DIVISION OF PORTS AND HARBORS

WWW.PORTOFNH.ORG

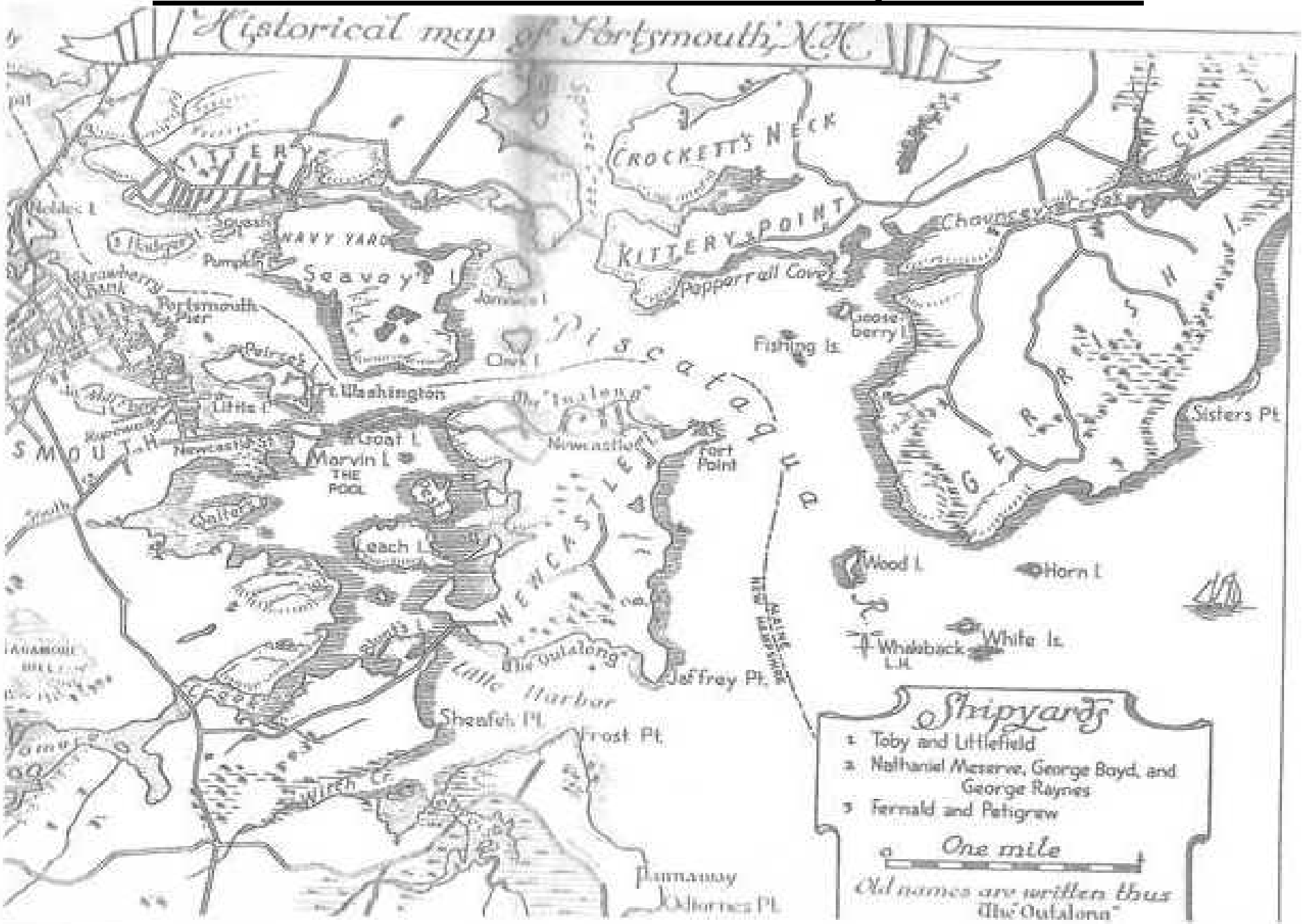
NOVEMBER 26, 2012

DIVISION OF PORTS AND HARBORS RESPONSIBILITIES

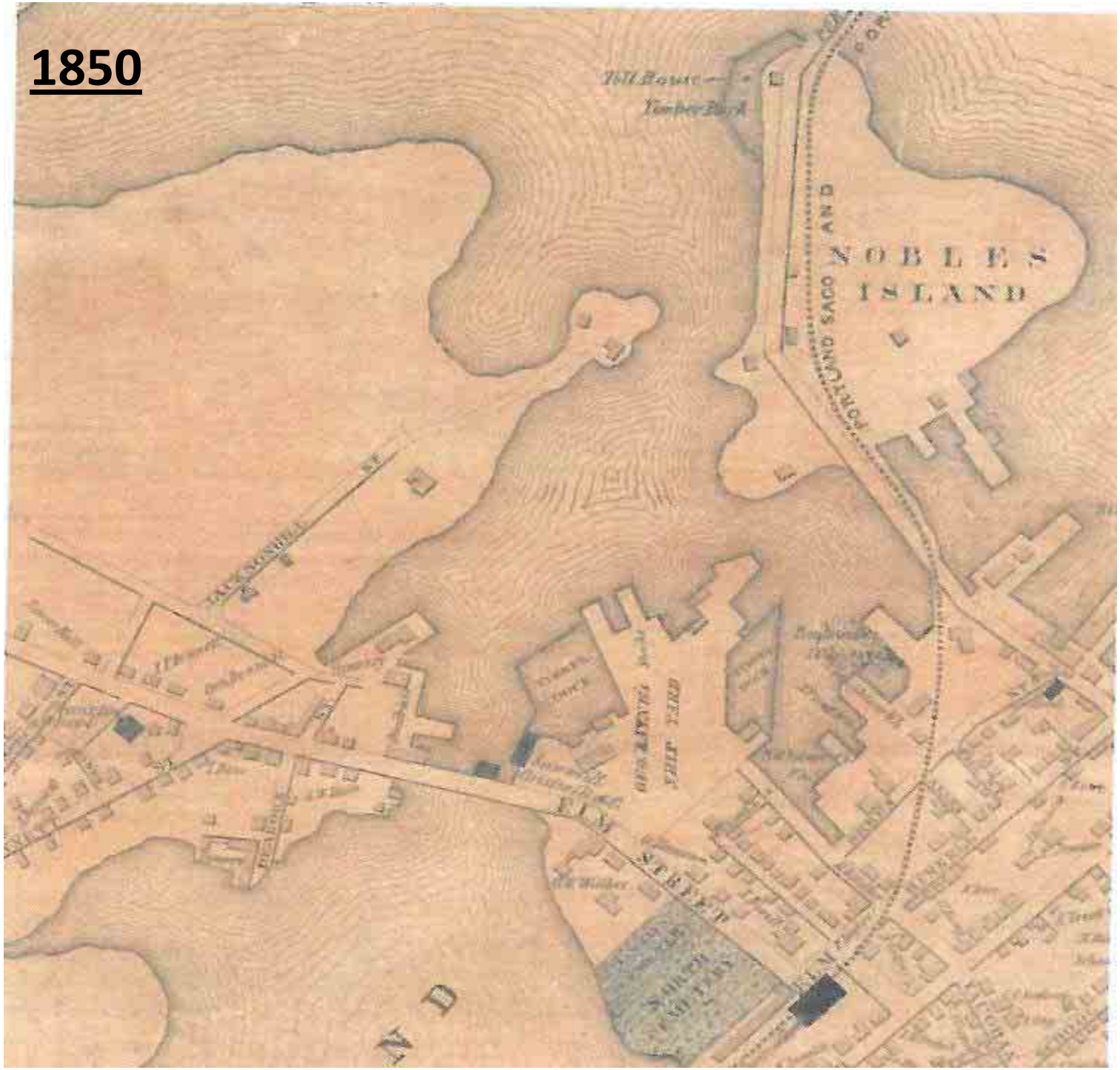
The management, maintenance, operation and maritime security of:

- **The state's only deep water, public access, general cargo marine terminal**
- **The passenger/ferry, commercial fishing and recreational vessel facilities in Portsmouth, Rye and Hampton Harbors**
- **Permitting of moorings and the placement of aids to navigation in State tidal waters**
- **Licensing of harbor, river and docking pilots**
- **Maintaining and dredging channels, harbors and anchorages**
- **Establishing and maintaining Foreign-Trade Zones in New Hampshire**
- **Management of a Revolving Loan Fund for the Commercial Fishing Industry**

HISTORICAL SKETCH OF PISCATAQUA HARBOR

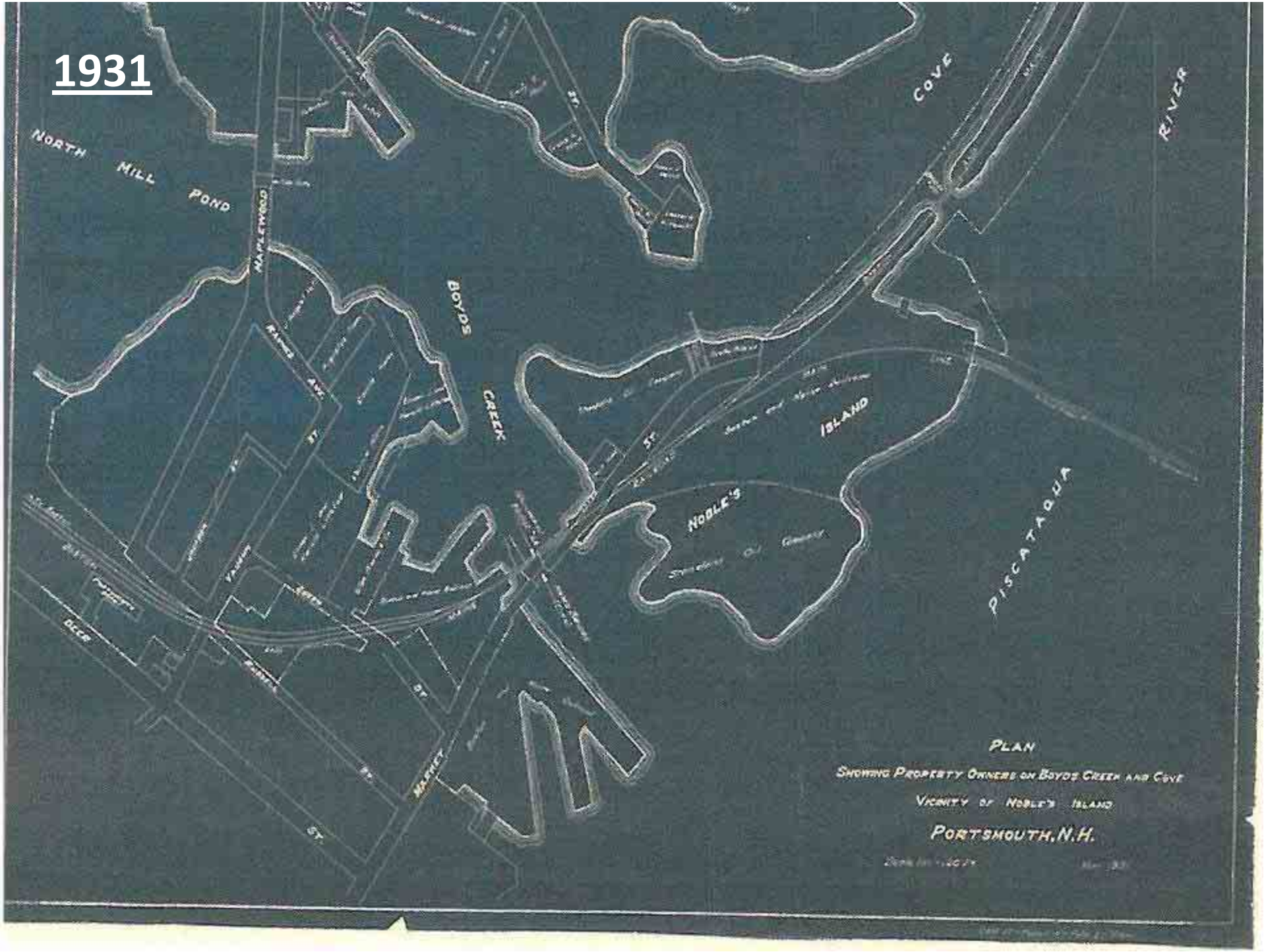


“MORNING LIGHT”
LAUNCHED 1853
TOBEY & LITTLEFIELD SHIPYARD


1850
NOBLES
ISLAND
PORTLAND AND
STREET

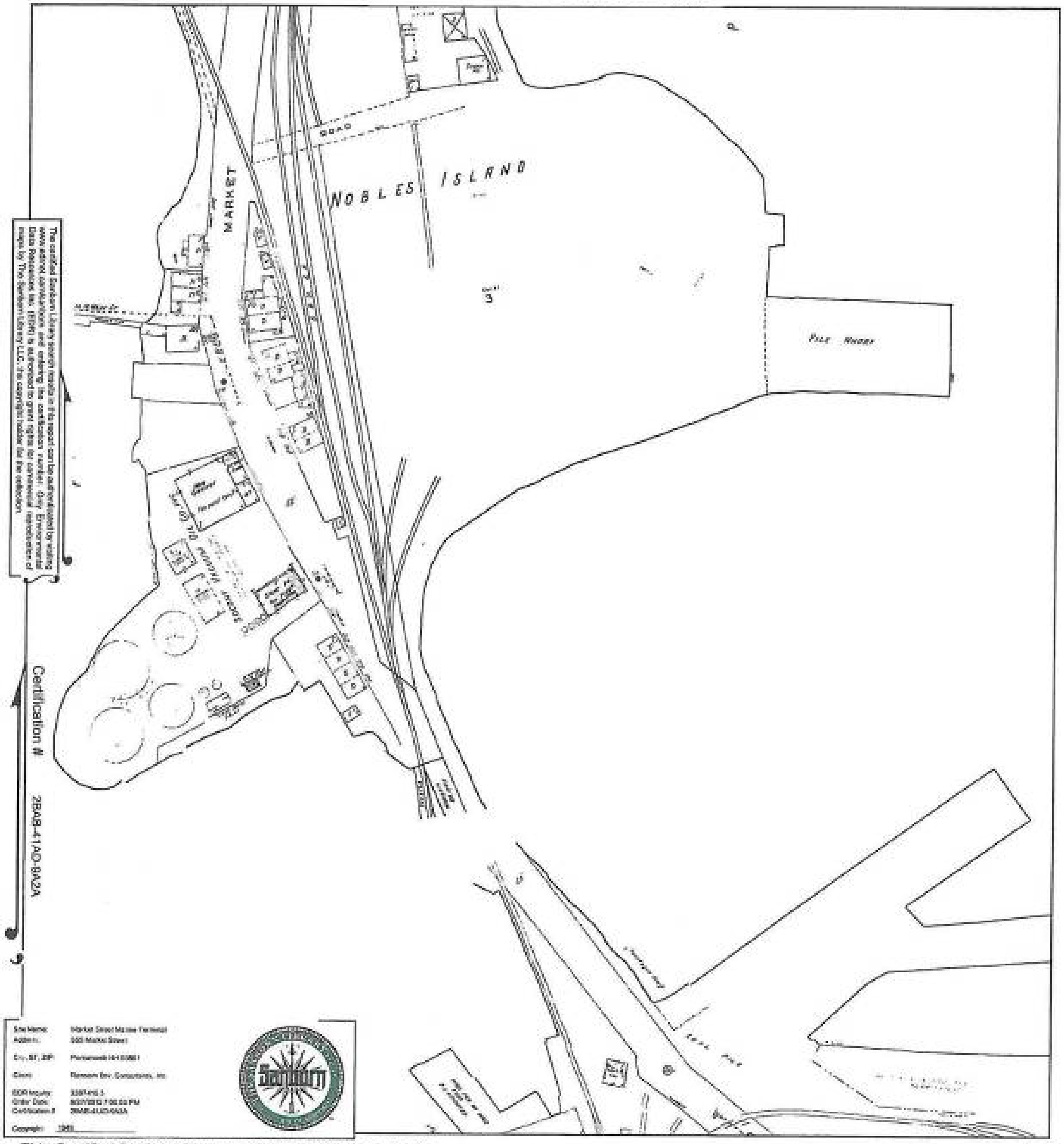
MARKET STREET WORKING WATERFRONT

1907


1931
NORTH
MILL
POND
MAPLEWOOD
AVE
BOYDS
CREEK
COVE
RIVER
ISLAND
NOBLE'S
PISCATAQUA
MARKET
ST
PLAN
SHOWING PROPERTY OWNERS ON BOYDS CREEK AND COVE
VICINITY OF NOBLE'S ISLAND
PORTSMOUTH, N.H.

1949

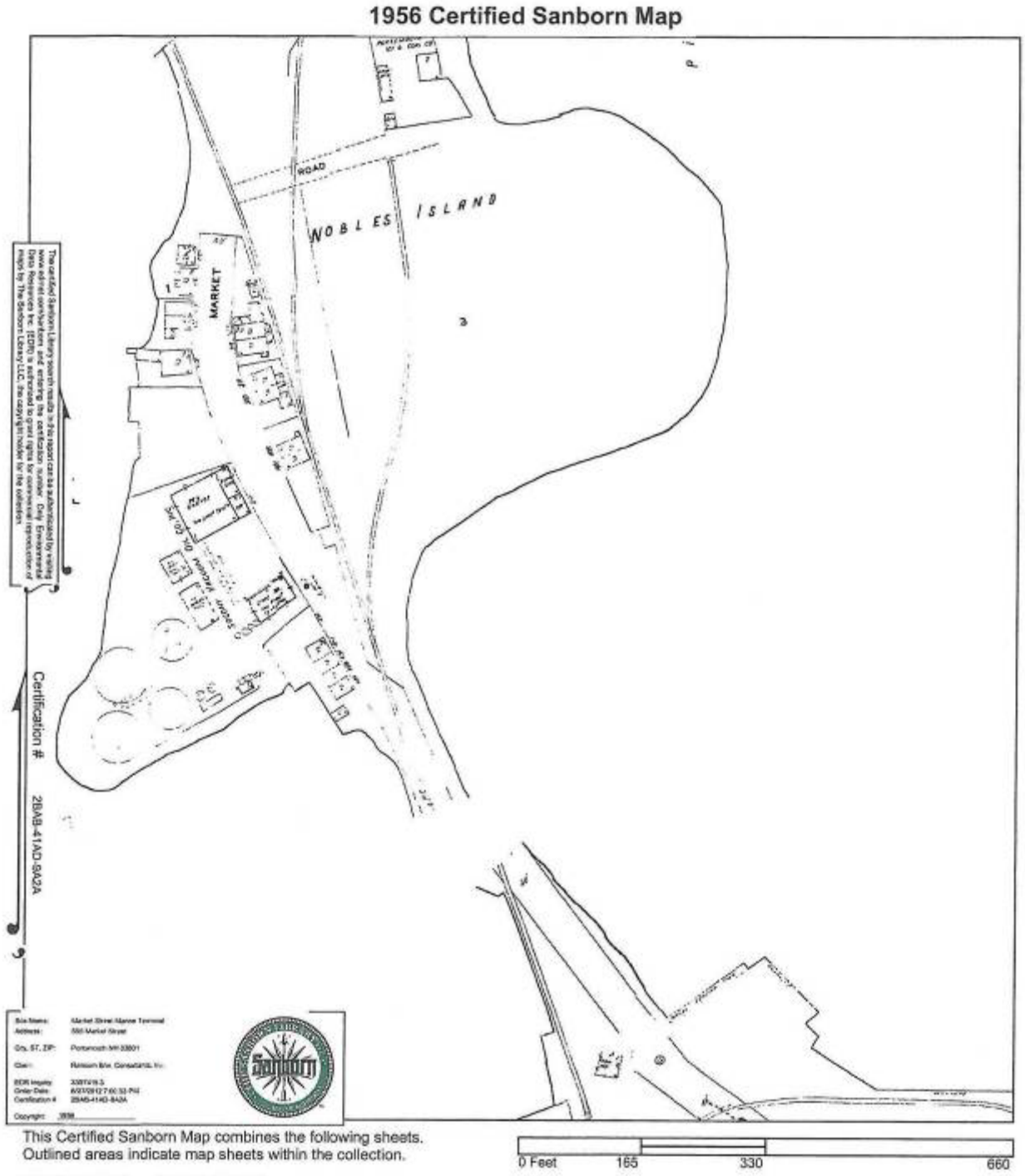
1949 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

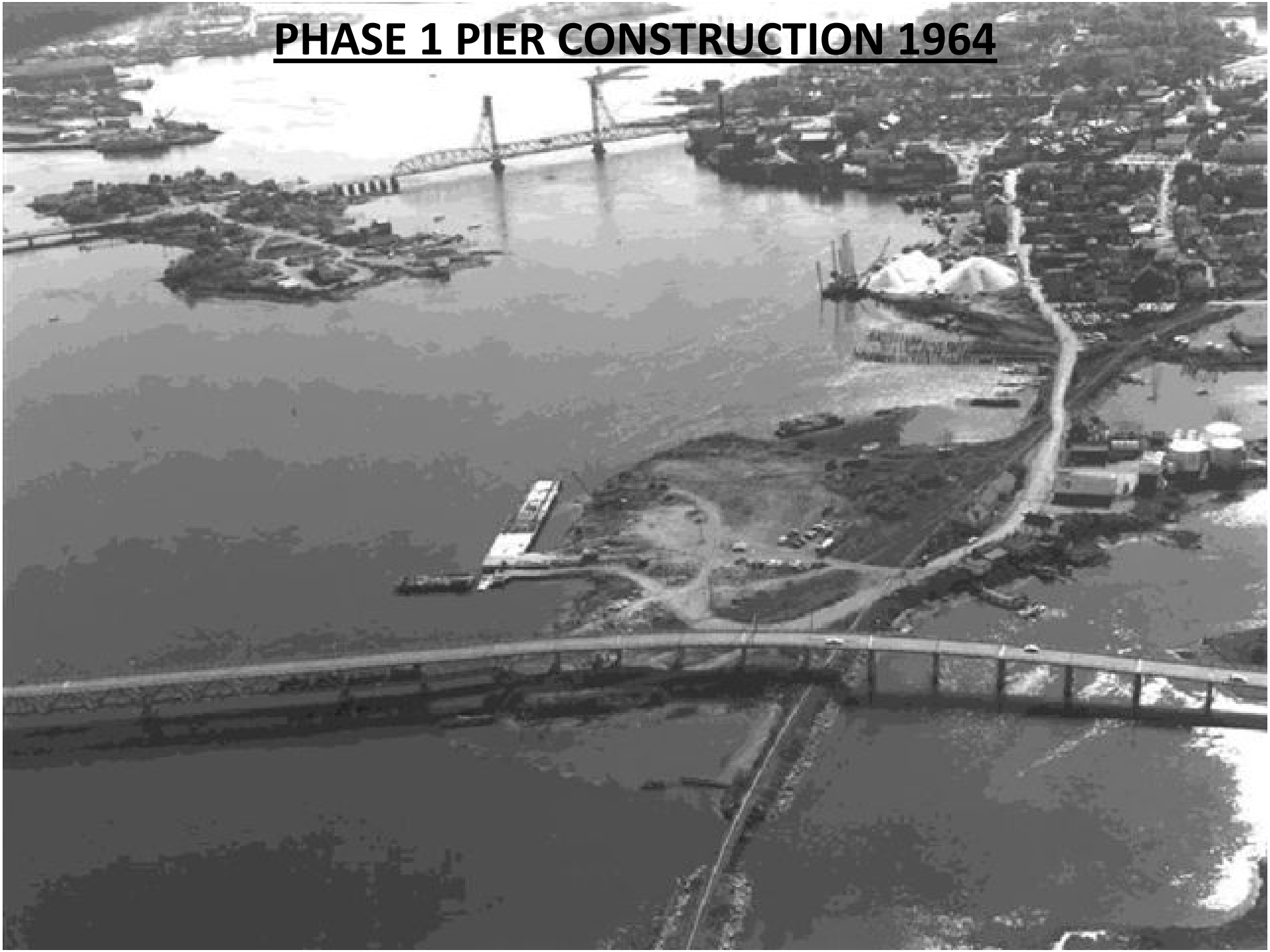
0 Feet 165 330 660

1956


1956 Certified Sanborn Map
ROAD
NOBLES ISLAND
MARKET
Certification #
2BA8-41AD-9A2A
This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.
0 Feet
165
330
660

NOBLE'S ISLAND - 1950'S

PHASE 1 PIER CONSTRUCTION 1964



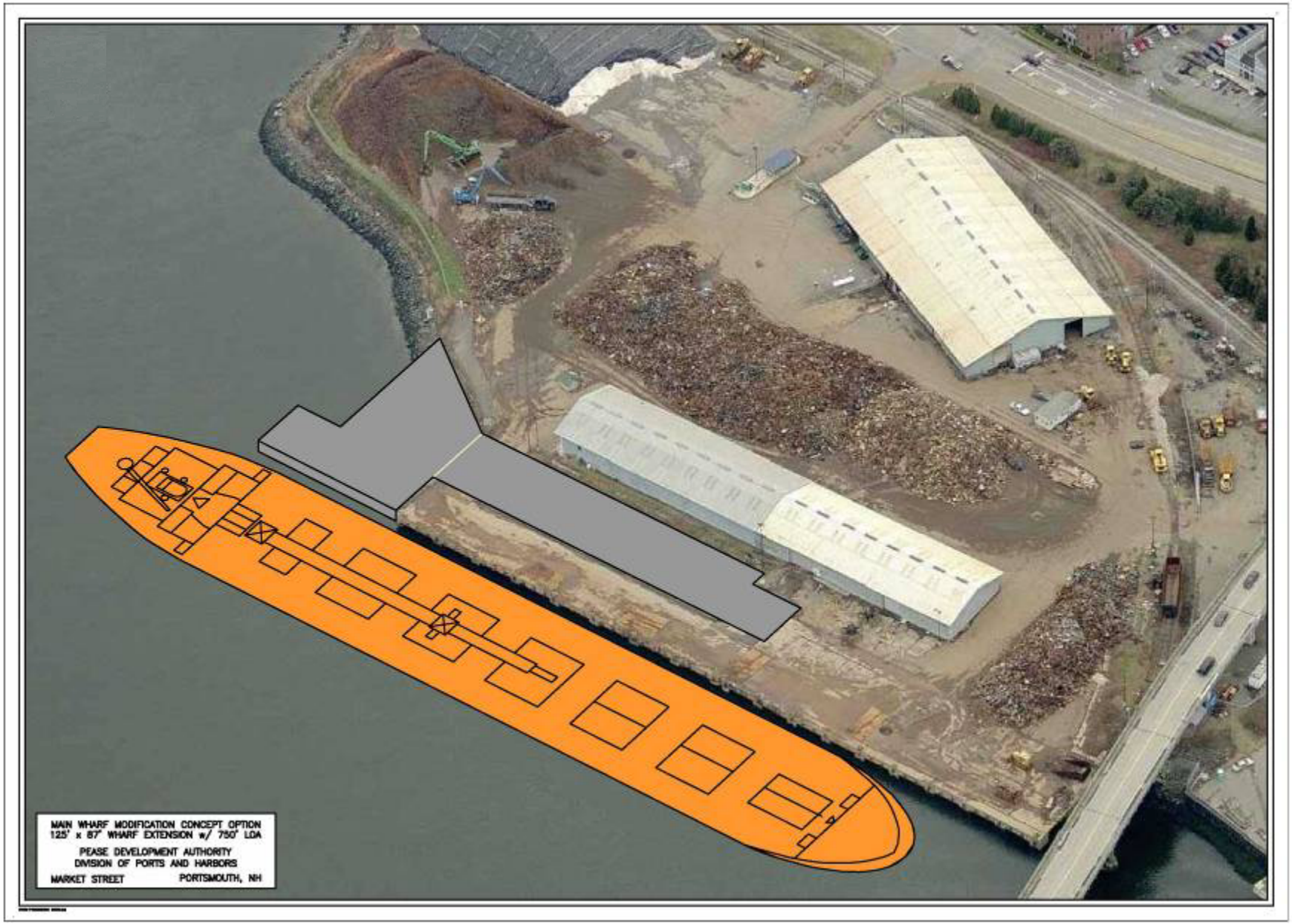
MARKET STREET MARINE TERMINAL 1966

PHASE 2 PIER CONSTRUCTION 1977

PHASE 3 PIER CONSTRUCTION 1997

PHASE 4 PIER CONSTRUCTION 2008

PROPOSED PHASE 5 PIER CONSTRUCTION



MARKET STREET MARINE TERMINAL CARGO ACTIVITIES

POWER PLANT COMPONENTS

ROAD

GYPSUM ROCK

WINDMILL COMPONENTS

MARKET STREET MARINE TERMINAL CARGO ACTIVITIES

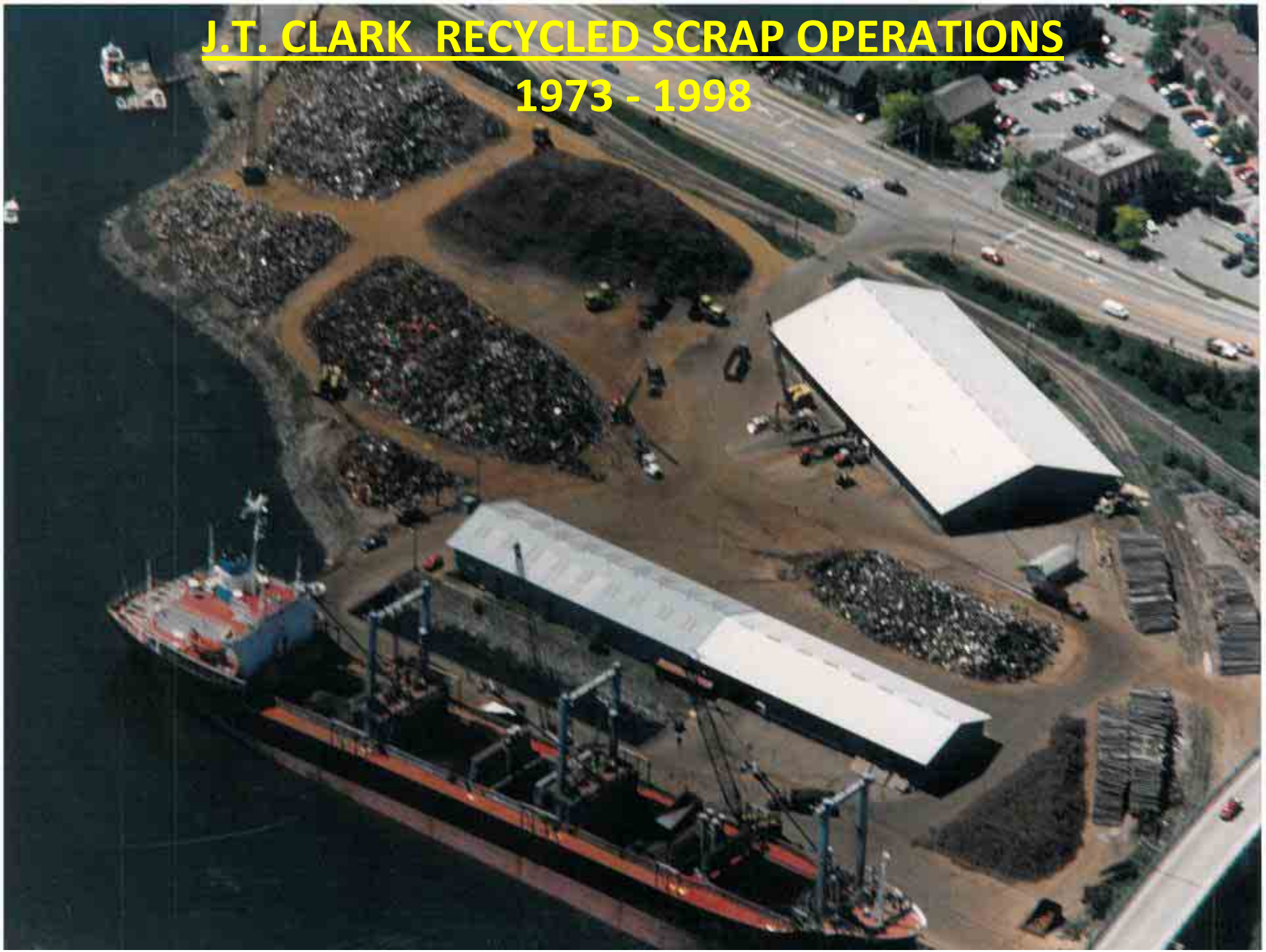
CARGO HANDLING EQUIPMENT

VULCANIZING

AREA MARITIME SAFETY TRAINING

TRANSFORMERS

MEMORIAL BRIDGE ASSEMBLY


J.T. CLARK RECYCLED SCRAP OPERATIONS
1973 - 1998

GRIMMEL RECYCLED SCRAP EXPORTS
2002 – PRESENT

FY2013 TD	6 SHIPS	94,305 TONS
FY2012	7 SHIPS	144,534 TONS
FY2011	6 SHIPS	172,507 TONS
FY2010	10 SHIPS	153,631 TONS
FY2009	10 SHIPS	124,101 TONS
FY2008	13 SHIPS	174,344 TONS
FY2007	9 SHIPS	184,874 TONS
FY2006	10 SHIPS	198,865 TONS
FY2005	10 SHIPS	214,577 TONS
FY2004	6 SHIPS	177,959 TONS
FY2003	4 SHIPS	86,741 TONS
FY2002	1 SHIP	17,500 TONS

RECYCLED SCRAP METAL
NEW HAMPSHIRE'S EXPORT RANKING
2012 #10 EXPORT*
2011 # 9 EXPORT*

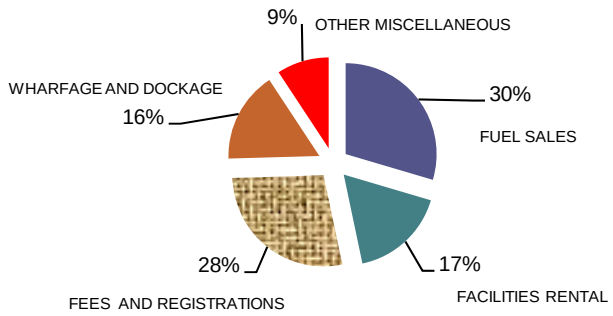
*Statistics from WISERTrade

DIVISION OF PORTS AND HARBOR
ANALYSIS OF UNRESTRICTED FUNDS- NET CASH FLOW

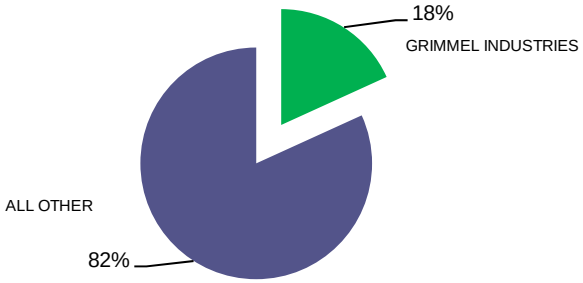
($ 000'S)

	2008	2009	2010	2011	2012
NET OPERATING INCOME	53	116	178	61	410
ADJUSTMENTS					
CAPITAL PROJECTS	-	(90)	(75)	(70)	(170)
NET CASH FLOW FROM OPERATIONS	53	26	103	(9)	240
IMPACT OF POTENTIAL LOSS OF GRIMMEL INDUSTRIES REVENUES	(398)	(363)	(404)	(462)	(469)
ADJUSTED NET CASH FLOW FROM OEPRATIONS	(345)	(337)	(301)	(471)	(229)

SOURCES OF OPERATING REVENUES



TOTAL OPERATING REVENUES



Recent Stormwater Management Upgrades

- EPA Stormwater General Permit for Industrial Activities
  - Regulates stormwater from sites with ongoing industrial activities by Standard Industrial Classification Codes
  - Prohibits discharges from industrial processes
  - Establishes BMPs and benchmarks
  - Requires monitoring + reporting
- Basic concept – Meet benchmarks with BMPs + avoid process water discharges

Regulatory Challenge for Recycled Metal Storage Piles

- Challenge -- Simultaneous compliance with state fugitive dust rule + federal stormwater discharge requirements
- NHDES “fugitive dust” rule
  - Management of “fugitive dust”
    - Wetting
    - Housekeeping
- But – EPA says water runoff from dust suppression are “process waters”

The Solution

- Consolidation of metal recycling operations to meet EPA + NHDES requirements
  - Incorporated into Division stormwater management system upgrades related to pier expansion
  - New outfall
  - Primary Treatment of Sediments
- Benefits of consolidation
- Housekeeping + “Adaptive Management”

Industrial Hygiene Monitoring – Current Operations

Evaluation included:

- Metals (zinc, lead, arsenic, cadmium, chromium, barium, mercury)
- PCBs (a historical component of automotive, plastics, paints, oils, caulking, adhesives, electrical components)

Evaluation for selected analytes for:

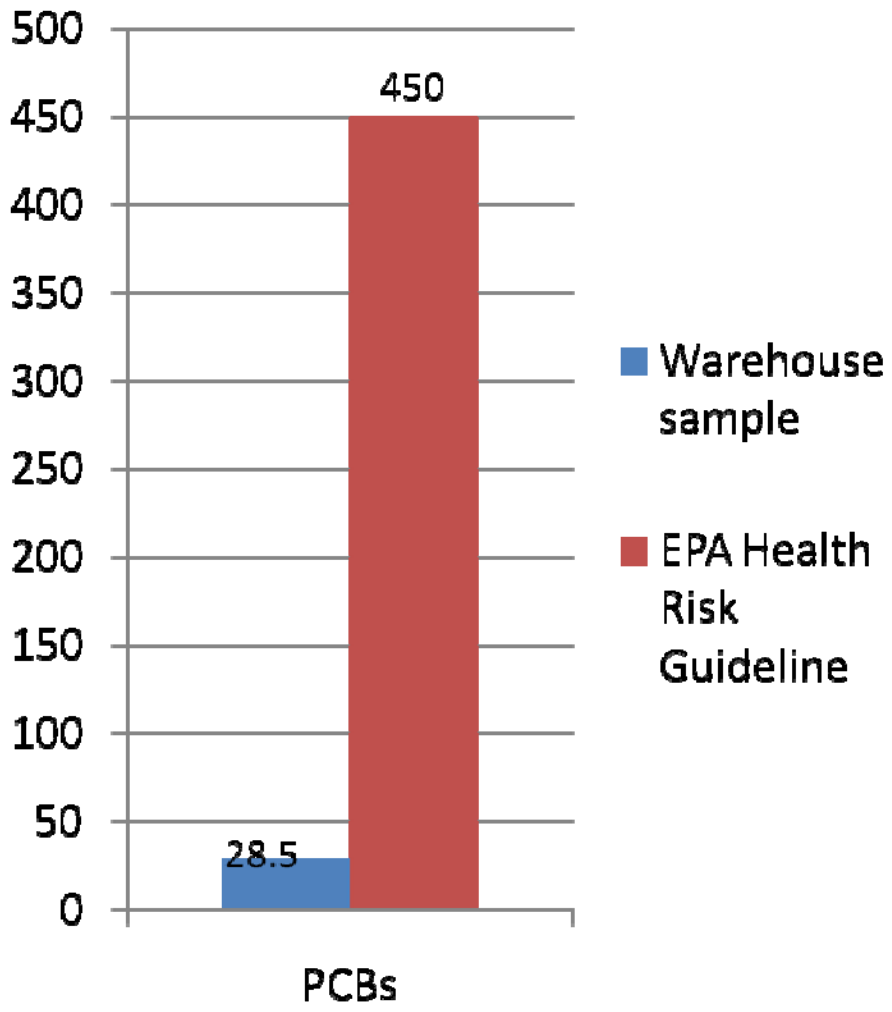
- Facility Workers (personal air monitors)
- Interior Office & Warehouse Air
- Interior Office & Warehouse Dust

Industrial Hygiene Monitoring-Results

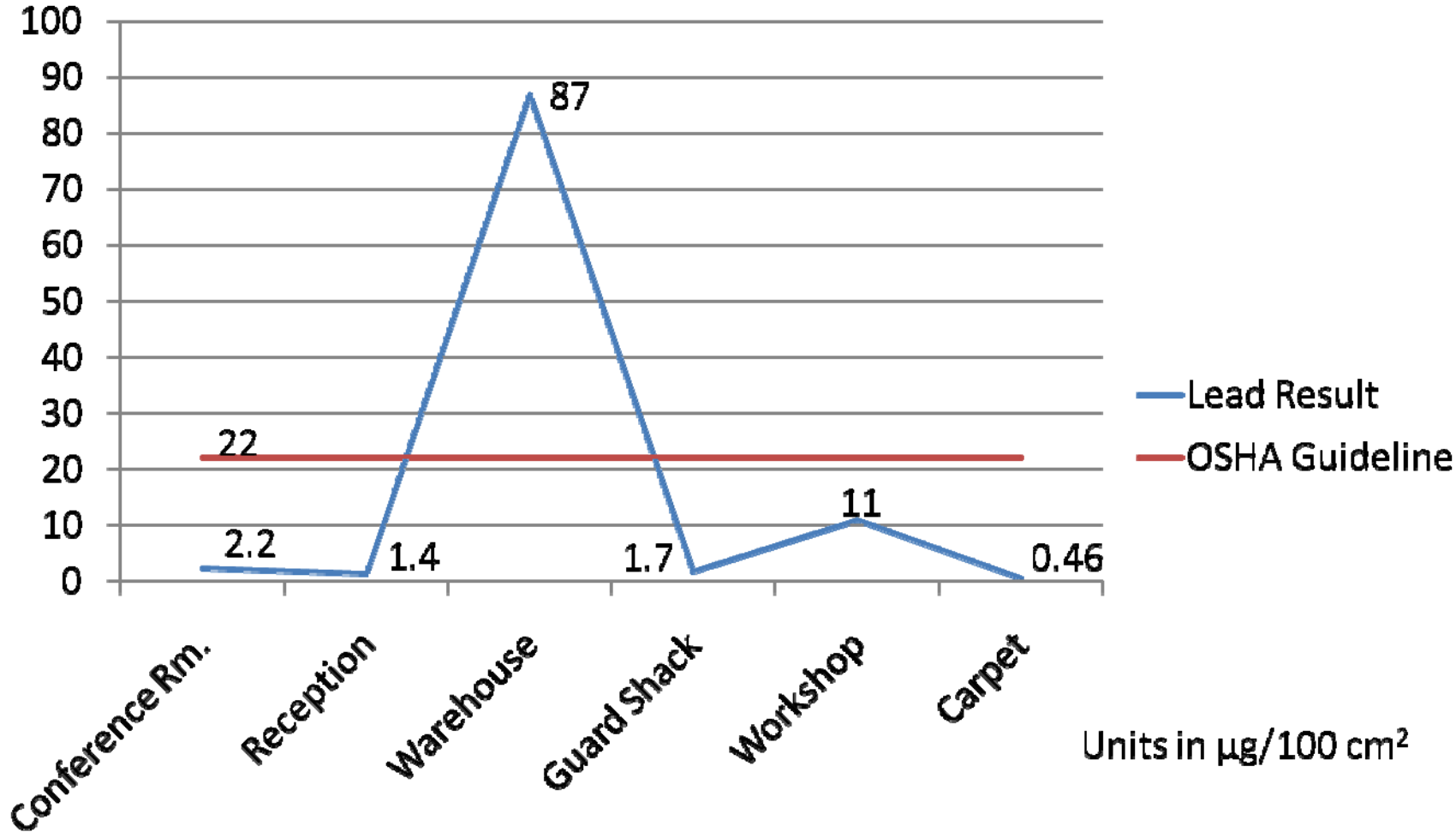
- **Wipe Samples:**
  - PCBs not detected
  - Lead was detected in five samples.
  - Four lead results were 50% or less of the OSHA recommended threshold (22 µg/100cm^2)
  - One warehouse dust sample – lead at 87 µg/m^2, was about 4 times the OSHA recommended threshold.
- **Carpet Vacuum Sample:**
  - Lead at 0.46 µg/100 cm^2, about 50x below the recommended threshold of 22 µg/100 cm^2
- **Personal Exposure Air Monitoring:**
  - No PCBs or lead detected
- **Ambient Air Monitoring:**
  - PCBs detected at 28.5 ng/m^3, below the USEPA guideline of 450 ng/m^3
  - Lead not detected

Industrial Hygiene Monitoring- The Results in Context

- Ambient air Warehouse PCB sample was 6.3% of the US EPA health risk guideline of 450 ng/m^3 for adults greater than 19 years of age.



Industrial Hygiene Monitoring- The Results in Context

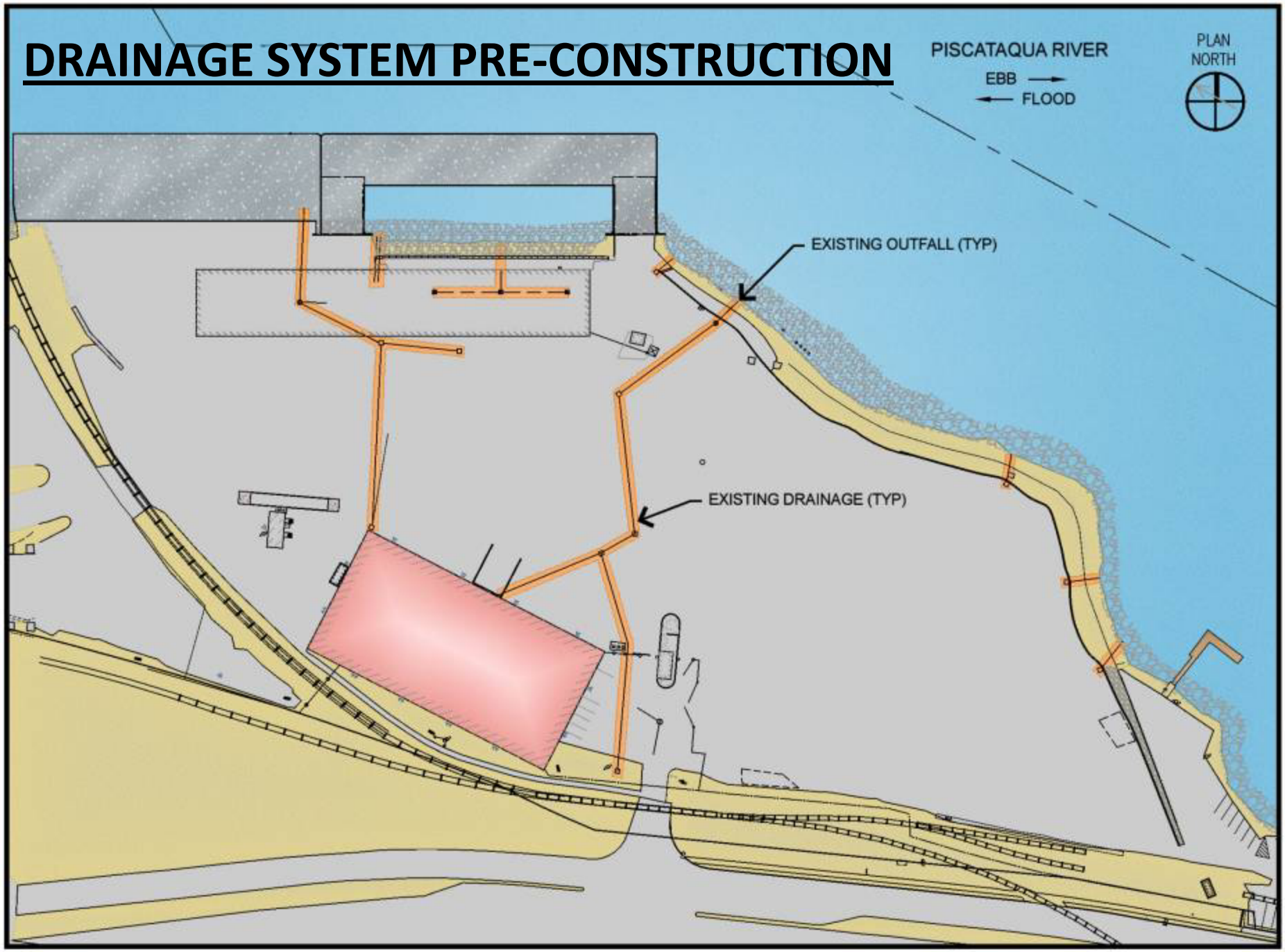


Next Steps

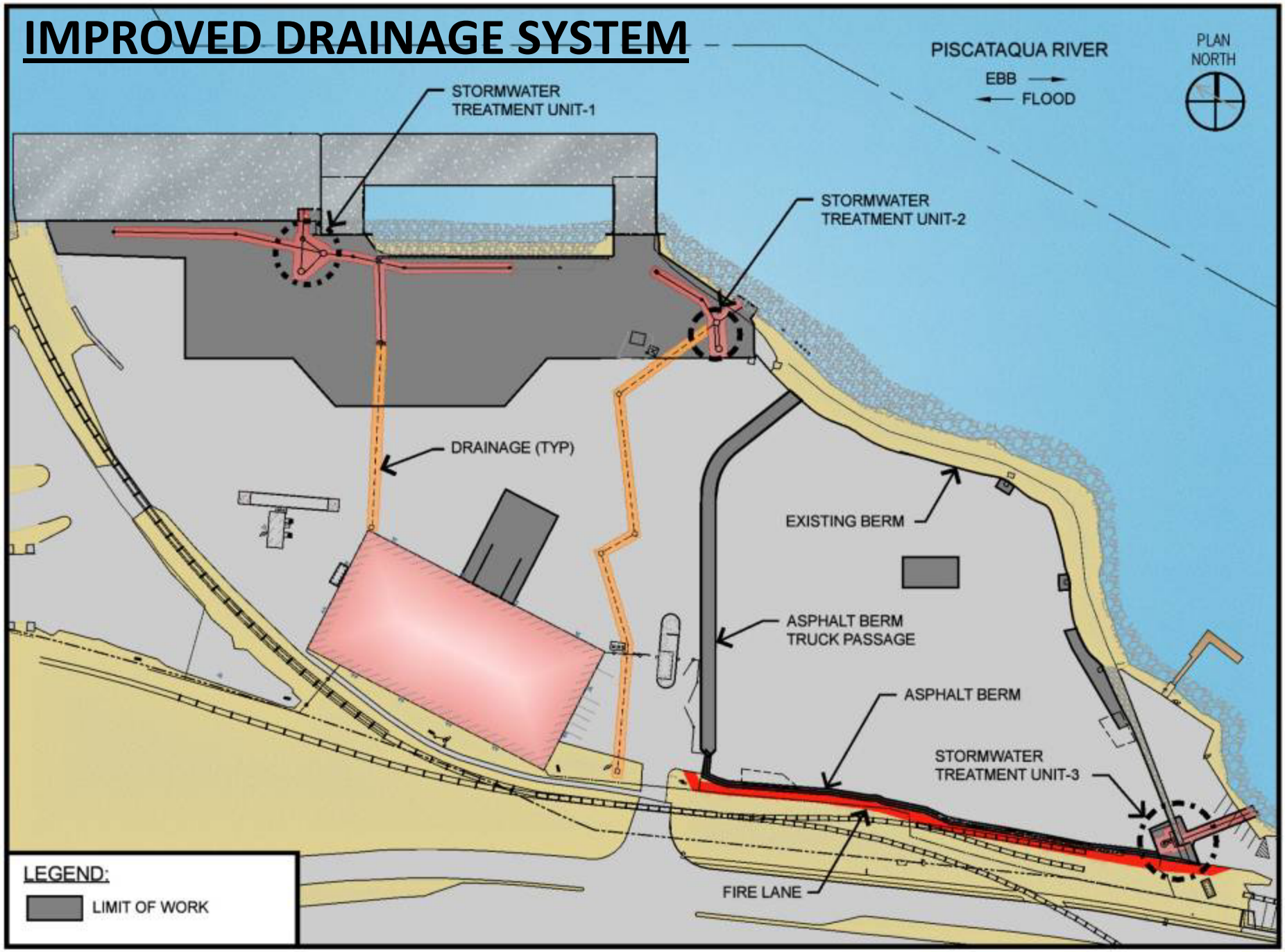
- Primary treatment efficacy testing

- On-going review of the effectiveness of housekeeping BMPs

DRAINAGE SYSTEM PRE-CONSTRUCTION



IMPROVED DRAINAGE SYSTEM



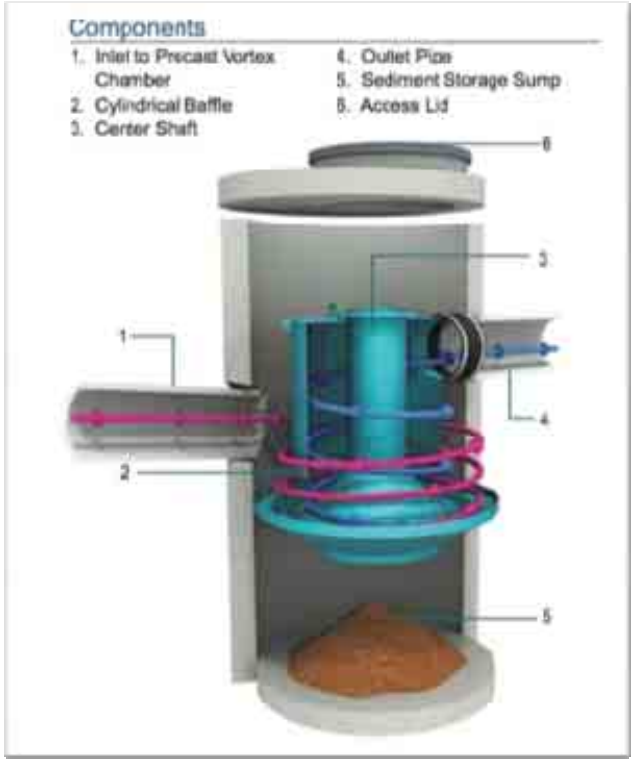
Market Street Marine Terminal Drainage Improvements

Treats Stormwater in Near Term and
Supports Future Expansion of Wharf in Long Term

PROJECT SUMMARY:

1.$700,000 modernization of drainage system to treat stormwater runoff.
2.Elimination of 4 outfalls and overland flow into Piscataqua River that discharge untreated runoff.
3.Installation of a new stormwater collection system and three hydrodynamic water treatment units.
4.When complete, all storm water from main yard will be directed into the treatment system.

Drainage construction October 16, 2012



Hydrodynamic particle separator designed to remove 80% of suspended solids form runoff

POST CONSTRUCTION CARGO CONSOLIDATION

SURVEY NOTES

1. DRAWING BASED ON TOPOGRAPHIC PLAN FOR PORTSMOUTH PORT AUTHORITY, MARKET STREET, PORTSMOUTH, NEW HAMPSHIRE PREPARED BY DOUCET SURVEY, INC. AND DATED MAY 6, 2011.
2. TOPOGRAPHIC SURVEY COMPLETED BY DOUCET SURVEY, INC. IN APRIL 2007, SEPTEMBER 2007, AND APRIL 2011.
3. HORIZONTAL DATUM – NH STATE PLANE 1983/NAD 1983 (CONUS) ZONE NH–2800.
4. VERTICAL DATUM IS BASED ON MEAN LOWER LOW WATER. THIS DATUM WAS CONVERTED FROM NAVD USING A CONVERSION FACTOR OF + 4.62.

PROJECT: Division of Ports and Harbors - Salt and Scrap Metal Storage Locations After Construction

DESIGNED BY: MRM DATE: 9/4/12 SCALE: 1"=120'

PEASE DEVELOPMENT AUTHORITY

55 INTERNATIONAL DRIVE, PORTSMOUTH, NH 03801

GRIMMEL INDUSTRIES SITE IMPROVEMENTS

- Integrate stormwater and process water controls with PDA port improvements
- Construct berm to isolate metal storage area
- Capture and reuse dust control water
- Eliminate process water discharges
- Separate the metal and salt piles to minimize metal corrosion
- Provide a stormwater treatment system
- Reduce stormwater constituents to achieve EPA requirements

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environmental consultants

GRIMMEL INDUSTRIES SITE IMPROVEMENTS

- Enable more frequent and more thorough dust suppression spraying
- Implement improved housekeeping BMPs (street sweeping, catch basin cleanouts) for the metal processing operations
- Enhance site sweeping frequency after ship loading and at least monthly in travelways and loading and storage areas
- Result in a significantly cleaner site with improved stormwater quality and less dust
- Ensure compliance and take additional corrective actions if necessary
- Use curtain/tray system during ship loading

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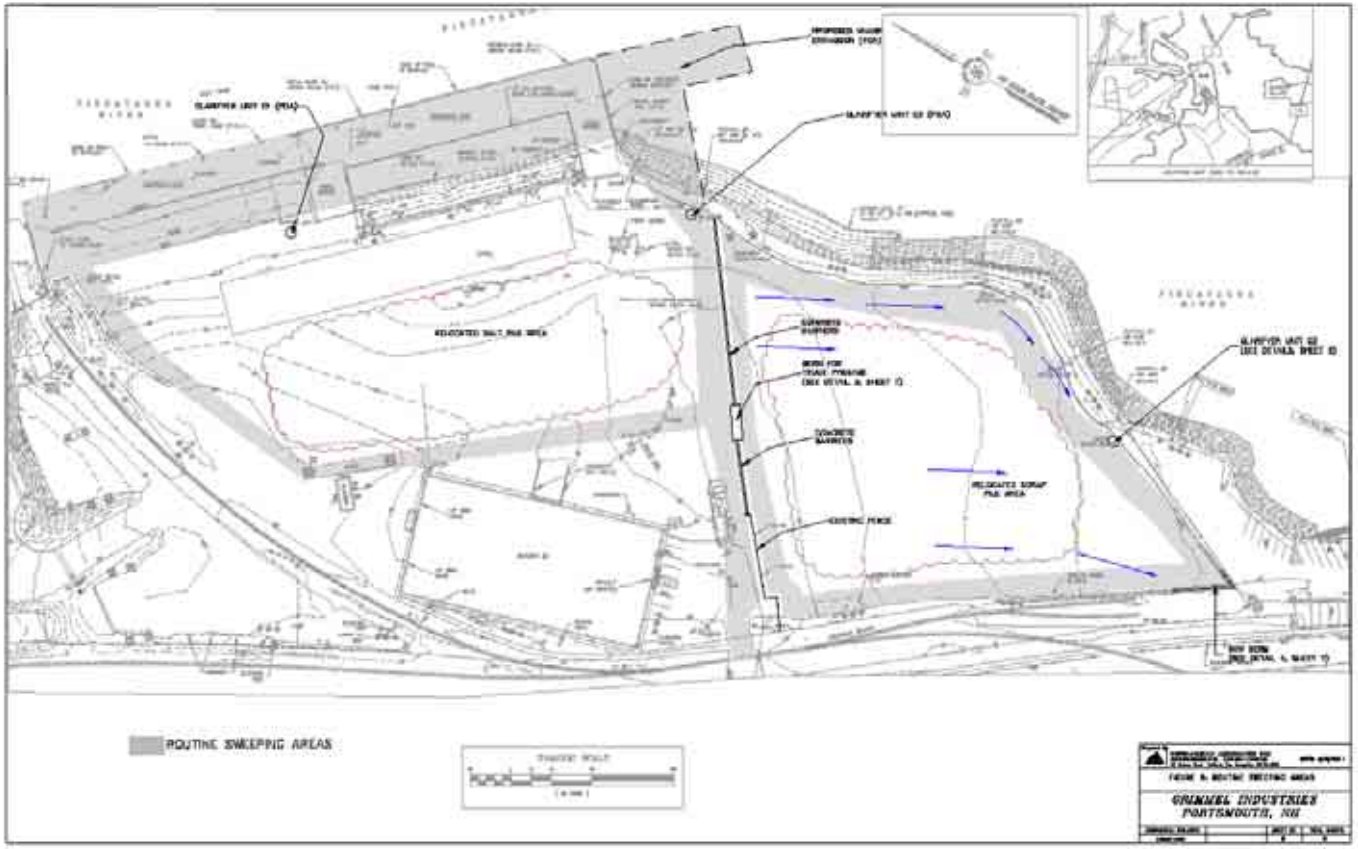
GRIMMEL SWEEPING AREAS



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DUST SUPPRESSION SPRAYING

Scrap Metal

Nozzle Spraying

Dust Boss Misting

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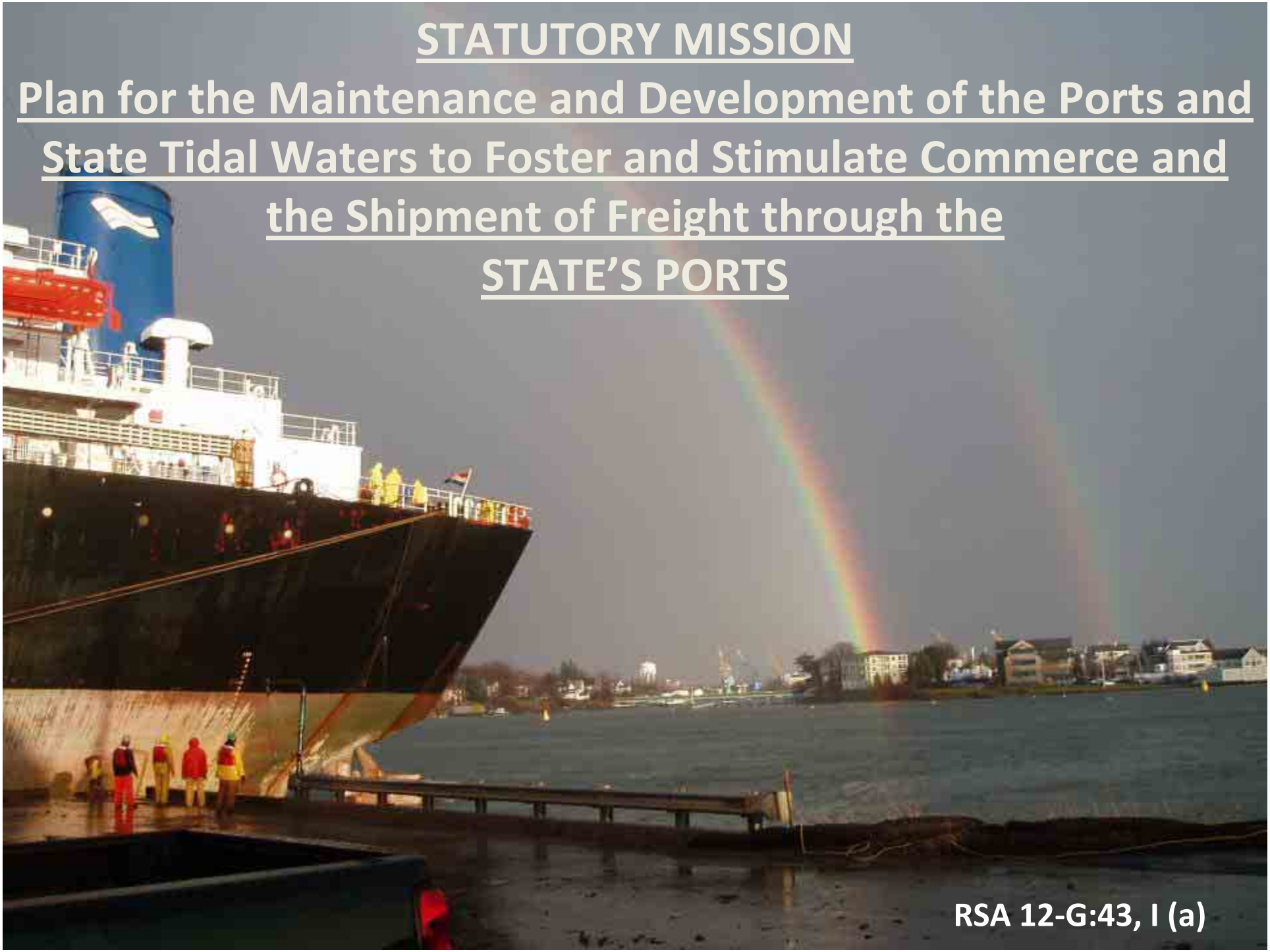

STATUTORY MISSION

Plan for the Maintenance and Development of the Ports and State Tidal Waters to Foster and Stimulate Commerce and the Shipment of Freight through the STATE'S PORTS

RSA 12-G:43, I (a)