

Appendix E
Phase I Environmental Site Assessment

**REPORT
PHASE I ENVIRONMENTAL SITE
ASSESSMENT**

**WILLOWOOD RE-CHANNELIZATION
PROJECT
2ND STREET & COLTRANE
EDMOND, OKLAHOMA**

**PREPARED FOR: MESHEK &
ASSOCIATES
MARCH 18, 2009**

**PREPARED BY: URS CORPORATION
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SITE NAME Willowood Re-channelization
ADDRESS 2nd Street and Coltrane
Edmond, Oklahoma County, Oklahoma

EXECUTIVE SUMMARY

URS Corporation (URS) conducted a Phase I Environmental Site Assessment (ESA) of the Willowood channel located immediately southeast of the intersection of 2nd Street and Coltrane in Edmond, Oklahoma. This location can further be described as being located in the NW ¼, Section 32, Township 14N, Range 2W in Oklahoma County, Oklahoma (Site).

This Phase I Environmental Site Assessment (ESA) was conducted in general conformance with the methods and procedures described in the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (Standard Designation E 1527-00).

Site Conditions

The Site consists of an approximately 50 foot by 1530 foot corridor used as a drainage area. The northern and southern quarters of the Site are unpaved and predominately vegetated by fescue. The central half of the drainage area is lined in concrete. The area follows part of Coffee Creek, an intermittent stream which is a tributary of Spring Creek. The Site is located in the middle of a residential neighborhood and is bordered on the northeast and southwest sides by the backsides of single-story residences. The northern and southern quarters of the Site are not bordered by residences.

Based on the available information, no current or historical Recognized Environmental Conditions were identified in association with site.

Historical Review

The historical data reviewed indicated that the Site had been undeveloped until the early 1980's. The 1970 aerial photograph of the Site shows undeveloped land. The 1984 aerial photograph shows some development immediately to the southwest of the Site. In 1995, the Willowood community bordering the Site had been developed. Based on URS' review, no historical Recognized Environmental Conditions were identified in association with a historical review of the Site.

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Agency Review URS reviewed the EDR regulatory database search report for the Site. The Site was not listed in the EDR regulatory database report. URS also reviewed the EDR regulatory database search report for the surrounding properties. No Recognized Environmental Conditions were identified in the vicinity of the Site.

Recommended Action Based on the findings presented in this Phase I Environmental Site Assessment, URS has determined there are no features or conditions of potential environmental concern existing in association with the Site and the adjoining properties.

This Executive Summary is not intended to be a "stand-alone" document, but a summary of our findings described in the following report. It is intended to be used in conjunction with the scope of services and limitations described therein.

The Phase I ESA site reconnaissance was performed by Mrs. Stephanie Rainwater on Thursday, February 26, 2009. Mrs. Rainwater is an Environmental Scientist in the URS Tulsa, Oklahoma office.

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1.0

INTRODUCTION

Purpose

The purpose of the Phase I Environmental Site Assessment (ESA) was to gather information regarding the subject property to evaluate whether features and conditions of potential environmental concern exist in association with the subject site and the adjoining properties.

The Phase I was performed for Meshek & Associates. URS understands that Meshek & Associates will rely on the contents and conclusions of this report in support of flood protection efforts on behalf of the City of Edmond.

Scope of Services

The scope of services for this Phase I is based on the requirements of ASTM "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (Standard Designation E 1527-00). The investigation of the Site included: research into the site history through the review of historical aerial photographs, city directories and topographic maps; review of a regulatory agency database list; and a visual assessment of the subject property, surrounding properties, and all improvements.

The Phase I Environmental Site Assessment did not include UST/AST tank or line testing, or testing for asbestos, radon, lead-based paint, lead in drinking water, mold, vapor intrusion, soil or groundwater contamination. In addition, this Phase I Environmental Site Assessment did not include a comprehensive compliance audit.

ASTM Standard

This report was prepared in general conformance with the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard E 1527-00). This standard defines a Recognized Environmental Condition as: "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 a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater 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."

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2.0 SITE DESCRIPTION

Location The Site is a stretch of a linear drainage system/intermittent creek oriented in a northwest to southeast manner immediately southwest of the intersection of 2nd Street and Coltrane Rd. in Edmond, Oklahoma County, Oklahoma. The site vicinity consists of commercial properties, undeveloped land and residential development. A Site Location Map is presented as Figure 1. A Site Plan is provided as Figure 2.

Adjoining Properties

URS' observation and evaluation of adjoining properties was limited to features and conditions that were visible from public rights-of-way. The following observations were made.

North: 2nd Street/ Highway 66 borders the subject property to the north. Beyond 2nd Street is undeveloped property followed by residential developments.

South: A mix of undeveloped, cleared land and residential developments are located to the south of the subject property. Spring Creek is located to the south of the subject property.

East: Single-family residences border the subject property to the east followed by commercial properties and Coltrane Road.

West: The subject property is bordered to the west by single-family residences followed by a mix of undeveloped land and commercial properties.

3.0 PHYSICAL SETTING

Topography According to the USGS *Edmond, Oklahoma* (1983) 7.5-minute series topographic quadrangle map, the subject site lies at an approximate elevation of 1,050 feet above mean sea level. Based on observations made at the time of the site visit and a review of the topographic map, the topography of the site is gently rolling, with a slope to the southeast towards Spring Creek.

Soils According to the U.S. Department of Agriculture's (USDA) Web Soil Survey, the subject property is equally underlain by soils of the Pulaski

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series. The Pulaski series consist of deep and moderately deep fine sandy loams with moderate infiltration rates and are subject to a range of flooding from occasional to frequent.

Wetlands

Based on a review of the U.S. Fish and Wildlife Service website (<http://www.fws.gov/wetlands/data/index.html>), no wetland areas are indicated on the subject property. In addition, no wetlands-type vegetation was observed on the subject property at the time of URS' site visit.

4.0

SITE HISTORY

URS' understanding of the Site's history is founded upon our review of historical aerial photographs, historical topographic maps, and other referenced documents as available. Historical aerial photographs (dated 1957, 1963, 1970, 1984, 1995, and 2005) of the Site were obtained from Environmental Data Resources, Inc. (EDR). Historical topographic maps of the site were also obtained from EDR dated 1935, 1940, 1966, 1975 and 1983.

Through a review of the historical information referenced above, URS was able to document site usage back to 1935. The historical data reviewed indicated that the Site had been undeveloped land since at least 1970. From the late 1970s until the mid 1980s, the Site appears to have had the development of single family housing units occur around it. The Site is currently used as a drainage area with many of the residences having a foundation or french drain discharging into the Site.

Sanborn Fire Insurance Maps

URS contracted with Environmental Data Resources, Inc. (EDR) in order to obtain historical Sanborn Fire Insurance maps for the Site vicinity. However, Sanborn Fire Insurance maps were not available for the Site vicinity.

Prior Documents/ Test Results

No previous environmental reports were available to URS regarding the Site.

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5.0 SITE RECONNAISSANCE

Mrs. Stephanie Rainwater of URS's Tulsa, Oklahoma office conducted a reconnaissance of the Site on Thursday, February 26, 2009. The site visit consisted of a walking tour of the subject property. Site photographs are provided in Appendix A. URS' observations are noted below.

Hazardous Materials or Waste

The Site was not identified in the EDR regulatory database search report as a registered hazardous waste generator facility. No indications of hazardous materials, waste storage, or generation were observed on the Site.

Solid Waste

Solid waste is not currently generated at this location.

Wastewater

The site appears to follow the sanitary sewage system with elevated manholes along the axis of the northern $\frac{3}{4}$ of the subject property. Additionally, what appear to be french drains, discharge storm water from each residence into the drainage area/subject property.

ASTs

No aboveground storage tanks (ASTs) were observed or reported for the Site.

USTs

No indications of underground storage tanks (USTs), such as fill ports or vent pipes, were observed on the Site. The Site was not identified as a registered UST site in the EDR database report.

Drums

No drums were observed or reported on the Site.

Discolored Pavement or Soil

No discolored pavement or soil was observed on the Site.

Pits, Ponds, or Lagoons

No pits, ponds, or lagoons associated with waste disposal were observed or reported on the Site.

PCBs

No potential PCB-containing equipment was observed or reported at the Site. Pad mounted transformers labeled "Non-PCB" were observed at adjacent residences but not on the Site.

Asbestos- Containing Materials

There are no structures directly located on the Site. Therefore, a visual asbestos-containing materials survey was not performed at the Site.

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6.0 GOVERNMENT AGENCY INFORMATION

Database Search URS reviewed information gathered from several environmental databases through Environmental Data Resources, Inc. (EDR) to evaluate whether activities on or near the Site have the potential to create adverse environmental impacts on the Site. EDR reviews databases compiled by Federal, State, and local government agencies. The complete list of databases is provided in Appendix B. It should be noted that this information is reported as URS received it from EDR, which in turn reports information as it is provided in various government databases. It is not possible for either URS or EDR to verify the accuracy or completeness of information contained in these databases. However, the use of and reliance on this information is a generally accepted practice in the conduct of environmental due diligence.

URS reviewed the EDR regulatory database search report for the Site. The Site was not listed in the EDR regulatory database report.

URS also reviewed the EDR regulatory database search report for the surrounding properties. Two properties of potential environmental concern were identified in the standard environmental records search of the surrounding property. These include the 7-Eleven station to the west of the subject property and a permanently closed drycleaners immediately south of the 7-Eleven station. Both locations are on Coltrane Road. Both properties are located approximately 1,000 feet away and at a higher elevation. The 7-Eleven station appears on both the UST list and the Historic UST list. The station has three fiberglass reinforced plastic USTs currently in use. Two of the USTs have tank capacities of 10,000 gallons, the third has a capacity of 6,000 gallons. No UST violations are listed for this facility. Neither of these facilities appears on the EPA's Enviromapper database. Based on the lack of violations, their distance relative to the subject site, and the permanently closed status of the drycleaners specifically, neither of these facilities appears to represent a Recognized Environmental Condition to the subject property.

No other properties were identified in the EDR database report within the ASTM designated search radii that appear to represent an environmental concern to the Site. A copy of the EDR regulatory database report and associated information is provided in Appendix B.

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7.0 FINDINGS AND CONCLUSIONS

URS has performed a Phase I Environmental Site Assessment of the Willowood Channel located immediately southeast of the intersection of 2nd Street and Coltrane Road in Edmond, Oklahoma County, Oklahoma. The Phase I ESA was performed in general conformance with the scope and limitations of ASTM Practice E 1527-00.

In the professional opinion of URS, an appropriate level of inquiry has been made into the previous usage of the property consistent with good commercial and customary practice in an effort to minimize liability. No Recognized Environmental Conditions were observed on the Site.

No off-site Recognized Environmental Conditions were identified as having a reasonable potential to adversely impact the Site.

8.0 LIMITATIONS

The conclusions presented in this report are professional opinions based solely upon indicated data described in this report, visual observations of the site and vicinity, and our interpretation of the available historical information and documents reviewed, as described in this report. They are intended exclusively for the purpose outlined herein and the site locations and project indicated.

The report and any additional information which URS prepared and submitted to the Meshek & Associates in connection with this project (collectively the "Reports") are for the sole use and benefit of the Meshek & Associates. However, the Reports may be used or relied upon by Meshek & Associates' partners, and affiliates, and any prospective purchasers of the property, as well as lenders or affiliates connected to this transaction subject to the terms and conditions of the contact, including without limitation, the warranty, liability, and indemnity terms thereof, and any person given such consent (the "Grantee") shall be deemed to have agreed to such terms and conditions by its use and reliance on the Reports. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

It should be recognized that this study was not intended to be a definitive investigation of contamination at the Site and the conclusions provided are not necessarily inclusive of all the possible conditions. Consequently, this study is not intended to warranty that the Site is free of contamination or other issues that would represent a liability to the user. Given that the scope of services for this investigation was limited, and that exploratory borings, soil and/or groundwater sampling or analytical testing was not undertaken, it is possible that currently unrecognized subsurface contamination may exist at the Site. URS makes no representations regarding the

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value or marketability of the Site or the suitability for any particular use, and none should be inferred based on the Reports.

Opinions and recommendations presented herein apply to the Site conditions existing at the time of our investigations and cannot necessarily apply to site changes of which URS is not aware and has not had the opportunity to evaluate. Changes in the conditions of this property may occur with time due to natural processes or the works of man on the Site or adjacent properties. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

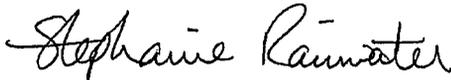
The Phase I ESA site reconnaissance was performed by Mrs. Stephanie Rainwater. This Phase I ESA was prepared under the oversight and management of URS representative Michelle Barnett and Paula Pettit. Mrs. Pettit is an Environmental Scientist in the URS Tulsa, Oklahoma office and has over 15 years experience in environmental site investigations, characterizations, assessments and auditing. Mrs. Barnett is a Senior Project Manager who has over 15 years of experience providing national environmental due diligence services.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in CFR Part 312.

This report was prepared by:

URS Corporation



Stephanie K. Rainwater
Environmental Scientist



Paula J. Pettit
Environmental Professional

FIGURES and APPENDICES

The figures and appendices for the Phase I Environmental Site Assessment (ESA) report prepared by URS Corporation, Tulsa OK, are not being reprinted as part of this Environmental Assessment. The ESA figures and appendices are available upon request to the Environmental and Historic Preservation section at FEMA Region 6.