NEW YORK STATE | Department of Environmental Conservation

February 2018

FACT SHEET

State Superfund Program

Receive Site Fact Sheets by *Email.* See "For More Information" to Learn How.

Site Name: Former IBM Endicott Facility
DEC Site #: 704014 Operable Unit 07
Address: 1701 North Street
Endicott, NY 13760

Have questions? See "Who to Contact" Below

Remedy Proposed for State Superfund Site; Public Comment Period and Public Meeting Announced

Public Meeting, Tuesday, 3/8/2018 at 6:00 PM

Union-Endicott High School
Lecture Hall
1200 East Main St.
Endicott, NY 13760

NYSDEC invites you to a public meeting to discuss the remedy proposed for the site. You are encouraged to provide comments at the meeting, and during the 30-day comment period described in this fact sheet.

The public is invited to comment on a remedy proposed by the New York State Department of Environmental Conservation (NYSDEC) related to Operable Unit 07 of the Former IBM Endicott Facility site ("OU7") located at 1701 North Street, Endicott, Broome County. Please see the map for the OU7 location.

Documents related to the cleanup of this operable unit can be found at the location identified below under "Where to Find Information." The estimated cost to implement the remedy is $182,000.

Additional site details, including environmental and health assessment summaries, are available on NYSDEC's website at:
http://www.dec.ny.gov/cfmx/extapps/derexternal/haz/details.cfm?pageid=3&progno=704014

How to Comment
NYSDEC is accepting written comments about the proposed plan for 30 days, from **February 24, 2018** through **March 26, 2018**. The proposed plan is available for review at the location(s) identified below under "Where to Find Information." Please submit comments to the NYSDEC project manager listed under Project Related Questions in the "Who to Contact" area below.

The site is listed as a Class "2" site in the State Registry of Inactive Hazardous Waste Sites (list of State Superfund sites). A Class 2 site represents a significant threat to public health or the environment; action is required

**Operable Unit:* An administrative term used to identify a portion of a site that can be addressed by a distinct investigation and/or cleanup approach. An operable unit can receive specific investigation, and a particular remedy may be proposed.

Proposed Remedial Action Plan
The remedy proposed for **Operable Unit 7** includes:

Monitored natural attenuation (MNA) through biological degradation and natural flushing of the groundwater contamination remaining after active remediation. Groundwater will continue to be monitored for site related contaminants. It is anticipated that contamination will decrease and meet drinking water standards in a period of 10 years. Reports providing an assessment of the attenuation will be provided every five years. If the groundwater concentrations do not reach standards in 10 years, a Remedial Site Optimization will be performed to evaluate the potential for further source control. This remedy will also maintain engineering controls which were part of the groundwater Interim Remedial Measure (IRM) conducted in 1984 and include institutional controls, in the form of a consent order, environmental easement and site management plan including a groundwater monitoring plan.

Summary of the Investigation for Operable Unit 7

Soil – In OU7 an area of soil contamination near Clark Street and Oak Hill Avenue that pre-dated IBM's acquisition of the property was removed by IBM in 1984. The soil was contaminated with tertrachloroethene (PCE), trichloroethene (TCE), 1,1,1-trichloroethane (TCA), toluene and chromium associated with Endicott-Johnson manufacturing activities. Approximately 780 tons of contaminated soil were excavated and disposed of off-site. The surface impoundment located south of Building 95 was certified clean closed in 1988. There is no evidence of soil contamination in Operable Unit 7 (OU7) exceeding Commercial Use standards.

Groundwater - The primary contaminants of concern in OU7 groundwater are TCE, TCA and their breakdown products. The monitoring wells in the southern portion of OU7 are below or approaching groundwater standards except for two onsite wells, EN-96 and EN150 (Figure 3). The offsite area to the south has two monitoring wells, MW-5 and MW-6, with concentrations of TCA and PCE above drinking water standards. The offsite PCE plume to the south of OU7 is not associated with the former IBM Endicott facility. Other contaminants are generally below or approaching groundwater standards.

Indoor Air - Huron conducted a Preliminary Site Assessment (PSA) in 2005. The PSA was designed to provide an onsite assessment of vapor intrusion. This included sampling of indoor air, sub-slab vapor and outdoor air for five buildings in OU7. There was one detection of TCE at 3.1ppb for indoor air, however this was attributed to new carpet being installed in the building. There are no concerns for soil vapor intrusion in the buildings in OU7.

NYSDEC developed the proposed remedy after reviewing the detailed investigation of the site and evaluating the results of the Extraction Well EN-154R Shutdown Test Report submitted under New York's State Superfund Program by IBM Corporate Environmental Affairs.

Next Steps

NYSDEC will consider public comments as it finalizes the remedy for OU7. The selected remedy will be described in a document called a "Record of Decision" for OU7 that will explain why the remedy was selected and respond to public comments.

NYSDEC will keep the public informed throughout the investigation and cleanup of the site.

Background

Location:

The former IBM Endicott facility is located in the Village of Endicott and in the Town of Union in Broome County, New York. The 135-acre facility lies along and on either side of a railroad corridor in the village and in the town. The central portion of the facility is approximately at the intersection of McKinley Avenue and the railroad in the village. Portions of the facility extend westward to Robble Avenue, northward to Watson Boulevard, eastward to Harding Avenue, and southward to south of North Street (Figure 2).

Site Features:

The site includes numerous current and former manufacturing buildings, office buildings, and ancillary support facilities. Paved parking areas are generally located around the periphery of the site buildings. An east-west railroad corridor bisects the facility and several public and private roadways intersect or transect the facility. Commercial, industrial, and residential areas surround the facility on all sides. The former Endicott Forging facility, a State Superfund site, is adjacent to the southeast portion of the former IBM facility. The Susquehanna River is approximately one mile south of the facility. Brixius Creek, a small tributary to the Susquehanna, passes along the eastern edge of the facility. The facility is served by municipal water supply, sanitary sewers and storm sewers. A private well field also supplies production water for manufacturing purposes.

Current Zoning and Land Use:

The former IBM Endicott facility property is currently zoned Commercial Industrial. The facility is currently owned by Huron Real Estate Associates, LLC, a real estate leasing and property management company. Huron leases manufacturing and office space in the facility to a variety of tenants. Occupancy and use of the facility changes from time to time as tenant needs and availability of leasable space changes. Most of the facility footprint is currently occupied or available for occupancy. An exception is the group of buildings in the oldest portion of the facility (informally known as the Old Group buildings) located along the north side of North Street east of McKinley Avenue.

Past Use of the Site:

The site was first developed by the Erie-Lackawanna Railroad around 1850. Additional development occurred beginning in 1901 by predecessors to the Endicott-Johnson Corporation, and beginning in 1904 by predecessors to the IBM Corporation. The site has a history of manufacturing and research and development beginning in the early 1900s.

Early industrial activity was associated primarily with shoe manufacturing by Endicott-Johnson and its predecessors in the western portion of the site. Associated on-site industries related to shoe manufacturing included leather tanning, box container manufacturing, chemical manufacturing, and an iron foundry. The railroad transported raw materials (including chemicals) to the site and finished products from the site. Solvents reportedly used by Endicott-Johnson as a part of its operations included carbon tetrachloride, TCE, PCE, TCA, methylene chloride, methyl ethyl ketone, toluene, xylene, and mixtures containing aromatics (gasoline, rubber solvent and mineral spirits). Endicott-Johnson ceased manufacturing operations in the village around 1980.

IBM and its predecessors also operated at the site beginning in the early 1900s in the Old Group buildings east of McKinley Avenue. IBM gradually expanded into areas previously occupied by Endicott-Johnson as the latter company reduced its manufacturing capacity. Mechanical business machines were manufactured by IBM and its predecessors until the 1950s. From the 1950s to the early 1980s, the facility was engaged primarily in the manufacture of mid-range, mainframe computers. In the early 1980s, operations at the facility primarily shifted to the manufacture of components (circuit cards, circuit panels, and ceramic substrates) in support of other IBM electronics manufacturing activities. The primary solvents used by IBM as part of its mainframe computer and electronic component manufacturing operations included TCE, PCE, TCA, methylene chloride, and Freon 113. The site was sold to Huron Real Estate Associates, LLC in 2002. IBM has reduced its presence and manufacturing capacity at the site since that time.

Operable Units:

The former IBM Endicott site is divided into seven operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination. Boundaries of the operable units at the Endicott site are generally defined by the limits of hydraulic capture in the various components of the groundwater remediation program or by convenient geographical features.

The various Operable Units at the former IBM Endicott facility are identified in the Consent Order and are described below. Operable Unit 7 (OU7) is the subject of this document. Records of Decision were issued previously for OUs 3, 4, 5 and 6. Records of Decision will be issued for OUs 1, 2, and 7 in the future. A site location map is attached as Figure 1. An area designation map is attached as Figure 2.

- Operable Unit 1 (OU1), also known as the Railroad Corridor Source Area, is the on-site source area in the main plant area where the bulk of contaminant releases occurred. OU1 generally incorporates the central portion of the facility from the railroad corridor northward.

- Operable Unit 2 (OU2), also known as the North Street Area, is the on-site portion of the main plant area south of the railroad and generally north of North Street.

  For purposes of investigation and remediation, OU1 and OU2 are usually considered together because they are both on-site areas separated only by the railroad.

- Operable Unit 3 (OU3), also known as the Southern Area, is the southern portion of the groundwater plume associated with the OU1 and OU2 source areas. OU3 extends approximately from Monroe Street southward to the Susquehanna River, and from just west of McKinley Avenue to just east of Arthur Avenue.

  For purposes of investigation and remediation, OU3 is generally considered together with an area identified in the Consent Order as Off-Site Capture Zone A because the two areas are contiguous and together represent the off-site plume area south of the main plant area. Off-Site Capture Zone A is the northern portion of the off-site groundwater plume associated with the OU1 and OU2 on-site source areas. Off-site Capture Zone A extends approximately from North Street southward to north of Broad Street, and from just west of Jefferson Avenue to just east of McKinley Avenue. See attached Figure 3.

- Operable Unit 4 (OU4), also known as the Ideal Cleaners Area, is the source area and groundwater plume associated with the former dry cleaning operation. Operable Unit 4 lies east of Off-Site Capture Zone A and extends southward from North Street to approximately Monroe Street. An area identified in the Consent Order as Off-Site Capture Zone B is part of OU4. Off-Site Capture Zone B is the plume area associated with the former Ideal Cleaners and extends from the source area to a line of extraction wells located along Monroe Street between Adams Avenue and the alley east of McKinley Avenue.

- Operable Unit 5 (OU5), also known as the Building 57 Area, is the source area and groundwater plume associated with Building 57/57A which is separate from and east of the main facility. OU5 includes Building 57/57A east of Hayes Avenue and north of the railroad tracks, as well as a former parking lot (known as Parking Lot 26) south of the railroad tracks.

- Operable Unit 6 (OU6) is the bedrock groundwater plume and includes all facility-related contamination in the bedrock aquifer.

- Operable Unit 7 (OU7), also known as the Northwestern Area, is the source area and groundwater plume associated with historic releases in this area. OU7 includes the portion of the former IBM facility northwest of the main facility and located west of Oak Hill Avenue and north of the railroad tracks.

Site Geology and Hydrogeology:

The geology of the site is characterized by a sequence of unconsolidated glacial and post-glacial sediments overlying a buried bedrock valley. Three separate water-bearing units are defined in the vicinity of the site: the Upper Aquifer, the Lower Aquifer, and the Bedrock Aquifer. The Upper Aquifer extends beneath the site and is the water-bearing unit most impacted by site-related contamination. Natural groundwater flow in all three units is to the south, ultimately discharging to the Susquehanna River. Groundwater withdrawals and injections for water supply or remediation purposes have altered the natural flow regime by creating artificial discharge and recharge points. Depth to groundwater in the vicinity of the site varies from about 10 to 40 feet below ground surface under pumping conditions.

State Superfund Program: New York's State Superfund Program (SSF) identifies and characterizes suspected inactive hazardous waste disposal sites. Sites that pose a significant threat to public health and/or the environment go through a process of investigation, evaluation, cleanup and monitoring.

NYSDEC attempts to identify parties responsible for site contamination and require cleanup before committing State funds.

For more information about the SSF, visit: http://www.dec.ny.gov/chemical/8439.html

FOR MORE INFORMATION

Where to Find Information

Project documents are available at the following locations to help the public stay informed.

George F. Johnson Memorial Library
Attn: Reference Librarian
1001 Park Street
Endicott, NY 13760
phone: (607) 757-5350

NYSDEC
Attn: Jessica LaClair
625 Broadway
Albany, NY 12233-7017
phone: (518) 402-9821
(jess.laclair@dec.ny.gov)

NYSDEC - Region 7
Attn: Division of Environmental Remediation
615 Erie Blvd. West
Syracuse, NY 13204
phone: (315) 426-7400

Select project documents are also available on the NYSDEC website at:
http://www.dec.ny.gov/chemical/37558.html

Who to Contact
Comments and questions are always welcome and should be directed as follows:

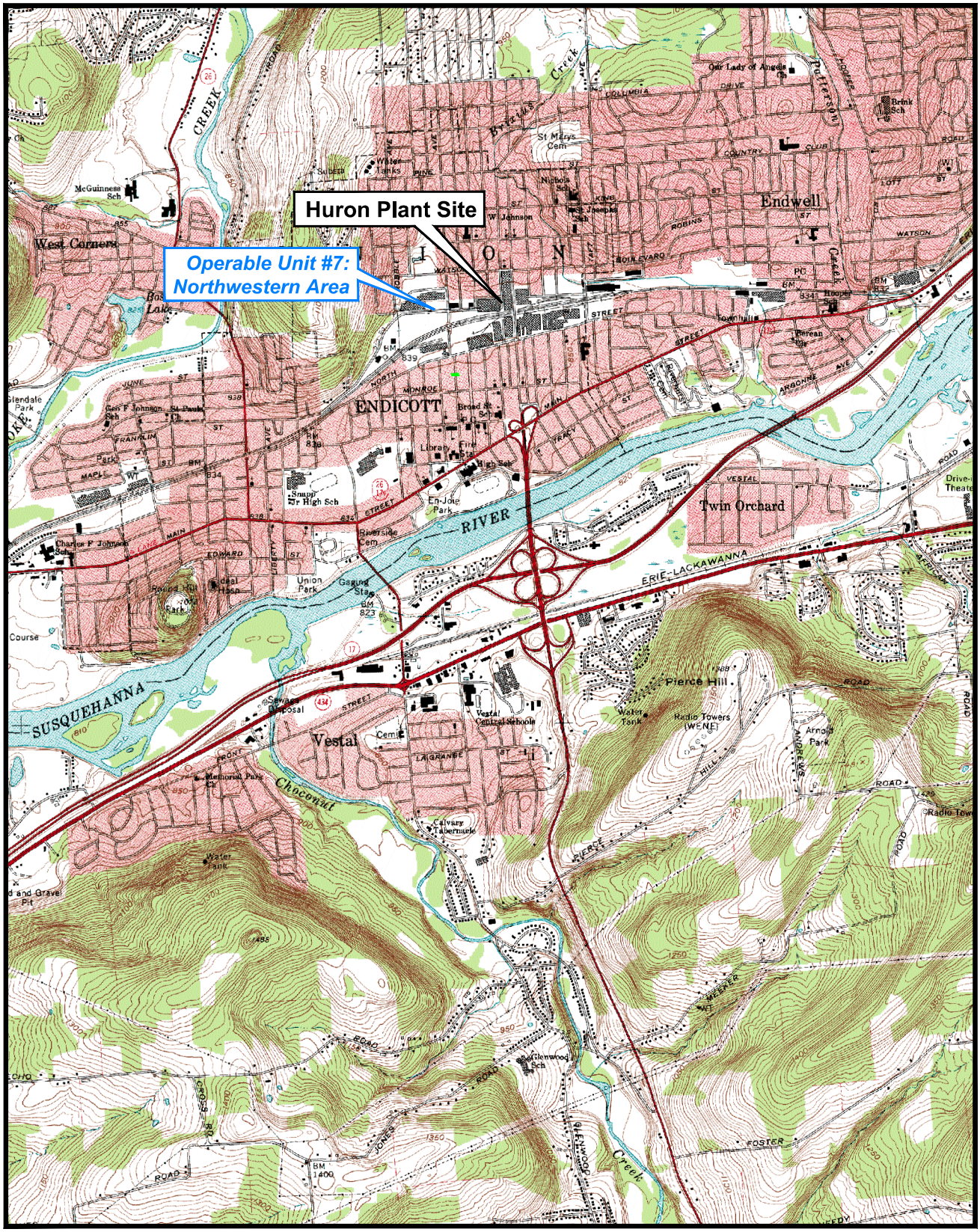
Project Related Questions
Jessica LaClair
Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7013
518-402-9821
jess.laclair@dec.ny.gov

Site-Related Health Questions
Julia Kenney
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza, Corning Tower, Room 1787
Albany, NY 12237
518-402-7860
BEEI@health.ny.gov

We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.

Receive Site Fact Sheets by Email
Have site information such as this fact sheet sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: http://www.dec.ny.gov/chemical/61092.html. It's quick, it's free, and it will help keep you *better informed*.

As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.



Portion of the Endicott, New York
7.5-minute USGS Quadrangle
(1969; Photoinspected 1976)

Figure 1

Former IBM Endicott Site
Site #704014

Site Location Map

GROUNDWATER SCIENCES CORPORATION

22007-008-D15 / 06-14-13

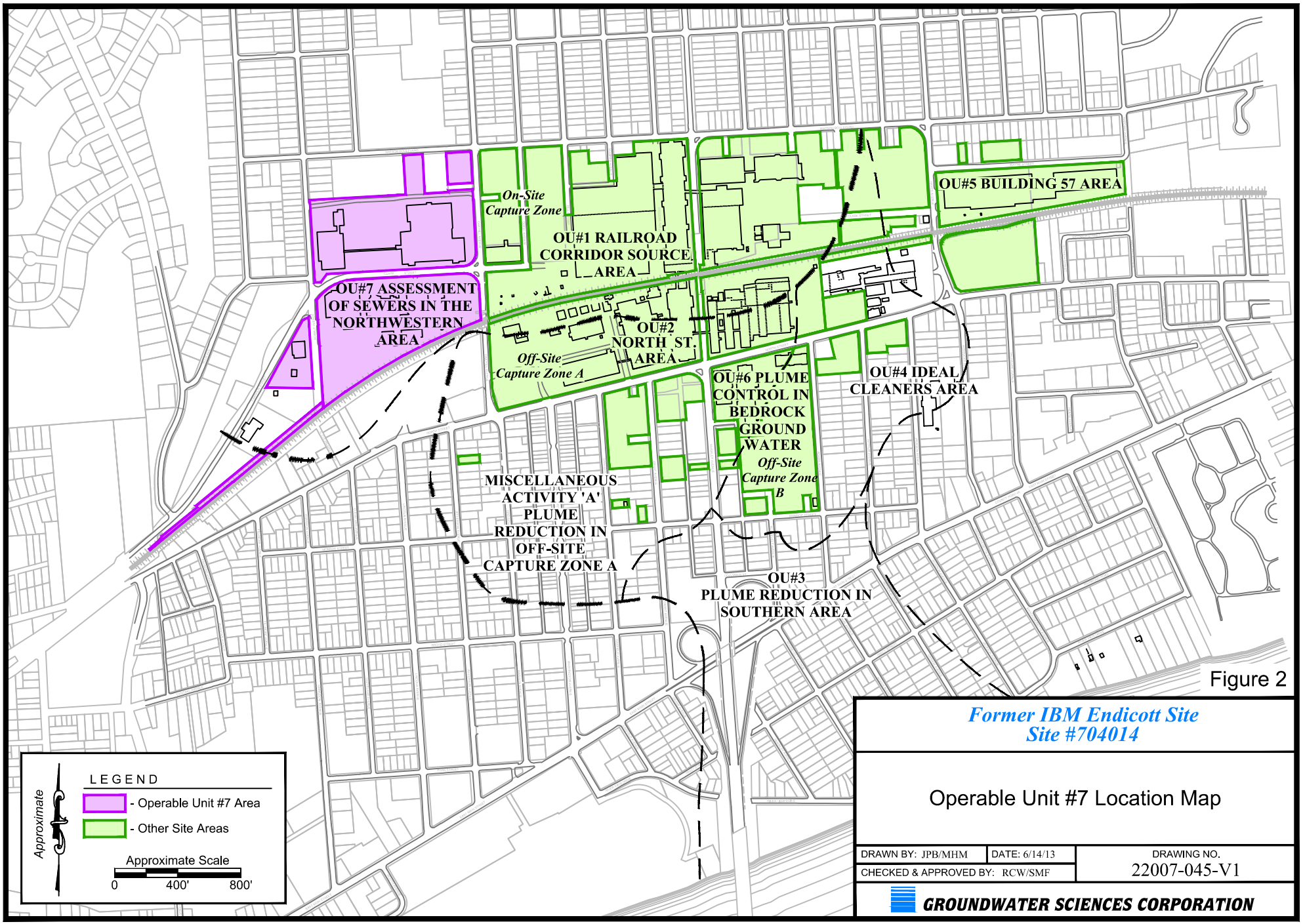


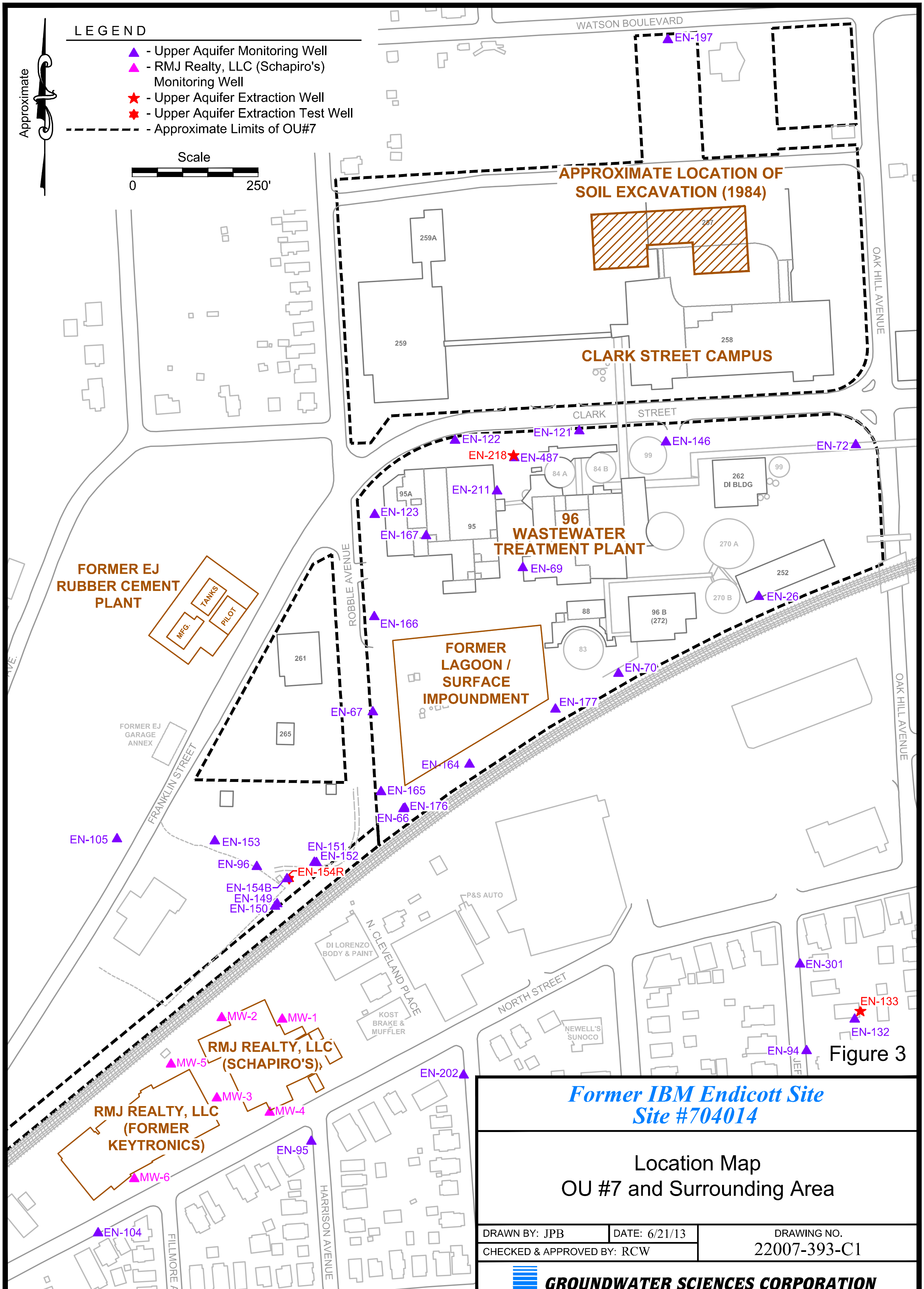
Figure 2

Former IBM Endicott Site
Site #704014

Operable Unit #7 Location Map

DRAWN BY: JPB/MHM	DATE: 6/14/13	DRAWING NO.
CHECKED & APPROVED BY: RCW/SMF		22007-045-V1

GROUNDWATER SCIENCES CORPORATION



Former IBM Endicott Site
Site #704014

Location Map
OU #7 and Surrounding Area

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