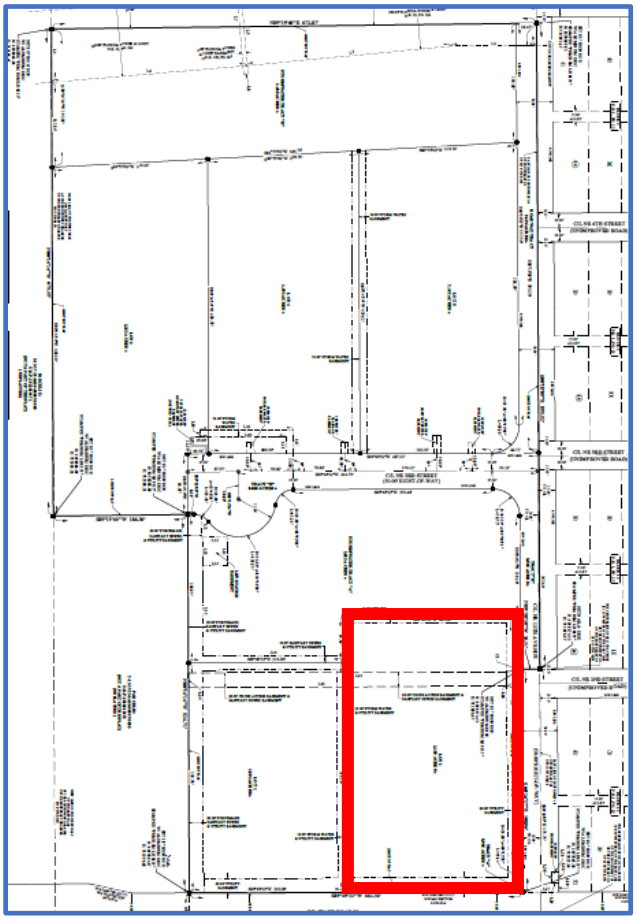
23-004-TRC

Site Plan Review Staff Report



Applicant| **Park Street Okeechobee, LLC**

Parcel Identification| **3-15-37-35-0210-00010-0010 and 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: Josh Cockriel, josh.cockriel@kimley-horn.com, (904) 828-3900
Site Address: Highway 70 E, Okeechobee, FL
Parcel Identification: 3-15-37-35-0210-00010-0010 and 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(s)

	Existing	Proposed
Future Land Use	Commercial	Commercial
Zoning	Heavy Commercial (CHV)	Heavy Commercial (CHV)
Use of Property	Vacant	Culver's Restaurant
Acreage	2.16 (replat)	2.16 acres

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

	Future Land Use	Zoning	Existing Use
North	Commercial	Heavy Commercial (CHV)	Vacant
East	(Okeechobee County) Commercial Corridor Mixed-Use	(Okeechobee County) Residential Mixed (RM) Commercial (C) Commercial 2 (C-2)	Unimproved NE 13th Ave, Vehicle Sales, Vacant Property
South	Commercial	Heavy Commercial (CHV)	SR-70, post office, service commercial
West	Commercial	Heavy Commercial (CHV)	Vacant, proposed car wash

General Description

The request for consideration by the City's Technical Review Committee is an application for Site Plan Review of a 4,827 sq/ft fast-food restaurant with drive through service, located on Lot 2 of the Park Street Commerce Center. Please see application 23-003-TRC for more information related to the replat and associated infrastructure plans. The applicant has submitted a concurrent special exception application (23-001-SE) for approval of the proposed drive-through. Access to the 2.16-acre subject property is provided by NE 13th Ave, which will be improved as part of the replat. 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: The applicant has provided a traffic analysis demonstrating available roadway capacity for a 4,600 sq/ft drive-through restaurant.

Access and Internal Circulation: Two ingress/egress driveways are proposed on the eastern property boundary with access to NE 13th Ave. An ingress/egress driveway is proposed on the western property boundary, providing through-access to the abutting commercial parcel to the west. Internal two way drive aisles are a minimum 24' wide. A crosswalk for pedestrians is provided from the northern parking area through the drive-through lanes to provide access to the building sidewalk.
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 per the City's zoning code, and none are proposed.

C. Dumpster Location and/or Trash Collection
The site plan provides a dumpster enclosure. Sufficiency of the dumpster enclosure and location will be addressed by the solid waste provider.

Consistency and Compatibility with Adjacent Uses

The proposed drive-through restaurant use is consistent with the comprehensive plan and is compatible with surrounding uses. Drive-through service is a special exception use within the Heavy Commercial (CHV) zoning district. The applicant has submitted a concurrent special exception application, 23-001-SE, to approve the drive-through use. The City's Board of Adjustment will determine whether the drive through is approved, denied, or approved with conditions. The subject property has frontage on SR-70, proximate to other commercial uses, and it is not expected that the proposed restaurant use will create any adverse impacts on the health, safety, and welfare of the surrounding community.

Compliance with Land Development Code

Regulation	Requirement	Provided
Permitted Uses §90-282	Restaurant, take-out restaurant, café are permitted principal uses within the CHV district	In compliance
Permitted Special Exception Uses §90-283	Drive-through service is a permitted special exception use within the CHV district	The applicant has submitted a concurrent special exception application for approval of drive-through service.
Minimum Lot Area §90-196(1)	6,250 square feet for all uses	93,872
Minimum Lot Width §90-285(1)	50’	245’
Min front yard setback §90-285(2)(a)	20’ to buildings; ten feet to parking and driveway	In compliance
Yards on corner lots §90-447	Any yard adjoining a street shall be considered a front yard. That yard upon which the property is addressed is required to comply with the minimum depth requirements of the regulations of this article. All other front yards shall be not less than 75 percent of the required minimum depth.	Addressing to be completed subsequent to final plat approval. Secondary front yard not determined. Site plan meets setbacks whether addressed on SR-70 or 13th Ave.
Minimum Required Side Setbacks §90-285(2)(a)	8’; 20’ 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%	5.14%
Max impervious surface §90-285(3)	85%	67.8%
Max height §90-285(4)	45 feet	In compliance
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’	In compliance

Regulation	Requirement	Provided
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'	In compliance
Paving §90-511(e)(1)	Each parking and loading space shall be paved	In compliance
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.	Internal pedestrian paths provided and marked
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.	Internal pedestrian paths provided and marked
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
Space Regulations §90-512(2)	1 space per 75 sq/ft of customer service area *Exact customer svc area not provided. Assuming CSA is 60% of total:* *4,867 x 0.6 = 2,920* *2,920 ÷ 75 = 39*	~39 spaces required 77 total spaces proposed
Min number of ADA parking spaces FL Accessibility Code §208.2	4 ADA spaces required for 76 to 100 spaces provided	4 ADA spaces proposed
Min ADA parking space dimensions FL Accessibility Code §502	12' by 20' w/ a 5' wide access aisle	In compliance

Regulation	Requirement	Provided
Off-street loading space requirement regulations; Commercial, Industrial §90-513(2)	1 loading space for 5,000 to 25,000 square feet floor area *No loading space required for proposed 4,827 sq/ft structure*	No loading space proposed
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. *93,872 ÷ 3,000 = 32 trees req* *94 shrubs req*	32 trees and 94 shrubs are required; 62 trees and 630 shrubs are proposed.
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. *39 x 18 = 702*	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. *702 ÷ 72 = 10*	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.	At least 2.42’ 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.	At least 8’ width provided
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.	No more than 10 uninterrupted parking spaces in a row proposed

Regulation	Requirement	Provided
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.	In compliance
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 *245 linear ft of north property line requires 490 sf of landscaped area with 2 trees and 5 shrubs* *317 linear ft of non-driveway frontage on 13th Ave requires 3,170 sf of landscaped area with 11 trees and 32 shrubs* *245 linear ft of frontage on SR70 requires 2,450 sf of landscaped area with 9 trees and 25 shrubs* *359 linear ft of non-driveway west property line requires 766 sf of landscaped area with 2 trees and 4 shrubs*	 5 trees & 16 shrubs 13 trees & 119 shrubs 9 trees & 63 shrubs 14 trees & at least 42 shrubs
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.	In compliance
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.	The applicant is not proposing to preserve any native vegetation.

Regulation	Requirement	Provided
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.	In compliance
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.	Native trees make up 100% of proposed plantings;
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

Regulation	Requirement	Provided
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 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.	In compliance
Sign definitions §90-564	Freestanding sign means any sign, which is incorporated into or supported by structures or supports in or upon the ground, independent of support from any building. Freestanding sign includes pole sign, pylon sign, ground sign or monument sign or "sandwich sign." Ground sign means a freestanding sign, other than a pole sign, supported by the ground, or by uprights or braces placed on or in the ground, and wholly independent of any building for support. Illuminated sign means any sign which contains a source of light or which is designed or arranged to reflect light from an artificial source including indirect lighting, neon, incandescent lights, backlighting, and also shall include signs with reflector that depend upon motor vehicle headlights for an image. Monument sign means a ground sign in which the entire bottom of the sign is in contact with the ground. Sign area means the area within the smallest regular geometric shape which contains the entire sign copy, but not including any supporting framework, braces or supports. Sign copy means the linguistic or graphic content, including trim and borders, of a sign. Sign face means the part of the sign that is or may be used to display sign copy. Sign height means the vertical distance from the finished grade at the base of the supporting structure to the top of the sign, or its frame or supporting structure, whichever is higher.	

Regulation	Requirement	Provided
Sign area computation §90-569(b)	(a) For freestanding signs, the sign area shall be the area within the smallest geometric shape that touches the outer points or edges of the sign face. (c) For freestanding signs where two sign faces are placed back to back on a single sign structure, and the faces are at no point more than four feet apart, the sign area shall be the area of one of the faces.	Area of oval portion of sign not provided Area of rectangular portion of sign is ~28 sf Site plan indicates sign width at 3 ft, which allows for computation of sign area to be one of the faces.
Free standing monument signs §90-571(1)	The sign area for each multiple occupancy complex and each occupant not located in a multiple occupancy complex shall not exceed 64 square feet in area, or eight feet in height	Total sign area not provided. Height proposed at 12 ft
Free standing monument signs §90-571(2)	No development shall have more than one freestanding monument sign.	One monument sign proposed
Free standing monument signs §90-571(3)	Permitted if located consistent with all applicable set back requirements and are not located in a public right-of-way	Monument sign located to meet 20 ft setbacks from both the east and south property line.
Ground signs §90-573(a)(1)	One ground sign or pole sign is allowed in the front yard, and such sign shall not exceed 50 square feet in sign area and 20 feet in height, and shall not be closer than 25 feet to a residential district.	Applicant may propose signage consistent with this provision, provided sign plans demonstrate compliance. Exact sign area not provided
Sidewalks § 78-36	Sidewalks shall be provided along each right-of-way.	Existing sidewalks provided along SR-70. Sidewalks proposed on 13th Ave as part of infrastructure improvements for plat 23-003-TRC.

Recommendation

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

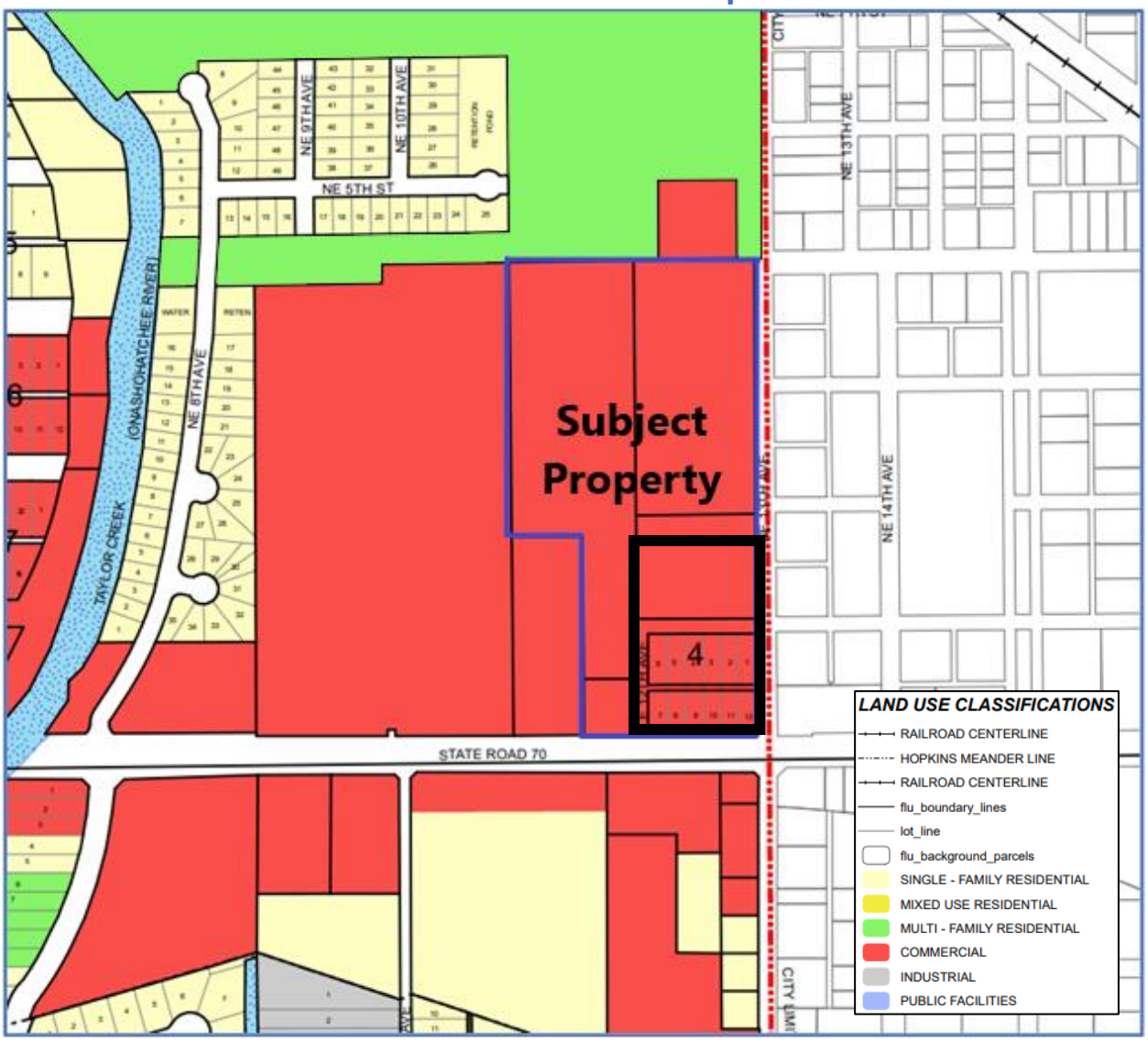
1. Plans must be consistent with final plat approval and all conditions of that approval.
2. Sign plans and location of sign shall not be approved until submittal of sign plans consistent with LDC or consistent with an approved sign variance.
3. Approval of this site plan is contingent on approval of special exception request 23-001-SE.
4. 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

Future Land Use Map



Zoning Map

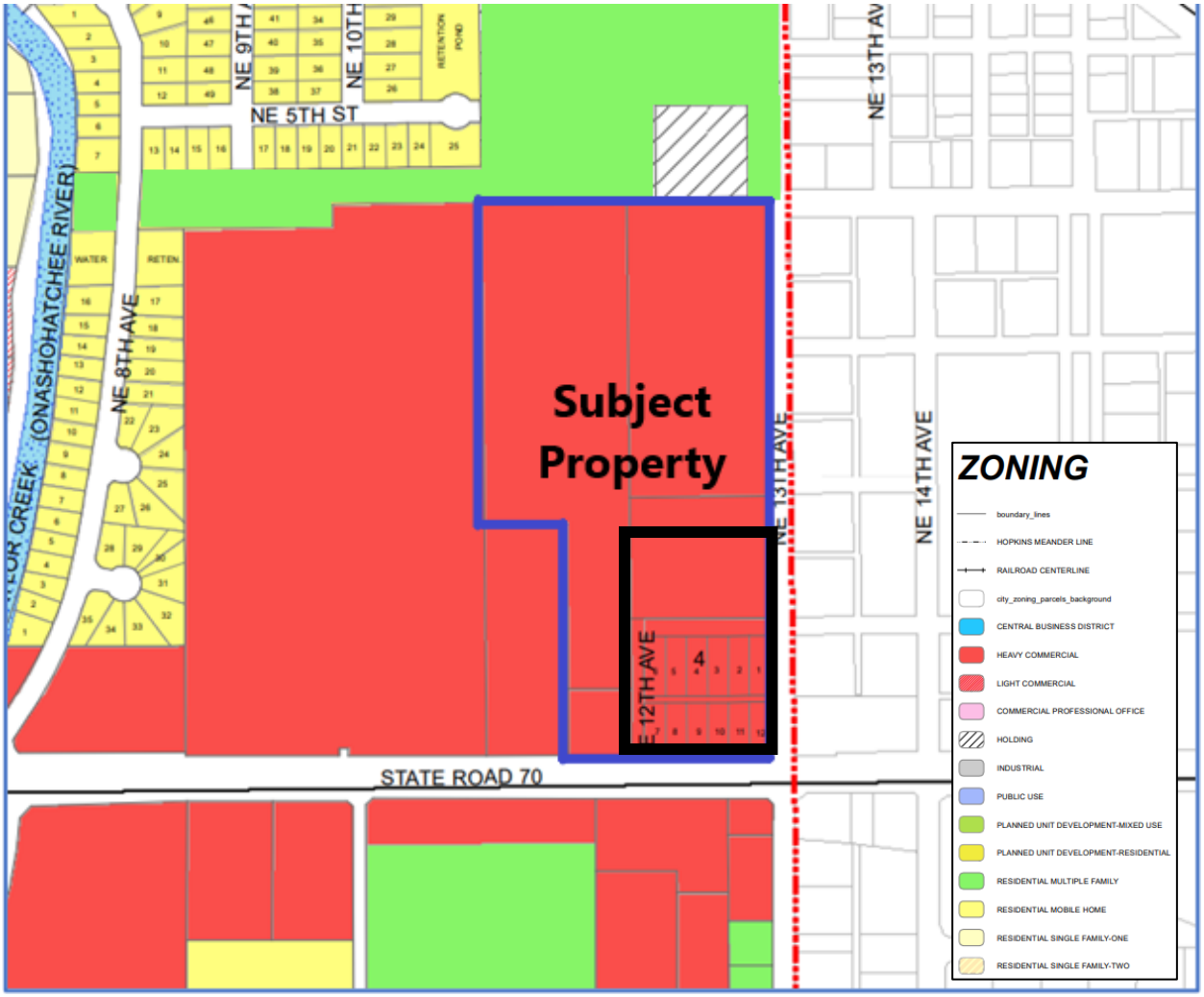

Subject Property
NE 5TH ST
NE 8TH AVE
NE 9TH
NE 10TH
NE 12TH AVE
NE 13TH AVE
NE 14TH AVE
STATE ROAD 70
RETENTION POND
ZONING
boundary_lines
HOPKINS MEANDER LINE
RAILROAD CENTERLINE
city_zoning_parcels_background
CENTRAL BUSINESS DISTRICT
HEAVY COMMERCIAL
LIGHT COMMERCIAL
COMMERCIAL PROFESSIONAL OFFICE
HOLDING
INDUSTRIAL
PUBLIC USE
PLANNED UNIT DEVELOPMENT-MIXED USE
PLANNED UNIT DEVELOPMENT-RESIDENTIAL
RESIDENTIAL MULTIPLE FAMILY
RESIDENTIAL MOBILE HOME
RESIDENTIAL SINGLE FAMILY-ONE
RESIDENTIAL SINGLE FAMILY-TWO

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	8-15-23
Application No.	23-004-TRC
Fee Paid:	2/23/23 E
Receipt No.	59178 E
Hearing Date:	9-21-23

	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): Josh Cockriel, P.E. (Civil Engineer)
6	Contact person daytime phone(s) and email address: (904) 828-3900 / josh.cockriel@kimley-horn.com
7	Engineer: Name, address and phone number: Kimley-Horn c/o Josh Cockriel, P.E. - 12740 Gran Bay Parkway West, Suite 2350 - (904) 828-3909
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: Future Lot 2 PARK STREET COMMERCE CENTER Those certain 2 parcels of land totaling approximately 2.16+/- acres located directly across from 1000 State Road 70 East, Okeechobee, Florida
10	Parcel Identification Number 3-15-37-35-0210-00010-0010 and 2-15-37-35-0A00-00010-0000
11	Current Future Land Use designation: Commercial
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. Proposed 4,827 sqft. Culver's quick service restaurant and associated parking areas and green space. Culver's typically operates less than 16 hours per day and does not include outdoor sales.
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. The property is currently a vacant lot.
15	Total land area in square feet (if less than two acres): or acres: 2.16+/-
16	Is proposed use different from existing or prior use ☑ Yes) ☐ No)

17	Number and description of phases: One Phase.
18	Source of potable water: Okeechobee Utility Authority
19	Method of sewage disposal: Gravity sewer to master development system.

	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	Printed Name	Date
	Adam Ramsay	8/15/23

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

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 V 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

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.

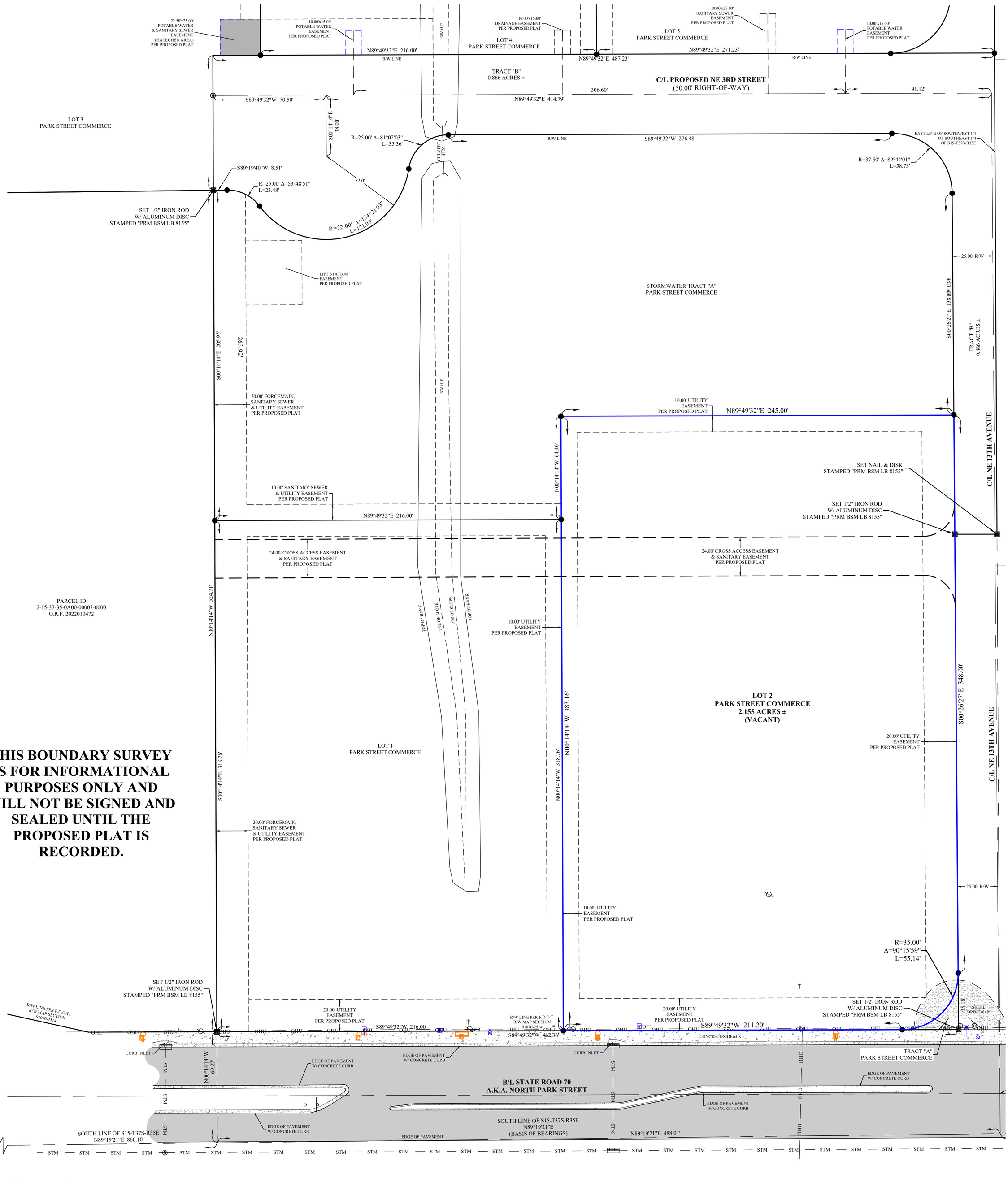
Karin Ammons
NOTARY PUBLIC
Print Name: Karin Ammons

Karin Ammons
My Commission DD211896
Expires July 11, 2007

[3593-68289.WPD]

BOUNDARY SURVEY

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



PARCEL ID:
2-15-37-35-0A00-00007-0000
O.R.F. 2022010472

THIS BOUNDARY SURVEY IS FOR INFORMATIONAL PURPOSES ONLY AND WILL NOT BE SIGNED AND SEALED UNTIL THE PROPOSED PLAT IS RECORDED.

LEGAL DESCRIPTION:

LOT 2, 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	8/19/23	UPDATED BOUNDARY SURVEY PER REVISED PLAT	TJL
CKD REB	SHEET 1 OF 1	DWG 22-445 BND LOT 2	DATE:	REVISIONS:	BY:

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

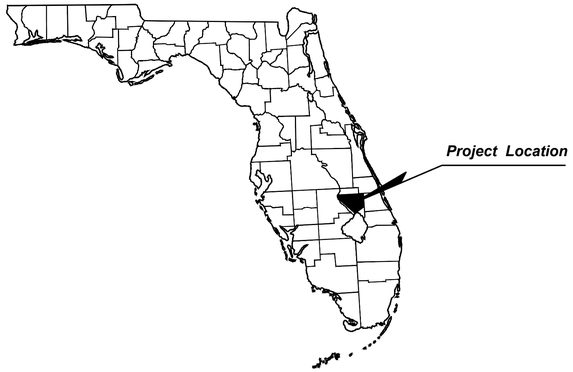
FINAL SITE PLAN/CONSTRUCTION PLANS
CULVER'S OKEECHOBEE

975 NE PARK ST

FOR

S&L PROPERTIES OKEECHOBEE, LLC

LOCATED IN
OKEECHOBEE, FLORIDA
NOV. 2023



LOCATION MAP
NOT TO SCALE

Civil Sheet List Table

SHEET NUMBER	SHEET TITLE
C-01	COVER SHEET
C-02	SIGNATURE SHEET
C-03	GENERAL NOTES
C-04	UTILITY NOTES
C-05	EXISTING CONDITIONS AND DEMOLITION PLAN
C-06	OVERALL SITE PLAN
C-07	PAVING AND GEOMETRY PLAN
C-08	GRADING AND DRAINAGE PLAN
C-09	UTILITY PLAN
C-10	SITE DETAILS
C-11	SITE DETAILS
C-12	DRAINAGE DETAILS
C-13	BEST MANAGEMENT PRACTICES
C-14	STORM WATER POLLUTION PREVENTION PLAN

Landscape Architect Sheet List Table

SHEET NUMBER	SHEET TITLE
LP-100	PLANITNG PLAN
LP-150	PLANTING NOTES
LP-151	PLANTING DETAILS
IR-100	IRRIGATION PLAN
IR-150	IRRIGATION NOTES
IR-151	IRRIGATION DETAILS

CIVIL ENGINEER:
JOSHUA COCKRIEL, P.E.
KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE (904) 828-3900

ARCHITECT:
WENDY MARTIN, AIA, NCARB
OLLMANN ERNEST MARTIN ARCHITECTS
200 S STATE ST.
BELVIDERE, IL 61008
PHONE (815) 544-7790

SURVEYOR:
BSM & ASSOCIATES, INC
80 SE 31ST LANE
OKEECHOBEE, FL 34974
(863) 484 8324

CONTRACTOR:
McCON BUILDING CORPORATION
1209 JOSEPH ST.
DODGEVILLE, WI 53533
PHONE (608) 929-7737

GEOTECH:
KSM ENGINEERING AND TESTING
11345 US HIGHWAY 1
SEBASTIAN, FL 32771
PHONE (772) 589 0712

OWNER:
JEFF LIEGEL
S&L PROPERTIES OKEECHOBEE, LLC
2651 KIRKING CT.
PORTAGE, WI 58901
PHONE (608) 742-2898

PROJECT DATUM: NAVD 88

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR
ENGINEER OF RECORD
SIGNATURE AND SEAL
REFER TO
C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY RCM
CHECKED BY JWC

COVER SHEET

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-01

JOSHUA W. COCKRIEL LICENSE No. 86636 STATE OF FLORIDA PROFESSIONAL ENGINEER

Kimley-Horn and Associates, Inc.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
CERTIFICATE OF AUTHORIZATION: 696
JOSHUA COCKRIEL, P.E. 86636

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSHUA COCKRIEL, P.E. ON THE DATE ADJACENT TO THE SEAL.

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

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

REGISTERED LANDSCAPE ARCHITECT MATTHEW A. JURNEY LA6666993 STATE OF FLORIDA

Kimley-Horn and Associates, Inc.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
CERTIFICATE OF AUTHORIZATION: REGISTRY NO. 35106
MATTHEW A. JURNEY No. LA6666993

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW A. JURNEY ON THIS DATE ADJACENT TO THE SEAL.

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

THE ABOVE NAMED PROFESSIONAL LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

Civil Sheet List Table

Landscape Architect Sheet List Table

No.	REVISIONS	DATE	BY

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

KHA PROJECT	045523036
DATE	NOV. 2023
SCALE	AS SHOWN
DESIGNED BY	JWC
DRAWN BY	RCM
CHECKED BY	JWC

SIGNATURE SHEET

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-02

GENERAL NOTES:

1. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE CITY OF OKEECHOBEE, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) AND THE CITY OF OKEECHOBEE UTILITY DEPARTMENT STANDARDS, SPECIFICATIONS, AND REQUIREMENTS.
2. ELEVATIONS ARE BASED ON NAVD 1988 DATUM. SURVEYS PROVIDED BY BSM & ASSOCIATES, INC, DATED NOVEMBER 11, 2022.
3. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND BECOMING FAMILIAR WITH THE SITE PRIOR TO CONSTRUCTION AND BIDDING.
4. THE CONTRACTOR SHALL ADHERE TO ALL NOTES PROVIDED IN THESE CONSTRUCTION DRAWINGS.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PERMITTED CONSTRUCTION DOCUMENTS. ANY DEVIATION FROM THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE ORGANIZATION AND/OR ENTITY RESPONSIBLE FOR THE INSTALLATION TO UPDATE/REPLACE ANY DEFICIENT MATERIAL/EQUIPMENT NECESSARY TO BRING THE FINAL PRODUCT TO THE STANDARDS OF THE PERMITTED CONSTRUCTION DOCUMENTS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL/DISPOSAL OF ANY UNSUITABLE MATERIAL FROM HIS OPERATION, FURNISHING AND COMPACTING SUITABLE REPLACEMENT BACKFILL MATERIAL IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INCLUDING RIGHT-OF-WAY PERMITS, AND INSURANCE REQUIRED FOR THE PROJECT.
8. THE LOCATION OF ALL UTILITIES SHOWN ON THE DRAWINGS ARE FROM INFORMATION PROVIDED BY THE SURVEYOR, THE CITY OF OKEECHOBEE PUBLIC WORKS DEPARTMENT AND LIMITED FIELD OBSERVATIONS.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM, IN THE FIELD, THE LOCATIONS AND ELEVATIONS SHOWN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION AND BUILDING PLACEMENT WITH ALL OTHER UTILITIES CONSTRUCTION.
11. CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE EROSION AND TURBIDITY CONTROLS DURING AND FOLLOWING CONSTRUCTION UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED TO AVOID ADVERSE ENVIRONMENTAL IMPACTS TO OFF-SITE PROPERTY AND DRAINAGE SYSTEMS.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES PRIOR TO CONSTRUCTION. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STORMWATER POLLUTION PREVENTION PLAN INCLUDED HEREIN.
13. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THESE CONSTRUCTION PLANS AND PROJECT SPECIFICATIONS.
14. ALL AREAS OF DISTURBED CITY, OR STATE RIGHT-OF-WAY SHALL BE SODDED.
15. THE CONTRACTOR SHALL PROVIDE A TEMPORARY WATER SERVICE OR WATER TRUCK FOR WASH-DOWN OF VEHICLES LEAVING THE PROJECT SITE IF NECESSARY.
16. THE CONTRACTOR(S) SHALL NOTIFY ALL APPLICABLE UTILITIES COMPANIES, THE ENGINEER OF RECORD, AND THE PROPERTY OWNER 48 HOURS PRIOR TO INITIATING ANY EXCAVATION ACTIVITIES, OR AS SPECIFIED BY THE UTILITIES COMPANIES AND THE PERMITS OBTAINED FOR THE WORK.
17. THE ENGINEER OF RECORD SHALL BE GIVEN FORTY EIGHT HOURS (48-HR) NOTICE OF ALL MEETINGS AND OR TESTING MEASURES RELATED TO SAID PROJECT.
18. THERE ARE TO BE NO OPEN TRENCHES AT THE END OF EACH WORK DAY.
19. THE TRENCH SAFETY SYSTEM SHALL BE COMPLIANT WITH OSHA STANDARD 29 CFR SECTION 1926.650 SUBPART P. THE CONTRACTOR SHALL PREPARE AND MAINTAIN DOCUMENTATION THAT THE TRENCH SAFETY SYSTEM IS IN COMPLIANCE WITH THE STATED OSHA STANDARD.
20. CONSTRUCTION WARNING SIGNS ARE TO BE MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE AND ALL TRAFFIC CONTROL DEVICES SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS WELL AS FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX.
21. THE CONTRACTOR IS RESPONSIBLE FOR CLEARLY IDENTIFYING THE AREA OF CONSTRUCTION AND SAFELY ROUTING ALL VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARLY MARKED AT ALL TIMES.
22. THE CONTRACTOR(S) SHALL LOCATE, VERIFY, AND IDENTIFY ALL EXISTING UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THE PLANS PRIOR TO ANY EXCAVATING ACTIVITIES.
23. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, THE ENGINEER OF RECORD, AND THE CITY OF OKEECHOBEE.
24. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES, SURVEY MONUMENTS, MARKERS, CORNERS, AND EXISTING FEATURES IN THE AREA. ANY DAMAGE SHALL BE REPLACED/REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY HIS OPERATIONS.
26. A COPY OF THE CONTRACTORS GENERAL LICENSE AND/OR UNDERGROUND UTILITY LICENSE SHALL BE PROVIDED TO THE OWNER AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.
27. GEOTECHNICAL REPORT AND BORINGS ARE PROVIDED BY KSM ENGINEEREING AND TESTING, DATED DECEMBER 30, 2022. REFER TO DRIVEWAY & PARKING LOTS FOR SITE PREPARATION RECOMMENDATIONS.
28. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR PROCEDURES IN PROPERLY PREPARING THE SITE FOR CONSTRUCTION OF FOUNDATIONS, PAVEMENT AND ALL ELEMENTS RELATED TO THIS PROJECT.
29. ANY MATERIALS CLASSIFIED BY THE GEOTECHNICAL REPORT AS UNSUITABLE SHALL NOT BE USED AS FILL SOIL UNLESS A METHOD OF MAKING THE MATERIAL SUITABLE IS APPROVED BY THE GEOTECHNICAL REPORT ENGINEER AND THE CLIENT.
30. ALL UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE SITE IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS. COSTS FOR EXCAVATION AND OFFSITE HAULING AND DISPOSAL SHALL BE BORNE BY THE CONTRACTOR.
31. TEMPORARY CONTROL OF GROUNDWATER SHOULD FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
32. A CITY OF OKEECHOBEE INSPECTOR SHALL BE CONTACTED 24 HOURS PRIOR TO ALL NECESSARY SITE WORK INSPECTIONS AND 5 DAYS PRIOR TO THE FINAL INSPECTION.

DEMOLITION NOTES:

1. CODES
   ALL CODES REGULATING DEMOLITION WORK SHALL BE COMPLIED WITH. THE CONTRACTOR SHALL PUT UP AND MAINTAIN SUCH BARRIERS AND WARNING LIGHTS, AS MAY BE NECESSARY OR REQUIRED BY CODE, TO PROTECT AND PREVENT UNAUTHORIZED PERSONNEL FROM ENTERING THE DEMOLITION WORK AREA. ALL DEMOLITION OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) INSOFAR AS THEY APPLY TO DEMOLITION WORK TO BE PERFORMED UNDER THIS CONTRACT.
2. PROTECTION OF BUILDINGS & EQUIPMENT
   TEMPORARY PROTECTIVE DEVICES, AS REQUIRED SHALL BE INSTALLED ADJACENT TO THE DEMOLITION WORK FOR PROTECTION OR PERSONNEL, EXISTING ADJACENT BUILDINGS, STRUCTURES AND EQUIPMENT AGAINST DUST, FALLING OR FLYING DEBRIS. ANY DAMAGE TO EXISTING STRUCTURES, FACILITIES AND/OR EQUIPMENT RESULTING FROM DEMOLITION WORK SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
3. DISPOSAL OF EXISTING EQUIPMENT & DEBRIS
   ALL DEBRIS AND EXISTING MATERIALS AND EQUIPMENT SHALL BE HAULED AWAY AND DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR OBTAINING DISPOSAL AREAS. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT SPILLAGE OF MATERIALS BEING HAULED IN PUBLIC STREETS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY CLEAN UP ANY SPILLAGE WHICH MAY ACCIDENTALLY OCCUR.
4. CLEANUP
   THE CONTRACTOR SHALL MAINTAIN AN ORDER OF NEATNESS AND GOOD HOUSEKEEPING. TOOLS, SCAFFOLDING AND OTHER DEMOLITION EQUIPMENT MUST AT ALL TIMES BE KEPT IN A NEAT AND ORDERLY ARRANGEMENT. AT THE CONCLUSION OF THE DEMOLITION OPERATIONS, THE ENTIRE WORK AREA SHALL BE LEFT IN A CLEAN CONDITION AS REQUIRED FOR SUBSEQUENT NEW WORK.

PAVING AND DRAINAGE NOTES:

1. ALL GRADING, PLACEMENT OF FILL, AND COMPACTION SHALL BE IN ACCORDANCE WITH THE CITY OF OKEECHOBEE STANDARD SPECIFICATIONS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. IN THE EVENT OF A STANDARD CONFLICT, THE CITY OF OKEECHOBEE SPECIFICATIONS AND STANDARDS SHALL HAVE PRIORITY.
2. THE CONTRACTOR SHALL CONSTRUCT ALL DRAINAGE STRUCTURES TO THE DESIGN ELEVATIONS SHOWN AND IN COMPLIANCE WITH TYPICAL CONSTRUCTION DETAILS.
3. ALL PIPE LENGTHS SHOWN HEREIN ARE APPROXIMATE LENGTHS FROM CENTER TO CENTER OF THE RELATED STRUCTURES.
4. ALL PIPE LENGTHS ARE SCALED AND MAY REQUIRE SLIGHT FIELD ADJUSTMENTS TO FIT CONDITIONS. ALL PIPE CROSSINGS SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAX. DRY DENSITY (ASTM D1557) AT 1' LIFTS.
5. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE PAVING AND DRAINAGE FACILITIES WITH ALL OTHER CONSTRUCTION. WATER AND SANITARY SEWER ARE PROVIDED AS PART OF THESE CONSTRUCTION DOCUMENTS.
6. ALL PIPE JOINTS SHALL BE PROPERLY FITTED AND SEALED PER PRODUCT MANUFACTURERS SPECIFICATIONS.
7. THE CONTRACTOR SHALL COORDINATE ALL NOTIFICATIONS AND UTILITY LOCATION EFFORTS WITH THE UTILITY OWNERS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES DURING CONSTRUCTION. REFER TO THE STORMWATER POLLUTION PREVENTION PLAN.
9. COMPACTION DENSITIES FOR ALL ROADWAY CROSSINGS ARE TO BE TAKEN IN ONE-FOOT (1') LIFTS.
10. LIMEROCK BEARING RATIOS FOR SUBGRADE AT FORTY (40) AND LIMEROCK OR ALTERNATIVE BASE COURSE AT ONE HUNDRED (100). THERE WILL BE NO UNDER TOLERANCE. CRUSHED CONCRETE IS AN ACCEPTABLE ALTERNATIVE TO LIMEROCK, ONLY IF IT MEETS THE SPECIFICATIONS DEFINED IN THE GEOTECHNICAL REPORT AS "BASE COURSE" AND AS APPROVED BY THE ENGINEER OF RECORD.
11. ALL MATERIAL USED FOR BACKFILL SHALL BE CLASS A3 FREE DRAINING SAND.
12. ALL CONSTRUCTION LINES & GRADES SHALL BE ESTABLISHED AND MAINTAINED BY THE CONTRACTOR.
13. CONTRACTOR WILL CLEAR, GRUB AND DISPOSE OF ALL DEBRIS AND SURFACE ORGANICS TO FIRM MATERIAL IN ALL EASEMENTS, ROAD RIGHT-OF-WAYS AND DETENTION AREAS. DISPOSAL SHALL BE INCLUDED IN THE CONTRACT.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF DOWNSTREAM TURBIDITY/ SILTATION THROUGH THE USE OF HAY BALES, SCREENS, SILTATION BASINS, CHEMICAL FLOCCULATION AND/OR ANY OTHER SUITABLE MEANS REQUIRED TO MEET FLORIDA STREAM STANDARDS. SEED AND MULCH ALL DISTURBED AREAS, SOD AS REQUIRED TO CONTROL EROSION THROUGH FINAL INSPECTION AND TO PRODUCE A UNIFORM STAND OF GRASS THROUGHOUT.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR BRICKING UP CURB INLETS TO FINISHED GRADE AND FURNISHING AND MAINTAINING ALL HARDWARE.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING CURB TRANSITIONS TO FINISH GRADE.
17. UNDERDRAINS SHALL BE INSTALLED IN ALL CASES WHERE THE SEASONAL HIGH WATER TABLE IS CLOSER THAN 12 INCHES BELOW THE PROPOSED SUBGRADE OF ANY ROAD, REGARDLESS OF PLANS. UNDERDRAINS SHALL BE STUBBED OUT 20' FROM ALL CURB INLETS FOR FUTURE POSSIBLE USE.
18. FILTER WRAP ALL DRAINAGE JOINTS TO CITY OF OKEECHOBEE SPECIFICATIONS.
19. A 2' STRIP OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS.
20. ALL POND SIDESLOPES SHALL BE STABILIZED WITH ESTABLISHED GRASS AT TIME OF FINAL INSPECTION.
21. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING ALL ADA PARKING SPACES AND ACCESSIBLE ROUTES, PURSUANT TO THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, LATEST EDITION IN EFFECT AT THE TIME THE PROJECT WAS APPROVED BY THE CITY OF OKEECHOBEE. IF THERE ARE DISCREPANCIES IN THE CONSTRUCTION DRAWINGS REGARDING GRADES ON SLOPES COMPARED TO ADA REQUIREMENTS, CONTRACTOR SHALL NOTIFY ENGINEER FOR CLARIFICATION, PRIOR TO IMPLEMENTATION. CONTRACTOR WILL BE RESPONSIBLE FOR ANY PAVEMENT, PARKING STALLS, SIDEWALKS, OR OTHER ADA ELEMENTS ASSOCIATED WITH THIS PROJECT THAT DOES NOT CONFORM TO ADA GUIDELINES AND THE INTENT OF THESE PLANS.
22. ALL ROADWAYS, DRIVEWAYS, AND BUILDING PAD LOCATIONS SHOULD BE PROOF ROLLED PRIOR TO IMPORTATION OF ADDITIONAL FILL OR SUBBASE MATERIAL (LIMEROCK). IN THE EVENT THAT PROPOSED COMPACTION AND DENSITIES CANNOT BE ACHIEVED, CONTRACTOR SHALL NOTIFY ENGINEER TO AID IN DETERMINING LIMITS OF UNSUITABLE MATERIALS.

SIGNAGE NOTES:

1. ALL SIGNS WITHIN CITY OF OKEECHOBEE RIGHT OF WAYS MUST MEET THE CITY OF OKEECHOBEE STANDARDS.

SIGNAGE AND PAVEMENT MARKING NOTES:

1. PAVEMENT MARKINGS SHOULD BE PLACED AS SHOWN ON THE PLANS AND DETAIL SHEETS.
2. ANY REQUIRED TEMPORARY MARKINGS MUST BE IN PLACE BEFORE OPENING LANES OF TRAFFIC. PAY ITEMS FOR TEMPORARY PAVEMENT MARKINGS ARE TO BE INCLUDED IN THE CONTRACT.
3. THE REMOVAL OF EXISTING PAVEMENT MARKINGS WILL BE CONSIDERED AN INCIDENTAL ITEM WITH NO ADDITIONAL COMPENSATION PROVIDED.
4. ALL PERMANENT PAVEMENT MARKINGS SHALL MEET CURRENT CITY OF OKEECHOBEE SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS, LATEST EDITION.
5. THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE PLACED NO SOONER THAN 30 CALENDAR DAYS AFTER THE COMPLETION OF THE FINAL PAVEMENT LAYER.
6. A BITUMINOUS REFLECTIVE PAVEMENT MARKER (RPM) ADHESIVE MEETING CURRENT CITY OF OKEECHOBEE AND/OR FDOT SPECIFICATIONS SHALL BE USED ON ASPHALT ROADWAYS.
7. THE CONTRACTOR SHALL USE CLASS – B REFLECTIVE PAVEMENT MARKERS (RPMS) INSTALLED TO MEET CURRENT CITY OF OKEECHOBEE SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS.
8. REFLECTIVE PAVEMENT MARKERS THAT DO NOT CONFLICT WITH PERMANENT (THERMOPLASTIC) MARKINGS SHALL BE PLACED ON ALL FINAL ASPHALTIC CONCRETE SURFACES IMMEDIATELY AFTER THE TEMPORARY PERMANENT STRIPING IS IN PLACE.
9. PAVEMENT MARKINGS REMOVAL;
   a. PAINT BLACKOUT METHOD OF PAVEMENT MARKINGS REMOVAL IS NOT ACCEPTABLE.
   b. GRINDING OR HYDRO BLAST METHODS SHALL BE USED ON WEATHERED ASPHALT SURFACES.
   c. REMOVAL ON NEW ASPHALT SURFACES SHALL BE BY HYDRO BLAST METHOD ONLY.
10. IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATIONS OF THE CITY OF OKEECHOBEE AND THE SPECIFICATIONS OF THE FDOT, THE CITY OF OKEECHOBEE WILL PREVAIL.

No.	REVISIONS	DATE	BY

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT	045523036
DATE	NOV. 2023
SCALE	AS SHOWN
DESIGNED BY	JWC
DRAWN BY	RCM
CHECKED BY	JWC

GENERAL NOTES

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-03

UTILITY NOTES:

1. ALL WATER, SEWER, AND REUSE WORK MUST BE PERFORMED IN ACCORDANCE WITH CITY OF OKEECHOBEE UTILITY DEPARTMENT WATER AND SEWER STANDARDS, DETAILS, AND SPECIFICATIONS AS WELL AS ALL APPLICABLE STATE AND LOCAL REGULATIONS.

2. ALL EQUIPMENT AND MATERIALS SHALL COMPLY WITH THE CITY OF OKEECHOBEE UTILITY DEPARTMENT STANDARDS AND SPECIFICATIONS.

3. WHERE IT IS NOT POSSIBLE FOR WATER AND SEWER (INCLUDING STORM) LINES TO CROSS WITH A MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE, A FULL-UNCUT LENGTH OF WATER QUALITY PIPE (i.e. DR 18 AWWA C-900 FOR NEWLY INSTALLED SEWER & DR 25 AWWA C-900 WATER) WHICH IS USUALLY 20 FEET LONG WILL BE CENTERED ON THE POINT OF CROSSING. THE CONTRACTOR WILL FIELD VERIFY THE VERTICAL SEPARATION. THE MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER (INCLUDING STORM) PIPES WHEN 18 INCHES IS NOT POSSIBLE WILL BE 6 INCHES OUTSIDE DIAMETER TO OUTSIDE DIAMETER. IT IS PREFERABLE TO HAVE THE WATER MAIN ABOVE THE SEWER LINES AND AT LEAST 18 INCHES VERTICAL SEPARATION.

4. A FULL UNCUT LENGTH OF WATER MAIN PIPE (USUALLY 20 FEET) SHALL BE CENTERED AT THE POINT OF CROSSING OF ALL WATER AND SEWER (INCLUDING STORM) LINES AT THE POINT OF CROSSINGS REGARDLESS OF THE VERTICAL SEPARATIONS.

5. IN THE CASE WHERE SOLVENT CONTAMINATION IS FOUND IN TRENCH, WORK WILL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH THE APPROVAL OF THE CITY OF OKEECHOBEE HEALTH DEPARTMENT, DUCTILE IRON PIPE, FITTINGS AND APPROVED SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATE AREA. THE DUCTILE IRON PIPE WILL EXTEND AT LEAST 100 FEET BEYOND ANY DISCOVERED SOLVENT.

6. IN REGARD TO THE REQUEST FOR A LETTER OF RELEASE TO PLACE THE CONSTRUCTION INTO SERVICE, THE BACTERIOLOGICAL SAMPLE POINTS SHALL BE INDICATED IN RED OR PINK ON THE RECORD OR AS BUILT DRAWINGS. THE SAMPLE NUMBERS WILL CORRESPOND TO THOSE ON THE BACTERIOLOGICAL SAMPLE LAB SHEETS.

7. THE RECORD OR "AS BUILT" DRAWINGS TO BE PREPARED BY THE CONTRACTOR AND SUBMITTED AT THE TIME OF THE REQUEST FOR A LETTER OF RELEASE TO PLACE THE CONSTRUCTION INTO SERVICE WILL CLEARLY DEPICT THE VERTICAL CLEARANCES BETWEEN WATER AND SEWER (INCLUDING STORM) LINES AT ALL CROSSING AND PARALLEL RUNS WHERE THE HORIZONTAL SEPARATION IS LESS THAN 10 FEET. IN ADDITION, THE CENTERING OF UNCUT LENGTHS OF PIPE (USUALLY 20 FEET) AT POINTS OF CROSSINGS WILL BE DOCUMENTED ON THE DRAWINGS AND ALL MITIGATING CONSTRUCTION MEASURES CLEARLY DEPICTED IN CASES WHERE A MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE BETWEEN THE WATER AND SEWER (INCLUDING STORM) LINES IS NOT POSSIBLE.

8. EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED PER THE BEST MEANS AVAILABLE WITHOUT EXCAVATION. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

9. VERTICAL LOCATIONS OF ALL UTILITIES (EXCLUDING EXISTING STORM SEWERS) SHOWN ON PLAN AND PROFILE SHEETS HAVE BEEN ASSUMED. CONTRACTOR SHALL EXERCISE CAUTION DURING EXCAVATION NEAR EXISTING UTILITIES SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF LOCATION DIFFERS FROM THAT SHOWN ON THE PLANS BEFORE CONTINUING WITH CONSTRUCTION.

10. SHOULD CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO CONTINUING CONSTRUCTION.

11. ALL WATER AND SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OR CHAPTER 489, FLORIDA STATUTES.

12. ALL UNDERGROUND UTILITIES TO BE INSTALLED SHALL BE IN ACCORDANCE WITH THE CITY OF OKEECHOBEE UTILITY DEPARTMENT SPECIFICATIONS AND THE APPROVED SITE PLANS.

13. ALL WATERMAINS AND FORCEMAINS SHALL HAVE A MINIMUM OF 36" COVER FROM FINISHED GRADE. ALL UTILITY PIPELINES ARE DESIGNED TO FINISHED GRADE AND SHALL BE PROTECTED FROM DAMAGE UNTIL WORK IS COMPLETED.

14. UNSUITABLE MATERIALS UNDER WATER AND SEWER MAINS SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL PROPERLY COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D1557).

15. ALL CURB STOPS ARE TO BE FORD BALL-TYPE WITH LOCKING CAPACITY. 1" MINIMUM.

16. NO CONNECTION TO EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATER LINES HAVE BEEN PRESSURE TESTED, DISINFECTED, CLEARED FOR SERVICE AND ACCEPTED FOR MAINTENANCE BY CITY OF OKEECHOBEE UTILITY DEPARTMENT AND FDEP.

17. CONTRACTOR IS RESPONSIBLE FOR PROPER NOTIFICATION OF INSPECTING AUTHORITIES BEFORE AND DURING CONSTRUCTION.

18. MECHANICAL RESTRAINTS ARE REQUIRED WHERE WATER MAINS AND FORCE MAINS ARE TERMINATED AND AT ALL BENDS. ANY VERTICAL CONFLICT CROSSING USING FITTING SHALL BE RODDED THROUGHOUT THE CROSSING. WHERE FORCE MAINS OR WATER MAINS ARE LAID WITHOUT FITTINGS, THE MAXIMUM DEFLECTION SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE PIPE USED.

19. FITTINGS SHALL BE USED AT LOCATIONS INDICATED ON THE PLANS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

20. ALL UNDERGROUND VALVES SHALL BE INSTALLED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH TOP SET TO FINAL GRADE IN ACCORDANCE WITH THE CITY OF OKEECHOBEE UTILITY DEPARTMENT DETAILS AND SPECIFICATIONS.

NOTICE OF PROCEDURE:

21. ALL COMMERCIAL BUILDING PERMITS AND METERS TO BE PROCESSED THROUGH THE CITY OF OKEECHOBEE UTILITY DEPARTMENT WATER AND SEWER CUSTOMER SERVICE SHALL BE ACCOMPANIED BY A SET OF APPROVED CIVIL DESIGN PLANS.

22. ALL WATER AND SEWER TAPS TO BE PERFORMED BY UTILITY CONTRACTOR OR LICENSED MASTER PLUMBER MUST BE SCHEDULED AT LEAST 48 HOURS IN ADVANCE THROUGH YOUR CITY OF OKEECHOBEE UTILITY DEPARTMENT INSPECTOR. IN ADDITION, IT IS THE ENGINEER OF RECORD'S RESPONSIBILITY TO SECURE APPLICABLE D.E.P./CITY OF OKEECHOBEE UTILITY DEPARTMENT PERMITS IN ACCORDANCE WITH THE CITY OF OKEECHOBEE UTILITY DEPARTMENT PERMITTING PROCEDURES.

23. METERS TO BE INSTALLED BY THE CITY OF OKEECHOBEE UTILITY DEPARTMENT FORCES UPON APPLICATION AND PAYMENT BY LICENSED MASTER PLUMBER.

24. WATER AND SEWER CAPACITY FEES SHALL BE REQUIRED AT TIME OF BUILDING PERMIT APPLICATION. FEES WILL BE BASED ON TOTAL NUMBER OF PLUMBING FIXTURE UNITS SHOWN OR LISTED ON BUILDING PLANS.

25. A PRE-CONSTRUCTION CONFERENCE IS REQUIRED AND SHALL BE SCHEDULED 48 HOURS IN ADVANCE WITH THE CITY OF OKEECHOBEE UTILITY DEPARTMENT.

26. ALL ON-SITE PRIVATE WATER AND SEWER CONSTRUCTION REQUIRES A PLUMBING PERMIT WITH SCHEDULED INSPECTION PRIOR TO INSTALLATION – CONTACT CITY CHIEF PLUMBING INSPECTOR.

POTABLE WATER SYSTEM NOTES:

1. NOTIFY THE CITY OF OKEECHOBEE UTILITY DEPARTMENT 48 HRS. IN ADVANCE OF MAKING THE CONNECTION TO THE EXISTING WATER MAIN STUB. A CITY OF OKEECHOBEE UTILITY DEPARTMENT INSPECTOR SHALL BE PRESENT AT TIME CONNECTION IS MADE.

2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES AND CONNECTION POINTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD IMMEDIATELY.

3. ALL WATER MAINS 4" THRU 12" DIAMETER SHALL BE PVC 1120-CLASS 150-DR-18 WITH PUSH-ON GASKETED JOINTS IN ACCORDANCE WITH THE CITY OF OKEECHOBEE UTILITY DEPARTMENT SPECIFICATIONS.

4. ALL POTABLE PVC PIPE 3 INCHES IN DIAMETER OR LESS SHALL BE LISTED AS NSF-PW AND SHALL BE SO MARKED.

5. ALL WATER LINES 2" DIAMETER ONLY SHALL BE PVC 1120-PR200-SDR21, PVC 1120-SCHEDULE 40 AND SCHEDULE 80 IN ACCORDANCE WITH LAKE CITY UTILITY DEPARTMENT SPECIFICATIONS. ALL 2" AND SMALLER WATER SERVICE LINES SHALL BE POLYETHYLENE PIPE.

6. ALL NEW AND RELOCATED WATER MAIN PIPE, FITTINGS, VALVES, AND FIRE HYDRANTS SHALL BE IN CONFORMANCE WITH APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) AND THE CITY OF OKEECHOBEE UTILITY DEPARTMENT STANDARDS.

7. ALL NEW AND RELOCATED WATER MAIN PIPE AND FITTINGS WILL COMPLY WITH THE LATEST FDEP AND AWWA STANDARDS FOR LEAD CONTENT.

8. ALL PACKING AND JOINTING MATERIALS USED IN THE JOINTS OF NEW AND RELOCATED WATER MAIN PIPE SHALL BE IN CONFORMANCE WITH APPLICABLE AWWA AND THE CITY OF OKEECHOBEE UTILITY DEPARTMENT STANDARDS.

9. ALL NEW AND RELOCATED WATER MAINS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH AWWA AND THE CITY OF OKEECHOBEE UTILITY DEPARTMENT STANDARDS.

10. ALL ROCK AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA AND THE CITY OF OKEECHOBEE UTILITY DEPARTMENT STANDARDS AND/OR PIPE MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES FOR NEW AND RELOCATED WATER MAIN PIPE SHALL BE REMOVED TO A DEPTH OF AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE. CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED FOR NEW AND RELOCATED WATER MAIN PIPE. THE BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND THE NEW AND RELOCATED WATER MAIN PIPE AND TO A SUFFICIENT HEIGHT ABOVE SUCH PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE.

11. ALL TEES, BENDS, PLUGS, AND HYDRANTS IN NEW AND RELOCATED WATER MAINS SHALL USE RESTRAINED JOINTS PER THE CITY OF OKEECHOBEE UTILITY DEPARTMENT DETAILS TO PREVENT MOVEMENT.

12. ALL NEW AND RELOCATED WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651 AND RULE 62-555.345, F.A.C.

13. ALL NEW AND RELOCATED WATER SERVICES SHALL BE IN CONFORMANCE WITH THE STATE PLUMBING CODE.

14. ALL PIPE AND PIPE FITTINGS FOR NEW AND RELOCATED WATER SERVICES SHALL COMPLY WITH THE LATEST FDEP AND AWWA STANDARDS FOR LEAD CONTENT. ALL SOLDERS AND FLUX FOR NEW AND RELOCATED WATER SERVICES SHALL COMPLY WITH THE LATEST FDEP AND AWWA STANDARDS FOR LEAD CONTENT.

15. THE POTABLE WATER SYSTEM SHALL MAINTAIN THE MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM THE SANITARY SEWER SYSTEM. THE MINIMUM HORIZONTAL AND VERTICAL CLEARANCES ARE DESCRIBED IN DETAIL UNDER THE STANDARD WATER/SEWER SEPARATION STATEMENT.

SANITARY SEWER SYSTEM NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES AND CONNECTION POINTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD IMMEDIATELY.

2. SANITARY SEWER LINE SHALL BE SDR-26 PVC PIPE, CONFORMING TO ASTM D-3034. SANITARY SEWER LINE SHALL BE COLOR CODED AND CLEARLY MARKED.

3. SANITARY SEWER FORCE MAIN SHALL BE C900 DR18 PVC PIPE CONFORMING TO ASTM D-1784, D-2241, D-3139, AND F-477. SANITARY FORCE MAIN SHALL BE COLOR CODED GREEN AND CLEARLY MARKED.

4. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD AND THE CITY OF OKEECHOBEE UTILITY DEPARTMENT ALL VIDEO LOGS AND DEFLECTION TEST RESULTS FOR REVIEW AND APPROVAL.

5. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD AND THE CITY OF OKEECHOBEE UTILITY DEPARTMENT ALL EXFILTRATION/INFILTRATION TEST RESULTS FOR REVIEW AND APPROVAL.

6. THE SANITARY SEWER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS. ANY DEVIATION FROM THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE ENTITY AUTHORIZING THE DEVIATIONS TO BRING THE SANITARY SEWER SYSTEM INTO COMPLIANCE WITH THESE CONSTRUCTION DOCUMENTS.

7. THE SANITARY SEWER SYSTEM SHALL MAINTAIN THE MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM THE POTABLE WATER SYSTEM. THE MINIMUM HORIZONTAL AND VERTICAL CLEARANCES ARE DESCRIBED IN DETAIL UNDER THE STANDARD WATER/SEWER SEPARATION STATEMENT.

8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONSTRUCTION OF THE SANITARY SEWER SYSTEM WITH THE OTHER UTILITIES BEING INSTALLED IN THE VICINITY.

9. LEAKAGE TEST SHALL BE CONDUCTED SO THAT THE LEAKAGE EXFILTRATION OR INFLITRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM. EXFILTRATION OR INFILTRATION TESTS SHALL BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET. AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C 924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES.

STANDARD WATER/SEWER SEPARATION STATEMENT:

1. SANITARY SEWERS (INCLUDING LATERALS), FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.

   WHERE SANITARY SEWERS, FORCE MAINS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 12 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.

   ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).

   WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 18 INCHES OF VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS AND SANITARY SEWER) AND THE NEW PIPE SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. ALL UNDERGROUND WATERMAINS IN THE PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL SEPARATION OF AT LEAST 3 FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND OUTSIDE OF ANY VACUUM SANITARY SEWER, STORM SEWER, STORMWATER FORCEMAIN, OR PIPELINE CONVEYING RECLAIMED WATER UNDER PART III OF CHAPTER 62-610 F.A.C. WATERMAIN SHALL BE LAID AT A MINIMUM DISTANCE OF 6 FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF A GRAVITY SANITARY SEWER (3 FEET IF THE WATERMAIN BOTTOM IS LAID ATLEAST 6" ABOVE THE TOP OF THE SEWER) WATERMAIN SHALL BE LAID ATLEAST 6 FEET HORIZONTALLY (OUTSIDE TO OUTSIDE) FROM PRESSURE SANITARY SEWER, SANITARY FORCEMAINS, OR RECLAIMED WATER LINES NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C.

   WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DUCTILE IRON, HDPE, AND PVC PIPE SHALL MEET THE CITY OF OKEECHOBEE UTILITY DEPARTMENT STANDARDS AND SPECIFICATIONS.

HYDROSTATIC TESTING NOTES:

1. AFTER ALL PRESSURE PIPES (WATER MAINS, SERVICES, AND FORCE MAINS) ARE INSTALLED, THE JOINTS COMPLETED, AND THE TRENCH BACKFILLED, THE NEWLY LAID PIPE AND APPURTENANCES SHALL BE SUBJECTED TO A HYDROSTATIC TEST OF 150 PSI FOR WATER, 150 PSI FOR SANITARY FORCEMAIN, AND 200 PSI FOR FIRE LINE FOR A PERIOD OF AT LEAST TWO HOURS. CONTRACTOR SHALL PERFORM A 24-HOUR (MINIMUM) PRE-TEST OF ALL PRESSURE PIPING PRIOR TO SCHEDULING PRESSURE TESTS WITH THE CITY OF OKEECHOBEE UTILITY DEPARTMENT AND THE ENGINEER. THE ENGINEER, AND THE CITY OF OKEECHOBEE UTILITY DEPARTMENT MUST BE NOTIFIED AT LEAST 48 HOURS BEFORE A TEST IS TO BE PERFORMED. TEST SHALL BE AS SET FORTH IN AWWA STANDARD C600. ANY LEAKS DETECTED SHALL BE CORRECTED AND THE SECTION OF PIPELINE RETESTED. THE TWO HOUR TEST PERIOD SHALL BEGIN WHEN ALL JOINTS HAVE BEEN DETERMINED TO BE WATER TIGHT. LEAKAGE SHALL BE LIMITED TO THAT ALLOWANCE SET FORTH IN SECTION 4 OF AWWA STANDARD C600 LATEST EDITION. HYDROSTATIC AND LEAKAGE TEST AND BLOW-DOWN (ZEROING OF GAGE) MUST OCCUR BEFORE SAMPLING FOR BACTERIOLOGICAL TEST. THE MAXIMUM ALLOWABLE PRESSURE LOSS IS 5 PSI REGARDLESS OF THE LENGTH OF PIPE.

AS-BUILT AND TESTING NOTES:

1. SIGNED AND SEALED AS-BUILTS SHALL BE PREPARED BY THE CONTRACTOR ACCORDING TO AGENCY CLEARANCE AND OWNER REQUIREMENTS.

2. TESTING SHALL BE PERFORMED BY THE CONTRACTOR ACCORDING TO ALL APPLICABLE REGULATIONS.

3. IN ADDITION TO THE REQUIREMENTS ABOVE, THE CONTRACTOR SHALL PERFORM THE FOLLOWING TESTS AND PROVIDE RESULTS TO THE OWNER:

   3.1 FOR GRAVITY SANITARY SEWER: AIR TESTED BETWEEN MANHOLES AT 3.5 PSI FOR 5 MINUTES PER ASTM F1417 FOR PLASTIC PIPES.
   3.2 FOR SANITARY FORCEMAINS: HYDROSTATIC PRESSURE TEST OF 150 PSI FOR 2 HOURS
   3.3 FOR WATERMAINS AND SERVICE LATERALS: HYDROSTATIC PRESSURE TEST OF 150 PSI FOR 2 HOURS
   3.4 FOR FIRE MAINS: PER FFPC AND NFPA
   3.5 FOR LIFT STATIONS: START-UP OBSERVATION REPORT BY PUMP MANUFACTURER.
   3.6 FOR CONCRETE PAVEMENT: TEST CYLINDERS (7 DAY AND 28 DAY BREAKS) AT RATE OF 1 PER 100 C.Y.
   3.7 FOR ASPHALT PAVEMENT: CORES TAKEN 3 HEAVY DUTY AND 3 LIGHT DUTY PER DAY OF ASPHALT WORK, LOCATIONS AS SPECIFIED BY OWNER. THE CORES SHALL BE TESTED FOR DENSITY AND CONFORMANCE TO THICKNESS REQUIREMENTS. CORES SHALL BE HOT PATCHED BY CONTRACTOR.
   3.8 FOR SUBGRADE: DENSITY SHALL BE TESTED BY NUCLEAR METHOD. ASTM D6938. ONE TEST IN EACH LIFT FOR EACH 10,000 SQ. FT.
   3.9 FOR BASE: DENSITY SHALL BE TESTED BY NUCLEAR METHOD, ASTM D6938. ONE TEST IN EACH LIFT FOR EACH 20,000 SQ. FT. OF IN-PLACE BASE MATERIAL AREA. THICKNESS SHALL BE TESTED ONCE FOR EACH 20,000 SQ. FT. OF IN-PLACE MATERIAL AREA.
   3.10 FOR UTILITY TRENCHES: DENSITY TEST EVERY 300', MINIMUM ON BETWEEN EACH STRUCTURE.

4. IN CASE OF CONFLICT OR DUPLICATION, CONTRACTOR SHALL ISSUE BID QUESTION ACCORDING TO BID REQUIREMENTS. IF NO QUESTION IS ASKED, BASE BID SHALL INCLUDE THE CONFLICTING OR DUPLICATE TESTING.

5. OTHER DOCUMENTS TO BE PROVIDED BY CONTRACTOR:

   CONSTRUCTION COST AS MAY BE REQUIRED BY JURISDICTION
   TABULATED CAMS DATA AS MAY BE REQUIRED BY JURISDICTION
   TABULATED NORTHING/EASTING AND GPS DATA AS MAY BE REQUIRED BY JURISDICTION

6. FDEP SANITARY SEWER TESTING REQUIREMENTS:

LEAKAGE TESTS:

1. THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.
2. EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET
3. AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C-924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES. [rswf 33.93, 33.94, AND 33.95]

DEFLECTION TEST FOR ALL FLEXIBLE PIPE:

TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM.

1. NO PIPE SHALL EXCEED A DEFLECTION OF 5%
2. A RIGID BALL OR MANDREL FOR THE DEFLECTION TEST WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX TO WHICH THE PIPE IS MANUFACTURED.
3. PERFORM THE TEST WITHOUT PULLING DEVICES. [RSWF 33.85]

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

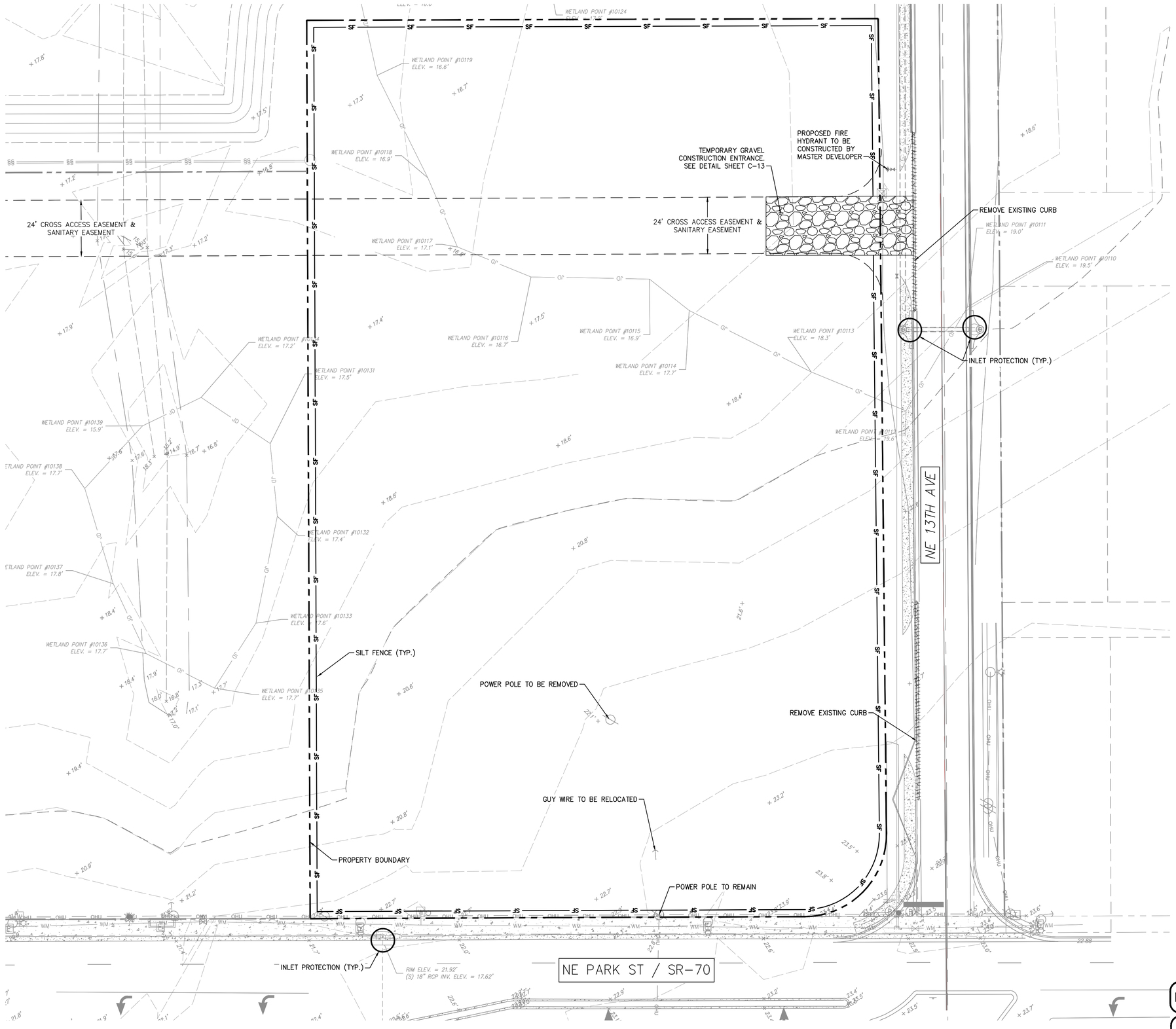
FOR
ENGINEER OF RECORD
SIGNATURE AND SEAL
REFER TO
C-02 - SIGNATURE SHEET

KHA PROJECT	045523036
DATE	NOV. 2023
SCALE	AS SHOWN
DESIGNED BY	JWC
DRAWN BY	RCM
CHECKED BY	JWC

UTILITY NOTES

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-04



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

DEMOLITION NOTES:

1. ALL DEMOLITION MATERIALS TO BE REMOVED FROM SITE AND PROPERLY DISPOSED OF AT AN APPROVED LANDFILL.
2. THE INTENT OF THE DEMOLITION PLAN IS TO DEPICT EXISTING FEATURES THAT ENCUMBER THE PROPOSED CONSTRUCTION AREA AND ARE SCHEDULED FOR REMOVAL. SOME INCIDENTAL ITEMS MAY HAVE BEEN INADVERTENTLY OMITTED FROM THE PLAN. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THIS DEMOLITION PLAN.
3. THIS DEMOLITION PLAN IS BASED ON AVAILABLE UTILITY INFORMATION AND MAY OR MAY NOT BE ALL INCLUSIVE FOR THIS SITE. ANY UTILITIES ENCOUNTERED DURING DEMOLITION THAT ARE NOT DEPICTED/ADDRESSED ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER, ARCHITECT, AND PROJECT ENGINEER IMMEDIATELY.
4. ALL FEATURES IDENTIFIED ON THIS PLAN WHICH ARE LISTED TO BE DEMOLISHED ARE TO BE REMOVED FROM THE SITE. AFTER DEMOLITION IS COMPLETE THE SITE SHALL BE DELIVERED IN A CONDITION SUITABLE FOR DEVELOPMENT.
5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.
6. CONTRACTOR TO USE CARE IN HANDLING DEBRIS FROM SITE TO ENSURE THE SAFETY OF THE PUBLIC. HAUL ROUTE TO BE CLOSELY MONITORED FOR DEBRIS OR MATERIALS TRACKED ONTO ADJOINING ROADWAYS, SIDEWALKS, ETC. ROADWAYS AND WALKWAYS TO BE CLEARED DAILY OR AS NECESSARY TO MAINTAIN PUBLIC SAFETY.
7. DEWATERING SHOULD BE ANTICIPATED AND ALL COSTS, PERMITS AND EQUIPMENT FOR DEWATERING SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
8. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO REMAINING IMPROVEMENTS.
9. SEE SITE AND IMPROVEMENTS PLANS FOR LIMITS AND GRADING OF RESURFACED DRIVEWAYS AND ENTRANCES.
10. SEE LANDSCAPE PLAN FOR TREE REMOVAL/ RELOCATION AND TREE PROTECTION.
11. SEE EROSION CONTROL PLAN FOR REMAINING INLET PROTECTION AND EROSION PREVENTION.
12. DEMOLITION CONTRACTOR SHALL CONSTRUCT EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AS NECESSARY DURING DEMOLITION OPERATIONS OR AS DIRECTED BY THE ENGINEER, CITY OR COUNTY INSPECTOR TO PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SOIL EROSION AND SEDIMENTATION.
13. VARIATIONS TO CONDITIONS OR DISCREPANCIES IN ACTUAL FIELD CONDITIONS AS THEY APPLY TO THE DEMOLITION OR SITE DEVELOPMENT WORK MUST BE BROUGHT TO THE OWNER'S REPRESENTATIVE AND ENGINEER'S ATTENTION PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION.
14. CONTRACTOR SHALL LOCATE, IDENTIFY, PROPERLY TERMINATE, AND MARK ALL EXISTING UTILITIES WITHIN THE DEMOLITION AREA THAT ARE TO REMAIN AND PROTECT THEM FROM DAMAGE.
15. THE DEMOLITION CONTRACTOR MUST PROTECT ALL LANDSCAPING AND OTHER FEATURES DESIGNATED TO REMAIN AND REPLACE SUCH ITEMS IF DISTURBED DURING DEMOLITION.
16. CONTRACTOR SHALL CONDUCT ALL DEMOLITION OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC AND/OR PRIVATE ACCESSES AND FACILITIES. ALL AREAS OUTSIDE OF THE PAVEMENT REMOVAL LINE MUST BE MAINTAINED FOR PUBLIC ACCESS.
17. THE DEMOLITION CONTRACTOR MUST PROTECT BENCH MARKS PROPERTY CORNERS, AND ALL OTHER SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT. IF A MARKER MUST BE REMOVED, IT SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AND REPLACED.
18. THE DEMOLITION CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES AS REQUIRED IN ACCORDANCE WITH THE U.S. DEPT. OF TRANSPORTATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND GOVERNING MUNICIPALITY REQUIREMENTS.
19. DEPRESSIONS AND VOID AREAS CAUSED BY DEMOLITION WORK ARE TO BE FILLED TO SUBGRADE AND PROPERLY COMPACTED TO THE EXISTING ELEVATION TO AVOID WATER PONDING.
20. THE DEMOLITION CONTRACTOR SHALL ACQUIRE ALL PERMITS AND PAY ALL ASSOCIATED FEES PERTAINING TO THE DEMOLITION AND DISPOSAL REQUIREMENTS. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ADHERENCE TO ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING THIS WORK. IF THERE ARE NO LOCAL, STATE OR FEDERAL REQUIREMENTS THE DEMOLITION CONTRACTOR SHALL ACQUIRE AN ENGINEERS CERTIFICATION THAT THE WORK HAS BEEN DONE IN ACCORDANCE WITH THE PLANS.
21. THE DEMOLITION CONTRACTOR SHALL COORDINATE THE DEMOLITION TO LEAVE ACCESS AND UTILITY SERVICE TO THE NEIGHBORING BUILDINGS AT ALL TIMES.
22. THE DEMOLITION CONTRACTOR SHALL FIELD LOCATE, MARK, AND PROTECT ALL EXISTING UTILITIES.
23. WATER SERVICE, SEWER SERVICE, POWER SERVICE AND ALL DRY UTILITIES SHALL BE MAINTAINED "IN-SERVICE" DURING THE HOURS OF BUSINESS FOR ALL EXISTING TENANTS.

LEGEND:

- PROPERTY BOUNDARY
- CURB REMOVAL
- SF — SILT FENCE
- TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
- ASPHALT PAVEMENT/ CONCRETE/ CURB REMOVAL
- INLET PROTECTION

ALL ELEMENTS THAT ARE PLACES OF PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES ON THE SITE (INCLUDING ACCESSIBLE ROUTES AND PARKING) SHALL MEET THE REQUIREMENTS OF "FLORIDA AMERICANS WITH DISABILITIES ACCESSIBILITY IMPLEMENTATION ACT", THE CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN, FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION AND THE FAIR HOUSING ACT, WHEN APPLICABLE.

PROJECT DATUM: NAVD 88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

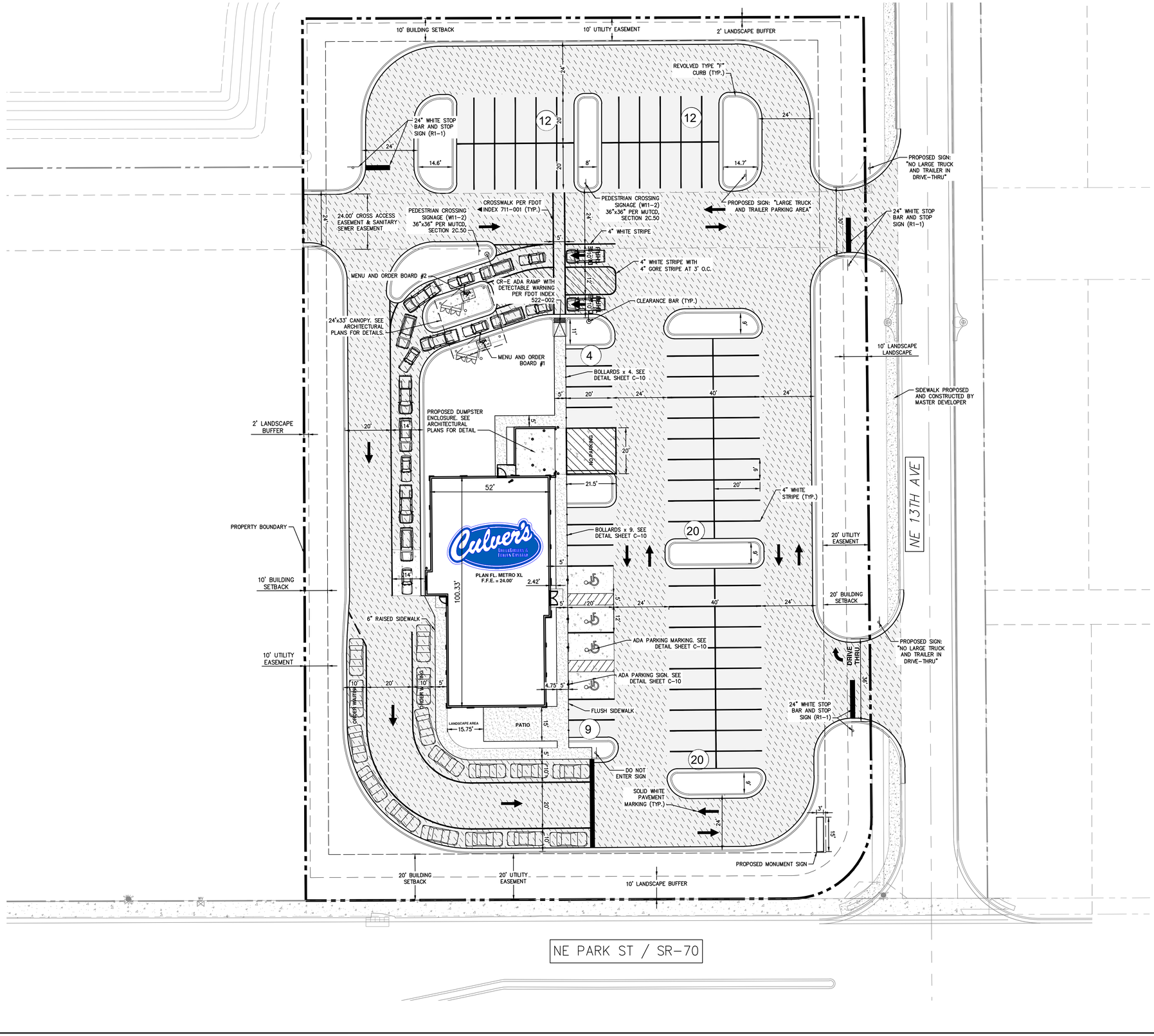
FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY ROM
CHECKED BY JWC

EXISTING CONDITIONS AND DEMOLITION PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-05



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND:

- PROPERTY BOUNDARY
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER
- CROSS-ACCESS EASEMENT
- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- BOLLARD

SITE DATA SUMMARY

SITE DATA INFO FOR RE# 2-15-37-35-0A00-00010-0000 & 3-15-37-35-0A00-00010-0010

ZONING: COMMERCIAL

LOT SIZE (SF)	93,872
LOT SIZE (AC)	2.15
BUILDING (SF)	4,827
BUILDING GFA (SF)	4,827
FAR	5.14%
LANDSCAPE AREA (SF)	28,341
PAVING (SF)	60,827
ISR-	69.9%
BUILDING SET BACKS:	
SR-70-	20 FEET
NORTH-	0 FEET
WEST-	0 FEET
REAR-	10 FEET
LANDSCAPE BUFFERS:	
SR-70-	10 FEET
NORTH-	2 FEET
WEST-	2 FEET
NE 13TH AVE-	10 FEET

REQUIRED PARKING CODE:
SECTION 3.90-512 PER CITY OF OKECHOBEE LAND DEVELOPMENT REGULATIONS
REQUIRED PARKING FOR RESTAURANT/FAST FOOD:
- 1 SPACE PER 75 SF OF CUSTOMER AREA

PARKING CALCULATIONS - REQUIRED

RESTAURANT/FAST FOOD:		1 SPACE PER 75 SF OF CUSTOMER AREA
BUILDING FOOTPRINT:		4,827 SF
		4,827 / 75 = 65 PARKING SPACES REQ.
STANDARD PARKING STALLS	=	73 SPACES
HANDICAP PARKING PROVIDED	=	4 SPACES
TOTAL	=	77 SPACES

GENERAL NOTES:

1. ALL ELEMENTS THAT ARE PLACES OF PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES ON THE SITE (INCLUDING ACCESSIBLE ROUTES AND PARKING) SHALL MEET THE REQUIREMENTS OF "FLORIDA AMERICANS WITH DISABILITIES ACCESSIBILITY IMPLEMENTATION ACT", THE CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN, FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION AND THE FAIR HOUSING ACT, WHEN APPLICABLE.
2. ALL ASPHALT REMOVAL SHALL HAVE SAW-CUT EDGES.
3. ALL TRAFFIC CONTROL SIGNAGE, CONES AND PROTECTIVE BARRIERS SHALL BE PROVIDED BY AND INSTALLED BY THE CONTRACTOR.
4. NO EXISTING WELLS LOCATED ON-SITE

PROJECT DATUM: NAVD 88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

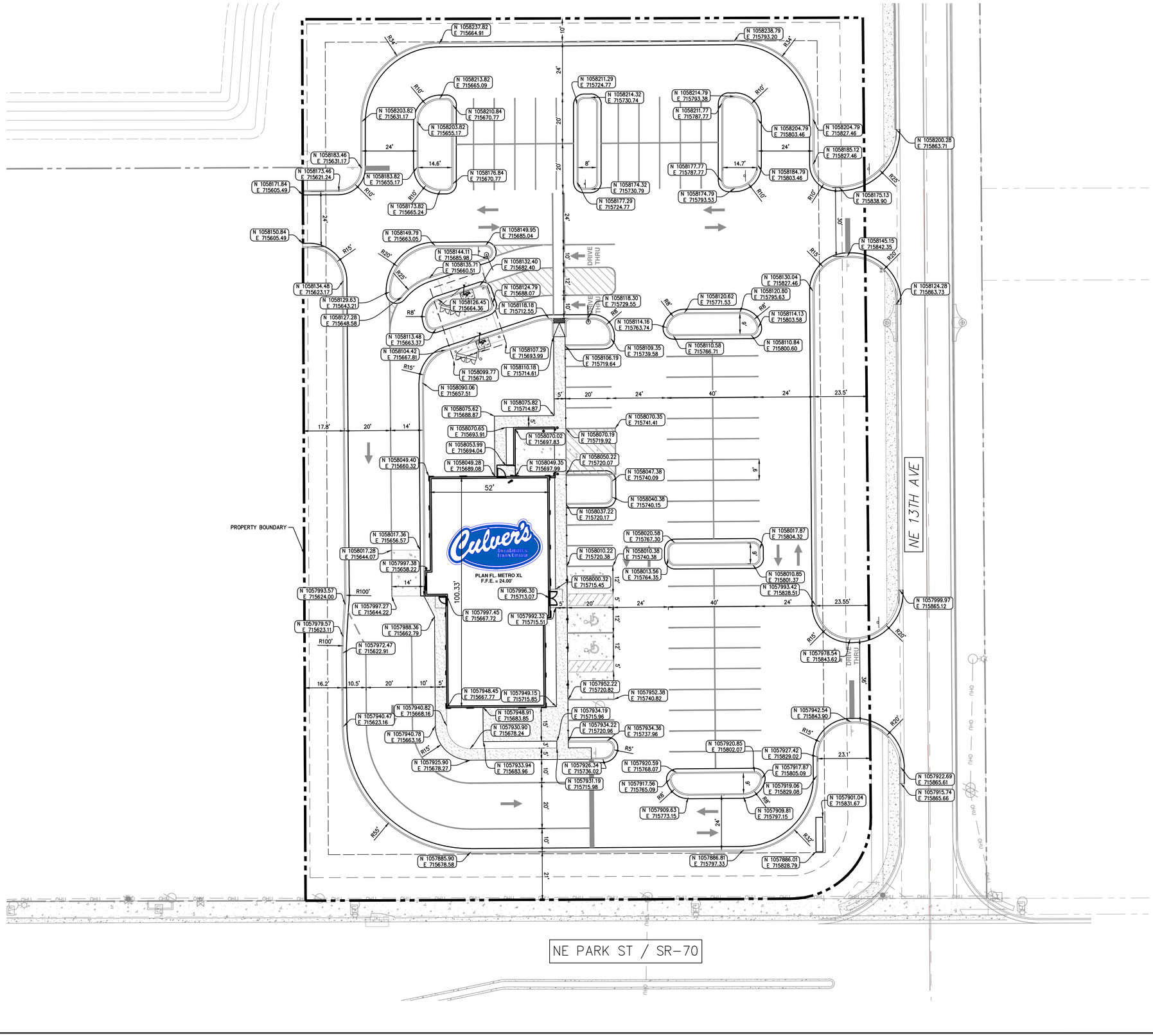
FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY RCM
CHECKED BY JWC

OVERALL SITE PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-06



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND:

- PROPERTY BOUNDARY
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK

NOTES:

1. THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.
2. ALL ELEMENTS THAT ARE PLACES OF PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES ON THE SITE (INCLUDING ACCESSIBLE ROUTES AND PARKING) SHALL MEET THE REQUIREMENTS OF "FLORIDA AMERICANS WITH DISABILITIES ACCESSIBILITY IMPLEMENTATION ACT", THE CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN, FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION AND THE FAIR HOUSING ACT, WHEN APPLICABLE.
3. ALL DIMENSION ARE TO FACE OF CURB. UNLESS NOTED OTHERWISE.
4. ALL ASPHALT REMOVAL SHALL HAVE SAW-CUT EDGES.
5. CONTRACTOR TO PROVIDE MAINTENANCE OF TRAFFIC TO THE ADJACENT PARKING SPACES AND DRIVE AISLES.
6. ALL TRAFFIC CONTROL SIGNAGE, CONES AND PROTECTIVE BARRIERS SHALL BE PROVIDED BY AND INSTALLED BY THE CONTRACTOR.
7. ALL RADII ARE 3' UNLESS OTHERWISE NOTED.

PROJECT DATUM: NAVD 88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

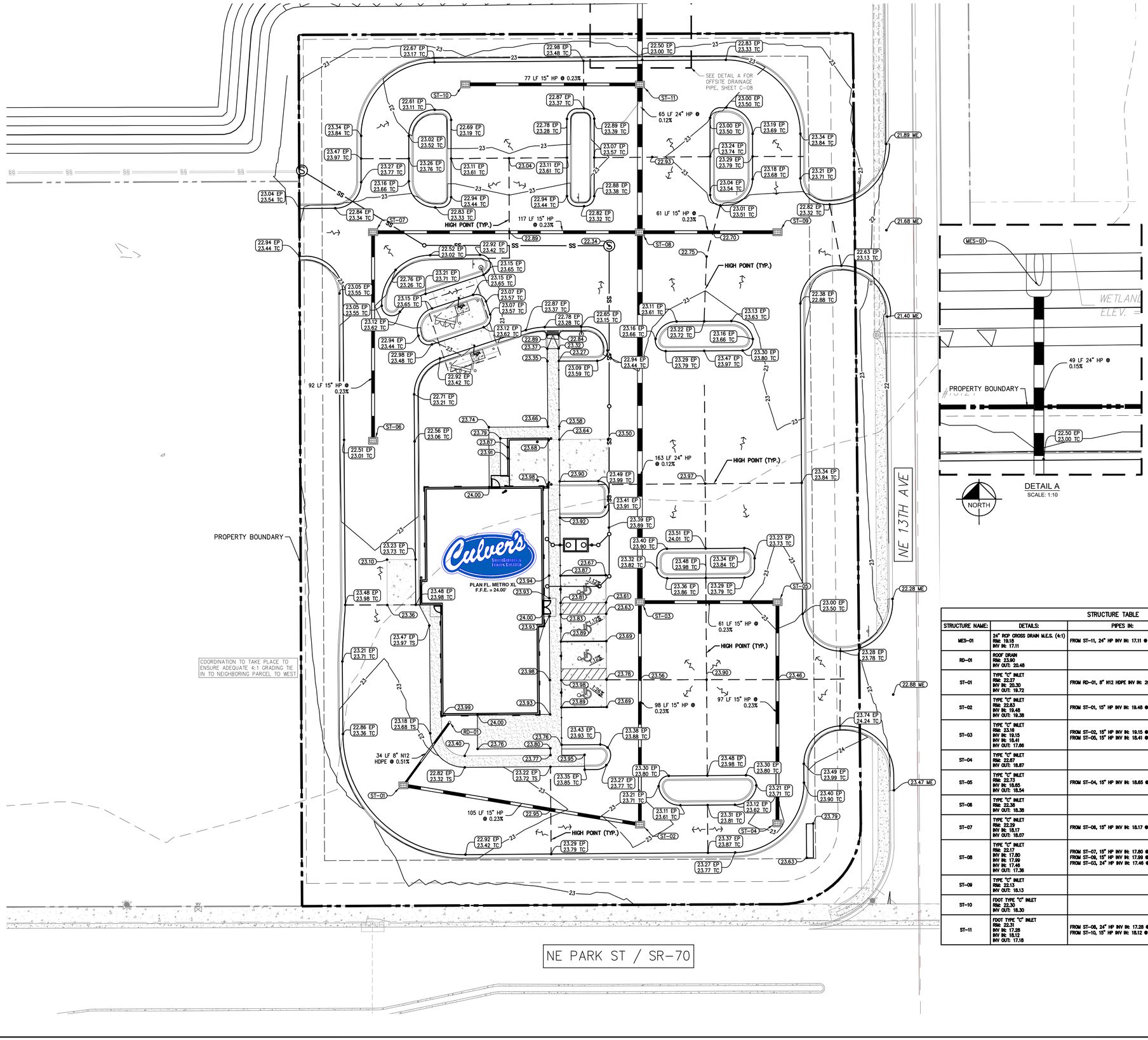
FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY RCM
CHECKED BY JWC

PAVING AND GEOMETRY PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-07



LEGEND:

- PROPERTY BOUNDARY
- HIGH POINT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- PROPOSED DRAINAGE MANHOLE
- PROPOSED DRAINAGE INLET
- 28.70 — PROPOSED SPOT GRADE
- 28.0 — PROPOSED CONTOUR LINE
- FLOW DIRECTION

NOTES

1. BOUNDARY AND TOPO PROVIDED BY BSM & ASSOCIATES, INC DATED 11/11/2022.
2. GEOTECH PROVIDED BY KSM ENGINEERING AND TESTING DATED 12/30/22.
3. ALL STORM, WATER, AND SEWER UTILITIES ARE TO BE TESTED BY THE CONTRACTOR PRIOR TO FINAL INSPECTION. REFER TO SHEET C-04 FOR TESTING NOTES.
4. PER FEMA FLOOD MAP AND TOPOGRAPHIC SURVEY CONDUCTED BY BSM & ASSOCIATES, INC DATED 11/11/2022, ENTIRETY OF OUTPARCEL IS LOCATED IN FLOOD ZONE X.

NOTES

1. ALL ASPHALT REMOVAL SHALL HAVE SAW-CUT EDGES. CONTRACTOR TO PROVIDE MAINTENANCE OF TRAFFIC TO THE ADJACENT PARKING SPACES AND DRIVE AISLES. ALL TRAFFIC CONTROL SIGNAGE, CONES AND PROTECTIVE BARRIERS SHALL BE PROVIDED BY AND INSTALLED BY THE CONTRACTOR.
2. CONTRACTOR MAY SUBSTITUTE "HP STORM" PIPE FOR RCP.
3. ALL EXISTING STORM PIPING TO BE FLUSHED PRIOR TO CONNECTING THE PROPOSED STORM PIPING TO THE SYSTEM.
4. TIE-IN GRADING BASED UPON MASTER DEVELOPER FINAL PROPOSED GRADES

STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
MES-01	24" RCP CROSS DRAIN M.E.S. (4:1) RIM: 19.18 INV IN: 17.11	FROM ST-11, 24" HP INV IN: 17.11 @ 0.15%	
RD-01	ROOF DRAIN RIM: 23.90 INV OUT: 20.48		TO ST-01, 8" N12 HDPE INV OUT: 20.48 @ 0.51%
ST-01	TYPE "C" INLET RIM: 22.27 INV IN: 20.30 INV OUT: 19.72	FROM RD-01, 8" N12 HDPE INV IN: 20.30 @ 0.51%	TO ST-02, 15" HP INV OUT: 19.72 @ 0.23%
ST-02	TYPE "C" INLET RIM: 22.63 INV IN: 19.48 INV OUT: 19.38	FROM ST-01, 15" HP INV IN: 19.48 @ 0.23%	TO ST-03, 15" HP INV OUT: 19.38 @ 0.23%
ST-03	TYPE "C" INLET RIM: 23.16 INV IN: 19.15 INV IN: 18.41 INV OUT: 17.66	FROM ST-02, 15" HP INV IN: 19.15 @ 0.23% FROM ST-05, 15" HP INV IN: 18.41 @ 0.23%	TO ST-08, 24" HP INV OUT: 17.66 @ 0.12%
ST-04	TYPE "C" INLET RIM: 22.87 INV OUT: 18.87		TO ST-05, 15" HP INV OUT: 18.87 @ 0.23%
ST-05	TYPE "C" INLET RIM: 22.73 INV IN: 18.65 INV OUT: 18.54	FROM ST-04, 15" HP INV IN: 18.65 @ 0.23%	TO ST-03, 15" HP INV OUT: 18.54 @ 0.23%
ST-06	TYPE "C" INLET RIM: 22.36 INV OUT: 18.38		TO ST-07, 15" HP INV OUT: 18.38 @ 0.23%
ST-07	TYPE "C" INLET RIM: 22.29 INV IN: 18.17 INV OUT: 18.07	FROM ST-08, 15" HP INV IN: 18.17 @ 0.23%	TO ST-08, 15" HP INV OUT: 18.07 @ 0.23%
ST-08	TYPE "C" INLET RIM: 22.17 INV IN: 17.80 INV IN: 17.99 INV IN: 17.46 INV OUT: 17.36	FROM ST-07, 15" HP INV IN: 17.80 @ 0.23% FROM ST-09, 15" HP INV IN: 17.99 @ 0.23% FROM ST-03, 24" HP INV IN: 17.46 @ 0.12%	TO ST-11, 24" HP INV OUT: 17.36 @ 0.12%
ST-09	TYPE "C" INLET RIM: 22.13 INV OUT: 18.13		TO ST-08, 15" HP INV OUT: 18.13 @ 0.23%
ST-10	FDOT TYPE "C" INLET RIM: 22.30 INV OUT: 18.30		TO ST-11, 15" HP INV OUT: 18.30 @ 0.23%
ST-11	FDOT TYPE "C" INLET RIM: 22.31 INV IN: 17.28 INV IN: 18.12 INV OUT: 17.18	FROM ST-08, 24" HP INV IN: 17.28 @ 0.12% FROM ST-10, 15" HP INV IN: 18.12 @ 0.23%	TO MES-01, 24" HP INV OUT: 17.18 @ 0.15%

PROJECT DATUM: NAVD 88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

ALL ELEMENTS THAT ARE PLACES OF PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES ON THE SITE (INCLUDING ACCESSIBLE ROUTES AND PARKING) SHALL MEET THE REQUIREMENTS OF "FLORIDA AMERICANS WITH DISABILITIES ACCESSIBILITY IMPLEMENTATION ACT", THE CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN, FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION AND THE FAIR HOUSING ACT, WHEN APPLICABLE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

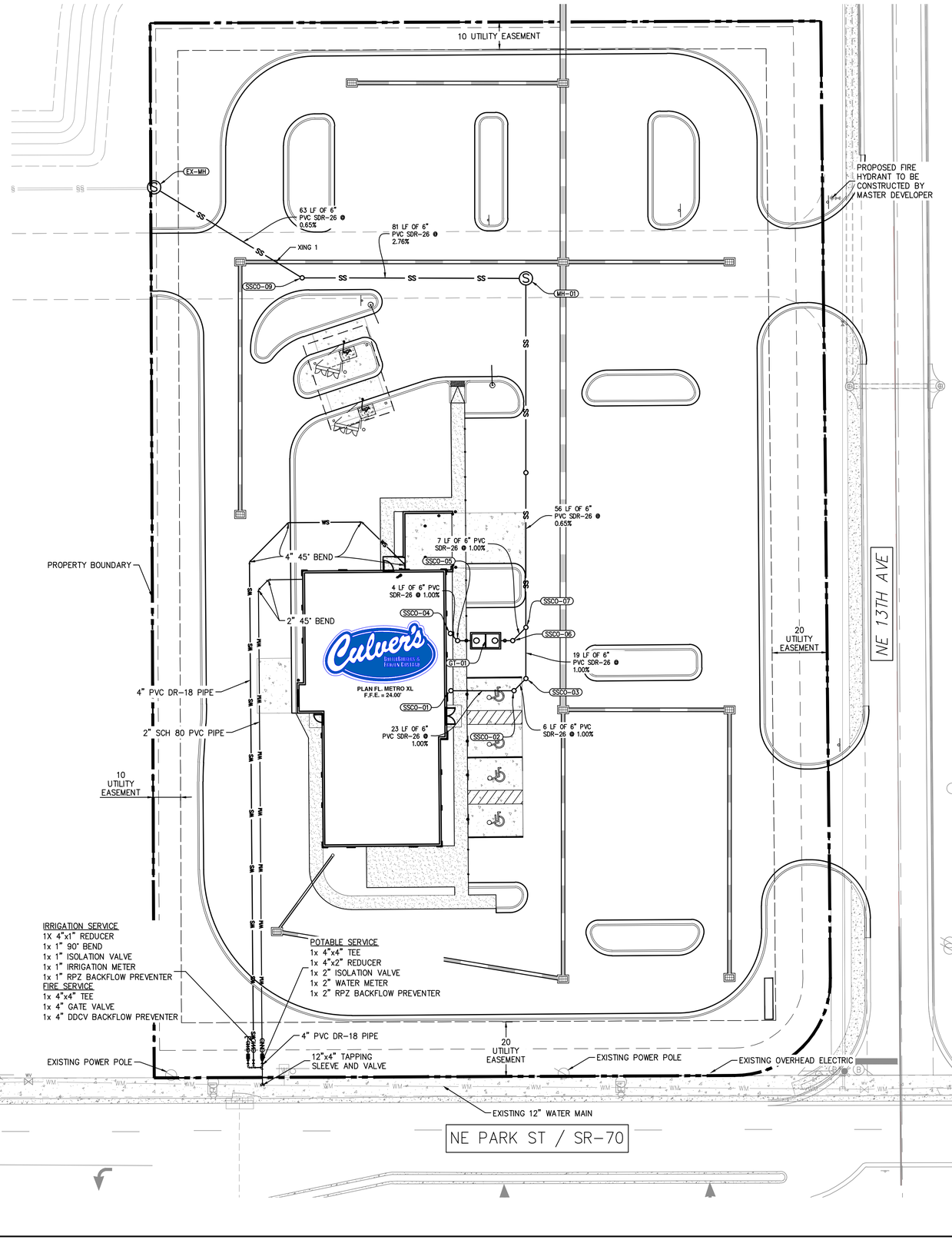
KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY RCM
CHECKED BY JWC

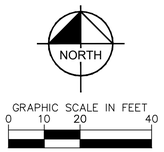
GRADING AND DRAINAGE PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-08

STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
EX-MH	EXISTING MANHOLE RIM: 23.42 INV IN: 16.01
GT-01	GREASE TRAP (1500 GAL.) RIM: 23.73 INV IN: 20.37 INV OUT: 19.87
MH-01	TYPE "A" MANHOLE RIM: 22.34 INV IN: 18.84 INV OUT: 18.74
SSCO-01	CLEANOUT RIM: 23.96 INV OUT: 20.18
SSCO-02	CLEANOUT RIM: 23.67 INV IN: 19.95 INV OUT: 19.95
SSCO-03	CLEANOUT RIM: 23.61 INV IN: 19.89 INV OUT: 19.89
SSCO-04	CLEANOUT RIM: 23.97 INV OUT: 20.50
SSCO-05	CLEANOUT RIM: 23.94 INV IN: 20.46 INV OUT: 20.47
SSCO-06	CLEANOUT RIM: 23.55 INV IN: 19.77 INV OUT: 19.77
SSCO-07	CLEANOUT RIM: 23.41 INV IN: 19.70 INV IN: 19.70 INV OUT: 19.70
SSCO-08	CLEANOUT RIM: 23.31 INV IN: 19.33 INV OUT: 19.33
SSCO-09	CLEANOUT RIM: 22.50 INV IN: 16.49 INV OUT: 16.42





LEGEND:

- PROPERTY BOUNDARY
- BUILDING FOOTPRINT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- WM — PROPOSED WATER SERVICE
- WS — PROPOSED FIRE SERVICE
- SS — PROPOSED SANITARY SERVICE
- WM — EXISTING WATER MAIN
- OHU — EXISTING OVERHEAD ELECTRIC

NOTES:

1. CONTRACTOR RESPONSIBLE FOR ADJUSTING THE TOP OF ALL UTILITY STRUCTURES TO MEET FINAL GRADE, AND COORDINATE WITH THE CITY OF OKEECHOBEE PRIOR TO CONSTRUCTION.
2. ALL STORM, WATER, AND SEWER UTILITIES ARE TO BE TESTED BY THE CONTRACTOR PRIOR TO FINAL INSPECTION. REFER TO SHEET C-04 FOR TESTING NOTES.
3. CONTRACTOR TO FIELD VERIFY SIZE AND LOCATION OF EXISTING UTILITIES. TAPS TO BE PERFORMED BY UTILITY CONTRACTOR MUST BE SCHEDULED IN ADVANCE WITH THE CITY OF OKEECHOBEE.
4. ALL SERVICES TO BE CONSTRUCTED PER THE CITY OF OKEECHOBEE'S STANDARDS AND DETAILS.
5. CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS, AND INVERTS OF EXISTING UTILITIES BEFORE CONSTRUCTION.
6. CONTRACTOR SHALL NOT INTERRUPT EXISTING UTILITY SERVICE DURING CONSTRUCTION.
7. UPON PROJECT COMMENCEMENT CONTRACTOR TO CONFIRM INVERT AND SIZE OF EXISTING SANITARY STUBOUT CONNECTION LOCATED ON WEST SIDE OF PROPERTY. ANY DISCREPANCIES FOUND WITH THE CONNECTION SHOWN TO BE COMMUNICATED TO OWNER AND ENGINEER WITHIN 48 HOURS OF COMMENCEMENT.
8. ESTIMATED FLOW DEMAND BASED UPON FLORIDA ADMINISTRATIVE CODE CHAPTER 64E-6.

   TABLE 1: RESTAURANT USING SINGLE SERVICE ARTICLES ONLY AND OPERATING 16 HOURS OR LESS PER DAY PER SEAT – 20 GPD/SEAT

   20 GPD/SEAT X 99 INDOOR SEATS = 1,980 GPD
   20 GPD/SEAT X 20 OUTDOOR SEATS = + 400 GPD

   TOTAL FLOW DEMAND = 2380 GPD = 1.65 GPM

UTILITY CROSSINGS:

CROSSING #1:
BOT PROPOSED 15" STORM = 17.86
TOP PROPOSED 6" SS = 16.82
12" MIN. SEPARATION MET

PROJECT DATUM: NAVD 88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

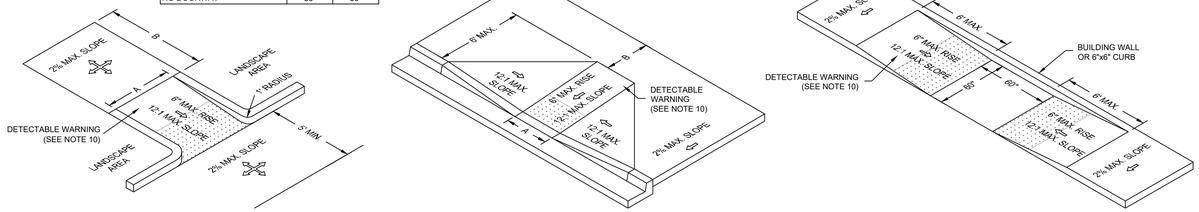
KHA PROJECT	045523036
DATE	NOV. 2023
SCALE	AS SHOWN
DESIGNED BY	JWC
DRAWN BY	RCM
CHECKED BY	JWC

UTILITY PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-09

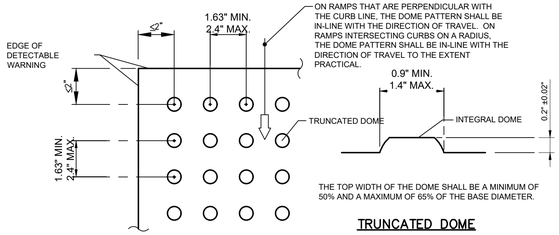
RAMP LOCATION	MINIMUM DIMENSION A	MINIMUM DIMENSION B
AT OUTSWING DOOR	44"	60"
AT INSWING/SLIDING DOOR	44"	48"
NO DOORWAY	36"	36"



NOTES:

1. ALL CURB CUT ACCESSIBLE RAMPS AND DETECTABLE WARNING SURFACES SHALL BE INSTALLED BY THE SITE CONTRACTOR.
2. THE STANDARD COLOR FOR THE DETECTABLE WARNING SURFACE SHALL BE YELLOW. ANY TYPE OF ADHESIVE OR GLUE DOWN MATS; STAMPED CONCRETE OR ANY VARIATION OTHER THAN WHAT IS SPECIFIED ABOVE WILL NOT BE ACCEPTED. COJ WILL CONSIDER ALTERNATIVES THAT ARE EQUAL TO THE PRODUCTS SPECIFIED ABOVE. THE CHIEF ENGINEER FOR DEVELOPMENT SERVICES WILL HAVE THE SOLE RESPONSIBILITY FOR DETERMINING THE PRODUCT ACCEPTABILITY.
3. ALL DETECTABLE WARNING SURFACES FOR SIDEWALKS AT CURB CUT HANDICAP RAMP SHALL BE AN APPROVED YELLOW COLORED COMPOSITE MATERIAL ANCHORED IN THE CONCRETE SIDEWALK RAMP. ANCHORED COMPOSITE WARNING AREA INSERTS ARE TO BE COLORED "SAFETY YELLOW", ARE TO BE SET INTO THE CONCRETE AND ARE TO BE FLUSH WITH CONCRETE SURFACE ALONG ALL FOUR SIDES. DESIGN DIMENSIONS OF DETECTABLE WARNING AREA SHALL CONFORM TO FDOT STANDARD PLANS INDEX 522-002.

ACCESSIBLE RAMPS
N.T.S



TRUNCATED DOME

BASE-TO-BASE SPACING SHALL BE 0.65" MINIMUM BETWEEN DOMES.

PLAN VIEW

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

ACCEPTABLE PRODUCTS:

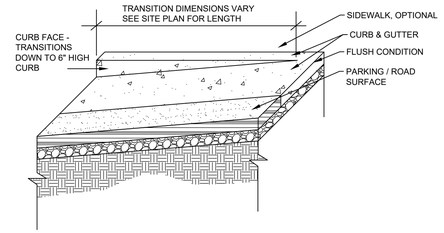
CAST IN PLACE COMPOSITE TACTILE

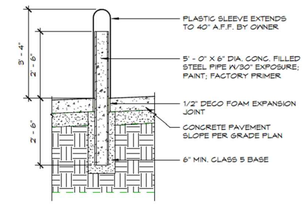
ADA SOLUTIONS, INC.
6789 PHILLIPS INDUSTRIAL BLVD.
JACKSONVILLE, FL 32256
PHONE: 904-268-7511
TOLL FREE: 800-729-3849
FAX: 904-268-3133

ARMORCAST PRODUCTS COMPANY
13230 SATICOY STREET
NORTH HOLLYWOOD, CA 91605
PHONE: 818-982-3600
FAX: 818-982-7742

DETECTABLE WARNING SYSTEMS
8081 PHILIPS HIGHWAY #22
JACKSONVILLE, FL 32256
PHONE: 866-999-7452

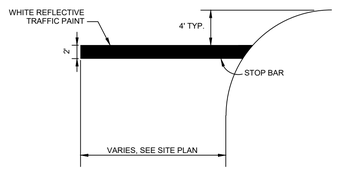
DETECTABLE WARNING DETAIL
NOT TO SCALE



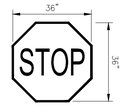


6" STORE BOLLARD DETAIL
1/2" = 1'-0"

NOTE:
- EACH BOLLARD SHALL BE PLACED AT THE CENTER OF PARKING STALL WHILE 6" BACK FROM THE FACE OF CURB/SIDEWALK



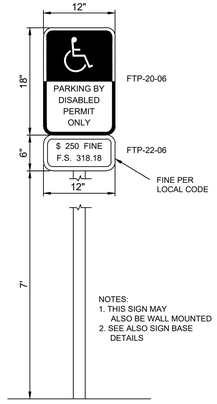
STOP BAR DETAIL
N.T.S.



R1-1

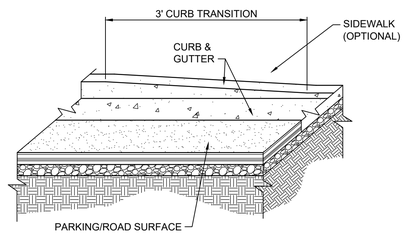
WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

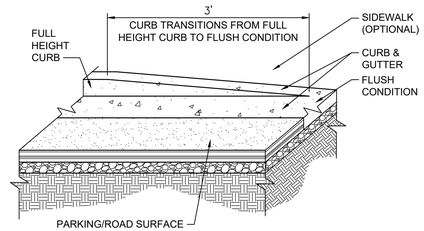
STOP SIGN
N.T.S.



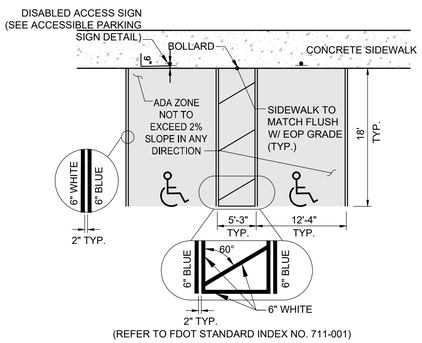
THESE SIGNS TYPICAL AT EACH ACCESSIBLE PARKING SPACE

ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE



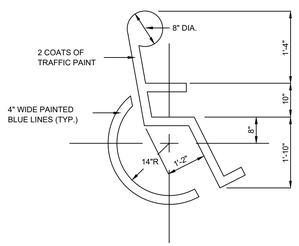


CURB TRANSITION DETAILS
NOT TO SCALE



(REFER TO FDOT STANDARD INDEX NO. 711-001)

ADA PARKING DETAIL
NOT TO SCALE



HANDICAPPED PARKING SYMBOL DETAIL
NOT TO SCALE

ACCESSIBILITY NOTES:

1. ALL ACCESSIBLE COMPONENTS CONSTRUCTED AS PART OF THESE PLANS SHALL COMPLY WITH CHAPTER 11 OF THE FLORIDA BUILDING CODE.
2. ACCESSIBLE ROUTE TO ACCESSIBLE SPACES, BUILDING ENTRANCES, AND PUBLIC STREETS SHALL NOT EXCEED 4.9% RUNNING SLOPE AND 1.9% CROSS SLOPE.
3. CHANGE IN ELEVATION WITHIN THE ACCESSIBLE ROUTE IS NOT TO EXCEED ½" WITHOUT A CURB RAMP.
4. UNLESS OTHERWISE SHOWN ON THE PLANS, THE MINIMUM CLEAR ROUTE SHALL BE 36" WIDE WITH A 60"x60" PASSING SPACE EVERY 200 FEET.
5. ACCESSIBLE ROUTES THROUGH PLANTERS SHALL BE LEVEL WITH THE SURROUNDING PAVEMENT OR PROVIDE CURB RAMPS AT EACH END WITH A MINIMUM 48" LEVEL LANDING IN BETWEEN.
6. THE ACCESSIBLE ROUTE IN FRONT OF PULL-IN PARKING SHALL BE A MINIMUM OF 44" WIDE AND NOT REDUCED BY VEHICLE OVERHANGS, CURBING, SIGN POSTS, OR OTHER OBSTRUCTIONS.
7. ANY WALK THAT CROSSES OR ADJOINS A VEHICULAR WAY NOT SEPARATED BY CURBS, RAILINGS, OR OTHER ELEMENTS SHALL BE DEFINED BY A CONTINUOUS 36" WIDE DETECTABLE WARNING.
8. SPECIAL RAMP RULES APPLY FOR ANY RISE GREATER THAN 6" INCLUDING BUT NOT LIMITED TO RESTRICTION ON SLOPE, TOTAL RISE BETWEEN LANDINGS, AND USE OF HANDRAILS, PER F.B.C 11-4.8.
9. PUBLIC SIDEWALK CURB RAMPS CONSTRUCTED WITHIN A PUBLIC RIGHT-OF-WAY, IN ABSENCE OF LOCAL ROADWAY GUIDELINES, SHALL MEET THE REQUIREMENTS OF F.D.O.T INDEX 304.
10. PLACE DETECTABLE WARNINGS ACROSS THE FULL WIDTH OF THE RAMP OR LANDING, TO A MINIMUM DEPTH OF 2 FEET MEASURED PERPENDICULAR TO THE CURB LINE AND NO GREATER THAN 5 FEET FROM THE BACK OF THE CURB OF EDGE OF PAVEMENT.
11. ALL DETECTABLE WARNING SURFACES FOR SIDEWALK AT CURB CUT HANDICAP RAMPS UNDER THE JURISDICTION OF COJ SHALL BE AN APPROVED YELLOW COLORED COMPOSITE MATERIAL ANCHORED IN THE CONCRETE SIDEWALK RAMP. ANCHORED COMPOSITE WARNING AREA INSERTS ARE TO BE COLORED "SAFETY YELLOW", ARE TO BE SET INTO THE CONCRETE AND ARE TO BE FLUSH WITH CONCRETE SURFACE ALONG ALL FOUR SIDES. DESIGN DIMENSIONS OF DETECTABLE WARNING AREA SHALL CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD PLAN INDEX 522-002, AND 28 CODE OF FEDERAL REGULATIONS (CFR) PART 36, APPENDIX A LATEST REVISIONS, AS WELL AS APPLICABLE COJ REQUIREMENTS.

No.	REVISIONS	DATE	BY

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

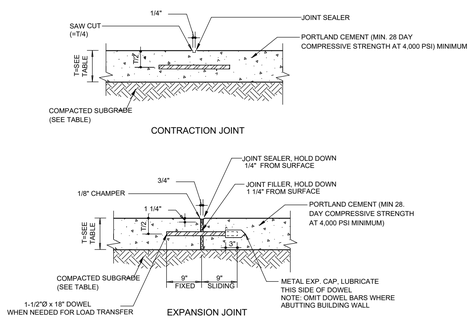
FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY RCM
CHECKED BY JWC

SITE DETAILS

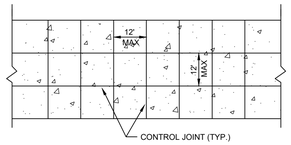
CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-10



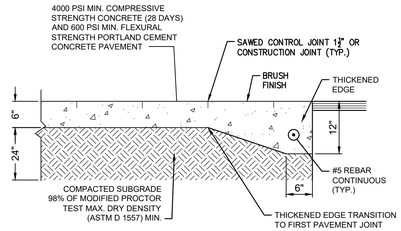
FOR CONCRETE PAVING LOCATED IN DUMPSTER ENCLOSURE, HANDICAP PARKING AND DRIVE-THROUGH:

CONCRETE PAVING SHALL BE TINTED AND SEALED. SOLOMONS COLOR, SGS INTEGRAL COLOR #920 BLACK ONYX 1 SHALL BE USED AT A RATE OF 25 LB BAG PER A YARD OF CONCRETE. THE CONCRETE SEALER SHALL BE WR MEADOWS SEALER CS-309-30. 1 POUND OF CONCRETE DYE SHALL BE MIXED WITH EVERY 5 GALLONS OF SEALER.



PLAN

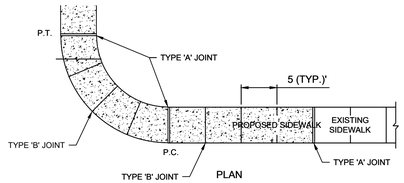
NOTES:
1. LONGITUDINAL AND TRANSVERSE JOINTS SHALL BE SAWED AS INDICATED.
2. THE JOINT SEAL MANUFACTURER'S SPECIFICATIONS SHALL BE COMPATIBLE WITH THE JOINT CONFIGURATION. PROVIDE TYPICAL DETAILS FOR CONSTRUCTION & EXP. JTS.
3. FOR ALL JOINTS THE BACKER ROD MATERIAL SHALL BE COMPATIBLE WITH THE COLD POURED SEALANT AND SLIGHTLY OVERSIZED TO PREVENT MOVEMENT DURING THE JOINT SEALANT OPERATION.
4. THE WIDTH OF ALL JOINTS SHALL BE CORRECTED FOR 68 DEGREE F.
5. EXPANSION JOINTS SHALL BE USED AT ALL LOCATIONS WHERE PAVEMENT ABUTS A PERMANENT STRUCTURE.
6. DOWELS AND TIE BARS FOR CONSTRUCTION JOINTS SHALL BE CAST IN PLACE.



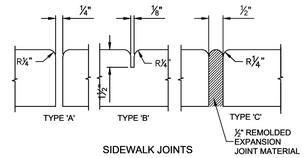
SECTION

SUBGRADE SOILS MUST BE MOISTENED PRIOR TO PLACEMENT OF CONCRETE.

CONCRETE PAVEMENT DETAIL
NOT TO SCALE

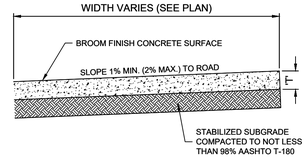


PLAN



SIDEWALK JOINTS

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
'A'	100' MAX. SPACING, P.C./P.T. OF CURVES, JUNCTION OF EXISTING AND NEW SIDEWALKS.
'B'	5'-0" CENTER TO CENTER
'C'	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES.



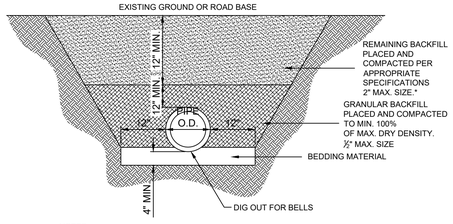
STANDARD CROSS SECTION

TABLE OF SIDEWALK THICKNESS	
LOCATION	'T'
PEDESTRIAN ONLY AREAS	4"
DRIVEWAYS AND OTHER TRAFFIC AREAS	6"

NOTE:
ALL SIDEWALK STREET CROSSINGS MUST MEET THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA) COMPLIANCE GUIDE. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.

CONCRETE SIDEWALK
NOT TO SCALE

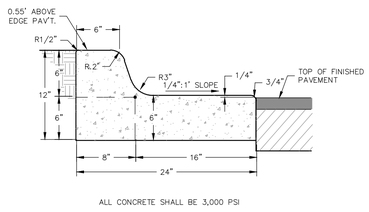
RAISED SIDEWALK AND PAVEMENT SECTION
N.T.S.



NOTES:
1. BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL (2" MAX SIZE). UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGER ROCK, MUCK AND DEBRIS.
5. ALL WORK SHALL CONFORM TO STATE OF FLORIDA TRENCH SAFETY ACT.

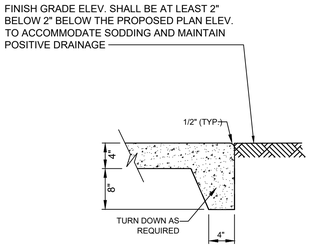
* COMPACT TO 98%OF AASHTO T-180 MAXIMUM DRY DENSITY UNDER EXISTING AND PROPOSED PAVEMENT AREAS. COMPACT TO 95% ON ALL OTHER AREAS UNLESS OTHERWISE NOTED..

TRENCH WITHOUT EXFILTRATION
NOT TO SCALE

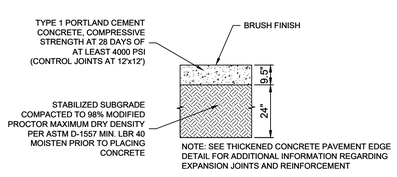


ALL CONCRETE SHALL BE 3,000 PSI

REVOLVED TYPE "F" CURB
N.T.S.



SIDEWALK AT GRADE DETAIL
NOT TO SCALE



CONCRETE PAVEMENT
N.T.S

STANDARD DUTY ASPHALT
N.T.S

HEAVY DUTY ASPHALT
N.T.S

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

No.	REVISIONS	DATE	BY

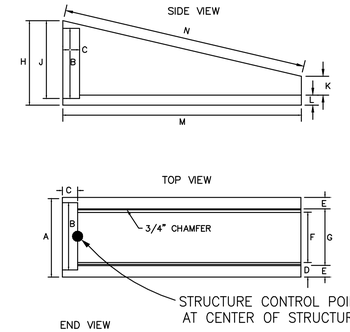
FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT	045523036		
DATE	NOV. 2023		
SCALE	AS SHOWN		
DESIGNED BY	JWC	DRAWN BY	RCM
CHECKED BY	JWC		

SITE DETAILS

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-11

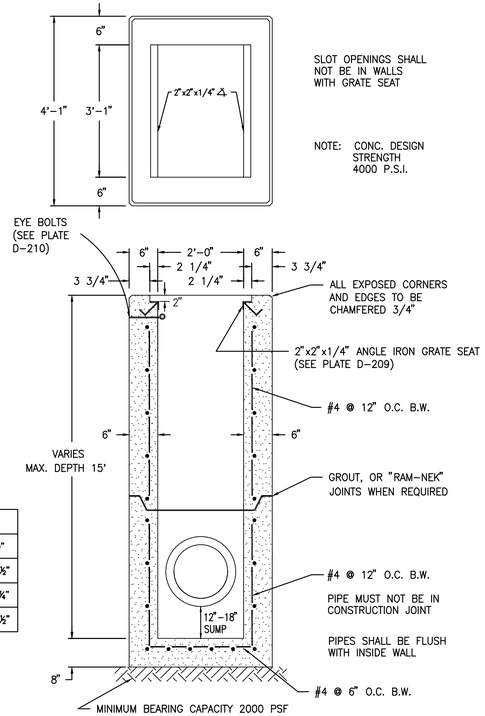


CONCRETE: 4,000 P.S.I.

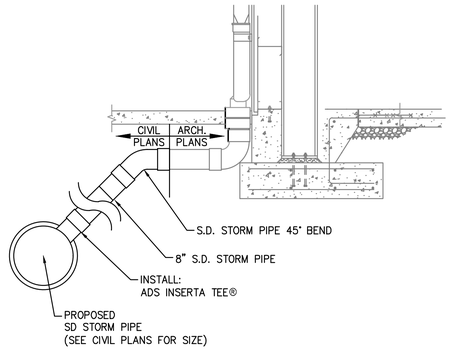
STEEL: #4 @ 12" E.W., WITH 1 #6 OVER PIPE OPENING. (2" CLEARANCE OVER STEEL, REINF. BARS, 1/2" TOLERANCE).

RCP/CMP	A	B	C	D	E	F	G	H	J	K	L	M	N
15" – 18"	2'–7"	2'–1"	6"	6"	6¾"	1'–6"	1'–7"	2'–10"	2'–4"	8"	6"	6'–10"	7'–0"
24"	2'–11"	2'–8"	6"	5"	4½"	1'–11"	2'–0"	3'–6"	3'–1"	7½"	5"	10'–0"	10'–3½"
30"	3'–6"	3'–2"	6"	6"	5½"	2'–5"	2'–6½"	3'–9"	3'–5"	7"	5"	11'–5"	11'–8¼"
36"	4'–1"	3'–10"	6"	7"	5½"	2'–9"	3'–0"	4'–6"	4'–0"	6"	6"	14'–0"	14'–4½"

STANDARD MITERED END SECTION DETAIL
NOT TO SCALE

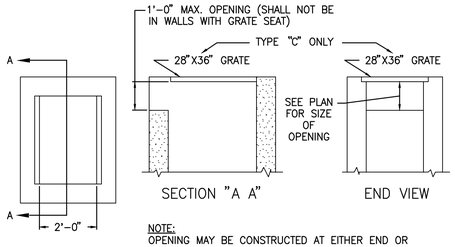


STORM SEWER TYPE "C" INLET
NOT TO SCALE



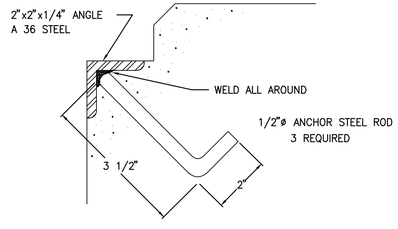
ROOF DRAIN CONNECTION DETAIL
N.T.S.

NOTE:
ALL TYPE "C" & "E" INLETS WITH SLOTS DEEPER THAN 6" SHALL BE CONSTRUCTED WITH A HORIZONTAL BAR(S) MAXIMUM SPACING 6", 1" DIAMETER GALV. PIPE EMBEDDED 2" IN PRE–CAST OR OTHER APPROVED METHOD.



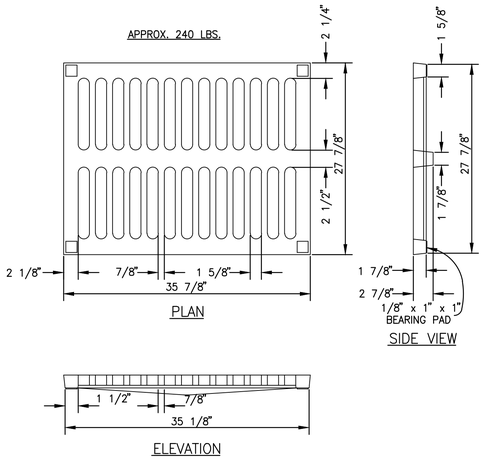
NOTE:
OPENING MAY BE CONSTRUCTED AT EITHER END OR BOTH ENDS AS SHOWN ON PLANS TYPE "C" OR "E"

DETAILS OF OPENINGS IN DITCH BOTTOM INLETS

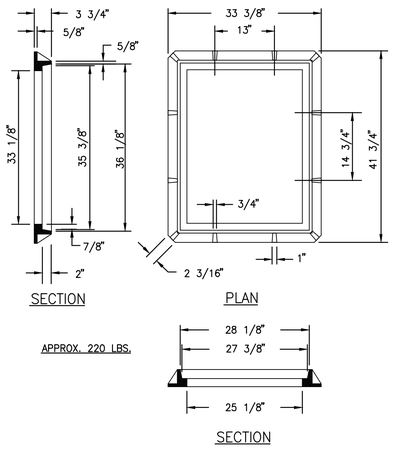


GRATE SEAT DETAIL

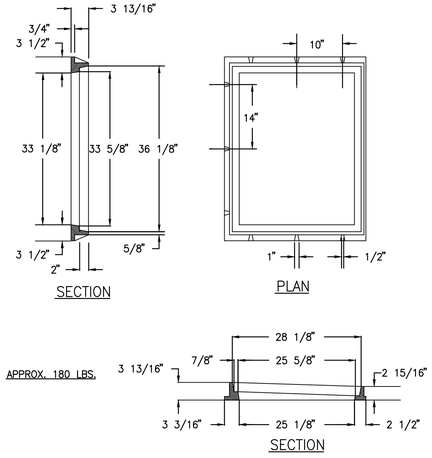
DETAIL FOR TYPE "C & E" INLET
NOT TO SCALE



STORM SEWER INLET GRATE
NOT TO SCALE



STORM SEWER CATCH BASIN FRAME
NOT TO SCALE



STORM SEWER CURB INLET FRAME
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY–HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904–828–3900
WWW.KIMLEY–HORN.COM REGISTRY NO. 35106

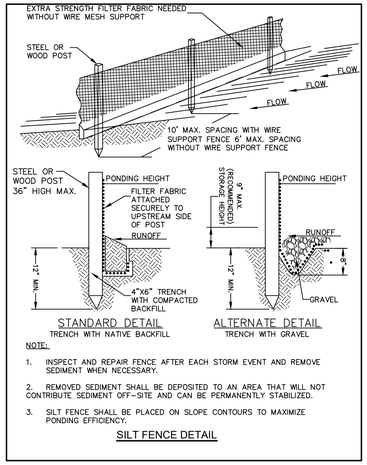
FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY RCM
CHECKED BY JWC

DRAINAGE DETAILS

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

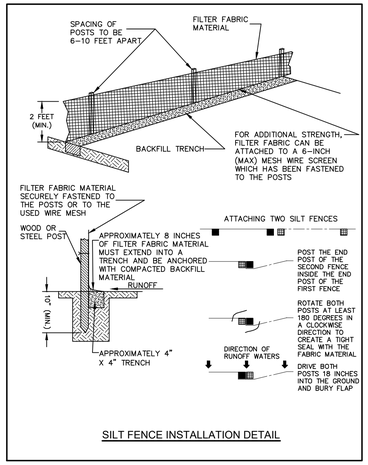
SHEET NUMBER
C-12



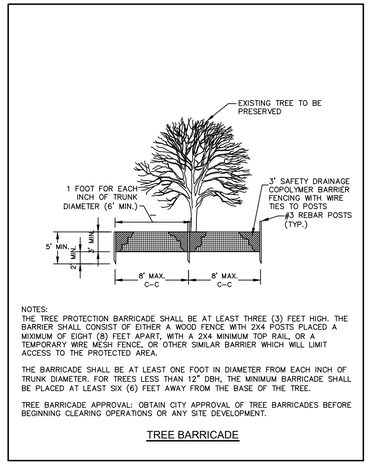
NOTE:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

SILT FENCE DETAIL



SILT FENCE INSTALLATION DETAIL

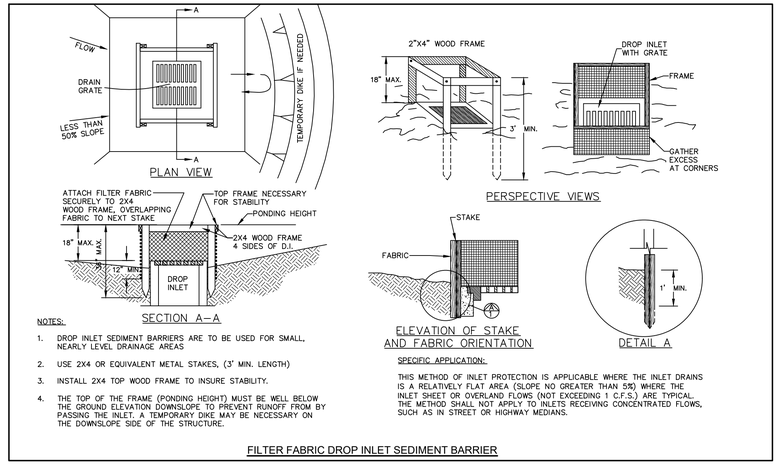


NOTES:
THE TREE PROTECTION BARRICADE SHALL BE AT LEAST THREE (3) FEET HIGH. THE BARRIER SHALL CONSIST OF EITHER A WOOD FENCE WITH 2X4 POSTS PLACED A MIXIMUM OF EIGHT (8) FEET APART, WITH A 2X4 MINIMUM TOP RAIL, OR A TEMPORARY WIRE MESH FENCE, OR OTHER SIMILAR BARRIER WHICH WILL LIMIT ACCESS TO THE PROTECTED AREA.

THE BARRICADE SHALL BE AT LEAST ONE FOOT IN DIAMETER FROM EACH INCH OF TRUNK DIAMETER. FOR TREES LESS THAN 12" DBH, THE MINIMUM BARRICADE SHALL BE PLACED AT LEAST SIX (6) FEET AWAY FROM THE BASE OF THE TREE.

TREE BARRICADE APPROVAL: OBTAIN CITY APPROVAL OF TREE BARRICADES BEFORE BEGINNING CLEARING OPERATIONS OR ANY SITE DEVELOPMENT.

TREE BARRICADE



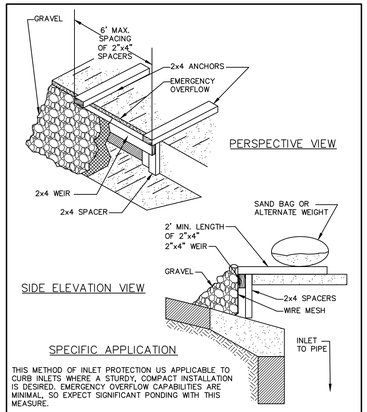
NOTES:

1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS
2. USE 2X4 OR EQUIVALENT METAL STAKES, (3' MIN. LENGTH)
3. INSTALL 2X4 TOP WOOD FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY PASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

SPECIFIC APPLICATION:

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS IS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

FILTER FABRIC DROP INLET SEDIMENT BARRIER

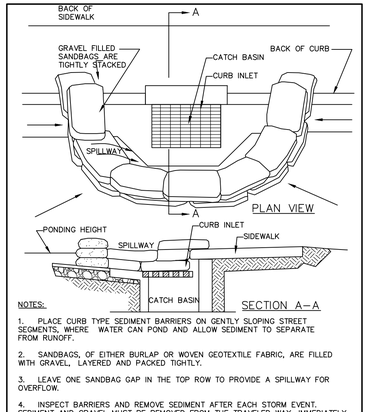


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION US APPLICABLE TO CURB INLETS WHERE A STURDY, COMPACT INSTALLATION IS DESIRED. EMERGENCY OVERFLOW CAPABILITIES ARE MINIMAL, SO EXPECT SIGNIFICANT PONDING WITH THIS MEASURE.

GRAVEL SHALL BE FDOT COARSE AGGREGATE #3, #357 OR #5

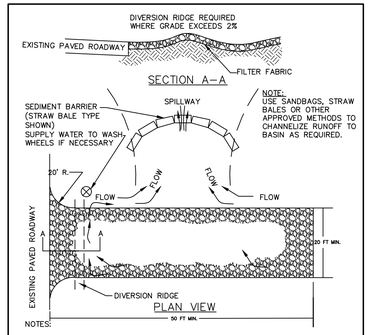
GRAVEL CURB INLET SEDIMENT FILTER WITH OVERFLOW METER



NOTES:

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS, OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

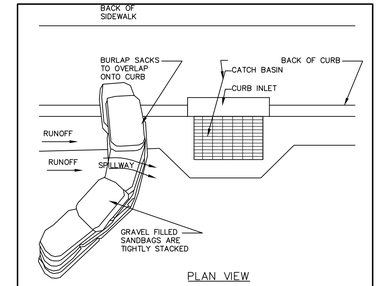
CURB INLET SEDIMENT BARRIER



NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

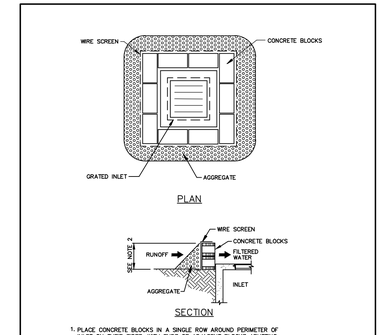
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



NOTES:

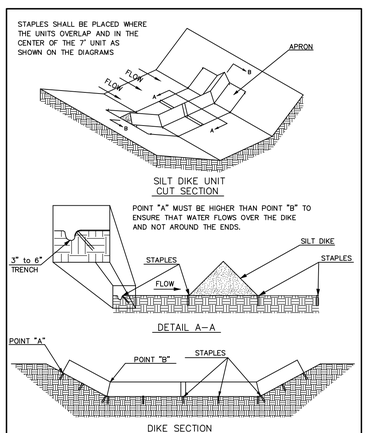
1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS OF EITHER BURLAP OR WOVEN 'GEOTEXTILE' FABRIC, ARE FILLED WITH GRAVEL LAYERED AND PACKED TIGHTLY.
3. LEAVE A ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

CURB AND GUTTER SEDIMENT BARRIER

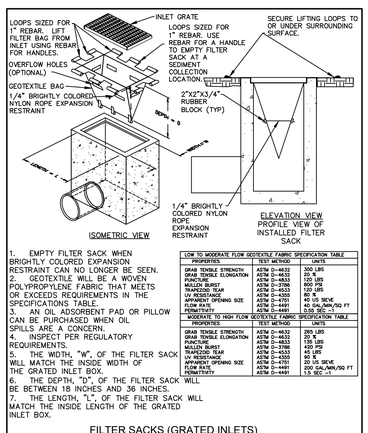


1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
2. HEIGHT OF BARRIER VARIES, USE STACKS OF 4-INCH, 8-INCH, OR 12" BLOCKS. MIN. HEIGHT OF BARRIER 12" AND MAX. HEIGHT OF 24"
3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
4. THE AGGREGATE SHALL BE ANY NON-ERODIBLE MATERIAL SUCH AS LOOSE ROCK, BROKEN CONCRETE THAT WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

BLOCK AND AGGREGATE INLET SEDIMENT DEVISE



SILT DIKE CHECK DAM



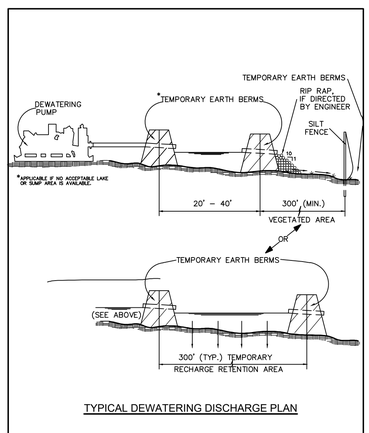
LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
MULLEN BURST	ASTM D-3786	600 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
MULLEN BURST	ASTM D-3786	430 LBS
TRAPEZOID TEAR	ASTM D-4533	450 PSI
UV RESISTANCE	ASTM D-4355	65 LBS
APPARENT OPENING SIZE	ASTM D-4751	70 %
FLOW RATE	ASTM D-4491	20 US SIEVE
PERMITTIVITY	ASTM D-4491	200 GAL/MIN/SQ FT
		1.5 SEC -1

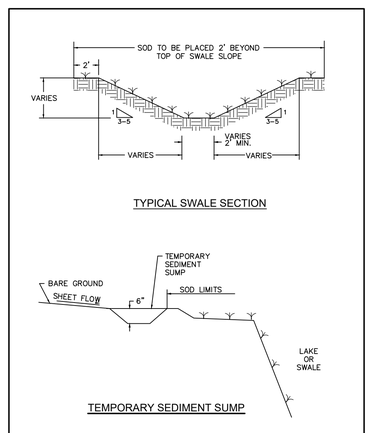
1. EMPTY FILTER SACK WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. GEOTEXTILE WILL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. AN OIL ADSORBENT PAD OR PILLOW CAN BE PURCHASED WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY REQUIREMENTS.
5. THE WIDTH, "W", OF THE FILTER SACK WILL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
6. THE DEPTH, "D", OF THE FILTER SACK WILL BE BETWEEN 18 INCHES AND 36 INCHES.
7. THE LENGTH, "L", OF THE FILTER SACK WILL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

FILTER SACKS (GRATED INLETS)

DO NOT USE ON ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.



TYPICAL DEWATERING DISCHARGE PLAN



No.	REVISIONS	DATE	BY

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY RCM
CHECKED BY JWC

BEST MANAGEMENT PRACTICES

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-13

STORM WATER POLLUTION PREVENTION PLAN

SITE DESCRIPTION:

PROJECT NAME AND LOCATION:

CULVER'S OKEECHOBEE
975 NE PARK STREET
OKEECHOBEE, FLORIDA 34972

*SEE COVER SHEET FOR LOCATION MAP

DEVELOPER NAME AND ADDRESS:

S&L PROPERTIES OKEECHOBEE, LLC
2651 KIRKING COURT
PORTAGE, WISCONSIN 53901

PROJECT DESCRIPTION:

THE PROJECT WILL CONSIST OF PARTIAL SITE DEMOLITION, BUILDING CONSTRUCTION AND ASSOCIATED PAVING, GRADING, DRAINAGE AND UTILITY CONNECTIONS.

CONTRIBUTING DRAINAGE AREA: 2.16 ACRES

ULTIMATE RECEIVING WATERS: MASTER DEVELOPMENT POND

ACTIVITIES THAT REQUIRE EROSION CONTROL:

SITE CLEARING AND GRUBBING; PROVIDING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; SITE GRADING; INSTALLATION OF STORM WATER, SANITARY SEWER, AND WATER INFRASTRUCTURE; CURB AND GUTTER, ROADWAYS, AND SIDEWALKS; LANDSCAPING.

*SEE PLANS FOR THE LOCATION OF TEMPORARY SEDIMENT BARRIERS AND OTHER EROSION CONTROL METHODS.

SUGGESTED SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF SITE CONSTRUCTION ACTIVITIES IS AS FOLLOWS:

1. PROVIDE STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND OTHER EROSION CONTROL MEASURES
3. CLEAR AND GRUB FOR SEDIMENT BASIN/STORMWATER POND/ EARTH DIKE
4. CONSTRUCT STORMWATER PONDS, EARTH DIKE, AND SEDIMENT BASINS
5. FINISH CLEARING AND GRUBBING OF SITE
6. REMOVE AND STORE TOPSOIL
7. PROVIDE INITIAL GRADING AS REQUIRED
8. STABILIZE ALL DISTURBED AREAS AS SOON AS POSSIBLE
9. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER
10. INSTALL BASE TO ROAD AND PARKING AREA
11. FINISH GRADING ENTIRE SITE
12. PROVIDE REQUIRED LANDSCAPING
13. CONSTRUCT PAVING
14. REMOVE ACCUMULATED SEDIMENT
15. REMOVE ANY ITEMS THAT ARE NOT REQUIRED

THE SEQUENCE OF CONSTRUCTION SHOWN ABOVE IS A GENERAL OVERVIEW AND IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS INCLUDED IN THESE PLANS. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING, IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND ALL OTHER APPLICABLE LAWS.

- FURTHERMORE; ENGINEER HAS NO CONTROL OVER OR RESPONSIBILITY FOR THE CONSTRUCTION MEANS AND METHODS OF THIS PROJECT. ANY TURBIDITY OR SEDIMENT RELEASES FROM THE PROJECT ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THIS DOCUMENT AN ITS CONTENTS ARE PROVIDED FOR GENERAL SWPPP GUIDANCE AND FOR CONTRACTOR CONVINCE.
- CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF THE SWPPP AT TIMES.
- CONTRACTOR SHALL BE PREPARED TO USE ANY NECESSARY METHODS FOR TURBIDITY CONTROL FROM THE SITE, INCLUDING POTENTIAL USE OF CHEMICAL DOSING/ADDITIVES (I.E. POLYACRYLAMIDE) TO ACHIEVE THE ACCEPTABLE EFFLUENT CRITERIA LEAVING THE SITE.

STABILIZATION PRACTICES:

TEMPORARY STABILIZATION – TOPSOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASE FOR AT LEAST 21 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 14 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED REQUIRED CAN BE FOUND IN TABLE 1.65 A OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, WHERE SOILS ARE ACIDIC 2 TONS OF PULVERIZED AGRICULTURAL LIMESTONE SHOULD BE ADDED PER ACRE AND 450 POUNDS OF 10–20–20 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, EACH AREA SHALL BE IMMEDIATELY MULCHED WITH STRAW OR EQUIVALENT EQUAL. AREAS OF THE SITE WHICH ARE TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB–BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED.

PERMANENT STABILIZATION – DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE APPROPRIATE PERMANENT SEED MIX CAN BE FOUND IN TABLES 1.66A, 1.66B AND 1.66C OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, 2 TONS/ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE AND THE PROPER FERTILIZER BASED ON THE TYPE OF SEEDING SHALL BE APPLIED TO EACH ACRE TO PROVIDE PLANT NUTRIENTS. AFTER SEEDING, EACH AREA SHALL BE MULCHED IMMEDIATELY.

STRUCTURAL PRACTICES:

EARTH DIKE – IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN–ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

SEDIMENT BASIN – A SEDIMENT BASIN SHALL BE CONSTRUCTED IN THE COMMON DRAINAGE AREA FOR THE SITE. THIS STORAGE POND SHALL HAVE A VOLUME OF 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE. ALL SEDIMENT COLLECTED IN THE BASIN MUST BE REMOVED FROM THE BASIN UPON COMPLETION OF CONSTRUCTION. SEDIMENT FROM THE BASIN MAY BE USED AS FILL ON THE SITE IF IT IS SUITABLE SOIL.

WASTE DISPOSAL:

WASTE MATERIALS – ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

HAZARDOUS WASTE – HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

SANITARY WASTE – SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.

OFFSITE TRACKING:

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE MAJOR ROAD CONNECTED TO THE PROJECT SHALL BE CLEANED ONCE A DAY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK RESULTING FROM CONSTRUCTION TRAFFIC. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARPAULIN.

TIMING OF CONTROL MEASURES:

THE INSTALLATION OF SILT FENCE (AND OTHER EROSION CONTROL MEASURES), A STABILIZED ENTRANCE AND SEDIMENT BASIN SHALL OCCUR PRIOR TO CLEARING AND GRUBBING ACTIVITY. AFTER CONSTRUCTION IS COMPLETE, THE ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE AREAS SHALL BE REGRADED AND PERMANENTLY STABILIZED AS SHOWN ON THE PLANS.

ITEMS REQUIRING POLLUTION PREVENTION:

THE FOLLOWING ITEMS ARE EXPECTED TO BE PRESENT ON THE PROJECT SITE: ASPHALT, CONCRETE, CLEANING SUPPLIES, DETERGENTS, FERTILIZERS, MASONARY BLOCKS/BRICKS, METAL PIECES, PAINT, PETROLEUM BASED PRODUCTS, ROOFING SUPPLIES, TAR, WOOD.

THE FOLLOWING ARE NON–STORM WATER SOURCES THAT WILL BE ENCOUNTERED AT THE SITE AND SHOULD BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE:
– UNCONTAMINATED GROUNDWATER EXPOSED DURING EXCAVATION
– WATER FROM WATER LINE FLUSHING
– PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

SPILL PREVENTION AND CONTROL:

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

– SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.
– STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.
– ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.
– ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.
– PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.
– ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

HAZARDOUS PRODUCTS:

– MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.
– PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

PRODUCT SPECIFIC PRACTICES:

– PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.
– THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
– PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.
– CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES:

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
– SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.
– THE FOLLOWING CLEAN–UP EQUIPMENT MUST BE KEPT ON–SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.
– ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.
– WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.
– TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.
– AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.
– THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

EROSION AND SEDIMENT CONTROLS:

BEST MANAGEMENT PRACTICES SHALL BE USED FOR THIS PROJECT TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN–OFF. THE LOCATION AND DETAILS OF EROSION CONTROL METHODS ARE SHOWN ON THE PLANS. THE SUB–CONTRACTOR(S) IS/ARE RESPONSIBLE FOR PLACING AND MAINTAINING THESE CONTROL METHODS AS SHOWN ON THE PLANS OR AS REQUIRED. HE/SHE SHALL ALSO PROVIDE THE REQUIRED EROSION PROTECTION AS REQUIRED BY LOCAL, STATE AND FEDERAL LAW. OFFSITE SHALL BE COVERED WITH A TARPAULIN.

STORM WATER MANAGEMENT:

STORM WATER COLLECTION SHALL BE PROVIDED BY CURB AND GUTTER AND DRAINAGE INLETS FOR THE DEVELOPED AREAS. THE AREAS THAT ARE REGRADED BUT NOT DEVELOPED SHALL BE STABILIZED IMMEDIATELY AFTER REGRADING. THE ENTIRE SITE SHALL DRAIN TO A SWMF. THE SWMF SHALL BE IN THE AREA OF THE TEMPORARY SEDIMENT BASINS. WHEN SLOPES HAVE BEEN STABILIZED, THE SEDIMENT THAT HAS ACCUMULATED SHALL BE REMOVED FROM THE BASIN AND THE APPROPRIATE VEGETATION SHALL BE PLANTED.

MAINTENANCE AND INSPECTION PRACTICES

THE FOLLOWING ARE MAINTENANCE AND INSPECTION PRACTICES THAT SHALL BE COMPLETED BY THE CONTRACTOR:

– ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL BY THE SUPERINTENDENT OR SOMEONE UNDER HIS/HER DIRECT SUPERVISION.
– ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE KEPT IN GOOD CONDITION. REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.
– THE SILT FENCE SHALL BE CLEARED OF SEDIMENT WHEN SEDIMENT MEASURES ONE–THIRD THE HEIGHT OF THE FENCE.
– THE SILT FENCE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF FENCE.
– THE SEDIMENT BASINS/DITCHES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. THEY SHALL BE CLEANED WHEN SEDIMENT REACHES 10% OF TOTAL CAPACITY AND AFTER CONSTRUCTION IS COMPLETE.
– THE DIVERSION DIKE SHALL BE INSPECTED MONTHLY. ANY BREACHES SHALL BE PROMPTLY REPAIRED.
– ALL SEEDING SHALL BE CHECKED FOR PROPER GROWTH AND UNIFORMITY. UNSTABALIZED AREAS SHALL BE RE–SODDED.
– A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON–SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.
– THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE/DATE	COMPANY NAME/ADDRESS	RESPONSIBILITY

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY–HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904–828–3900
WWW.KIMLEY–HORN.COM REGISTRY NO. 35106

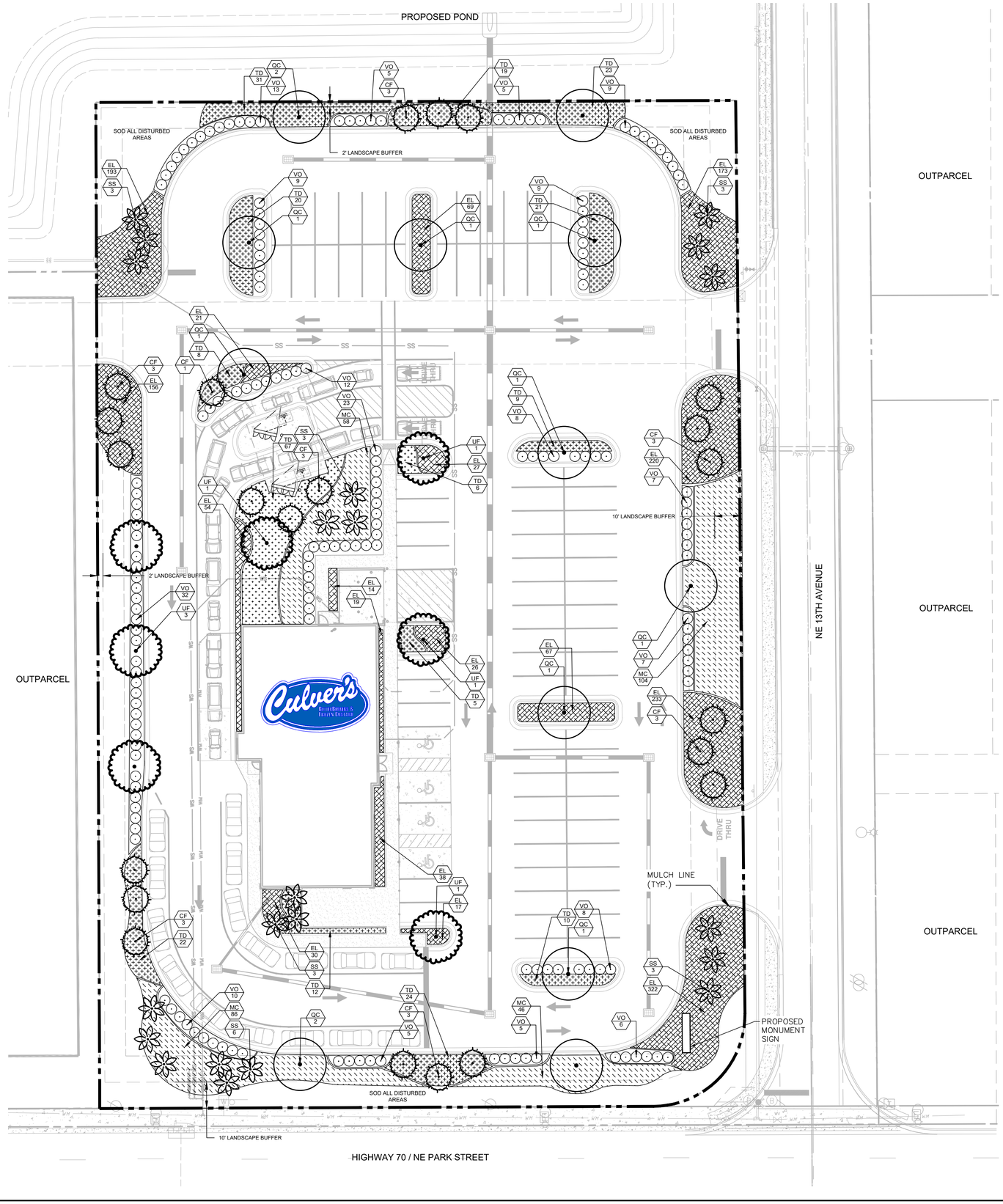
FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY ROM
CHECKED BY JWC

STORM WATER POLLUTION PREVENTION PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-14



PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	HEIGHT
	CF	22	CRATAEGUS FLAVA	SUMMER HAW	CONT	2" MIN	10' HT MIN
	QC	12	QUERCUS VIRGINIANA 'SDLN'	CATHEDRAL™ LIVE OAK	CONT	3" CAL	10'-12' HT.
	SS	21	SABAL PALMETTO	CABBAGE PALMETTO	B & B		10', 12`, 14` CT STAGGER HEIGHTS
	UF	7	ULMUS AMERICANA FLORIDANA	FLORIDA ELM	CONT	3" CAL MIN	10'-12' HT.

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACING
	VO	173	VIBURNUM OBOVATUM	WALTER'S VIBURNUM	CONT.	24" X 24"	4` O.C.

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE		
	MC	294	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	CONT.	24"X24"		48" o.c.
	TD	277	TRIPSACUM FLORIDANUM	FLORIDA GAMAGRASS	CONT.	24"X24"		48" o.c.

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACING	SPACING
	EL	1,679	ERNODEA LITTORALIS	GOLDEN CREEPER	CONT.	12"X12"	24" O.C.	24" o.c.

NOTE:
ALL DISTURBED AREAS TO BE PLANTED WITH PASPALUM NOTATUM 'ARGENTINE'

Landscape Requirements	Required	Provided
Sec. 90-532.		
1 tree/3,000 SF of Lot Area		
93,872 SF of Lot Area / 3,000 SF = 31 Trees	**31**	**62**
3 shrubs/3,000 SF of Lot Area		
93,872 SF of Lot Area / 3,000 SF = (46 x 3) = 93 Shrubs	**93**	**173**
Sec. 90-533. (1) - VUA		
18 SF of landscape area/parking space		
77 parking spaces x 18 SF of landscape area = 1,386 SF	**1,386 SF**	**5,056 SF**
Sec. 90-533. (2) - VUA		
1 tree/72 SF of required landscape area		
1,386 SF required landscape area / 72 SF = 19 Trees	**19**	**20**
Sec. 90-534. (2) - Highway 70 Buffer		
1 tree/300 SF of required landscape buffer		
(245' x 10' = 2,450) SF of required landscape buffer / 300 SF = 7 Trees	**8**	**8**
3 shrubs/300 SF of required landscape buffer		
2,450 SF of required landscape buffer / 300 SF = (8 x 3) 24 Shrubs	**24**	**24+**
Sec. 90-534. - NE 13th Avenue Landscape Buffer		
1 tree/300 SF of required landscape buffer		
(375' x 10' = 3,750) SF of required landscape buffer / 300 SF = 13 Trees	**13**	**13**
3 shrubs/300 SF of required landscape buffer		
3,750 SF of required landscape buffer / 300 SF = (13 x 3) 39 Shrubs	**39**	**39+**
Sec. 90-534. - North Landscape Buffer		
1 tree/300 SF of required landscape buffer		
(245' x 2' = 490) SF of required landscape buffer / 300 SF = 2 Trees	**2**	**5**
3 shrubs/300 SF of required landscape buffer		
490 SF of required landscape buffer / 300 SF = (2 x 3) 6 Shrubs	**6**	**6+**
Sec. 90-534. - West Landscape Buffer		
1 tree/300 SF of required landscape buffer		
(375' x 2' = 750) SF of required landscape buffer / 300 SF = 3 Trees	**3**	**15**
3 shrubs/300 SF of required landscape buffer		
750 SF of required landscape buffer / 300 SF = (3 x 3) 9 Shrubs	**9**	**9+**

LEGEND

- PROPERTY BOUNDARY
- EASEMENT
- LANDSCAPE SETBACK
- BUILDING SETBACK
- BOT — BOTTOM OF POND BANK
- TOB — TOB — TOP OF POND BANK
- X — X — WALL/FENCE LINE
- WM — WATER MAIN
- WS — WATER SERVICE
- SS — SANITARY SEWER
- PROPOSED FIRE HYDRANT

NATIVE PLANT CALCULATIONS (PER SEC. 90.540)	
*Native tree percentages have been calculated by quantity.	
NATIVE TREES	**QTY**
Florida Elm	7
Summer Haw	22
Cathedral Live Oak	12
Cabbage Palm	21
TOTAL NUMBER OF NATIVE TREES	**62**
NON-NATIVE TREES	**QTY**
N/A	0
TOTAL NUMBER OF NON-NATIVE TREES	**0**
PERCENTAGE OF TOTAL NATIVE TREES	100%
PERCENTAGE OF TOTAL NON-NATIVE TREES	0%
NATIVE SHRUBS & GROUNDCOVER CALCULATIONS (PER SEC. 90.540)	
*Native shrub and groundcover percentages have been calculated by total area.	
NATIVE SHRUBS	**SF**
Walter's Viburnum	3,670
Pink Muhly Grass	4,360
Florida Gamagrass	2,540
TOTAL SF OF NATIVE SHRUBS	**10,570**
NON-NATIVE SHRUBS	**SF**
N/A	0
TOTAL SF OF NON-NATIVE SHRUBS	**0**
PERCENTAGE OF TOTAL NATIVE SHRUBS	100%
PERCENTAGE OF TOTAL NON-NATIVE SHRUBS	0%
NATIVE GROUNDCOVER	**SF**
Golden Creeper	5,449
TOTAL SF OF NATIVE GROUNDCOVER	**5,449**
NON-NATIVE GROUNDCOVER	**SF**
N/A	**0**
TOTAL SF OF NON-NATIVE GROUNDCOVER	**0**
PERCENTAGE OF TOTAL NATIVE GROUNDCOVER	**100%**
PERCENTAGE OF TOTAL NON-NATIVE GROUNDCOVER	**0%**
Note: All plants chosen from the South Florida WMD Xeriscape Plant Guide	

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT	045230336
DATE	NOV. 2023
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	SAP
CHECKED BY	MAJ

PLANTING PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
FLORIDA
OKEECHOBEE

SHEET NUMBER
LP-100

TYPICAL PLANTING NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: OBTAINING ALL APPLICABLE PERMITS, FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS SPECIFIED HEREIN.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

3. THE CONTRACTOR SHALL SUBMIT A DETAILED PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN UNLESS THE WORK REQUIRES NOTHING MORE THAN A DIRECT APPLICATION OF THE DEPARTMENT OF TRANSPORTATION (DOT) DESIGN STANDARDS IF A DIRECT APPLICATION OF THE STANDARD IS PROPOSED. THE CONTRACTOR SHALL SUBMIT IN WRITING A STATEMENT INDICATING THE STANDARD INDEX AND PAGE NUMBER NO LESS THAN 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION. WHEN A DIRECT APPLICATION OF DOT STANDARD IS NOT ACCEPTABLE A PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A PROFESSIONAL ENGINEER WHO HAS SUCCESSFULLY COMPLETED ADVANCED TRAINING IN MAINTENANCE OF TRAFFIC, AS DEFINED BY DOT FOR APPROVAL BY THE COUNTY ENGINEER'S REPRESENTATIVE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNER OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR: REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA; LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION; THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

5. NOTIFY THE OWNER IMMEDIATE IF ANY DAMAGES OCCUR TO EXISTING TREES.

6. CALL ONE CALL (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

C. PROTECTION OF EXISTING PLANT MATERIALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC... THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE.

2. SEE TREE MITIGATION PLAN AND NOTES.

D. MATERIALS

1. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY* (OR TAGGED IN NURSERY) *IN SOME INSTANCES AN IMAGE TAKEN OF THE PLANT WITH A MEASURING STICK WILL SUFFICE

2. PLANT MATERIALS

a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE GRADE NO. 1 OR BETTER AS DETERMINED BY THE APPROPRIATE STATE DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.

b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:

2. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND HAVE A PH BETWEEN 5.5 AND 7.0.

b. CONTRACTOR SHALL COORDINATE ALL EARTHWORK OPERATIONS WITHIN TREE PROTECTION AREAS WITH THE PROJECT ARBORIST PRIOR TO BEGINNING WORK.

c. ALL TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH.

d. TOPSOIL, PH RANGE OF 5.5 TO 7.0, 3-5 PERCENT ORGANIC MATERIAL, MINIMUM. FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, SODS, STIFF CLAY, STONES LARGER THAN ONE INCH IN DIAMETER, STUMPS, ROOTS, TRASH, TOXIC SUBSTANCES OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH.

e. VERIFY AMOUNT STOCKPILED IF ANY, AND SUPPLY ADDITIONAL AS NEEDED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST FOUR INCHES DEEP. DO NOT OBTAIN TOPSOIL FROM BOGS OR MARSHES.

2. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

F. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

* WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF THREE (3) INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). SEE PLAN FOR MULCH SPECIFICATIONS.

2. PROVIDE A THREE (3) INCH MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA WITH PINNED WEED BARRIER FABRIC IN EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT (6' MINIMUM) PLANTED UNDER THIS CONTRACT.

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED (B&B), AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROUTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS: ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.

5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

4. RPG="ROOTS PLUS GROWER" CONTAINER PRODUCTS SHALL BE USED WHERE SPECIFIED.

K. MATERIALS LIST

1. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION.

2. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

L. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

2. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.

3. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

4. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

5. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

6. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SOIL MIXTURE SECTION OF THESE SPECIFICATIONS. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.

7. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

8. FOLLOW PLANTING SPECIFICATIONS IN PLANTING DETAILS

9. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET, PACK LIGHTLY WITH FEET; ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ALL BURLAP, ROPE, WIRES, BASKETS, ETC... SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.

10. TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST, IN ACCORDANCE WITH ANSI A-300.

11. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP-4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SOIL MIXTURE SECTION OF THESE SPECIFICATIONS. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

12. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO ENSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK.

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

4. SODDING

a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

b. THE SOD SHALL BE CERTIFIED TO MEET APPROPRIATE STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

6. LAWN MAINTENANCE

a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING TREE GUY SUPPORTS NECESSARY) TO ENSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR OR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

S. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

T. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

2. ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

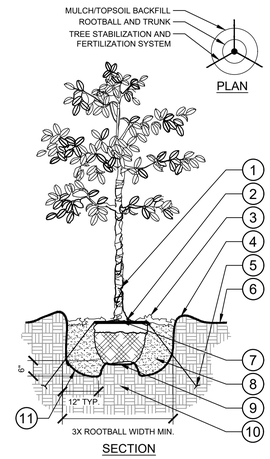
FOR
ENGINEER OF RECORD
SIGNATURE AND SEAL
REFER TO
C-02 - SIGNATURE SHEET

KHA PROJECT	045523036
DATE	NOV. 2023
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	SAP
CHECKED BY	MAJ

PLANTING NOTES

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
LP-150



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. MULCH 3" CLEAR FROM BASE OF TRUNK FLARE.
3. 3" MINIMUM MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. 4" HIGH BERM, FIRMLY COMPACTED.
5. TERRA TOGGLE EARTH ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. NATIVE SOIL FOR TREE PLANTINGS UNLESS UNSUITABLE.
9. TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.

NOTES:

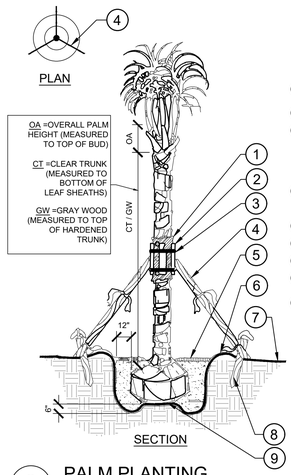
A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

1 TREE PLANTING

L-PL-TYP-01



1. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
2. FIVE 2" X 4" X 18" WOOD BATTENS.
3. SECURE BATTENS WITH 2- 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED IN RELATION TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
4. (3) 2"X4"X8' SUPPORTS. NAIL (DRILL AN NAIL IF NECESSARY) TO BATTENS AND 2" 4" STAKES. STAIN DARK BROWN.
5. 3" SPECIFIED MULCH
6. BERM SOIL TO HOLD WATER.
7. FINISH GRADE
8. 2X4X24" (MIN) P.T. WOOD STAKES (TYP.) NAIL TO SUPPORT POLES.
9. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

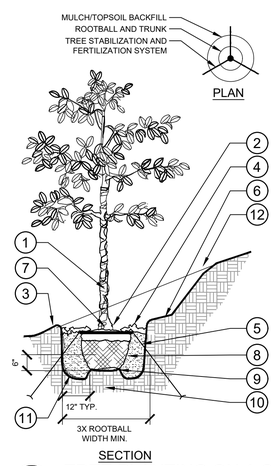
B. ALL TREE STAKING IS TO BE WITHIN MULCH BED AREA OUTSIDE TREE PIT.

C. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION - REFER TO POOR DRAINAGE CONDITION DETAIL.

2 PALM PLANTING

SECTION/ PLAN

L-PL-TYP-02



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3. 4" HIGH BERM, FIRMLY COMPACTED.
4. 3" MINIMUM OF HARDWOOD BARK MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. TERRA TOGGLE EARTH ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
12. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

NOTES:

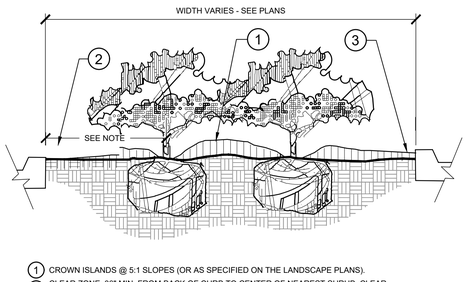
A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

3 TREE PLANTING ON A SLOPE

L-PL-TYP-02



1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS.
3. 2" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

NOTES:

A. EXCAVATE SOIL FOLLOWING THE SHRUB/GROUNDCOVER PLANTING DETAIL AND BACKFILL WITH APPROVED PLANTING MIX.

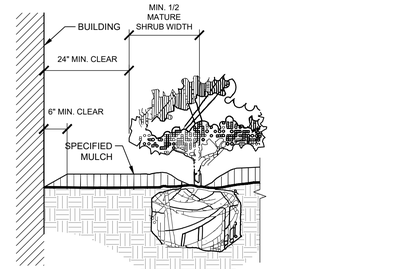
B. PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP).

C. ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

4 PLANTED PARKING LOT ISLANDS/MEDIANS

NTS

L-PL-TYP-04



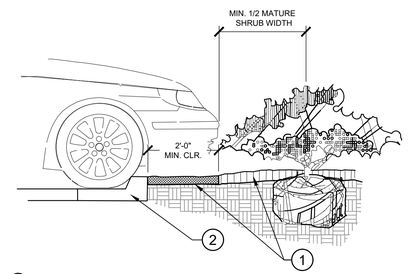
NOTES:

1. CLEAR ZONE: 36" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.
2. INSTALL SPECIFIED MULCH: 6" MIN. FROM BUILDING. SPECIFIED MULCH TO BE INSTALLED AT A DEPTH OF 3" (MIN.)

5 PLANTING ADJACENT TO BUILDING

NTS

L-PL-TYP-06

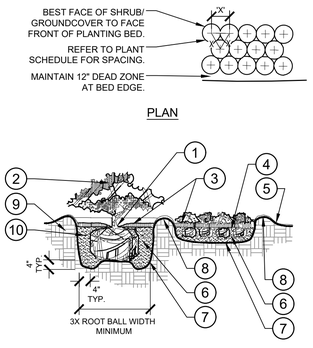


1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP. NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE.
2. CURB / PARKING LOT EDGE.

6 PARKING SPACE/ CURB PLANTING

NTS

L-PL-TYP-07



1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 3" MULCH LAYER AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES) NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY OF PLANTING PIT SIDES AND BOTTOM.
8. 4" HIGH BERM FIRMLY COMPACTED.
9. UNDISTURBED NATIVE SOIL.
10. FERTILIZER TABLETS (MAX 3" DEEP)

NOTES:

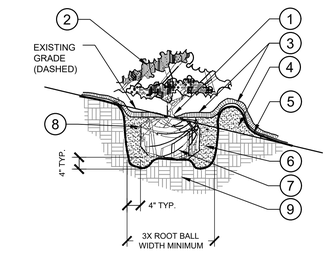
A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

7 SHRUB/ GROUNDCOVER PLANTING

L-PL-TYP-03



NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

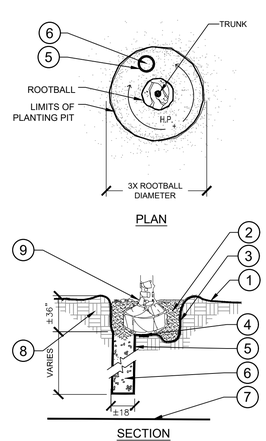
B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE SHRUBS AS DIRECTED BY OWNER'S REPRESENTATIVE.
3. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE SHRUBS ARE PLACED IN MASSES, MULCH SHALL BE SPREAD IN A CONTINUOUS BED.
4. SOIL BERM TO HOLD WATER. TOP OF PLANTING PIT 'BERM' TO BE LEVEL ACROSS PIT. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE. MULCH OVER EXPOSED TOPSOIL.
5. FINISHED GRADE (SEE GRADING PLAN)
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).
7. SCARIFY SIDES AND BOTTOM OF PLANTING PIT.
8. FERTILIZER TABLETS (MAX 3" DEEP).
9. UNDISTURBED NATIVE SOIL

8 SHRUB/ GROUNDCOVER PLANTING ON A SLOPE

L-PL-TYP-05



1. FINISH GRADE (SEE GRADING PLANS).
2. BACKFILL WITH NATIVE SOIL AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER.
4. SLOPE BOTTOM TO DRAIN.
5. AUGURED HOLE Ø ±18" PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
6. BACKFILL WITH 1/2" - 3/4" GRAVEL TO REQUIRED DEPTH THROUGH OCCLUDING LAYER TO ASSURE PROPER PERCOLATION.
7. WATER TABLE. (DEPTH VARIES)
8. UNDISTURBED NATIVE SOIL.
9. SET ROOTBALL ON UNDISTURBED STABLE SUBSOIL SO THAT TOP OF ROOT BALL IS 1" ABOVE FINISHED GRADE.

NOTES:

A. THIS DETAIL SHALL BE IMPLEMENTED WHERE PERCOLATION RATES ARE 2" PER HOUR OR LESS.

B. CONTRACTOR TO PERFORM PERCOLATION TEST AS REQUIRED. AND NOTIFY OWNER/LANDSCAPE ARCHITECT.

C. SEE TYPICAL TREE PLANTING DETAIL THIS SHEET FOR PLANT STAKING.

9 POOR DRAINAGE CONDITION

L-PL-TYP-09

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

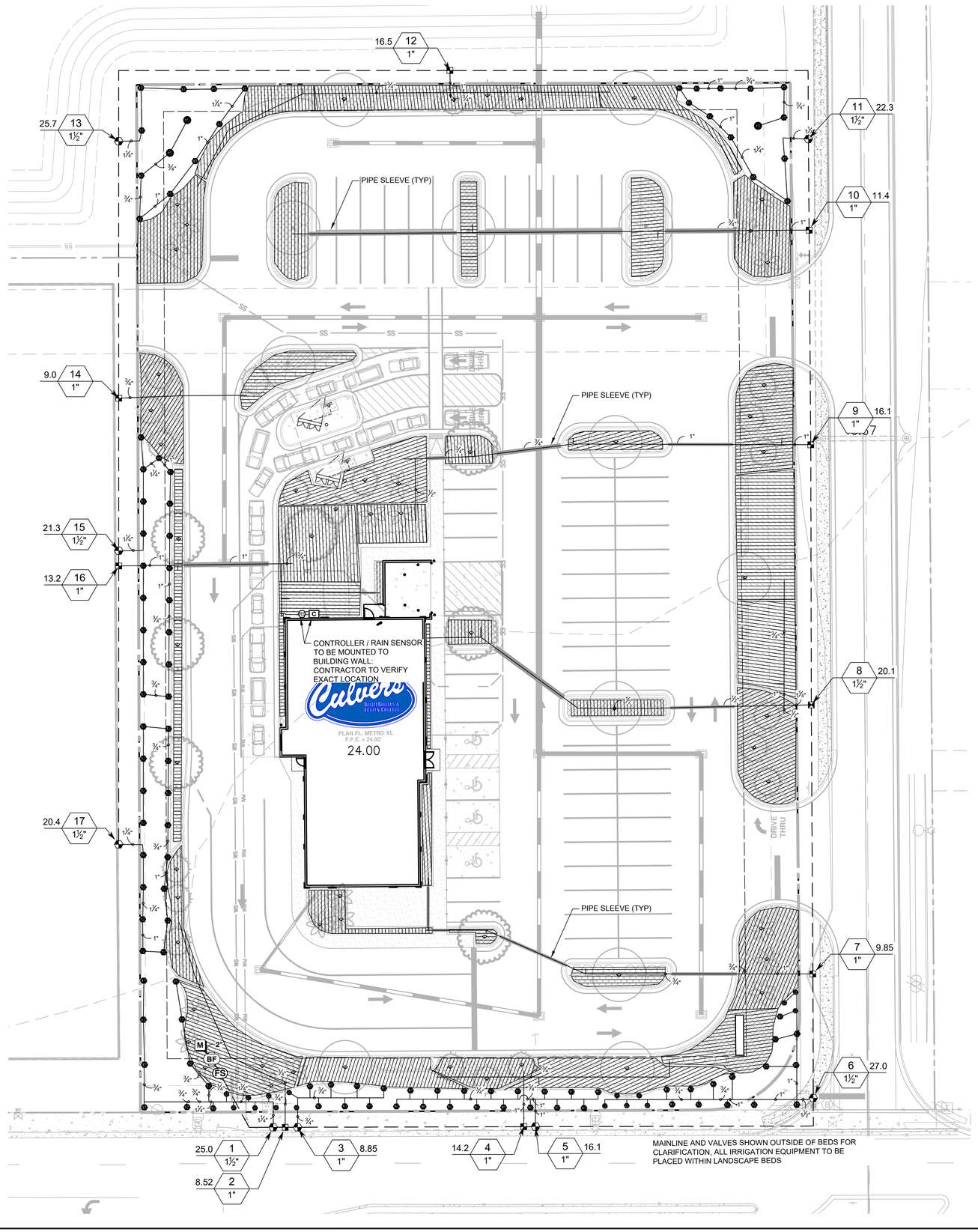
FOR
ENGINEER OF RECORD
SIGNATURE AND SEAL
REFER TO
C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY SAP
CHECKED BY MAJ

PLANTING DETAILS

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
FLORIDA
OKEECHOBEE

SHEET NUMBER
LP-151



IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
12 Q, 13 T, 14 H, 15 F	HUNTER PROS-06-CV 15 SERIES TURF SPRAY, 6IN. POP-UP. WITH DRAIN CHECK VALVE. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	3	30
9, 6, 8, 11, 12, 16, 17	HUNTER PROS-06-CV ADJ SERIES TURF SPRAY, 6IN. POP-UP. WITH DRAIN CHECK VALVE. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	119	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICZ-101-25 DRIP CONTROL ZONE KIT. 1IN. ICV GLOBE VALVE WITH 1IN. HY100 FILTER SYSTEM. PRESSURE REGULATION: 25PSI. FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN.	8
	HUNTER ICZ-151-XL-40 DRIP CONTROL ZONE KIT. 1-1/2IN. ICV GLOBE VALVE WITH 1IN. HY100 FILTER SYSTEM. PRESSURE REGULATION: 40PSI. FLOW RANGE: 20 GPM TO 60 GPM. 120 MESH STAINLESS STEEL SCREEN. 1-1/2IN. INLET X SINGLE 2IN. OUTLET	1
0.5 1.0 2.0 4.0 6.0	HUNTER HEB 1/2IN. FEMALE THREADED POINT SOURCE DRIP EMITTER. COLOR CODED EMITTERS FOR FLOW RATES OF 0.5 GPH - 6.0 GPH. RECOMMENDED PRESSURE FROM 20 PSI-50 PSI. OPTIONAL DIFFUSER CAP (HE) AVAILABLE FOR HIGHER FLOWS AND CLOG PROTECTION. ON IH-12 RISER	57
	AREA TO RECEIVE DRIPLINE HUNTER HDL-04-12-CV HDL-04-12-CV: HUNTER DRIPLINE W/ 0.4 GPH EMITTERS AT 12" O.C. CHECK VALVE, DARK BROWN TUBING WITH TAN STRIPING. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. INSTALL WITH HUNTER PLD BARBED OR PLD-LOC FITTINGS.	AS SHOWN

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	8
BF	FEBCO 825Y 1" SEE CIVIL PLANS FOR SPECIFICATIONS	1
C	CONTROLLER: HUNTER ACC INSTALL IN LOCKING METAL CABNET	1
RS	HUNTER RFC RAIN AND FREEZE SENSOR, WITH CONDUIT INSTALLATION, MOUNT AS NOTED. NORMALLY CLOSED SWITCH.	1
FS	HUNTER HC-100-FLOW 1IN. FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER TO MONITOR FLOW AND PROVIDE SYSTEM ALERTS. ALSO FUNCTIONS AS STAND ALONE FLOW TOTALIZER/SUB METER ON ANY RESIDENTIAL OR COMMERCIAL IRRIGATION SYSTEM.	1
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21	AS SHOWN
	IRRIGATION MAINLINE: PVC SCHEDULE 40	AS SHOWN
	PIPE SLEEVE: PVC SCHEDULE 40	AS SHOWN

Valve Callout

CRITICAL ANALYSIS

Generated: 2023-10-23 15:07

P.O.C. NUMBER: 01
Water Source Information:

FLOW AVAILABLE
Water Meter Size: 1"
Flow Available 37.5 GPM

PRESSURE AVAILABLE
Static Pressure at POC: 65 PSI
Elevation Change: 0.00 ft
Service Line Size: 2"
Length of Service Line: 10 ft
Pressure Available: 65 PSI

DESIGN ANALYSIS
Maximum Station Flow: 26.99 GPM
Flow Available at POC: 37.5 GPM
Residual Flow Available: 10.51 GPM

Critical Station: 12
Design Pressure: 30 PSI
Friction Loss: 4.65 PSI
Fittings Loss: 0.48 PSI
Elevation Loss: 0 PSI
Loss through Valve: 11.3 PSI
Pressure Req. at Critical Station: 46.4 PSI
Loss for Fittings: 0.18 PSI
Loss for Main Line: 1.81 PSI
Loss for POC to Valve Elevation: 0 PSI
Loss for Backflow: 11.3 PSI
Loss for Water Meter: 1.5 PSI
Critical Station Pressure at POC: 61.3 PSI
Pressure Available: 65 PSI
Residual Pressure Available: 3.73 PSI

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP
1	HUNTER ICV-G	1-1/2"	TURF SPRAY	25.02	186.2	38.8	53.3	1.61 in/h
2	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	8.52	181.8	38.5	51.3	0.64 in/h
3	HUNTER ICV-G	1"	TURF SPRAY	8.85	177.1	34.1	47.0	1.77 in/h
4	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	14.15	177.1	42.8	55.8	0.65 in/h
5	HUNTER ICV-G	1"	TURF SPRAY	16.08	181.5	35.0	48.1	1.56 in/h
6	HUNTER ICV-G	1-1/2"	TURF SPRAY	26.99	295.6	39.5	56.0	1.85 in/h
7	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	9.85	342.0	40.3	53.7	0.65 in/h
8	HUNTER ICZ-151-XL-40	1-1/2"	AREA FOR DRIPLINE	20.13	442.4	33.4	48.4	0.64 in/h
9	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	16.07	539.5	45.7	59.7	0.65 in/h
10	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	11.44	619.6	44.3	58.0	0.64 in/h
11	HUNTER ICV-G	1-1/2"	TURF SPRAY	22.34	653.6	38.2	54.8	1.65 in/h
12	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	16.51	812.9	46.4	61.3	0.65 in/h
13	HUNTER ICV-G	1-1/2"	TURF SPRAY	25.74	962.9	41.1	61.0	1.62 in/h
14	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	9.0	1,059	38.9	52.7	0.65 in/h
15	HUNTER ICV-G	1-1/2"	TURF SPRAY	21.33	1,116	36.9	55.0	1.55 in/h
16	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	13.23	1,121	41.7	56.3	0.65 in/h
17	HUNTER ICV-G	1-1/2"	TURF SPRAY	20.4	1,225	38.6	56.5	1.48 in/h
	Common Wire				1,187			

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	SUN	MON	TUE	WED	THU	FRI	SAT	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	HUNTER ICV-G	TURF SPRAY	1.61 in/h				28 min			28 min	1.5	56	1,401	701
2	HUNTER ICZ-101-25	AREA FOR DRIPLINE	0.64 in/h				70 min			70 min	1.5	140	1,193	596
3	HUNTER ICV-G	TURF SPRAY	1.77 in/h				26 min			26 min	1.5	51	452	226
4	HUNTER ICZ-101-25	AREA FOR DRIPLINE	0.65 in/h				70 min			70 min	1.5	140	1,981	991
5	HUNTER ICV-G	TURF SPRAY	1.56 in/h				29 min			29 min	1.5	58	933	466
6	HUNTER ICV-G	TURF SPRAY	1.85 in/h				25 min			25 min	1.5	49	1,323	661
7	HUNTER ICZ-101-25	AREA FOR DRIPLINE	0.65 in/h				70 min			70 min	1.5	140	1,379	689
8	HUNTER ICZ-151-XL-40	AREA FOR DRIPLINE	0.64 in/h				70 min			70 min	1.5	140	2,819	1,409
9	HUNTER ICZ-101-25	AREA FOR DRIPLINE	0.65 in/h				70 min			70 min	1.5	140	2,249	1,125
10	HUNTER ICZ-101-25	AREA FOR DRIPLINE	0.64 in/h				70 min			70 min	1.5	140	1,602	801
11	HUNTER ICV-G	TURF SPRAY	1.65 in/h				28 min			28 min	1.5	55	1,229	614
12	HUNTER ICZ-101-25	AREA FOR DRIPLINE	0.65 in/h				70 min			70 min	1.5	140	2,311	1,156
13	HUNTER ICV-G	TURF SPRAY	1.62 in/h				28 min			28 min	1.5	56	1,442	721
14	HUNTER ICZ-101-25	AREA FOR DRIPLINE	0.65 in/h				70 min			70 min	1.5	140	1,260	630
15	HUNTER ICV-G	TURF SPRAY	1.55 in/h				30 min			30 min	1.5	59	1,259	629
16	HUNTER ICZ-101-25	AREA FOR DRIPLINE	0.65 in/h				70 min			70 min	1.5	140	1,852	926
17	HUNTER ICV-G	TURF SPRAY	1.48 in/h				31 min			31 min	1.5	61	1,244	622
		TOTALS:					855			855		1,705	25,926	12,963

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR
ENGINEER OF RECORD
SIGNATURE AND SEAL
REFER TO
C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY SAP
CHECKED BY MAJ

IRRIGATION PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
IR-100

IRRIGATION SPECIFICATION AND NOTES

1. THE SYSTEM SHALL BE DESIGNED TO PROVIDE 100% COVERAGE. ANY CHANGES MADE IN THE LAYOUT DUE TO FIELD CONDITIONS SHALL BE IN ACCORDANCE WITH THESE STANDARDS.

2. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.

3. CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.

4. INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON-SITE.

5. IRRIGATION DESIGN IS SCHEMATIC ONLY. FULL AND COMPLETE SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY THE OWNER'S REPRESENTATIVE.

6. CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.

7. CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.

8. IRRIGATION CONTRACTOR TO PROVIDE POWER SUPPLY TO ELECTRIC CONTROLLERS.

9. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.

10. IRRIGATION SYSTEM SHALL NOT BE INSTALLED THROUGH PRESERVED PLANT COMMUNITIES OR WITHIN WETLANDS OR THEIR ASSOCIATED BUFFERS.

11. LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS, AS SPECIFIED.

12. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.

13. CONTRACTOR TO COORDINATE LOCATION OF ALL METERS AND BACKFLOW ASSEMBLIES WITH PROJECT OWNER.

14. THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.

15. ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES.

16. ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SLEEVES AS NOTED. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.

17. SLEEVES UNDER EXISTING PAVEMENT MUST BE DIRECTIONAL BORE. OPEN CUT IS NOT AN OPTION.

18. NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.

19. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR-CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.

20. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN NDS VALVE BOXES AS FOLLOWS:

    -RECTANGULAR 12"X17" HEAVY DUTY BOX. (PURPLE COVER FOR REUSE TO BE PROVIDED WHERE APPROPRIATE).

21. ALL UNSIZED PIPE SHALL BE 3/4" UNLESS OTHERWISE NOTED ON PLAN. SEE LATERAL PIPE SIZING REQUIREMENTS.

22. EACH TREE AND PALM (AS SHOWN ON THE PLANS) SHALL HAVE A MIN 24 GALLON PER HOUR FLOOD BUBBLER. LOCATE BUBBLER ON THE UPHILL SIDE OF TREES ON ALL SLOPES.

23. ALL IRRIGATION HEADS/DRIP TUBING SHALL BE LOCATED ONE (1) FOOT FROM BACK OF CURB WHEN NEXT TO A ROADWAY. (THIS SHALL NOT INCLUDE PARKING AREAS OR DRIVE AISLES).

24. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.

25. IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.

26. ALL DRIP ZONES SHALL BE INSTALLED WITH A FLUSH VALVE AND AIR RELIEF VALVE. IN THE EVENT THAT A DRIP ZONE HAS MORE THAN ONE HIGH OR LOW POINT, MORE THAN ONE AIR RELIEF VALVE OR FLUSH VALVE WILL BE REQUIRED FOR THAT ZONE. DRIPLINE SHALL PROVIDE 0.9 GPH EMITTERS, 18" O.C. WITH 18" LINE SPACING AT A MINIMUM.

27. IRRIGATION CONTRACTOR TO COORDINATE WITH OWNER FOR FINAL CONTROLLER AND RAIN SENSOR LOCATIONS. THE CONTROLLER SHALL BE PLACED IN A LOCKING CABINET IN THE MOST INCONSPICUOUS AREA APPROPRIATE FOR ITS LOCATION. (INDOOR VS. OUTDOOR USE)

28. LOCATE THE AUTOMATIC RAIN SENSOR SHUTOFF DEVICE IN AN AREA THAT IS UNOBSTRUCTED BY TREES, ROOF OVERHANGS, OR ANY OTHER OVERHEAD OBJECT. THE SENSOR SHALL NOT BE PLACED WITHIN THE SPRAY ZONE OF ANY SPRINKLER HEAD, INCLUDING OFF-SITE IRRIGATION. CONTRACTOR SHALL LOCATE SENSOR WITHIN CLOSE PROXIMITY TO THE IRRIGATION CONTROLLER.

29. CONTRACTOR SHALL PERFORM HYDRO-TESTING OF MAIN LINES.

    HYDRO-TESTING TO BE PERFORMED AS LISTED:

    THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FORTY-EIGHT (48) HOURS IN ADVANCE OF TESTING. PRIOR TO BACKFILLING, CONTRACTOR SHALL FILL PIPING WITH WATER, IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, TAKING CARE TO PURGE THE AIR FROM IT. A SMALL, HIGH PRESSURE PUMP OR OTHER MEANS OF MAINTAINING A CONTINUOUS WATER SUPPLY SHALL BE CONNECTED TO THE PIPING AND SET SO AS TO MAINTAIN 125 PSI FOR TWO (2) HOURS WITHOUT INTERRUPTION. CONTRACTOR SHALL MAKE ANY NECESSARY CORRECTIONS AND RETEST THE SYSTEM UNTIL THE OWNER'S REPRESENTATIVE IS SATISFIED THAT THE SYSTEM IS REASONABLY SOUND.

30. ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS. IF REQUIRED, ALL WIRING FOR A TWO WIRE PATH SHALL BE WITH RED/BLUE TWISTED PAIR 14 AWG. ELECTRIC CONTROL LINES FROM THE DECODER TO THE SOLENOID VALVES SHALL BE TWISTED PAIR 18 AWG. ALL DECODERS SHALL BE GROUNDED EVERY 1,000 L.F. OR EVERY 10 DEVICES. ALL WIRE SHALL BE FURNISHED IN MINIMUM 2,500' REELS AND SPLICING SHALL BE MINIMIZED. BURY SPLICE KIT. ALL 24 VOLT WIRING SHALL BE DONE IN ACCORDANCE WITH EXISTING CODES. SPLICING SHALL BE IN VALVE BOXES OR CONTROLLERS ONLY. IRRIGATION SYSTEM CONTROL SHALL BE TWO WIRE PATH. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR THIS INSTALLATION. TWO WIRE SYSTEM SHALL HAVE 2 -WAY COMMUNICATIONS FIELD PROGRAMMABILITY, STATION SPECIFICATIONS AND INTEGRATED SURGE PROTECTION.

31. ALL CONTROL WIRE SHALL BE INSTALLED IN A 1-1/4" ELECTRICAL CONDUIT.

32. CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.

33. ALL UNIMPROVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR.

34. INSTALL ALL BACKFLOW PREVENTION DEVICES AND ALL PIPING BETWEEN THE POINT OF CONNECTION AND THE BACKFLOW PREVENTER AS PER LOCAL CODES. FINAL LOCATION SHALL BE DETERMINED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

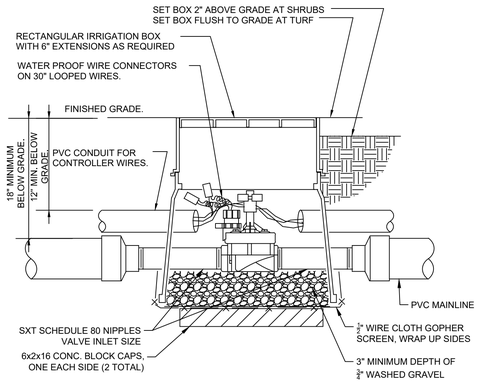
FOR
ENGINEER OF RECORD
SIGNATURE AND SEAL
REFER TO
C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY SAP
CHECKED BY MAJ

IRRIGATION NOTES

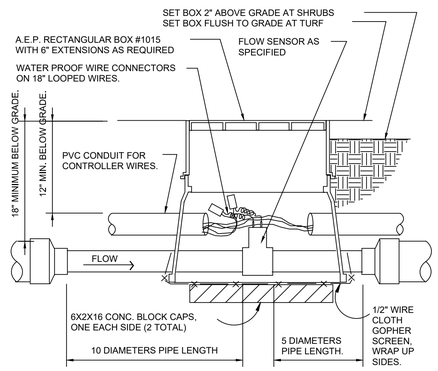
CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
IR-150



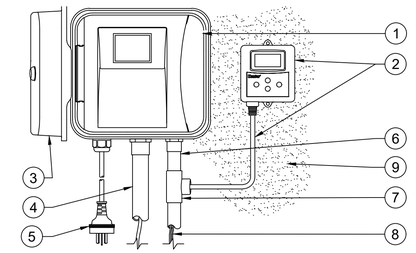
1 MASTER CONTROL VALVE

NTS L-IR-VAL-58



2 FLOW SENSOR ASSEMBLY

NTS L-IR-SEN-01

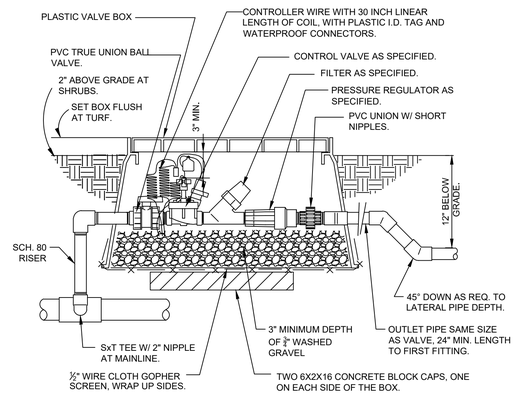


1 • IRRIGATION CONTROLLER. MOUNTED PER CONTROLLER SPECIFICATIONS.
2 • SOIL-CLIK MODULE AND PROVIDED CABLE
3 • PLASTIC CONTROLLER DOOR
4 • CONTROLLER WIRE CONDUIT TO PLANTER, SIZE AS REQUIRED
5 • 120 VAC CABLE & PLUG FOR CONNECTION TO GROUNDED 120 VAC POWER RECEPTACLE.
6 • SOIL-CLIK WIRE CONDUIT, 3/4"[19MM] SIZE.
7 • 3/4"[19MM] TEE FOR SOIL-CLIK SENSOR CABLE
8 • TWO (2) WIRE TO PROBE.
9 • SURFACE TO MOUNT CONTROLLER PER PLAN

NOTES:
A. COMPLETE INSTALLATION IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. REFER TO PRODUCT INSTALLATION GUIDE PRIOR TO INSTALLATION.
B. CONTROLLER SHOULD ACCEPT 120 VOLTS AC OR 230 VOLTS AC. HARD WIRE OR PLUG INTO A GROUNDED POWER SOURCE.
C. MODEL NUMBER AND SPECIFICATIONS PER PLAN.
D. MOUNTED CONTROLLER LCD SCREEN AT EYE LEVEL WHEN FEASIBLE.

3 SOIL SENSOR

NTS L-IR-EQU-18



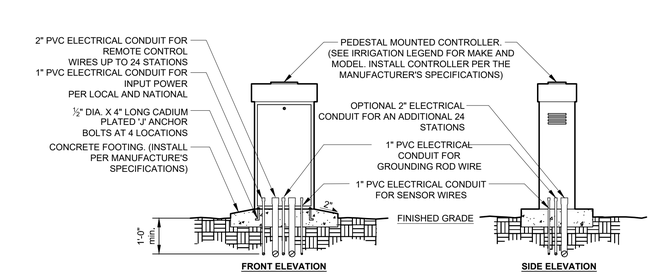
4 REMOTE CONTROL VALVE (DRIP)

NTS L-IR-VAL-15

1. REMOTE CONTROL VALVE AS SPECIFIED.
2. RECTANGULAR VALVE BOX.
3. PLASTIC I.D. TAG AT EACH VALVE.
4. WATER PROOF WIRE CONNECTORS ON 30" LOOPED WIRES.
5. 2" MINIMUM, 4" MAXIMUM BELOW TOP OF BOX.
6. 2" ABOVE FINISH GRADE AT SHRUBS.
7. 3/4" ABOVE FINISH GRADE AT LAWN.
8. OUTLET PIPE SAME SIZE AS VALVE, 24" MINIMUM TO FIRST FITTING.
9. 45 DEGREE DOWN AS REQUIRED TO LATERAL PIPE DEPTH.
10. INCREASE LATERAL LINE SIZE AS PER IRRIGATION PLAN.
11. TWO 6X2X16 CONCRETE BLOCK CAPS, ONE EACH SIDE OF THE BOX.
12. SCHEDULE 80 RISER.
13. MAIN LINE AS OCCURS.
14. 1/2" WIRE CLOTH GOPHER SCREEN, WRAP UP SIDES.
15. 6" THICK LAYER OF PEA GRAVEL BASE.

5 REMOTE CONTROL VALVE (SPRINKLERS/BUBBLERS)

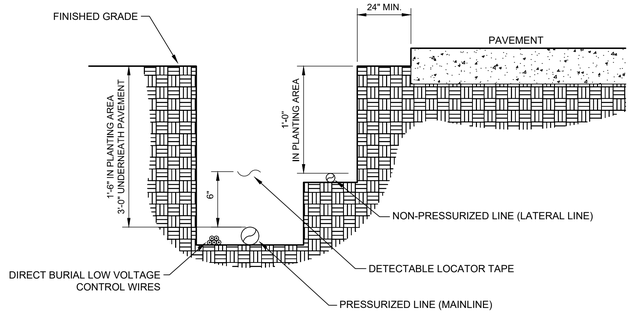
NTS L-IR-VAL-06



NOTES
1. COMMON AND CONTROLLER WIRE TO BE BUNDLED USING ELECTRICAL TAPE AT 10'-0" ON CENTER.
2. GROUNDING RODS SHALL BE LOCATED BETWEEN 8'-0" AND 12'-0" AWAY FROM THE CONTROLLER. GROUNDING RODS SHALL BE ½" IN DIAMETER X 8' IN LENGTH. CONNECT THE GROUNDING ROD TO THE CONTROLLER USING 6 GAUGE BARE COPPER WIRE OR PER THE MANUFACTURER'S SPECIFICATIONS.SEE GROUNDING ROD DETAIL.
3. ET STATION TO BE INSTALLED NO FURTHER THAN 90' AWAY FROM THE CONTROLLER AND A MINIMUM OF 15' OFF OF THE GROUND, OUT FROM UNDER ANY OVERHEAD OBSTRUCTIONS SUCH AS, BUT NOT LIMITED TO BUILDING OVERHANGS, TREES, OR UTILITIES.

6 PEDESTAL MOUNTED CONTROLLER

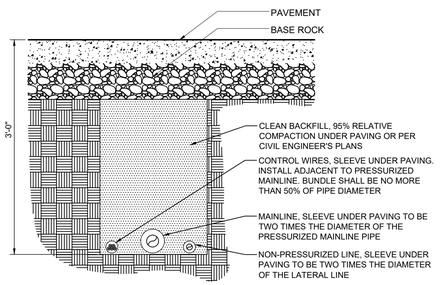
NTS L-IR-EQU-11



NOTES
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. SLEEVING IS REQUIRED AS SHOWN ON PLAN.
3. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

7 IRRIGATION TRENCHING

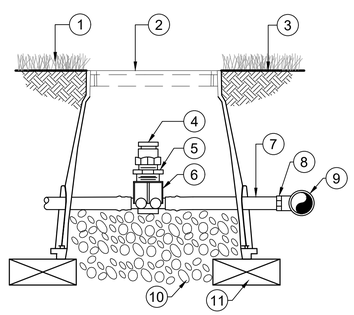
NTS L-IR-EQU-10



NOTES
1. SEE IRRIGATION LEGEND FOR MAINLINE SIZE AND TYPE.
2. ALL SLEEVES SHALL BE SCH. 200 PVC PIPE.
3. ALL SLEEVES SHALL EXTEND 12" BEYOND THE EDGE OF PAVEMENT.
4. END OF SLEEVES SHALL BE LOCATED WITH A WOODEN STAKE OR PVC PIPE. LOCATORS SHALL RUN CONTINUOUSLY FROM THE END OF THE SLEEVE TO FINISHED GRADE.

8 TYPICAL IRRIGATION SLEEVING

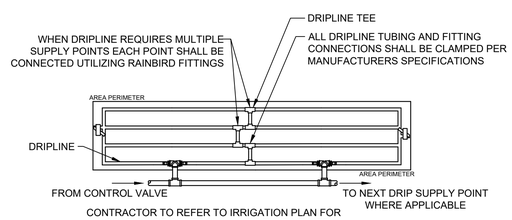
L-IR-EQU-02



1. TURF GRASS
2. SUBTERRANEAN EMITTER BOX
3. FINISHED GRADE
4. 1/2" AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
5. 1/2" X 3/4" PVC REDUCER BUSHING
6. BARB X FEMALE THREAD CONNECTOR
7. 1/2" BLANK DRIPLINE TUBING
8. BARB X MALE THREAD CONNECTOR
9. PVC TEE CONNECTED TO PVC HEADER PIPE
10. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL
11. BRICK (1 OF 2)

9 DRIPLINE AIR RELIEF VALVE

NTS L-IR-VAL-59

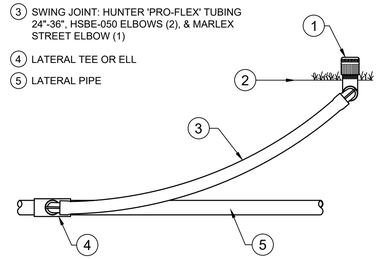


CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS.

NOTE
1. DRIP TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 16 INCHES.
2. DRIP TUBING TO BE INSTALLED IN A GRID PATTERN. DRIP TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.
3. INSTALL WITH AIR RELIEF VALVE, OPERATION INDICATOR AND FLUSH VALVE. INSTALL ALL UNDERGROUND EQUIPMENT IN 12" ROUND VALVE BOX.

10 TYPICAL DRIP IRRIGATION

NTS L-IR-DRI-25



1. HUNTER PCB BUBBLER
2. FINISH GRADE
3. SWING JOINT: HUNTER 'PRO-FLEX' TUBING 24"-36", HSBE-050 ELBOWS (2), & MARLEX STREET ELBOW (1)
4. LATERAL TEE OR ELL
5. LATERAL PIPE

11 HUNTER PCB BUBBLER

NTS L-IR-BUB-19

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR
ENGINEER OF RECORD
SIGNATURE AND SEAL
REFER TO
C-02 - SIGNATURE SHEET

KHA PROJECT	045523036
DATE	NOV. 2023
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	SAP
CHECKED BY	MAJ

IRRIGATION DETAILS

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
IR-151

LUMINAIRE SCHEDULE - BUILDING MOUNT

SYMBOL	LABEL	CATALOGUE NUMBER	LAMP	WATTS
●	N	LDN6 40/15 L08AR LS MVOLT GZ10 WL LITHONIA	LED	19
⧉	P	SLIM18N RAB LIGHTING	LED	18
◠	S	OLLWU LED P1 40K 120 DDB LITHONIA	LED	11

F6 SITE PHOTOMETRIC PLAN

SCALE : 1" = 20'-0"

STATISTICS

SYMBOL	AVG	MAX	MIN	MAX/MIN	AVG/MIN
+	2.0 fc	20.0 fc	0.0 fc	N/A	N/A

LUMINAIRE SCHEDULE - SITE LIGHTING

ALL POLES SHALL BE CONCRETE

PRELIMINARY

SYMBOL	LABEL	CATALOGUE NUMBER	LAMP	WATTS
▭▫▭	OA	(2) DSX1 LED P6 40K T5W MVOLT 25' POLE	LED	326
▭▫	OB	DSX1 LED P6 40K T2M MVOLT 25' POLE	LED	163

NEW CULVER'S RESTAURANT
975 NE Park Street
Okeechobee, FL 34973
County of OKEECHOBEE

SEAL

OWNER:
S & L Properties Okeechobee LLC
2651 Kirking Court
Portage, WI 53901
Jeffrey J. Liegel, Realty Manager / Member
608-742-2893

OLLMANN ASSOCIATES ARCHITECTS, P.C.
200 South State Street
Belvidere, Illinois 61008
815-544-7790 Phone

SITE PHOTOMETRIC PLAN

Date: 11-2-2023 Revision:

2023-010

SE 101

LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

INTENDED USE

Provides years of maintenance-free illumination for outdoor use in residential & commercial applications. Ideal for applications such as lighting walkways and stairways for safety and security.

CONSTRUCTION

Cast-aluminum housing with corrosion-resistant paint in either dark bronze or white finish.

ADA compliant.

OPTICS

4000K CCT LEDs.

Polycarbonate lens protects the LED from moisture, dirt and other contaminants.

LUMEN MAINTENANCE: The LED will deliver 70% of its initial lumens at 50,000 hour average LED life. See Lighting Facts label on page 2 for performance details.

ELECTRICAL

MVOLT driver operates on any line voltage from 120-277V

Operating temperature -30ºC to 40ºC.

1KV surge protection standard.

INSTALLATION

Surface mounts to universal junction box (provided by others).

LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations.

Tested in accordance with IESNA LM-79 and LM-80 standards.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Note: Specifications subject to change without notice.

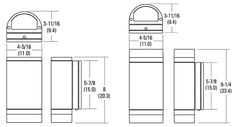
Outdoor General Purpose

OLLWD & OLLWU

LED WALL CYLINDER LIGHT

Specifications

All dimensions are inches (centimeters)



ORDERING INFORMATION For shortest lead times, configure products using **bolded options.**

Example: OLLWD LED P1 40K MVOLT DDB

Series		Performance Package	Color temperature (CCT)		Voltage		Finish	
OLLWD LED	Downlight	**P1**	**40K**	4000K	**MVOLT**	120V-277V	**DDB**	Dark bronze
OLLWU LED	Up & downlight				**120**	120V[1]	**WH**	White

Notes

1 Only available with OLLWU and in DDB.

LITHONIA LIGHTING®

Catalog Number	LDN6 40/15 MVOLT EZ10 WL HSG - L06AR LS TRIM
Notes	
Type	N

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.

CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.

Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment.

Two combination ½"-3/4" and four ½" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.

Accommodates 12"-24" joist spacing.

Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.

Max ceiling thickness 1-1/2".

OPTICS — LEDs are binned to a 3-step SDCM; 80 CRI minimum.

LED light source concealed with diffusing optical lens.

General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

ELECTRICAL — Multi-volt (120-277V, 50/60Hz) eldoLED 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

70% lumen maintenance at 50,000 hours.

LISTINGS — Certified to US and Canadian safety standards. Damp location standard (wet location, covered ceiling optional). ENERGY STAR® certified product.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

LDN6

6" OPEN and WALLWASH LED
Non-IC
New Construction Downlight

A+ Capable options indicated by this color background.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. **Example:** LDN6 35/15 L06AR LSS MVOLT EZ10

LDN6	40/15				L06AR		LS		MVOLT	
Series	**Color temperature**	**Lumens**[1]			**Aperture/Trim Color**		**Finish**		**Voltage**	
LDN6 6" round	27/ 2700K	05 500 lumens	25 2500 lumens		L06 Downlight	AR Clear	LSS Semi-specular		MVOLT Multi-volt	
	30/ 3000K	10 1000 lumens	30 3000 lumens		LW6 Wallwash	WR[1] White	LD Matte diffuse		120 120V	
	35/ 3500K	15 1500 lumens	40 4000 lumens			BR[1] Black	LS Specular		277 277V	
	40/ 4000K	20 2000 lumens	50 5000 lumens							
	50/ 5000K									

EZ10	WL		
Driver	**Options**		
EZ10 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 10%	SF[1] Single fuse	NB0[1] nLight™ Lumen Compensation	
EZ1 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%	TRW[4] White painted flange	HAO[4] High ambient option	
	TRBL[4] Black painted flange	WL Wet Location	
	EL[5] Emergency battery pack with integral test switch, CEC compliant	RRL___ RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ARL luminaire brands. Refer to RRL for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S.	
	ELR Emergency battery pack with integral test switch, CEC compliant		
	NPS80EZ[6] nLight™ dimming pack controls 0-10V eldoLED drivers.	USPOM US point of manufacture	
	NPS80EZER[6] nLight™ dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit.		

Accessories: *Order as separate catalog number.*

EAC ISSM 375	Compact interruptible emergency AC power system
EAC ISSM 125	Compact interruptible emergency AC power system
GRA6B J2	Oversized trim ring with 8" outside diameter [7]
SCA6	Sloped ceiling adapter. Refer to TECH-SCA for more options.

Notes

1 Overall height varies based on lumen package; refer to dimensional chart on page 3.
2 Not available with finishes.
3 120V only.
4 Available with clear (AR) reflector only.
5 Add "SD" for self-diagnostic option (i.e. ELSD)
6 Must specify voltage 120V or 277V.
7 Fixture begins at 85% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ10 and EZ1 drivers.
8 Fixture height is 6.5" for all lumen packages with HAO.

SLIM17FA15ADJ

RAB

Color: Bronze

Weight: 3.0 lbs

Project:	Type:
Prepared By:	Date:

Driver Info

Type	Constant Current
120V	0.13A
208V	0.07A
240V	0.06A
277V	0.05A
Input Watts	14.2/14/14.2W

LED Info

Watts	15W
Color Temp	3000K/4000K/5000K
Color Accuracy	70 CRI
L70 Lifespan	100,000 Hours
Lumens	1761/1904/1852 lm
Efficacy	124/136.2/130.3 lm/W

Technical Specifications

Field Adjustability

Field Adjustable:

Color temperature selectable by 3000K, 4000K and 5000K

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

IP Rating:

Ingress protection rating of IP65 for dust and water

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: PLOMVJOV62Q3

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

Equivalent to 70W Metal Halide

LED Characteristics

LEDs:

Long-life, high-efficiency, surface-mount LEDs

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.13A, 208V: 0.07A, 240V: 0.06A, 277V: 0.05A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

Photocell:

120-277V integrated button photocell included.

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

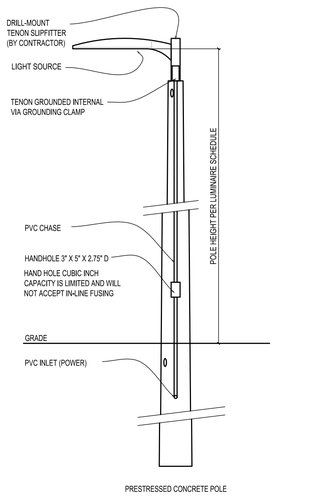
Maximum Ambient Temperature:

Suitable for use in up to 50°C (122°F)

Housing:

Precision die-cast aluminum housing and door frame

Need help? Tech help line: **(888) 722-1000** Email: **sales@rablighting.com** Website: **www.rablighting.com**



LIGHT POLE DETAIL

NO SCALE

D-Series Size 1
LED Area Luminaire

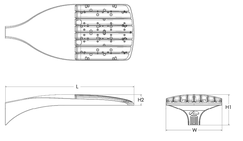
d*series

Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	0.69 ft² (0.06 m²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)



Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature[1]	Color Rendering Index[1]	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics**	(this section 70CRI only)		AFR Automotive front row	MVOLT (120V-277V)[4]	**Shipped included**
	P1 P6	30K 3000K	70CRI	T1S Type I short	HVOLT (347V-480V)[3,4]	SPA Square pole mounting (#8 drilling)
	P2 P7	40K 4000K	70CRI	T2M Type II medium	XVOLT (277V - 480V)[3,4]	RPA Round pole mounting (#8 drilling)
	P3 P8	50K 5000K	70CRI	T3M Type III medium		SPAS Square pole mounting #5 drilling[5]
	P4 P9	(this section 80CRI only, extended lead times apply)		T3LG Type III low glare[5]		RPAS Round pole mounting #5 drilling[5]
	P5	27K 2700K	80CRI	T4M Type IV medium		SPABN Square narrow pole mounting #8 drilling
	Rotated optics	30K 3000K	80CRI	T4LG Type IV low glare[5]		WBA Wall bracket[6]
	P10[1] P12[1]	35K 3500K	80CRI	TFTM Forward throw medium		MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)
	P11[1] P13[1]	40K 4000K	80CRI			
		50K 5000K	80CRI			

Control options		Other options		Finish (required)	
Shipped installed	PER7 Seven-pin receptacle only (controls ordered separately)[16,21]	**Shipped installed**		DDBXD	Dark Bronze
NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc[7,15,20,21]	FAO Field adjustable output[15,21]	SPD20KV 20KV surge protection		DBLXD	Black
PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc[15,20,21]	BL30 Bi-level switched dimming, 30%[16,21]	HS Houseside shield (black finish standard)[22]		DNAXD	Natural Aluminum
PER NEMA twist-lock receptacle only (controls ordered separately)[16]	BL50 Bi-level switched dimming, 50%[16,21]	L90 Left rotated optics[5]		DWHXD	White
PERS Five-pin receptacle only (controls ordered separately)[16,21]	DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[21]	R90 Right rotated optics[5]		DDBTXD	Textured dark bronze
	DS Dual switching[16,19,21]	CCE Coastal Construction[23]		DBLBXD	Textured black
		HA 50°C ambient operation[24]		DNATXD	Textured natural aluminum
		Shipped separately		DWHGXD	Textured white
		EGSR External Glare Shield (reversible, field install required, matches housing finish)			
		BSDB Bird Spikes (field install required)			

PRELIMINARY

NEW CULVER'S RESTAURANT
975 NE Park Street
Okeechobee, FL 34973
County of OKEECHOBEE

SEAL

OWNER:
S & L Properties Okeechobee LLC
2651 Kirking Court
Portage, WI 53901
Jeffrey J. Liegel, Realty Manager / Member
608-742-2893

OLLMANN ASSOCIATES ARCHITECTS, P.C.
200 South State Street
Belvidere, Illinois 61008
815-544-7790 Phone

SITE FIXTURE DETAILS

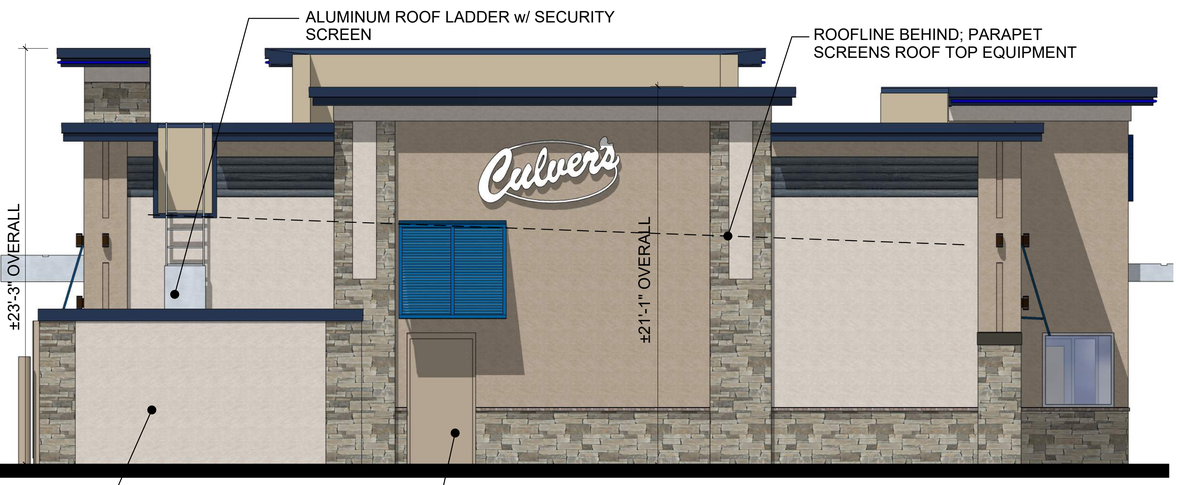
Date: 11-2-2023 Revision:

2023-010

SE 201

WEST / DRIVE THRU ELEVATION

SOUTH / FRONT ELEVATION



NORTH / REAR ELEVATION

EAST / MAIN ENTRY ELEVATION

REPRESENTATION	MATERIAL	COLOR
ROOF EDGE EXCEPTIONAL METALS		"HARBOR BLUE"
ACCENT EIFS		"TONY TAUPE" SW7038
WOOD-LOOK CLADDING NEWTECHWOOD		"BRAZILIAN IPE"
METAL AWNINGS (BY OTHERS)		"SIGNAL BLUE" RAL 5005
EIFS		"POPULAR GRAY" SW6071
MFGR'D STONE w/ STONE SILL TRIM		"ECHO RIDGE" BORAL

NEW CULVER'S RESTAURANT
Highway 70 / NE Park Street
Okeechobee, FL 34973
County of Okeechobee

Culver Franchising System, Inc
1240 Water Street
Prairie du Sac, WI 53578
608-643-7980

OLLMANN ASSOCIATES
ARCHITECTS
200 South State Street
Belvidere Illinois 61008
815-544-7790 Phone

ELEVATIONS

NOTE: THOUGH THESE IMAGES HAVE PHOTO REALISTIC QUALITIES, THE ACTUAL BUILDING MATERIALS MAY VARY IN APPEARANCE.

Revision:

Date: 01-26-2023

2023-010

A1

REAR LEFT VIEW (NWC)

REAR RIGHT VIEW (NEC)

NEW CULVER'S RESTAURANT
Highway 70 / NE Park Street
Okeechobee, FL 34973
County of Okeechobee

Culver Franchising System, Inc
1240 Water Street
Prairie du Sac, WI 53578
608-643-7980

OLLMANN ASSOCIATES
ARCHITECTS
200 South State Street
Belvidere Illinois 61008
815-544-7790 Phone

ELEVATIONS

NOTE: THOUGH THESE IMAGES HAVE PHOTO REALISTIC QUALITIES, THE ACTUAL BUILDING MATERIALS MAY VARY IN APPEARANCE.

Date: 01-26-2023

Revision:

2023-010

A2

NOTE: SOME ITEMS INSTALLED BY OTHERS REQUIRE ROUGH-IN AND/OR WIRING BY CONTRACTOR AS NOTED IN PLUMBING AND ELECTRICAL SCHEDULES.

OWNER FURNISHED, FOOD SERVICE EQUIPMENT CONTRACTOR (FSEC) INSTALLED

ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE
1	WALK IN COOLER (BOX, LINE SETS, & COIL DRAIN PIPES)	44	GRILL SIDE WARMER CART	80	REFRIGERATED S/S BACKCOUNTER
2	WALK IN FREEZER (BOX, LINE SETS, & COIL DRAIN PIPES)	45	STAINLESS STEEL WALLCAP / ELEC CHASE COVER	81	HEATED PASS-THRU UNIT
3	WALK-IN COOLER RACKS	47	FRONT PASS-THRU STAINLESS STEEL CHANNEL TRIM	82	TOOL SHELF
4	WALK-IN COOLER DUNNAGE RACKS	48	REFRIGERATED MEAT CART	83	REACH IN REFRIGERATOR - NOT INCLUDED
4A	MOBILE CUSTARD MIX RACKS	50	MOBILE WORKTABLE	90	FRONT SERVICE COUNTER
5	WALK-IN FREEZER SHELVING	51	GRILL AND STAND	92	CUP DISPENSERS
6	WALK-IN FREEZER DUNNAGE RACKS	52	OPEN NUMBER	93	STAINLESS STEEL DRIVE-THRU COUNTER
7	WORKTABLE / SINK	53	SANDWICH WRAP STATION	94	STAINLESS STEEL DRIVE-THRU COUNTER
8	WALL SHELF	54	ORDER BARS	95	CUP DISPENSERS
11	LOCKERS	57	STAINLESS STEEL REFRIGERATION CHASE COVER	100	DISPLAY CABINET
14	STAINLESS STEEL WALL CORNER GUARDS, SHOWN: (14)	58	FRY STATION HEAT LAMP	101	TRAY / TRASH / RECYCLE CABINETS
16	OPEN NUMBER	60	FRYERS	102	TRAY / TRASH CABINET - NOT INCLUDED
20	DISHTABLES AND UTENSIL SINKS	61	CUSTOM FISH REFRIGERATOR	106	RETAIL FREEZER
21	WALL SHELF	62	OPEN NUMBER	107	CONDIMENT CUP DISPENSERS
24	OPEN NUMBER	65	MOBILE STAINLESS STEEL WORKTABLE	108	TABLES / CHAIRS / BOOTHS
27	SLANTING WALL SHELF	66	FUTURE ICE MACHINE - ROUGH-IN ONLY	109	CONDIMENT DISPENSERS
29	CLEAN PAN SHELVING	66A	REMOTE ICE MAKER	110	NAPKIN DISPENSERS
31	JANITOR'S SHELVING	67	OPEN NUMBER	113	BEVERAGE COUNTER
34	REACH-IN FREEZER	68	WALL SHELF	114	CONDIMENT COUNTER
35	*NOT USED*	71	WORK TABLE	115	OPEN NUMBER
37	REFRIGERATED DRAWER BASE	74	REFRIGERATED TOPPING TABLE	119	WASTE RECEPTACLES
38	OPEN NUMBER	75	CUSTARD DIPPING CABINET	120	HIGH TOP TABLES AND CHAIRS
39	OPEN NUMBER	76	CAKE CONE DISPENSER	121	DROP IN CUSTARD COLD PAN
40	BREAD SHELF - NOT INCLUDED	77	SUNDAE TOPPING SYSTEM	123	WORKTOP REFRIGERATOR - NOT INCLUDED
41	REFRIGERATED WORKTABLE	78	DISH / CUP DISPENSERS	505	REFRIGERATION LINE SETS (SEE H6 / A105)
42	MOBILE WORKTABLE / OVERSHELF	79	WALL SHELVES		

OWNER FURNISHED, VENDOR INSTALLED

ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE
9	COOKER / WARMERS	98	ICED TEA BREWER / DISPENSER
12	WASTE OIL RECOVERY SYSTEM	99	DRIVE-THRU LID DISPENSER - NOT INCLUDED
15	BAG-IN-BOX SYSTEM	103	ICE AND SODA DISPENSER
17	TRASH CANS / CART	104	CARBONATOR
18	BUN RACKS	105	SELF SERVICE LID DISPENSER
33	CHEMICAL DISPENSING SYSTEM	111	STRAW DISPENSERS
36	MICROWAVE OVEN	112	CONDIMENT PANS
43	BUN TOASTER	118	MONITOR BRACKETS
46	OPEN NUMBER		
55	WRAP PAPER HOLDERS		NOTE: G.G. TO COORDINATE SOME ITEMS PLACED BY OWNER & NOT BY VENDOR - CONFIRM
56	HEATED BUN WARMER		
63	TRIPLE CUSTARD MACHINE		
69	ASTRO BLENDERS		
70	MILKSHAKE MACHINE		
72	HEATED SYRUP DISPENSERS		
73	LIQUID TOPPING DISPENSERS		
84	COFFEE MAKER		
85	POWER WASHER - NOT INCLUDED		
86	MENU BOARD / SIGNAGE PACKAGE		
87	WAFFLE CONE DISPENSER		
88	OPEN NUMBER		
89	FOOD LABEL MARKER		
91	CASH REGISTER / POS SYSTEM		
96	ICE AND SODA DISPENSER		
97	CARBONATOR		

OWNER FURNISHED, CONTRACTOR INSTALLED

ITEM	EQUIPMENT SCHEDULE
10	KETCHUP VOL PAK DISPENSER
13	WASHER / DRYER
19	HAND SINK
22	PRE-RINSE SPRAY ASSEMBLY
23	PRE-RINSE SPRAY ASSEMBLY
25	DISHWASHER
26	BOOSTER HEATER
30	EYE WASH STATION (CONTRACTOR TO PROVIDE MIXING VALVE PER PLUMBING SCHEDULE)
64	WATER FILTER
116	HAND TOWEL DISPENSERS
117	TOILET PAPER DISPENSERS
300	TRIM PACKAGE (SEE H2 / A103)
	FOOD SERVICE EQUIP. COUNTER BASES (SEE FINISH PLAN)
	SHARPS CONTAINERS
	AED OPTIONAL - CONFIRM WITH OWNER
	MOP HANGER
	ARTWORK (SEE SHEET A103.1)

CONTRACTOR FURNISHED, CONTRACTOR INSTALLED

ITEM	EQUIPMENT SCHEDULE
25A	DISHWASHER CONDENSATE HOOD - NOT INCLUDED
28	FIRE SUPPRESSION SYSTEMS
32	MOP SINK
49	EXHAUST HOOD - GRIDDLE
59	EXHAUST HOOD - FRYERS

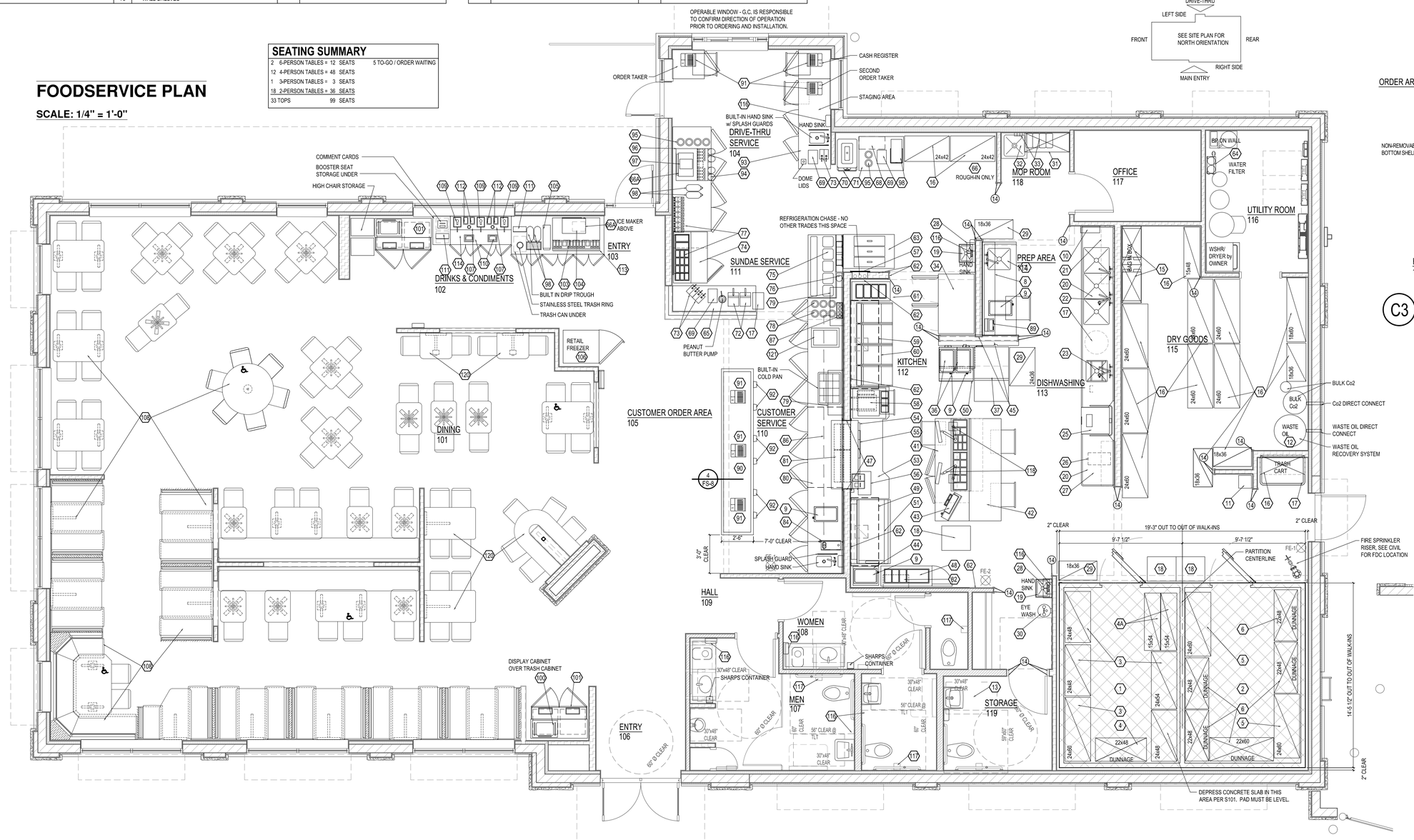
SEATING SUMMARY

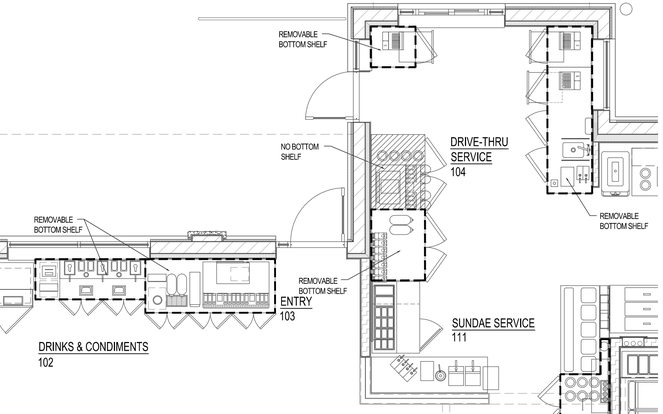
2	6-PERSON TABLES =	12	SEATS
12	4-PERSON TABLES =	48	SEATS
1	3-PERSON TABLES =	3	SEATS
18	2-PERSON TABLES =	36	SEATS
33	TOPS	99	SEATS

5 TO-GO / ORDER WAITING

FOODSERVICE PLAN

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





C3 CABINET BASE DETAIL

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

NEW CULVERS RESTAURANT
975 NE Park Street
Okeechobee, FL 34973
County of OKEECHOBEE

SEAL

OWNER:
S & L Properties Okeechobee LLC
2651 Kirking Court
Portage, WI 53901
Jeffrey J. Liegel, Realty Manager / Member
608-742-2883

OLLMANN ASSOCIATES ARCHITECTS, P.C.
200 South State Street
Belvidere, Illinois 61008
815-544-7790 Phone

FOOD SERVICE PLAN

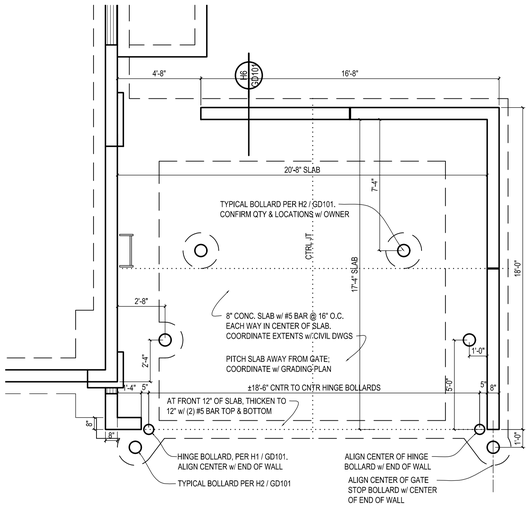
Revision:

Date: 1-27-2023

2023-010

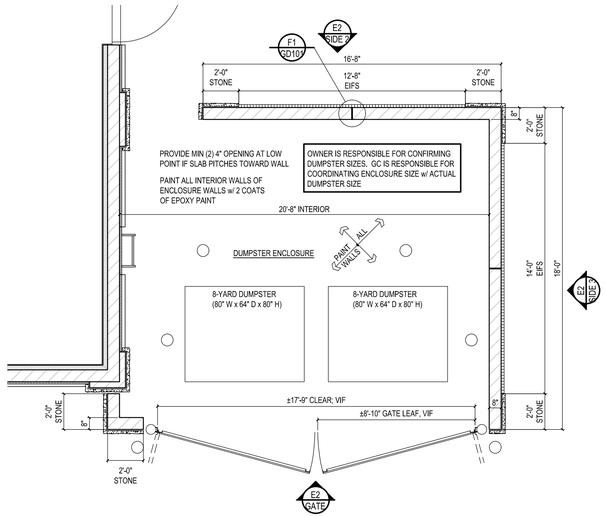
PRELIMINARY

FS-1

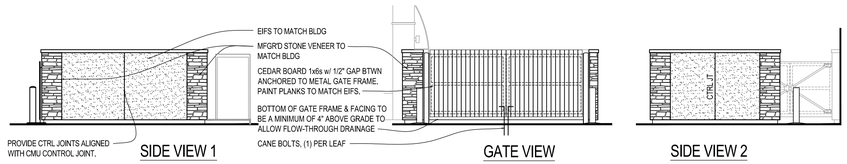


SEE CIVIL DRAWINGS FOR LOCATION OF ENCLOSURE

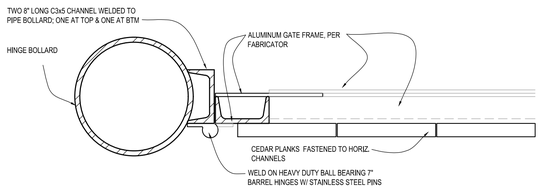
C2 FOUNDATION PLAN
SCALE : 1/4" = 1'-0"



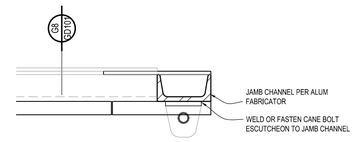
C3 FLOOR PLAN
SCALE : 1/4" = 1'-0"



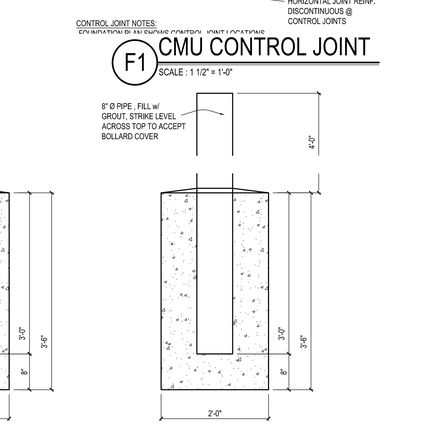
E2 ENCLOSURE ELEVATIONS
SCALE : 1/8" = 1'-0"



E7 HINGE DETAIL
SCALE : 3" = 1'-0"

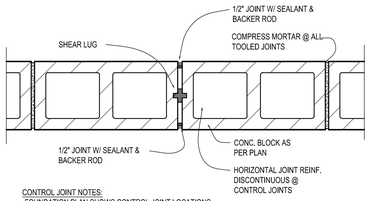


E8 SECT @ GATE MTG STILES
SCALE : 3" = 1'-0"

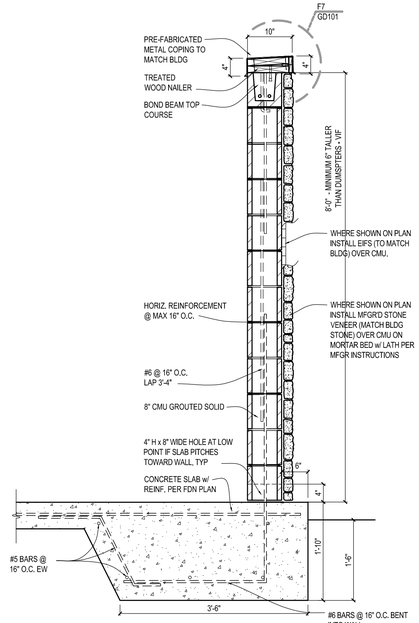


H1 HINGE BOLLARD
SCALE : 3/4" = 1'-0"

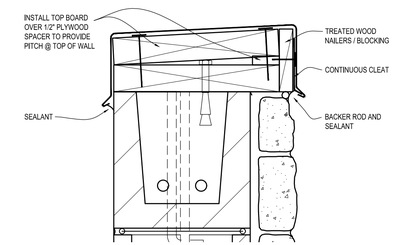
H2 BOLLARD
SCALE : 3/4" = 1'-0"



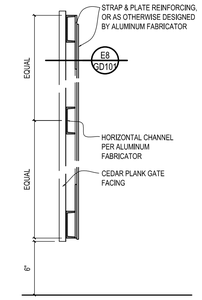
F1 CMU CONTROL JOINT
SCALE : 1 1/2" = 1'-0"



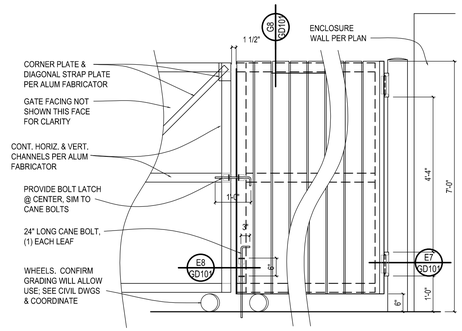
H6 ENCLOSURE WALL
SCALE : 3/4" = 1'-0"



F7 DETAIL
SCALE : 3" = 1'-0"



G8 DETAIL
SCALE : 1 1/2" = 1'-0"



H7 ENCLOSURE GATE ELEV
SCALE : 1/2" = 1'-0"

PRELIMINARY

NEW CULVER'S RESTAURANT
975 NE Park Street
Okeechobee, FL 34973
County of OKEECHOBEE

SEAL

OWNER:
S & L Properties Okeechobee LLC
2651 Kirking Court
Portage, WI 53901
Jeffrey J. Liegel, Realty Manager / Member
608-742-2883

OLLMANN ASSOCIATES ARCHITECTS, P.C.
200 South State Street
Belvidere, Illinois 61008
815-544-7790 Phone
© OAA - All rights reserved; any copying, transmittal or disclosure subject to OAA written approval.

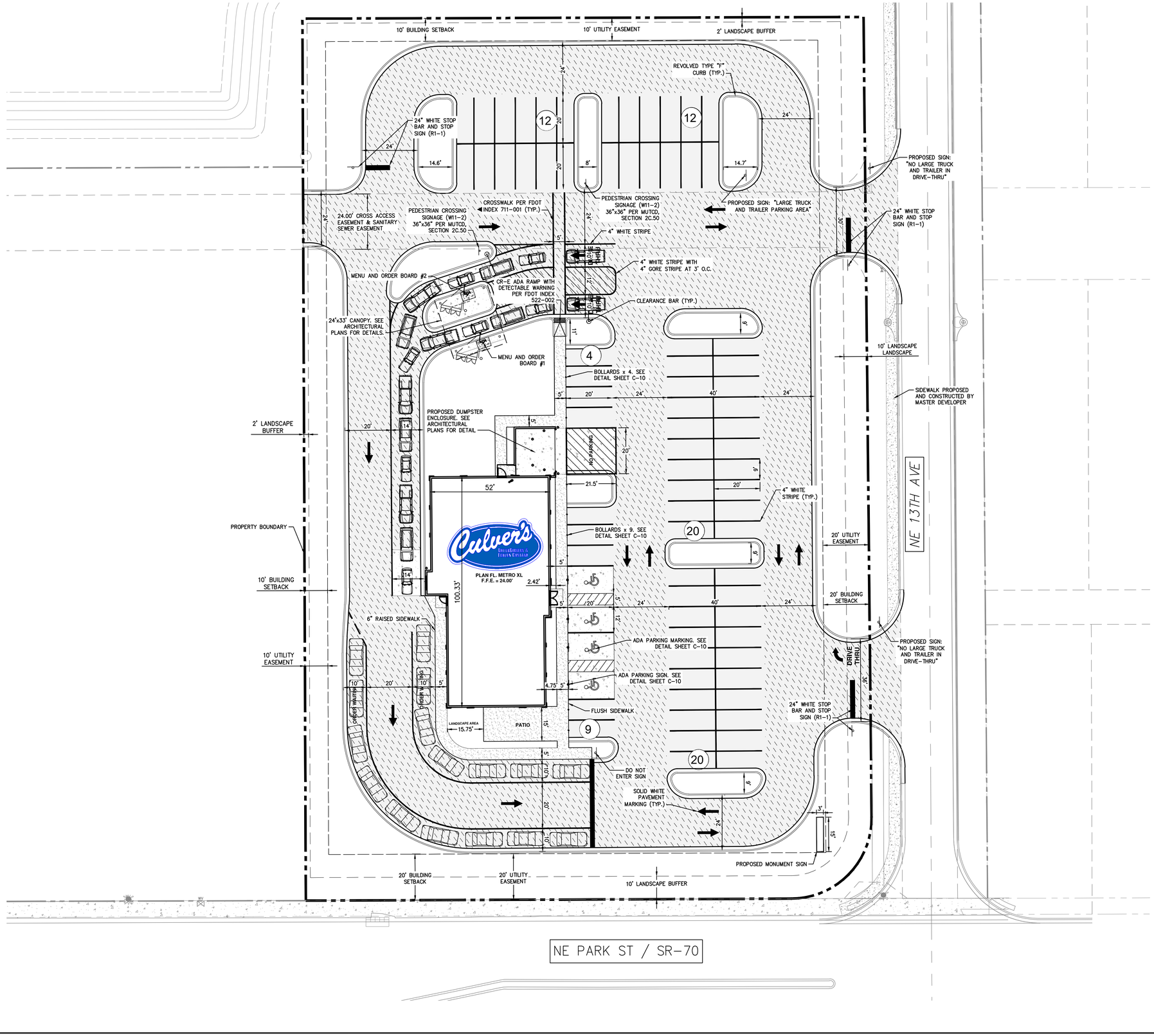
GARBAGE DUMPSTER

Revision:

Date: 1-27-2023

2023-010

GD 101



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND:

- PROPERTY BOUNDARY
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER
- CROSS-ACCESS EASEMENT
- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- BOLLARD

SITE DATA SUMMARY

SITE DATA INFO FOR RE# 2-15-37-35-0A00-00010-0000 & 3-15-37-35-0A00-00010-0010

ZONING: COMMERCIAL

LOT SIZE (SF)	93,872
LOT SIZE (AC)	2.15
BUILDING (SF)	4,827
BUILDING GFA (SF)	4,827
FAR	5.14%
LANDSCAPE AREA (SF)	28,341
PAVING (SF)	60,827
ISR-	69.9%
BUILDING SET BACKS:	
SR-70-	20 FEET
NORTH-	0 FEET
WEST-	0 FEET
REAR-	10 FEET
LANDSCAPE BUFFERS:	
SR-70-	10 FEET
NORTH-	2 FEET
WEST-	2 FEET
NE 13TH AVE-	10 FEET

REQUIRED PARKING CODE:
SECTION 3.90-512 PER CITY OF OKECHOBEE LAND DEVELOPMENT REGULATIONS
REQUIRED PARKING FOR RESTAURANT/FAST FOOD:
- 1 SPACE PER 75 SF OF CUSTOMER AREA

PARKING CALCULATIONS - REQUIRED

RESTAURANT/FAST FOOD:		1 SPACE PER 75 SF OF CUSTOMER AREA
BUILDING FOOTPRINT:		4,827 SF
		4,827 / 75 = 65 PARKING SPACES REQ.
STANDARD PARKING STALLS	=	73 SPACES
HANDICAP PARKING PROVIDED	=	4 SPACES
TOTAL	=	77 SPACES

GENERAL NOTES:

1. ALL ELEMENTS THAT ARE PLACES OF PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES ON THE SITE (INCLUDING ACCESSIBLE ROUTES AND PARKING) SHALL MEET THE REQUIREMENTS OF "FLORIDA AMERICANS WITH DISABILITIES ACCESSIBILITY IMPLEMENTATION ACT", THE CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN, FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION AND THE FAIR HOUSING ACT, WHEN APPLICABLE.
2. ALL ASPHALT REMOVAL SHALL HAVE SAW-CUT EDGES.
3. ALL TRAFFIC CONTROL SIGNAGE, CONES AND PROTECTIVE BARRIERS SHALL BE PROVIDED BY AND INSTALLED BY THE CONTRACTOR.
4. NO EXISTING WELLS LOCATED ON-SITE

PROJECT DATUM: NAVD 88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL REFER TO C-02 - SIGNATURE SHEET

KHA PROJECT 045523036
DATE NOV. 2023
SCALE AS SHOWN
DESIGNED BY JWC
DRAWN BY RCM
CHECKED BY JWC

OVERALL SITE PLAN

CULVER'S OKEECHOBEE
PREPARED FOR
S&L PROPERTIES OKEECHOBEE, LLC
OKEECHOBEE FLORIDA

SHEET NUMBER
C-06

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)

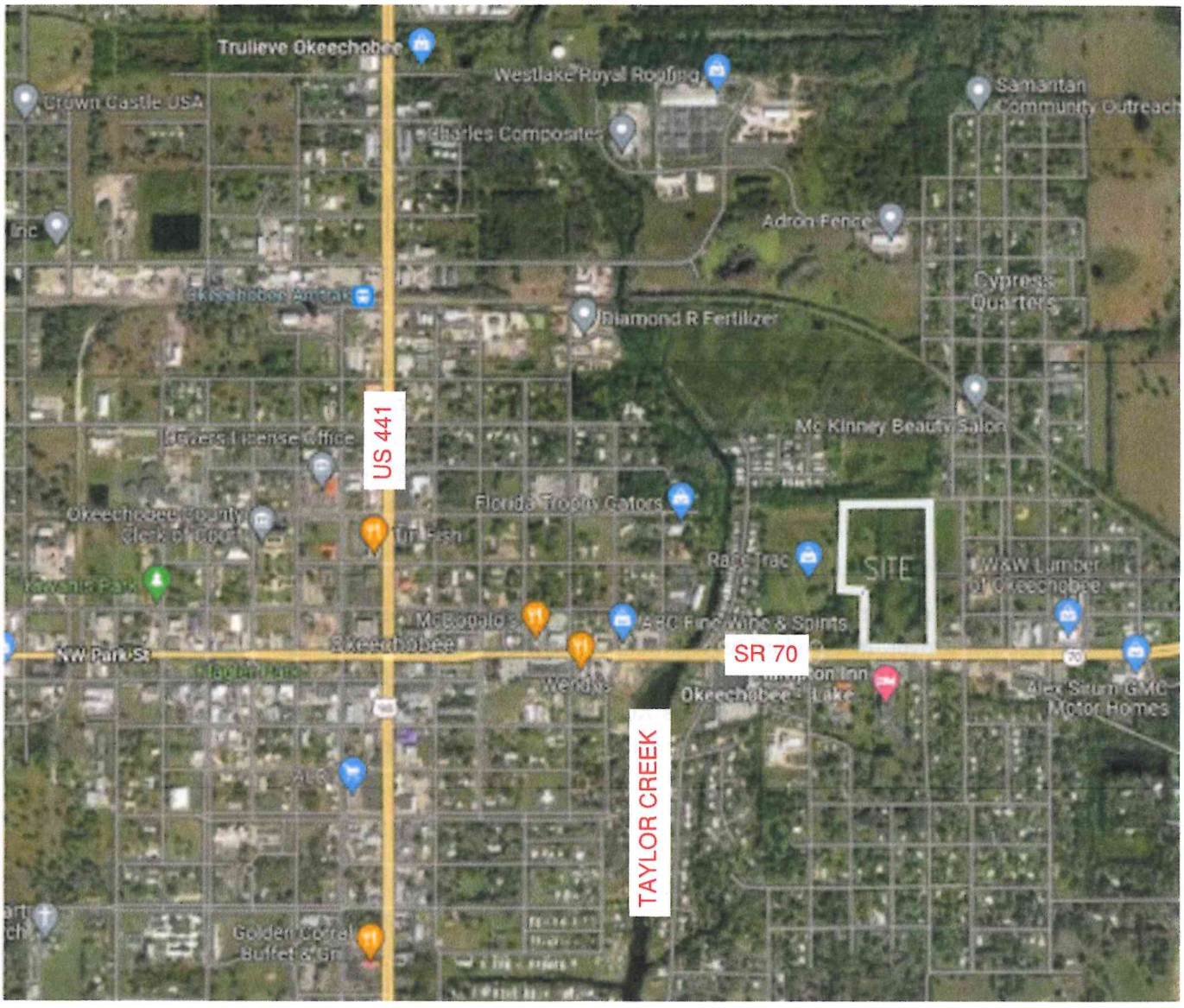
FEMA: Zone X (12093C0480C - 7/16/2016)

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.

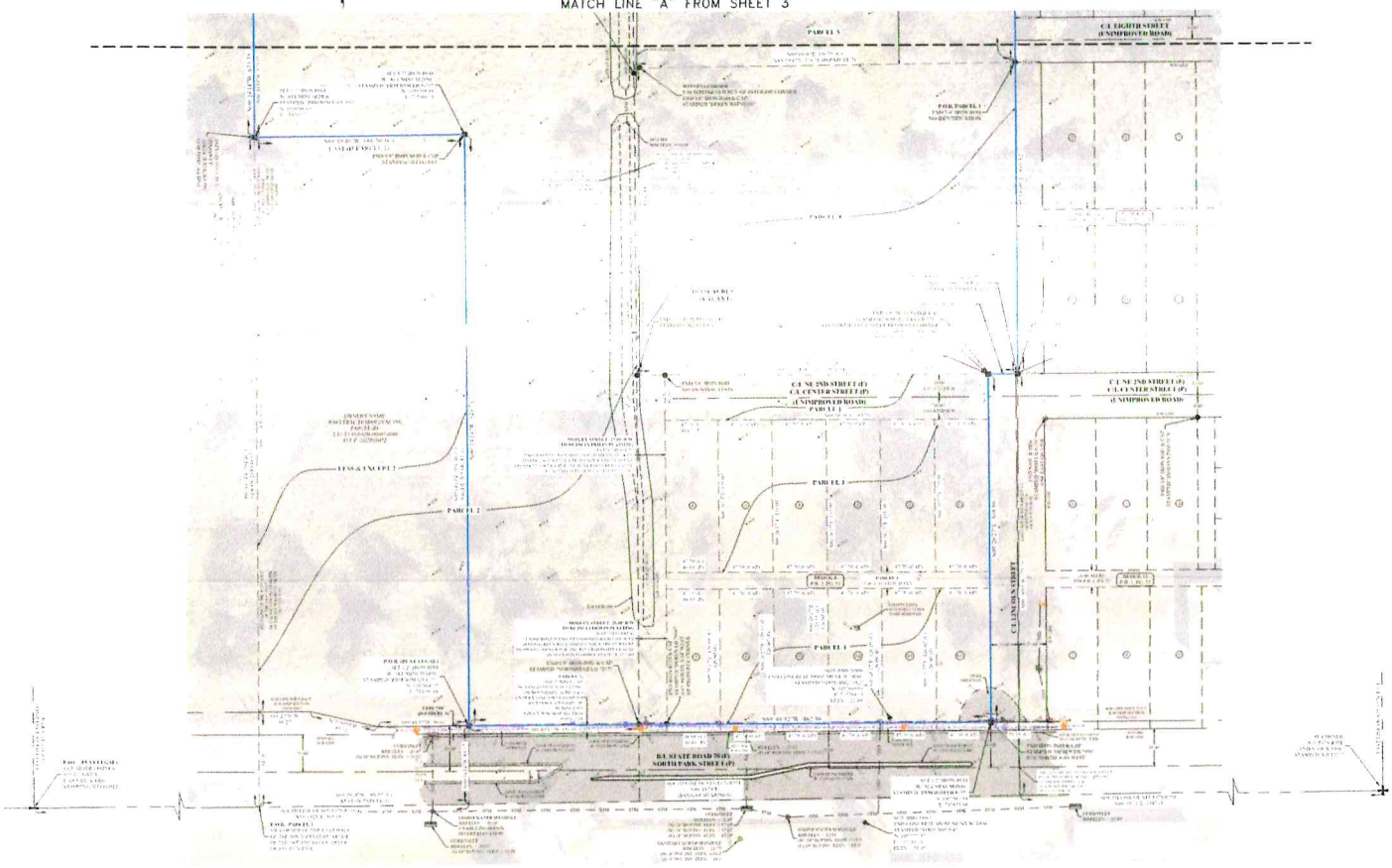
PRE-BASIN MAP

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

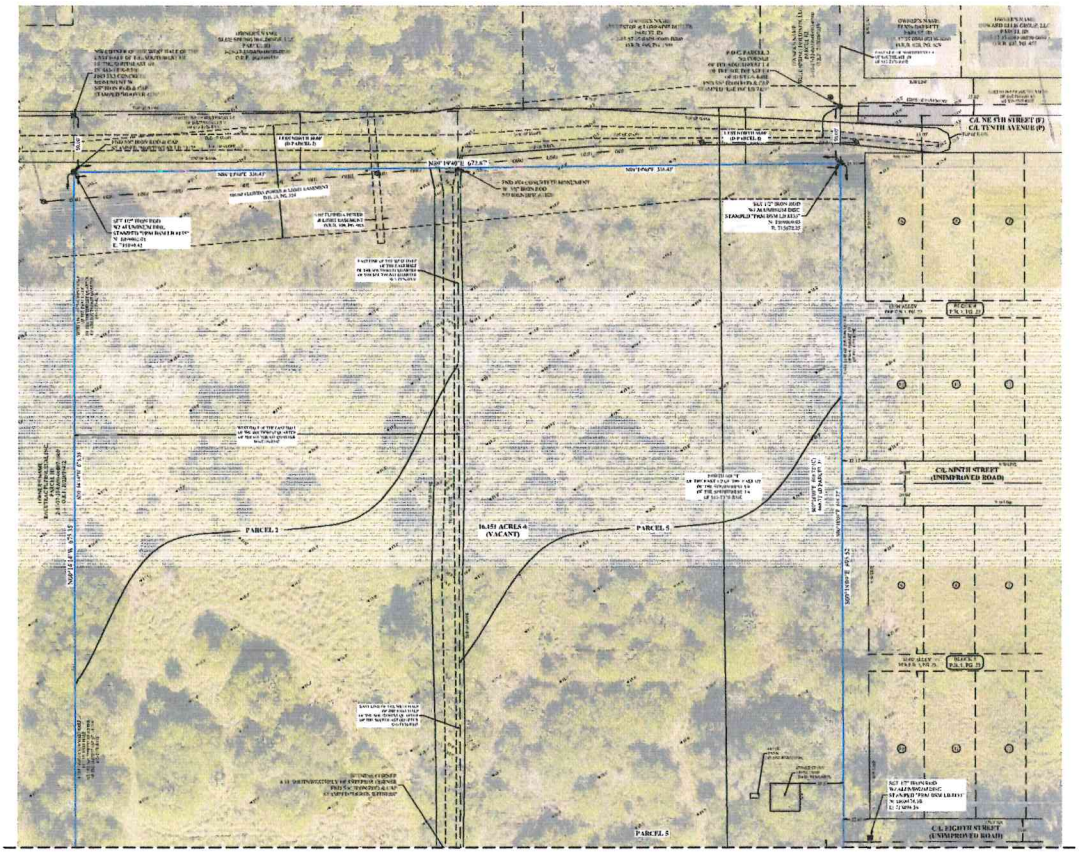


BSM & ASSOCIATES
LAND SURVEYING SERVICES

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



MATCH LINE "A" FROM SHEET 2

GRAPHIC SCALE

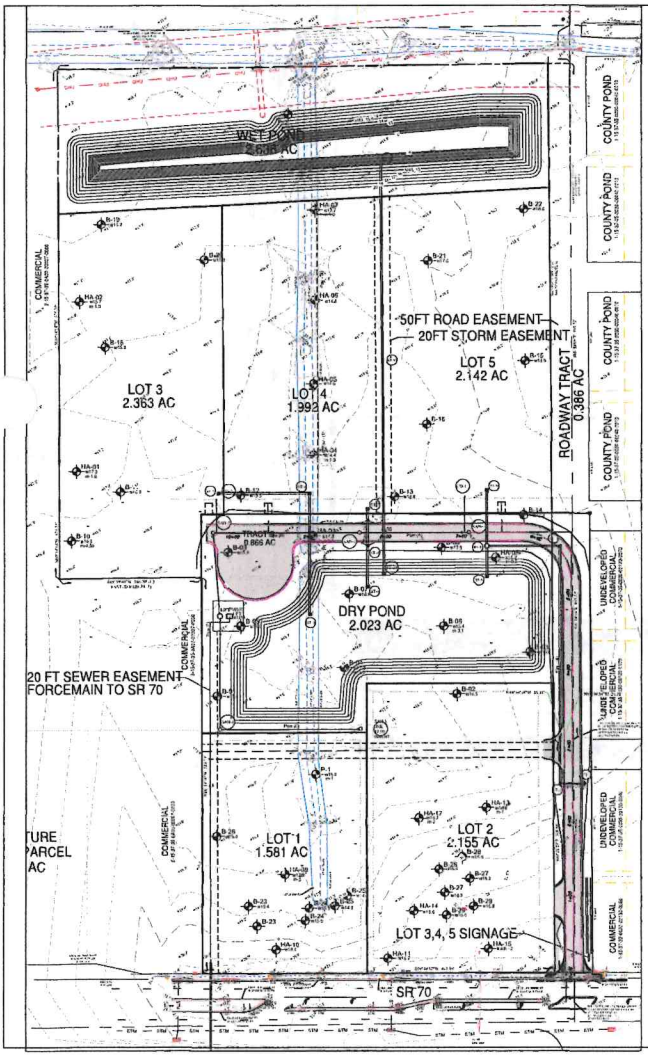
1 INCH = 40 FT
(INTENDED DISPLAY SCALE)

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 = 15.79 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

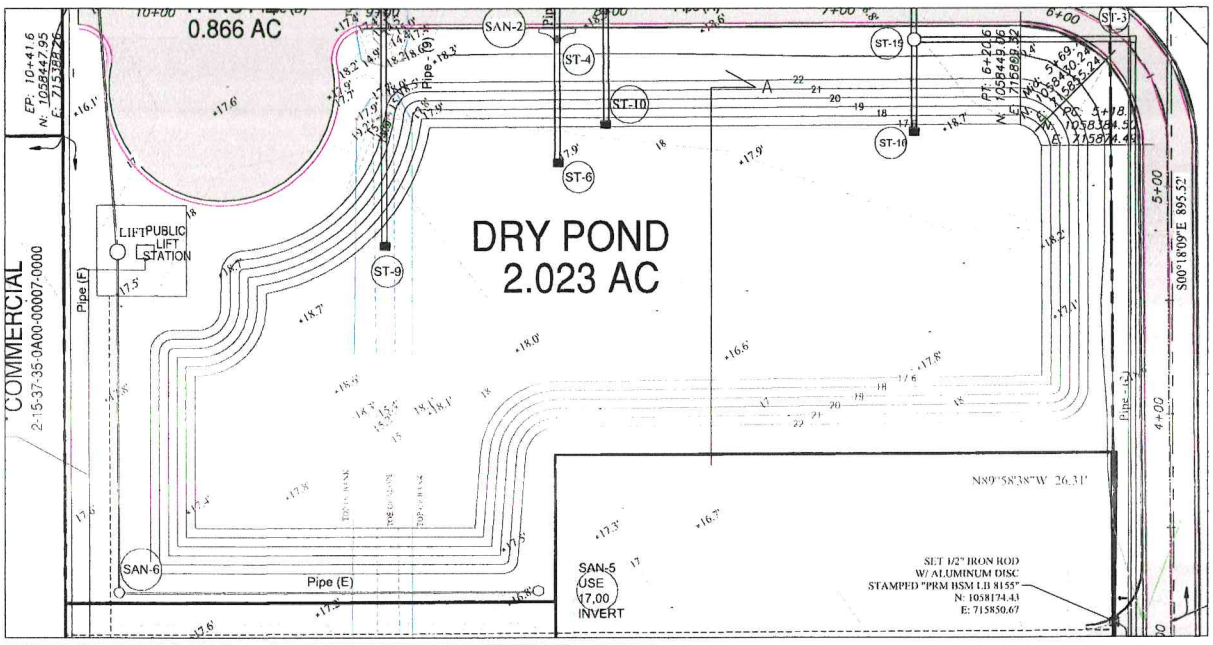
PARK STREET COMMERCE CENTER

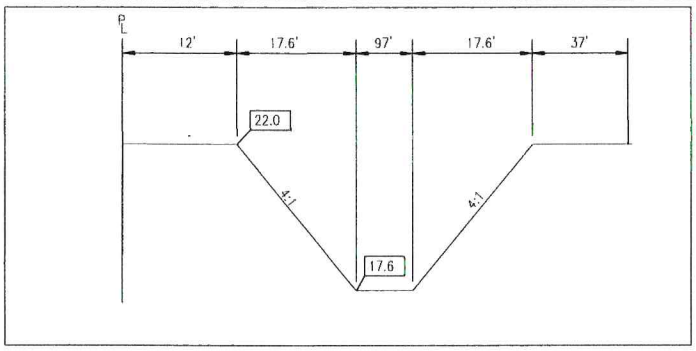
6/12/2023

GRADING PLAN

PROJECT NO. 2249

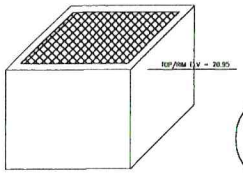
C5.0





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
(N.T.S.)

AMERICAN CIVIL ENGINEERING CO.

DRY STORM POND PLAN

PARK STREET COMMERCE CENTER

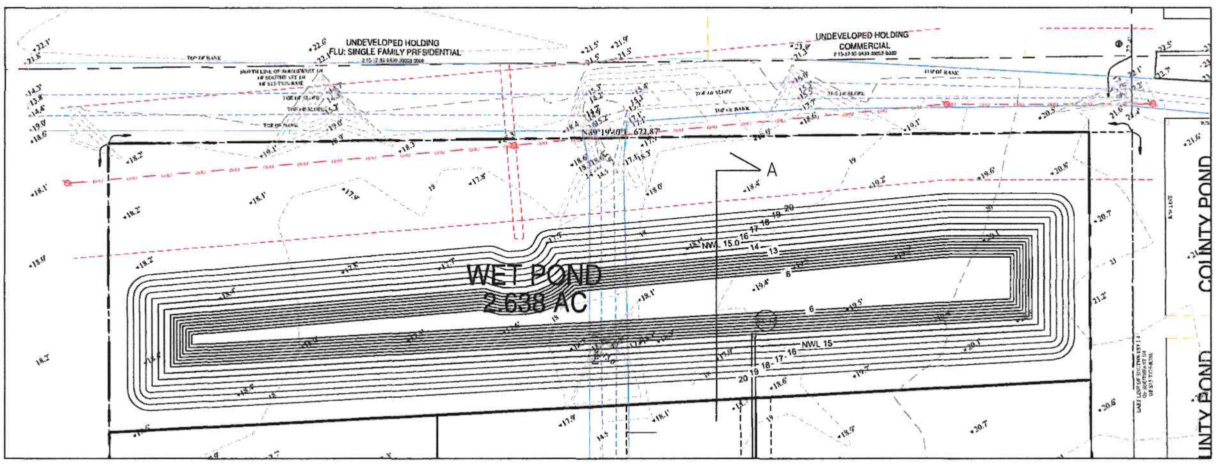
1000 STATE ROAD 73 E, OKEECHOBEE, FLORIDA 34972

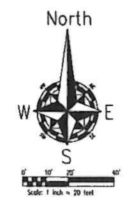
6/12/2023

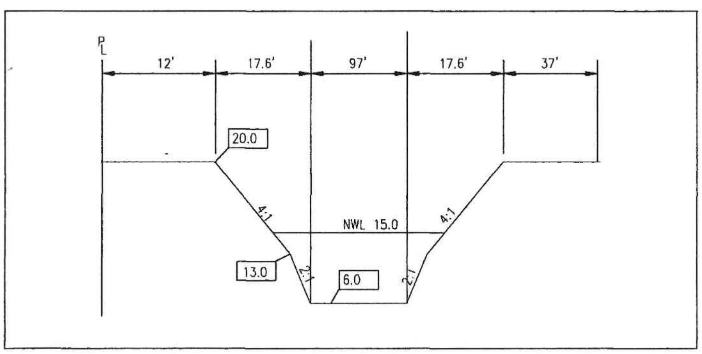
DRY STORM POND PLAN

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

C15.0

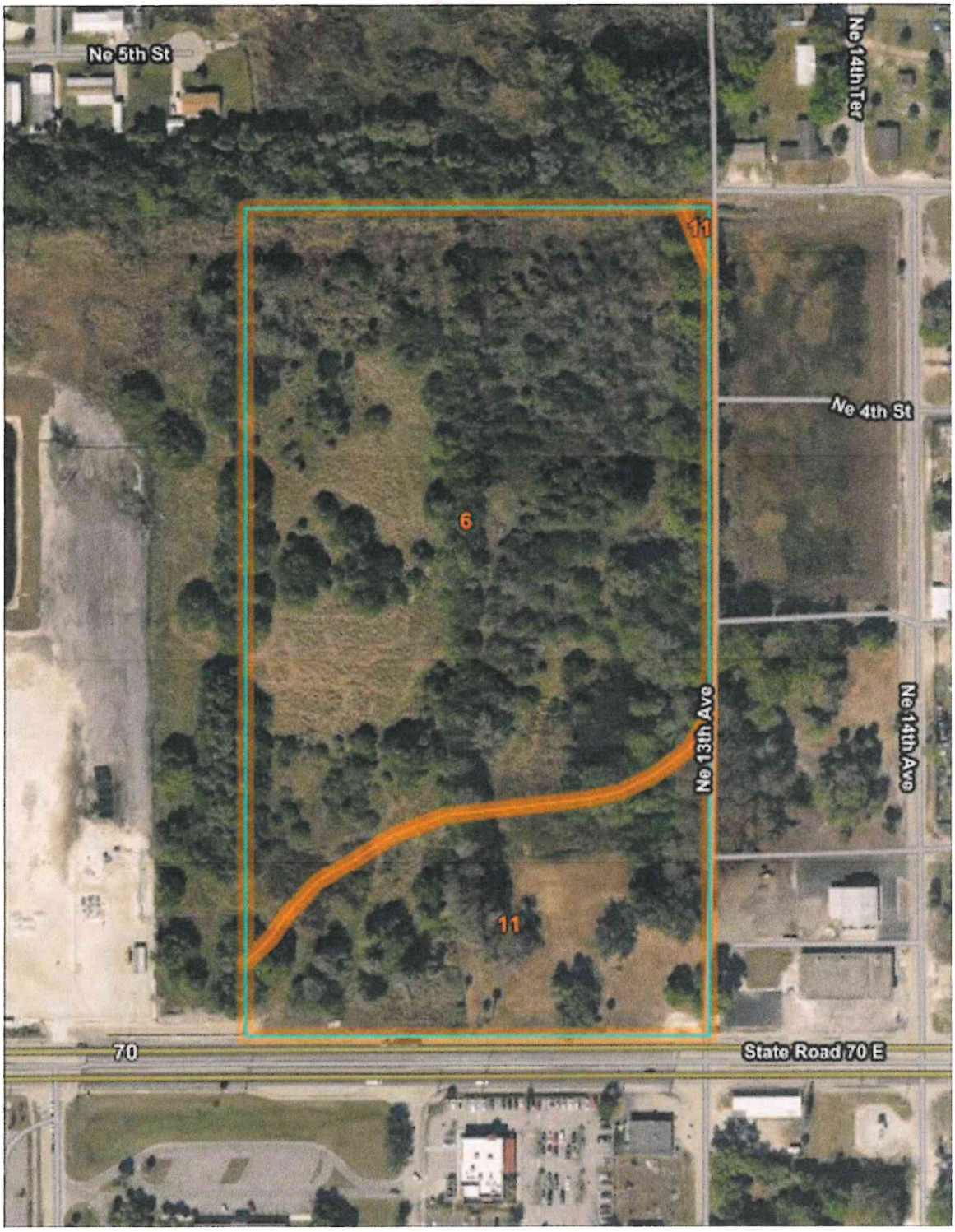
American Civil Engineering Co.

FEMA MAP

FEMA

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

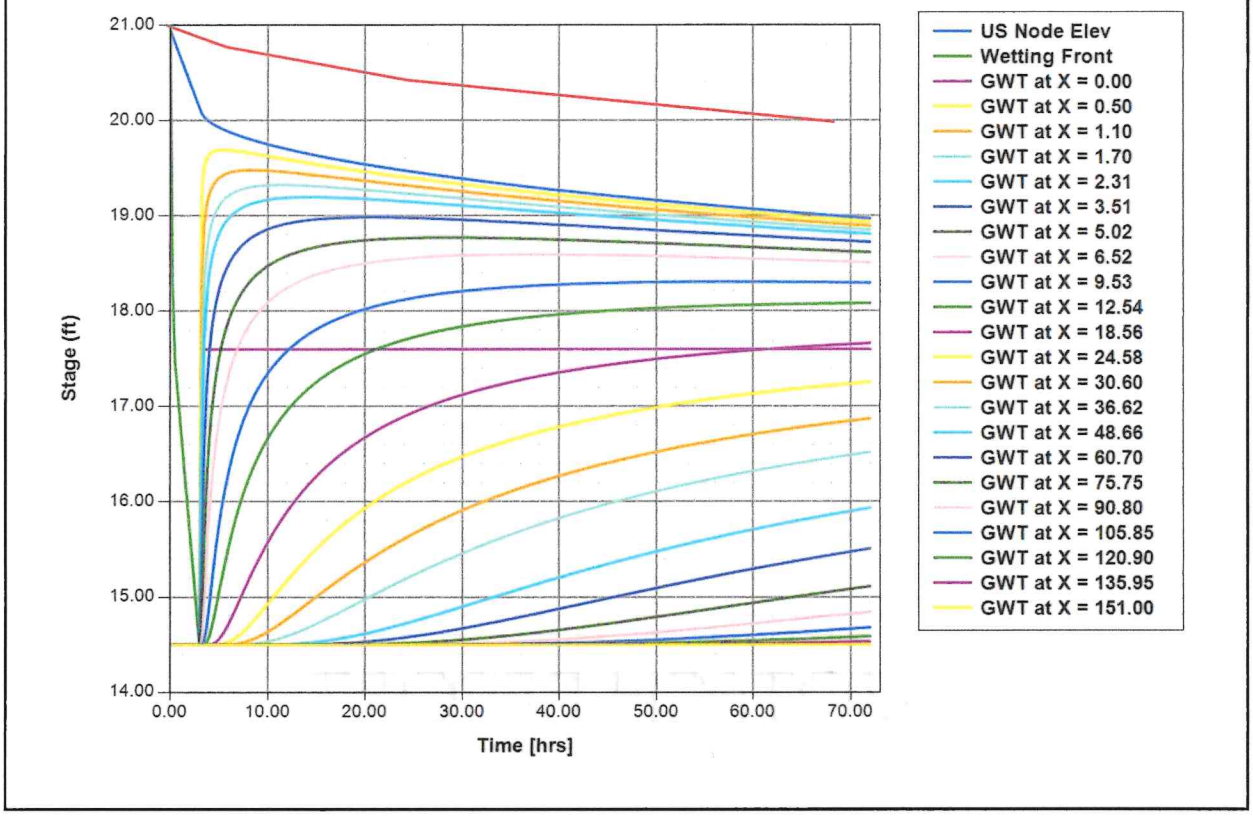
Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	9.00 in
Edge Length Option:	Automatic	Storm Duration:	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.

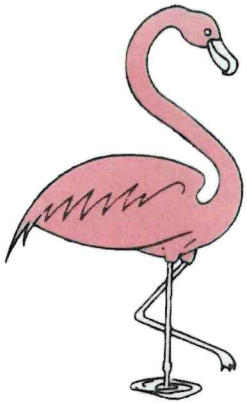
Thank you,

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.

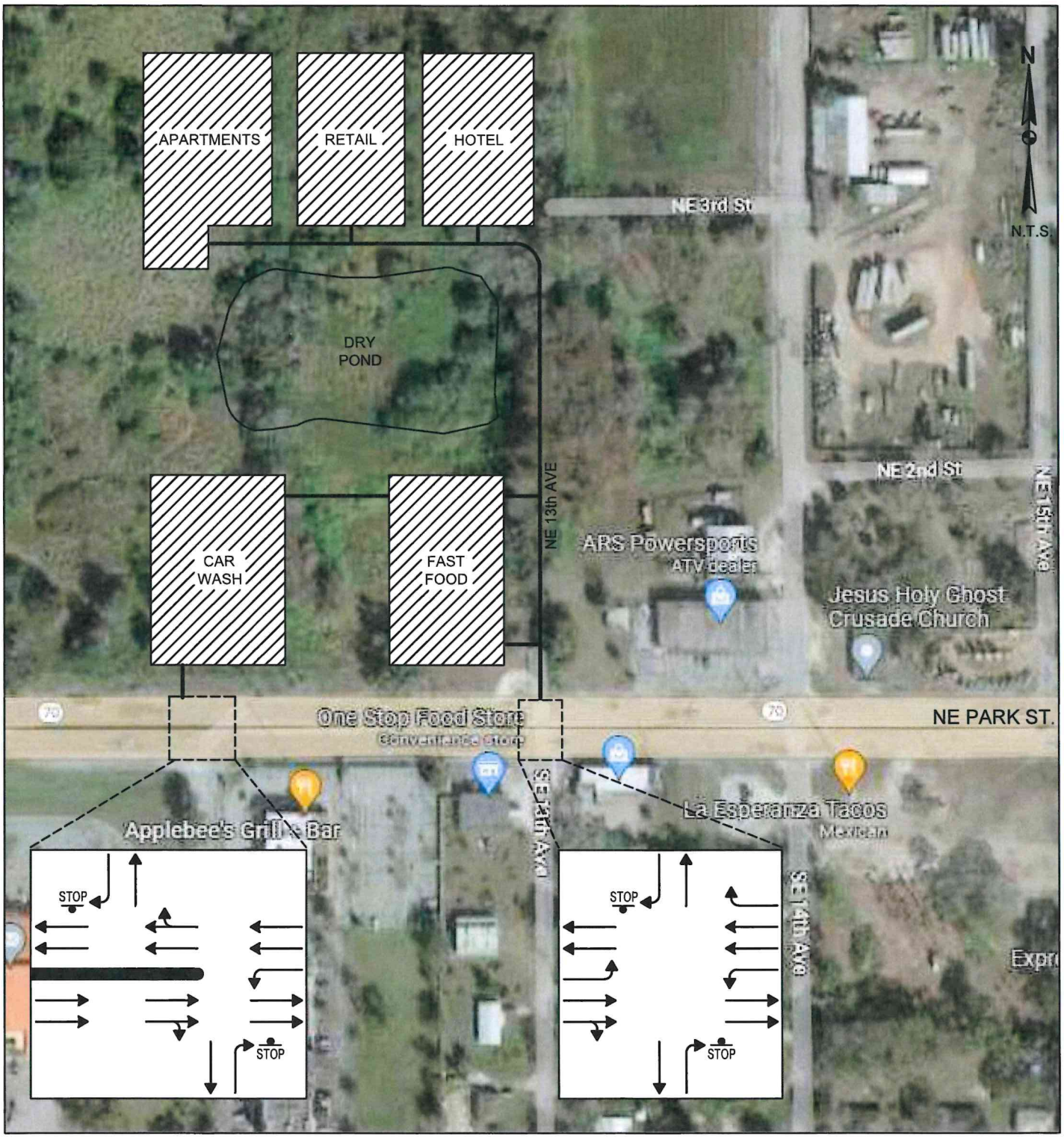
UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS

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

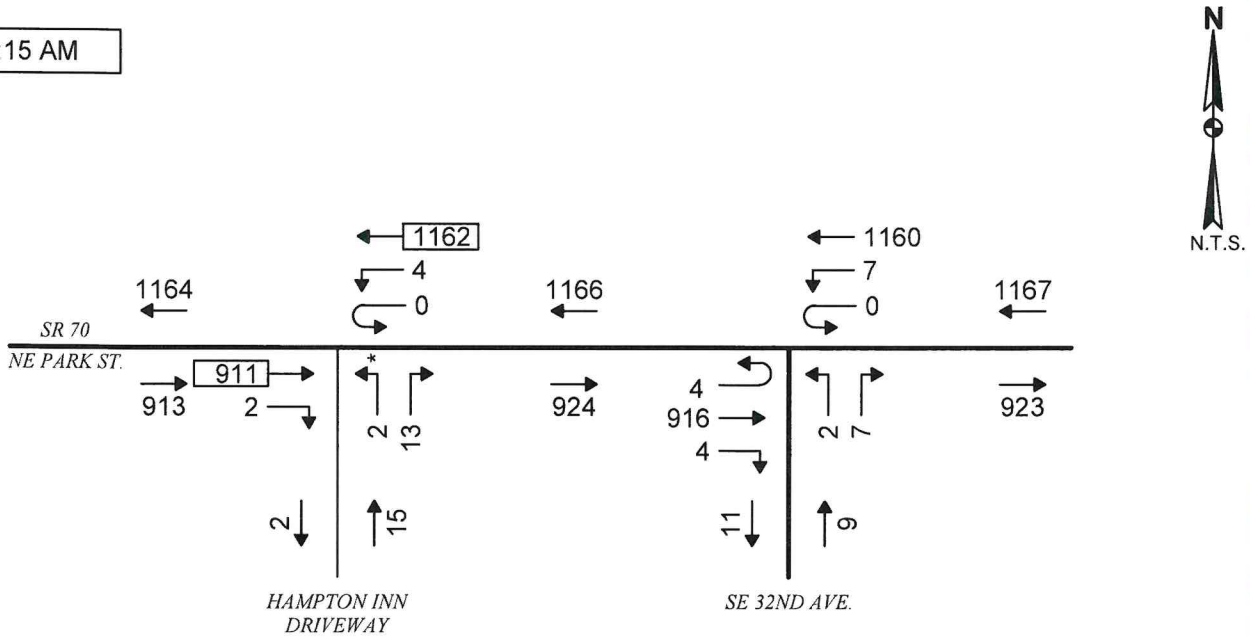
FIGURE 1

SITE LOCATION AND PROPOSED INTERSECTION LAYOUTS

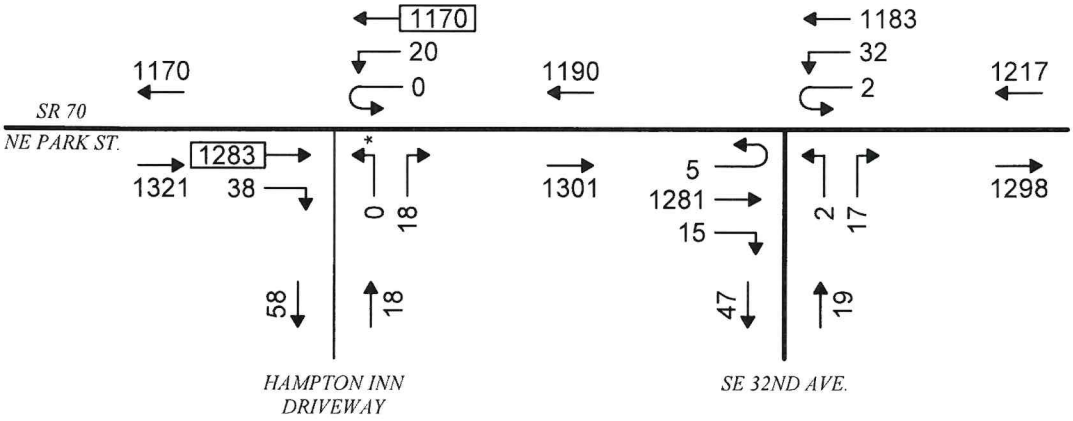
Buckholz Traffic

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

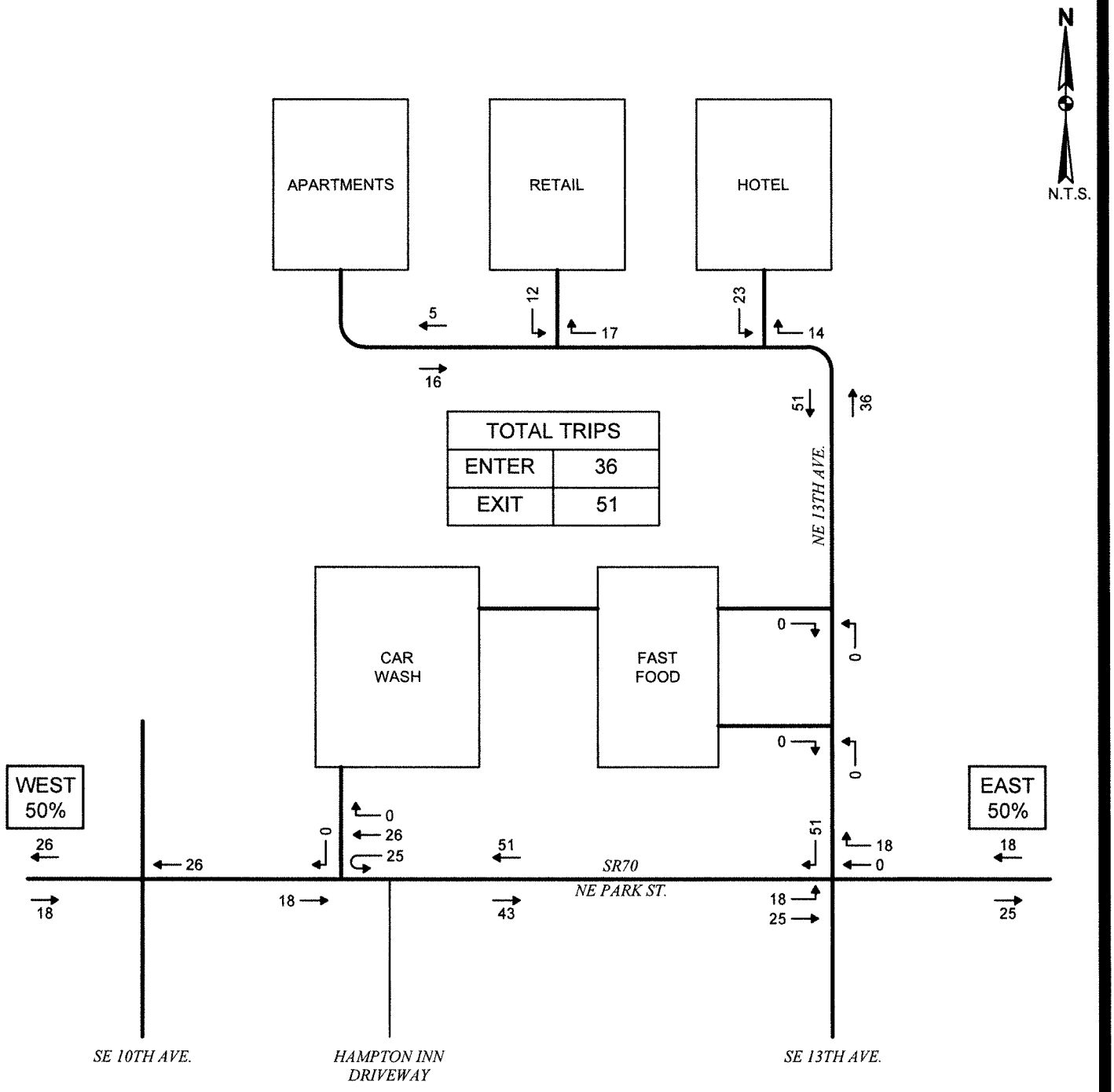


FIGURE 3

SITE TRAFFIC ASSIGNMENT

WEEKDAY AM PEAK HOUR

Buckholz Traffic

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

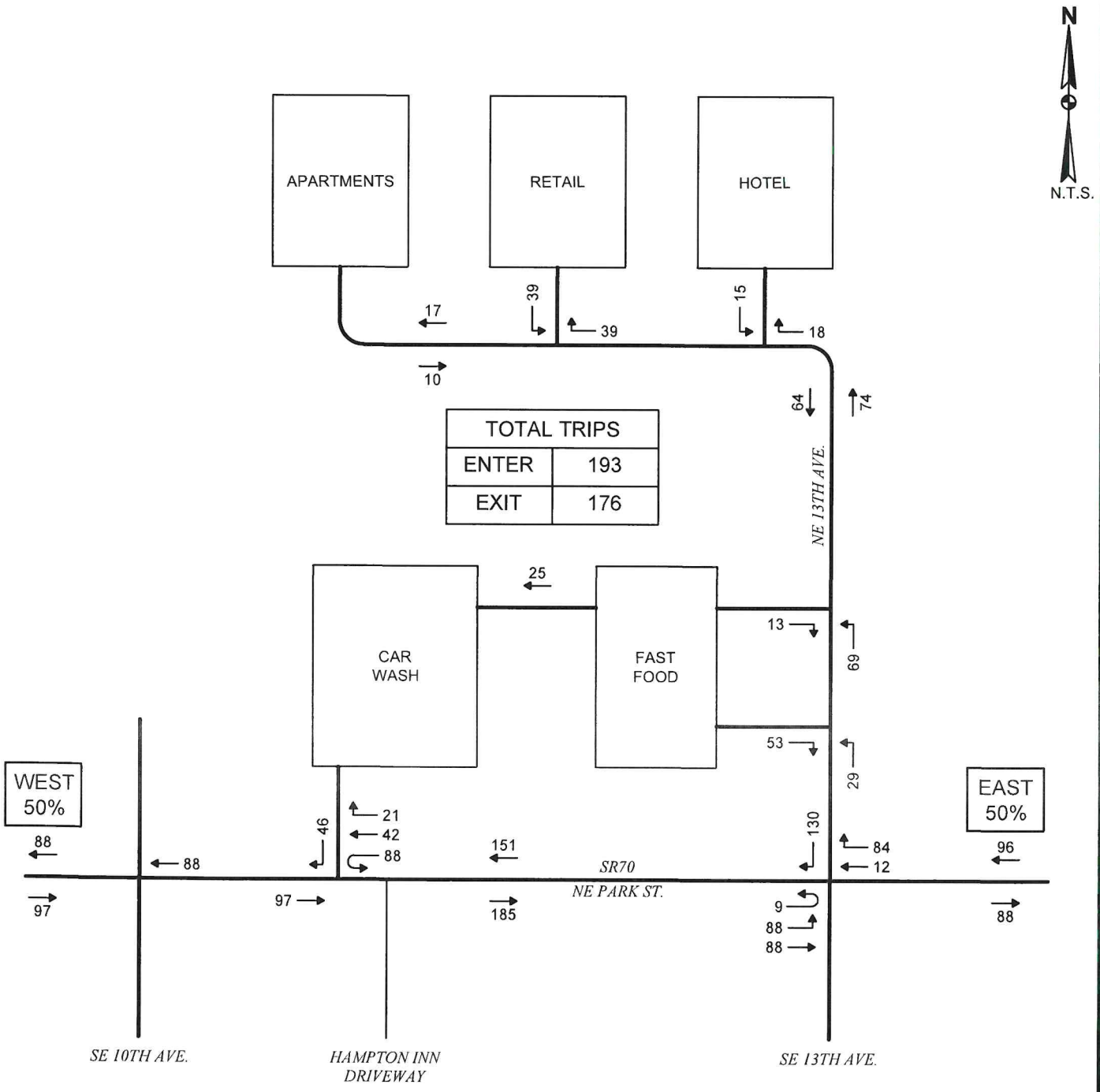


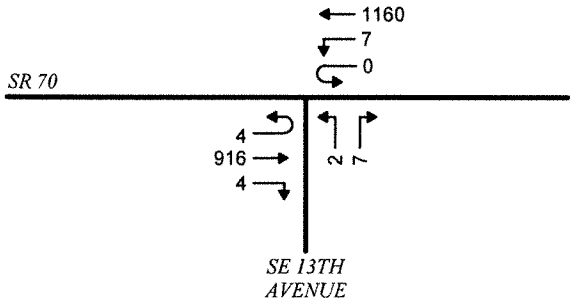
FIGURE 4

SITE TRAFFIC ASSIGNMENT

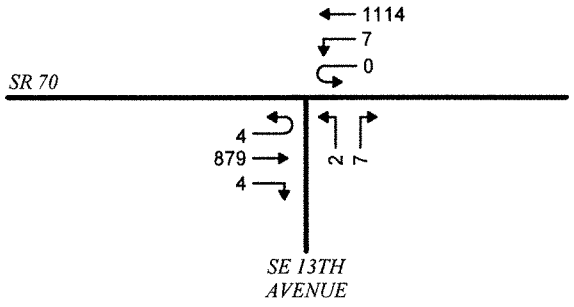
WEEKDAY PM PEAK HOUR

Buckholz Traffic

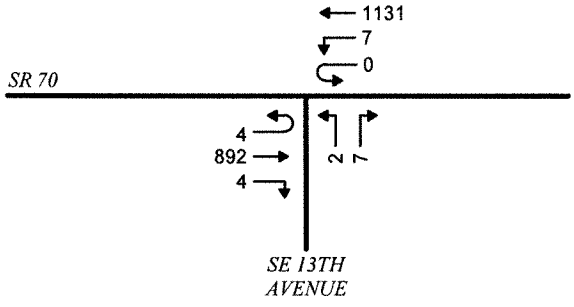
E:\23-1820\CAD2\FIG_04.DWG



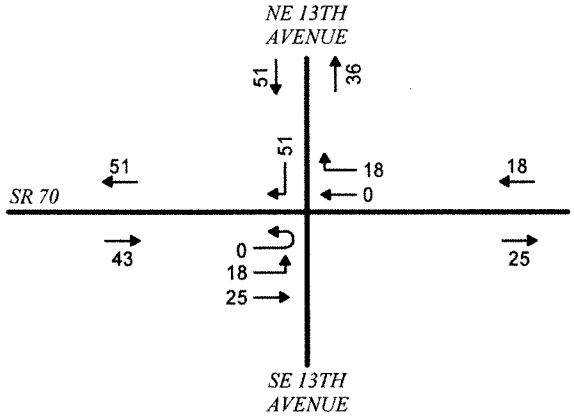
EXISTING TRAFFIC
02/13/23
7:15-8:15 AM



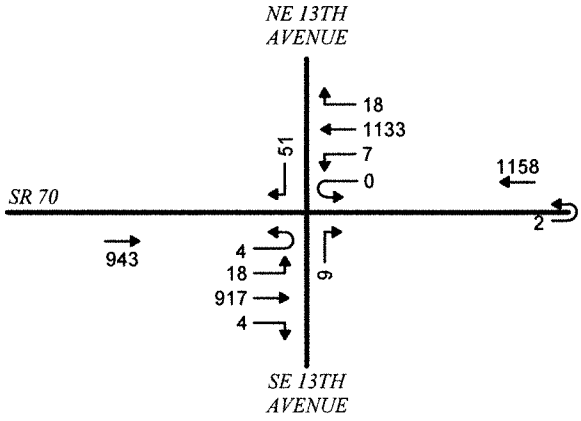
2023 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.96



2024 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 1.5%



SITE TRAFFIC



2024 BUILD TRAFFIC

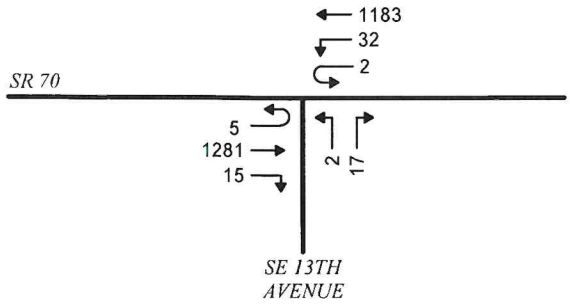
Buckholz Traffic

FIGURE 5

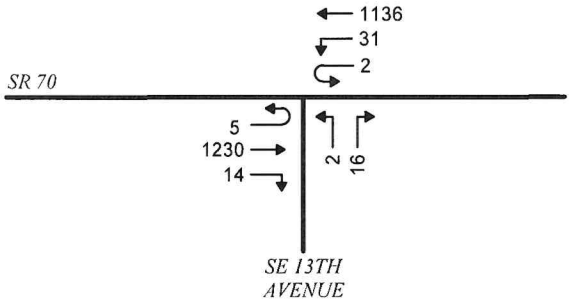
2024 BUILD TRAFFIC
SR 70 / 13TH AVENUE

WEEKDAY AM PEAK HOUR

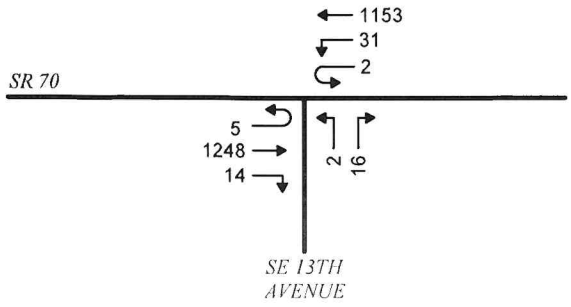
E:\23-1820\CAD2\FIG_05.DWG



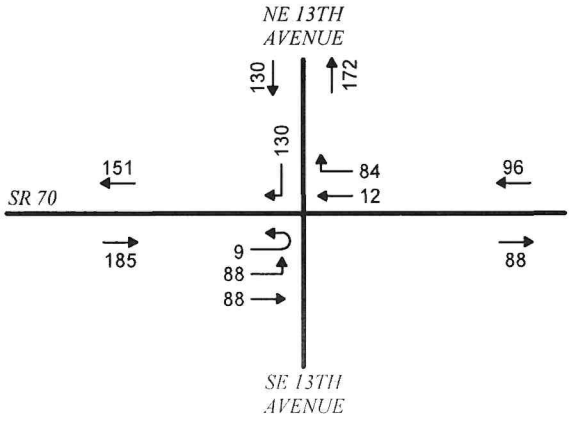
EXISTING TRAFFIC
02/13/23
5:00-6:00 PM



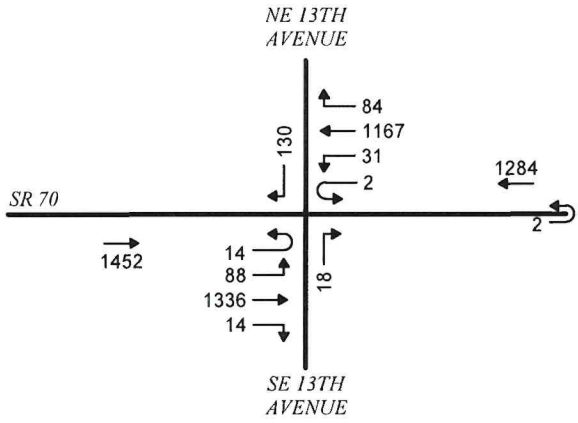
2023 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.96



2024 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 1.5%



SITE TRAFFIC



2024 BUILD TRAFFIC

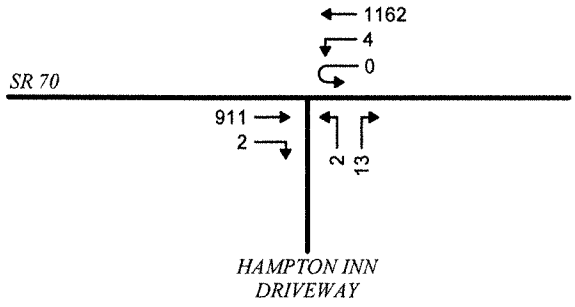
Buckholz Traffic

FIGURE 6

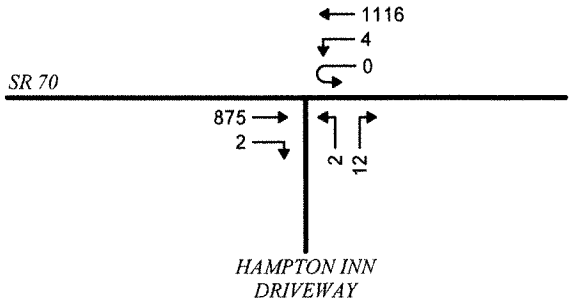
2024 BUILD TRAFFIC
SR 70 / 13TH AVENUE

WEEKDAY PM PEAK HOUR

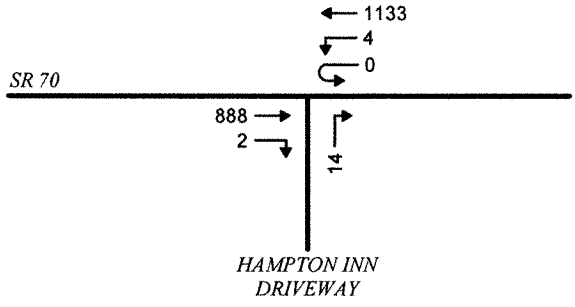
E:\23-1820\CAD2\FIG_06.DWG



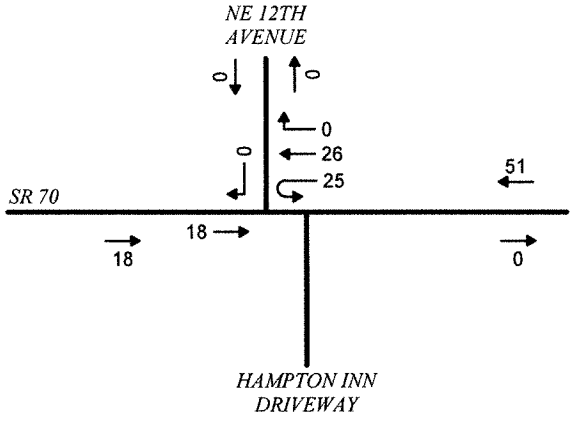
EXISTING TRAFFIC
02/13/23
7:15-8:15 AM



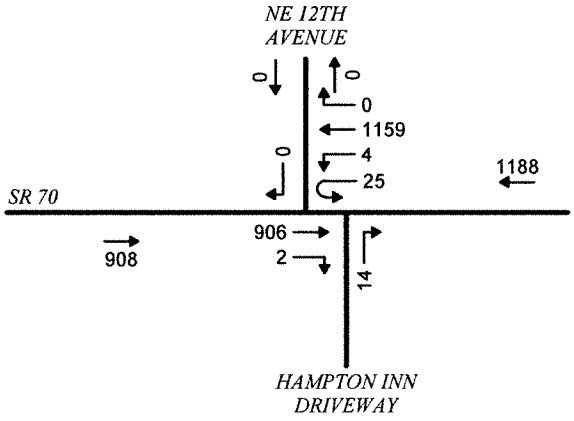
2023 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.96



2024 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 1.5%



SITE TRAFFIC



2024 BUILD TRAFFIC

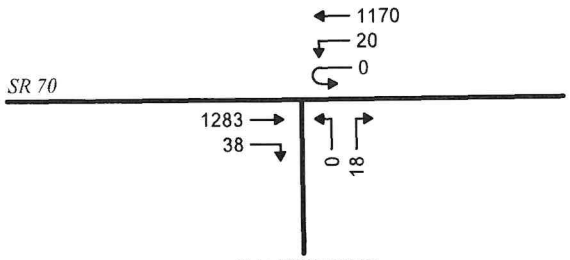
Buckholz Traffic

FIGURE 7

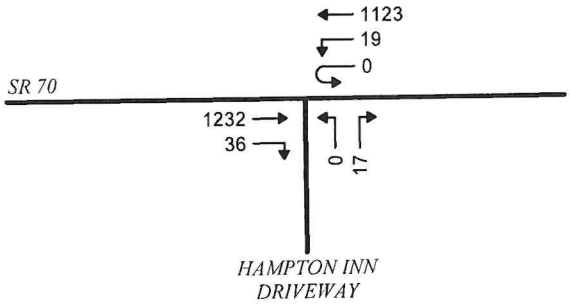
2024 BUILD TRAFFIC
SR 70 / HAMPTON DRIVEWAY

WEEKDAY AM PEAK HOUR

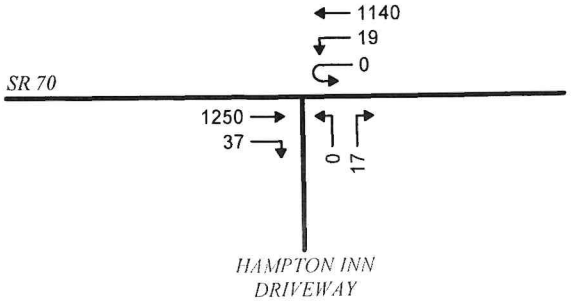
E:\23-1820\CAD2\FIG_07.DWG



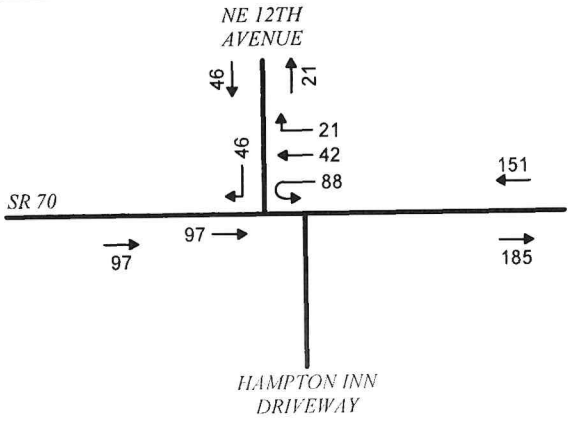
EXISTING TRAFFIC
02/13/23
5:00-6:00 PM



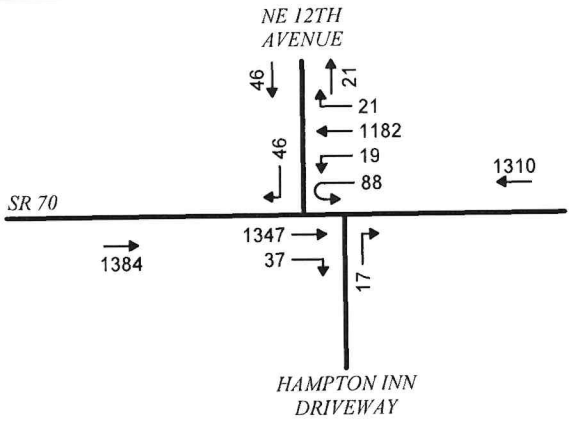
2023 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.96



2024 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 1.5%



SITE TRAFFIC



2024 BUILD TRAFFIC

Buckholz Traffic

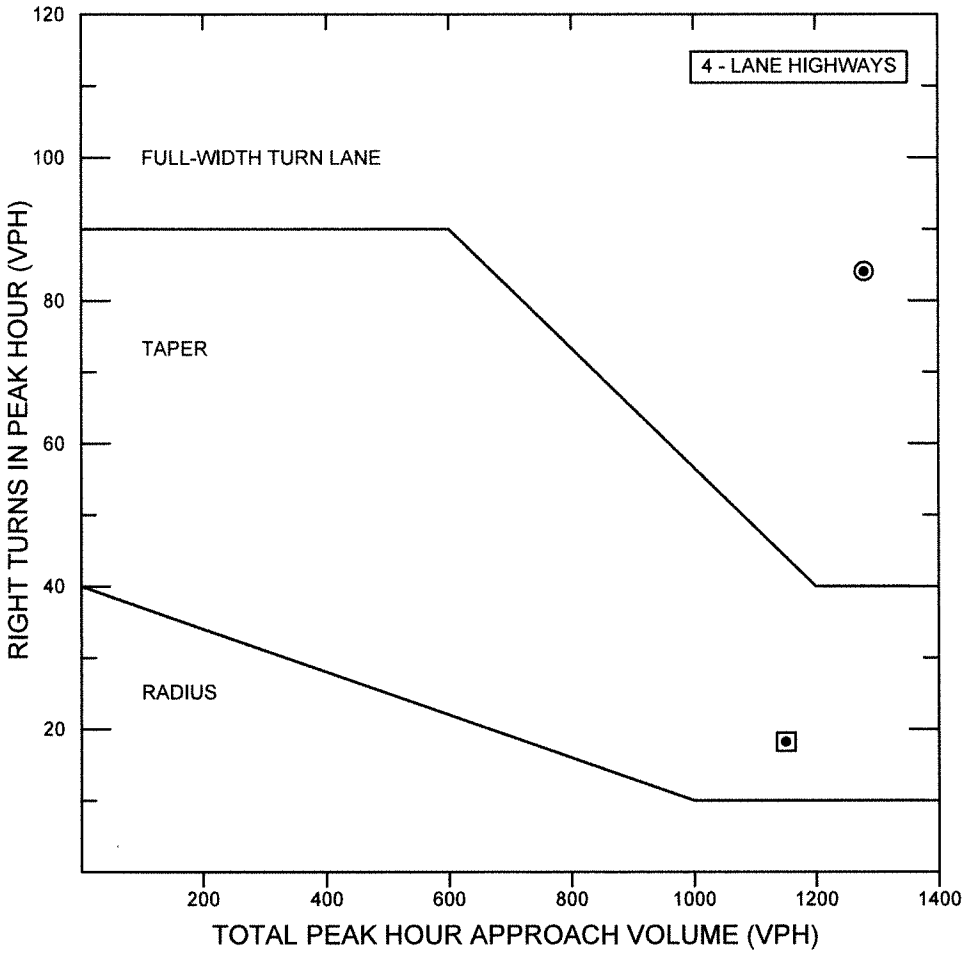
FIGURE 8

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

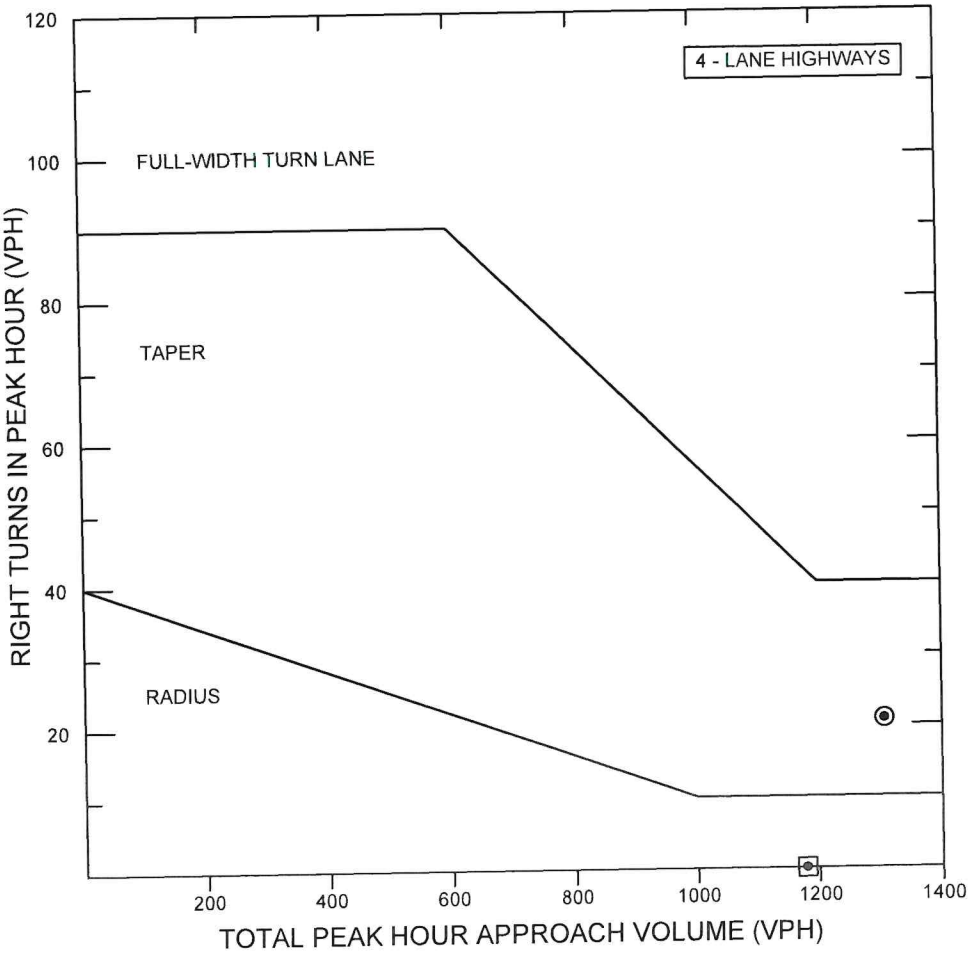
18 & 84 < 110 REQUIRED

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

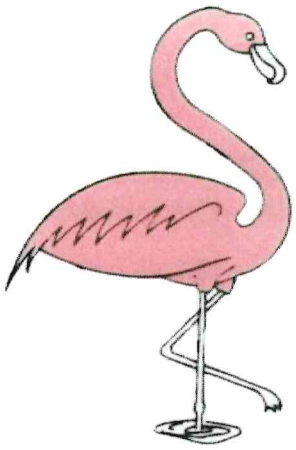
NE PARK STREET / NE 12TH AVENUE / HAMPTON INN DRIVEWAY

	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.

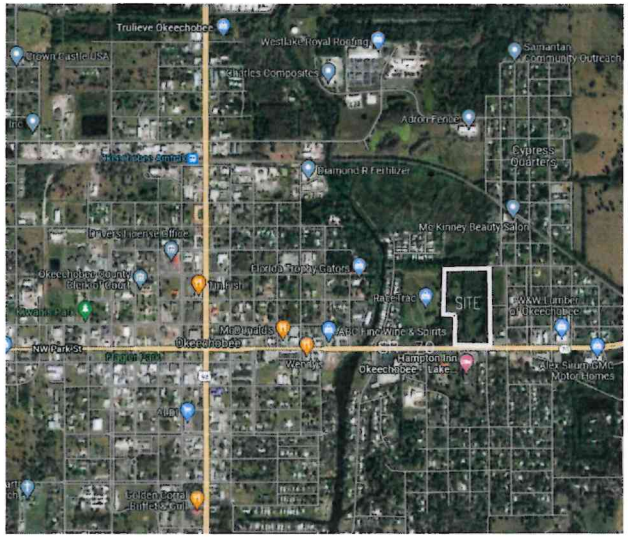
PARCEL 5 (PER O.R.B 528, PG 1342):

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.



VICINITY MAP

N.T.S.

NORTH

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

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

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: KATE 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

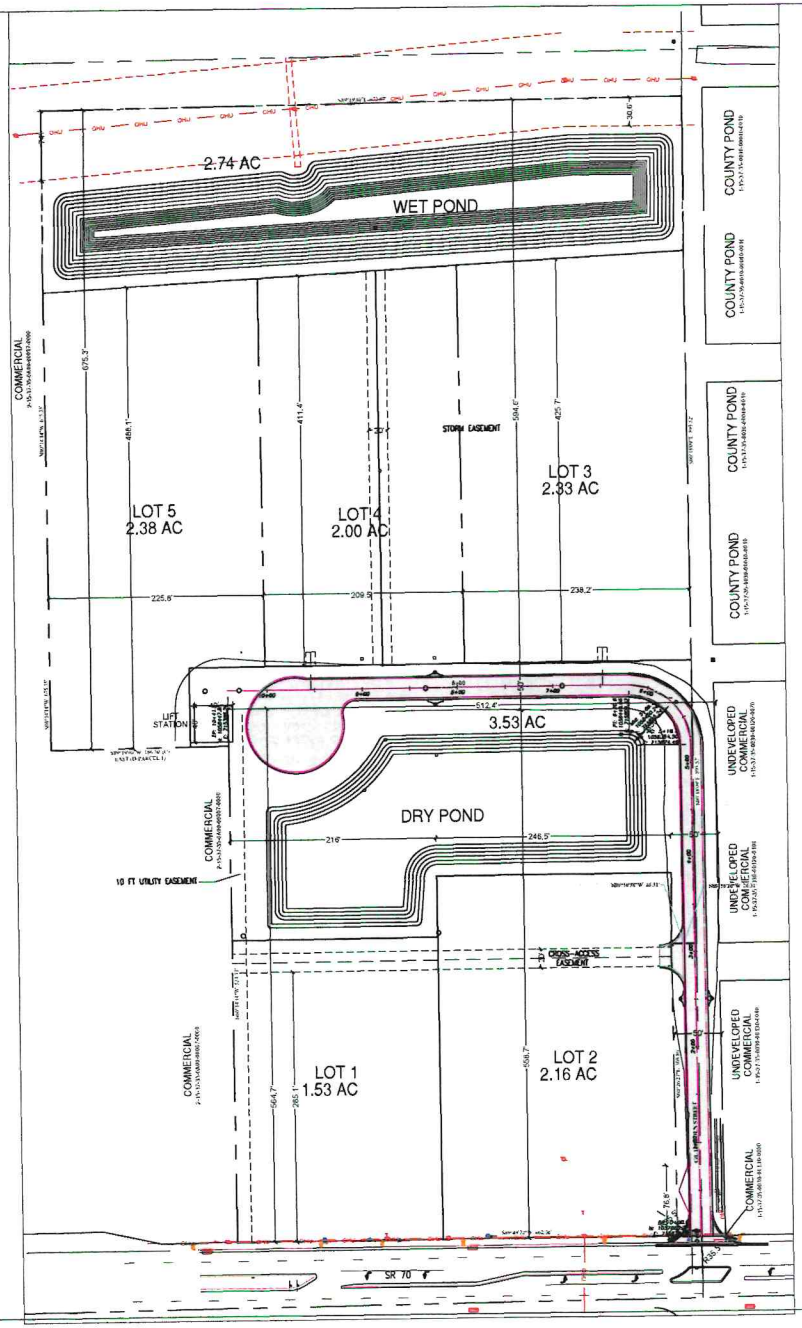
INDEX OF SHEETS

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

C1.0



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

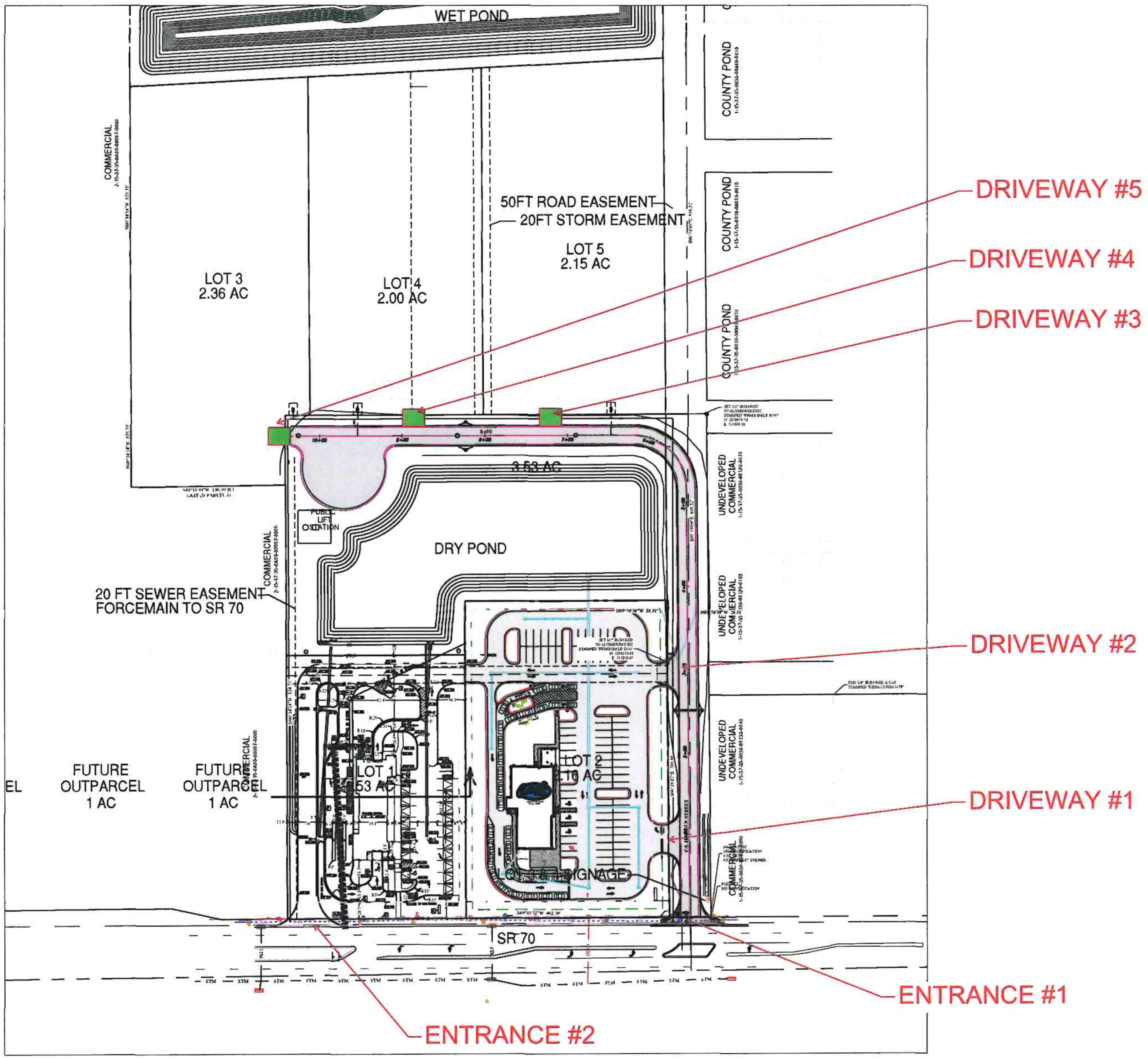
NO.	DATE	REVISIONS

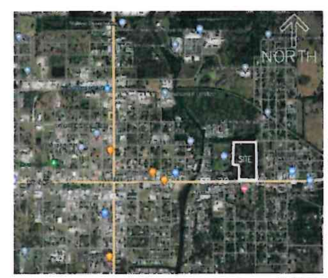
AMERICAN CIVIL ENGINEERING CO.
227 N. MOSS RD. SUITE 211, WINTER SPRINGS FLA 32708
(407) 327-7700
certificate of authorization number 27159

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.

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

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

TRAFFIC EXHIBIT
PARK STREET COMMERCE CENTER
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 64898

7/7/2023

PROJECT NO. 22409

1 OF 1

APPENDIX B

TURNING MOVEMENT COUNTS

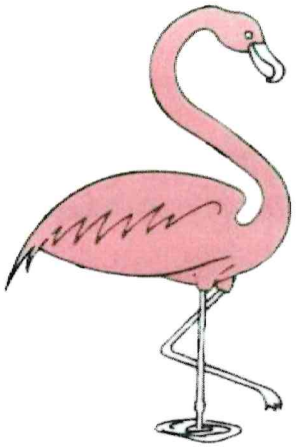


TABLE B-1
NE Park Street (SR 70) / Hampton inn Driveway
TURNING MOVEMENT COUNTS - ALL VEHICLES

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

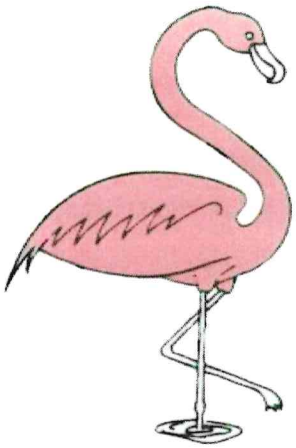
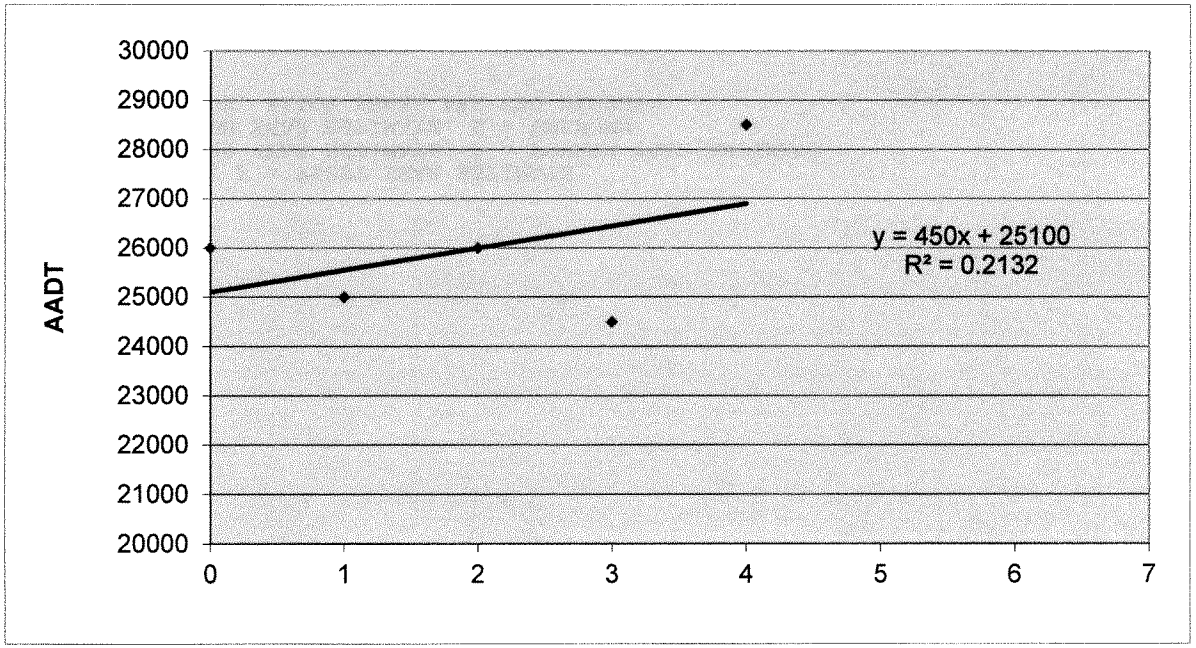


TABLE C-1
LINEAR REGRESSION ANALYSIS

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

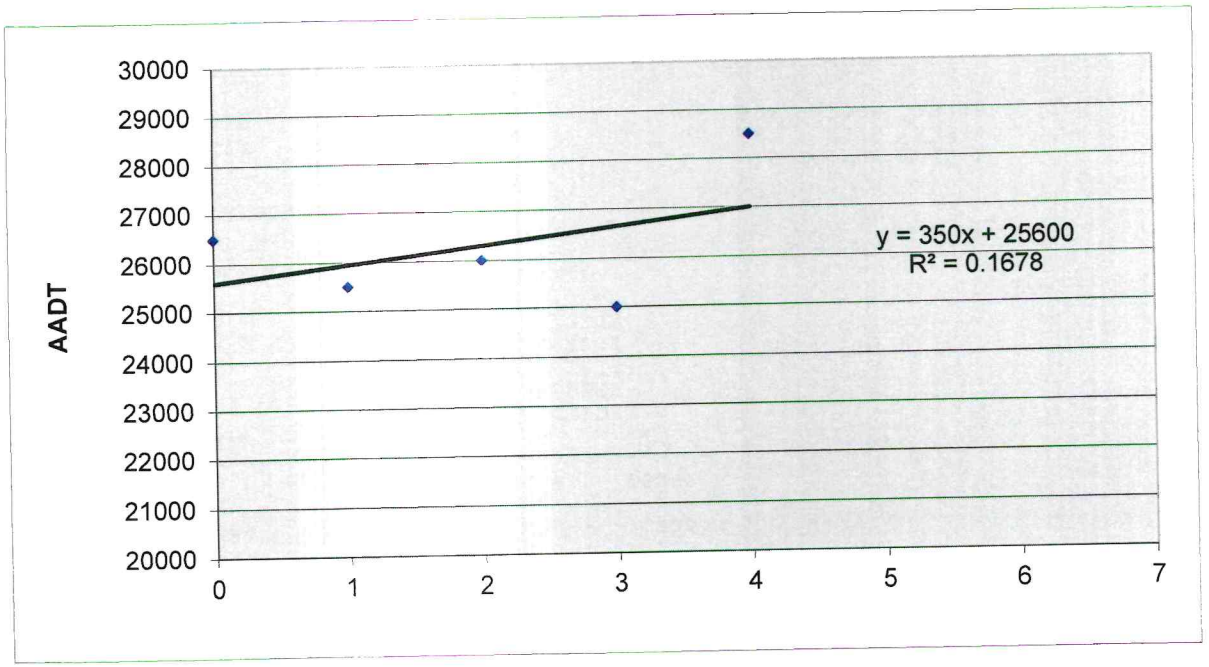
GENERATED BY SPS 5.0.55P

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

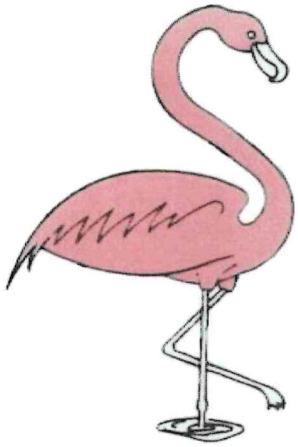
CLASSIFICATION SUMMARY DATABASE

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

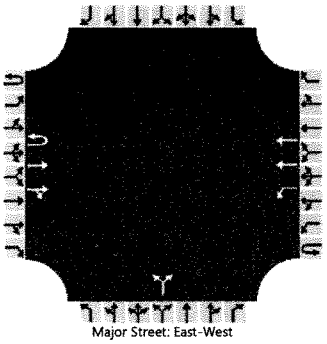
General Information

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

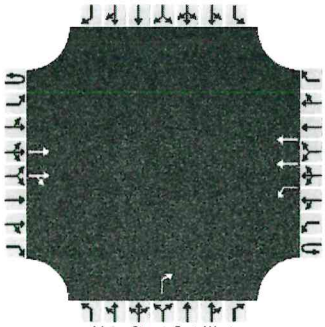
General Information

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



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

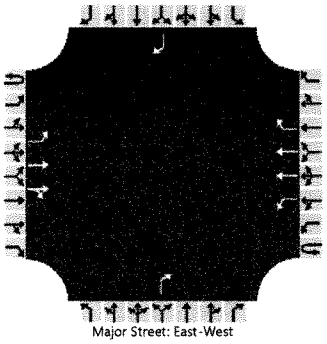
General Information

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



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

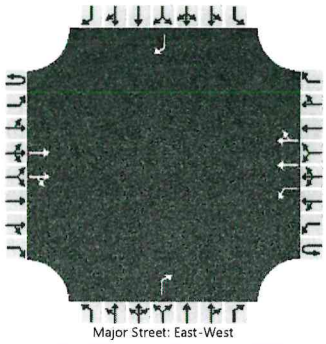
General Information

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

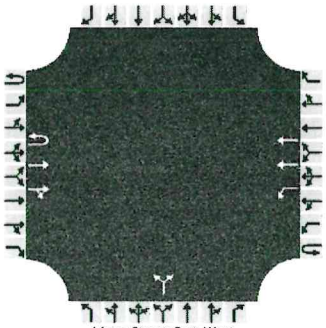
General Information

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

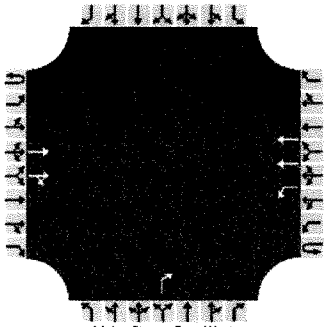
General Information

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

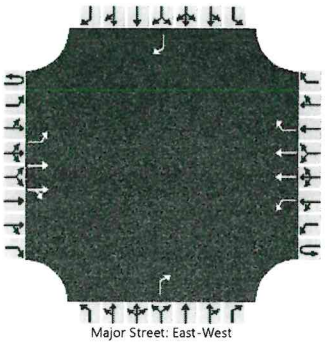
General Information

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

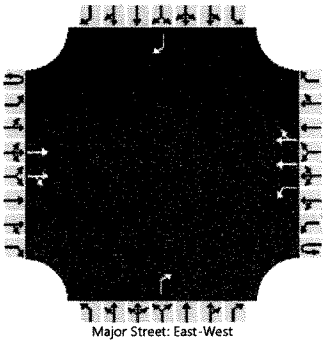
General Information

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


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)			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			

OKEECHOBEE UTILITY AUTHORITY

100 SW 5th Avenue
Okeechobee, Florida 34974-4221

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

November 7, 2023

Mr. Jeff Liegel
S & L Properties Okeechobee, LLC
2651 Kirking Court
Portage, WI 53901

Ref: **Water Capacity Request**

Parcel ID: 2-15-37-35-0A00-00010-0000
3-15-37-35-0210-00010-0010
City of Okeechobee, Okeechobee County

Dear Mr. Liegel:

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 July 2022 to June 2023, the maximum daily flow was 3.37 MGD, or about 65% of capacity. The OUA does have a potable water distribution main in State Road 70E right-of-way near the subject property. Any upgrade requirements to the water system infrastructure due to the demands of the proposed project will be at the developer's 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 7, 2023

Mr. Jeff Liegel
S & L Properties Okeechobee, LLC
2651 Kirking Court
Portage, WI 53901

Ref: **Wastewater Capacity Request**

Parcel ID: 2-15-37-35-0A00-00010-0000
3-15-37-35-0210-00010-0010
City of Okeechobee, Okeechobee County

Dear Mr. Liegel:

In reference to a request of the availability of wastewater capacity for 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 3.9 MGD. During the twelve month period from July 2022 to June 2023, the annual average daily demand was 0.967 MGD, or about 25% of the current 3.9 MGD treatment capacity. The OUA has a wastewater force main near the subject property. Any infrastructure improvements required by this project will be at the developer'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
Executive Director
Okeechobee Utility Authority

Kimley»Horn

September 20, 2023

RE: Culver's Restaurants
Drive-Through Queueing Observations

To Whom it may Concern:

Kimley-Horn has conducted drive-through queueing observations at two existing Culver's locations:

- 7818 Gate Parkway in Jacksonville, Florida (approx. 5,000 gross square feet)
- 1767 Blanding Boulevard in Middleburg, Florida (approx. 5,100 gross square feet)

Based on the hourly distribution of vehicle trips by land use, published by the Institute of Transportation Engineers in *Trip Generation, 11th Edition*, the highest weekday three-hour period of trip generation for a fast-food restaurant with drive-through is 11:00 AM to 2:00 PM. Accordingly, data collection at both existing Culver's locations occurred from 11:00 AM to 2:00 PM. This letter summarizes the queueing observations and recommendations for future Culver's restaurant designs.

Gate Parkway Culver's Queueing Observations

Drive-through queueing data was collected at the existing Gate Parkway Culver's on Thursday, November 17, 2022. At this location, one Kimley-Horn staff member documented the queue behind the order boards (including vehicles at the order boards), and one Kimley-Horn staff member documented the queues ahead of the order boards (including queues between the order boards and the pay window and queues ahead of the pay window in the order waiting spaces). Kimley-Horn staff also noted whether the space between the order boards and the pay window filled up (whether the queue in front of the order boards backed up to the order boards). This allowed determination of whether the order board or the area ahead of the order board was the controlling factor for the maximum queue behind the order board.

Queues were noted in two-minute intervals. The queues noted for each interval represent the maximum queue that occurred over that two-minute interval. The following observations were noted at the Gate Parkway Culver's:

- This is a double drive-through facility and both drive-through lanes were fully operational.
- From approximately 11:30 AM to 2:00 PM, two employees stood at the order boards (one at each order board) and took orders from the customers.

- It appeared that customers paying with credit card paid the employees that were standing at the order boards, skipped the pay window, and proceeded to the order waiting area.
- It appeared that customers paying with cash paid at the pay window.
- The maximum queue noted behind the order boards (including vehicles at the order boards) was 10 vehicles.
- During the entire observation period, the queue behind the pay window only backed up to the order boards one time, and this backup lasted approximately two minutes (from 12:59 PM to 1:01 PM). During this time, there were several empty spaces ahead of the pay window in the order waiting spaces. The queue behind the order boards from 12:59 PM to 1:01 PM was a maximum of 6 vehicles.

Based on these observations, the queue storage for future sites in design should be based on the maximum queue observed behind the order boards rather than measuring the queue from the pay window.

Blanding Boulevard Culver's Queueing Observations

Drive-through queueing data was collected at the existing Blanding Boulevard Culver's on Tuesday, November 29, 2022. At this location, one Kimley-Horn staff member documented the queue behind the order board (including the vehicle at the order board). Based on the previous observations at the Gate Parkway location, queues ahead of the order board were not documented, as these queues were not observed to affect the queues behind the order boards.

The following observations were noted at the Blanding Boulevard Culver's:

- This is a single drive-through facility.
- Unlike the Gate Parkway location, customers at the Blanding Boulevard location ordered directly from the order board (not from an employee standing near the order board) and paid at the pay window.
- The maximum queue noted behind the order board (including the vehicle at the order board) was 6 vehicles.
- During the entire observation period, the queue behind the pay window backed up to the order board three times (at 12:07 PM, at 1:10 PM, and at 1:17 PM), each time lasting less than 2 minutes.

The data collection sheets for each location are attached.

Conclusion

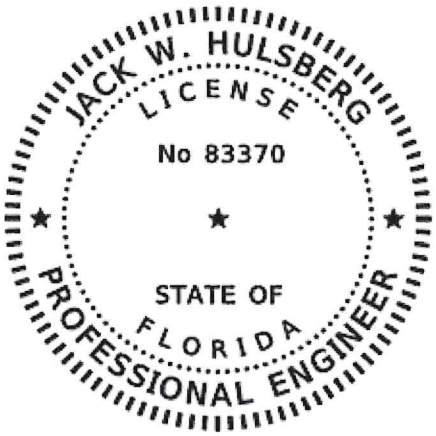
On-site queueing observations were conducted at two existing Culver's restaurants located on Gate Parkway in Jacksonville, Florida and on Blanding Boulevard in Middleburg, Florida. At the Gate Parkway location (double drive-through), the maximum queue observed behind the order boards was 10 vehicles, including the vehicles at the order boards. At the Blanding Boulevard location (single drive-through), the maximum queue observed behind the order board was 6 vehicles, including the vehicle at the order board. At both sites, the space between the pay window and the order boards was rarely ever filled by the queue, and therefore the controlling factor for the maximum queue was the order boards.

Based on the observations, future Culver's restaurants should be designed to accommodate at least 10 vehicles behind the order boards on site, including vehicles parked at the order boards.

Please do not hesitate to contact me at (904) 828-3900 or jack.hulsberg@kimley-horn.com should you have any questions.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.

Jack Hulsberg, P.E.
Project Manager



This item has been digitally signed and sealed by:

Jack Hulsberg Digitally signed by Jack Hulsberg
Date: 2023.09.20 11:15:46 -04'00'

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

Location: Culver's 7818 Gate Parkway
Jacksonville, FL 32256
Analysts: Ryen Clark and Jack Hulsberg

Date: Thursday, November 17, 2022

Time		Queue Behind Order Boards (Including vehicles at the order boards)	Did Space Between Window and Order Board Fill Up?	Queue Between Window and Order Board	Vehicles in Order Waiting Spaces
From	To				
11:00 AM	11:02 AM	2	No	2	1
11:02 AM	11:04 AM	1	No	2	1
11:04 AM	11:06 AM	0	No	2	1
11:06 AM	11:08 AM	1	No	0	3
11:08 AM	11:10 AM	5	No	0	3
11:10 AM	11:12 AM	5	No	0	2
11:12 AM	11:14 AM	5	No	0	2
11:14 AM	11:16 AM	5	No	0	1
11:16 AM	11:18 AM	3	No	2	2
11:18 AM	11:20 AM	3	No	4	2
11:20 AM	11:22 AM	3	No	3	3
11:22 AM	11:24 AM	9	No	1	5
11:24 AM	11:26 AM	9	No	0	5
11:26 AM	11:28 AM	6	No	0	5
11:28 AM	11:30 AM	3	No	0	7
11:30 AM	11:32 AM	3	No	0	8
11:32 AM	11:34 AM	4	No	0	8
11:34 AM	11:36 AM	2	No	2	6
11:36 AM	11:38 AM	1	No	0	7
11:38 AM	11:40 AM	1	No	0	6
11:40 AM	11:42 AM	2	No	0	3
11:42 AM	11:44 AM	1	No	0	1
11:44 AM	11:46 AM	2	No	0	2
11:46 AM	11:48 AM	0	No	0	3
11:48 AM	11:50 AM	1	No	0	3
11:50 AM	11:52 AM	1	No	0	2
11:52 AM	11:54 AM	4	No	0	3
11:54 AM	11:56 AM	2	No	1	4
11:56 AM	11:58 AM	1	No	0	6
11:58 AM	12:00 PM	3	No	0	6

Time		Queue Behind Order Boards (Including vehicles at the order boards)	Did Space Between Window and Order Board Fill Up?	Queue Between Window and Order Board	Vehicles in Order Waiting Spaces
From	To				
12:00 PM	12:02 PM	2	No	1	6
12:02 PM	12:04 PM	3	No	0	7
12:04 PM	12:06 PM	3	No	0	6
12:06 PM	12:08 PM	3	No	1	7
12:08 PM	12:10 PM	4	No	3	5
12:10 PM	12:12 PM	6	No	3	5
12:12 PM	12:14 PM	7	No	0	6
12:14 PM	12:16 PM	6	No	0	6
12:16 PM	12:18 PM	6	No	0	7
12:18 PM	12:20 PM	3	No	0	9
12:20 PM	12:22 PM	1	No	0	7
12:22 PM	12:24 PM	0	No	0	5
12:24 PM	12:26 PM	3	No	0	2
12:26 PM	12:28 PM	2	No	0	2
12:28 PM	12:30 PM	2	No	0	2
12:30 PM	12:32 PM	2	No	0	4
12:32 PM	12:34 PM	1	No	0	4
12:34 PM	12:36 PM	4	No	1	5
12:36 PM	12:38 PM	4	No	2	5
12:38 PM	12:40 PM	3	No	0	6
12:40 PM	12:42 PM	3	No	0	7
12:42 PM	12:44 PM	3	No	1	6
12:44 PM	12:46 PM	1	No	1	7
12:46 PM	12:48 PM	1	No	0	5
12:48 PM	12:50 PM	2	No	0	4
12:50 PM	12:52 PM	2	No	0	4
12:52 PM	12:54 PM	1	No	0	4
12:54 PM	12:56 PM	4	No	0	4
12:56 PM	12:58 PM	5	No	3	4
12:58 PM	1:00 PM	6	Yes	5	3

Time		Queue Behind Order Boards (Including vehicles at the order boards)	Did Space Between Window and Order Board Fill Up?	Queue Between Window and Order Board	Vehicles in Order Waiting Spaces
From	To				
1:00 PM	1:02 PM	4	Yes	6	2
1:02 PM	1:04 PM	4	No	2	6
1:04 PM	1:06 PM	1	No	0	7
1:06 PM	1:08 PM	2	No	1	4
1:08 PM	1:10 PM	2	No	0	6
1:10 PM	1:12 PM	3	No	1	6
1:12 PM	1:14 PM	3	No	0	5
1:14 PM	1:16 PM	4	No	0	7
1:16 PM	1:18 PM	8	No	0	7
1:18 PM	1:20 PM	10	No	0	6
1:20 PM	1:22 PM	9	No	1	7
1:22 PM	1:24 PM	9	No	1	6
1:24 PM	1:26 PM	10	No	0	7
1:26 PM	1:28 PM	10	No	0	8
1:28 PM	1:30 PM	7	No	2	8
1:30 PM	1:32 PM	5	No	4	6
1:32 PM	1:34 PM	4	No	3	7
1:34 PM	1:36 PM	3	No	2	8
1:36 PM	1:38 PM	2	No	3	5
1:38 PM	1:40 PM	5	No	0	2
1:40 PM	1:42 PM	5	No	0	3
1:42 PM	1:44 PM	2	No	1	4
1:44 PM	1:46 PM	1	No	2	4
1:46 PM	1:48 PM	3	No	0	4
1:48 PM	1:50 PM	5	No	0	6
1:50 PM	1:52 PM	4	No	1	6
1:52 PM	1:54 PM	3	No	3	5
1:54 PM	1:56 PM	3	No	0	8
1:56 PM	1:58 PM	2	No	1	7
1:58 PM	2:00 PM	2	No	1	6

Location: Culver's 1767 Blanding Blvd
Middleburg, FL 32068
Analyst: Ryen Clark

Date: Tuesday, November 29, 2022

Time		Queue Behind Order Board (Including vehicle at the order board)
From	To	
11:00 AM	11:02 AM	1
11:02 AM	11:04 AM	1
11:04 AM	11:06 AM	0
11:06 AM	11:08 AM	2
11:08 AM	11:10 AM	2
11:10 AM	11:12 AM	1
11:12 AM	11:14 AM	0
11:14 AM	11:16 AM	0
11:16 AM	11:18 AM	1
11:18 AM	11:20 AM	1
11:20 AM	11:22 AM	3
11:22 AM	11:24 AM	3
11:24 AM	11:26 AM	2
11:26 AM	11:28 AM	1
11:28 AM	11:30 AM	1
11:30 AM	11:32 AM	1
11:32 AM	11:34 AM	1
11:34 AM	11:36 AM	2
11:36 AM	11:38 AM	2
11:38 AM	11:40 AM	1
11:40 AM	11:42 AM	1
11:42 AM	11:44 AM	1
11:44 AM	11:46 AM	2
11:46 AM	11:48 AM	2
11:48 AM	11:50 AM	1
11:50 AM	11:52 AM	3
11:52 AM	11:54 AM	3
11:54 AM	11:56 AM	2
11:56 AM	11:58 AM	1
11:58 AM	12:00 PM	1

Time		Queue Behind Order Board (Including vehicle at the order board)
From	To	
12:00 PM	12:02 PM	2
12:02 PM	12:04 PM	2
12:04 PM	12:06 PM	4
12:06 PM	12:08 PM	2
12:08 PM	12:10 PM	1
12:10 PM	12:12 PM	2
12:12 PM	12:14 PM	1
12:14 PM	12:16 PM	0
12:16 PM	12:18 PM	1
12:18 PM	12:20 PM	2
12:20 PM	12:22 PM	1
12:22 PM	12:24 PM	1
12:24 PM	12:26 PM	1
12:26 PM	12:28 PM	1
12:28 PM	12:30 PM	1
12:30 PM	12:32 PM	0
12:32 PM	12:34 PM	5
12:34 PM	12:36 PM	6
12:36 PM	12:38 PM	5
12:38 PM	12:40 PM	3
12:40 PM	12:42 PM	4
12:42 PM	12:44 PM	1
12:44 PM	12:46 PM	1
12:46 PM	12:48 PM	1
12:48 PM	12:50 PM	0
12:50 PM	12:52 PM	2
12:52 PM	12:54 PM	2
12:54 PM	12:56 PM	1
12:56 PM	12:58 PM	1
12:58 PM	1:00 PM	1

Time		Queue Behind Order Board (Including vehicle at the order board)
From	To	
1:00 PM	1:02 PM	1
1:02 PM	1:04 PM	4
1:04 PM	1:06 PM	4
1:06 PM	1:08 PM	4
1:08 PM	1:10 PM	5
1:10 PM	1:12 PM	6
1:12 PM	1:14 PM	6
1:14 PM	1:16 PM	4
1:16 PM	1:18 PM	5
1:18 PM	1:20 PM	4
1:20 PM	1:22 PM	3
1:22 PM	1:24 PM	4
1:24 PM	1:26 PM	2
1:26 PM	1:28 PM	2
1:28 PM	1:30 PM	1
1:30 PM	1:32 PM	2
1:32 PM	1:34 PM	1
1:34 PM	1:36 PM	1
1:36 PM	1:38 PM	2
1:38 PM	1:40 PM	1
1:40 PM	1:42 PM	2
1:42 PM	1:44 PM	0
1:44 PM	1:46 PM	1
1:46 PM	1:48 PM	2
1:48 PM	1:50 PM	5
1:50 PM	1:52 PM	4
1:52 PM	1:54 PM	2
1:54 PM	1:56 PM	4
1:56 PM	1:58 PM	3
1:58 PM	2:00 PM	1

Kimley»Horn

September 20, 2023

RE: Culver's Restaurants
Drive-Through Queueing Observations

To Whom it may Concern:

Kimley-Horn has conducted drive-through queueing observations at two existing Culver's locations:

- 7818 Gate Parkway in Jacksonville, Florida (approx. 5,000 gross square feet)
- 1767 Blanding Boulevard in Middleburg, Florida (approx. 5,100 gross square feet)

Based on the hourly distribution of vehicle trips by land use, published by the Institute of Transportation Engineers in *Trip Generation, 11th Edition*, the highest weekday three-hour period of trip generation for a fast-food restaurant with drive-through is 11:00 AM to 2:00 PM. Accordingly, data collection at both existing Culver's locations occurred from 11:00 AM to 2:00 PM. This letter summarizes the queueing observations and recommendations for future Culver's restaurant designs.

Gate Parkway Culver's Queueing Observations

Drive-through queueing data was collected at the existing Gate Parkway Culver's on Thursday, November 17, 2022. At this location, one Kimley-Horn staff member documented the queue behind the order boards (including vehicles at the order boards), and one Kimley-Horn staff member documented the queues ahead of the order boards (including queues between the order boards and the pay window and queues ahead of the pay window in the order waiting spaces). Kimley-Horn staff also noted whether the space between the order boards and the pay window filled up (whether the queue in front of the order boards backed up to the order boards). This allowed determination of whether the order board or the area ahead of the order board was the controlling factor for the maximum queue behind the order board.

Queues were noted in two-minute intervals. The queues noted for each interval represent the maximum queue that occurred over that two-minute interval. The following observations were noted at the Gate Parkway Culver's:

- This is a double drive-through facility and both drive-through lanes were fully operational.
- From approximately 11:30 AM to 2:00 PM, two employees stood at the order boards (one at each order board) and took orders from the customers.

- It appeared that customers paying with credit card paid the employees that were standing at the order boards, skipped the pay window, and proceeded to the order waiting area.
- It appeared that customers paying with cash paid at the pay window.
- The maximum queue noted behind the order boards (including vehicles at the order boards) was 10 vehicles.
- During the entire observation period, the queue behind the pay window only backed up to the order boards one time, and this backup lasted approximately two minutes (from 12:59 PM to 1:01 PM). During this time, there were several empty spaces ahead of the pay window in the order waiting spaces. The queue behind the order boards from 12:59 PM to 1:01 PM was a maximum of 6 vehicles.

Based on these observations, the queue storage for future sites in design should be based on the maximum queue observed behind the order boards rather than measuring the queue from the pay window.

Blanding Boulevard Culver's Queueing Observations

Drive-through queueing data was collected at the existing Blanding Boulevard Culver's on Tuesday, November 29, 2022. At this location, one Kimley-Horn staff member documented the queue behind the order board (including the vehicle at the order board). Based on the previous observations at the Gate Parkway location, queues ahead of the order board were not documented, as these queues were not observed to affect the queues behind the order boards.

The following observations were noted at the Blanding Boulevard Culver's:

- This is a single drive-through facility.
- Unlike the Gate Parkway location, customers at the Blanding Boulevard location ordered directly from the order board (not from an employee standing near the order board) and paid at the pay window.
- The maximum queue noted behind the order board (including the vehicle at the order board) was 6 vehicles.
- During the entire observation period, the queue behind the pay window backed up to the order board three times (at 12:07 PM, at 1:10 PM, and at 1:17 PM), each time lasting less than 2 minutes.

The data collection sheets for each location are attached.

Conclusion

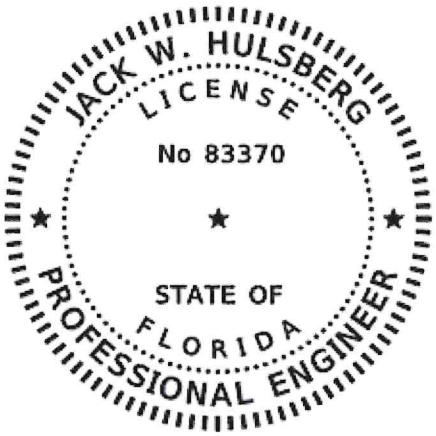
On-site queueing observations were conducted at two existing Culver's restaurants located on Gate Parkway in Jacksonville, Florida and on Blanding Boulevard in Middleburg, Florida. At the Gate Parkway location (double drive-through), the maximum queue observed behind the order boards was 10 vehicles, including the vehicles at the order boards. At the Blanding Boulevard location (single drive-through), the maximum queue observed behind the order board was 6 vehicles, including the vehicle at the order board. At both sites, the space between the pay window and the order boards was rarely ever filled by the queue, and therefore the controlling factor for the maximum queue was the order boards.

Based on the observations, future Culver's restaurants should be designed to accommodate at least 10 vehicles behind the order boards on site, including vehicles parked at the order boards.

Please do not hesitate to contact me at (904) 828-3900 or jack.hulsberg@kimley-horn.com should you have any questions.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.

Jack Hulsberg, P.E.
Project Manager



This item has been digitally signed and sealed by:

Jack Hulsberg Digitally signed by Jack Hulsberg
Date: 2023.09.20 11:15:46 -04'00'

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

Location: Culver's 7818 Gate Parkway
Jacksonville, FL 32256
Analysts: Ryen Clark and Jack Hulsberg

Date: Thursday, November 17, 2022

Time		Queue Behind Order Boards (Including vehicles at the order boards)	Did Space Between Window and Order Board Fill Up?	Queue Between Window and Order Board	Vehicles in Order Waiting Spaces
From	To				
11:00 AM	11:02 AM	2	No	2	1
11:02 AM	11:04 AM	1	No	2	1
11:04 AM	11:06 AM	0	No	2	1
11:06 AM	11:08 AM	1	No	0	3
11:08 AM	11:10 AM	5	No	0	3
11:10 AM	11:12 AM	5	No	0	2
11:12 AM	11:14 AM	5	No	0	2
11:14 AM	11:16 AM	5	No	0	1
11:16 AM	11:18 AM	3	No	2	2
11:18 AM	11:20 AM	3	No	4	2
11:20 AM	11:22 AM	3	No	3	3
11:22 AM	11:24 AM	9	No	1	5
11:24 AM	11:26 AM	9	No	0	5
11:26 AM	11:28 AM	6	No	0	5
11:28 AM	11:30 AM	3	No	0	7
11:30 AM	11:32 AM	3	No	0	8
11:32 AM	11:34 AM	4	No	0	8
11:34 AM	11:36 AM	2	No	2	6
11:36 AM	11:38 AM	1	No	0	7
11:38 AM	11:40 AM	1	No	0	6
11:40 AM	11:42 AM	2	No	0	3
11:42 AM	11:44 AM	1	No	0	1
11:44 AM	11:46 AM	2	No	0	2
11:46 AM	11:48 AM	0	No	0	3
11:48 AM	11:50 AM	1	No	0	3
11:50 AM	11:52 AM	1	No	0	2
11:52 AM	11:54 AM	4	No	0	3
11:54 AM	11:56 AM	2	No	1	4
11:56 AM	11:58 AM	1	No	0	6
11:58 AM	12:00 PM	3	No	0	6

Time		Queue Behind Order Boards (Including vehicles at the order boards)	Did Space Between Window and Order Board Fill Up?	Queue Between Window and Order Board	Vehicles in Order Waiting Spaces
From	To				
12:00 PM	12:02 PM	2	No	1	6
12:02 PM	12:04 PM	3	No	0	7
12:04 PM	12:06 PM	3	No	0	6
12:06 PM	12:08 PM	3	No	1	7
12:08 PM	12:10 PM	4	No	3	5
12:10 PM	12:12 PM	6	No	3	5
12:12 PM	12:14 PM	7	No	0	6
12:14 PM	12:16 PM	6	No	0	6
12:16 PM	12:18 PM	6	No	0	7
12:18 PM	12:20 PM	3	No	0	9
12:20 PM	12:22 PM	1	No	0	7
12:22 PM	12:24 PM	0	No	0	5
12:24 PM	12:26 PM	3	No	0	2
12:26 PM	12:28 PM	2	No	0	2
12:28 PM	12:30 PM	2	No	0	2
12:30 PM	12:32 PM	2	No	0	4
12:32 PM	12:34 PM	1	No	0	4
12:34 PM	12:36 PM	4	No	1	5
12:36 PM	12:38 PM	4	No	2	5
12:38 PM	12:40 PM	3	No	0	6
12:40 PM	12:42 PM	3	No	0	7
12:42 PM	12:44 PM	3	No	1	6
12:44 PM	12:46 PM	1	No	1	7
12:46 PM	12:48 PM	1	No	0	5
12:48 PM	12:50 PM	2	No	0	4
12:50 PM	12:52 PM	2	No	0	4
12:52 PM	12:54 PM	1	No	0	4
12:54 PM	12:56 PM	4	No	0	4
12:56 PM	12:58 PM	5	No	3	4
12:58 PM	1:00 PM	6	Yes	5	3

Time		Queue Behind Order Boards (Including vehicles at the order boards)	Did Space Between Window and Order Board Fill Up?	Queue Between Window and Order Board	Vehicles in Order Waiting Spaces
From	To				
1:00 PM	1:02 PM	4	Yes	6	2
1:02 PM	1:04 PM	4	No	2	6
1:04 PM	1:06 PM	1	No	0	7
1:06 PM	1:08 PM	2	No	1	4
1:08 PM	1:10 PM	2	No	0	6
1:10 PM	1:12 PM	3	No	1	6
1:12 PM	1:14 PM	3	No	0	5
1:14 PM	1:16 PM	4	No	0	7
1:16 PM	1:18 PM	8	No	0	7
1:18 PM	1:20 PM	10	No	0	6
1:20 PM	1:22 PM	9	No	1	7
1:22 PM	1:24 PM	9	No	1	6
1:24 PM	1:26 PM	10	No	0	7
1:26 PM	1:28 PM	10	No	0	8
1:28 PM	1:30 PM	7	No	2	8
1:30 PM	1:32 PM	5	No	4	6
1:32 PM	1:34 PM	4	No	3	7
1:34 PM	1:36 PM	3	No	2	8
1:36 PM	1:38 PM	2	No	3	5
1:38 PM	1:40 PM	5	No	0	2
1:40 PM	1:42 PM	5	No	0	3
1:42 PM	1:44 PM	2	No	1	4
1:44 PM	1:46 PM	1	No	2	4
1:46 PM	1:48 PM	3	No	0	4
1:48 PM	1:50 PM	5	No	0	6
1:50 PM	1:52 PM	4	No	1	6
1:52 PM	1:54 PM	3	No	3	5
1:54 PM	1:56 PM	3	No	0	8
1:56 PM	1:58 PM	2	No	1	7
1:58 PM	2:00 PM	2	No	1	6

Location: Culver's 1767 Blanding Blvd
Middleburg, FL 32068
Analyst: Ryen Clark

Date: Tuesday, November 29, 2022

Time		Queue Behind Order Board (Including vehicle at the order board)
From	To	
11:00 AM	11:02 AM	1
11:02 AM	11:04 AM	1
11:04 AM	11:06 AM	0
11:06 AM	11:08 AM	2
11:08 AM	11:10 AM	2
11:10 AM	11:12 AM	1
11:12 AM	11:14 AM	0
11:14 AM	11:16 AM	0
11:16 AM	11:18 AM	1
11:18 AM	11:20 AM	1
11:20 AM	11:22 AM	3
11:22 AM	11:24 AM	3
11:24 AM	11:26 AM	2
11:26 AM	11:28 AM	1
11:28 AM	11:30 AM	1
11:30 AM	11:32 AM	1
11:32 AM	11:34 AM	1
11:34 AM	11:36 AM	2
11:36 AM	11:38 AM	2
11:38 AM	11:40 AM	1
11:40 AM	11:42 AM	1
11:42 AM	11:44 AM	1
11:44 AM	11:46 AM	2
11:46 AM	11:48 AM	2
11:48 AM	11:50 AM	1
11:50 AM	11:52 AM	3
11:52 AM	11:54 AM	3
11:54 AM	11:56 AM	2
11:56 AM	11:58 AM	1
11:58 AM	12:00 PM	1

Time		Queue Behind Order Board (Including vehicle at the order board)
From	To	
12:00 PM	12:02 PM	2
12:02 PM	12:04 PM	2
12:04 PM	12:06 PM	4
12:06 PM	12:08 PM	2
12:08 PM	12:10 PM	1
12:10 PM	12:12 PM	2
12:12 PM	12:14 PM	1
12:14 PM	12:16 PM	0
12:16 PM	12:18 PM	1
12:18 PM	12:20 PM	2
12:20 PM	12:22 PM	1
12:22 PM	12:24 PM	1
12:24 PM	12:26 PM	1
12:26 PM	12:28 PM	1
12:28 PM	12:30 PM	1
12:30 PM	12:32 PM	0
12:32 PM	12:34 PM	5
12:34 PM	12:36 PM	6
12:36 PM	12:38 PM	5
12:38 PM	12:40 PM	3
12:40 PM	12:42 PM	4
12:42 PM	12:44 PM	1
12:44 PM	12:46 PM	1
12:46 PM	12:48 PM	1
12:48 PM	12:50 PM	0
12:50 PM	12:52 PM	2
12:52 PM	12:54 PM	2
12:54 PM	12:56 PM	1
12:56 PM	12:58 PM	1
12:58 PM	1:00 PM	1

Time		Queue Behind Order Board (Including vehicle at the order board)
From	To	
1:00 PM	1:02 PM	1
1:02 PM	1:04 PM	4
1:04 PM	1:06 PM	4
1:06 PM	1:08 PM	4
1:08 PM	1:10 PM	5
1:10 PM	1:12 PM	6
1:12 PM	1:14 PM	6
1:14 PM	1:16 PM	4
1:16 PM	1:18 PM	5
1:18 PM	1:20 PM	4
1:20 PM	1:22 PM	3
1:22 PM	1:24 PM	4
1:24 PM	1:26 PM	2
1:26 PM	1:28 PM	2
1:28 PM	1:30 PM	1
1:30 PM	1:32 PM	2
1:32 PM	1:34 PM	1
1:34 PM	1:36 PM	1
1:36 PM	1:38 PM	2
1:38 PM	1:40 PM	1
1:40 PM	1:42 PM	2
1:42 PM	1:44 PM	0
1:44 PM	1:46 PM	1
1:46 PM	1:48 PM	2
1:48 PM	1:50 PM	5
1:50 PM	1:52 PM	4
1:52 PM	1:54 PM	2
1:54 PM	1:56 PM	4
1:56 PM	1:58 PM	3
1:58 PM	2:00 PM	1

Kimley»Horn

October 23, 2023

Mr. Ben Smith, AICP
Morris-Depew Associates, Inc.
2914 Cleveland Avenue
Fort Myers, FL 33901

Re: Culver's Okeechobee
Application Number: 23-004-TRC
Submittal #1 Comments & Responses
KHA #045523036

Mr. Smith:

Kimley-Horn and Associates, Inc. (Kimley-Horn) is in receipt of the City of Okeechobee TRC Staff Report email dated September 18, 2023. We prepared the following responses to the TRC Staff Reports comments. City of Okeechobee staff comments are shown below in bold, followed by our responses in italics.

1. **Potable water and Sewer: Availability of potable water and sewer service for this site has not been included within the application submittal package.**

   Response: Please see the attached availability letter dated September 26, 2023.

2. **Traffic Generation: The applicant has provided a traffic analysis prepared by American Civil Engineering Co. which demonstrates available roadway capacity for 4,600 sq/ft drive-through restaurant, which is less than the proposed 4,827 sq/ft facility.**

   Response: The master developer has previously provided the Traffic analysis and has determined that the difference in square footage is deemed negligible where a net increase of 13 total cars was accounted for.

3. **Access and Internal Circulation: The site plan does not demonstrate that the access driveways and the internal drive aisles are a minimum 24' wide.**

   Response: Please see Sheets C-06 and C-07 for driveway and internal drive aisle dimensions.

4. **Furthermore, the proposed cross-access easement is 20' wide, which is not consistent with the minimum required 24' wide drive aisle width. It is recommended that the proposed easement width is revised in the proposed plat.**

   Response: Please see Sheets C-06 and C-07 for cross-access easement width of 24' per the master developer's plat information provided.

5. **Functionality of the drive through will be determined as part of the special use exception for that feature.**

   Response: Acknowledged.

6. **A crosswalk for pedestrians should be provided through the drive-through lanes to access the proposed sidewalk.**

   Response: Please see sheet C-06 for northern most pedestrian walkway/crosswalk along eastern side of the building with appropriate signage.

7. **Dumpster Location and/or Trash Collection: Multiple parking spaces obstruct access to the dumpster. In addition, accessing the dumpster requires the obstruction of the proposed pedestrian walkway to provide removal services.**

   Response: Please see Sheet C-06 for revised dumpster pad area. The parking stalls have been removed from in front of the dumpster. Also, per our discussion with Ben Smith on 10/11/23, the Culver's will coordinate with the solid waste entity to ensure that the dumpster is serviced after hours so that it can traverse the parking areas without conflict with customer vehicles.

8. **Minimum parking space dimensions: Dimensions of the proposed spaces are not provided.**

   Response: Please see Sheets C-06 and C-07 for parking dimensions.

9. **Minimum parking access dimensions: Drive aisle width is not indicated on the site plan. A minimum 24' width must be provided for all driveways and 2-way access aisles, including cross-access easement.**

   Response: Please see Sheets C-06 and C-07 for drive aisle and cross-access easement widths.

10. **Parking and loading space layout: No designated pedestrian crosswalks depicted.**

    Response: Please see sheet C-06 for northern most pedestrian walkway/crosswalk along eastern side of the building with appropriate signage.

11. **Parking and loading space layout: No pedestrian walkway/crosswalk provided from northern most parking spaces to the proposed pedestrian walkway along the eastern side of the building.**

    Response: Please see sheet C-06 for northern most pedestrian walkway/crosswalk along eastern side of the building with appropriate signage.

12. **Parking and loading space layout: Minimum 20' setback from "Lincoln Street" not indicated on the site plan.**

Response: Please see Sheet C-06 for the 20' building setback label.

13. **Minimum number of ADA parking spaces: Only 3 ADA spaces proposed.**

    Response: Please see Sheet C-06 for the additional ADA space that has been added.

14. **Minimum ADA parking space dimensions: Space dimensions are not indicated on the site plan.**

    Response: Please see Sheets C-06 and C-07 for ADA parking space dimensions.

15. **Landscaping Requirements for Parking and Vehicular Use Areas: 65 spaces required; 1,170 sq/ft of landscaped area required.**

    Response: 77 parking spaces and 28,341 sq/ft of landscaped area has been provided.

16. **Landscaping Requirements for Parking and Vehicular Use Areas: Width of the landscaped areas between the proposed building and the vehicular use areas is not provided.**

    Response: Please see Sheets C-06 and C-07 for landscaped areas width.

17. **Landscaping Requirements for Parking and Vehicular Use Areas: Dimensions of the landscaped islands not provided.**

    Response: Please see Sheets C-06 and C-07 for landscaped island dimensions.

18. **Landscape buffer areas: Buffer widths not completely provided. Only an 8' landscape buffer is proposed along SR-70 frontage.**

    Response: Please see Sheet C-06 for the proposed 10' Landscape Buffer.

19. **Landscape design and plan: No pedestrian walkway proposed between the northern parking spaces and the proposed building.**

    Response: Please see sheet C-06 for northern most pedestrian walkway/crosswalk along eastern side of the building with appropriate signage.

20. **Sidewalks: No sidewalks proposed along NE 13th Ave.**

    Response: The master developer shall provide sidewalks along NE 13th Ave as shown on Sheet C-06.

Recommendations:

1. **Plans must be consistent with final plat approval and all conditions of that approval.**

Response: Acknowledged, packages have been revised for consistency.

2. **Building permits may not be issued until final plat approval of 23-003-TRC.**

Response: Acknowledged.

3. **A monument sign is proposed, although no sign plan has been submitted with the site plan application. (Appendix B, Information 11). Proposed signage location and design plans must be submitted for review.**

Response: Please see Sheet C-06 for monument sign location as well as architectural details for design plans.

4. **Availability of potable water and sewer service for this site must be demonstrated.**

Response: Please see the attached availability letter dated September 26, 2023.

5. **The traffic study must be revised for consistency with the proposed intensity of the principal structure and for uses allowed within the CHV zoning district.**

Response: The traffic study was previously provided by the master developer and has been determined that the difference in net trips between the discrepancy between building SF to be negligible.

6. **The applicant must provide dimensions and length of the proposed drive-through queue (all proposed lanes) to be determine adequacy of on-site traffic circulation.**
    a. **Stacking lanes should be designed to minimize traffic congestion.**
    b. **Typical vehicle dimensions for proposed queueing should be provided.**

Response: The traffic design for the drive-through has been deemed appropriate through conversation with the city's planner.

7. **Revise dumpster enclosure location to address conflicts with parking facility.**

Response: Please see Sheet C-06 for revised dumpster pad area. The parking stalls have been removed from in front of the dumpster. Also, per our discussion with Ben Smith on 10/11/23, the Culver's will coordinate with the solid waste entity to ensure that the dumpster is serviced after hours so that it can traverse the parking areas without conflict with customer vehicles.

8. **Landscaping is proposed within the utility easement. Public works to determine whether a condition of approval is necessary to address removal and replacement for utility maintenance.**

Response: Acknowledged.

9. **Dimensions for parking spaces, drive aisles, setbacks, landscape buffers and other features must be provided to determine compliance.**

Response: Please see Sheet C-06 for parking spaces, drive aisles, setbacks, and landscape buffers dimensions.

10. **Internal pedestrian walkways should be designated.**

Response: Please see Sheet C-06 for designated pedestrian walkways.

11. **A crosswalk for pedestrians should be provided through the drive-through lanes to access the proposed sidewalk.**

Response: Please see sheet C-06 for northern most pedestrian walkway/crosswalk along eastern side of the building with appropriate signage.

12. **A sidewalk should be provided on 13th Ave.**

Response: The master developer shall provide and construct sidewalks along NE 13th Ave as shown on Sheet C-06.

I hope that the above responses are sufficient for you to complete the review of our application. Should you have any further questions, please feel free to contact me at (904) 828-3900.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

Josh Cockriel, PE
Project Manager

MONUMENT SERIES

D/F Illuminated Monument Sign with EMC

SCALE: 3/8" = 1'

ME-50-L-48X128-19-RGB-PBC

ME-50

D/F Illuminated Monument Sign with EMC

SIGN DETAILS:

Culver's sign cabinet of aluminum construction and internally illuminated with LED's

Thermoformed polycarbonate faces, embossed Culver's, 3M™ HP vinyl decoration

Watchfire® 48x128 RGB full color 19mm Electronic Message Center (EMC) with RF wireless communication

Amber EMC option available

Broadband communication option available

UL marked product

Culver's

SIGN & MENU BOARD BRAND STANDARDS
WITH TECHNICAL SPECIFICATIONS