ADDENDUM #3

CR 466A Phase I (US Highway 27/441 to Sunny Court)
Project No. 2016-02
Bid No. 16-0017

This addendum is being issued to make the following changes, corrections, clarifications and additions to the bidding document. The information in this addendum modifies and changes the original bidding documents and takes precedence over the original documents. **Receipt of this addendum shall be acknowledged by the bidder by signing and dating the appropriate line on page W-4 of the bid proposal**. Failure to acknowledge this addendum may preclude consideration of the bid proposal for award.

1. Contractor shall disregard Note #11 in Addendum #2. Contractor shall follow the revised Division J Laboratory Testing and Sampling Schedule provided in Addendum #3. Contractor shall be responsible for quality control testing and Lake County will be responsible for verification testing. Contractor shall note Item 28 on the bottom of Division J Laboratory Testing and Sampling Schedule to further explain Note #3 on Addendum #2.

2. Contractor shall bid to demolish the greenhouse structure located in the area of Pond #7. See attached Asbestos Survey for this greenhouse structure.

3. Contractor shall remove Sheets U-02 thru U-05 of City of Fruitland Park County Road 466A Phase I Utility Adjustment Plans in their entirety and insert attached revised Sheets U-02 thru U-05. Please see attached Revised Sheets W-6 through W-8 of Division W of the bidding document for new bid tabulation sheet for Water and Sewer Line Installation. Scaleable plans can be accessed at the following link: ftp://ftp.co.lake.fl.us/Public_Works/Road%20Operations/CR%20466A%20Phase%20I/Revised%20Utility%20Sheets.pdf

Question Asked Via E-Mail:

Q1: Typical section 1 & 2 on sheet no. 5 indicate the limerock base under the shoulder to be 10" limerock. Each of these two typical sections are detailed in such a manner that the shoulder base material looks to be a different thickness than the roadway. Please confirm the shoulder base thickness.

A1: Contractor shall bid to place limerock 10" in thickness, 6" outside of the paved shoulder on each side of the roadway.

Terry Scott, Construction Inspection Supervisor — Date: 2-11-16

DIVISION J
LABORATORY TESTING AND SAMPLING SCHEDULE

OPERATION	MATERIAL SPECIFICATION	TESTS	PROJECT REQUIREMENTS	TESTING FREQUENCY
Prime and Tack Coats	FDOT Standard Specifications (2015 Edition)		Certification	Every Transport
Type Superpave Asphaltic Concrete	FDOT Standard Specifications (2015 Edition)	Job Mix Formula	Certification	Each mix design or change of aggregates
		RICE (Gmm)	Section 334	One per sublot
		Extraction Gradation Analysis	Section 334	One per sublot
		Field Density (Gmb)	Section 334	5 six inch cores per sublot (Random Locations)
		Asphalt Binder	Section 334	1 sample for the first 1000 tons and 1 per 4000 tons after
		Thickness	Section 330	Daily
Pavement Smoothness	FDOT Standard Specifications (2015 Edition)	Rolling Straight Edge	Section 330 (FM 5-509) Max 3/16 inch	Final SP structural layer and friction course layer
Concrete	FDOT Standard Specifications (2015 Edition)	Compression Strength	FDOT Section 346 and 347	Section 347 acceptance based on Certification; Section 347 One (1) set of cylinders for 10 CY or more per day. Additional set(s) for each 50 CY/day. One (1) set for each class of concrete placed each day.
		Each class of concrete used	Certification	Each mix design or change
Embankment	FDOT Standard Specifications (2015 Edition)	StandardProctor AASHTO T-99	Section 120	Per material type
		Field Density	Section 120 -100% AASHTO T-99180	Section 120-One test per 500 LF per 12" lift of embankment Section 125-One test per 300 LF of pipe trench (or between structures) per 6' lift until 1 ft above pipe; 12" lift of backfill 1 ft above pipe Section 125 (modified) One test per 12" lift of structure backfill alternating sides
Compacted Subgrade	FDOT Standard Specifications (2015 Edition)	Standard Proctor AASHTO T-99	Section 120	One per material type
		Field Density	100% AASHTO T-99	Section 120 (modified)-One per 300 LF of sidewalk One per driveway
Stabilized Subgrade	FDOT Standard Specifications (2015 Edition)	Limerock Bearing Ratio FM 5-515	Section 160	One per 1,000 LF per lane (One per 2 lots) One per 2,000 LF per shoulder (One per 4 lots)
		Field Density/Thickness	Section 160-98% AASHTO T-180	Density-One per 500 LF per lane (1 per lot) Thickness – 3 per lot Density/thickness (modified)-One per 500 LF per shoulder

Limerock Base Course	FDOT Standard Specifications (2015 Edition)	Modified Proctor AASHTO T-180	Section 200	One per 4 8 lots
		Field Density/Thickness	Section 200-98% AASHTO T-180	Density-One per 300 LF per lane Thickness- 3 per lot Density/Thickness-One per 500 LF per shoulder
Sodding	FDOT Standard Specifications (2015 Edition) Section 575, Sodding, and Section 981	Each type of sod used	Certification	All seed, sod and mulch shall be free of noxious weeds and exotic pest plants, plant parts or seed listed in the current Category I "List of Invasive Species" from the Florida Exotic Pest Plant Council

28.LABORATORY TESTING

The contractor will be responsible for Quality Control testing and Acceptance testing in accordance with FDOT Standard Specifications for Road and Bridge Construction 2015 edition. Cost of all Verification, Resolution and Acceptance testing shall be borne by the County in accordance with the Standard Specifications. This is a lump sum contract and there will be no pay adjustments for asphalt quantities and fuel.

BID FORM – TABULATION OF ESTIMATED QUANTITIES
CR 466A PHASE I (US HIGHWAY 27/441 TO SUNNY COURT)
PROJECT NO. 2016-02, BID NO. 16-0017

Item No.	Description	Unit	Unit Price	Quantity	Amount
	WATER AND SEWER LINE INSTALLATION				
1	Mobilization	LS			
2	Maintenance of Traffic	LS			
3	12" PVC Watermain	LF			
4	12" Gate Valve	EA			
5	12" 45 Degree Bends	EA			
6	12" x 12" Tee	EA			
7	12" X 8" Tee	EA			
8	12" X 8" Cross	EA			
9	12" x 6" Reducer	EA			
10	8" PVC Watermain	LF			
11	8" Gate Valve	EA			
12	8" 45 Degree Bends	EA			
13	8" X 2" Tee	EA			
14	8" X 6" Reducer	EA			
15	6" Watermain	LF			
16	6" PVC Gate Valve	EA			
17	6" 90 Degree Bend	EA			
18	6" X 2" Reducer	EA			
19	2" PVC Watermain	LF			
20	2"Gate Valve	EA			
21	2" 90 Degree Bend	EA			
22	Fire Hydrant Assembly	EA			
23	6" Tapping Sleeve	EA			
24	Connect to Existing 2" Watermain	EA			
	Cont'd on Next Page				

BID FORM – TABULATION OF ESTIMATED QUANTITIES
CR 466A PHASE I (US HIGHWAY 27/441 TO SUNNY COURT)
PROJECT NO. 2016-02, BID NO. 16-0017

Item No.	Description	Unit	Unit Price	Quantity	Amount
	WATER AND SEWER LINE INSTALLATION (CONT'D)				
25	Connect to Existing 6" Watermain	EA			
26	Temporary Jumper Connections	EA			
27	Reconnect Existing Water Services	EA			
28	Remove Existing 8" Watermain	LF			
29	Remove Existing 6" Watermain	LF			
30	Remove Existing 2" Watermain	LF			
31	3" PVC Forcemain	LF			
32	3" Plug Valve	EA			
33	3" Tee	EA			
34	3" 45 Degree Bend	EA			
35	4" x 3" Reducer	EA			
36	3" x 2" Reducer	EA			
37	2.5" PVC Forcemain	LF			
38	2.5" Plug Valve	EA			
39	2.5" Air Release Valve	EA			
40	2.5" Tee	EA			
41	2.5" 45 Degree Bend	EA			
42	2" PVC Forcemain	LF			
43	2" Plug Valve	EA			
44	Existing 2" – 3" Forcemain Tie-Ins	EA			
45	Connect to Existing	EA			
46	Remove Existing 2.5" Forcemain	LF			
47	Remove Existing 2" Forcemain	LF			
48	Geotechnical Testing	LS			
	Cont'd on Next Page				

BID FORM – TABULATION OF ESTIMATED QUANTITIES
CR 466A PHASE I (US HIGHWAY 27/441 TO SUNNY COURT)
PROJECT NO. 2016-02, BID NO. 16-0017

Item No.	Description	Unit	Unit Price	Quantity	Amount
	WATER AND SEWER LINE INSTALLATION (CONT'D)				
49	Construction Layout/Survey	LS			
50	Certified As-Builts	LS			
51	12" DIP Watermain	LF			
52	8" DIP Watermain	LF			
53	12" x 6" Tee	EA			
54	12" Plug	EA			
55	2.5" x 3" Reducer	EA			
56	3" x 2" Tee	EA			
57	3" x 4" Cross	EA			
58	4" Plug Valve	EA			
59	Payment and Performance Bond	LS			
Water and Sewer Line Installation Subtotal Lump Sum Bid (Figures):					
Water and Sewer Line Installation Subtotal Lump Sum Bid (Words):					
Water and Sewer Line Installation Number of Calendar Days to Complete:					
	DEMOLITION OF STRUCTURES				
1	Demolition of 404 East Miller Street	LS			
2	Demolition of 307 No. Iona Avenue	LS			
3	Demolition of Greenhouse type structure	LS			
Demolition of Structures Subtotal Lump Sum Bid (Figures):					
Demolition of Structures Subtotal Lump Sum Bid (Words):					
Demolition of Structures					

TIERRA

February 8, 2016

Lake County
315 W. Main Street
Tavares, Florida 32778
Office: (352) 483-9006

Attn: Ms. Lori Koontz
Project Manager
LKoontz@lakecountyfl.gov

Re: NESHAP Asbestos Demolition Survey Report
CR-466A Abandoned Greenhouse
Lake County, Florida
Lake County Project No.: 2016-02
Tierra Project No.: 5511-16-005E

Ms. Koontz:

The purpose of this report is to present the results of a National Emissions Standard for Hazardous Air Pollutants (NESHAP) asbestos survey performed on January 29, 2016 at the above referenced project. We understand that these services were requested due to planned demolition of the Abandoned Greenhouse located northwest of the intersection at Citrus Boulevard (US 27) and Miller Street in Fruitland Park, Florida.

Asbestos Containing Materials (ACMs) were identified in the samples collected. Please refer to the attached report for details.

Tierra appreciates the opportunity to provide this service to Lake County. If you have any questions regarding this report, please contact our office at your earliest convenience.

Respectfully Submitted,

TIERRA INC.

FL PE No. 44650

cn=Scott S. Crandall
2016.02.08 16:08:33
-05'00'

Scott S. Crandall, P.E.
Florida Licensed Asbestos Consultant
License No. EA0000060

Clare Kramer, P.G.
Senior Environmental Scientist
AHERA Asbestos Building Inspector

Tierra, Inc.
591 Susan B. Britt Court • Winter Garden, FL 34787
Phone (407) 877-1354 • Fax (407) 654-7347

NESHAP ASBESTOS DEMOLITION SURVEY REPORT

CR-466A Abandoned Greenhouse

CR-466A (Miller Street)
Fruitland Park, Lake County, Florida

February 8, 2016

Prepared for:

Lake County
315 W. Main Street
Tavares, Florida 32778

Lake County Project No.: 2016-02

Prepared by:

Tierra, Inc.
591 Susan B. Britt Court
Winter Garden, Florida 34787

Tierra Project No.: 5111-16-005E

EXECUTIVE SUMMARY

Tierra, Inc. (Tierra) conducted a NESHAP asbestos survey of the Abandoned Greenhouse located northwest of the intersection at Citrus Boulevard (US 27) and Miller Street in Fruitland Park, Lake County, Florida. It is our understanding that this building is planned for demolition.

The purpose of this survey was to identify and sample suspect asbestos-containing materials (ACM) to provide information regarding the identity, location, condition and approximate quantities of these materials so that proper remediation and disposal methods can be evaluated.

The survey was conducted on January 29, 2016 by an Asbestos Hazard Emergency Response Act (AHERA) accredited inspector in general accordance with the sampling protocols established in Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763.

A total of ten (10) bulk asbestos samples were collected from a total of four (4) homogeneous areas of suspect ACM. These include interior and exterior samples.

Asbestos Containing Materials (ACMs) were identified in the samples collected.

The reports of laboratory analysis are provided in **Appendix A** and a photographic log of homogenous areas is presented in **Appendix B**.

This Executive Summary provides a brief overview of work activities completed at the Abandoned Greenhouse. The reader should utilize the detailed information presented within this report for specific information regarding any area of particular interest.

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

Tierra, Inc. (Tierra) conducted a NESHAP asbestos survey of the Abandoned Greenhouse located northwest of the intersection at Citrus Boulevard (US 27) and Miller Street in Fruitland Park, Lake County, Florida. Lake County Property Appraiser Parcel ID: 04-19-24-060000000200. The Property Record Card in included in **Appendix E**.

The survey was conducted on January 29, 2016 by an Asbestos Hazard Emergency Response Act (AHERA) accredited inspector in general accordance with the sampling protocols established in Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. Samples were delivered to an accredited laboratory for analysis by polarized light microscopy (PLM).

1.1 Project Purpose

Tierra understands that the property is to be redeveloped as part of a road improvement project. This asbestos survey was conducted as part of the proposed upcoming building modifications/demolition.

EPA regulation 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP), prohibits the release of asbestos fibers and other hazardous air pollutants to the atmosphere during rehabilitation or demolition activities. The asbestos NESHAP requires that potentially regulated asbestos-containing building materials be identified, classified and quantified prior to planned disturbances or demolition activities.

2.0 FIELD ACTIVITIES

The survey was conducted by Ms. Clare Kramer, an AHERA-accredited asbestos inspector. A copy of Ms. Kramer's asbestos inspector certificate is presented in **Appendix C**. The survey was conducted in general accordance with the sample collection protocols established in EPA regulation 40 CFR 763, the AHERA. A summary of the survey activities performed is provided below.

2.1 Visual Assessment

Our survey activities began with visual observation of the structures to identify homogeneous areas of suspect ACM. A homogeneous material consists of building materials that appear similar throughout in terms of color, texture and date of application. Building materials identified as steel, concrete, glass, wood, masonry, metal or rubber were not considered suspect ACM.

2.2 Physical Assessment

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the EPA as a material which can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

2.3 Sample Collection

Based on results of the visual observation, bulk samples of suspect ACM and protective coatings were collected in general accordance with industry sampling protocols. Representative samples of suspect materials were collected in each homogeneous area. Tierra personnel collected bulk samples using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker.

A total of ten (10) bulk asbestos samples were collected from a total of four (4) homogeneous areas of suspect ACM. These include interior and exterior samples. A summary of suspect ACM samples collected during the survey is included in **Section 4.1**.

2.4 Sample Analysis

Bulk samples of ACM were submitted, under chain of custody to EMSL Analytical Inc. in Orlando, Florida, for analysis by polarized light microscopy with dispersion staining techniques per EPA methodology 600/R-93/116 (40 CFR 763, Subpart F). The percentage of asbestos, where applicable, was determined by microscopic visual estimation. EMSL is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP Accreditation No. 101151-0).

The U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) define asbestos containing material (ACM) as any material which contains greater than one percent asbestos. When samples analyzed by Polarized Light Microscopy contain asbestos in amounts less than ten percent (< 10%), a more exact method of analysis called point counting may be performed at the client's request.

The EPA point count method allows a sample in which asbestos was visually detected, but which is visually estimated to have 10% or less asbestos, to be quantified using a point count procedure. If not point counted, a sample in which asbestos was visually detected and estimated (including trace to ≤1%) must be assumed to be greater than 1% and treated as an ACM.

The EPA point counting procedure is as follows: an ocular reticule (cross hair or point array) is used to visually superimpose a point or points on the microscope field of view. A total of 400 points superimposed on either asbestos fibers or non-asbestos matrix material must be counted over at least eight different preparations of representative sub-samples. If an asbestos fiber and matrix particle overlap so that a point is superimposed on their visual intersection, a point is scored for both categories. Point counting provides a quantification of the area percent asbestos. Per EPA's regulations, materials which have been point-counted and, therefore, quantitatively determined to have less than or equal to one percent (≤1%) asbestos, can be treated as non-ACM.

- No (0) samples were analyzed by the point counted method during this survey.

A total of ten (10) bulk asbestos samples were collected from a total of four (4) homogeneous areas of suspect ACM. These include interior and exterior samples. The reports of laboratory analysis are provided in **Appendix A**.

3.0 REGULATORY OVERVIEW

Demolition activities are regulated under the NESHAP statue for general dust control. Specifications for the proper work practices, controls and disposal should be developed to document compliance with all applicable regulations.

3.1 Asbestos Regulations

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition or renovation activity. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable or Category II non-friable ACM. Friable materials are those that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. Category I non-friable ACM includes packings, gaskets, resilient floor coverings and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM are any materials other than Category I materials that contain more than 1% asbestos.

Friable ACM, Category I and Category II non-friable ACM which are in poor condition and has become friable or which will be subjected to drilling, sanding, grinding, cutting or abrading and which could be crushed or pulverized during anticipated renovation or demolition activities are considered Regulated ACM (RACM).

In the State of Florjda, asbestos activities are regulated by the Florida Department of Environmental Protection (FDEP). RACM must be removed prior to demolition activities which will disturb the materials.

The owner or operator must provide the FDEP with written notification of planned removal activities at least 10 working days prior to the commencement of asbestos abatement activities. Removal of RACM and most other ACMs (unless exempt) must be conducted by a State of Florida licensed asbestos abatement contractor.

The OSHA Asbestos standard for construction (29 CFR 1926.1101) regulates workplace exposure to asbestos. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc). The OSHA standard classifies construction and maintenance activities which could disturb ACM and specifies work practices and precautions which employers must follow when engaging in each class of regulated work.

4.0 FINDINGS AND CONCLUSIONS

4.1 Asbestos

According to the property appraisers' information, the parcel had two miscellaneous improvements listed as: a 400 SF detached garage built in 1940 and a 200 SF carport/pole shed built in 1958. During the site visit only one structure was identified for sampling. The structure was a split-level one-story greenhouse that encompassed approximately 1,000 SF of interior space. The construction was concrete flooring, wood frame and panel siding. There was no insulation, mechanical heating/cooling or electrical system noted. A PVC piped irrigation system was observed. The building was in obvious poor condition due to the lack of maintenance for a number of years. There were no interior fixtures noted. The only furnishings were rows of growing tables constructed of wooden frames with 3 feet by 3 feet corrugated-board table-tops and 1 inch by 4 inch cement-board sides. The material resembled "Transite". Many of the tables had broken and fallen to the floor, many of the buildings side panels had been removed or were broken. The roof was not in-place and roofing materials were not observed on the ground beneath.

A total of ten (10) bulk asbestos samples were collected from a total of four (4) homogeneous areas of suspect ACM. These include interior and exterior samples. Roofing materials were not sampled due to the absence of a roof.

A summary of suspect ACM is provided in the following table, along with the results from the laboratory. The analytical results are included in **Appendix A**. The bulk sample log and on the sample location sketch provided in **Appendix D**.

Table 1 – ACM Sample Summary						
HA No.	Sample No.	Material Description	Location	Approx. Quantity	Lab Results % Asbestos	NESHAP Category
01	001	Gray Corrugated Board	Inside, Table-tops, NW Area	800 SF	20% Chrysotile	Category II
	002		Inside, Table-tops, SW Area		20% Chrysotile	
	003		Inside, Table-tops, NE Area		20% Chrysotile	
02	004	1"x4" Gray Cement Board	Inside, Table-top Sides, NW Area	800 SF	20% Chrysotile	Category II
	005		Inside, Table-top Sides, SW Area		20% Chrysotile	
	006		Inside, Table-top Sides, NE Area		20% Chrysotile	
03	007	Gray Wall Panel Boards	Exterior Panels, SE Wall	600 SF	20% Chrysotile	Category II
	008		Exterior Panels, N Central Wall		20% Chrysotile	
	009		Exterior Panels, W Wall		20% Chrysotile	
04	010	Fiberglass Wall Panels	Exterior, Upper Wall Panels (for confirmation only)	Not Recorded	Not Detected	N/A

4.2 Conclusions

Nine (9) of the ten (10) samples collected for analysis by PLM had detected asbestos mineral fibers (more than 1%) and are considered ACM. These included the cement boards used for the table tops and the exterior siding panels of the greenhouse. *Many of the boards have been damaged, broken and rest on the floor of the greenhouse or the exterior ground surrounding the structure. Some exterior panels seem to have been removed from the site. The boards are damaged; however the materials are still assessed to be a Category II non friable ACM.*

Due to the nature of the damage to the materials Tierra recommends a Florida Licensed asbestos contractor be used to demolish the building. Care should be taken to minimize additional breakage of the cement boards while employing wet demolition practices to prevent asbestos fibers from being released.

The removed material should be disposed of at a properly licensed landfill that is certified to receive asbestos containing material (ACM).

A written notification of planned removal activities must be provided to the FDEP at least 10 working days prior to the commencement of asbestos abatement activities.

It should be noted that suspect materials, other than those identified during the survey could exist within the structure in areas not accessible to the inspector at the time of the survey. Should suspect materials other than those which were identified during this survey be uncovered during the rehabilitation/demolition process, those materials should be assumed to be ACM until sampling and analysis can confirm or refute their asbestos content. ACMs will require handling and/or removal in accordance with applicable Federal and State regulations. Refer to **Section 3.1** for Asbestos Regulations.

5.0 GENERAL COMMENTS

This survey was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our survey of the subject bridge structure. The information contained in this report is relevant to the date on which this survey was performed, and should not be relied upon to represent conditions at a later date. Tierra does not warrant the work of regulatory agencies, laboratories or other third parties supplying information which may have been used in the preparation of this report. No warranty, express or implied, is made.

APPENDIX A

Laboratory Results

EMSL Analytical, Inc.
5125 Adanson Street, Suite 900 Orlando, FL 32804
Tel/Fax: (407) 599-5887 / (407) 599-9063
http://www.EMSL.com / orlandolab@emsl.com

EMSL Order: 341601101
Customer ID: TRRA42
Customer PO:
Project ID:

Attention: Clare Kramer
Tierra, Inc.
1133 Crown Park Circle
Winter Garden, FL 34787

Project: CR466A Greenhouse

Phone: (407) 877-1354
Fax:
Received Date: 2/ 1/2016 9:20 AM
Analysis Date: 2/ 1/2016
Collected Date: 1/29/2016

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
001 *341601101-0001*	Inside, Table-Tops, NW Area - Gray Corrugated Fiberboard	Gray/White Fibrous Heterogeneous		10% Ca Carbonate 70% Non-fibrous (Other)	20% Chrysotile
002 *341601101-0002*	Inside, Table-Tops, SW Area - Gray Corrugated Fiberboard	Gray/White Fibrous Heterogeneous		5% Ca Carbonate 75% Non-fibrous (Other)	20% Chrysotile
003 *341601101-0003*	Inside, Table-Tops, NE Area - Gray Corrugated Fiberboard	Gray/White Fibrous Heterogeneous		10% Ca Carbonate 70% Non-fibrous (Other)	20% Chrysotile
004 *341601101-0004*	Inside, Table-Top Sides, NW Area - Gray 1x4 Fiberboard	Gray/White Fibrous Heterogeneous		5% Ca Carbonate 75% Non-fibrous (Other)	20% Chrysotile
005 *341601101-0005*	Inside, Table-Top Sides, - Gray 1x4 Fiberboard	Gray/White Fibrous Heterogeneous		5% Ca Carbonate 75% Non-fibrous (Other)	20% Chrysotile
006 *341601101-0006*	Inside, Table-Top Sides, NE Area - Gray 1x4 Fiberboard	Gray/White Fibrous Heterogeneous		5% Ca Carbonate 75% Non-fibrous (Other)	20% Chrysotile
007 *341601101-0007*	Exterior, Lower Panels, S Wall - Gray Wall Panels	Gray/White Fibrous Heterogeneous		10% Ca Carbonate 70% Non-fibrous (Other)	20% Chrysotile
008 *341601101-0008*	Exterior, Lower Panels, N Wall - Gray Wall Panels	Gray/White Fibrous Heterogeneous		10% Ca Carbonate 70% Non-fibrous (Other)	20% Chrysotile
009 *341601101-0009*	Exterior, Lower Panels, W Wall - Gray Wall Panels	Gray/White Fibrous Heterogeneous		10% Ca Carbonate 70% Non-fibrous (Other)	20% Chrysotile
010 *341601101-0010*	Exterior, Upper Panels, SE Corner Wall - Beige Fiberglass Wall Panel	White/Yellow Fibrous Homogeneous	25% Glass	75% Non-fibrous (Other)	None Detected

Analyst(s)
Manolo Hernandez (10)

Jonathan Teda, Asbestos Lab Manager
or Other Approved Signatory

Initial Report From: 02/02/2016 10:01:17

OrderID: 341601101

EMSL Analytical, Inc.
5125 Adanson Street, Suite 90

Orlando, FL 32804
PHONE: (407) 599-5887
FAX: (407) 599-9063

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number *(Lab Use Only)*: 341601101

Company: TIERRA		**EMSL-Bill to:** ☐ Same ☑ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*	
Street: 591 Susan B. Britt Court			
City: Winter Garden	**State/Province:** FL	**Zip/Postal Code:** 34787	**Country:** United States
Report To (Name): Clare Kramer		**Telephone #:** 407-877-1354	
Email Address: ckramer@tierraeng.com		**Fax #:**	**Purchase Order:**
Project Name/Number: CR466A Greenhouse		**Please Provide Results:** ☐ Fax ☑ Email ☐ Mail	
U.S. State Samples Taken: FL		**CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt	

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour ☐ 6 Hour ■ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT You will be asked to sign an authorization form for this service Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PLM - Bulk (reporting limit)	TEM – Bulk
■ PLM EPA 600/R-93/116 (<1%)	☐ TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1
☐ PLM EPA NOB (<1%)	☐ NY ELAP Method 198.4 (TEM)
Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2
☐ NIOSH 9002 (<1%)	☐ TEM Qualitative via Filtration Prep Technique
☐ NY ELAP Method 198.1 (friable in NY)	☐ TEM Qualitative via Drop Mount Prep Technique
☐ NY ELAP Method 198.6 NOB (non-friable-NY)	**Other**
☐ OSHA ID-191 Modified	☐
☐ Standard Addition Method	

☐ **Check For Positive Stop – Clearly Identify Homogenous Group** **Date Sampled:** 1-29-2016

Samplers Name: CLARE KRAMER **Samplers Signature:**

Sample #	HA #	Sample Location	Material Description
001	01	Inside, Table-tops, NW Area	Gray Corrugated Fiberboard
002	01	Inside, Table-tops, SW Area	Gray Corrugated Fiberboard
003	01	Inside, Table-tops, NE Area	Gray Corrugated Fiberboard
004	02	Inside, Table-top Sides, NW Area	Gray 1x4 Fiberboard
005	02	Inside, Table-top Sides, SW Area	Gray 1x4 Fiberboard
006	02	Inside, Table-top Sides, NE Area	Gray 1x4 Fiberboard
007	03	Exterior, Lower Panels, S Wall	Gray Wall Panels
008	03	Exterior, Lower Panels, N Wall	Gray Wall Panels
009	03	Exterior, Lower Panels, W Wall	Gray Wall Panels
010	04	Exterior, Upper Panels, SE Corner Wall	Beige Fiberglass Wall Panel

Client Sample # (s): 001 - 010 **Total # of Samples:** 10

Relinquished (Client): **Date:** 1-29-2016. **Time:** 5pm.

Received (Lab): **Date:** 2/1/16 **Time:** 920

Comments/Special Instructions:
Call Clare with questions. Cell: (813) 766-8609
BillTo: Tierra Inc, 591 Susan B. Britt Court, Winter Garden, FL, 34787, United States
Attention: Clare Kramer Phone: 407-877-1354 Email: ckramer@tierraeng.com Purchase Order:

APPENDIX B

Photograph Log

Homogeneous Area 01 – Gray Corrugated-Board Table-tops

Homogeneous Area 02 – Gray 1"x4" Table-top Sides

Homogeneous Area 03 – Gray Wall Panel Boards, Lower Exterior Walls

Homogeneous Area 04 – Fiberglass Wall Panels, Upper Exterior Walls

APPENDIX C

Training Certificates

M·E·T·A

Mayhew Environmental Training Associates

INCORPORATED

Certificate # ME6B9CCB692C364EC

Clare Kramer

has on 9/1/2015, in Tampa, FL
completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 USC 2646

4-hr. Asbestos Building Inspector Refresher

as approved by FL
and the US EPA under 40 CFR 763 (AHERA)
from 9/1/2015 to 9/1/2015 and passed the associated exam on 9/1/2015
with a score of at least 70%

KANSAS MAYHEW INC. 1987 EST. 1985 ENVIRONMENTAL TRAINING ASSOCIATES SAFETY IN GOD ALONE

Training Provider #: FL49-0001221
Course #: 150901ASBIRFL514

SSN: XXX-XX-1214
Expiration: 9/1/2016

Bill Young
Instructor

Thomas Mayhew
President

P.O. Box 4693 - Lawrence, KS. 66047 - 800.444.6382
www.metaenvironmental.net

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT

LICENSE NUMBER	
EA0000060	

The ASBESTOS CONSULTANT - ENGINEER
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2016

CRANDALL, SCOTT S
DIVERSIFIED PROFESSIONAL SERVICES CORP
3600 10TH ST NE
ST PETERSBURG FL 33704

ISSUED: 09/30/2014

DISPLAY AS REQUIRED BY LAW

SEQ # L1409300007877

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

(850) 487-1395

TIERRA INC
SCOTT S CRANDALL
7351 TEMPLE TERRACE HWY
TAMPA FL 33637

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto **www.myfloridalicense.com**. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ZA405 ISSUED: 09/17/2013

ASBESTOS BUSINESS ORGANIZATION
TIERRA INC
SCOTT S CRANDALL

IS LICENSED under the provisions of Ch.469 FS.
Expiration date : NOV 30, 2015 L1309170004174

VIVA FLORIDA 500

The Department of State is leading the commemoration of Florida's 500th anniversary in 2013. For more information, please go to www.VivaFlorida.org.

DETACH HERE

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT

LICENSE NUMBER	
ZA405	

The ASBESTOS BUSINESS ORGANIZATION
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2015

TIERRA INC
SCOTT S CRANDALL
7351 TEMPLE TERRACE HWY
TAMPA FL 33637

VIVA FLORIDA 500

RICK SCOTT
GOVERNOR

ISSUED: 09/17/2013 SEQ # L1309170004174
DISPLAY AS REQUIRED BY LAW

KEN LAWSON
SECRETARY

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101151-0

EMSL Analytical, Inc.

Orlando, FL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2015-06-04 through 2016-06-30

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.
5125 Adanson Street, Suite 900
Orlando, FL 32804
Dr. Blanca Cortes
Phone: 407-599-5887 Fax: 407-599-9063
Email: bcortes@emsl.com
http://www.emsl.com

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 101151-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

APPENDIX D

Bulk Sample Log
Sample Location Sketch

BULK SAMPLE LOG

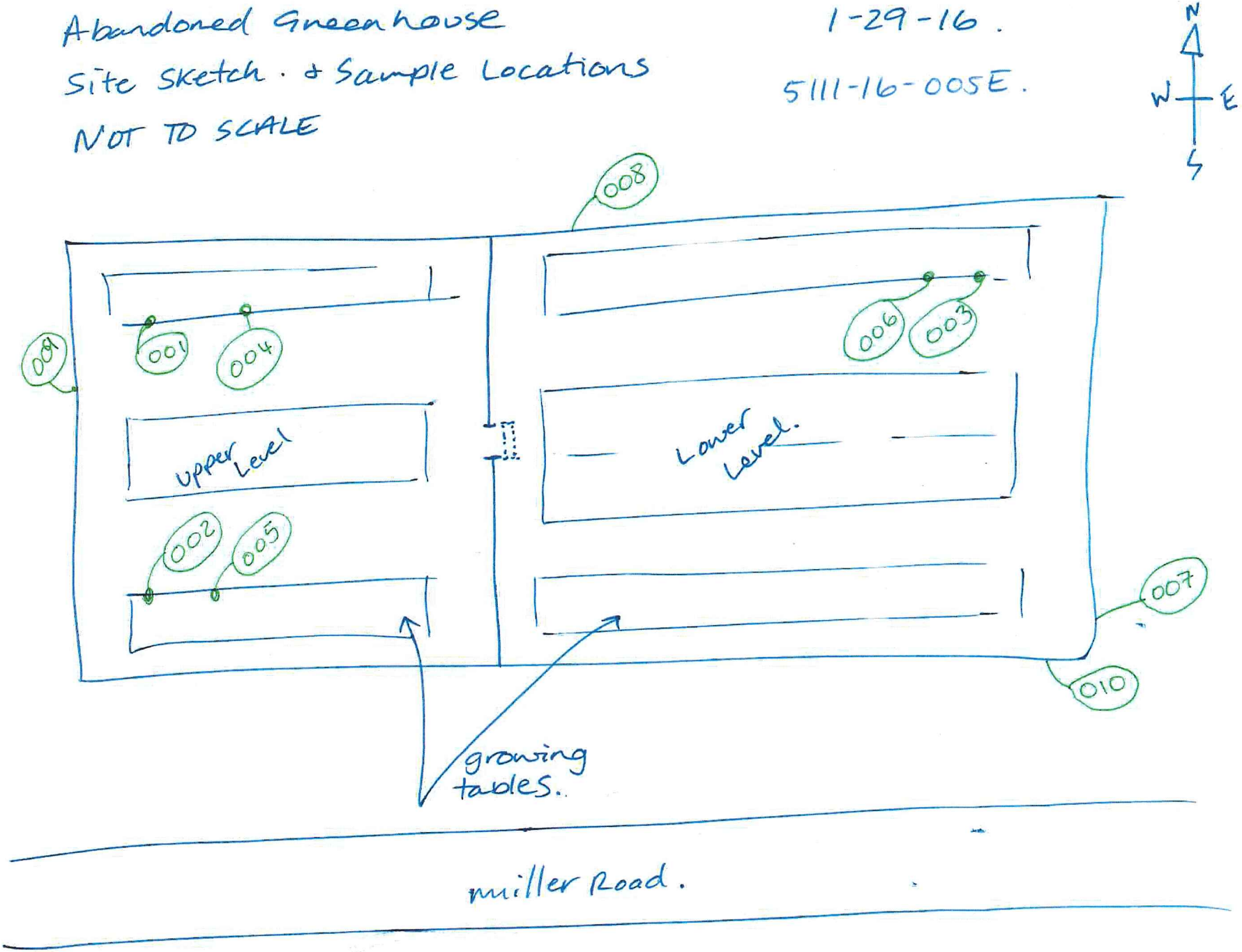
Project Name/Number:	Abandoned Greenhouse 5111-16-005E
Samplers Name/Date:	Clare Kramer 1-29-16.

HA #:	Sample #:	Friable: Y / N	Condition:
Material Description:		Location(s):	Approx. Amount:
01	001		
Corregated Fiberboard -gray		inside greenhouse table tops. - NW area	
01	002		
		- SW area	
01	003		
		- NE area.	
02	004		
1x4 Fiberboard - gray.		Inside greenhouse table top sides - NW area	
02	005		
		- SW area	
02	006		
		- NE area.	
03	007		
Wall Fiberboard -gray		Exterior greenhouse wall panels. -SE	
03	008		
		- N. Central	
03	009		
		West wall	
HA# 04	Sample# 010	Exterior greenhouse	
Fiberglass panels.		wall panels Confermation Only.	

Abandoned Greenhouse
Site Sketch. & Sample Locations
NOT TO SCALE

1-29-16.

5111-16-005E.



APPENDIX E

Property Appraiser Information

Property Record Card

General Information

Owner Name:	LAKE COUNTY BCC	**Alternate Key:**	3897749
Mailing Address:	ATTN COUNTY ATTORNEY 315 W MAIN ST TAVARES, FL 32778 *Update Mailing Address*	**Parcel Number:**	04-19-24-060000000200
		Millage Group and City:	00F1 (Fruitland Park)
		Total Millage Rate:	19.41980
		Trash/Recycling/Water/Info:	*My Public Services Map*
Property Location:	FRUITLAND PARK FL 34731 *Update Property Location*	**Property Name:**	-- *Submit Property Name*
		School Locator:	*School and Bus Map*
Property Description:	FRUITLAND PARK, LAKE COUNTY LAND OWNERS ASSN SUB FROM NE COR| OF SE 1/4 RUN S 01-32-45 W ALONG E LINE OF SE 1/4 A DIST OF | 1227.83 FT TO A POINT ON A LINE PROJECTED E'LY FROM THE N | LINE OF LOT 2, THENCE RUN N 89-16-55 W ALONG SAID N LINE OF | LOT 2, THENCE RUN N 89-16-55 W ALONG SAID N LINE OF LOT 2, | THENCE RUN N 89-16-55 W ALONG SAID N LINE OF LOT 2 & | PROJECTIONS THEREOF, A DIST OF 439.04 FT FOR POB, THENCE RUN| S 14-59-20 E ALONG SAID E LINE A DIST OF 53.82 FT, THENCE | RUN N 89-22-09 W 117.47 FT TO THE POINT OF CURVATURE OF A | CURVE CONCAVE SE'LY, HAVING A RADIUS OF 1574.89 FT, A CHORD | BEARING OF S 86-21-14 W & A CHORD DIST OF 234.92 FT, THENCE | RUN SW'LY ALONG THE ARC OF SAID CURVE, THRU A CENTRAL ANGLE | OF 08-33-16 A DIST OF 235.14 FT TO THE POINT OF REVERSE | CURVATURE OF A CURVE CONCAVE NW'LY, HAVING A RADIUS OF | 1480.89 FT, A CHORD BEARING OF S 83-05-35 W & A CHORD DIST | OF 52.53 FT, THENCE RUN SW'LY ALONG THE ARC OF SAID CURVE, | THRU A CENTRAL ANGLE OF 02-01-58 A DIST OF 52.54 FT, THENCE | RUN N 76.84 FT TO A POINT ON N LINE OF LOT 2, S 89-16-55 E | ALONG SAID N LINE OF LOT 2 A DIST OF 390.17 FT TO POB PB 2 | PG 36 | ORB 4600 PG 718 |		

Land Data

Line	Land Use	Frontage	Depth	Notes	No. Units	Type	Class Value	Land Value
1	(8096)	0	0		0.53	AC	$0.00	$24.00

Miscellaneous Improvements

No.	Type	No. Units	Unit Type	Year	Depreciated Value
0001	GARAGE DETACHED (DGF)	400	SF	1940	$2,081.00
0002	CARPORT/POLE SHED - UNFINISHED (UCP)	200	SF	1958	$228.00

Sales History

Book/Page	Sale Date	Instrument	Qualified/Unqualified	Vacant/Improved	Sale Price
4600 / 718	3/17/2015	Judicial	Unqualified	Vacant	$0.00

Click here to search for mortgages, liens, and other legal documents.

Property data last updated on 31 January 2016.

February 8, 2016

1:1,000

0 0.0075 0.015 0.03 mi

0 0.0125 0.025 0.05 km

Override 1

Override 1

County Boundary

Street Names

Local Streets

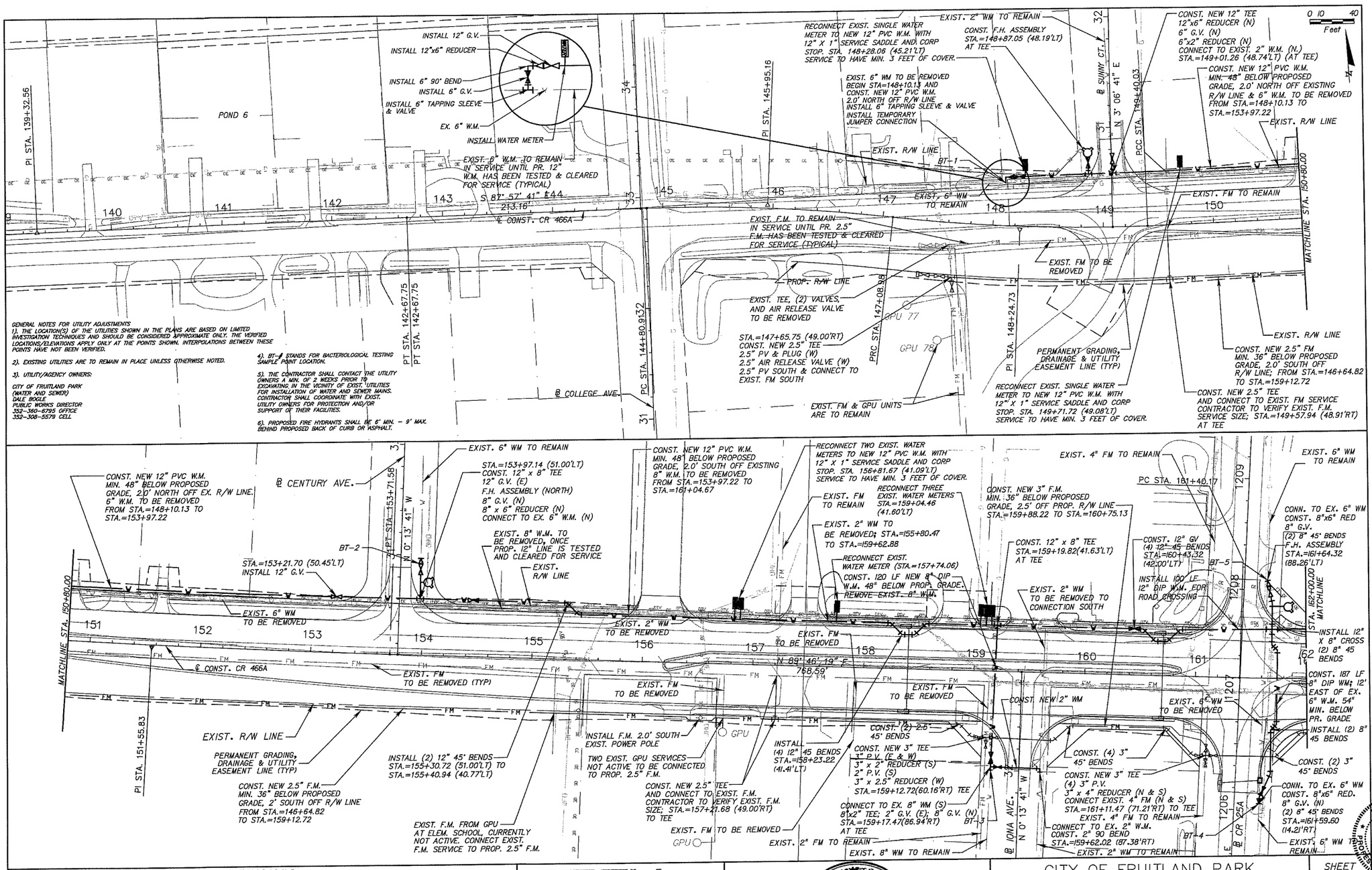
Property Name

Tax Parcels Alternate Key

Tax Parcels

Surrounding Counties

Lake County Board of County Commissioners



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2-1-2016		REVISED STORM AT STA.=161+69.00 PER COUNTY MARK-UP			
2-10-2016		REVISED STORM AT STA.=159+50 PER COUNTY MARK-UP; REVISED WATER MAIN CROSSINGS UNDER ROAD TO BE D.I.P.			

BESH
BOOTH ERN STRAUGHAN HOTT, INC
ENGINEERS • SURVEYORS • LAND PLANNERS
902 North Sinclair Ave.
Tavares, Florida 32778
www.3esandh.com
Office: 352.343.8481
Fax: 352.343.8496
Certificate of Authorization Number: 27025

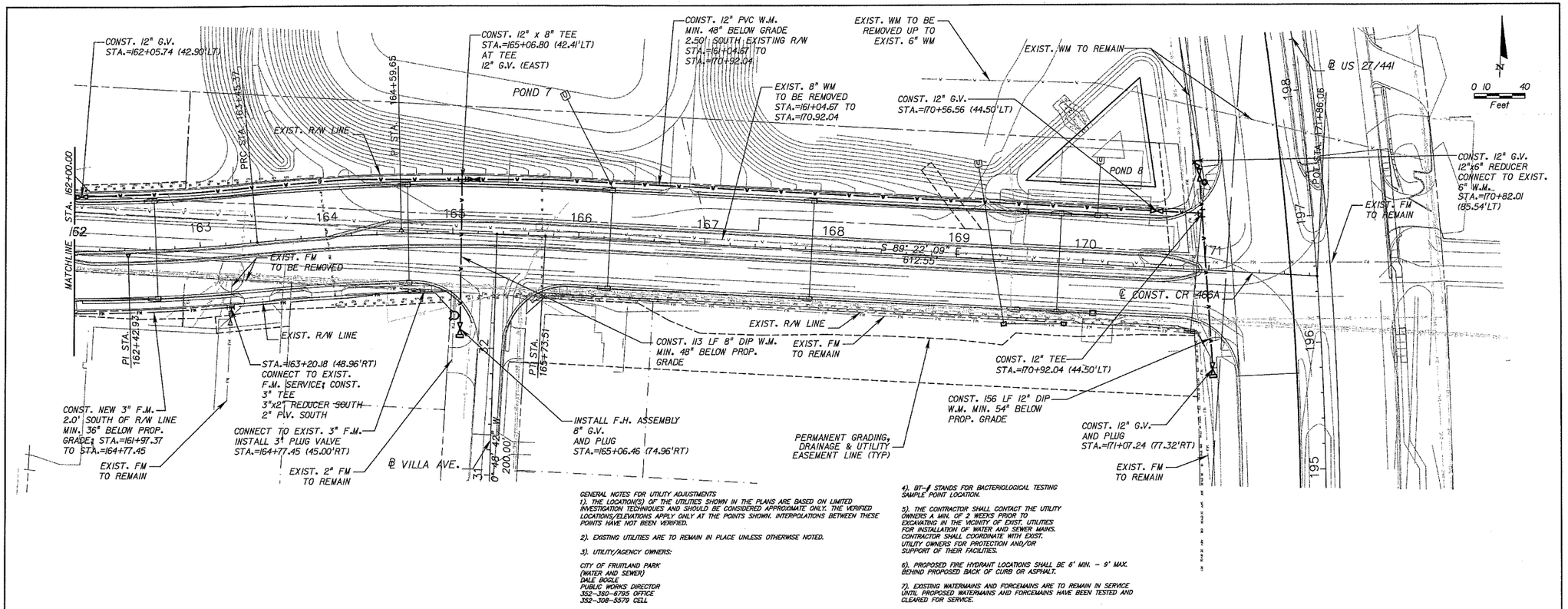
CITY OF FRUITLAND PARK
THE FRIENDLY CITY

CITY OF FRUITLAND PARK
C.R. 466A-PH.1
UTILITY ADJUSTMENT PLAN

SHEET NO. U-02

DUNE K. BOOTH LICENSE No 44631 STATE OF FLORIDA PROFESSIONAL ENGINEER
2/9/16

SPH 8-6-2015 8:00 AM COFPUTARDI.DWG



GENERAL NOTES FOR UTILITY ADJUSTMENTS

1). THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.

2). EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.

3). UTILITY/AGENCY OWNERS:

CITY OF FRUITLAND PARK
(WATER AND SEWER)
DALE BOGLE
PUBLIC WORKS DIRECTOR
352-360-6795 OFFICE
352-308-5579 CELL

4). BT-# STANDS FOR BACTERIOLOGICAL TESTING SAMPLE POINT LOCATION.

5). THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS A MIN. OF 2 WEEKS PRIOR TO EXCAVATING IN THE VICINITY OF EXIST. UTILITIES FOR INSTALLATION OF WATER AND SEWER MAINS. CONTRACTOR SHALL COORDINATE WITH EXIST. UTILITY OWNERS FOR PROTECTION AND/OR SUPPORT OF THEIR FACILITIES.

6). PROPOSED FIRE HYDRANT LOCATIONS SHALL BE 6' MIN. - 9' MAX. BEHIND PROPOSED BACK OF CURB OR ASPHALT.

7). EXISTING WATERMAINS AND FORCEMAINS ARE TO REMAIN IN SERVICE UNTIL PROPOSED WATERMAINS AND FORCEMAINS HAVE BEEN TESTED AND CLEARED FOR SERVICE.

LEFT BLANK INTENTIONALLY

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2-1-2016		REVISED STORM AT STA.=161+69.00 PER COUNTY MARK-UP			
2-10-2016		REVISED WATER MAIN CROSSINGS UNDER ROAD TO BE D.I.P.			

BOOTH ERN STRAUGHAN HOTT, INC
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902 North Sinclair Ave.
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Certificate of Authorization Number: 27029

CITY OF FRUITLAND PARK
THE FRIENDLY CITY

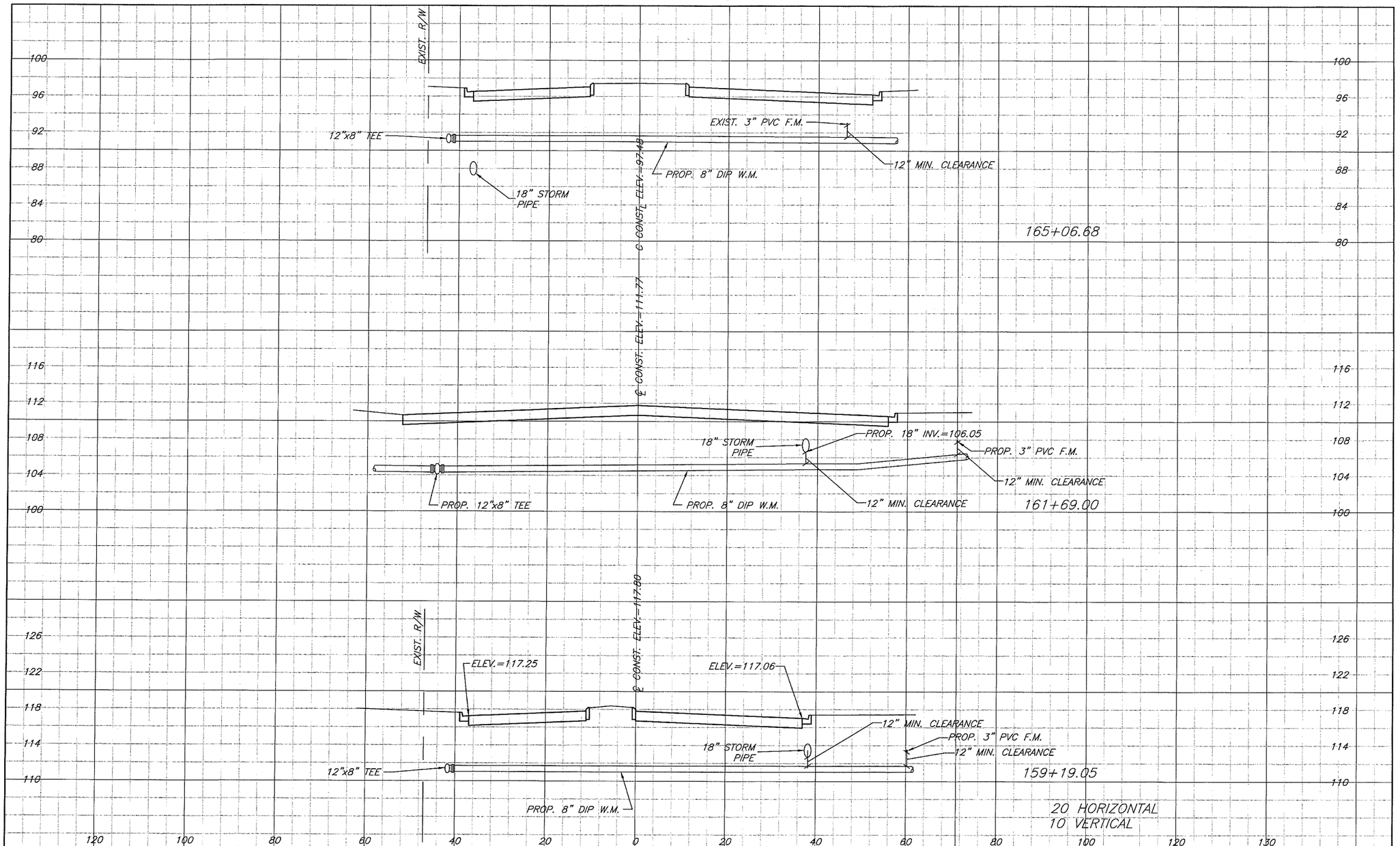
CITY OF FRUITLAND PARK
C.R. 466A-PH.1

UTILITY ADJUSTMENT PLAN

SHEET NO. U-03

SPH 8-6-2015 8:00 AM COFPUTARD2.DWG

DUANE K. BOOTH LICENSE No 49631 STATE OF FLORIDA PROFESSIONAL ENGINEER



DATE	REVISIONS	DATE	REVISIONS
2-1-2016	REVISED CROSS SECTION 161+69.00 PER COUNTY MARK-UP		
2-10-2016	REVISED WATER MAIN CROSSINGS UNDER ROAD TO BE D.I.P.		

BOOTH ERN STRAUGHAN HOTT, INC.
ENGINEERS • SURVEYORS • LAND PLANNERS
350 North Sinclair Ave.
Tavares, Florida 32778
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Office: 352.343.8481
Fax: 352.343.8486
Certificate of Authorization Number: 27029
DUANE K. BOOTH, P.E. LICENSE NO. 44631

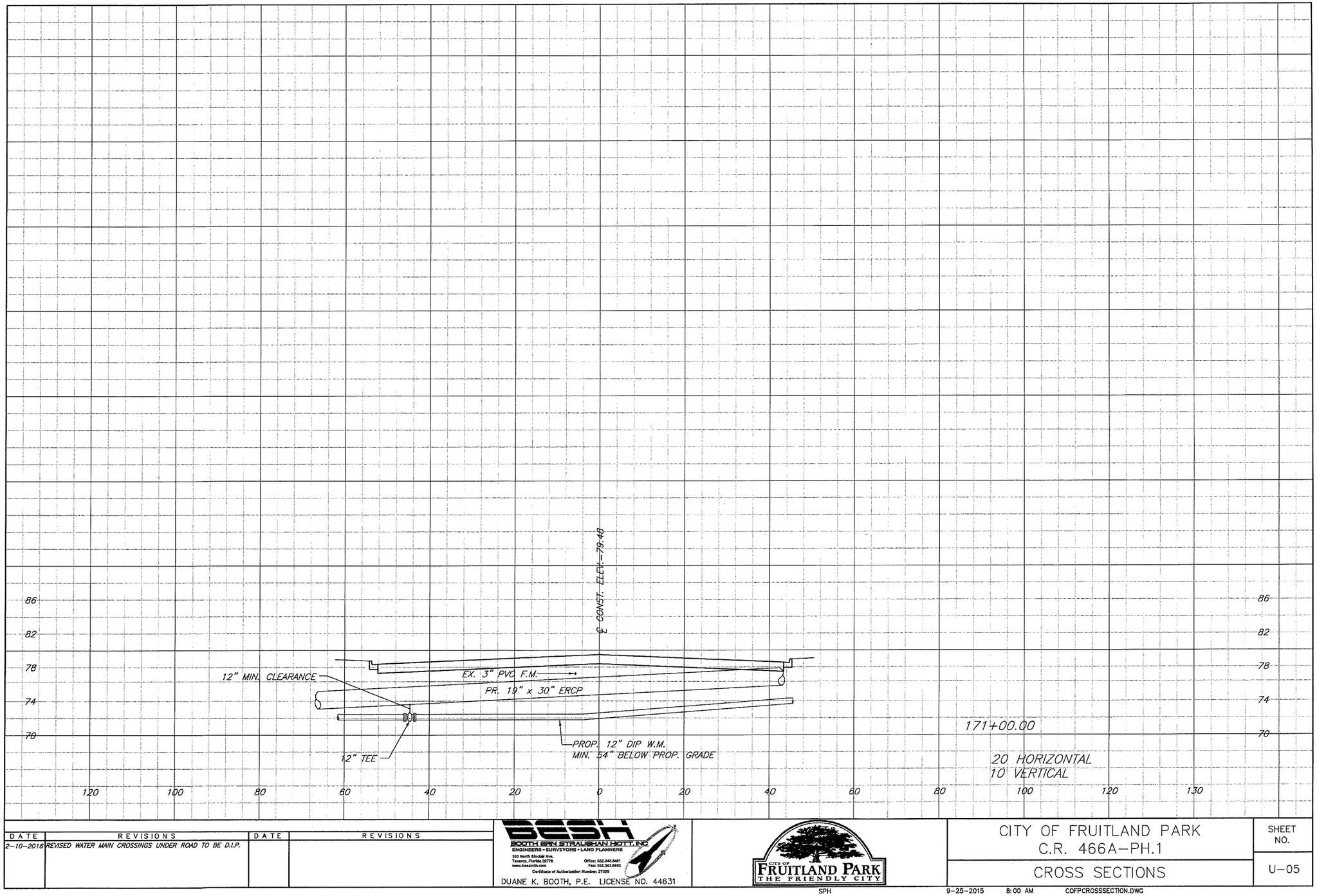
CITY OF FRUITLAND PARK
THE FRIENDLY CITY

CITY OF FRUITLAND PARK
C.R. 466A-PH.1
CROSS SECTION

SHEET NO. U-04

DUANE K. BOOTH LICENSE NO 44631 STATE OF FLORIDA PROFESSIONAL ENGINEER

SPH 9-25-2015 8:00 AM COFPCROSSSECTION.DWG



DATE	REVISIONS	DATE	REVISIONS
2-10-2016	REVISED WATER MAIN CROSSINGS UNDER ROAD TO BE D.I.P.		

BOOTH ERN STRAUGHAN HOTT, INC.
ENGINEERS • SURVEYORS • LAND PLANNERS
350 North Sinclair Ave.
Tavares, Florida 32778
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Office: 352.343.8481
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Certificate of Authorization Number: 27059
DUANE K. BOOTH, P.E. LICENSE NO. 44631

CITY OF FRUITLAND PARK
THE FRIENDLY CITY

SPH

CITY OF FRUITLAND PARK
C.R. 466A-PH.1

CROSS SECTIONS

SHEET NO.
U-05

9-25-2015 8:00 AM COFPCROSSSECTION.DWG

DUANE K. BOOTH
LICENSE
No. 44631
5/9/16
STATE OF FLORIDA
PROFESSIONAL ENGINEER