

August 3, 2015

Mr. Joe Ghiold  
Project Manager  
DENR-Waste Management  
NC Brownfields Program  
North Carolina Department of Environment and Natural Resources  
1646 Mail Service Center  
Raleigh, NC 27699

Re: 2015 Brownfields Area Reconnaissance and Receptor Survey Rev 1  
City of Monroe Brownfields Property Redevelopment  
309 & 310 West Crowell Street  
Monroe, North Carolina 28112  
NCD 003 155 587

Dear Mr. Ghiold:

On behalf of Tyco International, Inc (Tyco), AECOM is submitting this revised Brownfields Area Reconnaissance and Receptor Survey for the Former Scott Aviation Facility located in Monroe, North Carolina. Responses to your comments received on July 7, 2015 have been incorporated in this Survey..

If you have further questions, please feel free to contact me at 864.234.2253 or at [evelyn.rogers@aecom.com](mailto:evelyn.rogers@aecom.com).

Sincerely,

**AECOM Technical Services, Inc.**



M. Evelyn Rogers, P.E.  
Project Manager

Attachments: Response to Comments: 2015 Brownfields Area Reconnaissance and Receptor  
Survey for the Former Scott Aviation Facility  
Map 1 – Storm Water Drains & Piping Map  
Map 2 – Water & Sewer Lines Field Map  
Map 3 – Buried Electric & Natural Gas Lines Map  
Map 4 – Nearby Monitoring Wells Location Map  
Map 5 –Zoning Map

c: Joseph Janeczek PE, Tyco  
Stuart Rixman, Scott Figgie LLC  
Mary Katherine Stukes, Parker Poe  
McIver Law, AECOM

## BROWNFIELDS AREA RECONNAISSANCE AND RECEPTOR SURVEY GUIDANCE FORM

This form was created to facilitate the preparation of a receptor survey for a given brownfield property. This is a guidance document only, and Prospective Developers may complete and submit their own receptor survey, if they desire. Any receptor survey submitted must be completed by a qualified environmental professional.

### General Instructions

- 1.) Complete "Property Characteristics" Section and all portions of other sections where an "X" has been placed in the far left column under "Applicable to Site," as determined by the DENR Brownfields Project Manager on a site specific basis.
  
- 2.) The search-radius distances to potential receptors from the Property boundary will be determined by the DENR Brownfields Project Manager on a site by site basis.
  
- 3.) Search-radius distances are measured from the site Property Boundary unless otherwise indicated by the DENR Brownfield's Project Manager.

Site: Former Scott Aviation  
 Address: 309 & 310 West Crowell Street  
 City: Monroe  
 County: Union

### Section 1 - Property Characteristics

<i>Provide Information for the following potential receptors</i>	<i>Current Usage</i>	<i>Proposed Usage</i>
Size of Property (acres)	10	10
% of property that is wooded	20	20
% of property that is scrub/shrub	< 5	< 5
% of property that is open land	0	0
% of property that is grass area	5	5
% of property that is agricultural crops	0	0
% of property that is barren	0	0
% of property that is used for commercial or industrial usage including paved areas	70	70

**Section 2 - Surrounding Properties**

<i>Applicable to Site (DENR Use Only)</i>	<i>Direction from Subject Brownfield Property</i>	<i>Current Zoning/Land Use</i>	<i>Proposed Zoning/Land Use</i>
X	North	Commercial/Industrial	Same
X	South	Commercial/Industrial/ Residential (See Attached Map 5)	Same
X	East	Commercial/Industrial	Same
X	West	Commercial/Industrial/ Residential (See Attached Map 5)	Same

**Section 3 - Potential Receptors** - include burial depth, construction material and diameter, when available.

Applicable to Site (DENR Use Only)	Provide Information for the following potential receptors	Y/N	Field Verified	Date Verified	Distance	Direction	Depth
					Complete and attach map as appropriate		
X	Is a basement or subsurface foundation within 1000 ft of the Property boundary?	N	Y	6/11/2015	-	-	-
X	Is a school or daycare center within 1000 ft of the Property boundary?	N	Y	6/11/2015	-	-	-
X	Is a storm sewer within 1000 ft of the Property boundary?	Y	Y	6/11/2015	See Attached Map 1	See Attached Map 1	Variable (1.4' -9')
X	Is a sanitary sewer within 1000 ft of the Property boundary?	Y	Y	6/11/2015	See Attached Map 2	See Attached Map 2	6' - 8'
X	Is a septic system leach field within 1000 ft of the Property boundary?	N	Y	6/11/2015	-	-	-
X	Is a water line main within 1000 ft of Property boundary?	Y	Y	6/11/2015	See Attached Map 2	See Attached Map 2	3'
X	Is a natural gas line main within 1000 ft of the Property boundary?	Y	Y	6/11/2015	See Attached Map 3	See Attached Map 3	3'
X	Is a buried telephone/ cable main within 1000 ft of the Property boundary?	Y	Y	6/11/2015	5 ft	North/South	3"
X	Is a buried electrical cable main within 1000 ft of Property boundary?	Y	Y	6/11/2015	See Attached Map 3	See Attached Map 3	3'

**Section 4 - Local Water Supply**

Public: Yes Private: N/A

Potable Water Supplier Name: City of Monroe

Potable Water Supply Source: Lake Twitty

Distance: 3.5 miles Direction: Northeast

Potable Water Source Intake: N/A

Distance: N/A Direction: N/A

**Section 5 - Water Supply Wells**

<i>Applicable to Site (DENR Use Only)</i>	<i>Provide Information for the following potential receptors</i>	<i>Y/N</i>	<i>Field Verified</i>	<i>Date Verified</i>	<i>Distance</i>	<i>Direction</i>	<i>Depth</i>
					<i>Complete and attach map as appropriate</i>		
X	Is a public water supply well within 1 mile of the Property boundary?	N	Y	6/11/2015	-	-	-
X	Is a private water supply well within 1/2 mile of the Property boundary?	N	Y	6/11/2015	-	-	-
X	Is a irrigation supply well within 1/2 mile of the Property boundary?	N	Y	6/11/2015	-	-	-
X	Is a monitoring well within 1500 ft of the Property boundary?	Y	Y	6/11/2015	50 - 270 ft (See Attached Map 4)	West/South (See Attached Map 4)	42'

**Section 6 - Water Bodies on Property**

<i>Applicable to Site (DENR Use Only)</i>	<i>Provide Information for the following potential receptors</i>	<i>Comments</i>
X	Is water body naturally developed or man made?	None
X	List the uses of the water body	None
X	What is the source of the water for the water body	None
X	What is the nature of the bottom of the water body (e.g., rocky or concrete bottom, drainage ways or impoundments)	None
X	Are there any wetlands present on the property?	None

**Section 7 - Surface Water Body**

Applicable to Site (DENR Use Only)	Provide Information for the following potential receptors	Y/N	Name	Type	Distance	Direction	Depth
					Complete and attach map as appropriate		
X	Are there surface waters located within 500/1000 ft of the Property boundary?	Y	Bearskin Creek	Creek	225 ft (See Attached Map 4)	North (See Attached Map 4)	N/A
	<i>Additional water bodies, if needed</i>						

**Section 8 - Additional Requests/ Observations**

Applicable to Site (DENR Use Only)	Provide Information for the following potential receptors	Comments
	Stormwater	Stormwater drain depths vary with pipe grading. Attached Map 1 shows depths of piping at drain points (0 = drainage outfall) Only the depths of the drains were available from the City of Monroe; depths of the storm drainage lines were not. Proposed Brownfields property lines are shown in Orange.
	Sewer and Water Lines	Map 2 shows sewer lines in green and water lines in blue. Legend indicates burial depths of the lines provided by the City of Monroe.
	Telephone line	Telephone line is located on Northern side of West Crowell street and runs from Marshall St. to in front of both buildings before going above ground
	Private wells	Based on previous Phase I, there are 100 active private wells in Monroe. The nearest is located 1.6 miles to the southwest
	Monitoring wells	Six monitoring wells were located on the neighboring Enquirer Journal property to the west. W-1 (25' bgs) , W-2A (42' bgs), and W-3A (42'bgs) were installed by Golder Associates in 1997 for Thompson Newspapers Inc. on the Enquirer-Journal Site. Information on the other two monitoring wells could not be located.

	<p>Residential and/or Commercial Structures</p>	<p>Plans for the location of structures at the Brownfields property remain conceptual at this point in the process, although the Prospective Developer (PD) does not currently anticipate the property being redeveloped for residential use. The PD is in discussions with a potential purchaser of the northern, 8-acre parcel (north of Crowell Street), but the parties have not yet agreed on a site plan to include the location of future buildings. As NCDENR is aware, the PD plans to transfer a portion of the southern parcel (on the corner of Charlotte Avenue and Jefferson Street) to a non-profit entity and develop that parcel as a fire station, but those plans remain conceptual at this point as well. The PD has not yet identified a purchaser for the remainder of the southern parcel bordering Jefferson Street and accordingly a development plan for the remainder of the Jefferson Street frontage does not yet exist.</p>
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**MAP 1**

**STORM WATER DRAINS & PIPING MAP**

**Legend**

- Proposed Brownfields property Boundary ————
- Stormwater drainage lines - - - - -
- Storm drains ■ (number indicates depth of drain)
- Note 0 = stormwater outfall



**MAP 2**

**WATER & SEWER LINES FIELD MAP**

**Legend**

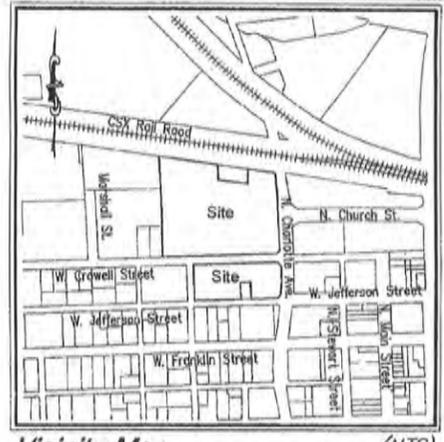
Sewer — (buried 6-8 ft deep)

Water — (buried 3-5 ft deep)

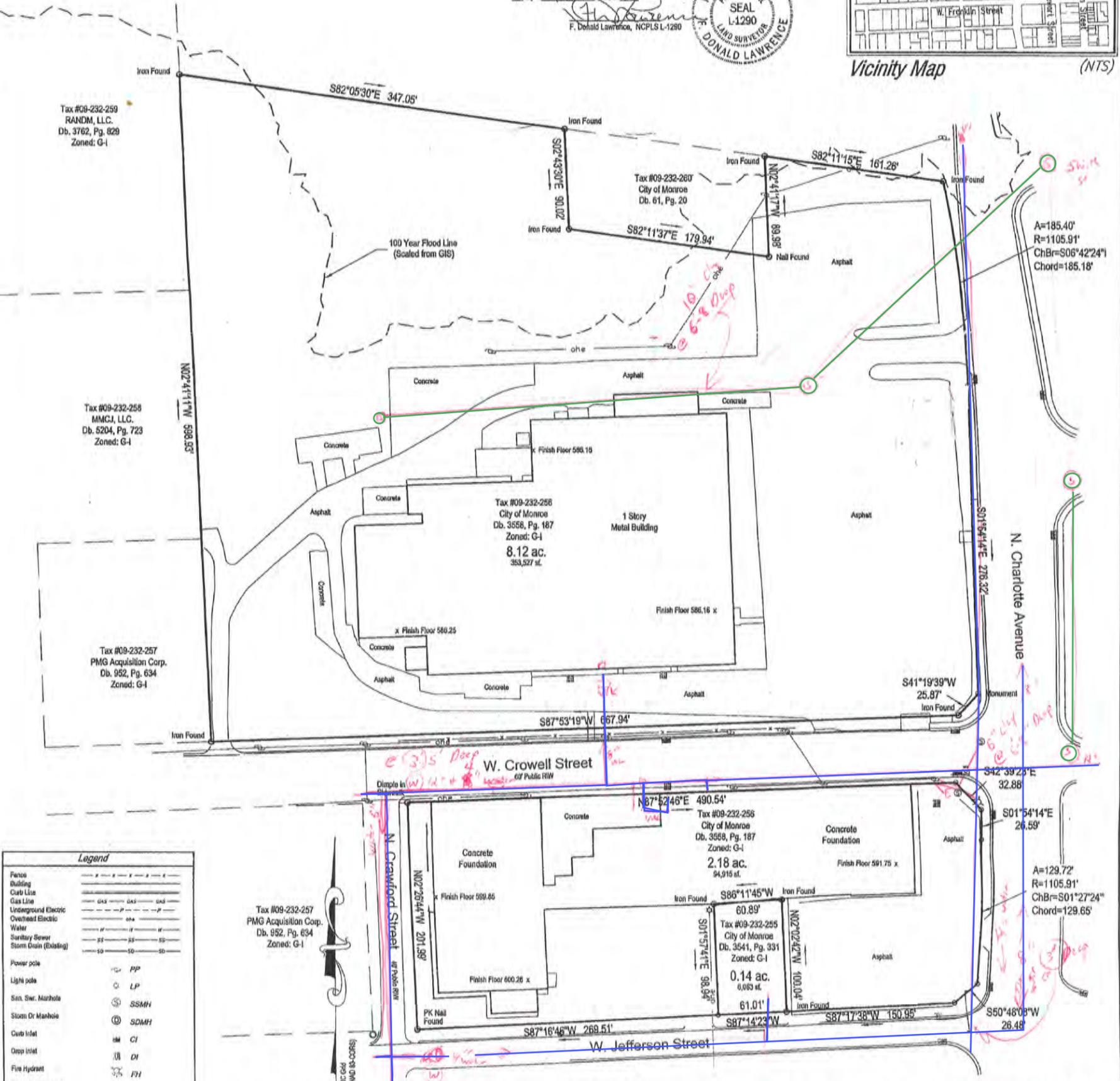
- NOTES**
1. Areas computed using coordinate geometry.
  2. This map was prepared without the benefit of a title search. Survey subject to full title search.
  3. This property may be subject to right of ways, easements, restrictions and covenants either recorded or implied.
  4. All distances shown are horizontal ground distances.
  5. No recoverable NCGS Horizontal Control Monument located within 2000 feet of subject property.
  6. Rebar set at all corners unless otherwise noted.
  7. Broken lines indicate property lines not surveyed.
  8. All adjoining property owner information is taken from current deeds and tax records and are considered as "Now or Formerly".
  9. Lawrence Associates makes no guarantees to the compaction or to the nonexistence of spoils areas.
  10. Other underground utilities may exist but their locations are not known.

**Flood Certification**  
 I have examined the Flood Insurance Rate Map for Union County North Carolina, Community Panel Number 3710543500J, dated October 16, 2008, and hereby certify that a portion of this property is located in a special flood hazard area as determined by the Federal Emergency Management Agency.

**Certificate of Survey and Accuracy**  
 State of North Carolina, Union County  
 I, **F. Donald Lawrence**, certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed recorded in Book 32, Page 240) that the boundaries not surveyed are clearly indicated as dashed lines drawn from adjoining owners deeds as shown; that the ratio of precision as calculated is 1:10,000 or better; that this plat was prepared in accordance with G.S. 47-30 as amended. This survey is of an existing parcel or parcels of land and does not create a new street or change an existing street.  
 Witness my original signature, registration number and seal this 19<sup>th</sup> day of **March**, A.D. 2013



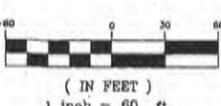
Vicinity Map (NTS)



**Legend**

Fence	---
Building	▭
Curb Line	—
Gas Line	— GAS — GAS
Underground Electric	— P — P
Overhead Electric	— P — P
Water	— W — W
Sanitary Sewer	— SS — SS
Storm Drain (Existing)	— SD — SD
Power pole	PP
Light pole	LP
San. Swr. Manhole	SSMH
Storm Dr Manhole	SDMH
Curb Inlet	CI
Drop Inlet	DI
Fire Hydrant	FH
San. Swr. Cleanout	SC
Telephone Pedestal	TP
Water Meter	WM
Water Valve	WV
Electric Transformer	ET
Gas Valve	GV
Gas Meter	GM
Cable TV ped	CATV

Slate Plane Coordinate values were obtained using a Topcon HiPer GPS using Virtual Reference Stations



**LAWRENCE ASSOCIATES**  
 106 W. Jefferson St.  
 Monroe, North Carolina 28112  
 P 704-289-1013 866-557-8051  
 F 704-283-9035  
 www.lawrencesurveying.com  
 Firm License Number: C-2856

**Boundary Survey of  
 City of Monroe Property**  
 City of Monroe  
 Monroe Township, Union County, NC

Orig. scale: 1" = 60' Date: February 19, 2013 Drawn By: JLH

**REVISIONS**


**MAP 3**

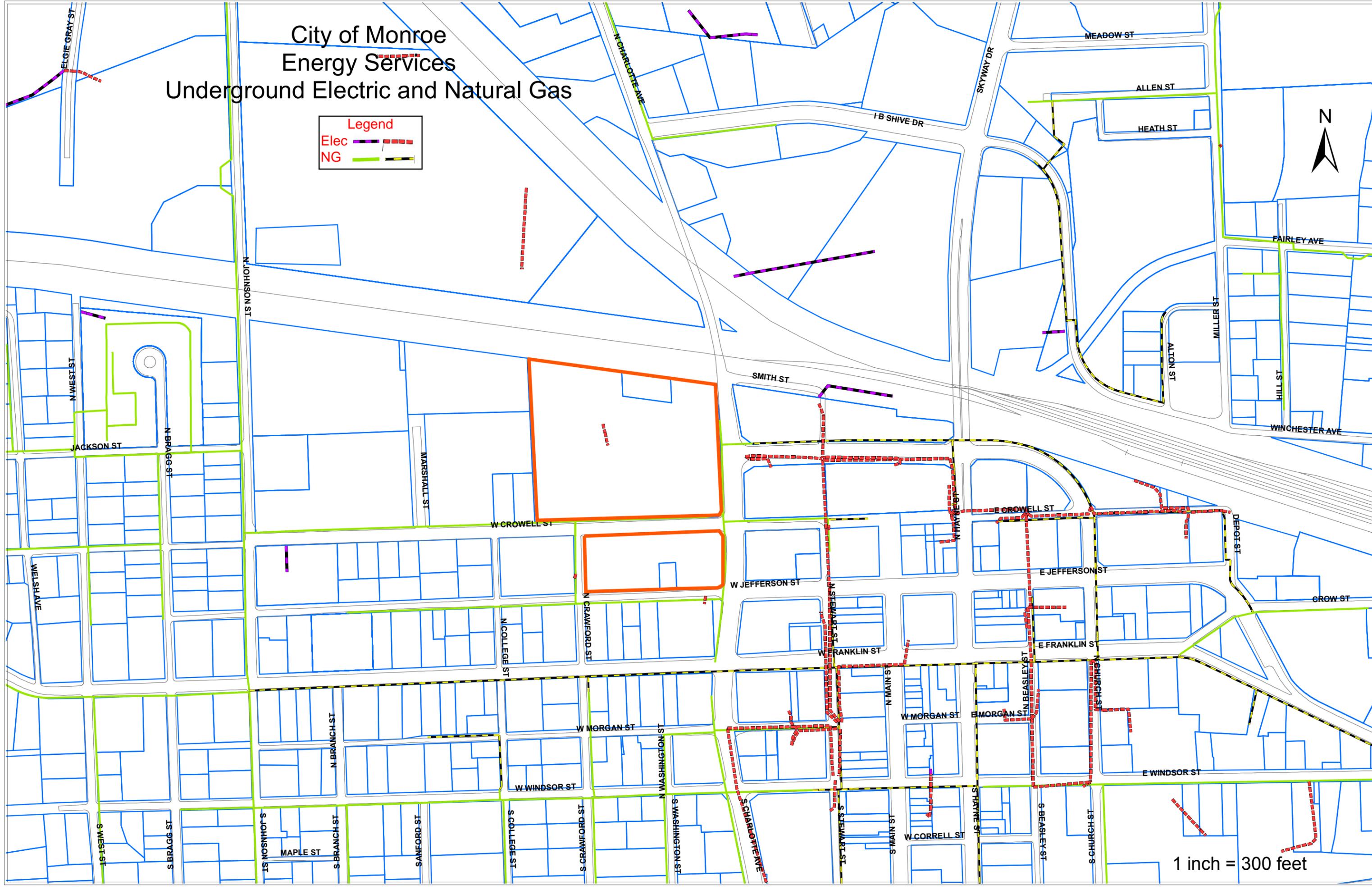
**BURIED ELECTRIC & NATURAL GAS LINES MAP**

# City of Monroe Energy Services Underground Electric and Natural Gas

**Legend**

Elec 

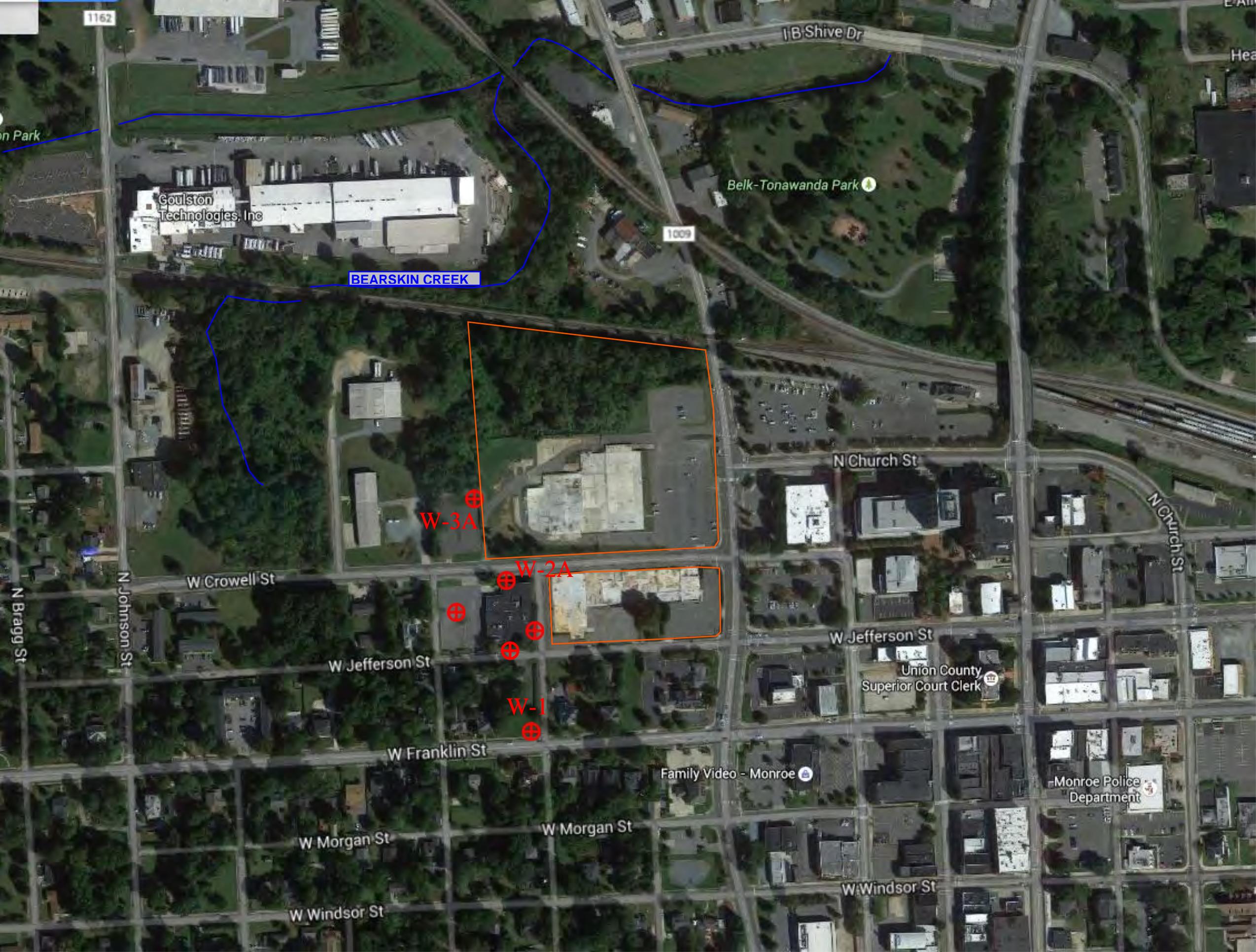
NG 



1 inch = 300 feet

**MAP 4**

**NEARBY MONITORING WELLS LOCATION MAP**



1162

JB Shive Dr

Goulston Technologies, Inc

Belk-Tonawanda Park

1009

BEARSKIN CREEK

N Church St

W-3A

W-2A

W Crowell St

W Jefferson St

W Jefferson St

Union County Superior Court Clerk

W Franklin St

W-1

Family Video - Monroe

Monroe Police Department

W Morgan St

W Morgan St

W Windsor St

W Windsor St

**MAP 5**  
**ZONING MAP**

# Monroe Zoning



**RESIDENTIAL ZONING DISTRICTS**

- R-10 (Residential - High Density)
- R-MF (Residential - Multi Family)

**COMMERCIAL DISTRICTS**

- CBD (Central Business District)
- OT (Office/Transitional)

**INDUSTRIAL DISTRICT**

- G-I

1:3,538

0    0.03    0.06    0.12 mi

0    0.0475    0.095    0.19 km

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community