GENERAL NOTES

1. The primary purpose of the work is to reduce or eliminate water leakage that is occurring from Lake Michigan to the Chicago River. The leakage control measures contained in these plans involves driving steel sheet piling and pressure grouting to serve as a cutoff wall. Piezometers have been placed throughout the work area and will be monitored by the Engineer throughout construction.

2. Prior to beginning any work, the Contractor shall obtain and submit to the Illinois Department of Natural Resources all necessary permits for construction. Permits from the U.S. Army Corps of Engineers and the IDNR were obtained during the design phase of the project, which covers work being performed in the waterways. Design plans have been submitted to City of Chicago, Department of Transportation, Office of Underground Coordination (OUC), File No. 43191 telephone number 312-744-4828. The contractor shall obtain a Harbor Permit from the Chicago Department of Transportation. See special provisions for more detailed information. The Contractor is responsible for coordinating all necessary work with the Illinois Department of Natural Resources, the U.S. Army Corps of Engineers, the City of Chicago and the Metropolitan Pier and Exposition Authority (MPEA). Costs for all necessary permits including additional insurance if applicable, are the responsibility of the Contractor and shall be included in the price bid for completing the work.

3. The Contractor shall exercise extreme care during construction operations to avoid damage to existing facilities designated to remain in place. Any damage to the existing facilities not indicated to be removed, shall be repaired by the contractor to the satisfaction of the Engineer at no additional cost to the Illinois Department Natural Resources.

4. Entrance to the site with construction vehicles and equipment, and delivery of materials shall be prearranged with the involved property owner, particularly with the MPEA and the U.S. Army Corps of Engineers. There may be weight and size limits of vehicles and equipment using roadways to enter the work area. The Contractor's submission of bid for the work indicates that he has fully determined means and methods for gaining access to the site for delivering materials and completing work. No additional compensation will be allowed due to site constraints.

5. The Contractor is responsible for jobsite safety at all times. It shall be the Contractor's sole responsibility to construct all items on these plans using construction means and methods that will protect property at all times and prevent bodily injury and/or death. The Contractor shall comply with all governmental requirements relative to safety.

PROPERTY OWNERS

The project will be constructed entirely on property owned by the U.S. Army Corps of Engineers. The following property owners are located at or adjacent to the site.

1. U.S. Army Corps of Engineers, Chicago District, 111 N. Canal Street, Chicago, Illinois, 60606. Contact: Mr. Greg Vejvoda, Lockmaster. Telephone Number 312-846-5487

2. Metropolitan Pier and Exposition Authority (property actually owned by the City of Chicago with an Interagency Agreement for the use of the property). Address and contact for the Metropolitan Pier and Exposition Authority: Ms. Renee Benjamin, 301 E. Cermak Road, Chicago, Illinois, 60616. Telephone Number 312-791-6264.

3. General Services Administration. Contact: Mr. Joseph O'Bradovic, Room 3774, 230 South Dearborn Street, Chicago, Illinois, 60604. Telephone Number 312-353-0857.

ABBREVIATIONS

TBM = Temporary Bench Mark
C.C.D = Chicago City Datum
B/WALL = Bottom of Wall
T/WALL = Top of Wall
EL. = Elevation
TYP. = Typical
DIA. = Diameter
H.S. = High Strength
ft. = feet
A.C.O.E. = Army Corps of Engineers

LEGEND

—E— ELECTRIC LINE
—•—•— FENCE
WATER
REMOVAL
TEMPORARY RIPRAP REMOVAL
AREA TO BE GROUTED

6. Dimensions and existing features shown on the plans are based on best available existing plans and survey. Accuracy of existing information contained on these plans cannot be guaranteed. Some exploratory work is required to determine buried features and to further define the work limits.
This work is further described in the Construction Sequence contained on this drawing. Minor adjustments may be made by the Engineer to extend or realign the proposed steel sheet piling to best suit site conditions and effectiveness of improvements.

7. All existing utilities and field conditions shall be physically checked and verified prior to bidding and construction. There may be additional utilities present at the site beyond those indicated on the plans. The Contractor shall be responsible for notifying DIGGER (312-744-7000) at least 48 hours in advance of beginning any work. The Contractor is responsible for coordinating with all utility agencies or companies prior to the commencement of construction, to determine the exact locations, protection, operation, and temporary relocation during construction. The Contractor shall be responsible for protecting the existing and new utilities when considered necessary by the Engineer and he shall brace and support the utilities to properly prevent settlement, displacement or change to the utility. The protection of the utilities as specified herein will not be paid for separately, but the cost thereof shall be considered included with the item of work involved requiring the protection. If existing utility lines encountered are in conflict with the proposed work, the Contractor shall notify the appropriate owner immediately for resolution.

8. The Contractor is advised that a concrete utility tunnel is present at the North Pier. The tunnel is located along the north side of the Chicago River turning basin. No construction loads will be permitted on this tunnel. Removing of the riprap, driving of the steel sheet piling, and placing concrete at the northeast corner of the Chicago River turning basin must be accomplished by barge mounted equipment.

9. All work must be performed in accordance with the construction sequence indicated on the plans and the requirements stated in the Illinois Department of Transportation (IDOT) Standard Specifications for Road and Bridge Construction, and the Special Provisions.

10. Elevations shown on the plans are referenced to the City of Chicago Datum (CCD). See Sheet 3 for benchmark locations.

11. Do not scale drawings for dimensions for construction.

12. Steel sheet piling shall conform to ASTM A328, and have a minimum thickness of $^{3}/_{8}$" and a minimum section modulus as follows:

Type	Min. section modulus (in.^{3}/ft)
AZ13	24.2
AZ18	33.5
PZ27	30.2

13. Structural steel shall conform to ASTM A36 unless otherwise noted.

14. All bolts shall be high-strength structural bolts conforming to ASTM A325 unless otherwise noted.

15. Cast-in-place concrete shall be IDOT Class SI, unless otherwise specified. f'c = 3,500 p.s.i.

16. Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60. See Special Provisions.

17. Reinforcement bars designated (E) shall be epoxy coated.

SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	UNIT	QUANTITY
50102400	CONCRETE REMOVAL	CU YD	58.3
50300225	CONCRETE STRUCTURES	CU YD	58.3
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,200
51201800	FURNISHING STEEL PILES HP 14 X 73	FOOT	104
51202305	DRIVING PILES	FOOT	160
*51204900	STEEL SHEET PILING	SQ FT	4,036
*67000500	ENGINEER'S FIELD OFFICE TYPE B	CAL MO	6
67100100	MOBILIZATION	L SUM	1
*	TEMPORARY BRACING ASSEMBLY	L SUM	1
*	REMOVE AND REPLACE EXISTING MODULAR BLOCK WALL	L SUM	1
*	ELECTRIC SERVICE RELOCATION	L SUM	1
*	FURNISHING STEEL PILES HP 14 X 73, SPECIAL	FOOT	56
*	SHEET PILING REMOVAL	SQ FT	164
*	LEAN CONCRETE FILL	CU YD	70
*	WALER ASSEMBLY	L SUM	1
*	SEEPAGE CONTROL GROUT HOLE	EACH	2
*	UNDERWATER JOINT REPAIR	FOOT	200
*	PRESSURE GROUTING	BAGS	330
*	PRESSURE GROUTING (PROVISIONAL)	BAGS	450
*	OBSERVATION WELLS	L SUM	1

* SEE SPECIAL PROVISIONS

CONSTRUCTION SEQUENCE

1. Prior to beginning any work, the Contractor shall locate all existing utilities within the work limits.

2. The Engineer will obtain and record water level readings at the various piezometer locations. Existing piezometers shall be restored as necessary.

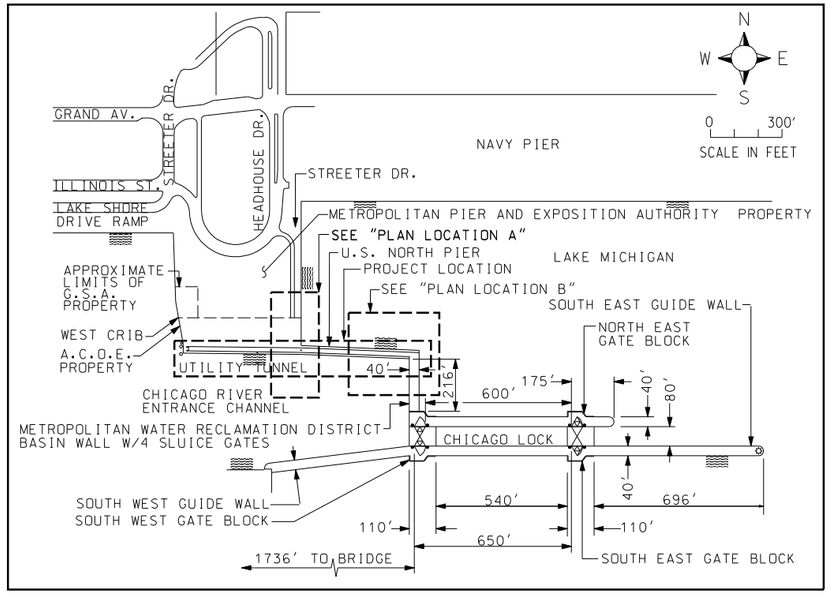
3. The Contractor shall prepare and submit his detailed pressure grouting procedure for assuring stabilization of the riprap behind the existing soldier pile retaining wall at location B and behind the existing sheet pile wall at location A, shown on sheets 5 and 3 respectively. The pressure grouting stabilization shall occur prior to removing riprap and steel sheet piling, and required repairs for driving new steel sheet piling.

4. The Contractor shall proceed with the sheet pile driving operations. At the conclusion of driving sheet piling, water levels will be recorded by the Engineer at the piezometer locations.

5. The Contractor shall proceed with the placement of lean concrete in the void located between the new sheet piling and existing crib wall as shown on Sheet 5. Replacement of the riprap at the front face of the wall and installation of the structural steel wale on the back face shall occur prior to placing the concrete. Placement of the concrete at this location shall be accomplished by the tremie method. Upon completion of the concrete placement, two holes shall be cored and filled with grout at the designated locations on the plans. The grouting will serve as a waterseal between the interface of the new and existing surfaces. Water levels will be recorded at the piezometer locations.

6. After all necessary submittals have been made by the Contractor and approved by the Engineer, the Contractor shall proceed with the grouting operations at the designated areas as shown on Sheet 6 (if necessary and only after approved by the Enginner). The primary basis for the grouting operation is to fill the voids present in the backfill. The results of the grouting operation must create a solid impermeable mass between the existing sheet piling and under the tunnel. During the grouting operations, water levels will be recorded at the piezometer locations.

7. The Contractor shall restore the site to the Pre-construction condition at no additional cost to the contract.



PROJECT LOCATION MAP