



SPECIAL MEETING OF THE LADY LAKE TOWN COMMISSION

DATE: Monday, August 17, 2015
TIME: 5:30 p.m.
PLACE: Town Hall Commission Chambers
409 Fennell Blvd., Lady Lake, Florida

ALL INTERESTED PERSONS ARE CORDIALLY INVITED TO ATTEND THIS PUBLIC MEETING

AGENDA*

1. Call to Order: Mayor Ruth Kussard
2. Roll Call
3. Public Comment
4. Conceptual Presentation for the Smallwood/Tutor Investment Real Estate Investment LLC Major Site Plan Application - MJSP 03/15-003 – Proposing a Two-Tenant Development Consisting of 3,600 Sq. Ft. of Storage/Warehouse Area Including Approximately 710 Sq. ft. of Office Space in Each Unit – Located at 322 Oak Street (a 0.53 Acre Parcel), Approximately 475 Lineal Ft. West of the Intersection of Oak Street & Teague Trail/County Road 25 (Thad Carroll)
5. Adjourn

***Back up for agenda items is available on the Town's website at www.ladylake.org or contact the Town Clerk at (352) 751-1571.**

This public hearing is being conducted in a handicapped accessible location. Any handicapped person requiring an interpreter for the hearing impaired or the visually impaired should contact the Clerk's Office at least two (2) days prior to the meeting and an interpreter will be provided. To access a Telecommunication Device for Deaf Persons (TDD), please call (352) 751-1565. Any handicapped person requiring special accommodations at this meeting should contact the Clerk's Office at least two (2) days prior to the meeting.

Advice to the Public: If a person decides to appeal a decision made with respect to any matter considered at the above meeting or hearing, he may need a verbatim record of the proceedings including the testimony and evidence, a record of which is not provided by the Town of Lady Lake. (F.S. 286-0105)

Please be advised that one or more members of any other Town Board or Committee may be in attendance of this meeting.

NS/Word/Town Clerk/Agendas - Commission Meeting – 8-17-2015



SPECIAL TOWN COMMISSION - CONCEPTUAL WORKSHOP AGENDA ITEM

REQUESTED COMMISSION MEETING DATE: August 17, 2015

SUBJECT: Conceptual Presentation for the Smallwood/Tutor Real Estate Investments, LLC Major Site Plan Application - MJSP 03/15-003 – Proposing a Two-Tenant Development Consisting of 3,600 Sq. Ft. of Storage/Warehouse Area Including Approximately 710 Sq. ft. of Office Space in Each Unit – Located at 322 Oak Street (a 0.53 Acre Parcel), Approximately 475 Lineal Ft. West of the Intersection of Oak Street & Teague Trail/County Road 25

DEPARTMENT: GROWTH MANAGEMENT

STAFF RECOMMENDATION:

Staff recommends having the applicant move forward with the Major Site Plan Application as submitted, with the proposed waivers:

- **Chapter 20, Section 20-3C).3).A). - Waiver request to allow a mix of styles rather than adopting one of the preferred architectural styles: Frame Vernacular, Craftsman/Bungalow, Mediterranean, or Mission.**
- **Chapter 20- Section 20-3C.4).C). - Waiver request from having to include three (3) architectural elements every (20) horizontal feet and ten (10) vertical feet on the facades of the building.**

SUMMARY:

A site plan application has been submitted by Gary Tutor and Marvin Smallwood on behalf of Smallwood/Tutor Real Estate Investments, LLC, proposing a multi-tenant development for property located at 322 Oak Street, approximately 475 lineal feet west of the intersection of Oak Street and County Road 25, identified by alternate key number 1279321. The site plan was reviewed to determine if it is in compliance with the Land Development Regulations (LDRs) including parking, setbacks, landscaping, engineering, environmental protection and commercial design standards. The applications were reviewed and determine to be in compliance with the Land Development Regulations (LDRs) and the Comprehensive Plan.

The entire parent parcel is approximately +/- 1.32 acres, but the project area is +/- .53 acres. The property is currently zoned "CP" Planned Commercial, and is governed under the terms of Memorandum of Agreement Ordinance 2006-06. The Future Land Use Map designation for the site is Commercial General- Retail Sales and Services

(RET). The property originally received Town Commission approval back in 2008 for a Major Site Plan entitled "Oak Street Commercial Buildings" for 10,080 square feet of office/warehouse, and now the owners are ready to move forward with this proposed project.

Tree Requirements:

In accordance with Chapter 10-Landscape and Tree Protection, the site is required to provide 84.8 tree caliper inches based on its .53-acre area (160"x .53). Please see the landscaping tree proposal breakdown:

Existing Trees to remain	36 tree caliper inches
Proposed Canopy & Understory Trees	142.5 tree caliper inches
Total tree caliper inches	178.5 tree caliper inches

The applicant is providing more than the required on-site tree caliper inches.

Notes:

- No historic trees will be removed for this development.

Commercial Design Standards

In accordance with the Land Development Regulations, **Chapter 20, Section 20-3C).3).A).**, new buildings should adopt one of the four recommended architectural styles: Frame Vernacular, Craftsman/Bungalow, Mediterranean, or Mission.

- The applicant is proposing a mix of styles combining modern style with some Mediterranean style elements. Consistency with adjacent architecture on a case-by-case basis has been allowed for other outparcel projects within Town Limits in the past (i.e. McDonalds, Mattress Firm, etc.). Exterior building elevation compatibility in accordance with **Chapter 20, section 20-3C).3).B).** has been reviewed and met.

Chapter 20- Section 20-3C.4).C) requires that building façades shall not exceed twenty (20) horizontal feet and ten (10) vertical feet without a minimum of three (3) architectural elements.

- Landscaping Buffers to be planted around the perimeter of the property will screen east, west, and south elevations of the building.

Public Meetings:

The **Technical Review Committee** members individually reviewed the application on Thursday, June 4, 2015, and provided outstanding comments regarding the Site Plan application.

No meetings were scheduled before the **Parks, Recreation, and Tree Advisory Committee** since no landscaping waivers were proposed for this project.

The **Town Commission** is tentatively scheduled to consider this application for final approval on Wednesday, September 2, 2015 at 6:00 p.m.

FISCAL IMPACT: \$ _____

- Capital Budget
- Operating
- Other

ATTACHMENTS: Ordinance(s) Resolution Budget Resolution

Other – Conceptual Site Plan Documents

Support Documents/Contracts Available for Review in Manager's Office

DEPARTMENT HEAD



Submitted 8/10/15

Date

FINANCE DEPARTMENT

Approved as to Budget Requirements

Date

TOWN ATTORNEY

Approved as to Form and Legality

Date

TOWN MANAGER



Approved Agenda Item for: 8/17/15

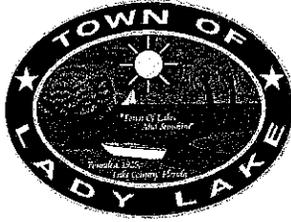
Date

8/10/15

BOARD ACTION: Approved as Recommended Disapproved

Tabled Indefinitely Continued to Date Certain Approved w/Modification

8/10/2015



TECHNICAL REVIEW COMMITTEE COMMENTS 2nd REVIEW 06/04/2015

Project: 3600-Square-Foot Bldg. @ Oak Street

Proposal: New Site Plan- MJSP 03/15-003

Description:

On 03/26/2015, Town Staff received a site plan application proposing a multi-tenant development for property located at 322 Oak Street, approximately 475 lineal feet west of the intersection of Oak Street and County Road 25, identified by alternate key number 1279321. The site plan was reviewed to determine if it is in compliance with the Land Development Regulations (LDRs) including parking, setbacks, landscaping, engineering, environmental protection and commercial design standards. The applications were reviewed and determine to be in compliance with the Land Development Regulations (LDRs) and the Comprehensive Plan.

The entire master parcel is approximately +/- 1.32 acres, but the project area is +/- .53 acres. The property is currently zoned "CP" Planned Commercial, and the Future Land Use Map designation for the site is Commercial General- Retail Sales and Services (RET).

GENERAL INFORMATION

The engineering and landscaping/irrigation plans submitted, consisting of six (6) sheets, are drawn on 24"x36" sheets and certified by David W. Springstead, **Professional Engineer with Springstead Engineering** dated June 2, 2015.

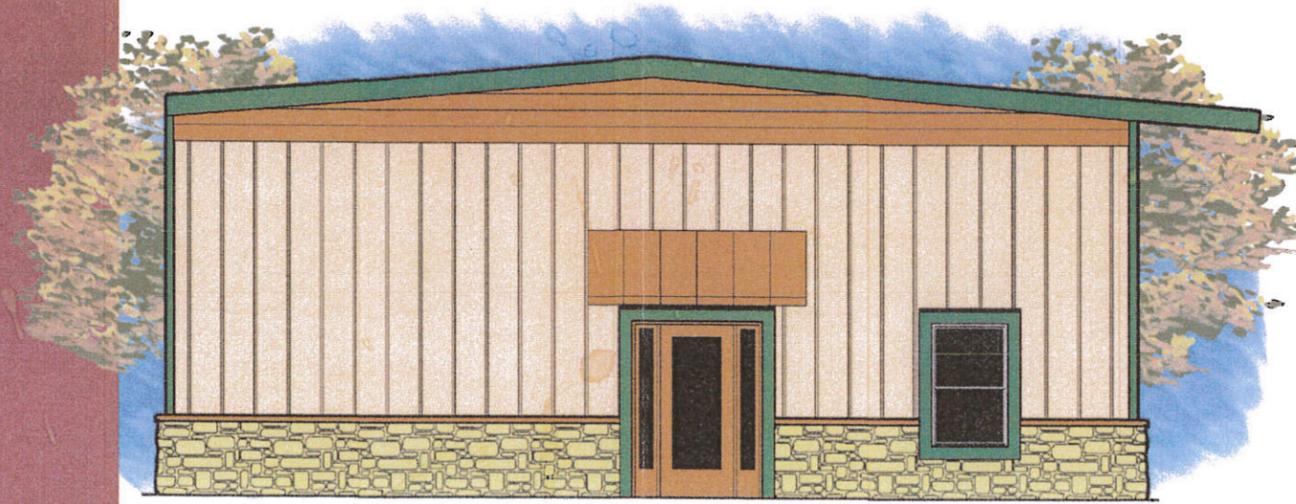
Below are staff comments from the Town of Lady Lake regarding your development. A hard copy via hand delivery and an electronic copy via e-mail are provided to the applicant. Comments are organized by department and must be sufficiently addressed before the proposal may proceed. If a re-submittal is warranted, the applicant shall provide written responses to each individual staff comment contained within this transmittal. **Re-submittals will not be accepted without bulleted written responses.**

Following submittal of any required revisions and responses, correspondence will be forwarded indicating the proposal's status, either: (1) requiring additional revision or documentations; or (2) ready for approval. Site plans are subject to public hearing, as well as plats, annexation requests, zoning requests, and comprehensive plan requests. When applicable, you will receive written notification that the item is scheduled for review by the Planning and Zoning Board or Town Commission. For additional information, contact Thad Carroll at (352) 751-1521.

GROWTH MANAGEMENT

Questions may be directed to Wendy Then, at wthen@ladylake.org

OAK STREET
ELEVATION CONCEPT



FRONT ELEVATION

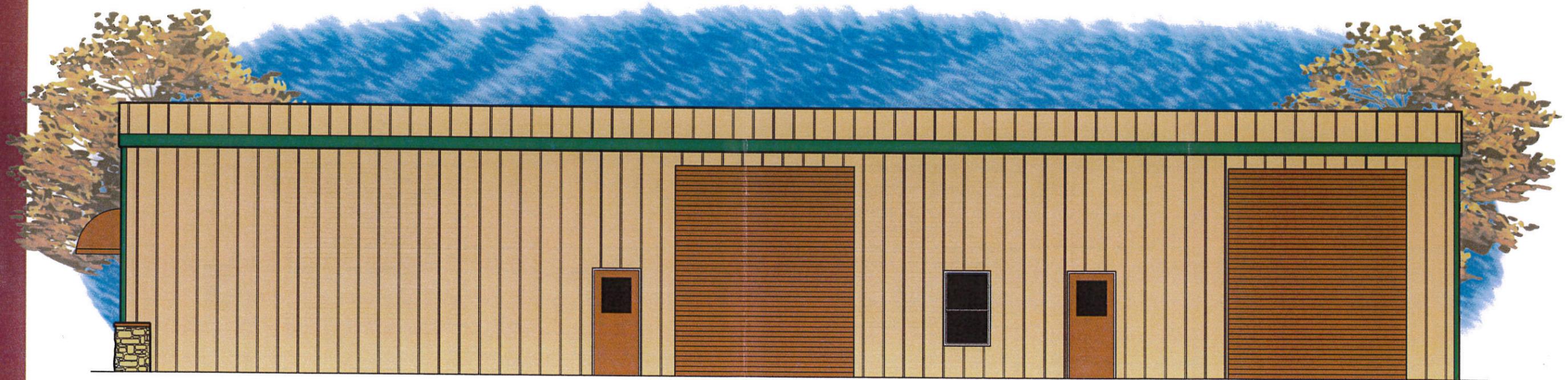
AgeWave Solutions, Inc.



THIS DRAFT RENDERING IS PROVIDED FOR INFORMATIONAL AND ILLUSTRATIVE PURPOSES. CHANGES MAY BE MADE DURING THE FURTHER PLANNING AND/OR DEVELOPMENT STAGES AND DIMENSIONS, FINISHES AND REPRESENTATIONS ARE SUBJECT TO CHANGED. ALL RIGHTS RESERVED.



OAK STREET ELEVATION CONCEPT



SIDE ELEVATION

AgeWave Solutions, Inc.



THIS DRAFT RENDERING IS PROVIDED FOR INFORMATIONAL AND ILLUSTRATIVE PURPOSES. CHANGES MAY BE MADE DURING THE FURTHER PLANNING AND/OR DEVELOPMENT STAGES AND DIMENSIONS, FINISHES AND REPRESENTATIONS ARE SUBJECT TO CHANGED. ALL RIGHTS RESERVED.



Wendy Then

From: Jason Hurley <jason@springsteadeng.net>
Sent: Monday, August 10, 2015 5:10 PM
To: Wendy Then
Cc: David Springstead; Staff Engineer; garyt@anchorcoatings.com
Subject: FW: Oak Street 3600 SF Bldg. Site- Commercial Design Standard Justification
Attachments: Oak Street 3600 SF Site- Front Facade (North) Elevation.pdf; Oak Street Side Elevation Concept.pdf; Cover -Special Workshop-Oak Street 3600 SF Site-08-2015.doc

Wendy,

As requested, we have reviewed the Special Town Commission – Conceptual Workshop Agenda staff recommendation and summary and do not wish to make any exceptions. The requested waivers for the proposed building's architectural style and elements are based on an attempt to value engineer the building in accordance with the design and use of the site. The building as planned, coincides with the neighboring theme of the existing industrial/manufacturing area and is consistent with the elevations of the adjacent commercial buildings. While the design of the proposed building incorporates only a few significant architectural elements, the abundance of landscape and tree plantings within the proposed buffers are provided to screen the view from the side property lines. Additionally, it should be noted that the site is not located on a main road and is consistent with the surrounding developments.

We trust that this info will be helpful in substantiating the requested waivers. Please don't hesitate to advise us if you need further clarification.

Sincerely,

Jason Hurley
Springstead Engineering, inc.
727 South 14th St.
Leesburg, FL 34748
Lake (352) 787-1414
Sumter (352) 793-3639
Fax (352) 787-7221

From: Wendy Then [mailto:wthen@ladylake.org]
Sent: Monday, August 10, 2015 3:37 PM
To: Jason Hurley
Subject: Oak Street 3600 SF Bldg. Site- Commercial Design Standard Justification

Hi Jason,

Please see attached. Let me know if you have any questions. Thanks.

Wendy Then, CFM
Town Planner
Town of Lady Lake
409 Fennell Blvd.
Lady Lake, FL 32159
352-751-1582

1. All comments are provided by the Growth Management Dept. as of 06-4-2015.
-

POLICE

Questions may be directed to Chief Chris McKinstry at cmckinstry@ladylake.org

1. No comments at this time from the Police Dept. regarding this project as of 06-04-2015.
-

FIRE

Questions may be directed to Kerry Barnett at k-15122@peoplepc.com or via phone 813-778-4981

1. All comments provided Fire Inspector have been addressed as of 06-03-2015.
-

BUILDING

Questions may be directed to Dallas Foss, Building Official at dfoss@usanova.com.

1. No comments at this time dated 03-31-2015.
-

PUBLIC WORKS

Questions may be directed to Butch Goodman, Utilities Supervisor at bgoodman@ladylakepw.org

1. Comments provided by the Lady Lake Public Works Dept. dated 04-15-2015 haven been acknowledged by applicant.
-

LAKE-SUMTER MPO

Questions may be directed to Olga Marcondes at OMarcondes@LakeSumterMPO.com or at 352-315-0170

1. Review Pending by MPO as of 06-04-2015.

TOWN OF LADY LAKE
APPLICATION FOR SITE PLAN REVIEW

1. Applicant's Name: Smallwood/Tutor Real Estate Investments, LLC
Telephone/Email: (352) 728-0867
Applicant is: Owner Developer Lessee Agent Optionee
2. Owner's Name: Gary Tutor or Marvin Smallwood
Address: 36025 Micro Racetrack Road, Fruitland Park, Florida 34731
Telephone/Email: (352) 728-0867
3. Engineer's Name: David W. Springstead, P.E./Springstead Engineering, Inc.
Address: 727 South 14th Street, Leesburg, Florida 34748
Telephone/Email: (352) 787-1414/staff@springsteadeng.net
Reg. Number: 48229
4. Architect's Name: Not applicable
Address: _____
Telephone/Email: _____
Registration Number: _____
5. Landscape Architect: Not applicable
Address: _____
Telephone/Email: _____
Registration Number: _____
6. Project Name: Oak Street - 3600 sf Building Site
Physical Location/Address: 322 Oak Street, Lady Lake, Florida 32159
11. The property is located in the vicinity of the following streets:
Oak Street, Lady Lake, Florida

TOWN OF LADY LAKE
APPLICATION FOR SITE PLAN REVIEW

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8. Area of property 23,436 Square Feet 0.54 Acres
9. The exact legal description of the property as shown on the Tax Receipt or the Warranty Deed, or attach a separate sheet to the application form:
From NW Cor of SE 1/4 Run E 264 ft for POB, S. 240 Ft., E to a Pt 210 ft. W of RR R/W,
N 240 Ft to N. Line of SE 1/4, W. to POB- Less N. 25 Ft. for RD R/W-ORB 2979 PG 1432
10. The property is currently zoned: CP
11. Briefly describe the proposed project: CP
If for storage, what type of material will be stored? N/A
12. Have any development reviews and/or approvals been granted to this property?
Yes No If yes, list the type, date and result:
Ordinance 2013-10
13. Has any Variance been granted concerning this property? Yes No
If yes, list the Case Number and briefly describe the nature of the Variance.

14. The plans shall be drawn on 24" x 36" sheets as a minimum, at the largest scale feasible. The plans or any portion thereof involving engineering, shall be certified by a professional engineer or landscape architect as required by SJRWMD. The following information must be included on the site plan:

General Information

- a. Name of project.
- b. General statement of intended use of site.
- c. Legal description of the property and size of parcel in acres or square feet.
- d. Name and address of owner.

TOWN OF LADY LAKE
APPLICATION FOR SITE PLAN REVIEW

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- e. Name, address and phone number of owner's agent.
- f. Name, address, signature and registration of the professionals preparing the plans.
- g. Date, north arrow and scale shall be designated and where appropriate, the same scale shall be used on all sheets.
- h. Vicinity map showing relationship of proposed development to the surrounding streets and thoroughfares, shall be at a scale no smaller than one inch equals five thousand two hundred eighty feet (1" = 5,280' or 1" = Mile).
- i. Linear dimensions of the site.
- j. Existing topography with a maximum of one (1) foot contour intervals for the proposed site.
- k. Finished grading elevations.
- l. Zoning of the site and of all adjacent parcels.
- m. All existing and proposed building restriction lines (i.e., highway setback lines, easements, covenants, rights-of-way and building setback lines).
- n. Percent of open space of site.
- o. Location of proposed signs.

Building and Structure

- a. Existing and proposed structures.
- b. Intended use.
- c. Number of stories.
- d. Height of building(s).
- e. Number of dwelling units and density.
- f. Projected number of employees, if applicable.
- g. If restaurant, show number of seats and occupancy load.

TOWN OF LADY LAKE
APPLICATION FOR SITE PLAN REVIEW

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- h. Square footage for proposed development, i.e., gross square footage, nonstorage area, square footage of each story, gross square footage of sales area, etc.
- i. Photograph or sketch of proposed sign with dimensions and material type.

Street, Sidewalks, Driveways, Parking Areas and Loading Spaces

- a. Engineering plans and specifications for streets, alleys, sidewalks and driveways to include soil borings, if necessary.
- b. All parking spaces delineated.
- c. Number of parking spaces.
- d. Number and location of handicapped spaces.
- e. Number of square feet of paved parking and driveway area.
- f. Surface materials and cross-section of proposed paved areas.
- g. Fire lanes per the Standard Fire Prevention Code adopted in the Building and Fire Codes chapter.
- h. Description/location of proposed driveway(s) and median cut(s).
- i. Internal traffic control circulation plan, including directional arrows and signs to direct traffic flow, as necessary.
- j. Location of traffic-control signs and signalization devices, if required.
- k. Number and location of required loading spaces.
- i. Number and location of required bicycle spaces.

Drainage and Stormwater

- a. Soil classifications, cross-sections and details of proposed retention/detention ponds, swales, berms, etc., as required by SJRWMD.
- b. Size, material and location of stormwater structures and pipes.

TOWN OF LADY LAKE
APPLICATION FOR SITE PLAN REVIEW

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- X c. Indicate flood elevation for 100-year flood and any other information required in Environmental Regulations chapter.

Proposed Water, Sewer and Solid Waste Facilities

- X a. Size, material, specifications and location of water mains, valves, services and fire hydrants.
- X b. Size, material, specifications and location of sanitary sewer lines and laterals with submittal of a profile, if necessary.
- X c. Size and location of septic tank and drainfield, if applicable.
- X d. Grease separation system, if applicable: Size, location and materials.
- X e. Location(s) and access provisions for refuse service, including pad, screening, fencing and landscaping, if applicable.

Landscaping

- X a. Landscaping plan and provisions for maintenance including size, type and location of all landscaping, screens, walls, fences and buffers per the requirements in the Landscaping and Tree Protection chapter. If water efficient landscaping is used, the information required in that chapter should be included.
- X b. Irrigation system plan.

Environmental Protection

- X a. Natural features such as waterbodies, wetlands, native vegetative communities, etc., as required in the Environmental Regulations chapter.
- X b. Conservation easements per the requirements.
- X c. Provisions for the adequate control of erosion and sediment, including the location and description of the methods to be utilized during and after all phases of clearing, grading and construction.

ADDITIONAL INFORMATION TO BE PROVIDED

- X a. Summary report of all concurrency data needed as noted in Chapter 4 of the Lady Lake Land Development Regulations.

TOWN OF LADY LAKE
APPLICATION FOR SITE PLAN REVIEW

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- b. Drainage calculations as required in the Stormwater Management chapter.
- c. Fire flow calculations, if applicable.
- d. Lift station calculations, where required.
- e. Copy of HRS permit, where required.
- f. A construction cost estimate prepared by the engineer of record, which shall delineate any proposed improvements to be maintained by the Town.
- g. Environmental assessment per the requirements, if applicable.
- h. Any additional data, maps, plans or statements, as may be required, which is commensurate with the intent and purpose of the Code.


Signature of Applicant

PLEASE SUBMIT APPLICATION TO THE GROWTH DEVELOPMENT DEPARTMENT ACCOMPANIED BY EIGHT (8) COPIES OF THE SITE PLAN AND FOUR (4) 11 X 17 (SIGNED AND SEALED IF REQUIRED), APPROPRIATE REVIEW FEES, PROOF OF OWNERSHIP AND ALL APPLICABLE INFORMATION AND DOCUMENTATION AS REQUIRED BY LADY LAKE ORDINANCE 94-08, LAND DEVELOPMENT REGULATIONS, ADOPTED AUGUST 15, 1994.

Office Use:	
Date Application Received: <u>3/26/15</u>	Received by: <u>W. Thelmer</u>
Fees Paid:	
Site Development Plan - Minor	_____
Site Development Plan - Major up to 100,000 sq. ft.	<input checked="" type="checkbox"/>
Site Development Plan - Major 100,001 sq. ft. and up	_____

OWNER'S AFFIDAVIT

STATE OF FLORIDA
COUNTY OF LAKE

Before me, the undersigned authority, personally appeared Gary Tutor of Marvin O. Smallwood, who being by me first duly sworn on oath, deposes and says:

(1) That he/she is the fee-simple owner of the property legally described on page one of this application.

(2) That he/she desires approval for:

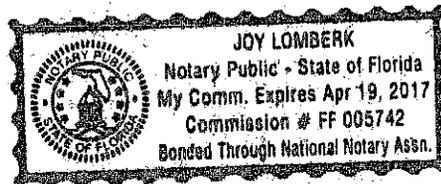
Oak Street - 3600 sf Building Site

(3) That he/she has appointed N/A to act as agent in his/her behalf to accomplish the above. The Owner is required to complete the APPLICANT'S AFFIDAVIT of this application if no agent is appointed to act in his/her stead.

Gary Tutor
Affiant (Owner's Signature)

The foregoing instrument was acknowledged before me this 25th day of March, 2015, by Gary Tutor, who is personally known to me or who has produced _____ as identification and who did (did not) take an oath.

Joy Lomberg
Notary Public



NOTE

All applications shall be signed by the owner of the property, or some person duly authorized by the owner to sign. This authority authorizing a person other than the owner to sign must be attached.

APPLICANT'S AFFIDAVIT

STATE OF FLORIDA
COUNTY OF LAKE

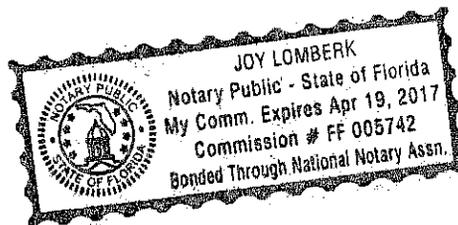
Before me, the undersigned authority, personally appeared Gary Tutor or Marvin Smallwood who being by me first duly sworn on oath, deposes and says:

- (1) That he/she affirms and certifies that he/she understands and will comply with all ordinances, regulations, and provisions of the Town of Lady Lake, Florida, and that all statements and diagrams submitted herewith are true and accurate to the best of his/her knowledge and belief, and further, that this application and attachments shall become part of the Official Records of the Town of Lady Lake, Florida, and are not returnable.
- (2) That he desires approval for:
Oak Street - 3600 sf Building Site
- (3) That the submittal requirements for the application have been completed and attached hereto as part of this application.

Gary Tutor
Affiant (Applicant's Signature)

The foregoing instrument was acknowledged before me this 25th day of March, 2015, by Gary Tutor, who is personally known to me or who has produced _____ as identification and who did (did not) take an oath.

Joy Lomberk
Notary Public



**TOWN OF LADY LAKE
APPLICATION FOR CONCURRENCY DETERMINATION**

1. Purpose for Concurrence Determination: (check one)

Comprehensive Plan Land Use Amendment
 Preliminary/Final Subdivision Approval
 Rezoning
 Site Plan Approval
 Other

2. Applicant: Smallwood/Tutor Real Estate investments, LLC
Address: 36025 Micro Racetrack Road, Fruitland Park, Florida
Telephone: 352-728-0867 **E-Mail:** _____

3. Owner: Same as above
Address: _____
Telephone: _____ **E-Mail:** _____

4. Property Address: 322 Oak Street, Lady Lake, Florida 32159

5. Alt. Key #: 1279321 **6. Total Acreage:** 0.54

7. Existing Zoning: CP **8. Proposed Zoning:** CP

9. Existing Land Use: RET **10. Proposed Land Use:** RET

11. Residential Lots/Units: N/A **12. Non-Resident, Gross Sq. Ft.:** 23,436

13. Method of Wastewater Treatment:
a. Septic Tank: _____ **b. Central Sewer:** **c. Other:** _____
County Permit: _____ **County #:** _____

14. Wastewater Flow Rates:*
ERU Determination Per Chapter 14, Appendix A-A: 2 **ERUS x 250 =** 500 **GPD**

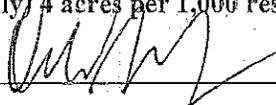
15. Water Usage:*
ERU Determination Per Chapter 14, Appendix A-A: 2 **ERUS x 250 =** 500 **GPD**

16. Solid Waste: (3.39 pounds per capita, per day): 110 **Pounds** (See attached)

17. Traffic Analysis: Name and Functional Classification of roadways adjacent to the property, the Average Daily Trip Generation and Average Daily Peak Hour Generation expected from this development (please refer to the Lake-Sumter MPO Traffic Analysis Guideline):
Oak Street is not classified. The anticipated net new peak hour trips total five (5) for the weekday. A Tier 1 review/exemption will be requested from the Lake-Sumter MPO.

18. Population (residential only) 1.86 persons per household: N/A **Persons**

19. Recreation (residential only) 4 acres per 1,000 residents: N/A **Acres**

Signature of Engineer:  **Date:** 3-24-15

* If circumstances apply where additional Water or Wastewater Capacity beyond minimum ERU based GPD is requested, please provide a justification letter with supporting calculations and documentation. At no time will the Town reduce Water or Wastewater Capacity request below the minimum ERU based GPD.

PROPERTY RECORD CARD

General Information

Owner Name:	SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS LLC	Alternate Key:	1279321
Mailing Address:	615 LAKESHORE DR LEESBURG, FL 34748 Update Mailing Address	Parcel Number:	17-18-24-000400003400
		Millage Group and City:	00LL (Lady Lake)
		Total Millage Rate:	19.04670
Property Location:	322 OAK ST LADY LAKE FL 32159 Update Property Location	Trash/Recycling /Water/Info:	My Public Services Map
		Property Name:	--- Submit Property Name
Property Description:	FROM NW COR OF SE 1/4 RUN E 264 FT FOR POB, S 240 FT, E TO A PT 210 FT W OF RR R/W, N 240 FT TO N LINE OF SE 1/4, W TO POB--LESS N 25 FT FOR RD R/W-- ORB 2979 PG 1432		
School Locator:	School and Bus Map		

Land Data

Line	Land Use	Frontage	Depth	Notes	No. Units	Type	Class Value	Land Value
1	VACANT COMMERCIAL (1000)	0	0		56192	SF	\$0.00	\$67,430.00

Miscellaneous Improvements

No.	Type	No. Units	Unit Type	Year	Depreciated Value
0001	UTILITY BUILDING - UNFINISHED (UBU)	160	SF	1936	\$198.00

Sales History

O.R. Book / Page	Sale Date	Instrument	Q/U	Vac./Imp.	Sale Price
831 / 2425	2/1/1985	PR	M	V	\$1.00
2979 / 1432	10/12/2005	WD	M	I	\$120,000.00

Values and Estimated Taxes

Tax Authority	Just Value	Assessed Value	Taxable Value	Millage	Estimated Taxes
LAKE COUNTY BCC	\$67,628	\$67,628	\$67,628	5.38560	\$364.22
LAKE COUNTY MSTU AMBULANCE	\$67,628	\$67,628	\$67,628	0.46290	\$31.31
LAKE COUNTY MSTU FIRE	\$67,628	\$67,628	\$67,628	0.47040	\$31.81
SCHOOL BOARD STATE	\$67,628	\$67,628	\$67,628	5.74600	\$388.59
SCHOOL BOARD LOCAL	\$67,628	\$67,628	\$67,628	1.50000	\$101.44
TOWN OF LADY LAKE	\$67,628	\$67,628	\$67,628	3.75000	\$253.61
ST JOHNS RIVER FL WATER MGMT DIST	\$67,628	\$67,628	\$67,628	0.31640	\$21.40

LAKE COUNTY VOTED DEBT SERVICE	\$67,628	\$67,628	\$67,628	0.16000	\$10.82
LAKE COUNTY WATER AUTHORITY	\$67,628	\$67,628	\$67,628	0.25540	\$17.27
NORTH LAKE HOSPITAL DIST	\$67,628	\$67,628	\$67,628	1.00000	\$67.63
				Total:	Total:
				19.0467	\$1,288.10

The values displayed above may NOT reflect certified values and therefore are subject to change before being finalized for ad valorem assessment purposes. The estimated tax totals are based on prior year adopted millage rates until each taxing authority certifies proposed rates (annually in mid-August) and adopts final millage rates (late September) of each year. Estimated tax totals do not reflect non-ad valorem assessments. (Fire Fees, Solid Waste, etc.) Please consult the [Tax Collector](#) for actual taxation amounts.

Copyright © 2014 Lake County Property Appraiser. All rights reserved.
Property data last updated on 19 December 2014.

THIS INSTRUMENT PREPARED BY/RETURN TO:
Christopher J. Shipley, Attorney at Law/CPA
Law Offices of Vason & Shipley
501 East Fifth Avenue
Mount Dora, Florida 32757-5623
Telephone: (352) 383-4151
Our File Number: 8547

CFN 2005163226
Bk 02979 Pgs 1432 - 1433; (2pgs)
DATE: 10/17/2005 10:14:27 AM
JAMES C. WATKINS, CLERK OF COURT
LAKE COUNTY
RECORDING FEES 18.50
DEED DDC 840.00

Tax parcel Number: 17-18-24-050000A00100

[Space Above This Line For Recording Data]

Warranty Deed

THIS WARRANTY DEED made this 12th of October, 2005, from **Lillie Ann Jones**, a single woman, whose address is Post Office Box 1383, Tavares, FL 32778 (hereinafter called "Grantor") to **Smallwood/Tutor Real Estate Investments, LLC**, a Florida limited liability company, whose address is 615 Lakeshore Drive, Leesburg, FL 34748 (hereinafter called "Grantee");

(Wherever used herein the terms "Grantor" and "Grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of business entities.)

WITNESSETH: that the Grantor, for and in consideration of the sum of Ten Dollars and Zero Cents (\$10.00), and other good and valuable consideration in hand paid to said Grantee, the receipt and sufficiency whereof are hereby acknowledged, does hereby grant, bargain, and sell to the said Grantee, and Grantee's heirs and assigns forever, the following described land, situate, lying and being in Lake County, Florida, to-wit:

PARCEL A:

FROM THE NORTHWEST CORNER OF THE SOUTHEAST 1/4, IN SECTION 17, TOWNSHIP 18 SOUTH, RANGE 24 EAST, LAKE COUNTY, FLORIDA, RUN EAST 264 FEET FOR A POINT OF BEGINNING, THENCE SOUTH 240 FEET, THENCE EAST TO A POINT 210 FEET WEST OF THE RAILROAD RIGHT-OF-WAY, THENCE NORTH 240 FEET TO THE NORTH LINE OF THE SOUTHEAST 1/4, THENCE WEST TO THE POINT OF BEGINNING, LESS AND EXCEPT THE NORTH 25 FEET THEREOF FOR ROAD RIGHT-OF-WAY.

PARCEL B:

THE EAST 29 FEET OF THE NORTH 210 FEET OF LOT 1, BLOCK "A", WASHINGTON HEIGHTS, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 9, PAGE 55, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

SUBJECT TO easements, restrictions and reservations of record, if any; however, this reference shall not operate to reimpose the same.

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

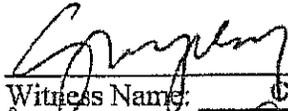
TO HAVE AND TO HOLD, the same in fee simple forever.

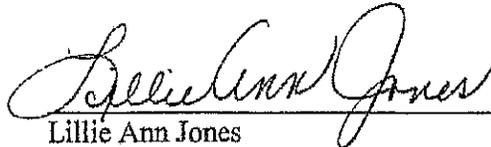
AND the said Grantor hereby covenants with the said Grantee that the Grantor is lawfully seized of

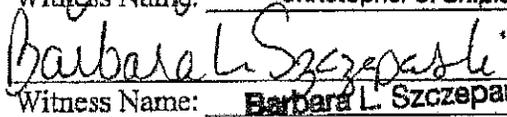
said land in fee simple; that the Grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2004.

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

**SIGNED, SEALED AND DELIVERED
IN THE PRESENCE OF:**


Witness Name: Christopher J. Shipley

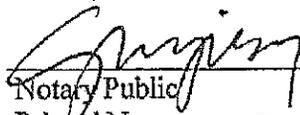

Lillie Ann Jones

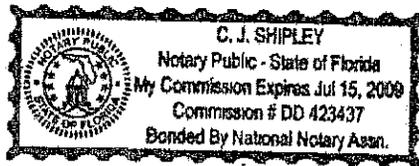

Witness Name: Barbara L. Szczepanski

State of Florida
County of Lake

The foregoing instrument was acknowledged before me this 13TH day of October, 2005 by Lillie Ann Jones, who is personally known or has produced a driver's license as identification.

[Notary Seal]


Notary Public
Printed Name: Christopher J. Shipley
My Commission Expires: 7-15-2009





Detail by Entity Name

Florida Limited Liability Company

SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS, LLC

Filing Information

Document Number	L05000008120
FEI/EIN Number	N/A
Date Filed	01/14/2005
State	FL
Status	ACTIVE
Last Event	REINSTATEMENT
Event Date Filed	10/03/2006
Event Effective Date	NONE

Principal Address

8564 E. CR 466
LADY LAKE, FL 32162

Mailing Address

36025 MICRO RACETRACK ROAD
FRUITLAND PARK, FL 34731

Changed: 10/03/2006

Registered Agent Name & Address

SMALLWOOD, MARVIN O
36025 MICRO RACETRACK ROAD
FRUITLAND PARK, FL 34731

Address Changed: 10/03/2006

Authorized Person(s) Detail

Name & Address

Title MGRM

SMALLWOOD, MARVIN O
36025 MICRO RACETRACK ROAD
FRUITLAND PARK, FL 34731

Title MGRM

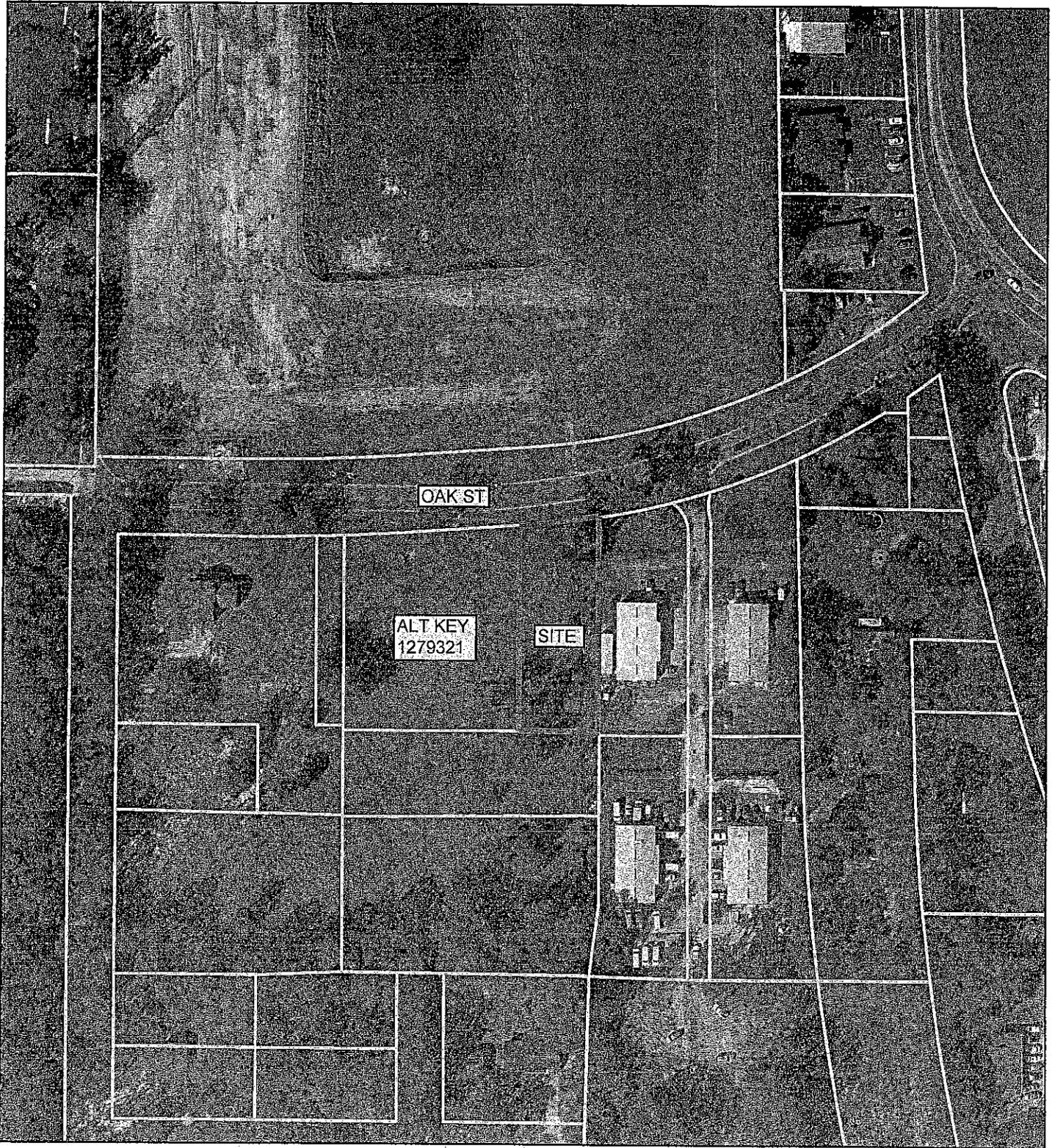
TUTOR, GARY
615 LAKESHORE DRIVE

Annual Reports

Report Year	Filed Date
2012	04/24/2012
2013	04/22/2013
2014	01/10/2014

Document Images

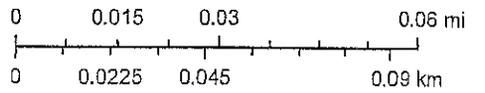
<u>01/10/2014 -- ANNUAL REPORT</u>	View image in PDF format
<u>04/22/2013 -- ANNUAL REPORT</u>	View image in PDF format
<u>04/24/2012 -- ANNUAL REPORT</u>	View image in PDF format
<u>02/22/2011 -- ANNUAL REPORT</u>	View image in PDF format
<u>04/23/2010 -- ANNUAL REPORT</u>	View image in PDF format
<u>04/30/2009 -- ANNUAL REPORT</u>	View image in PDF format
<u>09/22/2008 -- ANNUAL REPORT</u>	View image in PDF format
<u>04/27/2007 -- ANNUAL REPORT</u>	View image in PDF format
<u>10/03/2006 -- REINSTATEMENT</u>	View image in PDF format
<u>01/14/2005 -- Florida Limited Liablites</u>	View image in PDF format



February 16, 2015

1:1,775

Tax Parcels



SMALLWOOD/TUTOR
OAK ST 3,600 SF BUILDING SITE

Smallwood/Tutor
Oak St – 3600sf Building Site

Narrative

This project is located in the Town of Lady Lake, approximately 800 feet west of US Hwy 27/441 on the south side of Oak Street. The subject Parcel ID is 1279321. The proposed site is situated on the eastern 109 feet of the parent parcel. The property is currently undeveloped and is covered by a fair amount of grasses and several mature trees. The adjacent properties include a mix of commercial, agricultural, and residential uses.

The proposed development of the property includes constructing a 3,600sf metal building with the associated parking, drives, sidewalks and business signage. The proposed use of the site is commercial with portions of the building planned for offices, a repair shop, and warehouse space.

The site water and sewer will be served by the Town of Lady Lake Utilities and are currently in-place along the project right-of-way.

A stormwater management system will be constructed to address the increase in stormwater runoff generated by the site development. Discharges from the system will be limited to those calculated from the pre-developed site. No wetlands or surface waters will be impacted by the site construction. No adverse off-site impacts to neighboring properties are anticipated.

03/10/2015

Smallwood/Tutor
Oak St - 3600sf Building

Job #1510001.000

Prepared By:
David W. Springstead, P.E.
Jason Hurley

Estimated Concurrency Calculations

Wastewater Flow

Use	Criteria	Units	Flow	ERU
Office	15 gpd per 100 sf	1650 sf	247.5 gpd	1.0
Warehouse	15 gpd per 1 person	2 ea	30 gpd	0.1
Auto Service Shop	15 gpd per 1 person	2 ea	30 gpd	0.1
Total			307.5 gpd	1.2

x 115 %

Potable Water Demand (15% Multiplier of Wastewater Generation) 353.6 gpd **1.4**

Re-Use Water Demand (3/4" x twice a week = 469 gal per week) 67.0 gpd **0.2**

Solid Waste

(Based on Similar Projects)

1 dumpster

Use	Criteria	Units	Generates
Office	15 lbs per 1 employee	2 employees	30 lbs per day
Warehouse	40 lbs per 1 loading bay	1 loading bays	40 lbs per day
Auto Service Shop	20 lbs per 1 service bay	2 service bays	40 lbs per day
Total			110.0 lbs per day (1 dumpster)

Note: 1 ERU = 250 gpd Per Town of Lady Lake (Water & Sewer)
1 ERU = 274 gpd Per Town of Lady Lake (Reuse)

Job #1510001.000

03/10/2015

Smallwood/Tutor
Oak St 3600sf Building Site

Prepared By:
David W. Springstead, P.E.
Jason Hurley

Fire Protection Water Demand Calculations

Fire Area Type IIB and IIIB	Fire-Flow Required (gpm)	Flow Duration (hours)
3,600	1,500	2

(Calcs based on NFPA Table 18.4.5.1.2)

TRAFFIC ANALYSIS

Project Information

Project Name: Oak St - 3600sf Building Site
No: 1510001
Date: 3/10/2015
City: Lady Lake
State/Province: Florida
Zip/Postal Code: 32159
Country: United States
Client Name: Smallwood/Tutor
Analyst's Name: JRH
Edition: ITE-TGM 9th Edition

Land Use	Size	Weekday, A.M. Peak Hour of Weekday		P.M. Peak Hour of Weekday	
		Entry	Exit	Entry	Exit
715 - Single Tenant Office Building	(1.65)*1000 Sq. Feet Gross Floor Area	3	0	0	3
Reduction		0	0	0	0
Internal		0	0	0	0
Pass-by		0	0	0	0
Non-pass-by		3	0	0	0
942 - Automobile Care Center	(1.17)*1000 Sq. Feet Occ. Cr. Leasable Area	2	1	2	2
Reduction		0	0	0	0
Internal		0	0	0	0
Pass-by		0	0	0	0
Non-pass-by		2	1	2	2
150 - Warehousing	(0.77)*1000 Sq. Feet Gross Floor Area	0	0	0	0
Reduction		0	0	0	0
Internal		0	0	0	0
Pass-by		0	0	0	0
Non-pass-by		0	0	0	0
Total		5	1	2	5
Total Reduction		0	0	0	0
Total Internal		0	0	0	0
Total Pass-by		0	0	0	0
Total Non-pass-by		5	1	2	5

Driveway	Trip Distribution											
	Southbound			Westbound			Northbound			Eastbound		
Movement	7	1	7	1	7	1	7	1	7	1	7	1
Oak St Driveway	-	-	0	0	-	0	-	0	-	0	-	0
Background Traffic	-	-	2	*	-	-	-	-	-	-	-	*
Non-pass-by†	-	-	0	0	-	-	-	-	-	-	-	0
Pass-by‡	-	-	0	0	-	-	-	-	-	-	-	0
Oak St Driveway Total	-	-	2	0	-	-	-	-	-	-	-	0

† Character "*" denotes a movement that does not access the driveway and therefore cannot be considered for Non-pass-by trips.

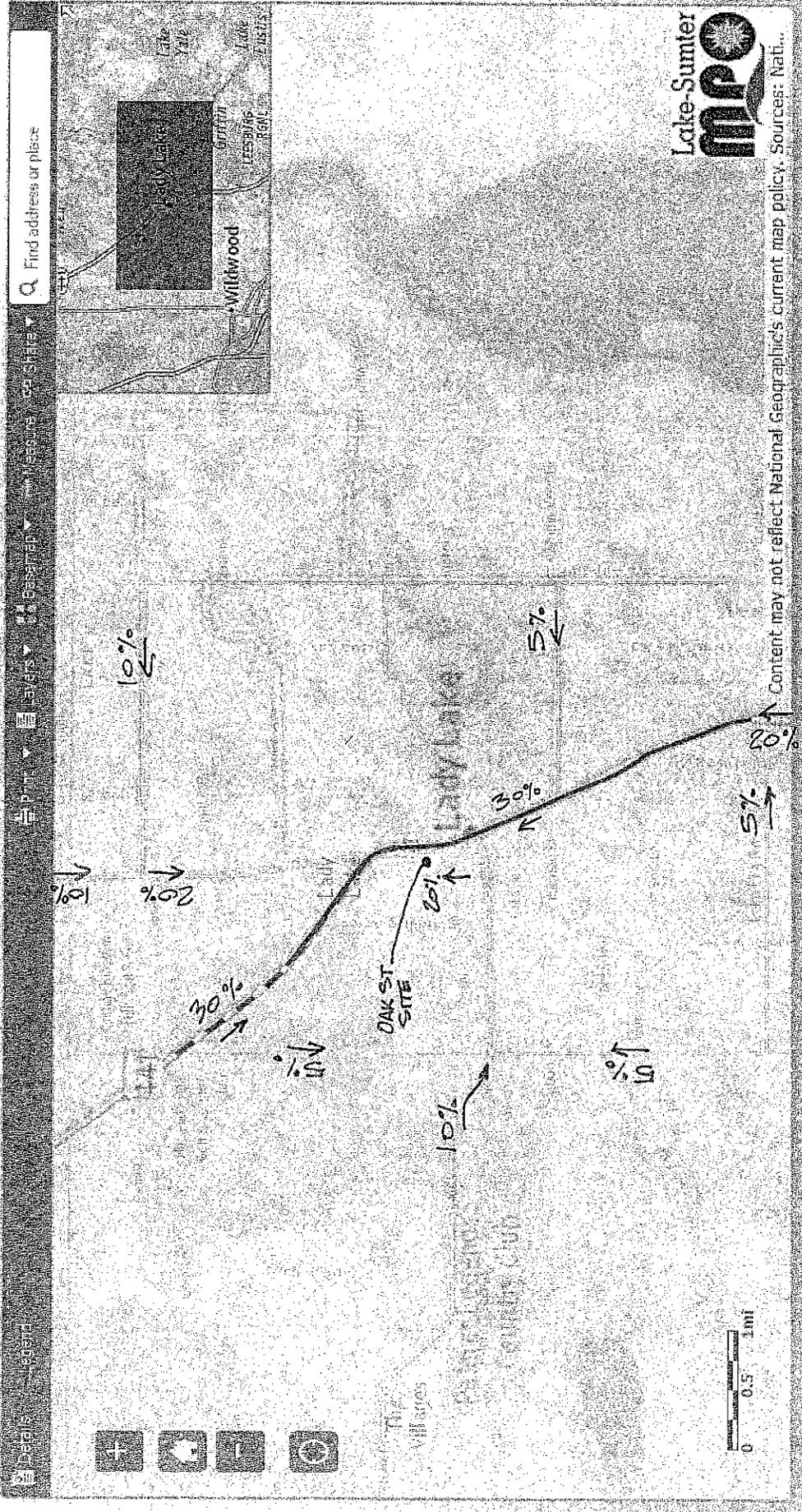
‡ A negative value in the pass-by row denotes trips that have been diverted to an inbound movement.

Driveway	Movement	Trip Distribution					
		Southbound		Westbound		Eastbound	
		U	T	U	T	U	T
Oak St Driveway	Background Traffic	-	-	0	0	-	0
	Non-pass-by†	-	-	0	*	-	1
	Pass-by‡	-	-	0	0	-	0
	Oak St Driveway Total	-	-	0	0	-	1

† Character "*" denotes a movement that does not access the driveway and therefore cannot be considered for Non-pass-by trips.

‡ A negative value in the pass-by row denotes trips that have been diverted to an inbound movement.

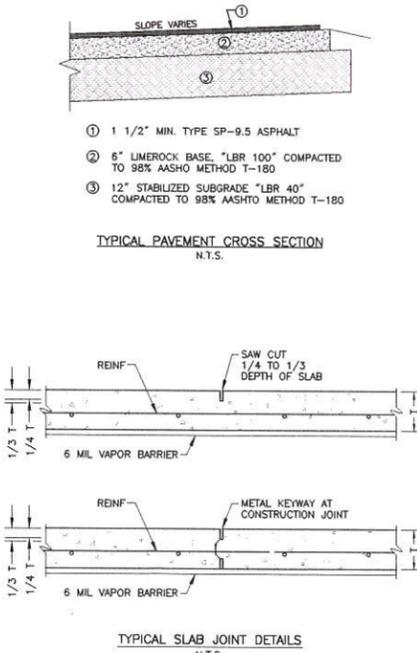
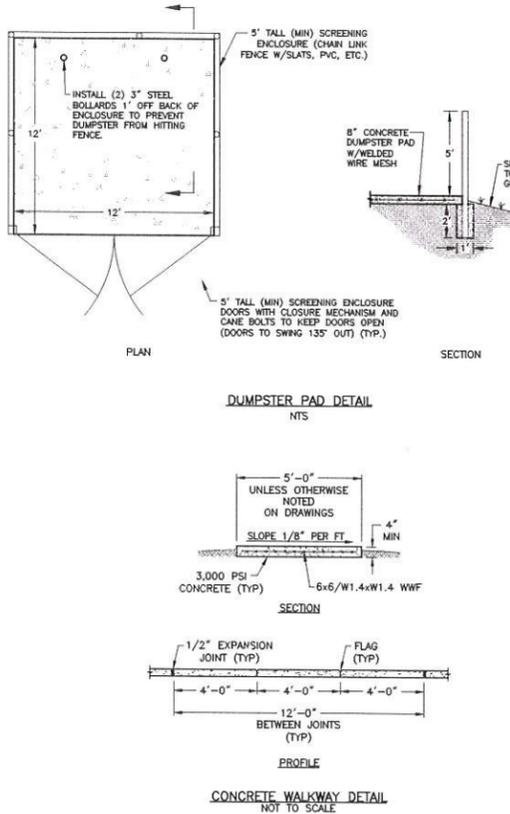
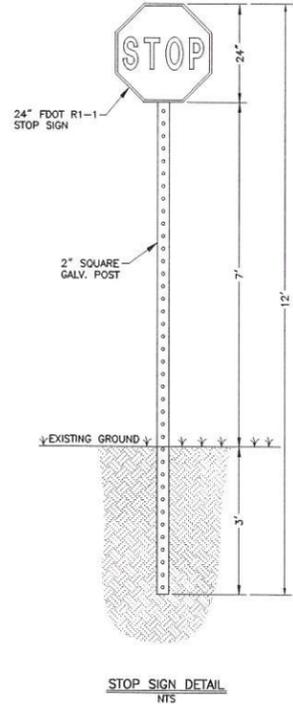
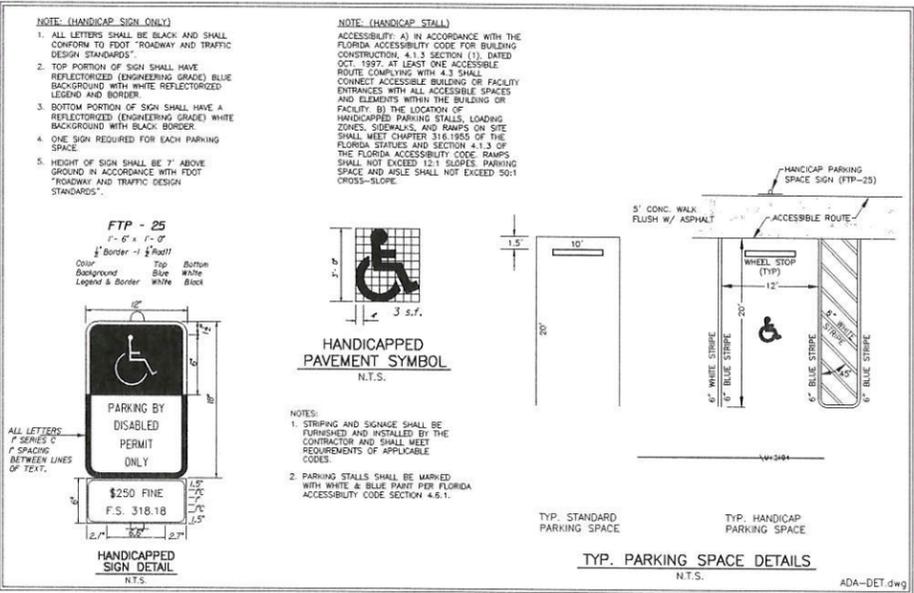
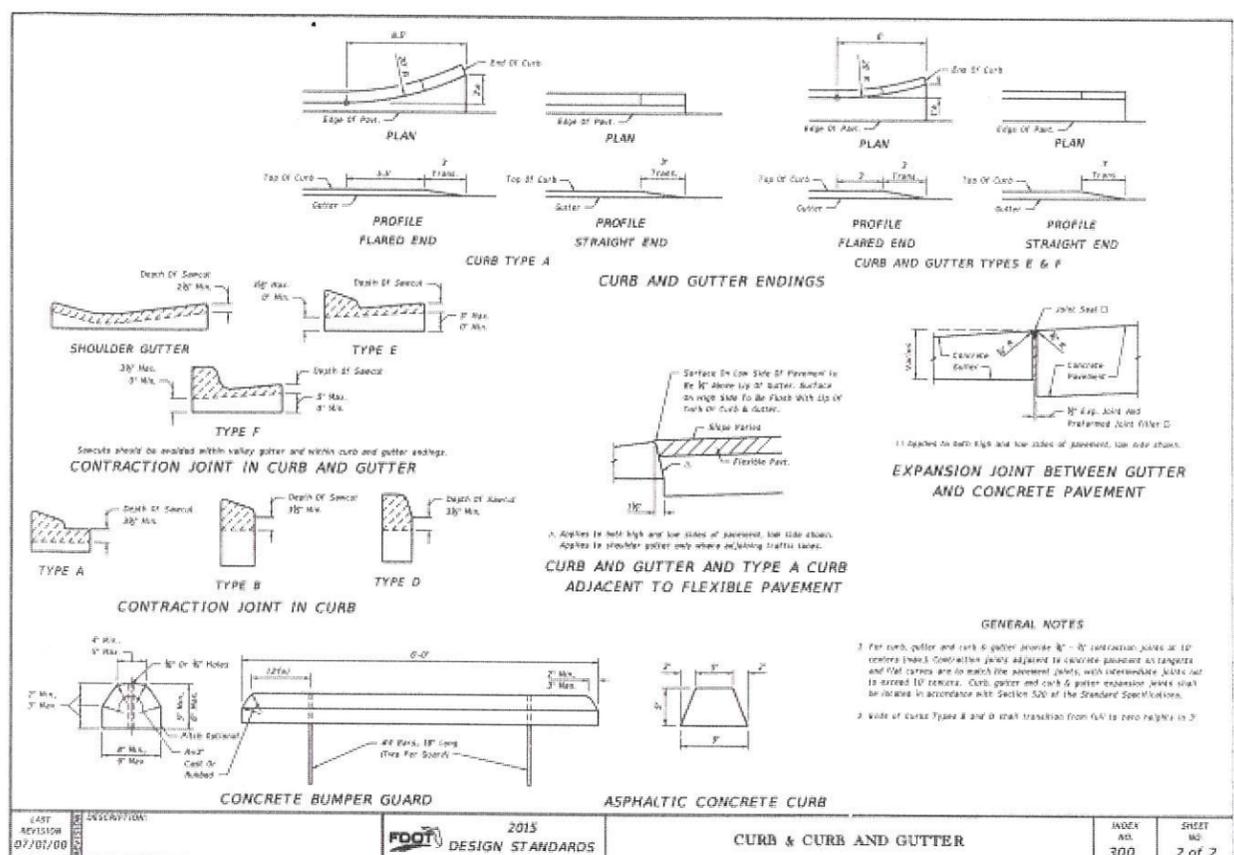
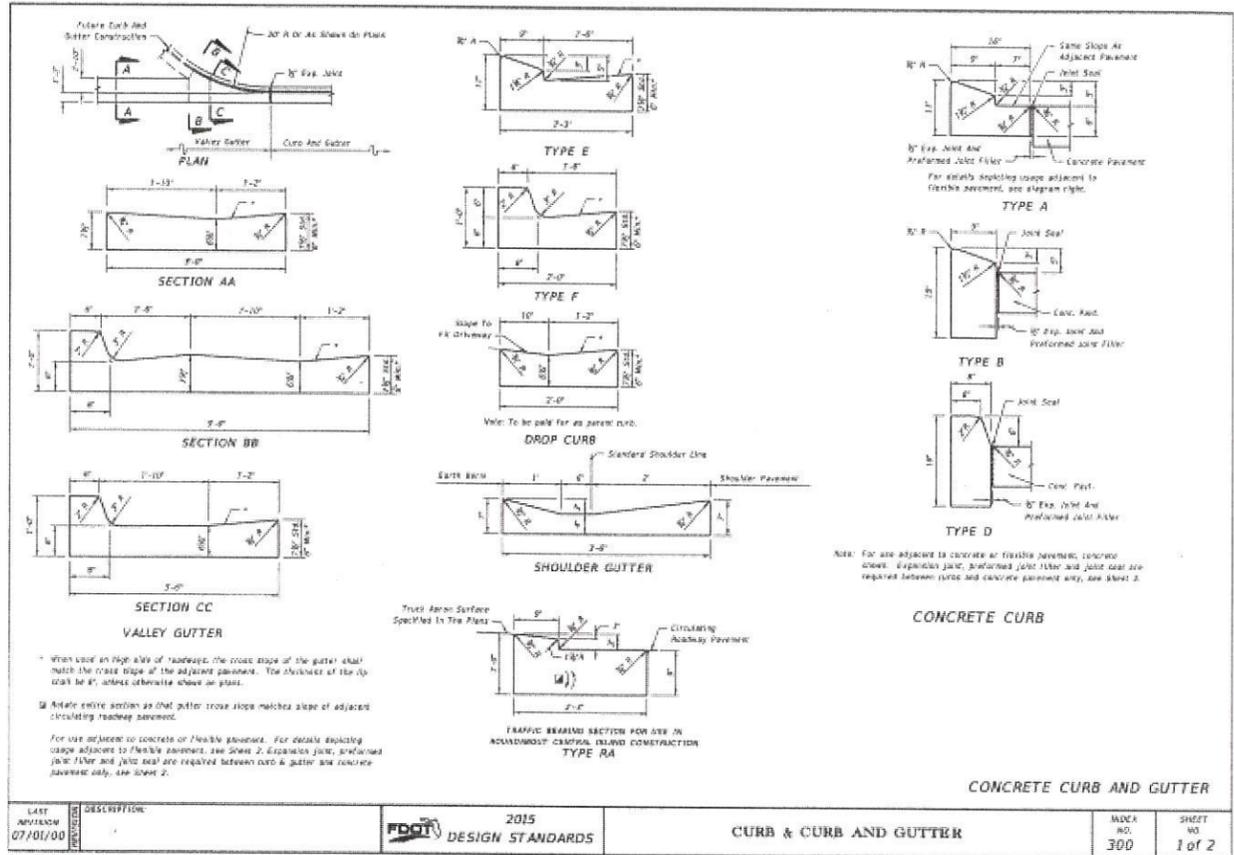
FY 2014-15 Transportation Improvement Program (TIP)



ESTIMATED
TRIP DISTRIBUTION / ASSIGNMENTS

SMALLWOOD/TUTOR
OAK ST 2600 BUDY SITE

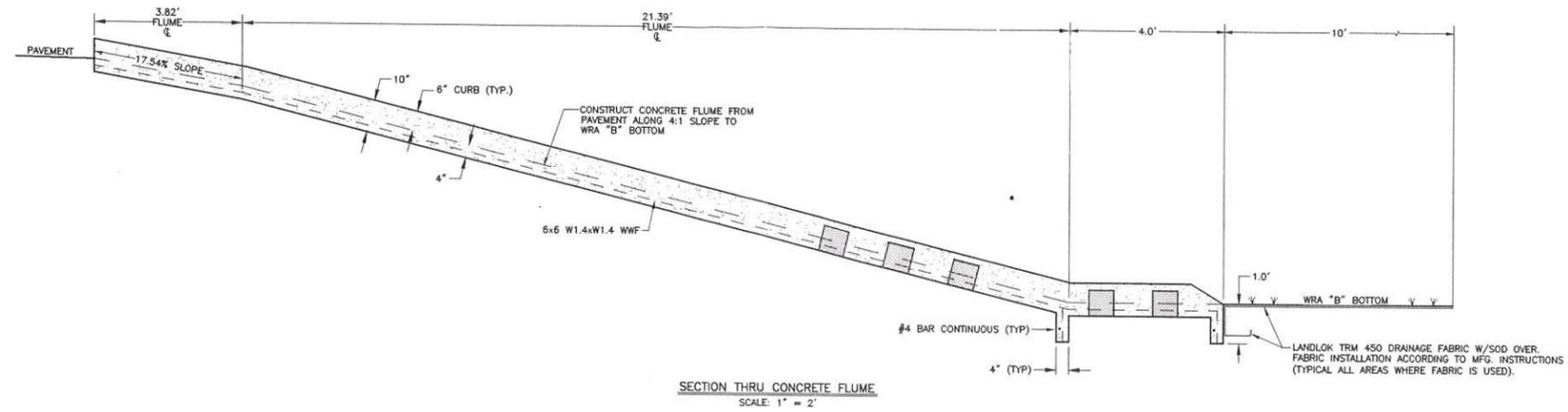
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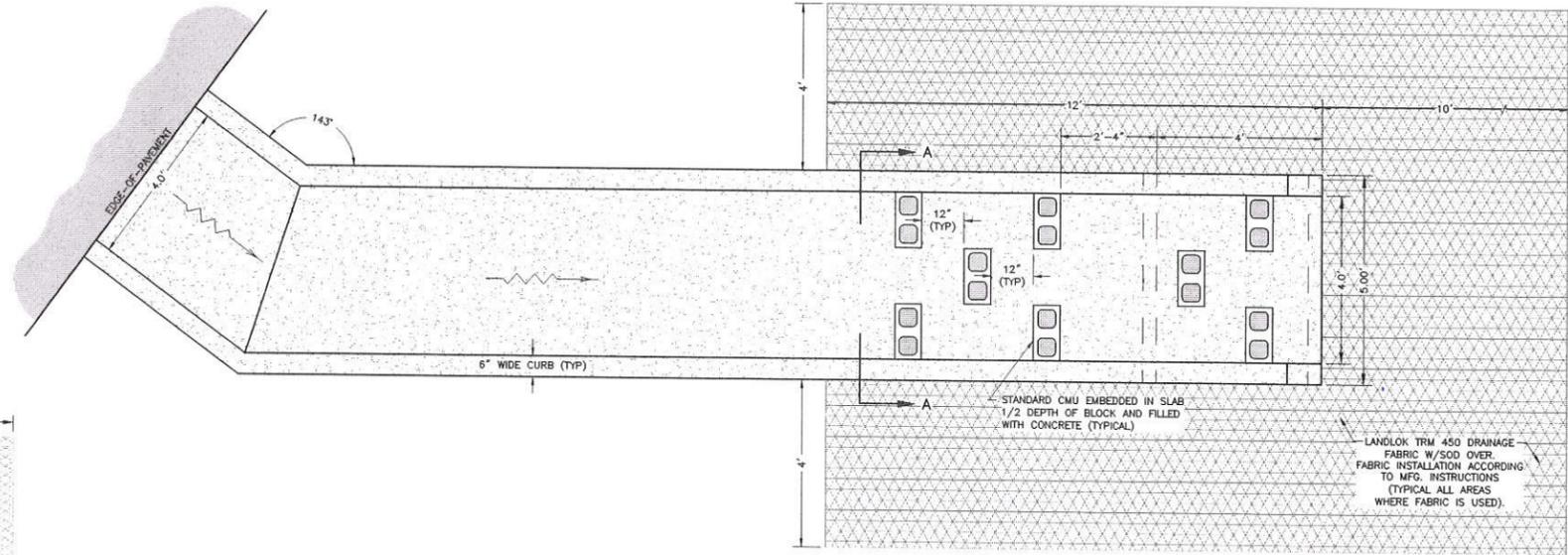
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PROJECT:	OAK STREET 3600 SF BUILDING SITE	REVISIONS:	DATE:
DRAWING:	SITE DETAILS	REVISIONS:	DATE:
DAVID W. SPRINGSTEAD, P.E. FLORIDA REGISTRATION No. 48229		REVISIONS:	DATE:
Springstead Engineering, Inc.		REVISIONS:	DATE:
Consulting Engineers Planners CA-0001723 LB-0001723		REVISIONS:	DATE:
727 South 14th Street Leesburg, FL 34748 (352) 787-1414		REVISIONS:	DATE:
SCALE:	FILE:	DATE:	
AS SHOWN	DETAILS	3/15	
DESIGN:	DRAWN:	CHECKED:	
DRAWING: SITE DETAILS			
CLIENT: SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS, LLC.			
JOB NO.:	SHEET:	3	
1510001.000	OF:	6	

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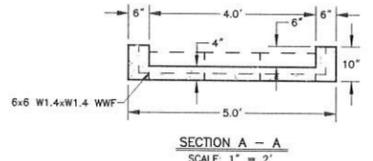
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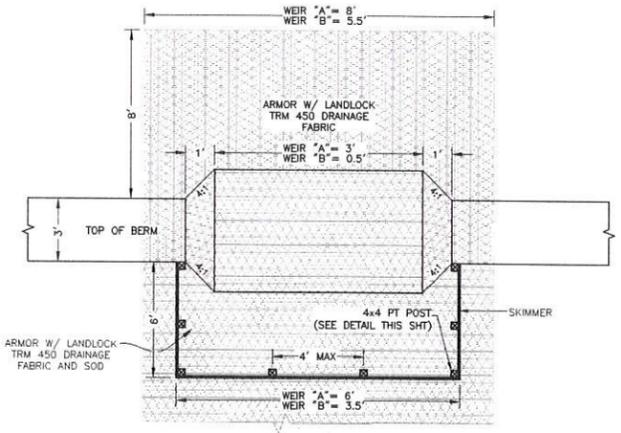
SECTION THRU CONCRETE FLUME
SCALE: 1" = 2"



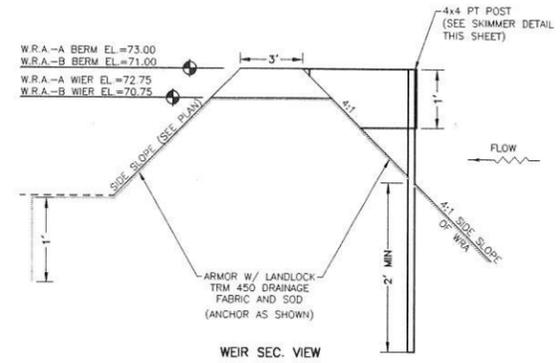
PLAN VIEW CONCRETE FLUME
SCALE: 1" = 2"



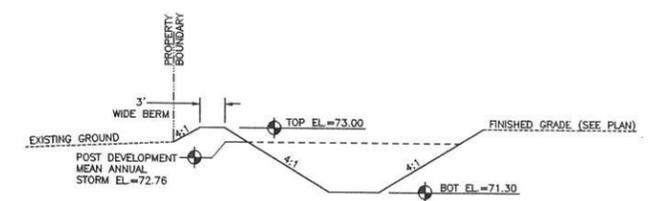
SECTION A - A
SCALE: 1" = 2"



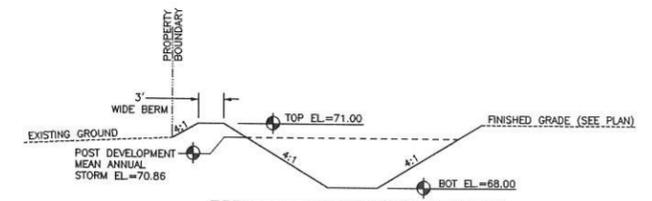
WEIR PLAN VIEW



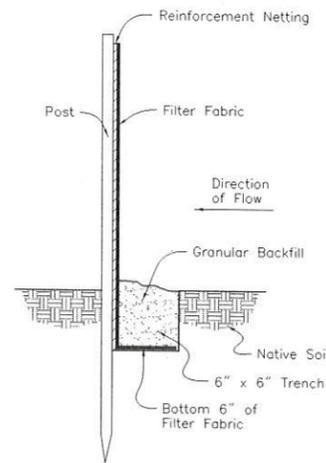
WEIR DETAIL
NOT TO SCALE



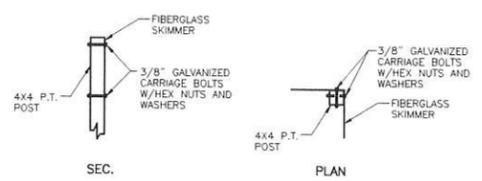
TYPICAL W.R.A-A CROSS SECTION
NOT TO SCALE



TYPICAL W.R.A-B CROSS SECTION
NOT TO SCALE



SILT BARRIER DETAIL
NOT TO SCALE



SKIMMER DETAIL
NOT TO SCALE

CLIENT: SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS, LLC.
PROJECT: OAK STREET 3600 SF BUILDING SITE
DRAWING: DRAINAGE DETAILS 4 of 6

David W. Springstead
8.7.15

DAVID W. SPRINGSTEAD, P.E.
FLORIDA REGISTRATION No. 48229

Springstead Engineering, Inc.

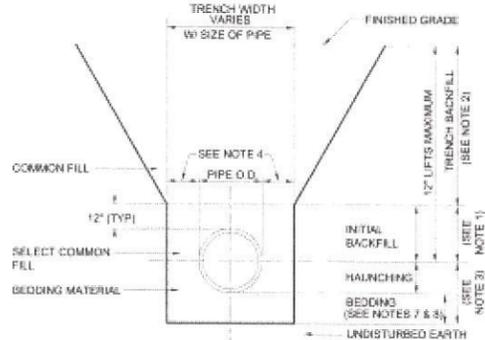


Consulting Engineers
Planners
CA-0001723
LB-0001723
727 South 14th Street
Leesburg, FL 34748
(352) 787-1414

SCALE: AS SHOWN	FILE: DETAILS	DATE: 3/15
DESIGN: [Signature]	DRAWN: [Signature]	CHECKED: [Signature]
DRAWING: DRAINAGE DETAILS		
CLIENT: SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS, LLC.		
JOB No.: 1510001.000	SECRET: 4	OF: 6

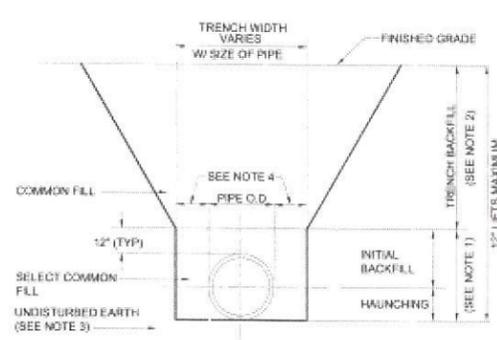
8/7/2015

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- NOTES:
- INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-100.
 - TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-100.
 - TYPE A BEDDING MATERIAL SHALL CONFORM TO FOOT NO. 57 AGGREGATE.
 - 15" MAX (12" MIN) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
 - WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 - ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 - BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 12" AND LARGER.
 - DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
 - FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN TOWN OF LADY LAKE RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RW UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

DETAIL: E101

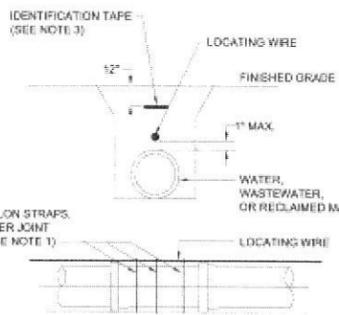


- NOTES:
- INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-100.
 - TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-100.
 - PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
 - 15" MAX (12" MIN) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
 - WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 - ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 - FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN TOWN OF LADY LAKE RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RW UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

DETAIL: E102

TYPE A BEDDING AND TRENCHING DETAIL
NOT TO SCALE

TYPE B BEDDING AND TRENCHING DETAIL
NOT TO SCALE

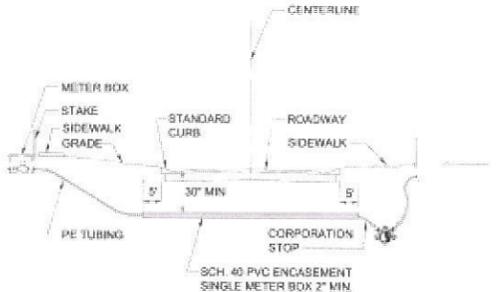


- NOTES:
- ALL PIPE SHALL REQUIRE INSULATED LOCATING WIRE (14 GAUGE SOLID COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE WRAPPED WITH NYLON STRAPS TO TOP CENTERLINE OF THE PIPE.
 - LOCATING WIRE SHALL TERMINATE INSIDE THE TEST STATION BOX AND SHALL EXTEND 12" ABOVE TOP OF COLLAR.
 - IDENTIFICATION TAPE SHALL BE MANUFACTURED OF POLYETHYLENE WITH A MINIMUM THICKNESS OF 4 MILS. TAPE WIDTH SHALL BE 3 INCHES AND SHALL HAVE BACKGROUND COLOR SPECIFIED BELOW, IMPRINTED WITH BLACK LETTERS. IMPRINT SHALL BE AS SPECIFIED BELOW AND SHALL REPEAT ITSELF A MINIMUM OF ONCE EVERY 2 FEET FOR ENTIRE LENGTH OF PIPE.
 - EARLY WARNING TAPE SHALL BE INSTALLED DIRECTLY ABOVE THE PIPE AT APPROXIMATELY 12-INCHES BELOW FINISHED GRADE AND SHALL HAVE THE FOLLOWING COLOR AND WARNING:

SERVICE TYPE	IMPRINT	BACKGROUND COLOR
WASTEWATER	"CAUTION-WASTEWATER LINE BURIED BELOW"	GREEN
POTABLE WATER	"CAUTION-POTABLE WATER LINE BURIED BELOW"	BLUE
RECLAIMED WATER	"CAUTION-RECLAIMED WATER LINE BURIED BELOW"	PURPLE

PIPE LOCATING WIRE
NOT TO SCALE

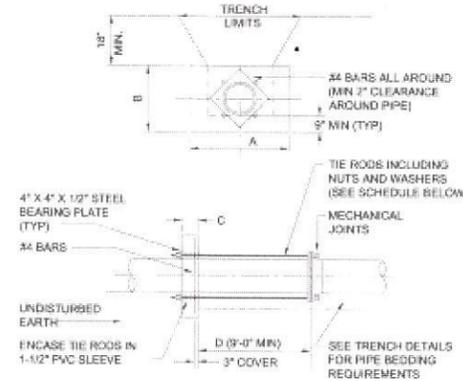
DETAIL: E114



- NOTES:
- DRAWING NOT TO SCALE.
 - ALL BOXES, METERS, BACKFLOWS, VALVES, AND PIPES FURNISHED BY CONTRACTOR.
 - METER SHALL BE INSTALLED WITHIN R/W.
 - MINIMUM SEPARATION BETWEEN CURB AND METER BOX AND BETWEEN METER BOX AND SIDEWALK.
 - CONTRACTOR TO LOCATE CURB STOP BY PLACING A STAKE (2" X 2" SQUARE AT 24" ABOVE GROUND) TOP PAINTED WITH THE COLOR OF THE UTILITY SERVICE AND WITH THE LOT NUMBERS IT SERVES.
 - ALL DOUBLE SERVICE LINES MUST BE 2" MIN. DIAMETER.
 - ALL SERVICE LINES UNDER ROADWAY SHALL BE POLY OR SCH. 80 PVC.
 - ALL SERVICE TAPS MUST BE 2" MIN. WITH CORP STOP.
 - ALL METERS MUST BE NEPTUNE E-CODER-PT VERSION.
 - ALL METER BOXES MUST BE NDS D1000, D1200, D1500.

DETAIL: E120

WATER SERVICES (TYPICAL)
NOT TO SCALE



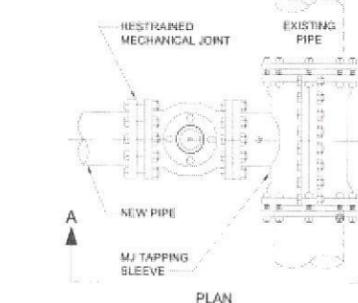
- NOTES:
- ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
 - MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
 - BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
 - ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
 - NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
 - DESIGN PRESSURE: 100 PSI.

PIPE SIZE (INCHES)	DIMENSIONS (FT.)				DIA.	NO.
	A	B	C	D		
6	2.0	2.0	1.0	3/4	2	
8	2.5	2.5	1.0	3/4	2	
10	3.0	2.5	1.0	3/4	2	
12	4.0	3.0	1.0	3/4	2	
16	5.0	3.5	1.5	3/4	4	
20	7.5	4.0	1.5	3/4	4	
24	8.0	5.0	1.5	3/4	6	

NOTE: THRUST COLLAR AREAS TO BE COMPACTED ON BASIS OF 2000 LBS/SF 90% RESTRAINT BEARING.

DETAIL: E105-2

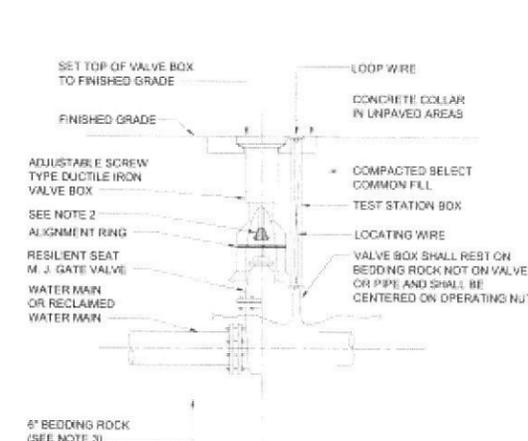
THRUST COLLAR RESTRAINTS
NOT TO SCALE



NOTE: VALVE SHALL BE MANUFACTURED BY AMERICAN AVK.

DETAIL: E121-1

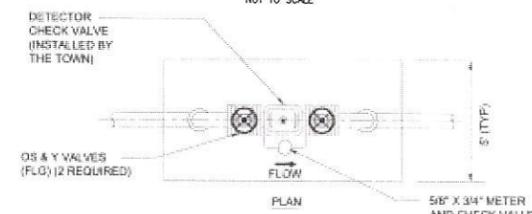
TAPPING SLEEVE AND GATE VALVE ASSEMBLY
NOT TO SCALE



- NOTES:
- PVC PIPE OR DUCTILE IRON PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
 - THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3" OF FINISHED GRADE.
 - BEDDING MATERIAL SHALL CONFORM TO FOOT NO. 57 AGGREGATE.
 - WIRE SHALL TERMINATE IN TEST STATION BOX.
 - REFER TO FIGURE A111 FOR INSTALLATIONS AT A DEPTH OF 5' OR GREATER.
 - VALVES SHALL BE AMERICAN AVK SERIES 25.

DETAIL: E107

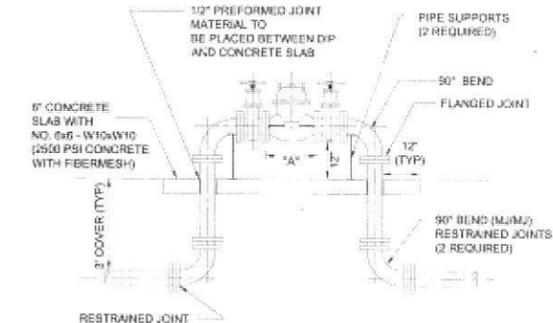
GATE VALVE AND BOX WATER MAINS
NOT TO SCALE



- NOTES:
- ALL ABOVE GROUND PIPE JOINTS SHALL BE FLANGED.
 - TOWN SHALL OWN & MAINTAIN METER ONLY.
 - PAINING IN ACCORDANCE WITH THIS MANUAL.
 - INGRESS EGRESS EASEMENT REQUIRED.
 - DETECTOR CHECK VALVE SHALL BE OWNER'S RESPONSIBILITY.
 - INSTALLED TO ANWA STANDARDS.

DETAIL: E202

DETECTOR CHECK VALVE WATER ASSEMBLY
NOT TO SCALE



VALVE SIZE	"
4"	16-1/2"
6"	22-1/2"
8"	28-1/2"

CLIENT: SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS, LLC.

PROJECT: OAK STREET 3600 SF BUILDING SITE

DRAWING: WATER AND SEWER DETAILS SHEET-1

5 of 6

REV.	DATE	DESCRIPTION
1	5/15/2015	REVISED AS PER TOWN OF LADY LAKE COMMENTS
2	6/9/2015	REVISED AS PER TOWN OF LADY LAKE COMMENTS
3	5/20/2015	REVISED AS PER TOWN OF LADY LAKE COMMENTS

DAVID W. SPRINGSTEAD, P.E.
FLORIDA REGISTRATION No. 48229



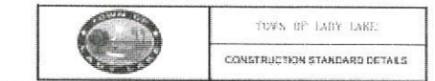
Consulting Engineers
Planners
CA-0001728
LB-0001728
727 South 14th Street
Leesburg, FL 34748
(352) 787-1414

SCALE:	FILE:	DATE:
AS SHOWN	DETAILS	3/15

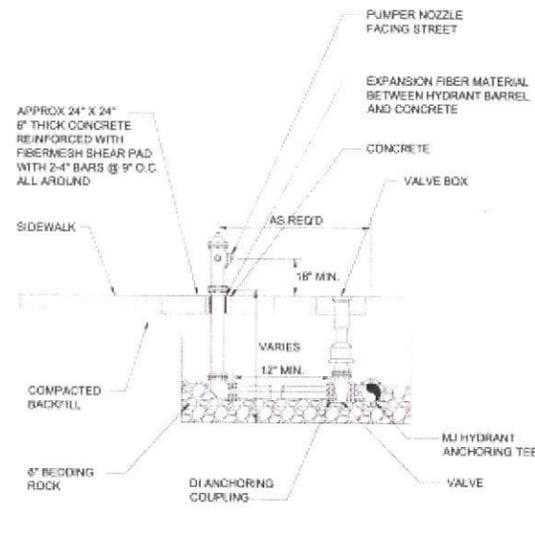
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[Signature]	[Signature]	[Signature]

DRAWING:	CLIENT:	JOB NO.:	SHEET:	DATE:
WATER AND SEWER DETAILS SHEET-1	SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS, LLC.	1510001.000	5	6/7/2015

STANDARD DETAIL AS PER THE LATEST TOWN OF LADY LAKE LAND DEVELOPMENT REGULATIONS CODE.

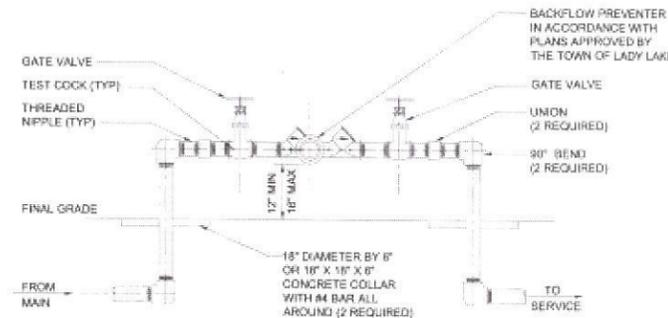


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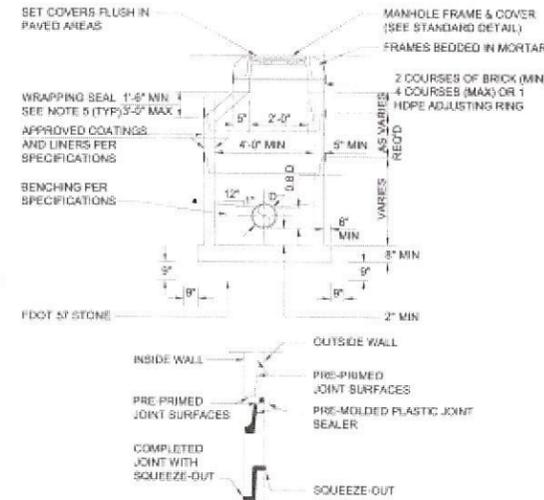
- NOTES:
1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
 2. ALL PIPE AND APPURTENANCES SHALL BE RESTRAINED.
 3. ALL FIRE HYDRANT AND VALVES TO BE ALK. MUELER OR CLOW.

FIRE HYDRANT ASSEMBLY
NOT TO SCALE



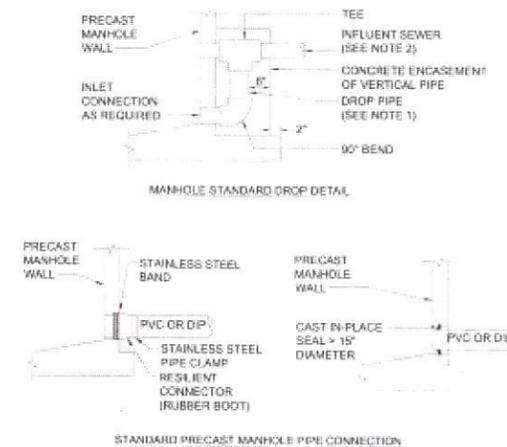
- NOTES:
1. ALL PIPE FITTINGS SHALL BE SCH 80 DR GALVANIZED
 2. RP2 TO BE MANUFACTURED BY WATTS OR WILKINS
 3. INSTALLED TO AWWA STANDARDS.

REDUCED PRESSURE BACKFLOW PREVENTER
NOT TO SCALE



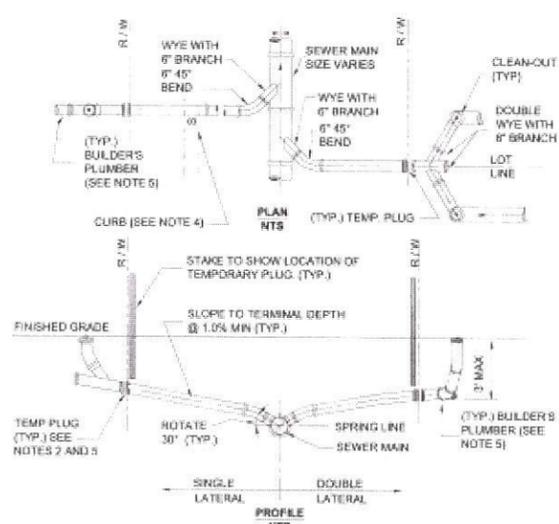
- NOTES:
1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24\"/>
 - 2. APPROVED CONCENTRIC CONE DESIGN MAY BE USED AS AN ALTERNATIVE.
 - 3. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
 - 4. LIFT HOLES THROUGH STRUCTURE ARE NOT PERMITTED.
 - 5. WRAP TIGHTLY AROUND CASTING JOINTS TO EFFECTIVELY SEAL THEM FROM GROUND WATER INFILTRATION.
 - 6. HDPE ADJUSTING RINGS MAY BE SUBSTITUTED FOR BRICK RISERS.

PRECAST CONCRETE MANHOLE
NOT TO SCALE



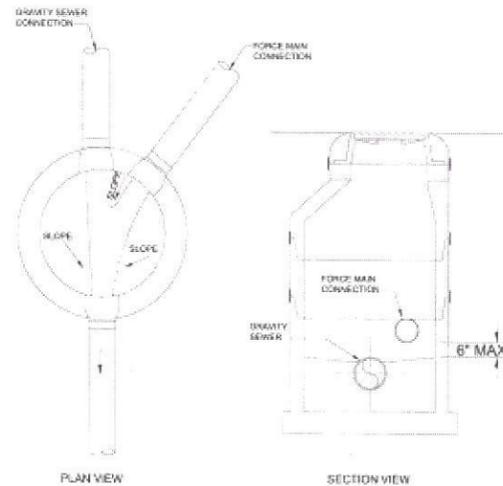
- NOTES:
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
 2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT LINES WHICH HAVE AN INVERT 2\"/>
 - 3. ALTERNATE WATER TIGHT CONNECTION DETAILS FOR CONNECTION OF 24\"/>
 - 4. INSIDE SERVICE DROP CONNECTIONS ARE PERMITTED ON EXISTING MANHOLES.

MANHOLE CONNECTION
NOT TO SCALE



- NOTES:
1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
 2. SERVICE LATERAL SHALL BE CAPPED BY DEVELOPER'S CONTRACTOR.
 3. ALL FITTINGS SHOWN ARE TO BE INSTALLED.
 4. SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY CUTTING AN 'X' IN THE CURB DIRECTLY OVER THE LATERAL.
 5. BUILDER'S PLUMBER WILL REMOVE PLUG INSTALL CLEANDOUT AND CONNECT SERVICE LATERAL TO HOUSE.

SERVICE LATERAL
NOT TO SCALE



- NOTES:
1. FORCE MAIN ORIENTED TO FACILITATE FLOW AND SHALL ENTER MANHOLE 1' ABOVE FLOW LINE.
 2. BENCH AS REQUIRED FOR NEW FORCE MAIN.
 3. MANHOLE RECEIVING FORCE MAIN AND NEXT MANHOLE SHALL BE COATED WITH SPECIALIZED COATING OR LINING.
 4. FORCE MAIN CONNECTION DESIGN SHALL BE AS APPLICABLE BY UTILITIES.

FORCE MAINOR SEWER CONNECTION
NOT TO SCALE

CLIENT: **SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS, LLC.**
PROJECT: **OAK STREET 3600 SF BUILDING SITE**
DRAWING: **WATER AND SEWER DETAILS SHEET-2**

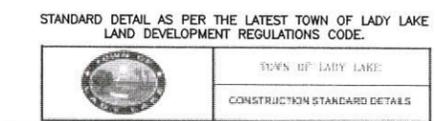
David W. Springstead
8.7.15
DAVID W. SPRINGSTEAD, P.E.
FLORIDA REGISTRATION No. 48229

Springstead Engineering, Inc.
Consulting Engineers
Planners
CA-0001728
LB-0001728
727 South 14th Street
Leesburg, FL 34748
(352) 787-1414

SCALE:	FILE:	DATE:
AS SHOWN	DETAILS	3/15
DESIGN:	DRAWN:	CHECKED:
<i>AD</i>	<i>LLB</i>	<i>AD</i>

DRAWING: **WATER AND SEWER DETAILS SHEET-2**

CLIENT: **SMALLWOOD/TUTOR REAL ESTATE INVESTMENTS, LLC.**
JOB NO.: **1510001.000**
SHEET: **5A**
OF: **6**



GENERAL PROJECT DATA

FOR IDENTIFICATION OF CONTRACTUAL AGREEMENTS, THIS SET OF DRAWINGS IS DATED MARCH 2015. ANY REVISIONS THEREAFTER WILL BE NOTED AND DATED ON THE AFFECTED DRAWING(S).

ALL CONSTRUCTION PROJECTS 1 OR MORE ACRES IN SIZE THAT DISCHARGE TO OFFSITE AREAS ARE REQUIRED TO ABIDE BY THE PROVISIONS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT, UNLESS OTHERWISE NOTED ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMITTING NPDES "NOTICE OF INTENT" (N.O.I.) AND "NOTICE OF TERMINATION" (N.O.T.) NOTICES TO THE EPA OR LOCAL STATE AGENCY HAVING JURISDICTION OVER THE NPDES PROGRAM. THE CONTRACTOR SHALL KEEP ON-SITE A COPY OF THE SWPPP, NOI, AND WATER MANAGEMENT DISTRICT PERMITS ISSUED TOGETHER WITH THE INSPECTION REPORTS AND CURRENT PLANS, INCLUDING ANY MODIFICATIONS REQUIRED.

THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS TO THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANY AND THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED BY THE CONTRACTOR BY THE RELOCATION OF VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT, AND NO EXTRA COMPENSATION WILL BE ALLOWED.

DRAINAGE SYSTEMS

THE DRAINAGE FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR DURING THE COURSE OF THIS PROJECT. THE CONTRACTOR SHALL INCLUDE FUNDS TO OPERATE AND MAINTAIN THE DRAINAGE SYSTEMS DURING THE WORK PROCESS.

THE UTILITIES ARE THE PROPERTY OF THE FOLLOWING:

Table with 2 columns: POWER, WATER & SEWER. Lists utility companies like Florida Power Corporation and Town of Lady Lake.

TELEPHONE

OCALA LINK, 302 E. BROADWAY, CENTRAL FLORIDA 32474

CABLE

BRIGHT HOUSE, LEESBURG, FL 34748

THE CONTRACTOR IS TO OBTAIN A COPY OF THE SOILS REPORT FOR REVIEW PRIOR TO CONSTRUCTION, AND THE CONSTRUCTION IS TO CONFORM TO THE RECOMMENDATIONS IN THAT REPORT.

SURVEY INFORMATION PREPARED BY: FARNER/BARLEY

AS-BUILTS

AS-BUILTS SHALL BE PROVIDED BY THE CONTRACTOR TO THE ENGINEER TWO WEEKS PRIOR TO FINAL INSPECTION. ALL AS-BUILT DATA SHALL BE PROVIDED BY A FLORIDA LICENSED SURVEYOR, SIGNED, SEALED, AND DATED BY THE RESPONSIBLE PARTY. SEE INDIVIDUAL SECTIONS (STORM, WATER SYSTEM, ETC.) FOR ADDITIONAL AS-BUILT REQUIREMENTS.

PERMITS AND PERMIT REQUIREMENTS

THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF ALL REGULATORY AND LOCAL AGENCY PERMITS. THE CONTRACTOR SHALL BE EXPECTED TO REVIEW AND ABIDE BY ALL THE REQUIREMENTS AND LIMITATIONS SET FORTH IN THE PERMITS. A COPY OF THE PERMIT SHALL BE KEPT ON THE JOB AT ALL TIMES.

LAYOUT AND CONTROL

UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL PROVIDE FOR THE LAYOUT OF ALL OF THE WORK TO BE CONSTRUCTED. BENCHMARK INFORMATION SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNER'S SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

QUALITY CONTROL TESTING REQUIREMENTS

ALL TESTING RESULTS SHALL BE PROVIDED TO THE OWNER/OPERATOR, CITY, COUNTY, AND THE ENGINEER. TESTING REQUIREMENTS ARE TO BE IN ACCORDANCE WITH THE OWNER/OPERATOR'S SPECIFICATIONS AND REQUIREMENTS. ALL TEST RESULTS SHALL BE PROVIDED (PASSING AND FAILING) ON A REGULAR AND IMMEDIATE BASIS. CONTRACTOR SHALL PROVIDE TESTING SERVICES THROUGH A FLORIDA LICENSED GEOTECHNICAL ENGINEERING FIRM ACCEPTABLE TO THE OWNER AND ENGINEER. CONTRACTOR TO SUBMIT TESTING FIRM TO OWNER FOR APPROVAL PRIOR TO COMMENCING TESTING.

SHOP DRAWINGS

SHOP DRAWINGS AND CERTIFICATIONS FOR ALL STORM DRAINAGE, WATER SYSTEM, SEWER SYSTEM, AND PAVING SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.

EARTHWORK

EARTHWORK QUANTITIES

THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS AND CALCULATIONS AS NECESSARY TO DETERMINE EARTHWORK QUANTITIES. THERE IS NO IMPLICATION THAT EARTHWORK BALANCES, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY IMPORT FILL NEEDED, OR FOR REMOVAL AND DISPOSAL OF EXCESS MATERIALS.

EROSION CONTROL

EROSION AND SILTATION CONTROL MEASURES ARE TO BE PROVIDED AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR ON AN ONGOING BASIS AND ARE TO BE MAINTAINED OR REPAIRED ON AN IMMEDIATE BASIS, AS REQUIRED.

WETLAND PROTECTION

THE LIMITS OF THE ON-SITE WETLANDS HAVE BEEN PROVIDED TO THE CONTRACTOR ON THE CONSTRUCTION PLANS OR ON PERMIT MATERIALS. THE METHODS ARE TO BE PROTECTED FROM DISTURBANCE AT ALL TIMES. CONTRACTOR SHALL PROVIDE EROSION, SILTATION, AND DIVERSION MEASURES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

LIMITS OF DISTURBANCE

AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. REPAIR OR RECONSTRUCTION OF DAMAGED AREAS ON SURROUNDING PROPERTIES SHALL BE PERFORMED BY THE CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED.

TREE REMOVAL

THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER WHEN ALL WORK IS LAID OUT (SURVEY STAKED), SO THAT A DETERMINATION MAY BE MADE OF SPECIFIC TREES TO BE REMOVED. NO TREE ON THE CONSTRUCTION PLANS AS BEING SAVED SHALL BE REMOVED WITHOUT PERMISSION FROM THE OWNER AND ENGINEER.

CLEARING AND GRUBBING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING FOR SITE CONSTRUCTION INCLUDING CLEARING FOR PAVING, UTILITIES, DRAINAGE FACILITIES AND BUILDING CONSTRUCTION. ALL AREAS TO BE CLEARED SHALL BE FIELD STAKED AND REVIEWED BY THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION.

MATERIAL STORAGE/DEBRIS REMOVAL

ALL MATERIALS EXCAVATED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STOCKPILED AT ON-SITE LOCATIONS AS SPECIFIED BY THE OWNER. MATERIALS SHALL BE STOCKPILED SEPARATELY AS USABLE (NONORGANIC) FILL STOCKPILES AND ORGANIC (MUCK) STOCKPILES. IF MUCK IS ENCOUNTERED, CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL UNSAVED FILL MATERIALS FROM THE SITE. ALL CLAY ENCOUNTERED SHALL BE EXCAVATED OUT AND REPLACED WITH CLEAN GRANULAR FILL MATERIALS.

FILL MATERIAL

ALL FILL MATERIALS SHALL CONTAIN NO MUCK, STUMPS, ROOTS, BRUSH, VEGETATIVE MATTER, RUBBISH OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE AND ENDURING BACKFILL. FILL SHALL BE CLEAN, NON-ORGANIC, GRANULAR MATERIAL WITH NOT MORE THAN 10% PASSING THE NO. 200 SIEVE.

COMPACTION

FILL MATERIALS PLACED UNDER ROADWAYS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS SPECIFIED IN ASHTO T-180. ALL OTHER FILL AREAS ARE TO BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY AS SPECIFIED IN ASHTO T-180. FILL MATERIALS SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 12" LIFTS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND OWNER WITH (PASSING AND FAILING) TESTING RESULTS. RESULTS SHALL BE PROVIDED ON A TIMELY AND REGULAR BASIS PRIOR TO CONTRACTOR'S PAY REQUEST SUBMITTAL FOR THE AFFECTED WORK.

POTABLE WATER/FIRE SYSTEMS:

OWNER/OPERATOR:

THE ENTITY THAT WILL OWN, OPERATE AND MAINTAIN THE WATER SYSTEM SHOWN ON THESE PLANS IS SMALLWOOD/TUTOR. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL THE REQUIREMENTS OF THAT ENTITY.

PIPE MATERIALS:

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL INFRASTRUCTURE TO BE CONSTRUCTED. WATER SYSTEM SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND OWNER FOR REVIEW PER THE OWNER'S POLICY FOR REVIEW OF SHOP DRAWINGS.

POLYVINYL CHLORIDE PLASTIC PIPE (PVC) 4" THROUGH 12" SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C900 (LATEST EDITION) AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI AND HAVE A DR (DIMENSION RATIO) OF 18. ALL PVC PIPE SHALL BEAR THE NSF LOGO FOR POTABLE WATER. JOINTS SHALL BE OF THE PUSH-ON TYPE AND COUPLINGS CONFORMING TO ASTM D3139. DR18 PIPE PIPE SMALLER THAN 4" SHALL BE SCH 80 THROUGH 12" IN ACCORDANCE WITH ASTM D1785.

DUCTILE IRON PIPE (DIP) SHALL BE STANDARD PRESSURE CLASS 350 IN SIZES 4" THROUGH 12" AND CONFORM TO ANSI/AWWA C150/A21.50 (LATEST EDITION). ALL DUCTILE IRON PIPE SHALL HAVE A STANDARD THICKNESS OF CEMENT MORTAR LINING AS SPECIFIED IN ANSI/AWWA C104/A21.4 (LATEST EDITION). PIPE JOINTS SHALL BE OF THE PUSH-ON RUBBER GASKET TYPE CONFORMING TO ANSI/AWWA C111/A21.11 (LATEST EDITION).

PVC PIPE SMALLER THAN 4" SHALL BE SCHEDULE 80 IN ACCORDANCE WITH ASTM D2464.

FITTINGS FOR DUCTILE IRON PIPE AND PVC C-900 PIPE SHALL BE DUCTILE IRON AND SHALL CONFORM TO ANSI/AWWA C153/A21.10 (LATEST EDITION) AND SHALL BE CEMENT LINED IN CONFORMANCE WITH ANSI/AWWA C104/A21.4 (LATEST EDITION).

POLYETHYLENE WRAP USED FOR CORROSION PREVENTION ON DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/ASTM D1248. THE MINIMUM NOMINAL THICKNESS SHALL BE 0.008 IN. (8 MILS). INSTALLATION OF POLY WRAP SHALL BE IN ACCORDANCE WITH ANWA C105.

VALVES:

GATE VALVES SHALL BE RESILIENT SEAT AND SHALL CONFORM TO ANSI/AWWA C509.87 WITH HANDWHEEL OR WRENCH NUT, EXTENSION STEMS AND OTHER APPURTENANCES AS REQUIRED. MANUFACTURER'S CERTIFICATION OF THE VALVES COMPLIANCE WITH ANWA SPECIFICATION C509 AND TESTS LISTED THEREIN WILL BE REQUIRED. VALVES SHALL BE CLOW, DRESSER KENNEDY, AMERICAN.

VALVE BOXES:

VALVE BOXES ON BURIED POTABLE WATER MAINS SHALL BE ADJUSTABLE, CAST IRON CONSTRUCTION, WITH MINIMUM INTERIOR DIAMETER OF 5" WITH COVERS CAST WITH THE INSCRIPTION IN LEGIBLE LETTERING ON TOP. WATER BOXES SHALL BE SUITABLE FOR THE APPLICABLE SURFACE LOADING AND VALVE SIZE, AND SHALL BE MANUFACTURED BY MUELLER COMPANY, MODEL 10364, OR APPROVED EQUAL. VALVE BOX PADS SHALL BE 18" X 18" X 4" THICK CONCRETE WITH #4 REINFORCING BARS. PAD TO BE SET AT FINISHED GRADE WITH RECESSED DETECTOR WIRE CONDUIT PORT PER DETAIL.

PIPE INSTALLATION:

PIPE INSTALLATION OF PVC WATER MAIN SHALL BE IN CONFORMANCE WITH ASTM D2774 (LATEST EDITION). INSTALLATION OF DUCTILE IRON PIPE WATER MAIN SHALL BE IN CONFORMANCE WITH ANWA C600.87.

COMPACTED BACKFILL SHALL BE TO 98% MAXIMUM DENSITY AS DETERMINED BY ASHTO T-180 UNDER ALL PAVEMENTS WITH 12" MAXIMUM LIFT THICKNESS. OTHER COMPACTION OF BACKFILL SHALL BE TO 95% MAXIMUM DENSITY AS DETERMINED BY ASHTO T-180 WITH 12" MAXIMUM LIFT THICKNESS. SEE PIPE TRENCHING DETAILS.

MINIMUM COVER OVER ALL PIPE SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE. SEE PLAN AND PROFILE SHEETS FOR REQUIRED DEPTH.

ALL WATER MAINS SHALL BE INSTALLED WITH PIPE RESTRAINTS OR THRUST BLOCKS, UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE.

ALL PLUGS, CAPS, TEES, BENDS, FIRE HYDRANTS, VALVES, ETC. SHALL BE PROVIDED WITH PIPE RESTRAINTS OR THRUST BLOCKS. FOR RESTRAINT AND THRUST BLOCK CONSTRUCTION SPECIFICATIONS, REFER TO WATER SYSTEM DETAILS.

PIPE IDENTIFICATION:

ALL WATER MAIN PIPE, INCLUDING FITTINGS, SHALL BE COLOR CODED OR MARKED USING BLUE AS PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE. SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE. FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE AT WASTEWATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED IN ACCORDANCE WITH SUBSECTION 62-555.320(10), F.A.C., AND ALL OTHER ABOVEGROUND PIPE SHALL BE PAINTED BLUE OR SHALL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE. A CONTINUOUS 14 GAUGE COPPER DETECTOR WIRE SHALL BE ATTACHED AS SHOWN ON THE WATER DETAIL SHEET.

DISINFECTION AND TESTING:

ALL PIPE SHALL BE DISINFECTED IN ACCORDANCE WITH ANWA STANDARD C651.

ALLOWABLE LEAKAGE FOR PVC PRESSURE MAINS WILL BE IN ACCORDANCE WITH ANWA M23.

THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TEST PUMPING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC AND LEAKAGE TESTING. CONTRACTOR SHALL CONTACT THE ENGINEER, OWNER/OPERATOR AND COUNTY IN WRITTEN FORM, FORTY-EIGHT (48) HOURS IN ADVANCE OF PROPOSED TESTING. THE CONTRACTOR SHALL PERFORM SATISFACTORY PRETESTING PRIOR TO NOTIFICATION.

THE WATER SYSTEM SHALL BE SOAK TESTED 24 HOURS @ 1.5 TIMES THE WORKING PRESSURE OR 150 PSI WHICHEVER IS GREATER, AND TESTED FOR LEAKAGE AT 150 PSI FOR TWO HOURS WITH ALLOWABLE LEAKAGE IN ACCORDANCE WITH ABOVE STANDARDS.

ALL TESTING SHALL BE PERFORMED WITH POTABLE WATER. AIR TESTING OF WATER MAINS WILL NOT BE ALLOWED.

CONTRACTOR SHALL PULL BACTERIOLOGICAL TEST SAMPLES FROM THE SAMPLE POINTS SPECIFIED BY THE ENGINEER.

CONNECTIONS TO EXISTING WATER MAINS:

PRIOR TO THE CONNECTION TO ANY EXISTING MAIN, THE PROPOSED WATER MAIN SHALL BE DISINFECTED AND HAVE ENGINEER APPROVED PRESSURE TESTING.

AS-BUILT DRAWINGS:

THE CONTRACTOR SHALL PROVIDE VERTICAL AND HORIZONTAL "AS-BUILT" INFORMATION RELATIVE TO ALL CONSTRUCTED UTILITIES AND STRUCTURES. THREE SETS SHALL BE PROVIDED FOR REVIEW.

AS-BUILT INFORMATION FOR THE WATER SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- 1. LOCATION OF ALL PUMPS, TANKS, RESEVOURS, PRESSURE SYSTEMS, EQUIPMENT, VALVES, FITTINGS, HYDRANTS AND SERVICES. HORIZONTAL AND VERTICAL.
2. LOCATION OF THE WATER MAIN TIED WITH COORDINATES.
3. CERTIFICATION AS TO THE SYSTEM MEETING THE MINIMUM COVER REQUIREMENTS.
4. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION WHICH DEVIATES FROM THE APPROVED ENGINEERING PLANS.
5. UTILITY LOCATES ON SYSTEMS INSTALLED UNDER THIS CONTRACT SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER UNTIL AS-BUILT DRAWINGS ARE REVIEWED AND APPROVED BY THE UTILITY.

PIPE IDENTIFICATION FOR SANITARY/STORM SEWERS:

ALL WASTEWATER/STORMWATER PIPE, INCLUDING FITTINGS, SHALL BE COLOR CODED OR MARKED USING GREEN AS PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL GREEN PIPE. SHALL HAVE A CO-EXTRUDED GREEN EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH GREEN STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE GREEN STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE. FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE AT WASTEWATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED AS SUGGESTED BY F.O.P.R. PIPES SHALL BE PAINTED GREEN OR SHALL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE. A CONTINUOUS 14 GAUGE COPPER DETECTOR WIRE SHALL BE ATTACHED AS SHOWN ON THE WATER DETAIL SHEET.

SANITARY SEWER NOTES:

OWNER/OPERATOR:

THE ENTITY THAT WILL OWN, OPERATE AND MAINTAIN THE SYSTEM SHOWN ON THESE PLANS IS SMALLWOOD/TUTOR. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL THE REQUIREMENTS OF THAT ENTITY.

LATERALS:

- 1. ALL SERVICE LATERALS AND FITTINGS SHALL BE A MINIMUM OF 4" IN DIAMETER.
2. ALL LATERALS SHALL TERMINATE WITH A 4" CLEAN-OUT AT THE PROPERTY LINE, AND AT A DEPTH TO FINAL GRADE OF 3 FEET.
3. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2' X 2' X 2' ABOVE GRADE WOODEN STAKE OR APPROVED MARKER AND CURB MARKED WITH A "S"
4. IF CLEANOUTS ARE NOT INSTALLED AT THE TIME OF FINAL INSPECTION, THEN THE TERMINAL END OF EACH LATERAL SHALL BE EXPOSED.

MAINS AND MANHOLES:

- 1. ALL GRAVITY SANITARY SEWER MAINS SHALL BE CONSTRUCTED OF DR-35 PVC PIPE MEETING ASTM 3034, AND SHALL HAVE A MINIMUM COVER OF THREE (3) FEET.
2. WHERE REQUIRED, MAINS SHALL BE CLASS 50 DUCTILE IRON PIPE (DIP) MEETING ANWA C150 AND C151. MAINS SHALL BE 60 MIL EPOXY COATED WITH POLYETHYLENE WRAP CONFORMING TO ANWA C105.
3. MAINS AND LATERALS WITH LESS THAN THREE (3) FEET OF COVER SHALL BE CLASS 50 DIP.
4. ALL PVC PIPE SHALL BEAR THE NSF-DW SEAL.
5. JOINTS SHALL BE INTEGRAL BELL ELASTOMER GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477. APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UN-B-7.
6. JOINTS BETWEEN PIPES OF DISSIMILAR MATERIALS MAY BE MADE WITH A FLEXIBLE MECHANICAL COMPRESSION COUPLING WITH NUMBER 318 STAINLESS STEEL BANDS.
7. ALL SANITARY MANHOLES SHALL BE PRECAST CONCRETE WITH A MINIMUM WALL THICKNESS OF FIVE (5) INCHES FOR INSIDE DIAMETER OF FOUR (4) FEET.
8. MANHOLES SHALL MEET ASTM C-478. RING AND COVER SHALL BE TRAFFIC BEARING H-20, CLASS 30 MEETING ASTM A-48.
9. INTERIOR AND EXTERIOR WALLS OF ALL MANHOLES SHALL HAVE A MINIMUM OF TWO (2) 8 MIL COATS OF AN APPROVED PROTECTIVE COAL TAR EPOXY.

FORCEMANS:

- 1. FORCEMANS SHALL BE DR 18 PVC PIPE CONFORMING TO ANWA C-900, OR 60 MIL EPOXY COATED CLASS 50 DIP. PVC PIPE SHALL HAVE INTEGRAL BELL PUSH ON TYPE JOINTS CONFORMING TO ASTM D3139.
2. ALL FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON WITH 250 PSI MINIMUM PRESSURE RATING.
3. METALLIC MARKING TAPE SHALL BE PLACED OVER THE MAIN AT A MAXIMUM DEPTH OF TWO (2) FEET BELOW THE SURFACE AND TIED INTO ALL VALVE BOXES. TESTING FOR CONTINUITY WILL BE REQUIRED.
4. ALL MAINS SHALL HAVE A MINIMUM COVER OF THREE (3) FEET. FORCEMANS WITH LESS THAN THREE (3) FEET OF COVER SHALL BE CLASS 50 DIP.
5. ALL SANITARY MANHOLES TO EXISTING SEWER FORCEMANS SHALL BE ACCOMPLISHED WITH A WET TAP AND THRUST BLOCK.
6. PROVIDE JOINT RESTRAINT OR THRUST BLOCKS AS SHOWN ON THE DETAIL SHEET, UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE.

TESTING:

- 1. SEWAGE COLLECTION SYSTEM:
A. ALL GRAVITY SEWER MAINS REQUIRE LOW PRESSURE AIR TESTING IN ACCORDANCE WITH THE LATEST UNI-BELL STANDARD FOR LOW-PRESSURE AIR TESTS.
B. ALL SEWER MAINS SHALL BE LINED IN PRECAST CONCRETE WITH A MINIMUM WALL THICKNESS OF FIVE (5) INCHES FOR INSIDE DIAMETER OF FOUR (4) FEET.
C. ALL MANHOLES SHALL BE INSPECTED FOR INFILTRATION, ALIGNMENT, FLOW CHANNEL CONSTRUCTION AND COAL TAR EPOXY PAINT THROUGHOUT.
D. HYDRO-STATIC TESTS CONSISTING OF A HYDROSTATIC PRESSURE TEST AND HYDROSTATIC LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY INSTALLED SEWER FORCE MAIN SYSTEM PRESSURE PIPES AND APPURTENANCES IN ACCORDANCE WITH ANWA C600 OR M23 AS APPLICABLE.

AS-BUILT DRAWINGS:

THE CONTRACTOR SHALL PROVIDE VERTICAL AND HORIZONTAL "AS-BUILT" INFORMATION RELATIVE TO ALL CONSTRUCTED UTILITIES AND STRUCTURES. THREE SETS SHALL BE PROVIDED FOR REVIEW. ONCE APPROVED BY THE UTILITY, ONE REPRODUCIBLE SET SHALL BE PROVIDED.

AS-BUILT INFORMATION FOR THE SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- 1. LOCATION OF ALL MANHOLES, PIPES, VALVES, FITTINGS, AND SERVICES. HORIZONTAL AND VERTICAL W/INVERTS.
2. LOCATION OF THE MAIN TIED WITH COORDINATES.
3. CERTIFICATION AS TO THE SYSTEM MEETING THE MINIMUM COVER REQUIREMENTS.
4. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION WHICH DEVIATES FROM THE APPROVED ENGINEERING PLANS.
5. UTILITY LOCATES ON SYSTEMS INSTALLED UNDER THIS CONTRACT SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR UNTIL AS-BUILT DRAWINGS ARE REVIEWED AND APPROVED BY THE UTILITY.

PIPE MATERIALS:

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL INFRASTRUCTURE TO BE CONSTRUCTED. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND OWNER FOR REVIEW PER THE CITY'S POLICY FOR REVIEW OF SHOP DRAWINGS.

POLYVINYL CHLORIDE PLASTIC PIPE (PVC) 4" THROUGH 12" SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C900 (LATEST EDITION) AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI AND HAVE A DR (DIMENSION RATIO) OF 18. JOINTS SHALL BE OF THE PUSH-ON TYPE AND COUPLINGS CONFORMING TO ASTM D3139. DR18 PIPE.

DUCTILE IRON PIPE (DIP) SHALL BE STANDARD PRESSURE CLASS 350 IN SIZES 4" THROUGH 12" AND CONFORM TO ANSI/AWWA C150/A21.50 (LATEST EDITION). PIPE JOINTS SHALL BE OF THE PUSH-ON RUBBER GASKET TYPE CONFORMING TO ANSI/AWWA C111/A21.11 (LATEST EDITION).

PIPE DETECTOR W/Locator WIRE SHALL BE INSTALLED ON ALL MAINS PER DETAIL.

PIPE SIZES GREATER THAN 12" IN BOTH PVC AND DUCTILE IRON SHALL BE SEPARATELY SPECIFIED ON THE PLANS; WITH THICKNESS CLASSES TO BE SHOWN BASED ON WORKING PRESSURES, PIPE DEPTH AND TRENCH CONDITIONS.

FITTINGS FOR DUCTILE IRON PIPE AND PVC C-900 PIPE SHALL BE DUCTILE IRON AND SHALL CONFORM TO ANSI/AWWA C153/A21.10 (LATEST EDITION).

POLYETHYLENE WRAP USED FOR CORROSION PREVENTION ON DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/ASTM D1248. THE MINIMUM NOMINAL THICKNESS SHALL BE 0.008 IN. (8 MILS). INSTALLATION OF POLY WRAP SHALL BE IN ACCORDANCE WITH ANWA C105.

PIPE INSTALLATION:

PIPE INSTALLATION OF PVC MAIN SHALL BE IN CONFORMANCE WITH ASTM D2774 (LATEST EDITION). INSTALLATION OF DUCTILE IRON PIPE MAIN SHALL BE IN CONFORMANCE WITH ANWA C600.87.

COMPACTED BACKFILL SHALL BE TO 98% MAXIMUM DENSITY AS DETERMINED BY ASHTO T-180 UNDER ALL PAVEMENTS WITH 12" MAXIMUM LIFT THICKNESS. OTHER COMPACTION OF BACKFILL SHALL BE TO 95% MAXIMUM DENSITY AS DETERMINED BY ASHTO T-180 WITH 12" MAXIMUM LIFT THICKNESS. SEE PIPE TRENCHING DETAILS.

MINIMUM COVER OVER ALL PIPE SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE. SEE PLAN AND PROFILE SHEETS FOR REQUIRED DEPTH.

ALL MAINS SHALL BE INSTALLED WITH RESTRAINED JOINT FITTINGS OR CONCRETE THRUST BLOCKS, UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE.

ALL PLUGS, CAPS, TEES, BENDS, FIRE HYDRANTS, VALVES, ETC. SHALL BE PROVIDED WITH RESTRAINTS OR THRUST BLOCKS. FOR RESTRAINT AND THRUST BLOCK CONSTRUCTION SPECIFICATIONS, REFER TO THE DETAILS.

JININGS AND COATINGS:

- 1. SEWAGE SERVICE: DUCTILE IRON PIPE AND FITTINGS SHALL RECEIVE AN INTERIOR LINING OF 40 MIL POLYETHYLENE LINING, PROTECTO 401 CERAMIC EPOXY, OR EQUAL. ALL POLYETHYLENE FOR THE DUCTILE IRON PIPE SHALL BE DONE AT THE MANUFACTURER'S PLANT.
2. COATINGS: DUCTILE IRON PIPE AND FITTINGS FOR BURIED SERVICE SHALL RECEIVE A 1 MIL ASPHALTIC COATING IN ACCORDANCE WITH ANSI A21.50 ALL EXPOSED PIPING SHALL BE PRIMED AT MANUFACTURERS PLANT TO RECEIVE A FIELD COATING AS SPECIFIED BY THE DESIGN ENGINEER.

STORM SEWER NOTES:

OWNER/OPERATOR:

THE ENTITY THAT WILL OWN, OPERATE AND MAINTAIN THE SYSTEM SHOWN ON THESE PLANS IS SMALLWOOD/TUTOR. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL THE REQUIREMENTS OF THAT ENTITY.

MAINS AND MANHOLES:

- 1. ALL STORM SEWER MAINS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE PIPE (RCP) MADE IN ACCORDANCE WITH ASTM C 507 STANDARDS AND MEETING FDOT REQUIREMENTS.
2. JOINTS SHALL BE TONGUE AND GROOVE WITH PREFORMED PLASTIC GASKET (RAM-NEK OR APPROVED EQUAL) MEETING FEDERAL SPECIFICATIONS SS-S-210 A, TYPE I, ROPE FORM AND ASHTO DESIGNATION M-198 75 I, TYPE B.
3. ALL MANHOLES AND INLET BOTTOMS SHALL BE PRECAST CONCRETE AND MEET FDOT SPECIFICATIONS FOR THE DESIGNATED TYPE AND SIZE.
4. MANHOLE RING AND COVERS AND INLET GRATES AND TOPS SHALL BE TRAFFIC BEARING H-20.

AS-BUILT DRAWINGS:

THE CONTRACTOR SHALL PROVIDE VERTICAL AND HORIZONTAL "AS-BUILT" INFORMATION RELATIVE TO ALL CONSTRUCTED UTILITIES AND STRUCTURES. THREE SETS SHALL BE PROVIDED FOR REVIEW. ONCE APPROVED BY THE UTILITY, ONE REPRODUCIBLE SET SHALL BE PROVIDED.

AS-BUILT INFORMATION FOR THE SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- 1. LOCATION OF ALL INLETS, MANHOLES, PIPES, STRUCTURES, DITCHES, BERMS, AND WATER RETENTION AREAS. HORIZONTAL AND VERTICAL WITH INVERTS.
2. LOCATION OF THE MAIN TIED WITH COORDINATES.
3. CERTIFICATION AS TO THE SYSTEM MEETING THE MINIMUM COVER REQUIREMENTS.
4. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION WHICH DEVIATES FROM THE APPROVED ENGINEERING PLANS.
5. UTILITY LOCATES ON SYSTEMS INSTALLED UNDER THIS CONTRACT SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR UNTIL AS-BUILT DRAWINGS ARE REVIEWED AND APPROVED BY THE UTILITY.

SEPARATION OF WATERMAINS, SANITARY SEWERS AND STORM SEWERS:

1. HORIZONTAL SEPARATION:

- A) STORM SEWERS: WATER MAINS SHALL MAINTAIN MINIMUM OF A THREE (3) FOOT HORIZONTAL SEPARATION FROM STORM SEWER LINES. THIS DISTANCE IS MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A THREE (3) FOOT SEPARATION, THE WATER MAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST SIX (6) INCHES MIN ABOVE THE TOP OF THE SEWER, AND THE WATER AND SEWER JOINTS SHALL BE STAGGERED.
B) SANITARY SEWER FORCEMANS: FORCE MAINS SHALL BE INSTALLED AT LEAST SIX (6) FEET AND PREFERABLY TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.
C) RECLAIMED WATER LINES: MAXIMUM OBTAINABLE SEPARATION OF RECLAIMED WATER FOR PUBLIC ACCESS IRRIGATION LINES AND DOMESTIC WATER LINES SHALL BE PRACTICED. A MINIMUM HORIZONTAL SEPARATION OF THREE (3) FEET OUTSIDE TO OUTSIDE SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND POTABLE WATER MAINS. IF IT IS NOT POSSIBLE TO OBTAIN THE SEPARATIONS AS DESCRIBED THEN THE CONFLICT SHALL BE MITIGATED USING A METHOD APPROVED FOR GRAVITY SANITARY SEWERS.
D) SEWER/SEPTIC TANK ABSORPTION FIELDS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER/SEPTIC TANK ABSORPTION FIELD TRENCH. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
E) GRAVITY SANITARY SEWERS: GRAVITY SEWERS SHALL BE INSTALLED AT LEAST 6 FEET AND PREFERABLY 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATERMAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 6-FT. SEPARATION, THE WATERMAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THAT THE BOTTOM OF THE WATERMAIN IS AT LEAST 6 INCHES MIN ABOVE THE TOP OF THE SEWER, AND THE WATER AND SEWER JOINTS SHALL BE STAGGERED.
F) IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED, BOTH THE WATERMAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.

2. VERTICAL SEPARATION:

- A) WATERMAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES AND PREFERABLY 12 INCHES BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF THE SEWER. WHERE THE WATERMAIN IS ABOVE THE SEWER, THE WATERMAIN SHALL BE INSTALLED IN A SEPARATE TRENCH LOCATED ON ONE SIDE OF THE SEWER, WHEN THE WATER MAIN MUST BE BELOW THE SEWER, A MINIMUM VERTICAL SEPARATION OF 12 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER SHALL BE MAINTAINED. AT CROSSINGS ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSS