



FACT SHEET Brownfield Cleanup Program

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

Site Name: RPC Core Area
DEC Site #: C344080
Address: 140 Old Orangeburg Road, Orangetown, NY 10962

Have questions? See "Who to Contact" Below

Remedy Proposed for Brownfield Site Contamination

The public is invited to comment on a proposed remedy being reviewed by the New York State Department of Environmental Conservation (NYSDEC) to address contamination related to the RPC Core Area Site (site) 140 Old Orangeburg Road in Orangetown, Rockland County, NY.

The cleanup activities will be performed and funded by JPMorgan Chase Bank, National Association (applicant) with oversight provided by NYSDEC. When NYSDEC is satisfied that cleanup requirements have been achieved, the applicant may be eligible for tax credits to offset the costs of performing cleanup activities and for redevelopment of the site.

Additional site details, including environmental and health assessment summaries, are available on NYSDEC's website at:

http://www.dec.ny.gov/cfm/xtapps/derexternal/haz/details.cfm?pageid=3&progno=C344080

How to Comment

NYSDEC is accepting written comments about the proposed cleanup plan for 45 days, from March 14, 2018 through April 28, 2018. The draft Remedial Action Work Plan (RAWP) containing the proposed site remedy is available for public review at the location(s) identified below under "Where to Find Information." (NOTE: This document also contains the draft Remedial Investigation Report which is currently under review by NYSDEC and the New York State Department of Health). Please submit comments on the RAWP to the NYSDEC project manager listed under Project Related Questions in the "Who to Contact" area below.

The proposed remedy includes the following elements:

- Abatement of asbestos and lead-based paint followed by demolition of buildings (including foundations), walkways, roadways, subgrade tunnels. On-site reuse of building concrete as recycled concrete aggregate (RCA) for fill.
Removal or plugging with concrete of building floor drains and storm water piping to eliminate off-site discharges.
Excavation of asphalt, concrete and sub-base material and the upper one foot (approximate) of soil to remove impacted surface soils and structurally incompetent material across the site, except in and north of the wooded wetland areas.
Excavation in the northern wooded area where contaminants exceed the soil cleanup objectives for commercial use (RCSCOs) to a depth of one foot.

- Excavation of visually contaminated fill containing coal particles and slag and placement of such fill in the foundation excavations as backfill beneath the final cover.
- Installation of vapor barriers beneath site buildings during construction.
- Placement of a final site cover, except in the northern wooded/wetland area identified above, consisting of a minimum of one foot of soil that meets the RCSCOs, or a building slab, pavement or concrete. A demarcation layer would be placed beneath the final site cover.
- Development and implementation of a Site Management Plan for long term management of remaining contamination, including plans for maintenance of the site cover and other engineering controls, monitoring, and reporting;
- Recording of an Environmental Easement to restrict the use of the site to commercial use and require compliance with the Site Management Plan; and
- Submittal of a Final Engineering Report that describes the remedial activities, certifies that the remedial requirements have been achieved, describes engineering and institutional controls to be implemented at the site, and describes any deviations from the RAWP.

Summary of the Investigation

A Remedial Investigation (RI) conducted between September 2017 and January 2018 identified the following:

The site surface consists of grass, asphalt or concrete underlain by historic fill material of variable thickness, underlain by native soils consisting of fine to coarse sands with silts and gravel, underlain by bedrock.

Soil samples contained arsenic, barium, copper, lead, mercury and several polycyclic aromatic hydrocarbons (PAHs) at levels exceeding soil cleanup objectives for commercial use. PAHs are found naturally in the environment but they can also be man-made. PAHs are created when products like coal, oil, gas, and garbage are burned but the burning process is not complete. Only one soil sample location contained PCBs above RCSCOs.

Groundwater in one monitoring well contained benzo(a)anthracene, a PAH, above the groundwater standards. Samples from the other seven permanent wells met the groundwater standards.

Trichloroethylene (TCE) was detected in one of the 32 soil vapor samples collected. Benzene, toluene, ethylbenzene and xylenes (BTEX) which are commonly associated with gasoline were detected in a number of soil vapor samples, as was 2-butanone (also known as methyl ethyl ketone).

Surface water samples collected from the northern water feature and from off-site storm water discharge locations contain the PAHs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and/or indeno(1,2,3-cd) pyrene at concentrations above standards. One off-site surface water sample also contained PCBs above standards.

Sediment samples contained metals, including lead, copper, cadmium and mercury, zinc and pesticides at concentrations above ecological standards. The sediment sample from the northern water feature on site (within the wetlands area) contained copper and cadmium at concentrations above ecological standards.

Next Steps

NYSDEC will consider public comments received on the proposed remedy presented in the draft RAWP and ultimately issue a final Decision Document. The New York State Department of Health (NYSDOH) must also concur with the remedy. The final Remedial Action Work Plan (with

revisions if necessary) and the Decision Document will be made available to the public. The applicant(s) may then design and perform the cleanup action to address the site contamination, with oversight by NYSDEC and NYSDOH.

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

Background

The RPC – Core Area site is located in a suburban area in the Hamlet of Orangeburg, Town of Orangetown, approximately 1,300 feet north of Old Orangeburg Road. The site is bounded by Convent Road to the north, Oak Street to the south, First Avenue to the east and Third Avenue to the West. The site lies approximately 1,200 feet east of Lake Tappan, a reservoir used for drinking water.

Site Features:

The portion of the former Rockland Psychiatric Center (RPC) which comprises the site was referred to as the Core Area of the RPC. The site is currently occupied by 32 abandoned and derelict buildings containing over 1.1 million square feet which are distributed across the site's 61 acres. The majority of the buildings are built with reinforced concrete with an exterior stucco surface. The surrounding paved parking areas, walkways, and roadways are in a state of disrepair. Landscaped areas on site are significantly overgrown. The buildings range in size from approximately 12,000 to 118,000 square feet and, when in use were used for patient housing, kitchen and dining areas, therapy and recreational activities and furniture. Most of the buildings are multiple floors and contain basements, unimproved large crawl spaces and utility and patient tunnels. The northwest corner of the site has no buildings. A small drainage swale which collects storm water runoff is located in this area and is surrounded by woods. The area between Buildings 32 and 34 is also wooded.

Current Zoning and Land Use:

The site is currently vacant and is zoned for commercial use. To the north of Convent Road are commercial establishments and residential housing. The Broadacres Golf Club, the Blaisdell Addiction Treatment Center and the current Rockland Children's Psychiatric Center are located east of the site. To the south and southwest, respectively are the Nathan Kline Institute and recreational fields for the Town of Orangetown. To the west are buildings that supported the former RPC, such as the powerhouse, wastewater treatment building, service buildings, and a fire station, followed by decommissioned landfills/forested areas and then Lake Tappan. To the northwest is the former Children's Psychiatric Center. The nearest residential properties are adjacent to the site to the north, just across Convent Road.

Past Use of the Site:

The site was formerly part of the 600+ acre Rockland Psychiatric Center (RPC) which began operations in the early 1930s. The RPC operated as a self-contained/self-sustaining facility, providing its own power, water and wastewater treatment for many years. Additionally, the RPC farmed to grow its own food, manufactured furniture and other items for sale and had its own recreation facilities. The facility was decommissioned by the New York State Office of Mental Health in the early 1990s.

Site Geology and Hydrogeology: The depth to groundwater ranges from approximately 3 to 16 ft below ground surface (bgs) in the northern portion of the site and 14 to 22 ft bgs in the southern portion of the site, and the flow of groundwater is predominantly toward the west. The depth to bedrock is approximately 25 ft below ground surface in the northern portion of the site and approximately 40 ft bgs in the southern portion of the site.

Brownfield Cleanup Program: New York's Brownfield Cleanup Program (BCP) encourages the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and redeveloped. These uses include recreation, housing, business or other uses.

A brownfield site is any real property where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance adopted by DEC that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations.

For more information about the BCP, visit: <http://www.dec.ny.gov/chemical/8450.html>

FOR MORE INFORMATION

Where to Find Information

Project documents are available at the following location(s) to help the public stay informed.

Orangeburg Library
20 South Greenbush Road
Orangeburg, NY 10962
phone: 845-359-2244

Who to Contact

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

Project Related Questions

Kevin Carpenter, PE
NYSDEC Project Manager
New York State Department of
Environmental Conservation
625 Broadway, Albany, NY 12233-7014
(518) 402-9799
kevin.carpenter@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
bee@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

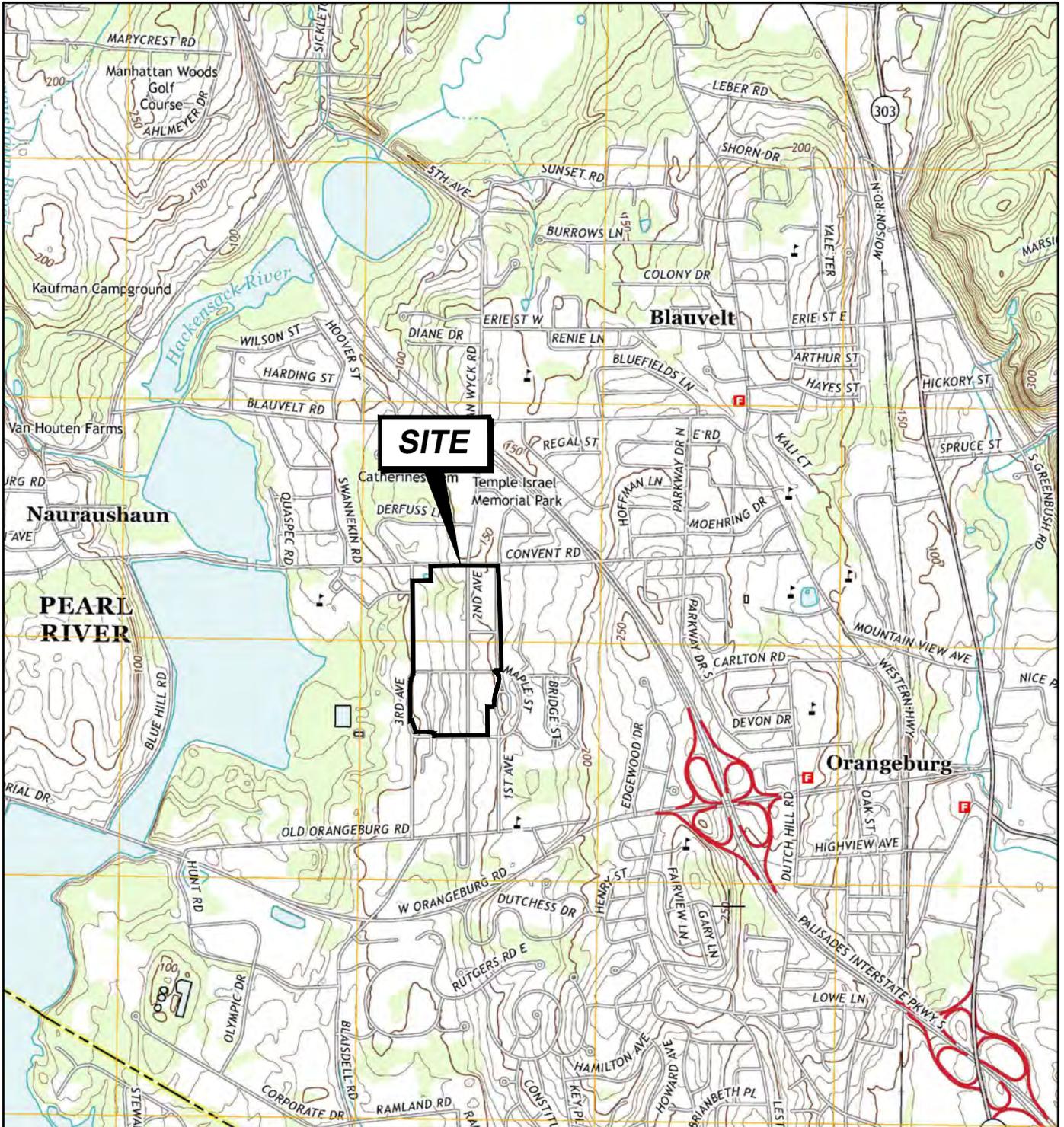
Have site information such as this fact sheet sent right to your email inbox.

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.

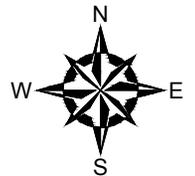
Note: Please disregard if you already have signed up and received this fact sheet electronically.

© 2017 - GZA GeoEnvironmental, Inc. GZA-J:\76500's\12.0076555.00\Figures\CAD\76555.00.003 F1.dwg [FIG-1] May 01, 2017 - 10:35am miguel.torres



QUADRANGLE LOCATION

SOURCE:
 USGS TOPOGRAPHIC MAP: NYACK, NY-NJ (2013).
 CONTOUR INTERVAL 10 FT., NAVD-1988, ORIGINAL
 SCALE 1:24,000 (1" = 2,000 FT.).



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

RPC - CORE AREA SITE - 140 OLD ORANGEBURG ROAD (PARCEL BOUNDED BY CONVENT ROAD, THIRD AVENUE, OAK STREET AND FIRST AVENUE) SECTION 73.08, BLOCK 1, LOT 1 ORANGETOWN, NEW YORK

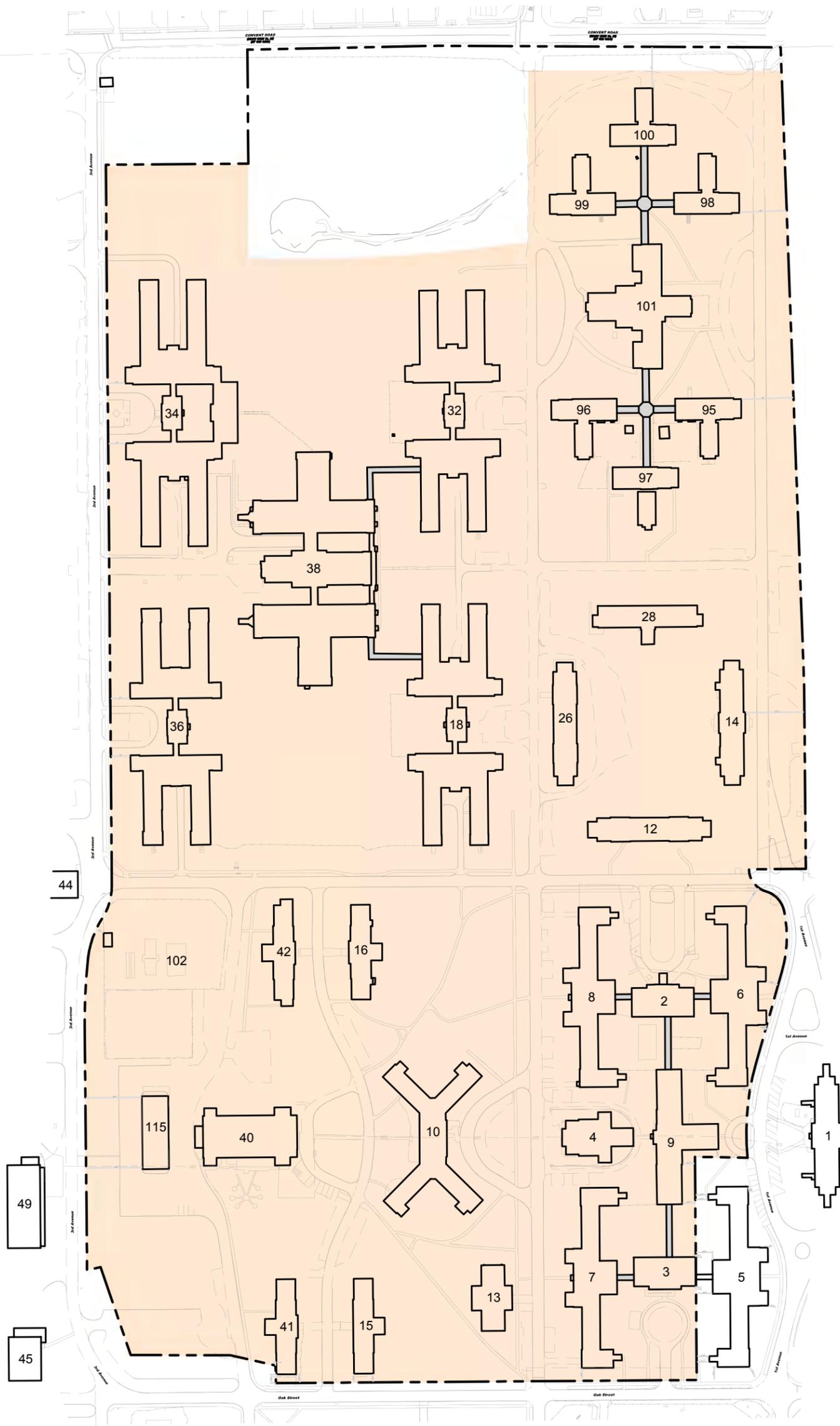
PREPARED BY:
 **GZA GeoEnvironmental, Inc.**
 Engineers and Scientists
 www.gza.com

PREPARED FOR:
 JP MORGAN CHASE BANK, NA

SITE LOCATION PLAN

PROJ MGR: MS	REVIEWED BY: MS	CHECKED BY: ZS
DESIGNED BY: MS	DRAWN BY: MT	SCALE: 1" = 2,000'
DATE: MAY 2017	PROJECT NO. 12.0076555.00	REVISION NO.

FIGURE
1
 SHEET NO.



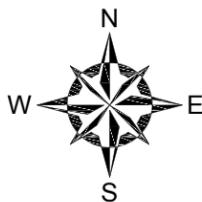
NOTES:

--- SITE BOUNDARY

APPROXIMATE LIMIT OF AREA WHERE THE TOP 1' OF SOIL WILL BE REMOVED

NOTES:

1. THE BASE MAP WAS DEVELOPED FROM A PLAN PROVIDED BY CH2M, ENTITLED "OVERALL UTILITY PLAN," DATED 4/20/2017, ORIGINAL SCALE 1" = 120', DRAWING NUMBER C300.

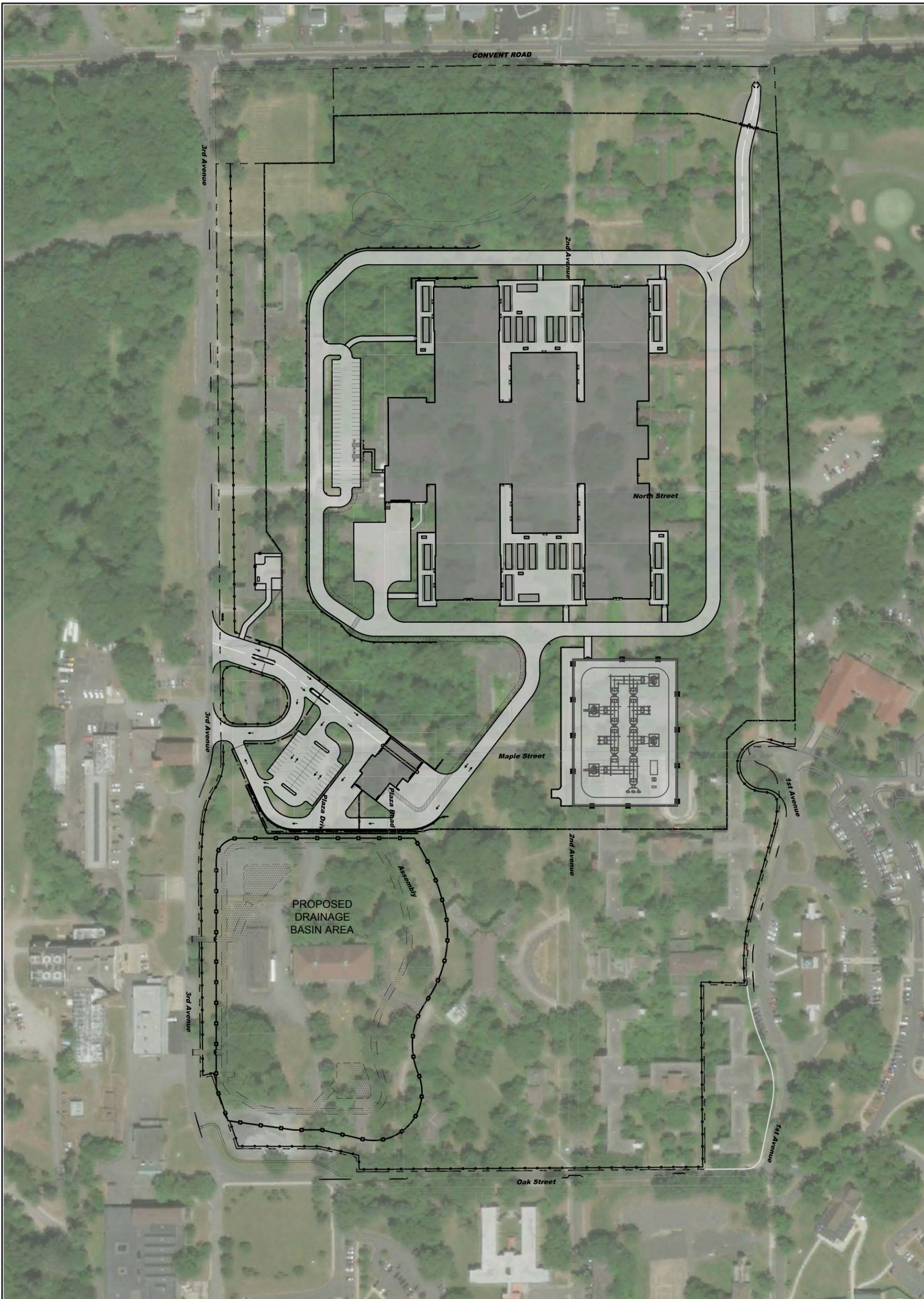


UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOREMEDIATION, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE. WITHOUT THE PRIOR WRITTEN CONSENT OF GZA, ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

140 OLD ORANGEBURG ROAD
ORANGEBURG, NEW YORK

REMED AT ON PLAN REMOVAL O
TOP ONE FOOT O SO L

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: JP MORGAN CHASE AND COMPANY	
PROJ MGR: MS DESIGNED BY: ZS DATE: FEBRUARY 2018	REVIEWED BY: ZS DRAWN BY: MT PROJECT NO. 12.0076555.00	CHECKED BY: MS SCALE: 1" = 200' REVISION NO.	FIGURE 15 SHEET NO.

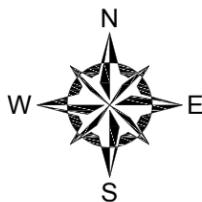


LEGEND:

- SITE BOUNDARY
- PROPOSED BUILDINGS
- PROPOSED PAVED AREAS

NOTES:

1. THE BASE MAP WAS DEVELOPED FROM A PLAN PROVIDED BY CH2M, ENTITLED "OVERALL UTILITY PLAN," DATED 12/5/2017, ORIGINAL SCALE 1" = 120', DRAWING NUMBER C300.



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEORENVIROMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE. WITHOUT THE PRIOR WRITTEN CONSENT OF GZA, ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

RPC - CORE AREA SITE - 140 OLD ORANBURG ROAD (PARCEL BOUNDED BY CONVENT ROAD, THIRD AVENUE, OAK STREET AND FIRST AVENUE) SECTION 73.08, BLOCK 1, LOT 1 ORANGETOWN, NEW YORK

REDEVELOPMENT PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: JP MORGAN CHASE BANK, NA	
PROJ MGR: MS	REVIEWED BY: MS	CHECKED BY: ZS	FIGURE 3 SHEET NO.
DESIGNED BY: ZS	DRAWN BY: MT	SCALE: 1" = 200'	
DATE: FEBRUARY 2018	PROJECT NO. 12.0076555.00	REVISION NO.	