



Public Notice

Applicant:
Mohawk Valley Economic
Development Growth Enterprises

Published: 8 Nov 2013
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U.S. Army Corps
of Engineers
Buffalo District
CELRB-TD-R

Application No: 2001-00890
Section: NY

All written comments should reference the above Application No. and be addressed to:
U.S. Army Corps of Engineers
(Attn: Bridget Brown)
7413 County House Road
Auburn, New York 13021

THE PURPOSE OF THIS PUBLIC NOTICE IS TO SOLICIT COMMENTS FROM THE PUBLIC REGARDING THE WORK DESCRIBED BELOW. NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT A PERMIT WILL BE ISSUED AT THIS TIME.

**Application for Permit under Authority of
Section 404 of the Clean Water Act (33 U.S.C. 1344).**

APPLICANT:

Mohawk Valley Economic Development Growth Enterprises (EDGE)
584 Phoenix Drive
Rome, New York 13441-4105

WATERWAY & LOCATION: tributaries to the Erie Canal, a navigable water, and adjacent wetlands located on an approximate 400 acre parcel at 5737 Marcy-SUNYIT Parkway, which is bound to the north by Hazard Road, to the south by abandoned farm land and a Mohawk-Adirondack rail line, to the west by residences along Morris Road, and to the east by Edic Road and Marcy/SUNY-IT Parkway, in the Town of Marcy, Oneida County, New York.

LATITUDE & LONGITUDE: Latitude North: 43.15899
Longitude West: -75.27124

EXISTING CONDITIONS/BACKGROUND:

In 2006 EDGE submitted an application to impact 7.93 acres of jurisdictional wetland and 5,770 linear feet of stream associated with site preparation activities to attract a semiconductor facility. The proposed site layout was based on the 300mm microchip fabrication technology. On August 27, 2012,

proposed site layout was based on the 300mm microchip fabrication technology. On August 27, 2012, the USACE Great Lakes and Ohio River Division Commander determined that the proposed project did not comply with the 404(b)(1) Guidelines because of insufficient information to make the required determinations, specifically with respect to the lack of a final end user who could finalize the project design; therefore, a Department of the Army permit was denied.

In 2011, EDGE performed off-site preparation including installation of utilities to the site and construction of the Marcy-SUNY-IT parkway (formerly referred to as the Edic Road by-pass). However, these activities did not result in impacts to waters of the US and therefore permits were not required from USACE for these activities. During construction of the parkway excess spoil was generated that is planned for use on the project site. EDGE installed a haul road on the site and created two spoil piles which were placed to avoid impacts to waters of the US. The remainder of the site is currently undeveloped and consists of inactive agricultural land, successional shrub and forest land, streams and wetlands. (See Existing Conditions on Sheets 8-12 of 23.)

The previous approved jurisdictional determinations (JDs) regarding waters of the US on the original site have expired. In addition, EDGE acquired additional contiguous parcels, with the site now totaling approximately 400 acres and is composed of property owned by SUNY-IT and EDGE. EDGE has entered into a Project Development Agreement with SUNY-IT which provides development rights and oversight to EDGE. Delineations have been conducted on all of the new parcels and the original site has been reviewed for changes to the boundaries of wetlands and streams. A request for a preliminary JD was received on August 9, 2013 for the modified site boundary and the off-site mitigation area at the Oriskany Flats Wildlife Management Area (OFWMA). The new JD request identifies a total of 40 acres of wetland, 10,867 linear feet of intermittent stream and 6,015 linear feet of ephemeral stream on the enlarged project site. In addition, the JD identifies a total of 61 acres of wetland, 740 linear feet of intermittent stream at off-site mitigation areas at the OFWMA. USACE is currently awaiting additional information necessary to complete the JD for the enlarged site. (See Sheets 2-7 of 23 for Table of existing Waters of the US.)

PROPOSED WORK:

EDGE proposes to prepare the Marcy Nanocenter site for development of a 450mm technology microchip foundry by the College of Nanoscale Science & Engineering (CNSE). The proposed project will result in the permanent loss of 13.1 acres of federally regulated wetlands (including 1.75 acres of wet meadow, 1.42 acres emergent marsh, 2.68 acres of scrub-shrub and 7.25 acres of forested covertypes), 6,410 linear feet of intermittent stream and 4,092 linear feet of ephemeral stream on the main project site. (See Impact Table on Sheets 2-6 of 23 and proposed development plan on Sheets 13-17 of 23.) The project will include the phased development of three semiconductor manufacturing facilities (FABs) and Research & Design center with common support elements. The support elements include a Central Utility Building (CUB), Electrical Services Building (ESB), electrical substation, gas yard, Hazard and Process Material Storage (HPM), water storage tank, offices, ring road and parking areas which need to be built with the first FAB. Earthwork, grading, stormwater management and other improvements within and inclusive of the ring road need to be completed within the initial phase and to mitigate vibration concerns caused during construction.

The transition from a 300 mm wafer to a 450 mm wafer fabrication facility requires more extensive power, water, and sewer infrastructure. These facilities are also bigger and taller to accommodate much larger tool sets, installation of bridge cranes that require higher floor to ceiling heights, and expanded support infrastructure requirements. In addition, new 450 mm FABs will include Front Opening Unified

(or Universal) Pod (foups) which is a specialized enclosure to hold silicon wafers securely and safely in a controlled environment for robotic conveyance and transfer between operations that would run from facility to facility and between each FAB. The use of the foups requires that these facilities be located in close proximity to each other.

The site's 175-foot elevation change difference from north to south requires CNSE's facilities to be constructed on several terraces with retaining walls.

The proposed site layout mitigates concerns over electromagnetic field (EMF) interferences with FAB operations and key structures are located within the ring road boundary away from the power lines. In addition, the site requires major site development activity that includes clearing and grubbing, grading, earthmoving work that will support stormwater and drainage improvements, and a terraced site with retaining walls. This will require major excavation and removal of soils and installation of fill material to provide a stable base for construction of foundations and a mat slab for the clean room facilities. This needs to be done in advance for all four terraces since the construction activity includes removal of rock and weathered shale. This may involve some blasting and use of heavy construction equipment, which would create potential vibrations that would interfere with an operational slab. Thus it is critical to complete this work in advance to eliminate this concern.

Development of the site requires the relocation of the existing National Grid Porter Terminal transmission line that traverses the center of the site (See Sheets 8-12 of 23 for current alignment). The new alignment will run along the southern property line and then in a northerly direction and finally running parallel to the other National Grid right-of-way (See Sheets 13-16 of 23). The removal of the existing line and installation of the new line will entail an estimated total of 0.36 acres of temporary and 0.001 acres of permanent impacts to waters of the U.S. National Grid has submitted an application (USACE # 2013-01098) for Nationwide Permit #12 –Utility Line Activities as they will be performing the work. However, any permanent impacts to waters of the US will be considered in the cumulative impact of the EDGE project. The National Grid application is currently incomplete.

Additionally proposed is a total of 1.36 acres of permanent wetland impact associated with off-site mitigation activities. See mitigation details below and Sheets 7, 20-23 of 23.

In summary, the proposed project will result in the permanent loss of 14.46 acres of federally regulated wetlands, 6,545 linear feet of intermittent stream and 4,092 linear feet of ephemeral stream associated with the impacts at the project site as well as the Oriskany Flats Wildlife Management Area mitigation area.

PROJECT PURPOSE:

Basic: manufacturing

Overall: construct a semiconductor manufacturing facility in the Oneida and Herkimer County area

Water Dependency Determination: The discharge of fill material into wetlands for the purpose of constructing a manufacturing facility is not a water dependent activity because it does not require access or siting within the special aquatic site in question to fulfill its basic purpose. Therefore, practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise.

ALTERNATIVES/AVOIDANCE AND MINIMIZATION INFORMATION:

Off-site within EDGE’s purview of Oneida and Herkimer Counties:

1. Griffiss Business & Technology Park (Rome, NY – Oneida County) – The Griffiss site was considered, but eliminated for the following reasons: Site was listed as a federal Superfund site, Site has an operational airport, which creates vibration concerns, Site does not have a contiguous land parcel(s) of sufficient size to meet industry and end user requirements.
2. Oneida County Airport Industrial Park (Whitestown, NY – Oneida County) – The airport site was considered, but eliminated for the following reasons: Site lacks adequate infrastructure to meet industry and end user requirements. Site does not have a contiguous land parcel(s) of sufficient size to meet industry and end user requirements.
3. Frankfort 5S South Business Park (Frankfort, NY – Herkimer County) – the Frankfort site was considered, but eliminated for the following reason: Site does not have sufficient acreage to meet industry and end user requirements,

In addition, these sites did not meet CNSE’s objective of aligning economic, academic and workforce development considerations facilitated by locating adjacent to a technology-based higher education institution, which exists at SUNYIT and expands upon direct strategic investments with construction of the Quad C and the alignment of academic programs between CNSE and SUNYIT.

On-site alternatives:

The application materials indicate that the proposed Marcy Nanocenter site layout must account for the following considerations:

- Industry and end user standards requiring continuity, integration, and connectivity of the primary manufacturing, utility support and office space (including process and material flows)
- Site safety considerations associated with movement of vehicles and pedestrians
- Electromagnetic fields (EMF) and vibration considerations requiring adequate buffers from adjacent roads, land uses and existing overhead electric transmission lines
- On-site topographic changes requiring the use of terracing and retaining walls.
- Buffer mandated by the Town of Marcy regarding the proximity of the developed site to residential uses to the west along Morris Road

These end user required specifications and existing site conditions were balanced with efforts to avoid and minimize (to the extent practicable) impacts on federally regulated waters of the United States.

The applicant considered the following alternatives:

Option 1A – Use of “Farmer Parcel” The use of the northern portion of the “Farmer Parcel” was ruled out for the following reasons:

- Use of the Farmer Parcel would result in a disjointed site plan, including a disconnection of manufacturing operations with the CUB;
- A disjointed site plan does not promote a safe site, which minimizes vehicle, pedestrian, and material movements (foups) including under overhead electric transmission lines;
- Potential EMF issues associated with overhead electric transmission lines;
- The Town of Marcy zoning and development approvals for the Farmer Parcel limit development west of the power lines to development not exceeding 550,000 SF;

- A single semiconductor fabrication facility proposed by CNSE would require a floor plate of 623,000 SF and the total building envelope would be approximately 1,869,000 SF, exceeding the thresholds allowed by the town.

Option 1B – Use of “Loin Property” for Parking, includes the construction of an additional parking lot on the northerly “Loin Property” owned by EDGE (See Sheet 18 of 23). This configuration was not preferred for the following reasons:

- Configuration results in greater encroachment (17 acre impact) upon waters of the United States than CNSE’s proposed development plan (13.1 acre impact).
- Parking on the Loin property would be too far removed for employees
- Parking is too proximal to Hazard Road and presents a visual and noise impact to the neighboring houses that is unacceptable. The Town of Marcy wants to maintain buffers to mitigate impacts to adjoining residences.

Option 1C – Use of “Loin Property” for Utility Support: relocates the electrical substation and water tank to the “Loin Property”, includes a realignment of parking, relocation of the gas yard and HPM, as well as a co-locating of the CUB and ESB facilities (See Sheet 19 of 23). This configuration was not preferred for the following reasons:

- Configuration results in a greater encroachment (14.7 acre impact) upon waters of the United States than CNSE’s proposed development plan (13.1 acre impact)
- Siting of the substation, Gas Yard and HPM warehouse along Hazard Road is not consistent with the Town Planning Board’s request to buffer utility yards from adjacent residential land uses:
- Electric substation is too close to Hazard Road; a location that the Town Planning Board does not support due, in part, to visual impacts on neighbors to the north
- The Gas Yard and HPM are too close to Hazard Road; a location that the Town Planning Board does not support due, in part, to visual impacts on neighbors to the north and their indication that these type of uses should be maintained further away from residential areas.
- CNSE’s proposed development plan reduces impacts on wetlands along the north side of the site and allows for the use of the Loin parcel as buffering.

Option 1D – 2 FAB Configuration the development of a two FAB configuration was not considered for the following cumulative reasons:

- A three FAB scenario is standard in the industry and given the level of required upfront investment and extensive infrastructure requirements, CNSE is planning a campus that can be staged over time to support construction of three advanced manufacturing facilities; a two FAB scenario is contrary to that objective.
- Due to the elevation changes, the same level of site disturbance activity with grading, storm drainage improvements, and construction of retaining walls for a terraced site are required whether the site has two or three semiconductor manufacturing facilities.

Proposed Alternative (See Sheets 13-17 of 23):

EDGE, in consultation with industry experts and CNSE, was able to compress the overall limits of site disturbance to impact the least amount of federally regulated waters of the United States, while still designing the site to satisfy the needs of CNSE as depicted on CNSE’s proposed development plan. To avoid and minimize impacts on waters of the US, the CNSE layout incorporates the following features:

- A multi-story parking garage to decrease the site footprint, which would have been necessary for additional surface parking.
- Clustering of facilities/buildings in proximity to each other to reduce the overall site footprint (minimizing open space).
- Maintaining a buffer along the western portion of the site, which is characterized by additional wetlands.
- Routing of the internal ring-road to minimize impacts on waters of the US.
- No development on the Loin property, which is characterized by additional wetlands.

PROPOSED MITIGATION (See Sheets 7, 20-23 of 23): EDGE proposes the following conceptual mitigation plan to compensate for the proposed permanent loss of 14.46 acres of federally regulated wetlands (including 3.11 acres of wet meadow, 1.42 acres emergent marsh, 2.68 acres of scrub-shrub and 7.25 acres of forested covertypes), 6,545 linear feet of intermittent stream and 4,092 linear feet of ephemeral stream associated with the impacts at the project site as well as the OFWMA mitigation area:

Off-site at the Oriskany Flats Wildlife Management Area (OFWMA) located on River Road, Town of Whitestown, Oneida County:

- Create no less than 12.1 acres of forested wetland and 1.0 acres of scrub-shrub wetland.
- Enhance 58 acres of shallow emergent marsh at OFWMA
- Enhance 14.5 acres of upland/grassland at OFWMA
- Enhance 740 linear feet of perennial stream bank at the OFWMA.
 - ❖ Note: a total of 1.36 acres of permanent wetland impact is associated with the installation of grass covered earthen berms and ditch plugs for the above mitigation activities.

On –Site:

- In-kind wetland creation of approximately 13 acres on the southern and southwestern portions of the Nanocenter site. The wetlands will be a combination of forested, shrub, emergent marsh and wet meadow. Hydrology will be provided by surface water input from the stormwater management system.
- To the extent practicable, new stream channels will be incorporated into the wetland creation design. EDGE anticipates providing the specifics in the future detailed mitigation plan.
- Restore 616 linear feet of intermittent stream (IS-9) in the northwest portion of the project parcel by creation of an enhanced channel with stable bed and banks and vegetated buffer.
- Preserve in perpetuity the remaining 25 acres of wetland and 5,500 linear feet of stream with an undetermined amount of upland buffer on the project parcel. The specific amounts will be provided in the detailed mitigation plan.
 - ❖ EDGE has indicated that if adequate stream or wetland mitigation cannot be performed at the Nanocenter site then they propose to supplement the mitigation plan with purchase of credits from the Ducks Unlimited In-Lieu Fee Program.

Location and details of the above described work are shown on the attached maps and drawings.

Water Quality Certification:

Water Quality Certification (WQC), or waiver thereof, from the New York State Department of Environmental Conservation is required for this project.

Previous WQC History:

Project site: #6-3044-00112/00001 for previous proposal issued on November 11, 2009. Modification #2 to include the Edic Road by-pass and associated infrastructure was issued on March 28, 2011 with no expiration date. A new WQC, modification or waiver is required for the new proposal.

Oriskany Flats Wildlife Management Area mitigation site: #6-3099-00017/00007 issued on October 21, 2009. Modification #1, issued on April 13, 2010 with October 20, 2014 expiration for currently proposed mitigation.

National Historic Preservation Act:

The project permit area is shown on Sheet 13 of 23. Per Section 106 of the National Historic Preservation Act, the Corps has determined that the project including proposed mitigation will result in **No Effect** to historic resources listed in, or eligible for listing in the National Register of Historic Places. Archeological Surveys of the project & mitigation sites previously identified six cultural/historical resources however they been determined to be not eligible for listing in the National Register of Historic Places. On December 4, 2012, the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) indicated that they concurred that the identified sites are not National Register Eligible and therefore it was their opinion that there will be No Historic Properties Affected (per 36 CFR Part 800.4(d)(1) as a result of the proposed undertaking(NYSOPRHP #12PR3666).

Endangered Species Act:

Pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), the Corps of Engineers is consulting, under separate cover, with the USFWS to evaluate any potential impacts to: Bog turtle (*Clemmys muhlenbergii*), Indiana bat (*Myotis sodalists*) and Northern Long-Eared bat (*Myotis septentrionalis*) and to ensure that the proposed activity is not likely to jeopardize their continued existence or result in the destruction or adverse modification of critical habitat.

Comments or questions pertaining to the work described in this notice should be reference the Application Number and be directed to the attention of **Bridget E. Brown**, who can be contacted at the above address, by calling **(315) 255-0143**, or by e-mail at: **bridget.brown@usace.army.mil** A lack of response will be interpreted as meaning that there is no objection to the work as proposed.

This notice is promulgated in accordance with Title 33, Code of Federal Regulations, parts 320-330. Any interested party desiring to comment on the work described herein may do so by submitting their comments, in writing, so that they are received no later than 4:30 pm on the expiration date of this notice.

Comments submitted in response to this notice will be fully considered during the public interest review for this permit application. All written comments will be made a part of the administrative record which is available to the public under the Freedom of Information Act. The Administrative Record, or portions thereof may also be posted on a Corps of Engineers internet web site. Due to resource limitations, this office will normally not acknowledge the receipt of comments or respond to individual letters of comment.

Any individual may request a public hearing by submitting their written request, stating the specific reasons for holding a hearing, in the same manner and time period as other comments.

Public hearings for the purposes of the Corps permit program will be held when the District Commander determines he can obtain additional information, not available in written comments, that will aid him in the decision making process for this application. A Corps hearing is not a source of information for the general public, nor a forum for the resolution of issues or conflicting points of view (witnesses are not sworn and cross examination is prohibited). Hearings will not be held to obtain information on issues unrelated to the work requiring a permit, such as property ownership, neighbor disputes, or the behavior or actions of the public or applicant on upland property not regulated by the Department of the Army. Information obtained from a public hearing is given no greater weight than that obtained from written comments. Therefore, you should not fail to make timely written comments because a hearing might be held.

The decision to approve or deny this permit request will be based on an evaluation of the probable impact, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among these are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. The Corps of Engineers is soliciting comments from the public; Federal, state and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

SIGNED

Diane C. Kozlowski
Chief, Regulatory Branch

NOTICE TO POSTMASTER: It is requested that this notice be posted continuously and conspicuously for 30 days from the date of issuance.