## FLOOD CONTROL MISSISSIPPI RIVER AND TRIBUTARIES MISSISSIPPI RIVER LEVEES

ITEM M-98.2 TO 97.2-L
LOUISIANA - JACKSON AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA
RELOCATION OF FACILITIES
DESIGN MEMORANDUM NO. 64



## United States Army Corps of Engineers

... Serving the Army ... Serving the Nation

DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

NEW ORLEANS, LOUISIANA

286638

**JUNE 1982** 

Serial No. 15





## DEPARTMENT OF THE ARMY NEW ORLEANS DISTRICT. CORPS OF ENGINEERS

P. O. BOX 60267 NEW ORLEANS, LOUISIANA 70160

REPLY TO ATTENTION OF:

LMNE D-MR

28 May 182

SUBJECT: Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-98.2 to 97.2-L, Louisiana to Jackson Avenue Floodwall, Orleans Parish, Louisiana, Relocation of Facilities, Design Memorandum No. 64

President
Mississippi River Commission
ATTN: MRCED-TD

- 1. The subject design memorandum is submitted herewith for review and approval in accordance with the provisions of ER 1110-2-1150 dated 19 June 1970.
- 2. The final Environmental Impact Statement (EIS) for the Mississippi River Levees and Channel Improvements projects, which includes the Louisiana to Jackson Avenue Floodwall was filed with the Council on Environmental Quality (CEQ) and the notice of its availability was published in the Federal Register on 16 April 1976. No inadequacies in the EIS were reported.
- 3. A cultural resources survey will be conducted prior to floodwall construction. The purpose of the cultural resources survey will be to ascertain the existence of archeological resources in the work area and to determine the applicable procedures to be followed to avoid damage to the archeological resources, if any are found. Additionally, specifications covering the work to be performed in constructing and maintaining the levees provide for preservation of any items of apparent historical or archeological interest which may be discovered in the course of construction activities. The specifications will require immediate notification of proper authorities if any items of this nature are encountered, and will further require that the work cease until the items can be classified and salvaged, if salvage is considered appropriate.
- 4. The Section 404 public notice for this reach of levee (Orleans Levee District) was issued on 20 October 1976. No adverse comments were received. In compliance with applicable regulations pursuant to Section 404(b) of Federal Water Pollution Control Act, a statement of findings covering proposed future construction of Mississippi River levees within the New Orleans District was submitted to the Environmental Protection Agency (EPA) on 14 July 1978. The statement of findings was approved on 6 November 1978.

LMNED-MR

27 87 85

SUBJECT: Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-98.2 to 97.2-L, Louisiana to Jackson Avenue Floodwall, Orleans Parish, Louisiana, Relocation of Facilities, Design Memorandum No. 64

- 5. Based on studies and investigations at this stage of design, the proposed action will not jeopardize the continued existence of any endangered species or threatened species or adverse modification of habitat of such species.
- 6. The latest approved PB-2A (CYP ER 013) shows total relocations cost of \$279,000, with \$247,000 and \$32,000 to be expended in FY 83 and FY 84, respectively. The CYP shows no scheduled expenditures in FY 82. The current working estimate for all relocations is estimated at \$335,000. Based on the scheduled project award date of August 1982, we estimate obligations and expenditures of \$75,000 in FY 82 and \$260,000 in FY 83. Funds for this expenditure are available from other items within the Mississippi River Levees program. These changes will be reflected in the Current Year Revised (CYR) program which is now being prepared. The proposed levels of expenditures for this item of work will contribute toward maintaining the currently estimated completion date for the overall Mississippi River Levee project.

7. Approval of the design memorandum is recommended.

1 Incl (11 Sets)
Design Memorandum No. 64

ROBERT C. LEE Colonel, CE Commanding FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-98.2 TO 97.2-L
LOUISIANA TO JACKSON AVENUE FLOODWALL
ORLEANS PARISH, LOUISIANA
RELOCATION OF FACILITIES
DESIGN MEMORANDUM NO. 64

#### STATUS OF DESIGN MEMORANDUMS

| Design<br>Memo<br>No. | <u>Titl</u> e  | Actu<br>Sche<br>Subn | edul | .ed |     |
|-----------------------|--|----------------------|------|-----|-----|
| 1                     | Flood Control, Mississippi River and Tributaries, Item M-25.0-R, Buras Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities  | 23 N                 | Vov  | 70  | (A) |
| 2                     | Flood Control, Mississippi River and Tributaries, Item M-26.0-R, Upper Buras Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities  | <b>21</b> J          | Jan  | 71  | (A) |
| 3                     | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-14.9-R, Commander Levee<br>Enlargement, Plaquemines Parish,<br>Louisiana, Relocation of Facilities    | 11 J                 | Jun  | 71  | (A) |
| 4                     | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-10.7-R, Venice Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities       | 6 A                  | Apr  | 71  | (A) |
| 5                     | Lower Red River - South Bank Red River<br>Levees, Item R-117.0-R (1957 Mileage),<br>Levee Enlargement, Rapides-Cotton<br>Bayou Levee, Rapides Parish, Louisiana,<br>Relocation of Facilities   | 22 J                 | fan  | 71  | (A) |
| 6                     | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-31.3-R, Tropical Bend Levee<br>Setback, Plaquemines Parish,<br>Louisiana, Relocation of Facilities    | 30 M                 | lar  | 71  | (A) |
| 7                     | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-10.4-R, Lower Venice Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities | 27 A                 | ug   | 71  | (A) |

| Design<br>Memo<br>No. | <u> Title</u>  | Actual (A) or<br>Scheduled (S)<br>Submission Date |
|-----------------------|--|---|
| 8                     | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-18.9-R, Fort Jackson-Boothville Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities                              | 30 Nov 72 (A)                                     |
| 9                     | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-21.5-R, Childress Levee<br>Enlargement, Plaquemines Parish,<br>Louisiana, Relocation of Facilities                                | 23 Sep 71 (A)                                     |
| 10                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-23.2-R, Buras-Triumph Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities  | 31 May 73 (A)                                     |
| 11                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-55.3-R, Upper Junior Levee<br>Setback, Plaquemines Parish, Louisiana,<br>Relocation of Facilities                                 | 21 June 71 (A)                                    |
| 12                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-51.0-L, Gravolet Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities                                 | 14 Sep 72 (A)                                     |
| 13                    | Flood Control, Mississippi River and Tributaries, Lower Red River - South Bank Red River Levees, Item R-123.5-R (1957 Mileage), Scott Home-Bertrand Levee Enlargement, Rapides Parish, Louisiana, Relocation of Facilities | 15 Sep 72 (A)                                     |
| 14                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-96.9-R, Amelia Street Levee,<br>Jefferson Parish, Louisiana,<br>Relocation of Facilities  | 31 Aug 71 (A)                                     |

| Design<br>Memo<br>No. | <u> Title</u>  | Actual (A) or<br>Scheduled (S)<br>Submission Date |
|-----------------------|--|---|
| 15                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-41.7-R, Port Sulphur Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities | 28 Jan 74 (A)                                     |
| 16                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-33.4-R, Nairn Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities                    | 22 Dec 75 (A)                                     |
| 17                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-37.7-R, Homeplace Levee<br>Enlargement, Plaquemines Parish,<br>Louisiana, Relocation of Facilities    | 5 Jan 73 (A)                                      |
| 18                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-57.7-R, Myrtle Grove Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of facilities             | 31 Jan 73 (A)                                     |
| 19                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-28.0-R, Empire Levee<br>Enlargement, Plaquemines Parish,<br>Louisiana, Relocation of Facilities       | 30 Aug 74 (A)                                     |
| 20                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-49.5-R, Woodland Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities                 | 24 Aug 73 (A)                                     |
| 21                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-47.2-R, Nolan Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities                    | 29 Jun 73 (A)                                     |

| Design<br>Memo<br>No. | <u> Title</u>  | Actual (A) or<br>Scheduled (S)<br>Submission Date |
|-----------------------|--|---|
| 22                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-45.0-R, Socola Levee<br>Enlargement, Plaquemines Parish,<br>Louisiana, Relocation of Facilities       | 28 Nov 72 (A)                                     |
| 23                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-75.0-L, Scarsdale Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities                    | 7 Dec 73 (A)                                      |
| 24                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-89.5-R, Cutoff Levee Setback,<br>Orleans Parish, Louisiana, Relocation<br>of Facilities               | 20 Dec 74 (A)                                     |
| 25                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-130.0-L, Gypsy Levee Setback, St. Charles Parish, Louisiana, Relocation of Facilities                       | 30 Dec 74 (A)                                     |
| 26                    | Flood Control, Mississippi River and Tributaries, Atchafalaya River Levees, Item A-31.3-L, Cross Bayou Levee Setback, Pointe Coupee Parish, Louisiana, Relocation of Facilities                | 8 Nov 74 (A)                                      |
| 27                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-39.0-R, Freeport Levee Enlargement, Plaquemines Parish, Louisiana   | 27 Dec 74 (A)                                     |
| 28                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-30.2 R, Upper Empire Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities | 30 Apr 75 (A)                                     |

| Design<br>Memo<br>No. | <u> Title</u>   | Actual (A) or<br>Scheduled (S)<br>Submission Date |
|-----------------------|---|---|
| 29                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-63.0-L, Monsecour Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities   | 15 Oct 75 (A)                                     |
| 30                    | Flood Control, Mississippi River and Tributaries, Atchafalaya River Levees, Item A-25.5-R, Goudeau Levee Setback, St. Landry Parish, Louisiana, Relocation of Facilities  | 30 Jun 76 (A)                                     |
| 31                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-320 to 303-R, Fifth Louisiana Levee District Levee Enlargement, Concordia, West Feliciana, and Pointe Coupee Parishes, Louisiana, Relocation of Facilities | 30 Jun 75 (A)                                     |
| 32                    | Flood Control, Mississippi River and Tributaries, Atchafalaya River Levees, Item A-4.6-L, Legonier Levee Setback, Pointe Coupee Parish, Louisiana, Relocation of Facilities   | 30 Sep 75 (A)                                     |
| 33                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-35.0-R, Nairn Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities   | 22 Dec 75 (A)                                     |
| 34                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-99.0-L, Louisiana Avenue Floodwall, Orleans Parish, Louisiana, Relocation of Facilities  | 21 Oct 75 (A)                                     |
| 35                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-144.5-L, Angelina Levee<br>Setback, Saint John the Baptist Parish,<br>Louisiana, Relocation of Facilities  | 12 Dec 75 (A)                                     |

| Design<br>Memo<br>No. | <u> T</u> i <u>tle</u>   | Acti<br>Sche<br>Subr | edu]       | Led |     |
|-----------------------|--|----------------------|------------|-----|-----|
| 36                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-205.0-R, Point Pleasant Levee Setback, Iberville Parish, Louisiana, Relocation of Facilities                      | 29 1                 | Nov        | 76  | (A) |
| 37                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-58.0-L, St. Sophie Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities                     | 15 \$                | Sep        | 75  | (A) |
| 38                    | Flood Control, Mississippi River and Tributaries, Atchafalaya River Levees, Item A-38.0L, Holloway Lake Levee Setback, Pointe Coupee Parish, Louisiana, Relocation of Facilities                     | 26 N                 | lar        | 76  | (A) |
| 39                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-90.5-L, Chalmette Slip Levee Enlargement, St. Bernard Parish, Louisiana, Relocation of Facilities                 | 5 N                  | ſay        | 77  | (A) |
| 40                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-95.3L, Thalia-Poydras Street<br>Floodwall, Orleans Parish, Louisiana,<br>Relocation of Facilities           | 10 J                 | <b>Jun</b> | 76  | (A) |
| 41                    | Flood Control, Mississippi River and<br>Tributaries, Mississippi River Levees,<br>Item M-217.5-L, Chariot Levee Setback,<br>East Baton Rouge Parish, Louisiana,<br>Relocation of Facilities          | 11 J                 | fun        | 76  | (A) |
| 42                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-52.6-R and M-52.1-R Junior and Lower Junior Levee Setbacks, Plaquemines Parish, Louisiana, Relocation of Facility | 24 J<br>ies          | an         | 77  | (A) |

| Design<br>Memo<br>No. | <u>Title</u>   | Actual (A) or<br>Scheduled (S)<br>Submission Date |
|-----------------------|--|---|
| 43                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-86.0-R, Stanton Levee Setback, Orleans Parish, Louisiana, Relocation of Facilities                | 10 Oct 78 (A)                                     |
| 44                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-215.3-L, Manchac Bend Levee Setback, East Baton Rouge Parish, Louisiana, Relocation of Facilities | 23 Dec 76 (A)                                     |
| 45                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-28.5-R, Empire Levee Setback, Plaquemines Parish Louisiana, Relocation of Facilities              | 16 Dec 77 (A)                                     |
| 46                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-49.0-R, Woodland Levee Setback, Plaquemines Parish Louisiana, Relocation of Facilities            | 28 Nov 77 (A)                                     |
| 47                    | Flood Control, Mississippi River and<br>Tributaries, Atchafalaya Basin Floodway,<br>New Berwick Floodwall, St. Mary Parish,<br>Louisiana, Relocation of Facilities                   | 14 Mar 79 (A)                                     |
| 48                    | Flood Control, Mississippi River and<br>Tributaries, Atchafalaya Basin Floodway,<br>New Morgan City Floodwall, St. Mary<br>Parish, Louisiana, Relocation of<br>Facilities            | 16 Mar 81 (A)                                     |
| 49                    | Flood Control, Mississippi River and<br>Tributaries, Atchafalaya Basin Floodway,<br>New Tiger Island Floodwall, St. Mary<br>Parish, Louisiana, Relocation of Faciliti                | 17 Oct 79 (A)                                     |
| 50                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-24.8-R, Buras-Triumph Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities      | 30 Sep 77 (A)                                     |

| Design<br>Memo<br>No. | <u>Title</u>   | Actual (A) or<br>Scheduled (S)<br>Submission Date |
|-----------------------|--|---|
| 51                    | Flood Control, Mississippi River and Tributaries, East Atchafalaya Basin Protection Levee, Item E-69.0 and E-73.3, Levee Enlargements, St. Martin and Iberville Parishes, Louisiana, Relocation of Louisiana State Route 997 | 3 Jun 77 (A)                                      |
| 52                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-100.0-L, Nashville-Napoleon Floodwall, Orleans Parish, Louisiana Relocation of Facilities   | 25 Aug 77 (A)                                     |
| 53                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-88.0-R, Algiers Lock Forebay Levee Enlargement, Orleans Parish, Louisiana, Relocation of Facilities                                       | 1 Aug 77 (A)                                      |
| 54                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-29.4-R, Empire Lock Modifications, Plaquemines Parish, Louisiana, Relocation of Facilities  | 19 May 78 (A)                                     |
| . 55                  | Flood Control, Mississippi River and Tributaries, West Atchafalaya Basin Protection Levee, Item W-86.0 Levee Enlargement, St. Mary Parish, Louisiana, Relocation of Facilities   | NOT SCHEDULED                                     |
| 56                    | Flood Control, Mississippi River and<br>Tributaries, East Atchafalaya Basin<br>Protection Levee, Item E-89, Driving<br>Steel Sheet Piling and Levee Enlargement,<br>St. Mary Parish, Louisiana, Relocation<br>of Facilities  | 15 May 78 (A)                                     |
| 57                    | Flood Control, Mississippi River and<br>Tributaries, Algiers Point Setback, Levee<br>Enlargement and Slope Pavement, Item<br>M-94.3-R, Orleans Parish, Louisiana<br>Relocation of Facilities                                 | 8 Aug 79  |

| Design<br>Memo |  | Actual (A) or<br>Scheduled (S) |
|----------------|--|--------------------------------|
| No.            | <u>Title</u>   | Submission Date                |
| 58             | Flood Control, Mississippi River and Tributaries, Item M-48.7-L, East Pointe-a-la-Hache Ferry Landing and Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities         | 2 Jun 78 (A)                   |
| 59             | Flood Control, Mississippi River and<br>Tributaries, Jackson Avenue Floodgate,<br>Item M-97.2-L, Orleans Parish, Louisiana,<br>Relocation of Facilites                                       | 9 Jun 78 (A)                   |
| 60             | Flood Control, Mississippi River and<br>Tributaries, Item M-303 to 293-R, Torras<br>Levee Enlargement and Berm, Pointe Coupee<br>Parish, Louisiana, Relocation of Faciliti                   | 26 Jul 78 (A)                  |
| 61             | Flood Control, Mississippi River and<br>Tributaries, East Atchafalaya Basin<br>Protection Levee, Item E-36.0, Levee<br>Enlargement, Iberville Parish, Louisiana,<br>Relocation of Facilities | 28 Mar 79 (A)                  |
| 62             | Flood Control, Mississippi River and<br>Tributaries, Item M-293 to 283-R, Levee<br>Raccourci Levee Enlargement, Pointe<br>Coupee Parish, Louisiana, Relocation of<br>Facilities              | 12 Jun 79 (A)                  |
| 63             | Flood Control, Mississippi River and Tributaries, West Atchafalaya Basin Protection Levee, Item W-85, Levee Enlargement, Iberia and St. Martin Parishes, Louisiana, Relocation of Facilities | 6 Oct 80 (A)                   |
| 64             | Flood Control, Mississippi River and<br>Tributaries, Louisiana-Jackson Avenue<br>Floodwall, Item M-98.2 to 97.2-L, Orleans<br>Parish, Louisiana, Relocation of<br>Facilities                 | June 82 (A)                    |

| Design<br>Memo<br>No. | <u> Title</u>   | Actual (A) or<br>Scheduled (S)<br>Submission Date |
|-----------------------|---|---|
| 65                    | Flood Control, Mississippi River<br>and Tributaries, Canal-Toulouse Street<br>Floodwall, Item M-94.9-94.6-L, Orleans<br>Parish, Louisiana, Relocation of<br>Facilities                                    | Oct 82 (S)  |
| 66                    | Flood Control, Mississippi River and Tributaries, West Atchafalaya Basin Protection Levee, Item W-117.0, Levee Enlargement, St. Mary Parish Louisiana, Relocation of Facilities                           | 15 Dec 80 (A)                                     |
| 67                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-56.1-L, Harlem Levee Setback Plaquemines Parish, Louisiana, Relocation of Facilities                                   | 17 Feb 81 (A)                                     |
| 68                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-71.0-L, Linwood Levee Setback Plaquemines Parish, Louisiana, Relocation of Facilities                                  | 16 Mar 81 (A)                                     |
| 69                    | Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-75.6 - 74.5-L, Scarsdale-Stella Levee Setback and Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities | 9 Jun 81 (A)                                      |
| 70                    | Flood Control, Mississippi River and Tributaries, West Atchafalaya Basin Protection Levee, Item W-68.0, Levee Enlargement & Berms, St. Martin Parish, Louisiana, Relocation of Facilities                 | Mar 83 (S)  |
| 71                    | Flood Control, Mississippi River and Tributaries, East Atchafalaya Basin Protection Levee, Item E-58.0A, Levee Enlargement & Berms, Iberville Parish, Louisiana, Relocation of Facilities                 | 27 Mar 81 (A)                                     |

# FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES MISSISSIPPI RIVER LEVEES ITEM M-98.2-97.2-L LOUISIANA-JACKSON AVENUE FLOODWALL ORLEANS PARISH, LOUISIANA RELOCATION OF FACILITIES DESIGN MEMORANDUM NO. 64

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#### PERTINENT DATA

#### Location:

The Louisiana to Jackson Avenue Floodwall, Item 98.2 to 97.2-L is located in Orleans Parish, Louisiana, on the east bank of the Mississippi River between levee stations 277+19.7 and 331+15 (approximate river miles 98 to 97 above the Head of Passes).

#### Purpose:

The Mississippi River and Tributaries Flood Control project embodies a plan to protect the Lower Mississippi Valley against the project design flood. The plan includes the use of levees, floodways, channel improvements and major tributary flood control improvements. Specifically, item M-98.2 to 97.2-L is designed to provide flood protection to a portion of the greater New Orleans Area.

#### Authorization:

The Flood Control Act of 15 May 1928 (Public Law 391, 70th Congress), as amended, provides authorization for the project.

#### Local Assuring Agency:

The local assuring agency for the Louisiana to Jackson Avenue Floodwall is the Board of Levee Commissioners of the Orleans Levee District.

#### Description.

The Louisiana to Jackson Avenue Floodwall is a proposed improvement to a reach of the main line levee on the east bank of the Mississippi River in the City of New Orleans, Orleans Parish, Louisiana, at approximate river mile 98.2 to 97.2 above the Head of The determination to construct a floodwall in the subject reach, is based on the lowest overall cost for the project after consideration is given to engineering, environmental, limitations of rights-of-way, and the desirability of The proposed floodwall alinement results in the least relocations. disruption of the facilities located in the subject reach. proposed improvement consists of constructing 1732.5 linear feet of concrete I-wall and 3844.5 linear feet of concrete T-wall with nine vehicular gates, of which seven are for roads and two are for The proposed floodwall will top out at elevation 24.0 railroads. N.G.V.D., the Mississippi River and Tributaries project design grade.

#### LIST OF EXISTING FACILITIES

| ITEM NO. | OWNER D                | ESCRIPTION                  | DISPOSITION  | PLATE     |
|----------|------------------------|-----------------------------|--------------|-----------|
| R-1      | City of New Orleans    | Louisiana Avenue            | Relocate     | 2         |
| R-2      | City of New Orleans    | Harmony Street              | Relocate     | 4         |
| R-3      | City of New Orleans    | Seventh Street              | Relocate     | 5         |
| R-4      | City of New Orleans    | Washington Avenue           | Relocate     | 7         |
| R-5      | City of New Orleans    | Third Street                | Relocate     | 8         |
| R-6      | City of New Orleans    | First Street                | Relocate     | 9         |
| R-8      | City of New Orleans    | Jackson Avenue              | Relocate     | 11        |
| RR-1     | Illinois Central Gulf  |                             |              |           |
|          | Railroad Company       | Railroad track              | Relocate     | 3         |
| RR-2     | New Orleans Public     |                             | 4.0          |           |
|          | Belt Railroad          |                             |              |           |
|          | (NOPBRR)               | Railroad track              | Relocate     | 3         |
| RR-3     | NOPBRR                 | Railroad track              | Relocate     | 3         |
| P-3      | NOPBRR                 | Telecommunications line     | Relocate     | 2 thru 4  |
| T-1      | South Central Bell     |                             |              |           |
|          | Telephone (SCB)        | Buried telephone cable      | Relocate     | 2         |
| T-2      | SCB                    | Buried telephone cable      | Relocate     | 2         |
| T-3      | SCB                    | Aerial telephone line       | Relocate     | 2         |
| T-4      | SCB                    | Aerial telephone line       | Relocate     | 5         |
| T-5      | SCB                    | Aerial telephone line       | Relocate     | 7         |
| T-6      | SCB                    | Buried telephone duct       | Relocate     | ,<br>9    |
| T-7      | SCB                    | Aerial telephone line       | Relocate     | 10        |
| T-8      | SCB                    | Aerial telephone line       | Not affected |           |
| P-2      | New Orleans Public     | morror corepnone rine       | not affected |           |
|          | Service Inc. (NOPSI)   | Aerial powerline            | Relocate     | 2         |
| P-4      | NOPSI                  | Aerial powerline            | Relocate     | 3         |
| P-5      | NOPSI                  | Aerial powerline            | Relocate     | 8 thru 11 |
| P-7      | NOPSI                  | Aerial powerline            | Relocate     | 4         |
| P-8      | NOPSI                  | Aerial powerline            | Relocate     | 5         |
| P-9      | NOPSI                  | Aerial powerline            | Relocate     | 7         |
| P-10     | NOPSI                  | Aerial guy wire             | Relocate     | 7         |
| P-11     | NOPSI                  | Aerial powerline            | Relocate     | 8         |
| P-12     | NOPSI                  | Aerial guy/pole             | Relocate     | 9         |
| P-13     | NOPSI                  | Aerial powerline and guy    | Relocate     | 10        |
| W-9      | Sewerage and Water     | Francisco and 827           |              |           |
|          | Board of New Orleans   |                             |              |           |
|          | (SWB)                  | 8-inch diameter waterline   | Relocate     | 8         |
| W-10     | SWB                    | 8-inch diameter waterline   | Relocate     | 8         |
| W-11     | SWB                    | 8-inch diameter waterline   | Relocate     | 9         |
| W-12     | SWB                    | 8-inch diameter waterline   | Relocate     | 10        |
| W-13     | SWB                    | 8-inch diameter waterline   | Relocate     | 10        |
| W-14     | SWB                    | 10-inch diameter waterline  | Not affected |           |
| SD-1     | Board of Commissioners |                             | alleeted     |           |
|          | of the Port of         |                             |              |           |
|          | New Orleans (DB)       | 8-inch diameter storm drain | n Relocate   | 2         |
| SD-2     | DB                     | 8-inch diameter drain       |              | _         |
|          |                        | w/headwall                  | Relocate     | 2         |
| S-1      | DB                     | 6-inch diameter sewerline   | Relocate     | 3         |
| s-2      | DB                     | 4-inch diameter sewerline   | Relocate     | 5         |
| S-3      | DB                     | 4-inch diameter sewerline   | Relocate     | 7         |
|          |                        |                             |              | •         |

| S-4  | DB                    | 3-inch FRP sewerline                      |   |
|------|-----------------------|---|---|
|      |                       | line and manhole Relocate                 | 9 |
| W-1  | DB                    | 8-inch diameter waterline Relocate        | 3 |
| W-2  | DB                    | 8-inch diameter waterline Relocate        | 4 |
| W-3  | DB                    | 8-inch diameter waterline Relocate        | 4 |
| W-6  | DB                    | 8-inch diameter waterline Relocate        | 6 |
| W-7  | DB                    | 8-inch diameter waterline Relocate        | 7 |
| W-8  | DB .                  | 8-inch diameter waterline Relocate        | 7 |
| W-15 | DB.                   | 8-inch diameter waterline Relocate        | 2 |
| E-1  | Red River Barge Line, |   |   |
|      | Inc.                  | 1-inch diameter electrical Relocate cable | 2 |

1. PURPOSE OF DESIGN MEMORANDUM. The purpose of this design memorandum is to present the plans for the relocation and alteration of facilities which will be affected by the construction of item M-98.2 to 97.2-L, Louisiana to Jackson Avenue Floodwall, hereinafter referred to as the Louisiana-Jackson reach. It is being submitted in compliance with Part 3, Section LXXIII, ER 1180-1-1, dated 1 July 1980 and DIVR 1110-2-1, dated 29 January 1968. It establishes the necessity for the relocation of the facilities and the plan of relocation; it establishes the legal obligation of the Federal Government, and where appropriate, it will provide the basis for reimbursing the Orleans Levee District for costs incurred in accomplishing the relocations described herein.

#### 2. PROJECT AUTHORIZIATION.

Authority for construction, enlargement, or a.Authorization. improvement of main line Mississippi River levees and thereby, for the Louisiana-Jackson Avenue Floodwall project, is contained in the Flood Control Act of 15 May 1928 (Public Law 391, 70th Congress), as amended. Authority for Federal reimbursement of costs to local cooperating agencies incurred in the course of accomplishing the relocation of interfering facilities is contained in the Act of 23 April 1934 (Public Law 171, 73d Congress). Pursuant to the provisions of DIVR 1110-2-1, which implements the policy for the relocation of public roads, highways, railroads, public utilities, structures, and public pipelines, as required for the construction of main line Mississippi River levees, will be accomplished at Federal expense.

- b. Local Cooperation. The furnishing of rights-of-way for levee foundations, for levees except for levee setbacks, and for floodwalls on the main stem Mississippi River is an obligation of local interests. (See section 3, Act of 15 May 1928).
- 3. AUTHORITY FOR ACCOMPLISHING RELOCATIONS. The Flood Control Act of 15 May 1928 (P.L. 391, 70th Congress) provides the authority for accomplishing the relocations. Policy for relocations is provided by DIVR 1110-2-1. The legal obligations of the Federal Government regarding the affected facilities and the extent of authority for the relocations are as established in the attorney's report which is attached as Appendix I.

#### 4. DESCRIPTION OF EXISTING FACILITIES AFFECTED BY THE PROJECT.

a. Roads. The City of New Orleans, Department of Streets owns various streets which will be affected by the project. The streets consist of bituminous surfacing of unknown thickness having been resurfaced on numerous occasions over the years. All streets described cross Tchoupitoulas Street and extend riverward to the wharf line; therefore, the following existing streets will be affected by floodwall.

| Item No. | Description Width Condition Louisiana Avenue Width: 60 feet Condition: Fair | Plate Wall line station 2 2+24 |
|----------|---|--------------------------------|
| R-2      | Harmony Street Width: 40 Feet Condition: Fair                               | 4<br>12+87                     |
| R-3      | Seventh Street<br>Width: 40 feet<br>Condition: Fair                         | 5<br>22+15                     |
| R-4      | Washington Avenue<br>Width: 40 feet<br>Condition: Fair                      | 7<br>30+52                     |
| R-5      | Third Street Width: 40 feet Condition: Fair                                 | 8<br>37+07                     |
| R-6      | First Street Width: 40 feet Condition: Fair                                 | 9<br>42+99                     |
| R-8      | Jackson Avenue<br>Width: 90 feet<br>Condition: Fair                         | 11<br>54+52                    |

b. Railroads. The Illinois Central Gulf Railroad (ICGRR) and the New Orleans Public Belt Railroad (NOPBRR) own the railroad tracks which will be affected by construction of the project. Item RR-1 (ICGRR) and items RR-2 and RR-3 (NOPBRR) are single main line tracks consisting of 90 pound, 39-foot rail supported by 6"x8"x8'-6" treated crossties spaced 23 ties per 39-foot of rail, and a combination clam shell and crushed rock ballast. Approximately 20 linear feet of each track will be affected by the floodwall construction at wall line station 8+60 (plate 3) for RR-1 and wall line station 11+22 and 11+34 (plate 3) for RR-2 and RR-3. The rails, crossties and ballast are in good condition.

#### c. Utilities.

(1) South Central Bell (SCB) owns the aerial and buried telephone lines which will be affected by the project. The telephone facilities consist of aerial service drop wires, creosote wood duct and steel pipe duct. Temporary relocation will be necessary due to the driving of the steel sheet piling and the floodgate bearing piles. Various lengths of SCB facilities will be affected by construction of the floodwall. The installation date for SCB facilities are unknown and the facilities are in good condition. The affected facilities are as follows:

| Item No.    | Description Condition  | Installation Date Design Life Affected Length                                     | Plate<br>Wall Line/Station |
|-------------|--|---|----------------------------|
| T-1         | 400-Pair, 26 Gauge buried telephone cable encased in a 4-inch iron pipe; condition: good                                       | 1976<br>50 years<br>117 feet  | Plate 2<br>2+25            |
| T-2         | Four-3 inch, w/one 900 Pair - 22 gauge cable, one 200 pair - 22 gauge cable; two ducts in good condition, two ducts not in use | 900 PR cable: 1924<br>200 PR cable: 1950<br>conduit: 1923<br>50 years<br>288 feet |                            |
| T-3         | Aerial service drop wire<br>12 PR drop wires<br>condition: good  | 1979<br>1 year<br>120 feet  | Plate 2<br>1+20<br>to 5+93 |
| T-4         | Aerial service drop wire<br>12 PR drop wire<br>Not in service  | 1978<br>1 year<br>135 feet  | Plate 5<br>21+12           |
| T-5         | Aerial drop wire<br>Six PR drop wires<br>condition: good   | 1979<br>2 years<br>145 feet   | Plate 7<br>30+57           |
| T-6         | One-3 inch creosote<br>wood duct<br>Not in use   | 1929<br>50 years<br>134 feet  | Plate 9<br>42+79           |
| <b>T-</b> 7 | One-50 pair cable (Aerial) One-6 PR dropwire condition: good   | 1979<br>3 years<br>146 feet   | Plate 10<br>47+36          |
| T-8         | Aerial telephone line<br>Not affected  | 1979<br>3 years<br>175 feet   | Plate 11<br>54+02          |

(2) New Orleans Public Service Inc. (NOPSI) owns the powerlines which will be affected by the project. The powerlines consist of overhead primary and secondary wires of varying voltage. Temporary relocation or deenergizing will be necessary due to the driving of the steel sheet piling and the floodgate bearing piles. Various lengths of NOPSI facilities will be affected by construction of the floodwall. The installation date for NOPSI facilities are unknown and the facilities are in good condition. The design life for NOPSI facilities are estimated to be 50 years. The affected facilities are as follows:

| Item No. | Description Condition  | Affected<br>Length | Plate Wall line/station   |
|----------|--|--------------------|---------------------------|
| P-2      | Overhead secondary powerline 120/240v condition: good          | 120 feet           | 2<br>2+58                 |
| P-4      | Overhead secondary powerline 120/240v condition: good          | 110 feet           | 3<br>6+24                 |
| P-5      | Overhead primary & secondary powerline 13.8 kv condition: good | 4276               | 8 to 11<br>35+12 to 53+76 |
| P-7      | Overhead primary powerline 120/240v condition: good            | 135                | 4<br>14+87                |
| P-8      | Overhead secondary powerline 120/240v condition: good          | 134                | 5<br>21+10                |
| P-9      | Overhead primary powerline 13.8 kv condition: good             | 131                | 7<br>30+19                |
| P-10     | Overhead guy wire condition: good                              | 172                | 7<br>33+57                |
| P-11     | Overhead secondary powerline 120/240v condition: good          | 165                | 8<br>37+33                |
| P-12     | Overhead guy and pole condition: good                          | 163                | 9<br>43+29                |
| P-13     | Overhead service drop/guy wire condition: good                 | 149                | 10<br>47+35               |

<sup>(3)</sup> The Sewerage and Water Board of New Orleans (SWB) owns the waterlines which will be affected by the project. The waterlines which intersect the floodwall alinement are all 8-inch diameter cast iron. Approximately 12 linear feet of waterline at each wall intersection will be affected. These facilities were installed in the early 1900's and are still in good condition. All manholes and water valves which are affected by the project will be relocated. The affected facilities are as follows:

| Description Item No. Condition |   | Design<br>Life | Plate<br>Wall Line/Station |
|--------------------------------|---|----------------|----------------------------|
| W-9                            | 8-inch waterline/w manhole & valve Condition: good    | 75 years       | 8<br>36+91                 |
| W-10                           | 8-inch waterline<br>Condition: good/w manhole & valve | 75 years       | 8<br>40+09                 |
| W-11                           | 8-inch waterline<br>Condition: good w/manhole & valve | 75 years       | 9<br>43+00                 |
| W-12                           | 8-inch waterline<br>Condition: good w/manhole & valve | 75 years       | 10<br>47+28                |
| W-13                           | 8-inch waterline/w manhole condition: good            | 75 years       | 10<br>50+76                |

(4) The Port Authority of New Orleans (Dock Board) owns the sewerlines, waterlines and storm drains which will be affected by the project. The sewerlines, waterlines and storm drains are all underground facilities which will be passed through sleeves in the steel sheet piling. Item S-4 has a manhole which will be affected by the floodwall and will have to be relocated. Item SD-2, 8-inch steel drain pipe with headwall, parallels the floodwall and will be affected by the project. These facilities cross the floodwall at various locations. Approximately 12 linear feet of each facility will be affected by the floodwall. These facilities were installed in the early 1900's and are still in good condition. The affected facilities are as follows:

| Item No | Description Condition   | Design<br>Life | Plate<br>Wall line/station |
|---------|---|----------------|----------------------------|
| SD-1    | 8-inch diameter steel storm drain condition: poor                           | 75 years       | 2<br>2+84                  |
| SD-2    | 8-inch diameter steel drainpipe w/<br>Headwall. condition: poor             | 75 years       | 2<br>4+05                  |
| S-1     | 6-inch diameter cast iron sewerline w/12 3/4" steel casing, condition: good | 75 years       | 3<br>7+35                  |
| S-2     | 4-inch diameter cast iron sewerline w/8" steel casing condition: good       | 75 years       | 5<br>18+56                 |
| s-3     | 4-inch diameter cast iron sewerline w/8" steel casing condition: good       | 75 years       | 7<br>30+29                 |

| S-4          | 3-inch diameter fiberglass reinforced sewerline w/manhole, condition: good | 75 years | 9<br>46+23 |
|--------------|--|----------|------------|
| W-1          | 8-inch diameter waterline condition: good                                  | 75 years | 3<br>6+04  |
| W-2          | 8-inch diameter waterline condition: good                                  | 75 years | 4<br>12+69 |
| W-3          | 8-inch diameter waterline condition: good                                  | 75 years | 4<br>15+95 |
| ₩ <b>-</b> 6 | 8-inch diameter waterline condition: good                                  | 75 years | 6<br>25+25 |
| ₩ <b>-</b> 7 | 8-inch diameter waterline condition: good                                  | 75 years | 7<br>29+69 |
| W-8          | 8-inch diameter waterline condition: good                                  | 75 years | 7<br>33+70 |
| W-15         | 8-inch diameter waterline condition: good                                  | 75 years | 2<br>2+79  |

(5) The New Orleans Public Belt Railroad owns Item P-3, an aerial telecommunications line which will be affected by the project from wall line station 4+90 to 12+30. The installation date for this facility is unknown and the facility is in good condition. The design life of Item P-3 is estimated to be 50 years. The affected sections of Item P-3 are depicted on plates 2 thru 4.

d. Others. Red River Barge Line Inc., owns Item E-1, a 1-inch diameter steel encased electrical conduit which will be affected by the project. Item E-1 is located at wall line station 1+01 (Plate 2).

#### 5. OWNER'S COMPENSABLE INTEREST.

a. General. The attorney's report, which considers the compensable interest of the owners of the facilities affected by the proposed project, is attached as Appendix I.

b. Roads. The attorney's report provides that the city of New Orleans, a governmental agency has a compensable interest in all of its facilities. (Items R-1, R-2, R-3, R-4, R-5, R-6 and R-8). In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to pay for the relocation of the roads dislocated by the project. The Federal Government will adjust these roads as a part of the floodwall contract.

c. Railroads. The attorney's report provides that ICGRR (Item RR-1), and NOPBRR (Items RR-2, RR-3 and P-3) have a compensable

interest in their trackage, which is located outside the existing levee right-of-way. In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to reimburse ICGRR and NOPBRR for the relocation of the railroad trackage in which they have a compensable interest, and must relocate the tracks as a project requirement. The Federal Government will design and construct the required falsework and will design and place the asphalt required for the gate sill cover; this will be accomplished as a part of the floodwall contract. The balance of the work required on the trackage will be accomplished by the respective owners and will be reimbursed by the Federal Government.

#### d. Utilities.

- (1) The attorney's report provides that SCB (Items T-1 thru T-7), NOPSI (Items P-2, P-4 & P-5, P-7 thru P-13), and NOPB RR (Item P-3) have a compensable interest in their facilities which are located outside the existing levee right-of-way. In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to reimburse SCB, NOPSI and NOPBRR for the relocation of the underground and aerial cables and lines in which they have a compensable interest, and must relocate these facilities as a project requirement.
- (2) The attorney's report provides that the Sewerage and Water Board (Items W-9 thru W-13), and the Dock Board (Items SD-1, SD-2,S-1 thru S-4, W-1 thru W-3, W-6 thru W-8 and W-15) have a compensable interest in their facilities. In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to acquire or relocate the subject facilities. The Federal Government will relocate all the above facilities as a part of the floodwall contract.
- e. Others. The attorney's report provides that the Dock Board not Red River Barge Line, Inc. (Item E-1) has a compensable interest in this facility. In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to acquire or relocate the subject facility, however Red River Barge Line, Inc., has agreed to relocate this facility at their own expense.
- 6. FIELD RECONNAISSANCE AND INVESTIGATION. Field surveys, field inspection, consultations, and correspondence with the affected facility owners and the Orleans District provided the basic information from which this design memorandum and the proposed relocation plans were prepared. This work was accomplished principally by Mr. Andre P. Lazarus of this district's Relocation Section and by Mr. Richard Tillman of the district's Structural Design Section.

#### 7. CRITERIA FOR RELOCATED FACILITIES.

- a. Roads. The design criteria for the relocation of R-1 thru R-6 as required at the gate openings will be in accordance with the provisions of the "General Specifications and Standard Plans for Street Paving and Temporary Surfacing of the City of New Orleans, Louisiana," adopted 28 November 1969. The design standards used for proposed street relocations are the typical design standards used by the City of New Orleans Department of Streets and, therefore, do not result in a betterment. The street alterations will be designed by this district and will be constructed by the floodwall contractor.
- Review of the "American Railway Engineering b. Railroads. Association (AREA) Manual for Railroad Engineering" and coordination with the NOPBRR and ICGRR provided the basis for establishing design criteria for the relocation of the subject trackage. The railroad relocations (Items RR-1, RR-2 and RR-3), provided for by this design memorandum are not considered to constitute betterments, but do include the placement of asphalt gate sill covering at all railroad gates. The asphalt gate sill cover is required to provide a smooth gradual transition over the exposed gate sills for safety In consideration of the fact that the owners will construct portions of the adjustments, during design, construction, and upon completion of construction, this district will inspect the relocations work to insure that no betterments are involved. If it is determined that an owner's criteria result in a betterment, the betterment at Government's expense will be disallowed by this This is in accord with paragraph 73-106 of ER 1180-1-1, which stipulates that "a substitute facility will be provided which will, as nearly as practicable, serve the owner in the same manner and reasonably as well as does the existing facility.
- c. Utilities. The Government will relocate Items S-1 thru S-4, W-1 thru W-3, W-6 thru W-8, W-15, SD-1 and SD-2, as part of the floodwall contract; this will be accomplished in accordance with the owner's design standards. The owners of the other interfering utilities will accomplish the design and relocation of their facilities (Items T-1 thru T-7, W-9 thru W-13, P-2, P-4 and P-5, P-7 thru P-13, and P-3) to their individual criteria, and in a manner which will eliminate interference with the project. The relocation item T-1 and T-2 will result in a betterment to these The cost for the betterment to items T-1 and T-2 will be borne by the owner of these facilities. This district will review the construction drawings for these relocations to insure that no other betterments are involved. During construction and upon completion of construction, this district will inspect the relocations in the field to insure that no betterments are involved. If it is determined that an owner's criteria results in a betterment, that betterment at Government expense will be disallowed by this district. This is in accord with para. 73-106 of ER 1180-1-1, which stipulates that "a substitute facility will be provided which will, as nearly as practicable, serve the owner in the same manner and reasonably as well as does the existing facility."
- d. Others. The owner of Item E-l will accomplish the design and relocation of its facility to its individual criteria and in a manner which eliminates interference with the project.

#### 8. DESCRIPTION OF PROPOSED RELOCATIONS.

- a. Roads. Items R-1 thru R-6 and R-8 will be relocated by the floodwall contractor. The relocation will consist of reconstructing these affected roads to their original condition along the existing road alinement as shown on plates 2, 4, 5, 7, 8, 9, and 11. The floodwall contractor will remove the affected portion of the existing roadways in order to facilitate the driving of the floodgate steel sheet piling in the area. The relocated roadway structure will consist of placing 12-inches of compacted shell and 3 1/2 inches of asphalt concrete overlay to provide a smooth transition from the top of the proposed gate sills to the existing roads.
- Item RR-1 (Plate 3 ICGRR) and Items RR-2, RR-3 (Plate 3- NOPBRR). The ICGRR and the NOPBRR will remove 20 feet of each track at gate nos. 2 and 3 to facilitate the driving of the steel sheet piles and will replace this trackage with the previously removed material. The floodwall contractor will construct false work (Plate 15) required to maintain continuous rail operations during gate construction. The floodwall contractor will fill the void between the tracks and sill with an asphaltic concrete mix to provide a smooth transition over the floodwall gate sill. Providing an asphalt filler is not considered a betterment, since it is furnished as a safety measure for railroad employees. The railroad company will provide inspectors and flagmen during all phases of the gate construction. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal cost, where appropriate.

#### c. Utilities.

- (1) South Central Bell. South Central Bell will relocate the following facilities in the manner described below. The Federal Government will reimburse 100 percent of the relocation cost minus betterments, plus removal cost, where appropriate.
- (a) Items T-3 thru T-5, and T-7 (Aerial Lines). To facilitate the driving of the steel sheet piling, South Central Bell will temporarily shift aside these service drop lines from where they cross the proposed floodwall. Upon completion of the sheet pile driving, South Central Bell will replace these facilities to their original alinement.
- (b) Items T-1, T-2 and T-6. The floodwall contractor will defer construction at the location of the South Central Bell existing buried cables until a sleeve has been installed through the wall at a new cable alinement and in a manner which eliminates interference with the project. South Central Bell will then place steel casing through the sleeve to contain their facilities (Plate 17). Upon completion of the relocation, the floodwall contractor will drive the sheet piles through the abandoned South Central Bell facilities.

The relocation of item T-1 and T-2 will result in a betterment to these facilities. The betterment to item T-1 will consist of placing two iron pipes in lieu of the existing pipe. The betterment to item T-2 will consist of placing 12 ducts in lieu of the 4 existing ducts and placing 590' of 400 pair cable in lieu of the existing 288' of 200 pair cable. The additional cost of the betterment to items T-1 and T-2 will be borne by the owner of these facilities.

- (2) New Orleans Public Service, Inc. (NOPSI). NOPSI will relocate the following facilities in a manner discussed below. The Federal Government will reimburse NOPSI 100 percent of all relocation costs, minus depreciation, salvage, and betterments, plus removal cost, where appropriate.
- Items P-2, P-4 and P5 and P-7 thru P-13. To facilitate the driving of the steel sheet piling, NOPSI will first install temporary bypass lines needed to maintain uninterrupted service to customers and then remove the existing facilities. The relocated aerial crossings will be in accord with Corps of Engineers design criteria for overhead utilities.
- (3) Sewerage and Water Board (S&WB). The S&WB waterlines will be passed through sleeves to be installed by the Government contractor through the sheet piling. The cutting of the pipes passing through the sleeve, and reconnecting of the pipes will be performed by the Sewerage and Water Board.
- (4) <u>Dock Board</u>. The Government contractor will perform all work associated with the relocation of the water, sewer, storm drain lines and manholes. The Government contractor will cut the existing pipe excepting Item SD-2 at its intersection with the floodwall, drive the sheet piling, burn a hole in the sheet piling, install the sleeve and reconnect service pipe of equal quality removed.

Item SD-2 is an 8-inch diameter steel storm drain with a concrete headwall, which is located parallel and on the floodside of the proposed floodwall. Item SD-2 will be relocated by replacing the concrete headwall at station 4+05 with a catch basin on the protected side of the proposed floodwall.

The Government contractor will install a valve box and valve on both SD-1 and SD-2 storm drain lines to effect a means of positive shutoff of the drain lines during high water.

- (5) NOPBRR. NOPBRR will relocate Item P-3 (telecommunication line) in a manner discussed below. The Federal Government will reimburse NOPBRR 100 percent of all relocation costs, minus depreciation, salvage, and betterments, plus removal cost, where appropriate.
- Item P-3. To facilitate the driving of the steel sheet piling, NOPBRR will first install temporary bypass lines needed to maintain uninterrupted service and then remove the existing facility. The

relocated aerial crossing will be in accord with Corps of Engineers design criteria for utilities over floodwalls. Item P-3 crosses the floodwall between wall line station 4+90 to 12+30.

d. Others. Item E-1 (Plate 2) will be relocated by the owners in a manner which will eliminate interference with the Louisiana-Jackson Avenue Floodwall project.

#### 9. PROCEDURE FOR ACCOMPLISHING RELOCATIONS.

a. Roads. This district will prepare the detailed plans and specifications for the relocation of R-1 thru R-6 and R-8 and will accomplish the ad justments in accordance with design and in conjunction with the floodwall construction memorandum, The City of New Orleans Street Department and the Dock contract. Board will review and approve the design of roadways. No new road right-of-way will be required.

The relocation of NOPBRR and the ICGRR trackage b. Railroads. (Items RR-1 thru RR-3) will be accomplished in accordance with this memorandum. and in conjunction with the construction contract, except for the falsework. This district will prepare the detailed plans and specifications for the construction of the falsework required for the relocation of Items RR-1 thru RR-The construction will be accomplished in accordance with this design memorandum and in conjunction with the floodwall construction The falsework plans will be reviewed and approved by the contract. railroad companies. All railroad relocation work will be closely coordinated between the railroad companies and the floodwall contractor. The Orleans Levee District, as the local assuring agency, will be requested to accomplish the railroad relocations, except for the falsework described herein in accordance with this design memorandum and subject to reimbursement of allowable cost not to exceed a given dollar amount. The dollar limit provided will be based on the approved design memorandum; however, reimbursement will be based on actual cost (less betterments and salvage and plus removal cost, as applicable). Upon completion of the relocations for which reimbursements are to be made, the Orleans Levee District will furnish a reimbursement assembly to this district consisting A copy of any contracts (including plans and specifications) covering work performed by others or itemized billings for labor and materials if the work was performed by the owner, and a copy of all canceled checks covering related payments. Further, all records related to the reimbursement request will be subject to audit by the Government and original time cards or payrolls, material records, and accounts for a11 charges expenditures for which reimbursement will be claimed from the Government will be available at all reasonable times for Government inspection. Finally, as far as practicable, separate records will be maintained for all items and accounts constituting the basis of information from which the reimbursement assembly is prepared.

#### c. Utilities.

- South Central Bell Telephone Company, New Orleans Public Service, Inc., and New Orleans Public Belt Railroad will prepare detailed plans and specifications for the relocation of their facilities (Items T-2 thru T-7, P-2, P-4 & P-5, P-7 thru P-13 and P-3), and will accomplish the relocations in accordance with this design memorandum and in conjunction with the floodwall construction contract. These relocation plans will be reviewed by this district to determine if the plans are compatible with the floodwall plans. All telephone and electric facility relocations will be closely coordinated between the facility owners and the floodwall construction contractor. The Orleans Levee District, as the local assuring agency, will be requested to effect the utility relocations described herein in accordance with the approved design memorandum and subject to reimbursement of actual cost not to exceed a given dollar amount. The dollar limit provided will be based on the approved design memorandum; however, reimbursements will be based on actual cost (less depreciation, salvage and betterments, and plus removal cost, as applicable). Upon completion of the relocation, the Orleans Levee District will furnish a reimbursement assembly to this district consisting of: A copy of any contracts (including plans and specifications) covering work performed by others or itemized billings for labor and materials if the work was performed by the owner, and a copy of all canceled checks covering related payments. Further, all records related to the reimbursement will be subject to audit by the Government and original time cards or payrolls, material records, and accounts for all charges and expenditures for which reimbursement will be claimed from the Government will be available at all reasonable times for Government inspection. Finally, so far as practicable, the owner will maintain separate records for all items and accounts constituting the basis of information from which the reimbursement assembly is prepared.
- (2) This district will prepare detailed plans and specifications for the relocation or abandonment of all of the Dock Board facilities (Items SD-1, SD-2, S-1 thru S-4, W-1 thru W-3, W-6 thru W-8 and W-15) and will accomplish the construction in accordance with the design memorandum and in conjunction with the floodwall construction. The relocation plans for all the facilities will be reviewed and approved by their prospective owners.
- d. Others. The relocation of Item E-1, as necessitated by the Louisiana-Jackson Avenue Floodwall will be accomplished by Red River Barge Line, Inc. at no cost to the Government.
- 10. ATTITUDE OF OWNERS. All affected facility owners have responded satisfactorily to all requests for information and have indicated their willingness to cooperate in matters pertaining to the project. The NOPBRR deferred in forwarding a cost estimate pending resolution of their comments concerning the proposed adjustment of their facilities. Upon resolution of these comments we anticipate no further difficulties with NOPBRR.

- 11. FACILITIES NOT AFFECTED. SCB owns Item T-8 (Plate 11), which will not be affected by the floodwall project. The Sewerage and Water Board of New Orleans owns Item W-14 (plate 11), which will not be affected by the floodwall project.
- 12. ESTIMATE OF COST. Estimate of cost for accomplishing the proposed relocations have been prepared in accordance with the policy set forth in ER 1180-1-1, and with the previously noted exception of NOPBRR, are based on plans for relocation, as proposed by or agreed to by the affected owners. These estimates are presented in tables 2 thru 9. A relocation cost summary is attached as Appendix II.

#### TABLE 2 - ESTIMATE OF COST CITY OF NEW ORLEANS - ROADS (MARCH 1982 PRICE LEVELS)

| Cos | t                                  |                  |          | Lump<br>Sum |                     |
|-----|------------------------------------|------------------|----------|-------------|---------------------|
| No. | Description                        | Unit             | Quantity | Cost (\$)   | Amount (\$)         |
| 02  | Relocations                        |                  |          |             |                     |
| 0.1 | Roads                              |                  |          |             |                     |
|     | Item R-1<br>(Louisiana Ave)        | Lump Sum<br>(LS) | LS       | 5,000       | 3,000               |
|     | Item R-2<br>(Harmony St)           | LS               | LS       | 4,000       | 3,000               |
|     | Item R-3<br>(Seventh St.)          | LS               | LS       | 4,000       | 3,000               |
|     | Item R-4<br>(Washington Ave)       | LS               | LS       | 4,000       | 3,000               |
|     | Item R-5<br>(Third Street)         | LS               | LS       | 4,000       | 3,000               |
|     | <pre>Item R-6 (First Street)</pre> | LS               | LS       | 4,000       | 3,000               |
|     | Item R-8<br>(Jackson Ave)          | LS               | LS       | 5,000       | 3,000               |
|     | RELOCATION COST                    |                  |          |             | 30,000              |
|     | Contingencies (25%+)               |                  |          |             | 9,000               |
|     | Subtotal                           |                  |          |             | 39,000 <sup>1</sup> |
| 30  | E&D (6%+)                          |                  |          |             | 1,500               |

31 S&A (6%+)

1,500

TOTAL

42,000

No removal cost because removal is incidental to the floodwall construction. No betterments and no new right-of-way required.

 $<sup>^2</sup>$  All above relocation work will be accomplished by the floodwall contractor as part of the Government contract.

## TABLE 3 - ESTIMATE OF COST ILLINOIS CENTRAL GULF RAILROAD (MARCH 1982 PRICE LEVELS)

| Cost<br>Acct<br>No. | Description          | Unit     | Quantity | Lump<br>Sum<br>Cost (\$) | Amount (\$) |
|---------------------|----------------------|----------|----------|--------------------------|-------------|
| 02                  | Relocation           |          |          | <u> </u>                 |             |
| 0.4                 | Railroads            |          |          |                          |             |
|                     | Item RR-1            | Lump Sum | LS       | 5,400                    | 5,400       |
|                     | RELOCATION COST      |          |          |                          | 5,400       |
|                     | Contingencies (25%+) |          |          |                          | 1,600       |
|                     | Subtotal             |          |          |                          | 7,000       |
| 30                  | E&D (6%+)            |          |          |                          | 500         |
| 31                  | S&A (6% <u>+</u> )   |          |          |                          | 500         |
|                     | TOTAL                |          |          |                          | 8,000       |

No salvage because materials to be reused.

No betterments.

Falsework and asphaltic sill overlay will be accomplished by the floodwall contractor as part of the Government contract.

# TABLE 4- ESTIMATE OF COST NEW ORLEANS PUBLIC BELT RAILROAD (MARCH 1982 PRICE LEVELS)

| Cost<br>Acct.<br>No. | Description          | Unit     | Quantity | Lump<br>Sum<br>Cost | Amount (\$) |
|----------------------|----------------------|----------|----------|---------------------|-------------|
| 02                   | Relocation           | OIL C    | quantity | COBL                | Amount (\$) |
| 0.4                  | Railroads            |          |          |                     |             |
|                      | Item RR-2            | Lump Sum | LS       | 5,400               | 5,400       |
|                      | Item RR-3            | LS       | LS       | 5,400               | 5,400       |
|                      | RELOCATION COST      |          |          |                     | 10,800      |
|                      | Contingencies (25%+) |          |          |                     | 2,200       |
|                      | Subtotal             |          |          |                     | 13,000      |
| 30                   | E&D (6%+)            |          |          |                     | 1,000       |
| 31                   | S&A (6%+)            |          |          |                     | 1,000       |
|                      | TOTAL                |          |          |                     | 15,000      |

 $<sup>^{1}\,</sup>$  No salvage because materials to be reused.

<sup>2</sup> No betterments.

Falsework and asphaltic sill overlay will be accomplished by the floodwall contractor as part of the Government contract.

## TABLE 5 - ESTIMATE OF COST SOUTH CENTRAL BELL TELEPHONE COMPANY (MARCH 1982 PRICE LEVELS)

| Cost<br>Acct.<br>No. | Description   | Unit | Quantity | Lump<br>Sum<br>Cost | Amount (\$)  |
|----------------------|---|------|----------|---------------------|--|
| 02<br>0.7            | Relocations<br>Utilities  |      |          |                     |  |
|                      | Item T-1  | LS   | LS       | 5,916               | 5,916  |
|                      | Item T-2  | LS   | LS       | 67,369              | 67,369   |
|                      | Item T-3  | LS   | LS       | 350                 | 350  |
|                      | Item T-5  | LS   | LS       | 1,563               | 1,563  |
|                      | Item T-6  | LS   | LS       | 7,660               | 7,660  |
|                      | Item T-7  | LS   | LS       | 1,827               | 1,827  |
| 30<br>31             | RELOCATION COST Less Cost of Betterments Subtotal Contingencies (25%+) Subtotal E&D (6%+) S&A (6%+) TOTAL |      |          |                     | 84,685<br>19,547 <sup>1</sup><br>65,138<br>15,862<br>81,000 <sup>2</sup><br>5,000<br>5,000<br>91,000 |

<sup>1</sup> Item T-1, Includes cost differentials in placing 2 iron pipes in lieu of one. The addition pipe will cost \$800 over the cost of placing one pipe.

Item T-2. Includes cost differentials in placing 12 ducts in lieu of four ducts. The additional ducts will cost \$16,947 over the cost of the four ducts. 590' of 400 pair cable will be placed in lieu of 288' of 200 pair cable. The additional cable and pairs will cost \$1800 over replacing original cable.

No depreciation based on ECI 73-209.3, change 21 dated 20 February 1974.

## TABLE 6 - ESTIMATE OF COST SEWERAGE & WATER BOARD OF NEW ORLEANS (MARCH 1982 PRICE LEVELS)

| Cost<br>Acct<br>No. | Description   | Unit         | Quantity | Lump<br>Sum<br>Cost | Amount (\$)                                  |
|---------------------|---|--------------|----------|---------------------|--|
| 02                  | Relocations   |              |          |                     |  |
| 0.7                 | Utilities & Structures  |              |          |                     |  |
|                     | Item W-9  | Lump Sum (LS | ) LS     | 13,039              | 13,039                                       |
|                     | Item W-10   | LS           | LS       | 13,194              | 13,194                                       |
|                     | Item W-11   | LS           | LS       | 14,019              | 14,019                                       |
|                     | Item W-12   | LS           | LS       | 12,195              | 12,195                                       |
|                     | Item W-13   | LS           | LS       | 12,195              | 12,195                                       |
|                     | RELOCATION COST Contingencies (25%+) Subtotal E&D (6%+) S&A (6%+) |              |          |                     | 64,642<br>16,358<br>81,000<br>5,000<br>5,000 |
|                     | TOTAL   |              |          |                     | 91,000                                       |

No betterments.

Material removed and not reused has zero salvage value.

 $<sup>^3</sup>$  No depreciation based on ECI 73-209.3, change 21 dated 20 February 1974.

# TABLE 7 - ESTIMATE OF COST NEW ORLEANS PUBLIC SERVICE, INC. (MARCH 1982 PRICE LEVELS)

| Cos<br>Acc<br>No. | t                      |             |          | Lump<br>Sum |                 |
|-------------------|------------------------|-------------|----------|-------------|-----------------|
| 110.              | Description            | Unit        | Quantity | Cost (\$)   | Amount (\$)     |
| 02                | Relocations            |             |          |             | ·               |
| 0.7               | Utilities & Structures |             |          |             |                 |
|                   | Phase I                | Lump Sum (1 | LS) LS   | 13,467      | 13,467          |
|                   | Item P-2               |             |          | ·           |                 |
|                   | Item P-4               |             |          |             |                 |
|                   | Item P-6               |             |          |             |                 |
|                   | Item P-7               |             |          |             |                 |
|                   | Item P-8               |             |          |             |                 |
|                   | Item P-9               |             |          |             |                 |
|                   | Item P-10              |             |          | •           |                 |
|                   | Phase II               | Lump Sum (I | S) LS    | 17,824      | 17,824          |
|                   | Item P-5               |             |          |             |                 |
|                   | Item P-11              |             |          |             |                 |
|                   | Item P-12              |             |          |             |                 |
|                   | Item P-13              |             |          |             |                 |
|                   | RELOCATION COST        |             |          |             | 21 001          |
|                   | Contingencies (25%+)   |             |          |             | 31,291          |
|                   | Subtotal               |             |          |             | 8,709<br>40,000 |
| 30                | E&D (6%+)              |             |          |             | 2 500           |
| 31                | S&A (6%+)              |             |          |             | 2,500<br>2,500  |
|                   | TOTAL                  |             |          |             |                 |
| _                 | 101711                 |             |          |             | 45,000          |

No betterments.

<sup>2</sup> Material removed and not reused has zero salvage value.

No depreciation based on ECI 72-209.3, change 21 dated 20 February 1974.

# TABLE 8 - ESTIMATE OF COST BOARD OF COMMISSIONERS PORT OF NEW ORLEANS (MARCH 1982 PRICE LEVELS)

| Cos |                       |          |      |     |        | Lump<br>Sum |      | 4           |       |
|-----|-----------------------|----------|------|-----|--------|-------------|------|-------------|-------|
| No. | Description           | U        | nit  | Qua | antity | Cost        | (\$) | Amount      | (\$)  |
| 02  | Relocations           |          |      |     |        |             |      | -           |       |
| 0.7 | Utilities and Structu | res      |      |     | ,      |             |      |             |       |
|     | Item SD-1             | Lump Sum | (LS) |     |        | 3,          | 000  | 3           | ,000  |
|     | Item SD-2             |          | LS   | LS  |        | 10,         | 500  | 10          | ,500  |
|     | Item S-1              |          | LS   | LS  |        | 2,          | 500  | 2           | 2,500 |
|     | Item S-2              |          | LS   | LS  |        | 2,          | 300  | 2           | ,300  |
|     | Item S-3              |          | LS   | LS  |        | 2,          | 300  | 2           | ,300  |
|     | Item S-4              |          | LS   | LS  |        | 10,         | 000  | 10          | ,000  |
|     | Item W-1              |          | LS   | LS  |        | 3,          | 000  | 3           | ,000  |
|     | Item W-2              |          | LS   | LS  |        | 3,          | 000  | 3           | ,000  |
|     | Item W-3              |          | LS   | LS  |        | 3,          | 000  | 3           | ,000  |
|     | Item W-6              |          | LS   | LS  |        | 3,          | 000  | 3           | ,000  |
|     | Item W-7              |          | LS   | LS  |        | 3,          | 000  | 3           | ,000  |
|     | Item W-8              |          | LS   | LS  |        | 3,0         | 000  | 3           | ,000  |
|     | Item W-15             |          | LS   | LS  |        | 3,0         | 000  | 3           | ,000  |
|     | RELOCATION COST       |          |      |     |        |             |      | 51.         | ,600  |
|     | Contingencies (25%+)  |          |      |     |        |             |      |             |       |
|     |                       |          |      |     |        |             |      | <del></del> | ,400  |
|     | SUBTOTAL              |          |      |     |        |             |      | 64,         | ,000  |

| 30 | E&D (6%+)          | 4,000  |
|----|--------------------|--------|
| 31 | S&A (6% <u>+</u> ) | 4,000  |
|    | TOTAL              | 72,000 |

No betterments.

No depreciation based on ECI 73-209.3, change 21 dated 21 February 1974.

The floodwall contractor will reuse cast iron and steel pipe; if the pipe cannot be reused, the pipe will be junked without consideration of salvage.

All above relocation work will be accomplished by the floodwall contractor as part of the Government contract.

## TABLE 9 - ESTIMATE OF COST NEW ORLEANS PUBLIC BELT RAILROAD (MARCH 1982 PRICE LEVELS)

| Cos<br>Acc |                          |      |          | Lump<br>Sum |             |
|------------|--------------------------|------|----------|-------------|-------------|
| No.        |                          | Unit | Quantity | Cost (\$)   | Amount (\$) |
| 02         | Relocations              |      |          |             |             |
| 0.7        | Utilities and structures |      |          |             |             |
|            | Item P-3                 | LS   | LS       | 8,000       | 8,000       |
|            | Relocation Cost          |      |          |             | 8,000       |
|            | Contingencies (25%+)     |      |          |             | 2,000       |
|            | Subtota1                 |      |          |             | 10,000      |
| 30         | E&D (6%+)                |      |          |             | 500         |
| 31         | S&A (6%+)                |      |          |             | 500         |
|            | TOTAL                    |      |          |             | 11,000      |

No betterments.

13. COMPARISON WITH PRIOR COST ESTIMATES. The current working estimate of cost is summarized under the uniform cost classification for comparison with the latest approved cost estimate. The latest approved cost estimate is the PB-3 for the Mississippi River Levees project, New Orleans District, bearing an effective date of 1 October 1981, as approved 1 December 1981 for construction funds. Since the PB-3 contains the relocation cost estimates for the entire Mississippi River Levees project, the funds included for Item M-98.2 to 97.2-L, Louisiana-Jackson Avenue Floodwall, have been broken out as follows for a suitable comparison.

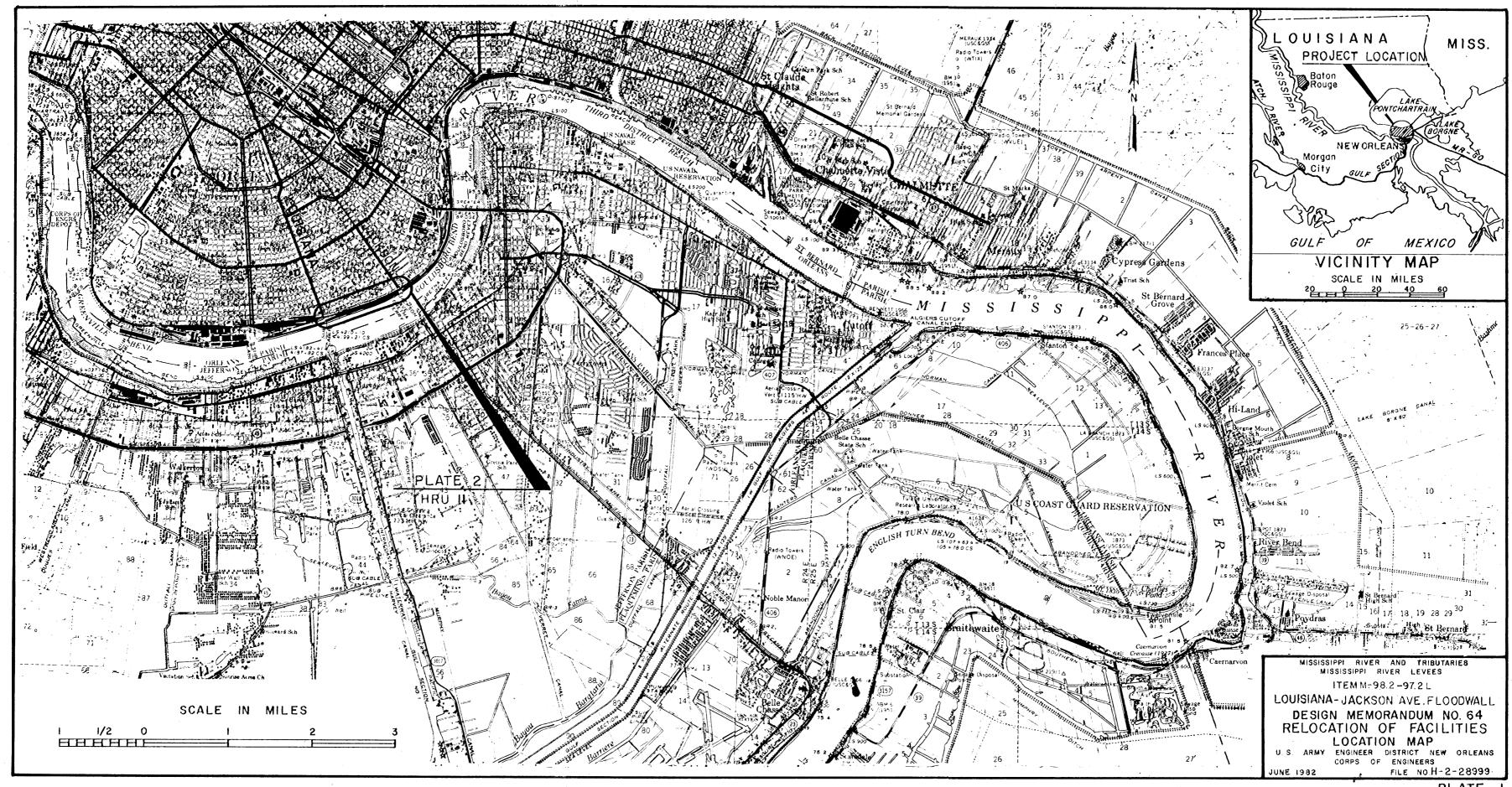
#### MISSISSIPPI RIVER LEVEES - CONSTRUCTION

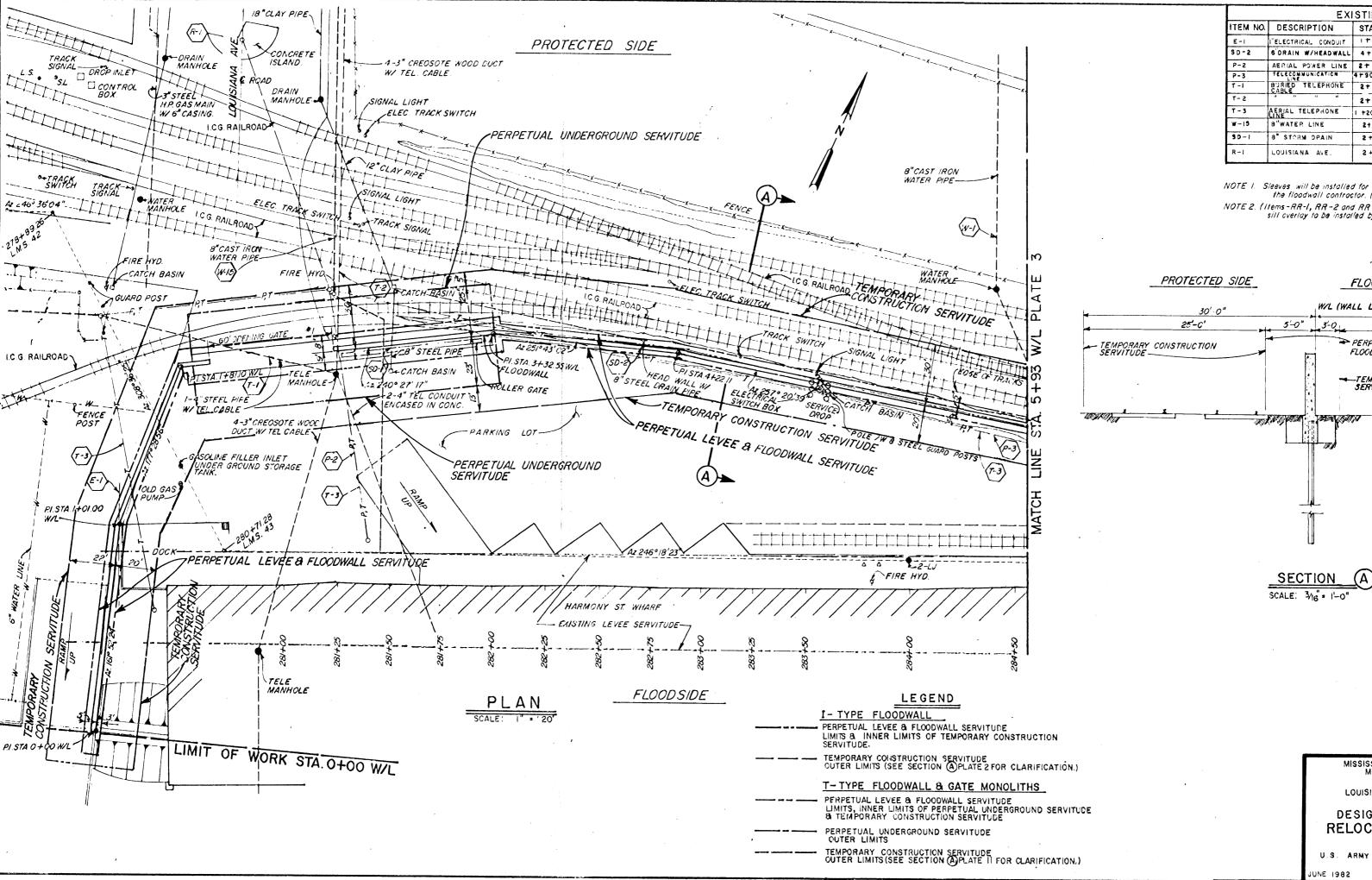
| Cost<br>Acct<br>No |             | Latest<br>PB-3<br>(\$1,000's) | Current Working Estimate (\$1,000's) | Difference<br>From PB-3<br>(\$1,000's) |
|--------------------|-------------|-------------------------------|--------------------------------------|--|
| 02                 | Relocations |                               |                                      |  |
| 0.1                | Roads       | 39                            | 39                                   | 0                                      |
| 0.4                | Railroads   | 102                           | 20                                   | <del>-</del> 82                        |
| 0.7                | Utilities   | 126                           | 276                                  | +150                                   |
| 30                 | E&D         | 20                            | 20                                   | 0                                      |
| 31                 | S&A         | 20                            | 20                                   | 0                                      |
| TOTA               | L           | 307                           | 375                                  | +68                                    |

No depreciation based on ECI 73-209.3, change 21 dated 21 February 1974.

# 14. JUSTIFICATION FOR COST REVISIONS.

- a. Railroads. The PB-3 estimate for the relocation of railroads was based on a preliminary floodwall alinement which impacted more trackage than was actually affected by the present proposed floodwall alinement. The present proposed floodwall alinement will only affect a 20' section of each track at gates 2 and 3.
- b. <u>Utilities</u>. The PB-3 estimate for the relocation of utilities was based on a preliminary floodwall alinement without detail inspection and knowledge of the number of affected utilities and their sizes. As a result of continued investigations with utility owners many more utilities were found to be affected resulting in estimated increased cost.
- 15. RECOMMENDATIONS. It is recommended that this design memorandum be approved as the basis for reimbursing the Orleans Levee District and floodwall contractor for costs incurred in accomplishing the road, railroad and utility relocations herein described.





EXISTING FACILITIES STA. W/L DISPOSITION RED RIVER BARGE S'ORAIN W/HEADWALL 4+05 DOCK BOARD E 2+58 SERVICE INC.
4+90105+93 NEW CRLEANS PUBLIC BELT RAILROAD
2+25 SOUTH CENTRAL BELL AERIAL POWER LINE 2+58
TELECOMMUNICATION 4+90 to BURIED TELEPHONE 2+25 2+57 1 +2010 5+9 DOCK EDARD 2179 DOCK BOARD CITY OF NEW ORLEANS DEPT. OF STREETS 2+24

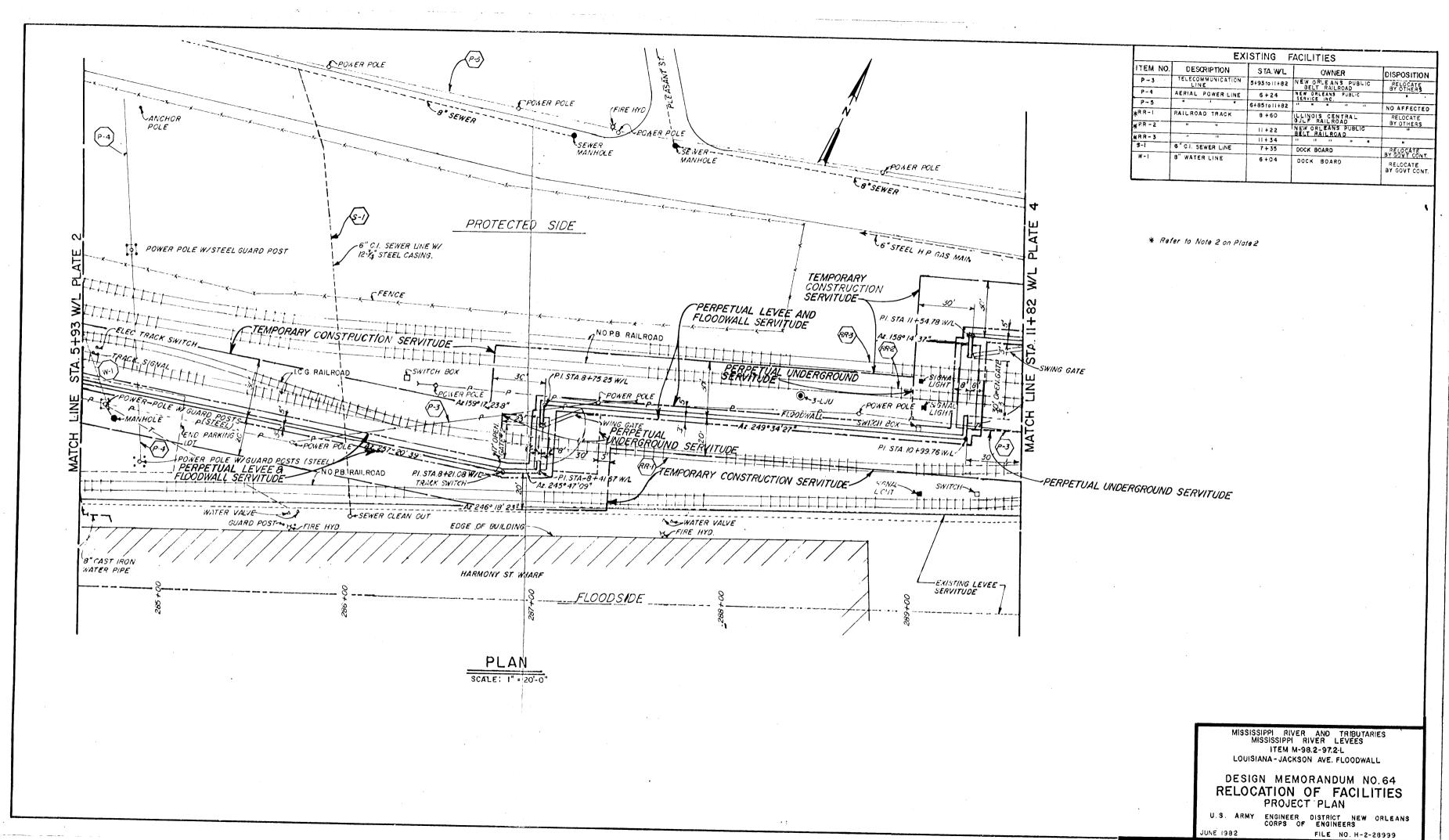
NOTE I. Sleeves will be installed for all underground utilities by the floodwall contractor. ( Plates 2 Thru 10 ). NOTE 2. (Items-RR-I, RR-2 and RR-3). Falsework and asphaltic sill overlay to be installed by the floodwall contractor. (Plate 3)

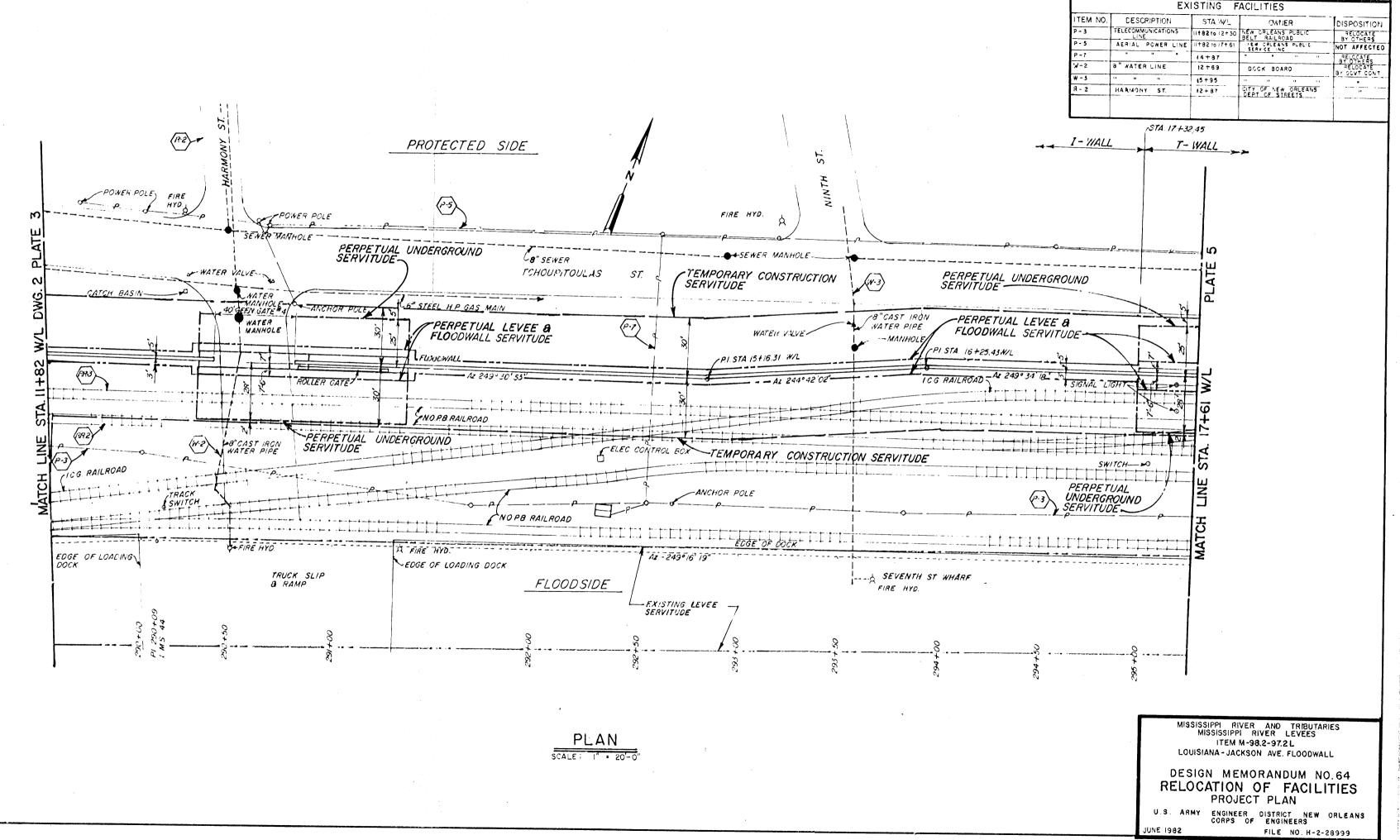
FLOODSIDE WIL (WALL LINE) PERPETUAL LEVEE & FLOCOWALL SERVITUDE SERVITUDE WY WY WY TO

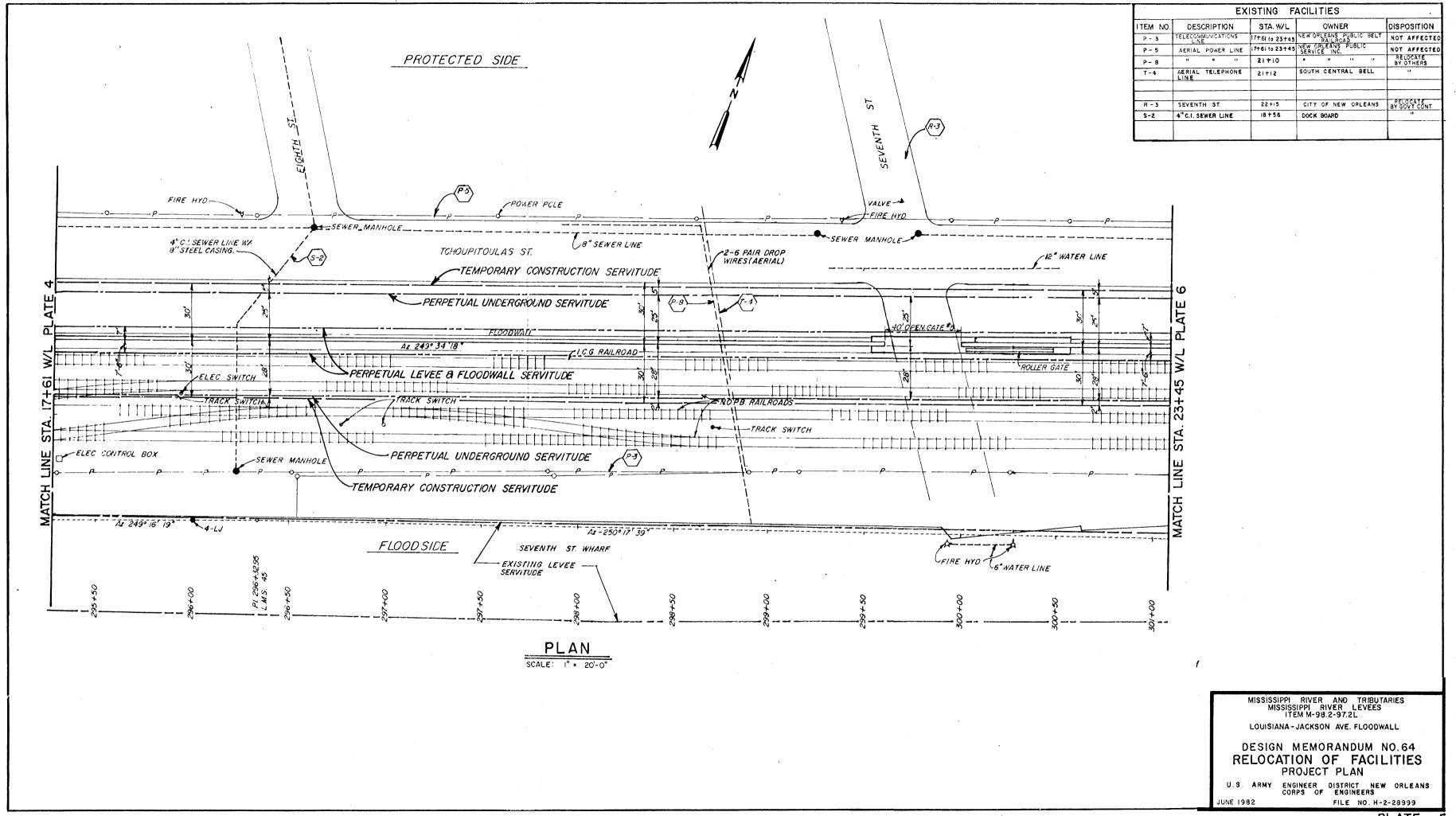
MISSISSIPPI RIVER AND TRIBUTARIES MISSISSIPPI RIVER LEVEES ITEM M-98.2-97.2-L LOUISIANA - JACKSON AVE. FLOODWALL

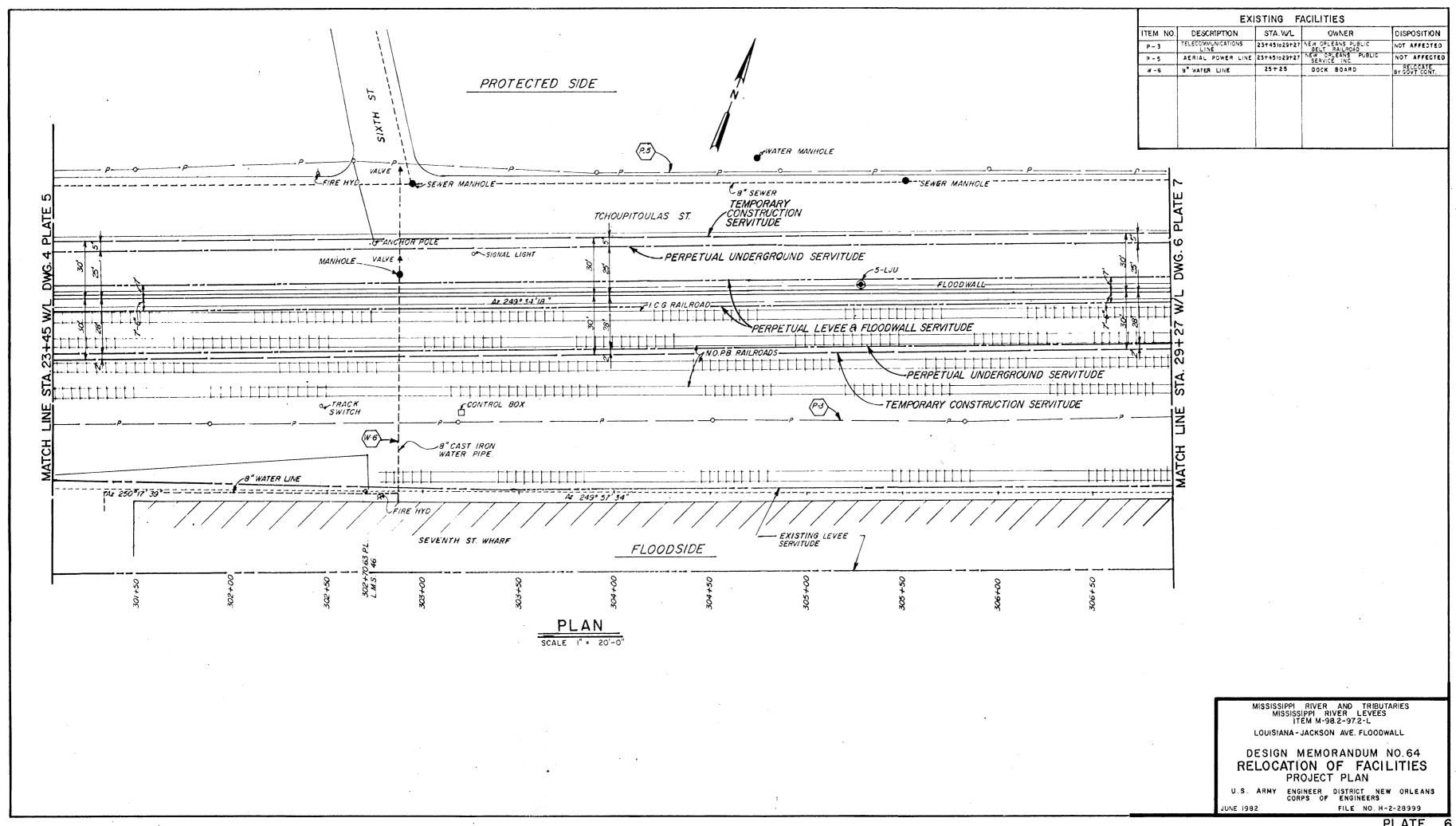
DESIGN MEMORANDUM NO.64 RELOCATION OF FACILITIES PROJECT PLAN

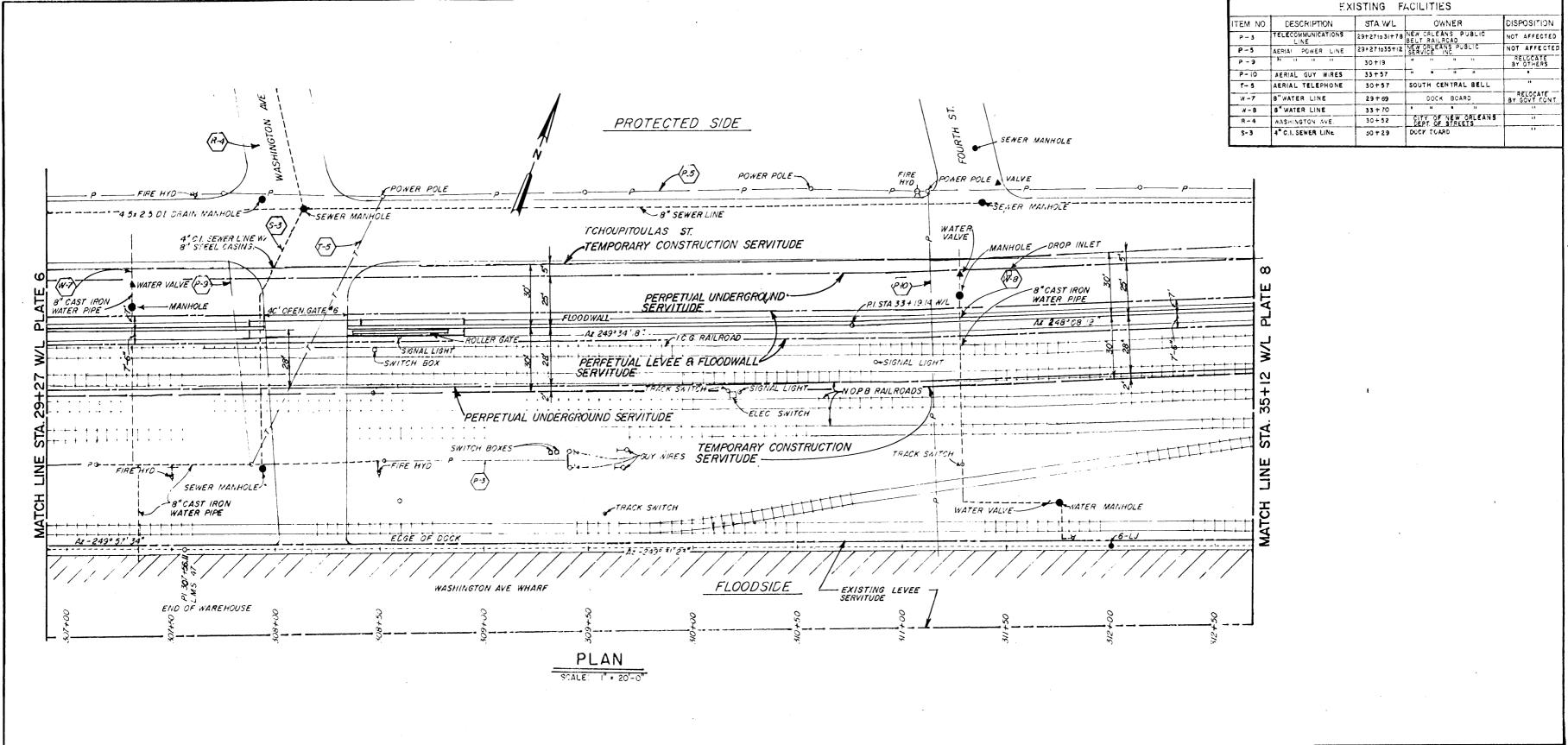
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS FILE NO. H-2-28999









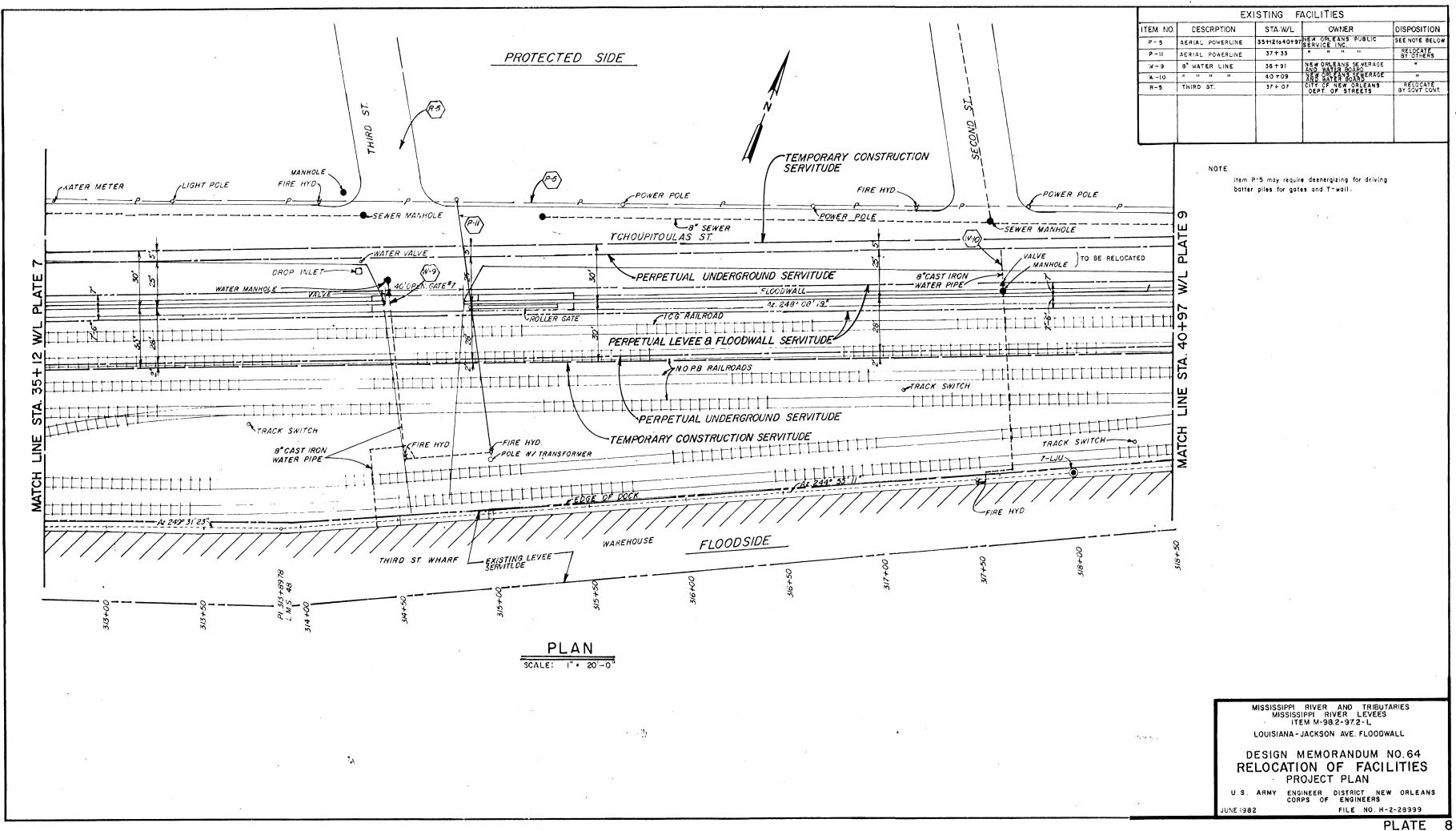


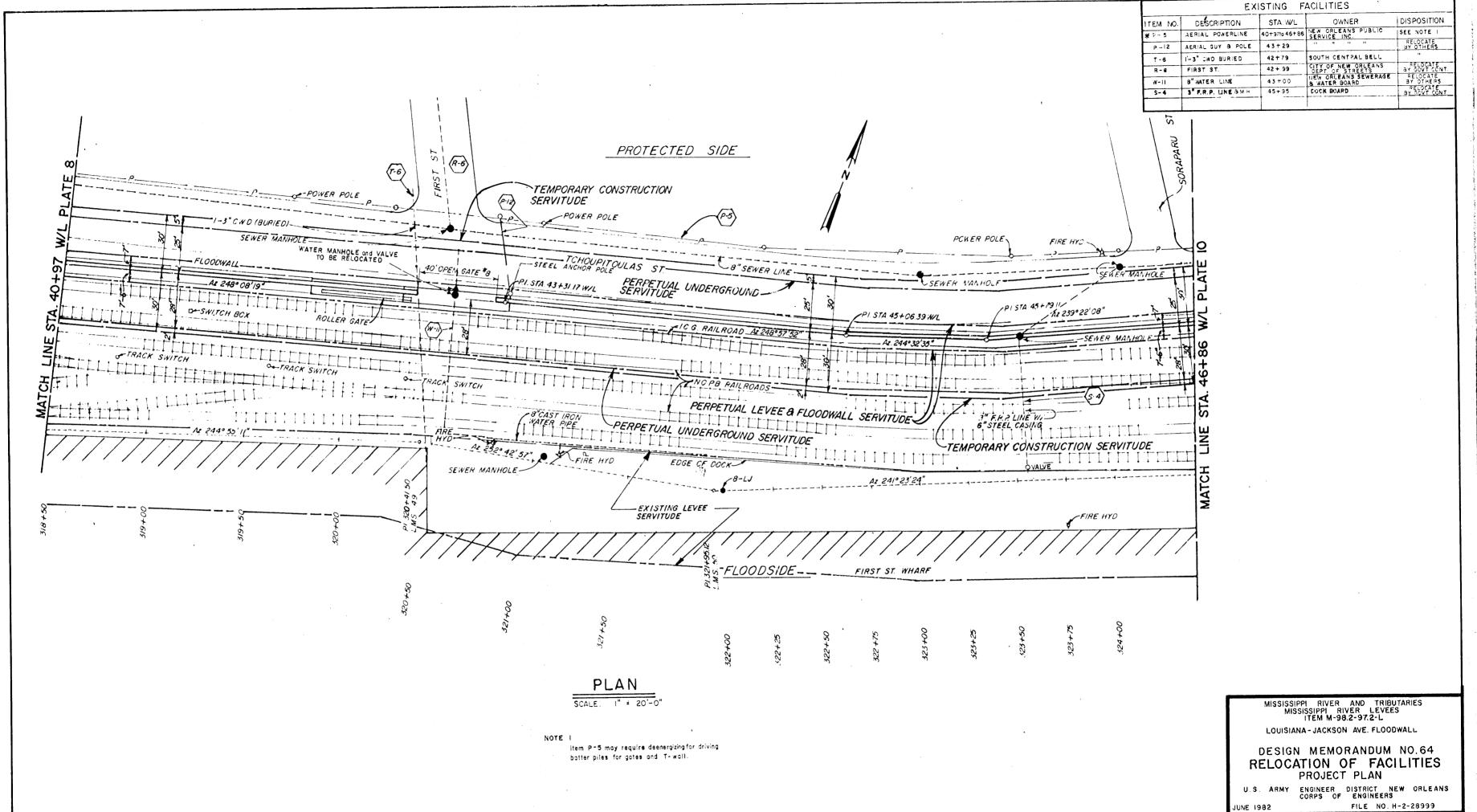
MISSISSIPPI RIVER AND TRIBUTARIES MISSISSIPPI RIVER LEVEES ITEM M-98.2-97.2-L

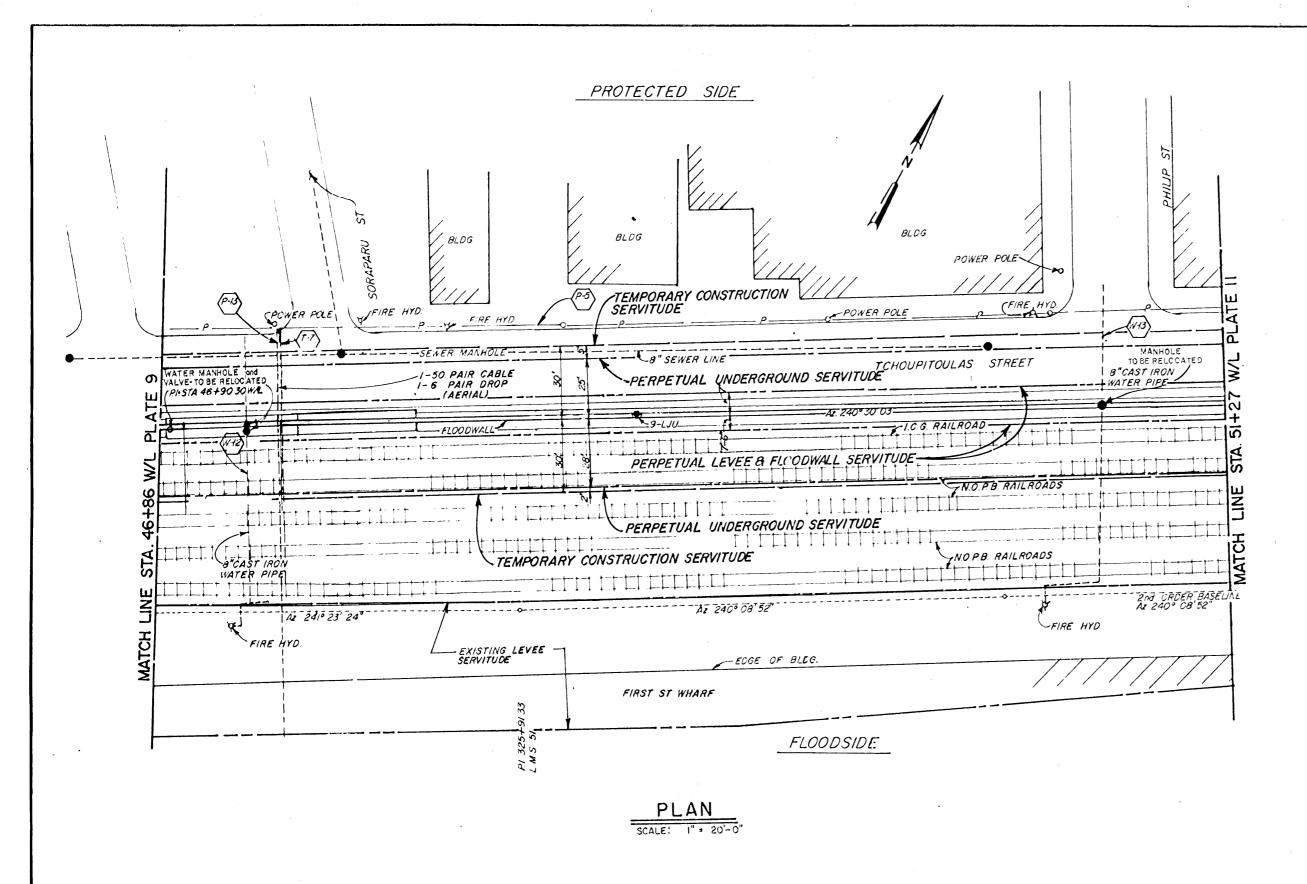
LOUISIANA-JACKSON AVE. FLOODWALL

DESIGN MEMORANDUM NO.64
RELOCATION OF FACILITIES
PROJECT PLAN

U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS
UNE 1982 FILE NO. H-2-28999







| EX                         | ISTING F   | ACILITIES   |   |
|----------------------------|--|---|---|
| DESCRIPTION                | STA.WL   | OWNER   | DISPOSITION   |
| AERIAL POWERLINE           | 46+861051+27   | NEW ORLEANS PUBLIC  | SEE NOTE I  |
| SERVICE DROP               | 47+35  | 4 11 4 11   | RELOCATE<br>BY OTHERS   |
| AERIAL TELEPHONE           | 47+36  | SOUTH CENTRAL BELL  | 14  |
| 3" WATER LINE<br>& MANHOLE | 47+28  | NEW ORLEANS SEWERAGE<br>AND WATER BOARD   |   |
| 8 WATER LINE<br>3 MANHOLE  | 50+76  | id to je 41   | 10  |
|                            |  |   |   |
|                            | DESCRIPTION  AERIAL POWERLINE AERIAL GUY MIRE A BERIAL TELEPHONE LINE  3"WATER LINE B MANHOLE B WATER LINE | DESCRIPTION STA.WL  AERIAL POWERLINE 46+861051+27  AERIAL GO ON OP 47+35  AERIAL TELEPHONE 47+36  LINE 47+28  3"WATER LINE 3 MANHOLE 3 WATER LINE 3 | DESCRIPTION STA.WL OWNER  AERIAL POWERLINE 46+861051+27 NEW ORLEANS PUBLIC SERVICE INC.  AERIAL GLONGURE 3 47+35 """  AERIAL TELEPHONE 47+36 SOUTH CENTRAL BELL  3"WATER LINE 47+28 NEW ORLEANS SEWERAGE AND WATER GOARD  3 WATER LINE 3 WATER LINE 47+28 AND WATER GOARD |

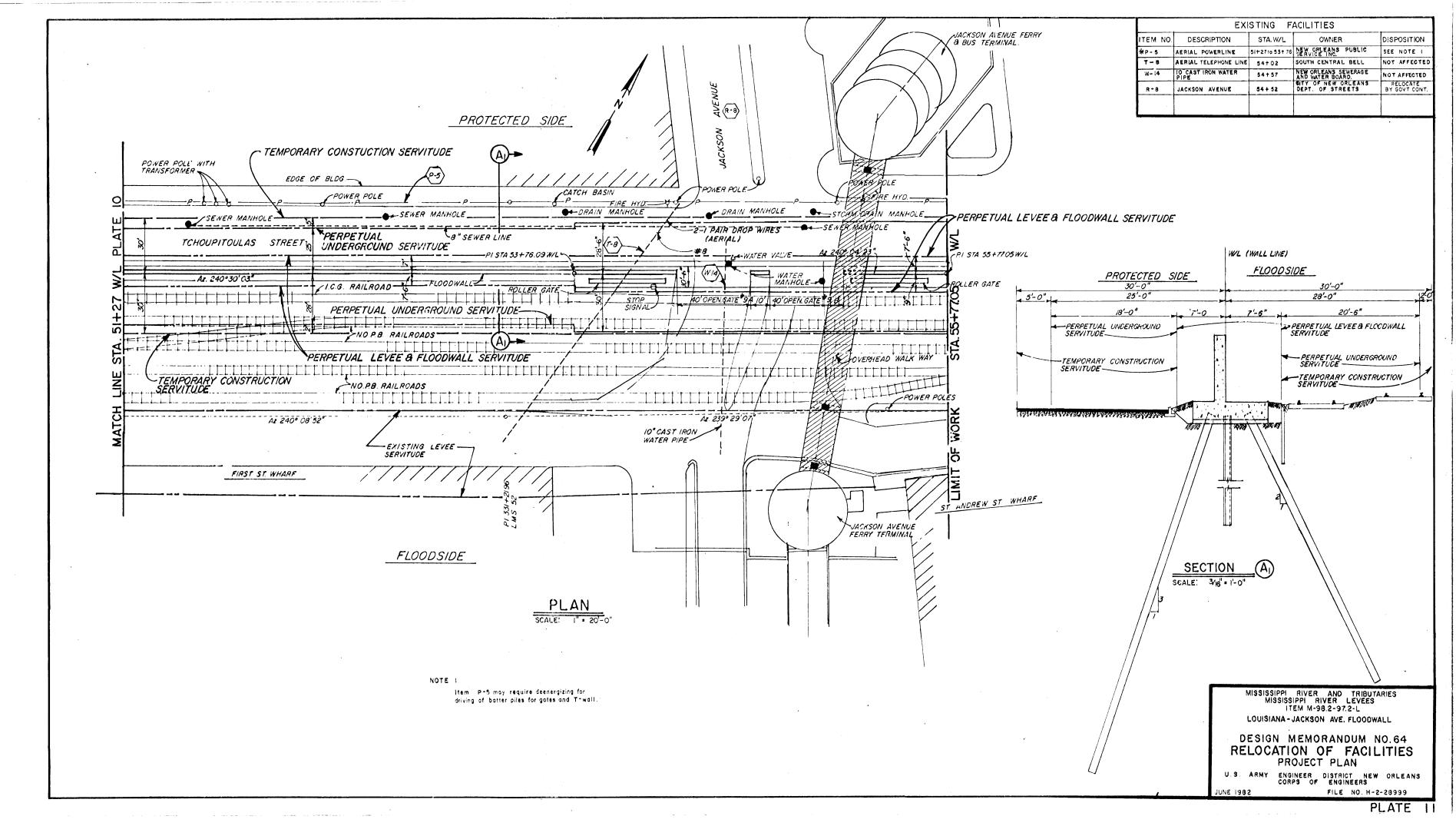
MISSISSIPPI RIVER AND TRIBUTARIES MISSISSIPPI RIVER LEVEES ITEM M-98.2-97.2L

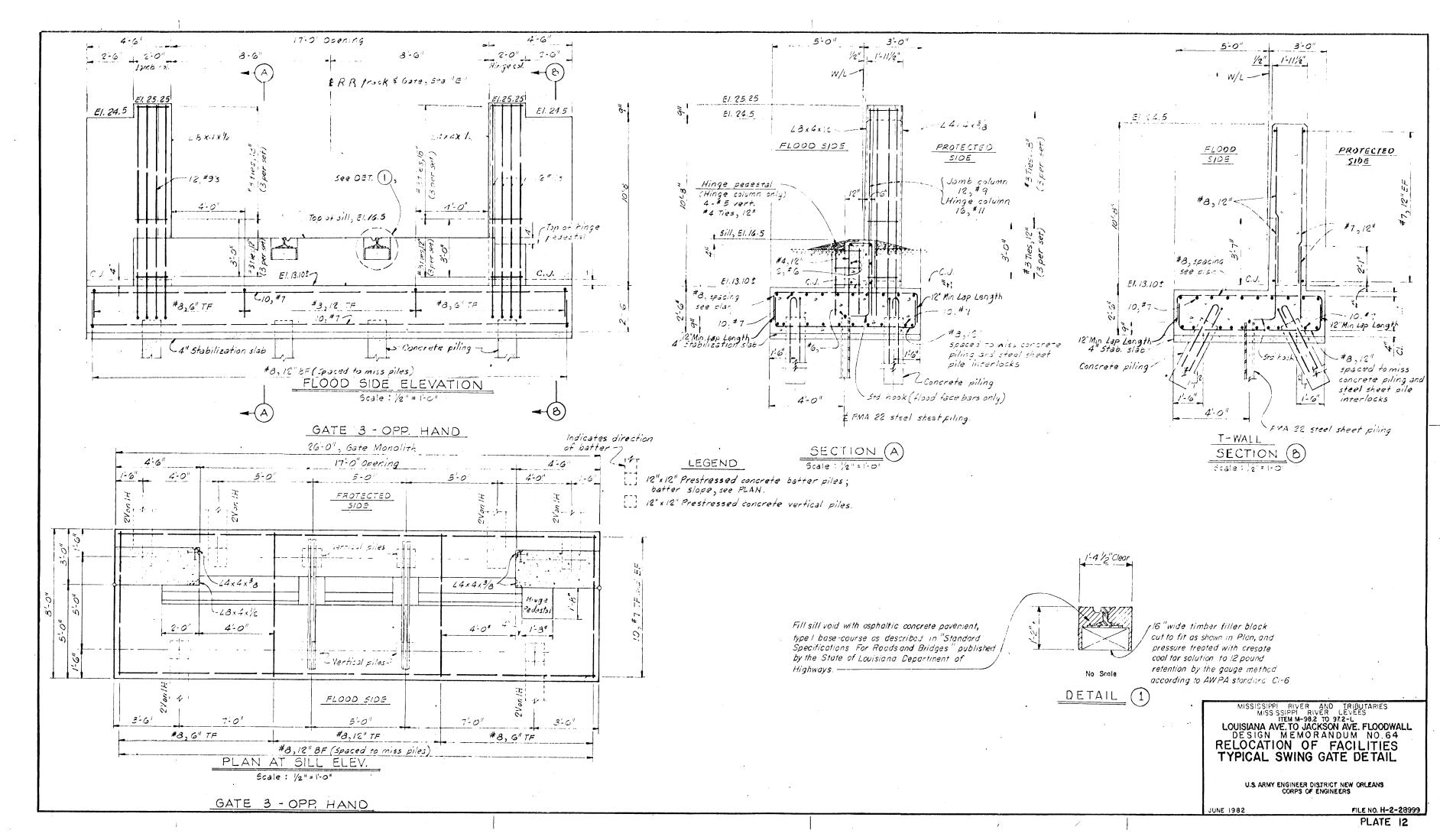
LOUISIANA - JACKSON AVE. FLOODWALL

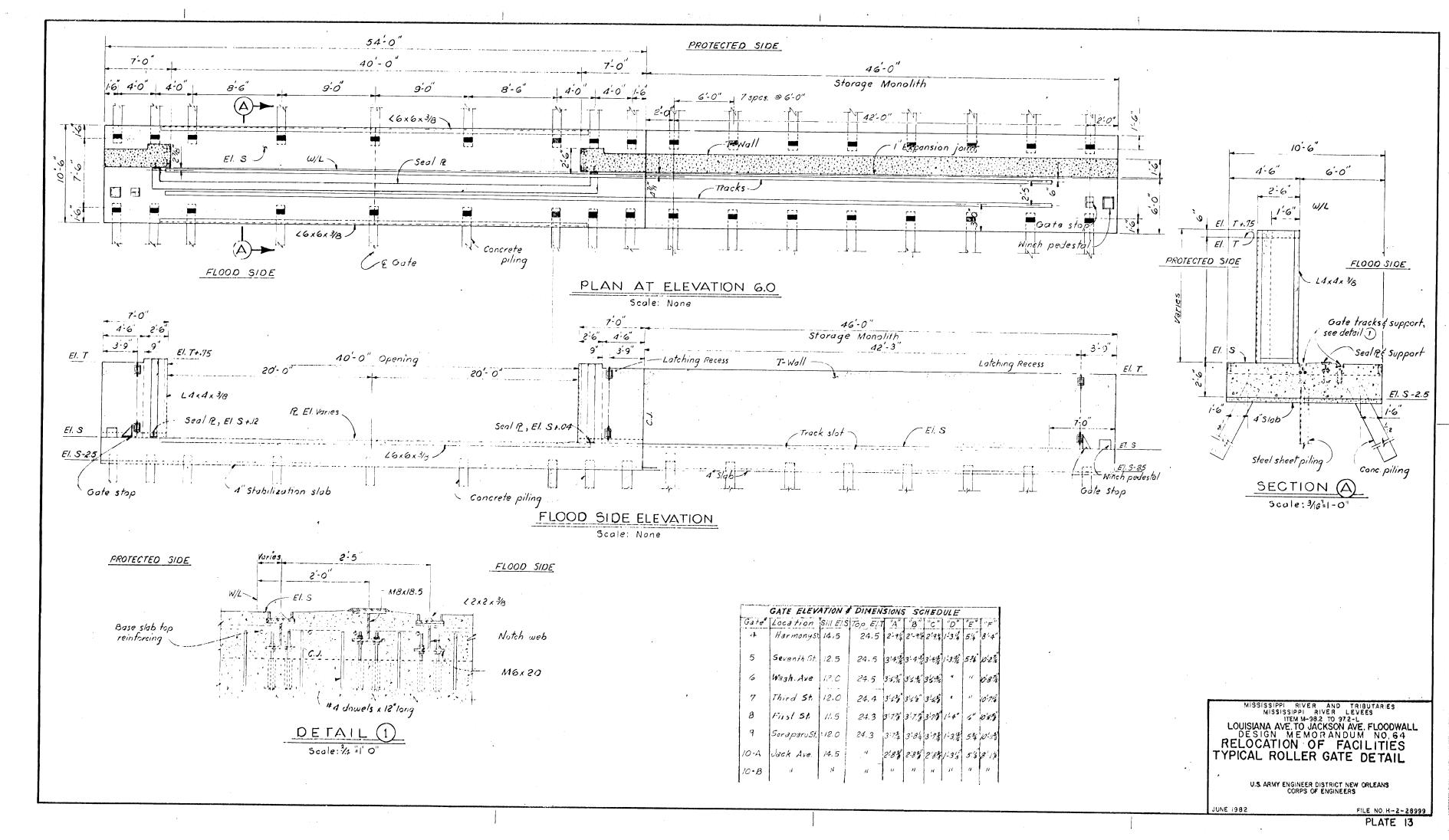
DESIGN MEMORANDUM NO.64
RELOCATION OF FACILITIES
PROJECT PLAN

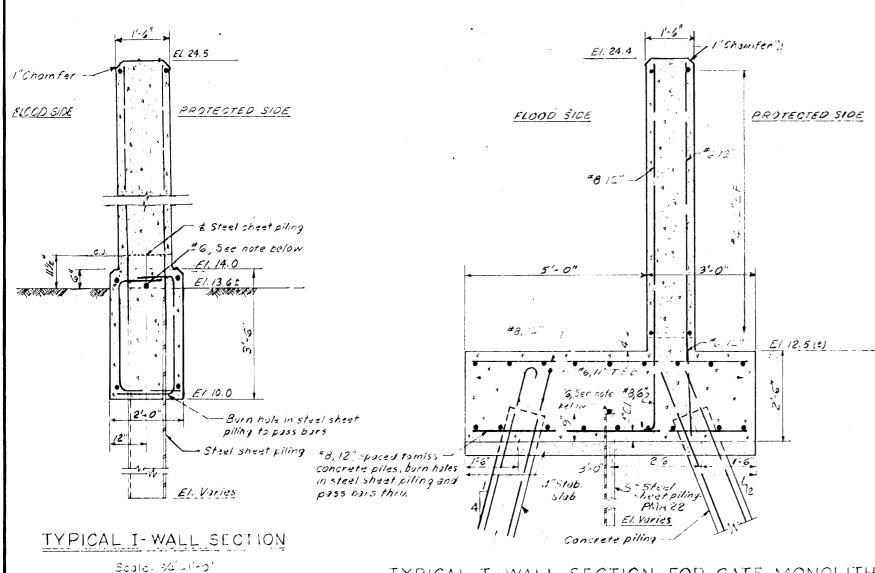
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS CORPS OF ENGINEERS

FILE NO. H-2-28999



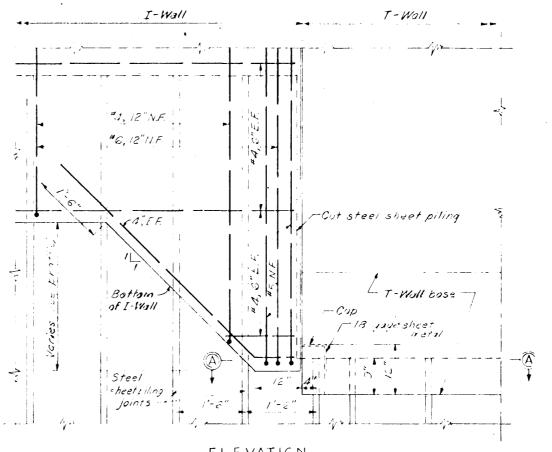




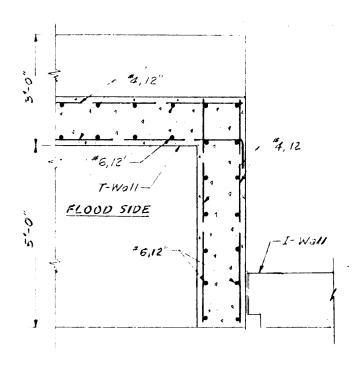


TYPICAL T-WALL SECTION FOR GATE MONOLITH Scale: 34"=1-5"

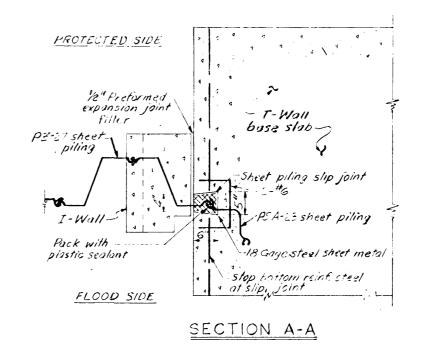
Note.
Weld a No 6 reinf, rod to top of each steel sheet pile. Install
flexible jumper at all monolith joints. Jumpers shall be insulated
No. No AWG copper, insulated with cross linked polyethylene in
an 8"dia loop. Jumper shall be welded to adjacent steel sheet
piles 3 inches below bottom of concrete cap. Welded connections shall be coated with splicing epox, to obtain a moisture proof connection.



ELEVATION TYPICAL DETAIL FOR I-WALL TO T-WALL AT BASE Sca- += 1-0"



TYPICAL T-WALL CORNER DETAIL Scale: 3/4"=1'-0"

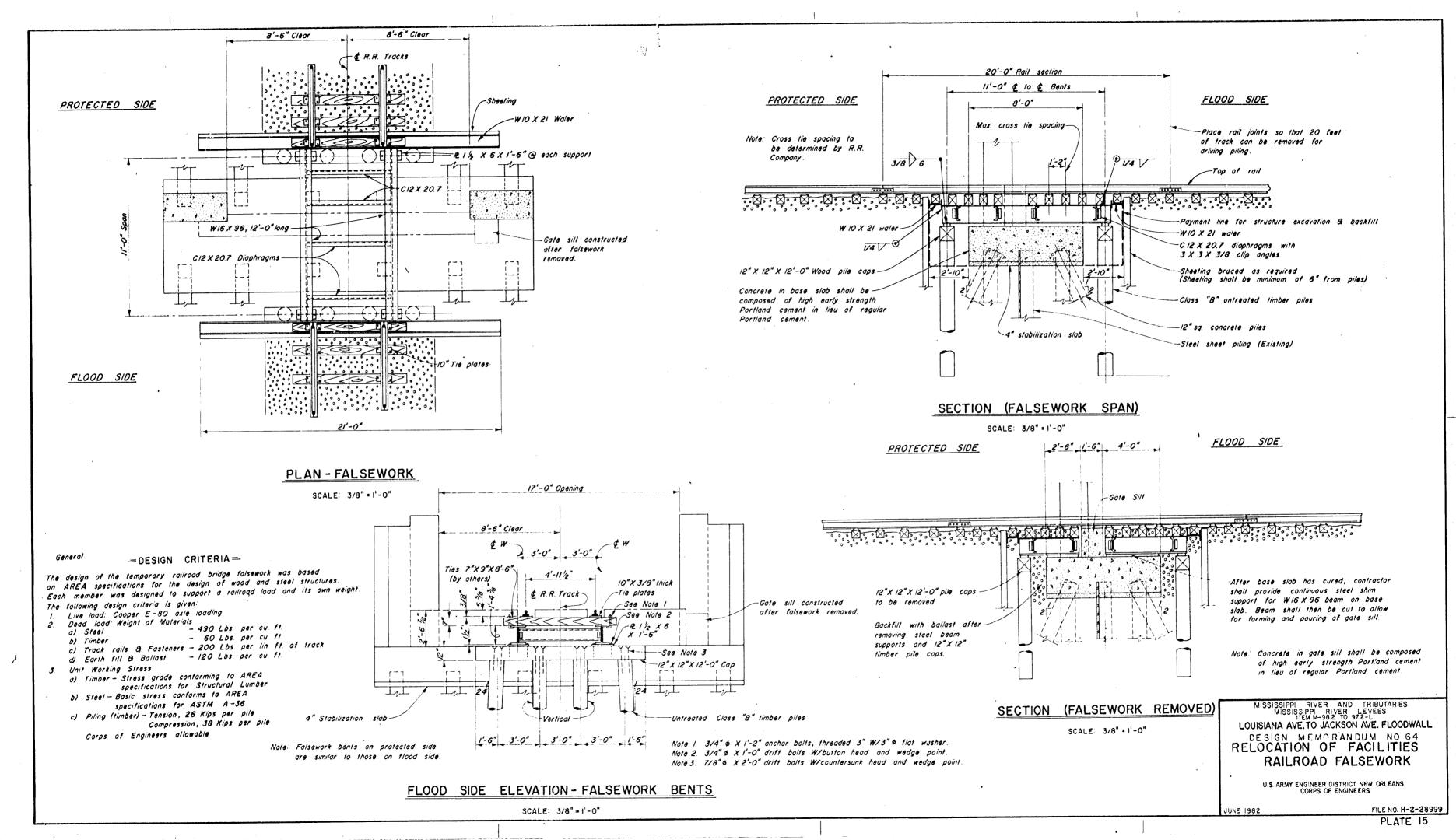


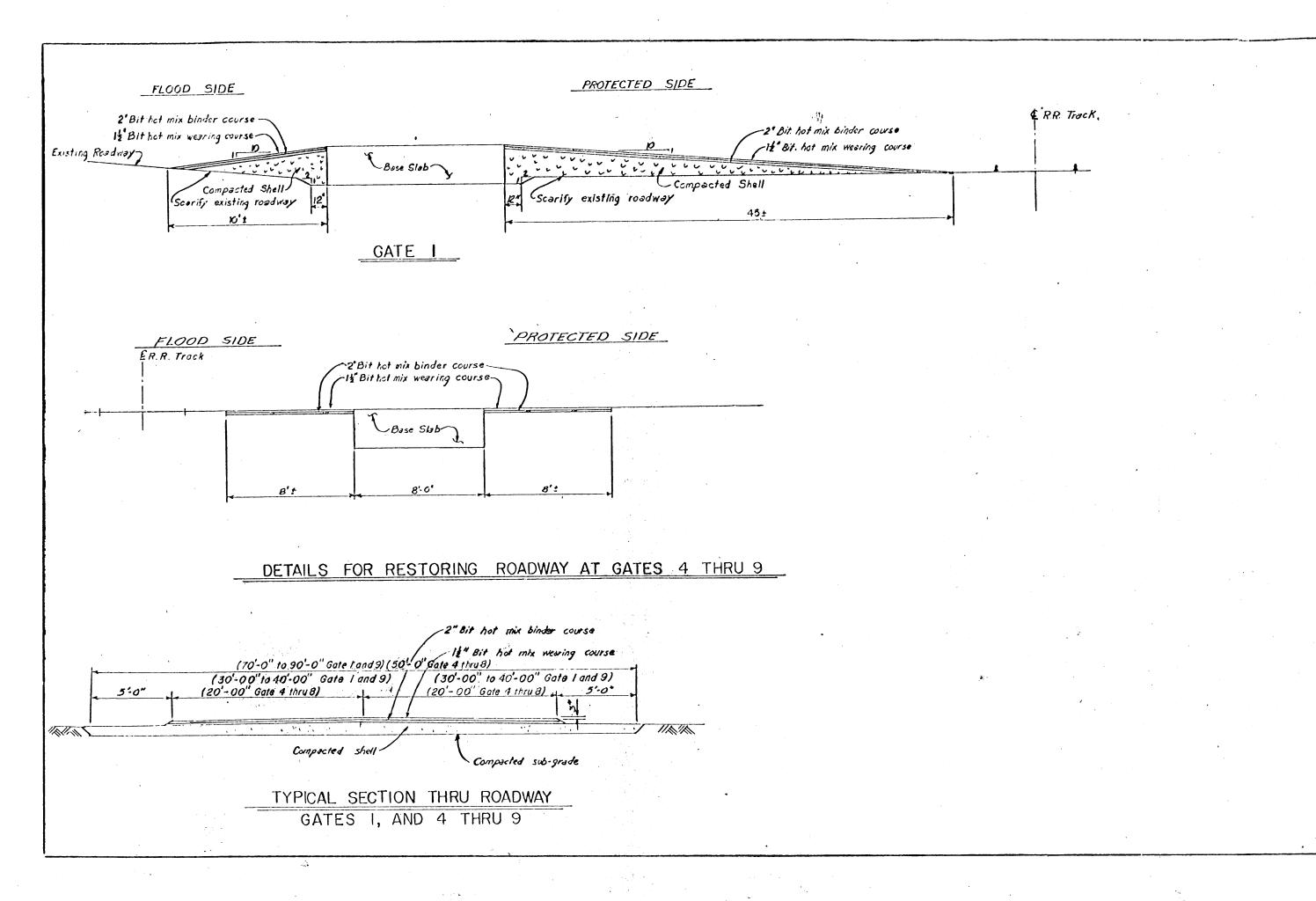
Chair: 1"=1'-0"

MISSISSIPPI RIVER AND TRIBUTARIES .
MISSISSIPPI RIVER LEVEES
ITEM M-98.2 TO 97.2-L
LOUISIANA AVE. TO JACKSON AVE. FLOODWALL RELOCATION OF FACILITIES
TYPICAL WALL SECTIONS AND DETAILS

U.S. ARMY ENGINEER DISTRICT NEW ORLEANS CORPS OF ENGINEERS

JUNE 1982





NOT TO SCALE

MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES

ITEM M-98.2-97.2-L

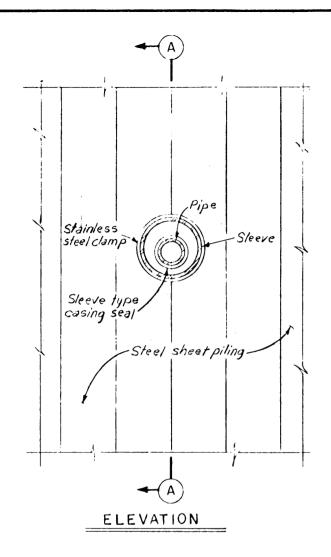
LOUISIANA - JACKSON AVE. FLOODWALL DESIGN MEMORANDUM NO.64

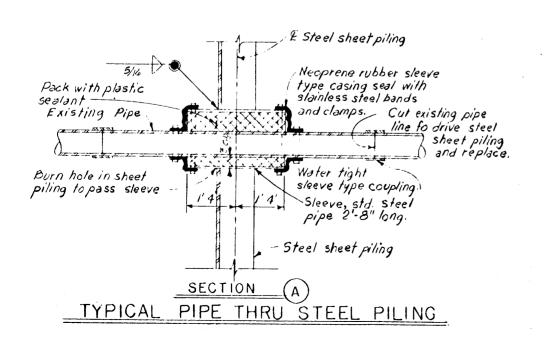
RELOCATION OF FACILITIES
ROAD DETAIL

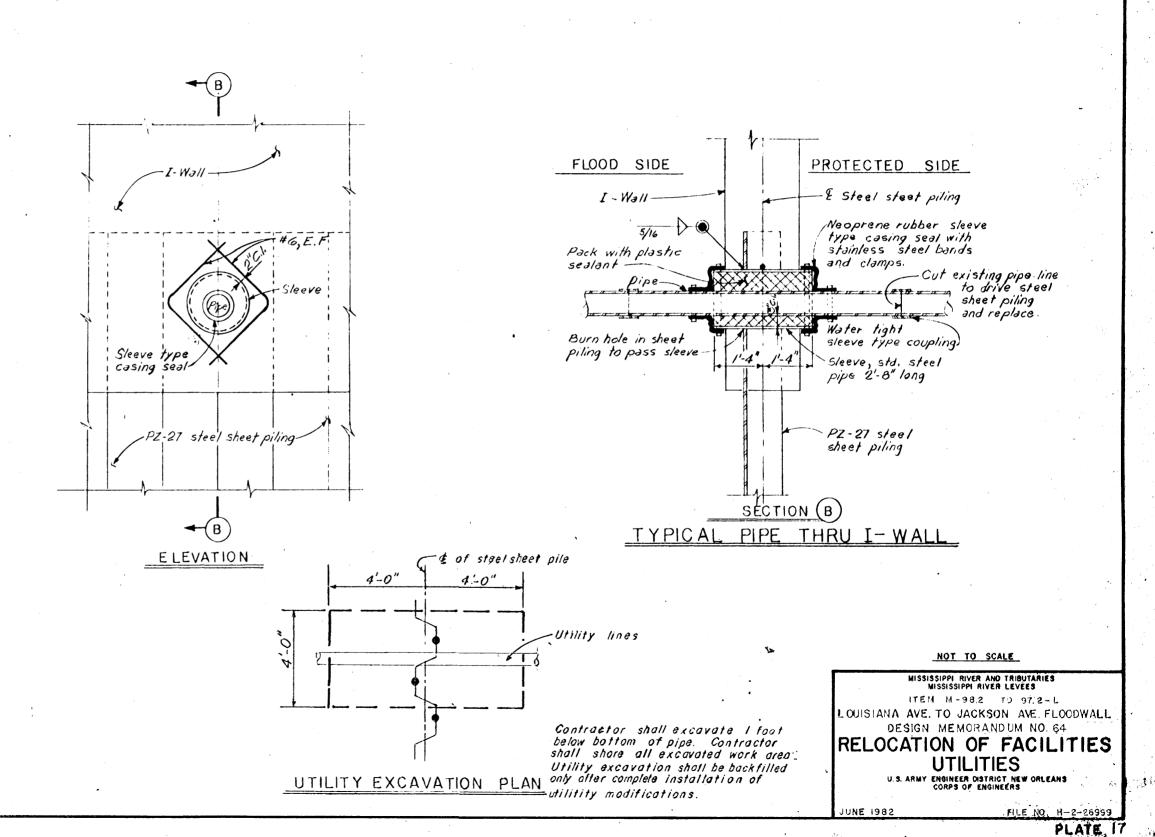
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS CORPS OF ENGINEERS

JUNE 1982

FILE NO. H-2- 28939







FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-98.2-97.2-L
LOUISIANA-JACKSON AVENUE FLOODWALL
ORLEANS PARISH, LOUISIANA
RELOCATION OF FACILITIES
DESIGN MEMORANDUM NO. 64

APPENDIX I ATTORNEY'S REPORTS

## Attorney's Report of Compensable Interest Louisiana-Jackson Avenue Floodwall Item M-98.2 - 97.2-L

This investigation and report are made in accordance with DIVR 1110-2-2 (see also DIVR 1110-2-1, 29 January 1968) and ER 1180-1-1, Section 73, Part 2, 73-203 and 73-204 on the following facilities which will be affected by subject project:

# **Facilities**

a. New Orleans Sewerage and Water Board owns facilities which cross the proposed floodwall alinement, as listed below:

| Item         | Size       | Type  | Plate |
|--------------|------------|-------|-------|
| ₩ <b>-</b> 9 | 8"         | Water | 8     |
| W-10         | 8"         | Water | 8     |
| W-11         | 8 <b>"</b> | Water | 9     |
| W-12         | 8"         | Water | 10    |
| W-13         | 8"         | Water | 10    |

b. South Central Bell Company owns telephone lines which cross the proposed floodwall alinement, as listed below:

| Item | Туре   | Plate |
|------|--------|-------|
| T-1  | Buried | 2     |
| T-2  | Buried | 2     |
| T-3  | Aerial | 2     |
| T-4  | Aerial | 5     |
| T-5  | Aerial | 7     |
| T-6  | Buried | 9     |
| T-7  | Aerial | 10    |

c. New Orleans Public Service, Inc., owns electrical facilities which cross the proposed floodwall alinement, as listed below:

| Item | Туре                        | Plate   |
|------|-----------------------------|---------|
| P-2  | Aerial                      | 2       |
| P-4  | Aerial                      | 3       |
| P-5  | Aerial                      | 8 to 11 |
| P-7  | Aerial                      | 4       |
| P-8  | Aerial                      | 5       |
| P-9  | Aerial                      | 7       |
| P-10 | Aerial Guy                  | 7       |
| P-11 | Aerial                      | 8       |
| P-12 | Aerial Guy and Pole         | 9       |
| P-13 | Aerial Service Drop and Guy | 10      |

| d∙       | New | Orleans  | Public  | Belt  | Railroad | Company | owns  | trackage  | and | l an   |
|----------|-----|----------|---------|-------|----------|---------|-------|-----------|-----|--------|
| electric | al: | facility | crossin | g the | proposed | floodwa | all a | linement, | as  | listed |
| below:   |     |          |         |       |          |         |       |           |     |        |

| Item | Type           | Plate   |
|------|----------------|---------|
| RR-2 | Railroad Track | 3       |
| RR-3 | Railroad Track | 3       |
| P-3  | Aerial         | 2, 3, 4 |

e. Illinois Central-Gulf Railroad Company owns a track which crosses the proposed floodwall alinement, as listed below:

| Item | Type           | Plate |
|------|----------------|-------|
|      |                |       |
| RR-1 | Railroad Track | 3     |

f. The City of New Orleans, Department of Streets, owns roads which cross the proposed floodwall alinement, as listed below:

| Item | Description      | Plate |
|------|------------------|-------|
| R-1  | Louisiana Avenue | 2     |
| R-2  | Harmony Street   | 4     |
| R-3  | Seventh Street   | 5     |
| R-4  | Washington Ave.  | 7     |
| R-5  | Third Street     | 8     |
| R-6  | First Street     | 9     |
| R-8  | Jackson Avenue   | 11    |

g. Red River Barge Line Inc. owns an electrical conduit which crosses the proposed floodwall alinement, as listed below:

| Item | Size | Type       | Plate |
|------|------|------------|-------|
| E-1  | 1"   | Electrical | 2     |
|      |      | Conduit    |       |

h. The Board of Commissioners of the Port of New Orleans owns facilities which cross the proposed floodwall alinement, as listed below:

| Item | Size       | Type                   | Plate |
|------|------------|------------------------|-------|
| SD-1 | 8"         | Storm Drain            | 2     |
| SD-2 | 8"         | Storm Drain/w headwall | 2     |
| S-1  | 6 <b>"</b> | Sewerline              | 3     |
| S-2  | 4 <b>"</b> | Sewerline              | 5     |
| S-3  | 4"         | Sewerline              | 7     |
| S-4  | <b>3"</b>  | Sewerline              | 9     |
| W-1  | 8"         | Waterline              | 3     |
| W-2  | 8"         | Waterline              | 4     |
| W-3  | 8"         | Waterline              | 4     |
| W-6  | 8"         | Waterline              | 6     |
| W-7  | 8"         | Waterline              | 7     |
| W-8  | 8"         | Waterline              | 7     |
| W-15 | 8"         | Waterline              | 2     |
|      |            |                        |       |

a.

## New Orleans Sewerage and Water Board

All of the facilities listed under a. above are owned, operated and maintained by the Sewerage and Water Board of New Orleans, a public utility (LSA-R.S. 33:4161), organized under LSA-R.S. 33:4071 et seq. LSA-R.S. 33:4078 gives the City of New Orleans through the Sewerage and Water Board, the right of expropriation whenever it becomes necessary or convenient for the sewerage, water, or drainage systems. Title to all such acquired property and to all public works constructed there by the Board vests in the City of New Orleans. The "Doctrine of Unopposed Occupancy and Use", codified in LSA-R.S. 19:14, also gives the city the right to expropriate such property, and construct facilities for sewerage and drainage thereupon. No prescriptive period is required; mere knowledge, consent, or acquiesence of landowners is sufficient for applying this statute.

In accordance with rules set out for the Board in LSA-R.S. 33:4078, "... the City of New Orleans shall not sell, exchange, utilize or dispose of any streets wherein are located any of the facilities and utilities of the Board without prior consent of the Board ..." To this date, no such consent has been given by the Sewerage and Water Board of New Orleans. Pursuant to this requirement and the "Doctrine of Unopposed Occupancy and Use", the City of New Orleans is the present owner of a servitude and therefore has a compensable interest in its facilities.

b•

#### South Central Bell Company

The telephone cables crossing the proposed floodwall alinement are owned, operated, and maintained by South Central Bell. This company has previously furnished this office certificates of the Secretary of State, State of Louisiana, dated 19 August 1970, showing that the Company, a Delaware Corporation has filed a copy of its Articles of Incorporation in his office and has qualified to do business in the State of Louisiana. The Company is considered to be a public utility according to LSA-R.S. 33:4161. Pursuant to LSA-R.S. 45:781, any domestic or foreign corporation formed to transmit intelligence by telephone, has the right to construct and maintain telephone lines along all public roads, works, railroads, and waters with the consent of the city council, provided they do not obstruct normal use of such facilities. The Company may without such consent, proceed to expropriate such land as is needed for these facilities, but may in no way impede the full use of such right of way for railroads, highways, sewerage and drainage systems, and other public works. As of this date, the Company has not produced any permits to place its facilities within the rights-of-way within the public

streets of the City of New Orleans, nor has the city produced copies of such permits. If South Central Bell's facilities are located within these rights-of-way for public streets without permission, they are in trespass against the city and no one else.

Inasmuch as subject relocations are not for the improvement of the streets, but for levee purposes, the usual requirement that a permittee or trespasser relocate at its expense, when necessary for the convenience of the street, is not applicable. In this case some of the facilities are being dislocated from dedicated street rights-of-way and railroad rights-of-way for levee purposes, not for street or railway convenience or needs and therefore the Company has a compensable interest in all these facilities. The Company has a compensable interest in its facilities located on private property pursuant to LSA-R.S. 19:14.

C.

#### New Orleans Public Service, Inc.

NOPSI, a Louisiana corporation, domiciled in the City of New Orleans is a privately owned public utility. LSA-R.S. 19:2(5), (7) give this corporation the right to expropriate property for the purpose of generating, transmitting and distributing electricity and steam for power, lighting, heating, or other such uses, or for the purpose of supplying the public with natural gas.

NOPSI's facilities in question are located both on private property and within dedicated streets of the City of New Orleans. The City of New Orleans pursuant to LSA-R.S. 33:4405, has the authority to grant permits to such Corporations for the use of city street rights-of-way for the transmission of power. But to date NOPSI has produced no such permits nor has the city produced any copies of said permits. The principle applied in b. above to utility companies being permittees or trespassers within the rights-of-way of city streets applies here also.

Some of the facilities or portions thereof are located outside of the street rights-of-way on private property. No evidence was presented that servitudes were obtained from the property owners, but none is required. The "Doctrine of Unopposed Occupancy and Use", LSA-R.S. 19:14, acts as a waiver of the private owner's right to contest the taking and thereby creates an interest in the property. Thus NOPSI has a compensable interest in the facilities herein described.

d.

# City of New Orleans - Public Belt Railroad Company

The NOPBR is owned and operated by the City of New Orleans by and through a commission known as the Public Belt Railroad Commission, established under Article 14, Section 26 of the 1921 Louisiana Constitution. This provision was

made statutory under the 1974 Constitution by Article 14, Section 16, and can now be found in LSA-R.S. 33:4530.

The facilities of the NOPBR listed herein are located pursuant to a lease agreement between the NOPBR and Illinois Central Railroad, and an Agreement and Consent Establishing a Corridor Within Public Servitude Areas, among the City of New Orleans, the Board of Commissioners of the Port of New Orleans, the Board of Levee Commissioners of the Orleans Levee District, New Orleans Public Belt Railroad Commission, and the Louisville and Nashville Railroad Company. That portion of the NOPBR trackage in city streets rights-of-way was permitted by City Ordinances. The city of New Orleans by and through the Public Belt Railroad Commission has the right to expropriate property necessary for the operation of a railroad system and the "Doctrine of Unopposed Occupancy and Use" codified in LSA-R.S. 19:14 is applicable.

The City of New Orleans by and through the Public Belt Railroad Commission has a compensable interest in its facilities listed herein.

e.

## Illinois Central-Gulf Railroad Company

There is no record as to how the Company acquired the rights-of-way for its facilities in this area.

According to LSA-R.S. 19:14, if the facilities have been placed on the property for a necessary and public purpose with the owner's knowledge, this acts as a waiver of his right to object to the presence of the facilities; the Company has effectively acquired a right-of-way through the doctrine of "Unopposed Occupany and Use."

LSA-R.S. 19:2(2) also gives the Company the right of expropriation of needed property for the construction of railroads, toll roads, or navigation canals.

The Company could otherwise have acquired an interest in the property by purchase or lease, but to date we have no knowledge of this.

In view of this, the Illinois Central-Gulf Railroad Company has a compensable interest in its facilities listed herein.

f.

#### City of New Orleans (Dept. of Streets)

New Orleans, a municiple corporation of the State of Louisiana, holds in trust for the public, fee title, not merely an easement or servitude to its

streets. The city has the power to expropriate under LSA-R.S. 19:2(1). The city may, pursuant to LSA-R.S. 33:4717, upon a two-thirds vote of the City Council, revoke the destination or dedication of such property and sell at private sale, exchange, or otherwise convey to the United States, the State of Louisiana or any department or agency of either, such property needed for public use. Pursuant to LSA-R.S. 52:2 the city may donate or convey land to the United States for flood control works.

Even if fee title to this property has not been acquired, the city has acquired an interest in the property through the doctrine of "Unopposed Occupancy and Use" codified in LSA-R.S. 19:14.

The City of New Orleans has a compensable interest in all of its facilities listed herein.

g.

## Red River Barge Line, Inc.

Red River Barge Line, Inc. has a one-inch electrical conduit located on privately owned property of the New Orleans Dock Board. There is no lease agreement, but the facilities are present with the verbal permission of the Dock Board since 1962, for a periodic toll paid by Red River Barge Line. Louisiana Civil Code Art. 491 provides that other constructions permanently attached to the ground are presumed to belong to the owner of the ground unless separate ownership is evidenced by an instrument filed for registry in the conveyance records. As Red River Barge has not filed an instrument in the conveyance records, the Dock Board, not Red River Barge, has a compensable interest in this facility.

h.

#### Board of Commissioners of the Port of New Orleans

All of the facilities listed under h. are owned by the Board of Commissioners of the Port of New Orleans, a state agency, organized under LSA-R.S. 34:1 et seq. LSA-R.S. 34:21 gives the Board the duty to provide light, water, police protection, and any other services for the public wharves, docks, sheds, and landings of the Port of New Orleans.

LSA-R.S. 34:23 provides the Board may expropriate property for commerce in accordance with the expropriation laws. LSA-R.S. 19:2 et seq. give the power and procedure for expropriation. The "Doctrine of Unopposed Occupancy and Use", codified in LSA-R.S. 19:14, also gives the city the right to expropriate property for commerce and to construct facilities. No prescriptive period is required and mere knowledge, consent, or acquiesence of landowners is sufficient under this statute. The Board has not presented any evidence of

ownership of the facilities, but under the "Doctrine of Unopposed Occupancy and Use" the Board is the present owner of a servitude and therefore has a compensable interest in its facilities.

## Authority and Obligation

Authority for construction, enlargement, or improvement of Main Line Mississippi River Levees, including berms, is contained in the Act of 15 May 1928 (PL 391, 70th Congress), as amended. The furnishings of rights-of-way for levee foundations and levees on the main stem Mississippi River, except levee setbacks, is an obligation of local interest (see Section 3, Act of 15 May 1928). The replacement or relocation of public roads, highways, railroads, public utilities, and pipelines required for the construction of main line Mississipi River Levees will be accomplished at Federal expense. Reimbursement of costs to local cooperating agencies in perfecting relocation of interfering facilities may be made pursuant to the Act of 23 April 1934 (PL 171, 73rd Congress).

## Summary

The Federal Government is obligated to relocate all the facilities listed herein under a. through h.

March 1982 Lonaine J. Caffery
TORRATNE C. CAFFERY

Attorney-Advisor

U. S. Army Engineer District

New Orleans

FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-98.2-97.2-L
LOUISIANA-JACKSON AVENUE FLOODWALL
ORLEANS PARISH, LOUISIANA
RELOCATION OF FACILITIES
DESIGN MEMORANDUM NO. 64

APPENDIX II SUMMARY OF RELOCATIONS COSTS

# SUMMARY OF RELCOATION COSTS

| Roads<br>City of New Orleans               | 39,000   | \$39,000  |
|--|--|-----------|
| Railroads<br>ICG RR<br>NOPB RR             | 7,000<br>13,000                                | \$20,000  |
| Utilities SCB SWB NOPSI Dock Board NOPB RR | 81,000<br>81,000<br>40,000<br>64,000<br>10,000 | \$276,000 |
| SUBTOTAL                                   |  | 335,000   |
| E&D  |  | 20,000    |
| S&A  |  | 20,000    |
| TOTAL                                      |  | 375,000   |

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