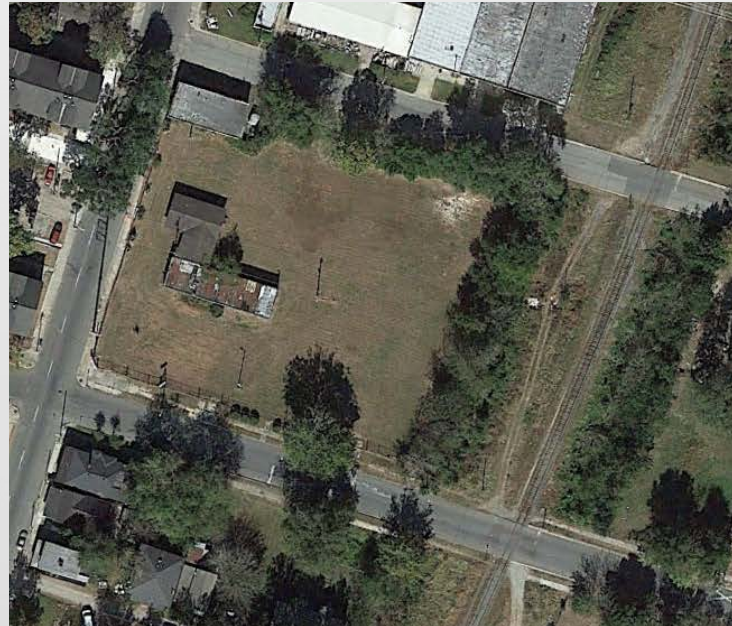


COASTAL GEORGIA BROWNFIELD CASE STUDIES:

From the Corner Lot to Former Industrial Sites



Stewart A. Dixon, P.G.

April 2017

Terracon

Environmental



Facilities



Geotechnical



Materials

Coastal Georgia Brownfield Sites

“The Corner Lot”

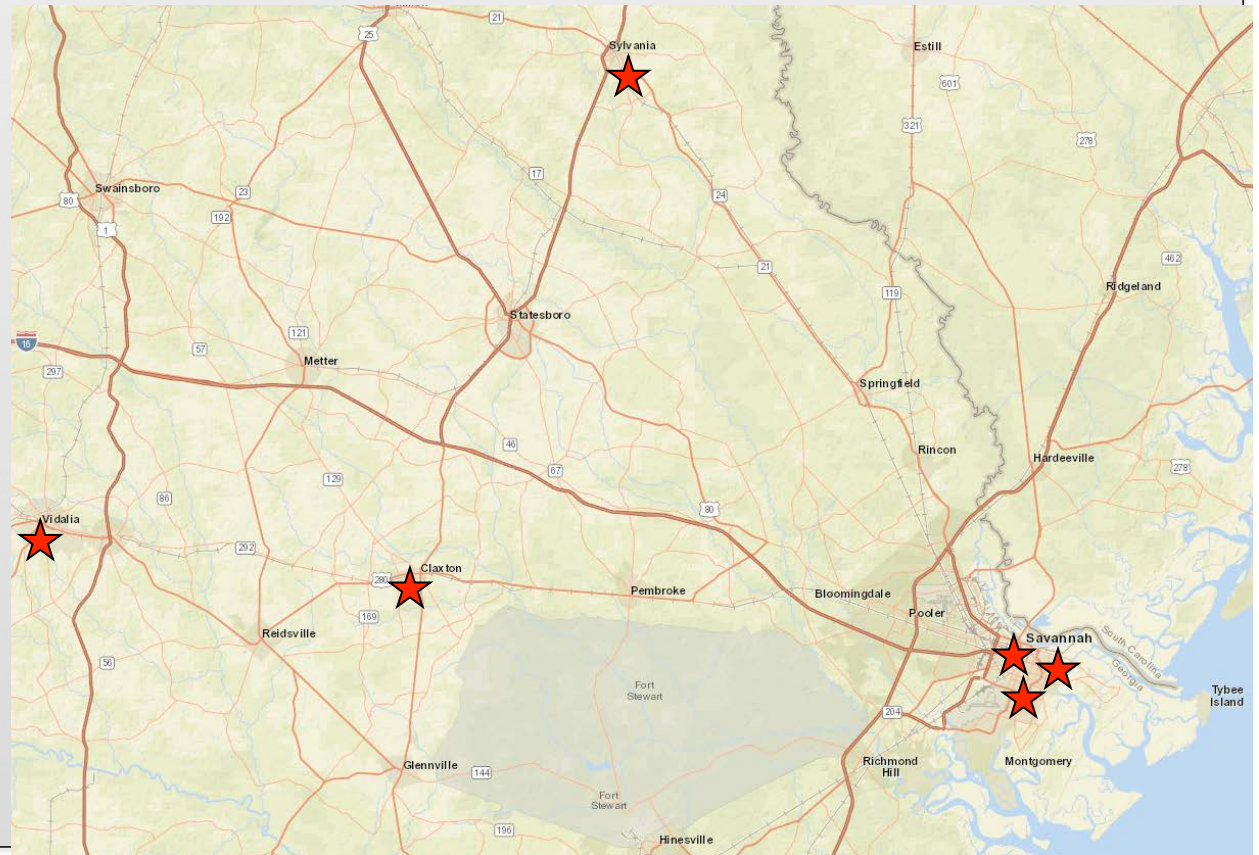
- Queen Street - Vidalia
- Duval Street - Claxton
- East Broad Street - Savannah

Former “Landfill” Sites

- President Street - Savannah
- Bremer Tract - Savannah

Former Industrial Plant

- Former SYS Plant - Sylvania

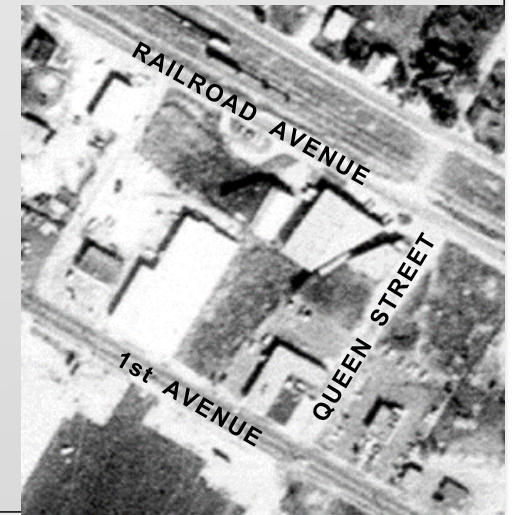
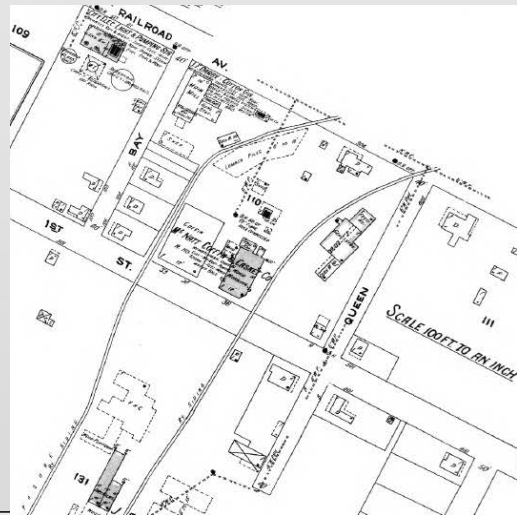


Queen Street Site

Vidalia

Site History:

- Former Industrial Site (Early 1990s)
- Railroad Spurs
- Auto Repair (1970s – mid-2000s)
- Dry Cleaner (1980s – 1990s)
- Restaurant (1988 – late 2000s)

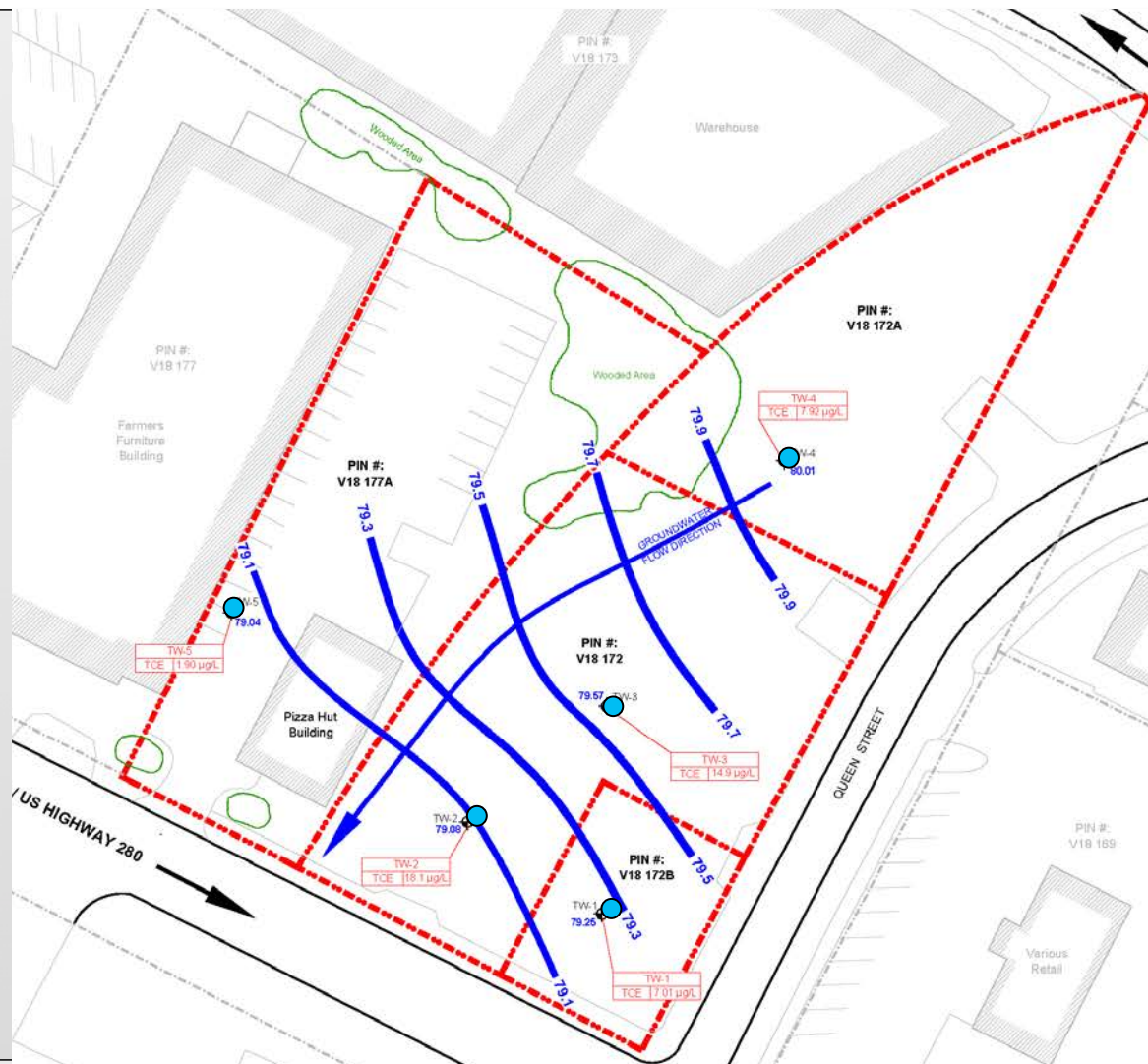


Queen Street Site

Vidalia

Highlights:

- Phase I ESA with Soil & Groundwater Sampling
 - VOCs
 - SVOCs
 - RCRA Metals
- No Detections of VOCs / SVOCs in Soil
- Trichloroethylene detected in all 5 Groundwater Samples
 - 2 ppb to 18 ppb

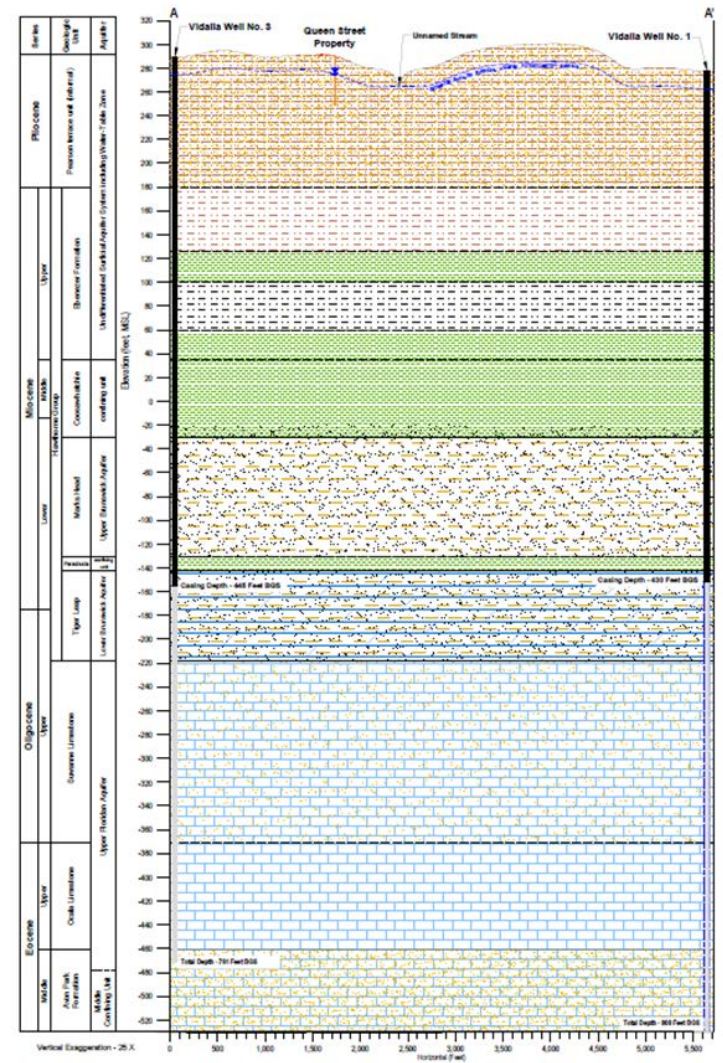


Queen Street Site

Vidalia

Highlights:

- Release notification submitted by Seller
- Receptor Survey
 - Surficial Aquifer not hydraulically connected to drinking water aquifer
- EPD issues “Non-listing” letter to Seller
- Brownfield App / CAP submitted upon receipt of Non-listing letter

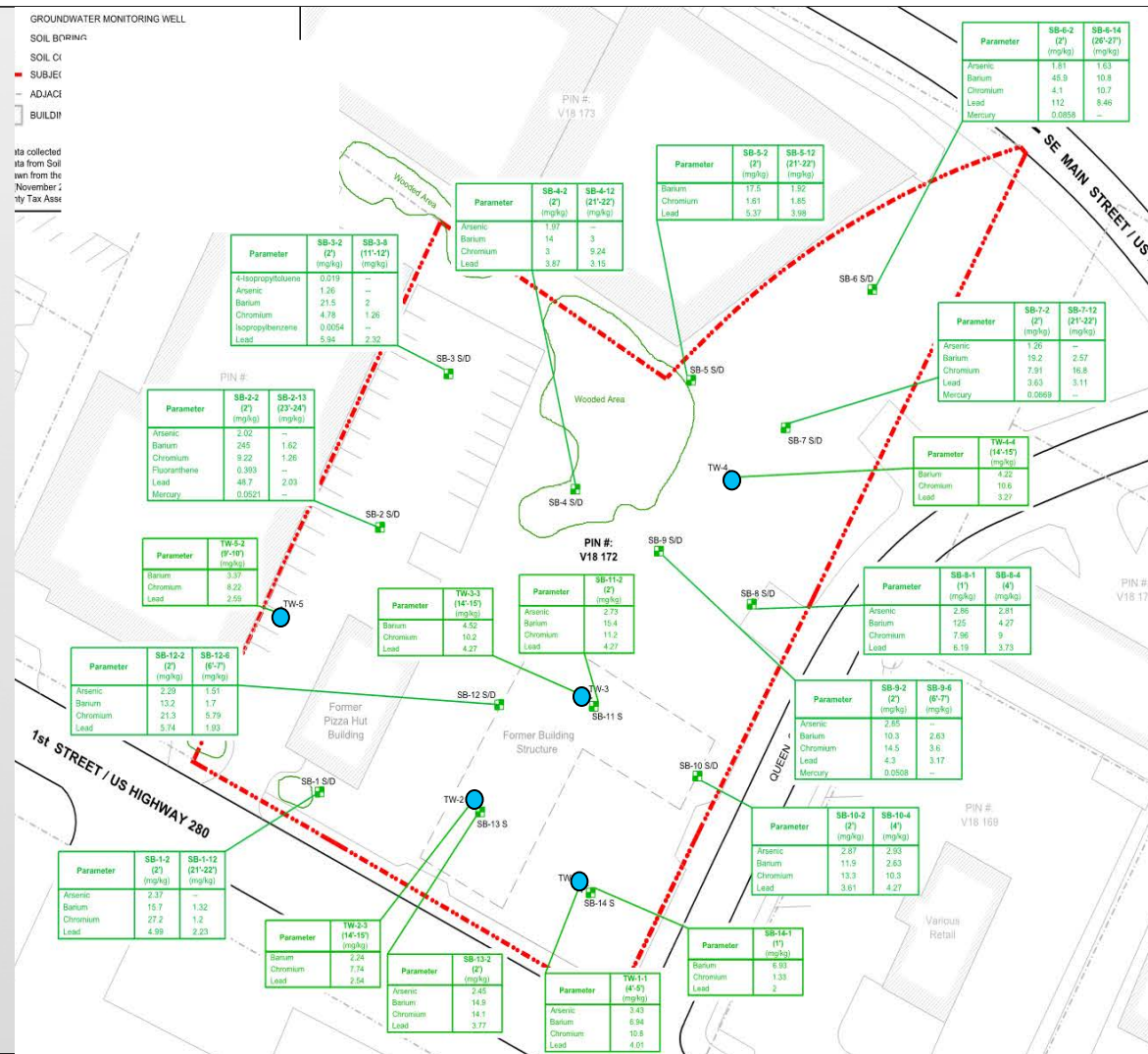


Queen Street Site

Vidalia

Highlights:

- Develop site investigation plan
 - Soils only (surface / subsurface)
 - Submit to EPD for approval
- 14 additional soil samples
- No VOC, SVOC, RCRA Metals detections above non-residential limits



Highlights:

- Prospective purchaser Compliance Status Report (PPCSR)
- No source material found >non-residential RRS
- EPD limitation of liability letter issued for VOCs, SVOCs, and RCRA Metals
- Prospective purchaser closes and redevelops
- Multi-million \$ investment in property
- Purchaser receives tax incentives
- Increases local tax base
- Job creation from a formerly vacant property



Queen Street Site
Vidalia, Georgia

North Duval Street

Claxton

Site History:

- Residential
- Auto Sales / Service
- On-site USTs
- Oil / Water Separator
- In-ground Hydraulic Lifts
- Prior Consultant Work
 - 2015 Phase I ESA
 - No RECs
 - 2015 Limited Sampling
 - No detections in soil

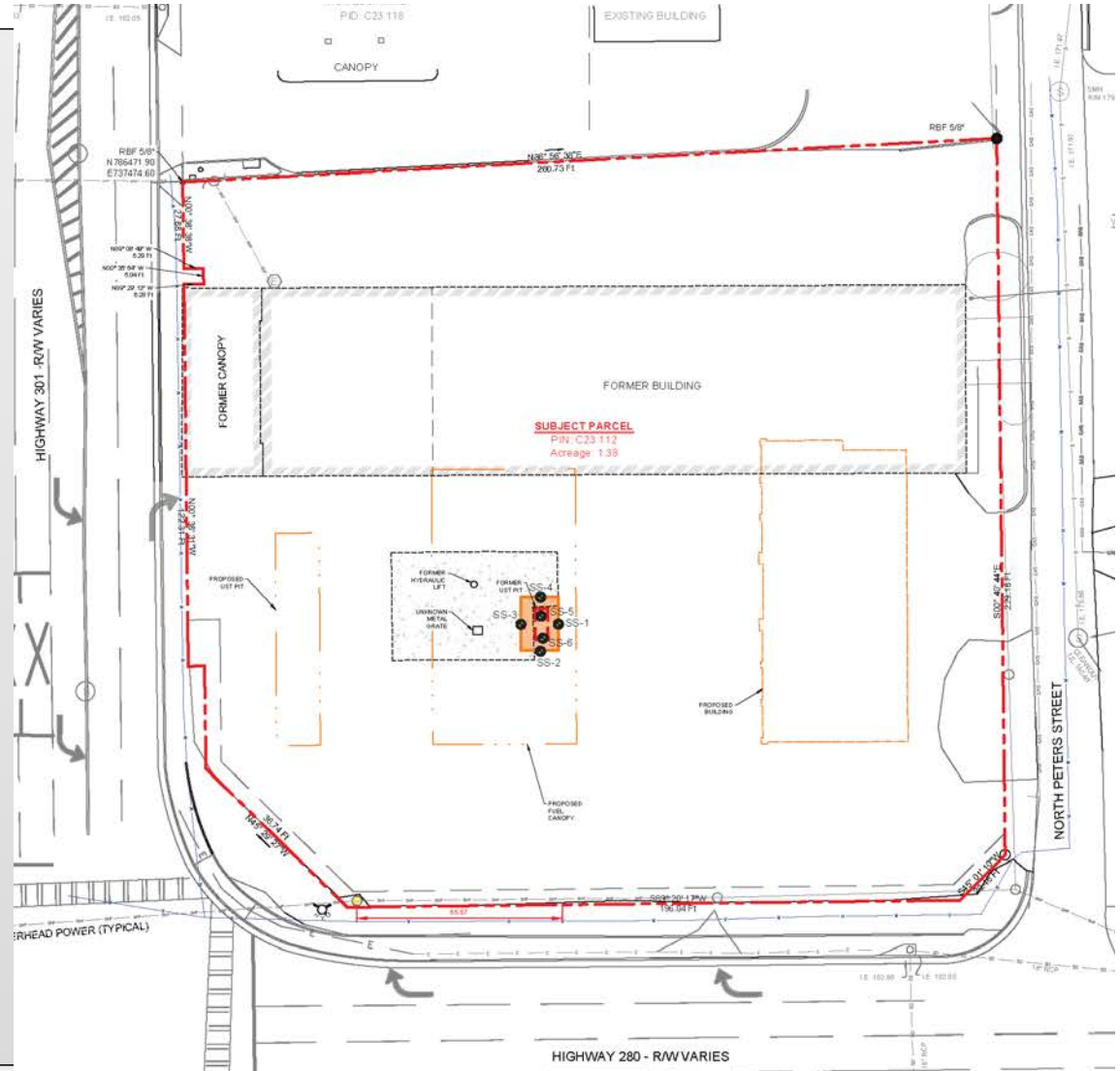


North Duval Street

Claxton

Highlights:

- Client begins redevelopment immediately after closing
- Previously unknown UST found during site construction

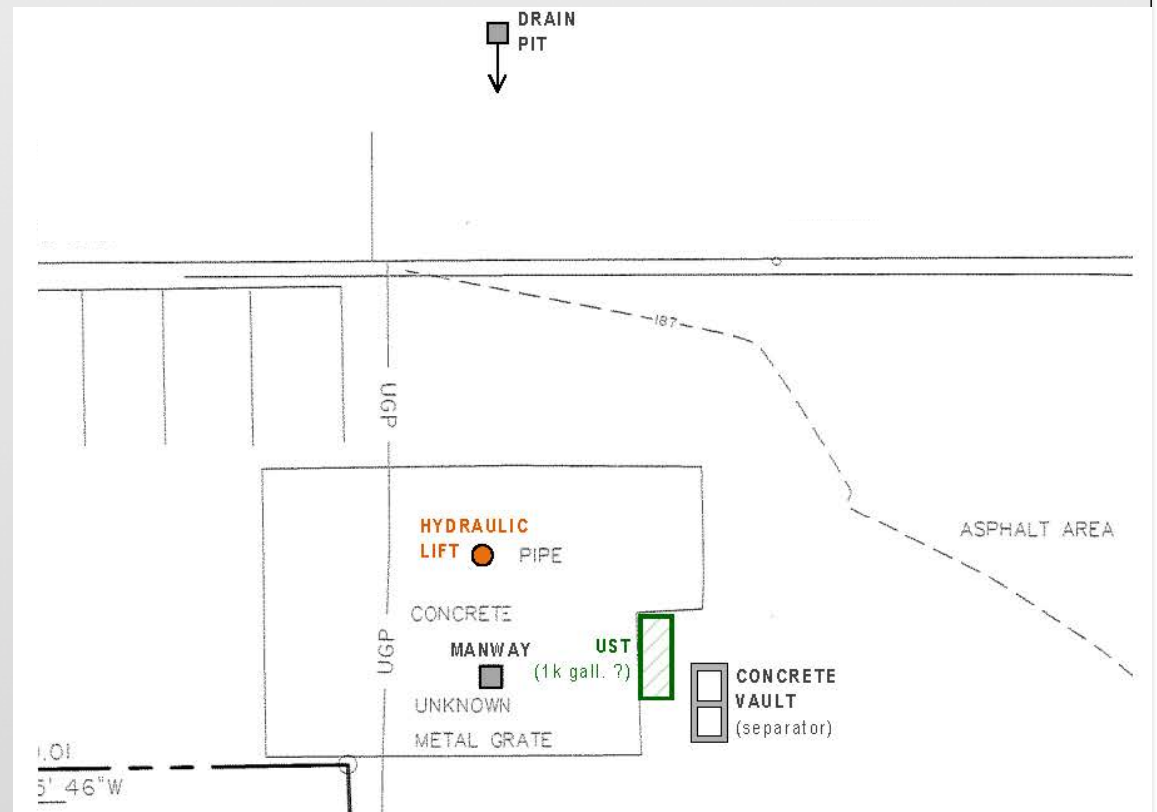


North Duval Street

Claxton

Highlights:

- Soil impacted above Regulatory Limits by UST
- Soil contamination found 25 days *after* closing

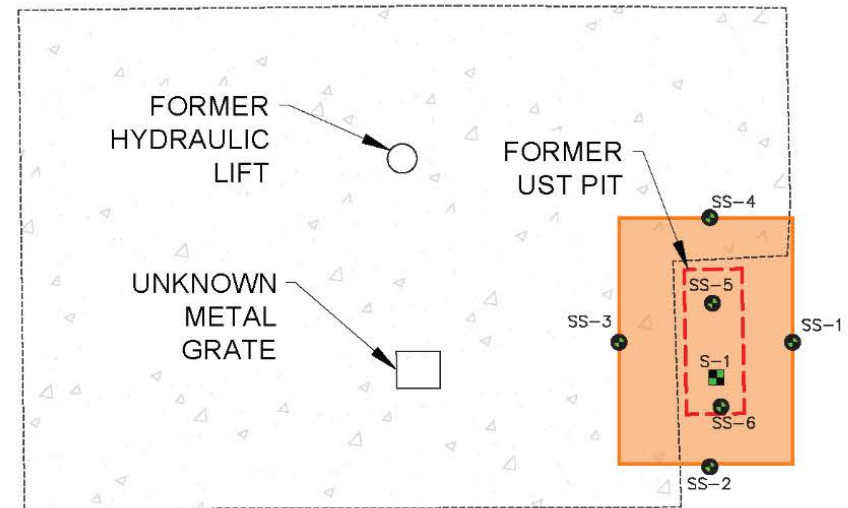


North Duval Street

Claxton

Highlights:

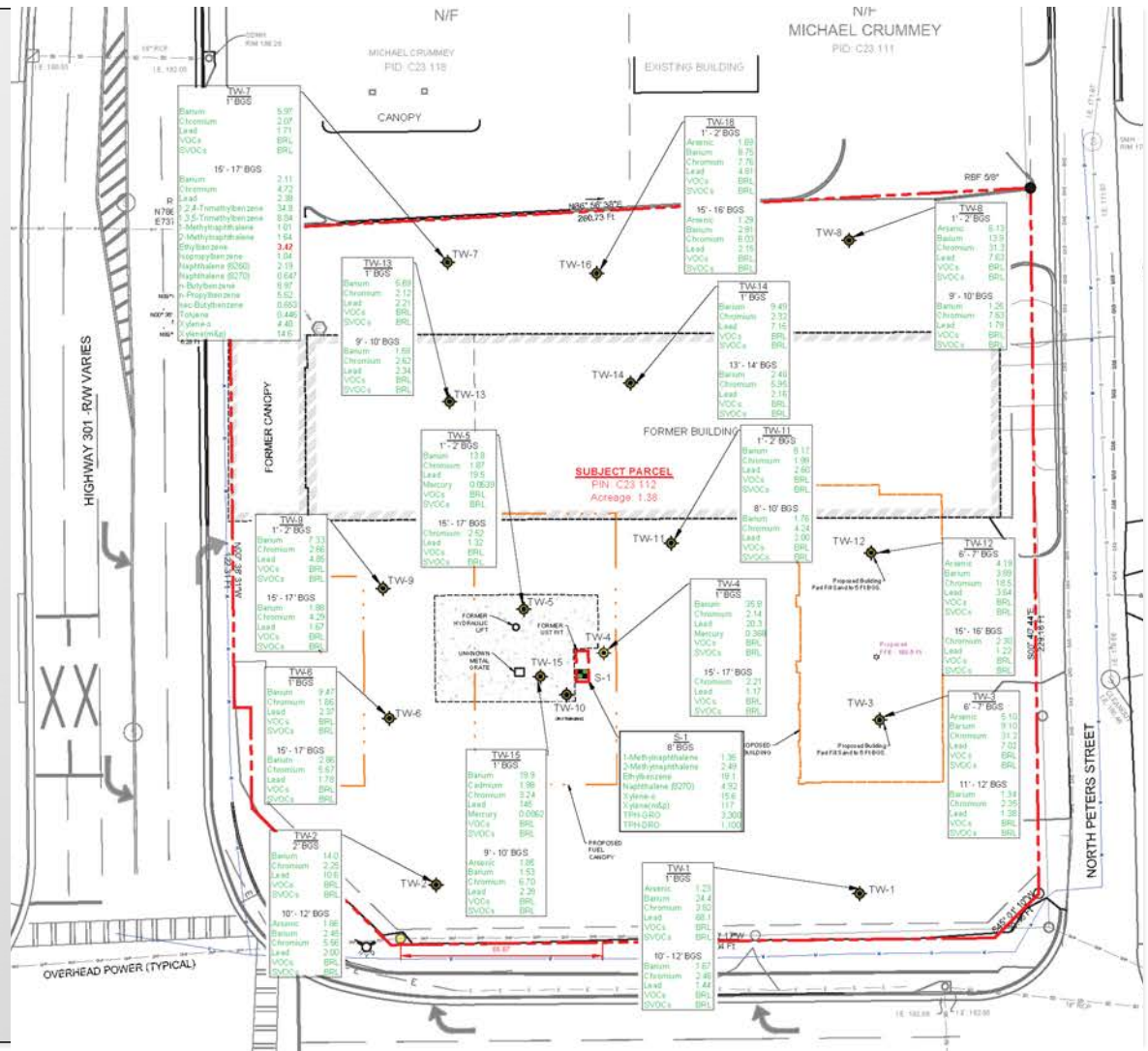
- Soil impacted above regulatory limits at UST
- Soil contamination found 25 days *after* closing
- Brownfield App and PPCAP submitted prior to 30 day deadline
- Site redevelopment work halted
- Site investigation work initiated
 - Soil and groundwater sampling



North Duval Street Claxton

Highlights:

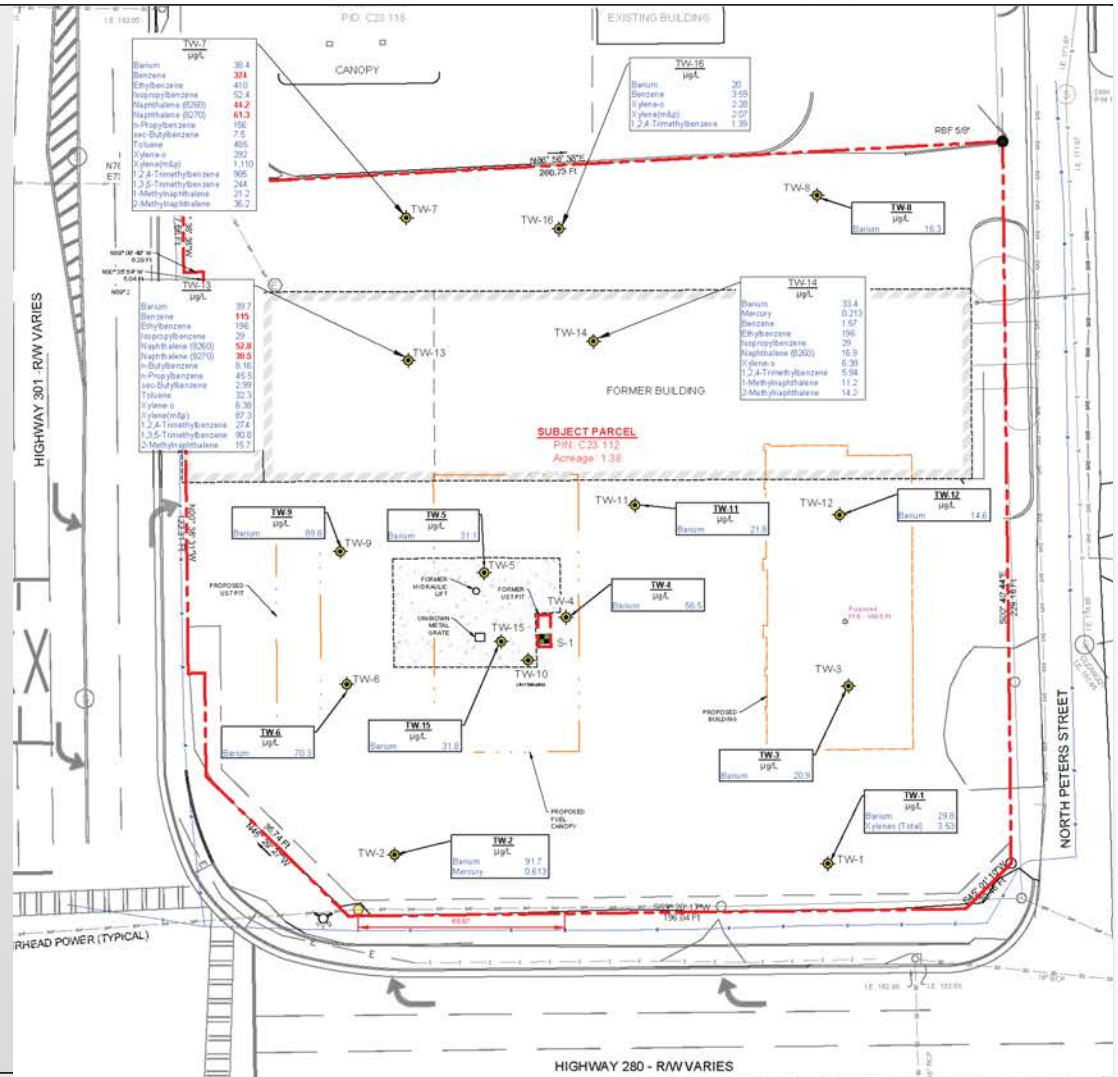
- Site investigation work
- 16 soil borings (shallow & deep)
- 16 groundwater samples
- Removal of UST & in-ground hydraulic lift
- Aggressive sampling plan / network to limit construction delays
- New buildings & infrastructure



North Duval Street Claxton

Highlights:

- Site investigation work
 - Limited soil detections above regulatory limits outside UST Pit
 - Limited groundwater detections above Regulatory Limits
- Over excavation of UST pit
- Site construction resumed in less than 2 weeks



North Duval Street

Claxton

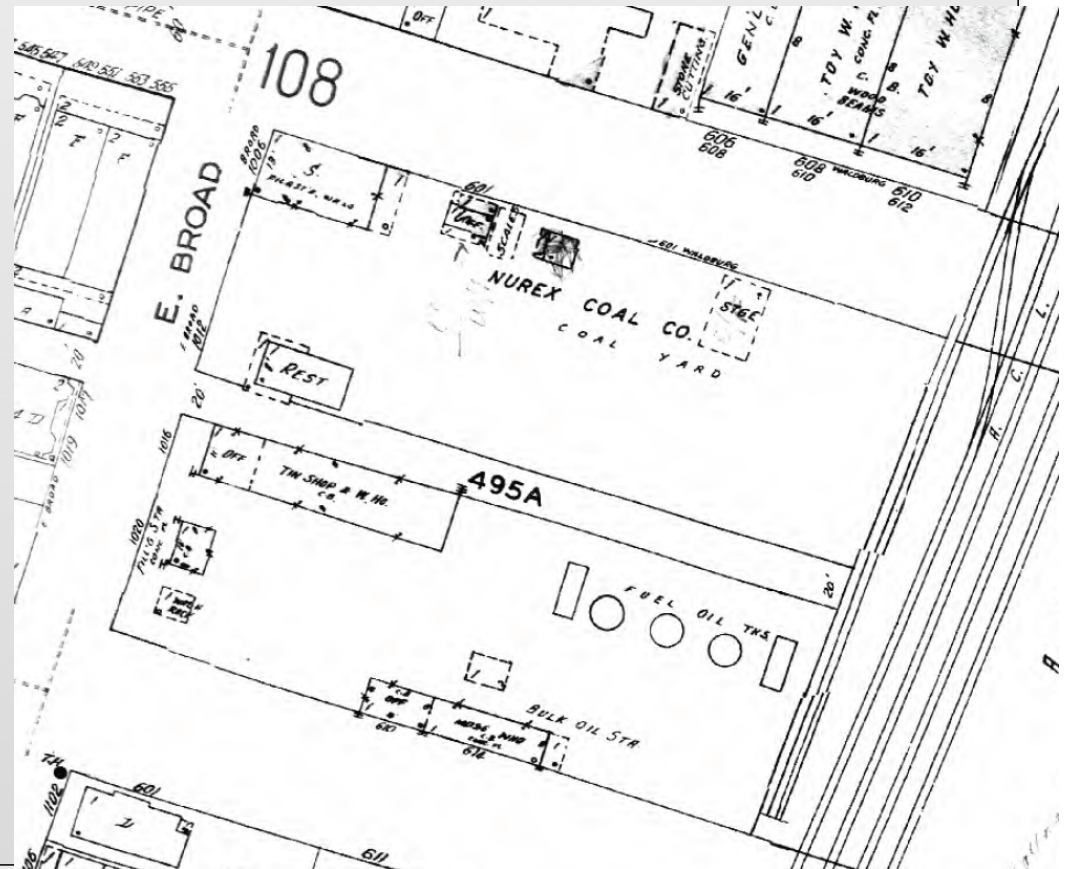
Highlights:

- Multi-million \$ investment in property
- Increased local tax base
- Local job creation



Savannah

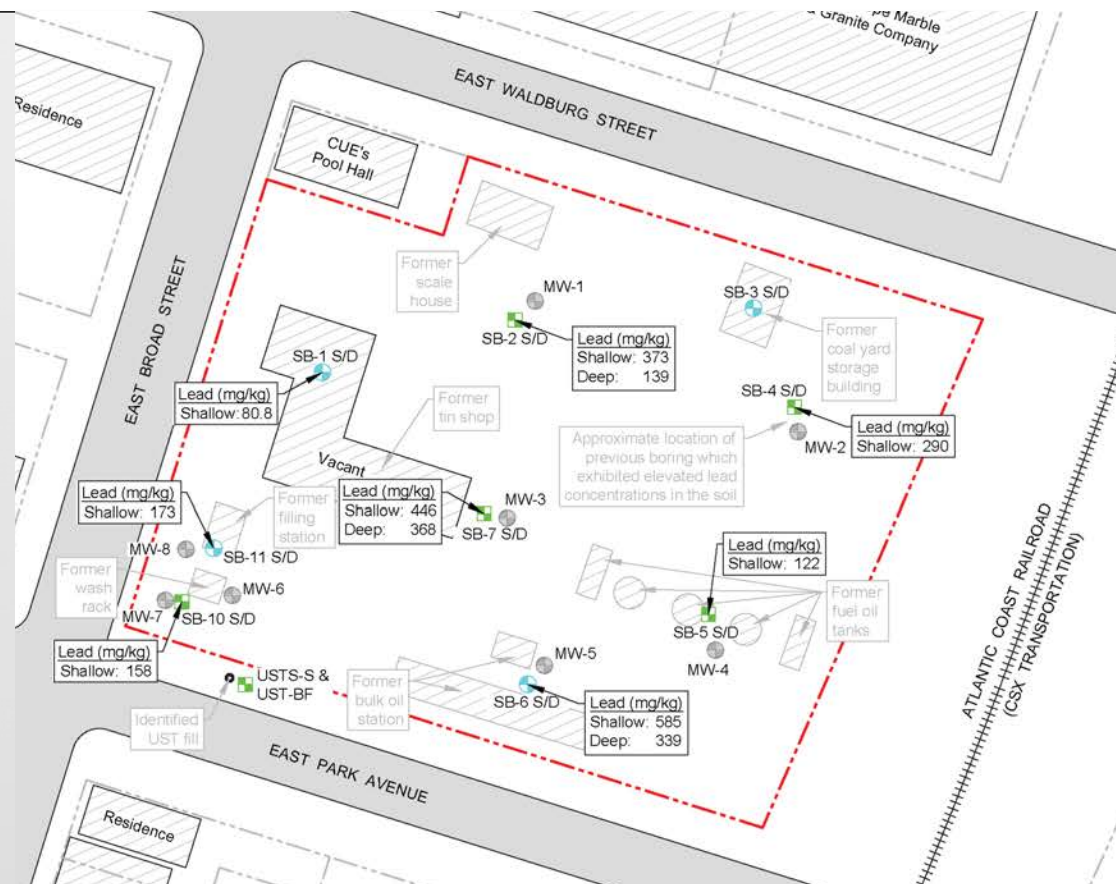
- Former tin shop
- Former coal yard
- Wood yard and axe handle factory
- Fuel oil ASTs
- USTs
- Evidence of buried debris
- Previous remediation of soil contamination



East Broad Street Savannah

Highlights:

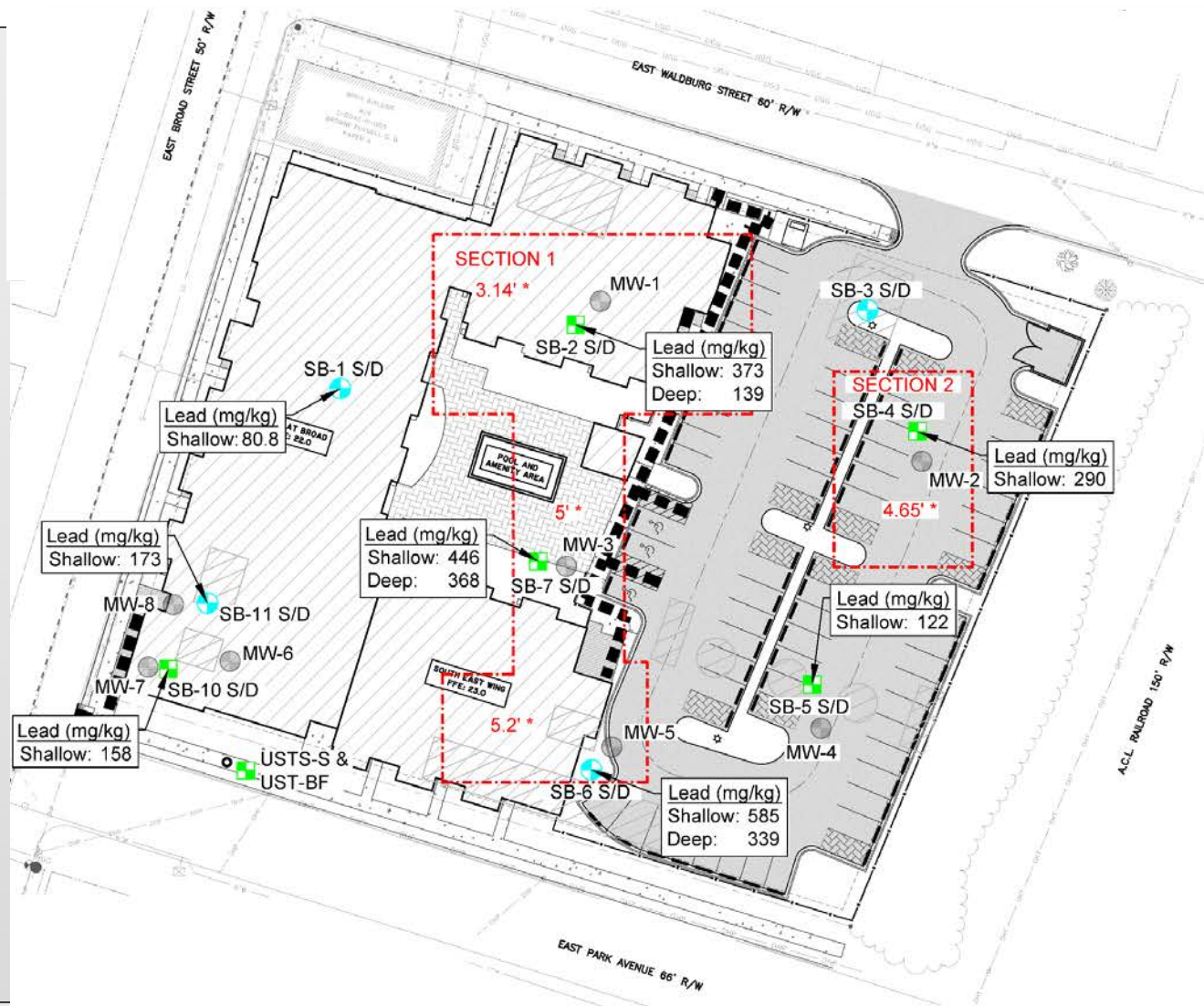
- Lead in soil above Type 1 & Type 2 RRS in both shallow & deep samples
- Type 2 RRS for Lead calculated using:
 - IEUBK Model
 - EPA Soil Screening Level Equation 10
- Additional delineation samples collected to define excavation limits



East Broad Street Savannah

Highlights:

- XRF used during excavation
- Final laboratory confirmation sampling
- 3,600 tons removed & disposed of at subtitle D landfill



Highlights:

- Redevelopment in progress
- 70 unit multi-family housing
- \$7 Million Investment

East Broad Street Savannah



Bremer Tract

Savannah

Site History:

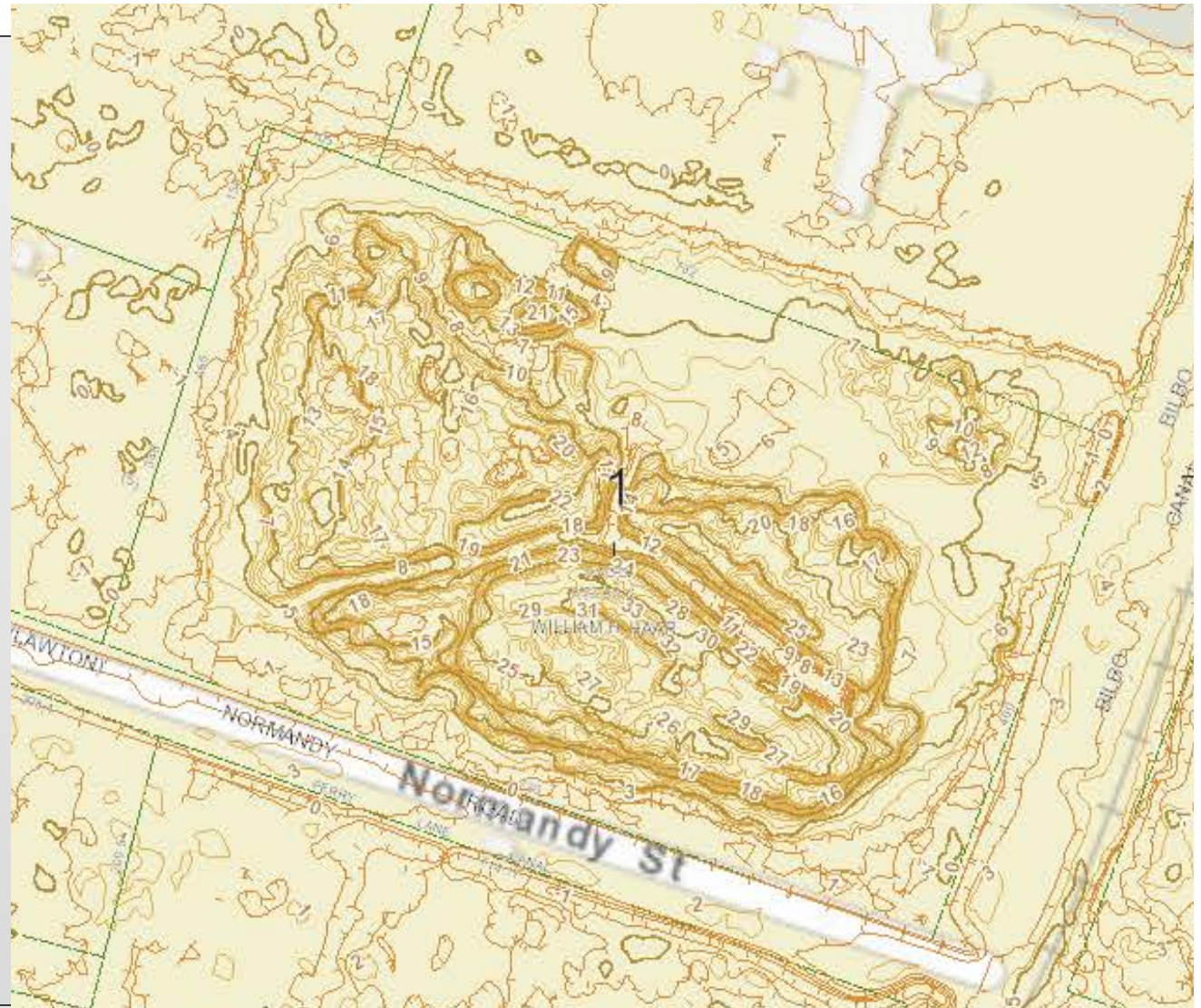
- 9 acres
- Filled with concrete waste from old Talmadge Bridge
- Former inert landfill (1990)
- Materials recovery facility (1998)



Bremer Tract Savannah

Site History:

- Fill clearly evident on topo



Bremer Tract Savannah

Site History:

- Debris includes:
 - Concrete
 - Wood
 - Metal
 - Plastic
 - Roof shingles
 - Wall board
 - Card board



Bremer Tract

Savannah



Bremer Tract

Savannah

Site History:

- Phase I ESA – 2016
- Soil & groundwater sampling



Bremer Tract

Savannah

Highlights:

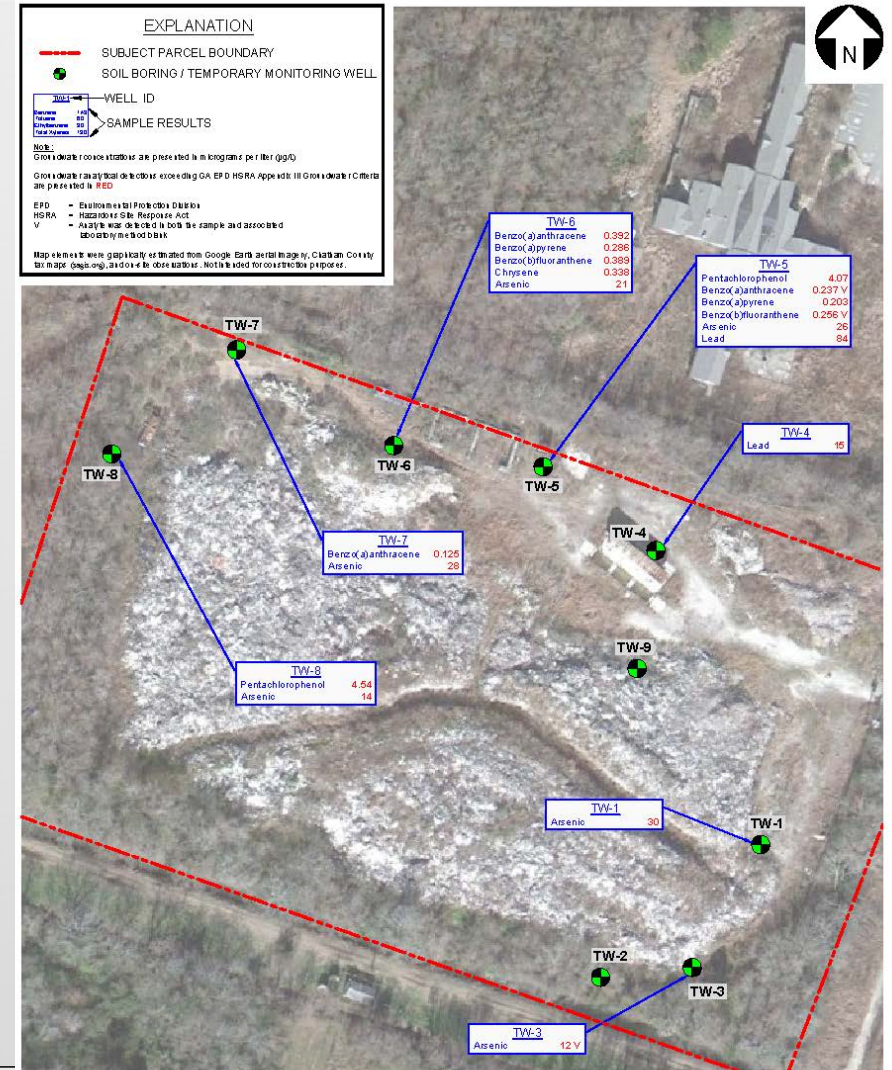
- **Soil** exceedances above HSRA Notification Criteria
 - Carbon disulfide
 - Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b,k)fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Bis(2-ethylhexyl)Phthalate



Bremer Tract Savannah

Highlights:

- **Groundwater** exceedances above HSRA Notification Criteria
 - Arsenic & Lead
 - Pentachlorophenol
 - Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Chrysene



Bremer Tract

Savannah

Highlights:

- Release Notification submitted by owner
- Brownfield App / PPCAP submitted on behalf of Prospective Purchaser
- Remediation plan includes removal & proper disposal of all on-site waste debris
- Redevelopment of site into upscale hotel



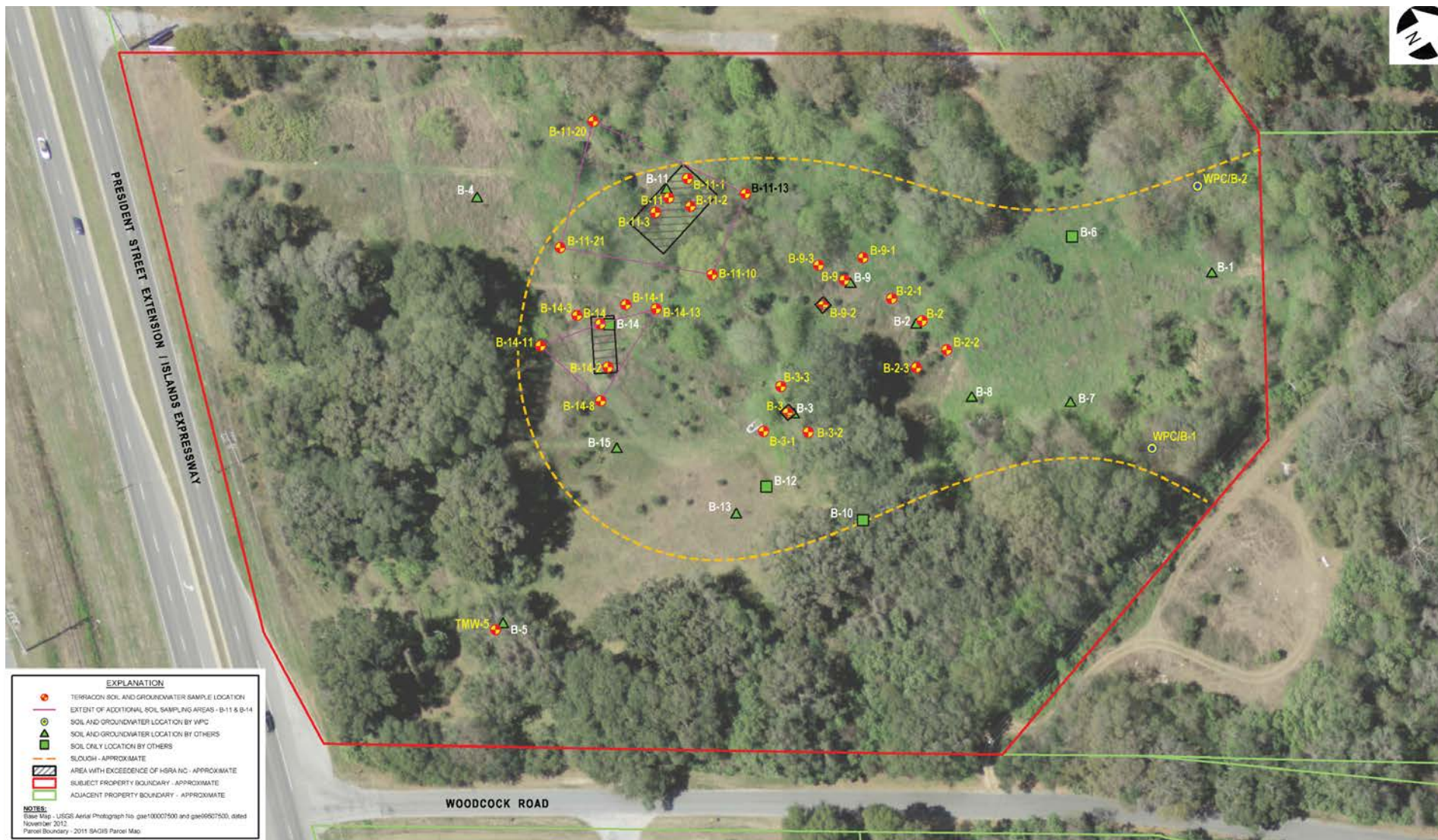
President Street Tract

Savannah

Site History:

- 10 acres
- Historically undeveloped
- Site filled with bricks, concrete, wood, plastic, tires, & metal
- PAH impacted soils above HSRA Appendix I NC
- No known release to groundwater





President Street Tract

Savannah

Highlights:

- Release Notification requesting listing deferral submitted
- Remediation of impacted soils completed
- 4,200 tons removed
- Corrective Action Report with HSRA Non-listing documentation submitted



President Street Tract Savannah

Highlights:

- Non-Listing letter issued by EPD
- Brownfield application & PPCAP submitted for the site
- Proposed redevelopment of the site as luxury apartments as part of the adjacent complex



Former SYS Plant

Sylvania

Site History:

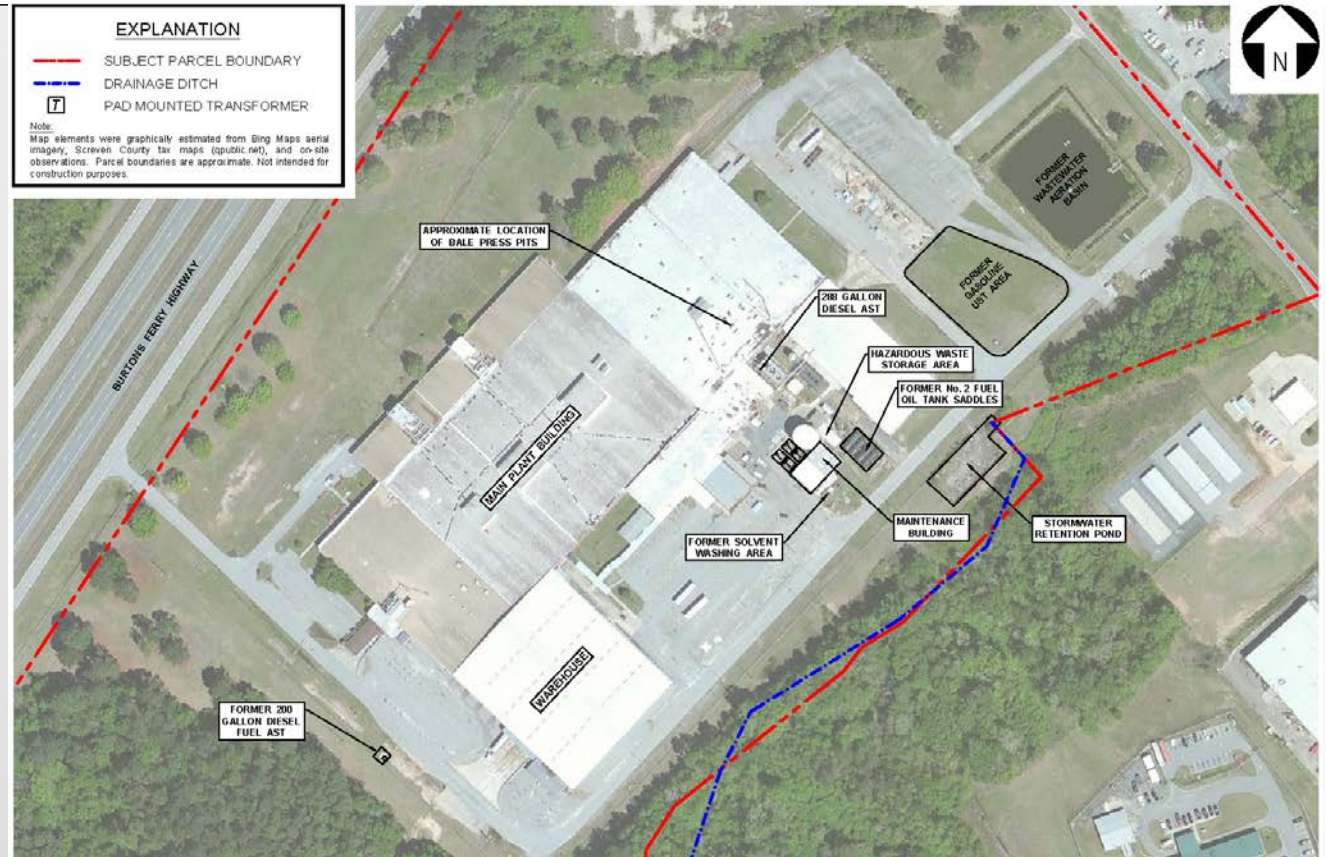
- Site developed in 1969
- Carpet yarn processing
- ASTs, USTs, hazardous waste storage, wastewater aeration basin
- Historical releases in soil & groundwater of:
 - VOCs
 - SVOCs
 - Metals



Former SYS Plant Sylvania

Site History:

- 7 potential source areas
- Previous work at site:
 - Soils certified to Type 2 RRS in 2005
 - Groundwater certified to Type 4 RRS
- Plant continued to operate from 2005 to 2009



Former SYS Plant

Sylvania

Highlights:

- Brownfield application & PPCAP submitted January 2017
- Prospective Purchaser buys site
- Developing sampling plan to fill in data gaps

Community Impact:

- \$2 Million investment in facility
- Creation of over local 100 jobs

International importer to invest \$2 million, create 100-plus jobs in Sylvania

2 Comments [Share](#)



An aerial view of the former Sylvania Yarn Systems building that is being renovated for ELK Group International in Screven County. (Photo courtesy Screven County Economic Development Authority)

Savannah Morning News, February 18, 2017

Terracon

RESPONSIVE.
RESOURCEFUL.
RELIABLE.

Environmental



Facilities



Geotechnical



Materials