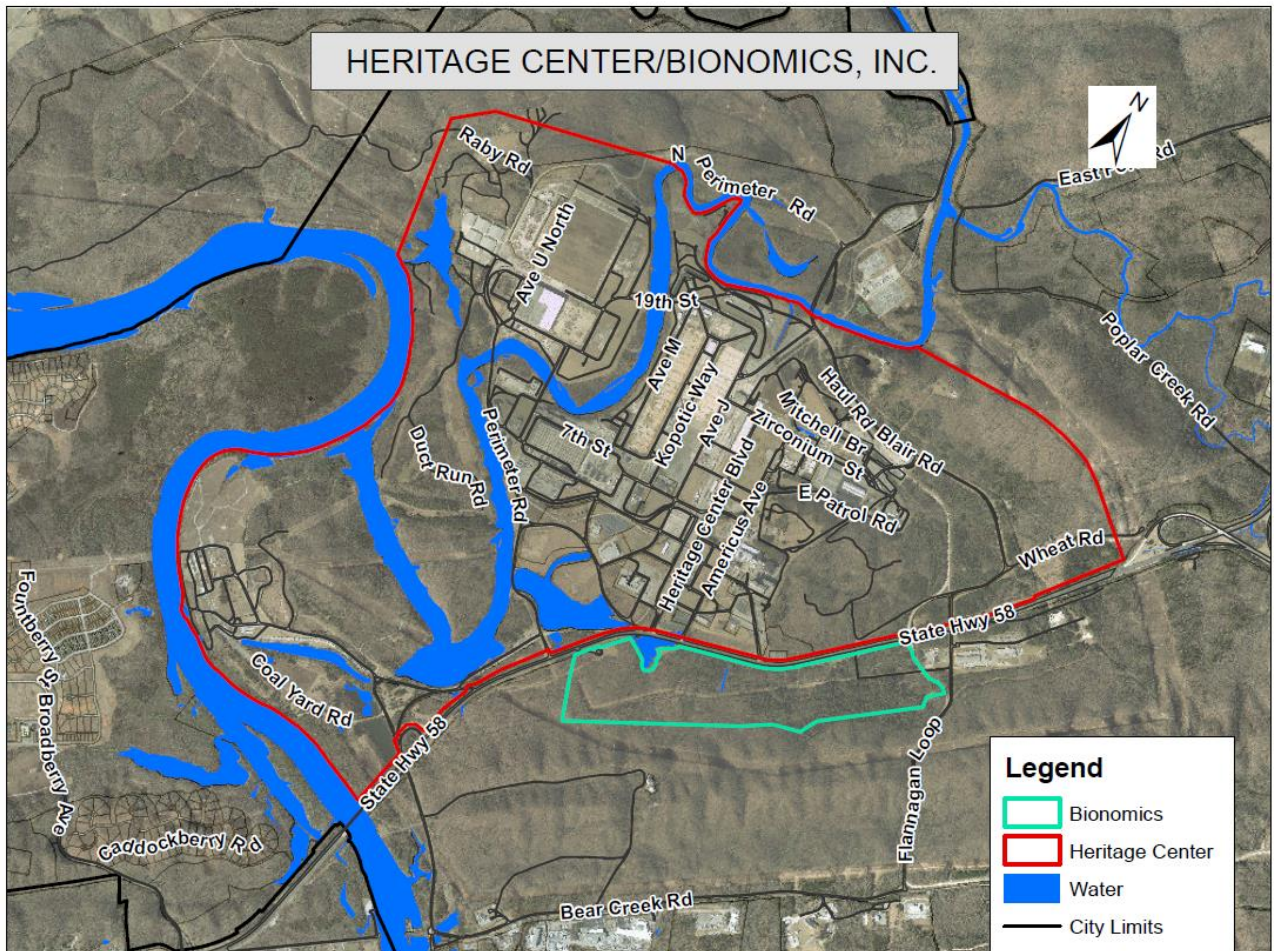


HERITAGE CENTER/BIONOMICS, INC. SUBAREA

(Also known as the K-25,
East Tennessee Technology Park)



The current status of this area had its beginnings when the U.S. government began buying property in the quiet hamlet of Wheat in a remote valley of East Tennessee in early 1942, only a few weeks after the attack on Pearl Harbor. Wheat had been founded by a local postmaster, Frank Wheat, in the mid 1880's after the area was opened to homesteading following a treaty with the Cherokee tribes of the area in 1798. By late 1942 the area was home to three gaseous diffusion plants used to enrich uranium for the atomic bombs that would help end World War II. The K-25 plant, which was part of the development, was the world's largest building under one roof, over a mile in length.

The K-25 site continued to find use as World War II ended and the Cold War began. The gaseous diffusion operation finally shut down in 1985 and the federal government began a program of environmental restoration, waste disposition and reindustrialization. Land which had been taken from earlier generations by eminent domain began to be returned to private use for the benefit of the people of the region. The Community Reuse Organization of East Tennessee was chartered in 1995. In 1996 the Oak Ridge K-25 site became the East Tennessee Technology Park and CROET took on the role of helping it convert into a private-sector industrial park. Much of the study area is still owned by DOE. Parcels are being released to local control incrementally.

The study area, approximately 2,200 acres total, is now both a national historic site and a developing industrial park. It is approximately ten miles west of the Intersection of the Oak Ridge Turnpike and Illinois Avenue, a mile from State Route 95 south, five miles from I-40, and fifteen miles from I-75. The site has frontage on the Oak Ridge Turnpike, State Route 58. There is rail service on the site and a barge terminal on the navigable Clinch River. Plans have been approved by the Metropolitan Knoxville Airport Authority for a general aviation reliever airport with a 5,000 foot runway on the site. Final FAA approval and funding is pending. The site is bounded on the north by the 1,536 acre Black Oak Ridge Conservation Easement and on the east by State Route 327/Blair Road.

Function, Character and Zoning

The anchor property in the study area is the K-25 Historic Heritage Site. The building has been removed for environmental reasons. What will remain are an elevated viewing station sitting above a structure that will house replicas of gaseous diffusion machinery, the K-25 foundation slab and a fire station, part of which is being converted into a museum. The facility will be operated by the National Park Service. Cleanup on the site was performed by the Bechtel Jacobs Company from 1998 through 2011, and since then by UCOR, which still has a presence on the site.

Although many buildings have been removed from the subarea for environmental reasons, the area retains substantial infrastructure: a network of roads, power distribution, water and sewer facilities, storm drainage, railroad spurs and barge facilities on the Clinch River. There are some trails on the site and a significant network of trails on adjoining properties.



Existing buildings near the front of the site



One of the older structures yet to be removed

There are environmental constraints that affect the potential for new development. A small amount of land may be affected by potential flooding adjacent to the waterways on the site. The most substantial constraint is topography. There are large areas with slopes in excess of 12%, some in excess of 20%. In spite of these constraints, UCOR and CROET have identified approximately 285 acres of land that can be developed. Based on market studies and the goals of CROET for ultimate use of the site, locations have been identified for airport linked development (25 acres), research and development (73 acres), advanced materials manufacturing (135 acres), eco industry (12 acres), freight and logistics (40 acres), public park lands and conservation areas. Individual sites within these allocations could range from one to 40 or more acres. These figures do not include three sites to be retained by DOE and land required for the airport.

There are existing activities on the site. There is the Heritage Center, a welcome center and office. There are offices of UCOR, the current site cleanup contractor. There are also a number of older buildings remaining from the time before 1985 when the site was active for national defense purposes. Those buildings are in the process of being removed. A few existing buildings are being rented currently by contractors who have work on the site. Most or all of those buildings will be removed. Even newer buildings near the Turnpike will have to be removed when the airport is built to make room for that improvement. In short, a person looking at the site now, trying to think about its potential and future use, should visualize it as land without buildings, or as land with new buildings where buildable sites exist.

The potential and likely future development of the area is illustrated on the following two pages taken from the *Heritage Center Revitalization Plan, May 2017*, a study produced by AECOM for UCOR with participation by CROET and the U.S. Department of Energy. The Potential Use Diagram shows the location, shape and size of parcels that can be marketed; color coded by the intended use. The Existing Utility Access Matrix shows the size and utility service available for each parcel. It should be understood that these pages are taken, with permission, from a planning document. They should not be read as a guarantee that each parcel will ultimately be used as shown. Some parcels might be subdivided into smaller units. Some might be used for a different but compatible use, Freight and Logistics for example instead of Airport Related Development. A decision to install a longer runway at the airport might require realignment of entry roads and with that reconfiguration of some of the parcels being marketed. In short, this is a portrait of intent, but things can change. Sometimes changes are reasonable and for the best. Sometimes they just cannot be helped.

Concept Alt. 1 - Potential Use Diagram - Parcels



Concept Alt. 1 - Existing Utility Access Matrix

		SIZE (ACRE)	SANITARY WATER	SANITARY SEWER	POWER	NATURAL GAS	TELE-COMM.
ADVANCED MATERIALS MANUFACTURING	AMM 1	10.00	Y	Y	Y	Y	Y
	AMM 2	42.13	Y	Y	Y	N	Y
	AMM 3	19.86	Y	Y	Y	N	Y
	AMM 4	12.17	N	Y	Y	N	Y
	AMM 5	5.13	Y	Y	Y	N	Y
	AMM 6	10.86	Y	N	Y	N	Y
	AMM 7	13.83	Y	N	Y	N	Y
	AMM 8	7.60	Y	Y	Y	N	Y
	AMM 9	13.11	Y	Y	Y	N	Y
ECO-INDUSTRY	EI 1	4.37	Y	Y	Y	Y	N
	EI 2	3.64	N	Y	Y	Y	N
	EI 3	4.47	Y	Y	Y	N	N
RESEARCH & DEVELOPMENT	RD 1	12.24	Y	Y	Y	Y	Y
	RD 2	14.56	Y	Y	Y	N	N
	RD 3	13.29	Y	Y	Y	Y	Y
	RD 4	2.69	Y	Y	Y	Y	Y
	RD 5	3.09	Y	Y	Y	N	Y
	RD 6	6.13	Y	Y	Y	Y	Y
	RD 7	2.97	Y	N	Y	Y	Y
	RD 8	3.43	Y	Y	Y	Y	Y
	RD 9	1.30	Y	Y	Y	Y	Y
	RD 10	4.53	Y	Y	Y	Y	Y
	RD 11	1.41	N	N	Y	N	N
	RD 12	4.01	N	N	Y	N	N
	RD 13	3.20	N	N	Y	N	N
FREIGHT & LOGISTICS	FL 1	1.94	N	Y	Y	Y	Y
	FL 2	7.97	N	N	Y	N	N
	FL 3	5.95	Y	Y	Y	Y	Y
	FL 4	23.67	Y	Y	Y	N	N
AIRPORT-RELATED DEVELOPMENT	ARD 1	6.39	Y	Y	Y	Y	Y
	ARD 2	14.59	N	Y	Y	Y	N
	ARD 3	4.73	Y	Y	Y	Y	Y

The zoning of the area is Federal Industry and Research. This classification is established for the U.S. Government Oak Ridge Reservation and operations within its boundaries. It would be normal for individual parcels to be rezoned, probably to an industrial classification, as they are transferred from government to private ownership. Many of the most developable sites around the K-25 site are already zoned IND-2.



City of Oak Ridge Fire Station #4

Conditions

On site conditions are somewhat mixed. Newer occupied buildings are attractive and well landscaped facilities. Older structures, remnants of the past, are showing their age. The same contrast is present in the infrastructure. The entrance area and some streets are in very good condition. Some older streets have cracks in the pavement and are absent curbs and gutters. The sewer system has been accepted by the city as part of the city system. The storm sewer system has not been accepted by the city. Some streets are city streets, some are not accepted.

Transportation

This site has excellent transportation resources. There is frontage on the Oak Ridge Turnpike, State Route 58 with almost immediate access to State Route 95. Rail and water transport are available on the site. Access to I-40 is five miles away and I-75 fifteen miles. The proposed airport would accept small business jet aircraft. The Knoxville airport is less than an hour away.

Safety

The city has a fire station on the site. As the Horizon Center and East Tennessee Technology Park/Heritage Center properties develop with new industrial uses it may be necessary to augment the existing station, depending on the scale and type of industrialization. Securing is currently provided by DOE. As the area transitions to private ownership securing will become the responsibility of the city and property owners.

BIONOMICS, INC.

The Bionomics property is on the south frontage of the Oak Ridge Turnpike, State Route 58, directly across the road from the K-25 site. It was previously the location of “Happy Valley,” a construction camp for the workers who built the K-25 plant and other facilities at that location in 1942-43. It was more like a small city than a camp, housing up to 15,000 people at its peak. Traces of the old settlement can still be seen on the site: fire plugs and building foundations. The property was purchased from the General Services Administration in 2016 in a bid process after being declared surplus by the DOE.

The property has about 160 acres stretching 3,800 feet along the highway with a depth ranging up to 900 feet. Bionomics Vice-President John McCormick was quoted at the time of the purchase as saying that there are no immediate plans for development of the property. It is not intended to be a place for expansion of the Bionomics operation located nearby on Bear Creek Road. Potential uses mentioned at the time included offices, light industrial, a business park, or a hotel. The deed prohibits housing, schools, or child care facilities from being placed on the property. The terrain and a creek impose some limitations on the development of the wooded site. It is estimated that about 80 acres could be developed.

There are two features near the site that could influence its future use. A nearby pond on the same side of the highway continues to be part of the DOE’s environmental management program. Also, there is a visitor’s overlook. There is an agreement between the property owners, the Roane Alliance, the City of Oak Ridge and the Roane County Sheriff’s Office to keep the overlook open.



Information about the Bionomics property was taken from John Huotari, <http://oakridgetoday.com/2017/10/20/once-like-a-small-city-happy-valley-has-sold>

Findings, Recommendations and Place Making

DOE, UCOR and CROET are working cooperatively toward the conversion of the K-25/ETTP site into a functioning industrial park and historic site. Some sites are already developed and approximately 185 acres of developable land has been transferred to CROET.

Agreements have been reached for implementation of preservation and commemorative plans on the site. Contamination made it necessary to remove the K-25 building. Approximately forty acres on the K-25 location will be dedicated to commemorative and interpretative activities. A three story building will be erected to recreate a scale representation of the gaseous diffusion technology with equipment used in the K-25 building. The structure will include a viewing tower and exhibits that tell the K-25 story. A History Center will be located nearby for additional historic material and activities. The site will be part of a national park operated by the Park Service.

One of the unresolved issues in the study area is the status of existing roads and infrastructure. Most of the roads have not yet been accepted by the city as public streets. Most of them are more than fifty years old and they were not built originally to current city specifications. Provisions in the city land use control ordinances require frontage on a public road to obtain a building permit. Where permits have been required recently the city has been accepting easements as an interim solution. It is not clear at this time how this issue will be resolved. What is clear is that as sites are sold and new uses begin to be made of them they will generate traffic and will place loads on the existing infrastructure. It is reasonable to expect that facilities will have to be improved.



Example of a private street



Part of the K-25 slab

It is impossible to know how long it will take for properties to make the full transition into private use and development. Some people might assume that the history of the area and its status as a brownfield will slow its development. But, the kinds of industries that are the most likely clients for purchase of these lands are accustomed to dealing with brownfield sites. Here the land is readily available, infrastructure is present, the history and condition of each parcel is very carefully documented, and there are no neighbors to placate. All these factors work in favor of a positive outcome. Once a few properties are sold and new buildings are in place it is reasonable to expect momentum to increase.