Gales Ferry Intermodal, LLC Presentation to Ledyard Planning and Zoning Commission December 14, 2023

Introduction of Applicant's team members

- Harry Heller, Esq. & Andrew McCoy, Heller, Heller and McCoy, Counsel
- George Andrews, PE/LEP & Susan Marquardt, PE, Loureiro Engineering Associates, Principal Engineer
- Tim Harmon & Kevin Godfrey, Maine Drilling and Blasting
- David George, Heritage Consultants, Cultural Resources Coordinator for the Project (unavailable tonight)
- Jeff Slade, Senior Geologist, PG, Continental Placer/Adirondack Geologic Services (unavailable tonight)
- Alan Perrault/Chase Davis, Gales Ferry Intermodal LLC
- Mike Cherry, Community Liaison

Today's vision is tomorrow's reality. Opportunities are a moment in time

- This project will provide a highly attractive site for very significant future development.
- The logistical and infrastructure advantages of the site make it ready to take advantage of development opportunities.
- The ability to be ready to take advantage of those opportunities when presented is critical for both the Applicant and the Town of Ledyard.





- The Applicant, Gales Ferry Intermodal, LLC is the owner of a 165-acre site located on the westerly side of Route 12 and easterly of the Thames River.
- The entire site is located in the Industrial Zoning District classification.
- This application seeks a modification of the existing special permit for the phased removal of surficial material and aggregate, and processing of aggregate material for transport offsite (primarily via barge) on an approximate to create approximately 26 acres of level industrial land.

OVERVIEW:

- A portion of the area proposed for the excavation consists of urban land which was utilized by the Dow Chemical Company/Trinseo/AmSty in conjunction with its industrial operations that is currently paved. This area will be used for material processing and handling.
- The remainder of the area is located on the southerly portion of the overall site and is separated from the neighborhood to the south by both:

(i) a 200' wide Eversource recently upgraded 115 KV Transmission Line which bisects the property in an easterly westerly direction and links high voltage power across the Thames River from Montville to a newly reconstructed Eversource substation on CT Route 12; and

(ii) the remainder of the Applicant's land which is located southerly of the transmission line easement.

GOAL OF PROPOSED EXCAVATION

 The area of proposed excavation is intended to create 26 +/- acres of prime, level industrial land to promote future industrial growth, ratables and employment opportunities within the Ledyard community.

Town Zoning





Past Uses and Current Status of the Property





Gales ferry terminal 1850s coal pier

Dow operated from 1950s to 2011

Past Uses and Current Status of the Property





Site circa 1950 prior to Dow Chemical

Site under development as Dow Chemical Plant

Past Uses and Current Status of the Property





Site circa 1980 as built out Dow Chemical Plant

Site in 2023 showing Amsty operation and slabs of former manufacturing buildings

Aerial View of Existing Site Conditions

Reconstructed pier with Montville powerplant and Transmission lines

Amsty and the remains of concrete slabs



Aerial view of site and surrounding area



Interest in Site for Offshore Wind/Green Energy



Coal Closure Energy Communities

Tract Status

Light orange: Census tract directly adjoining a census tract with a coal closure Dark orange: Census tract with a coal closure (former NRG Montville Power Plant- now Generation Bridge, an affiliate of Arclight of Boston, MA)

As defined in the Inflation Reduction Act (IRA), the Energy Community Tax Credit Bonus applies a bonus of up to 10% (for production tax credits) or 10 percentage points (for investment tax credits) for projects, facilities, and technologies located in energy communities. The GFI Gales Ferry site is in within an adjacent US Census Tract (7012) to Montville (6936).





CASHMAN FACILITIES RELATIVE TO PROPOSED OFFSHORE WIND FARMS

Example of a HVDC Converter Station



Example of Commercial Battery Storage



Proposed Site Excavation Plan/Preparation for Industrial Use



Phase 1 – Main Entrance



Grading and Drainage

- Bedrock benched at 25' H to 50' V
- 3 H to 1 V slope in all overburden areas to mitigate erosion
- Fill placed to bring grade back to a 1 ½% slope as shown
 - Provides overburden soils for foundations and utilities
- Processing activities proposed initially in the pavement area
- Processing to move into the excavation area when room permits
- Stratified Drift within infiltration areas excellent infiltration capacity

	2-Year Event		10-Year Event		25-Year Event		50-year Event		100-year Event	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
West Wetlands (POC 1)	0.69	0.69	10.44	6.88	22.86	15.8	34.59	28.29	48.98	44.8
West Off-Site (POC 2)	0.44	0.27	6.39	5.44	12.31	10.91	17.4	15.68	23.29	21.22
South Off-Site (POC 3)	20.22	15.46	39.91	30.41	52.82	40.3	62.64	47.82	73.2	55.9
Total	21.35	16.42	56.74	42.73	87.99	67.01	114.63	91.79	145.47	121.92

Table 1 – Peak-Flow Comparison, Cubic Feet per Second

Soil Erosion & Sediment Controls

- 5 project phases results in all phases < 10 acres of disturbance
- Stabilization of each phase before advancing to the next
- Water bars and mulch socks used for diversion
- 6 Permanent sediment basis using SE&SC Guidelines 2002
- Basins provide the full WQV
- Outlets to intermittent channel with discharge to same infiltration area as existing conditions
- Once final stabilization is met transition to detention
 - Outcome is a consistent reduction in discharge across the site as tabulated
- Drainage is temporary until site redevelopment is realized

Borings, Test Pits and Monitoring Well Locations



Geotech Information

- Four 200' depth core holes drilled to determine the type of rock present in the area to be excavated.
- Drilling confirmed two types of granite present.
- Bedrock present exhibits extremely low yield of groundwater.
- Hydrogeology of the Site limits the contribution of groundwater to the regional water table from the northern half of the Allyn Mountain is limited by the hydrogeology of the site.
- No significant water bearing zones or faults present.
- Core samples show the rock type and Rock Quality Designation are favorable for development of a stable rock cut face.
- No pyrrhotite or chalcopyrite present in the rock to support acid rock drainage – nothing present in any of the core samples.

Core samples from the site



Bozrah CT

Baldwin Hill Ledyard CT

Maine Drilling & Blasting

- 57 Years in business
- Diversified throughout the East Coast & Mid Atlantic
- 14 Operating Divisions
- Local offices, teams and autonomy
- Most experienced drilling and blasting company in Northeast
- Engineering and Technical Services department
- Currently operating in Ledyard (Baldwin Hill Rd) & Bozrah CT
- Vast knowledge of blasting next to historic and sensitive locations



Maine Drilling & Blasting Next to Sensitive Location Klarman Hall at Cornell University/Mass General Hospital

60,000cy Boston West End Residences Mass General Surgeries background



West Point Cathedral



Letchworth State Park "Grand Canyon of the East" Castile, NY



Cultural Context of the Project Area Archaeological Survey of the Project Area

- The Allyn Cemetery will remain undisturbed and accessible
- Mount Decatur is the historical location of Fort Decatur
- Archaeological survey identified Fort Decatur and a Sentry Post
- Report submitted to State Historic Preservation Office (SHPO)
- Project sponsor has met twice with SHPO to consider Project effects
- Phase 1a and 1b completed
- Actively engaged with non-profit groups concerning the appropriate management and stewardship of the cultural resource area.
- Ongoing investigation is being conducted by the project Archaeologist.







South Bastion





Aerials of Fort Decatur





200' Eversource Power line Easement On Site