



## Arthur Kill Terminal

ULURP No. C230225RSR, N230226RAR,  
N230227ZRR , C230228MLR, N230229RAR, C230231MMR

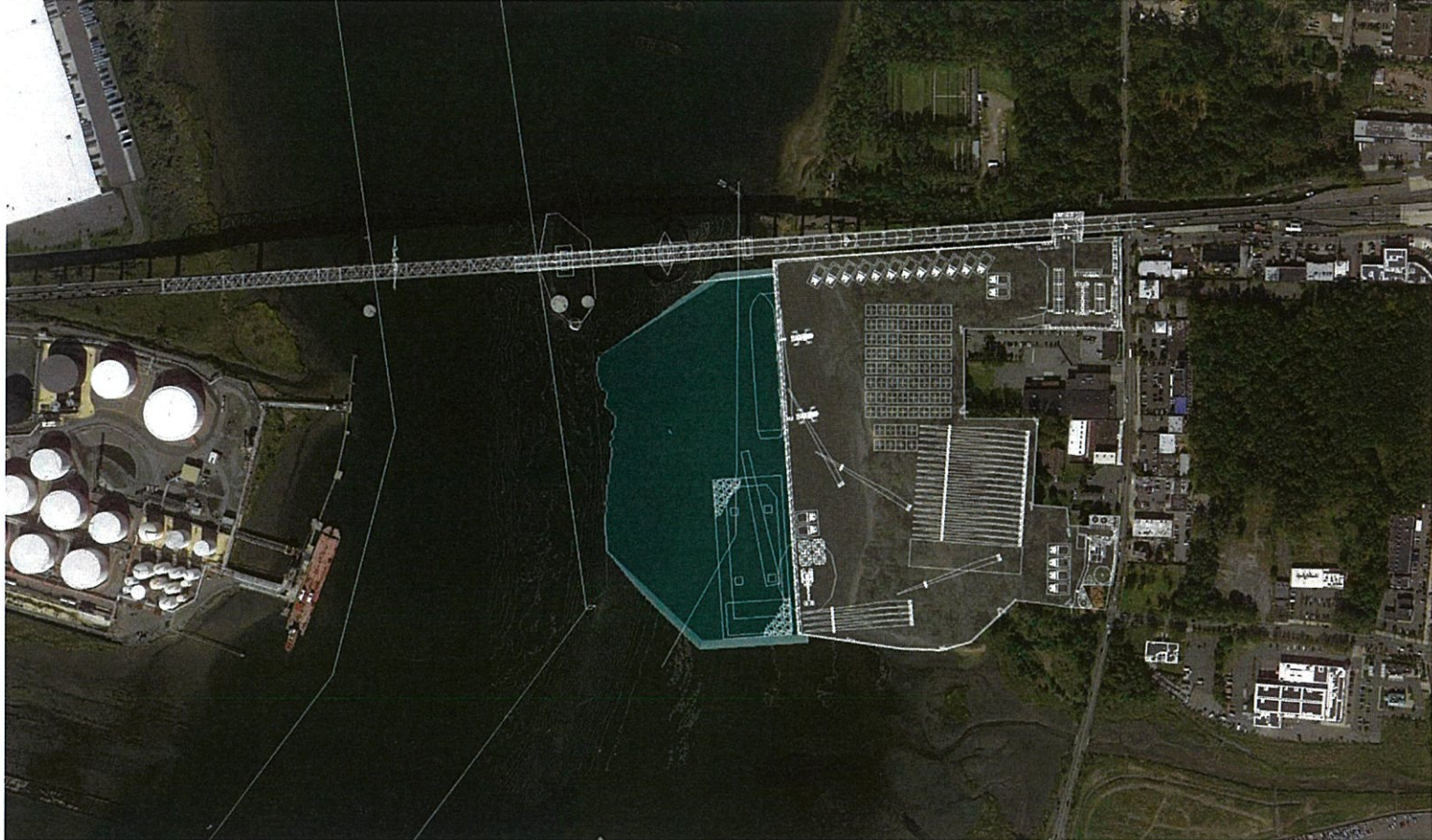
New York City Council  
Subcommittee on Zoning and Franchises

June 26, 2024

If you are a member of the public who wishes to testify, please register on the City Council Website at [council.nyc.gov](https://council.nyc.gov). Please visit the City Council Website to watch livestreams of all City Council Meetings and find recordings of previously held meetings.



# Site Plan



# Land Use Map



## Arthur Kill Terminal Area Map

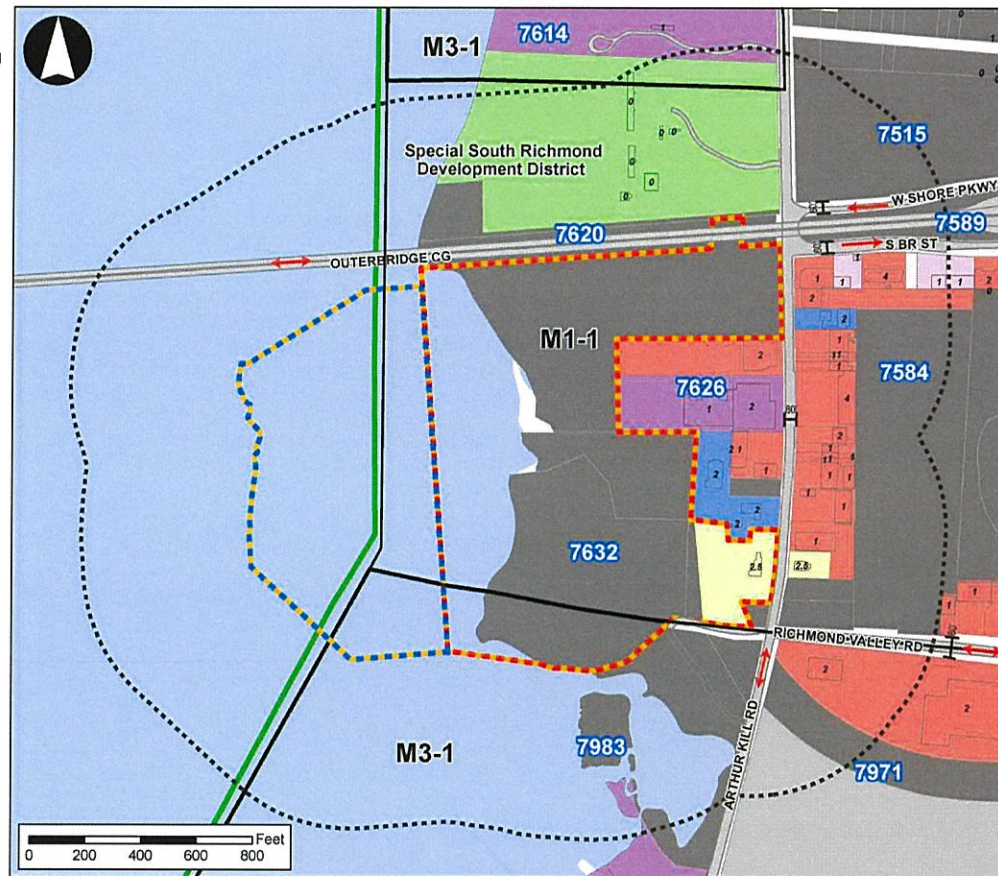
Applicant - Arthur Kill Terminal LLC  
 Block 7620, Lot 1 and Block 7632, Lots 6, 50, 150, and 151

### Project Information

- Project Site
- Special Districts
- Dredge Basin
- Zoning District Boundaries
- Project Area
- Street Direction
- 600' Radius
- 80' Street Width
- 5 Number of Floors
- 7020 Block Number

### Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Other or No Data







## Port Functions and Activities

- » AKT is a purpose-built port for the staging and assembly of offshore wind components. AKT could support the construction of as much as 15 GW of offshore wind (OSW) energy over the next 25 years, at a minimum.
  - OSW staging port operations involve the receiving, unloading, handling, staging, assembly, pre-commissioning and loadout of very large, heavy and specialized wind turbine generator and foundation components.
- » In addition to wind farm construction activities, AKT is also likely be used for wind farm decommissioning and major maintenance activities.
  - Offshore wind farms have a design life of approximately 25-30 years, after which time they will need to be decommissioned and retrofitted, which will require additional need for staging ports such as AKT.
  - During the operational life of any given wind farm, should there be a need for major maintenance (i.e., replacement of a blade or gearbox or other large piece of wind farm equipment), a staging port such as AKT would be required.
- » AKT will be privately owned by the Applicant and operated by the port's tenants (offshore wind farm developers, component manufacturers, etc.).
  - The Applicant will have permanent staff on-site responsible for overseeing the tenant port operations, long term maintenance activities, visitor center programming, and to ensure a constant point of contact with the community, stakeholders, and regulators.

# OSW Staging and Assembly Ports in Operation



State Pier in New London, CT



New Bedford Marine Commerce Terminal, New Bedford, MA



## Tenant Office/Warehouse (New Building) - 4823 Arthur Kill Road

- » Proposed 22,400 GSF building (15,200 SF footprint)
  - First-floor warehouse (8,000 SF), cafeteria, bathrooms
  - Second-floor offices
- » 111 parking spaces with room for additional parking as needed within the port
  - Continuation of PANYNJ access to parking area under OBX for maintenance activities
- » Environmental and energy-efficiency features:
  - LEED gold certification
  - Rooftop solar and solar canopy parking
  - EV charging systems
  - Bioswale to collect parking lot stormwater runoff
- » Includes voluntary widening of Arthur Kill Road by 15ft along property frontage and installation of new sidewalks and tree plantings
- » Easy access to I-440 via N. Bridge St. and S. Bridge St
- » Designed by Tottenville-based architect, Thomas LaPorta



## Visitor Center & Owner Offices (Renovation) - 4927 Arthur Kill Road

- » Restoration and adaptive reuse of historical “Cole House” building previously denied landmark preservation status
  - First floor visitor center with meeting areas and exhibits
  - Second floor offices for owner
  - Addition of rear second floor viewing deck for public observation of port activities
  - Rooftop solar, EV charging
  - 13 parking spaces
  
- » Includes voluntary widening of Arthur Kill Road (by 15ft) along property frontage and installation of new road lane and sidewalks.
  
- » Designed by Tottenville-based architect, Thomas LaPorta





# Rendering of AKT in Operations (Example Configuration)





## Lighting Design and Light Pole Heights

- » Proposed light poles range in height from 20 ft to a maximum of 115 ft. to comply with OSHA requirements and ensure the safety of workers.
  - The taller light poles are located further from Arthur Kill Road and will be facing into the port area to provide minimum safe lighting along the quayside.
- » All light poles would consist of LED lighting with directed focus, shielding, and control systems to ensure lighting is directed within the boundaries of the Project Site onto the port operations area, and away from adjacent properties.
  - At receptors over the property lines, luminosity values drop to below 0.2 fc which is lower than the ambient lighting from the bridge itself.





# Renderings Showing Light Poles from Streetscape



From sidewalk across from Mill Creek



From sidewalk across from Cole House



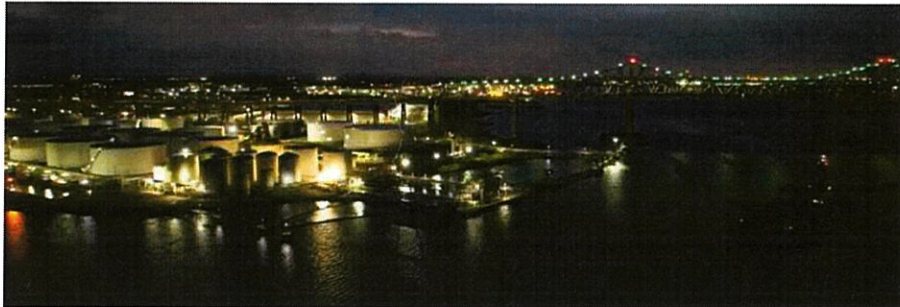
From sidewalk across from proposed Warehouse



## Nighttime Operations and Lighting

- » Tenants would only utilize the 24-hour operational allowance when necessary to facilitate the movement and loadout of vessels outside of normal daytime working hours
  - Nighttime operations are more expensive than daytime operations (due to overtime), and inbound/outbound vessel trips only occur periodically.
  - Site lighting would be dimmed when not in use, subject to code requirements and other regulations.
  
- » Nighttime lighting use is not anticipated to result in substantial light impacts
  - Outerbridge Crossing along northern property line is illuminated at night from lights at greater elevations (between 135 ft and 225 ft)

*Kinder Morgan Terminal in Perth Amboy Across from AKT*



*Outerbridge Crossing Night Lighting*



*Nighttime Operations at New London State Pier*





## AKT is Designed to be Minimally Disruptive to the Local Community and Existing Infrastructure



- » AKT is not expected to result in adverse traffic impacts.
  - During operations, all large equipment would arrive and depart by water, and only a few trucks per day can be expected (no larger than WB-50, and no wide loads)
  - Early on in construction, AKT will perform the widening of Arthur Kill Road along its frontage, increasing the existing 50 ft width by 15 ft and installing a sidewalk and tree plantings.
  - AKT is not proposing to use driveway at intersection of Richmond Valley Road and Arthur Kill Road other than as an emergency entrance (FDNY, ambulance, etc.)
- » AKT is designed to collect and divert stormwater runoff from neighboring properties.
  - Except for the parking lot, the surface of the site is 3ft layer of stone and designed to be highly permeable. The site will be approximately 85% pervious, allowing for the self-contained collection of stormwater on site rather than allowing it to run off.
  - The relatively high elevation of the bulkhead (15.25 ft) and upward slope to Arthur Kill Road (+30 ft) will substantially raise the grade of the site out of the FEMA 100-year flood plain, providing storm surge protection and resiliency for neighboring businesses along Arthur Kill Road.
- » AKT will have a LED lighting system that has been designed to direct light solely onto the project site and avoid lighting adjacent properties. Site lighting can be dimmed and controlled on demand in response to port activities.
- » Port operations involve the movement, physical assembly and electrical commissioning of large, highly specialized equipment.
  - Noise, fumes, and air quality issues are expected to be minimal based on our direct experience managing port operations for America's first offshore wind project and assessments conducted for the CEQR EIS and NEPA EA.



## AKT Will Create Substantial Community Benefits

- » AKT will result in decades of high-wage, union employment
  - AKT has entered into a MOU with the NYC Building and Construction Trades Council to enter into a Project Labor Agreement (PLA) for construction of the facility.
  - Operations at the port will also be subject to Project Labor Agreements
- » AKT will generate significant local investment and contracting opportunities for local suppliers and businesses
  - AKT will activate existing network of marine construction firms, suppliers, and skilled workers based in Staten Island
  - AKT is prioritizing local procurement for facility construction and maintenance
- » AKT will unlock untapped potential for Staten Island’s “jobs coast”
  - AKT aspires to be an important contributor to the community and a landmark for Staten Island’s emerging role in a major new American industry
  - AKT will attract additional OSW supply chain investments locally (already occurring on West Shore and Mariners’ Harbor)
  - AKT’s visitor center will be a central source for educational and workforce development information relating to offshore wind in Staten Island and beyond







## AKT Will Result in High-Wage Local Job Creation for Staten Island

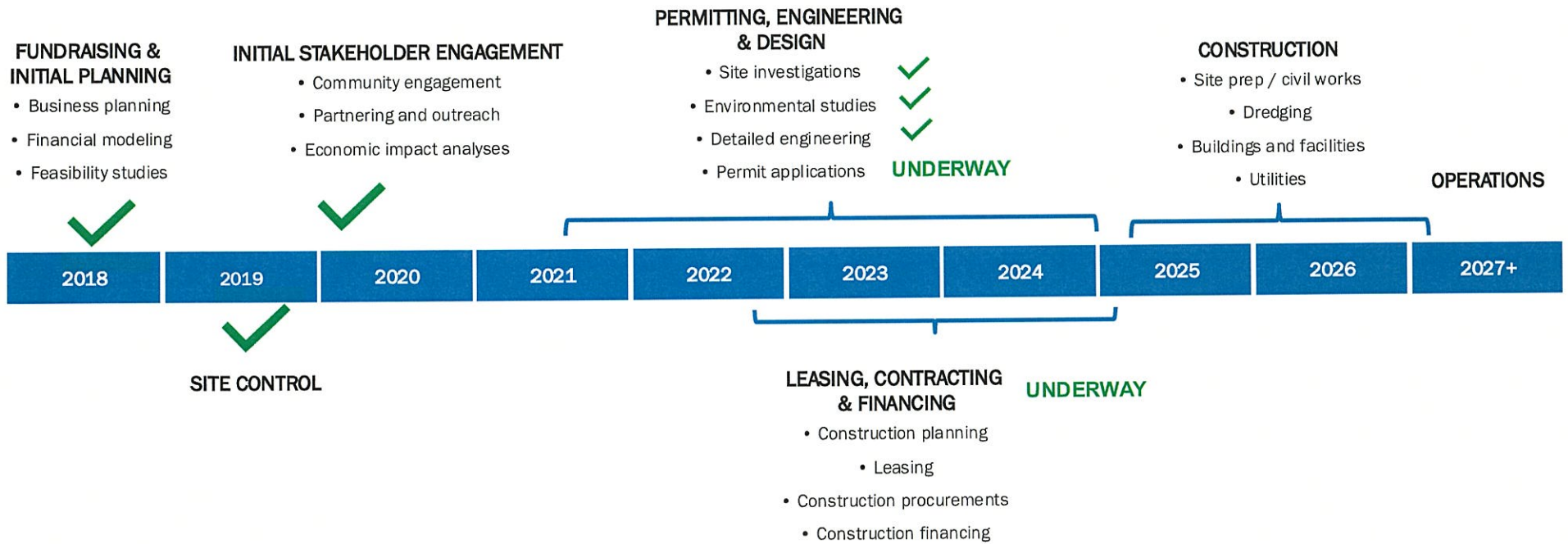
### Jobs Projected for the Construction and Operation of AKT

Phase	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Construction Phase (<2 Years)	600	113	320	1,033
Operations Phase (Annually) <i>incl. AKT tenants</i>	152	162	205	519

- » To aid in the readiness of a local workforce, the AKT team has been engaging with local workforce development organizations, such as CUNY College of Staten Island, SUNY Maritime, HireNYC, Climate Jobs NY, NYCEDC and the New York Harbor School.
- » AKT has strong working relationships with New York City’s labor unions and unique, direct experience working with local unions to perform offshore wind staging and assembly work in the US in connection with America’s first offshore wind project.
  - AKT has entered into a PLA MOU with the NYC Building and Construction Trades Council and is currently conducting construction procurements in which union labor involvement pursuant to a PLA is a key requirement.



# Timeline





## Proposed Land Use Actions

1. City Map Amendment to eliminate, discontinue, and close mapped but unused portion of Richmond Valley Road west of Arthur Kill Road;
2. Zoning Text Amendment to ZR § 107-00 to establish goals related to sustainability, resiliency, climate and clean energy objectives, and ZR § 107-65 to modify natural feature regulations;
3. Authorization pursuant to ZR § 107-65(b), as modified, to allow the removal of trees of six-inch caliper or more and to allow topographic modification of greater than two feet;
4. Authorization pursuant to ZR § 107-68 to allow 124 accessory off-street parking spaces;
5. Special permit pursuant to ZR § 107-73 to allow a structure with a height of greater than 50 feet; and
6. A landfill action to add approximately 1,176,544 cubic feet (43,575 cubic yards) of fill to create a quay along the Arthur Kill.





## Appendix

## Site Investigations and Environmental Impacts

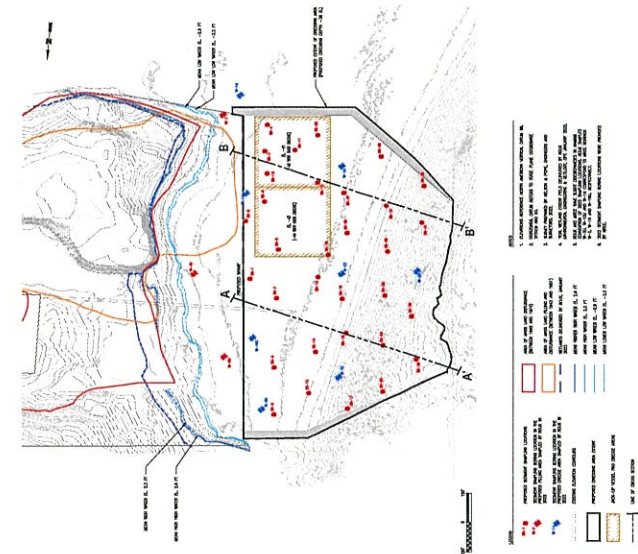
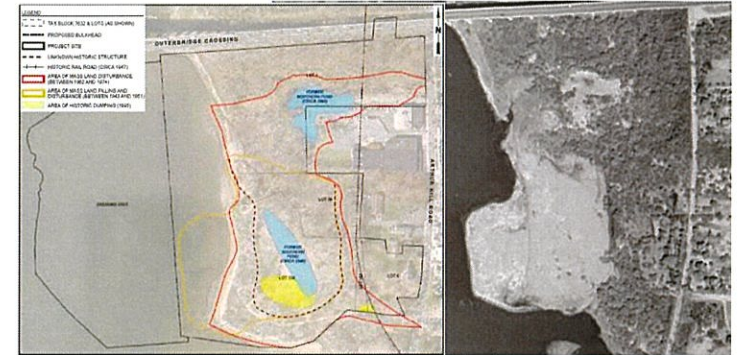


» AKT has conducted a thorough, multi-year site investigation in support of the Project's permit applications and Environmental Impact Statement.

- A supplemental Phase II Environmental Assessment was performed in March 2023 to investigate the locations of the project area beyond those included in the existing Phase I/II assessments.
- 39 environmental sediment samples were taken in the dredge basin and upland area to characterize the proposed dredged material and inform on site amendment activities and offsite disposal alternatives.
  - All sampling locations within the dredging area met the General Fill criteria outlined in 6 NYCRR Part 360 regulations, indicating suitability for use as upland fill.
  - Sediment samples assessed against NYSDEC TOGS 5.1.9 criteria found that the shallow sediment materials are predominantly Class B/C and virgin materials below 9 ft to 10 ft are predominately Class A.

» Based on a review of historical photographs, maps and sediment sampling data, the Project Site has previously undergone significant landfilling and disturbance across most of its footprint.

- The entire site, including the wetlands, is dominated by non-native, invasive species.
- Impacts to regulated wetlands resources are being addressed through offsite compensatory mitigation at the ratios requested by the various State and Federal agencies.
- The Project Site is not subject to impacts from the Nassau Metals site and the proposed dredging and construction work would not affect remediation work done for the Nassau Metals site







## Wetlands Impacts and Proposed Mitigation

- » AKT and its team devoted several years to performing an alternatives analysis to assess potential development sites in the tri-state area, considering factors such as channel access, berth length, laydown area, and air draft restrictions between sites and the open ocean.
- » Though the Project location is the one site that meets all of the attributes essential to an offshore wind staging and assembly port, its construction will result in unavoidable wetland impacts: approximately 18 acres of dredging (15.33 acres of littoral and sublittoral area) and 13.25 acres of filling (3.43 acres of freshwater wetlands and 9.82 acres of intertidal wetlands and littoral area), the majority of which are degraded and stressed due to past industrial and filling activities.
- » To offset the Project's impacts to these resources, AKT has identified sites to perform mitigation and has submitted a compensatory Mitigation Plan to the regulators, including NYSDEC, USACE, MARAD, and NOAA for their review and approval.
  - The proposed plan, currently under review, would provide for the restoration, creation, and/or enhancement of tidal and freshwater wetlands to compensate for the Project's impacts to these regulated resources.



## Site Clearing and Import of Fill and Materials

- » 1,204 trees will be removed for site clearing. 61 new trees would be planted around and within the Tenant Area and Cole House parking lots and streetscape.
- » To the maximum extent practicable, dredge materials would be amended and beneficially reused on-site
  - The majority of fill is either amended, beneficially reused dredge spoils generated from dredging of the ship basin (Class A) or clean stone (for pipe and utility bedding and finished surface).
  - Existing rip rap, stone, and concrete materials will be excavated, stockpiled, and reused on-site wherever possible.
- » All imported fill materials will be brought in via barge with the exception of a limited set of materials that will be sourced locally (within 5 miles) and delivered by truck.



# Protocol for Archaeological Resource Evaluation



- » As archaeological resources are almost always beneath the surface, their significance cannot be known until they are unearthed and analyzed. Per CEQR guidance, archaeological resources are considered "potentially significant" until the applicant can define the presence and potential significance, or not, of potential resources.
- » The potential resources at the AKT site will be evaluated pursuant to an Archeological Work Plan that has been approved by the New York State Historic Preservation Office and the New York City Landmarks Preservation Commission.
  - AKT intends to conduct hand excavations to determine the presence and status of any potential archaeological resources on site. This will be performed once clearing has occurred in the pertinent areas during early construction activity, as further described in the Project’s Archaeological Work Plan.
  - If archaeological resources are found to exist on site, AKT proposes to cap the site in situ. This is a common best management practice and would ensure the preservation of any archaeological resources.

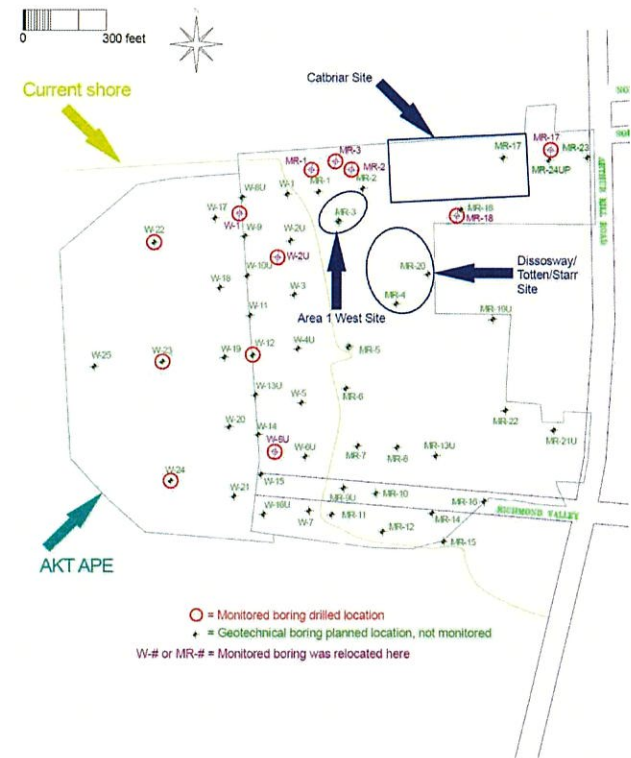


Figure 16 AKT APE with the three previously identified archaeological sites and depicting the project borings, both planned and as drilled, highlighting those that were archaeologically monitored.

Landmarks.com



## Will AKT Result in Adverse Noise Impacts?

- » Overall, noise impacts are expected to be minimal given the nature of the operations at the facility and the limited period of construction.
- » Operational noise will vary and may arise from the use of cranes, vessels, forklifts and other equipment and vessels at the wharf. Generally, the noise from these activities will not be disruptive to the surrounding neighborhood.
- » There is the potential for nighttime noise to be disturbing at the one non-conforming residential property across the street from the Cole House.
  - AKT has agreed to address the potential for noise impacts at this property with mitigation measures such as new windows and ventilation systems, if it is determined that impacts exceed the threshold for mitigation.





## Will AKT Result in Adverse Vessel Traffic Impacts?

- » The vessel types associated with AKT operations include offshore barges, cargo ships, tugboats, and heavy lift and wind turbine installation vessels (WTIV), most of which currently use the Arthur Kill and Lower New York Bay.
- » Based on AIS vessel transit data for vessels passing OBX, currently there are approximately 50 vessel trips per week (or 2 per hour) with small tug / tow vessels constituting the vast majority of utilization (about 90%).
- » The additional vessels associated with AKT's operations would be equivalent to a 2.6% increase in vessel traffic per year when compared with 2022 baseline vessel track traffic (AIS).
- » From time to time, for the larger and more specialized installation vessels (WTIV or feeder barges), temporary navigation channel restrictions may occur while a vessel is getting underway or berthing at AKT. However, vessel movements will be overseen by the Sandy Hook Pilots and coordinated with the US Coast Guard Vessel Traffic division for the safety of navigation and mitigation of risks.



## Offshore Wind Farm Environmental Concerns

- » Wind turbine components handled at AKT will not be operational at any time, and final assembly and startup of turbines will occur at wind farm sites offshore, by others.
  
- » In large part, an increase in marine mammal mortality in recent years can be attributed to an increase in vessel traffic following the pandemic and caused primarily by the shipping sector.
  - While offshore wind (OSW) developments are expected to increase vessel activity, they currently represent only a small proportion (2%) of tracked vessel traffic in U.S. Atlantic waters from North Carolina to Southern New England.
  - A full [report](#) on the relationship between whales and offshore wind was published by the New York State Environmental Technical Working Group.
  
- » Vessels coming and going from AKT would be slow and controlled, allowing adequate time for species to move away from vessel paths and endangered species monitors to effectively do their jobs.
  - Vessel speeds would be less than 10 knots from the mouth of the Lower New York Bay/Raritan Bay to the Arthur Kill, and between 2 to 3 knots when transiting between the Federal Navigation Channel and AKT on approach to the berthing area.



## Long Term Viability Through Macroeconomic and Industry-Wide Challenges



- » Demand for AKT is strong. There is not sufficient staging and assembly port capacity to handle the number of wind turbines to be built off the U.S. East Coast over the next 25 years and AKT enables faster installation times and use of the most efficient vessels and methods available, reducing construction costs for offshore wind farms in the region.
- » New York State is obligated to construct 9 GW of offshore wind power by 2035 under the Climate Leadership and Community Protection Act (CLCPA) and is estimated by the Climate Action Council to need as much as 18 GW of offshore wind by 2050.
- » Offshore wind is critical for U.S. states to meet their energy and climate goals. That is why NYSERDA acted quickly to solicit new contracts to cover the capacity that would have been provided by the offshore wind farms with pre-pandemic offtake agreements that are no longer viable.
- » While the financial planning for the Proposed Project is well advanced, if it were ultimately not able to secure all of the necessary funding, it would not proceed with construction.
- » Given the scale and cost of the Proposed Project, it will be financed and built only if, as expected, it is needed and will be well utilized for many years.



# AKT Location Relative to Offshore Wind Projects

