MICRON SEMICONDUCTOR FABRICATION
CLAY, NY

USACE/NYSDEC JOINT PERMIT APPLICATION
PERMIT APPLICATION APPENDIX
VOLUME I

FINAL PUBLIC COMMENT VERSION

APPLICATION NO: LRB-2000-02198

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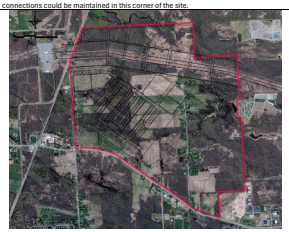
APPENDIX A

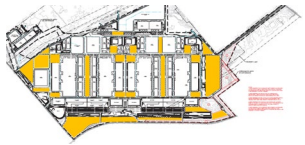
USACE Request for Additional Information Response Comment Response Matrices

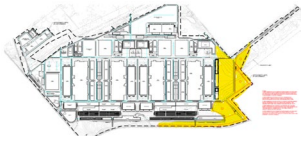
JPA					
Row Number	Date & Agency	Document	Comment Number	Agency Comment	Micron Response
4	03.27.25_USACE	404(b)(1)	1	It appears that our request from July 2024 regarding the pump station was not addressed: "Off-site location for pump house: Page 9 notes that other locations were ruled out due to an inability to purchase land. Have any additional efforts to seek out an alternative site been underway since that time? Also, were other on-site locations examined to meet these needs (e.g., the corner of Caughdenoy Road and Route 31, etc.)? Please provide additional detail for the proposed Pump Station, including size of site needed, detailed site layout…" USACE is requesting more information to assist in our evaluation if the proposed pump station minimizes wetland and stream impacts to the maximum extent practicable. Ways to reduce impacts are to move the proposed facility west, reduce the size, etc.	Micron provided the following explanation and justification for the proposed Pump Station in the August 8, 2024 letter to USACE: "Micron understands and appreciates the need to avoid and minimize impacts to on-site jurisdictional WOTUS to the extent practicable to demonstrate that the proposed design is the least environmentally damaging practicable alternative (LEDPA). From the initial design of the proposed site plan, Micron has taken steps to avoid and minimize impacts. For example, initial concepts for buildings north of the power lines were reduced significantly to avoid and preserve the majority of WOTUS in this area. The only remaining proposed development north of the power lines consists of the proposed biological treatment buildings, Pump House, and associated stormwater facilities. As set forth in the current 404(b)(1) document, revised June 7, 2024, the Pump House is a transfer point of industrial wastewater from Micron to the publicly owned treatment works (POTW) conveyance north to the Oak Orchard wastewater treatment plant (WWTP). It is associated with the designated Bio Buildings, which are essential to treating effluent flow to meet downstream requirements for the County issued POTW. The onsite industrial wastewater facilities are part of a system that will be designed to facilitate water reuse, treat incoming water to provide the ultra-pure water required for the semiconductor manufacturing process, and treat remaining unused wastewater to meet the County's pretreatment requirements, which are set in accordance with the County's permitted limits for final discharge. Micron reviewed and attempted to acquire additional off-site locations to house some of these facilities, including the Pump House. Offsite locations were not available to accommodate the appropriate size and engineering requirements of these facilities in relation to both Micron's onsite required processing and proximity to the County WWTP Facility. The current location of the Pump House and Bio Buildings provides the most practical alternative, which includes the shortest distance to maintain conveyance to and from the Oak Orchard site, applicable security and appropriate accessibility for maintenance and responsiveness. Additionally, if the Pump House and Bio Buildings were situated further south, there would be a conflict with other main utilities." [8/8/24 letter Response to Request # 5] The purpose and need for the proposed wastewater pump house is also provided in the 404(1)(b) document that was updated with the January 31, 2025 JPA submission. Specifically, the 404(b)(1) states: **1**. The proposed wastewater pump house conveys final treated wastewater to the POTW. Consequently, the pump house is located at the northwest corner of the WPCP to ensure proximity to the POTW (OCDWEP's Oak Orchard facility). Thus, WWTP buildings need to be located reasonably close to the wastewater pump house to reduce or to avoid requiring energy for pumping. **2**. WWTP buildings were planned to accommodate all these stated considerations and thus are located in the appropriate locations. Moving these buildings from these desired locations will cause long-term inefficiencies for operations of the Fabs. [January 31, 2025 404(b)(1) p. 41] Essentially, the pump house is conveying water to and from the proposed wastewater facilities located in the northeast corner of the site, just north of the power lines. The Pump Station will have equalization tanks, external reclaim storage tanks and a building for the pumps. It also includes a monitoring station for the outfall. The size of the station is 4.1 acres and it will serve all 4 fabs. This location was selected to provide proximity to other buildings on the main site while at the same time providing a feasible location for a conveyance to Oak Orchard. As stated throughout the 404(b)(1), all of the components of the proposed project are linked together and compressed onsite to the extent possible. There is simply no other practical location on the main site to construct the pump house without increasing the LOD and further impacting wetlands. Other areas or sites considered and found not practical are as follows: 1. Southwest corner of the site near the intersection of Caughdenoy Road and Route 31: This area represents the "first impression" of the Micron Campus that the commuting public will experience. It is neither feasible nor practical to place the pump house at that location for the following reasons: -Locating the pump house away from the other wastewater on campus facilities and further from the direct projected line to the Oak Orchard facility creates additional piping (both to and from the pump house) of approximately 5700 feet (1.1 miles). This additional footage would result in additional impacts to resources that conflict with LEDPA -Piping to and from the pump house in that location would conflict with the other proposed facilities on the site including numerous utilities. -The southwest corner of the site is the most visible aspect of the entire Micron project. Locating the pump station in the southwest corner of the site conflicts with the safety and aesthetic requirements of the Town of Clay Board. It is unlikely that the board and other entities reviewing Micron's proposed site plan would welcome a wastewater pumpstation as part of its primary public facing façade. *See continued below.*
				Continued answer to above question 1.	2. Other locations onsite: As demonstrated throughout the 404(b)(1) and supplemental submissions, the numerous components of the 4 Fab facility require the complex design, layout, and integration of the project elements that is illustrated in the proposed Site Plan. Each component, its size and its purpose is described in both the Draft EIS and the 404(b)(1). The design has been compacted to the maximum amount practicable to minimize the LOD as proposed and achieve LEDPA. There are simply no other areas on the main site that could accommodate the pump station without impacting more wetlands. 3. The only other area within the LOD without an identified building or associated development is the Southeast corner. This area is not feasible for a pumpstation since it is essential to Phase 1A and the pump station would have to covey almost 12,000 feet (2.2 miles) around the outer limits of the site from the proposed Fab 1 WWTP and back to the Oak Orchard conveyance easement. The pipes would have to run from WWTP1 & 2 all the way to the southeast corner and then back to the northwest to go back to the easement to Oak Orchard, thereby increasing further disturbance and wetland impacts. As stated in Micron's August 8, 2024 response to USACE comments: "The Pump House is required for Phase 1 of the project (see Response 5 for Pump House siting justification), locating the Pump House on the southeast portion of the Site is not technically practicable and would interfere with future site buildout plans if it is constructed in that area." [8/8/24 letter to USACE, Response to Request 13)] 4. Other potential offsite areas: Since the selection of the White Pine site for the proposed campus development, Micron has pursued the acquisition of additional offsite parcels to supplement or support development. Property was pursued to accommodate additional room for facilities such as the pump station, as well as to accommodate the Rail Spur, Childcare Center and natural resource mitigation projects. All parcels that were practically available were acquired and utilized, but there were none that could have efficiently accommodated the pump station. Even if offsite locations were available, they each would entail additional piping to and from the main site wastewater facilities, as well as additional piping to connect to the Oak Orchard easement, each also likely causing additioanal wetland impacts.
5	03.27.25_USACE	404(b)(1)	2	Page 7, "without the ability to build four co-located fabs, the project would incur an estimated $3.04B-$3.7B and thus would not be able to ensure ongoing economic viability". What would the extra $3B be? Where does this come from? What would the impact be to the cost of wafers produced? Would they be more expensive and therefore not cost competitive?	Costs associated with splitting the needed 4 Fab facility would include, but not limited to: Site search for a another feasible site that could accommodate 2 Fabs, including a site with the appropriate utilities; initial development costs for constructing on a new site, additional costs for shared utilities such as wastewater, stormwater, and energy substations, and cost to extend utilities to a new site; additional permitting and site approval costs; lost efficiency costs associated with manufacturing processes that can be extended and shared across 4 Fabs linked together; additional highway improvements needed to accommodate a separate site; and additional costs associated with training and locating work force at a second location. The most significant costs were calculated based on lost efficiencies from manducating across 4 Fabs at one facility versus splitting the site and having to duplicate processes that can't be shared on one site. The complexity of the semiconductor wafer10 manufacturing process is the primary driver of the need for larger fab clusters that co-locate large cleanrooms on a single campus to facilitate necessary efficiencies of scale. Fabs require an increasing amount of cleanroom space per wafer over time to accommodate the more sophisticated and larger tools needed for more advanced DRAM production. The cost of producing a wafer also depends on fixed costs of cleanroom and fab supporting infrastructure (e.g., site preparation, utilities, gas and chemical storage, warehouse and office space) and the average operating cost per wafer (e.g., cost of services, labor and workforce training, warehousing, upstream supplier service contracts). In general, co-locating more fabs and cleanroom spaces on a single site reduces both the fixed cost per wafer produced and the average operating cost per wafer.
6	03.27.25_USACE	404(b)(1)	3	The submitted document still refers to underground parking (Table 1 page 12). It is the USACE understanding that Micron originally evaluated the potential for underground parking to minimize impacts, but due to Geotech results this was found to be impracticable. Suggest explaining the history and updated plans.	Both underground and above ground parking were explored in an effort to reduce the footprint for required parking. Consolidating parking in multiffoor facilities reduces the overall site impact if parking was spread across the site at ground level only. After further geotechnical review, it was determined that underground parking is not feasible. However, to minimize the total footprint of impervious areas, and to reduce potential impacts to wetlands, Micron currently proposes a total of 4 above ground parking, each with 5 levles accomodating 2,400 parking spaces. A six level is contemplated for solar panel utilization. These parking garages will accomodate a total of 9,600 parking spaces. By consolidating parking within these aboveground facilites, outdoor surface level parking is reduced by 64 acres, thus minimizing impervious surfaces and potential wetland impacts.
7	03.27.25_USACE	404(b)(1)	4	Are multiple Fabs currently being constructed/operated in the US or just proposed? (Page13, second paragraph of 2.2)	Yes. Companies within the industry are operating or constructing multuple fab facilities throughout the United States. There is a global trend toward construction of large fab clusters, or megafabs, on single campuses, with average fab sizes sufficient to accommodate necessary cleanroom space for specific technology types. 82 percent of major semiconductor campuses have more than two fabs (1.2 million sq. ft. or greater) worth of cleanroom space, and 55 percent have more than three fabs (1.8 million sq. ft. or greater). 72 percent of such campuses established in the past 20 years were built with more than three fabs to take advantage of increasingly necessary efficiencies of scale.
8	03.27.25_USACE	404(b)(1)	5	Page 14, Section 2.2.1 Infrastructure Needs (and elsewhere) – the document refers often to "industry trends" with respect to the multiple fab co-location. Industry trends do not drive the 404(b)(1) analysis, but the reasons for them (cost efficiency, production benefits) do factor into the analysis. A breakdown of why the 4 fab approach is preferable and why having multiple sites is not practicable (possibly in table form) would be helpful. In 2023, USACE had previously provided a 404(b)(1) guideline compliance document as well as a document to assist with preparing an alternatives analysis. In addition, the document found at the attached link may be helpful: https://www.swf.usace.army.mil/Portals/47/docs/regulatory/Handouts/Preparing_An_Alternatives_%20Analysis.FINAL.pdf	The January 31, 2025 404(b)(1) provided much more than a reference to "industry trends" to explain why multiple fab co-location is more practical, feasible, and cost efficient. It also explains why multiple sites are not practicable. Page 7 of the 404(b)(1) states: "One of the most important factors for cost-efficiency, as highlighted above, is scale of co-located cleanrooms on one campus. This scale creates several key advantages, including higher fab equipment utilization, reduced infrastructure costs, creating a workforce ecosystem for the specialized labor required for chip manufacture, a co-located supplier ecosystem, and other utility- and operational-related efficiencies. Accordingly, there is a global trend towards construction of efficient mega-fabrication facilities (megafabs). Of major semiconductor campuses, 82% have more than two fabrication facilities (fabs) of cleanroom space (1.2M sq ft or greater) on a single site, and 55% have more than three fabs (1.8M sq ft or greater). Of the semiconductor fabrication campuses that have been built in the last 20 years, 72% were built with more than three fabs to take advantage of increasingly necessary efficiencies of scale. Without the ability to build four co-located Fabs, the Project would incur an estimated additional cost of $3.04B-$3.7B and thus would not be able to ensure ongoing economic viability given the competitive landscape of the memory chip market." Additionally, Page 13 and 14 of the 404(b)(1) explains that multiple fabs are proposed on a single site "to achieve economies of scale by clustering multiple Fabs within a single central site, thus realizing the logistical, managerial, and economic advantages of such consolidation, including access to a robust and centralized workforce pipeline; an established ecosystem of supply chain partners; reliable infrastructure to support electricity, water and other utility requirements; and reduced operational downtimes during expansions and modifications.....The proposed approach is consistent with a growing industry trend to co-locate multiple fabs on a single site to achieve economies of scale and efficient supply chain and feedstock management in addition to minimizing total project footprint and environmental effects (other, older chip manufacture locations in the State tend to include only a single fab with ancillary facilities)." As described, the co-location not only maximizes the operational and economic efficiency objectives of the industry, it minimizes the size of the required facilities and the resultant impact to natural resources (e.g., avoidance of the ~400 acres of land in the northern portion of the site) due to the efficiencies achieved. This minimization of facility size and clustering approach minimizes the resultant impact to natural resources that would be required if a multiple site approach was pursued and is consistent with the New York State objective to encourage cluster development to the extent practicable to minimize natural resources impacts: "The purpose of a cluster development shall be to enable and encourage flexibility of design and development of land in such a manner as to preserve the natural and scenic qualities of open lands. [SECTION 278 Subdivision review; approval of cluster development Town (TWN) CHAPTER 62, ARTICLE 16 (https://www.nysenate.gov/legislation/laws/TWN/278)].
9	03.27.25_USACE	404(b)(1)	6	Table 2, page 14. Which are "Musts" and which are "Wants"? It seems that the site selection ultimately rested on size, topography, power and water/gas for suitability/practicability. If that's the case, and the other factors didn't play a role, either remove the other factors from the table or identify them as "wants".	Site selection for a facility of this size requires a combination of all the factors provided in Table 2. Most critical are the following: 1. Site Availability – As state in the 404(b)(1) the project purpose "is to construct and operate four state-of-the-art advanced semiconductor fabrication facilities (Fabs), on a single, unified site in New York State (NYS) to efficiently meet market demand and ensure competiveness in the worldwide semiconductor market. Both the CHIPS Act and the NYS "Green CHIP" Program identify the urgency of development from both a national security and funding perspective. Therefore, it was essential that Micron identify a site that was immediately available. 2. Parcel Size – As emphasized in the 404(b)(1), the proposed development could not be accomplished in a footprint less than 1000 acres. Micron originally identified a more preferable footprint of up to 1400 acres. 3. Topography and other site conditions - 4. Adequate water supply capacity – 5. Adequate electricity supply 6. Adequate natural gas supply capacity – 7. Adequate wastewater treatment and pretreatment capacity The other listed criteria are also important and given the quality of each for the White Pine site, it resulted in a decision that that site was practical for the proposed development. In essence, if many of these additional characteristics were not met or achievable, it is unlikely that the site would have been selected for such an important development.
10	03.27.25_USACE	404(b)(1)	7	Page 23 Second Paragraph of Section 3.1.5 – The document refers to two sites. Where is the information on the other OCIDA site?	The reference to two sites is from the Clay Business Park, Draft Environmental Impact Statement dated September 2012. The DGEIS refers to a 1991 Feasibility Study which "identified two primary candidate locations for large-scale industrial uses, one in the Town of Lysander north of NYS Route 31…" and the current White Pine Site (formerly known as the Clay Business Park in the 2012 DEIS). "The Lysander site was considered less suitable of the two sites due in part to the presence of substantial wetlands and hydric soil conditions." Note that at the time of this GEIS, the White Pine Site was only proposed as 339 Acres, 63 Acres of which were described as wetlands in the DEIS. The 2012 DEIS also stated that "OCIDA focused its attention on developming the Clay site as the most feasible location for industrial development due to its location and other development attributes, including transportation access via highway and rail and the presence of critical utilities that can support industrial development." Lastly, the 2012 identified 4 existing industrial parks in Onondaga County, all of which were not practicable for the type of industrial development opportunities OCIDA was pursuing.
11	03.27.25_USACE	404(b)(1)	8	Page 26, Power zones and surplus/deficit - Is an energy surplus necessary or could power be purchased form another zone? Also, there is not adequate supply for Fabs 3 and 4 in Zone C.	Energy can be purchased from other zones, although it can be very difficult because there are constraints on the transmission system that limit the total capacity that can be moved from various locations. The White Pine Site was selected for thereliability and capacity of the National Grid substation, and its location, significantly reducing the need for additional transmission approval and construction. It is more practical to locate large energy demand closer to energy production resources (substations) to avoid significant impacts (environmental and economic) from the building of transmission networks spanning tens or hundreds of miles and numerous counties. Energy supply and demand is a dynamic condition and New York has numerous initiatives to develop more generation across the state, with a focus on transmission feasibility and connection to green energy. While the current generation is not capable of satisfying Fabs 3 and 4, given the loads within the zone, we know that the energy landscape will be different in the future and the most likely area for expanding capacity for subsequent FABs is in Central New York. Furthermore, the analysis described in the 404(b)(1) compares each zone against all others and Zone C is clearly the most practical to serve immediate demand for FABs 1&2 and most likely to be able to provide for future demand.
12	03.27.25_USACE	404(b)(1)	9	Table 4 Page 30 Gas infrastructure, STAMP site – is the 2024-2025 funded line 1000 MCF/HR or 1000 MCF/M?	1000 MCF/M (Mcf = 1,000 cubic feet)
13	03.27.25_USACE	404(b)(1)	10	Table 4 Page 30 – Sufficient Parcel size should be 1000 ac not 1400 ac. Please confirm this was an error	The desired parcel size is approximately 1400 Acres which would allow the most onsite flexibility for placing 4 FABs and their associated buildings and improvements, including significant green space and the greater potential to avoid natural resource impacts. As demonstrated with the proposed site plan, 1000 acres is sufficient to construction the 4 FABs, although it leaves very little, if any, extra space for site planning flexibility.
14	03.27.25_USACE	404(b)(1)	11	Alternative site evaluation: The PDEIS identifies the Creek Road parcel as Erie County, not Cattaraugus County, which is where the 404(b)(1) document shows it.	Yes, the Creek Road site is located in Chaffee, NY which is in Erie County
15	03.27.25_USACE	404(b)(1)	12	Chaffee site maps are mirror images, not side by side.	The image on the right is oriented correctly.

16	03.27.25_USACE	404(b)(1)	13	Page 37 Rail spur discussion – suggest expanding discussion on the reduction of impacts on the rail spur site. Also, the following comment from the July letter does not appear to have been addressed: "Rail spur (Section 3.1.9): This section notes that the rail spur site was selected based on the fact that it is contiguous with the existing CSX rail line, proximal to the White Pine Commerce Park, and has a willing seller. However, the Section 404(b)(1) analysis does not address what the site size and configuration needs are for a rail spur. The analysis also does not sufficiently address other nearby sites that may have less wetland impacts and that are still located proximal to the site. In addition, the document does not address the potential to reduce impacts at the rail spur location which is further complicated because the site needs (size and configuration) were not provided. For instance, could impacts be avoided/reduced by moving the spur and facility into primarily upland areas within the northern portion of the rail spur site? Additionally, the analysis should address construction alternatives for the Micron facility that may not require as much off-site fill, eliminating the potential need for the rail spur."	**Site size and configuration:** The January 31, 2025 404(b)(1) states the following: The existing Rail Spur Site was selected for the following reasons; conformance to each selection criteria is necessary to be a practicable site to meet Micron objectives: •Contiguous to the CSX existing rail line •Proximal to the White Pine Commerce Park •Willing seller •Minimum parcel size of 25-30 acres under common ownership Specific required components for Rail Spur Site construction include: Conveyors – efficient means to move material without trucks. Minimizes impact to site and surrounding roadways. Non-Aggregate Material Storage – Area to accommodate the potential to offload other construction material needed for the main site. Further reduces the potential of truck traffic to the main site. Emergency stock pile area – to offload material during maintenance and repair of conveyor system. Sized to accommodate 75,000 CY (estimated quantity if conveyor is down for 14 Days) In Micron's original 90% design for the Rail Spur, they planned for a stockpile with a 270° swing radius which would've given them ~101,000CY (~152T) capacity taking ~23-days to stack with 60-railcars/day (4,400CY/day). In an effort to mitigate wetland impacts, Micron reduced the emergency stockpile to 180° radius, knocking it down to approximately 75,000 CY. Office area and parking (30 Vehicles) – Necessary to accommodate onsite workers and continual oversight of offloading activities. Offloading facilities – Area where each rail car is unloaded (bottom dump to reduce noise and dust) and material is sent to conveyor system. Stormwater Facilities – Sized and located where they are to meet NYS Stormwater standards for Water Quality and Quantity. Located based on site design, layout and grading to maximum SW collection. As stated in Micron's August 8, 2024 Response Letter to USACE: The basis of design for the Rail Spur Project was to enable the delivery, offloading, and conveyance of aggregate material from the Rail Spur property to the Micron main site to reduce over-the-road heavy truck traffic to the network and surrounding communities. Micron evaluated several alternative configurations in attempts to achieve the basis of design objective while also minimizing wetland impacts. With input from CSX, design incorporated a siding track within the CSX right of way. *Continued in next cell*
				Continued answer to above question 1.	Micron also assessed configurations using the west side of CSX's track and determined it would not be feasible for the following reasons: 1. Only CSX can operate on CSX tracks, therefore the Rail Spur operator would not be able to cross the CSX main line. 2. There are existing utilities, including high voltage power lines, on the west side of the track that would limit the ability to install a siding track in that location. 3. CSX will not allow any overhead structure (conveyance system) to be constructed to allow the transport of materials over the main line track. Other configurations that would avoid and minimize WOTUS impacts to the extent practicable and enable the delivery and processing of needed railcars per day would require additional residential or commercial property acquisitions adjacent to the Rail Spur property. As stated in the current 404(b)(1) document, those properties were not available and/or did not meet the site size and location requirements. Micron assessed properties further south and north of the Rail Spur property and, based on the available online information about existing wetlands on these parcels, the properties do not represent the least environmentally damaging practicable alternatives. As stated in the January 31, 2025 404(b)(1), the orginal 90% design of the Rails Spur site was reexamined at the the request of USACE to remove components as far north as possible on the site to further avoid wetlands. The new design, including reduction of the proposed storage pile area, resulted in avoiding approximately 7 acres of federal wetlands. The new design is now the least enviromentally damaging practicle alternative and allows Micron to significantly reduce air quality and traffic impacts if fill were required to be trucked to the site. Micron also examined alternatives to reduce the amount of required fill to the site but found to practicle alternative. The following alternatives were assessed: 1. Below-grade foundation which would have reduced the amount of fill but this method was not technically feasible due to the fact that the lowest level of the Fab is for electrical gear and the water table is as high as 5' below the ground level, so there would be water intrusion that would be incompatible with the use of the lowest level of the Fab. 2. Lowering the platform needed to build but it would not allow for proper drainage for storm water. In short, the the proposed elevations to build the platform are optimized to reduce the fill while allowing proper storm water drainage and controls
17	03.27.25_USACE	404(b)(1)	14	USEPA previously requested that Micron provide maximum allowable distances for all project elements from proposed Fabs and other interrelated project elements. Micron noted that additional information on the area requirements and minimum practicable square footage of all proposed project elements are provided in Chapter 2 of the DEIS. USACE requests this information be provided directly to USACE and USEPA. Micron also noted in their response to USEPA that the revised application will include a discussion of applicable setbacks and evaluate the viability of seeking variances as a strategy to mitigate (note: this should be "minimize") wetland impacts. USACE has not yet seen this information.	The following drawings provided in Addendum 1 show the need for building alignment, space allocation, and total site contraints: SMP_ Micron Site - EPA Space Identification Links & Trestles_Building Configuration PMTA0-0005 SITE MASTER PLAN OVERALL SITE CONSTRAINTS Additionally, several conceptual views of truck-turning radius areas were included to show the relationship of buildings to one another. Finally, Table 1 of the 404(b)(1) document includes a summary of main project components, including the total building square footage per component.
18	03.27.25_USACE	404(b)(1)	15	Fab 4 Laydown Area: Please provide analysis on the final use of the laydown area for Fab 4, including the potential to restore this area back to wetland, or the potential to use this area to relocate a section of the project to reduce wetland impacts elsewhere.	The laydown area furthest to the south east corner of the site will be used for contruction of both FAB 3 and FAB 4. To accommodate construction and access, this area must both be disturbed and filled to provide proper elevation and stability for construction laydown and activity. It is anticipated that total construction time for the last two Fabs could extend up to 10 years. Therefore, it is not reasonable to assume that the impact of this area will be temporary. At the conclusion of Fab 4 construction the site will be set to final proposed grades to meet the existing contours of the site and allow for proper site drainage and stormwater control. Since there is limited open space on the reduced 1000 acre limit of disturbance area, this remaining "open" area in the southeast corner of the site will need to be utilized for ongoing maintainance and construction activity at the site. With a site including 4 Fabs and numerous associated buildings and utilities, it is likely that ongoing maintainance and construction activities will conitnue regularly at the site and this area will need to be reserved for any additional laydown, storage or construction office facilities. Such activity would not allow for building future wetlands. In addition, even if unused, it is unlikely that a viable wetland and connections could be maintained in this corner of the site.
19	03.27.25_USACE	404(b)(1)	16	As discussed during the March 20, 2025 state and federal resource agency meeting, it is suggested that you also provide a narrative and any plans you have available describing the proposed layout of the project in its early development.	 Micron's initial assessment of the site included a desire to utilize much of the entire 1,400-acre site as possible, including siting of a Childcare Facility, warehouses, vendor areas, parking areas and potential future support facilities on site. The initial site plan of Phases 1A and 1B (FABs 1 and 2) below shows an early assessment of the site and the desire to utilize the entire property north of the power lines for development. Micron made a critical decision early in the site development process that developing the whole site north of the power lines would not maximize avoidance of WOTUS and NYSFW, and consequently eliminated some onsite buildings (childcare, health care, recreation center, and warehousing) and the majority of improvements were condensed into the 1,000-acre LOD. Therefore, the current design represents the least environmentally damaging practicable alternative.
20	11.24_USACE	JPA	1	Your application must include a complete description of the proposed activity, including detailed drawings (plan views and typical cross sections) of the proposed fills. The size of each impact to waters of the US should also be identified on the detailed drawings and supported by a table identifying the proposed impacts. In addition, the application narrative notes that there are no temporary impacts to wetlands and streams associated with the project. However, it appears that some of the proposed work activities may only result in temporary impacts as opposed to permanent fills. If this is the case, please provide detailed plans (plan view and cross section) illustrating this, and provide updated acreages of the proposed impacts, separating temporary and permanent impacts. For instance, impacts for utility crossings could be constructed in a way that would result in only temporary impacts. In addition, see item 4 below regarding the potential impacts associated with Fab 4 construction.	A complete description of the proposed activity is provided in Section 2.0/Block 6A of the Joint Permit Application (JPA) Narrative, as well as Section 2.0/Block 6A of this JPA Addendum 1. Other drawings that have been requested by the USACE and other regulatory agencies, including additional plan views with typical cross sections for areas of hydrologic connectivity concern, as well as grading plans, are also included with this Addendum 1. The limits of disturbance and proposed phased wetlands impacts to Waters of the US (WOTUS) is identified in detail for Phase 1a, 1b, 2a, 2b in Drawings PMCT0-510-513, all of which were submitted with the January 31, 2025 JPA submission. Table 5 of this JPA Addendum 1 Permit Narrative (Section 3/Block 6B on Page 26) and Table **2-2** of the Compensatory Wetland and Stream Mitigation Plan (CWSMP) provide a detailed presentation of the Projected Impacts to Federally Regulated Wetlands. As the Micron main campus design approaches 30%, areas have been identified where impacts to wetlands and streams will be temporary. For the purposes of wetland credit determination, impacts were initially proposed as permanent to ensure credit generation would fully compensate for lost functions and values of wetlands and streams on the Micron Campus. Table 5 of the JPA Narrative and **Table 2-2** of the CWSMP have been updated in this JPA Addendum 1 submission to include newly identified temporary impacts. An update to CWSMP Tables **5-1**; Jurisdictional USACE Wetland Impacts by Construction Phase, and 5-2; Jurisdictional New York State Wetland Impacts by Construction Phase have also been provided in Addendum 1. Other drawings provided with this Addedum are: Duct Bank Temporary Impact Map Fab 1 Cross Sectional Drawing PMTC0-0900-0920 Civil Grading Segments with Wetlands
21	07.11.24_USACE	JPA	2	The application needs to include a detailed grading plan, stormwater management plan, and plan to show how wetlands and streams that are proposed to unimpacted will retain their upstream and/or downstream hydrologic connections. These grading plans need to demonstrate how hydrology may be modified or maintained as a result of the proposed fills. USACE is concerned that the hydrology of wetlands and streams not proposed to be impacted may be affected by the proposed impacts and could therefore result in indirect or secondary impacts. If this is the case, these impacts need to be included in the evaluation of this application. The project should be designed to avoid indirect or secondary impacts.	Detailed grading plans fo Proposed Project have been included (PMTC0-0900-0920 Civil Grading Segments with Wetlands) to this JPA Addendum 1. Additionally, conceptual plans for wetlands remaining outside the LOD, that demonstrate how hydrologic connectivity is included in Appendix O. This include strategic grading, conveyance channels, and other engineering solutions. A stormwater management plan was provided in Appendix O of the January 31 Micron JPA - Final. There are no upstream hydrologic connections associated with the Proposed Project due to the proposed permanent impacts, however the stormwater management plan outlines four main objectives shown below: 1. Maintain existing drainage patterns as much as possible and continue the conveyance of upland watershed runoff. 2. Control increases in stormwater runoff resulting from the proposed development without adversely altering downstream conditions. 3. Mitigate potential stormwater quality impacts and prevent soil erosion and sedimentation resulting from stormwater runoff. 4. Maximize Runoff Reduction (RRv) using green infrastructure measures. In addition to the Stormwater Plan, Micron also provided a Wetlands Assessment and Monitoring Plan including a Surface Water and Groundwater Monitoring Plan (SW/GW) and a Wetlands Connectivity memo (Updated Appendix O) that includes the installation and monitoring of surface water and groundwater data across the Micron Campus. The Surface Water and Groundwater (SW/GW) Monitoring Plan will utilize collected data to inform adaptive management, as approved, to maintain hydrology of remaining wetlands and streams as the Micron Campus is constructed. The proposed strategy outlined within these documents demonstrates 1. How hydrologic connectivity (e.g., stormwater discharge rates and points) will maintained under post-construction conditions and 2. How adaptive management will be employed, as necessary, to maintain consistency with the requirements of Article 24 of the ECL, the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-25-001), and Sections 401 and 404 of the Clean Water Act.
22	07.11.24_USACE	JPA	3	A detailed schedule of impacts is needed. The schedule of impacts should include a timeline identifying when proposed impacts to wetlands and streams associated with construction of all aspects of the proposed project. This schedule should include detailed impact maps and should clearly identify how hydrology would be maintained during the various phases of construction on the main campus for construction of each Fab, as requested in item 2 above. This should also include a schedule for the rail spur and child care center.	A detailed schedule of impacts has been provided in Table 2 and Table 5 of this JPA Addendum 1 Narrative, as well as in Tables **2-1** and **2-2** of the CWSMP. An update to Table **5-1** and Table **5-2** of the CWSMP has been provided which includes a timeline for impacts to wetlands and streams. A detailed impact map will be provided upon submission of the Stormwater Pollution Plan that clearly identifies how hydrology will be maintained throughout Phase 1a of construction. This will include the Rail Spur; however, the Childcare Center site will be covered under a separate NYSDEC permit as there is no impact to federal wetlands on the Childcare site. Maintaining the site hydrology for each phase of construction will also be outlined in the SW/GW Monitoring Plan and detailed in the Stormwater Pollution Prevention Plan (SWPPP). The SW/GW monitoring plan and the SWPPP will be adaptive management plans and adjusted, with DEC and Town of Clay (ToC) review and approval, to address any site hydrology concerns as laid out in New Appendix O - Wetland Assessment and Monitoring Plan.
23	07.11.24_USACE	JPA	4	The application needs to identify proposed disposal locations for any excess soil material that is proposed to be removed from the site.	Soil material will be reused onsite as appropriate, but it is expected that excess or unusable soil material will be stored onsite for use in final landscaping or disposed of offsite. While specific construction details are not yet identified, Micron will require all contractors to meet a specified disposal protocol that includes avoidance of jurisdictional WOTUS. Specific staging and laydown areas will be designated onsite, and the contractor(s) will be instructed to limit staging of soil, materials, and equipment to these areas. To the extent contractors need to temporarily store and stage these materials throughout the site, they will be required to do so within the identified limits of disturbance (LOD) during each construction phase and will be further instructed to avoid identified jurisdictional WOTUS. Lastly, all construction and soil movement onsite will be completed pursuant to the conditions of USACE, NYSDEC, and local wetland and stormwater regulations and permits. Off-site disposal of excess soil will be in accordance with federal, state, and local requirements, but specific disposal locations have not been identified. Micron will coordinate with the contractors to identify off-site locations where disposal can occur outside the limits of jurisdictional WOTUS. These locations will be provided to the involved agencies as soon as they are identified and in advance of any soil removal from the site. A preliminary Soil Materials Management Plan (SMMP) has been included in the Addendum 1 submission in Appendix U.

24	07.11.24_USACE	JPA	5	The USACE believes that there are opportunities to avoid and minimize impacts to waters of the US. For instance, and not limited to: it appears that impacts associated with the rail spur could be moved to reduce wetland impacts at that location; the pump station could be reconfigured or relocated; and the impacts for laydown and staging areas for the Fab 4 construction could be temporary and restored to wetland. The USACE will not be able to fully confirm if avoidance and minimization has occurred to the maximum extent practicable until a detailed site plan is provided. Please note that while USACE continues to provide information relating to the need for a detailed mitigation plan (including below), this does not preclude the need to first exhaust all reasonable options to further avoid and minimize impacts to waters of the US.	Micron understands and appreciates the need to avoid and minimize impacts to on-site jurisdictional WOTUS to the extent practicable to demonstrate that the proposed design is the least environmentally damaging practicable alternative (LEDPA). From the initial design of the proposed site plan, Micron has taken steps to avoid and minimize impacts. For example, initial concepts for buildings north of the power lines were reduced significantly to avoid and preserve the majority of WOTUS in this area. The only remaining proposed development north of the power lines consists of the proposed biological treatment buildings, Pump House, and associated stormwater facilities. As set forth in the current 404(b)(1) document, revised June 7, 2024, the Pump House is a transfer point of industrial wastewater from Micron to the publicly owned treatment works (POTW) conveyance north to the Oak Orchard wastewater treatment plant (WWTP). It is associated with the designated Bio Buildings, which are essential to treating effluent flow to meet downstream requirements for the County issued POTW. The onsite industrial wastewater facilities are part of a system that will be designed to facilitate water reuse, treat incoming water to provide the ultra-pure water required for the semiconductor manufacturing process, and treat remaining unused wastewater to meet the County's pretreatment requirements, which are set in accordance with the County's permitted limits for final discharge. Micron reviewed and attempted to acquire additional off-site locations to house some of these facilities, including the Pump House. Offsite locations were not available to accommodate the appropriate size and engineering requirements of these facilities in relation to both Micron's onsite required processing and proximity to the County WWTP Facility. The current location of the Pump House and Bio Buildings provides the most practical alternative, which includes the shortest distance to maintain conveyance to and from the Oak Orchard site, applicable security and appropriate accessibility for maintenance and responsiveness. Additionally, if the Pump House and Bio Buildings were situated further south, there would be a conflict with other main utilities. Please see Comment #1 in this worksheet for additional information on the pumpstation needs and location. Please see Comment #13 for more information on Rail Spur needs and layout.
25	07.11.24_USACE	JPA	6	The last sentence of Section 1.1 of updated application narrative still suggests that the rail spur is not included in the application. Please update the application accordingly.	As is spelled out in both Section 1.1 and Section 2.0 (Block 6A - Proposed Project), the Rail Spur is a component of this permit application. It is the Child Care Center that does not have any Federal Wetland Impacts that is not a part of this application. The last sentence of Section 1.1 pertains to the Environmental Impact Statement (EIS), which evaluates potential environmental impacts not covered under this JPA (i.e. Solid Waste, Air Quality, Noise etc.).
26	07.11.24_USACE	JPA	7	The application indicates that Micron is the applicant for the work proposed to be completed on the Main Campus site by National Grid. Please clarify what is proposed by Micron vs National Grid in terms of regulated work for utilities. Detailed drawings of the utility work are also required and as noted above, need to identify temporary andpermanent impacts associated with the utility work. This comment pertains to impacts for both the electric and natural gas utilities proposed. Please also clarify which state agency is reviewing the proposed electric utility impacts pursuant to Section 401Water Quality Certification, and the date the WQC request was or will be submitted. to that agency.	As was explained to the USACE and other regulatory agencies during a briefing held on April 10, 2025 regarding the National Grid Duct Bank and the relationship between National Grid and Micron in developing that area of the Site, the development of the Duct Bank is complex in terms of the overlying responsibilities of the two primary entities. From a sequence standpoint, the following are the major steps in development and who is responsible for what: Step 1 – Micron will clear cut the National Grid duct bank right-of-way of all trees and other woody vegetation (USACE temporary wetlands impact/NYSDEC permanent wetlands impact) Step 2 – National Grid will then grub/remove all wood stumps to allow for duct bank construction (USACE permanent wetlands impact) Step 3 – National Grid will then dig duct bank trenches and install service line lateral duct banks for Fabs 1 and 2 (Service line duct banks for Fabs 3 and 4 will not be constructed until just prior to Phase 2 of the Micron project) Step 4 – National Grid will then place manholes for emergency access to the individual service line duct banks (USACE permanent wetlands impact/NYSDEC permanent wetlands impact) Step 5 – Micron will then construct the gravel access roadway, and gravel access pads and tracts to facilitate emergency access (USACE permanent wetland impact/NYSDEC permanent wetlands impact) Detailed drawings related to the construction activities for the Duct Bank are included within the Substation Expansion/Duct Bank Combined Individual Permit. That application was submitted to the USACE the week of 21 April 2025. The 401 WQC for the Substation Expansion and the Duct Bank work (covered under National Grid's Article VII application) will be submitted by National Grid to the Pubic Service Commission the week of April 21, 2025. The WQC application for the portions of the Micron Campus outside of the Duct Bank will be submitted to the NYSDEC after the submission of this JPA Addendum 1.
27	07.11.24_USACE	JPA	8	Child Care Center: The USACE recently conducted field work and additional wetland was identified on the proposed Child Care site. Based on this and the preliminary site plans provided in the Section 404(b)(1) analysis, it appears that wetland impacts will now be proposed at this location. Please update the delineation maps and provide a detailed site plan identifying proposed impacts to waters of the US. If impacts are proposed, the 404(b)(1) analysis needs to be updated to include a section specific to the Child Care center.	Figures and supporting for delineated wetlands at the Childcare site were provided to the USACE and NYSDEC for jurisdictional determinations on July 19, 2024. Based on the updated delineation, the proposed Childcare preliminary site plan has been modified to avoid delineated wetlands except the entry road crossing of the narrow wetland strip on the Childcare site's south end. Maximum wetland impact would be less than **.06** acres and as driveway design progresses, other solutions will be considered (i.e. bottomless culverts) to further minimize or eliminate impacts. It is possible that some of the Childcare development activities will intrude into the 100-foot buffer associated with NYSDEC wetlands. If required, those intrusions will be addressed through a separate Article 24 application.
28	07.11.24_USACE	JPA	9	Serog Properties: The USACE recently conducted field work and additional wetland was identified on the Serog Properties. Please update the delineation maps, project narratives and project plans accordingly to reflect the additional wetland impact.	Figures and supporting documentation for delineated wetlands at the prior Serog Properties were provided to the USACE and NYSDEC for jurisdictional determinations on July 19, 2024. Jurisdictional determinations were received from USACE on October 11, 2024 . Wetland impacts associated with jurisdictional WOTUS on the prior Serog properties were incorporated in the updated project plans. All Serog property boundaries have been removed from references and figures in the JPA submission.
29	07.11.24_USACE	JPA	10	Utilities: To date, the USACE has not received information associated with several of the utilities proposed that would support the project. While it is understood that Micron would not be the applicant for these utilities, please provide an update on anticipated schedules associated with submittals of applications for these utilities. The USACE has not yet had any contact with the applicants for the proposed water main, fiber optic or wastewater portions of the project. Please provide USACE with a contact for each of these. Any applications submitted that would be associated with the proposed Micron development should be sent directly to Margaret Crawford of USACE and identify their association to the Micron project.	Micron notes that each utility is responsible for preparing their own wetland applications, depending on their own construction schedule. National Grid has submitted the Individual Permit for the Gas Main Project to the USACE with the most recent RFI response provided in December 2024. The combined Substation/Duct Bank IP application was submitted May 2, 2025. The contact for Onondaga County Water Authority (OCWA) is Andrew J. Weiss, P.E., BCEE. His contact information is: Director of Technical Services PO Box 4949 Syracuse, NY 13221-4949 P: 315-455-7061 x 3108 E: ajweiss@ocwa.org The contact for Onondaga County Department of Water Environment Protection (WEP) is Eric G. Shuler, P.E. His contact information is: Deputy Commissioner 650 Hiawatha Boulevard, West Syracuse, New York 13204 EricSchuler@ongov.net There is no set contact or supplier for fiber optic currently.
30	07.11.24_USACE	JPA	11	Please advise when you intend to submit the Section 401 Water Quality Certification request for the proposed project.	The Section 401 WQC will be submitted the week of May 26, 2025.
31	07.11.24_USACE	JPA	12a	Mitigation: Is there a plan to perpetually protect wetlands and streams remaining on site? If so, the application needs to identify the location of these areas to be perpetually protected and the mechanism to protect these areas (e.g., Third Party Conservation Easement, etc.).	The wetland and WOTUS regulatory programs (i.e., Sections 404 and 401 of the Clean Water Act, Articles 15 and 24 of the ECL) that are administered by the USACE, USEPA, and NYSDEC are designed to regulate any proposed impacts to the resources. Therefore, any future impacts to remaining on-site wetlands and WOTUS will require agency review and authorization prior to implementation, thereby ensuring that the functions and values of these resources is maintained within the watershed without perpetual protection. There currently is not a plan to permanently protect on-site remaining wetlands, nor is Micron seeking credit for preserving those wetlands. However, Micron has committed to the agencies to monitor and adaptively manage remaining on-site wetlands to maintain their existing functions and services through implementation of the proposed Wetland Assessment and Monitoring Plan to be provided as part of the JPA Addendum 1.
32	07.11.24_USACE	JPA	12b	Mitigation: As discussed in the last monthly mitigation meeting, USACE is still waiting for a detailed wetland and stream mitigation plan. USACE understands that the proposed mitigation sites are in the process of being delineated and we will need to review these delineations accordingly. As a reminder, the mitigation plan needs to be prepared in accordance with the USACE Mitigation Rule, found at 33 CFR 332. USACE previously provided information regarding mitigation in an e-mail on February 5, 2024, including information from the mitigation rule, definitions, including crediting used for in lieu fee, and performance standards. USACE has also provided information used in our Ohio section for stream mitigation in an e-mail on June 20, 2024. See attached.	Micron provided a draft version of the Compensatory Wetland and Stream Mitigation Plan as part of the JPA - Finat that was submitted on January 31, 2025. The USACE provided comments on that plan on March 12, 2025. Micron submitted a revised version of the Compensatory Wetland and Stream Mitigation Plan, including a detailed plan for the Buxton Creek Mitigation Site, to the Federal and State regulatory agencies on April 10, 2025. Micron has addressed comments on the Buxton Creek Mitigation Plan to guide the finalization of the remaining mitigation sites. These are submitted with this Addendum in Appendix N.
33	07.11.24_USACE	JPA	12c	Mitigation: A detailed schedule of proposed mitigation is requested. You have advised that you are proposing to mitigate for all of the proposed impacts up front, prior to impacts associated with Fabs 3 and 4 of the proposed facility. It is suggested that you propose draft performance standards that the mitigation areas will need to meet prior to commencement of impacts associated with future phases (e.g., Fabs 3 and 4).	Micron has provided a mitigation schedule in the revised Compensatory Wetland and Stream Mitigation Plan that was provided to the Federal and State regulatory agencies on April 10, 2025. Draft performance standards are included the the CWSMP. The full Mitigation plans are provided in this Addendum 1 in Appendix N.
34	07.11.24_USACE	JPA	12d	Mitigation: Section 7 of the Endangered Species Act (ESA) and Section 106 of the National Historic Preservation Act reviews for the mitigation sites will need to be completed. Please ensure that information related to potential impacts to ESA and historic resources are included in the mitigation plans.	Micron understands that Section 7 ESA and Section 106 of the NHPA need to be addressed at the various mitigation sites that will be supporting the project. The Wetland Trust (TWT), mitigation site managers, are working with the USFS to address Section 7 concerns. Additionally, TWT is addressing Section 106 concerns, with the understanding that the mitigation sites will be covered by the Programmatic Clearnace for historic artifact concerns that is being agreed to between the Department of Commerce, Chips Program Office, and New York State SHPO.
35	07.11.24_USACE	JPA	13	In addition to the above, the USACE has additional questions and comments on the updated Section 404(b)(1) analysis:	Noted. Specific responses to the 404(b)(1) comments are presented below.
36	07.11.24_USACE	JPA	13a	Much of the document relies on work proposed by others to provide the utilities, as opposed to the utilities already existing. The document needs to clearly explain what utility needs are currently met at the site and what work needs to occur to meet the project needs. For instance, considerable work and impacts to waters of the US is proposed to expand the substation.	Section 2.2.1 of the current 404(b)(1) document, revised January 2025, includes a summary of the infrastructure needs for the project. Table 2 in that section identifies the minimum project needs and practicality factors for each. As noted in the 404(b)(1) document access to substantial electric and water capacity are essential criteria for the project. As set forth in the document, the White Pine site meets the basic capacity needs for the various utilities needed to support the development including electric and water. No other site in New York State provides all of these basic capacity needs and any other location would require full construction of base utility support such as substations, wastewater treatment facilities, and water supply sources and infrastructure. Meeting these basic utilities needs is critical to site selection. Micron is coordinating with utility purveyors to provide connections between the utility capacilities and the project; this involves installation of connections and coveyances from the supply source to the site. **Table XX has been developed and included herein** to summarize a) existing utilities on or adjacent to the site and b) proposed utility upgrades that will be installed to meet the specific needs of the Micron development. Table XX will also be included in the updated JAP narrative. Each of the other utility purveyors is submitting separate applications that will include details of the proposed improvements and associated resource impacts.
37	07.11.24_USACE	JPA	13b	Site size: The Section 404(b)(1) analysis notes in Table 2 that the size of the site needs to be 1,400+ acres as a minimum project need. However, it is USACE's understanding that the proposed site is 1,413.94 acres, including areas north & south of the right-of-way. However, the total proposed limit of disturbance is only 976.32 acres. Please provide additional information to support the minimum site need for 1,400 acres.	See 404(b)(1) response #14.
38	07.11.24_USACE	JPA	13c	Off-site location for pump house: Page 9 notes that other locations were ruled out due to an inability to purchase land. Have any additional efforts to seek out an alternative site been underway since that time? Also, were other on-site locations examined to meet these needs (e.g., the corner of Caughdenoy Road and Route 31, etc.)? Please provide additional detail for the proposed Pump Station, including size of site needed, detailed site layout, and an explanation for the meaning of Bio 1 and Bio 2.	see 404(b)(1) response #1.
39	07.11.24_USACE	JPA	13d	Page 13: Please include a spreadsheet or list of what the Micron site provides compared to the Minimum Project Needs. This should also identify what minimum project needs are provided now and what would be provided with improvements and additional utilities.	See JPA response #13A from July 11, 2024 (Line 13 in the USACE tab).
40	07.11.24_USACE	JPA	13e	Rail Spur: The Section 404(b)(1) analysis suggests that the impacts to wetlands would be environmentally less impactful than the truck traffic to support construction. Please provide additional analysis of impacts associated with the rail spur site and provide a comparison of the environmental impacts associated with wetland loss versus to those associated with the truck traffic that would occur if the rail spur were not constructed. The USACE is responsible for authorizing only what represents the Least Environmentally Damaging Practicable Alternative (LEDPA). The Section 404(b)(1) Guidelines state that when a proposal "does not require access or proximity to or sighting within the special aquatic site in question to fulfill its basic purpose (i.e., is not 'water dependent'), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise" (40 CFR 230.10). Additional information is therefore necessary to refute this presumption.	See 404(b)(1) Response #13 from March 7, 2025 (Line 16 in the USACE tab). Using GHG parameters that were developed for the NYSDEC CLCPA analysis and agree to by the State, Micron estimated the potential impact on Greenhouse Gases that would occur as a result of the loss of wetlands through construction activities. Using a wetland impact number of 8.91 acres (3.60 hectares), it was estimated that upon construction, there would be an initial release of carbon dioxide (CO2) from wetland soils in the amount of 1,690 tpy of CO2. This is based on the premise that sequestered CO2 in the soil is component of the biomass in the wetland soil and upon disturbance is released. Additionally, as wetlands have an ability to continually remove CO2 from the atmosphere as part of the carbon cycle, the loss of 3.60 hectares of wetlands would result in the removal of an ability to remove 20.3 tpy of CO2 per year from the atmosphere. However, wetlands also generate methane (CH4), another GHG, as a biproduct of nature carbon processing that occurs in wetland soils. The loss of 3.60 hectares of wetlands would prevent the discharge of approximately 0.56 tpy of CH4 per year. By using standard dump trucks, the process of bringing in aggregate would require trucks to run to and from the Micron Campus every six minutes, twenty-four hours a day, seven days a week, for two and a half years (219,000 truck trips for Phase 1a fill needs). In contrast, a single rail car can carry five times the amount of fill or aggregate as a standard dump truck. By constructing the Rail Spur Site and utilizing rail instead of dump trucks only, Micron will significantly reduce mobile emissions of an average 7,300 truck trips per month. The emissions associated with the truck traffic needed is calculated at 15,347 tpy of CO2 and 0.08 tpy of CH4. Alternatively, the emissions from the entirety of the Rail Spur operations (diesel engine locomotive and conveyance) is 8,330 tpy CO2 and 0.64 tpy of CH4. That means that at the calculated rate of removal ability of the impacted wetlands (20.3 tpy of CO2), it would take approximately 750 years to remove the annual tpy impact of the truck traffic emissions needed for this project. Conversely, the removal of wetland methane production of 0.56 tpy nearly offsets the 0.64 tpy of CH4 emitted from Rail operations. Overall, the avoided emissions from Rail operations are 7,017 tpy of CO2, comparable to only an initial land use conversion pulse of 1,690 tpy for wetland impacts. Additionally, it should also be noted that Micron proposes to mitigate for lost wetlands at a ratio exceeding 2:1, which would more than compensate for any lost GHG benefits connected with the existing wetlands that will be impacted by the project.

41	07.11.24_USACE	JPA	13f	Rail spur (Section 3.1.9): This section notes that the rail spur site was selected based on the fact that it is contiguous with the existing CSX rail line, proximal to the White Pine Commerce Park, and has a willing seller. However, the Section 404(b)(1) analysis does not address what the site size and configuration needs are for a rail spur. The analysis also does not sufficiently address other nearby sites that may have less wetland impacts and that are still located proximal to the site. In addition, the document does not address the potential to reduce impacts at the rail spur location which is further complicated because the site needs (size and configuration) were not provided. For instance, could impacts be avoided/reduced by moving the spur and facility into primarily upland areas within the northern portion of the rail spur site? Additionally, the analysis should address construction alternatives for the Micron facility that may not require as much off-site fill, eliminating the potential need for the rail spur.	See 404(b)(1) Response #13 from March 7, 2025 (Line 16 in the USACE tab).
42	07.11.24_USACE	JPA	13g	Page 17 of the Section 404(b)(1) analysis notes that Micron's site selection and evaluation process considered site selection factors including "time-to-market" (and specifically – 'permitting and approvability'). As discussed previously, the application evaluation process for the proposed impacts associated with this project is substantial and requires extensive review. The 404(b)(1) analysis suggests that this site entails a quicker permitting process than another site might be. USACE suggests editing this section to define "time-to-market (permitting and approvability)".	The "time-to-market" language in the current 404(b)(1) analysis is part of Micron's structured approach to site selection. As emphasized throughout the document, the most compelling site selection factors included size, availability, and most importantly, availability of all the required utility and infrastructure requirements for the proposed development. Time-to-market is one of several other factors considered in site selection and it is not intended to imply a "quicker" process to approvability. Also see 404(b)(1) Response #6 from March 7, 2025 (Line 9 in the USACE tab).
43	07.11.24_USACE	JPA	13h	Electrical energy needs: The Section 404(b)(1) analysis identifies the electrical needs for Fabs 1 and 2, but not 3 and 4. The document also does not address the additional substation work and associated proposed impacts to wetlands that are being proposed to meet the needs of the proposed facility.	The current 404(b)(1) provides the anticipated energy use for 4 Fabs in Table 2 of Section 2.21. The reference to the 2 Fab energy demand is part of Section 3.1.6 where Micron documents that no other regions in NYS provide the necessary capacity for construction of the first two Fabs. Additional information detailing the energy demand for phased development will be provided in the updated 404(b)(1) and DEIS. The impacts to wetlands associated with utility work on the main Micron site are included in the JPA. Offsite utility impacts will be quantified and included in the DEIS. However, each utility is responsible for permitting the offsite impacts that they will incur. The impact to wetlands associated with the substation work is covered under Permit Number LRB-2024-00400 as submitted by National Grid as the permittee. Further information is provided in the USACE Response to 404(b)(1) Comment #8 from March 27, 2025 (Line 11).
44	07.11.24_USACE	JPA	13i	As noted above in the request for additional assessment of avoidance and minimization of impacts, please explain if the impacts identified in the southeast corner of the site are only needed for construction of Fab 4. If they are, can they be restored after construction of Fab 4? Alternatively, can the pump house or other components of the site be located here to minimize wetland and stream impacts elsewhere?	Please see Response 15 of the 03.27.25 USACE Comment (row 18) of this tab
45	07.11.24_USACE	JPA	13j	Page 45 suggests that the use of underground parking is being implemented to reduce the project footprint and therefore impacts on wetlands and streams. The USACE does not yet have detailed parking or building plans to confirm that impacts have been minimized to the maximum extent practicable.	Underground parking will not be used on the Micron Campus. Also see 404(b)(1) Response #3 from March 27, 2025 (Line 6 in the USACE tab).
46	02.12.25_USACE	JPA	1	The updated JPA did not include a complete response to the July 11, 2024 letter requesting additional information necessary for review of your application. The JPA material that has been updated in your recent submittal is substantial and it is requested that you please provide a point!by-point response to the July 2024 letter directing USACE to where the updated JPA addresses each requested item	A point by point response to the July 11, 2025 USACE letter is provided in Row 20 through Row 45. Specific references to the location of information that was requested in each comment is identified in either the January 31, 2025 JPA Final, or this May 16, 2025 JPA Addendum 1.
47	02.12.25_USACE	JPA	2	The USACE reviewed portions of the updated JPA with Micron in Syracuse on February 4, 2025 and discussed the lack of detailed drawings identifying proposed impacts. The updated JPA refers to grading plans PMTCO-0900 and -0900-02, but the level of detail in these grading plans does not enable an evaluation of the potential secondary impacts to orphaned wetlands as a result of proposed fills. In your email provided on February 11, 2025, you identified seven (7) areas where you will be producing conceptual plans to address the USACE concerns identified in item 2 above. There appear to be additional areas where information is necessary to demonstrate if secondary impacts may occur as a result of filling and grading. For instance, how will the hydrology be maintained within the unimpacted wetlands between circled areas 1 and 2.	A revised set of drawings PMTCO-0900-0920 have been submitted including the requested wetland layers. These 20 civil grading tiles show the proposed fill and the grading along the LOD. Additionally all areas identified to create orphan wetlands have been addressed in Appendix O within the Wetland Assessment and Monitoring Plan. This plan includes the Wetland Connectivity memo. Conceptual plans with a typical cross-section are provided in drawing Location1_NW_Swale
48	02.12.25_USACE	JPA	3	Additionally, USACE relayed a concern for the permanent impacts proposed on the southeast side of the pump station as there did not appear to be a need for permanent fills at this location. As indicated in the past, the USACE cannot authorize impacts that do not represent the Least Environmental Damaging Practicable Alternative	See 404(b)(1) Response #1 from March 27, 2025 (Line 4 in the USACE tab)
49	02.12.25_USACE	JPA	4	It is also requested that you please confirm the status of the mitigation plan included with your February 3, 2025 submittal. Page one of your transmittal letter requests that the "agencies review this template and work with TWT to provide enough input for TWT to develop the remaining site-specific plans." The letter then requests that the agencies hold the review of the Plan, in order to avoid unnecessary review of potentially changing information and to prioritize agency review of other components of the JPA. Accordingly, it is requested that you please confirm that the first site-specific plan is not ready for agency review.	The TWT Mitigation Plan and Buxton Creek Chapter were provided on April 8, 2025. Micron has received comments from the USACE ont the Mitigation Plan and the Buxton Creek Chapter on May 2, 2025. The remaining site chapters, as well as the revised Buxton Creek Chapter, are included as Appendix N in this Addendum 1.
50	02.12.25_USACE	JPA	5	As discussed with you on February 4th, and noted in your February 12, 2025 email, the USACE would like to resume biweekly meetings with Micron, CPO and the Natural Resource Agencies to go over the additional material provided on February 3rd and all remaining concerns, preferably starting February 20, 2025 if the parties are available	Biweekly, which have turned into weekly meetings occurred between submission of the JPA Final on January 31 2025 and the Addendum 1 submission on May 23, 2025.
51	02.12.25_USACE	JPA	6	Lastly, please provide a word version of the Section 404b1 analysis.	A word version of the 404(b)(1) was provided to the USACE.

JPA					
Row Number	Date & Agency	Document	Comment Number	Agency Comment	Sponsor Response
5	03.27.25_USEPA	404(b)(1)	1	These questions are related to Comments 2.b.i, 2.b.ii, and 2.b.iii in EPA's July 30, 2024 letter:	
6	03.27.25_USEPA	404(b)(1)	1a	JPA Permit Narrative Document, Table 1 (page 15) and Section 4 Block 6 (page 39) – both state, "Each Fab is expected to occupy approximately 1.2 million square feet (sf) of land and contain approximately 600,000 sf of cleanroom space, 290,000 sf of clean room support space, and 119,500 sf of administrative space." The necessary square footage of each Fab is stated again in JPA Volume III, Appendix M, Section 2.1.3 (page 8) Project Description, "Each Fab is expected to occupy approximately 1.2 million square feet (sf) (approximately 27.6 acres) of land." Appendix M, Section 3.2.1 (page 39) is also clear that each Fab is expected to cover approximately 1.2M sf. As stated, this would result in a total of 4.8M sf of total Fab space proposed on the Main Campus, as explained in Table 1 of the JPA Permit Narrative Document. The 1.2M sf number conflicts with information elsewhere in the JPA and within the recently submitted Draft Environmental Impact Statement (DEIS). JPA Volume III, Appendix M, Section 2.1.2 and Section 3.3.1; and DEIS Section 1.1.1, state Micron's economic model supports the short-term manufacture of 13,000 DRAM wafers per week starting in 2028, increasing to 52,000 wafers per week by 2041, which requires four 600,000 sf fabs. This would total 2.4M sf of proposed Fab space on the Main Campus. Can you please provide additional information on or resolve the discrepancies between the total building areas reported throughout the JPA? Can 52,000 wafer per week indeed be produced using 2.4M sf of total Fab space either by reducing the number of Fabs or individual Fab size? Where does the 600,000 sf/1.2M sf discrepancy come from? Is it referring to cleanroom space alone with other Fab components being modifiable? Does one or more of the documents need to be updated to reflect out of date/inaccurate information?	Comment noted. To clarify, each Fab is expected to occupy approximately 1.2 million square feet (sf) of land and contain approximately 600,000 sf of cleanroom space and 600,000 sf for supporting building infrastructure and utilities needed to operate the Fab.
7	03.27.25_USEPA	404(b)(1)	2	These questions are related to Comments 2.b.i, 2.b.ii, and 2.b.iii in EPA's July 30, 2024 letter:	
8	03.27.25_USEPA	404(b)(1)	2a	JPA Permit Narrative Document, Table 1 (page 16) states that 1.8M sf of Central Utility Buildings are needed while Appendix M, Section 3.2.1 (page 39) states that 470,000 sf of central utility buildings per two far, 940,000 sf total, are needed. Is this discrepancy due inclusion of outdated information once site design has advanced?	Comment noted. The JPA narrative is correct and the 404(b)(1) language is outdated. The total square footage needed for 4 central utility buildings is 1.8M sf.
9	03.27.25_USEPA	404(b)(1)	2b	JPA Volume 1, Appendix E, Appendix F, and Appendix G; and Volume III, Appendix M, Section 3.2.1 (page 39) state that there are 200,000 sf of product testing space per two fabs (400,000 sf total) proposed while JPA Permit Narrative Document (page 39) and JPA Volume IV, Chapter 1, page 1, state that for each Fab, there are "182,600 sf of product testing space housed in separate buildings." Table 1 of the JPA Permit Narrative document states that 4 probe buildings are proposed at 182,600 sf each (730,400 sf total). Is the 400,000 sf project testing space different than the 730,400 sf of probe buildings space needed for testing?	Comment noted. The JPA narrative is correct and the 404(b)(1) language is outdated. There are 4 probe buildings that require 730,400 sf.
10	03.27.25_USEPA	404(b)(1)	2c	Table 1 of the JPA Permit Narrative Document describes four administrative buildings totaling 478,000 sf. Appendix M, Section 3.2.1 states that each fab would have 250,000 sf of administrative space within its 1.2M sf footprint. No administrative space is described within the Fabs in Table 1. Is this space now all consolidated in proposed administrative buildings described in Table 1?	The administrative space noted within the Fab is separate and distinct from the administrative buildings. Employees working within the Fabs will be using the administrative spaces without exiting the Fabs. The 4 administrative buildings are separate and total 478,000 sf.
11	03.27.25_USEPA	404(b)(1)	2d	Table 1 of the JPA Permit Narrative Document describes each Fab as approximately 1.2Msf of footprint which includes 600,000 sf of cleanroom space. No additional cleanroom space is proposed in the Fabs. This conflicts with Section 3.2.1 which states that each Fab would have the 600,000 sf of cleanroom space described in Table 1 with an additional 290,000 of cleanroom storage space. Is the additional cleanroom space described in Section 3.2.1 but not proposed in Table 1 now part of cleanroom space in proposed Probe Buildings?	Comment noted. To clarify, each Fab is expected to occupy approximately 1.2 million square feet (sf) of land and contain approximately 600,000 sf of cleanroom space and 600,000 sf for supporting building infrastructure and utilities needed to operate the Fab.
12	03.27.25_USEPA	404(b)(1)	2e	The questions above describe uncertainty resulting from the most apparent examples of conflicting information. Please review the JPA and DEIS for all conflicting and inconsistent information. Please provide clear and up to date numbers for each building and area proposed on the Micron Campus site that is consistent across all documents.	N/A
13	03.27.25_USEPA	404(b)(1)	3	**This question is related to Comments 2.b.i, 2.b.ii, and 2.b.iii in EPA's July 30, 2024 letter:** Page 7 of Appendix M states, "without the ability to build four co-located fabs, the project would incur an estimated $3.04B-$3.7B and thus would not be able to ensure ongoing economic viability". How as the extra $3B+ in cost calculated? What would the impact be to the fixed cost per wafer and average operating cost per wafer produced without the ability to build four co-located Fabs? What fixed cost and average operating cost per wafer is too high for the project to be considered cost competitive and commercially viable?	Costs associated with splitting the needed 4 Fab facility would include, but not limited to: Site search for a another feasible site that could accommodate 2 Fabs, including a site with the appropriate utilities; initial development costs for constructing on a new site, additional costs for shared utilities such as wastewater, stormwater, and energy substations, and cost to extend utilities to a new site; additional permitting and site approval costs; lost efficiency costs associated with manufacturing processes that can be extended and shared across 4 Fabs linked together; additional highway improvements needed to accommodate a separate site; and additional costs associated with training and locating work force at a second location. The most significant costs were calculated based on lost efficiencies from manducating across 4 Fabs at one facility versus splitting the site and having to duplicate processes that can't be shared on one site. The complexity of the semiconductor wafer10 manufacturing process is the primary driver of the need for larger fab clusters that co-locate large cleanrooms on a single campus to facilitate necessary efficiencies of scale. Fabs require an increasing amount of cleanroom space per wafer over time to accommodate the more sophisticated and larger tools needed for more advanced DRAM production. The cost of producing a wafer also depends on fixed costs of cleanroom and fab supporting infrastructure (e.g., site preparation, utilities, gas and chemical storage, warehouse and office space) and the average operating cost per wafer (e.g., cost of services, labor and workforce training, warehousing, upstream supplier service contracts). In general, co-locating more fabs and cleanroom spaces on a single site reduces both the fixed cost per wafer produced and the average operating cost per wafer.
14	03.27.25_USEPA	404(b)(1)	4	 **This question is related to Comments 2.b.iii and 2.c.v in EPA's July 30, 2024 letter:** As mentioned in EPA's March 14, 2025 email to Micron, the Civil Storm Drainage Plan for the site contains a significant acreage of unlabeled areas (see map above). As stated in EPA's CWA 404q letter and our March 14 email, unlabeled areas can only be considered options for impact minimization if there is no dedicated final use. Can you please provide a site plan with all project elements clearly labeled (see figure above)?	The following drawings provided in Addendum 1 show the need for building alignment, space allocation, and total site contraints: SMP_Micron Site - EPA Space Identification Links & Trestles_Building Configuration PMTA0-0005 SITE MASTER PLAN OVERALL SITE CONSTRAINTS Additionally, several conceptual views of truck-turning radius areas were included to show the relationship of buildings to one another.
15	03.27.25_USEPA	404(b)(1)	5	**This question related to Comments 2.c.i in EPA's July 30, 2024 letter:** As built grading plans were requested in EPA's July 30, 2024 letter. Can these detailed grading plans please be provided as soon as possible? To go along with grading plans, a detailed schedule of impacts should be submitted to highlight what impact minimization measures have been taken thus far and allow for analysis of additional minimization opportunities.	Grading Plans (PMTC0-0900-0920 Civil Grading Segments with Wetlands) will be included in the revised JPA Addendum 1. As requested, on-site wetlands, proposed retaining walls, stormwater infrastructure, and tile views will be included in the revised Plans.
16	03.27.25_USEPA	404(b)(1)	6	**This question is related to 2.c.ii in EPA's July 30, 2024 letter:** EPA requested that Micron provide maximum allowable distances for all project elements from proposed Fabs and other interrelated project elements. In Appendix M, Section 2.1.3.1, Micron states that specific material inputs and flow distances ultimately dictate site design as to minimize the total distance of material flow and maximize the use of space. However, these statements are general and do not report on specific distances for specific project elements. To add further uncertainty to what these distances may be, biological treatment facilities, bulk gas yards, and water and wastewater treatment facilities are in different locations when compared to the proposed full build out design figures included in the May 30, 2024 Public Notice. Can Micron please provide the most up to date available information regarding engineering constraints for the site which dictate maximum allowable distances for all project elements from proposed Fabs and other interrelated project elements, including necessary area to allow for vehicle access?	The following drawings provided in Addendum 1 show the need for building alignment, space allocation, and total site contraints: SMP_Micron Site - EPA Space Identification Links & Trestles_Building Configuration PMTA0-0005 SITE MASTER PLAN OVERALL SITE CONSTRAINTS Additionally, several conceptual views of truck-turning radius areas were included to show the relationship of buildings to one another. Finally, Table 1 of the 404(b)(1) document includes a summary of main project components, including the total building square footage per component.

17	03.27.25_USEPA	404(b)(1)	7	 **This question related to Comments 2.c.iii and 2.c.iv in EPA's July 30, 2024 letter:** Can a detailed explanation on the final use of all laydown areas (see highlighted map above), including reasoning for including construction/laydown area after project construction is completed, the potential to restore this area back to wetland, and/or the potential to use this area to relocate a section of the project to reduce wetland impacts elsewhere please be provided?	See 404(b)(1) response #4 from March 27, 2025 (Line 14 in the USEPA tab) and 404(b)(1) response #15 from March 27, 2025 (Line 18 in the USACE tab). The laydown area furthest to the south east corner of the site will be used for contruction of both FAB 3 and FAB 4. To accommodate construction and access, this area must both be disturbed and filled to provide proper elevation and stability for construction laydown and activity. It is anticipated that total construction time for the last two Fabs could extend up to 10 years. Therefore, it is not reasonable to assume that the impact of this area will be temporary. At the conclusion of Fab 4 construction the site will be set to final proposed grades to meet the existing contours of the site and allow for proper site drainage and stormwater control. Since there is limited open space on the reduced 1000 acre limit of disturbance area, this remaining "open" area in the southeast corner of the site will need to be utilized for ongoing maintainance and construction activity at the site. With a site including 4 Fabs and numerous associated buildings and utilities, it is likely that ongoing maintainance and construction activities will conitnue regularly at the site and this area will need to be reserved for any additional laydown, storage or construction office facilities. Such activity would not allow for building future wetlands. In addition, even if unused, it is unlikely that a viable wetland and connections could be maintained in this corner of the site.
18	03.27.25_USEPA	404(b)(1)	8	**This question related to Comments 2.c.vii in EPA's July 30, 2024 letter:** Additional information was requested on an unlabeled figure located in Appendix M, Section 3.2.2 Process Laydown Summary. The figure is still present in the JPA on page 41 but now depicts a rejected alternative layout of the project. Unless it provides some relevance to the current project proposal, can this figure please be removed from the project application?	Please disregard the unlabeled figure in Section 3.2.2 of Appendix M (page 41 of the 404(b)(1)).
19	03.27.25_USEPA	404(b)(1)	9	These questions relate to Comments 2.c.vii, 2.c.viii, and 2.c.x in EPA's July 30, 2024 letter:	
20	03.27.25_USEPA	404(b)(1)	9a	Appendix M, Section 2.1.3.3 provides a brief narrative description of the proposed rail spur site. As discussed in our March 20, 2025 meeting, can you please provide additional detail on the individual components of the rail spur site including their purpose during and post-construction and how their minimum practicable square footage was calculated? This information should contain the level of detail provided in Table 1 and be accompanied by a rail spur site plan with all individual components labeled.	See 404(b)(1) response #13 from March 27, 2025 (Line 16 in the USACE tab)
21	03.27.25_USEPA	404(b)(1)	9b	It is currently unclear what the ultimate use of the rail spur site is once the campus has been constructed and the project is completed. Can more detail on the use of the rail spur post project construction please be provided?	See 404(b)(1) response #13 from March 27, 2025 (Line 16 in the USACE tab). It will continue to be utilized as a Rail spur upon completion of construction to support operations.
22	03.27.25_USEPA	404(b)(1)	10	**This question related to Comments 2.c.viii in EPA's July 30, 2024 letter:** Can an explanation please be provided for why the proposed stormwater pond on the rail spur site cannot be located adjacent to the proposed stockpile in the northern portion of the site? EPA believes that it is preferable to avoid the portion of W-49 that has better hydrologic connectivity to large, avoided portions of W-49 (currently proposed as stormwater retention) than to create a hydrologically isolated wetland basin in the northern portion of the site with no connection to downstream waters and will function as primary stormwater treatment.	Standard design practice for draining rail tracks requires drainage of the rail beds to that Storm pond following natural SW flows. It is not practicable to move the pond to the north, against SW flow only to have it drain back to the south VIA stormwater infrastructure. Further explanation can be found in the Response to USACE Comment 404(b)(1) #13 (Line 16 in the USACE tab).
23	03.27.25_USEPA	404(b)(1)	11	**This question related to Comments 5.1, 5.ii, and 5.iii in EPA's July 30, 2024 letter:** Can an on-site wetland preservation plan please be provided? The full plan should be based on and discuss the analysis of site hydrology, including stormwater management and groundwater monitoring, to ensure that avoided wetland areas will still have sufficient hydrology to maintain wetland conditions. Figures from a proposed wetland preservation plan were screen shared during a previous meeting but there have not been any formal submissions. Conceptual plans are acceptable as a full plan is being developed.	This conceptual plan will be provided as part of the Wetland Assessment and Monitoring Plan, which will be submitted with Addendum 1 of the JPA in Appendix O.
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25	07.30.24_USEPA	404(q)	1a	EPA is concerned that the Micron Campus Site project as proposed, and in the absence of additional information, may result in substantial and unacceptable impacts to ARNIs as covered in Part IV, paragraph 3(a) of the 1992 CWA Section 404(q) Memorandum of Agreement (MOA) between the EPA and the Department of the Army. An ARNI is a resource-based threshold used in applying the Section 404(q) MOA to resolve issues regarding individual permit cases. Factors considered in identifying ARNIs include the economic importance of the aquatic resource to the protection, maintenance, or enhancement of the quality of the Nation's waters.	Micron has developed a detailed Project Description that includes the purpose and need for a four-fab facility located in Central New York. The Project Description details specific screening factors utilized for site selection, which are detailed in our response to comments in Section #2 Project Purpose and Alternatives Analysis below. In addition to a robust site selection process and alternatives analysis, Micron has developed a Compensatory Wetland/Stream Mitigation Plan (CWSMP) to address proposed permanent impacts to on-site streams and wetlands. Each of the mitigation parcels will include Site Protection Instruments that perpetually protect the resources pursuant to the USACE's Compensatory Mitigation for Losses of Aquatic Resources (USACE 2008). Mitigation properties will fully compensate for functions and services provided by existing aquatic resources on the proposed Micron Campus. Details on the proposed mitigation plan can be found in Appendix A to this JPA Addendum 1. Future impacts to on-site jurisdictional Waters of the United States (WOTUS) that are not affected by proposed development will be avoided and minimized to the extent practicable, as design advances.
26	07.30.24_USEPA	404(q)	1b	EPA is concerned that the project's proposed CWA Section 404 discharges may result in substantial and unacceptable impacts to riverine/floodplain wetlands and tributaries associated with Youngs Creek, Shaver Creek, the Oneida River, and the Oswego River, all of which are ARNIs whose resources fall within the Lake Ontario watershed. Wetland areas improve water quality and potentially reduce pollutants by filtering nutrients, processing organic material, and reducing sediment loads before discharging water to the jurisdictional waters and tributaries listed above and to Lake Ontario itself. Loss of these areas may affect water storage and the ability of the natural landscape to slow water momentum and erosive potential, reduce flood heights, and allow for groundwater recharge. In the process of collecting and storing runoff, the vegetation in floodplain wetlands acts as a natural filter to remove the excess nutrients accumulated by the water, which will likely be lost should the project move forward as proposed. Wetlands serve as an important wildlife corridor between habitats and reduce flooding and excessive siltation downstream. They are also some of the most biologically productive natural ecosystems in the world and the loss of these systems may cause loss of habitat for all species, including many threatened and endangered species.	Micron acknowledges that wetland areas improve water quality, impact a number of important aquatic physical and chemical properties, and provide essential habitat for wildlife. Micron is committed to protecting these vital resources and, in partnership with The Wetland Trust (TWT), has developed a CWSMP that will fully compensate for functions and services provided by existing aquatic resources impacted by the Proposed Project. The latest version of the CWSMP can be found in Appendix A to this JPA Addendum 1. Micron understands the importance of diverse habitat types and the plant and animal species currently present that may be impacted by the permanent impacts proposed on the Micron Site. Detailed information on the affected environment and environmental consequences is outlined in Chapter 3 of the Draft Environmental Impact Statement (DEIS). To mitigate for impacts to those affected environments, Micron has developed robust mitigation strategies that will fully compensate for proposed impacts on the Micron Site. These strategies include a CWSMP for wetland and stream losses, a Net Conservation Benefit Plan for habitat losses to protected upland birds, and a Biological Assessment (BA) for any potential impacts to protected species of Bats. The New York State Department of Environmental Conservation (NYSDEC) and United States Fish & Wildlife Service (USFWS) requested a hydraulic analysis to evaluate post-development hydrologic conditions within aquatic resources downstream of the Site. Micron has met with all interested local, state, and federal agencies to advance its analysis of onsite and offsite hydrology, including modeling of the upstream and downstream watershed impacts. As a result of these models, Micron developed a Surface Water/Groundwater Monitoring plan as well as a Schematic Stormwater Design Technical Memorandum that have been provided to the USEPA. Memorandum that detail potential downstream impacts from the Micron Project. Stormwater management facilities are being designed in accordance with the New York State Stormwater Management Design Manual (Stormwater Manual; NYSDEC 2024) which includes management of the Water Quality Volume, the Water Quantity Volume, the Runoff Reduction Volume, and Green Infrastructure Planning. As work and construction phases progress, these plans will ensure there will be no significant impacts to resources downstream.
27	07.30.24_USEPA	404(q)	1c	The importance of wetlands in controlling nonpoint source pollution in Lake Ontario and the protection, maintenance, or enhancement of the quality of its waters is recognized by the EPA and other U.S. Federal Agencies as well as internationally by the Government of Canada. The Governments of the U.S. and Canada articulated the importance of wetland functions within the Lake Ontario watershed in the 2012 Great Lakes Water Quality Agreement (GLWQA) signed by then-EPA Administrator Lisa Jackson and the Canadian Environment Minister Peter Kent on Sept. 7, 2012.4 Importantly, General Objective #5 of the GLWQA states that the U.S. and Canada will work to "support healthy and productive wetlands and other habitats to sustain resilient populations of native species." Additionally, the Lake Ontario Lake wide Action and Management Plan 2018-2022 (LAMP) outlines collective actions for partnership agencies to address current threats to Lake Ontario. The LAMP calls on partnership agencies to protect, improve, and monitor Lake Ontario coastal and watershed wetlands to support fish and wildlife diversity and habitat through a variety of initiatives, including wetland protection through land use policy and land conservation incentives to landowners."	Micron acknowledges the important role wetlands play in controlling nonpoint source pollution in Lake Ontario. Micron is committed to improving the water quality of Lake Ontario, by way of the Oneida River watershed (10-digit HUC 0414020209), by establishing permanently protected wetland and wetland/stream complex mitigation sites on lands that are primarily agricultural in nature. Agricultural sites are well known contributors of excess sediment, nutrients (e.g., phosphorus, nitrogen), and other contaminants (e.g., E. coli bacteria) to downstream resources, which would include the Oneida River, Oswego River, and subsequently Lake Ontario. The CWSMP, developed in conjunction with TWT, details the proposed work areas and how these agricultural properties will be transformed into beneficial wetland and wetland/stream complexes. The mitigation properties will total over 1,400 acres and will also include buffer habitat vital to the protection of upland species such as the Northern Harrier and Indiana Bat. The latest version of the CWSMP can be found in in Appendix A to this JPA Addendum 1. As directed in the LAMP, Micron intends to extend its engagement to other initiatives supporting the larger Lake Ontario watershed, such as the 9 Element Plan for the Oneida Lake Watershed. Nonpoint source pollution associated with any construction and development activity on the Micron main site will be fully managed by Micron's stormwater plans and supporting documents as set forth in Response 1b above.
28	07.30.24_USEPA	404(q)	1d	Every five years, EPA and its federal partners develop a Great Lakes Restoration Initiative (GLRI) Action Plan to guide restoration and protection of the Great Lakes ecosystems and accelerate progress towards long term goals. Nonpoint source pollution control is a Focus Area of the Draft GLRI Action Plan IV. The value of riparian and floodplain wetlands is specifically recognized in Action Plan IV as Objective 3.2 of the Nonpoint Source Pollution Focus Area that specifically calls for reduction or prevention of stormwater runoff to improve and sustain water quality. One of the metrics used to measure progress towards this objective is Measure 3.2.3, which calls for quantification of acres of riparian buffers, wetlands, and floodplains restored or reconnected. The value of wetlands associated with maintaining and promoting healthy habitats and species populations is also recognized in GLRI Action Plan III. Objective 4.1 calls for the protection and restoration of native aquatic and terrestrial species important to the Great Lakes. Action Plan III specifically identifies the restoration of riparian habitat corridors and riverine wetlands as example projects to accomplish this goal.	Micron acknowledges and respects the Great Lakes Restoration Initiatives and is committed to the protection of the Great Lakes ecosystems. As mentioned in Micron Response to Comment #1b above, Micron has developed a Schematic Stormwater Design Technical Memorandum that details potential downstream impacts from the Micron Project using hydraulic modeling. The hydrologic and hydraulic (H&H) modeling that has been performed as part of the stormwater design includes evaluation of existing and post-development drainage patterns related to the proposed 1,400± acre Micron Site (including its associated watershed) and will demonstrate how pre-and post-construction rates and volumes will be maintained within remaining jurisdictional Waters of the United States (WOTUS). Micron will continue to finalize a surface water and ground water monitoring plan in coordination with Agencies to minimize impacts to resources downstream as work and phases progress. Additionally, as detailed in response to Section #4 Compensatory Mitigation below, Micron is committed to the creation of over 1,400 acres of riparian buffers, wetlands, floodplains, and over 15,000 linear feet of stream, all of which will fall within the Oneida River Watershed. These mitigation sites will provide vital habitat for native aquatic and terrestrial species as well as habitat corridors for a variety of wildlife. Please see the revised Compensatory Stream and Wetland Mitigation Plan for more on the GLRI in relation to this project.

29	07.30.24_USEPA	404(q)	1e	The role wetlands in the Lake Ontario watershed play in improving and maintaining water quality has immense economic importance in New York State. Lake Ontario is the 14th largest lake in the world; it is a deep, cold-water ecosystem that supports lake trout and whitefish. Thriving sport fisheries exist for a variety of species in Lake Ontario and its embayments and tributaries, including six trout and salmon species, Walleye (Sander vitreus), Yellow Perch (Perea flavescens), and Smallmouth Bass (Micropterus dolomieu). Offshore angling in the central and western parts of the Lake is largely focused on salmon and trout species, while angling in the eastern areas of the Lake target Walleye, Smallmouth Bass, and Lake Trout (Salvelinus namaycush). The sport fisheries generate millions of dollars annually for local, state, and provincial economies. In the United States in 2017, the value of the sport fishery activity was over US $2 billion (when direct, indirect, and induced economic effects are included) supporting over 10,000 jobs in New York State. Lake Ontario, Lake Ontario tributaries, and the St. Lawrence River accounted for 15% (3.026 million) of all New York State angler days (19.899 million).	Micron values the role that wetlands play in protecting water quality within the Lake Ontario watershed as well as the importance of water quality to not only support healthy sport and other fisheries resources, but also the wildlife and people that live in the watershed. Although the wetland and wetland/stream complexes that will be created on the various mitigation properties will be unlikely to directly support large populations of sportfish, or provide additional sport fishing opportunities, the chemical and physical aquatic services and habitat created will positively contribute to the overall health of the watershed which will indirectly support the sport fishing opportunities of the Oneida River, Oswego River, and Lake Ontario.
30	07.30.24_USEPA	404(q)	1f	In 2009 a binational group co-chaired by EPA and Environment Canada developed and published 'The Beautiful Lake: A Binational Biodiversity Conservation Strategy for Lake Ontario." The Strategy was developed through a two-year process that involved more than 150 Canadian and U.S. government, academic and non-governmental organization biodiversity experts. In April 2011 the GLWQA Lake Ontario Management Committee formally adopted the 2009 Strategy, thereby implementing a Lake Ontario Lakewide Management Plan Biodiversity Conservation Strategy. This document continuously highlights the importance of freshwater wetlands contained in the watershed upon Lake Ontario biodiversity and water quality. To restore the quality of nearshore waters through nonpoint source pollution control, the document calls for the promotion of soil erosion control, riparian buffer planting and conservation actions along streams, coastal zones and wetlands.	Please see Micron Response to Comment #1c in Row 28 above.
31	07.30.24_USEPA	404(q)	1g	Finally, the Oswego River delivers the second largest total tributary phosphorus load in New York State to Lake Ontario. Loss of wetland area in the Oswego River basin may affect water quality and the aquatic ecosystem of the Lake. Specifically, within the Oswego River watershed, the value of wetlands has been recognized as anthropogenic land use changes such as urbanization have had measurable effects on aquatic species assemblages. Wetland restoration has been highlighted as being particularly important for many fish communities in response to urbanization in the watershed. The Oneida River, a large tributary of the Oswego River, is listed by the New York State Department of Environmental Conservation as supporting walleye, tiger musky, northern pike, largemouth bass, smallmouth bass, black crappie, white crappie, yellow perch, pumpkinseed sunfish, bluegill, white perch, brown bullhead, channel catfish, common carp, freshwater drum, bowfin, round goby and gizzard shad populations. Protection of wetlands and tributaries within these watersheds, including Youngs Creek and Shaver Creek, is essential to continued support of healthy fish populations in these waters and limiting nutrient inputs to Lake Ontario.	Please see Micron Response to Comment #1c in Row 28 above.
32	07.30.24_USEPA	404(q)	2	According to the CWA Section 404(b)(1) Guidelines (Guidelines), only the least environmentally damaging practicable alternative (LEDPA) may be permitted (40 C.F.R.§ 230.10 (a)). To identify the LEDPA, a full range of practicable alternatives must be considered. The Guidelines clearly state that upland alternatives are presumed to be available for non-water dependent activities that do not involve the use of the aquatic ecosystem, including jurisdictional wetlands. EPA appreciates the efforts undertaken to assess and reduce the footprint of the project. However, the alternatives analysis lacked detailed evaluation of practicable off-site alternatives, on-site implementation, and/or design methods that were considered or have been incorporated into the project to further avoid and minimize the full range of impacts, including water quality and ecosystem impacts. Additionally, in accordance with Section 1502.14 of the National Environmental Policy Act (NEPA), agencies shall rigorously explore and objectively evaluate reasonable alternatives and identify the environmentally preferable alternative or alternatives amongst the alternatives considered in the environmental impact statement. The environmentally preferable alternative will maximize environmental benefits or cause the least damage to the biological and physical environment. The environmentally preferable alternative may be the proposed action, the no action alternative, or a reasonable alternative.	The Proposed Project's purpose and need centers around two key goals; one, access to safe, secure, and domestically produced chips and, two, strengthening the U.S. economy as well as that of New York State and Onondaga County by supporting high-tech job creation. Currently, Micron is the sole memory manufacturer producing DRAM in the United States, contributing less than 1% to the global DRAM manufacturing capacity. This is insufficient to meet the United States's economic and national security needs of 11% of the global market. Consistent with the policy goals of the CHIPS Act, the Proposed Project aims to boost domestic DRAM manufacturing to 12% of global capacity, fulfilling these critical needs. A minimum of 1000 acres of contiguous land is essential to accommodate the necessary manufacturing buildings and ancillary structures. This land requirement ensures that all facility components can be efficiently integrated and operated on a single campus. The scale and efficiencies required of this project are essential to DRAM manufacturing, which is highly competitive. Micron developed a set of site selection criteria that considered minimum parcel size, utility and energy availability, transportation accessibility, workforce development, time-to-market (permitting and approvability), climate-related risks, place enhancement (livability, advanced manufacturing ecosystem (including supply chain), and availability of incentives (among various other technical and socioeconomical factors). These criteria are critical for construction and operation of a semiconductor manufacturing facility that will meet Micron's production goals. The Site Selection Criteria is explained further in Chapter 2 of the preliminary DEIS, which will be made available to the agency. Of the sites identified by New York State as available for semiconductor manufacturing, the White Pines Commerce Park (WPCP) is the only site which meets Micron's site selection criteria. It is currently available for purchase, has land available of adequate size and shape to allow for the necessary construction footprint, can provide the necessary utilities, particularly the substantial requirement for renewable energy, transportation access and airport proximity, and provides access to available skilled labor to support a large semiconductor manufacturing facility. Additionally, on-site implementation options and alternative design methods were considered. A comprehensive evaluation of various site layout alternatives at the WPCP was undertaken to determine if there were options which reduced the overall area of disturbance as well as reduce energy consumption needed for moving gasses, chemicals, and other materials from support buildings to the fabs. Seven site configuration alternatives, including the preferred site configuration alternative, were considered and are detailed in Appendix B of Chapter 2 of the DEIS. The comparison of the overall area of disturbance shows minor differences between the seven site configuration alternatives. All of these being relatively equal, Micron examined the manufacturing considerations to select the best optimal site layout option. As detailed in Chapter 2 of the DEIS, six of the seven alternative layouts did not meet critical project requirements and would have reduced manufacturing efficiency Prior to final site selection, Micron conducted a separate, detailed analysis of alternative site locations in the State of New York. Each available site was evaluated against Micron's site selection criteria detailed in the DEIS. Of the fifteen available alternative parcels, only two met the parcel size criteria; however, neither site was in a New York State Energy Load Zone with adequate energy supply to meet the energy demand requirements and were therefore, not suitable for the project.
33	07.30.24_USEPA	404(q)	2a	The project purpose listed in JPA Appendix H Section 2.1.1 is "to construct and operate four state-of-the-art, advanced semiconductor fabrication facilities ("Fabs"), on a single, unified site in New York State to efficiently meet market demands and ensure competitiveness in the worldwide semiconductor market." The project purpose is critical to the subsequent alternatives analysis required by the Guidelines. From the information provided, the number of Fabs proposed plays a large role in determining the overall acreage necessary for full project build out. In JPA Appendix H, Section 3.3.2, the applicant offers justification for the proposal to develop no less than four Fabs on any proposed site. The applicant cites industry trends seeking to cluster multiple Fabs on a single site to achieve economies of scale and managerial and economic advantages. The applicant also cites the speculative costs of developing multiple sites for the purpose of semiconductor fabrication.	The preliminary DEIS and the revised JPA will state that the purpose of the Proposed Project is to create an economically viable supply of DRAM chips which can only be achieved by producing a certain number of wafers per week at one location to ensure economies of scale. With a goal of producing 52,000 wafers per week (on average over the life of the project), the only cost competitive way to produce that number of wafers per week is through the construction of 4 large fabs at a single location. We do not believe that this purpose is overly restrictive because were Micron to reduce the number of fab units, the production volume would decline, and the project would not be cost competitive with business peers and the manufacturing ecosystem would not be self-sustaining. Notwithstanding the appropriately stated project purpose, a reduced scale manufacturing alternative that would involve construction and operation of two fab units with 1.2 million square feet of cleanroom space is considered in the preliminary DEIS. The preliminary DEIS dismisses the reduced scale manufacturing alternative due to the absence of a second site in New York that could accommodate even two Fabs while meeting Micron's site selection criteria discussed above. Thus, because a reduced scale manufacturing alternative at WPCP would not facilitate Micron's manufacturing goals the preliminary DEIS concludes that it is not consistent with the project purpose and need nor the goals of the CHIPs Act. The Reduced Scale Alternative also does not meet the federal, state and local goal of optimizing high-tech advanced manufacturing nor the state and local purpose focused on establishing New York, including Onondaga County, as a leader in the domestic reshoring of semiconductor manufacturing and transforming the Onondaga County economy through new high-paying jobs, significant financial investment, and increased economic activity. Additional information on reduced scale manufacturing alternatives considered can be found in Chapter 2, Section 2.2.2 of the preliminary DEIS.
34	07.30.24_USEPA	404(q)	2b(i)	The Guidelines state that an alternative is practicable if it is available and capable of being done after taking into account the cost, existing technology, and logistics considering overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed to fulfill the basic purpose of the proposed activity may be considered. Currently, the applicant has not fully described or compared the environmental impacts, including potential impacts to waters of the United States, of pursuing an alternative site listed in JPA Appendix H. Additionally, the applicant has only considered, as described in JPA Appendix H, Section 3.1, undeveloped "greenfield" locations and has not considered any previously developed properties or brownfield lands. Finally, the applicant currently has federal funding for only Phase 1 of the project. It is unclear if additional funds will be secured to pursue Phase 2 and how this will affect the pursuit of Phase 2 development. With all of this taken into consideration, it is currently unclear if utilizing multiple sites or if building fewer than four Fabs on an alternative site will affect project viability. EPA recommends the applicant provide additional information on previously developed and brownfield sites that have been considered, the current availability of all alternative sites, anticipated environmental impacts associated with each site considered, costs associated with each alternative considered, and the process for securing and associated need for federal funding for the proposed Phase 2. Additional detail is also needed on the practicability of constructing and operating three Fabs as opposed to only considering two or four.	Please see Micron Response to Comment #2a above for details on reduced scale manufacturing alternatives considered and Micron Response to Comment #2 for Site Selection Criteria. Section 2.2.1 of the current 404(b)(1) document, revised June 7, 2024, includes a summary of the infrastructure needs for the project. As noted in Section 2.3 Basis of Selected Site 404(b)(1) document access to substantial electric and water capacity are essential criteria for the project. As set forth in the document, the White Pine site meets the basic capacity needs for the various utilities needed to support the development including electric and water. Alternate locations that were considered lacked one or more of the base utilities to support development, such as substations, wastewater treatment facilities, water supply sources and infrastructure. Meeting these basic utilities capacity needs is critical to site selection. Additionally, no alternate location was identified in New York State (including Brownfield sites) that had sufficient acreage under unified control in a configuration that would accommodate even two Fabs, let alone the preferred 4 Fab alternative sought by Micron. These needs are further discussed in Micron Response to Comment 2 as well as further and more detailed description in the Site Selection Criteria in Table 2.21 in Chapter 2 and B-3 pf Appendix B of the DEIS.

35	07.30.24_USEPA	404(q)	2b(ii)	The applicant lists the "sufficient parcel size" criterion for the purpose of site selection as "1,400+ acres." In the JPA, the total size of the preferred site, White Pine Commerce Park, is listed as 1,400 acres. It is well documented in the JPA that 221.7 acres of federally jurisdictional wetlands on the 1,400-acre preferred site are proposed to remain undeveloped to minimize project impacts. On project figures, there are other areas not proposed for development, including but not limited to: required local setbacks; the entirety of the high voltage power easement; the northeastern-most corner of the site which includes substantial upland areas intermixed with wetlands; upland that is not included in Phase 1A Laydown Area in the southwest corner of the site situated between Caughdenoy Road to the west, Parking 1 and Parking 2 to the north, and New York State Highway 31 to the south; upland north of New York State Highway 31, east of Phase 1A Laydown Area, and west of Phase 2A Laydown Area; and the northern portion of the rail spur site not proposed for development. The total acreage of areas that are proposed to remain undeveloped is currently unknown. For this reason, it is inaccurate to list 1,400+ acres, the total size of the preferred site, as the necessary acreage for project development when, from the information provided, hundreds of acres are to remain undeveloped. EPA recommends that the applicant revisit the sufficient parcel size in JPA Appendix H Section 3 to reflect only the total minimum acreage necessary to be developed and actively used for laydown, staging, and construction areas as areas left undeveloped should not be included in the sufficient parcel size. The alternatives analysis should be revised to reflect how alternative sites considered meet or do not meet this requirement. Without this information, the selected site cannot be supported as the LEDPA.	Sufficient parcel size for this application has been revised to 1000-acre minimum, rather than 1,400 plus acres. Parcel size is essential to accommodate the necessary size of the manufacturing buildings, maintaining adequate spacing between the buildings, space needed for supporting utilities, and ancillary structures. The revised acreage minimum ensures that all facility components can be efficiently integrated and operated on a single campus reducing the need for multiple utility or other site connections. The contiguous nature of the land also allows for a seamless build out of each Fab and significant operational efficiency reducing product transportation time between different parts of the facility and facilitating easier management and oversight. The scale and efficiencies required of this project are essential to DRAM manufacturing. A detailed analysis of alternative site locations in the State of New York was performed where each available site was evaluated against Micron's site selection criteria.1 All available sites meeting a minimum size of 500 acres in the State of New York were reviewed to determine if they met Micron's site selection criteria. Throughout the review, the most influential criteria were parcel-size and shape, sufficient to accommodate a large contiguous site footprint. Of the fifteen available alternative sites, only two met the 1000-acre minimum site acreage criteria. Of the two remaining sites, neither site was located in a New York State Energy Load Zone with adequate energy supply to meet the energy demand requirements. The review of each of the fifteen alternative sites considered is detailed in Appendix B of Chapter 2 of the preliminary DEIS.
36	07.30.24_USEPA	404(q)	2b(iii)	In the PN, proposed central utility building size for each set of two Fabs is listed as 360,000 square foot (sf) JPA Appendix H, Section 3.2.1, describes each set of two Fabs as being supported by 470,000 sf of central utility building space. Due to this discrepancy, it is currently unclear what the actual area of required central utility building space is. Additionally, required square footage of other project elements, including but not limited to cleanroom space, cleanroom support space, administrative space, warehouse space, and product testing space, are listed; however, the applicant has provided no justification for these space requirements. EPA recommends the applicant provide additional information on the area requirements and minimum practicable square footage of all proposed project elements.	Additional information on the area requirements and minimum practicable square footage of all proposed project elements are provided in Table 4 of the JPA Addendum 1 Narrative.
37	07.30.24_USEPA	404(q)	2c(i)	To date, the applicant has not submitted any as-built grading plans for any of the project elements proposed in the subject PN. Without this information, it is impossible to determine the actual geographic extent of proposed direct and indirect impacts, as well as opportunities for impact minimization. To identify the LEDPA, EPA recommends the applicant provide as-built grading plans as soon as possible.	Grading Plans ((PMTC0-0900-0920 Civil Grading Segments with Wetlands) have been provided as well as a more robust, up to date list of figures for the project within this JPA Addendum 1. Micron has provided a figure showing temporary vs. permanent impacts to wetlands within the National Grid Duct Bank.
38	07.30.24_USEPA	404(q)	2c(ii)	JPA Appendix H states that wastewater treatment plants (WWTPs) "cannot be located far from their respective fabs." They are also described as needing to be "reasonably close" to the wastewater pump house. The JPA states that "moving these buildings from (desired) locations will cause long term inefficiencies for operations of the Fabs." It is currently unclear what subjective terms such as "far" and "reasonably close" mean in relation to maximum allowable distances from respective Fabs or other interrelated project elements. The applicant also states that the clustered Fab design requires accessory elements resulting in a dense layout. It is unclear if reducing the density of project elements will result in further opportunities for impact minimization. EPA recommends the applicant provide maximum allowable distances for all project elements from proposed Fabs and other interrelated project elements. This includes but is not limited to: WWTPs, pump houses, bio buildings, bulk gas yard, electrical yard, central utilities building, hazardous process materials, industrial water tanks, administrative/probe and office buildings, and parking lots. Narrative justification for the maximum distance should be included for each project element. If a project element does not have a maximum distance requirement to any other project elements, it can be reasonably assumed that practicable alternatives that do not involve special aquatic sites are available. This includes siting in uplands on-site or exploration of additional off-site locations.	Offsite locations were explored and ultimately determined to be not available to accommodate the appropriate size and engineering requirements of these facilities in relation to both Micron's onsite required processing and proximity to the County Industrial WWTP Facility. The current location of the Pump House and Bio Buildings provides the most feasible alternative, which includes the shortest distance to maintain conveyance to and from the Oak Orchard campus, applicable security and appropriate accessibility for maintenance and responsiveness. Additionally, if the Pump House and Bio Buildings were situated further south, there would be a conflict with other main utilities. Recognizing the importance of exploring opportunities to avoid and minimize impacts to WOTUS, Micron will continue to assess potential modifications to the wastewater treatment facilities as detailed design progresses. This may include reduction in size or modification of layout to avoid or minimize impacts. For additional response please see response to Comment #1 from March 27, 2025 (Line 4 in the USACE tab)
39	07.30.24_USEPA	404(q)	2c(iii)	Figure 4 of JPA Appendix H, the proposed full build-out design, depicts the Future Construction Compound for use in Phases 1A-2B in purple. From the information provided, it is unclear what the use of the construction compound is upon completion of Phase 2B. It is also unclear what factors are necessary or were considered for the 133-acre listed size of this area. EPA recommends including additional information on the individual elements and sizing of this area. Additionally, EPA recommends that the applicant provide information regarding the desired use of this area post-construction. If this area is unrelated to the project purpose of semiconductor manufacturing, EPA recommends the applicant explore opportunities for wetland restoration in this area.	The construction laydown area noted will be utilized for Phase 2B of the Micron Campus which supports construction of Fab 4 and its ancillary buildings. It should be noted that this acreage is being recalculated due to recent Site Master Plan revisions. The new laydown calculations, as well as impacts by phase will be provided in the 404(b)(1) Analysisand is included in Appendix B-3 of Chapter 2 of the preliminary DEIS. Micron is currently not considering this area for wetland restoration as it cannot be restored for at least 20 years. Therefore, all impacts to streams and wetlands in this area have been accounted for as permanent impacts due to the intensity and duration of construction in this area. Construction and laydown will require substantial fill and compaction. Once the construction of all Fabs is complete, the area will be stabilized to final site design, which has not been determined. Micron has included impacts in these areas in its CWSMP. Clear timing of when phased construction impacts will occur will be explained in the second JPA submission. It should be noted that full mitigation will begin immediately upon receipt of permit and be completed well in advance of the later phase impacts. These include the main wetland complex east of Burnet Road. This will result in a net temporal gain in WOTUS values and services.
40	07.30.24_USEPA	404(q)	2c(iv)	JPA Appendix H, Section 3.3 states that in addition to the 113-acre construction compound, 190 acres of staging layout space is necessary to facilitate construction. JPA Appendix H, Section 3.2.1 says that areas that appear as undeveloped space for the initial construction phase are committed to material staging and laydown areas (and ultimately build-out) in the subsequent phase. EPA recommends that the applicant provide additional detailed information on the proposed use of the 190-acres of staging layout space. Without this information it is unclear if the proposed design represents the LEDPA or if there are additional opportunities for impact minimization on-site.	Recognizing the importance of exploring opportunities to avoid and minimize impacts to WOTUS, Micron will continue to assess potential modifications to the wastewater treatment facilities as detailed design progresses. This may include reduction in size or modification of layout to avoid or minimize impacts. Table B-3-2 in Appendix B of Chapter 2 of the DEIS includes additional details on the location and size of these facilities and a summary of additional alternatives considered. Please see Micron Response to Comment #2c(iii)
41	07.30.24_USEPA	404(q)	2c(v)	JPA Appendix H, Section 3.3.1 reiterates the applicant's statement from Section 3.2.1 that what might appear as an open area during Phase 1 is committed to the construction and operational requirements of Phase 2. Substantial portions of the site are depicted as laydown areas and the construction compound in Figures 1 through 4 of JPA Appendix H. However, it is unclear if the following areas, which remain unmarked on all project figures, represent opportunities for impact minimization: the northeastern-most corner of the site which includes substantial upland areas intermixed with wetlands; upland that is not included in Phase 1A Laydown Area in the southwest corner of the site situated between Caughdenoy Road to the west, Parking 1 and Parking 2 to the north, and New York State Highway 31 to the south; upland north of New York State Highway 31, east of Phase 1A Laydown Area, and west of Phase 2A Laydown Area; and the northern portion of the rail spur site. If these areas are committed to construction and operational requirements, EPA recommends these areas be mapped on Figures 1 through 4 of the JPA Appendix H. Without this information, uplands in these areas should be considered for impact minimization.	Since the submission of the JPA Appendix H, as referenced, Micron has undertaken further efforts to avoid and minimize impacts to wetlands where feasible. Micron has undertaken the addition of parking structures to limit surface parking as well as any available adjustments to the Limits of Disturbance. Additionally, Micron has advanced a revised Site Master Plan to show clear uses for areas described and the impacts associated with those areas. Detailed construction phase drawings will be provided in the 404(b)(1) Analysis (Appendix M of the Joint Permit Application (JPA) - Final version submitted January 31, 2025) and is included in Appendix B-3 of Chapter 2 of the DEIS.
42	07.30.24_USEPA	404(q)	2c(vi)	Elements of the Phase 2A Laydown Area are depicted in green on Figures 1 through 4 of the JPA. Wetland impacts, including forested wetland impacts, are associated with the Phase 2A Laydown Area. From the information provided, it is unclear why wetland impacts associated with the Phase 2A Laydown Area are proposed to occur before the construction of Phase 2A and why those impact areas are listed as permanent impacts that cannot be restored on-site and in-kind at the conclusion of Phase 2A construction. EPA recommends that the applicant provide additional information on the Phase 2A Laydown Area.	The darker green areas noted in Figures 1 through 4 of Appendix H of the Revised JPA application (April 25, 2024) were used to depict the locations of final site stormwater management areas that will be planted and used for the control of stormwater runoff from the Micron Campus, pursuant to the New York State Stormwater Design Manual (NYSDEC 2024). Micron submitted updated drawings as part of a Stormwater Management PLan that show clear site phasing in the revised 404(b)(1) Analysis (Appendix M of the January 31, 2025 JPA - Final. For additional details on the stormwater management features to be implemented on the Micron Campus including dry swales, planters, wet extended detention ponds, and filtration bioretention areas, please review, Figure 3-6 of the Stormwater Schematic Design Technical Memorandum that was provided for USEPA review on October 7th, 2024.
43	07.30.24_USEPA	404(q)	2c(vii)	JPA Appendix H, Section 3.2.2 Process Layout Summary, contains a figure on page 35 which visually depicts the location of elements of the preferred design that are not depicted in other figures. The figure is not labeled or referenced anywhere in the text of this section. Additionally, it does not contain a legend yet contains areas marked in blue and red that cannot be identified. It is unclear what the areas marked in blue and red are supposed to represent. The area marked in red and some areas marked in blue fall outside the limit of disturbance depicted in all other project figures. EPA recommends additional information on this figure be provided to determine its relevancy to the preferred design.	Micron has worked hard to ensure the inclusion of an updated Manufactuing Process description, Proposed Project Components, and Facility description with site selection and site layout alternatives analysis in Chapter 2 of the DEIS. This same description will be included in 404(b)(1) Analysis (Appendix M of the Joint Permit Application (JPA) - Final version submitted January 31, 2025.
44	07.30.24_USEPA	404(q)	2c(viii)	The rail spur is proposed to be constructed on Town of Clay tax parcel 046.- 02-03.2. The majority of delineated wetlands are concentrated on the southern side of the parcel. The majority of construction is also concentrated on the southern side of the parcel. It is currently unclear why upland areas are remaining undeveloped while non-water dependent project elements such as an office building, a temporary doublewide trailer, parking area, emergency stockpiling, a crane pad and runway, non-aggregate material storage, stormwater management, access roads, etc., are proposed in wetland areas. EPA recommends that the applicant provide additional information on why elements of the rail spur site cannot be constructed in upland areas.	The original design of the rail spur was intended to minimize impacts to neighboring properties, however after further design efforts, the proposed rail spur has been redesigned to avoid and minimize impacts to existing wetlands. By relocating the emergency storage area to the north of the site, Micron has reduced impacts to wetlands by approximately 5 acres. The remaining wetlands that will be impacted will be compensated for via the CWSMP. Updated site design for the Rail Spur was provided in the Joint Permit Application (JPA) - Final version submitted January 31, 2025. Further information as to why the Rail Spur site design must be configured for efficiency and operations is included in the Alternatives Carried Forward for Analysis in Chapter 2 of the preliminary DEIS.
45	07.30.24_USEPA	404(q)	2c(ix)	An approximately 112,000 cubic yard "emergency stockpile" of material is currently being proposed at the rail spur site. It is unclear what factors are driving the sizing of the proposed stockpile. Additionally, no grading plans have been provided for the project, so it is unclear what is underlying the proposed stockpile and what is the geographic extent of any proposed pad. EPA recommends the applicant provide additional information on the sizing of the stockpile and proposed grading under and around it.	As described in Chapter 2 of the preliminary DEIS, an estimated 112,000 CY stockpile area would be located internal to the Rail Spur Site which allows for railcar offloading activities to be maintained in the event of an unexpected equipment failure with the main aggregate conveyance system. Aggregate material would be trucked a short distance across Caughdenoy Road to the Micron Campus until main conveyance system operations are re-established. Micron would refer USEPA to Response to Comment #2c(viii) on Row 45.

46	07.30.24_USEPA	404(q)	2c(x)	The stated purpose of the rail spur is "to receive materials, supplies, and equipment during construction, to reduce truck traffic and related impacts to area roadways." It is currently unclear what the ultimate use of the rail spur site is once the campus has been constructed and the project is completed. EPA requests additional information on the intended use of the rail spur and stockpile location upon project completion. If areas are unrelated to the project purpose of semiconductor manufacturing at the completion of facility construction, EPA recommends the applicant explore opportunities for wetland restoration in this area.	Micron has since identified that a third-party owner operator will manage and ultimately determine what the rail spur is used for post-Micron construction needs. Micron's plans currently focus on utilizing the rail spur to support the delivery of aggregate fill and construction materials (e.g., rebar, precast items). Regarding reconfiguration of the site to minimize impacts to wetlands, Micron refers USEPA to our Response to Comment #2c(viii) on Row 45.
47	07.30.24_USEPA	404(q)	2c(xi)	From the information provided, it is unclear if the applicant has applied for setback variances from local authorities to develop/utilize upland areas of the site not currently proposed for development. EPA recommends the applicant pursue setback variances for all upland areas located in setback areas and not currently proposed for development, laydown, staging, or to support construction. The applicant should include information documenting application for setback variances, along with responses from local authorities, within the JPA. Without this information, the currently proposed design cannot be supported as the LEDPA	The revised application will include a discussion of applicable setbacks and evaluate the viability of seeking variances as a strategy to mitigate wetland impacts. If variances are determined to be warranted and practicable to achieve impact reductions, Micron will pursue them during the Site Plan Approval Application process with the Town of Clay. This approach ensures a thorough evaluation of options to minimize wetland impacts while aligning with regulatory requirements.
48	07.30.24_USEPA	404(q)	2c(xii)	The applicant's stated justification for including the rail spur in project designs is that it is intended to receive materials, supplies, and equipment during construction to reduce truck traffic and related impacts to area roadways. Wetlands on the rail spur site are forested swamp and are therefore presumed to be some of the highest value resources on the entire site. The applicant's justification for adding gas plants to the proposed project design is that while they create additional footprint, they result in a substantial reduction in truck trip generation volumes, reducing traffic impacts, road impacts, cost, and greenhouse gas emissions. From the information provided, it is currently unclear how the applicant is comparing valuation of environmental impacts and how wetland filling is considered environmentally preferable to greenhouse gas emissions generated from truck traffic and roadway impacts. EPA recommends the applicant provide more information on how the loss of wetlands and their associated functions in the context of the preferred design have been quantified and how they off-set greenhouse gas emissions and potential traffic impacts from truck traffic should individual project elements not be included in the current design.	The revised application will supplement the justification for the rail spur with a comparison of the avoided environmental impacts attributable to the rail spur and the wetland impacts. This information will also be included in the preliminary DEIS.
49	07.30.24_USEPA	404(q)	2c(xiii)	Since the PN was posted, jurisdictional wetlands have been found on the Family Care/Healthcare Center site. It is currently unclear what individual components of this project element are associated with proposed jurisdictional wetland impacts as no maps of jurisdictional wetlands have been provided, as well as no as-built plans. As this is a non-water dependent project element and is entirely unrelated to the basic project purpose of semiconductor chip fabrication, EPA recommends that impacts to jurisdictional wetlands be fully avoided. Project components currently proposed to be located in jurisdictional wetlands should be shifted and/or downsized to cause no impacts to jurisdictional wetlands.	The proposed site plan for Childcare/Health Center site has been modified to avoid delineated wetlands except the entry road crossing of the narrow wetland strip on the Childcare site's south end. Maximum wetland impact would be less than 0.1 acres (0.06 acres as currently designed) and as driveway design progresses, other solutions such as natural bottom culverts or other structures will be considered to further minimize impacts. As the Childcare/Health Center design advances, additional consideration will be given to further minimize impacts.
50	07.30.24_USEPA	404(q)	3(i)	EPA is concerned with the applicant's use of the USACE Highway Methodology Workbook Supplement as it is a purely descriptive method since it does not call for the collection of any quantifiable data in the field. The methodology's introduction states that it offers an approach that includes only a qualitative description of the physical characteristics of the wetlands and the bases for the conclusions rely on "best professional judgement." EPA questions the adequacy of using this methodology in a regulatory context as the USACE New England District, in collaboration with EPA, is developing a quantitative wetland functional assessment method to replace its 20-year-old qualitative "descriptive" method for use in its regulatory program. Due to its lack of objectivity, EPA finds the USACE Highway Methodology Workbook Supplement to be useful for high level analysis but not an adequate tool for site-specific functional analyses. Through conversations with the applicant, EPA is aware than Micron has collected quantitative data in the field associated with existing wetlands on the Micron Campus Site. EPA recommends that the applicant provide any quantitative data collected in the field associated with existing functional assessment efforts that provides a measurable assessment which can be relied upon to further direct avoidance and minimization of impacts to any high-quality aquatic resources. Metrics assessed and data collected may include but are not limited to hydrologic alteration and stressors, hydroperiod, water source, maximum water depth, depth to water table or saturation, soil type, substrate disturbance, soil horizon depths and profile descriptions, microtopography, plant species diversity, plant community assemblages, extent of invasive species, dominant vegetation, vegetation alteration, surrounding land use cover, extent and/or vegetative type of buffer, extent of human land use in buffer, etc.	A Compensatory Wetland/Stream Mitigation Plan (CSWMP) for proposed impacts to existing on-site wetlands has been submitted pursuant to the USACE's Final Compensatory Mitigation Rule for Losses of Aquatic Resources (40 CFR Part 332) and as required by Section 404 of the Clean Water Act. This CSWMP identifies how a) there will be no net loss in wetlands due to the completion of the mitigation plan and b) the values and services provided to the Oneida River Watershed have been quantified using The Highway Methodology Workbook Supplement; Wetlands Functions and Values, a Descriptive Approach (USACE 1999) consistent with the following excerpt from the Final Mitigation Rule: (f) Amount of compensatory mitigation. (1) If the district engineer determines that compensatory mitigation is necessary to offset unavoidable impacts to aquatic resources, the amount of required compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions. In cases where appropriate functional or condition assessment methods or other suitable metrics are available, these methods should be used where practicable to determine how much compensatory mitigation is required. If a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used. As stated in the Highway Methodology Supplement, this assessment tool "can be used for any project where the characterization of wetland resources is necessary for Section 404 permit requirements." Consistent with this statement, this methodology has been used and approved under the Clean Water Act by the USACE and NYSDEC for a wide range of projects since its publication, including the Marcy Nanocenter project that consisted of significant impact to, and mitigation of, aquatic resources for the purpose of microchip fabrication development. The proposed CSWMP submitted by Micron on September 20, 2024 provides for 352 acres of wetland creation to offset 200 acres of wetland fill and restoration of 13,574 linear feet of stream to offset impacts to 6,714 linear feet of stream. A summary of the functions and values of each wetland/cover type along with other wetland functions supporting information, including delineation data, photo logs, soil surveys, and topography will be submitted for review separately and before the submission of the upcoming JPA.
51	07.30.24_USEPA	404(q)	3(ii)	A quantitative functional assessment would also be helpful to ascertain appropriate compensatory mitigation. EPA recognizes that an approved functional assessment methodology for New York State currently does not exist. EPA recommends the applicant engage in conversations with NYSDEC, the New York Natural Heritage Program, and USACE Buffalo District to determine what nationwide or regional assessment methods using field collected data in the applicant's possession may apply, including but not limited to the New York State Wetland Condition Level 2 Rapid Assessment Method Version 4.2, and the Northeast Regional Floristic Quality Assessment.	In addition to the justification outlined above, Micron did not change the functional evaluation protocol based on the following. Additionally, Micron would note that a comprehensive wetlands and stream mitigation plan has been submitted that specifies the wetland functions that will be created as part of the mitigation program and how those functions will be monitored to ensure compliance with agreed upon performance criteria. 1. This methodology was cited in the Wetland Delineation Report that was provided to the involved agencies in April 2023. While the USEPA voiced its general disproval of the Highway Methodology in May 2024, neither the USACE nor the NYSDEC have requested or required that an alternative methodology be employed to date. The lack of such a request after more than a year of consideration indicates that the Highway Methodology would continue to be reviewed in the context of Clean Water Act approval. 2. The Developing methods, cultivating engagement, and creating end-user tools for wetland functional assessment document that was published by the USEPA and NYNHP in 2022 and referenced by the USEPA and USFWS in their comment letter states: "Our primary goal in this project is to develop and pilot a wetland functional assessment protocol that addresses functions and values protected under the NYS Freshwater Wetlands Act." This statement informs potential users that the New York State Wetland Condition Assessment (NYRAM) tool is under development and not finalized. Use of this tool over a published methodology (i.e., Highway Methodology and New York State Riparian Opportunity Assessment) that has precedent for review and approval by the involved agencies was not considered. 3. The USEPA's concern over the "descriptive" and "qualitative" nature of the Highway Methodology based on its reliance on the subjective best professional judgement of the biologists who employ it is echoed in the Northeast Floristic Quality Assessment (FQA): "There have been criticisms of the method, including that the coefficients have inherent bias because they are subjectively assigned by a team of botanists, insufficiently validated, or too strongly influenced by rarity (see references in Matthews et al. 2015). But as Taft et al. (1997) stated at the outset of development of FQAs, "The FQA method, though subjective, permits dispassionate and repeatable application because its value judgments are predetermined." Further, similar to the NYRAM, use of this tool over a published methodology that has precedent for review and approval by the involved agencies was not considered. Neither the NYRAM nor the FQA are identified by the USACE or NYSDEC on their websites so were not considered for use in developing the CWSMP. *Answer continued below..*
				Continued answer from above	4. The following were identified as primary wetland values and services for existing site wetlands using the Highway Methodology: a. Wildlife habitat b. Floodflow alteration c. Sediment/toxicant retention Secondary values/services displayed within wetlands include: a. Groundwater Recharge/Discharge b. Endangered Species Habitat c. Fish and Shellfish Habitat d. Nutrient Removal e, Production Export f. Sediment/Shoreline Stabilization It is anticipated that utilization of one of the alternative suggested methodologies will identify the same primary and secondary values and services upon completion. Further, none of the methodologies discussed herein provides a mitigation ratio as an end result and each requires the use of subjectivity and best professional judgement to arrive at a recommended ratio. As stated in the previous response, a summary of the functions and values of each wetland/cover type will be submitted for review separately and before the submission of the upcoming JPA. Included in the submission were the following files; delineation reports and data, wetland functions and values data forms, a functions summary table, historical photographs, photo logs and figures, topography, and the soil survey data.

52	07.30.24_USEPA	404(q)	4(i)	After the LEDPA is identified and impacts to the aquatic ecosystem are fully assessed, the applicant should demonstrate that the proposed mitigation will adequately compensate for the impacted resources, including wetlands and streams. Based on information in the PN, no formal and complete mitigation plan had been developed at the time of publication. Once fully developed, the compensatory mitigation plan (CMP) should clearly detail how the mitigation proposal will offset the loss of the functions and services of the impacted resources. Any wetlands and stream mitigation plans submitted should be compliant with the 2008 Federal Mitigation Rule and include all elements required in 40 CFR§230.94(c)(1)-(14).	Since the initial Public Notice, Micron has developed a draft Compensatory Wetland/Stream Mitigation Plan (CWSMP). The CWSMP details the properties that have been acquired by The Wetland Trust (TWT), on behalf of Micron, to fully compensate for lost functions and values to wetlands and streams on the Micron Site. The total wetland and stream impacts on the Micron Site are likely to be 200 acres of wetlands and 6,714 linear feet of stream. The wetland/stream mitigation properties will total over 1,400 acres and will also include buffer habitat vital to the protection of grassland bird species such as the Northern Harrier (Circus cyaneus) and endangered species like the Indiana Bat (Myotis sodalis). The 1,400-acres of wetland/stream mitigation property acquired will be spread across five main sites; Oneida River, Caughdenoy Creek, Upper Caughdenoy Creek, Buxton Creek, and Sixmile-Fish Creek all within the 10-digit Oneida River watershed (HUC 0414020209). The total amount of wetlands and streams to be created as part of the mitigation work will be about 350 acres of wetlands and 13,500 linear feet of stream. In addition to created wetlands and streams, an additional 750 acres of existing upland and wetland will be permanently protected across those five sites. The wetlands and wetland/stream complexes created as part of the mitigation work will be monitored for a 10-year period, or until all success criteria outlined in the CWSMP are achieved. In addition to the permanent protection of upland areas included in the wetland/stream mitigation properties mentioned in the previous paragraph, a separate Net Conservation Benefit Plan has also been developed to compensate for permanent impacts to upland habitat on the Micron Site that may be utilized by protected species such as the Northern Harrier. Grasslands that will be protected and managed through the Net Conservation Benefit Plan will total over 950 acres on 7 sites across Central New York. Lastly, a Biological Assessment (BA) has been developed that will compensate for any potential impacts to protected species of Bats on the Micron Site by permanently preserving over 1,300-acres of bat habitat, including known maternity roosts and hibernaculum. In total, over 3,700 acres of mitigation properties will be acquired and permanently protected to compensate for impacts to natural resources within the 984-acre Limits of Disturbance on the Micron Site. The CWSMP was included as Appendix N to the January 31, 2025 JPA - Final application, and a revised draft of that document has been included as Appendix A to this JPA Addendum 1. The Net Conservation Benefit Plan was also included as an Appendix to the January 31, 2025 JPA application. The BA has been provided to the USEPA for review and is currently in the hands of the USFWS for review.
53	07.30.24_USEPA	404(q)	4(ii)	To ensure full compensation for lost functions, EPA recommends that any mitigation project be in place prior to the discharge of fill material. This would minimize temporal loss of wetland and stream functions within the Oneida River watershed. EPA believes that compensation should preferably occur within the same 12-digit HUC (041402020905) or, at a minimum, within the same 8-digit HUC (04140202) where impacts will occur.	Site preparation, grading, and planting of each mitigation site is anticipated to be completed concurrently with the construction of Phase 1 of the Micron Project. All mitigation site construction for the project is anticipated to be completed within 6 years of permit issuance. All properties occur within the same 10-digit Oneida River watershed HUC (0414020209) where impacts will occur. A construction sequence table displaying the timing of mitigation site activities has been provided in table 7-1 in the CWSMP. Additionally, the timing and sequence of mitigation work by site is outlined in Appendix B, Section 6.2.6 of the CWSMP.
54	07.30.24_USEPA	404(q)	4(iii)	Mitigation for any unavoidable impacts should be in-kind and have associated measurable performance standards to ensure that lost aquatic resource functions are adequately replaced. Specific, observable and measurable criteria should be included in the CMP so it is clear whether the project goals related to the chemical, physical, and biological functions of the aquatic resources to be mitigated have been met, or whether corrective actions are needed. The performance standards, at a minimum, should indicate that the proposed wetland area(s) meet wetland criteria in accordance with the 1987 Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region and the 2005 Technical Standard for Wetland Hydrology." In addition, success criteria based on the evaluation of wetland parameters (i.e., hydrology, vegetation and soil indicators based on the information in the appropriate regional supplement), vegetation performance (e.g., aerial coverage, species composition, growth, etc.), and invasive species, should be used to evaluate whether the mitigation is meeting its objectives. EPA recommends consideration of the performance standards developed for monitoring of wetland mitigation banks and in-lieu fee sites in New York; however, due to the permittee-responsible party nature of the proposed mitigation, additional performance standards may be required beyond those currently in use by The Wetlands Trust In-Lieu Fee Program at other sites in New York. EPA recommends stream performance standards that measure, at a minimum, floodplain connectivity (e.g., bankfull width, ordinary high water mark, entrenchment ratio), vertical (e.g., bed elevation, slope) and lateral stability (e.g., width-depth ratio, cross-sections, sinuosity, bank erodibility hazard index), stream reach stability (e.g., riparian planting success, vegetation density and/or percent canopy cover, invasive species cover), and habitat (e.g., microtopography and large woody debris, fish and macroinvertebrate diversity).	Micron has developed a Compensatory Wetland/Stream Mitigation Plan (CWSMP) to address proposed permanent impacts to on-site streams and wetlands. Each of the mitigation parcels will include Site Protection Instruments that perpetually protect the resources. Other requested elements have been considered and addressed in the CWSMP.
55	07.30.24_USEPA	404(q)	4(iv)	The monitoring plan in the CMP should relate to the performance standards and include the success criteria to determine if the site is on a positive ecological trajectory. For wetlands, please describe what indicators will be monitored for wetland hydrology, hydrophytic vegetation establishment, hydric soil development, and other physical, chemical, and biological attributes of the site such as microtopography and species diversity. For streams, please describe what indicators will be monitored for channel alignment stability, channel bank stability, channel bed stability, riparian vegetation establishment, and macroinvertebrate colonization. The indicators should be linked to aquatic resource functions and include a range of values to determine success or failure. The performance standards associated with each indicator should adequately demonstrate attainment of these functions through a phased approach with clear end goals.	Micron, in partnership with TWT, has developed a CWSMP, that identifies performance standards and specific success criteria that will determine if the mitigation sites are meeting those performance standards. Wetland and stream mitigation success will be based on a variety of physical, chemical and biological attributes specifically outlined in Section 9 of the CWSMP.
56	07.30.24_USEPA	404(q)	4(v)	To better understand what will be monitored and when it will be monitored, EPA recommends adding a table to illustrate this information. Additionally, a map displaying monitoring locations and what will be monitored at those locations should be included.	Micron, in partnership with TWT, has developed the CWSMP that will provide detailed site design and monitoring instructions for each wetland/stream mitigation site in their own respective chapter. It is important that mitigation areas be built and evaluated in the field before specific areas can be identified as "representative" of as-built conditions. This would generally occur in the Baseline Monitoring Report that is produced the first growing season post-construction. At that time, specific monitoring locations could be established. Site monitoring will be conducted for a 10-year period that will begin the year after construction is completed and the post construction as-built report/Baseline Monitoring Report for the site is submitted. The ten-year monitoring program will evaluate the progress of the wetland and stream mitigation areas, identify potential maintenance and/or adaptive management strategies, and document the establishment of wetland functions and services in the mitigation areas. Key aspects of the monitoring program are success and spread of the native plantings and volunteers, documentation of wildlife use, hydrologic functions, and control of invasive plant species within the wetland mitigation areas. Specifics of the monitoring program can be found in Appendix B of the CWSMP.
57	07.30.24_USEPA	404(q)	4(vi)	EPA recommends a minimum of 5 monitoring years for palustrine emergent wetlands, 7-10 years for palustrine scrub-shrub wetlands, and at least 10 years for palustrine forested wetlands. These monitoring timeframes may be shortened if final success criteria are attained for 2-3 consecutive years.	TWT is proposing that each mitigation site will have a 15-year construction, maintenance, and monitoring period to be managed through annual monitoring reports and adaptive management. Detailed information about the monitoring timeframes can be found in TWT's Compensatory Wetland/Stream Mitigation Plan, that is included as Appendix N to this JPA Addendum 1.
58	07.30.24_USEPA	404(q)	4(vii)	EPA further recommends developing an Adaptive Management Plan in the CMP to address measures to be taken if the site fails to meet the performance standards. Actions should be specified for common problems of mitigation sites such as, but not limited to, inadequate or excess hydrology, invasive species colonization, and herbivory.	An Adaptive Management Plan has been developed and included in TWT's Mitigation Plan, which is included in Appendix N of this JPA Addendum 1.
59	07.30.24_USEPA	404(q)	4(viii)	To fully assess the adequacy of the mitigation proposal, detailed information is needed regarding the quality and functions of the aquatic resources within the proposed project area. Detailed site-specific data including assessment data sheets, photos, measurements, and other supporting documentation (i.e., Hydrogeomorphic (HGM) classification, habitat assessment, and age-class) should be provided. To the maximum extent practical, the CMP should strive to mitigate specific wetland types based on hydrogeomorphic data. For example, if open depressional features are to be filled at the impact site, the CMP should incorporate this wetland type into the mitigation site design, if feasible. Functions associated with identified HGM types should be listed clearly as functional attainment goals of the site and, when possible, monitoring indicators and/or performance standards should be assigned to determine achievement of each function based on wetland HGM type (e.g., monitoring wells demonstrate appropriate seasonal hydroperiod for open depressions). At a minimum, the dominant water source should be identified for different wetland types at the mitigation site (e.g., precipitation, overland flow, overbank flooding. groundwater), and the CMP should clearly demonstrate how the site will be constructed to receive and permanently maintain these sources of water.	A summary of the functions and values of each wetland/cover type will be submitted separately for review before the submission of the upcoming JPA. Included in the submission were the following files; delineation reports and data, wetland functions and values data forms, a functions summary table, historical photographs, photo logs and figures, topography, and soil survey data.
60	07.30.24_USEPA	404(q)	4(ix)	In addition to the comments provided above on what should be included in the CMP, the narrative and drawings should also include specific details on the site construction, including features such as constructed habitat elements, planting plans, microtopography, and site construction activities such as access, topsoil and subsoil stockpiles, limit of disturbance, and soil preparation.	A detailed Compensatory Wetland/Stream Mitigation Plan was submitted as Appendix N to the January 31, 2025 JPA - Final application. A revised/updated version of that plan has been included as Appendix N to this JPA Addendum 1.
61	07.30.24_USEPA	404(q)	4(x)	Once available, EPA requests a copy of the completed CMP to review and provide additional comments. The applicant can expect future comments from EPA on mitigation type (i.e., rehabilitation, re-establishment, and enhancement), site specific performance standards and success criteria, construction methods, credit ratios, etc., once the completed CMP is reviewed.	An initial draft of the Compensatory Wetlands/Stream Mitigation Plan was submitted for multi-Agency review on 20 September 2024. An updated version of the plan was submitted to the Agencies for review (including the USEPA) as Appendix N to the January 31, 2025 JPA - Final application. A revised version of that document has been included as Appendix N to this JPA Addendum 1.
62	07.30.24_USEPA	404(q)	5(i)	The proposed design will result in the bisection of several wetlands on the proposed site. It is currently unclear how the filling of portions of individual wetlands will affect unfilled portions that will remain undisturbed. EPA is concerned that alterations to site hydrology will have negative secondary effects on undisturbed wetlands on-site, including cutting off their hydrology source, resulting in a reduction of "avoided" wetland areas. EPA recommends the applicant provide information on how filling and grading will affect the quality, function, hydrology, lateral extent, and vegetative communities of proposed undisturbed wetland areas.	Micron has provided a surface water/groundwater monitoring plan, and associated stormwater technical support to USACE, NYSDEC, and USFWS. The proposed plans have demonstrated that the site is being designed in accordance with NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-0-20-001). Stormwater management facilities are being designed in accordance with New York State Stormwater Management Design Manual (Stormwater Manual; NYSDEC 2015) which includes management of the Water Quality Volume, the Water Quantity Volume, the Runoff Reduction Volume, and Green Infrastructure Planning. The hydrologic and hydraulic (H&H) modeling that is being performed as part of the stormwater design includes evaluation of existing and post-development drainage patterns related to the proposed 1,400+- acre development site (including its associated watershed) and will demonstrate how pre-and post-construction rates and volumes will be maintained within remaining jurisdictional WOTUS. Additionally, groundwater and surface water monitoring placements have been identified to observe any effects on undisturbed wetlands. Micron also provided a Wetlands Assessment and Monitoring Plan including a Surface Water and Groundwater Monitoring Plan (SW/GW) and a Wetlands Connectivity memo (Updated Appendix O) that includes the installation and monitoring of surface water and groundwater data across the Micron Campus. The Surface Water and Groundwater (SW/GW) Monitoring Plan will utilize collected data to inform adaptive management, as approved, to maintain hydrology of remaining wetlands and streams as the Micron Campus is constructed.

63	07.30.24_USEPA	404(q)	5(ii)	The applicant has not provided any information on hydrologic effects of filling over 200 acres of federally jurisdictional and non-jurisdictional wetlands, increases in total impervious surfaces, and/or altering the grade of the proposed site. EPA is concerned about the lack of discussion on how stormwater and increased runoff will be handled on-site. This is especially concerning as the effects of climate change are being felt in New York State. Annual precipitation and the frequency of heavy storms associated with climate change have already been documented in the Northeast and are expected to keep rising." Communities with environmental justice concerns are also at risk of being disproportionately affected by negative secondary effects on local hydrology and water quality associated with the proposed project. EPA recommends that the applicant conducts a complete hydraulic analysis for the proposed project and provide additional information on proposed stormwater management for the site. This information should include an analysis of potential downstream flooding, increased nutrient loading to the Oneida and Oswego Rivers and Lake Ontario, and take into consideration possible precipitation changes in the region associated with climate change.	As noted in Micron Response to Comment #1(b) and #5(i) above, detailed information on site hydrology and stormwater management has been provided in the H&H model, Stormwater Technical Memorandum, and Surface Water/Groundwater Monitoring Plan. Micron also provided a Wetlands Assessment and Monitoring Plan including a Surface Water and Groundwater Monitoring Plan (SW/GW) and a Wetlands Connectivity memo (Updated Appendix O) that includes the installation and monitoring of surface water and groundwater data across the Micron Campus. The Surface Water and Groundwater (SW/GW) Monitoring Plan in this Appendix will utilize collected data to inform adaptive management, as approved, to maintain hydrology of remaining wetlands and streams as the Micron Campus is constructed.
64	07.30.24_USEPA	404(q)	5(iii)	In addition, for the remaining resources which may be sensitive to disturbance and/or of high-quality, EPA recommends the applicant provide information on what specific or additional measures will be taken to protect and monitor these resources to ensure no degradation of avoided resources occurs. This information is especially important regarding the forested wetlands on the northern portion of the site.	As noted in Micron Response to Comment #1(b) and #5(i) above, detailed information on site hydrology and stormwater management has been provided in the H&H model, Stormwater Technical Memorandum, and Surface Water/Groundwater Monitoring Plan. Micron also provided a Wetlands Assessment and Monitoring Plan including a Surface Water and Groundwater Monitoring Plan (SW/GW) and a Wetlands Connectivity memo (Updated Appendix O) that includes the installation and monitoring of surface water and groundwater data across the Micron Campus. The Surface Water and Groundwater (SW/GW) Monitoring Plan in this Appendix will utilize collected data to inform adaptive management, as approved, to maintain hydrology of remaining wetlands and streams as the Micron Campus is constructed.
65	07.30.24_USEPA	404(q)	6(i)	To evaluate potential cumulative impacts to the aquatic ecosystem, other projects either associated with or not related to the development, from the past, present, and reasonably foreseeable future, impacting the same aquatic systems, should be identified. Assessment of these activities in the watershed should evaluate whether the combined effects of activities may result in significant degradation of aquatic resources. Additional stream and wetland impacts that may result from induced development, roadway improvements, and other future project components are not discussed in the PN. The PN does not identify how many anticipated permits, or what type, may be issued in conjunction with this PN. Without this information it is difficult to ascertain the likely cumulative impacts to aquatic resources in the Youngs Creek, Oneida River, and Oswego River watersheds. Given the proposed future development activities associated with the Micron Campus Site project, EPA recommends that the applicant conduct a thorough cumulative effects analysis. The rationale used to support the conclusions of the assessment should be clearly documented and articulated. EPA recommends the applicant thoroughly evaluate the project's potential to cause or contribute to significant degradation of the aquatic ecosystem and ensure that measures are undertaken to avoid and minimize the potential of secondary and cumulative impacts.	Like the Micron project, any future development/improvement projects, regardless of their proximity to the Micron Site, Childcare Center or rail spur, would be subject to applicable federal, State, and local review processes to assess associated impacts and mitigation requirements prior to implementation. Additionally, cumulative impacts associated with any connected actions, recommended roadway improvements and known future development projects in the watershed, whether induced by the project or not, are discussed in the cumulative effects section of the preliminary DEIS. Impacts from existing developments would be reflected in the baseline assessment included in the preliminary DEIS. The preliminary DEIS also includes a fulsome discussion of the measures that will be undertaken to avoid, minimize and mitigate cumulative impacts.
66	07.30.24_USEPA	404(q)	6(ii)	Indirect and cumulative impacts to be considered in the NEPA review are anticipated to include extensive induced development. These impacts might be from nearby and related residential and commercial development and associated infrastructure. EPA understands that there is potential for the need for other USACE permits for off-site improvements and impacts of these actions are currently unknown. The secondary effects or cumulative impacts should be fully considered in both the 404 permitting processes as well as in the NEPA review. The NEPA documents will provide an opportunity for disclosure of a greater range of impacts to all resource categories.	Information surrounding Cumulative Impact concerns including Growth Inducing, Land Use, and connected actions can be found in the preliminary DEIS and as such will be considered as part of the 404 permitting process for this application. Information regarding cumulative impacts, including growth-inducing impacts, land use changes, and connected actions, is addressed in detail in the preliminary DEIS. The DEIS outlines anticipated residential, commercial, and infrastructure developments potentially induced by the project, along with their associated indirect and cumulative impacts. These considerations will be evaluated comprehensively as part of the NEPA review process. Additionally, cumulative impacts will also be incorporated into the 404 permitting process to ensure a full assessment of secondary effects, including potential impacts requiring additional USACE permits.
67	07.30.24_USEPA	404(q)	7	The project applicant does not provide any information on potential impacts of the proposed project on communities with environmental justice (EJ) concerns. The proposed project has the potential to affect water quality and downstream flooding in the Oneida River, Oswego River, and Lake Ontario, as well as within their watersheds. EPA recommends the applicant provide information on potential impacts to communities with EJ concerns including identification of EJ communities downstream of the proposed project and identification of any potential effects the project may have on these communities. If potential negative effects are found to exist, EPA recommends the applicant explore appropriate mitigation measures.	Potential impacts and concerns with the project related to Environmental Justice are addressed in the relevant section in the preliminary DEIS.
68	07.30.24_USEPA	404(q)	8a	EPA appreciates the additional information provided regarding jurisdictional wetlands, a preliminary site plan, grading plan, utility plan, landscaping plan, and lighting plans for the Childcare center. Although the impacts to wetlands are anticipated to be less than one-tenth of an acre on this site, EPA encourages the applicant to design the road crossing in a way that further reduces impacts. This may be achieved by adjusting the routing of the road or utilizing a bridge or a large box culvert to cross the wetland area. Doing so would not only reduce direct impacts but would also reduce the risk of secondary impacts by maintaining continuity of the hydrology within the wetland. In addition to the impacts from the roadway, EPA is concerned that the grading plans for the stormwater management areas may impact the hydrology of the adjacent wetlands. As proposed, these water management areas will be graded below the elevation of the adjacent wetlands, which could result in unintentional drainage or other disruptions to the hydrological regime. EPA recommends the applicant further explore ways to minimize the wetland impacts from construction of the road and identify any best management practices and/or re-siting of the stormwater management areas to reduce secondary impacts to adjacent wetlands.	The proposed site plan for the Childcare Center has been modified to avoid delineated wetlands except the entry road as noted. As the Childcare site design advances, additional consideration will be given to design stormwater facilities so as to not impact the hydrology of the adjacent wetlands. The Childcare site is not included in this permit application.
69	07.30.24_USEPA	404(q)	8b	EPA acknowledges the additional information provided on the alternatives for the rail spur site; however, one issue that remains unclear is whether the applicant owns the parcel in the northern part of the site, tax parcel no. 146.-02-03.2. This area is currently proposed to be separated from the rail spur construction and operation area by a chain link fence, though it appears to be included as part of the overall rail spur site as indicated by the site boundaries on all submitted maps and drawings. EPA requests clarification on the ownership of this parcel and information on why this area cannot be used for any part of construction or operation to reduce wetland impacts in the southern portion of the site. Without this information, EPA cannot determined if the preferred rail spur design is the least environmentally damaging practicable alternative (LEDPA) for that project element.	Please see the Micron Response to Comments #2c(viii) - #2c(x) for information on rail spur design and LEDPA. Additional and updated information on the rail spur site will be submitted in the next JPA submission. The two tax parcels associated with rail spur currently owned by Micron NY Semi mfg LLC are Tax ID 046.-02-03.2 and 046.-01-19.1.
70	07.30.24_USEPA	404(q)	8c	In the August 8 response, the applicant indicates that an updated detailed table of impacts including an impact timeline, updated project plans including a site grading plan, construction details, stormwater management plan, hydraulic analysis addressing downstream hydrologic connectivity, information on off-site utilities, and additional information on the Serog property is expected in September of 2024. EPA looks forward to reviewing these materials and continuing discussions regarding impact avoidance and minimization opportunities. However, without this information EPA does not currently have enough information on impact avoidance and minimization to determine if the preferred alternative is indeed the LEDPA.	Micron has provided a stormwater management technical memo and hydraulic analysis addressing downstream hydrologic connectivity in October of 2024. Additionally, OCIDA has retained ownership of the Serog properties and updated delineations were provided to USACE. Impact timeline, updated project plans including a site grading plan, construction details, and information on off-site utilities will be provided with the upcoming submission of the revised JPA.
71	07.30.24_USEPA	404(q)	8d	The applicant provided some general information on the factors evaluated in locating the pump house, on-site wastewater treatment facilities, biological treatment buildings, and associated stormwater facilities. However, no specific information was provided on off-site locations considered to house some of these facilities, the minimal appropriate size and engineering requirements of these facilities, the importance and significance of distance in maintaining conveyance to and from the Oak Orchard wastewater treatment plant, applicable security, appropriate accessibility for maintenance and responsiveness, minimum necessary distances to other project elements, or conflicts with other main utilities. The applicant stated that it will continue to assess modifications to the wastewater treatment facilities in the detailed design that may include reduction in size, relocation, and/or modification of layout to avoid or minimize impacts. As raised in our July 30 letter, it is still unclear if the currently proposed design represents the LEDPA until the reduction in size, relocation, and/or modification of layout regarding all project elements is considered or specific information is provided justifying the current size, location, and/or layout of each project element.	Please see Micron Response to Comment #2c(ii).
72	07.30.24_USEPA	404(q)	8e	Based on the additional information provided, EPA continues to have concerns with the alternatives analysis, the potential for adverse secondary and cumulative effects on ARNIs, and the lack of a complete compensatory mitigation plan (CMP). The Guidelines state that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic environment." The alternatives analysis submitted for evaluation under the May 30, 2024 PN and updated on June 7, 2024, lacked detailed evaluation of practicable off-site alternatives, on-site implementation, and/or design methods that were considered or have been incorporated into the project to further avoid and minimize the full range of impacts to ARNIs, including water quality and ecosystem impacts. As of the date of this letter, the applicant has not yet fully addressed alternatives that would further reduce impacts to ARNIs and has not submitted either a draft or a final CMP.	Please see Micron Responses to Comments in Section #1 Aquatic Resources of National Importance (ARNI)

JPA					
Row Number	Date & Agency	Document	Comment Number	Agency Comment	Micron Response
4	04.02.25_NYSDEC	JPA	1	In general, outstanding items needed by Micron to obtain an article 24 Freshwater Wetlands Permit include, but are not limited to:	See Responses 1a-1f.
5	04.02.25_NYSDEC	JPA	1a	Final tree clearing plan	A tree clearing plan is provided in Section 7 and as an attachment of the JPA Addendum 1 permit narrative.
6	04.02.25_NYSDEC	JPA	1b	2. Final Limits of Disturbance (LOD) and associated details Specifies plans and details that demonstrate how the Micron projects applied the 6 NYCRR Part 663.5(e)(2) standards to the proposed wetland damages meet the following: a. compatible with the public health and welfare, b. is the only practicable alternative that could accomplish the applicant's objectives and c. have no practicable alternative on a site that is not a freshwater wetland or adjacent area. d. minimizes degradation to, or loss of, any part of the wetland or is adjacent area; and e. minimize any adverse impacts on the functions and benefits that the wetland provides.	Please see the NYSDEC Weighing Standards Report as prepared and provided in Appendix X of this Addendum 1 submission.
7	04.02.25_NYSDEC	JPA	1c	Respond to previous DEC comments transmitted to Micron on 12/13/2024 specific to the wetland mitigation plan.	Responses to previous DEC comments specific to the Wetland Mitigation Plan (CWSMP) are included in the Mitigation Plan CRM_All Agencies excel file under the NYSDEC Tab in Appendix N.
8	04.02.25_NYSDEC	JPA	1d	Revise wetlands ratios as detailed in number 9 below.	Please see Response 9 of the 04.02.25_NYSDEC Comment and Response 7ai of the 12.13.24_NYSDEC Comment included in the Mitigation Plan CRM_All Agencies excel file under the NYSDEC Tab in Appendix N.
9	04.02.25_NYSDEC	JPA	1e	Be advised that comments on Storm Water and Groundwater monitoring plan are being sent under separate cover based on ongoing technical discussions between DEC and Micron. Finalization of the monitoring plan is a required component for the issuance of the Article 24 wetlands permit.	Micron acknowledges this comment. Please see Appendix O - Wetland Assessment and Monitoring Plan.
10	04.02.25_NYSDEC	JPA	1f	Submit outstanding Uniform Procedures Act (UPA) materials as detailed in this document.	Please see Responses 12-14 of the 04.02.25_NYSDEC Comments below.
11	04.02.25_NYSDEC	Permit Narrative	1	**Block 6d-Type of Structures and Fill Materials.** The application states approximately 9 million cubic yards of sand, stone, and non-organic soil will be required to support construction of the site. Please be advised if this detail changes and fill sourced from solid waste is proposed, a non-specific solid waste fill permit per 6 NYCRR part 360.12(a)(4) will be required	Micron acknowledges this comment.
12	04.02.25_NYSDEC	Permit Narrative	2	**Block 6f – Tree Clearing.** Micron's "tree clearing removal plan" which is under development and referenced in this section must be submitted as part of the wetland permit application and is required as part of a complete permit application. Micron must include the tree clearing removal plan in the next submission.	A tree clearing plan is provided in Section 7 and as an attachment of the JPA Addendum 1 permit narrative.
13	04.02.25_NYSDEC	Permit Narrative	3	**Block 6K Alternatives to Avoid Regulated Areas.** Please see DEC's comment number 7 below.	Please see Response 7 of the 04.02.25_NYSDEC Comment below.
14	04.02.25_NYSDEC	Permit Narrative	4	Figures. Figure 13- "NYSDEC Wetlands(sic) Map" is not consistent with DEC's Freshwater Wetland Jurisdiction Determination (JD). Please update this figure consistent with DEC's February 13, 2024, JD.	Figure 13 - NYSDEC Wetlands Map will be updated in the Addendum 1 submission to be consistent with DEC's February 13, 2024 JD.
15	04.02.25_NYSDEC	Permit Narrative	5	Drawings. DEC's August 28, 2023, Notice of Incomplete Application follow up requested: Please provide final site plans, overhead, cross sectional, and profile view once on-site avoidance has been analyzed and incorporated into the plans. Please include all limits of disturbance for all site development activities and features. Micron did not include these figures in the updated JPA, and they are required as a component of a complete application. Based on the updated JPA, Micron proposes to phase the site plan submissions and only include plans for phase 1a (fab1) at this time. The DEC permit will likely include a condition which states Micron must submit updated site plans at least 8 months before construction of each phase begins. Additionally, the DEC permit will likely need to be modified to reflect Micron's updated site plans. 5. Submit final site plans for phase 1a including, overhead, cross sectional, and profile view once on-site avoidance has been analyzed and incorporated into the plans. Please include all limits of disturbance for all site development activities and features, including culverts, swales, retention walls, noise and visual berms, and stormwater controls.	The requested figures are provided as part of JPA Addendum 1 Narrative attachment including Limits of Disturbance by Phase, Site Plans, Cross-sections, and labeled space allocation within a 4 Fab Full Build Scenario. It is understood that final site plans for phase 1a including, overhead, cross sectional, and profile view will need to be submitted.
16	04.02.25_NYSDEC	Permit Narrative	6	Submit a set of overhead site plans which only show DEC regulated wetlands	As stated in Response 1b of the 04.02.25_NYSDEC Comment above, overhead site plans will be provided.
17	04.02.25_NYSDEC	Appendix C	7	**Item 3. Standards for Permit Issuance-Weighing Standards:** Please provide a narrative, with supporting information and plans, which applies the weighing standards at 6 NYCRR Part 663.5(e)(2) to the proposed wetland damages. Please include specific plans and details that demonstrate how the Micron projects meet the following: As requested by DEC in the NOIA follow up, Micron must include a weighing of need against the wetland benefits which are lost as a criterion for their alternative site plans selection (6 NYCRR Part 663.5(e)(2)). Micron's response, (Vol. 1, App. C, Item3)included a reference to the 404(b)(1) analysis which is a federal document which Micron cannot use in place of the state's weighing standard requirement. Micron can use the information within the 404(b)(1) in the weighing standards document. Please provide a narrative, with supporting information and plans, which applies the weighing standards at 6 NYCRR Part 663.5(e)(2) to the proposed wetland damages. Please include specific plans and details that demonstrate how the Micron projects meet the following:	
18	04.02.25_NYSDEC	Appendix C	7a	the proposed activity must be compatible with the public health and welfare, be the only practicable alternative that could accomplish the applicant's objectives and have no practicable alternative on a site that is not a freshwater wetland or adjacent area.	
19	04.02.25_NYSDEC	Appendix C	7b	For wetland Classes I, II, and III, the proposed activity must minimize degradation to, or loss of, any part of the wetland or is adjacent area and must minimize any adverse impacts on the functions and benefits that the wetland provides.	

20	04.02.25_NYSDEC	Appendix C	7c	Micron's weighing standards narrative should describe and demonstrate how the project first avoided and then minimized wetland impacts. This should include a discussion on building sizing, alignments, travel lanes, turning radiuses, and how the final site plan was determined. DEC understand Micron included much of this information in the 404(b)(1) analysis, but that information must be submitted as part of the weighing standard justification. Additionally, DEC offers the following comments associated with the 404(b)(1) section 3.3 "Evaluation of Alternatives." Please be advised DEC's comments are only associated with the weighing standards analysis and the do not replace any federal agency comments on the 404(b)(1) analysis. • Option 3 includes a large unused strip within the LOD, NE of the Fabs, which does not contain buildings or roadways. The weighing standard analysis will need to address in detail why this alternative is not viable as this area appears to be available for impact avoidance and onsite mitigation. • The analysis must evaluate the construction laydown area for fabs three and four for wetland impact avoidance. The analysis should consider ways to reduce the size of the construction laydown area or provide a detailed justification why it cannot be reduced. The analysis should include an evaluation to reduce the footprint of the bulk gas yard and the wastewater pump station. If these footprints cannot be reduced any further, provide a detailed elaboration as to why not.	Please see the NYSDEC Weighing Standards Report as prepared and provided in Appendix X of this Addendum 1 submission.
21	04.02.25_NYSDEC	Appendix N	10-Aug	NYSDEC comments and Micron responses specific to the Wetlands and Stream Mitigation Plan can be found in the Mitigation Plan CRM_All Agencies excel document under the NYSDEC tab in Appendix N	
22	04.02.25_NYSDEC	Appendix O	11	DEC will send Micron follow up comments on Appendix O under a separate cover based upon ongoing technical discussions between DEC and Micron.	Micron acknowledges this comment.
23	04.02.25_NYSDEC	6 NYCRR 621	12	.6 NYCRR Part 621.3(a)(4): If a project requires more than one department permit, the applicant must simultaneously submit all the necessary applications, or demonstrate to the department's satisfaction that there is good cause not to do so.	Micron acknowledges this comment.
24	04.02.25_NYSDEC	6 NYCRR 621	13	.6 NYCRR Part 621.3(a)(7): If a project is subject to the provisions of article 8 of the ECL (SEQR), the department must satisfy the requirements of Part 617 of this Title. An application is not complete until a properly completed environmental assessment form has been submitted and	Micron acknowledges this comment.
25	04.02.25_NYSDEC	6 NYCRR 621	13a	if it has been determined that the project may have a significant impact on the environment, a draft environmental impact statement (DEIS) has been accepted by the lead agency	Micron acknowledges this comment.
26	04.02.25_NYSDEC	6 NYCRR 621	14	6 NYCRR Part 621.3(a)(8) When an action requires a determination by the Office of Parks, Recreation and Historic Preservation pursuant to section 14.09 of the Parks, Recreation and Historic Preservation Law (New York State Historic Preservation Act of 1980), the application is not complete until the Office of Parks, Recreation and Historic Preservation has made a determination whether; (i) any historic, architectural, archeological or cultural resources present in the project impact area are significant (listed on or eligible for listing on the State or National Register of Historic Places); and (ii) the project may have any impacts on such significant resources.	Micron acknowledges this comment.
27	03.03.25_NYSDEC	ITP	1	6 NYCRR Part 621.3(a)(7): If a project is subject to the provisions of article 8 of the ECL (SEQR), the department must satisfy the requirements of Part 617 of this Title. An application is not complete until a properly completed environmental assessment form has been submitted and: (iii) if it has been determined that the project may have a significant impact on the environment, a draft environmental impact statement (DEIS) has been accepted by the lead agency	Micron acknowledges this comment.
28	03.03.25_NYSDEC	ITP	2	6 NYCRR Part 621.3(a)(8): When an action requires a determination by the Office of Parks, Recreation and Historic Preservation pursuant to section 14.09 of the Parks, Recreation and Historic Preservation Law (New York State Historic Preservation Act of1980), the application is not complete until the Office of Parks, Recreation and Historic Preservation has made a determination whether; (i) any historic, architectural, archeological or cultural resources present in the project impact area are significant (listed on or eligible for listing on the State or National Register of Historic Places); and (ii) the project may have any impacts on such significant resources.	All SHPO consultation information was included in the January 2025 submission in Appendix R.
29	03.03.25_NYSDEC	ITP	3	Please note – The determination of take and resultant Part 182 Incidental Take Permit shall only be issued for the work associated with the Micron White Pine Campus and Child Care Site (i.e. the "Proposed project"). All additional development and connected actions must be assessed for the presence of state and federal threated and endangered species and the potential for a take of these species. Once this evaluation is complete, separate Part 182 applications may be required for connected actions depending on the presence of protected species, the timing of construction, and the associated impact to protected species.	Micron requests a meeting with NYSDEC to understand the approach of removing the Connected Actions from this ITP application.
30	03.03.25_NYSDEC	ITP	4	Further explanation is required of the impacts to the Statewide population of the subject threatened and endangered species and what the intended mitigation will contribute to the species recovery in New York State. Provide further analysis of whether the issuance of an incidental take permit would jeopardize the continued existence of the subject population including a. Any studies of current or past use of the occupied habitat by the subject species; b. Maps or descriptions of any occupied habitat; c. Considerations of the species' capability to survive and reproduce; d. And discussion of any adverse impacts of the taking on the above listed capabilities based upon known population trends and known threats to the species.	Micron feels the analysis on how northern harrier and short-eared owl populations in NY would be impacted is as quantitative possible. Micron feels that a meeting to understand what further information than what has already presented in the draft would be needed to ensure all impacts are captures.
31	03.03.25_NYSDEC	ITP	5	Describe any efforts to modify the proposed activity to minimize or avoid entirely any take or taking of the subject species. This description should incorporate information found in the Clean Water Act Section 404(B)(1). All alternatives considered must be included in the Part 182 application and cannot merely be referenced in an unrelated section of the application.	Alternatives considered are included in Micron's response to the Weighing Standards Part 663 above.
32	03.03.25_NYSDEC	ITP	6	Both Micron and The Wetland Trust must sign the included implementation agreement	Micron acknowledges this comment.

33	03.03.25_NYSDEC	ITP	7	It appears that several of the proposed grassland bird mitigation sites contain freshwater wetlands. Certain activities to develop the mitigation sites, such as grubbing and stump removal, may require an Environmental Conservation Law Article 24 Freshwater Wetland Permit. Micron or the Wetland Trust must provide DEC information to determine if a freshwater wetland permit is required. As such, please see the information outlined below on DEC's latest freshwater wetland jurisdictional determination process. Please note, DEC's amended Article 24, Freshwater Wetlands Jurisdiction and classification regulations (6 NYCRR Part 664) went into effect on January 1, 2025. Information on regulated activities within freshwater wetlands and adjacent areas is available on DEC's website (see Regulated Activities), which contains examples of regulated activities and those exempt from wetland permits. To determine whether the property contains regulated freshwater wetlands the project sponsor must complete a Parcel Jurisdictional Determination (Parcel JD) using the attached instruction sheets, and the information found at the link below. The consultant will submit the Parcel JD(s) and supporting information to the Region 7 Bureau of Ecosystem Health for concurrence. https://dec.ny.gov/nature/waterbodies/wetlands/freshwater-wetlands-program/freshwaterwetland-jurisdictional-determination If the property contains regulated freshwater wetlands or adjacent areas, further delineation of the wetland boundaries and a Project Jurisdictional Determination (Project JD) may be required. A Project JD is a determination made by the regional DEC office about whether a proposed activity within a parcel containing regulated freshwater wetlands or adjacent areas requires an Article 24 Freshwater Wetlands permit. Project JD requests should be sent to the regional Bureau of Ecosystem Health (BEH) in the region where the project is located. Regional BEH email addresses and a link to a map of regional offices are also provided on the DEC website using the jurisdictional determination link provided above. If regulated freshwater wetlands or adjacent areas are present, all efforts must be made to first avoid disturbing the wetland and adjacent area. If disturbance to the wetland and/or adjacent area cannot be avoided, the project sponsor must submit a Freshwater Wetland permit application and obtain a permit to conduct a regulated activity. In accordance with DEC's Freshwater Wetlands Permit Requirements Regulations (6 NYCRR Part 663), the applicant would need to justify the disturbance, discuss alternatives and minimize impacts as part of the Freshwater Wetlands permit application. More information on application procedures and permit issuance standards is available on DEC's website at: https://dec.ny.gov/regulatory/permits-licenses/waterwayscoastlines-wetlands/freshwater-wetlands#Determine	Micron acknowledges this comment.

APPENDIX B

Response to NYSDEC Notice of Incomplete Application

Kevin M. Balduzzi
5786 Widewaters Parkway
Syracuse, NY 13214-1867
Deputy Regional Permit Administrator
Division of Environmental Permits

RE: Notice of Incomplete Application
Permit Applied For: Article 24 Freshwater Wetlands
Applicant: Micron New York Semiconductor Manufacturing LLC.
Facility: White Pine Commerce Park; DEC ID: 7-3124-00575/00003

Micron New York Semiconductor Manufacturing LLC (Micron) is in receipt of the NYS Department of Environmental Conservation's (the Department's) Notice of Incomplete Application (NOI), received on May 31, 2023. Below please find responses (Responses) to each NOI request (Request). Micron has updated its Joint Permit Application (JPA) and all applicable appendices to include the information provided in the Responses below, together with additional information as it is completed.
Micron's Responses are as follows:

NYSDEC Request #1

6 NYCRR Part 621.3(a)(4): If a project requires more than one department permit, the applicant must simultaneously submit all the necessary applications or demonstrate to the department's satisfaction that there is good cause not to do so.

The Micron Chip Fab development at the White Pine Commerce Park will likely require additional permits under the ECL, which Micron has not applied for. The following permit applications are required. Please be advised that other permits not listed below may be needed once Micron provides additional site-specific details to DEC.

Water Quality Certifications (401 certifications), section 401 of the Clean Water Act, U.S. Public Law 95-217, and 33 USC 1341 (see section 608.9[c] of this Title) (implemented by 6 NYCRR Part 608): for projects which impact federally regulated waters of the US require Federal approval under Section 404 of the Clean Water Act.

State Pollutant Discharge Elimination System (SPDES), ECL article 17 titles 7 and 8, (implemented by 6 NYCRR Part 750), General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001).).

Air Pollution Control, ECL article 19, (implemented by 6 NYCRR Parts 201 and 231): including construction and operation of a new emission source or a modification to an existing emission source of air contamination, and construction of indirect sources of air contamination.

Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern; Incidental Take Permits, ECL article 11, (implemented by 6 NYCRR Part 182) for the take of state-listed, endangered bird species occupied habitat.

Micron Response

Micron acknowledges 6 NYCRR Part 621.3(a)(4) and continues to work with the Department to identify permits needed for the development of a semiconductor manufacturing

facility on the White Pine Commerce Park in Clay, New York (the Proposed Project). Since receipt of the NOI, Micron has provided the Department with additional documentation in support of its JPA submission. Micron will provide, as Appendix M of its final JPA submission, a Clean Water Act Section 404(b)(1) analysis for approval and issuance of a Section 401 Water Quality Certification. Further, Endangered and Threatened Species of Fish and Wildlife Incidental Take Permits will be included as Appendix Q in the final submission of the JPA.

Micron's State Pollutant Discharge Elimination System (SPDES) permit for Construction and Air Pollution Control permits will not be included as part of the submission of the JPA and will be submitted separately.

NYSDEC Request #2

6 NYCRR Part 621.3(a)(7): If a project is subject to the provisions of article 8 of the ECL (SEQR), the department must satisfy the requirements of Part 617 of this Title. An application is not complete until a properly completed environmental assessment form has been submitted and:

> (i) a lead agency has been established pursuant to article 8 of the ECL; and
> (ii) a negative declaration, or conditioned negative declaration has been filed pursuant to article 8 of the ECL; or
> (iii) if it has been determined that the project may have a significant impact on the environment, a draft environmental impact statement (DEIS) has been accepted by the lead agency; and

In 2012, as the lead agency, the Onondaga County Industrial Development Agency (OCIDA) conducted a coordinated State Environmental Quality Review (SEQR) to develop the 340-acre multi-use White Pine Commerce Park. In 2013 OCIDA completed a Final Generic Environmental Impact Statement to address anticipated potential impacts associated with the proposed multi-use industrial Park and issued a Findings Statement that concluded that development of the 340±-acre multi-use Park avoided or minimized adverse environmental impacts to the maximum extent practicable. In 2021, OCIDA, as Project Sponsor, proposed to expand the Park to approximately 1,250± acres and subsequently issued a Final supplemental Generic Environmental Impact Statement to address anticipated potential impacts associated with the proposed multi-use industrial Park and Findings Statements which stated the expanded Park avoided or minimized adverse environmental impacts to the maximum extent practicable.

As stated in the May 2023 Joint Permit Application supporting information, section 1.1.2 New York State Environmental Quality Review Act, "A combined NEPA/SEQRA EIS will be prepared for the project to comply with federal and New York State environmental quality review." A Draft EIS, accepted by the lead agency, is required as a component of a complete application (6 NYCRR Part 621.3(a)(7)).

Micron Response

OCIDA circulated a notice of intent to serve as State Environmental Quality Review Act (SEQRA) (6 NYCRR Part 617) (New York Environmental Conservation Law §§8-0101 et seq.) Lead Agency on July 28, 2023. No objections to that notice were received during the 30-day period commencing on that date. At its regular meeting of September 14, 2023, OCIDA issued a Positive Declaration, indicating the need for an Environmental Impact Statement (EIS), and scheduled a public scoping meeting to be held on October 11, 2023.

Micron, as the Project Sponsor, is preparing a draft Environmental Impact Statement (DEIS). Since the Proposed Project requires certain federal permits and approvals that also require federal environmental review, including, but not limited to, a federal wetlands permit pursuant to Section 404 of the Clean Water Act, the DEIS will support a joint SEQRA and National Environmental Policy Act (NEPA) of 1969 (42 United States Code (U.S.C.) § 4321 et seq.) review. Micron acknowledges that a Draft EIS, accepted by the lead agency, is required as a component of a complete application.

NYSDEC Request #3

6 NYCRR Part 621.3(a)(8): When an action requires a determination by the Office of Parks, Recreation and Historic Preservation pursuant to section 14.09 of the Parks, Recreation and Historic Preservation Law (New York State Historic Preservation Act of 1980), the application is not complete until the Office of Parks, Recreation and Historic Preservation has made a determination whether;

(i) any historic, architectural, archeological or cultural resources present in the project impact area are significant (listed on or eligible for listing on the State or National Register of Historic Places); and
(ii) the project may have any impacts on such significant resources.

Micron Response

Micron has completed various phases of SHPO Consultation for the Proposed Project and will include the status of all SHPO information to date as Appendix R in its final JPA submission.

NYSDEC Request #4

6 NYCRR Part 621.4(j): Freshwater wetlands, permits under Part 663 of this Title, and article 24 of the ECL

(1) A complete application must include a properly completed joint application for permit form, plans and profile sketches of the proposed project, and a map at a scale of 1" = 2,000' (1 cm = 240 m) or larger showing the project's location and, if determined necessary, a wetland delineation approved by the department.

DEC determined that a wetland delineation, approved by the department, is needed as part of a complete application. DEC is aware that Ramboll Engineering staff are presently conducting an on-site delineation, and verification by DEC and the US Army Corps of Engineers will occur after it is complete. Please be advised that Ramboll must delineate the site for the entire project buildout. The freshwater wetland permit application must include an assessment of impacts for the whole project buildout, phases 1 and 2. Where a project will result in unavoidable wetland impacts, a complete application must also provide information on the mitigation of wetland impacts. Given the anticipated impacts to both state-regulated and federally regulated wetlands, the mitigation proposal should be developed in consultation with both DEC and the US Army Corps of Engineers.

Micron Response

Micron will provide the Department and the US Army Corps of Engineers (USACE) with Wetlands Jurisdictional Determination Letters as Appendix H of the final submission of the JPA. Micron will also include a Compensatory Wetlands and Stream Mitigation Plan, as Appendix N of its final JPA submission.

APPENDIX C

Response to NYSDEC Followup to Notice of Incomplete Application

Kevin M. Balduzzi
5786 Widewaters Parkway
Syracuse, NY 13214-1867
Deputy Regional Permit Administrator
Division of Environmental Permits

RE: Follow up to DEC's May 31, 2023, Notice of Incomplete Application
Facility: Micron-White Pine Park
DEC ID: 7-3124-00575/00003

Micron New York Semiconductor Manufacturing LLC (Micron) is in receipt of the NYS Department of Environmental Conservation's (the Department's) correspondence, dated August 28, 2023, as a follow up to the Department's May 31, 2023, Notice of Incomplete Application. Below please find responses (Responses) to each NOI request (Request). Micron has updated the Joint Permit Application (JPA) and all applicable appendices to include the information provided in the below Response, together with additional information as it is completed.

Micron's Responses are as follows:

Freshwater Wetland Permit Application

On Site Avoidance

1. The permit standards in the freshwater wetland regulations require that Micron first avoid and then minimize wetland impacts. Micron can propose mitigation to offset and compensate for all unavoidable wetland impacts after avoidance and minimization have been considered. Micron's alternatives analysis in Appendix F of the application primarily focused on operational efficiencies over environmental impacts, and the chosen alternative has the most significant wetland impacts. Please include an updated alternatives analysis that evaluates all options which reduce wetland fill, including, but not limited to, pile-supported structures, reduced construction laydown areas, and alternative building layouts.

   Micron Response to Comment #1

   An updated alternatives analysis will be included in the Section 404(b)(1) document as Appendix M of this JPA and will provide a thorough justification for the chosen alternative. Please see Micron Response to Comment #2 for additional information on alternatives considered.

2. The area east of Burnett Road contains a significant forested wetland complex (BRE-11) and a portion of Youngs Creek. The "Site Constraint Plan" sheets show the entire creek and forested wetland being developed. DEC requests that Micron's analysis evaluates an alternative site layout that avoids this area and reduces the total overall wetland impact acreage.

   Micron Response to Comment #2

   A comprehensive evaluation of various site layout alternatives for Micron's proposed semiconductor manufacturing facility in Clay, NY (the Proposed Project) is included in Chapter 2 (Description of the Proposed Action and Alternatives) of the Proposed Project's Draft Environmental Impact Statement (DEIS). This evaluation is also included in

Appendix M of the JPA (CWA Section 404(b)(1) Analysis), and considers options to reduce the overall area of disturbance of the Proposed Project. Specifically, the evaluation considers, among other things, fab material transport time, utility layout and routing, constructability, and stormwater management. The comparison of the overall area of disturbance among these seven site layout alternatives shows minor differences. The preferred option layout shows marginally less impact to jurisdictional wetlands. Due to the lesser impact, Micron examined the manufacturing considerations of the remaining options to select the best optimal site layout option.

Standards for Permit Issuance-Weighing Standards (6 NYCRR Part 663.5)

3. Once additional onsite avoidance is evaluated and incorporated into the site plan, Micron must include a weighing of need against the wetland benefits which are lost as a criterion for their alternative site plans selection (6 NYCRR Part 663.5(e)(2)). Please provide a narrative, with supporting information and plans, which applies the weighing standards at 6 NYCRR Part 663.4(e)(2) to the proposed wetland damages. The wetland delineation must be completed and verified before this analysis is completed. An accurate acreage of wetland and 100-foot adjacent area impacts must be included.

Micron Response to Comment #3

A narrative and all supporting information is included in the Compensatory Wetland & Stream Mitigation Plan (the Plan) Appendix N, including all wetland and stream delineations on proposed mitigation properties.

As detailed in the 404(b)(1) analysis, the Proposed Project has been designed to be the least environmentally damaging practicable alternative consistent with 6 NYCRR Part 663.4(e)(2). In furtherance of this analysis, the following process was undertaken to:

1. Evaluate sites across the entire United States to identify one that is viable
2. Plan and design project facilities and infrastructure improvements that meet Micron's requirements
3. Create a design that is:
    a. Compatible with the public health and welfare, be the only practicable alternative that could accomplish the applicant's objectives and have no practicable alternative on a site that is not a freshwater wetland or adjacent area; and
    b. Minimizes degradation to, or loss of, any part of the wetland or is adjacent area and minimizes adverse impacts on the functions and benefits that the wetland provides.

This process has been completed with the support of federal, state, and local governments in cooperation with the reviewing regulatory agencies to maximize the transparency and efficiency of its review.

Wetland Delineation

4. As required by 6 NYCRR Part 621.4(j)(1), a wetland delineation approved by DEC is needed for a complete application. The delineation, and verification, must include all parcels within the project areas, including the parcels which Onondaga County Industrial Agency has not secured access to yet. Please continue to coordinate with DEC and US Army Corps for the delineation verification. Please include site plans and shapefiles showing the DEC verified delineated wetland boundary and 100-foot adjacent area.

Micron Response to Comment #4

Micron has completed all wetland delineation and verifications for federal and state jurisdictional wetlands. These delineations will be shown in Appendix H of its final JPA submission.

5. DEC requests that Ramboll Engineering provide updated delineation shapefiles no less than one-week before site visits, to facilitate review of the delineation as it progresses. The Shapefiles should include the most recent sample and flag points. Additionally, please provide datasheets and hardcopy maps of this information.

Micron Response to Comment #5

Micron acknowledges this Request, and confirms that all shapefiles, datasheets and maps have been provided to date.

Wetland Mitigation

As stated in the weighing standards section above, Micron must first avoid, then minimize wetland impacts. Micron may propose mitigation to fully compensate for unavoidable wetland impacts to meet permit issuance standards. DEC understands that the wetland delineation is incomplete, and the total acreage of unavoidable wetland impacts is still being investigated. Additionally, it is DEC's understanding that Micron and its consultants are exploring potential wetlands mitigation sites. DEC recommends that Micron consult with DEC and US Army Corps, as mitigation sites are being investigated to ensure they meet mitigation standards and requirements. Additionally, while DEC cannot directly accept in lieu fees to offset wetland impacts, Micron may pay for third-party mitigation projects which DEC approves.

6. Micron must submit a wetland mitigation package as part of a complete freshwater wetland permit application. The package must demonstrate that the mitigation project will adequately compensate for losses to wetland functions and benefits resulting from the project by restoring or creating wetlands restoration and/or wetland creation. Please see attachment A regarding items that must be considered when evaluating projects.

Micron Response to Comment #6

Micron has submitted a revised Compensatory Wetland & Stream Mitigation Plan as Appendix N of the JPA application submission. The Plan will demonstrate full compensation for lost functions and values of wetlands impacted by the Proposed Project.

7. Micron must coordinate with the NYS Department of Public Service (DPS) and National Grid, regarding National Grid's Article VII mitigation site located in the SW corner of parcel 048.-01-23.1. This wetland mitigation work is a requirement under National Grid's Article VII Public Service Commission (PSC) Certificate for the Clay-DeWitt Line 3 rebuild project.

Micron Response to Comment #7

Micron will address the needs and requirements of the Wooding Mitigation Site within the Compensatory Wetland & Stream Mitigation Plan. The Plan will be attached as Appendix N to the final JPA submission.

Additional Items for the Freshwater Wetlands Permit Application

As stated in ECL § 24-0105 wetlands provide flood and stormwater control. Micron must provide details on how the water from the surrounding drainage area will be impacted by filling the wetland and portions of Young Creek.

8. Micron must conduct a hydraulic analysis of the impacts of filling wetlands, drainage areas, and Youngs Creek and its tributaries (including unmapped streams). Please evaluate how filling the property may affect the water flow and drainage patterns in the area and surrounding properties. Consider factors such as increased surface runoff, potential water flow redirection, and impacts on nearby waterbodies or stormwater management systems. This information will also be needed as part of the Storm Water Pollution Prevention Plan review. In the hydrologic/hydraulic analysis, please include:
    - Pre-construction design points (i.e., receiving waterbodies).
    - Wetland cover types.
    - Ordinary water levels in streams and wetlands
    - Hydraulic modeling to simulate the effects of filling on water flow, flood levels, and drainage patterns. The modeling should include all the surrounding areas that will be affected by this development.

    Micron Response to Comment #8

    In addition to the hydraulic analysis completed and submitted as Appendix O, Micron continues to conduct hydraulic analysis for the pre- and post-conditions of the Proposed Project site in conjunction with the Department. Based on the hydraulic and hydrologic modeling completed to date, a surface water/groundwater monitoring plan has been drafted and provided to the Department. Micron notes the requested items that have been and will continue to be included in Micron's submissions.

9. Additionally, please consider engaging with local stakeholders (e.g., neighboring property owners, codes officer, MS4) who know of any existing drainage or flooding issues in this area. Please discuss how flooding impacts will be mitigated.

    Micron Response to Comment #9

    Micron has ensured the continued inclusion and collaboration with the Town of Clay Planning and Development and Codes Enforcement Departments. Micron has met ad hoc with Town of Clay on various site plan and stormwater topics, and the Town participates during regular storm, surface and groundwater agency meetings. A full description of how flood impacts will be mitigated is included in Appendix O – Hydraulic Analysis.

Site Plans-Micron Site

10. Please provide final site plans, overhead, cross sectional, and profile view once on-site avoidance has been analyzed and incorporated into the plans. Please include all limits of disturbance for all site development activities and features.

    Micron Response to Comment #10

    Shapefiles and drawings showing limits of disturbance for the entire Micron campus and Rail Spur, as well as phased construction are included in the JPA application submission. Grading plans, cross sectional and site master plans are also included in this submission.

Drawings will continue to be submitted to the Department and other necessary agencies as design progresses.

Utility Permitting

11. Under the Uniform Procedures Regulations (UPA), eligible permittees are owners, lessees, and operators at a project site or facility (6 NYCRR Part 621.2(v)). The utility operator or owner must apply for the natural resource permits associated with utility infrastructure construction. Micron's consultants may prepare the application material, but the utility company will be the legally responsible party/applicant for the associated natural resource permits. DEC staff are available for a pre-application meeting to discuss this further with the utility companies and Micron representatives.

    Micron Response to Comment #11

    Micron acknowledges and agrees to this Request.

12. Utility upgrades and connections which require a Public Service Commission Article VII or 10 certificate will not be included in this permit. To the extent such approvals will be required, please include a diagram which clearly outlines and defines the limits of disturbance that will be authorized by Article VII or 10. This likely includes the electric substation upgrade, electrical transmission line extension, and the gas pipeline extension.

    Micron Response to Comment #12

    Micron has identified one area of disturbance on the Micron campus that will be subject to NYS Public Service Commission (PSC) approval pursuant to Article VII of the NY Public Service Law. The disturbance of the duct bank is noted within this permit application, as well as a temporary impact in the National Grid substation permit application LRB-2024-00400. All other upgrades and connections outside of the Micron campus will be noted in the individual permit applications submitted by the Utility.

Other Permitting Items

6 NYCRR Part 182-incidental Take of Endangered and Threatened Species

Based on early observations, the Micron site is occupied habitat for the state-threatened Northern Harrier, which biologists observed displaying essential behaviors (breeding, foraging) at the site, and Micron will need to apply for an incidental take permit per 6 NYCRR Part 182 (Part 182). The final grassland breeding bird survey may identify other threatened or endangered species at this site, which would also be subject to permitting requirements pursuant Part 182. Additionally, DEC will need to coordinate with the USFWS once they have reviewed the bat survey and tree-cutting plan

13. Please submit a final grassland breeding bird and bat survey report.

    Micron Response to Comment #13

    Micron has conducted a grassland breeding bird survey, which will be included as Attachment 3 of the Incidental Take Permit Application; JPA Appendix Q. The bat survey report will be included in the Biological Assessment; JPA Appendix P.

14. Micron must apply for an incidental take permit of threatened or endangered species. An application for an incidental take permit must include efforts to avoid, minimize and mitigate actions that are occurring onsite. An outline and description of what is needed in the Part 182 application is included as Attachment B.

Micron Response to Comment #14

Micron will submit an Incidental Take Permit Application for the specie(s) outlined in the associated Net Conservation Benefit Plan (NCBP), Appendix Q of the JPA. All efforts to avoid, minimize, and mitigate actions occurring onsite will be demonstrated within the NCBP. Micron will consult with the Department and US Fish & Wildlife Services (USFWS) to ensure mitigation sites meet the mitigation standards and requirements.

15. The incidental take permit application must include a mitigation plan that will accomplish a net conservation benefit to the species impacted. Like the wetland mitigation, DEC recommends that Micron consult with DEC and USFWS, as mitigation sites are being investigated to ensure they meet mitigation standards and requirements. Please see Attachment C for the Incidental Take Mitigation Requirements.

Micron Response to Comment #15

Please see Micron's Response to Request #14 above.

Chemical and Petroleum Bulk Storage

16. A Chemical Bulk Storage (CBS) registration is required for the storage of hazardous substances (listed at 6 NYCRR Part 597) in
    - An aboveground storage tank larger than 185 gallons;
    - Any size underground storage tank; or
    - In a container that can store 1,000 kg or more for a period of 90 consecutive days or more.

Micron Response to Comment #16

Micron acknowledges and agrees to this Request. CBS registration will not be included with the submission of the Joint Permit Application (JPA).

17. A Petroleum Bulk Storage (PBS) registration is required for
    - One or more tank systems that are designed to store a combined capacity of more than 1,100 gallons or more of petroleum in aboveground and/or underground storage tanks; or
    - One or more underground tank systems also regulated under 40 CFR Par 280 that are designed to store 110 or more gallons of petroleum.

Please see https://www.dec.ny.gov/chemical/287.html for information on regulations and the registration process. Please be advised that DEC manages registrations separately from permits, but it is recommended that you begin the registration process as soon as possible. For additional information or assistance, please contact Kevin Kemp at kevin.kemp@dec.ny.gov.

Micron Response to Comment #17

Micron acknowledges and agrees to this Request. PBS registration will not be included with the submission of the JPA.

Hazardous Waste

18. Will any hazardous waste listed in 6 NYCRR Part 371.4 be generated? If so, please provide details on the type of hazardous waste anticipated to be generated, approximate volumes, storage methods, and waste disposal options. The facility will likely need to obtain an EPA identification # and comply with Hazardous Waste Regulations found in 6 NYCRR Parts 370-372. For technical assistance, please contact Steve Perrigo at steve.perrigo@dec.ny.gov.

Micron Response to Comment #18a

Micron acknowledges that an EPA ID# will need to be obtained to comply with 6 NYCRR Parts 370-372. Details on types of hazardous waste anticipated, approximate volumes, storage methods, and waste disposal options are discussed in the DEIS and will be further provided separately from the JPA.

The SEQR EIS should include a section that evaluates and discusses hazardous waste generation, volume, storage, and disposal. The EIS should also assess the disposal facilities' ability to accept the increased volume and type(s) of hazardous waste generated.

Micron Response to Comment #18b

Hazardous waste generation, volume, storage, and disposal is discussed in Chapter 3.5 of the DEIS (Solid and Hazardous Waste). The DEIS will be submitted separately from the JPA.

Air Title V Permitting

19. Micron must submit an Air Title V permit application including an analysis which address section 7(2) of the Climate Leadership and Community Protection Act (CLCPA) Please see DEC Program Policy DAR-21 for guidance on preparing the CLCPA analysis https://www.dec.ny.gov/docs/air_pdf/dar21.pdf.

Micron Response to Comment #19

Micron will submit a revised Air Title V permit application separate from the JPA. An analysis under section 7(2) of the CLCPA will be submitted with the Air Title V application. A final CLCPA analysis of the Proposed Project, including all GHG impacts will be included as an Appendix to the DEIS Chapter 3.7 (GHG).

Wastewater Treatments

DEC requests all details relating to the conveyance and ultimate treatment of the wastewater from Micron. DEC understands that the wastewater will undergo some initial pretreatment at Micron and will ultimately be conveyed to the Onondaga County owned Oak Orchard Wastewater Treatment Plant for full treatment and discharge into the Oneida River. It is also DEC's understanding that the existing Oak Orchard treatment plant may be able to handle some initial phases of production without major modification.

20. To ensure this additional flow and loading does not disrupt the ability of the treatment plant to meet permit limits, DEC will need a detailed engineering report from Onondaga County on the plan for accepting wastewater and all phases of construction for ultimately upgrading the facility. DEC must review and approve the engineering report before Micron can begin operation and production. The County will need detailed information from Micron on the expected flows and loadings for each production phase. Please include a timeline

for providing this information to the County and when DEC can expect this report to be submitted.

Micron Response to Comment #20

Micron and the Onondaga County Water Redevelopment Corporation (OCWRC) continue to engage with the Department as design and engineering advances. A timeline of permitting information has been provided to the Department through these ongoing engagements. POTW/SPDES Wastewater discharge information will be submitted separately from the JPA.

21. During the design of the on-site collection system, the industry must consider separating its various waste streams (e.g. sanitary flows, cooling tower flow, and industrial high-strength flows) from the total wastewater flow during the design process to accommodate any pretreatment processes which may be required by Onondaga County.

Micron Response to Comment #21

Micron and OCWRC continue to engage with the Department as design and engineering advances. Preliminary segregation of waste streams and flows has been provided to the Department through these ongoing engagements. POTW/SPDES Wastewater discharge information will be submitted separately from the JPA.

22. Please provide information regarding the facilities wastewater sewer extension. Please see attachment D.

Micron Response to Comment #22

Municipal sewer conveyance to the Micron campus is to be handled through Onondaga County Water Environment Protection (OCWEP) and is identified in the Connected Actions section in Chapter 2 (Description of the Proposed Action and Alternatives) and Chapter 3.14 (Utility and Infrastructure) of the DEIS. Pump station upgrades to the municipal sewer system are not a part of the Proposed Project.

Industrial wastewater treatment, including the pump house and conveyance is being designed and permitted through OCWRC, as described in Responses 20 and 21, above.

Micron, OCWEP, and OCWRC acknowledge the requested information in Attachment D.

Water Use

23. Please provide details and volume for Micron's water requirements for all phases of development, including the following:
    - Source(s) of withdrawal
    - Volume of water needed in gallons per day.
    - Approximate dates for incremental demand increases associated with the phased development
    - Consumptive use volume (the portion of the Water Withdrawn or withheld from the Basin that is lost or otherwise not returned to the Basin due to evaporation, incorporation into products, or other processes.)
    - Discharge location and volume
    - Water conservation and reuse practices

- A flow diagram demonstrating how water will flow through the proposed facility from its intake location to the discharge location. The diagram should delineate between OCWA owned/operated infrastructure versus Micron owned/operated infrastructure.
- A general map showing the proposed intake location or tie-in to OCWA infrastructure, the location of the facility, and the location of the discharge point.

Micron Response to Comment #23

Details and volumes for Micron's water requirements for all phases of development are described in the Connected Actions section in Chapter 2 (Description of the Proposed Action and Alternatives) and Chapter 3.14 (Utility and Infrastructure) of the DEIS.

24. If Micron intends to develop and operate its own source, a water withdrawal permit application is required with the following:
    - General Water Withdrawal Permit Application Requirements
    - Applicant Checklist: https://www.dec.ny.gov/docs/water_pdf/wwacheck.pdf
    - Engineering Report (Recommended Format): https://www.dec.ny.gov/docs/water_pdf/receng.pdf
    - Joint Application Form: https://www.dec.ny.gov/docs/permits_ej_operations_pdf/jointapp.pdf
    - Water Withdrawal Application Supplement WW-1: https://www.dec.ny.gov/docs/permits_ej_operations_pdf/ww1form.pdf
    - Water Conservation Program Form: https://www.dec.ny.gov/docs/water_pdf/wcpfnon.pdf
    - For proposed surface water sources: "information on rainfall, stream flows and classifications, contributing watershed size, location of nearby USGS gages, other upstream withdrawals, safe yield analysis or passby flow calculations (See TOGS 1.3.12) and proposed withdrawal methods including intake structure design and screening." (6 NYCRR Part 601.10(e)(11))
    - For proposed groundwater sources: "well drilling logs, well monitoring locations and pump test data and analyses of results." (6 NYCRR Part 601.10(e)(10))
    - Water Withdrawal Application Procedures: https://www.dec.ny.gov/permits/6377.html
    - Water Withdrawal Program Application Forms: https://www.dec.ny.gov/lands/94327.htm

    Micron Response to Comment #24

    Micron does not intend to develop and operate its own water withdrawal source. All water to the Micron Campus will be provided by Onondaga County Water Authority (OCWA).

State Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity (CGP)

Please be advised that DEC will review the Stormwater Pollution Prevention Plan (SWPPP) concurrently with the MS4 as a condition of the project receiving coverage under the CGP. The SWPPP must be reviewed and approved by the MS4 prior to submitting the NOI to DEC. Micron must have the "MS4 SWPPP Acceptance" signed in accordance with VII.H of the CGP, and submitted with a completed NOI to DEC. Additionally, the CGP is a UPA permit and, as such, the provisions of 6 NYCRR Part 621.3 (a)(4) and (7) apply. Micron must first obtain all UPA permits, and a draft EIS must be accepted by the lead agency before coverage under the CGP is

authorized. Construction activity cannot begin until the authorization to discharge under this permit goes into effect.

Micron Response to Comment #25

Micron acknowledges that the site and construction SWPPPs will be provided for review and approval prior to submitting the NOI and prior to beginning any construction activity.

APPENDIX D

Response To USEPA; USFWS; and Onondaga Nation Comments on the August 15, 2024 USACE Permit Public Notice

November 15, 2024

Lisa F. Garcia
Regional Administrator
U.S. Environmental Protection Agency
Region 2
Ted Weiss Federal Building
290 Broadway
New York, New York 10007

**RE: MICRON NEW YORK SEMICONDUCTOR MANUFACTURING PROJECT,
REQUEST FOR ADDITIONAL INFORMATION,
RESPONSE TO USEPA 404Q LETTER TO USACE BUFFALO DISTRICT,
APPLICATION NUMBER LRB-2000-02198**

Dear Ms. Garcia;

Micron New York Semiconductor Manufacturing LLC (Micron) is in receipt of comments provided in your 404q letter submitted to the U.S. Army Corps of Engineers (USACE), Buffalo District pursuant to the Public Notice for the above-referenced Clean Water Act 404 Joint Permit Application (JPA). Below please find responses to each of your requests. Supporting maps, tables and other information are included as attachments to this response document. Micron will update a second submitted JPA and all applicable appendices to include the information provided in this response. The anticipated submission of this package is the fourth quarter of 2024.

Micron's responses are as follows:

SECTION #1 AQUATIC RESOURCES OF NATIONAL IMPORTANCE (ARNI)

USEPA Comment #1a

EPA is concerned that the Micron Campus Site project as proposed, and in the absence of additional information, may result in substantial and unacceptable impacts to ARNIs as covered in Part IV, paragraph 3(a) of the 1992 CWA Section 404(q) Memorandum of Agreement (MOA) between the EPA and the Department of the Army. An ARNI is a resource-based threshold used in applying the Section 404(q) MOA to resolve issues regarding individual permit cases. Factors considered in identifying ARNIs include the economic importance of the aquatic resource to the protection, maintenance, or enhancement of the quality of the Nation's waters.

Micron Response to Comment #1a

Micron has developed a detailed Project Description that includes the purpose and need for a four-fab facility located in Central New York. The Project Description details specific screening factors utilized for site selection, which are detailed in our response to comments in Section #2 Project Purpose and Alternatives Analysis below. In addition to a robust site selection process and alternatives analysis, Micron

has developed a Compensatory Wetland/Stream Mitigation Plan (CWSMP) to address proposed permanent impacts to on-site streams and wetlands. Each of the mitigation parcels will include Site Protection Instruments that perpetually protect the resources pursuant to the USACE's Compensatory Mitigation for Losses of Aquatic Resources (USACE 2008). Mitigation properties will fully compensate for functions and services provided by existing aquatic resources on the proposed Micron Campus. Details on the proposed mitigation plan can be found in our responses to comments in Section #4 Compensatory Mitigation below. Future impacts to on-site jurisdictional Waters of the United States (WOTUS) that are not affected by proposed development will be avoided and minimized to the extent practicable, as design advances.

USEPA Comment #1b

EPA is concerned that the project's proposed CWA Section 404 discharges may result in substantial and unacceptable impacts to riverine/floodplain wetlands and tributaries associated with Youngs Creek, Shaver Creek, the Oneida River, and the Oswego River, all of which are ARNIs whose resources fall within the Lake Ontario watershed. Wetland areas improve water quality and potentially reduce pollutants by filtering nutrients, processing organic material, and reducing sediment loads before discharging water to the jurisdictional waters and tributaries listed above and to Lake Ontario itself. Loss of these areas may affect water storage and the ability of the natural landscape to slow water momentum and erosive potential, reduce flood heights, and allow for groundwater recharge. In the process of collecting and storing runoff, the vegetation in floodplain wetlands acts as a natural filter to remove the excess nutrients accumulated by the water, which will likely be lost should the project move forward as proposed. Wetlands serve as an important wildlife corridor between habitats and reduce flooding and excessive siltation downstream. They are also some of the most biologically productive natural ecosystems in the world and the loss of these systems may cause loss of habitat for all species, including many threatened and endangered species.

Micron Response to Comment #1b

Micron acknowledges that wetland areas improve water quality, impact a number of important aquatic physical and chemical properties, and provide essential habitat for wildlife. Micron is committed to protecting these vital resources and, in partnership with The Wetland Trust (TWT), has developed a CWSMP that will fully compensate for functions and services provided by existing aquatic resources impacted by the Proposed Project. Further information on the CWSMP can be found in responses to comments in Section #4 Compensatory Mitigation below.

Micron understands the importance of diverse habitat types and the plant and animal species currently present that may be impacted by the permanent impacts proposed on the Micron Site. Detailed information on the affected environment and environmental consequences is outlined in Chapter 3 of the Draft Environmental Impact Statement (DEIS). To mitigate for impacts to those affected environments, Micron has developed robust mitigation strategies that will fully compensate for proposed impacts on the Micron Site. These strategies include a CWSMP for wetland and stream losses, a Net Conservation Benefit Plan for habitat losses to protected upland birds, and a Biological Assessment (BA) for any potential impacts to protected species of Bats.

The New York State Department of Environmental Conservation (NYSDEC) and United States Fish & Wildlife Service (USFWS) requested a hydraulic analysis to evaluate post-development hydrologic

conditions within aquatic resources downstream of the Site. Micron has met with all interested local, state, and federal agencies to advance its analysis of onsite and offsite hydrology, including modeling of the upstream and downstream watershed impacts. As a result of these models, Micron developed a Surface Water/Groundwater Monitoring plan as well as a Schematic Stormwater Design Technical Memorandum that detail potential downstream impacts from the Micron Project. Stormwater management facilities are being designed in accordance with the New York State Stormwater Management Design Manual (Stormwater Manual; NYSDEC 2024) which includes management of the Water Quality Volume, the Water Quantity Volume, the Runoff Reduction Volume, and Green Infrastructure Planning. As work and construction phases progress, these plans will ensure there will be no significant impacts to resources downstream.

USEPA Comment #1c

The importance of wetlands in controlling nonpoint source pollution in Lake Ontario and the protection, maintenance, or enhancement of the quality of its waters is recognized by the EPA and other U.S. Federal Agencies as well as internationally by the Government of Canada. The Governments of the U.S. and Canada articulated the importance of wetland functions within the Lake Ontario watershed in the 2012 Great Lakes Water Quality Agreement (GLWQA) signed by then-EPA Administrator Lisa Jackson and the Canadian Environment Minister Peter Kent on Sept. 7, 2012.4 Importantly, General Objective #5 of the GLWQA states that the U.S. and Canada will work to "support healthy and productive wetlands and other habitats to sustain resilient populations of native species." Additionally, the Lake Ontario Lakewide Action and Management Plan 2018-2022 (LAMP) outlines collective actions for partnership agencies to address current threats to Lake Ontario. The LAMP calls on partnership agencies to protect, improve, and monitor Lake Ontario coastal and watershed wetlands to support fish and wildlife diversity and habitat through a variety of initiatives, including wetland protection through land use policy and land conservation incentives to landowners."

Micron Response to Comment #1c

Micron acknowledges the important role wetlands play in controlling nonpoint source pollution in Lake Ontario. Micron is committed to improving the water quality of Lake Ontario, by way of the Oneida River watershed (10-digit HUC 0414020209), by establishing permanently protected wetland and wetland/stream complex mitigation sites on lands that are primarily agricultural in nature. Agricultural sites are well known contributors of excess sediment, nutrients (e.g., phosphorus, nitrogen), and other contaminants (e.g., E. coli bacteria) to downstream resources, which would include the Oneida River, Oswego River, and subsequently Lake Ontario. The CWSMP, developed in conjunction with TWT, details the proposed work areas and how these agricultural properties will be transformed into beneficial wetland and wetland/stream complexes. The mitigation properties will total over 1,400 acres and will also include buffer habitat vital to the protection of upland species such as the Northern Harrier and Indiana Bat. Further information on the CWSMP can be found in responses to comments in Section #4 Compensatory Mitigation below. As directed in the LAMP, Micron intends to extend its engagement to other initiatives supporting the larger Lake Ontario watershed, such as the 9 Element Plan for the Oneida Lake Watershed. Nonpoint source pollution associated with any construction and development activity on the Micron main site will be fully managed by Micron's stormwater plans and supporting documents as set forth in Response 1b above.

USEPA Comment #1d

Every five years, EPA and its federal partners develop a Great Lakes Restoration Initiative (GLRI) Action Plan to guide restoration and protection of the Great Lakes ecosystems and accelerate progress towards long term goals. Nonpoint source pollution control is a Focus Area of the Draft GLRI Action Plan IV. The value of riparian and floodplain wetlands is specifically recognized in Action Plan IV as Objective 3.2 of the Nonpoint Source Pollution Focus Area that specifically calls for reduction or prevention of stormwater runoff to improve and sustain water quality. One of the metrics used to measure progress towards this objective is Measure 3.2.3, which calls for quantification of acres of riparian buffers, wetlands, and floodplains restored or reconnected. The value of wetlands associated with maintaining and promoting healthy habitats and species populations is also recognized in GLRI Action Plan III. Objective 4.1 calls for the protection and restoration of native aquatic and terrestrial species important to the Great Lakes. Action Plan III specifically identifies the restoration of riparian habitat corridors and riverine wetlands as example projects to accomplish this goal.

Micron Response to Comment #1d

Micron acknowledges and respects the Great Lakes Restoration Initiatives and is committed to the protection of the Great Lakes ecosystems. As mentioned in Micron Response to Comment #1b above, Micron has developed a Schematic Stormwater Design Technical Memorandum that details potential downstream impacts from the Micron Project using hydraulic modeling. The hydrologic and hydraulic (H&H) modeling that has been performed as part of the stormwater design includes evaluation of existing and post-development drainage patterns related to the proposed 1,400± acre Micron Site (including its associated watershed) and will demonstrate how pre-and post-construction rates and volumes will be maintained within remaining jurisdictional Waters of the United States (WOTUS). Micron will continue to finalize a surface water and ground water monitoring plan in coordination with Agencies to minimize impacts to resources downstream as work and phases progress.

Additionally, as detailed in response to Section #4 Compensatory Mitigation below, Micron is committed to the creation of over 1,400 acres of riparian buffers, wetlands, floodplains, and over 13,000 linear feet of stream, all of which will fall within the Oneida River Watershed. These mitigation sites will provide vital habitat for native aquatic and terrestrial species as well as habitat corridors for a variety of wildlife.

USEPA Comment #1e

The role wetlands in the Lake Ontario watershed play in improving and maintaining water quality has immense economic importance in New York State. Lake Ontario is the 14th largest lake in the world; it is a deep, cold-water ecosystem that supports lake trout and whitefish. Thriving sport fisheries exist for a variety of species in Lake Ontario and its embayments and tributaries, including six trout and salmon species, Walleye (Sander vitreus), Yellow Perch (Perea flavescens), and Smallmouth Bass (Micropterus dolomieu). Offshore angling in the central and western parts of the Lake is largely focused on salmon and trout species, while angling in the eastern areas of the Lake target Walleye, Smallmouth Bass, and Lake Trout (Salvelinus namaycush). The sport fisheries generate millions of dollars annually for local, state, and provincial economies. In the United States in 2017, the value of the sport fishery activity was over US $2 billion (when direct, indirect, and induced economic effects are included) supporting over 10,000 jobs in New York State. Lake Ontario, Lake Ontario tributaries, and the St. Lawrence River accounted for 15% (3.026 million) of all New York State angler days (19.899 million).

Micron Response to Comment #1e

Micron values the role that wetlands play in protecting water quality within the Lake Ontario watershed as well as the importance of water quality to not only support healthy sport and other fisheries resources, but also the wildlife and people that live in the watershed. Although the wetland and wetland/stream complexes that will be created on the various mitigation properties will be unlikely to directly support large populations of sportfish, or provide additional sport fishing opportunities, the chemical and physical aquatic services and habitat created will positively contribute to the overall health of the watershed which will indirectly support the sport fishing opportunities of the Oneida River, Oswego River, and Lake Ontario.

USEPA Comment #1f

In 2009 a binational group co-chaired by EPA and Environment Canada developed and published 'The Beautiful Lake: A Binational Biodiversity Conservation Strategy for Lake Ontario." The Strategy was developed through a two-year process that involved more than 150 Canadian and U.S. government, academic and non-governmental organization biodiversity experts. In April 2011 the GLWQA Lake Ontario Management Committee formally adopted the 2009 Strategy, thereby implementing a Lake Ontario Lakewide Management Plan Biodiversity Conservation Strategy. This document continuously highlights the importance of freshwater wetlands contained in the watershed upon Lake Ontario biodiversity and water quality. To restore the quality of nearshore waters through nonpoint source pollution control, the document calls for the promotion of soil erosion control, riparian buffer planting and conservation actions along streams, coastal zones and wetlands.

Micron Response to Comment #1f

Please see Micron Response to Comment #1c above.

USEPA Comment #1g

Finally, the Oswego River delivers the second largest total tributary phosphorus load in New York State to Lake Ontario. Loss of wetland area in the Oswego River basin may affect water quality and the aquatic ecosystem of the Lake. Specifically, within the Oswego River watershed, the value of wetlands has been recognized as anthropogenic land use changes such as urbanization have had measurable effects on aquatic species assemblages. Wetland restoration has been highlighted as being particularly important for many fish communities in response to urbanization in the watershed. The Oneida River, a large tributary of the Oswego River, is listed by the New York State Department of Environmental Conservation as supporting walleye, tiger musky, northern pike, largemouth bass, smallmouth bass, black crappie, white crappie, yellow perch, pumpkinseed sunfish, bluegill, white perch, brown bullhead, channel catfish, common carp, freshwater drum, bowfin, round goby and gizzard shad populations. Protection of wetlands and tributaries within these watersheds, including Youngs Creek and Shaver Creek, is essential to continued support of healthy fish populations in these waters and limiting nutrient inputs to Lake Ontario.

Micron Response to Comment #1g

Please see Micron Response to Comment #1c above.

SECTION #2 PROJECT PURPOSE AND ALTERNATIVES ANALYSIS

USEPA Comment #2

According to the CWA Section 404(b)(1) Guidelines (Guidelines), only the least environmentally damaging practicable alternative (LEDPA) may be permitted (40 C.F.R.§ 230.10 (a)). To identify the LEDPA, a full range of practicable alternatives must be considered. The Guidelines clearly state that upland alternatives are presumed to be available for non-water dependent activities that do not involve the use of the aquatic ecosystem, including jurisdictional wetlands. EPA appreciates the efforts undertaken to assess and reduce the footprint of the project. However, the alternatives analysis lacked detailed evaluation of practicable off-site alternatives, on-site implementation, and/or design methods that were considered or have been incorporated into the project to further avoid and minimize the full range of impacts, including water quality and ecosystem impacts. Additionally, in accordance with Section 1502.14 of the National Environmental Policy Act (NEPA), agencies shall rigorously explore and objectively evaluate reasonable alternatives and identify the environmentally preferable alternative or alternatives amongst the alternatives considered in the environmental impact statement. The environmentally preferable alternative will maximize environmental benefits or cause the least damage to the biological and physical environment. The environmentally preferable alternative may be the proposed action, the no action alternative, or a reasonable alternative.

Micron Response to Comment #2

The Proposed Project's purpose and need centers around two key goals; one, access to safe, secure, and domestically produced chips and, two, strengthening the U.S. economy as well as that of New York State and Onondaga County by supporting high-tech job creation. Currently, Micron is the sole memory manufacturer producing DRAM in the United States, contributing less than 1% to the global DRAM manufacturing capacity. This is insufficient to meet the United States's economic and national security needs of 11% of the global market. Consistent with the policy goals of the CHIPS Act, the Proposed Project aims to boost domestic DRAM manufacturing to 12% of global capacity, fulfilling these critical needs.

A minimum of 1000 acres of contiguous land is essential to accommodate the necessary manufacturing buildings and ancillary structures. This land requirement ensures that all facility components can be efficiently integrated and operated on a single campus. The scale and efficiencies required of this project are essential to DRAM manufacturing, which is highly competitive. Micron developed a set of site selection criteria that considered minimum parcel size, utility and energy availability, transportation accessibility, workforce development, time-to-market (permitting and approvability), climate-related risks, place enhancement (livability, advanced manufacturing ecosystem (including supply chain), and availability of incentives (among various other technical and socioeconomical factors). These criteria are critical for construction and operation of a semiconductor manufacturing facility that will meet Micron's production goals. The Site Selection Criteria is explained further in Table 2.21 in Chapter 2 of the preliminary DEIS, which will be made available to the agency.

Of the sites identified by New York State as available for semiconductor manufacturing, the White Pines Commerce Park (WPCP) is the only site which meets Micron's site selection criteria. It is currently available for purchase, has land available of adequate size and shape to allow for the necessary construction footprint, can provide the necessary utilities, particularly the substantial requirement for renewable energy, transportation access and airport proximity, and provides access to available skilled labor to support a large semiconductor manufacturing facility.

Additionally, on-site implementation options and alternative design methods were considered. A comprehensive evaluation of various site layout alternatives at the WPCP was undertaken to determine if there were options which reduced the overall area of disturbance as well as reduce energy consumption needed for moving gasses, chemicals, and other materials from support buildings to the fabs. Seven site configuration alternatives, including the preferred site configuration alternative, were considered and are detailed in Appendix B.1.2. of Chapter 2 of the DEIS. The comparison of the overall area of disturbance shows minor differences between the seven site configuration alternatives. All of these being relatively equal, Micron examined the manufacturing considerations to select the best optimal site layout option. As detailed in Table 2.3-2 in Chapter 2 of the DEIS, six of the seven alternative layouts did not meet critical project requirements and would have reduced manufacturing efficiency Prior to final site selection, Micron conducted a separate, detailed analysis of alternative site locations in the State of New York. Each available site was evaluated against Micron's site selection criteria detailed in the DEIS. Of the fifteen available alternative parcels, only two met the parcel size criteria; however, neither site was in a New York State Energy Load Zone with adequate energy supply to meet the energy demand requirements and were therefore, not suitable for the project.

USEPA Comment #2a

The project purpose listed in JPA Appendix H Section 2.1.1 is "to construct and operate four state-of-the-art, advanced semiconductor fabrication facilities ("Fabs"), on a single, unified site in New York State to efficiently meet market demands and ensure competitiveness in the worldwide semiconductor market." The project purpose is critical to the subsequent alternatives analysis required by the Guidelines. From the information provided, the number of Fabs proposed plays a large role in determining the overall acreage necessary for full project build out. In JPA Appendix H, Section 3.3.2, the applicant offers justification for the proposal to develop no less than four Fabs on any proposed site. The applicant cites industry trends seeking to cluster multiple Fabs on a single site to achieve economies of scale and managerial and economic advantages. The applicant also cites the speculative costs of developing multiple sites for the purpose of semiconductor fabrication.

EPA finds the project purpose as stated to be overly restrictive as it reduces opportunities for wetlands and stream impact avoidance and minimization by specifying the exact number of Fabs to be constructed. EPA recommends broadening the project purpose by removing the applicant's desired number of Fabs to allow for increased opportunity for impact avoidance and minimization.

Micron Response to Comment #2a

The preliminary DEIS and the revised JPA will state that the purpose of the Proposed Project is to create an economically viable supply of DRAM chips which can only be achieved by producing a certain number of wafers per week at one location to ensure economies of scale. With a goal of producing 52,000 wafers per week (on average over the life of the project), the only cost competitive way to produce that number

of wafers per week is through the construction of 4 large fabs at a single location. We do not believe that this purpose is overly restrictive because were Micron to reduce the number of fab units, the production volume would decline, and the project would not be cost competitive with business peers and the manufacturing ecosystem would not be self-sustaining.

Notwithstanding the appropriately stated project purpose, a reduced scale manufacturing alternative that would involve construction and operation of two fab units with 1.2 million square feet of cleanroom space is considered in the preliminary DEIS. The preliminary DEIS dismisses the reduced scale manufacturing alternative due to the absence of a second site in New York that could accommodate even two Fabs while meeting Micron's site selection criteria discussed above. Thus, because a reduced scale manufacturing alternative at WPCP would not facilitate Micron's manufacturing goals the preliminary DEIS concludes that it is not consistent with the project purpose and need nor the goals of the CHIPs Act.

The Reduced Scale Alternative also does not meet the federal, state and local goal of optimizing high-tech advanced manufacturing nor the state and local purpose focused on establishing New York, including Onondaga County, as a leader in the domestic reshoring of semiconductor manufacturing and transforming the Onondaga County economy through new high-paying jobs, significant financial investment, and increased economic activity.

Additional information on reduced scale manufacturing alternatives considered can be found in Chapter 2, Section 3.3.1 of the preliminary DEIS.

USEPA Comment #2b(i)

The Guidelines state that an alternative is practicable if it is available and capable of being done after taking into account the cost, existing technology, and logistics considering overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed to fulfill the basic purpose of the proposed activity may be considered. Currently, the applicant has not fully described or compared the environmental impacts, including potential impacts to waters of the United States, of pursuing an alternative site listed in JPA Appendix H. Additionally, the applicant has only considered, as described in JPA Appendix H, Section 3.1, undeveloped "greenfield" locations and has not considered any previously developed properties or brownfield lands. Finally, the applicant currently has federal funding for only Phase 1 of the project. It is unclear if additional funds will be secured to pursue Phase 2 and how this will affect the pursuit of Phase 2 development. With all of this taken into consideration, it is currently unclear if utilizing multiple sites or if building fewer than four Fabs on an alternative site will affect project viability.

EPA recommends the applicant provide additional information on previously developed and brownfield sites that have been considered, the current availability of all alternative sites, anticipated environmental impacts associated with each site considered, costs associated with each alternative considered, and the process for securing and associated need for federal funding for the proposed Phase 2. Additional detail is also needed on the practicability of constructing and operating three Fabs as opposed to only considering two or four.

Micron Response to Comment #2b(i)

Please see Micron Response to Comment #2a above for details on reduced scale manufacturing alternatives considered and Micron Response to Comment #2 for Site Selection Criteria.

Section 2.2.1 of the current 404(b)(1) document, revised June 7, 2024, includes a summary of the infrastructure needs for the project. As noted in Section 2.3 Basis of Selected Site 404(b)(1) document access to substantial electric and water capacity are essential criteria for the project. As set forth in the document, the White Pine site meets the basic capacity needs for the various utilities needed to support the development including electric and water. Alternate locations that were considered lacked one or more of the base utilities to support development, such as substations, wastewater treatment facilities, water supply sources and infrastructure. Meeting these basic utilities capacity needs is critical to site selection. Additionally, no alternate location was identified in New York State (including Brownfield sites) that had sufficient acreage under unified control in a configuration that would accommodate even two Fabs, let alone the preferred 4 Fab alternative sought by Micron.
These needs are further discussed in Micron Response to Comment 2 as well as further and more detailed description in the Site Selection Criteria in Table 2.21 in Chapter 2 of the DEIS.

USEPA Comment #2b(ii)

The applicant lists the "sufficient parcel size" criterion for the purpose of site selection as "1,400+ acres." In the JPA, the total size of the preferred site, White Pine Commerce Park, is listed as 1,400 acres. It is well documented in the JPA that 221.7 acres of federally jurisdictional wetlands on the 1,400-acre preferred site are proposed to remain undeveloped to minimize project impacts. On project figures, there are other areas not proposed for development, including but not limited to: required local setbacks; the entirety of the high voltage power easement; the northeastern-most corner of the site which includes substantial upland areas intermixed with wetlands; upland that is not included in Phase 1A Laydown Area in the southwest corner of the site situated between Caughdenoy Road to the west, Parking 1 and Parking 2 to the north, and New York State Highway 31 to the south; upland north of New York State Highway 31, east of Phase 1A Laydown Area, and west of Phase 2A Laydown Area; and the northern portion of the rail spur site not proposed for development. The total acreage of areas that are proposed to remain undeveloped is currently unknown. For this reason, it is inaccurate to list 1,400+ acres, the total size of the preferred site, as the necessary acreage for project development when, from the information provided, hundreds of acres are to remain undeveloped. EPA recommends that the applicant revisit the sufficient parcel size in JPA Appendix H Section 3 to reflect only the total minimum acreage necessary to be developed and actively used for laydown, staging, and construction areas as areas left undeveloped should not be included in the sufficient parcel size. The alternatives analysis should be revised to reflect how alternative sites considered meet or do not meet this requirement. Without this information, the selected site cannot be supported as the LEDPA.

Micron Response to Comment #2b(ii)

Sufficient parcel size for this application has been revised to 1000-acre minimum, rather than 1,400 plus acres. Parcel size is essential to accommodate the necessary size of the manufacturing buildings, maintaining adequate spacing between the buildings, space needed for supporting utilities, and ancillary structures. The revised acreage minimum ensures that all facility components can be efficiently integrated and operated on a single campus reducing the need for multiple utility or other site connections. The contiguous nature of the land also allows for a seamless build out of each Fab and significant operational

efficiency reducing product transportation time between different parts of the facility and facilitating easier management and oversight. The scale and efficiencies required of this project are essential to DRAM manufacturing.

A detailed analysis of alternative site locations in the State of New York was performed where each available site was evaluated against Micron's site selection criteria.[1] All available sites meeting a minimum size of 500 acres in the State of New York were reviewed to determine if they met Micron's site selection criteria. Throughout the review, the most influential criteria were parcel-size and shape, sufficient to accommodate a large contiguous site footprint. Of the fifteen available alternative sites, only two met the 1000-acre minimum site acreage criteria. Of the two remaining sites, neither site was located in a New York State Energy Load Zone with adequate energy supply to meet the energy demand requirements. The review of each of the fifteen alternative sites considered is detailed in Appendix B of Chapter 2 of the preliminary DEIS.

USEPA Comment #2b(iii)

In the PN, proposed central utility building size for each set of two Fabs is listed as 360,000 square foot (sf) JPA Appendix H, Section 3.2.1, describes each set of two Fabs as being supported by 470,000 sf of central utility building space. Due to this discrepancy, it is currently unclear what the actual area of required central utility building space is. Additionally, required square footage of other project elements, including but not limited to cleanroom space, cleanroom support space, administrative space, warehouse space, and product testing space, are listed; however, the applicant has provided no justification for these space requirements. EPA recommends the applicant provide additional information on the area requirements and minimum practicable square footage of all proposed project elements.

Micron Response to Comment #2b(iii)

Additional information on the area requirements and minimum practicable square footage of all proposed project elements are provided in Table 2.41 in Chapter 2 of the DEIS.

USEPA Comment #2c(i)

To date, the applicant has not submitted any as-built grading plans for any of the project elements proposed in the subject PN. Without this information, it is impossible to determine the actual geographic extent of proposed direct and indirect impacts, as well as opportunities for impact minimization. To identify the LEDPA, EPA recommends the applicant provide as-built grading plans as soon as possible.

Micron Response to Comment #2c(i)

As-built grading plans for all project elements will not be available until grading has been completed, however proposed grading plans for Construction Phase 1 will be provided to the USEPA for review within the upcoming submission of the JPA package. Micron also plans to provide a map that shows temporary vs. permanent impacts to wetlands and streams for the entire site disturbance.

[1] Micron's site selection criteria is set forth in detail at Table 2.-1 in Chapter 2 of the preliminary DEIS.

USEPA Comment #2c(ii)

JPA Appendix H states that wastewater treatment plants (WWTPs) "cannot be located far from their respective fabs." They are also described as needing to be "reasonably close" to the wastewater pump house. The JPA states that "moving these buildings from (desired) locations will cause long term inefficiencies for operations of the Fabs." It is currently unclear what subjective terms such as "far" and "reasonably close" mean in relation to maximum allowable distances from respective Fabs or other interrelated project elements. The applicant also states that the clustered Fab design requires accessory elements resulting in a dense layout. It is unclear if reducing the density of project elements will result in further opportunities for impact minimization. EPA recommends the applicant provide maximum allowable distances for all project elements from proposed Fabs and other interrelated project elements. This includes but is not limited to: WWTPs, pump houses, bio buildings, bulk gas yard, electrical yard, central utilities building, hazardous process materials, industrial water tanks, administrative/probe and office buildings, and parking lots. Narrative justification for the maximum distance should be included for each project element. If a project element does not have a maximum distance requirement to any other project elements, it can be reasonably assumed that practicable alternatives that do not involve special aquatic sites are available. This includes siting in uplands on-site or exploration of additional off-site locations.

Micron Response to Comment #2c(ii)

Offsite locations were explored and ultimately determined to be not available to accommodate the appropriate size and engineering requirements of these facilities in relation to both Micron's onsite required processing and proximity to the County Industrial WWTP Facility. The current location of the Pump House and Bio Buildings provides the most feasible alternative, which includes the shortest distance to maintain conveyance to and from the Oak Orchard campus, applicable security and appropriate accessibility for maintenance and responsiveness. Additionally, if the Pump House and Bio Buildings were situated further south, there would be a conflict with other main utilities.

Recognizing the importance of exploring opportunities to avoid and minimize impacts to WOTUS, Micron will continue to assess potential modifications to the wastewater treatment facilities as detailed design progresses. This may include reduction in size or modification of layout to avoid or minimize impacts. Table 2.41 in Chapter 2 of the DEIS includes additional details on the location and size of these facilities and a summary of additional alternatives considered.

USEPA Comment #2c(iii)

Figure 4 of JPA Appendix H, the proposed full build-out design, depicts the Future Construction Compound for use in Phases 1A-2B in purple. From the information provided, it is unclear what the use of the construction compound is upon completion of Phase 2B. It is also unclear what factors are necessary or were considered for the 133-acre listed size of this area. EPA recommends including additional information on the individual elements and sizing of this area. Additionally, EPA recommends that the applicant provide information regarding the desired use of this area post-construction. If this area is unrelated to the project purpose of semiconductor manufacturing, EPA recommends the applicant explore opportunities for wetland restoration in this area.

Micron Response to Comment #2c(iii)

The construction laydown area noted will be utilized for Phase 2B of the Micron Campus which supports construction of Fab 4 and its ancillary buildings. It should be noted that this acreage is being recalculated due to recent Site Master Plan revisions. The new laydown calculations, as well as impacts by phase will be provided in the 404(b)(1) Analysis (Appendix N of the Joint Permit Application (JPA)) and is included in Appendix B-3 of Chapter 2 of the preliminary DEIS.

Micron is currently not considering this area for wetland restoration as it cannot be restored for at least 20 years. Therefore, all impacts to streams and wetlands in this area have been accounted for as permanent impacts due to the intensity and duration of construction in this area. Construction and laydown will require substantial fill and compaction.

Once the construction of all Fabs is complete, the area will be stabilized to final site design, which has not been determined. Micron has included impacts in these areas in its CWSMP. Clear timing of when phased construction impacts will occur will be explained in the second JPA submission. It should be noted that full mitigation will begin immediately upon receipt of permit and be completed well in advance of the later phase impacts. These include the main wetland complex east of Burnet Road. This will result in a net temporal gain in WOTUS values and services.

USEPA Comment #2c(iv)

JPA Appendix H, Section 3.3 states that in addition to the 113-acre construction compound, 190 acres of staging layout space is necessary to facilitate construction. JPA Appendix H, Section 3.2.1 says that areas that appear as undeveloped space for the initial construction phase are committed to material staging and laydown areas (and ultimately build-out) in the subsequent phase. EPA recommends that the applicant provide additional detailed information on the proposed use of the 190-acres of staging layout space. Without this information it is unclear if the proposed design represents the LEDPA or if there are additional opportunities for impact minimization on-site.

Micron Response to Comment #2c(iv)

Please see Micron Response to Comment #2c(iii)

USEPA Comment #2c(v)

JPA Appendix H, Section 3.3.1 reiterates the applicant's statement from Section 3.2.1 that what might appear as an open area during Phase 1 is committed to the construction and operational requirements of Phase 2. Substantial portions of the site are depicted as laydown areas and the construction compound in Figures 1 through 4 of JPA Appendix H. However, it is unclear if the following areas, which remain unmarked on all project figures, represent opportunities for impact minimization: the northeastern-most corner of the site which includes substantial upland areas intermixed with wetlands; upland that is not included in Phase 1A Laydown Area in the southwest corner of the site situated between Caughdenoy Road to the west, Parking 1 and Parking 2 to the north, and New York State Highway 31 to the south; upland north of New York State Highway 31, east of Phase 1A Laydown Area, and west of Phase 2A Laydown Area; and the northern portion of the rail spur site. If these areas are committed to construction and operational requirements, EPA recommends these areas be mapped on Figures 1 through 4 of the JPA

Appendix H. Without this information, uplands in these areas should be considered for impact minimization.

Micron Response to Comment #2c(v)

Since the submission of the JPA Appendix H, as referenced, Micron has undertaken further efforts to avoid and minimize impacts to wetlands where feasible. Micron has undertaken the addition of parking structures to limit surface parking as well as any available adjustments to the Limits of Disturbance. Additionally, Micron has advanced a revised Site Master Plan to show clear uses for areas described and the impacts associated with those areas. Detailed construction phase drawings will be provided in the 404(b)(1) Analysis (Appendix N of the Joint Permit Application (JPA)) and is included in Appendix B-3 of Chapter 2 of the DEIS.

USEPA Comment #2c(vi)

Elements of the Phase 2A Laydown Area are depicted in green on Figures 1 through 4 of the JPA. Wetland impacts, including forested wetland impacts, are associated with the Phase 2A Laydown Area. From the information provided, it is unclear why wetland impacts associated with the Phase 2A Laydown Area are proposed to occur before the construction of Phase2A and why those impact areas are listed as permanent impacts that cannot be restored on-site and in-kind at the conclusion of Phase 2A construction. EPA recommends that the applicant provide additional information on the Phase 2A Laydown Area.

Micron Response to Comment #2c(vi)

The darker green areas noted in Figures 1 through 4 of Appendix H were used to depict the locations of final site stormwater management areas that will be planted and used for the control of stormwater runoff from the Micron Campus, pursuant to the New York State Stormwater Design Manual (NYSDEC 2024). Micron will submit updated drawings that show clear site phasing and will include a legend to clarify the different features in the revised 404(b)(1) Analysis (Appendix N of the Joint Permit Application (JPA)) in Q4 of 2024. For additional details on the stormwater management features to be implemented on the Micron Campus including dry swales, planters, wet extended detention ponds, and filtration bioretention areas, please review, Figure 3-6 of the Stormwater Schematic Design Technical Memorandum that was provided for USEPA review on October 7th, 2024.

USEPA Comment #2c(vii)

JPA Appendix H, Section 3.2.2 Process Layout Summary, contains a figure on page 35 which visually depicts the location of elements of the preferred design that are not depicted in other figures. The figure is not labeled or referenced anywhere in the text of this section. Additionally, it does not contain a legend yet contains areas marked in blue and red that cannot be identified. It is unclear what the areas marked in blue and red are supposed to represent. The area marked in red and some areas marked in blue fall outside the limit of disturbance depicted in all other project figures. EPA recommends additional information on this figure be provided to determine its relevancy to the preferred design.

Micron Response to Comment #2c(vii)

Micron has worked hard to ensure the inclusion of an updated Manufactuing Process description, Proposed Project Components, and Facility description with site selection and site layout alternatives analysis in Chapter 2 of the DEIS. This same description will be included in 404(b)(1) Analysis (Appendix N of the Joint Permit Application (JPA).

USEPA Comment #2c(viii)

The rail spur is proposed to be constructed on Town of Clay tax parcel 046.- 02-03.2. The majority of delineated wetlands are concentrated on the southern side of the parcel. The majority of construction is also concentrated on the southern side of the parcel. It is currently unclear why upland areas are remaining undeveloped while non-water dependent project elements such as an office building, a temporary doublewide trailer, parking area, emergency stockpiling, a crane pad and runway, non-aggregate material storage, stormwater management, access roads, etc., are proposed in wetland areas. EPA recommends that the applicant provide additional information on why elements of the rail spur site cannot be constructed in upland areas.

Micron Response to Comment #2c(viii)

The original design of the rail spur was intended to minimize impacts to neighboring properties, however after further design efforts, the proposed rail spur has been redesigned to avoid and minimize impacts to existing wetlands. By relocating the emergency storage area to the north of the site, Micron has reduced impacts to wetlands by approximately 5 acres. The remaining wetlands that will be impacted will be compensated for via the CWSMP. Updated site design for the Rail Spur will be provided in the next JPA submission. Further information as to why the Rail Spur site design must be configured for efficiency and operations is included in the Alternatives Carried Forward for Analysis in Chapter 2 of the preliminary DEIS.

USEPA Comment #2c(ix)

An approximately 112,000 cubic yard "emergency stockpile" of material is currently being proposed at the rail spur site. It is unclear what factors are driving the sizing of the proposed stockpile. Additionally, no grading plans have been provided for the project, so it is unclear what is underlying the proposed stockpile and what is the geographic extent of any proposed pad. EPA recommends the applicant provide additional information on the sizing of the stockpile and proposed grading under and around it.

Micron Response to Comment #2c(ix)

As described in Chapter 2 of the preliminary DEIS, an estimated 112,000 CY stockpile area would be located internal to the Rail Spur Site which allows for railcar offloading activities to be maintained in the event of an unexpected equipment failure with the main aggregate conveyance system. Aggregate material would be trucked a short distance across Caughdenoy Road to the Micron Campus until main conveyance system operations are re-established. Micron would refer USEPA to Response to Comment *#2c(viii).*

USEPA Comment #2c(x)

The stated purpose of the rail spur is "to receive materials, supplies, and equipment during construction, to reduce truck traffic and related impacts to area roadways." It is currently unclear what the ultimate use of the rail spur site is once the campus has been constructed and the project is completed. EPA requests additional information on the intended use of the rail spur and stockpile location upon project completion. If areas are unrelated to the project purpose of semiconductor manufacturing at the completion of facility construction, EPA recommends the applicant explore opportunities for wetland restoration in this area.

Micron Response to Comment #2c(x)

Micron has since identified that a third-party owner operator will manage and ultimately determine what the rail spur is used for post-Micron construction needs. Micron's plans currently focus on utilizing the rail spur to support the delivery of aggregate fill and construction materials (e.g., rebar, precast items). Regarding reconfiguration of the site to minimize impacts to wetlands, Micron refers USEPA to our Response to Comment #2c(viii).

USEPA Comment #2c(xi)

From the information provided, it is unclear if the applicant has applied for setback variances from local authorities to develop/utilize upland areas of the site not currently proposed for development. EPA recommends the applicant pursue setback variances for all upland areas located in setback areas and not currently proposed for development, laydown, staging, or to support construction. The applicant should include information documenting application for setback variances, along with responses from local authorities, within the JPA. Without this information, the currently proposed design cannot be supported as the LEDPA

Micron Response to Comment #2c(xi)

The revised application will include a discussion of applicable setbacks and evaluate the viability of seeking variances as a strategy to mitigate wetland impacts. If variances are determined to be warranted and practicable to achieve impact reductions, Micron will pursue them during the Site Plan Approval Application process with the Town of Clay. This approach ensures a thorough evaluation of options to minimize wetland impacts while aligning with regulatory requirements.

USEPA Comment #2c(xii)

The applicant's stated justification for including the rail spur in project designs is that it is intended to receive materials, supplies, and equipment during construction to reduce truck traffic and related impacts to area roadways. Wetlands on the rail spur site are forested swamp and are therefore presumed to be some of the highest value resources on the entire site. The applicant's justification for adding gas plants to the proposed project design is that while they create additional footprint, they result in a substantial reduction in truck trip generation volumes, reducing traffic impacts, road impacts, cost, and greenhouse gas emissions. From the information provided, it is currently unclear how the applicant is comparing valuation of environmental impacts and how wetland filling is considered environmentally preferable to greenhouse gas emissions generated from truck traffic and roadway impacts. EPA recommends the applicant provide more information on how the loss of wetlands and their associated functions in the context of the preferred design have been quantified and how they off-set greenhouse gas emissions and

potential traffic impacts from truck traffic should individual project elements not be included in the current design.

Micron Response to Comment #2c(xii)

The revised application will supplement the justification for the rail spur with a comparison of the avoided environmental impacts attributable to the rail spur and the wetland impacts. This information will also be included in the preliminary DEIS.

USEPA Comment #2c(xiii)

Since the PN was posted, jurisdictional wetlands have been found on the Family Care/Healthcare Center site. It is currently unclear what individual components of this project element are associated with proposed jurisdictional wetland impacts as no maps of jurisdictional wetlands have been provided, as well as no as-built plans. As this is a nonwatery dependent project element and is entirely unrelated to the basic project purpose of semiconductor chip fabrication, EPA recommends that impacts to jurisdictional wetlands be fully avoided. Project components currently proposed to be located in jurisdictional wetlands should be shifted and/or downsized to cause no impacts to jurisdictional wetlands.

Micron Response to Comment #2c(xiii)

The proposed site plan for Childcare/Health Center site has been modified to avoid delineated wetlands except the entry road crossing of the narrow wetland strip on the Childcare site's south end. Maximum wetland impact would be less than 0.1 acres (0.06 acres as currently designed) and as driveway design progresses, other solutions such as natural bottom culverts or other structures will be considered to further minimize impacts. As the Childcare/Health Center design advances, additional consideration will be given to further minimize impacts.

SECTION #3 RESOURCE ASSESSMENT

USEPA Comment #3

The applicant states that a functional assessment of the freshwater wetland resources which may be impacted by the development of the Project Site was performed in accordance with the U.S. Army Corps of Engineers (USACE) Highway Methodology Workbook Supplement. The applicant states that this assessment method was designed to highlight ecologically and socially significant wetland attributes, if present.

USEPA Comment #3(i)

EPA is concerned with the applicant's use of the USACE Highway Methodology Workbook Supplement as it is a purely descriptive method since it does not call for the collection of any quantifiable data in the field. The methodology's introduction states that it offers an approach that includes only a qualitative description of the physical characteristics of the wetlands and the bases for the conclusions rely on "best professional judgement." EPA questions the adequacy of using this methodology in a regulatory context as the USACE New England District, in collaboration with EPA, is developing a quantitative wetland functional assessment method to replace its 20-year-old qualitative "descriptive" method for use in its regulatory program. Due to its lack of objectivity, EPA finds the USACE Highway Methodology Workbook Supplement to be useful for high level analysis but not an adequate tool for site-specific functional analyses.

Through conversations with the applicant, EPA is aware that Micron has collected quantitative data in the field associated with existing wetlands on the Micron Campus Site. EPA recommends that the applicant provide any quantitative data collected in the field associated with existing functional assessment efforts that provides a measurable assessment which can be relied upon to further direct avoidance and minimization of impacts to any high-quality aquatic resources. Metrics assessed and data collected may include but are not limited to hydrologic alteration and stressors, hydroperiod, water source, maximum water depth, depth to water table or saturation, soil type, substrate disturbance, soil horizon depths and profile descriptions, microtopography, plant species diversity, plant community assemblages, extent of invasive species, dominant vegetation, vegetation alteration, surrounding land use cover, extent and/or vegetative type of buffer, extent of human land use in buffer, etc.

Micron Response to Comment #3(i)

A Compensatory Wetland/Stream Mitigation Plan (CSWMP) for proposed impacts to existing on-site wetlands has been submitted pursuant to the USACE's Final Compensatory Mitigation Rule for Losses of Aquatic Resources (40 CFR Part 332) and as required by Section 404 of the Clean Water Act. This CSWMP identifies how a) there will be no net loss in wetlands due to the completion of the mitigation plan and b) the values and services provided to the Oneida River Watershed have been quantified using *The Highway Methodology Workbook Supplement; Wetlands Functions and Values, a Descriptive Approach* (USACE 1999) consistent with the following excerpt from the Final Mitigation Rule:

(f) Amount of compensatory mitigation. (1) If the district engineer determines that compensatory mitigation is necessary to offset unavoidable impacts to aquatic resources, the amount of required compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions. In cases where appropriate functional or condition assessment methods or other suitable metrics are available, these methods should be used where practicable to determine how much compensatory mitigation is required. If a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used.

As stated in the Highway Methodology Supplement, this assessment tool "can be used for any project where the characterization of wetland resources is necessary for Section 404 permit requirements." Consistent with this statement, this methodology has been used and approved under the Clean Water Act by the USACE and NYSDEC for a wide range of projects since its publication, including the Marcy Nanocenter project that consisted of significant impact to, and mitigation of, aquatic resources for the purpose of microchip fabrication development.

The proposed CSWMP submitted by Micron on September 20, 2024 provides for 352 acres of wetland creation to offset 200 acres of wetland fill and restoration of 13,574 linear feet of stream to offset impacts to 6,714 linear feet of stream. A summary of the functions and values of each wetland/cover type along with other wetland functions supporting information, including delineation data, photo logs, soil surveys, and topography will be submitted for review separately and before the submission of the upcoming JPA.

USEPA Comment #3(ii)

A quantitative functional assessment would also be helpful to ascertain appropriate compensatory mitigation. EPA recognizes that an approved functional assessment methodology for New York State currently does not exist. EPA recommends the applicant engage in conversations with NYSDEC, the New

York Natural Heritage Program, and USACE Buffalo District to determine what nationwide or regional assessment methods using field collected data in the applicant's possession may apply, including but not limited to the New York State Wetland Condition Level 2 Rapid Assessment Method Version 4.2, and the Northeast Regional Floristic Quality Assessment.

Micron Response to Comment #3(ii)

In addition to the justification outlined above, modification of the methodology used for valuation of existing values and services is not recommended based on the following:

1. This methodology was cited in the Wetland Delineation Report that was provided to the involved agencies in April 2023. While the USEPA voiced its general disproval of the Highway Methodology in May 2024, neither the USACE nor the NYSDEC have requested or required that an alternative methodology be employed to date. The lack of such a request after more than a year of consideration indicates that the Highway Methodology would continue to be reviewed in the context of Clean Water Act approval.
2. The *Developing methods, cultivating engagement, and creating end-user tools for wetland functional assessment* document that was published by the USEPA and NYNHP in 2022 and referenced by the USEPA and USFWS in their comment letter states: "*Our primary goal in this project is to develop and pilot a wetland functional assessment protocol that addresses functions and values protected under the NYS Freshwater Wetlands Act.*" This statement informs potential users that the New York State Wetland Condition Assessment (NYRAM) tool is under development and not finalized. Use of this tool over a published methodology (i.e., Highway Methodology and New York State Riparian Opportunity Assessment) that has precedent for review and approval by the involved agencies was not considered.
3. The USEPA's concern over the "descriptive" and "qualitative" nature of the Highway Methodology based on its reliance on the subjective best professional judgement of the biologists who employ it is echoed in the Northeast Floristic Quality Assessment (FQA): "*There have been criticisms of the method, including that the coefficients have inherent bias because they are subjectively assigned by a team of botanists, insufficiently validated, or too strongly influenced by rarity (see references in Matthews et al. 2015). But as Taft et al. (1997) stated at the outset of development of FQAs, "The FQA method, though subjective, permits dispassionate and repeatable application because its value judgments are predetermined.*" Further, similar to the NYRAM, use of this tool over a published methodology that has precedent for review and approval by the involved agencies was not considered. Neither the NYRAM nor the FQA are identified by the USACE or NYSDEC on their websites so were not considered for use in developing the CWSMP.
4. The following were identified as primary wetland values and services for existing site wetlands using the Highway Methodology:

    a. Wildlife habitat
    b. Floodflow alteration
    c. Sediment/toxicant retention

Secondary values/services displayed within wetlands include:

a. Groundwater Recharge/Discharge
b. Endangered Species Habitat
c. Fish and Shellfish Habitat
d. Nutrient Removal

e. Production Export
f. Sediment/Shoreline Stabilization

It is anticipated that utilization of one of the alternative suggested methodologies will identify the same primary and secondary values and services upon completion. Further, none of the methodologies discussed herein provides a mitigation ratio as an end result and each requires the use of subjectivity and best professional judgement to arrive at a recommended ratio.

As stated in the previous response, a summary of the functions and values of each wetland/cover type will be submitted for review separately and before the submission of the upcoming JPA. Included in the submission were the following files; delineation reports and data, wetland functions and values data forms, a functions summary table, historical photographs, photo logs and figures, topography, and the soil survey data.

SECTION #4 COMPENSATORY MITIGATION

USEPA Comment #4

EPA is aware that Micron has committed to submitting a comprehensive mitigation plan. EPA commends Micron on its efforts to date to engage with relevant federal and state agencies and develop a comprehensive compensatory mitigation plan with the aid of The Wetland Trust. This project presents a historic opportunity to develop an exemplary mitigation plan to offset the unprecedented extent of aquatic resource impacts proposed at the Micron Campus Site. Although it has not been demonstrated that the proposed project represents the LEDPA, EPA offers the following comments on compensatory mitigation for the wetlands and stream impacts:

USEPA Comment #4(i)

After the LEDPA is identified and impacts to the aquatic ecosystem are fully assessed, the applicant should demonstrate that the proposed mitigation will adequately compensate for the impacted resources, including wetlands and streams. Based on information in the PN, no formal and complete mitigation plan had been developed at the time of publication. Once fully developed, the compensatory mitigation plan (CMP) should clearly detail how the mitigation proposal will offset the loss of the functions and services of the impacted resources. Any wetlands and stream mitigation plans submitted should be compliant with the 2008 Federal Mitigation Rule and include all elements required in 40 CFR§230.94(c)(1)-(14).

Micron Response to Comment #4(i)

Since the initial Public Notice, Micron has developed a draft Compensatory Wetland/Stream Mitigation Plan (CWSMP). The CWSMP details the properties that have been acquired by The Wetland Trust (TWT), on behalf of Micron, to fully compensate for lost functions and values to wetlands and streams on the Micron Site. The total wetland and stream impacts on the Micron Site are likely to be 200 acres of wetlands and 6,714 linear feet of stream. The wetland/stream mitigation properties will total over 1,400 acres and will also include buffer habitat vital to the protection of grassland bird species such as the Northern Harrier (Circus cyaneus) and endangered species like the Indiana Bat (Myotis sodalis).

The 1,400-acres of wetland/stream mitigation property acquired will be spread across five main sites; Oneida River, Caughdenoy Creek, Upper Caughdenoy Creek, Buxton Creek, and Sixmile-Fish Creek all within the 10-digit Oneida River watershed (HUC 0414020209). The total amount of wetlands and streams to be created as part of the mitigation work will be about 350 acres of wetlands and 13,500 linear feet of

stream. In addition to created wetlands and streams, an additional 750 acres of existing upland and wetland will be permanently protected across those five sites. The wetlands and wetland/stream complexes created as part of the mitigation work will be monitored for a 10-year period, or until all success criteria outlined in the CWSMP are achieved.

In addition to the permanent protection of upland areas included in the wetland/stream mitigation properties mentioned in the previous paragraph, a separate Net Conservation Benefit Plan has also been developed to compensate for permanent impacts to upland habitat on the Micron Site that may be utilized by protected species such as the Northern Harrier. Grasslands that will be protected and managed through the Net Conservation Benefit Plan will total over 950 acres on 7 sites across Central New York. Lastly, a Biological Assessment (BA) has been developed that will compensate for any potential impacts to protected species of Bats on the Micron Site by permanently preserving over 1,300-acres of bat habitat, including known maternity roosts and hibernaculum.

In total, over 3,700 acres of mitigation properties will be acquired and permanently protected to compensate for impacts to natural resources within the 984-acre Limits of Disturbance on the Micron Site.

Detailed information on stream and wetland mitigation as well as downstream impacts will be provided in the CWSMP as an Appendix of the JPA in Q4 of 2024. The BA and Net Conservation Benefit Plan will also be included as appendices.

USEPA Comment #4(ii)

To ensure full compensation for lost functions, EPA recommends that any mitigation project be in place prior to the discharge of fill material. This would minimize temporal loss of wetland and stream functions within the Oneida River watershed. EPA believes that compensation should preferably occur within the same 12-digit HUC (041402020905) or, at a minimum, within the same 8-digit HUC (04140202) where impacts will occur.

Micron Response to Comment #4(ii)

Site preparation, grading, and planting of each mitigation site is anticipated to be completed concurrently with the construction of Phase 1 of the Micron Project. All mitigation site construction for the project is anticipated to be completed within 6 years of permit issuance. All properties occur within the same 10-digit Oneida River watershed HUC (0414020209) where impacts will occur. A construction sequence table displaying the timing of mitigation site activities has been provided in table 7-1 in the CWSMP. Additionally, the timing and sequence of mitigation work by site is outlined in Appendix B, Section 6.2.6 of the CWSMP.

USEPA Comment #4(iii)

Mitigation for any unavoidable impacts should be in-kind and have associated measurable performance standards to ensure that lost aquatic resource functions are adequately replaced. Specific, observable and measurable criteria should be included in the CMP so it is clear whether the project goals related to the chemical, physical, and biological functions of the aquatic resources to be mitigated have been met, or whether corrective actions are needed. The performance standards, at a minimum, should indicate that the proposed wetland area(s) meet wetland criteria in accordance with the 1987 Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual:

Northcentral and Northeast Region and the 2005 Technical Standard for Wetland Hydrology." In addition, success criteria based on the evaluation of wetland parameters (i.e., hydrology, vegetation and soil indicators based on the information in the appropriate regional supplement), vegetation performance (e.g., aerial coverage, species composition, growth, etc.), and invasive species, should be used to evaluate whether the mitigation is meeting its objectives. EPA recommends consideration of the performance standards developed for monitoring of wetland mitigation banks and in-lieu fee sites in New York; however, due to the permittee-responsible party nature of the proposed mitigation, additional performance standards may be required beyond those currently in use by The Wetlands Trust In-Lieu Fee Program at other sites in New York. EPA recommends stream performance standards that measure, at a minimum, floodplain connectivity (e.g., bankfull width, ordinary high water mark, entrenchment ratio), vertical (e.g., bed elevation, slope) and lateral stability (e.g., width-depth ratio, cross-sections, sinuosity, bank erodibility hazard index), stream reach stability (e.g., riparian planting success, vegetation density and/or percent canopy cover, invasive species cover), and habitat (e.g., microtopography and large woody debris, fish and macroinvertebrate diversity).

Micron Response to Comment #4(iii)

Micron has developed a Compensatory Wetland/Stream Mitigation Plan (CWSMP) to address proposed permanent impacts to on-site streams and wetlands. Each of the mitigation parcels will include Site Protection Instruments that perpetually protect the resources. Other requested elements have been considered and addressed in the CWSMP.

USEPA Comment #4(iv)

The monitoring plan in the CMP should relate to the performance standards and include the success criteria to determine if the site is on a positive ecological trajectory. For wetlands, please describe what indicators will be monitored for wetland hydrology, hydrophytic vegetation establishment, hydric soil development, and other physical, chemical, and biological attributes of the site such as microtopography and species diversity. For streams, please describe what indicators will be monitored for channel alignment stability, channel bank stability, channel bed stability, riparian vegetation establishment, and macroinvertebrate colonization. The indicators should be linked to aquatic resource functions and include a range of values to determine success or failure. The performance standards associated with each indicator should adequately demonstrate attainment of these functions through a phased approach with clear end goals.

Micron Response to Comment #4(iv)

Micron, in partnership with TWT, has developed a CWSMP, that identifies performance standards and specific success criteria that will determine if the mitigation sites are meeting those performance standards. Wetland and stream mitigation success will be based on a variety of physical, chemical and biological attributes specifically outlined in Section 9 of the CWSMP.

USEPA Comment #4(v)

To better understand what will be monitored and when it will be monitored, EPA recommends adding a table to illustrate this information. Additionally, a map displaying monitoring locations and what will be monitored at those locations should be included.

Micron Response to Comment #4(v)

Micron, in partnership with TWT, has developed the CWSMP that will provide detailed site design and monitoring instructions for each wetland/stream mitigation site in their own respective chapter. It is important that mitigation areas be built and evaluated in the field before specific areas can be identified as "representative" of as-built conditions. This would generally occur in the Baseline Monitoring Report that is produced the first growing season post-construction. At that time, specific monitoring locations could be established.

Site monitoring will be conducted for a 10-year period that will begin the year after construction is completed and the post construction as-built report/Baseline Monitoring Report for the site is submitted. The ten-year monitoring program will evaluate the progress of the wetland and stream mitigation areas, identify potential maintenance and/or adaptive management strategies, and document the establishment of wetland functions and services in the mitigation areas. Key aspects of the monitoring program are success and spread of the native plantings and volunteers, documentation of wildlife use, hydrologic functions, and control of invasive plant species within the wetland mitigation areas. Specifics of the monitoring program can be found in Appendix B of the CWSMP.

USEPA Comment #4(vi)

EPA recommends a minimum of 5 monitoring years for palustrine emergent wetlands, 7-10 years for palustrine scrub-shrub wetlands, and at least 10 years for palustrine forested wetlands. These monitoring timeframes may be shortened if final success criteria are attained for 2-3 consecutive years.

Micron Response to Comment #4(vi)

TWT is proposing that each mitigation site will have a 10-year construction, maintenance, and monitoring period to be managed through annual monitoring reports and adaptive management. Detailed information about the monitoring timeframes can be found in TWT's Offsite Compensatory Mitigation Plan, which is included as Appendix B to the Compensatory Wetland/Stream Mitigation Plan.

USEPA Comment #4(vii)

EPA further recommends developing an Adaptive Management Plan in the CMP to address measures to be taken if the site fails to meet the performance standards. Actions should be specified for common problems of mitigation sites such as, but not limited to, inadequate or excess hydrology, invasive species colonization, and herbivory.

Micron Response to Comment #4(vii)

An Adaptive Management Plan has been developed and included in Section 11 of TWT's Offsite Compensatory Mitigation Plan, which is included as Appendix B to the Compensatory Wetland/Stream Mitigation Plan.

USEPA Comment #4(viii)

To fully assess the adequacy of the mitigation proposal, detailed information is needed regarding the quality and functions of the aquatic resources within the proposed project area. Detailed site-specific data

including assessment data sheets, photos, measurements, and other supporting documentation (i.e., Hydrogeomorphic (HGM) classification, habitat assessment, and age-class) should be provided. To the maximum extent practical, the CMP should strive to mitigate specific wetland types based on hydrogeomorphic data. For example, if open depressional features are to be filled at the impact site, the CMP should incorporate this wetland type into the mitigation site design, if feasible. Functions associated with identified HGM types should be listed clearly as functional attainment goals of the site and, when possible, monitoring indicators and/or performance standards should be assigned to determine achievement of each function based on wetland HGM type (e.g., monitoring wells demonstrate appropriate seasonal hydroperiod for open depressions). At a minimum, the dominant water source should be identified for different wetland types at the mitigation site (e.g., precipitation, overland flow, overbank flooding, groundwater), and the CMP should clearly demonstrate how the site will be constructed to receive and permanently maintain these sources of water.

Micron Response to Comment #4(viii)

A summary of the functions and values of each wetland/cover type will be submitted separately for review before the submission of the upcoming JPA. Included in the submission were the following files; delineation reports and data, wetland functions and values data forms, a functions summary table, historical photographs, photo logs and figures, topography, and soil survey data.

USEPA Comment #4(ix)

In addition to the comments provided above on what should be included in the CMP, the narrative and drawings should also include specific details on the site construction, including features such as constructed habitat elements, planting plans, microtopography, and site construction activities such as access, topsoil and subsoil stockpiles, limit of disturbance, and soil preparation.

Micron Response to Comment #4(ix)

A conceptual CSWMP was submitted to the agencies on September 20, 2024. Detailed narratives and drawings for each mitigation site and proposed elements will be included in the final submission of the JPA.

USEPA Comment #4(x)

Once available, EPA requests a copy of the completed CMP to review and provide additional comments. The applicant can expect future comments from EPA on mitigation type (i.e., rehabilitation, re-establishment, and enhancement), site specific performance standards and success criteria, construction methods, credit ratios, etc., once the completed CMP is reviewed.

Micron Response to Comment #4(x)

A copy of the Compensatory Wetlands/Stream Mitigation Plan was submitted for multi-Agency review on 20 September 2024.

SECTION #5 SECONDARY EFFECTS

USEPA Comment #5

The Guidelines state that secondary effects are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities. Surface runoff from commercial developments on fill is listed as one example of secondary effects. Additionally, activities to be conducted on upland created by the discharge of dredged or fill material in waters of the United States may have secondary impacts within those waters which should be considered in evaluating the impact of creating those fast lands. Based on the information provided for review, it is unclear whether secondary and cumulative impacts were considered and/or how they were minimized. Secondary impacts to the remaining wetland systems need to be considered and evaluated.

USEPA Comment #5(i)

The proposed design will result in the bisection of several wetlands on the proposed site. It is currently unclear how the filling of portions of individual wetlands will affect unfilled portions that will remain undisturbed. EPA is concerned that alterations to site hydrology will have negative secondary effects on undisturbed wetlands on-site, including cutting off their hydrology source, resulting in a reduction of "avoided" wetland areas. EPA recommends the applicant provide information on how filling and grading will affect the quality, function, hydrology, lateral extent, and vegetative communities of proposed undisturbed wetland areas.

Micron Response to Comment #5(i)

Micron has provided a surface water/groundwater monitoring plan, and associated stormwater technical support to USACE, NYSDEC, and USFWS. The proposed plans have demonstrated that the site is being designed in accordance with NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-0-20-001). Stormwater management facilities are being designed in accordance with New York State Stormwater Management Design Manual (Stormwater Manual; NYSDEC 2015) which includes management of the Water Quality Volume, the Water Quantity Volume, the Runoff Reduction Volume, and Green Infrastructure Planning. The hydrologic and hydraulic (H&H) modeling that is being performed as part of the stormwater design includes evaluation of existing and post-development drainage patterns related to the proposed 1,400+- acre development site (including its associated watershed) and will demonstrate how pre-and post-construction rates and volumes will be maintained within remaining jurisdictional WOTUS. Additionally, groundwater and surface water monitoring placements have been identified to observe any effects on undisturbed wetlands.

USEPA Comment #5(ii)

The applicant has not provided any information on hydrologic effects of filling over 200 acres of federally jurisdictional and non-jurisdictional wetlands, increases in total impervious surfaces, and/or altering the grade of the proposed site. EPA is concerned about the lack of discussion on how stormwater and increased runoff will be handled on-site. This is especially concerning as the effects of climate change are being felt in New York State. Annual precipitation and the frequency of heavy storms associated with climate change have already been documented in the Northeast and are expected to keep rising." Communities with environmental justice concerns are also at risk of being disproportionately affected by negative secondary effects on local hydrology and water quality associated with the proposed project.

EPA recommends that the applicant conducts a complete hydraulic analysis for the proposed project and provide additional information on proposed stormwater management for the site. This information should include an analysis of potential downstream flooding, increased nutrient loading to the Oneida and Oswego Rivers and Lake Ontario, and take into consideration possible precipitation changes in the region associated with climate change.

Micron Response to Comment #5(ii)

As noted in Micron Response to Comment #1(b) and #5(i) above, detailed information on site hydrology and stormwater management has been provided in the H&H model, Stormwater Technical Memorandum, and Surface Water/Groundwater Monitoring Plan.

USEPA Comment #5(iii)

In addition, for the remaining resources which may be sensitive to disturbance and/or of high-quality, EPA recommends the applicant provide information on what specific or additional measures will be taken to protect and monitor these resources to ensure no degradation of avoided resources occurs. This information is especially important regarding the forested wetlands on the northern portion of the site.

Micron Response to Comment #5(iii)

As noted in Micron Response to Comment #1(b) and #5(i) above, detailed information on site hydrology and stormwater management has been provided in the H&H model, Stormwater Technical Memorandum, and Surface Water/Groundwater Monitoring Plan.

SECTION #6 CUMULATIVE EFFECTS

USEPA Comment #6(i)

To evaluate potential cumulative impacts to the aquatic ecosystem, other projects either associated with or not related to the development, from the past, present, and reasonably foreseeable future, impacting the same aquatic systems, should be identified. Assessment of these activities in the watershed should evaluate whether the combined effects of activities may result in significant degradation of aquatic resources.

Additional stream and wetland impacts that may result from induced development, roadway improvements, and other future project components are not discussed in the PN. The PN does not identify how many anticipated permits, or what type, may be issued in conjunction with this PN. Without this information it is difficult to ascertain the likely cumulative impacts to aquatic resources in the Youngs Creek, Oneida River, and Oswego River watersheds.

Given the proposed future development activities associated with the Micron Campus Site project, EPA recommends that the applicant conduct a thorough cumulative effects analysis. The rationale used to support the conclusions of the assessment should be clearly documented and articulated. EPA recommends the applicant thoroughly evaluate the project's potential to cause or contribute to significant degradation of the aquatic ecosystem and ensure that measures are undertaken to avoid and minimize the potential of secondary and cumulative impacts.

Micron Response to Comment #6(i)

Like the Micron project, any future development/improvement projects, regardless of their proximity to the Micron Site, Childcare Center or rail spur, would be subject to applicable federal, State, and local review processes to assess associated impacts and mitigation requirements prior to implementation. Additionally, cumulative impacts associated with any connected actions, recommended roadway improvements and known future development projects in the watershed, whether induced by the project or not, are discussed in the cumulative effects section of the preliminary DEIS. Impacts from existing developments would be reflected in the baseline assessment included in the preliminary DEIS. The preliminary DEIS also includes a fulsome discussion of the measures that will be undertaken to avoid, minimize and mitigate cumulative impacts.

USEPA Comment #6(ii)

In addition, indirect and cumulative impacts to be considered in the NEPA review are anticipated to include extensive induced development. These impacts might be from nearby and related residential and commercial development and associated infrastructure. EPA understands that there is potential for the need for other USACE permits for off-site improvements and impacts of these actions are currently unknown. The secondary effects or cumulative impacts should be fully considered in both the 404 permitting processes as well as in the NEPA review. The NEPA documents will provide an opportunity for disclosure of a greater range of impacts to all resource categories.

Micron Response to Comment #6(ii)

Information surrounding Cumulative Impact concerns including Growth Inducing, Land Use, and connected actions can be found in the preliminary DEIS and as such will be considered as part of the 404 permitting process for this application.

Information regarding cumulative impacts, including growth-inducing impacts, land use changes, and connected actions, is addressed in detail in the preliminary DEIS. The DEIS outlines anticipated residential, commercial, and infrastructure developments potentially induced by the project, along with their associated indirect and cumulative impacts. These considerations will be evaluated comprehensively as part of the NEPA review process. Additionally, cumulative impacts will also be incorporated into the 404 permitting process to ensure a full assessment of secondary effects, including potential impacts requiring additional USACE permits.

SECTION #7 ENVIRONMENTAL JUSTICE

USEPA Comment #7

The project applicant does not provide any information on potential impacts of the proposed project on communities with environmental justice (EJ)concerns. The proposed project has the potential to affect water quality and downstream flooding in the Oneida River, Oswego River, and Lake Ontario, as well as within their watersheds. EPA recommends the applicant provide information on potential impacts to communities with EJ concerns including identification of EJ communities downstream of the proposed project and identification of any potential effects the project may have on these communities. If potential negative effects are found to exist, EPA recommends the applicant explore appropriate mitigation measures.

Micron Response to Comment #7

Potential impacts and concerns with the project related to Environmental Justice are addressed in the relevant section in the preliminary DEIS.

SECTION #8 USEPA DETAILED COMMENTS ON ADDTIIONAL INFORMATION SUBMITTED BY THE APPLICANT DATED AUGUST 8, 2024

USEPA Comment #8a

EPA appreciates the additional information provided regarding jurisdictional wetlands, a preliminary site plan, grading plan, utility plan, landscaping plan, and lighting plans for the Childcare center. Although the impacts to wetlands are anticipated to be less than one-tenth of an acre on this site, EPA encourages the applicant to design the road crossing in a way that further reduces impacts. This may be achieved by adjusting the routing of the road or utilizing a bridge or a large box culvert to cross the wetland area. Doing so would not only reduce direct impacts but would also reduce the risk of secondary impacts by maintaining continuity of the hydrology within the wetland. In addition to the impacts from the roadway, EPA is concerned that the grading plans for the stormwater management areas may impact the hydrology of the adjacent wetlands. As proposed, these water management areas will be graded below the elevation of the adjacent wetlands, which could result in unintentional drainage or other disruptions to the hydrological regime. EPA recommends the applicant further explore ways to minimize the wetland impacts from construction of the road and identify any best management practices and/or re-siting of the stormwater management areas to reduce secondary impacts to adjacent wetlands.

Micron Response to Comment #8a

The proposed site plan for the Childcare Center has been modified to avoid delineated wetlands except the entry road as noted. As the Childcare site design advances, additional consideration will be given to design stormwater facilities so as to not impact the hydrology of the adjacent wetlands.

USEPA Comment #8b

EPA acknowledges the additional information provided on the alternatives for the rail spur site; however, one issue that remains unclear is whether the applicant owns the parcel in the northern part of the site, tax parcel no. 146.-02-03.2. This area is currently proposed to be separated from the rail spur construction and operation area by a chain link fence, though it appears to be included as part of the overall rail spur site as indicated by the site boundaries on all submitted maps and drawings. EPA requests clarification on the ownership of this parcel and information on why this area cannot be used for any part of construction or operation to reduce wetland impacts in the southern portion of the site. Without this information, EPA cannot determined if the preferred rail spur design is the least environmentally damaging practicable alternative (LEDPA) for that project element.

Micron Response to Comment #8b

Please see the Micron Response to Comments #2c(viii) - #2c(x) for information on rail spur design and LEDPA. Additional and updated information on the rail spur site will be submitted in the next JPA submission. The two tax parcels associated with rail spur currently owned by Micron NY Semi mfg LLC are Tax ID 046.-02-03.2 and 046.-01-19.1.

USEPA Comment #8c

In the August 8 response, the applicant indicates that an updated detailed table of impacts including an impact timeline, updated project plans including a site grading plan, construction details, stormwater management plan, hydraulic analysis addressing downstream hydrologic connectivity, information on off-site utilities, and additional information on the Serog property is expected in September of 2024. EPA looks forward to reviewing these materials and continuing discussions regarding impact avoidance and minimization opportunities. However, without this information EPA does not currently have enough information on impact avoidance and minimization to determine if the preferred alternative is indeed the LEDPA.

Micron Response to Comment #8d

Micron has provided a stormwater management technical memo and hydraulic analysis addressing downstream hydrologic connectivity in October of 2024. Additionally, OCIDA has retained ownership of the Serog properties and updated delineations were provided to USACE. Impact timeline, updated project plans including a site grading plan, construction details, and information on off-site utilities will be provided with the upcoming submission of the revised JPA.

USEPA Comment #8d

The applicant provided some general information on the factors evaluated in locating the pump house, on-site wastewater treatment facilities, biological treatment buildings, and associated stormwater facilities. However, no specific information was provided on off-site locations considered to house some of these facilities, the minimal appropriate size and engineering requirements of these facilities, the importance and significance of distance in maintaining conveyance to and from the Oak Orchard wastewater treatment plant, applicable security, appropriate accessibility for maintenance and responsiveness, minimum necessary distances to other project elements, or conflicts with other main utilities. The applicant stated that it will continue to assess modifications to the wastewater treatment facilities in the detailed design that may include reduction in size, relocation, and/or modification of layout to avoid or minimize impacts. As raised in our July 30 letter, it is still unclear if the currently proposed design represents the LEDPA until the reduction in size, relocation, and/or modification of layout regarding all project elements is considered or specific information is provided justifying the current size, location, and/or layout of each project element.

Micron Response to Comment #8d

Please see Micron Response to Comment #2c(ii).

USEPA Comment #8e

Based on the additional information provided, EPA continues to have concerns with the alternatives analysis, the potential for adverse secondary and cumulative effects on ARNIs, and the lack of a complete compensatory mitigation plan (CMP). The Guidelines state that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less

adverse impact on the aquatic environment." The alternatives analysis submitted for evaluation under the May 30, 2024 PN and updated on June 7, 2024, lacked detailed evaluation of practicable off-site alternatives, on-site implementation, and/or design methods that were considered or have been incorporated into the project to further avoid and minimize the full range of impacts to ARNIs, including water quality and ecosystem impacts. As of the date of this letter, the applicant has not yet fully addressed alternatives that would further reduce impacts to ARNIs and has not submitted either a draft or a final CMP.

Micron Response to Comment #8e

Please see Micron Responses to Comments in Section #1 Aquatic Resources of National Importance (ARNI)

Conclusion

Please let us know if you have any questions regarding the information that we have provided to you. We look forward to the complete submission of the upcoming Joint Permit Application.

Sincerely,

Scott Gatzemeier
Corporate Vice President, Front End US Expansion

CC:
Barbara R. Britton, CHIPS Program Office
Robert Petrovich, Onondaga County Industrial Development Agency
Ashley Kunz, Micron
Brittany Sanders, Micron
Katie Birchenough, Micron
Steven Russo, Greenberg Traurig, LLP
Charles Harman, WSP
Kenneth Lynch, Ramboll
Margaret Crawford, U.S. Army Corp of Engineers

August 8, 2024

Margaret Crawford
Department of the Army
U.S. Army Corps of Engineers Buffalo District
478 Main Street
Buffalo, NY 14202-3278

**RE: MICRON NEW YORK SEMICONDUCTOR MANUFACTURING PROJECT,
REQUEST FOR ADDITIONAL INFORMATION,
RESPONSE TO COMMENTS,
APPLICATION NUMBER LRB-2000-02198**

Dear Ms. Crawford;

Micron New York Semiconductor Manufacturing LLC (Micron) is in receipt of your Request for Additional Information required for the evaluation of the above-referenced Clean Water Act 404 Joint Permit Application (JPA). Below please find responses to each of your requests, with either complete answers to your requests, or a schedule for when the information will be provided. Supporting maps, tables and other information are included as attachments to this response document. Micron will update the final JPA and all applicable appendices to include the information provided in this response, together with additional information as it is completed. The anticipated submission of this final package is the fourth quarter of 2024.

Micron's responses are as follows:

USACE Request #1

Your application must include a complete description of the proposed activity, including detailed drawings (plan views and typical cross sections) of the proposed fills. The size of each impact to waters of the US should also be identified on the detailed drawings and supported by a table identifying the proposed impacts. In addition, the application narrative notes that there are no temporary impacts to wetlands and streams associated with the project. However, it appears that some of the proposed work activities may only result in temporary impacts as opposed to permanent fills. If this is the case, please provide detailed plans (plan view and cross section) illustrating this, and provide updated acreages of the proposed impacts, separating temporary and permanent impacts. For instance, impacts for utility crossings could be constructed in a way that would result in only temporary impacts. In addition, see item 4 below regarding the potential impacts associated with Fab 4 construction.

Response

Additional design plans and supporting information that include the building footprints and limits of disturbance, required fill areas and proposed grading plan, proposed construction phasing of the development, and stormwater management are currently being developed. In addition to these updated plans, a detailed table that identifies impacts to jurisdictional Waters of the United States (WOTUS), both

temporary and permanent, and the anticipated timing of each impact in relation to project phasing will be included. Micron aims to provide updated plans and a table of the associated impacts on or before September 13, 2024.

Impacts associated with utilities are addressed in Response #7, 10 and 13a below.

USACE Request #2

The application needs to include a detailed grading plan, stormwater management plan, and plan to show how wetlands and streams that are proposed to unimpacted will retain their upstream and/or downstream hydrologic connections. These grading plans need to demonstrate how hydrology may be modified or maintained as a result of the proposed fills. USACE is concerned that the hydrology of wetlands and streams not proposed to be impacted may be affected by the proposed impacts and could therefore result in indirect or secondary impacts.

Response

As part of the NEPA and SEQRA scoping process, the New York State Department of Environmental Conservation (NYSDEC) and United States Fish & Wildlife Service (USFWS) requested a hydraulic analysis to address downstream hydrologic connectivity both in relation to stormwater management and maintenance of remaining wetland hydrology. Micron has met with NYSDEC and advanced its analysis of onsite and offsite hydrology, including modeling of the upstream and downstream portions of the White Pine Site watershed. *Micron aims to provide a site grading plan, stormwater management plan, and associated technical support will be forwarded to USACE, NYSDEC and the USFW on or before September 13, 2024.*

Micron's plans and technical support will demonstrate that the site is being designed in accordance with NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-0-20-001). Stormwater management facilities are being designed in accordance with the New York State Stormwater Management Design Manual (Stormwater Manual; NYSDEC 2015) which includes management of the Water Quality Volume, the Water Quantity Volume, the Runoff Reduction Volume, and Green Infrastructure Planning. The hydrologic and hydraulic (H&H) modeling that is being performed as part of the stormwater design includes evaluation of existing and post-development drainage patterns related to the proposed 1,400± acre development site (including its associated watershed) and will demonstrate how pre-and post-construction rates and volumes will be maintained within remaining jurisdictional WOTUS.

USACE Request #3

A detailed schedule of impacts is needed. The schedule of impacts should include a timeline identifying when proposed impacts to wetlands and streams associated with construction of all aspects of the proposed project. This schedule should include detailed impact maps and should clearly identify how hydrology would be maintained during the various phases of construction on the main campus for construction of each Fab, as requested in item 2 above. This should also include a schedule for the rail spur and childcare center.

Response

As noted in Responses #1 and #2 above, a detailed table of impacts, including timeline, will be provided in impact maps and associated tables on or before September 13, 2024.

USACE Request #4

The application needs to identify proposed disposal locations for any excess soil material that is proposed to be removed from the site.

Response

Onsite soils will be reused onsite as appropriate but it is expected that excess or unusable soil material will be taken offsite. While specific construction details are not yet identified, Micron will require all contractors to meet a specified disposal protocol. Specific staging and laydown areas will be designated onsite, and the contractor(s) will be instructed to limit staging of soil, materials, and equipment to these areas. To the extent contractors need to temporarily store and stage these materials throughout the site, they will be required to do so within the identified limits of disturbance (LOD) during each construction phase and will be further instructed to avoid identified jurisdictional WOTUS. Lastly, all construction and soil movement onsite will be completed pursuant to the conditions of USACE, NYSDEC, and local wetland and stormwater regulations and permits.

Off-site disposal of excess spoils will be in accordance with federal, state, and local requirements, but specific disposal locations have not been identified yet. Micron will coordinate with the contractors to identify off-site locations where disposal can occur outside the limits of jurisdictional WOTUS. These locations will be provided to the involved agencies as soon as they are identified and in advance of any soil removal from the site.

USACE Request #5

The USACE believes that there are opportunities to avoid and minimize impacts to waters of the US. For instance, and not limited to: it appears that impacts associated with the rail spur could be moved to reduce wetland impacts at that location; the pump station could be reconfigured or relocated; and the impacts for laydown and staging areas for the Fab 4 construction could be temporary and restored to wetland. The USACE will not be able to fully confirm if avoidance and minimization has occurred to the maximum extent practicable until a detailed site plan is provided.

Response

Micron understands and appreciates the need to avoid and minimize impacts to on-site jurisdictional WOTUS to the extent practicable to demonstrate that the proposed design is the least environmentally damaging practicable alternative (LEDPA). From the initial design of the proposed site plan, Micron has taken steps to avoid and minimize impacts. For example, initial concepts for buildings north of the power lines were reduced significantly to avoid and preserve the majority of WOTUS in this area. The only remaining proposed development north of the power lines consists of the proposed biological treatment buildings, Pump House, and associated stormwater facilities.

As set forth in the current 404(b)(1) document, revised June 7, 2024, the Pump House is a transfer point of industrial wastewater from Micron to the publicly owned treatment works (POTW) conveyance north to the Oak Orchard wastewater treatment plant (WWTP). It is associated with the designated Bio Buildings, which are essential to treating effluent flow to meet downstream requirements for the County issued POTW. The onsite industrial wastewater facilities are part of a system that will be designed to facilitate water reuse, treat incoming water to provide the ultra-pure water required for the semiconductor manufacturing process, and treat remaining unused wastewater to meet the County's pretreatment requirements, which are set in accordance with the County's permitted limits for final discharge. Micron reviewed and attempted to acquire additional off-site locations to house some of these facilities, including the Pump House. Offsite locations were not available to accommodate the appropriate size and engineering requirements of these facilities in relation to both Micron's onsite required processing and proximity to the County WWTP Facility. The current location of the Pump House and Bio Buildings provides the most practical alternative, which includes the shortest distance to maintain conveyance to and from the Oak Orchard site, applicable security and appropriate accessibility for maintenance and responsiveness. Additionally, if the Pump House and Bio Buildings were situated further south, there would be a conflict with other main utilities.

Recognizing the importance of exploring opportunities to avoid and minimize impacts to WOTUS, Micron will continue to assess additional modifications to the wastewater treatment facilities as detailed design progresses. This may include reduction in size, relocation, and/or modification of layout to avoid or minimize impacts. The updated JPA will include additional details on the location and size of these facilities and a summary of additional alternatives considered.

Analysis of the Rail Spur site layout is provided in Response #13f below.

Impacts to wetlands and streams in the southeast corner of the Micron campus, the area that will have continued use as a contractor yard for the project and for laydown and construction of Fab 4, have been accounted for as permanent impacts due to the duration of the construction impacts in these areas (10 to 20 years). Once the construction of all Fabs is complete, the area will be stabilized to final site design. Micron has included impacts in these areas in its wetland and stream mitigation plans.

USACE Request #6

The last sentence of Section 1.1 of updated application narrative still suggests that the rail spur is not included in the application. Please update the application accordingly.

Response

Section 1.1 of the JPA Permit Narrative will be updated and submitted with the final complete JPA.

USACE Request #7

The application indicates that Micron is the applicant for the work proposed to be completed on the Main Campus site by National Grid. Please clarify what is proposed by Micron vs National Grid in terms of regulated work for utilities. Detailed drawings of the utility work are also required and as noted above, need to identify temporary and permanent impacts associated with the utility work. This comment pertains to impacts for both the electric and natural gas utilities proposed. Please also clarify which state

agency is reviewing the proposed electric utility impacts pursuant to Section 401Water Quality Certification, and the date the WQC request was or will be submitted. to that agency.

Response

Attached as Appendix A, is a table summarizing the onsite and offsite utilities, including regulatory approvals anticipated and a list of water quality certification (WQC) issuing agencies. *Additional detail regarding proposed onsite temporary and permanent impacts associated with utility work will be provided in the plans and tables anticipated to be submitted on or before September 13, 2024.*

USACE Request #8

Childcare Center: The USACE recently conducted field work and additional wetland was identified on the proposed Childcare site. Based on this and the preliminary site plans provided in the Section 404(b)(1) analysis, it appears that wetland impacts will now be proposed at this location. Please update the delineation maps and provide a detailed site plan identifying proposed impacts to waters of the US. If impacts are proposed, the 404(b)(1) analysis needs to be updated to include a section specific to the Childcare center.

Response

Figures and supporting documentation for delineated wetlands at the Childcare site were provided to the USACE and NYSDEC for jurisdictional determinations on July 19, 2024. Based on the updated delineation, the proposed Childcare preliminary site plan has been modified to avoid delineated wetlands except the entry road crossing of the narrow wetland strip on the Childcare site's south end. Maximum wetland impact would be less than .05 acres and as driveway design progresses, other solutions will be considered to further minimize impacts. Detailed identification of impacts and any proposed mitigation will be part of the updated JPA.

The following updated Childcare preliminary drawings are provided herein:

Appendix B: Preliminary Site Plan, Grading Plan, Utility Plan, Landscaping Plan, Lighting Plans

USACE Request #9

Serog Properties: The USACE recently conducted field work and additional wetland was identified on the Serog Properties. Please update the delineation maps, project narratives and project plans accordingly to reflect the additional wetland impact.

Response

Figures and supporting documentation for delineated wetlands at the Serog Properties were provided to the USACE and NYSDEC for jurisdictional determinations on July 19, 2024. Quantification of any wetland impacts associated with jurisdictional WOTUS on the Serog properties will be included in the updated project plans submission by September 13, 2024.

USACE Request #10

Utilities: To date, the USACE has not received information associated with several of the utilities proposed that would support the project. While it is understood that Micron would not be the applicant for these utilities, please provide an update on anticipated schedules associated with submittals of applications for these utilities. The USACE has not yet had any contact with the applicants for the proposed water main, fiber optic or wastewater portions of the project. Please provide USACE with a contact for each of these.

Response

Micron notes that each utility is responsible for preparing their own wetland applications, depending on their own construction schedule.

The contact for Onondaga County Water Authority (OCWA) is Andrew J. Weiss, P.E., BCEE. His contact information is:

Director of Technical Services
PO Box 4949
Syracuse, NY 13221-4949
P: 315-455-7061 x 3108
E: ajweiss@ocwa.org

The contact for Onondaga County Department of Water Environment Protection (WEP) is Eric G. Shuler, P.E. His contact information is:

Deputy Commissioner
650 Hiawatha Boulevard, West
Syracuse, New York 13204
ericschuler@ongov.net

There is no set contact or supplier for fiber optic currently.

USACE Request #11

Please advise when you intend to submit the Section 401 Water Quality Certification request for the proposed project.

Response

Based on discussions Micron has held with Kevin Balduzzi, Permit Administrator for NYSDEC Region 7, the Section 401 WQC will be submitted concurrently with submission of the DEIS.

USACE Request #12a

Is there a plan to perpetually protect wetlands and streams remaining on site? If so, the application needs to identify the location of these areas to be perpetually protected and the mechanism to protect these areas (e.g., Third Party Conservation Easement, etc.).

Response

Micron is developing comprehensive Compensatory Mitigation Plans to address proposed permanent impacts to on-site streams and wetlands. Each of the mitigation parcels will include Site Protection Instruments that perpetually protect the resources pursuant to the USACE's Compensatory Mitigation for Losses of Aquatic Resources (USACE 2008). Future impacts to on-site jurisdictional WOTUS that are not affected by proposed development will be avoided and minimized to the extent practicable and the proposed Mitigation Plans will provide the plans and mechanisms to protect onsite unimpacted wetlands as necessary.

USACE Request #12b

As discussed in the last monthly mitigation meeting, USACE is still waiting for a detailed wetland and stream mitigation plan. USACE understands that the proposed mitigation sites are in the process of being delineated and we will need to review these delineations accordingly. As a reminder, the mitigation plan needs to be prepared in accordance with the USACE Mitigation Rule, found at 33 CFR 332.

Response

Micron has been leading biweekly and now monthly meetings with the federal and state agencies to provide opportunities for the agencies' involvement in the progress and development of the Wetland and Stream Mitigation Plans. Micron will provide a wetland mitigation plan and a stream mitigation plan that are consistent with 33 CFR Part 332. Micron estimates submitting the mitigation plans in September 2024. These documents will include conceptual plan sheets that show the delineated wetlands at each mitigation site and potential mitigation work areas. More detailed plan sheets and finalized mitigation plans will be provided (estimated Q4 2024) following USACE and NYSDEC verification of delineations.

USACE Request #12c

A detailed schedule of proposed mitigation is requested. You have advised that you are proposing to mitigate for all of the proposed impacts up front, prior to impacts associated with Fabs 3 and 4 of the proposed facility. It is suggested that you propose draft performance standards that the mitigation areas will need to meet prior to commencement of impacts associated with future phases.

Response

Site preparation, grading, and planting of each mitigation site is anticipated to be completed concurrently with the construction of Phase 1 of the Micron Project. All mitigation site construction for the project is anticipated to be completed within 6 years of permit issuance. Draft performance standards will be included in the Wetland Mitigation Plan and Stream Mitigation Plan anticipated to be submitted in September 2024.

USACE Request #12d

Section 7 of the Endangered Species Act (ESA) and Section 106 of the National Historic Preservation Act reviews for the mitigation sites will need to be completed. Please ensure that information related to potential impacts to ESA and historic resources are included in the mitigation plans.

Response

Micron acknowledges that concurrence with the Section 7 of the ESA and Section 106 of the National Historic Preservation Act is required from USFWS and the State Historic Preservation Office (SHPO), respectively for each of the proposed mitigation sites. Information related to those clearances will be included as part of the Proposed Mitigation Plan.

USACE Request #13a

Much of the 404(b)(1) document relies on work proposed by others to provide the utilities, as opposed to the utilities already existing. The document needs to clearly explain what utility needs are currently met at the site and what work needs to occur to meet the project needs.

Response

Section 2.2.1 of the current 404(b)(1) document, revised June 7, 2024, includes a summary of the infrastructure needs for the project. Table 2 in that section identifies the minimum project needs and practicality factors for each. As noted in Section 2.3 Basis of Selected Site 404(b)(1) document access to substantial electric and water capacity are essential criteria for the project. As set forth in the document, the White Pine site meets the basic capacity needs for the various utilities needed to support the development including electric and water. **No other site in New York State provides electric and water capacity needs regardless of improvements, as described in the 404(b)(1) report. Alternate locations that were considered lacked one or more of the base utilities to support development, such as substations, wastewater treatment facilities, water supply sources and infrastructure.** Meeting these basic utilities capacity needs is critical to site selection.

Micron is coordinating with utility purveyors to provide connections between the utility capacities and the project; this involves installation of connections and conveyances from the supply source to the site. It is recognized that additional impacts to WOTUS may occur as a result of future utility upgrades and connections. Micron will update the 404(b)(1) document as needed to provide additional information on how each utility's basic infrastructure will be advanced over the phasing of the project.

USACE Request #13b

Site size: The Section 404(b)(1) analysis notes in Table 2 that the size of the site needs to be 1,400+ acres as a minimum project need. However, it is USACE's understanding that the proposed site is 1,413.94 acres, including areas north & south of the right-of-way. However, the total proposed limit of disturbance is only 976.32 acres. Please provide additional information to support the minimum site need for 1,400 acres.

Response

Micron's site selection process began with searching for sites 1400+ acres in size, which represent the optimal site size that was explored as part of the initial site selection process. This size was necessary to allow maximum flexibility for appropriate arrangement of the Micron facilities and potential associated utility improvements needed, while including space for flexibility to avoid and minimize impacts on any

given site. The proposed site is 1,413.94 acres, including areas north & south of the right-of-way. The total proposed limit of disturbance is only 976.32 acres, which represents the measures Micron took to avoid and minimize impacts. The proposed limits of disturbance represent Micron's design to achieve the least environmentally damaging and practicable alternative. This includes the avoidance of more than 200 acres of wetlands and other natural resources.

As stated in Section 3.1.6 of the 404(b)(1) evaluation (June 7th submission)), only four New York State technology parks reside in zones that have energy surpluses/capacities to be made available for a new semiconductor manufacturing facility and, of those, only the White Pine Commerce Park has the capability to meet Micron's requirements. Therefore, White Pine Commerce Park was selected as the practicable alternative. Moreover, the primary east/west and north/south transmission link connecting to significant low/no emission power production limiting the number of additional transmission/substation infrastructure upgrades that would be needed to accommodate the Project.

As previously stated, the 404(b)(1) document will be further updated to include this and additional information to support the practical site size needs for the Micron development.

USACE Request #13c

Off-site location for pump house: Page 9 notes that other locations were ruled out due to an inability to purchase land. Have any additional efforts to seek out an alternative site been underway since that time? Also, were other on-site locations examined to meet these needs (e.g., the corner of Caughdenoy Road and Route 31, etc.)? Please provide additional detail for the proposed Pump Station, including size of site needed, detailed site layout, and an explanation for the meaning of Bio 1 and Bio 2.

Response

Please see response to Request # 5

USACE Request #13d

Page 13: Please include a spreadsheet or list of what the Micron site provides compared to the Minimum Project Needs. This should also identify what minimum project needs are provided now and what would be provided with improvements and additional utilities.

Response

See response to Request #13a. Table 2 in the current 404(b)(1) document will be expanded to identify what project needs are provided now and what would be provided with improvements to existing utilities. The updated Table will be provided in the final 404(b)(1) document and submitted with the final JPA submission.

USACE Request #13e

Rail Spur: The Section 404(b)(1) analysis suggests that the impacts to wetlands would be environmentally less impactful than the truck traffic to support construction. Please provide additional analysis of impacts

associated with the rail spur site and provide a comparison of the environmental impacts associated with wetland loss versus to those associated with the truck traffic that would occur if the rail spur were not constructed. The USACE is responsible for authorizing only what represents the Least Environmentally Damaging Practicable Alternative (LEDPA). The Section 404(b)(1) Guidelines state that when a proposal "does not require access or proximity to or sighting within the special aquatic site in question to fulfill its basic purpose (i.e., is not 'water dependent'), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise" (40 CFR 230.10). Additional information is therefore necessary to refute this presumption.

Response

Section 2.1.3.3 of the current 404(b)(1) document outlines the Rail Spur components and the resulting mitigation benefits the facility provides to minimize impacts from otherwise necessary truck traffic to the site. Further quantification of the environmental impacts associated with truck traffic in lieu of a Rail Spur being constructed and utilized will be provided in both the updated 404(b)(1) and the Draft Environmental Impact Statement (DEIS). Both documents are expected by the end of September 2024.

Section 3.1.9 of the current 404(b)(1) cites further documents explaining why the Rail Spur site was chosen and why the selected location was the only practical alternative for providing the needs of the Rail Spur operation. Further information on the required site design and avoidance measures is provided in Response # 13f below.

USACE Request #13f

Rail spur (Section 3.1.9): This section notes that the rail spur site was selected because it is contiguous with the existing CSX rail line, proximal to the White Pine Commerce Park, and has a willing seller. However, the Section 404(b)(1) analysis does not address what the site size and configuration needs are for a rail spur. The analysis also does not sufficiently address other nearby sites that may have less wetland impacts and that are still located proximal to the site. In addition, the document does not address the potential to reduce impacts at the rail spur location which is further complicated because the site needs (size and configuration) were not provided.

Response

The basis of design for the Rail Spur Project was to enable the delivery, offloading, and conveyance of aggregate material from the Rail Spur property to the Micron main site to reduce over-the-road heavy truck traffic to the network and surrounding communities. Micron evaluated several alternative configurations in attempts to achieve the basis of design objective while also minimizing wetland impacts. With input from CSX, design incorporated a siding track within the CSX right of way. Micron also assessed configurations using the west side of CSX's track and determined it would not be feasible for the following reasons:

1. Only CSX can operate on CSX tracks, therefore the Rail Spur operator would not be able to cross the CSX main line.
2. There are existing utilities, including high voltage power lines, on the west side of the track that would limit the ability to install a siding track in that location.

3. CSX will not allow any overhead structure (conveyance system) to be constructed to allow the transport of materials over the main line track.

Other configurations that would avoid and minimize WOTUS to the extent practicable and enable the delivery and processing of needed railcars per day would require additional residential or commercial property acquisitions adjacent to the Rail Spur property. As stated in the current 404(b)(1) document, those properties were not available and/or did not meet the site size and location requirements. Micron assessed properties further south and north of the Rail Spur property. Based on the New York State Freshwater Wetlands (NYSFW) maps, the properties do not represent the least environmentally damaging practicable alternatives.

This information, together with additional detail regarding site layout restrictions and alternatives will be provided in the updated 404(b)(1) analysis.

USACE Request #13g

Page 17 of Section 404(b)(1) analysis notes that Micron's site selection and evaluation process considered site selection factors including "time-to-market" (and specifically – 'permitting and approvability'). As discussed previously, the application evaluation process for the proposed impacts associated with this project is substantial and requires extensive review. The 404(b)(1) analysis suggests that this site entails a quicker permitting process than another site might be. USACE suggests editing this section to define "time-to-market (permitting and approvability)".

Response

The "time-to-market" reference on page 17 of the current 404(b)(1) analysis is part of Micron's structured approach to site selection. As emphasized throughout the analysis, the most compelling site selection factors included size, availability and most importantly, proximity to all the required utility and infrastructure requirements for the proposed development. Time-to-market is one of several other factors considered in site selection and it is not intended to imply a quicker process to approvability as compared to other sites. The final 404(b)(1) document and analysis will be edited to further clarify this element.

USACE Request #13h

Electrical energy needs: The Section 404(b)(1) analysis identifies the electrical needs for Fabs 1 and 2, but not 3 and 4. The document also does not address the additional substation work and associated proposed impacts to wetlands that are being proposed to meet the needs of the proposed facility.

Response

The current 404(b)(1) provides the anticipated energy use for 4 Fabs in Table 2 of Section 2.21. The reference to the 2 Fab energy demand is part of Section 3.1.6 where Micron documents that no other regions in NYS provide the necessary capacity for construction of the first two Fabs. Additional information detailing the energy demand for phased development will be provided in the updated 404(b)(1) and DEIS.

The impacts to wetlands associated with utility work on the main Micron site are included in the JPA. Off-site utility impacts will be quantified and included in the DEIS. However, each utility is responsible for permitting the offsite impacts that they will incur. The impact to wetlands associated with the substation work is covered under Permit Number LRB-2024-00400 as submitted by National Grid as the permittee.

USACE Request #13i

As noted above in the request for additional assessment of avoidance and minimization of impacts, please explain if the impacts identified in the southeast corner of the site are only needed for construction of Fab 4. If they are, can they be restored after construction of Fab 4? Alternatively, can the pump house or other components of the site be located here to minimize wetland and stream impacts elsewhere?

Response

The phased construction drawings to be provided by September 13, 2024, will include a description of the timing of impacts and the need to utilize designated areas of the site for construction activities related to Phase 2 of the development (FABS 3 & 4). Micron currently expects a 20-year construction period for the entire site buildout. Because this area must be reserved for construction activity in that timeframe, the Pump House or other site components cannot be located there. The Pump House is required for Phase 1 of the project (see Response 5 for Pump House siting justification), locating the Pump House on the southeast portion of the Site is not technically practicable and would interfere with future site buildout plans if it is constructed in that area.

Micron has not considered this area for wetland mitigation since it cannot be used for mitigation for at least 20 years. Impacts to wetlands and streams in the southeast corner of the Micron campus, the area to be used as a contractor yard for the project and for laydown and construction of Fab 4, have been accounted for as permanent impacts due to the duration of the construction impacts in these areas (10 to 20 years). Once the construction of all Fabs is complete, the area will be stabilized to final site design. Micron has included impacts in these areas in its wetland and stream mitigation plans. As will be documented in the phased construction plans submitted by September 13, 2024, impacts will occur at various times during the phased construction, yet full mitigation will begin immediately and be completed well in advance of the later phase impacts to the main wetland complex east of Burnet Road. This will result in a net temporal gain in WOTUS values and services. *The requested plans and phased impacts will be provided on or before September 13, 2024.*

USACE Request #13j

Page 45 suggests that the use of underground parking is being implemented to reduce the project footprint and therefore impacts on wetlands and streams. The USACE does not yet have detailed parking or building plans to confirm that impacts have been minimized to the maximum extent practicable.

Response

Preliminary engineering identifies the following proposed parking facilities:

- 2,400 parking spots within the footprint of the Admin-Probe Building 1
- 2,400 parking spots within the footprint of the Office Building

- 2,400 parking spots within the footprint of the Admin-Probe Building 2
- Three (3) 500 spot outdoor surface parking lots (1,500 total spots)

Each outdoor 500 spot lot totals 8.6 acres which is based on 0.0172 acres/per spot. If the currently proposed indoor spaces are located outdoors, they would occupy at least an additional 120 acres of disturbance area (.0172 acres/parking spot * 2,400 spots * 3 indoor garages = 123.84 acres).

Micron is proposing to minimize parking impacts by allocating as many spots vertically as practicable. Micron will use underground parking, and if not, an above ground parking ramp will be utilized. More details of the proposed parking areas will be submitted as Micron furthers design.

Conclusion

Please let us know if you have any questions regarding the information that we have provided to you.

Sincerely,

Scott Gatzemeier
Corporate Vice President, Front End US Expansion

CC:
Barbara R. Britton, CHIPS Program Office
Robert Petrovich, Onondaga County Industrial Development Agency
Ashley Kunz, Micron
Brittany Sanders, Micron
Katie Birchenough, Micron
Steven Russo, Greenberg Traurig, LLP
Charles Harman, WSP
Kenneth Lynch, Ramboll

Attachments:

Appendix A: Table of Onsite and Offsite Utilities
Appendix B: Childcare Preliminary Site Plan, Grading Plan, Utility Plan, Landscaping Plan, Lighting Plans

January 31, 2025

Ian Drew
Field Supervisor
U.S. Department of the Interior
Fish & Wildlife Service
3817 Luker Road
Cortland, New York 13045

RE: MICRON NEW YORK SEMICONDUCTOR MANUFACTURING PROJECT, RESPONSES TO COMMENTS ON PUBLIC NOTICE LRB-2000-02198, IPAC NO: 2024-0005791

Dear Mr. Drew;

Micron New York Semiconductor Manufacturing LLC (Micron) is in receipt of comments provided by the US Fish & Wildlife Services (USFWS) to the U.S. Army Corps of Engineers (USACE), Buffalo District pursuant to the Public Notice for the above-referenced Clean Water Act 404 Joint Permit Application (JPA) associated with Micron's proposed semiconductor manufacturing project in Clay, New York (the Proposed Project). Below please find responses (Responses) to each of your comments.

Due to the format of the USFWS's letter, Micron has extracted what it understands to be comments on issues contained in the narrative of the letter. We have tabulated those concerns with Micron's responses below:

USFWS Concern	Micron Response
Description of Proposed Action	
Page 2, First Paragraph: Concerns with unspecified aquatic habitat impacts resulting from offsite utility work for: • Telecommunications • National Grid natural gas pipeline • National Grid substation expansion • Water and wastewater improvements • Widening of NY Route 31 • Two new access roads • New Interstate 81 interchange • Family care/health center	The above-referenced JPA is specific to the Micron main campus located on the White Pine Commerce Park (Micron Campus) and the rail spur site (Rail Spur). All potential impacts from offsite utilities will be considered in the Project's Draft Environmental Impact Statement (DEIS) pursuant to the National Environmental Protection Act (NEPA) and the State Environmental Quality Review Act (SEQRA) as well as the offsite utilities individual permit applications. The NYS Department of Transporation (NYSDOT) is undergoing a review of roadway improvements needed in the area, which will include environmental considerations associated with these improvements. Micron's proposed family care/health center (Childcare Center) will be considered under a separate permit.

USFWS Concern	Micron Response
Page 2, Fourth Paragraph: The USFWS has requested clarification as to the construction timing and start dates for the project.	Micron anticipates commencing site clearing, grading, and other initial construction activities beginning in and around November 2025, to accommodate tree clearing during the non-active bat season. Importantly, however, the start of these activities is contingent on the issuance of a final NEPA Record of Decision (ROD) and SEQRA Statement of Findings (SOF) for the Proposed Project's DEIS as well as approval and issuance of all required permits.
Page 2, Fourth Paragraph: The USFWS has requested clarification as to when the infrastructure actions associated with the project will begin construction.	Micron understands that National Grid anticipates starting ground clearing activities once all relevant environmental approvals are issued. National Grid anticipates starting work in November 2025. Utility improvements undertaken by the Onondaga County Water Authority (OCWA) and the Onondaga County Department of Water Environment Protection (OCWEP) are anticipated to begin in late 2025 or early 2026.
Page 2, Fifth Paragraph: The USFWS noted that several Appendices associated with the JPA were not included with the version that they reviewed.	Micron acknowledges that at the time of its original JPA submission, several appendices were not included because the information was unavailable or incomplete at that time. The requested Appendices have been included with this JPA submission. Those Appendices include but are not limited to the Wetland Functional Assessment Report (Appendix J), the Young's Creek Quantitative Evaluation (Appendix L), the 404(b)(1) analysis (Appendix M), the Wetland and Stream Mitigation Plan (Appendix N), the Hydraulic Analysis (Appendix O), and the Incidental Take Permit Net Conservation Benefit Plan (Appendix Q).
Alternatives Analysis - Offsite	
Page 2 and Page 3: The USFWS raised concerns with a lack of understanding of offsite alternative locations as the 404(b)(1) analysis was not included with the copy of the JPA that the Service reviewed.	Additional information related to offsite alternative locations can be found in the Proposed Project's 404(b)(1) analysis attached as Appendix M to the JPA.
Alternatives Analysis - Onsite	

USFWS Concern	Micron Response
Page 3: The USFWS has raised a number of concerns relative to the design and arrangement of the buildings and infrastructure on the Micron Campus.	An updated Section 404(b)(1) analysis is included as Appendix M to the JPA submission. The updated Section 404(b)(1) analysis will include, among other things: • Further justification as to why the Proposed Project must be comprised of 4 Fabs and arranged in a particular manner, including why it is not feasible to build numerous smaller Fabs in non-contiguous locations; • Onsite avoidance and minimization measures; • An explanation of the design of the associated infrastructure resulting from a distinct industrial purpose and need approach; and • A detailed explanation and justification of the placement of the wastewater buildings in the northern area near the electrical right-of-way, and further discussion regarding reducing the wastewater buildings' sizes and footprints to the extent practicable as design progresses to minimize impacts to wetlands in that area. Additionally, an updated Stormwater Technical Memorandum has been designed to detail a comprehensive view of the proposed stormwater program for the Main Campus. The Stormwater Technical Memorandum is attached as Appendix O to this JPA submission. As it relates to USFWS's comments regarding the construction compound area, Micron acknowledges that it is possible to use landscape approaches to enhance the construction compound area once it is no longer in use. However, the area will be cleared and graded as part of the overall site construction activities and therefore, the impacts to wetlands in that area will be considered permanent, though it is not expected that any buildings will be installed at that location. Finally, Micron has redesigned the Rail Spur to minimize the wooded wetlands to the extent practicable on the Rail Spur site.
Resource Impacts	
Page 4: The USFWS has raised concerns with the amount of impact to natural	• While Micron acknowledges the impact to onsite wetlands to allow for construction of the Proposed

USFWS Concern	Micron Response
resources which would result from the Micron project.	Project, wetlands will be developed as part of the mitigation plan for the Proposed Project and will be within the watershed and will replace the lost functions and values of the existing wetlands. Additional information regarding this information can be found in the Wetlands and Stream Mitigation Plan, attached as Appendix N to this JPA submission, • Micron has worked in partnership with the NYSDEC to develop a comprehensive hydraulic modeling and stormwater planning program to demonstrate that hydraulic connectivity is being maintained across the Micron Campus. The analysis has shown that connectivity will be maintained between remaining upstream and downstream areas. This information is contained in the Stormwater Technical Memorandum attached as Appendix O to this JPA submission. • Based on the hydraulic analysis referenced above, the stormwater management design has been configured to ensure that all onsite management ponds will direct flow downstream into Young's Creek in a way that maintains flow regime. Additional information on this issue can be found in the Stormwater Technical Memorandum attached as Appendix O to this JPA submission. • Micron acknowledges the potential for impacts to endangered species and has made efforts to lessen those potential impacts. Micron conducted detailed grassland bird and bat studies, the results of which can be found in the Incidental Take Permit (Appendix Q) and the Biological Assessment (Appendix P), to document the presence or absence of various species. Micron has prepared a comprehensive and detailed mitigation program that includes the preservation of large tracts of habitat for various species, including the preservation of bat maternity roosts. Additionally, all onsite construction activities will occur during the winter tree clearing window to limit impacts to those species. • The NEPA/SEQRA DEIS will evaluate induced growth and cumulative impacts associated with the Proposed Project including the increase in regional housing development, additional commercial and industrial development; and transportation projects to accommodate growth of area. • Construction planning ongoing, though preliminary searches for fill material have shown that the quantity

USFWS Concern	Micron Response
	of material needed can be found at existing sources across the region. While much of the material will be brought in through the Rail Spur to avoid excessive truck traffic on local roadways, the material will be brought from existing sources that are permitted for soil extraction. It is not anticipated that mining operations will impact aquatic habitat.
Mitigation	
Page 5: The USFWS has raised concerns with the Highway Methodology used for the functional assessment of the onsite wetlands.	As stated in the USACE Highway Methodology Supplement, this assessment tool "can be used for any project where the characterization of wetland resources is necessary for Section 404 permit requirements." Consistent with this statement, this methodology has been used and approved under the Clean Water Act by the USACE and NYSDEC for a wide range of projects since its publication, including other semiconductor manufacturing facilities in New York that resulted in significant impact to, and mitigation of, aquatic resources. In addition to the justification outlined above, modification of the methodology used for valuation of existing values and services is not recommended based on the following: • This methodology was cited in the Wetland Delineation Report provided to the involved agencies in April 2023. Further, neither the USACE nor the NYSDEC have requested or required that an alternative methodology be employed to date. The lack of such a request after more than a year of consideration indicates that the Highway Methodology would continue to be reviewed in the context of Clean Water Act approval. • The *Developing methods, cultivating engagement, and creating end-user tools for wetland functional assessment* document that was published by the USEPA and NYNHP in 2022 and referenced by the USEPA and USFWS in their comment letter states: "*Our primary goal in this project is to develop and pilot a wetland functional assessment protocol that addresses functions and values protected under the NYS Freshwater Wetlands Act*." This statement informs potential users that the New York State Wetland Condition Assessment (NYRAM) tool is under development and not finalized. Use of this tool over a published methodology (i.e., Highway

USFWS Concern	Micron Response
	Methodology and New York State Riparian Opportunity Assessment) that has precedent for review and approval by the involved agencies was not considered. • The USEPA's concern over the "descriptive" and "qualitative" nature of the Highway Methodology based on its reliance on the subjective best professional judgement of the biologists who employ it is echoed in the Northeast Floristic Quality Assessment (FQA): "*There have been criticisms of the method, including that the coefficients have inherent bias because they are subjectively assigned by a team of botanists, insufficiently validated, or too strongly influenced by rarity (see references in Matthews et al. 2015). But as Taft et al. (1997) stated at the outset of development of FQAs, "The FQA method, though subjective, permits dispassionate and repeatable application because its value judgments are predetermined.*" Further, like the NYRAM, use of this tool over a published methodology that has precedent for review and approval by the involved agencies was not considered. Neither the NYRAM nor the FQA are identified by the USACE or NYSDEC on their websites so were not considered for use in developing the CWMP. • Completion of a functional assessment using an alternative tool would significantly delay project progress due to the data collection that would be required (e.g., invasive species identification and estimate of prevalence within a 140-meter radius of a vegetative plot). • Further, the USEPA has requested, and been provided, specific information relative to supporting the functions and values of onsite wetlands without the employment of additional modeling effort.
Page 5: The USFWS has raised concerns with the presence of ephemeral streams onsite that would be affected by the project.	Micron recognizes that ephemeral streams play a significant role in the water budget and functional processes in larger wetland and stream systems. Micron has developed a comprehensive stream mitigation plan that addresses all jurisdictional streams identified by the USACE. The planned mitigation program will restore streams at locations within the watershed to create wetland/stream complexes. The Compensatory Wetlands and Stream Mitigation Plan is included as Appendix N to this JPA.

USFWS Concern	Micron Response
Page 5: The USFWS has raised a concern with The Wetland Trust in-lieu fee program.	The ILF Program provides that each service area is given a set of advanced credits to sell. Once these credits are sold, and as long as the USCAE allows the sponsor to sell credits for that service area, the mitigation responsibility is transferred to the sponsor. These credits will not be "used" until all other sites are developed so TWT has at least 5 years to have the proposed preserve site approved and constructed.
Endangered Species	
Page 5 and Page 6: The USFWS has identified the need for the lead Federal Agency to complete Section 7 consultation.	Micron has worked in collaboration with the Department of Commerce (CPO) and the USFWS in the preparation of a Biological Assessment (BA) for the Proposed Project. The BA evaluates the potential impacts to endangered and/or threatened species from site development activities. A revised BA will be submitted to the CPO and USFWS for further consideration.

January 31, 2025

Alma Lowry
Law Office of Joseph J. Heath
General Counsel for the Onondaga Nation
Attorney at Law
512 Jamesville Ave
Syracuse, NY 13210-1502

RE: RESPONSE TO COMMENTS,
SECTION 404 PERMIT APPLICATION FOR MICRON FACILITY
APPLICATION NUMBER LRB-2000-02198

Dear Ms. Lowry;

Micron New York Semiconductor Manufacturing LLC (Micron) is in receipt of your comments for the evaluation of the above-referenced Clean Water Act 404 Joint Permit Application (JPA) associated with Micron's proposed semiconductor manufacturing project in Clay, New York (the Proposed Project). Below, please find responses (Responses) to your comments. For information that is still unavailable in response to your comments, Micron has provided a schedule for when information will be provided. Micron will update the JPA and all applicable appendices to include the information provided in this Response, together with additional information as it is completed. The anticipated submission of this package is the first quarter of 2025.

Micron's responses are as follows:

Onondaga Nation Comment #1a

The Micron facility, as currently designed and located, will result in the loss of 204 acres of wetlands and more than a mile of ephemeral or intermittent streams. Altogether, the 1,400-acre project will disrupt almost 500 acres of intact forest and 549 acres of wild meadow and grasslands. According to the Environmental Assessment Form (EAF) filed in July 2023 as part of New York State's environmental review, the project will completely destroy at least 315 acres of forest and 430 acres of meadow and grasslands. This valuable natural habitat will be replaced with more than 500 acres of impervious surfaces. While some green space will remain, the proposed 427 acres of landscaping will likely be of low habitat value. (Revised Full Environmental Assessment Form, Part I, Micron New York Semiconductor Facility ("EAF"), p. 9, July 2023.)

Response

The Proposed Project which includes the Main Campus site and Rail Spur site has gone to great lengths through multiple design phases to minimize impacts to wetlands, streams, and upland habitat to the greatest extent practicable. Limits of disturbance have been reduced from the 1,415-acre site to 997 acres, avoiding impacts to more than 200 acres of wetlands. In addition to reducing and avoiding impacts on site, Micron has also acquired additional off-site mitigation properties as follows:

- *628 acres of off-site mitigation properties to offset unavoidable impacts to protected species identified utilizing the Micron Campus, such as the short-eared owl, and northern harrier. Though*

not found on properties associated with the Proposed Project, off-site mitigation properties will also provide valuable habitat for the New York State threatened sedge wren.

- *1,216 acres of bat habitat, including known maternity roosts, to mitigate potential impacts to bats on the Micron Campus.*
- *Wetland and stream mitigation properties totaling 1,113 acres of permanently protected habitat, of which 384 acres will be wetland and 13,574 linear feet of stream restoration. These created wetland/stream complexes will fully compensate for the lost functions and values of the impacted wetlands (201.12 federal jurisdictional acres) and streams (6,716 linear feet) found on the Micron Campus.*

Additional information regarding Micron's mitigation efforts can be found in the following Appendices: Appendix N (Wetland & Stream Mitigation), Appendix Q (Net Conservation Benefit Plan (Upland Birds)) of this JPA.

Onondaga Nation Comment #1b

This lost wetland, forest, and meadow/grassland habitat, which will be replaced by acres of roof-tops, parking lots, walkways, and other impervious surfaces, has high ecological value. Recent studies have discovered endangered Indian and northern long-eared bats, as well as the threatened sedge wrens, on the property. Because there were so many Indiana bats present on this site, researchers believe that it is a maternity roost, where the endangered species are breeding, and pups are being raised. (Glenn Coin, One more reason Micron is waiting until fall to break ground in Clay: endangered bats, Syracuse Post Standard, Feb. 28, 2024, available on-line at https://www.syracuse.com/business/2024/02/endangered-bats-on-micron-site-in-clay-are-one-reason-chip-maker-aims-to-break-ground-in-november.html

Response

Grassland bird monitoring was performed during site activities in 2023 and 2024 to evaluate the potential presence and nesting of the sedge wren, northern harrier, and short-eared owl. The short-eared owl has been documented wintering on the Micron Campus site while the northern harrier has been documented overwintering as well as breeding on the Micron Campus site. No individual sedge wrens have been observed on-site during prescribed monitoring.

Additionally, after a full season of detection and capture efforts, there is not sufficient evidence of endangered species of bats utilizing the Micron site on more than a transient basis. Micron will conduct all tree clearing activities during the migratory window to ensure protected bats are not directly affected by the clearing and grubbing activities. Micron will also continue to conduct acoustic surveys and radio tracking operations during pre-construction and post-construction activities to provide the US Fish & Wildlife Services (USFWS) and NYS Department of Environmental Conservation (NYSDEC) with valuable data on movements of these endangered bats species as the site is developed.

For information related to wetland, stream, and upland habitat mitigation information, please refer to Micron's Response to Comment #1.

Onondaga Nation Comment #1c

Wetlands, in general, provide valuable habitat for amphibians, reptiles, birds, and mammals. Many animals, reptiles, amphibians, and birds rely on wetlands for food, breeding grounds, and, for migratory

species, resting places. This wetland is likely to be no different. In addition to acknowledging the presence of two of the three endangered species found on site, the EAF lists a handful of the "predominant" wildlife on the Micron site (chipmunk, deer, racoon, squirrel, grouse tufted titmouse, and nuthatches). (EAF, p. 12.) However, it fails to mention any migratory birds, which suggests that the timing of the assessment may have excluded such species, and omits other animals important to the Nation, such as beavers whose activities have been observed on the site by Nation members. The loss of habitat for both rare and common animals is of concern to the Nation.

Response

As noted in Micron's Responses to Comments #1a and #1b above, detailed information on mitigation efforts will be provided in Appendix N of the JPA.

Onondaga Nation Comment #1d

In addition, many plants thrive only in wetlands and approximately half of the plants listed as endangered or threatened in New York State are wetlands plants. (U.S. Geological Survey, National Water Summary – Wetland Resources/New York, p. 291 (available on-line at https://www.fws.gov/sites/default/files/documents/National-Water-Summary-Wetland-Resources-New-York.pdf). The Nation recognizes that many critical medicinal and food plants are wetland dependent. Even if these plants have not yet been discovered on the site, disrupting hundreds of acres of wetlands limits their chances of re-establishing themselves in this area.

Response

In the fall of 2023 and spring of 2024, an environmental survey was conducted at the Micron Campus by qualified biologists. A complete Wetlands Functional Assessment Report is included as Appendix J to Micron's JPA submission and will include a list of dominant plant species observed on the Micron Campus. A complete list of plants to be seeded/planted on the Micron mitigation properties is available in the Micron NY Semiconductor Manufacturing Off-Site Compensatory Mitigation Plan (the Plan) produced and managed by The Wetland Trust (TWT). The Plan is included as Appendix N to Micron's JPA submission.

Onondaga Nation Comment #1e

The Army Corps notes that Micron has avoided any substantial impacts on perennial streams. However, the loss of more than a mile of intermittent and ephemeral streams may also have a significant impact on wildlife. Intermittently dry river and stream beds can serve as critical habitat and corridors for movement by terrestrial invertebrates and vertebrates. (Sanchez-Montoya et al. (2023), Intermittent rivers and ephemeral streams are pivotal corridors for aquatic and terrestrial animals, Bioscience 73(4): 291-301.) Given that the Micron site is centered within other forests and wetlands, these intermittent and ephemeral streams may play an important connective function for wildlife.

For the Nation, the loss of this habitat and the wildlife that relies upon it is deeply troubling. The Corps should carefully consider the habitat and wildlife costs of the destruction of 200 acres of wetlands and waterways, as well as the overall loss of more than 1,000 acres of wetland-related forest and meadow/grasslands.

Response

As noted in Micron's Responses to Comments #1a, #1b, #1c, and #1d above, detailed information on mitigation efforts will be provided in Appendix N of Micron's JPA submission.

Onondaga Nation Comment #2a

The proposed Micron project will have significant impacts on stormwater and flood management within the project area and beyond. In addition, the water quality benefits provided by more than 200 acres of wetlands will be lost.

The conversion of hundreds of acres of wetlands and forested areas to impervious surface, as well as the loss of more than a mile of intermittent and ephemeral streams, will cause major changes to the natural patterns of surface and stormwater flow in the project area. The stormwater absorption capacity of these 200 acres of wetlands and the additional acres of destroyed forests and grasslands will be lost. The increase in impermeable areas on the project site will likely increase runoff to adjacent land, even with the best stormwater management system. As a result, the Micron project may create flood risks for neighboring communities, such as the residential and commercial area just to the east of one of the largest contiguous wetland areas that will be destroyed by this project. Flood impacts may also have consequences for the survival or related plants and wildlife species. The Army Corps must carefully consider flood and stormwater management risks created by this project.

Response

During the scoping process for the Proposed Project's environmental review pursuant to the National Environmental Protection Act (NEPA) and State Environmental Quality Review Act (SEQRA), the NYSDEC and USFWS requested a hydraulic analysis to address downstream hydrologic connectivity in relation to stormwater management and maintenance of remaining wetland hydrology. Micron has met with NYSDEC and advanced an analysis of onsite and offsite hydrology, including modeling of the upstream and downstream portions of the White Pine Commerce Park (Site) watershed.
The Micron Campus is being designed in accordance with the requirements of NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-0-20-001). Stormwater management facilities are being designed in accordance with the New York State Stormwater Management Design Manual (Stormwater Manual; NYSDEC 2024) which includes management of the Water Quality Volume, the Water Quantity Volume, the Runoff Reduction Volume, and Green Infrastructure Planning. The hydrologic and hydraulic (H&H) modeling that is underway as part of the stormwater design includes evaluation of existing and post-development drainage patterns related to Micron Campus (including its associated watershed) and will demonstrate how pre-and post-construction rates and volumes will be maintained within remaining jurisdictional Waters of the United States (WOTUS).

Additional information on this topic can be found in Appendix O of the JPA.

Onondaga Nation Comment #2b

Wetlands also help to filter contaminants and sediments in surface water flows. Despite its current undeveloped state, the Micron site is surrounded by multiple roadways and rail lines. These transportation corridors may contribute sediment, road salt, and petroleum byproducts to stormwater runoff or other surface flows. With a reduced wetlands footprint, more of these contaminants are likely to be present in stormwater as it moves to adjacent rivers and lakes – either through natural movement or via Micron's stormwater management system. Again, the Corps should carefully consider the impact of this lost service.

Response

Micron acknowledges the important role wetlands play in controlling nonpoint source pollution in Lake Ontario. Micron is committed to improving the water quality of Lake Ontario, by way of the Oneida River watershed (10-digit HUC 0414020209), by establishing permanently protected wetland and wetland/stream complex mitigation sites on lands that are primarily agricultural in nature. Agricultural sites have shown to contribute excess sediment, nutrients (e.g., phosphorus, nitrogen), and other contaminants (e.g., E. coli bacteria) to downstream resources, which would include the Oneida River, Oswego River, and subsequently Lake Ontario. The CWSMP, developed in conjunction with TWT, details the proposed work areas that will be transformed into beneficial wetland and wetland/stream complexes. The mitigation properties will include buffer habitat vital to the protection of upland species such as the Northern Harrier and Indiana Bat. Further information on the CWSMP can be found in responses to comments in Section #4 Compensatory Mitigation below. As directed in the LAMP, Micron intends to extend its engagement to other initiatives supporting the larger Lake Ontario watershed, such as the 9 Element Plan for the Oneida Lake Watershed. Nonpoint source pollution associated with any construction and development activity on the Micron main site will be fully managed by Micron's stormwater plans and supporting documents as set forth in Response 1b above.

Onondaga Nation Comment #3

The Army Corps is required to consider the cumulative impacts of project-related disruptions to aquatic ecosystems. 40 C.F.R. § 230.11(g), (h). The Nation believes that this means an assessment of the broad impacts of the dredge and fill activities on or immediately adjacent to the WPCP site, as well as and in the context of the cumulative impacts of habitat and wetlands loss related to all necessary elements of this project. Such an analysis would necessarily mean an expanded frame of review.

Micron has asserted, in various contexts, that operating its proposed facility will require the expansion or construction of additional off-site water treatment facilities, water intake systems, and massive pipelines designed to transmit raw water to the facility and wastewater from the facility will have to be expanded or built throughout this area, as well as other energy-related infrastructure. These water and energy infrastructure projects are described in Micron's filings as necessary for project operation and may well include additional dredging or filling and additional wetlands impacts. Other Micron-related projects, such as roadway improvements, housing development, and the development of support services/businesses, are also considered to be part of or triggered by this project and may have impacts on wetlands and waterways.

At minimum, it seems that the Army Corps should consider the cumulative impacts of all infrastructure projects that are described as necessary to the functioning of the Micron facility as part of the cumulative impacts required for Section 404 permitting. See 40 C.F.R.§ 230.11(g). Many of these projects have tentative locations and sizing information, making their inclusion in a cumulative impact assessment feasible. Ideally, the Army Corps should expand its review to consider at least a rough approximation of

the overall impact of the Micron project, necessary infrastructure improvements, and related growth spurred by and supporting of the Micron facilities.

Response

Section 2.2.1 of the 404(b)(1) document includes a summary of the infrastructure needs for the Proposed Project. As noted in Section 2.3 Basis of Selected Site 404(b)(1) document access to substantial electric and water capacity are essential criteria for the Proposed Project. As set forth in the document, the Site meets the basic capacity needs for the various utilities needed to support the development including electric and water. Alternate locations that were considered lacked one or more of the base utilities to support development, such as substations, wastewater treatment facilities, water supply sources and infrastructure. Meeting these basic utilities capacity needs is critical to site selection.

These needs as well as cumulative impacts are further discussed in Table 2.21 in Chapter 2 of the DEIS.

Onondaga Nation Comment #4a

As the Army Corps indicates in the Notice of Permit Application, the Micron facility is not considered a water dependent project. As a result, to receive a Section 404 permit, Micron must demonstrate that there no practicable alternatives that are less environmentally damaging and would meet the goals of the project. 40 C.F.R. § 230.10(a). If the information provided is insufficient to demonstrate this standard is met, the permit must be denied. 40 C.F.R. § 230.12(a)(3)(iv). In this case, the Notice of Permit Application notes that Micron has provided an alternatives analysis that arguably meets this standard. However, without providing additional information regarding the alternatives considered and the reasons that they were either considered impracticable or more environmentally damaging, this assertion is not credible

Response

Criteria are set forth in Chapter 2 of the DEIS and the 404(b)1 for site selection and layout of a semiconductor manufacturing facility that will meet Micron's production goals. The Site Selection Criteria, alternatives analysis, infrastructure needs and reduced fab alternative, and alternative layouts are all further examined in these documents. Each alternative analysis concludes Micron to a least damaging practicable alternative on the White Pine Commerce Park. The 404(b)1 report can be found in Appendix M of the JPA submission.

Onondaga Nation Comment #4b

The Notice of Permit Application describes the project's purpose as "construct[ing] and operat[ing] four state-of-the-art, advanced semi-conductor fabrication facilities . . . on a single, unified site in New York State to efficiently meet market demand and ensure competitiveness in the worldwide semiconductor market." (Notice, p. 4.) This is an incredibly narrow purpose statement, which seems tailored to the WPCP. Rather than accepting this purpose at face value, the Army Corps should at minimum consider whether other alternatives, such as a slightly smaller facility or a facility on adjacent sites, or in another geographic location, would serve Micron's overall purpose.

Response

Please see Micron's Response to Comment #4a.

Onondaga Nation Comment #4c

Even if the Army Corps accepts Micron's current purpose statement, the public cannot evaluate whether Micron has met its burden. The Notice of Permit Application contains only a limited discussion of the off-site alternatives analysis conducted. Publicly available documents from the New York State Environmental Quality Review Act (SEQRA) Scoping process don't provide much more detail, although they reference a 2018 study of alternative sites within New York State by the NYS Economic Development Council (NYSEDC) and a 2012 study by the Onondaga County Industrial Authority (OCIDA), that reviewed alternative sites within the County. (OCIDA, Micron Semiconductor Fabrication, Clay, NY, Final SEQRA Scope of Work, Dec. 14, 2023). However, the actual documents are not included with the Final SEQRA Scope of Work and, from the Army Corps' description, it's unclear whether Micron relied on these recent documents in its Section 404(b) alternatives analysis at all. (The Notice of Permit Application states that Micron relied on and updated 20-year-old documents, which would exclude the 2012 and 2018 assessments referenced in the Final SEQRA Scope of Work.) The discussion of on-site alternatives within the Notice of Permit Application is similarly limited. Most importantly, the Army Corps has not made Micron's actual analysis available to the public.

Because the alternatives analysis is critical to the permitting decision, the Army Corps should provide the public with all of the relevant information, including the actual Section 404(b) alternatives analysis produced by Micron and any underlying documents that are referenced. Without a better understanding of what Micron has asserted, neither the public nor the Nation can meaningfully comment on whether it has met its burden of demonstrating that there are no viable, less environmentally damaging alternatives to this site or this design.

Response

Micron's site selection process began with searching for sites of 1000 acres or greater. 1000 acres was the minimum size necessary to accommodate the Micron facilities and potential associated utility improvements needed, while including space for flexibility to avoid and minimize impacts on any given site. The proposed site is 1,413.94 acres, including areas north & south of the right-of-way. The total proposed limit of disturbance is only 976.32 acres, which represents the measures Micron took to avoid and minimize impacts. The proposed limits of disturbance represent Micron's design to achieve the least environmentally damaging and practicable alternative. This includes the avoidance of more than 200 acres of wetlands and other natural resources.

As stated in Section 3.1.6 of the 404(b)(1) evaluation (June 7th submission), only four New York State technology parks reside in zones that have energy surpluses/capacities to be made available for a new semiconductor manufacturing facility and, of those, only the WPCP is of sufficient size to meet Micron's requirements. Therefore, the WPCP was selected as the only practicable alternative. Moreover, the primary east/west and north/south transmission link connecting to significant low/no emission power production limiting the number of additional transmission/substation infrastructure upgrades that would be needed to accommodate the Project.

As previously stated, the 404(b)(1) document will be further updated to include this and additional information to support the practical site size needs for the Proposed Project.

Onondaga Nation Comment #5a

If the Army Corps chooses to issue the requested Section 404 permit and allow the destruction of more than 200 acres of wetlands and over a mile of intermittent and ephemeral streams for the Micron project, it must require robust mitigation. Further, the permit should not issue until the Army Corps, the public, and the Nation all have an opportunity to review and comment on that mitigation plan to ensure that it adequately compensates for project-related losses.

Response

Micron can not proceed with the Proposed Project until all appropriate and applicable permits have been issued. The public will have a chance to review all pertinent documents related to the Draft Environmental Impact Statement and the Joint Permit Application per standard public notice and comment procedures.

Onondaga Nation Comment #5b

Compensatory mitigation generally takes the form of wetlands restoration, enhancement, or establishment within the same watershed as the damaged habitat. 40 C.F.R. § 332.3(a)(2). In limited cases, wetlands preservation may be allowed. Id. Depending on the value of the habitat lost and the services provided, compensatory mitigation will require more than a simple one-to-one ratio. 40 C.F.R. § 332.3(f)(2). In this particular case, given the value of the wetlands being lost, the disruption to three endangered species, and the impacts on other species of concern to the Nation, we urge the Army Corps to reject any one-to-one mitigation proposal, to set an appropriately high mitigation ratio, and to require that restored or created high quality wetland habitat is close enough to this site that it can provide similar bat habitat and breeding grounds.

Response

As noted in Responses to Comments #1a and #1b above, detailed information on mitigation efforts, including mitigation ratios, will be provided in Appendix N of the JPA.

Onondaga Nation Comment #5c

In this case, Micron has not provided a mitigation plan, but simply noted that it is working with a local land trust to generate one. However, under Army Corps regulations, mitigation should occur prior to or concurrent with the impact-causing activity. 33 C.F.R. § 332.3(m). This suggests that the mitigation plan should be produced prior to permit issuance. Further, Army Corps regulations state that a Section 404 permit should not issue until interested parties, including the Nation and the general public, have had the opportunity to meaningfully review and comment on proposed mitigation. 33 C.F.R. §§ 332.4(b)(1), (2). An assurance that a plan is being developed does not substitute for actual review of or comment on the compensatory mitigation plan.

Accordingly, the Army Corps should hold any decisions on this permit application until after the compensatory mitigation plan has been developed. That plan should be released for additional public review and comment. Once that has been accomplished, the Army Corps should insist that compensatory mitigation provide comparable ecological value to the lost wetlands, which the Nation believes will

require significantly more than a one-to-one ratio of restored or newly established wetlands in the project area.

Response

Please see Response to Comment #5a above.

Appendix E

SEQRA Full EAF

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Micron New York Semiconductor Manufacturing		
Project Location (describe, and attach a general location map): White Pine Commerce Park, 5171 Route 31, Town of Clay, NY 13041		
Brief Description of Proposed Action (include purpose or need): Micron intends to invest approximately $100 billion over the next 20 years to build a leading-edge semiconductor manufacturing campus in the Town of Clay on the approximately 1,400-acre White Pine Commerce Park. Micron intends to acquire the White Pine Commerce Park from the Onondaga County Industrial Development Agency (OCIDA) and construct a campus for four (4) memory fabrication plants (also known as Fabs) on the site. Each Fab, and their related facilities, would take approximately three to five years to construct. Interior fit-out of each Fab would continue after the building is complete, resulting in continuous site activity over approximately 20 years. It is anticipated that the first two (2) Fabs would be complete within approximately 10 years, and the second two (2) Fabs would be complete approximately 10 years thereafter. Skilled trade labor will be employed throughout the 20-year period. Each Fab would occupy approximately 1.2 million square feet of land and contain approx. 600,000 square feet of cleanroom space, 290,000 square feet of clean room support space, and 250,000 square feet of administrative space. A 360,000 square-foot central utility building, 200,000 square feet of warehouse, and 200,000 square feet of product testing space would support each two-Fab phase and be housed in separate buildings. The Proposed Project will also consist of ancillary on-site electrical substations, water and wastewater treatment and storage, and industrial gas storage.		
Name of Applicant/Sponsor: Micron New York Semiconductor Manufacturing, LLC	Telephone: E-Mail:	
Address: 8000 S. Federal Way		
City/PO: Boise	State: Idaho	Zip Code: 83716
Project Contact (if not same as sponsor; give name and title/role): Anna Eberlin, Senior Assistant General Counsel	Telephone: 208-363-2424 E-Mail: aeberlin@micron.com	
Address: Same as above.		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor): Onondaga County Industrial Development Agency (OCIDA)	Telephone: (315) 435-3770 E-Mail: RobertPetrovich@ongov.net	
Address: 333 W Washington Street #130		
City/PO: Syracuse	State: New York	Zip Code: 13202

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.) **See EAF Addendum for a preliminary list of Federal, State, and local agencies.**

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☑Yes ☐No	Abandonment of Town road (Burnet Road)	TBD
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Town of Clay Planning Board, Site Plan	TBD
c. City, Town or Village Zoning Board of Appeals ☑Yes ☐No	Town of Clay ZBA, Zoning Variances (potential)	TBD
d. Other local agencies ☑Yes ☐No	Coordination with County water, sewer;	& 239-nn referral to Town of Cicero
e. County agencies ☑Yes ☐No	Onondaga County IDA funding; 239-m review;	& Sale of County property to Micron
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYSDEC: Air Permit, T&E, Freshwater Wetland, 401 WQC, SPDES; NYSDOT: HWP	TBD
h. Federal agencies ☑Yes ☐No	USACE: Section 404	TBD

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑Yes ☐No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑Yes ☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
The project site is zoned Industrial 2 (I-2).

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? North Syracuse Central School District

b. What police or other public protection forces serve the project site?
Onondaga County Sheriff's Department

c. Which fire protection and emergency medical services serve the project site? Town of Cicero Fire Department, Clay Volunteer Fire Dept (VFD), Meyers Corner FD, Brewerton Fire District, North Syracuse FD, Caughdenoy VFD, Emergency Medical-NAVAC & NOVA

d. What parks serve the project site?
Two Town of Clay parks are located within one mile of the project site: Meltzer Park and the Clay Historical Park.

D. Project Details **See EAF Addendum for additional description of the Proposed Project.**

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Industrial semiconductor manufacturing facilities.

b. a. Total acreage of the site of the proposed action? ±1,253 acres
b. Total acreage to be physically disturbed? ±595 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? ±1,253 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☑ Yes ☐ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
Multiple residential and vacant parcels to be combined into one industrial parcel.
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☑ Yes ☐ No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
- Total number of phases anticipated 2
- Anticipated commencement date of phase 1 (including demolition) April month 2024 year
- Anticipated completion date of final phase Dec month 2043 year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

Phase 1 is construction of FAB 1 and FAB 2 and associated buildings and on-site and off-site infrastructure. Phase 2 is construction of FAB 3 and FAB 4 and associated buildings and site infrastructure.

f. Does the project include new residential uses? ☐ Yes ☑ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☑ Yes ☐ No

If Yes,

i. Total number of structures ±15-30

ii. Dimensions (in feet) of largest proposed structure: ±165' height; ±600' width; and ±2,000' length

iii. Approximate extent of building space to be heated or cooled: ±8-10 million square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☑ Yes ☐ No

If Yes,

i. Purpose of the impoundment: Industrial water supply storage proposed within tanks. No new surface water features other than stormwater.

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☑ Other specify: Stormwater

iii. If other than water, identify the type of impounded/contained liquids and their source.
Industrial process chemicals to be contained within on-site storage tanks.

iv. Approximate size of the proposed impoundment. Volume: 4 tanks ea. 5-6 million gallons; surface area: TBD acres

v. Dimensions of the proposed dam or impounding structure: ±100-110' height; ±100' ~~length~~ diameter

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):
TBD

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☐ Yes ☑ No
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)

If Yes:

i .What is the purpose of the excavation or dredging?

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards):
- Over what duration of time?

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No
If yes, describe.

v. What is the total area to be dredged or excavated? acres

vi. What is the maximum area to be worked at any one time? acres

vii. What would be the maximum depth of excavation or dredging? feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan:

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☑ Yes ☐ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): Potentially NYSDEC Class C Stream No. 899-10 (Tributaries of Oneida River); NYSDEC Wetlands BRE-11 & BRE-14; and on-site Waters of the United States

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:
Specific impacts will be determined by site plan development; potential impacts could include placement of fill or structures for outfall locations.

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☑ Yes ☐ No
If Yes, describe: Extent of impacts to waterbodies and wetlands to be determined by additional studies.

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☑ No
If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? ☑ Yes ☐ No
If Yes:

i. Total anticipated water usage/demand per day: 16-36 million gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑ Yes ☐ No
If Yes:

- Name of district or service area: Town of Clay UWD / Onondaga County Water Authority (line owned by Metropolitan Water Board)
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☑ No
- Is the project site in the existing district? ☐ Yes ☑ No
- Is expansion of the district needed? ☑ Yes ☐ No
- Do existing lines serve the project site? ☑ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☑ Yes ☐ No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project:
  Coordination with Onondaga County Water Authority has been initiated to determine extent to extensions/capacity expansions necessary.
- Source(s) of supply for the district: Lake Ontario

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☑ No
If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑ Yes ☐ No
If Yes:

i. Total anticipated liquid waste generation per day: 8-20 million gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
Sanitary wastewater and industrial process wastewater. Nature and volume of liquid waste to be generated are to be determined.

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑ Yes ☐ No
If Yes:

- Name of wastewater treatment plant to be used: Oak Orchard Wastewater Treatment Plant
- Name of district: Onondaga County Consolidated Sewer District
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☑ No
- Is the project site in the existing district? ☐ Yes ☑ No
- Is expansion of the district needed? ☑ Yes ☐ No

- Do existing sewer lines serve the project site? ☐ Yes ☑ No
- Will a line extension within an existing district be necessary to serve the project? ☑ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: Installation of new wastewater forcemains and pumping stations. Necessary improvements to the existing Oak Orchard Wastewater Treatment Plant to accommodate the project are being evaluated.

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☑ Yes ☐ No

If Yes:

- Applicant/sponsor for new district: OCIDA
- Date application submitted or anticipated: TBD
- What is the receiving water for the wastewater discharge? Oneida River

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: Micron will include on-site infrastructure to allow for reuse of industrial process water.

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑ Yes ☐ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or ±195 acres (impervious surface)

_____ Square feet or 1,253 acres (parcel size)

ii. Describe types of new point sources. Ditches, pipes, curbs, gutters, detention pond outfalls, etc.

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

On-site stormwater management facility and/or offsite discharge to tributaries of Oneida River.

- If to surface waters, identify receiving water bodies or wetlands: Oneida River
- Will stormwater runoff flow to adjacent properties? ☐ Yes ☑ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐ Yes ☑ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑ Yes ☐ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

Delivery and employee vehicles.

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

Potentially power generation.

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

Process emissions.

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☑ Yes ☐ No

If Yes: Micron is coordinating with NYSDEC to quantify air emissions in support of a Title V permit.

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☑ No

ii. In addition to emissions as calculated in the application, the project will generate:

- TBD Tons/year (short tons) of Carbon Dioxide (CO_2)
- TBD Tons/year (short tons) of Nitrous Oxide (N_2O)
- TBD Tons/year (short tons) of Perfluorocarbons (PFCs)
- TBD Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- TBD Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- TBD Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☑ Yes ☐ No

If Yes:

i. Estimate methane generation in tons/year (metric): TBD

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): Limited methane use on site to power air pollution control equipment to meet air quality standards. Amounts of methane will depend on final design of air pollution control equipment and influent stream composition.

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐ Yes ☑ No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☑ Yes ☐ No

If Yes: Micron is coordinating with NYSDOT on a comprehensive traffic impact study.

i. When is the peak traffic expected (Check all that apply): ☑ Morning ☑ Evening ☑ Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): 10 to 30 trucks/peak hour (approx. 2-5% of vehicle trips/hr for 870,000 SF logistics, warehousing, and/or shipping & receiving space)

iii. Parking spaces: Existing 0 Proposed +/-12,000 Net increase/decrease +/-12,000

iv. Does the proposed action include any shared use parking? ☐ Yes ☑ No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: Caughdenoy Road/NYS Route 31 improvements; site driveways on NYS Route 31; signal timing adjustments

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐ Yes ☑ No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☑ Yes ☐ No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐ Yes ☑ No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑ Yes ☐ No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: 7.15 billion kWh/year for Phase 1; 16.17 billion kWh/year for Phase 2

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): National Grid

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☑ Yes ☐ No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7 AM - 7 PM
- Saturday: 7 AM - 7 PM
- Sunday: N/A
- Holidays: N/A

ii. During Operations:

- Monday - Friday: 24 hours/day
- Saturday: 24 hours/day
- Sunday: 24 hours/day
- Holidays: 24 hours/day

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Noise generated from construction (M-F 7am-7pm) and site operations (24/7) are expected to contribute to sound levels.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☑ Yes ☐ No

Describe: Tree removal within the site is proposed. Landscaping at the perimeter of the site is proposed.

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Light sources could include pole-mounted and/or building mounted. Luminaries which are dark-sky friendly, high-efficiency LED lights with cut off shields to provide uniform and energy conscious illumination to walkways and parking lots will be implemented to the greatest extent possible.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☑ Yes ☐ No

Describe: Tree removal within the site is proposed. Landscaping at the perimeter of the site is proposed.

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☑ Yes ☐ No

If Yes:

i. Product(s) to be stored Petroleum, miscellaneous chemicals needed to support manufacturing and research & development.

ii. Volume(s) Varies per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:

Tanks and containers that are compliant with regulations. Secondary containment structures, as warranted.

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☑ Yes ☐ No

If Yes:

i. Describe proposed treatment(s):

Limited use of herbicides and pesticides in landscaped areas following an Integrated Pest Management plan.

ii. Will the proposed action use Integrated Pest Management Practices? ☑ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes: Micron is coordinating with NYSDEC to identify potential waste streams.

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: TBD tons per _____ (unit of time)
- Operation : Prelim. est. of 45,000 tons per year (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: On-site waste minimization and off-site reuse/recycling will be conducted. Materials privately hauled to recycling facility.
- Operation: On-site waste minimization through raw material usage and process optimization. Both on-site and off-site reuse and recycling will be conducted; materials privately hauled to recycling or reuse facility.

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: TBD
- Operation: TBD

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☑ Yes ☐ No

Micron is coordinating with NYSDEC to identify potential hazardous waste impacts.

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

A variety of hazardous materials will be handled, generated and managed in accordance with all applicable regulations. Typical hazardous materials used in advanced semiconductor fabrication include solvents, acids, bases, corrosives, oxidizers, slurries, and other gases and liquids.

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

Manufacturing, laboratory chemicals.

iii. Specify amount to be handled or generated TBD tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

On-site waste minimization through raw material usage and process optimization. Both on-site and off-site reuse will be conducted. Off-site recycling and energy recovery may occur after privately hauled to recycling or other facility.

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☑ Yes ☐ No

If Yes: provide name and location of facility: _____

TBD

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

_____

_____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☑ Industrial ☑ Commercial ☑ Residential (suburban) ☑ Rural (non-farm)
☑ Forest ☑ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

The site is bounded by highway commercial uses to the south, industrial uses to the west, residential agricultural use to the north, and commercial, residential, and undeveloped lands to the east.

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	5	514	+509
• Forested	485	170	- 315
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	549	119	- 430
• Agricultural (includes active orchards, field, greenhouse etc.)	60	25	- 35
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	300	220	- 80
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: Landscaped Areas	0	351	+351

c. Is the project site presently used by members of the community for public recreation? ☑ Yes ☐ No

i. If Yes: explain: Informal snowmobile trails.

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

The Cottages at Garden Grove is a nursing home located approximately 200 ft. east of the site at 5460 Meltzer Ct. in Cicero; Grace Evangelical Covenant Church is located at 5300 NY-31 in Clay, and ~200 ft. south of the proposed project site. The church runs a pre-school program.

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑ Yes ☐ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☑ Yes ☐ No

☑ Yes – Spills Incidents database — Provide DEC ID number(s): Spill No. 2005446

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

Not applicable

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? 10-15 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

Niagara silt loam, 0 to 4% slopes	41.56 %
Collamer silt loam, 2 to 6% slopes	26.95 %
Hilton loam, 3 to 8 % slopes	5.9 %

d. What is the average depth to the water table on the project site? Average: 4.5 feet

e. Drainage status of project site soils:
☑ Well Drained: 5 % of site
☑ Moderately Well Drained: 42 % of site
☑ Poorly Drained 53 % of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 98.46 % of site
☑ 10-15%: 0.92 % of site
☑ 15% or greater: 0.62 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features. See EAF Mapper report at end of EAF for identification of wetland resources.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 899-10 Classification C
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, NYS Wetland, Federal Waters, Fe... Approximate Size NYS Wetland (in a... 453 acres
- Wetland No. (if regulated by DEC) BRE-14, BRE-11

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:
i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site:

eastern chipmunk	white-tailed deer	nuthatch
eastern gray squirrel	wood thrush	ruffed grouse
tufted titmouse	racooon	other common birds & small mammals

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No

If Yes:

i. Species and listing (endangered or threatened): _____

Sedge Wren, Indiana Bat

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:

i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☑ Yes ☐ No

i. If Yes: acreage(s) on project site? Approx. 1/2 of Project Site (626 +/-ac) soils are rated as prime farmland or farmland of statewide significance.

ii. Source(s) of soil rating(s): USDA Web Soil Survey

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No

If Yes:

i. CEA name: _____

ii. Basis for designation: _____

iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District

ii. Name: Updated consultation with NYS SHPO will be conducted.

iii. Brief description of attributes on which listing is based:

Coordination with NYS SHPO will be conducted.

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Oneida Lake; several local or County parks; NYS Cicero Swamp Wildlife Management Area

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): State or local park

iii. Distance between project and resource: Varies by resource miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

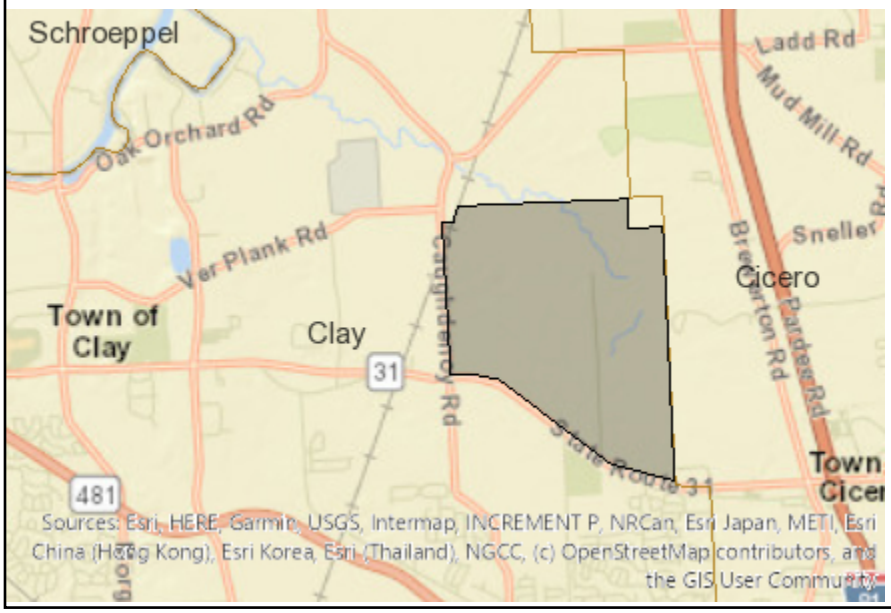
Applicant/Sponsor Name _____ Date_____

Signature_____ Title_____

PRINT FORM

EAF Mapper Summary Report

Friday, July 7, 2023 11:40 AM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	899-10
E.2.h.iv [Surface Water Features - Stream Classification]	C
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters, NYS Wetland
E.2.h.iv [Surface Water Features - Wetlands Size]	NYS Wetland (in acres):36.2, NYS Wetland (in acres):313.8
E.2.h.iv [Surface Water Features - DEC Wetlands Number]	BRE-14, BRE-11
E.2.h.v [Impaired Water Bodies]	No

E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Sedge Wren, Indiana Bat
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

MICRON SEMICONDUCTOR FABRICATION

CLAY, NY
SEQRA EAF ADDENDUM

November 3, 2023

CONTENTS

TABLES

FIGURES

ABBREVIATIONS

ADA ..... Americans with Disabilities Act
CEQ ..... Council on Environmental Quality
CFR ..... Code of Federal Regulations
CLCPA ..... Climate Leadership and Community Protection Act
DEIS ..... Draft Environmental Impact Statement
EIS ..... Environmental Impact Statement
FHWA ..... Federal Highway Administration
GEIS ..... Generic Environmental Impact Statement
GHG ..... Greenhouse Gas
LWRP ..... Local Waterfront Revitalization Program
MSAT ..... Mobile Source Air Toxic
NAAQS ..... National Ambient Air Quality Standards
NEPA ..... National Environmental Policy Act
NOI ..... Notice of Intent
NYSDEC ..... New York State Department of Environmental Conservation
NYSDOT ..... New York State Department of Transportation
OCDOT ..... Onondaga County Department of Transportation
OCDWEP ..... Onondaga County Department of Water Environment Protection
OCIDA ..... Onondaga County Industrial Development Agency
OCWA ..... Onondaga County Water Authority
OPRHP ..... New York State Office of Parks, Recreation and Historic Preservation
SEQRA ..... New York State Environmental Quality Review Act
SGEIS ..... Supplemental Generic Environmental Impact Statement
SHPO ..... State Historic Preservation Office
SMTC ..... Syracuse Metropolitan Transportation Council
SPDES ..... State Pollutant Discharge Elimination System
SWPPP ..... Stormwater Pollution Prevention Plan
TEM ..... NYSDOT's The Environment Manual
USACE ..... United States Army Corps of Engineers
U.S.C. ..... United States Code
USEPA ..... United States Environmental Protection Agency
USFWS ..... United States Fish and Wildlife Service
WPCP ..... White Pine Commerce Park
WWTP ..... Wastewater Treatment Plant

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1 Introduction

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company and wholly owned subsidiary of Micron Technology, Inc., is proposing to construct a semiconductor manufacturing campus (the "Micron Campus") in the Town of Clay, New York, at the White Pine Commerce Park (WPCP), an approximately 1,400-acre industrial park controlled by the Onondaga County Industrial Development Agency (OCIDA). The Micron Campus, together with ancillary development on nearby properties (described below), are referred to collectively as the "Proposed Project".

Micron is seeking federal funding under the "Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022 (the "CHIPS Act") and will require certain federal permits and approvals, including, but not limited to, federal wetlands permits pursuant to Section 404 of the Clean Water Act. Therefore, Micron, as the Project Sponsor, will comply with the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code (U.S.C.) § 4321 et seq.) and Council on Environmental Quality's (CEQ) NEPA-implementing regulations (40 Code of Federal Regulations (CFR) §§ 1500-1508), as well as the requirements of the New York State Environmental Quality Review Act (SEQRA) (6 NYCRR Part 617) (New York Environmental Conservation Law §§8-0101 et seq).

This document is being provided as an addendum to the SEQRA Environmental Assessment Form (EAF). It provides a description of the Proposed Project, as well as additional information on the purpose and need for the Proposed Project. This document also includes an initial list of agencies likely to either review or permit the Proposed Project.

1.1 PROJECT OVERVIEW

Micron is a world leader in innovative memory solutions that transform how the world uses information. For over 40 years, the company has been instrumental to the world's most significant technology advancements, delivering optimal memory and storage systems for a broad range of applications. Memory is at the leading edge of semiconductor manufacturing and fuels everything from feature-rich 5G smartphones to the AI-enabled cloud. Micron's leadership in both DRAM and NAND technologies provides the market-based confidence to invest up to $100 billion to affirm the company's industry-leading memory innovation and deliver differentiated products to its customers.

Micron's proposed semiconductor manufacturing facility campus in the Town of Clay, Onondaga County, New York will be built-out over an approximate 20-year period, and will consist of the construction of four (4) Memory Fabrication facilities (Fabs). Micron expects that the Fabs will be built in sequence, with construction of each Fab starting as the preceding Fab is being fit-out with

manufacturing equipment and operations begun (the DEIS will analyze an interim analysis year as well as a final year of completion). This process will result in continuous construction activities on the site over the approximate 20-year period, with a significant portion of that construction occurring inside previously-constructed Fab buildings. Micron intends to start construction of the Micron Campus in 2024 with Fabs 1 and 2 complete and operational by 2032. Full build-out of the Micron Campus (completion of Fabs 3 and 4) would be complete in 2043. Each Fab is expected to occupy approximately 1.2 million square feet (sf) of land and contain approximately 600,000 sf of cleanroom[1] space, 290,000 sf of cleanroom[2] support space, and 250,000 sf of administrative space. Each set of two Fabs would be supported by approximately 470,000 sf of central utility buildings[3], 200,000 sf of warehouse space, and 200,000 sf of product testing space[4] housed in separate buildings. The proposed Micron Campus will also include ancillary on-site electrical substations, water and wastewater pre-treatment and storage, and industrial gas storage. The entire Micron Campus, with four (4) Fabs and all ancillary support facilities, driveways, and parking; the jack and bore site; and the Childcare Site (which are described in more detail below) comprise the "Proposed Project."[5] Off-site water, wastewater, electricity, natural gas, and telecommunication utility improvements necessary for the Proposed Project will be identified as "off-site improvements" and will also be analyzed in the EIS (see Section 3 of this document for additional information on these project components).

The Micron Campus is an approximately 1,400-acre assemblage of land located in an area of the Town of Clay bordered by NYS Route 31 to the south, Caughdenoy Road to the west, a series of National Grid overhead power lines to the north (although the site extends approximately 100 feet beyond the power lines), and the Town of Clay/Town of Cicero boundary line to the east. The majority of the Micron Campus is contained within the Town of Clay, Onondaga County, New York and is accessible from I-81 from an interchange with NYS Route 31 (see Figure 1).

[1] Cleanroom: This part of the campus is where the thousands of advanced equipment are housed that are used to take raw silicon wafers and build the chips. It is called a cleanroom because there are strict requirements on particles in the air that can impact the functionality of the chips. The chips are built up in layers of metals and insulators, similar to how a building is constructed floor-by-floor.

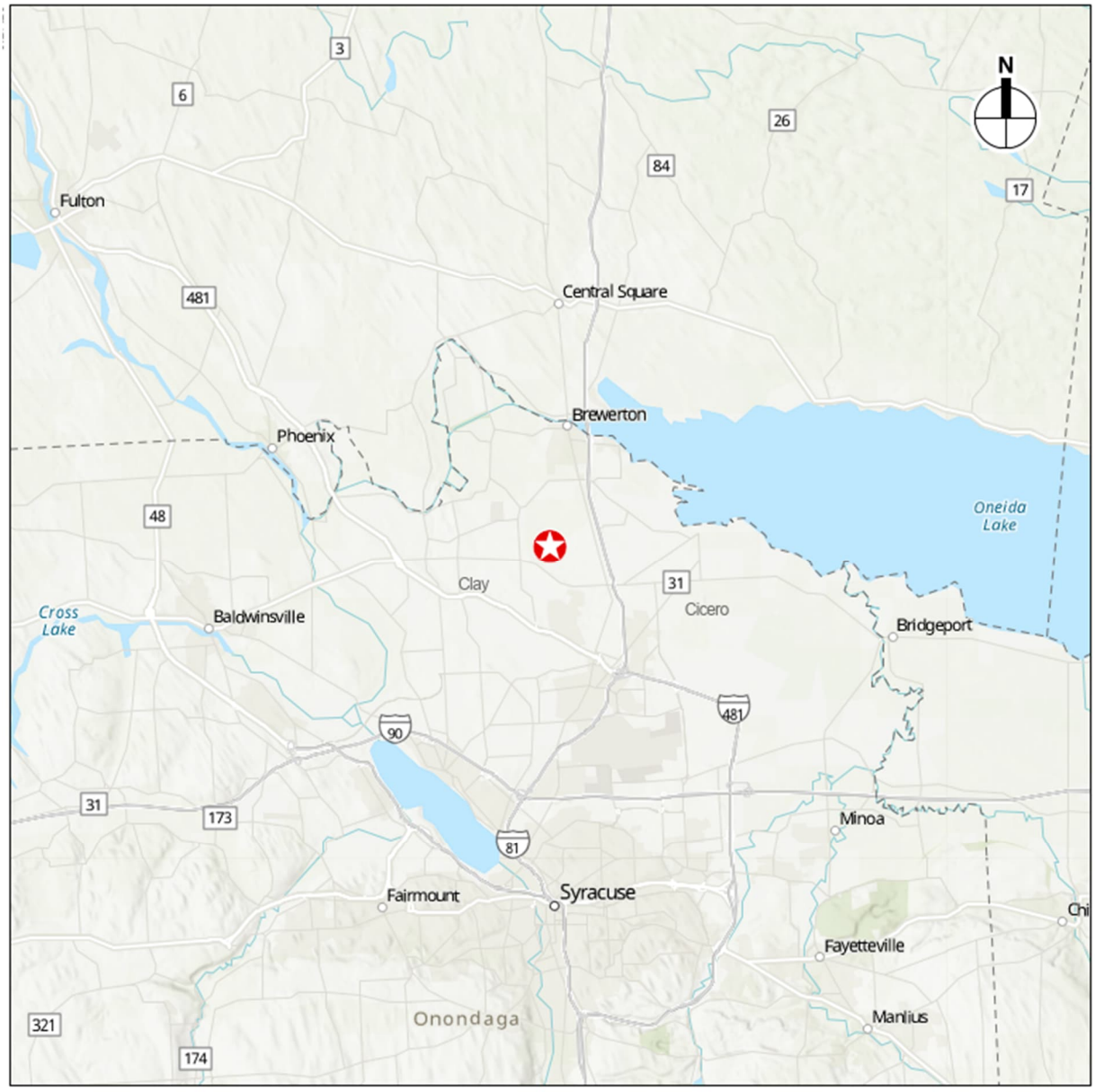
[2] Cleanroom support: This part of the campus includes functions such as workshops to refurbish parts, labs to complete incoming chemical tests, surface analysis of what is on the wafers, and perform cross-sections of the wafer to validate the structure of the chips meets requirements.

[3] Central utility building: These buildings house the systems required for delivering the utilities necessary to produce the chips. These utilities include systems such as HVAC, electrical transmission equipment, water purification and recycling, and chemical/specialty gas delivery systems.

[4] Product testing space: This space is used to house advanced equipment that takes finished wafers and performs electrical testing that validates the chips function to required specifications before the wafers are shipped out for assembly into products and further testing.

[5] Full development of the four (4) Fab Micron Campus is contingent upon acquisition of all properties within the area identified as the Micron Campus.

FIGURE 1 LOCATION OF PROPOSED MICRON CAMPUS



2 Purpose and Need

2.1 PURPOSE AND NEED

The purpose of the Proposed Project is to further the United States goal to expand domestic memory chip manufacturing capacity and restore U.S. leadership in semiconductor manufacturing as embodied in the "Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022" (the "CHIPS Act"). For Micron, the purpose is to advance its leading-edge position in the development and manufacturing of DRAM memory chips.

The purpose of the CHIPS Act and the need for the Proposed Project is to reduce U.S. reliance on foreign production of both leading edge and older generation microelectronics. Semiconductors were invented in America, and the U.S. semiconductor industry has historically dominated many parts of the international semiconductor supply chain, such as R&D, chip design and manufacturing. Yet the U.S. position within the semiconductor industry has been declining. According to Semiconductor Industry Association, U.S. production of the world's microchips has fallen from 37% in 1990 to 12% in 2020. The need for the Proposed Project is to reduce economic and national security risks by building domestic capacity, to establish a dynamic and collaborative network for semiconductor research and innovation centers, and to improve competitiveness and strengthen regional supply chain industries. Micron provides a unique and essential role in domestic production of leading-edge memory chips that are essential and high-volume components of the semiconductor industry.

Micron's investment in the Proposed Project will also advance the goals of the State of New York and OCIDA to enhance job growth in Central New York by promoting advanced manufacturing in the region. The Proposed Project is anticipated to generate nearly 50,000 jobs in Central New York over more than a 20-year period, including approximately 9,000 high-paying Micron jobs directly generated by the Proposed Project and about 40,000 additional jobs with suppliers, contractors and other businesses supporting the proposed chip manufacturing facility. To this end, Micron and the State of New York have announced a historic $500 million investment in community and workforce development over a more than 20-year period. Micron will further invest $250 million in line with its commitment to the Green CHIPS Community Investment Fund. An additional $250 million is expected to be invested, with $100 million from New York, and $150 million from local, other state and national partners. This fund is intended to expand and train the workforce in the region, including providing support for disadvantaged populations.

2.2 PROJECT BACKGROUND

Central New York as well as other regions of New York State have experienced a reduction in manufacturing jobs over several decades. In 1991, OCIDA and the City of Syracuse Chamber of

Commerce commissioned an Industrial Park Feasibility Study to identify potential candidate sites for locating industrial businesses in Onondaga County (the "County"). The study identified two sites for large scale industrial uses, with the White Pine Commerce Park ("WPCP") ultimately selected as the preferred site for purchase due to its proximity to National Grid's Caughdenoy electric substation, highway access, and Industrial zoning designation. Between 1991 and 1999, the County purchased seven properties to form the original approximately 340-acre WPCP (previously referred to as Clay Business Park).

OCIDA's intent in acquiring the lands, was further justified in 1998 with the advent of the SEMI-NY program (as discussed below), resulted in the accumulation of the original 340-acre footprint of the WPCP. The SEMI-NY program was a New York State initiative initiated in 1998 to attract the semiconductor industry to the state by identifying and advancing "qualified" sites that were consistent with conceptual semiconductor industry profiles. OCIDA's objective was to further the County's economic development agenda by providing a site that met the SEMI-NY criteria and could be presented as a qualified site for a semiconductor manufacturing facility under the SEMI-NY program. To support OCIDA's efforts to obtain the SEMI-NY "qualified" site designation for its site, OCIDA prepared a Generic Environmental Impact Statement (GEIS) to assess potential environmental and socio-economic impacts associated with full build-out of the 300-acres by a yet to be determined semiconductor company. The GEIS, which was prepared pursuant to New York's SEQRA process, was released in April 2002.

From 2017 to the present, OCIDA has made significant investments to advance and market the WPCP, with the semiconductor industry targeted as the site's highest and best use. In the ensuing years following the initial creation and focused marketing of the WPCP, the semiconductor industry, for several commercial reasons, has transitioned toward the construction and use of a Fab complex, which typically consists of two to four Fabs operating at a single site; a trend introduced in Asia and Europe and now replicated in the US. The semiconductor industry of today focuses on economies of scale, the need to build fewer, larger Fabs, and the managerial and economic benefits regarding workforce and reducing operational downtimes during expansions. This has resulted in the need for 1000-acre sites.

As a result, over the past six years, OCIDA decided to purchase adjacent land to enlarge the WPCP to accommodate this new vision. The WPCP is now over 1,400 contiguous acres. This size makes it considerably larger than most available sites in New York. Considering other critical additional project needs beyond sheer size (e.g., proximity to a sufficient supply of electricity and water, wastewater treatment, and natural gas) further diminishes the number of available sites that can accommodate modern semiconductor manufacturing. Overlaying the acreage and infrastructure needs with access to multi-modal transportation and labor needs is often a point of failure for most other sites, which might otherwise meet the acreage need. Accordingly, sites that substantially meet Micron's site selection criteria are not commonly available, which further supports Micron's selection of the WPCP as the location for the proposed Micron Campus.

OCIDA utilized the development of a GEIS (2012) and the follow up Supplemental Generic Environmental Impact Statement (SGEIS), completed in 2021, to evaluate potential locations throughout Onondaga County for development of a site suitable to attract semi-conductor manufacturing. OCIDA, in 2012 and again in 2021, selected the WPCP as its preferred site to attract private industrial and commercial development because of its size, potential for industrial zoning, access to transportation, proximity of utilities, as well as a history of Town of Clay efforts to facilitate industrial development at the property.

The 2012 GEIS considered the following potential sites in addition to WPCP:

- Radisson Corporate Park – 950 acres in the Town of Lysander;
- Hancock Air Park – 200 acres adjacent to the Syracuse Hancock Airport;
- Collamer Crossings Business Park – 200 acres in the Town of Dewitt located near NYS Route 298, I-90, I-481; and
- Syracuse Research Park – 99-acre site adjacent to Syracuse University.

OCIDA deemed the Radisson Corporate Park as an unviable choice because it lacked sufficient room and it did not offer the location specific advantages such as the proximity to Interstates 81 and 481 that the WPCP did. Neither the Hancock Air Park nor the Collamer Crossing Business Park were deemed viable options because the available lots were small and could not accommodate large industrial uses. The Syracuse Research Park was available for light industrial use, but OCIDA concluded that it could not easily accommodate large-scale industrial uses.

The 2012 GEIS evaluated three (3) different site layouts for the WPCP: 1) a layout that provided 1 million sf of development while avoiding all State-mapped wetlands; 2) a layout that provided 1.5 million sf of development that balanced approximately 4.2 acres of wetland impacts against the additional benefits from the larger size of development; and 3) a layout that provided over 2 million sf balanced against additional impacts to wetlands. OCIDA identified the third alternative as the "preferred alternative" in the 2012 GEIS based on the overall economic returns versus the degree of environmental impacts. The GEIS also included a 2012 engineering report evaluating three (3) options for extending sanitary sewer service to the WPCP: 1) use of Verplank Road north of NYS Route 31; 2) use of the NYS Route 31 right-of-way; and 3) use of the Metropolitan Water Board (now OCWA) right-of-way south of NYS Route 31. The 2012 engineering report built from a 2003 feasibility study, the *Semi-NY Sewer Route Feasibility Study*, which evaluated five sanitary sewer line routing options. OCIDA selected the third option for extension of sanitary sewer service to the WPCP as the preferred alternative.

The 2021 SGEIS revisited the question of whether the WPCP was the preferred alternative to attract industrial and commercial development to Onondaga County, and compared it to the same

alternative candidate sites that the 2012 GEIS assessed, again concluding that "[n]one of the previously considered alternative locations would be able to accommodate the large-scale industrial use that the [White Pine Commerce] Park is promoting due to size limitations and proximity to services and necessary infrastructure."

The 2021 SGEIS concluded that significant expansion of the WPCP was feasible and more likely to attract leading edge manufacturing, such as semiconductor manufacturing. The alternative locations considered in the 2021 SGEIS were rejected as much too small to accommodate semiconductor manufacturing. The 2021 SGEIS assessed the additional potential significant adverse impacts from a larger facility and an increase in size of the development parcel to approximately 1,250 acres (later expanded to the current approximately 1,400 acres). OCIDA indicated in the SEQRA Findings Statement that "consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is the one that avoids or minimizes adverse impacts to the maximum extent practicable, and that adverse impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigation measures that were identified as practicable."

On August 9, 2022, President Biden signed into law the CHIPS Act making over $50 billion available "to strengthen American manufacturing, supply chains, and national security, and invest in research and development, science and technology, and the workforce of the future to keep the United States the leader in the industries of tomorrow, including nanotechnology, clean energy, quantum computing, and artificial intelligence."[6]

On August 11, 2022, New York State Governor Kathy Hochul signed into law the Green CHIPS Act, which provides up to $10 billion in economic incentives for environmentally friendly semiconductor manufacturing and supply chain projects (Ch. 494, L. 2022). The Green CHIPS legislation was passed to align with the provisions of the Federal CHIPS Act for the purpose of attracting domestic semiconductor manufacturing and related activities to New York State.

On October 4, 2022, Micron announced plans to invest up to $100 billion over the next 20-plus years to develop a new leading edge semiconductor manufacturing facility at what is now known as the WPCP in Clay, New York, with a first-tier investment of $20 billion planned by the end of this decade. Micron intends to apply for funding from both the CHIPS Act and the Green CHIPS Act to assist in the financing of the Proposed Project. Micron and Empire State Development (ESD), the umbrella organization of New York State's two principal economic development public-benefit corporations, established a framework, known as the Community Investment Framework, outlining the shared investments to be made by Micron and the State of New York. This framework

[6] FACT SHEET: CHIPS and Science Act will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China, August 9, 2022, The White House. https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/

will allow for the strengthening the existing regional workforce and to create new growth and expansion of the workforce overall.

Micron's Proposed Project is the long-anticipated fulfillment of OCIDA's original goal to attract a state-of-the art manufacturing facility to generate high-paying employment opportunities in Onondaga County. Micron's investment also furthers recent United States and New York State policies and programs to incentivize domestic semiconductor manufacturing.

3 Description of the Proposed Project

Micron intends to build a semiconductor manufacturing facility campus (the "Micron Campus") at the expanded White Pine Commerce Park, which will be built-out over an approximately 20-year period with four Fabs. It is expected that Fabs will be continuously fit-out and construction on the next Fab will be in sequence as the prior Fab finishes fit-out. The EIS will analyze an interim analysis year of 2031 with the first two Fabs open with construction ongoing as well as a final analysis year for the total project with all four Fabs in operation in 2043).

The Micron Campus would comprise approximately 1,400 acres, consisting of the enlarged White Pine Commerce Park parcel studied in the 2021 SGEIS along with additional contiguous acreage acquired or to be acquired by OCIDA. Each Fab is expected to cover approximately 1.2 million sf of land and contain approximately 600,000 sf of cleanroom space, 290,000 sf of cleanroom support space, and 250,000 sf of administrative space. Each set of two Fabs will be supported by approximately 470,000 sf of central utility buildings, 200,000 sf of warehouse space, and 200,000 sf of product testing space housed in separate buildings. The Micron Campus will also have ancillary on-site electrical substations, water and wastewater treatment and storage, and industrial gas storage. See Figure 2 for a preliminary site plan of the proposed Micron Campus.[7]

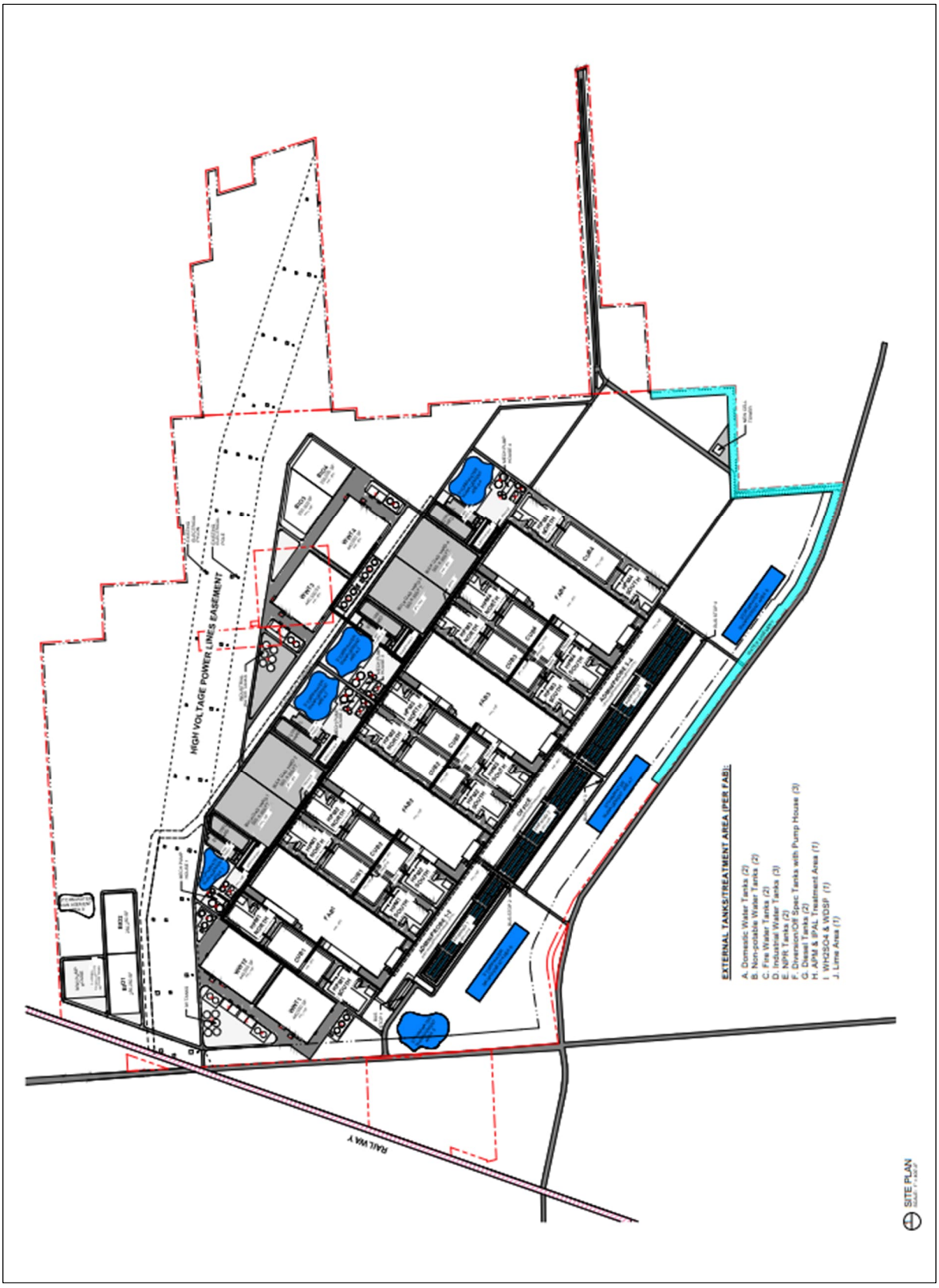
Two (2) additional properties will be developed with uses ancillary to the Micron Campus (see Figure 3):

- An approximately 30.2-acre parcel on the north side of Caughdenoy Road (Town of Clay tax parcel 042.-01-13.0, 9100 Caughdenoy Road) (the "Childcare Site") on which Micron will construct an employee health care center and childcare center.
- An approximately 1-acre parcel on the northwest side of the White Pine Commerce Park (048.-01-02.1) ("jack and bore site") which will be used for utility line conveyance.

The Micron Campus, with four (4) Fabs and all ancillary support facilities, driveways, and parking; the jack and bore site; and the Childcare Site comprise the "Proposed Project."

[7] Modifications to the preliminary site plan may, ultimately, reduce the footprint of the areas shown for "electrical easement." Micron is working with National Grid to refine plans for proposed electrical interconnections.

FIGURE 2 PROPOSED SITE PLAN FOR MICRON CAMPUS



Off-site energy (natural gas and electricity), telecommunications, water, wastewater utility, and rail spur improvements will also be required and will be identified as "off-site improvements" necessary for the Proposed Project and analyzed in the environmental review, as well as in a separate regulatory process before the New York Public Service Commission with regard to the electric transmission lines needed for the Proposed Project (see Figure 3). The following off-site improvements have been identified:

Energy

- Extension of a 16-inch diameter natural gas line from National Grid's Gas Regulator Station (GRS) 147 at 4459 NYS Route 31 to the Micron Campus (approximately 3.15 miles) and construction of GRS 147A at the same address as the existing GRS;
- Construction of four (4) underground electrical transmission duct bank connections from the existing National Grid sub-station west of Caughdenoy Road.

Telecommunications

- Extension of existing fiber-optic lines located along NYS Route 31 to the Micron Campus and from the existing fiber-optic lines located along Caughdenoy Road.

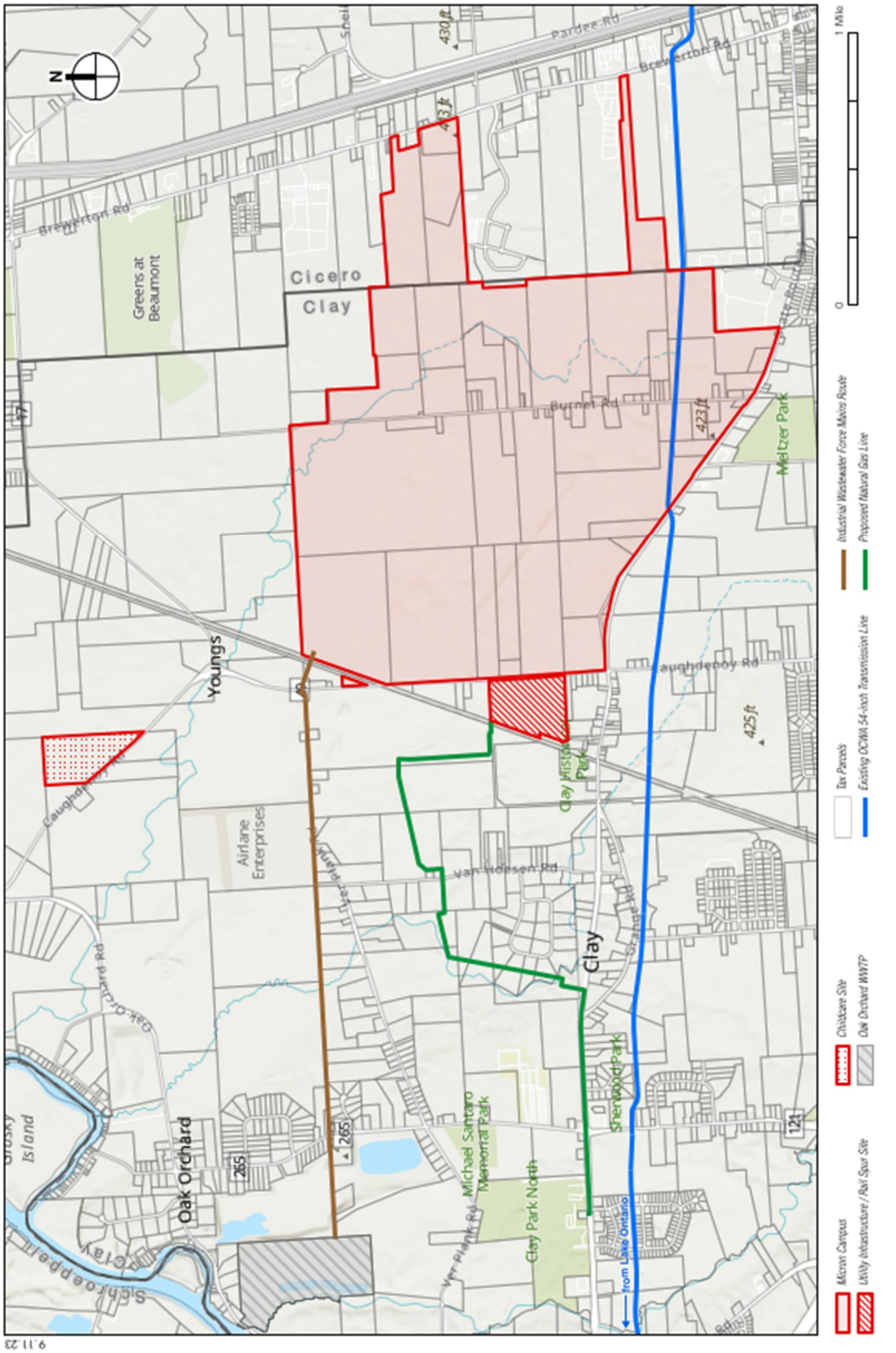
Water Supply

Onondaga County Water Authority (OCWA) has capacity within its water supply system to service Micron's initial water demand for construction and operations of Fab 1 (approximately 11.5 million gallons per day (MGD)). A new Clear Water Pumping Station at OCWA's Lake Ontario Water Treatment Plant (LOWTP) would be required. This new Clear Water Pumping Station will be designed to accommodate anticipated water demand for Micron's Fab 2 to Fab 4. Potable water for initial construction would be provided to the Micron Campus through existing water mains located in Caughdenoy Road and Burnet Road. Potable water for Fab 1 operations would be provided to the Micron Campus through construction of a new connection from OCWA's existing Eastern Branch Transmission Main south of NYS Route 31 via a new service connection within a 99-foot-wide easement within the Micron Campus along Caughdenoy Road.

To serve the anticipated future total demand of approximately 48 MGD, OCWA would have to make the following water supply infrastructure improvements:

- Construction of a new Raw Water Tunnel and Raw Water Pumping Station at OCWA's existing Burt Point property on Lake Ontario (City of Oswego);
- Construction of a new Raw Water Transmission Main from Burt Point to OCWA's Lake Ontario Water Treatment Plant (LOWTP) using an easement that OCWA obtained for such purposes in the 1990s;
- Modification to the LOWTP with addition of two (2) new filters, one (1) contact basin, and one (1) new clearwell as well as additional chemical storage space and residual handling facilities;

FIGURE 3 MICRON CAMPUS AND OFF-SITE IMPROVEMENTS



- Expansion of OCWA's Clear Water Transmission Main from LOWTP to OCWA's Terminal Campus with one (1) additional 54-inch diameter line parallel to the existing 54-inch diameter line;
- Construction of one (1) 15 million gallon water storage tank at OCWA's Terminal Campus;
- Upgrading of existing pumps at OCWA's Farrell Pumping Station at Terminal Campus and construction of a parallel pumping station;
- Expansion of OCWA's Eastern Branch Transmission Main south of NYS Route 31 from one (1) 54-inch diameter water main with up to three (3) additional 54-inch diameter water mains depending on evaluations of Micron's initial water re-use and reclamation performance; and
- Relocation of a portion of the existing OCWA Eastern Branch Transmission Line crossing the Micron Campus to allow for Micron Fab 3 and Fab 4 construction.

Wastewater

Onondaga County Department of Water Environment Protection (OCDWEP) will be able to convey sanitary wastewater from the Micron Campus during initial construction through a planned extension of municipal sanitary wastewater force mains to a portion of the Oak Orchard Wastewater Treatment Plant (WWTP) service area that has not previously been served by municipal infrastructure. Operation of Micron's Fab 1 will require additional industrial wastewater infrastructure and improvements to the Oak Orchard WWTP in addition to planned industrial wastewater pre-treatment facilities that Micron will construct on the Micron Campus. The following OCDWEP infrastructure improvements are required prior to operation of Micron's Fab 1:

- Construction of OCDWEP industrial wastewater service conveyance to the Oak Orchard wastewater treatment plant (WWTP) from a new industrial wastewater pumping station to be constructed on Micron property west of Caughdenoy Road. Conveyance infrastructure would comprise four (4) 30-inch force mains for industrial wastewater; and one (1) 36-inch force main for reclaimed water supply;
- Connection from the Micron Campus to the industrial wastewater pumping station through four (4) new 30-inch diameter industrial wastewater conveyance lines under Caughdenoy Road; and
- Expansion of the Oak Orchard WWTP to treat industrial wastewater (with pre-treatment required by Micron at the Micron Campus).

Utility Infrastructure/Rail Spur Site

Related to the Proposed Project, Micron has proposed to construct a rail spur on an approximately 36.9-acre adjacent parcel on the west side of Caughdenoy Road (Town of Clay tax parcel 046.-02-03.2) (the "rail spur site"). The rail spur will be used to deliver construction aggregate to the Micron Campus to reduce construction vehicle impacts on the local community from construction

of the Proposed Project, which will facilitate the avoidance, minimization and mitigation of traffic, air, climate change and community character impacts. The rail spur is a separate but related action that would require advanced construction to achieve the intended benefit of reduced construction vehicle impacts from the Proposed Project. Although it will be addressed separately under SEQRA so that it is in place at the commencement of groundbreaking in order to maximize mitigation measures for the Proposed Project, it will also be analyzed in the DEIS.

4 Proposed Project Operations and Setting

The SEQRA EAF prepared for the Proposed Project includes a number of instances of "TBD" as detailed information on many aspects of the construction or operation of the Proposed Project are being developed through on-going detailed technical studies. The information will be presented in the Draft Environmental Impact Statement (DEIS) being prepared by Micron.

This section of the EAF Addendum provides additional information to facilitate an understanding of where significant adverse environmental impacts may result from the Proposed Project. Item numbers reference section and sub-section numbers in the EAF where Micron believes significant adverse impacts may occur.

D.2.b Development of the Micron Campus and off-site infrastructure will likely result in impacts to Federal and New York State wetlands. Micron is completing a comprehensive delineation of all wetlands within areas of disturbance associated with the Proposed Project and has initiated consultation with the United States Army Corps of Engineers (USACE) and New York State Department of Environmental Conservation (NYSDEC). Specific options for mitigation have not been developed but will be identified in the DEIS.

D.2.c Micron has initiated consultation with the Onondaga County Water Authority (OCWA) regarding the necessary infrastructure improvements that would be required to provide approximately 48 million gallons per day to the Micron Campus. See Section 3, above, for an identification of the infrastructure improvements that would be required for the Proposed Project.

D.2.d Micron has initiated consultation with the Onondaga County Department of Water Environment Protection (OCDWEP) regarding the necessary infrastructure improvements that would be required to convey and treat sanitary wastewater and industrial wastewater generated by the Micron Campus. See Section 3, above, for an identification of the infrastructure improvements that would be required for the Proposed Project.

D.2.e Micron will develop a Stormwater Pollution Prevention Plan (SWPPP), or multiple SWPPPs, covering all areas of disturbance that would be required for the Proposed Project. The SWPPP(s) will be prepared as part of a complete Site Plan application to the Town of Clay Planning Board and reviewed by the Town of Clay as the designated Municipal Separate Storm Sewer System (MS4).

D.2.f/D.2.g/D.2.h The Proposed Project will generate new air emissions from mobile sources (vehicles) and stationary sources (on-site emissions). Micron is coordinating with NYSDEC to identify likely compounds that could be emitted and the quantities of such compounds in support of a planned Title V Permit submission.

D.2.j Micron has initiated consultation with the New York State Department of Transportation (NYSDOT), the Federal Highway Administration (FHWA), Onondaga County Department of Transportation, the Town of Clay, and the Town of Cicero to identify the requirements for a comprehensive traffic impact study that will be included in the DEIS.

D.2.k Micron has initiated consultation with New York Power Authority, National Grid, and the New York Independent System Operator (NYISO) to identify the necessary energy infrastructure that would be required to serve the Proposed Project. See Section 3, above, for an identification of the infrastructure improvements that would be required for the Proposed Project.

D.2.m Micron is conducting a comprehensive noise assessment to identify any potential impacts related to construction or operations noise from both mobile sources (vehicles accessing the site) and stationary sources (equipment on-site).

D.2.n Micron is preparing a detailed lighting plan for the proposed Micron Campus and will evaluate potential effects of lighting on surrounding properties.

D.2.p The Micron Campus will include a number of storage tanks and containers that are compliant with regulations. Secondary containment structures will be provided, as warranted. The DEIS will identify the likely materials and quantities to be stored on the Micron Campus. Micron will continue to coordinate with NYSDEC on any permitting for bulk storage.

D.2.q Micron intends to develop an Integrated Pest Management (IPM) plan. The IPM plan may address methods for management of noxious, non-native, and/or invasive species during construction and over the life of the Proposed Project.

D.2.r/D.2.t Micron is developing a comprehensive inventory of waste streams to be managed at the Micron Campus, including both hazardous and non-hazardous wastes. Preliminary estimates indicate approximately 45,000 tons per year of waste would be generated during operations. Additional detail will be provided in the DEIS. Micron will coordinate with Onondaga County and/or the NYSDEC on any applicable permitting.

E.1.b The EIS will include a complete assessment of land use and cover types based on field studies and mapping being conducted in Spring and Summer of 2023. Numbers presented in the EAF are from best-available resources prior to completion of the detailed field studies.

E.1.d A detailed inventory of land uses surrounding the Micron Campus will be part of the DEIS and will provide information on potentially sensitive land uses that would be evaluated as part of detailed technical studies (e.g., noise, air emissions).

E.1.h The DEIS will include detailed information relating to the potential history of contamination at the proposed Micron Campus and at proposed off-site utility corridors. The information will

include summaries of historic operations at these locations, if any, as well as Federal, State, and local databases of known or potential spills.

E.2 The DEIS will include detailed information relating to natural resource conditions on or near the Micron Campus. Information on depth to bedrock, soil type, slope, and wetlands will be developed based on detailed technical studies being conducted in Spring and Summer of 2023. Micron has initiated consultation with the United States Fish and Wildlife Service (USFWS) and NYSDEC to identify potential threatened, endangered, or special status species that may exist on or near the Micron Campus. Micron has initiated detailed field studies of potential habitat for Indiana bat and sedge wren in Spring 2023 pursuant to protocol reviewed by USFWS and NYSDEC.

E.3 Micron has initiated consultation with the New York State Historic Preservation Officer (SHPO) regarding any buildings, archaeological sites, or districts listed on, or eligible for listing on, the National or State Register of Historic Places. Field studies of existing structures and areas potentially disturbed by the Proposed Project are being conducted in Spring and Summer 2023. Micron is conducting a visual impact assessment consistent with NYSDEC Program Policy DEP-00-2, "Assessing and Mitigating Visual and Aesthetic Impact" (2019). A five-mile radius from the Proposed Project is being evaluated consistent with that Program Policy.

5 Agency and Public Coordination

Agency and public coordination are an integral component at all stages of planning and project development, including within the SEQRA process.

5.1 AGENCY COORDINATION ACTIVITIES

The agency coordination process will include coordination with various Federal, State, and local agencies (see Table 1, "Preliminary List of SEQRA Lead, Involved, and Interested Agencies" and Table 2, "Preliminary List of Federal Agencies").

OCIDA, as the lead agency for the Proposed Project, has coordinated with Micron to identify Involved and Interested Agencies to be informed and involved throughout the environmental review.

An "Involved Agency" means "an agency that has jurisdiction by law to fund, approve or directly undertake an action. If an agency will ultimately make a discretionary decision to fund, approve or undertake an action, then it is an 'involved agency' notwithstanding that it has not received an application for funding or approval at the time the SEQR process is commenced. The lead agency is also an 'involved agency'" (6 NYCRR 617.2(t)).

An "Interested Agency" means "an agency that lacks the jurisdiction to fund, approve or directly undertake an action but wishes to participate in the review process because of its specific expertise or concern about the proposed action. An 'interested agency' has the same ability to participate in the review process as a member of the public" (6 NYCRR 617.2(u)).

TABLE 1 PRELIMINARY LIST OF SEQRA LEAD, INVOLVED, AND INTERESTED AGENCIES

Agency	Potential Role	Responsibilities
Lead Agency		
Onondaga County Industrial Development Agency (State environmental review lead)	Lead Agency	SEQRA leadership and coordination, establishing final entitlement of White Pine Industrial Park and coordination of land development agreements. Sale of OCIDA property to Micron. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Involved and Interested Agencies		
New York State Department of Environmental Conservation	Involved Agency	Title V air quality permitting, wetlands jurisdictional determination and permitting, consultation related to threatened & endangered species, SWPPP permits for on-site and off-site land disturbance, modification to existing SPDES discharge for Oak Orchard WWTP, Section 401 water quality certification, hazardous petroleum and chemical bulk storage, and SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.
New York State Empire State Development	Involved Agency	Approval of Green Chips Grant.
New York State Office of Parks, Recreation and Historic Preservation (OPRHP)	Involved Agency	Consultation related to potential impact to historic and cultural resources. OPRHP serves as the New York SHPO.
New York State Department of Transportation	Involved Agency	Consultation in traffic impact evaluation and mitigation measures to address adverse transportation impacts on state routes and interstate highways. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Syracuse Metropolitan Transportation Council (SMTC)	Interested Agency	General consultation and approval actions to add to official regional transportation plans.
Onondaga County Dept. of Transportation (OCDOT)	Involved Agency	Consultation in traffic impact evaluation and mitigation on county routes. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Town of Clay Planning Board	Involved Agency	Site Plan/Subdivision (re-subdivision of multiple parcels) approvals including MS4/SWPPP approval.
Town of Cicero Town Board	Interested Agency	Referral per General Municipal Law.
Town of Cicero Planning Board	Involved Agency	Subdivision Approval.
New York Power Authority	Involved Agency	Proving high-load factor energy allocation and ReCharge expansion energy allocation.
New York State Energy Research Development Authority	Interested Agency	Collaborating on Green Chips Grant.
Onondaga County Department of Water Environment Protection	Involved Agency	Enlarging wastewater treatment capacity and extending sewer lines to the Micron Campus; SPDES Industrial Pretreatment Permit
Onondaga County Water Authority	Involved Agency	Extending potable water lines to the Micron Campus.

TABLE 2 PRELIMINARY LIST OF FEDERAL AGENCIES

Federal Agencies	
US Dept. of Commerce	Approval of CHIPS Act funding application.
US Army Corps of Engineers (USACE)	Issue 404 Wetlands permit.
Federal Highway Administration	Consultation on the need and design of alterations to the national highway system and the interstate highway system to mitigate identified adverse traffic impacts.
U.S. Environmental Protection Agency	NEPA advisory role (i.e., Environmental Justice) and consultation related to the issuance of federally-delegated Clean Air Act and Clean Water Act permits to be issued by New York State Department of Environmental Conservation.
U.S. Department of Interior, Office of Environmental Policy and Compliance	Consultation related to Section 4(f) of the U.S. Dept. of Transportation Act.
U.S. Fish & Wildlife Service	Consultation on federal Endangered Species Act compliance.

Appendix F

SEQRA Positive Declaration

POSITIVE DECLARATION, AVAILABILITY OF DRAFT SCOPE, AND PUBLIC SCOPING SESSION

The Onondaga County Industrial Development Agency (OCIDA), as lead agency, has determined that the proposed Micron New York Semiconductor Manufacturing Action may have a significant adverse impact on the environment and a Draft Environmental Impact Statement (EIS) must be prepared. A copy of the draft scoping document and SEQRA Positive Declaration, as well as application materials and the Environmental Assessment Form, may be viewed on OCIDA's webpage: https://www.ongoved.com/ocida/project-documents/ and the project sponsor's webpage: http://www.micron.com/ny. Paper copies of these documents may also be viewed at the offices of OCIDA during normal business hours by appointment by using the email address below.

A public scoping meeting will be held on Wednesday, October 11, 2023 at 6:30 p.m. pursuant to 6 NYCRR Part 617 to gather unsworn, public comment on the draft scoping document and proposed content of the Draft EIS. The meeting will take place at the North Syracuse Junior High School Auditorium, 5353 West Taft Road, North Syracuse, New York, 13212. All persons, organizations, corporations, or government agencies which may be affected by the proposed project are invited to attend the meeting and to submit oral or written comments. Although pre-registration is not required to attend the meeting, any person who wishes to speak is strongly encouraged to pre-register by 10:00 a.m. on October 10, 2023 by sending an email to micron@ongov.net.

Lengthy statements should be in writing and summarized for oral presentation. Reasonable time limits may be set for each speaker to afford everyone an opportunity to be heard. Equal weight will be given to both oral and written statements. The scoping meeting will have simultaneous Spanish and American Sign Language interpretation. Requests for additional language translation services or special needs assistance, at no charge for either service, please contact OCIDA by 5:00 p.m. October 6, 2023, using the contact information listed below.

Written comments on the draft scoping document will be accepted by OCIDA and must be submitted by mail or e-mail to the contact listed below by October 20, 2023. Written comments should be limited in content to comments on potential significant adverse impacts that should be addressed in the Draft EIS. General opposition to the proposal cannot be accommodated within the scoping document or the Draft EIS.

The Proposed Action is the development of the White Pine Commerce Park (Park), 5171 Route 31, Town of Clay, New York, by Micron New York Semiconductor Manufacturing LLC (Micron). Micron intends to invest approximately $100 billion over the next 20 years to build a leading-edge semiconductor manufacturing campus in the Town of Clay at the expanded White Pine Commerce Park (the "Micron Campus"), which will be built-out over an approximately 20-year period with four Fabs. Micron intends to acquire the Park from the OCIDA and construct a Campus. It is expected that Fabs will be continuously fit-out and construction on the next Fab will be in sequence as the prior Fab finishes fit-out.

The Micron Campus would comprise approximately 1,400 acres, consisting of the Park previously studied by OCIDA along with additional contiguous acreage acquired or to be acquired by OCIDA. Each Fab is expected to cover approximately 1.2 million sf of land and contain approximately 600,000 sf of cleanroom space, 290,000 sf of cleanroom support space and 250,000 sf of administrative space. Each set of two Fabs will be supported by approximately 470,000 sf of central utility buildings, 200,000 sf of warehouse space, and 200,000 sf of product testing space housed in separate buildings. The Micron Campus will also have ancillary on-site electrical substations, water and wastewater treatment and storage, and industrial gas storage as well as off-site energy (natural gas and electricity), telecommunications, water, wastewater utility, and rail spur improvements.

Contact:
Onondaga County Industrial Development Agency
ATTN: Micron Project
335 Montgomery Street, 2nd Floor
Syracuse, New York 13202
Phone: (315) 435-3770
Fax: (315) 435-3669
Email: micron@ongov.net

Appendix G

SEQRA Scoping Document

MICRON SEMICONDUCTOR FABRICATION
CLAY, NY

FINAL SEQRA SCOPE OF WORK

December 14, 2023

CONTENTS

TABLES

FIGURES

APPENDICES

ABBREVIATIONS

ADA ..... Americans with Disabilities Act
CEQ ..... Council on Environmental Quality
CFR ..... Code of Federal Regulations
CLCPA ..... Climate Leadership and Community Protection Act
DEIS ..... Draft Environmental Impact Statement
EIS ..... Environmental Impact Statement
FHWA ..... Federal Highway Administration
GEIS ..... Generic Environmental Impact Statement
GHG ..... Greenhouse Gas
LWRP ..... Local Waterfront Revitalization Program
MSAT ..... Mobile Source Air Toxic
NAAQS ..... National Ambient Air Quality Standards
NEPA ..... National Environmental Policy Act
NOI ..... Notice of Intent
NYSDEC ..... New York State Department of Environmental Conservation
NYSDOT ..... New York State Department of Transportation
OCDOT ..... Onondaga County Department of Transportation
OCDWEP ..... Onondaga County Department of Water Environment Protection
OCIDA ..... Onondaga County Industrial Development Agency
OCWA ..... Onondaga County Water Authority
OPRHP ..... New York State Office of Parks, Recreation and Historic Preservation
SEQRA ..... New York State Environmental Quality Review Act
SGEIS ..... Supplemental Generic Environmental Impact Statement
SHPO ..... State Historic Preservation Office
SMTC ..... Syracuse Metropolitan Transportation Council
SPDES ..... State Pollutant Discharge Elimination System
SWPPP ..... Stormwater Pollution Prevention Plan
TEM ..... NYSDOT's The Environment Manual
USACE ..... United States Army Corps of Engineers
U.S.C. ..... United States Code
USEPA ..... United States Environmental Protection Agency
USFWS ..... United States Fish and Wildlife Service
WPCP ..... White Pine Commerce Park
WWTP ..... Wastewater Treatment Plant

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1 Introduction

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company (LLC) and wholly owned subsidiary of Micron Technology, Inc., is proposing to construct a semiconductor manufacturing campus (the "Micron Campus") in the Town of Clay, New York, at the White Pine Commerce Park (WPCP), an approximately 1,400-acre industrial park controlled by the Onondaga County Industrial Development Agency (OCIDA). The Micron Campus, together with ancillary development on nearby properties (described below), are referred to collectively as the "Proposed Project."

After receipt of an Application for Financial Assistance from Micron, OCIDA circulated a notice of intent to serve as State Environmental Quality Review Act (SEQRA) (6 NYCRR Part 617) (New York Environmental Conservation Law §§8-0101 et seq.) Lead Agency on July 28, 2023. No objections to that notice were received during the 30-day period commencing on that date. At its regular meeting of September 14, 2023, OCIDA issued a Positive Declaration, indicating the need for an Environmental Impact Statement (EIS), and scheduled a public scoping meeting held on October 11, 2023.

Micron, as the Project Sponsor, will prepare a draft Environmental Impact Statement (DEIS) pursuant to SEQRA. Since Micron is seeking federal funding under the "Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022 (the "CHIPS Act") and the Proposed Project will require certain federal permits and approvals that require federal environmental review, including, but not limited to, federal wetlands permits pursuant to Section 404 of the Clean Water Act, the SEQRA DEIS will also contain information to support the National Environmental Policy Act (NEPA) of 1969 (42 United States Code (U.S.C.) § 4321 et seq.) review.

This document is the Final SEQRA Scope for the proposed DEIS. It was prepared pursuant to 6 NYCRR Part 617.8 and provides: (1) a brief description of the Proposed Project; (2) an identification of potentially significant adverse impacts from the SEQRA Environmental Assessment Form and through consultation with Federal, State, and local agencies; (3) the extent and quality of information needed to adequately address each impact; (4) an initial identification of mitigation measures; and (5) the reasonable alternatives to be considered.

1.1 PROPOSED PROJECT OVERVIEW AND DESCRIPTION

Micron is a world leader in innovative memory solutions that transform how the world uses information. For over 40 years, the company has been instrumental to the world's most significant technology advancements, delivering optimal memory and storage systems for a broad range of applications. Memory is at the leading edge of semiconductor manufacturing and fuels everything from feature-rich 5G smartphones to the AI-enabled cloud. Micron's leadership in both

DRAM and NAND technologies provides the market-based confidence to invest up to $100 billion to affirm the company's industry-leading memory innovation and deliver differentiated products to its customers.

Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") in the Town of Clay, Onondaga County, New York will be built-out over an approximate 20-year period, and will consist of the construction of four (4) Memory Fabrication facilities (Fabs). Micron expects that the Fabs will be built in sequence, with construction of each Fab starting as the preceding Fab is being fit-out with manufacturing equipment and operations begun (the DEIS will analyze two interim analysis years as well as a final year of completion). This process will result in continuous construction activities on the site over the approximate 20-year period, with a significant portion of that construction occurring inside previously-constructed Fab buildings. Micron intends to start construction of the Micron Campus in 2024 with Fabs 1 and 2 operational by 2032. Fabs 3 and 4 would be operational by 2041.

1.1.1 Proposed Project Location

The proposed Micron Campus is an approximately 1,400-acre assemblage of land located at the White Pine Commerce Park (WPCP) in the Town of Clay bordered by NYS Route 31 to the south, Caughdenoy Road to the west, a series of National Grid overhead power lines to the north (although the Micron Campus extends approximately 100 feet beyond the power lines), and the Town of Clay/Town of Cicero boundary line to the east. Most of the Micron Campus is contained within the Town of Clay, Onondaga County, New York and is accessible from I-81 via an interchange with NYS Route 31. Figure 1 identifies the broader vicinity within which the Micron Campus would be located. Figure 2 identifies the Micron Campus in relation to surrounding roadways.

1.1.2 Project Background

OCIDA completed a Generic Environmental Impact Statement (GEIS) in 2013 and a Supplemental GEIS (SGEIS) in 2021 on potential development of WPCP with manufacturing use. See Section 3.2 for additional information on the project background and OCIDA's efforts to prepare a shovel-ready site for manufacturing use, with a particular focus on the semiconductor industry.

FIGURE 1 VICINITY MAP

FIGURE 2 LOCATION OF PROPOSED PROJECT

1.1.3 Project Description

1.1.3.1 Micron Campus

The Micron Campus would comprise approximately 1,400 acres, consisting of the enlarged WPCP parcel studied in the 2021 SGEIS along with additional contiguous acreage acquired or to be acquired by OCIDA or Micron. Each Fab is expected to cover approximately 1.2 million sf of land and contain approximately 600,000 sf of cleanroom space[1], 290,000 sf of cleanroom support space[2], and 250,000 sf of administrative space. Each set of two Fabs will be supported by approximately 470,000 sf of central utility buildings[3], 200,000 sf of warehouse space, and 200,000 sf of product testing space[4] housed in separate buildings. The Micron Campus will also have ancillary on-site electrical substations, as well as facilities for water and wastewater treatment and storage, along with industrial gas storage. See Figure 3 for a preliminary site plan of the proposed Micron Campus.

Two (2) additional properties will be developed with uses ancillary to the Micron Campus (see Figure 4):

- An approximately 30.2-acre parcel on the north side of Caughdenoy Road (Town of Clay tax parcel 042.-01-13.0, 9100 Caughdenoy Road) (the "Childcare Site") on which Micron will construct an employee health care center and childcare center; and
- An approximately 1-acre parcel on the northwest side of the WPCP (048.-01-02.1) ("jack and bore site") which will be used for utility line conveyance.

The Micron Campus, with four (4) Fabs and all ancillary support facilities, driveways, and parking; the jack and bore site; and the Childcare Site comprise the "Proposed Project." The DEIS will include additional description of each element of the Proposed Project as well as a high-level description of key Micron systems to provide an understanding of Micron's proposed use and management of water, chemicals, and energy serving the site (including provisions for renewable energy sources). The DEIS will also describe Micron's generation and management of various waste streams and how best management practices will be implemented to limit energy consumption, water consumption, air pollutants, and generation of waste.

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1 **Cleanroom:** This part of the campus is where the thousands of advanced pieces of equipment are housed that are used to take raw silicon wafers and build the chips. It is called a cleanroom because there are strict requirements on particles in the air that can impact the functionality of the chips. The chips are built up in layers of metals and insulators, similar to how a building is constructed floor-by-floor.

2 **Cleanroom support:** This part of the campus includes functions such as workshops to refurbish parts, labs to complete incoming chemical tests, surface analysis of what is on the wafers, and analysis of cross-sections of the wafer to validate the structure of the chips meets requirements.

3 **Central utility building:** These buildings house the systems required for delivering the utilities necessary to produce the chips. These utilities include systems such as HVAC, electrical transmission equipment, water purification and recycling, and chemical/specialty gas delivery systems.

4 **Product testing space:** This space is used to house advanced equipment that takes finished wafers and performs electrical testing that validates the chips function to required specifications before the wafers are shipped out for assembly into products and further testing.

FIGURE 3 PROPOSED SITE PLAN FOR MICRON CAMPUS

1.1.3.2 Off-Site Improvements

Off-site energy (natural gas and electricity), telecommunications, water, wastewater utility, and rail spur improvements also will be required and will be identified as "off-site improvements" necessary for the Proposed Project (see Figure 4). The DEIS will assess impacts of the Proposed Project and off-site improvements. National Grid will complete a separate Article 7 regulatory process before the New York Public Service Commission with regard to the electric transmission lines needed for the Proposed Project. The following off-site improvements have been identified:

Energy

- Extension of a 16-inch diameter natural gas line from National Grid's Gas Regulator Station (GRS) 147 at 4459 NYS Route 31 to the Micron Campus (approximately 3.15 miles) and construction of GRS 147A at the same address as the existing GRS;
- Construction of eight (two per Fab) underground electrical transmission duct bank connections from the existing National Grid sub-station west of Caughdenoy Road.

Telecommunications

- Extension of existing fiber-optic lines located along NYS Route 31 to the Micron Campus and from the existing fiber-optic lines located along Caughdenoy Road.

Water Supply

Onondaga County Water Authority (OCWA) has capacity within its water supply system to service Micron's initial water demand for construction and operations of Fab 1 (approximately 11.5 million gallons per day (MGD)). A new Clear Water Pumping Station at OCWA's Lake Ontario Water Treatment Plant (LOWTP) would be required. This new Clear Water Pumping Station will be designed to accommodate anticipated water demand for Micron's Fab 2, Fab 3, and Fab 4. Potable water for initial construction would be provided to the Micron Campus through existing buried water mains located within the Caughdenoy Road and Burnet Road rights-of-way. Potable water for Fab 1 operations would be provided to the Micron Campus through construction of a new connection from OCWA's existing Eastern Branch Transmission Main south of NYS Route 31 via a new service connection within a 99-foot-wide easement within the Micron Campus along Caughdenoy Road.

To serve the anticipated future demand of approximately 48 MGD, OCWA would have to make the following water supply infrastructure improvements:

- Construction of a new Raw Water Tunnel and Raw Water Pumping Station at OCWA's existing Burt Point property on Lake Ontario (City of Oswego);
- Construction of a new Raw Water Transmission Main from Burt Point to OCWA's Lake Ontario Water Treatment Plant (LOWTP) using an easement that OCWA obtained for such purposes in the 1990s;

- Modification to the LOWTP with addition of two (2) new filters, one (1) contact basin, and one (1) new clearwell as well as additional chemical storage space and residual handling facilities;
- Expansion of OCWA's Clear Water Transmission Main from LOWTP to OCWA's Terminal Campus with one (1) additional 54-inch diameter line parallel to the existing 54-inch diameter line;
- Construction of one (1) 15 million gallon water storage tank at OCWA's Terminal Campus;
- Upgrading of existing pumps at OCWA's Farrell Pumping Station at Terminal Campus and construction of a parallel pumping station;
- Expansion of OCWA's Eastern Branch Transmission Main south of NYS Route 31 from one (1) 54-inch diameter water main with up to three (3) additional 54-inch diameter water mains depending on evaluations of Micron's initial water re-use and reclamation performance; and
- Relocation of a portion of the existing OCWA Eastern Branch Transmission Line crossing the Micron Campus to allow for Micron Fab 3 and Fab 4 construction.

Wastewater

Onondaga County Department of Water Environment Protection (OCDWEP) will be able to convey sanitary wastewater from the Micron Campus during initial construction through a previously planned and separately studied extension of municipal sanitary wastewater force mains to a portion of the Oak Orchard Wastewater Treatment Plant (WWTP) service area that has not previously been served by municipal infrastructure. Operation of Micron's Fabs 1-4 will require additional industrial wastewater infrastructure and improvements to the Oak Orchard WWTP in addition to planned industrial wastewater pre-treatment facilities that Micron will construct on the Micron Campus. The following OCDWEP infrastructure improvements are required prior to operation of Micron's Fab 1:

- Construction of OCDWEP industrial wastewater service conveyance to the Oak Orchard wastewater treatment plant (WWTP) from a new industrial wastewater pumping station to be constructed on the Micron Campus. Conveyance infrastructure would comprise four (4) 30-inch force mains for industrial wastewater; and one (1) 36-inch force main for reclaimed water supply; and
- Expansion of the Oak Orchard WWTP to treat industrial wastewater (with pre-treatment required by Micron at the Micron Campus).

Rail Spur Site

Micron has proposed to construct a rail spur on an approximately 37-acre area on the west side of Caughdenoy Road (including Town of Clay tax parcel 046.-02-03.2) (the "rail spur site"). The rail spur will be used to deliver construction aggregate to the Micron Campus to reduce construction vehicle impacts on the local community from construction of the Proposed Project, which will

facilitate the avoidance, minimization and mitigation of traffic, air, climate change and community character impacts. The rail spur is a separate but related action that would require advanced construction to achieve the intended benefit of reduced construction vehicle impacts from the Proposed Project. Although it will be addressed separately under SEQRA so that it is in place at the commencement of groundbreaking in order to maximize mitigation measures for the Proposed Project, it will also be analyzed in the SEQRA DEIS.

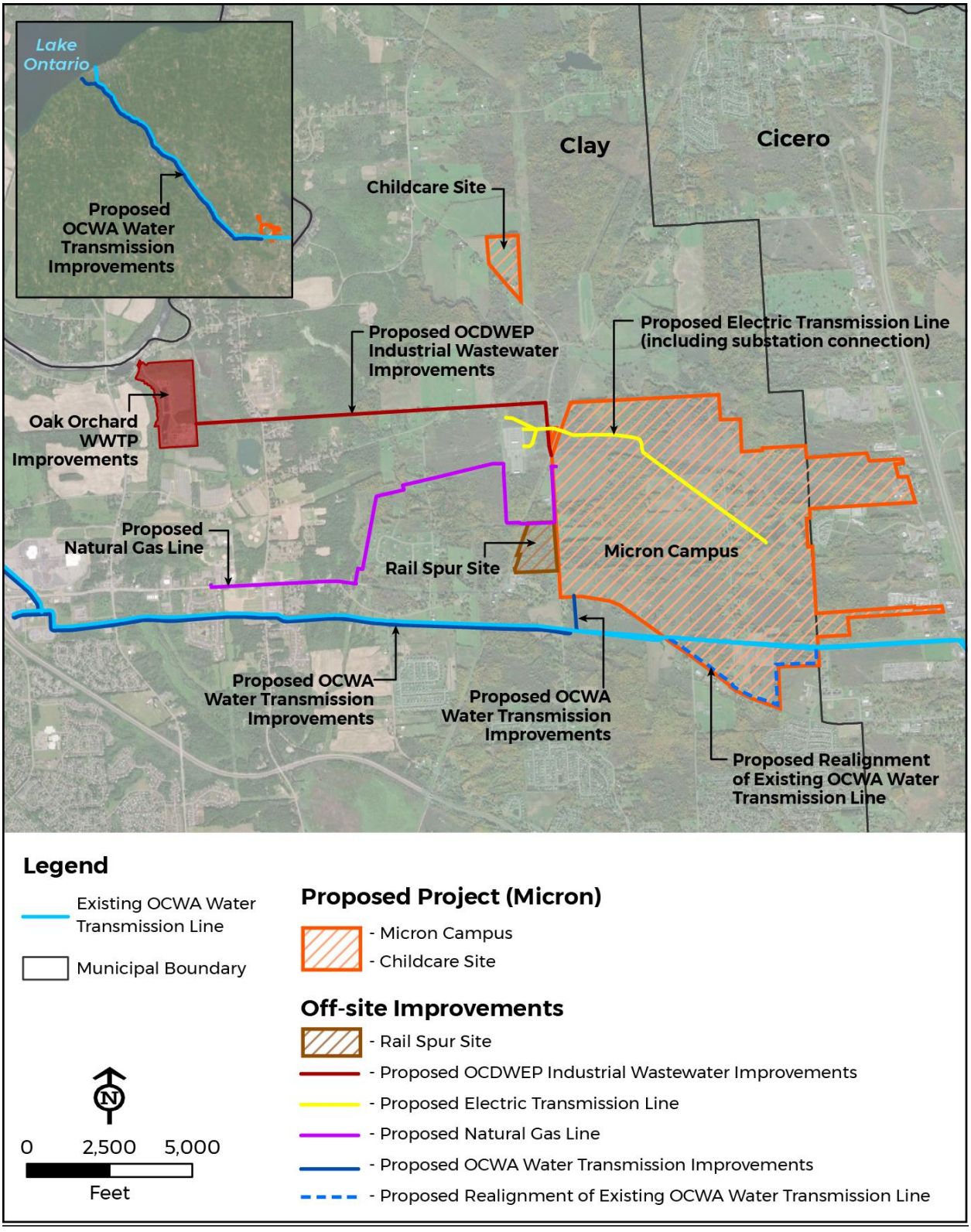
1.1.3.3 Proposed Project Employment

Micron will create approximately 9,000 high-paying jobs by 2045 to support the Micron Campus when operating at full capacity and about 40,000 community jobs over a 20-plus year period to include suppliers, contractors, and other supporting roles. Micron has begun efforts to attract a diverse and multi-talented workforce to Central New York. Using its existing labor models for high-volume fabs around the globe, Micron has estimated that 90% of its workers will be dedicated to manufacturing, and the remaining 10% will provide support services, including IT, security, quality, procurement, supply chain, smart manufacturing technology, finance, people, and legal services.

The bulk of manufacturing headcount will comprise three major job categories, each with a mix of specific jobs and skillsets. In the category of leadership (~10%), there are directors, managers, and supervisors. Typical qualifications for managers are a B.A. or B.S. degree or equivalent training and experience and five years of leadership experience. For supervisors, these are an A.A. or A.S. degree or Production Operations Management Certificate or equivalent training and experience. For directors, a B.A. or B.S. degree or equivalent training and experience, and eight years of leadership experience is required. In the category of Engineering & Professional (~44%), the bulk of needed roles are equipment engineers and process engineers. Engineering roles require a B.S. in Engineering or a B.S. in a relevant discipline, and Micron provides specific on-the-job training for the role's function. In the category of Technicians (~36%), the bulk of needed roles are equipment technicians and process technicians. Technician roles require the same minimum qualifications, and Micron provides specific on-the-job training for the role's function. The qualifications are an A.A or A.S. degree or completion of a Micron Apprenticeship Program or, other approved certification, or a combination of certifications under development with Micron community college partners or equivalent training and experience.

Micron will operate three (3) shifts over a 24-hour day. Day and night shifts will be utilized to sustain 24-hour manufacturing activities as well as a maintenance shift.

FIGURE 4 PROPOSED PROJECT AND OFF-SITE IMPROVEMENTS



2 The Scoping Process and Agency Coordination

Scoping provides an opportunity for the public to learn more about the Proposed Project and to provide valuable input as Micron and OCIDA prepare the SEQRA Draft EIS (DEIS). A SEQRA Positive Declaration and notice of public scoping meeting was published in the *Environmental Notice Bulletin* on September 20, 2023. Notice of the public scoping meeting was placed in The Post Standard (Syracuse.com) – a newspaper of general circulation serving the broader Clay, New York area on September 19, 2023.

Project information and this final SEQRA Scope was also posted on OCIDA's website (www.ongoved.com).

OCIDA, as SEQRA Lead Agency, invited the public and agencies to be involved in the environmental review process. During the SEQRA scoping process, comments were encouraged on the draft purpose and need, potential alternatives, and environmental issues of concern. A list of the Federal, State, and local agencies with which OCIDA is coordinating is provided in Section 6.

Public Comment Period and Community Meetings

- The comment period for the scoping process was extended beyond the minimum required 30 days from September 20, 2023, to October 31, 2023. During this period, OCIDA held a public scoping meeting on October 11, 2023, at 6:30 PM to obtain input from the public. Everyone who registered or asked to speak was given the opportunity to submit a verbal comment.

The scoping meeting provided simultaneous Spanish and American Sign Language interpretation. No additional language translation services or special needs assistance were requested.

How Comments Were Received

Comments were accepted during the scoping period via:

- Public comment at the public scoping meeting on October 11, 2023;
- E-mails to micron@ongov.net; and
- Mail to Attn: Micron Project, Office of Economic Development, Onondaga County, 335 Montgomery Street, 2nd Floor, Syracuse, NY 13202

All comments received, no matter their format, were considered equally. In total, 39 individuals, organizations, or agencies provided comments during the public comment period including written comment letters from the United States Fish & Wildlife Service and the New York State Department of Environmental Conservation.

How Comments Were Used

After the end of the comment period on October 31, 2023, OCIDA, with assistance as needed from Micron, collected, reviewed, and summarized the comments received and prepared this final SEQRA Scope with attached Response to Comments found in Appendix B. The comments received during the scoping period were considered by OCIDA to define this final scope of the DEIS and to inform the related technical analyses and environmental resources to be evaluated.

OCIDA has made the final SEQRA Scope available to all interested and involved agencies as well as on its website (*www.ongoved.com/ocida*) and to everyone that commented during the public comment period. This final SEQRA Scope will be used to prepare the DEIS.

3 Purpose and Need

3.1 PURPOSE AND NEED

The purpose of the Proposed Project is to further the United States goal to expand domestic memory chip manufacturing capacity and restore U.S. leadership in semiconductor manufacturing as embodied in the "Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022" (the "CHIPS Act"). For Micron, the purpose is to advance its leading-edge position in the development and manufacturing of DRAM memory chips.

The purpose of the CHIPS Act and the need for the Proposed Project is to reduce U.S. reliance on foreign production of both leading edge and older generation microelectronics. Semiconductors were invented in America, and the U.S. semiconductor industry has historically dominated many parts of the international semiconductor supply chain, such as R&D, chip design and manufacturing. Yet the U.S. position within the semiconductor industry has been declining. According to the Semiconductor Industry Association, U.S. production of the world's microchips has fallen from 37% in 1990 to 12% in 2020. The need for the Proposed Project is to reduce economic and national security risks by building domestic capacity, to establish a dynamic and collaborative network for semiconductor research and innovation centers, and to improve competitiveness and strengthen regional supply chain industries. Micron provides a unique and essential role in domestic production of leading-edge memory chips that are essential and high-volume components of the semiconductor industry.

Micron's investment in the Proposed Project will also advance the goals of the State of New York and OCIDA to enhance job growth in Central New York by promoting advanced manufacturing in the region. The Proposed Project is anticipated to generate nearly 50,000 jobs in Central New York over more than a 20-year period, including 9,000 good-paying Micron jobs directly generated by the Proposed Project and over 40,000 additional jobs with suppliers, contractors and other businesses supporting the proposed chip manufacturing facility. To this end, Micron and the State of New York have announced a historic $500 million investment in community and workforce development over a more than 20-year period. Micron will further invest $250 million in line with its commitment to the Green CHIPS Community Investment Fund. An additional $250 million is expected to be invested, with $100 million from New York, and $150 million from local, other state and national partners. This fund is intended to expand and train the workforce in the region, including providing support for disadvantaged populations.

3.2 PROJECT BACKGROUND

Central New York as well as other regions of New York State have experienced a reduction in manufacturing jobs over several decades. In 1991, OCIDA and the City of Syracuse Chamber of

Commerce commissioned an Industrial Park Feasibility Study to identify potential candidate sites for locating industrial businesses in Onondaga County (the "County"). The study identified two sites for large scale industrial uses, with the White Pine Commerce Park (WPCP) ultimately selected as the preferred site for purchase due to its proximity to National Grid's Clay electric substation, highway access, and Industrial zoning designation. Between 1991 and 1999, the County purchased seven properties to form the original approximately 340-acre WPCP (previously referred to as Clay Business Park).

OCIDA's intent in acquiring the lands, was further justified in 1998 with the advent of the SEMI-NY program (as discussed below), resulted in the accumulation of the original 340-acre footprint of the WPCP. The SEMI-NY program was a New York State initiative initiated in 1998 to attract the semiconductor industry to the state by identifying and advancing "qualified" sites that were consistent with conceptual semiconductor industry profiles. OCIDA's objective was to further the County's economic development agenda by providing a site that met the SEMI-NY criteria and could be presented as a qualified site for a semiconductor manufacturing facility under the SEMI-NY program. To support OCIDA's efforts to obtain the SEMI-NY "qualified" site designation for its site, OCIDA prepared a SEQRA Generic Environmental Impact Statement (GEIS) to assess potential environmental and socio-economic impacts associated with full build-out of the 300-acres by a yet to be determined semiconductor company.

From 2017 to the present, OCIDA has made significant investments to advance and market the WPCP, with the semiconductor industry targeted as the site's highest and best use. In the ensuing years following the initial creation and focused marketing of the WPCP, the semiconductor industry, for several commercial reasons, has transitioned toward the construction and use of a Fab complex, which typically consists of two to four fabrication facilities operating at a single site; a trend introduced in Asia and Europe and now replicated in the United States. The semiconductor industry of today focuses on economies of scale; the need to build fewer, larger Fabs; and the managerial and economic benefits regarding workforce and reducing operational downtimes during expansions. This has resulted in the need for 1000-acre sites.

As a result, over the past six years, OCIDA decided to purchase adjacent land to enlarge the WPCP to accommodate this new industry model. The WPCP is now over 1,400 contiguous acres. This size makes it considerably larger than most available sites in New York. Considering other critical additional project needs beyond sheer size (e.g., proximity to a sufficient supply of electricity and water, wastewater treatment, and natural gas) further diminishes the number of available sites that can accommodate modern semiconductor manufacturing. Overlaying the acreage and infrastructure needs with access to multi-modal transportation and labor needs is often a point of failure for most other sites, which might otherwise meet the acreage need. Accordingly, sites that substantially meet Micron's site selection criteria are not commonly available, which further supports Micron's selection of the WPCP for the proposed Micron Campus.

OCIDA utilized the development of a GEIS (2013) and the follow-up Supplemental Generic Environmental Impact Statement (SGEIS), completed in 2021, to evaluate potential locations throughout Onondaga County for development of a site suitable to attract semiconductor manufacturing. OCIDA, in 2013, and again in 2021, selected the WPCP as its preferred site to attract private industrial and commercial development because of its size, potential for industrial zoning, access to transportation, proximity of utilities, as well as a history of Town of Clay efforts to facilitate industrial development at the property.

The 2013 GEIS considered several other potential sites in addition to WPCP:

- Radisson Corporate Park – 950 acres in the Town of Lysander;
- Hancock Air Park – 200 acres adjacent to the Syracuse Hancock Airport;
- Collamer Crossings Business Park – 200 acres in the Town of Dewitt located near NYS Route 298, I-90, I-481; and
- Syracuse Research Park – 99-acre site adjacent to Syracuse University.

OCIDA deemed the Radisson Corporate Park as an unviable choice because it lacked sufficient room and it did not offer the location specific advantages such as the proximity to I-81 and I-481/NY 481 that the WPCP did. Neither the Hancock Air Park nor the Collamer Crossing Business Park were deemed viable options because the available lots were small and could not accommodate large industrial uses. The Syracuse Research Park was available for light industrial use, but OCIDA concluded that it could not easily accommodate large-scale industrial uses.

The 2013 GEIS evaluated three (3) different site layouts for the WPCP: 1) a layout that provided 1 million sf of development while avoiding all State-mapped wetlands; 2) a layout that provided 1.5 million sf of development that balanced approximately 4.2 acres of wetland impacts against the additional benefits from the larger size of development; and 3) a layout that provided over 2 million sf balanced against additional impacts to wetlands. OCIDA identified the third alternative as the "preferred alternative" in the 2013 GEIS based on the overall economic returns versus the degree of environmental impacts. The 2013 GEIS also included a 2012 engineering report evaluating three (3) options for extending sanitary sewer service to the WPCP: 1) use of Verplank Road north of NYS Route 31; 2) use of the NYS Route 31 right-of-way; and 3) use of the Metropolitan Water Board (now OCWA) right-of-way south of NYS Route 31. The 2012 engineering report built from a 2003 feasibility study, the *Semi-NY Sewer Route Feasibility Study*, which evaluated five (5) sanitary sewer line routing options. OCIDA selected the third option for extension of sanitary sewer service to the WPCP as the preferred alternative.

The 2021 SGEIS revisited the question of whether the WPCP was the preferred alternative to attract industrial and commercial development to Onondaga County. The SGEIS compared WPCP to the

same alternative candidate sites that the 20132 GEIS assessed, again concluding that "[n]one of the previously considered alternative locations would be able to accommodate the large-scale industrial use that the [White Pine Commerce] Park is promoting due to size limitations and proximity to services and necessary infrastructure."

The 2021 SGEIS concluded that significant expansion of the WPCP was feasible and more likely to attract leading edge manufacturing, such as semiconductor manufacturing. The alternative locations considered in the 2021 SGEIS were rejected as much too small to accommodate semiconductor manufacturing. The 2021 SGEIS assessed the additional potential significant adverse impacts from a larger facility and the creation of a shovel-ready WPCP by increasing the size of the development parcel to approximately 1,250 acres (later expanded to the current approximately 1,400 acres). OCIDA indicated in the SEQRA Findings Statement that "consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is the one that avoids or minimizes adverse impacts to the maximum extent practicable, and that adverse impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigation measures that were identified as practicable."

On August 9, 2022, President Biden signed into law the CHIPS Act making over $50 billion available "to strengthen American manufacturing, supply chains, and national security, and invest in research and development, science and technology, and the workforce of the future to keep the United States the leader in the industries of tomorrow, including nanotechnology, clean energy, quantum computing, and artificial intelligence."[5]

On August 11, 2022, New York State Governor Kathy Hochul signed into law the Green CHIPS Act, which provides up to $10 billion in economic incentives for environmentally friendly semiconductor manufacturing and supply chain projects (Ch. 494, L. 2022). The Green CHIPS legislation was passed to align with the provisions of the Federal CHIPS Act for the purpose of attracting domestic semiconductor manufacturing and related activities to New York State.

On October 4, 2022, Micron announced plans to invest up to $100 billion over the next 20-plus years to develop a new leading edge semiconductor manufacturing facility at what is now known as the WPCP in Clay, New York, with a first-tier investment of $20 billion planned by the end of this decade. Micron intends to apply for funding from both the CHIPS Act and the Green CHIPS Act to assist in the financing of the Proposed Project. Micron and Empire State Development (ESD), the umbrella organization of New York State's two principal economic development public-benefit corporations, established a framework, known as the Community Investment Framework, outlining the shared investments to be made by Micron and the State of New York. This framework

[5] FACT SHEET: CHIPS and Science Act will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China, August 9, 2022, The White House. https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/

will allow for the strengthening of the existing regional workforce and to create new growth and expansion of the workforce overall.

Micron's Proposed Project is the long-anticipated fulfillment of OCIDA's original goal to attract a state-of-the-art manufacturing facility to generate high-paying employment opportunities in Onondaga County. Micron's investment also furthers recent United States and New York State policies and programs to incentivize domestic semiconductor manufacturing.

4 Project Alternatives

4.1 INTRODUCTION

SEQRA requires the evaluation of alternatives to the Proposed Project, including either alternative sites or alternative designs, as well as a No Action Alternative. The evaluation of alternative site locations to be presented in the DEIS for the Proposed Project will be based upon the prior evaluation of alternative sites reflected in the earlier SEQRA analyses prepared by OCIDA as well as work completed by the New York State Economic Development Council (Project Rhino). See Table 1 for a summary of the various alternatives considered previously in the establishment of WPCP and those that will be carried into the DEIS for consideration.

4.2 DISCUSSION OF ALTERNATIVE PROJECT LOCATIONS

4.2.1 Alternative Sites in New York State

The DEIS will include a discussion of project location needs for semiconductor manufacturing in general and Micron in particular. The DEIS will also discuss the process previously undertaken by New York State to identify candidate sites for semiconductor manufacturing over recent years. That process identified four (4) sites throughout New York State as "shovel ready" sites for semiconductor manufacturing: STAMP in Genesee County, WPCP in Onondaga County, Marcy Nanocenter in Oneida County, and Luther Forest Technology Campus in Saratoga County. The DEIS will discuss the three alternative shovel ready sites and detail why they are not suitable alternative locations for the Proposed Project. For example, since 2012, GlobalFoundries U.S., Inc. has operated a semiconductor manufacturing facility at the Luther Forest Technology Campus in Saratoga County. Marcy Nanocenter Parcel #1 was previously developed into a manufacturing facility for Wolfspeed. The remaining parcel at Marcy Nanocenter is only 438 acres, too small for the proposed project. Some development has already occurred at STAMP and the remaining available acreage at that site also is too small to accommodate the Proposed Project.

In 2018 the New York State Economic Development Council (NYSEDC) prepared a "Competitive Site Location Benchmarking for Semiconductor Manufacturing" study (also known as "Project Rhino"). The purpose of the benchmarking study was to assess and compare four (4) sites in New York State, including WPCP, for their readiness to support semiconductor manufacturing; benchmark those four (4) sites against six (6) other sites located throughout the United States; and identify other industrial sectors that might be attracted to New York State to support semiconductor manufacturing. The study was based upon a hypothetical semiconductor manufacturing facility and evaluated each of the sites against a number of quality, cost, and economic incentive factors.

The qualitative assessment evaluated the sites against five categories, each of which had several factors included: site quality and suitability; workforce and community alignment; utilities capacity, quality, and reliability; economic development and regulatory context; and incentive capacity and capability. WPCP ranked second nationally for access to utilities and readiness of those utilities to serve the site. It was noted that all four New York State sites ranked first through fourth for the degree to which tax and non-tax incentives have been made available from the State and local governments. Lastly, three of the New York sites, including WPCP, ranked in the top five for economic development and regulatory support.

While all four New York State sites were among the most expensive in terms of construction costs, personnel, water and wastewater, and real estate and personal income taxes, the New York State sites had a competitive advantage on electricity and natural gas costs. On balance, the study concluded that New York State led all competitors in terms of the capacity, capability, and probability of delivering a meaningful incentives package.

The DEIS will include a summary of the prior New York State site selection process and detail why alternative semiconductor locations in New York State cannot accommodate the Proposed Project.

4.2.2 Alternative Sites and Design Options in Onondaga County

As previously noted, as part of its effort to develop a "shovel-ready" industrial park in Onondaga County, OCIDA evaluated a number of potential locations throughout the county. OCIDA ultimately selected WPCP as its preferred site to attract private industrial and commercial development because of its size, potential for industrial zoning, access to transportation, proximity of utilities, as well as a history of Town of Clay efforts to facilitate industrial development at the property.

The 2012 DGEIS prepared by OCIDA evaluated three (3) different site layouts for WPCP: 1) a layout that provided 1 million sf of development while avoiding all State-mapped wetlands; 2) a layout that provided 1.5 million sf of development that balanced approximately 4.2 acres of wetland impacts against the additional benefits from the larger size of development; and 3) a layout that provided over 2 million sf balanced against additional impacts to wetlands. OCIDA identified the third alternative as the "preferred alternative" in the 2012 DGEIS based on the overall economic returns versus the degree of environmental impacts. The DGEIS also included a 2012 engineering report evaluating three (3) options for extending sanitary sewer service to WPCP: 1) use of Verplank Road north of NYS Route 31; 2) use of the NYS Route 31 right-of-way; and 3) use of the Metropolitan Water Board (now OCWA) right-of-way south of NYS Route 31. The 2012 engineering report built from a 2003 feasibility study, the *Semi-NY Sewer Route Feasibility Study*, that evaluated five (5) sanitary sewer line routing options. OCIDA selected the third option for extension of sanitary sewer service to WPCP as the preferred alternative.

The 2021 Final SGEIS prepared by OCIDA revisited the question of whether WPCP was the preferred alternative to attract industrial and commercial development to Onondaga County, and compared it to the same alternative candidate sites that were assessed in the 2012 DGEIS, concluding that "[n]one of the previously considered alternative locations would be able to accommodate the large-scale industrial use that the [White Pine Commerce] Park is promoting due to size limitations and proximity to services and necessary infrastructure." The 2021 Final SGEIS further concluded that significant expansion of WPCP was feasible and more likely to attract leading edge manufacturing, such as semiconductor manufacturing. The 2021 SGEIS assessed the additional potential significant adverse impacts from a larger facility (up to 4 million sf of manufacturing space) and increase in size of the development parcel to approximately 1,250 acres. OCIDA indicated in the SEQRA Findings Statement that "consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is the one that avoids or minimizes adverse impacts to the maximum extent practicable, and that adverse impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigation measures that were identified as practicable."

The DEIS will include a summary of the prior Onondaga County site selection process, but will not include detailed impact assessment of any of the candidate sites included in that prior process.

4.2.3 Other Alternatives Considered but Determined Not Feasible

The DEIS will include a summary of other alternatives previously considered but determined not to be feasible, including an alternative that relies exclusively on alternative sources of energy (beyond use of renewable energy for purchased electricity).

The DEIS will also summarize previous Onondaga County Water Authority studies evaluating potential alternative sources of water.

4.3 ALTERNATIVES TO BE CONSIDERED IN THE DEIS

4.3.1 No Action Alternative

Under the No Action Alternative, WPCP would delay OCIDA's long-standing efforts to develop the WPCP, with a particular focus on development that will bring high-tech facilities and high paying jobs to Onondaga County. OCIDA's 2021 Final SGEIS concluded that development of up to 4 million sf of manufacturing space would avoid, minimize, or mitigate adverse environmental impacts to the maximum extent practicable. The WPCP would therefore remain vacant land until such time as OCIDA identified another development proposal for the WPCP.

4.3.2 The Proposed Project

Micron intends to build a semiconductor manufacturing facility campus (the "Micron Campus") at the expanded WPCP, which will be built-out over an approximately 20-year period with four

Fabs. It is expected that Fabs will be continuously fit-out and construction on the next Fab will be in sequence as the prior Fab finishes fit-out. The DEIS will analyze an interim analysis year of 2031 with Fab 1 in operation and Fab 2 under construction and anticipated completion of major off-site transportation improvements,[6] 2037 with Fab 1 and Fab 2 operating and construction of Fab 3 underway, as well as a final analysis year of 2041 with all four Fabs in operation with on-going fit-out of Fab 4).

4.3.3 The Proposed Project with No Access from US Route 11

Micron intends to build a site access road from US Route 11 in the Town of Cicero to facilitate construction and operation access to the Proposed Project once construction of Fab 3 commences. The DEIS will analyze an alternative access scenario that eliminates this site access road from the Micron Campus to US Route 11. In this alternative, all access to the Micron Campus would be from NYS Route 31 and Caughdenoy Road.

4.3.4 Alternative Internal Configurations of the Proposed Project

Consistent with the requirements of the Clean Water Act (Section 404(b)(1)), which governs the filling of wetlands, Micron must demonstrate that the Proposed Project is the least environmentally damaging practicable alternative ("LEDPA"). In accordance with USEPA "Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230), Micron has developed an alternative analysis to evaluate the reasonableness and practicableness of several on-site layout alternatives. The DEIS will consider these on-site layout alternatives.

4.3.5 Reduced Scale Proposed Project

The DEIS will consider an alternative development site plan reflecting a reduced scale of the Proposed Project, which would comprise only the first two Fabs, as described above. All of the same off-site improvements would be considered as part of the Reduced Scale Proposed Project and while the improvements would be scaled to the requirements of the smaller project, the areal extent of disturbance to construct those conveyances would be substantially similar to that required for the Proposed Project while only realizing half of the economic and social benefits from the Proposed Project.

The purpose of this alternative is to assess significant adverse effects from a reduced scale project and compare such effects to the Proposed Project.

[6] The 2031 interim year analysis will evaluate any traffic, air quality, noise, and construction impacts for what is projected to be a peak of operations and construction employment. For other areas of impact analysis, the 2037 analysis year representing completion of Fab 1 and Fab 2 will be used to reflect the larger amount of project completion at that time.

TABLE 1 SUMMARY OF ALTERNATIVES CONSIDERED OR TO BE CONSIDERED

Alternatives Considered	Status of Alternative
Alternative Sites Considered in New York State	
STAMP in Genesee County	Withdrawn from further consideration because some development has already occurred, and the remaining parcel is too small for the proposed project.
Marcy Nanocenter in Oneida County	Withdrawn from further consideration because the site was previously developed into a manufacturing facility for Wolfspeed.
Luther Forest Technology Campus in Saratoga County	Withdrawn from further consideration because, since 2012, GlobalFoundries has operated a semiconductor manufacturing facility on this site.
Previous Alternatives Considered in OCIDA 2013 Generic EIS (GEIS) for White Pine Commerce Park	
Radisson Corporate Park	Withdrawn from further consideration because it lacked room and did not offer the location specific advantages such as proximity to Interstate 81.
Hancock Air Park	Withdrawn from further consideration because available lots were too small and could not accommodate large industrial uses.
Collamer Crossings Business Park	
Syracuse Research Park	Withdrawn from consideration because it could not easily accommodate large-scale industrial uses.
Concept 1: 1 million square foot development – no wetland impacts	
Concept 2: 1.5 million square foot development – 4.2 acres of wetland impacts	
Concept 3: 2 million square foot development – additional wetlands impacts	
Previous Alternatives Considered in OCIDA 2021 Supplemental GEIS for White Pine Commerce Park	
Alternative 1: Retain site as open space	Withdrawn from consideration because it could not easily accommodate large-scale industrial uses.
Alternative 2: Same as Concept 3 in OCIDA's 2013 GEIS	Withdrawn from consideration because it could not easily accommodate large-scale industrial uses.
Alternative 3: Comparable to Alternative 2 but at smaller scale	
Preferred Alternative: 4 million square feet development – additional wetlands impacts	OCIDA identified this alternative as the preferred alternative in the Supplemental GEIS based on the overall economic returns versus the degree of environmental impacts.
Other Alternatives Considered but Determined to be Not Feasible	
Alternative Energy Sources	The DEIS will describe how Micron's Proposed Project could not rely exclusively on alternative energy sources (beyond use of renewable energy for purchased electricity) before reliable energy sources are identified and developed.
Alternatives to be Considered in the Draft EIS for the Micron Semiconductor Fabrication Project	
No Action	These alternatives will be considered in the DEIS for the Micron Semiconductor Fabrication Project in Clay, NY.
Proposed Project (4 fabs)	
Proposed Project No Access from US Route 11	
Proposed Project Alternative Internal Configurations* – Options 2, 3, 4, 5, 6 and 7	
Reduced Scale Proposed Project (2 fabs)**	

* Note: Proposed Project– Alternative Internal Configuration Option 1 is the Proposed Project (4 fabs).

** This alternative is similar to the Preferred Alternative: 4 million square feet development identified in the OCIDA 2021 SGEIS.

5 Analysis Framework

This section outlines the analytical framework that will be used to complete the DEIS. It describes the reasoning behind the chosen analysis year(s) and study area(s) and outlines the methodology used to establish baseline conditions from which the environmental effects will be analyzed.

5.1 ORGANIZATION OF THE ENVIRONMENTAL IMPACT STATEMENT

Preparation of the DEIS will conform to 6 NYCRR Part 617.9(b). The Proposed Project will be evaluated for potential significant adverse effects to the Project Site[7] and applicable study areas for all relevant environmental technical categories in accordance with applicable SEQRA requirements. The DEIS will consider short-term (construction) and long-term (operational) effects (including direct and indirect effects) of the Proposed Project. Cumulative impacts will also be addressed, as applicable. The DEIS will identify proposed mitigation for any significant adverse environmental impacts. The DEIS shall include a list of all Involved and Interested Agencies to which copies of the DEIS and supporting material will be distributed. See Table 2, "Preliminary List of SEQRA Lead, Involved, and Interested Agencies," and Table 3, "Preliminary List of Federal Agencies," in Section 6.

Consistent with those regulations, the DEIS technical chapters are proposed as shown below. Appendices of the DEIS will contain any detailed technical studies used to complete the DEIS.

- Cover Sheet (see below)
- Table of Contents
- Executive Summary
- Chapter 1 – Purpose and Need
- Chapter 2 – Project Alternatives and Description of the Proposed Project
- Chapter 3 – Land Use, Zoning, and Public Policy
- Chapter 4 – Community Facilities, Open Space and Recreation
- Chapter 5 – Socioeconomic Conditions
- Chapter 6 – Environmental Justice
- Chapter 7 – Historic and Cultural Resources
- Chapter 8 – Visual Impacts and Community Character
- Chapter 9 – Geology, Soils, and Topography
- Chapter 10 – Water Resources
- Chapter 11 – Ecological Communities and Wildlife
- Chapter 12 – Solid Waste
- Chapter 13 – Hazardous Materials

[7] References to the "Project Site" refer to any location where elements of the Proposed Project or off-site improvements will be constructed.

- Chapter 14 – Transportation
- Chapter 15 – Air Quality
- Chapter 16 – Greenhouse Gas Emissions and Climate Change
- Chapter 17 – Noise and Vibration
- Chapter 18 – Utilities and Infrastructure
- Chapter 19 – Use and Conservation of Energy
- Chapter 20 – Construction
- Chapter 21 – Permits
- Chapter 22 –Cumulative Impacts
- Chapter 23 – Unavoidable Adverse Impacts
- Chapter 24 – Growth Inducing Aspects
- Chapter 25 – Irreversible and Irretrievable Commitment of Resources
- Chapter 26 – Mitigation
- Appendices

Consistent with 6 NYCRR Part 617.9(b)(3), the DEIS Cover Sheet shall:

(i) identify the document as a DEIS;
(ii) identify the name of the Proposed Project;
(iii) identify the location of the Proposed Project;
(iv) identify the name and address of the Lead Agency and the contact information of a person at the agency who can provide further information;
(v) identify the names of individuals and organizations that prepared any portion of the DEIS;
(vi) identify the date the DEIS was accepted as complete with respect to the Final Scope by the Lead Agency; and
(vii) identify the date of the DEIS Public Hearing and the closing of the Public Comment Period.

5.2 ANALYSIS YEARS

The following analysis years (build years) will be included in the DEIS for the Proposed Project. Selection of analysis years is based on Micron's projected operations and construction employment and peak levels of activities:

- 2031 — Interim analysis year with Fab 1 in operation and Fab 2 under construction and anticipated completion of major off-site transportation improvements[8];

[8] The 2031 interim year analysis will evaluate any traffic, air quality, noise, and construction impacts for what is projected to be a peak of operations and construction employment. For other areas of impact analysis, the 2037 analysis year representing completion of Fab 1 and Fab 2 will be used to reflect the larger amount of project completion at that time.

- 2037 — Interim analysis year with Fab 1 and Fab 2 operating and construction of Fab 3 underway; and
- 2041 — All four Fabs in operation with on-going fit out of Fab 4.

Specific study areas for technical evaluations will be established and described in each chapter as appropriate (i.e., traffic intersections for analysis).

5.3 METHODOLOGIES FOR TECHNICAL ANALYSES

5.3.1 Technical Studies

The environmental review will include site-specific evaluations and studies of the full range of technical areas needed to comply with SEQRA. The following bullets identify the key environmental topics that could result in potential adverse impacts that will be studied. If environmental analysis reveals any significant adverse impacts, the document will identify any reasonable measures to minimize or mitigate those impacts. To the extent applicable, prior studies completed by OCIDA as part of its generic environmental impact statements will be referenced in the site-specific assessments completed as part of the current environmental impact statement.

- **LAND USE, ZONING, AND PUBLIC POLICY:** This analysis will assess land use, zoning, and public policy, including relevant New York State policy related to Green CHIPS. Zoning compliance of the Proposed Project will be assessed where project elements are proposed. The study area for the land use assessment will be one mile from the Micron Campus as well as, where relevant, any other areas where off-site development is proposed to occur. Public policy assessments will cover the Town of Clay, Town of Cicero, and Onondaga County, as appropriate. This analysis will also identify reasonably foreseeable development projects (projects known or likely to be built within the time horizon of the Proposed Project in the study area) based on information obtained from the Town of Clay, Town of Cicero, and Onondaga County. Changes in land use and/or zoning that may result from the Proposed Project, either directly or indirectly, will be described and evaluated. Consistency with any applicable local or regional policies, including the SMTC 2050 Long Range Transportation Plan, Onondaga County Comprehensive Plan, Onondaga County Climate Action Plan, Town of Clay Comprehensive Plan (if available; draft anticipated in March 2024), Town of Clay Northern Land Use Study, Town of Clay Local Waterfront Revitalization Program (LWRP) (for proposed modifications to the Oak Orchard WWTP), Town of Cicero Comprehensive Plan (if available; draft anticipated in April 2024), and City of Oswego LWRP (for proposed improvements to water supply infrastructure) will be evaluated.
- **COMMUNITY FACILITIES/OPEN SPACE AND RECREATION:** The police, fire, emergency, and community service providers within the Town of Clay and the Town of Cicero, and school district(s) that serve the Proposed Project will be identified and the impacts to each service will be analyzed with potential mitigation identified where significant adverse impacts are identified. The relevant Town of Clay and Town of Cicero departments will be consulted regarding the

existing staffing of emergency services; planned changes to staffing levels, service levels, equipment and/or facilities; and how those departments would respond to emergency situations at the site. The DEIS will assess potential impacts of the Proposed Project on staffing levels, service levels, equipment and/or facilities on- and off-site. The chapter will discuss separation distance between buildings, proposed fire access, and construction in accordance with applicable building and fire codes. The chapter will also describe and map existing parks and recreational resources on-site and within one mile of the Micron Campus, including walking paths and trails. Using information made available by the State/County/Town parks agencies, the assessment will include a discussion of planned changes to existing parks and recreational resources, and/or development of new parks and recreational resources anticipated to occur in the future without the Proposed Project. Potential direct and indirect impacts of the Proposed Project on parks and recreational facilities will be assessed. Operations of the Proposed Project may result in new residential populations that may generate additional school children. The DEIS will identify enrollment trends for the following school districts and will identify whether any of these school districts may require capacity enhancements: North Syracuse Central School District (CSD), Baldwinsville CSD, Liverpool CSD, Central Square CSD, and Phoenix CSD.

- **SOCIOECONOMIC CONDITIONS:** This analysis will examine the potential direct and indirect effects of the Proposed Project on population, housing, and economic activities within local and regional study areas. The local study area will be the Town of Clay, and the regional study area will include Onondaga County and surrounding counties in the Central New York region (the area from which most Micron employees would reside). The analysis will use a variety of data sources including the U.S. Census Bureau, New York State Department of Labor, Syracuse Metropolitan Transportation Council (SMTC), OCIDA, Empire State Development (ESD), and study area municipalities to present: existing demographic and workforce characteristics; changes that are expected to occur in the future independent of the Proposed Project; and the potential impacts of the Proposed Project. The impact assessment will consider changes in demographics and housing costs, property taxes, changes in labor supply and effects on existing businesses, and municipal costs generated by the Proposed Project. In addition to considering potential adverse effects, the analysis will describe anticipated social and economic benefits such as jobs, economic and workforce development opportunities, and municipal and state tax revenues. The DEIS will also describe Micron's efforts to work with community leaders through the Community Engagement Committee (CEC) (an entity convened by the Governor's Office, Micron, and local elected officials) to consider how project benefits can be distributed throughout the affected communities, including to communities of color or low-income communities. This is necessary to issue findings where agencies must balance social and economic considerations against environmental impacts that cannot be avoided or mitigated.
- **ENVIRONMENTAL JUSTICE:** The environmental justice study area will include all census block groups that are within or intersect a 10-mile radius of the Proposed Project as well as the area that

could be affected by changes in traffic patterns resulting from the Proposed Project. The environmental justice study area also encompasses the areas that would be affected by the off-site improvements. Pursuant to the Laws of New York (2022) ECL § 8-0113(2)(b), this analysis will consider the direct or indirect impacts of the Proposed Project on any identified low-income, minority, or "disadvantaged communities" (as defined in ECL § 75-0101(5)), including whether the Proposed Project may cause or increase a disproportionate pollution burden on those communities. This analysis will also follow Executive Order 12898 on Environmental Justice, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," and Executive Order 14096, "Revitalizing our Nation's Commitment to Environmental Justice for All," to determine whether the Proposed Project will result in any disproportionate and adverse impacts on minority or low-income populations (in anticipation of consistency with federal guidelines as part of federal NEPA review or permitting for the Proposed Project). This analysis will also describe the public outreach undertaken to inform and involve minority and low-income populations who may be affected by the Proposed Project.

- **HISTORIC AND CULTURAL RESOURCES:** This analysis will document the Proposed Project's impact on historic and cultural resources consistent with Section 14.09 of the New York State Historic Preservation Act, and NYSDEC Commissioner Policy 42, "Contact, Cooperation, and Consultation with Indian Nations." An Area of Potential Effects (APE) (study area) will be defined for potential direct effects covering any location where construction would occur as well as a ¼-mile study area for potential indirect effects where construction activities would result in permanent above-ground features that could have the potential to indirectly affect historic architectural resources. The New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) Cultural Resources Information System (CRIS) will be consulted to identify if there are any known listed or eligible structures within the APE. Additionally, any previously unidentified historic resources in the APE will be identified and evaluated. The evaluation will assess the potential of the Proposed Project to affect historic and cultural resources in the APE including buried archaeological resources through consultation with the New York State Historic Preservation Office (SHPO). It is anticipated that Section 106 of the National Historic Preservation Act compliance would be completed by a Federal agency as part of federal permitting for the Proposed Project.
- **VISUAL IMPACTS AND COMMUNITY CHARACTER:** This analysis will evaluate the Proposed Project for potential visual and community character impacts within a five-mile radius of the Micron Campus and ¼-mile from the Childcare Site and rail spur site (which are included within the five-mile radius of the Micron Campus) and ¼-mile from above-ground structures associated with the off-site improvements. This section of the DEIS will detail the existing aesthetic characteristics of the WPCP and surrounding area through descriptive text and representative photographs including a description of prevalent landforms and vegetative cover. Potential changes in views of the Proposed Project and its surroundings will be evaluated through comparisons of post-development conditions to the existing conditions and to the established

aesthetic character of the surrounding area. The analysis will identify and describe significant views into the existing WPCP from a range of representative publicly accessible vantage points and aesthetic resources and the preservation of existing vegetative buffers. The visual and architectural character of the Proposed Project, with special attention to the site lighting and off-site visibility of buildings and structures will be assessed. Assessment of impacts shall be based on the NYSDEC Program Policy document "Assessing and Mitigating Visual and Aesthetic Impacts" last revised December 13, 2019.

- **GEOLOGY, SOILS, AND TOPOGRAPHY:** This analysis will identify the major geologic and soil conditions within areas where construction of the Proposed Project and off-site improvements would occur, focusing on suitability of the property for development and stormwater management purposes, as applicable. The analysis will use information readily available from the United States Department of Agriculture's Natural Resources Conservation Service (e.g., soil survey) as well as the geotechnical investigation of the Micron Campus to complete this chapter. Any soils classified as prime agricultural soils will be identified. The assessment will also include a slope map and discussion of proposed modifications to site topography including categories of 0-10%, 10-15%, 15-25% and 25% or greater. A summary of the geotechnical investigation and cut and fill analysis for the Micron Campus will also be included.
- **WATER RESOURCES:** This analysis will address the potential impacts to water resources present on the Project Site or in any area impacted by off-site improvements, including groundwater, streams and wetlands. Groundwater levels will be described from geotechnical investigations. Wetlands will be delineated using the three-part standard outlined in the 1987 U.S. Army Corps of Engineers delineation manual, with the boundaries verified through the Jurisdictional Determination process. New York State regulated wetlands will also be delineated pursuant to the standards set forth at Article 24 of the Environmental Conversation Law and NYSDEC's freshwater wetlands regulations set forth at 6 NYCRR Part 663. Any water resources will be characterized and any potential adverse impacts to them will be assessed and potential mitigation identified. The DEIS will include an assessment of wetland functions and services. A physical and chemical characterization of Youngs Creek will be presented in the DEIS based on site reconnaissance. The Proposed Project's location with respect to any floodplain would also be documented. A Stormwater Pollution Prevention Plan (SWPPP) prepared pursuant to the NYSDEC *Stormwater Management Design Manual* will be prepared for the Proposed Project and included as an appendix to the DEIS. Potential impacts of stormwater generated by the Proposed Project on streams and wetlands will be described in the DEIS. While specific impacts and mitigation measures are not known at this time, impacts to streams and wetlands from the Proposed Project are likely. Stream and wetland mitigation could include on-site or off-site stream or wetland creation, restoration, or enhancements approved by USACE and NYSDEC. The wetland delineation report and draft conceptual compensatory mitigation plan will be included as an appendix to the DEIS.
- **ECOLOGICAL COMMUNITIES AND WILDLIFE:** This analysis will address the potential impacts to ecological communities (terrestrial and aquatic) and wildlife. The U.S. Fish & Wildlife Service

(USFWS) Information, Planning, and Consultation System (IPaC) and New York State Natural Heritage Program database will be queried for any known or potential threatened or endangered species within the study area, which includes the Project Site as well as any areas where off-site improvements would be constructed. This will include an assessment for the presence of, and potential impacts to, threatened and endangered species for all linear utility construction projects, new infrastructure, and the expansion of existing infrastructure (e.g., Oak Orchard Wastewater Treatment Plant and the Lake Ontario water filtration plant). Consultation with NYSDEC and USFWS to develop protocol for assessing presence of habitat for any identified species and protocol for assessing potential impacts to any identified species will be undertaken. Summaries of field studies will be included as an appendix to the DEIS. The DEIS will include characterization of wildlife within the Project Site based on literature review and field observations collected seasonally, including winter and migration seasons. Field studies will identify existing plant species that are invasive, non-native, or both invasive and non-native. Field studies will also include characterization of aquatic wildlife (biology) within Youngs Creek. Potential impacts to wildlife that will be considered in the DEIS include, but are not limited to, habitat fragmentation, noise, lighting, pollution, human activity and traffic. The DEIS will include a commitment to prepare and implement an invasive species management plan as a condition of site plan approval.

- **SOLID WASTE:** This analysis will describe the proposed generation of solid waste by the Proposed Project and how that material will be handled, stored, and transported. This analysis will describe Micron's proposed measures to reduce generation of solid waste through reuse or recycling. This analysis will describe Onondaga County's Solid Waste Management Plan and how the Proposed Project would comply. The analysis will consider the capacity of the existing waste management network and the ability to accept increased volumes generated by the Proposed Project as well as the anticipated population growth in the study area. Approximate timing of expansion of waste or recycling facilities, if needed, will be discussed.
- **HAZARDOUS MATERIALS:** The assessment of hazardous materials will include Phase I environmental site assessments compatible with American Society for Testing and Materials (ASTM) standards (E1527-21) to identify potential areas of concern within areas where construction of the Proposed Project would occur. All pertinent environmental databases will be reviewed for each off-site improvement area and site inspections will be conducted where feasible. Phase II environmental sampling would be conducted as needed and to the extent practicable. Any warranted remedial approaches for addressing identified or potential contaminated materials would be described. The chapter will identify any hazardous materials (including any chemical or petroleum bulk or other storage) that would be used, stored, transported, or generated by the Proposed Project and measures to protect against releases to the environment and impacts to human health, including worker safety. Hazardous wastes as identified in 6 NYCRR Part 371.4 that the Proposed Project may generate will be described, including the type of hazardous waste anticipated to be generated, estimated volumes, storage methods, disposal options, and how the facility will comply with hazardous waste

regulations at 6 NYCRR Part 370-373. Potential mitigation measures to be considered include an evaluation of methods to reduce generation of hazardous waste.

- **TRANSPORTATION:** Construction and operation of the Proposed Project can be expected to generate a substantial number of new vehicular trips on the local and regional highway network including local roads and I-81 and NYS Route 481. The DEIS will describe the existing transportation network, project conditions in the future with and without the Proposed Project and will assess potential impacts associated with the Proposed Project, such as changes to intersection and roadway capacity and Levels of Service as well as access to existing and anticipated uses along key highway corridors serving the Project Site. In consultation with NYSDOT, New York State Thruway Authority, and Onondaga County Department of Transportation, automatic traffic recorder (ATR), turning movement counts (TMC), and vehicle classification counts (VCC) will be conducted. See Appendix A for additional information on the locations of proposed traffic data collection. Analysis will consider the effects of Proposed Project operations and construction, including during times when both operations and construction overlap. The DEIS will also describe the site driveways, internal circulation roadways, and parking facilities that will be part of the Proposed Project and designed to accommodate peak employee demand and on-going construction activity. The regional travel demand model developed by the Syracuse Metropolitan Transportation Council (SMTC), the designated Metropolitan Planning Organization (MPO) for the area serving the Project Site, will be used to identify existing and projected travel patterns on area roadways throughout the region. A sub-area section of SMTC's model will be used to provide the analysis foundation for a Visum transportation planning model to assign routing through the regional study area. Micro-simulation modeling of roadways and intersections within the study area will be conducted with either Vissim or Synchro traffic analysis modeling tools to analyze potential impacts of the Proposed Project in coordination with NYSDOT. Additional evaluations of existing crash patterns related to addressing safety, signal functionality, signing and striping, roadway lighting, and ITS systems will be completed to propose future improvements designed to increase safety and service in the area. While specific impacts and mitigation measures are not known at this time, impacts to area roadways due to additional traffic (during construction and during operations) from the Proposed Project are likely. Traffic mitigation may include improvements to area roadways or construction of new roadways. The DEIS will identify any proposed traffic improvements and a timetable for their implementation.

  The Transportation assessment will also include an identification of, and assessment of potential impacts from the Proposed Project and off-site improvements to, transit systems operating within Onondaga County as well as the CSX freight rail operations using the railroad line adjacent to the Micron Campus.

- **AIR QUALITY:** This analysis will assess mobile source and stationary source air emissions from the Proposed Project, including air emissions from operation of the fabs as well as the increased vehicular traffic on the local and regional roads and highways. The mobile source air quality analyses will be performed in accordance with the procedures found in the NYSDOT *The*

Environmental Manual (TEM), the USEPA guidance on project-level analyses, and the FHWA's current guidance on Mobile Source Air Toxic (MSAT) analysis. Potential air quality effects associated with construction activities will also be assessed. Overall, transportation conformity is not applicable to projects in Onondaga County. Consistent with the Clean Air Act and the Final Transportation Conformity Rule, the assessment will determine whether any regional or localized impacts to air quality (beneficial or detrimental) will result from the Proposed Project, including whether the Proposed Project would cause or contribute to any new violation of any National Ambient Air Quality Standards (NAAQS) in any area or increase the frequency or severity of any existing violation of any NAAQS in any area, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones in any area.

The Proposed Project will require a stationary source air pollution control permit for the new manufacturing facilities. The air pollution control permit application will include evaluation of pollutants subject to NAAQS, New York air toxic control and ambient air requirements, and a Climate Leadership and Community Protection Act (CLCPA) greenhouse gas evaluation. The DEIS will summarize these detailed air quality modeling and impact assessment analyses that will be prepared to support the air pollution control permitting process and address potential impacts to human health from project related air emissions.

- **GREENHOUSE GAS AND CLIMATE CHANGE:** This analysis will estimate greenhouse gas (GHG) emissions from embodied carbon (carbon embodied in building materials) and construction activities and will describe anticipated facility design features that will minimize energy consumption and GHG emissions. This analysis will use the Motor Vehicle Emission Simulator (MOVES). Following the rule of reason (*Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews*), MOVES can be used for calculation of mobile source GHG emissions as inputs are available from use in the NAAQS related analysis. The GHG assessment will also follow applicable standards or guidance from the New York State CLCPA.
- **NOISE AND VIBRATION:** The Proposed Project will have the potential to increase noise levels based on construction activities and operation of the proposed facility. The increase in vehicular traffic is also likely to result increase in noise levels both on- and off-site. Noise standards as available from applicable local, state, and federal will be reviewed and used to establish impact thresholds and criteria. Traffic noise measurement and modeling methodology will use the NYSDOT TEM, Section 4.4.18, "Noise Analysis Policy and Procedures" (or "NYSDOT Noise Policy") and will use FHWA Traffic Noise Model (TNM) 2.5 to perform the traffic noise analyses. The assessment of potential noise impacts will also be conducted following the NYSDEC guidance document, "Assessing and Mitigating Noise Impacts" (DEP-00-1, Revised February 2, 2001).
- **UTILITIES AND INFRASTRUCTURE:** As noted in the Proposed Project description, there are substantial off-site infrastructure improvements that will be required to support the Proposed Project. The DEIS will identify and describe these required improvements and assess if the Proposed Project, with improvements (and acknowledging any measures that Micron can take to reduce

consumption of energy or water or generation of wastewater), has the potential to adversely affect the larger community in terms of potential impacts to water from operational usage, as well as sanitary sewer and industrial wastewater discharges. The analysis will also note connections to energy (electrical and natural gas) and telecommunications infrastructure, and capacity of those systems, as applicable.

- **USE AND CONSERVATION OF ENERGY:** This analysis will describe the Proposed Project's use and conservation of energy and measures that Micron intends to pursue to reduce energy consumption and use of renewable sources.
- **CONSTRUCTION IMPACTS:** This analysis will address impacts arising from the primary construction activities for the Proposed Project and off-site improvements, such as construction traffic on surrounding streets, noise and vibration, air quality (e.g., emissions from construction equipment), effects on adjacent historic structures, dewatering activities, and any hazardous materials that may be disturbed by construction activities. This assessment will also qualitatively discuss potential impacts associated with noise, air quality, water quality, and traffic impacts from construction of the Proposed Project.
- **CUMULATIVE IMPACTS:** The DEIS will consider any significant adverse impacts resulting from the incremental impact of the Proposed Project when added to other past, present, and reasonably foreseeable future actions. This chapter will identify the other projects or actions included in the assessment and summarize the cumulative impacts of the Proposed Project contained in each of the technical areas of evaluation.
- **UNAVOIDABLE ADVERSE IMPACTS:** This chapter will identify any impacts that are unavoidable and that cannot be reasonably mitigated.
- **GROWTH INDUCING ASPECTS OF THE PROPOSED PROJECT:** This chapter will focus on whether the Proposed Project will have the potential to induce new development within the surrounding area, including, but not limited to, White Pine South, an approximately 105-acre parcel south of the Micron Campus and NYS Route 31. As noted, one of the purposes of the Proposed Project will be to create both direct and indirect employment opportunities in Central New York. The DEIS will evaluate the environmental impacts that arise from such economic enhancements and new development.
- **IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES:** This chapter will include a discussion of any irreversible or irretrievable commitments of resources.
- **MITIGATION:** This chapter will summarize any mitigation measures required to avoid, minimize or mitigate identified significant adverse effects. Mitigation measures will be described in detail in the technical analyses. While specific impacts and mitigation measures are not known at this time, impacts to wetlands and area roadways due to additional traffic (during construction and during operations) from the Proposed Project are likely. Wetland mitigation could include on-site or off-site wetland enhancements approved by USACE and NYSDEC. Traffic mitigation could include physical enhancements to area roadways, railways, and/or

signal timing changes approved by the Federal Highway Administration (FHWA), NYSDOT or Onondaga County.

6 Agency and Public Coordination

Agency and public coordination are an integral component at all stages of planning and project development, including in this SEQRA scoping process.

6.1 AGENCY COORDINATION ACTIVITIES

The agency coordination process will include coordination with various Federal, State, and local agencies (see Table 2, "Preliminary List of SEQRA Lead, Involved, and Interested Agencies" and Table 3, "Preliminary List of Federal Agencies").

OCIDA, as the lead agency for the Proposed Project, has coordinated with Micron to identify Involved and Interested Agencies to be informed and involved throughout the environmental review.

An "Involved Agency" means "an agency that has jurisdiction by law to fund, approve or directly undertake an action. If an agency will ultimately make a discretionary decision to fund, approve or undertake an action, then it is an 'involved agency' notwithstanding that it has not received an application for funding or approval at the time the SEQR process is commenced. The lead agency is also an 'involved agency'" (6 NYCRR 617.2(t)).

An "Interested Agency" means "an agency that lacks the jurisdiction to fund, approve or directly undertake an action but wishes to participate in the review process because of its specific expertise or concern about the proposed action. An 'interested agency' has the same ability to participate in the review process as a member of the public" (6 NYCRR 617.2(u)).

TABLE 2 PRELIMINARY LIST OF SEQRA LEAD, INVOLVED, AND INTERESTED AGENCIES

Agency	Potential Role	Responsibilities
Lead Agency		
Onondaga County Industrial Development Agency (State environmental review lead)	Lead Agency	SEQRA leadership and coordination, establishing final entitlement of White Pine Industrial Park and coordination of land development agreements. Sale of OCIDA property to Micron. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Involved and Interested Agencies		
New York State Department of Environmental Conservation	Involved Agency	Title V air quality permitting, wetlands jurisdictional determination and permitting, consultation related to threatened & endangered species, SWPPP permits for on-site and off-site land disturbance, modification to existing SPDES discharge for Oak Orchard WWTP, Section 401 water quality certification, hazardous petroleum and chemical bulk storage, and SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.
New York State Empire State Development	Involved Agency	Approval of Excelsior Jobs Program Green Chips Project Application.
New York State Office of Parks, Recreation and Historic Preservation (OPRHP)	Involved Agency	Consultation related to potential impact to historic and cultural resources. OPRHP serves as the New York SHPO.
New York State Department of Transportation	Involved Agency	Consultation in traffic impact evaluation and mitigation measures to address adverse transportation impacts on state routes and interstate highways. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Syracuse Metropolitan Transportation Council (SMTC)	Interested Agency	General consultation and approval actions to add to official regional transportation plans.
Onondaga County Department of Planning	Interested Agency	General consultation.
Onondaga County Dept. of Transportation (OCDOT)	Involved Agency	Consultation in traffic impact evaluation and mitigation on county routes. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Town of Clay Planning Board	Involved Agency	Site Plan/Subdivision (re-subdivision of multiple parcels) approvals including MS4/SWPPP approval.
Town of Cicero Town Board	Interested Agency	Referral per General Municipal Law.
Town of Cicero Planning Board	Involved Agency	Subdivision Approval.
City of Syracuse	Interested Agency	General consultation.
New York Power Authority	Involved Agency	Proving high-load factor energy allocation and ReCharge expansion energy allocation.
New York State Energy Research Development Authority	Interested Agency	Collaborating on Excelsior Jobs Program Green Chips Project Application..
Onondaga County Department of Water Environment Protection	Involved Agency	Enlarging wastewater treatment capacity and extending sewer lines to the Micron Campus; Modification of OCDWEP's SPDES Permit by NYSDEC; issuance of an Industrial Wastewater Discharge Permit from OCDWEP to Micron Campus.
Onondaga County Water Authority	Involved Agency	Extending potable water lines to the Micron Campus.

TABLE 3 PRELIMINARY LIST OF FEDERAL AGENCIES

Federal Agencies	
US Dept. of Commerce	Approval of CHIPS Act funding application.
US Army Corps of Engineers (USACE)	Issue 404 Wetlands permit.
Federal Highway Administration	Consultation on the need and design of alterations to the national highway system and the interstate highway system to mitigate identified adverse traffic impacts.
U.S. Environmental Protection Agency	NEPA advisory role (i.e., Environmental Justice) and consultation related to the issuance of federally-delegated Clean Air Act and Clean Water Act permits to be issued by New York State Department of Environmental Conservation.
U.S. Department of Interior, Office of Environmental Policy and Compliance	Consultation related to Section 4(f) of the U.S. Dept. of Transportation Act.
U.S. Fish & Wildlife Service	Consultation on federal Endangered Species Act compliance.

Appendix A

TRAFFIC STUDY AREA

It is expected that traffic due to the Proposed Project, which includes construction workers, Micron employees, and community jobs induced by the Proposed Project, will be distributed throughout Onondaga County and beyond. The DEIS will focus on the immediate area around the Proposed Project and will examine potentially impacted traffic areas through regional, highway, and local analyses. The regional analysis will focus on the broader transportation network links within a roughly 30-minute driving commute of the proposed Micron Campus because this is the area that is expected to experience the largest increases in traffic volume. Within this area, all major highways in the greater Syracuse area are represented, and it is expected that trips coming from a greater distance to the Micron Campus, including from the City of Syracuse would be captured along these major access roadways. Additionally, the area allows other major projects in the area, such as the modifications to Interstate 81 (I-81) to be considered in the analysis.

The highway and local analyses will focus on the major highways, interstates, and intersections within a five-mile radius of the proposed Micron Campus. A 5-mile radius was chosen as this captures the locations most likely to be impacted by the Proposed Project.

The analyzed highway area includes sections of New York State Route 481/Interstate 481 (NY 481/I-481) and I-81. The analyzed local area will include 42 intersections along NY 31, United States Route 11 (US 11), Caughdenoy Road, Verplank Road, and other local streets.

The study area extents of the regional, highway and local study areas described above are shown in Figure A-1.

FIGURE A-1 TRAFFIC STUDY AREA

AUTOMATIC TRAFFIC RECORDER (ATR) COUNTS

Continuous 24-hour, two-way Automatic Traffic Recorder (ATR) counts will be collected at 190 locations within the New York State Department of Transportation (NYSDOT) jurisdiction, collected at 65 locations within the Onondaga County Department of Transportation (OCDOT), and collected at 36 locations within the New York State Thruway Authority (NYSTA) jurisdiction, each for a total of 7 days. The ATR counts will be collected by a third-party vendor using traffic data collection cameras or pneumatic tubes. ATR volume data summaries will be summarized in 15-minute intervals by location. The proposed ATR count locations, for each jurisdiction, are shown in Figure A-2.

TURNING MOVEMENT COUNTS (TMC)

Turning Movement Counts (TMCs) will be collected at 25 signalized and 7 unsignalized intersections within the NYSDOT jurisdiction and at 3 signalized and 6 unsignalized intersections within the OCDOT jurisdiction. A high-resolution video technology will be used to record vehicle classification TMC counts and crosswalk pedestrian volumes for two 5-hour time periods. The classified TMC counts will be compiled on two representative mid-weekdays (Tuesday, Wednesday, or Thursday) during the ATR count period nearest their location. The time periods chosen for reduction will be subject to the ATR results but is currently anticipated to be 5AM to 10AM and 3PM to 8PM. The number of conflicting pedestrians and bicyclists will be counted simultaneously with vehicle turning movement counts. Traffic recorded in the TMCs will be sorted into four classifications: Autos, Buses (including non-articulated buses, articulated buses and jitneys), Medium Trucks, and Heavy Trucks. The proposed TMC count locations are provided in Figure A-3.

VEHICLE CLASSIFICATION COUNTS (VCC)

29 ATR locations have been identified within the NYSDOT jurisdiction and 4 ATR locations have been identified within the NYSTA jurisdiction for Vehicle Classification Counts (VCCs). VCC shall be collected to provide detailed vehicle classification data over a 24-hour period during one of the three representative mid- weekdays (Tuesday, Wednesday, or Thursday). The VCC volume data summary will be summarized by location in 15-minute intervals. Traffic recorded for the VCCs will be sorted into four vehicle classifications: Autos, Buses (which would include non-articulated buses, articulated buses and jitneys), Medium Trucks, and Heavy Trucks. The proposed VCC ATR count locations are provided in Figure A-4.

FIGURE A-2 AUTOMATIC TRAFFIC RECORDER LOCATIONS

FIGURE A-3 TURNING MOVEMENT COUNT LOCATIONS

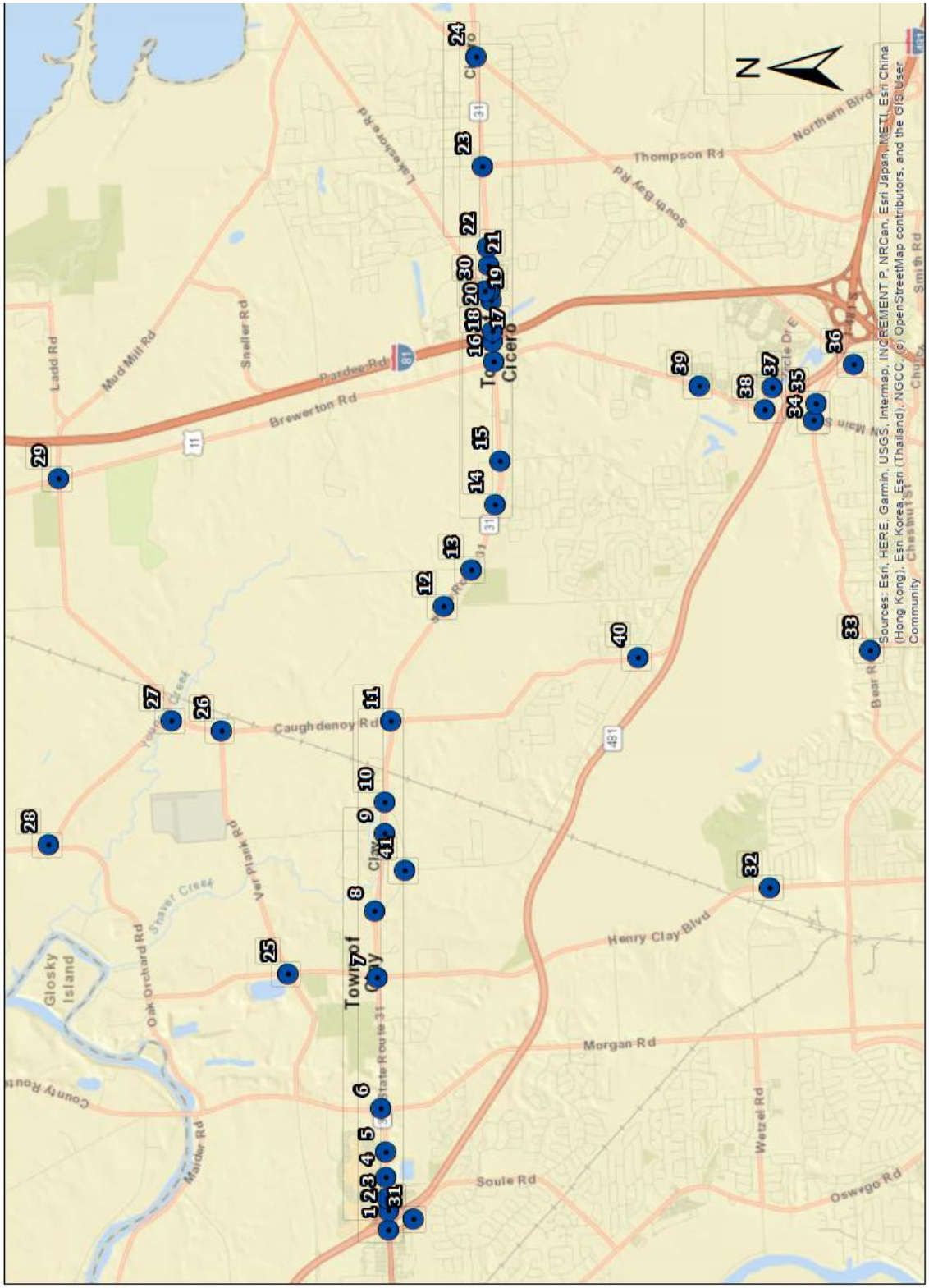
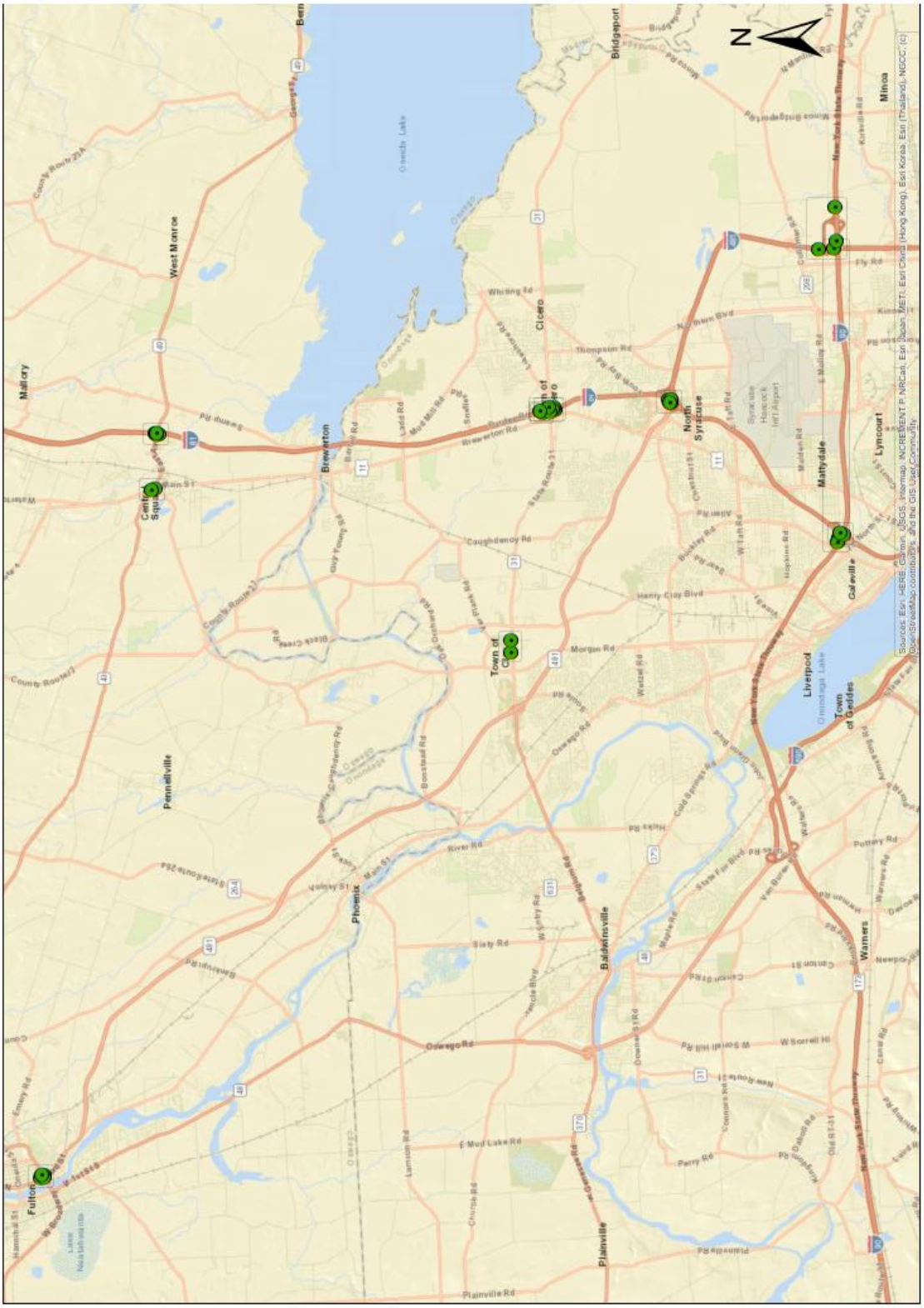


FIGURE A-4 VEHICLE CLASSIFICATION COUNT LOCATIONS



MICRON SEMICONDUCTOR FABRICATION
CLAY, NY

FINAL SEQRA SCOPE OF WORK

APPENDIX B:
RESPONSE TO COMMENTS

December 14, 2023

Contents

A. Introduction

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company (LLC) and wholly owned subsidiary of Micron Technology, Inc., is proposing to construct a semiconductor manufacturing campus (the "Micron Campus") in the Town of Clay, New York, at the White Pine Commerce Park (WPCP), an approximately 1,400-acre industrial park controlled by the Onondaga County Industrial Development Agency (OCIDA). The Micron Campus, together with ancillary development on nearby properties, are referred to collectively as the "Proposed Project." Off-site energy (natural gas and electricity), telecommunications, water, and wastewater utility improvements also will be required and are referred to as "off-site improvements" necessary for the Proposed Project. Rail spur improvements adjacent to the site are also considered off-site improvements.

After receipt of an Application for Financial Assistance from Micron, OCIDA circulated a notice of intent to serve as State Environmental Quality Review Act (SEQRA) (6 NYCRR Part 617) (New York Environmental Conservation Law §§8-0101 et seq.) Lead Agency on July 28, 2023. No objections to that notice were received during the 30-day period commencing on that date. At its regular meeting of September 14, 2023, OCIDA issued a Positive Declaration, indicating the need for an Environmental Impact Statement (EIS), and scheduled a public scoping meeting held on October 11, 2023. The Positive Declaration and notice of public scoping meeting was published in the Environmental Notice Bulletin on September 20, 2023. Notice of the public scoping meeting was placed in The Post Standard (Syracuse.com) – a newspaper of general circulation serving the broader Clay, New York area. Project information and a Draft SEQRA Scope were posted on OCIDA's website (www.ongoved.com).

This document is an addendum to the Final SEQRA Scope. It identifies comments received through a public scoping process that ran from September 20, 2023, through October 31, 2023, including an in-person scoping meeting on October 11, 2023, at North Syracuse Junior High School.

Additional information on the Proposed Project and off-site improvements is contained in the Final SEQRA Scope.

B. Commenters on SEQRA Scope of Work

Individuals, elected officials, agencies, and organizations ("commenters") were able to submit comments during the SEQRA scoping process in a variety of ways:

- Oral testimony was received during a public scoping meeting on October 11, 2023; and
- Written comments were received via mail and e-mail through October 31, 2023.

The list below identifies all commenters who submitted comments during the comment period. In some instances, commenters used more than one method for submitting comments.

All comment submittals (written and oral) were reviewed and substantive comments were allocated to comment categories. This document provides responses by comment category. When multiple commenters submitted similar comments, the similar comments were paraphrased and summarized in the respective comment categories, with effort taken to retain the substance and tone of the comments received. Each comment response includes a numbered cross-reference to the corresponding comment submittal(s). Attachment 1 is the full transcript of the public scoping meeting. Attachment 2 contains all written comments received during the public comment period.

AGENCY COMMENTS

A. New York State Department of Environmental Conservation (NYSDEC) Region 7
B. United States Fish & Wildlife (USFWS)
C. Onondaga County Legislator Charles Garland
D. Town of Clay Supervisor Damien Ulatowski

ORAL TESTIMONY AT PUBLIC SCOPING MEETING

1. Frank Sciortino
2. Jay Riordan | Cicero Democratic Committee and candidate for Town Council
3. Donald Hughes | Sierra Club
4. John Przepiora | Greening USA, Inc.
5. Mary Scanlon
6. Diana Elliott
7. Jim Nistico
8. Denise Androvette | Sierra Club member
9. Debra DeSocio | Sierra Club member
10. Peter Wirth | Climate Change Awareness and Action
11. Brian Heffron

WRITTEN PUBLIC COMMENTS

12. Frank Sciortino

13. Debra DeSocio | Central and Northern NY Sierra Club
14. Steve Erwin | Trucking Association of New York
15. Nathan Gunn
16. Minchin G Lewis
17. Audrey Fletcher
18. Paul Goldsman
19. Onondaga Audubon
20. Peter Wirth
21. Jill Shultz
22. Mary Lou Bender
23. Craig Polhamus
24. Richard Ellenbogen | Allied Converters, Inc.
25. Roger Caiazza
26. Michelle Fanelli
27. Brian Cocca
28. Center for Public Environmental Oversight
29. Sara Pieklik
30. CNY Sustainability Coalition
31. Sierra Club
32. Michael Wolfson
33. Frank Fowler
34. Jim Baker
35. Steve Strauss | Empire State Passengers Association[1]

[1] Although this comment was received late, it was still considered by OCIDA and addressed in this Response to Comments.

C. Response to Agency Comments

New York State Department of Environmental Conservation (NYSDEC)

NYSDEC Comment 1: The DEIS should include a separate chapter addressing stormwater management which should include an evaluation of stormwater runoff (industrial and construction) and water quality. This section should identify the current requirements of NYSDEC' s State Pollutant Discharge Elimination System (SPDES) Permits, including the Construction General Permit (GP-0-20-001) and Multi-Sector General Permit (GP-0-23-001), and also evaluate how these requirements will be met. Sufficient information should be developed to identify the approximate size and location of necessary stormwater management measures and outfalls during and after construction.

Response: Although stormwater impacts and management will be evaluated in the DEIS, it will not be in a separate chapter but will be included in the water resources chapter as part of the assessment of the Proposed Project's impact on surface waters. The Scope indicates that a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the Proposed Project and described in the DEIS (it will also be included as an appendix).

NYSDEC Comment 2: Due to the scale of the project and the anticipated need to have large areas of soil exposed at any given time, the DEIS should evaluate the soil characteristics that may cause or contribute to erosion on site. A reference should be developed to identify any supporting information or reports that will be included as an appendix. The Stormwater Pollution Prevention Plan (SWPPP) needs to address hydraulic changes pre- and post-construction, and all changes to hydrology from filling in any wetlands, streams, and drainage ways on site. It is important to note that while NYSDEC's Region 7 Division of Water and the Town of Clay will jointly evaluate the required SWPPP prepared by the Applicant, responsibility for the approval of the SWPPP lies with the Town of Clay as per the municipal separate stormwater sewer systems (MS4) General Permit (currently GP 0-15-003).

Response: The SWPPP will be prepared pursuant to the New York State Stormwater Management Design Manual (SMDM) and included in Micron's site plan application to the Town of Clay. Any soil characteristics that may cause or contribute to erosion will be identified in the SWPPP. Measures to protect against erosion during construction will also be identified in the SWPPP.

NYSDEC Comment 3: Stormwater management should pay particular attention to Chapter 3 of the New York State Stormwater Management Design Manual (SMDM) and its focus on Stormwater Management Planning. The SMDM requires a specific planning process when addressing stormwater management on a project site and guides the planner through steps to maintain pre-development natural hydrologic conditions of the site by application of environmentally sound development principles, such as green infrastructure, as well as treatment and control of runoff discharges from the site.

Response: Comment noted.

NYSDEC Comment 4: Identify additional potential development alternatives considering design and configuration changes to avoid or minimize potential impacts to wetlands, streams, and other sensitive natural resources. The area east of Burnett [sic] Road contains a large, forested wetland complex and portions of Youngs Creek; additional consideration should be given to avoiding development in this area.

Response: The Scope has been revised to indicate that the DEIS will consider two additional alternatives: 1) an alternative that evaluates the Proposed Project without access to and from US Route 11; and 2) an alternative that evaluates different internal configurations of Micron's proposed Fabs to determine to what extent impacts to wetlands, streams, and other natural resources on the Micron Campus can be avoided or minimized.

NYSDEC Comment 5: The DEIS should include a discussion of potential alternatives and mitigation that could reduce energy and fuel demands during construction and the long-term operation of the facility, including renewable energy sources.

Response: The Scope has been revised to indicate that the DEIS will include a summary of other alternatives previously considered but determined not to be feasible, including an alternative that relies exclusively on alternative sources of energy (beyond use of renewable energy for purchased electricity). The DEIS will also assess the proposed use and conservation of energy (including provisions for renewable energy sources). The DEIS will include an evaluation of energy impacts from construction and long-term operation of the facility, along with potential mitigation of those impacts.

NYSDEC Comment 6: Natural resource impacts associated with off-site infrastructure improvements (linear utility construction projects, pump stations, water intake and associated improvements, wastewater plant) should be evaluated and described in the DEIS, including the presence of, and impacts to, wetlands, waterbodies, and threatened and endangered species for. Horizontal drilling should be discussed and considered.

Response: The Scope has been revised to clarify that the DEIS will include an assessment of off-site improvements in each of the relevant subject areas, including natural resources. Proposed mitigation methods will be discussed.

NYSDEC Comment 7: The DEIS should include a table summarizing the amounts and types of wetlands, streams, and other waterbodies on the Proposed Project site, and those associated with the previous comment. The table should also quantify the impacts on these resources for phases 1 and 2, and the cumulative of both phases.

Response: Comment noted.

NYSDEC Comment 8: The DEIS should include a complete discussion on the avoidance and minimization of wetlands impacts, which are the first two analyses required prior to considering

wetland mitigation under implementing regulatory programs for Section 404 of the Clean Water Act and Article 24 of the New York State Environmental Conservation Law.

Response: The Scope has been revised to indicate that the DEIS will consider an alternative that evaluates different internal configurations of Micron's proposed Fabs to determine to what extent impacts to wetlands, streams, and other natural resources on the Micron Campus can be avoided or minimized.

NYSDEC Comment 9: The DEIS should include and discuss wetland creation and restoration prior to consideration of enhancement. Please see attachment B, which discusses DEC wetland mitigation requirements. This information should be discussed in the DEIS.

Response: The Scope has been revised to note that creation and restoration of wetlands would be considered prior to consideration of enhancement.

NYSDEC Comment 10: The DEIS should include the Proposed Project's onsite wetland delineation and compensatory mitigation package being developed by Micron and its consultants.

Response: The Scope has been revised to indicate that the wetland delineation report and draft conceptual compensatory mitigation plan will be included as an appendix to the DEIS.

NYSDEC Comment 11: The DEIS should address and discuss stream mitigation that will be completed to offset impacts to waterbodies on the Proposed Project site.

Response: The Scope has been revised to clarify that potential impacts (and any required mitigation) to streams will be assessed as part of the water resources assessment.

NYSDEC Comment 12: The DEIS should include an assessment of the functions and benefits of all the streams and wetlands on the Proposed Project site.

Response: The Scope has been revised to indicate that the DEIS will include an assessment of wetland functions and services.

NYSDEC Comment 13: The Acoustic Bat Survey Report and the Grassland Breeding Bird Survey Report, prepared for Micron New York by AKRF Inc. should be discussed and appended to the DEIS. The DEIS should reference Grass Land Bird Mitigation Requirements (attachment to comment letter)

Response: The Scope has been revised to indicate that the field reports for work conducted in Spring 2023 on bat habitat and grassland birds will be included as appendices to the DEIS.

NYSDEC Comment 14: The natural resource analysis of the Proposed Project should also include details on wildlife that likely use the site based on habitat types and any ancillary observations made by on-site natural resource consultants. The DEIS should discuss the impacts on the species associated with converting these habitats to an industrial site.

Response: The Scope indicates that the DEIS will include discussion of natural resources, including wildlife habitats, potential impacts and proposed mitigation.

NYSDEC Comment 15: The C-Class Youngs Creek (Water Index Number ONT-66-11-14), located east of Burnett [sic] Road, is continuously connected to the Oneida River (Water Index Number ONT-66-11) with no known impassable barrier. The site plan OCIDA included with the draft scope shows portions of the Proposed Project filling Youngs Creek. The DEIS should include information on any portions of Youngs Creek being filled or "culverted" and discuss how water in the stream will be managed.

Response: The Scope has been revised to note that field studies describing physical, biological, and chemical characteristics of Youngs Creek will be conducted as part of the DEIS.

NYSDEC Comment 16: A biological survey of Youngs Creek on the Proposed Project site should be completed to assess fish species composition in this stream and detail the effects on these species associated with any impact on the stream. The analysis should consider upstream and downstream impacts, and evaluate upstream and downstream instream habitat enhancement projects to mitigate potential onsite impacts.

Response: The Scope has been revised to include a requirement for field studies to characterize aquatic wildlife within Youngs Creek.

NYSDEC Comment 17: The DEIS should include further details to identify how surface and subsurface water resources will be evaluated. It should address potential on-site and off-site flooding and impacts to surface and groundwater, and an evaluation of impacts on surface water volume, including streams, wetlands, and drainage ways, and groundwater elevations during and after construction. Impacts to groundwater levels, quantity, and quality from filling wetlands should be assessed, including a groundwater hydrologic and hydraulic analysis of the impacts of placing fill in watersheds contributing to the project area. Special consideration should be given to filling wetlands, drainage areas, Youngs Creek, and its tributaries, including unmapped streams, and evaluate how fill may affect the surface and subsurface water flow and drainage patterns in the area and surrounding properties. Consider factors such as increased surface runoff, potential water flow redirection, and impacts on nearby waterbodies or stormwater management systems. Portions of this information are also needed as part of the SWPPP review. Points for consideration in the hydrologic/hydraulic analysis were identified.

Response: The Scope has been revised to clarify that the DEIS will identify both surface and subsurface water resources and impacts to those resources, including from construction, and potential mitigation of those impacts. See also Responses to NYSDEC Comments 1, 15, 16.

NYSDEC Comment 18: The DEIS should discuss how drainage will be maintained and how potential flooding would be mitigated.

Response: The DEIS will include the requested discussion.

NYSDEC Comment 19: NYSDEC supports documenting floodplains and recommends re-evaluating and updating floodplain mapping for any significant grade changes.

Response: Comment noted.

NYSDEC Comment 20: Dewatering of groundwater during construction should be discussed including best management practices that may be employed to avoid and mitigate impacts to the resource.

Response: The DEIS will include the requested discussion.

NYSDEC Comment 21: Evaluate the impact potential population growth associated with this development will have on the management of solid waste and recyclables, as well as the anticipated amount of waste and recyclable material generated by Micron. Onondaga County law requires that waste generated within the County be disposed of at the Onondaga County Resource Recovery Waste to Energy Facility. Consider the existing waste management network's capacity, and ability to accept increased volumes associated with the Proposed Project, and the potential for population growth. If the evaluation includes an expansion of any waste or recycling facilities or the use of the Onondaga County landfill, approximate dates of the expansion(s) should be included that correspond with Micron's expected buildout.

Response: The Scope has been revised to indicate that the DEIS will address issues of solid waste generation from the Proposed Project, as well as plans by Onondaga County to manage solid waste and recyclables as a result of economic development related to the Proposed Project. The Scope has been revised to provide additional detail on how the capacity of the existing waste management network would be affected by the Proposed Project.

NYSDEC Comment 22: The DEIS should include a discussion of hazardous waste, listed in 6 NYCRR Part 371.4, that the Proposed Project may generate, including type of hazardous waste anticipated to be generated, approximate volumes, storage methods, disposal options, and how the facility will operate following hazardous waste regulations found at 6 NYCRR Part 370-373.

Response: The Scope has been revised to clarify that the DEIS will include a description of the generation, storage, and disposal of hazardous wastes identified in 6 NYCRR Part 371.4.

NYSDEC Comment 23: Mitigation considerations for solid waste should include an evaluation of processing methods and chemicals used in the manufacturing process to determine if alternative methods could reduce the generation of hazardous waste.

Response: See Responses to NYSDEC Comments 21 and 22.

NYSDEC Comment 24: The air quality modeling included in the DEIS should include an air quality impact evaluation or dispersion modeling analysis for a variety of emission sources including major sources, air toxic sources, and any sources that appear likely to contravene an applicable ambient air quality standard. NYSDEC developed the DAR-10 guidance document, NYSDEC Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis. The applicant should submit a modeling protocol to DEC for approval prior to performing any dispersion modeling analyses.

Response: The Scope notes that a stationary source air pollution control permit for the new manufacturing facilities will be required. The air pollution control permit application will include evaluation of pollutants subject to the National Ambient Air Quality Standards (NAAQS), New York air toxic control and ambient air requirements, and a Climate Leadership and Community Protection Act (CLCPA) greenhouse gas evaluation. The Scope indicates that the DEIS will summarize these detailed air quality modeling and impact assessment analyses that will be prepared to support the air pollution control permitting process.

NYSDEC Comment 25: If the impact assessment includes a private, pre-construction, on-site air quality monitoring network, the plan will need prior NYSDEC approval. Guidance for the establishment, maintenance, and reporting requirements of private air monitoring networks can be found in DAR-2, 6 NYCRR Part 231-12.3 and Appendix B to 40 CFR Part 58.

Response: Comment noted.

NYSDEC Comment 26: If one or more applicable requirements or proposed compliance certification sections require the use of a continuous emissions monitoring (CEM) system, the analysis should develop and include a continuous emissions monitoring plan. The analysis should include applicable RACT/BACT/LAER demonstrations, as well as appropriate Emission Reduction Credit (ERCs) demonstrations and analysis.

Response: See Response to NYSDEC Comment 24.

NYSDEC Comment 27: The analysis should include, as applicable, a Toxic Impact Assessment and Environmental Rating Demonstration pursuant to the requirements of 6 NYCRR Part 212. DEC developed DAR-1: Guidelines for the Evaluation and Control of Ambient Air Contaminants Under Part 212.

Response: See Response to NYSDEC Comment 24.

NYSDEC Comment 28: NYSDEC recommends that a copy of the Air Title V permit application and supporting information be appended to the DEIS to the extent it is available.

Response: Information supporting the Air Title V permit application will be provided as an appendix to the DEIS.

NYSDEC Comment 29: The Proposed Project is subject to the mandates of the Climate Leadership and Community Protection Act (CLCPA) and therefore requires an analysis pursuant to Section 7(2) of CLCPA. Please see DEC Program Policy DAR-21 for guidance on preparing the CLCPA analysis.

Response: The DEIS will include an assessment of GHG emissions associated with the Proposed Project and will assess compliance with Section 7(2) of the CLCPA.

NYSDEC Comment 30: NYSDEC recommends evaluating and quantifying GHG and co-pollutants of mobile emissions sources during construction and when the plant is in operation. Additionally, alternatives and mitigation that reduce GHG and co-pollutants from mobile emission sources must be considered.

Response: The Scope indicates that the DEIS will assess the Proposed Project's potential emission of GHGs and the measures proposed to avoid, minimize, and mitigate any impacts.

NYSDEC Comment 31: Among other CLCPA requirements, the Proposed Project will result in an actual increase in greenhouse gas (GHG) emissions, including both direct and indirect GHG emissions. Therefore, the DEIS should include a discussion of the justification for the Proposed Project, along with the technical and economic feasibility of any alternatives or GHG mitigation measures to address the increase. Any such mitigation should take place at the New York facility or in the immediate area, rather than in other cities or out of state. NYSDEC offered examples of potential alternatives and mitigation measures.

Response: The Scope indicates that the DEIS will include an assessment of GHG emissions associated with the Proposed Project and will assess compliance with Section 7(2) of the CLCPA.

NYSDEC Comment 32: The discussion of natural resource impacts for constructing utility connections, such as clean water, wastewater, electric, gas, telecommunications, and roadway expansions should be referenced in the Utilities and Infrastructure section of the DEIS.

Response: The Scope has been revised to clarify that the DEIS will include assessment of all off-site improvements (water, wastewater, electricity, natural gas, telecommunications) in each of the relevant subject areas, including natural resources.

NYSDEC Comment 33: NYSDEC recommends developing a phasing plan, which coincides with Micron's incremental expansion, for the buildout and expansion of all utility upgrades required to meet the Proposed Project's anticipated demands. The phasing plan should include sewer extensions, pumping systems, new clean water source(s) and distribution systems, wastewater plant upgrades, and gas and electricity distribution infrastructure.

Response: The Scope indicates that the DEIS will describe the proposed phasing plan of off-site improvements required to meet the Proposed Project's anticipated demand.

NYSDEC Comment 34: The DEIS should also provide adequate information to demonstrate that all utility upgrades will be constructed, operational, and sufficient to accept waste from or provide service to the Proposed Project. Please see Attachment D, which lists the typical details DEC reviews for a sewer extension and force main approvals.

Response: See Response to NYSDEC Comment 33.

NYSDEC Comment 35: Provide adequate details on the Proposed Project's wastewater loading, flow, and discuss the on-site wastewater pretreatments.

Response: The Scope has been revised to indicate that the Project Description chapter of the DEIS will include additional description of Micron's proposed use and management of water and chemicals (including on-site pretreatment) and Micron's proposed generation and management of various waste streams and how best management practices will be implemented.

NYSDEC Comment 36: The DEIS should provide details on the design specification of the new lake water intake structure and intake screening and assess potential fish impingement mortality and entrainment, and additional measures, including specific equipment, to avoid and minimize fish impingement and entrainment.

Response: The DEIS will identify and describe required infrastructure improvements, including, to the extent known, information on the design, and potential impacts to environmental resources from construction of those improvements.

NYSDEC Comment 37: The DEIS should consider and include details and a summary of water conservation and reuse practices to mitigate water demands.

Response: The Scope has been revised to indicate that the Project Description chapter of the DEIS will include additional description of Micron's proposed use and management of water (including on-site pretreatment) and how best management practices will be implemented to conserve water usage.

NYSDEC Comment 38: The DEIS should include a summary of any investigated and considered alternative water sources.

Response: The Scope has been revised to indicate that the DEIS will describe any previous studies conducted by Onondaga County Water Authority on alternative sources of water.

NYSDEC Comment 39: Water withdrawals within the Great Lakes Basin are subject to the requirement and provisions of the Great Lakes-St. Lawrence River Basin Water Resource Compact. The DEIS should discuss and address how the proposed water withdrawal and use is consistent with the Compact and all state, local, and federal laws.

Response: In accordance with NYSDEC rules and guidance there is an exception for public water supply systems from the Great Lakes-St. Lawrence River Basin Water Resources Compact as enacted in ECL Article 21 Title 10. The DEIS will include discussion regarding water withdrawal, including applicable permits and regulations.

NYSDEC Comment 40: NYSDEC recommends renaming the DEIS chapter as "Use and Conservation of Energy."

Response: The Scope has been revised to indicate that the chapter will be named "Use and Conservation of Energy."

NYSDEC Comment 41: The DEIS should contain a description of energy sources to be used during both construction and operational phases of a project, including accurate estimates of demand or consumption. Discuss alternatives and mitigation that could reduce energy and fuel demands during construction and long-term operation.

Response: The DEIS will assess the Proposed Project's energy requirements and will include a discussion of the use of alternative energy sources and energy conservation. If significant adverse impacts with regard to energy resources are identified, mitigation of such impacts will be identified.

NYSDEC Comment 42: The 2018 amendments to SEQR regulations require all New York State agencies to evaluate such GHG impacts in a new section specifically dedicated to climate change and its impacts. Proposed energy conservation measures that go beyond the minimum requirements of the State Energy Conservation Construction Code (9 NYCRR Parts 7810 through 7816) should be specifically identified, such as LEED or Energy Star. Please refer to Chapter 5, Section C, Item 44 on page 123 in the SEQR Handbook. The information and energy conservation measures discussed in this section may be applicable and cross-referenced to the Greenhouse Gas Emissions and Climate Change chapter.

Response: Comment noted.

United States Fish & Wildlife Services (USFWS)

USFWS Comment 1: Section five of the Scope provides general topics and specific technical studies proposed to inform the DEIS. We note that while the list of resources includes wetlands, floodplains, and vegetated habitat, there is no mention of an analysis of the project's effects on wildlife. The Scope should be amended to include literature review and field observations of wildlife using the site at all times of the year, including winter and migration seasons. Potential impacts to wildlife that should be considered in the DEIS include, but are not limited to, noise, lighting, pollution, human activity and traffic. Potential loss of habitat and fragmentation appear to be substantial and will negatively affect many species. This information should be included in the Scope and documented in the DEIS.

Response: The Scope has been revised to divide the "Natural Resources" chapter into separate "Water Resources" and "Ecological Communities & Wildlife" chapters to

provide clarity regarding how water resources (groundwater, streams, and wetlands) and habitat for wildlife will be assessed in the DEIS. The DEIS will assess potential impacts on wildlife, including where appropriate, literature review and field observations collected seasonally, including winter and migration seasons. This assessment will evaluate potential impacts associated with noise, lighting, pollution, human activity and traffic as well as from the potential loss of habitat and fragmentation.

USFWS Comment 2: Regarding site vegetation, the Scope should include mapping of vegetation communities, surveys to document endemic plants and identification of rare species and communities as well as invasive plant species. Information should also be provided on the present and future threats of spreading invasive plants to and from the site. An invasive species management plan should be developed for the site in consultation with NYSDEC.

Response: The Scope has been revised to enhance the description of how the DEIS will address ecological communities and potential impacts of the Proposed Project. The DEIS will include mapping of vegetation communities, surveys to document endemic plants and identification of rare species and communities as well as invasive plant species. The DEIS will also assess present and future threats of spreading invasive plants to and from the site.

USFWS Comment 3: The information gathered using the Service's Information, Planning and Consultation (IPaC) system should be included in the DEIS along with a description of studies completed thus far. For example, the Service and the Micron team, along with staff from the NYSDEC, have discussed studies of two endangered bat species believed to be using the site.

Based on information in IPaC, the project is within the range of the federally listed endangered Indiana bat (Myotis sodalis) and the federally listed endangered northern long-eared bat (Myotis septentrionalis). Accordingly, Micron initiated acoustic surveys of these species at sample locations on the site. A summary of the survey results should be included in the DEIS. The documented call locations should be analyzed in regard to tree removal and habitat modification. This information should inform what the potential effects to these listed species may be and what, if any, measures could be implemented to mitigate adverse effects. The Service will continue to work with Micron and other partners in evaluating the project's effects on federally listed species. Since federal agencies will be funding, permitting and/or approving aspects of the project, section 7 consultation under the ESA will be required.

Response: The Scope has been revised to indicate that summaries of field studies will be included as an appendix to the DEIS. The Scope indicates that the USFWS IPaC system will be queried.

USFWS Comment 4: The Scope indicates that wetlands will be identified and delineated in consultation with the US Army Corps of Engineers. We understand that most of that field work has been completed. However, the Scope does not indicate if or how wetland functions and services will be evaluated and reported. This information is important in understanding the habitat and social values (flood flow attenuation, sediment and nutrient retention, pollution abatement, etc.) these

areas provide. Documentation in the DEIS is also important to understand what is being potentially lost from the project and what mitigation is required of Micron to replace these functions and services. In line with section 404 of the Clean Water Act, the project design must avoid, minimize, and mitigate potential impacts to aquatic resources to the greatest extent practicable. This review approach should be added to the Scope.

Response: The discussion of wetlands has been revised in the Scope to make clear that a discussion of wetland function and services will be included in the DEIS along with a discussion of Section 404 permitting factors.

USFWS Comment 5: Wetland mitigation is mentioned in the Scope as potentially occurring on and off site. While the extent of potential wetland impacts is not yet known, it appears to be a substantial amount based upon the extent of wetlands found on the 1400-acre site. Mitigation for unavoidable impacts should occur within the same watershed (as defined by the 8-digit hydrologic code) and be as close to the impacted wetlands as practicable. Micron has inquired about mitigation options including the purchase of credits at third party wetland mitigation banks or in-lieu fee sites. The Service does not support the complete purchase of available credits for the Micron project as that reduces the effectiveness of the mitigation program.

Response: Comment noted.

Onondaga County Legislator Garland

Comment 1: "I want to be sure that our collective efforts ensure a pathway out of poverty for all of the residents I represent."

Response: Comment noted.

Comment 2: Raised concerns about the potential for increased traffic on highways and roads in and around the project due to population growth and workforce commutes.

Response: In coordination with the New York State Department of Transportation (NYSDOT), Onondaga County, the Town of Clay, and the Town of Cicero, and as indicated in the Scope, the DEIS will include an assessment of traffic conditions at the regional and local levels. Input from the Syracuse Metropolitan Transportation Council (SMTC) is also being provided. The Scope has been revised to include additional detail on how the traffic and transportation study area has been defined through consultation with NYSDOT and SMTC and in recognition of modifications to I-81.

Comment 3: Raised safety concerns relative to increased traffic and questioned what improvements would be made.

Response: See Response to Legislator Garland Comment 2.

Comment 4: Questioned the study area for traffic and whether additional areas to the south should be included.

Response: See Response to Transportation Comments 1-2.

Comment 5: “How is traffic going to be addressed as the scoping of the project goes further and further and brings not only Micron employees to our -- to our boundaries, but also those support industries that are so vital to that operation and will be instrumental in the growth of our community.”

Response: See Response to Growth Inducing Impacts 2.

Town of Clay

Comment 1: The DEIS should include the reason or purpose for the chimneys or stacks (163 ± ft), and the emissions associates with those stacks.

Response: The Scope indicates that the DEIS will include analysis of impacts associated with construction and operation of the facility, including visual impacts and air emissions impacts.

Comment 2: Safeguards should be established for the discharges into the rivers, including testing, to confirm the discharges are safe and not contaminating the receiving waters.

Response: Comment noted.

Comment 3: Assurances should be made regarding the safe conveyance of wastewater from the facility to the Oak Orchard treatment plant.

Response: Comment noted.

Comment 4: The DEIS should address not only the traffic impacts to the Town from Micron employees but also those from the support industries.

Response: The DEIS will include a full analysis of traffic impacts, including growth-inducing impacts.

D. Response to Public Comments

Purpose and Need

Comment 1: Many commenters expressed overall support of the Proposed Project and noted the many positive impacts, including economic impacts, it will have in the Town, County, region and State. (1, 14, 15 16, 17, 33, 34, 35)

Response: Comment noted.

Project Alternatives and Description of the Proposed Project

Comment 1: One commenter stated that "Micron, DEIS needs to greatly expand its range of alternatives." (30)

Response: See Responses to NYSDEC Comments 4-5.

Comment 2: Comments asked why Micron needs to site the Proposed Project in Clay. (26)

Response: See Response to NYSDEC Comment 4. The Scope indicates that the DEIS section on alternatives will detail the analyses previously performed for the proposed location of the Proposed Project and other locations in New York State and Onondaga County.

Comment 3: Commenters suggest that the Draft Environmental Impact Statement should include an alternative to add a Combined Cycle generating plant on the Micron Property. (24, 25)

Response: See Response to NYSDEC Comment 5.

Comment 4: Comments requested a consideration of alternative energy sources, including the use of renewable energy. (3, 10, 13, 20, 21, 26, 29, 30, 31,)

Response: See Response to NYSDEC Comment 5.

Comment 5: "Careful attention must be paid to ensuring the energy at the plant will be fossil free." (10)

Response: As outlined in the Scope, the DEIS will assess the Proposed Project's energy needs, including its potential use of fossil free energy.

Land Use, Zoning, & Public Policy

Comment 1: The Sierra Club and CNY Sustainability Coalition commented "Why isn't the city of Syracuse explicitly included here? Seems to be a major omission." (30, 31)

Response: While changes to land use, zoning, and public policy within the City of Syracuse will be unlikely given the distance between the City of Syracuse and WPCP, the Scope indicates that the DEIS will address regional issues of economic activity and how that might affect land use within the surrounding area, including the City of Syracuse. See also response to *Other* Comment 11.

Community Facilities, Open Space & Recreation

Comment 1: A number of comments note that open space and the enjoyment of outdoor activities (e.g., birding) was important and should be preserved. Numerous studies have demonstrated the benefit to humans of having green spaces nearby. (19, 26, 29)

Response: The Scope indicates that the DEIS will consider potential direct and indirect impacts of the Proposed Project on parks and recreational resources as well as open space.

Comment 2: The Sierra Club and CNY Sustainability Coalition commented that "This section is poorly organized and deserves to be rewritten to define more clearly what are the parameters to be studied and analyzed relevant to police, fire and other emergency services; schools; parks and rec facilities. Absent from the community facilities most notably is the health care and hospital system." (30, 31)

Response: The Scope has been revised to provide greater clarity on the study areas that will be used for each of the technical areas of analysis, including for community facilities and services and parks and recreational resources. Because the technical areas are related to variable conditions, there will necessarily be a variety of study areas defined for each area. Note, however, that an assessment of impact on health care and the hospital system is not contemplated as it is beyond the scope of the environmental review of the Proposed Project.

Comment 3: "Onondaga County health care facilities, in particular our hospitals, were short-staffed even before the Coronavirus pandemic. Waiting times and bed shortages were unfortunately highlighted by Covid-19 cases and have continued. What improvements in the healthcare system are proposed to remedy these shortcomings in view of the expectation of potentially thousands of new residents to work at and/or serve the Micron plant." (32)

Response: See Response to Community Facilities, Open Space & Recreation Comment 2.

Socioeconomic Conditions

Comment 1: The public comments raised questions about the future workforce. (16, 26)

Response: Micron has been engaged in an extensive discussion with the Community Engagement Committee (CEC) (an entity convened by the Governor's Office, Micron, and local elected officials) on how the economic benefits of Micron's Proposed Project will be experienced within the broader community, including, but not limited to, the City of Syracuse. Micron has been working with regional stakeholders to identify and enhance workforce development programs in anticipation of the thousands of jobs that the Proposed Project will generate. The draft Scope included estimates of projected Micron employment and the general qualifications required for different categories of jobs. The Scope has been revised to include a new sub-heading for this text: "Proposed Project Employment."

Comment 2: Some comments requested a discussion of the anticipated impacts on property taxes. (1, 3, 5, 26,)

Response: SEQRA does not require consideration of purely economic impacts. Notwithstanding, the Scope indicates that the DEIS will consider changes in demographics and housing costs, changes in labor supply and effects on existing businesses, and municipal costs generated by the Proposed Project. As part of

this, anticipated impacts to municipal tax levies (the amount of the municipal budget derived from property taxes) will be qualitatively discussed.

Comment 3: How will the increase in this infrastructure expansion be covered financially? Will the local community be impacted financially due to the building of the pipeline to carry the water? How is the expense being covered? How much money will it take to pay for the whole building?" (26)

Response: This comment is outside the scope of SEQRA. Notwithstanding, the Scope indicates that the DEIS will consider changes in demographics and housing costs, changes in labor supply and effects on existing businesses, and municipal costs generated by the Proposed Project.

Comment 4: "What are the projected benefits for the local community? What does Micron have to offer the local community as they plan their environmental impact? How will the negative effects of this infrastructure affect me economically in the beginning and through to the future?" (26)

Response: The Scope indicates that the DEIS will describe Micron's projected benefits to the community as well as its efforts to work with community leaders through the CEC to consider how project benefits can be distributed throughout the affected communities, including to communities of color or low-income communities.

Comment 5: The benefits and adverse impacts of socioeconomics need to be considered together and the DEIS should specify the analytical standards, tools and techniques employed. (32, 35)

Response: The Scope indicates that potential adverse socioeconomic impacts will be assessed in the DEIS.

Environmental Justice

Comment 1: Comments raised concern that project-related traffic could potentially affect environmental justice areas and suggested that traffic data be collected from an expansive geographic, especially since the southwest side of the city which has been a concentration of historically disadvantaged populations. (16)

Response: The Scope indicates that the DEIS will include analysis of potential impacts on environmental justice communities and disadvantaged communities. See Response to Transportation Comment 1.

Comment 2: "There is a draft permitting requirement that should be considered in the Technical Studies section of the DEIS. The New York State Department of Environmental Conservation (DEC) recently proposed a new policy that will require an analysis of impacts on disadvantaged communities (DACs) as part of most environmental permitting actions." (25)

Response: Comment noted. Micron will consider applicable guidance in the DEIS.

Historic and Cultural Resources

Comment 1: One commenter noted the existence of properties located on Burnet Road and other parts of the White Pine site, some of which are eligible or potentially eligible for listing on the NY State Register of Historic Places and commented that these properties were supposed to be surveyed/assessed in conjunction with the NY State Historic Preservation Office. (18) One commenter suggested preservation of a house on the corner of Burnet and Route 31, and also preservation of a barn on the south side of Route 31. (34)

Response: The properties located on Burnet Road were studied as part of the SGEIS for the WPCP prepared in 2021 to establish a shovel ready commerce park. Any demolition of those properties is not part of the Proposed Project and was completed earlier this year for public safety purposes. The Scope indicates that coordination with the New York State Historic Preservation Office (SHPO) would be required for any additional properties not previously evaluated. In coordination with SHPO, and as indicated in the Scope, the DEIS will identify potential eligible or listed historic resources at WPCP or the surrounding area.

Visual Impacts & Community Character

Comment 1: Commenters raised concerns about visual impacts, including impacts associated with lighting. (19, 22)

Response: The Scope indicates that a visual impact assessment will be conducted consistent with NYSDEC Program Policy "Assessing and Mitigating Visual Impacts."

Comment 2: Concerns were raised about the Proposed Project's impact on community character and quality of life. (4, 24)

Response: The Scope indicates that potential impacts to community character will be addressed in the DEIS.

Comment 3: The Sierra Club and CNY Sustainability Coalition commented that "This project has the potential to significantly alter the character of the community—not only the locale surrounding the immediate project location, but the wider Syracuse and Onondaga County as well as portions of Oswego County as population growth and housing development is induced." (30, 31)

Response: See Response to Visual Impacts & Community Character Comment 2.

Geology, Soils, & Topography

Comment 1: "Reference is made to 'property survey' as a data source but later the 'geotechnical investigation' is mentioned but not included in the sentence describing the analysis. Is this an oversight that should be corrected? Certainly the geotechnical survey will provide valuable information to confirm or modify the USGS soil survey data." (30, 31)

Response: The Scope has been revised to clarify the information to be used in the geology, soils, and topography DEIS chapter.

Water Resources

Comment1: Public comments related to consumption of water, water infrastructure, wastewater, and water quality. (2, 3, 5, 17, 26, 27, 28, 30, 32)

Response: The Scope has been revised to indicate that the DEIS will include additional description of Micron's proposed consumption of water and generation of wastewater and how those volumes will be minimized as well as managed and coordinated with County infrastructure.

Comment 2: The DEIS must describe the types and amounts of pollutants that will be discharged into the water. (27)

Response: See Response to Water Resources Comment 1.

Comment 3: The DEIS should evaluate ways in which water consumption can be minimized including options for recycling. (3, 32)

Response: See Response to Water Resources Comment 1.

Comment 4: The volume of water and the contents of wastewater including, but not limited to known hazardous waste products/chemicals must be identified, including, the various expected contents of the water must be specified, including hazardous materials, even if the weights and the volumes are not known. (27, 28, 32)

Response: See Response to Water Resources Comment 1.

Comment 5: Questions were raised about the industrial wastewater, including how it will be treated and monitored. (5, 28, 30, 31)

Response: See Response to Water Resources Comment 1.

Comment 6: Concerns were raised about the massive use of water and potential impacts to water resources. (2, 3, 26, 30, 31, 32)

Response: The Scope indicates that the DEIS will evaluate potential impacts to water resources.

Comment 7: The public must be assured that the public water drinking supply will never be compromised to accommodate water use by the Micron plant. (32)

Response: Comment noted.

Comment 8: Questions were posed regarding safeguards and monitoring for wastewater leaving the Micron facility. (5, 27, 28, 30, 31)

Response: The Scope indicates that the DEIS will discuss applicable permitting, monitoring, and reporting obligations associated with wastewater.

Ecological Communities and Wildlife

Comment 1: Public comments raised concerns of the potentials impacts to wildlife and habitat on and around the site, specifically to birds, butterflies and other animals native to the site. (19, 21, 22, 23, 26, 28, 29, 30, 31)

Response: The Scope indicates that potential adverse impacts to these natural resources will be addressed in the DEIS.

Comment 2: Native plants should be considered as part of mitigation plans instead of typical ornamentals. (19)

Response: The Scope indicates that the DEIS will consider use of native plants as mitigation where necessary and if appropriate.

Solid Waste

Comment 1: Public comments submitted raised questions about solid waste and the amount of materials that would be used at the site, and what the process would be to dispose of the waste. (3, 26, 28, 32,)

Response: The Scope indicates that the DEIS will evaluate solid waste generation from the Proposed Project, including proposed management, impacts to resources, as well as proposed mitigation strategies, including recycling to reduce waste stream volumes.

Hazardous Materials & Hazardous Waste

Comment 1: Public comments raised concerns about hazardous materials being transported to and from the site, along with how Micron plans to dispose of such materials. Comments mentioned the use of PFAS as it relates to the semiconductor industry more broadly. Comments requested more information about the use of PFAS and the potential effect on communities and the environment. Comments also expressed interest in further analysis as it relates to the materials that will be used at the site and how risks will be avoided or mitigated with respect to those materials. (3, 4, 9, 23, 26, 28, 32)

Response: See Response to NYSDEC Comment 22.

Comment 2: Comments requested that the DEIS identify any hazardous materials, including chemical or petroleum bulk storage that would be used towards transport or generated by the proposed project and measures to protect against releases to the environment. (4, 30, 31)

Response: See Response to NYSDEC Comment 22. The Scope has been revised to indicate that the Project Description in the DEIS must further illustrate Micron's intended use, management, and conservation of water, chemicals, and energy.

Transportation

Comment 1: A commenter provided that "The importance of I-81 is recognized for its impact in the draft scoping document. The majority of the Micron Campus is contained within the Town of Clay, Onondaga County, New York and is accessible from I-81 from an interchange with NYS Route 31 (see Figure 1). OCIDA deemed the Radisson Corporate Park as an unviable choice because it lacked . . . specific advantages such as the proximity to Interstates 81 and 481. The draft scoping document notes that the lack of "access to multi-modal transportation" is often a point of failure for most other sites. Changes to I-81 should be evaluated for potential adverse impacts on the Micron Development." (16)

Response: The Scope indicates that the DEIS, in coordination with the New York State Department of Transportation (NYSDOT), will evaluate regional and local traffic conditions. The assessment of potential future traffic conditions will include potential I-81 modifications. The Scope has been revised to include additional detail on how the traffic and transportation study area has been defined through consultation with NYSDOT and SMTC and in recognition of modifications to I-81.

Comment 2: Several additional public comments raised concerns about the potential for increased traffic on highways and roads in and around the project due to population growth and workforce commutes. Many commenters are concerned about impact to residents and listed areas directly around the Project Site, while others raised concerns about the regional traffic impact. (1, 2, 5, 7, 14, 15, 16, 17, 22, 26, 32)

Response: In coordination with NYSDOT, Onondaga County, the Town of Clay, and the Town of Cicero, and as indicated in the Scope, the DEIS will include an assessment of traffic conditions at the regional and local levels. Input from the Syracuse Metropolitan Transportation Council (SMTC) is also being provided. The Scope has been revised to include additional detail on how the traffic and transportation study area has been defined through consultation with NYSDOT and SMTC and in recognition of modifications to I-81. See also response to Legislator Garland Comment 2.

Comment 3: Many commenters requested that the DEIS analyze and provide details for the proposed traffic improvements. As part of this, certain potential traffic improvements were proposed to help alleviate the traffic of the current roads that exist now. (2, 8)

Response: The Scope indicates that the DEIS will identify proposed transportation improvements and provide a schedule for when the improvements would be required.

Comment 4: Comments raised safety concerns and questions about what improvements would be made. Many commenters are concerned about impact to residents and listed areas directly around

the Project Site, while others raised concerns about the regional traffic impact. (3, 5, 13, 15, 16, 17, 20, 28, 29, 30)

Response: See Response to Transportation Comments 1-3.

Comment 5: Traffic must be evaluated in the context of existing and proposed infrastructure. (16)

Response: See Response to Transportation Comments 1-3.

Comment 6: "Significant adverse impacts could result in the assessment of environmental impacts from traffic if Automatic Traffic Recorder (ATR) counts and Vehicle Classification Counts (VCC) data sites are not added to collect data from sites in the City of Syracuse." (16)

Response: See Response to Transportation Comments 1-2.

Comment 7: A question was raised regarding the proposed number of entrances to the campus as well as the traffic flow and routes for delivery trucks. (2, 5)

Response: Details of proposed access points and circulation routes for employee vehicles and delivery vehicles will be described in the DEIS.

Comment 8: Certain comments questioned the study area for traffic and whether additional areas to the south should be included. "There [are] no traffic counters utilized on I-481 at the NY Route 92/5 exchange nor in the City of Syracuse." (15, 16)

Response: See Response to Transportation Comments 1-2. The Scope has been revised to include additional detail on how the traffic and transportation study area has been defined through consultation with NYSDOT and SMTC and in recognition of modifications to I-81. The interchange of I-481 and NY Route 92/5 is included in the regional study area.

Comment 9: The Trucking Association of New York commented that "[w]hile the Micron project itself may not have a negative impact on our industry, the additional vehicle traffic will. Put that increased vehicular traffic on a poorly designed interstate, and the results will be disastrous for our industry." As additional context, the Trucking Association of New York attached its October 2021 comments on the I-81 Viaduct Project DEIS. (14)

Response: See Response to Transportation Comment 1.

Air Quality

Comment 1: Public comments mentioned air quality as it relates to operations at the Proposed Project Site along with the air quality implications due to increased traffic and potential hazardous material. These comments requested additional detail on proposed air emissions, including mobile source emissions, and requested that air quality impacts be evaluated in the context of the existing

and proposed infrastructure" and, "Air quality should be monitored at all the traffic locations." (16, 17, 32, 36)

Response: See Response to NYSDEC Comment 24. The Scope indicates that the DEIS will include assessment of mobile source and stationary source emissions from the Proposed Project. Mobile source emissions are primarily generated from additional vehicular traffic during both construction and operations. Stationary source emissions are generated from operation of the proposed Fabs. The Scope notes that a stationary source air pollution control permit for the new manufacturing facilities will be required. The air pollution control permit application will include evaluation of pollutants subject to the National Ambient Air Quality Standards (NAAQS), New York air toxic control and ambient air requirements, and a Climate Leadership and Community Protection Act (CLCPA) greenhouse gas evaluation. The Scope indicates that the DEIS will summarize these detailed air quality modeling and impact assessment analyses that will be prepared to support the air pollution control permitting process.

Comment 2: The public must be informed now regarding the amounts and types of air pollutants released by current Micron industrial facilities and expected to be released/emitted by the proposed Clay plant. (32)

Response: See Response to NYSDEC Comment 24.

Comment 3: Micron should identify plans to notify first responders and public of any toxic air releases, and first responders should be provided in advance with training and equipment to respond safely to such releases. (28)

Response: Comment Noted.

Comment 4: Employees should be warned about the toxicity of gases used by the industry and trained to protect themselves from potential releases, both at low levels associated with chronic toxicity as well as higher levels with acute toxicity." (28)

Response: Comment noted.

Greenhouse Gas Emissions and Climate Change

Comment 1: Public comments noted that the use of natural gas seems inconsistent with New York State's Climate Leadership and Community Protection Act (CLPCA) greenhouse gas (GHG) reduction goals. (10, 20, 23)

Response: See Responses to NYSDEC Comments 29-31.

Comment 2: Members of the public provided comments about GHGs. (10, 20, 35)

Response: The Scope indicates that the DEIS will assess the Proposed Project's potential emission of GHGs and the measures proposed to avoid, minimize and mitigate any impacts.

Comment 3: "Semiconductors have a carbon problem. The public should be informed about the plan to prevent fluorocarbons from being introduced to our local air." (9)

Response: See Response to Greenhouse Gas and Climate Change Comments 1 and 2.

Comment 4: "Interested to learn about the impact of embodied carbon as well as operational carbon in both the Micron plant and the associated growth." (6)

Response: See Response to Greenhouse Gas and Climate Change Comments 1 and 2.

Comment 5: Methane is a much more potent greenhouse gas than CO2. (10)

Response: Comment noted.

Comment 6: "The current plans for powering the Micron facility in Clay, NY, while looking good on paper, will in fact increase emissions on energy used to supply the Micron facility… The reality is that Micron is going to be powered by Fossil Fuel Generation that is transmitted over long distances, very likely from out of state in Pennsylvania or Ohio that have generation carbon footprints far higher than those in NY State. As GHG emissions are not cognizant of political boundaries on a map, those emissions will end up affecting NY State residents." (14)

Response: Comment noted.

Comment 7: "There are also possibilities for using the CO2 emissions of the generating facility for agricultural purposes, further reducing the carbon footprint of the plant." (14)

Response: Comment noted.

Noise & Vibration

Comment 1: Several public comments referred to concerns about noise & vibration from construction and operation, including noise from increased traffic. (8, 19, 29)

Response: The Scope indicates that the DEIS will include assessment of noise and vibration generated by construction and operations of the Proposed Project, including from increased vehicular traffic.

Utilities and Infrastructure

Comment 1: One comment requests that the process for wastewater be described.

Response: The Scope indicates that the DEIS will describe the manner in which wastewater will be treated.

Comment 2: There needs to be better definition of the assessment of potential impacts on infrastructure (water, stormwater, sanitary sewer, electrical and telecommunications) will be assessed.

Response: The Scope indicates that the DEIS will include an assessment of potential adverse impacts on utilities and infrastructure due to demand associated with the Proposed Project.

Comment 3: The release of toxic contaminants through water pathways is one of the most serious threats of semiconductor productions. Releases of certain contaminants in wastewater could compromise the operations of the Oak Orchard Wastewater Treatment Plant, even undermining compliance with its discharge permit.

Response: The Scope indicates that the DEIS will include an assessment of impacts from wastewater discharges from the Proposed Project.

Comment 4: Industrial pre-treatment must be described in the DEIS and should include identification of identify ways to pre-treat hazardous chemicals, perhaps even reusing some, before comingling with other wastes. This is particularly important for PFAS, because in the future more PFAS compounds are likely to be subjected to enforceable environmental standards, many at very low concentrations." (18)

Response: The Scope indicates that the DEIS will include an assessment of impacts from wastewater discharges from the Proposed Project, and will include a description of industrial pretreatment at the Proposed Project.

Comment 5: The DEIS needs to address parameters such as system capacity, level of service changes, fiscal implications for the community and impacts on water bodies. (16)

Response: The Scope has been revised to indicate that the DEIS will include additional description of Micron's proposed consumption of water and generation of wastewater and how those volumes will be managed and coordinated with County infrastructure.

Comment 6: Impacts associated with the "natural gas main" that will be extended to the plant must be included in the DEIS. (30, 31)

Response: The Scope has been revised to clarify that the DEIS will include assessment of all off-site improvements (water, wastewater, electricity, natural gas, telecommunications) in each of the relevant subject areas.

Anticipated Use & Conservation of Energy

Comment 1: "It is imperative to reduce emissions through clean energy usage initiatives and energy conservation projects." (2,36)

Response: Comment noted.

Comment 2: One comment questioned the impact of the Proposed Project on their energy bill and whether the Proposed Project will strain the grid and cause blackouts. (16)

Response: The Scope has been revised to indicate that the DEIS will include additional description on Micron's proposed use and conservation of energy (including provisions for renewable energy sources).

Comment 3: Additional detail was requested on the anticipated energy needs of this project which were noted to be enormous. (20,23)

Response: The DEIS will describe the Proposed Project's energy needs.

Comment 4: "Electrical consumption is anticipated to be 16 billion kilowatt-hours of electricity per year, when fully built. (Phase 2, Envir. Assessment Form, Part 1, Section K) To put this in perspective, this is equivalent to all of the electricity consumed by the states of New Hampshire and Vermont, combined. The entire state of New York used 143 billion kWh of energy in 2022. Micron will increase demand in NY by 11%." (20,23)

Response: Comment noted.

Comment 5: Questions were raised regarding the type and source of energy to be used by the Proposed Project. (10, 11, 16, 22)

Response: See Response to Anticipated Use and Conservation of Energy Comment 2.

Comment 6: Commenters requested consideration of various sources of electricity, including those that are currently available, and whose which may become available as the plant is constructed.

Response: See Response to NYSDEC Comment 5; Response to Anticipated Use and Conservation of Energy Comment 2.

Comment 7: The DEIS must evaluate the ability of current power lines owned and operated by National Grid to deliver the required power. (30)

Response: See Response to Anticipated Use and Conservation of Energy Comment 2.

Comment 8: One commenter questioned whether Micron stated its goal "to achieve 100% renewable energy for existing U.S. operations by the end of 2025" applies to the proposed facility. (10)

Response: See Response to Anticipated Use and Conservation of Energy Comment 2.

Construction

Comment 1: Several public comments referred to concerns about construction, specifically the use of heavy duty equipment and expected constructed related vehicular trips. (1, 13, 24)

Response: The Scope indicates that the DEIS will include evaluation of traffic conditions and potential adverse impacts during the construction of the Proposed Project. Specific analysis of traffic and traffic-related air quality and noise during construction will be identified and assessed in the DEIS, including potential mitigation options to address any adverse impacts.

Permits

Comment 1: "The SEQRA review should list all anticipated permitting processes, with the anticipated schedule of public comment periods, and it should require public notification to interested parties of each permit application as it is submitted." (18)

Response: Section 6 of the Scope lists the Federal, State, and local agencies with which Micron would coordinate on the Proposed Project and a preliminary list of anticipated permits that would be required to construct and operate the Proposed Project. The status, and contents, of draft permit applications would be made available, as applicable, as appendices to the DEIS. When OCIDA releases the DEIS for public review, it will announce the schedule for public comment and notifications will be distributed in accordance with applicable rules and regulations.

A forecasted date for the commencement of construction will be included in the DEIS.

Cumulative Impacts

Comment 1: "The use of the word 'summarize' to describe the scope of this Chapter is insufficient. This Chapter must assess indirect and cumulative impacts of the proposed project for each of the technical areas included in the DEIS. If these effects are included elsewhere it may be appropriate to summarize them here. Let's be clear about exactly what is required to be included in the DEIS." (20, 23)

Response: The Scope has been revised to indicate that the "Cumulative Impacts" chapter will consider any significant adverse impacts resulting from the incremental impact of the Proposed Project when added to other past, present, and reasonably foreseeable future actions. Each of the technical areas of the DEIS will address direct and indirect effects of the Proposed Project and off-site improvements.

Growth Inducing Aspects

Comment 1: Onondaga Audubon commented on Housing & Development that "the region outside of the project's direct footprint will be modified in order to support influx of as many as 100,000 new residents. Zoning maps have already been changed to increase the amount of land available to be developed for housing." (21)

Response: Comment noted.

Comment 2: The DEIS should include an analysis of the potential for growth-induced changes in the community that this project will induce." (32, 35)

Response: The Scope indicates that the DEIS will include an assessment of potential growth-inducing effects of the Proposed Project. This assessment will evaluate projected growth in traffic as a result of new residential development and any noise or air quality impacts associated with that increase in traffic.

Comment 3: Commenters note that the Proposed Project will cause an increase in demand for new housing and questioned the necessary capacity as well as the potential environmental impacts. (19)

Response: The location of any development of new housing within the Central New York region in response to any demand generated by Micron employment is unknown at this time and outside of Micron's control. It is therefore beyond the scope of this environmental review. Notwithstanding, any such new development would be subject to local comprehensive planning policies and zoning laws and regulations and require separate approvals pursuant to those local laws, regulations, and policies. The Scope indicates that the DEIS will evaluate projected growth in traffic as a result of new residential development and any noise or air quality impacts associated with that increase in traffic. The Scope also indicates that the DEIS will evaluate potential indirect impacts to community facilities and services as a result of projected residential population growth (see above).

Comment 4: "This is going to affect the housing market, are there any plans in order to ease this transition or combat this? (28)

Response: See Response to Growth Inducing Comment 3.

Comment 5: "With new jobs and housing comes increased traffic and therefore noise and air pollution. What impact will this have on residents' health and how will it be mitigated?" (19, 27)

Response: See Response to Growth Inducing Comment 2.

Other

Comment 1: Many commenters asserted that the NYSDOT's environmental review of the I-81 project was inadequate and that similar mistakes should not be made for the Proposed Project. (14, 15, 16, 33)

Response: Comment noted. The I-81 project is a separate and distinct project.

Comment 2: "Onondaga County health care facilities, in particular our hospitals, were short-staffed even before the Coronavirus pandemic. Waiting times and bed shortages were unfortunately highlighted by Covid-19 cases and have continued. What improvements in the healthcare system are proposed to remedy these shortcomings in view of the expectation of potentially thousands of new residents to work at and/or serve the Micron plant." (36)

Response: An assessment of impact on health care and the hospital system is beyond the scope of the environmental review of the Proposed Project.

Comment 3: “Demand new housing have walkable community parks that exceed the WHO recommendation of green space per person, and demand current brownfield sites be the priority sites of new development.” (29, 31)

Response: The specific development of new housing within the Central New York region in response to any demand generated by Micron employment is unknown at this time and outside of Micron’s control. The Scope indicates that impacts from induced demand will be considered in the DEIS. .

Comment 4: “It just brought, and I sort of a thought to myself to make sure that the scope does consider and focus and put ample attention towards the rail line. I'm not sure if the current CSX line that is moving across 31 is a part of what would be an increase in that rail traffic because of -- if that movement happened with that grant and that played out in (unintelligible). But I just want to, you know, make sure that the scope looks at the rail lines and the impact of the rail service and of an increase in that surface as we move forward here in the future generation. Thank you.” (12)

Response: The Scope has been revised to indicate that the DEIS will address the existing CSX rail line adjacent to WPCP and its potential use to support construction of the Proposed Project and reduce construction truck traffic. Potential air quality and noise impacts of additional rail traffic along the CSX rail line would also be considered in the DEIS.

Comment 5: The use of rail was encouraged to mitigate transportation impacts. (35)

Response: Comment noted.

Comment 6: Several comments raised concerns about transit options in the area and how those options would be addressed for workers and commuters who will be working at the site. Commenters also encouraged prioritizing bike, and pedestrian access to the site. (29, 31, 32)

Response: The Scope has been revised to indicate that the DEIS, in coordination with the Central New York Regional Transportation Authority (Centro), will identify potential adverse impacts to transit service caused by the Proposed Project and modifications and expansion to transit service that may be required to address those impact and address the need for such services caused by the Proposed Project.

Comment 7: “The only mitigation measures mentioned in this section are improvements to roadways. It is imperative that the utilization of public transportation, including mass transit by bus and light rail, be considered.” (32)

Response: See Response to Other Comment 6.

Comment 8: It should be noted that the Community Grid Plan is subject to a court order requiring the need for additional diligence related to the Micron development among other factors.” (17)

Response: See Response to Other Comment 1.

Comment 9: Some comments questioned the use of the terminology "100 percent renewable energy." (10, 11, 22)

Response: Comment noted.

Comment 10: News reports have indicated that Micron has not committed to the huge expense of building a second water supply system from Lake Ontario in order to serve its industrial needs. The taxpayers of Onondaga County should not pay for this water supply system. This new system amounts to a dedicated supply for the Clay Micron plant." (36)

Response: Comment noted.

Comment 11: The City of Syracuse should be considered an interested agency. (31, 32)

Response: The Scope has been revised to include the City of Syracuse as an interested agency.

Comment 12: The DEIS should include a chapter for Wastewater and Stormwater.

Response: See Response to NYSDEC Comment 1.

Comment 13: A detailed assessment of the expected numbers of cancers and other pollutant-related illnesses based on air emissions, water discharge, and hazardous solid waste from the plant must be identified as part of the DEIS. (24)

Response: The Scope has been revised to indicate that the DEIS will include an assessment of potential adverse health impacts associated with air emissions and the use and disposal of hazardous waste from the facility.

Comment 14: "Micron is to be commended for committing itself to a large degree of sustainability, but what is actually achievable?" (3)

Response: The Scope indicates that the DEIS will discuss sustainability measures that Micron intends to implement at its facility.