

**REPORT OF PHASE I  
ENVIRONMENTAL SITE ASSESSMENT**

**APPROXIMATE 68-ACRE TRACT  
US HIGHWAY 521  
INDIAN LAND, SOUTH CAROLINA**

**ECS PROJECT NUMBER M1774**

March 8, 2000

Mr. Jim Merrifield  
Crosland Commercial  
125 Scaleybark Road  
Charlotte, North Carolina 28209

Reference: Report of Phase I Environmental Site Assessment  
Approximate 68-Acre Tract  
US Highway 521  
Indian Land, South Carolina

ECS Project Number M1774

Dear Mr. Merrifield:

Engineering Consulting Services, Ltd. (ECS) is pleased to provide the results of our recently performed Environmental Site Assessment (ESA). This work was completed pursuant to your authorization of our proposal M2100P, dated February 2, 2000.

Our assessment has revealed no evidence of recognized environmental conditions associated with the site or the surrounding properties. No further assessment is recommended at this time.

We appreciate the opportunity to provide our environmental-related services to Crosland Commercial. If you have any questions concerning this report, please call us at (704) 525-5152.

Sincerely,

**ENGINEERING CONSULTING SERVICES, LTD.**

Stephen C. Brown  
Environmental Geologist

Christopher L. Corbitt, P.G.  
Principal Geologist

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**

APPROXIMATE 68-ACRE TRACT  
US HIGHWAY 521  
INDIAN LAND, SOUTH CAROLINA

# ECS, Ltd.

ENGINEERING CONSULTING SERVICES, LTD.  
8702 RED OAK BOULEVARD, SUITE A  
CHARLOTTE, NORTH CAROLINA 28217

PREPARED FOR:

CROSLAND COMMERCIAL  
125 SCALEYBARK ROAD  
CHARLOTTE, NORTH CAROLINA  
ATTN: MR. JIM MERRIFIELD

PROJECT NUMBER M1774

March 8, 2000

# TABLE OF CONTENTS

<b>SECTION 1: EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>SECTION 2: INTRODUCTION .....</b>	<b>2</b>
2.2 SPECIAL TERMS AND CONDITIONS.....	2
2.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT.....	3
<b>SECTION 3: SETTING .....</b>	<b>4</b>
3.1 LOCATION AND LEGAL DESCRIPTION .....	4
3.2 SITE DESCRIPTION AND PROPERTY IMPROVEMENTS.....	4
3.3 SITE GEOLOGY AND HYDROGEOLOGY .....	4
<b>SECTION 4: RECORDS REVIEW .....</b>	<b>6</b>
4.1 REGULATORY RECORDS SEARCH.....	6
4.1.1 US EPA National Priorities List, NPL.....	6
4.1.2 US EPA CERCLIS / NFRAP Sites List.....	6
4.1.3 US EPA RCRA Large Quantity Generators List.....	7
4.1.4 US EPA RCRA Small Quantity Generators List .....	7
4.1.5 US EPA RCRA TSD Facilities .....	7
4.1.6 US EPA RCRA CORRACTS List.....	7
4.1.7 US EPA Emergency Response Notification System (ERNS) List.....	8
4.1.8 State Priority List, SPL .....	8
4.1.9 State Equivalent CERCLIS List, SCL.....	8
4.1.10 State Leaking Underground Storage Tank (LUST) List.....	8
4.1.11 State Underground Storage Tank (UST) List.....	9
4.1.12 State Solid Waste Landfills, Incinerators, or Transfer Stations List.....	9
<b>SECTION 5: SITE AND AREA RECONNAISSANCE AND USE HISTORY.....</b>	<b>10</b>
5.1 CURRENT USE OF THE PROPERTY .....	10
5.1.1 HAZARDOUS MATERIALS .....	10
5.1.2 UTILITIES .....	10
5.1.3 STORAGE TANKS.....	10
5.1.4 ELECTRICAL TRANSFORMERS .....	10
5.1.5 SOLID WASTE .....	10
5.2 PAST USE OF THE PROPERTY.....	11
5.3 CURRENT AND PAST USE OF ADJOINING PROPERTIES .....	11
5.4 WETLANDS .....	11
<b>SECTION 6: FINDINGS AND CONCLUSIONS.....</b>	<b>12</b>
<b>SECTION 7: APPENDIX .....</b>	<b>13</b>

## **SECTION 1: EXECUTIVE SUMMARY**

Engineering Consulting Services, Ltd. (ECS) has contracted with Crosland Commercial to perform a Phase I Environmental Site Assessment (ESA) for an approximate 68-acre tract located along US Highway 521 near Indian Land, South Carolina. The ESA was performed in general accordance with ASTM Standard E 1527-97.

The property, designated as Tax ID Map 5, Parcel 103, is currently owned by the Weir Associates Limited Partnership, Patrick Family LLC, and Bissell Real Estate. The site is an approximate 68-acre irregular shaped tract. The central and eastern portions are wooded. The western portion of the site is open and contains exposed soils from off-road motorbiking activities.

Electrical power is supplied to the site area by Duke Power Company. Potable water is supplied to the site area by the local municipality. Domestic wastewater from the site area is discharged into the local municipal sanitary sewer system. Some residences in the site area may maintain private water supply wells and utilize septic tank systems to discharge domestic wastewater. No process wastewater is presently generated at the site.

No evidence of aboveground or underground tanks was observed on the site. ECS did not observe indications of burial of solid waste on the property. Scattered piles of inert household debris were noted in several areas near the southern property boundary. No regulatory records for the site or surrounding properties were found within the establish ASTM search radii.

A review of available aerial photographs indicates that the southwestern portion of the subject property was cultivated farmland from at least 1938 to 1975. Remaining areas were wooded. A 1986 aerial photograph depicts the site as wooded with a fallow field located in the southwestern portion of the site along US Highway 521. A 1997 aerial photograph depicts wooded land in the central and eastern portions of the site with exposed soils in the western portion of the site along US Highway 521.

The adjoining properties to the north, south, east and west are a mixture of rural residential and wooded land. Commercial properties are located along US Highway 521. A review of aerial photographs dated 1938, 1956, 1966, 1975, 1986, 1990 and 1997 illustrates that the site area has been a mixture of wooded acreage, farm land, and rural residential since at least 1938.

An unnamed tributary of Sixmile Creek traverses the northeastern portion of the site. The stream and potentially adjacent wetlands are jurisdictional waters and are regulated by the South Carolina Department of Health and Environmental Control and the United States Army Corps of Engineers.

Our assessment has revealed no evidence of recognized environmental conditions associated with the site or the surrounding properties. ECS recommends no further assessment at this time.

*The Executive Summary is an integral part of the Phase I environmental site assessment report. ECS recommends that the report be read in its entirety.*

## **SECTION 2: INTRODUCTION**

The objective of the ESA is to identify recognized environmental conditions associated with the subject property. "Recognized Environmental Conditions" is a term related to the presence or likely presence of hazardous and/or petroleum substances on a property where site conditions may indicate a potential for adverse environmental impact to the property. The term is not intended to include de minimis conditions that generally do not present a risk or 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 government agencies.

It was not the purpose of this study to determine the actual presence, magnitude or extent of adverse environmental impact to the property, if indicated by the findings. Further assessment would be appropriate, including sampling and analytical testing, if adverse environmental impact to the site is suspected.

### **2.2 Special Terms and Conditions**

A Phase I ESA cannot completely eliminate uncertainty regarding the potential for recognized environmental conditions in connection with the site. Appropriate research and inquiry does not mean an exhaustive study and is limited to reasonable limits of time and cost. Recognized environmental conditions and determination of potential adverse site impact is based on site and surrounding area observations and reasonably available information. The findings of this Phase I ESA are not intended to serve as an audit for health and safety or compliance issues pertaining to improvements or activities on the site. ECS, Ltd. is not liable for the discovery and elimination of hazards that may potentially cause damage, accidents or injury.

All observations, conclusions and recommendations pertaining to environmental conditions at the subject site are limited to conditions observed, and/or information and materials available and reviewed at the time this assessment was performed. No other warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of Crosland Commercial. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties. The use of this report by any non-designated third party or parties will be such party's sole risk and ECS, Ltd. disclaims liability for any such third party use or reliance.

### **2.3 Limitations and Exceptions of Assessment**

The Phase I assessment is a general site characterization that identifies potential environmental concerns based on readily available information, site observations and inquiries with persons knowledgeable of the property. The assessment was performed in general accordance with the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments (Designation E1527-97)*, as described in our Proposal M2100P, dated February 2, 2000. Specific Terms and Conditions are defined in the General Conditions of Services attached to the proposal. The proposal was authorized by Mr. Jim Merrifield of The Crosland Group, Inc. on February 7, 2000.

The scope of work for this project did not include an evaluation relative to the following items:

1. Radon
2. Lead-based paint
3. Lead in drinking water
4. Wetlands or endangered species
5. Asbestos Containing Materials (ACM)
6. Sampling and analysis of air, soil, or water (surface or groundwater).

## **SECTION 3: SETTING**

### **3.1 Location and Legal Description**

The site is located along US Highway 521 near Indian Land, South Carolina (Figure 1). The property, designated as Tax ID Map 5, Parcel 103 is currently owned by the Weir Associates Limited Partnership (40%) , Patrick Family LLC (30%), and Bissell Real Estate (30%). A legal description of the property can be found in Deed Book B15, Page 189 of the Lancaster County Tax Records.

### **3.2 Site Description and Property Improvements**

The site is an approximate 68-acre irregular shaped tract. The central and eastern portions are wooded. The western portion of the site is open with exposed soils (Photograph 1).

### **3.3 Site Geology and Hydrogeology**

The following resources were reviewed to evaluate the site-specific area geological and hydrogeological characteristics:

- USGS 7.5-Minute Topographic Map, Weddington, North Carolina Quadrangle, dated 1968 (photorevised 1988).
- Soil Survey of Lancaster County; United States Department of Agriculture, Soil Conservation Service, dated 1973.
- The Geology of the Carolinas, 50<sup>th</sup> Anniversary Volume, compiled by Horton, Jr., J. Wright and Victor A. Zullo, The University of Tennessee Press, dated 1991.
- Geologic Map of the Charlotte 1° x 2° Quadrangle, North Carolina and South Carolina, dated 1988.

The site is located in the Charlotte Belt of the Piedmont Physiographic Province consisting generally of low rounded hills and long rolling northeast to southwest trending ridges with incised creek channels. Based on a review of the geologic map, the site is underlain by metamorphosed granite. In the Piedmont, it is reasonable to assume that the direction of near-surface groundwater flow under static conditions (no pumping interference) approximates the surface topography of the site.

Surface and subsurface drainage patterns within the Piedmont typically indicate the direction contaminants would be transported by surface water or groundwater. The direction and movement of groundwater through soil is dependent on soil type and the presence of relict structures and textures of

the underlying rock. Fractures, faults, folds, and foliation planes affect the migration of groundwater in rock.

Groundwater recharge within the Piedmont region generally occurs on upland areas. The residual soils and saprolite act as an infiltration medium and reservoir for water to seep into the fractures and joints of the underlying rock. Discharge from the system occurs at surface water features such as streams and lakes or at the base of slopes. In the Piedmont, the depth to groundwater is variable, but typically occurs within 40 ft of the ground surface.

Based on our interpretation of the topographic maps and on-site observations, the site is situated on the northeastern flank of a local topographic high. Surface run-off and subsurface drainage from most of the site would be expected to flow to the northeast towards an unnamed tributary of Sixmile Creek that traverses the northeast corner of the site. We also noted that surface drainage from the site and adjacent properties could be influenced by cultural features, such as buildings, paved areas, curbs, gutters, and storm drain systems.

According to the Lancaster County Soil Survey, soils on the site have been mapped as Appling fine sandy loam, Wedowee sandy loam, and Worsham sandy loam. Appling and Wedowee soils are typically well drained and are generally found on ridges of upland areas or on side slopes of upland areas. Worsham soils are typically poorly drained and are generally found along drainageways.

## **SECTION 4: RECORDS REVIEW**

### **4.1 Regulatory Records Search**

ECS has performed a regulatory list review provided by Vista Information Solutions (Vista) in general accordance with ASTM Standard E 1527-97. A copy of the regulatory search report is provided in the Appendix to this report. The report contains a description of the databases searched, the search distances, tabular and detailed summaries of listed facilities, and graphical plots displaying the location of listed facilities in relation to the site.

We note that the U.S. EPA and the North Carolina State regulatory lists are limited and include only those sites known to the regulatory agencies at the time of publication that produce hazardous waste, have a reported incident or are suspected of having had a contaminant release due to the generation or handling of hazardous materials.

#### **4.1.1 US EPA National Priorities List, NPL**

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or met three specific criteria set jointly by the US Dept. of Health and Human Services and the US EPA in order to become a NPL site. (Database dated December 1999)

- The subject property does not appear on the NPL.
- None of the surrounding properties within a one-mile search radius of the site are identified on the NPL.

#### **4.1.2 US EPA CERCLIS / NFRAP Sites List**

The CERCLIS list contains sites which are either proposed or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of pre-remedial, remedial, removal and community relations activities or events at the site, funding information, and unrestricted enforcement. (Database dated October 1999)

The NFRAP classification is for sites whereby following an initial investigation, no contamination was found, contamination was removed, or the contamination was not significant enough to require Federal Superfund action or NPL consideration.

- The subject property does not appear on the Federal CERCLIS list.
- None of the surrounding properties within a one-half mile radius of the site are identified on the CERCLIS list.

#### 4.1.3 US EPA RCRA Large Quantity Generators List

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The EPA compiles a list of RCRA facilities that report the generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Large Quantity Generators are facilities that generate at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. (Database dated September 1999)

- The subject property does not appear on the Large Quantity Generators list.
- No facilities, within a one-eighth mile search radius of the site, are identified on the Large Quantity Generators list.

#### 4.1.4 US EPA RCRA Small Quantity Generators List

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The EPA compiles a list of RCRA facilities that report the generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Small Quantity Generators are facilities that generate less than 1000 kg/month of non-acutely hazardous waste. (Database dated September 1999)

- The subject property does not appear on the Small Quantity Generators list.
- None of the adjacent facilities are identified on the Small Quantity Generators list.

#### 4.1.5 US EPA RCRA TSD Facilities

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The EPA compiles a list of RCRA TSD facilities that treat, store and/or dispose of hazardous waste. (Database dated September 1999)

- The subject property does not appear on the RCRA TSD list.
- None of the surrounding properties within a one-half mile radius of the site are identified on the RCRA TSD list.

#### 4.1.6 US EPA RCRA CORRACTS List

The EPA maintains this database of RCRA facilities, which are undergoing "corrective action". A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA. (Database dated September 1999)

- The subject property does not appear on the CORRACTS list
- None of the surrounding properties within a one-mile radius of the site are identified on the CORRACTS list.

#### 4.1.7 US EPA Emergency Response Notification System (ERNS) List

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center and the Department of Transportation. (Database dated August 1999)

- The subject property does not appear on the ERNS list.

#### 4.1.8 State Priority List, SPL

This database, which is the State equivalent of the NPL, is provided by the North Carolina Department of Environment and Natural Resources, Superfund Section and the South Carolina Department of Health and Environmental Control. (Databases dated November 1998 and June 1999)

- The subject property does not appear on the SPL.
- None of the surrounding properties located within a one-mile radius of the site are identified on the SPL.

#### 4.1.9 State Equivalent CERCLIS List, SCL

This database, which is the State equivalent of the federal CERCLIS, is provided by the North Carolina Department of Environment and Natural Resources, Superfund Section. The SCDHEC has no State Equivalent CERCLIS list.

The State Inventory includes the following categories: NPL List; State Site Priority List (SPL); Sites with Investigations Pending; Responsible Party Voluntary Remedial Action Sites; State Cleanup Sites; No Further Action Sites; and Duplicate Sites. (Database dated November 1998)

- The subject property does not appear on the SCL list.
- None of the surrounding properties within a one-half mile radius of the site are identified on the CERCLIS list.

#### 4.1.10 State Leaking Underground Storage Tank (LUST) List

This database is generated by the North Carolina Department of Environment and Natural Resources and the South Carolina Department of Health and Environmental Control. The LUST list consists mostly of sites associated with leaking underground storage tanks. (Database dated December 1999)

- The subject property does not appear on the LUST list.
- None of the surrounding properties within a one-half mile radius of the site are identified on the LUST list.

#### 4.1.11 State Underground Storage Tank (UST) List

This database is generated by the North Carolina Department of Environment and Natural Resources and the South Carolina Department of Health and Environmental Control. This list does not include residential heating oil USTs since they are not required to be registered with the State of North Carolina. (Databases dated July and December 1999)

- Registered USTs were not identified on the subject property.
- Registered USTs were not identified on the adjacent properties.

#### 4.1.12 State Solid Waste Landfills, Incinerators, or Transfer Stations List

This database is generated by the North Carolina Department of Environment and Natural Resources and the South Carolina Department of Health and Environmental Control. (Databases dated April, July, September and October 1999)

- The subject property does not appear on the landfills list.
- None of the surrounding properties within a one-half radius of the site are identified on the landfill list.

There are ten unmapped facilities listed by the regulatory databases. Based on the information available, these unmapped facilities are not likely to impact the site because they are too distant.

## **SECTION 5: SITE AND AREA RECONNAISSANCE AND USE HISTORY**

The site reconnaissance was performed on February 14, 2000 by our Mr. Christopher L. Corbitt and Mr. Stephen C. Brown. The reconnaissance consisted of walking the perimeter and central portions of the site and observing the site topography and surface drainage patterns.

### **5.1 Current Use of the Property**

The site is currently mostly wooded and undeveloped. Individuals use the western and central portions of the site as a place to ride off-road motorcycles. Numerous trails were noted on the parcel.

#### **5.1.1 Hazardous Materials**

Storage and usage of chemicals was not observed on the property.

#### **5.1.2 Utilities**

Electrical power is supplied to the site area by Duke Power Company. Potable water is supplied to the site area by the local municipality. Domestic wastewater from the site area is discharged into the local municipal sanitary sewer system. Some residences in the site area may maintain private water supply wells and utilize septic tank systems to discharge domestic wastewater. No process wastewater is presently generated at the site.

#### **5.1.3 Storage Tanks**

No evidence of aboveground or underground tanks was observed on the site.

#### **5.1.4 Electrical Transformers**

Electrical transformers are a potential source of environmental concern due to the presence of coolant oils that may contain polychlorinated biphenyl (PCB) compounds. We observed no transformers on the subject property.

#### **5.1.5 Solid Waste**

ECS did not observe indications of burial of solid waste on the property. Scattered piles of inert household debris were noted in several areas near the southern property boundary (Photographs 2, 3 and 4).

## **5.2 Past Use of the Property**

Historical use information for this environmental assessment included the following sources:

- Aerial Photographs from the Mecklenburg County Engineering Department, dated 1997, 1986, 1975 and 1966.
- Aerial Photographs from the Mecklenburg County Soil Conservation Service, dated 1956 and 1938.

A review of available aerial photographs indicates that the southwestern portion of the subject property was cultivated farmland from at least 1938 to 1975. Remaining areas were wooded. A 1986 aerial photograph depicts most of the site as wooded with a fallow field located in the southwestern portion of the site along US Highway 521. A 1997 aerial photograph depicts wooded areas in the central and eastern portions of the site with exposed soils in the western portion of the site along US Highway 521.

## **5.3 Current and Past Use of Adjoining Properties**

The adjoining properties to the north, south, east and west are a mixture of rural residential and wooded land. Commercial properties are located along US Highway 521, such as the adjacent mini-storage facility to the southwest of the site. A review of aerial photographs dated 1938, 1956, 1966, 1975, 1986, 1990 and 1997 illustrates that the site area has been a mixture of wooded acreage, farm land, and rural residential since at least 1938.

## **5.4 Wetlands**

An unnamed tributary of Sixmile Creek traverses the northeastern portion of the site. The stream and potentially adjacent wetlands are jurisdictional waters and are regulated by the South Carolina Department of Health and Environmental Control and the United States Army Corps of Engineers. Permits may be required from these agencies prior to developing these areas.

## **SECTION 6: FINDINGS AND CONCLUSIONS**

Engineering Consulting Services, Ltd. (ECS) contracted with Crosland Commercial to perform a Phase I Environmental Site Assessment (ESA) for an approximate 68-acre tract located along US Highway 521 near Indian Land, South Carolina. We found no evidence of recognized environmental conditions associated with the site or the surrounding properties. ECS recommends no further assessment at this time.

**SECTION 7: APPENDIX**

Appendix A

Figures

Appendix B

Photographs

Appendix C

Vista Regulatory Report

**APPENDIX A**

**FIGURES**

**APPENDIX B**

**PHOTOGRAPHS**

**APPENDIX C**

**VISTA REGULATORY REPORT**