

Preservation and Adaptive Reuse Initiative Site Assessment, Planning and Feasibility Study

Public Informational Meeting, February 2nd, 2017

Team Introductions

Fisher Associates

Bill Price, RLA Sarah Hogan, RLA

Bero Architecture

Virginia Searl, RA Jennifer Ahrens, RA

Ryan Biggs Clark Davis

Jack Healy, PE Stacey Thomas

Mike Miller

MJ Engineering

Brian Cooper, PE Holly Capasso

Hartgen Archeological Assoc.

Justin DiVirgilio

Adirondack Studios

Seth Harkins

Popli Design Group

Joseph Parisella



















Inventory & Analysis

Site Inventory & HistoryFisher Associates

Environmental Site AssessmentFisher Associates

Building AssessmentBero Architecture

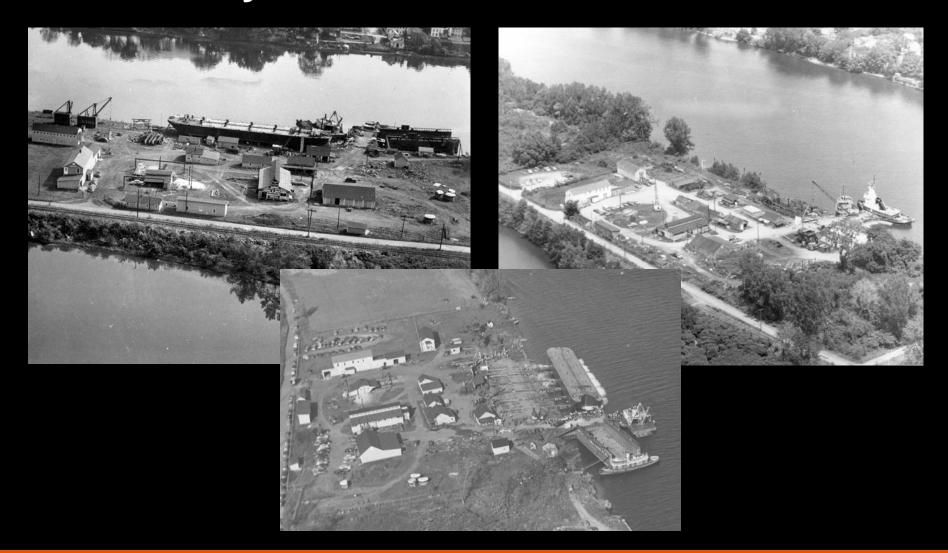
Structural AssessmentRyan Biggs Clark Davis

Hydrology SummaryMJ Engineering



Cultural Resource Survey Hartgen

Site History – Matton Shipyard development over the years.





Site History – Boats Constructed at Matton Shipyard



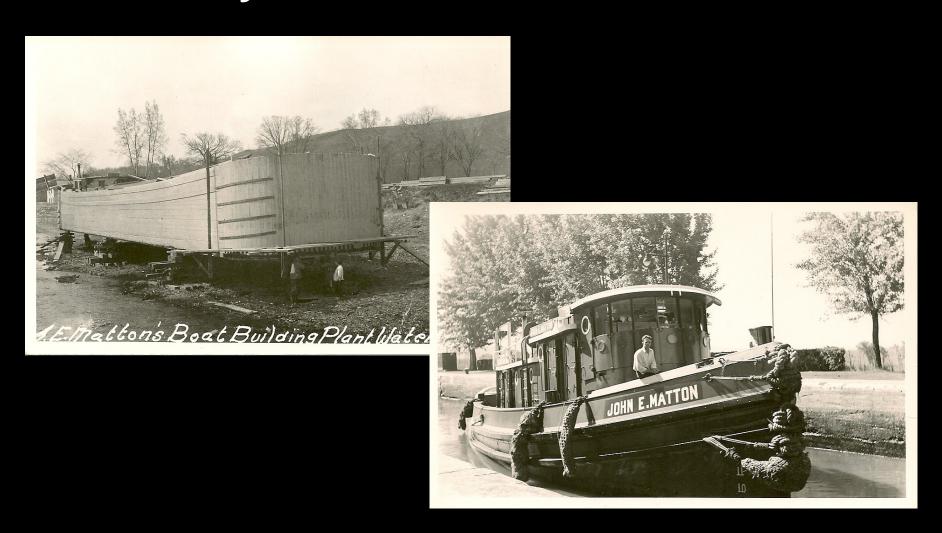








Site History – Boats Constructed at Matton Shipyard





Site Inventory

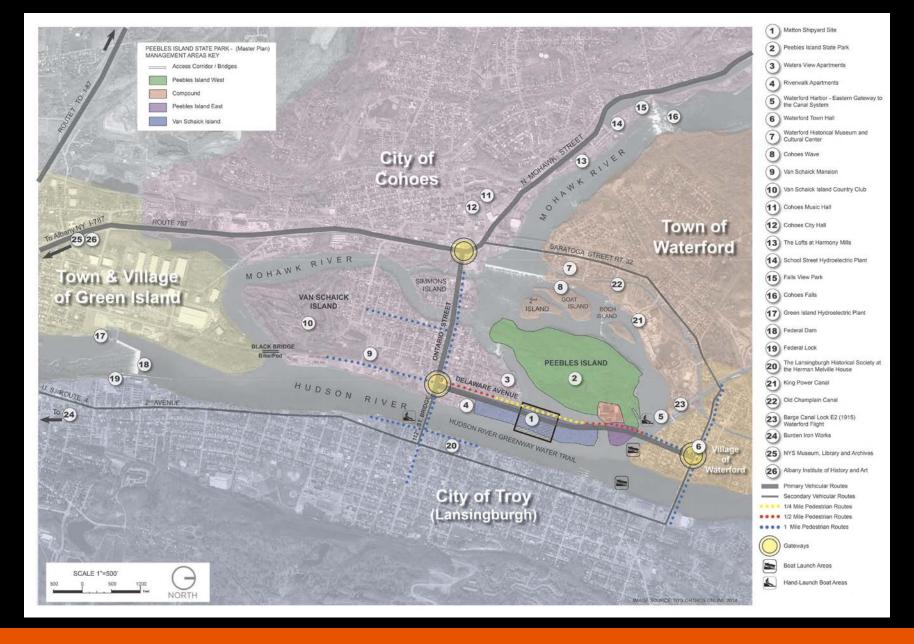
- Issues
 - Building Condition
 - Engineering
 - Utility Infrastructure
 - Shoreline Stabilization
 - Traffic, Pedestrian, Bike, Vehicular
 - Archeological (Pre-Contact Period)
 - Historic (Shipyard)
 - Textile Industry
 - Environmental
 - Hazardous
 - Ecological Flooding, Vegetation, Habitat

















Building Condition Assessment

- Salvageable Buildings
 - Building No. 1 Office / Stores
 - Building No. 3 Watchman's Building
 - Building No. 5 Carpenter Shop
- Non-salvageable Buildings
 - Building No. 6 Stores
 - Building No. 8 Pipe Shop
 - Building No. 9 Pitch Building
 - Building No. 12A Electrical Building







Building Condition Assessment

- Character-defining Features
 - The essential physical features that enable a property to convey its historic identity.
 - They define both why a property is significant and when it was significant.

Without them a property can no longer be identified.









Structural Building Assessment





- Structures Stable for Mothballing
- Structural Renovation Repairs
 - Roof Reinforcement
 - Base of Wall Framing Repairs
 - Floor Reinforcement (Based on Intended Use)
 - Foundation Repairs (Based Flooding Retrofit)
 - Lateral Bracing







Structural Building Assessment - Beyond Repair

Building 6 - Compressor/Tools Shop







Building 8 - Pipe Shop







Building 12A - Electrical Building



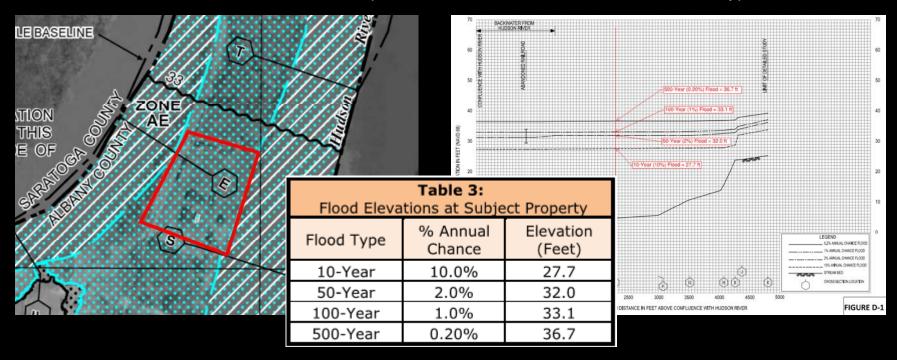






Hydrology Summary

- Flood Elevations
 - Ground elevations at the property range from 16 ft to 28 ft
 - FEMA Flood Insurance Study and FIRM Map
 - Provide 10, 50, 100, and 500-year flood elevations for Mohawk and Hudson
 - Utilizes cross-sections flood profiles of the rivers to determine the flood types





Hydrology Summary

- Property Base Flood Elevation (BFE) = 33.1 feet
- Hurricane Irene Flood Elevation = 29.08 feet (~30 year flood)
- Located in Flood Zone AE High-Risk Area
 - 1 in 4 chance of flooding during a 30-year mortgage
 - Home and business owners with mortgages from federal regulated insured lenders are required to purchase flood insurance.
- FEMA National Flood Insurance Program (NFIP)
 - FEMA P-936, Floodproofing Non-Residential Buildings (2013) Chapter 2: Design Considerations for Floodproofing
 - To order to achieve a favorable NFIP insurance rating, a building must be dry floodproofed to an elevation at least 1-foot above the BFE
 - BFE at property + 1 foot = 32.1 feet



Cultural Resource Survey

- Background Research Highly important Native American site at the north end of Van Schaick Island
 - Excavations were primarily done by avocational archeologists.
 - Findings north of Matton Shipyard include Numerous Native American burials, the outline of a stockade, a midden of mussel shell and sturgeon plates, complete pottery vessels, and other artifacts.
 - The site north of the shipyard was largely destroyed by topsoil stripping.
- The site continued southward into the Matton Shipyard.
 - Trade axe found by Homer Folger near the "planer site"
 - Hearth, projectile point, and concentration of fire-cracked rock observed by OPRHP archeologists in 1985 as fuel tank was removed. Two cultural strata were observed.
 - Indian burials reportedly found during World War II when a new building was constructed.



Community Outreach

- Stakeholder Interviews & Key Themes:
 - Public Water Access: kayaks, canoes, fishing, camping
 - Mixed-Use Development: restaurants, shopping
 - Tourism / Economic Development: museum trail
 - Education: BOCES, K-12, STEM
 - Regional Connectivity
 - Industrial Heritage
 - Natural Environment
 - Power Generation
 - Adjacent Islands
 - Multi-generational Experience
 - Women, Men, Children
 - Technology / Interactive
 - Maintain Authentic Industrial Character



Program Discussion

- Program Issues
 - Limiting Use of the Shipyard Property
 - Success Metrics
 - Financial & Operational Sustainability
 - Attendance
 - Create Industrial Aesthetic / Character "Clutter is Good"
 - Influence on Town Land Use Planning

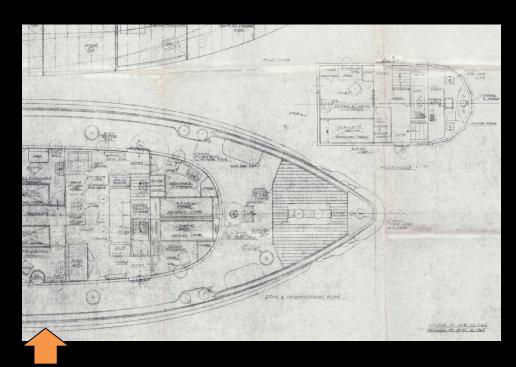


Program Discussion

- Program Opportunities
 - Availability of Adjacent Parcels / Masterplan Development
 - Terminal Wharf / Lands North of Matton
 - Public / Private Partnership
 - Event Venue
 - Commercial Partnership: Outdoor Sports
 - Rentals: Outdoor Equipment
 - Visiting Vessels
 - Boat Building / Boat Repair & Maintenance
 - Range of Water Access
 - Kayaks, Canoes, Transient Facilities
 - Water Taxi
 - Engage the Senses

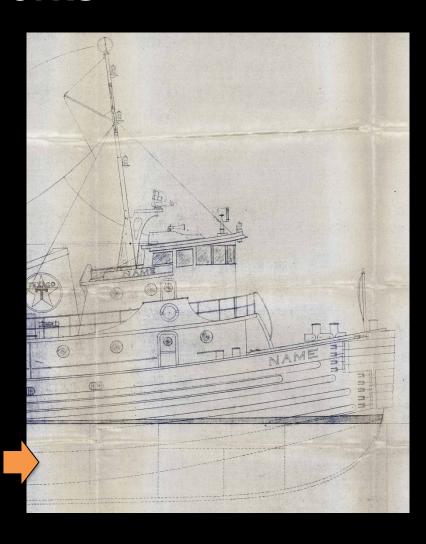


Plans from Burden Ironworks



Arrangement & Hold Plan, Welded Steel Diesel Tugboat
Turecamo Coastal & Harbor Towing
Merritt Demarest, Naval Architect Sept. 21, 1960

Outboard Profile, Welded Steel Diesel Tugboat Matton Shipyard Company Merritt Demarest, Naval Architect May 6, 1965





Project Next Steps

- Program Development
- Conceptual Site Plans
- Public Meeting #2 May 2017
- Implementation Strategies
- Final Masterplan Document



















Preliminary Program Discussion

- National Register Criteria
 - A
 - Property is associated with events that have made a significant contribution to the broad patterns of our history.
 - Commerce
 - Maritime History
 - Transportation
 - Industry
 - C
 - Property...represents a significant and distinguishable entity whose components lack individual distinction
- Aspects of Integrity
 - Location, Design, Setting, Materials, Workmanship, Feeling, Association



Environmental Site Assessment

Environmental Site Assessment Phase 1

- Paints, Solvents & Cleaning Products
- Wastewater disposal
- Fuel Tanks

Visual Site Assessment

- Asbestos & Lead Base Paint
 - Building Surfaces Lead Base Paint
- Asbestos Containing Building Materials
 - Roof Shingles, Floor Tiles, Wall Plaster, Window Glaze

Recommendations

- Hazardous Materials Survey
- Removal of Paints, Solvents & Cleaning Products, Fuel Tanks



Hydrology Summary

- Hurricane Irene
 - Floodwaters peaked on August 29, 2011
 - Waterlines at office building = 29.08 ft
 - Flood Type
 - Mohawk = 23- year flood (Using E)
 - Hudson = 35-year flood (Using S)

- Table 3: Flood Elevations at Subject Property % Annual Elevation Flood Type Chance (Feet) 10-Year 10.0% 27.7 32.0 50-Year 2.0% 100-Year 1.0% 33.1 500-Year 0.20% 36.7
- USGS Floods of 2011 in New York Scientific Investigation Report 2014-5058
 - Used USGS stream gauges upstream at Cohoes (Mohawk) & Waterford (Hudson)
 - Maximum gauge discharge for each = 30-year flood

		Streamgage name	Drainage area (mi²)	Period-of-record peak discharge				August 26–29, 2011, peak discharge					
Map num- ber	Streamgage number			Period of record	Date	Stage (ft)	Dis- charge (ft²/s)	Date	Time (h)	Stage (ft)	Dis- charge (ft²/s)	Annual exceedance probability (percent)	Recurrence interval (years)
26 0	1335754	Hudson River above Lock 1 near Waterford, N.Y.	4,605	1888-1929	03/28/13		120,000						
				1930–56, 1977–2011	01/01/49		118,000	08/29/11	1815	34.60	75,500	3,3	30
53 (1357500	Mohawk River at Cohoes, N.Y.	3,450	1918-2011	03/06/64	23.15	143,000	08/29/11	1300	21.86	117,000	3.3	30



Cultural Resource Survey

Field Results

- Southeastern 1/3 of property has been disturbed to a depth of at least 3 feet.
- Remaining 2/3 of property contained three principal strata:
- (1) fill/recent alluvium
- (2) a buried "A" horizon/former ground surface pre-dating the Matton Shipyard
- (3) "B" horizon/subsoil
- Paul Huey (OPRHP) noted evidence of cultural stratum at about 3 feet deep while observing removal of a fuel tank in 1985. This layer was not observed in the shovel tests.
- Precontact artifacts were primarily debitage, with a few bifaces and firecracked rock.

