



**STIP Project No. R-5768
US 311/NC 65/SR 1928 (Stokesburg Rd.)
Walnut Cove, Stokes County, North Carolina**

GEOENVIRONMENTAL PLANNING REPORT

on behalf of

**North Carolina Department of Transportation
Geotechnical Engineering Unit
1589 Mail Service Center
Raleigh, NC 27699-1589**

October 2017



Rummel, Klepper & Kahl, LLP

GeoEnvironmental Planning Report

In coordination with the geo-environmental investigation for R-5828, RK&K has investigated the above referenced project based on additional information from EDR that was not included in the previous geo-environmental assessment to identify potential hazardous material sites for inclusion in the environmental document.

HAZARDOUS MATERIALS EVALUATION

Purpose

This section presents the results of a hazardous material evaluation conducted in the vicinity of the project study area designated for construction of proposed roadway improvements associated with the US-311/NC-65/SR-1928 (Stokesburg Rd.) project in Walnut Cove, Stokes County, North Carolina. 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

Environmental Data Resources, Inc. (EDR) regulatory database information and Geographical Information System (GIS) mapping were evaluated to identify known sites of concern in relation to the US-311/NC-65/SR-1928 project as a preliminary screening of the corridor. A search of environmental agency site documentation was requested on July 21, 2017 and the material reviewed to identify potential environmental concerns. RK&K personnel conducted a field reconnaissance along the preliminary corridor from public rights-of-way to verify conditions at the identified sites on September 28, 2017.

Findings

UST Facilities

Based on our study, six (6) current or former UST facilities were identified within the vicinity of the project, four (4) of which were located within the project limits.

Hazardous Waste Sites

No current Hazardous Waste Sites were identified within the project limits.

Landfills

No apparent former landfills were identified within the project limits.

Other Geo-Environmental Concerns

One (1) cement plant and a new car wash with a potential oil/water separator were identified within the project limits.

Anticipated Impacts

Four (4) former UST facilities are located within the project limits of disturbance. One (1) current and one former UST facilities are located adjacent to the project limits. In addition, one (1) cement plant and one (1) car wash were identified within the project limits of disturbance. We anticipate moderate to high monetary and scheduling impacts resulting from these sites, if property acquisition or soil excavation/grading activities reach the groundwater table. (See the following table and appendices for details)

Sites of Concern

1)	<p>Property Name Cemex Walnut Cove RMC Carolina Materials 211 Main Street</p>	<p>Property Owner: Boyd Hole DBA Boyd Hole Concrete; Betty D Hole DBA Boyd Hole Concrete</p>
	<p>Facility ID #: Unidentified</p>	<p>UST Owner: N/A</p>

Looking east from S. Main Street at the building front and entrance.



This facility currently is a cement vehicle maintenance area. The facility is not listed in the reviewed public records. This site was not previously identified as a potential project concern.

The site inspection of September 28, 2017, showed that the site is used for truck maintenance and parking for tractor trailers and construction vehicles. Two small sheds serve as an office and supply building, and a larger building with two bays is a maintenance garage. The exterior of the buildings show no evidence of USTs, AST or discharges out of the buildings into the soil. All maintenance activities occur within the building.

This site, which is within the study area, is anticipated to present low geo-environmental impacts to the project.

2)	<p>Property Name Joe Grindstaff residence 207 S Main Street (301 Main St)</p>	<p>Property Owner: Jimmy L. Knight Jr; Debbie R. Knight PO Box 531 Walnut Cove, NC 27052</p>
	<p>Facility ID #: Unidentified</p>	<p>UST Owner: N/A</p>

Building front and entrance, facing south.



This facility currently is unoccupied and appears abandoned. The site is listed in the reviewed public records in the historical auto database, for records as an automotive supply and parts facility listed to, Grindstaff Joe, between 1992 to 1999.

The site inspection of September 28, 2017, showed that the property contains a single structure that has been abandoned and is in a state of disuse. The remainder of the property is covered in grass or gravel, with a single tree adjacent to the building. The vegetation is sparse and stressed, but no visible signs of areas of affected growth is present. No ASTs or surface signs of USTs are present.

This site is anticipated to present moderate geo-environmental impacts to the project.

3)	Property Name Former Friendly Food Mart 6 Route 2 (403Stokesburg Rd)	Property Owner: Dr. VL Dehart PO Box 398 Walnut Cove, NC 27052
	Facility ID #: 00-0-0000008364 Incident #: 19490	UST Owner: Dan River Oil Co.

Looking SE at the front of facility, with groundwater monitoring well in foreground



This facility currently is abandoned. The facility is listed in the reviewed public records in the UST database, for three 4,000-gallon gasoline tanks, all removed – and LUST and LUST TRUST databases for an open case of petroleum release with gross benzene contamination of groundwater in February 2000, with clean-up completed in September 2001.

Public records reviewed on October 5, 2017, designate the site as a former gasoline facility containing three 4,000-gallon gasoline USTs with unknown installation dates. The tanks were excavated on June 2, 1998, and removed for off-site disposal. Analytical laboratory results of soils excavated from beneath the USTs indicated the presence of petroleum concentrations below NC standards. Contaminated soils were identified near the dispenser island and the product lines with limited excavation removing impacted soils. High BTEX concentrations were detected in groundwater adjacent to NC 65.

The site inspection on September 28, 2017, identified an abandoned building and small parking lot. No indication of USTs were identified, but a cover plate indicating the presence of four groundwater monitoring wells were noted. **This site is anticipated to present moderate geo-environmental impacts to the project.**

4)	Property Name Ray Neal residence 511 McAlster Street	Property Owner: Gloria Hairston
	Incident #: 87080, 87036	UST Owner: Unidentified

Front of residence



This facility currently operates as a private residence. The facility is listed in the reviewed public records in the LAST and the IMD databases, for a case of 200 gallons of petroleum release from an AST in March 2004, with soil contamination. Closure and cleanup were not reported, but contaminated soil was noted as being removed. This site was not previously identified as a potential project concern.

The site inspection of September 28, 2017, showed that the property is a private residence. No signs of a UST or AST were present. The ground surface is lawn, with a bare-earth driveway. No business or commercial activity was apparent.

This site is anticipated to present moderate geo-environmental impacts to the project.

5)	Property Name NC Country Ham 304 Main Street	Property Owner: Town Fork Produce, Inc.
	Facility ID #: Unidentified	UST Owner: N/A

Looking SE from S. Main St. (US 311) at the front of facility



This facility is a small strip mall of small businesses. The facility is not listed in the reviewed public records.

The site inspection of September 28, 2017, showed that the site is used as a fresh produce and meat market on designated days. The market was not open at the time of assessment. A hair salon is also present in the strip mall. There are no signs of discharges, spills or hazardous material use on-site. There were no indications of USTs or ASTs, or other hazardous material storage on-site.

This site may have been misidentified as the Pork Produce Mart/former Gene Miller residence in the previous geo-environmental assessment and is therefore not anticipated to present a geo-environmental impact to the project.

6)	Property Name The Cove Grill/Former Fulps Exxon 407 S Main Street	Property Owner: Duane Sutphin 1015 Beaver Island Trail Walnut Cove, NC 27052
	Facility ID #: Unidentified	UST Owner: N/A

Front of facility



Disused wash bays



Concrete pad, former location of fuel USTs



The September 28, 2017, inspection of this property that fronts S. Main Street (US 311) observed the facility operating as restaurant and storage site. The facility is not listed in the reviewed public records. On the west side of the facility is a concrete patch in the asphalt paving pad. The owner of this property stated that a UST was removed between 1975 to 1980. The owner also operates a fuel delivery business with tanker trucks, but there is no infrastructure at this site. The wash bays located in the western portion of the property are not currently used. The ground surface is mostly asphalt pavement, with patches of gravel.

This site is anticipated to present moderate geo-environmental impacts to the project.

7)	Property Name Car Wash 415 Stokesburg Road	Property Owner: Walkertown Lube-N-Wash, LLC
	Facility ID #:	UST Owner:



This facility currently operates as an automated self-serve car wash. The facility is not listed in the reviewed public records.

The site inspection of September 28, 2017 showed that the site is an automatic car wash with 5 bays – one that moves the vehicle through the bay, and four that are stationary with central floor drains for hand washing. Minimal wash water appears to flow out of the bays. There are no indications that there are USTs to receive/recycle the used water. There were no personnel on site. Vacuums are also present in separate setups and an oil/water separator may be in place onsite.

This site is not anticipated to present geo-environmental impacts to the project. This site is also not a geo-environmental concern for the R-5768, NC-65 at US-311/1928 Intersection project.

8)	Property Name Mobil 634 S Main Street	Property Owner: AS&S Inc; Muhammad Ramzan Nasir; Robina Kausar
	Facility ID #: Unidentified	UST Owner: Unknown

Dispenser area & convenience store



Fuel USTs, with car wash



This facility currently operates as a gas station and convenience store. The facility is not listed in the reviewed public records.

The site inspection of September 28, 2017, showed that the site has six dispenser islands, a car wash building, and a convenience store. There are three fuel USTs – premium gasoline, regular gasoline, and diesel fuel. The car wash was not in operation at the time of inspection. Significant sediment from the north side of the property had washed alongside the car wash and north edge of the paved asphalt surface. There was no indication of tanks in use for the car wash. No ASTs were present. No vehicle maintenance or repair is performed.

This site is not anticipated to present geo-environmental impacts to the project. This site is also identified as a low geo-environmental concern in the R-5768, NC-65 at US-311/1928 Intersection geo-environmental report.

9)	Property Name Pork Produce Mart/former Gene Miller residence 711 S Main Street	Property Owner: McLamb Holdings, LLC
	Facility ID #: 00-0-0000024859	UST Owner: Barrow Oil Company

Front of building



This facility currently is abandoned. NCDEQ’s database identified four tanks on the property, with a 3,000-gallon gasoline UST installed in 1986 and a 4,000-gallon and two 3,000-gallon gasoline USTs installed in 1964. Reportedly, one 3,000 gallon UST associated with the former operations was removed and replaced with the same sized UST in 1986. All USTs were removed in 2005 and no groundwater incident number was assigned. A cleanup was reported in 1986 and closed out to residential standards in 2016

The site inspection of September 28, 2017 showed that the site is a single residential building, with no activity. It appeared to be abandoned. The ground surface is a mix of gravel cover and short grass. A single monitoring well is in place in the gravel area, possibly indicating the former location of commercial tanks.

This site is anticipated to present low geo-environmental impacts to the project. This site may have been misidentified as the NC Country Ham site in previous geo-environmental assessments that identified the site as a moderate concern.

Please note that discovery of additional sites not recorded by regulatory agencies and not reasonably discernible during the project reconnaissance may occur. RK&K should be notified immediately upon the identification of additional sites so any potential impact(s) may be assessed. If the project area changes or property acquisitions occur, the estimation of potential risk relative to the contaminants of concern may also change.

If there are questions regarding the identified geo-environmental issues, please contact Mark Pierce, PE at 919-653-7480.

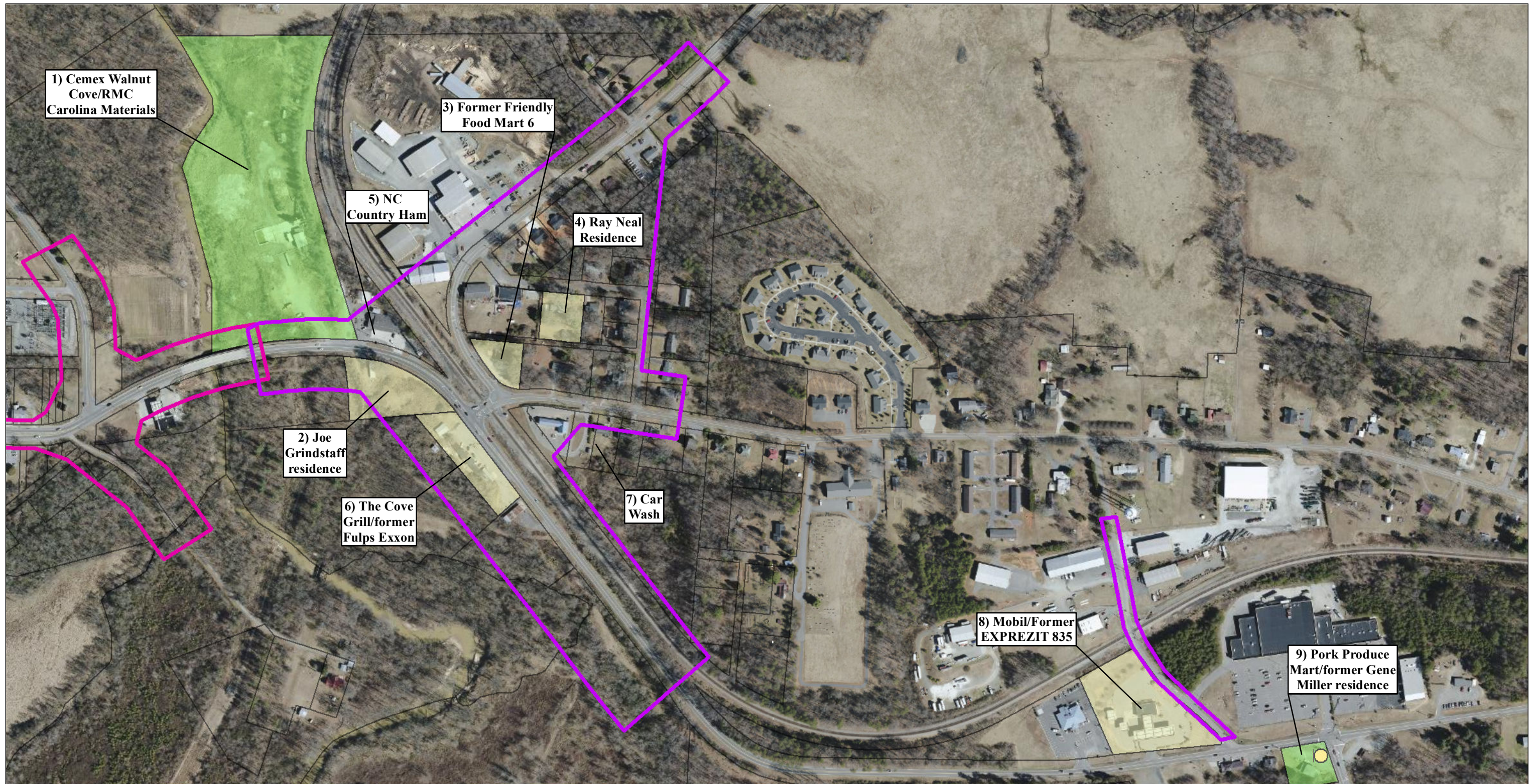
Mark Pierce
Project Manager

cc:
Scott Blevins, PE, RK&K

APPENDIX A

FIGURES





1) Cemex Walnut Cove/RMC Carolina Materials

3) Former Friendly Food Mart 6

5) NC Country Ham

4) Ray Neal Residence

2) Joe Grindstaff residence

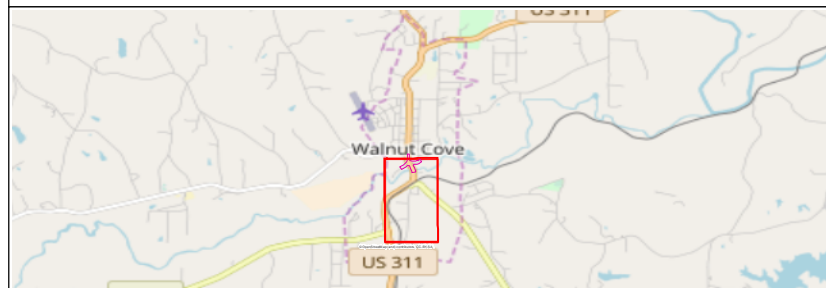
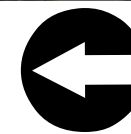
6) The Cove Grill/former Fulps Exxon

7) Car Wash

8) Mobil/Former EXPREZIT 835

9) Pork Produce Mart/former Gene Miller residence

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LEGEND:

- R-5768 Study Area
- R-5828 Study Area
- Parcel Boundary
- Low
- Moderate
- Regional Underground Storage Tanks

Sites of Concern Priority

- Low
- Moderate



R-5768 - US 311/NC 65/SR 1928 (STOKESBURG RD)
WALNUT COVE, NORTH CAROLINA

Map Title:
Appendix B - Figure 1 :
Site Location Map

Data Source:
NCDOT, EDR

Date: October 2017

Scale: 1" = 344'

APPENDIX B

SUMMARY TABLE



Table 1: USTs, Landfills & Other Potentially Contaminated Sites

Site #	Type	Address	UST Facility ID#	Property Name	UST Owner/ Property Owner	Anticipated Impact	Anticipated Risk	Comments
1	Observation	211 Main Street	Unidentified	Cemex Walnut Cove/RMC Carolina Materials	N/A	Cement Dust, Metals	Low	The facility is not listed in the reviewed public records. The property is the site of truck operations and interior repair
2	Hist Auto	207 S Main Street	Unidentified	Joe Grindstaff Residence	Unidentified	Petroleum	Moderate	HIST AUTO database, for records of the Automotive Supplies and Parts, Grindstaff Joe, in 1992 to 1999
3	UST, LUST	Route 2	0-008364 00-0- 0000008364	Former Friendly Food Mart 6	Dan River Oil Co.	Petroleum	Moderate	UST database, for three 4,000-gallon gasoline tanks, all removed – and the LUST and the LUST TRUST databases, for an open case of petroleum release with gross benzene contamination of groundwater in February 2000, with clean-up completed in September 2001
4	LAST, IMD	511 McAlister Street	87080, 87036	Ray Neal residence	Unidentified	Petroleum	Moderate	LAST and the IMD databases, for a case of 200 gallons of petroleum release from an AST in March 2004, with soil contamination. Closure and cleanup were not reported, but contaminated soil was noted as being removed
5	Observation	304 Main Street	Unidentified	N.C. County Ham	Unidentified	None	None	The facility is not listed in the reviewed public records. The property is the site of commercial operations with no tank use.
6	Observation	407 Main Street	Unidentified	The Cove Grill/former Fulp's Exxon	Unidentified	Petroleum	Moderate	The facility is not listed in the reviewed public records. The property is the site of a former gas station and car wash.
7	Observation	415 Stokesburg Road	N/A	Car Wash	Walkertown Lube-N-Wash, LLC	None	None	Car wash within R-5768

Appendix B

Site #	Type	Address	UST Facility ID#	Property Name	UST Owner/ Property Owner	Anticipated Impact	Anticipated Risk	Comments
8	Geoenvironmental	634 S Main Street	Unidentified	Mobil	AS&S Inc; Muhammad Ramzan Nasir; Robina Kausar	None	Moderate	Active petroleum station within R-5768
9	Geoenvironmental	711 S Main Street	Unidentified	Pork Produce Mart/former Gene Miller residence	McLamb Holdings, LLC	None	Low	Former USTs within R-5768