



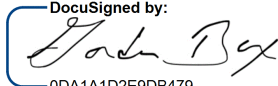
PAT McCRORY  
Governor

NICHOLAS J. TENNYSON  
Secretary

August 12, 2016

MEMORANDUM TO: William T. Goodwin, PE  
Project Development-Bridge Section - Section Head  
Project Development and Environmental Analysis Branch

ATTN: John Williams  
Project Development Engineer

FROM: Gordon Box, LG  8/12/2016  
GeoEnvironmental Project Manager  
GeoEnvironmental Section  
Geotechnical Engineering Unit

TIP NO: B-5808  
WBS: 45762.1.1  
COUNTY: Cabarrus  
DIVISION: 10  
DESCRIPTION: Replace Bridge No. 57 & 59 on US 29 & US 601 over Irish Buffalo Creek

SUBJECT: **GeoEnvironmental Report for Planning**

The GeoEnvironmental Section has completed the GeoEnvironmental Report for Planning. This report has the following components and is transmitted as:

  X   Hazardous Materials Report (13) pages

Please contact me if you have any questions concerning this project.



## **Hazardous Materials Report**

The GeoEnvironmental Section of the Geotechnical Engineering Unit has investigated the above referenced project to identify hazardous material sites for inclusion in the environmental document.

### **HAZARDOUS MATERIALS EVALUATION**

#### **Purpose**

This section presents the results of a hazardous material evaluation conducted along the above referenced project. The main purpose of this investigation is to identify properties within the project study area that are or may be contaminated and therefore result in increased project costs and future liability if acquired by the Department. Hazardous material impacts may include, but are not limited to, active and abandoned underground storage tank (UST) sites, hazardous waste sites, regulated landfills and unregulated dumpsites.

#### **Techniques/Methodologies**

The Geographical Information System (GIS) was consulted to identify known sites of concern in relation to the project corridor. GeoEnvironmental Section staff conducted a field reconnaissance along the Replace Bridge No. 57 & 59 on US 29 & US 601 over Irish Buffalo Creek on May 16, 2016. A search of appropriate environmental agencies' databases was performed to assist in evaluating sites identified during this study.

#### **Findings**

##### **UST Facilities**

Nine petroleum sites were identified within the project limits.

##### **Hazardous Waste Sites**

No Hazardous Waste Sites were identified within the project limits.

##### **Landfills**

No apparent landfills were identified within the project limits.

##### **Other GeoEnvironmental Concerns**

No other geoenvironmental concerns were identified within the project limits.

#### **Anticipated Impacts**

The GeoEnvironmental Section observed nine potentially contaminated UST properties during the field reconnaissance and regulatory agencies' records search (see the following table and appendices for details).

---

1)	<b>Property Name</b> Historical Automotive Service and/or Automotive Recycling 570 – 530 Concord Pkwy N Concord, NC	<b>Property Owner</b> Whitaker Investments LLC A NC LLC 530 Concord Pkwy N Concord, NC
	<b>Facility ID #:</b> NA	<b>UST Owner:</b> NA
	<b>Incident #:</b> NA	



First Image c. 2015; second image NCDOT Historical Aerial 2/1/1961 Mission 129, exposure 13 (top of page is northward); Third Image Google Streetview c. 2016 (view northeastward)

This parcel is located south of the intersection of US 29 & US 601 and Poplar Tent Rd. This single parcel contains Dan'elle Clothing Warehouse, Punchy's Diner, and Punchy Whitaker's Wheel and Tire Pros. This parcel does not appear on the UST Section Registry nor are any NCDEQ incidents associated. There is no evidence of USTs or UST removals. Hydraulic lifts were not observed at the modern Punchy Whitakers Wheel and Tire Pros. In a NCDOT Historical Aerial, several cars and pre-existing buildings were observed that suggest that auto service and/or auto recycling was performed, thus hydraulic lifts or spills from auto recycling may be present. **This site is anticipated to present low geoenvironmental impacts to the project.**

---

---

2)	<b>Property Name</b> Premier Auto Sound Security Concord Ink Tattoo/Piercing 590 Concord Pkwy N Concord, NC	<b>Property Owner</b> Whitaker Donald E 3661 Richwood Cir. Kannapolis, NC
----	---	--

**Facility ID #:** NA

**UST Owner:** NA

**Incident #:** NA



First Image Streetview c. 2015 view eastward Image c. 2015; Second image NCDOT Historical Aerial 2/1/1961 Mission 129, exposure 13 (top of page is northward)

This apparent former gas station is located on southeastern quadrant of the intersection of US 29 & US 601 and Poplar Tent Rd. The architectural style, age, location and NCDOT Historical Aerial suggest that it operated as a gas station c. 1961. **This site is anticipated to present low goenvironmental impacts to the project.**

---



---

3)	<b>Property Name</b> Citgo AKA Carolina Quick Lube 589 Concord Pkwy N Concord, NC	<b>Property Owner</b> United Oil of the Carolinas PO Box 68 Gastonia, NC
	<b>Facility ID #:</b> 0-034794 <b>Incident #:</b> NA	<b>UST Owner:</b> United Oil of the Carolinas PO Box 68 2758 E Ozark Ave. Gastonia, NC



View southeastward (Google Streetview c. 2015)

This active gas station is located on south-southwestern quadrant of the intersection of US 29 & US 601 and Poplar Tent Rd. A groundwater monitoring well was observed near the store building. **This site is anticipated to present low geoenvironmental impacts to the project.**

---

---

4)	<b>Property Name</b> Marathon Mid-State Oil Company/ Sun Oil 603 Concord Pkwy Concord, NC	<b>Property Owner</b> Prime Business LLC A NC Manager Maged LLC 1534 Copperplate Rd. Charlotte, NC
	<b>Facility ID #:</b> 00-0-0000032782 (USTNum: MO-3470) <b>Incident #:</b> 8727 (c. 1992)	<b>UST Owner:</b> Mid-State Oil Co. Richard King PO Box 849Lexington, NC AKA Prime Business LLC A NC Manager Maged LLC 1534 Copperplate Rd. Charlotte, NC



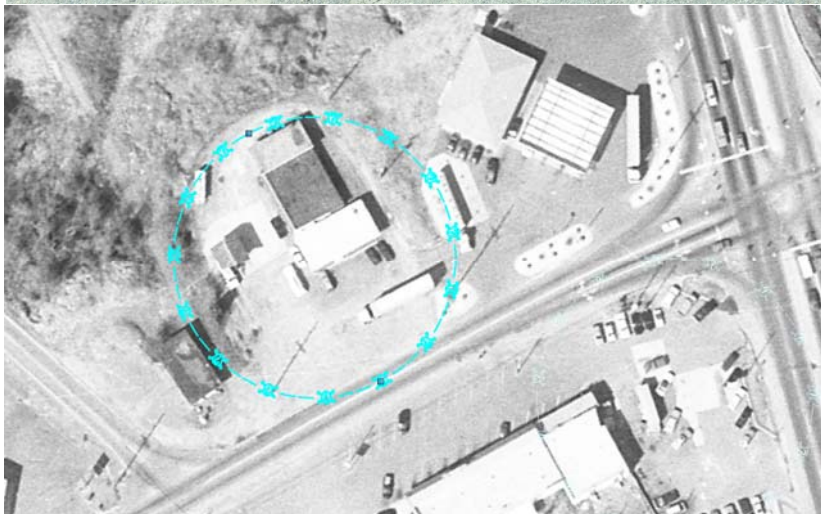
View northwestward (Google Streetview c. 2015)

This active gas station is located on the western quadrant of the intersection of US 29 & US 601 and Poplar Tent Rd. An Incident was assigned by NCDEQ. **This site is anticipated to present low geoenvironmental impacts to the project.**

---

---

5)	<b>Property Name</b> Your Custom Car AKA Twice the Ice AKA Security Oil Company 2242 Poplar Tent Rd. Kannapolis, NC	<b>Property Owner</b> Security Oil Co., Inc. PO Box 5028 Concord, NC
	<b>Facility ID #:</b> 00-0-0000000147 (USTNum: MO-5470) <b>Incident #:</b> 19034 (c. 1998)	<b>UST Owner:</b> Security Oil Co., Inc. Grady Carpenter 2242 Poplar Tent Rd. Concord, NC



First image view northwestward; Second Image NCDOT Historical Aerial 3/10/1993 Mission 3092, exposure 60 (top of page is northward);

This former gas station and/or oil company facility is located approximately 300 feet west of the intersection of US 29 & US 601 and Poplar Tent Rd. According to the UST Section Registry USTs were registered and an Incident recorded. Four USTs are evident west of the building. **This site is anticipated to present low geoenvironmental impacts to the project.**

---



---

6)	<b>Property Name</b> Cement Plant 470 McGill Ave. PO Box 508 Concord, NC	<b>Property Owner</b> Concrete Supply Co., LLC A NC LLC PO Box 5247 Charlotte, NC
	<b>Facility ID #:</b> 003384, 028860 <b>Incident #:</b> NA	<b>UST Owner:</b> Carolina Oil Co of Concord, Inc. PO Box 5010 Concord, NC AKA Concrete Supply Co. 3823 Raleigh St. Charlotte, NC



View northward (Google Streetview c. 2015)

This cement plant is located on northeastern quadrant of the intersection of US 29 & US 601 and Poplar Tent Rd. According to the UST Section Registry two USTs were reportedly filled in situ with inert material. An above ground storage tank (AST) is currently on site currently (blue circle). **This site is anticipated to present low geoenvironmental impacts to the project.**

---



7) **Property Name**  
Webster Radiator and A/C  
650 Concord Pkwy N.  
Concord, NC

**Facility ID #:** NA  
**Incident #:** NA

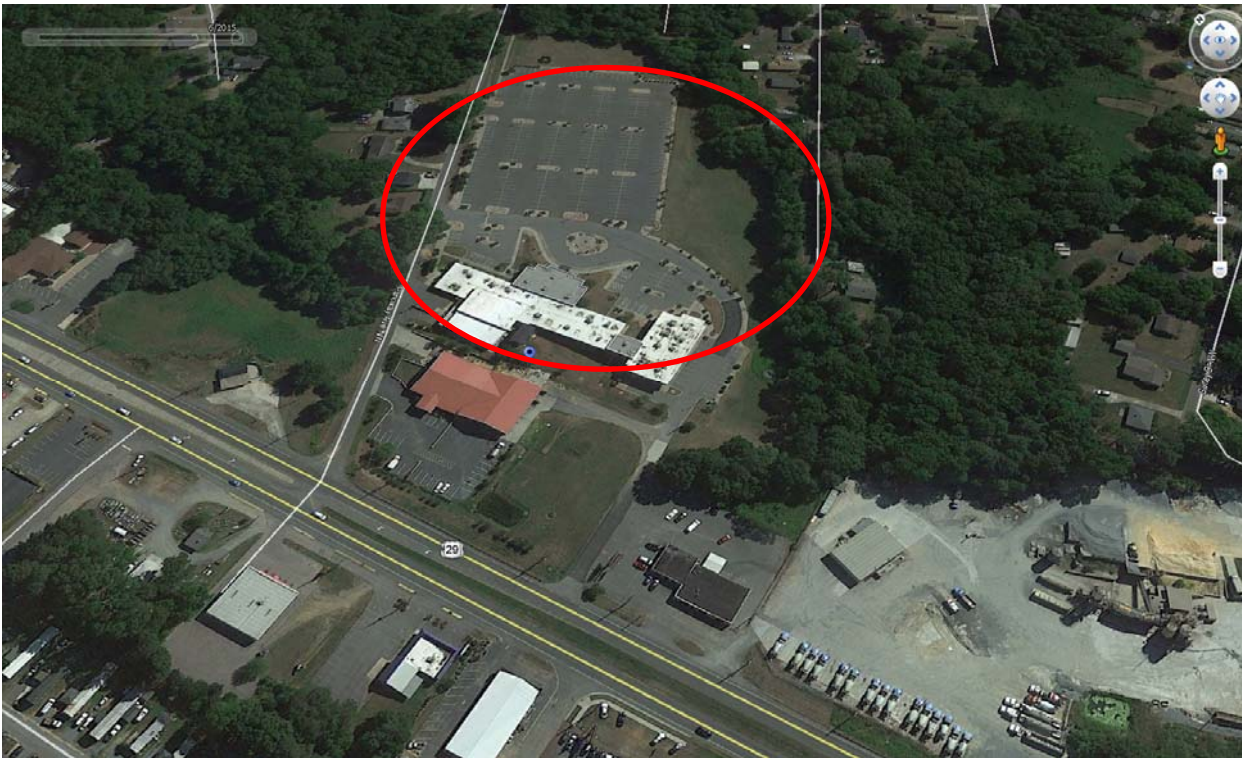
**Property Owner**  
Greenwich Investors XLV Reo LLC  
c/o Wmd Asset Management LLC 6279  
Dupont Station Ct. E  
Jacksonville, FL  
**UST Owner:** NA



View north-northeastward (Google Streetview c. 2015)

This former location of Webster Radiator and A/C is located 1000 feet north of the intersection of US 29 & US 601 and Poplar Tent Rd. Hydraulic lifts may be present behind the bay five bay doors. **This site is anticipated to present low geoenvironmental impacts to the project.**

- 
- 8) **Property Name**  
Cabarrus Schools Maintenance Facility  
660 Hwy 29 N  
Concord, NC
- Property Owner**  
Cabarrus County  
PO Box 707  
Concord, NC
- Facility ID #:** 00-0-0000028999 (UST Num MO-5188)  
**Incident #:** 17721 (c. 1996)
- UST Owner:** Cabarrus County Schools  
PO Box 388  
Concord, NC



View north-northeastward (Google Streetview c. 2015)

This school maintenance facility is located 1000 feet north of the intersection of US 29 & US 601 and Poplar Tent Rd. behind the site of Webster Radiator and A/C. According to the UST Section Registry a UST registered and an Incident recorded, and a No Further Action status was reportedly granted c. 2001. **This site is anticipated to present low geoenvironmental impacts to the project.**

---

---

9)	<b>Property Name</b> Car Battery Sales 688 Concord Pkwy N Concord, NC	<b>Property Owner</b> Frances Medlin Fam. Farms I LLC PO Box 703 Concord, NC
	<b>Facility ID #:</b> NA <b>Incident #:</b> NA	<b>UST Owner:</b> NA



First Image NCDOT Historical Aerial 3/10/1993 Mission 3092, exposure 60 (top of page is northward); Second Image view northward

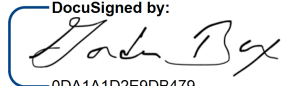
This car battery sales facility and apparent former gas station is located 1000 feet north of the intersection of US 29 & US 601 and Poplar Tent Rd. A NCDOT Historical Aerial suggests it was a gas station (first image, blue circle), and an apparent former pump island is evident in the concrete (second image, blue circle). **This site is anticipated to present low geoenvironmental impacts to the project.**

---



Please note that discovery of additional sites not recorded by regulatory agencies and not reasonably discernible during the project reconnaissance may occur. The GeoEnvironmental Section should be notified immediately after discovery of such sites so their potential impact(s) may be assessed.

If there are questions regarding the geoenvironmental issues, please contact me, at 919-707-6859.

DocuSigned by:  
  
8/12/2016  
0DA1A1D2E9DB479...

Gordon Box, LG  
GeoEnvironmental Project Manager  
GeoEnvironmental Section  
Geotechnical Engineering Unit

Cc:

John Pilipchuk, LG, PE, State Geotechnical Engineer  
David Chang, Ph.D., PE, State Hydraulics Engineer  
Charles Brown, PE, PLS, State Locations and Surveys Engineer  
Tom Koch, PE, Assistant State Structures Engineer  
Randy Bowers, Division Design Construction Engineer  
Brian Skeens, PE, Area Roadway Construction Engineer  
Kenneth Hill, Division Right of Way Agent  
Eric Williams, PE, Geotechnical Regional Manager  
Shane Clark, Geotechnical Regional Manager  
Roger Worthington, PE, State Utilities Engineer, Utilities Unit  
Teresa Hart, PE, CPM, Support Services Section Head, Project Development  
Jody Kuhne, LG, PE, Regional Geological Engineer  
NCDOT Service Account, Roadway Design  
Row-notify@ncdot.gov  
File

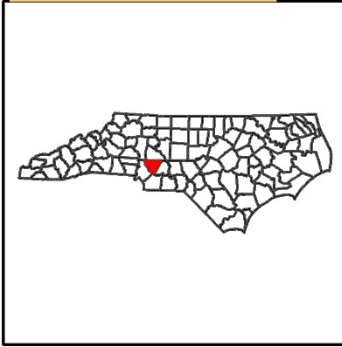
**Appendix A**  
**Location of GeoEnvironmental Sites of Concern**



**Legend**

- Environmental Sites
- B-5808

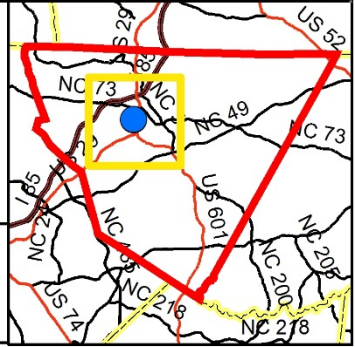
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Project 45762.1.1 (TIP # B-5808)  
 Bridge # 57 & 59 on US 29/601 over Irish Buffalo Creek  
 Cabarrus County

800 400 0 800 Feet

NC Department of Transportation  
 Geotechnical Engineering Unit  
 GeoEnvironmental Section





TIP: B-5808 Project # 45762.1.1

Bridge Photographs

5/16/16



Bridge 57 on US 29 & US 601 over Irish Buffalo Creek. View to the north.



Bridges 57 (left) & 59 (right) on US 29 & US 601 over Irish Buffalo Creek. View to the south. (Google Streetview c. 2015)



Bridge 57 on US 29 & US 601 view of Irish Buffalo Creek northwestward. (Google Streetview c. 2015)



Bridge 59 on US 29 & US 601 view of Irish Buffalo Creek southeastward. (Google Streetview c. 2015)