AAPA American Association of Port Authorities

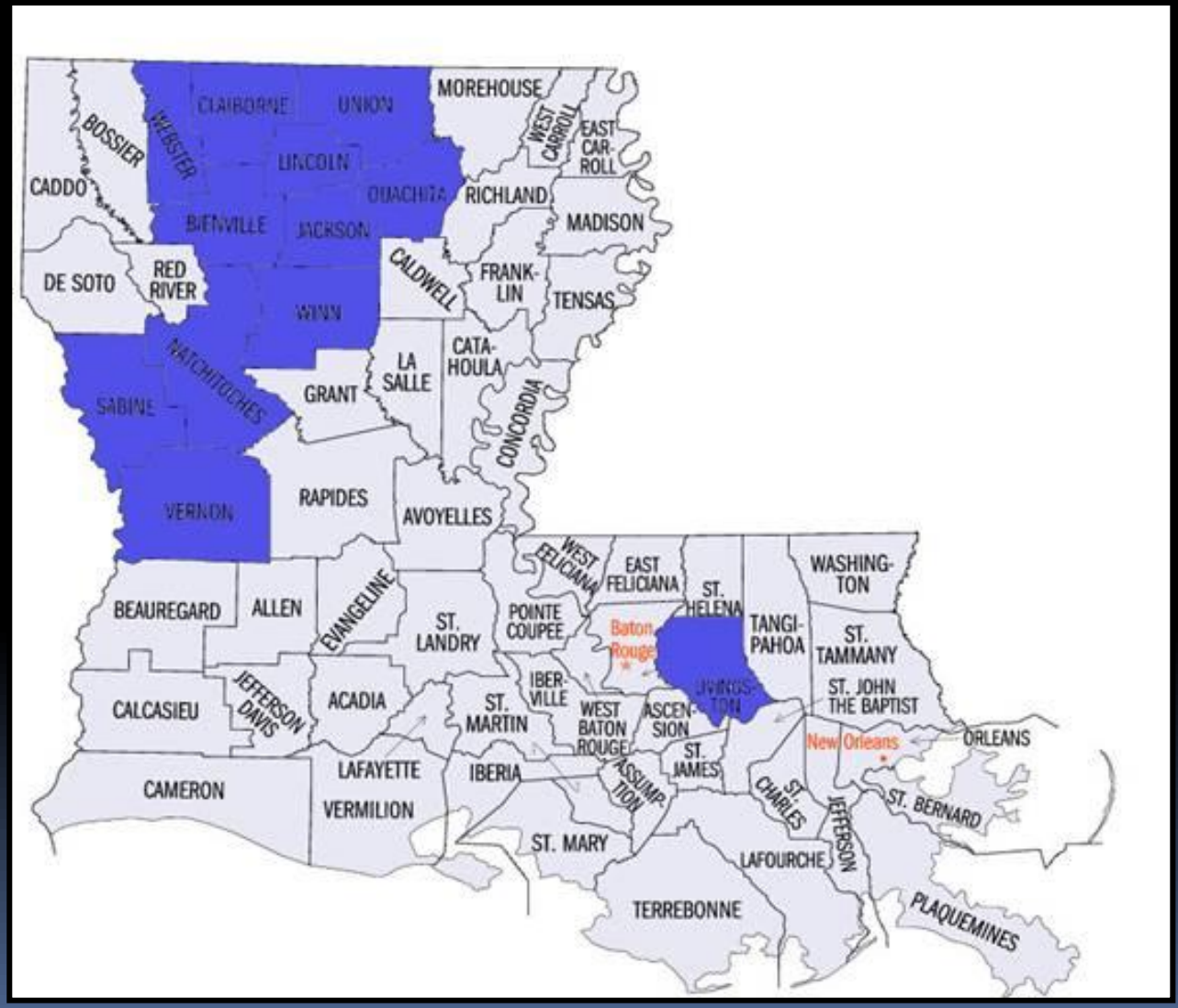
Alliance of the Ports of Canada, the Caribbean, Latin America and the United States

2013 Facilities Engineering Award of Excellence

Riverfront Cold Storage Facility

PORT OF NEW ORLEANS

Louisiana's Poultry Industry



Cold Storage Product Flow

Move from local and regional farmers, producers and processors

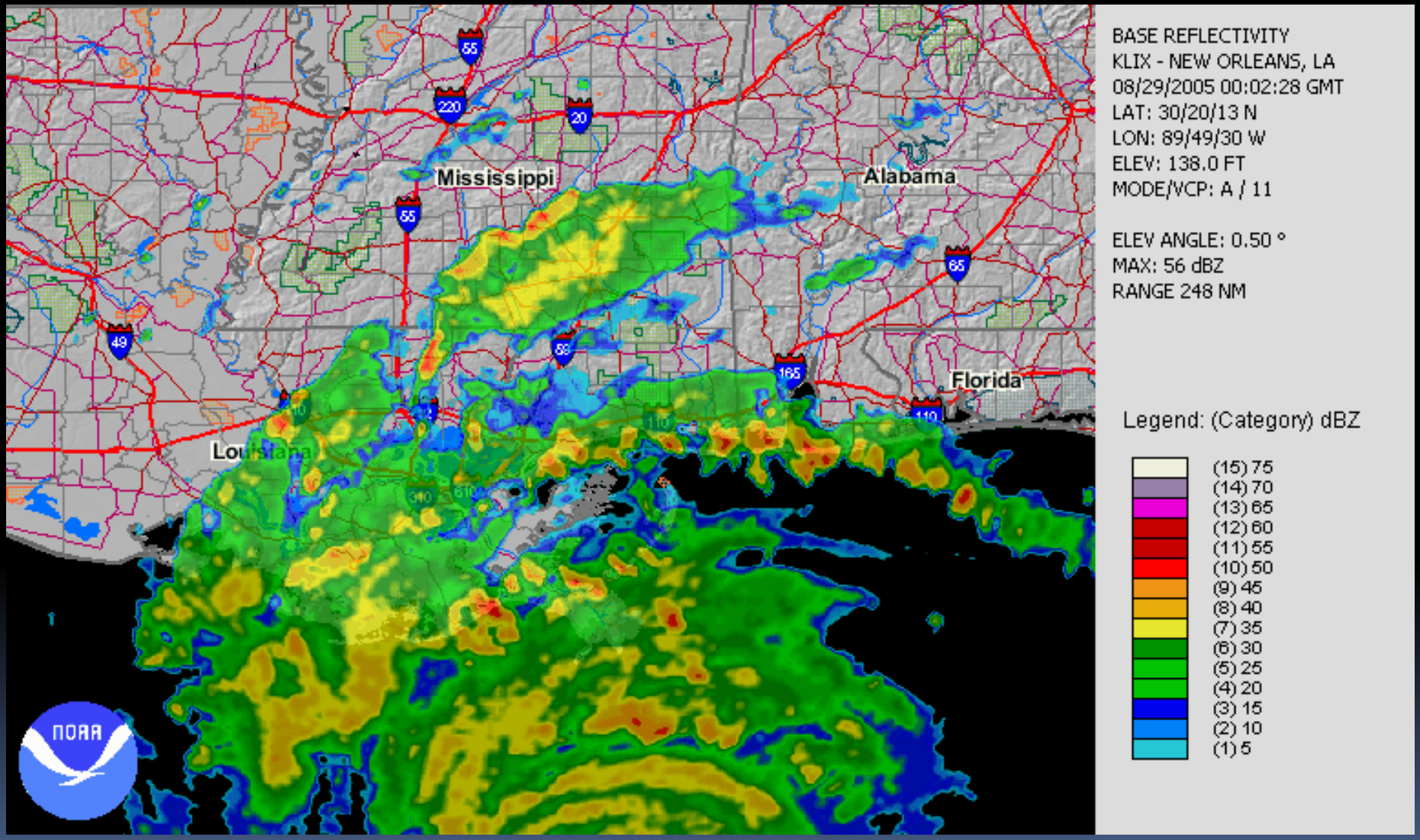
Blast frozen in cold storage warehouses

Shipped via truck, rail and vessel to restaurants and grocers

Port of New Orleans
Existing Cold Storage Facility
Jourdan Road Terminal

Terminal Operator: New Orleans Cold Storage (NOCS)

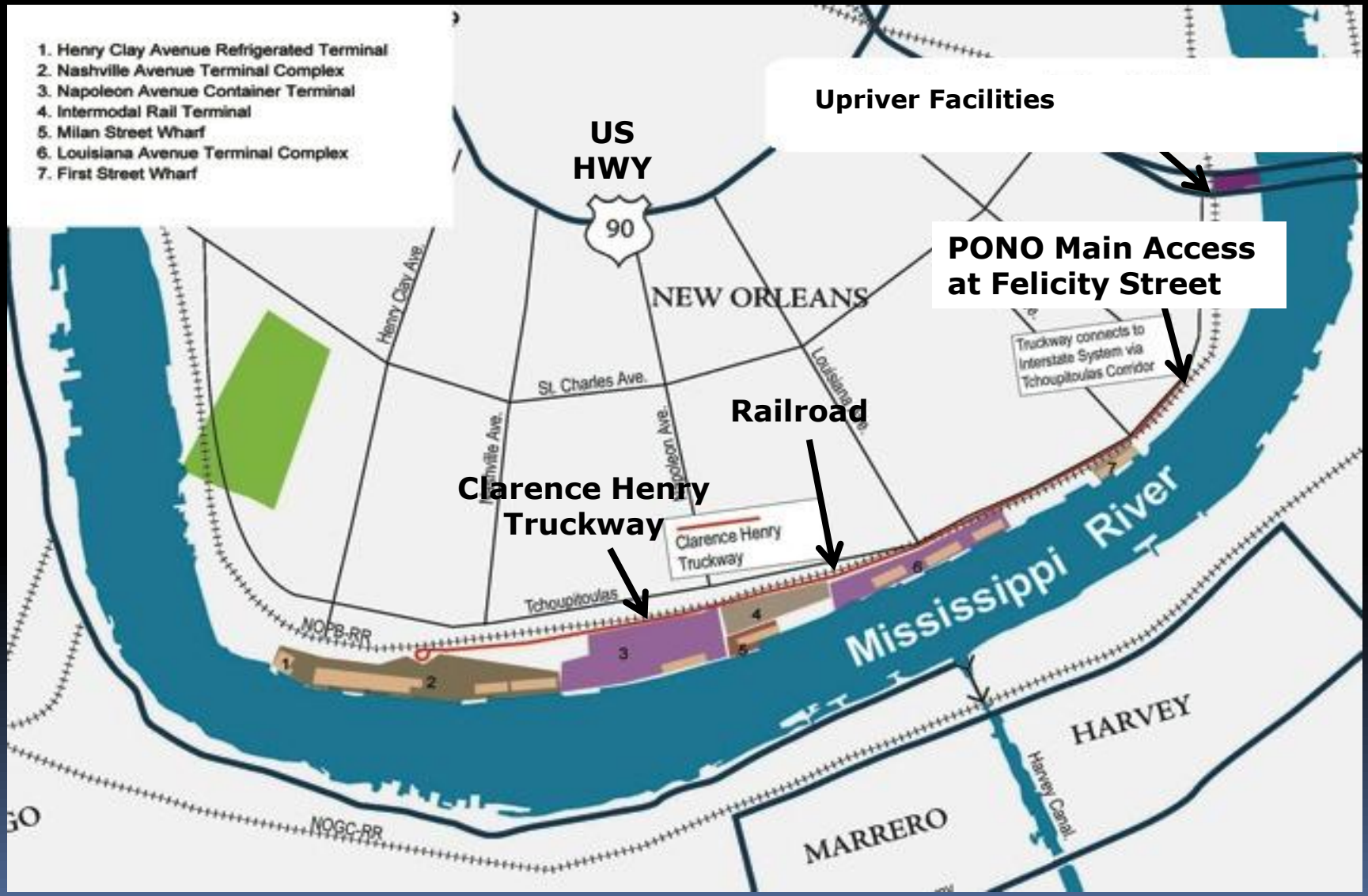
Why Relocate to the Riverfront?



Why Relocate to the Riverfront?

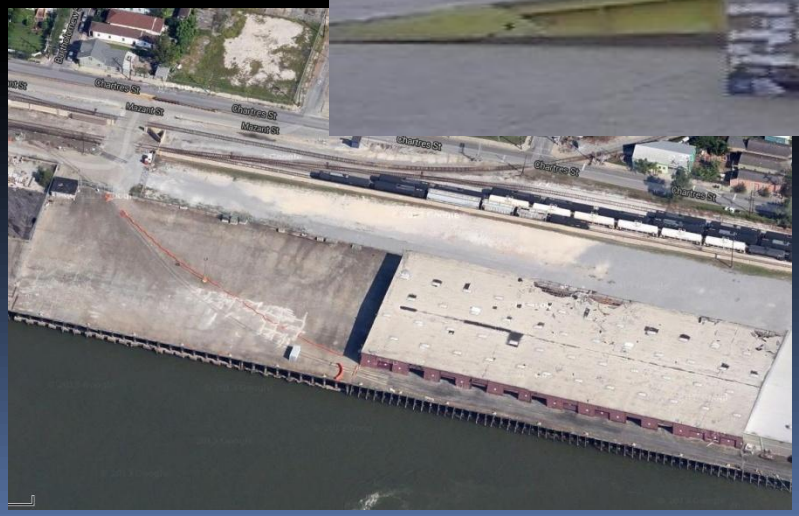
Inner Harbor Navigation (IHNC) Lock

Project Intermodal Access



Short-Term Solution

Move cold storage operations to the Poland Avenue Terminal.



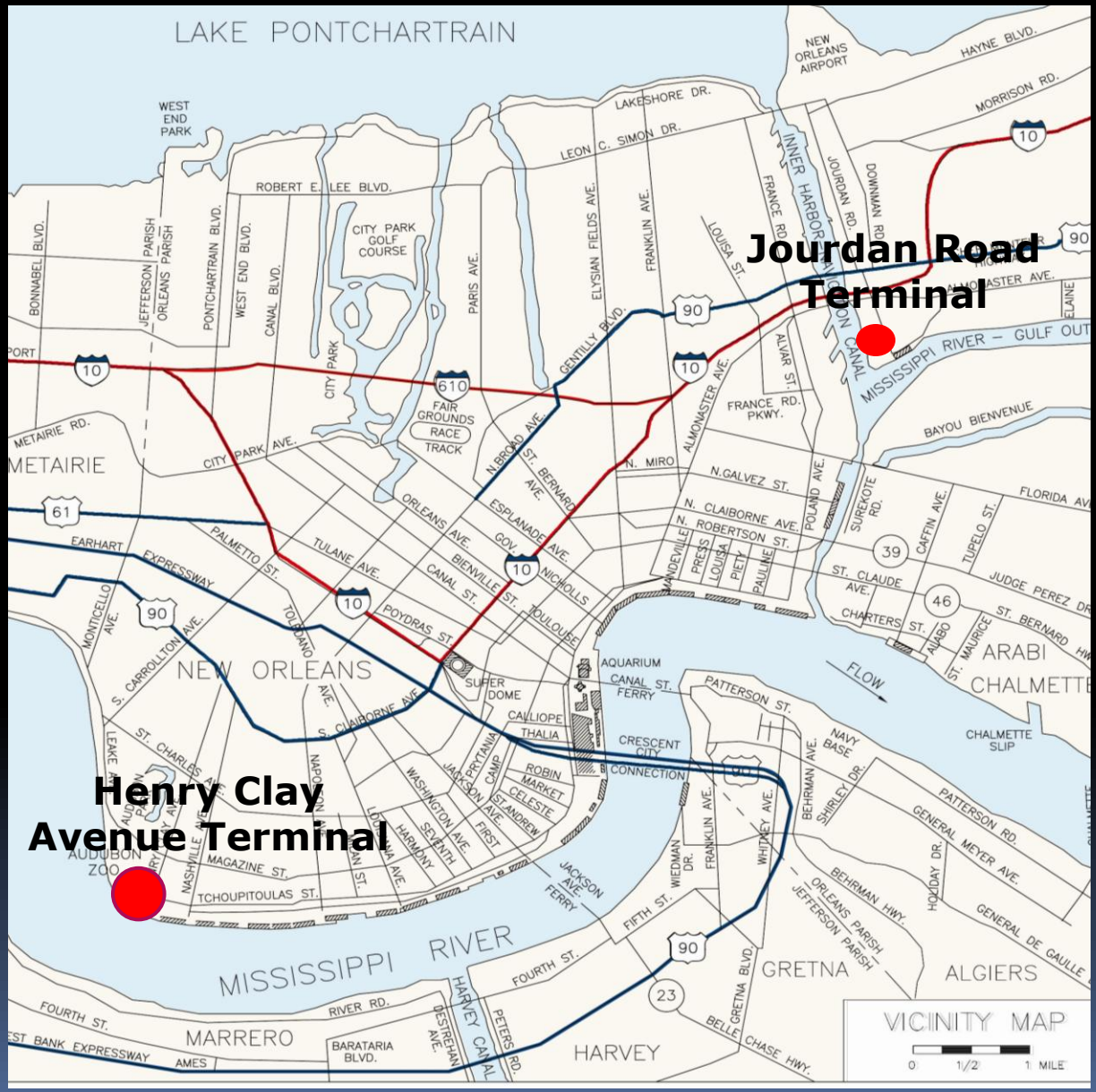
Long-Term Solution

Construct a new cold storage facility at Henry Clay Avenue Terminal.

Former Henry Clay Avenue Wharf and Shed

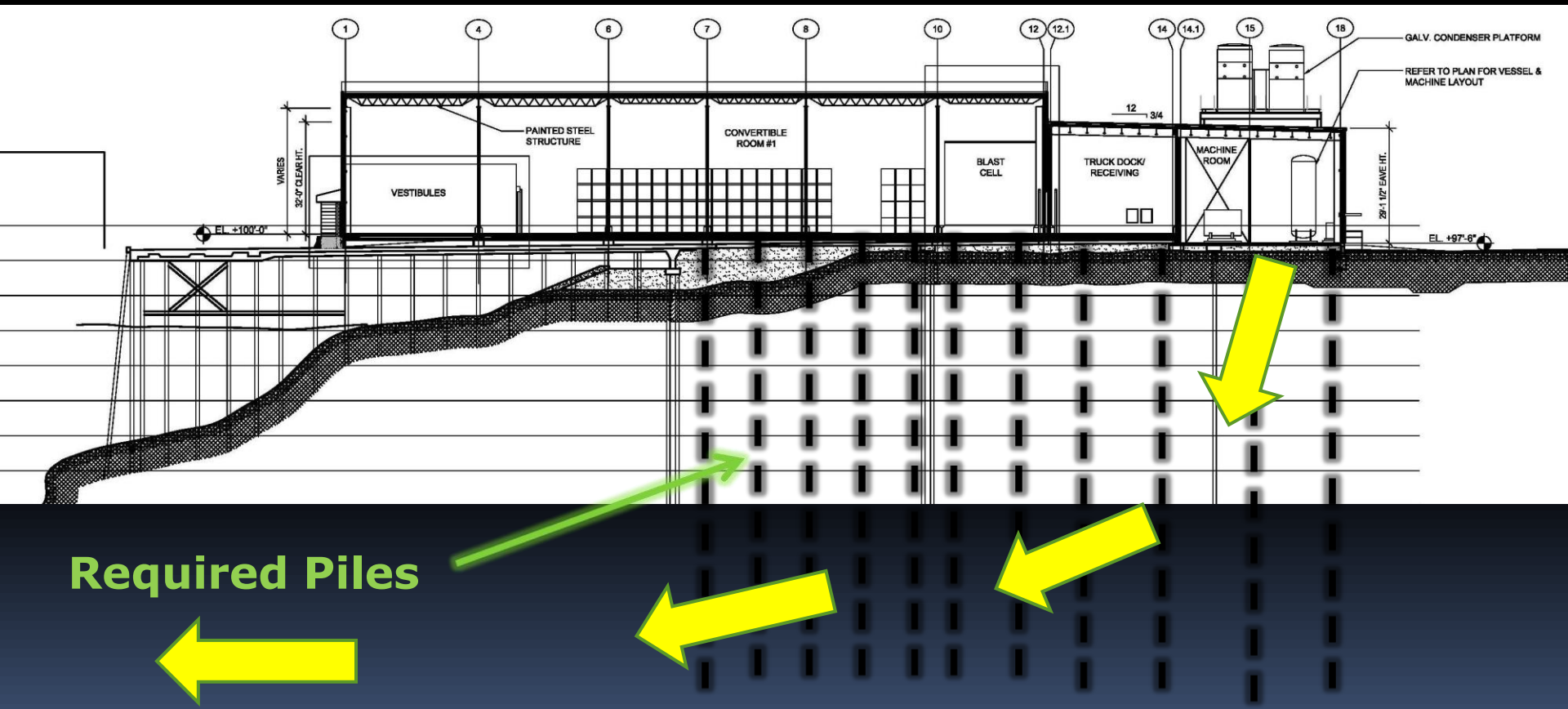
Riverfront Cold Storage Facility
First Design Build Project
at the Port of New Orleans

PONO Cold Storage Facilities



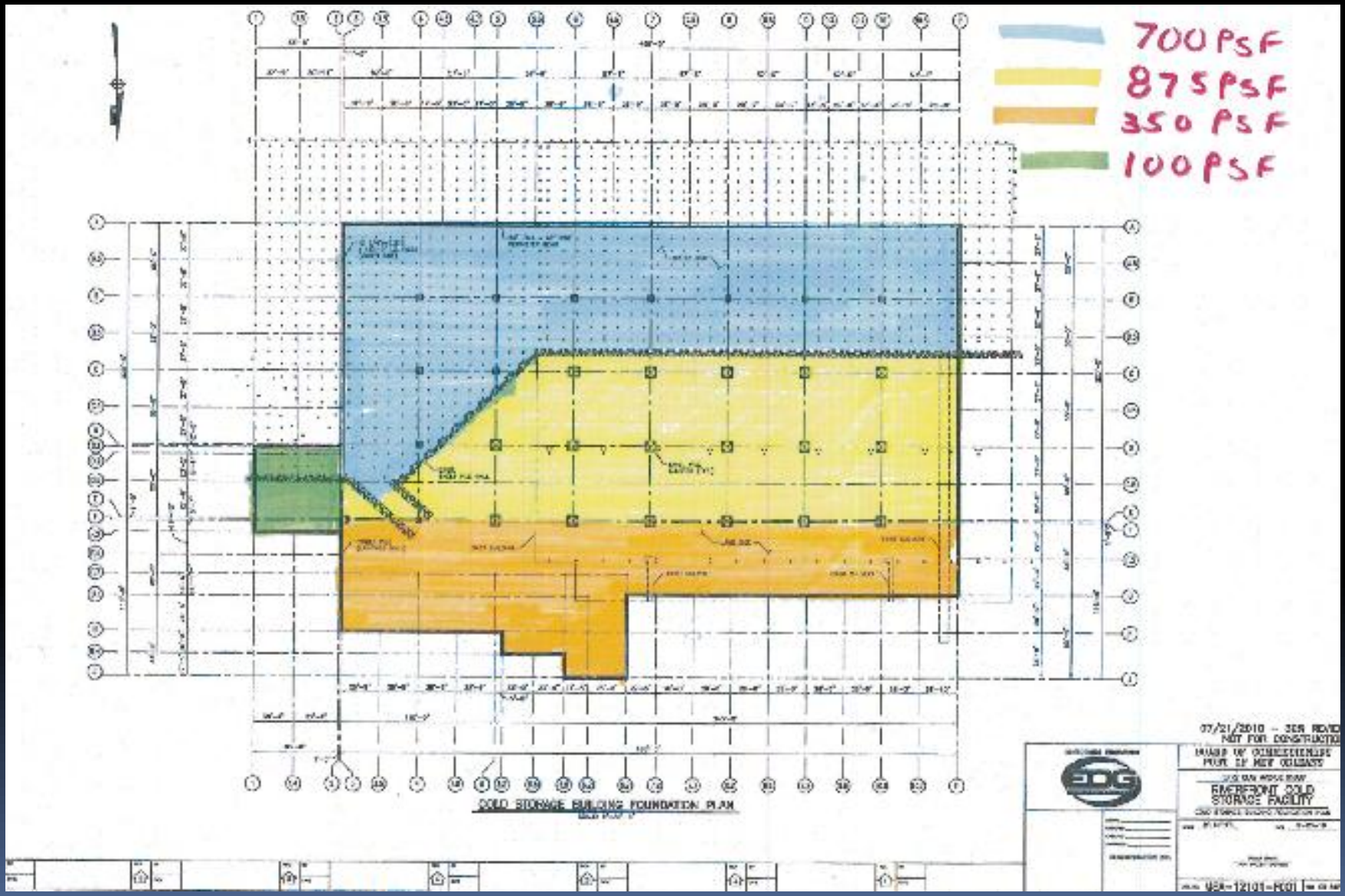
Site Constraints

Riverside **Landside**



Required Piles

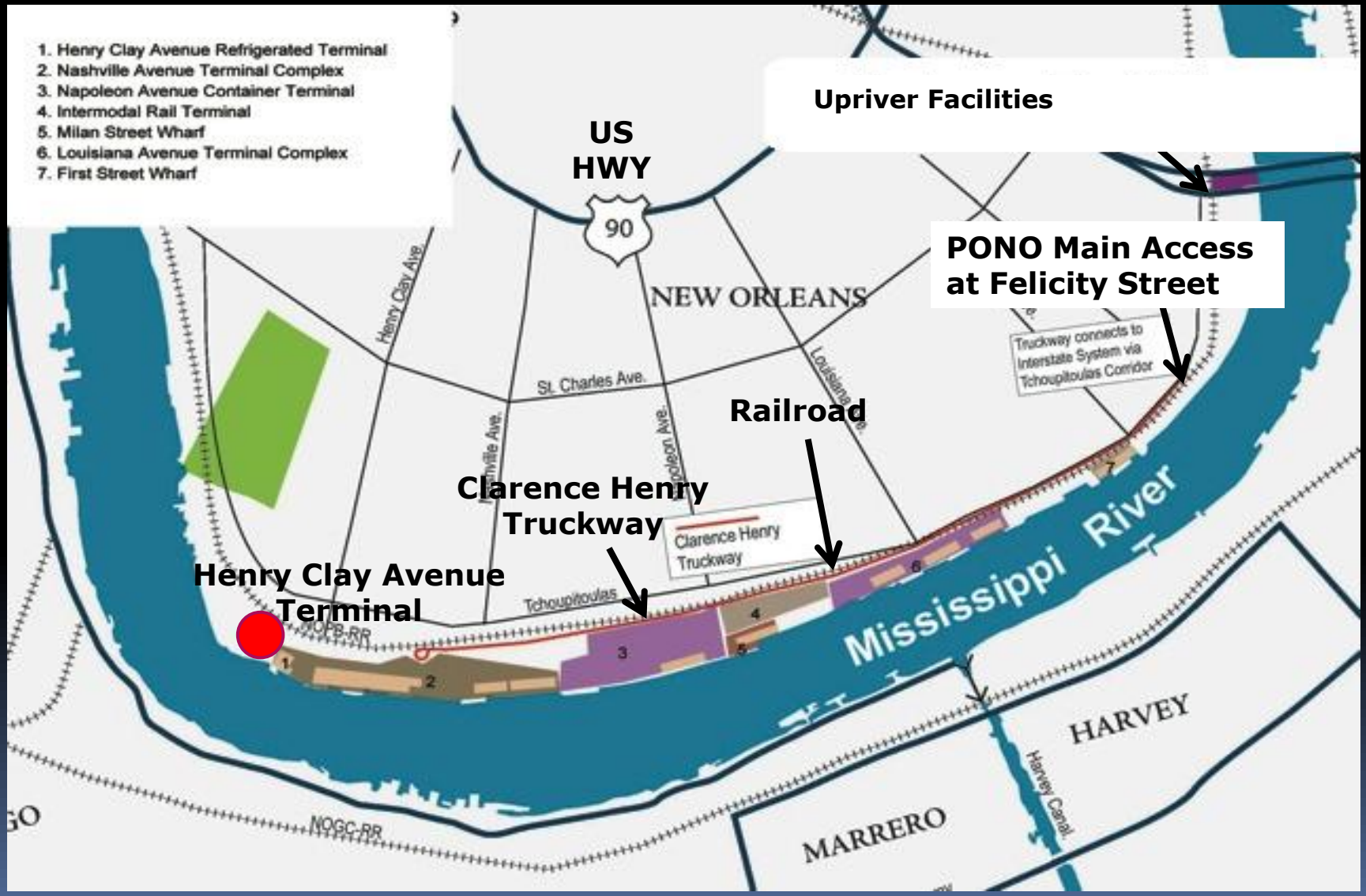
Foundation Plan



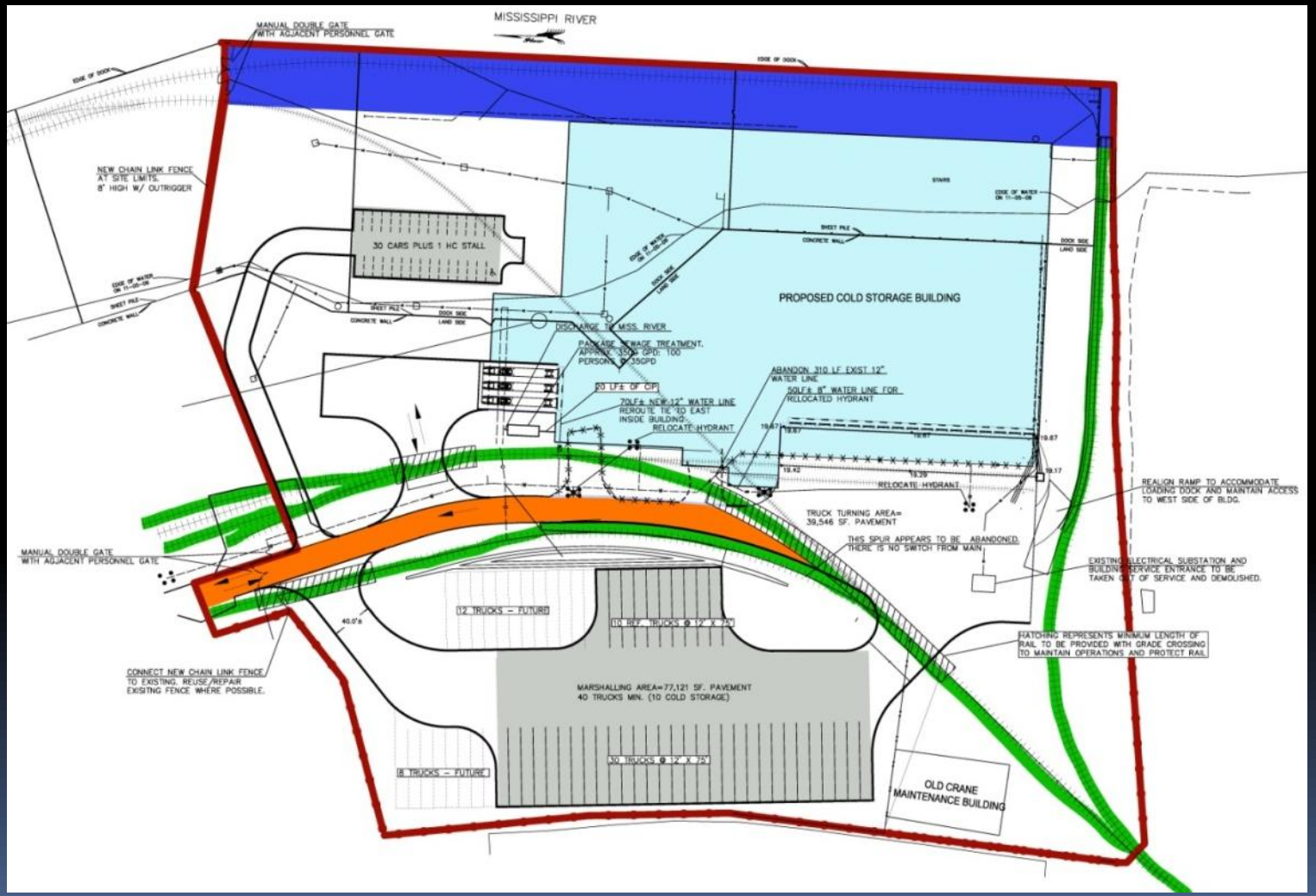
Other Challenges

- **High River Conditions – seasonal fluctuations in Mississippi River**
- **Vapor Barrier and Under Floor Heat System**
- **Blast Freezer Changes**
- **Existing Rail System – maintain active rail service running directly through the project site during construction.**

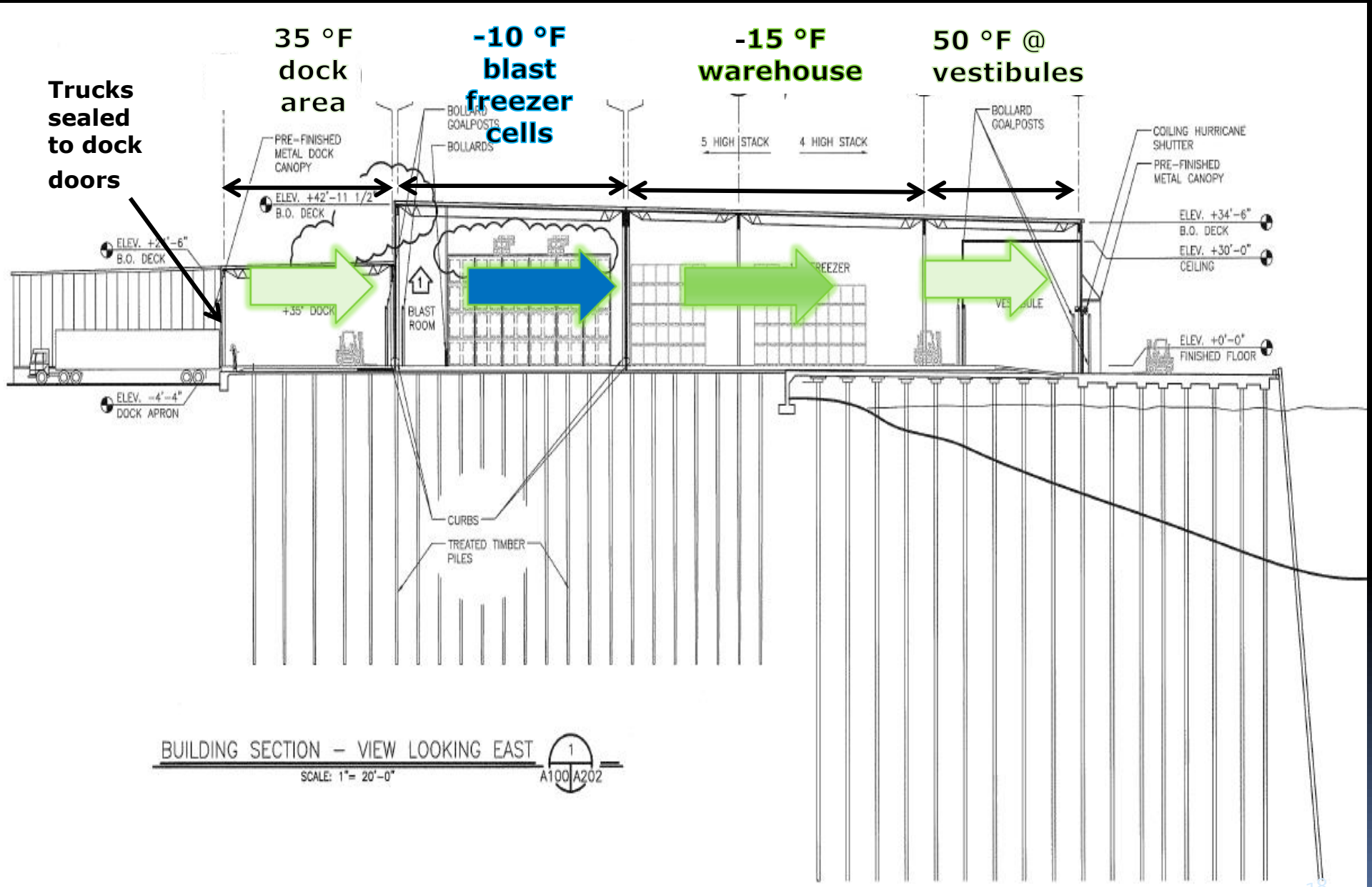
Project Intermodal Access



Site Plan


MISSISSIPPI RIVER
MANUAL DOUBLE GATE WITH ADJACENT PERSONNEL GATE
NEW CHAIN LINK FENCE AT SITE LIMITS. 8' HIGH W/ OUTRIGGER
30 CARS PLUS 1 HC STALL
PROPOSED COLD STORAGE BUILDING
DISCHARGE TO MISS. RIVER
PACKAGE SEWAGE TREATMENT. APPROX. 3500 GPD; 100 PERSONS @ 35GPD
20 LF± OF CIP
70LF± NEW 12" WATER LINE REROUTE TIE TO EAST INSIDE BUILDING. RELOCATE HYDRANT
ABANDON 310 LF EXIST 12" WATER LINE
50LF± 8" WATER LINE FOR RELOCATED HYDRANT
RELOCATE HYDRANT
TRUCK TURNING AREA= 39,546 SF. PAVEMENT
THIS SPUR APPEARS TO BE ABANDONED. THERE IS NO SWITCH FROM MAIN.
REALIGN RAMP TO ACCOMMODATE LOADING DOCK AND MAINTAIN ACCESS TO WEST SIDE OF BLDG.
EXISTING ELECTRICAL SUBSTATION AND BUILDING SERVICE ENTRANCE TO BE TAKEN OUT OF SERVICE AND DEMOLISHED.
MANUAL DOUBLE GATE WITH ADJACENT PERSONNEL GATE
12 TRUCKS - FUTURE
10 REF. TRUCKS @ 12' X 75'
HATCHING REPRESENTS MINIMUM LENGTH OF RAIL TO BE PROVIDED WITH GRADE CROSSING TO MAINTAIN OPERATIONS AND PROTECT RAIL
CONNECT NEW CHAIN LINK FENCE TO EXISTING. REUSE/REPAIR EXISITNG FENCE WHERE POSSIBLE.
MARSHALLING AREA=77,121 SF. PAVEMENT 40 TRUCKS MIN. (10 COLD STORAGE)
30 TRUCKS @ 12' X 75'
8 TRUCKS - FUTURE
OLD CRANE MAINTENANCE BUILDING

Temperature Control from Trucks to Ships



Facility Under Construction

Battery Stations and Washer

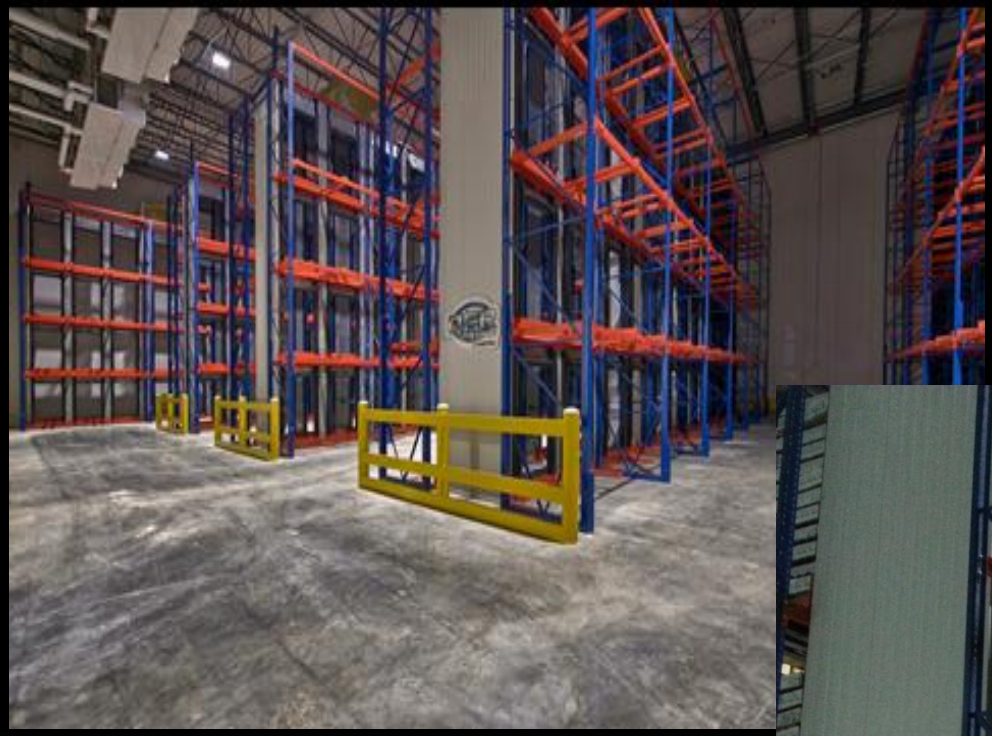
Truck Bays - Exterior

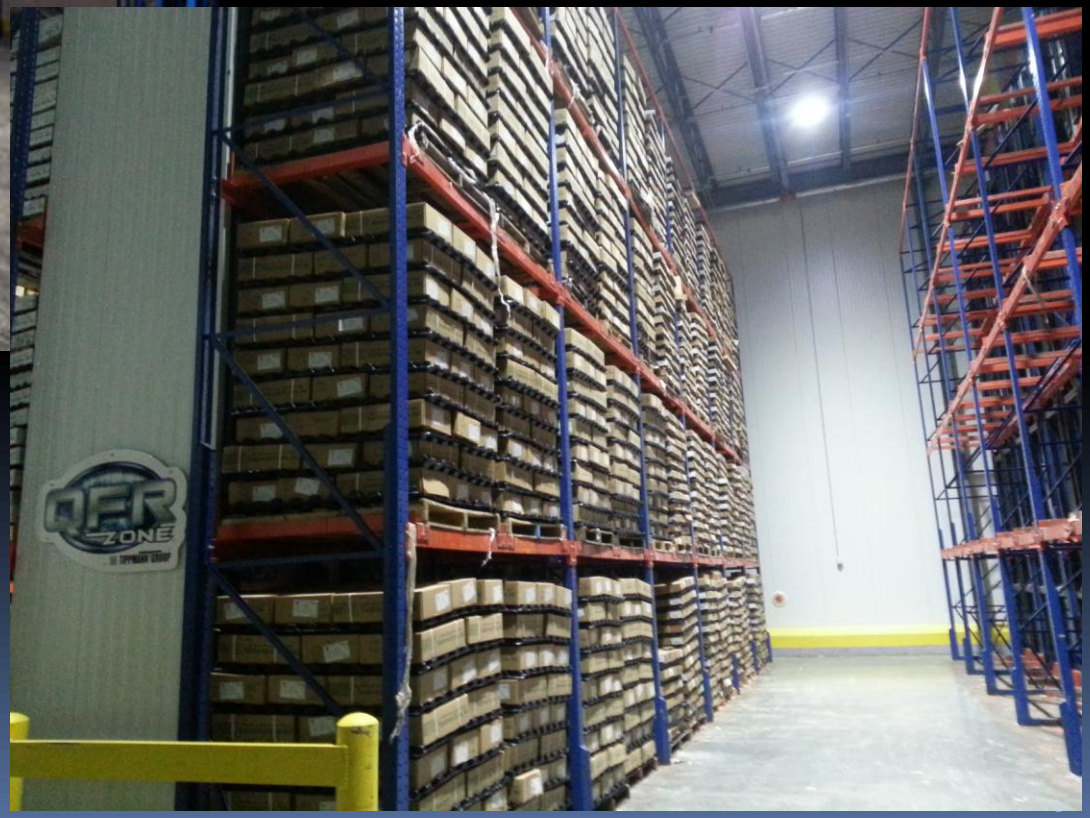
Truck Bays - Interior

Shipping and Receiving Dock

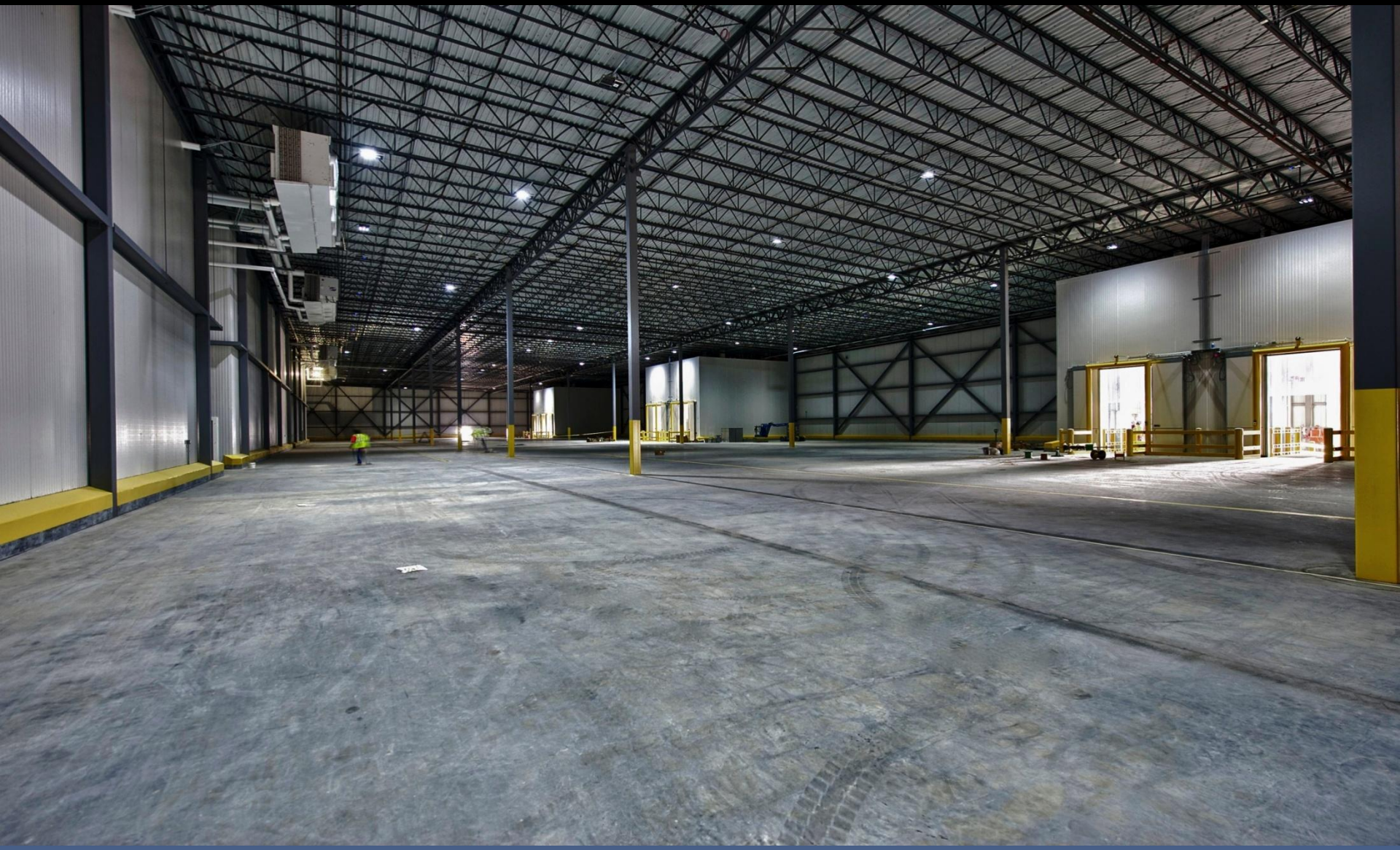
Blast Freezer Entrance

Rack Freezing System



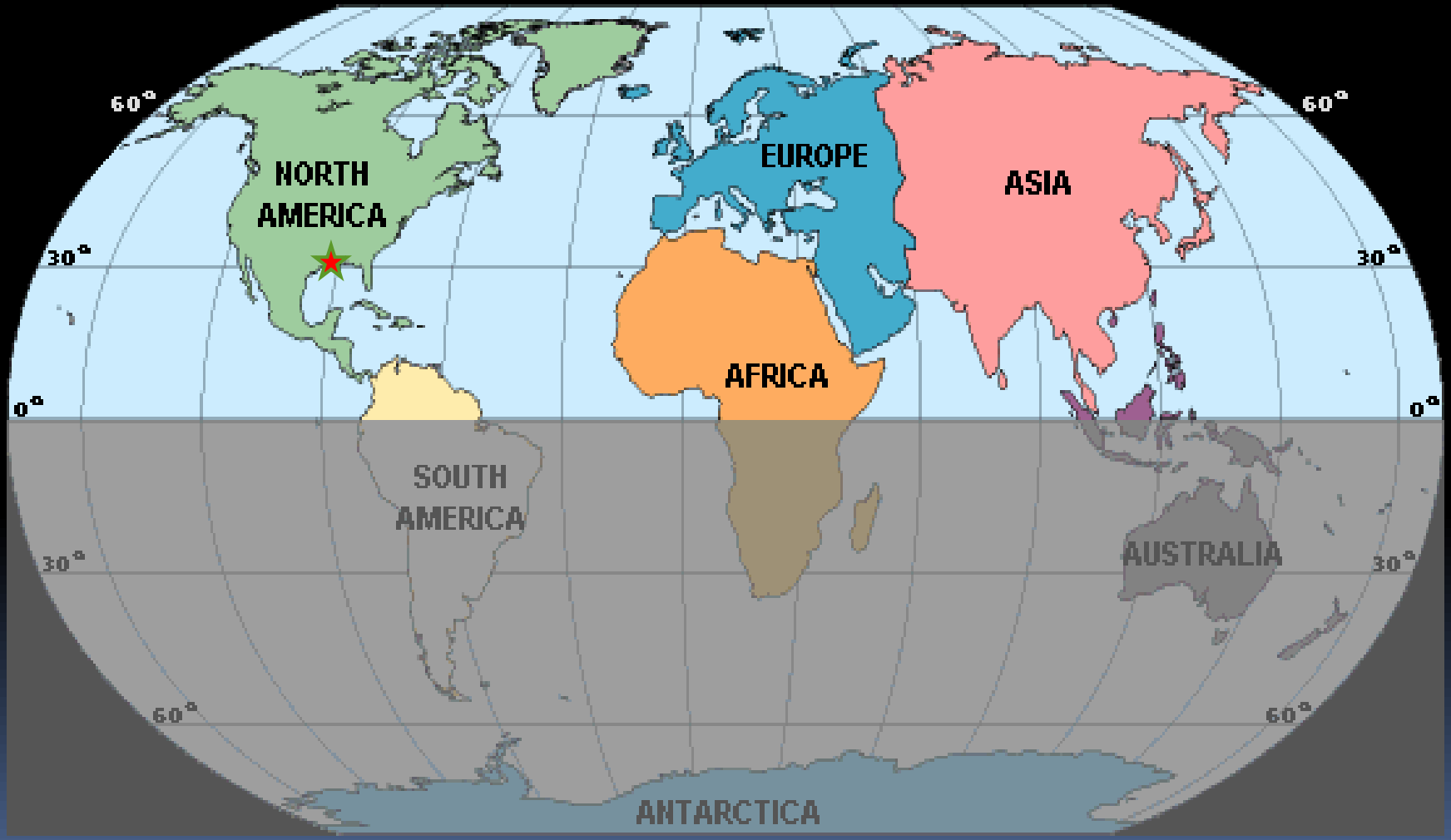


Freezer Warehouse



Freezer Warehouse

Largest Blast Freeze Operation in the Northern Hemisphere



By the Numbers

142,000 SF
Building Area

296,328 SF
Wharf Area

50+
Years
Useful Life

3.5
Marshalling Yard Acreage

101,640 SF
Freezer

$40.5 million
total project cost

2 years
start of design to substantial completion
June 2010 – June 2012

Leadership In Energy and Environmental Design (LEED) Standards

Employed for energy savings and operational efficiencies including:

- **Light-emitting diodes (LED) lighting with centralized control and motion sensor systems**
- **Intricate sequence of systems that reduce energy demand such as:**
  - **Wider doors that allow trucks to open directly into the building**
  - **Air doors to reduce warm air infiltration**
  - **Dehumidifiers**

Total Project Costs at Henry Clay Site

MPJV Design-Build Contract	$35,126,609
Design Build – Other Engineering	$2,076,674
Shed and Foundation Demolition	$662,465
Substructure Bracing and Revetment	$1,345,252
Degrading Bank Line	$972,796
Comfort Station	$308,582
Total	$40,492,378

Project Funding Sources

Total Project Costs	**$40,492,378**
State Reimbursement (CDBG funds)	**-$23,500,000**
FEMA Funding	**-$2,791,388**
Site Selection Expenses	**$3,239,342**
Net Project Costs to PONO	**$17,440,332**

Riverfront Cold Storage Facility
First Design Build Project
at the Port of New Orleans

Project Management Institute
Atlanta Chapter
2012 Project of the Year
Award

Time-Lapsed Construction Sequence

Thank you!

Questions and Comments?

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