CELMN-CD-NO-Q 19 Sep 95

MEMORANDUM THRU

Area Engineer, NOAO
C/Const Div ATTN: Contr Admin Br

FOR C/Engr Div

SUBJECT: Narrative Completion Report for Contract No. DACW29-94-C-0003, Lake Pontchartrain, Louisiana & Vicinity, High Level Plan, London Avenue Outfall Canal, Parallel Protection, Pumping Station No. 3 to Mirabeau Avenue Floodwall, Orleans Parish, Louisiana

1. The subject contract dated 15 Oct 93, was awarded to Boh Bros Construction Company, Incorporated, Post Office Drawer 53266, New Orleans, Louisiana 70153. The Notice to Proceed was issued on 18 Nov 93, with construction to start no later than 28 Nov 93. The original completion date was set for 12 May 95, with the estimated amount of the contract being $6,684,517.00.

2. Required work under this contract included Clearing and Grubbing, Selective Demolition of 13,100 ft. of existing floodwall along with a pedestrian bridge at Mirabeua Avenue and an abandoned vehicular bridge at Benefit Street, construction of 13,100 feet of sheet piling and steel reinforced concrete I-type floodwall, structural excavation and backfill necessary to construct floodwall, embankment along the floodwall, asphalt paving repair, construction of two swing gate structures, complete with steel floodgates at railroad crossing, construction of temporary falsework necessary to build the swing gate structures, modifications of waterlines at several locations, driving of steel "H" piles necessary for swing gate construction, temporary and permanent relocation of electric feeder cables, temporary flood protection & coffer dams, and fertilizing & seeding.

3. The Preconstruction Conference was held at the New Orleans Area Office on 18 Nov 93. Detailed minutes of this meeting are located in the contract file. The Notice to Proceed was signed by the contractor on 18 Nov 93 and the contractor began mobilizing equipment and performing preliminary survey work on 26 Nov 93.

4. The contractor mobilized project trailers on 5 Dec 93 and began installing safety fence and erosion control on 30 Dec 93. The entire jobsite was enclosed during construction with the 48" safety

fence. The contractor installed 10,241 linear feet of 36" silt fence manufactured by Mirafi, Incorporated.

5. This contract provided for 17 major construction phases: (1) Clearing and Grubbing, (2) Selective Demolition, (3) Embankment, (4) Structural Excavation and Backfill, (5) Fertilizing and seeding, (6) Temporary Falsework for R/R Gates, (7) Driving Steel Sheet Piling, Type PZ22 and PSA23, (8) Driving Steel H-Piles, (9) Reinforced Concrete Floodwall, (10) Utility Modifications, (11) Incidental Paving, (12) Temporary and Permanent Relocation of Electric Pump Station Feeder Lines, (13) Structural Steel Gates and Metalwork, (14) Painting, (15) Temporary Flood Protecction, (16) Erosion Control, and (17) Relocation of Trees and Shrubs.

6. The contractor started the major phases of work on 13 Jan 94 with the removal of the pedestrian foot bridge located near Mirabeau Avenue. The contractor used hand labor and a small hydraulic boom truck mounted crane to remove the walkway and handrails. The timber pilings were pulled on 9 Dec 94, with the use of Lorain 60-ton motor crane mounted on flexifloats, and the holes left were filled with a cement slurry.

7. In order to provide access to and from the jobsite, the grass on the landside of the existing floodwall was cleared and the existing levee was degraded approximately 2 feet. This material was rolled down the slope and moved around the jobsite to make a 15-20 foot shelf for the contractor's crawler cranes. The contractor used a caterpillar D-5 dozer to clear and degrade the existing levee, and a caterpillar 235 backhoe with a dump truck to move degraded material to stockpile areas. Also, the concrete steps at Mirabeau were removed to provide a clear access from the north. Additional access to the jobsite was also obtained by the contractor through Dillard University on the east side of the canal and the Parkway Commission's property on the east and west sides of the canal. This phase of work began on 25 Jan 95 and was continually maintained during floodwall construction between Mirabeau Avenue and Gentilly Boulevard.

8. The contractor relocated all of the trees and shrubs located along the levee near the residence at Dillard University on 1 Feb 95. The trees were replanted near the Physical Plant in Dillard University and maintained during the life of the project. On 12 Jul 95 all trees and shrubs were replanted at the original location along the levee and all clean-up work was completed at the residence.

9. Demolition of the Benefit Street bridge began on 9 Feb 94 with the contractor mobilizing an American 5299 crawler type crane with

an 80-foot boom, and a 410C caterpillar backhoe with a hydro-hammer, to the jobsite. The bridge deck was broken into sections with the backhoe and lifted out with the crane utilizing a fabricated harness. A small barge placed in the canal was used to catch any broken concrete from the demolition process. The demolition and removal of the bridge deck and beams was completed on 1 Mar 94. The remaining timber pilings were pulled at a later date on 17 Oct 94 by the contractor when the permanent sheetpile for the floodwall were driven in this area and all holes left were filled with a bentonite cement slurry. The contractor utilized an American 5299A crawler crane with an 80' boom to pull these timber pilings.

10. Modification to the existing waterlines began on 3 Mar 94. The existing waterline was replaced with a new 6-inch waterline between E B/L Station 20+60 to 14+31 and E B/L Station 6+36 to 1+23 and a new 4 in waterline encased in a 12" steel pipe between E B/L Station 1+23 to 0+82. All new water lines were Class 150 PVC pipe with a minimum of 3 feet of cover, except under the Railroad, which recieved 5.5 feet of cover. Also installed were five new water meters, three water valves, and one fire hydrant between E B/L Station 0+82 to 6+36. The existing waterline was removed between E B/L Station 0+82 to 1+23, and 6+36 to 13+25 and cut, plugged, and abandoned between E B/L Station 1+23 to 6+36 and 14+31 to 20+60. All newly installed waterline was pressure tested and chlorinated in the presence of a S&WB representative and a government representative. Service through the existing waterlines was not interrupted until all necessary preparations were made to perform the tie-ins at the designated locations. The waterline work was completed on 20 Jun 95.

11. The temporary relocation of the electric feederlines began on 15 Mar 94. A subcontractor, Hazard Construction Company, Inc. performed all relocation work for the contractor. The relocation of Electric Feederline No. 340 from its original position located on existing slope pavement to the vertical face of the concrete channel lining started at E B/L Station 21+00 and continued thru E B/L Station 1+25. Upon completion of this temporary relocation, feederline No. 400 was replaced with new cable in 5" conduit and temporarily installed on the vertical face of the channel lining from W/B/L Station 21+00 to 14+10. The remaining feederline cable (FL-340 from E B/L Station 21+00 to 68+56 and FL-400 from W B/L Station 21+00 to 68+88) was temporarily relocated to a trench located on the floodside of the existing floodwall to protect it during floodwall demolition. The cables were deenergized during relocation work, and tested at the pumping station to assure no damage was done to the cables during the relocation. The cables were all temporarily relocated by
16 Feb 95.

12. On 29 Apr 94 the driving of 283,866.40 sq. ft. of steel sheet piling commenced. The contractor used Syro steel sheet pile type SPZ-22, SPZ-26, and special fabricated zee and tee type sheetpile for this contract. The contractor utilized two separate driving crews on both the east and west sides of the canal. Sheetpile driving started at Mirabeau and proceeded south to pumping station No. 1.

The contractor used the following equipment to drive the sheetpile on the west side of the canal 1-50 ton American 5299A crane with 80' boom, 1-416 ICE vibratory hammer, 1- clothes pin hammer, and 1-40 feet steel I-beam to maintain alignment. The contractor utilized a 60-ton 670 Lorain motor crane with 80' boom mounted on (6) six-10'x40'x7' and (2) two-10'x20'x7' flexi-float barges equipped with an ICE416 vibratory hammer and a 40' steel I-beam for alignment to drive the sheetpile on the east side of the canal between Mirabeau Avenue and Gentilly Blvd and also between W B/L 17+95 to 14+21.

Prior to driving the sheetpile under interstate 610 and the uncapped sheetpile at the floodgates, the contractor procured the services of Specialty Coatings to apply the approved coal tar epoxy to these sheetpiles. These sheets were sandblasted to white metal finish and the coal tar epoxy was applied (sprayed) in two coats to provide a 16 mil thickness. The sheets under I-610 were field cut into five sections and driven in spliced (welded from interlock to interlock) sections with the use of a Gradall 880 backhoe and an ICE 216 vibratory hammer.

Within the railroad right-of-way, the contractor utilized the American 5299A crane with 100' boom, a Vulcan 08 single acting air hammer, a clothes pin hammer, and a 40' steel I-beam for alignment to drive the cofferdam sheetpile (PMA22) and the new sheetpile under the gate slab. All sheetpile driven on subject contract were driven to grade and work was completed on 25 May 95.

A private testing laboratory was retained by the Orleans Levee District, which monitored vibrations during sheet pile operations.

13. The contractor commenced construction of the reinforced concrete floodwalls on 4 May 94. There were four hundred thirty-eight (438) permanent concrete I-wall monoliths, (6) six temporary concrete I-wall monoliths, and two (2) concrete gate monoliths placed on subject contract. Prior to placing the 4-inch stabilization slab, cathodic protection was installed on the sheetpile at all monolith joints. The I-walls were placed from Elev 3.5, 4.0, and 4.5 to Elev 14.4 on both the east and west sides of

the canal. All rebar was Grade 60 and placed according to contract drawings. An approved three bulb(Tamms/Horn Products) waterstop was placed between each monolith joint along with a fibre expansion joint filler (Sealtight). The contractor used EFCO (Economy Forms Corporation) steel forms along with plyform material backed with steel double channel wales. The forms were connected with 1 1/4" x 1" taper ties spaced according to the contractor's formwork design. A rubber fractured fin form material was attached to the land side form to provide the required finish, except between Station E B/L 21+40.96 to 33+10.96 and W B/L 48+65.18 to 58+55.18 which received a repeated pattern of three BAS- relief architectural panels followed by three fractured fin panels. All formwork was set using a 5299A American Crane. The I-wall monoliths were made in one placement, and the gate monoliths were constructed in two placements.

Concrete was delivered to the jobsite by concrete mixer trucks and placed into forms with a concrete bucket and rubber trunks of various lengths. Concrete pump trucks were utilized for I-wall placements between approximate E B/L station 56+00 to 48+00, E B/L Station 20+70 to 14+50, under the I-610 on both the east and west sides, and for the two gate monoliths. The concrete pump trucks were used due to limited access along the existing levee. Quality control was maintained daily through use of the 1246 checkout list with air content tests, slump tests, temperature checks, and test cylinders done by the contractor. The contractor placed concrete on both sides of the canal simultaneously by two different concrete work crews. These crews started at Mirabeau Avenue and worked behind the sheetpile driving crews proceeding south to the pumping station. Concrete monoliths were moist cured for the entire seven day curing period. The contractor averaged three I-wall placements per week per side, between Mirabeau Avenue and Gentilly Boulevard, and two per week per side south of Gentilly Boulevard. The last concrete I-wall was placed on 8 Jun 95. The contractor utilized the following equipment per side for this item of work; 1-5299A American Crawler-type crane, 1-2CY concrete bucket, 2-concrete vibrators, form oil, several rubber chutes of various lengths, curing blankets, miscellaneous hand tools used for concrete wall construction, and occasionally a Schwing BPL 1200 concrete pump truck equipped with feeder pipe.

14. On 20 Jun 94, the contractor commenced demolition of the existing floodwall at E BL Station 12+26.95. The contractor used a caterpillar 325 backhoe equipped with a hydraulic ram (hammer) to break the concrete cap off in pieces between the pump station and approx station 1+00 on both east and west sides. The existing sheetpile were then pulled and hauled off site between E B/L Station 1+46-5+87, 12+26.95-12+85, and 14+50-20+70, and W B/L Station 10+55-12+55, and 14+24-17+95. Within the other reaches the

sheetpile was cut off at elevations from EL 5.0 to 7.0. Between W and E B/L Station 21+00 to Mirabeau Avenue, the existing concrete cap was scored in 30' sections and lifted out with the 325 Backhoe and hauled off site to a recycling yard (Pontchartrain Materials) for disposal. The existing concrete channel lining and the new perm sheetpile served as temporary flood protection in areas where the alignment of the new floodwall coincided with the old floodwall. At no time during hurricane season was there an opening in flood protection more than 300 linear feet, and non-hurricane season of 750 linear feet opened. All existing floodwall was demolished and removed from the jobsite by 25 May 95.

15. The contractor began the permanent installation of electric feeder cable (FL-400) on 26 Aug 94. Hazard construction was the subcontractor that performed all electrical work on the feederlines. Prior to any wall construction, new cable was installed 2' deep, except within LDOTD ROW which was 4' deep, in a 12" wide trench, encapsulated with 3000 psi concrete between W B/L Station 2+60 to 12+70. This new section of cable was spliced to the existing cable at Station 2+60 and new cable at 12+70. Between W B/L Station 12+70 to 14+10 new cable was installed in 5" conduit and secured to the channel lining under the Gentilly Boulevard bridge. The contractor then replaced the existing cable between W/B/L Station 14+10 to 21+00 with new cable encased in 5" conduit and made two splices at each end. This cable was installed on the new floodwall after placement of the 4" incidental paving between the new floodwall and the channel lining. Finally, the contractor relocated the existing cable to the new floodwall between W B/L Station 21+00 to 68+88. This work started at Mirabeau Avenue and proceeded south to allow the contractor to obtain slack in the line. The subcontractor utilized a small truck mounted crane and sling along with hand labor to install the cable on the new wall. The new cable was brought out on large reels and stretched out with use of a 215 caterpillar rubber tire backhoe. The backhoe was also used to excavate and backfill the trench.

The permanent installation of the electric feeder cable FL-340 began on 14 Nov 94. This work consisted of relocating the feederline to the floodside of the new floodwall using bolts and clamps to secure the line to the wall. The line was installed after the new wall was painted and all structural backfill was in place from E B/L station 1+25 to 12+85 and 14+70 to 68+56. Between E B/L Station 12+85 to 14+70, new 3/C #500 15KV cable was installed under the Gentilly Bridge and spliced to the existing FL-340 at both ends. This new cable installation at the above location, was the last electrical work done on the project, and was completed on 29 Jun 95. Also on the east side, FL-432 was passed thru the new permanent

sheetpile at approximate E B/L Station 21+60 installed in a 16" dia. split steel sleeve packed with plastic sealant and sealed with neoprene rubber sleeves.

16. The contractor commenced application of the approved Tammoseal cementitous items paint (1st coat) beginning at Mirabeau Avenue on the floodside to both the east and west floodwalls on 13 Sep 94. The cementitous paint was applied at a rate of 2 pounds/square yard of concrete surface. Upon completion of the floodside, the landside of the floodwalls were painted with the Tammoseal. Two coats of acrylic emulsion paint (Tammosheen) was then placed over the cementitous paint on the floodside and then the landside. The contractor initially used a sprayer to apply the cementitous paint, but did not fill all voids and pits in the concrete surface. A roller was then used which provided the required finish and filled all voids in the surfaces. The final two coats of acrylic emulsion paint was sprayed on with an air sprayer. The painting operation was completed on 24 Jul 95.

17. Structural backfill was begun on 26 Aug 94 on the floodside of both the east and west floodwalls. The floodside was backfilled first to allow the contractor to relocate the feeder cable to the new wall. The material was cast over the new wall with a 880 Gradall Backhoe and compacted with hand tampers and plate compactors (Mikasa Products). The backfill was placed within 2 feet on both sides of the wall in 8" thick lifts and compacted to 90% of the max dry density. Soil samples were taken to develop standard proctor curves and compaction tests were performed by Alpha Testing Laboratory. The contractor utilized a vibratory roller (RT560-Wacker Corp) and a Tandem vibratory roller (BW90AD-Bomag) to compact the fill on the landside of the floodwall. Make note that at the R/R monoliths, the subballast supplied by Norfolk Southern was compacted as dense as the material in the same area, with hand tampers to the satisfaction of railroad personnel. All structural backfill was completed on 15 Jun 95 when the last lift was placed at E B/L Station 2+00.

18. The work within the railroad rights-of-way commenced on 7 Dec 94. This phase of work consisted of driving cofferdam and permanent sheetpile, pipe piles and steel H-piles, constructing and installing four falsework structures to maintain traffic on the railroad tracks, placing two concrete gate monoliths, and installing two steel swing gates. Prior to any work within the R/R ROW, meetings were held to establish a working relationship with the Railroad Company (Norfolk Southern). At these meetings the railroad POC established a work window for the contractor from 0730 to 1430 within the R/R ROW. During the life of the contract, the contractor was continually denied this allowable schedule and encountered delay time.

The contractor worked on the west side first by driving two rows of steel sheetpile (PMA-22), 20 feet long, perpendicular with the tracks, and one row down the centerline of both sets of tracks. Continuous pipe piles were then driven to EL-60.0 to support the falsework bridges. Structural excavation for the gate base monolith followed. The contractor removed the falsework bridge, excavated the material for the base slab, and reset the falsework bridge for one track in an 8 hour workday. After all structural excavation, the steel H-piles and the permanent sheetpile were driven. Quality assurance was maintained during the driving of the H-piles by using a level, marking the pile footage, and recording blow counts for the 2,016 LF of HP 14x73 steel H-piles. All piles were driven to grade. The contractor then constructed the reinforced gate base slabs and columns using 4000 psi concrete and epoxy coated rebar in the gate sill. The contractor completed the concrete work and removed all falsework (5' below grade) on the west side on 9 Mar 95. The contractor commenced operations on the east side on 13 Mar 95 and completed work on 15 May 95. The following equipment was utilized; 1-5299 American Crane with 100' Boom, 80' pile leads, 1-Vulcan 08 air hammer, 1-clothes pin hammer, 1-880 Gradall backhoe, 1-Schwing 1200 concrete pump truck, crane mats, 2 CY concrete bucket, concrete vibrators, and other miscellaneous hand tools for concrete work.

19. The two railroad swing gates were fabricated and painted by Manufab, Incorporated of Pearlington, Mississippi. Quality assurance was maintained by visits to Manufab's yard. The gates were installed by Manufab on 6 Apr 95 (west) and 22 Jun 95 (east) and two trial operations were conducted. Some adjustments were made on both gates and they were accepted on 24 Jul 95. The contractor used a Caterpillar 325 backhoe to set the gates

20. After all floodwall was constructed and painted, the contractor started rebuilding and reshaping the landside levee. The embankment was built to the lines and grades shown on the plans from the existing levee material using D-4 and D-5 caterpillar dozers, 1-235 caterpillar backhoe, 1-215 caterpillar backhoe, and several dump trucks. Work commenced on 2 Feb 95 and was completed on 5 Jul 95.

21. Fertilizing, seeding, and mulching of the completed levee on the east and west side began on 19 Jun 95 between Mirabeau Avenue and Gentilly Blvd. Subcontractor, Economy Grassing performed this phase of work. After harrowing the dressed levee, an approved fertilizer and unhulled Bermuda seed was broadcast and cultipacked and wood cellulose fiber mulch was sprayed over the entire bare surface of levee. The subcontractor completed this first section 21 Jun 95. The area between the pumping station no. 1 and Gentilly

Boulevard was completed on 13 Jul 95. The following equipment was used; 1-2130 John Deere tractor, 1-seed broadcaster, 1- spike tooth harrow and 1-Hydro mulch sprayer.

22. The last phase of work was to repave London Avenue between E B/L Station 2+35 to 5+75 and W B/L Station 14+00+0 17+75, and the Benefit Street Bridge ramps on both sides of the canal. The areas damaged along London Avenue during construction operations received a 3.5" binder and 1.5" wearing course. The areas previously occupied by the Benefit Street bridge ramps received a 8" thick crushed concrete base course compacted to 95% max dry density, along with the overlay. All asphalt work was started and completed on 26 Jul 95. The following equipment was used; 1- vibratory roller, 1-D3 Caterpillar dozer, 1-Paving machine and other incidental equipment.

23. The contractor had difficulty in coordinating with utility owners for relocation of their lines located with contract R.O.W.. There were Cox Cable lines crossing the canal and running parallel with the canal located within the ROW not shown on the contract drawings. No substantial construction delays were encountered by the contractor, however, the coordination efforts of the contractor were increased due to the utility owners poor relocation work.

24. There were twenty-two modifications on this contract and a summary of each follows:

a. P00001 (FM-001) dated 23 Mar 94. This modification provided additional funds for payment in accordance with SPECIAL CLAUSE H-26, an increase of $1,972,000.00.

b. P00002 (CIN-01) dated 31 Mar 94. This modification corrected stationing and offsets, and dimension discrepancies found after award, and increased the amount of coated sheetpile due to an error in the original stations on the east side. The modification increased the contract by $3,879.22 with no time extension.

c. P00003 (TE-001) dated 11 Apr 94. This modification extended the required completion date of the contract (7) seven calendar days due to unusually severe weather encountered between 18 Nov 93 to 31 Mar 94. The contract price remains the same.

d. P00004 (UCO-01) dated 25 Apr 94. This modification was to provide approximately 200 feet of additional 15 KV feederline cable to be installed under the east side of Gentilly Boulevard bridge. The existing cable was damaged prior to any electrical work commencing. The UCO was written in order for the contractor to obtain the additional cable within a reasonable time from the supplier due to manufacturing time restraints. This modification

was settled at a later date.

e. P00005 (FM-002) dated 25 Apr 94. This modification provided additional funds for payment in accordance with SPECIAL CLAUSE H-26, an increase of $3,884,517.00.

f. P00006 (CIN-03) dated 2 May 94. This modification substituted acrylic emulsion paint for cementitous paint on the landside BAS-relief architectural monoliths, and to provide a sack rubbed finish to these surfaces. The originally specified cementitous paint would cover the detail of the artwork panels. The modification increased the contract by $5,799.30 with no time extension.

g. P00007 (CIN-02) dated 29 Jun 94. This modification changed the type and number of sill plates, stiffners, and railroad plate deflectors, added cofferdam sheeting, modified the falsework pipe piles and changed all rebar to be epoxy coated within the gate sills on both the east and west sides. The Norfolk Southern Railroad Company requested these changes after contract award. The modification increased the contract by $23,005.20 with no time extension.

h. P00008 (CIN-05) dated 29 Jun 94. This modification changed the size of the new waterline installed between E B/L Station 2+08 to 6+36 from 4" to 6" diameter and realigned the waterline to eliminate two bends. The S&WB of New Orleans requested a larger size waterline that was supplying a fire hydrant due to fire prevention codes. The modification increased the contract by $1,500.00 with no time extension.

i. P00009 (TE-002) dated 11 Jul 94. This modification extended the required completion date of the contract eleven (11) calendar days due to unusually severe weather encountered between 1 Apr 94 to 30 Jun 94. The contract price remains the same.

j. P00010 (CIN-06) dated 5 Aug 94. This modification was to replace the 200 linear feet of additional electric feederline under the east side of Gentilly Boulevard. The existing cable was damaged prior to any work done on this cable. This modification definitizes UCO-01. The modification increased the contract by $24,993.59 with an increase in contract time of ten (10) calendar days.

k. P00011 (CIN-07) dated 12 Sep 94. This modification added a feederline cable splice to the existing FL400 at W B/L Station 14+10. Due to the closing of Gentilly Boulevard Bridge, this additional splice was needed to allow the contractor to stay clear from working under the bridge for safety purposes and not be

impacted or delayed in his progress of work. The modification increased the contract by $5,000.00 with no time extension.

l. P00012 (UCO-02) dated 16 Sep 94. This modification directed the contractor to close any gaps in hurricane protection due to expected high tides from an approaching hurricane. This work took place on 15 and 16 Sep 94 in which the contractor pulled 60' of sheet pile up to EL 11.5 between E B/L Station 20+80 to 21+40. This modification was settled at a later date.

m. P00013 (TE-003) dated 18 October 94. This modification extended the required completion date of the contract seven (7) calendar days due to unusually severe weather encountered between 1 Jul 94 to 30 Sep 94. The contract price remains the same.

n. P00014 (CIN-08) dated 17 Nov 94. This modification was for the contractor to close the gaps in hurricane protection due to an approaching hurricane. This modification definitizes UCO-02. The modification increased the contract amount by $12,620.00 with an increase in contract time of six (6) calendar days.

o. P00015 (CIN-10) dated 12 Apr 95. This modification was for formwork modifications made by the contractor due to varying elevations of the concrete channel liner. The channel liner elevation differed in places as much as 6 inches from the plan elevation. This modification increased the contract by $10,200.00 with no time extension.

p. P00016 (TE-004) dated 14 Apr 95. This modification extended the required completion date of the contract thirteen (13) calendar days due to unusually severe weather encountered between 1 Oct 94 to 31 Mar 95. The contract price remains the same.

q. P00017 (CIN-11) dated 23 May 95. This modification added slope pavement and reinforced retaining walls at the two railroad gates. The original contract drawings provided no details at these two ends of the job. The modification increased the contract price by $7,500.00 with no time extension.

r. P00018 (CIN-09) dated 9 Jun 95. This modification was to remove approximately 1300 linear feet of sheetpiling above elevation 7.5 to allow placement of slope pavement and for additional demolition costs due to the sheetpile extending further in the concrete cap than shown. The contract drawings contained discrepancies as to the actual elevation of the existing sheetpile embedded in the existing concrete cap. The modification increased the contract price by $43,000.00 with an increase in contracct time of fourteen (14) calendar days.

s. P00019 (FM-003) dated 19 Jun 95. This modification provided additional funds for payment in accordance with SPECIAL CLAUSE H-26 and Contract Clause I-18, an increase of $105,742.10.

t. P00020 (TE-005) dated 12 Jul 95. This modification extended the required completion date of the contract fifteen (15) calendar days due to unusually severe weather encountered between 1 Apr 95 to 30 Jun 95. The contract price remains the same.

u. Pending time modification (TE-006) for an additional twenty-two (22) calendar days due to unusually severe weather encountered between 1 Jul 95 to 17 Aug 95. The contract price will remain the same.

25. The contractor submitted a claim on August 11, 1995, in the amount of $144,917.74 for construction delays encountered while working within Norfolk Southern Railroad Rights-of-Way. The claim is being analyzed for merit.

26. The following is a list of major suppliers on the subject contract:

a. Steel Sheet Piles - Syro, Inc., Girard, OH

b. Reinforcing Steel - Lulich Steel Corp., Slidell, LA

c. Concrete - Carlo Ditta, Inc., New Orleans, LA

d. Waterstop/Silt Fence/Expansion Joint Filler/Form Oil/ Cementitous and Acrylic Emulsion Paint-Building Specialties, Incorporated, New Orleans, LA

e. Waterline Supplies - Louisiana Utilities, Jefferson, LA

f. 15 KV Feederline Cable-Okonite Co., Ramsey, NJ

g. Feederline Splice Kits - Mac Products, Inc., Kearney, NJ

h. Misc. Electric Feederline Supplies - Nulite Electrical, New Orleans, LA

i. Asphalt - T. L. James & Co., Kenner, LA

j. Crushed Concrete - Pontchartrain Materials Corp., New Orleans, LA

k. Steel H-Piles - LB Foster Co., Pittsburgh, PA

l. Floodgates & Metal Items - Manufab, Pearlington, MS

m. Coal Tar Epoxy Application - Specialty Ctgs, Kenner, LA

n. Formwork - EFCO, Des Moines, IW

o. Seed - Alexandria Seed, Alexandria, LA

p. Hi-potential feederline tests - Point Eight, Belle Chasse, LA

q. Density Tests - Alpha Testing, Kenner, LA

r. Artwork Molds - H. H. Horil & Assn., Mobile, AL

27. Subcontractors performing work on this project along with the contract responsibilities are as follows:

a. Hazard Construction & Drayage Company, 701 S. Alexandar, New Orleans, LA 70119. All electrical relocation work.

b. Economy Grassing, Innc., 7054 W. T. Hall Roadd, Ethel, LA 70730. Seeding, Fertilizing, and Mulching.

28. The contractor submitted and enforced an adequate Accident Prevention Program. The contractor was very cooperative in the performance of the work and performed daily safety inspections in addition to holding weekly safety meetings. There were no lost time accidents throughout the duration of the project.

29. The contractor was efficient and professional in the performance of the work and any extra work required to complete this project. The equipment used was kept in good working condition. Quality Control was maintained throughout the life of the contract.

30. Following is a comparison of contract quantities versus actual quantities:

Item	Description	Qty & Unit	Unit Price	Est. Amt	Final Qty	Earnings to Date
0001	Mob & Demob	LS	LS	$100,000	100%	$100,000
0002	Clearing & Grub	LS	LS	$ 20,000	100%	$ 20,000
0003	Selective Demo (P00018)	LS	LS	$282,000	100%	$282,000

0004	Ped. Bridge Demo	LS	LS	$ 5,000	100%	$ 5,000
0005	Embankment Semicompact. fill	LS	LS	$40,000	100%	$40,000
0006	Structural Excav and backfill	LS	LS	$400,000	100%	$400,000
0007	Fertilizing & Seeding	LS	LS	$10,000	100%	$10,000
0008	Temp. Falsework for gates (P00007)	LS	LS	$113,505.20	100%	$113,505.20
0009	Piling Steel Sht Type PZ-22 (P00002)	273,573SF	$8.58	$2,347,256.34	283,886.40SF	$2,435,573.71
0010	Piling, Steel Sht Type PSA-23	1,110 SF	$18	$19,980	850.29SF	$15,305.22
0011	Furnish & Deliver H piles	2,020LF	$16	$32,320	2,016LF	$32,256
0012	Driving Piles (Steel H piles)	2,020	$5	$10,100	2,016LF	$10,080
0013	Reinforced Concrete Floodwall (P00002),(P00006) (P00015),(P00017)	LS	LS	$2,113,569.57	100%	$2,113.569.57
0014	Utility Mods. (P00008)	LS	LS	$ 168,500	100%	$168,500
0015	Temp. Relocation of Feeder lines	LS	LS	$400,000	100%	$400,000
0016	Permanent Relocation of Feeder lines (P00010) (P00011)	LS	LS	$429,993.59	100%	$429,993.59
0017	Structural Steel Gates & Misc. Metals	LS	LS	$ 70,000	100%	$70,000
0018	Painting (P00002)	LS	LS	$134,469.61	100%	$134,469.61

0019	Railroad Ins.	LS	LS	$ 7,000		100%	$ 7,000
0020	Temp. Flood Protc & Coffer Dams	LS	LS	$ 5,000		100%	$ 5,000
0021	State Req Performance Bond	LS	LS	$70,000		100%	$70,000
0022	Erosion Control						
	AA. First 13,900	13,900LF		$2	$27,800	10,241LF	$20,482
	BB. All over 13,900	1,450LF		$2	$ 2,900		
0023	Temp Flood Protection (P00014)	LS	LS	$12,620.		100%	$12,620

31 A copy of as-built drawings are attached.

32. The contract was completed in accordance with contract plans and specifications with final acceptance on 17 Aug 95.

Jules Boudreaux

Jules Boudreaux
Project Engineer
New Orleans Area Ofc

CF:
Proj Engr (Boudreaux)
Proj Insp (Bollent)
Ofc Engr w/as-built
CELMN-CD-Q
CELMN-PA
CELMN-CT
CELMN-ED-C
CELMN-CD-CS
CELMN-CD-B
CELMN-PP
CELMN-OD-ON

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PLANS FOR

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY

HURRICANE PROTECTION

HIGH LEVEL PLAN

ORLEANS PARISH, LA.

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL.

AS BUILT

AS BUILT

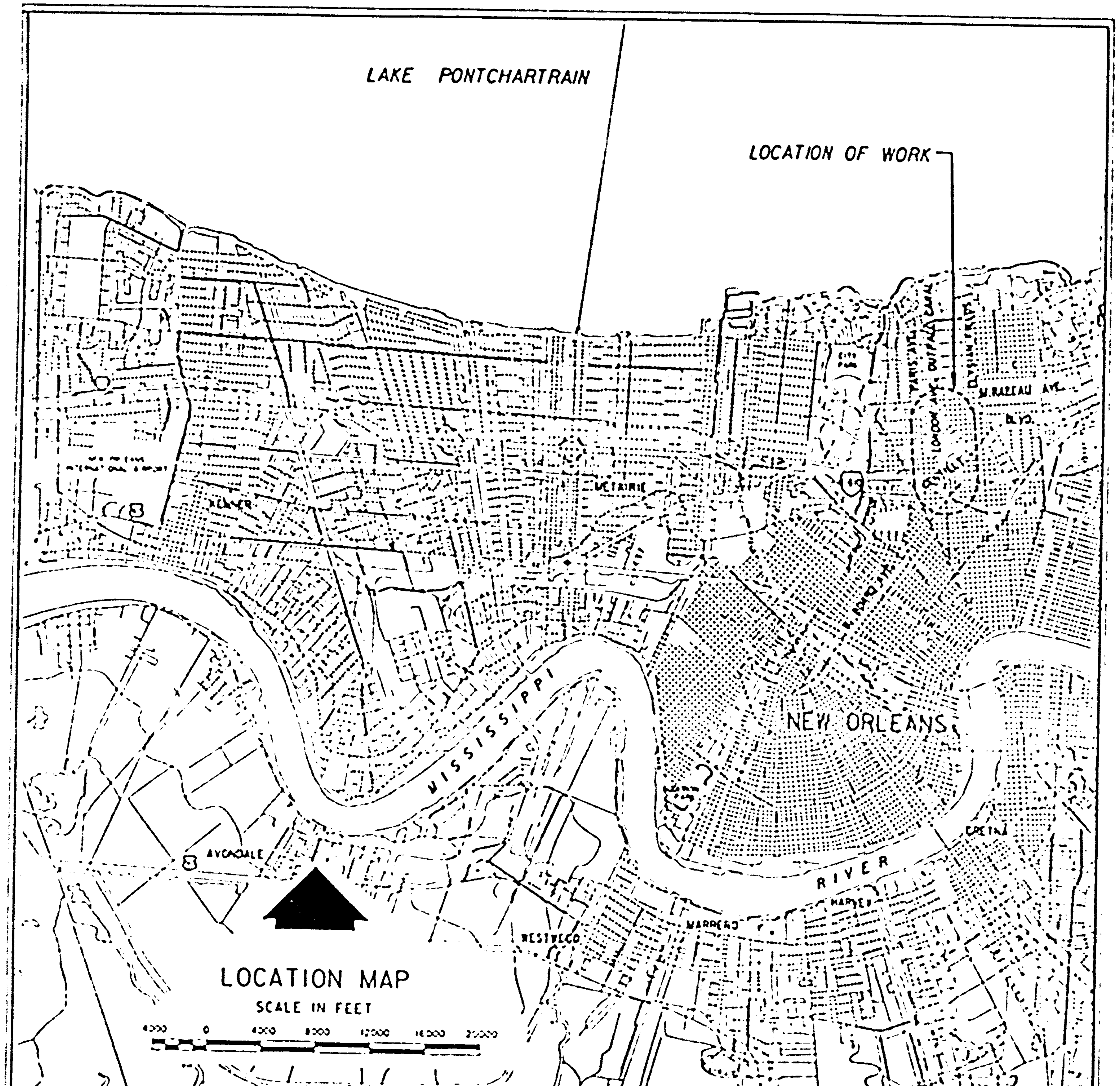
US Army Corps
of Engineers
New Orleans District

1993

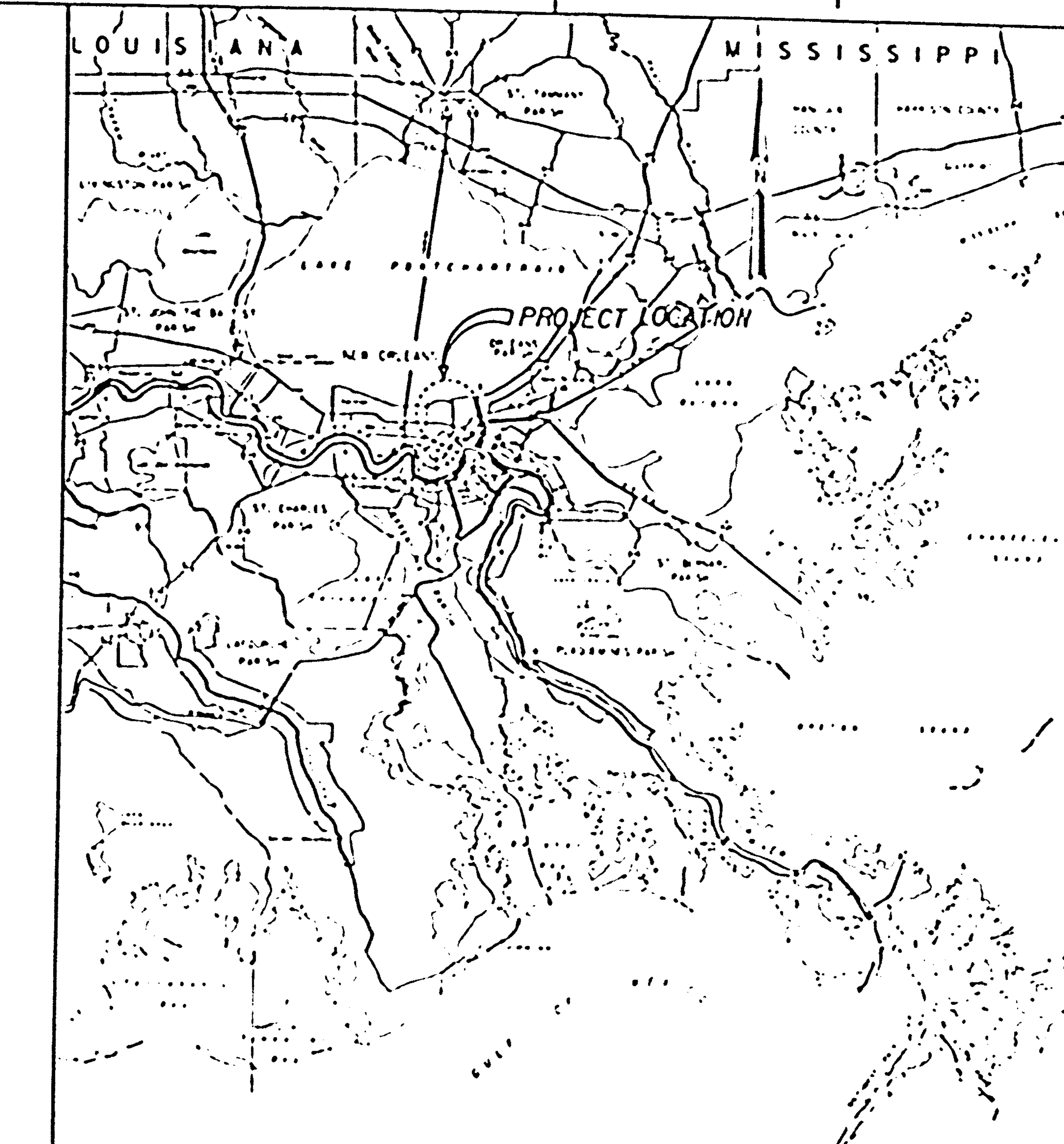
DRAWINGS IN THIS FOLIO HAVE BEEN REDUCED ONE HALF THE ORIGINAL SCALE

H-4-40145

C-A-D



LOCATION MAP
SCALE IN FEET
4000 0 4000 8000 12000 16000 20000



VICINITY MAP
SCALE IN MILES

TABULATION OF BENCH MARKS

DESIGNATION	DESCRIPTION	ELEVATION
P 153	AT NEW ORLEANS, ABOUT 0.8 MILES WEST ALONG LAKESHORE DR. FROM THE WEST SIDE OF THE TRAFFIC CIRCLE AT THE JUNCTION OF ELYSIAN FIELDS AVE., ABOUT 0.55 MI. NE ALONG LAKE TERRACE DR. FROM THE EAST END OF THE LAKESHORE DR. BRIDGE OVER BAYOU ST. JOHN, THENCE 0.1 MI. EAST ALONG LAKESHORE DR. TO THE BRIDGE ACROSS LONDON AVE. CANAL. SET IN THE TOP OF THE EAST END OF PEDESTRIAN WALK ALONG THE SOUTH SIDE OF THE BRIDGE OVER THE EAST ABUTMENT OF THE BRIDGE, 5 FT. SOUTH OF THE SOUTH CURB OF THE DRIVE, 6 IN. WEST OF THE EAST END OF THE BRIDGE AND ABOUT 1 FT. ABOVE THE DRIVE.	11.270 N.G.V.D. (1964 EPOCH)

Safety is a Part of Your Contract

THIS PLAN ACCOMPANIES MODIFICATION P0000 TO CONTRACT NUMBER DACW29 94 C-0003

INDEX TO DRAWINGS

DRG.	TITLE	DRG.	TITLE	DRG.	TITLE
1	INDEX, LOCATION, AND VICINITY MAP	21A	TYPICAL SECTIONS - WEST SIDE	38	SWING GATE - ADJUSTABLE BOTTOM SEAL
2	GENERAL NOTES	22	STEEL SHEET PILE LAYOUT	39	SWING GATE HINGE DETAILS
3	CONSTRUCTION SERVITUDE AND RIGHTS-OF-WAY	23	STEEL SHEET PILE LAYOUT	40	HINGE DETAILS
4	CONSTRUCTION SERVITUDE AND RIGHTS-OF-WAY	24	SHEET PILE DETAILS	41	GATE LATCHING DETAILS
5	CONSTRUCTION SERVITUDE AND RIGHTS-OF-WAY	25	CONCRETE I-WALL - EAST SIDE	42	GATE LATCHING DEVICE DETAILS
6	CONSTRUCTION SERVITUDE AND RIGHTS-OF-WAY	26	CONCRETE I-WALL - WEST SIDE	43	FALSEWORK AT NORFOLK SOUTHERN RAILROAD
7	CONSTRUCTION SERVITUDE AND RIGHTS-OF-WAY	26A	SPECIAL ARCHITECTURAL TREATMENT △	43A	CONCRETE PILE DETAILS
8	PLAN	27	I-WALL - REINFORCEMENT DETAILS	44	TYPICAL LADDER DETAILS
9	PLAN	28	TYPICAL WALL JOINTS	45	REFERENCE BOLT DETAILS
10	PLAN	28A	WALL JOINT DETAILS - GENTILLY BLVD. AND MIRABEAU AVE.	46	UTILITIES
11	PLAN	29	GATE MONOLITH TO I-WALL JOINTS	47	WATER LINE RELOCATION - EAST SIDE
12	PLAN	30	TYPICAL JOINT DETAIL	48	ELECTRIC FEEDER RELOCATION - EAST SIDE
13	GATE MONOLITHS AT RAILROAD CROSSING	31	RAILROAD GATE MONOLITHS	49	ELECTRIC FEEDER RELOCATION - WEST SIDE
14	PLAN AT I-610 - EAST SIDE	31A	PAVEMENT DETAILS AT SWING GATES △	50-51	STAGE HYDROGRAPHS
15	PLAN AT I-610 - WEST SIDE	32	SWING GATE MONOLITH - EAST SIDE	52	SOIL BORING LEGEND
16	PROFILES	33	SWING GATE MONOLITH - WEST SIDE	52A	BORROW AREA AND SOIL BORING
17	PROFILES	33A	RAIL ANCHORAGE SYSTEM	53-58	SOIL BORINGS
18	PROFILES	34	SWING GATE	R1-R13	SURVEY DATA - EXISTING CONDITIONS
19	TYPICAL SECTIONS - EAST SIDE	35	SWING GATE DETAILS	R14-R16	BENEFIT ST. BRIDGE
	TYPICAL SECTIONS - EAST SIDE	36	SWING GATE DETAILS	R17	EXISTING FLOODWALL - PLAN AND PROFILES
	TYPICAL SECTIONS - WEST SIDE	37	SWING GATE SEAL		

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

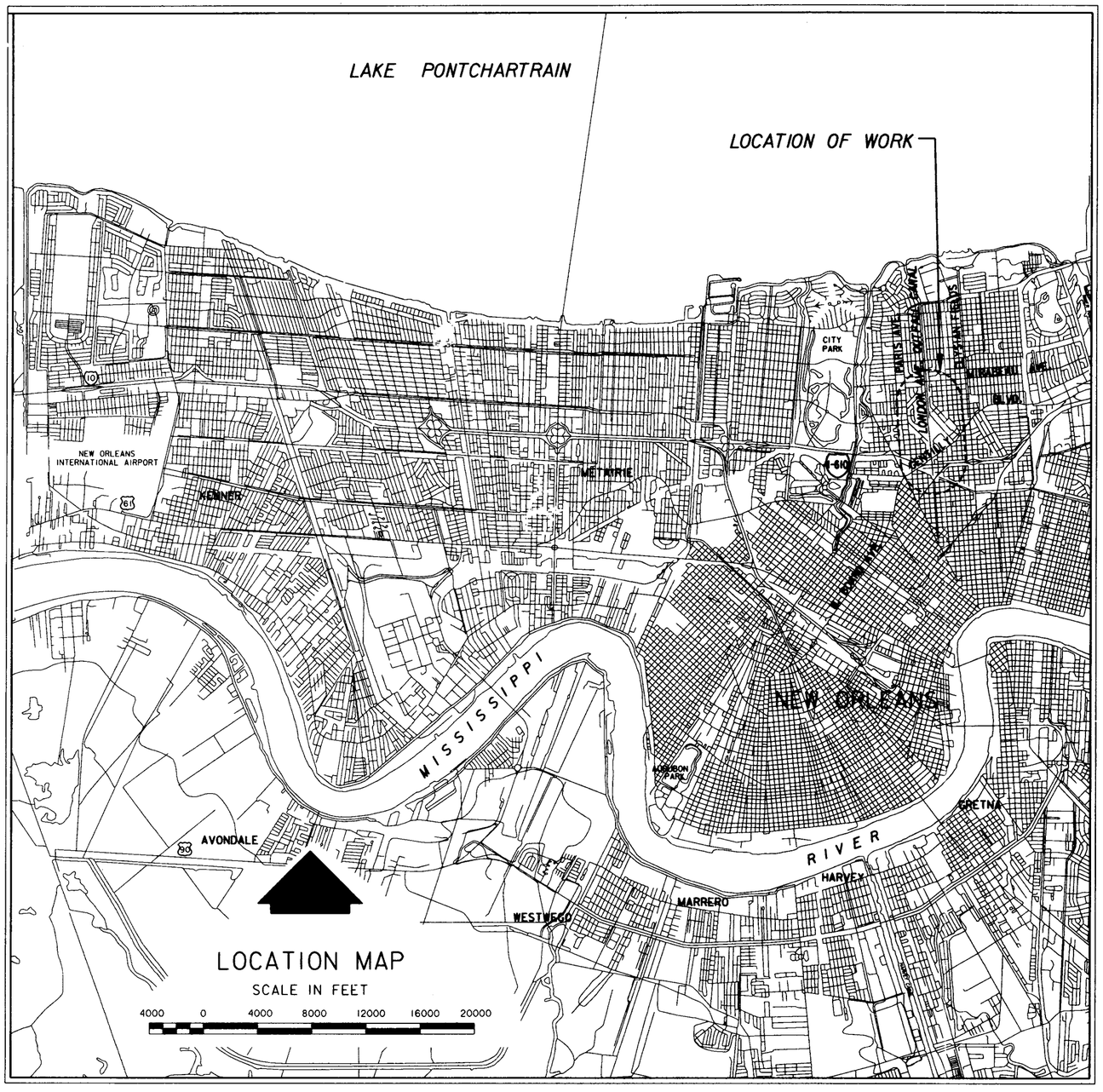
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

INDEX, LOCATION, AND VICINITY MAP

DACW29 93 B-0008

4800

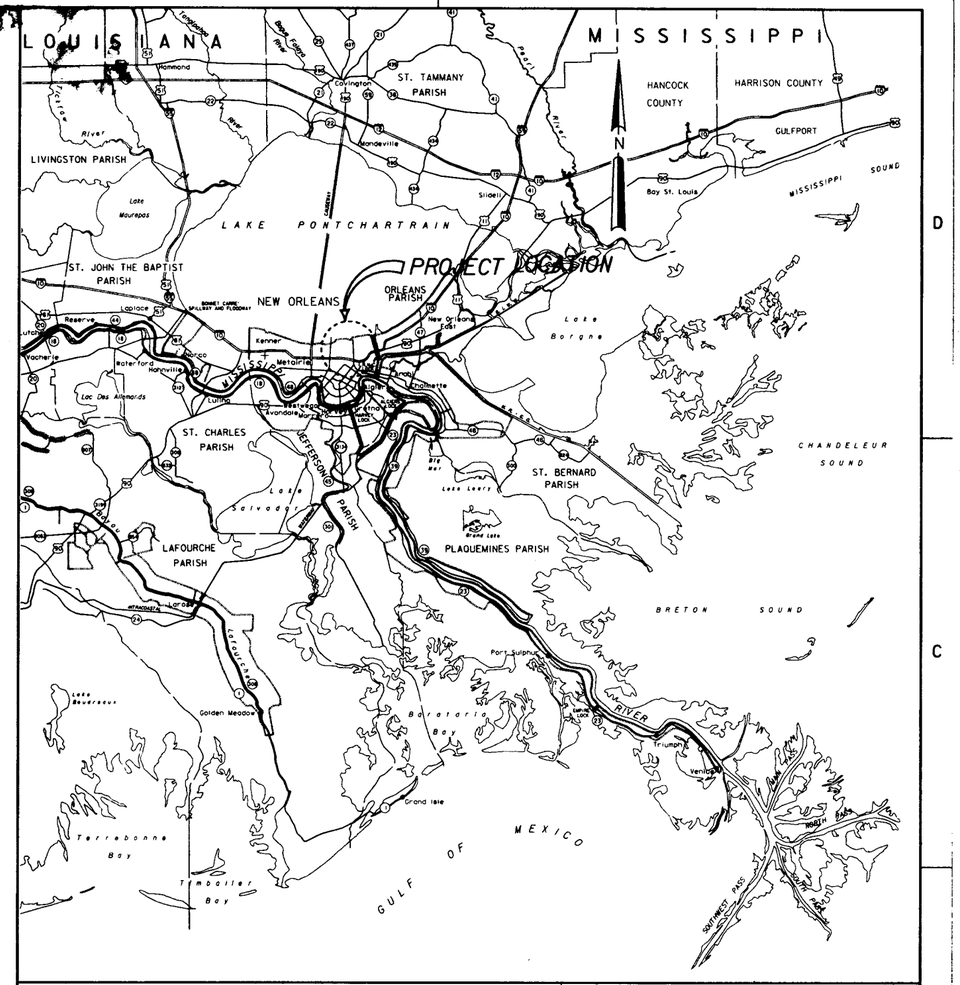
H-4-40145



LOCATION MAP

SCALE IN FEET

4000 0 4000 8000 12000 16000 20000



VICINITY MAP

SCALE IN MILES

10 0 10 20 30 40 50

TABULATION OF BENCH MARKS

DESIGNATION	DESCRIPTION	ELEVATION
P 153	AT NEW ORLEANS, ABOUT 0.8 MILES WEST ALONG LAKESHORE DR. FROM THE WEST SIDE OF THE TRAFFIC CIRCLE AT THE JUNCTION OF ELYSIAN FIELDS AVE., ABOUT 0.55 MI. NE ALONG LAKE TERRACE DR. FROM THE EAST END OF THE LAKESHORE DR. BRIDGE OVER BAYOU ST. JOHN, THENCE 0.1 MI. EAST ALONG LAKESHORE DR. TO THE BRIDGE ACROSS LONDON AVE. CANAL. SET IN THE TOP OF THE EAST END OF PEDESTRIAN WALK ALONG THE SOUTH SIDE OF THE BRIDGE OVER THE EAST ABUTMENT OF THE BRIDGE, 5 FT. SOUTH OF THE SOUTH CURB OF THE DRIVE, 6 IN. WEST OF THE EAST END OF THE BRIDGE AND ABOUT 1 FT. ABOVE THE DRIVE.	11.270 N.G.V.D. (1964 EPOCH)

Safety is a Part of Your Contract

VALUE INCENTIVE CLAUSES IN ENGINEERING — YOUR KEY TO HIGHER PROFITS

NOTE:
DRAWINGS IN THIS FOLIO HAVE BEEN REDUCED ONE HALF THE ORIGINAL SCALE

INDEX TO DRAWINGS

DWG.	TITLE	DWG.	TITLE	DWG.	TITLE
1	INDEX, LOCATION, AND VICINITY MAP	21A	TYPICAL SECTIONS - WEST SIDE	39	SWING GATE HINGE DETAILS
2	GENERAL NOTES	22	STEEL SHEET PILE LAYOUT	40	HINGE DETAILS
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20	TYPICAL SECTIONS - EAST SIDE	37	SWING GATE SEAL		
21	TYPICAL SECTIONS - WEST SIDE	38	SWING GATE - ADJUSTABLE BOTTOM SEAL		

SYMBOL	DESCRIPTION	DATE	APPROVED
△1	ADDED DWG. 26A, AMENDMENT NO. 1	8-1-93	A.L.D.

REVISIONS

C•A•D

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

INDEX, LOCATION, AND VICINITY MAP

DESIGNED BY: A. DESOTO
DRAWN BY: D. BORDELON
CHECKED BY: W. BAUMY
DATE: JUNE 93

SOLICITATION NO. DACW29-93-B-0080
CADD FILE: 40145d28.dgn
PLOT DATE: 8/10/93
PLOT SCALE: 4800
FILE NO. H-4-40145
DWG. 1 OF 58

SUBMITTED BY: CHIEF, DESIGN BRANCH
APPROVED BY: CHIEF, ENGINEERING DIVISION
APPROVED BY: COLONEL, C/E, DISTRICT ENGINEER

Safety is a Part of Your Contract

GENERAL NOTES:

1. AZIMUTHS SHOWN ARE MEASURED CLOCKWISE FROM THE NORTH.
2. ELEVATIONS ARE IN FEET AND REFER TO NATIONAL GEODETIC VERTICAL DATUM (N.G.V.D.).
3. DIMENSIONS AND/OR ELEVATIONS MARKED THUS (±) ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ACTUAL DIMENSIONS IN THE FIELD.
4. DIMENSIONS AND/OR ELEVATIONS MARKED THUS (N.T.S.) ARE NOT SHOWN TO SCALE.
5. DRAWINGS ARE GENERALLY TO SCALE, BUT SHOULD NOT BE SCALED. N.T.S. IS SHOWN ONLY WHERE DRAWING IS OBVIOUSLY OUT OF SCALE.
6. BENCH MARKS AND BASE LINES HAVE BEEN ESTABLISHED AT THE SITE BY THE GOVERNMENT; SEE DWG. 1 FOR BENCH MARK DESCRIPTION.
7. THE BASELINE STATIONING REFERS TO THE CORPS OF ENGINEERS TRAVERSE NO. 92-098.
8. FOR BORING LOGS, SEE DWGS. 52A-58.
9. UNCONTROLLED MOSAICS PREPARED FROM AERIAL PHOTOS FLOWN MARCH 1992.
10. FOR EXISTING CONDITIONS, SEE DWGS. R1-R17.

STEEL NOTES:

1. ALL STRUCTURAL STEEL SHALL BE ASTM A36, UNLESS OTHERWISE NOTED.
2. TO PREVENT CORROSION BY MOISTURE BETWEEN STEEL SURFACES IN CONTACT, ALL SUCH CONTACTS SHALL BE SEALED WATERTIGHT BY RUNNING A CONTINUOUS 1/8" FILLET WELD ALONG ALL EDGES OF THE CONTACT, UNLESS OTHERWISE NOTED.
3. ALL WELDING SHALL BE ELECTRIC WELDING. WORKMANSHIP AND TECHNIQUE, WHERE APPLICABLE, SHALL CONFORM TO THE AMERICAN WELDING SPECIFICATIONS (SEE SPECS.) STRUCTURAL WELDING CODE.
4. WELDING SYMBOLS SHOWN ARE THOSE ADOPTED BY THE AMERICAN WELDING SOCIETY AND INDICATE ONLY SIZE AND TYPE OF WELDS REQUIRED. DETAILED INFORMATION SHALL BE SHOWN ON THE SHOP DRAWINGS AND SUBMITTED BY THE CONTRACTOR FOR APPROVAL.
5. DIMENSIONS SHOWN OR CALLED FOR ARE THE FINAL DIMENSIONS; ALLOWANCES MUST BE MADE FOR MACHINING.
6. ITEMS MARKED C.R.S. SHALL BE CORROSION RESISTANT STEEL (STAINLESS STEEL), SEE SPECIFICATIONS.

CONCRETE NOTES:

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F'_C) OF 3000 PSI AT 28 DAYS, 90 DAYS IF POZZOLAN IS USED, UNLESS OTHER WISE NOTED.
2. STABILIZATION SLAB CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F'_C) OF 2500 PSI AT 28 DAYS, 90 DAYS IF POZZOLAN IS USED.
3. REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH (Fy) OF 60,000 PSI.
4. REINFORCING SHALL BE SPACED TO MISS RECESSES FOR GATE LATCHES.
5. CONSTRUCTION JOINTS SHALL BE PROVIDED WHERE SHOWN. WHERE NOT SHOWN, CONSTRUCTION JOINTS SHALL BE PLACED AT LOCATIONS LEAST LIKELY TO IMPAIR THE INTERGRITY OF THE CONCRETE STRUCTURE. CONSTRUCTION JOINT LOCATIONS SHALL BE APPROVED BY THE CONTRACTING OFFICER.
6. UNLESS OTHERWISE NOTED, PROVIDE 3/4" CHAMFER AT ALL EXPOSED JOINTS, EDGES, EXTERNAL CORNERS, AND VERTICAL EXPANSION JOINTS.
7. ALL PRIMARY REINFORCEMENT SHALL HAVE A MINIMUM COVER OF 3" UNLESS OTHERWISE NOTED. THE COVER FOR SECONDARY REINFORCEMENT MAY BE REDUCED FROM THE ABOVE BY THE DIAMETER OF THE BAR.
8. ALL BENDS OF REINFORCEMENT AND ALL BAR SPACERS AND SUPPORTS SHALL BE IN ACCORDANCE WITH SP-66, AMERICAN CONCRETE INSTITUTE DETAILING MANUAL - 1980.
9. REINFORCING BAR DESIGNATION NUMBERS CONFORM TO THE NUMBERING SYSTEM OF THE CONCRETE REINFORCING STEEL INSTITUTE.
10. REINFORCING BARS SHALL BE CONTINUOUS AT ALL CORNERS UNLESS OTHERWISE NOTED.
11. REINFORCEMENT, WHERE NECESSARY TO AVOID OPENINGS, PIPES, EMBEDDED ITEMS AND OTHER OBSTRUCTIONS, SHALL BE BENT OR SHIFTED AS DIRECTED BY THE CONTRACTING OFFICER.
12. THE EMBEDMENT AND SPLICE TABLE SHALL BE USED IN DETERMINING LAP SPLICES AND EMBEDMENT LENGTHS WHERE LENGTHS ARE NOT OTHERWISE INDICATED. SPLICE LENGTHS SHALL BE BASED ON THE SMALLER BAR BEING LAPPED. THE CONTRACTOR WILL BE ALLOWED TO MAKE SPLICES IN ADDITION TO THOSE INDICATED IN THE DRAWINGS, WHERE ESSENTIAL TO CONSTRUCTIBILITY, SUBJECT TO APPROVAL BY THE CONTRACTING OFFICER. SPLICES OTHER THAN THOSE SHOWN ON THE DRAWINGS AND OTHER THAN ANY ADDITIONAL SPLICES REQUIRED BY THE CONTRACTING OFFICER, WILL BE AT THE CONTRACTOR'S EXPENSE.
13. ALL EXTERIOR FORMED SURFACES NOT COVERED BY BACKFILL SHALL BE CLASS "A" FINISH AND SURFACES COVERED BY BACKFILL SHALL BE CLASS "D" FINISH, UNLESS OTHERWISE NOTED.
14. FOR "SWING GATE MONOLITH" CONCRETE PLACEMENT, THE CONTRACTOR SHALL EITHER PLACE A CONSTRUCTION JOINT AT APPROXIMATELY MID-WALL HEIGHT OR SHALL EMPLOY TEMPORARY "WINDOWS" IN THE FORMS TO FACILITATE CONCRETE PLACEMENT AND CONSOLIDATION.
15. THE MINIMUM LAP LENGTH FOR WELDED WIRE FABRIC SHALL BE 8 INCHES.

REINFORCEMENT EMBEDMENT AND SPLICE TABLES

BAR SIZE	BASIC TABLE				ALTERNATE TABLE			
	MINIMUM EMBEDMENT LENGTH, INCHES		MINIMUM LAP LENGTH INCHES		MINIMUM EMBEDMENT LENGTH, INCHES		MINIMUM LAP LENGTH INCHES	
	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER
3	16	12	21	16	16	12	21	16
4	21	16	28	21	21	16	28	21
5	27	21	35	27	27	21	35	27
6	32	25	42	32	32	25	42	32
7	37	29	49	37	37	29	49	37
8	45	35	59	45	43	33	56	43
9	57	44	74	57	48	37	63	48
10	72	56	94	72	58	45	75	58
11	89	68	116	89	71	55	92	71

NOTES:

1. USE THE BASIC TABLE IF ALL OF THE FOLLOWING CONDITIONS ARE MET:
   A) CENTER TO CENTER BAR SPACING LATERALLY IS AT LEAST 4 BAR DIAMETERS
   B) CONCRETE COVER IS AT LEAST 2 BAR DIAMETERS, AND
   C) EDGE DISTANCE TO THE FIRST BAR IN A LAYER IS AT LEAST 2 BAR DIAMETERS.
2. THE ALTERNATE TABLE MAY BE USED IF ALL OF THE FOLLOWING CONDITIONS ARE MET:
   A) CENTER TO CENTER BAR SPACING LATERALLY IS AT LEAST 6 BAR DIAMETERS
   B) CONCRETE COVER IS AT LEAST 2 BAR DIAMETERS, AND
   C) EDGE DISTANCE TO THE FIRST BAR IN A LAYER IS AT LEAST 2.5 BAR DIAMETERS.
3. IF CONCRETE COVER OR EDGE DISTANCE IS LESS THAN 2 BAR DIAMETERS OR THE CENTER TO CENTER BAR SPACING LATERALLY IS LESS THAN 4 DIAMETERS, SEE ACI 318 FOR APPROPRIATE GUIDANCE.
4. TOP BARS ARE HORIZONTAL BARS AND BARS INCLINED LESS THAN 45 DEGREES WITH RESPECT TO A HORIZONTAL PLANE WHICH ARE PLACED SUCH THAT MORE THAN 12 INCHES OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.
5. THE TABLES SHOWN ABOVE ARE FOR NORMAL WEIGHT CONCRETE AND UNCOATED REINFORCING BARS. IF EPOXY COATED BARS ARE USED, SEE ACI 318 FOR ADDITIONAL CONSIDERATIONS.

ABBREVIATIONS

BF	= BOTTOM FACE
BL	= BOTTOM LAYER
C	= CENTER
C.I.	= CAST IRON
CJ	= CONSTRUCTION JOINT
CL	= CLEAR COVER
C/L OR ℄	= CENTER LINE
C.R.S.	= CORROSION RESISTANT STEEL
Ø	= DIAMETER
D	= DRAIN
D.I.	= DROP INLET
D.P.	= DRAIN PIPE
D/S	= DOWN STREAM
D.V.	= DRAIN VALVE MANHOLE
EB/L	= EAST BASELINE
EF	= EACH FACE
EL.	= ELEVATION
ES	= EQUALLY SPACED
F.H.	= FIRE HYDRANT
FF	= FAR FACE
FL	= ELECTRIC FEEDER LINE
G	= GAS
LDH	= LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT MARKER
MH	= MANHOLE
NF	= NEAR FACE
N.T.S.	= NOT TO SCALE
O.C.	= ON CENTER
OPT.	= OPTIONAL
P	= POWER
P.C.	= POINT OF CURVATURE
P.T.	= POINT OF TANGENCY
S	= SEWER
S.C.O.	= SEWER CLEANOUT
ST	= STANDARD HOOK
STA.	= STATION
T	= TELEPHONE
TF	= TOP FACE
TEL.M.H.	= TELEPHONE MANHOLE
TL	= TOP LAYER
TP	= TEST PILE
U/S	= UP STREAM
W	= WATER
WB/L	= WEST BASELINE
W/L	= WALL LINE
W.M.	= WATER METER
W.V.	= WATER VALVE

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

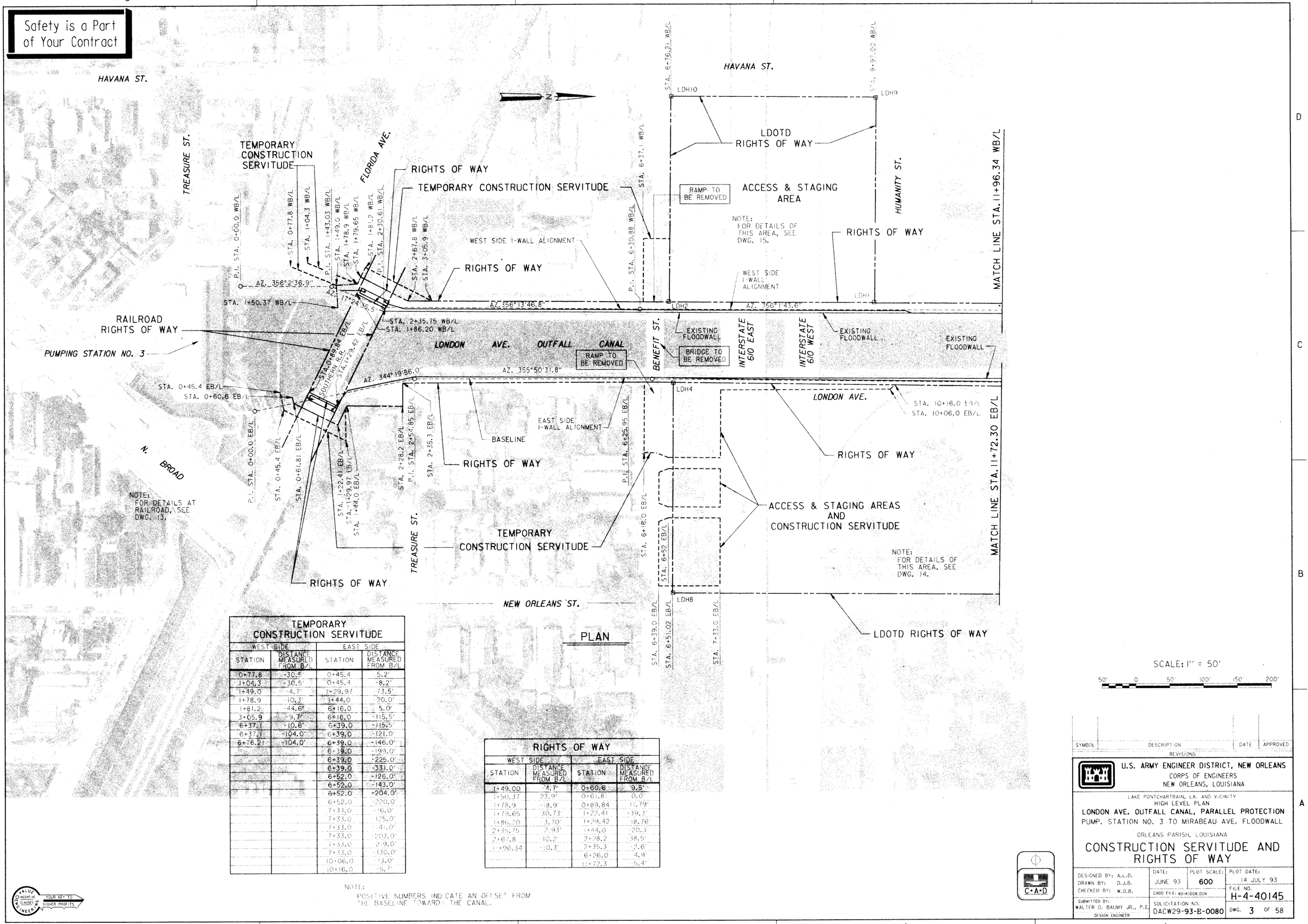
GENERAL NOTES

DESIGNED BY: A.L.D. DRAWN BY: J.E.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 20 JULY 93
	CADD FILE: 40145NO3.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 2 OF 58

C·A·D

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract



TEMPORARY CONSTRUCTION SERVITUDE

WEST SIDE STATION	WEST SIDE DISTANCE MEASURED FROM B/L	EAST SIDE STATION	EAST SIDE DISTANCE MEASURED FROM B/L
0+77.8	-30.5'	0+45.4	5.2'
1+04.3	-30.5'	0+45.4	-8.2'
1+49.0	-4.7'	1+29.97	73.5'
1+78.9	10.3'	1+44.0	20.0'
1+81.2	-44.6'	6+16.0	5.0'
3+05.9	-9.7'	6+16.0	-115.5'
6+37.1	-10.6'	6+39.0	-115.5'
6+37.1	-104.0'	6+39.0	-121.0'
6+76.21	-104.0'	6+39.0	-146.0'
		6+39.0	-199.0'
		6+39.0	-226.0'
		6+39.0	-331.0'
		6+52.0	-126.0'
		6+52.0	-143.0'
		6+52.0	-204.0'
		6+52.0	-220.0'
		7+33.0	-6.0'
		7+33.0	125.0'
		7+33.0	-41.0'
		7+33.0	-203.0'
		7+33.0	219.0'
		7+33.0	-330.0'
		10+06.0	15.0'
		10+16.0	-5.7'

RIGHTS OF WAY

WEST SIDE STATION	WEST SIDE DISTANCE MEASURED FROM B/L	EAST SIDE STATION	EAST SIDE DISTANCE MEASURED FROM B/L
1+49.00	-4.7'	0+60.6	9.5'
1+50.37	23.9'	0+61.8	0.0'
1+78.9	-8.9'	0+89.84	11.79'
1+79.65	30.73'	1+22.41	-39.3'
1+86.20	-3.70'	1+29.42	18.76'
2+35.75	2.93'	1+44.0	-20.3'
2+67.8	10.2'	2+28.2	38.5'
1+96.34	-0.3'	2+35.3	-2.6'
		6+26.0	4.9'
		11+72.3	5.4'

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

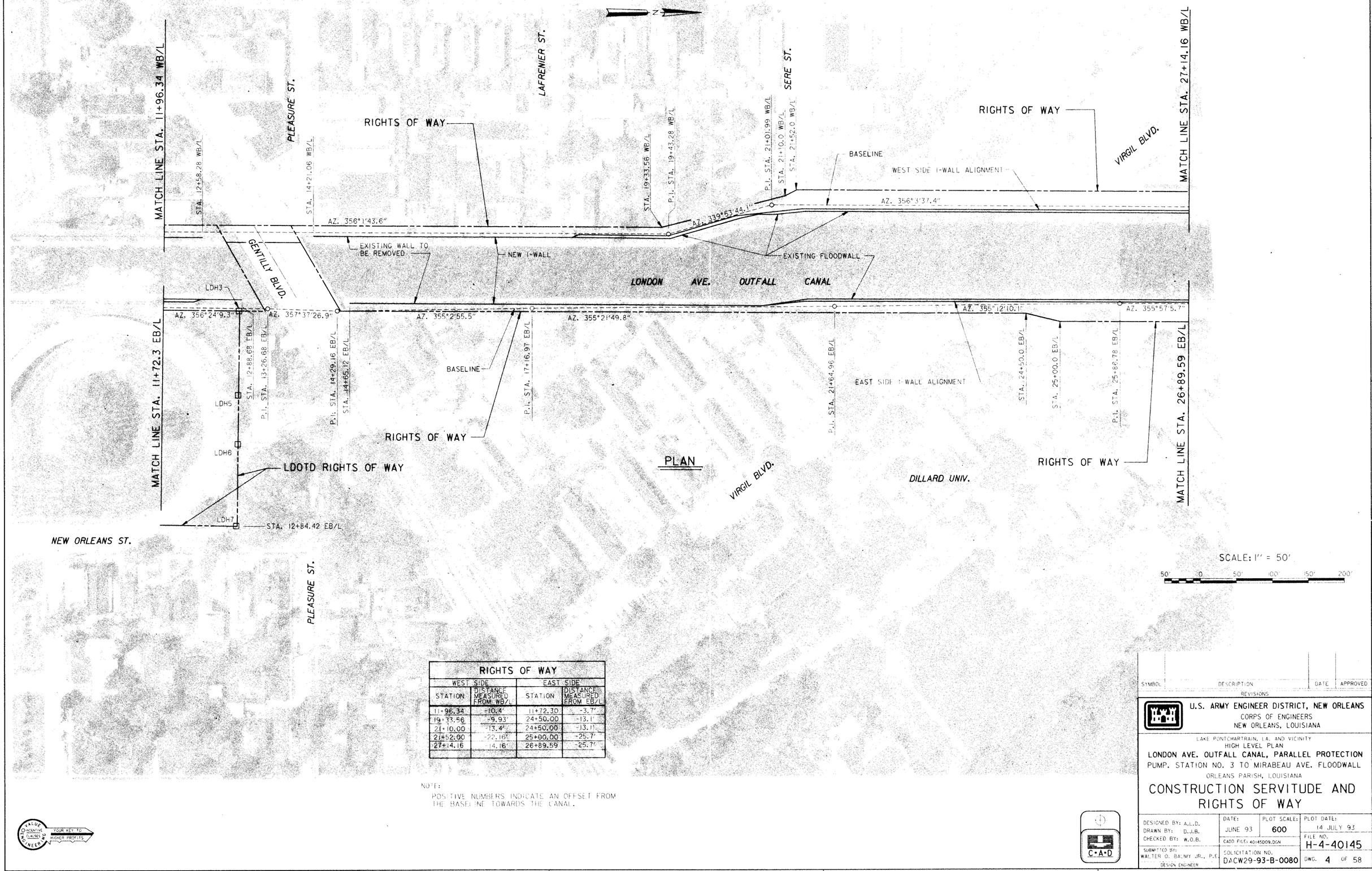
CONSTRUCTION SERVITUDE AND RIGHTS OF WAY

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145008.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 3 OF 58

C·A·D

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract



SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

RIGHTS OF WAY			
WEST SIDE		EAST SIDE	
STATION	DISTANCE MEASURED FROM WB/L	STATION	DISTANCE MEASURED FROM EB/L
11+96.34	-10.4'	11+72.30	-3.7'
19+33.56	-9.93'	24+50.00	-13.1'
21+10.00	-13.4'	24+50.00	-13.1'
21+52.00	-22.16'	25+00.00	-25.7'
27+14.16	-14.16'	26+89.59	-25.7'

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

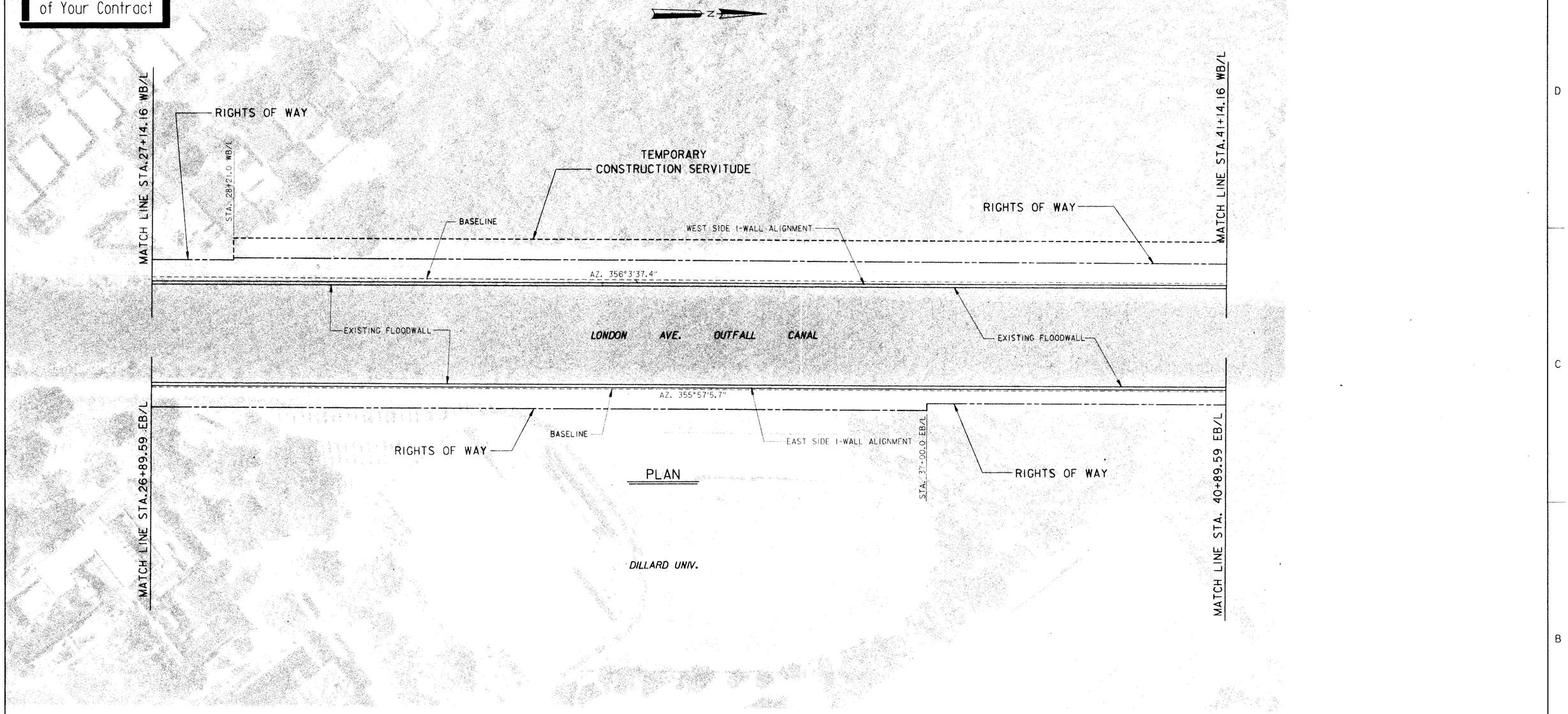
CONSTRUCTION SERVITUDE AND RIGHTS OF WAY

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145009.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 4 OF 58

VALUE ENGINEERING PROPOSITIVE CLAIMS YOUR KEY TO HIGHER PROFITS

C·A·D

Safety is a Part of Your Contract



PLAN

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

TEMPORARY CONSTRUCTION SERVITUDE			
WEST SIDE		EAST SIDE	
STATION	DISTANCE MEASURED FROM WB/L	STATION	DISTANCE MEASURED FROM EB/L
28+21.0	22.6'		
28+21.0	53.97'		
41+14.16	53.97'		

RIGHTS OF WAY			
WEST SIDE		EAST SIDE	
STATION	DISTANCE MEASURED FROM WB/L	STATION	DISTANCE MEASURED FROM EB/L
27+14.16	22.16'	26+89.59	25.7'
28+21.0	22.16'	37+00.00	25.7'
28+21.0	25.47'	37+00.00	9.1'
41+14.16	25.47'	40+89.59	9.1'

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

VALUE INCENTIVE CLAUSES SAVE ENGINEERING YOUR KEY TO HIGHER PROFITS

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

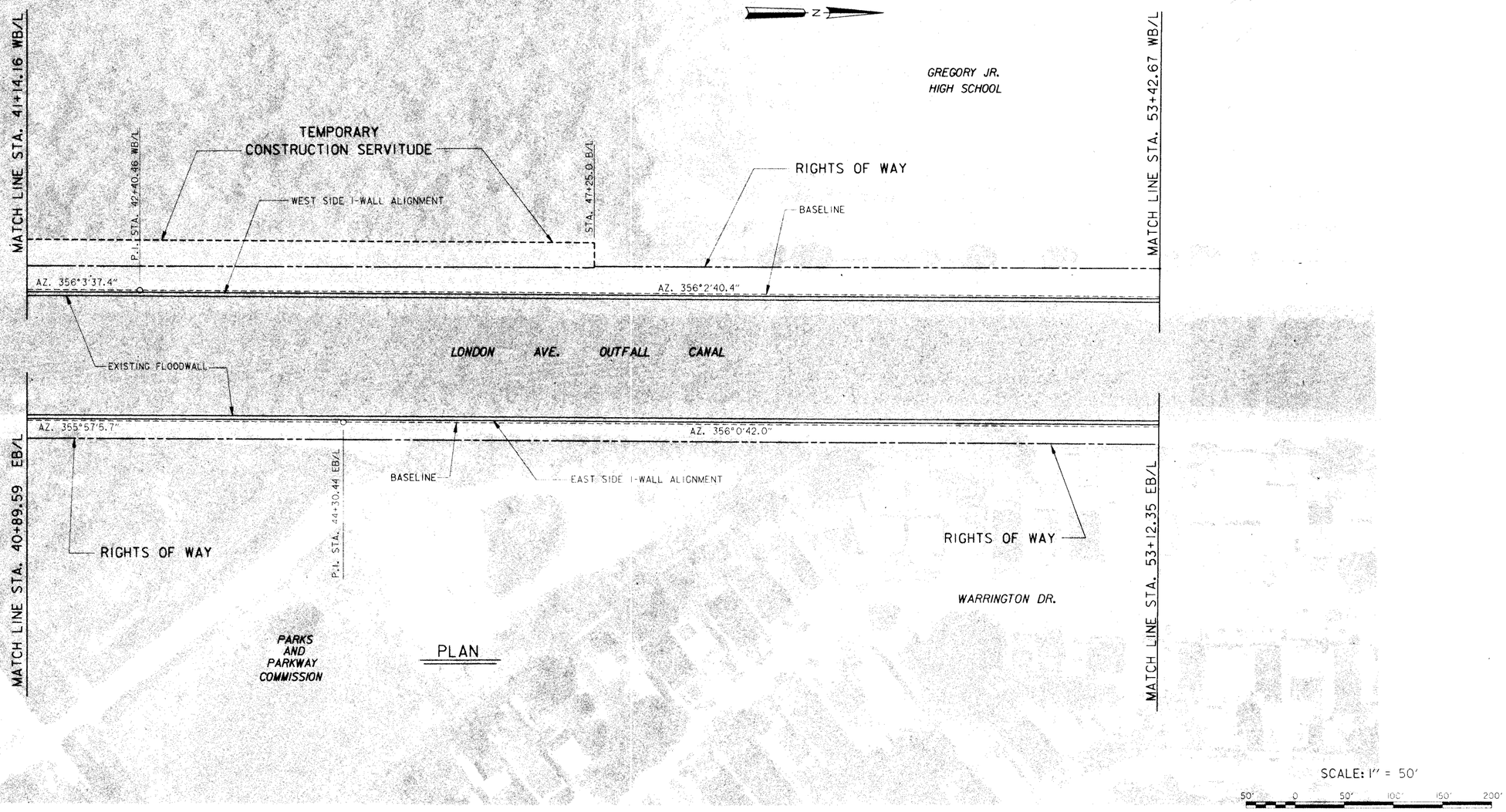
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

CONSTRUCTION SERVITUDE AND RIGHTS OF WAY

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145D10.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 5 OF 58

C•A•D

Safety is a Part of Your Contract



PLAN

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

TEMPORARY CONSTRUCTION SERVITUDE			
WEST SIDE		EAST SIDE	
STATION	DISTANCE MEASURED FROM WB/L	STATION	DISTANCE MEASURED FROM EB/L
41+14.16	53.97'		
47+25.0	53.97'		
47+25.0	27.2'		

RIGHTS OF WAY			
WEST SIDE		EAST SIDE	
STATION	DISTANCE MEASURED FROM WB/L	STATION	DISTANCE MEASURED FROM EB/L
41+14.16	25.47'	40+89.59	19.1'
47+25.0	27.2'	53+12.35	19.1'
53+42.67	27.2'		

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

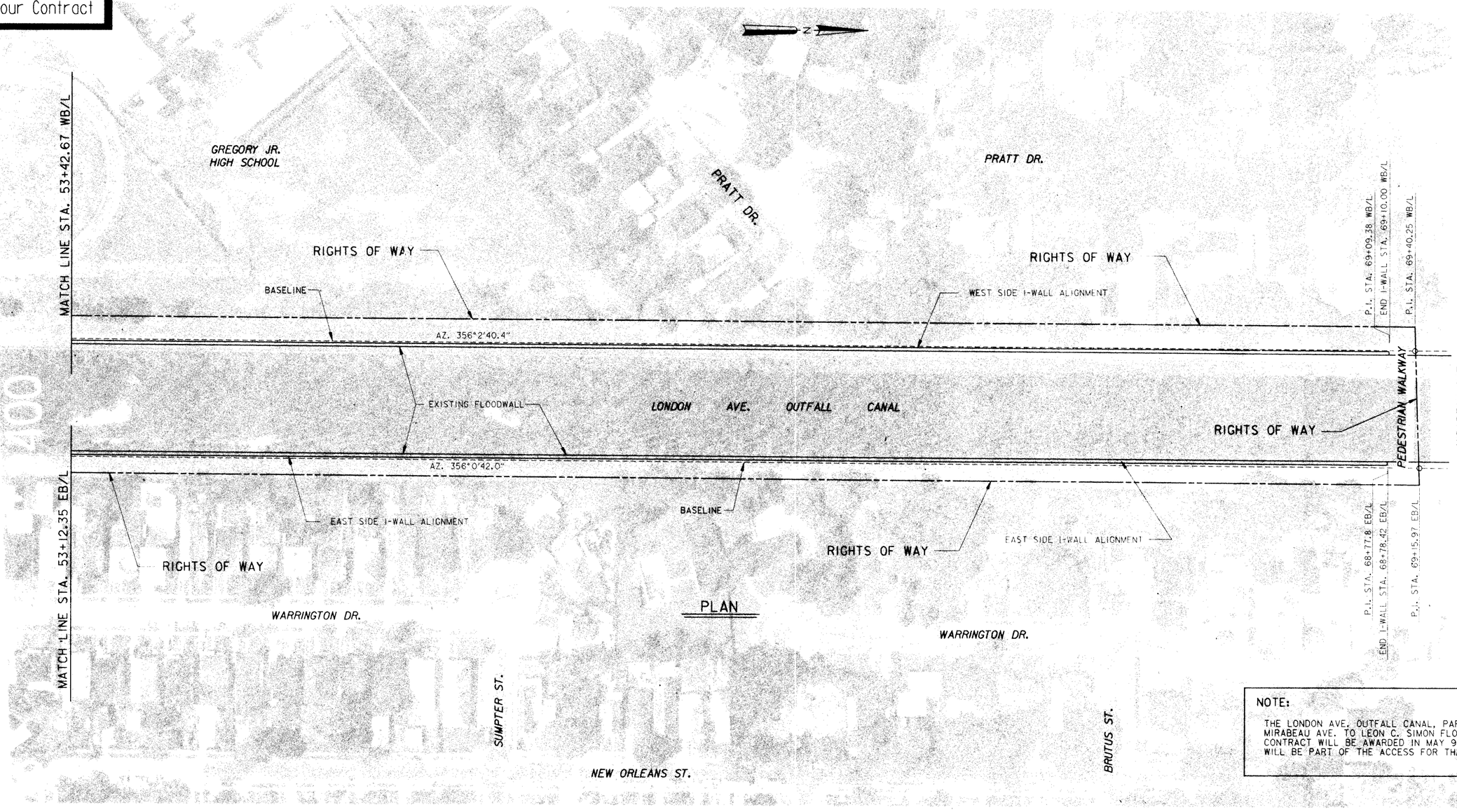
CONSTRUCTION SERVITUDE AND RIGHTS OF WAY

DESIGNED BY: A.L.D. DRAWN BY: D.J.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 14 JULY 93
	CADD FILE: 40145031.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 6 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

C•A•D

Safety is a Part of Your Contract



PLAN

NOTE:

THE LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION, MIRABEAU AVE. TO LEON C. SIMON FLOODWALL CONSTRUCTION CONTRACT WILL BE AWARDED IN MAY 94. MIRABEAU AVE. WILL BE PART OF THE ACCESS FOR THAT PROJECT.

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

RIGHTS OF WAY			
WEST SIDE		EAST SIDE	
STATION	DISTANCE MEASURED FROM WB/L	STATION	DISTANCE MEASURED FROM EB/L
53+42.67	-27.2'	53+12.35	-19.1'
69+40.41	27.2'	69+16.68	-20.1'

NOTE:

POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

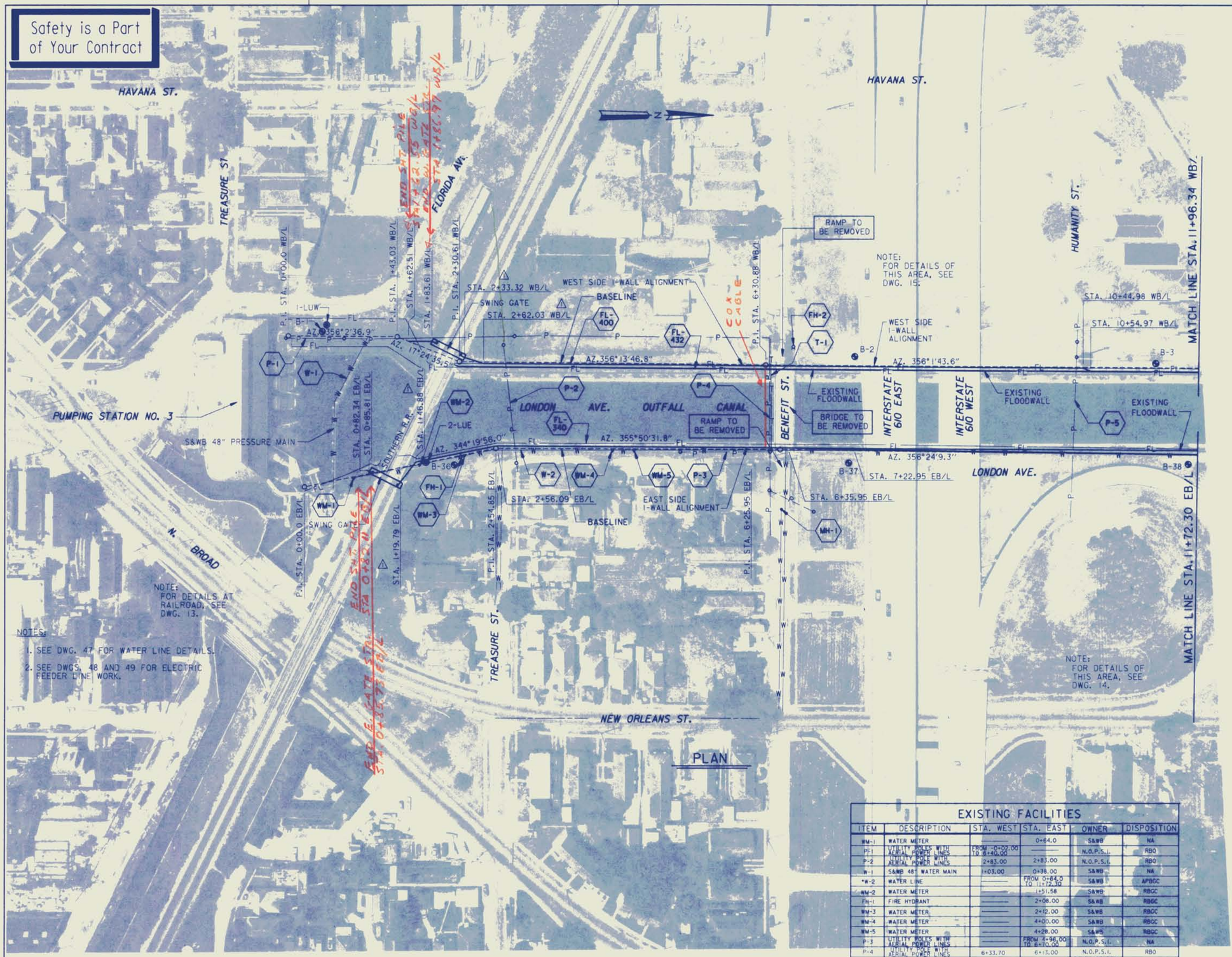
CONSTRUCTION SERVITUDE AND RIGHTS OF WAY

DESIGNED BY: A.L.D. DRAWN BY: D.J.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 14 JULY 93
	CADD FILE: 40145D12.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 7 OF 58

VALUE ENGINEERING INCENTIVE CLAUSE — YOUR KEY TO HIGHER PROFITS

C·A·D

Safety is a Part of Your Contract



PLAN

NOTES:

1. SEE DWG. 47 FOR WATER LINE DETAILS.
2. SEE DWGS. 48 AND 49 FOR ELECTRIC FEEDER LINE WORK.

LEGEND

- —W—W— WATER LINE
- —P—P— AERIAL POWER LINE
- —T—T— AERIAL TELEPHONE LINE
- —G—G— GAS LINE
- —FL—FL— S&WB FEEDER CABLES
- POWER POLE
- MANHOLE
- WATER METER
- FIRE HYDRANT
- EUSTIS UNDISTURBED BORINGS
- CORPS UNDISTURBED BORINGS
- EUSTIS CANAL BOTTOM BORINGS
- WATER VALVE

NA - NOT AFFECTED
RBO - RELOCATED BY OWNER
RBGC - RELOCATED BY GOVERNMENT CONTRACTOR
APBGC - ABANDONED, AND PLUGGED BY GOVERNMENT CONTRACTOR
RMBGC - REMOVED BY GOVERNMENT CONTRACTOR

WALL ALIGNMENT OFFSETS

EB/L	WB/L	OFFSETS*
~~0+82.34~~		6.73'
~~0+85.81~~		4.04'
1+19.79		-22.29'
1+46.88		2.67'
2+56.09		2.44'
6+35.95		2.37'
7+22.95		-2.09'
	~~1+62.51~~	-4.22'
	~~1+83.61~~	-13.36'
	2+33.32	-9.55'
	2+62.03	-1.58'
	10+44.98	-0.39'
	10+54.97	4.49'

* POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

EXISTING FACILITIES

ITEM	DESCRIPTION	STA. WEST	STA. EAST	OWNER	DISPOSITION
WM-1	WATER METER	———	0+64.0	S&WB	NA
P-1	UTILITY POLES WITH AERIAL POWER LINES	FROM -0+02.00 TO 6+40.00	———	N.O.P.S.I.	RBO
P-2	UTILITY POLE WITH AERIAL POWER LINES	2+83.00	2+83.00	N.O.P.S.I.	RBO
W-1	S&WB 48" WATER MAIN	1+03.00	0+38.00	S&WB	NA
*W-2	WATER LINE	———	FROM 0+64.0 TO 11+72.30	S&WB	APBGC
WM-2	WATER METER	———	1+51.58	S&WB	RBGC
FH-1	FIRE HYDRANT	———	2+08.00	S&WB	RBGC
WM-3	WATER METER	———	2+12.00	S&WB	RBGC
WM-4	WATER METER	———	4+00.00	S&WB	RBGC
WM-5	WATER METER	———	4+28.00	S&WB	RBGC
P-3	UTILITY POLES WITH AERIAL POWER LINES	———	FROM 4+96.00 TO 8+40.00	N.O.P.S.I.	NA
P-4	UTILITY POLE WITH AERIAL POWER LINES	6+33.70	6+13.00	N.O.P.S.I.	RBO
T-1	AERIAL TELEPHONE LINES	6+33.70	6+13.00	SOUTH CENTRAL BELL	RBO
MH-1	MANHOLE	———	6+26.00	S&WB	NA
FH-2	FIRE HYDRANT	6+67.00	———	S&WB	NA
P-5	UTILITY POLES WITH AERIAL POWER LINES	10+36.00	10+09.00	N.O.P.S.I.	RBO
**FL-340	PRIMARY 25 CYCLE POWER CABLE	———	FROM 0+00.00 TO 11+72.30	S&WB	RBGC
***FL-400	PRIMARY 25 CYCLE POWER CABLE	FROM 0+00.00 TO 11+96.34	———	S&WB	RBGC
FL-432	PRIMARY 25 CYCLE POWER CABLE	FROM 0+00.00 TO 11+96.34	———	S&WB	NA

NOTES:
△ * ABANDON STA. 0+64.0 TO 6+36.0 EB/L
REPLACE STA. 0+64.0 TO 6+36.0 EB/L
REMOVE STA. 6+36.0 TO 11+72.30 EB/L
** REMOVE AND RELOCATE STA. 1+20.0 TO 11+72.30 EB/L
*** REMOVE AND REPLACE STA. 2+40.0 TO 21+00.0 WB/L

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

SYMBOL	DESCRIPTION	DATE	APPROVED
△	REVISED TABLES AND PLAN, AMEND. NO. 1	10-14-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

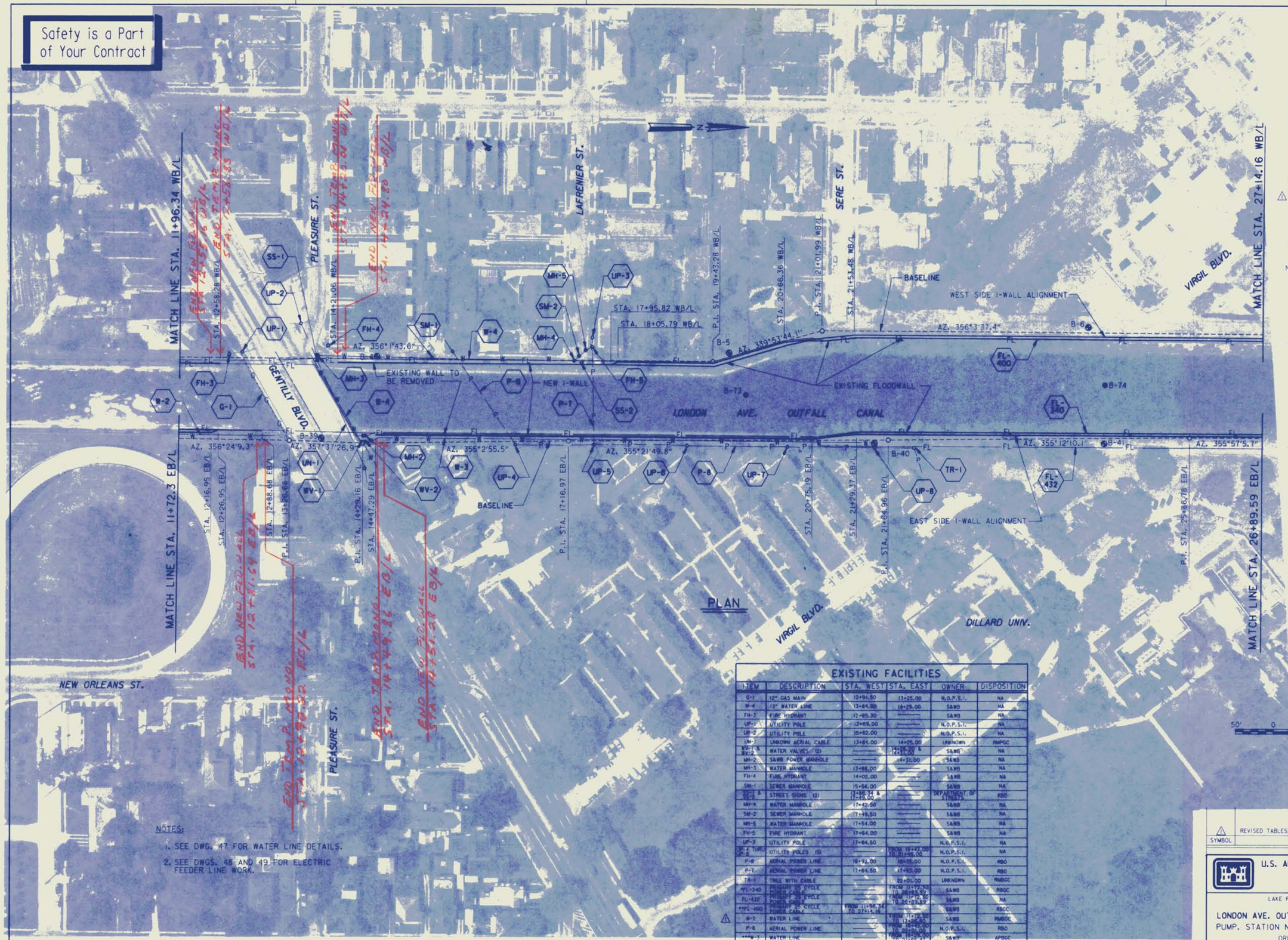
PLAN

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 9 AUGUST 93
DRAWN BY: P.J.S.			
CHECKED BY: W.O.B.	CADD FILE: 401#5008.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 8 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

C·A·D

Safety is a Part of Your Contract



WALL ALIGNMENT OFFSETS		
EB/L	WB/L	OFFSETS
12+16.95	———	0.56'
12+26.95	———	5.49'
12+88.68	———	5.82'
14+65.12	———	9.01'
20+75.19	———	0.88'
21+29.37	———	6.76'
———	12+58.25	4.49'
———	14+09.98	4.18'
———	17+95.82	4.68'
———	18+05.79	0.12'
———	19+43.28	0.51'
———	20+66.36	2.36'
———	21+53.48	0.05'

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

NOTES:
1. SEE DWG. 47 FOR WATER LINE DETAILS.
2. SEE DWGS. 48 AND 49 FOR ELECTRIC FEEDER LINE WORK.

EXISTING FACILITIES

ITEM	DESCRIPTION	STA. WEST	STA. EAST	OWNER	DISPOSITION
G-1	12" GAS MAIN	12+91.50	13+25.00	N.O.P.S.I.	NA
W-4	12" WATER LINE	13+84.00	14+28.00	S&WB	NA
FH-3	FIRE HYDRANT	12+65.30	———	S&WB	NA
UP-1	UTILITY POLE	12+89.00	———	N.O.P.S.I.	NA
UP-2	UTILITY POLE	15+82.00	———	N.O.P.S.I.	NA
UN-1	UNKNOWN AERIAL CABLE	13+84.00	14+25.00	UNKNOWN	RMPGC
WV-1 & WV-2	WATER VALVES (2)	———	14+00.00 & 14+31.00	S&WB	NA
MH-2	S&WB POWER MANHOLE	———	14+31.00	S&WB	NA
MH-3	WATER MANHOLE	13+88.00	———	S&WB	NA
FH-4	FIRE HYDRANT	14+02.00	———	S&WB	NA
SM-1	SEWER MANHOLE	15+56.00	———	S&WB	NA
SS-1 & SS-2	STREET SIGNS (2)	13+36.34 & 17+49.00	———	DEPARTMENT OF STREETS	RBO
MH-4	WATER MANHOLE	17+42.50	———	S&WB	NA
SM-2	SEWER MANHOLE	17+49.50	———	S&WB	NA
MH-5	WATER MANHOLE	17+54.00	———	S&WB	NA
FH-5	FIRE HYDRANT	17+64.00	———	S&WB	NA
UP-3	UTILITY POLE	17+64.50	———	N.O.P.S.I.	NA
UP-4 THRU UP-8	UTILITY POLES (5)	———	FROM 18+43.00 TO 21+65.00	N.O.P.S.I.	NA
P-6	AERIAL POWER LINE	16+92.00	18+35.00	N.O.P.S.I.	RBO
P-7	AERIAL POWER LINE	17+84.50	17+93.00	N.O.P.S.I.	RBO
TR-1	TREE WITH CABLE	———	22+01.00	UNKNOWN	RMBGC
*FL-340	PRIMARY 25 CYCLE POWER CABLE	———	FROM 11+72.30 TO 26+89.59	S&WB	RBGC
FL-432	PRIMARY 25 CYCLE POWER CABLE	———	FROM 11+72.30 TO 26+87.59	S&WB	NA
*FL-400	PRIMARY 25 CYCLE POWER CABLE	FROM 11+96.34 TO 27+14.16	———	S&WB	RBGC
W-2	WATER LINE	———	FROM 11+72.30 TO 26+89.59	S&WB	RMBGC
P-8	AERIAL POWER LINE	———	FROM 18+43.00 TO 21+65.00	N.O.P.S.I.	RBO
***W-3	WATER LINE	———	FROM 14+29.00 TO 21+65.47	S&WB	APBGC
W-4	WATER LINE	FROM 13+88.00 TO 17+54.00	14+28.00	S&WB	NA

NOTE: SEE DWG 8 FOR LEGEND.
*NOTE: REMOVE AND RELOCATE FROM STA. 11+72.30 TO 26+89.59 EB/L.
**NOTE: REMOVE AND REPLACE FROM STA. 2+40.0 TO 21+00.0 WB/L.
***NOTE: ABANDON AND REPLACE FROM STA. 14+29.0 TO 21+65.47 EB/L.

SYMBOL	DESCRIPTION	DATE	APPROVED
1	REVISED TABLES; AMEND. NO. 1	10-14-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PLAN

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 9 AUGUST 93
DRAWN BY: P.J.S.			
CHECKED BY: W.O.B.	CADD FILE: 40145D09.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 9 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

C-A-D

Safety is a Part
of Your Contract

NOTES:
1. SEE DWG. 47 FOR WATER LINE DETAILS.
2. SEE DWGS. 48 AND 49 FOR ELECTRIC FEEDER LINE WORK.

WALL ALIGNMENT OFFSETS

	EB/L	WB/L	OFFSETS
	12+16.95	———	0.56'
	12+26.95	———	5.49'
△2	~~12+88.68~~	12+94.22	6.25'
△2	~~14+50.79~~	14+49.66	9.60'
	20+75.19	———	0.88'
	21+29.37	12+58.83	6.76'
△1	———	~~12+58.25~~	4.49'
△2	14+20.01	~~14+21.06~~	4.18'
	———	17+95.82	4.68'
	———	18+05.79	0.12'
	———	19+43.28	0.51'
	———	20+66.36	2.36'
	———	21+53.48	0.05'

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

THIS PLAN ACCOMPANIES
MODIFICATION P00002
TO CONTRACT NUMBER
DACW29-94-C-0003

THIS PLAN ACCOMPANIES
MODIFICATION P0000
TO CONTRACT NUMBER
DACW29-94-C-0003

SCALE: 1'' = 50'
50' 0 50' 100' 150' 200'

EXISTING FACILITIES

ITEM	DESCRIPTION	STA. WEST	STA. EAST	OWNER	DISPOSITION
G-1	12" GAS MAIN	12+91.50	13+25.00	N.O.P.S.I.	NA
W-4	12" WATER LINE	13+84.00	14+28.00	S&WB	NA
FH-3	FIRE HYDRANT	12+65.30	———	S&WB	NA
UP-1	UTILITY POLE	12+69.00	———	N.O.P.S.I.	NA
UP-2	UTILITY POLE	15+82.00	———	N.O.P.S.I.	NA
UN-1	UNKOWN AERIAL CABLE	13+84.00	14+25.00	UNKNOWN	RMPGC
WV-1 & WV-2	WATER VALVES (2)	———	14+28.00 & 14+31.00	S&WB	NA
MH-2	S&WB POWER MANHOLE	———	14+31.00	S&WB	NA
MH-3	WATER MANHOLE	13+88.00	———	S&WB	NA
FH-4	FIRE HYDRANT	14+02.00	———	S&WB	NA
SM-1	SEWER MANHOLE	15+58.00	———	S&WB	NA
SS-1 & SS-2	STREET SIGNS (2)	13+86.34 & 17+49.00	———	DEPARTMENT OF STREETS	RBO
MH-4	WATER MANHOLE	17+42.50	———	S&WB	NA
SM-2	SEWER MANHOLE	17+49.50	———	S&WB	NA
MH-5	WATER MANHOLE	1[illegible]+54.00	———	S&WB	NA
FH-5	FIRE HYDRANT	17+64.00	———	S&WB	NA
UP-3	UTILITY POLE	17+64.50	———	N.O.P.S.I.	NA
UP-4 THRU UP-8	UTILITY POLES (5)	———	FROM 18+43.00 TO 21+46.00	N.O.P.S.I.	NA
P-6	AERIAL POWER LINE	15+92.00	16+35.00	N.O.P.S.I.	RBO
P-7	AERIAL POWER LINE	17+64.50	17+53.00	N.O.P.S.I.	RBO
TR-1	TREE WITH CABLE	———	22+01.00	UNKNOWN	RMBGC
*FL-340	PRIMARY 25 CYCLE POWER CABLE	———	FROM 11+72.30 TO 26+89.59	S&WB	RBGC
FL-432	PRIMARY 25 CYCLE POWER CABLE	———	FROM 11+72.30 TO 26+89.59	S&WB	NA
**FL-400	PRIMARY 25 CYCLE POWER CABLE	FROM 11+96.34 TO 27+14.16	———	S&WB	RBGC
W-2	WATER LINE	———	FROM 11+72.30 TO 13+26.80	S&WB	RMBGC
P-8	AERIAL POWER LINE	———	FROM 18+43.00 TO 22+01.00	N.O.P.S.I.	RBO
***W-3	WATER LINE	———	FROM 14+29.00 TO 21+65.47	S&WB	APBGC
W-4	WATER LINE	FROM 13+88.00 TO 17+54.00	14+28.00	S&WB	NA

NOTE: SEE DWG 8 FOR LEGEND.

△3 *NOTE: REMOVE AND RELOCATE FROM STA. 11+72.30 TO 12+85 AND 14+70 TO 26+89.59 EB/L.
REMOVE AND REPLACE FROM STA. 12+85 TO 14+70.

**NOTE: REMOVE AND REPLACE FROM STA. 2+40.0 TO 21+00.0 WB/L.

***NOTE: ABANDON AND REPLACE FROM STA. 14+29.0 TO 21+65.47 EB/L.

SYMBOL	DESCRIPTION	DATE	APPROVED
△3	REVISED TABLES FOR FL-340 MOD. #	4-24-94	A.L.D.
△2	REVISED TABLES; MOD. #2	1-24-94	A.L.D.
△1	REVISED TABLES; AMEND. NO. 1	10-14-93	A.L.D.

REVISIONS

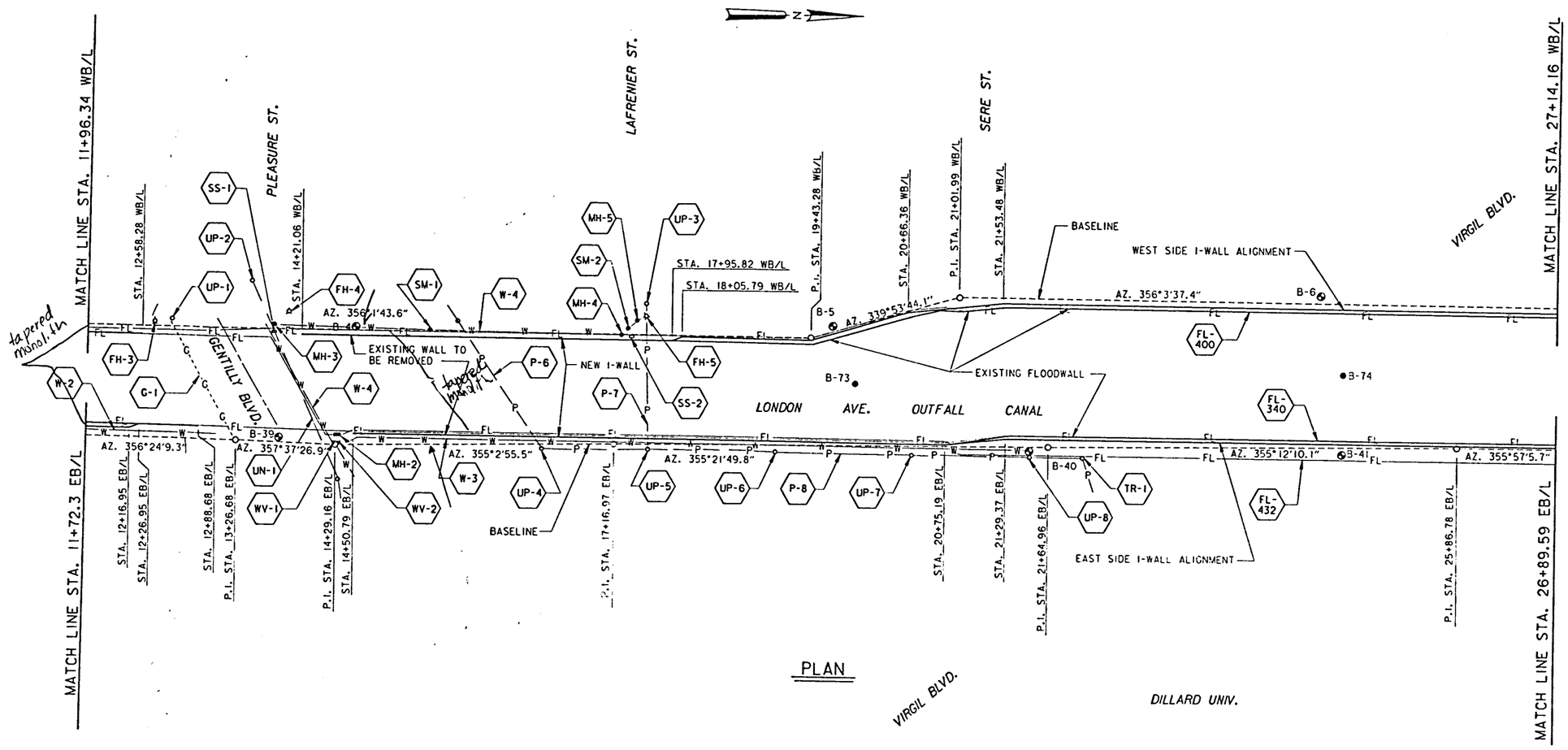
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PLAN

DESIGNED BY: A.L.D.
DRAWN BY: P.J.S.
CHECKED BY: W.O.B.
DATE: JUNE 93
PLOT SCALE: 600
PLOT DATE: 26 APR 94
CADD FILE: AD.45009.DGN
FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E.
DESIGN ENGINEER
SOLICITATION NO. DACW29-93-B-0080
DWG. 9 OF 58

Safety is a Part of Your Contract



PLAN

WALL ALIGNMENT OFFSETS		
EB/L	WB/L	OFFSETS
12+16.95	———	0.56'
12+26.95	———	5.49'
12+88.68	———	6.25'
14+50.79	———	9.60'
20+75.19	———	0.88'
21+29.37	———	6.76'
———	12+58.25	4.49'
———	14+21.06	4.18'
———	17+95.82	4.68'
———	18+05.79	0.12'
———	19+43.28	0.51'
———	20+66.36	2.36'
———	21+53.48	0.05'

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

EXISTING FACILITIES					
ITEM	DESCRIPTION	STA. WEST	STA. EAST	OWNER	DISPOSITION
C-1	12" GAS MAIN	12+91.50	13+25.00	N.O.P.S.I.	NA
W-4	12" WATER LINE	13+84.00	14+28.00	S&WB	NA
FH-3	FIRE HYDRANT	12+65.30	———	S&WB	NA
UP-1	UTILITY POLE	12+69.00	———	N.O.P.S.I.	NA
UP-2	UTILITY POLE	15+82.00	———	N.O.P.S.I.	NA
UN-1	UNKOWN AERIAL CABLE	13+84.00	14+25.00	UNKOWN	RMPGC
WV-1 & WV-2	WATER VALVES (2)	———	14+28.00 & 14+31.00	S&WB	NA
MH-2	S&WB POWER MANHOLE	———	14+31.00	S&WB	NA
MH-3	WATER MANHOLE	13+88.00	———	S&WB	NA
FH-4	FIRE HYDRANT	14+02.00	———	S&WB	NA
SM-1	SEWER MANHOLE	15+56.00	———	S&WB	NA
SS-1 & SS-2	STREET SIGNS (2)	13+86.34 & 17+49.00	———	DEPARTMENT OF STREETS	RBO
MH-4	WATER MANHOLE	17+42.50	———	S&WB	NA
SM-2	SEWER MANHOLE	17+49.50	———	S&WB	NA
MH-5	WATER MANHOLE	17+54.00	———	S&WB	NA
FH-5	FIRE HYDRANT	17+64.00	———	S&WB	NA
UP-3	UTILITY POLE	17+64.50	———	N.O.P.S.I.	NA
UP-4 THRU UP-8	UTILITY POLES (5)	———	FROM 18+43.00 TO 21+46.00	N.O.P.S.I.	NA
P-6	AERIAL POWER LINE	15+92.00	16+35.00	N.O.P.S.I.	RBO
P-7	AERIAL POWER LINE	17+64.50	17+53.00	N.O.P.S.I.	RBO
TR-1	TREE WITH CABLE	———	22+01.00	UNKOWN	RVBGC
*FL-340	PRIMARY 25 CYCLE POWER CABLE	———	FROM 11+72.30 TO 26+89.59	S&WB	RBGC
FL-432	PRIMARY 25 CYCLE POWER CABLE	———	FROM 11+72.30 TO 26+89.59	S&WB	NA
**FL-400	PRIMARY 25 CYCLE POWER CABLE	FROM 11+96.34 TO 27+14.16	———	S&WB	RBGC
W-2	WATER LINE	———	FROM 11+72.30 TO 13+26.95	S&WB	RVBGC
P-8	AERIAL POWER LINE	———	FROM 16+43.00 TO 22+01.00	N.O.P.S.I.	RBO
***W-3	WATER LINE	———	FROM 14+29.00 TO 21+65.47	S&WB	APBGC
W-4	WATER LINE	FROM 13+88.00 TO 17+54.00	14+28.00	S&WB	NA

NOTE: SEE DWG 8 FOR LEGEND.
*NOTE: REMOVE AND RELOCATE FROM STA. 11+72.30 TO 26+89.59 EB/L.
**NOTE: REMOVE AND REPLACE FROM STA. 2+40.0 TO 21+00.0 WB/L.
***NOTE: ABANDON AND REPLACE FROM STA. 14+29.0 TO 21+65.47 EB/L.

NOTES:

1. SEE DWG. 47 FOR WATER LINE DETAILS.
2. SEE DWGS. 48 AND 49 FOR ELECTRIC FEEDER LINE WORK.

THIS PLAN ACCOMPANIES MODIFICATION P0000 TO CONTRACT NUMBER DACW29-94-C-0003

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

SYMBOL	DESCRIPTION	DATE	APPROVED
2	REVISED TABLES; MOD.	1-24-94	A.L.D.
1	REVISED TABLES; AMEND. NO. 1	10-14-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PLAN

DESIGNED BY: A.L.D. DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: JAN. 24, 1994
	CADD FILE: 4C145D09.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BALMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 9 OF 58

VALUE ENGINEERING SAVES TAXES YOUR KEY TO HIGHER PROFITS

C·A·D

Safety is a Part of Your Contract

ROW, OBTAINED BY CONTRACTOR FROM PARKWAY COMM.,

MATCH LINE STA.27+14.16 WB/L

MATCH LINE STA.41+14.16 WB/L

MATCH LINE STA.26+89.59 EB/L

MATCH LINE STA. 40+89.59 EB/L

BASELINE

WEST SIDE I-WALL ALIGNMENT

EAST SIDE I-WALL ALIGNMENT

6-LUG

B-7

AZ. 356°3'37.4"

B-8

B-9

EXISTING FLOODWALL

B-75

LONDON AVE. OUTFALL CANAL

B-76

FL-400

FL-340

EXISTING FLOODWALL

B-77

B-42

AZ. 355°57'5.7"

B-43

B-44

MH-6

FL-432

PLAN

DILLARD UNIV.

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

EXISTING FACILITIES

ITEM	DESCRIPTION	STA. WEST	STA. EAST	OWNER	DISPOSITION
MH-6	S&WB POWER MANHOLE	———	28+70.00	S&WB	NA
FL-432	PRIMARY 25 CYCLE POWER CABLE	———	FROM 26+89.59 TO 40+89.59	S&WB	NA
FL-340	PRIMARY 25 CYCLE POWER CABLE	———	FROM 26+89.59 TO 40+89.59	S&WB	RBGC
FL-400	PRIMARY 25 CYCLE POWER CABLE	FROM 27+14.16 TO 41+14.16	———	S&WB	RBGC

NOTE: SEE DWG 8 FOR LEGEND.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PLAN

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 14 JULY 93
DRAWN BY: P.J.S.			
CHECKED BY: W.O.B.	CADD FILE: 40145010.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 10 OF 58

VALUE INCENTIVE CLAUSES FOR ENGINEERS — YOUR KEY TO HIGHER PROFITS

C•A•D

Safety is a Part of Your Contract

AAS

2400

MATCH LINE STA. 41+14.16 WB/L

P.I. STA. 42+40.46 WB/L

WEST SIDE I-WALL ALIGNMENT

AZ. 356°3'37.4"

B-10

BASELINE

CS-1

AZ. 356°2'40.4"

B-11

MATCH LINE STA. 53+42.67 WB/L

GREGORY JR. HIGH SCHOOL

FL-400

EXISTING FLOODWALL

B-78

LONDON AVE. OUTFALL CANAL

B-79

FL-340

AZ. 355°57'5.7"

B-45

AZ. 356°0'42.0"

B-46

MH-7

BASELINE

EAST SIDE I-WALL ALIGNMENT

CS-1

FL-432

MATCH LINE STA. 40+89.59 EB/L

P.I. STA. 44+30.44 EB/L

ROW OBTAINED BY CONTRACTOR FROM PARKWAY COMM

WARRINGTON DR.

MATCH LINE STA. 53+12.35 EB/L

PARKS AND PARKWAY COMMISSION

PLAN

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

WALL ALIGNMENT OFFSETS		
EB/L	WB/L	OFFSETS
———	42+40.46	1.25'
44+30.44	———	1.63'

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

EXISTING FACILITIES					
ITEM	DESCRIPTION	STA. WEST	STA. EAST	OWNER	DISPOSITION
MH-7	S&WB POWER MANHOLE	———	42+93.00	S&WB	NA
CS-1	CONCRETE STEPS	49+80.00	49+50.00	UNKNOWN	RMBGC
FL-432	PRIMARY 25 CYCLE POWER CABLE	———	FROM 40+89.59 TO 53+12.35	S&WB	NA
FL-340	PRIMARY 25 CYCLE POWER CABLE	———	FROM 40+89.59 TO 53+12.35	S&WB	RBGC
FL-400	PRIMARY 25 CYCLE POWER CABLE	FROM 41+14.16 TO 53+42.67	———	S&WB	RBGC

NOTES:
1. SEE DWG. 8 FOR LEGEND.
2. SEE DWGS. 48 AND 49 FOR ELECTRIC FEEDER LINE WORK.

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

C-A-D

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

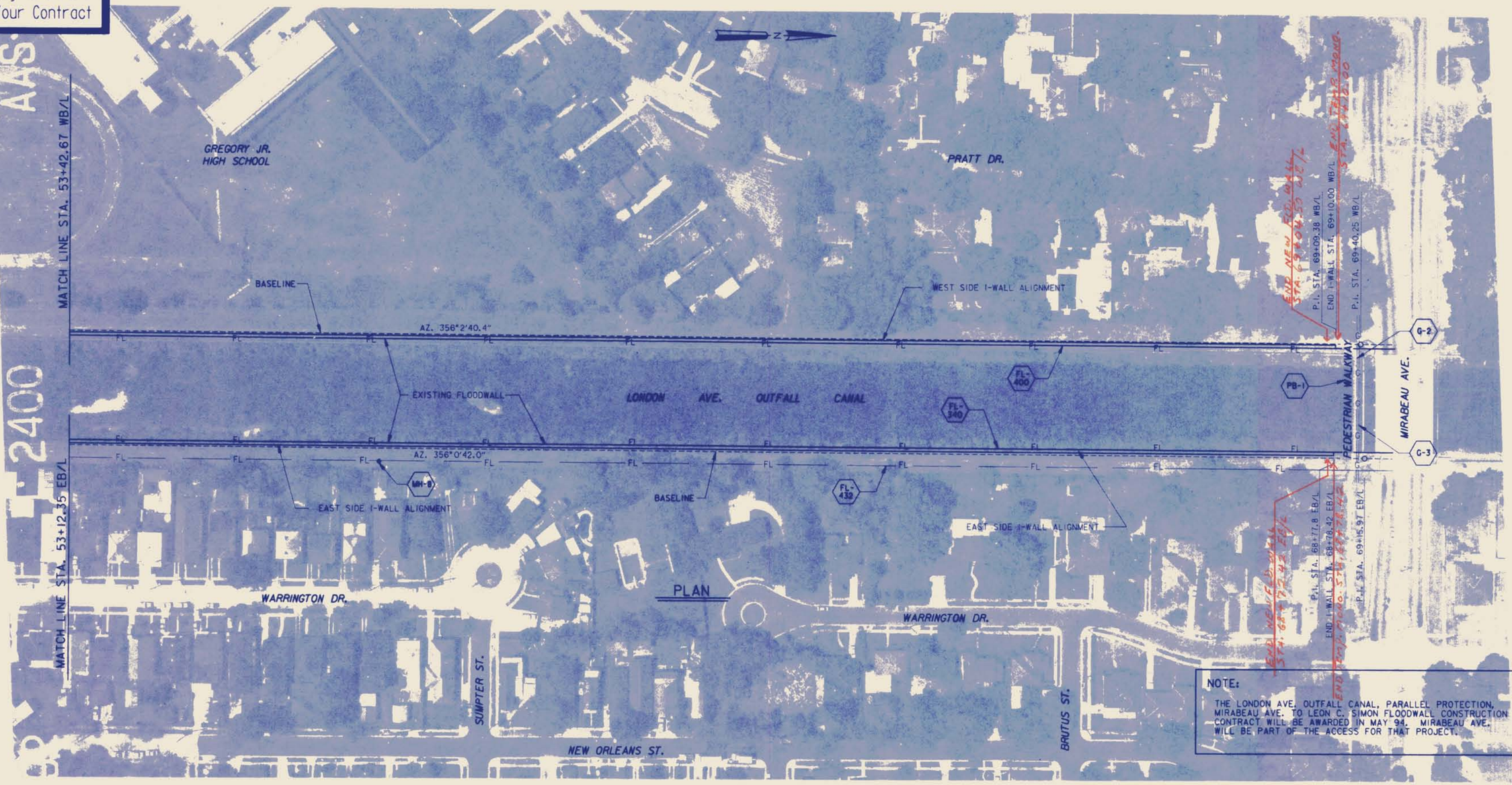
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PLAN

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 14 JULY 93
DRAWN BY: P.J.S.			FILE NO. H-4-40145
CHECKED BY: W.O.B.	CADD FILE: 40145D11.DGN		
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 11 OF 58

Safety is a Part of Your Contract



NOTE:

THE LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION, MIRABEAU AVE. TO LEON C. SIMON FLOODWALL CONSTRUCTION CONTRACT WILL BE AWARDED IN MAY 94. MIRABEAU AVE. WILL BE PART OF THE ACCESS FOR THAT PROJECT.

SCALE: 1" = 50'

50' 0 50' 100' 150' 200'

△ WALL ALIGNMENT OFFSETS

EB/L	WB/L	OFFSETS
68+77.8	———	4.15'
68+77.8	———	9.00'
68+78.42	———	9.03'
———	69+09.38	1.20'
———	69+09.38	6.17'
———	69+10.0	6.17'

NOTE:

POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

EXISTING FACILITIES

ITEM	DESCRIPTION	STA. WEST	STA. EAST	OWNER	DISPOSITION
MH-8	S&WB POWER MANHOLE	———	56+95.00	S&WB	NA
PB-1	PEDESTRIAN BRIDGE	69+30.00	68+90.00	UNKNOWN	RMBGC
G-2	10" GAS MAIN	69+36.00	68+98.00	N.O.P.S.I.	NA
G-3	6" GAS MAIN	69+38.00	69+00.00	N.O.P.S.I.	NA
FL-432	PRIMARY 25 CYCLE POWER CABLE	———	FROM 53+12.35 TO 69+16.68	S&WB	NA
FL-340	PRIMARY 25 CYCLE POWER CABLE	———	FROM 53+12.35 TO 69+16.68	S&WB	RBGC
FL-400	PRIMARY 25 CYCLE POWER CABLE	FROM 53+42.67 TO 69+40.41	———	S&WB	RBGC

NOTES:

1. SEE DWG. 8 FOR LEGEND.
2. CONCRETE STEPS LEADING TO PB-1 TO BE REMOVED.
3. SEE DWGS. 48 AND 49 FOR ELECTRIC FEEDER LINE WORK.

SYMBOL	DESCRIPTION	DATE	APPROVED
△	REVISED OFFSETS; AMEND. NO. 1	10-6-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

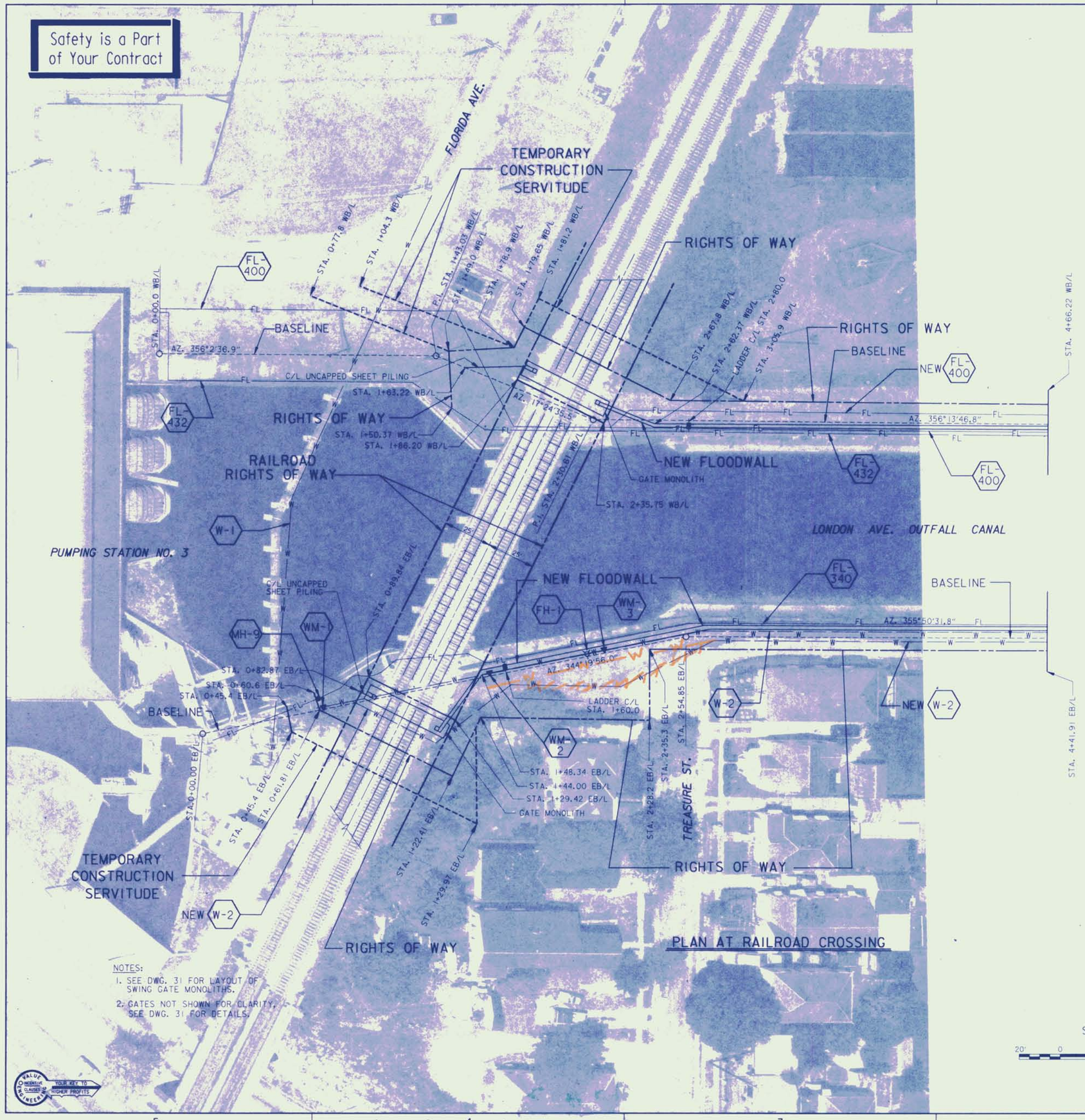
PLAN

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 600	PLOT DATE: 9 AUGUST 93
DRAWN BY: P.J.S.	CADD FILE: 401450I2.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.			
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 12 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

C·A·D

Safety is a Part of Your Contract



NOTES:
1. SEE DWG. 31 FOR LAYOUT OF SWING GATE MONOLITHS.
2. GATES NOT SHOWN FOR CLARITY, SEE DWG. 31 FOR DETAILS.

SCALE: 1" = 20'

20' 0 20' 40' 60' 80'

TEMPORARY CONSTRUCTION SERVITUDE

WEST SIDE		EAST SIDE	
STATION	DISTANCE MEASURED FROM B/L	STATION	DISTANCE MEASURED FROM B/L
1+04.3	-30.5	0+45.4	5.2'
0+77.8	-30.5	0+45.4	-8.2'
1+49.0	-4.7'	1+29.97	-73.5'
1+78.9	-10.3'	1+44.0	-20.0'
1+81.2	-44.6'		
3+05.9	-9.7'		

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

RIGHTS OF WAY

WEST SIDE		EAST SIDE	
STATION	DISTANCE MEASURED FROM B/L	STATION	DISTANCE MEASURED FROM B/L
1+49.00	-4.7'	0+60.6	9.5'
1+50.37	-23.9'	0+61.81	0.0'
1+78.9	-18.9'	0+89.84	11.79'
1+79.65	-30.73'	1+22.41	-39.3'
1+86.20	-3.70'	1+29.42	-18.76'
2+35.75	2.93'	1+44.0	-20.3'
2+67.8	-10.2'	2+28.2	-38.5'
4+66.22	-10.2'	2+35.3	-2.6'
		4+41.91	-6.5'

NOTE:
POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

EXISTING FACILITIES

ITEM	DESCRIPTION	STA. WEST	STA. EAST	OWNER	DISPOSITION
WM-1	WATER METER	———	0+64.0	S&WB	NA
W-1	S&WB 48" WATER MAIN	1+03.00	0+38.00	S&WB	NA
*W-2	WATER LINE	———	FROM 0+64.0 TO 4+49.91	S&WB	APBGC
WM-2	WATER METER	———	1+51.58	S&WB	RBGC
FH-1	FIRE HYDRANT	———	2+08.00	S&WB	RBGC
WM-3	WATER METER	———	2+12.00	S&WB	RBGC
**FL-340	PRIMARY 25 CYCLE POWER CABLE		FROM 0+00.00 TO 4+41.91	S&WB	RBGC
***FL-400	PRIMARY 25 CYCLE POWER CABLE	FROM 0+00.00 TO 4+66.22	———	S&WB	RBGC
FL-432	PRIMARY 25 CYCLE POWER CABLE	FROM 0+00.00 TO 4+66.22	———	S&WB	NA
MH-9	POWER MANHOLE		0+61.81	S&WB	NA

NOTE: SEE DWG 8 FOR LEGEND.
*NOTE: ABANDON STA. 0+64.0 TO 4+41.91 EB/L
REPLACE STA. 0+64.0 TO 4+41.91 EB/L
**NOTE: REMOVE AND RELOCATE STA. 1+20.0 TO 4+41.91 EB/L
***NOTE: REMOVE AND REPLACE STA. 2+40.0 TO 21+00.00 WB/L

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

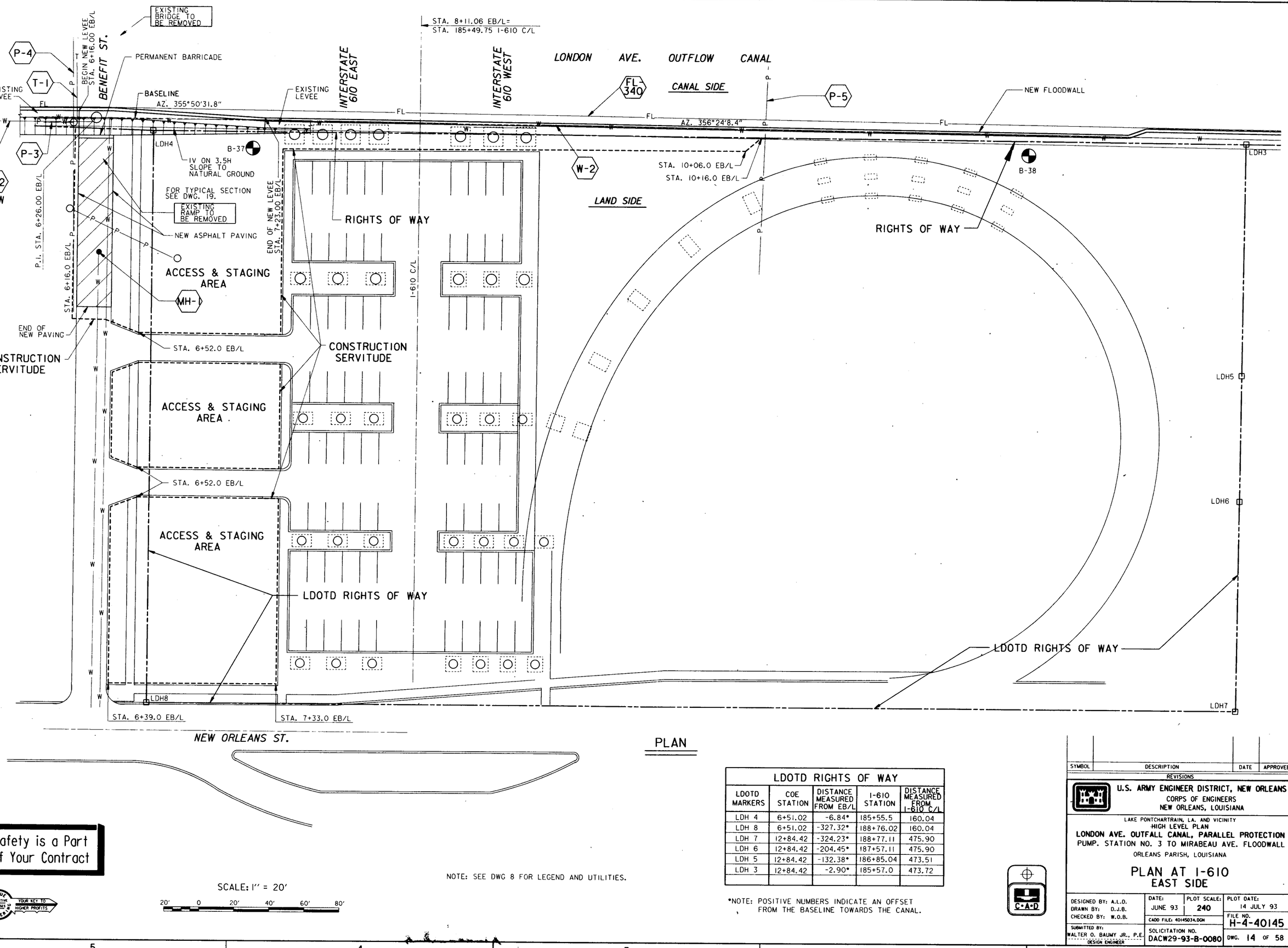
LAKE PONTCHARTRAIN, LA AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

GATE MONOLITHS AT RAILROAD CROSSING

C·A·D

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 240	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145d30.dgn		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 13 OF 58

VALUE ENGINEERING INCENTIVE CLAUSE — YOUR KEY TO HIGHER PROFITS



PLAN

LDOTD RIGHTS OF WAY				
LDOTD MARKERS	COE STATION	DISTANCE MEASURED FROM EB/L	I-610 STATION	DISTANCE MEASURED FROM I-610 C/L
LDH 4	6+51.02	-6.84*	185+55.5	160.04
LDH 8	6+51.02	-327.32*	188+76.02	160.04
LDH 7	12+84.42	-324.23*	188+77.11	475.90
LDH 6	12+84.42	-204.45*	187+57.11	475.90
LDH 5	12+84.42	-132.38*	186+85.04	473.51
LDH 3	12+84.42	-2.90*	185+57.0	473.72

*NOTE: POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

NOTE: SEE DWG 8 FOR LEGEND AND UTILITIES.

SCALE: 1" = 20'

20' 0 20' 40' 60' 80'

Safety is a Part of Your Contract

ALLIED ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

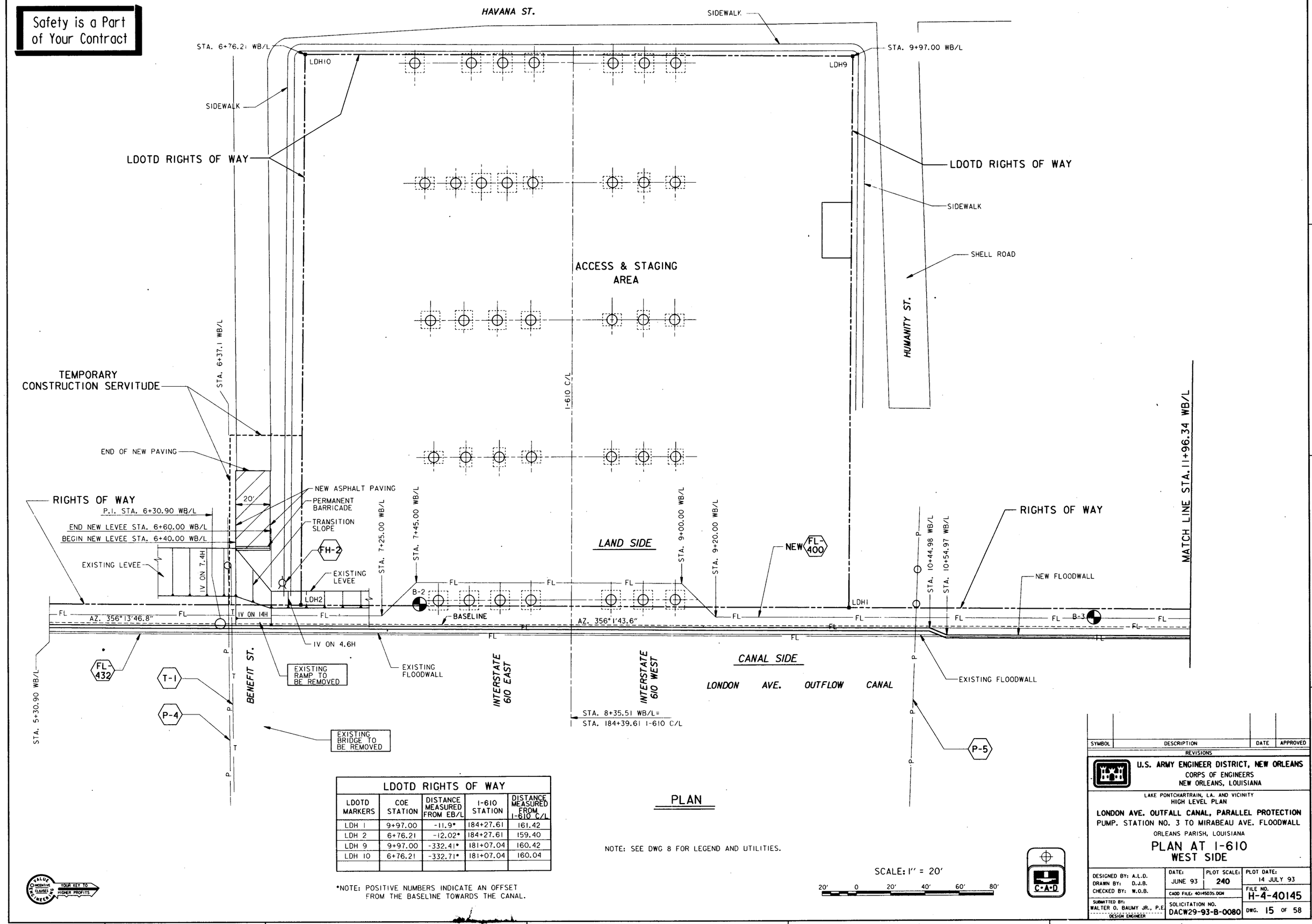
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PLAN AT I-610
EAST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 240	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145034.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 14 OF 58

Safety is a Part of Your Contract



LDOTD RIGHTS OF WAY				
LDOTD MARKERS	COE STATION	DISTANCE MEASURED FROM EB/L	I-610 STATION	DISTANCE MEASURED FROM I-610 C/L
LDH 1	9+97.00	-11.9*	184+27.61	161.42
LDH 2	6+76.21	-12.02*	184+27.61	159.40
LDH 9	9+97.00	-332.41*	181+07.04	160.42
LDH 10	6+76.21	-332.71*	181+07.04	160.04

*NOTE: POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

PLAN

NOTE: SEE DWG 8 FOR LEGEND AND UTILITIES.

SCALE: 1" = 20'

20' 0 20' 40' 60' 80'

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

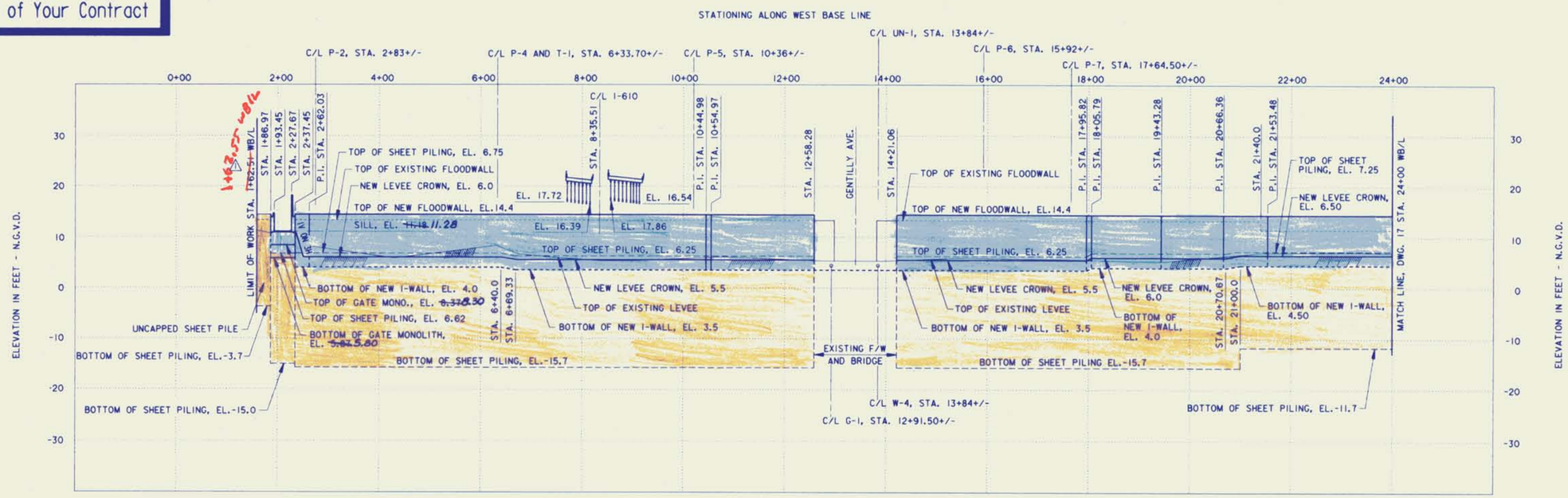
PLAN AT I-610 WEST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 240	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145035.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 15 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

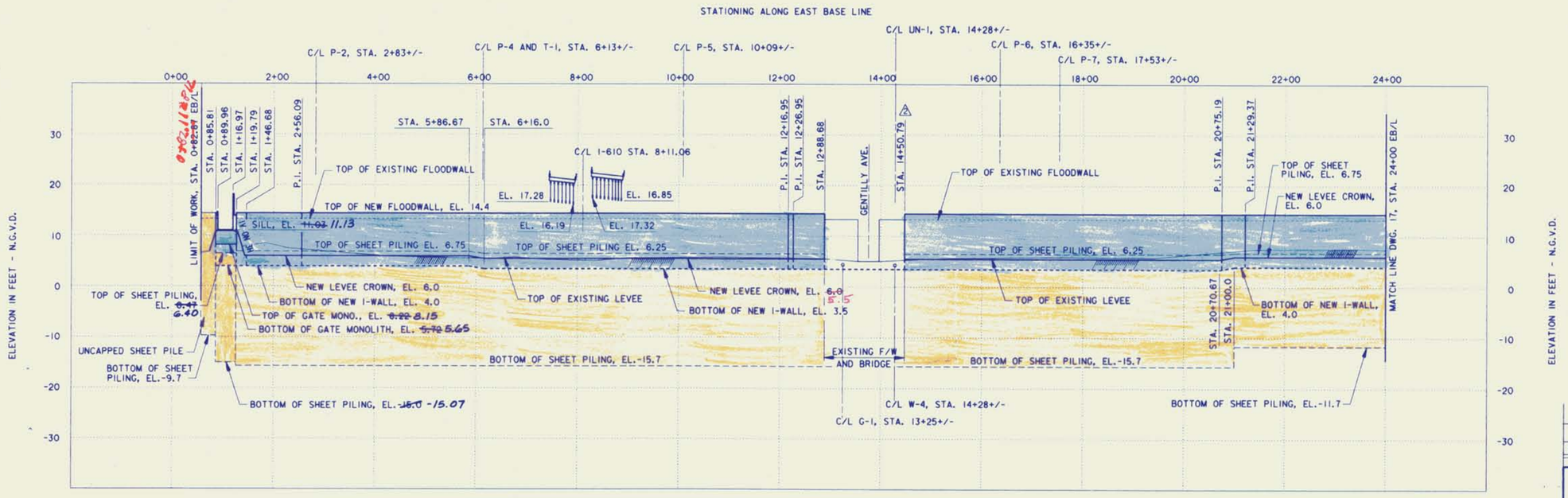
C·A·D

Safety is a Part of Your Contract



WEST PROFILE - CANAL SIDE

SCALE: HOR. 1" = 100'
VERT. 1" = 10'



EAST PROFILE - LAND SIDE

SCALE: HOR. 1" = 100'
VERT. 1" = 10'

NOTES:

1. UTILITIES PARALLEL TO FLOODWALL NOT SHOWN.
2. SHEET PILING JACKED AND SPLICED BETWEEN 7+19 EB/L TO 8+90 EB/L AND 7+40 WB/L TO 9+13 WB/L.

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SCALE: 1" = 100'

100' 0 100' 200' 300' 400'

THIS PLAN ACCOMPANIES MODIFICATION P00002 TO CONTRACT NUMBER DACW29-94-C-0003

SYMBOL	DESCRIPTION	DATE	APPROVED
2	REVISED STA. IN EAST PROFILE; MOD. #2	1-24-94	A.L.D.
1	REVISED STA. IN WEST PROFILE; AMEND. NO. 1	10-8-93	A.L.D.

REVISIONS

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

LAKE PONCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PROFILES

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 1200	PLOT DATE: JAN. 24, 1994
DRAWN BY: P.J.S.			
CHECKED BY: W.O.B.	CADD FILE: 40145P20.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 16 OF 58

26 JAN 95

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

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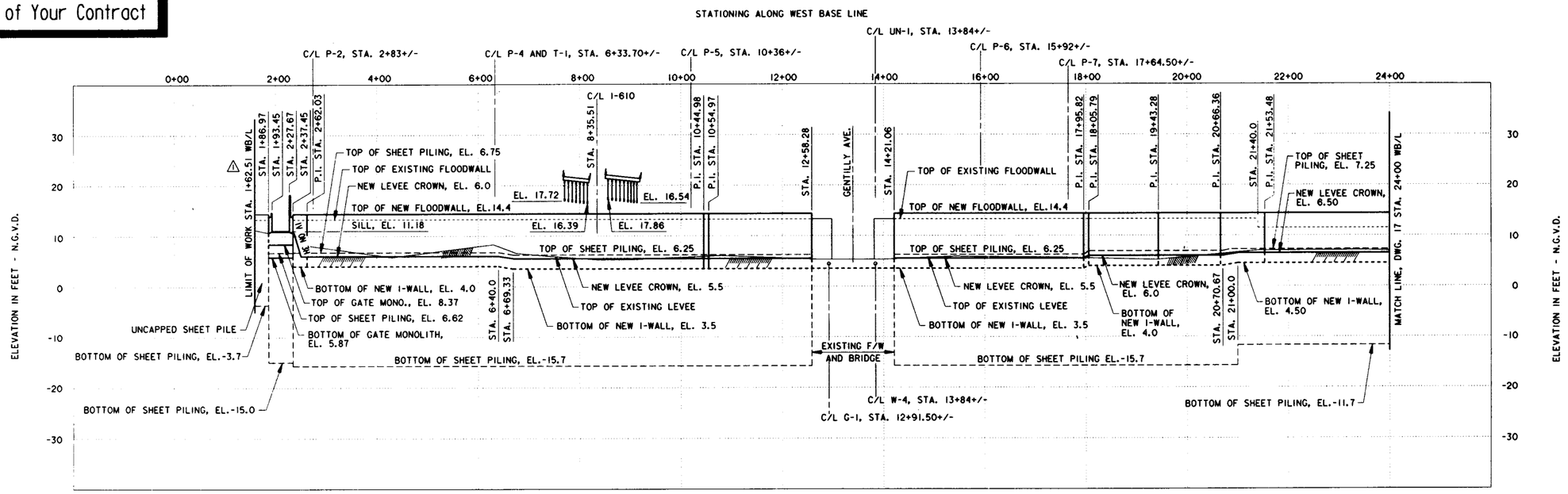
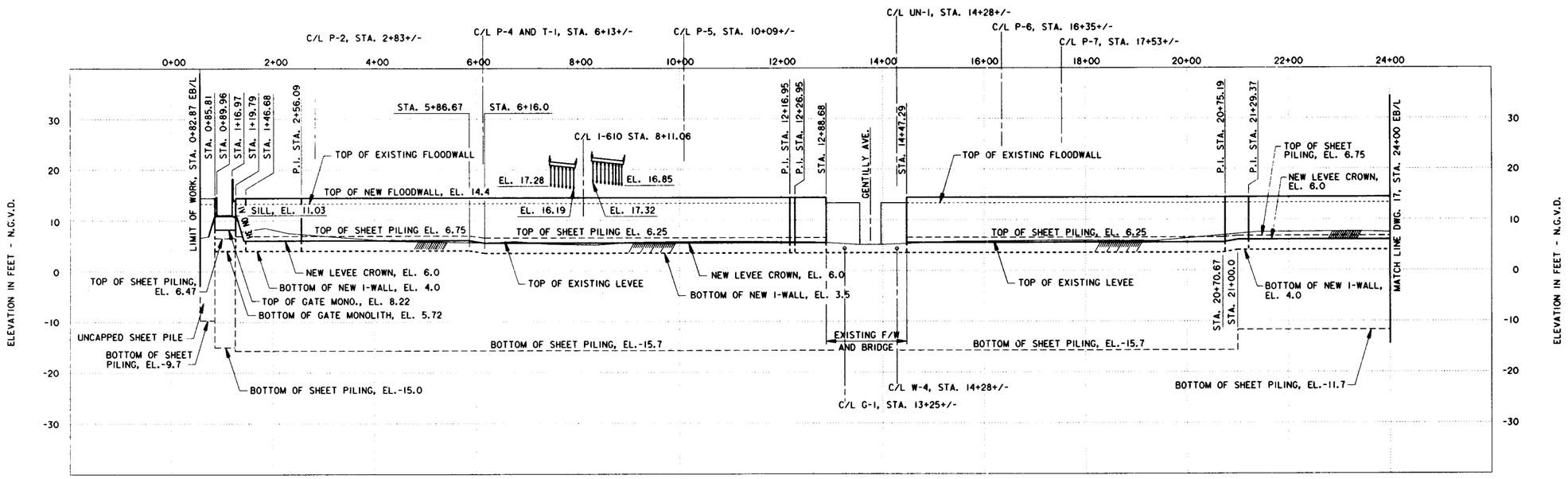
Safety is a Part of Your Contract



WEST PROFILE - CANAL SIDE

SCALE: HOR. 1" = 100'
VERT. 1" = 10'



EAST PROFILE - LAND SIDE

SCALE: HOR. 1" = 100'
VERT. 1" = 10'

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SCALE: 1" = 100'

100' 0 100' 200' 300' 400'

NOTES:

1. UTILITIES PARALLEL TO FLOODWALL NOT SHOWN.
2. SHEET PILING JACKED AND SPLICED BETWEEN 7+19 EB/L TO 8+90 EB/L AND 7+40 WB/L TO 9+13 WB/L.

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	REVISED STA. IN WEST PROFILE; AMEND. NO. 1	10-6-93	A.L.D.

REVISIONS

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

LAKE PONCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PROFILES

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 1200	PLOT DATE: 22 JULY 93
DRAWN BY: P.J.S.	CADD FILE: 40145P20.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.			
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 16 OF 58

VALUE ENGINEERING INCENTIVE CLAUSE 15 — YOUR KEY TO HIGHER PROFITS

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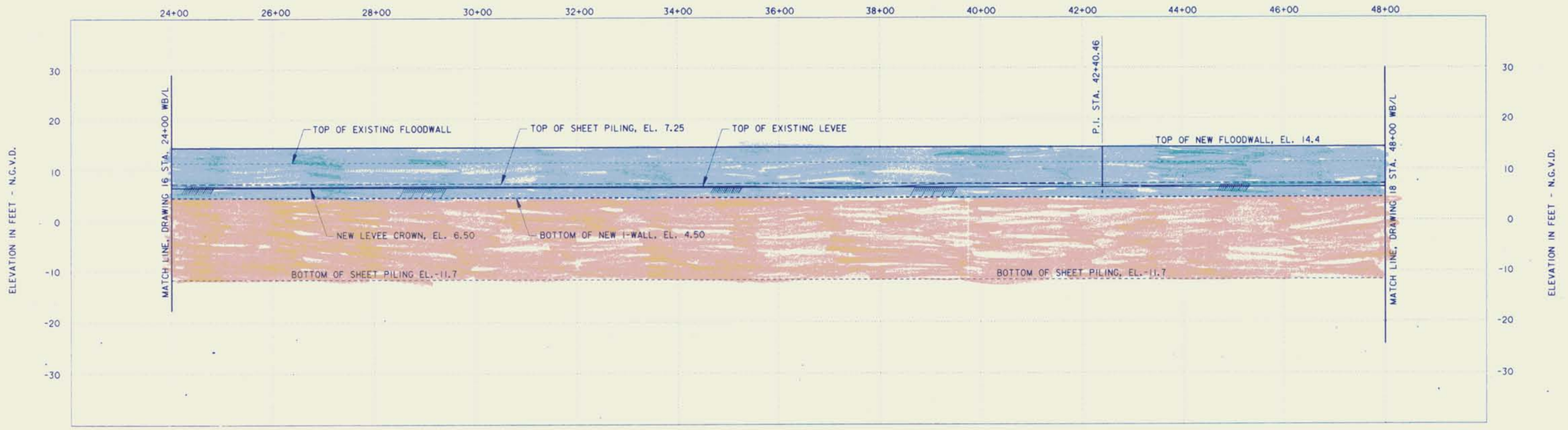
Safety is a Part of Your Contract

STATIONING ALONG WEST BASE LINE



WEST PROFILE - CANAL SIDE

SCALE: HOR. 1" = 100'
VERT. 1" = 10'

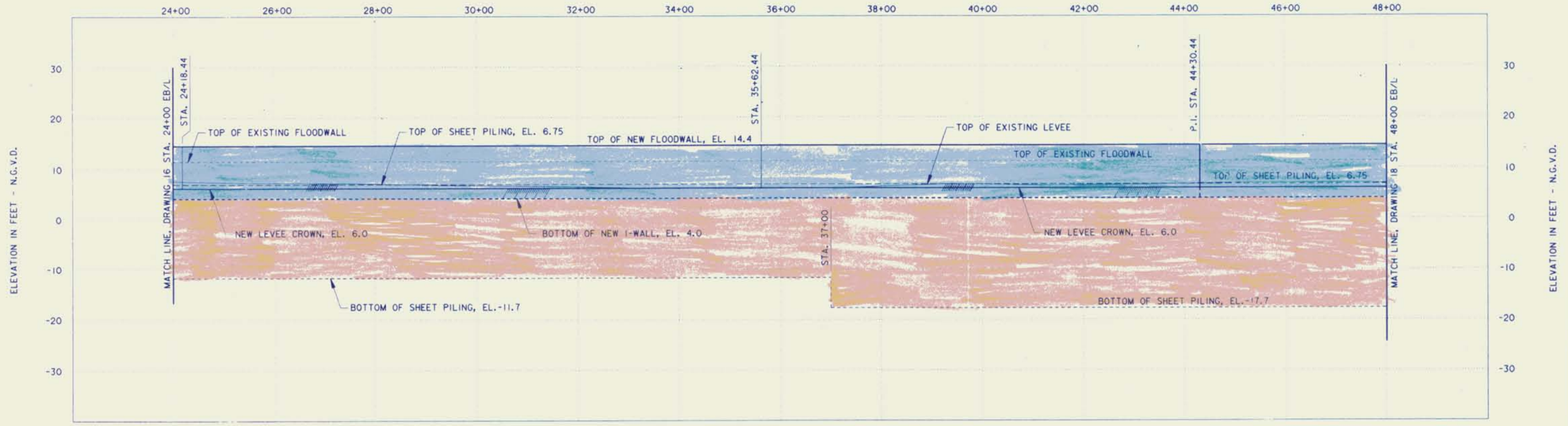
SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SCALE: 1" = 100'

100' 0 100' 200' 300' 400'

STATIONING ALONG EAST BASE LINE



EAST PROFILE - LAND SIDE

SCALE: HOR. 1" = 100'
VERT. 1" = 10'

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

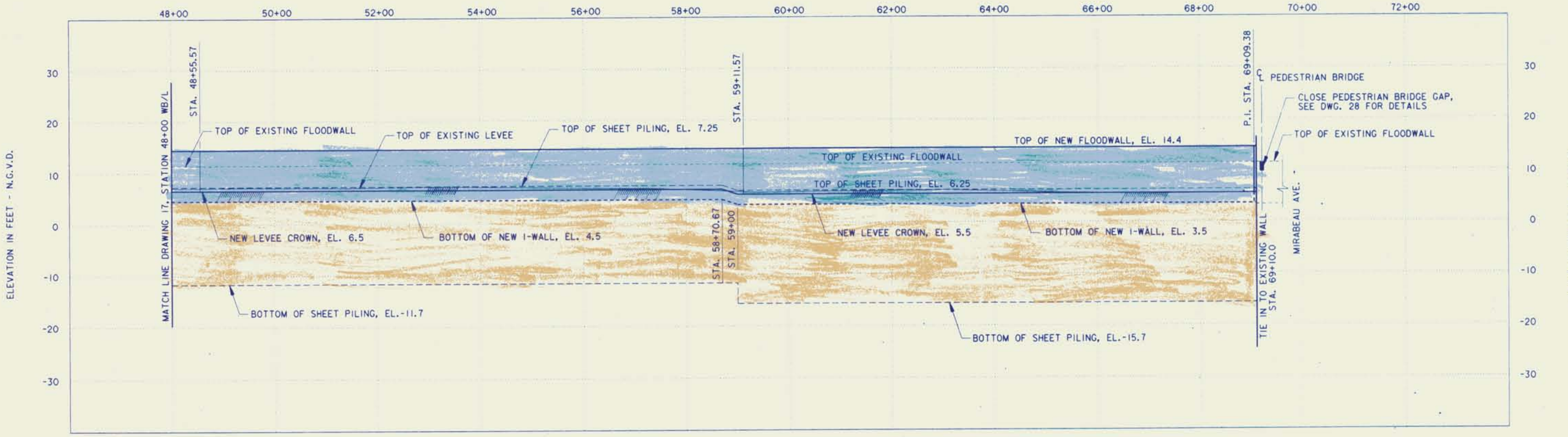
LAKE PONCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PROFILES

DESIGNED BY: A.L.D. DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1200	PLOT DATE: 14 JULY 93
	CADD FILE: 40145P21.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 17 OF 58

Safety is a Part of Your Contract

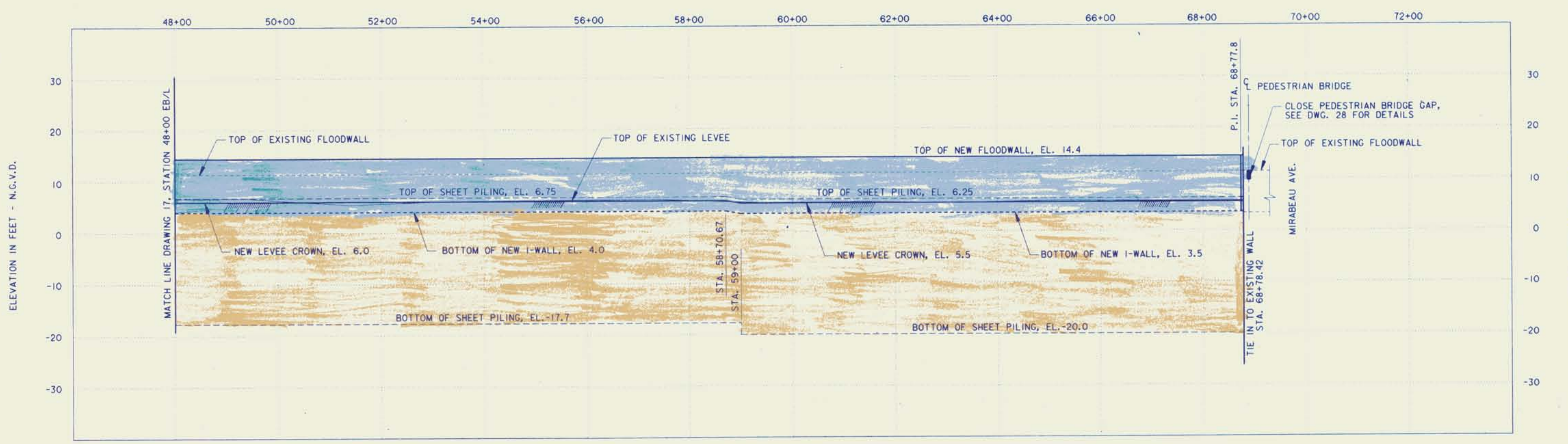
STATIONING ALONG WEST BASE LINE



WEST PROFILE - CANAL SIDE

SCALE: HOR. 1" = 100' VERT. 1" = 10'

STATIONING ALONG EAST BASE LINE



EAST PROFILE - LAND SIDE

SCALE: HOR. 1" = 100' VERT. 1" = 10'

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SCALE: 1" = 100'

100' 0 100' 200' 300' 400'

NOTE:
SEE DWG. 28 FOR TIE-IN DETAILS.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

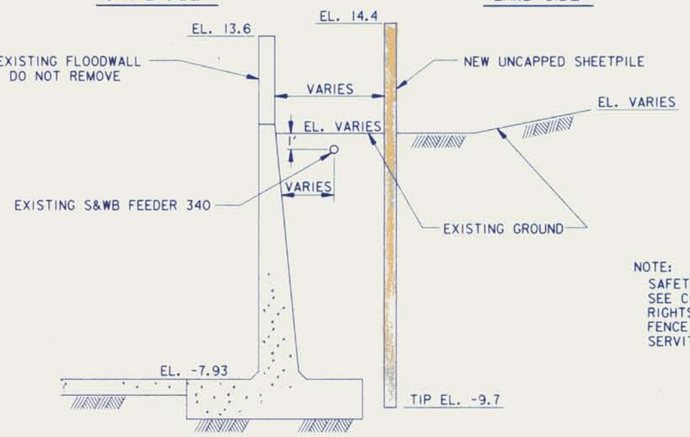
PROFILES

DESIGNED BY: A.L.D. DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1200	PLOT DATE: 22 JULY 93
	CADD FILE: 40145P22.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 18 OF 58

C•A•D

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

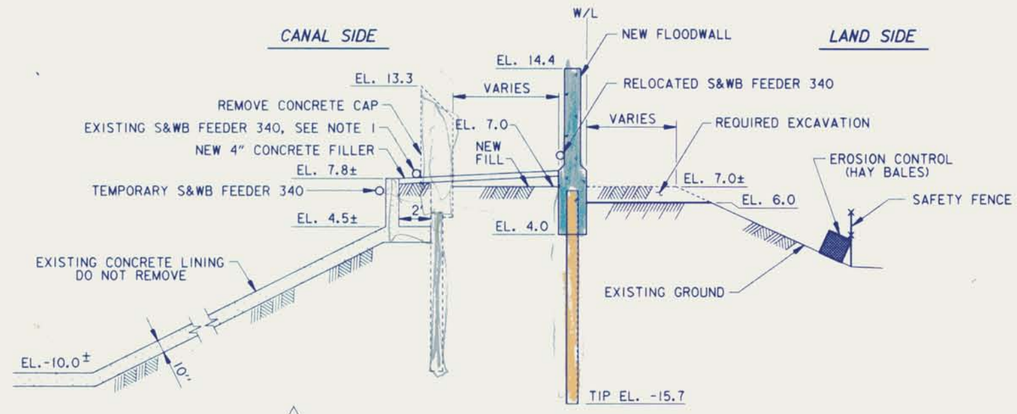
Safety is a Part of Your Contract



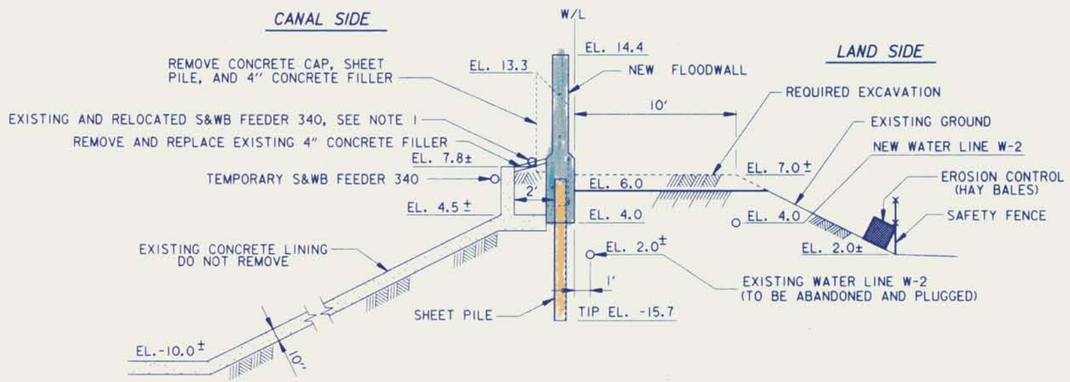
STA. 0+82.87 TO STA. 0+85.81

NOTE:
SEE PROFILES FOR TRANSITIONS.

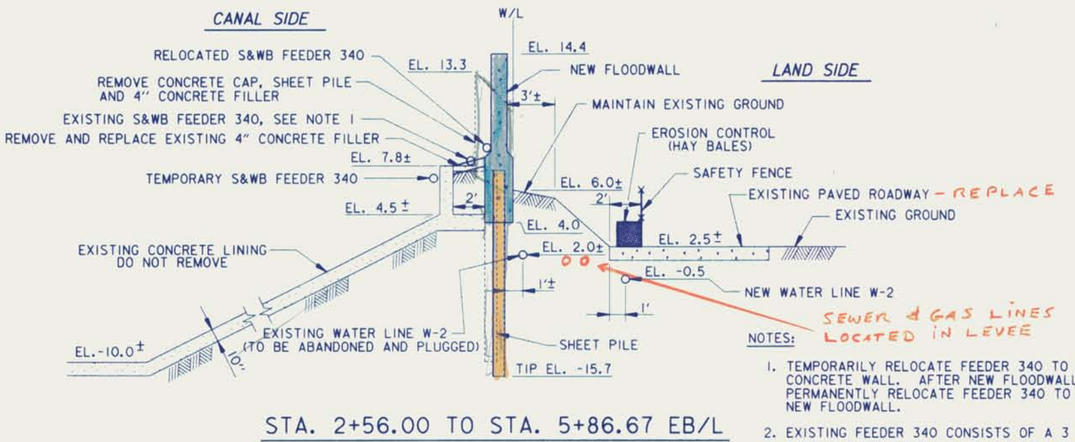
NOTE:
SAFETY FENCE AND EROSION CONTROL NOT SHOWN. SEE CONSTRUCTION SERVITUDE AND RIGHTS OF WAY DWGS. 3 THRU 7. FENCE FOLLOWS LIMITS OF CONSTRUCTION SERVITUTE AND RIGHTS OF WAY.



STA. 1+19.79 TO STA. 1+46.18 EB/L

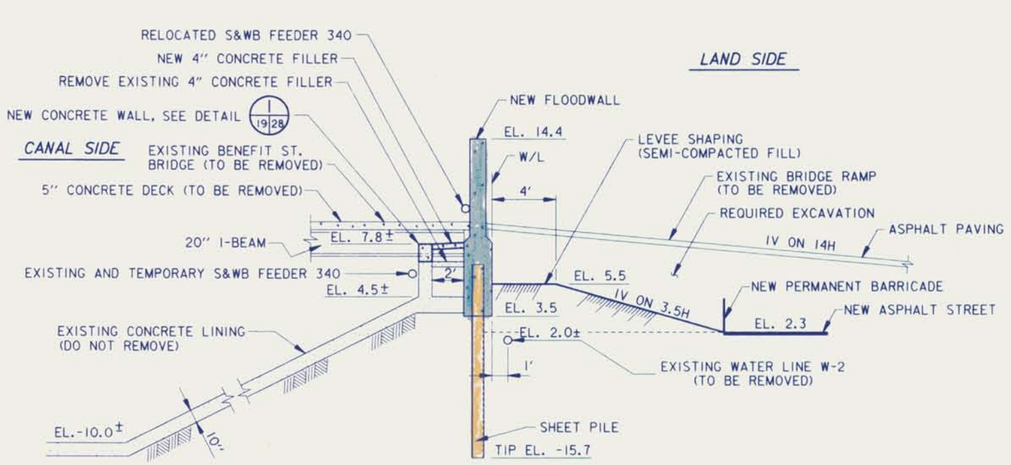


STA. 1+46.18 TO STA. 2+56.00 EB/L



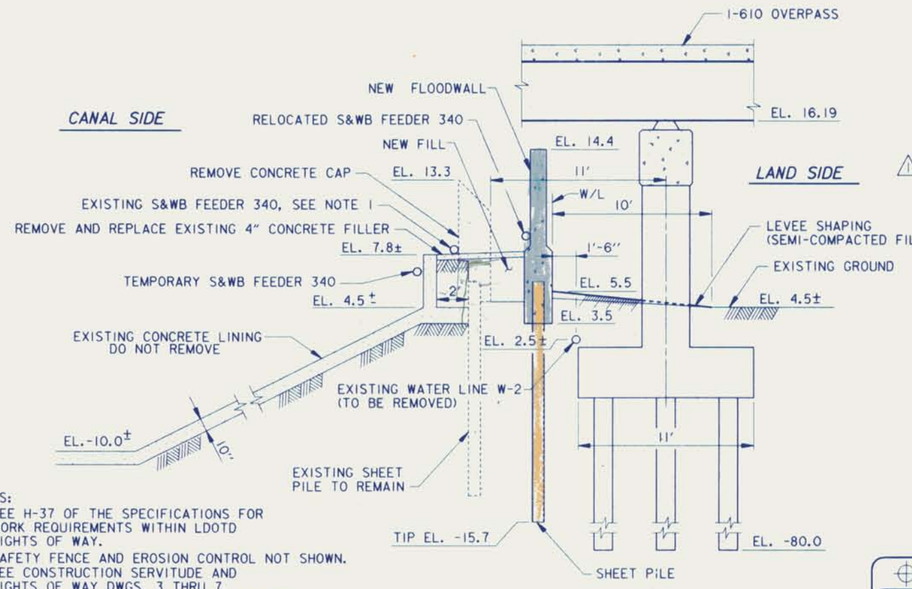
STA. 2+56.00 TO STA. 5+86.67 EB/L

NOTES:
1. TEMPORARILY RELOCATE FEEDER 340 TO SIDE OF EXISTING CONCRETE WALL. AFTER NEW FLOODWALL IS COMPLETE, PERMANENTLY RELOCATE FEEDER 340 TO SIDE OF NEW FLOODWALL.
2. EXISTING FEEDER 340 CONSISTS OF A 3 CONDUCTOR STEEL ARMORED SUBMARINE 400 MCM COPPER, RUBBER INSULATED, LEAD COVERED, POWER CABLE, RATED 15KV. THE CABLE IS DIRECT BURIED AND IS CONCRETE ENCAPSULATED AT THE RAILROAD AND STREET CROSSINGS.
3. FOR WATER LINE RELOCATION DETAILS, SEE DWG. 47.
4. FOR PROFILES, SEE DWGS. 16 THRU 18.
5. FOR FEEDER LINE DETAILS, SEE DWG.48
6. A SILT FENCE MAY BE SUBSTITUTED FOR THE HAY BALES.
7. RIGHTS OF WAY ARE NOT SHOWN FOR CLARITY.
8. PROVIDE A UNIFORM TRANSITION IN LEVEE DESIGN SECTIONS BETWEEN 5+86.67 AND 6+16.00 AND, 6+36.00 AND 7+23.00.
9. SAFETY FENCE FOLLOWS LIMITS OF CONSTRUCTION SERVITUDE AND RIGHTS OF WAY. SEE CONSTRUCTION SERVITUDE AND RIGHTS OF WAY DWGS. 3 THRU 7 OF 58.



STA. 6+16.00 TO STA. 6+36.00 EB/L

NOTES:
1. BRIDGE PIERS NOT SHOWN FOR CLARITY.
2. SAFETY FENCE AND EROSION CONTROL NOT SHOWN. SEE CONSTRUCTION SERVITUDE AND RIGHTS OF WAY DWGS. 3 THRU 7. FENCE FOLLOWS LIMITS OF CONSTRUCTION SERVITUTE AND RIGHTS OF WAY.



STA. 7+23.00 TO STA. 12+16.95 EB/L

NOTES:
1. SEE H-37 OF THE SPECIFICATIONS FOR WORK REQUIREMENTS WITHIN LDOTD RIGHTS OF WAY.
2. SAFETY FENCE AND EROSION CONTROL NOT SHOWN. SEE CONSTRUCTION SERVITUDE AND RIGHTS OF WAY DWGS. 3 THRU 7. FENCE FOLLOWS LIMITS OF CONSTRUCTION SERVITUTE AND RIGHTS OF WAY.

SCALE: 1/4" = 1'- 0"

12" 0 5' 10' 15' 20'

SYMBOL	DESCRIPTION	DATE	APPROVED
1	REVISED SECTION STA. ADDED STAS. TO NOTE 8 AND ADDED NOTE 9; AMEND. NO. 1	10-6-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

TYPICAL SECTIONS EAST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 48	PLOT DATE: 20 JULY 93
DRAWN BY: D.J.B.	CADD FILE: 40145022.C'N		FILE NO. H-4-40145
CHECKED BY: W.O.B.	SOLICITATION NO. DACW29-93-B-0080		DWG. 19 OF 58
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER			

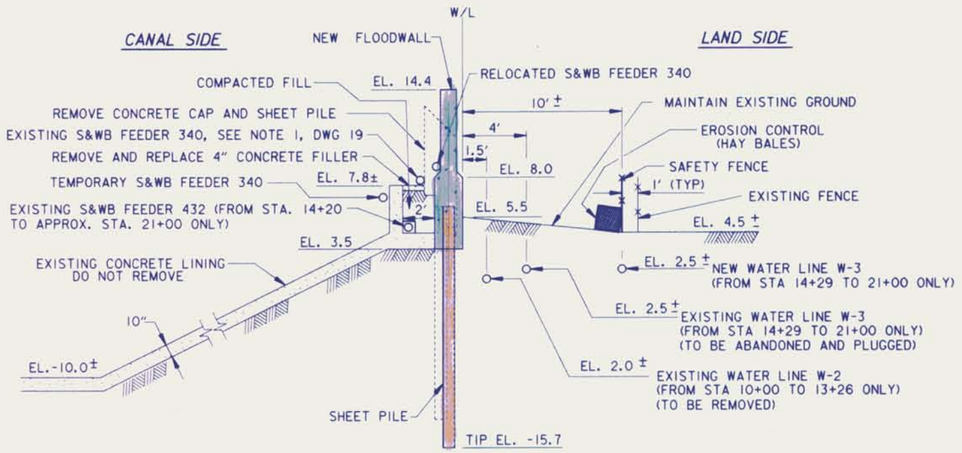
C•A•D

VALUE ENGINEERING INCENTIVE CLAUSES TO YOUR KEY TO HIGHER PROFITS

5 4 3 2 1

Safety is a Part of Your Contract

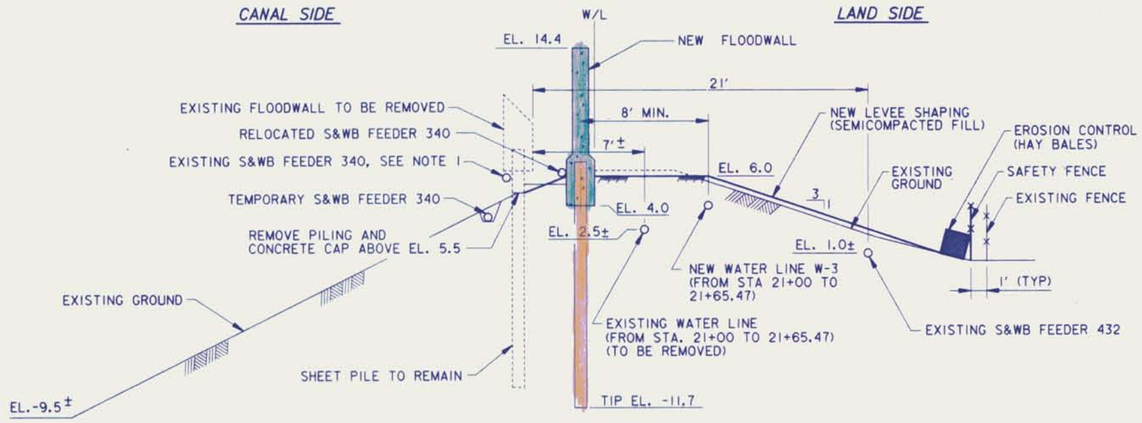
NOTE:
SEE PROFILES FOR TRANSITIONS.



STA. 12+26.95 TO STA. 12+85.18 EB/L

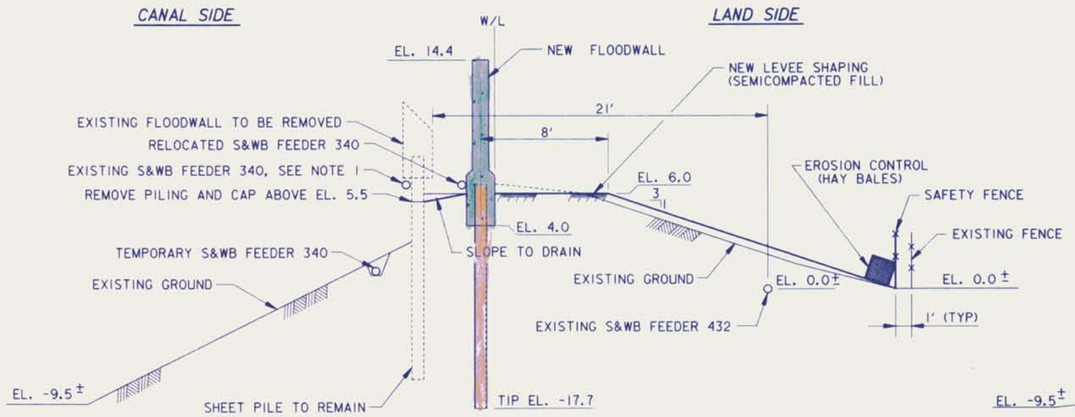
STA. 14+50.79 TO STA. 20+70.67 EB/L

SCALE: 1/4" = 1'-0"



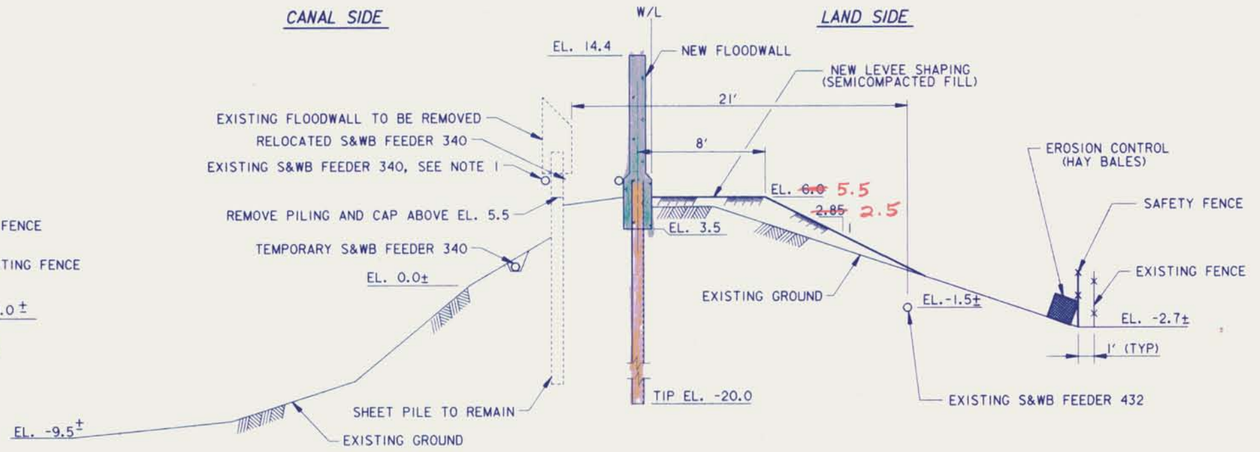
STA. 21+00.0 TO STA. 36+70.67 EB/L

SCALE: 1/4" = 1'-0"



STA. 37+00 TO STA. 58+70.67 EB/L

SCALE: 1/4" = 1'-0"



STA. 59+00.0 TO STA. 68+78.42 EB/L

SCALE: 1/4" = 1'-0"

NOTES:

1. TEMPORARILY RELOCATE FEEDER 340 BY DIGGING A TRENCH, COVERING WITH STEEL PLATE AND LEVEE MATERIAL. AFTER THE CONCRETE CAP IS REMOVED FROM THE SHEET PILE, FEEDER 340 SHALL BE REMOVED FROM THE TEMPORARY TRENCH AND ATTACHED TO THE NEW FLOODWALL.
2. SEE NOTES 2 THRU 7 AND 9, DWG. 19.
3. PROVIDE A UNIFORM TRANSITION IN LEVEE DESIGN SECTIONS BETWEEN STAS. 12+16.95 AND 12+26.95; STAS. 20+70.67 AND 21+00; STAS. 36+70.67 AND 37+00 (CANAL SIDE); STAS. 58+70.67 AND 59+00 EB/L.

SCALE: 1/4" = 1'- 0"

12" 0 5' 10' 15' 20'

SYMBOL	DESCRIPTION	DATE	APPROVED
1	REVISED NOTE 2; AMEND. NO. 1	10-6-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

TYPICAL SECTIONS
EAST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 48	PLOT DATE: 14 JULY 93
DRAWN BY: P.J.S.			
CHECKED BY: W.O.B.	CADD FILE: 40145503.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 20 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

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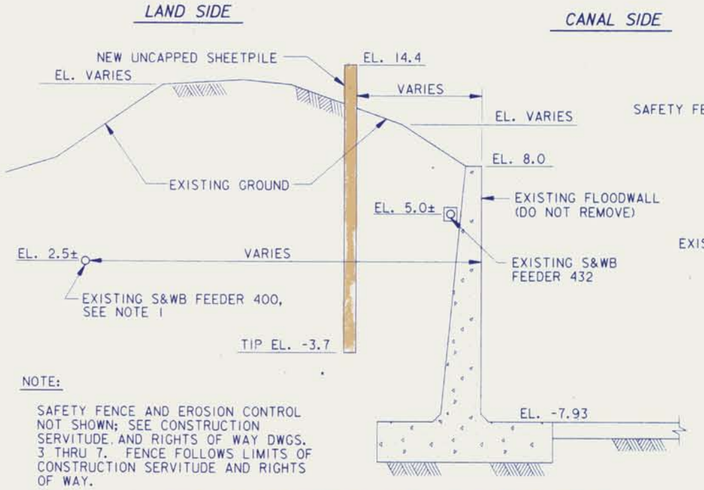
NOTE:
SEE PROFILES FOR TRANSITIONS.

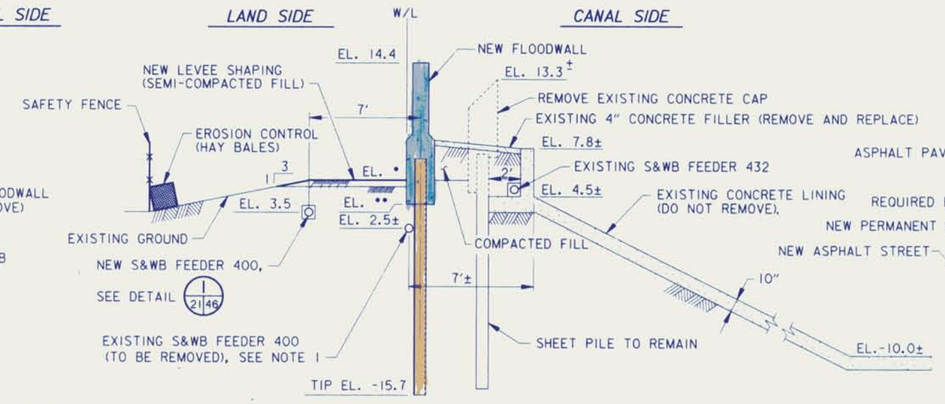


NOTE:

SAFETY FENCE AND EROSION CONTROL NOT SHOWN; SEE CONSTRUCTION SERVITUDE AND RIGHTS OF WAY DWGS. 3 THRU 7. FENCE FOLLOWS LIMITS OF CONSTRUCTION SERVITUDE AND RIGHTS OF WAY.

STA. 1+62.51 TO STA. 1+86.97 WB/L

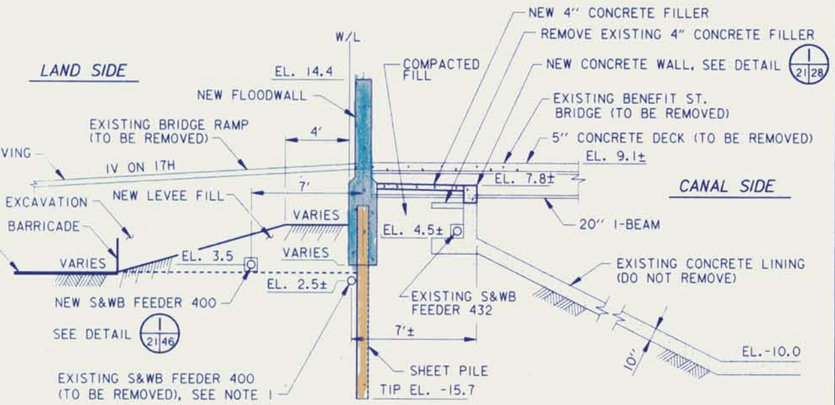
SCALE: 1/4" = 1'-0"



STA. 2+37.45 TO STA. 6+40.0 WB/L
STA. 6+69.33 TO STA. 7+40.0 WB/L
STA. 9+13.0 TO STA. 10+44.98 WB/L

SCALE: 1/4" = 1'-0"

- • EL. 6.0 STA. 2+37.0 TO STA. 6+40.0
  EL. 5.5 STA. 6+69.33 TO STA. 7+40.0
  STA. 9+13.0 TO STA. 10+45.0
- •• EL. 4.0 STA. 2+37.0 TO STA. 6+40.0
  EL. 3.5 STA. 6+69.33 TO STA. 7+40.0
  STA. 9+13.0 TO STA. 10+45.0



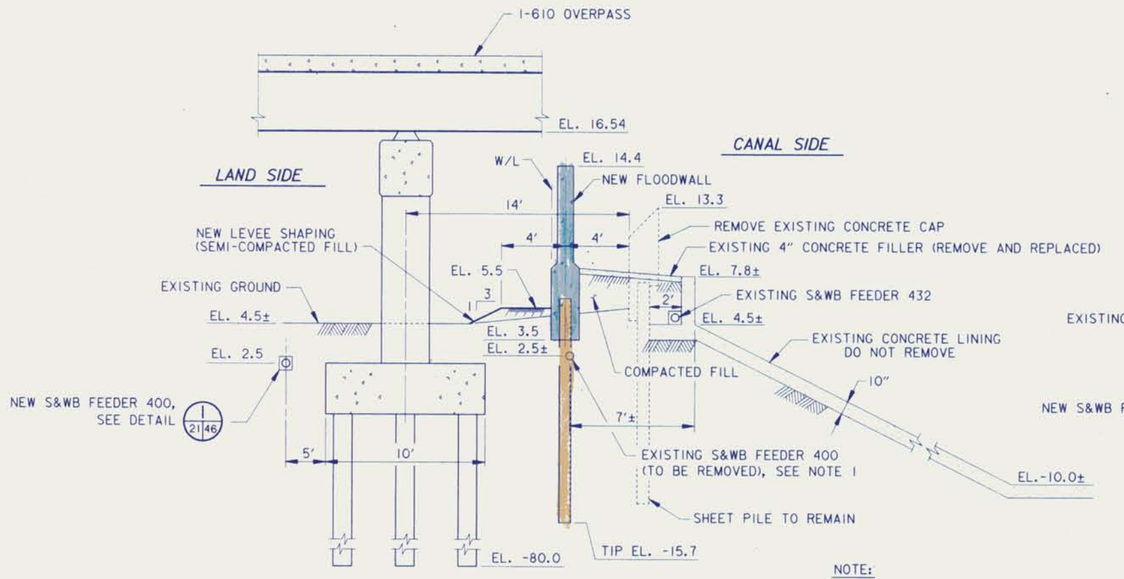
STA. 6+40.0 TO STA. 6+69.33 WB/L

SCALE: 1/4" = 1'-0"

NOTE:

BRIDGE PIERS NOT SHOWN FOR CLARITY. SEE PROFILE FOR LEVEE TRANSITION.

SAFETY FENCE AND EROSION CONTROL NOT SHOWN; SEE CONSTRUCTION SERVITUDE AND RIGHTS OF WAY DWGS. 3 THRU 7. FENCE FOLLOWS LIMITS OF CONSTRUCTION SERVITUDE AND RIGHTS OF WAY.



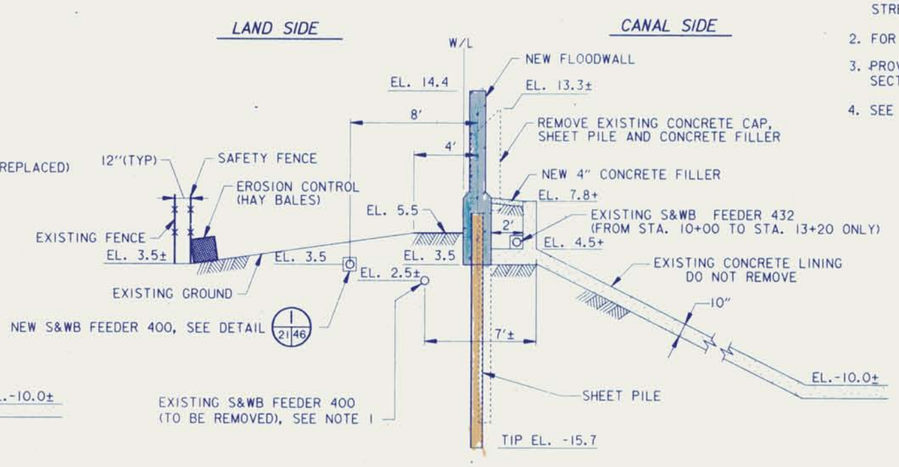
STA. 7+40.0 TO STA. 9+13.0 WB/L

SCALE: 1/4" = 1'-0"

NOTE:

SEE H-37 OF THE SPECIFICATIONS FOR WORK REQUIREMENTS WITHIN LDOTD RIGHTS OF WAY.

SAFETY FENCE AND EROSION CONTROL NOT SHOWN; SEE CONSTRUCTION SERVITUDE AND RIGHTS OF WAY DWGS. 3 THRU 7. FENCE FOLLOWS LIMITS OF CONSTRUCTION SERVITUDE AND RIGHTS OF WAY.



STA. 10+54.97 TO STA. 12+54.78 WB/L

SCALE: 1/4" = 1'-0"

NOTES:

1. EXISTING FEEDER 400 CONSISTS OF A 3 CONDUCTOR STEEL ARMORED SUBMARINE 400 MCM COPPER, RUBBER INSULATED, LEAD COVERED, POWER CABLE, RATED 15KV. THE CABLE IS DIRECT BURIED AND IS CONCRETE ENCAPSULATED AT THE RAILROAD AND STREET CROSSINGS.
2. FOR FEEDER 400 RELOCATION DETAILS, SEE DWG. 49.
3. PROVIDE A UNIFORM TRANSITITON IN LEVEE DESIGN SECTIONS BETWEEN STATIONS 10+44.98 AND 10+54.97 WB/L.
4. SEE NOTES 4,6,7, DWG. 19.

SCALE: 1/4" = 1'- 0"

12" 0 5' 10' 15' 20'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

TYPICAL SECTIONS WEST SIDE

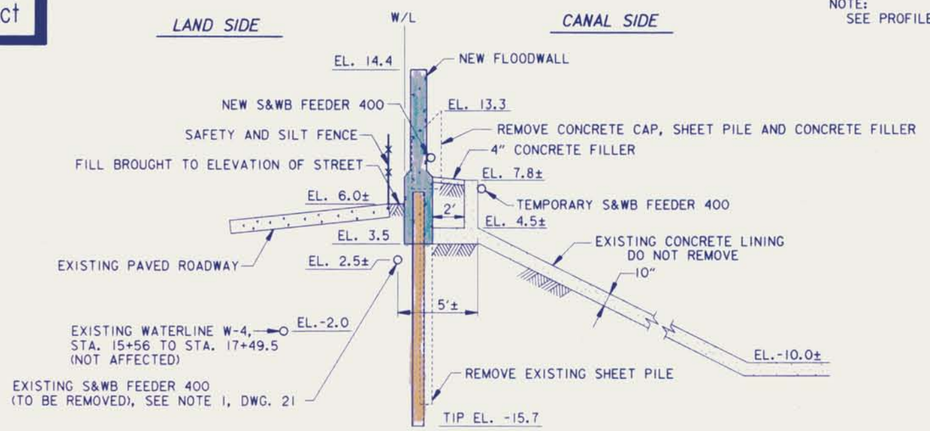
DESIGNED BY: A.L.D. DRAWN BY: D.J.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 48	PLOT DATE: 20 JULY 93
	CADD FILE: 40145023.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 21 OF 58

C-A-D

VALUE ENGINEERING — INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

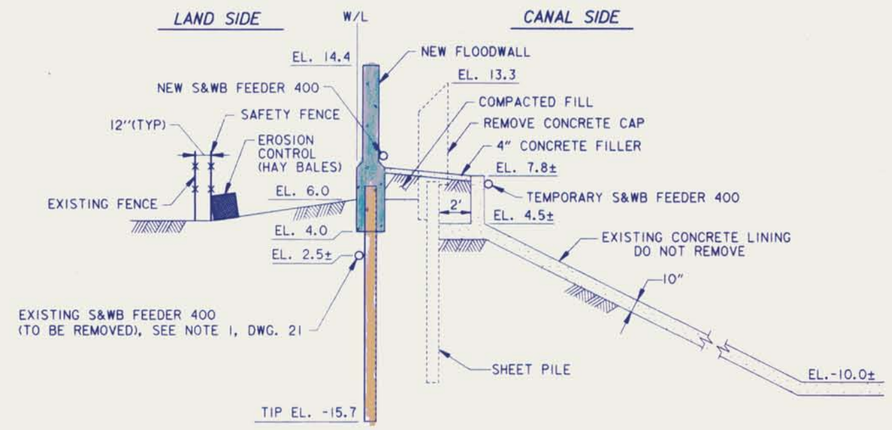
Safety is a Part of Your Contract

NOTE:
SEE PROFILES FOR TRANSITIONS.



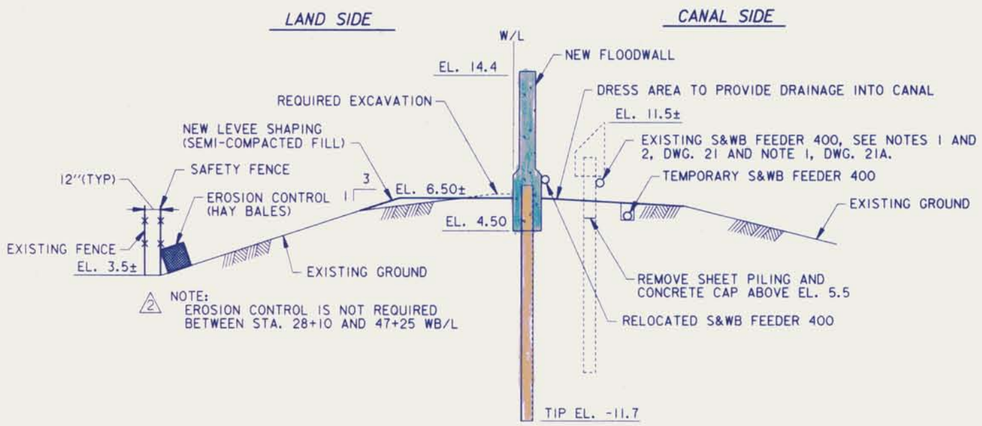
STA. 14+24.56 TO STA. 17+95.82 WB/L

SCALE: 1/4" = 1'-0"



STA. 18+05.79 TO STA. 20+70.67 WB/L

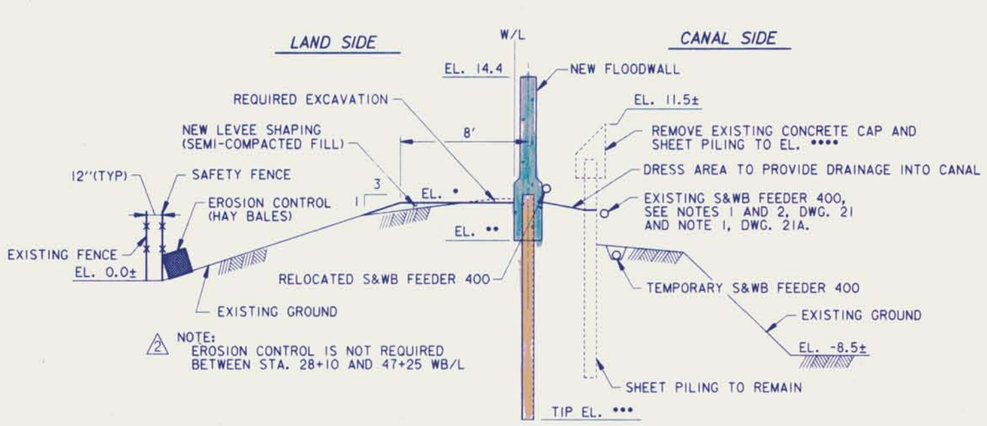
SCALE: 1/4" = 1'-0"



2

STA. 21+00.0 TO STA. 34+40.0 WB/L

SCALE: 1/4" = 1'-0"

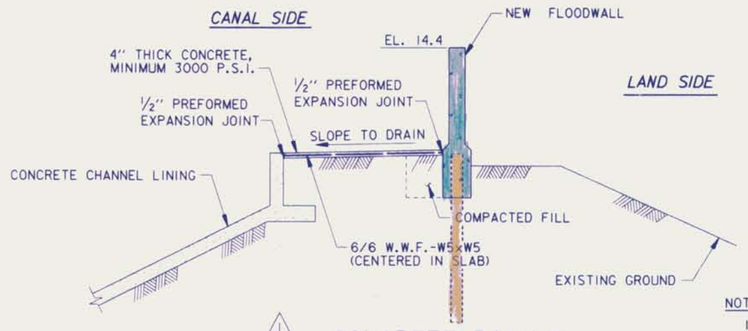


2

STA. 35+00.0 TO STA. 69+05.67 WB/L

SCALE: 1/4" = 1'-0"

- • EL. 6.50± STA. 35+00 TO 58+70.67
  EL. 5.50± STA. 59+00 TO 69+05.67
- •• EL. 4.50 STA. 35+00 TO 58+70.67
  EL. 3.50 STA. 59+00 TO 69+05.67
- ••• EL.-11.7 STA. 35+00 TO 58+70.67
  EL.-15.7 STA. 59+00 TO 69+05.67
- •••• EL. 6.0 STA. 35+00 TO 58+70.67
  EL. 5.0 STA. 59+00 TO 69+05.67



1

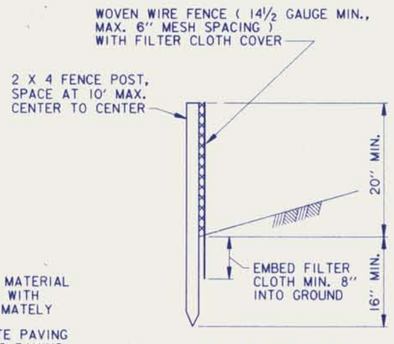
CONCRETE PAVING

STA. 1+25.88 TO STA. 21+00 EB/L
STA. 2+34.93 WB/L TO STA. 21+00 WB/L

SCALE: 1/4" = 1'-0"

NOTES:

1. ONE HALF (1/2) INCH EXPANSION JOINT MATERIAL SHALL ALSO BE PROVIDED TO COINCIDE WITH THE I-WALL MONOLITH JOINTS (APPROXIMATELY
2. STATIONS ARE APPROXIMATE. CONCRETE PAVING SHALL BE PROVIDED WHEREVER EXISTING PAVING IS REMOVED FOR I-WALL CONSTRUCTION.
3. PAVING SHALL BE ENTIRELY REPLACED BETWEEN THE NEW FLOODWALL AND EXISTING CONCRETE CHANNEL LINING WHERE DISTURBED.



SILT FENCE

NOT TO SCALE

NOTES:

1. TEMPORARILY RELOCATE FEEDER •400 BY DIGGING A TRENCH, COVERING WITH A STEEL PLATE AND LEVEE MATERIAL. AFTER THE CONCRETE CAP IS REMOVED FROM SHEET PILE, FEEDER •400 SHALL BE REMOVED FROM THE TEMPORARY TRENCH AND ATTACHED TO THE NEW FLOODWALL.
2. PROVIDE A UNIFORM TRANSITION IN LEVEE DESIGN SECTIONS BETWEEN STATIONS 17+95.82 AND 18+05.79, 20+70.67 AND 21+00 AND 34+40 AND 35+00 WB/L.
3. SEE NOTES 1 AND 2, DWG. 21.
4. SEE NOTES 4, 6, 7 AND 9, DWG. 19.

C·A·D

SCALE: 1/4" = 1'- 0"

12" 0 5' 10' 15' 20'

SYMBOL	DESCRIPTION	DATE	APPROVED
2	REVISED NOTES 2 AND 4, ADDED NOTE TO TWO TYPICAL SECTIONS; AMEND. NO. 1	10-6-93	A.L.D.
1	MOVED CONCRETE PAVING DETAIL FROM DWG. 43A TO 21A; AMEND. NO. 3	9-6-93	H.M.B.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

TYPICAL SECTIONS
WEST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 48	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.	CADD FILE: 40145G01.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.			
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 21A OF 58

VALUE ENGINEERED — YOUR KEY TO HIGHER PROFITS

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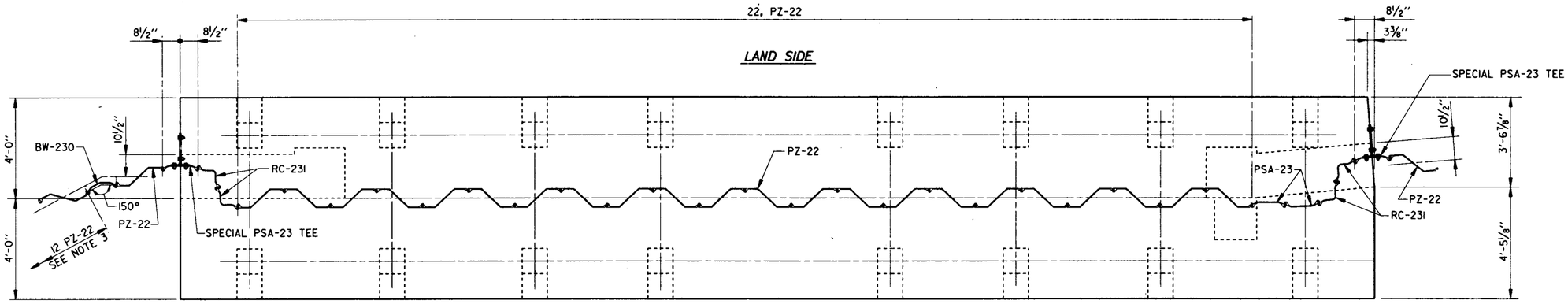
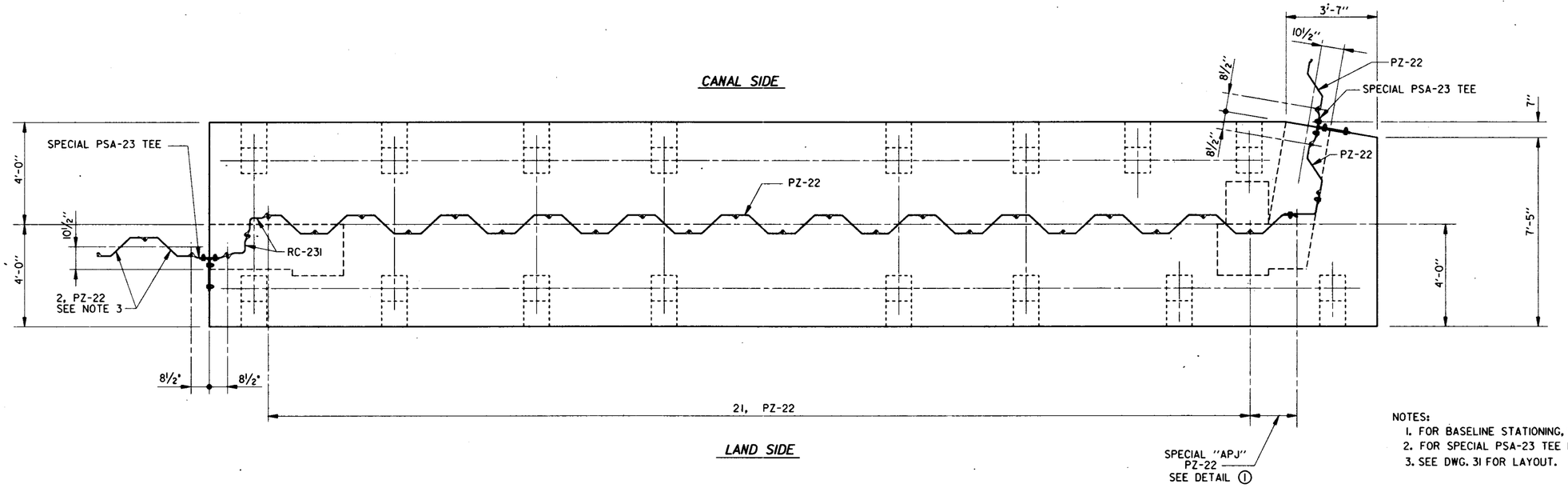


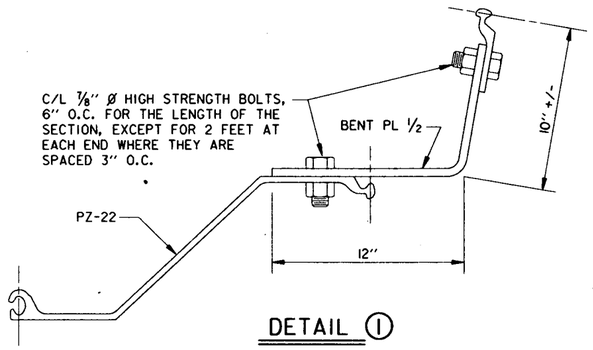
SWING GATE MONOLITH-WEST SIDE

SCALE: ½" = 1'- 0"



SWING GATE MONOLITH-EAST SIDE

SCALE: ½" = 1'- 0"



DETAIL ①

SPECIAL TYPE "APJ" PZ-22 BENT CORNER

SCALE: 3" = 1'-0"

NOTES:
1. FOR BASELINE STATIONING, SEE DWG. 31.
2. FOR SPECIAL PSA-23 TEE DETAIL, SEE DWG. 24.
3. SEE DWG. 31 FOR LAYOUT.

SCALE: ½" = 1'- 0"

12" 0 2' 4' 6' 8'

SCALE: 3" = 1' - 0"

12" 0 1'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

STEEL SHEET PILE LAYOUT

DESIGNED BY: A.I.D.	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145025 DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 22 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

COAD

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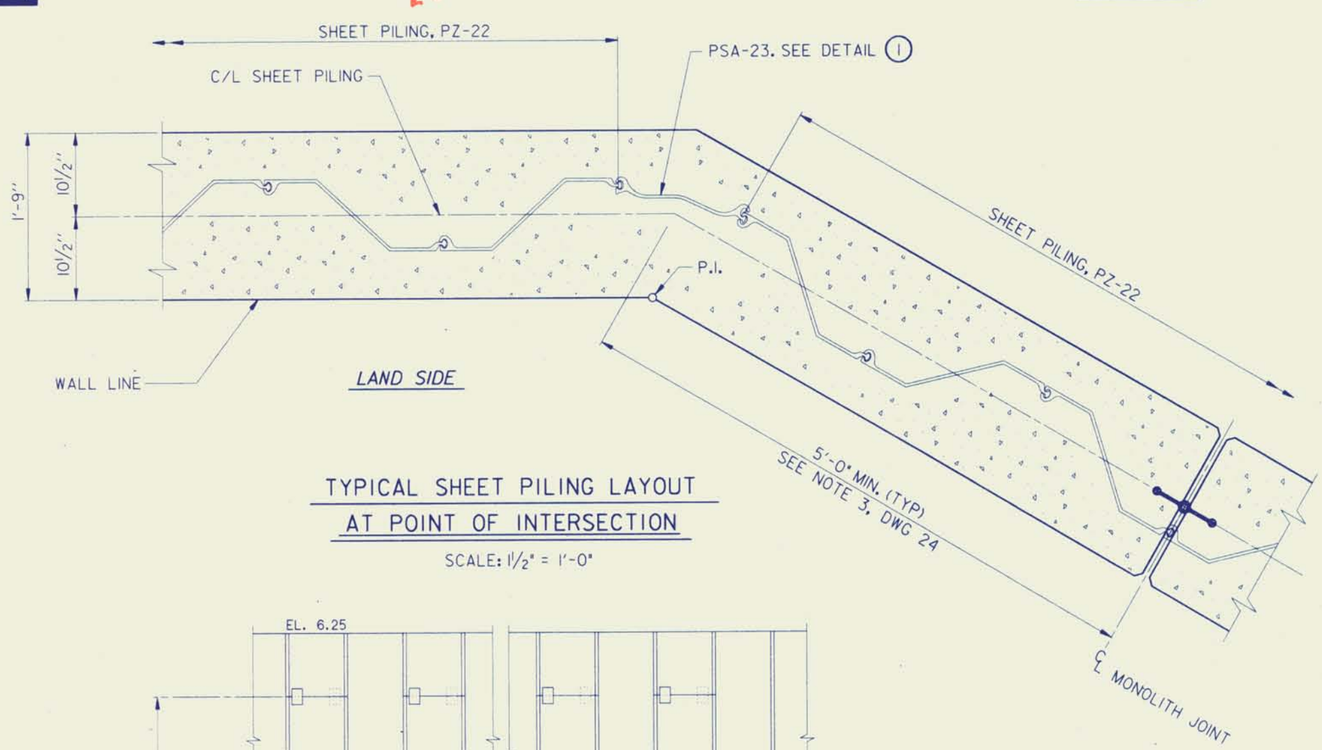
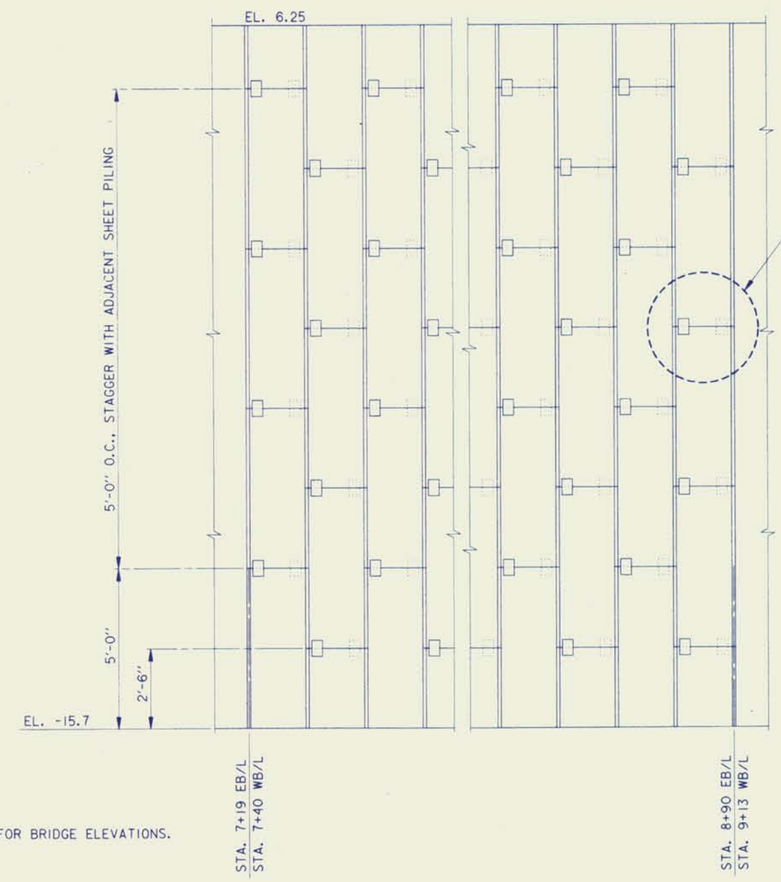
(SYRO SPZ-22)



TYPICAL SHEET PILING LAYOUT
AT POINT OF INTERSECTION

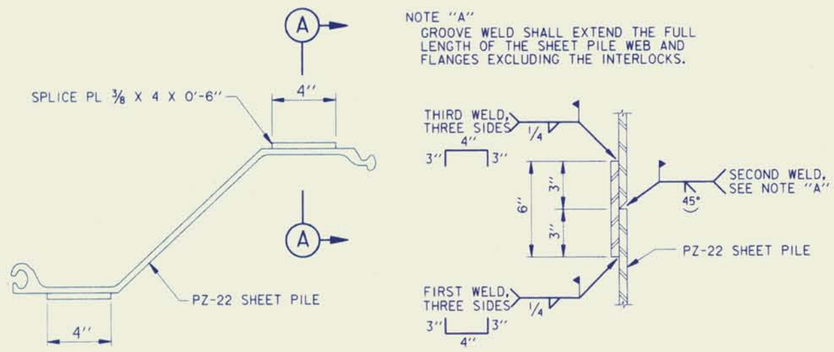
SCALE: 1½" = 1'-0"



NOTE:
SEE PROFILES FOR BRIDGE ELEVATIONS.

SHEET PILE SPLICE DETAIL AT I-610

SCALE: ½" = 1'-0"



PLAN

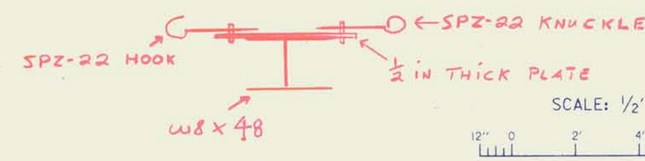
SECTION (A)

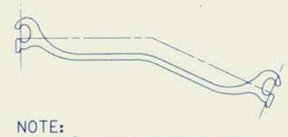
DETAIL (2)

SHEET PILE SPLICE

SCALE: 3" = 1' - 0"

FABRICATED SHEETPILE CONNECTION
WBL STA 10+05 AND 2+45
(22.0') (22.5')
BOLTED AS DWG. 22 "SPECIAL TYPE" DETAIL.





NOTE:
ANGLE VARIES, SEE PLAN.

DETAIL (1)

TYPE "PSA-23" BENT CORNER

SCALE: 3" = 1'-0"

SCALE: ½" = 1'- 0"

SCALE: 1 ½" = 1' - 0"

SCALE: 3" = 1' - 0"

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

STEEL SHEET PILE LAYOUT

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 4	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145B02.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 23 OF 58

C·A·D

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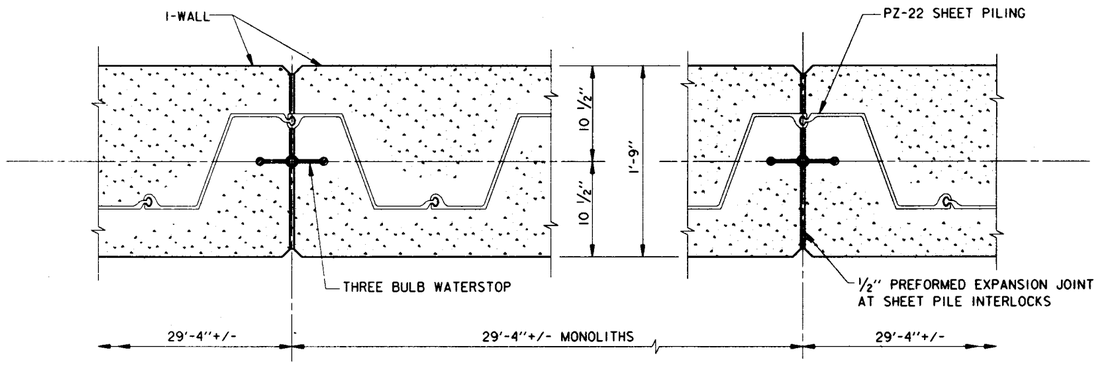
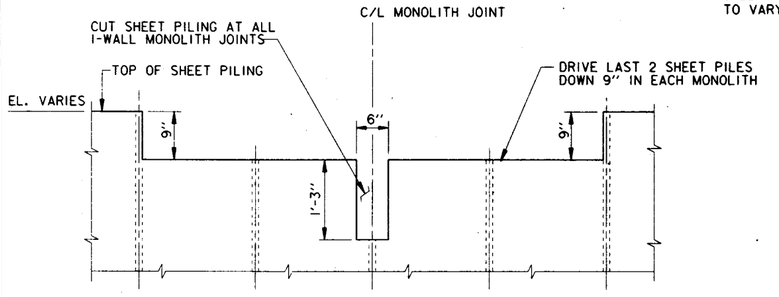


TYPICAL MONOLITH AT SHEET PILE INTERLOCKS

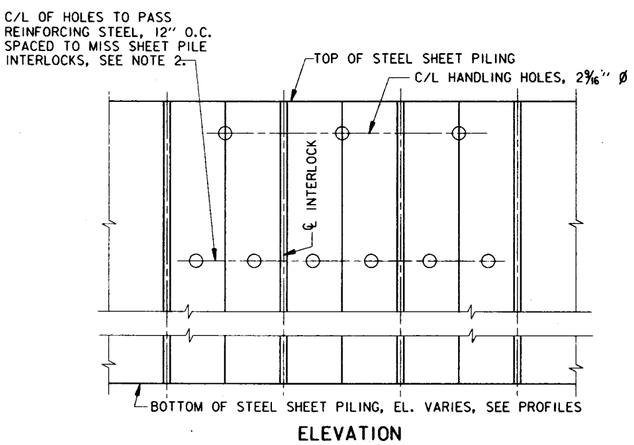
SCALE: 1 ½" = 1' - 0"

NOTE:
I-WALL MONOLITHS SHALL BE 29'-4"+/- UNLESS OTHERWISE APPROVED. EACH MONOLITH SHALL END AT THE CENTER OF THE NEAREST SHEET PILE INTERLOCK. IF A SUBSTITUTE SHEET PILE IS USED, THE MONOLITH JOINTS SHALL BE ALLOWED TO VARY AS FOLLOWS:
MINIMUM MONOLITH LENGTH = 29'-0"
MAXIMUM MONOLITH LENGTH = 30'-0"



SHEET PILING DETAILS
I-WALL MONOLITH JOINTS

SCALE: 1" = 1'- 0"



ELEVATION

DETAILS OF HOLES IN SHEET PILING

SCALE: 1" = 1'- 0"

LEGEND

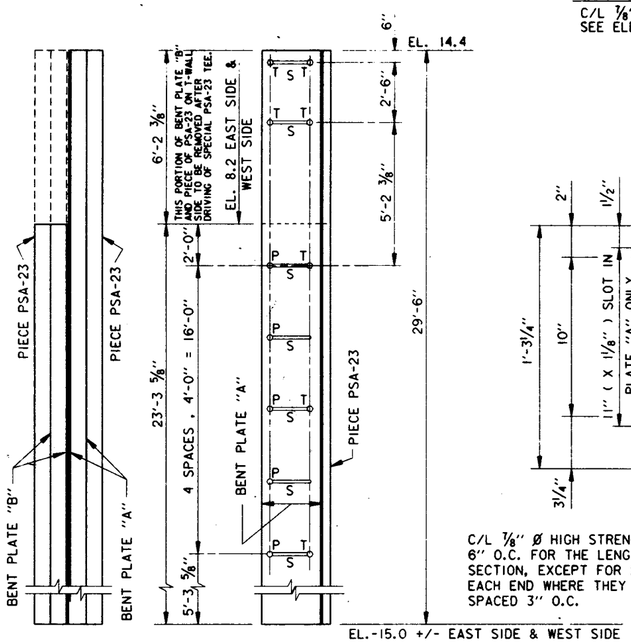
P = PERMANENT BOLT
T = TEMPORARY BOLT
S = SLOTTED HOLE (PLATE "A" ONLY)

SHEET PILE NOTES

1. A MINIMUM OF 6 INCHES CONCRETE COVER SHALL BE PROVIDED OVER SHEET PILING AT ALL POINTS.
2. HOLES CUT IN STEEL SHEET PILING FOR PASSING REINFORCING BARS SHALL NOT EXCEED 2"Ø. WHERE HOLES FALL WITHIN THE WEB OF THE STEEL SHEET PILE, THE HOLE SHALL BE SLOTTED 4" HORIZONTALLY TO ACCOMMODATE PASSING THE REINFORCING BARS.
3. MONOLITH JOINTS SHALL BE LOCATED A MINIMUM OF 5' FROM POINTS OF INTERSECTION.
4. RESERVED
5. RESERVED
6. ANY SUBSTITUTIONS SHALL BE SUBMITTED TO THE CONTRACTING OFFICER REPRESENTATIVE FOR APPROVAL.
7. STEEL SHEET PILE SURFACE PREPARATION AND PAINTING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
8. STATIONS FOR SPECIAL PSA-23 TEES ARE APPROXIMATE.

NOTES

1. FOR GENERAL NOTES, SEE DWG. 2.
2. FOR CONCRETE NOTES, SEE DWG. 2.

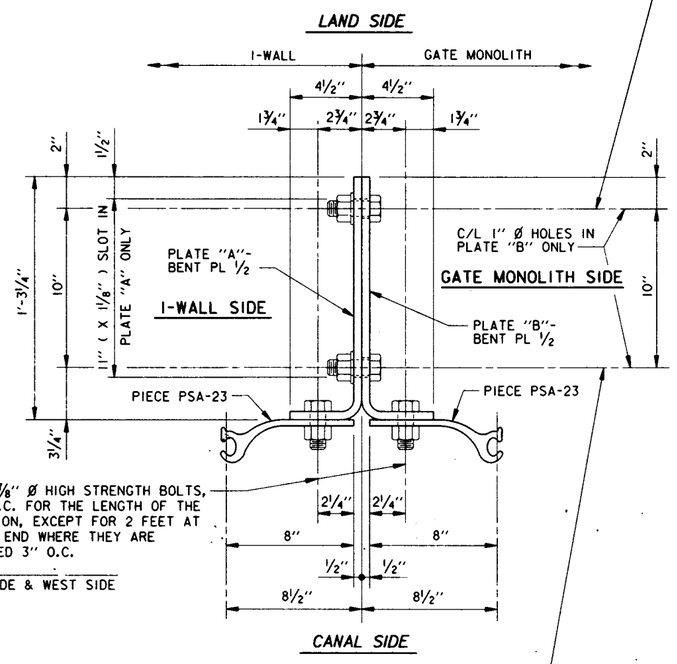


LAND SIDE ELEVATION | I-WALL SIDE ELEVATION

STA. 1+87 WB/L AND STA. 0+86 EB/L
ELEVATION OF SPECIAL PSA-23 TEE
SHOWING BENT PLATES BOLT SPACING

SCALE: HORIZ. ¾" = 1'- 0"
VERT. ⅜" = 1'- 0"

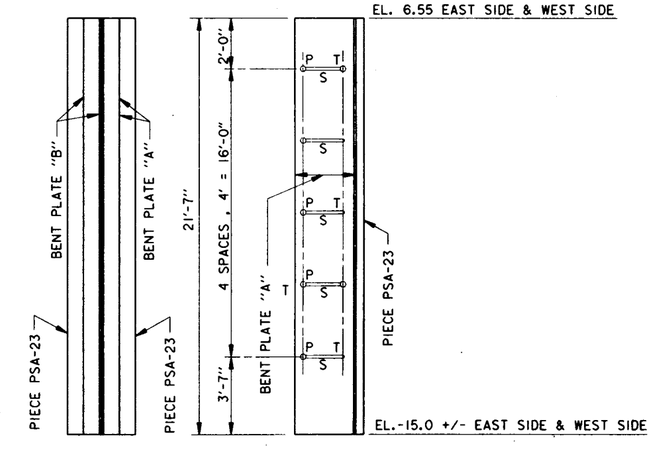
PERMANENT BOLTS
C/L ⅞" Ø HIGH STRENGTH BOLTS W/ FLAT WASHERS.
SEE ELEVATION OF SPECIAL PSA-23 TEE SHOWING BENT PLATES BOLT SPACING.



TEMPORARY DRIVING BOLTS
C/L ⅞" Ø HIGH STRENGTH BOLTS W/ FLAT WASHERS.
SEE ELEVATION OF SPECIAL PSA-23 TEE SHOWING BENT PLATES BOLT SPACING.
THESE BOLTS ARE TO BE REMOVED AS SPECIAL PSA-23 TEE IS DRIVEN, SO THAT UPON COMPLETION OF DRIVING NO TEMPORARY BOLTS SHALL REMAIN.

DETAIL (1)
SPECIAL PSA-23 TEE

SCALE: 3" = 1' - 0"



LAND SIDE ELEVATION | I-WALL SIDE ELEVATION

STA. 2+38 WB/L AND STA. 1+22 EB/L
ELEVATION OF SPECIAL PSA-23 TEE
SHOWING BENT PLATES BOLT SPACING

SCALE: HORIZ. ¾" = 1'- 0"
VERT. ⅜" = 1'- 0"

SCALE: ⅜" = 1'- 0"
12" 0 2' 4' 6' 8' 10'
SCALE: ¾" = 1'- 0"
12" 0 1' 2' 3' 4' 5'
SCALE: 1" = 1'- 0"
12" 0 1' 2' 3' 4' 5'
SCALE: 1 ½" = 1'- 0"
12" 0 1' 2' 3'
SCALE: 3" = 1'- 0"
12" 0 1'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

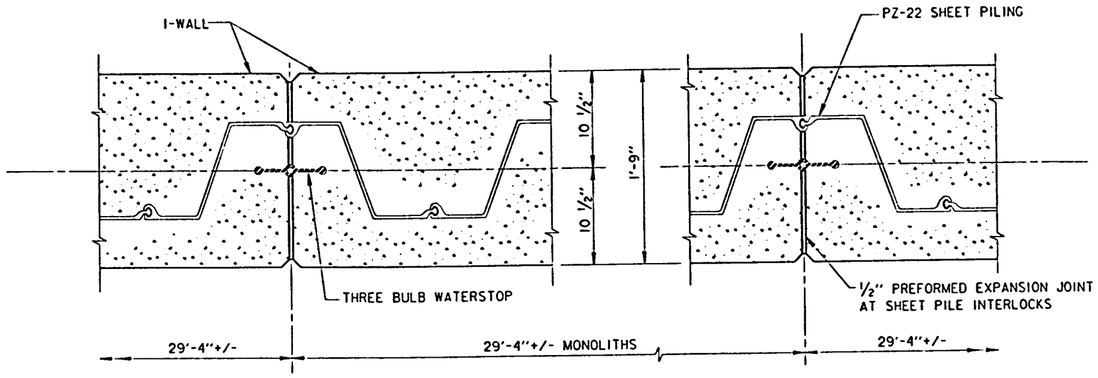
SHEET PILE DETAILS

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 4	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145021.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 24 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

C-A-D

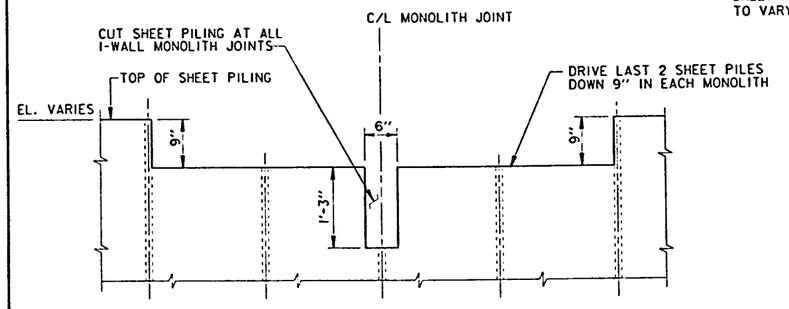
Safety is a Part of Your Contract



TYPICAL MONOLITH AT SHEET PILE INTERLOCKS

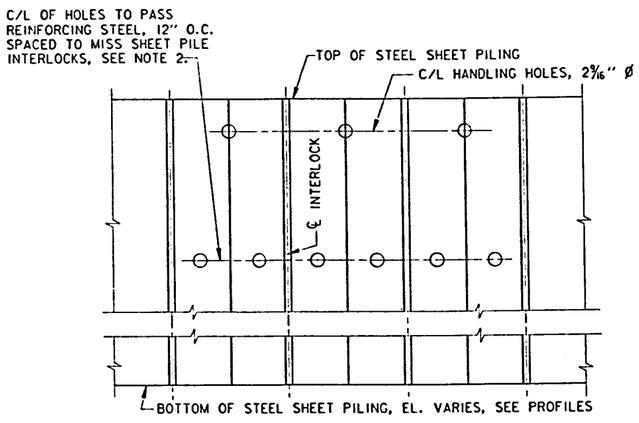
SCALE: 1 ½" = 1' - 0"

NOTE:
I-WALL MONOLITHS SHALL BE 29'-4"+/- UNLESS OTHERWISE APPROVED. EACH MONOLITH SHALL END AT THE CENTER OF THE NEAREST SHEET PILE INTERLOCK. IF A SUBSTITUTE SHEET PILE IS USED, THE MONOLITH JOINTS SHALL BE ALLOWED TO VARY AS FOLLOWS:
MINIMUM MONOLITH LENGTH = 29'-0"
MAXIMUM MONOLITH LENGTH = 30'-0"



SHEET PILING DETAILS
I-WALL MONOLITH JOINTS

SCALE: 1" = 1'- 0"



ELEVATION

DETAILS OF HOLES IN SHEET PILING

SCALE: 1" = 1'- 0"

LEGEND

P = PERMANENT BOLT
T = TEMPORARY BOLT
S = SLOTTED HOLE
(PLATE "A" ONLY)

SHEET PILE NOTES

1. A MINIMUM OF 6 INCHES CONCRETE COVER SHALL BE PROVIDED OVER SHEET PILING AT ALL POINTS.
2. HOLES CUT IN STEEL SHEET PILING FOR PASSING REINFORCING BARS SHALL NOT EXCEED 2"Ø. WHERE HOLES FALL WITHIN THE WEB OF THE STEEL SHEET PILE, THE HOLE SHALL BE SLOTTED 4" HORIZONTALLY TO ACCOMMODATE PASSING THE REINFORCING BARS.
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4. RESERVED
5. RESERVED
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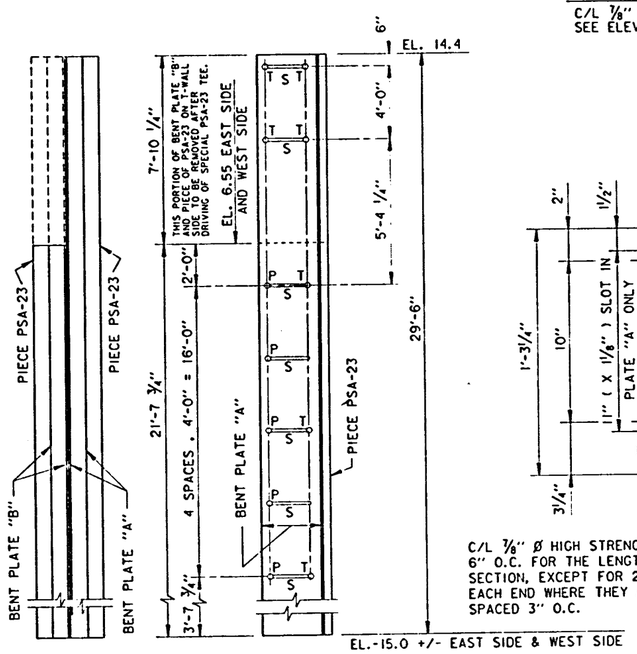
8. STATIONS FOR SPECIAL PSA-23 TEES ARE APPROXIMATE.

NOTES

1. FOR GENERAL NOTES, SEE DWG. 2.
2. FOR CONCRETE NOTES, SEE DWG. 2.



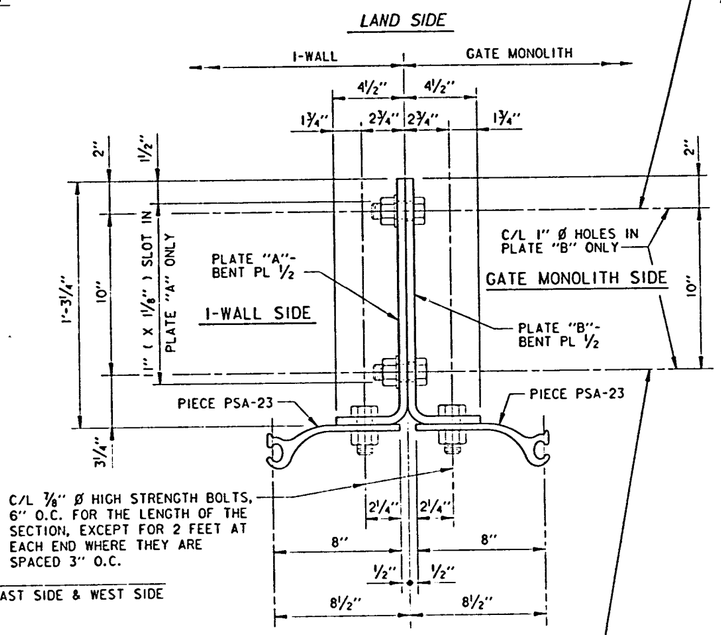
LAND SIDE ELEVATION — I-WALL SIDE ELEVATION

⚠1 STA. 1+87 WB/L AND STA. 0+86 EB/L

ELEVATION OF SPECIAL PSA-23 TEE
SHOWING BENT PLATES BOLT SPACING

SCALE: HORIZ. ¾" = 1'- 0"
VERT. ⅜" = 1'- 0"

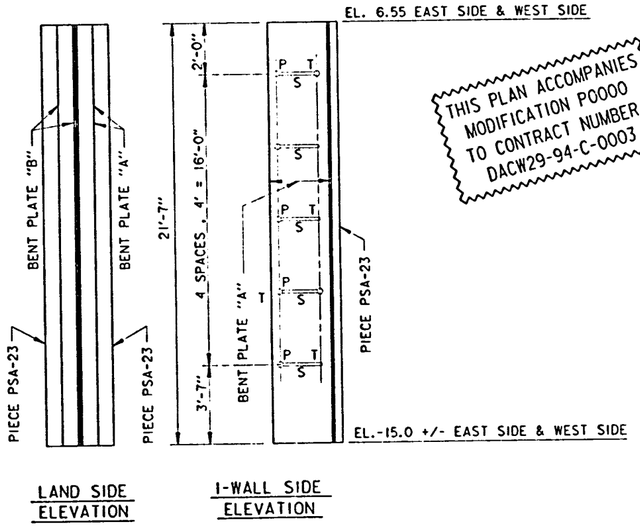
PERMANENT BOLTS
C/L ⅞" Ø HIGH STRENGTH BOLTS W/ FLAT WASHERS.
SEE ELEVATION OF SPECIAL PSA-23 TEE SHOWING BENT PLATES BOLT SPACING.



TEMPORARY DRIVING BOLTS
C/L ⅞" Ø HIGH STRENGTH BOLTS W/ FLAT WASHERS.
SEE ELEVATION OF SPECIAL PSA-23 TEE SHOWING BENT PLATES BOLT SPACING.
THESE BOLTS ARE TO BE REMOVED AS SPECIAL PSA-23 TEE IS DRIVEN, SO THAT UPON COMPLETION OF DRIVING NO TEMPORARY BOLTS SHALL REMAIN.

DETAIL ①
SPECIAL PSA-23 TEE

SCALE: 3" = 1' - 0"



LAND SIDE ELEVATION — I-WALL SIDE ELEVATION

STA. 2+38 WB/L AND STA. 1+22 EB/L
ELEVATION OF SPECIAL PSA-23 TEE
SHOWING BENT PLATES BOLT SPACING

SCALE: HORIZ. ¾" = 1'- 0"
VERT. ⅜" = 1'- 0"

THIS PLAN ACCOMPANIES MODIFICATION P0000 TO CONTRACT NUMBER DACW29-94-C-0003

SCALE: ⅜" = 1'- 0"
SCALE: ¾" = 1'- 0"
SCALE: 1" = 1'- 0"
SCALE: 1 ½" = 1' - 0"
SCALE: 3" = 1' - 0"

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	REVISED ELEVATION OF SPECIAL PSA-23 TEE AT STA 1+87 WB/L AND STA 0+86 EB/L MOD.	1-24-94	W.O.B.

REVISIONS

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

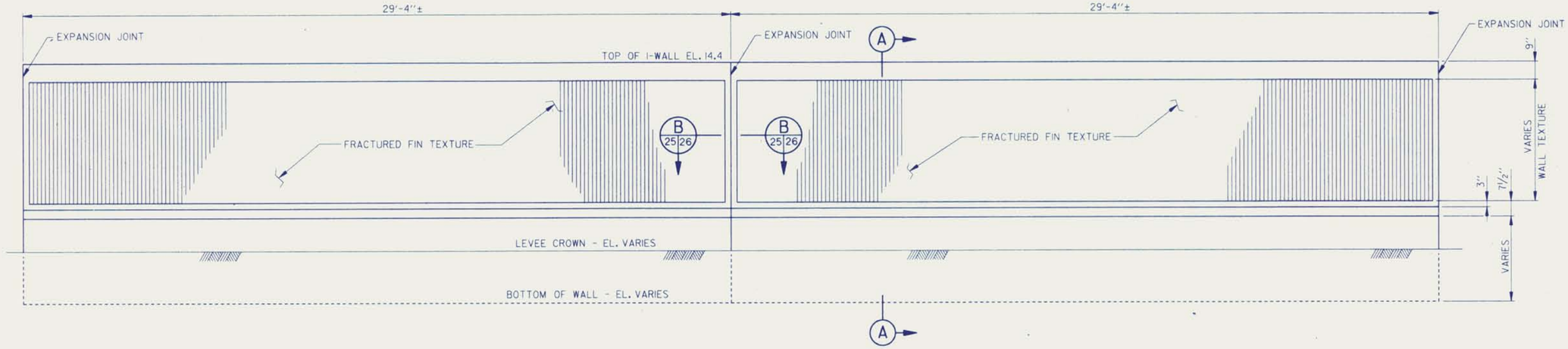
LAKE PONTCHARTRAIN, LA. VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION - PUMP STATION NO. 3 MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SHEET PILE DETAILS

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 4	PLOT DATE: JAN.24,1994
DRAWN BY: D.J.B.	CADD FILE: 40145021.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.	SOLICITATION NO. DACW29-93-B-0080		DWG. 24 OF 58
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER			

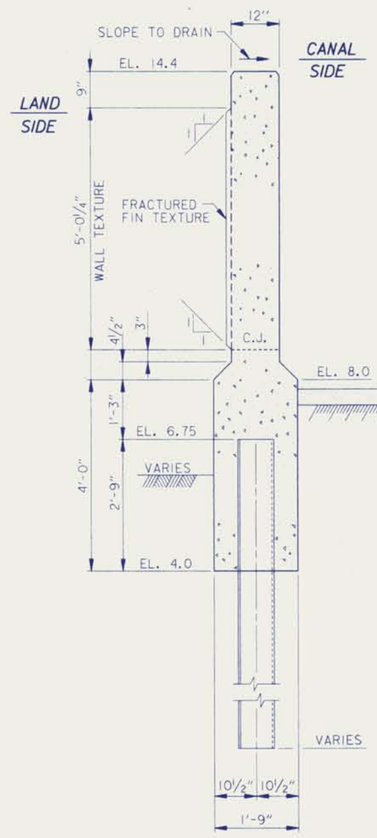
VALUE ENGINEERING INCENTIVE CLAUSES 52.248-3 — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract



TYPICAL I-WALL
LAND SIDE TEXTURE FINISH

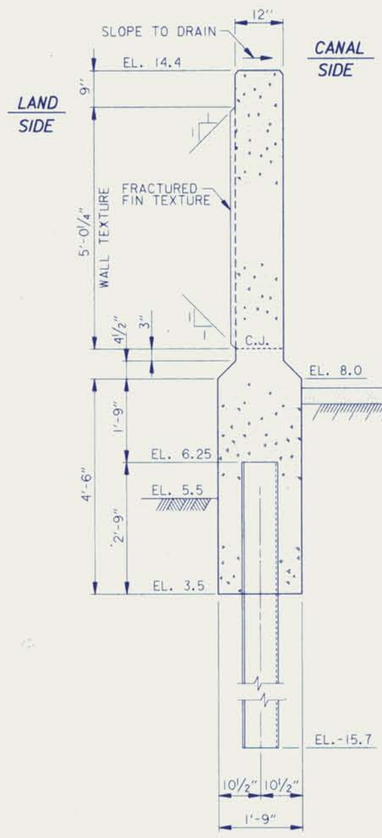
SCALE: ½" = 1'- 0"



STA. 1+24 TO 5+87

SECTION (A)

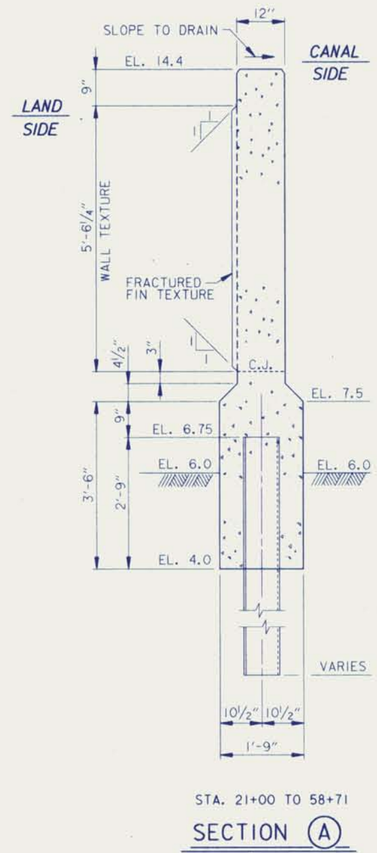
SCALE: ¾" = 1'- 0"



STA. 6+16 TO 12+85
STA. 14+51 TO 20+71

SECTION (A)

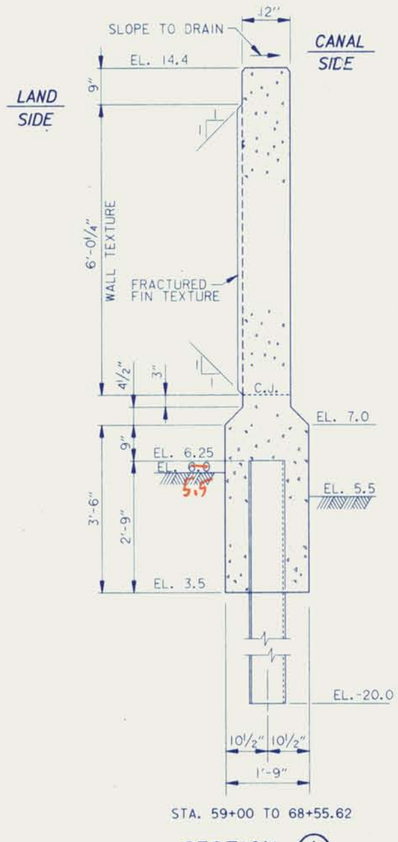
SCALE: ¾" = 1'- 0"



STA. 21+00 TO 58+71

SECTION (A)

SCALE: ¾" = 1'- 0"
SEE NOTE 2



STA. 59+00 TO 68+55.62

SECTION (A)

SCALE: ¾" = 1'- 0"

NOTES:
1. SEE PROFILE DWGS. 16 THRU 18 FOR SHEET PILE TIP ELEVATION.
2. FRACTURED FIN WALL TEXTURE TO BE USED ON ALL MONOLITHS EXCEPT AS NOTED ON DWG. 26A.
3. SEE DWG. 26 FOR TYPICAL TRANSITION MONOLITH BETWEEN REACHES.

NOTES:
1. FOR GENERAL NOTES, SEE DWG. 2.
2. FOR CONCRETE NOTES, SEE DWG. 2.
3. ALL FORM TIE BOLTS SHALL BE PLACED IN THE VALLEY OF THE FRACTURED FIN TEXTURE (I.e., BETWEEN ADJACENT FINS).
4. CONTRACTOR SHALL MAKE ALL EFFORTS TO MINIMIZE THE OCCURRENCE OF BUTT JOINTS. CONTRACTOR SHALL SUBMIT, FOR PRIOR APPROVAL, DRAWINGS SHOWING THE LOCATION OF ALL BUTT JOINTS IN FORMS USED FOR CONSTRUCTION.
5. FOR TREATMENT AT EXPANSION JOINTS AND P.I.'S, SEE DWG. 26.
6. STATIONING IS ROUNDED OFF. SEE PROFILE DRAWINGS.
7. FOR TRANSITION AREAS, SEE PLANS AND PROFILES.

SCALE: ½" = 1'- 0"

12" 0 2' 4' 6' 8'

SCALE: ¾" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

CONCRETE I-WALL
EAST SIDE

DESIGNED BY: A.L.D. DRAWN BY: D.J.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 16	PLOT DATE: 14 JULY 93
	CADD FILE: 40145D07.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 25 OF 58

VALUE INCENTIVE CLAUSES IN ENGINEERING — YOUR KEY TO HIGHER PROFITS

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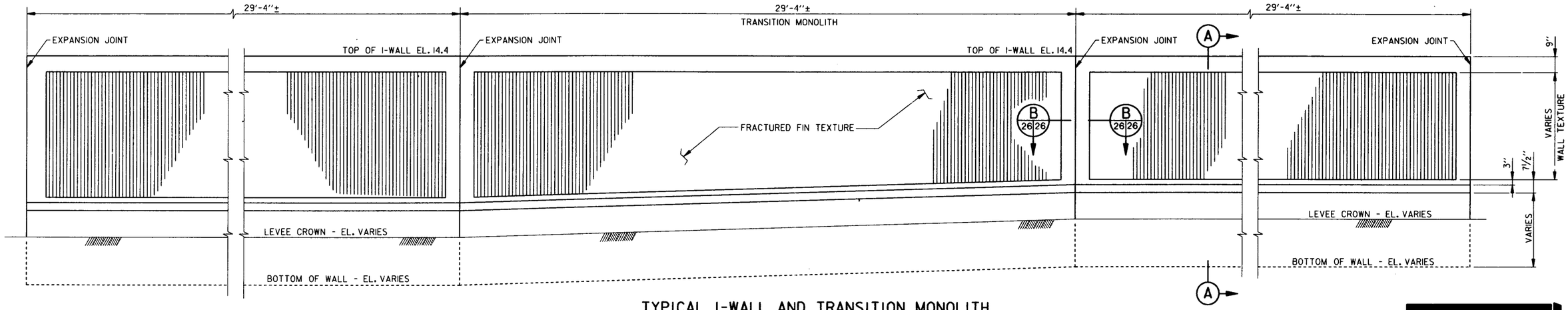

TYPICAL I-WALL AND TRANSITION MONOLITH LAND SIDE TEXTURE FINISH

SCALE: ½" = 1'- 0"

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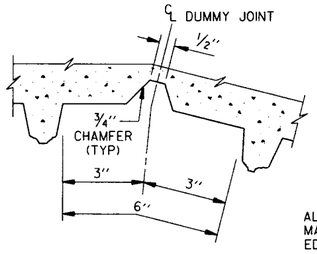
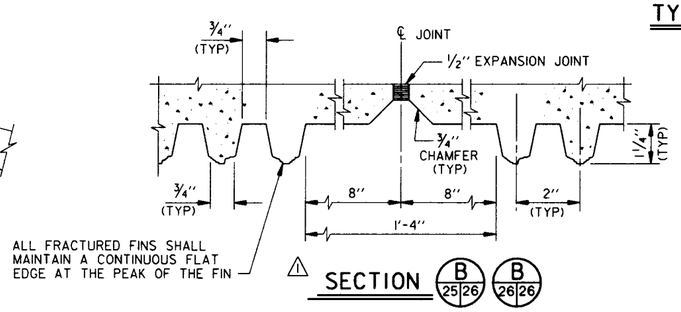


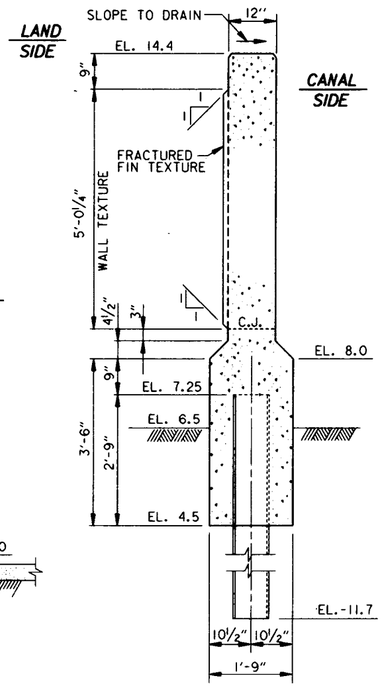
SPECIAL TEXTURE AT P.I.

SCALE: 6" = 1" - 0"



TYPICAL TEXTURE AT EXPANSION JOINTS

SCALE: 6" = 1" - 0"

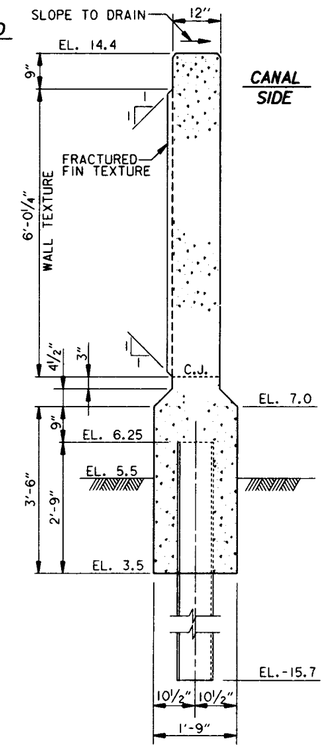


STA. 21+00 TO 58+71

SECTION A

SCALE: ¾" = 1'- 0"

⚠ SEE NOTE 2



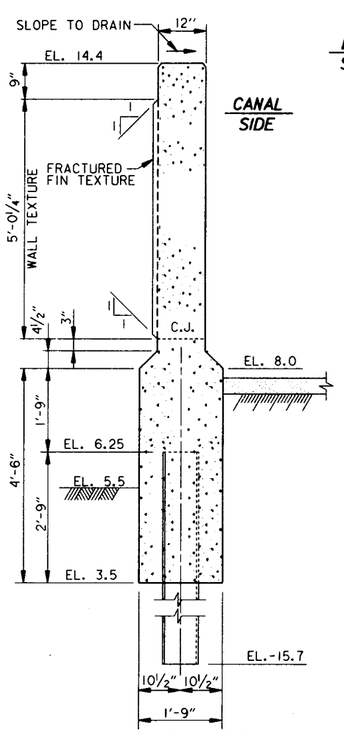
STA. 59+00 to 69+06

SECTION A

SCALE: ¾" = 1'- 0"

NOTES:

1. FOR GENERAL NOTES, SEE DWG. 2.
2. FOR CONCRETE NOTES, SEE DWG. 2.
3. ALL FORM TIE BOLTS SHALL BE PLACED IN THE VALLEY OF THE FRACTURED FIN TEXTURE (i.e., BETWEEN ADJACENT FINS).
4. CONTRACTOR SHALL MAKE ALL EFFORTS TO MINIMIZE THE OCCURRENCE OF BUTT JOINTS. CONTRACTOR SHALL SUBMIT, FOR PRIOR APPROVAL, DRAWINGS SHOWING THE LOCATION OF ALL BUTT JOINTS IN FORMS USED FOR CONSTRUCTION.
5. STATIONING IS ROUNDED OFF, SEE PROFILE DRAWINGS.
6. FOR TRANSITION AREAS, SEE PLANS AND PROFILES.



STA. 2+37 TO 6+40

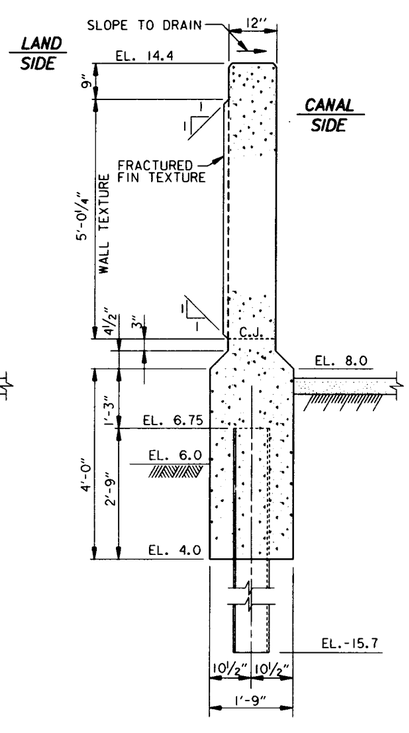
SECTION A

SCALE: ¾" = 1'- 0"

STA. 6+69 TO 12+55
STA. 14+25 TO 17+96

SECTION A

SCALE: ¾" = 1'- 0"



STA. 18+06 TO 20+71

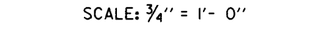
SECTION A

SCALE: ¾" = 1'- 0"

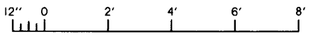
⚠ NOTES:

1. SEE PROFILE DWGS. 16 THRU 18 FOR SHEET PILE TIP ELEVATION.
2. FRACTURED FIN WALL TEXTURE TO BE USED ON ALL MONOLITHS EXCEPT AS NOTED ON DWG. 26A.

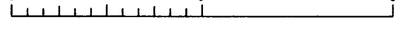
SCALE: ¾" = 1'- 0"



SCALE: ½" = 1'- 0"



SCALE: 6" = 1' - 0"



SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	REVISED SECTION B, ADDED NOTES, AMEND. NO. 1	8-1-93	A.L.D.

REVISIONS

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

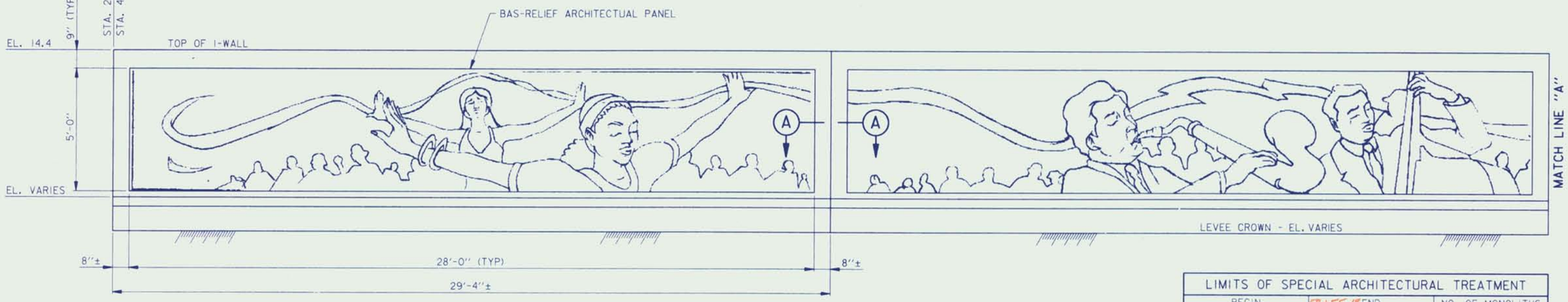
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

CONCRETE I-WALL WEST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 16	PLOT DATE: 10 AUGUST 93
DRAWN BY: D.J.B.	CADD FILE: 40145D05.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.			
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 26 OF 58

VALUE ENGINEERING — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract



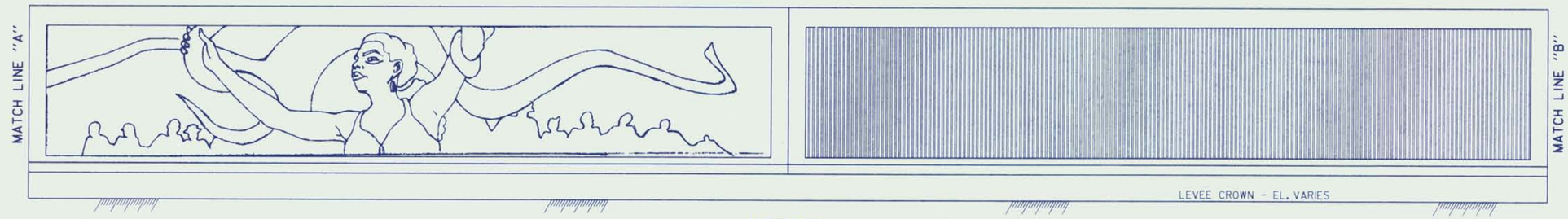
ELEVATION

ARCHITECTURAL WALL ENHANCEMENT

SCALE: ½" = 1'-0"

LIMITS OF SPECIAL ARCHITECTURAL TREATMENT		
BEGIN	~~58+55.18~~ END	NO. OF MONOLITHS
STA. ~~48+84.90~~ WB/L (48+65.18)	STA. ~~58+52.90~~ WB/L	33
STA. ~~21+42.97~~ EB/L (21+40.96)	STA. 32+86.97 EB/L (33+10.96)	39

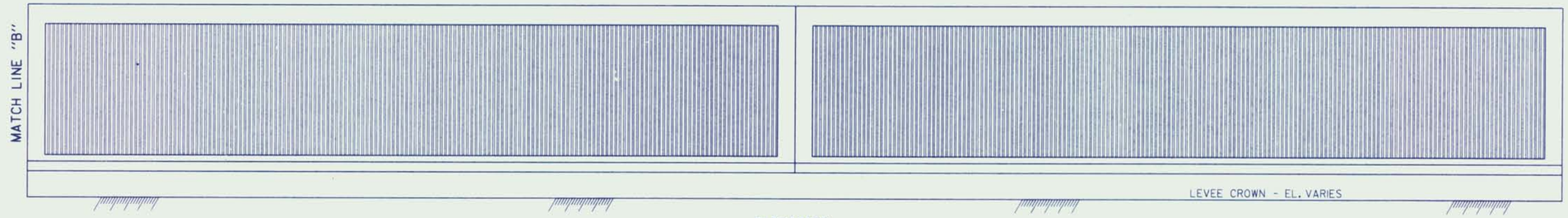
STATION LIMITS ARE BASED UPON 29'-4" MONOLITHS. ENDING STATIONS MAY VARY, HOWEVER THE NUMBER OF MONOLITHS CANNOT VARY. REPEAT PATTERN OF THREE BAS-RELIEF ARCHITECTURAL PANELS FOLLOWED BY THREE FRACTURED FIN PANELS. THE PATTERN WILL END WITH THE BAS-RELIEF ARCHITECTURAL PANELS.



ELEVATION

ARCHITECTURAL WALL ENHANCEMENT

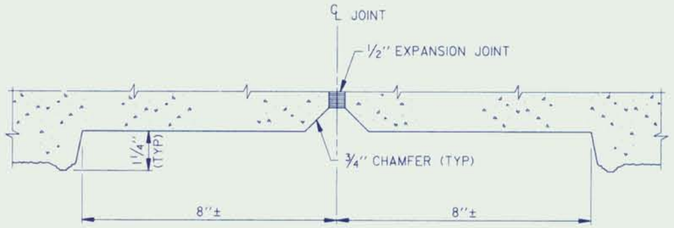
SCALE: ½" = 1'-0"



ELEVATION

ARCHITECTURAL WALL ENHANCEMENT

SCALE: ½" = 1'-0"



SECTION (A)

TYPICAL TEXTURE AT EXPANSION JOINTS

SCALE: 6" = 1'-0"

NOTES:

1. FIBERGLASS NEGATIVE MOLDS OF THE BAS-RELIEF ARCHITECTUAL PANELS WILL BE FURNISHED TO THE CONTRACTOR BY THE GOVERNMENT. FROM THESE NEGATIVE MOLDS, THE CONTRACTOR SHALL CAST POSITIVE MOLDS TO BE USED FOR MAKING REQUIRED FORM LINERS.
2. I-WALL MONOLITHS SHALL BE 29'-4", UNLESS OTHERWISE APPROVED. EACH MONOLITH SHALL END AT THE CENTER OF THE NEAREST SHEET PILE INTERLOCK. IF A SUBSTITUTE SHEET PILE IS USED, THE MONOLITH JOINTS SHALL BE ALLOWED TO VARY BETWEEN 29'-0" AND 30'-0". ARCHITECTURAL TREATMENT SHALL BE LATERALLY CENTERED ON THE MONOLITHS REGARDLESS OF MONOLITH LENGTHS.
3. SEE DWGS. 25 AND 26 FOR MONOLITH TREATMENT ELSEWHERE.

SCALE: ½" = 1'- 0"

12" 0 2' 4' 6' 8'

SCALE: 6" = 1' - 0"

6" 3" 0

C·A·D

SYMBOL	DESCRIPTION	DATE	APPROVED
1	ADDED DWG. 26A, AMENDMENT NO. 1.	8-1-93	A.L.D.

REVISIONS

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

LAKE PONCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SPECIAL ARCHITECTURAL TREATMENT

DESIGNED BY: A.L.D.	DATE: JULY 93	PLOT SCALE: 24	PLOT DATE: 6 AUGUST 93
DRAWN BY: B.A.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145G12.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 26A OF 58

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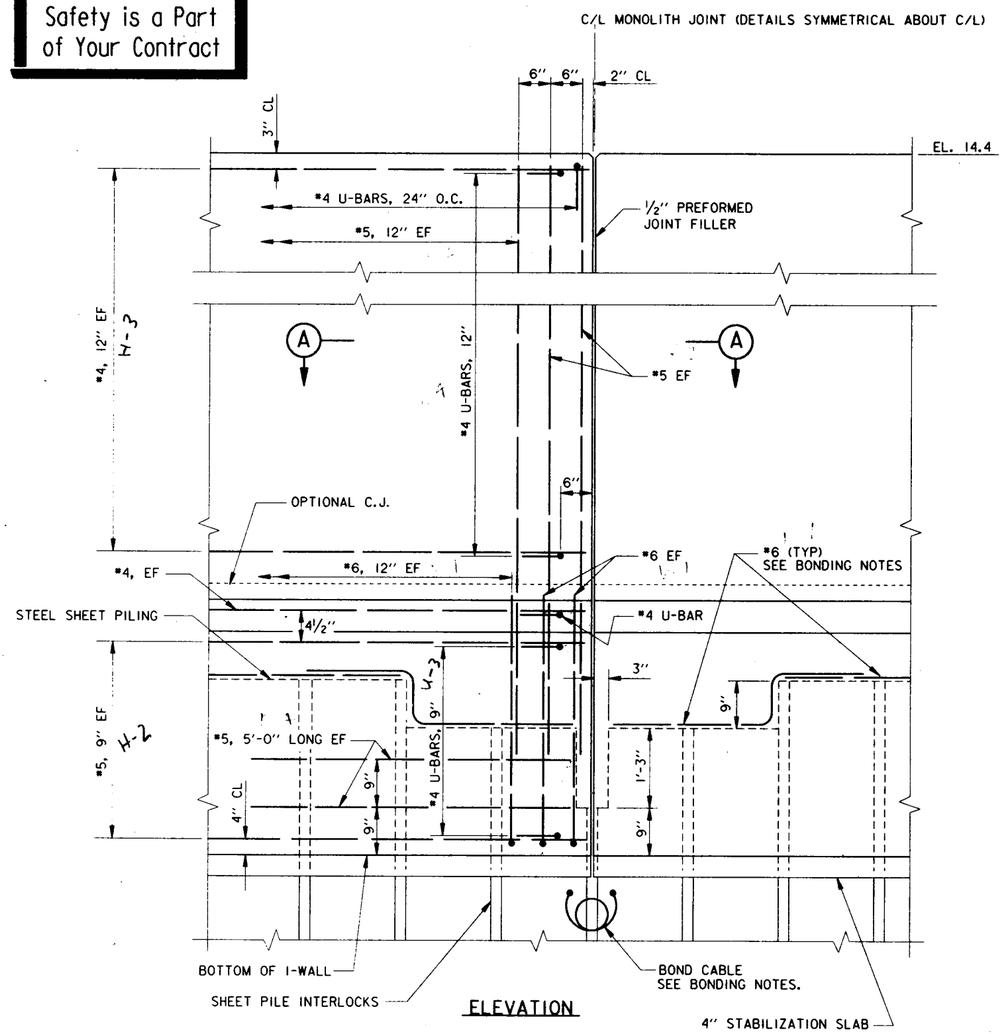
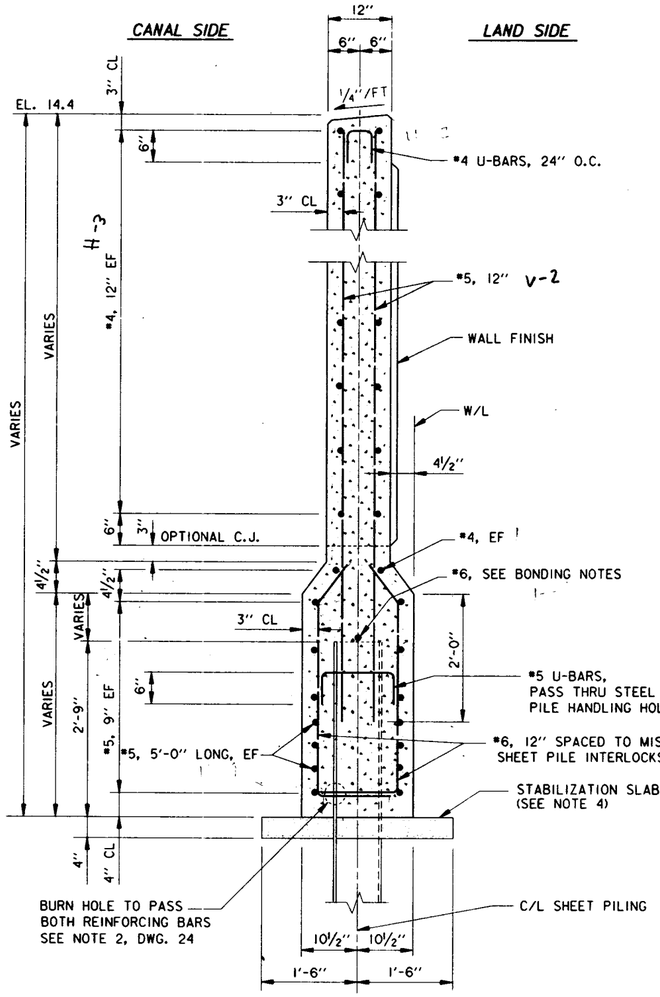


ELEVATION

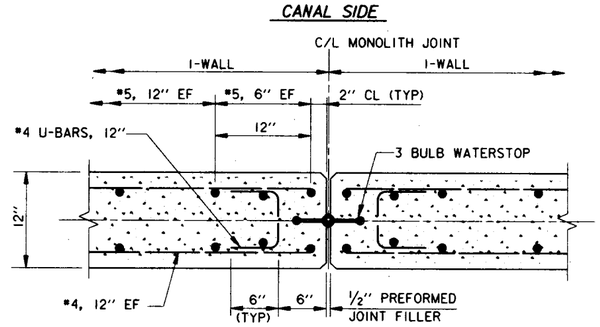
DETAIL OF I-WALL MONOLITH JOINTS

SCALE: 1" = 1'- 0"



TYPICAL I-WALL SECTION

SCALE: 1" = 1'- 0"



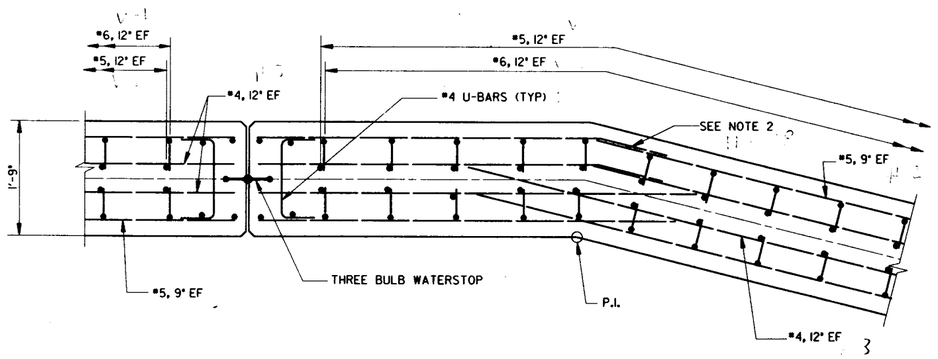
SECTION (A)

TYPICAL REINFORCEMENT AT MONOLITH JOINTS

SCALE: 1 1/2" = 1'- 0"

NOTES:

1. FOR VARYING I-WALL DIMENSIONS, SEE DWGS. 25 AND 26.
2. FOR WALL FINISH LOCATIONS, SEE DWGS. 16 THRU 18.
3. FOR FRACTURED FIN WALL FINISH, SEE DWGS. 25 AND 26.
4. TERMINATE STABILIZATION SLAB AT INTERFACE OF CONCRETE LINING WHERE APPLICABLE.
5. THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE ADEQUATE CONCRETE CONSOLIDATION IS OBTAINED IN THE 1'-9" THICK SECTION OF THE I-WALL SHOULD HE WISH TO ELIMINATE THE CONSTRUCTION JOINT.



TYPICAL REINFORCEMENT PLAN AT POINT OF INTERSECTION (P.I)

SCALE: 1" = 1'- 0"

NOTES:

1. *4 U-BARS ARE NOT SHOWN FOR CLARITY.
2. FOR LAP LENGTHS AND EMBEDMENT LENGTHS, SEE TABLE, DWG 2.
3. FOR GENERAL NOTES, SEE DWG. 2.

BONDING NOTES :

*6 REINFORCING BAR TO BE WELDED TO THE TOP OF EACH STEEL SHEET PILE. *6 REINFORCING BAR SHALL NOT EXTEND ACROSS THE MONOLITH JOINT. INSTALL BOND CABLE AT ALL I-WALL JOINTS AND AT ALL TRANSITIONS FROM T-WALL TO I-WALL JOINTS.
BOND CABLE SHALL HAVE AN 8" DIAMETER LOOP TO ALLOW FOR STRESSES.
BOND CABLES SHALL BE WELDED AS SPECIFIED TO ADJACENT STEEL PILES 7" BELOW BOTTOM OF CONCRETE CAP FOR I-WALL JOINTS AND AT TRANSITION FROM T-WALL TO I-WALL JOINTS.
WELDED CONNECTIONS SHALL BE COATED WITH SPLICING EPOXY TO OBTAIN MOISTURE PROOF JOINT.
SEE SPECIFICATIONS.

*6 REINFORCING BARS SHALL BE WELDED TO THE LAST THREE SHEET PILINGS AT EACH END OF THE MONOLITH AS SHOWN FOR CONTINUITY.

SPLICING OF *6 REINFORCING BAR WILL NOT BE ALLOWED, EXCEPT AT THE ENDS OF I-WALL MONOLITHS AS SHOWN.

SCALE: 1" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 1 1/2" = 1' - 0"

12" 0 1' 2' 3'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

I-WALL REINFORCEMENT DETAILS

DESIGNED BY: A.L.D. DRAWN BY: J.E.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 12	PLOT DATE: 19 JULY 93
	CADD FILE: 40145HIS DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 27 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

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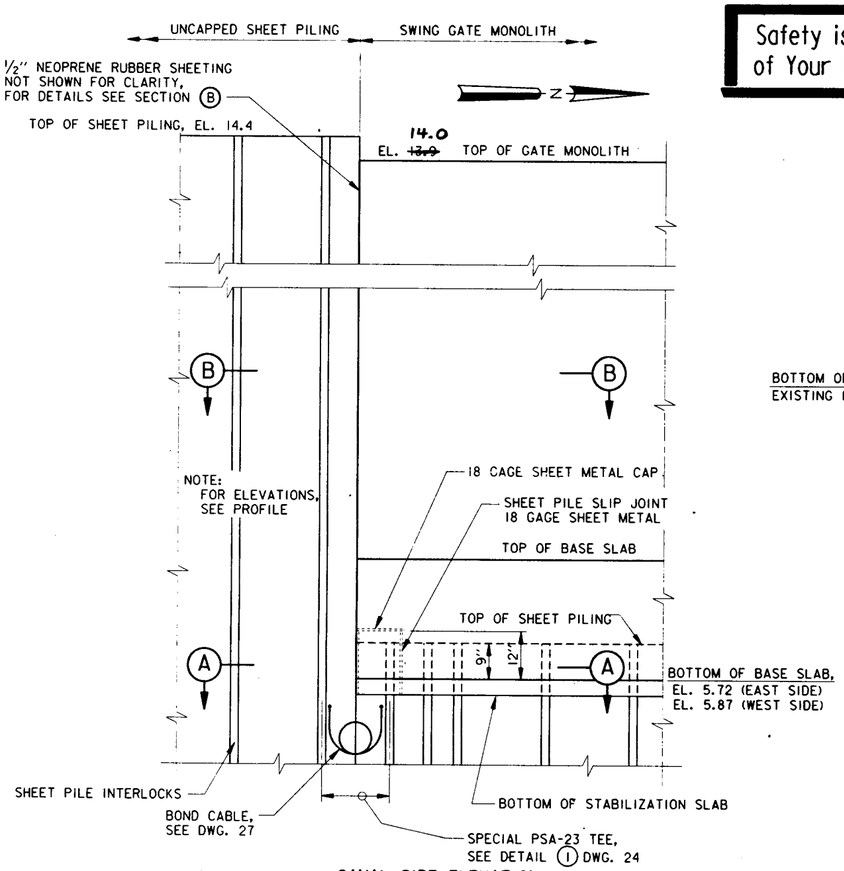
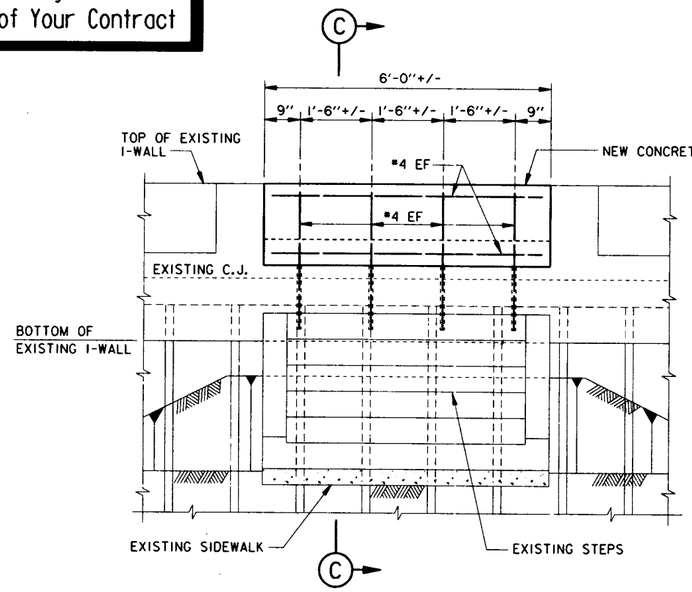
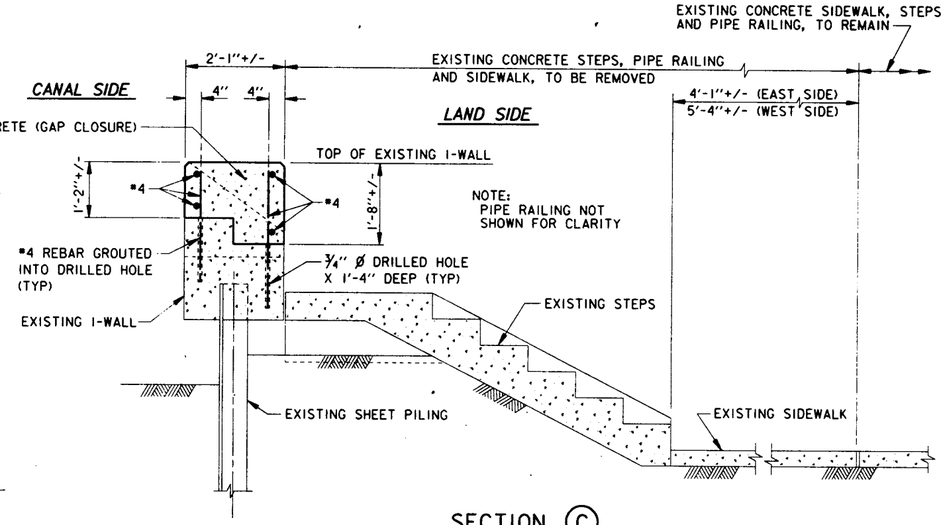


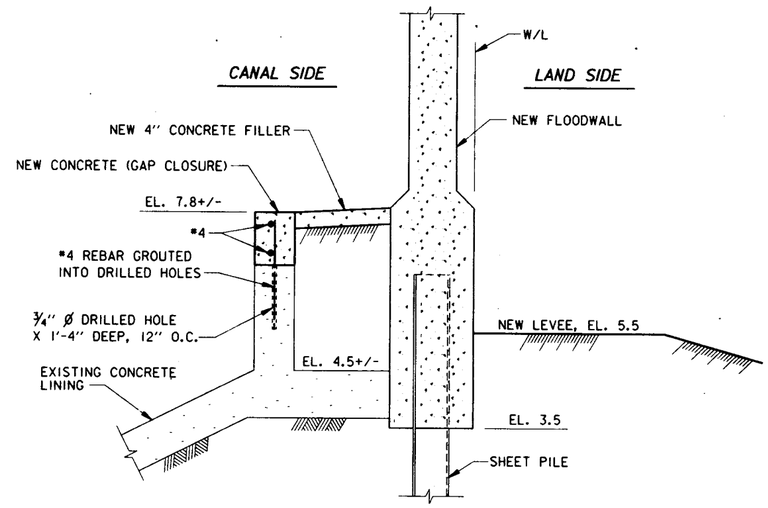
CANAL SIDE ELEVATION
APPROX. STA. 1+87 WB/L - SHOWN
APPROX. STA. 0+86 EB/L - OPPOSITE HAND
UNCAPPED SHEET PILING TO GATE MONOLITH
SCALE: ¾" = 1'- 0"



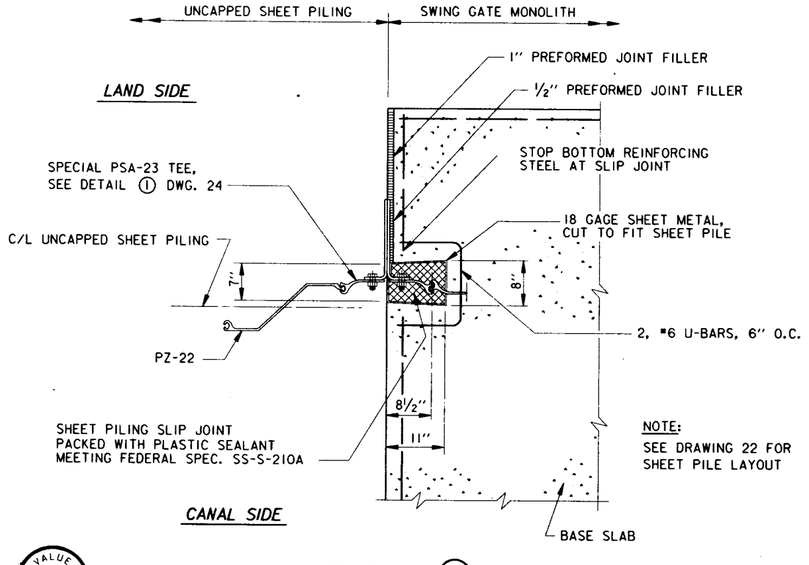
LAND SIDE ELEVATION
EAST SIDE - SHOWN
WEST SIDE - OPPOSITE HAND
EXISTING PEDESTRIAN BRIDGE (PB-1) GAP CLOSURE
SCALE: ¾" = 1'- 0"



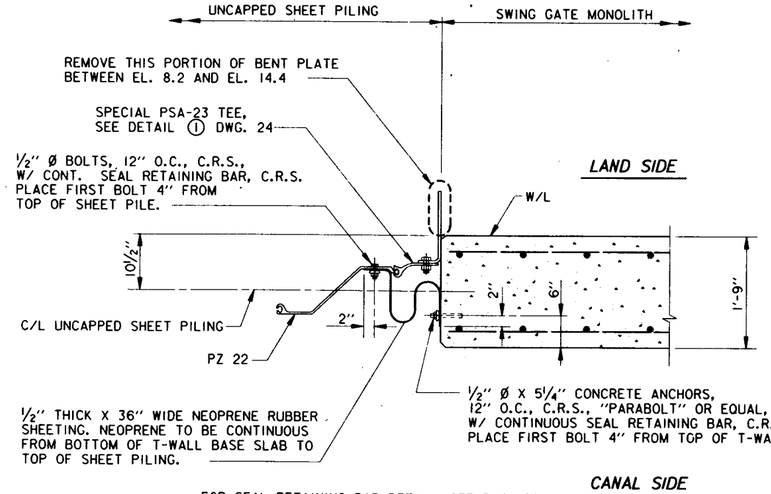
SECTION C
SCALE: ¾" = 1'- 0"



EAST SIDE - SHOWN
WEST SIDE - OPPOSITE HAND
DETAIL 1/19/28 1/21/28
SCALE: ¾" = 1'- 0"



SECTION A
SCALE: 1" = 1'- 0"



FOR SEAL RETAINING BAR DETAIL, SEE DWG. 30.

SECTION B
SCALE: 1" = 1'- 0"

NOTE:
1. FOR GENERAL NOTES, SEE DWG. 2.

SCALE: ¾" = 1'- 0"
12" 0 1' 2' 3' 4' 5'
SCALE: 1" = 1'- 0"
12" 0 1' 2' 3' 4' 5'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

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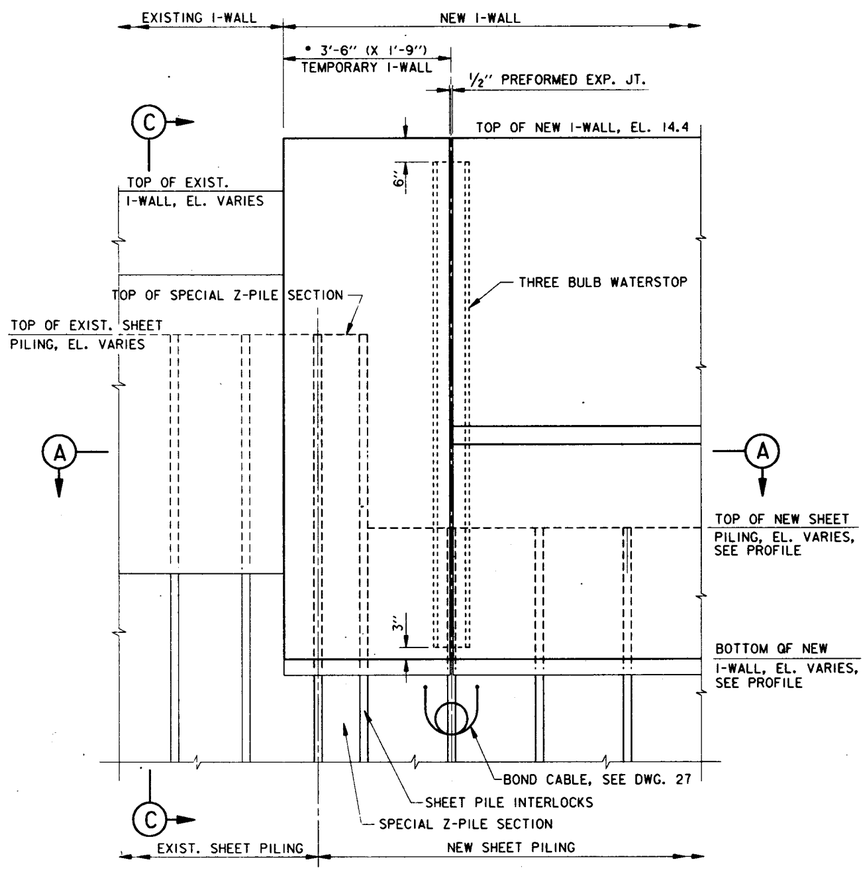
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

TYPICAL WALL JOINTS

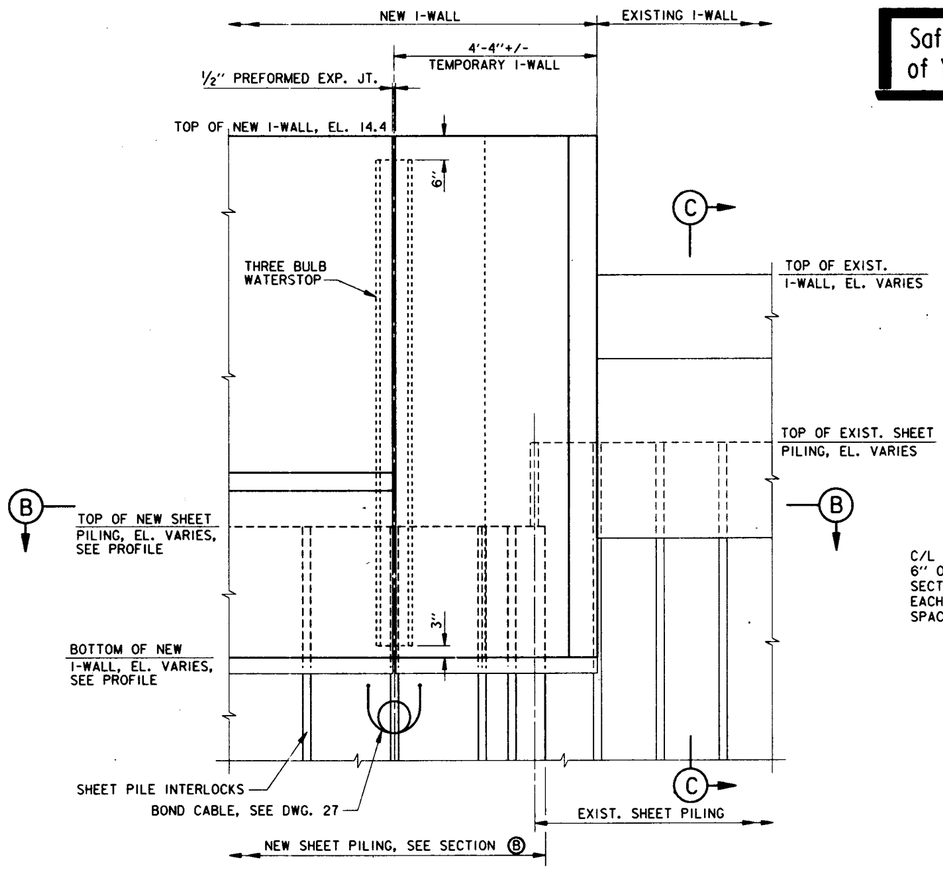
DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 16	PLOT DATE: 20 JULY 93
DRAWN BY: J.E.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145HOB.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 28 OF 58



LAND SIDE ELEVATION

STA. 14+47.29 EB/L AND STA. 12+58.28 WB/L - SHOWN
STA. 12+88.68 EB/L AND STA. 14+21.06 WB/L - OPPOSITE HAND
NEW I-WALL TO EXISTING I-WALL - VICINITY GENTILLY BLVD.

SCALE: ¾" = 1'- 0"

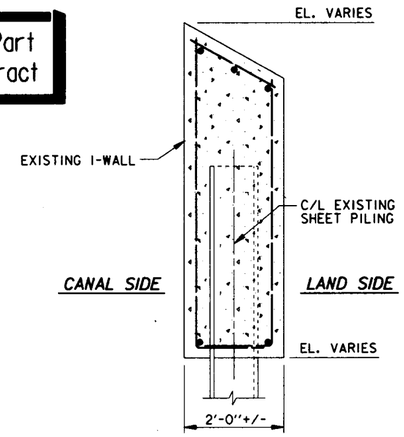


LAND SIDE ELEVATION

STA. 68+78.42 EB/L - SHOWN
STA. 69+10.0 WB/L - OPPOSITE HAND
NEW I-WALL TO EXISTING I-WALL - VICINITY MIRABEAU AVE.

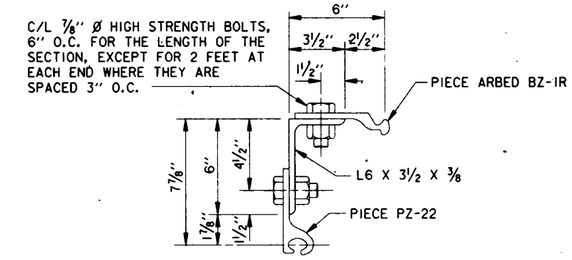
SCALE: ¾" = 1'- 0"

Safety is a Part of Your Contract



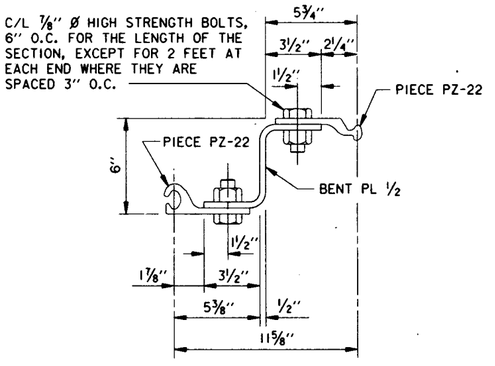
SECTION C

SCALE: ¾" = 1'- 0"



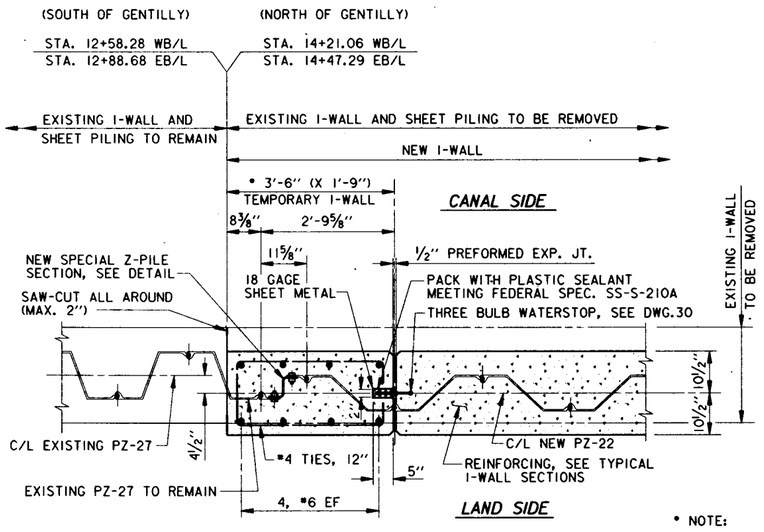
SPECIAL L-PILE SECTION

SCALE: 3" = 1' - 0"



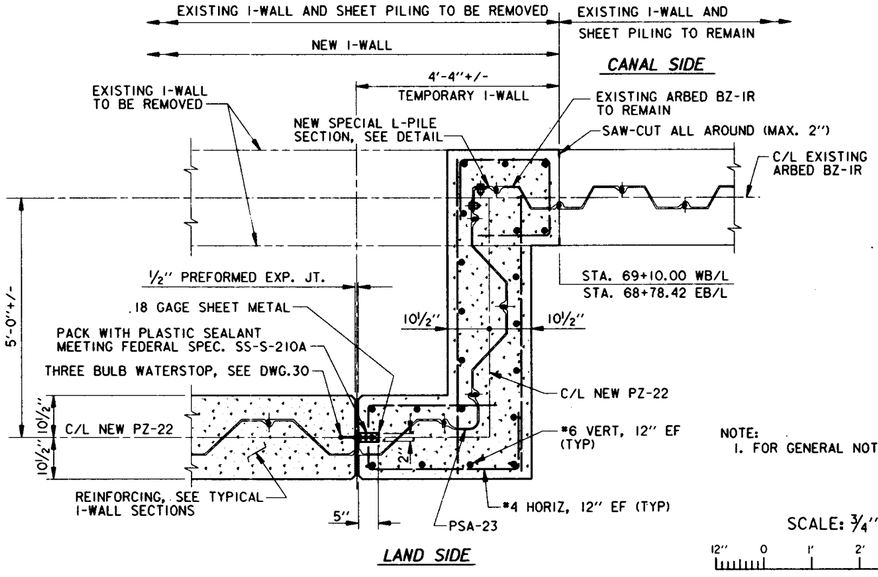
SPECIAL Z-PILE SECTION

SCALE: 3" = 1' - 0"



SECTION A

SCALE: ¾" = 1'- 0"



SECTION B

SCALE: ¾" = 1'- 0"

NOTE:
1. FOR GENERAL NOTES, SEE DWG. 2.

SCALE: ¾" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 3" = 1' - 0"

12" 0 1'

• NOTE:
DIMENSION MAY BE VARIED TO SUIT FIELD CONDITIONS.

VALUE ENGINEERING — INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

C•A•D

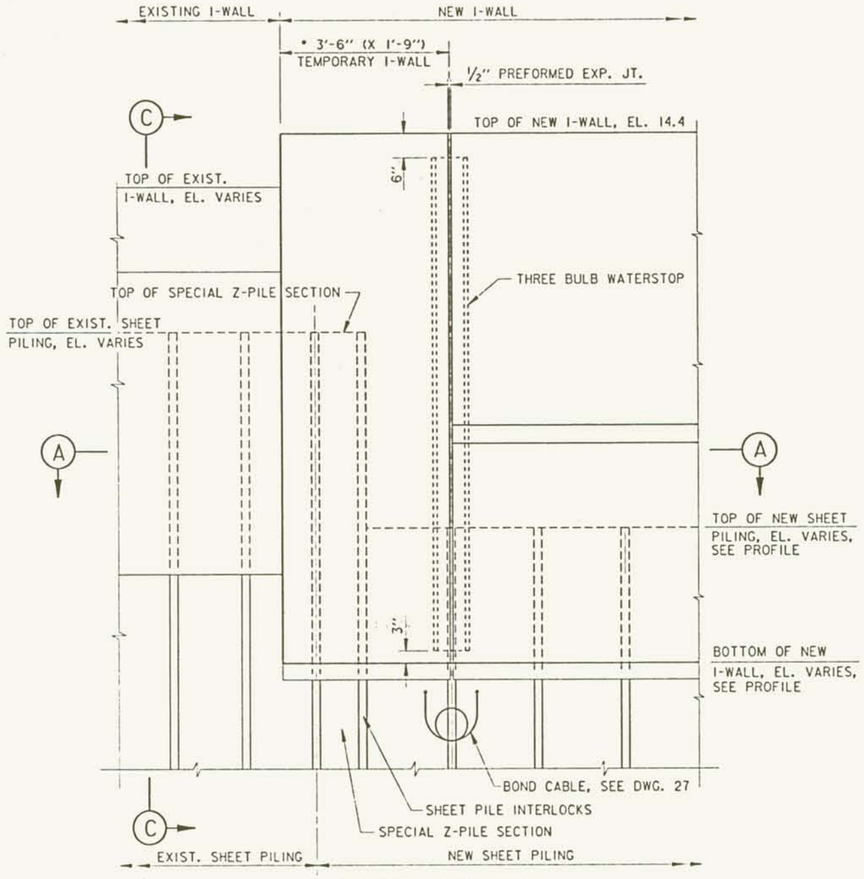
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

WALL JOINT DETAILS
GENTILLY BLVD. AND MIRABEAU AVE.

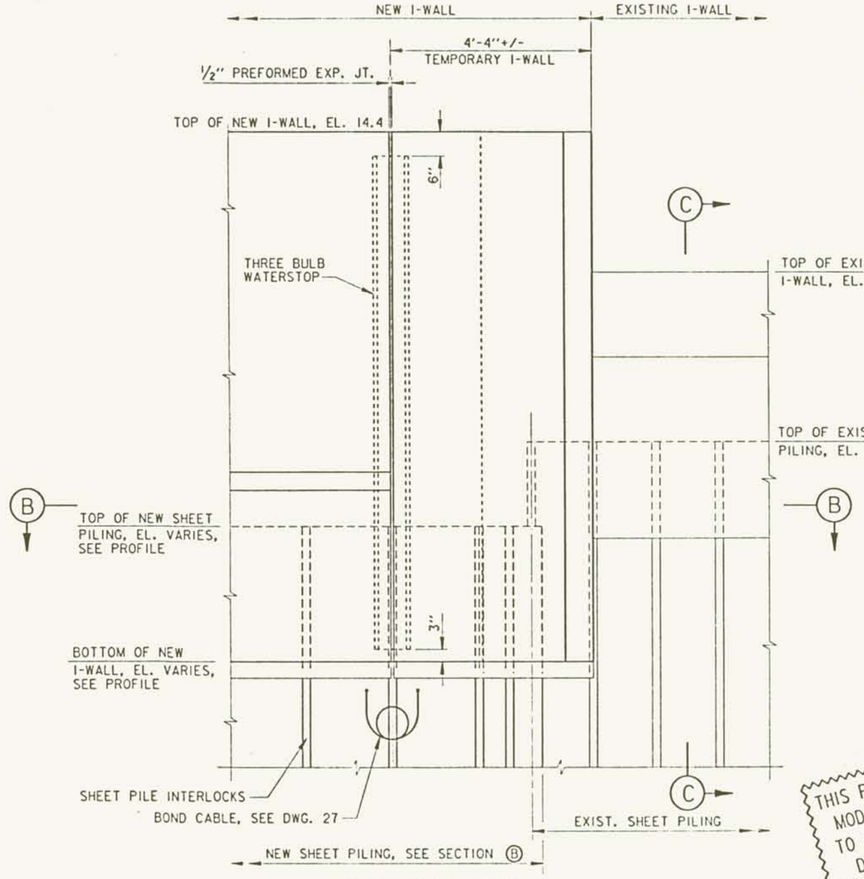
DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 16	PLOT DATE: 14 JULY 93
DRAWN BY: J.E.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145802.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 28A OF 58



LAND SIDE ELEVATION

STA. 14+47.29 EB/L AND STA. 12+58.28 WB/L - SHOWN
STA. 12+88.68 EB/L AND STA. 14+21.06 WB/L - OPPOSITE HAND
NEW I-WALL TO EXISTING I-WALL - VICINITY GENTILLY BLVD.

SCALE: 3/4" = 1'- 0"

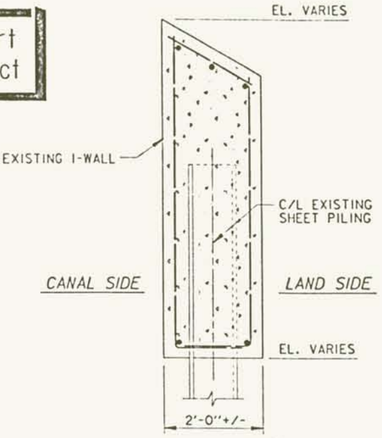


LAND SIDE ELEVATION

STA. 68+78.42 EB/L - SHOWN
STA. 69+10.0 WB/L - OPPOSITE HAND
NEW I-WALL TO EXISTING I-WALL - VICINITY MIRABEAU AVE.

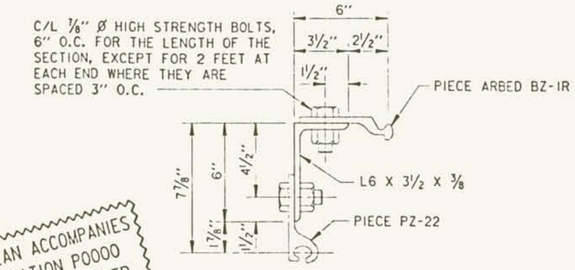
SCALE: 3/4" = 1'- 0"

Safety is a Part of Your Contract



SECTION (C)

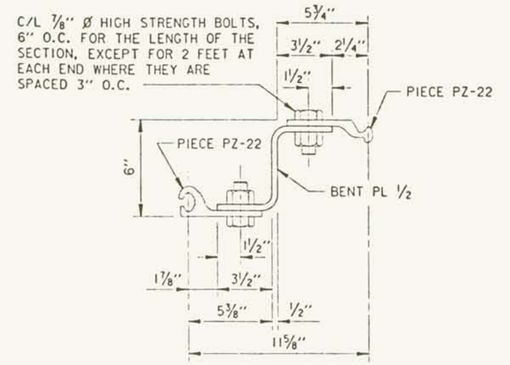
SCALE: 3/4" = 1'- 0"



SPECIAL L-PILE SECTION

SCALE: 3" = 1' - 0"

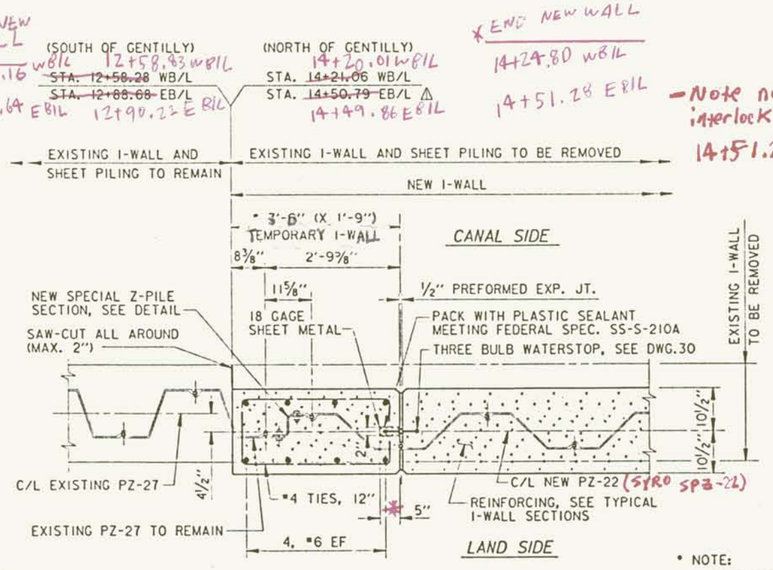
THIS PLAN ACCOMPANIES MODIFICATION P0000 TO CONTRACT NUMBER DACW29-94-C-0003



SPECIAL Z-PILE SECTION

SCALE: 3" = 1' - 0"

END NEW WALL
12+55.16 WB/L ~~12+58.93 WB/L~~
12+81.64 EB/L ~~12+88.68 EB/L~~

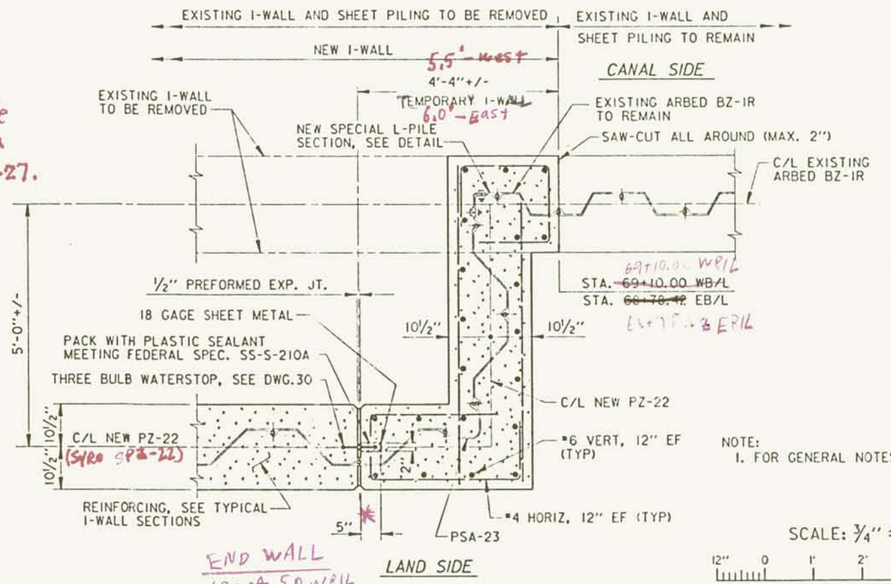


SECTION (A)

SCALE: 3/4" = 1'- 0"

END NEW WALL
14+24.80 WB/L
14+51.28 EB/L

-Note north sheetpile interlock at EB/L Sta 14+51.28 is a PZ-27.



END WALL
69+04.50 WB/L
68+72.42 EB/L

LAND SIDE

SECTION (B)

SCALE: 3/4" = 1'- 0"

* NOTE:
DIMENSION MAY BE VARIED TO SUIT FIELD CONDITIONS.

NOTE:
1. FOR GENERAL NOTES, SEE DWG. 2.

SCALE: 3/4" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 3" = 1' - 0"

12" 0 1'

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	REVISED STA. IN SECT. A; MOD.	1-24-94	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

WALL JOINT DETAILS
GENTILLY BLVD. AND MIRABEAU AVE.

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 16	PLOT DATE: JAN.24,1994
DRAWN BY: J.E.B.			
CHECKED BY: W.O.B.	CADD FILE: 42145B03.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BALMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 28A OF 58

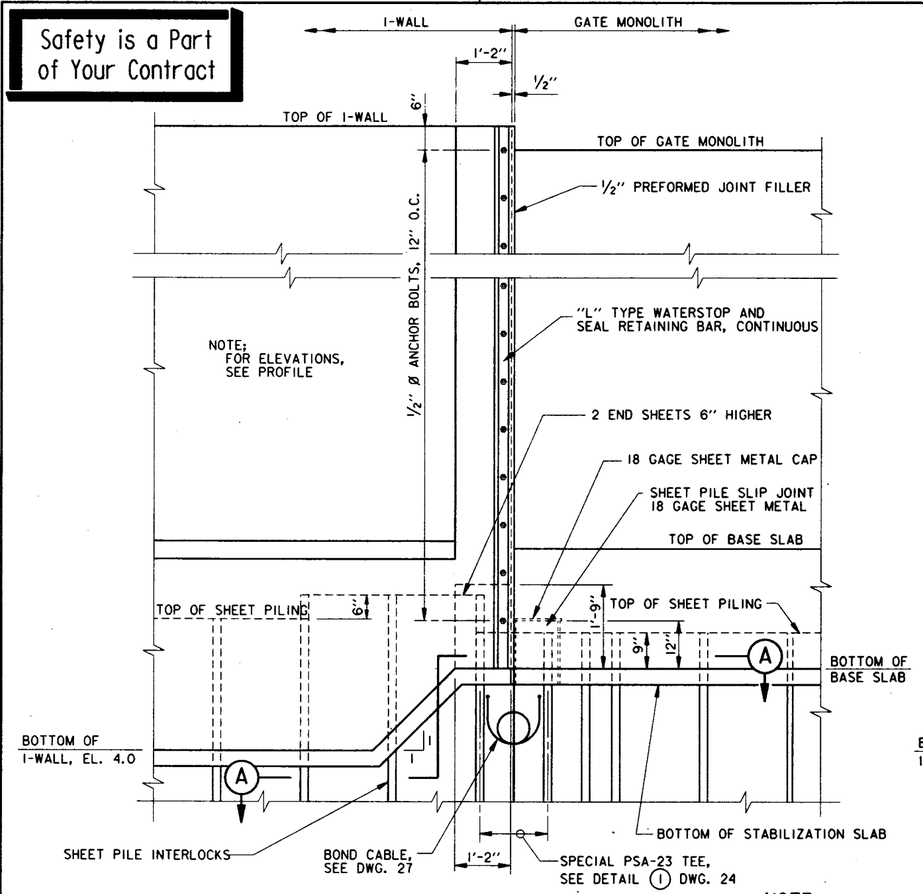
C·A·D

VALUE ENGINEERING (INCENTIVE CLAUSES) YOUR KEY TO HIGHER PROFITS

5 4 3 2 1

D C B A

Safety is a Part of Your Contract

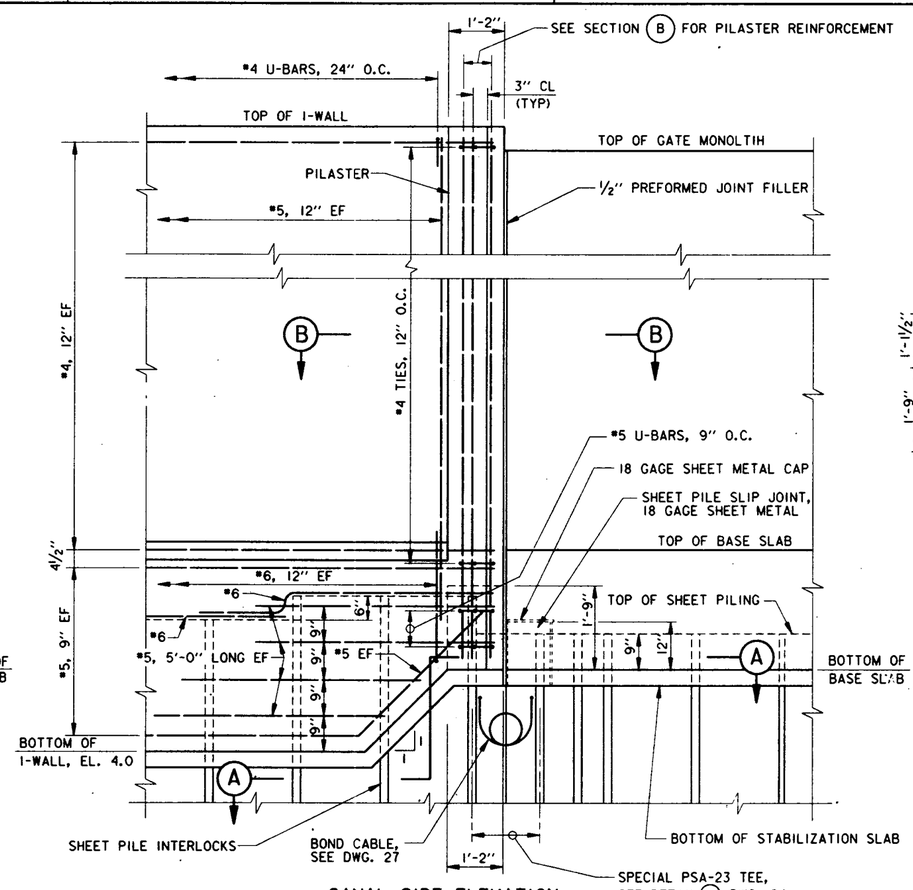


CANAL SIDE ELEVATION

I-WALL TO SWING GATE MONOLITH

SCALE: ¾" = 1'- 0"

NOTE:
EAST SIDE - SHOWN
WEST SIDE - OPPOSITE HAND

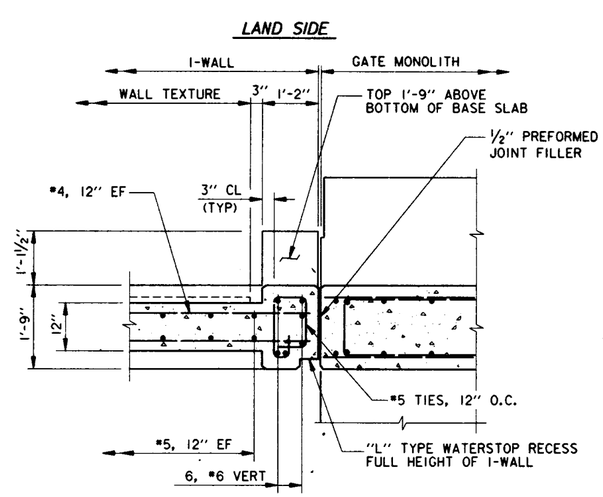


CANAL SIDE ELEVATION

REINFORCEMENT

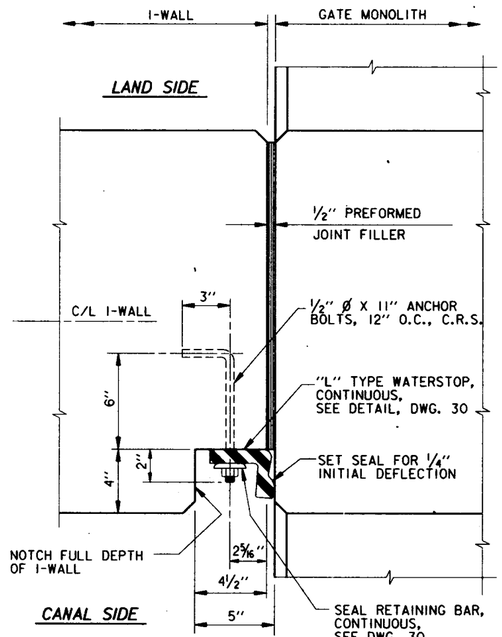
I-WALL TO GATE MONOLITH

SCALE: ¾" = 1'- 0"



SECTION (B)

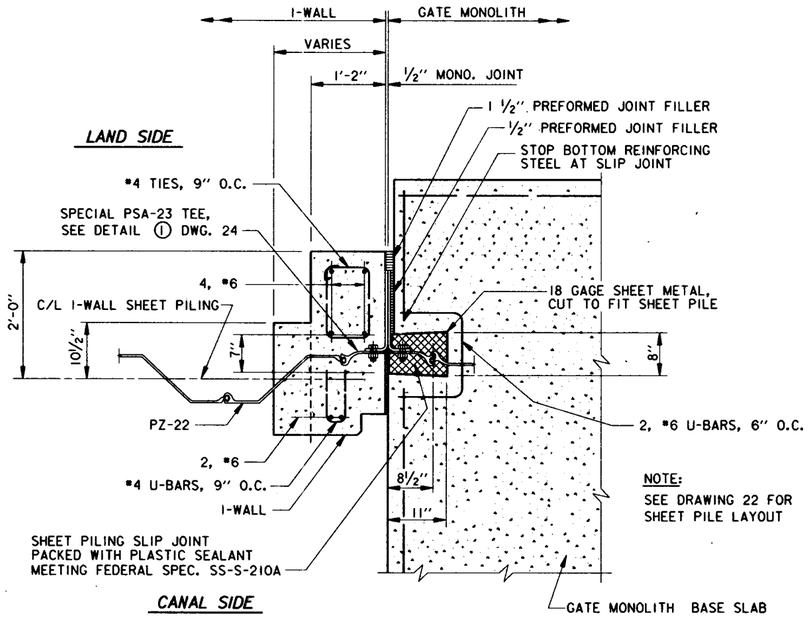
SCALE: ¾" = 1'- 0"



PLAN

I-WALL TO GATE MONOLITH

SCALE: 3" = 1' - 0"



SECTION (A)

SCALE: 1" = 1'- 0"

FOR GENERAL NOTES, SEE DWG. 2.

SCALE: ¾" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 1" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 3" = 1' - 0"

12" 0 1'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

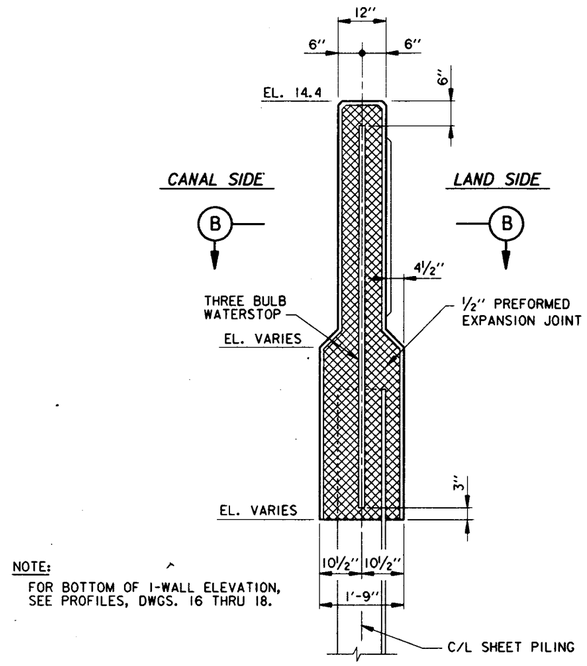
GATE MONOLITH TO I-WALL JOINT

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 16	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145HOT.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 29 OF 58

C•A•D

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

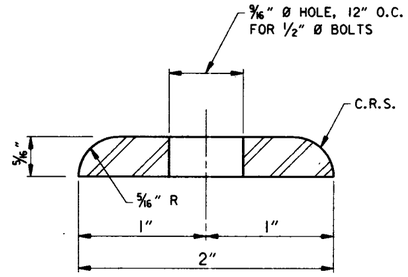
Safety is a Part of Your Contract



NOTE:
FOR BOTTOM OF I-WALL ELEVATION, SEE PROFILES, DWGS. 16 THRU 18.

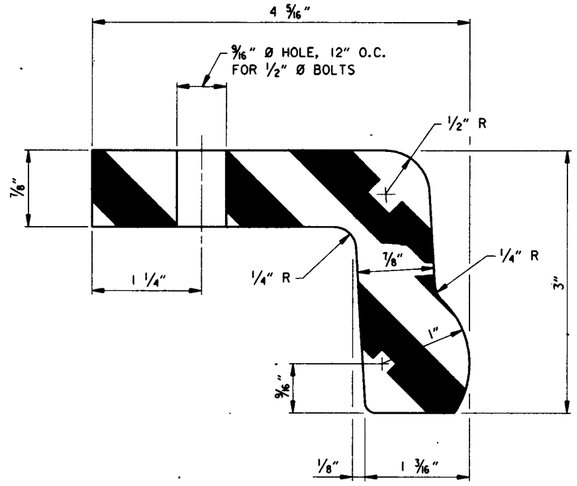
TYPICAL I-WALL JOINT

SCALE: ¾" = 1'- 0"



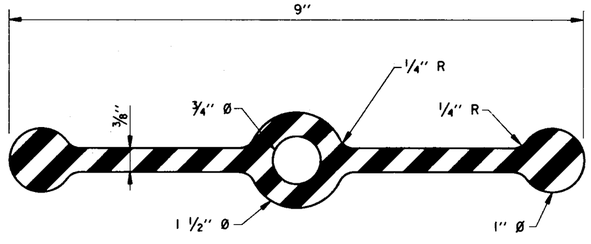
SEAL RETAINING BAR

SCALE: 6" = 1'- 0"



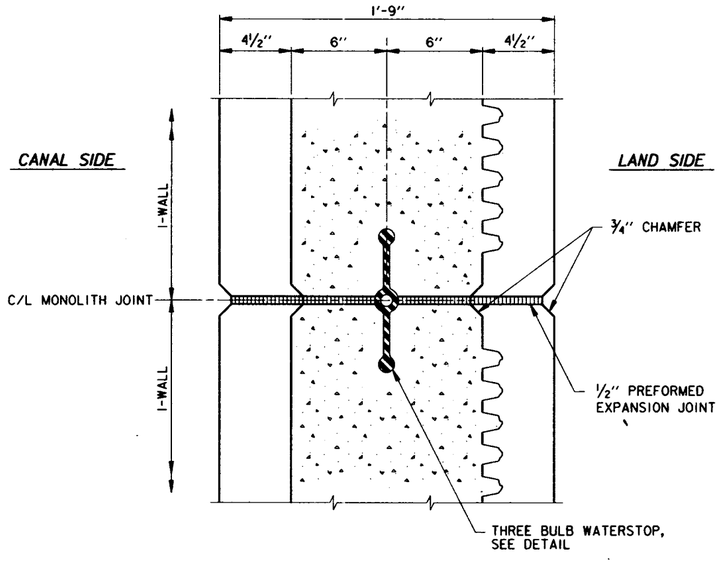
"L" TYPE WATERSTOP

SCALE: 12" = 1'- 0"



THREE BULB WATERSTOP

SCALE: 12" = 1' - 0"



SECTION (B)

SCALE: 3" = 1' - 0"

FOR GENERAL NOTES, SEE DWG. 2.

SCALE: ¾" = 1'- 0"
12" 0 1' 2' 3' 4' 5'

SCALE: 3" = 1' - 0"
12" 0 1'

SCALE: 6" = 1' - 0"
6" 3" 0

SCALE: 12" = 1' - 0"
6" 3" 0

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE.FLOODWALL
ORLEANS PARISH, LOUISIANA

TYPICAL JOINT DETAILS

DESIGNED BY: A.L.D. DRAWN BY: J.E.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 14 JULY 93
	CADD FILE: 40145HOC DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 30 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

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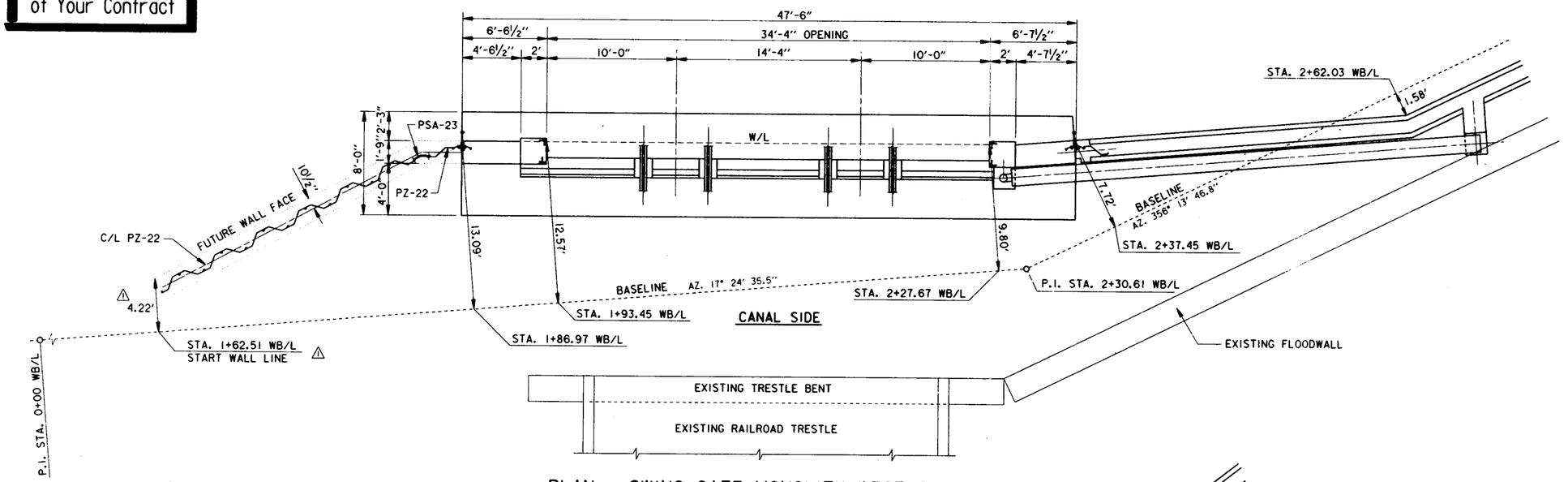
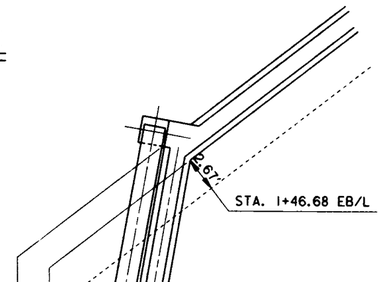
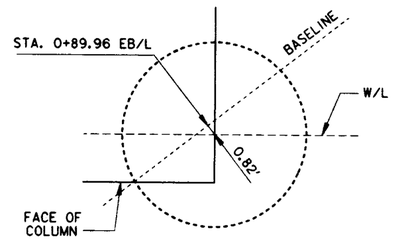


PLAN - SWING GATE MONOLITH WEST SIDE

SCALE: 1/4" = 1'- 0"

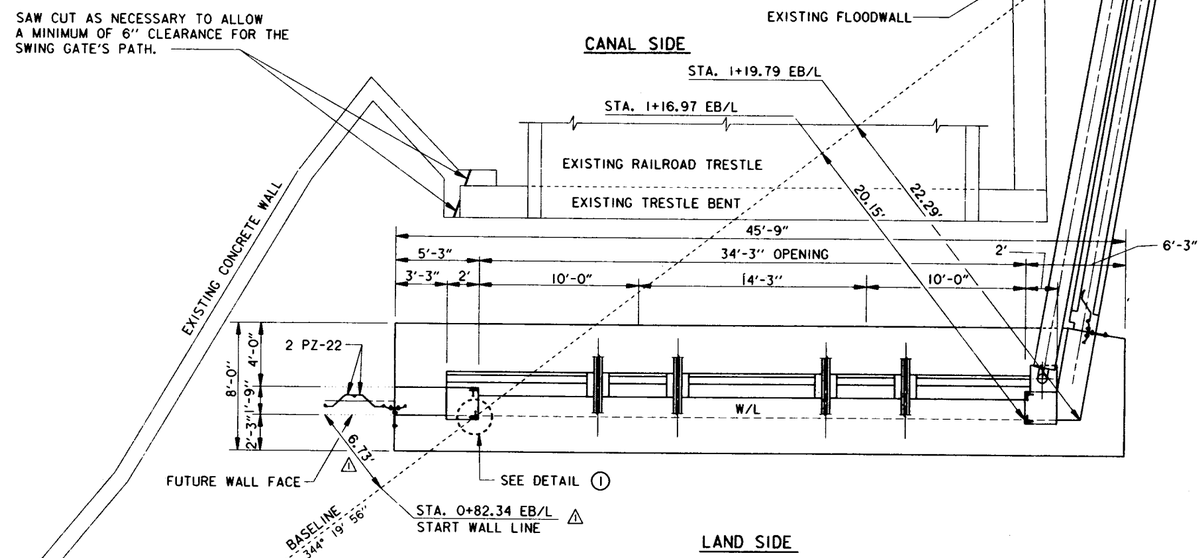
NOTES:
1. SWING GATES ARE SHOWN IN THE STORED POSITION.
2. SEE DWG. 47 FOR WATER LINE RELOCATION ON EAST SIDE.
3. SEE DWGS. 48 AND 49 FOR ELECTRIC FEEDER LINE RELOCATIONS.





DETAIL (1)

SCALE: 3" = 1'- 0"



PLAN - SWING GATE MONOLITH EAST SIDE

SCALE: 1/4" = 1'- 0"

SCALE: 1/4" = 1'- 0"

12" 0 5' 10' 15' 20'

SCALE: 3" = 1' - 0"

12" 0 1'

SYMBOL	DESCRIPTION	DATE	APPROVED
1	REVISED STARTING POINT; AMEND. NO. 1	10-14-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

RAILROAD GATE MONOLITHS

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 48	PLOT DATE: 10 AUGUST 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145D24.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0030		DWG. 31 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

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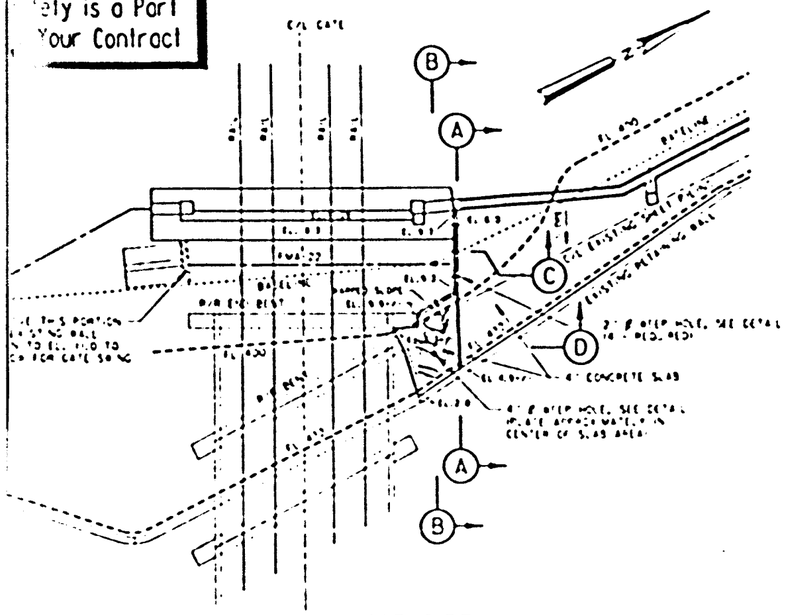


ety is a Part
Your Contract

PARTIAL PLAN - WEST SIDE

SCALE: 1" = 10'

NOTES:

1. ALL ELEVATIONS ARE APPROXIMATE.
2. 4" CONCRETE SLAB, MINIMUM 3000 P.S.I., REINFORCE WITH 6/6 W.W.F. - W5 X W5 (CENTERED IN SLAB)

⚘ PROVIDE ½" PREFORMED EXPANSION JOINT MATERIAL BETWEEN CONCRETE SLAB/CURB AND NEW AND EXISTING CONCRETE STRUCTURES.

PARTIAL PLAN - EAST SIDE

SCALE: 1" = 10'

THIS PLAN ACCOMPANIES
MODIFICATION P0000
TO CONTRACT NUMBER
DACW29-94-C-0003

SECTION Ⓐ

SCALE: ¼" = 1'-0"

SECTION Ⓑ

SCALE: ¼" = 1'-0"

SECTION Ⓒ

SCALE: ¼" = 1'-0"

SECTION Ⓓ

SCALE: ¼" = 1'-0"

SLAB DETAIL

WALL DETAIL

WEEP HOLE DETAIL

SCALE: ¾" = 1'- 0"

SCALE: 1" = 10'

SCALE: ¼" = 1'- 0"

SCALE: ¾" = 1'- 0"

SECTION Ⓔ

SCALE: ¼" = 1'-0"

SECTION Ⓕ

SCALE: ¼" = 1'-0"

SECTION Ⓖ

SCALE: ¼" = 1'-0"

△	ADDED [illegible]	[illegible]	A.L.D.
SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

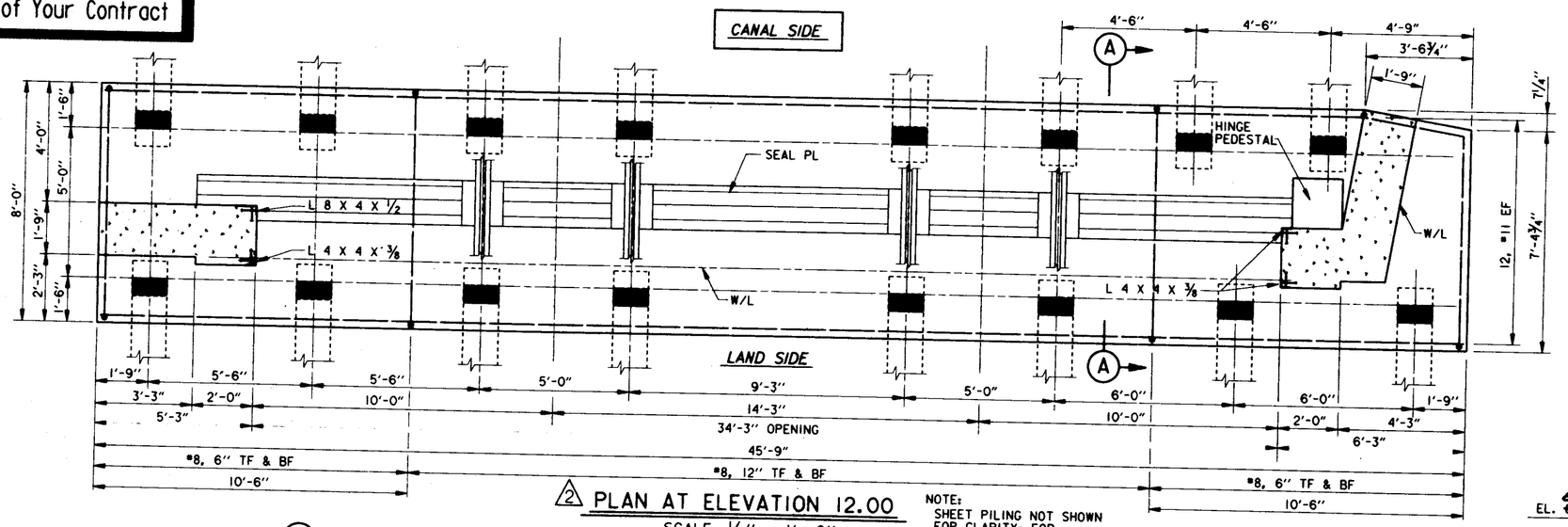
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

PAVEMENT DETAILS AT SWING GATES

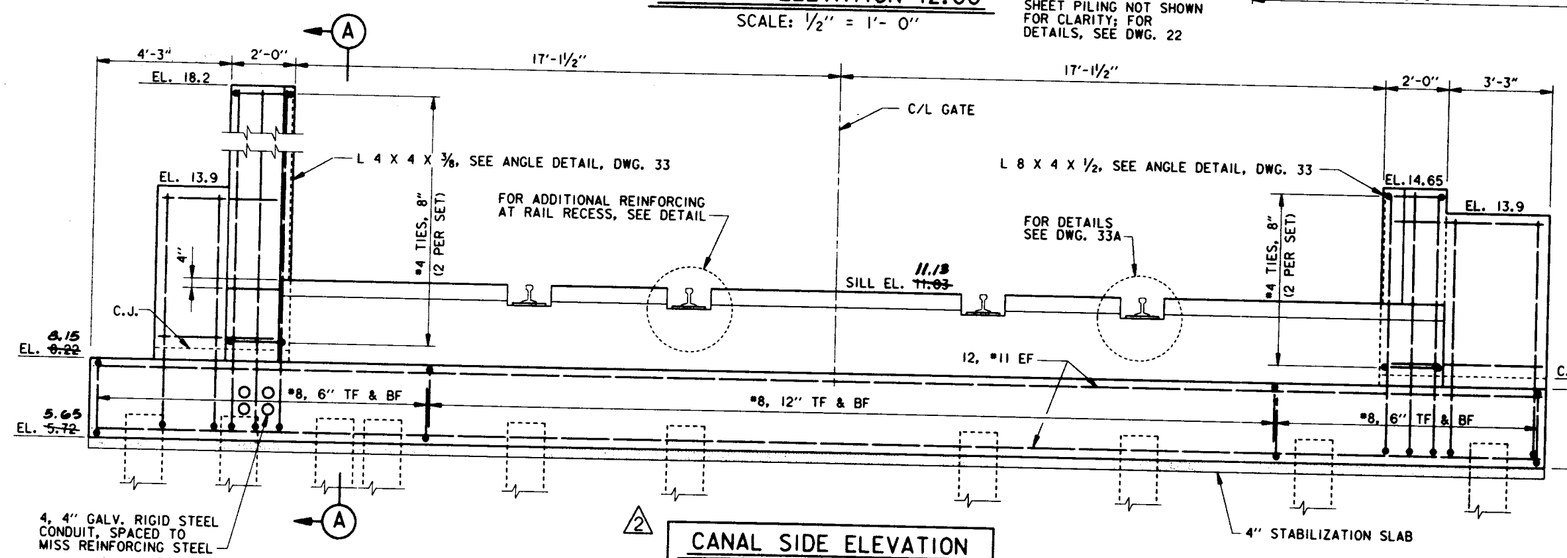
DESIGNED BY: A.L.D.
DRAWN BY: [illegible]
CHECKED BY: B.C.B.
SUBMITTED BY: [illegible]
DATE: FEB 95
PLOT SCALE: 120
PLOT DATE: 10 MAR 95
FILE NO. H-4-40145
SOLICITATION NO. DACW29-93-B-0080
SH. 31A OF 58

Safety is a Part of Your Contract

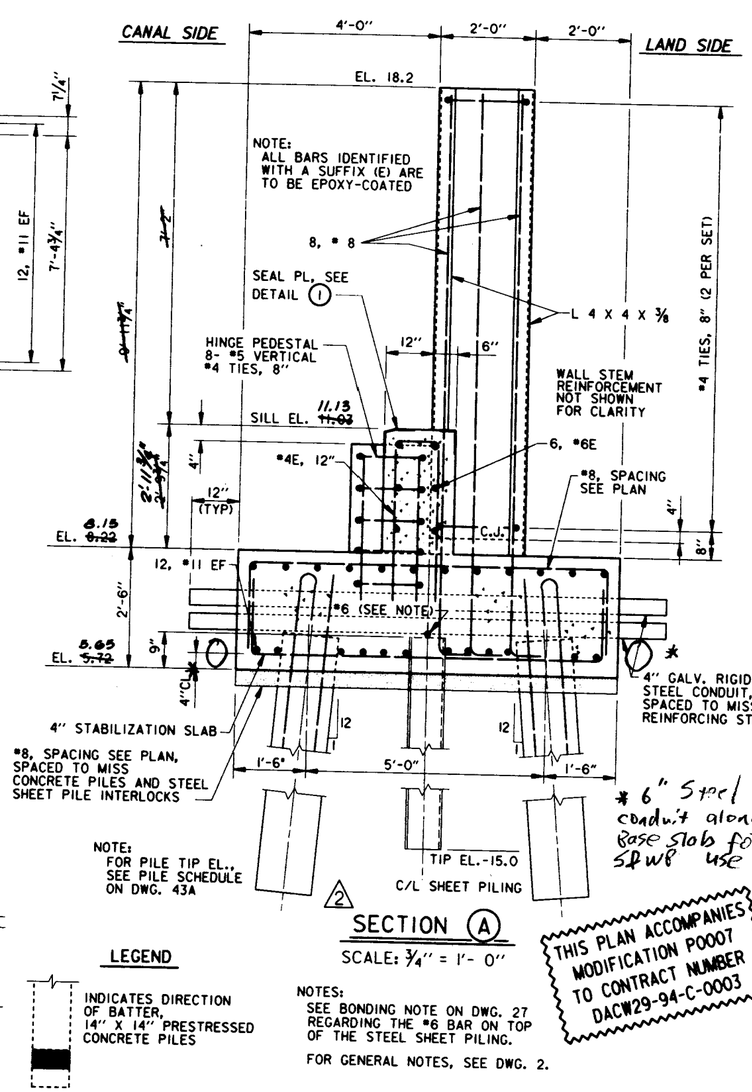


2 PLAN AT ELEVATION 12.00
SCALE: ½" = 1'- 0"

NOTE:
SHEET PILING NOT SHOWN FOR CLARITY; FOR DETAILS, SEE DWG. 22



2 CANAL SIDE ELEVATION
SCALE: ½" = 1'- 0"



NOTE:
FOR PILE TIP EL., SEE PILE SCHEDULE ON DWG. 43A

2 SECTION (A)
SCALE: ¾" = 1'- 0"

LEGEND

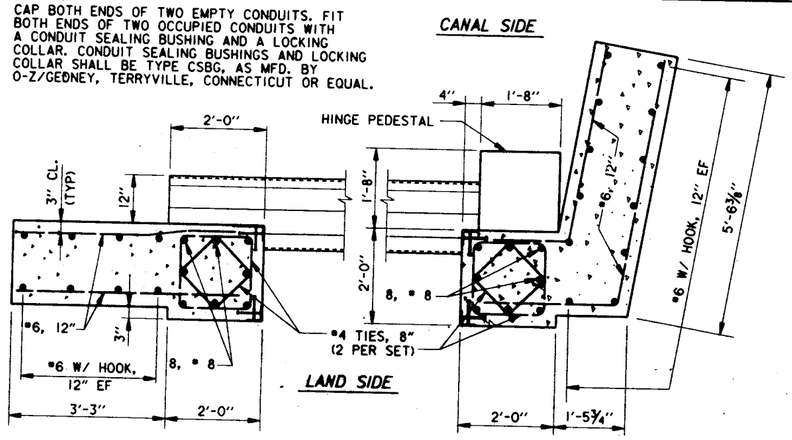
INDICATES DIRECTION OF BATTER, 14" X 14" PRESTRESSED CONCRETE PILES

NOTES:
SEE BONDING NOTE ON DWG. 27 REGARDING THE *6 BAR ON TOP OF THE STEEL SHEET PILING.

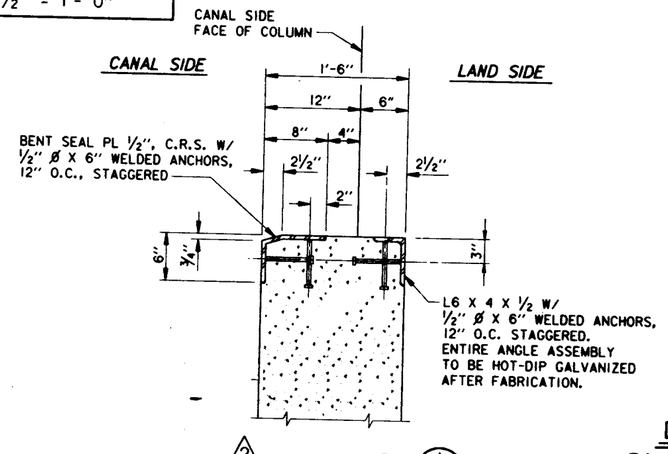
FOR GENERAL NOTES, SEE DWG. 2.

THIS PLAN ACCOMPANIES MODIFICATION P0007 TO CONTRACT NUMBER DACW29-94-C-0003

NOTE:
CAP BOTH ENDS OF TWO EMPTY CONDUITS. FIT BOTH ENDS OF TWO OCCUPIED CONDUITS WITH A CONDUIT SEALING BUSHING AND A LOCKING COLLAR. CONDUIT SEALING BUSHINGS AND LOCKING COLLAR SHALL BE TYPE CSBG, AS MFD. BY O-Z/GEDNEY, TERRYVILLE, CONNECTICUT OR EQUAL.

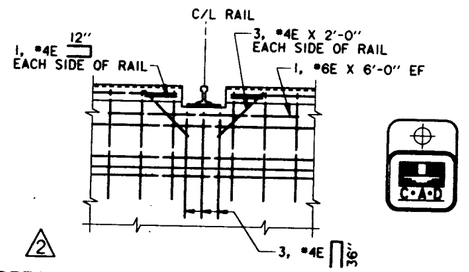


2 SECTION AT ELEVATION 12.0
SCALE: ¾" = 1'- 0"



2 DETAIL (1) (1/33|32)
SILL PLATE DETAIL
SCALE: 1½" = 1'- 0"

1 FOR ALTERNATE PILE TYPE, SEE DWG. 43A AND SPECIFICATIONS



2 DETAIL OF ADDITIONAL REINFORCING AT RAIL RECESS - TYPICAL EACH GATE MONOLITH
SCALE: ½" = 1'- 0"

SCALE: ½" = 1'- 0"
SCALE: ¾" = 1'- 0"
SCALE: 1½" = 1'- 0"

SYMBOL	DESCRIPTION	DATE	APPROVED
2	GENERAL REVISIONS; MOD. 7	2-17-94	H.M.B.
1	ADDED NOTE FOR ALTERNATE PILE TYPE; AMEND. NO. 3	9-3-93	H.M.B.

REVISIONS

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

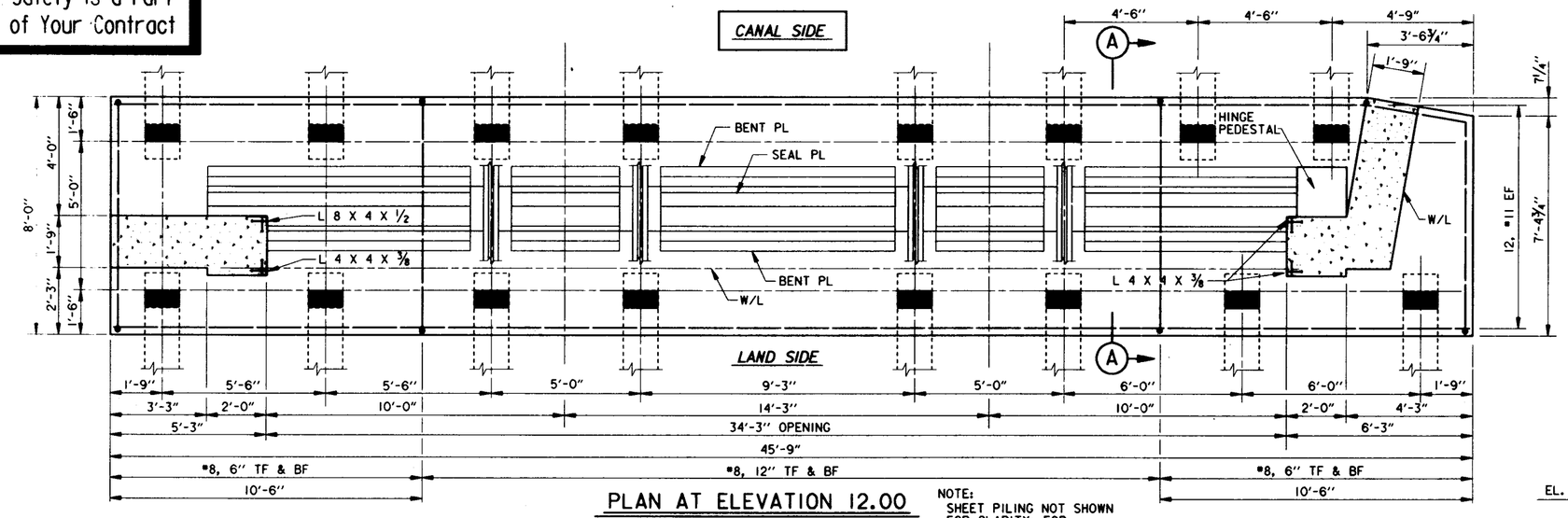
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE MONOLITH
EAST SIDE

DESIGNED BY: H.M.B. DRAWN BY: D.J.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 14 JULY 93
	CADD FILE: 40145027.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 32 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

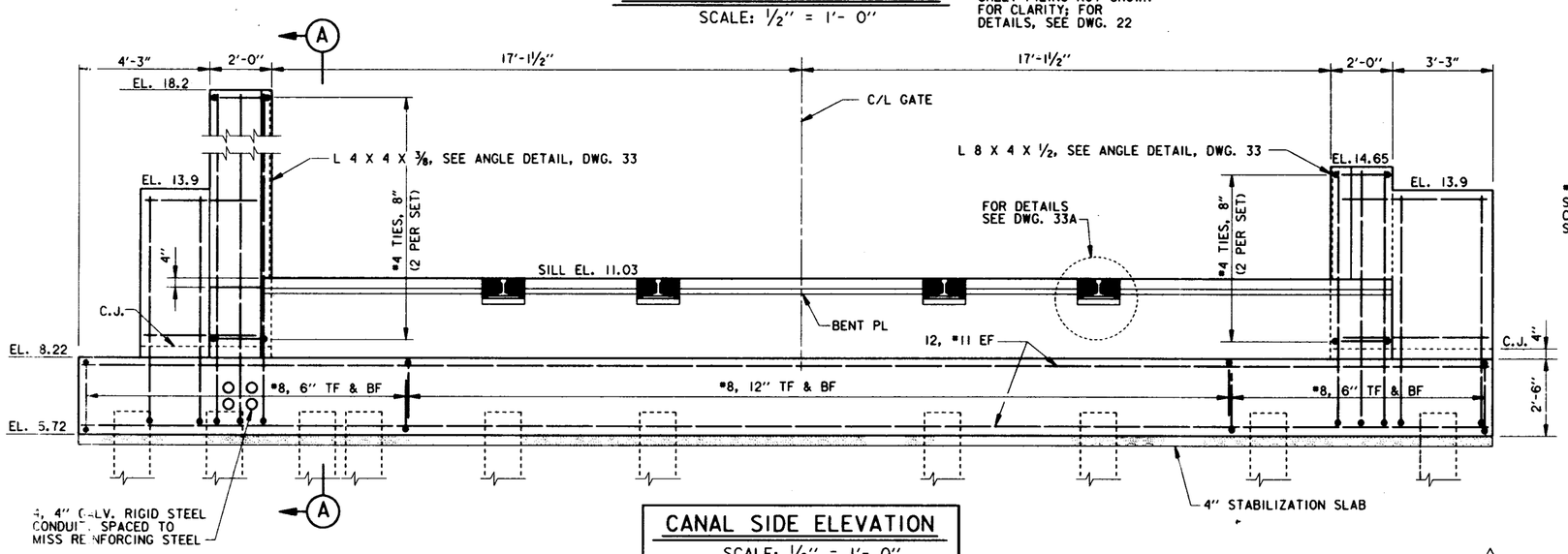
Safety is a Part of Your Contract



PLAN AT ELEVATION 12.00

SCALE: ½" = 1'- 0"

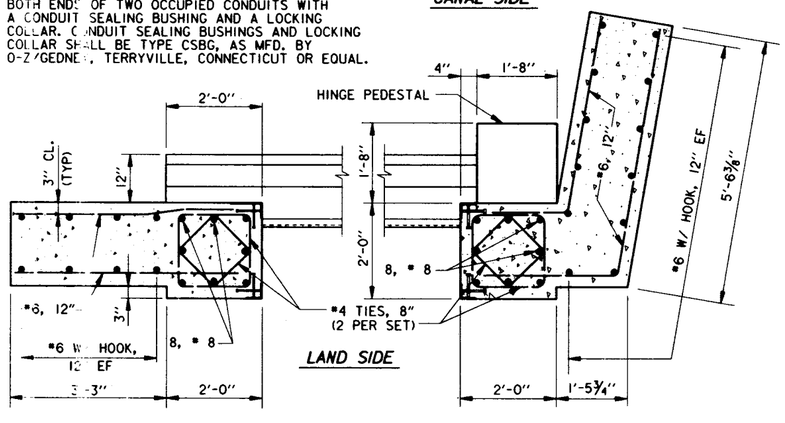
NOTE:
SHEET PILING NOT SHOWN FOR CLARITY; FOR DETAILS, SEE DWG. 22



CANAL SIDE ELEVATION

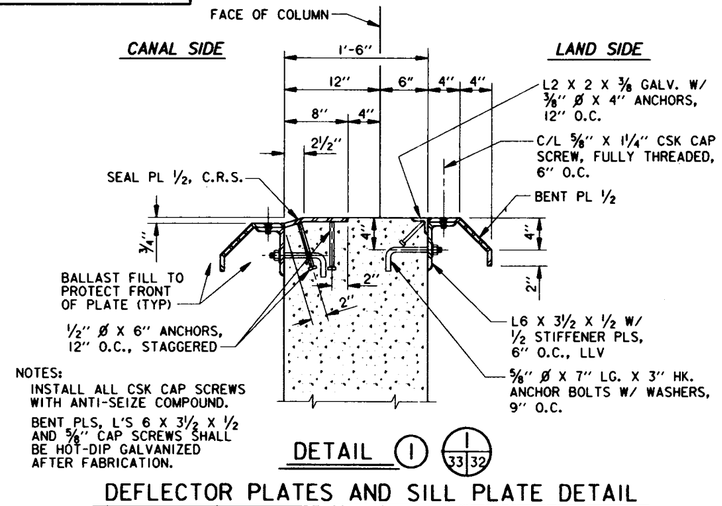
SCALE: ½" = 1'- 0"

NOTE:
CAP BOTH ENDS OF TWO EMPTY CONDUITS. FIT BOTH ENDS OF TWO OCCUPIED CONDUITS WITH A CONDUIT SEALING BUSHING AND A LOCKING COLLAR. CONDUIT SEALING BUSHINGS AND LOCKING COLLAR SHALL BE TYPE CSBG, AS MFD. BY O-Z/GEDNEY, TERRYVILLE, CONNECTICUT OR EQUAL.



SECTION AT ELEVATION 12.0

SCALE: ¾" = 1'- 0"

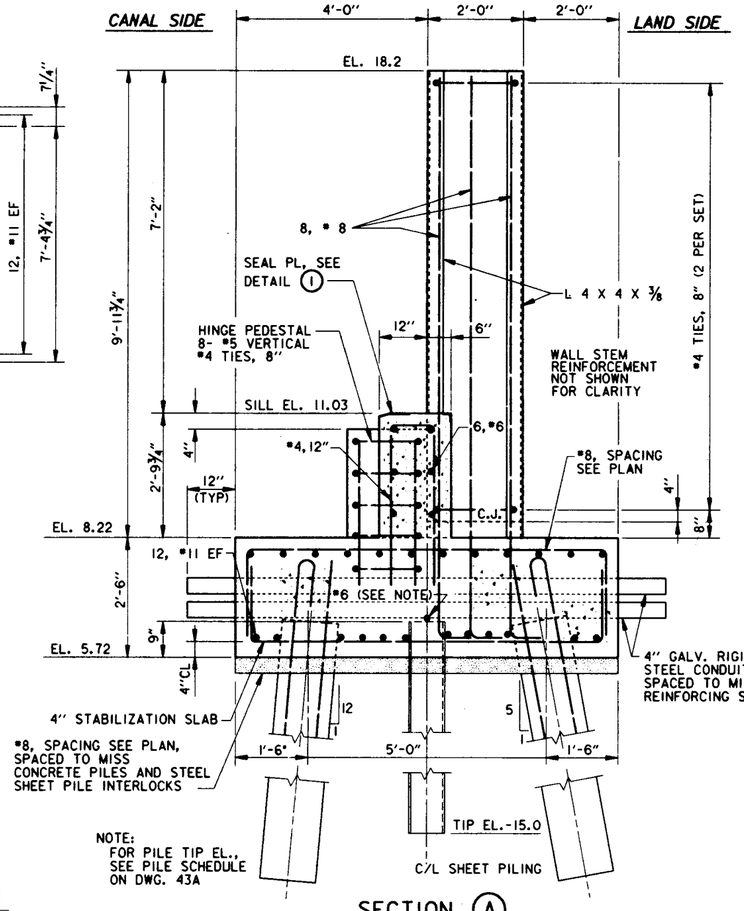


NOTES:
INSTALL ALL CSK CAP SCREWS WITH ANTI-SEIZE COMPOUND.
BENT PLS, L'S 6 X 3½ X ½ AND ⅝" CAP SCREWS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.

DETAIL (1) (1/33 1/32)

DEFLECTOR PLATES AND SILL PLATE DETAIL

SCALE: 1 ½" = 1'- 0"



SECTION (A)

SCALE: ¾" = 1'- 0"

NOTES:
SEE BONDING NOTE ON DWG. 27 REGARDING THE #6 BAR ON TOP OF THE STEEL SHEET PILING.

FOR GENERAL NOTES, SEE DWG. 2.

LEGEND

INDICATES DIRECTION OF BATTER, 14" X 14" PRESTRESSED CONCRETE PILES

⚠1 FOR ALTERNATE PILE TYPE, SEE DWG. 43A AND SPECIFICATIONS

SCALE: ½" = 1'- 0"

12" 0 2' 4' 6' 8'

SCALE: ¾" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 1 ½" = 1'- 0"

12" 0 1' 2' 3'

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠1	ADDED NOTE FOR ALTERNATE PILE TYPE; AMEND. NO. 3	9-3-93	H.M.B.

REVISIONS

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

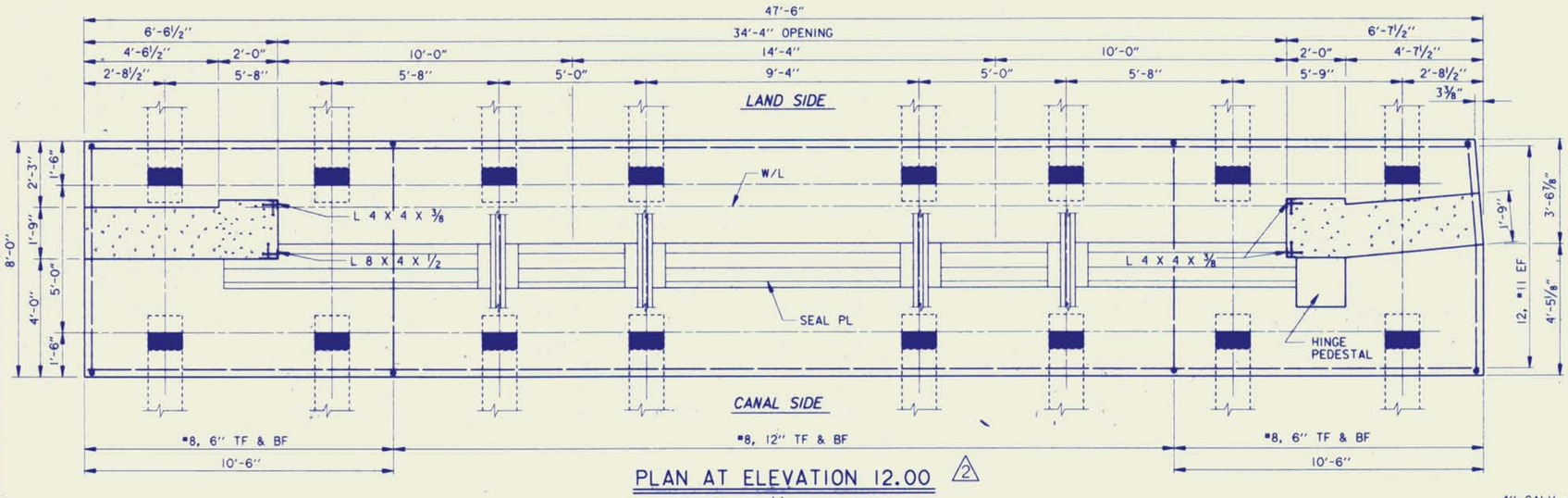
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE MONOLITH EAST SIDE

DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145D27.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BALMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 32 OF 58

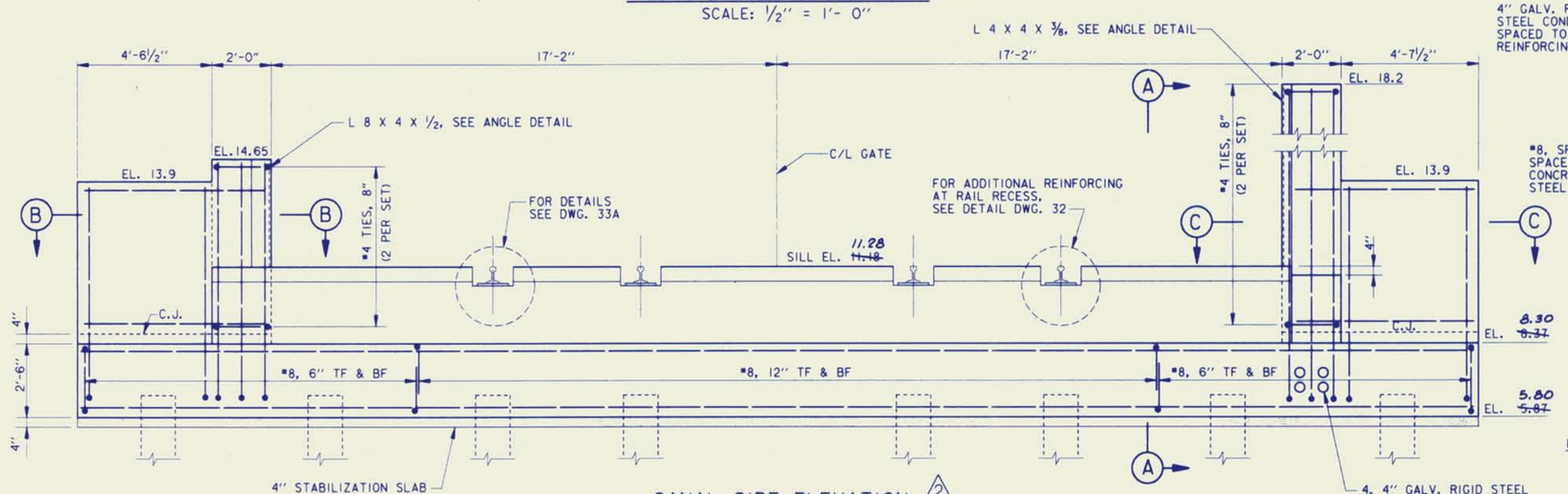
C-A-D

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS



PLAN AT ELEVATION 12.00 (2)

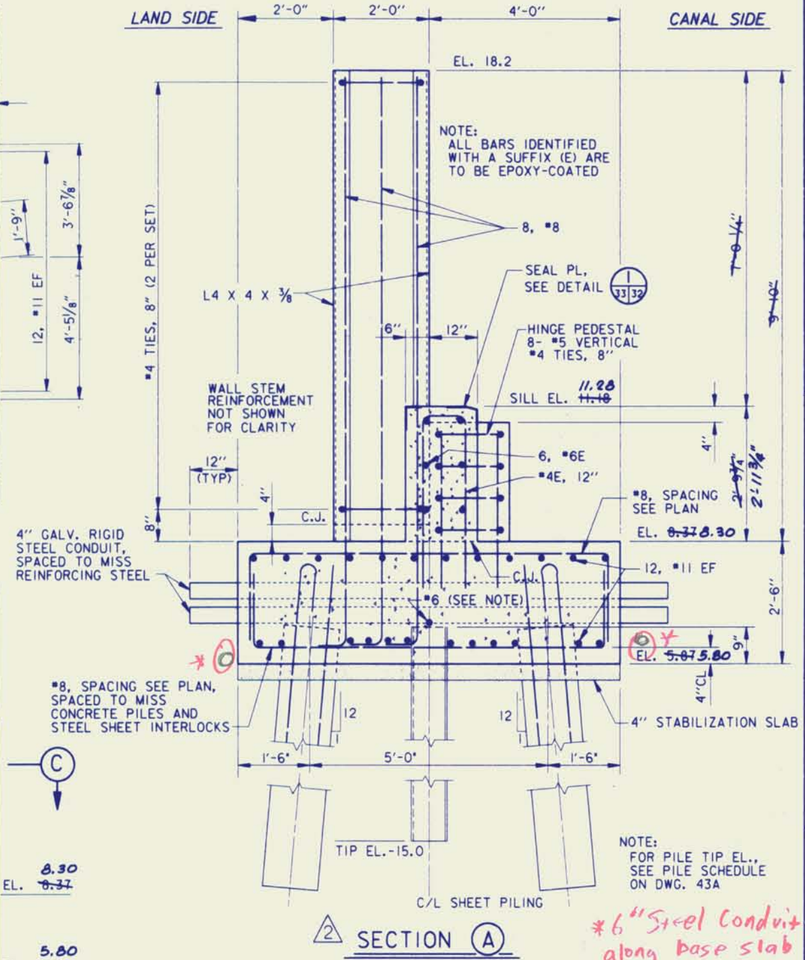
SCALE: 1/2" = 1'- 0"



CANAL SIDE ELEVATION (2)

SCALE: 1/2" = 1'- 0"

NOTE:
SHEET PILING NOT SHOWN FOR CLARITY, FOR DETAILS SEE DWG. 22.



SECTION (A) (2)

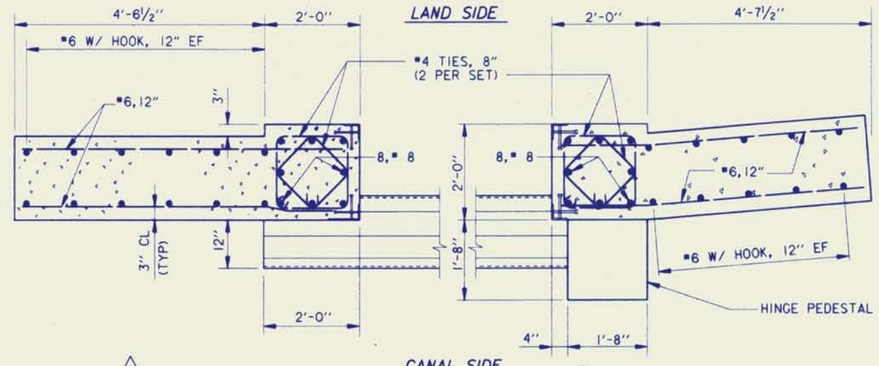
SCALE: 3/4" = 1'- 0"

*6 "Steel Conduit along base slab for SCADA use.

NOTE:
CAP BOTH ENDS OF TWO EMPTY CONDUITS. FIT BOTH ENDS OF TWO OCCUPIED CONDUITS WITH A CONDUIT SEALING BUSHING AND A LOCKING COLLAR. CONDUIT SEALING BUSHINGS AND LOCKING COLLAR SHALL BE TYPE CSBG, AS MFD. BY O-Z/GEDNEY, TERRYVILLE, CONNECTICUT OR EQUAL.

NOTE:
SEE BONDING NOTE ON DWG. 27 REGARDING THE *6 BAR ON TOP OF THE STEEL SHEET PILING.

FOR GENERAL NOTES, SEE DWG. 2.

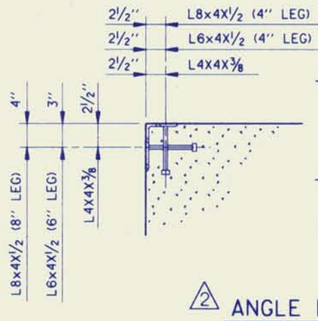


SECTION (B) (2)

SCALE: 3/4" = 1'- 0"

SECTION (C) (2)

SCALE: 3/4" = 1'- 0"



AT COLUMNS:
L4X4X3/8 W/ 1/2" Ø X 6" WELDED ANCHORS, 12" O.C. STAGGERED
L8X4X1/2 W/ 1/2" Ø X 6" WELDED ANCHORS, 12" O.C. STAGGERED

AT GATE SILL:
L6X4X1/2 W/ 1/2" Ø X 6" WELDED ANCHORS, 12" O.C. STAGGERED

NOTE:
ENTIRE ANGLE ASSEMBLY TO BE HOT-DIP GALVANIZED AFTER FABRICATION.

ANGLE DETAIL (2)

SCALE: 1 1/2" = 1'- 0"

(1) FOR ALTERNATE PILE TYPE, SEE DWG. 43A AND SPECIFICATIONS

LEGEND

INDICATES DIRECTION OF BATTER, 14" X 14" PRESTRESSED CONCRETE PILES

THIS PLAN ACCOMPANIES MODIFICATION P0007 TO CONTRACT NUMBER DACW29-94-C-0003

SCALE: 1/2" = 1'- 0"

SCALE: 3/4" = 1'- 0"

SCALE: 1 1/2" = 1'- 0"

Safety is a Part of Your Contract

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

SYMBOL	DESCRIPTION	DATE	APPROVED
2	GENERAL REVISIONS; MOD. 7	2-17-94	H.M.B.
1	ADDED NOTE FOR ALTERNATE PILE TYPE; AMEND. NO. 3	9-3-93	H.M.B.

REVISIONS

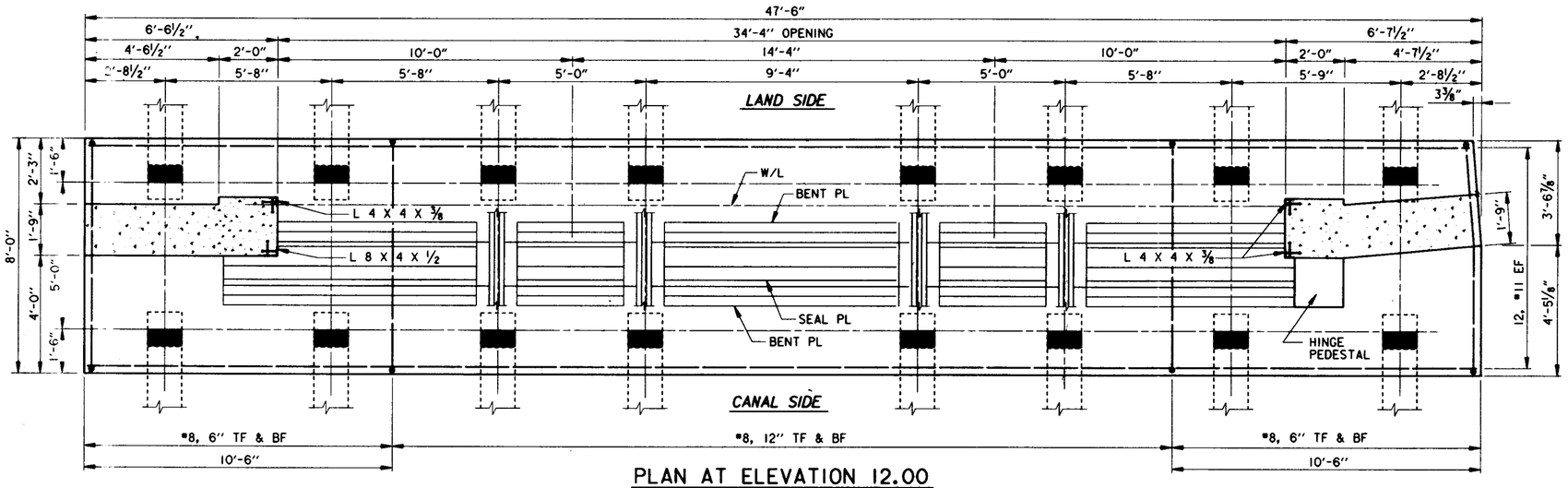
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE MONOLITH WEST SIDE

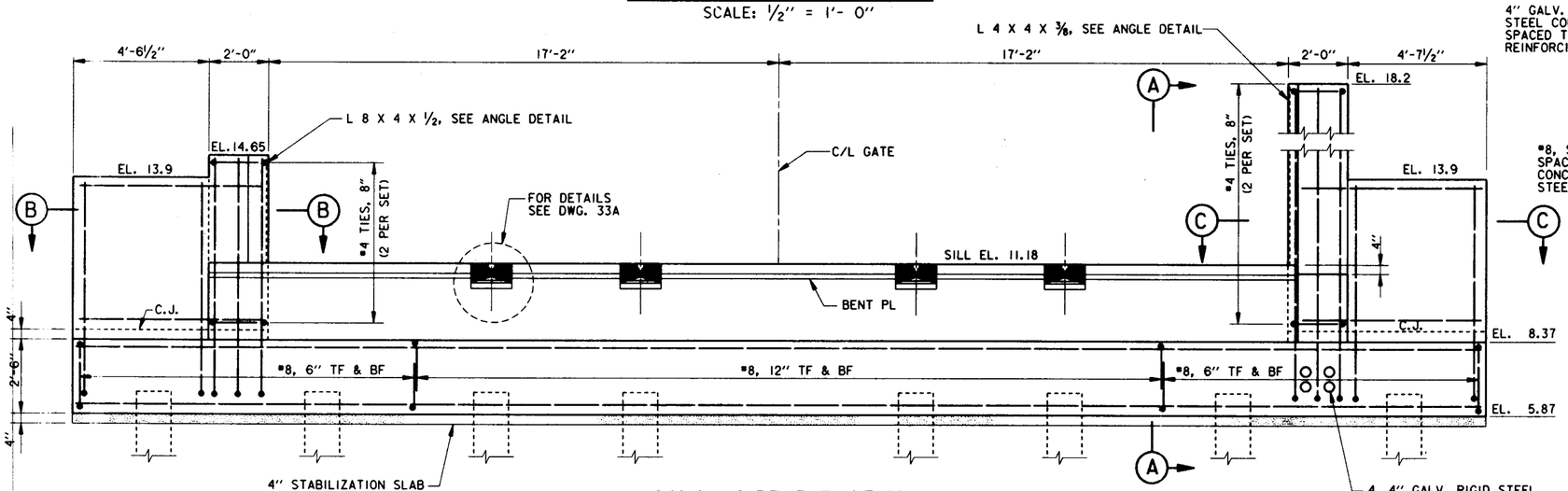
DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145G07.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 33 OF 58

26 JAN 95



PLAN AT ELEVATION 12.00

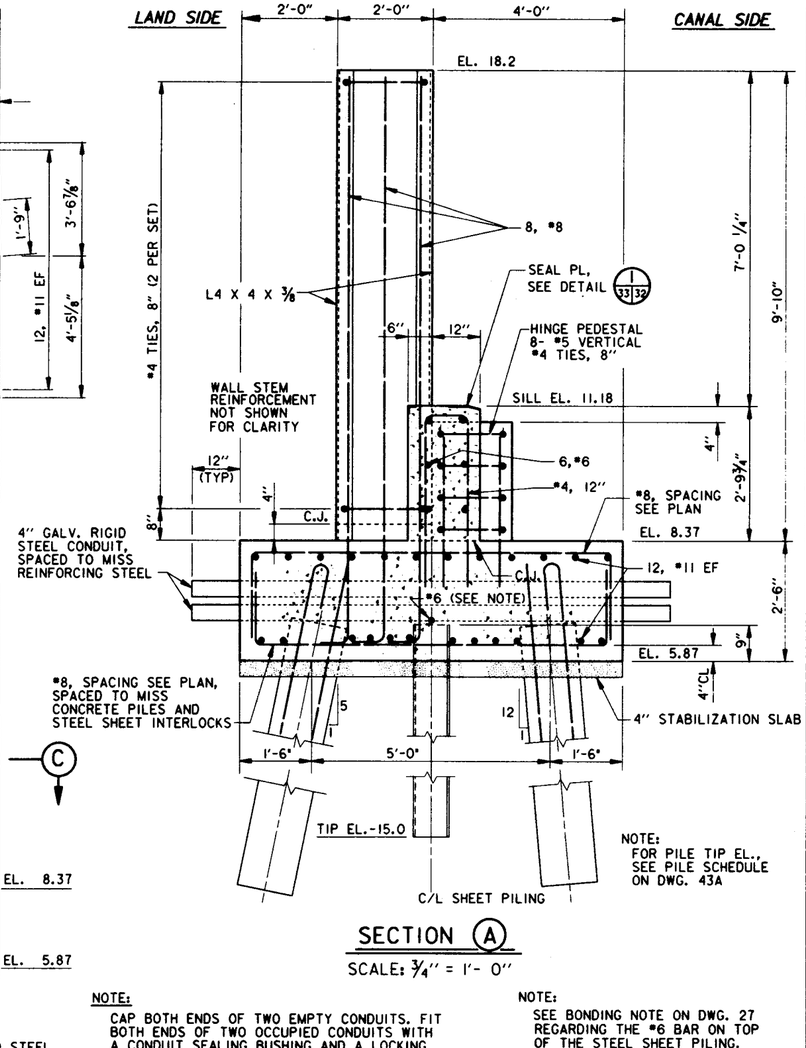
SCALE: ½" = 1'- 0"



CANAL SIDE ELEVATION

SCALE: ½" = 1'- 0"

NOTE:
SHEET PILING NOT SHOWN FOR CLARITY, FOR DETAILS SEE DWG. 22.



NOTE:
FOR PILE TIP EL., SEE PILE SCHEDULE ON DWG. 43A

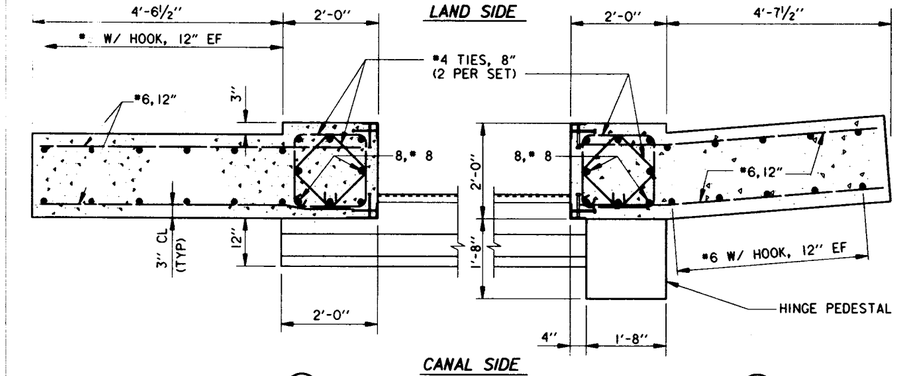
SECTION (A)

SCALE: ¾" = 1'- 0"

NOTE:
CAP BOTH ENDS OF TWO EMPTY CONDUITS. FIT BOTH ENDS OF TWO OCCUPIED CONDUITS WITH A CONDUIT SEALING BUSHING AND A LOCKING COLLAR. CONDUIT SEALING BUSHINGS AND LOCKING COLLAR SHALL BE TYPE CSBG, AS MFD. BY O-Z/GEDNEY, TERRYVILLE, CONNECTICUT OR EQUAL.

NOTE:
SEE BONDING NOTE ON DWG. 27 REGARDING THE #6 BAR ON TOP OF THE STEEL SHEET PILING.

FOR GENERAL NOTES, SEE DWG. 2.

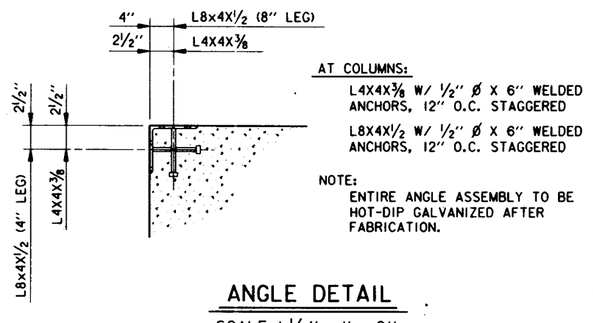


SECTION (B)

SCALE: ¾" = 1'- 0"

SECTION (C)

SCALE: ¾" = 1'- 0"



AT COLUMNS:
L4X4X⅜ W/ ½" Ø X 6" WELDED ANCHORS, 12" O.C. STAGGERED
L8X4X½ W/ ½" Ø X 6" WELDED ANCHORS, 12" O.C. STAGGERED

NOTE:
ENTIRE ANGLE ASSEMBLY TO BE HOT-DIP GALVANIZED AFTER FABRICATION.

ANGLE DETAIL

SCALE: 1 ½" = 1'- 0"

⚠1
FOR ALTERNATE PILE TYPE, SEE DWG. 43A AND SPECIFICATIONS

LEGEND

INDICATES DIRECTION OF BATTER, 14" X 14" PRESTRESSED CONCRETE PILES

SCALE: ½" = 1'- 0"
12" 0 2' 4' 6' 8'

SCALE: ¾" = 1'- 0"
12" 0 1' 2' 3' 4' 5'

SCALE: 1 ½" = 1'- 0"
12" 0 1' 2' 3'

Safety is a Part of Your Contract

VALUE INCENTIVE CLAUSES ENGINEERING INC. — YOUR KEY TO HIGHER PROFITS

C·A·D

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠1	ADDED NOTE FOR ALTERNATE PILE TYPE; AMEND. NO. 3	9-3-93	H.M.B.

REVISIONS

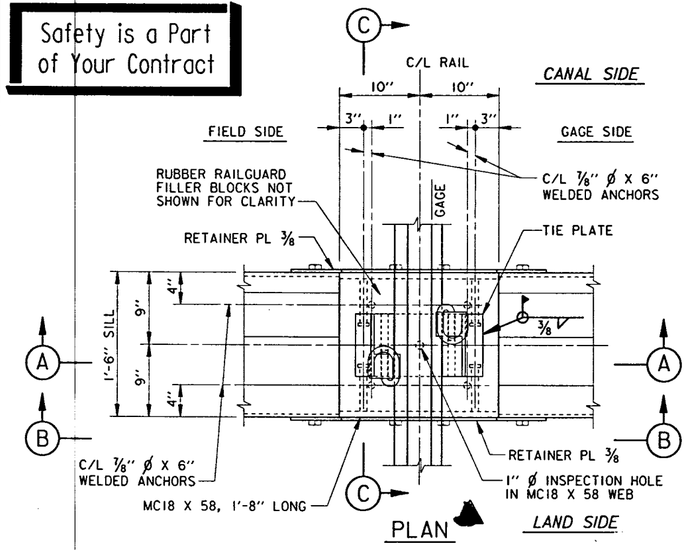
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

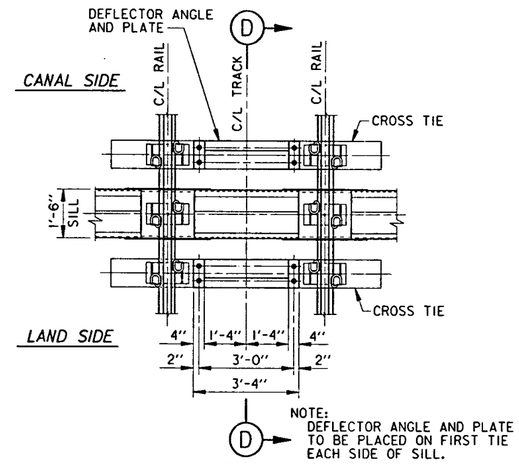
SWING GATE MONOLITH
WEST SIDE

DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B.	CADD FILE: 40145G07.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.			
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 33 OF 58

Safety is a Part of Your Contract



PLAN

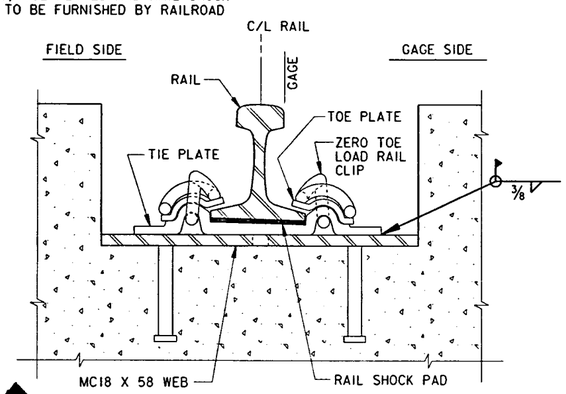


PLAN

DEFLECTOR ANGLE AND PLATE DETAIL

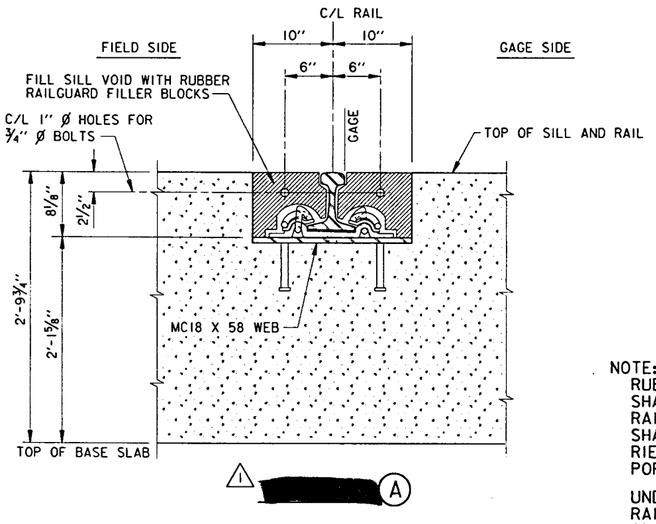
SCALE: ½" = 1'- 0"

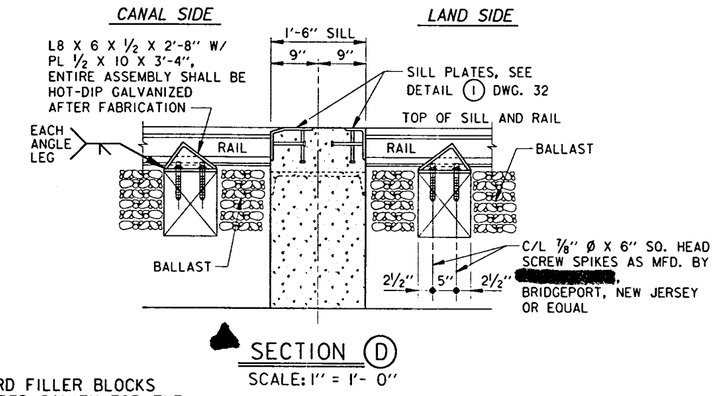
NOTE:
TIE PLATE, ZERO TOE LOAD RAIL CLIPS, TOE PLATES AND RAIL SHOCK PAD TO BE FURNISHED BY RAILROAD



RAIL AND COMPONENT PARTS DETAIL

SCALE: 3" = 1' - 0"



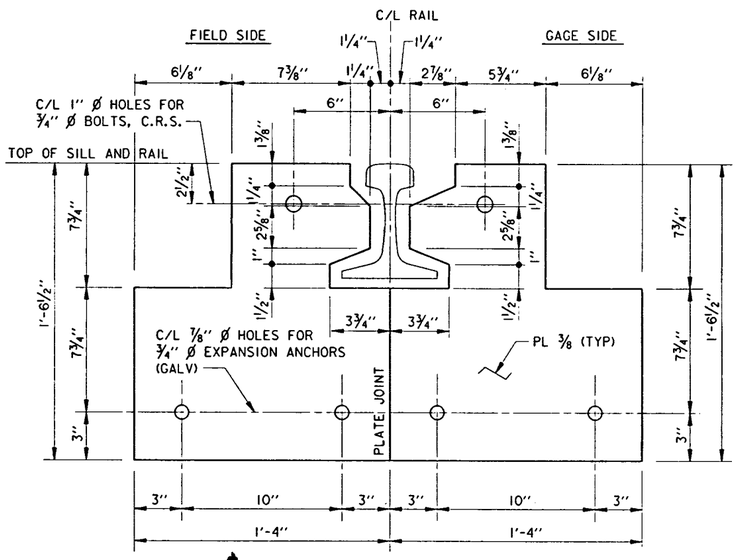


SECTION (D)

SCALE: 1" = 1'- 0"

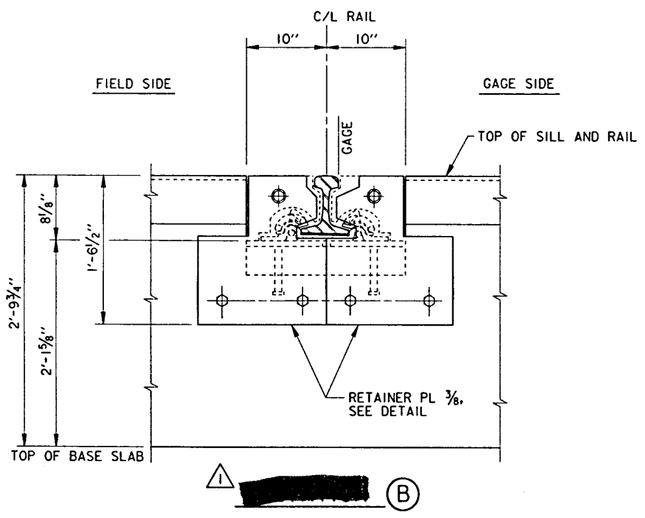
NOTE:
RUBBER RAILGUARD FILLER BLOCKS SHALL HAVE MOLDED CAVITY FOR THE RAIL AND ITS COMPONENT PARTS AND SHALL BE AS MFD. BY RIEDEL OMNI RUBBER PRODUCTS, INC., PORTLAND, OREGON OR EQUAL.

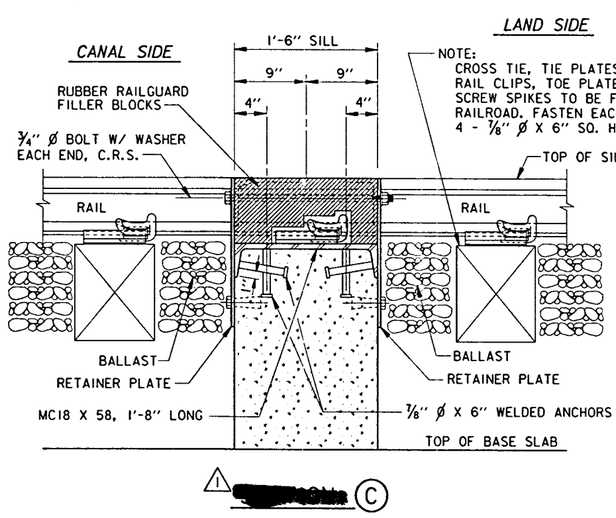
UNDER NORMAL CONDITIONS RUBBER RAILGUARD FILLER BLOCKS SHALL BE STORED ON THE TOP BEAM OF GATE, FOR DETAILS, SEE DWG. 34.



RETAINER PLATE DETAIL

SCALE: 3" = 1' - 0"





RAIL ASSEMBLY

SCALE: 1 ½" = 1' - 0"

NOTES:
FOR GENERAL NOTES, SEE DWG. 2.
FOR SILL PLATE DETAIL, SEE DWG. 32.

SCALE: ½" = 1'- 0"
12" 0 2' 4' 6' 8'

SCALE: 1" = 1'- 0"
12" 0 1' 2' 3' 4' 5'

SCALE: 1 ½" = 1' - 0"
12" 0 1' 2' 3'

SCALE: 3" = 1' - 0"
12" 0 1'

THIS PLAN ACCOMPANIES MODIFICATION P0000 TO CONTRACT NUMBER DACW29-94-C-0003

C·A·D

SYMBOL	DESCRIPTION	DATE	APPROVED
1	GENERAL REVISIONS; MOD.	2-17-94	W.O.B.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

RAIL ANCHORAGE SYSTEM

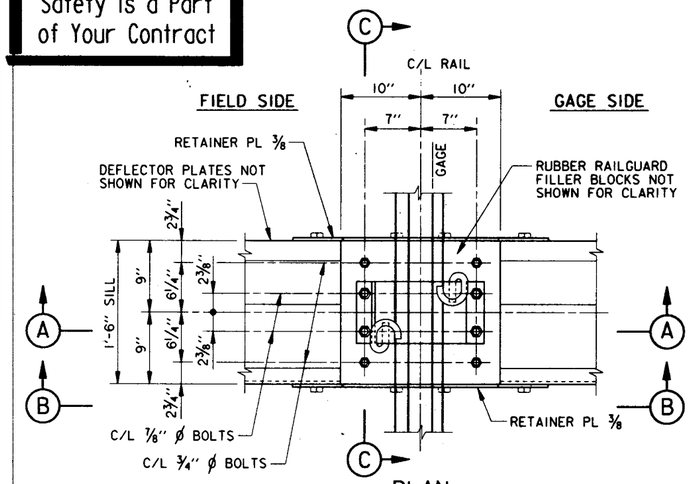
DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 8	PLOT DATE: 16 JULY 93
DRAWN BY: H.J.H.			
CHECKED BY: W.O.B.	CADD FILE: 40145B04.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 33A OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

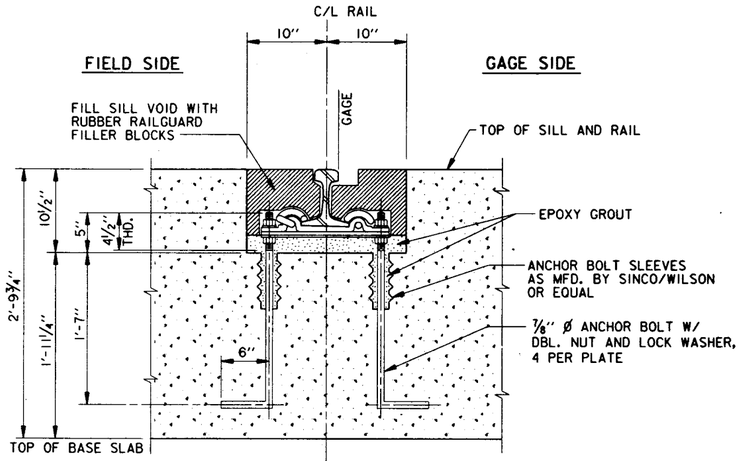
5 4 3 2 1

D C B A

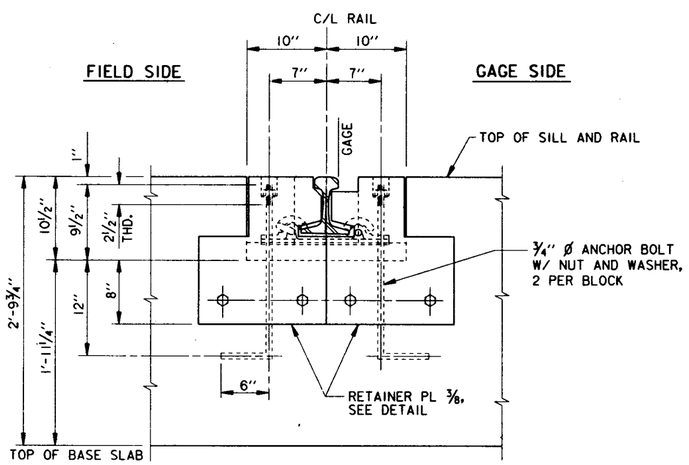
Safety is a Part of Your Contract



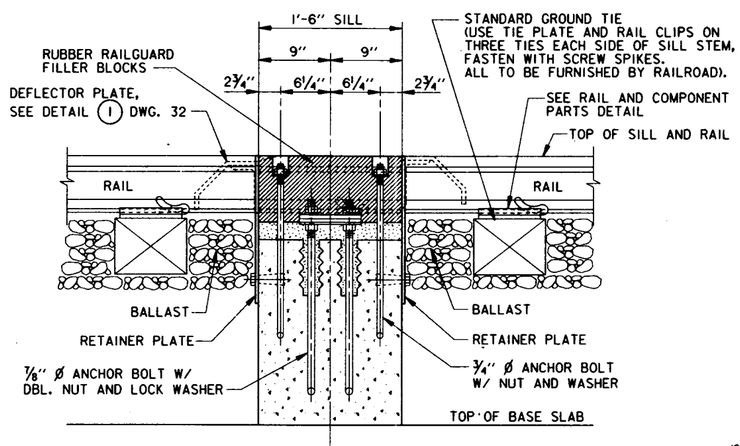
PLAN



SECTION (A)



ELEVATION (B)

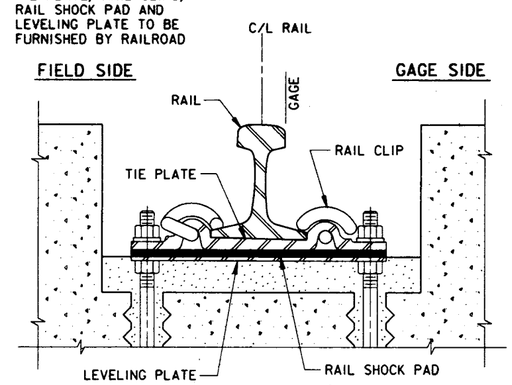


SECTION (C)

RAIL ASSEMBLY

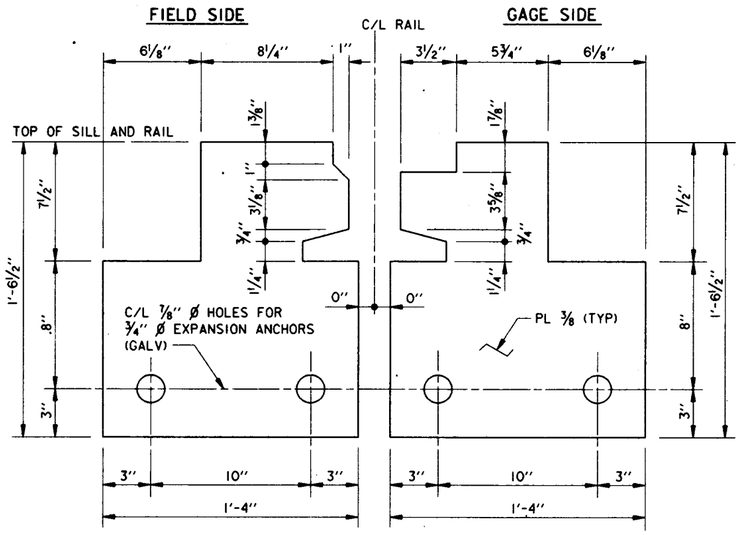
SCALE: 1 1/2" = 1' - 0"

NOTE:
TIE PLATE, RAIL CLIPS, RAIL SHOCK PAD AND LEVELING PLATE TO BE FURNISHED BY RAILROAD



RAIL AND COMPONENT PARTS DETAIL

SCALE: 3" = 1' - 0"



RETAINER PLATE DETAIL

SCALE: 3" = 1' - 0"

NOTES:
FOR GENERAL NOTES, SEE DWG. 2.
FOR DEFLECTOR PLATE DETAILS, SEE DWG. 32.

SCALE: 1 1/2" = 1' - 0"

12" 0 1' 2' 3'

SCALE: 3" = 1' - 0"

12" 0 1'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

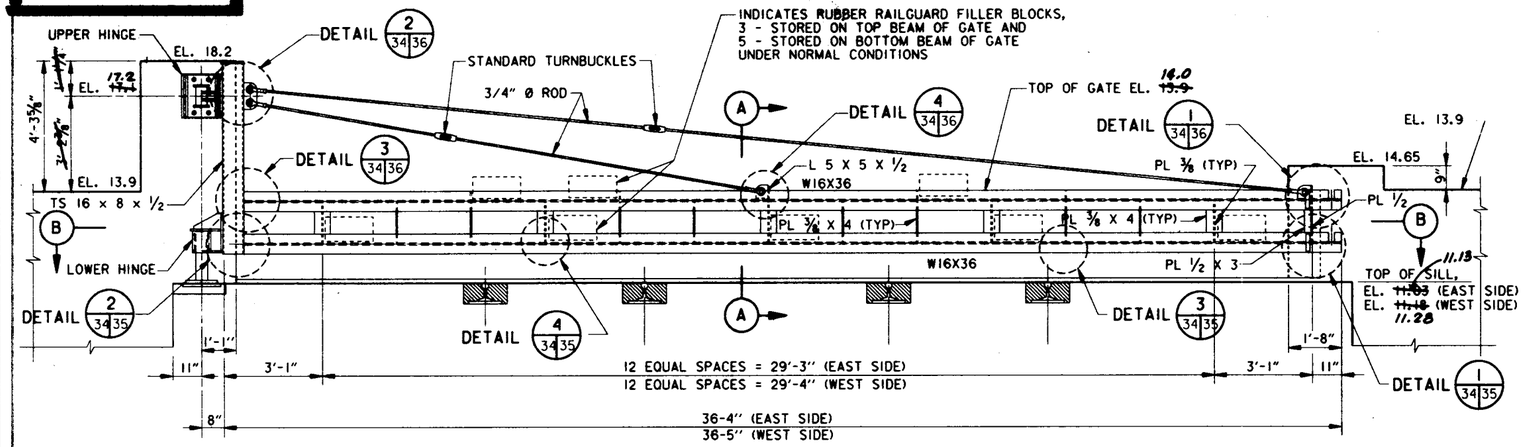
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

RAIL ANCHORAGE SYSTEM

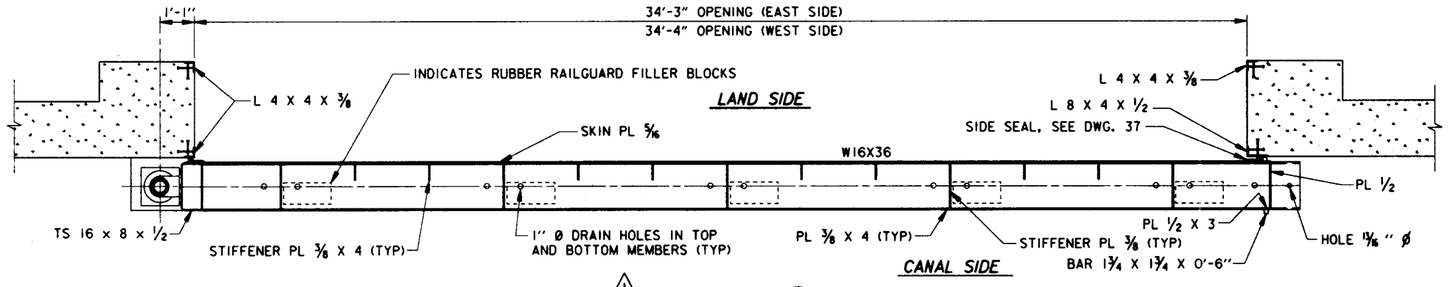
DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 8	PLOT DATE: 16 JULY 93
DRAWN BY: H.J.H.			
CHECKED BY: W.O.B.	CADD FILE: 40145804.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 33A OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract

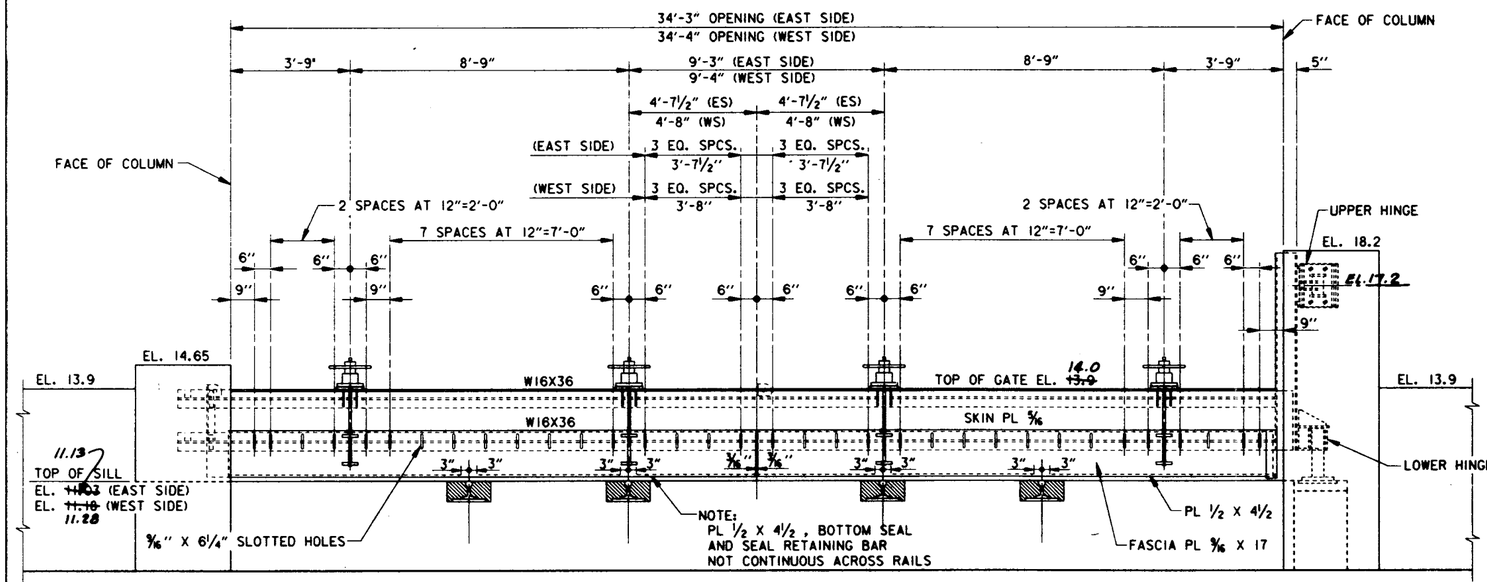


⚠ CANAL SIDE ELEVATION (EAST SIDE AS SHOWN)
CANAL SIDE ELEVATION (WEST SIDE OPPOSITE HAND)
SCALE: 1/2" = 1'-0"



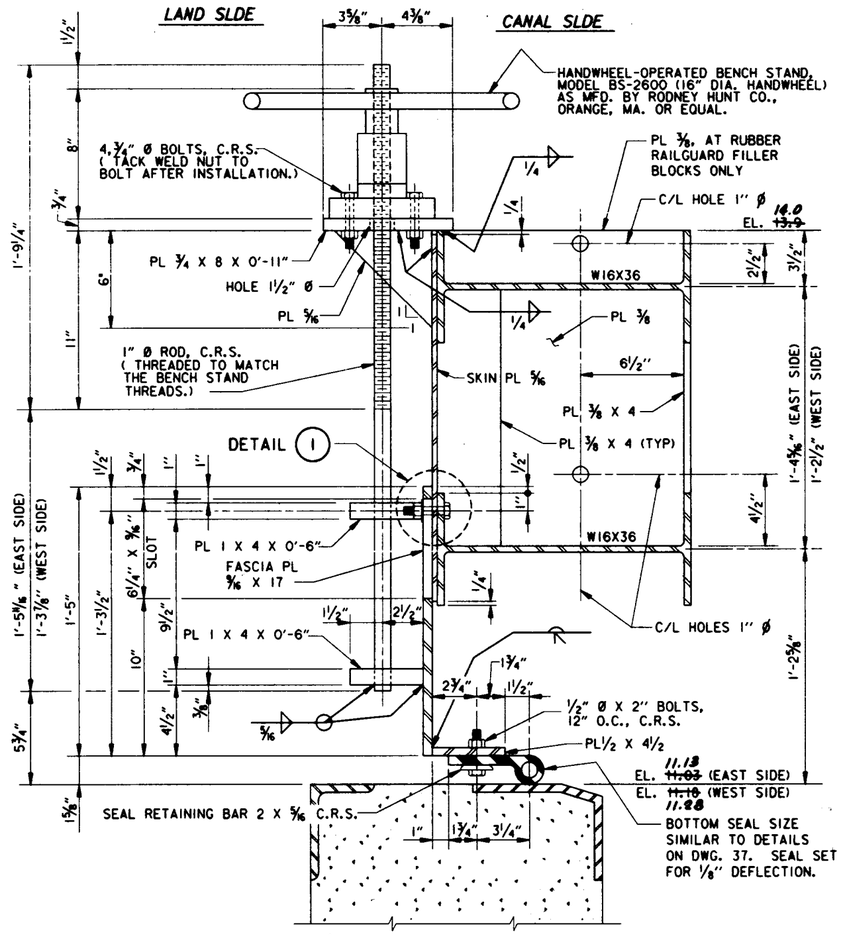
⚠ SECTION (B)
SCALE: 1/2" = 1'-0"

NOTE:
SHIFT VERTICAL STIFFENER PLS AS REQUIRED TO CLEAR SLOTTED HOLES IN FASCIA PLS.

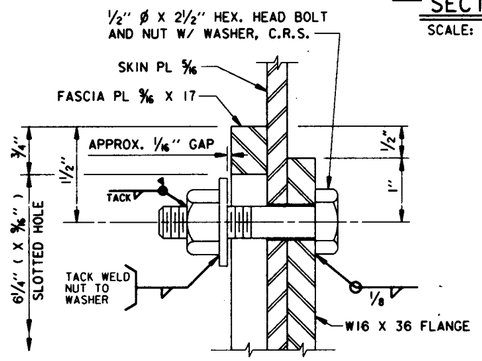


NOTE:
BOLTS NOT SHOWN FOR CLARITY

LAND SIDE ELEVATION (EAST SIDE AS SHOWN)
LAND SIDE ELEVATION (WEST SIDE OPPOSITE HAND)
SCALE: 1/2" = 1'-0"



⚠ SECTION (A) (A 38/34)
SCALE: 3" = 1'-0"



DETAIL (1)
SCALE: 12" = 1' - 0"

THIS PLAN ACCOMPANIES MODIFICATION P0007 TO CONTRACT NUMBER DACW29-94-C-0003

FOR GENERAL NOTES, SEE DWG. 2.

SCALE: 1/2" = 1'- 0"
12" 0 2' 4' 6' 8'
SCALE: 3" = 1' - 0"
12" 0 1'
SCALE: 12" = 1' - 0"
6" 3" 0

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	REVISED SEAL PLATE IN SECTION A AND ADDED PLS 3/8 TO TOP BEAM; MOD. 7	2-17-94	H.M.B.

REVISIONS

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

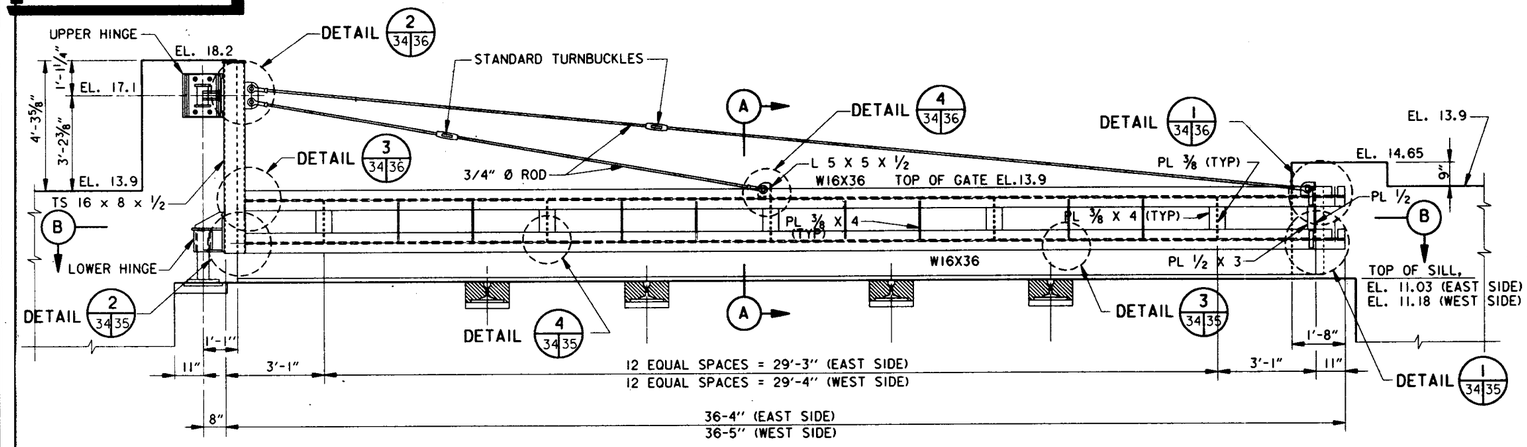
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE

DESIGNED BY: H.M.B. DRAWN BY: D.J.B./H.J.H. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 19 JULY 93
	CADD FILE: 40145D02.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 34 OF 58

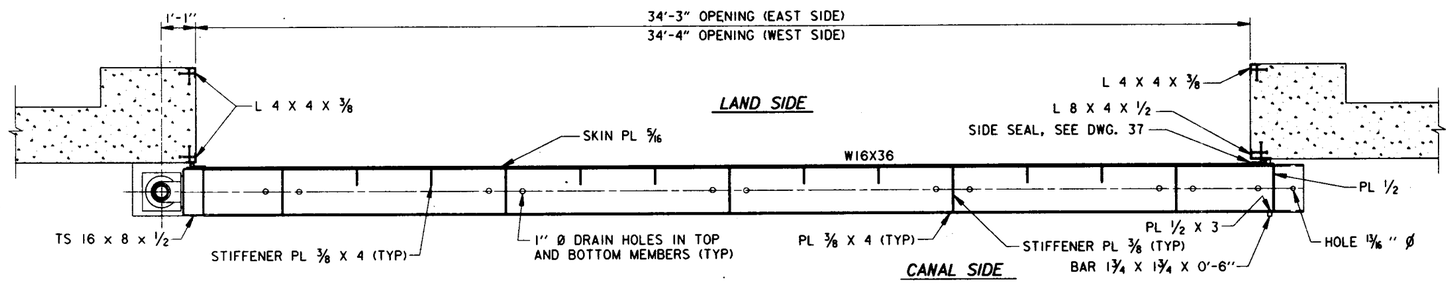
26 JAN 95

Safety is a Part of Your Contract



CANAL SIDE ELEVATION (EAST SIDE AS SHOWN)
CANAL SIDE ELEVATION (WEST SIDE OPPOSITE HAND)

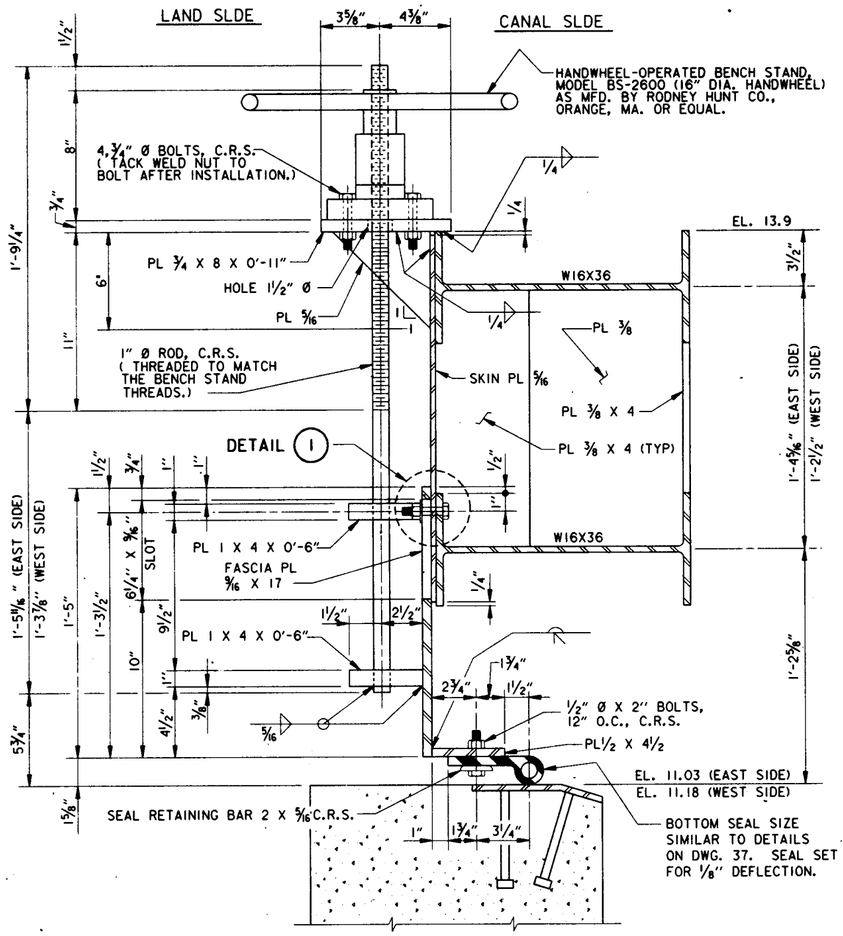
SCALE: 1/2" = 1'-0"



SECTION (B)

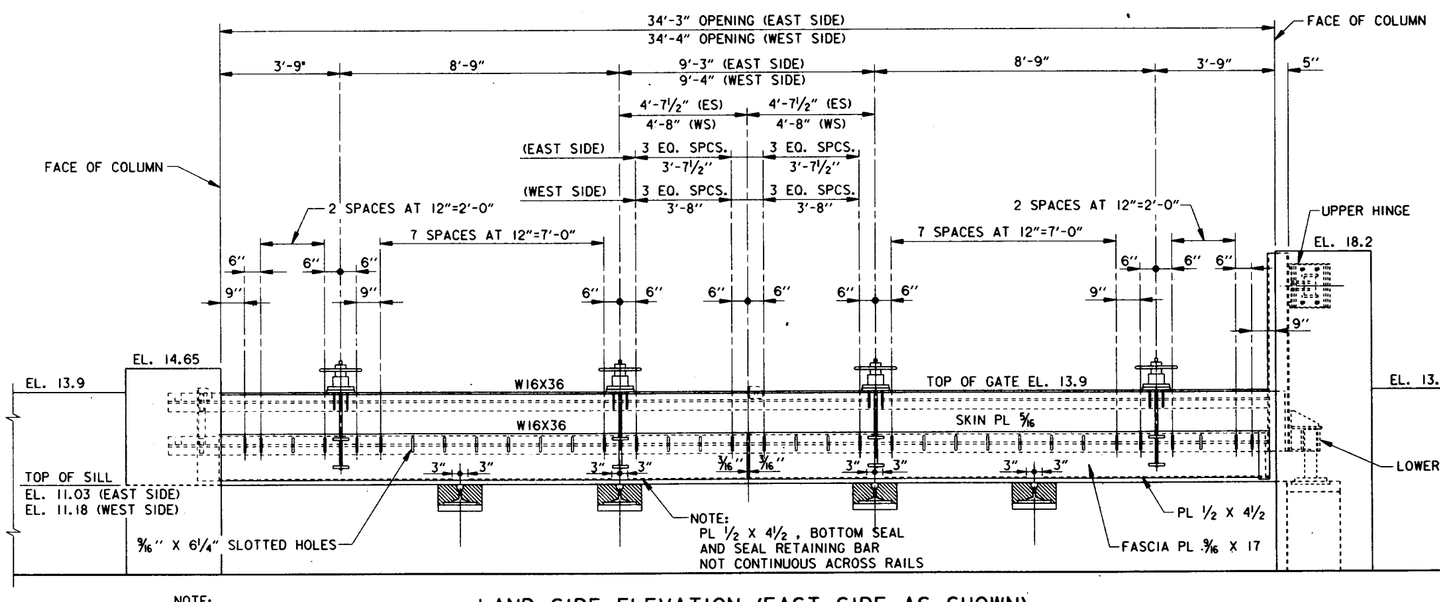
SCALE: 1/2" = 1'-0"

NOTE:
SHIFT VERTICAL STIFFENER PLS AS REQUIRED TO CLEAR SLOTTED HOLES IN FASCIA PLS.



SECTION (A) (A/38/34)

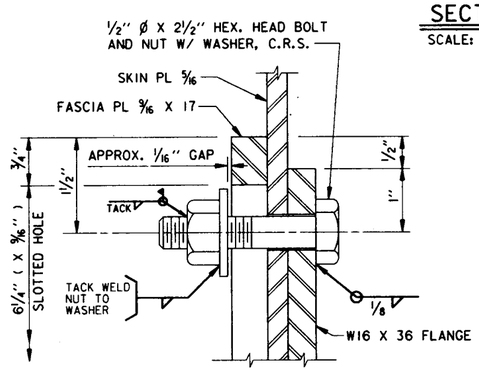
SCALE: 3" = 1'-0"



NOTE:
BOLTS NOT SHOWN FOR CLARITY

LAND SIDE ELEVATION (EAST SIDE AS SHOWN)
LAND SIDE ELEVATION (WEST SIDE OPPOSITE HAND)

SCALE: 1/2" = 1'-0"



DETAIL (1)

SCALE: 12" = 1' - 0"

FOR GENERAL NOTES, SEE DWG. 2.

SCALE: 1/2" = 1'- 0"

12" 0 2' 4' 6' 8'

SCALE: 3" = 1' - 0"

12" 0 1'

SCALE: 12" = 1' - 0"

6" 3" 0

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE

DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 19 JULY 93
DRAWN BY: D.J.B./H.J.H.			
CHECKED BY: W.O.B.	CADD FILE: 40145002.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 34 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

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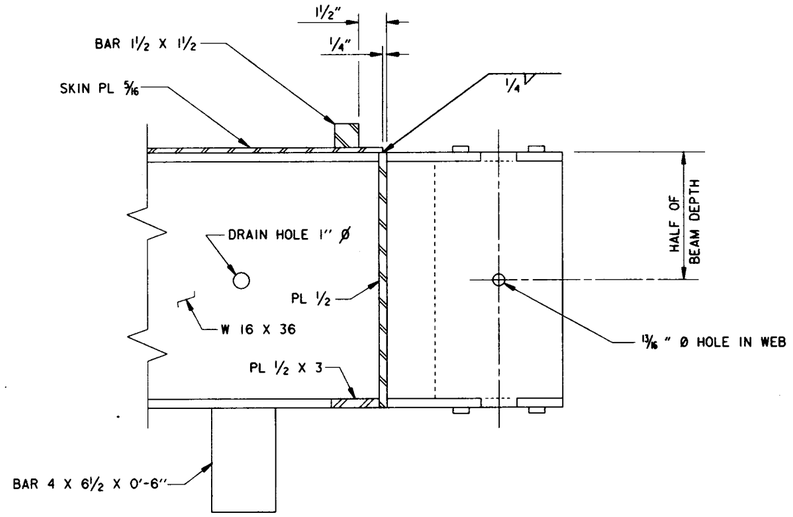
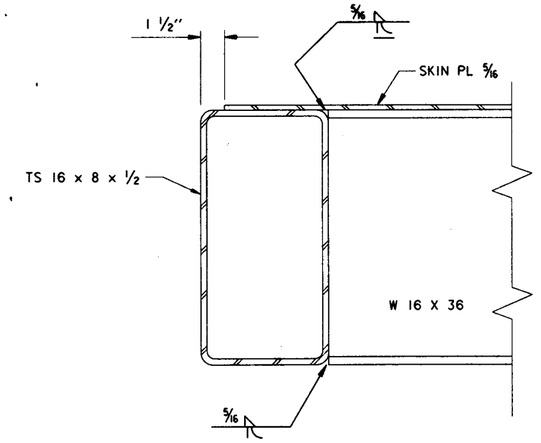
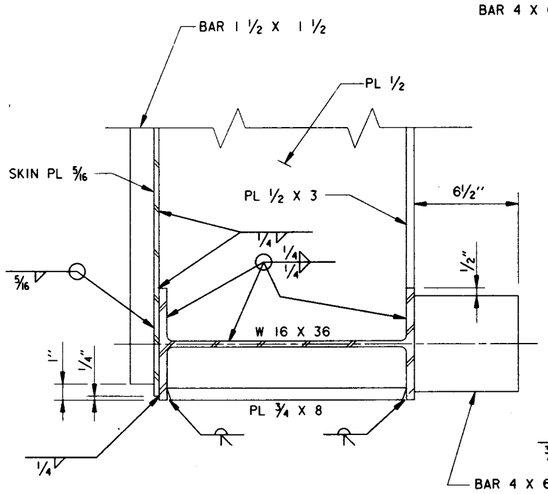
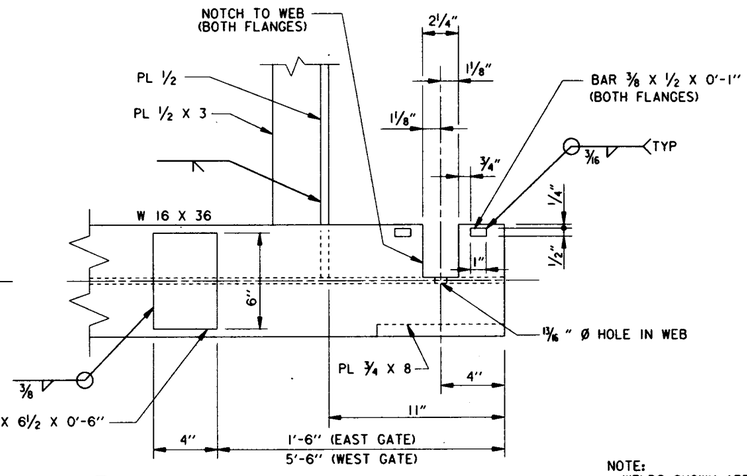
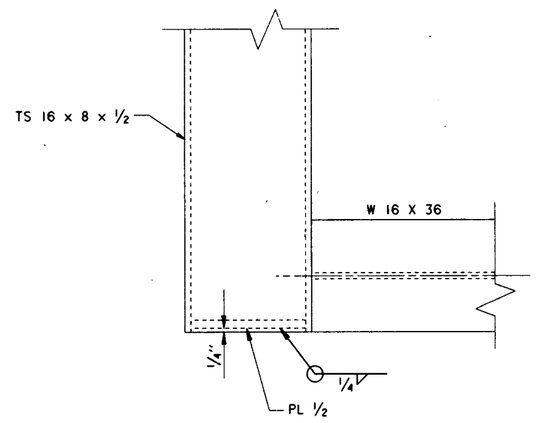




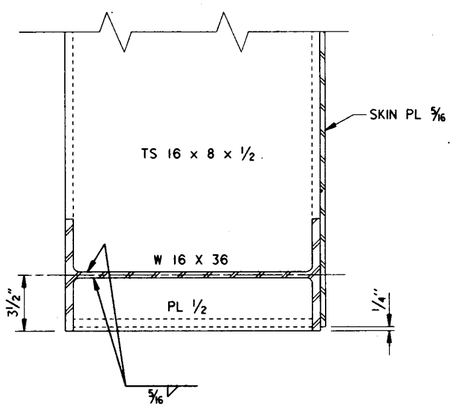




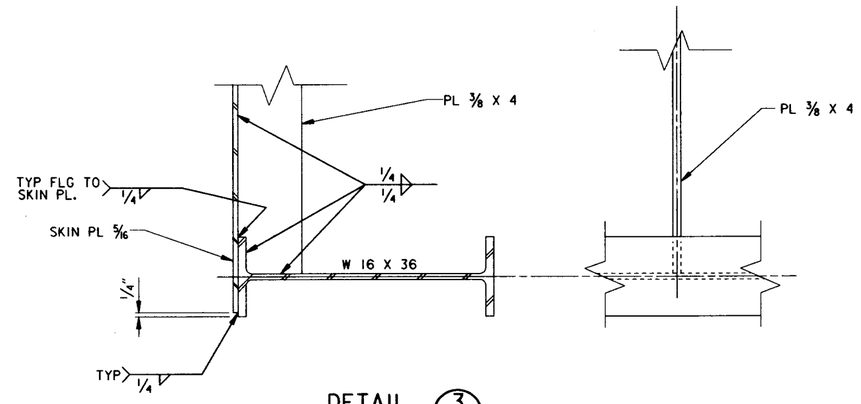
DETAIL 1 (34|35)



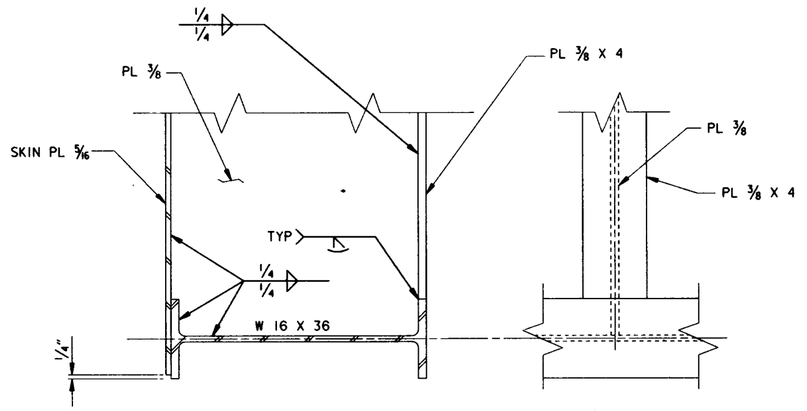
DETAIL 2 (34|35)



NOTE:
WELDS SHOWN ARE TYPICAL FOR SIMILAR JOINTS.



DETAIL 3 (34|35)



DETAIL 4 (34|35)

FOR GENERAL NOTES, SEE DWG. 2.

SCALE: 3" = 1' - 0"

12" 0 1'

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE DETAILS

DESIGNED BY: H.M.B. DRAWN BY: D.J.B./H.J.H. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 4	PLOT DATE: 14 JULY 93
	CADD FILE: 40145003.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 35 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

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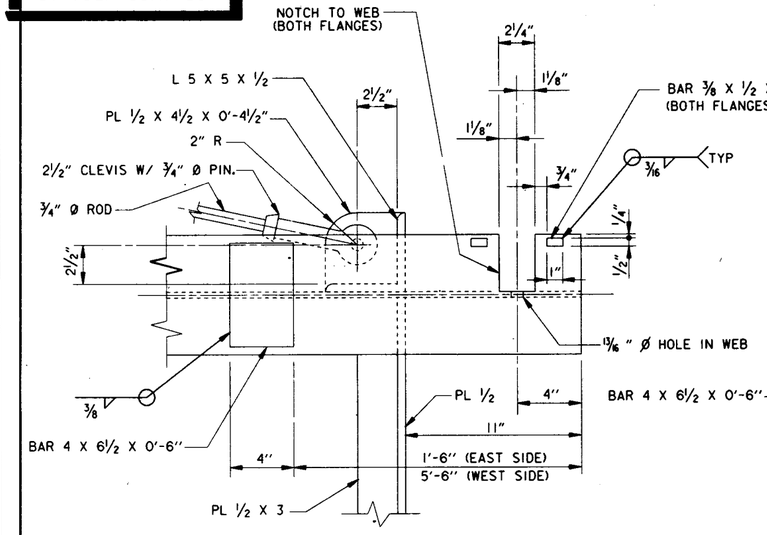
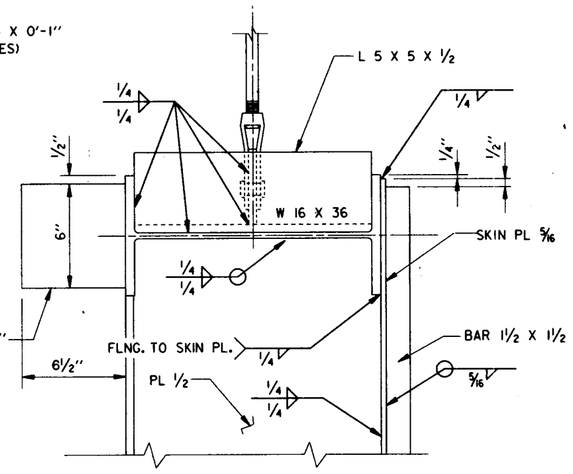
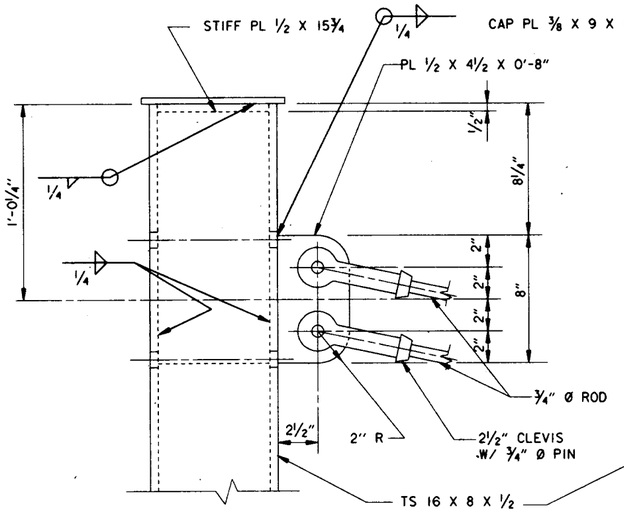
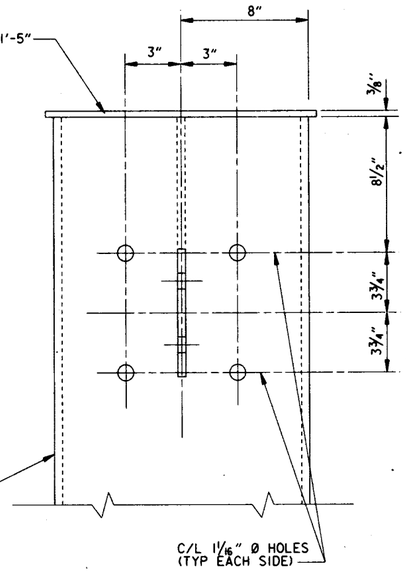




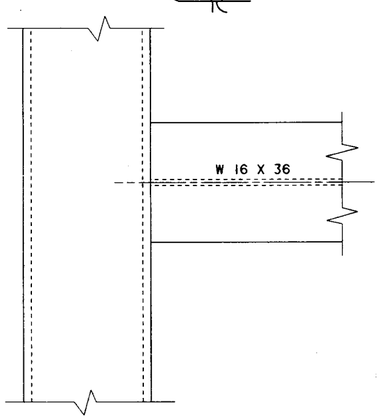
DETAIL 1 (34|36)

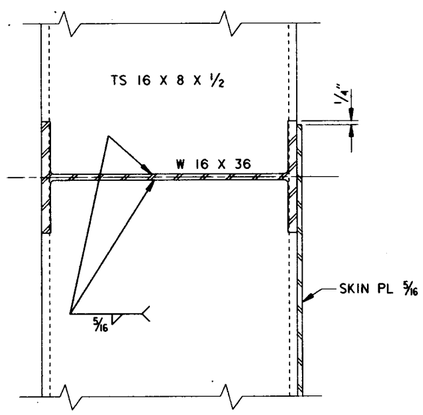




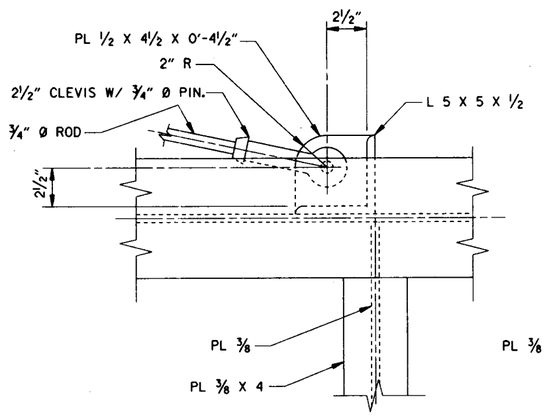
DETAIL 2 (34|36)

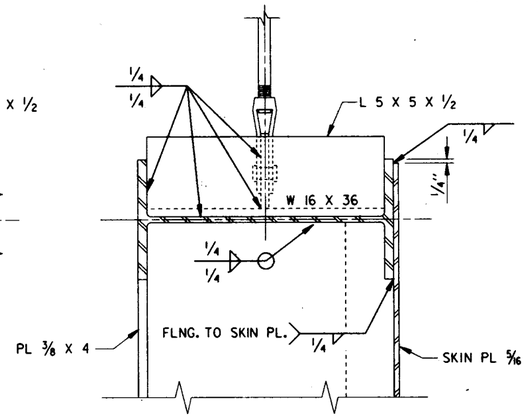
NOTE:
WELDS SHOWN ARE TYPICAL FOR SIMILAR JOINTS.





DETAIL 3 (34|36)





DETAIL 4 (34|36)

FOR GENERAL NOTES, SEE DWG. 2.

SCALE: 3" = 1' - 0"

12" 0 1'

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE DETAILS

DESIGNED BY: H.M.B. DRAWN BY: D.J.B./H.J.H. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 4	PLOT DATE: 14 JULY 93
	CADD FILE: 40145D04.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 36 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

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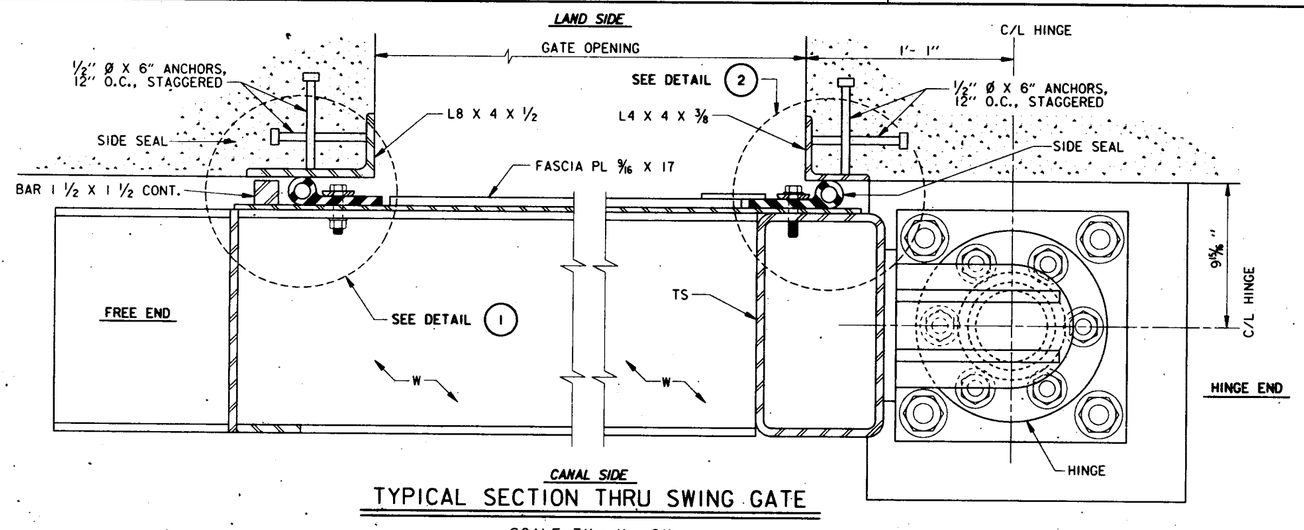
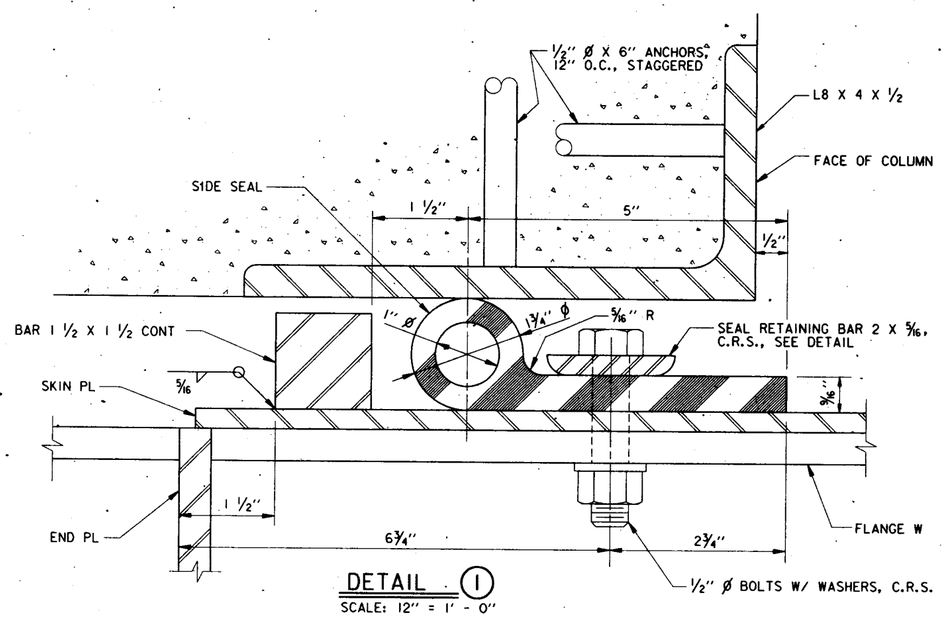


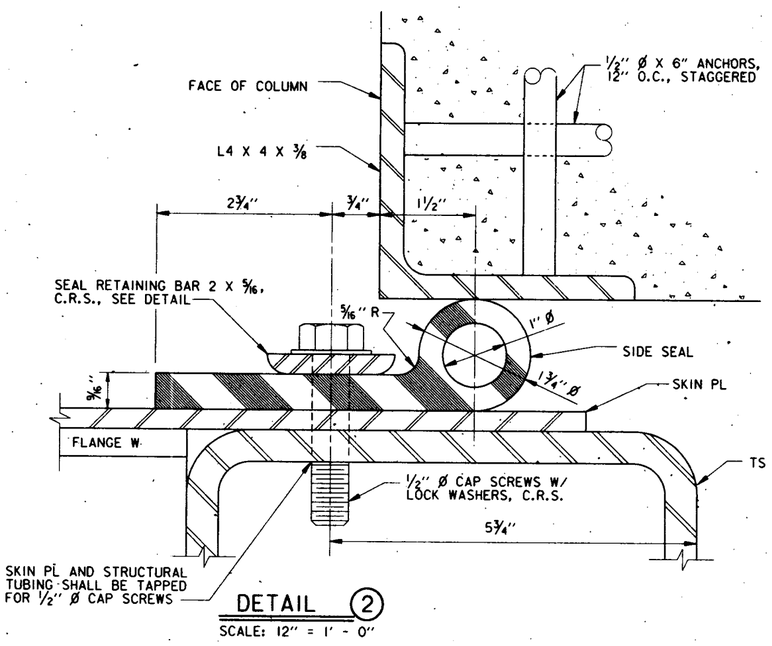
TYPICAL SECTION THRU SWING GATE

SCALE: 3" = 1' - 0"



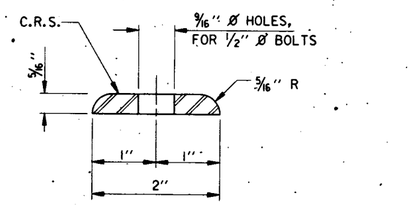
DETAIL (1)

SCALE: 12" = 1' - 0"



DETAIL (2)

SCALE: 12" = 1' - 0"



SEAL RETAINING BAR

SCALE: 12" = 1' - 0"

NOTES:

FOR GENERAL NOTES, SEE DWG. 2.

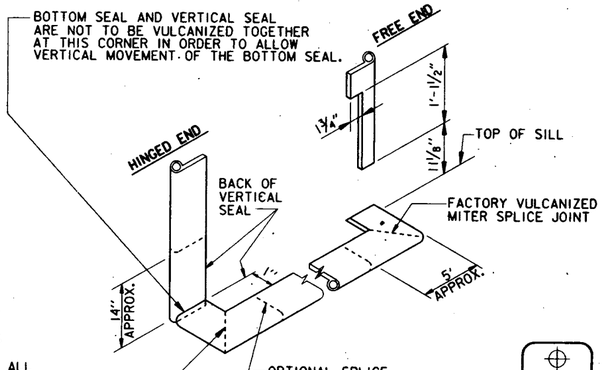
ALL SPLICES WILL BE FACTORY MADE IN HEAVY STEEL PRESS TYPE MOLDS UNDER PRESSURE AND HEAT.

ALL SPLICE JOINTS MUST DEVELOP STRENGTH OF AT LEAST 50% OF THE MINIMUM TENSILE STRENGTH REQUIRED OF THE RUBBER.

SEAL CLAMP ANGLES SHALL BE PAINTED ON ALL SIDES PRIOR TO ASSEMBLY.

AFTER ASSEMBLY AND SEAL ADJUSTMENTS ARE MADE, ALL GAPS IN SEALS AND SEAL SUPPORTS SHALL BE SEALED WITH A SILICONE RUBBER SEALANT TO PROVIDE WATERTIGHT JOINTS.

BURNING HOLES IN SEAL WILL NOT BE ALLOWED.



CORNER DETAIL, TYPICAL BOTH SIDES

TYPICAL GATE SEAL

NOT TO SCALE

SCALE: 3" = 1' - 0"

12" 0 1'

SCALE: 12" = 1' - 0"

6" 3" 0

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE SEAL

DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 14 JULY 93
DRAWN BY: J.E.B./H.J.H.			
CHECKED BY: W.O.B.	CADD FILE: 4014SHO: DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 37 OF 58

C•A•D

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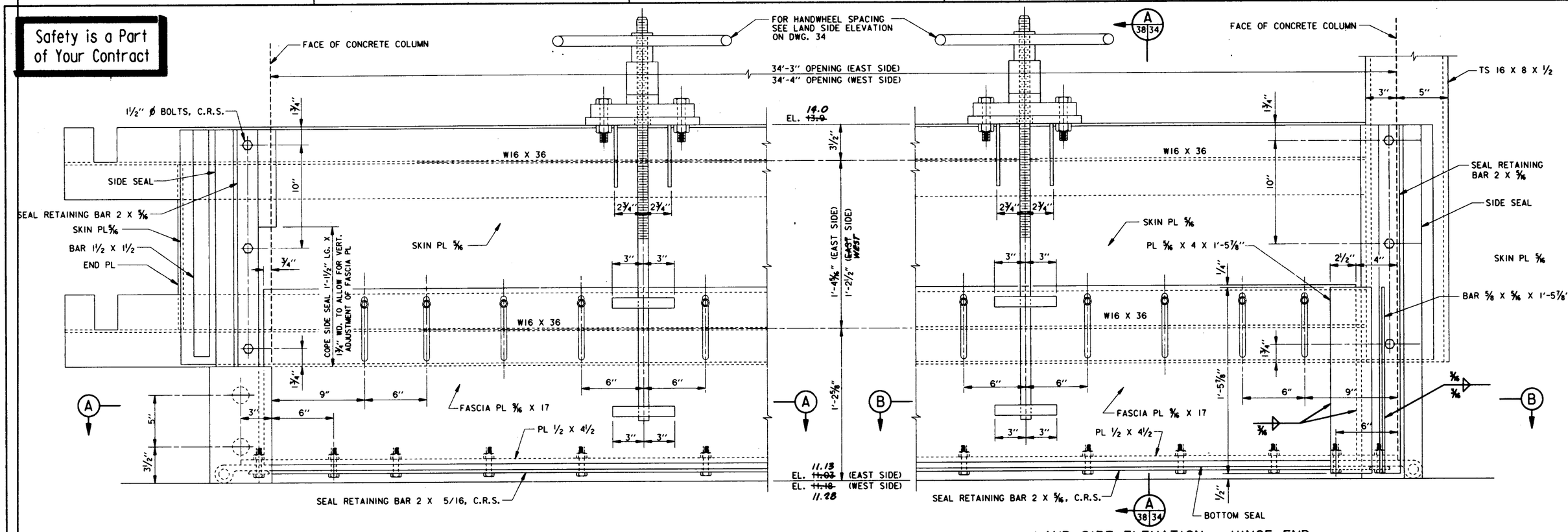
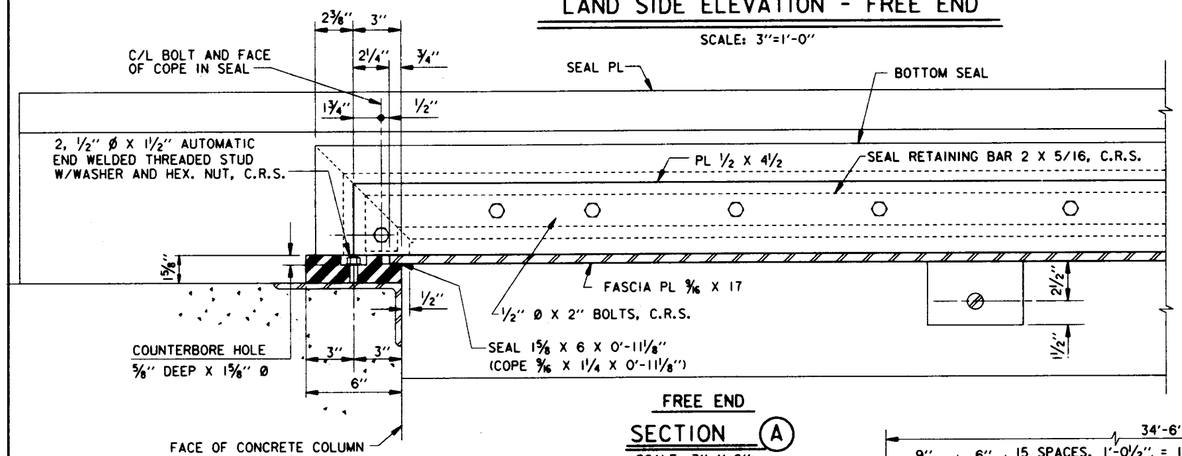


LAND SIDE ELEVATION - FREE END

SCALE: 3"=1'-0"



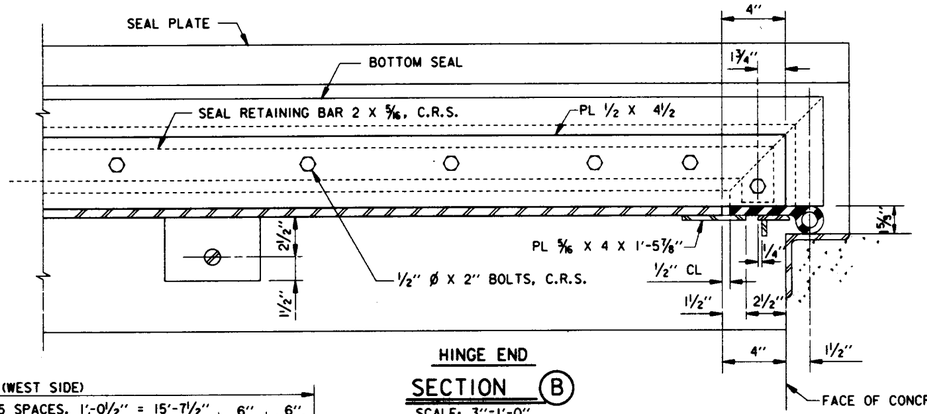
FREE END

SECTION (A)

SCALE: 3"=1'-0"

LAND SIDE ELEVATION - HINGE END

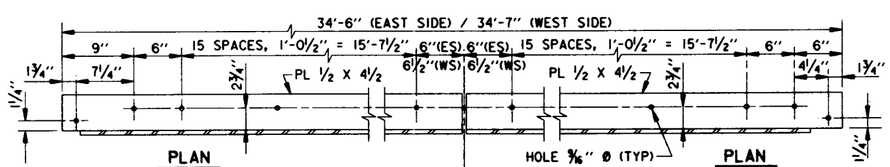
SCALE: 3"=1'-0"



HINGE END

SECTION (B)

SCALE: 3"=1'-0"



ELEVATION

FREE END OF FASCIA

SCALE: 1 ½" = 1' - 0"

ELEVATION

HINGE END OF FASCIA

SCALE: 1 ½" = 1' - 0"

SCALE: 1 ½" = 1' - 0"

SCALE: 3" = 1' - 0"

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

FOR GENERAL NOTES, SEE DWG. 2.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

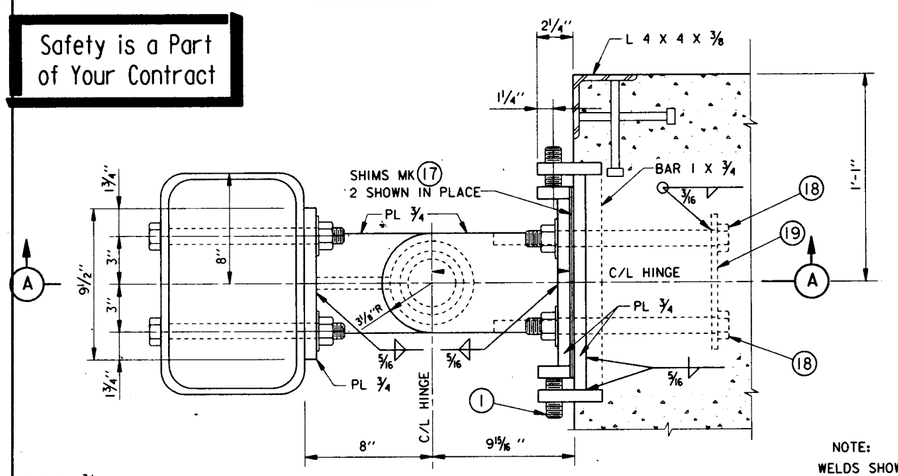
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SWING GATE
ADJUSTABLE BOTTOM SEAL

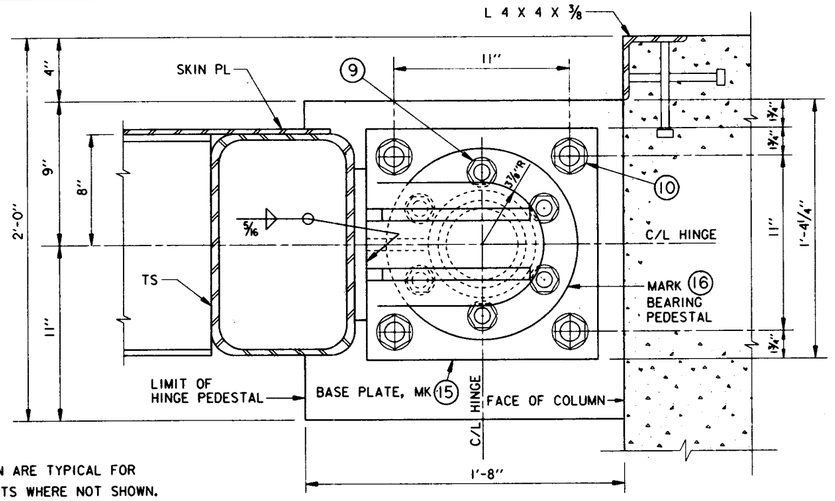
DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 4	PLOT DATE: 14 JULY 93
DRAWN BY: J.E.B./H.J.H.			
CHECKED BY: W.O.B.	CADD FILE: 40145H16.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 38 OF 58

26 JAN 95

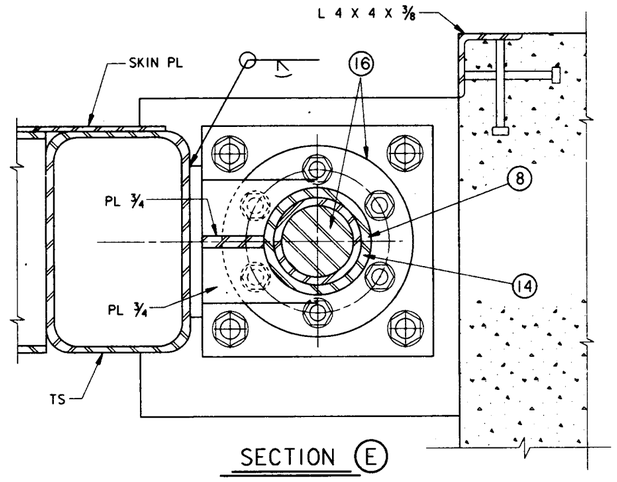
Safety is a Part of Your Contract



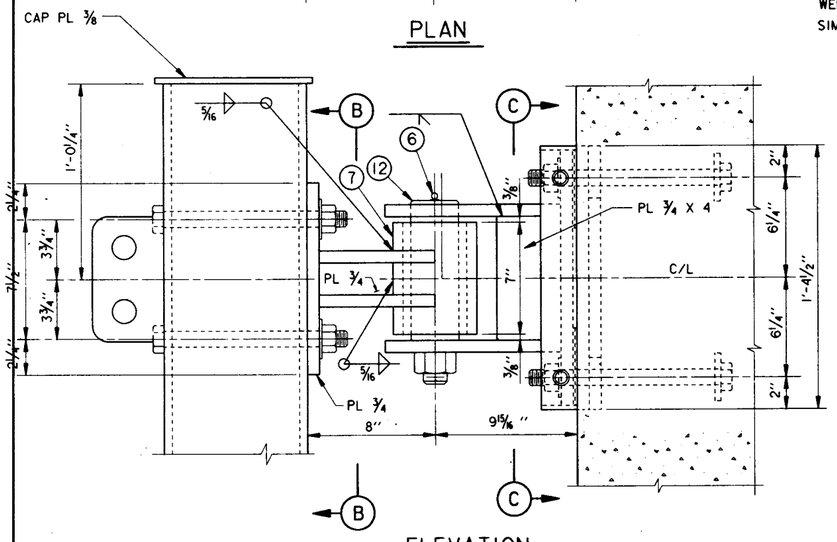
PLAN



NOTE:
WELDS SHOWN ARE TYPICAL FOR SIMILAR JOINTS WHERE NOT SHOWN.

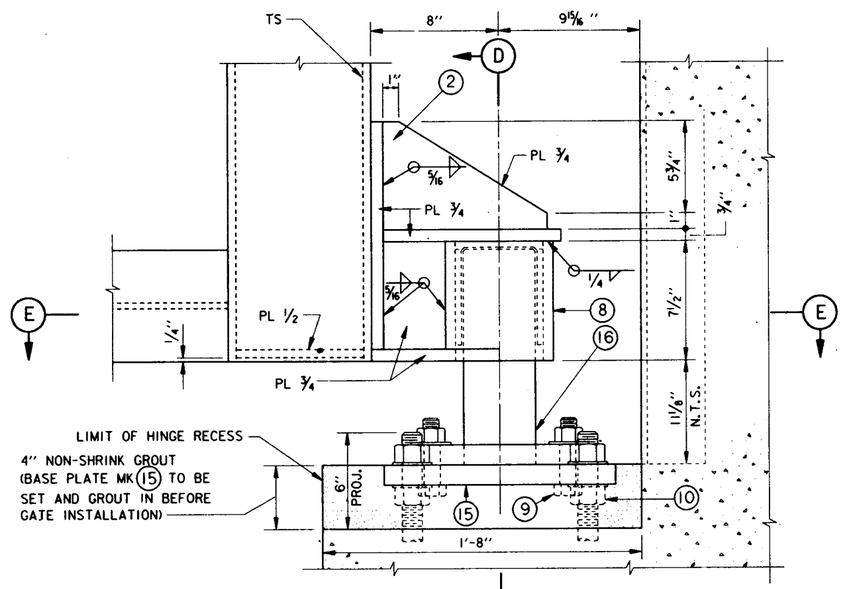


SECTION (E)

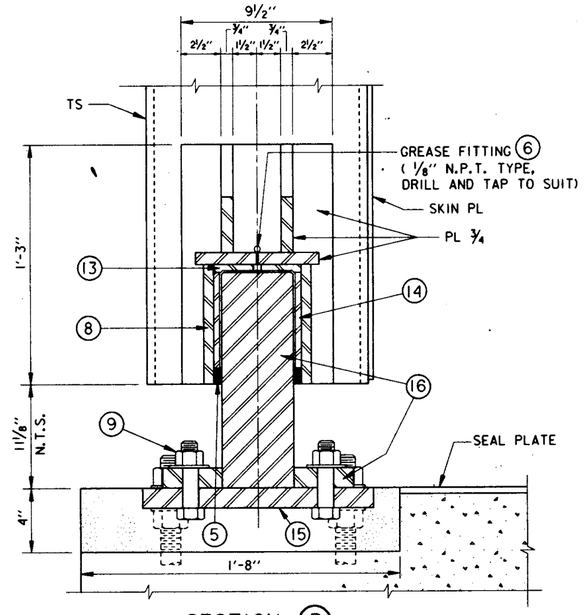


ELEVATION

PLAN

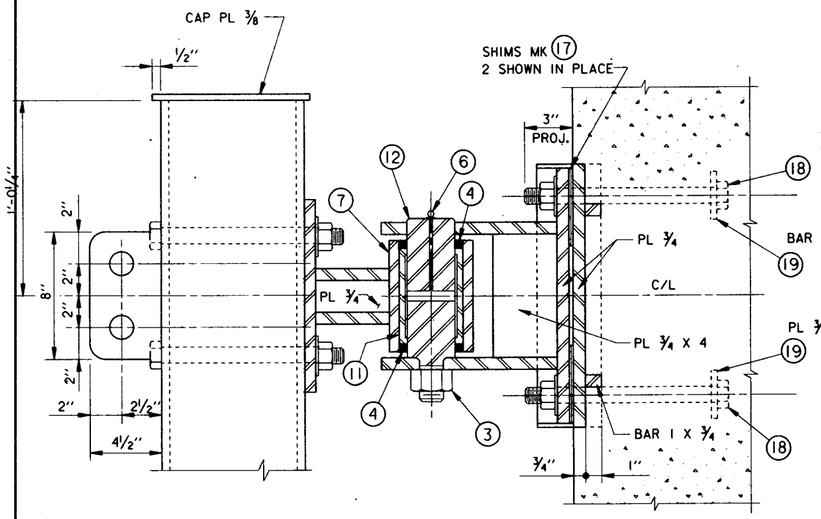


ELEVATION

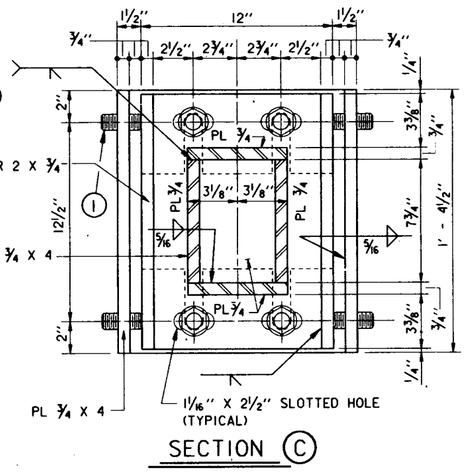


SECTION (D)

NOTE:
(10) DENOTES MARK NUMBERS, SEE DWG 40



SECTION (A)



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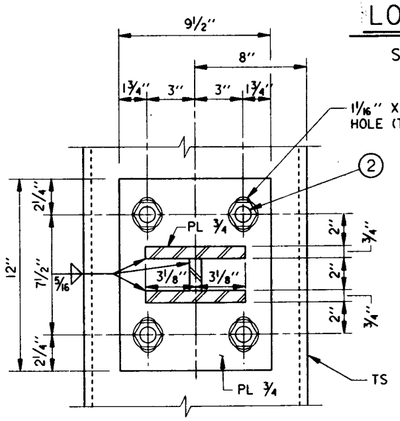


SECTION (B)

LOWER HINGE
SCALE: 3" = 1'-0"

UPPER HINGE
SCALE: 3" = 1'-0"

SCALE: 3" = 1' - 0"
12" 0 1'

FOR GENERAL NOTES, SEE DWG. 2.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

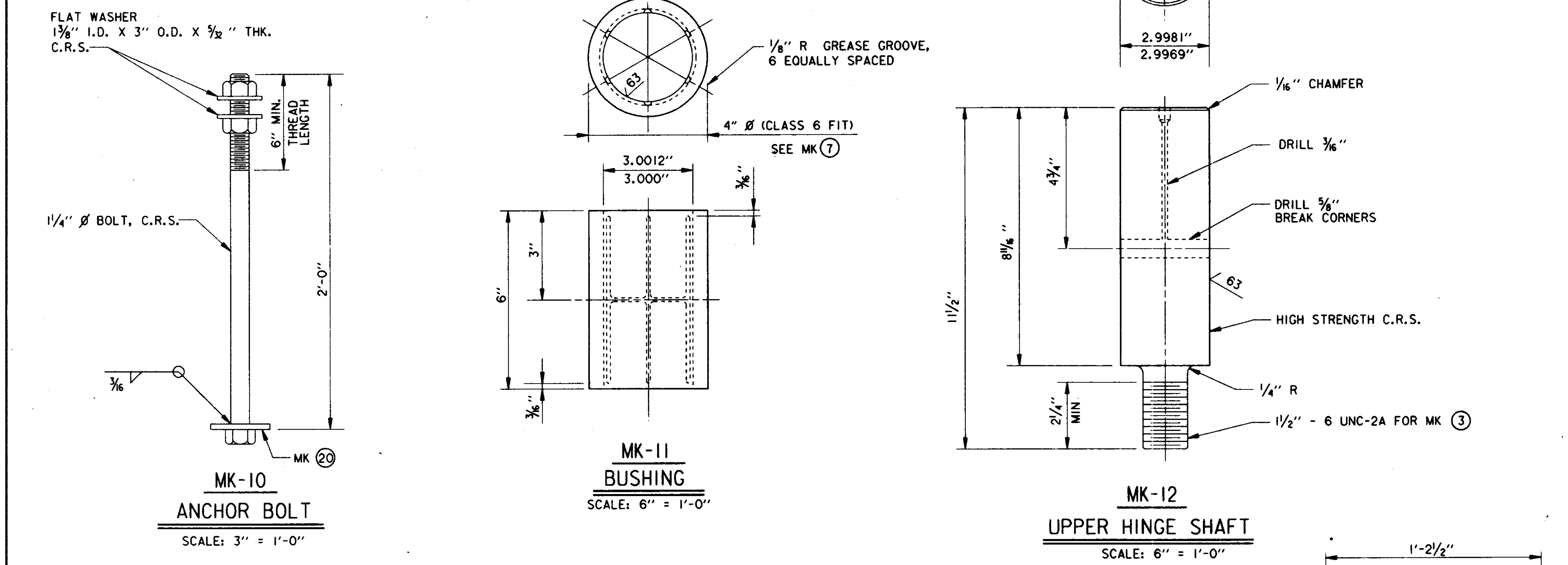
SWING GATE HINGE DETAILS

DESIGNED BY: H.M.B. DRAWN BY: J.E.B./H.J.H. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 4	PLOT DATE: 14 JULY 93
	CADD FILE: 40145H02.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 39 OF 58

C·A·D

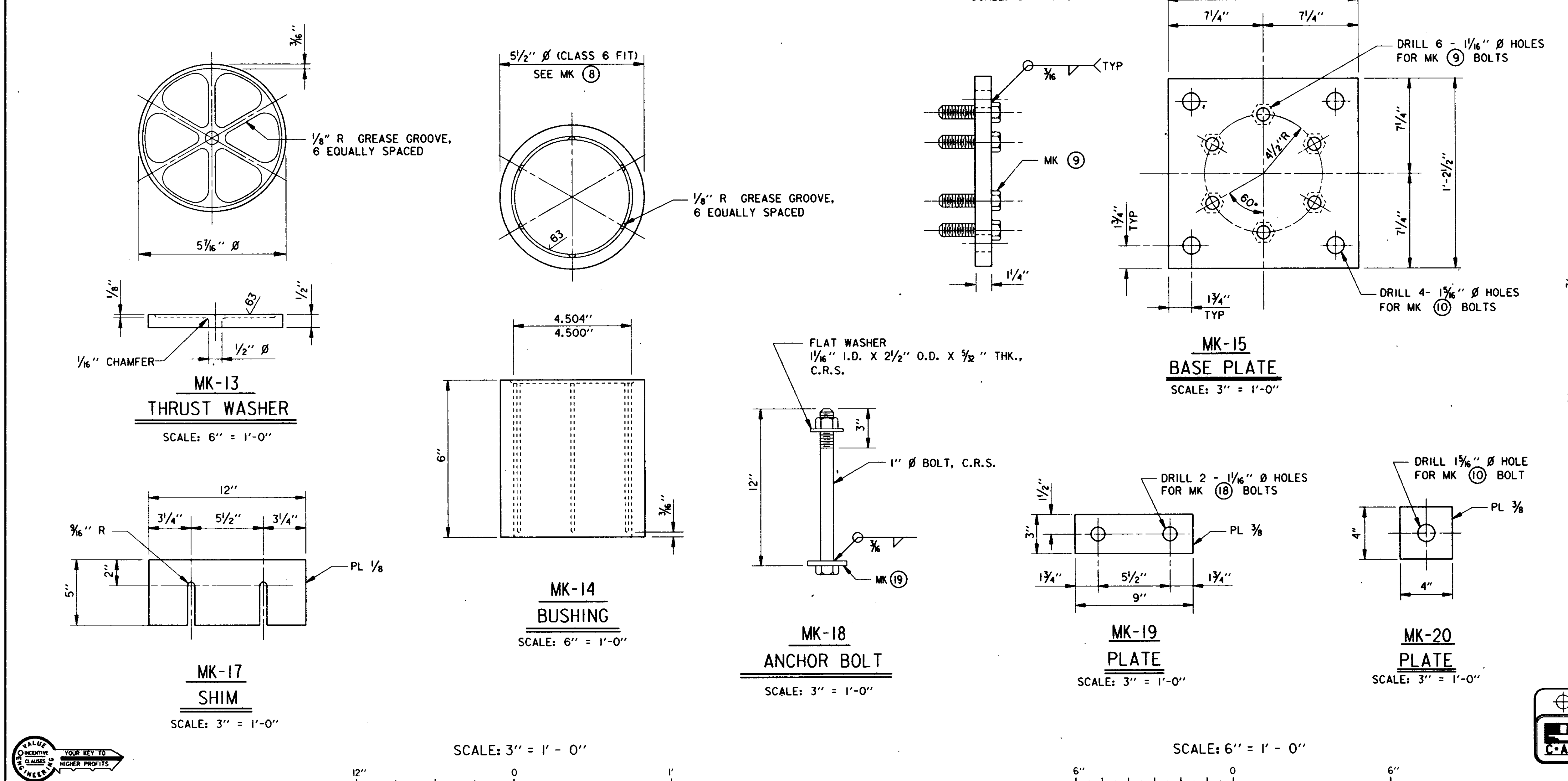
VALUE ENGINEERING INCENTIVE CLAUSES YOUR KEY TO HIGHER PROFITS

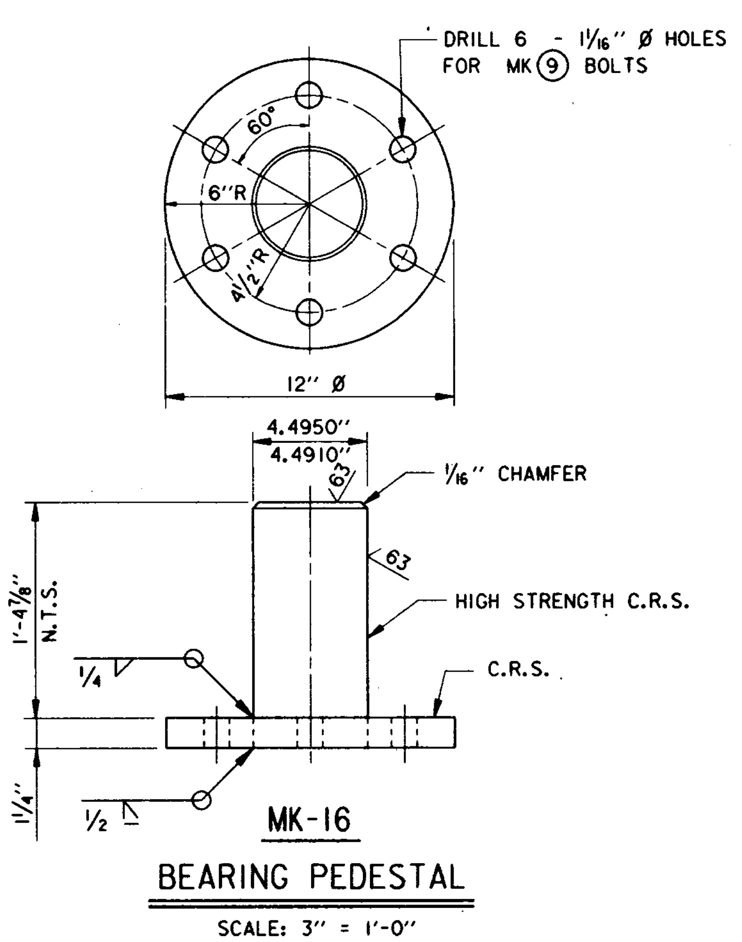
Safety is a Part of Your Contract



MARK NO.	QUANTITY	DESCRIPTION		MATERIAL
PARTS NOT DETAILED				
1	4	SET SCREW - HEX SOCKET, 1" Ø X 2 1/2" LONG, CLASS 3A, FLAT POINT		FED. SPEC. FF-S-200A(2) C.R.S., ALLOY 304
2	4	1" Ø X 10 1/2" LONG HEX BOLT WITH NUT AND FLAT WASHER 1 1/16" I.D. X 2 1/2" O.D. X 5/32" THK.		ASTM F593, GROUP 2, ALLOY 316, CONDITION CW
3	1	NUT, HEAVY HEX 1 1/2"-6 UNC-2B, W/ FLAT WASHER 1 5/8" I.D. X 3 1/2" O.D. X 3/16" THK.		ASTM F594, GROUP 2, ALLOY 316, CONDITION CW
4	2	GREASE SEAL, GARLOCK KLOZURE NO. 63 - 2176 OR EQUAL		COMMERCIAL GRADE
5	1	GREASE SEAL, GARLOCK KLOZURE NO. 53 - 2753 OR EQUAL		COMMERCIAL GRADE
6	2	GREASE FITTING, 1/8" N.P.T. TYPE		COMMERCIAL GRADE
7	1	MECHANICAL TUBING, 5 1/4" O.D. X 4" I.D. X 7" LONG MACHINED FOR CLASS 6 FIT BETWEEN I.D. OF TUBING AND O.D. OF MK-11 BUSHING		A-513, TYPE 6
8	1	MECHANICAL TUBING, 6 3/4" O.D. X 5 1/2" I.D. X 7 1/2" LONG MACHINED FOR CLASS 6 FIT BETWEEN I.D. OF TUBING AND O.D. OF MK-14 BUSHING		A-513, TYPE 6
9	6	1" Ø X 4" LONG HEX BOLT WITH NUT AND FLAT WASHER 1 1/16" I.D. X 2 1/2" O.D. X 5/32" THK.		SAME AS MARK NO. 2
-PARTS DETAILED-				
10	4	1 1/4" Ø X 2'-0" LONG HEX BOLT WITH DBL. NUT AND FLAT WASHERS		SAME AS MARK NO. 2
11	1	BUSHING, 4" O.D. X 3" I.D. X 6" LONG		B-22, NO.937
12	1	UPPER HINGE SHAFT, 2.99" O.D. X 11 1/2" LONG		A-276, TYPE 431
13	1	THRUST WASHER, 5 7/16" Ø WITH 1/2" HOLE		B-22, NO.937
14	1	BUSHING, 5 1/2" O.D. X 4 1/2" I.D. X 6" LONG		B-22, NO.937
15	1	BASE PLATE 1 1/4" X 14 1/2 X 1'-2 1/2"		STEEL A-36
16	1	BEARING PEDESTAL	PLATE 1 1/4 X 12" Ø	A-276, TYPE 304
			SHAFT 4 1/2" Ø X 1'-6 1/8" LONG	A 276, TYPE 431
17	AS REQ'D	SHIM PLATE 1/8 X 5 X 0'-12"		STEEL A-36
18	4	1" Ø X 12" LONG HEX BOLT WITH NUT & WASHER		SAME AS MARK NO. 2
19	2	PLATE 3/8 X 3 X 0'-9"		STEEL A-36
20	4	PLATE 3/8 X 4 X 0'-4"		STEEL A-36

NOTE: QUANTITIES SHOWN ARE FOR ONE COMPLETE SWING GATE.





FOR GENERAL NOTES, SEE DWG. 2.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

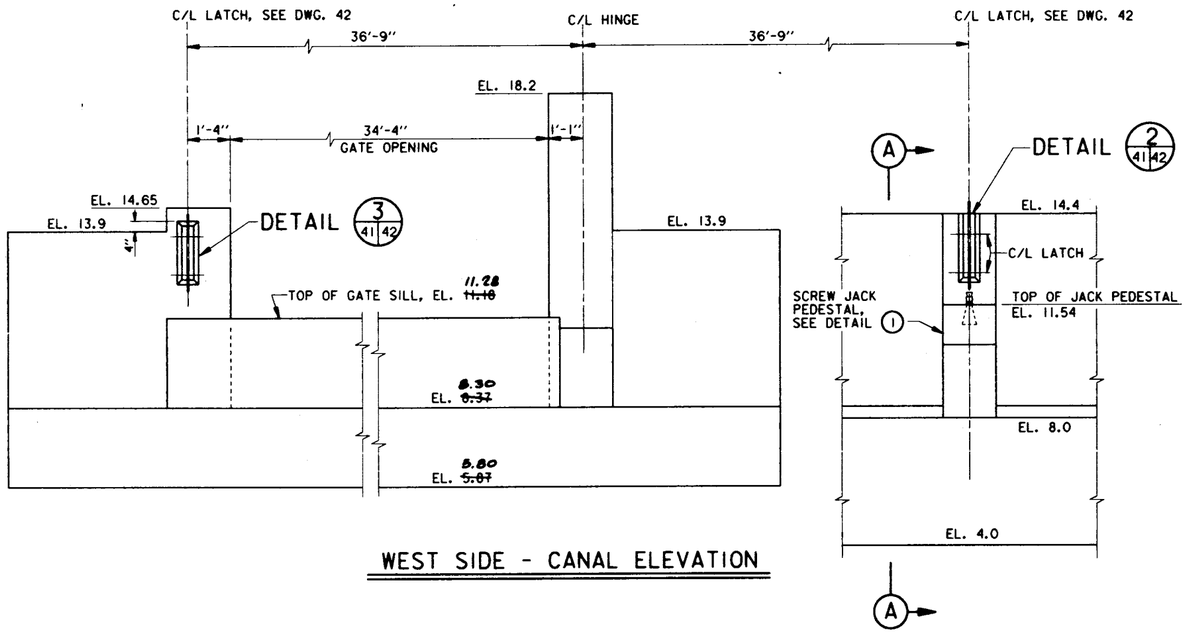
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

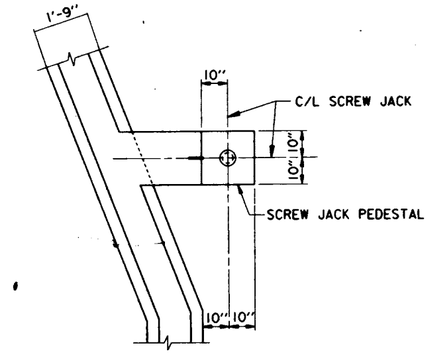
HINGE DETAILS

DESIGNED BY: H.M.B. DRAWN BY: J.E.B./H.J.H. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 4	PLOT DATE: 14 JULY 93
	CADD FILE: 40145H03.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 40 OF 58

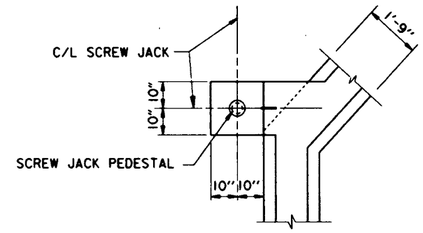
Safety is a Part of Your Contract



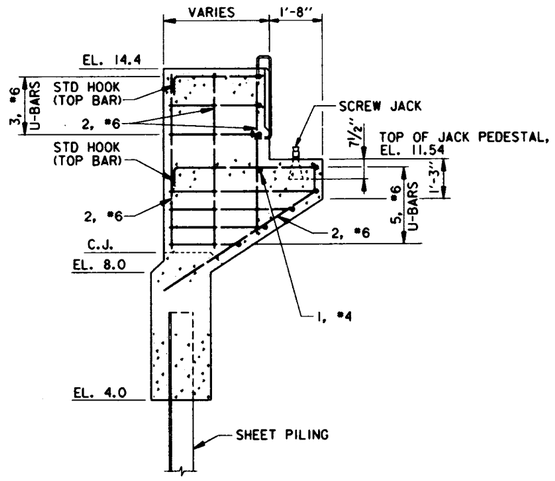
WEST SIDE - CANAL ELEVATION



PLAN



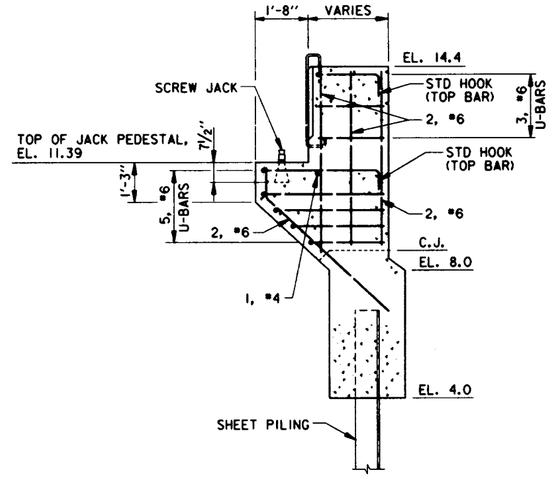
PLAN



SECTION AT C/L SCREW JACK

DETAIL (1)

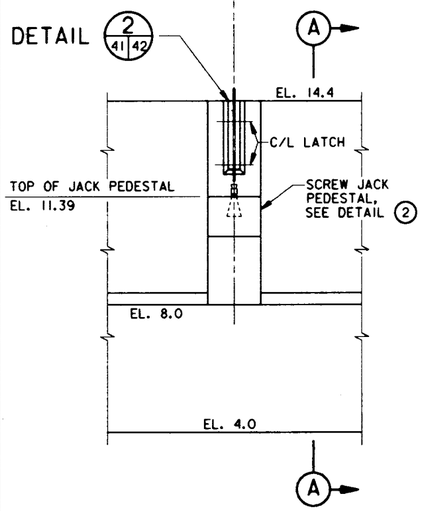
WEST SCREW JACK PEDESTAL

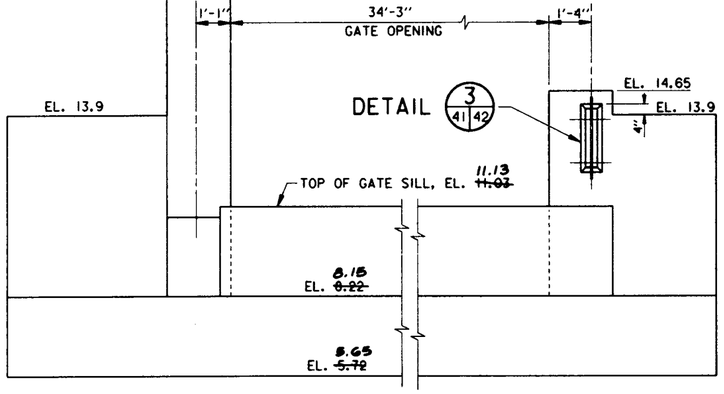


SECTION AT C/L SCREW JACK

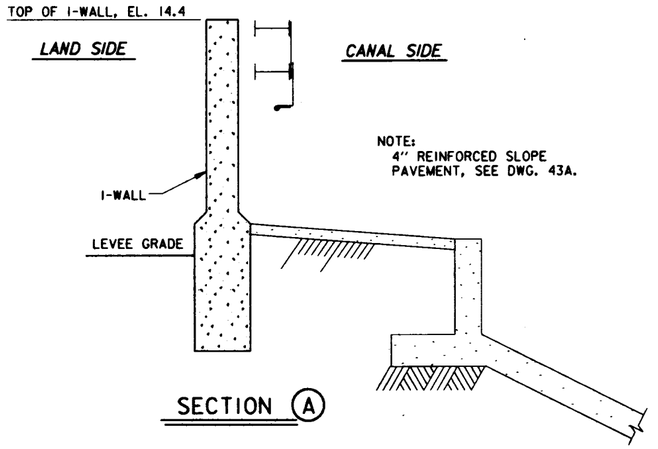
DETAIL (2)

EAST SCREW JACK PEDESTAL





EAST SIDE - CANAL ELEVATION



NOTE:
4" REINFORCED SLOPE PAVEMENT, SEE DWG. 43A.

SECTION (A)

NOTES:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 4 BICYCLE LOCKS, AS SPECIFIED, FOR LOCKING GATES IN STORED POSITION (KEYED ALIKE).

FOR GENERAL NOTES, SEE DWG. 2.

SCALE: ½" = 1'- 0"

12" 0 2' 4' 6' 8'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

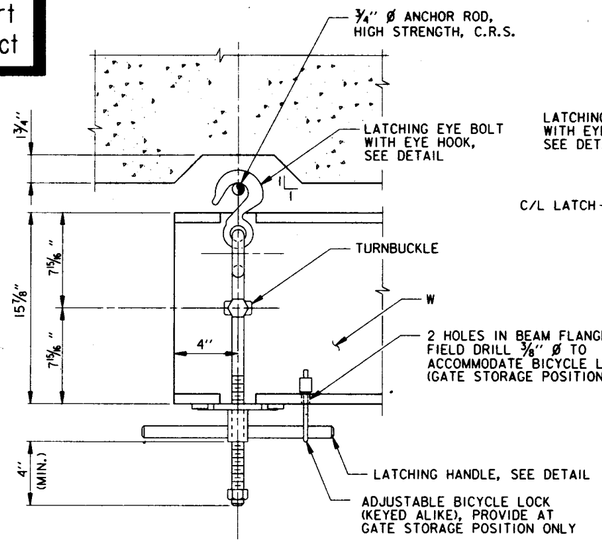
GATE LATCHING DETAILS

DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B./H.J.H.			
CHECKED BY: W.O.B.	CADD FILE: 40145026.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 41 OF 58

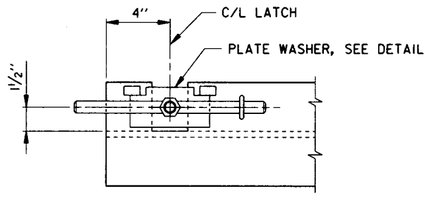
26 JAN 95

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract



PLAN

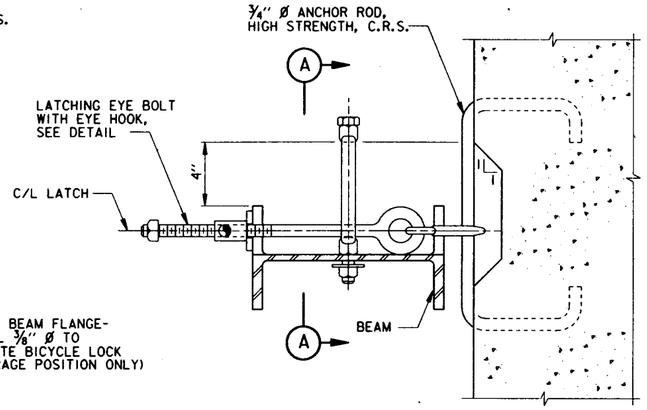


ELEVATION

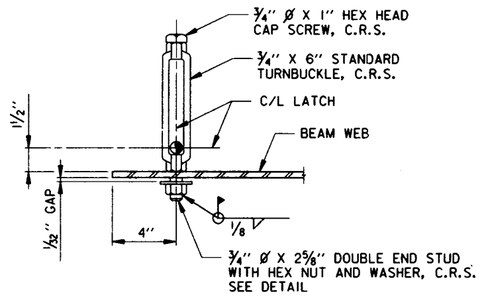
DETAIL (1)

LATCHING DEVICE

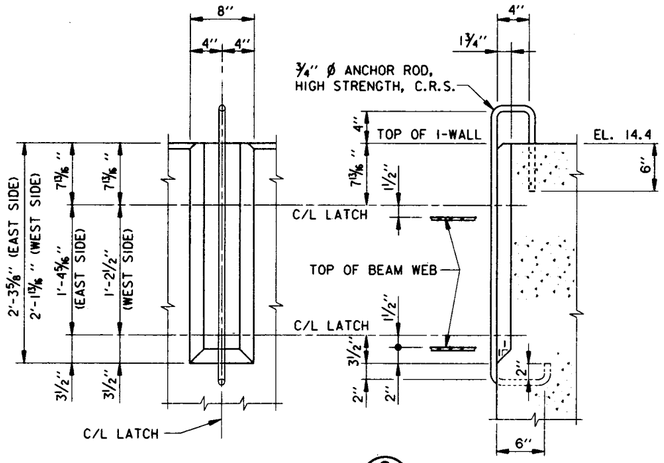
SCALE: 3" = 1' - 0"



SECTION AT C/L OF LATCHING DEVICE

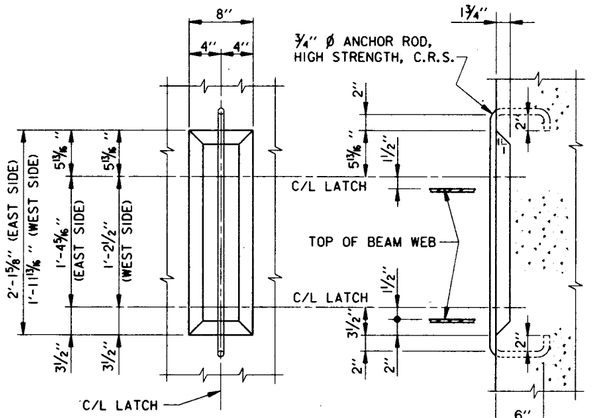


SECTION (A)



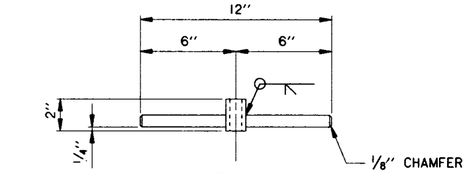
DETAIL (2) 41|42

SCALE: 1 ½" = 1' - 0"

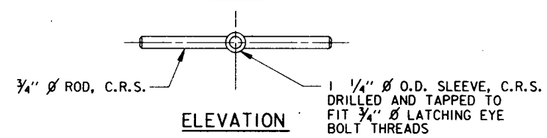


DETAIL (3) 41|42

SCALE: 1 ½" = 1' - 0"



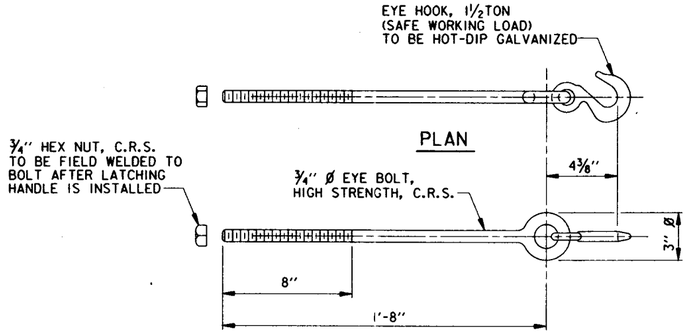
PLAN



ELEVATION

LATCHING HANDLE

SCALE: 3" = 1' - 0"

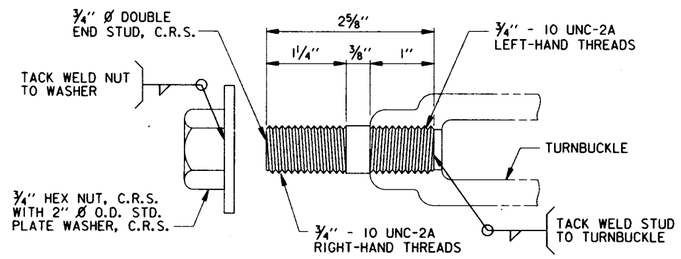


PLAN

ELEVATION

LATCHING EYE BOLT W/ EYE HOOK

SCALE: 3" = 1' - 0"



DOUBLE END STUD

SCALE: 12" = 1' - 0"

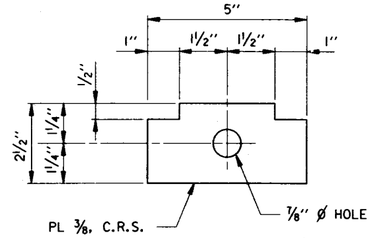


PLATE WASHER

SCALE: 6" = 1' - 0"

SCALE: 1 ½" = 1' - 0"

12" 0 1' 2' 3'

SCALE: 3" = 1' - 0"

12" 0 1'

SCALE: 6" = 1' - 0"

6" 0 6"

SCALE: 12" = 1' - 0"

6" 3" 0

FOR GENERAL NOTES, SEE DWG. 2.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

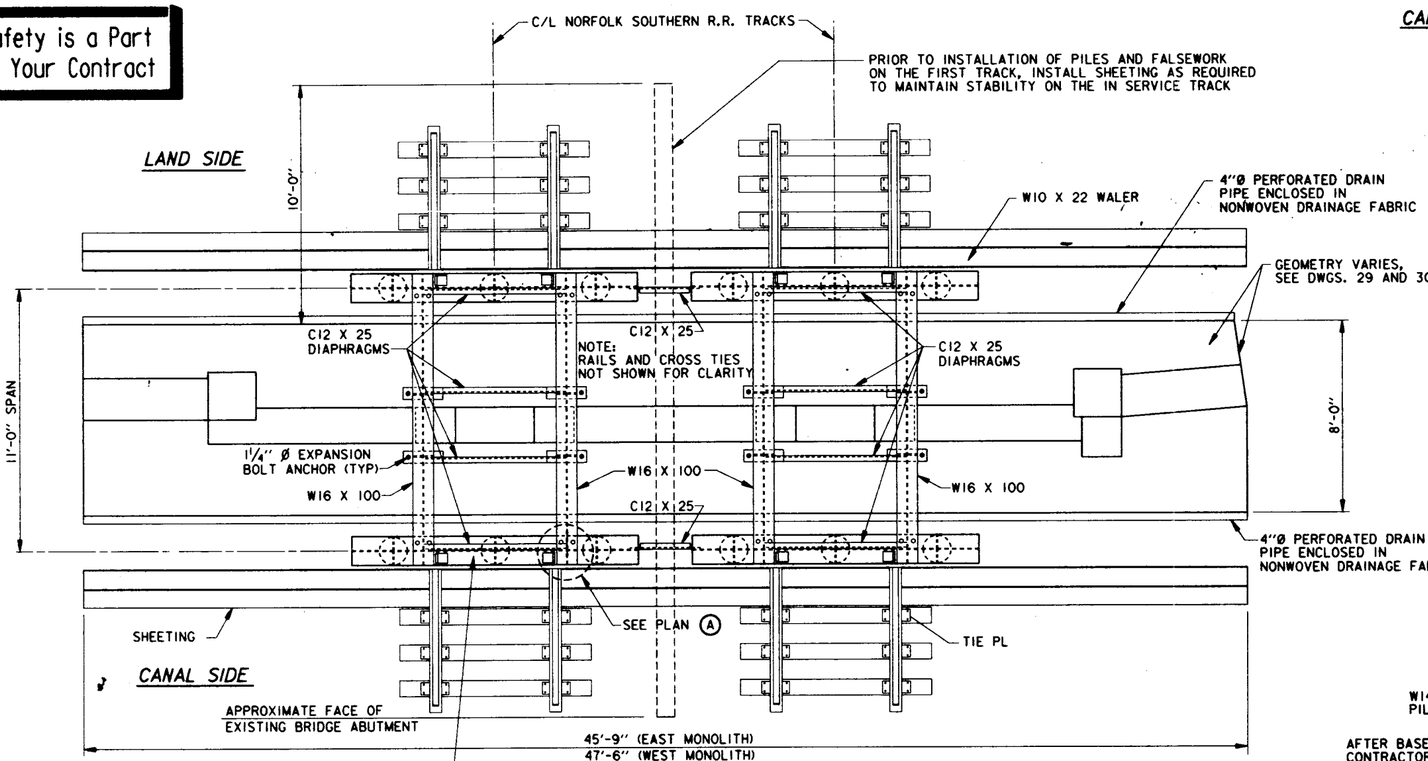
GATE LATCHING DEVICE DETAILS

DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 14 JULY 93
DRAWN BY: D.J.B./H.J.H.			
CHECKED BY: W.O.B.	CADD FILE: 401HSH04.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 42 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

C·A·D

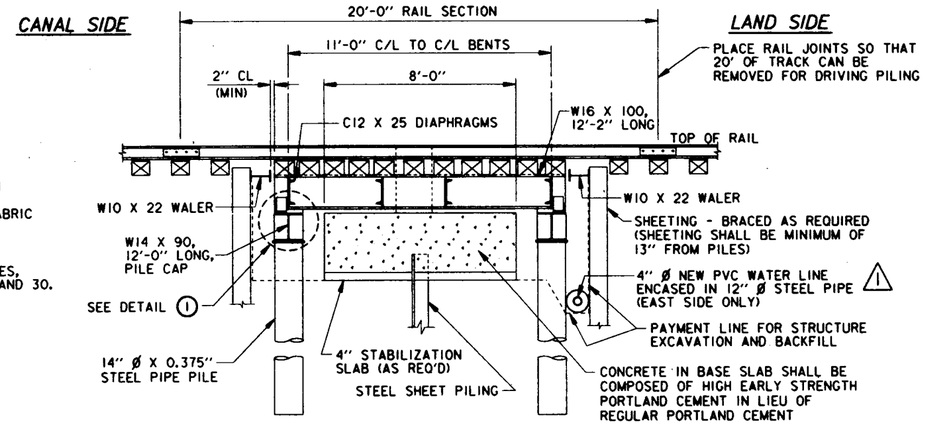
Safety is a Part of Your Contract



2 1 NOTE: PROBE FOR EXISTING WATER LINE W-2 ON THE CANAL SIDE OF THE EAST GATE MONOLITH PRIOR TO DRIVING 14" Ø STEEL PIPE PILES.

2 PLAN - FALSEWORK

SCALE: 3/8" = 1'-0"

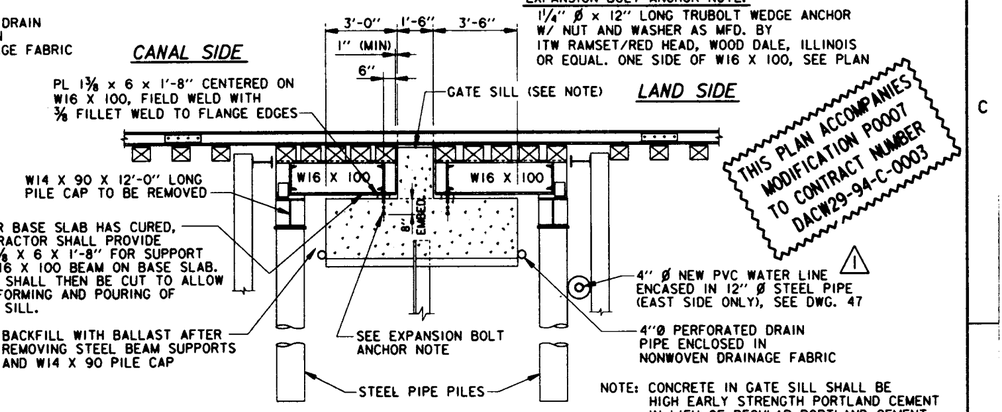


2 1 SECTION - FALSEWORK SPAN

SCALE: 3/8" = 1'-0"

NOTE: CROSS TIE SPACING TO BE DETERMINED BY R.R. COMPANY

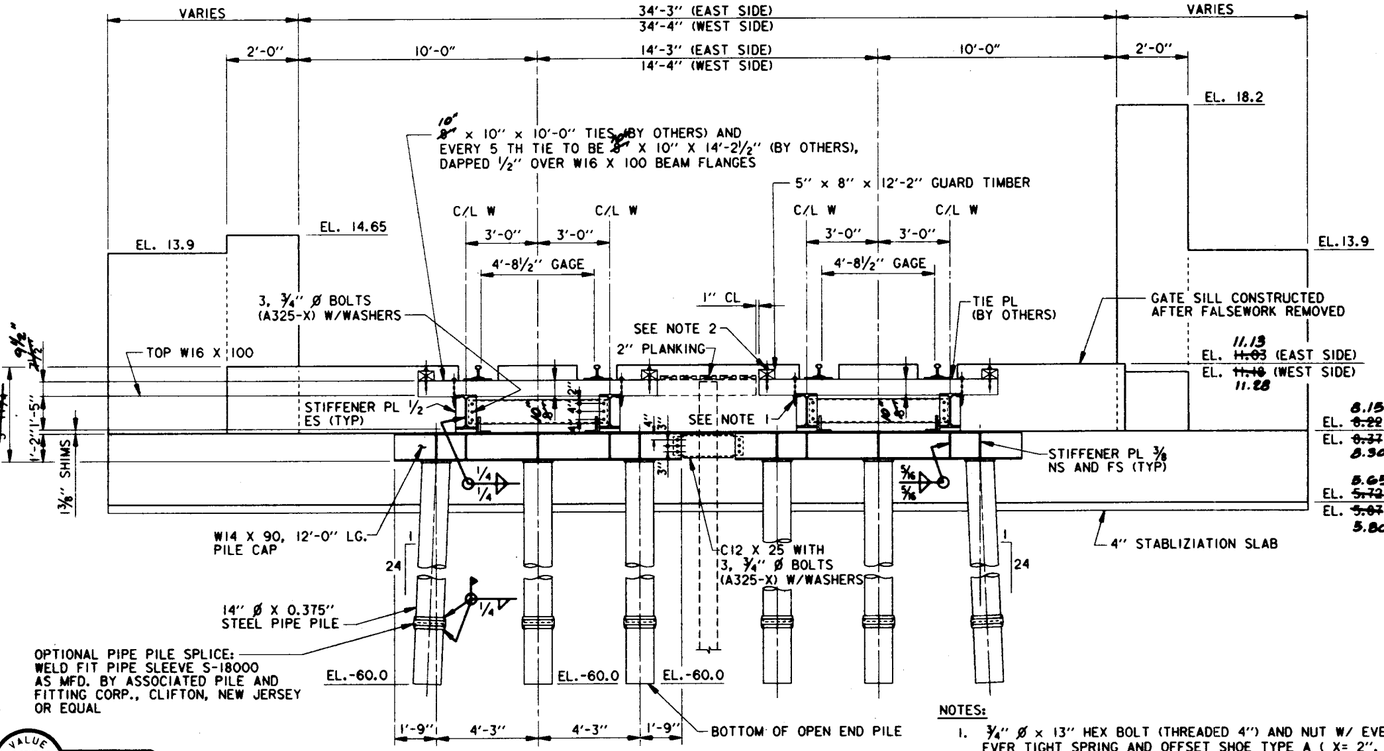
EXPANSION BOLT ANCHOR NOTE:
1¼" Ø x 12" LONG TRUBOLT WEDGE ANCHOR W/ NUT AND WASHER AS MFD. BY ITW RAMSET/RED HEAD, WOOD DALE, ILLINOIS OR EQUAL. ONE SIDE OF W16 X 100, SEE PLAN



THIS PLAN ACCOMPANIES MODIFICATION P0007 TO CONTRACT NUMBER DACW29-94-C-0003

2 1 SECTION - FALSEWORK PARTIALLY REMOVED

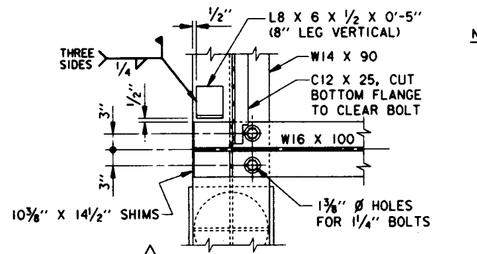
SCALE: 3/8" = 1'-0"



2 ELEVATION - FALSEWORK BENTS

SCALE: 3/8" = 1'-0"

NOTES:
1. ¾" Ø x 13" HEX BOLT (THREADED 4") AND NUT W/ EVER TIGHT WASHER, EVER TIGHT SPRING AND OFFSET SHOE TYPE A (X= 2", Y= ½"), AS MFD. BY LEWIS BOLT AND NUT CO., WAYZATA, MINNESOTA OR EQUAL
2. ⅝" Ø x 10" WASHER HEAD TIMBER DRIVE SPIKE AS MFD. BY LEWIS BOLT AND NUT CO., WAYZATA, MINNESOTA OR EQUAL



2 PLAN (A)

SCALE: 1"=1'-0"

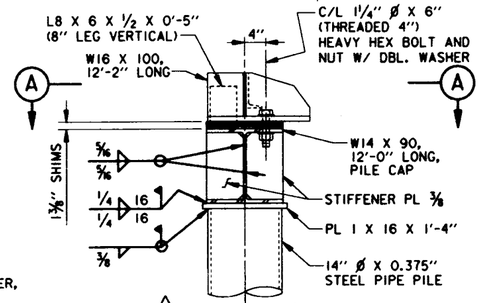
NOTES:
1. FOR GENERAL NOTES, SEE DWG. 2.
2. EXTEND DRAINAGE PIPE TO FACE OF EMBANKMENT SLOPE. PROTECT WITH 12" SOIL BLANKET.
3. FOR PVC WATER LINE REQUIREMENTS, SEE DWG. 47.

SCALE: 3/8" = 1'- 0"

12" 0 2' 4' 6' 8' 10'

SCALE: 1" = 1'- 0"

12" 0 1' 2' 3' 4' 5'



2 DETAIL (1)

SCALE: 1"=1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVED
2	GENERAL REVISIONS: MOD. 7	2-17-94	A.L.D.
1	REVISED NOTES IN FALSEWORK SECTIONS AND ADDED NOTE IN PLAN; AMEND. NO. 3	9-3-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

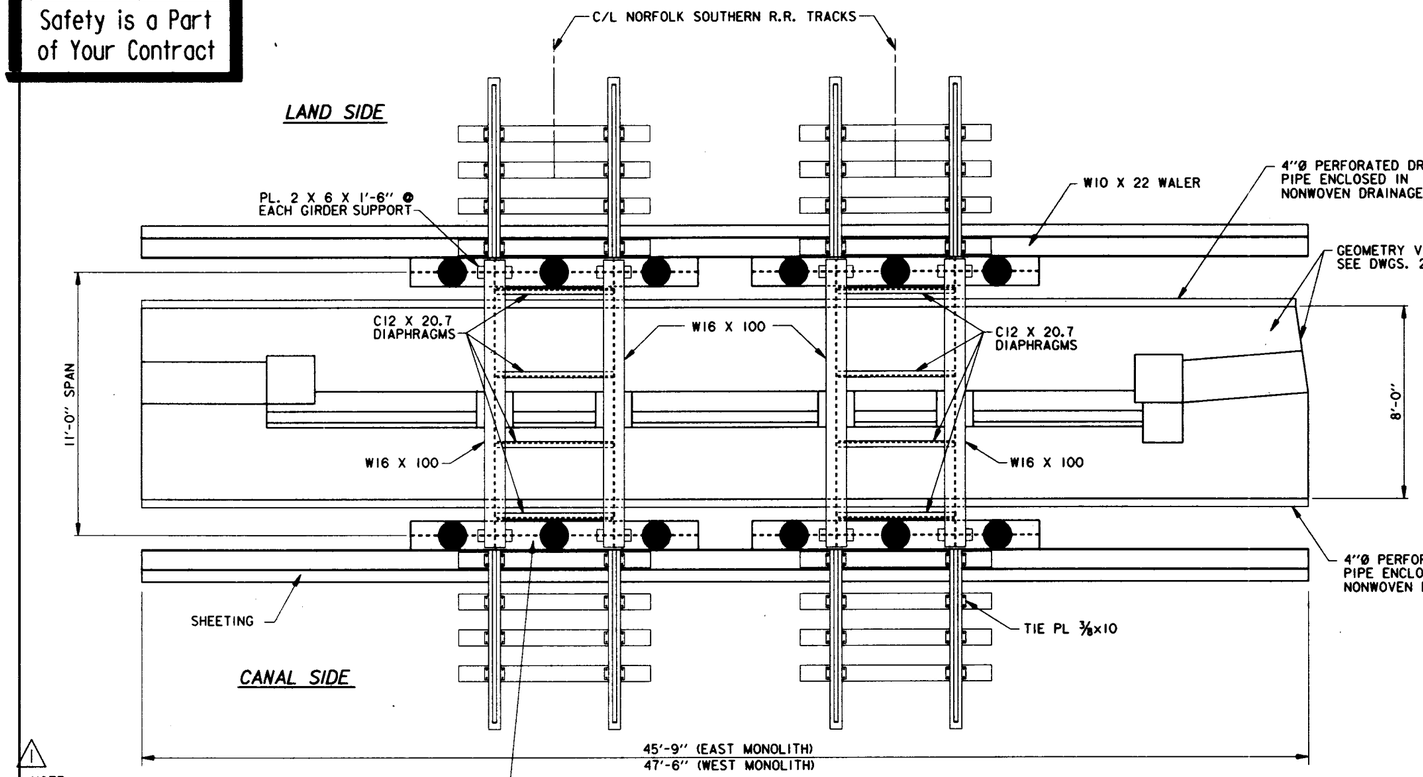
FALSEWORK AT NORFOLK SOUTHERN RAILROAD

DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 32	PLOT DATE: 14 JULY 93
DRAWN BY: J.E.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145HIT.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 43 OF 58

26 JAN 95

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

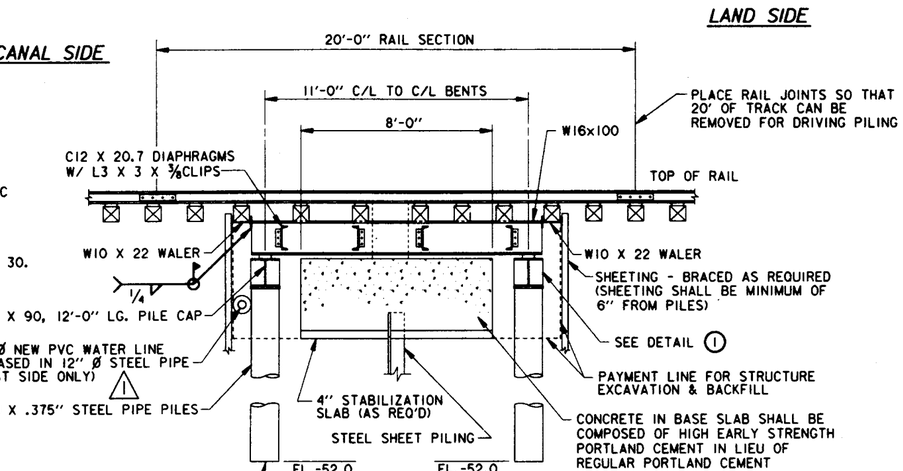
Safety is a Part of Your Contract



⚠1 NOTE:
PROBE FOR EXISTING WATER LINE W-2 ON THE CANAL SIDE OF THE EAST GATE MONOLITH PRIOR TO DRIVING 14" Ø STEEL PIPE PILES. THE 4'-3" DIMENSION MAY BE ADJUSTED FROM A MINIMUM OF 3'-3" TO A MAXIMUM OF 5'-3" TO AVOID INTERFERENCE WITH W-2.

PLAN - FALSEWORK

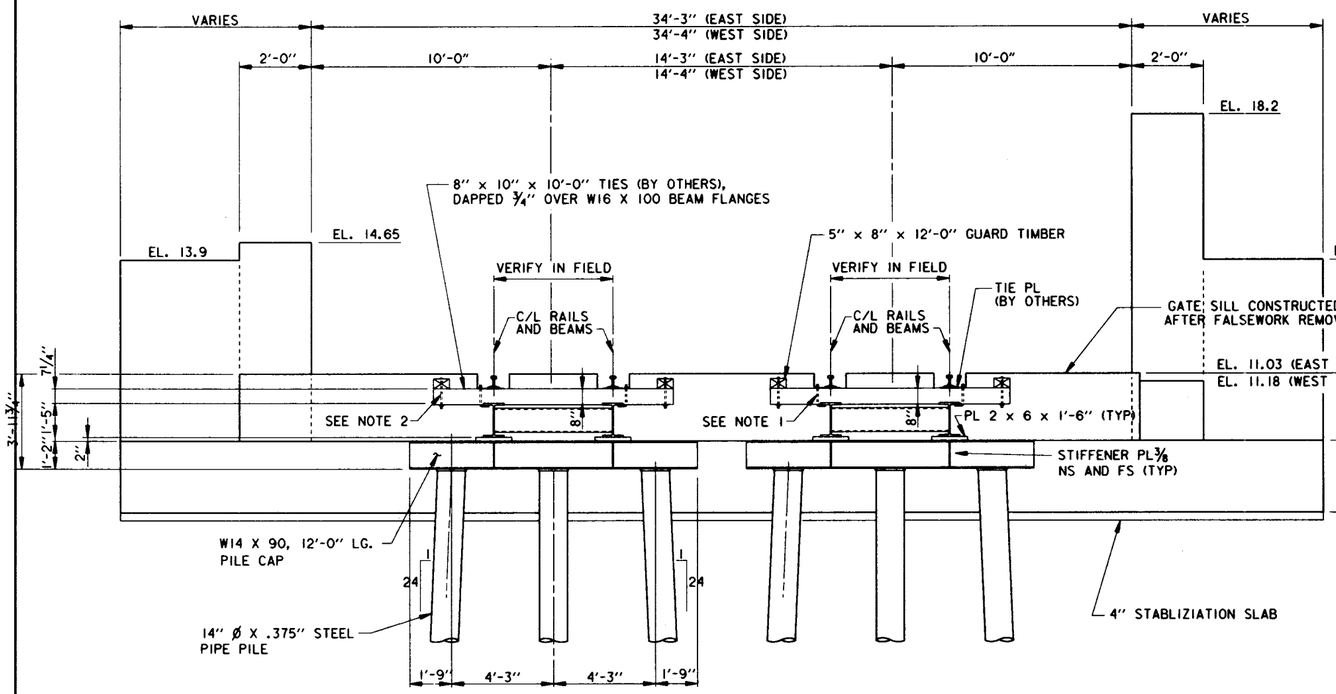
SCALE: 3/8" = 1'-0"



⚠1 SECTION - FALSEWORK SPAN

SCALE: 3/8" = 1'-0"

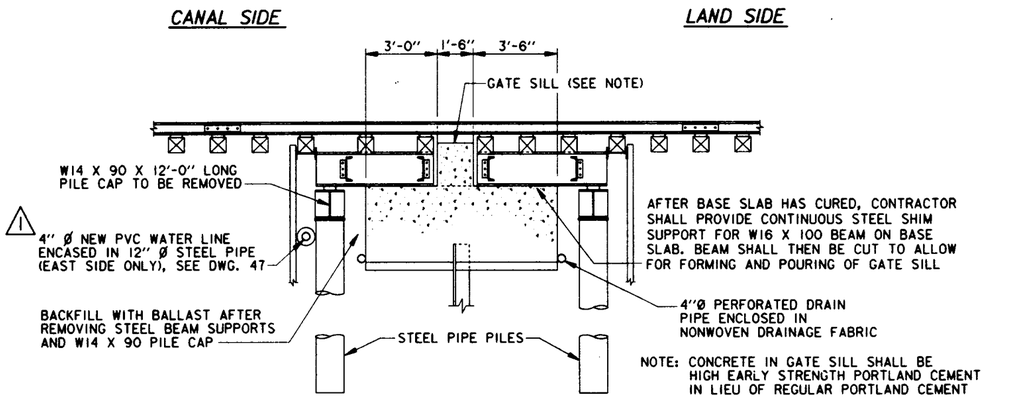
NOTE:
CROSS TIE SPACING TO BE DETERMINED BY R.R. COMPANY



ELEVATION - FALSEWORK BENTS

SCALE: 3/8" = 1'-0"

NOTES:
1. 3/4"Ø x 1'-2" ANCHOR BOLTS, THREADED 3", WITH 3"Ø FLAT WASHERS
2. 3/4"Ø x 1'-4" CARRIAGE BOLTS, WITH 3"Ø FLAT WASHERS



⚠1 SECTION - FALSEWORK PARTIALLY REMOVED

SCALE: 3/8" = 1'-0"

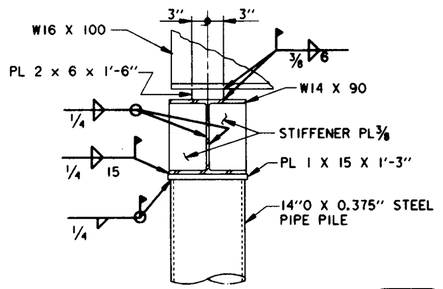
NOTES:
1. FOR GENERAL NOTES, SEE DWG. 2.
2. EXTEND DRAINAGE PIPE TO FACE OF EMBANKMENT SLOPE. PROTECT WITH 12" SOIL BLANKET.
3. FOR PVC WATER LINE REQUIREMENTS, SEE DWG. 47.

SCALE: 3/8" = 1'- 0"

12" 0 2' 4' 6' 8' 10'

SCALE: 1" = 1'- 0"

12" 0 1' 2' 3' 4' 5'



DETAIL 1

SCALE: 1"=1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	REVISED NOTES IN FALSEWORK SECTIONS AND ADDED NOTE IN PLAN; AMEND. NO. 3	9-3-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

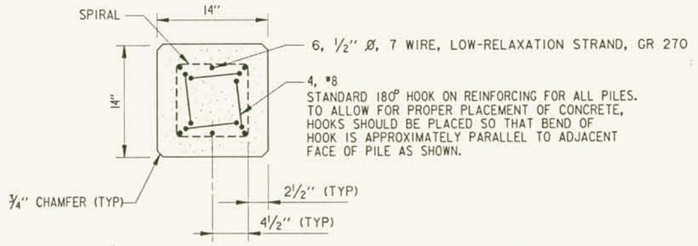
FALSEWORK AT NORFOLK SOUTHERN RAILROAD

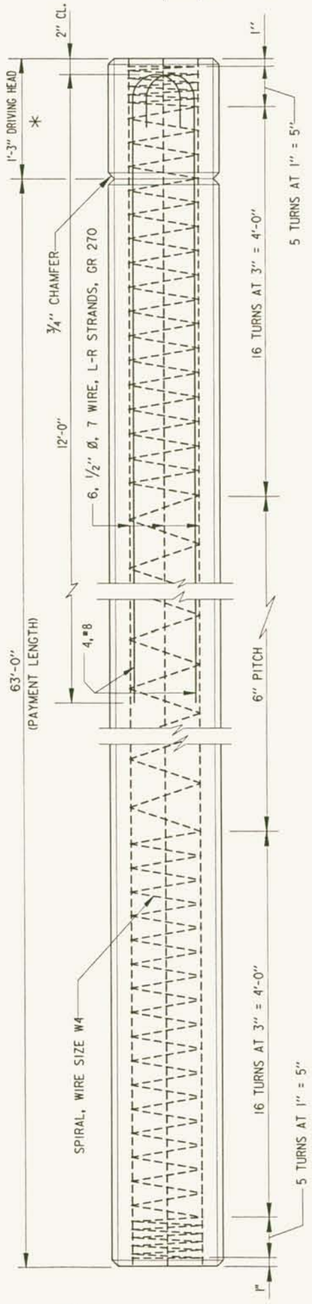
DESIGNED BY: H.M.B.	DATE: JUNE 93	PLOT SCALE: 32	PLOT DATE: 14 JULY 93
DRAWN BY: J.E.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145H17.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 43 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

C-A-D

Safety is a Part of Your Contract



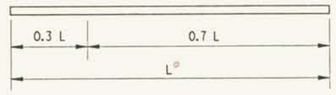


NOTE:
GRIND PRESTRESSED STRANDS FLUSH WITH PILE HEAD AND PILE TIP.

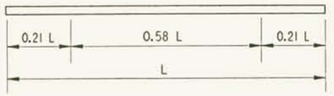
14" X 14"
PRESTRESSED PRECAST CONCRETE PILE

SCALE: 1 ½" = 1' - 0"

* DRIVING HEAD CONCRETE, STRANDS AND SPIRAL TIES TO BE REMOVED AFTER DRIVING TO EXPOSE HOOKS. (NO PAYMENT)



1 POINT PICKUP (L ≤ 59') 14" X 14" PILE



2 POINT PICKUP (L ≤ 84') 14" X 14" PILE

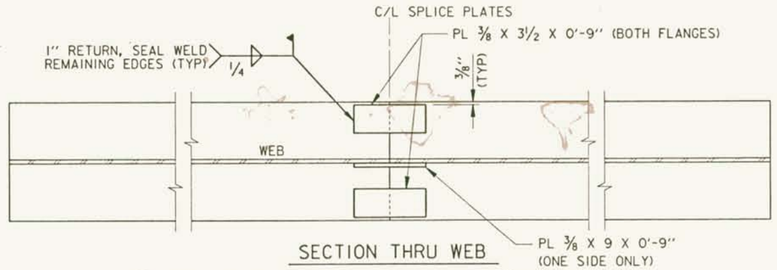
NOTE: PICKUP POINTS TO BE PLAINLY MARKED ON PILES

△2

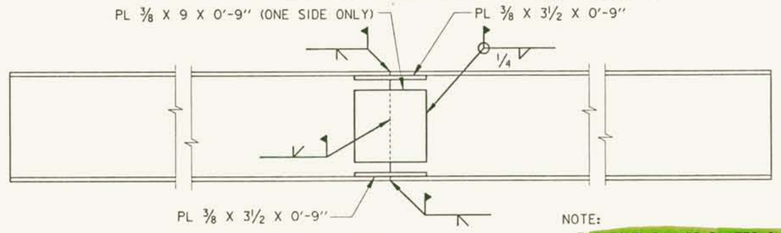
PILE SCHEDULE

GATE MONOLITH	PILE SIZE	NUMBER OF PILES	PILE BATTER	PILE TIP ELEVATION	PAYMENT LENGTH CANAL SIDE	PAYMENT LENGTH LAND SIDE
EAST SIDE	14"x14" *	8	1 ON 12	-56.3		63'
		8	1 ON 12	-56.3	63'	
WEST SIDE	14"x14" *	8	1 ON 12	-56.2		63'
		8	1 ON 12	-56.2	63'	

* CONTRACTOR'S OPTION TO USE HP14 X 73 PILES IN LIEU OF 14" X 14" CONCRETE PILES, SEE SPECIFICATIONS.



SECTION THRU WEB

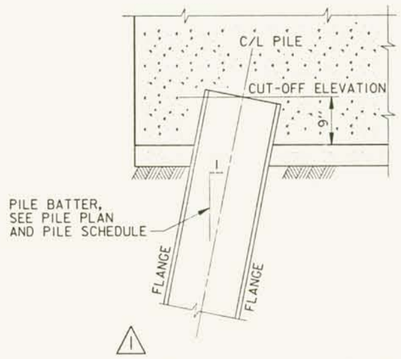


△2 △1 WEB ELEVATION
HP14 X 73 PILE SPLICE

SCALE: 1 ½" = 1' - 0"

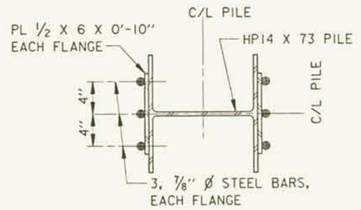
NOTE:
THE FOUR FLANGE PLATES SHALL BE IN PLACE BEFORE THE GROOVE WELDS ARE MADE. △2

GROOVE WELDS SHALL BE GROUND SMOOTH FOR FLUSH FIT OF OVERLAPPING SPLICE PLATES AS REQUIRED.

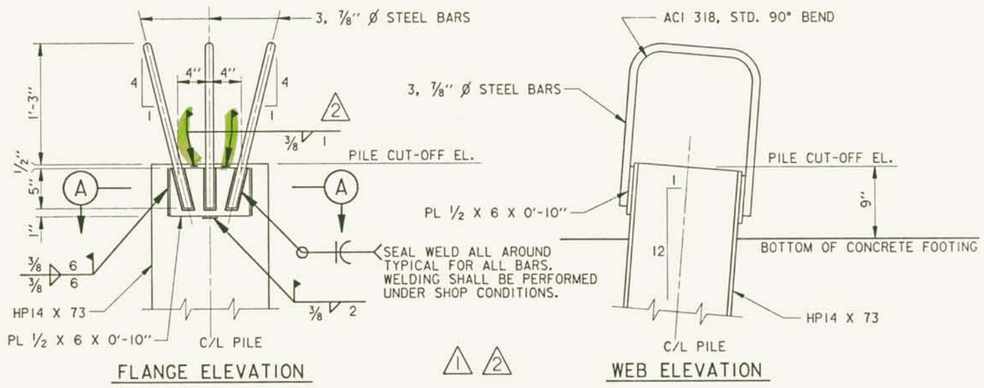


△1 PILE CUT-OFF DETAIL

SCALE: 1" = 1'-0"



SECTION (A)



FLANGE ELEVATION

△1 △2 WEB ELEVATION

TENSION PILE CONNECTION DETAIL - CANAL SIDE PILES ONLY

SCALE: 1 ½" = 1' - 0"

THIS PLAN ACCOMPANIES MODIFICATION POOOO TO CONTRACT NUMBER DACW29-94-C-0003

NOTES

1. FOR GENERAL NOTES, SEE DWG. 2.

REFERENCE DRAWINGS

1. PILING AND MONOLITH LAYOUT, SEE DWGS. 32 AND 33.

SCALE: 1" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 1 ½" = 1' - 0"

12" 0 1' 2' 3'

SYMBOL	DESCRIPTION	DATE	APPROVED
△	REVISED PILE SCHEDULE, HP14 X 73 PILE SPLICE DETAIL AND TENSION PILE CONN. DETAIL; MOD. 7	2-17-94	H.M.B.
△	MOVED CONCRETE PAVING DETAIL TO DWG. 21A AND ADDED HP14 X 73 DETAILS; AMEND. NO. 3	9-6-93	H.M.B.

REVISIONS

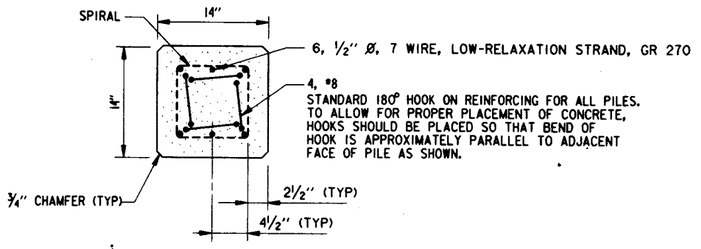
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

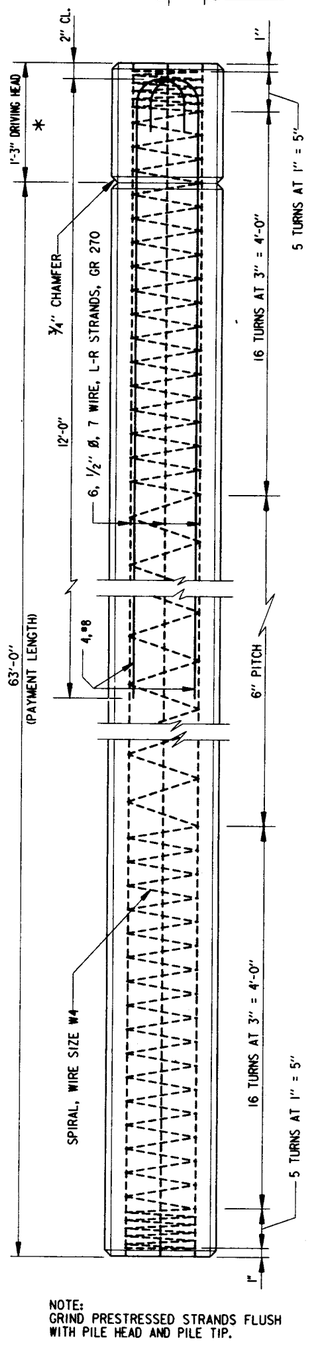
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION. NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

CONCRETE PILE DETAILS

DESIGNED BY: A.L.D. DRAWN BY: J.E.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 14 JULY 93
	CADD FILE: 40145H10.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 43A OF 58

C•A•D



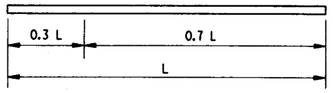


NOTE:
GRIND PRESTRESSED STRANDS FLUSH WITH PILE HEAD AND PILE TIP.

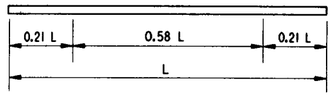
14" X 14" PRESTRESSED PRECAST CONCRETE PILE

SCALE: 1 ½" = 1' - 0"

* DRIVING HEAD CONCRETE, STRANDS AND SPIRAL TIES TO BE REMOVED AFTER DRIVING TO EXPOSE HOOKS. (NO PAYMENT)



1 POINT PICKUP (L≤ 59') 14" X 14" PILE



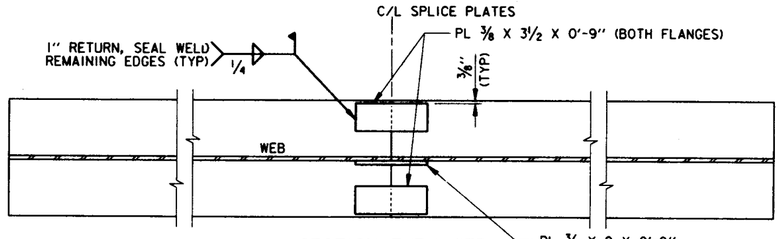
2 POINT PICKUP (L≤ 84') 14" X 14" PILE

NOTE: PICKUP POINTS TO BE PLAINLY MARKED ON PILES

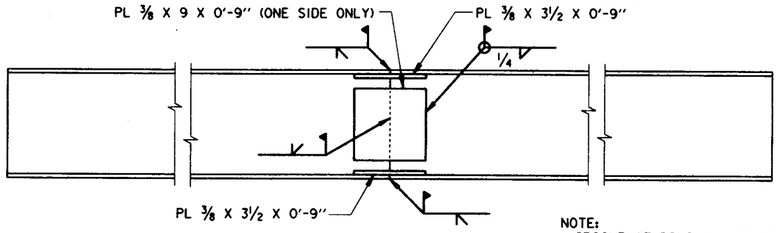
PILE SCHEDULE

GATE MONOLITH	PILE SIZE	NUMBER OF PILES	PILE BATTER	PILE TIP ELEVATION	PAYMENT LENGTH	
					CANAL SIDE	LAND SIDE
EAST SIDE	14"x14"	8	1 ON 5	-55.3		63'
	*	8	1 ON 12	-56.3	63'	
WEST SIDE	14"x14"	8	1 ON 5	-55.2		63'
	*	8	1 ON 12	-56.2	63'	

* CONTRACTOR'S OPTION TO USE HP14 X 73 PILES IN LIEU OF 14" X 14" CONCRETE PILES, SEE SPECIFICATIONS.



SECTION THRU WEB

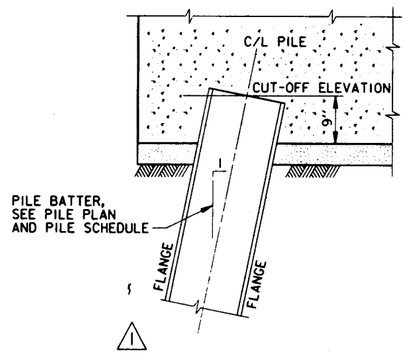


WEB ELEVATION

HP14 X 73 PILE SPLICE

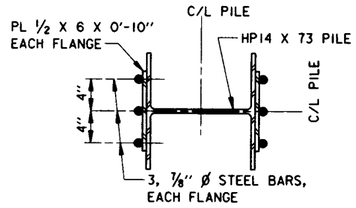
SCALE: 1 ½" = 1' - 0"

NOTE:
GROOVE WELDS SHALL BE GROUND SMOOTH FOR FLUSH FIT OF OVERLAPPING SPLICE PLATES AS REQUIRED.

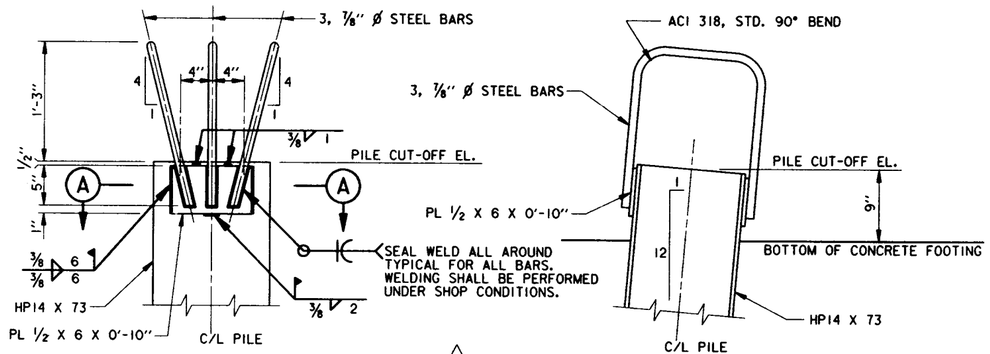


PILE CUT-OFF DETAIL

SCALE: 1" = 1'-0"



SECTION (A)



FLANGE ELEVATION

WEB ELEVATION

TENSION PILE CONNECTION DETAIL - CANAL SIDE PILES ONLY

SCALE: 1 ½" = 1' - 0"

NOTES

1. FOR GENERAL NOTES, SEE DWG. 2.

REFERENCE DRAWINGS

1. PILING AND MONOLITH LAYOUT, SEE DWGS. 32 AND 33.

SCALE: 1" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 1 ½" = 1' - 0"

12" 0 1' 2' 3'

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	MOVED CONCRETE PAVING DETAIL TO DWG. 21A AND ADDED HP14 X 73 DETAILS; AMEND. NO. 3	9-6-93	H.M.B.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION. NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

CONCRETE PILE DETAILS

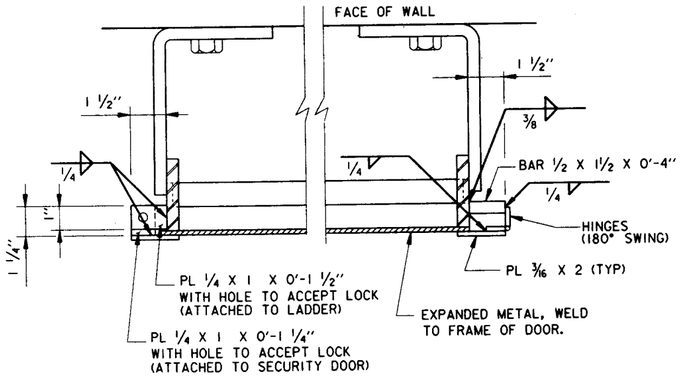
DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 14 JULY 93
DRAWN BY: J.E.B.			
CHECKED BY: W.O.B.	CADD FILE: 4014SH10.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 43A OF 58

Safety is a Part of Your Contract

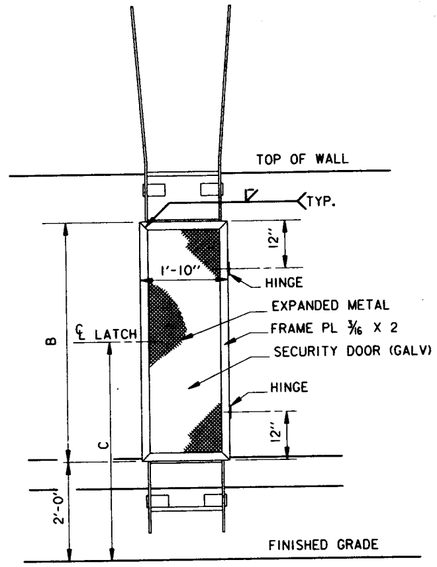
C-A-D

Safety is a Part of Your Contract

NOTE:
ALL LADDERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.



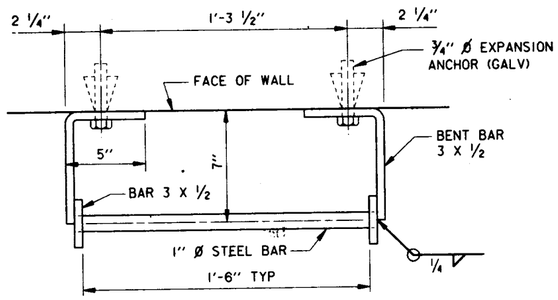
PLAN
SCALE: 3/8" = 1"



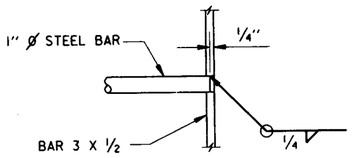
LAND SIDE ELEVATION
SCALE: 3/4" = 1'- 0"

NOTE:
CONTRACTOR TO PROVIDE A SECURITY DOOR FOR ALL LADDERS ON THE LAND SIDE OF WALL ONLY.

LADDER SECURITY DOOR DETAILS

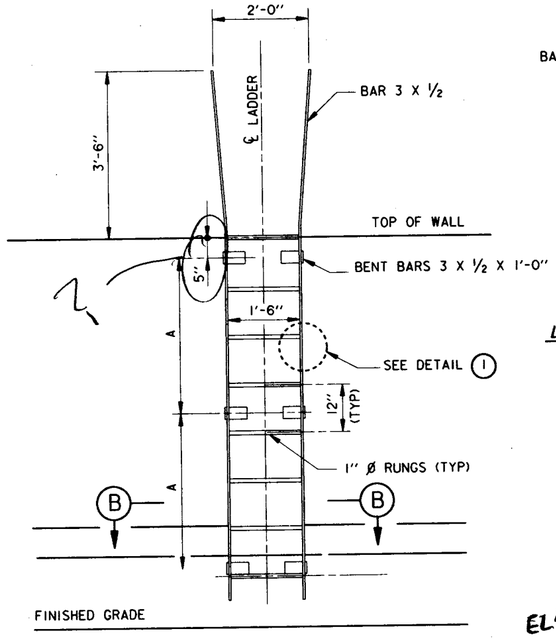


SECTION (B)
SCALE: 3" = 1" - 0"



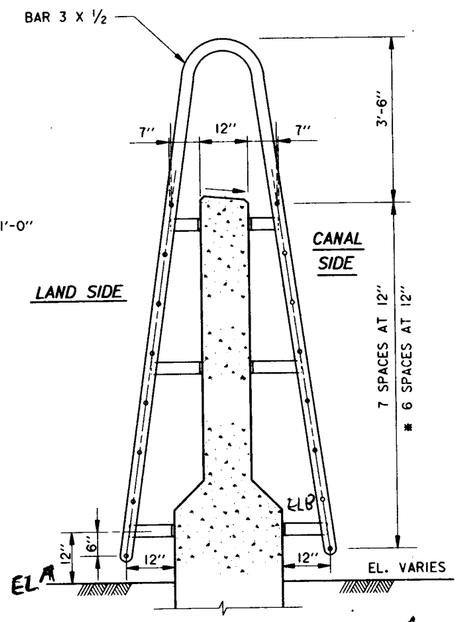
DETAIL (1)
SCALE: 3" = 1" - 0"

LONDON AVE. LADDER LOCATIONS							
EAST BASELINE STATION				WEST BASELINE STATION			
	A	B	C		A	B	C
STA. 1+60.00	3'-2"	4'-9"	4'-5"	STA. 2+80.00	3'-2"	4'-9"	4'-5"
STA. 9+70.00	3'-2"	4'-9"	4'-5"	STA. 9+30.00	3'-2"	4'-9"	4'-5"
STA. 18+00.00	3'-2"	4'-9"	4'-5"	STA. 19+00.00	3'-2"	4'-9"	4'-5"
STA. 42+00.00	3'-6"	5'-3"	4'-8"	STA. 41+80.00	3'-1"	4'-6"	4'-3"
STA. 67+00.00	3'-9"	5'-9"	4'-11"	STA. 67+32.00	3'-1"	5'-0"	4'-6"



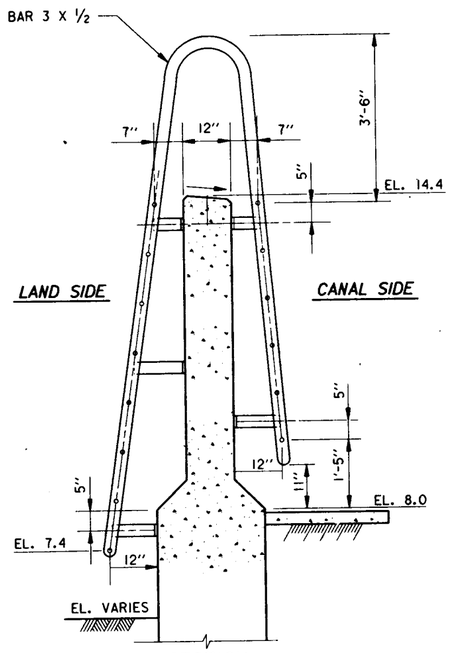
LAND SIDE ELEVATION

NOTE:
REMOVE TEXTURE FINISH TO ATTACH LADDER TO WALL.



ELB	SECTION	ELA
7.5	STA. 42+00 EB/L	6.0 to 6.0
7.0	STA. 67+00 EB/L	6.0 to 5.5
8.0 *	STA. 41+80 WB/L -	6.5 to 6.5
7.0	STA. 67+32 WB/L -	5.5 to 5.5

LADDER DETAILS
SCALE: 3/4" = 1'- 0"



SECTION
STA. 1+60 EB/L
STA. 9+70 EB/L
STA. 18+00 EB/L
STA. 2+80 WB/L
STA. 9+30 WB/L
STA. 19+00 WB/L

SCALE: 3/8" = 1"
1" 0 2" 4" 6" 8" 10"

SCALE: 3/4" = 1'- 0"
12" 0 1' 2' 3' 4' 5'

SCALE: 3" = 1' - 0"
12" 0 1'

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN AND PROFILE, SEE DWGS. 3 THRU 18
FOR TYPICAL WALL SECTIONS, SEE DWGS. 19 THRU 21A.
FOR I-WALL CONCRETE, SEE DWGS. 25 AND 26.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

LAKE PONTCHARTRAIN, LA. VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

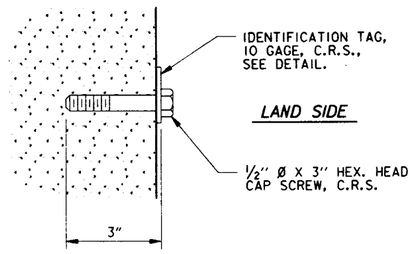
TYPICAL LADDER DETAILS

DESIGNED BY: A.L.D. DRAWN BY: D.J.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 14 JULY 93
	CADD FILE: 40145008.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 44 OF 58

C·A·D

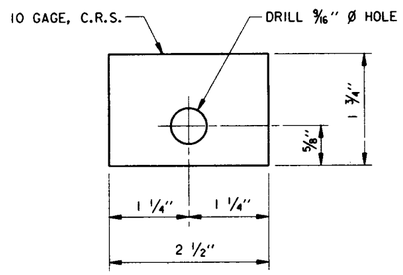
VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract



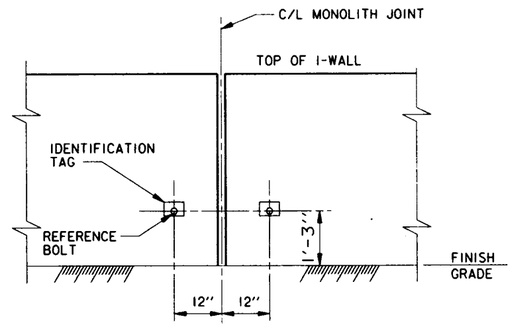
REFERENCE BOLT

SCALE: 6" = 1' - 0"



IDENTIFICATION TAG

SCALE: 12" = 1' - 0"



TYPICAL ELEVATION OF SETTLEMENT REFERENCE MARKER

SCALE: 3/4" = 1'- 0"

SETTLEMENT REFERENCE MARKER SCHEDULE

EAST SIDE			WEST SIDE		
S.R.M. NO.	W/L STATION * (C/L MONOLITH JOINT)	ELEVATION **	S.R.M. NO.	W/L STATION * (C/L MONOLITH JOINT)	ELEVATION **
1	1 + 20.00		1	2 + 30.00	
2	3 + 00.00		2	4 + 00.00	
3	5 + 00.00		3	6 + 00.00	
4	7 + 00.00		4	8 + 00.00	
5	9 + 00.00		5	10 + 00.00	
6	11 + 00.00		6	12 + 00.00	
7	13 + 00.00		7	12 + 80.00	
8	15 + 00.00		8	14 + 15.00	
9	17 + 00.00		9	16 + 00.00	
10	19 + 00.00		10	18 + 00.00	
11	21 + 00.00		11	20 + 00.00	
12	23 + 00.00		12	24 + 00.00	
13	25 + 00.00		13	26 + 00.00	
14	27 + 00.00		14	28 + 00.00	
15	29 + 00.00		15	30 + 00.00	
16	31 + 00.00		16	32 + 00.00	
17	33 + 00.00		17	34 + 00.00	
18	35 + 00.00		18	36 + 00.00	
19	37 + 00.00		19	38 + 00.00	
20	39 + 00.00		20	40 + 00.00	
21	41 + 00.00		21	42 + 00.00	
22	43 + 00.00		22	44 + 00.00	
23	45 + 00.00		23	46 + 00.00	
24	47 + 00.00		24	48 + 00.00	
25	49 + 00.00		25	50 + 00.00	
26	51 + 00.00		26	52 + 00.00	
27	53 + 00.00		27	54 + 00.00	
28	55 + 00.00		28	56 + 00.00	
29	57 + 00.00		29	58 + 00.00	
30	59 + 00.00		30	60 + 00.00	
31	61 + 00.00		31	62 + 00.00	
32	63 + 00.00		32	64 + 00.00	
33	65 + 00.00		33	66 + 00.00	
34	67 + 00.00		34	68 + 85.00	
35	68 + 50.00				

NOTES:

* W/L STATIONS ARE APPROXIMATE. LOCATE REFERENCE BOLTS AT NEAREST MONOLITH JOINT TO THOSE STATIONS SHOWN. THE CONTRACTOR SHALL ESTABLISH WALL LINE STATIONING, BEGINNING WITH STA. 0+00 AT THE PUMP STATION.

** THE CONTRACTOR SHALL TAKE FINAL ELEVATIONS OF ALL SETTLEMENT REFERENCE MARKERS AND SHALL SUBMIT THIS DATA TO THE CONTRACTING OFFICER REPRESENTATIVE (COR). THE COR WILL FURNISH THIS DATA TO ENGINEERING DIVISION, ATTENTION OF: CELMN-ED-DD.

THE FIRST SETTLEMENT REFERENCE BOLT IS LOCATED NORTH OF THE RAILROAD GATE MONOLITH. REFERENCE MARKER I.D. TAGS SHALL BE STAMPED WITH THE APPLICABLE W/L STATION NUMBER.

FOR GENERAL NOTES, SEE DWG. 2.

C-A-D

SCALE: 3/4" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 6" = 1' - 0"

6" 0 6"

SCALE: 12" = 1' - 0"

6" 3" 0

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

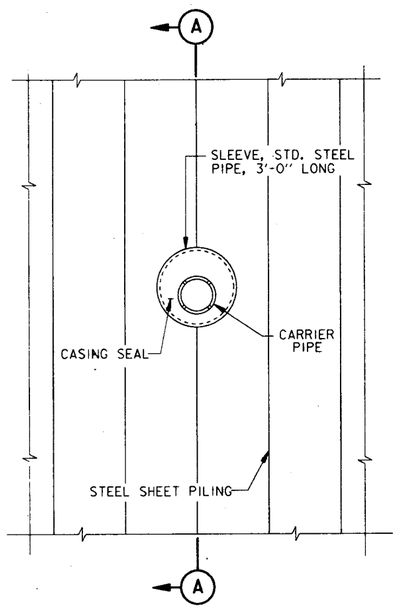
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

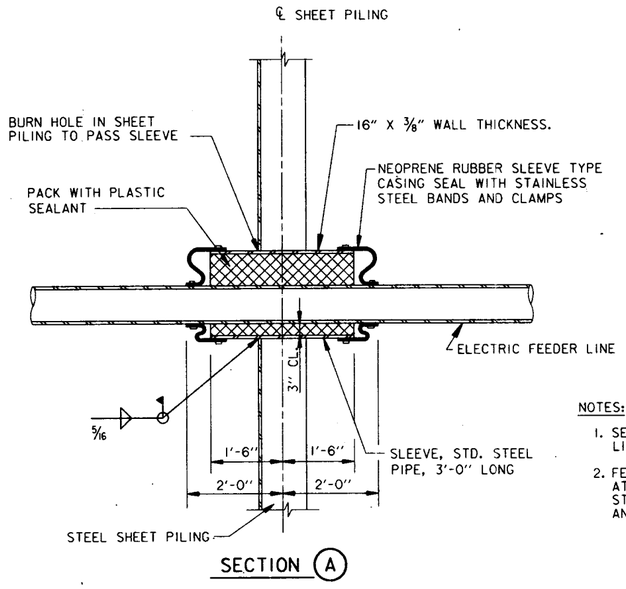
REFERENCE BOLT DETAILS

DESIGNED BY: H.M.B. DRAWN BY: D.J.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 21 JULY 93
	CADD FILE: 40145020.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 45 OF 58

Safety is a Part of Your Contract



ELEVATION



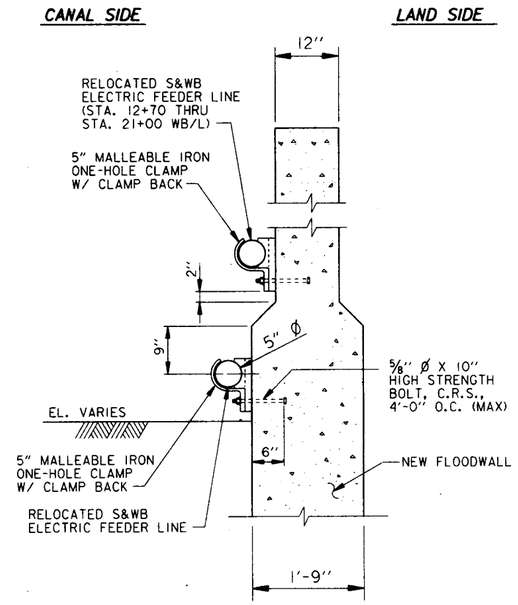
SECTION (A)

NOTES:

1. SEE DRAWINGS 48 AND 49 FOR LIMITS OF FEEDER RELOCATION.
2. FEEDERS PASS THROUGH FLOODWALL AT APPROXIMATE STA. 1+75 WB/L; STA. 2+60 WB/L; STA. 12+70 WB/L AND STA. 21+65 EB/L.

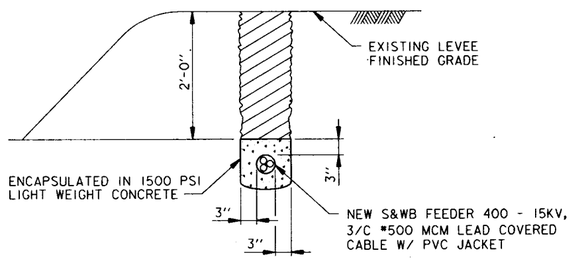
TYPICAL FEEDER LINE THRU STEEL SHEET PILING

SCALE: 3/4" = 1'-0"



ELECTRIC FEEDER LINE RELOCATED

SCALE: 1" = 1'- 0"

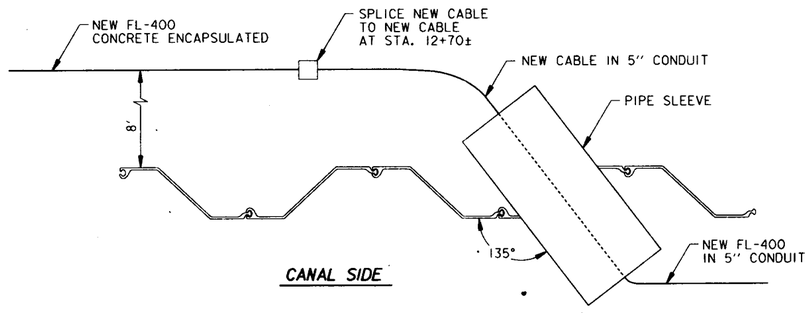


DETAIL (1 / 49|46)

SCALE: 1" = 1'-0"

NOTE:
BURY CABLE 4' DEEP BETWEEN STA. 6+76.21 AND STA. 9+97.00 WB/L

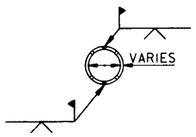
LAND SIDE



CANAL SIDE

DETAIL (2 / 49|46)

N.T.S.



IF CONDITIONS PERMIT, AN ALTERNATE METHOD OF PASSING A UTILITY LINE THROUGH SHEET PILE CAN BE ACCOMPLISHED WITHOUT CUTTING THE UTILITY LINE. THIS METHOD CONSISTS OF LATERALLY DISPLACING THE UTILITY LINE, DRIVING THE SHEET PILING, NOTCHING THE SHEET PILE AND INSTALLING SLEEVES IN HALVES.

SLEEVE INSTALLATION IN HALVES

SCALE: 3/4" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SCALE: 1" = 1'- 0"

12" 0 1' 2' 3' 4' 5'

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

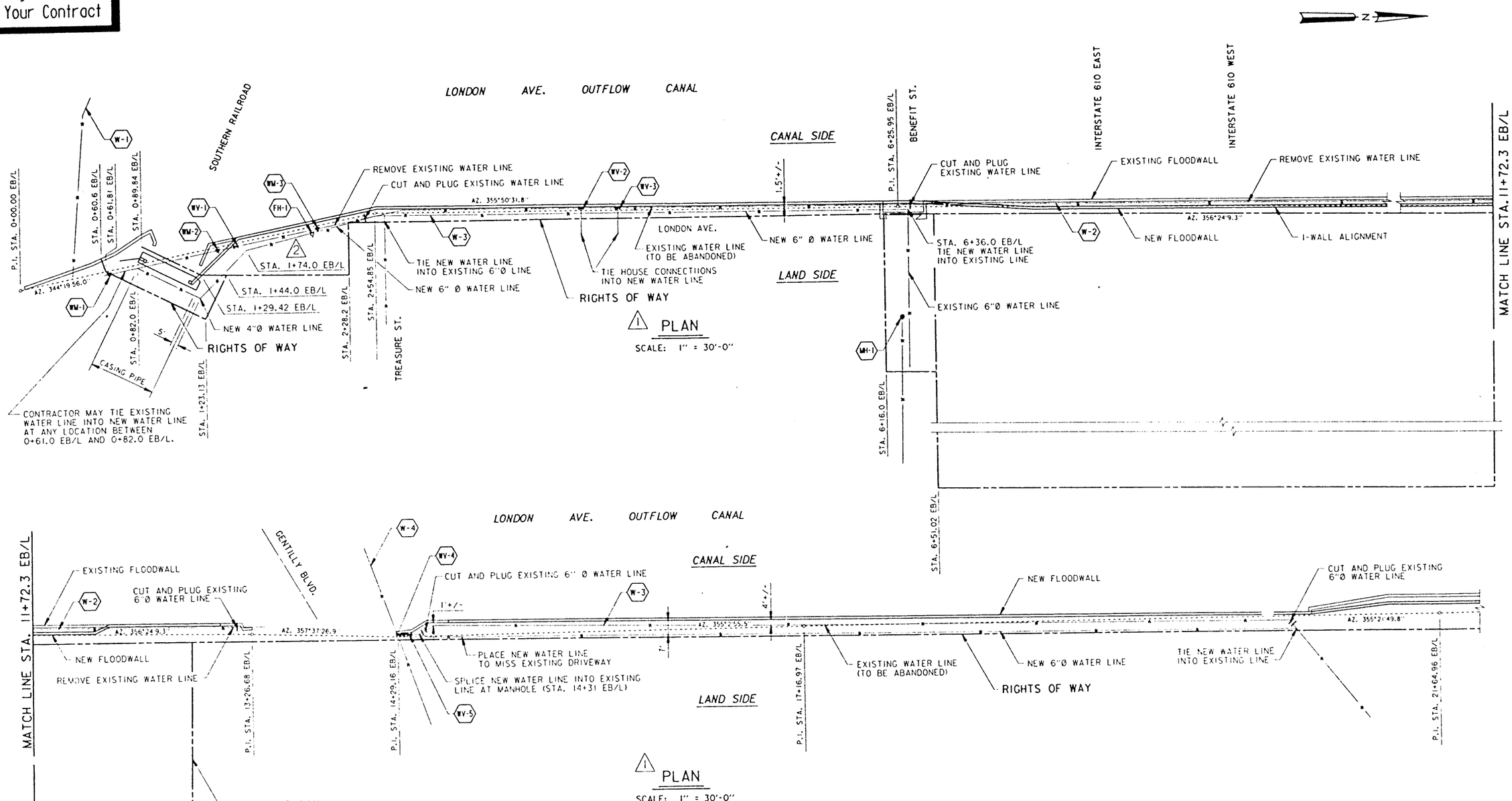
UTILITIES

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 16	PLOT DATE: 14 JULY 93
DRAWN BY: J.E.B.			
CHECKED BY: W.O.B.	CADD FILE: 4014SHOS.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 46 OF 58

C•A•D

VALUE INCENTIVE CLAUSE IN ENGINEERING — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract



NOTES:

1. FOR SECTIONS, SEE DWGS. 19 THRU 21A
2. NEW WATER LINE TO HAVE A MINIMUM OF 3 FEET OF COVER, EXCEPT UNDER RAILROAD, WHERE 5.5 FEET OF COVER IS REQUIRED.
3. PLACE WATER METERS, WATER VALVES AND FIRE HYDRANTS AT STATIONS WHERE METERS, VALVES AND HYDRANTS CURRENTLY EXIST, IN ACCORDANCE WITH SPECIFICATIONS.
4. FOR STATIONING OF RIGHTS OF WAY, SEE DWGS. 3 THRU 7.
5. NEW 4" PVC WATER LINE SHALL BE ENCASED IN 12" STEEL PIPE FROM STA. 0+82.0 EB/L TO STA. 1+74.0 EB/L.
6. PROVIDE NEOPRENE RUBBER SLEEVE TYPE CASING SEAL WITH STAINLESS STEEL BANDS AND CLAMPS AT EACH END OF CASING PIPE.

SCALE: 1" = 30'

30' 0 30' 60' 90' 120'

THIS PLAN ACCOMPANIES MODIFICATION P0008 TO CONTRACT NUMBER DACW29-94-C-0003

SYMBOL	DESCRIPTION	DATE	APPROVED
2	REVISIONS TO WATER LINE LAYOUT; MOD. 8	4-8-94	A.L.D.
1	REVISIONS TO WATER LINE LAYOUT; AMEND. NO. 3	9-7-93	A.L.D.

REVISIONS

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

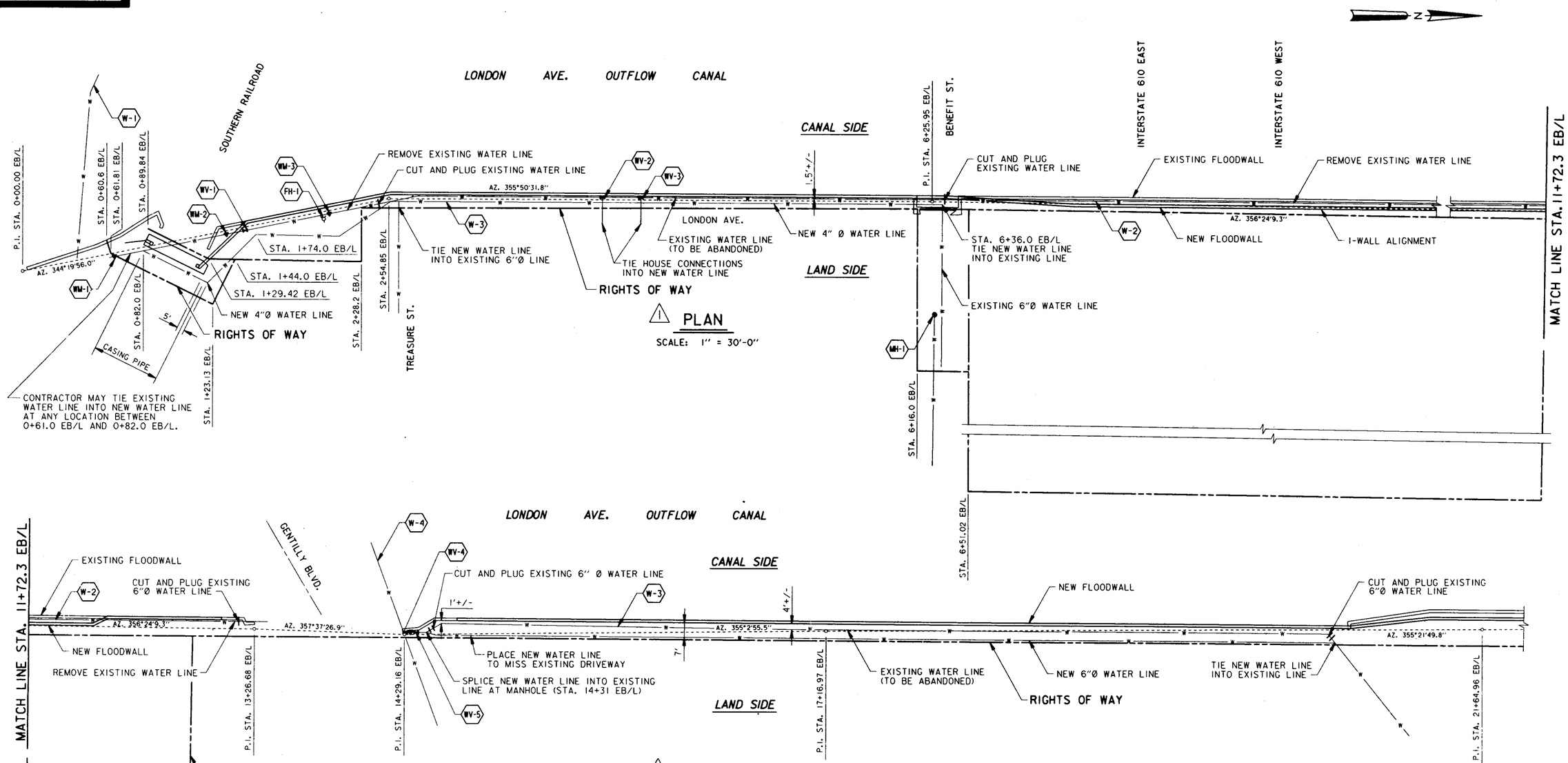
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

WATER LINE RELOCATION EAST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 360	PLOT DATE: 08 MAR 94
DRAWN BY: B.A.B.			
CHECKED BY: W.O.B.	CADD FILE: 40145S02.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 47 OF 58

C•A•D

Safety is a Part of Your Contract



NOTES:

1. FOR SECTIONS, SEE DWGS. 19 THRU 21A
2. NEW WATER LINE TO HAVE A MINIMUM OF 3 FEET OF COVER, EXCEPT UNDER RAILROAD, WHERE 5.5 FEET OF COVER IS REQUIRED.
3. PLACE WATER METERS, WATER VALVES AND FIRE HYDRANTS AT STATIONS WHERE METERS, VALVES AND HYDRANTS CURRENTLY EXIST, IN ACCORDANCE WITH SPECIFICATIONS.
4. FOR STATIONING OF RIGHTS OF WAY, SEE DWGS. 3 THRU 7.
5. NEW 4" PVC WATER LINE SHALL BE ENCASED IN 12" STEEL PIPE FROM STA. 0+82.0 EB/L TO STA. 1+74.0 EB/L.
6. PROVIDE NEOPRENE RUBBER SLEEVE TYPE CASING SEAL WITH STAINLESS STEEL BANDS AND CLAMPS AT EACH END OF CASING PIPE.

SCALE: 1" = 30'

30' 0 30' 60' 90' 120'

VALUE ENGINEERING INCENTIVE CLAUSES IN YOUR KEY TO HIGHER PROFITS

SYMBOL	DESCRIPTION	DATE	APPROVED
1	REVISIONS TO WATER LINE LAYOUT; AMEND. NO. 3	9-7-93	A.L.D.

REVISIONS

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

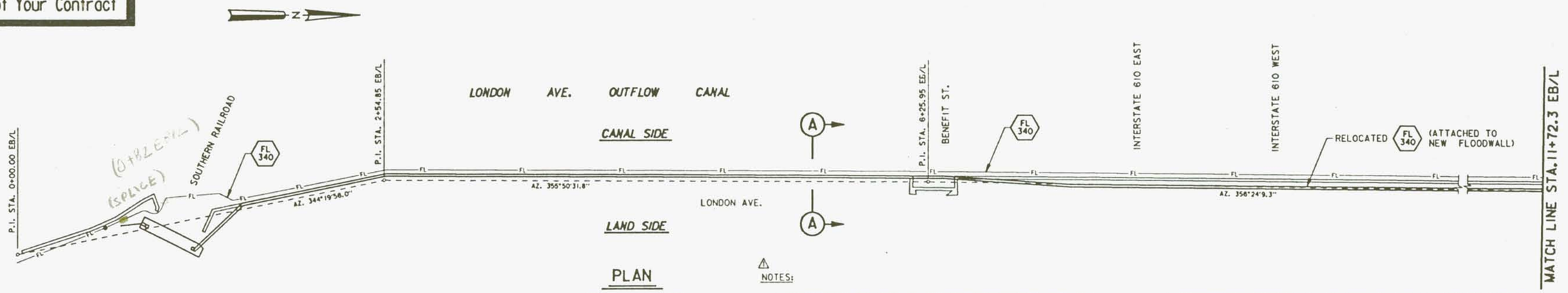
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

WATER LINE RELOCATION EAST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 360	PLOT DATE: 22 JULY 93
DRAWN BY: B.A.B.			
CHECKED BY: W.O.B.	CADD FILE: 40H45502.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 47 OF 58

Safety is a Part of Your Contract

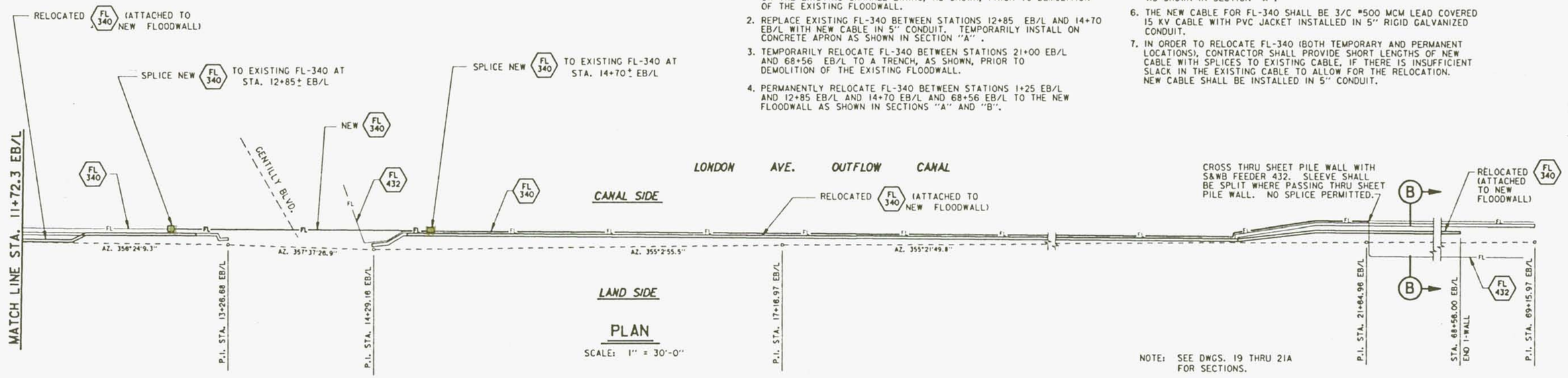


PLAN

SCALE: 1" = 30'-0"

⚠ NOTES:

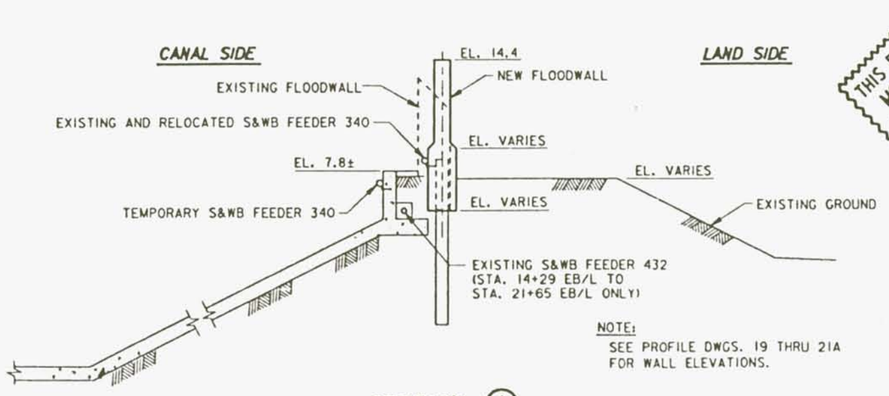
1. TEMPORARILY RELOCATE FL-340 BETWEEN STATIONS 1+25 EB/L AND 12+85 EB/L AND 14+70 EB/L AND 21+00 EB/L TO A POSITION ON THE EXISTING CHANNEL LINING, AS SHOWN, PRIOR TO DEMOLITION OF THE EXISTING FLOODWALL.
2. REPLACE EXISTING FL-340 BETWEEN STATIONS 12+85 EB/L AND 14+70 EB/L WITH NEW CABLE IN 5" CONDUIT. TEMPORARILY INSTALL ON CONCRETE APRON AS SHOWN IN SECTION "A".
3. TEMPORARILY RELOCATE FL-340 BETWEEN STATIONS 21+00 EB/L AND 68+56 EB/L TO A TRENCH, AS SHOWN, PRIOR TO DEMOLITION OF THE EXISTING FLOODWALL.
4. PERMANENTLY RELOCATE FL-340 BETWEEN STATIONS 1+25 EB/L AND 12+85 EB/L AND 14+70 EB/L AND 68+56 EB/L TO THE NEW FLOODWALL AS SHOWN IN SECTIONS "A" AND "B".
5. PERMANENTLY RELOCATE FL-340 (NEW CABLE IN 5" CONDUIT) BETWEEN STATIONS 12+85 EB/L AND 14+70 EB/L TO SIDE OF NEW FLOODWALL AS SHOWN IN SECTION "A".
6. THE NEW CABLE FOR FL-340 SHALL BE 3/C #500 MCM LEAD COVERED 15 KV CABLE WITH PVC JACKET INSTALLED IN 5" RIGID GALVANIZED CONDUIT.
7. IN ORDER TO RELOCATE FL-340 (BOTH TEMPORARY AND PERMANENT LOCATIONS), CONTRACTOR SHALL PROVIDE SHORT LENGTHS OF NEW CABLE WITH SPLICES TO EXISTING CABLE, IF THERE IS INSUFFICIENT SLACK IN THE EXISTING CABLE TO ALLOW FOR THE RELOCATION. NEW CABLE SHALL BE INSTALLED IN 5" CONDUIT.



PLAN

SCALE: 1" = 30'-0"

NOTE: SEE DWGS. 19 THRU 21A FOR SECTIONS.

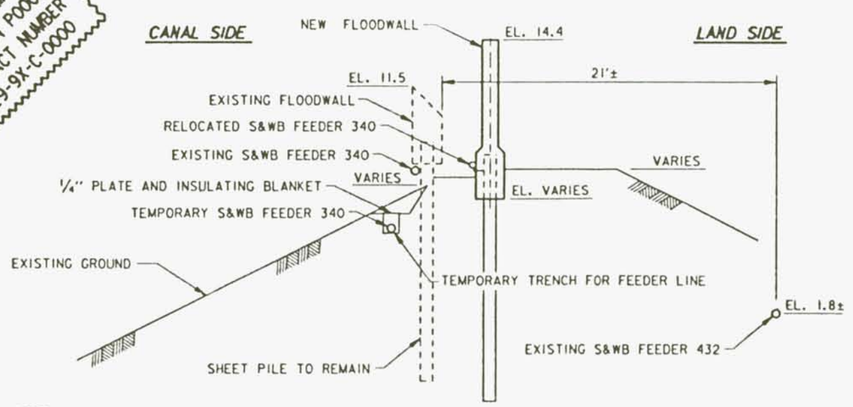


NOTE: SEE PROFILE DWGS. 19 THRU 21A FOR WALL ELEVATIONS.

SECTION (A)

SCALE: 1/4" = 1'-0"

THIS PLAN ACCOMPANIES MODIFICATION P00000 TO CONTRACT NUMBER DACW29-9X-C-0000



NOTE:

TRENCHES SHALL BE FILLED WITH SEMI-COMPACTED FILL UPON COMPLETION OF THE FEEDER LINE RELOCATION.

SECTION (B)

SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'- 0"

12" 0 5' 10' 15' 20'

SCALE: 1" = 30'

30' 0 30' 60' 90' 120'

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	ADDED NOTES MOD.*	4-26-94	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

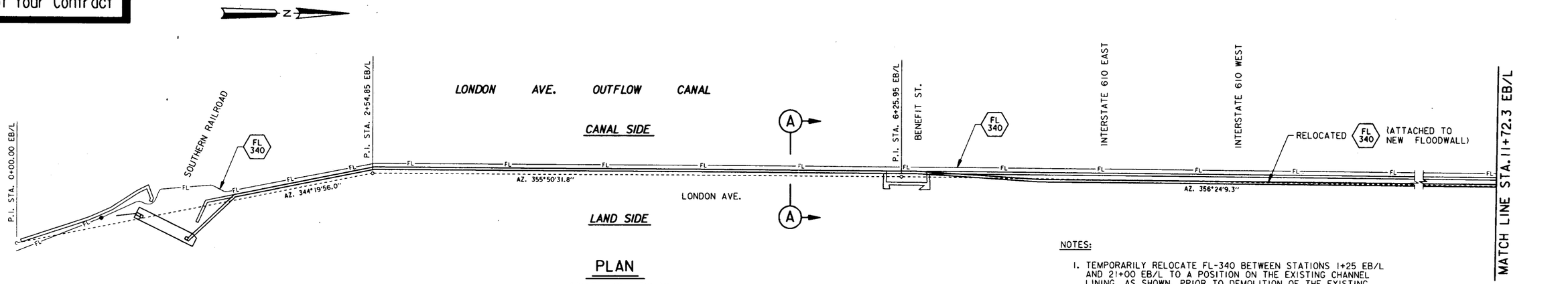
ELECTRIC FEEDER RELOCATION EAST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 360	PLOT DATE: 26 APR 94
DRAWN BY: P.J.S.	CADD FILE: 40145002.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.			
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 48 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

C-A-D

Safety is a Part of Your Contract

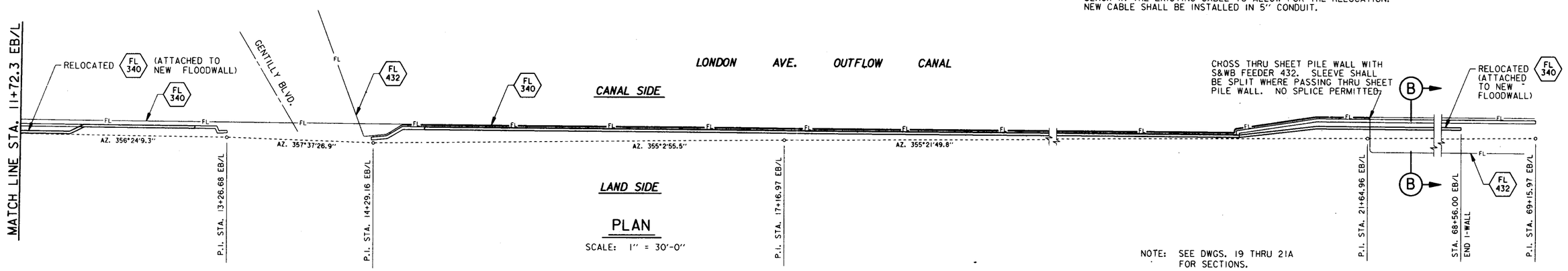


PLAN

SCALE: 1" = 30'-0"

NOTES:

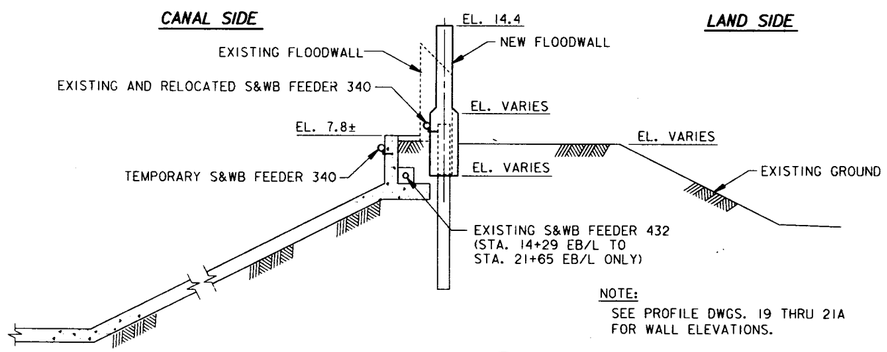
1. TEMPORARILY RELOCATE FL-340 BETWEEN STATIONS 1+25 EB/L AND 2!+00 EB/L TO A POSITION ON THE EXISTING CHANNEL LINING, AS SHOWN, PRIOR TO DEMOLITION OF THE EXIST!NG FLOODWALL.
2. TEMPORARILY RELOCATE FL-340 BETWEEN STATIONS 2!+00 EB/L AND 68+56 EB/L TO A TRENCH, AS SHOWN, PRIOR TO DEMOLITION OF THE EXISTING FLOODWALL.
3. PERMANENTLY RELOCATE FL-340 BETWEEN STATIONS 1+25 EB/L AND 68+56 EB/L TO THE NEW FLOODWALL AS SHOWN IN SECTIONS "A" AND "B".
4. IN ORDER TO RELOCATE FL-340 (BOTH TEMPORARY AND PERMANENT LOCATIONS), CONTRACTOR SHALL PROVIDE SHORT LENGTHS OF NEW CABLE WITH SP!ICES TO EXISTING CABLE, IF THERE IS INSUFFICIENT SLACK IN THE EXISTING CABLE TO ALLOW FOR THE RELOCATION. NEW CABLE SHALL BE INSTALLED IN 5" CONDUIT.



PLAN

SCALE: 1" = 30'-0"

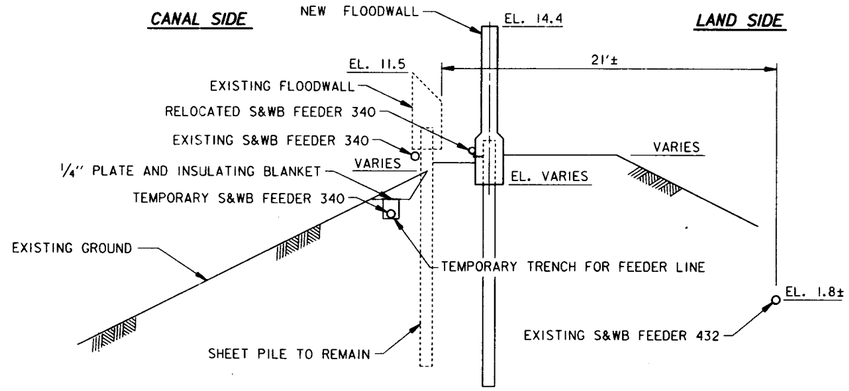
NOTE: SEE DWGS. 19 THRU 21A FOR SECTIONS.



NOTE:
SEE PROFILE DWGS. 19 THRU 21A FOR WALL ELEVATIONS.

SECTION (A)

SCALE: 1/4" = 1'-0"



NOTE:
TRENCHES SHALL BE FILLED WITH SEMI-COMPACTED FILL UPON COMPLETION OF THE FEEDER LINE RELOCATION.

SECTION (B)

SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'- 0"
12" 0 5' 10' 15' 20'

SCALE: 1" = 30'
30' 0 30' 60' 90' 120'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

ELECTRIC FEEDER RELOCATION
EAST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 360	PLOT DATE: 16 JULY 93
DRAWN BY: P.J.S.			
CHECKED BY: W.O.B.	CADD FILE: 40145GC2.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 48 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

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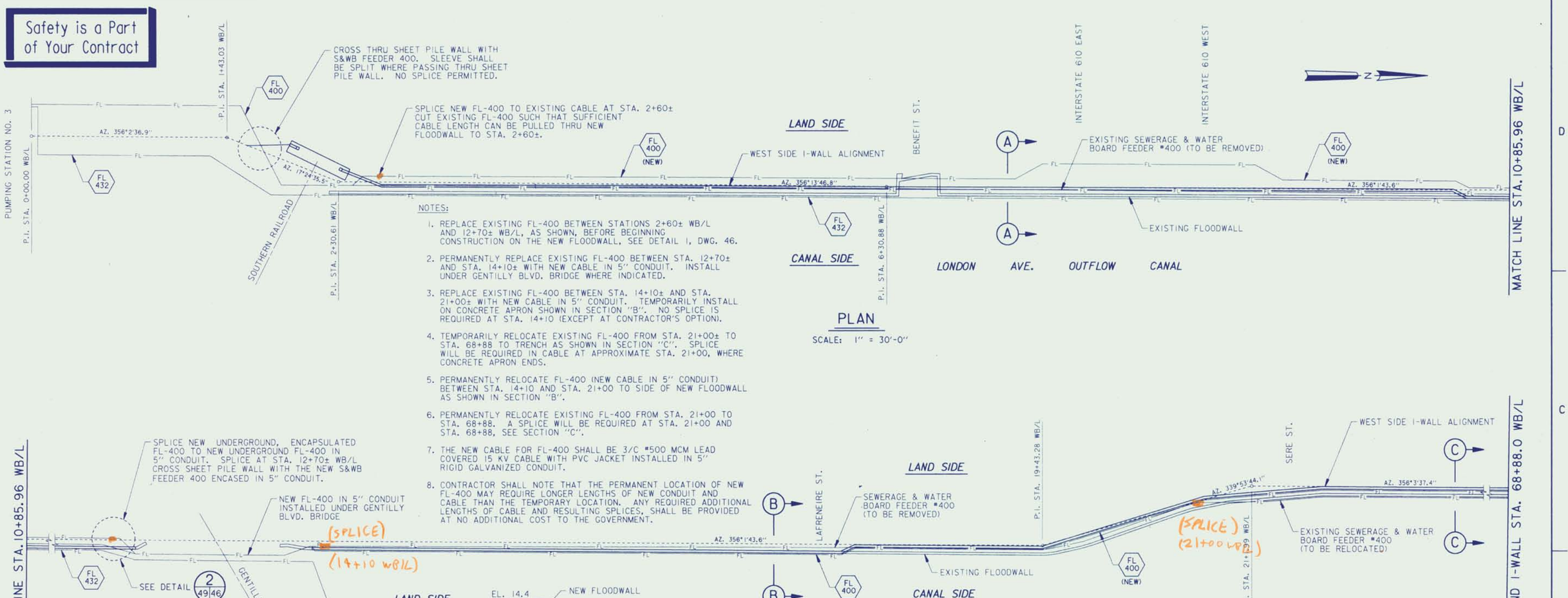
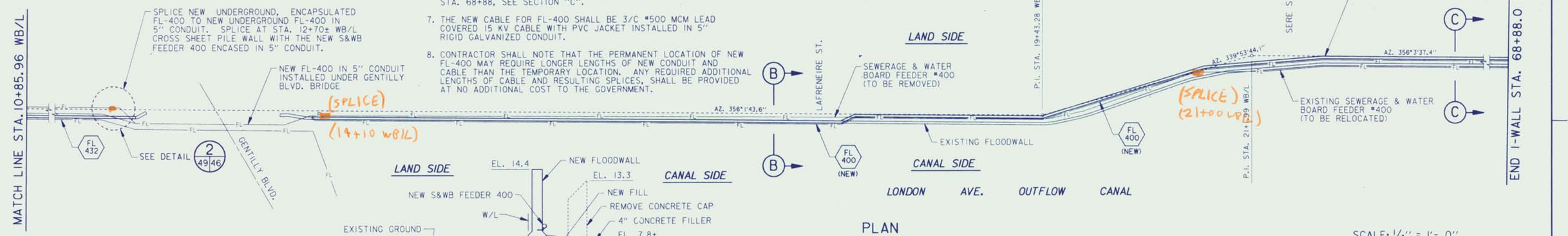


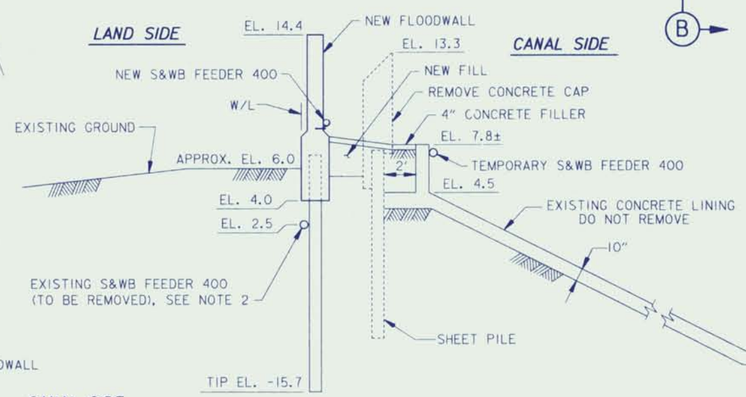
NOTES:

1. REPLACE EXISTING FL-400 BETWEEN STATIONS 2+60± WB/L AND 12+70± WB/L, AS SHOWN, BEFORE BEGINNING CONSTRUCTION ON THE NEW FLOODWALL, SEE DETAIL 1, DWG. 46.
2. PERMANENTLY REPLACE EXISTING FL-400 BETWEEN STA. 12+70± AND STA. 14+10± WITH NEW CABLE IN 5" CONDUIT. INSTALL UNDER GENTILLY BLVD. BRIDGE WHERE INDICATED.
3. REPLACE EXISTING FL-400 BETWEEN STA. 14+10± AND STA. 21+00± WITH NEW CABLE IN 5" CONDUIT. TEMPORARILY INSTALL ON CONCRETE APRON SHOWN IN SECTION "B". NO SPLICE IS REQUIRED AT STA. 14+10 (EXCEPT AT CONTRACTOR'S OPTION).
4. TEMPORARILY RELOCATE EXISTING FL-400 FROM STA. 21+00± TO STA. 68+88 TO TRENCH AS SHOWN IN SECTION "C". SPLICE WILL BE REQUIRED IN CABLE AT APPROXIMATE STA. 21+00, WHERE CONCRETE APRON ENDS.
5. PERMANENTLY RELOCATE FL-400 (NEW CABLE IN 5" CONDUIT) BETWEEN STA. 14+10 AND STA. 21+00 TO SIDE OF NEW FLOODWALL AS SHOWN IN SECTION "B".
6. PERMANENTLY RELOCATE EXISTING FL-400 FROM STA. 21+00 TO STA. 68+88. A SPLICE WILL BE REQUIRED AT STA. 21+00 AND STA. 68+88, SEE SECTION "C".
7. THE NEW CABLE FOR FL-400 SHALL BE 3/C #500 MCM LEAD COVERED 15 KV CABLE WITH PVC JACKET INSTALLED IN 5" RIGID GALVANIZED CONDUIT.
8. CONTRACTOR SHALL NOTE THAT THE PERMANENT LOCATION OF NEW FL-400 MAY REQUIRE LONGER LENGTHS OF NEW CONDUIT AND CABLE THAN THE TEMPORARY LOCATION. ANY REQUIRED ADDITIONAL LENGTHS OF CABLE AND RESULTING SPLICES, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE GOVERNMENT.

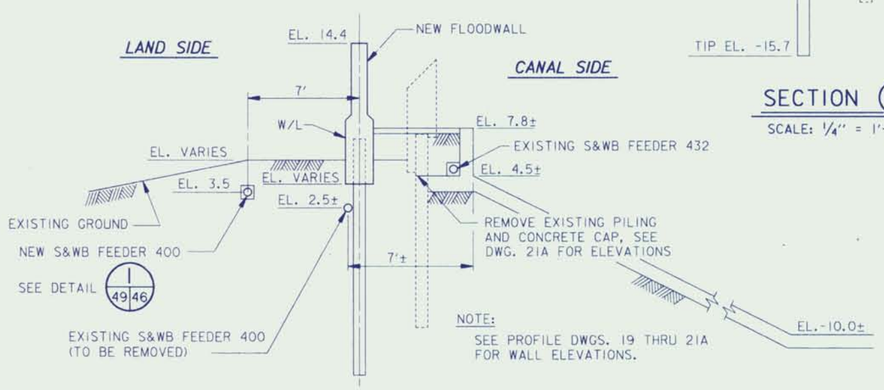
PLAN
SCALE: 1" = 30'-0"



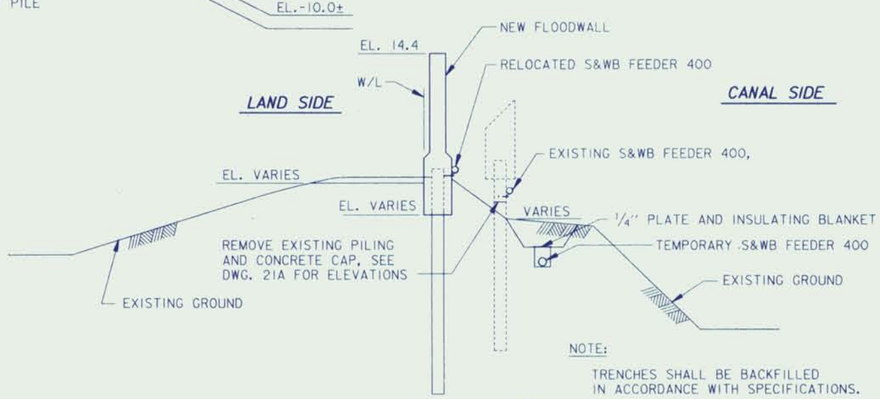
PLAN
SCALE: 1" = 30'-0"



SECTION (B)
SCALE: 1/4" = 1'-0"



SECTION (A)
SCALE: 1/4" = 1'-0"



SECTION (C)
SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'- 0"
12" 0 5' 10' 15' 20'

SCALE: 1" = 1'- 0"
12" 0 1' 2' 3' 4' 5'

SCALE: 1" = 30'
30' 0 30' 60' 90' 120'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP. STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

ELECTRIC FEEDER RELOCATION
WEST SIDE

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 360	PLOT DATE: 14 JULY 93
DRAWN BY: P.J.S.	CADD FILE: 40145501.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.			
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 49 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES IN CONTRACT — YOUR KEY TO HIGHER PROFITS

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GAGE READINGS IN FT NGVD

GAGE READINGS IN FT NGVD

LOCATION:

LAT. 30-01-18, LONG. 90-06-57. ON WEST END OF MUNICIPAL YACHT BUILDING IN WEST END HARBOR. (STA. 8562506.)

C·A·D

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

STAGE HYDROGRAPHS

DESIGNED BY: A.L.D. DRAWN BY: D.J.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 1 JUNE 93
	CADD FILE: 40145D13.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 50 OF 58

GAGE READINGS IN FT NGVD

GAGE READINGS IN FT NGVD

LOCATION:

LAT. 30-01-45, LONG. 90-01-58. BAROID PLANT WHARF ON EAST BANK, 250 FEET SOUTH OF SEABROOK BRIDGE. (STA. 7606006.)

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

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SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

STAGE HYDROGRAPHS

DESIGNED BY: A.L.D.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 1 JUNE 93
DRAWN BY: D.J.B.			
CHECKED BY: W.O.B.	CADD FILE: 401450'4.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 51 OF 58

Safety is a Part of Your Contract

UNIFIED SOIL CLASSIFICATION

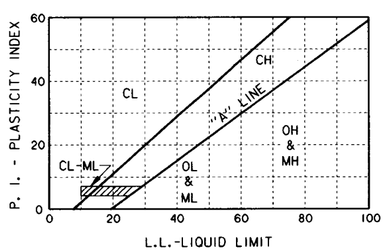
MAJOR DIVISION		TYPE	LETTER SYMBOL	SYMBOL	TYPICAL NAMES
COARSE - GRAINED SOILS More than half of material is larger than No. 200 sieve size.	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size.	CLEAN GRAVEL (Little or No fines)	GW		GRAVEL, Well Graded, gravel-sand mixtures, little or no fines
			GP		GRAVEL, Poorly Graded, gravel-sand mixtures, little or no fines
		GRAVEL WITH FINES (Appreciable Amount of Fines)	GM		SILTY GRAVEL, gravel-sand-silt mixtures
			GC		CLAYEY GRAVEL, gravel-sand-clay mixtures
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size.	CLEAN SAND (Little or No Fines)	SW		SAND, Well-Graded, gravelly sands
			SP		SAND, Poorly-Graded, gravelly sands
		SANDS WITH FINES (Appreciable Amount of Fines)	SM		SILTY SAND, sand-silt mixtures
			SC		CLAYEY SAND, sand-clay mixtures
FINE - GRAINED SOILS More than half the material is smaller than No. 200 sieve size.		SILTS AND CLAY (Liquid Limit < 50)	ML		SILT & very fine sand, silty or clayey fine sand or clayey silt with slight plasticity
			CL		LEAN CLAY, Sandy Clay, Silty Clay, of low to medium plasticity
			OL		ORGANIC SILTS and organic silty clays of low plasticity
		SILTS AND CLAY (Liquid Limit > 50)	MH		SILT, fine sandy or silty soil with high plasticity
			CH		FAT CLAY, inorganic clay of high plasticity
			OH		ORGANIC CLAYS of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt		PEAT, and other highly organic soil
WOOD			Wd		WOOD
SHELLS			Sl		SHELLS
NO SAMPLE					

NOTE: Soils possessing characteristics of two groups are designated by combinations of group symbols

DESCRIPTIVE SYMBOLS

COLOR	
COLOR	SYMBOL
TAN	T
YELLOW	Y
RED	R
BLACK	BK
GRAY	Gr
LIGHT GRAY	lGR
DARK GRAY	dGr
BROWN	Br
LIGHT BROWN	lBr
DARK BROWN	dBr
BROWNISH-GRAY	br Gr
GRAYISH-BROWN	gy Br
GREENISH-GRAY	gn Gr
GRAYISH-GREEN	gy Gn
GREEN	Gn
BLUE	Bl
BLUE-GREEN	Bl Gn
WHITE	Wh
MOTTLED	Mot

CONSISTENCY FOR COHESIVE SOILS		
CONSISTENCY	COHESION IN LBS./SQ.FT. FROM UNCONFINED COMPRESSION TEST	SYMBOL
VERY SOFT	< 250	vSo
SOFT	250-500	So
MEDIUM	500-1000	M
STIFF	1000-2000	St
VERY STIFF	2000-4000	vSt
HARD	> 4000	H



PLASTICITY CHART

For classification of fine-grained soils

MODIFICATIONS	
MODIFICATION	SYMBOL
Traces	Tr-
Fine	F
Medium	M
Coarse	C
Concretions	cc
Rootlets	rt
Lignite fragments	lg
Shale fragments	sh
Sandstone fragments	sds
Shell fragments	slf
Organic matter	O
Clay strata or lenses	CS
Silt strata or lenses	SIS
Sand strata or lenses	SS
Sandy	S
Gravelly	G
Boulders	B
Slickensides	SL
Wood	Wd
Oxidized	Ox

NOTES:

FIGURES TO LEFT OF BORING UNDER COLUMN "W OR D_{10}"

Are natural water contents in percent dry weight

When underlined denotes D_{10} size in mm *

FIGURES TO LEFT OF BORING UNDER COLUMNS "LL" AND "PL"

Are liquid and plastic limits, respectively

SYMBOLS TO LEFT OF BORING

▽	Ground-water surface and date observed
©	Denotes location of consolidation test **
Ⓢ	Denotes location of consolidation-drained direct shear test **
Ⓡ	Denotes location of consolidation-undrained triaxial compression test **
Ⓤ	Denotes location of unconsolidated-undrained triaxial compression test **
Ⓣ	Denotes location of sample subjected to consolidation test and each of the above three types of shear test **
FW	Denotes free water encountered in boring or sample

FIGURES TO RIGHT OF BORING

Are values of cohesion in lbs./sq.ft. from unconfined compression tests

In parenthesis are driving resistances in blows per foot determined with a standard split spoon sampler (1⅜" I.D., 2" O.D.) and a 140 lb. driving hammer with a 30" drop

Where underlined with a solid line denotes laboratory permeability in centimeters per second of undisturbed sample

Where underlined with a dashed line denotes laboratory permeability in centimeters per second of sample remoulded to the estimated natural void ratio.

* The D_{10} size of a soil is the grain diameter in millimeters of which 10% of the soil is finer, and 90% coarser than D_{10}

** Results of these tests are available for inspection in the U.S. Army Engineer District Office, if these symbols appear beside the boring logs on the drawings

TYPICAL NOTES:

While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations characteristic of the subsuface materials of the region are anticipated and, if encountered, such variations will not be considered as differing materially within the purview of the contract clause entitled "Differing Site Conditions."

Ground-water elevations shown on the boring logs represents ground-water surfaces encountered in such borings on the dates shown. Absence of water surface data on certain borings indicates that no ground-water data are available from the boring but does not necessarily mean that ground-water will not be encountered at the locations or within the vertical reaches of such borings.

Consistency of cohesive soils shown on the boring logs is based on driller's log and visual examination and is approximate, except within those vertical reaches of the borings where shear strengths from unconfined compression tests are shown.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL

ORLEANS PARISH, LOUISIANA

SOIL BORING LEGEND

DESIGNED BY: A.L.D. DRAWN BY: J.E.B. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 14 JULY 93
	CADD FILE: 40145H1X.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 52 OF 58

VALUE ENGINEERING INCENTIVE CLAUSES — YOUR KEY TO HIGHER PROFITS

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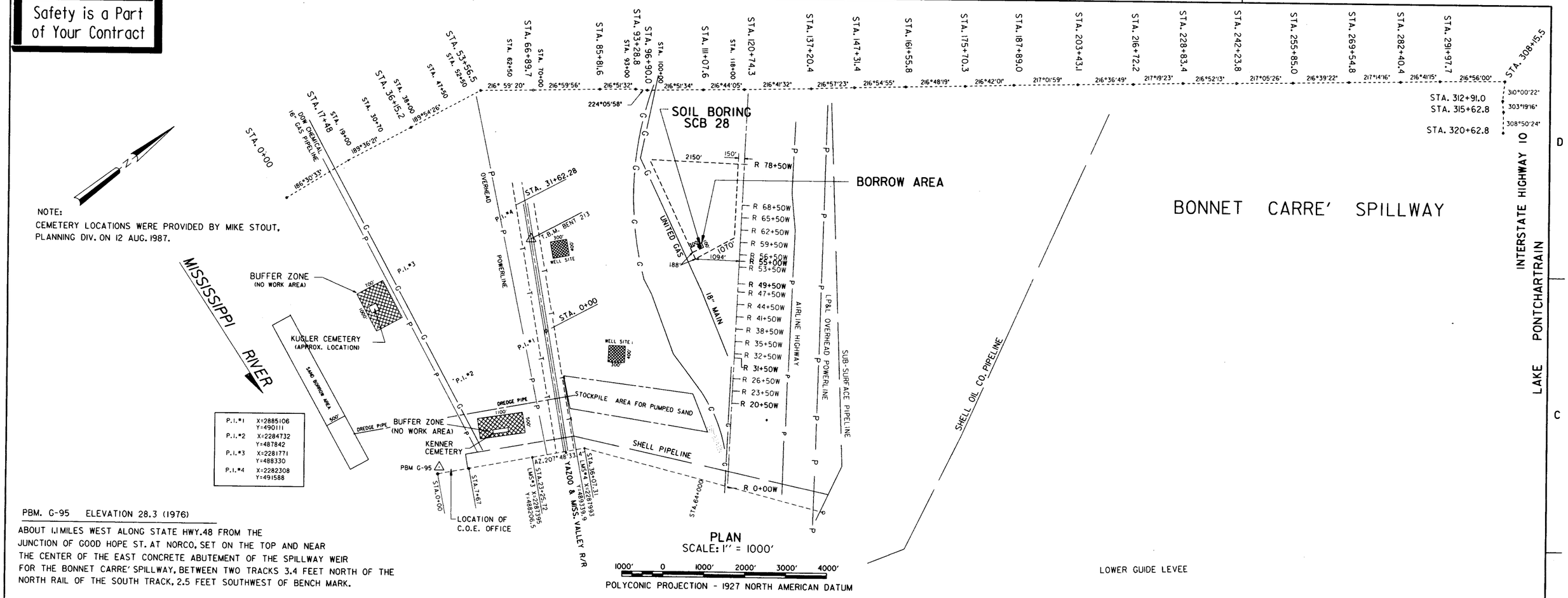


NOTE:
CEMETERY LOCATIONS WERE PROVIDED BY MIKE STOUT, PLANNING DIV. ON 12 AUG. 1987.

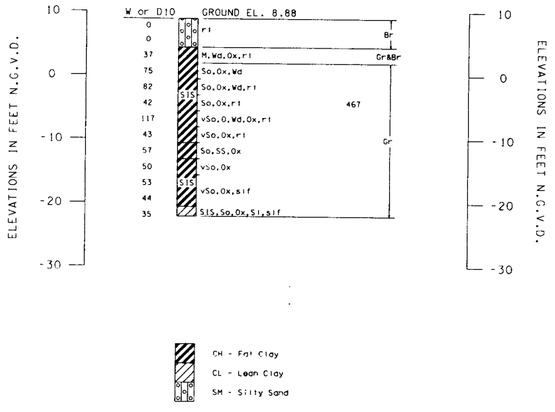
PBM. G-95 ELEVATION 28.3 (1976)

ABOUT 1.1 MILES WEST ALONG STATE HWY. 48 FROM THE JUNCTION OF GOOD HOPE ST. AT NORCO, SET ON THE TOP AND NEAR THE CENTER OF THE EAST CONCRETE ABUTEMENT OF THE SPILLWAY WEIR FOR THE BONNET CARRE' SPILLWAY, BETWEEN TWO TRACKS 3.4 FEET NORTH OF THE NORTH RAIL OF THE SOUTH TRACK, 2.5 FEET SOUTHWEST OF BENCH MARK.

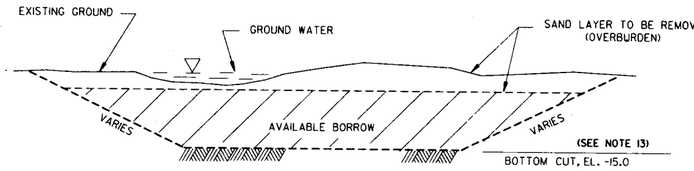
PLAN
SCALE: 1" = 1000'

1000' 0 1000' 2000' 3000' 4000'

POLYCONIC PROJECTION - 1927 NORTH AMERICAN DATUM



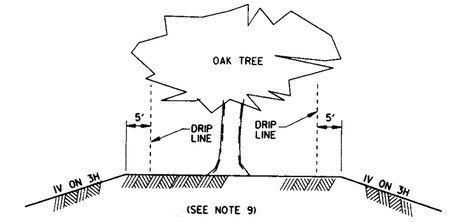
1. FOR BORING LOCATION SEE PLAN.
2. FOR BORING LEGEND SEE DWG. 52.



TYPICAL EXCAVATION SECTION
NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE DWG. 2.
2. ACCESS TO THE BORROW PIT LOCATION FROM AIRLINE HIGHWAY SHALL BE BY EXISTING DIRT ROADS LOCATED THROUGHOUT THE SPILLWAY.
3. NO EXCAVATION WITHIN 100 FEET OF POWER POLES.
4. SAND OVERBURDEN SHALL BE STOCKPILED PARALLEL TO THE SPILLWAY GUIDE LEVEE.
5. THE GOVERNMENT HAS THE RIGHT TO REQUIRE THE CONTRACTOR TO MOVE OUT OF THE SPILLWAY WITH A 10 DAY NOTICE.
6. SIDE SLOPES OF BORROW PIT SHALL NOT EXCEED 1V ON 3H.
7. EXCAVATION BELOW EL. -15.0 FEET IS NOT REQUIRED; HOWEVER, IF THE BORROW MATERIAL IS ACCEPTABLE BELOW EL. -15.0 FEET AND THE CONTRACTOR ELECTS TO EXCAVATE DEEPER, THE CONTRACTOR MAY DO SO IF APPROVED BY CONTRACTING OFFICER.
8. EXCAVATION WITHIN THE BORROW AREA SHALL BEGIN AT THE MOST SOUTHERN END OF THE PIT AND SHALL PROGRESS FULL WIDTH AND DEPTH TOWARD THE NORTH END. THE CONTRACTOR SHALL BEGIN EXCAVATION OPERATIONS IN AREAS ADJACENT TO PREVIOUSLY EXCAVATED PITS.
9. PRIOR TO CONSTRUCTION, CERTAIN EXISTING OAK TREES IN THE BORROW AREA SHALL BE ADEQUATELY MARKED WITH FLAGGING TO REMAIN UNDISTURBED. EXCAVATION AROUND THESE MARKED TREES SHALL BE AS DETAILED THIS DRAWING.
10. IN THE EVENT THE BORROW AREA CONTAINS STANDING WATER, THE CONTRACTOR SHALL DEWATER THE AREA PRIOR TO CLEARING/GRUBBING AND EXCAVATING THE AREA.
11. SEE BORROW BORING LOG, THIS DWG.
12. SEE SOIL BORING LEGEND, DWG 52.
13. THE GROUND WATER TABLE IS SEASONAL, I.E. VARIES WITH THE AMOUNT OF RAINFALL AND WITH THE MISSISSIPPI RIVER STAGES. THEREFORE, THE ELEVATION OF THE GROUND WATER TABLE ENCOUNTERED DURING CONSTRUCTION COULD BE DIFFERENT FROM THAT SHOWN ON THE BORING LOGS.
14. BORINGS WERE TAKEN WITH A STANDARD SPLITSPOON SAMPLER.



EXCAVATION IN VICINITY OF FLAGGED OAK TREES
NOT TO SCALE

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

LAKE PONTCHARTRAIN, LA. VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

BONNET CARRE' SPILLWAY BORROW SITE AND SOIL BORING

DESIGNED BY: T.W.W.	DATE: JUNE 93	PLOT SCALE: 1	PLOT DATE: 14 JULY 93
DRAWN BY: T.WADE WRIGHT	CADD FILE: 40145F06.DGN		FILE NO. H-4-40145
CHECKED BY: W.O.B.			
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 52A OF 58

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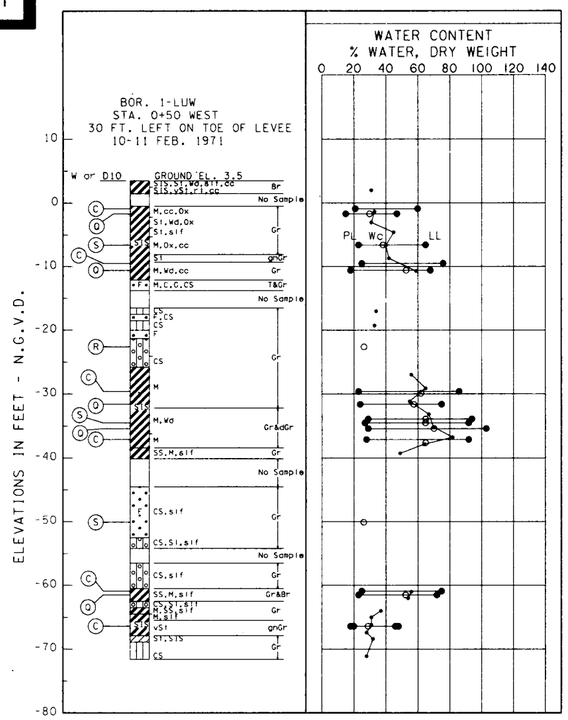

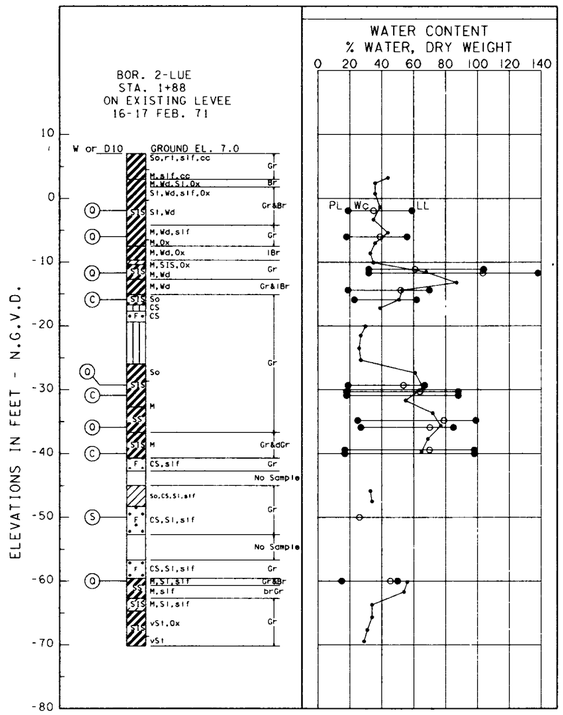

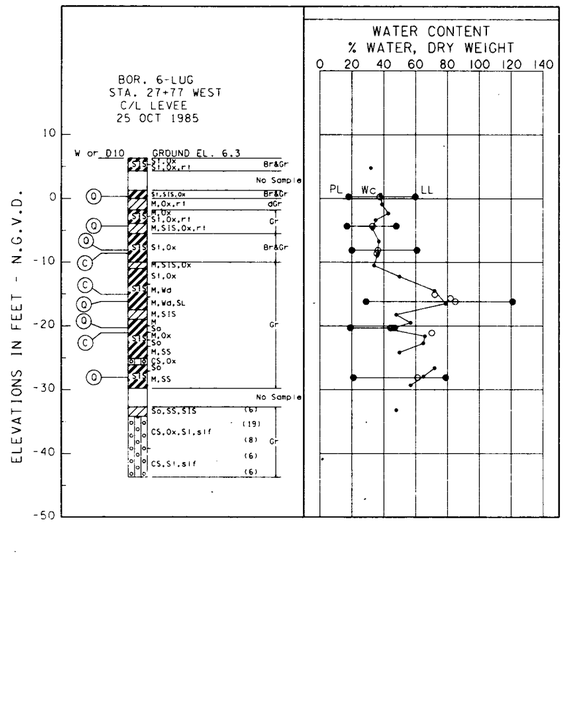

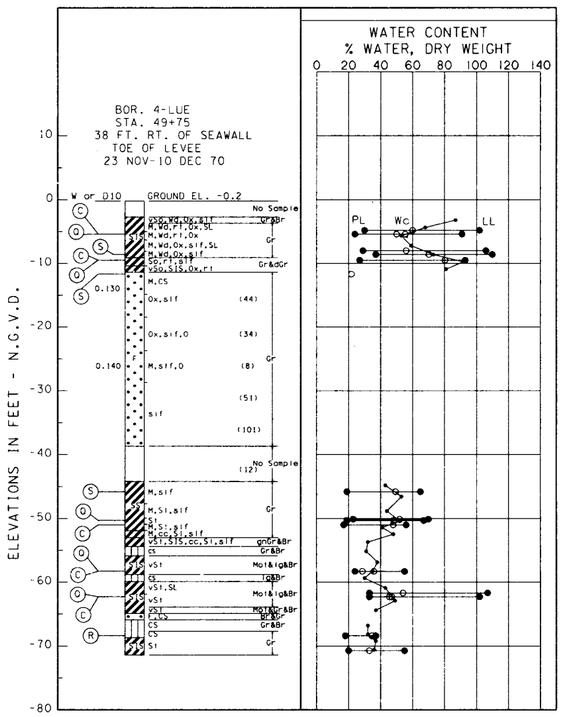

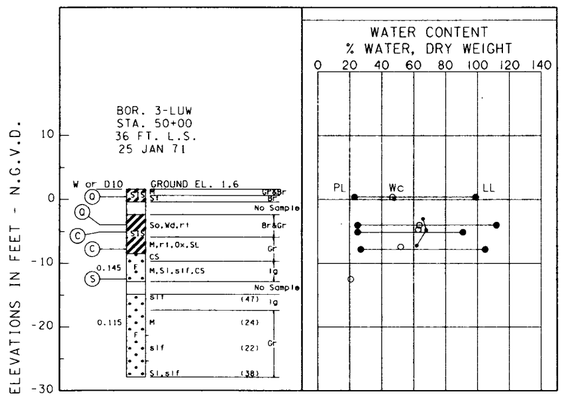

1. FOR BORING LOCATIONS SEE DWGS. 8 THRU 12.
2. FOR BORING LEGEND SEE DWG. 52.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

DESIGNED BY: PINNER DRAWN BY: WOODS CHECKED BY: RICHARDSON	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 21 JULY 93
	CADD FILE: 40145F01.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 53 OF 58

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LOG OF BORING

EUSTIS ENGINEERING COMPANY — SOIL AND FOUNDATION CONSULTANTS — METAIRIE, LA. — Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 1 Soil Technician A. Croal, Jr. Date 3 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	1.7	2.5	0.0	2.5	Very stiff gray & brown clay w/shells, brick fragments, clayey silt pockets & grass roots	
2	4.7	5.5	2.5	6.0	Soft tan & gray clay w/silt pockets	
3	7.7	8.5	6.0		Medium stiff gray clay w/silt pockets & few brick fragments	
4	10.7	11.5			Medium stiff gray clay w/sandy silt pockets, shells & brick fragments	
5	13.7	14.5			Medium stiff gray clay w/shells, brick fragments & organic matter	
6	18.2	19.0		20.0	Medium stiff to stiff gray clay w/sandy silt pockets, trace of organic matter & brick fragments	
7	22.2	23.0	20.0	23.0	Loose gray clayey silt	
8	23.0	24.5	23.0		Medium dense gray silty sand	5 20
9	25.5	27.0			Ditto	5 23
10	28.0	29.5		30.0	Ditto	7 24
11	33.2	34.0	30.0		Medium stiff gray clay w/clayey silt lenses	
12	38.2	39.0		40.0	Medium stiff gray clay	
13	43.2	44.5		46.5	Medium stiff gray clay w/clayey silt & few silty sand lenses	
14	48.2	49.0	46.5	52.0	Loose gray fine sand w/clay pockets & shell fragments	
15	53.2	54.0	52.0	54.5	Loose gray silty sand w/clay pockets, lenses & shell fragments	
16	54.5	56.0	54.5	57.0	Medium dense gray silty sand	5 25
17	57.0	58.5	57.0	58.5	Loose gray silty sand w/clay layers	1 7
18	59.5	61.0	58.5	62.5	Very loose gray clayey sand	2 3
19	63.2	64.0	62.5	66.5	Soft gray sandy clay w/sand pockets, thin shell layers & shell fragments	
20	68.2	69.0	66.5	71.5	Medium stiff gray clay w/sandy silt pockets & shell fragments	
21	73.2	74.0	71.5		Stiff greenish-gray clay w/clayey silt pockets & lenses	
22	76.7	77.5		80.0	Stiff greenish-gray clay w/clayey silt lenses, layers & sandy silt layers	

LOG OF BORING

EUSTIS ENGINEERING COMPANY — SOIL AND FOUNDATION CONSULTANTS — METAIRIE, LA. — Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 2 Soil Technician George Hardee Date 5 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0		Stiff tan & gray clay w/sandy silt pockets & shells	
2	4.5	5.5		6.0	Stiff tan & gray clay w/silt pockets	
3	7.5	8.5	6.0	9.0	Medium stiff brown & gray clay w/clayey silt pockets	
4	10.5	11.5	9.0		Medium stiff to soft tan & gray silty clay w/clay pockets	
5	13.5	14.5		15.0	Soft gray & tan silty clay w/clay layers	
6	18.5	19.5	16.0	20.0	Medium stiff gray clay w/organic matter & silty clay layers	
7	23.0	24.0	20.0	24.5	Soft gray silty clay w/sandy silt lenses & layers	
8	29.0	29.5	24.5	29.5	Loose gray silty sand w/clay layers	
9	33.5	34.5	29.5		Soft gray clay w/clayey silt lenses & layers	
10	38.5	39.5			Ditto	
11	43.5	44.5		46.0	Medium stiff gray clay w/clayey silt lenses & layers	
12	48.5	49.5	46.0	52.5	Loose gray clayey sand w/shells & clay pockets	
13	53.5	54.5	52.5	56.0	Very soft gray sandy clay w/sand pockets & lenses & shells	
14	57.0	58.0	56.0		Medium dense gray fine sand w/silt & shells	
15	58.5	60.0		60.5	Medium dense gray fine sand	8 25
16	61.0	62.5	60.5		Medium stiff gray sandy clay	3 4
17	63.5	64.5		68.0	Medium stiff gray sandy clay w/sand pockets & shell fragments	
18	68.5	69.5	68.0	72.0	Medium stiff gray & brown clay w/sand pockets	
19	73.5	74.5	72.0		Very stiff gray & tan clay w/clayey silt pockets	
20	78.5	79.5		81.5	Very stiff gray & tan clay w/silt lenses	
21	83.5	84.5	81.5		Stiff greenish-gray & tan clay w/silt lenses	
22	88.5	89.5			Ditto	
23	92.5	93.5		93.5	Stiff greenish-gray & tan clay w/sand layers	
24	95.0	96.5	93.5	97.5	Dense gray fine sand	12 40
25	98.5	100.0	97.5	100.0	Medium compact gray sandy silt w/clayey silt & clay layers	6 30

LOG OF BORING

EUSTIS ENGINEERING COMPANY — SOIL AND FOUNDATION CONSULTANTS — METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 3 Soil Technician George Hardee Date 5 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
			0.0	0.7	Medium stiff gray & tan silty clay w/roots & shells	
1	1.5	2.5	0.7	2.5	Very stiff tan & gray clay w/silt lenses & pockets	
2	4.5	5.5	2.5	7.0	Stiff tan & gray clay w/clayey silt pockets & silty clay layers	
3	7.5	8.5	7.0		Loose tan & gray clayey silt w/silty clay layers	
4	10.5	11.5		12.0	Loose tan & gray clayey silt	
5	13.5	14.5	12.0		Very loose to loose gray clayey silt w/clay & silty clay lenses	
6	18.5	19.5			Very loose to loose gray clayey silt w/silty clay layers	
7	23.5	24.5			Very loose to loose gray clayey silt w/roots & silty clay layers	
8	28.5	29.5		30.0	Very loose to loose gray clayey silt w/silty clay layers	
9	33.5	34.5	30.0	36.0	Soft gray silty clay w/clayey silt layers	
10	38.5	39.5	36.0	43.0	Soft gray silty clay w/clayey silt layers	
11	43.5	44.5	43.0		Medium compact gray clayey silt w/silty clay layers	
12	48.5	49.5		50.0	Ditto	

Geotechnical Investigation
London Avenue Canal
Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269
New orleans, Louisiana

For: The Board of Levee Commissioners of the Orleans Levee District
New Orleans, Louisiana

Burk & Associates, Inc., Engineers, Planners & Environmental Scientists
New Orleans, Louisiana

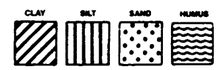
LOCATION OF BORINGS

Boring Number	Approx Station Number	Location
B-1	0+85	Levee Crown
B-2	7+60	Levee Crown
B-3	11+60	Levee Crown
B-4	14+70	Levee Crown
B-5	19+60	Levee Crown
B-6	24+60	Levee Crown
B-7	29+60	Levee Crown
B-8	34+60	Levee Crown
B-9	39+60	Levee Crown
B-10	44+60	Levee Crown
B-11	50+35	Levee Crown
B-12	55+00	Levee Crown
B-13	60+00	Levee Crown
B-14	65+00	Levee Crown
B-15	69+85	Levee Crown
B-36	1+95	Levee Crown
B-37	7+10	Levee Crown
B-38	11+60	Levee Crown
B-39	13+70	Levee Crown
B-40	21+40	Levee Crown
B-41	24+60	Levee Crown
B-42	29+60	Levee Crown
B-43	34+60	Levee Crown
B-44	39+60	Levee Crown
B-45	44+60	Levee Crown
B-46	50+65	Levee Crown
B-47	55+00	Levee Crown
B-48	60+00	Levee Crown
B-49	65+00	Levee Crown
B-50	68+80	Levee Crown
B-73	19+60	Canal Centerline
B-74	24+60	Canal Centerline
B-75	29+60	Canal Centerline
B-76	34+60	Canal Centerline
B-77	39+60	Canal Centerline
B-78	44+60	Canal Centerline
B-79	50+35	Canal Centerline
B-80	55+00	Canal Centerline
B-81	60+00	Canal Centerline
B-82	65+00	Canal Centerline
B-83	69+20	Canal Centerline

GENERAL BORING NOTES FOR EUSTIS BORINGS - B-1 THRU B-15, B-36 THRU B-50, AND B-73 THRU B-83

1. Eustis Soil Borings are plotted by depth.
2. For Boring Locations see tabular form above and see dwgs
3. All Eustis undisturbed levee borings were taken with a 3 inch diameter shelby tube sample barrel, except boring B-45, which was taken with a 5 inch diameter shelby tube sample barrel.
4. All canal bottom borings were taken with a 2-inch diameter piston sampler.
5. Standard Penetration Test: Number in first column indicates number of blows of 140 lb. hammer dropped 30-inch required to seat 2-inch O.D. splitspoon sampler 6-inch. Number in second column indicates number of blows of 140 lb. hammer dropped 30-inch required to drive 2-inch O.D. splitspoon sampler 1 ft after seating 6-inch.
6. While these logs of borings are considered to be representative of subsurface conditions at its respective location on the date shown, it is not warranted that it is representative of subsurface conditions at other locations and times.

EUSTIS SOIL BORING LEGEND



PREDOMINANT TYPE SHOWN HEAVY.
MODIFYING TYPE SHOWN LIGHT.

NOTE:
1. FOR BORING LOCATIONS, SEE DWGS. 8 THRU 12.
2. FOR BORING LEGEND, SEE DWG. 52.

LOG OF BORING

EUSTIS ENGINEERING COMPANY — SOIL AND FOUNDATION CONSULTANTS — METAIRIE, LA. — Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 4 Soil Technician George Hardee Date 7 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
			0.0	0.2	Asphalt & gravel	
1	1.5	2.5	0.2		Stiff tan & gray silty clay w/clay pockets, brick fragments & clayey silt layers	
2	4.5	5.5		6.0	Stiff tan & gray silty clay w/clayey silt layers & some gravel	
3	7.5	8.5	6.0	9.0	Medium stiff tan & gray clay w/clayey silt pockets	
4	10.5	11.5	9.0		Soft gray & tan silty clay w/clayey silt layers & lenses	
5	13.5	14.5			Soft gray & tan silty clay w/clayey silt layers & roots	
6	17.0	18.0		19.5	Soft gray & tan silty clay w/roots & clayey silt layers	
7	20.5	21.0	19.5		Soft gray silty clay w/roots, clayey silt lenses & clay pockets	
8	23.5	24.5			Very soft gray silty clay w/clayey silt & clay lenses	
9	28.5	29.5		31.5	Soft gray silty clay w/clayey silt & clay layers	
10	33.5	34.5	31.5		Very loose gray clayey silt w/silty clay lenses & pockets	
11	38.5	39.5			Loose gray clayey silt w/clay & silty clay layers	
12	43.5	44.5		46.0	Loose gray clayey silt w/clay layers	
13	48.5	49.5	46.0		Medium compact gray clayey silt w/alternating clay lenses	
14	53.0	54.0			Ditto	
15	57.5	58.5		58.5	Medium compact gray clayey silt w/clay pockets & trace of sand	
16	58.5	60.0	58.5	60.5	Medium compact gray sandy silt	5 22
17	61.0	62.5	60.5		Medium stiff gray silty clay	2 6
18	63.5	65.0		65.0	Medium stiff gray silty clay w/clayey silt & clay layers	3 14
19	68.5	69.5	65.0	71.0	Stiff gray clay w/sandy silt layers	
20	74.5	75.0	71.0	75.0	Medium dense gray silty sand w/clay layers	
21	78.5	79.5	75.0	80.0	Medium stiff greenish-gray & tan clay w/silt lenses	

LOG OF BORING

EUSTIS ENGINEERING COMPANY — SOIL AND FOUNDATION CONSULTANTS — METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 5 Soil Technician George Hardee Date 8 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	2.5	Medium stiff tan & gray silty clay w/cinders	
2	5.0	5.5	2.5	6.0	Medium compact miscellaneous fill (cinders, brick fragments & clay pockets)	
3	7.5	8.5	6.0		Stiff tan & gray clay w/clayey silt pockets	
4	10.5	11.5		12.0	Stiff tan & gray clay w/silt pockets & silty clay layers	
5	13.5	14.5	12.0		Soft tan & gray silty clay w/clayey silt pockets	
6	18.5	19.5		20.0	Soft tan & gray silty clay w/clay pockets	
7	23.5	24.5	20.0	27.0	Soft gray silty clay w/clayey silt lenses & roots	
8	28.5	29.5	27.0	31.0	Loose gray sandy silt w/silty clay & clayey silt layers	
9	33.5	34.5	31.0	36.0	Loose gray silty sand w/clayey silt layers	
10	38.5	39.5	36.0	42.5	Medium stiff dark gray clay w/silt lenses	
11	43.5	44.5	42.5	46.0	Loose to medium dense gray silty sand w/clay layers	
12	49.0	49.5	46.0	50.0	Loose gray clayey sand w/shells & clay pockets	

LOG OF BORING

EUSTIS ENGINEERING COMPANY — SOIL AND FOUNDATION CONSULTANTS — METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 6 Soil Technician George Hardee Date 7 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	2.5	Stiff tan & gray clay w/clayey silt pockets	
2	4.5	5.5	2.5	6.0	Stiff tan & gray clay w/silt pockets	
3	7.5	8.5	6.0		Medium stiff tan & gray clay w/clayey silt pockets & silty clay layers	
4	10.5	11.5			Medium stiff tan & gray clay w/silt pockets	
5	13.5	14.5		16.0	Ditto	
6	18.5	19.5	16.0	20.0	Medium stiff tan & gray silty clay w/clay layers	
7	23.5	24.5	20.0		Soft gray clay w/roots & trace of organic matter	
8	28.5	29.5			Soft gray clay w/silt lenses & silty clay layers	
9	33.5	34.5			Soft gray clay w/sandy silt & silty sand lenses	
10	38.5	39.5			Soft gray clay w/silt lenses	
11	43.5	44.5		45.0	Soft gray clay w/sand lenses & layers	
12	48.5	49.5	45.0	50.0	Loose gray clayey sand w/shells	

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

DESIGNED BY: PINNER DRAWN BY: WOODS CHECKED BY: RICHARDSON	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 1 JUNE 93
	CADD FILE: 4014C023.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 54 OF 58

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 7 Soil Technician George Hardee Date 8 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Embedded Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0		Stiff tan & gray clay w/clayey silt pockets & gravel	
2	4.5	5.5		6.0	Stiff tan & gray clay w/silt pockets	
3	7.5	8.5	6.0	9.5	Medium stiff gray silty clay w/organic matter & clay layers	
4	10.5	11.5	9.5		Medium stiff gray & tan silty clay	
5	13.5	14.5			Medium stiff tan & gray silty clay w/silt pockets	
6	18.5	19.5		21.0	Medium stiff tan & gray silty clay w/silty clay layers	
7	23.5	24.5	21.0	24.5	Medium stiff gray clay w/roots & organic matter	
8	28.5	29.5	24.5		Soft gray clay w/silt lenses	
9	33.5	34.5			Soft gray clay w/silty sand lenses & layers	
10	38.5	39.5		43.0	Ditto	
11	43.5	44.5	43.0		Loose gray silty sand w/clay pockets & shells	
12	48.5	49.5		50.0	Ditto	

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 8 Soil Technician George Hardee Date 8 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Embedded Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0		Stiff gray & brown clay w/silt pockets	
2	4.5	5.5		6.0	Stiff gray & brown clay w/clayey silt pockets & roots	
3	8.5	9.0	6.0		Medium stiff grey & tan clay w/roots & organic matter	
4	11.0	11.5			Medium stiff gray & tan clay w/roots & humus pockets	
5	13.5	14.5		16.5	Medium stiff gray & tan clay w/clayey silt pockets & large roots	
6	18.5	19.5	16.5	20.0	Stiff gray & tan clay	
7	23.5	24.5	20.0		Soft gray clay w/roots & organic matter	
8	28.5	29.5			Soft gray clay w/silt lenses	
9	33.5	34.5		36.0	Soft gray clay w/sand lenses & layers	
10	37.0	38.0	36.0	38.5	Soft gray clay w/silty sand lenses & layers	
11	38.5	40.0	38.5		Medium dense gray fine sand	7 25
12	41.0	42.5		43.5	Ditto	8 29
13	44.0	45.5	43.5	48.0	Very loose gray fine sand w/clay layers	2 4
14	48.5	50.0	48.0	50.0	Very loose gray clayey sand w/shells & clay pockets	1 1

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 9 Soil Technician George Hardee Date 9 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Embedded Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	2.5	Medium stiff tan & gray clay w/clayey silt pockets & organic matter	
2	4.5	5.5	2.5		Medium stiff grey & tan clay w/clayey silt pockets, sandy silt lenses & organic matter	
3	7.5	8.5		9.0	Medium stiff gray & tan clay w/clayey silt pockets, sandy silt lenses & organic matter (fill)	
4	10.5	11.5	9.0		Medium stiff gray clay w/roots	
5	13.5	14.5			Medium stiff gray clay w/silt pockets	
6	17.0	18.0		18.0	Soft gray clay w/roots & organic matter	
7	18.5	20.0	18.0		Medium dense gray fine sand	2 16
8	21.0	22.5		23.0	Ditto	5 17
9	23.5	25.0	23.0	25.0	Dense gray fine sand	9 41
10	26.0	27.5	25.5		Medium dense gray fine sand	7 19
11	28.5	30.0			Ditto	9 24
12	33.5	35.0			Ditto	5 24
13	38.5	40.0		43.0	Medium dense gray fine sand w/shells	4 16
14	43.5	45.0	43.0		Loose gray clayey sand w/shells	2 2
15	49.5	50.0		50.0	Ditto	

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 10 Soil Technician George Hardee Date 9 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Embedded Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	2.5	Stiff tan & gray clay w/sand pockets, shells & organic matter	
2	4.5	5.5	2.5		Medium stiff gray & tan clay w/silt pockets & organic matter	
3	7.5	8.5			Soft gray & tan clay w/organic matter & roots (fill)	
4	10.5	11.5			Medium stiff gray & tan clay w/roots	
5	13.5	14.5		15.5	Soft gray & tan clay w/soft clay pockets, silt pockets & roots	
6	16.0	17.5	15.5		Dense gray fine sand	7 38
7	18.5	20.0			Ditto	9 44
8	21.0	22.5		23.0	Ditto	3 40
9	23.5	25.0	23.0		Medium dense gray fine sand	7 30
10	28.5	30.0		33.0	Medium dense gray fine sand w/clay layers	7 23
11	33.5	35.0	33.0	37.0	Loose gray fine sand w/clay layers	7 8
12	38.5	40.0	37.0	43.0	Dense gray fine sand w/clay layers	10 32
13	43.5	45.0	43.0	47.5	Loose gray fine sand w/clay layers	2 8
14	48.5	50.0	47.5	50.0	Medium stiff gray clay w/sand pockets & shells	

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.
Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 11 Soil Technician J. R. Eustis Date 9 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Embedded Feet From	To	Visual Classification	Standard Penetration Test
1	2.0	2.5	0.0		Very stiff gray & tan clay w/silty clay layers & small roots (fill)	
2	5.0	5.5			Stiff to very stiff grey & tan clay w/clayey sand pockets & lenses & trace of gravel (fill)	
3	8.0	8.5		9.0	Stiff gray & tan clay w/sand pockets & lenses & wood (fill)	
4	11.0	11.5	9.0	12.0	Medium stiff gray clay w/silt pockets & lenses, wood & pockets of organic matter	
5	13.5	14.0	12.0	15.0	Soft to medium stiff gray clay w/much wood	
6	15.0	15.5	15.0	15.5	Loose gray fine sand w/clay layers	
7	15.5	17.0	15.5	17.5	Very dense gray fine sand	6 57
8	18.0	19.5	17.5	20.0	Dense gray fine sand	12 45
9	20.5	22.0	20.0		Very dense gray fine sand	18 50=11"
10	23.5	25.0			Very dense gray fine sand w/few shell fragments	11 50=11"
11	28.5	30.0		33.0	Very dense gray fine sand	19 50
12	33.5	35.0	33.0		Dense gray fine sand w/many shell fragments	7 32
13	38.5	40.0		43.0	Ditto	12 46
14	43.5	45.0	43.0	48.0	Very dense gray fine sand	30 50=6"
15	48.5	50.0	48.0	50.0	Loose gray clayey sand w/clay layers	11 8
16	54.0	54.5	50.0		Stiff grey clay w/sand pockets & few shell fragments	
17	59.0	59.5		59.5	Medium stiff gray clay w/sand pockets & few shell fragments	
18	64.0	64.5	59.5		Very stiff greenish-gray & tan clay w/silty clay layers	
19	69.0	69.5		70.0	Stiff greenish-gray & tan clay w/sand lenses & pockets	
20	72.5	73.0	70.0		Medium compact tan sandy silt w/few clay lenses	
21	73.5	75.0		78.0	Ditto	8 25
22	78.5	80.0	78.0		Dense gray silty fine sand w/trace of shell fragments	12 46
23	83.5	85.0		88.0	Ditto	7 34
24	88.5	90.0	88.0	93.0	Medium dense gray silty fine sand w/clay layers	20 27
25	93.5	95.0	93.0	98.0	Compact gray clayey silt w/clay layers	4 33
26	98.5	100.0	98.0	100.0	Medium compact gray clayey silt w/clay layers	5 14

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 12 Soil Technician George Hardee Date 17 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Embedded Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	2.5	Soft gray & tan clay w/clayey sand layers & pockets	
2	4.5	5.5	2.5	6.0	Stiff gray & tan clay w/large sand pockets	
3	7.5	8.5	6.0	9.0	Medium stiff gray & tan clay w/organic matter, silty sand layers & pockets	
4	11.5	12.0	9.0	14.0	Medium stiff gray clay w/roots & silty clay pockets & wood	
5	14.5	15.0	14.0		Dense gray fine sand w/clay pockets	
6	15.0	16.5		17.0	Dense gray fine sand	2 46
7	17.5	19.0	17.0	20.0	Very dense gray fine sand	19 50=10"
8	20.5	22.0	20.0	23.0	Dense gray fine sand	9 36
9	23.5	25.0	23.0		Very dense gray fine sand w/shells	16 50=11"
10	28.5	30.0			Ditto	15 50=10"
11	33.5	35.0			Very dense gray fine sand	15 50=11"
12	38.5	40.0		42.0	Very dense gray fine sand w/shells	10 50=10"
13	43.5	45.0	42.0	48.0	Dense gray fine sand w/clay layers	6 45
14	48.5	50.0	48.0	50.0	Soft gray clay w/sand pockets	1 2

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 13 Soil Technician George Hardee Date 17 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Embedded Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	3.0	Medium stiff gray & tan clay w/organic matter & silt & sand pockets	
2	4.5	5.5	3.0	6.0	Medium stiff gray & tan clay w/roots, organic matter & sand pockets	
3	7.5	8.5	6.0	9.0	Soft gray clay w/roots & organic matter	
4	10.5	11.5	9.0	13.0	Soft dark gray clay w/roots, silt pockets & organic matter	
5	14.5	15.0	13.0		Soft gray & tan clay w/roots & wood	
6	16.0	17.0		17.0	Soft gray & tan clay w/large roots & decayed wood	
7	17.0	18.5	17.0		Medium dense gray fine sand	5 22
8	20.0	21.5			Ditto	6 21
9	23.5	25.0		29.0	Ditto	7 29
10	28.5	30.0	29.0	31.5	Dense gray fine sand	8 32
11	33.5	35.0	31.5	39.0	Medium dense gray fine sand	8 27
12	38.5	40.0	39.0		Dense gray fine sand w/shell fragments	7 39
13	43.5	45.0		47.5	Dense gray fine sand	8 31
14	48.5	50.0	47.5	50.0	Loose gray fine sand w/clay layers	3 6

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 14 Soil Technician George Hardee Date 17 October 1985
Ground Elev. ____ Datum ____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Embedded Feet From	To	Visual Classification	Standard Penetration Test
1	2.0	2.5	0.0		Medium stiff gray & tan clay w/organic matter & silt pockets	
2	4.5	5.5		6.0	Medium stiff gray & tan clay w/organic matter, roots & sand pockets	
3	7.5	8.5	6.0	9.0	Medium stiff dark gray clay w/organic matter & clayey silt layers	
4	11.5	12.0	9.0	12.0	Medium stiff gray clay w/large roots	
5	13.5	14.5	12.0		Soft gray & tan clay w/roots	
6	17.0	18.0		18.0	Soft grey clay w/roots & organic matter	
7	18.0	19.5	18.0		Medium dense gray fine sand	3 11
8	21.0	22.5			Ditto	3 18
9	23.5	25.0			Ditto	4 19
10	28.5	30.0		33.0	Ditto	6 24
11	33.5	35.0	33.0	38.0	Dense gray fine sand	14 38
12	38.5	40.0	38.0	44.0	Very dense gray fine sand	15 50=9"
13	43.5	45.0	44.0	48.0	Medium dense gray fine sand w/clay layers	12 24
14	48.5	50.0	48.0	50.0	Very loose gray clayey sand	1 3

FOR GENERAL NOTES ON EUSTIS' SOIL BORINGS, SEE DWG. 54

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

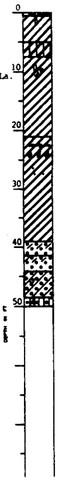
DESIGNED BY: PINNER
DRAWN BY: WOODS
CHECKED BY: RICHARDSON
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER
DATE: JUNE 93
PLOT SCALE: 24
CADD FILE: 40145023.DGN
PLOT DATE: 1 JUNE 93
FILE NO. H-4-40145
SOLICITATION NO. DACW29-93-B-0080
DWG. 55 OF 58

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 43 Soil Technician S. Porta Date 5 November 1985
Ground Elev. ____ Datum ____ Gr. Water Depth: See Text

Sample No.	Sample Depth - Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	0.0	0.5	0.0	0.5	Medium stiff gray & tan clay w/grass roots	
2	2.5	3.0	0.5	5.0	Stiff brown & gray clay w/silt pockets	
3	5.5	6.0	5.0	7.5	Medium stiff gray & tan silty clay	
4	8.5	9.0	7.5		Medium stiff gray & tan clay w/silt pockets	
5	11.5	12.0			Medium stiff gray & tan clay w/wood	
6	14.5	15.0			Medium stiff gray & tan clay	
7	19.5	20.0		21.0	Medium stiff gray & tan clay w/silt pockets	
8	24.5	25.0	21.0		Soft gray clay w/organic clay layers	
9	29.5	30.0			Soft gray clay w/silty clay layers	
10	34.5	35.0			Medium stiff gray clay w/fine sand lenses & pockets	
11	38.5	39.0		39.0	Soft gray clay w/fine sand lenses	
12	39.0	40.5	39.0	41.5	Dense gray sand w/clay layers	5 31
13	41.5	43.0	41.5	44.0	Medium dense gray sand w/clay layers	7 24
14	44.0	45.5	44.0		Loose gray clayey sand w/shells	6 12
15	46.5	48.0		48.5	Ditto	1 4
16	49.5	50.0	48.5	50.0	Loose gray silty sand w/many shell fragments	

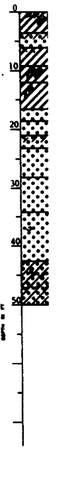


LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 44 Soil Technician George Hardee Date 7 November 1985
Ground Elev. ____ Datum ____ Gr. Water Depth: See Text

Sample No.	Sample Depth - Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	3.5	Medium stiff gray & brown clay w/clayey sand pockets & trace of organic matter	
2	4.5	5.5	3.5	6.0	Loose tan fine sand w/clay layers	
3	8.0	8.5	6.0	9.0	Soft tan & gray clay w/sand pockets	
4	11.5	12.0	9.0	12.0	Soft gray clay w/roots & organic matter	
5	14.5	15.0	12.0	16.5	Medium stiff gray & tan clay w/roots	
6	16.5	18.0	16.5	18.5	Medium dense gray fine sand	2 21
7	19.0	20.5	18.5	21.0	Dense gray fine sand	10 43
8	21.5	23.0	21.0	23.0	Medium dense gray fine sand w/clay layers	5 20
9	24.5	26.0	23.0	28.0	Dense gray fine sand	15 39
10	28.5	30.0	28.0	34.0	Medium dense gray fine sand	10 25
11	33.5	35.0	34.0		Dense gray fine sand	10 32
12	38.5	40.0		42.5	Dense gray fine sand w/shells	11 43
13	43.5	45.0	42.5		Loose gray clayey sand	1 4
14	48.5	49.5		50.0	Loose gray clayey sand w/shells, clay pockets & layers	

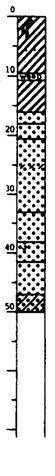


LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 45 Soil Technician George Hardee Date 8 November 1985
Ground Elev. ____ Datum ____ Gr. Water Depth: See Text

Sample No.	Sample Depth - Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0		Medium stiff tan & gray fissured clay w/silt pockets	
2	4.5	5.5			Medium stiff tan & gray fissured clay	
3	7.5	8.5		9.5	Soft tan & gray fissured clay w/large sand pockets	
			9.5	10.5	Wood	
4	11.5	12.5	10.5		Soft gray & tan clay	
5	14.5	15.5		16.0	Medium stiff gray & tan clay	
6	16.0	17.5	16.0	18.0	Loose gray fine sand	1 6
7	18.5	20.0	18.0	20.5	Dense gray fine sand	17 47
8	21.0	22.5	20.5		Medium dense gray fine sand	10 18
9	23.5	25.0			Medium dense gray fine sand w/clay layers	6 20
10	28.5	30.0		33.0	Ditto	8 29
11	33.5	35.0	33.0	38.0	Dense gray fine sand	10 35
12	38.5	40.0	38.0	41.5	Very dense gray fine sand w/shells	11 50=10"
13	43.5	45.0	41.5	47.0	Medium dense gray fine sand	1 16
14	48.5	50.0	47.0	50.0	Loose gray clayey sand	2 3

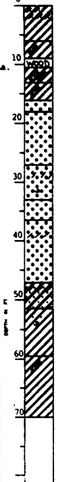


LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 46 Soil Technician George Hardee Date 8 November 1985
Ground Elev. ____ Datum ____ Gr. Water Depth: See Text

Sample No.	Sample Depth - Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0		Stiff gray & brown clay w/clayey sand pockets & layers	
2	4.5	5.5		6.0	Medium stiff gray & brown clay w/clayey sand pockets & layers	
3	7.5	8.5	6.0	9.0	Medium stiff tan & gray clay w/trace of organic matter	
			9.0	10.5	Wood	
4	11.5	12.5	10.5	13.0	Very soft gray clay w/roots & organic matter	
5	14.0	15.0	13.0	16.0	Soft gray & tan clay w/roots	
6	16.0	17.5	16.0	18.0	Medium dense gray fine sand	1 15
7	18.5	20.0	18.0		Dense gray fine sand	9 42
8	21.0	22.5			Ditto	14 45
9	23.5	25.0		27.0	Ditto	12 39
10	28.5	30.0	27.0	33.0	Medium dense gray fine sand w/clay layers & shells	9 24
11	33.5	35.0	33.0	36.5	Very dense gray fine sand	14 50=10"
12	38.5	40.0	36.5		Medium dense gray fine sand w/clay layers	2 24
13	43.5	45.0		47.0	Ditto	7 30
14	48.5	50.0	47.0	51.5	Soft gray sandy clay w/clay layers	1 3
15	53.5	54.5	51.5		Medium stiff gray clay w/sand pockets & shells	
16	58.5	59.5		59.5	Ditto	
17	63.5	64.5	59.5		Stiff tan & gray clay w/fissures	
18	68.5	69.5		70.0	Stiff tan & gray clay	



LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 47 Soil Technician A. Croal, Jr. Date 11 November 1985
Ground Elev. ____ Datum ____ Gr. Water Depth: See Text

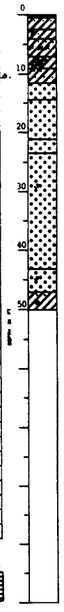
Sample No.	Sample Depth - Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	0.0	0.5	0.0	0.5	Stiff dark gray clay w/trace of fine gravel & grass roots	
2	1.2	2.0	0.5	2.5	Soft tan & gray clay w/fine sand layers	
3	3.2	4.0	2.5	4.0	Medium stiff brown & gray clay w/silt pockets & sand lenses	
4	5.2	6.0	4.0	7.0	Soft tan & gray clay w/fine sand & clayey sand layers	
5	7.7	8.5	7.0	9.0	Soft gray clay w/roots & wood	
6	10.7	11.5	9.0	11.5	Extremely soft gray & tan clay w/fine sand pockets & layers	
7	12.0	13.5	11.5	14.5	Dense gray & tan fine sand	5 38
8	14.5	16.0	14.5		Very dense gray & tan fine sand	7 50=9"
9	18.5	20.0		21.0	Ditto	8 50=10"
10	21.0	22.5	21.0	23.5	Dense gray & tan fine sand	10 46
11	23.5	25.0	23.5		Very dense gray & tan fine sand w/many shell fragments	8 50=11"
12	28.5	30.0			Ditto	15 50=9"
13	33.5	35.0			Ditto	13 50=10"
14	38.5	40.0		43.0	Ditto	10 50=8"
15	43.5	45.0	43.0	47.0	Dense gray & tan fine sand w/shell fragments	4 31
16	48.5	50.0	47.0	50.0	Very soft gray & tan clay w/fine sand pockets & few shell fragments	0 1

*Number in first column indicates number of blows of 140-lb. hammer dropped 30 in. required to seat 3-in. O.D. splitspoon sampler 6 in. Number in second column indicates number of blows of 140-lb. hammer dropped 30 in. required to drive 3-in. O.D. splitspoon sampler 1 ft. after seating 6 in.

Remarks: ____

CLAY SILT SAND HUMUS

Predominant type shown heavy. Modifying type shown light.



LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 48 Soil Technician A. Croal, Jr. Date 11 November 1985
Ground Elev. ____ Datum ____ Gr. Water Depth: See Text

Sample No.	Sample Depth - Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	0.0	0.5	0.0	1.0	Very stiff dark gray clay w/grass roots	
2	1.7	2.5	1.0		Stiff gray clay w/sand pockets	
3	4.7	5.5		6.0	Stiff brown & gray clay w/sandy clay & clayey silt pockets	
4	7.7	8.5	6.0	9.0	Soft gray & tan clay w/fine sand layers	
5	10.7	11.5	9.0	12.0	Extremely soft gray clay w/roots & organic matter	
6	13.7	14.5	12.0	15.0	Soft gray clay w/roots & organic matter	
7	17.7	18.5	15.0	18.5	Soft gray clay w/organic matter & large roots	
8	18.5	20.0	18.5		Medium dense gray fine sand	1 14
9	21.0	22.5			Ditto	6 25
10	23.5	25.0			Ditto	4 23
11	26.0	27.5		28.5	Ditto	4 26
12	28.5	30.0	28.5	32.0	Dense gray fine sand	5 38
13	33.5	35.0	32.0		Medium dense gray fine sand	12 26
14	38.5	40.0		43.5	Medium dense gray fine sand w/shell fragments	5 24
15	43.5	45.0	43.5	47.0	Very dense gray fine sand	13 50=9"
16	48.5	50.0	47.0	50.0	Loose gray clayey sand w/clay pockets & few shell fragments	2 6

*Number in first column indicates number of blows of 140-lb. hammer dropped 30 in. required to seat 3-in. O.D. splitspoon sampler 6 in. Number in second column indicates number of blows of 140-lb. hammer dropped 30 in. required to drive 3-in. O.D. splitspoon sampler 1 ft. after seating 6 in.

Remarks: ____

CLAY SILT SAND HUMUS

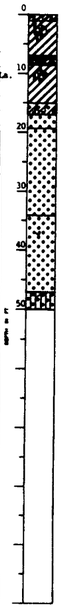
Predominant type shown heavy. Modifying type shown light.

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 49 Soil Technician A. Croal, Jr. Date 12 November 1985
Ground Elev. ____ Datum ____ Gr. Water Depth: See Text

Sample No.	Sample Depth - Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	0.0	0.5	0.0	1.0	Stiff dark gray clay w/grass roots	
2	1.7	2.5	1.0		Medium stiff tan & gray clay w/silt pockets & brick fragments	
3	4.7	5.5		7.0	Medium stiff tan & gray clay w/silt pockets & trace of organic matter (fill)	
4	7.7	8.5	7.0	8.5	Soft gray & brown organic clay w/humus layers, organic matter & roots	
5	10.7	11.5	8.5		Soft gray clay w/roots & wood	
6	13.7	14.5		15.0	Soft gray clay	
7	17.0	17.5	15.0	17.0	Very loose to loose gray clayey sand w/roots	
8	18.0	18.5	17.0	19.5	Medium dense gray fine sand	3 30
9	19.5	21.0	19.5		Dense gray fine sand	6 37
10	22.0	23.5			Ditto	11 47
11	24.5	26.0			Ditto	7 50
12	28.5	30.0		34.0	Ditto	3 32
13	33.5	35.0	34.0		Very dense gray fine sand	6 50=8"
14	38.5	40.0			Very dense gray fine sand w/few shell fragments	18 50=8"
15	43.5	45.0		47.0	Very dense gray fine sand	4 50=10"
16	48.5	50.0	47.0	50.0	Medium dense gray silty sand w/clay	7 21



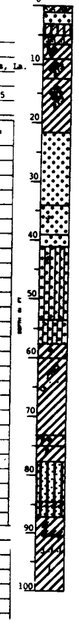
LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA

Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. 50 Soil Technician A. Croal, Jr. Date 13 November 1985
Ground Elev. ____ Datum ____ Gr. Water Depth: See Text

Sample No.	Sample Depth - Feet From	To	Depth Stratum Feet From	To	Visual Classification	Standard Penetration Test
1	0.0	0.5	0.0	1.0	Very stiff gray & brown clay w/fine sand lenses, pockets & shell fragments	
2	1.7	2.5	1.0	3.0	Loose tan fine sand	
3	2.5	4.0	3.0	5.0	Medium compact brown & gray clayey silt w/fine sand lenses	3 14
4	5.0	6.5	5.0	6.5	Medium stiff to stiff gray clay w/sandy silt lenses & layers	2 8
5	8.2	9.0	6.5	9.0	Soft dark gray clay w/silt pockets & trace of organic matter	
6	10.7	11.5	9.0	12.5	Soft dark gray clay w/organic matter & roots	
7	13.7	14.5	12.5		Very soft gray clay w/organic matter & wood	
8	18.2	19.0		21.8	Soft gray clay w/organic matter & roots	
9	21.7	22.5	21.8		Loose to medium dense gray fine sand	
10	22.5	24.0			Medium dense gray fine sand	4 26
11	25.0	26.5			Ditto	4 23
12	27.5	29.0			Ditto	3 19
13	30.0	31.5		34.0	Ditto	8 25
14	33.5	35.0	34.0	39.0	Dense gray fine sand w/shell fragments	9 32
15	38.5	40.0	39.0	41.0	Very dense gray fine sand	12 50=11"
16	43.5	45.0	41.0		Medium dense gray silty sand w/few shell fragments	6 26
17	48.5	50.0		53.5	Medium dense gray silty sand	5 27
18	53.5	55.0	53.5	57.5	Loose gray silty sand	3 10
19	58.5	60.0	57.5	60.0	Soft gray clay w/shell fragments	2 4
20	63.2	64.0	60.0	66.0	Medium stiff grey fissured clay w/sand pockets & few shell fragments & vertical fissures.	
21	68.2	69.0	66.0	73.0	Stiff gray clay w/few shell fragments	
22	73.2	74.0	73.0	75.0	Stiff greenish-gray clay w/silt pockets & shells	
23	76.7	77.5	75.0	77.5	Very stiff greenish-grey & tan clay w/few silt pockets	
24	77.5	79.0	77.5		Compact gray sandy silt	9 44
25	80.0	81.5			Ditto	8 35
26	82.5	84.0		84.5	Medium compact gray sandy silt	6 21
27	85.0	86.5	84.5	87.0	Very loose gray sandy silt w/clay layers	2 2
28	88.5	90.0	87.0		Medium stiff gray clay w/clayey silt lenses & layers	2 6
29	91.7	92.5			Medium stiff gray clay w/sandy silt layers	
30	96.7	97.5		100.0	Stiff gray clay w/silt lenses	



FOR GENERAL NOTES ON EUSTIS' SOIL BORINGS, SEE DWG. 54

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

DESIGNED BY: PINNER DRAWN BY: WOODS CHECKED BY: RICHARDSON	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 1 JUNE 93
	CADD FILE: 4014c023.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 57 OF 58

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana

Boring No. 15 (West) Soil Technician A. Croal, Jr. Date 17 October 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Strata Feet From	To	Visual Classification	Standard Penetration Test
1	1.7	2.5	0.0	2.5	Medium stiff tan & gray clay w/silt pockets & grass roots	
2	4.7	5.5	2.5	5.5	Medium stiff tan & gray clay w/sand pockets & roots	
3	7.7	8.5	5.5		Soft dark gray clay w/silty sand layers, organic matter & roots	
4	10.7	11.5		12.0	Soft dark gray clay w/organic matter & roots	
5	13.7	14.5	12.0	15.0	Soft gray clay w/roots	
6	15.5	17.0	15.0		Medium dense gray fine sand w/clay pockets & roots	3 20
7	18.0	19.5		20.5	Medium dense gray fine sand w/clay layers	10 14
8	20.5	22.0	20.5		Very dense gray fine sand	50-6" (Seat)
9	23.5	25.0			Ditto	25 50-8"
10	28.5	30.0			Ditto	20 50-6"
11	33.5	35.0			Very dense gray fine sand w/few shell fragments & trace of silt	18 50-8"
12	38.5	40.0			Very dense gray fine sand	23 50-6"
13	43.5	45.0		46.0	Very dense gray fine sand w/few shell fragments	2 50-10"
14	48.5	50.0	46.0	50.0	Medium dense gray fine sand w/clay pockets & shell fragments	3 12
15	53.2	54.0	50.0		Medium stiff gray clay w/silty sand pockets & few shell fragments	
16	58.2	59.0			Medium stiff gray clay w/few silty sand pockets & few shell fragments	
17	63.2	64.0		66.0	Medium stiff gray clay w/shell fragments	
18	68.2	69.0	66.0	69.0	Stiff gray clay w/shell fragments & trace of sand	
19	69.5	70.0	69.0	70.0	Stiff green clay	

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana

Boring No. 36 Soil Technician A. J. Mayeux Date 26 October 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Strata Feet From	To	Visual Classification	Standard Penetration Test
1	2.0	2.5	0.0	4.0	Loose gray & tan clayey silt w/miscellaneous fill	
2	5.0	5.5	4.0	7.0	Medium stiff tan & gray silty clay	
3	8.0	8.5	7.0		Medium stiff gray silty clay w/organic matter	
4	11.0	11.5		12.5	Ditto	
5	14.0	14.5	12.5	16.0	Stiff tan & gray clay w/silt pockets	
6	19.0	19.5	16.0	21.0	Medium stiff gray & tan silty clay	
7	24.0	24.5	21.0	26.5	Soft gray clay w/silt pockets	
8	26.5	28.0	26.5	29.0	Medium dense gray silty sand	3 21
9	29.0	30.5	29.0	31.0	Medium dense gray silty sand w/clay layers	7 18
10	31.5	33.0	31.0		Loose gray silty sand w/clay layers	3 8
11	34.0	35.5		35.5	Ditto	2 6
12	39.0	39.5	35.5		Medium stiff gray clay w/silt lenses	
13	44.0	44.5			Ditto	
14	49.0	49.5		50.0	Ditto	
15	54.0	54.5	50.0	56.0	Soft gray sandy clay w/shell fragments	
16	51.5	58.0	56.0	58.5	Very loose gray silty sand w/clay lenses & shell fragments	
17	58.5	60.0	58.5		Medium dense gray sand w/shell fragments	3 14
18	61.0	62.5		63.0	Ditto	4 13
19	64.0	64.5	63.0	67.0	Loose gray clayey sand w/clay pockets & shell fragments	
20	69.0	69.5	67.0	73.5	Medium stiff gray & tan clay w/silt lenses & pockets & sand layers	
21	74.0	74.5	73.5		Stiff greenish-gray silty clay	
22	79.0	79.5			Ditto	
23	84.0	84.5		86.0	Ditto	
24	89.0	89.5	86.0		Stiff greenish-gray & tan clay	
25	94.0	94.5			Very stiff greenish-gray & tan clay	
26	99.0	99.5		100.0	Ditto	

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana

Boring No. 37 Soil Technician S. Porta Date 25 October 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Strata Feet From	To	Visual Classification	Standard Penetration Test
1	0.0	0.5	0.0	1.0	Soft gray silty clay w/grass roots	
2	2.5	3.0	1.0	4.0	Stiff gray & tan clay w/silt pockets & shells	
3	5.5	6.0	4.0		Medium stiff gray & tan clay w/silt pockets	
4	8.5	9.0		9.5	Ditto	
5	11.5	12.0	9.5	14.0	Soft tan & gray clay w/vertical sand lenses	
6	14.5	15.0	14.0	16.0	Medium stiff gray clay w/trace of organic matter	
7	19.5	20.0	16.0	24.0	Soft gray clay w/clayey silt layers	
8	24.5	25.0	24.0		Loose gray silty fine sand w/clay layers	
9	25.0	26.5		28.0	Ditto	5 8
10	28.0	29.5	28.0		Soft gray clay w/silt lenses	1
11	34.5	35.0			Ditto	
12	39.5	40.0		41.0	Soft gray clay w/sand lenses & layers	
13	44.5	45.0	41.0	47.0	Loose gray clayey sand w/clay layers & shells	
14	49.5	50.0	47.0	51.0	Soft gray sandy clay w/large silty sand pockets & shells	
15	52.5	53.0	51.0	56.0	Loose gray silty sand w/shells	
16	53.0	54.5	56.0		Ditto	4 8
17	56.0	57.5		57.5	Loose gray sand & shells w/clay layers	3 3
18	59.5	60.0	57.5	62.0	Very loose gray clayey sand w/shells	
19	64.5	65.0	62.0	67.0	Medium stiff gray & tan clay w/silt lenses & pockets	
20	69.5	70.0	67.0	72.0	Very stiff greenish-gray & tan clay w/silt pockets	
21	74.5	75.0	72.0		Stiff gray & tan clay w/silt pockets & layers	
22	79.5	80.0		80.0	Ditto	

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana

Boring No. 38 Soil Technician R. Elkins Date 26 October 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Strata Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	3.5	Stiff gray & tan clay w/sand, grass roots & few brick fragments	
2	4.5	5.5	3.5		Soft gray & tan silty clay w/concretions	
3	7.5	8.5		9.5	Ditto	
4	10.5	11.5	9.5	12.0	Medium stiff gray & tan silty clay w/roots	
5	13.5	14.5	12.0	15.0	Loose gray sandy silt w/trace of clay	
6	18.0	19.0	15.0	20.0	Medium compact gray sandy silt w/clay layers & decayed wood	
7	23.0	24.0	20.0		Loose gray clayey silt w/silty clay layers	
8	28.0	29.0		30.0	Loose gray clayey silt w/sand layers	
9	33.0	34.0	30.0		Soft gray & tan clay w/sandy silt layers	
10	38.0	39.0		41.0	Soft gray & tan clay w/sand lenses	
11	43.0	44.0	41.0	46.0	Medium compact gray clayey silt w/sand lenses	
12	48.0	49.0	46.0	50.0	Loose gray clayey silt w/clay layers & shell fragments	

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana

Boring No. 39 Soil Technician S. Porta Date 5 November 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Strata Feet From	To	Visual Classification	Standard Penetration Test
1	0.0	0.5	0.0	1.0	Medium stiff gray silty clay w/grass roots	
2	2.5	3.0	1.0	4.5	Medium stiff gray & tan clay w/clayey silt pockets, few roots & fill	
3	5.5	6.0	4.5	7.5	Medium stiff brown & gray clay w/clayey silt pockets & fill	
4	8.5	9.0	7.5	11.0	Medium stiff gray & tan silty clay w/roots	
5	11.5	12.0	11.0	13.5	Very soft gray silty clay w/clay layers	
6	14.5	15.0	13.5	17.0	Medium compact gray clayey silt	
7	19.5	20.0	17.0	21.0	Loose gray sandy silt w/clay layers	
8	24.5	25.0	21.0	27.0	Soft gray silty clay w/clay layers	
9	29.5	30.0	27.0		Loose gray sandy silt w/silty clay layers	
10	34.5	35.0			Ditto	
11	39.5	40.0			Ditto	
12	43.5	45.0			Ditto	
13	45.0	46.5			Ditto	2 7
14	47.5	49.0			Ditto	2 8
15	50.0	51.5			Loose gray sandy silt w/clay layers	1 9
16	53.5	55.0			Ditto	1 6
17	58.5	60.0			Ditto	1 4
18	63.5	65.0			Ditto	2 6
19	68.5	70.0		73.5	Ditto	2 11
20	73.5	75.0	73.5		Medium stiff greenish-gray fissured clay w/clayey silt pockets	
21	79.5	80.0			Medium stiff greenish-gray fissured clay	
22	84.5	85.0		86.0	Medium stiff greenish-gray fissured clay w/clayey silt layers	
23	89.5	90.0	86.0		Medium stiff tan & gray fissured clay	
24	94.5	95.0		95.0	Stiff tan & gray fissured clay	
25	95.0	96.5	95.0	97.0	Medium dense gray silty sand	4 29
26	98.5	100.0	97.0	100.0	Medium dense gray clayey sand w/silty sand layers	5 16

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Sheet 1 of 2

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana

Boring No. 40 Soil Technician George Hardee Date 7 November 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Strata Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0	3.0	Medium stiff tan silty clay w/clay pockets, organic matter, brick & fragments (fill)	
2	4.0	5.0	3.0		Stiff tan & gray clay w/cinders, clayey silt & clay pockets (fill)	
3	6.5	7.5		8.5	Medium stiff tan & gray clay w/clayey silt pockets & roots (fill)	
4	9.0	10.0	8.5	11.0	Stiff tan & gray clay w/clayey silt pockets	
5	11.5	12.5	11.0		Medium stiff tan & gray clay w/clayey silt pockets	
6	14.0	15.0			Ditto	
7	16.5	17.5			Ditto	
8	19.0	20.0		20.0	Ditto	
9	21.5	22.5	20.0	23.0	Medium stiff gray silty clay w/clayey silt layers & lenses	
10	24.0	25.0	23.0	25.0	Soft gray silty clay w/clayey silt & clay pockets	
11	28.5	29.5	25.0		Loose gray sandy silt w/clay lenses	
12	31.5	32.5		33.5	Loose gray sandy silt w/silty clay & clay layers	
13	34.0	35.0	33.5	36.0	Medium stiff gray clay w/clayey silt & sandy silt lenses	
14	36.5	37.5	36.0		Medium stiff gray clay w/sandy silt lenses	
15	39.0	40.0			Ditto	
16	41.5	42.5			Soft gray clay w/silty sand lenses & layers	
17	44.0	45.0		45.0	Soft gray clay w/sand lenses & pockets	
18	45.0	46.5	45.0	47.0	Medium dense gray fine sand	7 11
19	48.5	50.0	47.0	50.0	Loose gray clayey sand w/sandy clay layers	2 5

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana

Boring No. 41 Soil Technician R. Elkins Date 26 October 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Strata Feet From	To	Visual Classification	Standard Penetration Test
1	1.5	2.5	0.0		Stiff gray & tan clay w/concretions, roots & sand	
2	4.5	5.5		6.0	Medium stiff gray & tan clay w/silty clay layers & roots	
3	7.5	8.5	6.0	9.0	Very stiff gray & tan clay w/roots & sand lenses	
4	10.5	11.5	9.0		Medium stiff gray & tan clay	
5	13.5	14.5			Ditto	
6	18.0	19.0		20.0	Medium stiff gray & tan clay w/silty clay layers	
7	23.0	24.0	20.0	25.0	Medium stiff gray clay w/organic matter	
8	28.0	29.0	25.0	30.0	Loose gray sandy silt w/trace of clay	
9	33.0	34.0	30.0		Very soft gray clay w/large sandy silt layers & lenses	
10	38.0	39.0			Ditto	
11	43.0	44.0		45.0	Soft gray clay w/sand lenses, pockets & shell fragments	
12	48.0	49.0	45.0	50.0	Loose gray clayey sand w/shell fragments	

LOG OF BORING

EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana

Boring No. 42 Soil Technician S. Porta Date 5 November 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	To	Depth Strata Feet From	To	Visual Classification	Standard Penetration Test
1	0.0	0.5	0.0	1.0	Medium stiff brown & gray clay w/silt & organic matter & roots	
2	2.5	3.0	1.0		Stiff gray & tan clay w/roots & trace of gravel	
3	5.5	6.0			Stiff gray & tan clay w/silt pockets	
4	8.5	9.0			Ditto	
5	11.5	12.0			Medium stiff gray & tan clay w/silt pockets	
6	14.5	15.0			Stiff gray & tan clay	
7	19.5	20.0		21.0	Stiff tan & gray clay w/silt pockets	
8	24.5	25.0	21.0	26.0	Medium stiff gray clay w/trace of organic matter	
9	29.5	30.0	26.0		Soft gray clay	
10	34.5	35.0			Ditto	
11	39.5	40.0		40.0	Soft gray clay w/silty sand lenses & layers	
12	40.0	41.5	40.0	43.0	Soft gray clay	1 21
13	42.5	44.0	43.0	46.0	Soft gray clay w/sand layers	2 1
14	49.5	50.0	46.0	50.0	Loose gray clayey sand w/shells	

FOR GENERAL NOTES ON EUSTIS' SOIL BORINGS, SEE DWG. 54

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

DESIGNED BY: PINNER DRAWN BY: WOODS CHECKED BY: RICHARDSON	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 1 JUNE 93
	CADD FILE: 40145C23.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 56 OF 58

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

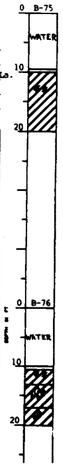
Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. _____ Soil Technician A. J. Mayeux Date 12 December 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	Sample Depth — Feet To	Depth Stratum Feet From	Depth Stratum Feet To	Visual Classification	Standard Penetration Test
					BORING 73	
			0.0	10.0	Water	
1	11.5	12.0	10.0	12.0	Very soft black muck	
			12.0		Concrete	
					BORING 74	
			0.0	10.0	Water	
1	11.5	12.0	10.0	13.5	Extremely soft black muck	
2	15.5	16.0	13.5	18.0	Medium stiff gray & tan clay w/trace of silt	
3	19.0	19.5	18.0	20.0	Loose gray clayey silt	

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. _____ Soil Technician A. J. Mayeux Date 12 December 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

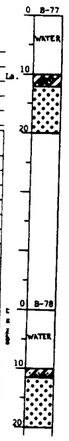
Sample No.	Sample Depth — Feet From	Sample Depth — Feet To	Depth Stratum Feet From	Depth Stratum Feet To	Visual Classification	Standard Penetration Test
					BORING 75	
			0.0	9.5	Water	
			9.5	10.0	Extremely soft black muck	
1	12.5	13.0	10.0		Medium stiff gray & tan clay w/clayey silt pockets	
2	15.5	16.0			Ditto	
3	19.0	19.5		20.0	Ditto	
					BORING 76	
			0.0	10.0	Water	
			10.0	10.5	Extremely soft black muck	
1	11.5	12.0	10.5	13.0	Medium stiff gray & tan clay w/clayey silt pockets	
2	15.0	15.5	13.0	17.0	Medium stiff gray clay w/roots & organic matter	
3	19.0	19.5	17.0	20.0	Soft to medium stiff gray clay with organic matter	



LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. _____ Soil Technician R. Mayeux Date 11 December 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

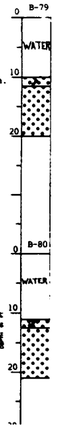
Sample No.	Sample Depth — Feet From	Sample Depth — Feet To	Depth Stratum Feet From	Depth Stratum Feet To	Visual Classification	Standard Penetration Test
					BORING 77	
			0.0	10.0	Water	
1	10.5	11.5	10.0	12.0	Extremely soft gray clay w/organic matter & roots	
2	14.0	14.5	12.0		Loose to medium dense gray sand	
3	17.0	17.5			Ditto	
4	19.5	20.0		20.0	Ditto	
					BORING 78	
			0.0	10.0	Water	
1	10.0	11.0	10.0	11.5	Extremely soft dark gray sandy clay w/some organic matter	
2	14.0	14.5	11.5		Medium dense gray sand	
3	17.0	17.5			Ditto	
4	19.5	20.0		20.0	Ditto	



LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. _____ Soil Technician R. Mayeux Date 10 December 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

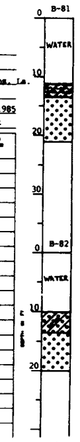
Sample No.	Sample Depth — Feet From	Sample Depth — Feet To	Depth Stratum Feet From	Depth Stratum Feet To	Visual Classification	Standard Penetration Test
					BORING 79	
			0.0	10.0	Water	
1	10.5	11.0	10.0	11.5	Loose dark gray sand w/organic matter	
2	14.5	15.0	11.5		Medium dense gray sand	
3	17.0	17.5			Ditto	
4	19.5	20.0		20.0	Ditto	
					BORING 80	
			0.0	11.0	Water	
1	11.5	12.0	11.0	12.5	Loose gray sand w/trace of organic matter	
2	14.5	15.0	12.5		Loose to medium dense dark gray sand	
3	17.5	18.0			Ditto	
4	20.5	21.0		21.0	Ditto	



LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. _____ Soil Technician R. Mayeux Date 10-11 December 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

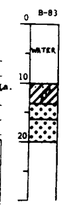
Sample No.	Sample Depth — Feet From	Sample Depth — Feet To	Depth Stratum Feet From	Depth Stratum Feet To	Visual Classification	Standard Penetration Test
					BORING 81	
			0.0	11.0	Water	
1	11.0	12.0	11.0	13.5	Very soft gray organic clay w/silty sand layers	
2	14.0	14.5	13.5		Medium dense gray sand	
3	17.0	18.0			Ditto	
4	20.5	21.0		21.0	Ditto	
					BORING 82	
			0.0	10.0	Water	
1	10.0	11.0	10.0		Loose gray clayey sand w/organic matter	
2	13.0	13.5		13.5	Loose gray clayey sand	
3	15.0	15.5	13.5		Locae gray sand	
4	19.5	20.0		20.0	Ditto	



LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: London Avenue Canal, Levee and Floodwall Improvements
Orleans Levee Board Project No. 2049-0269, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, La.
Burk & Associates, Inc., New Orleans, Louisiana
Boring No. _____ Soil Technician R. Mayeux Date 10 December 1985
Ground Elev. _____ Datum _____ Gr. Water Depth See Text

Sample No.	Sample Depth — Feet From	Sample Depth — Feet To	Depth Stratum Feet From	Depth Stratum Feet To	Visual Classification	Standard Penetration Test
					BORING 83	
			0.0	10.0	Water	
1	11.0	12.0	10.0	13.5	Very soft gray clay w/sand pockets & roots	
2	14.5	15.0	13.5	16.0	Loose gray sand	
3	17.0	17.5	16.0		Medium dense gray sand	
4	19.5	20.0		20.0	Ditto	



FOR GENERAL NOTES ON EUSTIS' SOIL BORINGS, SEE DWG. 54

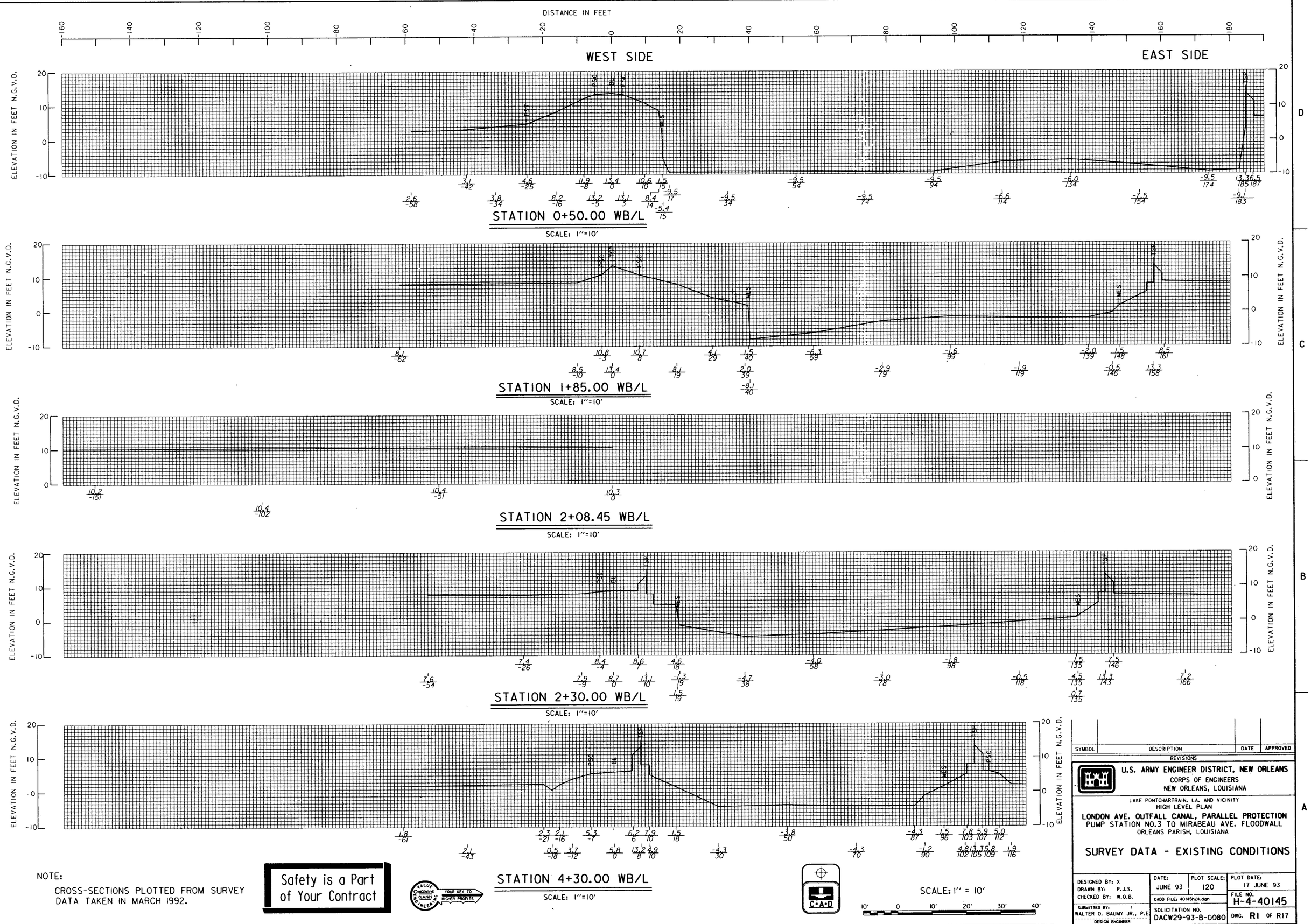
SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL. PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

DESIGNED BY: PINNER DRAWN BY: WOODS CHECKED BY: RICHARDSON	DATE: JUNE 93	PLOT SCALE: 24	PLOT DATE: 1 JUNE 93
	CADD FILE: 40145023.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. 58 OF 58



NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

Safety is a Part of Your Contract

VALUE INCENTIVE ENGINEERING INC. YOUR KEY TO HIGHER PROFITS

C-A-D

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

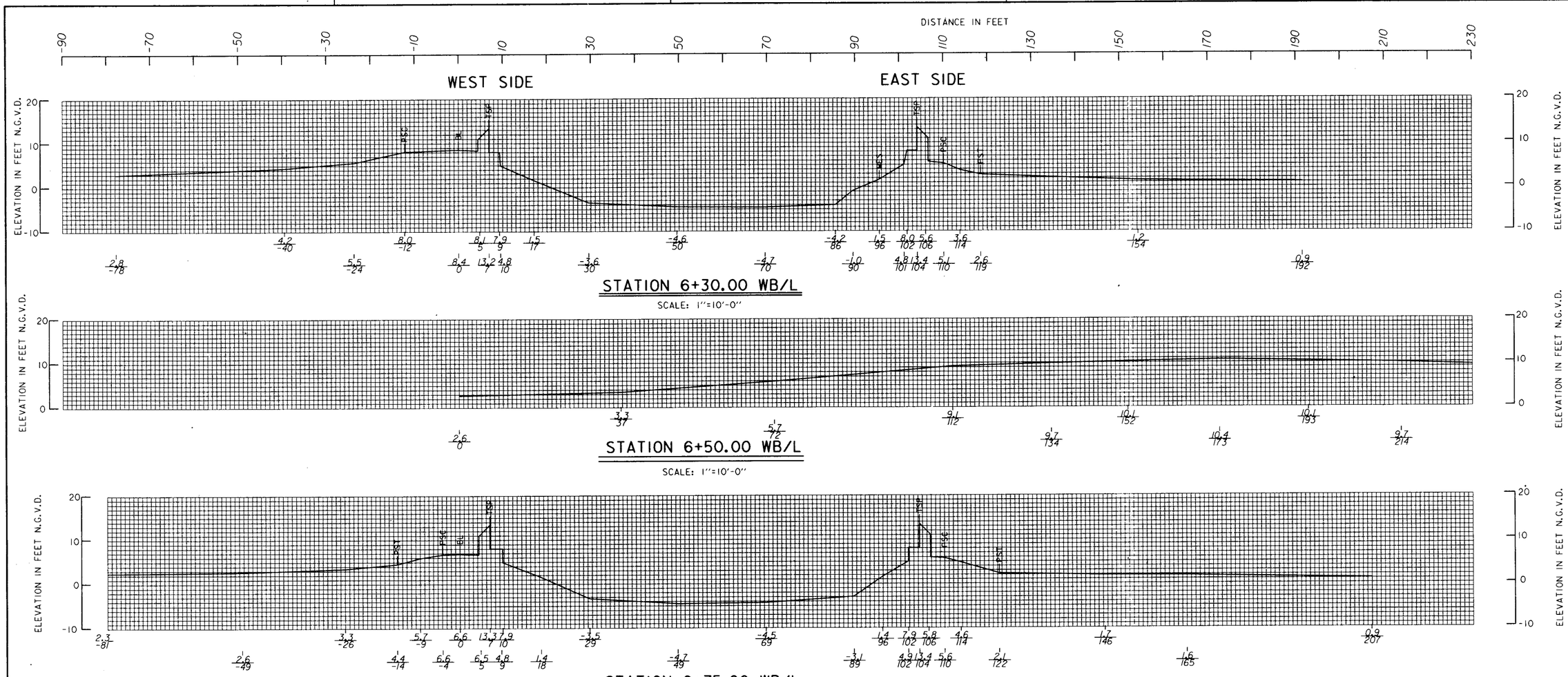
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

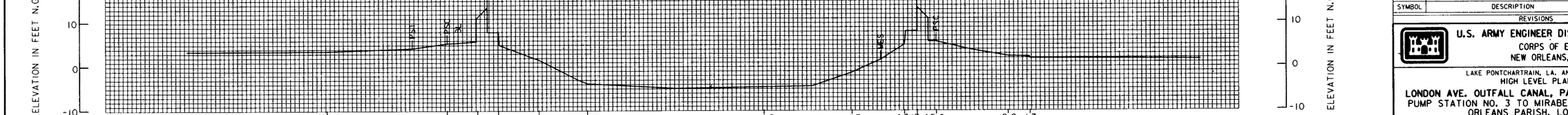
SURVEY DATA - EXISTING CONDITIONS

DESIGNED BY: X	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
DRAWN BY: P.J.S.			
CHECKED BY: W.O.B.	CADD FILE: 40145h24.dgn		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R1 OF R17



STATION 6+30.00 WB/L

SCALE: 1"=10'-0"



STATION 6+50.00 WB/L

SCALE: 1"=10'-0"

STATION 6+75.00 WB/L

SCALE: 1"=10'-0"

STATION 7+40.00 WB/L

SCALE: 1"=10-0"

NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

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STATION 8+35.43 WB/L

SCALE: 1"=10'-0"

VALUE INCENTIVE CLAUSES FOR ENGINEERS — YOUR KEY TO INCREASED HIGHER PROFITS

C·A·D

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO. 3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SURVEY DATA - EXISTING CONDITIONS

DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145H2C.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R2 OF R17

DISTANCE IN FEET

-40 -20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320

WEST SIDE EAST SIDE

ELEVATION IN FEET N.G.V.D.

20 10 0 -10

STATION 9+00.15 WB/L

SCALE: 1"=10'

STATION 10+80.0 WB/L

SCALE: 1"=10'

STATION 12+75.0 WB/L

SCALE: 1"=10'

10 0

STATION 13+20.0 WB/L

SCALE: 1"=10'

10 0

STATION 13+65.0 WB/L

SCALE: 1"=10'

NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

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SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

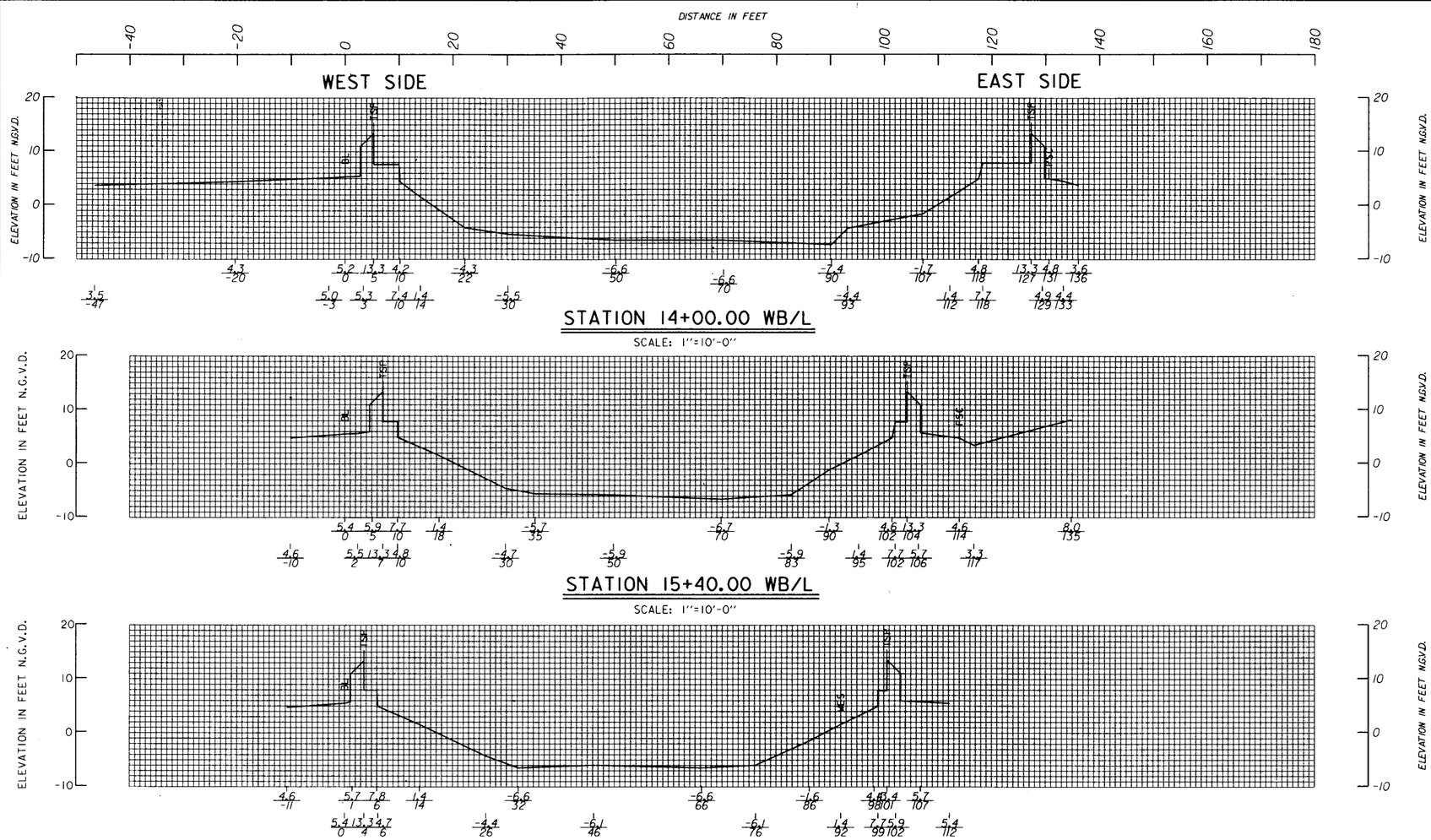
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SURVEY DATA - EXISTING CONDITIONS

DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 4014550A.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R3 OF R17



STATION 14+00.00 WB/L

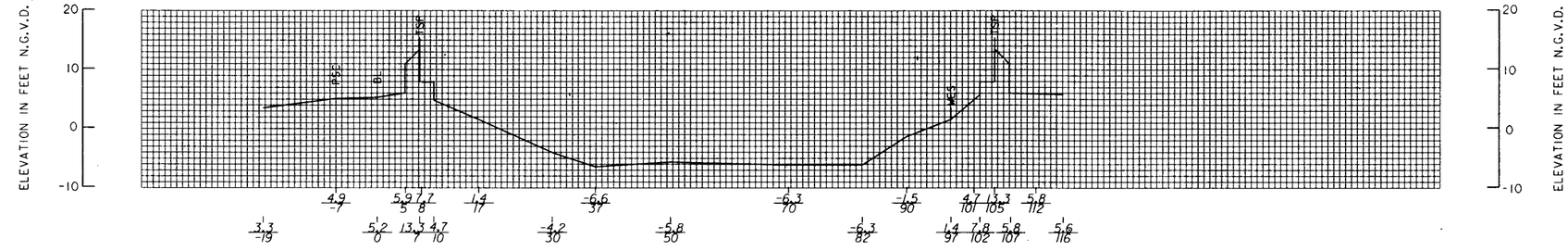
SCALE: 1"=10'-0"

STATION 15+40.00 WB/L

SCALE: 1"=10'-0"

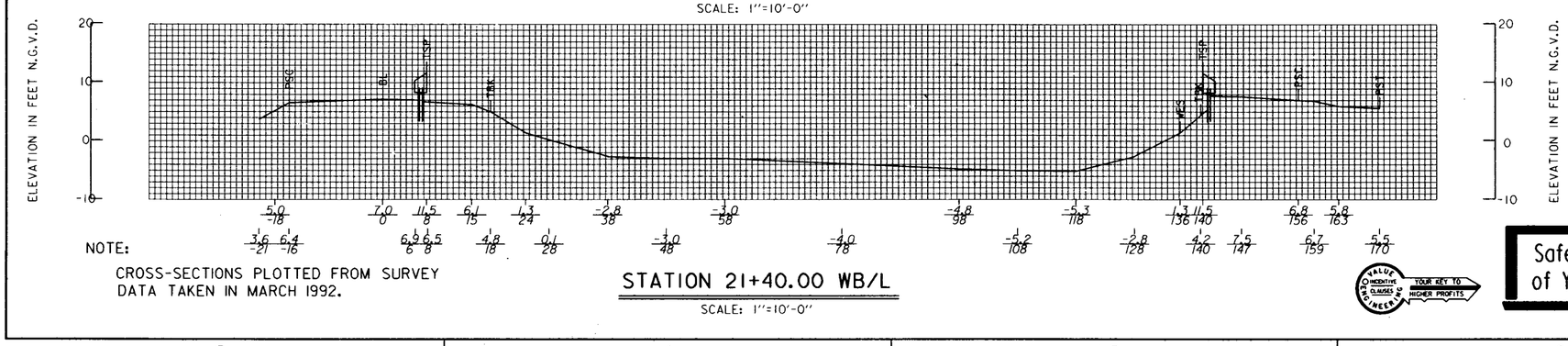
STATION 17+40.00 WB/L

SCALE: 1"=10'-0"



STATION 19+40.00 WB/L

SCALE: 1"=10'-0"



STATION 21+40.00 WB/L

SCALE: 1"=10'-0"

NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

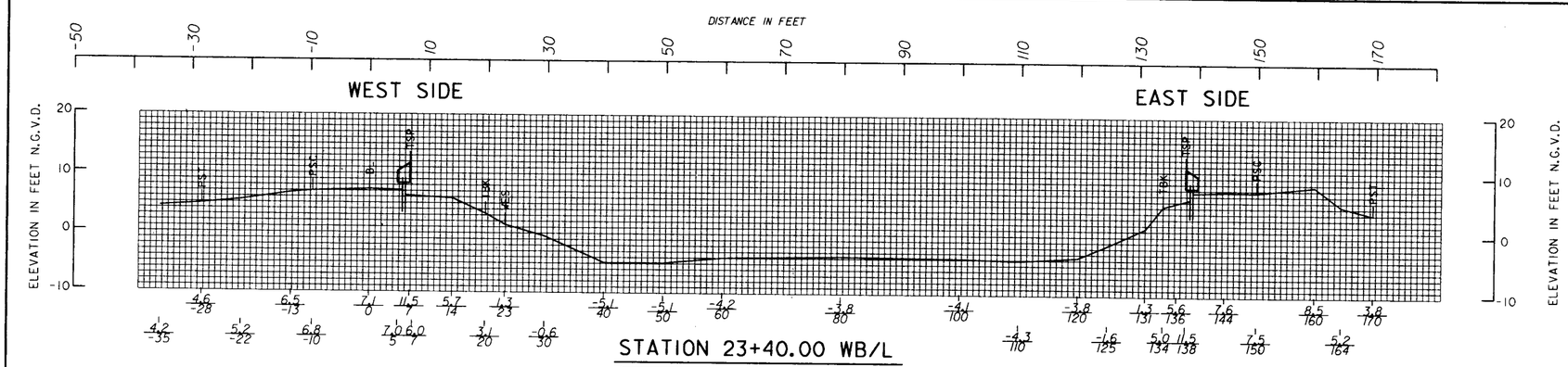
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

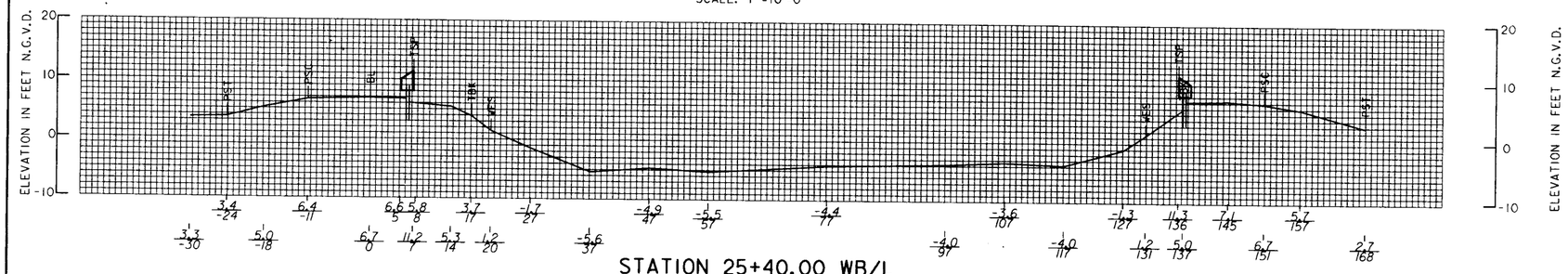
SURVEY DATA - EXISTING CONDITIONS

DESIGNED BY: X	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
DRAWN BY: P.J.S.			
CHECKED BY: W.O.B.	CADD FILE: 40145H2C.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R4 OF R17



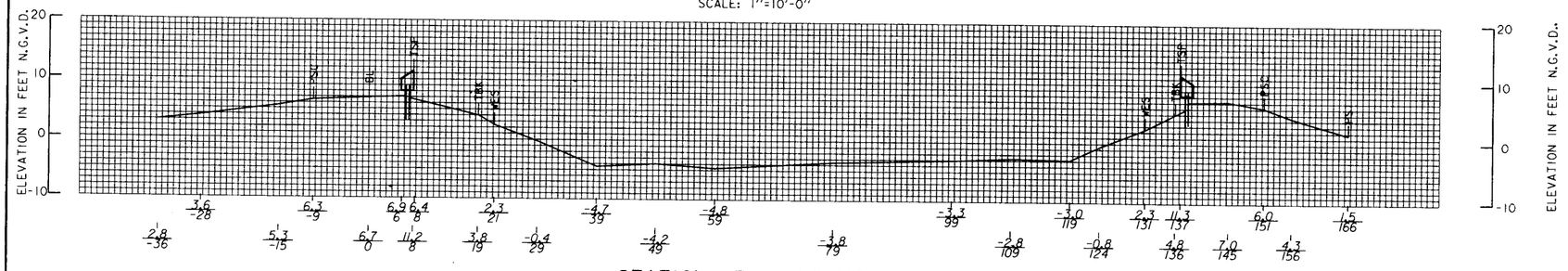
STATION 23+40.00 WB/L

SCALE: 1"=10'-0"



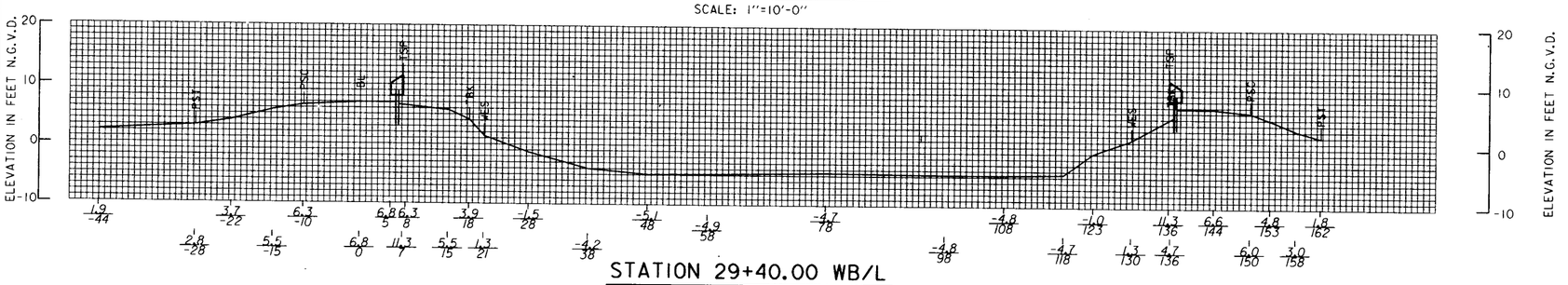
STATION 25+40.00 WB/L

SCALE: 1"=10'-0"



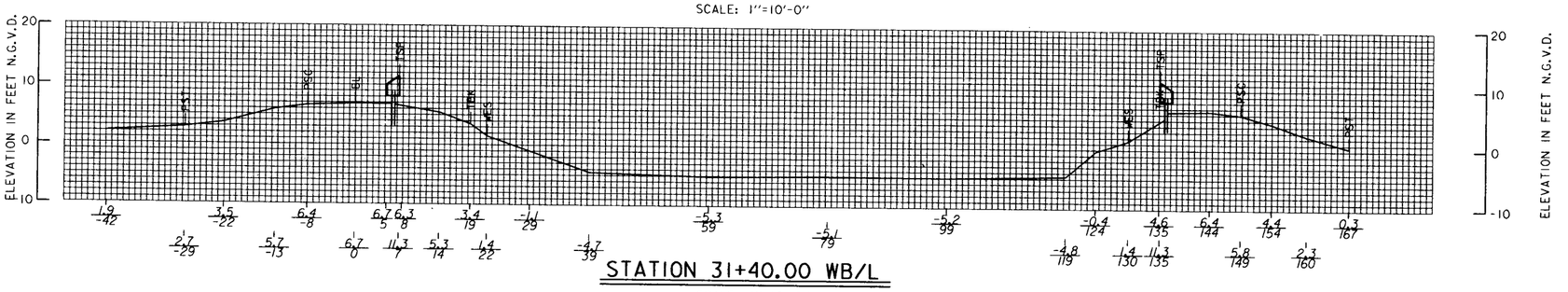
STATION 27+40.00 WB/L

SCALE: 1"=10'-0"



STATION 29+40.00 WB/L

SCALE: 1"=10'-0"



STATION 31+40.00 WB/L

SCALE: 1"=10'-0"

NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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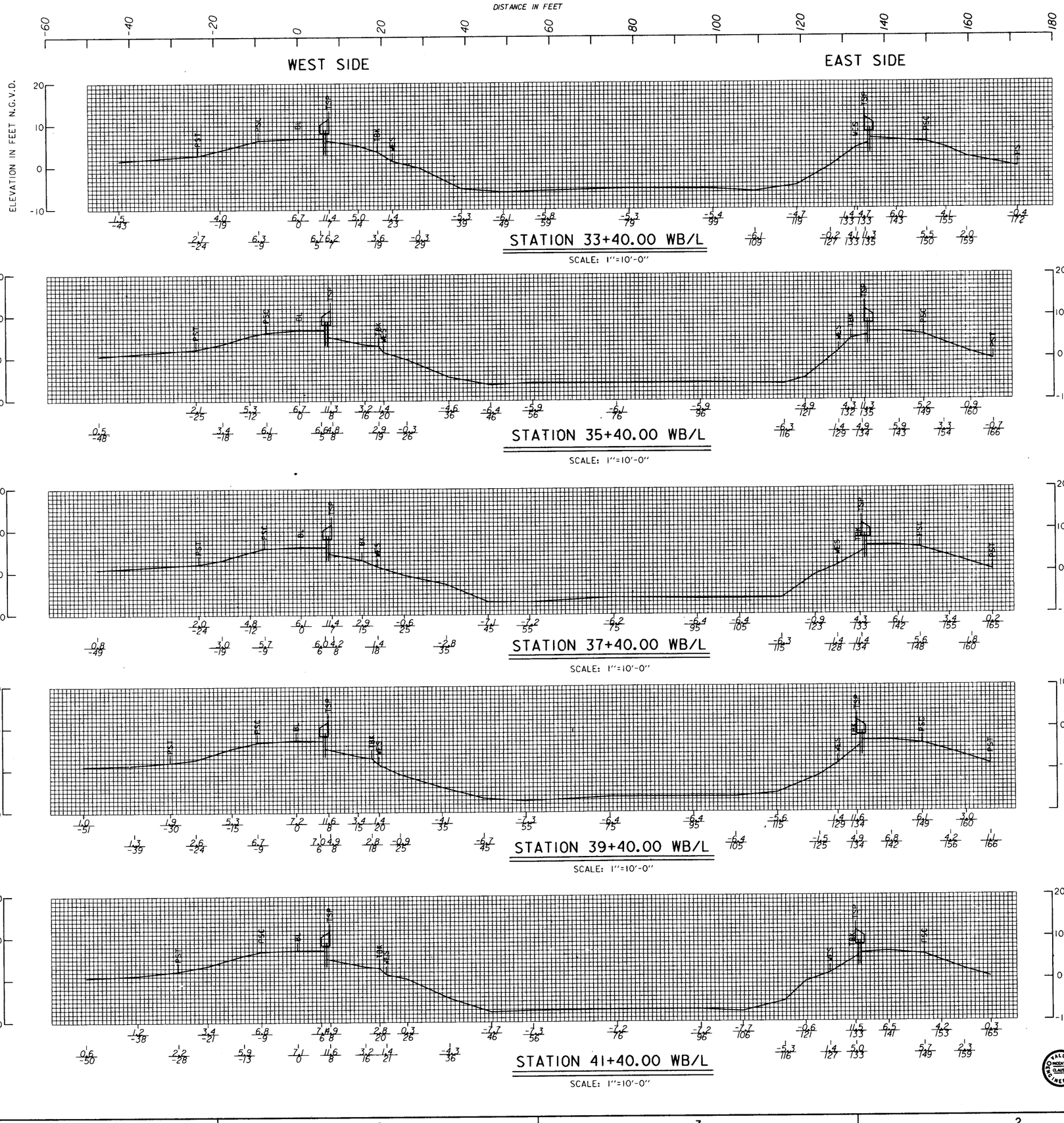
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SURVEY DATA - EXISTING CONDITIONS

DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145HQ3.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R5 OF R17

Safety is a Part of Your Contract



NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SURVEY DATA - EXISTING CONDITIONS

DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145H30.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R6 OF R17

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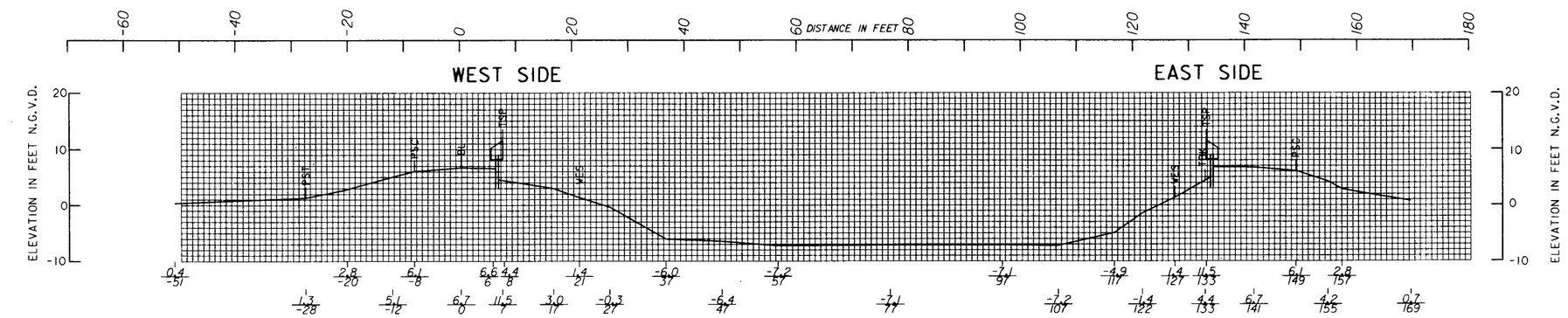
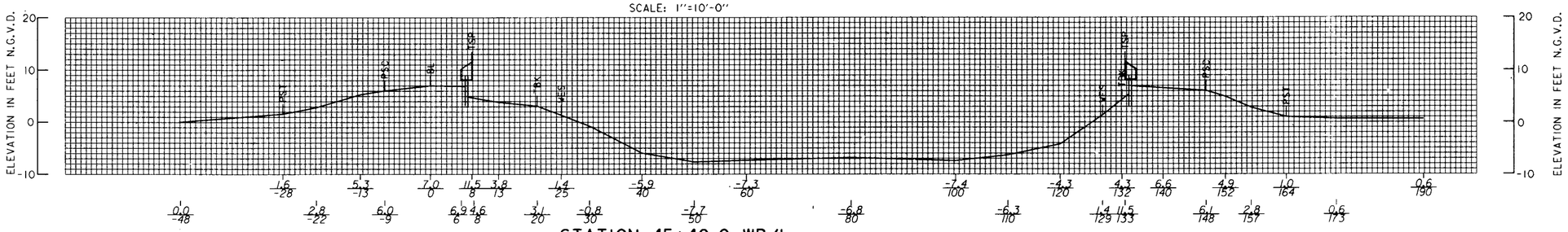
VALUE INCENTIVE CLAUSES ENGINEERING — YOUR KEY TO HIGHER PROFITS

C·A·D



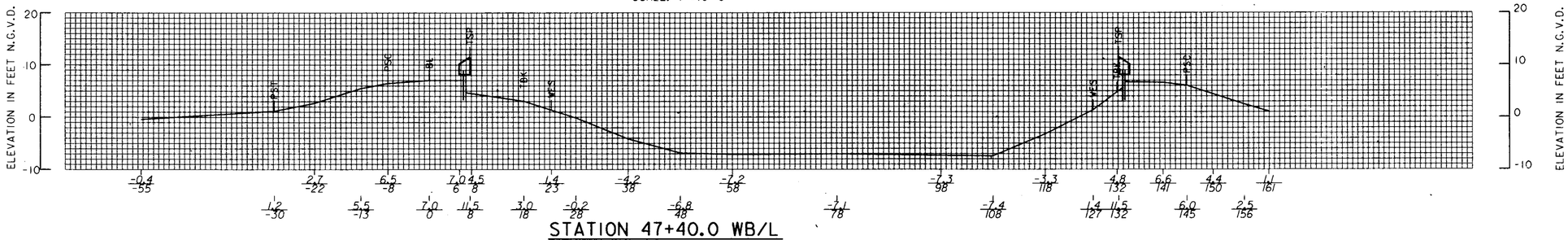
STATION 43+40.0 WB/L

SCALE: 1"=10'-0"



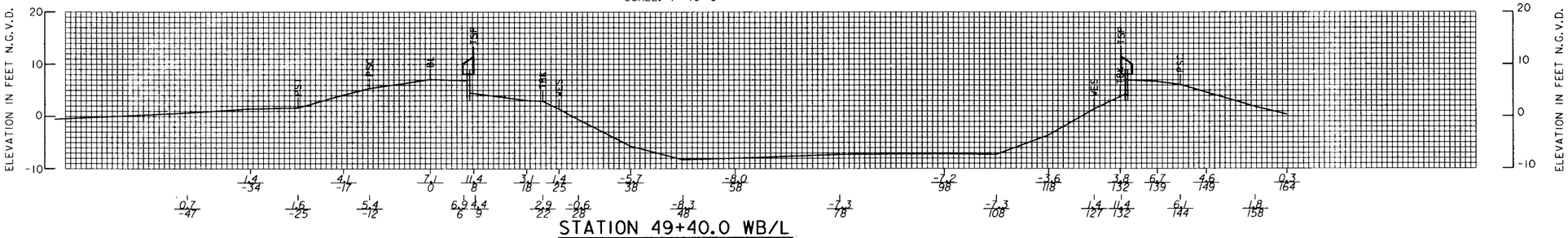
STATION 45+40.0 WB/L

SCALE: 1"=10'-0"



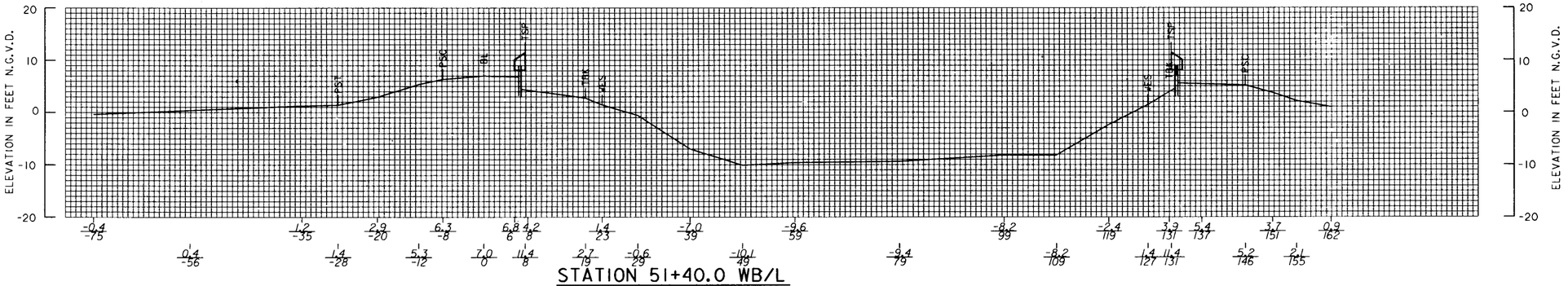
STATION 47+40.0 WB/L

SCALE: 1"=10'-0"



STATION 49+40.0 WB/L

SCALE: 1"=10'-0"



STATION 51+40.0 WB/L

SCALE: 1"=10'-0"

NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED
	REVISIONS		

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

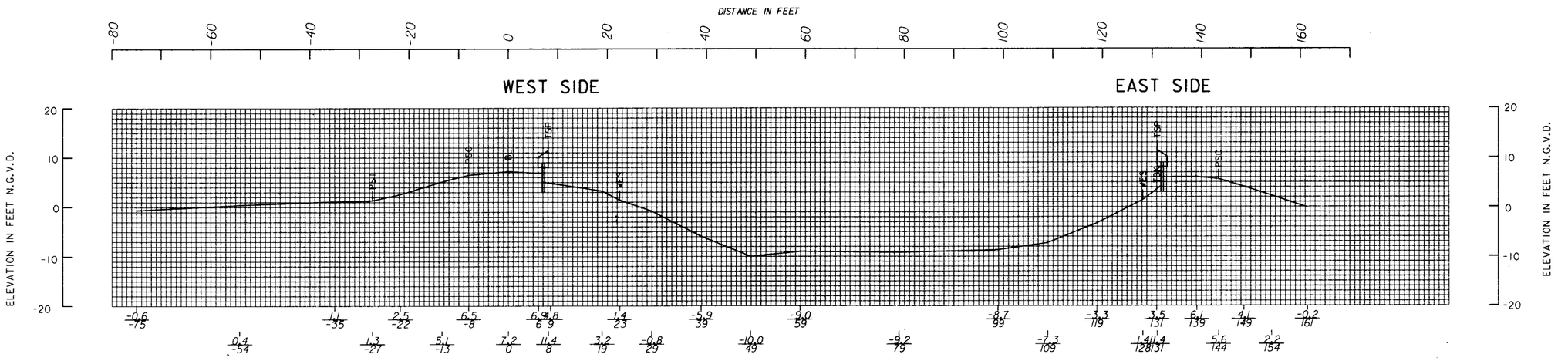
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SURVEY DATA - EXISTING CONDITIONS

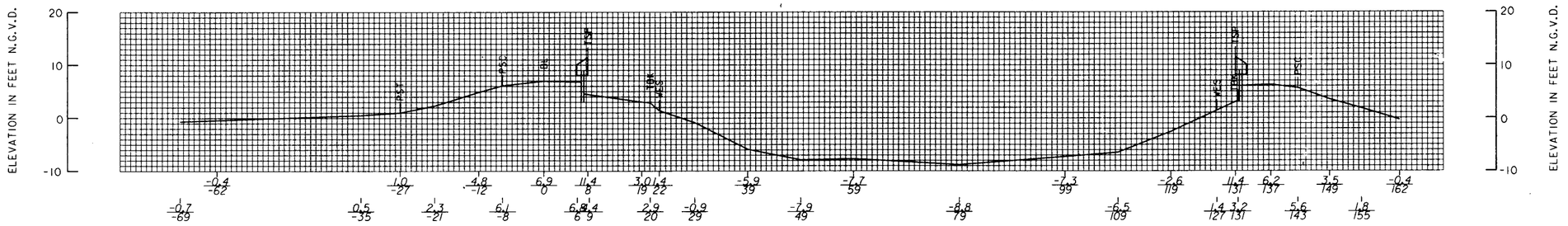
DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145H3.DGN		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R7 OF R17

Safety is a Part of Your Contract



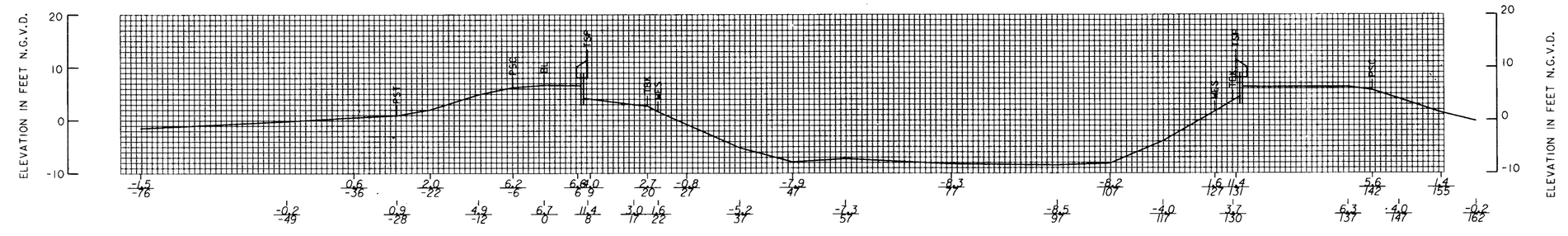
STATION 53+40.0 WB/L

SCALE: 1"=10'-0"



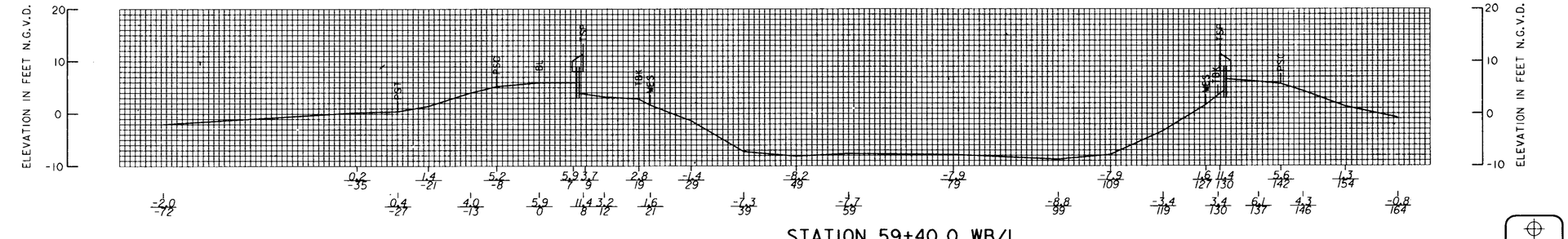
STATION 55+40.0 WB/L

SCALE: 1"=10'-0"



STATION 57+40.0 WB/L

SCALE: 1"=10'-0"



STATION 59+40.0 WB/L

SCALE: 1"=10'-0"

NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SURVEY DATA - EXISTING CONDITIONS

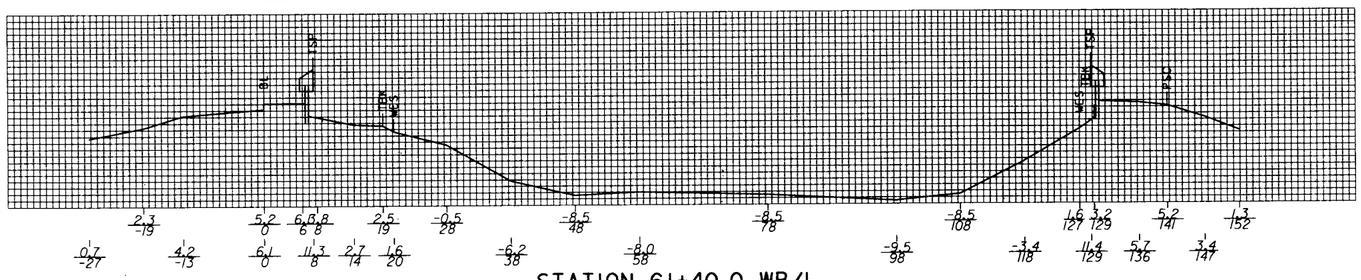
DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 15 JUNE 93
	CADD FILE: 40145n32.dgn		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BALMY, JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R8 OF R17

DISTANCE IN FEET

-40 -20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300

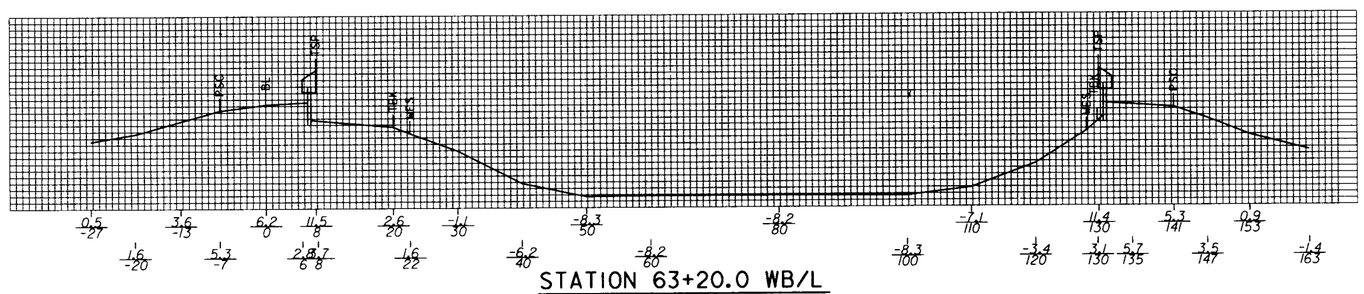
WEST SIDE EAST SIDE

ELEVATION IN FEET N.G.V.D. 20 10 0 -10



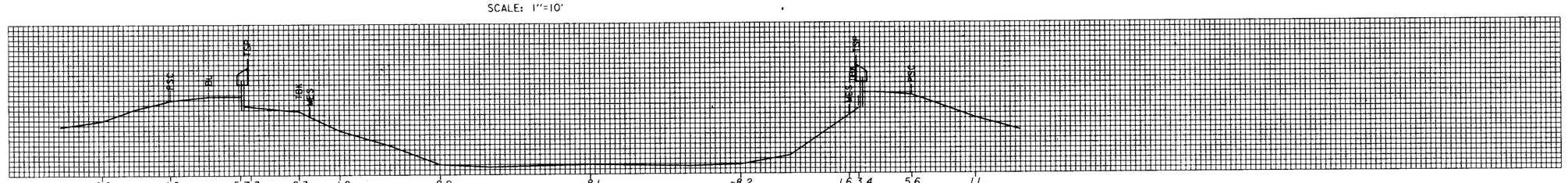
STATION 61+40.0 WB/L

SCALE: 1"=10'



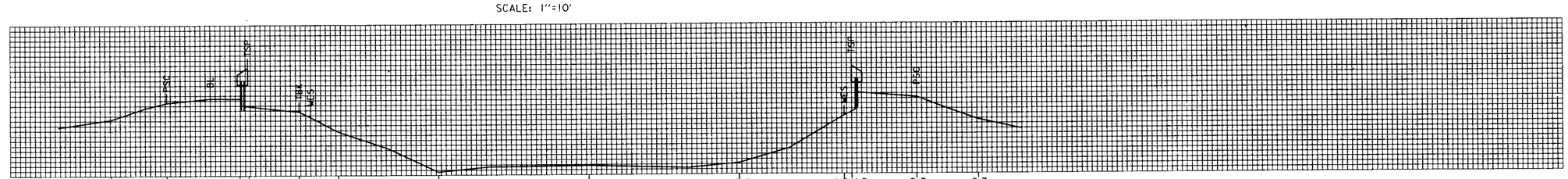
STATION 63+20.0 WB/L

SCALE: 1"=10'



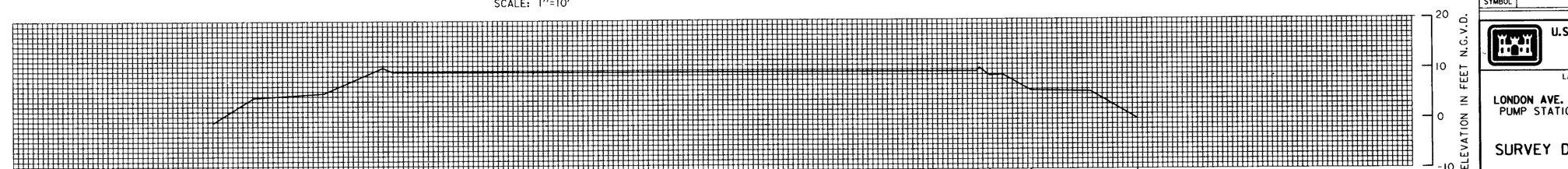
STATION 65+20.0 WB/L

SCALE: 1"=10'



STATION 67+20.0 WB/L

SCALE: 1"=10'



STATION 69+20.0 WB/L

SCALE: 1"=10'

Safety is a Part of Your Contract

VALUE ENGINEERING CLAUSES — YOUR KEY TO HIGHER PROFITS

C•A•D

NOTE:

CROSS-SECTIONS PLOTTED FROM SURVEY DATA TAKEN IN MARCH 1992.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

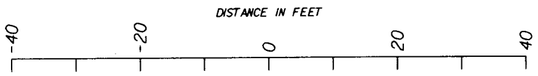
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

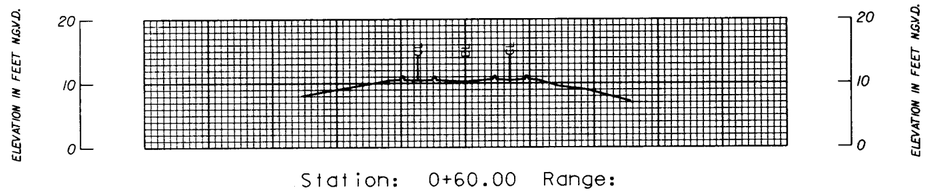
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

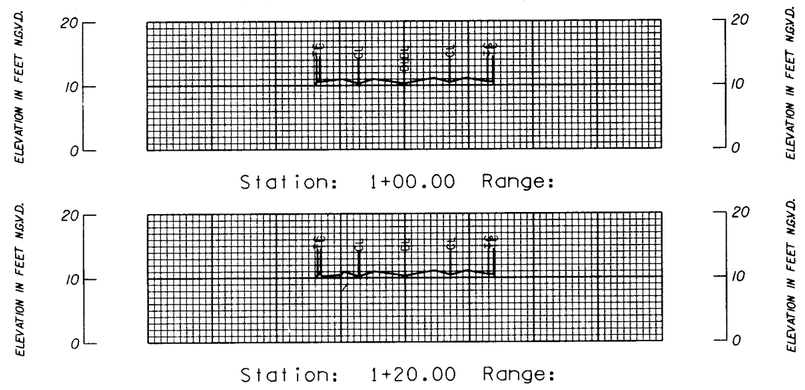
SURVEY DATA - EXISTING CONDITIONS

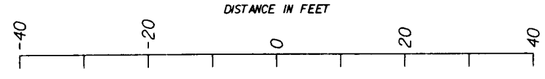
DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145h33.dgn		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R9 OF R17

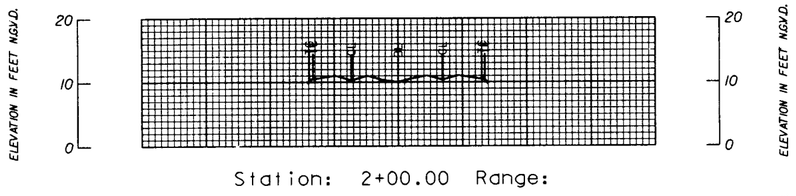
Safety is a Part of Your Contract

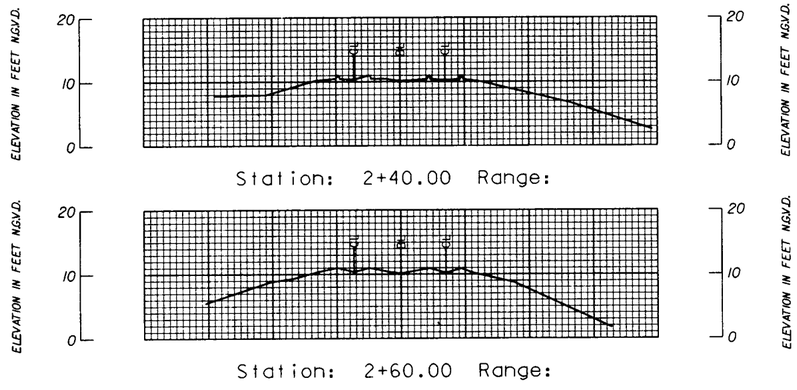








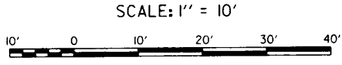




SOUTHERN R.R.

NOTE:
STATIONING BEGINS ON WEST SIDE OF CANAL AND CONTINUES ALONG THE CENTERLINE OF THE TWO SETS OF RAILROAD TRACKS FOR THIS DWG. ONLY.
⚠ STATION 0+00 IS 80 FEET WEST OF THE BRIDGE ABUTMENT.

SCALE: 1'' = 10'



SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	REVISED NOTE; AMEND. NO. 1	10-6-93	A.L.D.

REVISIONS

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

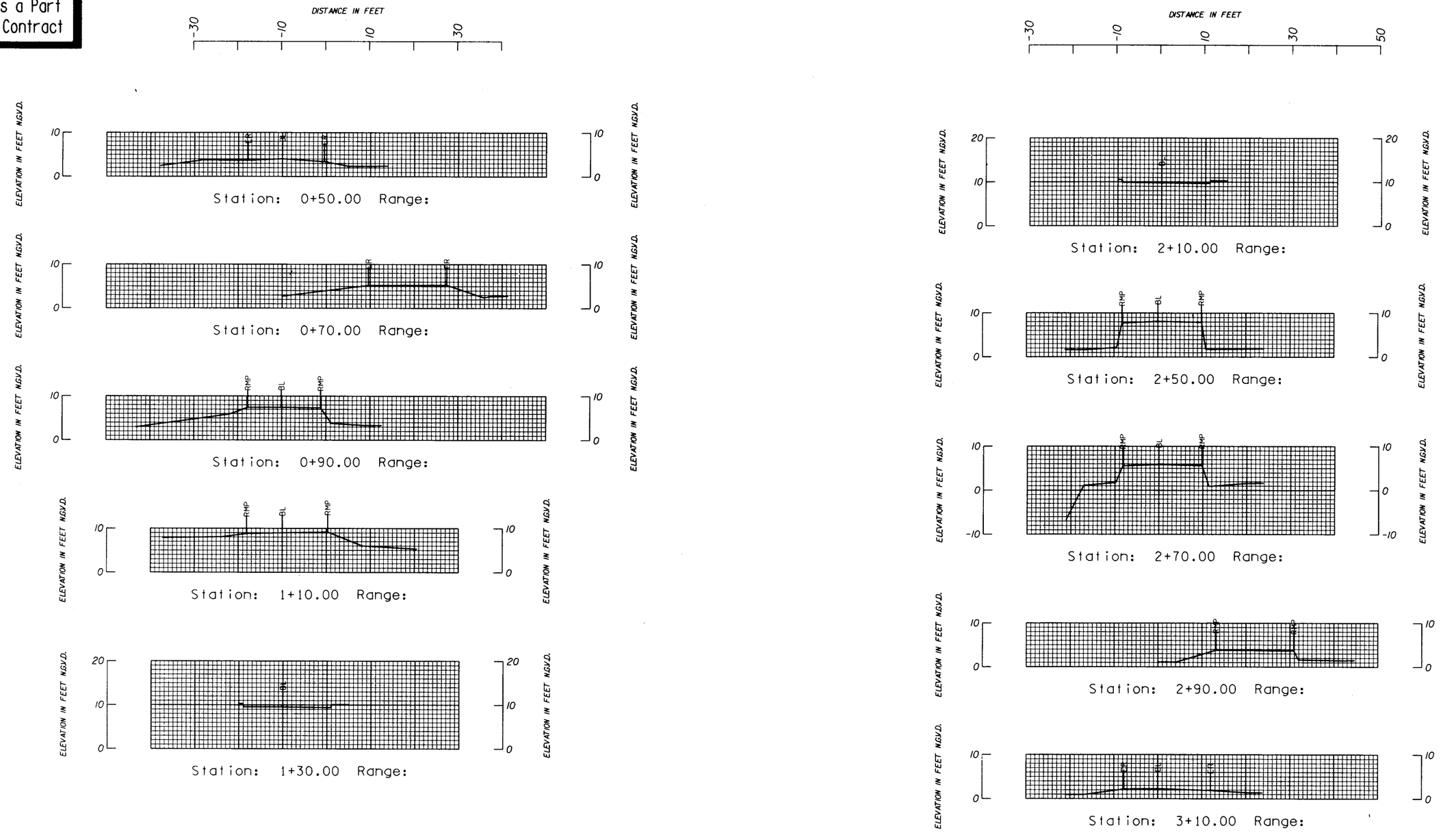
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN

LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SURVEY DATA - EXISTING CONDITIONS

DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145103.cgm		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R10 OF R17

Safety is a Part of Your Contract



BENEFIT ST. BRIDGE

NOTE:
STATIONING BEGINS ON WEST SIDE OF CANAL AND CONTINUES ALONG THE CENTERLINE OF THE BENEFIT ST. BRIDGE FOR THIS DWG. ONLY.
⚠ STATION 0+00 IS 25 FEET WEST OF THE RAMP TOE.

SCALE: 1'' = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED
⚠	REVISED NOTE; AMEND. NO. 1	10-6-93	A.L.D.

REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

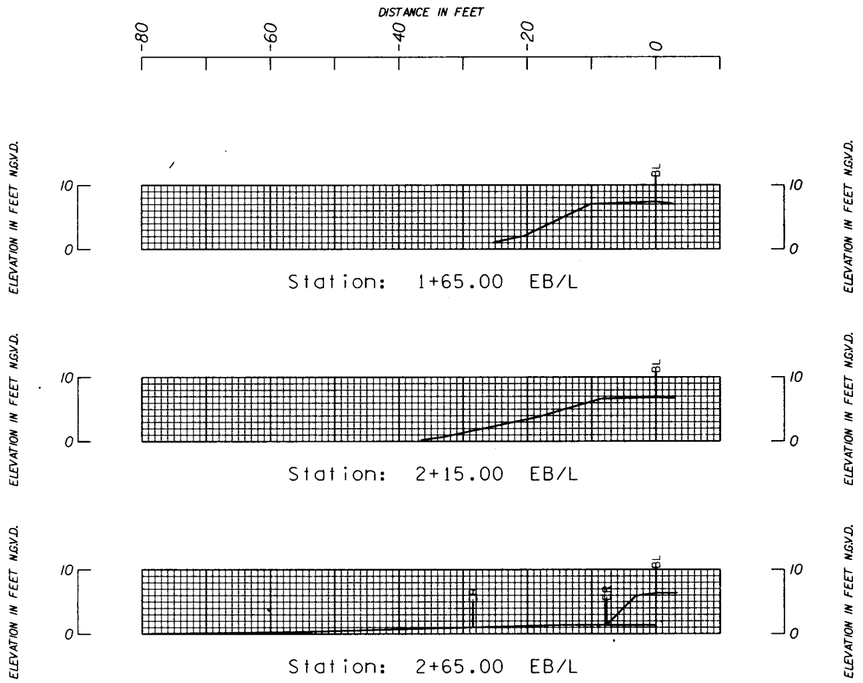
SURVEY DATA - EXISTING CONDITIONS

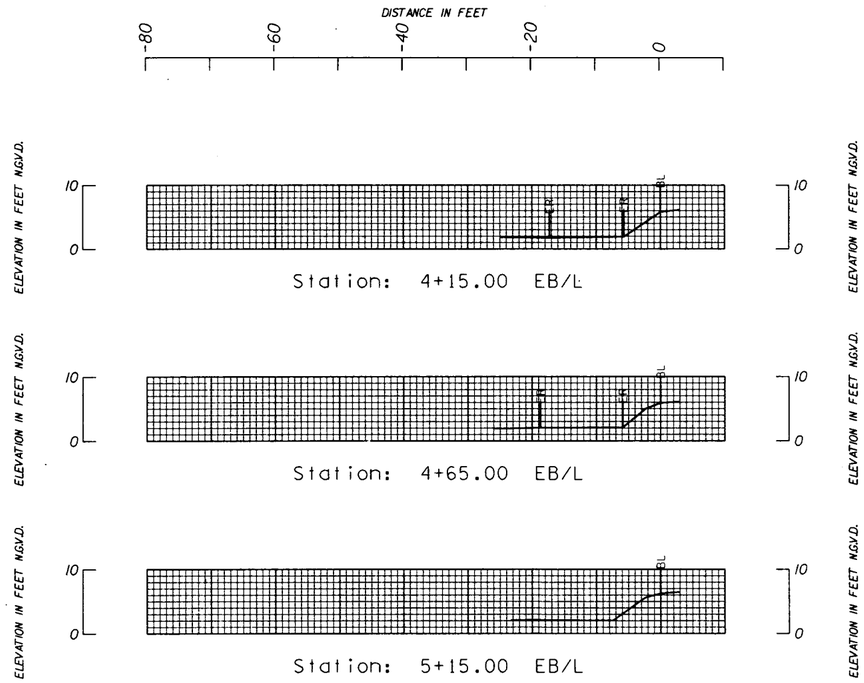
DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145f04.cgn		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R11 OF R17

INCENTIVE CLAUSE VALUE ENGINEERING — YOUR KEY TO HIGHER PROFITS

C•A•D

Safety is a Part of Your Contract





I+65 TO 5+65 EB/L

EB/L = EAST BASELINE

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISIONS

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

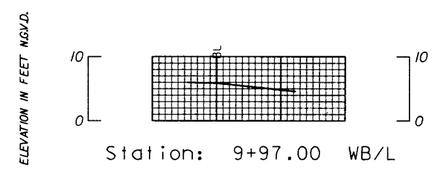
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

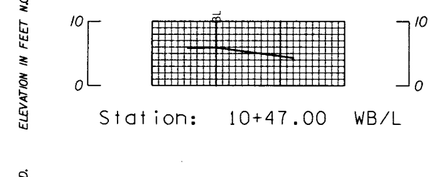
SURVEY DATA - EXISTING CONDITIONS

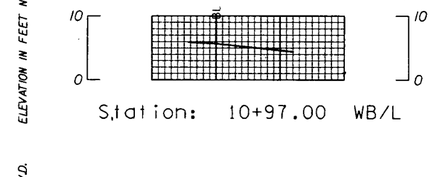
DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145105.dgn		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R12 OF R17

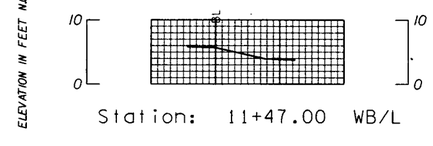
C•A•D

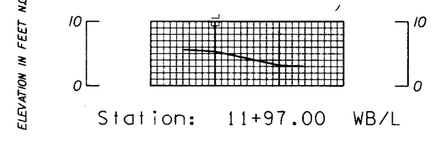
Safety is a Part of Your Contract

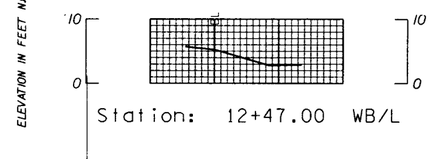


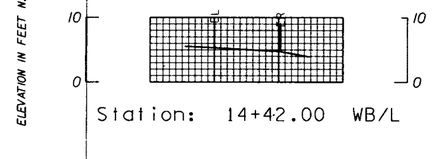


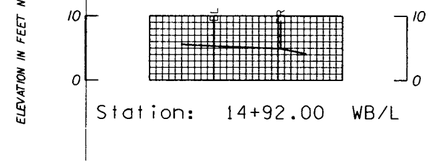


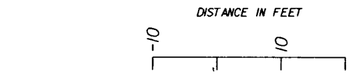


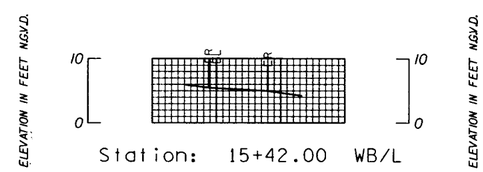


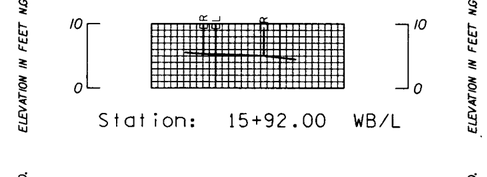


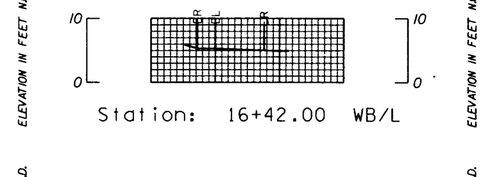


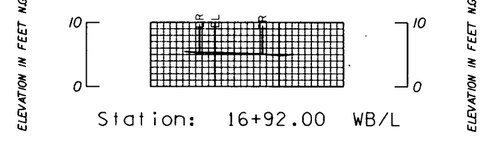


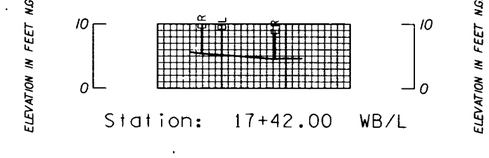


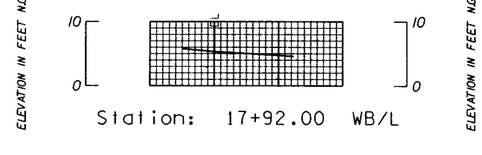


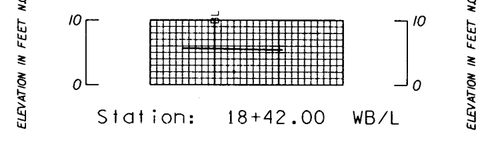


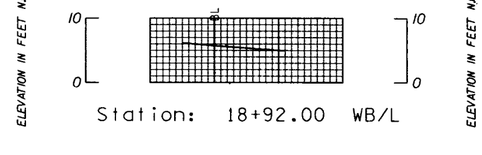


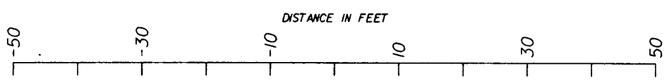


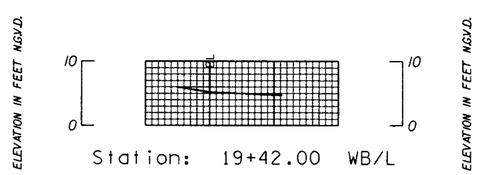


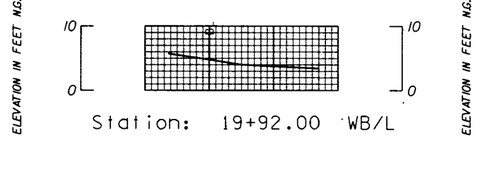


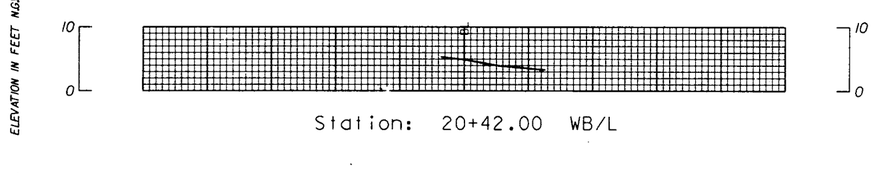


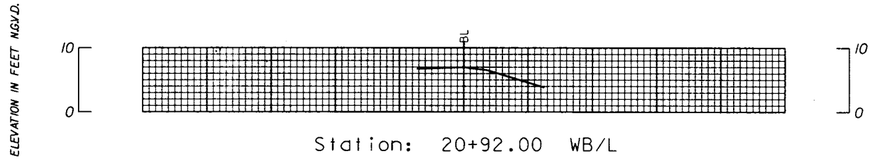


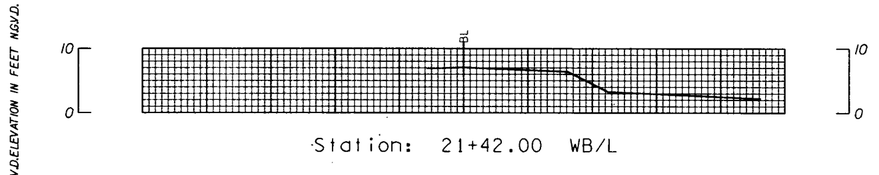


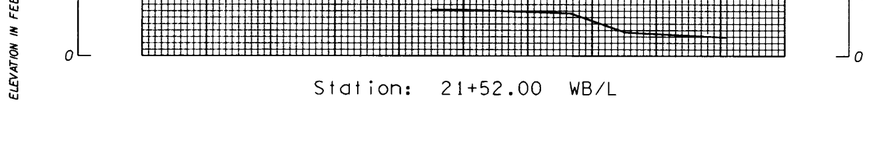












WB/L = WEST BASELINE

NOTE:

ER = EDGE OF ROAD

SCALE: 1" = 10'

10' 0 10' 20' 30' 40'

SYMBOL	DESCRIPTION	DATE	APPROVED

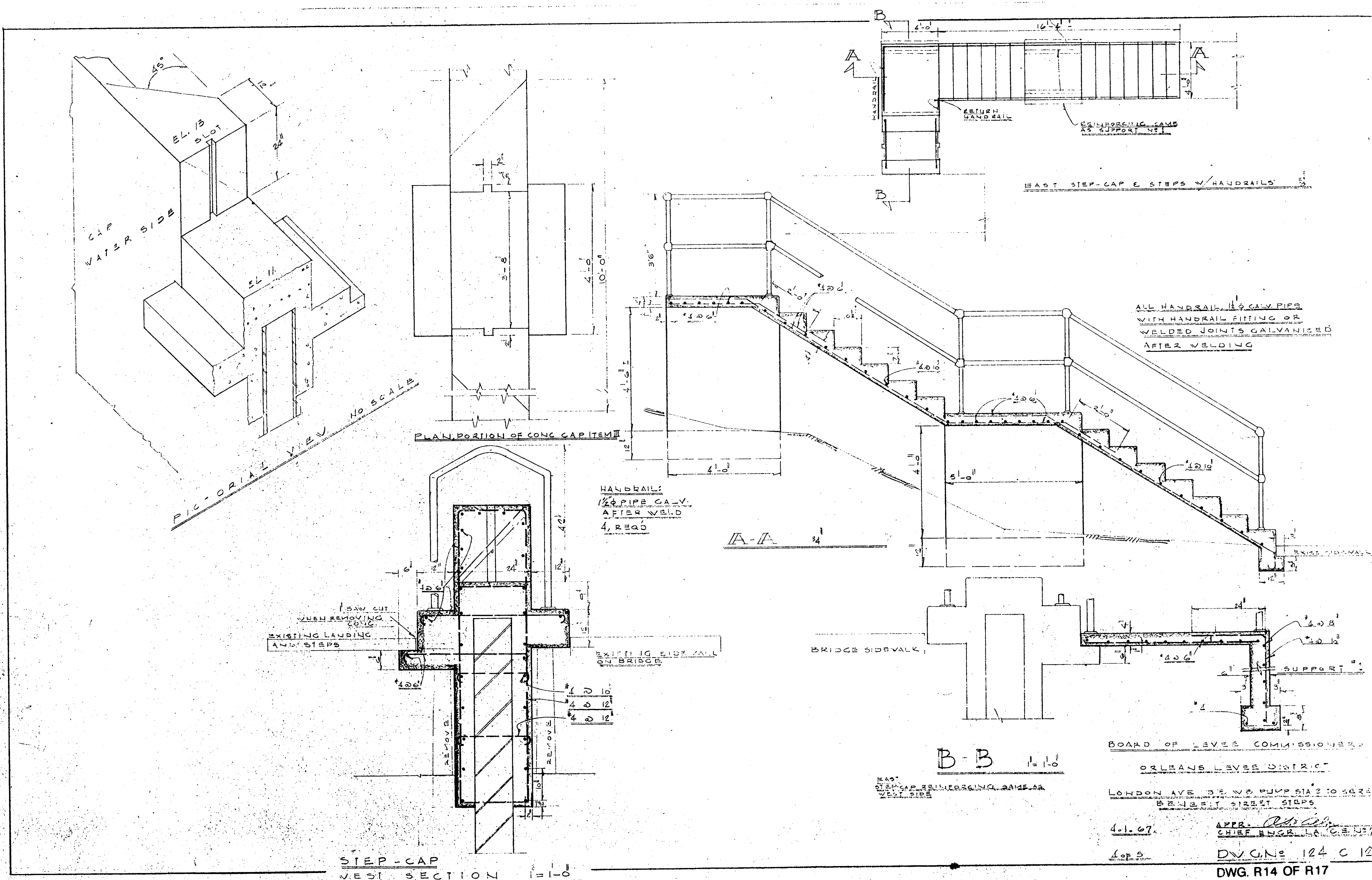
REVISIONS

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

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
PUMP STATION NO.3 TO MIRABEAU AVE. FLOODWALL
ORLEANS PARISH, LOUISIANA

SURVEY DATA - EXISTING CONDITIONS

DESIGNED BY: X DRAWN BY: P.J.S. CHECKED BY: W.O.B.	DATE: JUNE 93	PLOT SCALE: 120	PLOT DATE: 17 JUNE 93
	CADD FILE: 40145f02.dgn		FILE NO. H-4-40145
SUBMITTED BY: WALTER O. BAUMY JR., P.E. DESIGN ENGINEER	SOLICITATION NO. DACW29-93-B-0080		DWG. R13 OF R17


PIC-ORIAL VIEW NO SCALE
CAP WATER SIDE
EL. 13
SLOT
EL. 11
45°
24"
PLAN, PORTION OF CONC CAP ITEM III
3'-8"
4'-0"
10'-0"
EAST STEP-CAP & STEPS W/ HANDRAILS
RETURN HANDRAIL
REINFORCING SAME AS SUPPORT No 1
HANDRAIL
16'-4"
4'-0"
ALL HANDRAIL 1½"Ø GALV. PIPE WITH HANDRAIL FITTING OR WELDED JOINTS GALVANIZED AFTER WELDING
HANDRAIL: 1½"Ø PIPE GALV. AFTER WELD 4, REQ'D
A-A 3/4"
3'6"
4'-0"
5'-0"
EXIST. SIDEWALK
#4 @ 6"
#4 @ 10"
2'-0"
STEP-CAP WEST SECTION 1"=1'-0"
1" SAW CUT WHEN REMOVING CONC.
EXISTING LANDING AND STEPS
EXISTING SIDEWALK ON BRIDGE
REMOVE
#4 @ 10"
#4 @ 12"
#4 @ 12"
24"
12"
BRIDGE SIDEWALK
SUPPORT #1
#4 @ 8"
#4 @ 6"
B-B 1"=1'-0"
EAST STEP-CAP REINFORCING SAME AS WEST SIDE

BOARD OF LEVEE COMMISSIONERS

ORLEANS LEVEE DISTRICT

LONDON AVE. 3'E. W.B. PUMP STA. 2 TO SEREE

BENEFIT STREET STEPS

4.1.67.

APPR. [signature] CHIEF ENGR. LA. C.E. No 7

1 OF 5

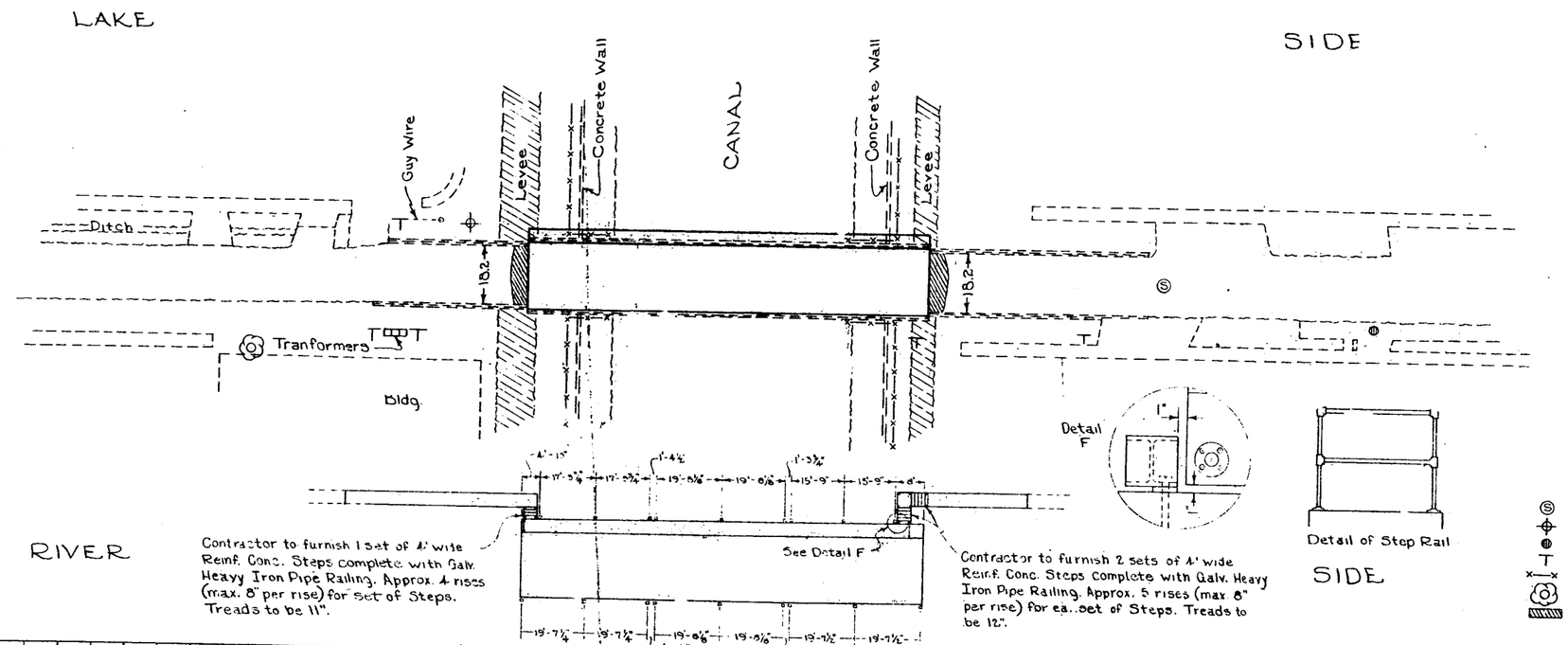
DWG. No 124 C 12

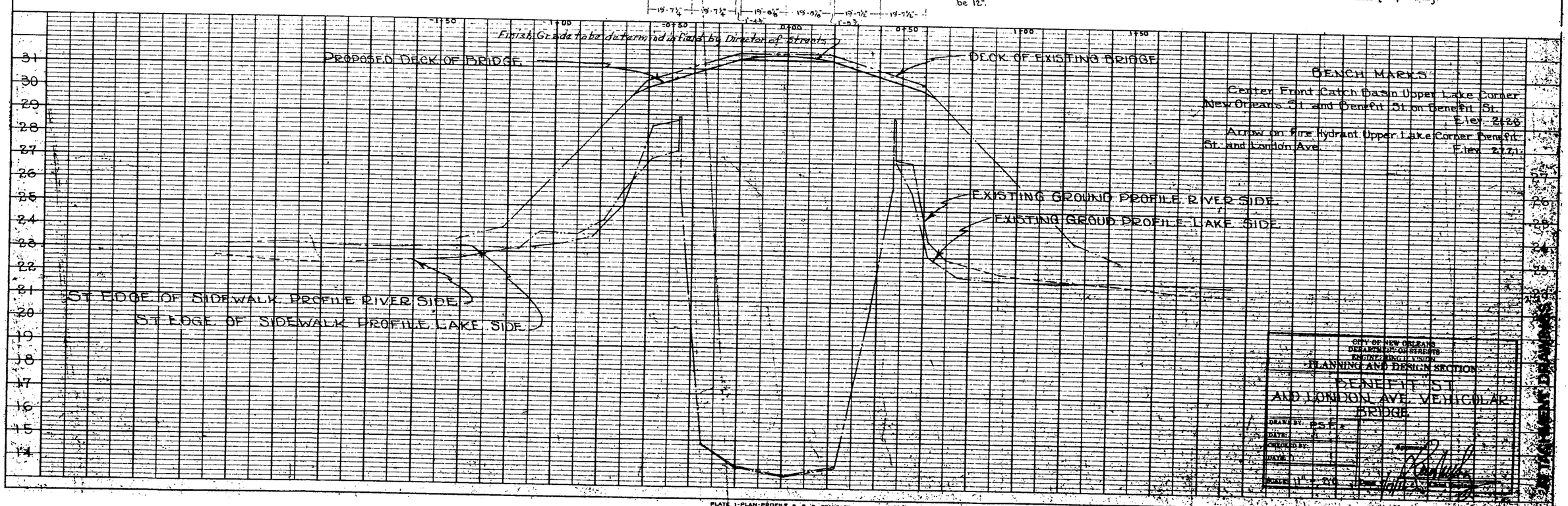
DWG. R14 OF R17

BENEFIT ST. AND LONDON AVE. VEHICULAR BRIDGE

SCALE - 1" = 20'

SHEET 1 OF 2 SHEET





BENCH MARKS

Center Front Catch Basin Upper Lake Corner New Orleans St. and Benefit St. on Benefit St.
Elev. 2.26

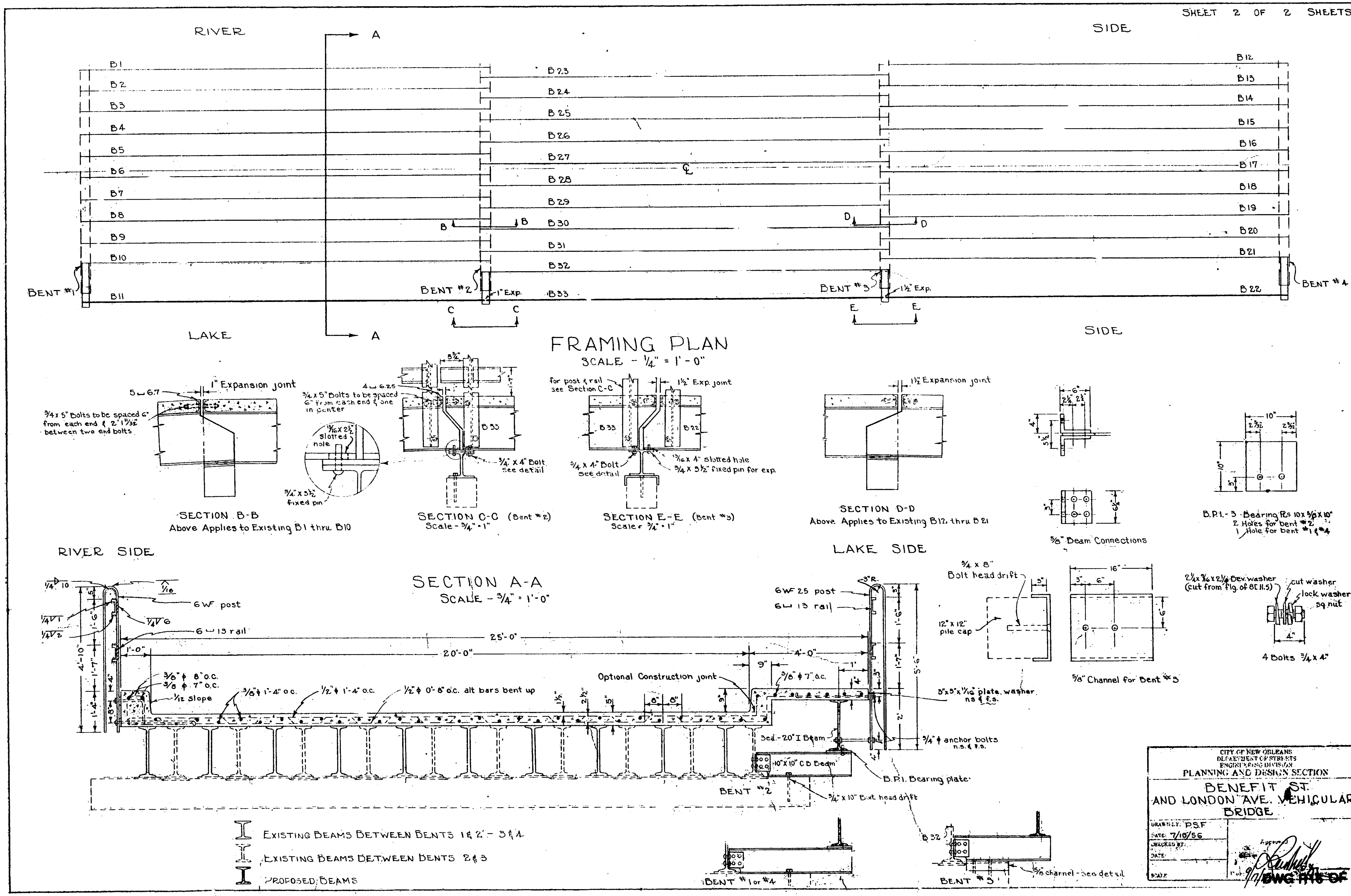
Arrow on Fire Hydrant Upper Lake Corner Benefit St. and London Ave.
Elev. 2.72

CITY OF NEW ORLEANS
DEPARTMENT OF STREETS
ENGINEERING DIVISION
PLANNING AND DESIGN SECTION

BENEFIT ST. AND LONDON AVE. VEHICULAR BRIDGE

DRAWN BY: P.S.E.
DATE:
CHECKED BY:
DATE:
SCALE: 1" = 2'-0"

PLATE 1-PLAN-PROFILE B. R. R.-STANDARD
1002-RAG PAPER MADE AND PRINTED IN U. S. A.


SHEET 2 OF 2 SHEETS
RIVER
SIDE
LAKE
SIDE
B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11
B12 B13 B14 B15 B16 B17 B18 B19 B20 B21 B22
B23 B24 B25 B26 B27 B28 B29 B30 B31 B32 B33
BENT #1
BENT #2
1" Exp.
BENT #3
1½" Exp.
BENT #4
FRAMING PLAN
SCALE - ¼" = 1' - 0"
1" Expansion joint
5 ⌴ 6.7
¾ x 5" Bolts to be spaced 6" from each end & 2' 1 11/32" between two end bolts
SECTION B-B
Above Applies to Existing B1 thru B10
4 ⌴ 6.25
¾ x 5" Bolts to be spaced 6" from each end & one in center
13/16 x 2½ slotted hole
¾" x 5½" fixed pin
¾" x 4" Bolt see detail
SECTION C-C (Bent #2)
Scale - ¾" = 1"
for post & rail see Section C-C
1½" Exp. joint
¾ x 4" Bolt see detail
13/16 x 4" slotted hole
¾ x 5½" fixed pin for exp.
SECTION E-E (Bent #3)
Scale - ¾" = 1"
1½" Expansion joint
SECTION D-D
Above Applies to Existing B12 thru B21
⅝" Beam Connections
B.P.1.-3 Bearing Pls 10 x ⅝ x 10"
2 Holes for bent #2
1 Hole for bent #1 & #4
RIVER SIDE
LAKE SIDE
SECTION A-A
SCALE - ¾" = 1'-0"
6WF post
6 ⌴ 13 rail
6WF 25 post
6 ⌴ 13 rail
25'-0"
20'-0"
4'-0"
⅜" ϕ 8" o.c.
⅜ ϕ 7" o.c.
1/12 slope
⅜" ϕ 1'-4" o.c.
½" ϕ 1'-4" o.c.
½" ϕ 0'-8" o.c. alt bars bent up
Optional Construction joint
⅜" ϕ 7" o.c.
5"x5"x 11/16 plate, washer n.s. & f.s.
Sec. 20" I Beam
¾" ϕ anchor bolts n.s. & f.s.
10"x10" C.B Beam
B.P.1. Bearing plate
BENT #2
¾" x 10" Bolt head drift
¾ x 8" Bolt head drift
12" x 12" pile cap
⅝" Channel for Bent #3
2¼ x 9/16 x 2¼ Bev. washer (cut from flg. of 8I 11.5)
cut washer
lock washer
sq. nut
4 Bolts ¾ x 4"
EXISTING BEAMS BETWEEN BENTS 1 & 2 - 3 & 4
EXISTING BEAMS BETWEEN BENTS 2 & 3
PROPOSED BEAMS
BENT #1 or #4
B 32
BENT #3
⅝ channel - see detail
CITY OF NEW ORLEANS
DEPARTMENT OF STREETS
ENGINEERING DIVISION
PLANNING AND DESIGN SECTION
BENEFIT ST. AND LONDON AVE. VEHICULAR BRIDGE
DRAWN BY: P.S.F.
DATE: 7/18/56
CHECKED BY:
DATE:
SCALE: