

FOR PLANNING USE ONLY

Case #: _____
 Application Fee: \$ _____
 Filing Date: _____
 Acceptance Date: _____
 Review Type: P&Z

Site Plan Application

Reference City of Alachua Land Development Regulations Article 2.4.9

A. PROJECT

1. Project Name: Dreyer's DKI Site Plan
2. Address of Subject Property: 14619 NW US HWY 441
3. Parcel ID Number(s): 03211-003-000
4. Existing Use of Property: COMMERCIAL BUSINESS
5. Future Land Use Map Designation: COMMERCIAL
6. Zoning Designation: CI
7. Acreage: 1.96

B. APPLICANT

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): Craig R. Hedgecock, PE/PSM Title: _____
 Company (if applicable): _____
 Mailing address: 27 NW 48th Boulevard
 City: Gainesville State: FL ZIP: 32607
 Telephone: 352-377-9928 FAX: _____ e-mail: chedgecock@cox.net
3. If the applicant is agent for the property owner*:
 Name of Owner (title holder): Dreyer's Cleaning and Restoration, Inc.
 Mailing Address: 14619 NW US HWY 441
 City: Alachua State: FL ZIP: 32615

* Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☐ Yes ☒ No
 If yes, list names of all parties involved: _____
 If yes, is the contract/option contingent or absolute? ☐ Contingent ☐ Absolute

D. ATTACHMENTS

1. Site Plan including but not limited to:
 - a. Name, location, owner, and designer of the proposed development.
 - b. Zoning of the subject property.
 - c. Vicinity map - indicating general location of the site and all abutting streets and properties.
 - d. Complete legal description.
 - e. Statement of Proposed Uses.
 - f. Location of the site in relation to adjacent properties, including the means of ingress and egress to such properties and any screening or buffers along adjacent properties.
 - g. Date, north arrow, and graphic scale (not to exceed one (1) inch equal to fifty (50) feet.)
 - h. Area and dimensions of site.
 - i. Location of all property lines, existing right-of-way approaches, sidewalks, curbs, and gutters.
 - j. Access and points of connection to utilities (electric, potable water, sanitary sewer, gas, etc.)
 - k. Location and dimensions of all existing and proposed parking areas and loading areas.
 - l. Location, size, and design of proposed landscaped areas (including existing trees and required landscaped buffer areas) with detail illustrating compliance with Section 6.2.2 of the Land Development Regulations.

- m. Location and size of any lakes, ponds, canals, or other waters and waterways.
- n. Structures and major features – fully dimensioned – including setbacks, distances between structures, floor area, width of driveways, parking spaces, property or lot lines, and floor area ratio.
- o. Location of waste receptacles and detail of waste receptacle screening.
- p. For development consisting of a nonresidential use, except for single tenant retail sales and services uses greater than or equal to 20,000 square feet in area and except for use types within the industrial services, manufacturing and production, warehouse freight and movement, waste-related services, and wholesale sales use categories:
 - i. Architectural plans and dimension plans which demonstrate compliance with the design standards for business uses as provided in Section 6.8.2 of the LDRs, including:
 - (a) Calculation of glazing of the front façade.
 - (b) Calculation of the area of ground floor façades subject to glazing.
 - (c) Detail on the architectural plans and dimension plans depicting façade massing and/or alternatives to required façade massing.
 - (d) Sufficient plan detail and calculations of each material utilized in each façade.
- q. For development consisting of a nonresidential use where a single tenant is greater than or equal to 20,000 square feet in area:
 - i. Architectural plans and dimension plans which demonstrate compliance with the design standards for single tenant retail sales and service uses greater than or equal to 20,000 square feet in area as provided in Section 6.8.3 of the LDRs, including:
 - (a) Calculation of glazing of the façades facing streets, residential uses, and vacant residential/agricultural land.
 - (b) Calculation of the area of ground floor façades subject to glazing.
 - (c) If glazing alternatives are used, calculation of area of alternative materials used.
 - (d) Detail on the architectural plans and dimension plans depicting façade massing and/or alternatives to required façade massing.
 - (e) Color architectural plans depicting the color of all materials used in the façade.
- r. For development consisting of one or more of the following: Multi-family residential; Hotel; or Mobile Home Park:
 - i. Tabulation of gross acreage.
 - ii. Tabulation of density.
 - iii. Number of dwelling units proposed.
 - iv. Location and percent of total open space and recreation areas.
 - v. Floor area of dwelling units.
 - vi. Number of proposed parking spaces.
 - vii. Street layout.
 - viii. Layout of mobile home stands (for mobile home parks only).
 - ix. City of Alachua Public School Student Generation Form.

Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins

- 2. Stormwater management plan - including the following:
 - a. Existing contours at one (1) foot intervals based on U.S. Coastal and Geodetic Datum.
 - b. Proposed finished floor elevation of each building site.
 - c. Existing and proposed stormwater management facilities with size and grades.
 - d. Proposed orderly disposal of surface water runoff.
 - e. Centerline elevations along adjacent streets.
 - f. Water Management District surfacewater management Statement of proposed uses on the site plan
- 3. Fire Department Access and Water Supply: The design criteria shall be Chapter 18 of the Florida Fire Prevention Code. Plans must be on separate sealed sheets and must be prepared by a professional Fire engineer licensed in the State of Florida. Fire flow calculations must be provided for each newly constructed building. When required, fire flow calculations shall be in accordance with the Guide for Determination of Required Fire Flow, latest edition, as published by the Insurance Service Office (ISO) and /or Chapter 18, Section 18.4 of the Florida Fire Prevention Code, whichever is greater. All calculations must be demonstrated and provided. All calculations and specifications must be on the plans and not on separate sheets. All fire protection plans are reviewed and approved by the Alachua County Fire Marshal.
- 4. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.
- 5. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)

For commercial project Applications:

- a. In addition to submitting specific written information regarding your **commercial** development's compliance with the relevant Goals, Objectives, and Policies of the City of Alachua Comprehensive Plan, you must respond directly to the standards listed below. You should be specific in terms of how your commercial development will comply with these standards.

Policy 1.3.d Design and performance standards

The following criteria shall apply when evaluating commercial development proposals:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;
2. Buffering from adjacent existing/potential uses;
3. Open space provisions and balance of proportion between gross floor area and site size;
4. Adequacy of pervious surface area in terms of drainage requirements;
5. Placement of signage;
6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area;
7. Safety of on-site circulation patterns (patron, employee and delivery vehicles), including parking layout and drive aisles, and points of conflict;

8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;
9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and
10. Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.
11. Commercial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres but 5 acres or greater, a .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio to parcels 1 acre or less.

For industrial project Applications:

- b. In addition to submitting specific written information regarding your **industrial** development's compliance with the relevant Goals, Objectives, and Policies of the City of Alachua Comprehensive Plan, you must respond directly to the standards listed below. You should be specific in terms of how your industrial development will comply with these standards.

Policy 1.5.d

The City shall develop performance standards for industrial uses in order to address the following:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;
2. Buffering from adjacent existing/potential uses;
3. Open space provisions and balance of proportion between gross floor area and site size;
4. Adequacy of pervious surface area in terms of drainage requirements;
5. Placement of signage;
6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area;
7. Safety of on-site circulation patterns (patron, employee and delivery vehicles, trucks), including parking layout and drive aisles, and points of conflict;
8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;
9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and
10. Performance based zoning requirements that may serve as a substitute for or accompany land development regulations in attaining acceptable site design.
11. Industrial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres by 5 acres or greater, .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio for parcels 1 acre or less.

6. For Site Plans for Buildings Less than 80,000 Square Feet in Area: One (1) set of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications.
For Site Plans for Buildings Greater than or Equal to 80,000 Square Feet in Area: Two (2) sets of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications.
7. Neighborhood Meeting Materials, including:
 - i. Copy of the required published notice (advertisement) – must be published a newspaper of general circulation, as defined in Article 10 of the City's Land Development Regulations
 - ii. Copy of written notice (letter) sent to all property owners within 400 feet and to all persons/organizations registered with the City to receive notice, and mailing labels or list of those who received written notice
 - iii. Written summary of meeting – must include (1) those in attendance; (2) a summary of the issues related to the development proposal discussed; (3) comments by those in attendance about the development proposal; and, (4) any other information deemed appropriate.
8. Legal description with tax parcel number, separate from all other documentation on 8.5" x 11" paper.
9. Proof of ownership (i.e., copy of deed.)
10. Proof of payment of taxes.
11. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District or Self-Certification for a Stormwater Management System in Uplands Serving Less than 10 Acres of Total Project Area and Less than 2 Acres of Impervious Surfaces from the Florida Department of Environmental Protection pursuant to Section 403.814(12), Florida Statutes.
12. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).
13. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).
14. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review or additional reviews of the application beyond the initial engineering review fee will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

All 14 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.


 Signature of Applicant

Craig R. Hedgecock, PE/PSM

Typed or printed name and title of applicant

 Signature of Co-applicant


 Typed or printed name of co-applicant

State of Florida County of Alachua

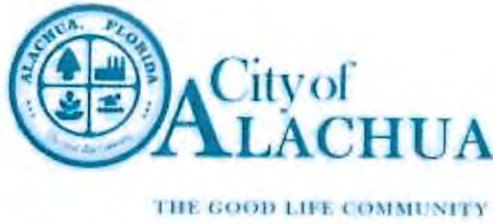
The foregoing application is acknowledged before me this 31st day of October, 2019 by Craig R. Hedgecock

_____, who is/are personally known to me, or who has/have produced _____
 as identification.




 Signature of Notary Public, State of Florida

Alachua ♦ Planning and Community Development Department
 PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121



Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: 14619 NW US HWY 441

Parcel ID Number(s): 03211-001-000 and 03211-003-000

Acreage: 1.958

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Dreyer's Cleaning and Restoration, Inc. Title: Owners

Company (if applicable): _____

Mailing Address: 14619 NW US HWY 441

City: Alachua State: FL ZIP: 32615

Telephone: 352-258-3670 FAX: _____ e-mail: jonathon@dreyersdki.com

C. AUTHORIZED AGENT

Name: Craig R. Hedgecock, PE/PSM Title: _____

Company (if applicable): _____

Mailing address: 27 NW 48th Boulevard

City: Gainesville State: FL ZIP: 32607

Telephone: 352-377-9928 FAX: _____ e-mail: chedgecock@cox.net

D. REQUESTED ACTION:

Commercial Site Plan application.

I hereby certify that I am the property owner of record, or I have received authorization from the property owner of record to file an application for a development permit related to the property identified above. I authorize the agent listed above to act on my behalf for purposes of this application.

[Signature]
Signature of Applicant

Signature of Co-applicant

Jonathon Dreyer, President

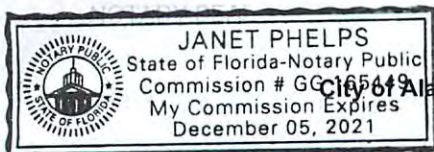
Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 31 day of October, 2019, by Jonathon

Dreyer, who is/are personally known to me, or who has/have produced _____
as identification.



[Signature]
Signature of Notary Public, State of Florida

City of Alachua ♦ Planning and Community Development Department
PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121
Revised 9/30/2014

This instrument prepared by and
after recording return to:

PREPARED BY AND RETURN TO:
Mary A. Robison, Esquire (KDB)
Fisher, Tousey, Leas & Ball, P.A.
501 Riverside Avenue, Suite 600
Jacksonville, Florida 32202

Doc Stamp-Deed: \$1,995.00



SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED, made and entered into as of the 30th day of May, 2018, by MEGAHEE ENTERPRISES, LTD., LLLP, a Florida limited liability limited partnership, successor by conversion to Megahee Enterprises, Ltd., the address for which is 2513 SW 50th Boulevard, Gainesville, Florida 32608 (the "Grantor"), to DREYER'S CLEANING & RESTORATION, INC., a Florida corporation, the address for which is 7235 NW 13th Boulevard, Gainesville, Florida 32653 (the "Grantee").

W I T N E S S E T H:

THAT, for and in consideration of the sum of Ten and No/100 Dollars (\$10.00), and other good and valuable consideration, the receipt and sufficiency of which are acknowledged by Grantor, Grantor hereby grants, bargains, sells, conveys and confirms unto Grantee all that certain real property together with the improvements thereon (collectively, the "Real Property") in Alachua County, Florida, and more particularly described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

TOGETHER WITH all the tenements, hereditaments and appurtenances thereto belonging or in any way appertaining.

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

Subject to conditions, covenants, restrictions, reservations, easements, rights-of-way, taxes assessed subsequent to December 31, 2017, and all applicable zoning ordinances; provided, however, this reference will not serve to reimpose any such conditions, covenants, restrictions, reservations or easements.

And Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever, claiming by, through or under Grantor, but not otherwise.

IN WITNESS WHEREOF, Grantor has caused this Special Warranty Deed to be executed on its behalf as of the day and year first above written.

Signed, sealed and delivered
in the presence of:

MEGAHEE ENTERPRISES, LTD., LLLP,
a Florida limited liability limited partnership

Witness Print Name: Joe J. Morris

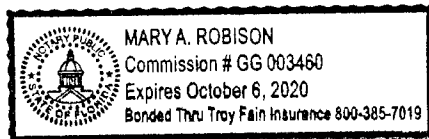
By: [Signature]
Joan M. Jones
Its: General Partner

Witness Print Name: Mary A. Robison

STATE OF FLORIDA
COUNTY OF ALACHUA

The foregoing instrument was acknowledged before me this 30th day of May, 2018, by Joan M. Jones, a General Partner of MEGAHEE ENTERPRISES, LTD., LLLP, a Florida limited liability limited partnership, on behalf of the partnership, who ☒ is personally known to me or ☐ has produced _____ as identification.

Notary Stamp



[Signature]
Print Name: Mary A. Robison
Title: Notary Public
Serial No. (if any) GG003460
Commission Expires: 10/6/20

790672

EXHIBIT "A"

A PARCEL OF LAND LOCATED IN SECTION 14, TOWNSHIP 08 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, BEING A PORTION OF LOTS 3 AND 4 OF "WOODBRIIDGE'S SUBDIVISION OF STRINGFELLOW FARM, ALACHUA, FLORIDA", AS RECORDED IN PLAT BOOK "C", PAGE 68-A, OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF LOT 6 OF SAID "WOODBRIIDGE'S SUBDIVISION OF STRINGFELLOW FARM, ALACHUA, FLORIDA", AND BEING ON THE NORTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY 441 (RIGHT-OF-WAY WIDTH VARIES); THENCE SOUTH 82°34'32" EAST, ALONG THE SOUTH LINE OF LOTS 6, 5, AND 4 OF SAID "WOODBRIIDGE'S SUBDIVISION OF STRINGFELLOW FARM, ALACHUA, FLORIDA", AND ALONG SAID NORTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY 441, A DISTANCE OF 851.63 FEET; THENCE, LEAVING SAID SOUTH LINE OF LOTS 6, 5, AND 4, NORTH 01°33'18" WEST, A DISTANCE OF 21.26 FEET TO A 1/2" REBAR & CAP (LB 7996) AND THE POINT OF BEGINNING; THENCE, CONTINUE ALONG SAID NORTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY 441, SOUTH 82°34'32" EAST, A DISTANCE OF 291.58 FEET TO A 1/2" REBAR & CAP MARKING THE SOUTHWEST CORNER OF THAT PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 1683, PAGE 363; THENCE, LEAVING SAID NORTH RIGHT-OF-WAY LINE, NORTH 05°24'01" EAST, ALONG THE WEST LINE OF SAID PARCEL OF LAND AND ALONG THE NORTHERLY PROJECTION THEREOF, A DISTANCE OF 300.81 FEET TO A 1/2" REBAR & CAP (LB 7996) ON THE NORTH LINE OF LOT 3 OF SAID "WOODBRIIDGE'S SUBDIVISION OF STRINGFELLOW FARM, ALACHUA, FLORIDA", AND BEING ON THE SOUTH RIGHT-OF-WAY LINE OF N.W. 150TH AVENUE (38 FOOT RIGHT-OF-WAY AS MONUMENTED); THENCE SOUTH 88°51'46" WEST, ALONG THE NORTH LINE OF SAID LOTS 3 AND 4, AND ALONG SAID SOUTH RIGHT-OF-WAY LINE OF N.W. 150TH AVENUE, A DISTANCE OF 324.44 FEET TO A 1/2" REBAR & CAP (LB 7996); THENCE, LEAVING SAID NORTH AND SOUTH LINES, SOUTH 01°33'18" EAST, A DISTANCE OF 255.46 FEET TO THE POINT OF BEGINNING.



2018 Roll Details — Real Estate Account At 14619 NW US HWY 441

Print this page

Real Estate Account #03211 003 000

Parcel details

Latest bill

View/Print full bill history

2018

2017

2016

2015

...

2002

PAID

PAID

PAID

PAID

PAID

Get Bills by Email

PAID 2019-01-31 \$3,680.69

Receipt #18-0096879

Owner: DREYERS CLEANING & RESTORATION INC

7235 NW 13TH BLVD

GAINESVILLE, FL 32653

Situs: 14619 NW US HWY 441

Account number: 03211 003 000

Alternate Key: 1012430

Millage code: 1700

Millage rate: 22.5620

Assessed value: 157,700

School assessed value: 157,700

Unimproved land value: 78,800



Location is not guaranteed to be accurate.

Property Appraiser

2018 Annual bill

View

Ad valorem: \$3,558.02

Non-ad valorem: \$197.79

Total Discountable: 3755.81

No Discount NAVA: 0.00

Total tax: \$3,755.81

Legal description

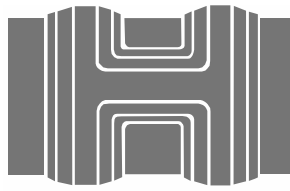
COM SW COR LOT 6 OF WOOD BRIDGE S/D PB C-68-A RUN E ALONG N R/W US 441 1043.52 FT TO POB CONT E ALONG R/W 100.07 FT N 5 DEG E 163.64 FT N 84 DEG W 100 FT S 05 DEG W 160.00 FT TO POB OR 4603/1559

Location

Book, page, item: 4603-1559-

Geo number: 14-08-18-03211003000

Range: 18



CRAIG R. HEDGECK
ENGINEERS, PLANNERS, SURVEYORS

NFPA FIRE FLOW CALCULATION

FOR

“DREYER’S DKI SITE PLAN”
TAX PARCEL NO. 03211-000-000 & 03211-003-000
14619 WEST US HIGHWAY 441
ALACHUA, FLORIDA

NOVEMBER 2, 2019

GENERAL PROJECT DESCRIPTION

THE PROJECT INVOLVES THE ADDITION OF A COMMERCIAL BUILDING TO THE SITE LOCATED AT 14619 WEST US HIGHWAY 441 IN THE CITY OF ALACHUA, FLORIDA.

TOTAL FLOOR AREA = 11,900 SQ.FT.

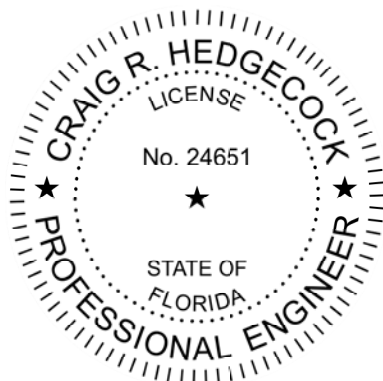
CONSTRUCTION TYPE: III-B

REQUIRED FIRE FLOW:

NFPA 1 = 2250 GPM

(SOURCE: 16.4.3.1.3.1 and Table 18.4.5.1.2 FLORIDA FIRE PROTECTION CODE)

NFPA NEEDED FIRE FLOW: 2250 GPM



CRAIG R. HEDGECK, PE
Florida Registration No. 24651

FLORIDA FIRE PROTECTION CODE

16.4.3.1.3.1

Completion of the water mains and hydrants may be on an alternate schedule approved by the fire official.

Cross Reference of Building Construction Types										
(Table 18.4.5.1 Construction Types Designation Per NFPA 220; NFPA 5000)										
NFPA 220 NFPA 5000	I(443)*	I(332)	II(222)	II(111)	II(000)	III(211)	III(200)	IV(2HH)	V(111)	V(000)
IBC/FBC	I-A	I-B	----	II-A	II-B	III-A	III-B	IV	V-A	V-B
SBC	I	II	----	IV 1-hr.	IV unp	V 1-hr.	V unp	III	VI 1-hr	VI unp
UBC	----	I FR	II FR	II 1-hr.	II N	III 1-hr.	III N	IV HT	V 1-hr.	V-N
BNBC	1A	1B	2A	2B	2C	3A	3B	4	5A	5B

Table 18.4.5.1.2

Fire Flow Requirements for Buildings.						
Table 18.4.5.1.2 Minimum Required Fire Flow and Flow Duration for Buildings						
Fire Area ft ² (x0.0929 for m ²)						
I(443), I(332), II(222)1	II(111), III(211)*1	IV(2HH), V(111)*1	II(000), III(200), III(000)*1	V(000)*1	Fire Flow gpm ²	Flow Duration (hours)
0–22,700	0–12,700	0–8,200	0–5,900	0–3,600	1,500	2
22,701–30,200	12,701–17,000	8,201–10,900	5,901–7,900	3,601–4,800	1,750	
30,201–38,700	17,001–21,800	10,901–12,900	7,901–9,800	4,801–6,200	2,000	
38,701–48,300	21,801–24,200	12,901–17,400	9,801–12,600	6,201–7,700	2,250	
48,301–59,000	24,201–33,200	17,401–21,300	12,601–15,400	7,701–9,400	2,500	
59,001–70,900	33,201–39,700	21,301–25,500	15,401–18,400	9,401–11,300	2,750	



FIRE HYDRANT FLOW TEST DATA

Company: Cheshire Companies

Address: 1325 NW 53rd Ave Suite E
Gainesville, FL

Contact:

Name/Title: Kyle Chesire
Phone #: 352-494-0062

Hydrant Location: Alachua, FL

(#1) Residual Hydrant: Hwy 441 Across from Sun State Bank

Hydrant Location: Alachua, FL

(#2) Flowed Hydrant: Hwy 441 Across From Hunter Marine

Testing:

Year: 2019
Technician: Jerry Gentry

Date: 10/30/2019
Time: 8:00 AM

RESULTS

(#1) Residual Hydrant:

Static: 82 PSI
Residual: 65 PSI

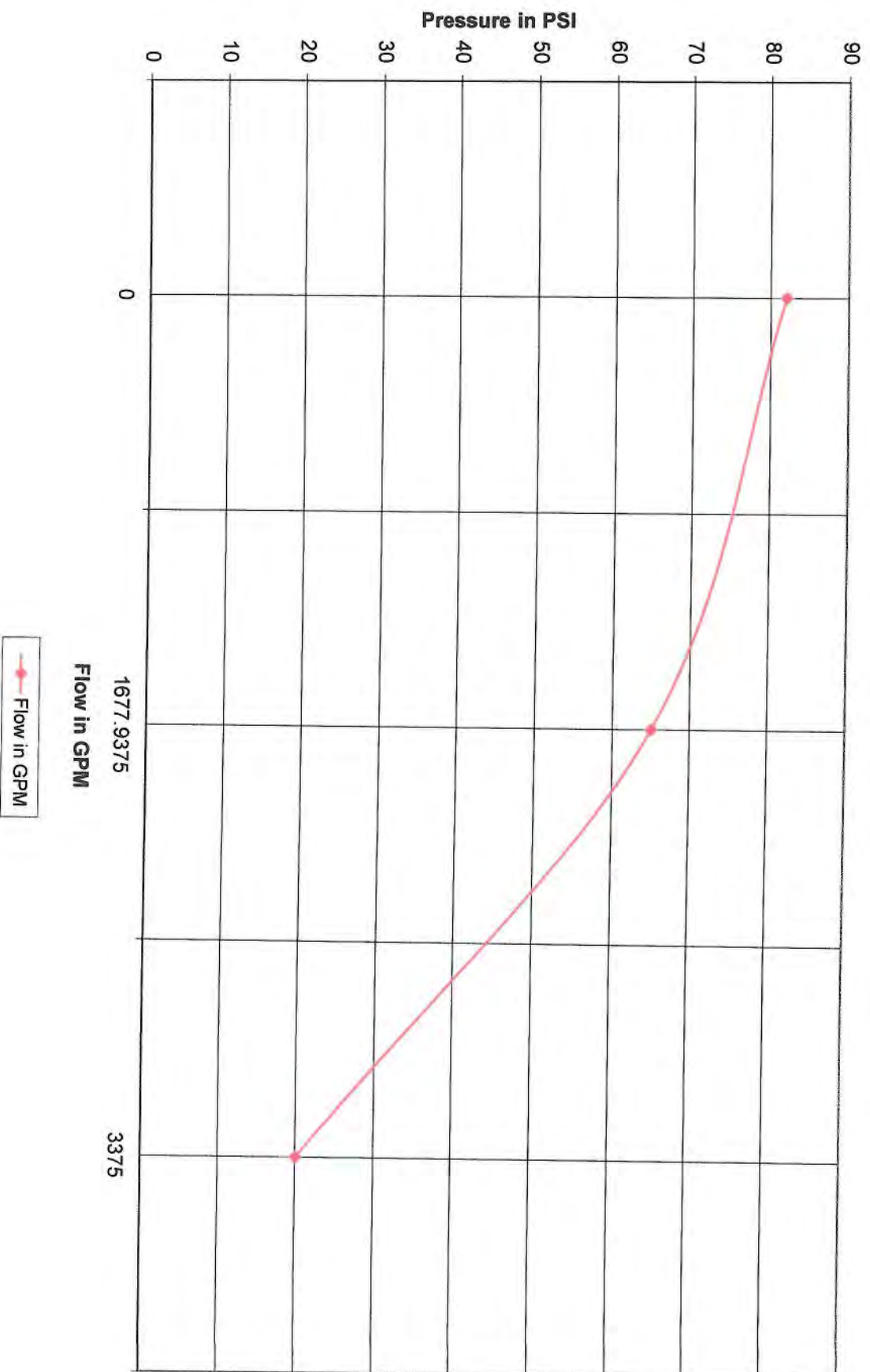
(#2) Flowed Hydrant / Hydrants:

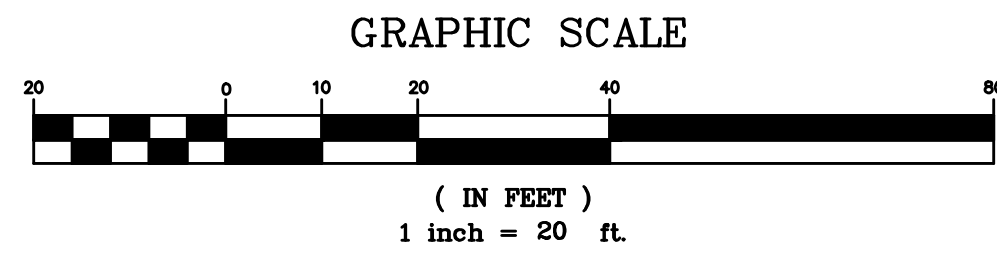
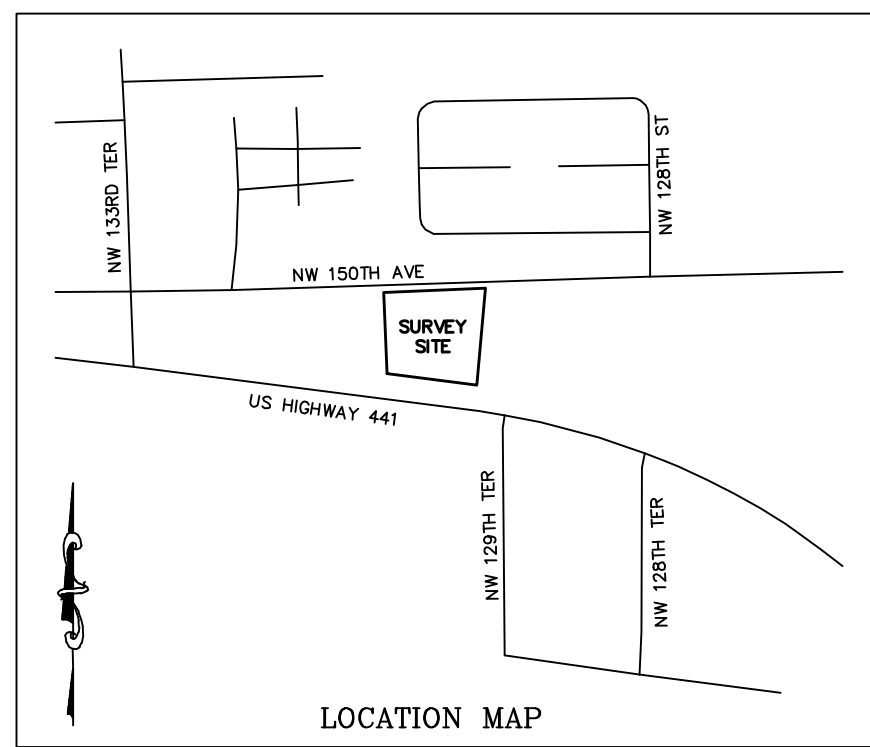
Pito: 1 25 PSI 2 25 PSI

Flow: 1 839 GPM 2 839 GPM

Hydrant Flow At 20 PSI: 3375 GPM

Cheshire Companies Hydrant Flow





SITE PLAN

PREPARED FOR: DREYER'S DKI

BEING A PORTION OF

TAX PARCEL #03211-001-000 &

TAX PARCEL 03211-003-000

14619 N.W. US HIGHWAY 441

ALACHUA, FL 32615

SECTION 14, TOWNSHIP 08 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA

N.W. 150TH AVENUE (38' R/W AS MONUMENTED)

FLORIDA FIRE PROTECTION CODE

16.4.3.1.3.1

Completion of the water mains and hydrants may be on an alternate schedule approved by the fire official.

Cross Reference of Building Construction Types										
(Table 18.4.5.1 Construction Types Designation Per NFPA 220; NFPA 5000)										
NFPA 220 NFPA 5000	I(443)*	I(332)	II(222)	II(111)	II(000)	III(211)	III(200)	IV(2H-I)	V(111)	V(000)
IBC/FBC	I-A	I-B	—	II-A	II-B	III-A	III-B	IV	V-A	V-B
SBC	I	II	—	IV 1-hr.	IV unpr.	V 1-hr.	V unpr.	III	VI 1-hr.	VI unpr.
UBC	—	I FR	II FR	II 1-hr.	II N	III 1-hr.	III N	IV HT	V 1-hr.	V-N
BNBC	1A	1B	2A	2B	2C	3A	3B	4	5A	5B

Table 18.4.5.1.2

Fire Flow Requirements for Buildings					
Table 18.4.5.1.2 Minimum Required Fire Flow and Flow Duration for Buildings					
Fire Area A* (±0.8929 for m²)					
I(443), I(332), II(222)†	II(111), III(211)†	IV(2HH), V(111)†	II(000), III(200), III(000)†	V(000)*†	Fire Flow gpm*†
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500
22,701-30,200	12,701-17,000	8,201-10,800	5,901-7,800	3,601-4,800	1,750
30,201-38,700	17,001-21,800	10,801-12,800	7,801-9,800	4,801-6,200	2,000
38,701-48,300	21,801-24,200	12,801-17,400	9,801-12,400	6,201-7,700	2,250
48,301-59,000	24,201-33,200	17,401-21,300	12,401-15,400	7,701-9,400	2,500
59,001-70,900	33,201-38,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750

NFPA FIRE FLOW = 2250 GPM



FIRE HYDRANT FLOW TEST DATA

Company: Cheshire Companies

Address: 1325 NW 53rd Ave Suite E
Gainesville, FL

Contact: Name/Title: Kyle Chesire
Phone #: 352-494-0062

Hydrant Location: Alachua, FL
Residual Hydrant: Hwy 441 Across from Gun Oaks Park
Hydrant Location: Alachua, FL
Flowed Hydrant: Hwy 441 Across from Hunter Marine

Testing: Year: 2019 Date: 10/30/2019
Technician: Jerry Gentry Time: 8:00 AM

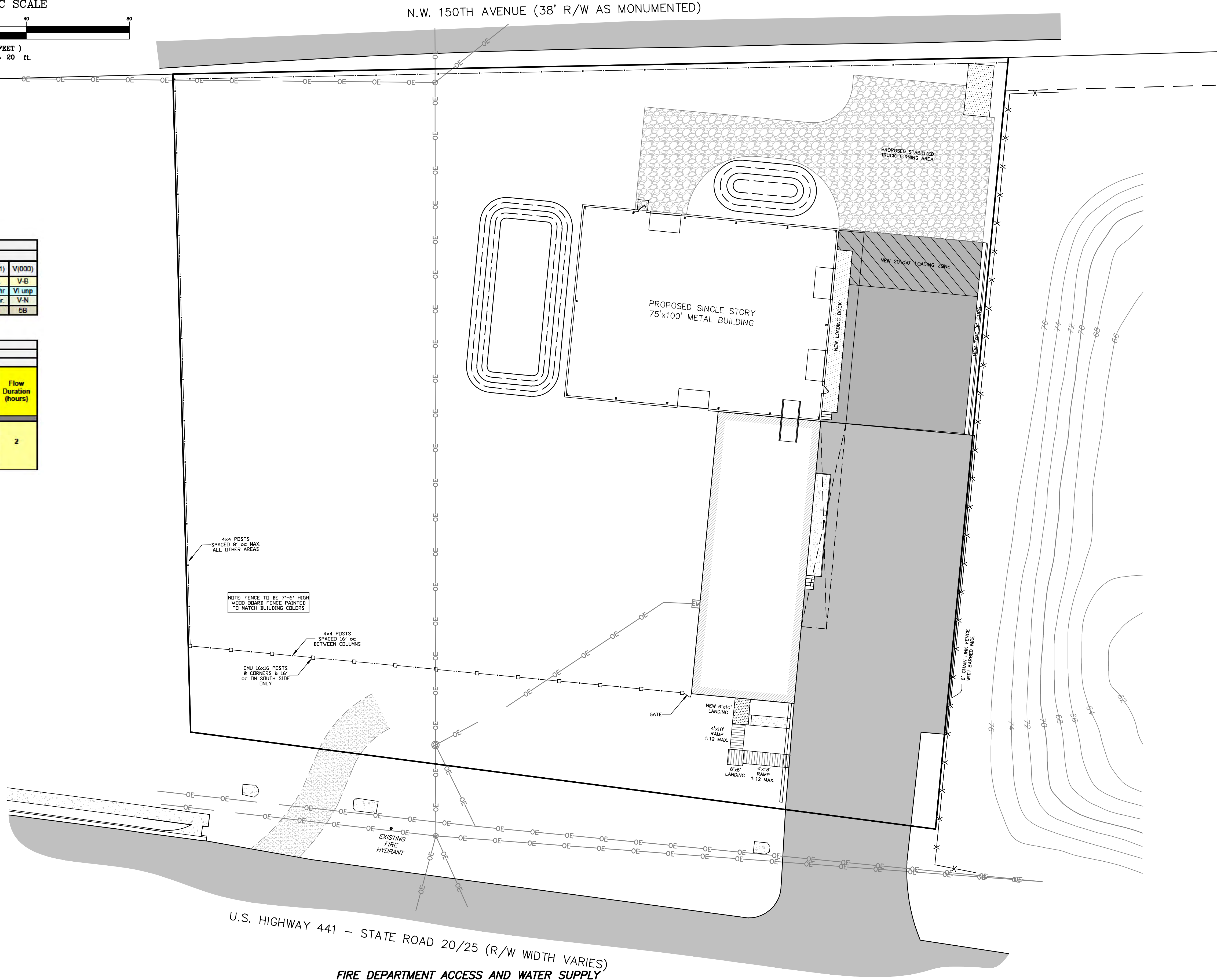
RESULTS

(#1) Residual Hydrant:
Static: 82 PSI
Residual: 65 PSI

(#2) Flowed Hydrant / Hydrants:
Pilot: 1 26 PSI 2 25 PSI
Flow: 1 836 GPM 2 839 GPM

Hydrant Flow At 20 PSI: 3375 GPM

Fire Protection Systems - Fabrication - Alarm Systems - FM-200 - Fire Alarm Communications - Access Control/CCTV - Fiber Optics - AV Systems
W.W. Gay Fire Protection, Inc. - W.W. Gay Fire Integrated Systems, Inc.



U.S. HIGHWAY 441 - STATE ROAD 20/25 (R/W WIDTH VARIES)

FIRE DEPARTMENT ACCESS AND WATER SUPPLY

DATE: NOVEMBER 2, 2019
DRAWN BY: CRAIG R. HEDGECOCK
CHECKED BY: CRAIG R. HEDGECOCK
DRAWING NO.: DREYER'S DKI

CRAIG R. HEDGECOCK
ENGINEERS - PLANNERS - SURVEYORS
27 N.W. 48TH BOULEVARD
GAINESVILLE, FL 32607 (352) 377-9928

REVISIONS:

NOT VALID UNLESS SIGNED AND SEALED BELOW

FOR REVIEW ONLY

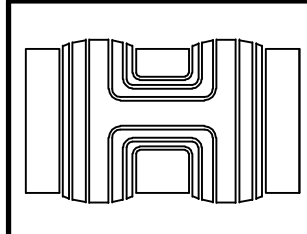
CRAIG R. HEDGECOCK, P.E./P.S.M. DATE: P.E. NO. 24851 - P.S.M. NO. 3506 - FLORIDA

SITE PLAN

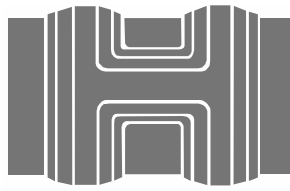
PREPARED FOR: DREYER'S DKI

14619 NW US HIGHWAY 441 - TAX PARCEL NO. 03211-001-000 & 03211-003-000

CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA



SHEET
1 OF 1



CRAIG R. HEDGECK
ENGINEERS, PLANNERS, SURVEYORS

DREYER'S DKI SITE PLAN

Alachua County Tax Parcel 03211-003-000
City of Alachua, Alachua County, Florida

CONCURRENCY IMPACT ANALYSIS

Pursuant to Article 2.4.14 of the Land Development Regulations

Certificate of Concurrency Compliance.

Purpose. The purpose of this section is to provide a mechanism for reviewing applications for development approval to ensure that no development order is issued unless there is adequate public facility capacity for roads, sanitary sewer, solid waste, stormwater management, potable water, or recreation facilities.

Level of service (LOS) standards. The level of service (LOS) standards adopted for roads, sanitary sewer, solid waste, stormwater management, potable water, and recreation facilities are those adopted in the Comprehensive Plan, which is incorporated herein by reference.

This project will have a de minimis, or no impact on public facility levels of service as follows:

Roads:

At the time a development order is issued, the necessary facilities and services are in place or under construction.

The project as proposed will generate **NO** additional vehicle trips as the proposed building is meant to support the existing operations carried on at the site. The proposed development's impact on West US Highway 441 is considered to be "de minimis" based upon FDOT thresholds.

Based upon the latest City of Alachua Development Monitoring Report dated July, 2019, the segment of West US Highway 441 from NW 126th to SR 235 has a Comprehensive Plan MSV allowable AADT of 45,700 and allowable Peak Hour Trips totaling 4,110. The existing traffic plus projected and reserved trips for the highway segment totals 22,178 AADT with a peak hour total of 2,241 trips. The percentage of capacity utilized totals 48.53% of the AADT and 54.53% for the peak hour.

Therefore, the proposed building addition will not degrade the level of service of the roadway.

Sanitary Sewer/Potable Water:

Goal 1: Plan for and provide adequate, high quality and economical wastewater service while protecting the environment, especially groundwater resources.

Objective 1.2 Wastewater service will be made available to new development in a manner to promote compact urban growth, promoting development where wastewater service is available, and discouraging urban sprawl.

Goal 4: Provide an adequate supply of high quality potable water to customers throughout the service area.

Objective 4.1 Achieve and maintain acceptable levels of service for potable water quality and quality.

Utilizing Table I of Chapter 64-E, FAC, “STANDARDS FOR ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS”, for forty (40) employees, the estimated sewage flow would be 600 gpd. The domestic wastewater is currently discharged into an existing ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM that was recently upgraded. Actual “metered” potable water demand over the past three months averaged approximately 106 gallons per day. The site will be connected to the City of Alachua wastewater system and said effect would be “de minimis” as follows:

Based upon the latest City of Alachua Development Monitoring Report dated July, 2019, the “Treatment Plant Current Permitted Capacity” is 1,500,000 gallons per day. After subtracting “Actual Treatment Plant Flows” and “Projected Reservations & Reserved Capacity”, the “Residual Capacity” is 57,239 gallons per day or 3.82% of the “Permitted Design Capacity”. The additional 106 gpd would decrease same to 3.81%.

No additional potable water demand will be required as the proposed building will have no plumbing fixtures. Therefore, the existing potable water demand averaging 106 gallons per day for the past three (3) months should not increase.

Based upon the latest City of Alachua Development Monitoring Report dated July, 2019, the “Current Permitted Capacity” is 2,300,000 gallons per day. After subtracting “Actual Potable Water Flows” and “Projected Reservations & Reserved Capacity”, the “Residual Capacity” is 260,393 gallons per day or 11.32% of the “Permitted Design Capacity”.

Stormwater Management:

The project will qualify for a “Self-Certification for a Stormwater Management System in Uplands Serving Less than 10 Acres of Total Project Area and Less than 2 Acres of Impervious Surfaces” from the Florida Department of Environmental Protection pursuant to Section 403.814(12), Florida Statutes.

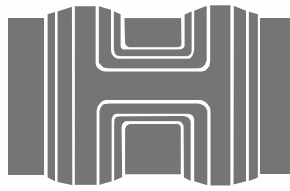
The proposed on-site drainage retention area will provide the required water quantity and quality treatment volume for the SRWMD 100 Year Critical Duration Rainfall Events from the proposed building and stabilized surfaces contributing runoff to same. There is also a substantial amount of open space on site in the vicinity of same to provide additional capacity in the future if it is determined to be needed.

Solid Waste:

Goal 2: The City of Alachua will provide for solid waste disposal service in a sanitary, economic, and environmentally safe manner.

Solid waste is currently served by a commercial hauler utilizing a 20 yard dumpster that is emptied as required at approximately a two (2) week interval. No additional solid waste is anticipated from the proposed building.

Based upon the latest City of Alachua Development Monitoring Report dated July, 2019, the “New River Solid Waste Facility Capacity” is 50 years. The “Existing Demand” and “Projected Reservations & Reserved Capacity” totals 14,163.27 tons per year.



CRAIG R. HEDGECK
ENGINEERS, PLANNERS, SURVEYORS

DREYER'S DKI SITE PLAN

Alachua County Tax Parcel 03211-003-000
City of Alachua, Alachua County, Florida

CONSISTENCY WITH THE CITY OF ALACHUA COMPREHENSIVE PLAN

Objective 1.3: Commercial

The City of Alachua established three commercial districts: Community Commercial, Commercial, Central Business District. These districts provide for a broad range of retail sales and services, as well as office uses, in order to provide for the availability of goods and services, both to the citizens of Alachua and to the citizens of the North Central Florida region.

Policy 1.3.b: Commercial: The Commercial land use category is established to provide for general commercial uses, as well as more intense commercial and highway commercial uses. This is the land use category in which large-scale, regional commercial uses may locate. The following uses are allowed within the Commercial land use category:

1. Retail sales and services; 2. Personal services; 3. Financial Institutions; 4. Outdoor recreation and entertainment; 5. Tourist-related uses; 6. Hotels, motels; 7. Commercial shopping centers; 8. Auto-oriented uses; 9. Traditional Mixed-use Neighborhood Planned Developments; 10. Employment Center Planned Developments; 11. Commercial recreation centers; 12. Office/business parks; 13. Limited industrial services; 14. Eating Establishments.

This anticipated use of this project is an “allowable” use under land use category 13. listed above.

Objective 2.4: Landscaping and Tree Protection Standards:

The City shall adopt landscaping and tree protection standards in order to achieve the aesthetic design values of the community and preserve tree canopies, as well as specimen protected, heritage and champion trees.

Policy 2.4.a: Landscaping: General – The City shall require landscaping plans to be submitted with each non residential and multiple family residential site plan. The minimum landscaped area shall be 30% of the development site. Landscaping designs shall incorporate principles of xeriscaping, where feasible. The City shall develop a list of preferred planting materials to assist in the landscape design. Landscape plans shall include perimeter and internal site landscaping.

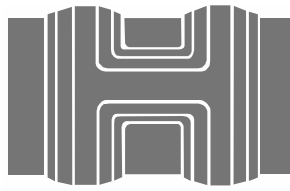
The Landscape & Irrigation Plan for this project complies with the above. The site has in excess of 70% landscaped area and/or open space.

Objective 2.5: Open Space Standards:

The City shall utilize open space requirements to preserve the rural character of Alachua, protect natural resources, and provide spaces for people to recreate and gather.

Policy 2.5.a: There shall be a minimum of 10% percent open space required. The City shall establish incentives for the provision of open space beyond minimum requirements.

The site has in excess of 70% open space.



CRAIG R. HEDGECK
ENGINEERS, PLANNERS, SURVEYORS

DREYER'S DKI SITE PLAN

Alachua County Tax Parcel 03211-003-000
City of Alachua, Alachua County, Florida

CONSISTENCY WITH THE CITY OF ALACHUA RESIDENTIAL PROTECTION STANDARDS

Sec. 6.6. - Infill standards.

6.6.3 Residential protection standards.

(A) General conditions. As a condition of the approval of any nonresidential development located within 500 feet of any residential district or adjacent to an existing residential single-family or two-family development, conditions may be imposed to reduce or minimize any potential adverse impacts on the residential land or development. Such conditions may include but are not limited to the following:

- (1) Hours of operation and deliveries. Hours of operation and deliveries.
Generally the hours of operation are from 8:00 am to 5:00 pm.
- (2) Activities that generate potential adverse impacts. Location on a site of activities that generate potential adverse impacts on adjacent uses such as noise and glare.
All activities will take place inside of an enclosed building.
- (3) Placement of trash receptacles. Placement of trash receptacles.
A “roll-off dumpster” or “dump trailer” is proposed at the northeasterly end of the new loading zone approximately 50’ from the property line. The view of same from the adjacent existing residential properties will be blocked by a proposed 6’ high opaque wood fence and 20’ Type D buffer and 6’ high opaque wood fence along the north property line.
- (4) Loading and delivery area. Location of loading and delivery areas.
Loading and delivery for the most part will be from the easterly side of the proposed building away from the residential properties.
- (5) Lighting. Lighting location, intensity, and hours of illumination.
There will be no exterior lighting therefore no light trespass onto the adjacent residential properties.
- (6) Placement of outdoor machines and activities. Placement and illumination of outdoor vending machines, telephones, or similar outdoor services and activities.
There will be no outdoor machines and activities.

- (7) Additional landscaping and buffering to mitigate adverse impacts. Additional landscaping and buffering to mitigate adverse impacts.

Additional landscaping in the form of a Type D buffer was required (and provided) along the north side of the property to provide buffering along with a 6' high opaque wood fence.

- (8) Height restrictions. Height restrictions to preserve light and privacy and views of significant features from public property and rights-of-way.

The height of the proposed building will preserve light and privacy and views of significant features from public property and rights-of-way due to it being placed a generous distance back from the public property.

- (9) Preservation of natural lighting and solar access. Preservation of natural lighting and solar access.

Natural lighting and solar access will be preserved.

- (10) Ventilation and control of odors and fumes. Ventilation and control of odors and fumes.

There will be no odors and fumes created.

- (11) Paving and parking areas. Paving to control dust.

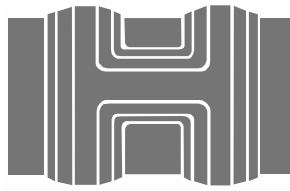
The area subject to vehicular traffic will be paved and/or stabilized.

- (12) Placement or configuration of site design. Placement or configuration of site design.

The site activities for the most part will occur east of the proposed building.

- (B) Height and setbacks. Any nonresidential structure located in any nonresidential district and within 100 feet of a property boundary of a residential district or adjacent to a single-family or two-family dwelling shall be set back from the boundary of the residential district property boundary or residential development a minimum distance equal to the height of the nonresidential structure.

The proposed building will exceed the required minimum distance from same.



CRAIG R. HEDGECK
ENGINEERS, PLANNERS, SURVEYORS

MEMORANDUM

TO: Adjoining Property Owners and Interested Other Parties

RE: Neighborhood Meeting

You are receiving this letter informing you of a Neighborhood Meeting to be held at 5:30 pm on October 28, 2019 at the Alachua County Library District, Alachua Branch.

A "Conceptual Site Plan" for the project is attached.

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a City of Alachua Site Plan application on a 1.96±-acre site, (Alachua County Tax Parcel 03211-001-000 and 03211-003-000), located at 14619 NW US HWY 441 in Alachua, Florida. The application intent is to add an additional building to the site.

This is not a public hearing. The purpose of this meeting is to inform the public about the nature of the proposal and seek their comments.

Time:

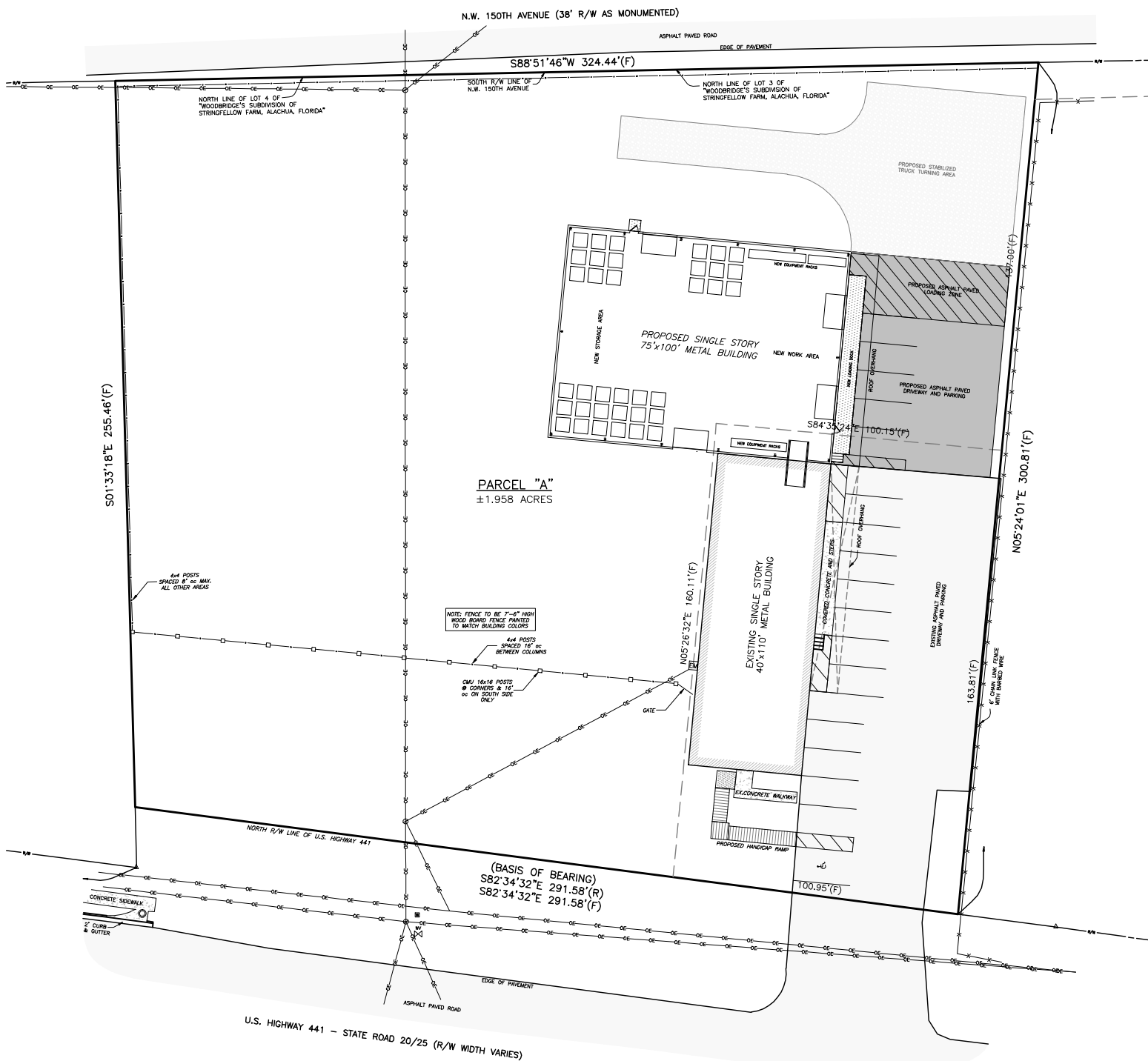
5:30 pm on Monday, October 28, 2018

Location:

Alachua County Library District, Alachua Branch
14913 NW 140th St
Alachua, FL 32615

Contact:

Craig R. Hedgecock, PE/PSM
Phone Number: (352) 377-9928
chedgecock@cox.net



ADJOINING PROPERTY OWNERS LABELS

03209-010-000
Carl D. & Connie C. Riherd
27110 NW 203rd Place
High Springs, FL 32643

03209-010-021
Bradley & Schroeder
PO Box 443
Alachua, FL 32616

03209-010-022
Shirley Baker
15022 NW 130th Drive
Alachua, FL 32615

14520 NW Highway 441
Kathleen E. Crawford
15012 NE 130th Drive
Alachua, FL 32615-5742

03209-010-024
Cheryl L. Studebaker
15002 NW 130th Drive
Alachua, FL 32615

03209-010-025
Geraldine A. Reynolds Heirs
13015 NE 150th Road
Alachua, FL 32615-5520

03209-010-026
Wayne A. Watt
13005 NW 150th Road
Alachua, FL 32615-5520

03209-010-027
Mildred Marie Guseman
13010 NW 150th Road
Alachua, FL 32615

03209-010-028
Shirley Knighten
PO Box 911
Alachua, FL 32616

03209-010-029
Theresa C. Gunderson Trustee
12914 NW 150th Road
Alachua, FL 32615

03209-010-030
Sandra P. Brown Life Estate
12904 NW 150th Road
Alachua, FL 32615

03209-010-031
Helen F. Sawyer
12816 NW 150th Road
Alachua, FL 32615

03209-010-034
Lou Dean Waybright
12819 NW 151st Place
Alachua, FL 32615

03209-010-035
Lonnie Averett Life Estate
12829-NW 151st Place
Alachua, FL 32615

03209-010-036
Joseph Kremer
12911 NW 151st Place
Alachua, FL 32615

03209-010-037
Lovci & Riley Sr.
12921 NW 151st Place
Alachua, FL 32615

03209-010-038
John Arnolds Stubbs
9549 SW Old Wire Road
Fort White, FL 32038

03211-001-000 & 03229-001-000
Megahee Enterprises LTD
4110 SW 34th Street STE 24
Gainesville, FL 32608

03211-001-001
State of Florida II FDOT
PO Box 1088
Lake City, FL 32056-1088

03211-002-000
Charles W. & Diana H. Snelgrove
Life Estate
362 SW Snelgrove Glen
Fort White, FL 32038

03212-002-000
Justin Ellison
330 North Main Street
High Springs, FL 32643

03212-001-000, 03121-001-000,
03121-004-000, & 03229-000-000
Marlow Alachua Holdings LLC
5212 Snead Island Road
Palmetto, FL 34221

03212-012-000
Sunstate Federal Credit Union
14520 NW US Highway 441
Alachua, FL 32615

03316-015-000, 03316-060-000, &
03316-068-000,
Church of God by Faith
PO Box 2040
Alachua, FL 32616-2040

03316-015-001
Ella Mae White
PO Box 1612
Alachua, FL 32616-1612

03316-038-000
Ramona H. Griner
201 SE 2nd Avenue #306
Gainesville, FL 23601

03316-044-000
David & Joessa Merricks
13102 NW 150th Avenue
Alachua, FL 32615

03316-047-000
Henry & Theodosia Speed Jr.
13206 NW 151st Avenue
Newberry, FL 32699

03316-048-000
Criswell & Grant
1705 NE 6th Place
Gainesville, FL 32641-5853

03316-070-000
Church of God by Faith
7121 NE 26th Place
Gainesville, FL 32601

INTERESTED OTHER PARTIES LABELS

President TCMOA
1000 Turkey Creek
Alachua FL 32615

Linda Dixon, AICP
Assistant Director Planning
PO Box 115050
Gainesville FL 32611

Craig Parenteau
FL Department of Environmental
4801 Camp Ranch Road
Gainesville FL 32641

Jeannette Hinsdale
P.O. Box 1156
Alachua FL 32616

Antoinette Endelicato
5562 NW 93rd Avenue
Gainesville FL 32653

Lynn Coullias
7406 NW 126th Ave
Alachua FL 32615

Dan Rhine
288 Turkey Creek
Alachua FL 32615

Lynda Coon
7216 NW 126 Avenue
Alachua FL 32615

Tom Gorman
9210 NW 59th Street
Alachua FL 32653

Tamara Robbins
PO Box 2317
Alachua FL 32616

Richard Gorman
5716 NW 93rd Avenue
Alachua FL 32653

Michele L. Lieberman
County Manager
12 SE 1st Street
Gainesville FL 32601

Peggy Arnold
410 Turkey Creek
Alachua FL 32615

Bonnie Flynn
16801 NW 166th Drive
Alachua FL 32615

David Forest
23 Turkey Creek
Alachua FL 32615

Adam Boukari
City Manager
P.O. Box 9
Alachua, FL 32616

een director of humane Society. always fostered il they found a hen her mother ancer and asked ke care of her onal experience ne the issue of knowing what en to their pets

ized what a was on people, ne terminally ill, ng what would eir pets," Taylor y were like their d to not know l happen to them ning."

er, Wisner and ounded Covenant t is an immense ith an estimated ets surrendered each year by nd veterinarians eir owners died o make a plan for many of which uthanized. While n concentration gs and cats, they d foster services animals including farm animals. was no way that f them could care

download a free planning booklet and emergency cards to help people devise their own plan for their animals. They also offered more services for a fee of \$85 for the first pet and \$40 for each additional pet. This charge is for additional services ranging from arranging the pets' transfer to a designated person or if no owner is designated, then they can be housed in a volunteer foster home until a suitable new owner is found. The fee also helps pay a \$500 pet care fee paid to Covenant Pet Trust volunteers or the named recipient for the initial intake and care of the pet. They also offer a free plan to military members who are transferred overseas to take care of their pets during their absence with foster care until they return or find a home for the pet if the service member does not come home.

This would be a massive undertaking alone, but the organization has about 40 volunteers and 15 foster homes. They also work in coordination with other agencies and shelters to house and find homes for



RAY CARSON/Alachua County Today

the pets. "We will help foster animals, but our goal is for people to plan ahead for their loved pets. We will take them in as space and funds allow, but we want to get everyone thinking ahead, both for the animals' safety and for their own peace of mind," Taylor said. "We want to get the word out that people should plan ahead and also hopefully get more people willing to foster these pets." For anyone who would like to make donations, volunteer or become a foster home, call 386-288-1339.

Email rcarson@alachuatoday.com

ected from 10-12 applications

state that could or this award," e. Every July ociation receives ns or nominations ward. "This year of Newberry was

selected from somewhere between 10-12 applications that were submitted," Hope said.

Hope congratulated Purvis and Director of Utilities and Public Works Jamie Jones as he presented the award. He further commended City Manager Mike New and the City Commission for a job well done.

"It is truly an honor for the City of Newberry to be recognized by the FRWA and its member systems as the Medium Wastewater System of the Year," said Jones. "This award is the direct result of hard work

service," Jones said.

As far as anyone at the City is aware, this is the first time Newberry has received this award.

Email cwalker@alachuatoday.com

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a City of Alachua Site Plan application on a 0.46±-acre site, (Alachua County Tax Parcel 03342-000-000), located at 15303 NW 140th Street in Alachua, Florida. The application intent is to convert the building into an office.

This is not a public hearing. The purpose of this meeting is to inform the public about the nature of the proposal and seek their comments.

Time: 5:15 pm on Monday, October 28th, 2019

Location: Alachua County Library Dist., Alachua Branch
14913 NW 140th St, Alachua, FL 32615

Contact: Craig R. Hedgecock, PE/PSM
Phone Number: (352) 377-9928
chedgecock@cox.net

(Published: Alachua County Today - October 10, 2019)

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a City of Alachua Site Plan application on a 1.96±-acre site, (Alachua County Tax Parcel 03211-001-000 and 03211-003-000), located at 14619 NW US HWY 441 in Alachua, Florida. The application intent is to add an additional building to the site.

This is not a public hearing. The purpose of this meeting is to inform the public about the nature of the proposal and seek their comments.

Time: 5:30 pm on Monday, October 28th, 2019

Location: Alachua County Library Dist., Alachua Branch
14913 NW 140th St, Alachua, FL 32615

Contact: Craig R. Hedgecock, PE/PSM
Phone Number: (352) 377-9928
chedgecock@cox.net

(Published: Alachua County Today - October 10, 2019)

ARI
LTY INC.

g exceptional
e services and
experiences"



ALACHUA COUNTY TODAY

Published Weekly
Alachua, Alachua County, FLORIDA

STATE OF FLORIDA
COUNTY OF ALACHUA:


Before the undersigned authority personally appeared **ROBERT BOUKARI**, who on oath says that he (she) is the Manager of *Alachua County Today*, a weekly newspaper published at Alachua in Alachua County, Florida; that the attached copy of advertisement, being a Public Notice in the Matter of:
NEIGHBORHOOD MEETING - DKI, was published in said newspaper in the issues of **October 10, 2019**.

Affiant further says that *Alachua County Today* is a newspaper published at Alachua, in said Alachua County, Florida, and that the said newspaper has heretofore been continuously published in said Alachua County, Florida, each week and has been entered as periodicals matter at the post office in Alachua, in said Alachua County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he (she) has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before me this **10th day of October, 2019** by **Robert Boukari**, who is personally known to me.



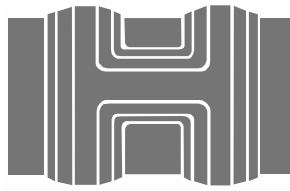
(Signature of Affiant)



(Signature of Notary Public)



HABIB BRYAN BOUKARI
Commission # GG 327026
Expires May 26, 2023
Bonded Thru Budget Notary Services



CRAIG R. HEDGECK
ENGINEERS, PLANNERS, SURVEYORS

MEMORANDUM

October 31, 2019

A Neighborhood Meeting was held to discuss a City of Alachua Site Plan application on a 1.96±-acre site, (Alachua County Tax Parcel 03211-000-000 & 03211-003-000), located at 14619 NW US Highway 441. The application intent is to construct a commercial building addition.

The purpose of the meeting was to inform the public about the nature of the proposal and seek their comments.

Time: 5:30 pm, Monday, October 28, 2019

Location: Alachua County Library District, Alachua Branch
14913 NW 140th St, Alachua, FL 32615

Meeting Summary:

Besides the project consultants and the petitioner, five (5) other individuals attended said meeting. We shared the "work in progress" drawing sheets with same.

Neighbors residing from and representing the church to the North and behind showed up to find out about the project, ask about placement of the landscaping and fencing in hopes to separate their houses from the new development, requested full cut off light fixtures that wouldn't shine outside of the lot and requested that there not be any retention pond that would harbor water and bugs.

NEIGHBORHOOD MEETING

OCTOBER 28, 2019

DREYER'S DKI SITE PLAN

NAME

ADDRESS

email

TELEPHONE

Nedra Bates	POB 872 Alachua FL 32615	Nedra.bates@gmail.com	352-278-3077
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SANDRA BROWN	12904 NW 150th Rd	SANDee 9549 @yahoo.com	352-284-9705
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Cheryl Studebaker	15002 NW 130 th Dr. GAINESVILLE, FL 32608	Chstude55@gmail.com	
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JOSHUA SHATKIN	2266 SW 43rd	JOSHUA@SHATKIN.NET	
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Rosemarie Tyson	15603 NW 14th Ter	Tysonra@gmail.com	352-213-1041
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Chandine Bates	14209 NW 156th	Cbates44@gmail.com	352-474-1362
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Kyle Cheshire	1325 NW 53rd AVE Gainesville FL		
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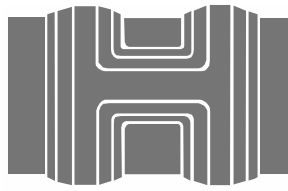
Jonathan Drayer	14619 N Hwy 441 Alachua FL 32615		352-258-3670
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LAND DESCRIPTION: PARCEL "A" (PREPARED BY DEREN LAND SURVEYING)

A PARCEL OF LAND LOCATED IN SECTION 14, TOWNSHIP 08 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, BEING A PORTION OF LOTS 3 AND 4 OF "WOODBIDGE'S SUBDIVISION OF STRINGFELLOW FARM, ALACHUA, FLORIDA", AS RECORDED IN PLAT BOOK "C", PAGE 68-A, OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF LOT 6 OF SAID "WOODBIDGE'S SUBDIVISION OF STRINGFELLOW FARM, ALACHUA, FLORIDA", AND BEING ON THE NORTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY 441 (RIGHT-OF-WAY WIDTH VARIES); THENCE SOUTH 82°34'32" EAST, ALONG THE SOUTH LINE OF LOTS 6, 5, AND 4 OF SAID "WOODBIDGE'S SUBDIVISION OF STRINGFELLOW FARM, ALACHUA, FLORIDA", AND ALONG SAID NORTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY 441, A DISTANCE OF 851.63 FEET; THENCE, LEAVING SAID SOUTH LINE OF LOTS 6, 5, AND 4, NORTH 01°33'18" WEST, A DISTANCE OF 21.26 FEET TO A 1/2" REBAR & CAP (LB 7996) AND THE POINT OF BEGINNING; THENCE, CONTINUE ALONG SAID NORTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY 441, SOUTH 82°34'32" EAST, A DISTANCE OF 291.58 FEET TO A 1/2" REBAR & CAP MARKING THE SOUTHWEST CORNER OF THAT PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 1683, PAGE 363; THENCE, LEAVING SAID NORTH RIGHT-OF-WAY LINE, NORTH 05°24'01" EAST, ALONG THE WEST LINE OF SAID PARCEL OF LAND AND ALONG THE NORTHERLY PROJECTION THEREOF, A DISTANCE OF 300.81 FEET TO A 1/2" REBAR & CAP (LB 7996) ON THE NORTH LINE OF LOT 3 OF SAID "WOODBIDGE'S SUBDIVISION OF STRINGFELLOW FARM, ALACHUA, FLORIDA", AND BEING ON THE SOUTH RIGHT-OF-WAY LINE OF N.W. 150TH AVENUE (38 FOOT RIGHT-OF-WAY AS MONUMENTED); THENCE SOUTH 88°51'46" WEST, ALONG THE NORTH LINE OF SAID LOTS 3 AND 4, AND ALONG SAID SOUTH RIGHT-OF-WAY LINE OF N.W. 150TH AVENUE, A DISTANCE OF 324.44 FEET TO A 1/2" REBAR & CAP (LB 7996); THENCE, LEAVING SAID NORTH AND SOUTH LINES, SOUTH 01°33'18" EAST, A DISTANCE OF 255.46 FEET TO THE POINT OF BEGINNING. CONTAINING 1.96 ACRES, MORE OR LESS.

ALACHUA COUNTY PROPERTY APPRAISER PARCEL NUMBERS: 03211-000-000 & 03211-003-000
OWNER: DREYER'S CLEANING & RESTORATION, INC.



CRAIG R. HEDGECK
ENGINEERS, PLANNERS, SURVEYORS

ENGINEERING REPORT

FOR

DREYER'S DKI SITE PLAN

TAX PARCEL NUMBER 03211-003-000
14619 US HIGHWAY 441
ALACHUA, FLORIDA

NOVEMBER 28, 2019



Craig R. Hedgecock, State of Florida, Professional Engineer, License No. 24651
This item has been electronically signed and sealed by Craig R. Hedgecock, PE
on the date indicated using a SHA-1 authentication code.

Printed copies of this document are not considered signed and sealed and
the SHA-1 authentication code must be verified on any electronic copies.

CRAIG R. HEDGECK, PE DATE
FLORIDA REGISTRATION NO. 24651

GENERAL PROJECT DESCRIPTION

THE PROJECT INVOLVES THE CONSTRUCTION OF AN ADDITIONAL COMMERCIAL BUILDING ALONG WITH PARKING AND SURFACE WATER MANAGEMENT FACILITIES FOR THE SITE LOCATED AT 14619 NW HIGHWAY 441 IN THE CITY OF ALACHUA, FLORIDA.

THE PROPOSED STORMWATER TREATMENT FACILITY WILL BE A “DRY RETENTION” SYSTEM TO TREAT THE RUNOFF FROM THE PROPOSED BUILDING AND CONTRIBUTING AREA FOR THE SRWMD 100 YEAR CRITICAL DURATION RAINFALL EVENTS.

ENGINEERING ANALYSIS

DRAINAGE RETENTION SYSTEM:

THE CONTRIBUTING DRAINAGE AREA TO THE PROPOSED DRAINAGE RETENTION SYSTEM IS APPROXIMATELY 20,900± SQ.FT. (0.480 AC.).

COMPOSITE CURVE NUMBER:

1520 x 76 STABILIZED SURFACE
7500 x 98 BUILDING
2831 x 100 DRA (@ELEV. 81.0)
9049 x 39 OPEN SPACE
COMPOSITE CN = 71.1

THE SCS SOIL TYPE IS PRIMARILY ARREDONDO, HYDROLOGIC GROUP A.

THE REQUIRED TREATMENT VOLUME = $[1' \times 20900]/12 = 1742$ CU.FT.
DESIGN HIGH WATER = 80.83'

DRA VOLUME CALCULATIONS:

STAGE	AREA	VOLUME
80.0	1797	0
80.5	2081	970
81.0	2831	2198
81.5	3445	3767
82.0	4124	5659 [P=330']

PONDS Version 3.2.0274 INPUT:

$L = \{(330/2) + \sqrt{[(330^2/4) - (4 \times 5659/2.0)]}\}/2 = 145.6'$
 $W = \{(330/2) - \sqrt{[(330^2/4) - (4 \times 5659/2.0)]}\}/2 = 19.4'$
 $K_h = (30.1/2) = 15.0$ feet/day $K_v = (14.6/2) = 7.3$ feet/day
[FACTOR OF SAFETY UTILIZED: 2]

THE DESIGN HIGH WATER ELEVATION (SRWMD 100 YEAR/8 HOUR) = 81.57'

DREYER'S PRE-POST RUNOFF FROM "PROPOSED" SURFACES TO FDOT DRA:

100 YEAR/ 24 HOUR SRWMD RAINFALL EVENT

RAINFALL = 11"

PRE-DEVELOPMENT RUNOFF = 2.64" (CN=39)

POST-DEVELOPMENT RUNOFF = 7.95" (CN=76)

POST-DEVELOPMENT RUNOFF = 10.76" (CN=98)

100 YEAR/ 240 HOUR SRWMD RAINFALL EVENT

RAINFALL = 18"

PRE-DEVELOPMENT RUNOFF = 5.13" (CN=39)

POST-DEVELOPMENT RUNOFF = 14.69" (CN=76)

POST-DEVELOPMENT RUNOFF = 17.76" (CN=98)

PRE-DEVELOPMENT RUNOFF DIVERTED TO NEW DRA: (CN=39)

20,900 sq.ft. x 2.64"/12 = 4600± cu.ft. [100 YEAR/24 HOUR RAINFALL EVENT]

20,900 sq.ft. x 5.13"/12 = 8935± cu.ft. [100 YEAR/240 HOUR RAINFALL EVENT]

ADDITIONAL RUNOFF FROM NEW PARKING AREA: (CN=98)

3614 sq.ft. x 8.12"/12 = 2445 cu.ft. [100 YEAR/24 HOUR RAINFALL EVENT]

3614 sq.ft. x 17.76"/12 = 5349 cu.ft. [100 YEAR/240 HOUR RAINFALL EVENT]

ADDITIONAL RUNOFF FROM STABILIZED AREA: (CN=76)

2336 sq.ft. x 5.31"/12 = 1034 cu.ft. [100 YEAR/24 HOUR RAINFALL EVENT]

2336 sq.ft. x 14.69"/12 = 2860 cu.ft. [100 YEAR/240 HOUR RAINFALL EVENT]

POST-DEVELOPMENT ADDITIONAL RUNOFF TO FDOT DRA FROM PROPOSED SURFACES:

3479 cu.ft. [100 YEAR/24 HOUR RAINFALL EVENT] < (4600 cu.ft. Pre-Development)

8309 cu.ft. [100 YEAR/240 HOUR RAINFALL EVENT] < (8935 cu.ft. Pre-Development)

There will be a "Post Development" **NET** decrease in runoff to the FDOT DRA.

PONDS Version 3.2.0274
Retention Pond Recovery - Refined Method
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Devo Seereeram, Ph.D., P.E.

Project Data

Project Name: DREYER'S DKI
Simulation Description:
Project Number:
Engineer : CRAIG R. HEDGECK, PE/PSM
Supervising Engineer:
Date: 11-24-2019

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 66.50
Water Table Elevation, [WT] (ft datum): 72.50
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 15.00
Fillable Porosity, [n] (%): 25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 7.3
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 4124.0

Geometry Data

Equivalent Pond Length, [L] (ft): 145.6
Equivalent Pond Width, [W] (ft): 19.4
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
80.00	1797.0
80.50	2081.0
81.00	2831.0
81.50	3445.0
82.00	4124.0

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Scenario Input Data

Scenario 1 :: SRWMD 100 YEAR/24 HOUR RAINFALL EVENT

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 1

Basin Area (acres) 0.480
Time Of Concentration (minutes) 5.0
DCIA (%) 0.0
Curve Number 71.1
Design Rainfall Depth (inches) 11.0
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 484
Rainfall Distribution Suwanee River WMD 24 Hour

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.500	3.000
1.000	
1.500	
2.000	
2.500	

Scenario 2 :: SRWMD WATER QUALITY

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

Treatment Volume (ft³) 1742

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.100	2.000
0.250	2.500
0.500	3.000
1.000	3.500
1.500	4.000

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Scenario Input Data (cont'd.)

Scenario 3 :: SRWMD 100 YEAR/1 HOUR RAINFALL EVENT

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 1

Basin Area (acres) 0.480
Time Of Concentration (minutes) 5.0
DCIA (%) 0.0
Curve Number 71.1
Design Rainfall Depth (inches) 4.4
Design Rainfall Duration (hours) 1.0
Shape Factor UHG 484
Rainfall Distribution FDOT 1 Hour

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.500	3.000
1.000	
1.500	
2.000	
2.500	

Scenario 4 :: SRWMD 100 YEAR/2 HOUR RAINFALL EVENT

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 1

Basin Area (acres) 0.480
Time Of Concentration (minutes) 5.0
DCIA (%) 0.0
Curve Number 71.1
Design Rainfall Depth (inches) 5.4
Design Rainfall Duration (hours) 2.0
Shape Factor UHG 484
Rainfall Distribution FDOT 2 Hour

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.500	3.000
1.000	
1.500	
2.000	
2.500	

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Scenario Input Data (cont'd.)

Scenario 5 :: SRWMD 100 YEAR/4 HOUR RAINFALL EVENT

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 1

Basin Area (acres) 0.480
Time Of Concentration (minutes) 5.0
DCIA (%) 0.0
Curve Number 71.1
Design Rainfall Depth (inches) 6.7
Design Rainfall Duration (hours) 4.0
Shape Factor UHG 484
Rainfall Distribution FDOT 4 Hour

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.500	3.000
1.000	
1.500	
2.000	
2.500	

Scenario 6 :: SRWMD 100 YEAR/8 HOUR RAINFALL EVENT

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 1

Basin Area (acres) 0.480
Time Of Concentration (minutes) 5.0
DCIA (%) 0.0
Curve Number 71.1
Design Rainfall Depth (inches) 8.0
Design Rainfall Duration (hours) 8.0
Shape Factor UHG 484
Rainfall Distribution FDOT 8 Hour

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.500	3.000
1.000	
1.500	
2.000	
2.500	

PONDS Version 3.2.0274
Retention Pond Recovery - Refined Method
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Scenario Input Data (cont'd.)

Scenario 7 :: SRWMD 100 YEAR/72 HOUR RAINFALL EVENT

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 1

Basin Area (acres) 0.480
Time Of Concentration (minutes) 5.0
DCIA (%) 0.0
Curve Number 71.1
Design Rainfall Depth (inches) 13.8
Design Rainfall Duration (hours) 72.0
Shape Factor UHG 484
Rainfall Distribution FDOT 72 Hour

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.500	3.000
1.000	
1.500	
2.000	
2.500	

Scenario 8 :: SRWMD 100 YEAR/168HOUR RAINFALL EVENT

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 1

Basin Area (acres) 0.480
Time Of Concentration (minutes) 5.0
DCIA (%) 0.0
Curve Number 71.1
Design Rainfall Depth (inches) 16.0
Design Rainfall Duration (hours) 168.0
Shape Factor UHG 484
Rainfall Distribution FDOT 168 Hour

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.500	3.000
1.000	
1.500	
2.000	
2.500	

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Retention Pond Recovery - Refined Method
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Scenario Input Data (cont'd.)

Scenario 9 :: SRWMD 100 YEAR/240 HOUR RAINFALL EVENT

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 1

Basin Area (acres) 0.480
Time Of Concentration (minutes) 5.0
DCIA (%) 0.0
Curve Number 71.1
Design Rainfall Depth (inches) 18.0
Design Rainfall Duration (hours) 240.0
Shape Factor UHG 484
Rainfall Distribution FDOT 240 Hour

Initial ground water level (ft datum) 72.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.500	3.000
1.000	
1.500	
2.000	
2.500	

PONDS Version 3.2.0274
Retention Pond Recovery - Refined Method
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Sort-By-Category Report

Scenarios Considered: 1 to 9

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	6	81.570	5.078	SRWMD 100 YEAR/8 HOUR RAINFALL EVENT
2	5	81.526	3.133	SRWMD 100 YEAR/4 HOUR RAINFALL EVENT
3	4	81.222	1.856	SRWMD 100 YEAR/2 HOUR RAINFALL EVENT
4	3	81.086	0.911	SRWMD 100 YEAR/1 HOUR RAINFALL EVENT
5	1	81.006	15.100	SRWMD 100 YEAR/24 HOUR RAINFALL EVE...
6	2	80.831	0.002	SRWMD WATER QUALITY
7	7	80.105	36.044	SRWMD 100 YEAR/72 HOUR RAINFALL EVE...
8	8	80.000	115.611	SRWMD 100 YEAR/168HOUR RAINFALL EVE...
9	9	80.000	157.878	SRWMD 100 YEAR/240 HOUR RAINFALL EV...



ENGINEERING CONSULTANTS IN GEOTECHNICAL • ENVIRONMENTAL • CONSTRUCTION MATERIALS TESTING

October 24, 2019
Project No. 19-4205.17G

Kyle Cheshire
Cheshire Construction and Development, Inc.
1325 NW 53rd Avenue, Suite E
Gainesville, Florida 32609

Reference: Proposed Metal Building and Drainage Retention Area
14619 NW US Highway 441, Alachua, Florida
Geotechnical Site Exploration

Dear Mr. Cheshire:

As requested, Geo-Technologies, Inc. (Geo-Tech) has performed a site exploration at the project site. Services were conducted in accordance with our Proposal No. 10009 September 11, 2019.

The following report summarizes our findings, evaluations and recommendations. Generally accepted soils and foundation engineering practices were employed in the preparation of this report.

Proposed finish floor elevations and loading conditions had not been established at the time of this report. The design of building foundation systems for this project was not included in Geo-Tech's scope of services.

Geo-Tech appreciates the opportunity to provide our services for this project. Should you have any questions regarding the contents of this report or if we may be of further assistance, please do not hesitate to contact the undersigned.

Sincerely,



Gerald W. Green Jr.
Soil and Water Scientist

GWG/DAC/ds



Purposes

Purposes of this study were to explore the subsurface conditions in the proposed drainage retention, and building area and provide geotechnical engineering site preparation recommendations to guide design and construction of the drainage retention area, parking area and building foundations system.

Site Description

The project site is located at 14619 NW US Highway 441 in Alachua, Florida. At the time of our site exploration, the project site had an existing structure, parking lot and grass covered areas.

Exploration Program

Field exploration services for the geotechnical exploration consisted of the following:

Drainage Retention Area

- Two (2) direct push borings (DP-1 and D P-2) to depths of approximately twenty (20) feet below existing site grade in the proposed drainage retention area (ASTM D-6282). Direct Push borings were performed on October 17, 2019.
- Two (2) field horizontal and two (2) field vertical permeability tests in the proposed drainage retention areas. Permeability testing was performed on October 17, 2019.

Building Area

- Three (3) Standard Penetration Test (SPT) borings (B-1 through B-3) to depths of approximately fifteen (15) feet below existing site grade in the proposed building areas (ASTM D-1586). SPT borings were performed on October 17, 2019.

Sampling & Testing Descriptions

Auger Sampling

Auger borings were performed using the methodology outlined in ASTM D-4700. Auger boring sampling method consists of rotating an auger to advance the barrel into the ground. The operator may have to apply downward pressure to keep the auger advancing. When the barrel is filled, the unit is withdrawn from the cavity and a sample may be collected from the barrel.

Samples recovered during performance of our auger borings were visually classified in the field and representative portions of the samples were placed in containers and transported to our laboratory for further analysis.

Direct Push Sampling

Direct Push (DP) soil sampling method (ASTM D-6282) consists of advancing a sampling device into subsurface soils by applying static pressure, by applying impacts, or by applying vibration, or any combination thereof, to the above ground portion of the sampler extensions until sampler has been advanced to the desired sampling depth. The sampler is recovered from the borehole and the sample removed from the sampler. The sampler is cleaned and the procedure repeated for the next desired sampling interval.

Sampling can be continuous for full depth borehole logging or incremental for specific interval sampling. Samplers used can be protected type for controlled specimen gathering or unprotected for general soil specimen collection. Direct push methods of soil sampling are used for geologic investigation, soil chemical composition studies, and water quality investigations. Continuous sampling is used to provide a lithological detail of the subsurface strata and to gather samples for classification and index.

Samples recovered during performance of our direct push borings were visually classified in the field and were transported to our laboratory for further analysis.

Standard Penetration Testing

A Standard Penetration Test (SPT) boring (ASTM D-1586) is defined as a standard split-barrel sampler driven into the soil by a one hundred and forty (140) pound hammer falling thirty (30) inches. The number of blows required to drive the sampler one (1) foot, after seating six (6) inches, is designated resistance, or "N"-Value is an index to soil strength and consistency.

Samples recovered during performance of our SPT borings were visually classified in the field and representative portions of the samples were placed in containers and transported to our laboratory for further analysis.

Gradation (-200) Testing

A specimen of soil is washed over a seventy-five (75) μm (No. 200) sieve. Clay and other particles that are dispersed by the wash water, as well as water-soluble materials, are removed from the soil during the test. The loss in mass resulting from the wash treatment is calculated as mass percent of the original sample and is reported as the percentage of material finer than a seventy-five (75) μm (No. 200) sieve by washing.

Findings

Drainage Retention Area

Boring locations and general subsurface conditions found in our soil borings DP-1 and DP-2 are graphically presented on the soil profiles in Appendix I. Horizontal lines designating the interface between differing materials found represent approximate boundaries. Transition between soil layers is typically gradual. A site plan for the boring locations are in Appendix II.

Soils found in our soil borings generally consisted of slightly clayey sand and clayey sand to the depths drilled.

Ground water table levels were not found at our boring locations at the time of drilling.

Seasonal High Water Table Levels

Estimated seasonal high water table levels were found at depths ranging from approximately nine (9) to eleven (11) feet below existing site grade. Estimated seasonal high water table levels are indicated on the soil profiles at the appropriate depths.

Confining Layers

A confining layer was not found in borings DP-1 and DP-2 within fifteen (15) feet drill depth. Confining layers are indicated on the soil profiles at the appropriate depths.

Permeability

Two (2) field horizontal and two (2) field vertical permeability tests were performed adjacent to our boring locations at depths ranging from approximately four (4) feet below existing site grade.

Resulting coefficients of horizontal and vertical permeability are noted on the soil profiles and in Table 1 below.

Table 1 Results of Permeability Testing

Boring No.	Depth of Test (feet)	K _H Rate (feet/day)	K _V Rate (feet/day)
DP-1	4.0	30.1	14.6
DP-2	4.0	28.3	14.1

Measured permeability rates should not be used for design purposes without an appropriate safety factor. Actual pond exfiltration rates will depend on many factors such as ground water mounding, pond bottom siltation, construction technique, and the amount of soil compaction during construction.

Building Area

Boring locations and general subsurface conditions found in our soil borings B-1 through B-3 are graphically presented on the soil profiles in Appendix I. Horizontal lines designating the interface between differing materials found represent approximate boundaries. Transition between soil layers is typically gradual. A site plan for the boring locations is in Appendix II.

Soils found in our soil borings generally consisted of a surficial layer of very loose to slightly clayey sand underlain by very loose to medium dense clayey sand and medium stiff to very stiff slightly sandy clay to the depths drilled.

Ground water table levels were not found at our boring locations at the time of drilling. In Geo-Tech's opinion, ground water levels may not influence near surface construction. After periods of prolonged rainfall water may become perched above the clayey soils and deeper foundation systems may encounter a perched water condition.

Evaluations

Based on the soil borings performed, the clayey sand soils found at our boring locations typically exhibit moderate shrink/swell behavior with moisture content changes. Generally, these clay soils will swell upon wetting and shrink upon drying thus causing movement of structures placed on them.

Recommendations

Building Area

The foundation system may utilize a monolithic thickened edge slab or a perimeter footing and finish site grades should be selected so that the bottom of the foundation and floor slabs are at least two (2) feet above the underlying unsuitable clayey soils (see Figure 2 in Appendix III).

In Geo-Tech's opinion, there are three (3) suitable options for the site:

- Option 1: Excavate the clayey soils to create the minimum buffer between the foundation and floor slabs and the top of the clayey soils. If excavating for the foundation system to provide the recommended separation, excavation should extend a minimum of two (2) feet beyond each side of the footing. Care should be taken to ensure the foundation system bears in the backfilled area(s).

The depth of excavation should be controlled so that a "bathtub effect" that will trap water is not created. The bottom of the undercut should be graded to drain to a positive gravity outfall. If it is not feasible to have a positive gravity outfall, an underdrain should be placed in the bottom of the excavation to drain stormwater that may accumulate in the excavation.

Structural fill should be placed in accordance with the Structural Fill Material and Compaction of Fill Soils sections of this report.

We wish to emphasize that the excavation and replacement of the underlying clay soils from beneath the building is not a guarantee that the deeper clays will not cause foundation movements. However, the risk is reduced significantly.

- Option 2: Raise the existing site grade to provide the recommended separation. However, prior to importing and placing fill soils to raise the existing site grade the building area should be proof-rolled to increase the density of the near surface soils. Proof-rolling should occur after stripping and grubbing.

Structural fill should be placed in accordance with the Structural Fill Material and Compaction of Fill Soils sections of this report.

- Option 3: Combine Options 1 and 2 in order to attain the desired finish floor elevation.

Recommended Building Site Preparation

Stripping and Grubbing

The "footprint" of the proposed building, plus an additional horizontal margin of ten (10) feet, should be stripped of the existing vegetation, stumps, surface debris, or other deleterious materials as found. Expect clearing and grubbing to depths of about eight (8) to twelve (12) inches. Deeper clearing and grubbing depths may be encountered in heavily vegetated areas

where major root systems are found. Actual depth(s) of stripping and grubbing must be determined by visual observation and judgment during the earthwork operation.

Proof-Rolling

If utilizing Option 2 in the Recommendations section of this report, proof-rolling of the cleared surface is recommended to: 1) locate any soft areas or unsuitable surface or near surface soils; 2) increase the density of the near surface soils; and 3) prepare the existing surface for the addition of fill soils (if required). Proof-rolling of the building areas should consist of at least ten (10) passes of a self-propelled static compactor. Each pass of the compactor should overlap the preceding pass by thirty (30) percent to insure complete coverage. If deemed necessary, in areas continuing to "yield," remove all deleterious material and replace with a clean, compacted sand backfill. Proof-rolling should occur after cutting and before filling. Vibratory compaction equipment should not be used within one hundred (100) feet of neighboring structures.

Structural Fill Material

Structural fill material should be free of organic material such as roots and/or vegetation. Geo-Tech recommends using sand fill with between three (3) to twelve (12) percent by dry weight of material passing the U.S. Standard No. 200 sieve size. All structural fill should be pre-qualified prior to importing and placing.

Upper slightly clayey sands found on site should meet these requirements and can be used if kept separate from the clayey soils during the earthwork phase of construction. Clayey soils are typically not used for structural fill due to inherent nature to retain moisture and the natural weight of the material makes compaction requirements difficult to achieve. However, the clayey soils can be utilized for other non-structural grading as desired.

Compaction of Fill Soils

Structural fill should be placed in level lifts not thicker than twelve (12) inches (uncompacted). Each lift in the proposed building areas should be compacted to at least ninety-eight (98) percent of the maximum density as determined by the Modified Proctor Test Method (ASTM D-1557) maximum dry density value. If hand-held compaction equipment is used, reduce the uncompacted lift thickness to six (6) inches. Filling and compaction operation should continue in lifts until the desired elevation is attained.

Foundation Support

Foundations for the proposed structure may consist of shallow foundations placed on compacted engineered fill material. Such footings may be designed for maximum allowable soils contact pressures of two thousand five hundred (2,500) pounds per square foot. For purposes of confinement, exterior footings should be embedded at least twenty-four (24) inches below the lowest adjacent grade as measured to the base of the footing. Interior footings should be embedded a minimum of eighteen (18) inches below the lowest adjacent grade as measured to the base of the footing.

Moisture entry from the underlying subgrade soils should be minimized. An impervious membrane placed between the subgrade soils and floor slab will help to accomplish this. A polyethylene film (six [6] mil) is commonly used for this purpose. Care should be used so that the membrane is not punctured when placing reinforcing steel (or mesh) and concrete.

Quality Control

Geo-Tech recommends establishing a comprehensive quality control program to insure that site preparation and foundation construction is conducted according to the plans and specifications. Materials testing and inspection services should be provided by Geo-Technologies, Inc. An engineering technician should be on-site to monitor all stripping and grubbing, to verify that all deleterious materials have been removed.

Density testing should be performed during backfill and below all footings and floor slabs to check the required compaction. Field density values should be compared to laboratory proctor moisture-density results for each different natural and fill soil encountered.

If excavating to attain the recommended separation, Geo-Tech recommends that we be notified to verify the depth of excavation, daylight gravity drain (if required), compaction of backfill and foundation is properly located within boundaries of excavation.

Geotechnical engineering design does not end with the advertisement of construction documents. The design is an on going process throughout construction. Because of Geo-Tech's familiarity with the site conditions and the intent of the engineering design, we are most qualified to address problems that might arise during construction in a timely and cost effective manner.

Closure/General Qualifications

This report has been prepared in order to aid evaluation of the project site and to assist various design professionals in the design of the drainage retention area, parking area and building foundation system. The scope is limited to the specific project and the location described herein, and our description of the project represents our understanding of the significant aspects relevant to soil and foundation characteristics. In the event that any changes in present project concepts as outlined in this report are planned, we should be informed so the changes can be reviewed and the conclusions of this report modified as necessary in writing by the soils and foundation engineer.

It is recommended that all construction operations dealing with earthwork and foundations be reviewed by our soil engineer to provide information on which to base a decision whether the design requirements are fulfilled in the actual construction. Evaluations and recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated on the Boring Location Map, and from any other information discussed in this report. This report does not reflect any variations, which may occur between these borings. In the performance of subsurface investigations, specific information is obtained at specific locations at specific times. Variations in soil and rock conditions exist on most sites between boring locations. Groundwater levels may also vary from time to time. The nature and extent of variations may not become evident until the course of construction. If variations then appear evident, it will be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during the construction period and noting the characteristics of any variations.

APPENDIX I
SOIL PROFILES

Log of Borehole: B-1

Project: METAL STURTURE AND DRA US HWY. 441 ALACHUA

Project No: 19-4205.17G

Boring Location: SEE SITE PLAN

Engineer: NJH/DAC

Client: CHESHIRE CONSTRUCTION DEVELOPMENT

Enclosure: SITE PLAN

GEO-TECH, INC.

ENGINEERING CONSULTANTS

1016 SE 3rd Avenue

Ocala, Florida

352.694.7711

WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values
0		Ground Surface		0.0				
1		SLIGHTLY CLAYEY SAND BROWN SLIGHTLY CLAYEY SAND (SP-SC)	LOOSE		1		5	5
2								
3			VERY LOOSE	3.0	2		2	2
4		CLAYEY SAND GREY CLAYEY SAND (SC)						
5			LOOSE		3		5	5
6								
7			VERY LOOSE		4		4	4
8		% PASSING -200 SIEVE AT APPROX. 8.0 FEET = 25.3						
9			MEDIUM DENSE	9.0	5		10	10
10		SLIGHTLY SANDY CLAY GREY BROWN SLIGHTLY SANDY CLAY (CH)						
11								
12								
13								
14			MEDIUM STIFF	15.0	6		6	6
15								
16		End of Borehole						
17								
18								
19								
20								
21								
22								
23								
24								
25								

Ground Water Depth: NOT FOUND

Drill Date: OCTOBER 17, 2019

Drilled By: RD/JB

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile : 1 OF 5

Log of Borehole: B-2

GEO-TECH, INC.

ENGINEERING CONSULTANTS

1016 SE 3rd Avenue
Ocala, Florida
352.694.7711

WWW.GEOTECHFL.COM

Project: METAL STRUCTURE AND DRA US HWY. 441 ALACHUA

Project No: 19-4205.17G

Boring Location: SEE SITE PLAN

Engineer: NJH/DAC

Client: CHESHIRE CONSTRUCTION DEVELOPMENT

Enclosure: SITE PLAN

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values
0		Ground Surface		0.0				0 20 40 60 80 100
1		SLIGHTLY CLAYEY SAND BROWN SLIGHTLY CLAYEY SAND (SP-SC)	MEDIUM DENSE		1		12	12
2			VERY LOOSE		2		2	2
3			VERY LOOSE		3		3	3
4								
5								
6				6.0				
7		CLAYEY SAND GREY CLAYEY SAND (SC)	VERY LOOSE		4		4	4
8		% PASSING -200 SIEVE AT APPROX. 8.0 FEET = 40.1						
9			MEDIUM DENSE		5		12	12
10								
11								
12								
13								
14			MEDIUM DENSE		6		14	14
15				15.0				
16		End of Borehole						
17								
18								
19								
20								
21								
22								
23								
24								
25								

Ground Water Depth: NOT FOUND

Drill Date: OCTOBER 17, 2019

Drilled By: RD/JB

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile : 2 OF 5

Log of Borehole: B-3

Project: METAL STRUCTURE AND DRA US HWY. 441

Project No: 19-4205.17G

Boring Location: SEE SITE PLAN

Engineer: NJH/DAC

Client: CHESHIRE CONSTRUCTION DEVELOPMENT

Enclosure: SITE PLAN

GEO-TECH, INC.

ENGINEERING CONSULTANTS

1016 SE 3rd Avenue

Ocala, Florida

352.694.7711

WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values
								0 20 40 60 80 100
0		Ground Surface		0.0				
1		SLIGHTLY CLAYEY SAND BROWN SLIGHTLY CLAYEY SAND (SP-SC)	LOOSE		1		6	6
2			VERY LOOSE		2		1	1
3			VERY LOOSE		3		2	2
4				6.0				
5					4		3	3
6		CLAYEY SAND GREY BROWN CLAYEY SAND (SC)	VERY LOOSE		5		9	9
7								
8								
9		% PASSING -200 SIEVE AT APPROX. 10 FEET = 21.2	MEDIUM DENSE					
10								
11								
12								
13				13.5				
14		SLIGHTLY SANDY CLAY DARK GREY SLIGHTLY SANDY CLAY (CH)	VERY STIFF	15.0	6		17	17
15								
16		End of Borehole						
17								
18								
19								
20								
21								
22								
23								
24								
25								

Ground Water Depth: NOT FOUND

Drill Date: OCTOBER 17, 2019

Drilled By: RD/JB

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile : 3 OF 5

Log of Borehole: DP-1

Project: METAL BUILDIN AND DRA, US HWY. 441 ALACHUA

Project No: 19-4205.17G

Boring Location: SEE SITE PLAN

Engineer: NJH/DAC

Client: CONSTRUCTION DEVELOPMENT

Enclosure: SITE PLAN

GEO-TECH, INC.

ENGINEERING CONSULTANTS

1016 SE 3rd Avenue

Ocala, Florida

352.694.7711

WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Depth/Elev.	Number	Remarks
0		Ground Surface	0.0		
1		SLIGHTLY CLAYEY SAND REDDISH BROWN SLIGHTLY CLAYEY SAND (SP-SC)		1	FIELD HORIZONTAL PERMEABILITY RATE AT APPROX. 4 FEET = 30.1 FT/DAY FIELD VERTICAL PERMEABILITY RATE AT APPROX. 4 FEET = 14.6 FT/DAY
2					
3					
4					
5					
6					
7					
8			8.0		
9		CLAYEY SAND REDDISH BROWN CLAYEY SAND (SC)	9.0	2	ESHWT AT APPROX. 9.0 FEET
10		CLAYEY SAND GREY AND REDDISH BROWN CLAYEY SAND (SC)			
11					
12				3	
13					
14					
15			15.0		
16		End of Borehole			
17					
18					
19					
20					

Ground Water Depth: NOT FOUND

Drill Date: OCTOBER 17, 2019

Drilled By: RD/JB

Drill Method: ASTM D-6282

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile : 4 OF 5

Log of Borehole: DP-2

GEO-TECH, INC.
ENGINEERING CONSULTANTS
1016 SE 3rd Avenue
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Project: METAL BUILDIN AND DRA, US HWY. 441 ALACHUA

Project No: 19-4205.17G

Boring Location: SEE SITE PLAN

Engineer: NJH/DAC

Client: CONSTRUCTION DEVELOPMENT

Enclosure: SITE PLAN

Depth (ft)	Symbol	Description	Depth/Elev.	Number	Remarks
0		Ground Surface	0.0		
1		SLIGHTLY CLAYEY SAND REDDISH BROWN SLIGHTLY CLAYEY SAND (SP-SC)			
2					
3					
4					
5				1	FIELD HORIZONTAL PERMEABILITY RATE AT APPROX. 4 FEET =28.3 FIELD VERTICAL PERMEABILITY RATE AT APPROX. 4 FEET =14.1
6					
7					
8					
9					
10			10.0		
11		CLAYEY SAND REDDISH BROWN CLAYEY SAND (SC)	11.0	2	ESHWT AT APPROX. 11.0 FEET
12		CLAYEY SAND GREY AND REDDISH BROWN CLAYEY SAND (SC)			
13				3	
14					
15			15.0		
16		End of Borehole			
17					
18					
19					
20					

Ground Water Depth: NOT FOUND

Drill Date: OCTOBER 17, 2019

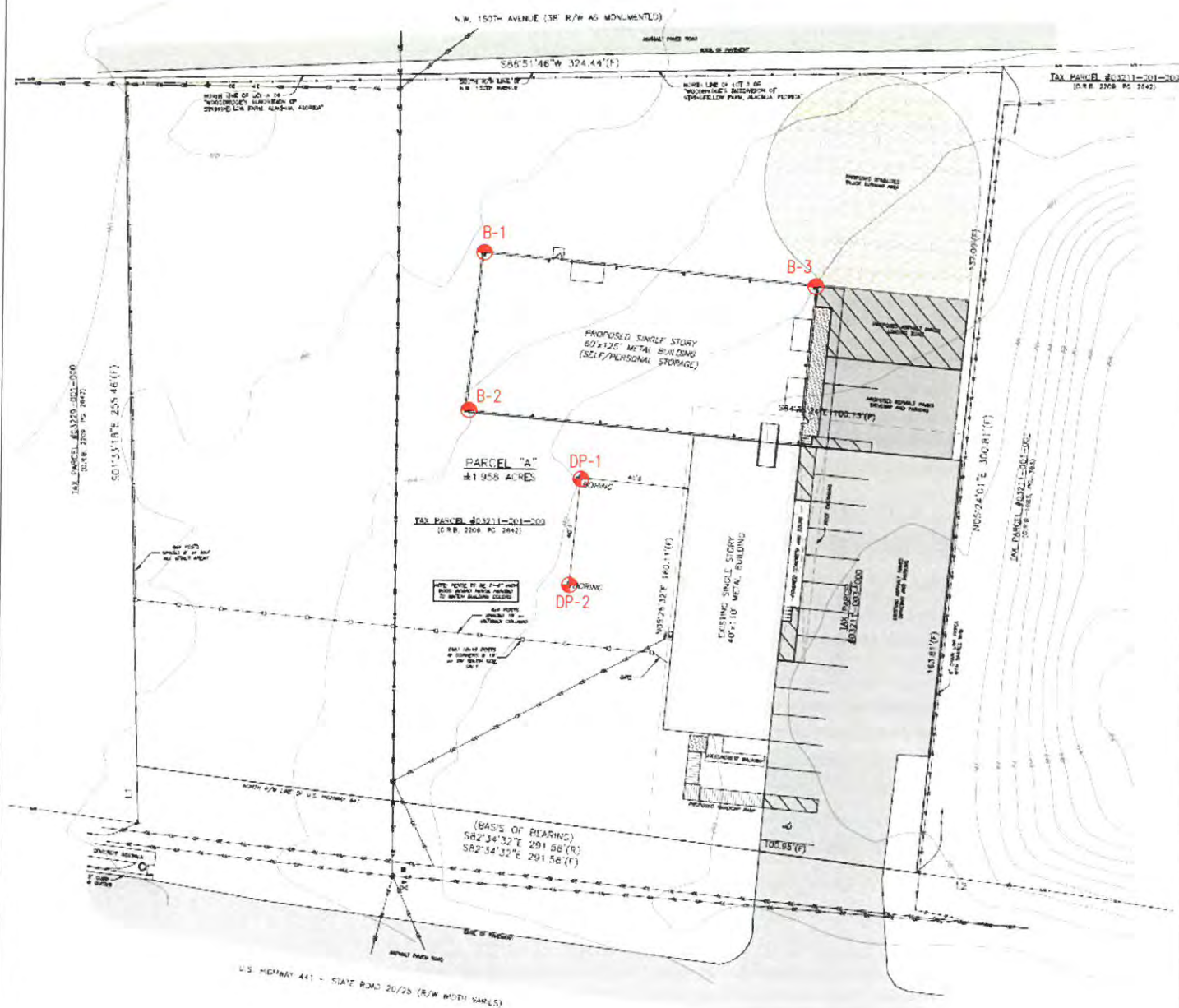
Drilled By: RD/JB

Drill Method: ASTM D-6282

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile : 5 OF 5

APPENDIX II
BORING LOCATION MAP



- ⊙ = APPROXIMATE DIRECT PUSH BORING LOCATION
● = APPROXIMATE STANDARD PENETRATION TEST (SPT) BORING LOCATION

CHESHIRE CONSTRUCTION DEVELOPMENT
METAL STRUCTURE AND DRA
14619 NW US HIGHWAY 441
ALACHUA, FLORIDA

BORING LOCATION MAP

GEO-TECH, INC.

■ GEOTECHNICAL ■ ENVIRONMENTAL
■ CONSTRUCTION MATERIALS TESTING ■ GEOPHYSICAL EXPLORATION
1016 SE 3rd AVENUE, OCALA, FLORIDA 34471 ~ (352) 694-7711

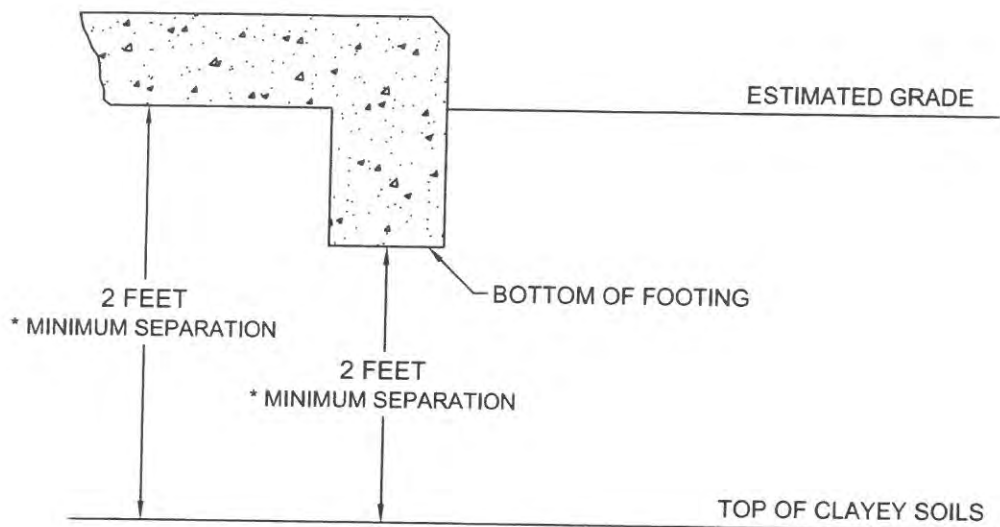
PROJECT NO.
19-4205.17G

SCALE: NTS

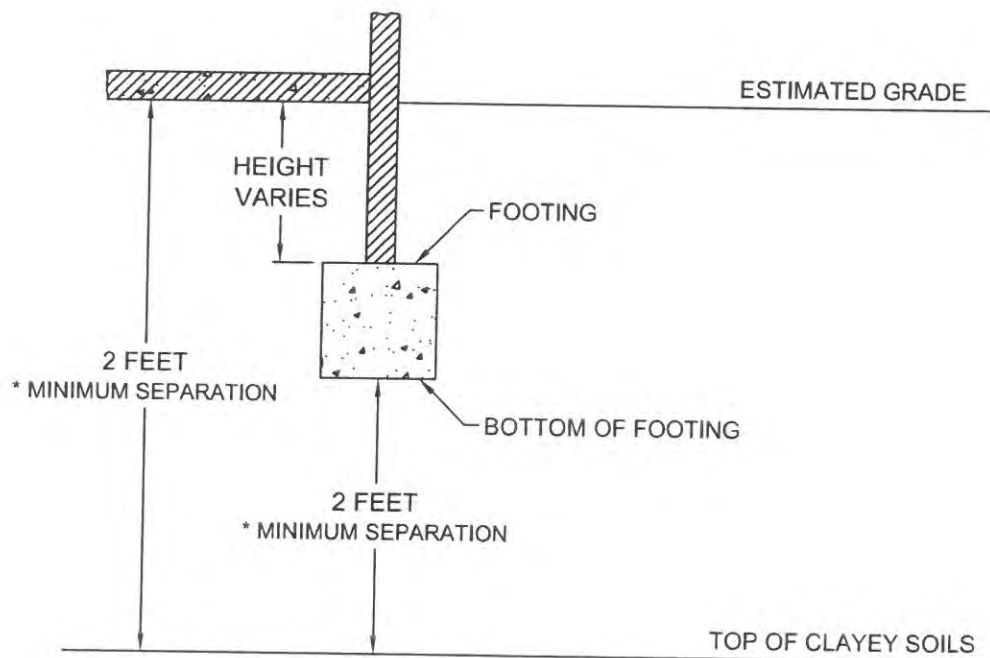
DATE: 10-23-19

FIGURE: 1

APPENDIX III
SEPARATION DETAIL



MONOLITHIC FOOTING DETAIL
NOT TO SCALE



*MAY VARY DEPENDING UPON CONSTRUCTION TECHNIQUE

RECOMMENDED SEPARATION

GEO-TECH, INC.

■ GEOTECHNICAL ■ ENVIRONMENTAL
■ CONSTRUCTION MATERIALS TESTING ■ GEOPHYSICAL EXPLORATION
1016 SE 3rd AVENUE, OCALA, FLORIDA 34471 ~ (352) 694-7711

Figure

1



United States
Department of
Agriculture

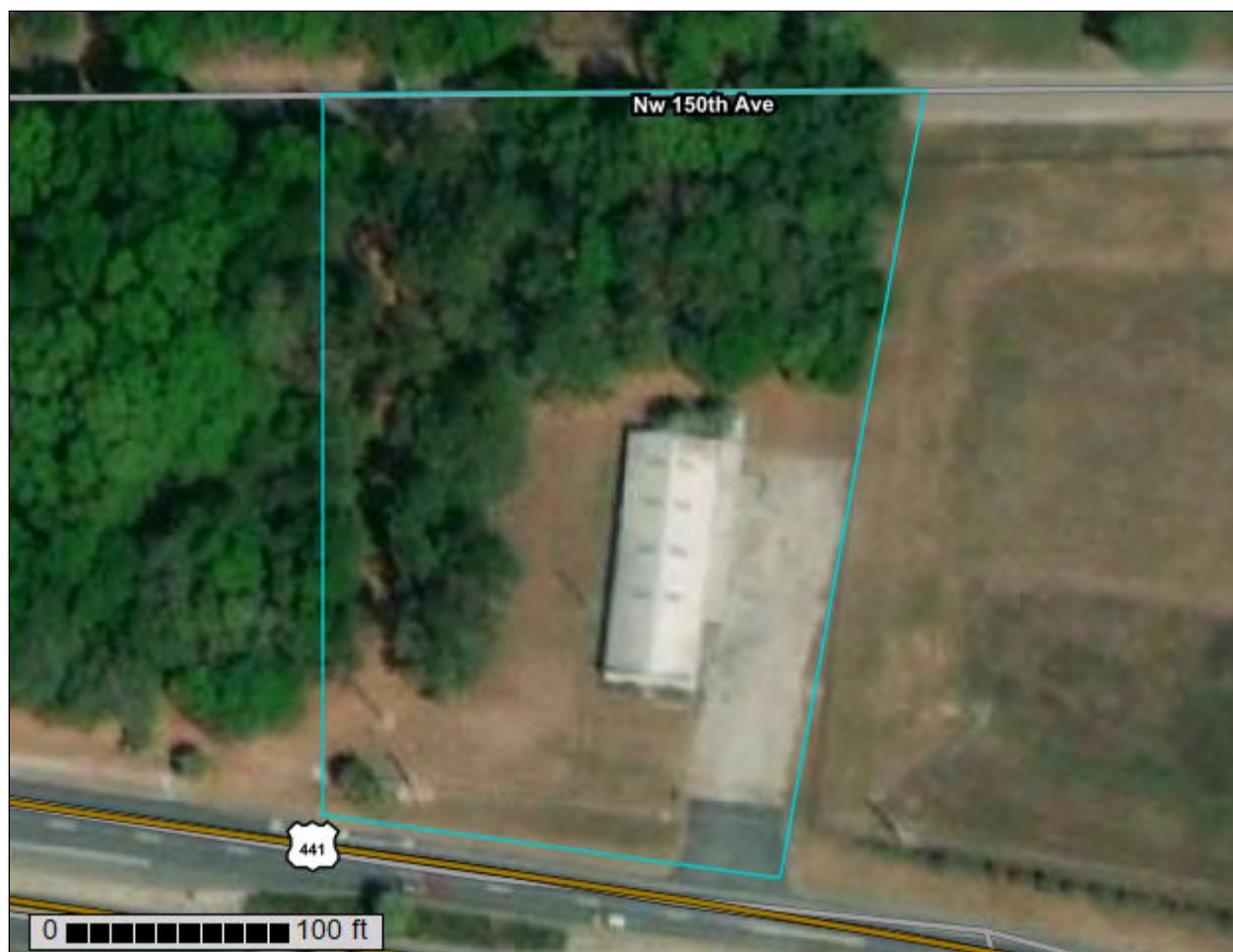
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Alachua County, Florida**

DREYER'S DK1



August 18, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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35—Gainesville sand, 0 to 5 percent slopes.....	11

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:639 if printed on A portrait (8.5" x 11") sheet.

0 5 10 20 30 Meters

0 30 60 120 180 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

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

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

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

Soil Survey Area: Alachua County, Florida
Survey Area Data: Version 19, Sep 11, 2018

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

Date(s) aerial images were photographed: Nov 26, 2014—Dec 9, 2017

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Arredondo-Urban land complex, 0 to 5 percent slopes	1.7	91.9%
35	Gainesville sand, 0 to 5 percent slopes	0.2	8.1%
Totals for Area of Interest		1.9	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Alachua County, Florida

4—Arredondo-Urban land complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: brr1
Elevation: 40 to 150 feet
Mean annual precipitation: 50 to 58 inches
Mean annual air temperature: 66 to 73 degrees F
Frost-free period: 248 to 278 days
Farmland classification: Not prime farmland

Map Unit Composition

Arredondo and similar soils: 63 percent
Urban land: 32 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arredondo

Setting

Landform: Hills on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Side slope, interfluvium
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 8 inches: fine sand
E - 8 to 49 inches: fine sand
EB - 49 to 54 inches: loamy sand
Bt - 54 to 86 inches: sandy clay loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 4.0
Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Forage suitability group: Forage suitability group not assigned (G154XB999FL)
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: No parent material

Minor Components

Millhopper

Percent of map unit: 2 percent
Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Gainesville

Percent of map unit: 1 percent
Landform: Hills on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Kendrick

Percent of map unit: 1 percent
Landform: Ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Candler

Percent of map unit: 1 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

35—Gainesville sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: brqq
Elevation: 40 to 150 feet
Mean annual precipitation: 50 to 58 inches

Custom Soil Resource Report

Mean annual air temperature: 66 to 73 degrees F

Frost-free period: 248 to 278 days

Farmland classification: Not prime farmland

Map Unit Composition

Gainesville and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gainesville

Setting

Landform: Hills on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: sand

C1 - 7 to 29 inches: sand

C2 - 29 to 82 inches: loamy sand

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 4.0

Available water storage in profile: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

Hydric soil rating: No

Minor Components

Fort meade

Percent of map unit: 4 percent

Landform: Ridges on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Hydric soil rating: No

Kendrick

Percent of map unit: 4 percent
Landform: Ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Arredondo

Percent of map unit: 4 percent
Landform: Hills on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Lake

Percent of map unit: 3 percent
Landform: Ridges, hills, marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No