

**Voluntary Remediation Plan Application**  
**Bellemeade Shopping Center**  
**1131-1167 Powder Springs Street**  
**Marietta, Cobb County, GA 30064**  
**February 2012**



***Prepared By:***  
EnviroRisk Consultants, Inc.  
PO Box 945  
Grayson, GA 30017

***Prepared For:***  
Boyd Georgia Property, LLC  
736 Johnson Ferry Road, Suite C-220  
Marietta, GA 30068



## Envirorisk Consultants, Inc.

PO Box 945  
Grayson, Georgia 30017

Phone: 770-864-9789  
Cell: 770-241-6176  
Fax: 770-978-7139

*"Providing Risk-Based Environmental Solutions from a Business Perspective."*

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February 20, 2012

Mr. David Brownlee  
Acting Program Manager  
Response and Remediation Program  
2 Martin Luther King, Jr. Drive SE  
Suite 1462 East  
Atlanta, GA 30334

Subject: Voluntary Remediation Plan Application  
Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064

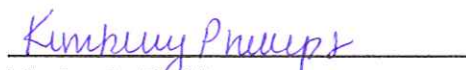
Dear Mr. Brownlee-

Envirorisk Consultants, Inc. (Envirorisk) on behalf of Boyd Georgia Property, LLC has prepared this Draft Voluntary Remediation Plan Application (VRPA) for the referenced site. The owner made a determination to submit this VRPA following our February 9, 2012 meeting where EPD representatives suggested entering the Voluntary Remediation Program to facilitate a property lease and eliminate the possibility of the site being placed on the Hazardous Site Inventory (HSI). Your expedited review is appreciated to prevent termination of the lease contract. As requested in an email dated February 17, 2012, the document has been revised to include Type 1 RRS values as the delineation criteria.

If you require any further information or clarification of this information provided, please do not hesitate to contact us at (770) 864-9789. Thank you for your advice and assistance in this process.

Sincerely,

**ENVIRORISK CONSULTANTS, INC.**

  
Kimberly Phillips  
Project Scientist



# Voluntary Investigation and Remediation Plan Application Form and Checklist

## VRP APPLICANT INFORMATION

COMPANY NAME	Boyd Georgia Property, LLC			
CONTACT PERSON/TITLE	Don Goodman, Agent			
ADDRESS	736 Johnson Ferry Road, Suite C-220, Marietta, GA 30068			
PHONE	770.738.2001	FAX	770.579.6201	E-MAIL dgoodman@emcallanta.com
<b>GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP</b>				
NAME	Ken Summerour, PG	GA PE/PG NUMBER	GA PG #1083	
COMPANY	EnviroRisk Consultants, Inc.			
ADDRESS	PO Box 945, Grayson, GA 30017			
PHONE	770.864-9789	FAX	770.978.7139	E-MAIL ksummerour@eriskinc.com

## APPLICANT'S CERTIFICATION

In order to be considered a qualifying property for the VRP:

- (1) The property must have a release of regulated substances into the environment;
- (2) The property shall not be:


- (A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601.
- (B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or
- (C) A facility required to have a permit under Code Section 12-8-86.
- (3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.
- (4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6.

In order to be considered a participant under the VRP:

- (1) The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action.
- (2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


I also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.

APPLICANT'S SIGNATURE		
APPLICANT'S NAME/TITLE (PRINT)	Donald L. Goodman, Managing Agent	DATE 2/9/2012



QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)				
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)				
HSI Number	N/A	Date HSI Site listed	N/A	
HSI Facility Name	N/A	NAICS CODE	N/A	
PROPERTY INFORMATION				
TAX PARCEL ID	17006700020	PROPERTY SIZE (ACRES)	7.89	
PROPERTY ADDRESS	1135 - 1171 Powder Springs Street			
CITY	Marietta	COUNTY	Cobb	
STATE	Georgia	ZIPCODE	30064	
LATITUDE (decimal format)	N33 55.2766'	LONGITUDE (decimal format)	W84 34.2469'	
PROPERTY OWNER INFORMATION				
PROPERTY OWNER(S)	Boyd Georgia Property, LLC		PHONE #	770.738.2001
MAILING ADDRESS	736 Johnson Ferry Road, Suite C-220			
CITY	Marietta	STATE/ZIPCODE	GA 30068	
ITEM #	DESCRIPTION OF REQUIREMENT		Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)
1.	\$5,000 APPLICATION FEE IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)		Attached to front of application check # 1644 dated 2/20/12	
2.	WARRANTY DEED(S) FOR QUALIFYING PROPERTY.		Appendix A	
3.	TAX PLAT OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).		Appendix B- Figure 2	
4.	ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF). The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a <b>PROJECTED MILESTONE SCHEDULE</b> for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-annual status report to the director describing implementation of the plan		Included	
5.			Appendix B- Figure 5 (Conceptual Site Model) & Appendix D- Milestone Schedule	



	during the preceding period. A Gantt chart format is preferred for the milestone schedule.		
	The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:		
5.a.	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment;	Appendix D-Milestone Schedule	
5.b.	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment;	Appendix D-Milestone Schedule	
5.c.	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and	Appendix D-Milestone Schedule	
5.d.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.	Appendix D-Milestone Schedule	
6.	<p><b>SIGNED AND SEALED PE/PG CERTIFICATION AND SUPPORTING DOCUMENTATION:</b></p> <p>"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.</p> <p>Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.</p> <p>The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."</p> <p><i>Kenneth C. Summerow</i>  Printed Name and GA PE/PG Number  <i>[Signature]</i>  Signature and Stamp</p> <p><u>2-20-2012</u>  Date</p>	 <p>Page 1 of 1</p>	



# ADDITIONAL QUALIFYING PROPERTIES (N/A)

TAX PARCEL ID		N/A		PROPERTY INFORMATION	
PROPERTY ADDRESS				PROPERTY SIZE (ACRES)	
CITY				COUNTY	
STATE				ZIPCODE	
LATITUDE (decimal format)				LONGITUDE (decimal format)	
PROPERTY OWNER INFORMATION					
PROPERTY OWNER(S)				PHONE #	
MAILING ADDRESS					
CITY				STATE/ZIPCODE	

TAX PARCEL ID				PROPERTY INFORMATION	
PROPERTY ADDRESS				PROPERTY SIZE (ACRES)	
CITY				COUNTY	
STATE				ZIPCODE	
LATITUDE (decimal format)				LONGITUDE (decimal format)	
PROPERTY OWNER INFORMATION					
PROPERTY OWNER(S)				PHONE #	
MAILING ADDRESS					
CITY				STATE/ZIPCODE	

TAX PARCEL ID				PROPERTY INFORMATION	
PROPERTY ADDRESS				PROPERTY SIZE (ACRES)	
CITY				COUNTY	
STATE				ZIPCODE	
LATITUDE (decimal format)				LONGITUDE (decimal format)	
PROPERTY OWNER INFORMATION					
PROPERTY OWNER(S)				PHONE #	
MAILING ADDRESS					
CITY				STATE/ZIPCODE	



# VOLUNTARY REMEDIATION PLAN APPLICATION

for

**BELLEMEADE SHOPPING CENTER**  
1131-1167 POWDER SPRINGS STREET  
MARIETTA, COBB COUNTY, GA 30064

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Prepared for:

**BOYD GEORGIA PROPERTY, LLC**

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Prepared by:

**Envirorisk Consultants, Inc.**



Post Office Box 945  
Grayson, GA 30017  
770-864-9789

Issue Date: February 17, 2012  
*Revised February 20, 2012*



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#### APPENDIX A – WARRANTY DEED

#### APPENDIX B - FIGURES

Figure 1 – Site Location Map

Figure 2 – Tax Plat Map

Figure 3 – Topographic Map

Figure 4 – Site Map Showing Concentration Data

Figure 5 – Preliminary Conceptual Site Model

#### APPENDIX C – SITE PHOTOGRAPH LOGS

#### APPENDIX D – MILESTONE SCHEDULE



## VOLUNTARY REMEDIATION PLAN APPLICATION

Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064

### GEOLOGY CERTIFICATION

I certify that I am a qualified ground-water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in ground-water hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding ground-water monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction.



Kenneth C. Summerour, P.G. #1083  
Registered Professional Geologist



Date



Professional Geologist Stamp/Seal

## 1.0 INTRODUCTION

Envirorisk Consultants, Inc. (Envirorisk) has prepared this Voluntary Remediation Plan Application (VRPA) on behalf of Boyd Georgia Property, LLC (the "Owner") for the Bellemeade Shopping Center located at 1131–1167 Powder Springs Street, Marietta, Cobb County, Georgia, 30064 (hereafter referred to as "the site" or "subject site"). The owner made a determination to submit this VRPA following a February 9, 2012 meeting with the Georgia Environmental Protection Division (EPD). In this meeting, Envirorisk and the Owner representative presented data illustrating the presence of one or more potential off-site sources for regulated constituents detected in the groundwater on the site. EPD representatives suggested entering the site into the Voluntary Remediation Program as an alternative to groundwater remediation or private well closure in order to facilitate the property lease/use and eliminate the possibility of the site being placed on the Hazardous Site Inventory (HSI).

### 1.1 PURPOSE

This VRPA was prepared to satisfy requirements of the Georgia Voluntary Remediation Program Act. The purpose of this plan is to provide the following information using all reasonably available data sources:

- general information on the site setting and physical characteristics of the surrounding environment;
- geological and hydrogeological characteristics of the study area including subsurface flow pathways;
- currently known source(s) of regulated constituents in the subsurface and approximate extent;
- a preliminary 3-dimensional conceptual site model (CSM) developed using available data which details the site's surface and subsurface conditions;
- a description of potential human health and ecological receptors;
- complete or incomplete exposure pathways;
- a proposed preliminary remedial and investigative approach to address regulated constituents exceeding applicable treatment standards; and
- a projected milestone schedule for site investigation and remediation.

This information is provided in the subsequent sections of the report. Supporting documentation including a VRP Application form, warranty deed, modified tax plat (Figure 2), and other relevant information is provided in the appendices.



## 1.2 PROPERTY AND PARTICIPANT ELIGIBILITY

Based on our review of provisions contained in the Georgia Voluntary Remediation Program Act, Part 3, Code Section 12-8-105, this site is considered a qualifying property for the Voluntary Remediation Program. The Owner reported the presence of regulated constituents in the groundwater in a Release Notification dated December 13, 2011. This VRPA has been prepared as an alternative to potential site listing on the HSI. The site is not listed on the federal National Priorities List, is not currently undergoing response activities by an EPA order, and is not a facility required to have a permit under Code Section 12-8-66. In addition, there are no liens on the Property filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12.

Boyd Georgia Property, LLC is the sole owner of Bellemeade Shopping center and is not in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the EPA or EPD.

## 1.3 DESCRIPTION OF SITE AND SURROUNDING PROPERTIES

The site consists of 7.89 acres of land, improved with two (2) single story buildings containing approximately 73,200 square feet constructed in 1973. The site is located southeast of the intersection of Bellemeade Drive and Powder Springs Street in Land Lots 66 and 67, 17th District, and is designated as Parcel 1417006700020 in Marietta, Cobb County, Georgia. A Warranty Deed is included in Appendix A. The site location, tax parcel identification, and topography are illustrated in Appendix B as Figures 1-3.

The two site buildings and surrounding parking areas are referred to as the "Bellmeade Shopping Center" with street addresses numbered 1131-1167 Powder Springs Street. The buildings are constructed slab-on-grade with masonry exterior siding and a thermoplastic polyolefin (TPO)/built-up roof. The anchor space (Suite 1167) was previously occupied by Food Depot but is currently vacant. The remaining tenant spaces are occupied by various tenants including: an Islamic center (Suite 1139), Metro PCS (Suite 1147), Jackson-Hewitt Tax Service (Suite 1151), Popular Auto Insurance (Suite 1153, formerly Ocean Cleaners), Westside Veterinarian (Suite 1155), Nails (Suite 1159), Wing Factory (Suite 1161), Dollar General (Suite 1169), and Saint Vincent de Paul Society thrift shop. Suites 1135, 1137, and 1167 are currently vacant.

Site areas surrounding the buildings are improved with asphalt pavement/parking areas and landscaping. Two fenced storm water detention areas are present along the western and southern property boundaries. Access to the site is provided via the Bellemeade Drive right-of-way and the Powder Springs Street right-of-way. Figure 4 is a scaled aerial map depicting the site and adjacent property features along with a summary of subsurface data.



Surrounding properties consist of mixed-use commercial and residential development. The site is bordered by the following properties:

- **West-Southwest** – Asia Buffet & Grill, adjacent southwest (formerly Maria Bonita restaurant), followed by Bellemeade Drive and an AutoZone [formerly a Leaking Underground Storage Tank (LUST) site], McDonald's, and a Goodyear Auto Service Center;
- **North-Northwest** – Citgo convenience store (LUST site) immediately northwest followed by Powder Springs Street and the Cobb County Government Center (former Coles Cleaners/Brownfield site), and KFC restaurant;
- **East-Northeast** – Powder Springs Beverage (a Package store) followed by a small retail strip center containing a Viva Mexico restaurant which was formerly a One Hour Martinizing dry cleaner, with residential apartments/homes further east;
- **South** – XP Auto Sales followed by residential properties.

A site photograph log depicting the site and surrounding properties is included as Appendix C.

#### 1.4 PREVIOUS ENVIRONMENTAL STUDIES

In preparation of this VRPAP, Envirorisk was provided and/or obtained the following environmental studies, presented in chronological order:

- *Phase I Environmental Site Assessment (ESA) of Bellmeade Shopping Center, prepared for NDI Management & Development, Inc. by BAT Associates, Inc., dated July 11, 2005.*
- *Application for Limitation of Liability and Corrective Action Plan for Proposed Marietta SW Wal-Mart #97865 (currently Cobb County Government Center – 1150 Powder Springs Street), prepared for Wal-Mart Stores East, LP, by Contour Environmental, LLC, dated December 31, 2007.*
- *Brownfield Compliance Status Report for Powder Springs Station Shopping Center (currently Cobb County Government Center – 1150 Powder Springs Street), prepared by MACTEC Engineering and Consulting, Inc., dated September 2009 (selections of report was copied from EPD files).*
- *Phase I Environmental Site Assessment – Proposed Wal-Mart Neighborhood Market #3060-00, prepared for Wolverton & Associates, Inc., by Contour Environmental, LLC, dated April 5, 2011.*



- *Limited Phase II Site Investigation – Proposed Wal-Mart Neighborhood Market #3060-00, prepared for Wolverton & Associates, Inc., by Contour Environmental, LLC, dated July 27, 2011.*
- *Follow-up groundwater flow evaluation, laboratory data, and updated figures provided by Contour Environmental, LLC, January 17-19, 2012.*
- *Draft Water Well Use Survey prepared for Equitable Management Corporation, by Contour Environmental, LLC, dated February 2, 2012.*

A review of the July 2005 Phase I ESA indicated that a dry cleaner (Ocean Cleaners) previously operated on-site (suite address 1153) from the early 1990s to late 1990s-2000. The ESA indicated that soil samples were collected in 1996 and 1998 which did not detect regulated constituents above Georgia EPD thresholds. Sample locations and analytical results were not provided in the Phase I ESA, but it did identify the One Hour Martinizing dry cleaners as a potential concern. The Phase I ESA did not recommend further investigations.

A review of the Brownfield CAP and CSR for the nearby Cobb County Government Center, formerly Coles Cleaners, indicates that low to moderate dissolved tetrachloroethene (PCE) concentrations were previously detected in the groundwater. A review of the 2009 CSR indicates the highest concentration reported was 240 micrograms per liter ( $\mu\text{g/L}$ ) with 8  $\mu\text{g/L}$  reported in a monitoring well/boring B-8, located nearest to the subject site (see Figure 4). The measured groundwater flow direction at the property was predicted to the west-northwest and north, away from the subject site.

The April 2011 Phase I ESA indicated that the site was first developed with the existing shopping center buildings in 1973. This report recommended further investigation to inspect for potential contaminant impact from the Ocean Cleaners on-site and potential off-site sources including the adjacent Citgo convenience store to the northwest and the former One Hour Martinizing dry cleaner to the northwest. The Citgo LUST site had a confirmed petroleum release in January 2001 which later received a No Further Action Required (NFAR) status from the EPD in August 2001. One Hour Martinizing was historically listed as a RCRA Small Quantity Generator (SQG) in 1986 for the generation of F002 spent halogenated solvent waste including PCE and breakdown products. The facility status was later down-graded to a non generator.

The July 2011 Limited Phase II Site Investigation (Phase II SI) was performed to address subsurface concerns identified in the April 2011 Phase I ESA. Additionally, the Phase II SI also addressed a solvent odor identified in a geotechnical boring southwest of the former Food Depot suite on-site. The Phase II SI included the advancement of fifteen (-15-) soil borings using a direct push rig. Soil and groundwater samples were collected for laboratory analysis of volatile organic compounds (VOCs), using United States Environmental Protection Agency (USEPA) Method 8260 and semi-volatile organic compounds (SVOCs) using USEPA approved Method 8270.

The results indicated the detection of four (-4-) chlorinated VOCs (PCE, trichloroethene (TCE), cis-1,2-dichloroethene (cis-DCE), and vinyl chloride) in groundwater samples collected on the north-northwest portion of the site. The highest concentration (PCE) was detected at 1,000 µg/L in boring B-4 located immediately south of the Citgo (Figure 4). Low levels of chlorinated VOCs (PCE, TCE, and cis-DCE) and traces of acetone were also detected in a sediment sample (HA-1) collected in the western detention pond. Soil and groundwater samples collected around the Ocean Cleaners were non-detect, suggesting that chlorinated VOCs on-site originated from an off-site source. Detections of numerous polynuclear aromatic hydrocarbons (PAHs) indicative of treated wood debris were also observed in fill materials encountered in boring B-3, advanced near the aforementioned geotechnical boring. This area was later excavated to remove the impacted soils.

In January-February, 2012, Contour Environmental, LLC (Contour) performed additional investigations to further evaluate the extent of the dissolved VOC plume, groundwater flow direction, and proximity of nearby water well receptors. Four piezometers (PZ-1 through PZ-4) were installed, sampled, and surveyed (Figure 4). The findings indicated shallow groundwater was predicted to flow to the south. Additional chlorinated VOCs were detected in PZ-4 near the northeast property boundary suggesting that the One Hour Martinizing property may be a source. The findings of water well database searches and site reconnaissance surveys indicated the presence of down-gradient wells within 1 to 3 miles (see Figure 3), potentially affecting the site scoring process used to determine HSI listing.



## 2.0 PRELIMINARY CONCEPTUAL SITE MODEL

This preliminary CSM discussion provides data on the physical environment and subsurface in order to evaluate relevant mechanisms for contaminant transport via known or suspected exposure pathways. Specifically, this section provides a brief discussion of physiographic/topographic conditions, geology, hydrogeology, regulated constituents, potential sources, transport mechanisms, and potential receptors and exposure pathways. A Preliminary CSM figure is provided in Appendix B as Figure 5.

### 2.1 LOCAL PHYSIOGRAPHIC AND TOPOGRAPHIC CONDITIONS

The site is located in the Piedmont Province of Georgia in the Central Uplands District (Clark and Zisa, 1976.) The Central Uplands District is characterized by a series of low, linear ridges separated by broad, open valleys. Streams flowing in this district are generally transverse to the structure and occupy valleys below ridge crests.

The site is located within the United States Geologic Survey (USGS) Marietta, GA topographic quadrangle. A review of Figure 3 indicates that the site slopes to the southwest, with the highpoint of the property in the northwestern corner at approximately 1,100 feet above mean sea level (amsl) and the southwest portion at an approximate elevation of 1,060 feet amsl. Powder Springs Street traverses near the crest of a topographic ridge which slopes to the northwest on the northern half of the street and south-southwest on the southern half of the street, in the site area. The natural gradient of the site is to the south-southwest. Surface water flow is channeled into one of two storm water detention areas located along the western and southern site boundaries. The nearest presumably down-gradient surface water body is a small lake and/or feeder tributary located approximately 0.25-0.5 miles south. This lake drains into Olley Creek, located approximately 0.7 miles south-southeast of the site. Olley Creek eventually feeds into the Chattahoochee River.

### 2.2 REGIONAL AND SITE GEOLOGY

Cobb County lies within the Piedmont Physiographic Province, which regionally extends from Alabama to Maine. The Piedmont Province consists of a complex series of greenschist to amphibolite grade metamorphic rocks, meta-igneous, meta-sedimentary rocks, and igneous intrusives of Pre-Cambrian to Paleozoic age. Structural features in the area are generally oriented along a southwest-northeast strike impacted from regional tectonic events (McConnell & Abrams, 1984.)

The Georgia Piedmont generally includes geologic rock units north of the Fall Line boundary with the Coastal Plain Province, south of the Blue Ridge Province, and south-southeast of the Valley and Ridge Province. The Brevard Zone, a northeast/southwest trending structural shear zone, has commonly been used to divide the Georgia Piedmont into Northern and Southern segments (Higgins, 1966).



Recent interpretations describe the Piedmont-Blue Ridge as one combined province (Crawford & Higgins, et.al., 1999). These new interpretations have resulted in the re-grouping of rock formations into two assemblages: the parautochthonous continental margin assemblage and the allochthonous oceanic assemblage. The allochthonous assemblage (from an unknown origin) was theorized to have been obducted onto the parautochthonous assemblage and later isoclinally folded in the middle to late Ordovician period.

The allochthonous oceanic assemblage includes late Proterozoic to early Ordovician age rock formations consisting of meta-intrusives, meta-plutonics, and ultramafics. The parautochthonous assemblage includes Appalachian basement rocks (primarily meta-granites) intruded by middle Proterozoic age meta-volcanic and meta-plutonic rock formations. The basement rocks and intrusives are overlain by early Cambrian to early Ordovician age meta-sedimentary rock formations (Crawford & Higgins, et.al., 1999).

A review of the *Geologic Map of Georgia* indicates that the site and surrounding areas are underlain by biotite gneiss, mica schists, and amphibolite. Rock outcroppings in the area are rarely visible due to vegetation and the high degree of chemical weathering.

Piedmont soils in this area generally consist of micaceous-silt and sand mixtures and clays grading into saprolite with depth. Saprolite has the texture and appearance of the parent bedrock but has been decomposed by chemical weathering. The saprolite residuum eventually grades into partially weathered rock (PWR) and competent bedrock with depth.

Site geologic conditions reported in the Phase II SI indicate sandy silts with debris (fill) to depths ranging from of 1 to 12 feet below ground surface (ft-bgs) followed by gray to brown sandy-silt saprolite (residuum). Bedrock or PWR was encountered at depths ranging from 6 to 27 ft-bgs.

## 2.3 REGIONAL AND SITE HYDROGEOLOGY

Depth to shallow groundwater in the Piedmont generally ranges from a few feet below ground surface to depths greater than fifty (-50-) ft-bgs in some locations. The water bearing zone where groundwater occurs, generally referred to as the water table, may consist of weathered soils, saprolite, or fractured bedrock. Shallow groundwater flow in the Piedmont often mimics surface topography; however, significant flow may occur along preferential pathways created by heterogeneities in the soil, fill materials, fractures, or other relict bedrock features.

Groundwater in the Piedmont typically occurs in an unconfined or semi-confined condition. Recharge is provided by the infiltration of rainfall and surface water through the soil overburden. More permeable zones in the soil matrix, as well as fractures, joints and discontinuities in the underlying bedrock can affect groundwater conditions.



Contaminant transport in the saprolite and bedrock may be enhanced or greatly influenced by secondary fracture pathway. More rapid transport is often theorized to occur within the more coarse-grained eroded PWR zone located immediately above competent bedrock. Regardless, the water table in the Piedmont is generally expected to be dominated by porous flow and is a subdued replica of the natural surface topography.

Shallow groundwater was encountered at depths of 12-20 ft-bgs during completion of the Phase II SI. The groundwater flow direction was determined to be to the south.

## 2.4 REGULATED CONSTITUENTS IN SOIL

During the prior Phase II SI, a total of twenty three (-23-) soil samples and one (-1-) sediment sample were collected and analyzed for VOCs and SVOCs. The results are provided in Table 1 below.

**Table 1. Soil Sampling Results**

Boring ID	B-1	B-2	B-3	B-4	B-5	HSRA "NC" (mg/kg)	TYPE I RRS (mg/kg)
Sample Date	6-1-11	6-1-11	6-1-11	6-1-11	7-7-11		
Sample Depths	8' bgs	6' bgs	12' bgs	N/A	(a) 5' bgs (b) 12' bgs		
VOCs – EPA Method 8260							
Acetone	BRL	BRL	BRL	N/A	(a) BRL (b) BRL	2.74	400
Cis 1,2-Dichloroethene	BRL	BRL	BRL	N/A	(a) BRL (b) BRL	0.53	7.0
Tetrachloroethene	BRL	BRL	BRL	N/A	(a) BRL (b) BRL	0.18	0.5
Trichloroethene	BRL	BRL	BRL	N/A	(a) BRL (b) BRL	0.13	0.5
All Remaining VOCs	BRL	BRL	BRL	N/A	BRL	N/A	N/A
SVOCs – EPA Method 8270							
SVOCs	BRL	BRL	BRL	BRL	BRL	N/A	N/A
BRL = Below Laboratory Reporting Limits VOC = Volatile Organic Compounds SVOC = Semi-Volatile Organic Compounds mg/kg – Results Reported in Milligrams Per Kilogram N/A = Not Applicable bgs = Below Ground Surface <b>Highlight</b> – Result Exceeds the HSRA Notification Concentration HSRA Notification Concentrations (NC) standards taken from Appendix I of the Hazardous Site Response Rules, Chapter 391-3-19. Type I Risk Reduction Standards (RRS) calculated by multiplying concentrations contained in Appendix 3, Table 1 (391-3-19) by 100.							

**Table 1. Soil Sampling Results (continued)**

Boring ID	B-6	B-7	B-8	B-9	B-10 (PZ-2)	HSRA "NC" (mg/kg)	TYPE I RRS (mg/kg)
Sample Date	7-7-11	7-7-11	7-7-11	7-7-11	7-7-11		
Sample Depths	(a) 5' bgs	7' bgs	(a) 5' bgs	(a) 5' bgs	(a) 5' bgs		
	(b) 12' bgs		(b) 12' bgs	(b) 12' bgs	(b) 12' bgs		
VOCs – EPA Method 8260							
Acetone	(a) BRL	0.13	(a) BRL	(a) BRL	(a) BRL	2.74	400
	(b) BRL		(b) BRL	(b) BRL	(b) BRL		
Cis,1,2-Dichloroethene	(a) BRL	BRL	(a) BRL	(a) BRL	(a) BRL	0.53	7.0
	(b) BRL		(b) BRL	(b) BRL	(b) BRL		
Tetrachloroethene	(a) BRL	BRL	(a) BRL	(a) BRL	(a) BRL	0.18	0.5
	(b) BRL		(b) BRL	(b) BRL	(b) BRL		
Trichloroethene	(a) BRL	BRL	(a) BRL	(a) BRL	(a) BRL	0.13	0.5
	(b) BRL		(b) BRL	(b) BRL	(b) BRL		
All Remaining VOCs	BRL	BRL	BRL	BRL	BRL	N/A	N/A
SVOCs – EPA Method 8270							
SVOCs	(b) BRL	BRL	(b) BRL	(b) BRL	(b) BRL	N/A	N/A
BRL = Below Laboratory Reporting Limits VOC = Volatile Organic Compounds SVOC = Semi-Volatile Organic Compounds mg/kg – Results Reported in Milligrams Per Kilogram N/A = Not Applicable bgs = Below Ground Surface Highlight – Result Exceeds the HSRA Notification Concentration HSRA Notification Concentrations (NC) standards taken from Appendix I of the Hazardous Site Response Rules, Chapter 391-3-19. Type I Risk Reduction Standards (RRS) calculated by multiplying concentrations contained in Appendix 3, Table 1 (391-3-19) by 100.							

Boring ID	B-11	B-12	B-13	B-14	B-15	HA-1	HSRA "NC" (mg/kg)	TYPE I RRS (mg/kg)
Sample Date	7-7-11	7-7-11	7-7-11	7-7-11	7-7-11	7-7-11		
Sample Depths	(a) 5' bgs	9'bgs	(a) 5' bgs	(a) 5' bgs	(a) 5' bgs	1.5' bgs		
	(b) 10' bgs		(b) 12' bgs	(b) 12' bgs	(b) 12' bgs			
VOCs – EPA Method 8260								
Acetone	(a) BRL	BRL	(a) BRL	(a) BRL	(a) BRL	0.12	2.74	400
	(b) BRL		(b) BRL	(b) BRL	(b) BRL			
Cis,1,2-Dichloroethene	(a) BRL	BRL	(a) BRL	(a) 0.10	(a) BRL	0.019	0.53	7.0
	(b) BRL		(b) BRL	(b) BRL	(b) BRL			
Tetrachloroethene	(a) BRL	BRL	(a) BRL	(a) BRL	(a) BRL	0.34	0.18	0.5
	(b) BRL		(b) BRL	(b) BRL	(b) BRL			
Trichloroethene	(a) BRL	BRL	(a) BRL	(a) BRL	(a) BRL	0.0067	0.13	0.5
	(b) BRL		(b) BRL	(b) BRL	(b) BRL			
All Remaining VOCs	BRL	BRL	BRL	BRL	BRL	BRL	N/A	N/A
SVOCs – EPA Method 8270								
SVOCs	BRL	BRL	BRL	BRL	BRL	BRL	N/A	N/A

BRL = Below Laboratory Reporting Limits  
VOC = Volatile Organic Compounds  
SVOC = Semi-Volatile Organic Compounds  
mg/kg – Results Reported in Milligrams Per Kilogram  
N/A = Not Applicable  
bgs = Below Ground Surface  
**Highlight** – Result Exceeds the HSRA Notification Concentration  
HSRA Notification Concentrations (NC) standards taken from Appendix I of the Hazardous Site Response Rules, Chapter 391-3-19.  
Type I Risk Reduction Standards (RRS) calculated by multiplying concentrations contained in Appendix 3, Table 1 (391-3-19) by 100.



A review of Table 1 indicates that regulated constituents detected in the soil samples were limited to cis-DCE detected at 0.10 milligrams per kilogram (mg/kg) in B-14 @ 5 ft-bgs and acetone detected at 0.13 mg/kg in B-7 @ 7 ft-bgs.

Higher concentrations of chlorinated VOCs were detected in HA-1 (sediment) collected in the western detention pond. The detections reported in this sample were 0.12 mg/kg acetone, 0.019 mg/kg of cis-DCE, 0.34 mg/kg of PCE, and 0.0067 mg/kg of TCE.

All of the constituents in soil and sediment samples were below Notification Concentrations (NCs) outlined in Appendix 1 of the Georgia Rules for Hazardous Site Response (391-3-19), with the exception of PCE. The PCE concentration detected in HA-1 exceeded the 0.18 mg/kg NC. All concentrations were below Type 1 Risk Reduction Standards (RRS).

Detections of PAH constituents in B-3 @ 10-12 ft-bgs are not shown on Table 1 but are displayed on Figure 4. These PAHs appear to be associated with creosote treated wood debris and were observed in fill materials in one isolate area only. The fill soils around B-3 were subsequently excavated and removed from the site.

## 2.5 REGULATED CONSTITUENTS IN GROUNDWATER

Four (-4-) chlorinated VOCs (PCE, TCE, cis-DCE, and vinyl chloride) were identified in groundwater samples collected at the site. No SVOCs were detected in the groundwater. A total of nine (-9-) samples were collected as shown in Table 2 below.

**Table 2. Groundwater Sampling Results**

Boring ID	B-1**	B-3	B-4	B-5	B-10***	PZ-1	PZ-2***	PZ-3**	PZ-4	TYPE 1 RRS (µg/L)
Sample Date	6-1-11	6-1-11	6-1-11	7-7-11	7-7-11	1-16-12	1-16-12	1-18-12	1-16-12	N/A
Tetrachloroethene	BRL	BRL	1,000	BRL	BRL	180	BRL	BRL	140	5
Trichloroethene	BRL	BRL	22	BRL	BRL	6.5	BRL	BRL	5.1	5
Cis 1,2-Dichloroethene	BRL	BRL	100	BRL	30	28	59	BRL	25	70*
Vinyl Chloride	BRL	BRL	BRL	BRL	9.4	BRL	13	BRL	BRL	2
All SVOCs	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	N/A
BRL = Below Laboratory Reporting Limits SVOC = Semi-Volatile Organic Compounds µg/L – Results Reported in Micrograms Per Liter N/A = Not Applicable bgs = Below Ground Surface <b>Highlight</b> – Result Exceeds the HSRA Groundwater Concentration *No HSRA Criteria- used the Maximum Contaminant Level from Chapter 391-3-5 Safe Drinking Act. **B-1 and PZ-3 were collected in the same location. ***B-10 and PZ-2 were collected in the same location.										

A review of Table 2 indicates the highest VOC concentrations were observed in a sample collected from B-4. The VOCs detected in this sample included 1,000 µg/L of PCE, 22 µg/L of TCE, and 100 µg/L cis-DCE. All of these constituents exceed Type 1 RRS values. These constituents were detected in lower concentrations in other borings/piezometers advanced on the northwest and north portions of the site. The contoured extent of the dissolved PCE plume is illustrated on Figure 4. Vinyl chloride was detected in two (-2-) samples (B-10 and PZ-2) at low concentrations ranging from 9.4 to 13 µg/L. Samples from B-10 and PZ-2 were collected in the same location. All other groundwater samples collected on the southern portion of the site including the vicinity of Ocean Cleaners were non-detect.

## 2.6 SUSPECTED CONTAMINANT SOURCES

Soil and groundwater samples collected around the Ocean Cleaners were non-detect suggesting that chlorinated VOCs detected at the site originated from an off-site source. A potential source is the One Hour Martinizing dry cleaner located approximately 250 feet northeast of the site. This source will be investigated as described in Section 3.1 since dissolved PCE concentrations are higher on the southwest portion of the site, and other potential sources to the north-northwest will also be evaluated.

The detection of chlorinated VOCs in the sediment (HA-1) is attributed to groundwater migration and base flow into the detention basin versus a surface spill. The low level acetone detections in the soil are attributed to natural biodegradation processes often related to reductive dechlorination and are not presumed to be the result of a chemical release.

## 2.7 TRANSPORT MECHANISMS

Possible mechanisms for transport of VOC constituents in the soil include vapor migration, volatilization, and leaching to groundwater. Potential transport mechanisms for groundwater at the site include volatilization, vapor migration, dispersion, and advective transport (see Figure 5).

## 2.8 POTENTIAL RECEPTORS AND EXPOSURE PATHWAYS

The current use of the site is commercial and the property is predominantly covered with asphalt pavement or slab-on-grade building structures. EnviroRisk understands that under the proposed lease arrangement the existing site structures and possibly the foundation slabs will be removed to facilitate new construction. In the case of new construction, future short-term receptors will be construction workers, engineering oversight personnel, and the occasional trespasser. Exposure routes may include ingestion of wind-blown dust or groundwater containing chemical contaminants and/or vapor propagation.



Ecological receptors or other sensitive receptors such as day cares were not identified in past environmental studies. Potential groundwater receptors include surface water bodies and water wells. Based on water well surveys and field reconnaissance, the nearest down-gradient surface water body is located approximately 0.25-0.5 miles to the south. The nearest active potentially down-gradient water well (Kirky well) is located greater than one mile to the west-southwest. Currently, there is no evidence of off-site dissolved plume migration.

Exposure pathways at the site including indoor/outdoor inhalation of vapors (from both soil and groundwater) and possible ingestion during construction activities. These exposure pathways are not considered complete at this time and will be evaluated during future investigations.

### 3.0 PRELIMINARY REMEDIAL ACTION PLAN

The preliminary Remedial Action Plan will include an initial off-site investigation in an effort to locate a potential source (Phase I). If a source is identified as a result of the Phase I investigation, Envirorisk will contact EPD to discuss future actions required. In the event that more comprehensive site investigations and remediation is required, a preliminary plan is provided in the sections below.

#### 3.1 PHASE I INVESTIGATION

The Phase I investigation will include the advancement of two temporary monitoring wells on the southern portion of the package store property (Figure 4). Pending access from the adjacent Citgo store, one or more of the existing monitoring wells may also be sampled for VOCs and/or additional temporary wells may be installed as shown on Figure 4.

The temporary monitoring wells will be installed using a direct push drill rig equipped with a dual-sampling system. This drilling method employs an outer steel casing during borehole advancement to allow positive placement of well materials during construction. Soil samples will be retrieved in four to five foot sections using interior macrocore-style core barrels. The soils will be evaluated by a field geologist and examined to create boring logs indicative of the subsurface vertical profile. Soil samples will be collected from each core and field screened using a photoionization detector (PID) or flame ionization (FID) in an effort to detect possible sources of VOC vapors in the subsurface soils. In the event that elevated readings are observed, soil samples will be collected for laboratory analysis.

After advancing the boring beneath the water table (approximately 15-20 ft-bgs), one-inch PVC temporary wells will be constructed inside the outer rod casing. The wells will be constructed using 10 to 15 foot sections of 0.010 inch, Schedule 40 PVC screen threaded to riser pipe. A silica sand pack will be placed approximately two feet over the top of the screen and will be followed by a hydrated bentonite seal. The wells will be briefly purged and sampled using low-flow protocols. Groundwater samples will be analyzed for VOCs using an EPD approved laboratory. Based on the findings, a decision will be made whether to abandon the wells or complete the temporary wells by installing flush mount well vaults.

The sampling data will be used to update plan view maps and cross-sections. Detected constituents will be delineated to HSRA Type 1 RRS listed in Tables 1 and 2. The data obtained will be provided in the First Progress Report.



### 3.2 PHASE II INVESTIGATION

If required or necessitated by results from the Phase I investigation, Phase II investigations will involve the installation of 9 to 10 additional monitoring wells in the approximate locations shown on Figure 4. The wells will be installed using the same procedures described in Phase I above, with the exception that most of the wells will be completed as permanent monitoring wells. In addition, to evaluate the vertical extent of VOC impact, one deep monitoring well will be installed to a target depth of 30-40 ft-bgs in the top of competent bedrock, adjacent to B-4. This well will be installed using a combination of Hollow Stem Augering and Air Rotary drilling techniques. An outer casing will be required prior to drilling into bedrock to limit down-hole migration of fluids during well installation.

Approximately one week after well installation, each of the wells will be surveyed, gauged for groundwater depth, and sampled using low flow protocols. Detected constituents will be delineated to HSRA Type 1 RRS listed in Tables 1 and 2. The resulting data will be used to update figures and tables and prepare an updated Progress Report, as needed.

### 3.3 REMEDIAL APPROACH

After completion of Phase I and II (if required) site investigations, the following remedial alternatives will be considered:

- Fate and transport modeling to demonstrate compliance with applicable clean-up standards;
- In-situ treatment using chemical oxidants, chemical reductants, or microbially mediated reductive dechlorination;
- Vapor extraction with or without air sparging performed using an on-site remediation system.

Based on the absence of soil contamination above Type 1 RRS values and distance to potential groundwater receptors, a Monitored Natural Attenuation (MNA) approach will likely be sought as an alternative to active groundwater remediation. This approach will involve the determination of dissolved plume migration over time along with the calculation of alternative concentration levels (ACLs) using BIOCHLOR or a similar fate-and-transport model. Additional details regarding this approach will be provided to EPD in an upcoming progress report.

#### 4.0 MILESTONE SCHEDULE

In accordance with the Georgia Voluntary Remediation Program Act, a milestone schedule has been included as Appendix D. This schedule incorporates the four (-4-) generic milestones required by EPD under the Program, as well as site specific remedial actions. The schedule is intended to be flexible, allowing for changes in scope and/or activities based on subsequent findings.



## 5.0 REFERENCES

BAT Associates, Inc., *Phase I Environmental Site Assessment of Bellemeade Shopping Center*, prepared for NDI Management & Development, Inc., July 11, 2005.

Cobb County Tax Assessor's Office, accessed online at [www.cobbassessor.org](http://www.cobbassessor.org), February 2012.

Clark & Zisa, *A Physiographic Map of Georgia*, Department of Natural Resources, Georgia Geologic Survey, 1976.

Contour Environmental, LLC, *Application for Limitation of Liability and Corrective Action Plan for Proposed Marietta SW Wal-Mart #97865* (currently Cobb County Government Center – 1150 Powder Springs Street), prepared for Wal-Mart Stores East, LP, December 31, 2007.

Contour Environmental, LLC, *Draft Water Well Use Survey*, prepared for Equitable Management Corporation, February 2, 2012.

Contour Environmental, LLC, Follow-up groundwater flow evaluation, laboratory data, and updated figures dated January 17-19, 2012.

Contour Environmental, LLC, *Limited Phase II Site Investigation – Proposed Wal-Mart Neighborhood Market #3060-00*, prepared for Wolverton & Associates, Inc., July 27, 2011.

Contour Environmental, LLC, *Phase I Environmental Site Assessment – Proposed Wal-Mart Neighborhood Market #3060-00*, prepared for Wolverton & Associates, Inc., April 5, 2011.

Crawford & Higgins, et.al., *Geologic Map of Georgia*, Department of Natural Resources, Geologic and Water Resources Division, Georgia Geologic Survey, 1999.

Georgia Department of Natural Resources, *Groundwater Pollution Susceptibility Map of Georgia*, 1992.

Georgia Department of Natural Resources, *Georgia Voluntary Remediation Program Act*, Part 3, Code Section 12-8-105.

Georgia Environmental Protection Division, *Rules for Hazardous Site Response*, Appendix I, Chapter 391-3-19.

Higgins, M.W., *The Geology of the Brevard Lineament near Atlanta*, Georgia Geological Survey Bulletin 77, p. 49, 1966.

MACTEC Engineering and Consulting, Inc., *Brownfield Compliance Status Report for Powder Springs Station Shopping Center* (currently Cobb County Government Center–1150 Powder Springs Street), September 2009 (selections of report was copied from EPD files).

McConnell, K. & Abrams, C., *Geology of Greater Atlanta Region*, Bulletin 96, Department of Natural Resources, Georgia Geologic Survey, 1984.

Tanner, J.D., et al, *Geologic Map of Georgia*, Department of Natural Resources.

United States Geologic Survey, Marietta, Georgia Quadrangle Map.

**APPENDIX A.**

**WARRANTY DEED**



Deed Book 14626 Pg. 263  
Filed and Recorded Jul-23-2008 09:21am  
2008-0099440  
Real Estate Transfer Tax \$5,750.00

Jay C. Stephenson  
Jay C. Stephenson  
Clerk of Superior Court Cobb Cty. Ga.

4/16  
After Recording, please return to:  
Smith, Eubanks, Smith & Turpin P.C.  
P.O. Box 1116  
Marietta, GA 30061  
File No. 08130550

STATE OF GEORGIA  
COUNTY OF COBB

**LIMITED WARRANTY DEED**

THIS INDENTURE, made the 22nd day of July, in the year Two Thousand Eight  
between

**BELLEMEADE PLAZA LLC,**  
A Georgia Limited Liability Company

as party of the first part, hereinafter called GRANTOR, and

**BOYD GEORGIA PROPERTY, LLC**  
A Georgia Limited Liability Company

as party or parties of the second part, hereinafter called GRANTEE (the words "GRANTOR" and  
"GRANTEE" to include its respective successors and assigns where the context requires or permits).

**W I T N E S S E T H**, that: GRANTOR, for and in consideration of the sum of TEN AND 00/100'S  
(\$10.00) DOLLARS and other good and valuable considerations in hand paid at and before the sealing and  
delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold,  
aliened, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, and confirm unto the  
said GRANTEE,

All that tract or parcel of land lying and being in Land Lots 66 and 67 of the 17<sup>th</sup> District,  
2<sup>nd</sup> Section, Cobb County, Georgia, being more particularly described on Exhibit "A"  
attached hereto and made a part hereof by reference.

This conveyance is made subject to the Permitted Title Exceptions shown on Exhibit "B"  
attached hereto and made a part hereof by reference.

**TO HAVE AND TO HOLD** the said tract or parcel of land, with all and singular the rights, members  
and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use,  
benefit and behoof of the said GRANTEE forever in **FEE SIMPLE**.

AND THE SAID GRANTOR will warrant and forever defend the right and title to the above described property unto the said GRANTEE against the claims of all persons claiming under, by or through GRANTOR.

IN WITNESS WHEREOF, the GRANTOR has caused its duly authorized co-managers to sign this instrument under seal, the day and year above written.

GRANTOR:  
BELLEMEADE PLAZA LLC

By: [Signature] (SEAL)  
NGA-TEX DANG, Manager

By: [Signature] (SEAL)  
VICTOR J. GIBBONS, Manager

Signed, sealed and delivered  
in the presence of:

[Signature]  
Witness

[Signature]  
Notary Public





## EXHIBIT "A"

All that tract or parcel of land lying and being in Land Lots 66 and 67 of the 17th District, 2<sup>nd</sup> Section, Cobb County, Georgia, and being more particularly described as follows:

Commencing at a point located on the southeasterly right of way of Powder Springs Road and the easterly right of way of Bellemeade Drive; thence along the right of way of Powder Springs Road thence North 52 degrees 00 minutes 59 seconds East, a distance of 175.00 feet to a 1" open top pipe found; said pipe being the POINT OF BEGINNING; thence continuing along said right of way North 52 degrees 00 minutes 59 seconds East, a distance of 319.98 feet to a 5/8" rebar found; thence leaving said right of way South 05 degrees 46 minutes 00 seconds East, a distance of 315.73 feet to a pk nail found; thence North 77 degrees 41 minutes 17 seconds East, a distance of 178.41 feet to a 1" open top pipe found; thence South 06 degrees 18 minutes 31 seconds East, a distance of 517.97 feet to a 1/2" rebar found; thence South 89 degrees 51 minutes 03 seconds West, a distance of 90.72 feet to a point; thence along a curve to the left, an arc distance of 128.30 feet, said curve having a radius of 177.32 feet and being subtended by a chord of 125.52 feet, at South 69 degrees 39 minutes 52 seconds West to a 5/8" rebar found; thence South 48 degrees 56 minutes 09 seconds West a distance of 141.94 feet to a 1/2" rebar found; thence along a curve to the right, an arc distance of 112.53 feet, said curve having a radius of 155.34 feet and being subtended by a chord of 110.09 feet, at South 69 degrees 20 minutes 21 seconds West to a 5/8" rebar found; thence North 89 degrees 54 minutes 28 seconds West, a distance of 40.00 feet to a 1/2" rebar found; thence North 00 degrees 16 minutes 05 seconds West, a distance of 150.17 feet to a 1/2" rebar found; thence North 89 degrees 43 minutes 05 seconds East, a distance of 41.42 feet to a 1" open top pipe found; thence North 16 degrees 48 minutes 52 seconds West, a distance of 171.68 feet to a point; thence South 73 degrees 12 minutes 09 seconds West, a distance of 169.37 feet to a 1" open top pipe found on the easterly right of way of Bellemeade Drive; thence continuing along said right of way North 00 degrees 13 minutes 48 seconds West, a distance of 247.86 feet to a 1" open top pipe found; thence leaving said right of way North 77 degrees 25 minutes 21 seconds East, a distance of 165.00 feet to a point; thence North 11 degrees 42 minutes 28 seconds West, a distance of 225.00 feet to a 1" open top pipe found on the southeasterly right of way of Powder Springs Road; said pipe being the POINT OF BEGINNING.

Said tract contains 343,674 sf. (7.89 acres)

Being the property depicted on plat of survey prepared for NDI Management & Development, LLC, Bellemeade Plaza, LLC, United Community Bank and Chicago Title Insurance Company by Armstrong Land Surveying, Inc., bearing the seal and signature of Robert T. Armstrong, Georgia Registered Land Surveyor No. 1991, dated July 28, 2005, revised August 15, 2005, which is incorporated herein by this reference for a more particular description of the said property.

TOGETHER WITH the rights, easements, privileges and obligations appurtenant to the above-described land created and established under that certain Declaration of Easement by and between Naredel Properties of Georgia, II, the Citizens and Southern National Bank and Citizens and Southern Realty Investors, dated November 16, 1973, filed November 19, 1973, and recorded in Deed Book 1477, page 225, Records of Cobb County, Georgia.

EXHIBIT "B"

PERMITTED TITLE EXCEPTIONS

1. All taxes for the year 2008 and subsequent years which are liens but are not yet due and payable.
  2. Easements contained in that certain Right-of-Way Deed from Mary Anne Irwin to the State Highway Board of Georgia dated August 20, 1937, filed October 16, 1937, and recorded in Deed Book 126, page 410(b), Records of Cobb County, Georgia.
  3. Easements contained in that certain Right-of-Way Deed from Mrs. Lila Irwin, Mary Anne Irwin and A. A. Irwin to the State Highway Board of Georgia dated August 20, 1937, filed October 18, 1937, and recorded in Deed Book 126, page 412(b), aforesaid records.
  4. Distribution Line Permit from Naredel Properties of Georgia, II to the Board of Lights and Water dated April 30, 1973, filed May 30, 1973, and recorded in Deed Book 1427, page 656, aforesaid records.
  5. Declaration of Easement by and between Naredel Properties of Georgia, II, the Citizens and Southern National Bank and Citizens and Southern Realty Investors, dated November 16, 1973, filed November 19, 1973, and recorded in Deed Book 1477, page 225, aforesaid records.
  6. Easement from New York Life Insurance Company to the Board of Lights and Water Works dated November 9, 1982, filed February 4, 1983, and recorded in Deed Book 2677, page 251, aforesaid records.
  7. Declaration of Taking entered in that certain Condemnation Proceeding styled Cobb County, Georgia v. New York Life Insurance Company, et al in the Superior Court of Cobb County Georgia, being Civil Action File No. 1-84-3838, dated July 10, 1984, aforesaid records.
  8. Unrecorded Reciprocal Easement Agreement between Naredel Properties of Georgia, II and Mobil Oil Corporation (NOTE: This unrecorded instrument is set forth in that certain Special Warranty Deed from Mobil Oil Corporation to Amoco Oil Corporation dated October 9, 1981, and recorded in Deed Book 2429, page 180, aforesaid records).
-



Deed Book 14813, Pg. 2651  
Filed and Recorded Nov-15-2010 04:03pm  
2010-0150327  
Real Estate Transfer Tax \$299.20

*Jay C. Stephenson*

Jay C. Stephenson  
Clerk of Superior Court Cobb Cty, Ga.

After recording, please return to:  
Jian Hui Wang  
7014 Igor Gap Road  
Chattanooga, TN 37421

STATE OF GEORGIA

COUNTY OF FULTON

LIMITED WARRANTY DEED

THIS DEED is made as of November 15<sup>th</sup>, 2010, between STATE BANK AND TRUST COMPANY, a Georgia banking corporation ("Grantor") and JIAN HUI WANG ("Grantee") (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH that Grantor, for and in consideration of Ten Dollars (\$10.00) in hand paid at and before the sealing and delivery of these presents, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, convey and confirm unto Grantee the following described real property (the "Property"), to-wit:

All that lot, tract or parcel of land, together with improvements thereon, lying and being in Land Lot 66 of the 17<sup>th</sup> District of Cobb County, Georgia and being more particularly described on EXHIBIT "A" attached hereto and made a part hereof by reference thereto.

TO HAVE AND TO HOLD the Property with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of Grantee, forever, in FEE SIMPLE, subject, however, to all liens, exceptions, easements, rights-of-way, covenants, conditions, restrictions, reservations, encroachments, protrusions, shortages in area, boundary disputes and discrepancies, matters which could be discovered or would be revealed by, respectively, an inspection or current survey of the Property, encumbrances, impositions (monetary and otherwise), access limitations, licenses, leases, prescriptive rights, rights of parties in possession, rights of tenants, co-tenants, or other co-owners, and any and all other matters or conditions affecting the Property, as well as standby fees, real estate taxes, and assessments on the Property for the current year and prior and subsequent years, and subsequent taxes and assessments for prior years due to change in land usage or ownership, and any and all zoning laws, regulations, and ordinances of municipal and other governmental authorities

affecting the Property (all of the foregoing being collectively referred to as the "Permitted Encumbrances").

AND Grantor will warrant and forever defend the right and title to the Property unto Grantee against the claims of all persons claiming by, through or under Grantor, but not otherwise; provided, however, that Grantor's conveyance of the Property and Grantor's warranties of title contained in this Deed are and shall be subject to the Permitted Encumbrances.

IN WITNESS WHEREOF, Grantor has caused this Deed to be executed and delivered under seal as of the date first written above.

As to signatory on behalf of Grantor,  
signed, sealed and delivered in  
the presence of:

Unofficial Witness

Notary Public (Affix seal and  
commission expiration date)



GRANTOR:

STATE BANK AND TRUST COMPANY, a  
Georgia banking corporation

By:

William C. Boyajan  
Attorney-in-Fact





**Exhibit A**

All that tract or parcel of land lying and being in Land Lot 66, 17th District, 2nd Section, Cobb County, Georgia as shown on that Boundary Survey

prepared for Eun & Agnes, Inc., Buckhead Community Bank, William H. Dodson, II, LLC and Lawyers Title Insurance Corporation prepared by Ken Nutt, L.L.C., prepared December 3, 2003, certified by Kenneth L. Nutt, Georgia Registered Land Surveyor No. 2104, on January 30, 2006 and being more particularly described as follows:

BEGIN at a point located on the eastern-right-of-way of Bellemeade Drive (eighty foot right-of-way), said point being 399.18 feet south as measured along the eastern right-of-way of said Bellemeade Drive from the intersection of the eastern right-of-way of said Bellemeade Drive and the southern right-of-way of Powder Springs Road, leaving said right-of-way, thence North 73 degrees 08 minutes 19 seconds East along property now or formerly owned by Bellemeade Shopping Center a distance of 169.37 feet to a point; thence South 16 degrees 51 minutes 42 seconds East along property now or formerly owned by Bellemeade Shopping Center a distance of 171.75 feet to a point; thence South 89 degrees 42 minutes 37 seconds West along property now or formerly owned by Antonio Perez a distance of 211.35 to a point located on the eastern right-of-way of Bellemeade Drive (eighty foot right-of-way); thence North 00 degrees 16 minutes 38 seconds West along the eastern right-of-way of said Bellemeade Drive a distance of 116.31 feet to a point, said point being the POINT OF BEGINNING; being improved property known as 1177 Bellemeade Drive according to the current system of numbering property in Cobb County, Georgia, containing 0.616 acres, more or less.

# APPENDIX B.

## FIGURES





Figure 1. Site Location Map



Envirorisk Consultants, Inc.  
PO Box 945  
Grayson, GA 30017

LEGEND:  
Adapted from Bing Maps  
(2011)  
Scale: 1 inch = 285 feet

**Voluntary Remediation Plan  
Application**

Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064



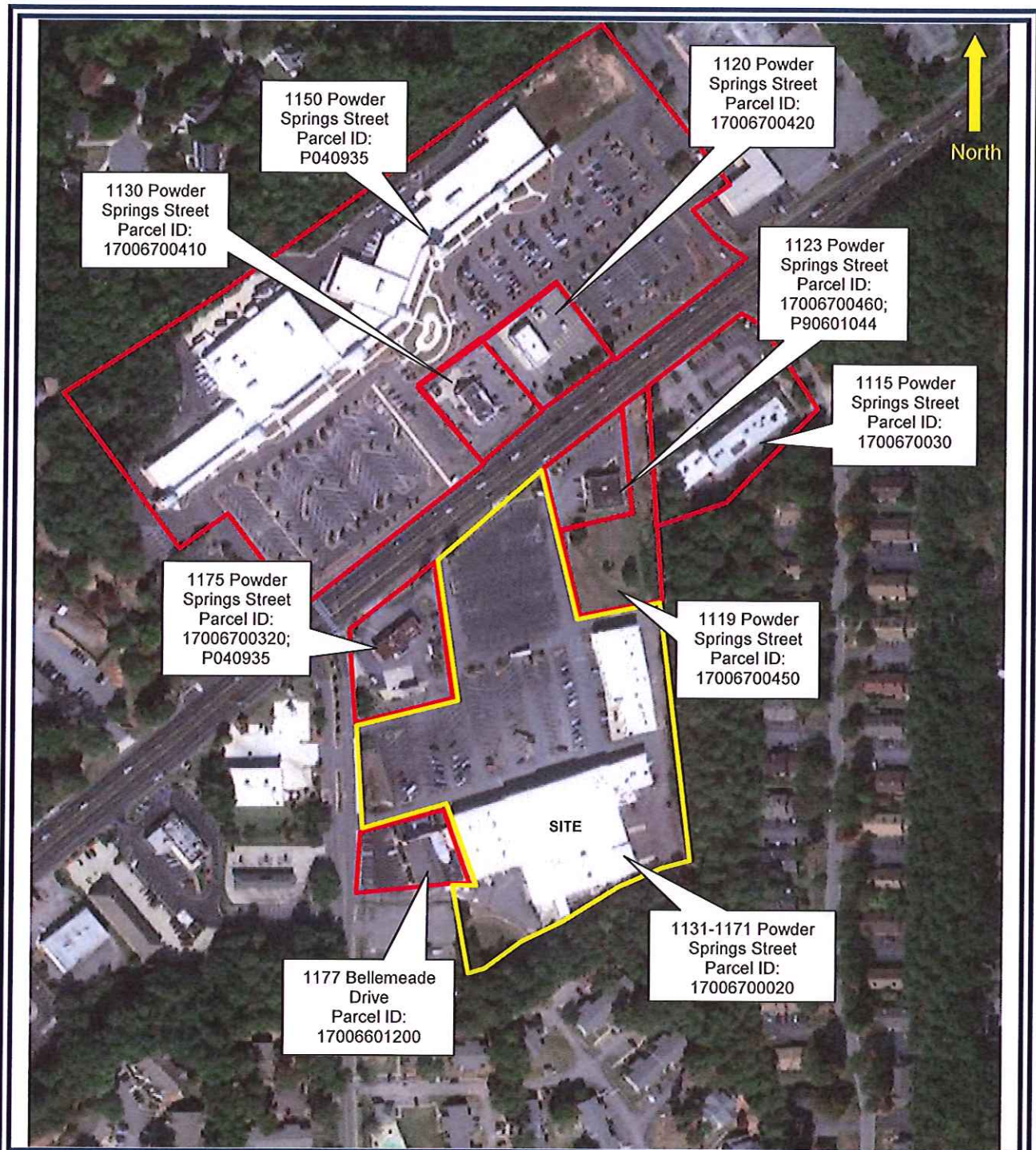


Figure 2. Tax Plat Map

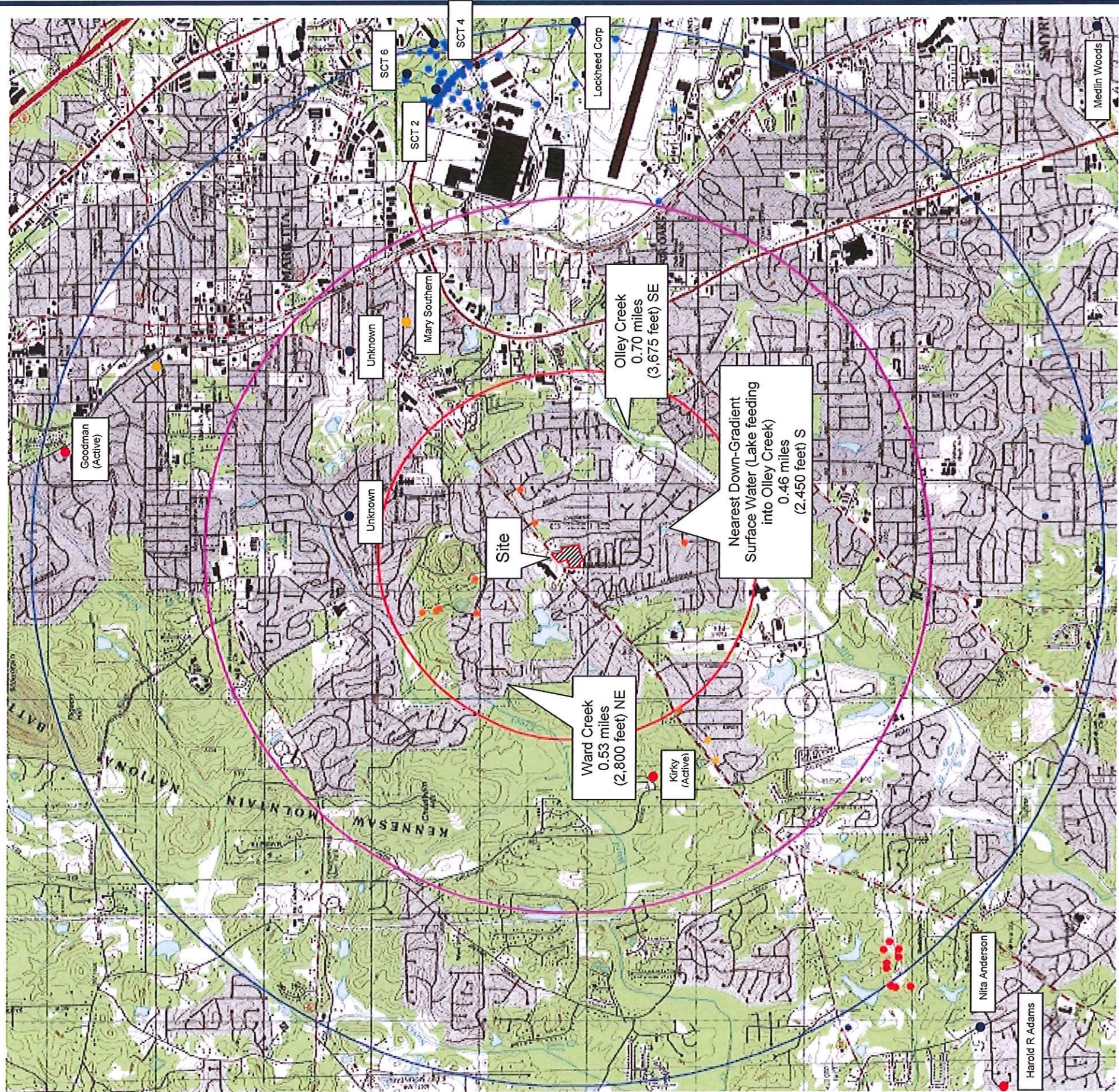


Envirorisk Consultants, Inc.  
PO Box 945  
Grayson, GA 30017

**LEGEND:**  
Adapted from Bing Maps (2011) and Cobb  
County Tax Assessor (accessed online)  
Yellow Outline = Site Tax Parcel  
Red Outline = Surrounding Property Tax  
Parcels  
Scale: 1 inch = 275 feet

**Voluntary Remediation Plan  
Application**  
Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064





### Explanation

- | Search Radius  | Site   |
|--|--|
| <ul style="list-style-type: none"> <li>1 Mile</li> <li>2 Miles</li> <li>3 Miles</li> </ul> | <ul style="list-style-type: none"> <li>Domestic Water Well – No Municipal Connection</li> <li>Irrigation Water Well – Municipal Water Connection at Site</li> <li>Wells reported as inactive and has municipal connection</li> <li>NWIS (USGS) Location</li> <li>Abandoned/Not in Use</li> </ul> |

FIGURE 3. Site Topographic Map

#### LEGEND:

Topographic Map  
 Source: USGS Topography Online; Georgia EPD Survey; Well survey findings provided by Contour Environmental LLC  
 Scale: 1 inch = 3,500 feet

Envirorisk Consultants, Inc.  
 PO Box 945  
 Grayson, GA 30017



Voluntary Remediation Plan  
 Application  
 Bellemeade Shopping Center  
 1131-1167 Powder Springs Street  
 Marietta, Cobb County, GA 30064





LEGEND & NOTES

- EXISTING BORING LOCATION
- EXISTING WELLS/BORINGS ON FORMER COLES CLEANERS
- PROPOSED 1" SOURCE INVESTIGATION WELL (PHASE I)
- PROPOSED DELINEATION WELL (PHASE II)
- PROPOSED DEEP VERTICAL DELINEATION WELL (PHASE II)
- PREDICTED GROUNDWATER FLOW DIRECTION
- APPROXIMATE GROUNDWATER CONTOURS USING 1/17/2012 GROUNDWATER ELEVATION DATA. (PZ-1, 3, & 4)
- APPROXIMATE SITE PROPERTY LINE
- CONTOUR LINES SHOWING EXTENT OF PCE ON SITE
- CONTOUR LINES SHOWING EXTENT OF PCE ON COLE CLEANERS SITE

BRL - BELOW LABORATORY REPORTING LIMITS

NS - NOT SAMPLED

GROUNDWATER SAMPLES SHOWN IN RED COLLECTED BY CONTOUR ENVIRONMENTAL, REPORTED IN ug/L (1-16 & 17, 2012)

SOIL SAMPLES SHOWN IN GREEN WERE ALSO COLLECTED BY CONTOUR ENVIRONMENTAL, REPORTED IN mg/kg (6/1 & 7/7 & 12, 2011)

PCE GROUNDWATER SAMPLES SHOWN IN PINK WERE TAKEN BY MACTEC CONSULTING, REPORTED IN ug/L (8-2009)

SEDIMENT SAMPLE SHOWN IN BLUE WERE TAKEN BY CONTOUR ENVIRONMENTAL, REPORTED IN mg/kg (6/1 & 7/7 & 12, 2011)

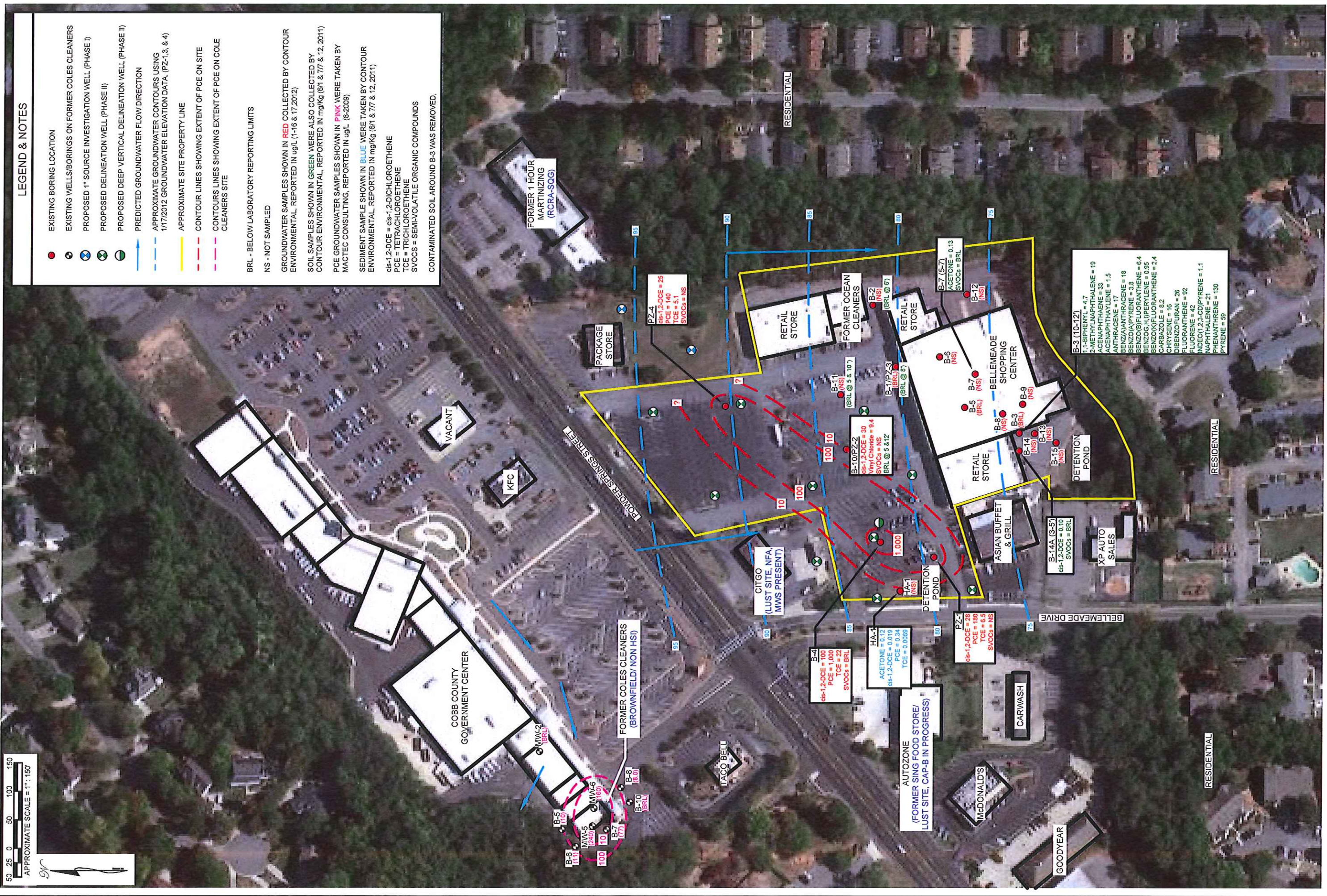
cis-1,2-DCE = cis-1,2-DICHLOROETHENE

PCE = TETRACHLOROETHENE

TCE = TRICHLOROETHENE

SVOCs = SEMI-VOLATILE ORGANIC COMPOUNDS

CONTAMINATED SOIL AROUND B-3 WAS REMOVED.



B-3 (10-12)

1,1-BIPHENYL = 4.7
2-METHYLNAPHTHALENE = 19
ACENAPHTHAENE = 33
ACENAPHTHAYLENE = 1.5
ANTHRACENE = 17
BENZO(A)ANTHRACENE = 18
BENZO(A)PYRENE = 3.8
BENZO(B)FLUORANTHENE = 6.4
BENZOG(H)IPERYLENE = 0.85
BENZO(K)FLUORANTHENE = 2.4
CARBAZOLE = 8.2
CHRYSENE = 16
DIBENZOFURAN = 26
FLUORANTHENE = 92
FLUORENE = 42
INDEQ(1,2,3-CD)PYRENE = 1.1
NAPHTHALENE = 21
PHENANTHRENE = 130
PYRENE = 59

FIGURE NO

4

BELLEMEADE SHOPPING CENTER  
1131-1167 POWDER SPRINGS STREET  
MARIETTA, COBB COUNTY, GEORGIA 30064

SITE MAP SHOWING CONCENTRATION DATA

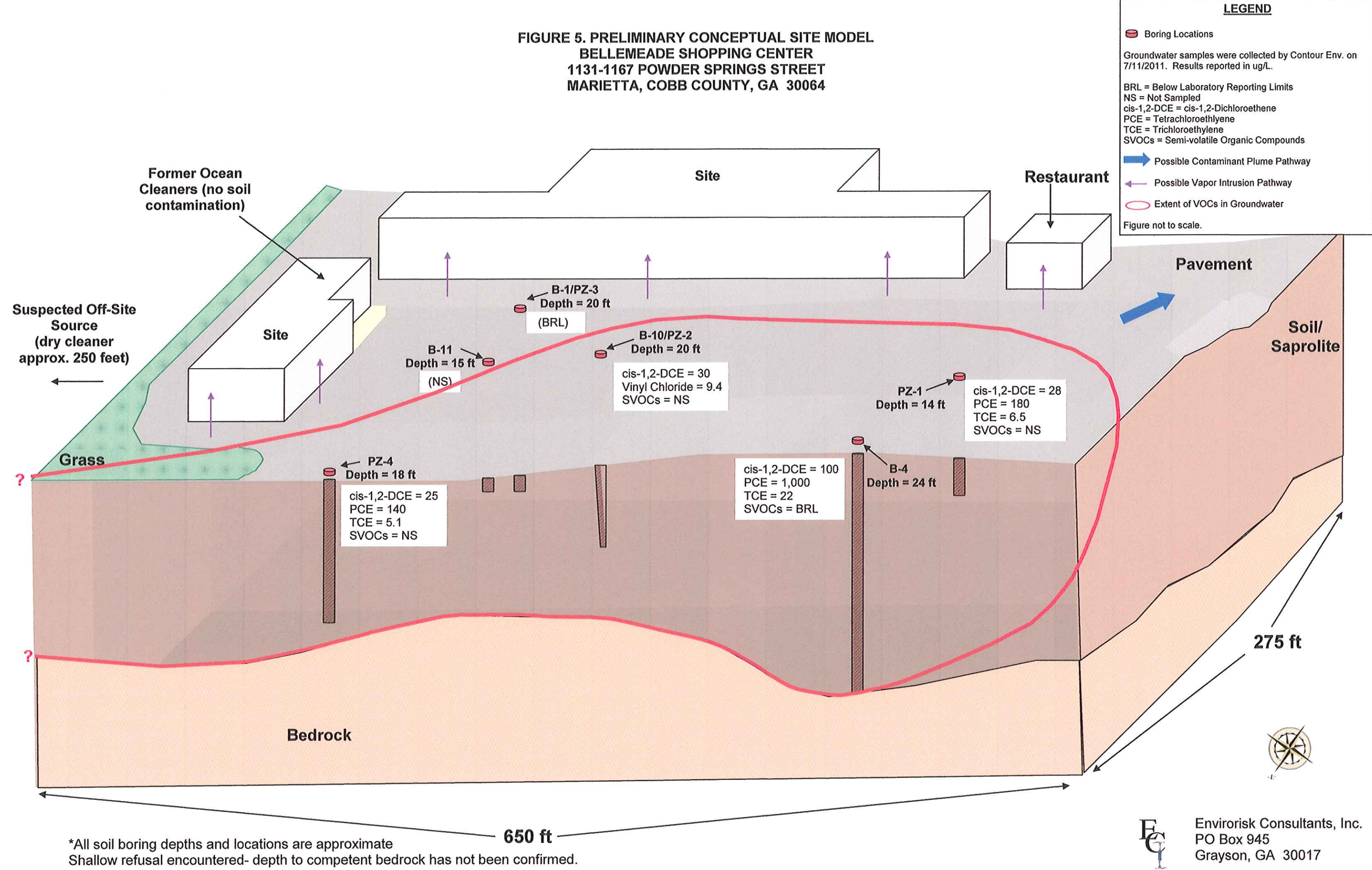
DATE: 2/16/12  
DWN. ADL  
CHKD. KP  
APPR. KCS

ENVIRORISK  
CONSULTANTS, INC.





FIGURE 5. PRELIMINARY CONCEPTUAL SITE MODEL  
BELLEMEADE SHOPPING CENTER  
1131-1167 POWDER SPRINGS STREET  
MARIETTA, COBB COUNTY, GA 30064



\*All soil boring depths and locations are approximate  
Shallow refusal encountered- depth to competent bedrock has not been confirmed.





# APPENDIX C.

## SITE PHOTOGRAPH LOGS





**PHOTOGRAPH 1**  
View of Bellemeade shopping center/former Ocean Cleaners  
facing SE in vicinity of borings B4 and B10



**PHOTOGRAPH 2**  
View of Bellemeade shopping center facing south from  
Powder Springs Street

***Site Photographs (page 1 of 4)***

**Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064**



**PHOTOGRAPH 3**

Southern view of eastern side of Bellemeade shopping center illustrating gradient



**PHOTOGRAPH 4**

View of upgradient Citgo with former Cole's Cleaners in foreground, taken in vicinity of B4 facing N/NW illustrating gradient

*Site Photographs (page 2 of 4)*

**Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064**





**PHOTOGRAPH 5**

View of upgrade and adjacent Citgo LUST site facing SE and illustrating UST pit, MWs, and gradient

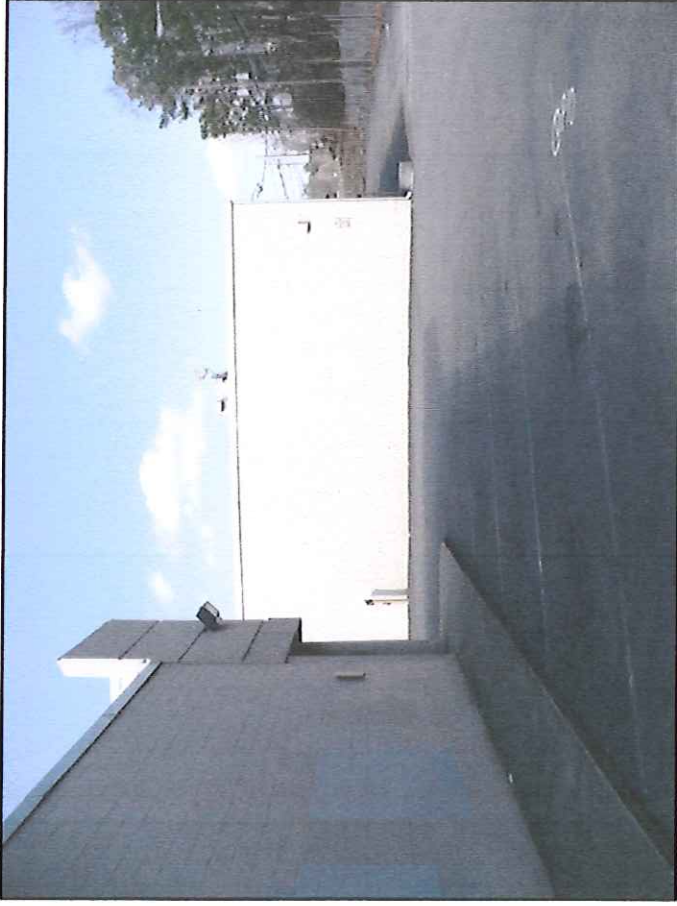


**PHOTOGRAPH 6**

North view of western detention pond showing upgrade Citgo

***Site Photographs (page 3 of 4)***

**Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064**



**PHOTOGRAPH 7**  
View of gradient facing north towards former  
Ocean Cleaners



**PHOTOGRAPH 8**  
Former location of 1-hour Martinizing facility  
(currently Viva Mexico)

***Site Photographs (page 4 of 4)***

**Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064**



# APPENDIX D.

## MILESTONE SCHEDULE

Bellemeade Shopping Center  
1131-1167 Powder Springs Street  
Marietta, Cobb County, GA 30064

NOTES:

*\*Month 1 will start upon acceptance into the VRP.*

*Schedule has been estimated based on information available at the time of this submittal. The timeline may need to be adjusted based on future findings and/or EPD correspondence.*