
Welcome to
Milwaukee

The Port of Milwaukee

The Port of Milwaukee is a critical transportation and distribution link to Southeastern Wisconsin's Economy

The Commercial Port's Mission

The Mission of the Port is to enhance the overall economic and social environment of our region by stimulating trade, business and employment.

Consistent with the Port's water-related location, the Port shall strive to be a premier provider of transporation and distribution services for its commercial customers and support public recreation, leisure and other uses the Port deems to be in the public interest.

Shipping through the Port of Milwaukee saves area consumers over $38.7 million annually on transportation costs.

Here's the Bulk of it…

Transportation & Distribution!

Over 3,000,000 tons of B**ulk** cargoes -
salt, coal, grain and cement -
are transported through the Port yearly.

The Port distributes salt north to Fond du Lac, west to Madison and Rockford, and south to O'Hare.

Salt - 250,000 lane miles of streets are covered with the Salt distributed from the Port.

It takes

180 rail cars or

692 trucks to carry

the same load as just

1 cargo ship.

The Port brought in 2.6 billion pounds for the 2007/2008 shipping season and its almost all gone.

AREA CEMENT USERS **SAVE $10 MILLION** ANNUALLY BY USING THE PORT OF MILWAUKEE

Cement - during an average year, the amount of cement that is transported through the Port is enough to pave an interstate between Madison and Minneapolis

Grain Exports, including corn, wheat and soybeans, originate within a 100-mile radius of the City of Milwaukee

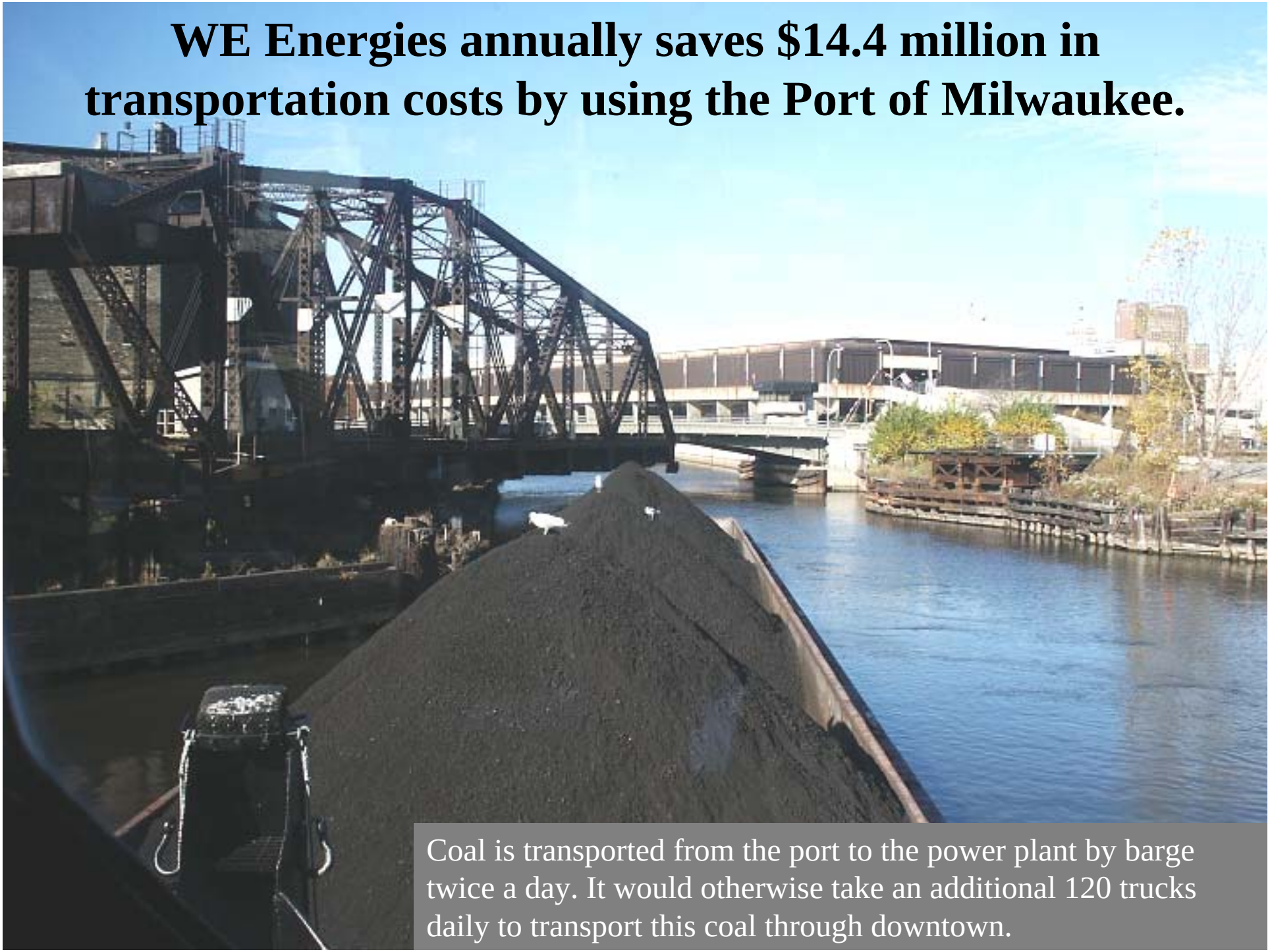
Nidera Grain Elevator

Grain exported through the Port in 2006 amounted to 528 farms harvested in SE Wisconsin.

Coal arrives in these mammoth “Lakers” and distributed inland by hopper barge.


MB I - 10
STERN

WE Energies annually saves $14.4 million in transportation costs by using the Port of Milwaukee.



Coal is transported from the port to the power plant by barge twice a day. It would otherwise take an additional 120 trucks daily to transport this coal through downtown.

BREAKBULK
is the Most Labor Intensive and Most Valuable of cargoes.

Bulk commodities make up the majority of our tonnage - *BUT* - on a per ton basis **Breakbulk cargoes**, (i.e. machinery, steel, transformers, wind turbines) **produce more revenue and more jobs.**

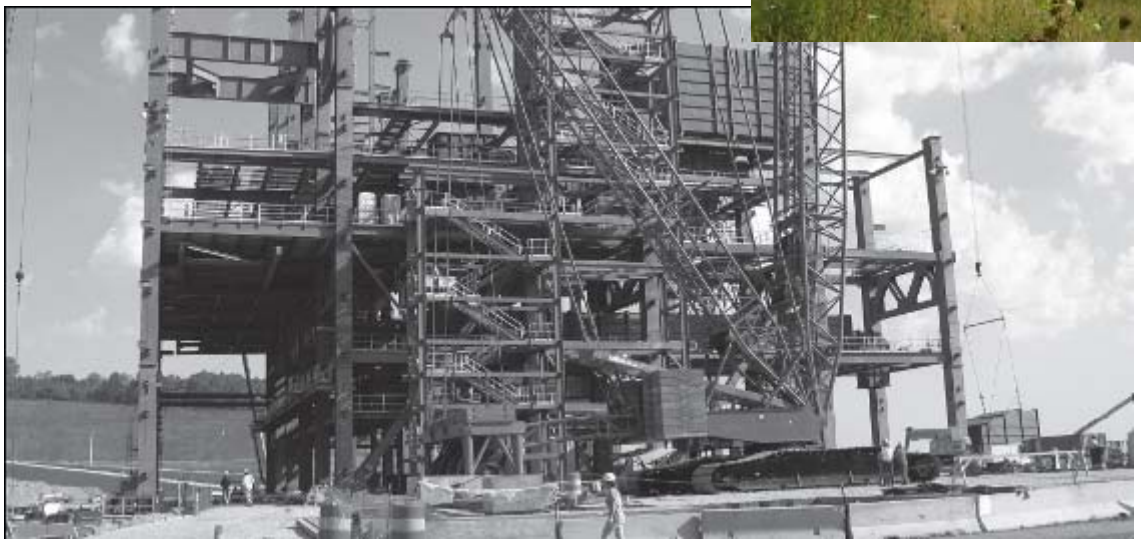

FEDNAV
FMT
Winning the deals
Our stevedore for breakbulk cargoes, Federal Marine Terminals, competes with other Great Lakes ports as well as ports in the Gulf and East Coast for these cargoes.

POWER GENERATION

Windmill farms are increasing rapidly in the plains and Midwestern parts of the United States. In 2007 alone the Port of Milwaukee handled projects for wind farms in Minnesota and Illinois.

Domestic moves within the Great Lakes.

Oak Creek Power Plant Project



Many components to build this plant were manufactured at the Port by Gillen and Advance Boiler and Tank and barged to the Oak Creek site.

Local companies mining the world's resources

The Port is used for the exports of goods such as mining equipment to the farthest corners of the earth. The heavy lifting capacity of our cranes (440,000 pounds) is required to load these machines.

In 2006, $143 million in steel products were shipped to the Port by area manufacturers on a lowest cost basis.

What do Slim Fast and beer have in common?

57,000 tons of tin plate


Our warehouses distributed over 200,000 tons of steel in 2006, 80% of which went to Wisconsin manufacturers.

3 lifts per truck

Average 20 minutes to load one truck; four trucks loaded simultaneously.

It took 10,000 man hours to unload 20,000 tons of pipe for the Guardian Pipe Project.

By now you might be thinking, just how do those ships get here?

IT TAKES 4-1/2 DAYS FOR A SHIP TO TRAVEL FROM MONTREAL TO MILWAUKEE.

U.S. Army Corps of Engineers, Detroit District


Lake
Michigan
MILWAUKEE
MUSKEGON
CHICAGO
Illinois River

DO YOU KNOW WHY WE DON'T GET CONTAINER SHIPS IN THE LAKES?

Ocean ships are limited to the size of the St. Lawrence Seaway locks

- maximum of 740 feet long
- 78 feet wide (beam)
- 26'3" foot draft, and
- 116.5 feet above water

Proactive Approach to Solving Great Lakes Issues

- "Great Ships Initiative." This $3.5 million effort (Port sponsored) focuses on developing and implementing shipboard treatment technology necessary to prevent the introduction of aquatic nuisance species into the Great Lakes by ocean-going ships
- Green Efforts
- Dredging
- Seasonality

JOBS

- Jones Island employs roughly 350 people.
- The commercial port is directly or indirectly responsible for over **2,000** jobs including truck drivers, tug boat operators, railroad workers, etc.

INTERMODAL
moving containerized cargo by ship/rail/truck

Containers are available at the Port on the sixth morning after the train leaves Vancouver, and on the third morning after leaving Montreal.

Customers can pick up their container within minutes of unloading the train with virtually no waiting time to load trucks.

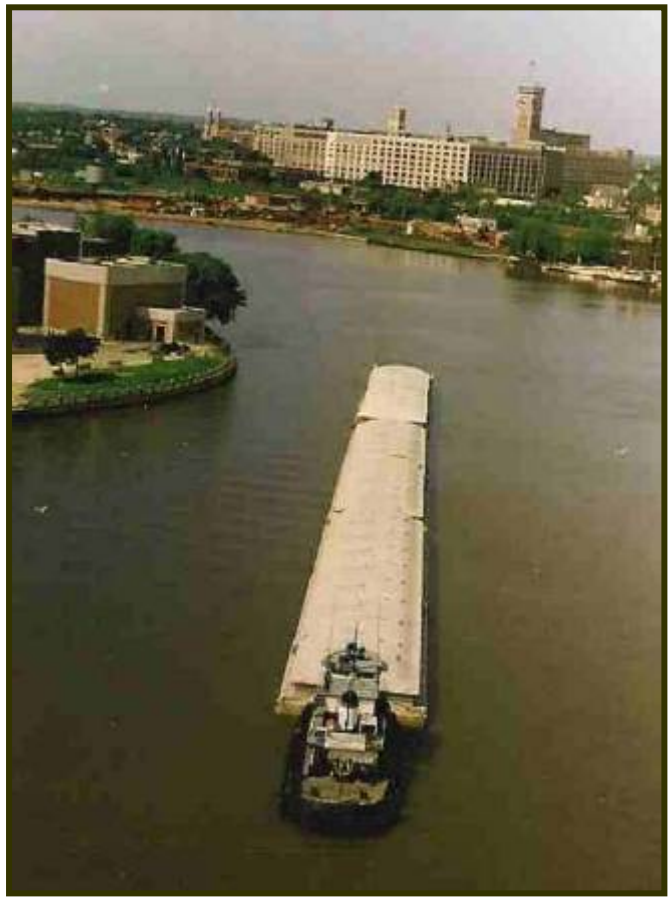
INLAND RIVER BARGES

TRANSPORTATION CONNECTIONS

Barging is friendly to the environment.

The Eastman study (sponsored by the United States Departments of Energy and Transportation) shows that the distance **one gallon of fuel can move one ton is 59 miles by truck, 202 miles by train, and 514 miles by water.**

Waterway transportation provides competitive shipping rates, keeping truck and rail costs low.



It is **important to note** that the energy efficiency of barge transportation results in other environmental benefits besides the obvious fuel savings. As a consequence of being less energy intensive than other modes, **on a ton-mile basis water transport also produces less air pollution, -- and is usually quieter.** The less energy used, the less air pollution produced.

SO WHAT DO WE DO IN THE WINTER?

Winter Mooring at the Port gives the vessel owners a chance to do maintenance to keep the vessels running during the shipping season.

Economic impact of winter ship repairs is $3 million annually.

Winter vessels arrive early January...

Photo courtesy of the Milwaukee Journal Sentinel.

and leave by mid-March.

Distribution of commodities that arrived during the shipping season continue throughout the winter.

SUPPORTING PUBLIC RECREATION AND LEISURE FOR A BETTER QUALITY OF LIFE.

CITY OF FESTIVALS

The Board of Harbor Commissioners is landlord to the 70 acres along the City's lakefront commonly known as the Summerfest grounds, dedicated to entertaining the public.


DISCOVERY
WORLD

Discovery World at Pier Wisconsin

- new cruise ship dock

The Grand Mariner made 5 trips to the new cruise ship dock in 2007

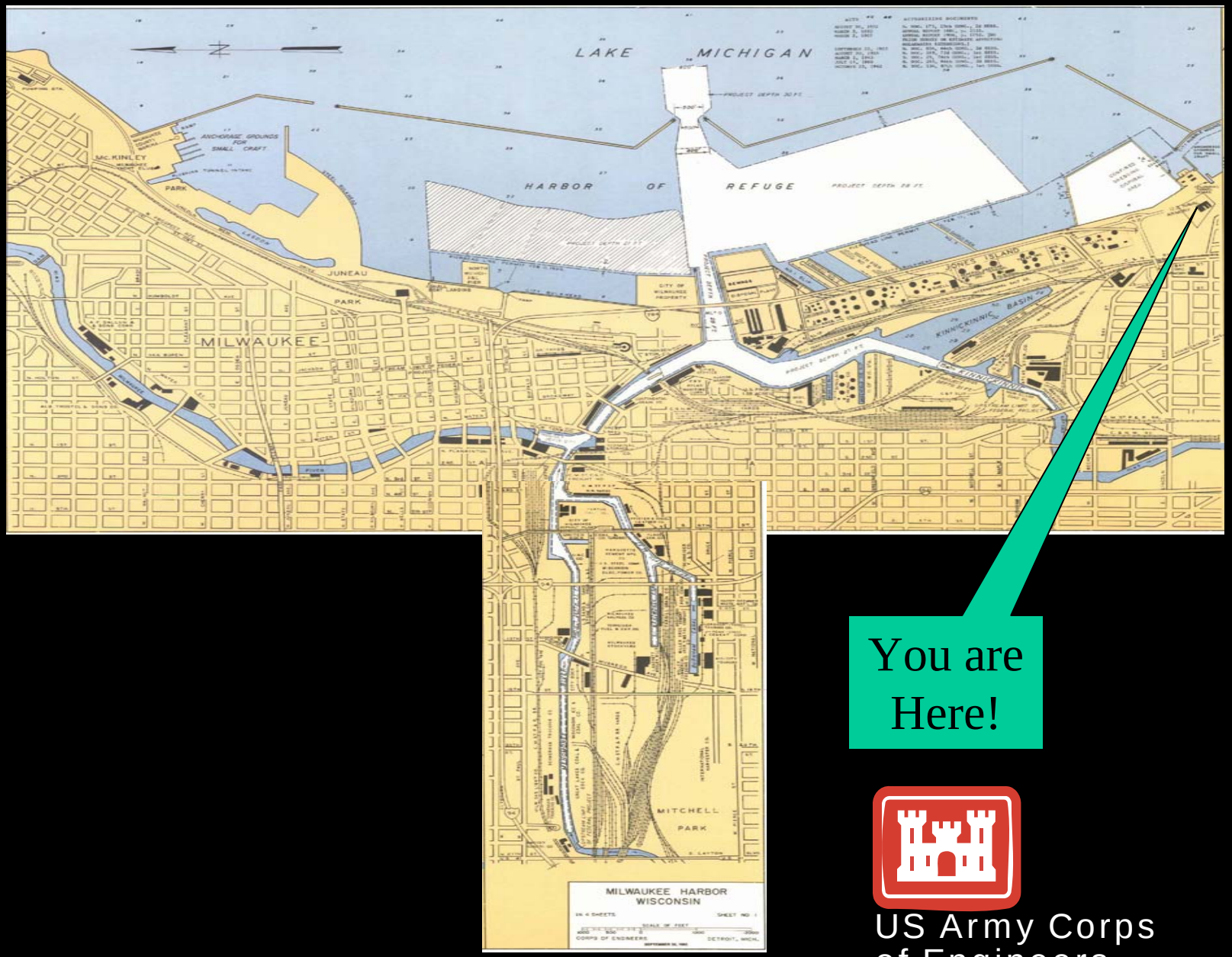
International and domestic cruise ship business began in 1997.

The successful Lake Express passenger/auto ferry will start its 5th year of service in 2008.

Passengers enjoy the stress free 2-1/2 hour boat trip across Lake Michigan in lieu of the congested car trip through Chicago and Indiana.

Clean Rivers


PORT OF MILWAUKEE
HARBOR SEAGULL



You are Here!

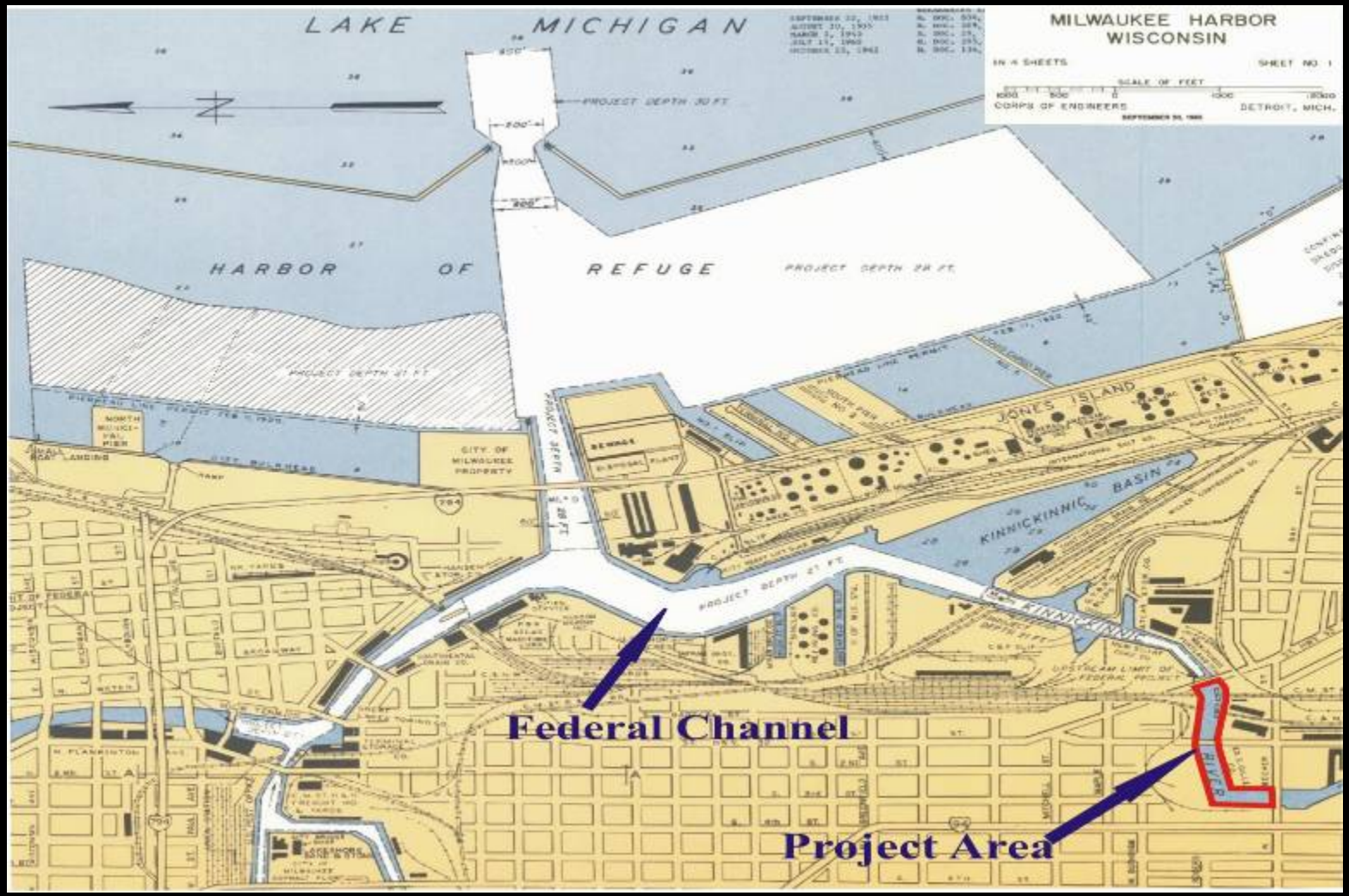
US Army Corps of Engineers

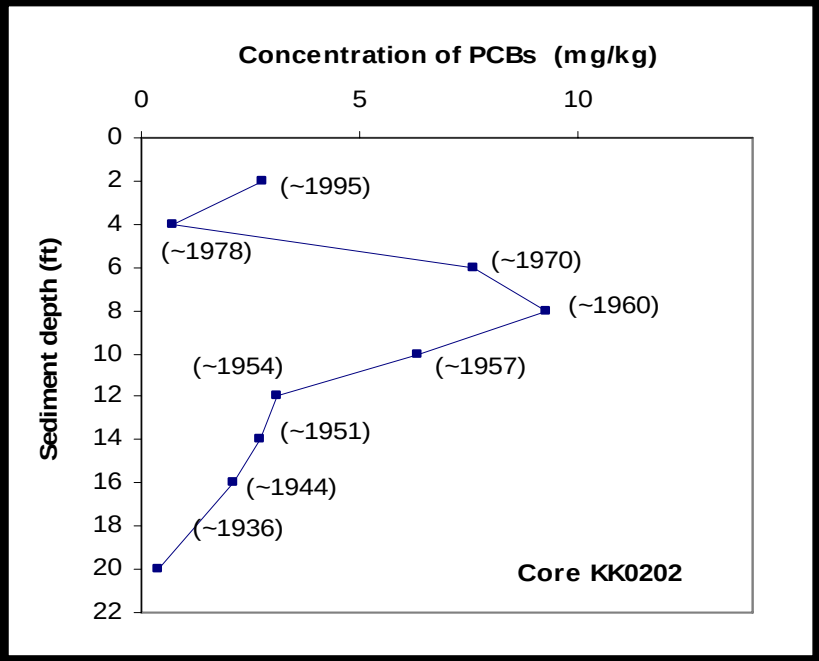
MILWAUKEE HARBOR

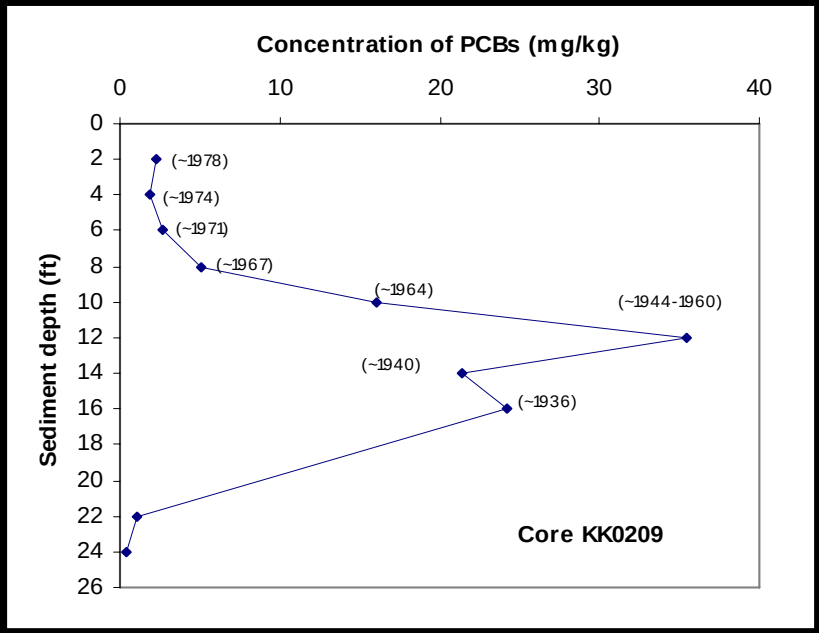
US Army Corps
of Engineers

US Army Corps
of Engineers

Project Location
Relative to the Federal Channel




Concentration of PCBs (mg/kg)
0
5
10
Sediment depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
(~1995)
(~1978)
(~1970)
(~1960)
(~1954)
(~1957)
(~1951)
(~1944)
(~1936)
Core KK0202


Concentration of PCBs (mg/kg)
0
10
20
30
40
Sediment depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
(~1978)
(~1974)
(~1971)
(~1967)
(~1964)
(~1944-1960)
(~1940)
(~1936)
Core KK0209

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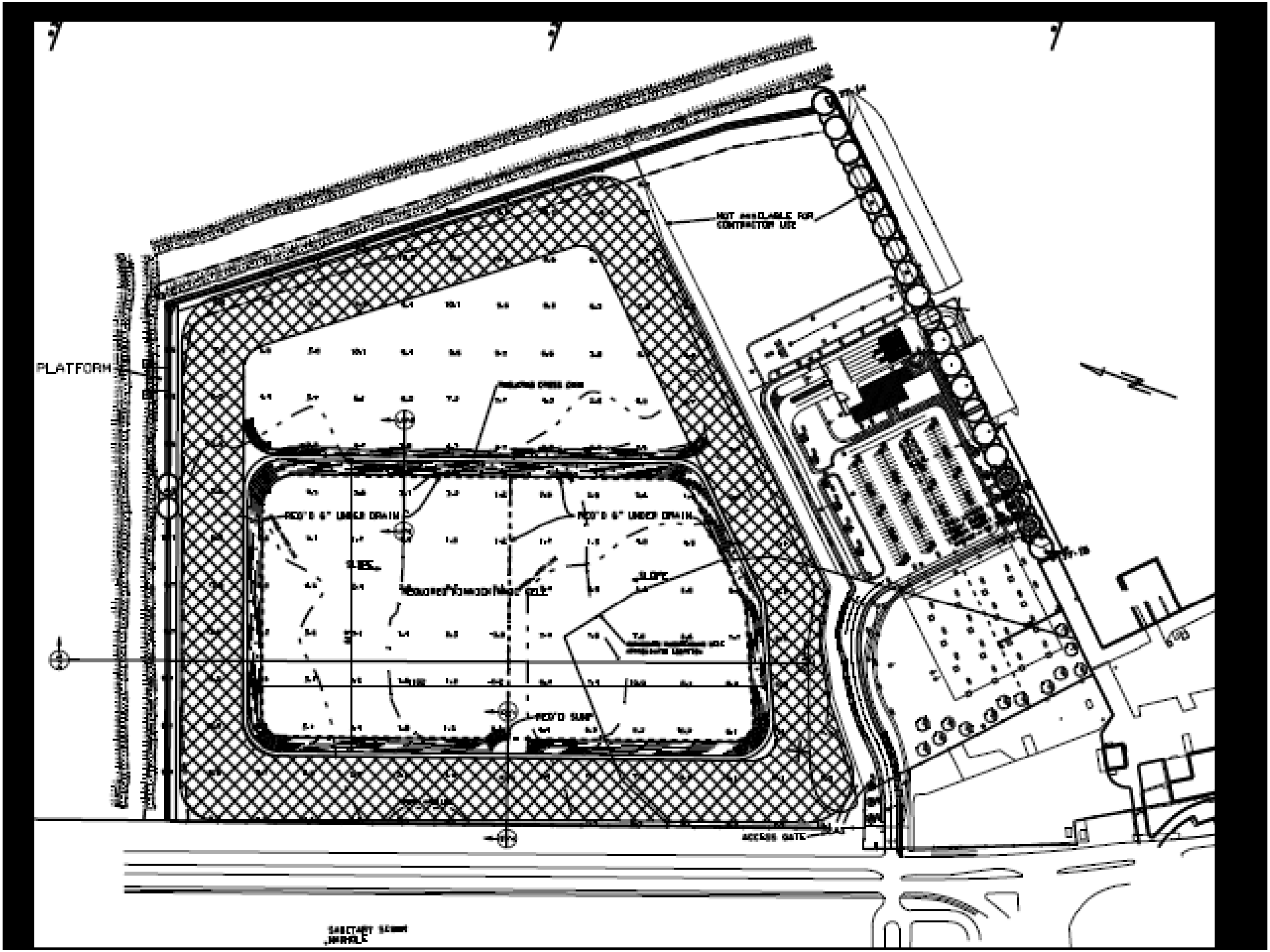
PLATFORM
NOT AVAILABLE FOR CONTRACTOR USE
PROV'D 6" UNDER DRAIN
PROV'D 6" UNDER DRAIN
SLOPE
PROV'D SUMP
ACCESS GATE

Removal Actions

Action 4

US Army Corps
of Engineers

- Sediment Removal: 140,000-170,000 (CY)
- Width: 80-foot channel with side slope
- Water Depth:
  - Channel: 20.5 to 24.5 feet below LMCD (IGLD85)
  - Side: transitioning to 11 feet from the channel to bank
- Post-project surficial sediment PCB concentration:
  - Channel: ≤1 ppm ; Side: may exceed 5 ppm
- Estimated PCB removal: 1,200 lbs (545 kg)
- Project-related bank work: partial seawall installation
- Estimated project cost:
  - $8-12 million-CDF disposal
  - $22-26 million-landfill disposal

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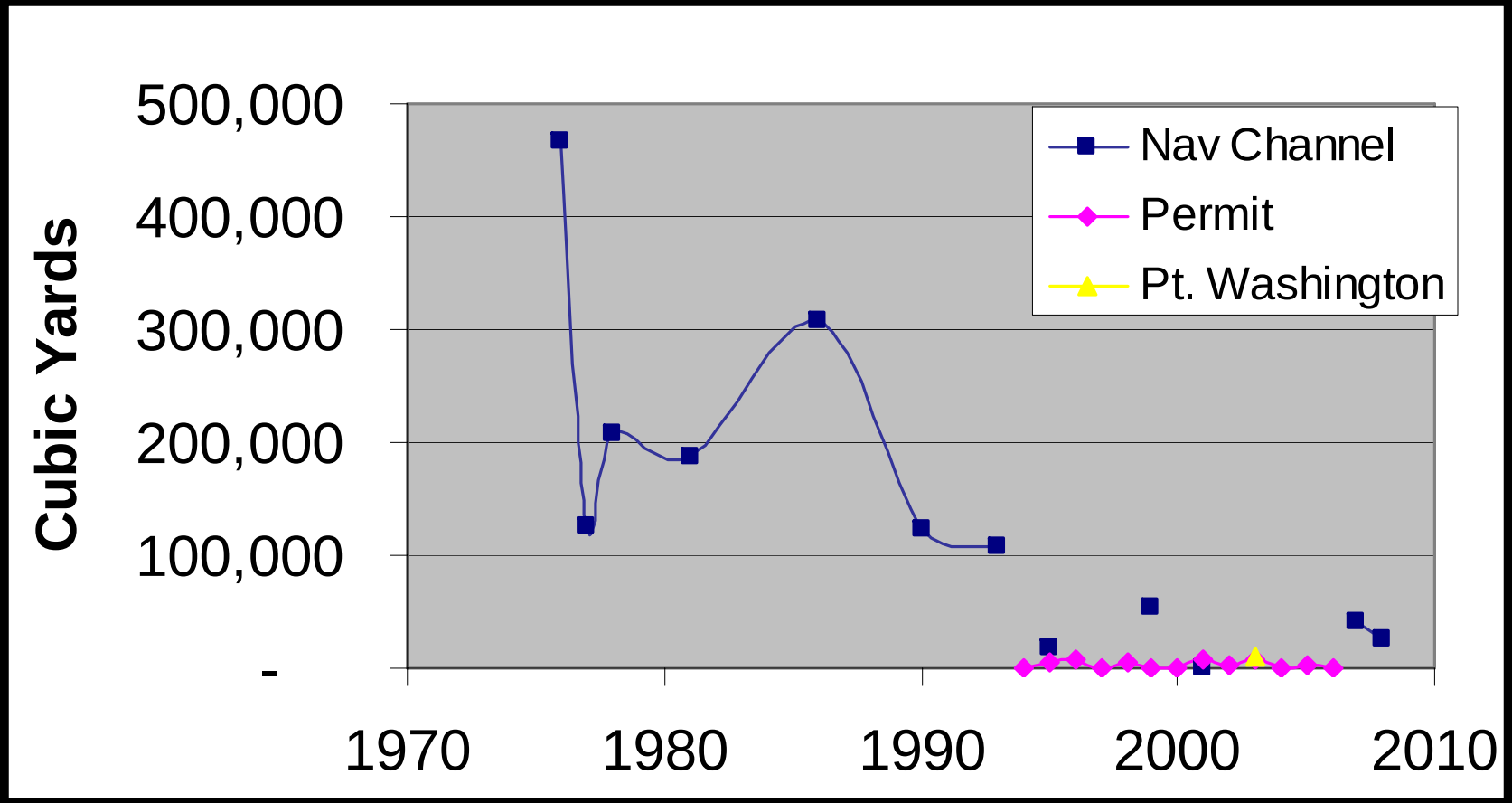

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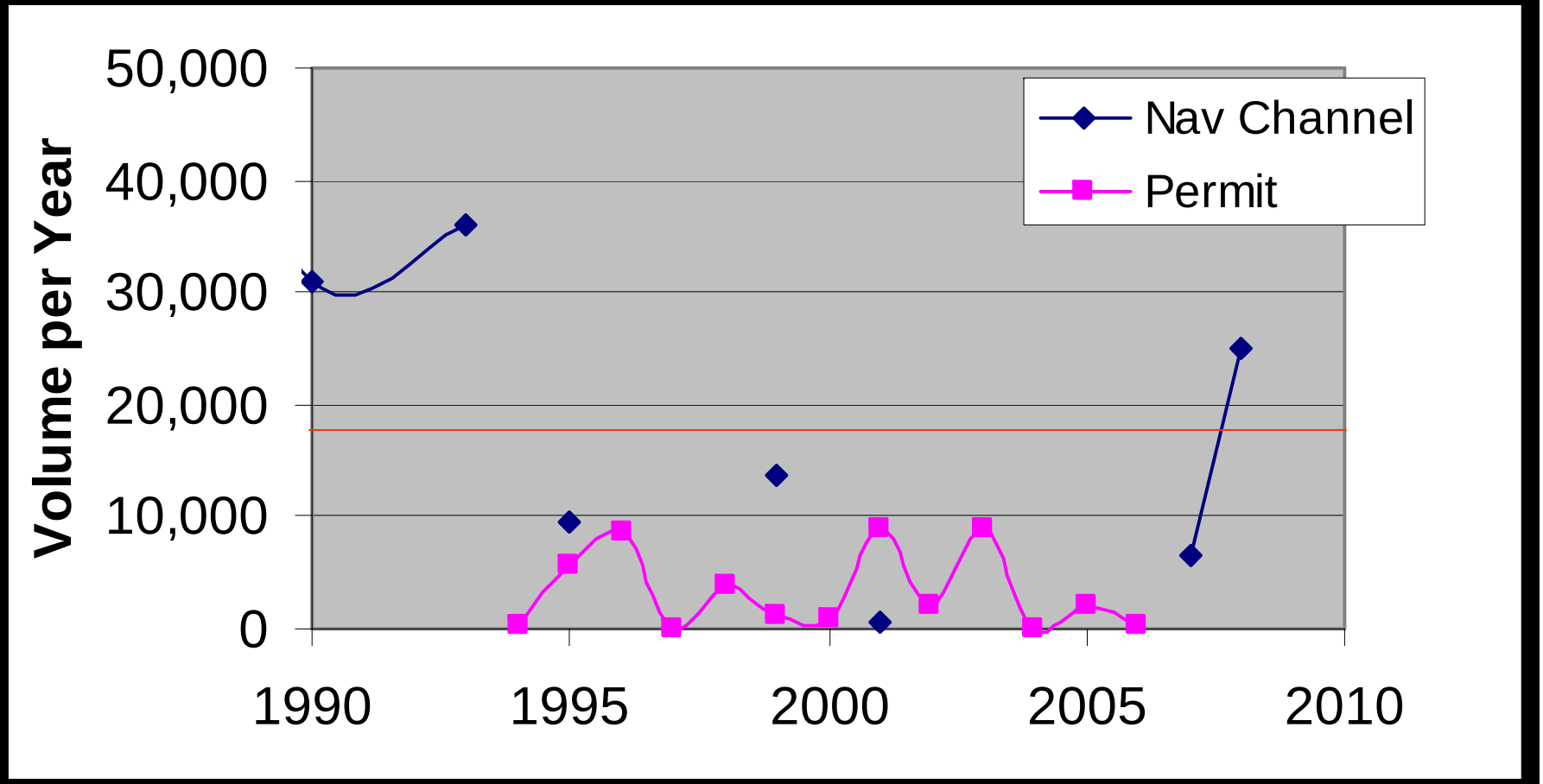

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	Annual Quantity (cubic yards)	DMMP Volume (20 years capacity)
Navigation Channel	17,500	350,000
Permit Dredging	3,500	70,000
Totals	21,000	420,000

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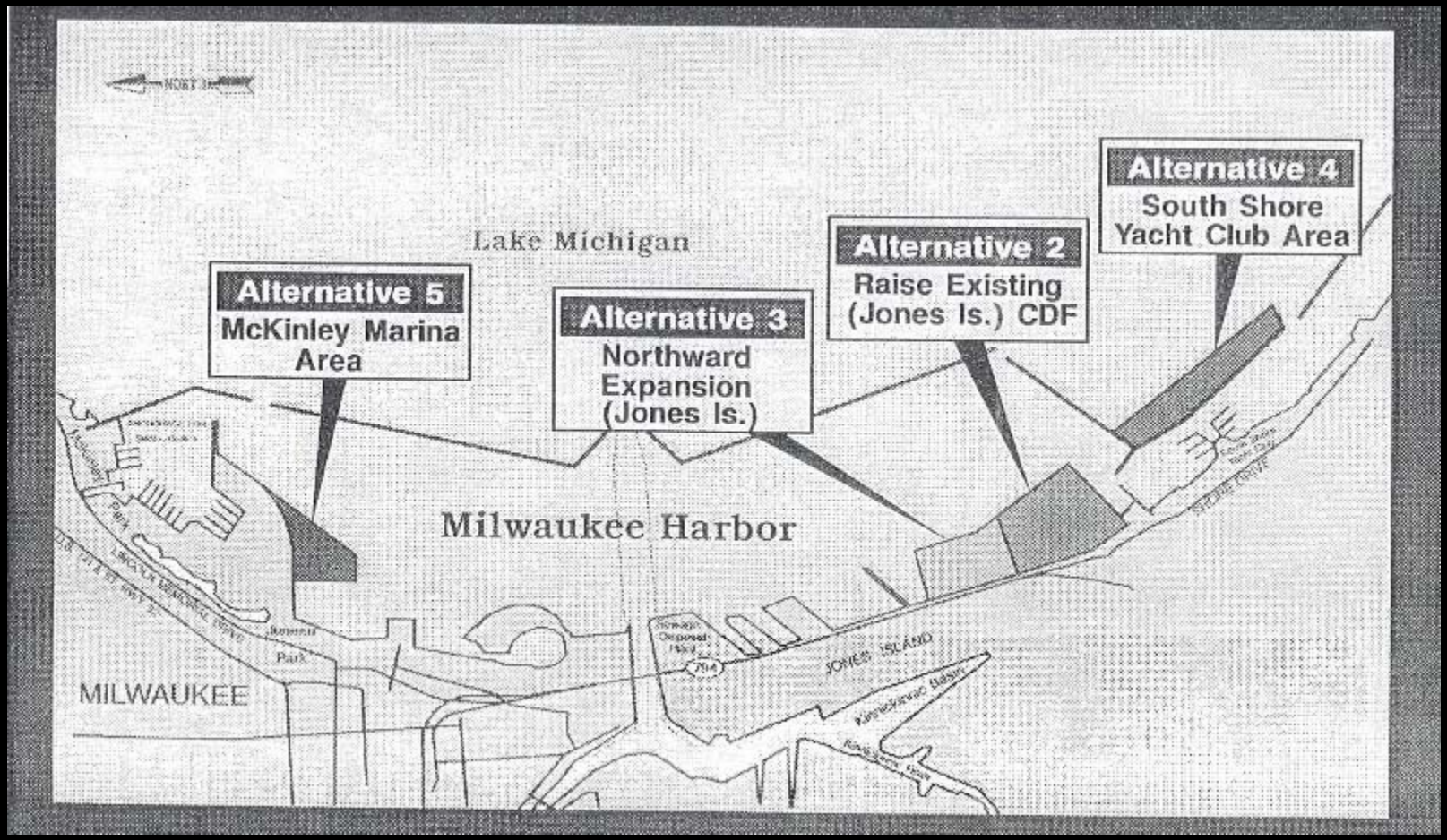
of Engineers



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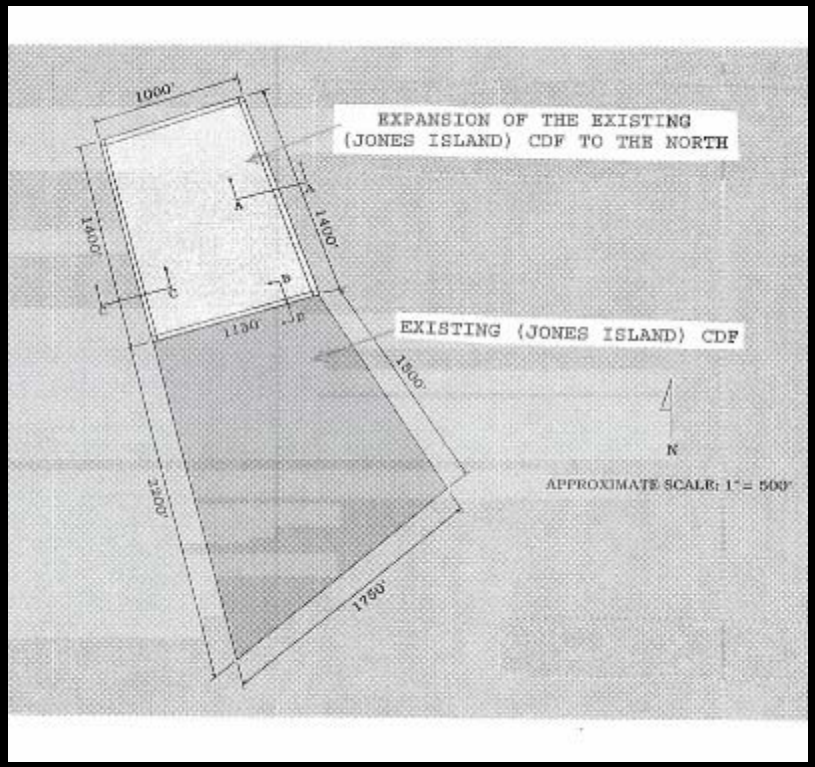
of Engineers
Detroit District



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of Engineers

	Northward Expansion	CDF Dike Raising
Capacity (cy)	700,000	550,000
DMMP Volume Required	420,000	420,000
Non-Federal Capacity (cy)	280,000	130,000
Construction Cost (1995)	$16,399,000*	$1,410,900**
Cost per Cubic Yard (1995)	$23.42	$2.56

*Based on 1.06M cy capacity
** Based on Raising Dikes to +24 for 852K cy capacity

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	DMDF Constructed to +18 feet
Capacity (cy)	510,000
DMMP Volume Required	350,000
Capacity Available to Port	160,000

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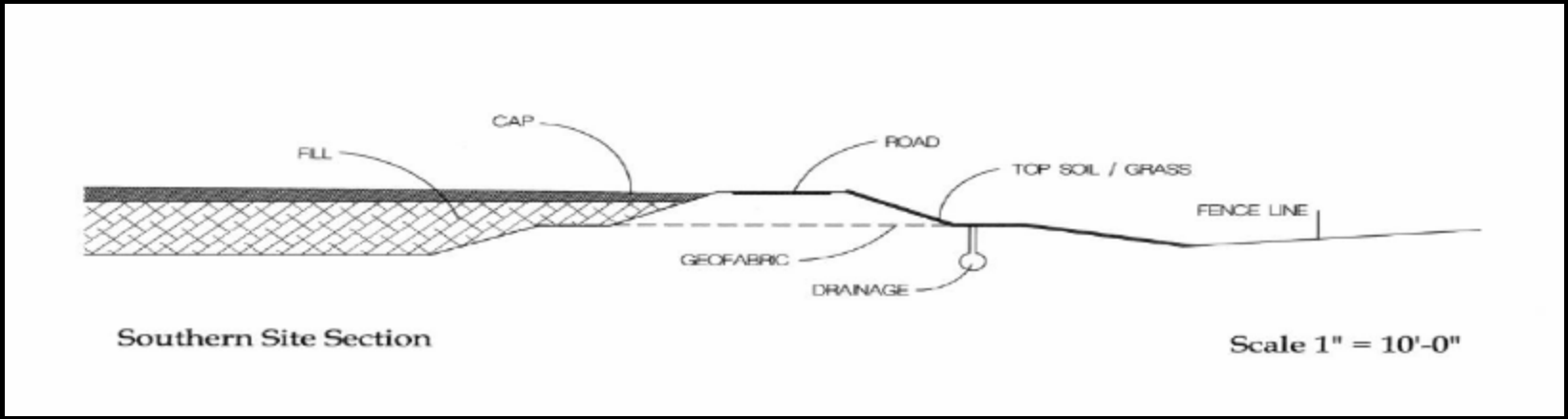
Detroit District



- View Block for Coast Guard, Neighborhood, and Port Authority
- Limits Future Use of Property.
- Increased Handling Cost for Dredged Material.
- Solid Waste Operations Plan

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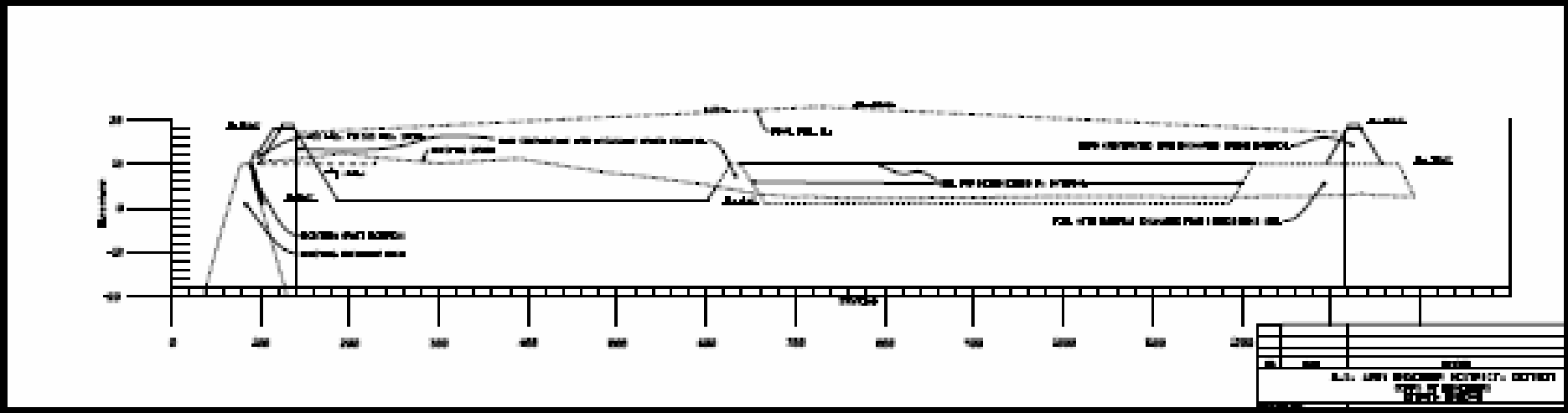
of Engineers

Detroit District



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DMDF Construction Cost (FY09)	$2,474,272
Construction Contingency (15%)	$371,141
Total Construction	$2,845,413
E&D (6%)	$170,725
S&A (9%)	$256,807
Contracting & Award	$10,000
EDDC	$28,454
Non-Construction Contingency (15%)	$69,790
Total Cost	$3,380,469

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Detroit District

DMDF Construction Cost	$3,380,469
DMDF Capacity	510,000
Cost/cubic yard	$6.63

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	Volume (20 years)	Cost Share (Fed/Non-Fed)	Federal Cost	Non-Federal Cost
Federal Navigation Channel	350,000	65/35	$1,507,954	$811,974
Non-Federal Navigation	160,000	0/100	$0	$1,060,539
Totals	510,000		$1,507,974	1,872,515

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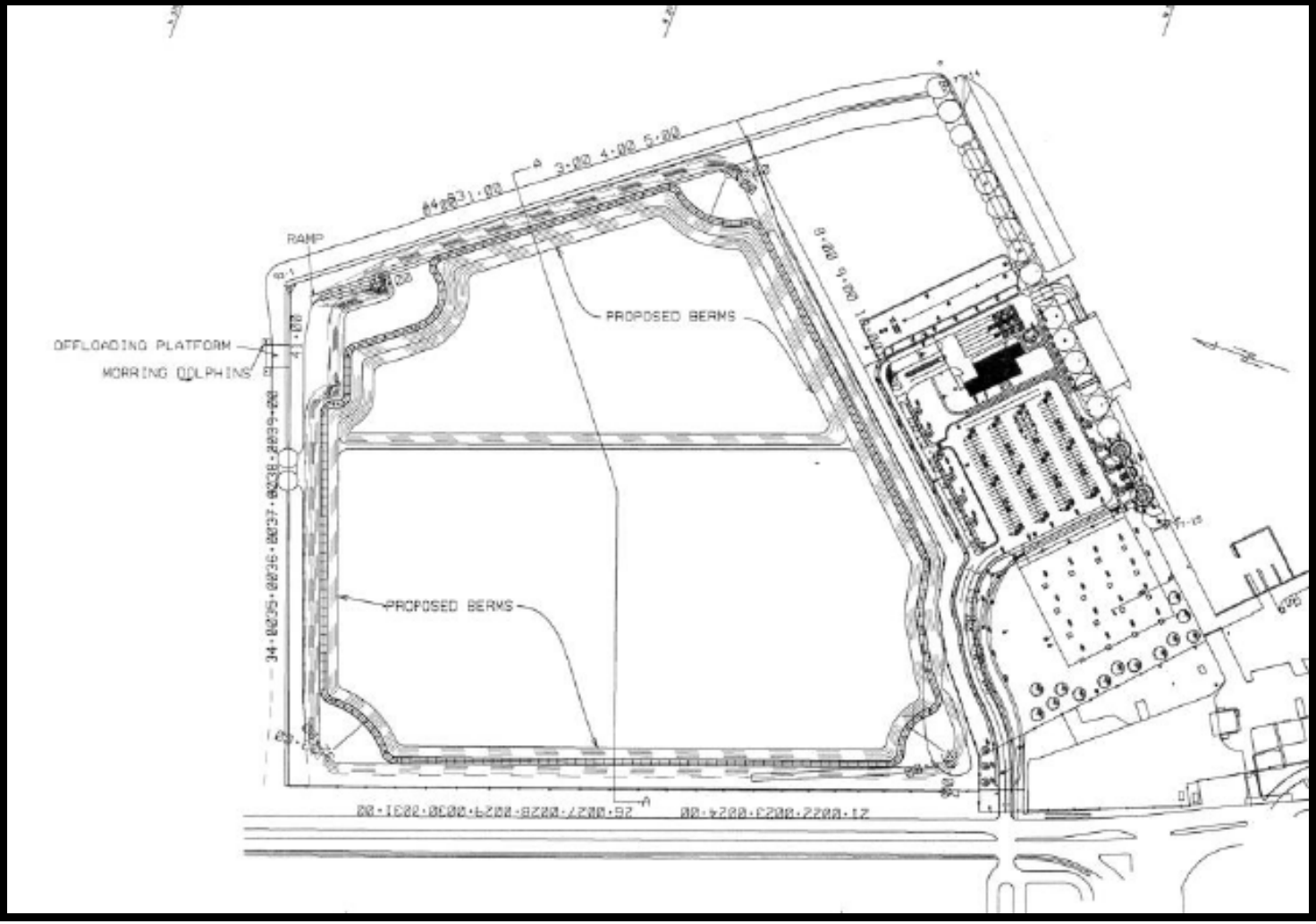
Detroit District



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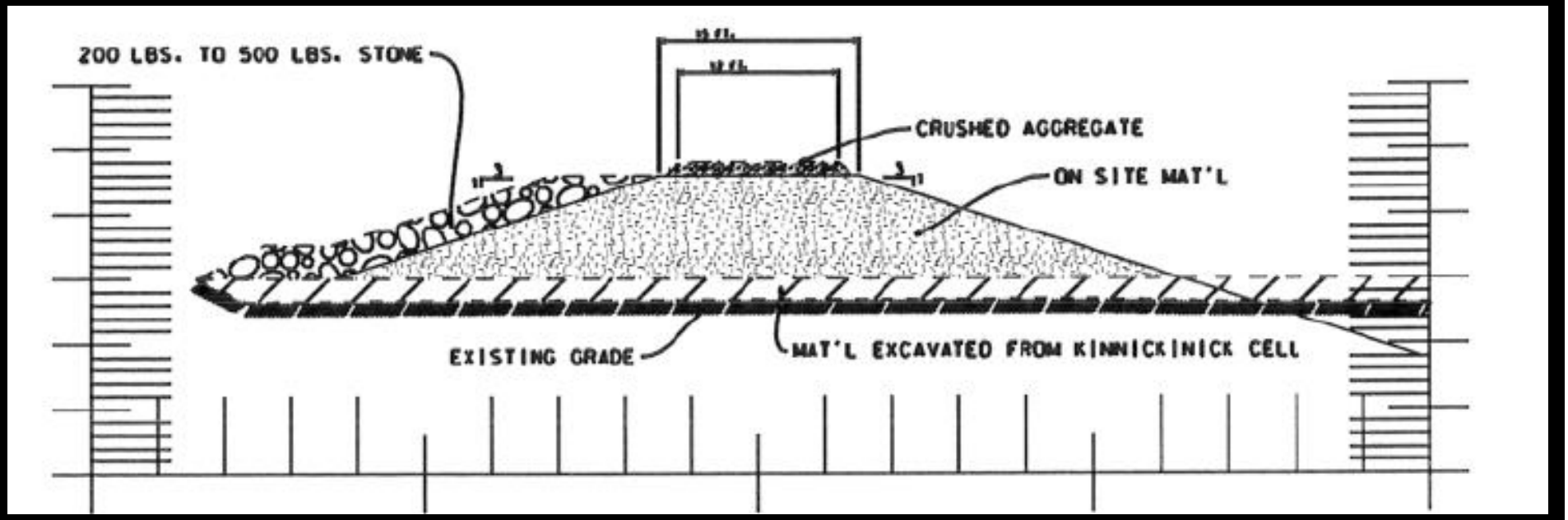
Detroit District



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- DMMP
  - Division Approval of Preliminary DMMP and EA.
  - Complete DMMP and EA Public Review.
  - Port submits Closure Plan to WDNR.
  - State Approval of DMDF (Solid Waste Exemption).
  - Final Division Approval of DMMP.

- Project Implementation
  - Project Cooperation Agreement.
  - Develop Plans and Specifications.
  - HQ Review of PCA.
  - Port Approval of PCA.
  - ASA-CW Signature of PCA.

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- GLLA
  - State/Port/GLNPO Sign Cooperation Agreement.
  - Complete Design of Dredging/Seawalls Project.
  - Complete Design of CDF cell.
  - State and Corps (St. Paul District) Regulatory Approval.
  - DNR Environmental Document.
  - EPA and State provide funding shares.
  - Corps and Port Authority Approve Dredging Plan.

US Army Corps
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Detroit District

- Sorting/Separation plan.
- Schedule of CDF usage (inc. backup plan if dates are exceeded).
- Volumes to be Placed (inc. backup plan if cell capacity is exceeded).
- Transfer of $1M to cover first half of tipping fees.
- Plan to operate and maintain sump system on the site for 6 months after dredging is completed.

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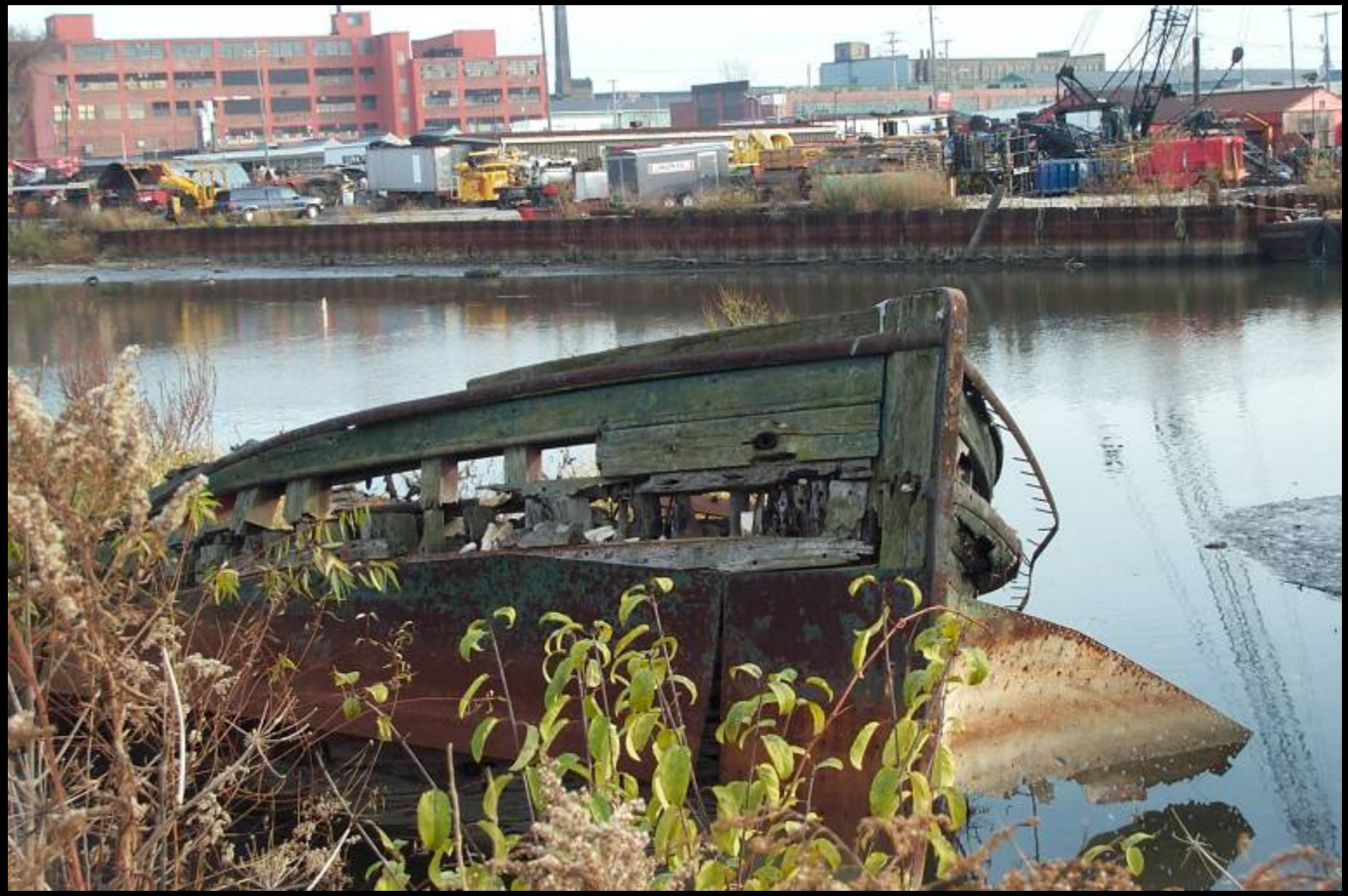

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Detroit District

The Corps of Engineers reserves the right to:

- Halt disposal operations at any time.
- Request sampling of the dredged material before or during the disposal operations.
- Require one week Advance Notice before using CDF.
- On-site Inspector (TBD).
- Require the permittee to repair any damages or reimburse the government for repair costs, (beyond fair wear and tear) to the disposal facility resulting from the permittee's operation.

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Detroit District

- Safety Plan.
- Environmental Monitoring Plan.
- Pumping/Dewatering Plan.
- Weekly Progress Report, including volumes placed.
- Prior and After Dredge Area Surveys (include side slopes!).

US Army Corps
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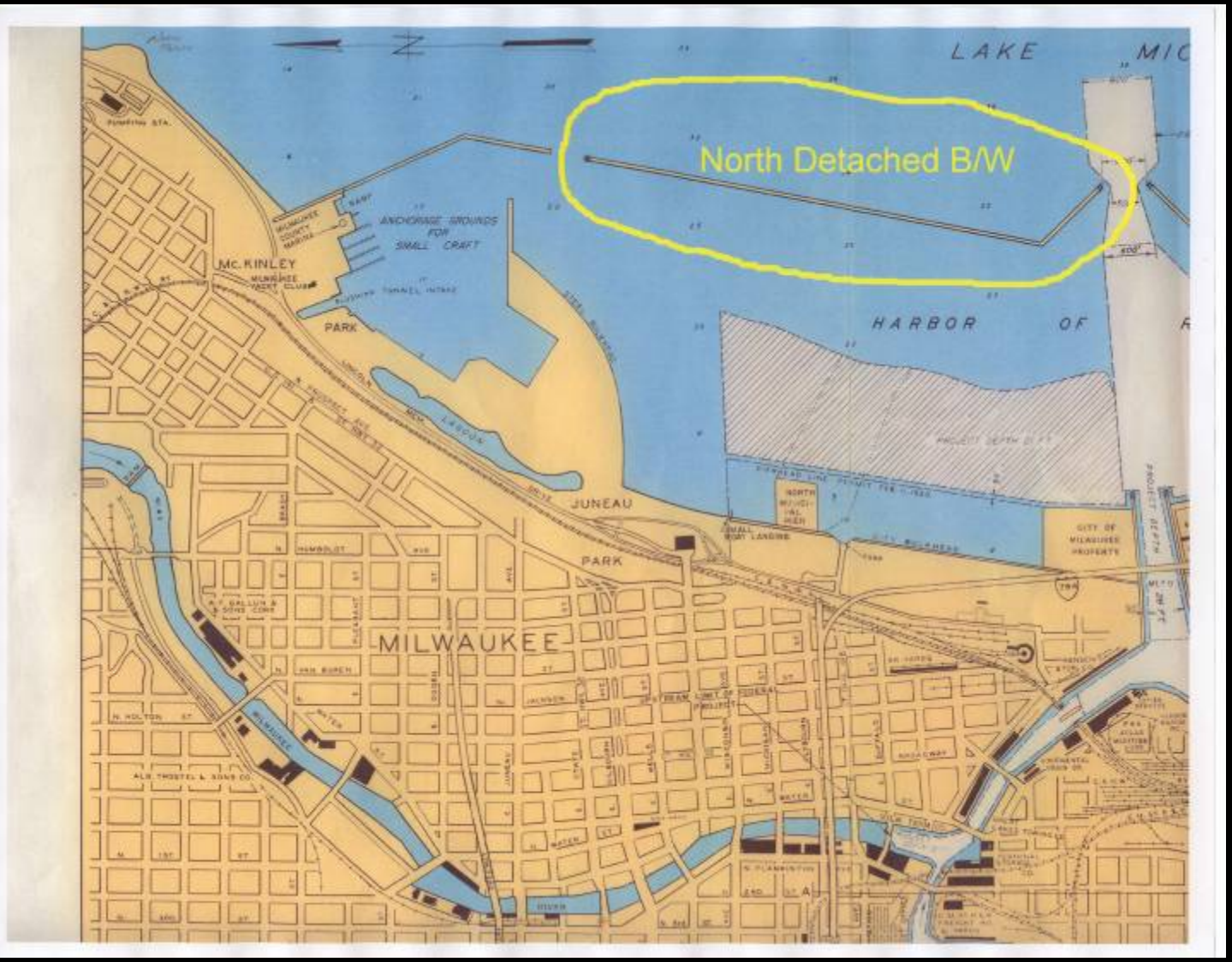
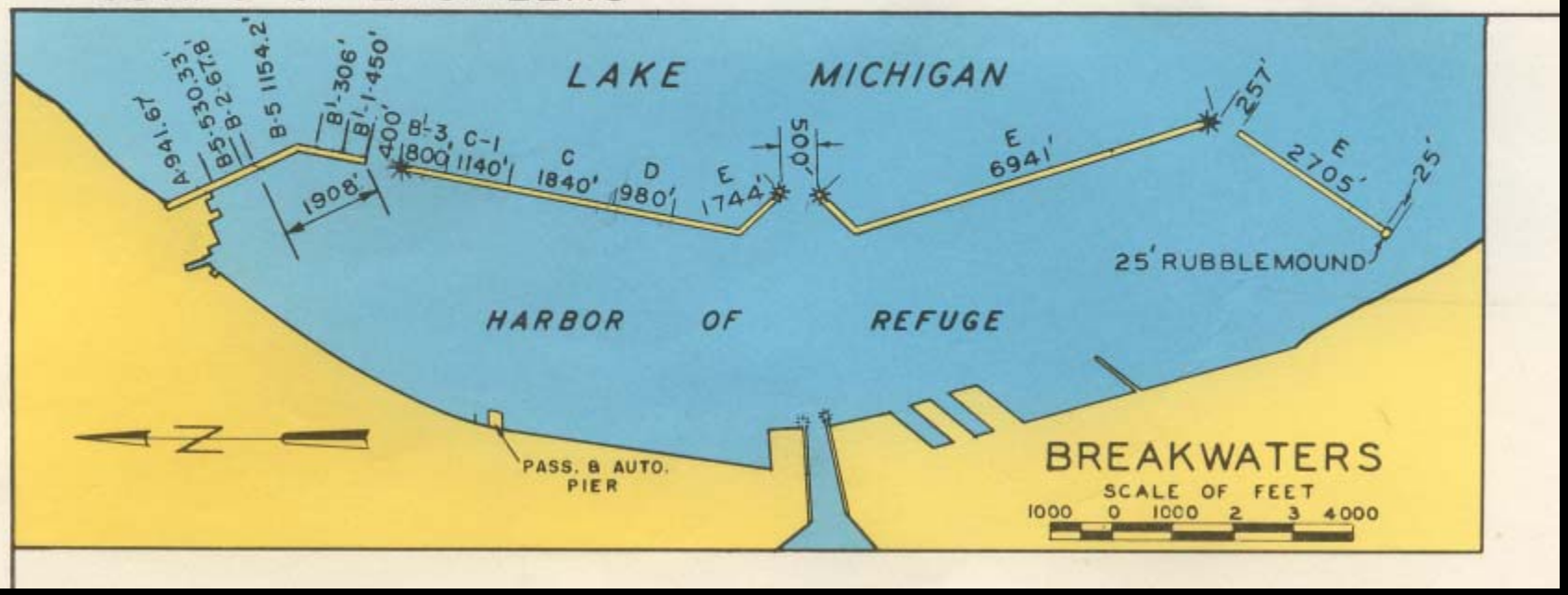
Detroit District

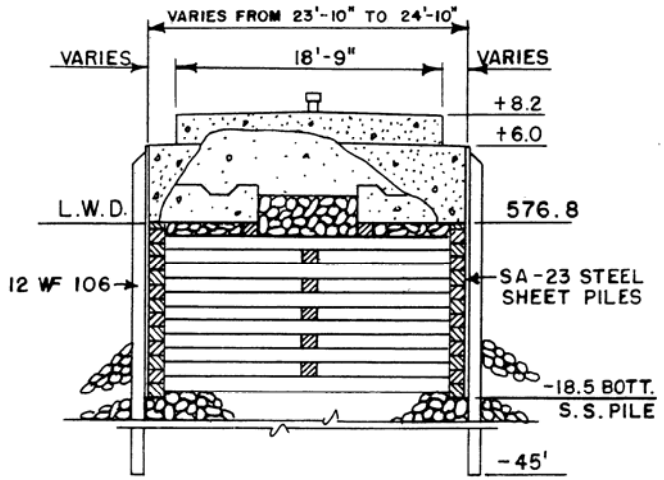
- ✓Plan to Deal with Excess Water on the Site.
- ✓Plan to Deal with Contracting/Logistical issues of Two Contractors working on the site in FY08.
- ✓Close out the Existing CDF at the end of the Legacy Act project.

What the river skimmer can’t pick up, the Harbor Seagull can.


North Detached B/W
LAKE
HARBOR
OF
ANCHORAGE GROUNDS FOR SMALL CRAFT
Mc. KINLEY
PARK
JUNEAU
PARK
MILWAUKEE

CORPS OF ENGINEERS





SECTION B'-3

NORTH BREAKWATER

BUILT : SUBSTRUCTURE 1888,89,90,91,93.
SUPERSTRUCTURE 1907,08,09.
REPAIRED 1959

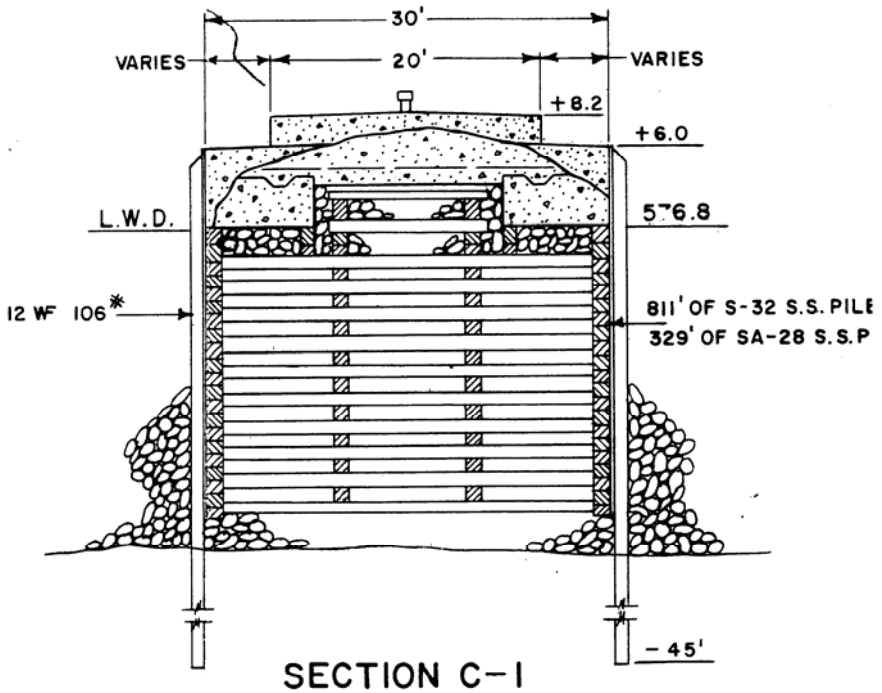

5
M.P.H.
SLOW
NO WAKE
23. 7. 2006


23. 7. 2006


23. 7. 2006


23. 7. 2006


23. 7. 2006



SECTION C-1

NORTH BREAKWATER

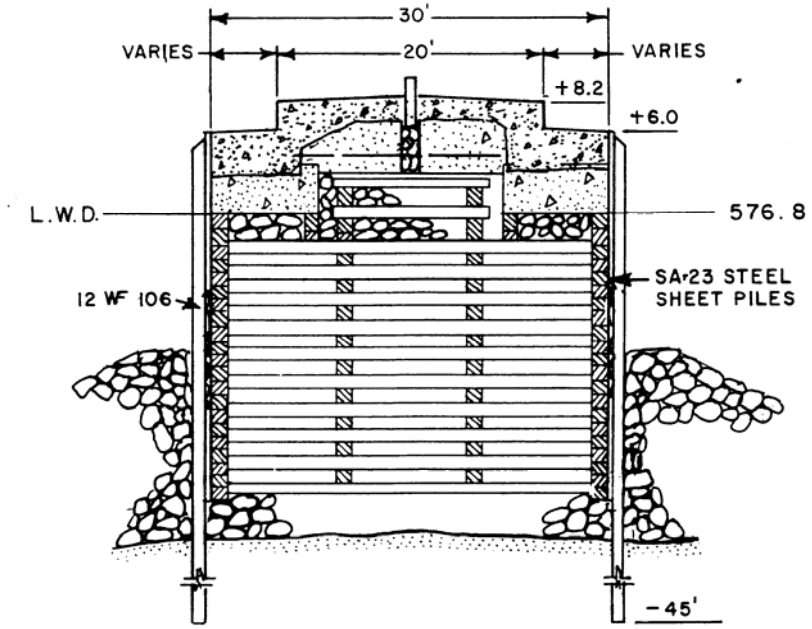
BUILT: SUBSTRUCTURE 1895, 97-99.
SUPERSTRUCTURE 1907-9

REPAIRED: 1957


23. 7. 2006


1 2 3 4
7 8 9 10 11
23. 7. 2006

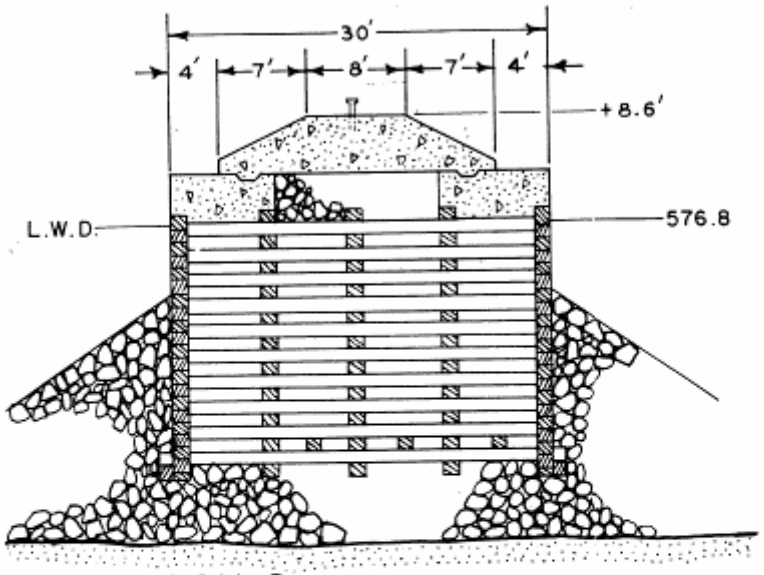

23. 7. 2006



SECTION - C · NO. BREAKWATER

BUILT : SUBSTRUCTURE 1895, 97-99
SUPERSTRUCTURE 1907-09
REPAIRED 1962-64


23. 7. 2006



SECTION-D NORTH BREAKWATER

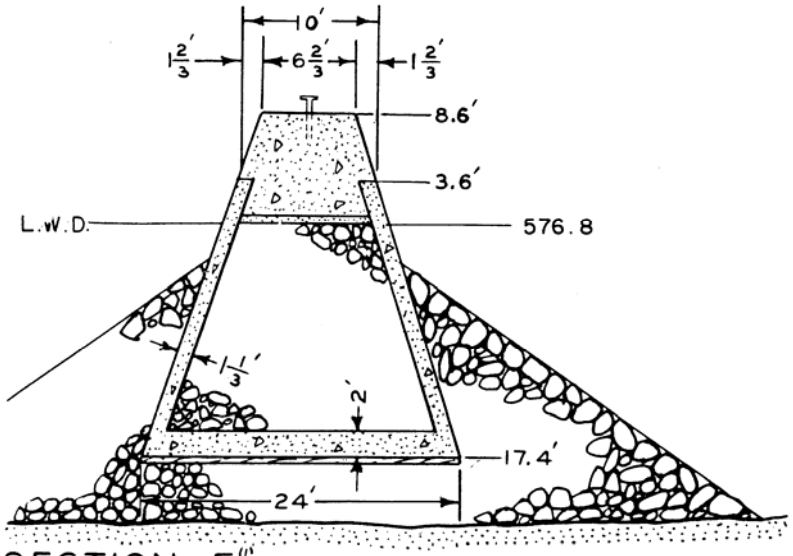
BUILT: SUBSTRUCTURE 1907-9

SUPERSTRUCTURE 1923-4


23. 7. 2006


23. 7. 2006


23. 7. 2006



SECTION – E[11] NO.& SO. BREAKWATERS

	N. B.	S. B.
BUILT: SUBSTRUCTURE	1924-5	1925-9
SUPERSTRUCTURE	1924-5	1925-9, 31-32

NOTE: OUTER 54 LINEAR FEET OF NORTH BR'KWATER CONSISTS OF THREE RECTANGULAR CAISSONS.


23. 7. 2006


23. 7. 2006


23. 7. 2006

Statistics

- Overall Length of N. B/W = 6,504 l.f.
- Estimate Cost of Repairs= $15-20 M
- Overall Condition = Poor to Already Failed
- Current Band-Aids are barely keeping this structure together.

Thank you

Port of Milwaukee

414-286-3511

www.milwaukee.gov/port