

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT
MT. ZION BAPTIST CHURCH
535 W. WASHINGTON STREET
ORLANDO, FLORIDA**

Prepared for:



**The City of Orlando
Economic Development Department
400 S. Orange Avenue
Orlando, Florida, 32802-4990
EPA Brownfield Cooperative Agreement BF-95498212**

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LIST OF ABBREVIATIONS AND ACRONYMS

AST	aboveground storage tank
ASTM	American Society for Testing and Materials
AULs	activity and use limitations
BOCC	Board of County Commissioners
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System (maintained by EPA)
CESQG	conditionally exempt small quantity generator
CFR	Code of Federal Regulations
CORRACTS	Identifies hazardous waste handlers with RCRA corrective action activity
DE-I	direct exposure - residential
DE-II	direct exposure – commercial/industrial
DCE	dichloroethylene
DOH	Department of Health and Human Services
DRF	discharge reporting form
ECT	Environmental Consulting & Technology, Inc.
EDR	Environmental Data Research
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act (also known as SARA Title III)
ERNS	emergency response notification system
ESA	environmental site assessment
FAC	Florida Administrative Code
FIC/FEC	Federal Institution Controls/Federal Engineering Controls
FOIA	Freedom of Information Act
FR	Federal Register
HREC	historic recognized environmental condition
ICs	institutional controls
LQG	large quantity generator
LLP	Landowner Liability Protections under the Brownfields Amendments
LSCTL	leachability soil cleanup target level
LST	leaking storage tanks
LUST	leaking underground storage tank
MSDS	material safety data sheet
NCP	national contingency plan
NFA	no further action
NFRAP	former CERCLIS sites where no further remedial action is planned under CERCLA
NPDES	national pollutant discharge elimination system
NPL	national priorities list
OCEPD	Orange County Environmental Protection Division
PCBs	polychlorinated biphenyls
PEC	perchloroethylene
PRP	potentially responsible party
RCRA	resource conservation and recovery act

SARA	superfund amendments and reauthorization act
SQG	small quantity generator
SRCO	Site Rehabilitation Completion Order
TP	Target Property
TEC	trichloroethylene
TSDF	hazardous waste treatment, storage and disposal facility
US	United States
USC	United States code
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	underground storage tank

1.0 SUMMARY

ECT has completed a Phase I Environmental Site Assessment (ESA) for the property located at 535 West Washington Street, Orlando, Orange County, Florida 32801. This Phase I ESA was conducted in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E1527-13 for Phase I ESAs. Deviations or data gaps from this Practice are described in Section 11 of this report.

The Phase I ESA investigation has revealed no evidence of RECs associated with the Site.

The Environmental Data Research (EDR) Radius Map Report with GeoCheck identified the former Orlando Gasification Plant under a number of regulatory databases, including CERCLIS. The CERCLIS database contains hazardous sites that are either on the US EPA National Priorities List (NPL), proposed to be on the NPL, or are undergoing studies to determine if the site should be listed. Considerable studies have been conducted at the Orlando gasification facility and adjoining properties. No contaminants were documented as being present at the Site and environmental investigations have shown contaminant migration away from the Site in a north-northeast direction. This is not considered a REC, as the benzene groundwater plume exists on the site adjacent to the TP.

2.0 INTRODUCTION

ECT has conducted a Phase I ESA for the property located at 535 West Washington Street, Orlando, Orange County, Florida 32801 (Site). The Site is currently home to the Mt. Zion Missionary Baptist Church. A Site Location Map is provided as **Figure 1**. A USGS Topographic Map, 1998, West Orlando, which includes the Site and the surrounding area, is provided as **Figure 2**. An aerial photograph, circa 2012, depicting the Site is also provided as **Figure 3**.

2.1 Purpose

Mr. Dan Dashtaki with the City of Orlando authorized ECT to conduct a Phase I ESA of the Site to evaluate the presence/absence of RECs in anticipation of future redevelopment activities. The City of Orlando is the recipient of a Brownfields Assessment Grant, EPA Cooperative Agreement BF-95498212. This grant was awarded in September 2012, and is a community-wide assessment grant, with emphasis on the Parramore area, specifically targeting redevelopment areas.

The objective of the Phase I ESA was to identify RECs in connection with the Site, to the extent feasible pursuant to the processes prescribed in the ASTM E-1527-13 guidelines. The term “*REC*” as defined by ASTM is the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or the material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to

public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This Phase I ESA includes information gathered from federal, state, and local agencies; personal interviews with people familiar with the Site and surrounding properties; a Site visit was conducted by ECT on May 13, 2014. This report is intended to meet the due diligence requirements of ASTM E 1527-13.

2.2 Detailed Scope of Services

The Phase I ESA conducted by ECT included, but was not limited to, the following services:

- Review of the public record;
- Site reconnaissance to identify visual signs of environmental conditions on or adjoining the Site, and to evaluate evidence found in the review of public record that might be indicative of activities resulting in hazardous substances or petroleum products being used or deposited in the Site;
- Interviews with local officials or individuals knowledgeable about the Site;
- Preparation of a written report documenting our findings, opinions, and conclusions.

2.3 Significant Assumptions

This Phase I ESA was prepared using information obtained from and/or provided by the following sources:

- Visual observations of the Site;
- Available published information;
- Third-party database searches, and;
- Local/State government officials and/or records.

It is assumed that the information obtained through the above methods is valid and accurate as provided. The passage of time, manifestation of latent conditions, and occurrence of future events or changes to existing codes/regulations may alter the conclusions and recommendations of this report.

2.4 Limitations and Exceptions

The opinions presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by ECT and the party for whom this report was originally prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representation, warranty, or guarantee, expressed or implied, is intended or given. To the extent that ECT relied upon information prepared by other parties not under contract to ECT, ECT makes no representation as to the accuracy or completeness of such information. This report is expressly for the sole and

exclusive use of the party for whom this report was originally prepared, and for a particular purpose. Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

The findings presented in this report apply solely to the Site conditions existing at the time when ECT's assessment was performed. It must be recognized, however, that an ESA is intended for the purpose of determining the potential for contamination through limited research and investigative activities and in no way represents a conclusive or complete site characterization. Conditions in other parts of the Site may vary from those at the locations where data were collected. ECT's ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. ECT does not provide any guarantees, certifications, or warranties that a property is free from environmental contamination. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards.

2.5 Special Terms and Conditions

The scope of work for this Phase I ESA did not include testing of electrical equipment for the potential presence of PCBs or the assessment of natural hazards such as naturally occurring asbestos or methane gas, assessment of the potential presence of radionuclides, or assessment of non-chemical hazards such as the potential for damage from earthquakes or floods. This Phase I ESA also did not include an extensive assessment of the environmental compliance status of the Site or of the businesses operating onsite, or a health-based risk assessment.

2.6 User Reliance

This Phase I ESA was conducted for the use and reliance of the City of Orlando. No use of the information contained in this report by others is permissible without receiving prior written authorization to do so from ECT. ECT is not responsible for independent conclusions, opinions, or recommendations made by others or otherwise based on the findings presented in this report.

3.0 SITE DESCRIPTION

This section presents a general overview of the Site, onsite improvements, and surrounding properties.

3.1 Location and Legal Description

The Site consists of one parcel located near the intersection of West Washington Street and Chatham Avenue, located within Section 26 of Township 22 South, and Range 29 East in Orlando, Orange County, Florida.

The Orange County Property Appraiser's Office information identifies the Site under the following parcel identification number, address, names, and legal descriptions:

26-22-29-6716-07-040; 535 West Washington Street; JAMES B PARRAMORES ADDITION C/66 LOTS 1, 3, & 4 & S 50 FT OF W1/2 LOT 2 ALL IN BLK G.

A copy of the Orange County Property Appraiser's information is included as **Appendix A**.

3.2 Site and Vicinity General Characteristics

The Site consists of one parcel totaling approximately 1.36 acres. The Site is bound by West Jefferson Street to the north, North Terry Avenue to the west, West Washington Street to the south, and Chatham Avenue to the east.

3.3 Current Use of the Property

The Site is developed and home to the Mt. Zion Missionary Baptist Church.

3.4 Descriptions of Structures, Roads, and Other Improvements on the Site

3.4.1 General Description of Structures

There are currently two structures on the Site. One structure is a single-family residential structure serving as the church's office and the second structure is the church.

3.4.2 Roads

The Site is accessible by West Washington Street to the south and Chatham Avenue to the east, West Jefferson Street to the north, and North Terry Avenue to the west.

3.4.3 Potable Water Supply

Potable water is provided by the Orlando Utilities Commission.

3.4.4 Sewage Disposal System

Sewage disposal is provided by the Orlando Utilities Commission.

3.5 Current Uses of the Adjoining Properties

The adjoining properties currently are utilized for residential, light industrial and state government purposes. The adjoining property to the north across West Jefferson Street is the TECO-People's Gas facility. The adjoining property to the west of the Site across North Terry Avenue is the Callahan Neighborhood Center. The adjoining properties to the south across West Washington Street consists of both developed parcels with residential structures and vacant developed parcels. The adjoining property to the east across Chatham Avenue is the State of Florida Office Complex.

4.0 USER-PROVIDED INFORMATION

A user questionnaire was completed by Reverend James Spooky on May 13, 2014, a copy of which is provided in **Appendix A**.

4.1 Title Records

A review of title records was not included in the scope of work for this Phase I ESA.

4.2 Environmental Liens or Activity and Use Limitations

The Client did not provide ECT with copies of the deed or chain-of-title. Therefore, ECT has no knowledge of environmental liens or use limitations associated with the Site.

4.3 Specialized Knowledge

No specialized knowledge was provided to ECT for this Phase I ESA.

4.4 Commonly Known or Reasonably Ascertainable Information

The parcel on the Site is developed and contains two structures. Reasonably ascertainable information included reports obtained from the Orange County Property's Appraiser's website.

4.5 Valuation Reduction for Environmental Issues

No information regarding valuation reduction was provided.

4.6 Owner, Property Manager, and Occupant Information

The Mt. Zion Missionary Baptist Church owns the parcel that comprises the Site. The parcel is developed with two structures present.

4.7 Reason for Performing Phase I

The reason for performing the Phase I ESA is to evaluate the presence/absence of RECs at the site and to provide an update regarding the current status of the parcel to the City of Orlando and to the Mt. Zion Baptist Church.

4.8 Other

No additional information was provided by the Client to ECT for the preparation of this Phase I ESA.

5.0 RECORDS REVIEW

The following section presents the results of ECT's historical records review, including aerial photographs, topographic maps, Sanborn maps, and city directories pertaining to the Site, or Target Property (TP).

5.1 Standard Environmental Record Sources

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate. A copy of the EDR Summary Radius Map Report is provided in **Appendix B**.

The environmental records were requested with a center-point of the study area located within the boundaries of the subject property. More detailed information regarding the individual databases searched is included in the Government Records Searched/Data

Currency Tracking section of the EDR report. This section of the report also includes information regarding when each database was last updated. The report listed sites of potential concern based on the above search criteria. However, only the sites which appeared to have the potential for environmental impacts to the subject site due to proximity, anticipated direction of groundwater flow, and/or potential for migrating contamination are discussed below. Note: distances to potential concerns are from the nearest boundary of the Site.

- **ORLANDO GASIFICATION PLANT**

Location: 600 Block West Robinson Street

Concern: CERCLIS

Summary: The former Orlando Gasification Plant is listed under a number of regulatory databases, including CERCLIS. The CERCLIS database contains hazardous sites that are either on the US EPA National Priorities List (NPL), proposed to be on the NPL, or are undergoing studies to determine if the site should be listed. Considerable studies have been conducted at the Orlando gasification facility, and current investigations focus on relatively deep documented groundwater impacts, extending to the Floridan aquifer. This facility is located north-northwest (NNW) 1/8 – 1/4 miles (0.135 mi.) from the TP. However, no evidence of contaminant migration towards the Site has been documented and for this reason the former Orlando Gasification Plant is not considered a REC.

- **DIKEOU PROPERTY**

Location: 100 Washington Street

Concern: LUST, DWM CONTAM

Summary: EDR has searched the Leaking Underground Storage Tank (LUST) inventory available to EDR researchers. In 2007, this property was listed as a fuel user/non-retail property with a documented discharge of an unknown quantity of gasoline and/or diesel resulting in soil and groundwater impacts. The property owner applied for the state Innocent Victim Petroleum Storage System Restoration Program but the site remains inactive awaiting funding. As a result, this property is also listed under the DMW CONTAM listing of active or known sites requiring cleanup but remain inactive awaiting funding. DIKEOU PROPERTY is located east (E) 1/4 to 1/2 miles (0.315 mi.) from the TP. Because this property is located at the same elevation above sea level as the TP, it is assumed that contaminants would not migrate toward the TP. For this reason, DIKEOU PROPERTY is not considered a potential concern for the TP.

- DEEDS Orlando and DEEDs Orlando Expanded

Location: Large area of downtown Orlando including the subject site

Concern: Brownfield Area

Summary: The first two listings in the database report identify the Downtown Economic Enhancement District (DEED) brownfield area originally designated in 2004 and expanded in 2007. Inclusion of the subject site or other properties within this area does not indicate that contamination is present, and is simply a legal designation to allow access to certain economic incentives related to the State and Federal Brownfields Programs. These area wide designations are not considered RECs.

5.2 Additional Environmental Record Sources

The following additional or proprietary record sources were also searched and reviewed.

5.2.1 Historical Topographic Maps

EDR's Historical Topographic Map Report is designed to assist in evaluating potential liability on a TP resulting from past activities. EDR's Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s. Historical topographic maps were produced and reviewed from 1956 through 1995. Results of the topographic map review are discussed in Section 5.3.

5.2.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were produced since the late 1800's to provide information relative to fire hazards on insurable property. These maps often indicate locations of underground and aboveground gasoline tanks, storage facilities for flammable chemicals, such as dry cleaners, paint shops, maintenance and garage facilities, as well as historical information on occupants of buildings, unavailable through other sources. Production of these maps typically was limited to the immediate vicinity of downtown urban areas. EDR purchased the Sanborn Company and has access to all available Sanborn maps. EDR performed a search of its archive and indicated that Sanborn maps were produced for the vicinity of the TP in various years from 1908 to 1973. Findings of the map reviews are discussed in Section 5.4.

5.2.3 Historical City Directory Review

R.L. Polk directories, Cole Information Services, Piedmont Directory Co., and/or Hill-Donnelly Cross Reference directories are referenced for study areas which help identify changes in land use based on the type of businesses that occupied the subject site and surrounding area. The type of business, such as automotive, dry cleaning, gasoline/service stations, etc. are indicative of the possible presence of hazardous substances or petroleum products. Addresses within the general vicinity of the TP first appeared in available historical directories in 1922. Results of the directory search are discussed in Sections 5.4.

5.2.4 City of Orlando Report Review

The City of Orlando provided ECT with Figures to review from the Arcadis report titled Feasibility Study Report – Operable Unit 1, dated February 2013. ECT superimposed the soil sampling data onto an aerial photograph circa 2013 to compare and contrast the soil sampling locations for the former Orlando Gasification Plant or Manufactured Gas Plant (MGP) to the Mt. Zion Baptist Church. Surface soil sampling was completed within the right-of-ways (ROWs) of West Jefferson Street, which adjoins Mt. Zion Baptist Church. Surface soil samples (0-2 feet below land surface) were collected for polycyclic aromatic hydrocarbons (PAHs), volatile aromatic compounds (VOCs), and metals (antimony, arsenic, and beryllium). The compounds reported were below the preliminary remediation goals (RPGs) established for the MGP site, with the exception of arsenic. Arsenic was detected at a level of 13 milligrams per kilogram (mg/kg) in the ROW near the intersection of West Jefferson Street and North Terry Avenue.

Groundwater contaminant plume maps from the Arcadis report were reviewed. The groundwater contaminant plumes originating from the Orlando Gasification Plant appear to be migrating to the north, or away from the Site.

A copy of the Arcadis figures and the figures generated by ECT are provided in **Appendix C**.

5.3 Physical Setting Source(s)

Physical sources that provide such information such as geological, hydrologic, or topographic characteristics were reviewed for potential migration pathways onto the Site. The Site has an approximate elevation of 109 feet National Geodetic Vertical Datum (NGVD) and the surrounding properties are typically at the same elevation or slightly lower to the north, south, east and west than the subject Site.

5.4 Historical Use Information on the Property

To evaluate historical use of the TP, ECT reviewed readily available aerial photographs, city directories, and fire insurance maps.

5.4.1 Topographic Maps

Historical USGS topographic maps of the Site and surrounding area were obtained and reviewed by EDR for years 1956, 1970, 1980, and 1995. As shown on **Figure 2**, the USGS Topographic Map, 1997, Orlando West Quad 3712, the surrounding area is generally flat, at a National Geodetic Vertical Datum (NGVD) of 109 ft. Topographic elevations have been relatively consistent with the historic topographic maps. A brief review of the topographic maps for the TP is provided below:

1956 – 1995 – No significant changes to the TP were identified in the Topographic Maps reviewed.

5.4.2 Aerial Photographs

Aerial photographs were obtained and reviewed from EDR for years 1947, 1952, 1969, 1974, 1978, 1980, 1984, 1994, 1997, 1999, 2005, 2006, 2007, and 2010. The EDR Aerial

Photograph Decade Package is provided in **Appendix C**. The most current 2012 aerial map, **Figure 3**, was also reviewed for activities on the TP. A brief synopsis of activities derived from the aerial photographs for the TP is provided below:

1947 – 2010 - The TP appears to contain residential dwellings or institutional buildings.

5.4.3 Directories

A review of the city directories provided by EDR was conducted as a part of this Phase I ESA. The directory information did not indicate past businesses or activities on the TP that would be considered suspect or warrant additional records review. A copy of the EDR-City Directory Abstract is provided in **Appendix C**.

5.4.4 Fire Insurance Maps

Fire Insurance Maps (Sanborn Maps) were obtained and reviewed from EDR for years 1908, 1913, 1919, 1925, 1950, 1956, 1965, and 1973. The Sanborn Maps are provided in **Appendix C**. A brief synopsis of activities derived from the Sanborn Maps for the TP is provided below:

1908 – Missionary Baptist Church and residential dwellings exist on the TP.

1913 – Mt. Zion Baptist Church and residential dwellings exist on the TP.

1919 – Mt. Zion Baptist Church and residential dwellings exist on the TP.

1925 – Mt. Zion Baptist Church and residential dwellings exist on the TP.

1950 – Mt. Zion Baptist Church and residential dwellings exist on the TP.

1956 – Residential dwellings exist on the TP.

1965 – Mt. Zion Baptist Church and residential dwellings exist on the TP.

1973 – Mt. Zion Baptist Church and residential dwellings exist on the TP.

5.5 Historical Use Information on Adjoining Properties

To evaluate historical use of the adjoining properties, ECT reviewed readily available topographic maps, aerial photographs, Orange County Property Appraiser's information, and fire insurance maps.

5.5.1 Topographic Maps

Historical USGS topographic maps of the Site and surrounding area were obtained and reviewed by EDR for years 1956, 1970, 1980, and 1995. As shown on **Figure 2**, the USGS Topographic Map, 1997, Orlando West Quad 3712, the surrounding area is generally flat, at a National Geodetic Vertical Datum (NGVD) of 109 ft. Topographic elevations have been relatively consistent with the historic topographic maps. A brief review of the topographic maps for the adjoining properties of the TP is provided below:

1956 – 1980 – No significant changes to the adjoining properties of the TP were identified in the Topographic Maps reviewed.

1995 – Sunshine Park to the north has been replaced with the Amway Arena.

5.5.2 Aerial Photographs

Aerial photographs were obtained and reviewed from EDR for years 1947, 1952, 1969, 1974, 1978, 1980, 1984, 1994, 1997, 1999, 2005, 2006, 2007 and 2010. The EDR Aerial Photograph Decade Package is provided in **Appendix C**. The most current 2012 aerial map, **Figure 3**, was also reviewed for activities on the adjoining properties of the TP. A brief synopsis of activities derived from the aerial photographs is provided below:

1947 – The adjoining properties are developed with residential buildings to the south, east and west. The property adjoining to the north has unknown structures and above ground storage tanks (ASTs) used for the storage of manufactured gas.

1952 – No major changes from the previous aerial photograph.

1969 – The ASTs to the north are now gone and People’s Gas System, Inc. office building is present. No other major changes from the previous aerial are apparent.

1974 – No major changes from the previous aerial photograph.

1978 – It appears a parking lot has been installed on the adjoining property to the east and the residential structures are gone. No other major changes from the previous aerial photograph are apparent.

1980 – No major changes from the previous aerial photograph.

1984 – It appears a commercial building has been constructed at the north end of the parking lot adjoining the TP to the east. No other major changes from the previous aerial photograph are apparent.

1994 – It appears additional commercial buildings have been constructed at the north end of the parking lot on the adjoining property to the east of the TP, and the parking lot is gone. No other major changes from the previous aerial photograph are apparent.

1997 – No major changes from the previous aerial photograph.

1999 – No major changes from the previous aerial photograph.

2005 – No major changes from the previous aerial photograph.

2006 – No major changes from the previous aerial photograph.

2007 – No major changes from the previous aerial photograph.

2010 – No major changes from the previous aerial photograph.

2012 – No major changes from the previous aerial photograph.

5.5.3 Directories

A review of the city directories indicated that in 1957, Southern Atlantic Gas Co. plant was located at 539 W. Robinson Avenue West. This location is the former manufactured gas plant previously identified in the aerial photographs .

5.5.4 Fire Insurance Maps

Sanborn Maps were obtained and reviewed from EDR for years 1908, 1913, 1919, 1925, 1950, 1956, 1965, and 1973. The Sanborn Maps are provided in **Appendix C**. A brief synopsis of activities derived from the Sanborn Maps for the adjoining properties is provided below:

1908 – Washington Street is called Veach Street. Residential dwellings and vacant property exist on adjoining properties. A public grade school is present on an adjoining property to the north, across Douglas.

1913 – Residential dwellings exist on the adjoining properties. A barber shop appears on the adjoining property to the east.

1919 – No major changes from the previous Sanborn Map.

1925 – Veach Street is now called Washington and Douglas is now called Jefferson. Residential dwellings and vacant property exist on adjoining properties. The barber shop on the adjoining property to the east is gone. A large capacity AST appears on a property adjoining to the north (north of the grade school).

1950 – The grade school to the north is no longer visible and an additional large capacity AST is present with four high pressure natural gas ASTs. Residential dwellings and vacant property exists to the west, south and east.

1956 – Residential dwellings west of the large capacity ASTs are gone and properties are vacant. Residential dwellings and vacant property exists to the west, south and east.

1965 – Florida Gas Utilities has been constructed on the adjoining property to the north replacing the large capacity ASTs. Residential dwellings and vacant property exists to the west, south and east.

1973 – No major changes from the previous Sanborn Map.

6.0 SITE RECONNAISSANCE

On May 13, 2014, a representative of ECT performed a site reconnaissance to observe general site conditions and to identify visible evidence of RECs. The property consisted of two structures. Select photographs taken on the property during the site reconnaissance are provided in **Appendix D**.

6.1 Methodology and Limiting Conditions

The methodology for the site reconnaissance included traversing the Site in a grid pattern while observing the ground surface of the property. A Site Reconnaissance Checklist documenting the Site and adjoining properties was completed and is provided in **Appendix D**.

6.2 General Site Setting

6.2.1 Current Use(s) of the Property

The current use of the Site is a church and church office.

6.2.2 Past Use(s) of the Property

The Site appears to have been developed as early as 1908, according to the Sanborn Maps.

6.2.3 Current Uses of Adjoining Properties

The Site is located in a developed area of Washington Street. A mix of vacant, commercial, and residential properties are located to the south of the Site. The State Regional Service Center is to the east. Residential dwellings and People's Gas System, Inc. exist to the north.

6.2.4 Past Uses of Adjoining Properties

Past uses of the adjoining parcels have been both commercial and residential.

6.2.5 Current or Past Uses in the Surrounding Area

Current and past uses in the surrounding area are a mix of commercial, residential, and education facilities.

6.2.6 Geologic, Hydrogeologic, and Hydrologic Conditions

According to the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Soil Survey of Orange County, Florida (1989), the majority of the subject property is underlain by Millhopper fine sands. Below is a brief description of this soil type:

Millhopper fine sand: This soil type is nearly level to gently sloping and moderately well drained and is found on low ridges and knolls on the uplands and on the flatwoods. The slopes are nearly smooth to slightly convex. A seasonal high water table in Tavares soil is at a depth of 40 to 72 inches for more than 6 months, and it recedes to a depth of more than 80 inches during extended dry periods. A seasonal high water table in Millhopper soil is at a depth of 40 to 60 inches for 1 to 4 months, and it recedes to a depth of 60 to 72 inches for 2 to 4 months. During periods of high rainfall, the water table is at a depth of 30 to 40 inches for cumulative periods of 1 to 3 weeks. The permeability of Tavares soil is very rapid. The permeability of Millhopper soil is rapid in the surface and subsurface layers and moderately rapid of moderate in the subsoil. The available water capacity of Tavares soil is very low. The available water capacity of Millhopper soil is low in the surface and subsurface layers and medium in the subsoil. Natural fertility is very low in Tavares soil and low in Millhopper soil. Organic matter content is very low in Tavares soil and low or moderately low in Millhopper soil. In most areas, the soils in this map unit are used for citrus crops and/or for homesite development.

ECT personnel also reviewed the soil survey of Orange County, dated 1957 (issued 1960). According to the Soil Survey, Orange County is underlain by marine deposited beds of sand, silt, clay, limestone, dolomite, and shale to about 6,500 feet below land surface (bls). The uppermost unit is Pleistocene to Recent in age and generally composed of unconsolidated, very fine to medium-grained quartz sand with some clays. The Pleistocene and Recent age sediments are underlain by the Hawthorn Group of Miocene age (about 25 million years old). In general, the Hawthorn Group is highly variable and diverse, including inter-bedded and inter-fingered sand, clayey sand, sandy-clayey

phosphatic sediments, dolomite, and limestone. The Miocene age sediments are underlain by a thick sequence of late Eocene age limestone formations known as the Ocala Group. It is described as gray clay and gravel to white, soft limestone. The Ocala Group Limestone is underlain by the Avon Park Limestone, which is also of Eocene age. This formation is composed of similar materials, but distinguished from overlying units by the occurrence of sand-sized, cone-shaped foraminifera. The formation is usually tan in color, but can range from chalky white to light brown or ashen gray. The Lake City Limestone of middle Eocene age underlies the Avon Park Limestone. It is similar in lithology and water-bearing properties to the Avon Park Limestone and makes up the bottom portion of the Floridan aquifer.

According to the Soil Survey, ground water occurs in both artesian and non-artesian conditions in the Orange County. The non-artesian aquifer is composed mainly of sand and shell with varying amounts of clay and provides limited amounts of water. Water from this aquifer is used mainly for livestock and limited domestic use. Water quality in this aquifer varies depending on the chemical composition of the aquifer and the content of the calcium carbonate in the area. The secondary artesian aquifer and the Floridan Aquifer are the two types of artesian aquifers in Orange County. The secondary artesian aquifer generally yields less water than the Floridan Aquifer, but yields more than the non-artesian aquifers. The secondary artesian aquifers contain undifferentiated sediments and are more extensive in the Hawthorn Group. The quality of the secondary artesian aquifer varies with depth, location, and local geologic and hydrologic conditions.

The Floridan Aquifer underlies all of Florida. In Orange County, the Floridan Aquifer includes the Lake City Limestone, the Avon Park Limestone, the Ocala Group, and parts of the Hawthorn Group. The aquifer consists of alternating layers of limestone and dolomite or dolomitic limestone. This aquifer is one of the most productive in the world. Ground water recharge in Orange County of the Floridan Aquifer comes from annual rainfall. Water also enters the Floridan Aquifer by underground flow from outside the region. Discharge of ground water from the Floridan Aquifer occurs by spring outflow, seepage into the St. Johns River system, by outflows to other areas, and by localized pumping in the area.

6.3 Exterior Observations

The following items or conditions were looked for or identification was attempted, as indicated in the ASTM standard.

6.3.1 Hazardous Substances and Petroleum Products Containers in Connection with Identified Uses

Two structures were present at the Site.

6.3.2 Storage Tanks

No aboveground storage tanks (ASTs) or underground storage tanks (USTs) were observed on the Site.

6.3.3 Odors

No strong, pungent, or noxious odors and their sources were detected during the Site reconnaissance.

6.3.4 Pools of Liquid

No standing surface water and pools or sumps containing liquids likely to contain hazardous substances or petroleum products were observed during the Site reconnaissance.

6.3.5 Drums

No drums were observed during the Site reconnaissance.

6.3.6 Hazardous Substance and Petroleum Products Containers (Not Necessarily in Connection with Identified Uses)

No hazardous substances or petroleum products containers not necessarily in connection with identified uses were observed during the Site reconnaissance.

6.3.7 Unidentified Substance Containers

No unidentified substance containers were observed during the Site reconnaissance.

6.3.8 PCBs

There were no transformers or other structures at the Site containing PCBs.

6.3.9 Pits, Ponds, or Lagoons

No pits, ponds, lagoons or other stormwater features were identified during the Site reconnaissance.

6.3.10 Stained Soil or Pavement

No stained soil was observed during the Site reconnaissance.

6.3.11 Stressed Vegetation

No stressed vegetation (from other than insufficient water) was identified during the Site reconnaissance.

6.3.12 Solid Waste

No areas that were apparently filled or graded by non-natural causes (or filled of unknown origin) suggesting trash construction debris, demolition debris, or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal were identified during the Site reconnaissance.

6.3.13 Wastewater

No wastewater or other liquids (including stormwater) or any discharge into a drain, ditch, underground injection system, or stream on or adjacent to the Site were observed discharging to drains or underground injection systems on site during the Site reconnaissance.

6.3.14 Wells

No private water well, pump or associated plumbing was observed during the Site visit.

6.3.15 Septic Systems

No septic systems were observed during the Site reconnaissance.

6.3.16 Other

No other observations were recorded during the Site reconnaissance.

6.4 Interior Observations

There were two buildings on the Site. The church office was visually inspected, the main church was not inspected due to an on-going function. Reverend Spooney provided answers to the interior observations for the main church.

6.4.1 Heating/Cooling

A central heating and cooling system was identified during the Site reconnaissance for both structures.

6.4.2 Stains or Corrosion

No stains or corrosion was identified during the Site reconnaissance.

6.4.3 Drains and Sumps

No drains or sumps were observed during the Site reconnaissance.

6.4.4 Hazardous Substances and Petroleum Products with Identified Uses

No hazardous substances or petroleum products were observed during the Site reconnaissance.

6.4.5 Storage Tanks

No ASTs, USTs, vent pipes, or fill pipes were identified within the structure during the Site reconnaissance.

6.4.6 Odors

No strong, pungent or noxious odors were during the Site reconnaissance.

6.4.7 Pools of Liquid

No strong, pungent or noxious odors were during the Site reconnaissance.

6.4.8 Drums

No drums were observed within the building during the Site reconnaissance.

6.4.9 Hazardous Substance and Petroleum Products Containers (Not Necessarily in Connection with Identified Uses)

No hazardous substances or petroleum products containers were observed during the Site reconnaissance.

6.4.10 Unidentified Substance Containers

No open or damaged containers of unidentified substances suspected of being hazardous substances or petroleum products were observed during the Site reconnaissance.

6.4.11 PCBs

No open or damaged containers of unidentified substances suspected of being hazardous substances or petroleum products were observed during the Site reconnaissance.

7.0 INTERVIEWS

Interviews with local government officials were not conducted as part of this Phase I ESA.

7.1 Interviews with Site Contacts

An interview was conducted with Reverend Spooney, a site contact, during ECT's site visit on May 13, 2014. Reverend Spooney was not aware of any current or historical chemical storage and/or spills at the Site. He was not aware of any other environmental concerns associated with the property. A copy of the user questionnaire completed during the interview with Reverend Spooney is provided in **Appendix A**.

7.2 Interviews with Local Government Officials

Interviews with local government officials were not conducted as a part of this Phase I ESA.

8.0 FINDINGS

This section identifies known or suspect RECs and other findings discovered during the Phase I ESA investigations.

1. **ORLANDO GASIFICATION PLANT, 600 Block West Robinson Street:**

The EDR report had the former Orlando Gasification Plant is listed under a number of regulatory databases, including CERCLIS. The CERCLIS database contains hazardous sites that are either on the US EPA National Priorities List (NPL), proposed to be on the NPL, or are undergoing studies to determine if the site should be listed. Considerable studies have been conducted at the Orlando gasification facility, and current investigations focus on relatively deep documented groundwater impacts, extending to the Floridan aquifer. This facility is located north adjacent to the TP. The documented impacts are not considered a REC, as the groundwater plume extends away from the TP.

2. **DEEDS Orlando and DEEDs Orlando Expanded, Large area of downtown:**

The EDR report identified the Downtown Economic Enhancement District (DEED) brownfield area originally designated in 2004 and expanded in 2007. Inclusion of the subject site or other properties within this area does not indicate that contamination is present, and is simply a legal designation to allow access to certain economic incentives related to the State and Federal Brownfields Programs. These area-wide designations are not considered RECs for the TP.

3. **DIKEOU PROPERTY, 100 Washington Street:**

The EDR report showed in 2007 this property was listed as a fuel user/non-retail property with a documented discharge of an unknown quantity of gasoline and/or diesel resulting in soil and groundwater impacts. The property owner applied for the state Innocent Victim Petroleum Storage System Restoration Program but the site remains inactive awaiting funding. As a result, this property is also listed under the DMW CONTAM listing of active or known sites requiring cleanup but remain inactive awaiting funding. DIKEOU PROPERTY is located east (E) 1/4 to 1/2 miles (0.315 mi.) from the TP. Because this property is located at the same elevation above sea level as the TP, it is assumed that contaminants would not migrate toward the TP. For this reason, DIKEOU PROPERTY is not considered a REC.

8.1 Known or Suspect RECs

This Phase I ESA has not revealed evidence of RECs in connection with the Site.

8.2 Historical RECs

This Phase I ESA has revealed no evidence of historical RECs in connection with the Site.

8.3 De Minimis Conditions

No deminimus conditions were observed on the Site.

8.4 Other Findings

There are no other findings than those discussed in Section 8.0.

9.0 OPINION

This section includes the environmental professional's opinion(s) of the impact on the property of conditions identified in the findings section.

1. ORLANDO GASIFICATION PLANT, 600 Block West Robinson Street

This site is not considered a REC for the TP.

2. DEEDS Orlando and DEEDs Orlando Expanded, Large area of downtown included TP

These area wide designations are not considered RECs for the TP.

3. DIKEOU PROPERTY, 100 Washington Street

This site is not considered a REC for the TP.

10.0 CONCLUSIONS

ECT has conducted a Phase I ESA for the Site located at 535 West Washington Street. This Phase I ESA was conducted in conformance with the scope and limitations of ASTM Practice E1527-13 for Phase I ESAs. Deviations or data gaps from this Practice are described in Section 11 of this report.

The Phase I ESA investigation has revealed evidence of one REC associated with the Site.

11.0 DEVIATIONS/DATA GAPS

The following deviations from ASTM practice were identified:

- The five-year interval review of historical sources from the present, back to the property's first developed use or back to 1940 could not be achieved. This is considered a deviation to the ASTM 1527-13 standard and constitutes a data failure. For the purposes and intent of this report, this data failure is not considered significant.
- ECT was not provided with chain of title for the subject parcels. The absence of a chain of title is considered a data failure. For the purposes and intent of this report, this data failure is not considered significant.

12.0 ADDITIONAL SERVICES

No additional services outside of the scope of work (i.e., asbestos, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and biological agents) were provided for this investigation.

13.0 REFERENCES

Environmental Data Resources, Inc. The EDR Aerial Photo Decade Package: 535 West Washington Street, Orlando, FL 32801. April 9, 2014.

Environmental Data Resources, Inc. Certified Sanborn Map Report: 535 West Washington Street, Orlando, FL 32801. April 9, 2014.

Environmental Data Resources, Inc. The EDR City-Directory Abstract: 535 West Washington Street, Orlando, FL 32801. April 9, 2014.

Environmental Data Resources, Inc. EDR Historical Topographic Map Report: 535 West Washington Street, Orlando, FL 32801. April 9, 2014.

Environmental Data Resources, Inc. The EDR Radius Map Report with GeoCheck: 535 West Washington Street, Orlando, FL 32801. April 9, 2014.

Florida Department of Environmental Protection. Online Environmental Database. <http://dwmedms.dep.state.fl.us/Oculus/servlet/login>

Google Maps, 2012 Aerial photography review.

Orange County Property Appraisers Website. April 9, 2014.

Orange County Historical Aerial Photographs.

Florida Department of Transportation Aerial photograph collection.

14.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

The environmental assessment described herein was conducted by the undersigned employees of AEC and ECT. ECT's investigation consisted solely of the activities described in the Introduction of this report, and in accordance with the Terms and Conditions of Services Authorization #II.

I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in §312.10 of 40 CFR 312. I, have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. I have developed and performed the all-appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312. The qualifications of the environmental professionals listed below are provided in **Appendix E**.

Report Reviewed By:



Chad R. Downing, Associate Scientist III
Environmental Consulting & Technology, Inc.

Report Approved By:



Jeffrey J. Peters, P.G., Principal Scientist
Environmental Consulting & Technology, Inc.