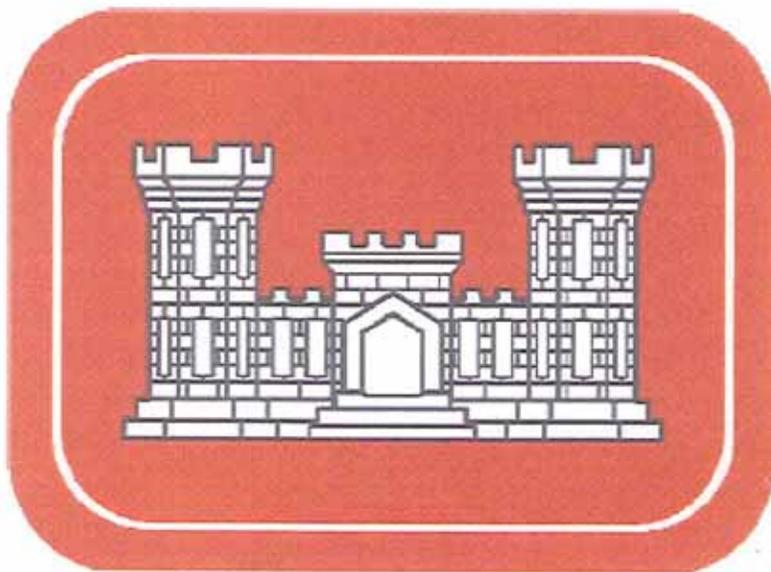


# **ENGINEERING ALTERNATIVES REPORT**

**West Bank and Vicinity, New Orleans, Louisiana  
Hurricane Protection Project  
Phase 2 Hurricane Protection  
Algiers Canal (East)  
Hero Levee to Hwy. 23  
WBV – 49.2  
Plaquemines Parish, Louisiana**

Prepared for:

**Department of the Army  
New Orleans District, Corps of Engineers**



Prepared by:

**HURRICANE PROTECTION ALLIANCE, JV  
527 W. Esplanade Ave., Ste. 200  
Kenner, LA 70065**

**October 30, 2008**

**FINAL**

**West Bank and Vicinity  
New Orleans, Louisiana  
Hurricane Protection Project**

**WBV- 49.2 Algiers Canal (East Side)  
Hero Levee To Hwy. 23  
Plaquemines Parish, Louisiana**

**TABLE OF CONTENTS**

<u>Description</u>	<u>Page No.</u>
<b><u>VOLUME I</u></b>	
1. INTRODUCTION	1
2. EXECUTIVE SUMMARY	2
3. PURPOSE AND SCOPE	3
a. Purpose	
b. Scope	
4. DESCRIPTION OF EXISTING PROTECTION	4
a. Type Of Protection	
b. Alignment	
c. Limits of Right-of-way	
d. Vegetation Free Zone for Operations and Maintenance	5
e. Level of Protection	
5. DESCRIPTION OF PROPOSED ALTERNATIVES	6
a. Alternative 1- T-Walls	
b. Alternative 2- Earthen Levees	8
c. Alternative 3- Reinforced Earthen Levees	9
d. Alternative Alignments	10
6. DESIGN REFERENCES, DESIGN CRITERIA AND DESIGN INFORMATION	11
a. Design References	
b. Design Criteria	
c. Hydraulic Design Criteria	14
d. Geotech/Civil design Criteria and Information	17
e. Structural Design Criteria and Information	18
f. Mechanical and Electrical	21

## TABLE OF CONTENTS

<u>Description</u>	<u>Page No.</u>
<b><u>VOLUME I</u></b>	
7. RELOCATIONS	21
8. ARMORING	22
9. SURVEYS	25
10. REAL ESTATE REQUIREMENTS	27
11. BORROW REQUIREMENTS	28
12. COST ENGINEERING	29
13. CONSTRUCTION SEQUENCE AND DURATION	30
14. QUALITY IMPLEMENTATION	31
15. RECOMMENDATIONS	32
16. OPERATION AND MAINTENANCE REQUIREMENTS	32

## **APPENDICIES**

<b>APPENDIX A</b>	<b>Geotechnical Report</b>
<b>APPENDIX B</b>	<b>Drawings</b>
<b>APPENDIX C</b>	<b>Design Calculations/ Information</b>
<b>APPENDIX D</b>	<b>Cost Estimate</b>
<b>APPENDIX E</b>	<b>Construction Duration</b>
<b>APPENDIX F</b>	<b>Independent Technical Review / ITR Certificate</b>
<b>APPENDIX G</b>	<b>DrChecks Reports (COE Review)</b>
<b>APPENDIX H</b>	<b>Design Quality Control Plan (DQCP)</b>

**Engineering Alternative Report (EAR)**  
**West Bank and Vicinity Hurricane Protection Projects**  
**WBV 49.2 Algiers Canal (East) Hero Levee to Hwy 23**  
**Plaquemines Parish, Louisiana**

**1. INTRODUCTION**

The Algiers Canal (East) project is part of the West bank and Vicinity (WBV) Hurricane Protection project, authorized via WRDA 1999 which combined three previously authorized projects under one heading. Through the hurricanes of 2005, this project was not completed as authorized. Since these hurricanes, additional authorizations have mandated the Corps of Engineers to complete the pre-authorized work on an accelerated schedule, repair and restore damaged sections, and raise the level of protection to 100-year, or 1% probability storm levels, in order to permit participation in the National Flood Insurance Program. This Engineering Alternative Report (EAR) specifically deals with increasing the level of protection along the east bank of the Algiers Canal between the Hero Levee and LA Rte 23 (B/L Stations 287+00 and 570+90). The EAR is required as part of the project planning phase and includes analysis of alternatives, construction cost estimates, right-of-way and relocation requirements, drawings, operation and maintenance considerations, design calculations, construction durations, geotechnical analysis, etc.

## **2. EXECUTIVE SUMMARY**

The previously authorized level of protection was designed and constructed to provide an un-reinforced earthen levee in this reach of the Greater New Orleans Hurricane and Storm Damage and Risk Reduction System, hereinafter referred to as HSDRRS. The WBV-49.2 EAR includes three alternative proposals for increasing the level of existing hurricane protection to 100-year levels through the year 2057. The scope of work dictated that the worst conditions encountered be used for design of each alternative. After reviewing the advantages and disadvantages for each of the three alternatives, consideration of a fourth alternative is recommended: a T-wall without a protected side berm, between the Belle Chasse tunnel and the existing drainage pumping station could be constructed within the existing right of way, and be the least disruptive to the adjacent residential neighborhood. A 15 ft. wide perpetual underground pile easement will be required to accommodate batter piling on the protected side of the wall. South of the pumping station, a reinforced earthen levee is recommended in this alternative. This would be constructed on mostly uninhabited land, with some degrading the existing levee as proposed for the alternative reinforced earthen levee section presented in Alternative 3. The estimated cost and construction duration are less for Alternative 4, and construction of a T-wall section through populated areas avoids the need to acquire significant amounts of occupied property.

### **3. PURPOSE AND SCOPE OF REPORT**

#### **a. Purpose.**

The purpose of this report is to present the results of an engineering analysis of alternatives for the reaches of the HSDRRS levee included in this report and to recommend the most feasible alternative based on the conclusions of this engineering analysis to provide a continued 100 year, or any storm that has a 1% probability of occurring during a given year, level of protection through the year 2057. Future hydraulic analysis will be conducted to reassess, revalidate and revise as appropriate the 100-year (1%) level of protection elevations required. Estimated construction durations for each alternative will also be presented.

#### **b. Scope.**

This report evaluates the feasibility of modifying the Algiers Canal (East) HSDRRS to provide additional hurricane protection to meet the 2057 (1%) level of protection. Final selection of an alternative will be subject to the USACE selection process of which this report will become a part. The work is authorized as an implementation of the "West Bank of the Mississippi River in the Vicinity of New Orleans, LA (East of the Harvey Canal) Feasibility Report and Environmental Impact Statement" dated August 1994. The authorized project provides Standard Project Hurricane (SPH) protection along the Algiers Canal on the east side, between the Hero Canal levee and La. Highway 23 Bridge.

#### **4. DESCRIPTION OF EXISTING PROTECTION**

##### **a. Type of Protection**

From the beginning at B/L Station 287+00 to the end of the project at B/L Station 570+90, the existing hurricane protection consists of an un-reinforced earthen levee section for the entire reach, except at the location of the existing drainage pumping station. The top of the existing levee elevation varies between +8.0 and +10.0. The Plaquemines pump station is protected by a frontage structure, consisting of a pile supported T-wall.

##### **b. Alignment**

The existing alignment generally follows the east bank of the Algiers Canal. The baseline for the current project generally lies along the flood side toe of the existing levee for the length of the project.

##### **c. Limits of Right-of-way**

The existing right-of-way will be nearly adequate for construction of Alternative 1; only three small areas of additional right-of-way will be required, in addition to a 15 ft. wide perpetual underground pile easement in the populated area on the north end of the project, and a short segment near the southern end of the project. The earthen levee alternatives will require substantial additional ROW, including that for second lifts for the levee alternatives.

**d. Vegetation Free Zone for Operations and Maintenance.**

The all earthen levee alternative, which has the maximum footprint, has adequate clearance to provide a 15 ft. vegetation free zone on both the protected and flood sides and will thus be in compliance with current guidance and policy. Levee designs will include tree removal, sloping, grading, placing fill, etc. necessary to achieve a maintainable 15 ft. vegetation free zone from the toe of the levee on both the flood and protected sides. All plans and specifications (P&S) for HSDRRS levee contracts will ensure standards are met with respect to maintenance corridors.

**e. Level of Protection**

The level of protection provided by the existing earthen levee is for a Standard Project Hurricane (SPH), as defined in Design Memorandum No. 2, East and West of Algiers Canal, dated January 1999. The design levee crown elevation was 9.5 NAVD 88 (2004.65). The proposed alternatives will elevate the level of existing hurricane protection to 100-year levels through the year 2057.

**5. DESCRIPTION OF PROPOSED ALTERNATIVES**

**a. Alternative 1- T-Walls**

This alternative consists of constructing a concrete T-wall, having a top of wall elevation of +14.0 NAVD 88 (2004.65), along the toe of the existing earthen levee, and placing compacted clay fill between the levee and the flood side of the wall. The fill slopes from elevation +9.5 at the flood side face of the wall to the levee crown. In order to control unbalanced loads, a 36 ft. (+/-) wide berm is required on the protected side between B/L Stations 307+00 and 527+00. From B/L Station 527+00 to the north end of the project, because of the proximity of residences near the toe of the existing levee, a T-wall with no berm would be constructed. The right of way requirements are minimal. The only additional ROW required is a narrow strip between B/L Stations 287+00 and 307+00, to accommodate the required vegetation free zone on the protected side, and two small areas to accommodate new ramps at gate crossings at B/L Station 403+00 and at B/L Station 504+20. Also, the above described 15 ft. wide pile easement will be required in this segment of the project. The T-wall with no berm would also be constructed between B/L Stations 287+00 and 307+00.

The primary advantage of Alternative 1 is that it can be constructed within the existing right-of-way. This means that none of the resident housing next to

the right-of-way between B/L Stations 527+00 and 572+00 need be acquired. Another advantage is that a minimal amount of additional lifts are required in order to maintain the flood protection height of the walls. The amount of fill is substantially less than that of the other alternatives.

A disadvantage of this alternative is that access to the canal is generally limited. Two existing ramps and related new floodgates are proposed for construction to provide access to existing dock facilities on the adjacent canal. Another disadvantage is that it is the most expensive alternative. A third disadvantage is the noise factor, associated with pile driving operations near the residences, just south of the Belle Chasse Highway. The availability of steel piling materials could also be a negative factor relating to construction alternative option considerations.

**b. Alternative 2- Earthen Levees**

The earthen levee enlargement alternative, as determined by the geotechnical analysis, consists of a 1V:4H side slope on the flood side, 1V:3H side slope on the protected side, and a first lift 146 ft. wide berm extending from El. +6.0 on the protected side to natural ground. The projected second lift will require a shift of the centerline of the levee of approximately 130 ft. to the protected side, and berms extending out from elevation +11.0 on each side measuring approximately 250 ft. This alternative requires acquisition of approximately 420 ft. of additional right of way width for the length of the project, which includes 15 ft. clearance to the property line. The design crown elevation is +14.0 NAVD 88 (2004.65). Additional lifts have been anticipated to maintain the 100 year level of protection to the year 2057 based on current geotechnical information available and are shown in Appendix A.

The advantage of this alternative is that it is less expensive than the T-wall option. However, this advantage is partially offset by higher future maintenance costs, credited to the additional lifts required to maintain the 100-year levee height. The pile driving noise would be reduced; however, the noise would still be a factor at the T-wall tie-in located near the Belle Chasse tunnel.

The major disadvantage is the necessity for property and residential housing acquisition near the north end of the project, including approximately 70 residential housing units for right-of-way for the widened levee and related berms. The limited availability of embankment materials could result in the escalation of material costs in the area.

**c. Alternative 3- Reinforced Earthen Levees**

This alternative is the same as Alternative 2, except that the earthen levee is reinforced with geotextile fabric. The required first lift berm is approximately 120 ft. wide, and its beginning elevation is +7.5 on the protected side of the levee. The projected second levee lift includes a berm on the protected side at elevation +11.0, extending out 146 ft. The required additional right of way width is approximately 240 ft. from B/L Station 287+00 to B/L Station 527+00 and 240 ft. wide north of this station. The additional width includes a clearance of approximately 15 ft. from the base of the berm. Additional lifts have been anticipated to maintain the 100 year level of protection to the year 2057 based on current geotechnical information available and are shown in Appendix A.

An advantage of the reinforced earthen levee alternative is that it is more cost effective than the earthen levee option. The width of the berms required, when compared with the full earthen levee option, is less in all areas. The berm width in the northern end is generally controlled by seepage considerations.

Future maintenance costs, related to additional lifts required to maintain the crest height of the levee, are negative considerations for this alternative. The pile driving noise factor would be reduced, but not totally eliminated, at the T-wall tie-in near the Belle Chasse tunnel. Another negative aspect to this alternative, when compared to Alternative 2, is the necessity of degrading the existing levee in order to place the geotextile reinforcement.

The requirement for taking existing residential housing is less than that of Alternative 2; 45 homes require removal.

#### **d. Alternative Alignments**

The alignment of each of the three proposed alternatives generally follows that of the existing earthen levee. Consideration of a new offset alignment for construction of a full earthen levee second lift will require acquisition of a considerable amount of additional right-of-way. Typical sections for each alternative are included in this report.

---

## 6. DESIGN REFERENCES, DESIGN CRITERIA, and DESIGN INFORMATION

### a. Design References

1. Elevations for Design of Hurricane Protection Levees and Structures, Lake Pontchartrain and Vicinity Hurricane Protection Project; West Bank and Vicinity Hurricane Protection Project, (and subsequent addenda), USACE MVN, October 9, 2007
2. Vertical Datum Report – West Jefferson Polder, USACE MVN, Jan 08.
3. Design Memorandum (DM) No. 2, Vol. 1, dated Jan 1999 East and West of Algiers Canal.

### b. Design Criteria.

The following is the current design criteria used in developing this Engineer Alternative Report. Some of the design criteria used to develop this report is interim guidance. As final design criteria become available, it will be incorporated into the in-process design products (e.g., refined stability analysis); however, it is not anticipated that final design criteria will significantly alter the design outcome or alternatives recommended in this report.

(1) Design criteria to be used in design of the HSDRRS are based on established USACE engineering practices for features including embankments, fills, walls and hydraulic structures as applicable to the work at the following internet website: <http://www.usace.army.mil/publications/>.

(2) HSDRRS specific design guidelines and criteria includes the Hurricane and Storm Damage Reduction System Design Guidelines (Interim), New Orleans District Engineering Division, dated October 2007, can be found at the following internet website:

<http://www.mvn.usace.army.mil/ED/edsp/index.htm>.

(3) The following USACE EM's, ETL's, EC's and additional documents were referenced and are available on the internet website at:

<http://www.usace.army.mil/pubtypes.html>):

- EM 1110-2-1902, Slope Stability, Oct. 03
- EM 1110-2-1913, Design and Construction of Levees, Apr. 00
- EM 1110-2-1901, Seepage Analysis and Control for Dams, Apr 93
- EM 385-1-1, Safety and Health Requirements Manual, ENG Form 5044-R (Nov. 03).
- EM 1110-2-2000, Standard Practice for Concrete for Civil Works Structures Change 2 (Mar 01).
- EM 1110-2-2100, Stability Analysis of Concrete Structures (Dec 05)
- EM 1110-2-2102, Water-stops and Other Joint Materials (Sep 95).
- EM 1110-2-2104, Strength Design Criteria for Reinforced Concrete Hydraulic Structures (Jun 92, Aug 03).

WBV-49.2 ALGIERS CANAL (EAST) HERO LEVEE TO HWY. 23  
Plaquemines Parish, Louisiana

---

- EM 1110-2-2105, Design of Hydraulic Steel Structures Change 1 (May 94).
- EM 1110-2-2400, Structural Design and Evaluation of Outlet Works (Jun 03)
- EM 1110-2-2502, Retaining and Floodwalls (Sep 89).
- EM 1110-2-2503, Design of Sheet Pile Cellular Structures Cofferdams & Retaining Structures (Sep 89)
- EM 1110-2-2504, Design of Sheet Pile Walls (Mar 94).
- EM 1110-2-2701, Vertical Lift Gates (Nov 97)
- EM 1110-2-2705, Structural Design of Closure Structures for Local Flood Protection Projects (Mar 94)
- EM 1110-2-2902, Conduits, Culverts, and Pipes (Mar 98).
- EM 1110-2-2906, Design of Pile Foundations (Jan 91).
- EM 1110-2-3102, General Principles of Pumping Station Design and Layout (Feb 95)
- EM 1110-2-3104, Structural and Architectural Design of Pumping Stations (Jun 89)

- DIVR 1110-1-400, Soil Mechanic Data (Dec. 98)

<https://inet.mvk.usace.army.mil/offices/im/private/cis/publications/mvdpubs.htm>

- ETL 1110-2-569, Design Guidance for Levee Underseepage (May 05)

WBV-49.2 ALGIERS CANAL (EAST) HERO LEVEE TO HWY. 23  
Plaquemines Parish, Louisiana

**c. Hydraulic Design Criteria.**

Table 1

<b>Algiers Canal East Bank (WBV 49.2)</b>				
<b>1% Design Elevations (NAVD 88)</b>				
<b>(Extracted from Elevations for Design of Hurricane Protection Levees and Structures Report dated 9 October 2007)</b>				
Segment	Location	Type	Existing Top of Levee (average)	Future (1%) Top of Levee Design Elevation
--	Hero Canal Levee to Hwy 23	Levee	9.5	14.0
--	Hero Canal Levee to Hwy 23	Structure/Wall	--	14.0

The source of the hydraulic elevations in this EAR is the USACE MVN, October 9, 2007 report: *Elevations for Design of Hurricane Protection Levees and Structures, Lake Pontchartrain and Vicinity Hurricane Protection Project; West Bank and Vicinity Hurricane Protection Project*, (and subsequent addenda). All elevations are in Feet NAVD88 2004.65.

The Hurricane and Storm Damage Risk Reduction System (HSDRRS) includes features that provide protection from a hurricane event that would produce a 1% exceedence surge elevation and associated waves. Hydraulic modeling and analyses performed to calculate the surge elevation and wave characteristics are described in the October 9, 2007 report.

After construction is complete, the HSDRRS will meet the hydraulic requirements for levee certification, as documented in draft Engineering Technical Letter (ETL), Engineering and Design, Certification of Levee Systems, for the National Flood Insurance Program (NFIP).

The hydraulic elevations presented in this EAR should be considered initial elevations. Additional, more thorough engineering investigations may follow to determine final construction elevations.

This EAR considers different configurations of levees and structures that may have different design elevations. The selected alternative may have effects on design elevations in adjacent contract reaches. To assure continuity of design methodology, consistency of designs across contract reaches, and provide close quality management, final design elevations utilized throughout the New Orleans area will be reviewed by the New Orleans District Engineering Division Chief of Hydraulics and Hydrologic Branch.

## **FUTURE ANALYSIS**

As noted in the October 9, 2007 report, in the future, subsidence and sea level rise will affect elevations required for levee certification, and an analysis was performed to project the effect of these parameters on future surge elevations and wave characteristics. The New Orleans District will perform regular

reassessments of these and other hydrologic parameters to assure the effectiveness of the system in future years. The system will undergo a reassessment after major events, significant changes in design and analysis methodologies, or no less than once every 10 years.

### **GAGES**

There is no gaging station in the vicinity of the contract reach. During the design phase, gaging requirements will be established and gage(s) will be installed. The gage(s) will be used for determining the tidal datum local mean sea level (LMSL) prior to construction. Additional temporary gages may be required depending on vertical accuracy requirements. The gage(s) can also be used to monitor future hydrologic conditions in the area. The datum of the gage(s) has been established to comply with criteria contained in the Vertical Control Requirements for Engineering, Design, Construction, and Operation of Flood Control, Shore Protection, Hurricane Protection, and Navigation Projects (Engineering Division Policy Memo #2).

The relationship between NAVD88 2004.65 and LMSL for the gage(s) will be reevaluated and reviewed by NOAA every 5 years (or more frequently if warranted based upon rate of subsidence)

The "Vertical Datum Report" for the West Jefferson Polder contains specific information on the gage network and the relationship between LMSL and NAVD 88 2004.65 for the project area.

**d. Geotech/Civil Design Criteria and Information**

A complete geotechnical analysis will be performed on the selected alternative during the preparation of P&S. This analysis will conform to the guidelines included in the latest version of the "Hurricane and Storm Damage and Risk Reduction System Design Guidelines". We do not expect this further design work to affect the selection of the preferred alternative.

The geotechnical engineering was performed by Hurricane Protection Alliance, JV, and is included in the Geotechnical Appendix. Geotechnical engineering analyses were performed using existing soil data. Geotechnical design was performed in accordance with criteria established by the Corps of Engineers. The report includes a discussion of assumptions and analyses along with appropriate drawings and recommendations. The soil boring data used for the geotechnical study and calculations are provided in the same document.

Underseepage of the earthen levees was evaluated. Slope stability analyses were performed using the LMVD Method of Planes. The impact of geosynthetic reinforcement and foundation improvement methods such as deep soil mixing will be considered in the P&S design phase to ascertain if cost savings can be accomplished.

**e. Structural Design Criteria and Information**

For the T-wall alternative, the T-wall structure is intended to be placed at the toe of the existing levee, with compacted clay fill being placed between the levee and the wall. The levee would be used as a barge barrier. With this design concept in mind, the following load cases were developed for the T-wall:

- Construction case; dead load of structure, with fill in place. Overload factor = 16 2/3%.
- Construction case; same as above, with surcharge and drag loads added. Overload factor = 16 2/3%.
- Water at SWE, unbalanced loads, pervious and impervious; No overload.
- Water at top of wall, unbalanced loads, pervious and impervious; overload factor = 50%.

Per the Scope of Work, the existing levee would serve as a barge barrier; thus, impact loading from barge collision was not included as a load case. The geotechnical analysis indicated that there were unbalanced loading conditions, which were partially offset by placing berms on the flood side of the T-wall. The effects of the berms were included in the load combinations.

A complete structural analysis will be performed on the selected alternative during the preparation of P&S. This analysis will conform to the guidelines included in the latest version of the "Hurricane and Storm Damage and Risk Reduction System Design Guidelines". We do not expect this further design work to affect the selection of the preferred alternative.

### **1. Concrete Structures**

Concrete structures were designed in accordance with ACI 318-05 as modified by EM 1110-2-2104 Strength Design for Reinforced Concrete Hydraulic Structures. The computer program CPGA (X0080) was used to calculate pile loads, with steel pipe piles being used.

The flood protection elevations for the floodwalls are as follows:

- Top of wall elevation= 14.0 NAVD 88 (2004.65)
- Still Water Elevation (SWE)= 11.0 NAVD 88 (2004.65)

The US Army Corps of Engineers provided the following design information:

- Post Katrina Hurricane Flood Protection – (20 April 2006) Design Criteria Supplement Load Combination Tables
- Hurricane and Storm Damage Reduction System Design Guidelines (updated 23 Oct 2007)

The minimum 28-day compressive strength of structural concrete ( $f_c$ ) shall be 4,000 psi. The yield strength of structural steel (ASTM A-36) shall be 36,000 psi.

## **2. Steel Structures**

Steel structures were designed in accordance with AISC Manual of Steel Construction, 9<sup>th</sup> Edition, and by EM 1110-2-2705, Structural Design of Closure Structures for Local Flood Control Projects and EM 1110-2-2105, Design of Hydraulic Steel Structures. Swing gates were designed for the levee crossings at B/L Station 403+00 (+/-) and at B/L Station 506+20 (+/-). The identical gates were designed to be constructed with ASTM A-36 steel.

Each gate consists of a pair of horizontal girders along the top and bottom, connected by vertical intercostals spaced at equal intervals. A skin plate covers the flood side. The gates will be painted for corrosion protection.

**f. Mechanical and Electrical**

N/A

**7. RELOCATIONS**

Utilities requiring relocation are tabulated for each alternative on drawings G-102 through G-104. The buried telephone cable at B/L Station 397+88 and the fuel supply line and pumping station at B/L Station 405+33 shall be relocated by their respective owners. The contractor will relocate the 18" drainage force main and pumping station at B/L Station 524+00 and the 8" sewer force main at B/L Station 568+00. Both are owned by Plaquemines Parish. For alternatives requiring additional right-of-way in residential area, demolition and removal of housing and related utility services will be required.

All utility crossings will conform to the requirements in the Hurricane and Storm Damage Reduction System Design Guidelines (see references).

**8. ARMORING**

Armoring will be provided for critical areas of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) features described in this report. The design criteria determining the overtopping rates and armoring methods are still under investigation. Therefore, a detailed description of the armoring for the features in this report is not available. This work will continue in parallel with other pre-award activities until complete.

The Armoring Team is tasked to provide research and planning for the use of armoring against erosion and scour on the protected side of selected critical portions of levees and floodwalls in the HSDRRS. These critical areas include: transition points (where levees and floodwalls transition into any hardened feature such as other levees, floodwalls, pump stations, etc.), utility pipeline crossings, floodwall protected side slopes, and earthen levees that are exposed to wave and surge overtopping during a 500-year hurricane storm event. The Armoring Team will be guiding the design PDT in this process by providing an Armoring Manual for design guidance and criteria. This manual will be the basis for decisions on what should be armored and how armoring should take place.

The Armoring Team defines resiliency as the capacity of the levee/floodwall to resist, with out catastrophic failure, overtopping (wave and surge) caused

by a storm which is greater than the design event. A Resilience Team has been formed to validate the Armoring Team's initial focus. MVN Engineering Division is leading the Resiliency effort to certify the practicality and applicability of using the 500 year storm event for armoring. The armoring methods to be implemented in the final design are anticipated to provide erosion protection such that the structure will be resilient to the 500-year event, or more defined as the ability of the structure to provide protection during events greater than the design event without catastrophic failure.

The following armoring methods are under consideration and the appropriate combination of methods will be applied throughout the earthen levee projects included in the HSDRRS:

- ACB – Articulated Concrete Blocks
- ACB/TRM – The physical conditions or hydraulic parameters are such that small modifications could allow a reduction to a TRM (Turf Reinforcement Mattress)
- TRM
- TRM/Grass – The physical conditions or hydraulic parameters are such that small modifications could allow a reduction to a surface with good grass cover only
- Good grass cover

The armoring required for floodwalls will be a hybrid of materials to accomplish the require level of armoring. For instance, the interim floodwall repairs curtailed the concrete splash pads midway down the levee slope. The Armoring Team suggests that these pads be extended down the entire slope of levee and be curtailed at the toe in order to eliminate a transition in a critical part of the levee section.

Transitions have been a significant part of the Armoring Team's effort to date. The transitions from structures to floodwalls to sheet piles are being addressed with detailed design drawings and will be forwarded to the individual design PDTs to aid them in their site-specific designs.

Pipeline crossings are being identified by the Relocations Section in MVN. The Armoring Team is reviewing their detail drawings and requirements to include armoring features. These drawings will need ITR and should be forwarded to those utility owners that are ultimately responsible for the work.

## **9. SURVEYS**

### **1. Field Data Collection.**

(a) Site reconnaissance. N/A

(b) Survey data. All elevations presented in this report are in National American Vertical Datum of 1988 (NAVD88-2004.65). Surveys were performed using NAVD88 benchmark elevations.

### **2. Survey Plan.**

Future surveys including those taken for P&S development will conform to the requirements stated in Section 9 of the latest version of the "Hurricane and Storm Damage Risk Reduction System Design Guidelines". This includes identifying a minimum of three (3) permanent benchmarks (new or existing) on design and construction drawings for all flood control projects. The benchmarks shall be established relative to existing NAVD88 control established by the National Geodetic Survey (NGS), using either conventional differential leveling and/or the latest NGS-approved differential GPS network observations, with appropriate corrections to the local hydraulic design surface. Prior to and during actual construction stake out, these primary reference marks shall be verified externally and internally and field records of these survey verifications shall be permanently

archived. A complete reevaluation of the vertical datum shall be conducted at each scheduled periodic inspection.

A survey report will be completed and an ITR conducted when surveys are complete. The survey documentation will be included as part of the Engineering Design Documentation for P&S, Construction and O&M phases of the project.

The "Vertical Datum Report" for the West Jefferson Polder contains information on the primary control points for the project area.

**10. REAL ESTATE REQUIREMENT**

The T-wall alternative requires the least additional right-of-way, totaling approximately 0.72 acres; a narrow strip is required near the south end of the project to accommodate the berm, and two small areas are needed to construct ramps at B/L Stations 403+00 and 506+20. In addition a 15-foot wide perpetual underground pile easement will be required in the residential area on the north end of the project. The earthen levee alternative requires the greatest amount of additional right-of-way (293.6 acres), because of the large levee footprint and the required stability berm for levee lift 2 on the protected side of the project. The reinforced earthen levee requires a lesser amount (137.4 acres), because of the smaller footprint and berm required for the second levee lift. The latter two alternatives will require taking residences near the northern end of the project. The right-of-way requirements are presented on the attached right-of-way plans.

**11. BORROW REQUIREMENTS**

Current borrow sources typically come from three alternatives:

1. Government Furnished which consists of acquisition of real estate interests.
  
2. Contractor Furnished which requires the contractor to provide its own suitable borrow, per criteria set forth in the P&S. The P&S will identify available sites that are known to be suitable and environmentally cleared, but the contractor will also be allowed to pursue other borrow sources, provided the criteria are met.
  
3. Supply Contract which consists of the Government providing borrow material to the construction contractor through a separate supply contract. The Government currently goes through a borrow analysis for each contract to select which of the above alternatives will be used.

At the present time, no borrow sources have been identified for this project.

**12. COST ENGINEERING**

**1. Quantities.**

A tabulation of the estimated quantities and construction costs for each alternative is found in Appendix D. The estimated cost for each alternative is as follows:

Alternative 1 (T-Walls)	\$ 546,166,680
Alternative 2 (Earthen Levee)	\$ 518,016,045
Alternative 3 (Reinforced Earthen Levee)	\$ 420,280,288
Alternative 4 (Reinforced Earthen Levee + T-Walls)	\$ 417,317,434

**2. Contingencies**

A contingency of 30% is included in each of the above total estimates, to account for variances in material and labor costs during construction.

### **13. CONSTRUCTION SEQUENCE AND DURATION**

Bar chart construction schedules for the three alternatives have been prepared, and are attached. The schedules assume that four crews would be working simultaneously; two beginning at the Plaquemines Pumping Station and one at each end of the project. For the T-wall alternate, delivery times for materials could have an effect on construction time. The attached schedule is for a standard 40-hour work-week. The schedule would naturally be accelerated for longer work periods.

The estimated project duration for each alternative is as follows:

1. Alternative 1 – 106 weeks, including 4 weeks each for mobilization and demobilization,
2. Alternative 2 – 98 weeks, including mobilization/demobilization time,
3. Alternative 3 - 81 weeks, and
4. Alternative 4- 94 weeks.

This includes time for grading the existing levee and subsequent placement of geotechnical fabric reinforcement prior to constructing the new levee.

The project area can be reached by Walker Road at the south end, and by Barriere Road from the north. Both of these roads intersect with LA Hwy 23. The contractor shall be required to comply with all local ordinances pertaining to hauling over public roads, and shall be responsible for maintaining the roads utilized in the hauling operations.

The recommended plan of construction, for Alternatives 2 and 3, consists of hauling clay fill from an approved source, in order to elevate the existing levee to the required 100-year level. For Alternative 1, the T-wall and gate monoliths will be constructed using ready-mix concrete from local suppliers. Steel would be fabricated locally. Noise and vibrations from pile driving should be monitored in the area adjacent to the residences along the north end of the project. Pile driving operations should most likely be limited to daylight hours, in this zone. Otherwise, 24-hour pile driving can be performed in the remainder of the project area.

No such limitations occur for Alternatives 2 and 3; 24-hour construction can be undertaken for the entire length and duration of the project, if necessary.

**14. QUALITY IMPLEMENTATION**

- A. Quality Control Plan** – A quality control plan was prepared and is included in Appendix E
- B. Independent Technical Review** - An independent technical review was performed and the results are attached as Appendix F

**15. RECOMMENDATIONS – Refer To Executive Summary**

**16. OPERATION AND MAINTENANCE REQUIREMENTS**

Operation and maintenance (O&M) of the features installed under the various design alternatives consists of cutting grass for the earthen levee alternatives, and inspection of structures and removal of graffiti for T-wall sections. The swing gates (under the T-wall alternative) would require routine inspections, and regular operation to assure proper functioning, along with painting.

**West Bank and Vicinity  
Hurricane Protection Project  
WBV 49.2 Algiers Canal (East)  
Hero Levee to Hwy 23**

**Plaquemines Parish, Louisiana**

**APPENDIX A**

**GEOTECHNICAL REPORT**

**(See Separate Report)**

**West Bank and Vicinity  
Hurricane Protection Project  
WBV 49.2 Algiers Canal (East)  
Hero Levee to Hwy 23**

**Plaquemines Parish, Louisiana**

## **APPENDIX B**

## **DRAWINGS**





SHEET NO.	DESCRIPTION
C-01A	COVER
G-100A	LOCATION AND VICINITY MAP
G-101A	INDEX TO DRAWINGS
C-101-A1 THROUGH 106-A1	ALTERNATIVE 1 - PLAN/PROFILE STA. 287+00 TO 572+51
C-310-A1	TYPICAL SECTIONS OF ALTERNATIVE 1 - T-WALLS
G-102A	TABULATIONS OF ALTERNATIVE 1 - WALL
C-101-A2 THROUGH 106-A2	ALTERNATIVE 2 - PLAN/PROFILE STA. 287+00 TO 572+51
C-310-A2	TYPICAL SECTIONS OF ALTERNATIVE 2 - T-WALLS
G-103A	TABULATIONS OF ALTERNATIVE 2 - T-WALLS
C-101-A3 THROUGH 106-A3	ALTERNATIVE 3 - PLAN/PROFILE STA. 287+00 TO 572+51
C-310-A3	TYPICAL SECTIONS OF ALTERNATIVE 3 - T-WALLS
G-104A	TABULATIONS OF ALTERNATIVE 3 REINFORCED EARTHEN LEVEE
C-300 THROUGH 304	CIVIL SECTIONS AND DETAILS
S-101 THROUGH 107	STRUCTURAL SECTIONS AND DETAILS

**GENERAL NOTES:**

- ALL AZIMUTHS ARE GEODETIC AZIMUTHS TURNED IN A CLOCKWISE DIRECTION FROM 0° DUE NORTH.
- UNLESS OTHERWISE NOTED, ALL ELEVATIONS ARE EXPRESSED IN FEET AND REFER TO NORTH AMERICAN VERTICAL DATUM (NAVD88-2004.05).
- ALL DISTANCES ARE MEASURED PERPENDICULAR TO THE BASELINE UNLESS OTHERWISE NOTED.
- DO NOT INTERRUPT (LATERAL AND NATURAL) DRAINAGE FLOWS DURING CONSTRUCTION.
- INSIDE THE PLAN AREA, POLYCONIC PROJECTION, 1983 NORTH AMERICAN DATUM IS SHOWN BY SOLID TICKS AND LAMBERT CONFORMAL CONIC PROJECTION IS SHOWN BY DASHED TICKS PREPARED FROM AERIAL PHOTOS FLOWN SEPTEMBER 2005.
- LOCATION OF EXISTING UTILITIES INDICATED ON THE PLAN SHEETS ARE SHOWN FOR INFORMATIONAL PURPOSE ONLY AND ARE BASED IN PART ON INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY CONSTRUCTION OPERATIONS. THE DAMAGE SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR MUST VERIFY ELEVATIONS OF ALL EXISTING STRUCTURES THAT ARE A PART OF THE JOB.
- NOISE CONTROL - CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO AVOID UNNECESSARY NOISE APPROPRIATE FOR THE AMBIENT SOUND LEVELS IN THE AREA DURING WORKING HOURS. ALL CONSTRUCTION MACHINERY AND VEHICLES SHALL BE EQUIPPED WITH PRACTICAL SOUND MUFFLING DEVICES AND OPERATED IN A MANNER TO CAUSE NOISE LEVEL NOT TO EXCEED 80 DBA AT THE LIMITS OF CONSTRUCTION IN ACCORDANCE WITH LOCAL ORDINANCE.
- DUST CONTROL - ALL TEMPORARY HAUL ROADS AND BARE EARTHEN SURFACES WITHIN THE CONSTRUCTION LIMITS SHALL BE WATERED DOWN TO PREVENT DUST FROM DRIFTING INTO ADJACENT AREAS. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN A WATER PAYER TEMPORARILY TO HAUL ROADS AND BARE EARTH SURFACES TO PREVENT DUST. DUST WILL RESULT IN THE CONTRACTOR STOPPING RELATED OPERATIONS UNTIL A SUITABLE PLAN TO CONTROL DUST IS IMPLEMENTED.
- ALL WORK AROUND HIGH VOLTAGE POWER LINES SHALL BE IN ACCORDANCE WITH ENERGY REGULATIONS AND WITH THE PROJECT SPECIFICATIONS.

**LEGEND**

--- BASE LINE	--- FINISH GRADE	CONCRETE SCOUR PROTECTION
--- EXIST RW	--- EXCAVATION GRADE	DEGRADE
--- EXIST GRADE	--- LEVEE CENTER	DEGRADE/BACKFILL
--- FLOOD CENTER	--- MATCH LINE	COMPACT FILL

FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

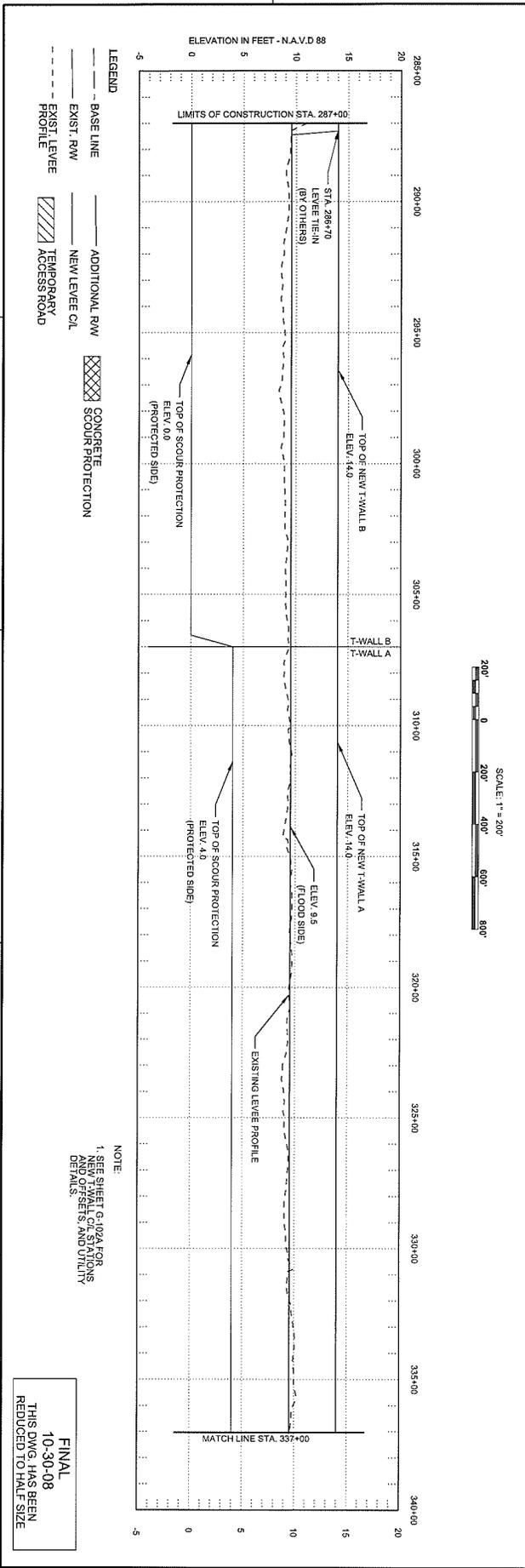
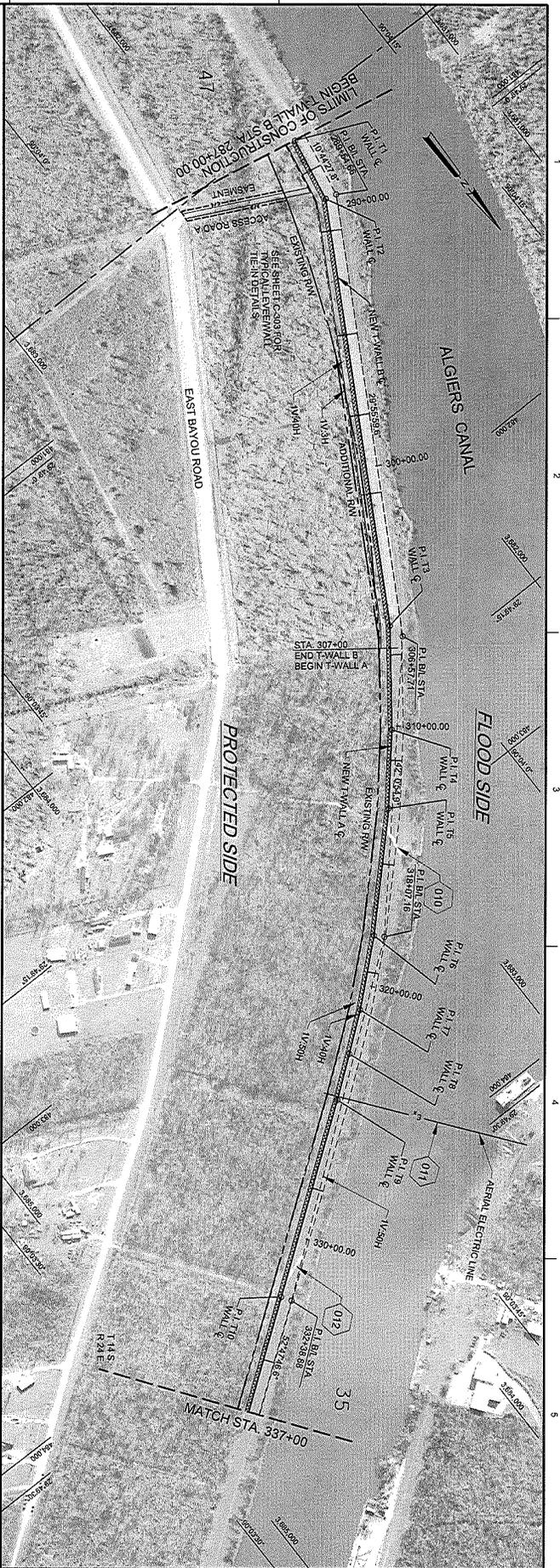
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 1421 Zenith Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: J.Z.	DATE: 02 OCT 2008	
	DWN BY: MAJ	CHECKED BY: EAB	
SUBMITTED BY: AIMS GROUP INC.	PLOT SCALE: 1" = 200'	PLOT DATE: 09/29/08	MARK:      DESCRIPTION      DATE      APPR:      MARK      DESCRIPTION      DATE      APPR:

ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23  
WBV-49-2

**INDEX TO DRAWINGS**

PLAQUEMINES PARISH, LOUISIANA

SHEET IDENTIFICATION  
G-101A



U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zeno Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: JJJ	DATE: 30 OCT. 2008	
	DRAWN BY: MAJ	CHECKED BY: EAB	SUBMITTAL NO.:  CONTRACT NO.: W119L-01-02-0002
SUBMITTED BY: AIMS GROUP, INC.	PLOT SCALE: 1" = 200'	PLOT DATE: 10/29/08	FILE NUMBER: 100808
SIZE: ANE1.D	FILE NAME: W8V-02_C-101_A1.DGN	MARK:	APPR:

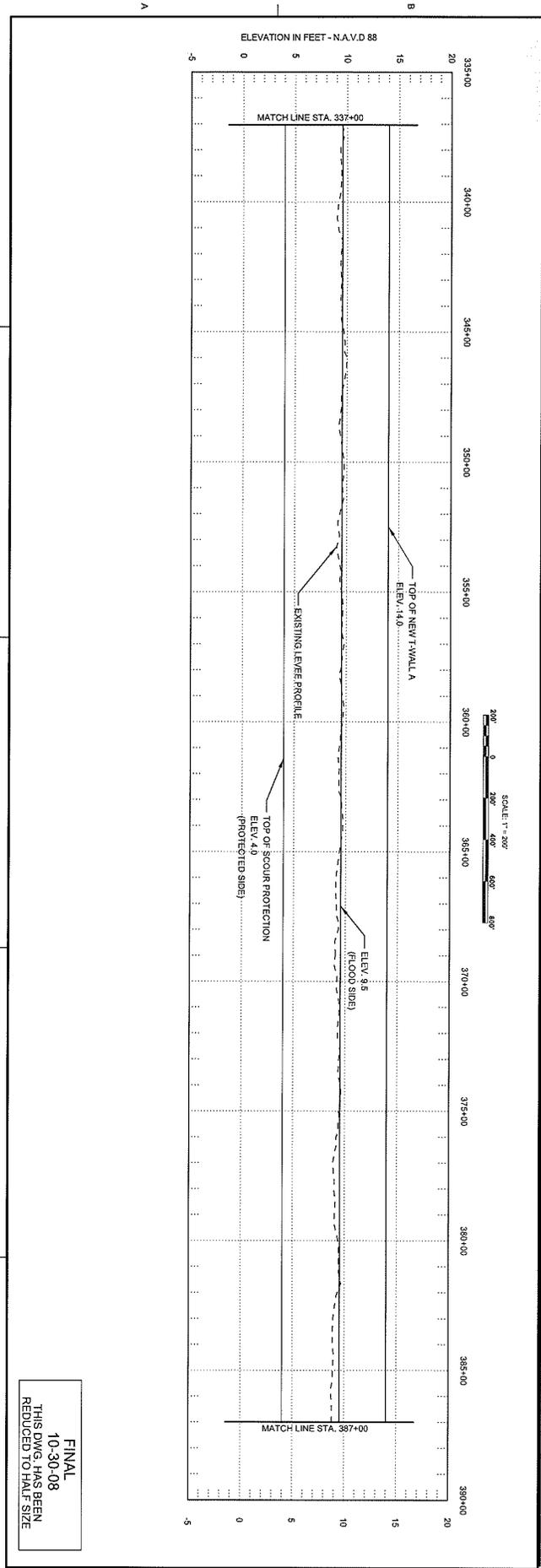
  

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR

**FINAL**  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR  
 WEST BANK AND VICINITY, NEW ORLEANS, LA  
 PHASE 2 HURRICANE PROTECTION  
 ALGIER CANAL (EAST) HERO LEVEE TO HWY 23  
 WBV-49.2  
**ALT. 1 T-WALL PLAN AND PROFILE**  
 STA. 287+00 TO STA. 337+00  
 PLAQUEMINES PARISH, LOUISIANA

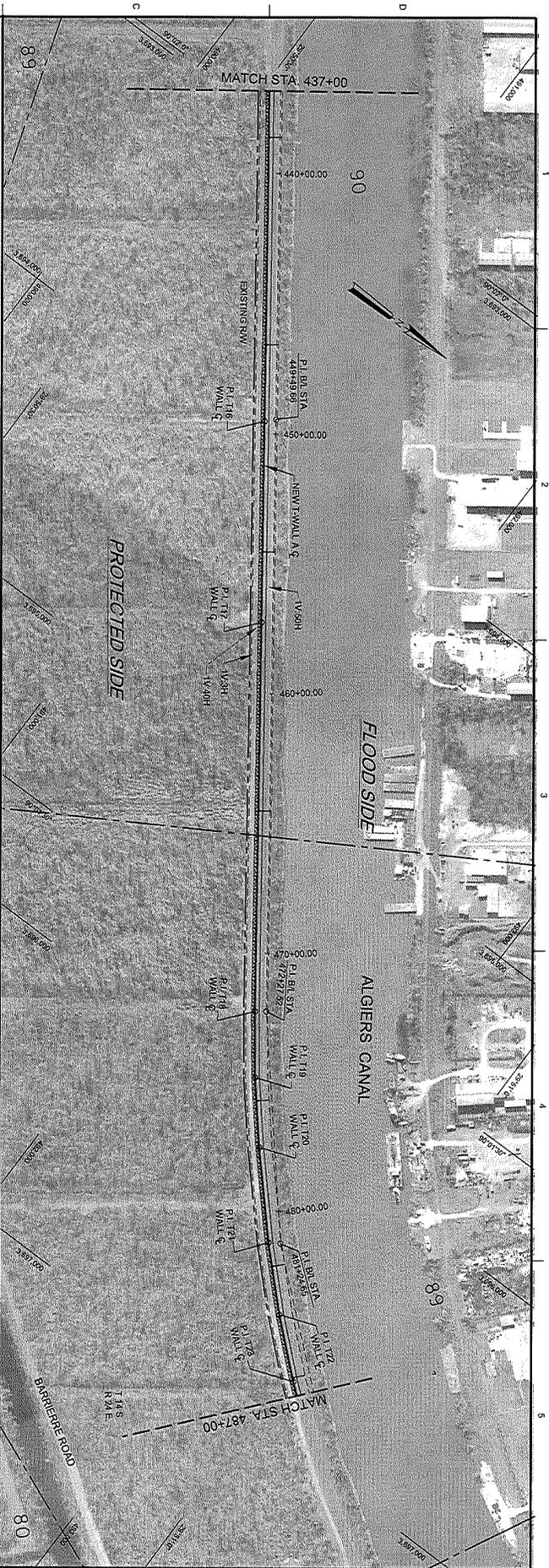
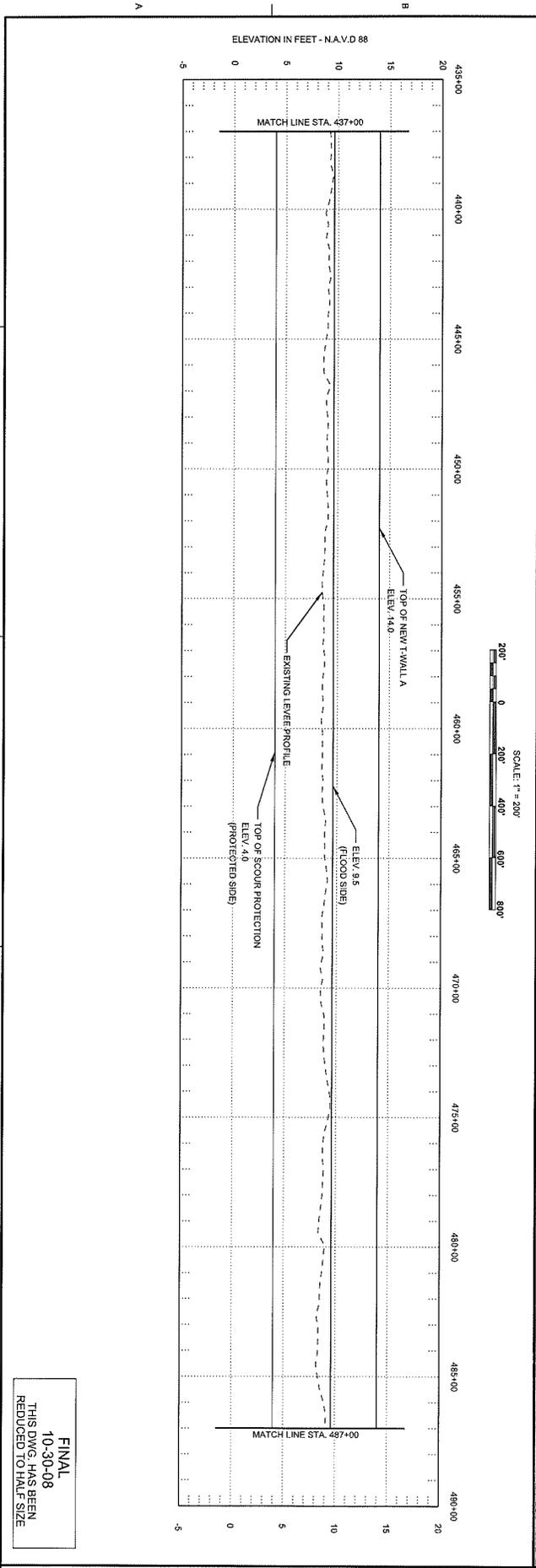




FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO FINAL SIZE

SHEET IDENTIFICATION <b>C-102 A1</b>	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY: NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIER'S CANAL (EAST) HERO LEVEE TO HWY 23 WBV-49.2	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenth Street, Metairie, LA 70001 (504) 887-7243	DESIGNED BY: JJW DRAWN BY: CDO BY: MAJ SUBMITTED BY: AIMS GROUP INC PLOT SCALE: 1" = 100'-0" SIZE: 11" X 17" FILE NAME: WBV-49.2_C102_A1.DGN	DATE: 26 OCT. 2008 SCHEMATIC NO.: CONTRACT NO.: W913PS-G1-D-002 FILE NUMBER:	<table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																
	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																					
U.S. Army Corps of Engineers DISTRICT OFFICE NEW ORLEANS DISTRICT 1000 Poydras Street New Orleans, LA 70112-2490 (504) 586-1000																																													





FINAL  
10-30-08  
THIS DRAWING HAS BEEN  
REDUCED TO HALF SIZE

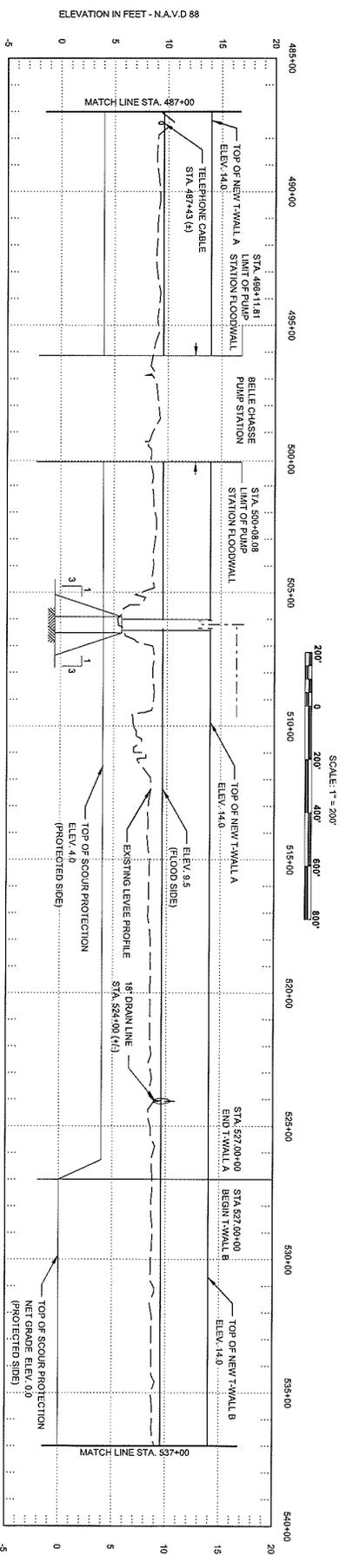
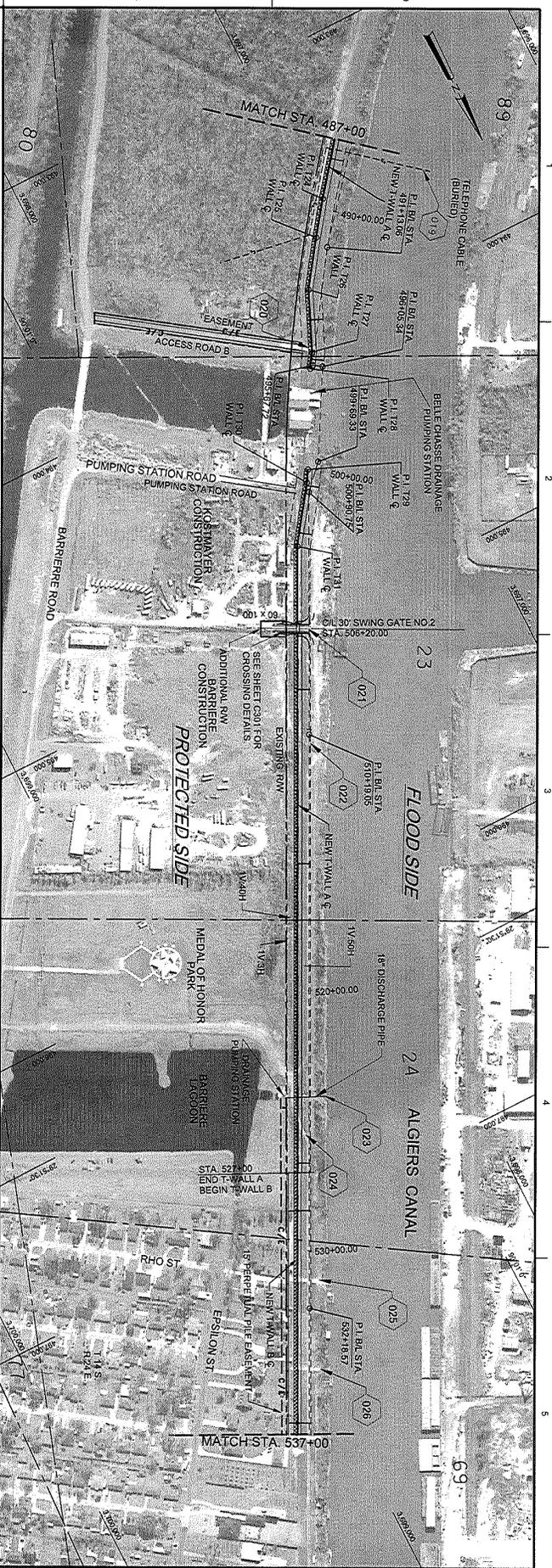
ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23  
WBV-49.2  
**ALT. 1 T-WALL PLAN AND PROFILE  
STA.437+00 TO STA. 487+00**  
PLAQUEMINES PARISH, LOUISIANA

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT  
NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
Consulting Engineers  
4421 Zenith Street, Metairie, LA 70001  
(504) 887-7045

DESIGNED BY: JJK  
DRAWN BY: MJD  
SUBMITTED BY: AIMS GROUP, INC.  
PLOT SCALE: 1" = 200'  
SIZE: A  
FILE NAME: WBV-49.2\_C10M\_A1.DGN  
DATE: 08 OCT 2008  
SOLICITATION NO.:  
CONTRACT NO.: W9-SPR-06-D-0002  
FILE NUMBER:

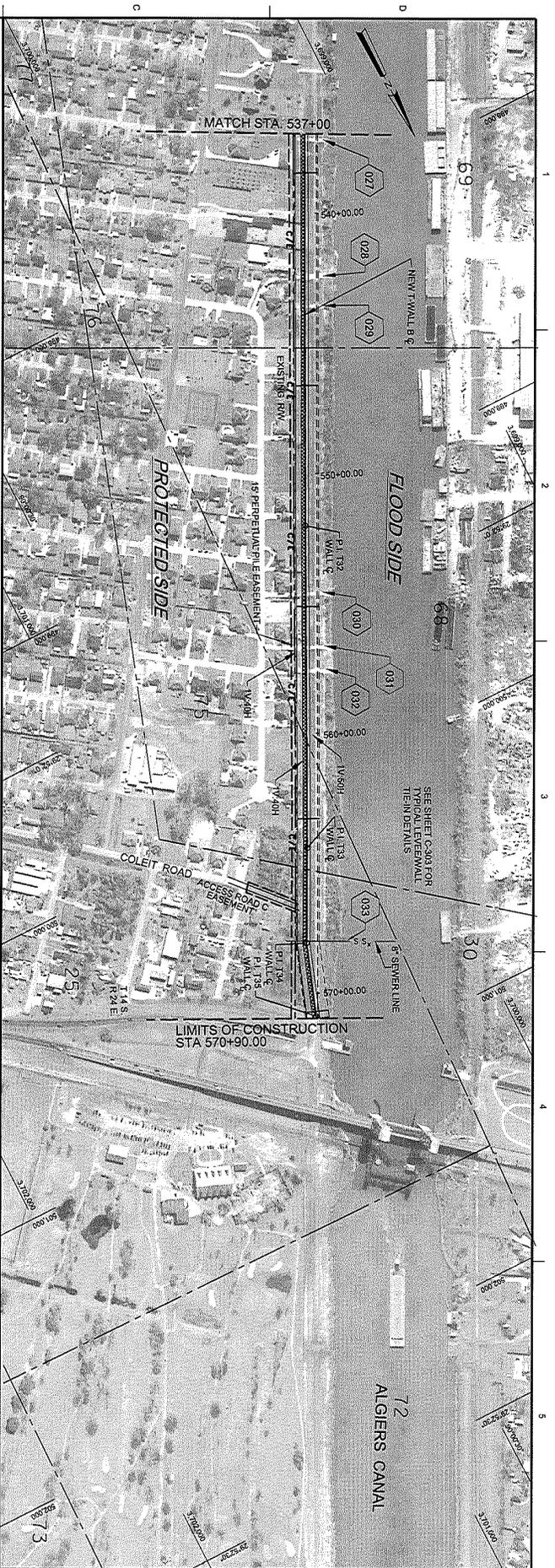
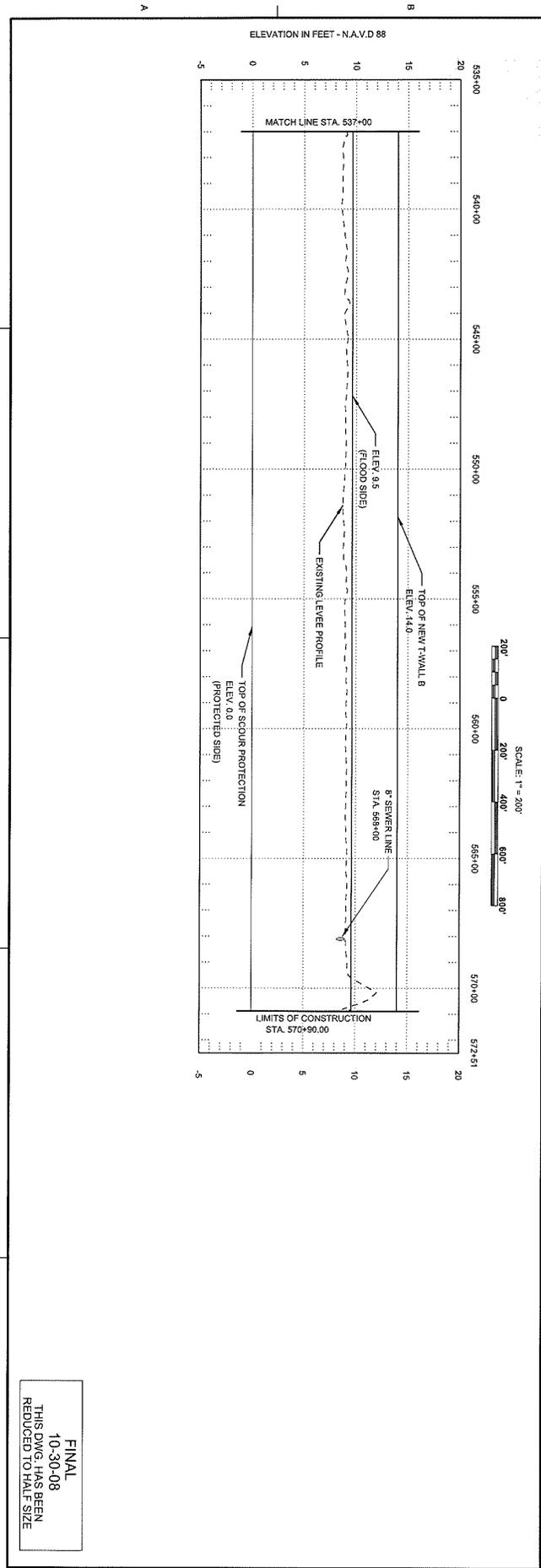
MARK	DESCRIPTION	DATE	APP'D	MARK	DESCRIPTION	DATE	APP'D





FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO FINAL SIZE

U.S. Army Corps of Engineers New Orleans District New Orleans, Louisiana	DESIGNED BY: L.A. K	DATE: 16 OCT 2008
	DRAWN BY: CHD BY: MAJ EAS	SOLICITATION NO.: W933P6-04-0-0002
AIMS GROUP, Inc. Consulting Engineers 4421 2nd St, Metairie, LA 70001 (504) 887-7045	SUBMITTED BY: AIMS GROUP, INC.	CONTRACT NO.: W933P6-04-0-0002
	PLOT SCALE: 1" = 200' PLOT DATE: 11/11/08	FILE NUMBER: W933P6-04-0-0002
SIZE: A1	FILE NAME: W933P6-04-0-0002	APPR: [ ] DATE: [ ]
SHEET IDENTIFICATION C-105 A1	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 W933P6-04-0-0002 ALT. 1 T-WALL PLAN AND PROFILE STA. 487+00 TO STA. 537+00 PLAQUEMINES PARISH, LOUISIANA	APPR: [ ] DATE: [ ]



FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

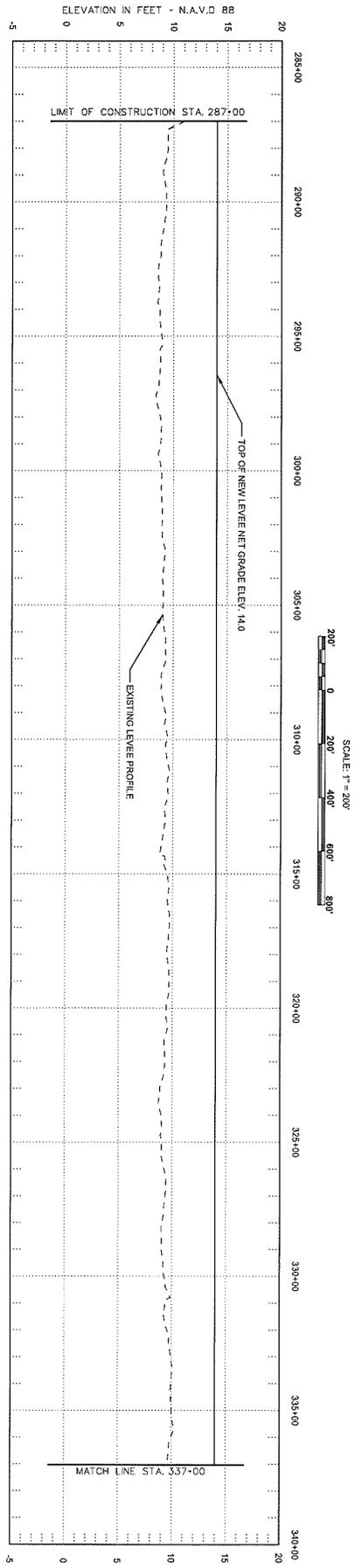
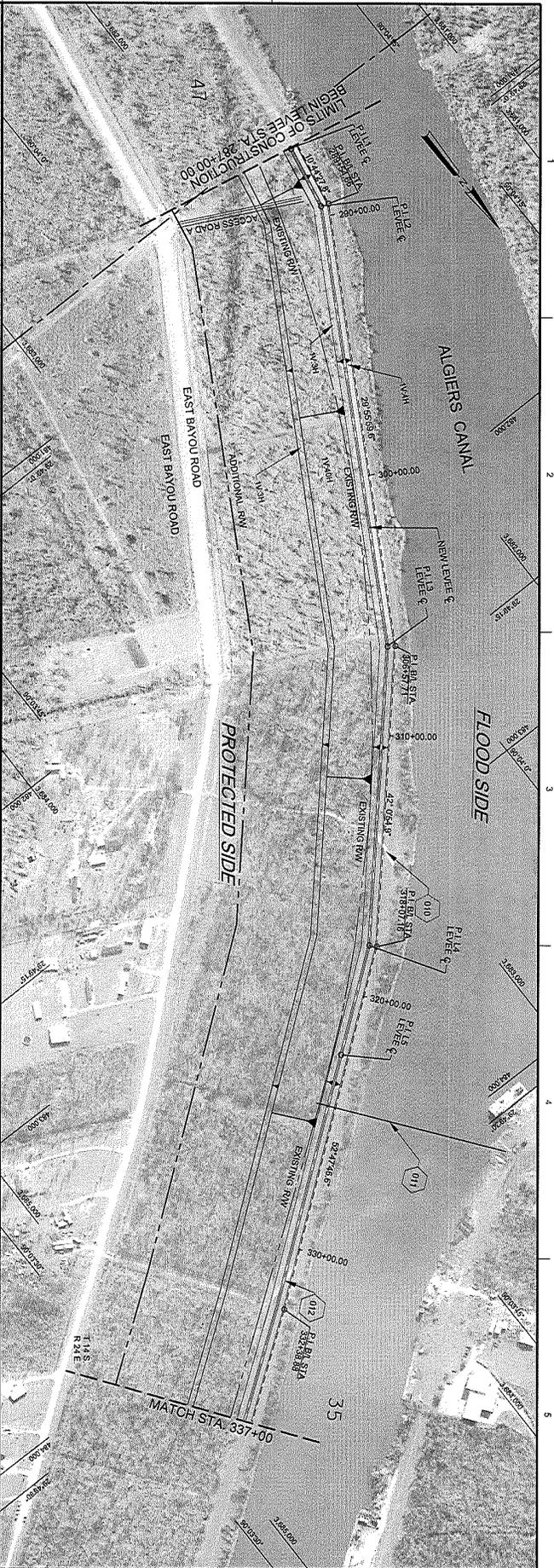
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenoith Street, Metairie, LA 70001 (504) 887-7043	DESIGNED BY: JLN	DATE: 30 OCT. 2008
	SUBMITTED BY: AIMS GROUP INC.	SOLICITATION NO.: W10795-06-04-0002
PLOT SCALE: 1" = 200'	PLOT DATE: 10/20/08	FILE NUMBER: WBY-492_C106_A1.DGN
SIZE: ANSI D	FILE NAME: WBY-492_C106_A1.DGN	

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR

ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGERS CANAL (EAST) HERO LEVEE TO HWY 23 WBV-492 <b>ALT. 1 T-WALL PLAN AND PROFILE</b> STA. 537+00 TO STA. 572+50.58 PLaquemines Parish, LOUISIANA	
---	--







NOTE:  
 1. SEE TYPICAL SECTION ON SHEET C-101A2  
 2. SEE SHEET G-103A FOR NEW LEVEE OF CANAL  
 3. SEE STATIONS AND OFFSETS AND UTILITIES DETAILS.

FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY.23 WBV-49.2  
 ALT. 2 - EARTHEN LEVEE PLAN AND PROFILE STA. 287+00 TO STA. 337+00  
 PLAQUEMINES PARISH, LOUISIANA

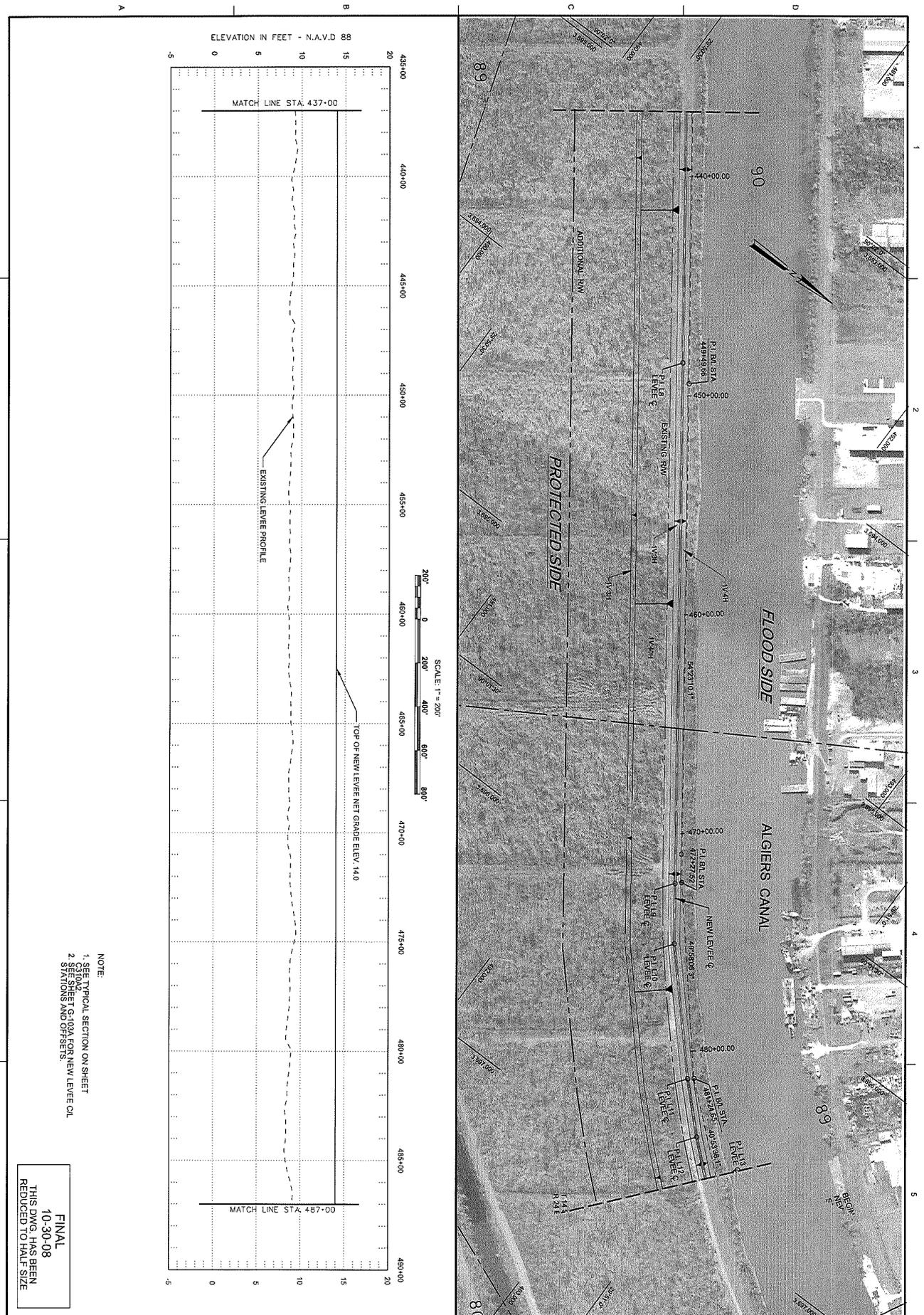
DESIGNED BY: J.J.N.  
 CHECKED BY: EAB  
 SUBMITTED BY: JAMES GROUP INC.  
 PLOT SCALE: 1" = 200'  
 FILE NAME: WBV-49.2\_C(1).A2.DGN  
 DATE: 30 OCT 2008  
 REGISTRATION NO.:  
 CONTRACT NO.: W127846-0002  
 FILE NUMBER:  
 SIZE: 11  
 U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT  
 NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
 Consulting Engineer  
 4421 Zenith Street, Metairie, LA 70001  
 (504) 887-7040

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.









NOTE:  
 1. SEE TYPICAL SECTION ON SHEET  
 2. SEE SHEET G-102A FOR NEW LEVEE C/L  
 STATIONS AND OFFSETS.

FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR  
 WEST BANK AND VICINITY, NEW ORLEANS, LA  
 PHASE 2 HURRICANE PROTECTION  
 ALGIER'S CANAL (EAST) HERO LEVEE TO HWY 23  
 WBV-49.2  
 ALT. 2 - EARTHEN LEVEE PLAN AND PROFILE  
 STA. 437+00 TO STA. 487+00  
 PLAQUEMINES PARISH, LOUISIANA

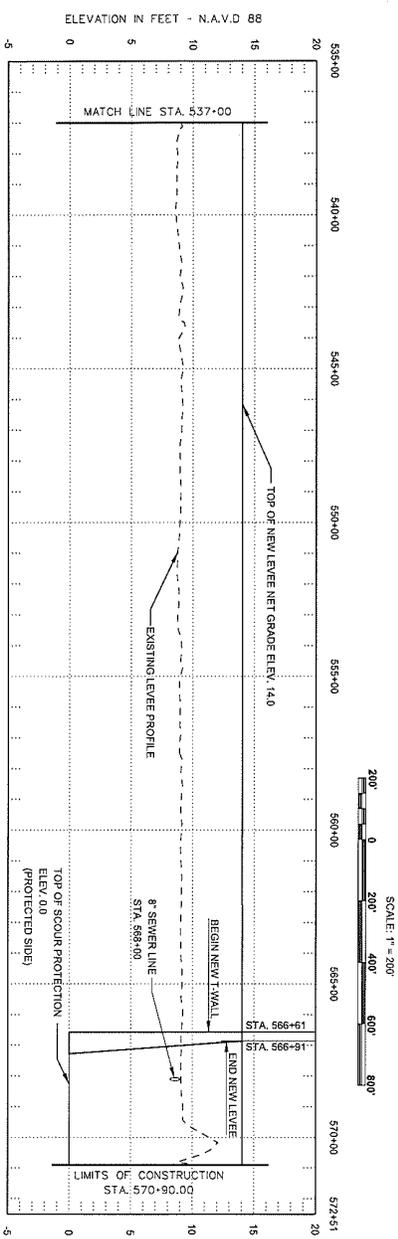
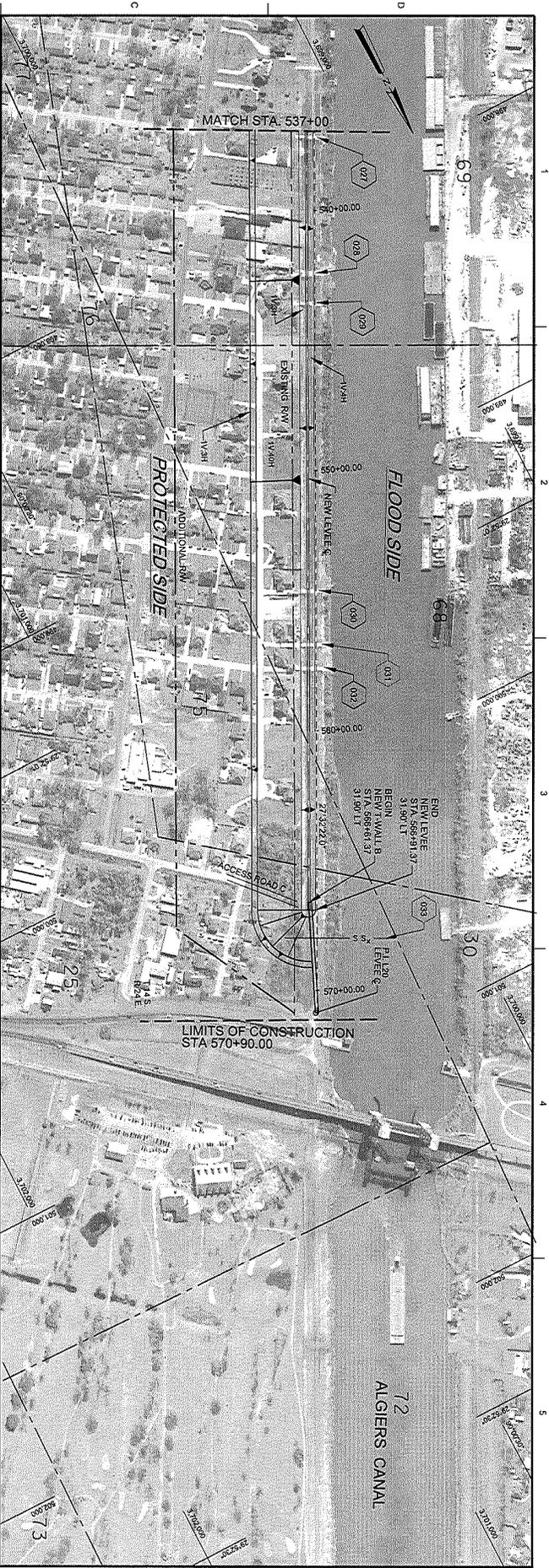
U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT  
 NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
 Drafting Engineers  
 4421 Zurich Street, Metairie, LA 70001  
 (504) 887-7045

DESIGNED BY: JUN	DATE: 30 OCT. 2008
DRAWN BY: MAL	CHECKED BY: EAD
SUBMITTED BY: AIMS GROUP, INC.	CONTRACT NO. WV1278-01A-002
PLOT SCALE: 1" = 100'	FILE NUMBER:
SIZE: A2	FILE NAME: WBV-49.2_C-104_A2.DGN
ANGID:	

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.



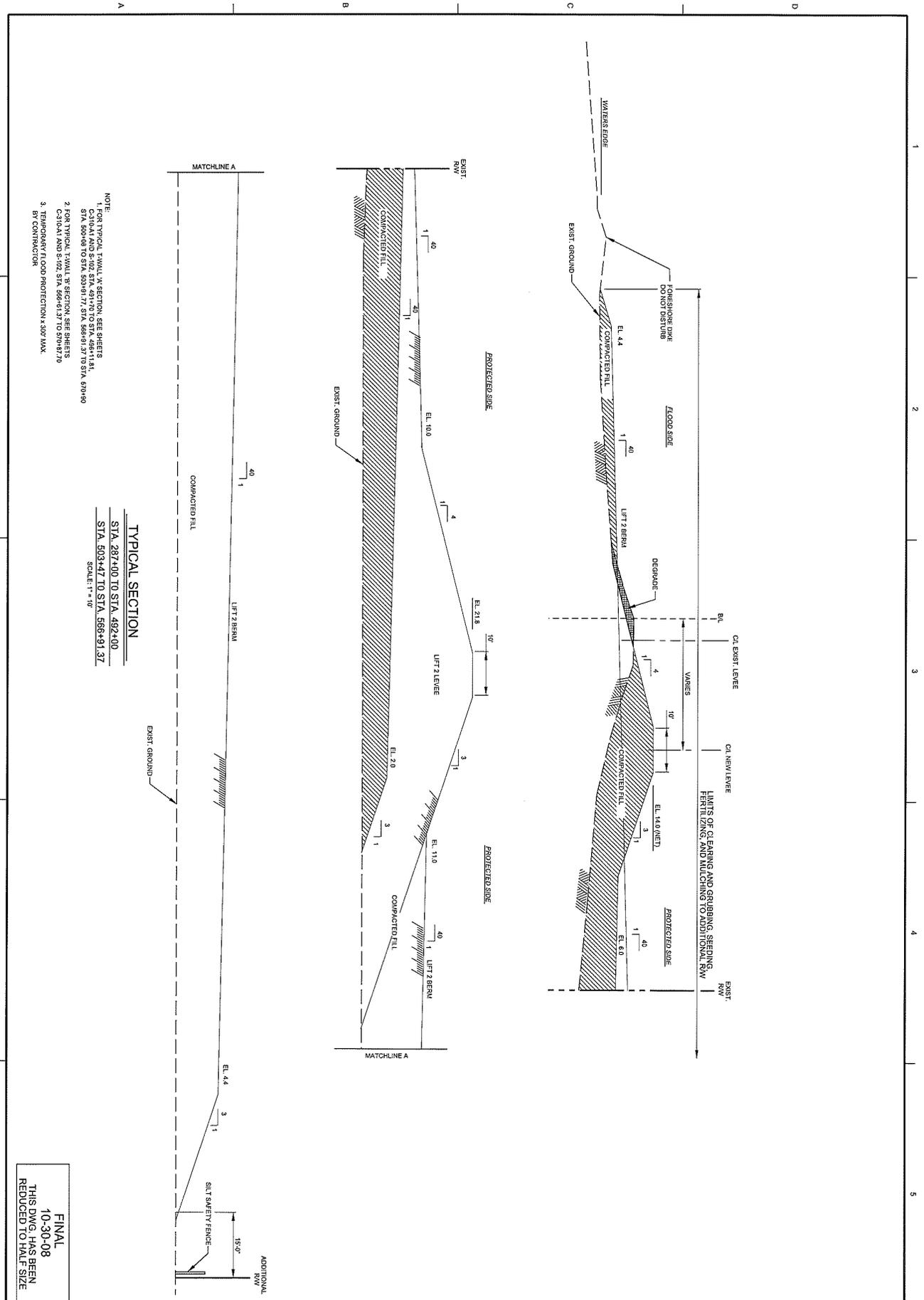




NOTE:  
 1. SET TYPICAL SECTION ON SHEET C-106 A2  
 2. SEE SHEET G-103 FOR NEW LEVEE CIL STATIONS AND OFFSETS.

**FINAL**  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 NBV-49-2 <b>ALT. 3 - REINFORCED EARTHEN LEVEE          PLAN AND PROFILE</b> STA. 537+00 TO STA. 572+50.58 PLAQUEMINES PARISH, LOUISIANA		U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 26th Street, Metairie, LA 70001 (504) 887-7545		DESIGNED BY: LJA DRAWN BY: MAJ CHECKED BY: EAB SUBMITTED BY: AIMS GROUP INC. PLOT SCALE: 1" = 200.00' SCALE: 1" = 200' FILE NAME: NBV-49-2_C106_A2.DGN		DATE: 30 OCT 2008 SOLICITATION NO.: CONTRACT NO.: W912PB-BR-D-0002 FILE NUMBER: PLOT DATE: 10/29/08			
SHEET IDENTIFICATION C-106 A2		MARK DESCRIPTION DATE APPR MARK DESCRIPTION DATE APPR		MARK DESCRIPTION DATE APPR MARK DESCRIPTION DATE APPR		MARK DESCRIPTION DATE APPR MARK DESCRIPTION DATE APPR		MARK DESCRIPTION DATE APPR MARK DESCRIPTION DATE APPR	



NOTE:  
 1. FOR TYPICAL TOWNAL V.S. SECTION, SEE SHEETS C-310-A1 AND S-102 STA. 461+00 TO STA. 466+11.81, STA. 500+08 TO STA. 503+81.72, STA. 564+01.37 TO STA. 570+80  
 2. FOR TYPICAL TOWNAL V.S. SECTION, SEE SHEETS C-310-A1 AND S-102 STA. 566+61.37 TO 570+87.70  
 3. TEMPORARY FLOOD PROTECTION 3.30' MAX BY CONTRACTOR

TYPICAL SECTION  
 STA. 287+00 TO STA. 492+00  
 STA. 503+47 TO STA. 566+91.37  
 SCALE: 1" = 10'

FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERIS CANAL (EAST) HERO LEVEE TO HWY 23 VBY-49-2 <b>TYPICAL SECTION ALTERNATIVE 2          EARTHEN LEVEE</b> PLAQUEMINES PARISH, LOUISIANA	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenith Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: JJJA DRAWN BY: MAJ CHECKED BY: EAB SUBMITTED BY: AIMS GROUP INC. PLOT SCALE: 1" = 10' SIZE: ANSI D FILE NAME: WBY-49-2_C-310_A2.DGN	DATE: 30 OCT. 2008 SOLICITATION NO.: CONTRACT NO.: WY-03-05-0002 FILE NUMBER: SOURCE:	<table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																																																																	<p>U.S. Army Corps of Engineers          New Orleans District          New Orleans, Louisiana</p>
	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																																																																					

TABULATION OF EXISTING RIGHT-OF-WAY

ITEM NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		ITEM NO.	BL STATION	DISTANCES MEASURED FROM BASELINE	
		PROTECTED SIDE	AZIMUTH			PROTECTED SIDE	AZIMUTH
E1	287+00.00	160.0'	90°	E22	449+50.20	86.5'	90°
E2	288+92.3	177.0'	90°	E23	456+88.33	86.0'	90°
E3	292+01.05	140.0'	90°	E24	472+26.88	86.3'	90°
E4	294+50.19	103.0'	90°	E25	474+72.18	101.3'	90°
E5	298+50.19	80.0'	90°	E28	477+47.90	101.8'	90°
E6	299+89.33	64.0'	90°	E27	481+24.65	88.0'	139°11'17.99"
E7	302+88.82	68.0'	90°	E28	483+90.53	106.6'	90°
E8	306+37.65	90.0'	90°	E29	486+58.44	116.7'	90°
E9	310+16.85	63.0'	90°	E30	489+38.34	101.4'	90°
E10	313+28.41	57.2'	90°	E31	492+56.96	93.2'	90°
E11	317+89.80	92.2'	90°	E32	496+23.75	124.6'	90°
E12	321+01.36	63.6'	90°	E33	497+82.87	128.6'	90°
E13	322+23.80	62.4'	90°	E34	500+80.27	95.0'	90°
E14	324+54.65	82.7'	90°	E35	510+17.51	87.2'	90°
E15	332+41.63	84.4'	90°	E36	524+40.30	87.6'	90°
E16	332+66.50	83.6'	90°	E37	551+91.40	88.3'	90°
E17	377+60.56	82.0'	90°	E38	564+39.52	83.9'	90°
E18	380+41.18	82.8'	90°	E39	570+90.00	87.6'	90°
E19	400+65.51	84.6'	90°				
E20	406+55.03	85.5'	90°				
E21	434+94.50	85.5'	90°				

UTILITIES WITHIN EXISTING RW

ITEM NO.	OWNER	DESCRIPTION	STATION	DISPOSITION	RELOCATION BY
010	PRIVATE	RAMP	314+10.74	REMOVE	CONTRACTOR
011	ENTREPRENEUR	OVERHEAD ELECTRIC TRANSMISSION CROSSING	324+4.1	DO NOT DISTURB	CONTRACTOR
012	PRIVATE	RAMP	331+2.0	REMOVE	CONTRACTOR
013	AT & T	BURNED TELEPHONE CABLE	397+68	RELOCATE OVER LEVEE	OWNER
014	U.S. NAVY	FUEL PUMPING STATION	402+58	RELOCATE OVER LEVEE	OWNER
015	U.S. NAVY	RAMP	402+77	REMOVE & REPLACE	CONTRACTOR
016	U.S. NAVY	FUEL SUPPLY LINE	403+93	RELOCATE OVER LEVEE	OWNER
017	U.S. NAVY	JRB FUEL DOCK	406+11	DO NOT DISTURB	CONTRACTOR
018	U.S. NAVY	RAMP	408+18	REMOVE	CONTRACTOR
019	AT & T	BURNED TELEPHONE CABLE	487+43	RELOCATE OVER LEVEE	OWNER
020	PRIVATE	RAMP	483+00	REMOVE	CONTRACTOR
021	PRIVATE	RAMP	506+11.71	REPLACE	CONTRACTOR
022	PRIVATE	RAMP	510+46.63	REMOVE	CONTRACTOR
023	PLAQUEMINES PARISH	18" DRAINAGE FORCE MAIN AND PLUMBING STATION	624+00	RELOCATE	CONTRACTOR
024	PRIVATE	RAMP	525+02.63	REMOVE	CONTRACTOR
025	PRIVATE	RAMP	531+13.83	REMOVE	CONTRACTOR
026	PRIVATE	RAMP	534+32.17	REMOVE	CONTRACTOR
027	PRIVATE	RAMP	537+16.32	REMOVE	CONTRACTOR
028	PRIVATE	RAMP	542+36.47	REMOVE	CONTRACTOR
029	PRIVATE	RAMP	543+55.32	REMOVE	CONTRACTOR
030	PRIVATE	RAMP	554+61.40	REMOVE	CONTRACTOR
031	PRIVATE	RAMP	556+67.77	REMOVE	CONTRACTOR
032	PRIVATE	RAMP	557+57.54	REMOVE	CONTRACTOR
033	PLAQUEMINES PARISH	6" DIA. SEWER FORCE MAIN	588+00	RELOCATE OVER LEVEE	CONTRACTOR

TABULATION OF ALTERNATIVE 2 - EARTHEN LEVEE ADDITIONAL RIGHT-OF-WAY

POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		ACRES	POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		ACRES
		PROTECTED SIDE	AZIMUTH				PROTECTED SIDE	AZIMUTH	
A01	286+91.34'	540.87'	90°	A16	469+69.33'	576.51'	90°		
A02	288+64.19'	540.93'	90°	A17	505+80.31'	540.1'	90°		
A03	306+00.99'	540.93'	90°	A18	532+18.57'	539.79'	90°	50.44	
A04	317+55.40'	540.21'	90°	A19	569+01.98'	540.12'	90°		
A05	332+26.12'	540.27'	90°	A20	570+88.04'	146.22'	90°	34.13	
A06	377+61.60'	540.27'	90°						
A07	406+54.64'	540.28'	90°	62.40					
A08	449+48.34'	540.28'	90°	75.20					
A09	474+91.18'	562.27'	90°						
A10	481+24.65'	539.89'	90°						
A11	483+70.86'	557.04'	90°	36.55					
A12	486+61.61'	561.27'	90°						
A13	489+54.40'	551.78'	90°						
A14	491+13.05'	539.88'	90°						
A15	493+67.72'	540.17'	90°						
TOTAL									233.60

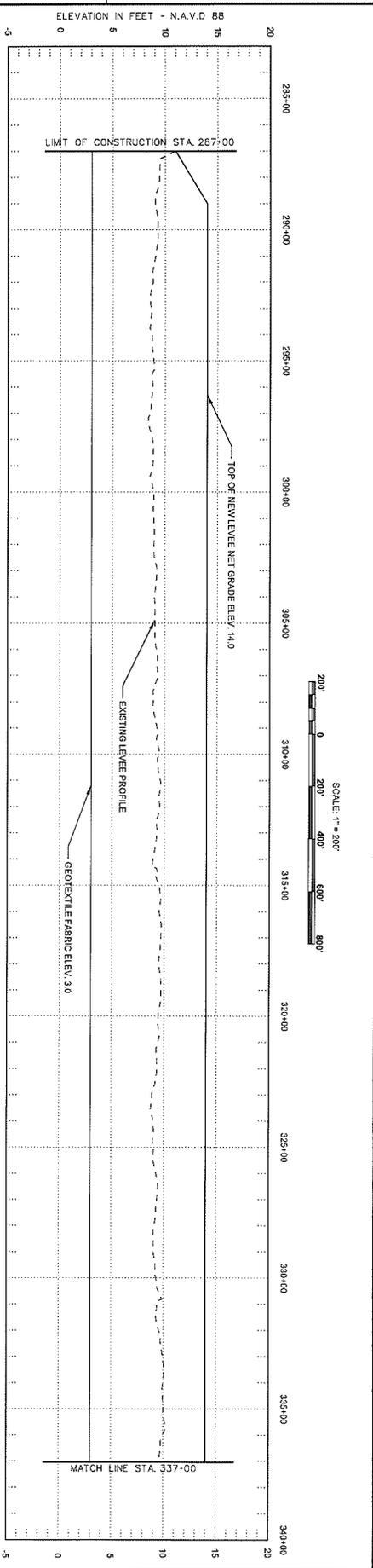
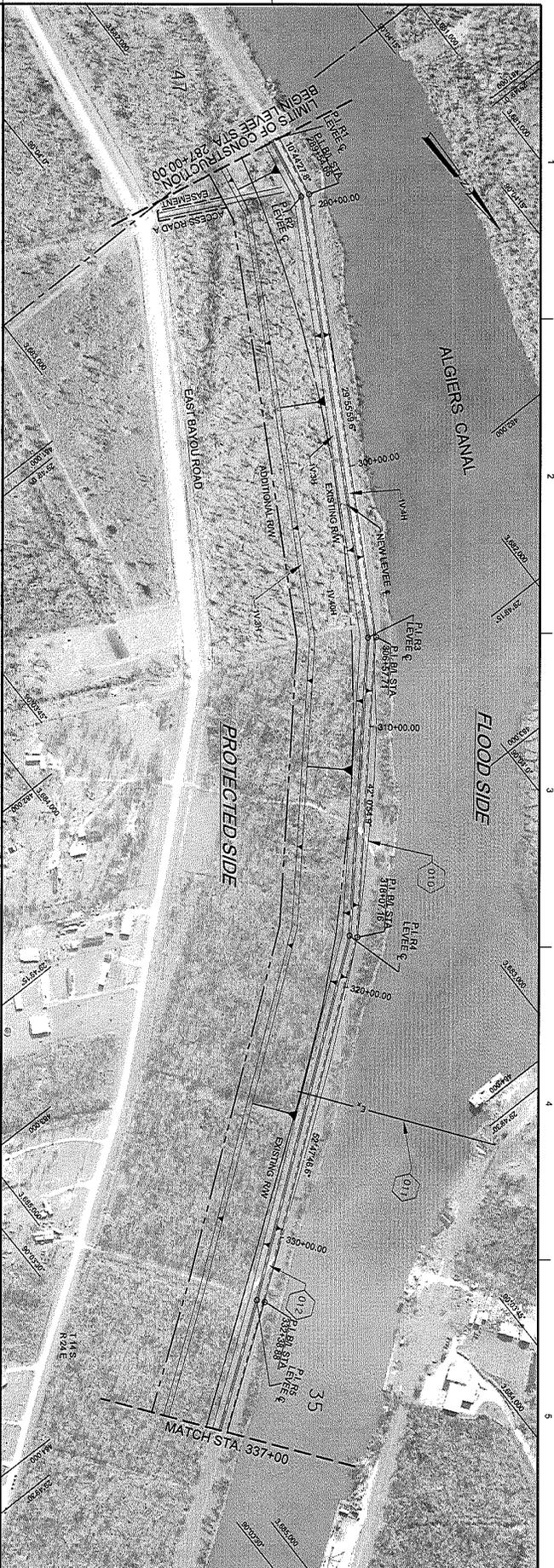
TABULATION OF ALTERNATIVE 2 - EARTHEN LEVEE C/L

POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE	
		FLOOD PROTECTED SIDE	FLOOD PROTECTED SIDE			FLOOD PROTECTED SIDE	FLOOD PROTECTED SIDE
L1	287+00.00	30.0'	L13	489+35.36	41.85'	30.0'	
L2	289+64.43	30.0'	L14	491+13.06	13.70'	30.0'	
L3	306+60.54	30.0'	L15	493+18.85	47.52'	30.0'	
L4	318+04.79	30.0'	L16	486+11.68	30.84'	30.0'	
L5	332+38.00	30.0'	L17	504+00.08	47.52'	30.0'	
L6	377+65.88	30.0'	L18	502+69.41	30.0'	30.0'	
L7	406+55.41	30.0'	L19	510+18.80	30.0'	30.0'	
L8	446+46.66	30.0'		532+16.03	30.0'	30.0'	
L9	472+27.52	30.0'		570+87.70	4.37'	30.0'	
L10	474+93.92	28.57'					
L11	481+24.88	47.11'					
L12	483+88.88	51.15'					
L12A	486+52.88						

NOTE: ALL OFFSETS ARE MEASURED 90° TO THE BASELINE.

FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERIS CANAL (EAST) HERO LEVEE TO HWY. 23 WBV-49.2 <b>TABULATION OF ALTERNATIVE 2                  EARTHEN LEVEE</b> PLAQUEMINES PARISH, LOUISIANA	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 2 <sup>nd</sup> Street, Metairie, LA 70001 (504) 887-7645	DESIGNED BY: J.L.J. DRAWN BY: MAJ CHECKED BY: EAB SUBMITTED BY: AIMS GROUP, INC. PLOT SCALE: 1" = 300' SIZE: ANSIC	DATE: 30 OCT 2008 CONTRACT NO.: W192P-01-D-0002 FILE NUMBER:	US Army Corps of Engineers New Orleans District New Orleans, Louisiana



NOTE:  
 1. SEE TYPICAL SECTION ON SHEET  
 10-30-08 FOR NEW LEVEE C/L  
 2. SEE SHEET G-10A FOR NEW LEVEE C/L  
 STATIONS, OFFSETS AND UTILITY DETAILS.

FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

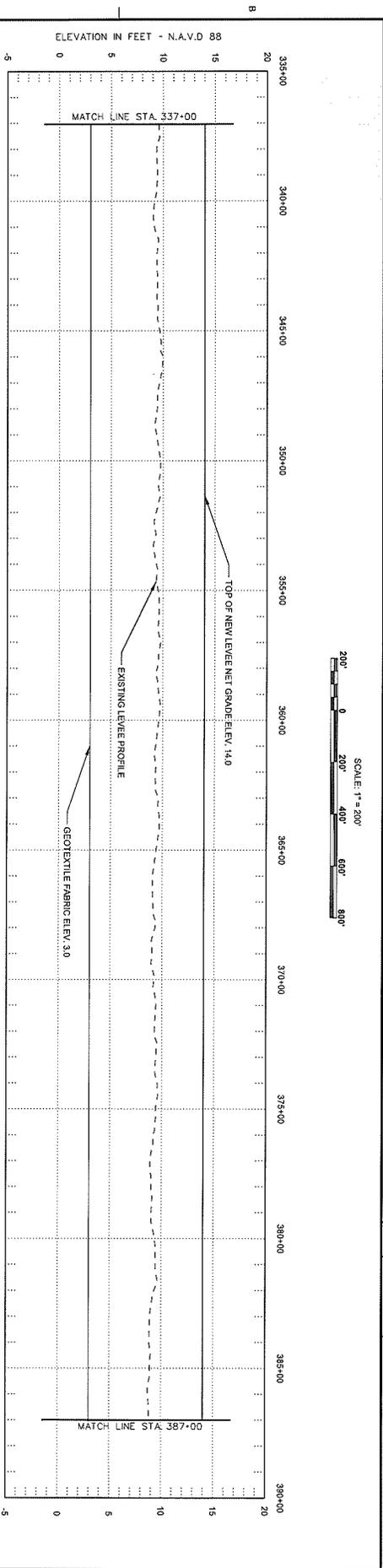
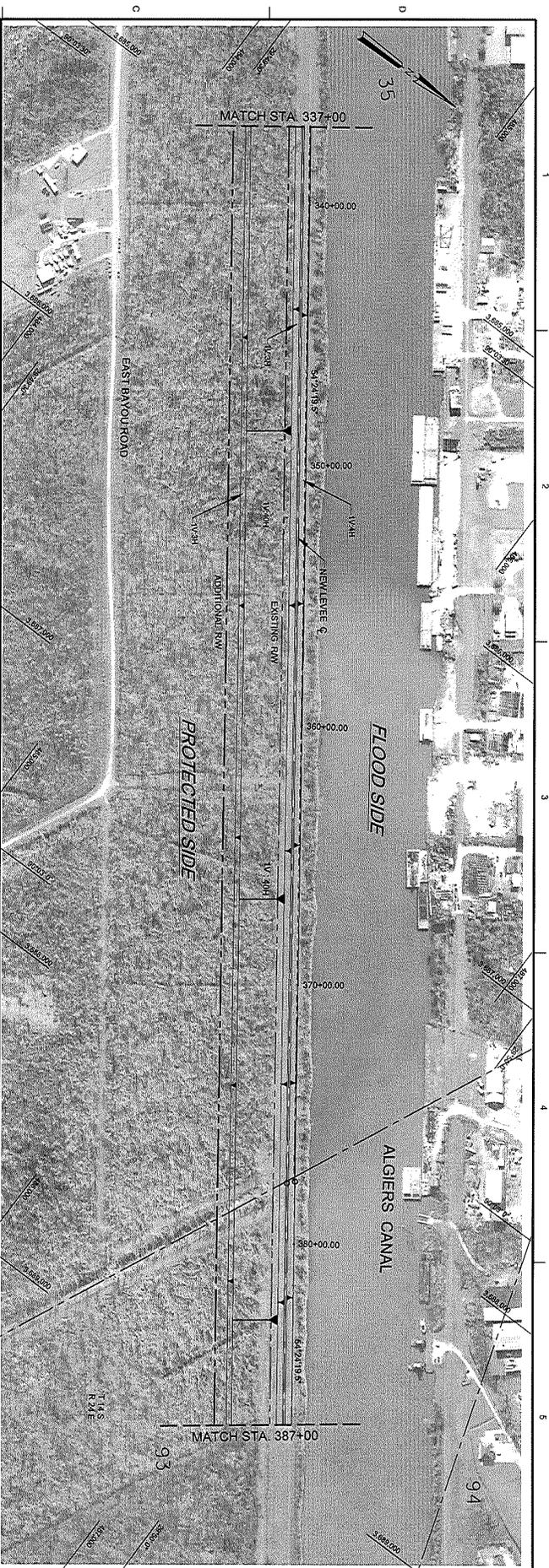
ALTERNATIVE REPORT FOR  
 WEST BANK AND VICINITY, NEW ORLEANS, LA  
 PHASE 2 HURRICANE PROTECTION  
 ALGIER'S CANAL (EAST) HERO LEVEE TO HWY.23  
 WBV-49  
 ALT. 3 - REINFORCED EARTHEN LEVEE  
 PLAN AND PROFILE  
 STA. 287+00 TO STA. 337+00  
 PLAGEMINES PARISH, LOUISIANA

U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT  
 NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
 Consulting Engineers  
 4121 Zenoith Street, Metairie, LA 70001  
 (504) 887-7045

DESIGNED BY: J.J.N.  
 DRAWN BY: M.W.  
 SUBMITTED BY: M.W.  
 PLOT SCALE: 1" = 200'  
 DATE: 30 OCT. 2008  
 SOLICITATION NO.:  
 CONTRACT NO.: W19R000002  
 FILE NUMBER:  
 SIZE: 11  
 AND ID: WBV-49.2 C101 A3.DGN

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR

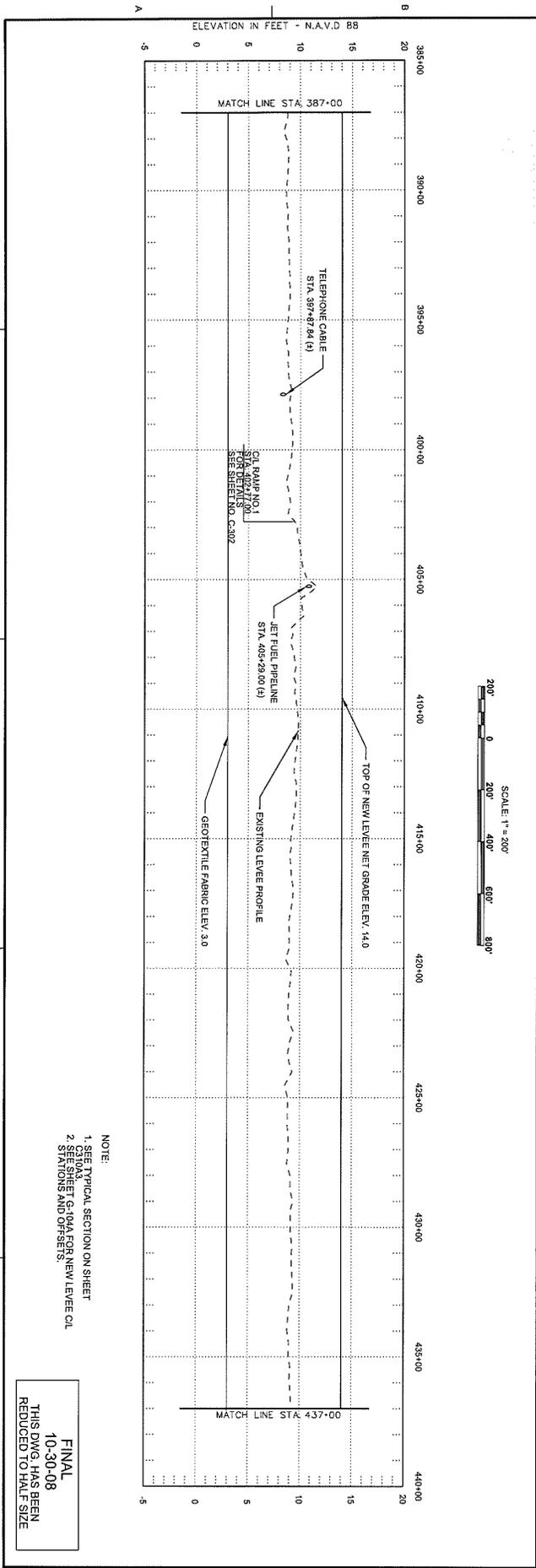




NOTE:  
 1. SEE TYPICAL SECTION ON SHEET  
 2. SEE SHEET G-10A FOR NEW LEVEE C/L  
 STATIONS AND OFFSETS.

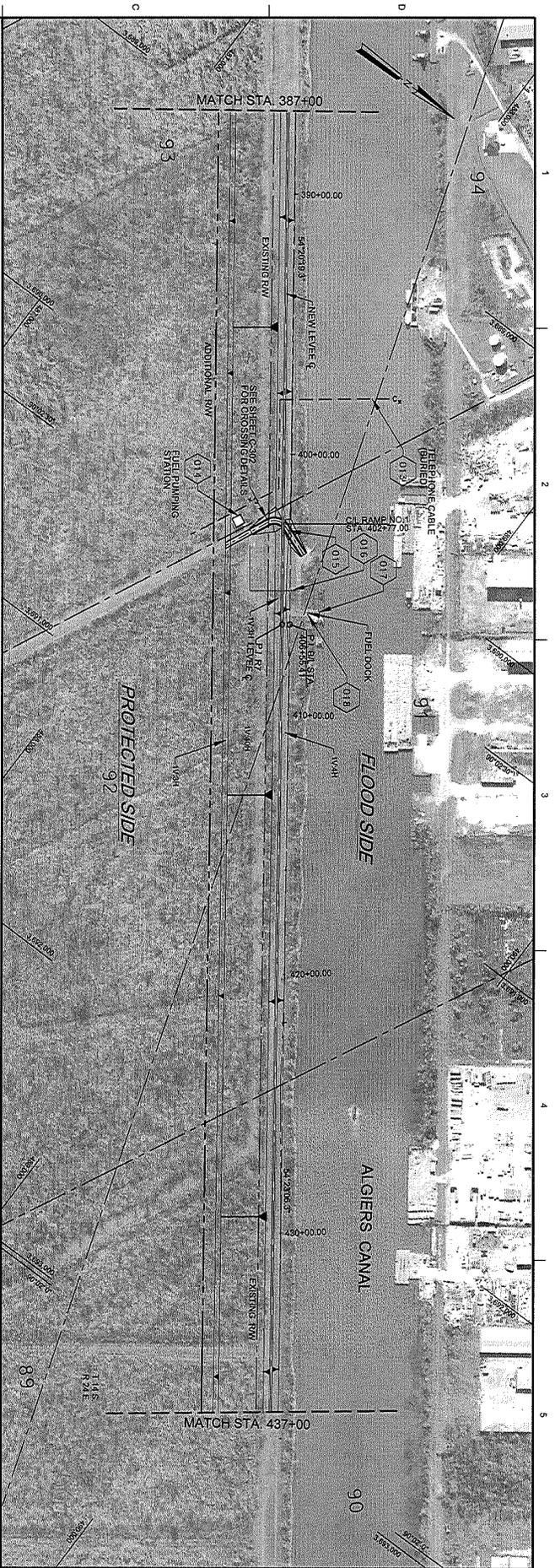
**FINAL**  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4121 Zerkis Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: JLN	DATE: 30 OCT. 2008	DISCONTINUATION NO.: CONTRACT NO.: W19SPR62-2002 FILE NUMBER: 103038																																								
	DRAWN BY: MAJ	CHECKED BY: EAB																																									
SUBMITTED BY: AIMS GROUP INC.	PLOT SCALE: 1" = 100'	PLOT DATE: 10/30/08	FILE NAME: WBV-49.2_C102_A3.DGN																																								
SHEET IDENTIFICATION C-102 A3	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGERS CANAL (EAST) HERO LEVEE TO HWY.23 (WBV-49) <b>ALT. 3 - REINFORCED EARTHEN LEVEE          PLAN AND PROFILE</b> STA. 337+00 TO STA. 387+00 PLAGUEMINES PARISH, LOUISIANA	<table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																	US Army Corps of Engineers New Orleans District
MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																				

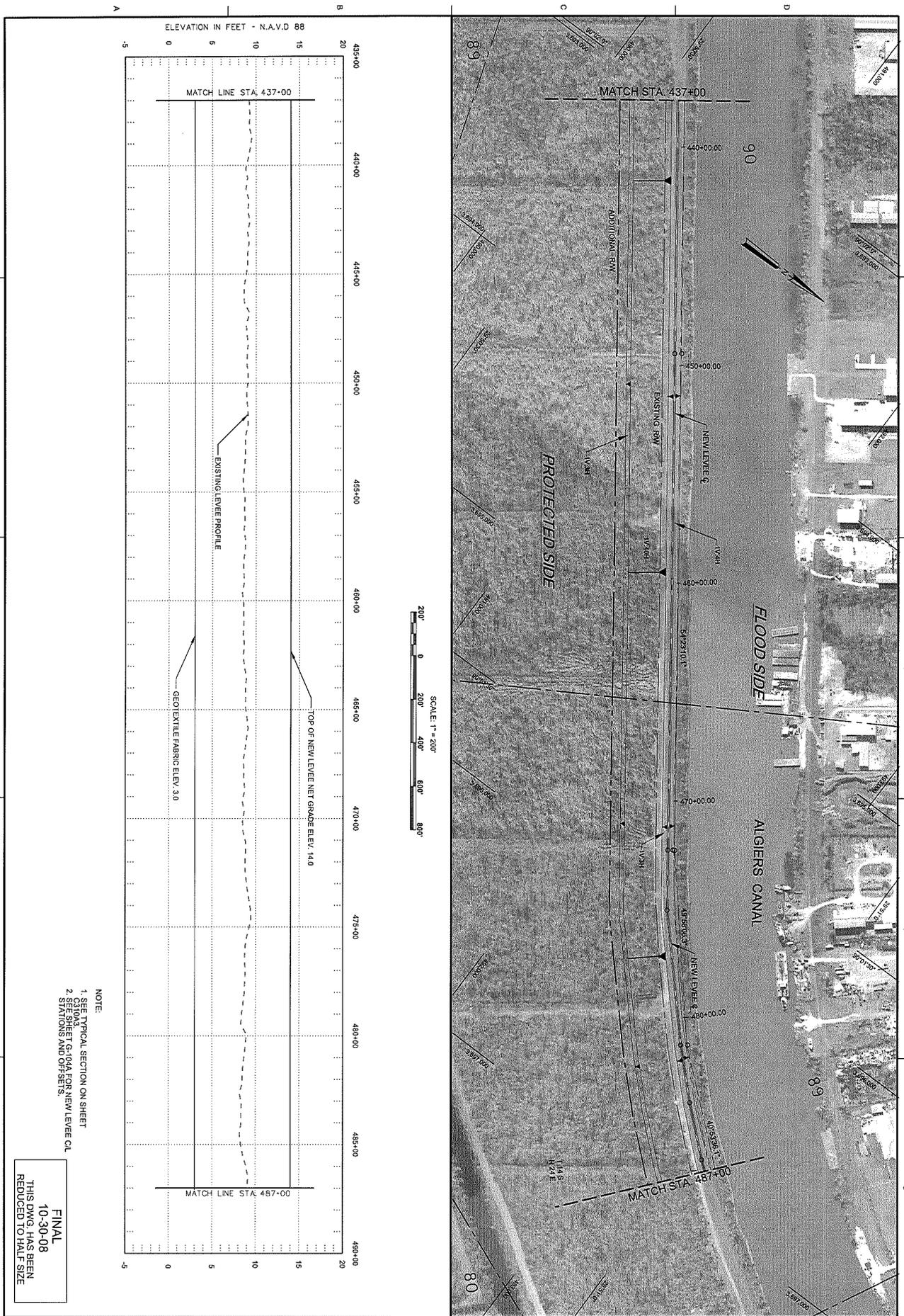


NOTE:  
 1. SEE TYPICAL SECTION ON SHEET C-103A3.  
 2. SEE SHEET GOALS FOR NEW LEVEE CUL STATIONS AND OFFSETS.

**FINAL**  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE



ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 189+87.84 TO 437+00 <b>ALT. 3 - REINFORCED EARTHEN LEVEE          PLAN AND PROFILE</b> STA. 387+00 TO STA. 437+00 PLAQUEMINES PARISH, LOUISIANA	DESIGNED BY: MAJ	DATE: 04/01/2008	U.S. Army Corps NEW ORLEANS DISTRICT	
	DRAWN BY: MAJ	CHECKED BY: EAB		SOLICITATION NO.: W91298-08-D-0002
	SUBMITTED BY: AIMS GROUP, INC.	CONTRACT NO.: W91298-08-D-0002		FILE NUMBER: 100008
	PLOT SCALE: 1" = 100'	PLOT DATE: 10/30/08		FILE NAME: W9149.2_C103_A3.DGN
SIZE: A3	FILE NAME: W9149.2_C103_A3.DGN	ANNO ID:	MARK DESCRIPTION DATE APPR MARK DESCRIPTION DATE APPR	



NOTE:  
 1. SEE TYPICAL SECTION ON SHEET  
 10-30-08  
 2. SEE SHEET G-104A FOR NEW LEVEE CL  
 STATIONS AND OFFSETS.

FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

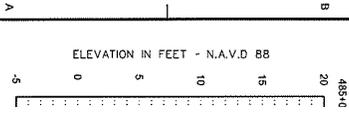
ALTERNATIVE REPORT FOR  
 WEST BANK AND VICINITY, NEW ORLEANS, LA  
 PHASE 2: HURRICANE PROTECTION  
 ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23  
 WBV-49.2  
 ALT. 3 - REINFORCED EARTHEN LEVEE  
 PLAN AND PROFILE  
 STA. 437+00 TO STA. 487+00  
 PLAQUEMINES PARISH,  
 LOUISIANA

U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT  
 NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
 Consulting Engineers  
 4421 2nd St, Metairie, LA 70001  
 (504) 887-7045

DESIGNED BY: J.J.N.	DATE: 30 OCT 2008
DRAWN BY: MAJ	SOLICITATION NO.:
CHECKED BY: EAB	CONTRACT NO.:
APPROVED BY: AMS GROUP, INC.	PROJECT NO.:
PROJECT NAME: 10309P	FILE NUMBER:
SIZE: ANSI D	FILE NAME: WBV-49.2 C104 A3.DGN

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR



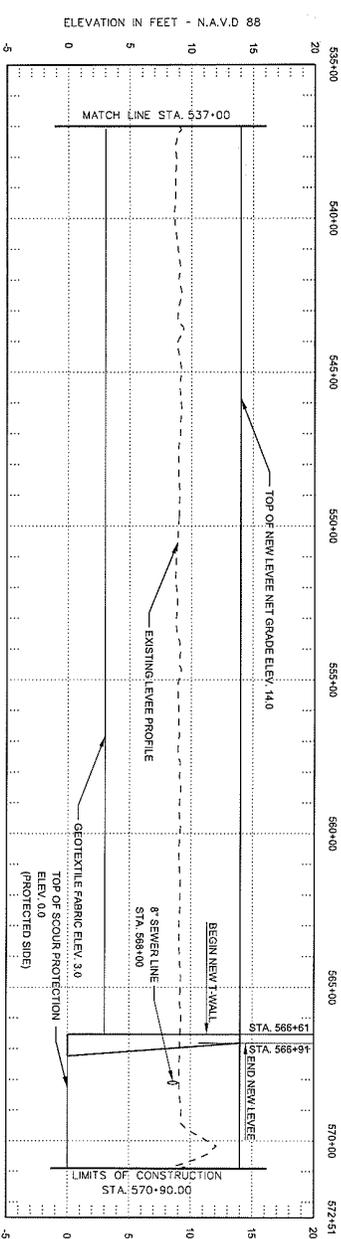
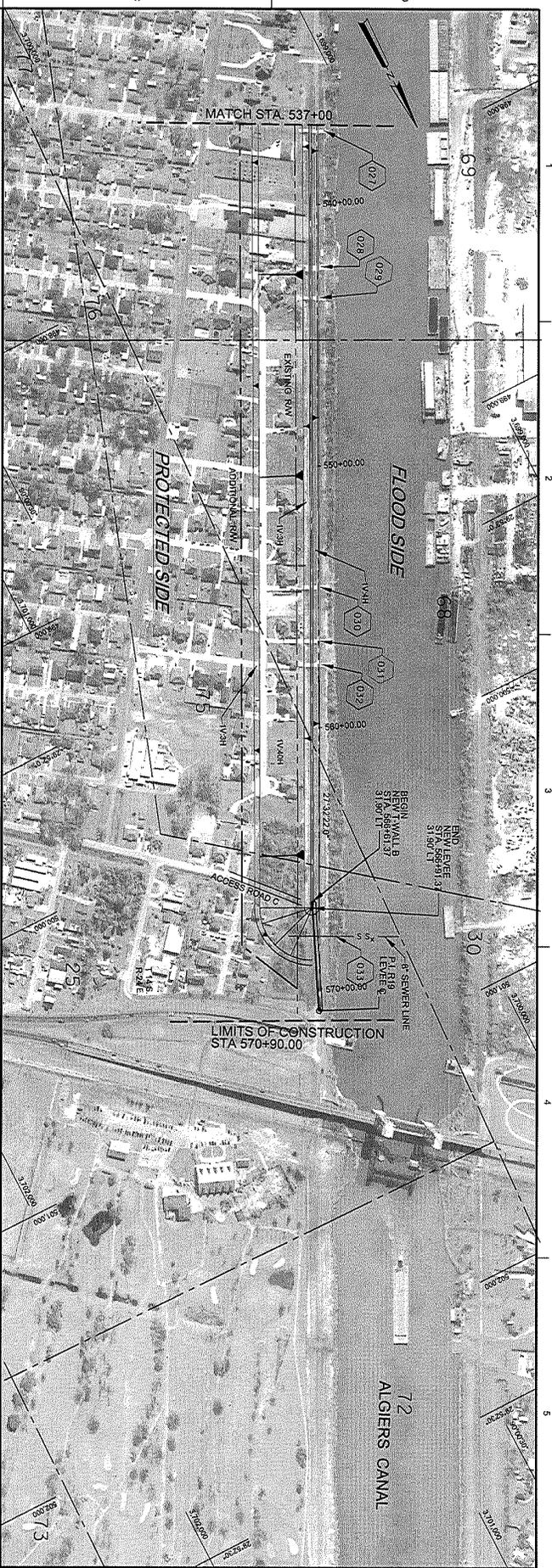


A

B

C

D



NOTE:  
 1. SEE TYPICAL SECTION ON SHEET C-109 A3  
 2. SEE SHEET G-104 FOR NEW LEVEE CIL  
 3. FOR TYPICAL T-WALL SECTION, SEE SHEETS C-310A1 AND S-101

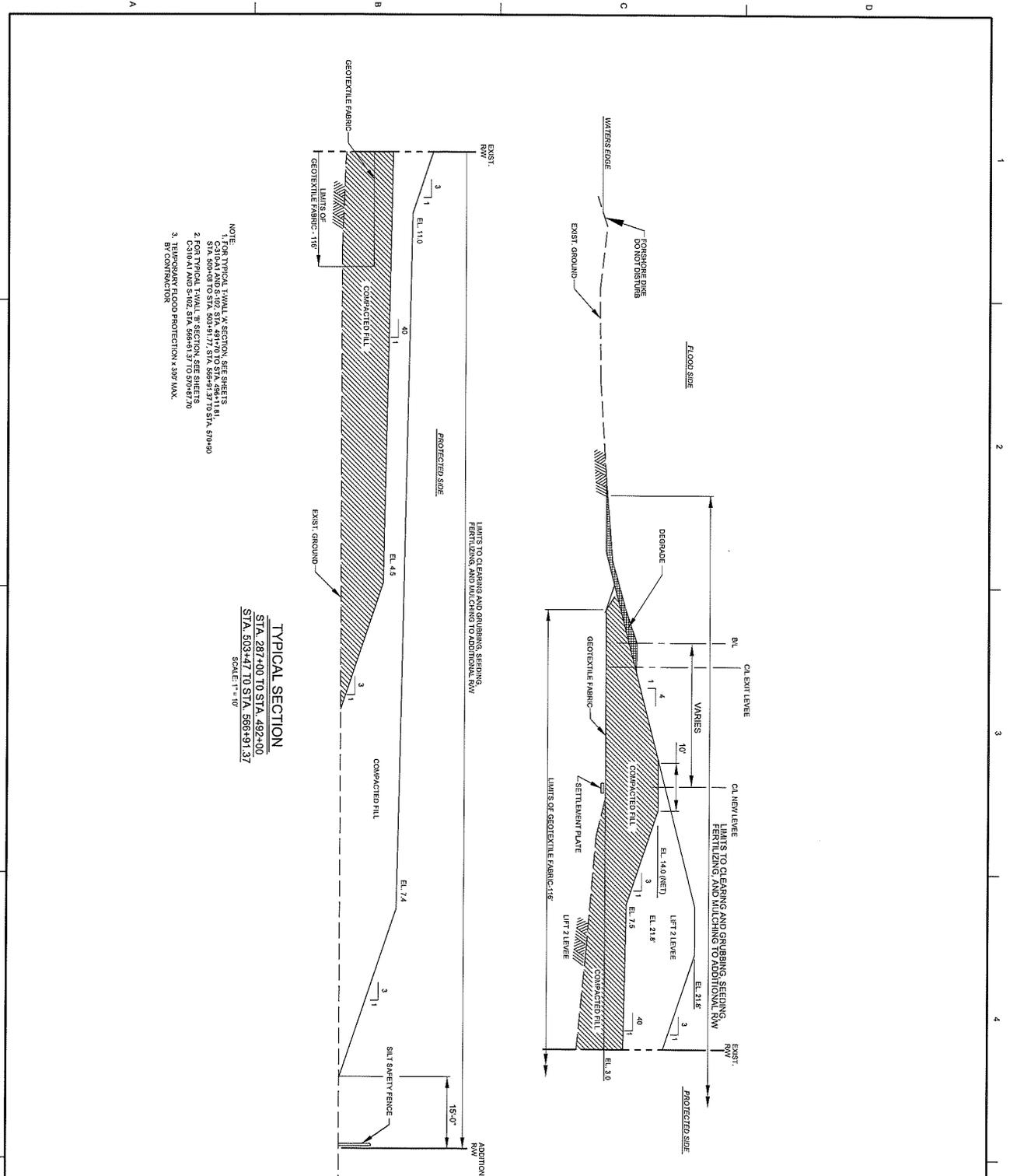
ALTERNATIVE REPORT FOR  
 WEST BANK AND VICINITY, NEW ORLEANS, LA  
 PHASE 2 HURRICANE PROTECTION  
 ALGIER'S CANAL (EAST) HERO LEVEE TO HWY.23  
 WBV-49.2  
**ALT. 3 - REINFORCED EARTHEN LEVEE  
 PLAN AND PROFILE**  
 STA. 537+00 TO STA. 572+50.55  
 PLACUNIMNES PARISH, LOUISIANA

DESIGNED BY: DATE: 30 OCT. 2008  
 DRAWN BY: MAJ CHD BY: EAS SOLICITATION NO.:  
 SUBMITTED BY: AIMS GROUP, INC. CONTRACT NO.: W91279-04-D-0002  
 PLOT SCALE: 1" = 200' FILE NUMBER:  
 SIZE: A3 FILE NAME: WBV-49.2\_C106\_A3.DGN  
 ANS/D

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR

U.S. Army Corps of Engineers  
 NEW ORLEANS DISTRICT

SHEET IDENTIFICATION  
 C-109 A3



- NOTE:
1. FOR TYPICAL T-WALL, K SECTION, SEE SHEETS C310A1 AND S-102, STA. 487+70 TO STA. 492+11.81.
  2. FOR TYPICAL T-WALL, B SECTION, SEE SHEETS C310A1 AND S-102, STA. 566+41.37 TO 570+87.79.
  3. TEMPORARY FLOOD PROTECTION x 300' MAX. BY CONTRACTOR.

**TYPICAL SECTION**  
 STA. 287+00 TO STA. 492+00  
 STA. 503+47 TO STA. 566+91.37  
 SCALE: 1" = 10'

FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

SHEET IDENTIFICATION <b>C-310-A3</b>	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIER CANAL (EAST) HERO LEVEE TO HWY 23 WBV-49.2	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	DESIGNED BY: JJA DWBY: MAL SUBMITTED BY: AIMS GROUP, INC. PLOT SCALE: 1" = 10' SIZE: A ANCH: 9	DATE: 09 OCT 2008 DEDICATION NO.: CONTRACT NO.: W17P6-05-D-0002 FILE NUMBER: WBV-49.2_C-310_A3.DGN	U.S. Army Corps of Engineers NEW ORLEANS DISTRICT
	<b>TYPICAL SECTION REINFORCED          EARTHEN LEVEE</b> PLAQUEMINES PARISH, LOUISIANA	<b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 26th Street, Metairie, LA 70001 (504) 887-7945	MARK DESCRIPTION DATE APPR MARK DESCRIPTION DATE APPR	MARK DESCRIPTION DATE APPR MARK DESCRIPTION DATE APPR	

TABULATION OF EXISTING RIGHT-OF-WAY

ITEM NO.	BL. STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH	ITEM NO.	BL. STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH
		PROTECTED SIDE	PROTECTED SIDE				PROTECTED SIDE	PROTECTED SIDE	
E1	287+00.00	180.0'	90°	E22	449+50.20	85.5'	90°		
E2	288+82.3	177.0'	90°	E23	456+88.33	86.0'	90°		
E3	289+01.05	140.0'	90°	E24	472+25.89	86.3'	90°		
E4	294+51.19	103.0'	90°	E25	474+22.16	101.3'	90°		
E5	289+69.79	80.0'	90°	E26	477+47.92	101.8'	90°		
E6	289+83.33	64.0'	90°	E27	481+24.55	88.0'	90°	139°11'17.89"	
E7	302+98.82	68.0'	90°	E28	483+50.53	106.6'	90°		
E8	306+33.65	80.0'	90°	E29	486+56.44	110.7'	90°		
E9	310+18.55	63.0'	90°	E30	489+38.34	110.4'	90°		
E10	315+28.41	57.5'	90°	E31	492+58.56	93.2'	90°		
E11	317+88.90	82.2'	90°	E32	495+23.75	124.6'	90°		
E12	321+01.36	63.6'	90°	E33	497+82.87	128.6'	90°		
E13	322+72.50	62.4'	90°	E34	500+80.27	85.0'	90°		
E14	324+54.85	62.7'	90°	E35	510+17.51	87.2'	90°		
E15	323+41.63	84.4'	90°	E36	524+40.20	87.5'	90°		
E16	324+68.50	83.6'	90°	E37	551+91.40	83.5'	90°		
E17	327+81.06	82.6'	90°	E38	554+39.52	83.6'	90°		
E18	330+81.18	82.8'	90°	E39	570+80.00	87.5'	90°		
E19	400+85.61	84.6'	90°						
E20	406+55.93	85.5'	90°						
E21	434+64.50	85.5'	90°						

TABULATION OF ALTERNATIVE 3 REINFORCED EARTHEN LEVEE ADDITIONAL RIGHT-OF-WAY

POINT NO.	BL. STATION	DISTANCES MEASURED FROM BASELINE		ACRES	POINT NO.	BL. STATION	DISTANCES MEASURED FROM BASELINE		ACRES
		PROTECTED SIDE	PROTECTED SIDE				PROTECTED SIDE	PROTECTED SIDE	
A01	287+00.00	300.0'	90°	A16	500+80.92	300.4'	90°		
A02	289+04.38	300.0'	10°53'3.5"	A17	504+00	289.5'	90°		
A03	306+26.54	298.47'	281°18'3.2"	A18	504+00	328.55'	90°		
A04	317+83.38	300.83'	47°21'54.5"	A19	504+50	339.35'	90°		
A05	332+34.30	300.83'	52°07'28.8"	A20	505+50	308.56'	90°		
A06	377+60.04	299.32'	53°48'8.2"	A21	527+00	195.0'	90°		
A07	406+55.41	299.32'	59°41'47.2"	A22	527+00	325.12'	90°		
A08	449+49.66	321.0'	53°44'20.8"	A23	528+00	300.12'	90°		
A09	474+86.69	321.0'	47°12'22.2"	A24	528+00	300.12'	90°		
A10	481+24.85	297.02'	44°12'14.1"	A25	568+00	86.47'	90°		
A11	483+81.46	316.29'	47°12'14.1"	A26	570+80.00	86.47'	90°		
A12	486+84.19	320.54'	47°07'4.2"	A25					
A13	489+68.49	311.15'	38°27'10.6"						
A14	491+38.97	299.39'	35°27'13.7"						
A15	495+67.72	299.33'	33°47'58.0"	2.05					
TOTAL				2.05				137.4	

TABULATION OF ALTERNATIVE 3 REINFORCED EARTHEN LEVEE C/L

POINT NO.	BL. STATION	DISTANCES MEASURED FROM BASELINE		ACRES	POINT NO.	BL. STATION	DISTANCES MEASURED FROM BASELINE		ACRES
		PROTECTED SIDE	PROTECTED SIDE				PROTECTED SIDE	PROTECTED SIDE	
R1	287+00.00	300.0'	90°	R2	289+48.43	300.0'	90°		
R2	289+48.43	300.0'	300°	R3	306+60.54	300.0'	90°		
R3	306+60.54	300.0'	300°	R4	318+04.79	300.0'	90°		
R4	318+04.79	300.0'	300°	R5	332+38.00	300.0'	90°		
R5	332+38.00	300.0'	300°	R6	377+65.88	300.0'	90°		
R6	377+65.88	300.0'	300°	R7	406+55.41	300.0'	90°		
R7	406+55.41	300.0'	300°	R8	449+49.66	300.0'	90°		
R8	449+49.66	300.0'	300°	R9	474+86.92	300.0'	90°		
R9	474+86.92	300.0'	90°	R10	481+24.85	28.67'	90°		
R10	481+24.85	28.67'	90°	R11	483+80.66	47.71'	90°		
R11	483+80.66	47.71'	90°	R12	486+82.68	51.15'	90°		
R12	486+82.68	51.15'	90°	R13	489+35.36	41.85'	90°		
R13	489+35.36	41.85'	90°	R14	491+13.06	30.0'	90°		
R14	491+13.06	30.0'	90°	R15	495+19.85	13.70'	90°		
R15	495+19.85	13.70'	90°	R16	496+11.66	47.82'	90°		
R16	496+11.66	47.82'	90°	R17	502+99.41	30.0'	90°		
R17	502+99.41	30.0'	90°	R18	522+18.03	30.0'	90°		
R18	522+18.03	30.0'	90°	R19	570+81.70	4.37'	90°		

NOTE: ALL OFFSETS ARE MEASURED 90° TO THE BASELINE.

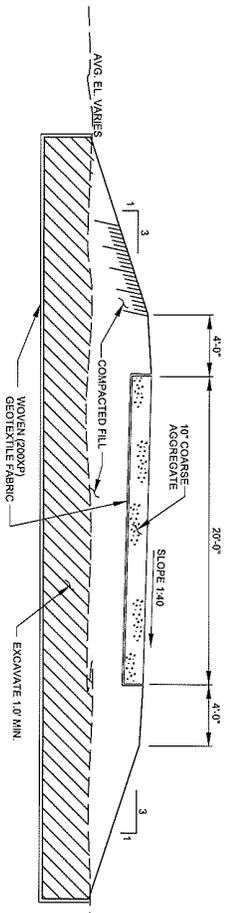
FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERIS CANAL (EAST) HERO LEVEE TO HWY 23 FROM HWY 92  
**TABULATIONS ALTERNATIVE 3 REINFORCED EARTHEN LEVEE**  
PLAQUEMINES PARISH, LOUISIANA

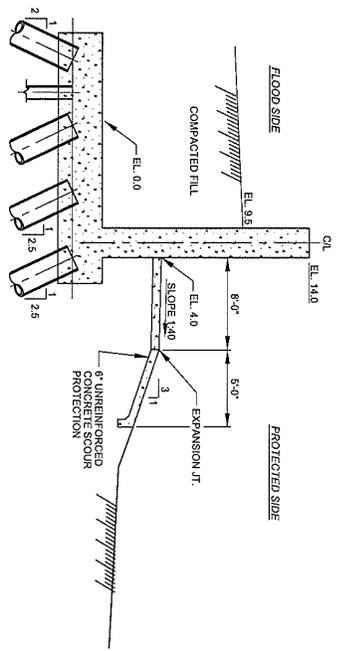
U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT  
NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
Consulting Engineers  
4421 Zwick Street, Metairie, LA 70001  
(504) 887-7645

DESIGNED BY: DATE: 10/30/08  
DRAWN BY: CHK BY: SOLICITATION NO.:  
MAJ. EAD  
CONTRACT NO.: W912P9-04-D-0002  
SUBMITTED TO: FILE NUMBER:  
AIMS GROUP, INC.  
PLOT SCALE: 1" = 300.00'  
PLOT DATE: 10/30/08  
FILE NAME: W912P9-04-D-0002.DGN

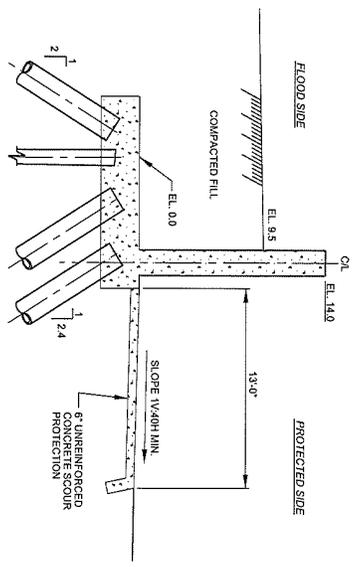
U.S. Army Corps of Engineers  
New Orleans District



**CROSSING RAMP**  
SCALE 1/4" = 1'-0"



**T-WALL A**  
**TYPICAL SCOUR PROTECTION**  
SCALE 1/4" = 1'-0"



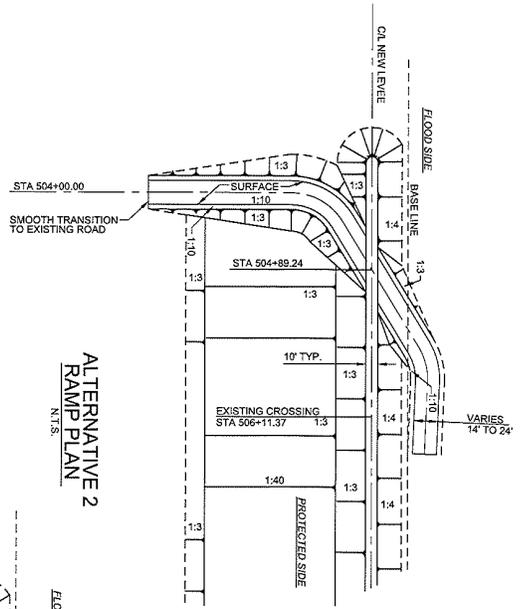
**T-WALL B**  
**TYPICAL SCOUR PROTECTION**  
SCALE 1/4" = 1'-0"

**FINAL**  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

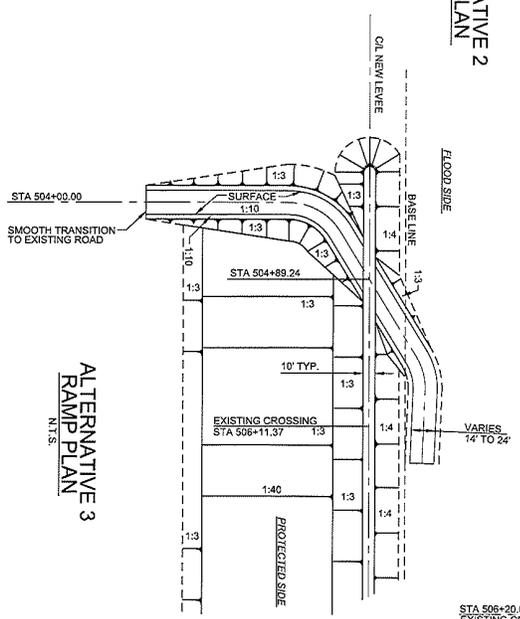
ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 WBV-49.2 <b>CIVIL WORK DETAILS</b> PLACEMINES PARISH, LOUISIANA		U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zeno Street, Metairie, LA 70001 (504) 887-7443		DESIGNED BY: MAJ CHKD BY: EAB SUBMITTED BY: AIMS GROUP, INC. PLOT SCALE: 1:1 SIZE: ANSI D		DATE: 30 OCT. 2008 SOLICITATION NO.: CONTRACT NO.: WB1276-08-D-0002 FILE NUMBER: R008 FILE NAME: WBV-49.2_C005.DGN		<table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																	 U.S. Army Corps of Engineers District Engineer New Orleans District	
MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																												

A B C D

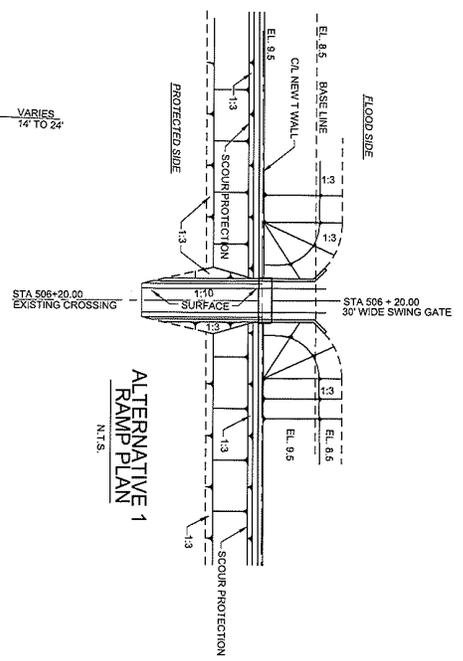
1 2 3 4 5



**ALTERNATIVE 2  
RAMP PLAN**  
N.T.S.



**ALTERNATIVE 3  
RAMP PLAN**  
N.T.S.



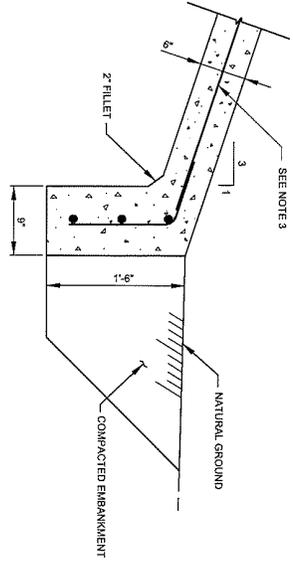
**ALTERNATIVE 1  
RAMP PLAN**  
N.T.S.

FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

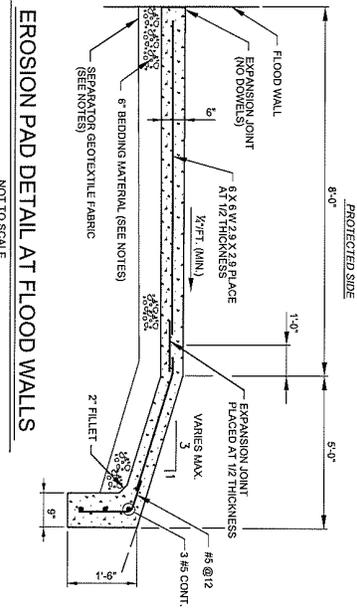
SHEET IDENTIFICATION C-301	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 WBV-49.2	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	DESIGNED BY: LJA DWN BY: EAB SUBMITTED BY: AIMS GROUP, INC. PLOT SCALE: 1" = 5000' SHEET NO.: 11	DATE: 30 OCT 2006 SOLICITATION NO.: CONTRACT NO.: WB13PS-06-D-0002 FILE NUMBER: PLOT DATE: 9/20/06	U.S. Army Corps of Engineers New Orleans District
	LEVEE CROSSING PLAN PLAQUEMINES PARISH, LOUISIANA	AIMS GROUP, Inc. Consulting Engineers 4421 Zerkle Street, Metairie, LA 70001 (504) 887-7945	FILE NAME: WBV-49.2_C301.DGN	MARK DESCRIPTION DATE APPR. MARK DESCRIPTION DATE APPR.	U.S. Army Corps of Engineers New Orleans District



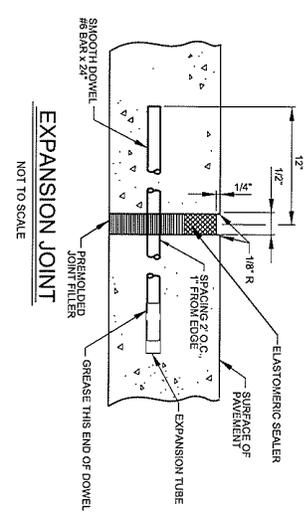




**TYPICAL CONCRETE PROTECTION FOR 6" SCOUR PROTECTION**  
NOT TO SCALE



**EROSION PAD DETAIL AT FLOOD WALLS**  
NOT TO SCALE



**EXPANSION JOINT**  
NOT TO SCALE

- NOTES:**
1. CONTRACTION JOINTS SHALL BE SPACED 10 FT. O.C. LONGITUDINAL AND LATERAL FOR ALL CONCRETE SLABS.
  2. TRANSVERSE EXPANSION JOINTS AT 30' SPACING. CONCRETE SHALL BE FULLY INTERLOCK OR WALL EXP. JT. SEE EXPANSION JOINT DETAIL.
  3. FOR SCOUR PROTECTION REINFORCING STEEL DOWELS, BEDDING MATERIAL AND GEOTEXTILE REQUIREMENTS REFER TO EROSION PAD DETAIL SHOWN ON THIS SHEET.
  4. REFER TO STRUCTURAL CONCRETE SPECIFICATIONS (4800 P.S.I. CONCRETE W/ CLASS A FINISH)
  5. SEPARATOR FABRIC SHALL HAVE A MINIMUM OF 200 P.P.I. TENSILE STRENGTH IN ANY PRINCIPAL DIRECTION.

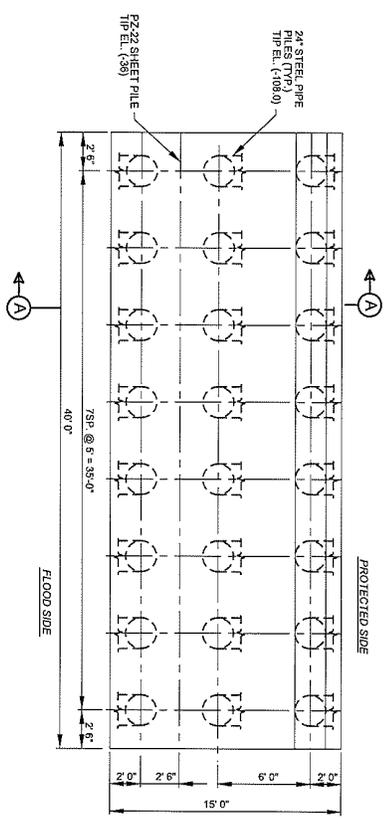
FINAL  
10-30-08  
THIS DRAWING HAS BEEN  
REDUCED TO HALF SIZE

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenith Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: L.S.	DATE: 12 OCT 2008	SOLICITATION NO.: EAS  CONTRACT NO.: WB12FR-08-D-0002  FILE NUMBER:																	
	DWN BY: CND EAB MAJ EAB	PLOT SCALE: 1" = 30'00"			PLOT DATE: 11/03/08															
SIZE: ANSI D	FILE NAME: WBV-49.2_C104.DGN	<table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPV</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPV</th> </tr> </thead> <tbody> <tr> <td> </td> </tr> </tbody> </table>			MARK	DESCRIPTION	DATE	APPV	MARK	DESCRIPTION	DATE	APPV								
MARK	DESCRIPTION	DATE	APPV	MARK	DESCRIPTION	DATE	APPV													

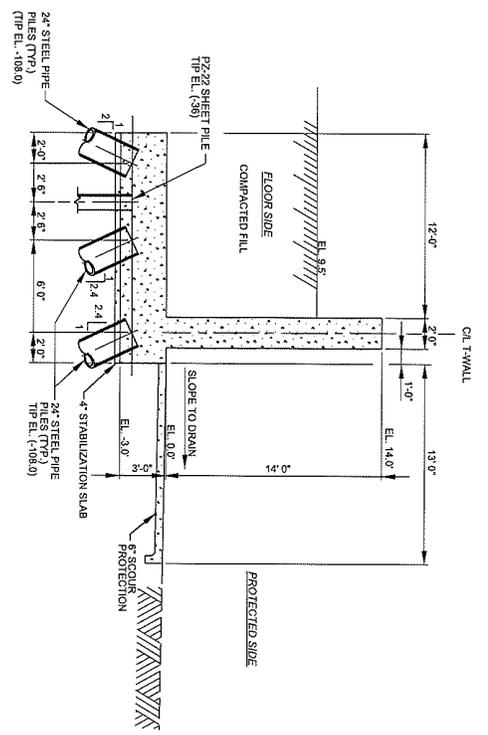
SHEET  
IDENTIFICATION  
C-304

ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIERES CANAL (EAST) HERO LEVEE TO HWY 23  
WBV-49.2  
**SCOUR DETAILS**  
PLAQUEMINES PARISH, LOUISIANA

U.S. Army Corps  
of Engineers  
of Engineers  
of Engineers  
of Engineers



**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"

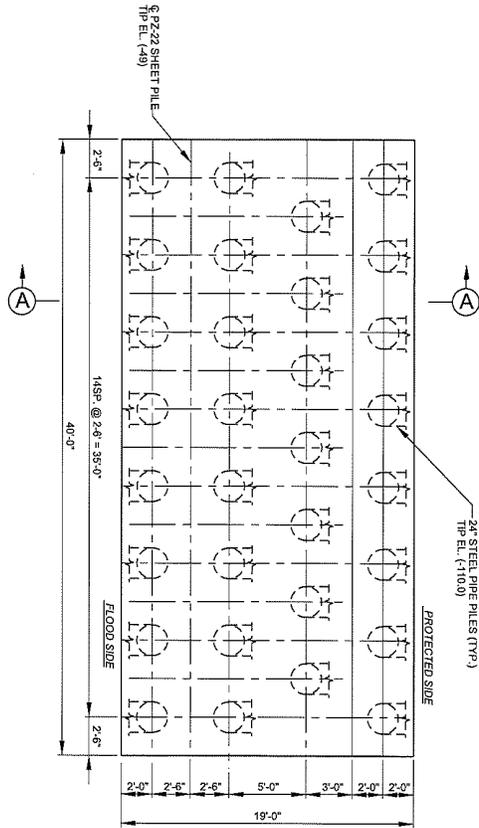


**SECTION A**  
SCALE: 1/4" = 1'-0"

**TYPE "B" T-WALL**

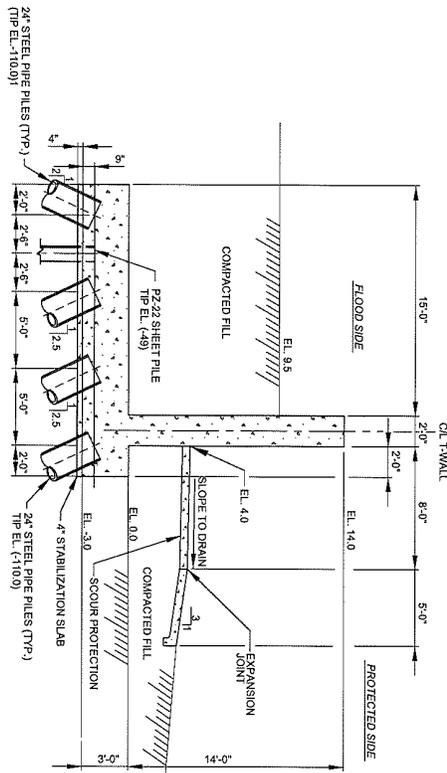
FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

SHEET IDENTIFICATION S-101	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERIS CANAL (EAST) HERO LEVEE TO HWY 23 WBV-49.2 <b>TYP. SECTION &amp; PLAN</b> <b>T-WALL TYPE "B"</b> PLAQUEMINES PARISH, LOUISIANA	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zwick Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: LJK DRAWN BY: MAJ SUBMITTED BY: AIMS GROUP, INC. PLOT SCALE: 1/4" = 1'-0" SIZE: A AND: D	DATE: 30 OCT 2008 SOLICITATION NO.: CONTRACT NO.: W912P9-06-D-0002 FILE NUMBER: 100000	U.S. Army Corps of Engineers New Orleans District New Orleans, Louisiana		
			MARK	DESCRIPTION	DATE	APPR.	MARK



**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"

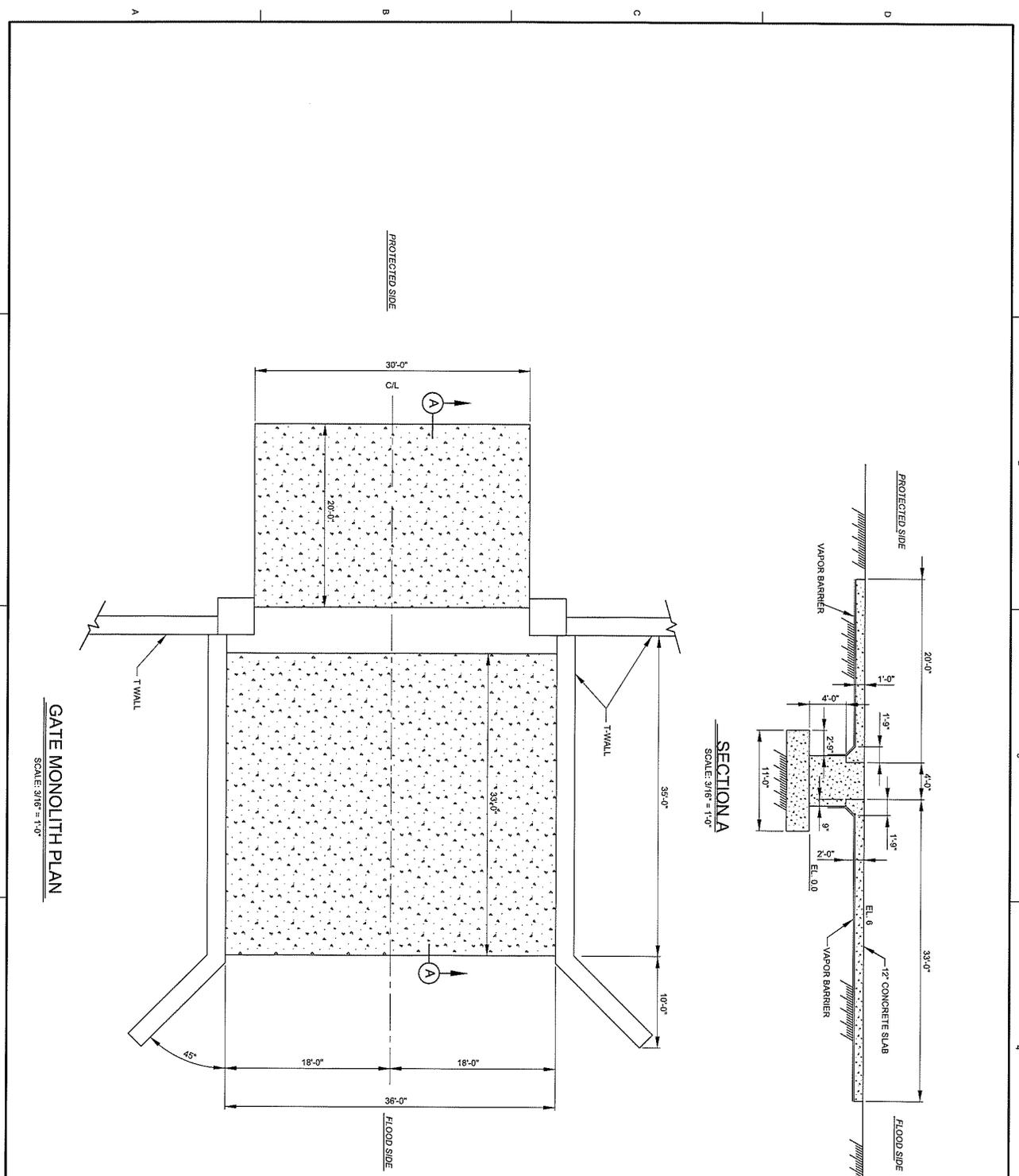
**TYPE "A" T-WALL**



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

FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

SHEET IDENTIFICATION S-102	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALCIERS CANAL (EAST) HERO LEVEE TO HWY 23 WBV-49.2 <b>TYP. SECTION &amp; PLAN</b> T-WALL TYPE "A" PLAQUEMINES PARISH, LOUISIANA		U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenois Street, Metairie, LA 70001 (504) 887-7045		DESIGNED BY: JJJ DRAWN BY: MAJ CHECKED BY: EAG SUBMITTED BY: AIMS GROUP INC. CONTRACT NO.: W13P6862002 PLOT SCALE: 1/4" = 1'-0" PLOT DATE: 10/20/08 FILE NUMBER: WBV-49.2 S-102.DGN		DATE: 30 OCT 2008 SOLICITATION NO.: CONTRACT NO.: W13P6862002 FILE NUMBER:		U.S. Army Corps of Engineers New Orleans District	
	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR		



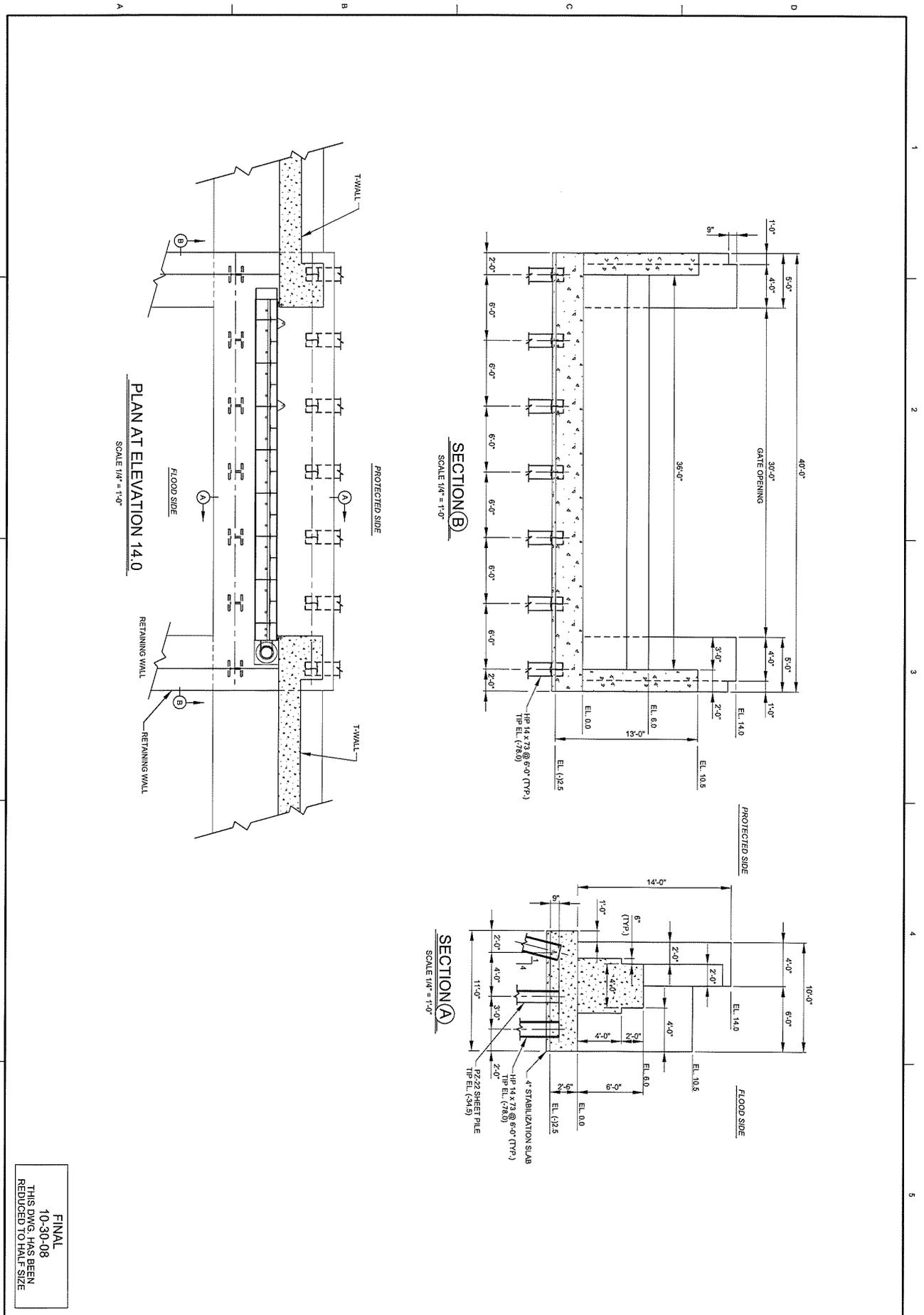
**GATE MONOLITH PLAN**  
SCALE: 3/16" = 1'-0"

**SECTION A**  
SCALE: 3/16" = 1'-0"

FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

SHEET IDENTIFICATION S-103	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 WBV-49.2  <b>GATE MONOLITH PLAN</b>  PLAQUEMINES PARISH, LOUISIANA	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenith Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: LJB	DATE: 13 OCT 2008	SOLICITATION NO.: CONTRACT NO.: FILE NUMBER:
			DRAWN BY: MAJ	CHECK BY: EAB	
			PLOT SCALE: 1/16" = 1'-0"	PLOT DATE: 10/20/08	
			SIZE: ANSI D	FILE NAME: WBV-49.2_S-103.DGN	
		MARK DESCRIPTION DATE APPR. MARK DESCRIPTION DATE APPR.			





FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

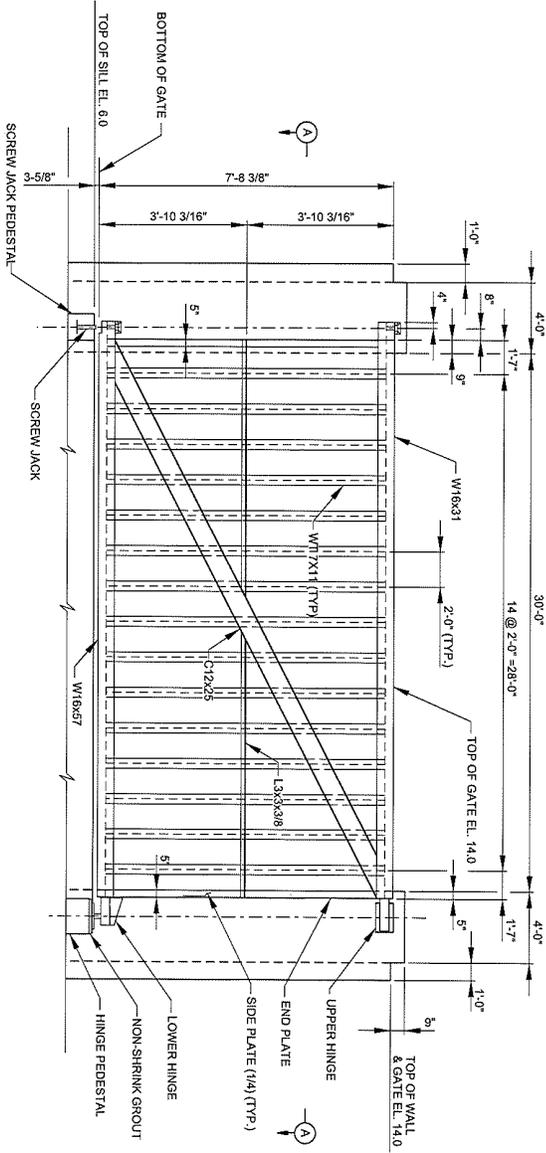
ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIER'S CANAL (EAST) HERO LEVEE TO HWY 23  
WBV-48.2  
**SWING GATE MONOLITH**  
PLAQUEMINES PARISH, LOUISIANA

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT  
NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
Design Engineers  
4421 Zenith Street, Metairie, LA 70001  
(504) 887-7045

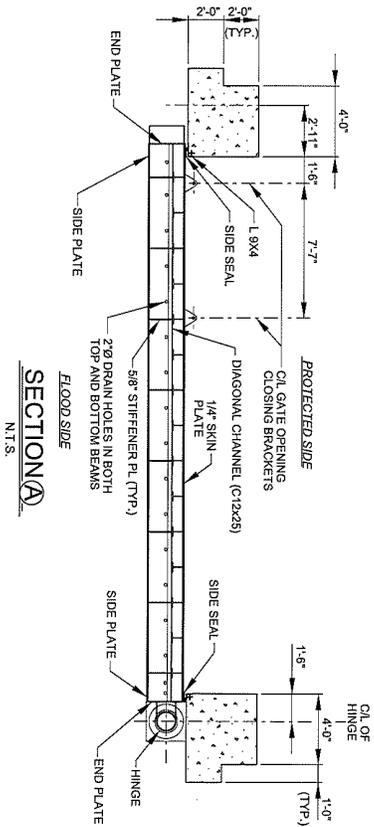
DESIGNED BY: J.J.N.  
DRAWN BY: MAJ  
CHECKED BY: EAS  
SUBMITTED BY: AIMS GROUP, INC.  
PLOT SCALE: 1/4" = 1'-0"  
PLOT DATE: 10/30/08  
DATE: 30 OCT 2008  
SOLICITATION NO.:  
CONTRACT NO.: WBV-48.2-2002  
FILE NUMBER:  
SHEET NAME: WBV-48.2-S-104.DGN

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR





GATE ELEVATION  
N.T.S.



SECTION A-A  
FLOOD SIDE  
N.T.S.

FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 421 Zenith Street, Metairie, LA 70001 (504) 887-7445	DESIGNED BY: J.J.M.	DATE: 26 OCT 2008	U.S. Army Corps of Engineers New Orleans District																
	DWN BY: MAJ	CHD BY: EAB		REGISTRATION NO.: CONTRACT NO.: FILE NUMBER:															
SUBMITTED BY: AIMS GROUP INC.	PLOT SCALE: 1:1	PLOT DATE: 20/08/08	<table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> </tr> </thead> <tbody> <tr> <td> </td> </tr> </tbody> </table>	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR								
MARK	DESCRIPTION	DATE		APPR	MARK	DESCRIPTION	DATE	APPR											
FILE NAME: WBV-49.2_S-105.DGN																			

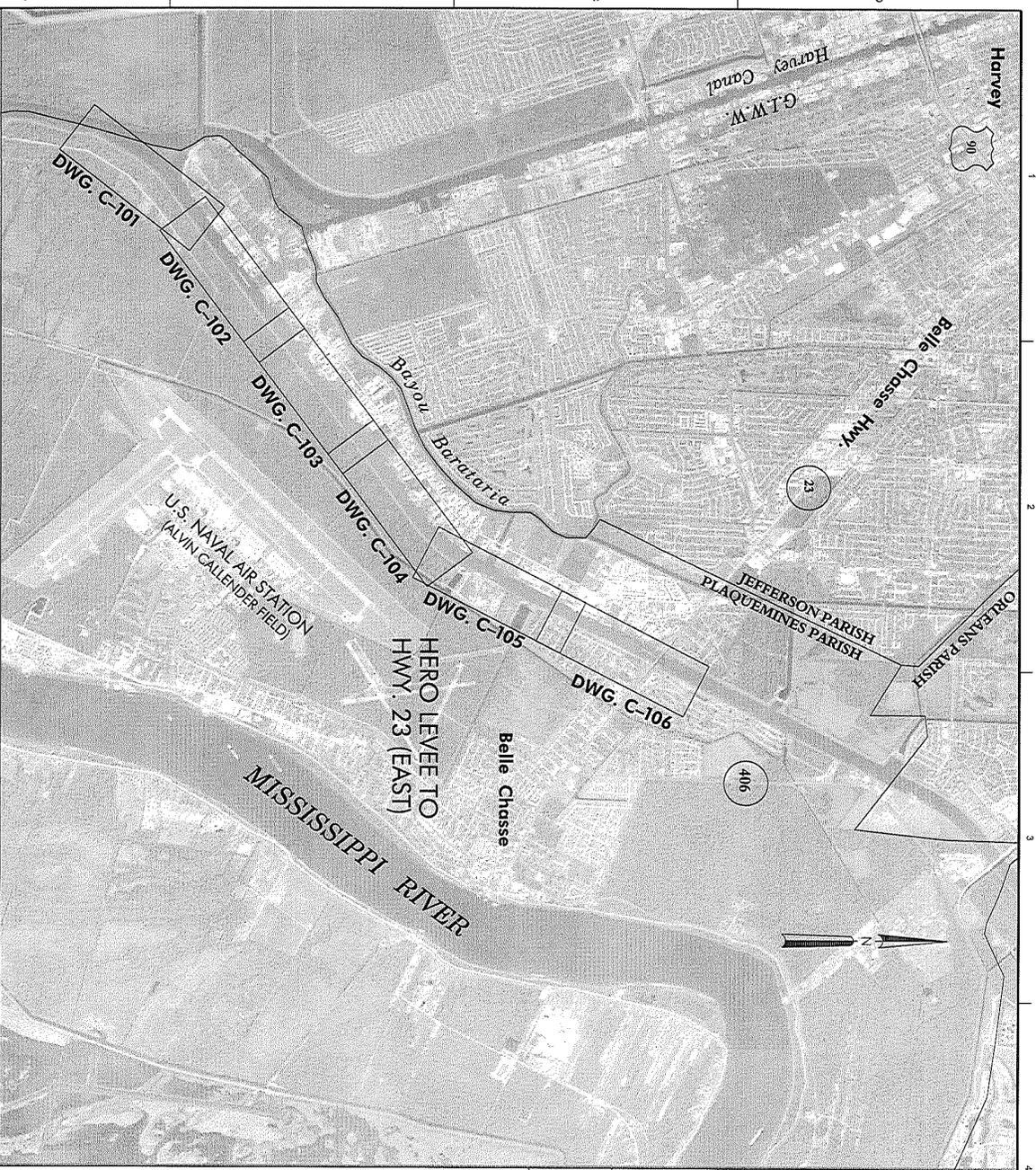
ALTERNATIVE REPORT FOR  
 WEST BANK AND VICINITY, NEW ORLEANS, LA  
 PHASE 2 HURRICANE PROTECTION  
 ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23  
 WBV-49.2  
**30' SWING GATE DETAILS**  
 PLAQUEMINES PARISH, LOUISIANA

SHEET IDENTIFICATION  
 S-105



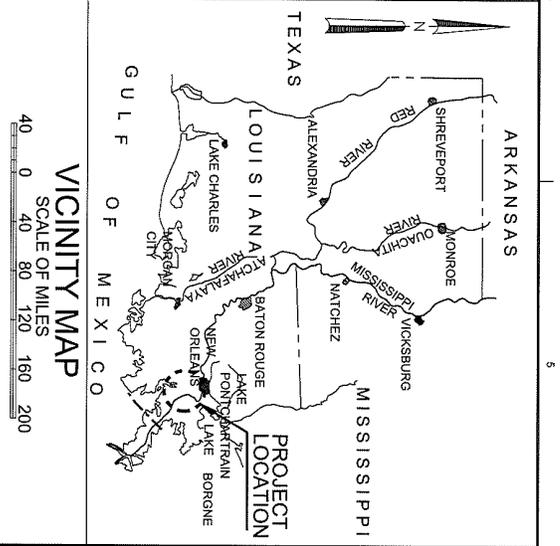






# LOCATION MAP

SCALE: 1" = 2000'  
 2000' 0 2000' 4000' 6000' 8000'



## VICINITY MAP

SCALE OF MILES  
 40 0 40 80 120 160 200

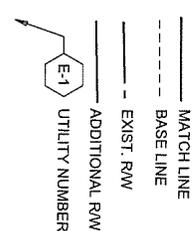
FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

SHEET IDENTIFICATION <b>G-100</b>	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGERS CANAL (EAST) HERO LEVEE TO HWY 23 W814-49.2 <b>LOCATION AND VICINITY MAP</b> PLAQUEMINES PARISH, LOUISIANA	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenith Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: J.J.N. DWN BY: MAJ SUBMITTED BY: AIMS GROUP INC. PLOT SCALE: 1" = 1000' SIZE: ANSI D	DATE: 22 SEPT. 2008 SOLICITATION NO.: CONTRACT NO.: W1278-06-D-0002 FILE NUMBER: 6208 PLOT DATE: 9/22/08	<table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																
	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																					
	U.S. Army Corps of Engineers District Engineer New Orleans District																																												

**INDEX TO DRAWINGS**

SHEET NO.	DESCRIPTION
C-01	COVER RIGHT OF WAY AND RELOCATIONS
G-100	LOCATION AND VICINITY MAP
G-101	INDEX TO DRAWINGS
G-102	TABULATIONS OF ALTERNATIVE 1 T.M.W.L.
C-101-A1 RW	ALTERNATIVE 1 RIGHT OF WAY STA. 287+00 TO 337+00
C-102-A1 RW	ALTERNATIVE 1 RIGHT OF WAY STA. 337+00 TO 387+00
C-103-A1 RW	ALTERNATIVE 1 RIGHT OF WAY STA. 387+00 TO 437+00
C-104-A1 RW	ALTERNATIVE 1 RIGHT OF WAY STA. 437+00 TO 487+00
C-105-A1 RW	ALTERNATIVE 1 RIGHT OF WAY STA. 487+00 TO 537+00
C-106-A1 RW	ALTERNATIVE 1 RIGHT OF WAY STA. 487+00 TO 572+50.88
G-103	TABULATIONS OF ALTERNATIVE 2 EARTHEN LEVEE
C-101-A2 RW	ALTERNATIVE 2 RIGHT OF WAY STA. 287+00 TO 337+00
C-102-A2 RW	ALTERNATIVE 2 RIGHT OF WAY STA. 337+00 TO 387+00
C-103-A2 RW	ALTERNATIVE 2 RIGHT OF WAY STA. 387+00 TO 437+00
C-104-A2 RW	ALTERNATIVE 2 RIGHT OF WAY STA. 437+00 TO 487+00
C-105-A2 RW	ALTERNATIVE 2 RIGHT OF WAY STA. 487+00 TO 537+00
C-106-A2 RW	ALTERNATIVE 2 RIGHT OF WAY STA. 487+00 TO 572+50.88
C-101-A3 RW	TABULATIONS OF ALTERNATIVE 3 REINFORCED EARTHEN LEVEE
C-102-A3 RW	ALTERNATIVE 3 RIGHT OF WAY STA. 287+00 TO 337+00
C-103-A3 RW	ALTERNATIVE 3 RIGHT OF WAY STA. 337+00 TO 437+00
C-104-A3 RW	ALTERNATIVE 3 RIGHT OF WAY STA. 437+00 TO 487+00
C-105-A3 RW	ALTERNATIVE 3 RIGHT OF WAY STA. 487+00 TO 537+00
C-106-A3 RW	ALTERNATIVE 3 RIGHT OF WAY STA. 487+00 TO 570+80

**LEGEND**



BMP	BENCH MARK	DESCRIPTION
BEI 1 EL: 3.42 (CONSTRAINED) MAVD 83-2004-85		MONUMENT DESCRIPTION: MONUMENT IS A 3/4" IRON ROD SET FLUSH WITH THE GROUND. IT IS LOCATED 57' SE OF A PAUL ROAD ROAD, 25' NE OF ANOTHER ALTERNATIVE 1 RIGHT OF WAY STA. 437+00 AT THE POINT OF BEGINNING (P.O.B.)
		MONUMENT LOCATION: MONUMENT IS ON HWY 23 AND 1/4 MILES SOUTH ON HWY 23 TO BARBERE ROAD LA PALCO BLVD. NEAR TERRITOWN, LA. SO ROAD TO THE MONUMENT ON THE RIGHT.
		MONUMENT DESCRIPTION: MONUMENT IS A STANDARD CEO BRONZE CAP ON RE BAR STAMPED "AC2 D1002C". IT IS LOCATED 86.4' WWV OF THE AIR BASE BOAT RAISE AND 1.4 MILES SW OF THE PUMP STATION AT THE POINT OF BEGINNING (P.O.B.) OF THE ASPHALT ROAD AT THE AIR BASE BOAT RAISE.
		MONUMENT LOCATION: FROM THE INTERSECTION OF HWY 23 AND WPAJCE BLVD. NEAR TERRY TOWN, LA, GO 1/4 MILES SOUTH ON HWY 23 TO BARBERE ROAD AND TAKE A RIGHT TURN. TAKE A RIGHT TURN AND GO 800' ACROSS THE CONCRETE BRIDGE BEHIND THE PUMP STATION THEN TURN RIGHT AND GO NW TO THE LEVEE ALONG ALGIERS CANAL. TO SW 1/3 MILES TO THE MONUMENT IN THE CENTER OF THE LEVEE.

FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zwick Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: LJA TOWN BY: MAJ SUBMITTED BY: AIMS GROUP, INC. PLOT SCALE: 1" = 500' SIZE: ANSI D	DATE: 29 SEPT. 2008 SOLICITATION NO.: CONTRACT NO.: W17PM-08-0022 FILE NUMBER: 652 FULL NAME: WBV-49.2 D-01-D0N	INDEX TO DRAWINGS <table border="1"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> </tr> </thead> <tbody> <tr> <td> </td> </tr> </tbody> </table>	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR								
	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR											
ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY.23 WBV-49.2  <b>INDEX TO DRAWINGS</b>  PLAQUEMINES PARISH, LOUISIANA																			

TABULATION OF EXISTING RIGHT-OF-WAY

ITEM NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH	ITEM NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH
		PROTECTED SIDE	PROJECTED SIDE				PROTECTED SIDE	PROJECTED SIDE	
E1	287+00.00	160.0'	177.0'	90°	E2	449+50.30	85.6'	90°	
E2	288+02.3	140.0'	140.0'	90°	E3	468+58.83	86.6'	90°	
E3	282+01.05	140.0'	140.0'	90°	E4	472+55.89	86.3'	90°	
E4	294+50.19	103.0'	103.0'	90°	E5	474+72.16	101.3'	90°	
E5	288+88.78	80.0'	80.0'	90°	E6	477+47.80	101.8'	90°	
E6	299+88.33	64.0'	64.0'	90°	E7	481+24.65	88.0'	139°11'17.99"	
E7	302+98.82	68.0'	68.0'	90°	E8	483+90.53	106.6'	90°	
E8	308+37.85	90.0'	90.0'	90°	E9	488+58.44	110.7'	90°	
E9	310+15.55	63.0'	63.0'	90°	E10	489+38.34	101.4'	90°	
E10	313+28.41	97.5'	97.5'	90°	E11	492+56.56	93.2'	90°	
E11	317+88.90	82.2'	82.2'	90°	E12	488+23.75	124.6'	90°	
E12	321+01.36	63.6'	63.6'	90°	E13	497+82.87	128.6'	90°	
E13	322+72.50	62.4'	62.4'	90°	E14	500+80.27	95.0'	90°	
E14	324+52.85	82.7'	82.7'	90°	E15	510+77.51	81.2'	90°	
E15	323+41.63	84.4'	84.4'	90°	E16	524+40.30	87.5'	90°	
E16	325+86.50	83.6'	83.6'	90°	E17	531+14.40	88.3'	90°	
E17	377+60.56	82.6'	82.6'	90°	E18	564+39.52	83.9'	90°	
E18	380+81.18	84.6'	84.6'	90°	E19	570+80.00	87.8'	90°	
E19	400+85.61	85.5'	85.5'	90°	E20				
E20	406+55.93	85.5'	85.5'	90°	E21				
E21	434+84.50			90°					

UTILITIES WITHIN EXISTING RAW

ITEM NO.	OWNER	DESCRIPTION	STATION	DISPOSITION	RELOCATION BY
010	PRIVATE	RAMP	314+10.74	REMOVE	CONTRACTOR
011	ENERGY	OVERHEAD ELECTRIC TRANSMISSION CROSSING	324+41	DO NOT DISTURB	CONTRACTOR
012	PRIVATE	RAMP	331+20	REMOVE	CONTRACTOR
013	AT & T	BURIED TELEPHONE CABLE	397+88	WALL SLEEVE THRU SHEET PILE	OWNER
014	U.S. NAVY	FUEL PUMPING STATION	402+88	DO NOT DISTURB	CONTRACTOR
015	U.S. NAVY	RAMP	402+77	REPLACE	CONTRACTOR
016	U.S. NAVY	FUEL SUPPLY LINE	405+33	WALL SLEEVE THRU SHEET PILE	OWNER
017	U.S. NAVY	JIB FUEL DOCK	408+11	DO NOT DISTURB	OWNER
018	U.S. NAVY	RAMP	408+18	DO NOT DISTURB	OWNER
019	AT & T	BURIED TELEPHONE CABLE	487+43	WALL SLEEVE THRU SHEET PILE	CONTRACTOR
020	PRIVATE	RAMP	495+00	REMOVE	CONTRACTOR
021	PRIVATE	RAMP	508+11.71	REPLACE	CONTRACTOR
022	PRIVATE	RAMP	510+46.83	REMOVE	CONTRACTOR
023	PLAQUEMINES PARISH	18" DRAINAGE FORCE MAIN AND PUMPING STATION	524+00	WALL SLEEVE THRU SHEET PILE	CONTRACTOR
024	PRIVATE	RAMP	525+02.83	REMOVE	CONTRACTOR
025	PRIVATE	RAMP	531+13.63	REMOVE	CONTRACTOR
026	PRIVATE	RAMP	534+92.17	REMOVE	CONTRACTOR
027	PRIVATE	RAMP	537+13.32	REMOVE	CONTRACTOR
028	PRIVATE	RAMP	542+36.47	REMOVE	CONTRACTOR
029	PRIVATE	RAMP	543+65.32	REMOVE	CONTRACTOR
030	PRIVATE	RAMP	554+61.40	REMOVE	CONTRACTOR
031	PRIVATE	RAMP	558+07.77	REMOVE	CONTRACTOR
032	PRIVATE	RAMP	557+57.54	REMOVE	CONTRACTOR
033	PLAQUEMINES PARISH	8" DIA. SEWER FORCE MAIN	568+00	WALL SLEEVE THRU SHEET PILE	CONTRACTOR

TABULATION OF ALTERNATIVE 1 T-WALL CIL

POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE	
		FLOOD SIDE	PROTECTED SIDE			FLOOD SIDE	PROTECTED SIDE
T1	287+00.00	42.0'	42.0'	T2	483+82.22	62.62'	62.62'
T2	288+47.77	42.0'	42.0'	T3	485+58.84	66.87'	66.87'
T3	305+70.28	42.0'	42.0'	T4	489+56.27	58.50'	58.50'
T4	310+14.80	20.15'	20.15'	T5	491+09.46	47.00'	47.00'
T5	313+44.71	14.47'	14.47'	T6	492+82.17	50.85'	50.85'
T6	318+02.33	38.73'	38.73'	T7	493+18.85	13.70'	13.70'
T7	320+97.80	20.61'	20.61'	T8	495+11.68	47.52'	47.52'
T8	322+71.45	19.38'	19.38'	T9	500+48.08	30.84'	30.84'
T9	324+53.46	18.74'	18.74'	T10	500+57.90	18.88'	18.88'
T10	327+08.07	41.38'	41.38'	T11	502+09.82	48.62'	48.62'
T11	327+80.04	39.86'	39.86'	T12	552+01.80	47.33'	47.33'
T12	380+78.75	39.89'	39.89'	T13	568+42.22	42.85'	42.85'
T13	400+83.25	41.62'	41.62'	T14	588+07.00	44.60'	44.60'
T14	406+55.41	41.73'	41.73'	T15	570+80.00	4.08'	4.08'
T15	434+81.94	42.33'	42.33'				
T16	449+48.68	41.66'	41.66'				
T17	457+22.46	42.91'	42.91'				
T18	472+22.46	43.40'	43.40'				
T19	474+77.44	57.20'	57.20'				
T20	477+47.18	58.85'	58.85'				
T21	481+18.88	48.33'	48.33'				

TABULATION OF ALTERNATIVE 1 T-WALL ADDITIONAL RIGHT-OF-WAY

POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH	ACRES
		PROTECTED SIDE	PROJECTED SIDE		
A01	295+64.15	82.0'			
A02	306+75.61	89.93'			0.45
A03	402+82.50	85.94'			
A04	402+82.50	160.94'			
A05	403+37.50	86.0'			
A06	403+37.50	181.0'			0.18
A07	505+81.22	67.41'			
A08	505+81.22	187.41'			
A09	508+41.22	187.41'			0.14
A10	508+41.22	87.41'			
TOTAL					0.72

TABULATION OF ALTERNATIVE 1 PILE EASMENT

POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE	
		FLOOD SIDE	PROTECTED SIDE
P1	524+40.30	102.8'	102.8'
P2	551+91.40	100.3'	100.3'
P3	564+39.52	88.9'	88.9'
P4	570+80.00	102.8'	102.8'

NOTE: ALL OFFSETS ARE MEASURED 90° TO THE BASELINE.

FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

SHEET IDENTIFICATION  
G-102

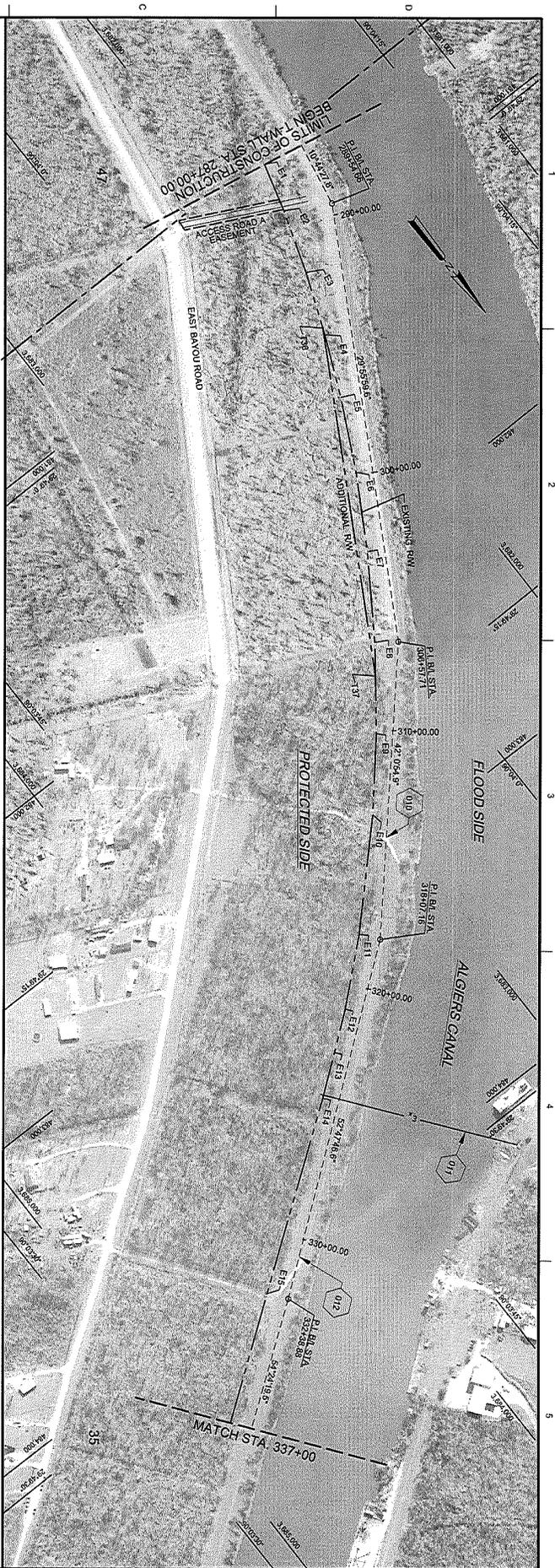
ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA. PHASE 2 HURRICANE PROTECTION ALGERS CANAL (EAST) HERO LEVEE TO HWY 23 189+82.5  
**TABULATIONS ALTERNATIVE 1 T-WALL**  
PLAQUEMINES PARISH, LOUISIANA

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT  
NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
Consulting Engineers  
4421 26th Street, Metairie, LA 70001  
(504) 887-7245

DESIGNED BY: DATE: 10/27/08  
DRAWN BY: MAJ CDD BY: EAS  
SUBMITTED TO: CONTRACT NO.: W12P9-06-D-0002  
AIMS GROUP, INC. FILE NUMBER:  
PLOT SCALE: 1" = 500'  
PLOT DATE: 10/27/08  
SIZE: A  
ANGLED: W19-40.3, 0102-00N

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR

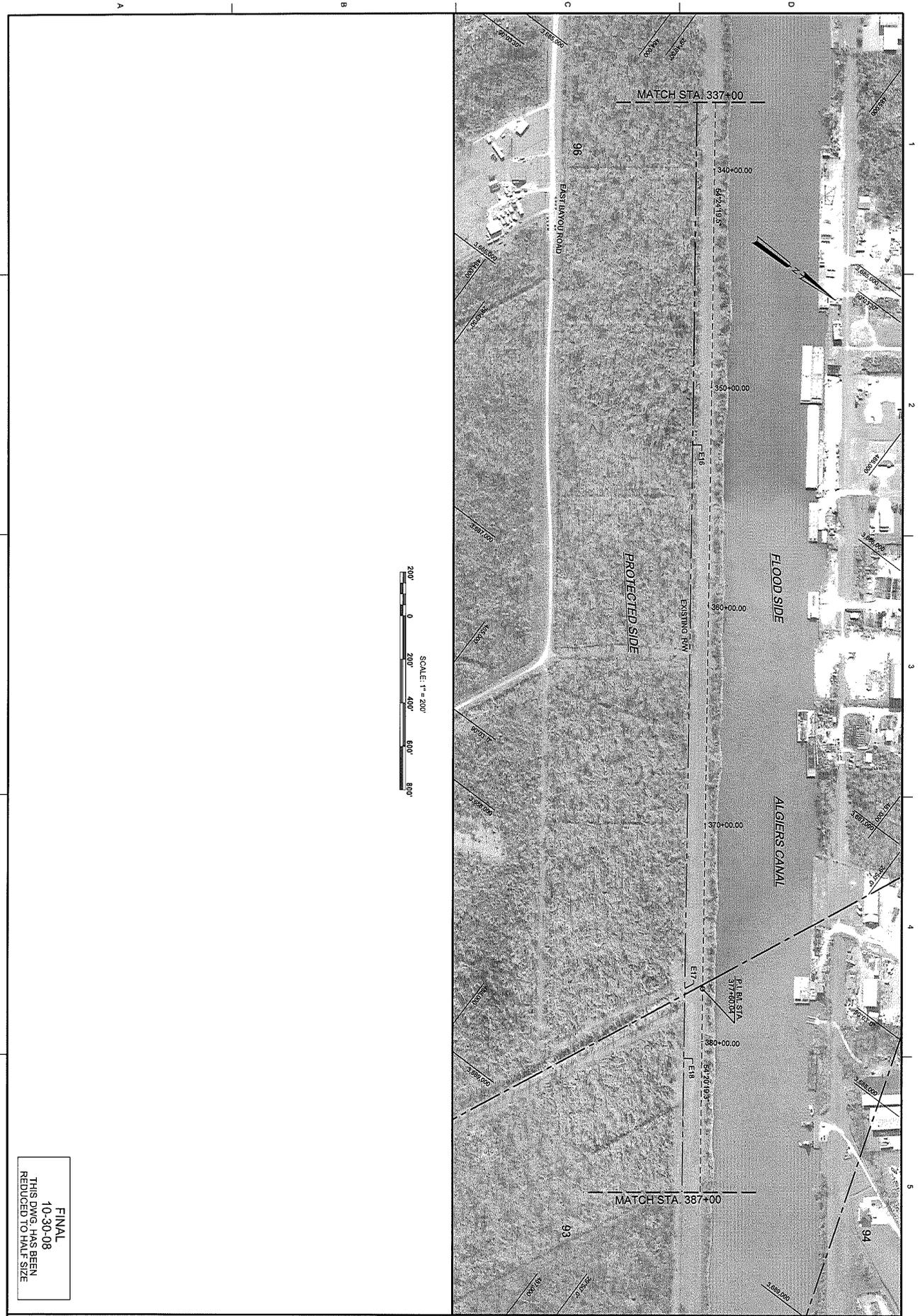
U.S. Army Corps of Engineers  
New Orleans District



NOTE  
 1. SEE SHEET G-102 FOR ADDITIONAL ROW STATIONS, OFFSETS AND UTILITIES RELOCATION.

FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

SHEET IDENTIFICATION C-101 A1 RW	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 WBV-49.2		U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA		DESIGNED BY: L.J.F. DRAWN BY: MAJ CHECKED BY: EAB		DATE: 29 SEPT. 2008 SOLICITATION NO.: CONTRACT NO.: W17R-05-C-0002		
	ALT. 1 RIGHT OF WAY STA. 287+00 TO STA. 337+00 PLACEMINES PARISH, LOUISIANA		AIMS GROUP, Inc. Consulting Engineers 4421 Zurich Street, Metairie, LA 70001 (504) 887-7945		SUBMITTED BY: AIMS GROUP, INC. PLOT SCALE: 1" = 200'		FILE NUMBER: 200804 FILE NAME: WBV-49.2_C101_ROW-A1.DWG		
								U.S. Army Corps of Engineers New Orleans District	



FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIER'S CANAL (EAST) HERO LEVEE TO HWY.23  
WBV-49.2

**ALT. 2 RIGHT OF WAY  
STA. 337+00 TO STA. 387+00**

PLAQUEMINES PARISH, LOUISIANA

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

**AIMS GROUP, Inc.**  
Consulting Engineers  
4421 24th Street, Metairie, LA 70001  
(504) 887-7242

DESIGNED BY: LJN	DATE: 20 SEPT. 2008
DWN BY: MAJ	CONTRACT NO.:
CHK BY: EAS	WBV-49.2-G-D-002
SUBMITTED BY: AIMS GROUP, INC.	FILE NUMBER:
PLOT SCALE: 1" = 200'	PLOT DATE: 8/20/08
SIZE: ANSI D	FILE NAME: WBV-49.2-G-100-ROW-A1.DGN

MARK	DESCRIPTION	DATE	APPROV	MARK	DESCRIPTION	DATE	APPROV

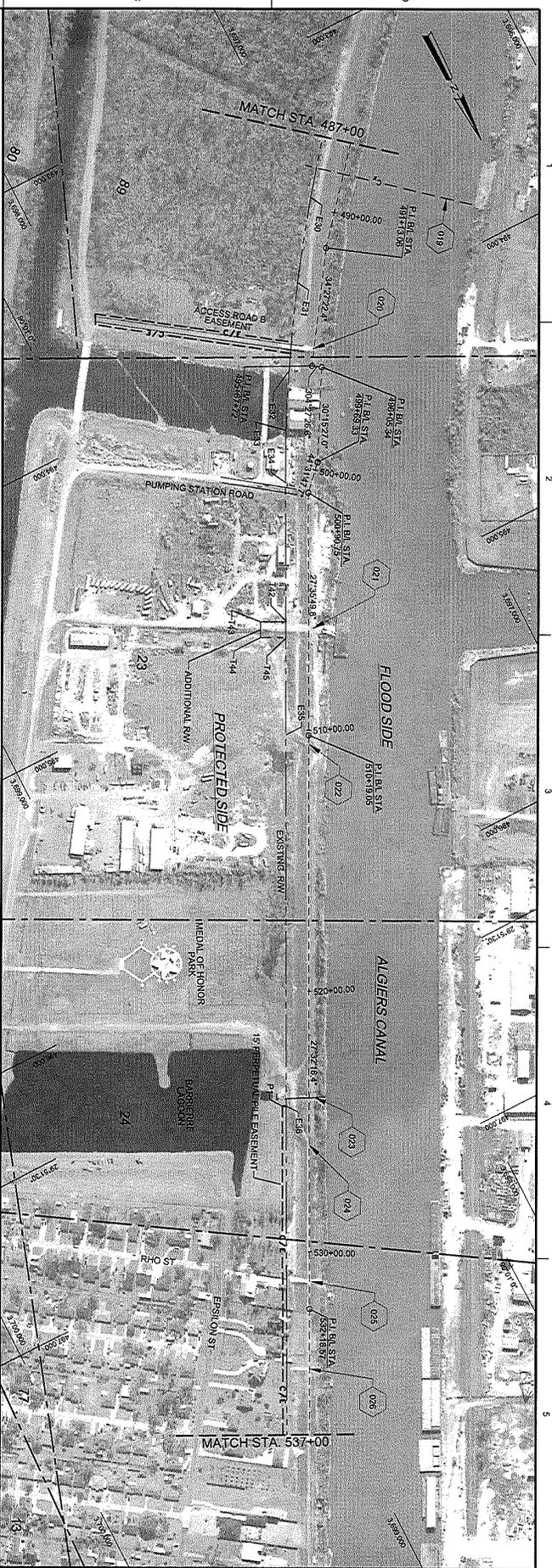






FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGERS CANAL (EAST) HERO LEVEE TO HWY 23 WBV-48.2 <b>ALT. 1 RIGHT OF WAY          STA. 437+00 TO STA. 487+00</b> PLACEMINES PARISH, LOUISIANA	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA  <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenoth Street, Metairie, LA 70001 (504) 887-7945	DESIGNED BY: LJK DRAWN BY: MAJ CHECKED BY: EAB SUBMITTED BY: AIMS GROUP, INC. PLOT SCALE: 1" = 200' SIZE: ANS.D FILE NAME: WBV-48.2_C104_ROW-1.DGN	DATE: 28 SEPT. 2008 SUBSTITUTION NO.: CONTRACT NO.: WY19M-662-0002 FILL NUMBER: DATE: 10/30/08 PLOT DATE: 10/30/08	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> <th>MARK</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPR</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																																																																	 US Army Corps of Engineers New Orleans District New Orleans, Louisiana
MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR																																																																																						

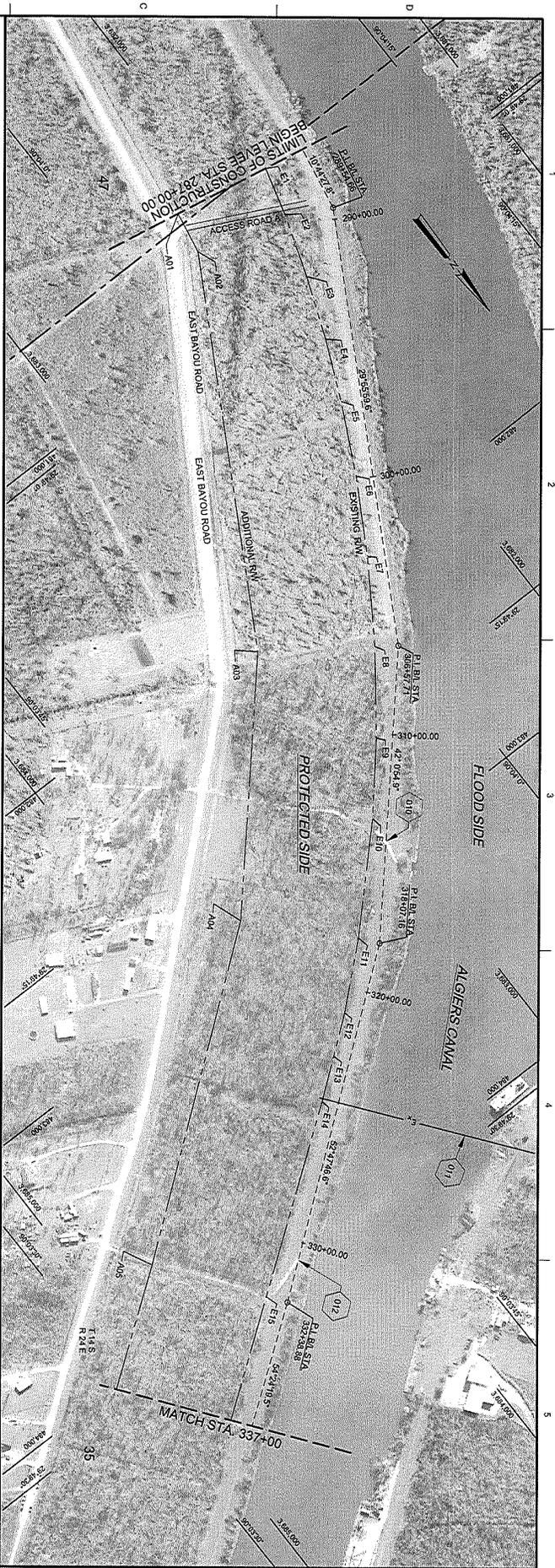


FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA	DESIGNED BY: LJA	DATE: 26 SEPT. 2008	SOLICITATION NO. CONTRACT NO. FILE NUMBER:
	DRAWN BY: MAJ	CHECK BY: EAS	
AIMS GROUP, Inc. Consulting Engineers 4421 2nd St. Metairie, LA 70001 (504) 887-7245	SUBMITTED BY: AIMS GROUP INC.	PLOT SCALE: 1" = 200'	FILE NUMBER: W61291-66-D-0002
	PLOT DATE: 11	FILE NAME: W61492-0106-R04A1-B03H	FILE NUMBER: W61291-66-D-0002
SHEET IDENTIFICATION C-105 A1 RW1	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 W61492	ALT. 1 RIGHT OF WAY STA. 487+00 TO STA. 537+00 PLAQUEMINES PARISH, LOUISIANA	U.S. Army Corps of Engineers District





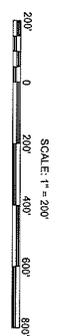
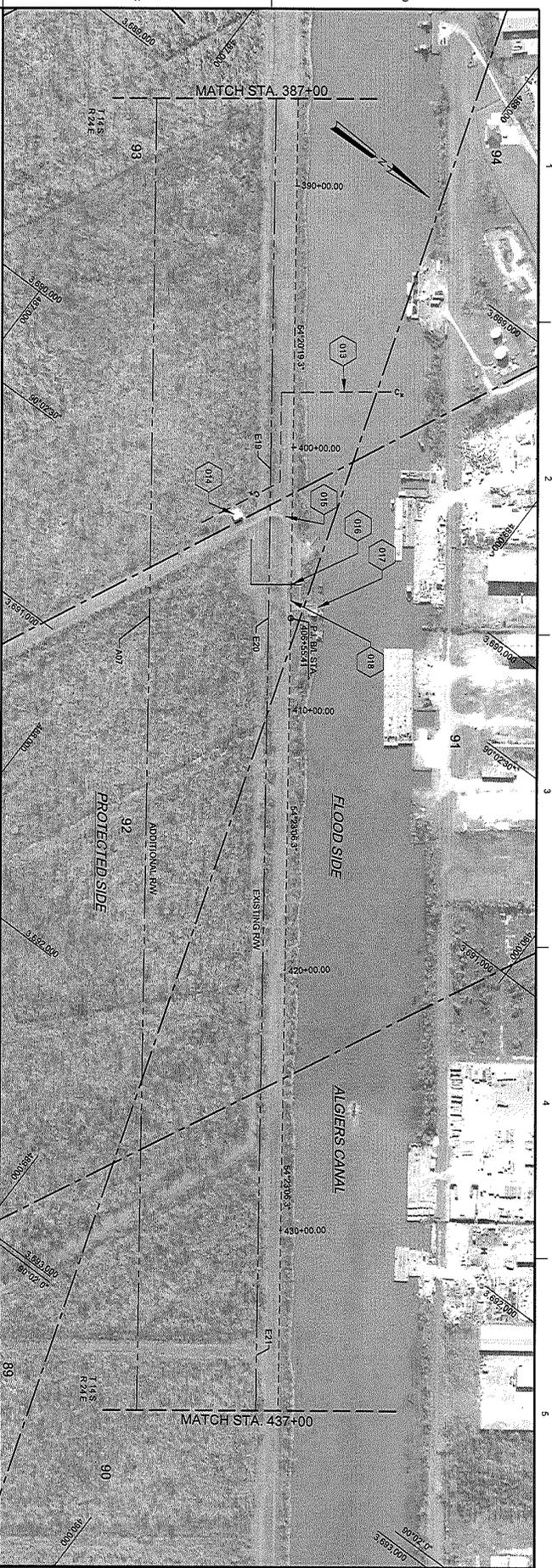


NOTE:  
1. SEE SHEET 5-103 FOR ADDITIONAL RW STATIONS, OFFSETS AND UTILITIES RELOCATION

FINAL  
10-30-08  
THIS DRAWING HAS BEEN  
REDUCED TO HALF SIZE

SHEET IDENTIFICATION C-101 A2 RW	ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23 HWY-492 <b>ALT. 2 RIGHT OF WAY</b> STA. 287+00 TO STA. 337+00 PLAQUEMINES PARISH, LOUISIANA	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenth Street, Metairie, LA 70001 (504) 887-7045	DESIGNED BY: LJK	DATE: 22 SEPT. 2008	U.S. Army Corps of Engineers District Office New Orleans District
			DRAWN BY: MAJ	SOLICITATION NO. #: W913PS-06-D-0002	
		PLOT SCALE: 1" = 200' PLOT DATE: 10/20/08		FILE NUMBER:	
		SIZE: A2/D FILE NAME: W91492_021_R01A2.DGN		MARK DESCRIPTION DATE APPR MARK DESCRIPTION DATE APPR	





FINAL  
 10-30-08  
 THIS DWG. HAS BEEN  
 REDUCED TO HALF SIZE

SHEET  
 IDENTIFICATION  
 C-103 A2 R/W

ALTERNATIVE REPORT FOR  
 WEST BANK AND VICINITY, NEW ORLEANS, LA  
 PHASE 2 HURRICANE PROTECTION  
 ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23  
 HW-4932  
**ALT. 2 RIGHT OF WAY**  
 STA. 387+00 TO STA. 437+00  
 PLAQUEMINES PARISH, LOUISIANA

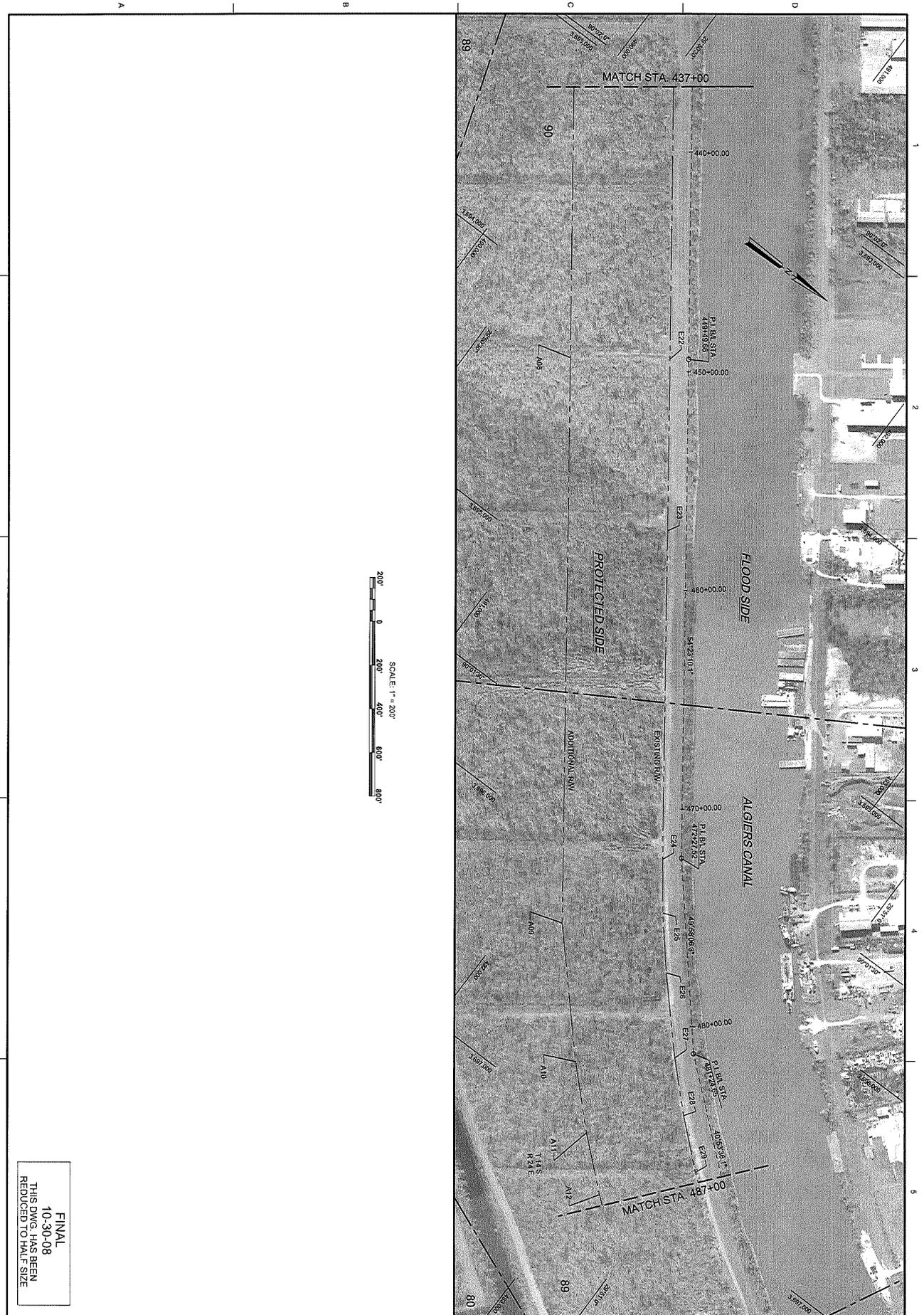
U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT  
 NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
 Consulting Engineers  
 4421 2nd St., Metairie, LA 70001  
 (504) 887-7245

DESIGNED BY: LJK  
 DWN BY: MAJ  
 SUBMITTED BY: AIMS GROUP INC.  
 PLOT SCALE: 1" = 200'  
 SIZE: A3  
 ANSLD: WBY-4932-C103-R0W-A2-RDN

DATE: 12 SEPT. 2008  
 SOLICITATION NO.:  
 CONTRACT NO.: W51276-B-D-C002  
 FILE NUMBER:  
 PLOT DATE: 12/20/08

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR

U.S. Army Corps  
 of Engineers  
 NEW ORLEANS DISTRICT



FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIER'S CANAL (EAST) HERO LEVEE TO HWY 23  
WBV-49.2

**ALT. 2 RIGHT OF WAY  
STA. 437+00 TO STA. 487+00**  
PLAQUEMINES PARISH, LOUISIANA

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

**AIMS GROUP, Inc.**  
Consulting Engineers  
4421 Zwick Street, Metairie, LA 70001  
(504) 887-7045

DESIGNED BY: L.J.N. DATE: 20 SEPT. 2008  
DRAWN BY: MAJ. CHK BY: EAB SOLICITATION NO.:  
SUBMITTED BY: AIMS GROUP, INC. CONTRACT NO.: W913PS-06-D-0002  
PLOT SCALE: 1" = 200' FILE NUMBER:  
SHEET: 13  
SHEET NAME: WBV-49.2-C104-ROW-A2-DWG  
ANSI D

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR







TABULATION OF EXISTING RIGHT-OF-WAY

ITEM NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH	ITEM NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH
		PROTECTED SIDE	PROTECTED SIDE				PROTECTED SIDE	PROTECTED SIDE	
E1	281+00.00	160.0'	170.0'	90°	E22	449+50.20	85.0'	85.0'	90°
E2	283+92.3	172.0'	172.0'	90°	E23	456+88.33	86.0'	86.0'	90°
E3	282+01.05	140.0'	140.0'	90°	E24	472+252.89	86.3'	86.3'	90°
E4	293+50.19	103.0'	103.0'	90°	E25	474+72.16	101.3'	101.3'	90°
E5	299+66.78	80.0'	80.0'	90°	E26	477+47.90	101.8'	101.8'	90°
E6	299+69.33	64.0'	64.0'	90°	E27	481+24.65	88.0'	88.0'	133°11'17.99"
E7	302+48.82	68.0'	68.0'	90°	E28	483+90.53	100.6'	100.6'	90°
E8	306+37.85	90.0'	90.0'	90°	E29	486+56.44	110.7'	110.7'	90°
E9	310+16.55	63.0'	63.0'	90°	E30	489+38.34	101.4'	101.4'	90°
E10	313+28.41	57.5'	57.5'	90°	E31	492+56.98	93.2'	93.2'	90°
E11	317+69.90	82.2'	82.2'	90°	E32	495+23.75	124.6'	124.6'	90°
E12	321+01.38	63.6'	63.6'	90°	E33	497+82.87	126.6'	126.6'	90°
E13	322+73.90	62.4'	62.4'	90°	E34	500+80.22	95.0'	95.0'	90°
E14	324+54.85	62.7'	62.7'	90°	E35	510+17.51	87.2'	87.2'	90°
E15	332+41.63	84.4'	84.4'	90°	E36	524+40.30	87.5'	87.5'	90°
E16	352+48.50	83.6'	83.6'	90°	E37	531+91.40	83.3'	83.3'	90°
E17	317+69.90	82.6'	82.6'	90°	E38	544+39.32	83.9'	83.9'	90°
E18	389+81.18	84.6'	84.6'	90°	E39	570+50.00	87.6'	87.6'	90°
E19	409+66.61	85.5'	85.5'	90°					
E20	409+65.93	85.5'	85.5'	90°					
E21	434+84.50	85.5'	85.5'	90°					

UTILITIES WITHIN EXISTING ROW

ITEM NO.	OWNER	DESCRIPTION	STATION	DISPOSITION	RELOCATION BY
010	PRIVATE	RAMP	314+10.74	REMOVE	CONTRACTOR
011	ENTREPRENEUR	OVERHEAD ELECTRIC TRANSMISSION CROSSING	324+11	DO NOT DISTURB	OWNER
012	PRIVATE	RAMP	331+20	REMOVE	CONTRACTOR
013	A I & T	BURNED TELEPHONE CABLE	397+88	RELOCATE OVER LEVEE	OWNER
014	U.S. NAVY	FUEL PUMPING STATION	402+77	RELOCATE OVER LEVEE	OWNER
015	U.S. NAVY	RAMP	405+33	REMOVE & REPLACE	CONTRACTOR
016	U.S. NAVY	FUEL SUPPLY LINE	405+33	RELOCATE OVER LEVEE	OWNER
017	U.S. NAVY	JIB FUEL DOCK	406+18	DO NOT DISTURB	OWNER
018	U.S. NAVY	RAMP	406+18	REMOVE	CONTRACTOR
019	A I & T	BURNED TELEPHONE CABLE	487+43	RELOCATE OVER LEVEE	OWNER
020	PRIVATE	RAMP	493+00	REMOVE	CONTRACTOR
021	PRIVATE	RAMP	506+11.71	REPLACE	CONTRACTOR
022	PRIVATE	RAMP	510+46.83	REMOVE	CONTRACTOR
023	PLAQUEMINES PARISH	18" DRAINAGE FORCE MAIN AND PUMPING STATION	524+00	RELOCATE	CONTRACTOR
024	PRIVATE	RAMP	525+02.63	REMOVE	CONTRACTOR
025	PRIVATE	RAMP	531+13.63	REMOVE	CONTRACTOR
026	PRIVATE	RAMP	534+52.17	REMOVE	CONTRACTOR
027	PRIVATE	RAMP	537+15.52	REMOVE	CONTRACTOR
028	PRIVATE	RAMP	542+36.47	REMOVE	CONTRACTOR
029	PRIVATE	RAMP	543+53.32	REMOVE	CONTRACTOR
030	PRIVATE	RAMP	554+61.40	REMOVE	CONTRACTOR
031	PRIVATE	RAMP	556+87.77	REMOVE	CONTRACTOR
032	PRIVATE	RAMP	557+57.54	REMOVE	CONTRACTOR
033	PLAQUEMINES PARISH	8" DIA. SEWER FORCE MAIN	568+00	RELOCATE OVER LEVEE	CONTRACTOR

TABULATION OF ALTERNATIVE 3 REINFORCED EARTHEN LEVEE

POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH	ACRES	POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH	ACRES
		PROTECTED SIDE	PROTECTED SIDE					PROTECTED SIDE	PROTECTED SIDE		
A01	287+00.00	300.0'	300.0'	90°	0.00	A16	500+80.92	320.44'	320.44'	90°	0.00
A02	288+04.38	300.0'	300.0'	10°53'3.5"	0.00	A17	504+00	299.55'	299.55'	90°	0.00
A03	306+28.54	289.47'	289.47'	28°18'18.3"	0.00	A18	504+00	323.35'	323.35'	90°	0.00
A04	317+83.38	300.83'	300.83'	41°19'54.5"	0.00	A19	504+50	326.55'	326.55'	90°	0.00
A05	332+34.30	300.83'	300.83'	52°09'23.8"	21.9	A20	505+50	308.66'	308.66'	90°	13.41
A06	377+60.04	289.32'	289.32'	53°46'8.2"	22.0	A21	527+00	195.0'	195.0'	90°	20.0
A07	408+55.41	288.32'	288.32'	53°14'12.2"	14.92	A22	527+00	325.12'	325.12'	90°	13.41
A08	449+49.66	299.32'	299.32'	53°44'20.8"	14.92	A23	528+00	325.12'	325.12'	90°	13.41
A09	474+98.69	297.92'	297.92'	53°44'4.9"	13.7	A24	528+00	300.12'	300.12'	90°	13.41
A10	481+24.05	316.29'	316.29'	47°13'22.2"	13.7	A25	568+00	300.12'	300.12'	90°	13.41
A11	483+81.48	320.54'	320.54'	44°12'14.1"	13.7	A26	570+80.00	84.47'	84.47'	90°	20.0
A12	488+94.19	320.54'	320.54'	47°07'4.2"	43.25						
A13	489+68.49	311.15'	311.15'	38°21'10.6"	13.7						
A14	491+38.97	298.39'	298.39'	35°27'13.7"	13.7						
A15	495+67.72	299.33'	299.33'	33°47'59.0"	2.95						
TOTAL					137.4						

TABULATION OF ALTERNATIVE 3 REINFORCED EARTHEN LEVEE C/L

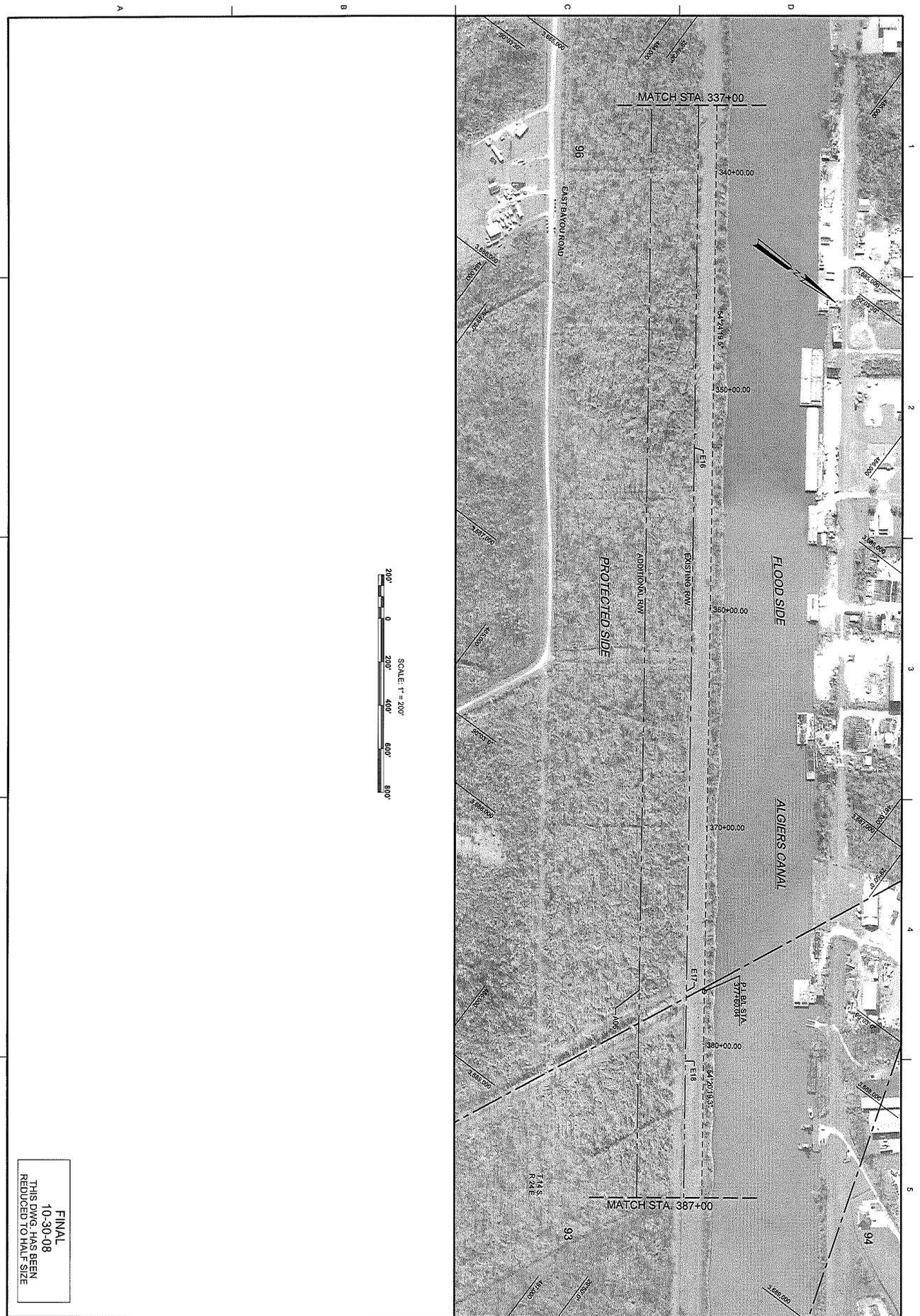
POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH	ACRES	POINT NO.	BL STATION	DISTANCES MEASURED FROM BASELINE		AZIMUTH	ACRES
		FLOOD PROTECTED SIDE	FLOOD PROTECTED SIDE					FLOOD PROTECTED SIDE	FLOOD PROTECTED SIDE		
R1	287+00.00	289.46+3	289.46+3	30.0'	0.00	R11	481+24.05	28.57'	28.57'	90°	0.00
R2	288+04.38	308+60.54	308+60.54	30.0'	0.00	R12	483+98.69	47.11'	47.11'	90°	0.00
R3	318+04.79	332+38.00	332+38.00	30.0'	0.00	R13	489+35.36	41.95'	41.95'	90°	0.00
R4	332+38.00	377+65.88	377+65.88	30.0'	0.00	R14	491+13.06	30.0'	30.0'	90°	0.00
R5	377+65.88	406+55.41	406+55.41	30.0'	0.00	R15	495+19.85	13.70'	13.70'	90°	0.00
R6	406+55.41	448+49.66	448+49.66	30.0'	0.00	R16	498+11.68	47.52'	47.52'	90°	0.00
R7	448+49.66	472+27.52	472+27.52	30.0'	0.00	R17	500+80.00	30.84'	30.84'	90°	0.00
R8	472+27.52	481+24.05	481+24.05	51.3'	0.00	R18	504+00	30.0'	30.0'	90°	0.00
R9	481+24.05	483+98.69	483+98.69	28.57'	0.00	R19	504+50	4.37'	4.37'	90°	0.00
R10	483+98.69	489+35.36	489+35.36	41.95'	0.00						
R11	489+35.36	491+13.06	491+13.06	30.0'	0.00						
R12	491+13.06	495+19.85	495+19.85	13.70'	0.00						
R13	495+19.85	498+11.68	498+11.68	47.52'	0.00						
R14	498+11.68	500+80.00	500+80.00	30.84'	0.00						
R15	500+80.00	504+00	504+00	30.0'	0.00						
R16	504+00	504+50	504+50	30.0'	0.00						
R17	504+50	505+50	505+50	308.66'	0.00						
R18	505+50	527+00	527+00	195.0'	0.00						
R19	527+00	527+00	527+00	325.12'	0.00						
R20	527+00	528+00	528+00	325.12'	0.00						
R21	528+00	528+00	528+00	300.12'	0.00						
R22	528+00	568+00	568+00	300.12'	0.00						
R23	568+00	570+80.00	570+80.00	84.47'	0.00						

NOTE: ALL OFFSETS ARE MEASURED 90° TO THE BASELINE.

FINAL  
10-30-08  
THIS DRAWING HAS BEEN  
REduced TO HALF SIZE

<p>U.S. Army Corps of Engineers District Office</p>	DESIGNED BY: [ ] DATE: 09/22/08 CHECKED BY: [ ] DATE: 09/22/08 SUBMITTED BY: [ ] DATE: 09/22/08 FILE NUMBER: [ ]
	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA <b>AIMS GROUP, Inc.</b> Consulting Engineers 4421 Zenith Street, Metairie, LA 70001 (504) 887-7400
ALTERNATIVE REPORT FOR WEST BANK AND VICINITY, NEW ORLEANS, LA PHASE 2 HURRICANE PROTECTION ALGIERIS CANAL (EAST) HERO LEVEE TO HWY.23 NEW ORLEANS, LA <b>TABULATIONS ALTERNATIVE 3                  REINFORCED EARTHEN LEVEE</b> PLAQUEMINES PARISH, LOUISIANA	SHEET IDENTIFICATION G104





FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

SHEET  
IDENTIFICATION  
C-102 A3 RW

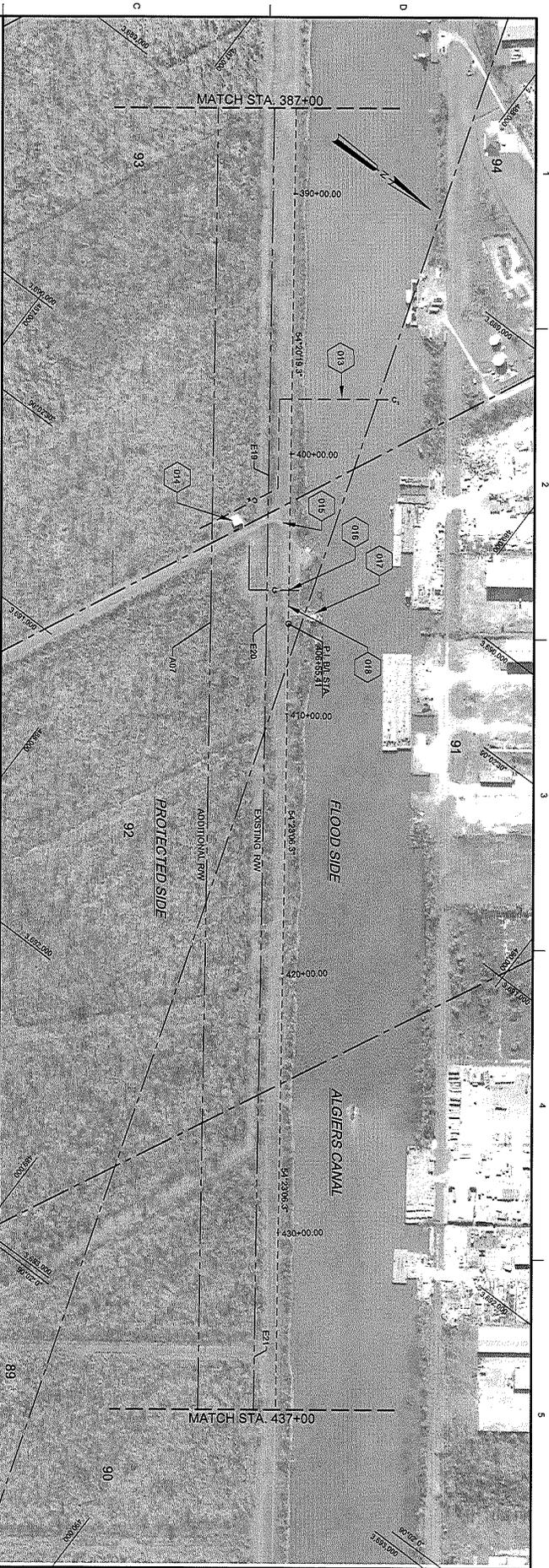
ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIER'S CANAL (EAST) HERO LEVEE TO HWY.23  
WBV-49.2  
**ALT. 3 RIGHT OF WAY**  
STA. 337+00 TO STA. 387+00  
PLAQUEMINES PARISH, LOUISIANA

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT  
NEW ORLEANS, LOUISIANA  
**AMS GROUP, Inc.**  
Consulting Engineers  
4421 Zenda Street, Metairie, LA 70001  
(504) 887-7245

DESIGNED BY: J.J.N.	DATE: 20 SEPT. 2008
DRAWN BY: MAJ	CHECKED BY: EAS
SUBMITTED BY: AMS GROUP, INC.	CONTRACT NO. W127R-08-D-2002
PROJECT NO. 11	FILE NUMBER:
SIZE: A3	FILE NAME: WBV-49.2.C102.A3.DWG

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.





FINAL  
10-30-08  
THIS DRAWING HAS BEEN  
REDUCED TO FINAL SIZE

SHEET  
IDENTIFICATION  
C-103 AA RWI

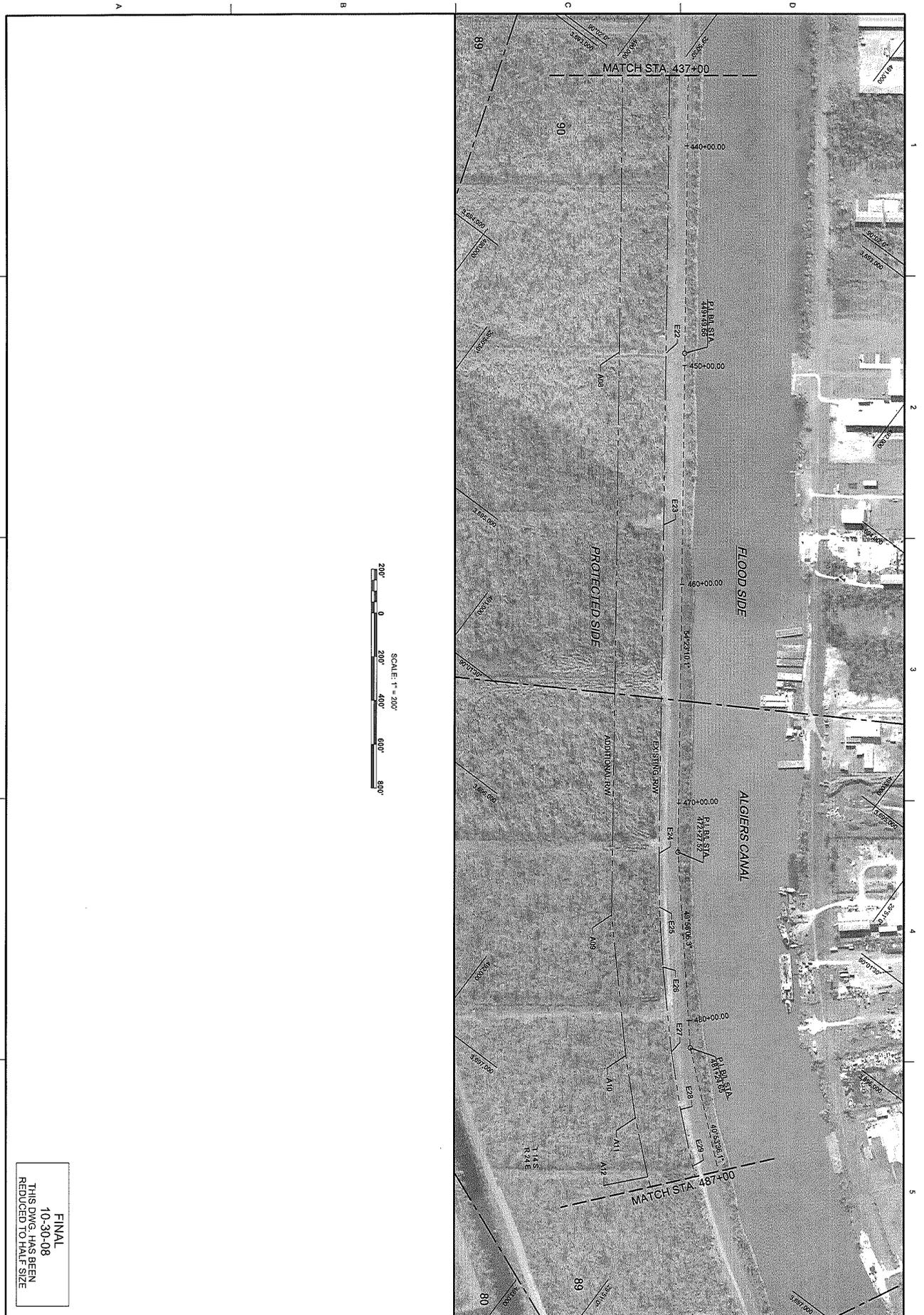
ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIERS CANAL (EAST) HERO LEVEE TO HWY 23  
WBV-409.2  
**ALT. 3 RIGHT OF WAY**  
STA. 387+00 TO STA. 437+00  
PLAQUEMINES PARISH, LOUISIANA

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT  
NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
Consulting Engineers  
4421 26th Street, Metairie, LA 70001  
(504) 887-7245

DESIGNED BY: LJN	DATE: 22 SEPT. 2008
DRAWN BY: MAJ	CHECKED BY: EAS
CONTRACT NO. W13P6-08-D-0002	FILE NUMBER:
PROJECT NAME: WBV-409.2, C103, R09A-A3.DGN	

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR





FINAL  
10-30-08  
THIS DWG. HAS BEEN  
REDUCED TO HALF SIZE

SHEET  
IDENTIFICATION  
C-104 A3 RW

ALTERNATIVE REPORT FOR  
WEST BANK AND VICINITY, NEW ORLEANS, LA  
PHASE 2 HURRICANE PROTECTION  
ALGIER'S CANAL (EAST) HERO LEVEE TO HWY 23  
WBV-49.2  
**ALT. 3 RIGHT OF WAY  
STA. 437+00 TO STA. 487+00**  
PLAQUEMINES PARISH, LOUISIANA

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT  
NEW ORLEANS, LOUISIANA  
**AIMS GROUP, Inc.**  
Consulting Engineers  
4421 Zeeb Street, Metairie, LA 70001  
(504) 887-7245

DESIGNED BY: J.ZK.  
OWN BY: MMJ  
SUBMITTED BY: AIMS GROUP INC.  
PLOT SCALE: 1/4" = 200'  
SIZE: A3  
AND/D: WBV-49.2-C104-R03A-A3.DGN

DATE: 28 SEPT. 2008  
SOLICITATION NO.:  
CONTRACT NO.: W91279-08-D-0002  
FILE NUMBER:

MARK	DESCRIPTION	DATE	APPR	MARK	DESCRIPTION	DATE	APPR







**West Bank and Vicinity  
Hurricane Protection Project  
WBV 49.2 Algiers Canal (East)  
Hero Levee to Hwy 23**

**Plaquemines Parish, Louisiana**

**APPENDIX C  
DESIGN CALCULATIONS/  
INFORMATION**

## **STRUCTURAL CALCULATIONS**

### **CONCRETE STRUCTURES**

<b>T-WALL TYPE A</b>	<b>SHEETS 1 TO 41 OF 41</b>
<b>T-WALL TYPE B</b>	<b>SHEETS 1 TO 32 OF 32</b>
<b>GATE MONOLITH</b>	<b>SHEETS 1 TO 22 OF 22</b>

### **STEEL STRUCTURES**

<b>30' SWING GATE</b>	<b>SHEETS 1 TO 4 OF 4</b>
-----------------------	---------------------------

## STRUCTURAL CALCULATIONS

For the T-wall alternative, the T-wall structure is intended to be placed at the toe of the existing levee, with compacted clay fill being placed between the levee and the wall. The levee would be used as a barge barrier. With this design concept in mind, the following load cases were developed for the T-wall:

- Construction case; dead load of structure, with fill in place. Overload factor = 16 2/3%.
- Construction case; same as above, with surcharge and drag loads added. Overload factor = 16 2/3%.
- Water at SWE; No overload.
- Water at top of wall; overload factor = 50%.

Per the Scope of Work, the existing levee would serve as a barge barrier; thus, impact loading from barge collision was not included as a load case. The geotechnical analysis indicated that there were unbalanced loading conditions, which were offset by placing berms on the flood side of the T-wall. The effects of the berms were included in the load combinations.

## **A. CONCRETE STRUCTURES**

Concrete structures were designed in accordance with ACI 318-05 as modified by EM 1110-2-2104 Strength Design for Reinforced Concrete Hydraulic Structures. The computer program CPGA (X0080) was used to calculate pile loads, with steel H-piles being used.

The flood protection elevations for the floodwalls are as follows:

- Top of wall elevation= 14.0 NAVD 88 (2004.65)
- Still Water Elevation (SWE)= 11.0 NAVD 88 (2004.65)

The US Army Corps of Engineers provided the following design information:

- Post Katrina Hurricane Flood Protection –(20 April 2006) Design Criteria Supplement Load Combination Tables
- Hurricane and Storm Damage Reduction System Design Guidelines (updated 23 Oct 2007)

The minimum 28-day compressive strength of structural concrete ( $f'_c$ ) shall be 4,000 psi. The yield strength of structural steel (ASTM A-36) shall be 36,000 psi.

The applied loads (dead and live) were multiplied by a factor of 1.7 to calculate the ultimate design loads. In, addition, since the T-wall is a hydraulic structure, an additional factor of 1.3 was applied. Thus, the ultimate design loads were:

$$U = (1.3 \times 1.7) \times (D + L)$$

This is in accordance with EM 1110-2-2104.

Two types of T-walls were designed. Type A is located between B/L Stations 287+00 and 527+00 and Type B will be constructed between B/L Stations 527+00 and 572+51. Type A has a 4' x 36' berm on the protected side, while Type B has no berm on the protected side. Due to the high unbalanced loads, each type utilizes 24-inch diameter steel pipe piles.

The stem thickness was determined by calculating the shear and moment at the base of the wall under the worst loading condition (fill in place, no berm, water to top of wall), with the above load factors applied to obtain the ultimate design shear and moment. The resisting shear and moment were then calculated, and compared to those applied. A thickness of 2' – 0" was calculated. The slab thickness was calculated in a likewise manner, and a thickness of 3' – 0" was determined.

The pile capacity curves for the Q condition, and considering critical slope failure surfaces as necessary (with load test, FS = 2.0), were used to estimate the required pile tip elevation. It was assumed that the piles would resist the

unbalanced loads and that sheet piles would prevent seepage only. The sheet pile tip elevation was set at 5 feet below the critical failure surface as per HSDRSDG.

## **B. STEEL STRUCTURES**

Steel structures were designed in accordance with AISC Manual of Steel Construction, 9<sup>th</sup> Edition, and by EM 1110-2-2705, Structural Design of Closure Structures for Local Flood Control Projects and EM 1110-2-2105, Design of Hydraulic Steel Structures. Swing gates were designed for the levee crossings at B/L Station 403+00 (+/) and at B/L Station 504+00 (+/-). The identical gates were designed to be constructed with ASTM A-36 steel.

Each gate consists of a pair of horizontal girders along the top and bottom, connected by vertical intercostals spaced at equal intervals. A skin plate covers the flood side. The gates will be painted for corrosion protection.

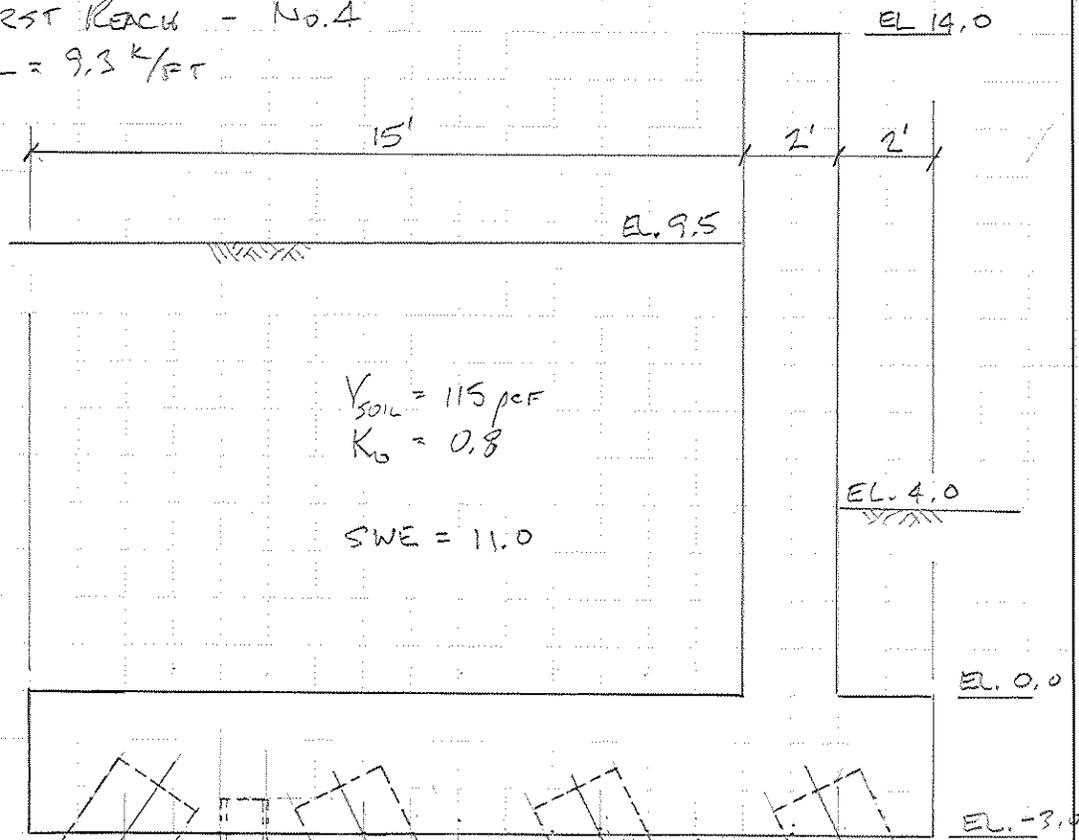
**T-WALL TYPE A**

**SHEETS 1 TO 41 OF 41**

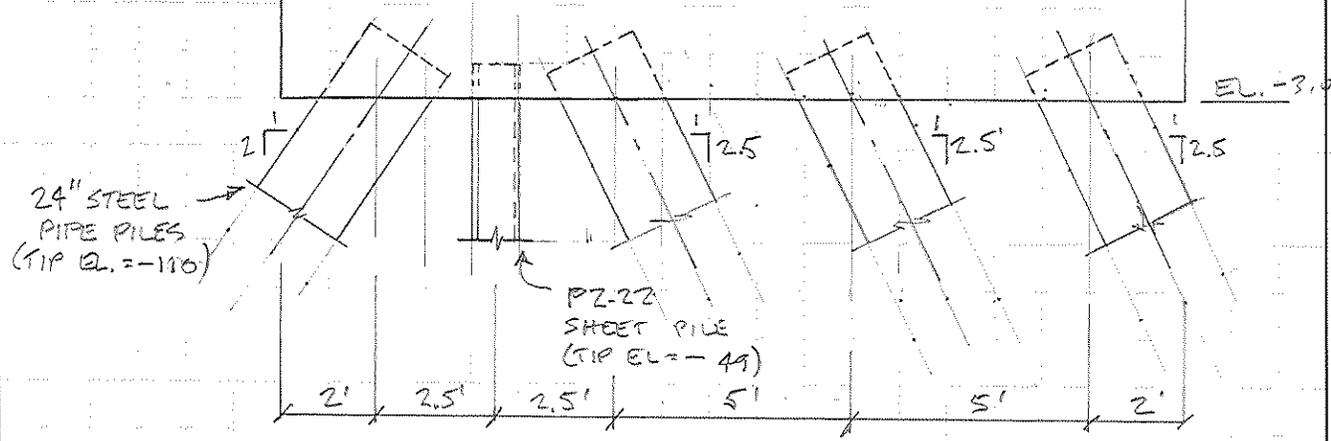
By: EAB Date: 5/22/08 Ck: Date:

T-WALL TYPE A

"WORST REACH" - No. 4  
 UBL = 9.3 k/ft



$V_{SOIL} = 115 \text{ pcF}$   
 $K_b = 0.8$   
 SWE = 11.0



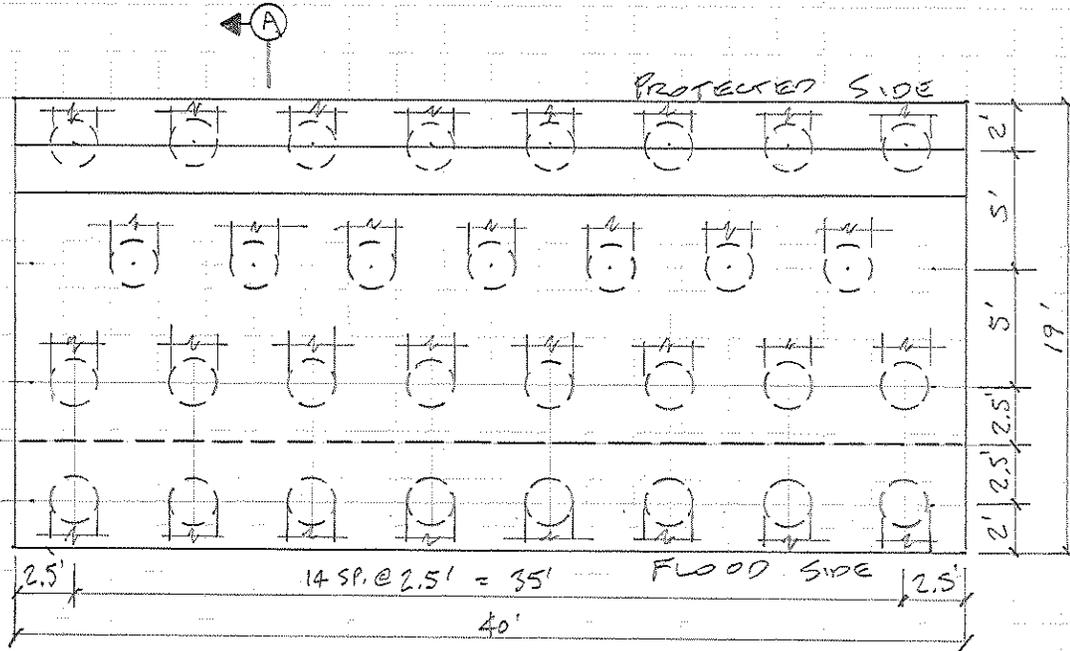
24" STEEL PIPE PILES (TIP EL. = -116)

PZ-22 SHEET PILE (TIP EL. = -49)

SECTION (A)

By: EAB Date: 6/2/03 Ck: Date:

TYPE A. T-WALL



← A PLAN



By: EAB

Date: 5/2/08

Check: Date:

CPGA PROGRAM INPUT

FOR T-WALL TYPE A (WORST REACH IS NO. 4 - UBL = 9.3 k/1)

FROM ESTIMATED  $K_H B$  PROFILE  $\Rightarrow K_H B = 70 D \text{ PSI (+1)}$

FOR 24" STEEL PIPE PILES,  $D = 2'$

FROM EM 1110-2-2906, p. 4-35  $\Rightarrow S = 6'$  OR  $\frac{6'}{2'} = 3B$

$\therefore R_g = 3.0$                        $C = 1$

$E_s = \frac{70 \times 2}{1000 \times 3} = 0.047 \text{ ksi}$

24" PIPE PILE DATA:

$I_X = I_Y = 2,549.4 \text{ in}^4$

$S_X = S_Y = 212.4 \text{ in}^3$

$A = 36.9 \text{ in}^2$

$W = 125.5 \text{ LB/FT}$

FROM PILE CAPACITY CURVES (Q CONDITION) (ASSUME  $L = 100'$ )

$AC = 122^k \text{ (F.S. = 2)}$

$AT = 77^k \text{ (F.S. = 2)}$

$ACC = 36.9 \text{ in}^2 \times 17.0 \text{ ksi} = 627.3^k$

$ATT = 36.9 \text{ in}^2 \times 20.0 \text{ ksi} = 738^k$

$AM1 = AM2 = 212.4 \text{ in}^3 \times 22 \text{ ksi} = 4,672.8 \text{ IN-KIPS}$

4/41  
5/13

**POST KATRINA HURRICANE FLOOD PROTECTION - (20 APRIL 2006) DESIGN CRITERIA  
SUPPLEMENT LOAD COMBINATION TABLES**

LOAD CASE	% ALLOWABLE OVERSTRESS		PILE LOAD - FACTORS OF SAFETY (F.O.S.)						
	WALL	FOUNDATION	STATIC LOAD TEST			PDA LOAD TEST			NO LOAD TEST
			C	T	C	T	C	T	
I. CONSTRUCTION	16 2/3	16 2/3	1.70	1.70	2.15	2.60	2.60	2.60	2.60
II. CONSTRUCTION + WIND	33 1/3	33 1/3	1.50	1.50	1.90	2.25	2.25	2.25	2.25
III. STILL WATER LEVEL (SWL)	0	0	2.00	2.00	2.50	3.00	3.00	3.00	3.00
IV. SWL + WIND	33 1/3	33 1/3	1.50	1.50	1.90	2.25	2.25	2.25	2.25
V. SWL + WAVE	33 1/3	33 1/3	1.50	1.50	1.90	2.25	2.25	2.25	2.25
VI. SWL + ** BOAT IMPACT (BI)	50	33 1/3	1.50	1.50	1.90	2.25	2.25	2.25	2.25
VII. SWL + WAVE + **BI	75	50	1.33	1.33	1.67	2.00	2.00	2.00	2.00
VIII. SWL + UNBALANCED LOAD	0	0	2.00	2.00	2.50	3.00	3.00	3.00	3.00

LOAD CASE	% ALLOWABLE OVERSTRESS		PILE LOAD - FACTORS OF SAFETY (F.O.S.)						
	WALL	FOUNDATION	STATIC LOAD TEST			PDA LOAD TEST			NO LOAD TEST
			C	T	C	T	C	T	
I. WATER TO TOP OF WALL, NO UNBALANCED LOAD + NO WAVE LOAD	50	33 1/3	1.50	1.50	1.90	2.25	2.25	2.25	2.25
II. WATER TO TOP OF WALL, UNBALANCED LOAD + NO WAVE LOAD	50	50	1.33	1.33	1.67	2.00	2.00	2.00	2.00
III. WATER TO TOP OF WALL, W/ OR W/O UNBALANCED LOAD + ** BOAT IMPACT (BI)	75	67	1.20	1.20	1.50	1.80	1.80	1.80	1.80

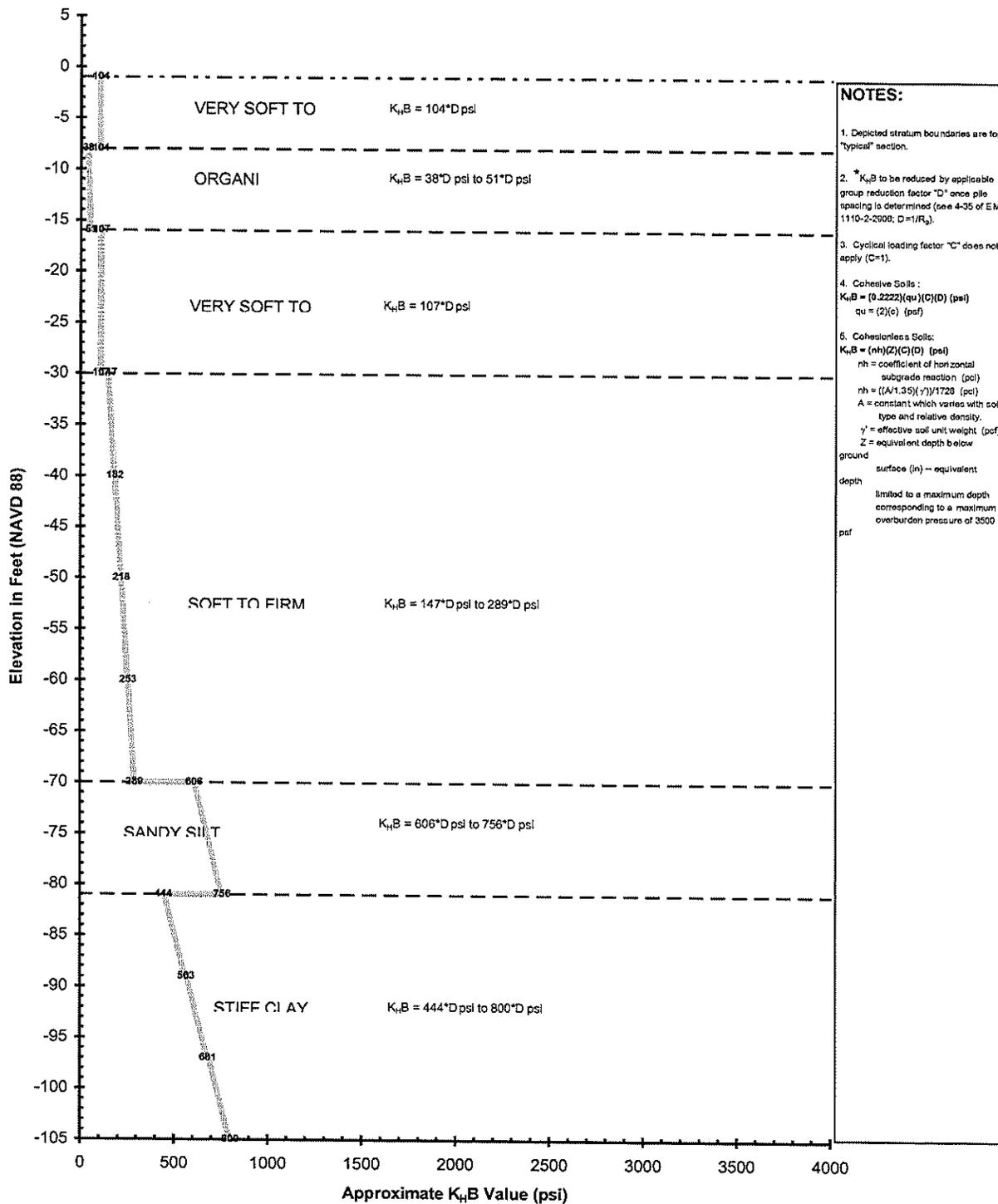
**\* GENERAL NOTES:**

1. IF UNBALANCED LOAD IS PRESENT FOR THE SWL LOAD CASE, IT SHALL BE INCLUDED IN ALL SWL LOAD CASE COMBINATIONS.
2. ACTUAL UNFACTORED SERVICE LOADS SHALL BE USED IN ANY PILE ANALYSIS PROGRAM (CPGA).
3. AN INCREASE IN ALLOWABLE DEFLECTIONS WILL BE ALLOWED FOR OVERSTRESS CONDITIONS. SOUND ENGINEERING JUDGEMENT SHALL BE UTILIZED IN DECIDING THE APPROPRIATE OVERSTRESS.

**\*\* NOTES ON BOAT IMPACT**

1. FOR SWL CASES, APPLY (BI) 3-FT ABOVE SWL
2. FOR WATER TO TOP OF WALL, APPLY (BI) AT TOP OF WALL
3. DESIGN ASSUMING A 100 KIP LOAD WHERE BARGE IMPACT CAN OCCUR NOW OR IN THE FUTURE OR A 50 KIP LOAD FOR OTHER VESSELS SUCH AS PLEASURE CRAFT OR WORK BOATS. A MINIMUM BOAT IMPACT LOAD OF 0.5 KIPS / FT SHALL BE APPLIED WHERE APPLICABLE. CURRENT OBSTRUCTIONS THAT ARE MARGINAL AND HAVE A HIGH PROBABILITY OF NOT LASTING THE PROJECT LIFE, SHALL BE ASSUMED NON-EXISTENT.
4. WALL LOAD DISTRIBUTION. THE LOAD SHALL BE DISTRIBUTED OVER A 5 FOOT WIDTH PLUS THE WIDTH GAINED ALONG A 45-DEGREE ANGLE
5. FOUNDATION LOAD DISTRIBUTION. THE LOAD SHALL BE DISTRIBUTED OVER THE FULL WIDTH OF THE MONOLITH FOUNDATION. EFFECTS OF ANY ECCENTRIC LOADING CAUSED BY IMPACT AT ONE END OF THE MONOLITH (MOMENT ABOUT THE VERTICAL AXIS) SHOULD BE BASED ON SOUND ENGINEERING JUDGEMENT.
6. GATE LOAD DISTRIBUTION. THE LOADS SHALL BE DISTRIBUTED OVER A 5 FOOT WIDTH ON THE UPPER GIRDER. NO LOAD IS ASSUMED ON THE LOWER GIRDER(S).
7. MINIMUM THICKNESS FOR WALLS SUBJECT TO BOAT IMPACT SHALL BE 18 INCHES.

Algiers Canal Reach 4 East - Estimated  $K_{tB}$  Profile



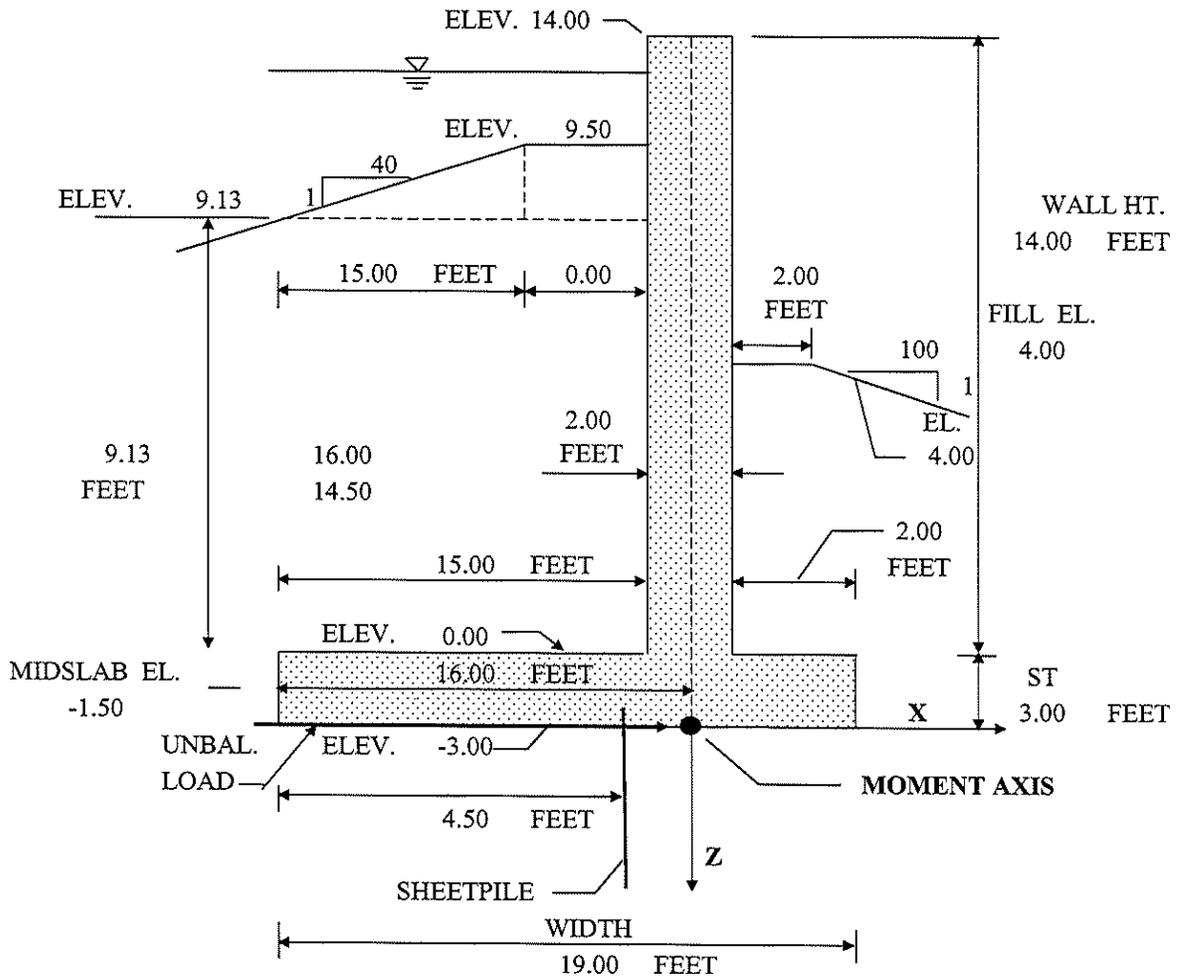
Pipe Properties	
Nominal Diameter	24 in
Schedule	XS
Material	Steel
Outside Diameter	24.000000 in
Inside Diameter	23.000000 in
Wall Thickness	0.500000 in
Inside CS Area	415.475640 in <sup>2</sup>
Transverse Metal Area	36.913715 in <sup>2</sup>
Moment of Inertia	2,549.353422 in <sup>4</sup>
Section Modulus	212.446118 in <sup>3</sup>
Radius of Gyration	8.310385 in
Outside Surface Area	6.283183 ft <sup>2</sup> /ft
Inside Surface Area	6.021384 ft <sup>2</sup> /ft
Weight	125.490000 lb/ft

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**

DATE: #####

BY: EAB      CHKD:

CONCRETE STRENGTH	4,000			
REINFORCING STRENGTH	60,000			
WALL INTERVAL	1	9.3	K / FT.	STILLWATER
SLAB INTERVAL	1.33	9.3	K / FT.	TOP OF WALL
MONOLITH LENGTH	40			IMPACT
BACKFILL WEIGHT	115	PCF	0	K
Ko	0.8			

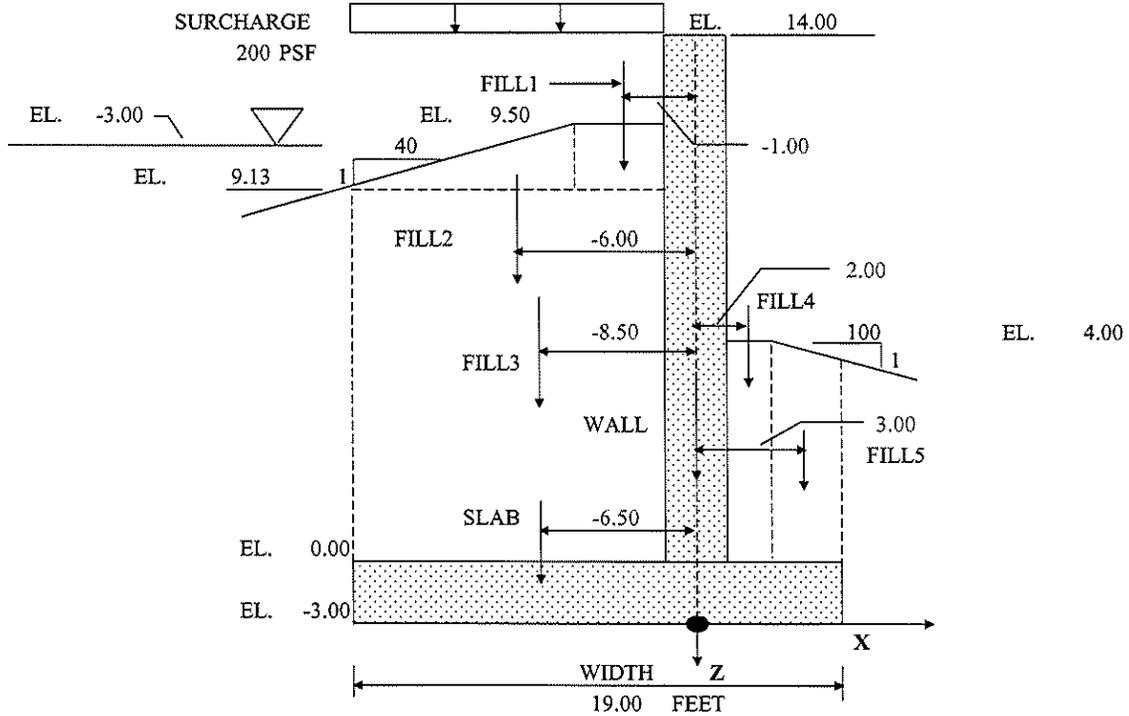


**DESIGN CRITERIA**

- EM1110-2-2104 "STRENGTH DESIGN FOR REINFORCED HYDRAULIC STRUCTURES"
- CONCRETE:**      HYDRAULIC FACTOR (Hf) = 1.3  
                     DL & LL LOAD FACTORS = 1.7  
                     MAX. REINFORCING = 0.375 RHO<sub>bal</sub>
- REINFORCING PER EQS. D-3 & D-4, AXIAL LOADS IGNORED
- ALLOWABLE SHEAR PER ACI 318, EQ. 11-3
- CLEAR COVER:      4      INCHES IN WALLS & TOP OF SLAB  
                             9      INCHES IN BOTTOM OF SLAB TO ALLOW FOR PILES

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 1 - CONSTRUCTION**

FLOODSIDE WATER ELEV.                   -3.00  
 UPLIFT - PROT. SIDE                       -3.00  
 ALLOWABLE OVERSTRESS                 16.66 %



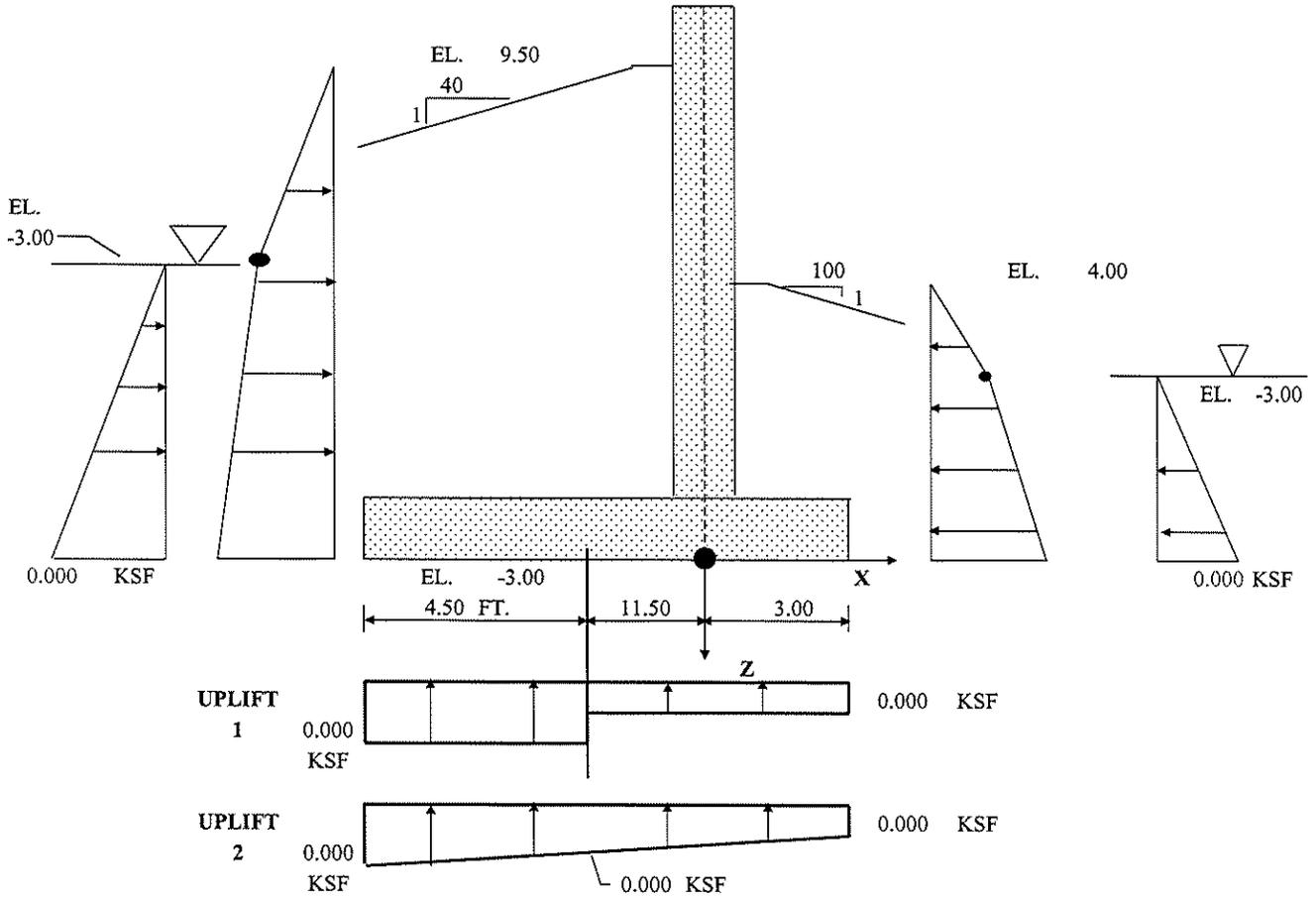
**FLOODWALL APPLIED GRAVITY LOADING - CASE 1**

ITEM	FORCE Z (WEIGHT)	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
CONCRETE SLAB	8.55	-6.50	0.00	55.6	0
CONCRETE WALL	4.20	0.00	0.00	0.0	0
FLOODSIDE FILL1	0.00	-1.00	0.00	0.0	0
FLOODSIDE FILL2	0.32	-6.00	0.00	1.9	0
FLOODSIDE FILL3	15.74	-8.50	0.00	133.8	0
PROTECTED SIDE FILL4	0.92	2.00	0.00	-1.8	0
PROTECTED SIDE FILL5	0.00	3.00	0.00	0.0	0
FLOODSIDE WATER	0.00	-32.17	0.00	0.0	0
FLOODSIDE WATER	0.00	0.00	0.00	0.0	0

<b>TOTALS</b>	<b>29.73</b>	<b>-6.37</b>	<b>189.47</b>	<b>0</b>
<b>CONCRETE</b>	<b>12.75</b>	<b>-4.36</b>	<b>55.58</b>	<b>0</b>
<b>FLOODSIDE FILL 1-3</b>	<b>16.06</b>	<b>-8.45</b>	<b>135.74</b>	<b>0</b>
<b>PROT. SIDE FILL 4-5</b>	<b>0.92</b>	<b>2.00</b>	<b>-1.84</b>	<b>0</b>
<b>FLOODSIDE WATER</b>	<b>0.00</b>	<b>-</b>	<b>0.00</b>	<b>0</b>
	<b>KIPS</b>		<b>FT.-K</b>	<b>FT.-K</b>

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 1 - CONSTRUCTION**

9/41

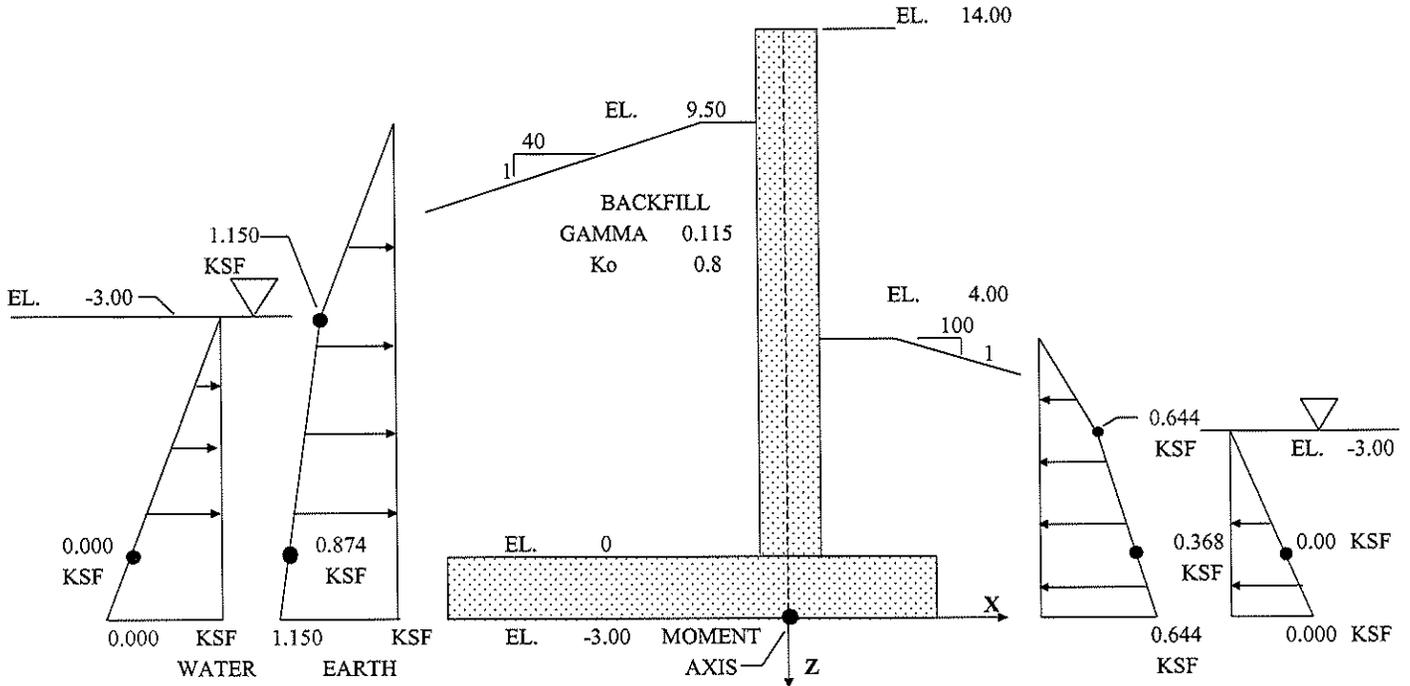


ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 1	4.50	0.00	0.00	-13.75	0.00	0	0
<b>PROTECTED SIDE:</b>							
UPLIFT 1	14.50	0.00	0.00	-4.25	0.00	0	0
<b>TOTALS</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0</b>
<b>FLD.SIDE</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0</b>
<b>PROT. SIDE</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0</b>
			KIPS			FT.-K	FT.-K

ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 2 (UNIF)	4.50	0.000	0.00	-13.75	0.00	0.00	0.00
UPLIFT 2 (TRI)	4.50	0.000	0.00	-14.50	0.00	0.00	0.00
<b>PROTECTED SIDE:</b>							
UPLIFT 2 (UNIF)	14.50	0.000	0.00	-4.25	0.00	0.00	0.00
UPLIFT 2 (TRI)	14.50	0.000	0.00	-6.67	0.00	0.00	0.00
<b>TOTALS</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0.00</b>
<b>FLOOD SIDE</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0.00</b>
<b>PROT. SIDE</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0.00</b>
			KIPS			FT.-K	FT.-K

ALGIERS CANAL (EAST)  
T-WALL TYPE A (REACH 4)  
CASE 1 - CONSTRUCTION

10/41



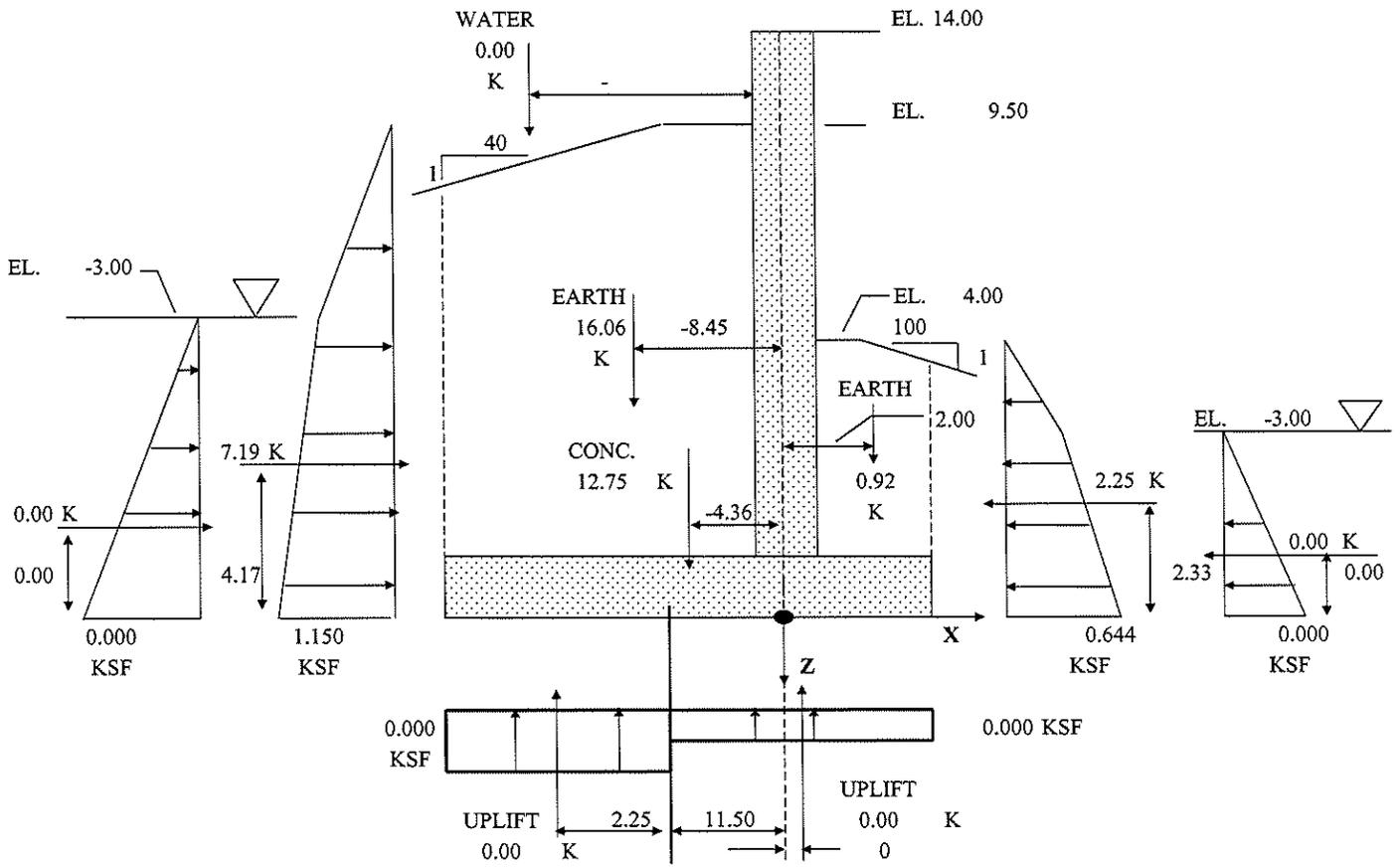
FLOODWALL HORIZONTAL LOADING - CASE 1

ITEM	HEIGHT	PRESS	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
<b>FLOODSIDE:</b>								
EARTH 1	12.50	1.150	7.19	k/ft	0.00	-4.17	0	-29.9
EARTH 2	0.00	1.150	0.00	k/ft	0.00	0.00	0	0.0
EARTH 3	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
GRND WATER	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
<b>PROTECTED:</b>								
EARTH 4	7.00	0.644	-2.25	k/ft	0.00	-2.33	0	5.3
EARTH 5	0.00	0.644	0.00	k/ft	0.00	0.00	0	0.0
EARTH 6	0.00	0.644	0.0	k/ft	0.00	0.00	0	0.0
GRND WATER	0.00	0.000	0.0	k/ft	0.00	0.00	0	0.0

	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT.	Myy FT-K/FT.
FLOODSIDE EARTH FORCE	7.19		0.00	-4.17		-29.9
FLOODSIDE WATER FORCE	0.00		0.00	0		0.0
TOTAL FLOODSIDE FORCE	7.19	k/ft	0.00	-4.17	0.0	-29.9
PROT. SIDE EARTH FORCE	-2.25		0.00	-2.33		5.3
PROT. SIDE WATER FORCE	0.00		0.00	0		0.0
TOTAL PROT. SIDE FORCE	-2.25	k/ft	0.00	-2.33	0.0	5.3
TOTAL NET HORIZ. FORCE	4.93	k/ft	0.00	-5.00	0.0	-24.7

ALGIERS CANAL (EAST)  
T-WALL TYPE A (REACH 4)  
CASE 1 - CONSTRUCTION

11/21



LOADING SUMMARY - CASE 1 WITH MINIMUM UPLIFT

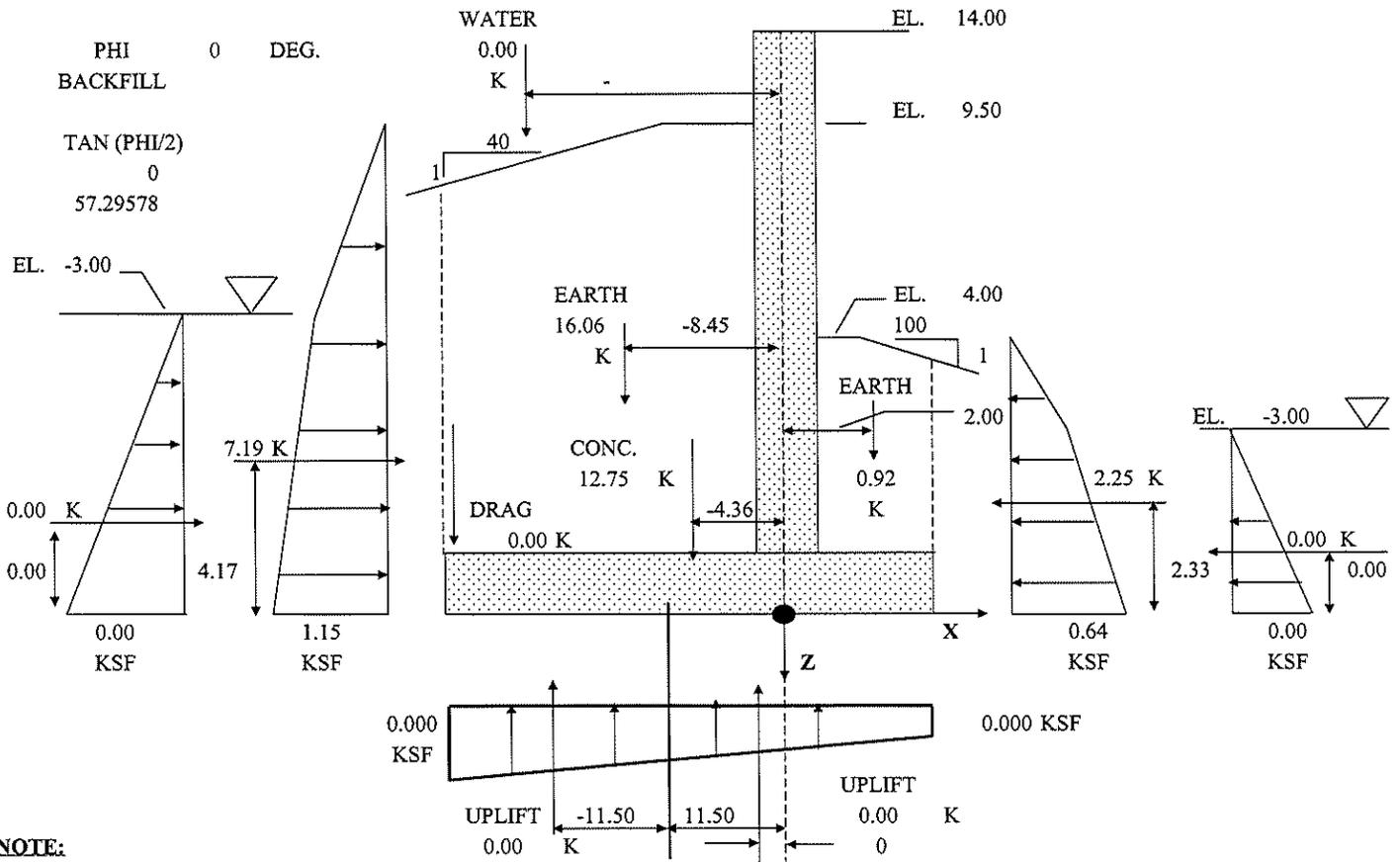
ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	12.8	k/ft	-4.36	0.00	56	0
FLDSIDE FILL	0.0	0.0	16.1	k/ft	-8.45	0.00	136	0
PROTSIDE FILL	0.0	0.0	0.9	k/ft	2.00	0.00	-2	0
F. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
P. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
F. S. EARTH Pr.	7.2	0.0	0.0	k/ft	-	-4.17	-29.95	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	-2.33	0	0
F. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0
P. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0

IGNORE

	X	Y	Z	Mxx	Myy	Mzz
TOTALS	7.2	0.0	29.7	0	160	0
MONO. TOTAL	246	0.0	1020	0	5470	0

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 1 - CONSTRUCTION**

12/41



**NOTE:**

DRAG LOAD = (EARTH P)\*TAN(PHI/2)

**LOADING SUMMARY - CASE 1 WITH DRAG/SURCHARGE LOAD**

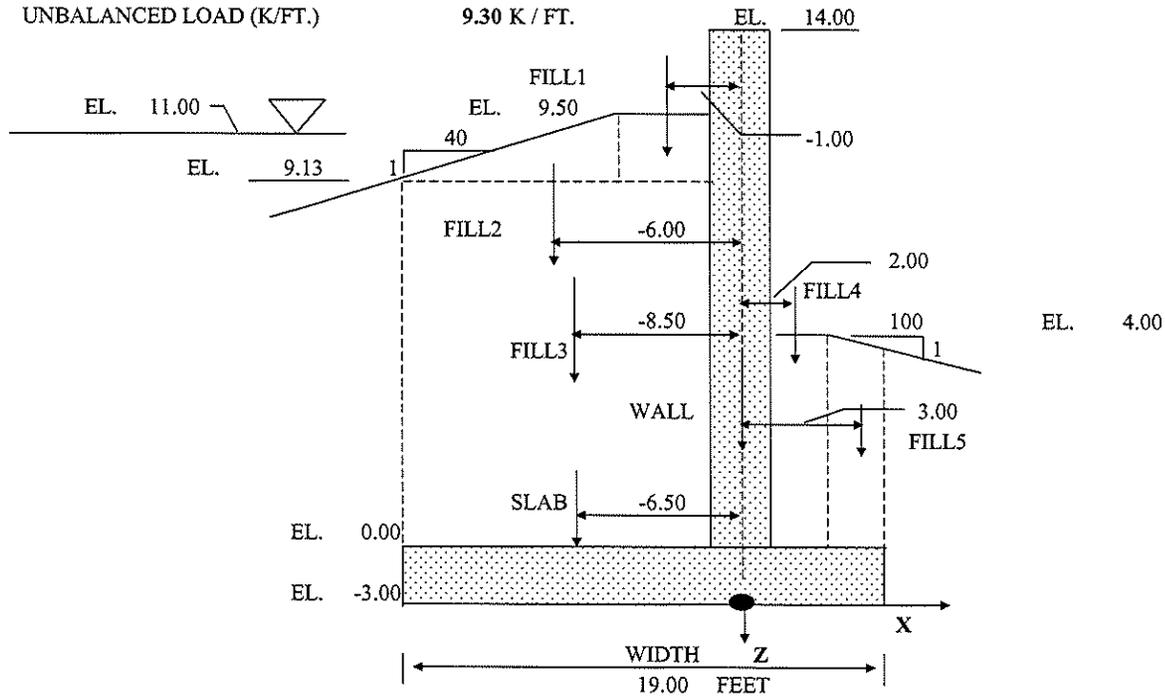
ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	12.8	k/ft	-4.36	0.00	56	0
FLDSIDE FILL	0.0	0.0	16.1	k/ft	-8.45	0.00	136	0
PROTSIDE FILL	0.0	0.0	0.9	k/ft	2.00	0.00	-2	0
DRAG LOAD	0.0	0.0	0.0	k/ft	-16.00	0.00	0	0
SURCHARGE	0.0	0.0	3.0	k/ft	-8.50	0.00	26	0
F. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
P. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
F. S. EARTH Pr.	7.2	0.0	0.0	k/ft	-	-4.17	-29.9	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	-2.33	0	0
F. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0
P. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0

-0.58

	X	Y	Z	Mxx	Myy	Mzz
<b>TOTALS</b>	7.2	0.0	32.7	0	185	0
<b>MONO. TOTAL</b>	246	0.0	1122	0	6344	0
				X	Y	Z
<b>VERTICAL</b>			1122	-6.57		
<b>HORIZ</b>			246			-4.17

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 2 - WATER @ SWE**

FLOODSIDE WATER ELEV. 11.00  
 UPLIFT - PROT. SIDE 0.00  
 ALLOWABLE OVERSTRESS 0  
 UNBALANCED LOAD (K/FT.) 9.30 K / FT.



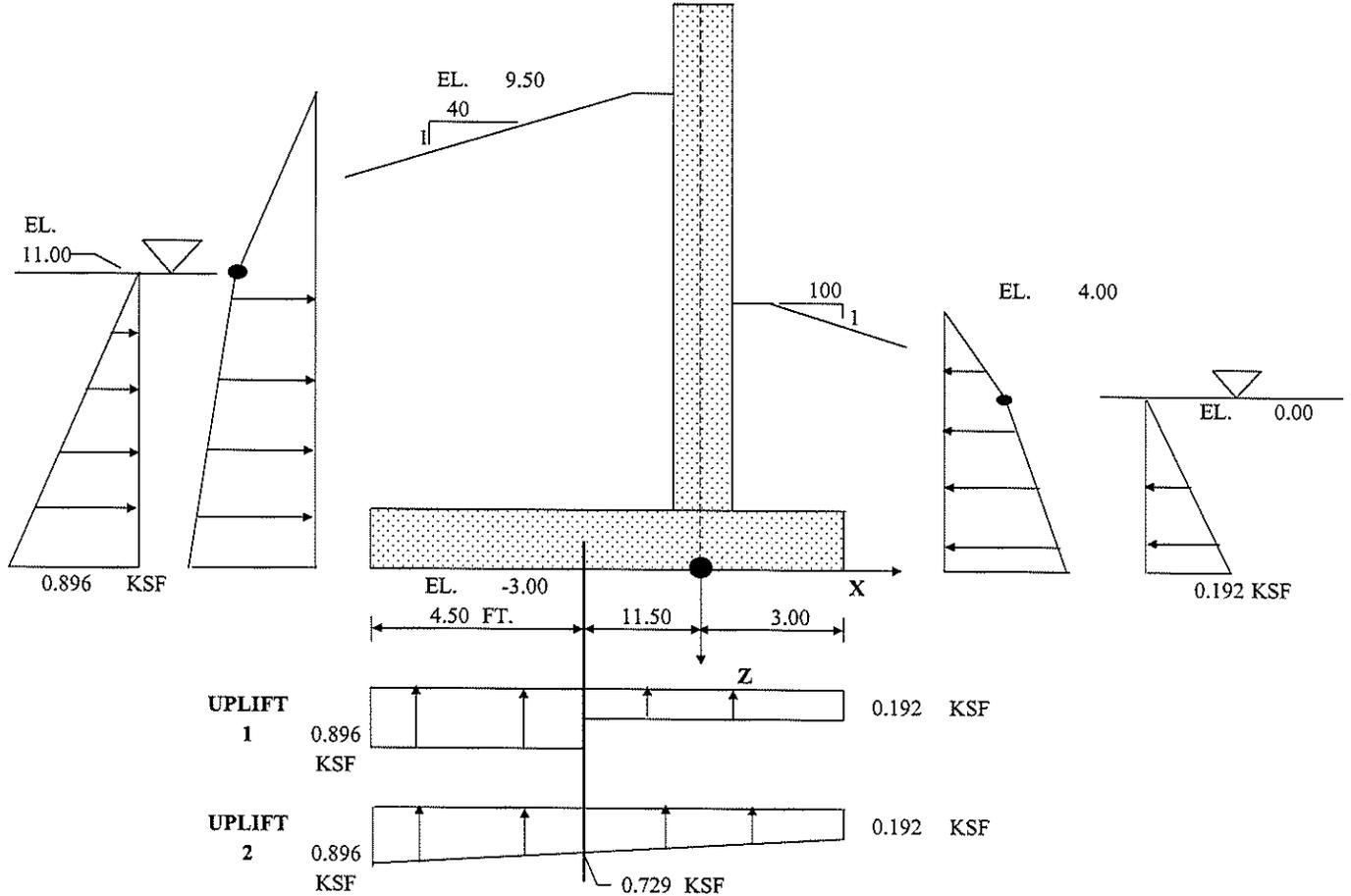
**FLOODWALL APPLIED GRAVITY LOADING - CASE 2**

ITEM	FORCE Z (WEIGHT)	X CENT. FEET	Y CENT. FEET	M <sub>yy</sub> FT.-K	M <sub>zz</sub> FT.-K
CONCRETE SLAB	8.55	-6.50	0.00	56	0
CONCRETE WALL	4.20	0.00	0.00	0	0
FLOODSIDE FILL1	0.00	-1.00	0.00	0	0
FLOODSIDE FILL2	0.32	-6.00	0.00	2	0
FLOODSIDE FILL3	15.74	-8.50	0.00	134	0
PROTECTED SIDE FILL4	0.92	2.00	0.00	-2	0
PROTECTED SIDE FILL5	0.00	3.00	0.00	0	0
FLOODSIDE WATER	0.18	-11.00	0.00	2	0
FLOODSIDE WATER	1.44	-8.50	0.00	12	0

<b>TOTALS</b>	<b>31.35</b>	<b>-6.50</b>	<b>203.69</b>	<b>0</b>
<b>CONCRETE</b>	<b>12.75</b>	<b>-4.36</b>	<b>55.58</b>	<b>0</b>
<b>FLOODSIDE FILL 1-3</b>	<b>16.06</b>	<b>-8.45</b>	<b>135.74</b>	<b>0</b>
<b>PROT. SIDE FILL 4-5</b>	<b>0.92</b>	<b>2.00</b>	<b>-1.84</b>	<b>0</b>
<b>FLOODSIDE WATER</b>	<b>1.62</b>	<b>-8.78</b>	<b>14.22</b>	<b>0</b>
	<b>KIPS</b>		<b>FT.-K</b>	<b>FT.-K</b>

ALGIERS CANAL (EAST)  
T-WALL TYPE A (REACH 4)  
CASE 2 - WATER @ SWE

10/41

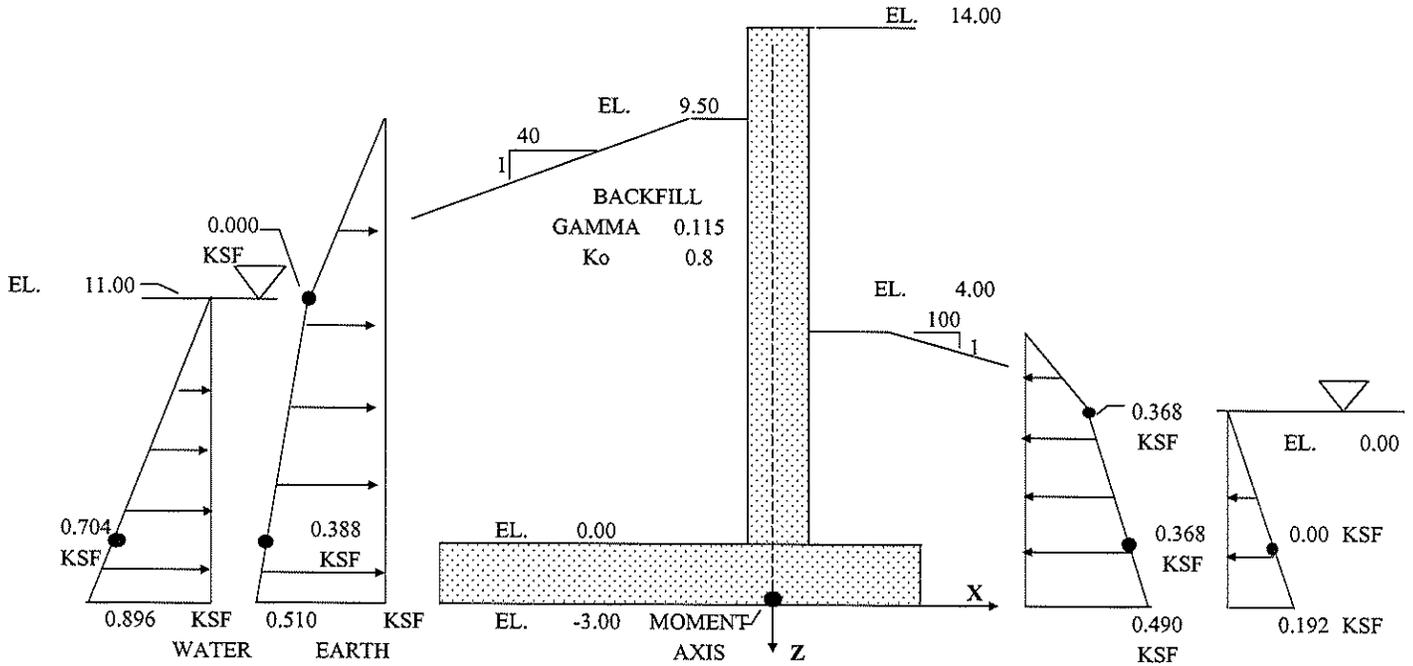


ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 1	4.50	0.90	-4.03	-13.75	0.00	-55	0
<b>PROTECTED SIDE:</b>							
UPLIFT 1	14.50	0.19	-2.78	-4.25	0.00	-12	0
<b>TOTALS</b>			<b>-6.82</b>	<b>-9.87</b>		<b>-67</b>	<b>0</b>
<b>FLD.SIDE</b>			<b>-4.03</b>	<b>-13.75</b>		<b>-55.44</b>	<b>0</b>
<b>PROT. SIDE</b>			<b>-2.78</b>	<b>-4.25</b>		<b>-11.83</b>	<b>0</b>
			<b>KIPS</b>			<b>FT.-K</b>	<b>FT.-K</b>

ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 2 (UNIF)	4.50	0.729	-3.28	-13.75	0.00	-45.12	0.00
UPLIFT 2 (TRI)	4.50	0.167	-0.38	-14.50	0.00	-5.44	0.00
<b>PROTECTED SIDE:</b>							
UPLIFT 2 (UNIF)	14.50	0.192	-2.78	-4.25	0.00	-11.83	0.00
UPLIFT 2 (TRI)	14.50	0.537	-3.90	-6.67	0.00	-25.97	0.00
<b>TOTALS</b>			<b>-10.34</b>	<b>-8.55</b>		<b>-88.36</b>	<b>0.00</b>
<b>FLOOD SIDE</b>			<b>-3.66</b>	<b>-13.83</b>		<b>-50.56</b>	<b>0.00</b>
<b>PROT. SIDE</b>			<b>-6.68</b>	<b>-5.66</b>		<b>-37.80</b>	<b>0.00</b>
			<b>KIPS</b>			<b>FT.-K</b>	<b>FT.-K</b>

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 2 - WATER @ SWE**

15/41



2.04

6.272

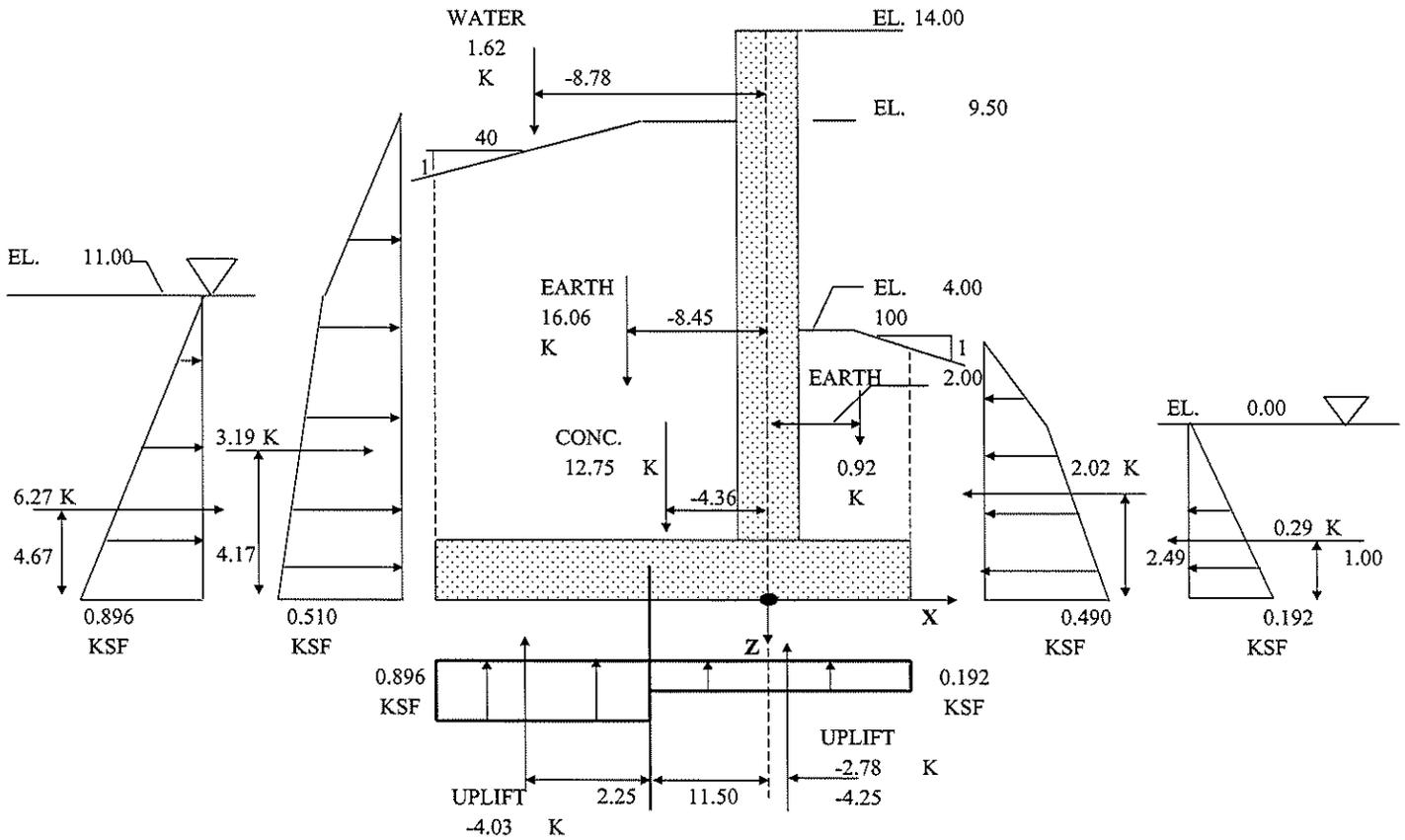
**FLOODWALL HORIZONTAL LOADING - CASE 2**

ITEM	HEIGHT	PRESS	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
<b>FLOODSIDE:</b>								
EARTH 1	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
EARTH 2	12.50	0.000	0.00	k/ft	0.00	0.00	0	0.0
EARTH 3	12.50	0.510	3.19	k/ft	0.00	-4.17	0	-13.3
GRND WATER	14.00	0.896	6.27	k/ft	0.00	-4.67	0	-29.3
<b>PROTECTED:</b>								
EARTH 4	4.00	0.368	-0.74	k/ft	0.00	-4.33	0	3.2
EARTH 5	3.00	0.368	-1.10	k/ft	0.00	-1.50	0	1.7
EARTH 6	3.00	0.490	-0.18	k/ft	0.00	-1.00	0	0.2
GRND WATER	3.00	0.192	-0.29	k/ft	0.00	-1.00	0	0.3

	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
<b>FLOODSIDE EARTH FORCE</b>	3.19		0.00	-4.17		-13.3
<b>FLOODSIDE WATER FORCE</b>	6.27		0.00	-4.67		-29.3
<b>TOTAL FLOODSIDE FORCE</b>	9.46	k/ft	0.00	-4.50	0.0	-42.6
<b>PROT. SIDE EARTH FORCE</b>	-2.02		0.00	-2.49		5.0
<b>PROT. SIDE WATER FORCE</b>	-0.29		0.00	-1.00		0.3
<b>TOTAL PROT. SIDE FORCE</b>	-2.31	k/ft	0.00	-2.30	0.0	5.3
<b>TOTAL NET HORIZ. FORCE</b>	7.15	k/ft	0.00	-5.21	0.0	-37.2

ALGIERS CANAL (EAST)  
T-WALL TYPE A (REACH 4)  
CASE 2 - WATER @ SWE

16/21



LOADING SUMMARY - CASE 2 WITH MINIMUM UPLIFT

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	12.8	k/ft	-4.36	0.00	56	0
FLDSIDE FILL	0.0	0.0	16.1	k/ft	-8.45	0.00	136	0
PROTSIDE FILL	0.0	0.0	0.9	k/ft	2.00	0.00	-2	0
F.SIDE WATER	0.0	0.0	1.6	k/ft	-8.78	0.00	14	0
F. SIDE UPLIFT	0.0	0.0	-4.0	k/ft	-13.75	0.00	-55	0
P. SIDE UPLIFT	0.0	0.0	-2.8	k/ft	-4.25	0.00	-12	0
F. S. EARTH Pr.	3.2	0.0	0.0	k/ft	-	-4.17	-13	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	-2.49	0	0
F. S. WATER Pr.	6.3	0.0	0.0	k/ft	-	-4.67	-29	0
P. S. WATER Pr.	-0.3	0.0	0.0	k/ft	-	-1.00	0	0

IGNORE

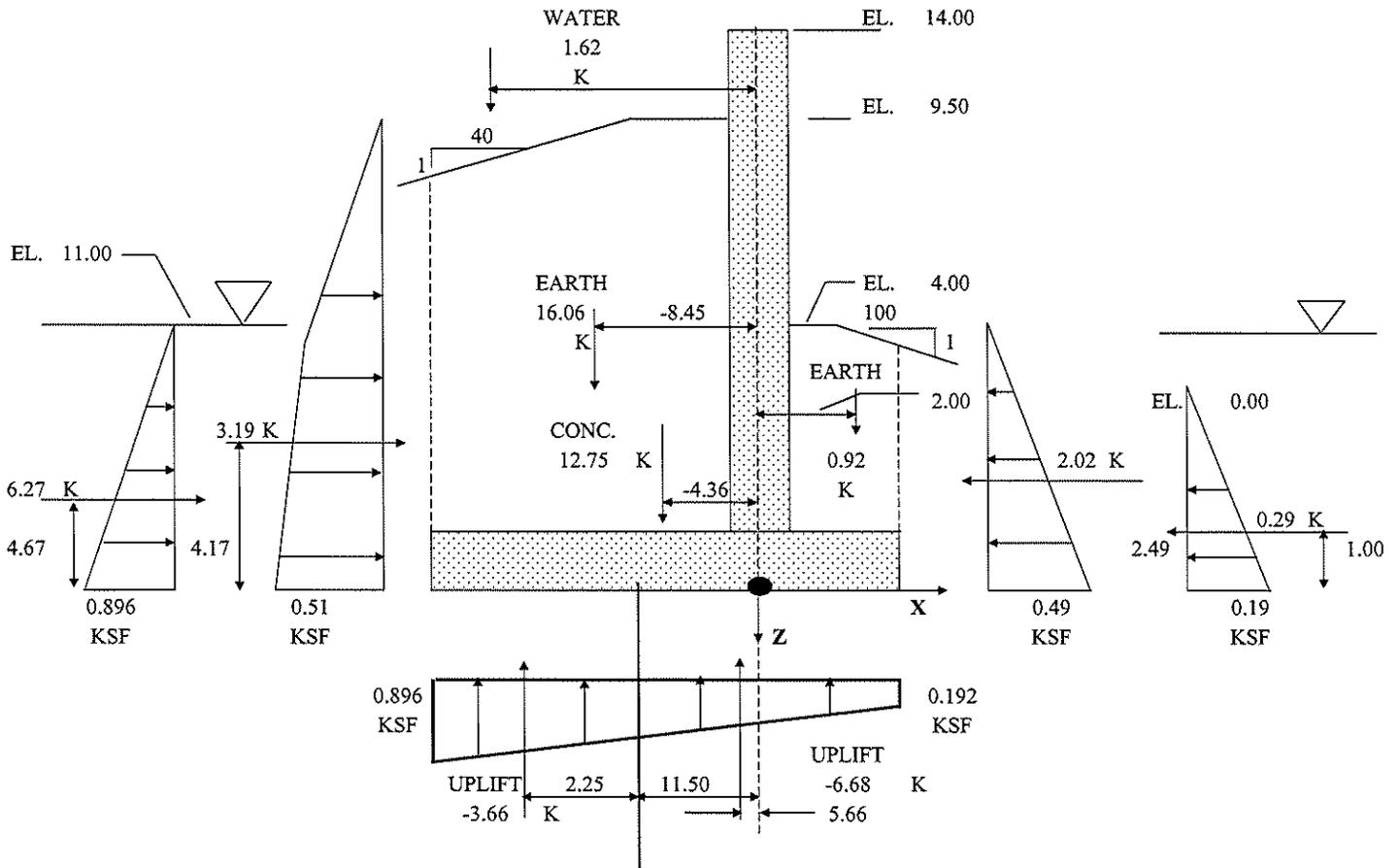
148.25

-42.26

TOTALS	X	Y	Z		Mxx	Myy	Mzz
	9.2	0.0	24.5		0	94	0
MONO. TOTAL	367	0.0	982		0	3766	0

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 2 - WATER @ SWE**

17/41



**LOADING SUMMARY - CASE 2 WITH MAXIMUM UPLIFT**

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	12.8	k/ft	-4.36	0.00	56	0
FLDSIDE FILL	0.0	0.0	16.1	k/ft	-8.45	0.00	136	0
PROTSIDE FILL	0.0	0.0	0.9	k/ft	2.00	0.00	-2	0
F.SIDE WATER	0.0	0.0	1.6	k/ft	-8.78	0.00	14	0
F. SIDE UPLIFT	0.0	0.0	-3.7	k/ft	-13.83	0.00	-51	0
P. SIDE UPLIFT	0.0	0.0	-6.7	k/ft	-5.66	0.00	-38	0
F. S. EARTH Pr.	3.2	0.0	0.0	k/ft	-	-4.17	-13	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	-2.49	0	0
F. S. WATER Pr.	6.3	0.0	0.0	k/ft	-	-4.67	-29	0
P. S. WATER Pr.	-0.3	0.0	0.0	k/ft	-	-1.00	0	0

IGNORE

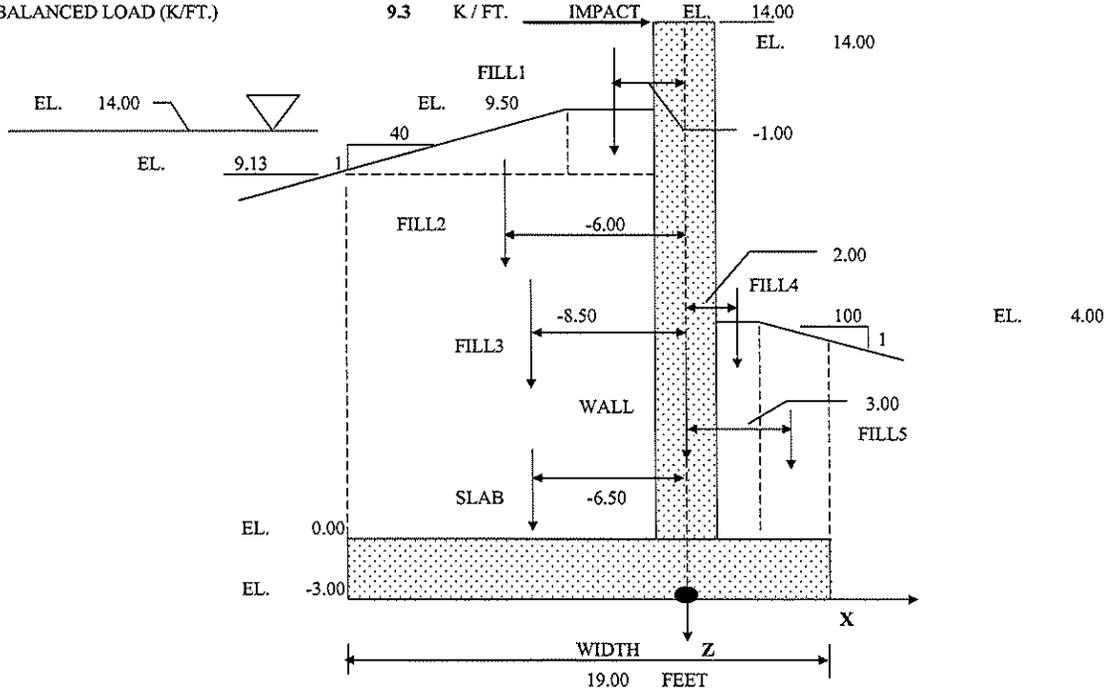
115.33

-42.26

	X	Y	Z		Mxx	Myy	Mzz
TOTALS	9.2	0.0	21.0		0	73	0
MONO. TOTAL	366.9	0.0	840.7		0	2923	0
VERTICAL			841			-5.49	
HORIZ			367				-4.61

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 3 - WATER TO TOP OF WALL**

FLOODSIDE WATER ELEV. 14.00  
 UPLIFT - PROT. SIDE 0.00  
 ALLOWABLE OVERSTRESS 50 % 0 K (CASE\_ONLY)  
 UNBALANCED LOAD (K/FT.) 9.3 K / FT.



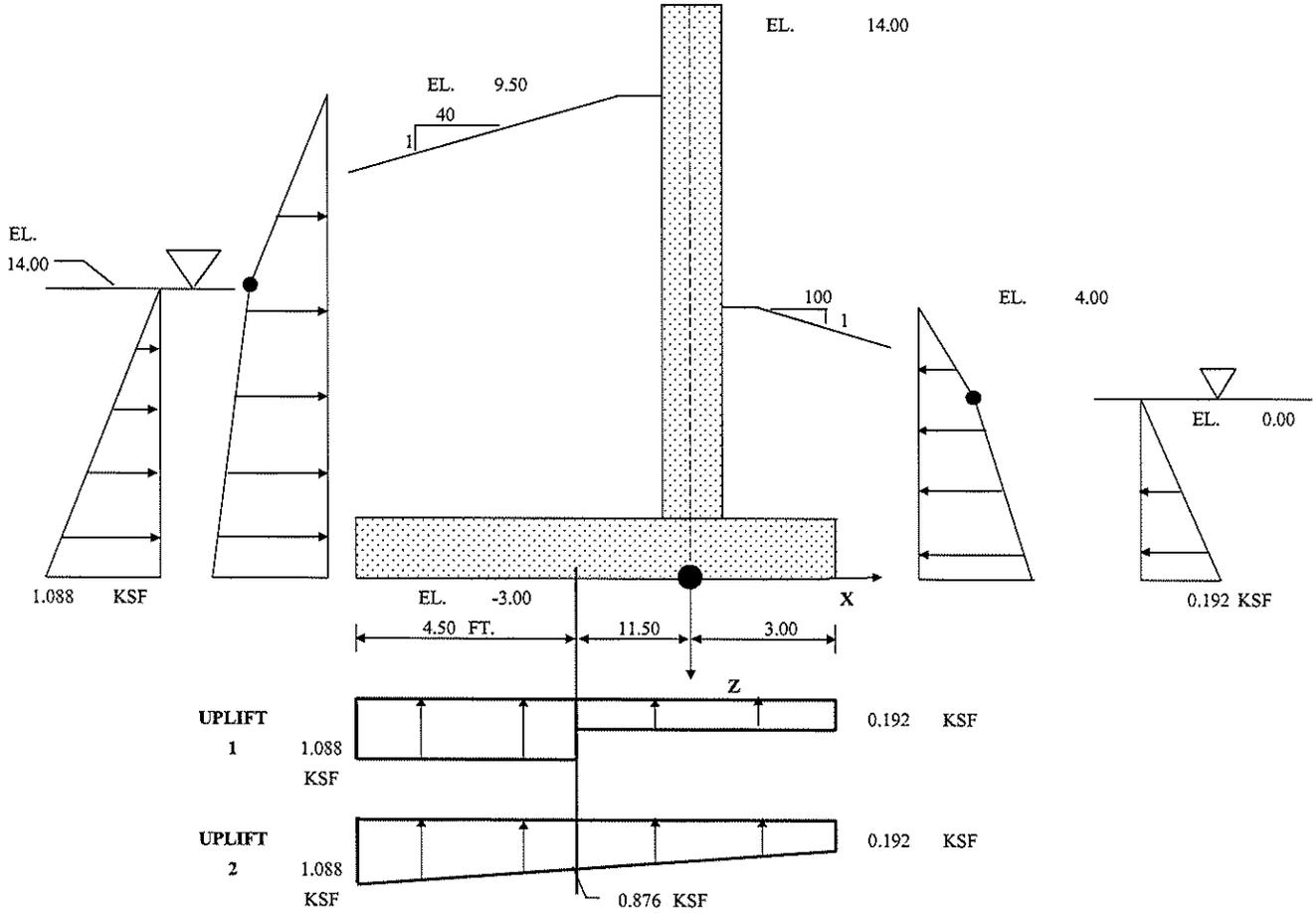
**FLOODWALL APPLIED GRAVITY LOADING - CASE 3**

ITEM	FORCE Z (WEIGHT)	X CENT. FEET	Y CENT. FEET	M <sub>yy</sub> FT.-K	M <sub>zz</sub> FT.-K
CONCRETE SLAB	8.55	-6.50	0.00	56	0
CONCRETE WALL	4.20	0.00	0.00	0	0
FLOODSIDE FILL1	0.00	-1.00	0.00	0	0
FLOODSIDE FILL2	0.32	-6.00	0.00	2	0
FLOODSIDE FILL3	15.74	-8.50	0.00	134	0
PROTECTED SIDE FILL4	0.92	2.00	0.00	-2	0
PROTECTED SIDE FILL5	0.00	3.00	0.00	0	0
FLOODSIDE WATER	0.18	-11.00	0.00	2	0
FLOODSIDE WATER	4.32	-8.50	0.00	37	0

<b>TOTALS</b>	<b>34.23</b>	<b>-6.67</b>	<b>228.17</b>	<b>0</b>
<b>CONCRETE</b>	<b>12.75</b>	<b>-4.36</b>	<b>55.58</b>	<b>0</b>
<b>FLOODSIDE FILL 1-3</b>	<b>16.06</b>	<b>-8.45</b>	<b>135.74</b>	<b>0</b>
<b>PROT. SIDE FILL 4-5</b>	<b>0.92</b>	<b>2.00</b>	<b>-1.84</b>	<b>0</b>
<b>FLOODSIDE WATER</b>	<b>4.50</b>	<b>-8.60</b>	<b>38.70</b>	<b>0</b>
	<b>KIPS</b>		<b>FT.-K</b>	<b>FT.-K</b>

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 3 - WATER TO TOP OF WALL**

19/41

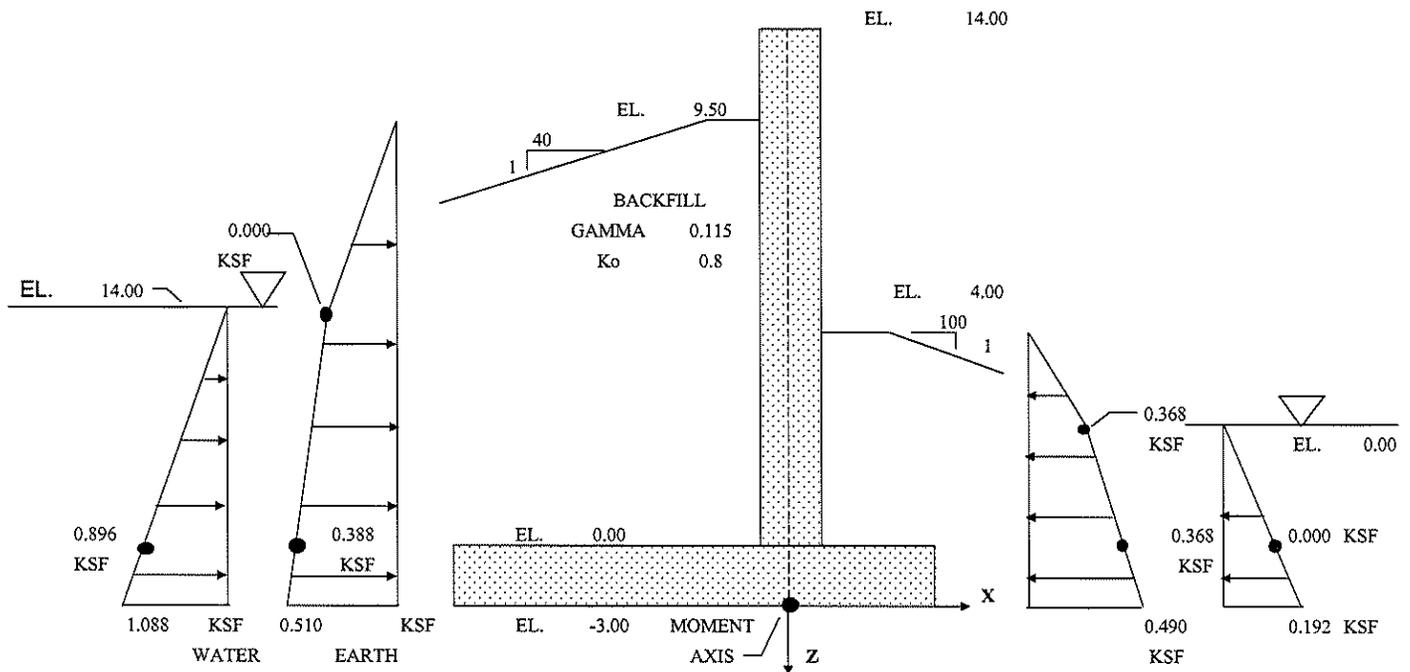


ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 1	4.50	1.09	-4.90	-13.75	0.00	-67	0
<b>PROTECTED SIDE:</b>							
UPLIFT 1	14.50	0.19	-2.78	-4.25	0.00	-12	0
<b>TOTALS</b>			<b>-7.68</b>	<b>-10.31</b>		<b>-79</b>	<b>0</b>
<b>FLD.SIDE</b>			<b>-4.90</b>	<b>-13.75</b>		<b>-67.32</b>	<b>0</b>
<b>PROT. SIDE</b>			<b>-2.78</b>	<b>-4.25</b>		<b>-11.83</b>	<b>0</b>
			KIPS			FT.-K	FT.-K

ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 2 (UNIF)	4.50	0.876	-3.94	-13.75	0.00	-54.19	0.00
UPLIFT 2 (TRI)	4.50	0.212	-0.48	-14.50	0.00	-6.92	0.00
<b>PROTECTED SIDE:</b>							
UPLIFT 2 (UNIF)	14.50	0.192	-2.78	-4.25	0.00	-11.83	0.00
UPLIFT 2 (TRI)	14.50	0.684	-4.96	-6.67	0.00	-33.05	0.00
<b>TOTALS</b>			<b>-12.16</b>	<b>-8.72</b>		<b>-105.99</b>	<b>0.00</b>
<b>FLOOD SIDE</b>			<b>-4.42</b>	<b>-13.83</b>		<b>-61.11</b>	<b>0.00</b>
<b>PROT. SIDE</b>			<b>-7.74</b>	<b>-5.80</b>		<b>-44.88</b>	<b>0.00</b>
			KIPS			FT.-K	FT.-K

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 3 - WATER TO TOP OF WALL**

20/41



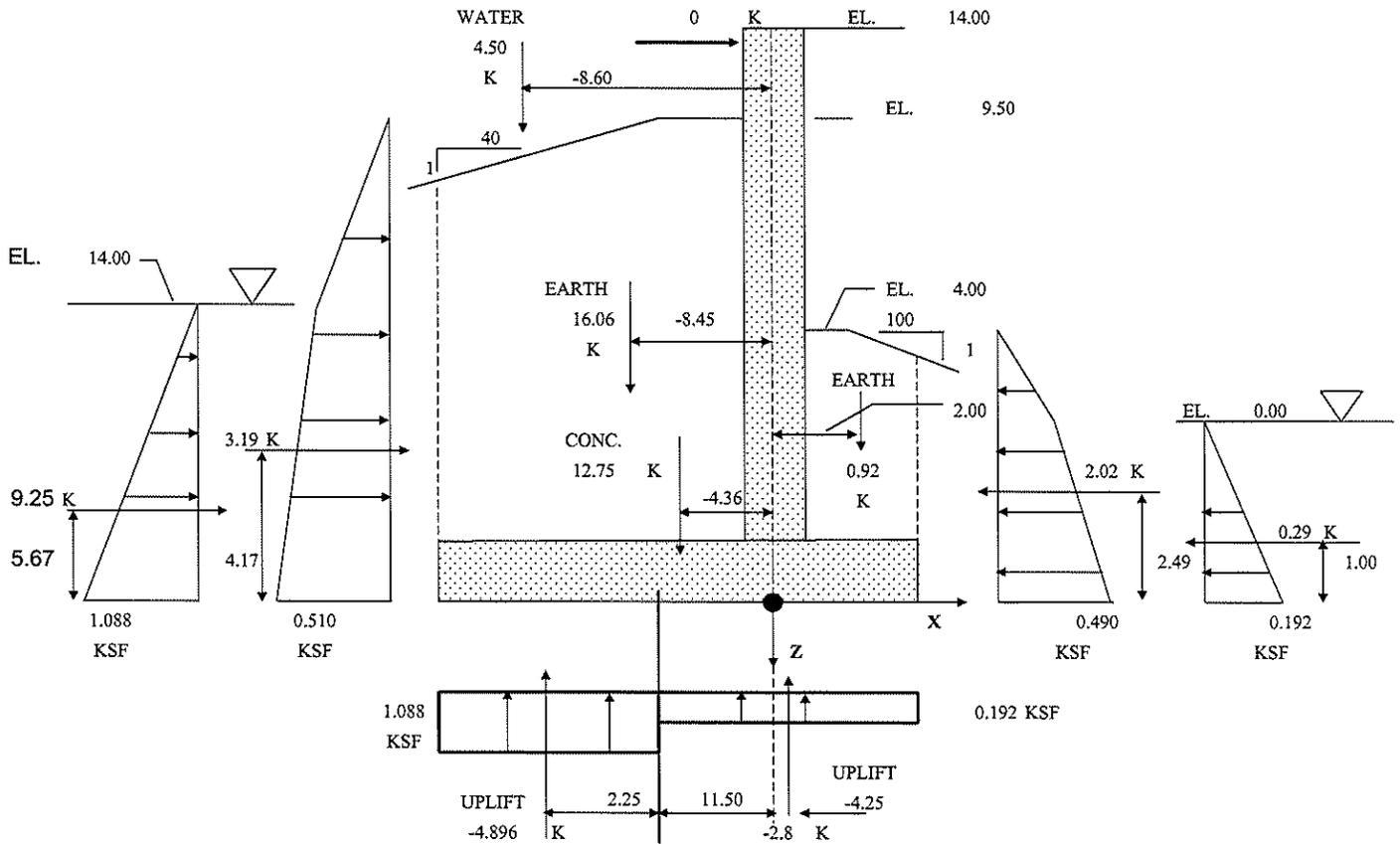
**FLOODWALL HORIZONTAL LOADING - CASE 3**

ITEM	HEIGHT	PRESS	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
<b>FLOODSIDE:</b>								
EARTH 1	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
EARTH 2	12.50	0.000	0.00	k/ft	0.00	0.00	0	0.0
EARTH 3	12.50	0.510	3.19	k/ft	0.00	-4.17	0	-13.3
GRND WATER	17.00	1.088	9.25	k/ft	0.00	-5.67	0	-52.4
<b>PROTECTED:</b>								
EARTH 4	4.00	0.368	-0.74	k/ft	0.00	-4.33	0	3.2
EARTH 5	3.00	0.368	-1.10	k/ft	0.00	-1.50	0	1.7
EARTH 6	3.00	0.490	-0.18	k/ft	0.00	-1.00	0	0.2
GRND WATER	3.00	0.192	-0.29	k/ft	0.00	-1.00	0	0.3

	FORCE X	Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT.	Myy FT-K/FT.
<b>FLOODSIDE EARTH FORCE</b>	3.19	0.00	-4.17		-13.3
<b>FLOODSIDE WATER FORCE</b>	9.25	0.00	-5.67		-52.4
<b>TOTAL FLOODSIDE FORCE</b>	12.44	k/ft	-5.28	0.0	-65.7
<b>PROT. SIDE EARTH FORCE</b>	-2.02	0.00	-2.49		5.0
<b>PROT. SIDE WATER FORCE</b>	-0.29	0.00	-1.00		0.3
<b>TOTAL PROT. SIDE FORCE</b>	-2.31	k/ft	-2.30	0.0	5.3
<b>TOTAL NET HORIZ. FORCE</b>	10.12	k/ft	-5.96	0.0	-60.4

21/41

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 3 - WATER TO TOP OF WALL**



**LOADING SUMMARY - CASE 3 WITH MINIMUM UPLIFT**

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	12.8	k/ft	-4.36	0.00	56	0
FLDSIDE FILL	0.0	0.0	16.1	k/ft	-8.45	0.00	136	0
PROTSIDE FILL	0.0	0.0	0.9	k/ft	2.00	0.00	-2	0
F.SIDE WATER	0.0	0.0	4.5	k/ft	-8.60	0.00	39	0
F. SIDE UPLIFT	0.0	0.0	-4.9	k/ft	-13.75	0.00	-67	0
P. SIDE UPLIFT	0.0	0.0	-2.8	k/ft	-4.25	0.00	-12	0
F. S. EARTH Pr.	3.2	0.0	0.0	k/ft	-	-4.17	-13	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	-2.49	0	0
F. S. WATER Pr.	9.2	0.0	0.0	k/ft	-	-5.67	-52	0
P. S. WATER Pr.	-0.3	0.0	0.0	k/ft	-	-1.00	0	0

SUM M  
149.02

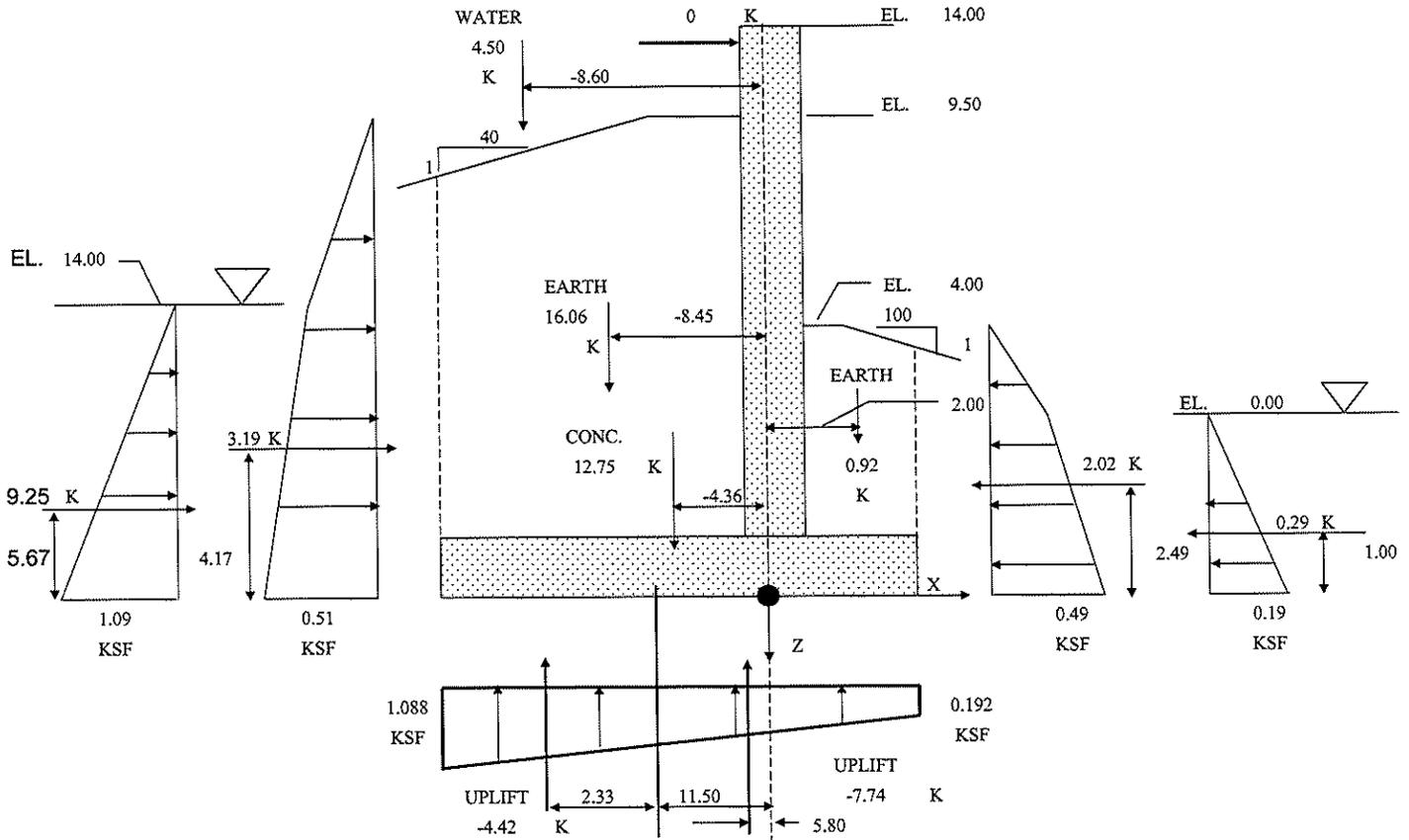
SUM M  
-65.40

IGNORE

	X	Y	Z	Mxx	Myy	Mzz
TOTALS	12.1	0.0	26.6	0	84	0
MONO. TOTAL	324	0.0	708	0	2230	0
IMPACT (CASE 9)	0.0				0	
TOTAL CASE 9	324	0.0	708	0.0	2230	0.0

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE A (REACH 4)**  
**CASE 3 - WATER TO TOP OF WALL**

22/41



**LOADING SUMMARY - CASE 3 WITH MAXIMUM UPLIFT**

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	12.8	k/ft	-4.36	0.00	56	0
FLDSIDE FILL	0.0	0.0	16.1	k/ft	-8.45	0.00	136	0
PROTSIDE FILL	0.0	0.0	0.9	k/ft	2.00	0.00	-2	0
F.SIDE WATER	0.0	0.0	4.5	k/ft	-8.60	0.00	39	0
F. SIDE UPLIFT	0.0	0.0	-4.4	k/ft	-13.83	0.00	-61	0
P. SIDE UPLIFT	0.0	0.0	-7.7	k/ft	-5.80	0.00	-45	0
F. S. EARTH Pr.	3.2	0.0	0.0	k/ft	-	-4.17	-13	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	-2.49	0	0
F. S. WATER Pr.	9.2	0.0	0.0	k/ft	-	-5.67	-52	0
P. S. WATER Pr.	-0.3	0.0	0.0	k/ft	-	-1.00	0	0

SUM M  
122.18

SUM M  
-65.40

	X	Y	Z		Mxx	Myy	Mzz
<b>TOTALS</b>	12.1	0.0	22.1		0	57	0
<b>MONO. TOTAL</b>	324	0.0	589		0	1514	0
<b>IMPACT (CASE 10)</b>	0.0					0.0	
<b>TOTAL CASE 10</b>	324	0.0	589		0.0	1514	0.0
<b>VERTICAL</b>			589		-5.53		
<b>HORIZ</b>			324				-5.38



**ALGIERS CANAL (EAST)  
T-WALL TYPE A (REACH 4)**

LOAD CASE	LOAD CONDITION	OL (%)	FOUNDATION LOADS					
			X	Y	Z	MXX	MYX	MZZ
1	CONSTRUCTION / NORMAL CONDITION	16 2/3	246	0	1,020	0	5,470	0
2	CONST. W/ DRAG & SURCHARGE LDS	16 2/3	246	0	1,122	0	6,344	0
2a	MIN. UPLIFT, UNBALANCED LOADS	0	739	0	982	0	3,766	0
2b	MAX. UPLIFT, UNBALANCED LOADS	0	739	0	841	0	2,923	0
3	WATER @ SWE ( EL. 11.0 )							
3a	MIN. UPLIFT, UNBALANCED LOADS	0	774	0	992	0	3,254	0
3b	MAX. UPLIFT, UNBALANCED LOADS	0	774	0	841	0	2,403	0
4	WATER @ TOP OF WALL ( EL. 14.0 )							
4a	MIN. UPLIFT, UNBALANCED LOADS	50	696	0	708	0	2,230	0
4b	MAX. UPLIFT, UNBALANCED LOADS	50	696	0	589	0	1,514	0
5	WATER @ TOP OF WALL ( EL. 14.0 )							
5a	MIN. UPLIFT, UNBALANCED LOADS		696	0	708	0	2,230	0
5b	MAX. UPLIFT, UNBALANCED LOADS		696	0	589	0	1,514	0

## T-WALL9.TXT

10 ALGIERS CANAL (EAST)-  
11 T-WALL TYPE A  
20 PROP 29000 2549 2549 36.9 2 0 ALL  
30 SOIL ES 0.047 LEN 100 0 ALL  
41 PIN ALL  
50 ALLOW R 122 77 627.3 738 4673 4673 ALL  
70 BAT 2 1 TO 8  
71 BAT 2.5 9 TO 31  
89 ANG 180 1 TO 8  
90 ANG 0 9 TO 31  
100 PILE 1 -14.0 -17.5 0  
101 PILE 9 -9.0 -17.5 0  
102 PILE 17 1.0 -17.5 0  
103 PILE 25 -4.0 -15.0 0  
110 ROW Y 8 1 7 AT 5.0  
120 ROW Y 8 9 7 AT 5.0  
130 ROW Y 8 17 7 AT 5.0  
140 ROW Y 7 25 6 AT 5.0  
170 LOAD 1 246 0 1020 0 5470 0  
171 LOAD 2 246 0 1122 0 6344 0  
172 LOAD 3 739 0 982 0 3766 0  
173 LOAD 4 739 0 841 0 2923 0  
174 LOAD 5 696 0 708 0 2230 0  
175 LOAD 6 696 0 589 0 1514 0  
235 FOUT 1 2 3 4 5 6 7 T-WALL9.DOC  
240 PSO 1  
250 PFO ALL



26/01

.00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00  
.00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00

THIS MATRIX APPLIES TO THE FOLLOWING FILES -

1

\*\*\*\*\*

PILE GEOMETRY AS INPUT AND/OR GENERATED

NUM	X FT	Y FT	Z FT	BATTER	ANGLE	LENGTH FT	FIXITY
1	-14.00	-17.50	.00	2.00	180.00	100.00	P
2	-14.00	-12.50	.00	2.00	180.00	100.00	P
3	-14.00	-7.50	.00	2.00	180.00	100.00	P
4	-14.00	-2.50	.00	2.00	180.00	100.00	P
5	-14.00	2.50	.00	2.00	180.00	100.00	P
6	-14.00	7.50	.00	2.00	180.00	100.00	P
7	-14.00	12.50	.00	2.00	180.00	100.00	P
8	-14.00	17.50	.00	2.00	180.00	100.00	P
9	-9.00	-17.50	.00	2.50	.00	100.00	P
10	-9.00	-12.50	.00	2.50	.00	100.00	P
11	-9.00	-7.50	.00	2.50	.00	100.00	P
12	-9.00	-2.50	.00	2.50	.00	100.00	P
13	-9.00	2.50	.00	2.50	.00	100.00	P
14	-9.00	7.50	.00	2.50	.00	100.00	P
15	-9.00	12.50	.00	2.50	.00	100.00	P
16	-9.00	17.50	.00	2.50	.00	100.00	P
17	1.00	-17.50	.00	2.50	.00	100.00	P
18	1.00	-12.50	.00	2.50	.00	100.00	P
19	1.00	-7.50	.00	2.50	.00	100.00	P
20	1.00	-2.50	.00	2.50	.00	100.00	P
21	1.00	2.50	.00	2.50	.00	100.00	P
22	1.00	7.50	.00	2.50	.00	100.00	P
23	1.00	12.50	.00	2.50	.00	100.00	P
24	1.00	17.50	.00	2.50	.00	100.00	P
25	-4.00	-15.00	.00	2.50	.00	100.00	P
26	-4.00	-10.00	.00	2.50	.00	100.00	P
27	-4.00	-5.00	.00	2.50	.00	100.00	P
28	-4.00	.00	.00	2.50	.00	100.00	P
29	-4.00	5.00	.00	2.50	.00	100.00	P
30	-4.00	10.00	.00	2.50	.00	100.00	P
31	-4.00	15.00	.00	2.50	.00	100.00	P
						-----	
						3100.00	

\*\*\*\*\*

APPLIED LOADS

LOAD CASE	PX K	PY K	PZ K	MX FT-K	MY FT-K	MZ FT-K
--------------	---------	---------	---------	------------	------------	------------

1	246.0	.0	1020.0	.0	5470.0	.0
2	246.0	.0	1122.0	.0	6344.0	.0
3	739.0	.0	982.0	.0	3766.0	.0
4	739.0	.0	841.0	.0	2923.0	.0
5	696.0	.0	708.0	.0	2230.0	.0
6	696.0	.0	589.0	.0	1514.0	.0

\*\*\*\*\*

ORIGINAL PILE GROUP STIFFNESS MATRIX

.86852E+04	.24854E-03	.84065E+04	.72760E-10	-.27881E+06	-.41755E-01
.24854E-03	.20517E+03	-.49709E-03	.00000E+00	-.83511E-01	-.16202E+05
.84065E+04	-.49709E-03	.46808E+05	.11642E-09	.36178E+07	.83511E-01
.72760E-10	.00000E+00	.11642E-09	.83622E+09	.74506E-08	-.13958E+09
-.27881E+06	-.83511E-01	.36178E+07	-.37253E-08	.49260E+09	.14030E+02
-.41755E-01	-.16202E+05	.83511E-01	-.13958E+09	.14030E+02	.15845E+09

LOAD CASE 1. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 0.

LOAD CASE 2. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 0.

LOAD CASE 3. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 8.

LOAD CASE 4. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 8.

LOAD CASE 5. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 8.

LOAD CASE 6. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 16.

\*\*\*\*\*

PILE CAP DISPLACEMENTS

LOAD CASE	DX IN	DY IN	DZ IN	RX RAD	RY RAD	RZ RAD
1	.1690E-02	.3761E-07	.2571E-01	-.8659E-12	-.5459E-04	-.5187E-11
2	-.5366E-03	.4700E-07	.2809E-01	-.1082E-11	-.5207E-04	-.6484E-11
3	.1371E+00	-.7443E-07	-.3870E-01	.1714E-11	.4536E-03	.1027E-10
4	.1463E+00	-.8711E-07	-.4675E-01	.2006E-11	.4973E-03	.1202E-10
5	.1429E+00	-.8961E-07	-.4856E-01	.2063E-11	.4918E-03	.1236E-10
6	.1506E+00	-.1003E-06	-.5529E-01	.2310E-11	.5282E-03	.1384E-10

\*\*\*\*\*

PILE FORCES IN LOCAL GEOMETRY

M1 & M2 NOT AT PILE HEAD FOR PINNED PILES  
 \* INDICATES PILE FAILURE  
 # INDICATES CBF BASED ON MOMENTS DUE TO

(F3\*EMIN) FOR CONCRETE PILES  
 B INDICATES BUCKLING CONTROLS

LOAD CASE - 1

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-.1	.0	25.0	.0	5.3	.0	.21	.04
2	-.1	.0	25.0	.0	5.3	.0	.21	.04
3	-.1	.0	25.0	.0	5.3	.0	.21	.04
4	-.1	.0	25.0	.0	5.3	.0	.21	.04
5	-.1	.0	25.0	.0	5.3	.0	.21	.04
6	-.1	.0	25.0	.0	5.3	.0	.21	.04
7	-.1	.0	25.0	.0	5.3	.0	.21	.04
8	-.1	.0	25.0	.0	5.3	.0	.21	.04
9	.0	.0	33.9	.0	3.5	.0	.28	.05
10	.0	.0	33.9	.0	3.5	.0	.28	.05
11	.0	.0	33.9	.0	3.5	.0	.28	.05
12	.0	.0	33.9	.0	3.5	.0	.28	.05
13	.0	.0	33.9	.0	3.5	.0	.28	.05
14	.0	.0	33.9	.0	3.5	.0	.28	.05
15	.0	.0	33.9	.0	3.5	.0	.28	.05
16	.0	.0	33.9	.0	3.5	.0	.28	.05
17	-.1	.0	44.8	.0	4.9	.0	.37	.07
18	-.1	.0	44.8	.0	4.9	.0	.37	.07
19	-.1	.0	44.8	.0	4.9	.0	.37	.07
20	-.1	.0	44.8	.0	4.9	.0	.37	.07
21	-.1	.0	44.8	.0	4.9	.0	.37	.07
22	-.1	.0	44.8	.0	4.9	.0	.37	.07
23	-.1	.0	44.8	.0	4.9	.0	.37	.07
24	-.1	.0	44.8	.0	4.9	.0	.37	.07
25	.0	.0	39.3	.0	4.2	.0	.32	.06
26	.0	.0	39.3	.0	4.2	.0	.32	.06
27	.0	.0	39.3	.0	4.2	.0	.32	.06
28	.0	.0	39.3	.0	4.2	.0	.32	.06
29	.0	.0	39.3	.0	4.2	.0	.32	.06
30	.0	.0	39.3	.0	4.2	.0	.32	.06
31	.0	.0	39.3	.0	4.2	.0	.32	.06

LOAD CASE - 2

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-.1	.0	31.3	.0	4.9	.0	.26	.05
2	-.1	.0	31.3	.0	4.9	.0	.26	.05
3	-.1	.0	31.3	.0	4.9	.0	.26	.05
4	-.1	.0	31.3	.0	4.9	.0	.26	.05
5	-.1	.0	31.3	.0	4.9	.0	.26	.05
6	-.1	.0	31.3	.0	4.9	.0	.26	.05
7	-.1	.0	31.3	.0	4.9	.0	.26	.05
8	-.1	.0	31.3	.0	4.9	.0	.26	.05
9	-.1	.0	36.8	.0	5.3	.0	.30	.06

10	-.1	.0	36.8	.0	5.3	.0	.30	.06
11	-.1	.0	36.8	.0	5.3	.0	.30	.06
12	-.1	.0	36.8	.0	5.3	.0	.30	.06
13	-.1	.0	36.8	.0	5.3	.0	.30	.06
14	-.1	.0	36.8	.0	5.3	.0	.30	.06
15	-.1	.0	36.8	.0	5.3	.0	.30	.06
16	-.1	.0	36.8	.0	5.3	.0	.30	.06
17	-.1	.0	47.2	.0	6.7	.0	.39	.08
18	-.1	.0	47.2	.0	6.7	.0	.39	.08
19	-.1	.0	47.2	.0	6.7	.0	.39	.08
20	-.1	.0	47.2	.0	6.7	.0	.39	.08
21	-.1	.0	47.2	.0	6.7	.0	.39	.08
22	-.1	.0	47.2	.0	6.7	.0	.39	.08
23	-.1	.0	47.2	.0	6.7	.0	.39	.08
24	-.1	.0	47.2	.0	6.7	.0	.39	.08
25	-.1	.0	42.0	.0	6.0	.0	.34	.07
26	-.1	.0	42.0	.0	6.0	.0	.34	.07
27	-.1	.0	42.0	.0	6.0	.0	.34	.07
28	-.1	.0	42.0	.0	6.0	.0	.34	.07
29	-.1	.0	42.0	.0	6.0	.0	.34	.07
30	-.1	.0	42.0	.0	6.0	.0	.34	.07
31	-.1	.0	42.0	.0	6.0	.0	.34	.07

LOAD CASE - 3

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-.9	.0	-49.5	.0	83.7	.0	.64	.09
2	-.9	.0	-49.5	.0	83.7	.0	.64	.09
3	-.9	.0	-49.5	.0	83.7	.0	.64	.09
4	-.9	.0	-49.5	.0	83.7	.0	.64	.09
5	-.9	.0	-49.5	.0	83.7	.0	.64	.09
6	-.9	.0	-49.5	.0	83.7	.0	.64	.09
7	-.9	.0	-49.5	.0	83.7	.0	.64	.09
8	-.9	.0	-49.5	.0	83.7	.0	.64	.09
9	.8	.0	107.9	.0	-74.1	.0	.88	.19
10	.8	.0	107.9	.0	-74.1	.0	.88	.19
11	.8	.0	107.9	.0	-74.1	.0	.88	.19
12	.8	.0	107.9	.0	-74.1	.0	.88	.19
13	.8	.0	107.9	.0	-74.1	.0	.88	.19
14	.8	.0	107.9	.0	-74.1	.0	.88	.19
15	.8	.0	107.9	.0	-74.1	.0	.88	.19
16	.8	.0	107.9	.0	-74.1	.0	.88	.19
17	1.0	.0	17.7	.0	-86.2	.0	.15	.05
18	1.0	.0	17.7	.0	-86.2	.0	.15	.05
19	1.0	.0	17.7	.0	-86.2	.0	.15	.05
20	1.0	.0	17.7	.0	-86.2	.0	.15	.05
21	1.0	.0	17.7	.0	-86.2	.0	.15	.05
22	1.0	.0	17.7	.0	-86.2	.0	.15	.05
23	1.0	.0	17.7	.0	-86.2	.0	.15	.05
24	1.0	.0	17.7	.0	-86.2	.0	.15	.05
25	.9	.0	62.8	.0	-80.2	.0	.51	.12
26	.9	.0	62.8	.0	-80.2	.0	.51	.12
27	.9	.0	62.8	.0	-80.2	.0	.51	.12
28	.9	.0	62.8	.0	-80.2	.0	.51	.12

30/41

29	.9	.0	62.8	.0	-80.2	.0	.51	.12
30	.9	.0	62.8	.0	-80.2	.0	.51	.12
31	.9	.0	62.8	.0	-80.2	.0	.51	.12

LOAD CASE - 4

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-1.0	.0	-58.0	.0	88.4	.0	.75	.10
2	-1.0	.0	-58.0	.0	88.4	.0	.75	.10
3	-1.0	.0	-58.0	.0	88.4	.0	.75	.10
4	-1.0	.0	-58.0	.0	88.4	.0	.75	.10
5	-1.0	.0	-58.0	.0	88.4	.0	.75	.10
6	-1.0	.0	-58.0	.0	88.4	.0	.75	.10
7	-1.0	.0	-58.0	.0	88.4	.0	.75	.10
8	-1.0	.0	-58.0	.0	88.4	.0	.75	.10
9	.9	.0	108.4	.0	-80.0	.0	.89	.19
10	.9	.0	108.4	.0	-80.0	.0	.89	.19
11	.9	.0	108.4	.0	-80.0	.0	.89	.19
12	.9	.0	108.4	.0	-80.0	.0	.89	.19
13	.9	.0	108.4	.0	-80.0	.0	.89	.19
14	.9	.0	108.4	.0	-80.0	.0	.89	.19
15	.9	.0	108.4	.0	-80.0	.0	.89	.19
16	.9	.0	108.4	.0	-80.0	.0	.89	.19
17	1.0	.0	9.6	.0	-93.3	.0	.08	.04
18	1.0	.0	9.6	.0	-93.3	.0	.08	.04
19	1.0	.0	9.6	.0	-93.3	.0	.08	.04
20	1.0	.0	9.6	.0	-93.3	.0	.08	.04
21	1.0	.0	9.6	.0	-93.3	.0	.08	.04
22	1.0	.0	9.6	.0	-93.3	.0	.08	.04
23	1.0	.0	9.6	.0	-93.3	.0	.08	.04
24	1.0	.0	9.6	.0	-93.3	.0	.08	.04
25	1.0	.0	59.0	.0	-86.6	.0	.48	.11
26	1.0	.0	59.0	.0	-86.6	.0	.48	.11
27	1.0	.0	59.0	.0	-86.6	.0	.48	.11
28	1.0	.0	59.0	.0	-86.6	.0	.48	.11
29	1.0	.0	59.0	.0	-86.6	.0	.48	.11
30	1.0	.0	59.0	.0	-86.6	.0	.48	.11
31	1.0	.0	59.0	.0	-86.6	.0	.48	.11

LOAD CASE - 5

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-.9	.0	-59.6	.0	85.9	.0	.77	.10
2	-.9	.0	-59.6	.0	85.9	.0	.77	.10
3	-.9	.0	-59.6	.0	85.9	.0	.77	.10
4	-.9	.0	-59.6	.0	85.9	.0	.77	.10
5	-.9	.0	-59.6	.0	85.9	.0	.77	.10
6	-.9	.0	-59.6	.0	85.9	.0	.77	.10
7	-.9	.0	-59.6	.0	85.9	.0	.77	.10
8	-.9	.0	-59.6	.0	85.9	.0	.77	.10
9	.9	.0	102.2	.0	-78.6	.0	.84	.18

10	.9	.0	102.2	.0	-78.6	.0	.84	.18
11	.9	.0	102.2	.0	-78.6	.0	.84	.18
12	.9	.0	102.2	.0	-78.6	.0	.84	.18
13	.9	.0	102.2	.0	-78.6	.0	.84	.18
14	.9	.0	102.2	.0	-78.6	.0	.84	.18
15	.9	.0	102.2	.0	-78.6	.0	.84	.18
16	.9	.0	102.2	.0	-78.6	.0	.84	.18
17	1.0	.0	4.5	.0	-91.8	.0	.04	.03
18	1.0	.0	4.5	.0	-91.8	.0	.04	.03
19	1.0	.0	4.5	.0	-91.8	.0	.04	.03
20	1.0	.0	4.5	.0	-91.8	.0	.04	.03
21	1.0	.0	4.5	.0	-91.8	.0	.04	.03
22	1.0	.0	4.5	.0	-91.8	.0	.04	.03
23	1.0	.0	4.5	.0	-91.8	.0	.04	.03
24	1.0	.0	4.5	.0	-91.8	.0	.04	.03
25	.9	.0	53.4	.0	-85.2	.0	.44	.10
26	.9	.0	53.4	.0	-85.2	.0	.44	.10
27	.9	.0	53.4	.0	-85.2	.0	.44	.10
28	.9	.0	53.4	.0	-85.2	.0	.44	.10
29	.9	.0	53.4	.0	-85.2	.0	.44	.10
30	.9	.0	53.4	.0	-85.2	.0	.44	.10
31	.9	.0	53.4	.0	-85.2	.0	.44	.10

LOAD CASE - 6

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-1.0	.0	-66.8	.0	89.8	.0	.87	.11
2	-1.0	.0	-66.8	.0	89.8	.0	.87	.11
3	-1.0	.0	-66.8	.0	89.8	.0	.87	.11
4	-1.0	.0	-66.8	.0	89.8	.0	.87	.11
5	-1.0	.0	-66.8	.0	89.8	.0	.87	.11
6	-1.0	.0	-66.8	.0	89.8	.0	.87	.11
7	-1.0	.0	-66.8	.0	89.8	.0	.87	.11
8	-1.0	.0	-66.8	.0	89.8	.0	.87	.11
9	.9	.0	102.7	.0	-83.5	.0	.84	.18
10	.9	.0	102.7	.0	-83.5	.0	.84	.18
11	.9	.0	102.7	.0	-83.5	.0	.84	.18
12	.9	.0	102.7	.0	-83.5	.0	.84	.18
13	.9	.0	102.7	.0	-83.5	.0	.84	.18
14	.9	.0	102.7	.0	-83.5	.0	.84	.18
15	.9	.0	102.7	.0	-83.5	.0	.84	.18
16	.9	.0	102.7	.0	-83.5	.0	.84	.18
17	1.1	.0	-2.3	.0	-97.7	.0	.03	.02
18	1.1	.0	-2.3	.0	-97.7	.0	.03	.02
19	1.1	.0	-2.3	.0	-97.7	.0	.03	.02
20	1.1	.0	-2.3	.0	-97.7	.0	.03	.02
21	1.1	.0	-2.3	.0	-97.7	.0	.03	.02
22	1.1	.0	-2.3	.0	-97.7	.0	.03	.02
23	1.1	.0	-2.3	.0	-97.7	.0	.03	.02
24	1.1	.0	-2.3	.0	-97.7	.0	.03	.02
25	1.0	.0	50.2	.0	-90.6	.0	.41	.10
26	1.0	.0	50.2	.0	-90.6	.0	.41	.10
27	1.0	.0	50.2	.0	-90.6	.0	.41	.10
28	1.0	.0	50.2	.0	-90.6	.0	.41	.10

32/01

29	1.0	.0	50.2	.0	-90.6	.0	.41	.10
30	1.0	.0	50.2	.0	-90.6	.0	.41	.10
31	1.0	.0	50.2	.0	-90.6	.0	.41	.10

\*\*\*\*\*

PILE FORCES IN GLOBAL GEOMETRY

LOAD CASE - 1

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	-11.1	.0	22.4	.0	.0	.0
2	-11.1	.0	22.4	.0	.0	.0
3	-11.1	.0	22.4	.0	.0	.0
4	-11.1	.0	22.4	.0	.0	.0
5	-11.1	.0	22.4	.0	.0	.0
6	-11.1	.0	22.4	.0	.0	.0
7	-11.1	.0	22.4	.0	.0	.0
8	-11.1	.0	22.4	.0	.0	.0
9	12.6	.0	31.5	.0	.0	.0
10	12.6	.0	31.5	.0	.0	.0
11	12.6	.0	31.5	.0	.0	.0
12	12.6	.0	31.5	.0	.0	.0
13	12.6	.0	31.5	.0	.0	.0
14	12.6	.0	31.5	.0	.0	.0
15	12.6	.0	31.5	.0	.0	.0
16	12.6	.0	31.5	.0	.0	.0
17	16.6	.0	41.6	.0	.0	.0
18	16.6	.0	41.6	.0	.0	.0
19	16.6	.0	41.6	.0	.0	.0
20	16.6	.0	41.6	.0	.0	.0
21	16.6	.0	41.6	.0	.0	.0
22	16.6	.0	41.6	.0	.0	.0
23	16.6	.0	41.6	.0	.0	.0
24	16.6	.0	41.6	.0	.0	.0
25	14.6	.0	36.6	.0	.0	.0
26	14.6	.0	36.6	.0	.0	.0
27	14.6	.0	36.6	.0	.0	.0
28	14.6	.0	36.6	.0	.0	.0
29	14.6	.0	36.6	.0	.0	.0
30	14.6	.0	36.6	.0	.0	.0
31	14.6	.0	36.6	.0	.0	.0

LOAD CASE - 2

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	-13.9	.0	28.0	.0	.0	.0
2	-13.9	.0	28.0	.0	.0	.0
3	-13.9	.0	28.0	.0	.0	.0

4	-13.9	.0	28.0	.0	.0	.0
5	-13.9	.0	28.0	.0	.0	.0
6	-13.9	.0	28.0	.0	.0	.0
7	-13.9	.0	28.0	.0	.0	.0
8	-13.9	.0	28.0	.0	.0	.0
9	13.6	.0	34.2	.0	.0	.0
10	13.6	.0	34.2	.0	.0	.0
11	13.6	.0	34.2	.0	.0	.0
12	13.6	.0	34.2	.0	.0	.0
13	13.6	.0	34.2	.0	.0	.0
14	13.6	.0	34.2	.0	.0	.0
15	13.6	.0	34.2	.0	.0	.0
16	13.6	.0	34.2	.0	.0	.0
17	17.5	.0	43.8	.0	.0	.0
18	17.5	.0	43.8	.0	.0	.0
19	17.5	.0	43.8	.0	.0	.0
20	17.5	.0	43.8	.0	.0	.0
21	17.5	.0	43.8	.0	.0	.0
22	17.5	.0	43.8	.0	.0	.0
23	17.5	.0	43.8	.0	.0	.0
24	17.5	.0	43.8	.0	.0	.0
25	15.5	.0	39.0	.0	.0	.0
26	15.5	.0	39.0	.0	.0	.0
27	15.5	.0	39.0	.0	.0	.0
28	15.5	.0	39.0	.0	.0	.0
29	15.5	.0	39.0	.0	.0	.0
30	15.5	.0	39.0	.0	.0	.0
31	15.5	.0	39.0	.0	.0	.0

LOAD CASE - 3

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	23.0	.0	-43.9	.0	.0	.0
2	23.0	.0	-43.9	.0	.0	.0
3	23.0	.0	-43.9	.0	.0	.0
4	23.0	.0	-43.9	.0	.0	.0
5	23.0	.0	-43.9	.0	.0	.0
6	23.0	.0	-43.9	.0	.0	.0
7	23.0	.0	-43.9	.0	.0	.0
8	23.0	.0	-43.9	.0	.0	.0
9	40.8	.0	99.8	.0	.0	.0
10	40.8	.0	99.8	.0	.0	.0
11	40.8	.0	99.8	.0	.0	.0
12	40.8	.0	99.8	.0	.0	.0
13	40.8	.0	99.8	.0	.0	.0
14	40.8	.0	99.8	.0	.0	.0
15	40.8	.0	99.8	.0	.0	.0
16	40.8	.0	99.8	.0	.0	.0
17	7.5	.0	16.1	.0	.0	.0
18	7.5	.0	16.1	.0	.0	.0
19	7.5	.0	16.1	.0	.0	.0
20	7.5	.0	16.1	.0	.0	.0
21	7.5	.0	16.1	.0	.0	.0
22	7.5	.0	16.1	.0	.0	.0

23	7.5	.0	16.1	.0	.0	.0
24	7.5	.0	16.1	.0	.0	.0
25	24.1	.0	58.0	.0	.0	.0
26	24.1	.0	58.0	.0	.0	.0
27	24.1	.0	58.0	.0	.0	.0
28	24.1	.0	58.0	.0	.0	.0
29	24.1	.0	58.0	.0	.0	.0
30	24.1	.0	58.0	.0	.0	.0
31	24.1	.0	58.0	.0	.0	.0

## LOAD CASE - 4

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	26.8	.0	-51.4	.0	.0	.0
2	26.8	.0	-51.4	.0	.0	.0
3	26.8	.0	-51.4	.0	.0	.0
4	26.8	.0	-51.4	.0	.0	.0
5	26.8	.0	-51.4	.0	.0	.0
6	26.8	.0	-51.4	.0	.0	.0
7	26.8	.0	-51.4	.0	.0	.0
8	26.8	.0	-51.4	.0	.0	.0
9	41.1	.0	100.4	.0	.0	.0
10	41.1	.0	100.4	.0	.0	.0
11	41.1	.0	100.4	.0	.0	.0
12	41.1	.0	100.4	.0	.0	.0
13	41.1	.0	100.4	.0	.0	.0
14	41.1	.0	100.4	.0	.0	.0
15	41.1	.0	100.4	.0	.0	.0
16	41.1	.0	100.4	.0	.0	.0
17	4.5	.0	8.5	.0	.0	.0
18	4.5	.0	8.5	.0	.0	.0
19	4.5	.0	8.5	.0	.0	.0
20	4.5	.0	8.5	.0	.0	.0
21	4.5	.0	8.5	.0	.0	.0
22	4.5	.0	8.5	.0	.0	.0
23	4.5	.0	8.5	.0	.0	.0
24	4.5	.0	8.5	.0	.0	.0
25	22.8	.0	54.5	.0	.0	.0
26	22.8	.0	54.5	.0	.0	.0
27	22.8	.0	54.5	.0	.0	.0
28	22.8	.0	54.5	.0	.0	.0
29	22.8	.0	54.5	.0	.0	.0
30	22.8	.0	54.5	.0	.0	.0
31	22.8	.0	54.5	.0	.0	.0

## LOAD CASE - 5

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	27.5	.0	-52.9	.0	.0	.0
2	27.5	.0	-52.9	.0	.0	.0
3	27.5	.0	-52.9	.0	.0	.0

35/41

4	27.5	.0	-52.9	.0	.0	.0
5	27.5	.0	-52.9	.0	.0	.0
6	27.5	.0	-52.9	.0	.0	.0
7	27.5	.0	-52.9	.0	.0	.0
8	27.5	.0	-52.9	.0	.0	.0
9	38.8	.0	94.6	.0	.0	.0
10	38.8	.0	94.6	.0	.0	.0
11	38.8	.0	94.6	.0	.0	.0
12	38.8	.0	94.6	.0	.0	.0
13	38.8	.0	94.6	.0	.0	.0
14	38.8	.0	94.6	.0	.0	.0
15	38.8	.0	94.6	.0	.0	.0
16	38.8	.0	94.6	.0	.0	.0
17	2.6	.0	3.8	.0	.0	.0
18	2.6	.0	3.8	.0	.0	.0
19	2.6	.0	3.8	.0	.0	.0
20	2.6	.0	3.8	.0	.0	.0
21	2.6	.0	3.8	.0	.0	.0
22	2.6	.0	3.8	.0	.0	.0
23	2.6	.0	3.8	.0	.0	.0
24	2.6	.0	3.8	.0	.0	.0
25	20.7	.0	49.2	.0	.0	.0
26	20.7	.0	49.2	.0	.0	.0
27	20.7	.0	49.2	.0	.0	.0
28	20.7	.0	49.2	.0	.0	.0
29	20.7	.0	49.2	.0	.0	.0
30	20.7	.0	49.2	.0	.0	.0
31	20.7	.0	49.2	.0	.0	.0

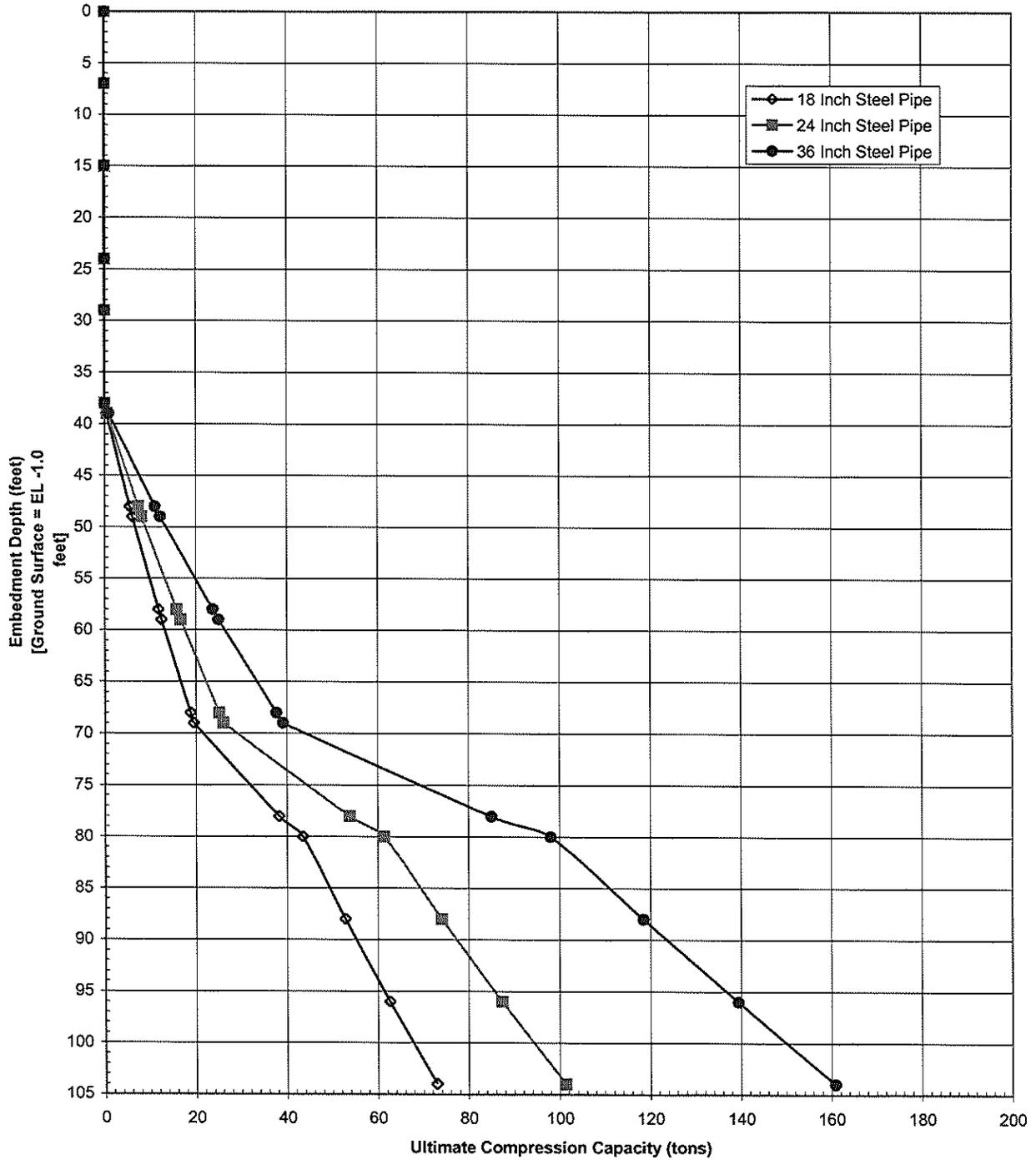
LOAD CASE - 6

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	30.7	.0	-59.3	.0	.0	.0
2	30.7	.0	-59.3	.0	.0	.0
3	30.7	.0	-59.3	.0	.0	.0
4	30.7	.0	-59.3	.0	.0	.0
5	30.7	.0	-59.3	.0	.0	.0
6	30.7	.0	-59.3	.0	.0	.0
7	30.7	.0	-59.3	.0	.0	.0
8	30.7	.0	-59.3	.0	.0	.0
9	39.0	.0	95.0	.0	.0	.0
10	39.0	.0	95.0	.0	.0	.0
11	39.0	.0	95.0	.0	.0	.0
12	39.0	.0	95.0	.0	.0	.0
13	39.0	.0	95.0	.0	.0	.0
14	39.0	.0	95.0	.0	.0	.0
15	39.0	.0	95.0	.0	.0	.0
16	39.0	.0	95.0	.0	.0	.0
17	.1	.0	-2.5	.0	.0	.0
18	.1	.0	-2.5	.0	.0	.0
19	.1	.0	-2.5	.0	.0	.0
20	.1	.0	-2.5	.0	.0	.0
21	.1	.0	-2.5	.0	.0	.0
22	.1	.0	-2.5	.0	.0	.0

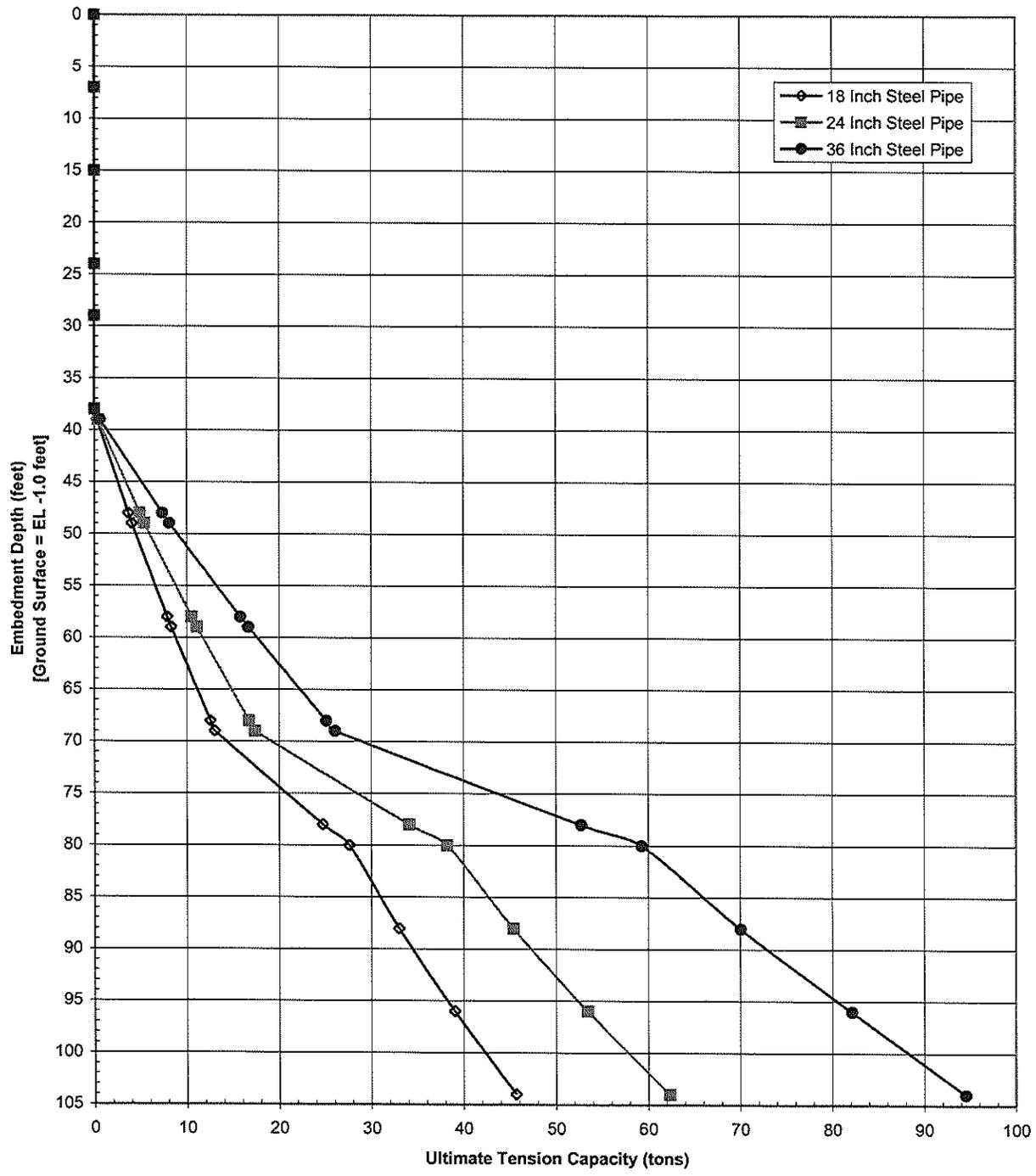
36/41

23	.1	.0	-2.5	.0	.0	.0
24	.1	.0	-2.5	.0	.0	.0
25	19.6	.0	46.2	.0	.0	.0
26	19.6	.0	46.2	.0	.0	.0
27	19.6	.0	46.2	.0	.0	.0
28	19.6	.0	46.2	.0	.0	.0
29	19.6	.0	46.2	.0	.0	.0
30	19.6	.0	46.2	.0	.0	.0
31	19.6	.0	46.2	.0	.0	.0

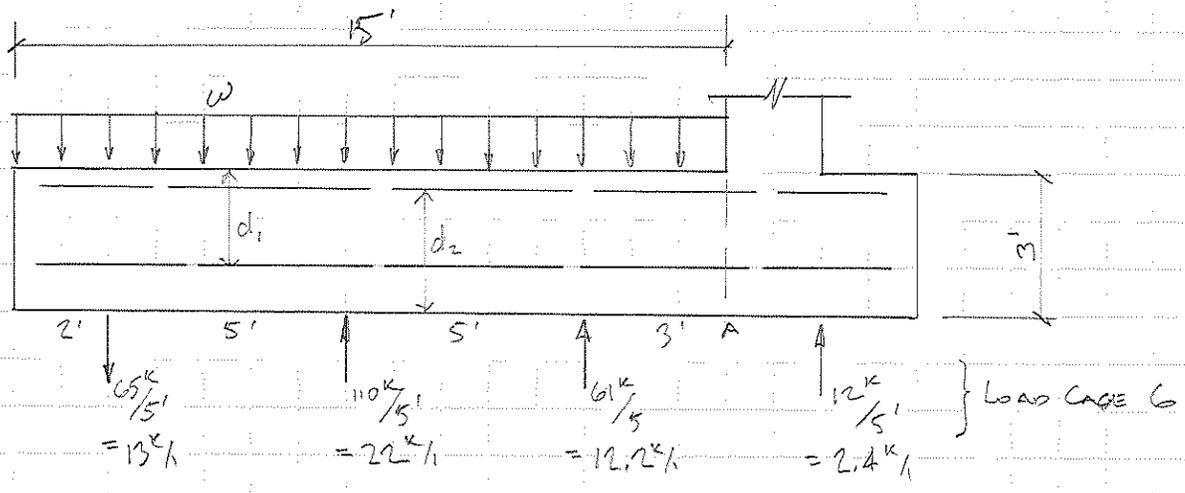
Algiers East - Reach 4 Ultimate Compression Capacity (Q Condition)  
For Steel Pipe Piles  
Considering Critical Slope Failure Surface = EL -39.0 feet



### Algiers East - Reach 4 Ultimate Tensile Capacity (Q Condition) For Steel Pipe Piles Considering Critical Slope Failure Surface = EL -39 feet



SLAB DESIGN



$$w = 14'(0.064 \text{ k/CF}) + 9.5'(0.115 \text{ k/CF} - 0.064 \text{ k/CF}) = 1.38 \text{ k/1/1}$$

$$w_c = 3'(0.15 \text{ k/CF}) = 0.45 \text{ k/1/1}$$

$$\Sigma w = 1.38 + 0.45 = 1.83 \text{ k/1/1}$$

$$M_A = \frac{1}{2}(1.83)(15)^2 = 205.9 \text{ k/1}$$

$$+ 13 \text{ k/1}(13') = 169.0 \text{ k/1}$$

$$- 22 \text{ k/1}(8') = -176.0 \text{ k/1}$$

$$- 12.2 \text{ k/1}(3') = -36.6 \text{ k/1}$$

$$\Sigma M_A = 162.3 \text{ k/1} \times 1.7 \times 1.3 = 358.7 \text{ k/FT (M_u)}$$

$$d_2 = 36'' - 4'' \text{ cov.} - 0.5'' = 31.5''$$

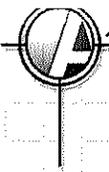
$$\text{Say } \rho = \rho_{\text{max}} = 0.00713, \quad A_s = 0.00713 \times 12 \times 31.5 = 2.70 \text{ in}^2/\text{FT}$$

$$a = \frac{2.70 \times 60}{0.85 \times 4 \times 12} = 3.97''$$

$$M_n = 2.70 \times 60 \text{ ksi} \left( 31.5'' - \frac{3.97''}{2} \right) / 12 = 398.5 \text{ k/FT}$$

$$M_u = \phi M_n = 0.9 \times 398.5 = 358.7 \text{ k/FT} = 358.7 \text{ k/FT} \quad \text{OK.}$$

$\therefore$  3' DEPTH OF SLABS IS OK



By: EAB Date: 4/15/08

Check: Date:

CHECK WIDTH OF STEM (REF: EM 1110-2-2104)

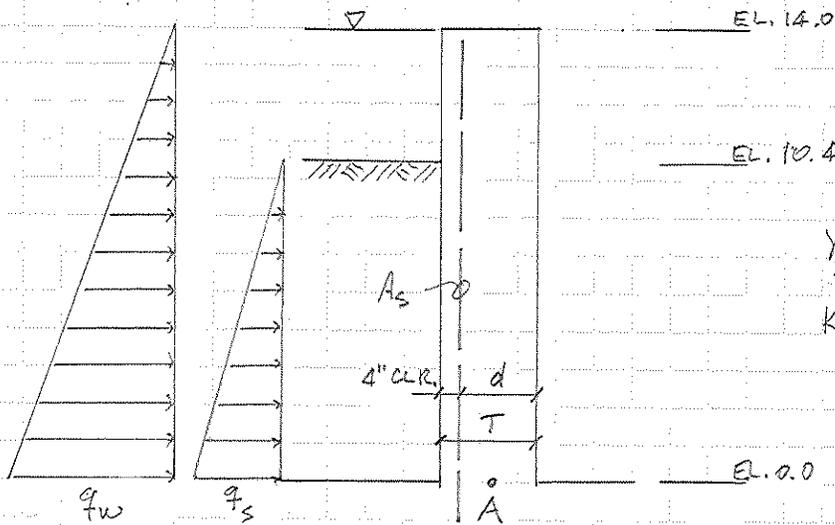
CONCRETE STRENGTH ( $f'_c$ ) = 4,000 psi

REINFORCING STEEL YIELD STRENGTH ( $f_y$ ) = 60,000 psi

MIN. COVER TO REBARS = 4 IN

LOAD FACTOR = 1.7

HYDRAULIC FACTOR = 1.3



$$Y_s = 122 \text{ pcf}$$

$$K_0 = 0.5 \text{ (AT REST)}$$

$$q_w = (14 - 0) \times 62.5 \text{ pcf} = 875 \text{ psf}$$

$$q_s = (10.4 - 0) \times 0.5 \times (122 - 62.5) = 309 \text{ psf}$$

$$V_A = \frac{1}{2}(14)(0.875 \text{ k/ft}) + \frac{1}{2}(10.4)(0.309 \text{ k/ft}) = 6.13 \text{ k} + 1.61 \text{ k} = 7.04 \text{ k}$$

$$V_u = 1.7 \times 1.3 \times 7.04 = 15.56 \text{ k}$$

$$M_A = 6.13 \text{ k} \times \frac{14}{3} + 1.61 \text{ k} \times \frac{10.4}{3} = 28.6 \text{ k-ft} + 5.6 \text{ k-ft} = 34.2 \text{ k-ft}$$

$$M_u = 1.7 \times 1.3 \times 34.2 \text{ k-ft} = 75.6 \text{ k-ft}$$



By: EAB Date: 4/15/08 Ck:

Date:

$$\text{MIN REINFORCEMENT } (\rho_{\min}) = \frac{200}{f_y} = 0.003333$$

$$\text{MAX. REINFORCEMENT } (\rho_{\max}) = 0.25 \rho_{\text{bal}} \quad \text{WHERE}$$

$$\rho_{\text{bal}} = \frac{0.85 f'_c B_v}{f_y} \left( \frac{87,000}{87,000 + f_y} \right) \quad \text{and } \beta_1 = 0.85$$

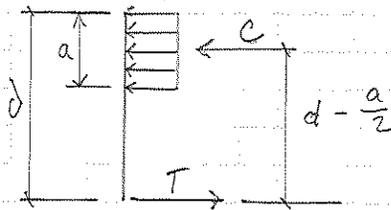
$$= \frac{0.85 \times 4000 \times 0.85}{60,000} \left( \frac{87,000}{87,000 + 60,000} \right)$$

$$= 0.028507$$

$$\rho_{\max} = 0.25 \times 0.028507 = 0.00713$$

$$\text{ASSUME } \rho = 0.005, \quad T = 2'-0" = 24", \quad \therefore d = 24" - 4" - 0.5" = "$$

$$A_s = 0.005 \times 12" \times 19.5" = 1.17 \text{ in}^2/\text{FT}$$



$$a = \frac{A_s f_y}{0.85 f'_c b} \quad b = 12"$$

$$= \frac{1.17 \text{ in}^2 \times 60 \text{ ksi}}{0.85 \times 4 \text{ ksi} \times 12 \text{ in}}$$

$$= 1.72 \text{ in}$$

$$T = A_s f_y \quad c = 0.85 f'_c b a$$

$$M_n = T \left( d - \frac{a}{2} \right)$$

$$= 1.17 \text{ in}^2 \times 60 \text{ ksi} \left( 19.5 \text{ in} - \frac{1.72 \text{ in}}{2} \right)$$

$$= 1,303 \text{ in}^2\text{-K/FT} = 109 \text{ K/FT}$$

$$M_u = \phi M_n = 0.9 (109) = 98.1 \text{ K/FT} > 75.6 \text{ K/FT} \quad \text{OK}$$

$$\phi V_c = \phi 2 \sqrt{f'_c} b d$$

$$= 0.85 \times 2 \sqrt{4000} \times 12" \times 19.5" / 1000 = 25.2 \text{ K/FT} > 15.56 \text{ K/FT}$$

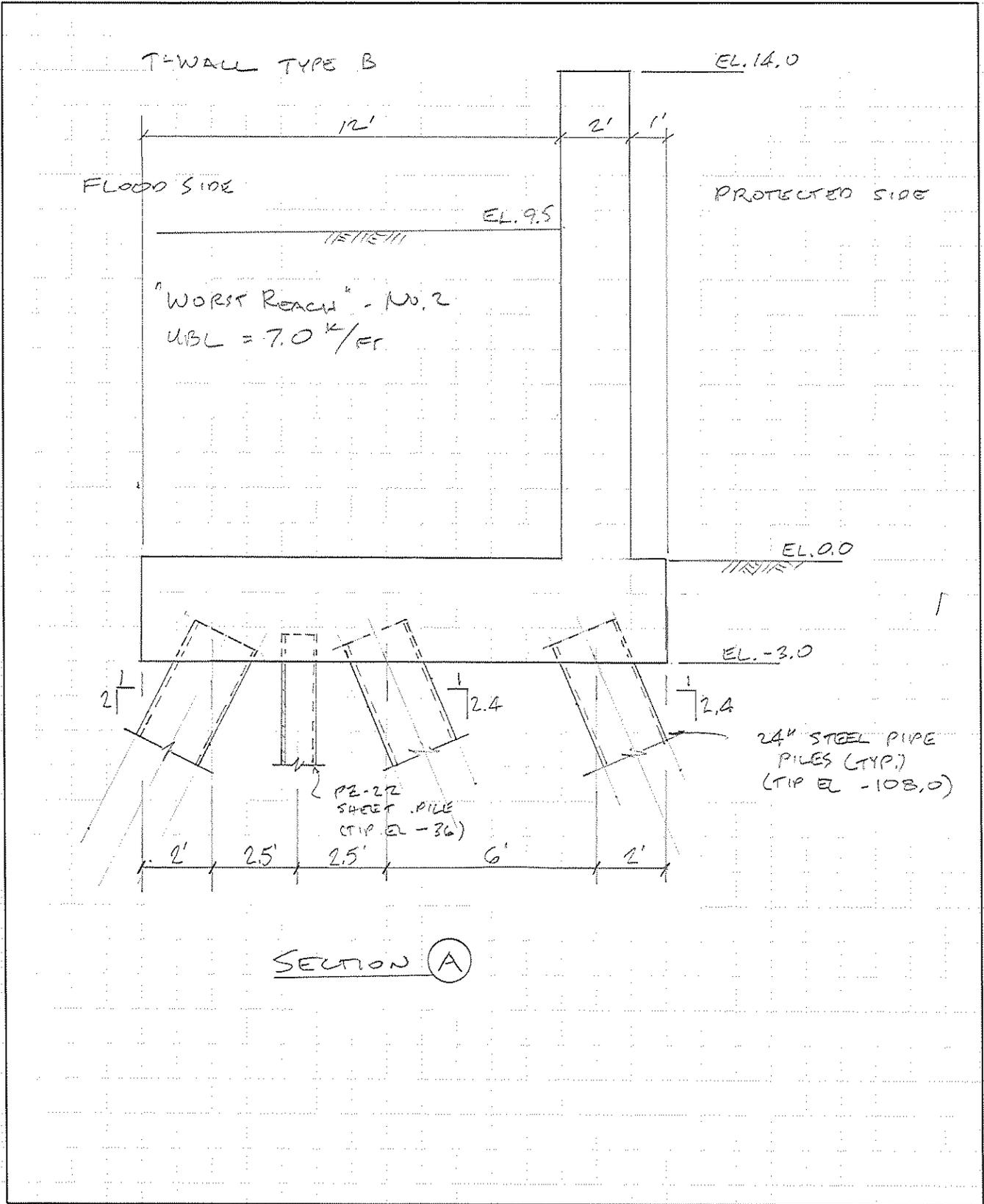
OK

$\therefore T = 2'-0"$  IS ADEQUATE

**T-WALL TYPE B**

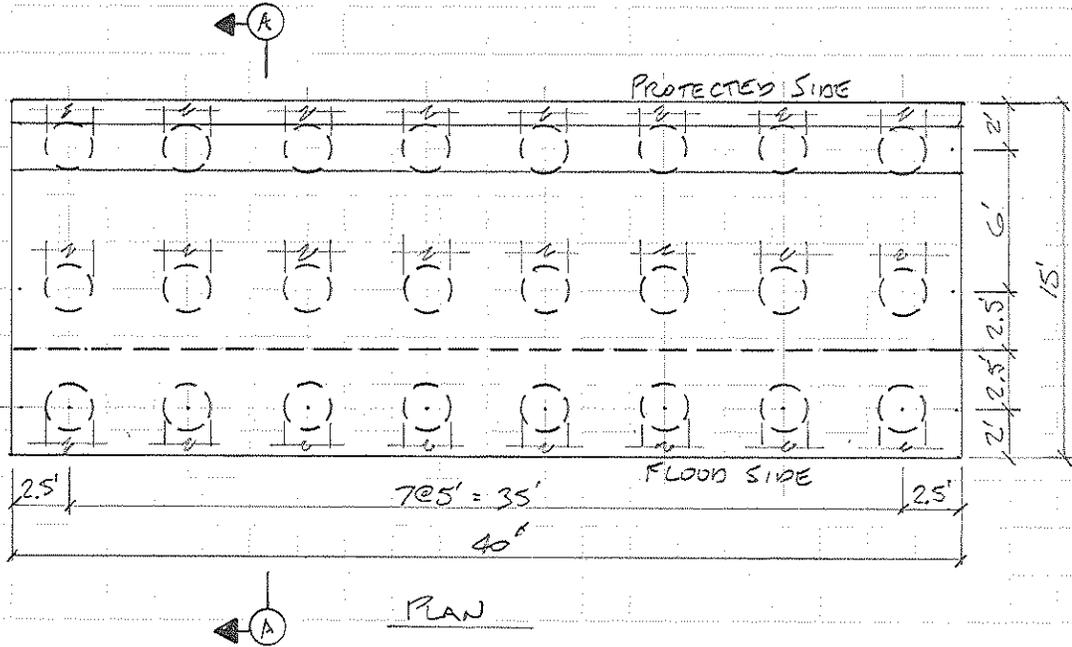
**SHEETS 1 TO 29 OF 29**

By: EAB Date: 5/27/08 Ck: Date:





TYPE B T-WALL

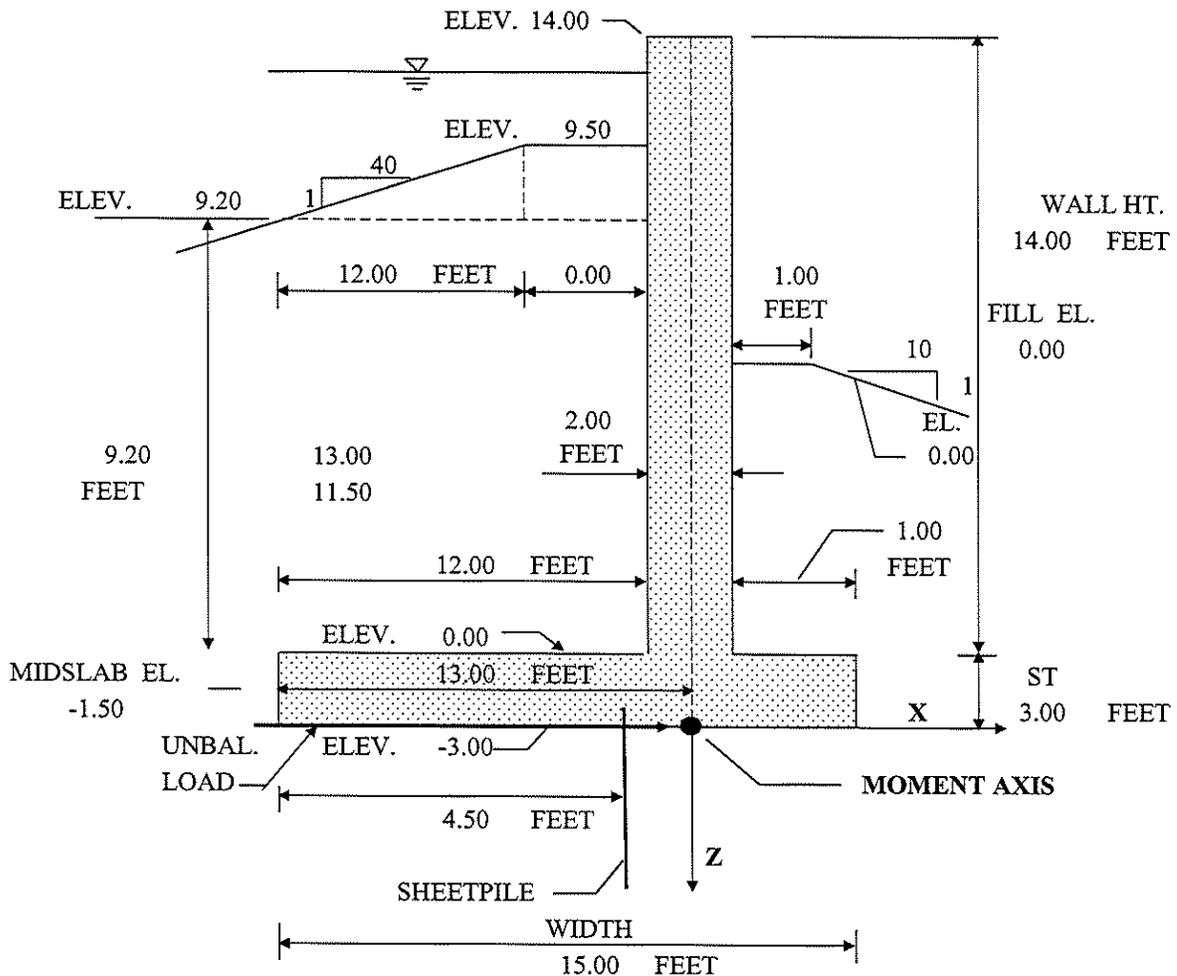


**ALGIERS CANAL (EAST)  
T-WALL TYPE B (REACH 2)**

DATE: #####

BY: EAB      CHKD:

CONCRETE STRENGTH	4,000		
REINFORCING STRENGTH	60,000	UNBALANCED SOILS LOADING	
WALL INTERVAL	1	7.0 K / FT.	STILLWATER
SLAB INTERVAL	1.33	7.0 K / FT.	TOP OF WALL
MONOLITH LENGTH	40	IMPACT	
BACKFILL WEIGHT	115 PCF	0 K	
Ko	0.8		



**DESIGN CRITERIA**

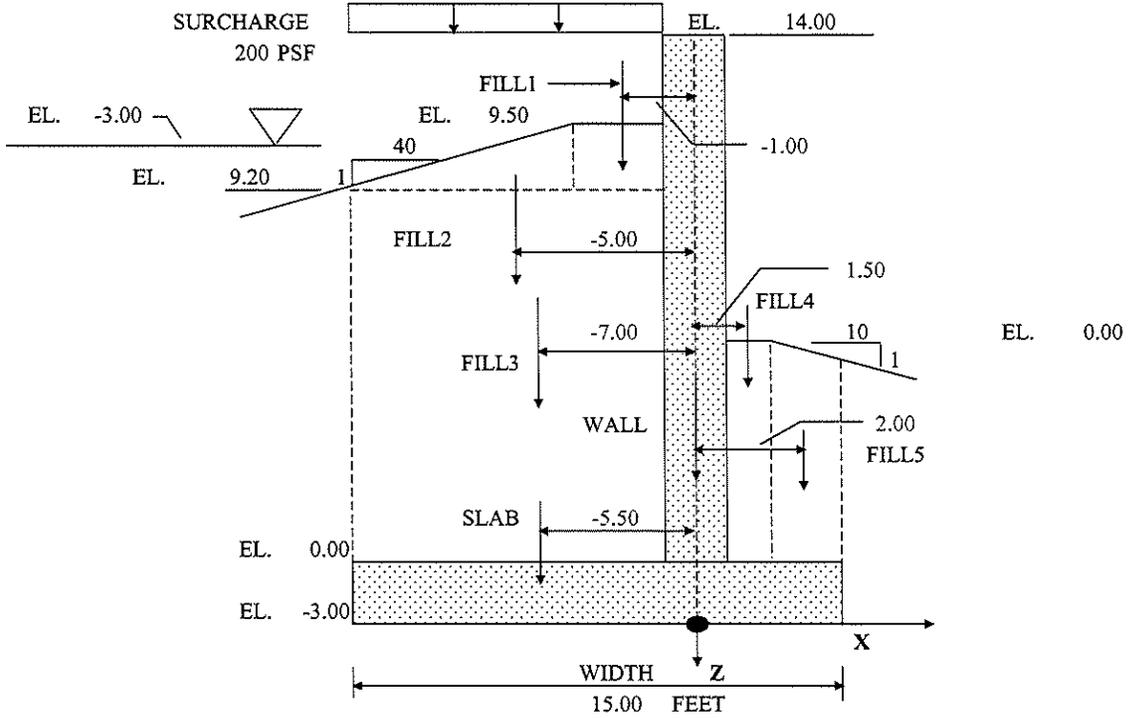
EM1110-2-2104 "STRENGTH DESIGN FOR REINFORCED HYDRAULIC STRUCTURES"

**CONCRETE:**      HYDRAULIC FACTOR (Hf) = 1.3  
                     DL & LL LOAD FACTORS = 1.7  
                     MAX. REINFORCING = 0.375 RHO<sub>bal</sub>  
 REINFORCING PER EQS. D-3 & D-4, AXIAL LOADS IGNORED  
 ALLOWABLE SHEAR PER ACI 318, EQ. 11-3

CLEAR COVER:	4	INCHES IN WALLS & TOP OF SLAB
	9	INCHES IN BOTTOM OF SLAB TO ALLOW FOR PILES

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 1 - CONSTRUCTION**

FLOODSIDE WATER ELEV.                   -3.00  
 UPLIFT - PROT. SIDE                       -3.00  
 ALLOWABLE OVERSTRESS                 16.66 %



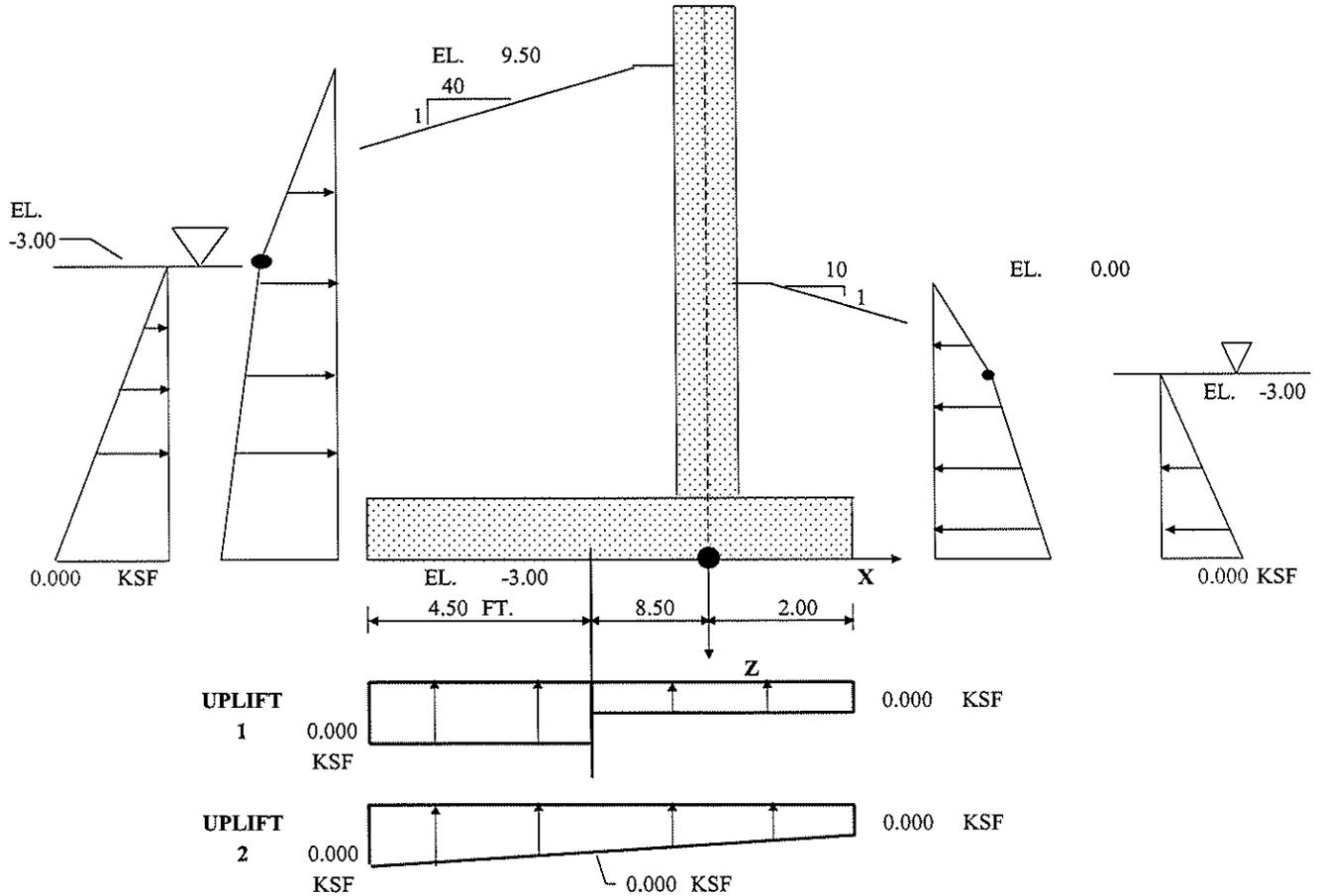
**FLOODWALL APPLIED GRAVITY LOADING - CASE 1**

ITEM	FORCE Z (WEIGHT)	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
CONCRETE SLAB	6.75	-5.50	0.00	37.1	0
CONCRETE WALL	4.20	0.00	0.00	0.0	0
FLOODSIDE FILL1	0.00	-1.00	0.00	0.0	0
FLOODSIDE FILL2	0.21	-5.00	0.00	1.0	0
FLOODSIDE FILL3	12.70	-7.00	0.00	88.9	0
PROTECTED SIDE FILL4	0.00	1.50	0.00	0.0	0
PROTECTED SIDE FILL5	0.00	2.00	0.00	0.0	0
FLOODSIDE WATER	0.00	-29.27	0.00	0.0	0
FLOODSIDE WATER	0.00	0.00	0.00	0.0	0

<b>TOTALS</b>	23.85	-5.33	127.03	0
<b>CONCRETE</b>	10.95	-3.39	37.13	0
<b>FLOODSIDE FILL 1-3</b>	12.90	-6.97	89.91	0
<b>PROT. SIDE FILL 4-5</b>	0.00	1.50	0.00	0
<b>FLOODSIDE WATER</b>	0.00	-	0.00	0
	KIPS		FT.-K	FT.-K

ALGIERS CANAL (EAST)  
T-WALL TYPE B (REACH 2)  
CASE 1 - CONSTRUCTION

5/32

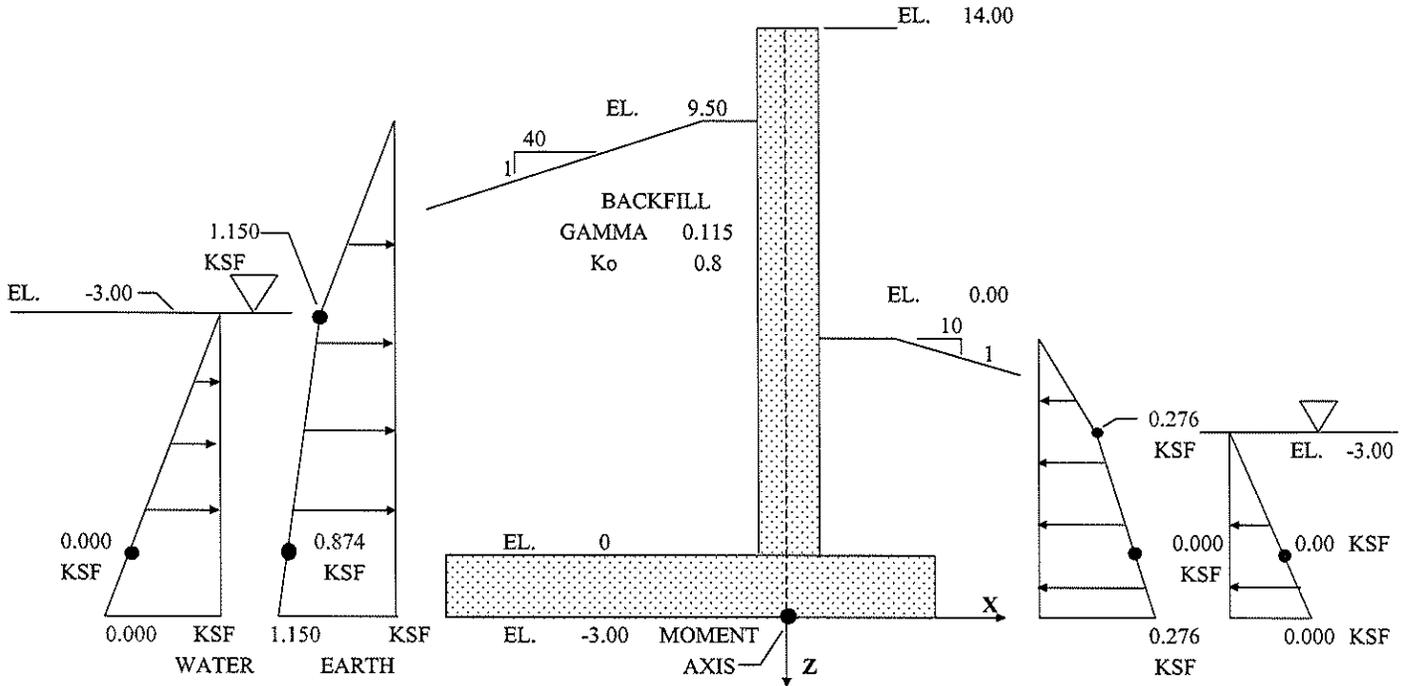


ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 1	4.50	0.00	0.00	-10.75	0.00	0	0
<b>PROTECTED SIDE:</b>							
UPLIFT 1	10.50	0.00	0.00	-3.25	0.00	0	0
<b>TOTALS</b>			0.00	0		0.00	0
<b>FLD.SIDE</b>			0.00	0		0.00	0
<b>PROT. SIDE</b>			0.00	0		0.00	0
			KIPS			FT.-K	FT.-K

ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 2 (UNIF)	4.50	0.000	0.00	-10.75	0.00	0.00	0.00
UPLIFT 2 (TRI)	4.50	0.000	0.00	-11.50	0.00	0.00	0.00
<b>PROTECTED SIDE:</b>							
UPLIFT 2 (UNIF)	10.50	0.000	0.00	-3.25	0.00	0.00	0.00
UPLIFT 2 (TRI)	10.50	0.000	0.00	-5.00	0.00	0.00	0.00
<b>TOTALS</b>			0.00	0		0.00	0.00
<b>FLOOD SIDE</b>			0.00	0		0.00	0.00
<b>PROT. SIDE</b>			0.00	0		0.00	0.00
			KIPS			FT.-K	FT.-K

6/32

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 1 - CONSTRUCTION**



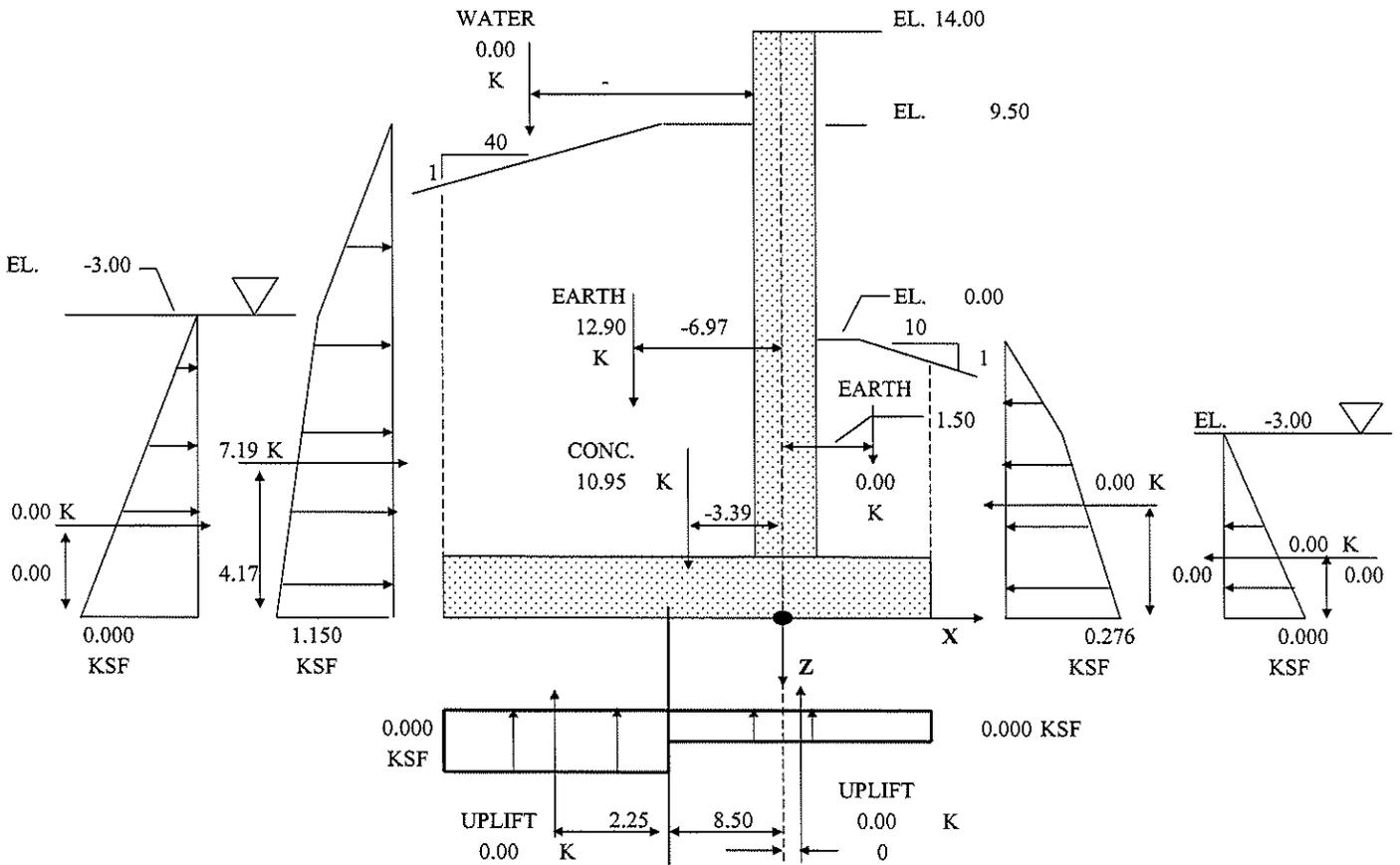
**FLOODWALL HORIZONTAL LOADING - CASE 1**

ITEM	HEIGHT	PRESS	FORCE		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
			X					
<b>FLOODSIDE:</b>								
EARTH 1	12.50	1.150	7.19	k/ft	0.00	-4.17	0	-29.9
EARTH 2	0.00	1.150	0.00	k/ft	0.00	0.00	0	0.0
EARTH 3	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
GRND WATER	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
<b>PROTECTED:</b>								
IGNORE EARTH 4	3.00	0.276	0.00	k/ft	0.00	-1.00	0	0.0
IGNORE EARTH 5	0.00	0.276	0.00	k/ft	0.00	0.00	0	0.0
IGNORE EARTH 6	0.00	0.276	0.0	k/ft	0.00	0.00	0	0.0
IGNORE GRND WATER	0.00	0.000	0.0	k/ft	0.00	0.00	0	0.0

	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT.	Myy FT-K/FT.
<b>FLOODSIDE EARTH FORCE</b>	7.19		0.00	-4.17		-29.9
<b>FLOODSIDE WATER FORCE</b>	0.00		0.00	0		0.0
<b>TOTAL FLOODSIDE FORCE</b>	7.19	k/ft	0.00	-4.17	0.0	-29.9
<b>PROT. SIDE EARTH FORCE</b>	0.00		0.00	0		0.0
<b>PROT. SIDE WATER FORCE</b>	0.00		0.00	0		0.0
<b>TOTAL PROT. SIDE FORCE</b>	0.00	k/ft	0	0	0.0	0.0
<b>TOTAL NET HORIZ. FORCE</b>	7.19	k/ft	0.00	-4.17	0.0	-29.9

ALGIERS CANAL (EAST)  
T-WALL TYPE B (REACH 2)  
CASE 1 - CONSTRUCTION

7/32



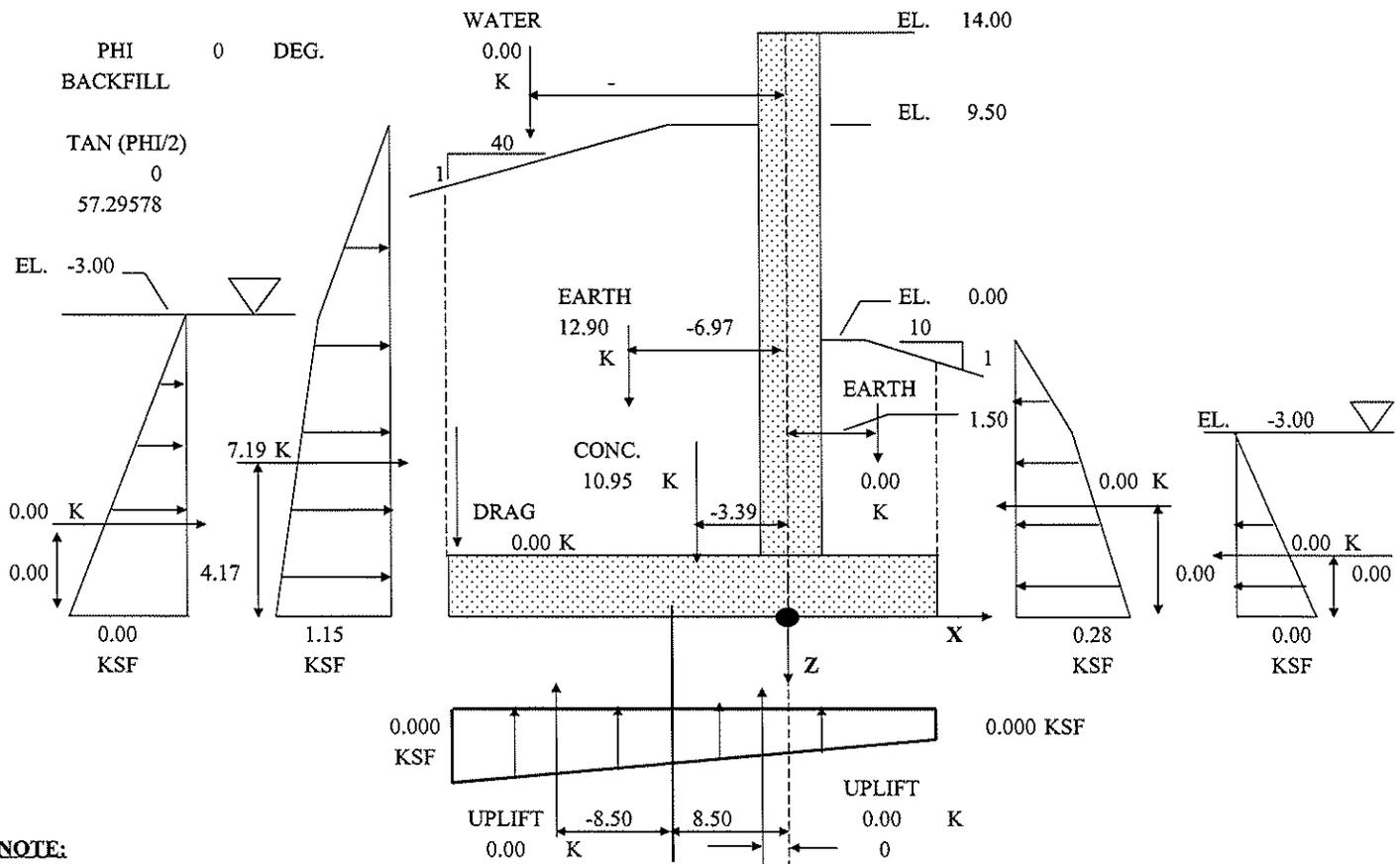
LOADING SUMMARY - CASE 1 WITH MINIMUM UPLIFT

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	11.0	k/ft	-3.39	0.00	37	0
FLDSIDE FILL	0.0	0.0	12.9	k/ft	-6.97	0.00	90	0
PROTSIDE FILL	0.0	0.0	0.0	k/ft	1.50	0.00	0	0
F. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
P. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
F. S. EARTH Pr.	7.2	0.0	0.0	k/ft	-	-4.17	-29.95	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	0	0	0
F. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0
P. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0

	X	Y	Z	Mxx	Myy	Mzz
TOTALS	7	0	23.9	0	97	0
MONO. TOTAL	246	0	818	0	3329	0

2/32

**ALGIERS CANAL (EAST)  
T-WALL TYPE B (REACH 2)  
CASE 1 - CONSTRUCTION**



**NOTE:**  
DRAG LOAD = (EARTH P)\*TAN(PHI/2)

**LOADING SUMMARY - CASE 1 WITH DRAG/SURCHARGE LOAD**

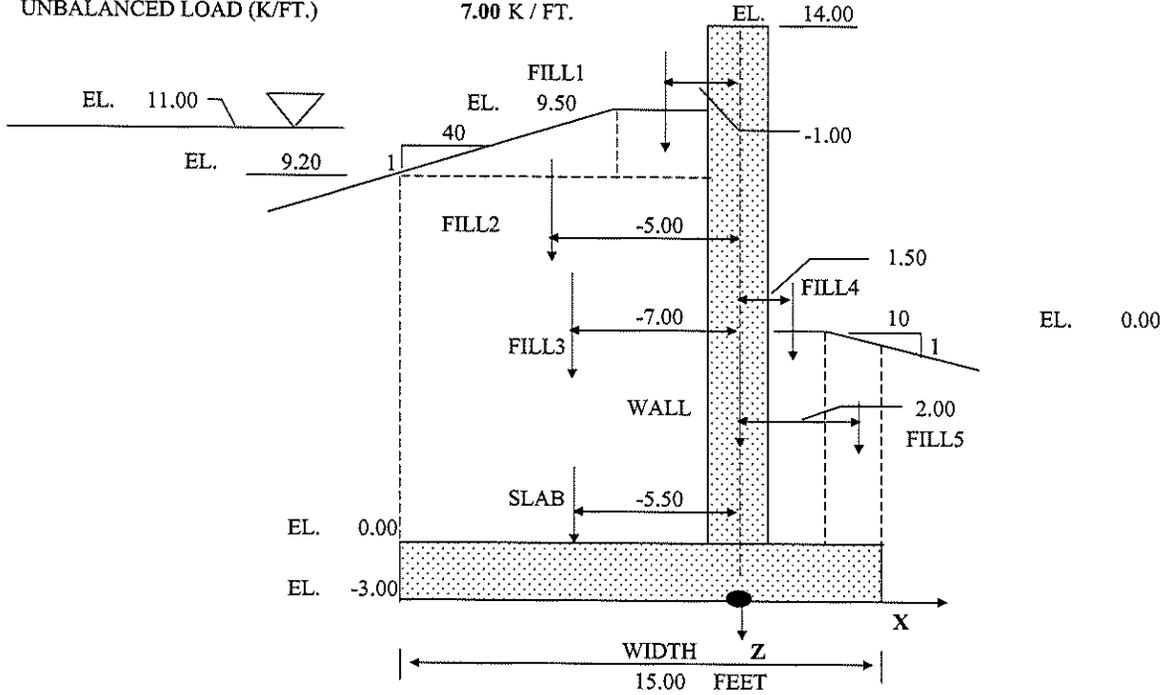
ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	11.0	k/ft	-3.39	0.00	37	0
FLDSIDE FILL	0.0	0.0	12.9	k/ft	-6.97	0.00	90	0
PROTSIDE FILL	0.0	0.0	0.0	k/ft	1.50	0.00	0	0
DRAG LOAD	0.0	0.0	0.0	k/ft	-13.00	0.00	0	0
SURCHARGE	0.0	0.0	2.4	k/ft	-7.00	0.00	17	0
F. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
P. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
F. S. EARTH Pr.	7.2	0.0	0.0	k/ft	-	-4.17	-29.9	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	0	0	0
F. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0
P. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0

-0.58

	X	Y	Z	Mxx	Myy	Mzz
TOTALS	7.2	0.0	26.3	0	114	0
MONO. TOTAL	246	0.0	900	0	3905	0
				X	Y	Z
VERTICAL			900	-5.48		
HORIZ			246			-4.17

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 2 - WATER @ SWE**

FLOODSIDE WATER ELEV. 11.00  
 UPLIFT - PROT. SIDE 0.00  
 ALLOWABLE OVERSTRESS 0  
 UNBALANCED LOAD (K/FT.) 7.00 K / FT.



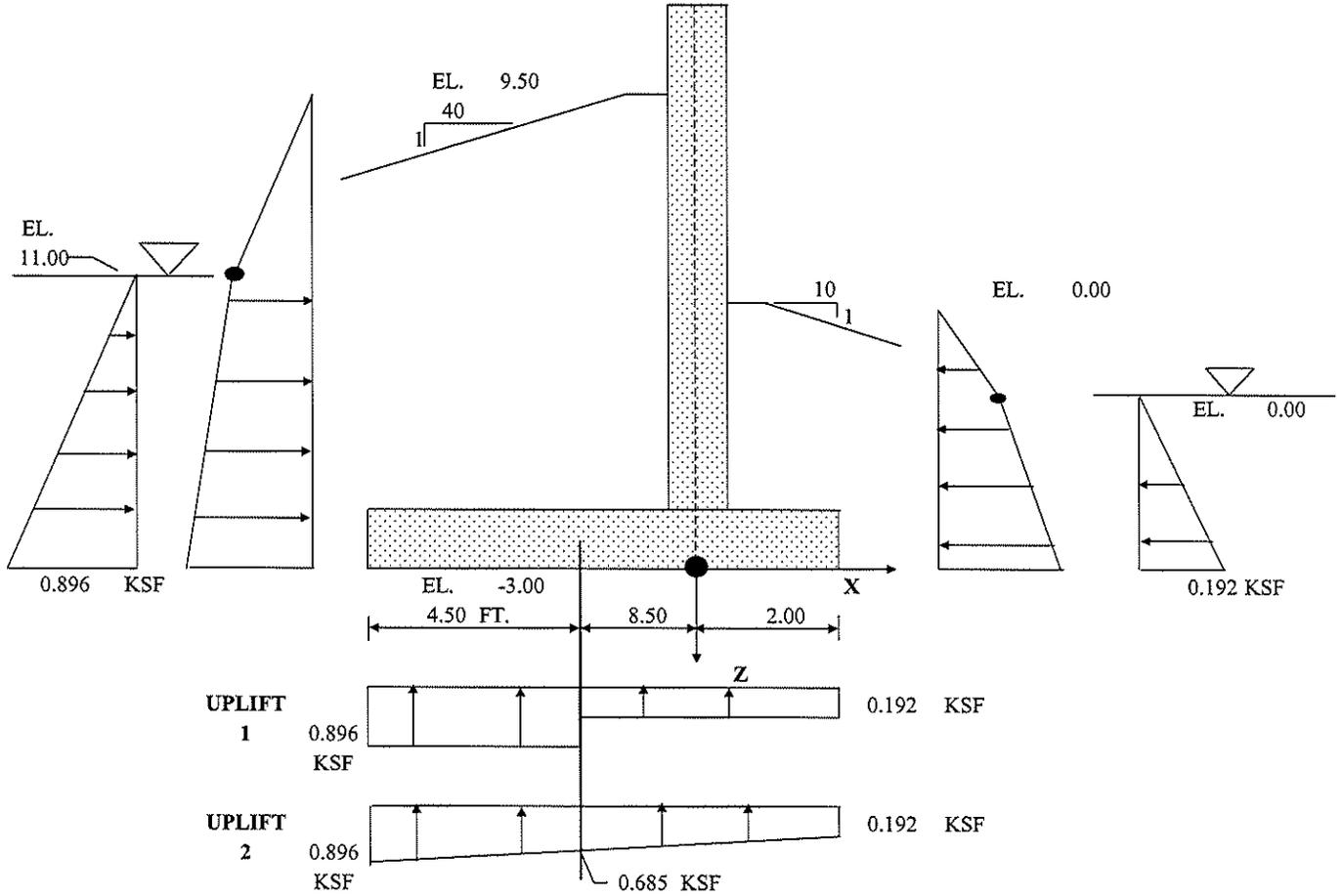
**FLOODWALL APPLIED GRAVITY LOADING - CASE 2**

ITEM	FORCE Z (WEIGHT)	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
CONCRETE SLAB	6.75	-5.50	0.00	37	0
CONCRETE WALL	4.20	0.00	0.00	0	0
FLOODSIDE FILL1	0.00	-1.00	0.00	0	0
FLOODSIDE FILL2	0.21	-5.00	0.00	1	0
FLOODSIDE FILL3	12.70	-7.00	0.00	89	0
PROTECTED SIDE FILL4	0.00	1.50	0.00	0	0
PROTECTED SIDE FILL5	0.00	2.00	0.00	0	0
FLOODSIDE WATER	0.11	-9.00	0.00	1	0
FLOODSIDE WATER	1.13	-7.00	0.00	8	0

<b>TOTALS</b>	<b>25.09</b>	<b>-5.42</b>	<b>135.92</b>	<b>0</b>
<b>CONCRETE</b>	<b>10.95</b>	<b>-3.39</b>	<b>37.13</b>	<b>0</b>
<b>FLOODSIDE FILL 1-3</b>	<b>12.90</b>	<b>-6.97</b>	<b>89.91</b>	<b>0</b>
<b>PROT. SIDE FILL 4-5</b>	<b>0.00</b>	<b>1.50</b>	<b>0.00</b>	<b>0</b>
<b>FLOODSIDE WATER</b>	<b>1.24</b>	<b>-7.18</b>	<b>8.89</b>	<b>0</b>
	KIPS		FT.-K	FT.-K

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 2 - WATER @ SWE**

10/32

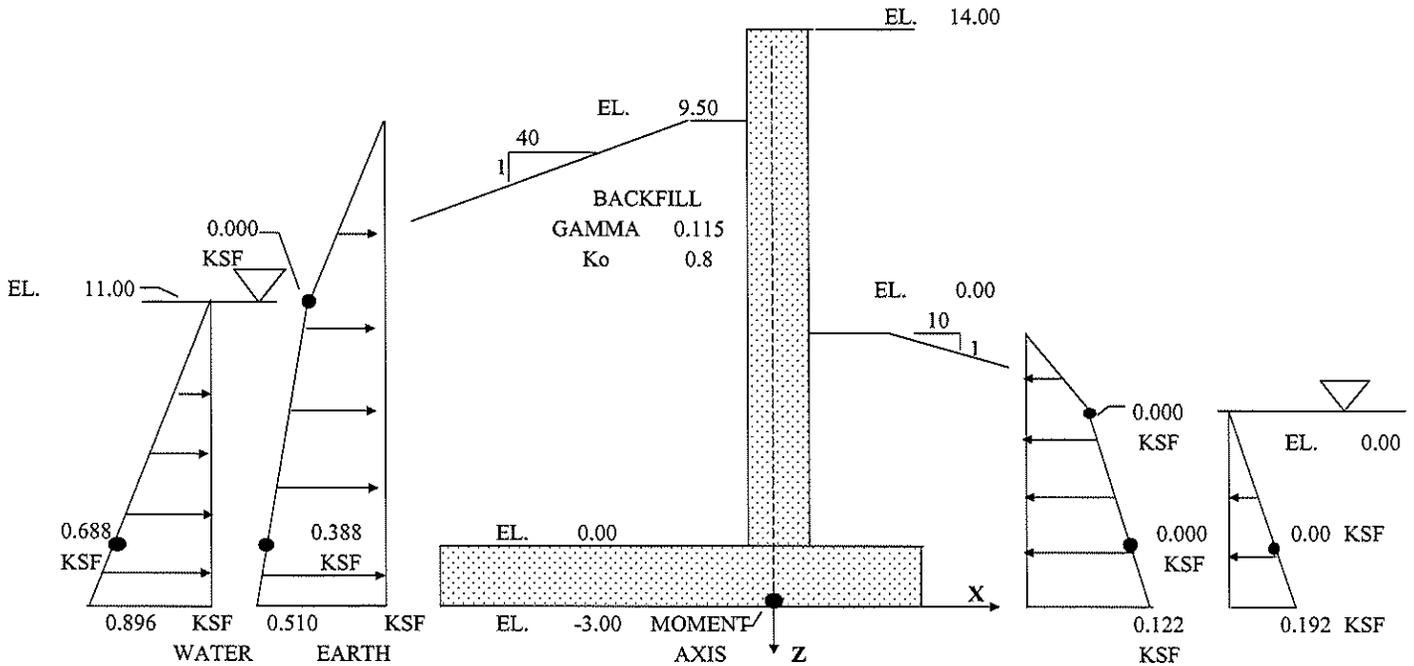


ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 1	4.50	0.90	-4.03	-10.75	0.00	-43	0
<b>PROTECTED SIDE:</b>							
UPLIFT 1	10.50	0.19	-2.02	-3.25	0.00	-7	0
<b>TOTALS</b>			<b>-6.05</b>	<b>-8.25</b>		<b>-50</b>	<b>0</b>
<b>FLD.SIDE</b>			<b>-4.03</b>	<b>-10.75</b>		<b>-43.34</b>	<b>0</b>
<b>PROT. SIDE</b>			<b>-2.02</b>	<b>-3.25</b>		<b>-6.55</b>	<b>0</b>
			<b>KIPS</b>			<b>FT.-K</b>	<b>FT.-K</b>

ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 2 (UNIF)	4.50	0.685	-3.08	-10.75	0.00	-33.13	0.00
UPLIFT 2 (TRI)	4.50	0.211	-0.48	-11.50	0.00	-5.46	0.00
<b>PROTECTED SIDE:</b>							
UPLIFT 2 (UNIF)	10.50	0.192	-2.02	-3.25	0.00	-6.55	0.00
UPLIFT 2 (TRI)	10.50	0.493	-2.59	-5.00	0.00	-12.94	0.00
<b>TOTALS</b>			<b>-8.16</b>	<b>-7.12</b>		<b>-58.08</b>	<b>0.00</b>
<b>FLOOD SIDE</b>			<b>-3.56</b>	<b>-10.85</b>		<b>-38.59</b>	<b>0.00</b>
<b>PROT. SIDE</b>			<b>-4.60</b>	<b>-4.23</b>		<b>-19.49</b>	<b>0.00</b>
			<b>KIPS</b>			<b>FT.-K</b>	<b>FT.-K</b>

14/32

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 2 - WATER @ SWE**



2.04

6.272

**FLOODWALL HORIZONTAL LOADING - CASE 2**

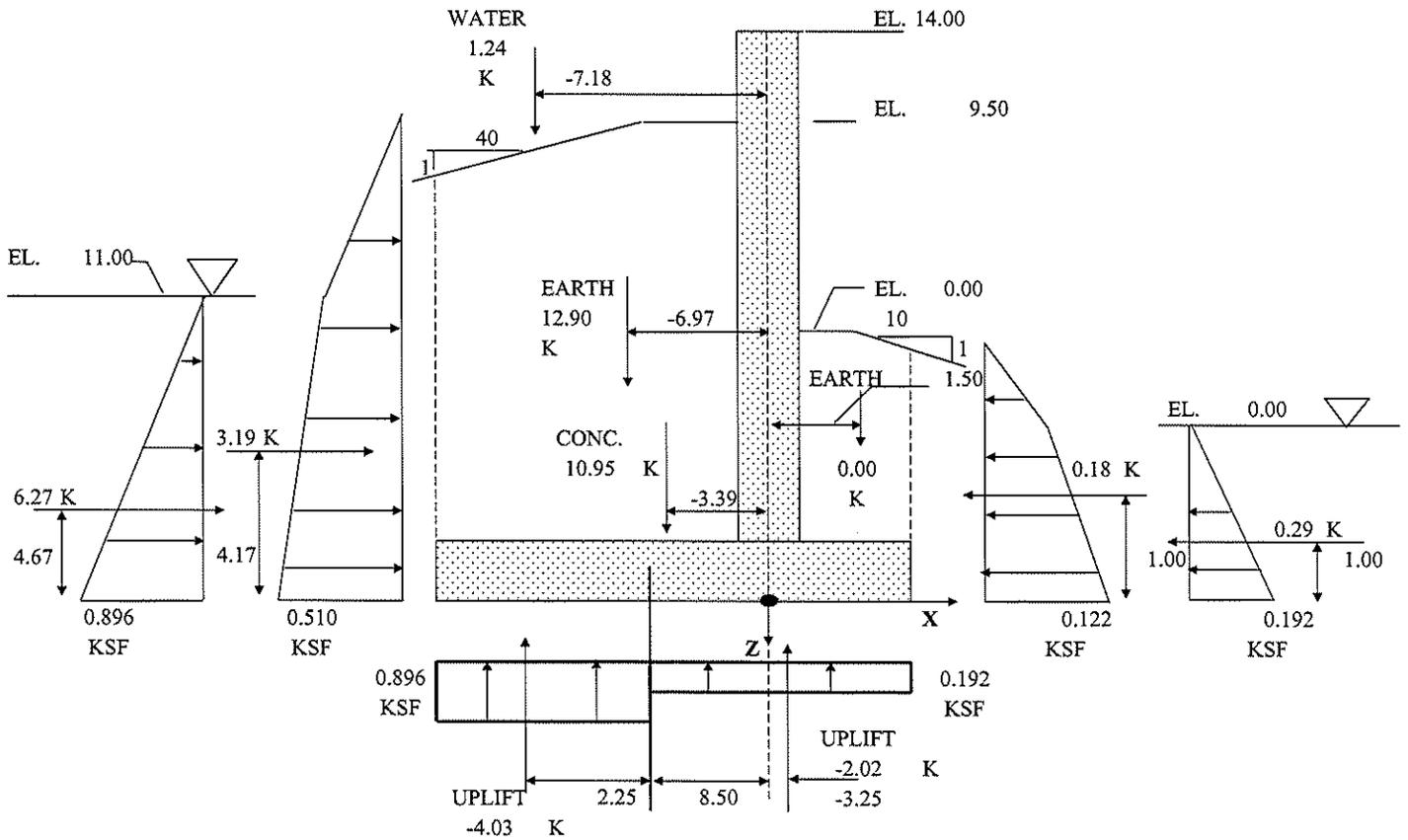
ITEM	HEIGHT	PRESS	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
<b>FLOODSIDE:</b>								
EARTH 1	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
EARTH 2	12.50	0.000	0.00	k/ft	0.00	0.00	0	0.0
EARTH 3	12.50	0.510	3.19	k/ft	0.00	-4.17	0	-13.3
GRND WATER	14.00	0.896	6.27	k/ft	0.00	-4.67	0	-29.3
<b>PROTECTED:</b>								
EARTH 4	0.00	0.000	0.00	k/ft	0.00	-3.00	0	0.0
EARTH 5	3.00	0.000	0.00	k/ft	0.00	-1.50	0	0.0
EARTH 6	3.00	0.122	-0.18	k/ft	0.00	-1.00	0	0.2
GRND WATER	3.00	0.192	-0.29	k/ft	0.00	-1.00	0	0.3

IGNORE

	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
FLOODSIDE EARTH FORCE	3.19		0.00	-4.17		-13.3
FLOODSIDE WATER FORCE	6.27		0.00	-4.67		-29.3
TOTAL FLOODSIDE FORCE	9.46	k/ft	0.00	-4.50	0.0	-42.6
PROT. SIDE EARTH FORCE	-0.18		0.00	-1.00		0.2
PROT. SIDE WATER FORCE	-0.29		0.00	-1.00		0.3
TOTAL PROT. SIDE FORCE	-0.47	k/ft	0.00	-1.00	0.0	0.5
TOTAL NET HORIZ. FORCE	8.99	k/ft	0.00	-4.68	0.0	-42.1

*rygn*

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 2 - WATER @ SWE**



**LOADING SUMMARY - CASE 2 WITH MINIMUM UPLIFT**

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	11.0	k/ft	-3.39	0.00	37	0
FLDSIDE FILL	0.0	0.0	12.9	k/ft	-6.97	0.00	90	0
PROTSIDE FILL	0.0	0.0	0.0	k/ft	1.50	0.00	0	0
F.SIDE WATER	0.0	0.0	1.2	k/ft	-7.18	0.00	9	0
F. SIDE UPLIFT	0.0	0.0	-4.0	k/ft	-10.75	0.00	-43	0
P. SIDE UPLIFT	0.0	0.0	-2.0	k/ft	-3.25	0.00	-7	0
F. S. EARTH Pr.	3.2	0.0	0.0	k/ft	-	-4.17	-13	0
P. S. EARTH Pr.	-0.2	0.0	0.0	k/ft	-	-1.00	0	0
F. S. WATER Pr.	6.3	0.0	0.0	k/ft	-	-4.67	-29	0
P. S. WATER Pr.	-0.3	0.0	0.0	k/ft	-	-1.00	0	0

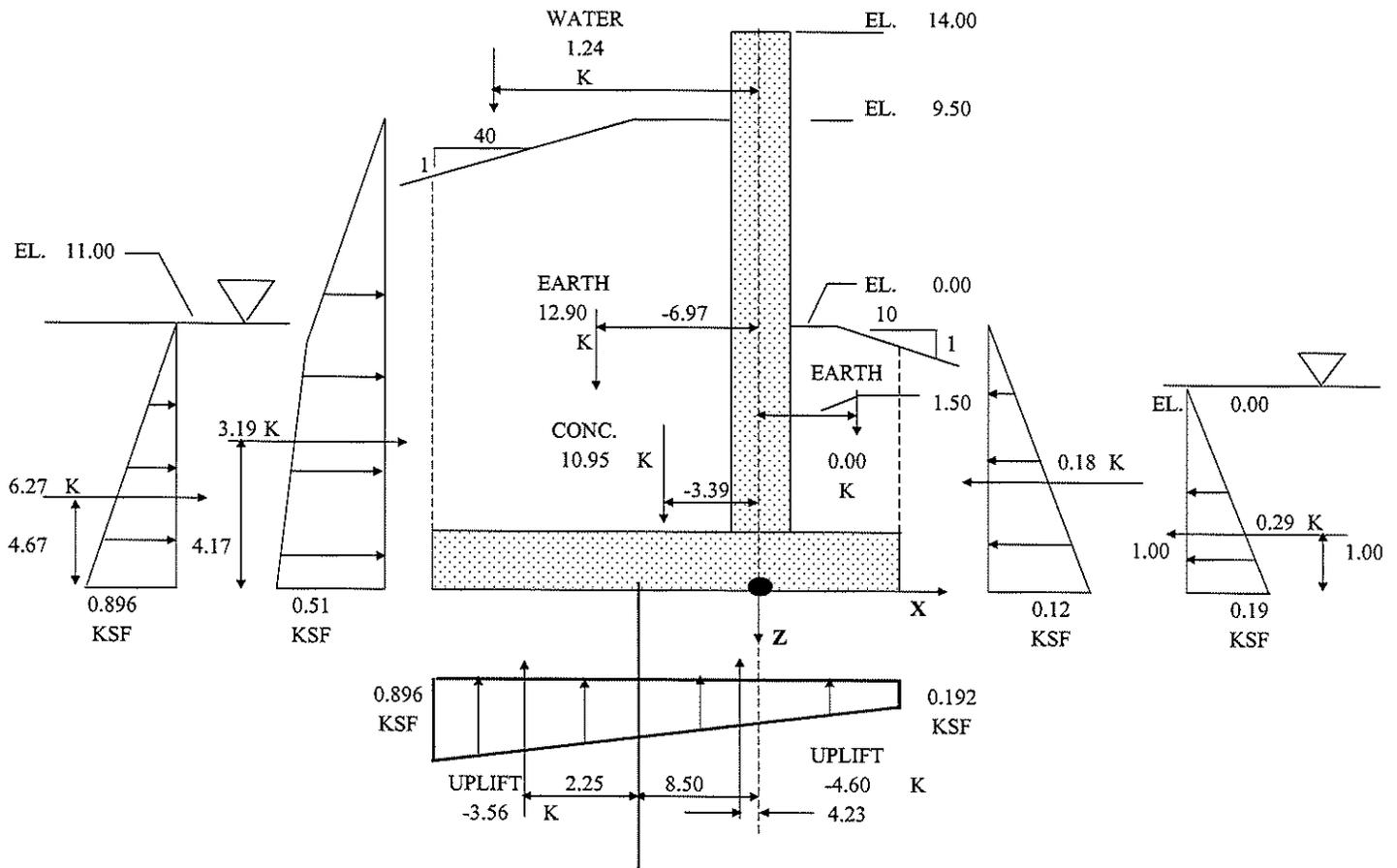
92.58

-42.08

	X	Y	Z	Mxx	Myy	Mzz
<b>TOTALS</b>	<b>9.0</b>	<b>0.0</b>	<b>19.0</b>	<b>0</b>	<b>44</b>	<b>0</b>
<b>MONO. TOTAL</b>	<b>360</b>	<b>0.0</b>	<b>762</b>	<b>0</b>	<b>1758</b>	<b>0</b>

ALGIERS CANAL (EAST)  
T-WALL TYPE B (REACH 2)  
CASE 2 - WATER @ SWE

15/13



LOADING SUMMARY - CASE 2 WITH MAXIMUM UPLIFT

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	11.0	k/ft	-3.39	0.00	37	0
FLDSIDE FILL	0.0	0.0	12.9	k/ft	-6.97	0.00	90	0
PROTSIDE FILL	0.0	0.0	0.0	k/ft	1.50	0.00	0	0
F. SIDE WATER	0.0	0.0	1.2	k/ft	-7.18	0.00	9	0
F. SIDE UPLIFT	0.0	0.0	-3.6	k/ft	-10.85	0.00	-39	0
P. SIDE UPLIFT	0.0	0.0	-4.6	k/ft	-4.23	0.00	-19	0
F. S. EARTH Pr.	3.2	0.0	0.0	k/ft	-	-4.17	-13	0
P. S. EARTH Pr.	-0.2	0.0	0.0	k/ft	-	-1.00	0	0
F. S. WATER Pr.	6.3	0.0	0.0	k/ft	-	-4.67	-29	0
P. S. WATER Pr.	-0.3	0.0	0.0	k/ft	-	-1.00	0	0

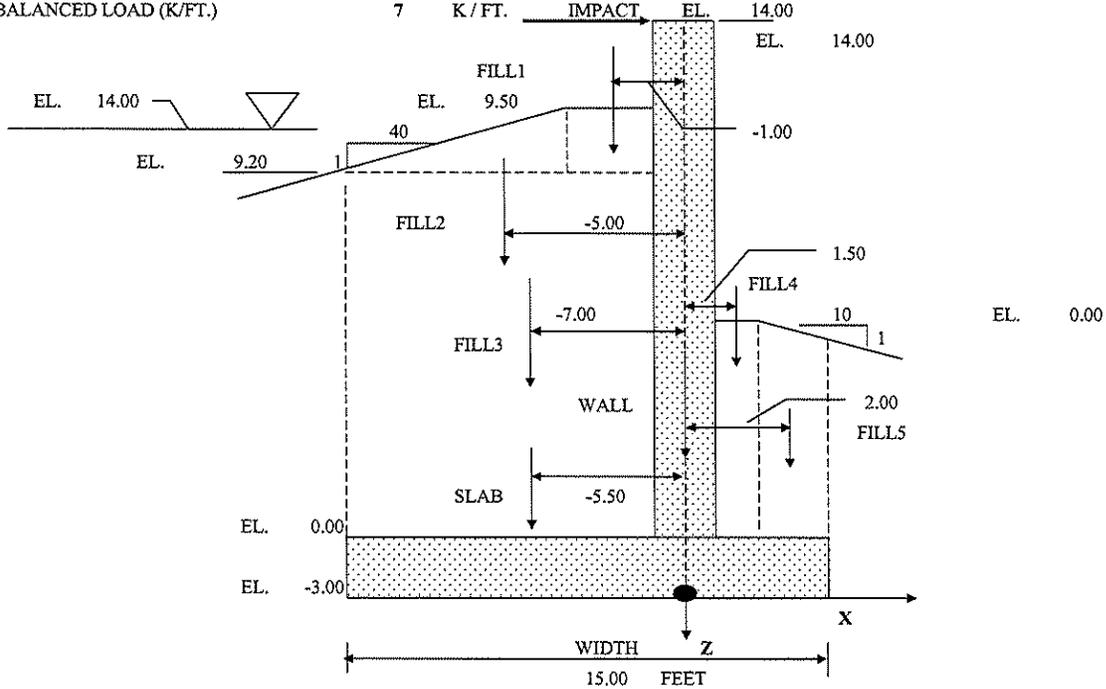
77.84

-42.08

	X	Y	Z		Mxx	Myy	Mzz
TOTALS	9.0	0.0	16.9		0	36	0
MONO. TOTAL	359.5	0.0	677.2		0	1430	0
VERTICAL			677			-4.60	
HORIZ			360				-4.68

**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 3 - WATER TO TOP OF WALL**

FLOODSIDE WATER ELEV. 14.00  
 UPLIFT - PROT. SIDE 0.00  
 ALLOWABLE OVERSTRESS 33.33 % 0 K (CASE\_ONLY)  
 UNBALANCED LOAD (K/FT.) 7 K / FT. IMPACT EL. 14.00



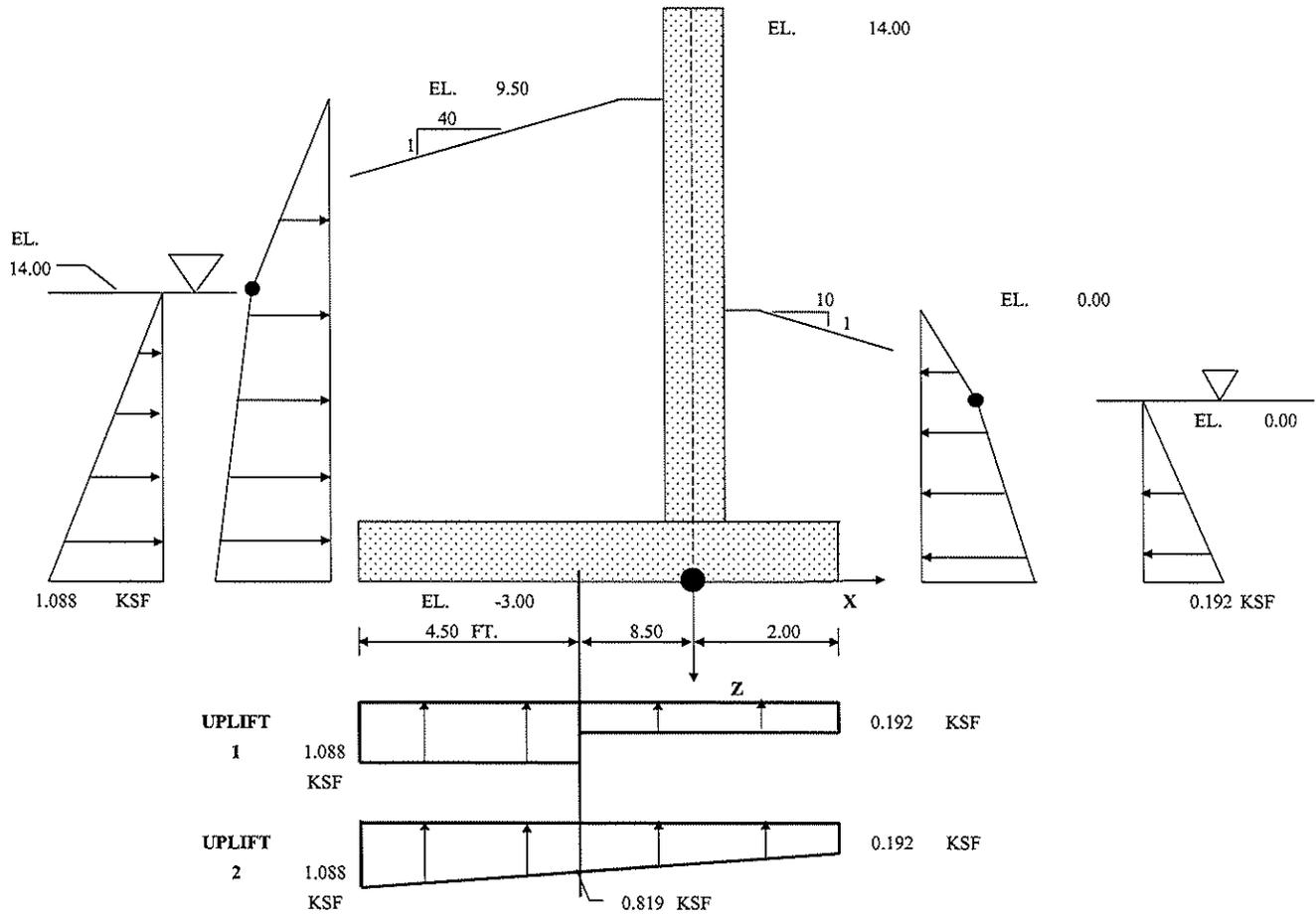
**FLOODWALL APPLIED GRAVITY LOADING - CASE 3**

ITEM	FORCE Z (WEIGHT)	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
CONCRETE SLAB	6.75	-5.50	0.00	37	0
CONCRETE WALL	4.20	0.00	0.00	0	0
FLOODSIDE FILL1	0.00	-1.00	0.00	0	0
FLOODSIDE FILL2	0.21	-5.00	0.00	1	0
FLOODSIDE FILL3	12.70	-7.00	0.00	89	0
PROTECTED SIDE FILL4	0.00	1.50	0.00	0	0
PROTECTED SIDE FILL5	0.00	2.00	0.00	0	0
FLOODSIDE WATER	0.11	-9.00	0.00	1	0
FLOODSIDE WATER	3.38	-7.00	0.00	24	0

<b>TOTALS</b>	27.34	-5.55	151.67	0
<b>CONCRETE</b>	10.95	-3.39	37.13	0
<b>FLOODSIDE FILL 1-3</b>	12.90	-6.97	89.91	0
<b>PROT. SIDE FILL 4-5</b>	0.00	1.50	0.00	0
<b>FLOODSIDE WATER</b>	3.49	-7.06	24.64	0
	KIPS		FT.-K	FT.-K

15/32

ALGIERS CANAL (EAST)  
T-WALL TYPE B (REACH 2)  
CASE 3 - WATER TO TOP OF WALL

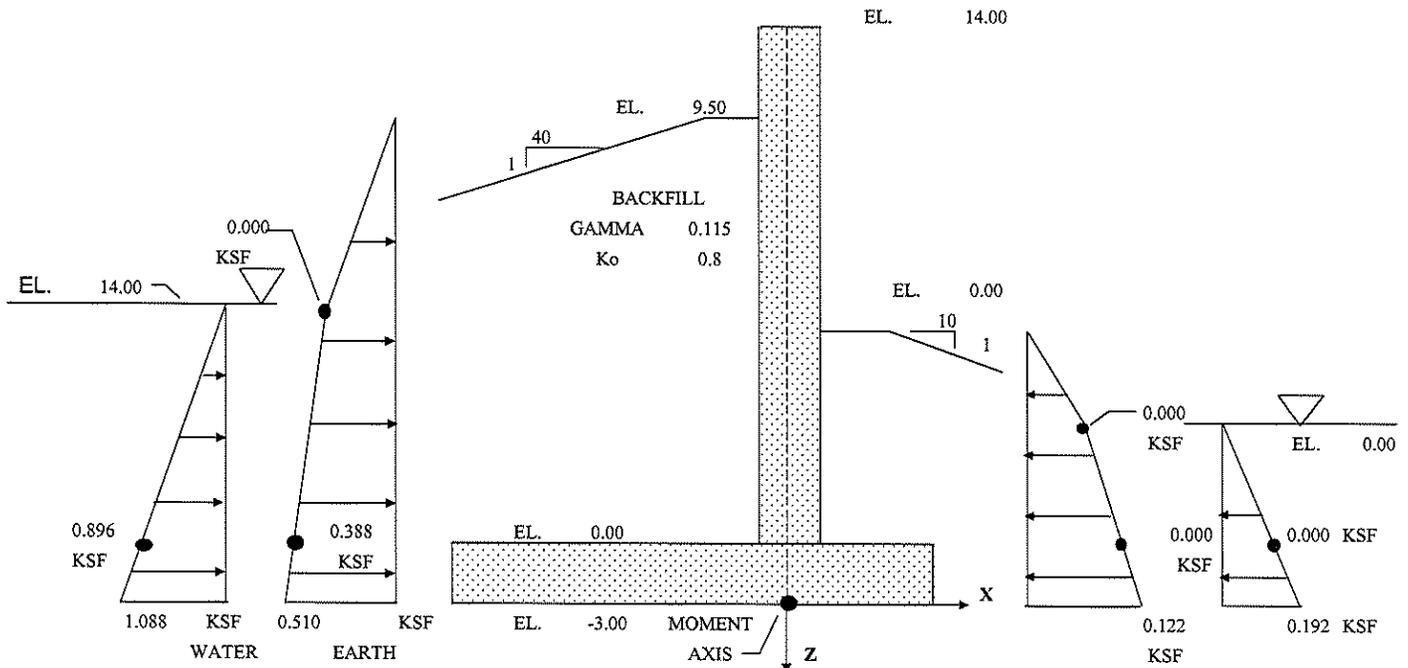


ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 1	4.50	1.09	-4.90	-10.75	0.00	-53	0
<b>PROTECTED SIDE:</b>							
UPLIFT 1	10.50	0.19	-2.02	-3.25	0.00	-7	0
<b>TOTALS</b>			<b>-6.91</b>	<b>-8.56</b>		<b>-59</b>	<b>0</b>
<b>FLD.SIDE</b>			<b>-4.90</b>	<b>-10.75</b>		<b>-52.63</b>	<b>0</b>
<b>PROT. SIDE</b>			<b>-2.02</b>	<b>-3.25</b>		<b>-6.55</b>	<b>0</b>
			<b>KIPS</b>			<b>FT.-K</b>	<b>FT.-K</b>

ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 2 (UNIF)	4.50	0.819	-3.69	-10.75	0.00	-39.63	0.00
UPLIFT 2 (TRI)	4.50	0.269	-0.60	-11.50	0.00	-6.96	0.00
<b>PROTECTED SIDE:</b>							
UPLIFT 2 (UNIF)	10.50	0.192	-2.02	-3.25	0.00	-6.55	0.00
UPLIFT 2 (TRI)	10.50	0.627	-3.29	-5.00	0.00	-16.46	0.00
<b>TOTALS</b>			<b>-9.60</b>	<b>-7.25</b>		<b>-69.60</b>	<b>0.00</b>
<b>FLOOD SIDE</b>			<b>-4.29</b>	<b>-10.86</b>		<b>-46.58</b>	<b>0.00</b>
<b>PROT. SIDE</b>			<b>-5.31</b>	<b>-4.34</b>		<b>-23.02</b>	<b>0.00</b>
			<b>KIPS</b>			<b>FT.-K</b>	<b>FT.-K</b>

16/30

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 3 - WATER TO TOP OF WALL**



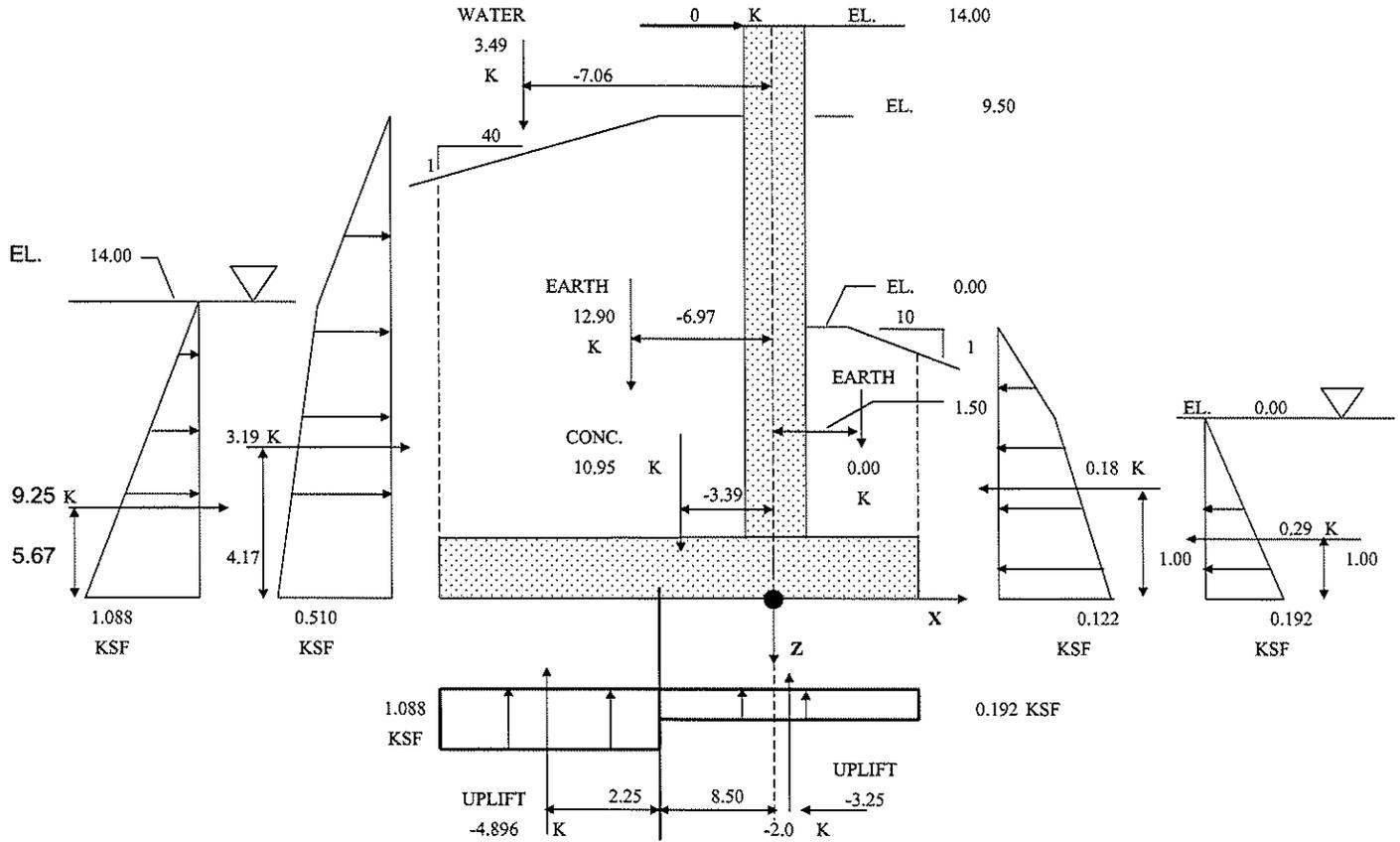
**FLOODWALL HORIZONTAL LOADING - CASE 3**

ITEM	HEIGHT	PRESS	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
<b>FLOODSIDE:</b>								
EARTH 1	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
EARTH 2	12.50	0.000	0.00	k/ft	0.00	0.00	0	0.0
EARTH 3	12.50	0.510	3.19	k/ft	0.00	-4.17	0	-13.3
GRND WATER	17.00	1.088	9.25	k/ft	0.00	-5.67	0	-52.4
<b>PROTECTED:</b>								
EARTH 4	0.00	0.000	0.00	k/ft	0.00	-3.00	0	0.0
EARTH 5	3.00	0.000	0.00	k/ft	0.00	-1.50	0	0.0
EARTH 6	3.00	0.122	-0.18	k/ft	0.00	-1.00	0	0.2
GRND WATER	3.00	0.192	-0.29	k/ft	0.00	-1.00	0	0.3

	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT.	Myy FT-K/FT.
<b>FLOODSIDE EARTH FORCE</b>	3.19		0.00	-4.17		-13.3
<b>FLOODSIDE WATER FORCE</b>	9.25		0.00	-5.67		-52.4
<b>TOTAL FLOODSIDE FORCE</b>	12.44	k/ft	0.00	-5.28	0.0	-65.7
<b>PROT. SIDE EARTH FORCE</b>	-0.18		0.00	-1.00		0.2
<b>PROT. SIDE WATER FORCE</b>	-0.29		0.00	-1.00		0.3
<b>TOTAL PROT. SIDE FORCE</b>	-0.47	k/ft	0.00	-1.00	0.0	0.5
<b>TOTAL NET HORIZ. FORCE</b>	11.96	k/ft	0.00	-5.45	0.0	-65.2

M/S

1  
**ALGIERS CANAL (EAST)**  
**T-WALL TYPE B (REACH 2)**  
**CASE 3 - WATER TO TOP OF WALL**



**LOADING SUMMARY - CASE 3 WITH MINIMUM UPLIFT**

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	11.0	k/ft	-3.39	0.00	37	0
FLDSIDE FILL	0.0	0.0	12.9	k/ft	-6.97	0.00	90	0
PROTSIDE FILL	0.0	0.0	0.0	k/ft	1.50	0.00	0	0
F. SIDE WATER	0.0	0.0	3.5	k/ft	-7.06	0.00	25	0
F. SIDE UPLIFT	0.0	0.0	-4.9	k/ft	-10.75	0.00	-53	0
P. SIDE UPLIFT	0.0	0.0	-2.0	k/ft	-3.25	0.00	-7	0
F. S. EARTH Pr.	3.2	0.0	0.0	k/ft	-	-4.17	-13	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	-1.00	0	0
F. S. WATER Pr.	9.2	0.0	0.0	k/ft	-	-5.67	-52	0
P. S. WATER Pr.	-0.3	0.0	0.0	k/ft	-	-1.00	0	0

IGNORE

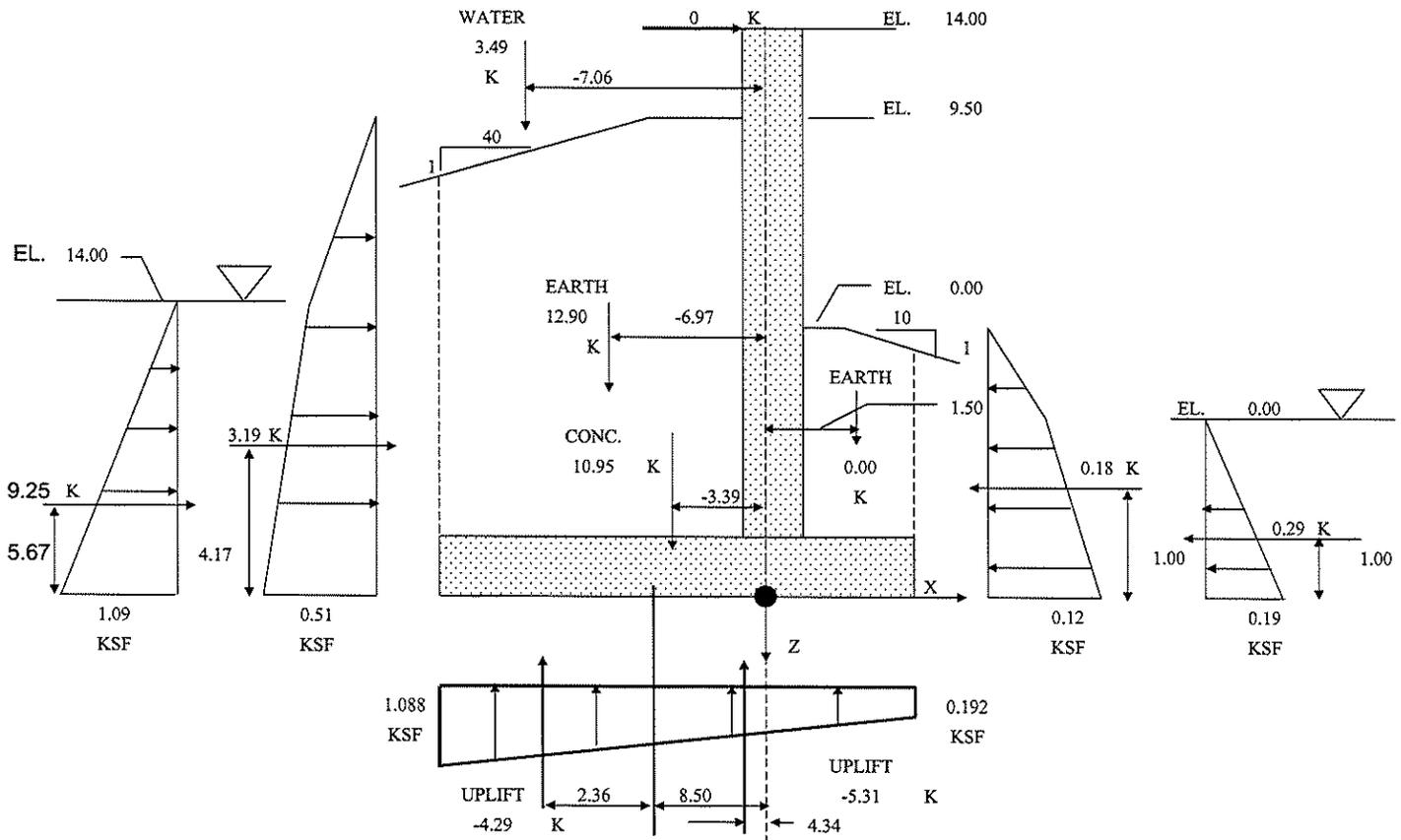
SUM M  
92.49

SUM M  
-65.40

	X	Y	Z	Mxx	Myy	Mzz
<b>TOTALS</b>	12.1	0.0	20.4	0	27	0
<b>MONO. TOTAL</b>	364	0.0	613	0	813	0
<b>IMPACT (CASE 9)</b>	0.0				0	
<b>TOTAL CASE 9</b>	364	0.0	613	0.0	813	0.0

18/13

# ALGIERS CANAL (EAST) T-WALL TYPE B (REACH 2) CASE 3 - WATER TO TOP OF WALL



**LOADING SUMMARY - CASE 3 WITH MAXIMUM UPLIFT**

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	11.0	k/ft	-3.39	0.00	37	0
FLDSIDE FILL	0.0	0.0	12.9	k/ft	-6.97	0.00	90	0
PROTSIDE FILL	0.0	0.0	0.0	k/ft	1.50	0.00	0	0
F.SIDE WATER	0.0	0.0	3.5	k/ft	-7.06	0.00	25	0
F. SIDE UPLIFT	0.0	0.0	-4.3	k/ft	-10.86	0.00	-47	0
P. SIDE UPLIFT	0.0	0.0	-5.3	k/ft	-4.34	0.00	-23	0
F. S. EARTH Pr.	3.2	0.0	0.0	k/ft	-	-4.17	-13	0
P. S. EARTH Pr.	0.0	0.0	0.0	k/ft	-	-1.00	0	0
F. S. WATER Pr.	9.2	0.0	0.0	k/ft	-	-5.67	-52	0
P. S. WATER Pr.	-0.3	0.0	0.0	k/ft	-	-1.00	0	0

SUM M  
82.07

SUM M  
-65.40

	X	Y	Z	Mxx	Myy	Mzz
TOTALS	12.1	0.0	17.7	0	17	0
MONO. TOTAL	364	0.0	532	0	500	0
IMPACT (CASE 10)	0.0				0.0	
TOTAL CASE 10	364	0.0	532	0.0	500	0.0
VERTICAL			532		-4.63	
HORIZ			364			-5.38



**ALGIERS CANAL (EAST)  
T-WALL TYPE B (REACH 2)**

LOAD CASE	LOAD CONDITION	OF (%)	FOUNDATION LOADS					
			X	Y	Z	Mxx	Myy	Mzz
1	CONSTRUCTION / NORMAL CONDITION	16 2/3	246	0	818	0	3,329	0
2	CONST. W/ DRAG & SURCHARGE LDS	16 2/3	246	0	900	0	3,905	0
3	WATER @ SWE ( EL. 11.0 ) MIN. UPLIFT, UNBALANCED LOADS	0	640	0	762	0	1,758	0
3a	WATER @ SWE ( EL. 11.0 ) MAX. UPLIFT, UNBALANCED LOADS	0	640	0	677	0	1,430	0
3b	WATER @ SWE ( EL. 11.0 ) MIN. UPLIFT, UNBALANCED LOADS	0	675	0	762	0	1,747	0
3c	WATER @ SWE ( EL. 11.0 ) MAX. UPLIFT, UNBALANCED LOADS	0	675	0	577	0	920	0
4	WATER @ SWE ( EL. 14.0 ) MIN. UPLIFT, UNBALANCED LOADS	0	675	0	762	0	1,757	0
4a	WATER @ SWE ( EL. 14.0 ) MAX. UPLIFT, UNBALANCED LOADS	0	675	0	577	0	920	0
4b	WATER @ TOP OF WALL ( EL. 14.0 ) MIN. UPLIFT, UNBALANCED LOADS	50	644	0	613	0	813	0
4c	WATER @ TOP OF WALL ( EL. 14.0 ) MAX. UPLIFT, UNBALANCED LOADS	50	644	0	532	0	500	0
5	WATER @ TOP OF WALL ( EL. 14.0 ) MIN. UPLIFT, UNBALANCED LOADS	0	644	0	613	0	813	0
5a	WATER @ TOP OF WALL ( EL. 14.0 ) MAX. UPLIFT, UNBALANCED LOADS	0	644	0	532	0	500	0

9/82

20/30

T-WALLB.TXT

10 ALGIERS CANAL (EAST)-  
11 T-WALL TYPE B  
20 PROP 29000 2549 2549 36.9 2 0 ALL  
30 SOIL ES 0.047 LEN 100 0 ALL  
41 PIN ALL  
50 ALLOW R 122 77 627.3 738 4673 4673 ALL  
70 BAT 2 1 TO 8  
71 BAT 2.4 9 TO 24  
89 ANG 180 1 TO 8  
90 ANG 0 9 TO 24  
100 PILE 1 -11.0 -17.5 0  
101 PILE 9 -6.0 -17.5 0  
102 PILE 17 0.0 -17.5 0  
110 ROW Y 8 1 7 AT 5.0  
120 ROW Y 8 9 7 AT 5.0  
130 ROW Y 8 17 7 AT 5.0  
170 LOAD 1 246 0 818 0 3329 0  
171 LOAD 2 246 0 900 0 3905 0  
172 LOAD 3 640 0 761 0 1758 0  
173 LOAD 4 640 0 677 0 1430 0  
174 LOAD 5 644 0 613 0 813 0  
175 LOAD 6 644 0 532 0 500 0  
235 FOUT 1 2 3 4 5 6 7 T-WALLB.DOC  
240 PSO 1  
250 PFO ALL



22/32

.00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00  
.00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00

THIS MATRIX APPLIES TO THE FOLLOWING PILES -

1

\*\*\*\*\*

PILE GEOMETRY AS INPUT AND/OR GENERATED

NUM	X FT	Y FT	Z FT	BATTER	ANGLE	LENGTH FT	FIXITY
1	-11.00	-17.50	.00	2.00	180.00	100.00	P
2	-11.00	-12.50	.00	2.00	180.00	100.00	P
3	-11.00	-7.50	.00	2.00	180.00	100.00	P
4	-11.00	-2.50	.00	2.00	180.00	100.00	P
5	-11.00	2.50	.00	2.00	180.00	100.00	P
6	-11.00	7.50	.00	2.00	180.00	100.00	P
7	-11.00	12.50	.00	2.00	180.00	100.00	P
8	-11.00	17.50	.00	2.00	180.00	100.00	P
9	-6.00	-17.50	.00	2.40	.00	100.00	P
10	-6.00	-12.50	.00	2.40	.00	100.00	P
11	-6.00	-7.50	.00	2.40	.00	100.00	P
12	-6.00	-2.50	.00	2.40	.00	100.00	P
13	-6.00	2.50	.00	2.40	.00	100.00	P
14	-6.00	7.50	.00	2.40	.00	100.00	P
15	-6.00	12.50	.00	2.40	.00	100.00	P
16	-6.00	17.50	.00	2.40	.00	100.00	P
17	.00	-17.50	.00	2.40	.00	100.00	P
18	.00	-12.50	.00	2.40	.00	100.00	P
19	.00	-7.50	.00	2.40	.00	100.00	P
20	.00	-2.50	.00	2.40	.00	100.00	P
21	.00	2.50	.00	2.40	.00	100.00	P
22	.00	7.50	.00	2.40	.00	100.00	P
23	.00	12.50	.00	2.40	.00	100.00	P
24	.00	17.50	.00	2.40	.00	100.00	P
						-----	
						2400.00	

\*\*\*\*\*

APPLIED LOADS

LOAD CASE	PX K	PY K	PZ K	MX FT-K	MY FT-K	MZ FT-K
1	246.0	.0	818.0	.0	3329.0	.0
2	246.0	.0	900.0	.0	3905.0	.0
3	640.0	.0	761.0	.0	1758.0	.0
4	640.0	.0	677.0	.0	1430.0	.0
5	644.0	.0	613.0	.0	813.0	.0
6	644.0	.0	532.0	.0	500.0	.0

23/52

\*\*\*\*\*

ORIGINAL PILE GROUP STIFFNESS MATRIX

.72075E+04	.24854E-03	.44075E+04	.87311E-10	-.38719E+06	-.32808E-01
.24854E-03	.15884E+03	-.49709E-03	.00000E+00	-.65616E-01	-.10801E+05
.44075E+04	-.49709E-03	.35755E+05	.00000E+00	.23840E+07	.65616E-01
.58208E-10	.00000E+00	.00000E+00	.67578E+09	.00000E+00	-.83302E+08
-.38719E+06	-.65616E-01	.23840E+07	.11176E-07	.26213E+09	.86613E+01
-.32808E-01	-.10801E+05	.65616E-01	-.83302E+08	.86613E+01	.13742E+09

LOAD CASE	1.	NUMBER OF FAILURES =	0.	NUMBER OF PILES IN TENSION =	0.
LOAD CASE	2.	NUMBER OF FAILURES =	0.	NUMBER OF PILES IN TENSION =	0.
LOAD CASE	3.	NUMBER OF FAILURES =	0.	NUMBER OF PILES IN TENSION =	8.
LOAD CASE	4.	NUMBER OF FAILURES =	0.	NUMBER OF PILES IN TENSION =	8.
LOAD CASE	5.	NUMBER OF FAILURES =	0.	NUMBER OF PILES IN TENSION =	8.
LOAD CASE	6.	NUMBER OF FAILURES =	0.	NUMBER OF PILES IN TENSION =	8.

\*\*\*\*\*

PILE CAP DISPLACEMENTS

LOAD CASE	DX IN	DY IN	DZ IN	RX RAD	RY RAD	RZ RAD
1	.2252E-01	.2898E-07	.1962E-01	-.2889E-12	.7247E-05	-.2344E-11
2	.2226E-01	.3913E-07	.2113E-01	-.3900E-12	.1951E-04	-.3164E-11
3	.1616E+00	-.8879E-07	-.5062E-01	.8850E-12	.7795E-03	.7180E-11
4	.1715E+00	-.9871E-07	-.5958E-01	.9839E-12	.8606E-03	.7981E-11
5	.1674E+00	-.1080E-06	-.5706E-01	.1077E-11	.8034E-03	.8735E-11
6	.1770E+00	-.1176E-06	-.6580E-01	.1172E-11	.8828E-03	.9508E-11

\*\*\*\*\*

PILE FORCES IN LOCAL GEOMETRY

M1 & M2 NOT AT PILE HEAD FOR PINNED PILES  
 \* INDICATES PILE FAILURE  
 # INDICATES CBF BASED ON MOMENTS DUE TO  
 (F3\*EMIN) FOR CONCRETE PILES  
 B INDICATES BUCKLING CONTROLS

LOAD CASE - 1

26/5

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-.2	.0	14.9	.0	17.6	.0	.12	.03
2	-.2	.0	14.9	.0	17.6	.0	.12	.03
3	-.2	.0	14.9	.0	17.6	.0	.12	.03
4	-.2	.0	14.9	.0	17.6	.0	.12	.03
5	-.2	.0	14.9	.0	17.6	.0	.12	.03
6	-.2	.0	14.9	.0	17.6	.0	.12	.03
7	-.2	.0	14.9	.0	17.6	.0	.12	.03
8	-.2	.0	14.9	.0	17.6	.0	.12	.03
9	.1	.0	48.6	.0	-7.8	.0	.40	.08
10	.1	.0	48.6	.0	-7.8	.0	.40	.08
11	.1	.0	48.6	.0	-7.8	.0	.40	.08
12	.1	.0	48.6	.0	-7.8	.0	.40	.08
13	.1	.0	48.6	.0	-7.8	.0	.40	.08
14	.1	.0	48.6	.0	-7.8	.0	.40	.08
15	.1	.0	48.6	.0	-7.8	.0	.40	.08
16	.1	.0	48.6	.0	-7.8	.0	.40	.08
17	.1	.0	47.7	.0	-7.9	.0	.39	.08
18	.1	.0	47.7	.0	-7.9	.0	.39	.08
19	.1	.0	47.7	.0	-7.9	.0	.39	.08
20	.1	.0	47.7	.0	-7.9	.0	.39	.08
21	.1	.0	47.7	.0	-7.9	.0	.39	.08
22	.1	.0	47.7	.0	-7.9	.0	.39	.08
23	.1	.0	47.7	.0	-7.9	.0	.39	.08
24	.1	.0	47.7	.0	-7.9	.0	.39	.08

LOAD CASE - 2

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-.2	.0	20.1	.0	18.3	.0	.16	.04
2	-.2	.0	20.1	.0	18.3	.0	.16	.04
3	-.2	.0	20.1	.0	18.3	.0	.16	.04
4	-.2	.0	20.1	.0	18.3	.0	.16	.04
5	-.2	.0	20.1	.0	18.3	.0	.16	.04
6	-.2	.0	20.1	.0	18.3	.0	.16	.04
7	-.2	.0	20.1	.0	18.3	.0	.16	.04
8	-.2	.0	20.1	.0	18.3	.0	.16	.04
9	.1	.0	52.4	.0	-7.1	.0	.43	.08
10	.1	.0	52.4	.0	-7.1	.0	.43	.08
11	.1	.0	52.4	.0	-7.1	.0	.43	.08
12	.1	.0	52.4	.0	-7.1	.0	.43	.08
13	.1	.0	52.4	.0	-7.1	.0	.43	.08
14	.1	.0	52.4	.0	-7.1	.0	.43	.08
15	.1	.0	52.4	.0	-7.1	.0	.43	.08
16	.1	.0	52.4	.0	-7.1	.0	.43	.08
17	.1	.0	50.1	.0	-7.5	.0	.41	.08
18	.1	.0	50.1	.0	-7.5	.0	.41	.08
19	.1	.0	50.1	.0	-7.5	.0	.41	.08
20	.1	.0	50.1	.0	-7.5	.0	.41	.08
21	.1	.0	50.1	.0	-7.5	.0	.41	.08
22	.1	.0	50.1	.0	-7.5	.0	.41	.08
23	.1	.0	50.1	.0	-7.5	.0	.41	.08

25/5~

24 .1 .0 50.1 .0 -7.5 .0 .41 .08

LOAD CASE - 3

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-1.1	.0	-45.5	.0	100.8	.0	.59	.08
2	-1.1	.0	-45.5	.0	100.8	.0	.59	.08
3	-1.1	.0	-45.5	.0	100.8	.0	.59	.08
4	-1.1	.0	-45.5	.0	100.8	.0	.59	.08
5	-1.1	.0	-45.5	.0	100.8	.0	.59	.08
6	-1.1	.0	-45.5	.0	100.8	.0	.59	.08
7	-1.1	.0	-45.5	.0	100.8	.0	.59	.08
8	-1.1	.0	-45.5	.0	100.8	.0	.59	.08
9	1.0	.0	119.9	.0	-88.3	.0	.98	.21
10	1.0	.0	119.9	.0	-88.3	.0	.98	.21
11	1.0	.0	119.9	.0	-88.3	.0	.98	.21
12	1.0	.0	119.9	.0	-88.3	.0	.98	.21
13	1.0	.0	119.9	.0	-88.3	.0	.98	.21
14	1.0	.0	119.9	.0	-88.3	.0	.98	.21
15	1.0	.0	119.9	.0	-88.3	.0	.98	.21
16	1.0	.0	119.9	.0	-88.3	.0	.98	.21
17	1.1	.0	27.5	.0	-101.2	.0	.23	.07
18	1.1	.0	27.5	.0	-101.2	.0	.23	.07
19	1.1	.0	27.5	.0	-101.2	.0	.23	.07
20	1.1	.0	27.5	.0	-101.2	.0	.23	.07
21	1.1	.0	27.5	.0	-101.2	.0	.23	.07
22	1.1	.0	27.5	.0	-101.2	.0	.23	.07
23	1.1	.0	27.5	.0	-101.2	.0	.23	.07
24	1.1	.0	27.5	.0	-101.2	.0	.23	.07

LOAD CASE - 4

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-1.2	.0	-50.6	.0	106.5	.0	.66	.09
2	-1.2	.0	-50.6	.0	106.5	.0	.66	.09
3	-1.2	.0	-50.6	.0	106.5	.0	.66	.09
4	-1.2	.0	-50.6	.0	106.5	.0	.66	.09
5	-1.2	.0	-50.6	.0	106.5	.0	.66	.09
6	-1.2	.0	-50.6	.0	106.5	.0	.66	.09
7	-1.2	.0	-50.6	.0	106.5	.0	.66	.09
8	-1.2	.0	-50.6	.0	106.5	.0	.66	.09
9	1.0	.0	121.5	.0	-94.4	.0	1.00	.21
10	1.0	.0	121.5	.0	-94.4	.0	1.00	.21
11	1.0	.0	121.5	.0	-94.4	.0	1.00	.21
12	1.0	.0	121.5	.0	-94.4	.0	1.00	.21
13	1.0	.0	121.5	.0	-94.4	.0	1.00	.21
14	1.0	.0	121.5	.0	-94.4	.0	1.00	.21
15	1.0	.0	121.5	.0	-94.4	.0	1.00	.21
16	1.0	.0	121.5	.0	-94.4	.0	1.00	.21
17	1.2	.0	19.5	.0	-108.8	.0	.16	.05
18	1.2	.0	19.5	.0	-108.8	.0	.16	.05

20/10

19	1.2	.0	19.5	.0	-108.8	.0	.16	.05
20	1.2	.0	19.5	.0	-108.8	.0	.16	.05
21	1.2	.0	19.5	.0	-108.8	.0	.16	.05
22	1.2	.0	19.5	.0	-108.8	.0	.16	.05
23	1.2	.0	19.5	.0	-108.8	.0	.16	.05
24	1.2	.0	19.5	.0	-108.8	.0	.16	.05

LOAD CASE - 5

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-1.1	.0	-55.4	.0	103.0	.0	.72	.10
2	-1.1	.0	-55.4	.0	103.0	.0	.72	.10
3	-1.1	.0	-55.4	.0	103.0	.0	.72	.10
4	-1.1	.0	-55.4	.0	103.0	.0	.72	.10
5	-1.1	.0	-55.4	.0	103.0	.0	.72	.10
6	-1.1	.0	-55.4	.0	103.0	.0	.72	.10
7	-1.1	.0	-55.4	.0	103.0	.0	.72	.10
8	-1.1	.0	-55.4	.0	103.0	.0	.72	.10
9	1.0	.0	116.1	.0	-92.6	.0	.95	.20
10	1.0	.0	116.1	.0	-92.6	.0	.95	.20
11	1.0	.0	116.1	.0	-92.6	.0	.95	.20
12	1.0	.0	116.1	.0	-92.6	.0	.95	.20
13	1.0	.0	116.1	.0	-92.6	.0	.95	.20
14	1.0	.0	116.1	.0	-92.6	.0	.95	.20
15	1.0	.0	116.1	.0	-92.6	.0	.95	.20
16	1.0	.0	116.1	.0	-92.6	.0	.95	.20
17	1.2	.0	20.9	.0	-105.9	.0	.17	.06
18	1.2	.0	20.9	.0	-105.9	.0	.17	.06
19	1.2	.0	20.9	.0	-105.9	.0	.17	.06
20	1.2	.0	20.9	.0	-105.9	.0	.17	.06
21	1.2	.0	20.9	.0	-105.9	.0	.17	.06
22	1.2	.0	20.9	.0	-105.9	.0	.17	.06
23	1.2	.0	20.9	.0	-105.9	.0	.17	.06
24	1.2	.0	20.9	.0	-105.9	.0	.17	.06

LOAD CASE - 6

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-1.2	.0	-60.3	.0	108.6	.0	.78	.10
2	-1.2	.0	-60.3	.0	108.6	.0	.78	.10
3	-1.2	.0	-60.3	.0	108.6	.0	.78	.10
4	-1.2	.0	-60.3	.0	108.6	.0	.78	.10
5	-1.2	.0	-60.3	.0	108.6	.0	.78	.10
6	-1.2	.0	-60.3	.0	108.6	.0	.78	.10
7	-1.2	.0	-60.3	.0	108.6	.0	.78	.10
8	-1.2	.0	-60.3	.0	108.6	.0	.78	.10
9	1.1	.0	117.7	.0	-98.6	.0	.97	.21
10	1.1	.0	117.7	.0	-98.6	.0	.97	.21
11	1.1	.0	117.7	.0	-98.6	.0	.97	.21
12	1.1	.0	117.7	.0	-98.6	.0	.97	.21
13	1.1	.0	117.7	.0	-98.6	.0	.97	.21

87/3~

14	1.1	.0	117.7	.0	-98.6	.0	.97	.21
15	1.1	.0	117.7	.0	-98.6	.0	.97	.21
16	1.1	.0	117.7	.0	-98.6	.0	.97	.21
17	1.2	.0	13.1	.0	-113.3	.0	.11	.05
18	1.2	.0	13.1	.0	-113.3	.0	.11	.05
19	1.2	.0	13.1	.0	-113.3	.0	.11	.05
20	1.2	.0	13.1	.0	-113.3	.0	.11	.05
21	1.2	.0	13.1	.0	-113.3	.0	.11	.05
22	1.2	.0	13.1	.0	-113.3	.0	.11	.05
23	1.2	.0	13.1	.0	-113.3	.0	.11	.05
24	1.2	.0	13.1	.0	-113.3	.0	.11	.05

\*\*\*\*\*

PILE FORCES IN GLOBAL GEOMETRY

LOAD CASE - 1

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	-6.5	.0	13.4	.0	.0	.0
2	-6.5	.0	13.4	.0	.0	.0
3	-6.5	.0	13.4	.0	.0	.0
4	-6.5	.0	13.4	.0	.0	.0
5	-6.5	.0	13.4	.0	.0	.0
6	-6.5	.0	13.4	.0	.0	.0
7	-6.5	.0	13.4	.0	.0	.0
8	-6.5	.0	13.4	.0	.0	.0
9	18.8	.0	44.8	.0	.0	.0
10	18.8	.0	44.8	.0	.0	.0
11	18.8	.0	44.8	.0	.0	.0
12	18.8	.0	44.8	.0	.0	.0
13	18.8	.0	44.8	.0	.0	.0
14	18.8	.0	44.8	.0	.0	.0
15	18.8	.0	44.8	.0	.0	.0
16	18.8	.0	44.8	.0	.0	.0
17	18.4	.0	44.0	.0	.0	.0
18	18.4	.0	44.0	.0	.0	.0
19	18.4	.0	44.0	.0	.0	.0
20	18.4	.0	44.0	.0	.0	.0
21	18.4	.0	44.0	.0	.0	.0
22	18.4	.0	44.0	.0	.0	.0
23	18.4	.0	44.0	.0	.0	.0
24	18.4	.0	44.0	.0	.0	.0

LOAD CASE - 2

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	-8.8	.0	18.0	.0	.0	.0
2	-8.8	.0	18.0	.0	.0	.0

28/3~

3	-8.8	.0	18.0	.0	.0	.0
4	-8.8	.0	18.0	.0	.0	.0
5	-8.8	.0	18.0	.0	.0	.0
6	-8.8	.0	18.0	.0	.0	.0
7	-8.8	.0	18.0	.0	.0	.0
8	-8.8	.0	18.0	.0	.0	.0
9	20.2	.0	48.3	.0	.0	.0
10	20.2	.0	48.3	.0	.0	.0
11	20.2	.0	48.3	.0	.0	.0
12	20.2	.0	48.3	.0	.0	.0
13	20.2	.0	48.3	.0	.0	.0
14	20.2	.0	48.3	.0	.0	.0
15	20.2	.0	48.3	.0	.0	.0
16	20.2	.0	48.3	.0	.0	.0
17	19.3	.0	46.2	.0	.0	.0
18	19.3	.0	46.2	.0	.0	.0
19	19.3	.0	46.2	.0	.0	.0
20	19.3	.0	46.2	.0	.0	.0
21	19.3	.0	46.2	.0	.0	.0
22	19.3	.0	46.2	.0	.0	.0
23	19.3	.0	46.2	.0	.0	.0
24	19.3	.0	46.2	.0	.0	.0

LOAD CASE - 3

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	21.3	.0	-40.2	.0	.0	.0
2	21.3	.0	-40.2	.0	.0	.0
3	21.3	.0	-40.2	.0	.0	.0
4	21.3	.0	-40.2	.0	.0	.0
5	21.3	.0	-40.2	.0	.0	.0
6	21.3	.0	-40.2	.0	.0	.0
7	21.3	.0	-40.2	.0	.0	.0
8	21.3	.0	-40.2	.0	.0	.0
9	47.0	.0	110.3	.0	.0	.0
10	47.0	.0	110.3	.0	.0	.0
11	47.0	.0	110.3	.0	.0	.0
12	47.0	.0	110.3	.0	.0	.0
13	47.0	.0	110.3	.0	.0	.0
14	47.0	.0	110.3	.0	.0	.0
15	47.0	.0	110.3	.0	.0	.0
16	47.0	.0	110.3	.0	.0	.0
17	11.6	.0	25.0	.0	.0	.0
18	11.6	.0	25.0	.0	.0	.0
19	11.6	.0	25.0	.0	.0	.0
20	11.6	.0	25.0	.0	.0	.0
21	11.6	.0	25.0	.0	.0	.0
22	11.6	.0	25.0	.0	.0	.0
23	11.6	.0	25.0	.0	.0	.0
24	11.6	.0	25.0	.0	.0	.0

LOAD CASE - 4

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	23.7	.0	-44.7	.0	.0	.0
2	23.7	.0	-44.7	.0	.0	.0
3	23.7	.0	-44.7	.0	.0	.0
4	23.7	.0	-44.7	.0	.0	.0
5	23.7	.0	-44.7	.0	.0	.0
6	23.7	.0	-44.7	.0	.0	.0
7	23.7	.0	-44.7	.0	.0	.0
8	23.7	.0	-44.7	.0	.0	.0
9	47.7	.0	111.8	.0	.0	.0
10	47.7	.0	111.8	.0	.0	.0
11	47.7	.0	111.8	.0	.0	.0
12	47.7	.0	111.8	.0	.0	.0
13	47.7	.0	111.8	.0	.0	.0
14	47.7	.0	111.8	.0	.0	.0
15	47.7	.0	111.8	.0	.0	.0
16	47.7	.0	111.8	.0	.0	.0
17	8.6	.0	17.6	.0	.0	.0
18	8.6	.0	17.6	.0	.0	.0
19	8.6	.0	17.6	.0	.0	.0
20	8.6	.0	17.6	.0	.0	.0
21	8.6	.0	17.6	.0	.0	.0
22	8.6	.0	17.6	.0	.0	.0
23	8.6	.0	17.6	.0	.0	.0
24	8.6	.0	17.6	.0	.0	.0

LOAD CASE - 5

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	25.8	.0	-49.0	.0	.0	.0
2	25.8	.0	-49.0	.0	.0	.0
3	25.8	.0	-49.0	.0	.0	.0
4	25.8	.0	-49.0	.0	.0	.0
5	25.8	.0	-49.0	.0	.0	.0
6	25.8	.0	-49.0	.0	.0	.0
7	25.8	.0	-49.0	.0	.0	.0
8	25.8	.0	-49.0	.0	.0	.0
9	45.6	.0	106.8	.0	.0	.0
10	45.6	.0	106.8	.0	.0	.0
11	45.6	.0	106.8	.0	.0	.0
12	45.6	.0	106.8	.0	.0	.0
13	45.6	.0	106.8	.0	.0	.0
14	45.6	.0	106.8	.0	.0	.0
15	45.6	.0	106.8	.0	.0	.0
16	45.6	.0	106.8	.0	.0	.0
17	9.1	.0	18.8	.0	.0	.0
18	9.1	.0	18.8	.0	.0	.0
19	9.1	.0	18.8	.0	.0	.0
20	9.1	.0	18.8	.0	.0	.0
21	9.1	.0	18.8	.0	.0	.0
22	9.1	.0	18.8	.0	.0	.0
23	9.1	.0	18.8	.0	.0	.0

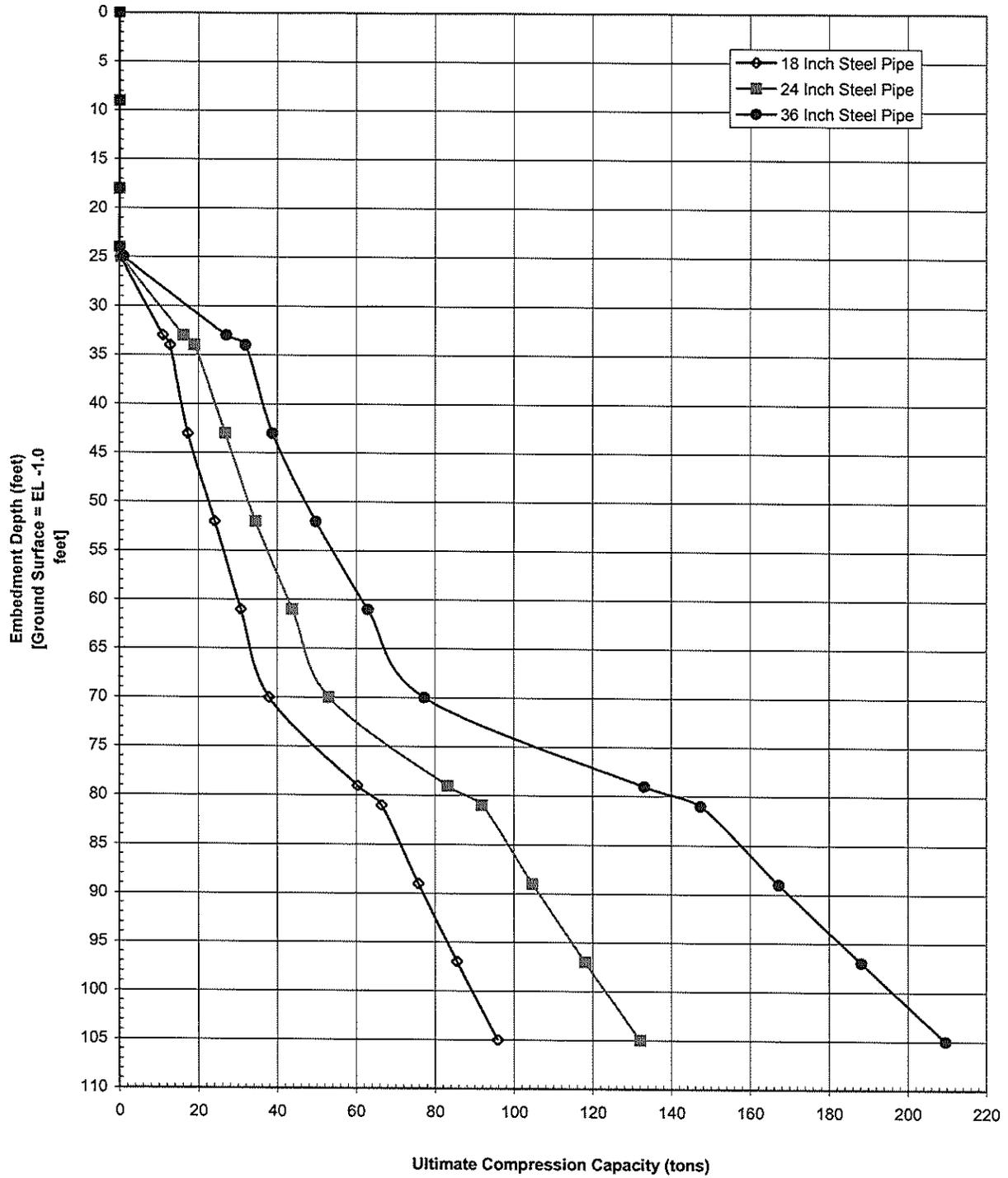
30/30

24            9.1            .0            18.8            .0            .0            .0

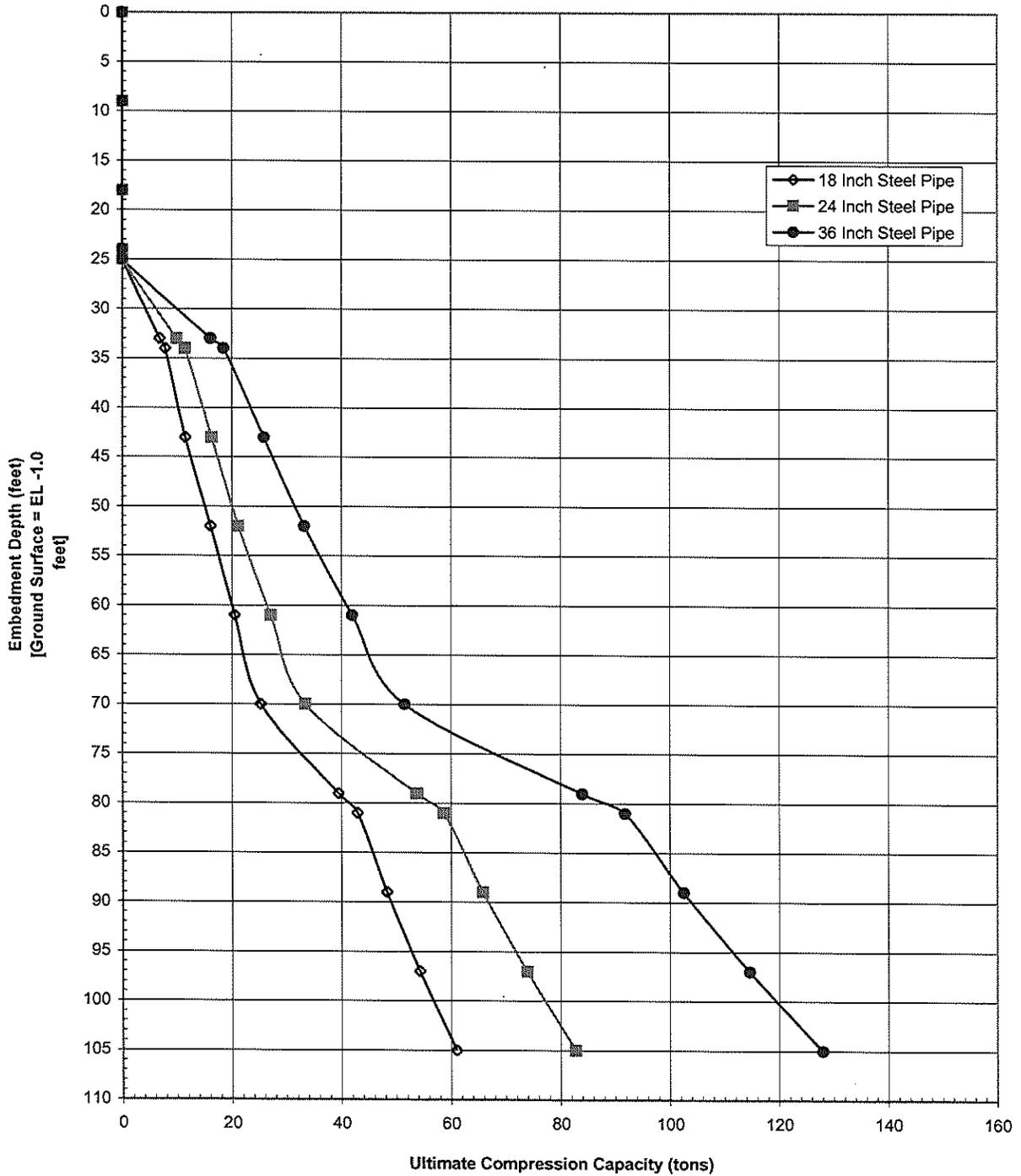
LOAD CASE -        6

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	28.0	.0	-53.4	.0	.0	.0
2	28.0	.0	-53.4	.0	.0	.0
3	28.0	.0	-53.4	.0	.0	.0
4	28.0	.0	-53.4	.0	.0	.0
5	28.0	.0	-53.4	.0	.0	.0
6	28.0	.0	-53.4	.0	.0	.0
7	28.0	.0	-53.4	.0	.0	.0
8	28.0	.0	-53.4	.0	.0	.0
9	46.3	.0	108.3	.0	.0	.0
10	46.3	.0	108.3	.0	.0	.0
11	46.3	.0	108.3	.0	.0	.0
12	46.3	.0	108.3	.0	.0	.0
13	46.3	.0	108.3	.0	.0	.0
14	46.3	.0	108.3	.0	.0	.0
15	46.3	.0	108.3	.0	.0	.0
16	46.3	.0	108.3	.0	.0	.0
17	6.2	.0	11.6	.0	.0	.0
18	6.2	.0	11.6	.0	.0	.0
19	6.2	.0	11.6	.0	.0	.0
20	6.2	.0	11.6	.0	.0	.0
21	6.2	.0	11.6	.0	.0	.0
22	6.2	.0	11.6	.0	.0	.0
23	6.2	.0	11.6	.0	.0	.0
24	6.2	.0	11.6	.0	.0	.0

Algiers East - Reach 2 Ultimate Compression Capacity (Q Condition)  
For Steel Pipe Piles  
Considering Critical Slope Failure Surface = EL -26.0 feet



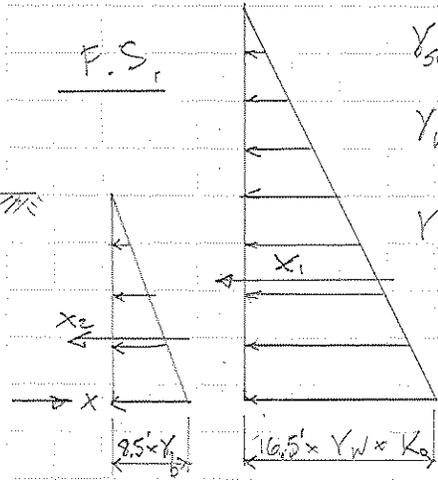
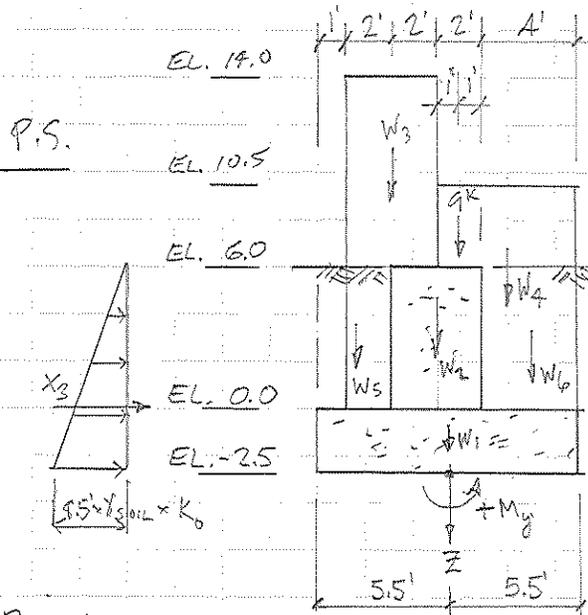
### Algiers East - Reach 2 Ultimate Tensile Capacity (Q Condition) For Steel Pipe Piles Considering Critical Slope Failure Surface = EL -26.0 feet



**GATE MONOLITH**

**SHEETS 1 TO 22 OF 22**

GATE MONOLITH



$Y_{soil} = 0.115 \text{ kecf}$   
 $Y_w = 0.065 \text{ kecf}$   
 $Y_b = Y_{soil} - Y_w = 0.050 \text{ kecf}$   
 $K_b = 0.5$

DEAD LOAD

- (FTG)  $W_1 = 40' \times 2.5' \times 11' \times 0.15 \text{ kecf}$
  - (STEM)  $W_2 = 4' \times 6' \times 30' \times 0.15 \text{ kecf}$
  - (Posts)  $W_3 = 4' \times 4' \times 14' \times 2 \times 0.15 \text{ kecf}$
  - (STEM)  $W_{2A} = 3' \times 2' \times 6' \times 2 \times 0.15 \text{ kecf}$
  - (RET.WL)  $W_4 = 6' \times 10.5' \times 2' \times 2 \times 0.15 \text{ kecf}$
- GATE LOAD

	<u><math>\Sigma E</math></u>		<u><math>\Sigma My</math></u>
$= 165.0^k$	$\times 0$	$= 0^k$	
$= 108.0^k$	$\times +0.5'$	$= +54^k$	
$= 67.2^k$	$\times +2.5'$	$= +168^k$	
$= 10.8^k$	$\times -0.5'$	$= -5.4^k$	
$= 37.8^k$	$\times -2.5'$	$= -94.5$	
$= 9^k$	$\times -0.5'$	$= -4.5$	
<u><math>397.8^k</math></u>		<u><math>+117.6^k</math></u>	

WATER AT TOP OF GATE

$X_1 = 16.5' \times 0.065 \text{ kecf} \times \frac{16.5'}{2}$   
 $X_2 = 8.5' \times 0.05 \text{ kecf} \times \frac{8.5'}{2} \times 0.5$   
 $X_3 = 8.5' \times 0.115 \text{ kecf} \times \frac{8.5'}{2} \times 0.5$

	<u><math>\Sigma X</math></u>		<u><math>\Sigma My</math></u>
$= -8.85^k$	$\times \frac{16.5'}{3}$	$= +48.7^k$	
$= -0.90^k$	$\times \frac{8.5'}{3}$	$= +2.5$	
$= +2.08^k$	$\times \frac{8.5'}{3}$	$= -5.9$	
<u><math>-7.67^k</math></u>		<u><math>+45.3^k</math></u>	

$W_5 = 6' \times 30' \times 3' \times 0.115 \text{ kecf}$   
 $W_6 = 4' \times 6' \times 36' \times 0.05 \text{ kecf}$   
 $WATER = 14' \times 4' \times 36' \times 0.065 \text{ kecf}$

	<u><math>\Sigma E</math></u>		<u><math>\Sigma My</math></u>
$= 20.7^k$	$\times +4'$	$= +82.8^k$	
$= 43.2^k$	$\times -3.5'$	$= -151.2^k$	
$= 131.0^k$	$\times -3.5'$	$= -458.6^k$	

$194.9^k$	$- 527^k$
$+ 397.8^k$	$+ 117.6^k$
<u><math>592.7^k</math></u>	$- 409.8^k$
	$+ 45.3^k$
	<u><math>- 364.1^k</math></u>



By: EAB Date: 5/3/08 Ck: Date:

WATER AT SWE (EL. 11.0)

$X_1 = 13.5' \times 0.065 \text{kecf} \times \frac{13.5'}{2}$	$= -5.92 \text{K/}$	$\times \frac{13.5'}{3}$	$= +20.61 \text{K/}$
$X_2$	$= -0.90$		$= +.25$
$X_3$	$= +2.08$		$= - .59$
	<u><math>-4.74 \text{K/}</math></u>		<u><math>+20.27 \text{K/}</math></u>
	<u><math>\Sigma X</math></u>		<u><math>\Sigma M_y</math></u>
$\text{WATER} = 11' \times 4' \times 36' \times 0.065 \text{kecf}$	$= 103.0 \text{K}$	$\times -3.5'$	$= -360.4 \text{K}$
$W_5$	$20.7 \text{K}$		$+ 82.8$
$W_6$	$43.2 \text{K}$		$-151.2$
	<u><math>166.9 \text{K}</math></u>		<u><math>-428.8 \text{K}</math></u>
	$+397.8 \text{K}$		$+117.6$
	<u><math>564.7 \text{K}</math></u>		<u><math>+23.2</math></u>
			<u><math>-205 \text{K}</math></u>



By: EAB

Date: 5/3/08

CK:

Date:

LOAD CASE 1 - DEAD LOAD (16 2/3% OVERLOAD)

$$X = 0$$

$$Z = 398^k$$

$$M_y = +118^k$$

LOAD CASE 2 - WATER TO TOP OF GATE (50% OVERLOAD)

$$X = -8^k$$

$$Z = 593^k$$

$$M_y = -364^k$$

LOAD CASE 3 - WATER TO SWE (NO OVERLOAD)

$$X = -5^k$$

$$Z = 565^k$$

$$M_y = -288^k$$

## GATEWALL.TXT

10 ALGIERS CANAL (EAST)-  
11 GATE WALL MONOLITH  
20 PROP 29000 724 261 21.4 2 0 ALL  
30 SOIL ES 0.074 LEN 110 0 ALL  
41 PIN ALL  
50 ALLOW H 94 62 363.8 428 644.4 1926 ALL  
61 FOVSTR 1.166 1.166 1  
62 FOVSTR 1.5 1.5 2  
70 BAT 0 8 TO 14  
71 BAT 4 1 TO 7  
90 ANG 0 8 TO 14  
91 ANG 180 1 TO 7  
100 PILE 1 -4.0 -18.0 0  
110 PILE 8 3.0 -18.0 0  
129 ROW Y 7 1 6 AT 6.0  
130 ROW Y 7 8 6 AT 6.0  
170 LOAD 1 0 0 398 0 118 0  
171 LOAD 2 -8 0 593 0 -364 0  
172 LOAD 3 -5 0 565 0 -288 0  
235 FOUT 1 2 3 4 5 6 7 GATEWALL.DOC  
240 PSO 1  
250 PFO ALL



6/22

.00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00  
.00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00 .00000E+00

THIS MATRIX APPLIES TO THE FOLLOWING FILES -

1

\*\*\*\*\*

PILE GEOMETRY AS INPUT AND/OR GENERATED

NUM	X FT	Y FT	Z FT	BATTER	ANGLE	LENGTH FT	FIXITY
1	-4.00	-18.00	.00	4.00	180.00	110.00	P
2	-4.00	-12.00	.00	4.00	180.00	110.00	P
3	-4.00	-6.00	.00	4.00	180.00	110.00	P
4	-4.00	.00	.00	4.00	180.00	110.00	P
5	-4.00	6.00	.00	4.00	180.00	110.00	P
6	-4.00	12.00	.00	4.00	180.00	110.00	P
7	-4.00	18.00	.00	4.00	180.00	110.00	P
8	3.00	-18.00	.00	V	.00	110.00	P
9	3.00	-12.00	.00	V	.00	110.00	P
10	3.00	-6.00	.00	V	.00	110.00	P
11	3.00	.00	.00	V	.00	110.00	P
12	3.00	6.00	.00	V	.00	110.00	P
13	3.00	12.00	.00	V	.00	110.00	P
14	3.00	18.00	.00	V	.00	110.00	P
						-----	
						1540.00	

\*\*\*\*\*

APPLIED LOADS

LOAD CASE	PX K	PY K	PZ K	MX FT-K	MY FT-K	MZ FT-K	OVERSTRESS COM TEN
1	.0	.0	398.0	.0	118.0	.0	1.17 1.17
2	-8.0	.0	593.0	.0	-364.0	.0	1.50 1.50
3	-5.0	.0	565.0	.0	-288.0	.0	

\*\*\*\*\*

ORIGINAL PILE GROUP STIFFNESS MATRIX

.45869E+03	.32724E-04	-.15401E+04	-.72760E-11	-.73923E+05	-.15707E-02
.32724E-04	.95076E+02	-.13464E-03	-.86736E-18	-.64626E-02	-.57046E+03
-.15401E+04	-.13464E-03	.12779E+05	.00000E+00	.60505E+05	.64626E-02
.00000E+00	.86736E-18	.58208E-10	.26499E+09	.18626E-08	.31935E+08
-.73923E+05	-.64626E-02	.60505E+05	.18626E-08	.22809E+08	.31020E+00
-.15707E-02	-.57046E+03	.64626E-02	.31935E+08	.31020E+00	.96825E+07

LOAD CASE 1. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 0.  
 LOAD CASE 2. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 0.  
 LOAD CASE 3. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 0.

\*\*\*\*\*

PILE CAP DISPLACEMENTS

LOAD CASE	DX IN	DY IN	DZ IN	RX RAD	RY RAD	RZ RAD
1	.6132E+00	.4738E-07	.9655E-01	.3927E-11	.1793E-02	-.3258E-10
2	.5560E+00	.5029E-07	.1071E+00	.4168E-11	.1326E-02	-.3458E-10
3	.5918E+00	.5030E-07	.1085E+00	.4169E-11	.1479E-02	-.3459E-10

\*\*\*\*\*

PILE FORCES IN LOCAL GEOMETRY

M1 & M2 NOT AT PILE HEAD FOR PINNED PILES  
 \* INDICATES PILE FAILURE  
 # INDICATES CBF BASED ON MOMENTS DUE TO  
 (F3\*EMIN) FOR CONCRETE PILES  
 B INDICATES BUCKLING CONTROLS

LOAD CASE - 1

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-3.4	.0	26.8	.0	154.0	.0	.24	.13
2	-3.4	.0	26.8	.0	154.0	.0	.24	.13
3	-3.4	.0	26.8	.0	154.0	.0	.24	.13
4	-3.4	.0	26.8	.0	154.0	.0	.24	.13
5	-3.4	.0	26.8	.0	154.0	.0	.24	.13
6	-3.4	.0	26.8	.0	154.0	.0	.24	.13
7	-3.4	.0	26.8	.0	154.0	.0	.24	.13
8	3.2	.0	30.1	.0	-147.8	.0	.27	.14
9	3.2	.0	30.1	.0	-147.8	.0	.27	.14
10	3.2	.0	30.1	.0	-147.8	.0	.27	.14
11	3.2	.0	30.1	.0	-147.8	.0	.27	.14
12	3.2	.0	30.1	.0	-147.8	.0	.27	.14
13	3.2	.0	30.1	.0	-147.8	.0	.27	.14
14	3.2	.0	30.1	.0	-147.8	.0	.27	.14

LOAD CASE - 2

PILE	F1	F2	F3	M1	M2	M3	ALF	CBF
------	----	----	----	----	----	----	-----	-----

	K	K	K	IN-K	IN-K	IN-K		
1	-3.1	.0	29.0	.0	140.0	.0	.21	.10
2	-3.1	.0	29.0	.0	140.0	.0	.21	.10
3	-3.1	.0	29.0	.0	140.0	.0	.21	.10
4	-3.1	.0	29.0	.0	140.0	.0	.21	.10
5	-3.1	.0	29.0	.0	140.0	.0	.21	.10
6	-3.1	.0	29.0	.0	140.0	.0	.21	.10
7	-3.1	.0	29.0	.0	140.0	.0	.21	.10
8	2.9	.0	55.8	.0	-134.0	.0	.40	.15
9	2.9	.0	55.8	.0	-134.0	.0	.40	.15
10	2.9	.0	55.8	.0	-134.0	.0	.40	.15
11	2.9	.0	55.8	.0	-134.0	.0	.40	.15
12	2.9	.0	55.8	.0	-134.0	.0	.40	.15
13	2.9	.0	55.8	.0	-134.0	.0	.40	.15
14	2.9	.0	55.8	.0	-134.0	.0	.40	.15

LOAD CASE - 3

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-3.3	.0	28.8	.0	148.8	.0	.31	.16
2	-3.3	.0	28.8	.0	148.8	.0	.31	.16
3	-3.3	.0	28.8	.0	148.8	.0	.31	.16
4	-3.3	.0	28.8	.0	148.8	.0	.31	.16
5	-3.3	.0	28.8	.0	148.8	.0	.31	.16
6	-3.3	.0	28.8	.0	148.8	.0	.31	.16
7	-3.3	.0	28.8	.0	148.8	.0	.31	.16
8	3.1	.0	52.0	.0	-142.6	.0	.55	.22
9	3.1	.0	52.0	.0	-142.6	.0	.55	.22
10	3.1	.0	52.0	.0	-142.6	.0	.55	.22
11	3.1	.0	52.0	.0	-142.6	.0	.55	.22
12	3.1	.0	52.0	.0	-142.6	.0	.55	.22
13	3.1	.0	52.0	.0	-142.6	.0	.55	.22
14	3.1	.0	52.0	.0	-142.6	.0	.55	.22

\*\*\*\*\*

## PILE FORCES IN GLOBAL GEOMETRY

LOAD CASE - 1

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	-3.2	.0	26.8	.0	.0	.0
2	-3.2	.0	26.8	.0	.0	.0
3	-3.2	.0	26.8	.0	.0	.0
4	-3.2	.0	26.8	.0	.0	.0
5	-3.2	.0	26.8	.0	.0	.0
6	-3.2	.0	26.8	.0	.0	.0
7	-3.2	.0	26.8	.0	.0	.0

9/12/22

8	3.2	.0	30.1	.0	.0	.0
9	3.2	.0	30.1	.0	.0	.0
10	3.2	.0	30.1	.0	.0	.0
11	3.2	.0	30.1	.0	.0	.0
12	3.2	.0	30.1	.0	.0	.0
13	3.2	.0	30.1	.0	.0	.0
14	3.2	.0	30.1	.0	.0	.0

LOAD CASE - 2

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	-4.1	.0	28.9	.0	.0	.0
2	-4.1	.0	28.9	.0	.0	.0
3	-4.1	.0	28.9	.0	.0	.0
4	-4.1	.0	28.9	.0	.0	.0
5	-4.1	.0	28.9	.0	.0	.0
6	-4.1	.0	28.9	.0	.0	.0
7	-4.1	.0	28.9	.0	.0	.0
8	2.9	.0	55.8	.0	.0	.0
9	2.9	.0	55.8	.0	.0	.0
10	2.9	.0	55.8	.0	.0	.0
11	2.9	.0	55.8	.0	.0	.0
12	2.9	.0	55.8	.0	.0	.0
13	2.9	.0	55.8	.0	.0	.0
14	2.9	.0	55.8	.0	.0	.0

LOAD CASE - 3

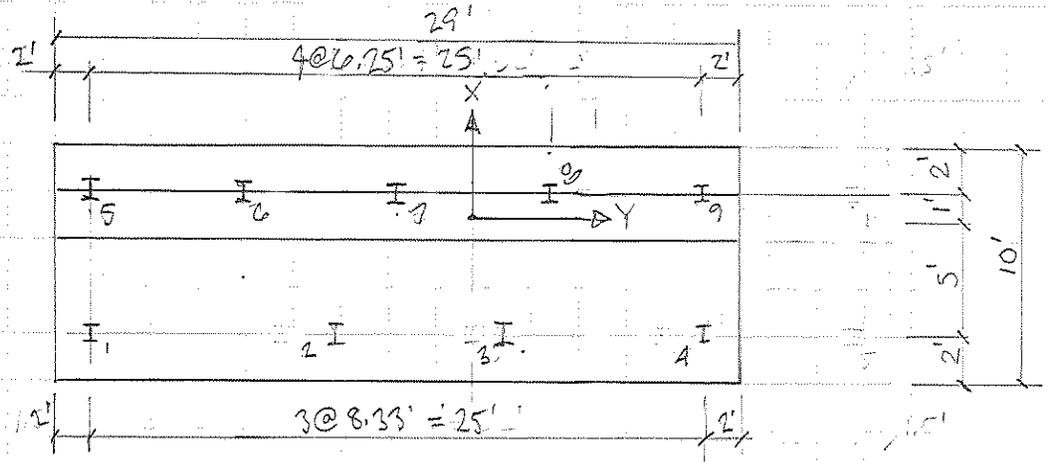
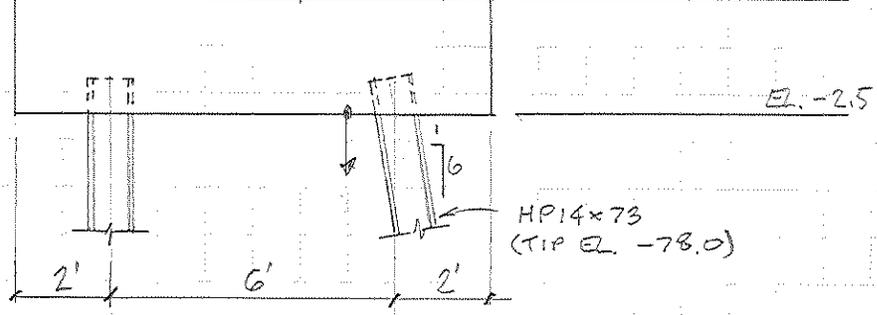
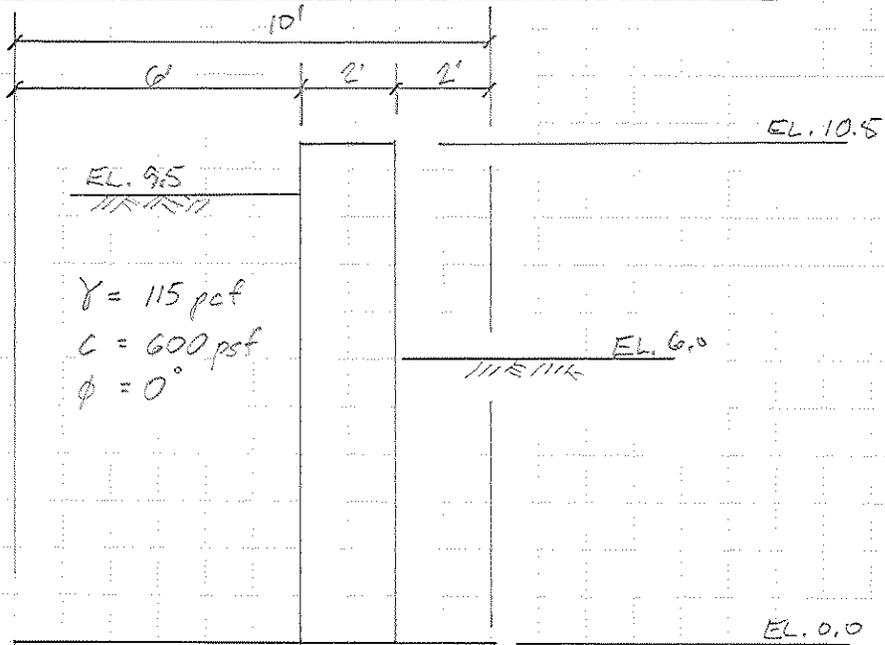
PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	-3.8	.0	28.7	.0	.0	.0
2	-3.8	.0	28.7	.0	.0	.0
3	-3.8	.0	28.7	.0	.0	.0
4	-3.8	.0	28.7	.0	.0	.0
5	-3.8	.0	28.7	.0	.0	.0
6	-3.8	.0	28.7	.0	.0	.0
7	-3.8	.0	28.7	.0	.0	.0
8	3.1	.0	52.0	.0	.0	.0
9	3.1	.0	52.0	.0	.0	.0
10	3.1	.0	52.0	.0	.0	.0
11	3.1	.0	52.0	.0	.0	.0
12	3.1	.0	52.0	.0	.0	.0
13	3.1	.0	52.0	.0	.0	.0
14	3.1	.0	52.0	.0	.0	.0

By: EAG

Date: 4/23/08 Ck:

Date:

RETAINING WALL MONOLITH

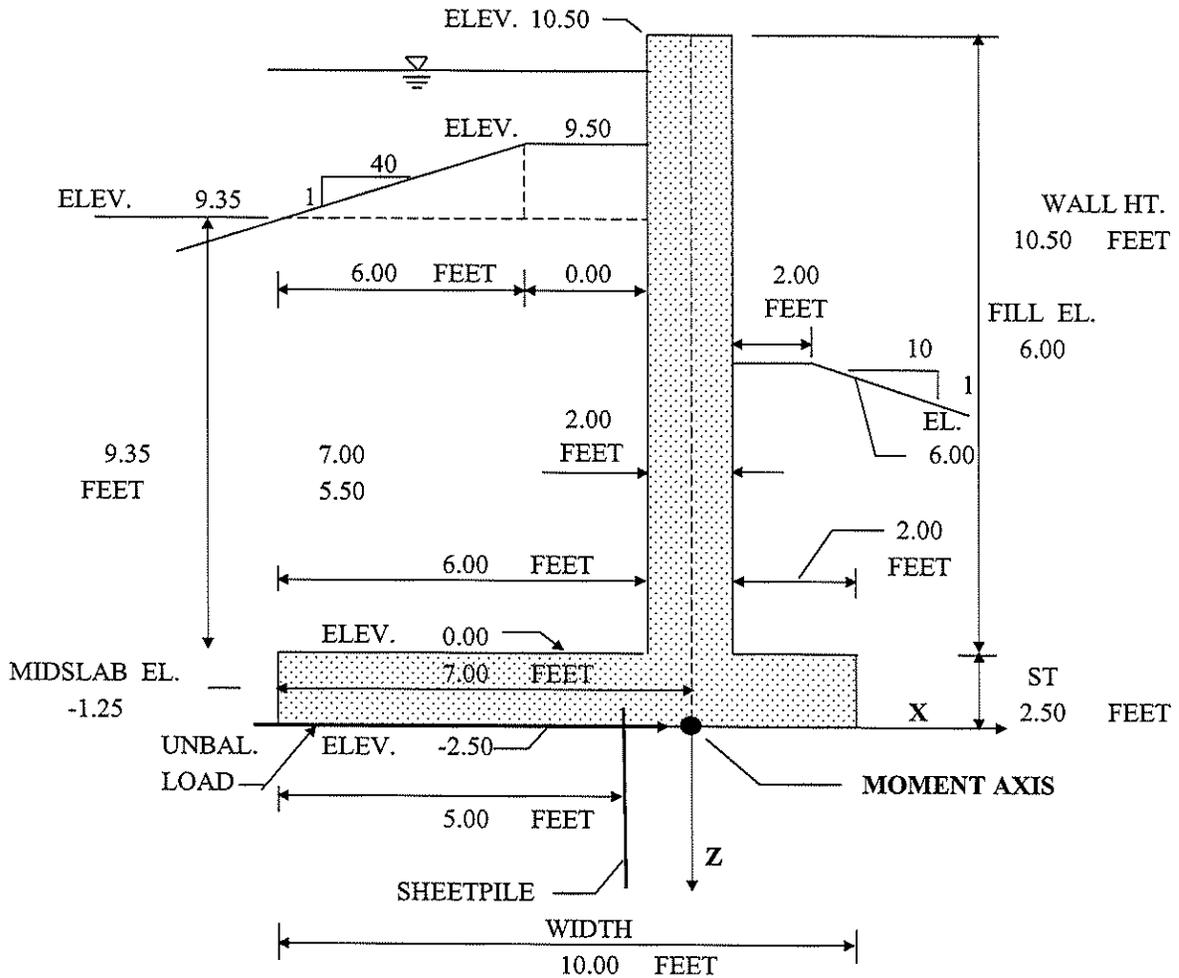


**ALGIERS CANAL (EAST)  
RETAINING WALL**

DATE: 5/5/2008

BY: EAB      CHKD:

CONCRETE STRENGTH	4,000	UNBALANCED SOILS LOADING	
REINFORCING STRENGTH	60,000	0.0	K / FT. STILLWATER
WALL INTERVAL	1	0.0	K / FT. TOP OF WALL
SLAB INTERVAL	1.33	IMPACT	
MONOLITH LENGTH	29	0	K
BACKFILL WEIGHT	115 PCF		
K <sub>o</sub>	0.5		

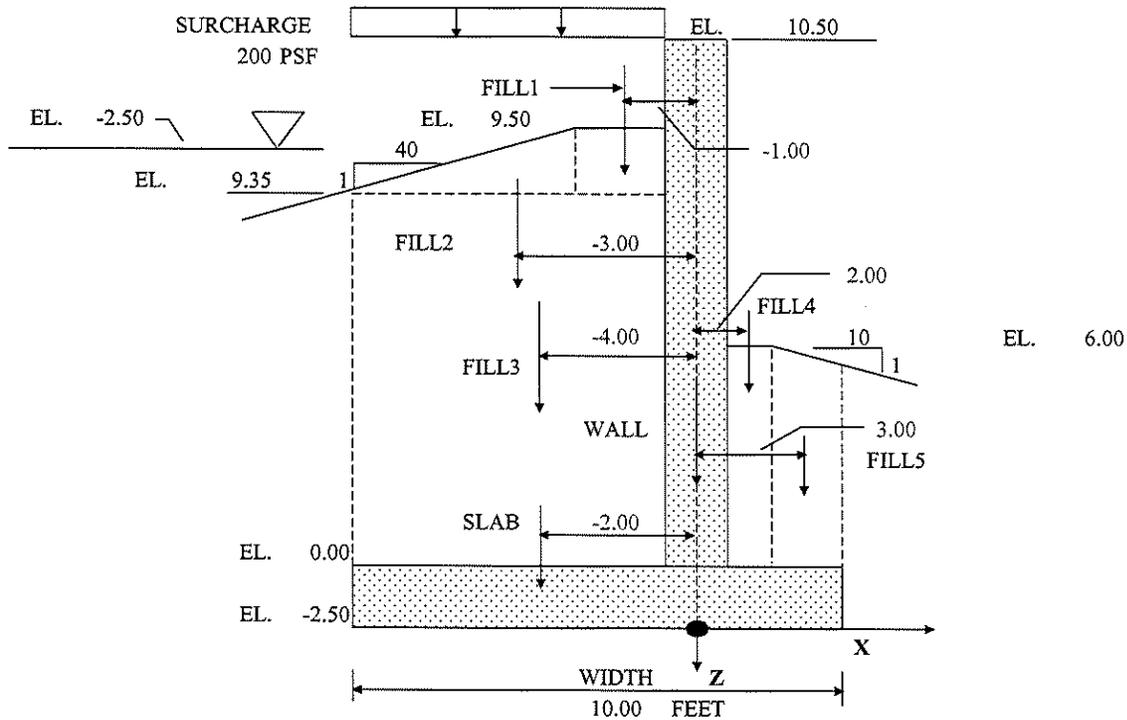


**DESIGN CRITERIA**

- EM1110-2-2104 "STRENGTH DESIGN FOR REINFORCED HYDRAULIC STRUCTURES"
- CONCRETE:**
- HYDRAULIC FACTOR (H<sub>f</sub>) = 1.3
  - DL & LL LOAD FACTORS = 1.7
  - MAX. REINFORCING = 0.375 RHO<sub>bal</sub>
  - REINFORCING PER EQS. D-3 & D-4, AXIAL LOADS IGNORED
  - ALLOWABLE SHEAR PER ACI 318, EQ. 11-3
  - CLEAR COVER:
    - 4 INCHES IN WALLS & TOP OF SLAB
    - 9 INCHES IN BOTTOM OF SLAB TO ALLOW FOR PILES

**ALGIERS CANAL (EAST)  
RETAINING WALL**

FLOODSIDE WATER ELEV.           -2.50  
 UPLIFT - PROT. SIDE               -2.50  
 ALLOWABLE OVERSTRESS         16.66 %



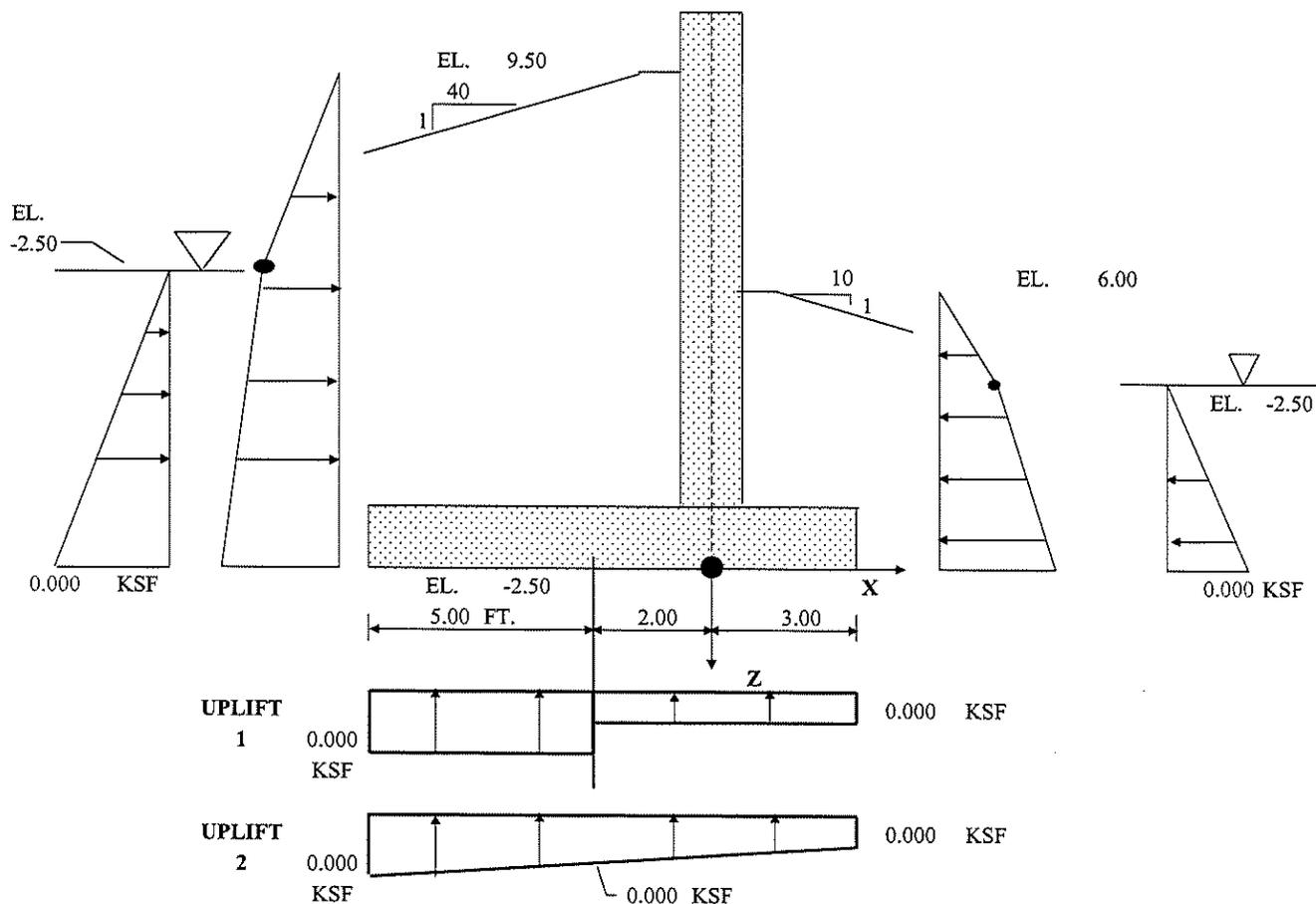
**FLOODWALL APPLIED GRAVITY LOADING - CASE 1**

ITEM	FORCE Z (WEIGHT)	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
CONCRETE SLAB	3.75	-2.00	0.00	7.5	0
CONCRETE WALL	3.15	0.00	0.00	0.0	0
FLOODSIDE FILL1	0.00	-1.00	0.00	0.0	0
FLOODSIDE FILL2	0.05	-3.00	0.00	0.2	0
FLOODSIDE FILL3	6.45	-4.00	0.00	25.8	0
PROTECTED SIDE FILL4	1.38	2.00	0.00	-2.8	0
PROTECTED SIDE FILL5	0.00	3.00	0.00	0.0	0
FLOODSIDE WATER	0.00	-22.80	0.00	0.0	0
FLOODSIDE WATER	0.00	0.00	0.00	0.0	0

<b>TOTALS</b>	<b>14.78</b>	<b>-2.08</b>	<b>30.70</b>	<b>0</b>
<b>CONCRETE</b>	<b>6.90</b>	<b>-1.09</b>	<b>7.50</b>	<b>0</b>
<b>FLOODSIDE FILL 1-3</b>	<b>6.50</b>	<b>-3.99</b>	<b>25.96</b>	<b>0</b>
<b>PROT. SIDE FILL 4-5</b>	<b>1.38</b>	<b>2.00</b>	<b>-2.76</b>	<b>0</b>
<b>FLOODSIDE WATER</b>	<b>0.00</b>	<b>-</b>	<b>0.00</b>	<b>0</b>
	KIPS		FT.-K	FT.-K

1  
**ALGIERS CANAL (EAST)**  
**RETAINING WALL**

13/22

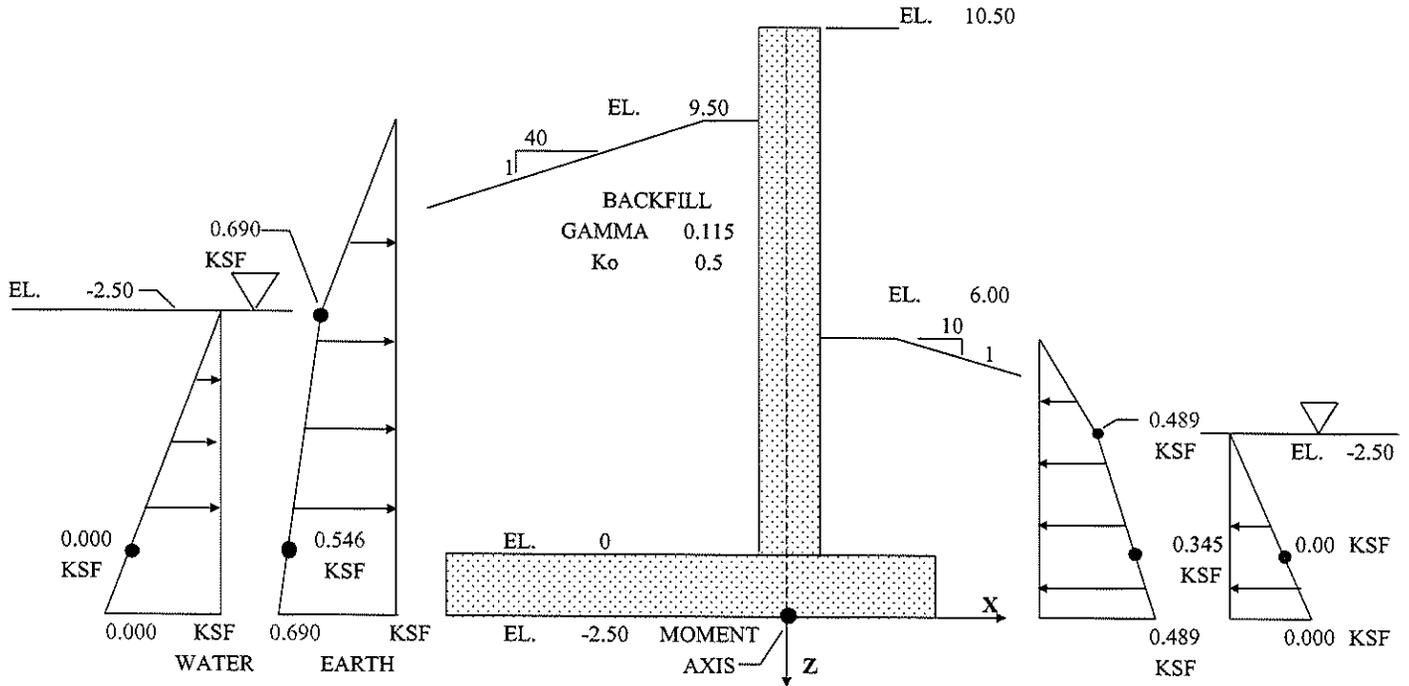


ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 1	5.00	0.00	0.00	-4.50	0.00	0	0
<b>PROTECTED SIDE:</b>							
UPLIFT 1	5.00	0.00	0.00	0.50	0.00	0	0
<b>TOTALS</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0</b>
<b>FLD.SIDE</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0</b>
<b>PROT. SIDE</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0</b>
			<b>KIPS</b>			<b>FT.-K</b>	<b>FT.-K</b>

ITEM	WIDTH	PRESS	FORCE Z	X CENT. FEET	Y CENT. FEET	Myy FT.-K	Mzz FT.-K
<b>FLOODSIDE:</b>							
UPLIFT 2 (UNIF)	5.00	0.000	0.00	-4.50	0.00	0.00	0.00
UPLIFT 2 (TRI)	5.00	0.000	0.00	-5.33	0.00	0.00	0.00
<b>PROTECTED SIDE:</b>							
UPLIFT 2 (UNIF)	5.00	0.000	0.00	0.50	0.00	0.00	0.00
UPLIFT 2 (TRI)	5.00	0.000	0.00	-0.33	0.00	0.00	0.00
<b>TOTALS</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0.00</b>
<b>FLOOD SIDE</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0.00</b>
<b>PROT. SIDE</b>			<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0.00</b>
			<b>KIPS</b>			<b>FT.-K</b>	<b>FT.-K</b>

ALGIERS CANAL (EAST)  
RETAINING WALL

14/22



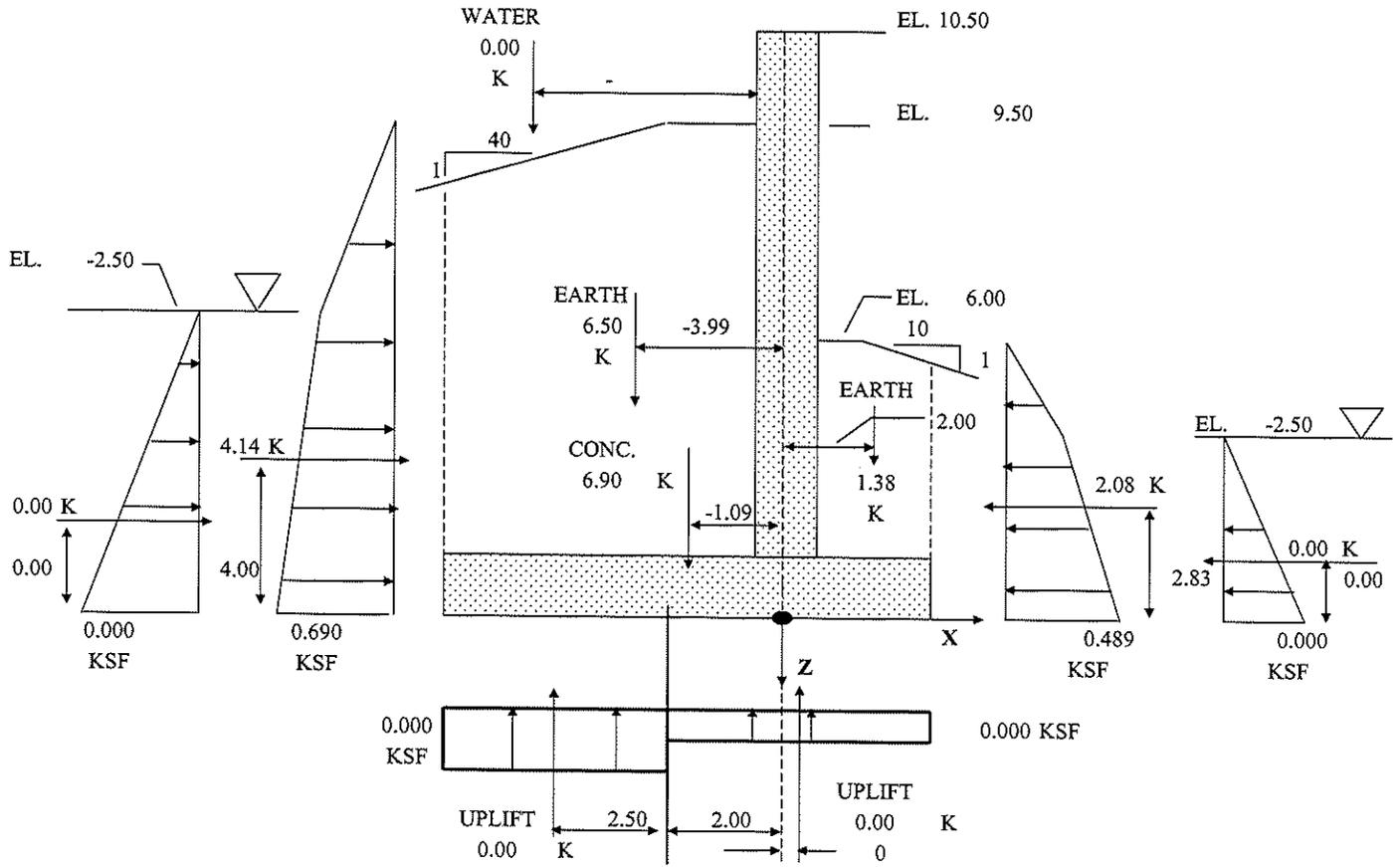
FLOODWALL HORIZONTAL LOADING - CASE 1

ITEM	HEIGHT	PRESS	FORCE X		Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
<b>FLOODSIDE:</b>								
EARTH 1	12.00	0.690	4.14	k/ft	0.00	-4.00	0	-16.6
EARTH 2	0.00	0.690	0.00	k/ft	0.00	0.00	0	0.0
EARTH 3	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
GRND WATER	0.00	0.000	0.00	k/ft	0.00	0.00	0	0.0
<b>PROTECTED:</b>								
EARTH 4	8.50	0.489	-2.08	k/ft	0.00	-2.83	0	5.9
EARTH 5	0.00	0.489	0.00	k/ft	0.00	0.00	0	0.0
EARTH 6	0.00	0.489	0.0	k/ft	0.00	0.00	0	0.0
GRND WATER	0.00	0.000	0.0	k/ft	0.00	0.00	0	0.0

	FORCE X	Y CENT. FEET	Z CENT. FEET	Mzz FT-K/FT	Myy FT-K/FT
FLOODSIDE EARTH FORCE	4.14	0.00	-4.00		-16.6
FLOODSIDE WATER FORCE	0.00	0.00	0		0.0
TOTAL FLOODSIDE FORCE	4.14 k/ft	0.00	-4.00	0.0	-16.6
PROT. SIDE EARTH FORCE	-2.08	0.00	-2.83		5.9
PROT. SIDE WATER FORCE	0.00	0.00	0		0.0
TOTAL PROT. SIDE FORCE	-2.08 k/ft	0.00	-2.83	0.0	5.9
TOTAL NET HORIZ. FORCE	2.06 k/ft	0.00	-5.17	0.0	-10.7

ALGIERS CANAL (EAST)  
RETAINING WALL

15/22



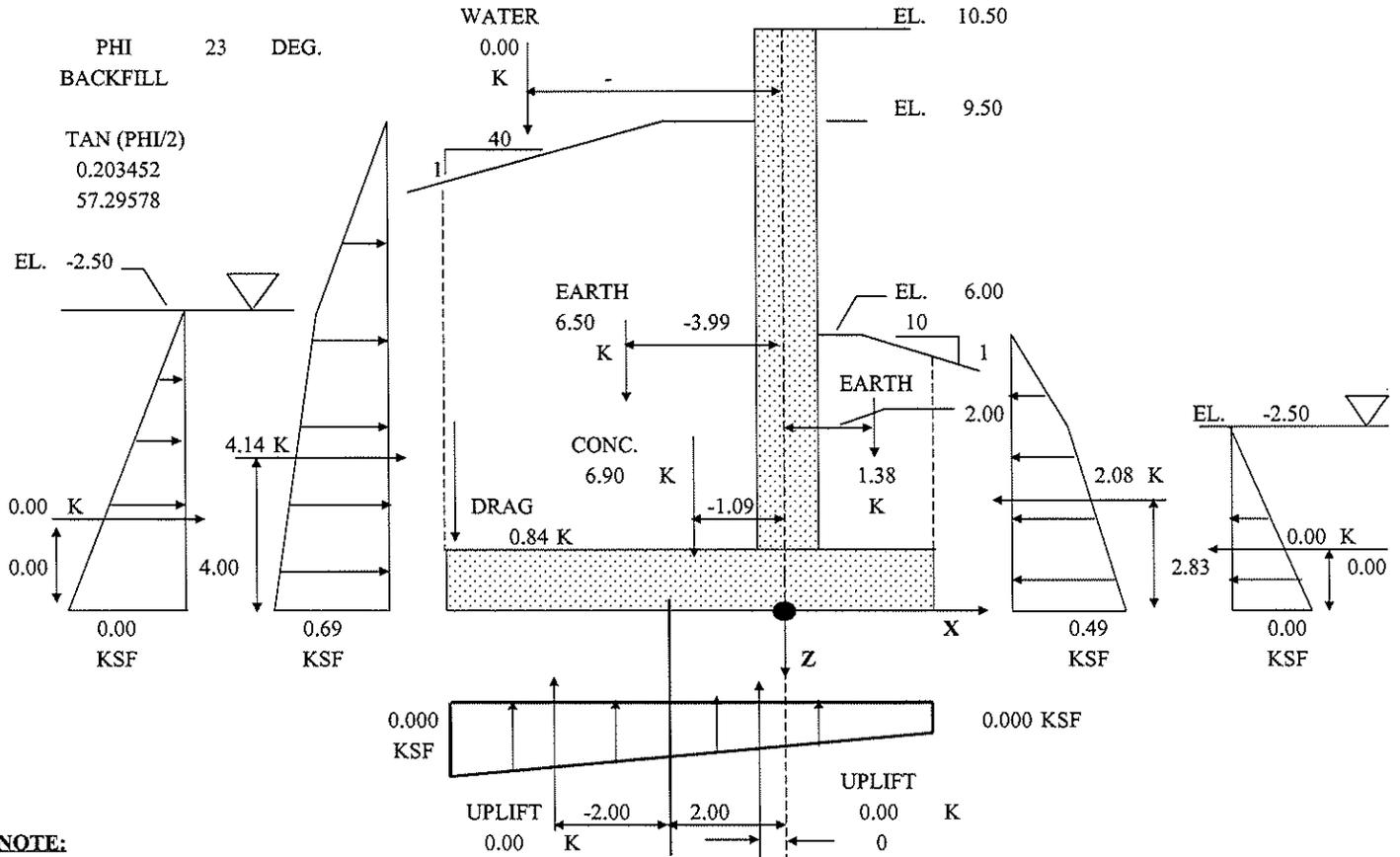
LOADING SUMMARY - CASE 1 WITH MINIMUM UPLIFT

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	6.9	k/ft	-1.09	0.00	8	0
FLDSIDE FILL	0.0	0.0	6.5	k/ft	-3.99	0.00	26	0
PROTSIDE FILL	0.0	0.0	1.4	k/ft	2.00	0.00	-3	0
F. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
P. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
F. S. EARTH Pr.	4.1	0.0	0.0	k/ft	-	-4.00	-16.56	0
P. S. EARTH Pr.	-2.1	0.0	0.0	k/ft	-	-2.83	6	0
F. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0
P. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0

TOTALS	X	Y	Z		Mxx	Myy	Mzz
	2.1	0.0	14.8		0	20	0
MONO. TOTAL	59.8	0.0	428.7		0	581	0

ALGIERS CANAL (EAST)  
RETAINING WALL

10/22



NOTE:  
DRAG LOAD = (EARTH P)\*TAN(PHI/2)

LOADING SUMMARY - CASE 1 WITH DRAG/SURCHARGE LOAD

ITEM	FORCE X	FORCE Y	FORCE Z		X CENT. FEET	Z CENT. FEET	Myy FT-K/FT	Mzz FT-K/FT
CONCRETE	0.0	0.0	6.9	k/ft	-1.09	0.00	8	0
FLDSIDE FILL	0.0	0.0	6.5	k/ft	-3.99	0.00	26	0
PROTSIDE FILL	0.0	0.0	1.4	k/ft	2.00	0.00	-3	0
DRAG LOAD	0.0	0.0	0.8	k/ft	-7.00	0.00	6	0
SURCHARGE	0.0	0.0	1.2	k/ft	-4.00	0.00	5	0
F. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
P. SIDE UPLIFT	0.0	0.0	0.0	k/ft	0	0.00	0	0
F. S. EARTH Pr.	4.1	0.0	0.0	k/ft	-	-4.00	-16.6	0
P. S. EARTH Pr.	-2.1	0.0	0.0	k/ft	-	-2.83	6	0
F. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0
P. S. WATER Pr.	0.0	0.0	0.0	k/ft	-	0	0	0

-0.97

	X	Y	Z	Mxx	Myy	Mzz
TOTALS	2.1	0.0	16.8	0	31	0
MONO. TOTAL	60	0.0	488	0	891	0
VERTICAL			488			
HORIZ			60	-2.46		-5.17



**ALGIERS CANAL (EAST)  
RETAINING WALL**

LOAD CASE	LOAD CONDITION	FOUNDATION LOADS						
		X	Y	Z	Mxx	Myy	Mzz	
1	CONSTRUCTION / NORMAL CONDITION	60	0	429	0	581	0	
2	CONST. W/ DRAG & SURCHARGE LDS	60	0	488	0	891	0	
2a	WATER @ SWE(EL.11.0) MINIMUM UPLIFT	60	0	429	0	581	0	
2b	WATER @ SWE(EL.11.0) MAXIMUM UPLIFT	60	0	429	0	581	0	
3	WATER @ SWE(EL.11.0) MIN. UPLIFT, UNBALANCED LOADS	60	0	429	0	581	0	
Not Used	WATER @ SWE(EL.11.0) MAX. UPLIFT, UNBALANCED LOADS	60	0	429	0	581	0	
3a	WATER @ SWE(EL.11.0) MIN. UPLIFT, UNBAL. & WAVE LOADS	63	0	429	0	538	0	
3b	WATER @ SWE(EL.11.0) MAX. UPLIFT, UNBAL. & WAVE LOADS	63	0	429	0	538	0	
4a	WATER @ SWE(EL.11.0) MIN. UL - UNBAL. LD., WAVE & IMPACT	63	0	429	0	538	0	
4b	WATER @ SWE(EL.11.0) MAX. UL - UNBAL. LD., WAVE & IMPACT	63	0	429	0	538	0	
4	WATER @ TOP OF WALL (EL. 14.0) MINIMUM UPLIFT	208	0	323	0	-475	0	
Not Used	WATER @ TOP OF WALL (EL. 14.0) MAXIMUM UPLIFT	208	0	323	0	-377	0	
4	WATER @ TOP OF WALL (EL. 14.0) MIN. UPLIFT, UNBALANCED LOADS	208	0	323	0	-475	0	
DesCk - B	WATER @ TOP OF WALL (EL. 14.0) MAX. UPLIFT, UNBALANCED LOADS	208	0	323	0	-377	0	
5	WATER @ TOP OF WALL (EL. 14.0) MIN. UPLIFT - UNBAL. LD. & IMPACT	208	0	323	0	-475	0	
Not Used	WATER @ TOP OF WALL (EL. 14.0) MAX. UPLIFT - UNBAL. LD. & IMPACT	208	0	323	0	-475	0	

## RETWALL.TXT

10 ALGIERS CANAL (EAST)-  
11 RETAINING WALL MONOLITH  
20 PROP 29000 724 261 21.4 2 0 ALL  
30 SOIL ES 0.074 LEN 110 0 ALL  
41 PIN ALL  
50 ALLOW H 94 62 363.8 428 644.4 1926 ALL  
61 FOVSTR 1.166 1.166 1 2  
70 BAT 6 5 TO 9  
71 BAT 0 1 TO 4  
90 ANG 0 5 TO 9  
91 ANG 180 1 TO 4  
100 PILE 1 -5.0 -12.5 0  
110 PILE 5 1.0 -12.5 0  
129 ROW Y 4 1 3 AT 8.3333  
130 ROW Y 5 5 4 AT 6.25  
170 LOAD 1 60 0 429 0 581 0  
171 LOAD 2 60 0 488 0 891 0  
235 FOUT 1 2 3 4 5 6 7 RETWALL.DOC  
240 PSO 1  
250 PFO ALL



20/22

.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00

THIS MATRIX APPLIES TO THE FOLLOWING PILES -

1

\*\*\*\*\*

FILE GEOMETRY AS INPUT AND/OR GENERATED

NUM	X FT	Y FT	Z FT	BATTER	ANGLE	LENGTH FT	FIXITY
1	-5.00	-12.50	.00	V	180.00	110.00	P
2	-5.00	-4.17	.00	V	180.00	110.00	P
3	-5.00	4.17	.00	V	180.00	110.00	P
4	-5.00	12.50	.00	V	180.00	110.00	P
5	1.00	-12.50	.00	6.00	.00	110.00	P
6	1.00	-6.25	.00	6.00	.00	110.00	P
7	1.00	.00	.00	6.00	.00	110.00	P
8	1.00	6.25	.00	6.00	.00	110.00	P
9	1.00	12.50	.00	6.00	.00	110.00	P
						-----	
						990.00	

\*\*\*\*\*

APPLIED LOADS

LOAD CASE	PX K	PY K	PZ K	MX FT-K	MY FT-K	MZ FT-K	OVERSTRESS COM	TEN
1	60.0	.0	429.0	.0	581.0	.0	1.17	1.17
2	60.0	.0	488.0	.0	891.0	.0	1.17	1.17

\*\*\*\*\*

ORIGINAL PILE GROUP STIFFNESS MATRIX

.17372E+03	-.53465E-06	.75814E+03	.36380E-11	-.90977E+04	.12661E-01
-.53465E-06	.61120E+02	.00000E+00	.00000E+00	.00000E+00	-.12224E+04
.75814E+03	.00000E+00	.83364E+04	-.22567E+01	.17077E+06	.00000E+00
.00000E+00	.00000E+00	-.22567E+01	.98485E+08	-.13540E+03	-.85291E+07
-.90977E+04	.00000E+00	.17077E+06	-.13540E+03	.14199E+08	.00000E+00
.12661E-01	-.12224E+04	.00000E+00	-.85291E+07	.00000E+00	.20833E+07

LOAD CASE 1. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 0.

LOAD CASE 2. NUMBER OF FAILURES = 0. NUMBER OF PILES IN TENSION = 0.

\*\*\*\*\*

## PILE CAP DISPLACEMENTS

LOAD CASE	DX IN	DY IN	DZ IN	RX RAD	RY RAD	RZ RAD
1	.3495E+00	.6859E-07	.6678E-02	.1309E-08	.6346E-03	.3276E-08
2	.3581E+00	.1154E-06	.7758E-02	.1886E-08	.8891E-03	.5614E-08

\*\*\*\*\*

## PILE FORCES IN LOCAL GEOMETRY

M1 & M2 NOT AT PILE HEAD FOR PINNED PILES  
 \* INDICATES PILE FAILURE  
 # INDICATES CBF BASED ON MOMENTS DUE TO  
 (F3\*EMIN) FOR CONCRETE PILES  
 B INDICATES BUCKLING CONTROLS

LOAD CASE - 1

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-1.8	.0	42.1	.0	84.2	.0	.38	.14
2	-1.8	.0	42.1	.0	84.2	.0	.38	.14
3	-1.8	.0	42.1	.0	84.2	.0	.38	.14
4	-1.8	.0	42.1	.0	84.2	.0	.38	.14
5	1.8	.0	53.2	.0	-83.1	.0	.48	.16
6	1.8	.0	53.2	.0	-83.1	.0	.48	.16
7	1.8	.0	53.2	.0	-83.1	.0	.48	.16
8	1.8	.0	53.2	.0	-83.1	.0	.48	.16
9	1.8	.0	53.2	.0	-83.1	.0	.48	.16

LOAD CASE - 2

PILE	F1 K	F2 K	F3 K	M1 IN-K	M2 IN-K	M3 IN-K	ALF	CBF
1	-1.9	.0	57.5	.0	86.3	.0	.52	.17
2	-1.9	.0	57.5	.0	86.3	.0	.52	.17
3	-1.9	.0	57.5	.0	86.3	.0	.52	.17
4	-1.9	.0	57.5	.0	86.3	.0	.52	.17
5	1.9	.0	52.7	.0	-85.2	.0	.48	.16
6	1.9	.0	52.7	.0	-85.2	.0	.48	.16
7	1.9	.0	52.7	.0	-85.2	.0	.48	.16
8	1.9	.0	52.7	.0	-85.2	.0	.48	.16
9	1.9	.0	52.7	.0	-85.2	.0	.48	.16

\*\*\*\*\*

## PILE FORCES IN GLOBAL GEOMETRY

LOAD CASE - 1

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	1.8	.0	42.1	.0	.0	.0
2	1.8	.0	42.1	.0	.0	.0
3	1.8	.0	42.1	.0	.0	.0
4	1.8	.0	42.1	.0	.0	.0
5	10.5	.0	52.1	.0	.0	.0
6	10.5	.0	52.1	.0	.0	.0
7	10.5	.0	52.1	.0	.0	.0
8	10.5	.0	52.1	.0	.0	.0
9	10.5	.0	52.1	.0	.0	.0

LOAD CASE - 2

PILE	PX K	PY K	PZ K	MX IN-K	MY IN-K	MZ IN-K
1	1.9	.0	57.5	.0	.0	.0
2	1.9	.0	57.5	.0	.0	.0
3	1.9	.0	57.5	.0	.0	.0
4	1.9	.0	57.5	.0	.0	.0
5	10.5	.0	51.6	.0	.0	.0
6	10.5	.0	51.6	.0	.0	.0
7	10.5	.0	51.6	.0	.0	.0
8	10.5	.0	51.6	.0	.0	.0
9	10.5	.0	51.6	.0	.0	.0

**30' SWING GATE**

**SHEETS 1 TO 4 OF 4**

By: EAB Date: 4/21/08 Ck: Date:

### 30' SWING GATE

REF: EM 1110-2-2705, APPENIX C, AISC 1989 EDITION

#### LOAD CASES:

I1: DESIGN FLOOR LOADING: Gate closed, water @ SWE.  
Design stresses  $\leq \frac{5}{6} \times$  AISC Allowables

I2: MAXIMUM FLOOR LOADING: Gate closed, water @ top of gate.  
Design stresses  $\leq 1.11 \times$  AISC Allowables

I3: EARTHQUAKE LOADING: N/A to gate

I4: SHORT-DURATION LOADING: Gate is open, closed or in-between, subjected to construction and/or wind loads.  
Design stresses  $\leq 1.11 \times$  AISC Allowables

I5: GATE SWINGING: Gate in any position, dead load only.  
Design stresses  $\leq \frac{5}{6} \times$  AISC Allowables

CASES I1 and I3 are not significant. Cases I4 and I5 are applicable for designing latching devices and hinges, respectively. Since the report is for "feasibility level" purposes, only I2 will be investigated, since hinges and latches are details to be designed during P/S stage.

#### DESIGN CRITERIA:

STEEL - A36,  $F_y = 36$  ksi

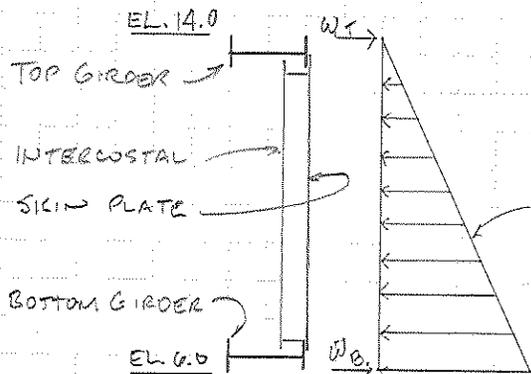
TOP OF GATE ELEVATION - 14.0

TOP OF SILL ELEVATION - 6.0

WIDTH OF GATE OPENING - 30' (DESIGN SPAN LENGTH = 32')

By: EAG Date: 4/21/08 Ck:

Date:



$$W_T = \frac{1}{3} \times \frac{1}{2} \times 0.065 \times 32^2 = 0.69 \text{ k}$$

$$M_{MAX} = 2.13 \text{ k} \cdot \text{ft} @ \text{EL. 9.60}$$

$$W_B = \frac{2}{3} \times \frac{1}{2} \times 0.065 \times 32^2 = 1.39 \text{ k}$$

TOP GIRDER:  $M = \frac{1}{3} \times 0.69 \text{ k} \times 32^2 = 88.3 \text{ k}$

ALLOWABLE FLEXURAL STRESS ( $F_y$ ) =  $1.1 \times 0.66 F_y = 1.1 \times 0.66 \times 36 = 26.1 \text{ ksi}$

REQ'D SECTION MODULUS ( $S_x$ ) =  $\frac{M}{F_y} = \frac{88.3 \text{ k} \times 12 \text{ in}}{26.1 \text{ ksi}} = 40.6 \text{ in}^3$

TRY W16x31 ( $S = 47.2 \text{ in}^3$ ):  $\frac{b_f}{2t_f} = \frac{5.525 \text{ in}}{2 \times 0.44 \text{ in}} = 6.3 < \frac{65}{\sqrt{F_y}} = \frac{65}{\sqrt{36}} = 10.83$

$\frac{d}{t_w} = \frac{15.83 \text{ in}}{0.275 \text{ in}} = 57.7 < \frac{640}{\sqrt{F_y}} = \frac{640}{6} = 106.7$

∴ SECTION IS COMPACT

SELECT W16x31

BOTTOM GIRDER:  $M = \frac{1}{3} \times 1.39 \times 32^2 = 177.9 \text{ k}$

REQ'D  $S = \frac{177.9 \times 12}{26.1 \text{ ksi}} = 81.8 \text{ in}^3$

TRY W16x57 ( $S = 92.2 \text{ in}^3$ ):  $\frac{b_f}{2t_f} = \frac{7.12 \text{ in}}{2 \times 0.715 \text{ in}} = 5.0 < 10.83 \text{ OK}$

$\frac{d}{t_w} = \frac{16.43 \text{ in}}{0.43 \text{ in}} = 38.2 < 106.7 \text{ OK}$

SELECT W16x57

SKIN PLATE: ASSUME INTERCOSTALS ARE SPACED AT  
2' O.C.

$$p = 7.5' \times 0.065 \text{ kcf} = 0.4875 \text{ ksf} = 0.00339 \text{ ksi}$$

$$M = \frac{0.00339 \text{ k/ft}^2 \times (2' \times 12'/1)^2}{12} = 0.1625 \text{ k-ft}$$

$$F_b = \frac{5}{6} (0.75 F_y) = 22.5 \text{ ksi}$$

$$t_{\min} (\text{STRESS}) = \sqrt{\frac{6M}{F_b}} = \sqrt{\frac{6 \times 0.1625}{22.5}} = 0.208''$$

$$t_{\min} (\text{DEFL}) = \sqrt[4]{\frac{PL^4}{12BE}} = \sqrt[4]{\frac{0.00339 \times 24^4}{12.3 \times 29 \times 10^3}} = 0.235'' (\text{GOVERNS})$$

USE $t = \frac{1}{4}''$
-------------------------

INTERCOSTALS:

$$\text{DESIGN MOMENT (M)} = 2' \times 2.13 \text{ k/ft} = 4.26 \text{ k-ft}$$

$$F_b = \frac{5}{6} (0.6 F_y) = 13 \text{ ksi}$$

$$S (\text{REQ'D}) = \frac{4.26 \text{ k-ft} \times 12 \text{ in/ft}}{13 \text{ ksi}} = 2.84 \text{ in}^3$$

SELECT WT 1 x 11 (S = 2.91 in <sup>3</sup> )
--

By: EAB Date: 4/24/68 Ck: Date:

STEEL SWING GATE

ESTIMATE OF DEAD LOAD:

TOP GIRDER - W16x31 - (28' + 2 × 1.5833' + 1.0) × 31 #/1	=	997.2 #
BOTT. GIRDER - W16x57 - (do) × 57 #/1	=	1833.5
INTERCOSTALS - WT 7x11 - 15 × 27' × 11 #/1	=	1270.5
SKIN PLATE (1/4") - (28 + 2 × 1.5833') × 7.7' × 10.2 psf	=	2447.8
SIDE PLATE (1/4") - 2 × 7.7 × 4.25 #/1	=	65.5
END PLATE (1/4") - 2 × 7.7 × (10.2 + 3.4) #/1	=	209.4
CHANNEL - C12x25 - $\sqrt{28^2 + 7.7^2} \times 25$ #/1	=	726.0
ANGLE - L3x3x3/8 - 28' × 7.2 #/1	=	201.6
		7,751.8 #
MISCELLANEOUS (10%)	=	775.2
TOTAL	=	8,527.0 #

(USE 9<sup>k</sup> FOR DESIGN)

**West Bank and Vicinity  
Hurricane Protection Project  
WBV 49.2 Algiers Canal (East)  
Hero Levee to Hwy 23**

**Plaquemines Parish, Louisiana**

**APPENDIX D**

**COST ESTIMATE**

**OPINION OF ESTIMATED COST SUMMARY**

29-Aug-08

TOTAL ALTERNATIVE 1 - T WALLS	\$ 546,161,680
TOTAL ALTERNATIVE 2 - EARTHEN LEVEE	\$ 518,016,045
TOTAL ALTERNATIVE 3 - REINFORCED EARTHEN LEVEE	\$ 420,280,288
TOTAL ALTERNATIVE 4 - REINFORCED LEVEE + T WALL	\$ 417,317,434
<b>RECOMMENDED ALTERNATIVE 4 - REINFORCED LEVEE + T WALL</b>	<b>\$ 417,317,434</b>

**Alternative 1- T-Wall  
Demolition and Removal**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization (5%)	LS	1	\$ 3,750	\$ 3,750
2	Removal of Existing Structures and Obstructions	LS	1	\$ 75,000	\$ 75,000
Subtotal					\$ 78,750
Contingency (30%)					\$ 23,625
<b>Total Demolition</b>					<b>\$ 102,375</b>

**New T Wall**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization (5%)	LS	1	\$ 19,886,287	\$ 19,886,287
2	Clearing and Grubbing x 60' x Length	AC	39	\$ 9,000	\$ 351,000
3	Excavation	CY	248,383	\$ 15	\$ 3,725,739
4	4" Stabilization Slab	CY	4,167	\$ 150	\$ 625,011
5	24" Dia Steel H-Piles	LF	2,348,186	\$ 120	\$ 281,782,370
6	Pile Load Test	EA	7	\$ 85,000	\$ 595,000
7	Steel Sheet Pile Cut Off Wall (PZ22)	SF	300,330	\$ 35	\$ 10,511,550
7A	Contractor Temporary Sheet Pile Protection	SF	559,992	\$ 20	\$ 11,199,844
8	Painting Sheet Pile and Piling	SF	1,897,306	\$ 3	\$ 5,691,919
9	Reinforced Concrete For Wall Base	CY	56,270	\$ 550	\$ 30,948,658
10	Reinforced Concrete For Wall Stem	CY	29,037	\$ 850	\$ 24,681,138
11	Scour Protection Concrete 13' X 6 " Thk.	CY	6,741	\$ 300	\$ 2,022,194
	Bedding Material	CY	6,700	\$ 15	\$ 100,500
	Geotextile Fabric (600 PPI )	SY	38,800	\$ 10	\$ 388,000
12	Embankment (Compacted)	CY	453,183	\$ 35	\$ 15,861,409
13	Fertilizing, Seeding, Soil Amending +Mulching	AC	39	\$ 8,100	\$ 315,900
14	Additional Lift at Walls (2nd Lift @ 1'X 60')	CY	62,300	\$ 35	\$ 2,180,500
	Additional Lift at Walls (3rd Lift @ 1'X 60')	CY	62,300	\$ 35	\$ 2,180,500
	Additional Lift at Walls (4th Lift @ 1'X 60')	CY	62,300	\$ 35	\$ 2,180,500
15	3 Additional Fert., Seed., Soil Amend. + Mulch.	AC	120	\$ 8,100	\$ 972,000
16	Temporary Retaining Wall (assumes 300lf if exposed during hurricane season X50' sht. pile+rock stab.- 2 occurrences)	SF	25,000	\$ 50	\$ 1,250,000
17	Additional Mobilization	LS	3	\$ 54,000	\$ 162,000
Subtotal					\$ 417,612,019
Contingency (30%)					\$ 125,283,606
<b>Total L+ T-Walls</b>					<b>\$ 542,895,625</b>

**Alternative 1- T-Walls**

**Structural Steel**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization (5%)	LS	1	\$ 23,240	\$ 23,240
2	30' Swing Gate And Concrete Monolith (Excluding Piling and Sheet Piling)	EA	2	\$ 215,000	\$ 430,000
5	Misc. Structural Metal Work	LS	1	\$ 30,000	\$ 30,000
6	Paint	SF	2,400	\$ 2	\$ 4,800
Subtotal					\$ 488,040
Contingency (30%)					\$ 146,412
<b>Total Structural Steel</b>					<b>\$ 634,452</b>

**Appurtenant Features of Construction**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization	LS	1	\$ 88,360	\$ 88,360.00
2	Utility Sleeves Thru Sheet Pile Walls	EA	4	\$ 4,300	\$ 17,200
3	Contractor Access Roads	LF	30,000	\$ 55	\$ 1,650,000
4	Roadway Access Ramps	LF	400	\$ 250	\$ 100,000
5	Rights-Of-Way (0.72 Acres) * Removed by Real Estate Division		NA*		
6	Silt Fencing	LF	30,000	\$ 3	\$ 90,000
Subtotal					\$ 1,945,560
Contingency (30%)					\$ 583,668
<b>Total Appurtenant Features of Construction</b>					<b>\$ 2,529,228</b>

<b>Total Demolition and Removal</b>	<b>\$ 102,375</b>
<b>Total T- Walls</b>	<b>\$ 542,895,625</b>
<b>Total Structural Steel</b>	<b>\$ 634,452</b>
<b>Total Appurtenant Features of Construction</b>	<b>\$ 2,529,228</b>
<b>TOTAL ALTERNATIVE 1 - T WALLS</b>	<b>\$ 546,161,680</b>

**Alternative 1- T-Wall Quantity Estimate**

Total Station		T-Wall	Description
28700			
		2000	T Wall B
30700			
		4500	T Wall A
35200			
		7700	T Wall A
42900			
		1500	T Wall A
44400			
		2100	T Wall A
46500			
		3117	T Wall A
49617			
			PS 1
50007			
		2693	T Wall A
52700	21610		Sub-Total- T WallA
		2600	T Wall B
55300			
		1790	T Wall B
57090	6390		Sub-Total T WallB
<b>Total</b>		<b>28000</b>	

<b>Totals</b>		
<b>29037</b>	29037	<b>Conc. Stem CY 2'X14'</b>
<b>56270</b>	56270	<b>Conc. Base CY (Size Varies)</b>
<b>1903212</b>	1903212	<b>24DiaSt Pilex117.43'Ave (30 piles/40' monolith)X117.43' X Length of Wall) LF (T WallA)</b>
<b>444974</b>	444974	<b>24DiaSt Pilex116.06'Ave (24 piles/40' monolith)X116.06' X Length of Wall) LF (T WallB)</b>
<b>559992</b>	559992	<b>ContractorTemporary Sheet Pile Protection (20' PZ22 Reused)</b>
<b>300330</b>	300330	<b>PZ22 SF X 47' LF(A) 34'(B)</b>
<b>248383</b>	248383	<b>Excavation CY</b>
<b>4167</b>	4167	<b>4" Stabilization Slab CY</b>
<b>6741</b>	6741	<b>Scour Protection CY ( 13ft X 6"th X Length of Wall)</b>
<b>1897306</b>	1897306	<b>Paint SF(upper 10ft of all piles HP and PZ piles)</b>
<b>T-WallA</b>	<b>T-WallB</b>	
<b>2'X14'</b>	<b>2'X14'</b>	<b>Conc. Stem</b>
<b>10'X2.5</b>	<b>19'X3'</b>	<b>Conc. Base</b>

**Alternative 2 - Earthen Levee  
Demolition and Removal**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization (5%)	LS	1		\$ 179,425
2	Removal of Exist. Structures and Obstructions				
	Sewer and Water Facilities	LF	14200	\$ 35	\$ 497,000
	Gas and Electrical Services	LF	14,200	\$ 25	\$ 355,000
	Roadways	SY	18900	\$ 35	\$ 661,500
	Walks and Driveways	SY	13000	\$ 25	\$ 325,000
	Houses	EA	70	\$ 25,000	\$ 1,750,000
Subtotal					\$ 3,588,500
Contingency (30%)					\$ 1,076,550
<b>Total Demolition</b>					<b>\$ 4,665,050</b>

**New Earthen. Levee**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization (5%)	LS	1	\$18,693,422	\$ 18,693,422
2	Clearing and Grubbing	AC	185	\$ 9,000	\$ 1,665,000
3	Excavation	CY	29,565	\$ 15	\$ 443,474
4	4" Stabilization Slab	CY	206	\$ 150	\$ 30,882
5	24" Dia Steel H-Piles	LF	110,942	\$ 120	\$ 13,313,011
6	Pile Load Test	EA	2	\$ 85,000	\$ 170,000
7	Steel Sheet Pile Cut Off Wall (PZ22)	SF	34,152	\$ 35	\$ 1,195,306
8	Painting Sheet Pile and Piling	SF	95,689	\$ 3	\$ 287,066
8B	Contractor Temporary Sheet Pile Protection	SF	25,792	\$ 20	\$ 515,844
9	Reinforced Concrete For Wall Base	CY	2,536	\$ 550	\$ 1,394,714
10	Reinforced Concrete For Wall Stem	CY	1,337	\$ 850	\$ 1,136,767
11	Scour Protection Concrete 13' X 6 " Thk.	CY	310	\$ 300	\$ 93,139
	Bedding Material	CY	330	\$ 15	\$ 4,950
	Geotextile Fabric (600 PPI )	SY	1,900	\$ 10	\$ 19,000
12	Embankment (Compacted)	CY	1,757,619	\$ 35	\$ 61,516,677
13	Fertilizing, Seeding, Soil Amending +Mulching	AC	185	\$ 8,100	\$ 1,498,500
14	Additional Levee Lifts ( 2nd)	CY	5,412,536	\$ 35	\$ 189,438,745
	Additional Levee Lifts ( 3rd)	CY	1,658,887	\$ 35	\$ 58,061,036
	Additional Levee Lifts ( 4th)	CY	1,157,744	\$ 35	\$ 40,521,029
15	Additional Lift at Walls (1 Lift @ 1' Ea)	CY	2,866	\$ 35	\$ 100,303
16	3 Additional Fert., Seed., Soil Amend. + Mulch.	AC	210	\$ 8,100	\$ 1,701,000
17	Additional Mobilization	LS	3	\$ 54,000	\$ 162,000
18	Temporary Retaining Wall (assumes 200lf if exposed during hurricane season and 50' shts 2 occurrences)	SF	20,000	\$ 30	\$ 600,000
Subtotal					\$392,561,866
Contingency (30%)					\$117,768,560
<b>Total Full. Levee</b>					<b>\$510,330,426</b>

**Alternative 2 - Earthen Levee**

**Appurtenant Features of Construction**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization	LS	1	\$ 105,215	\$ 105,215
2	Utility Sleeves Thru Sheet Pile Walls	EA	1	\$ 4,300	\$ 4,300
3	Contractor Access Roads	LF	30,000	\$ 55	\$ 1,650,000
4	Roadway Access Ramps	LF	800	\$ 250	\$ 200,000
5	Rights-Of-Way				
	Land Private Ownership(26%)	AC	28		NA*
	Land Government Owned (74%)	AC	80		NA*
	Housing	EA	#REF!		NA*
	* Removed by Real Estate Division				
6	Drainage Pumping Station 25 CFS	EA	1	\$ 250,000	\$ 250,000
7	Silt Fencing	LF	38,000	\$ 3	\$ 114,000
Subtotal					\$ 2,323,515
Contingency (30%)					\$ 697,055
<b>Total Appurtenant Features of Construction</b>					<b>\$ 3,020,570</b>

<b>Total Demolition and Removal</b>	<b>\$ 4,665,050</b>
<b>Total Full Levee</b>	<b>\$510,330,426</b>
<b>Total Appurtenant Features of Construction</b>	<b>\$ 3,020,570</b>
<b>TOTAL ALTERNATIVE 2 - EARTHEN LEVEE</b>	<b>\$518,016,045</b>

**Alternative 2 - Full Levee Quantity Estimate**

<b>Total Station</b>	<b>Full Levee</b>	<b>T-WallB</b>	<b>Description</b>
28700			
	4600		
33300			
	1900		
35200			
	7700		
42900			
	1500		
44400			
	2100		
46500			
	2670		
49170			
		447	T Wall A
49617			
PS No.1			
50007			
<b>870</b>		<b>423</b>	<b>T Wall A Sub Total</b>
50430			
	2270		
52700			
	2600		
55300			
	1370		
56670			
		<b>420</b>	<b>T Wall B Sub total</b>
57090			
<b>Total</b>	<b>26710</b>	<b>1290</b>	

<b>Totals</b>		
1337	1337	Conc. Stem CY 2'X14'
2536	2536	Conc. Base CY (Size Varies)
81695	81695	24DiaSt Pilex117.43'Ave (32 piles/40' monolith)X117.43' X Length of Wall) LF (T WallA)
29247	29247	24DiaSt Pilex116.06'Ave (24 piles/40' monolith)X116.06' X Length of Wall) LF (T WallB)
34152	34152	PZ22 SF X 47' LF(A) 34'(B)
25792	25792	ContractorTemporary Sheet Pile Protection (20' PZ22 Reused)
29565	29565	Excavation CY
206	206	4" Stabilization Slab CY
310	310	Scour Prot. CY ( 13ft X 6"th X Wall Lgt.)
95689	95689	Paint SF(upper 10ft of all piles HP, PZ)

### Alternative 3 - Reinforced Earthen Levee

#### Demolition and Removal

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization (5%)	LS	1	\$ 39,801	\$ 39,801
2	Removal of Existing Structures and Obstructions				
	Sewer and Water Facilities	LF	7000	\$ 35	\$ 245,000
	Gas and Electrical Services	LF	7,000	\$ 25	\$ 175,000
	Roadways	SF	7000	\$ 35	\$ 245,000
	Walks and Driveways	SY	5241	\$ 25	\$ 131,025
	Houses	EA	15	\$ 25,000	\$ 375,000
Subtotal					\$ 1,210,826
Contingency (30%)					\$ 363,248
<b>Total Demolition</b>					<b>\$ 1,574,074</b>

#### New Rein. Earthen Levee

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mob & Demob (5%)	LS	1	\$15,279,868	\$ 15,279,868
2	Clearing and Grubbing	AC	120	\$ 9,000	\$ 1,080,000
3	Excavation	CY	270,125	\$ 15	\$ 4,051,880
4	4" Stabilization Slab	CY	206	\$ 150	\$ 30,882
5	24" Dia Steel H-Piles	LF	58,494	\$ 120	\$ 7,019,309
6	Pile Load Test	EA	2	\$ 85,000	\$ 170,000
7	Steel Sheet Pile Cut Off Wall (PZ22)	SF	55,152	\$ 35	\$ 1,930,308
7A	Painting Sheet Pile and Piling	SF	61,708	\$ 8	\$ 493,666
7B	Contractor Temporary Sheet Pile Protection	SF	577,384	\$ 20	\$ 11,547,688
8	Reinforced Concrete For T-Wall Base	CY	2,239	\$ 550	\$ 1,231,555
9	Reinforced Concrete For T-Wall Stem	CY	2,536	\$ 850	\$ 2,155,467
10	Scour Protection Concrete 13' X 6" Thk.	CY	206	\$ 300	\$ 61,763
	Bedding Material	CY	1,925	\$ 15	\$ 28,875
	Geotextile Fabric (600 PPI )	SY	11,200	\$ 10	\$ 112,000
11	Embankment (Compacted)	CY	1,452,130	\$ 35	\$ 50,824,546
12	Geotextile Fabric (1800 PPI )	SY	344,262	\$ 37	\$ 12,737,702
13	Fertilizing, Seeding, Soil Amending +Mulching	AC	120	\$ 8,100	\$ 972,000
14	Additional Levee Lifts ( 2nd)	CY	2,533,633	\$ 35	\$ 88,677,154
	Additional Levee Lifts ( 3rd)	CY	2,138,741	\$ 35	\$ 74,855,946
	Additional Levee Lifts ( 4th)	CY	1,252,021	\$ 35	\$ 43,820,728
15	Additional Lifts at Walls (1 Lift @ 1' ea)	CY	19,511	\$ 35	\$ 682,889
16	3 Additional Fert., Seed., Soil Amend. + Mulch.	AC	210	\$ 8,100	\$ 1,701,000
17	Additional Mobilization	LS	3	\$ 54,000	\$ 162,000
18	Temporary Retaining Wall (assumes 300lf if exposed during hurricane season X50' sht. pile+rock stab.- 2 occurrences)	SF	25,000	\$ 50	\$ 1,250,000
Subtotal					\$ 320,877,225
Contingency (30%)					\$ 96,263,168
<b>Total Rein. Levee</b>					<b>\$ 417,140,393</b>

**Alternative 3 - Reinforced Earthen Levee**

**Appurtenant Features of Construction**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization	LS	1	\$ 105,215	\$ 105,215
2	Utility Sleeves Thru Sheet Pile Walls	EA	1	\$ 4,300	\$ 4,300
3	Contractor Access Roads	LF	30,000	\$ 55	\$ 1,650,000
4	Roadway Access Ramps	LF	800	\$ 250	\$ 200,000
5	Rights-Of-Way				
	Land Private Ownership(26%)	AC	17		NA*
	Land Government Owned (74%)	AC	59		NA*
	Housing	EA	15		NA*
6	Drainage Pumping Station 25 CFS	EA	1	\$ 250,000	\$ 250,000
7	Silt Fencing	LF	35,000	\$ 3	\$ 105,000
	* Removed by Real Estate Division				
Subtotal					\$ 2,314,515
Contingency (30%)					\$ 694,355
<b>Total Appurtenant Features of Construction</b>					<b>\$ 3,008,870</b>

<b>Total Demolition and Removal</b>	<b>\$ 131,025</b>
<b>Total Reinforced Levee</b>	<b>\$ 417,140,393</b>
<b>Total Appurtenant Features of Construction</b>	<b>\$ 3,008,870</b>
<b>TOTAL ALTERNATIVE 3 - REINFORCED EARTHEN LEVEE</b>	<b>\$ 420,280,288</b>

<b>Total</b>			
<b>Station</b>	<b>Rein Levee</b>	<b>T-WallB</b>	<b>Description</b>
28700			
	4600		
33300			
	1900		
35200			
	7700		
42900			
	1500		
44400			
	2100		
46500			
	2670		
49170			
		447	T Wall A
49616.8			
PS No.1			
50007.2			
		423	
50430		870	T Wall A Sub Total
	2270		
52700			
	2600		
55300			
	1370		
56670			
		420	T Wall B Sub total
57090			
<b>Total</b>	<b>26710</b>	<b>2159</b>	<b>28869</b>

<b>Totals</b>		
<b>2239</b>	<b>2239</b>	<b>Conc. Stem CY 2'X14'</b>
<b>2536</b>	<b>2536</b>	<b>Conc. Base CY (Size Varies)</b>
<b>29247</b>	<b>29247</b>	<b>monolith)X117.43' X Length of Wall) LF (T</b>
		<b>24DiaSt Pilex116.06'Ave (24 piles/40'</b>
<b>29247</b>	<b>29247</b>	<b>monolith)X116.06' X Length of Wall) LF (T</b>
		<b>WallB)</b>
<b>55152</b>	<b>55152</b>	<b>PZ22 SF X 47' LF(A) 34'(B)</b>
<b>577384</b>	<b>577384</b>	<b>ContractorTemporary Sheet Pile</b>
		<b>Protection (20' PZ22 Reused)</b>
<b>270125</b>	<b>270125</b>	<b>Excavation CY</b>
<b>206</b>	<b>206</b>	<b>6" Stabilization Slab CY</b>
<b>520</b>	<b>520</b>	<b>Scour Prot. CY ( 13ft X 6"th X WallLgt.)</b>
<b>344262</b>	<b>344262</b>	<b>Geotextile Fabric 116' X Levee Length</b>
<b>61708</b>	<b>61708</b>	<b>Paint SF(upper 10ft of all piles HP, PZ)</b>

**Alternative 4 - Reinforced Levee + T Wall  
Demolition and Removal**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization (5%)	LS	1	\$ -	
2	Removal of Exist. Structures and Obstructions	LS	1	\$ 175,000	\$ 175,000
Subtotal					\$ 175,000
Contingency (30%)					\$ 52,500
<b>Total Demolition</b>					<b>\$ 227,500</b>

**Alternative 4 - Reinforced Levee + T Wall**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization (5%)	LS	1	\$ 15,162,186	\$ 15,162,186
2	Clearing and Grubbing	AC	130	\$ 9,000	\$ 1,170,000
3	Excavation	CY	291,605	\$ 15	\$ 4,374,073
4	4" Stabilization Slab	CY	1,417	\$ 150	\$ 212,604
5	24" Dia Steel H-Piles	LF	524,332	\$ 120	\$ 62,919,831
6	Pile Load Test	EA	3	\$ 85,000	\$ 255,000
7	Steel Sheet Pile Cut Off Wall (PZ22)	SF	296,822	\$ 35	\$ 10,388,758
8	Painting Sheet Pile and Piling	SF	493,278	\$ 3	\$ 1,479,835
7B	Contractor Temporary Sheet Pile Protection	SF	150,592	\$ 20	\$ 3,011,844
8	Reinforced Concrete For Wall Base	CY	13,945	\$ 550	\$ 7,669,603
10	Reinforced Concrete For Wall Stem	CY	7,808	\$ 850	\$ 6,637,212
11	Scour Protection Concrete 13' X 6" Thk.	CY	1,813	\$ 300	\$ 543,805
	Bedding Material	CY	550	\$ 15	\$ 8,250
	Geotextile Fabric (600 PPI )	SY	3,200	\$ 10	\$ 32,000
12	Embankment (Compacted)	CY	988,018	\$ 35	\$ 34,580,640
12A	Geotextile Fabric (1800 PPI )	SY	263,836	\$ 37	\$ 9,761,916
13	Fertilizing, Seeding, Soil Amending +Mulching	AC	130	\$ 8,100	\$ 1,053,000
14	Additional Levee Lifts ( 2nd)	CY	1,894,437	\$ 35	\$ 66,305,296
	Additional Levee Lifts ( 3rd)	CY	1,599,170	\$ 35	\$ 55,970,963
	Additional Levee Lifts ( 4th)	CY	936,156	\$ 35	\$ 32,765,444
15	Additional Lift at Walls (1 Lift @ 1' Ea)	CY	16,732	\$ 35	\$ 585,636
16	3 Additional Fert., Seed., Soil Amend. + Mulch.	AC	260	\$ 8,100	\$ 2,106,000
17	Additional Mobilization	LS	3	\$ 54,000	\$ 162,000
18	Temporary Retaining Wall (assumes 300lf if exposed during hurricane season X50' sht. pile+rock stab.- 2 occurrences)	SF	25,000	\$ 50	\$ 1,250,000
Subtotal					\$318,405,896
Contingency (30%)					\$ 95,521,769
<b>Total Rein Levee + T Wall</b>					<b>\$413,927,664</b>

**Alternative 4 - Reinforced Levee + T Wall**

**Appurtenant Features of Construction**

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Estimated Amount
1	Mobilization	LS	1	\$ 99,215	\$ 99,215.00
2	Utility Sleeves Thru Sheet Pile Walls	EA	1	\$ 4,300	\$ 4,300
3	Contractor Access Roads	LF	30,000	\$ 55	\$ 1,650,000
4	Roadway Access Ramps	LF	400	\$ 250	\$ 100,000
4A	30' Swing Gate And Concrete Monolith	EA	1	\$ 215,000	\$ 215,000
4B	Misc.Structural Metal Work	LS	1	\$ 15,000	\$ 15,000
5	Rights-Of-Way				
	Land Government Owned (74%)	AC	80		NA*
	* Removed by Real Estate Division				
6	Drainage Pumping Station 25 CFS	EA	1	\$ 250,000	\$ 250,000
7	Silt Fencing	LF	33,000	\$ 3	\$ 99,000
Subtotal					\$ 2,432,515
Contingency (30%)					\$ 729,755
<b>Total Appurtenant Features of Construction</b>					<b>\$ 3,162,270</b>

<b>Total Demolition and Removal</b>	<b>\$ 227,500</b>
<b>Total Rein. Levee + T-Wall</b>	<b>\$413,927,664</b>
<b>Total Appurtenant Features of Construction</b>	<b>\$ 3,162,270</b>
<b>TOTAL ALTERNATIVE 4 - REINFORCED LEVEE + T WALL</b>	<b>\$417,317,434</b>

**Alternative 4 - Reinforced Levee + T Wall**

Total Station	Rein Levee	T-WallB	Description
28700			
	4600		
33300			
	1900		
35200			
	7700		
42900			
	1500		
44400			
	2100		
46500			
	2670		
49170			
		447	T Wall A
49617			
PS No.1			
50007			
		2693	T Wall A
52700	<b>3140</b>		<b>Sub-Total- T WallA</b>
		2600	T Wall B
55300			
		1790	T Wall B
57090	<b>4390</b>		<b>Sub-Total T WallB</b>
57090			
<b>Total</b>	<b>20470</b>	<b>7530</b>	

<b>Totals</b>		
<b>7808</b>	<b>7808</b>	<b>Conc. Stem CY 2'X14'</b>
<b>13945</b>	<b>13945</b>	<b>Conc. Base CY (Size Varies)</b>
<b>218630</b>	<b>218630</b>	<b>24DiaSt Pilex117.43'Ave (30piles/40' monolith)X117.43' X Length of Wall) LF (T WallA)</b>
<b>305702</b>	<b>305702</b>	<b>24DiaSt Pilex116.06'Ave (24 piles/40' monolith)X116.06' X Length of Wall) LF (T WallB)</b>
<b>296822</b>	<b>296822</b>	<b>PZ22 SF X 47' LF(A) 34'(B)</b>
<b>150592</b>	<b>150592</b>	<b>ContractorTemporary Sheet Pile Protection (20' PZ22 Reused)</b>
<b>291605</b>	<b>291605</b>	<b>Excavation CY</b>
<b>1417</b>	<b>1417</b>	<b>4" Stabilization Slab CY</b>
<b>1813</b>	<b>1813</b>	<b>Scour Prot. CY ( 13ft X 6"th X Wall Lgth.)</b>
<b>263836</b>	<b>263836</b>	<b>Geotextile Fabric 116' X Levee Length</b>
<b>493278</b>	<b>493278</b>	<b>Paint SF(upper 10ft of all piles HP, PZ)</b>

**EARTHWORK - REINFORCED LEVEE**

**Lift1**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excv SF	Excavation CY
28700	2000		889.9	65919	274.3	20319
30700	4500		823	137167	316.6	52767
35200	7700		1027.6	293056	254.1	72466
42900	1500		1003.4	55744	311.1	17283
44400	2100		1181.8	91918	242.5	18861
46500	2800		1120.6	116210	241.6	25055
49300	PS					
50300	2400		1120.6	99609	241.6	21476
52700	2600		1579.4	152090	223.4	21513
55300	1950.58		1457.7	105310	282.2	20387
57250.58						
			Sub-Total	1117023		270125
	W/Berm El. 7.5			1452129.9		
LeveeSum	27550.58		<b>Total</b>	<b>1,452,130</b>		<b>270,125</b>
Wall	1216.48					

**EARTHWORK - FULL LEVEES**

**Lift1**

BL Station	BL Length	Reach	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700	2000	1	1712.7	126867	31.8	2356
30700	4500	2	1538.4	256400	47.3	7883
35200	7700	1	1712.7	488437	31.8	9069
42900	1500	3	1792.3	99572	11	611
44400	2100	1	1712.7	133210	31.8	2473
46500	2800	4	2048	212385	14.8	1535
49300				PS		
50300	2400	4	2048	182044	14.8	1316
52700	2600	5	1532.4	147564	9.4	905
55300	1950.58	2	1538.4	111140	47.3	3417
57250.58						
LeveeSum	27550.58		<b>Total</b>	<b>1,757,619</b>		<b>29,565</b>
Wall	1216.48					

**EARTHWORK - T WALL**

**Lift 1**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700	2000		399.13	29565	351.2	26015
30700	4500		429.6	71600	256.5	42750
35200	7700		448.6	127934	179.3	51134
42900	1500		429	23833	227.6	12644
44400	2100		458.1	35630	95.6	7436
46500	3116.81		422.8	48807	204	23549
49616.81				PS		
50007.2	2692.8		431.7	43055	316.3	31546
52700	2600		431.7	41571	316.3	30459
55300	1950.58		431.7	31188	316.3	22851
57250.58						
LeveeSum	28160.19		<b>Total</b>	<b>453,183</b>		<b>248,383</b>

**EARTHWORK - REINFORCED LEVEES + T WALL**

**Lift1**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excv SF	Excavation CY
28700	2000		889.9	65919	274.3	20319
30700	4500		823	137167	316.6	52767
35200	7700		1027.6	293056	254.1	72466
42900	1500		1003.4	55744	311.1	17283
44400	2100		1181.8	91918	242.5	18861
46500	2800		1120.6	116210	241.6	25055
49300				PS		
50007.2	2692.8		431.7	43055	316.3	31546
52700	2600		431.7	41571	316.3	30459
55300	1950.58		431.7	31188	316.3	22851
57250.58						
			Sub-Total	760014		
	W/Berm El. 7.5			988018.3		
LeveeSum	27843.38		<b>Total</b>	<b>988,018</b>		<b>291,605</b>
Wall	1216.48					

**EARTHWORK - REINFORCED LEVEE**

**Lift2**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700	2000		2483	183926	0	0
30700	4500		2483	413833	0	0
35200	7700		2483	708115	0	0
42900	1500		2483	137944	0	0
44400	2100		2483	193122	0	0
46500	2800		2483	257496	0	0
49300	PS				0	
50300	2400		2483	220711	0	0
52700	2600		2483	239104	0	0
55300	1950.58		2483	179381	0	0
57250.58						
LeveeSum	27550.58		<b>Total</b>	<b>2,533,633</b>		<b>0</b>
Wall	1402					

<b>TOTAL ADDITIONAL LIFTS</b>	<b>5,924,395</b>
-------------------------------	------------------

**EARTHWORK - FULL LEVELS**

**Lift 2**

BL Station	BL Length	Reach	Cr.Area SF	Compacted Fill CY	Excv SF	Excavation CY
28700	2000	1	5593	414296	107	7926
30700	4500	2	5070.2	845033	107	17833
35200	7700	1	5593	1595041	107	30515
42900	1500	3	5280.7	293372	107	5944
44400	2100	1	5593	435011	107	8322
46500	2800	4	5048.9	523590	107	11096
49300				PS	0	
50300	2400	4	5048.9	448791	107	9511
52700	2600	5	5100	491111	107	10304
55300	1950.58	2	5070.2	366290	107	7730
57250.58 Relocated Levee						
LeveeSum	27550.58		<b>Total</b>	<b>5,412,536</b>		<b>109,182</b>
Wall	1402					

<b>TOTAL ADDITIONAL LIFTS</b>	<b>8,229,166</b>
-------------------------------	------------------

**EARTHWORK - T WALL**

**Lift 2**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excv SF	Excavation CY
28700						
	2000		0	0	0	0
30700						
	4500		0	0	0	0
35200						
	7700		0	0	0	0
42900						
	1500		0	0	0	0
44400						
	2100		0	0	0	0
46500						
	3116.81		0	0	0	0
49616.81						
			0		0	
50007.2						
	2692.8		0	0	0	0
52700						
	2600		0	0	0	0
55300						
	1950.58		0	0	0	0
57250.58						
LeveeSum	28160.19		<b>Total</b>	<b>0</b>		<b>0</b>

**EARTHWORK - REINFORCED LEVEES + T WALL**

**Lift 2**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700	2000		2483	183926	0	0
30700	4500		2483	413833	0	0
35200	7700		2483	708115	0	0
42900	1500		2483	137944	0	0
44400	2100		2483	193122	0	0
46500	2800		2483	257496	0	0
49300	Sub-Tot	20600		PS	0	
50007.2	2692.8		0	0	0	0
52700	2600		0	0	0	0
55300	1950.58		0	0	0	0
57250.58						
Relocated Levee 1,2,3			4926			
LeveeSum	27843.38		<b>Total</b>	<b>1,894,437</b>		<b>0</b>
Wall	1402					

<b>TOTAL ADDITIONAL LIFTS</b>	<b>4,429,763</b>
-------------------------------	------------------

**EARTHWORK - REINFORCED LEVEE**

**Lift3**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700						
	2000		2096	155259	0	0
30700						
	4500		2096	349333	0	0
35200						
	7700		2096	597748	0	0
42900						
	1500		2096	116444	0	0
44400						
	2100		2096	163022	0	0
46500						
	2800		2096	217363	0	0
49300						
				PS	0	
50300						
	2400		2096	186311	0	0
52700						
	2600		2096	201837	0	0
55300						
	1950.58		2096	151423	0	0
57250.58						
LeveeSum			<b>Total</b>	<b>2,138,741</b>		<b>0</b>
Wall	8118.36					

**EARTHWORK - FULL LEVEES**

**Lift3**

BL Station	BL Length	Reach	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700	2000	1	1570.7	116348	0	0
30700	4500	2	1754.1	292350	0	0
35200	7700	1	1570.7	447940	0	0
42900	1500	3	1726.8	95933	0	0
44400	2100	1	1570.7	122166	0	0
46500	2800	4	1498.7	155421	0	0
49300					0	
50300	2400	4	1498.7	133218	0	0
52700	2600	5	1752.8	168788	0	0
55300	1950.58	2	1754.1	126723	0	0
57250.58						
LeveeSum			<b>Total</b>	<b>1,658,887</b>		<b>0</b>
Wall	8118.36					

**EARTHWORK - T WALL**

**Lift 3**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700						
	2000		0	0	0	0
30700						
	4500		0	0	0	0
35200						
	7700		0	0	0	0
42900						
	1500		0	0	0	0
44400						
	2100		0	0	0	0
46500						
	3116.81		0	0	0	0
49616.81						
			0	PS	0	
50007.2						
	2692.8		0	0	0	0
52700						
	2600		0	0	0	0
55300						
	1950.58		0	0	0	0
57250.58						
LeveeSum			<b>Total</b>	<b>0</b>		<b>0</b>

**EARTHWORK - REINFORCED LEVEES + T WALL      Lift3**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700						
	2000		2096	155259	0	0
30700						
	4500		2096	349333	0	0
35200						
	7700		2096	597748	0	0
42900						
	1500		2096	116444	0	0
44400						
	2100		2096	163022	0	0
46500						
	2800		2096	217363	0	0
49300						
			0		0	
50007.2						
	2692.8		0	0	0	0
52700						
	2600		0	0	0	0
55300						
	1950.58		0	0	0	0
57250.58						
LeveeSum			<b>Total</b>	<b>1,599,170</b>		<b>0</b>
Wall	8118.36					

**EARTHWORK - REINFORCED LEVEE**

**Lift4**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excv SF	Excavation CY
28700	2000		1227	90889	0	0
30700	4500		1227	204500	0	0
35200	7700		1227	349922	0	0
42900	1500		1227	68167	0	0
44400	2100		1227	95433	0	0
46500	2800		1227	127244	0	0
49300	PS			PS	0	
50300	2400		1227	109067	0	0
52700	2600		1227	118156	0	0
55300	1950.58		1227	88643	0	0
57250.58						
<b>LeveeSum</b>	<b>27550.58</b>		<b>Total</b>	<b>1,252,021</b>		<b>0</b>
Wall	1402					

**EARTHWORK - FULL LEVEES**

**Lift4**

BL Station	BL Length	Reach	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700	2000	1	1171.4	86770	0	0
30700	4500	2	1120.4	186733	0	0
35200	7700	1	1171.4	334066	0	0
42900	1500	3	1109.1	61617	0	0
44400	2100	1	1171.4	91109	0	0
46500	2800	4	1083.7	112384	0	0
49300				PS	0	
50300	2400	4	1083.7	96329	0	0
52700	2600	5	1119.4	107794	0	0
55300	1950.58	2	1120.4	80942	0	0
57250.58						
LeveeSum	27550.58		<b>Total</b>	<b>1,157,744</b>		<b>0</b>

**EARTHWORK - T WALL**

**Lift 4**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excv SF	Excavation CY
28700	2000		0	0	0	0
30700	4500		0	0	0	0
35200	7700		0	0	0	0
42900	1500		0	0	0	0
44400	2100		0	0	0	0
46500	3116.81		0	0	0	0
49616.81			0		0	
50007.2	2692.8		0	0	0	0
52700	2600		0	0	0	0
55300	1950.58		0	0	0	0
57250.58						
LeveeSum	28160.19		<b>Total</b>	<b>0</b>		<b>0</b>

**EARTHWORK - REINFORCED LEVEES + T WALL**

**Lift4**

BL Station	BL Length	WL Length	Cr.Area SF	Compacted Fill CY	Excav SF	Excavation CY
28700	2000		1227	90889	0	0
30700	4500		1227	204500	0	0
35200	7700		1227	349922	0	0
42900	1500		1227	68167	0	0
44400	2100		1227	95433	0	0
46500	2800		1227	127244	0	0
49300				PS	0	
50007.2	2692.8		0	0	0	0
52700	2600		0	0	0	0
55300	1950.58		0	0	0	0
57250.58						
LeveeSum	27843.38		<b>Total</b>	<b>936,156</b>		<b>0</b>

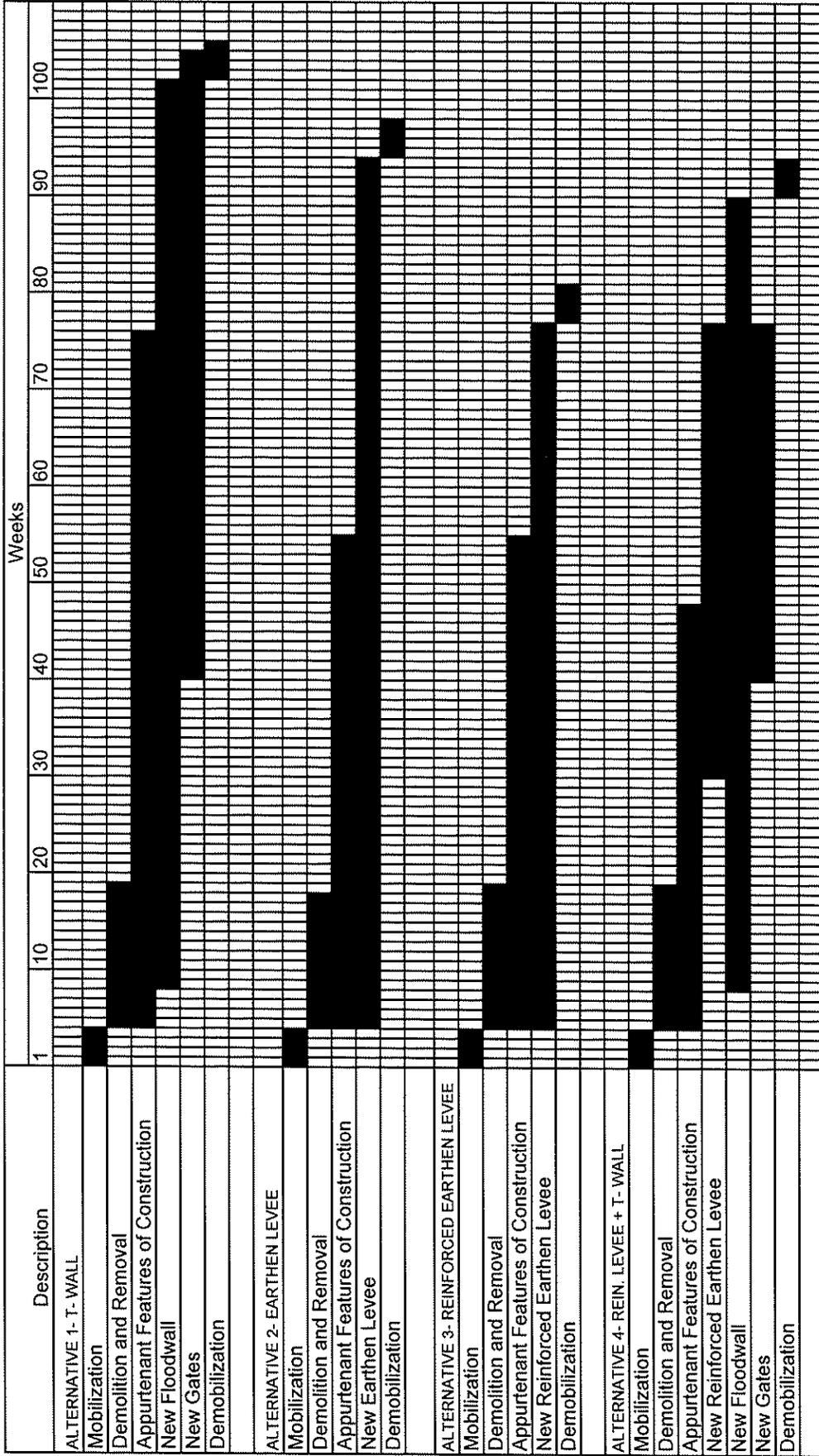
**West Bank and Vicinity  
Hurricane Protection Project  
WBV 49.2 Algiers Canal (East)  
Hero Levee to Hwy 23**

**Plaquemines Parish, Louisiana**

**APPENDIX E**

**CONSTRUCTION DURATION**

**CONSTRUCTION DURATION**  
40 Hour Work Week



**West Bank and Vicinity  
Hurricane Protection Project  
WBV 49.2 Algiers Canal (East)  
Hero Levee to Hwy 23**

**Plaquemines Parish, Louisiana**

**APPENDIX F**

**INDEPENDENT TECHNICAL REVIEW /**

**ITR CERTIFICATE**

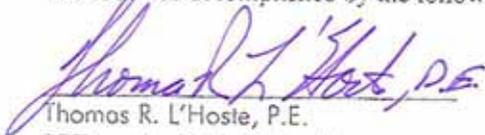
STATEMENT OF TECHNICAL REVIEW

For 100% Engineering Alternative Report (EAR)  
Preparation of Engineering Alternative Study for  
WBV-49.2 Algiers (East Side)  
Hero Levee to Hwy. 23  
Paquemines Parish, Louisiana

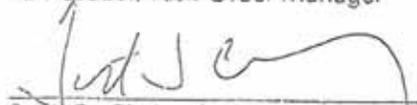
COMPLETION OF INDEPENDENT TECHNICAL REVIEW:

The Hurricane Protection Alliance, JV (HPA) has completed the Independent Technical Review (ITR) of the 95% submittal Engineering Alternative Study for the Algiers (East) project WBV-49.2 in Plaquemines Parish, Louisiana. Notice is hereby given that an independent technical review, that is appropriate to the level of risk and complexity inherent in the project, has been conducted as defined in the Design Quality Control Plan. The independent technical review included review of: assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level obtained; and reasonableness of the result, including whether the product meets the customer's needs. The independent technical review was accomplished by an independent team. All comments resulting from the 95% review have been resolved and all issues requiring change have been incorporated into the 100% final submittal.

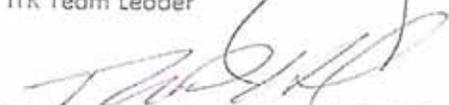
The ITR was accomplished by the following personnel:

  
Thomas R. L'Hoste, P.E.  
PDT Leader/Task Order Manager

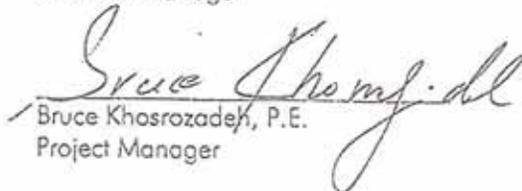
10/29/08  
Date

  
Scott G. Chehardy, P.E.  
ITR Team Leader

10/29/08  
Date

  
Thomas P. Hickey, P.E.  
Contract Manager

10/29/08  
Date

  
Bruce Khosrozadeh, P.E.  
Project Manager

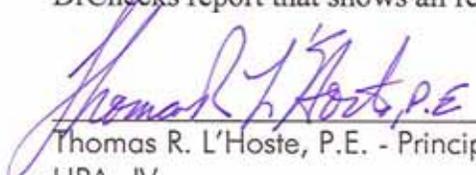
10/29/08  
Date

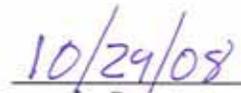
**CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW:**

Significant concerns and the explanation of the resolution are as follows:

Based on the technical review performed, there were no major features that were determined to be missing based on the scope of work. All issues have been fully resolved in DrChecks and all required changes have been incorporated into the documents.

As noted above, all concerns resulting from independent technical review of this engineering product have been fully resolved. Please see the attached printout of the DrChecks report that shows all resolutions of issues concerning this project.

  
\_\_\_\_\_  
Thomas R. L'Hoste, P.E. - Principle  
HPA, JV

  
\_\_\_\_\_  
Date

*(ATTACH COPY OF ITR COMMENTS AS BACKUP TO THIS DOCUMENT  
INDICATING ALL COMMENTS HAVE BEEN ADEQUATELY AND THOROUGHLY  
ADDRESS AND CLOSED)*

*(ALL DOCUMENTS TO BE PROVIDED IN ELECTRONIC FORM AFTER  
SIGNATURES ARE AFFIXED AND PROVIDED TO CORPS OF ENGINEERS COR)*

Comment Report: All Comments  
 Project: WBV-49.2  
 Review: A-E, 65% ITR  
 Displaying 25 comments for the criteria specified in this report.  
 703 ms to run this page

Id ▲	Discipline	Section/Figure	Page Number	Line Number
1922262	Structural	n/a'	n/a	n/a
(Document Reference: Calculations)  I don't understand the 13-foot dimension on the floodside fill on the input page. This causes errors in both the weight of fill and water in all cases.  Submitted By: <a href="#">Robert Yokum</a> ((985) 674-1846). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> This was a typo. However, I have discovered that the unbalanced load was incorrect. The T-wall has since been redesigned, taking into account the other comments you made.  Submitted By: <a href="#">Eugene Brian</a> (504-887-7045) Submitted On: 23-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">Robert Yokum</a> ((985) 674-1846) Submitted On: 28-May-08			
Current Comment Status: Comment Closed				
1922265	Structural	n/a'	n/a	n/a
(Document Reference: Calculations)  The unit weight of water in all water related calculations is now 64 pcf per NOD. Since the fill being placed is levee material, I also suggest using a Ko of 0.8 for clay.  Submitted By: <a href="#">Robert Yokum</a> ((985) 674-1846). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> The spreadsheets for all calculations have been revised, using 64 pcf for the unit weight of water.  Submitted By: <a href="#">Eugene Brian</a> (504-887-7045) Submitted On: 23-May-08			
1-1	<b>Backcheck Recommendation Open Comment</b>  Submitted By: <a href="#">Robert Yokum</a> ((985) 674-1846) Submitted On: 28-May-08			
1-2	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">Robert Yokum</a> ((985) 674-1846) Submitted On: 28-May-08			
Current Comment Status: Comment Closed				
1922266	Structural	n/a'	n/a	n/a
(Document Reference: Calculations)  With only 4 feet of fill on the protected side and typically poor compactive efforts adjacent to the walls, I suggest ignoring the resisting fill horizontal force. Keep the weight - especially since you're paving above it.				

Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> Done.  Submitted By: Eugene Brian (504-887-7045) Submitted On: 23-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 28-May-08			
Current Comment Status: Comment Closed				
1922268	Structural	n/a'	n/a	n/a
(Document Reference: Calculations)				
I don't understand why you show only the sheeting effective cases. Typically, the pervious case governs. With this in mind, I always assume protected side uplift to the top of the slab and recommend that you do as well especially since you're near El. 0.0.				
Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> Loading for both pervious and impervious cases are now included. P/S uplift was calculated to top of slab.  Submitted By: Eugene Brian (504-887-7045) Submitted On: 23-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 28-May-08			
Current Comment Status: Comment Closed				
1922269	Structural	n/a'	n/a	n/a
(Document Reference: Calculations)				
I believe that your gate skin plate thickness and steel members are too thin. I think that the minimum thickness should be 5/16."				
Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> We will revise skin plate thickness.  Submitted By: Eugene Brian (504-887-7045) Submitted On: 23-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 28-May-08			
Current Comment Status: Comment Closed				
1922272	Structural	n/a'	n/a	n/a
(Document Reference: Costs)				
I believe that your costs for gates might be low. I was recently instructed to use \$8.00 per pound for fabricated steel. I also think you should use a cost of \$200 / CY for stabilization slab.				

Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 23-May-08

Revised 23-May-08.

1-0	<p><b>Evaluation Concurred</b> Will check cost and revies estimate as may be required.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 30-May-08</p>
-----	--

Current Comment Status: Comment Closed

1922274	Structural	n/a'	n/a	n/a
---------	------------	------	-----	-----

(Document Reference: Foundations)

I think that you should reconsider and eliminate the 1 on 1.5 pile batters (2nd T-wall). In most cases you should even avoid 1 on 2 whenever you can---especially if you have concrete piles.

Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 23-May-08

1-0	<p><b>Evaluation Concurred</b> Our scope of work only permits the use of steel piles (H or pipe). We will re-examine the batters.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 23-May-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 28-May-08</p>
-----	--

Current Comment Status: Comment Closed

1922277	Structural	n/a'	n/a	n/a
---------	------------	------	-----	-----

(Document Reference: Foundations)

All of these walls are pretty tall. You should consider a wider spacing and 3 rows of piles. A three pile system has much more reserve capacity. Unless the wall is really short, I'd eliminate a two-pile system from consideration. The extra pile is well worth the money and actually allows potential for future increases in the level of protection.

Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 23-May-08

1-0	<p><b>Evaluation Concurred</b> Done.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 23-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 28-May-08</p>
-----	--

Current Comment Status: Comment Closed

1922286	Structural	n/a'	n/a	n/a
---------	------------	------	-----	-----

(Document Reference: Calculations)

With water to the top of the wall an impact may still be appropriate. I believe that impact should be checked for the top of wall condition because it may influence the wall thickness and quantities.

Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 23-May-08

1-0	<p><b>Evaluation Potential Scope Impact Non-concurred</b>                  The SOW provides for the existing levee to serve as an impact barrier, thus protecting the T-wall from barge impact. To include impact in the design would require a change in the scope.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 28-May-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  WRT scope, I agree. As a practical matter, the wall could get hit. For a study, the SOW and the assumption is acceptable.</p> <p>Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 30-May-08</p>
2-0	<p><b>Evaluation Concurred</b>                  No additional comment.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 23-Jun-08</p>
2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 23-Jun-08</p>
<p>Current Comment Status: Comment Closed</p>	

1923145	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

In the SOW, para. 1.3.6, it states the new ROW should be the levee (or berm) toe plus 15'. The additional ROW in the EAR appears to range from 20' to 30'.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 23-May-08

1-0	<p><b>Evaluation Concurred</b>                  The distance varies slightly from section to section: however, approximately 25' clearance was used to allow for a temporary access road along this corridor.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  ok</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 29-May-08</p>
<p>Current Comment Status: Comment Closed</p>	

1923148	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

The report write up does not address all of the information required by the SOW Appendix D.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 23-May-08

1-0	<p><b>Evaluation Concurred</b>                  Based on corps comments, this matter will be addressed in detail for the 95% submittal.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  ok</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 29-May-08</p>
<p>Current Comment Status: Comment Closed</p>	

1923150	Civil	n/a'	n/a	n/a
<p>In the SOW, para 2.2.1.4, it states that X-Y coordinates should be provided on the ROW sheets for boundary PI's on additional servitudes to be acquired.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u>. Submitted On: 23-May-08</p>				
1-0	<p><b>Evaluation Non-concurred</b>                  On another project we showed coordinates on the new points, and were directed to show base line stationing and offsets, which are easier for the surveyor to lay out. Coordinate call-outs and tick marks will be shown on the border of the R/W drawings.</p> <p>Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  We simply pointed out what was in the SOW. If the COE is acceptable to this, we have no objection.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 29-May-08</p>			
2-0	<p><b>Evaluation Concurred</b>                  No further comment.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 23-Jun-08</p>			
2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Station/Offset will be acceptable for the study.</p> <p>Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 24-Jun-08</p>			
<p>Current Comment Status: <b>Comment Closed</b></p>				
1923152	Civil	n/a'	n/a	n/a
<p>In the SOW, para 2.2.1.4, it states ROW drawings shall include sections, townships and ranges (callout and lines). I could not find these.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u>. Submitted On: 23-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  Based on Corps comments, we requested this information be supplied or located by the Corps for incorporation into this project.</p> <p>Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  ok</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 29-May-08</p>			
<p>Current Comment Status: <b>Comment Closed</b></p>				
1923160	Civil	C-310-A1 thru C-313-A1	n/a	n/a
<p>Under the Alt 1 typical sections for the T-wall (C-310-A1 thru C-313-A1), the placement of the T-wall in relation to the levee seems to vary. The geotech engineer explained to us (under the Algiers West project) that the geotechnical analysis was based upon the heel of the T-wall being placed precisely at the toe of the levee on the protected side. Since this would be for the worst-case section, I understand that the T-wall would vary slightly in all other locations as the existing ground elevation and levee alignment adjusted. In lieu of this, it appears that you have generally placed the toe of the levee near the base of the T-wall stem. Have you checked with the geotechnical engineer to confirm this does not negatively impact his calculations?</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u>. Submitted On: 23-May-08</p>				

1-0	<b>Evaluation Concurred</b> Yes. One goal in the design of the T-walls was to stay within the R/W, which in general placed the centerline of the wall near or at the (varying) toe of the existing levee.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> ok  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 29-May-08			
Current Comment Status: Comment Closed				
1923162	Civil	n/a'	n/a	n/a
In the SOW, para 6.3.3(1), it calls for a standard cover sheet. You did one for the ROW set of drawings only. I interpreted the need for a "project" standard cover sheet.  Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> A cover sheet and general note sheet will be added at the request of the Corps.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> ok  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 29-May-08			
Current Comment Status: Comment Closed				
1923164	Civil	n/a'	n/a	n/a
In the SOW, para 6.3.3(2), it calls for a legend, general notes and abbreviations plan sheet.  Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> General note/legend/abbreviation sheet will be added.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> ok  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 29-May-08			
Current Comment Status: Comment Closed				
1923165	Civil	n/a'	n/a	n/a
In the SOW, para 6.3.3(3), it calls for an "index of drawings" plan sheet. You provided one for the ROW drawings only.  Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> Index will be added.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> ok  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 29-May-08			

Current Comment Status: Comment Closed				
1923168	Civil	n/a'	n/a	n/a
(Document Reference: Alt 2 and Alt 3 Section Drawings)				
In the levee section drawings, the centerline of the existing levee is labeled as "C/L Exit Levee". Shouldn't there be an "s" in "Exit" to make "Exist"?				
Submitted By: Scott Chehardy (504-466-5667). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> Yes. Exist. is correct.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> ok  Submitted By: Scott Chehardy (504-466-5667) Submitted On: 29-May-08			
Current Comment Status: Comment Closed				
1923171	Civil	Sheet C-317-A2	n/a	n/a
Sheet C-317-A2 – After the break line in the section, the slope of the berm call out appears to have changed, but it in not legible in my copy. Please verify.				
Submitted By: Scott Chehardy (504-466-5667). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> This sheet will be deleted base on Corps comments.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> ok  Submitted By: Scott Chehardy (504-466-5667) Submitted On: 29-May-08			
Current Comment Status: Comment Closed				
1923172	Civil	C-310-A3 to C-317-A3	n/a	n/a
The section drawings for Alt 3 (C-310-A3 to C-317-A3) have a temporary levee shown on the flood side. Presumably this is for protection while the existing levee is degraded to install the geotextile fabric. No elevation of this temp levee is provided. It appears lower than the existing levee but higher than the elevation of the geotextile fabric installation. How was this elevation chosen?				
Submitted By: Scott Chehardy (504-466-5667). Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> The approximated elevation shown is 6.0. The intent is to keep wave wash out of the 300' long max. open area during construction of the levee. Further detailing of this temporary levee can be best accomplished after receipt of Corps comments on this report, and possibly during the construction plan phase of this project.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> ok  Submitted By: Scott Chehardy (504-466-5667) Submitted On: 29-May-08			

Current Comment Status: Comment Closed				
1923174	Civil	C-310-A3 to C-317-A3	n/a	n/a
<p>Under the Alt 3 section sheets (C-310-A3 to C-317-A3), I wish to confirm the following. The top of the berm in sections 7 and 8 is at elevation +6.0. The top of the berm in sections 1 thru 6 is at elevation +3.0 (even with the geotech fabric). Was this three-foot drop in berm depth a result of the change in soil conditions? Under Alt 2 (un-reinforced levee), the berm depths were constant or all sections.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 23-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> Soil Reach 5 depicted on C-3-16A3 requires a berm of 146' x 5.5' based on seepage analysis. The berm will start at elevation 6.0. This section will be used for the Typical Section for Alternate 3 for the 95% submittal. The other sections will be deleted based on Corps comments.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> ok</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 29-May-08</p>			
Current Comment Status: Comment Closed				
1923176	Civil	C-314-A3	n/a	n/a
<p>Under Alt 3, C-314-A3 – On one side of the break line the top of berm appears to be around +3 elevation, but after the break line it appears to be at a much higher elevation according to the vertical scale. The scale may have been placed in the wrong location. Please verify.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 23-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> Based on other comments, this sheet will be deleted from the set of drawings.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> ok</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 29-May-08</p>			
Current Comment Status: Comment Closed				
1923178	Civil	Sheet S-101	n/a	n/a
<p>S-101 – On the plan view the side dimension appears to incorrectly show 10'-0".</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 23-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> Dimension should be 19'-0". However, this T-wall has been redesigned using 24" steel pipe piles, and will be shown on the 95% submittal.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 28-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> ok</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 28-May-08</p>			
Current Comment Status: Comment Closed				

1923180	Civil	Sheet S-103 and S-104	n/a	n/a
S-103 (Section A) and S-104 (Section A) – Should the 11'-6" and 11'-0" dimensions be the same on both of these section drawings for the slab at elevation 0.0?				
Submitted By: <a href="#">Scott Chehardy (504-466-5667)</a> . Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> 11'-0" is correct. The correction will be made on the 95% submittal. Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> ok Submitted By: <a href="#">Scott Chehardy (504-466-5667)</a> Submitted On: 28-May-08			
Current Comment Status: Comment Closed				
1923301	Geotechnical	n/a'	n/a	n/a
Geotechnical ITR was performed for the 65% EAR submittal. Comments were included in Appendix G of the Geotechnical Report, which itself was an Appendix of the EAR 65% submittal (9 May 2008). All comments were subsequently addressed. No further comments at this moment.				
Submitted By: <a href="#">Bruce Khosrozadeh (9046411834)</a> . Submitted On: 23-May-08				
1-0	<b>Evaluation Concurred</b> No further comment Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 30-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">Bruce Khosrozadeh (9046411834)</a> Submitted On: 30-May-08			
Current Comment Status: Comment Closed				

There are currently a total of 195 users online as of 08:32 AM 02-Oct-08.

Patent 11/892,984. | [About ProjNet<sup>SM</sup>](#) | [About Us](#) | [Privacy Policy](#) | [Test Browser](#) | [Test Connection](#) | [Call Center](#) | **SBU Only** | SM property of ERDC since 2004.

Questions and comments to Call Center [staff@rcesupport.com](mailto:staff@rcesupport.com), 1-217-367-3273 or 1-800-428-HELP (4357)

Classified information is NOT permitted on this site. Do NOT share your ProjNet password.

Comment Report: All Comments

Project: WBV-49.2

Review: AE, 95% ITR

Displaying 34 comments for the criteria specified in this report.

844 ms to run this page

Id ▲	Discipline	DocType	Spec	Sheet	Detail
2029688	Civil	Feasibility Study	n/a'	General Comments	n/a
<p>General ·Sheet Identification #s have at least 3 or more different text sizes throughout the plan sheets. ·On various plan/profile sheets and ROW sheets throughout there is overlapping text. Combined with aerial photograph backgrounds it makes some of the text difficult to read. ·On the plan/profile sheets and ROW sheets for all 3 alternatives, the LOC end at 570+90 but the title of the sheets says 572+50.58.</p> <p>Submitted By: <a href="#">Scott Chehardy (504-466-5667)</a>. Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b>                      Drawings will be corrected. LOC is 570+90, this will be shown in title block.</p> <p>Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 01-Aug-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b>                      Closed without comment.</p> <p>Submitted By: <a href="#">Scott Chehardy (504-466-5667)</a> Submitted On: 01-Aug-08</p>				
<p>Current Comment Status: <b>Comment Closed</b></p>					
2029689	Civil	Feasibility Study	n/a'	Sheets C-101 A1	n/a
<p>·Note should say G-102 A ·Transition from Type A to B is not shown in profile (similar to C-105 A1) ·Top of scour protection not shown here or in C-102 A1 but it is shown on sheets C-103 thru C-105. ·The legend shows a line type for the "Additional R/W" that does not match the one shown in the plan view.</p> <p>Submitted By: <a href="#">Scott Chehardy (504-466-5667)</a>. Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b>                      Drawing will be corrected.</p> <p>Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 01-Aug-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b>                      Closed without comment.</p> <p>Submitted By: <a href="#">Scott Chehardy (504-466-5667)</a> Submitted On: 01-Aug-08</p>				
<p>Current Comment Status: <b>Comment Closed</b></p>					
2029692	Civil	Feasibility Study	n/a'	Sheets C-101 A1 thru C-106 A1	n/a
<p>·On each plan view there are a dozen or more call outs that say "Slope Varies". This is a preference issue, but it does not seem necessary. ·Consider showing the legend and note on all 6 plan/profile sheets. ·On sheet C-103 A1, point T13 the baseline station shown on the plan conflicts with what is shown on Table G-102 A.</p> <p>Submitted By: <a href="#">Scott Chehardy (504-466-5667)</a>. Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b>                      a. The callouts will remain as is. b. The legend and note will remain on the first P/P sheet only. c. This will be corrected.</p> <p>Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 01-Aug-08</p>				

1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029695	Civil	Feasibility Study	n/a'	Sheets C-310 A1	n/a
<p>·Typical section on top (T-Wall B) says "STA. 2877+00.....". Should be "STA. 287+00". ·Typical section on bottom (T-Wall A) appears to show the slope fill from the T-wall extending over the top of the existing levee and ending at the temporary sheeting. Please verify this is correct. ·T-Wall B and T-Wall A on this sheet do not correlate with T-Wall B and T-Wall A show n on sheets S-101 and S-102. They appear to be switched. Verify this does not affect plan/profile call outs.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	Evaluation Concurred a. This will be corrected. b. The slope fill extends to the flood side of the existing levee. The drawing will be corrected. c. The titles will be switched to their correct positions. P/P callouts are correct.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029697	Civil	Feasibility Study	n/a'	Sheets C-101 A2 thru C-106 A2	n/a
<p>·Line type for additional ROW is not the right line type. Fix in legend also. ·General note should say G-103 A on all sheets. ·Consider showing the legend on all 6 plan/profile sheets. ·On sheet C-104 A2, point L8, the baseline station shown on the plan conflicts with what is shown on Table G-103 A. ·On sheet C-105 A2, we cannot find point L15.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	Evaluation Concurred a. This will be corrected. b. Note will be corrected. c. This will be corrected. d. Point L15 will be located on the plan and shown.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	Backcheck Recommendation Close Comment  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029698	Civil	Feasibility Study	n/a'	Sheet C-105 A2	n/a
<p>On the north side of the PS the transition call outs for the levee to T-wall are duplicated in the plan view and some are not correct.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	Evaluation Concurred This will be corrected.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>				
Current Comment Status: Comment Closed					
2029699	Civil	Feasibility Study	n/a'	Sheet C-106 A2	n/a
<p>Levee to T-wall transitions are not shown in the profile view. It should be similar to that shown on C-105 A2 at the pump station.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b> This will be corrected.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>				
Current Comment Status: Comment Closed					
2029735	Civil	Feasibility Study	n/a'	Sheet C-310 A2	n/a
<p>·Quad D3 and D4 have text errors. "Exit Levee" should be "Exist Levee" and "Mulchint" should be "Mulching". ·Need to either show distance on berms or the elevations at all slope transitions otherwise there is not enough information to layout the levee. Also should show the required offset distance from the geotech report. -The overlapping of the 2nd lift with the 2057 final levee section makes this drawing very confusing. Additonally, it appears to incorrectly show the 2057 levee location. Although I have not seen your geotech data, if the 2nd lift has an offset shift to the landside than so it would seem that the final section did too. This means the layout in the plan/profile drawings and possibly ROW drawings needs to be modified.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b> a. and b. This will be corrected. c.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>				
1-1	<p><b>Backcheck Recommendation Open Comment</b> It does not appear you finished your answer.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>				
2-0	<p><b>Evaluation Concurred</b> The text related items will be corrected. We will also put in berm lengths for all cross sections. As far as the overlapping of cross sections is concerned, we show the theoretical levee section that is in the location of where the first lift will occur (Net. 14.0). This cross section depicts what is theoretical based on the scope of work. This is also how it was shown to us in all example EARs provided to us by the COE. The second lift controls the R/W that is required for the alternative and its purpose is to show how the R/W line was developed. This information matches the information in the geotech report Appendix. During the comment phase for the 65% submittal, we were instructed by the N.O. Corps to only have one representative cross section per each alternative. By doing this, we were limited with what we could show in one cross-section drawing. This is the reason for the one drawing and why there is an overlap in information. There were originally 15 cross-section sheets and now there are 3. We will maintain what we have until instructed otherwise with the COE N.O. District.</p> <p>Submitted By: <u>Thomas L'Hoste</u> ((504)887-7045) Submitted On: 01-Aug-08</p>				
2-1	<p><b>Backcheck Recommendation Close Comment</b> ok, i agree.</p>				

Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08					
Current Comment Status: Comment Closed					
2029736	Civil	Feasibility Study	n/a'	Sheet G-103 A	n/a
Disposition table – This appears to be the same table copied from the T-wall option with the same dispositions. On this earthen levee alternative, I do not believe utilities will be relocated through "wall sleeves in sheet pile" as it states.					
Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> This will be corrected.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029739	Civil	Feasibility Study	n/a'	Sheets C-101 A3 thru C-106 A3	n/a
Line type for additional ROW is not the right line type. Fix in legend also. General note should say G-104 A on all sheets. Consider showing the legend on all 6 plan/profile sheets.					
Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> a. This will be corrected. b. The legend will be shown on the first P/P sheet only.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029790	Civil	Feasibility Study	n/a'	Sheets C-106 A3	n/a
Levee to T-wall transitions are not shown in the profile view. It should be similar to that shown on C-105 A3 at the pump station.					
Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> a. This will be corrected.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029792	Civil	Feasibility Study	n/a'	Sheet C-310 A3	n/a
Quad D3 and D4 have text errors. "Exit Levee" should be "Exist Levee" and "Mulchint" should be "Mulching". The overlapping of the 2nd lift with the 2057 final levee section makes this drawing very confusing. Was there no levee					

offset for the reinforced alternative? None is shown. ·Need to either show distance on berms or the elevations at all slope transitions otherwise there is not enough information to layout the levee. There is a stray word in quad B4, "additional".

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  a. This will be corrected. b. c. This will be corrected. d. The word shall be deleted.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	---

2-0	<p><b>Evaluation Concurred</b>                  a. This will be corrected. b. c. This will be corrected. d. The word shall be deleted.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	--

*Backcheck not conducted*

Current Comment Status: **Comment Closed**

2029796	Civil	Feasibility Study	n/a'	Sheet G-104 A	n/a
---------	-------	-------------------	------	---------------	-----

Disposition table – This appears to be the same table copied from the T-wall option again with the same dispositions. On this reinforced earthen levee alternative, I do not believe utilities will be relocated through "wall sleeves in sheet pile" as it states.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  This will be corrected.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	---

Current Comment Status: **Comment Closed**

2029803	Civil	Feasibility Study	n/a'	Sheet C-300	n/a
---------	-------	-------------------	------	-------------	-----

Typical Scour Protection – top of scour pad is called out as El 4.0. According to structural sheets, in some places the top of scour is 0.0, thus this isn't accurate for a "typical".

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  The elevation will be changed to "Elevation Varies".</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	---

Current Comment Status: **Comment Closed**

2029806	Civil	Feasibility Study	n/a'	Sheet C-303	n/a
---------	-------	-------------------	------	-------------	-----

There are 2 sections labeled "F". Not sure where they go to since the call out is sheet C1/C5. Please correct.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b> This will be corrected.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	--

Current Comment Status: <b>Comment Closed</b>	
---	--

2029809	Civil	Feasibility Study	n/a'	Sheets S-101 and S-102	n/a
---------	-------	-------------------	------	------------------------	-----

T-Wall B and T-Wall A shown on sheets S-101 and S-102 do not correlate with the typical section T-Wall B and T-Wall A on sheet C-310 A1. Please refer to previous comment on this. Sheet project title in title block on these two sheets is shifted out of the title block.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b> These details are correct as shown. The titles on sheet C-310 A1 will be switched to their correct position.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	--

2-0	<p><b>Evaluation Concurred</b> These details are correct as shown. The titles on sheet C-310 A1 will be switched to their correct position.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	---

<i>Backcheck not conducted</i>	
--------------------------------	--

Current Comment Status: <b>Comment Closed</b>	
---	--

2029810	Civil	Feasibility Study	n/a'	Sheets S-103 and S-104	n/a
---------	-------	-------------------	------	------------------------	-----

The section A on both sheets show the base width to be different dimensions. It is 11'-0" on one and 11'-6" on the other.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b> 11' -0" is correct. The drawing will be corrected.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	--

Current Comment Status: <b>Comment Closed</b>	
---	--

2029811	Civil	Feasibility Study	n/a'	Sheet G-102	n/a
There is no table for the perpetual easement. Points P1 thru P4.					
Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> A table for perpetual easement shall be prepared.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: <b>Comment Closed</b>					
2029812	Civil	Feasibility Study	n/a'	Sheets C-101 A1 R/W thru C-106 A1 R/W	n/a
·Consider showing the legend and note on all 6 plan/profile sheets. ·Existing R/W line type is wrong in the legend ·Additional R/W line type is wrong in the legend and drawing. It was correct on the plan/profile drawing (Sheet C-101 A1) ·Most of these 6 sheets have all the disposition table utility numbers missing. There is possibly a layer turned off.					
Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> a. Legend will be shown on the first P/P sheet only. b. and c. This will be corrected. d. This will be checked.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b>  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: <b>Comment Closed</b>					
2029814	Civil	Feasibility Study	n/a'	Sheets G-103	n/a
Disposition table – This appears to be the same table copied from the T-wall option with the same dispositions. Levee alternatives do not use sheet pile with sleeves.					
Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> This will be corrected.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: <b>Comment Closed</b>					
2029817	Civil	Feasibility Study	n/a'	Sheets C-101 A2 R/W thru C-106 A2 R/W	n/a
·Consider showing the legend and note on all 6 plan/profile sheets. ·Parts of the legend are missing. ·Existing R/W line type is wrong in the legend ·Additional R/W line type is wrong in the legend and drawing. ·These 6 sheets have all the					

disposition table utility numbers missing. There is possibly a layer turned off. -On sheet C-101 it states "Begin T-wall Construction". This is not correct.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b> These will be checked and corrected as necessary.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>
<p>Current Comment Status: <b>Comment Closed</b></p>	

2029818	Civil	Feasibility Study	n/a'	Sheets G-104	n/a
---------	-------	-------------------	------	--------------	-----

Disposition table -- This appears to be the same table copied from the T-wall option with the same dispositions. Levee alternatives do not use sheet pile with sleeves.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b> This will be checked.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>
<p>Current Comment Status: <b>Comment Closed</b></p>	

2029819	Civil	Feasibility Study	n/a'	Sheets C-101 A3 R/W thru C-106 A3 R/W -	n/a
---------	-------	-------------------	------	---	-----

-Consider showing the legend and note on all 6 plan/profile sheets. -Parts of the legend are missing. -Existing R/W line type is wrong in the legend -Additional R/W line type is wrong in the legend and drawing. -On sheet C-101 it states "Begin T-wall Construction". This is not correct.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b> These will be checked and corrected as necessary.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>
<p>Current Comment Status: <b>Comment Closed</b></p>	

2030518	Civil	Feasibility Study	n/a'	Report	n/a
---------	-------	-------------------	------	--------	-----

Very minor comments -Appendix does not list Appendix F mentioned on page 31 -page 20 states that second swing gate is at sta 504+00, but it appears to be sta 506+20 on plans. -Table of Contents has the words "Executive" and "Recommendations" spelled incorrectly

Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> Corrections shall be made.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: <b>Comment Closed</b>					
2030840	Structural	Technical Report	n/a'	n/a	n/a
Strongly recommend, at least in future, that you DO NOT use overstress factors for your load input into CPGA. Also OS factors are applied to all loads in a load case. It appears that you are applying OS to all loads EXCEPT the unbalanced forces.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08  Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> Comment noted. We will address this during P&S phase.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: <b>Comment Closed</b>					
2030843	Structural	Technical Report	n/a'	n/a	n/a
The unbalanced anchor force for the sheetpile is the TOTAL force for the wedge to meet the required factor of safety. The anchor force applied to the T-wall is actually lower—probably close to half.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08  Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: <b>Comment Closed</b>					
2030844	Structural	Technical Report	n/a'	n/a	n/a
Pile spacing is much too close for this size of pile, but probably OK for study estimate. Wider spacing will require more pile depth. Minor impact on costs considering the overall project.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					

Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840.  Submitted By: Eugene Brian (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Open Comment</b>  Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 04-Aug-08				
1-2	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030847	Structural	Technical Report	n/a'	n/a	n/a
For Slab A "design", pile forces do not match Case 6 from CPGA. No major change in conclusion regarding slab depth, the forces just don't match.  Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 01-Aug-08					
Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840.  Submitted By: Eugene Brian (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030850	Structural	Technical Report	n/a'	n/a	n/a
1 on 2.4 is a pretty "odd" batter in wall section B. Recommend using 1:2.5 or 1 on 2.0. If changed, correct on typical drawings as well.  Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 01-Aug-08					
Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See responseto Comment No. 2030840  Submitted By: Eugene Brian (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030853	Structural	Technical Report	n/a'	n/a	n/a
On wall B, you could eliminate some of the piles (1/2) in the back row since the loads are quite low for all cases-- spacing still only 5D.					

Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 01-Aug-08

Revised 01-Aug-08.

1-0	<p><b>Evaluation Concurred</b> See response to Comment No. 2030840</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 04-Aug-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 04-Aug-08</p>
<p>Current Comment Status: <b>Comment Closed</b></p>	

2030856	Structural	Technical Report	n/a	n/a	n/a
---------	------------	------------------	-----	-----	-----

On your typical T-wall sections, you show a settlement plate adjacent to the T-wall that's supporting much of the fill. This is probably not a good location to monitor settlement for payment.

Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b> See response to Comment No. 2030840</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 04-Aug-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 04-Aug-08</p>
<p>Current Comment Status: <b>Comment Closed</b></p>	

2030857	Structural	Technical Report	n/a	n/a	n/a
---------	------------	------------------	-----	-----	-----

On Dwg. S-105, the gate diagonals should probably be tie rods, in lieu of the channels shown. Suggest changing if project moves forward.

Submitted By: Robert Yokum ((985) 674-1846). Submitted On: 01-Aug-08

Revised 01-Aug-08.

1-0	<p><b>Evaluation Concurred</b> See response to Comment No. 2030840.</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 04-Aug-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Robert Yokum ((985) 674-1846) Submitted On: 04-Aug-08</p>
<p>Current Comment Status: <b>Comment Closed</b></p>	

2030860	Structural	Technical Report	n/a	n/a	n/a
---------	------------	------------------	-----	-----	-----

On Dwg. S-106 the foundation plan for the gate doesn't appear to be as robust as expected. With only two rows of piles, there is little to no redundancy or excess stiffness. This is further compounded by having only 1 row of battered piles. If the project advances to a detailed level, I suggest, that the batters be increased from 1:6 to 1:3 to add overall foundation stiffness.

Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					
Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: <b>Comment Closed</b>					
2037993	Geotechnical	Engineering Appendix	n/a	n/a	n/a
ITR of the geotechnical report was performed prior to submittal of the report. Comments were included in the Appendix of that report.					
Submitted By: <u>Bruce Khosrozadeh</u> (9046411834). Submitted On: 07-Aug-08					
1-0	<b>Evaluation Check and Resolve</b> Please attach the word or pdf file of your comments / resolutions. A record must be contained within this system.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 13-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Comments by: Bruce Khosrozadeh Responses by: Carlos E. Cepero 1) Please revise Lift Construction Schedule Spreadsheet – correct Cc and eo for organics layers located in R3E, R4E and R5E. Corrections done. 2) Please revise Lift Construction Schedule Spreadsheet – correct Layer Midpoint Vertical Effective Stress calculation in R5E. Corrections done. 3) Please revise Lift Construction Schedule Spreadsheet – Layer Thickness at each lift now should be reduced to account for layer consolidation from previous lift. Corrections done. 4) Please, revise Lift Construction Schedule Spreadsheet – correct manually input Uz, Uavg values for R3E. Corrections done. 5) On consol. test data, please review & modify accordingly Cc and Cv values in spreadsheet. Revisions made. 6) The stability analysis for the proposed lifts yields FS lower than the allowed minimum. Suggest increasing berm height and length. Will adjust berm size to satisfy minimum stability safety criteria for the lifts. 7) Table 12 – verify that all the stability analysis results where an actual value is reported are presented in the appropriate appendix. This comment applies to both Spencer's and MOP results. Explain why otherwise. Corrections done. 8) Algiers East Lift Schedule Related Changes: - Correct Tv Calcs in Spreadsheet to reflect consistent units of Ft <sup>2</sup> /Day. Corrections done. 9) Modify Spreadsheet to allow Single and Double Drainage Path capabilities . Spreadsheet modified. 10) Algiers East Lift Schedule Changes to Minimize Stability Berm Reqs: Suggest Revising Scheduled Lift Dates for R4E to 2009/2012/2022/2037/2057 to minimize the required berm. Corrections done. 11) Algiers East Revisions to Appendix F, Pile Capacity and Modulus: -Add Steel Pipe Pile Driven Output results to each reach. Added. 12) Same Appendix - Move Khb and Soil Pressure Plots to end of appendix (were duplicated) - Revise R3E Khb Plot – (data labels and series definitions). Corrections made.  Submitted By: <u>Bruce Khosrozadeh</u> (9046411834) Submitted On: 15-Aug-08				
1-2	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 15-Aug-08				
Current Comment Status: <b>Comment Closed</b>					

There are currently a total of 216 users online as of 08:39 AM 02-Oct-08.

Questions and comments to Call Center [staff@rcesupport.com](mailto:staff@rcesupport.com), 1-217-367-3273 or 1-800-428-HELP (4357)

---

Classified information is NOT permitted on this site. Do NOT share your ProjNet password.

Comment Report: All Comments

Project: WBV-49.2

Review: AE, 95% ITR

Displaying 34 comments for the criteria specified in this report.

1188 ms to run this page

<u>Id</u>	<u>Discipline</u>	<u>DocType</u>	<u>Spec</u>	<u>Sheet</u>	<u>Detail</u>
2029688	Civil	Feasibility Study	n/a	General Comments	n/a
<p>General -Sheet Identification #s have at least 3 or more different text sizes throughout the plan sheets. ·On various plan/profile sheets and ROW sheets throughout there is overlapping text. Combined with aerial photograph backgrounds it makes some of the text difficult to read. ·On the plan/profile sheets and ROW sheets for all 3 alternatives, the LOC end at 570+90 but the title of the sheets says 572+50.58.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b>                  Drawings will be corrected. LOC is 570+90, this will be shown in title block.                  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.                  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>				
<p>Current Comment Status: Comment Closed</p>					
2029689	Civil	Feasibility Study	n/a	Sheets C-101 A1	n/a
<p>·Note should say G-102 A ·Transition from Type A to B is not shown in profile (similar to C-105 A1) ·Top of scour protection not shown here or in C-102 A1 but it is shown on sheets C-103 thru C-105. ·The legend shows a line type for the "Additional R/W" that does not match the one shown in the plan view.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b>                  Drawing will be corrected.                  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.                  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>				
<p>Current Comment Status: Comment Closed</p>					
2029692	Civil	Feasibility Study	n/a	Sheets C-101 A1 thru C-106 A1	n/a
<p>·On each plan view there are a dozen or more call outs that say "Slope Varies". This is a preference issue, but it does not seem necessary. ·Consider showing the legend and note on all 6 plan/profile sheets. ·On sheet C-103 A1, point T13 the baseline station shown on the plan conflicts with what is shown on Table G-102 A.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b>                  a. The callouts will remain as is. b. The legend and note will remain on the first P/P sheet only. c. This will be corrected.                  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>				

<p><b>1-1 Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p> <p>Current Comment Status: <b>Comment Closed</b></p>					
2029695	Civil	Feasibility Study	n/a'	Sheets C-310 A1	n/a
<p>·Typical section on top (T-Wall B) says "STA. 2877+00.....". Should be "STA. 287+00". ·Typical section on bottom (T-Wall A) appears to show the slope fill from the T-wall extending over the top of the existing levee and ending at the temporary sheeting. Please verify this is correct. ·T-Wall B and T-Wall A on this sheet do not correlate with T-Wall B and T-Wall A show n on sheets S-101 and S-102. They appear to be switched. Verify this does not affect plan/profile call outs.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u>. Submitted On: 01-Aug-08</p>					
<p><b>1-0 Evaluation Concurred</b>                  a. This will be corrected. b. The slope fill extends to the flood side of the existing levee. The drawing will be corrected. c. The titles will be switched to their correct positions. P/P callouts are correct.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>					
<p><b>1-1 Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p> <p>Current Comment Status: <b>Comment Closed</b></p>					
2029697	Civil	Feasibility Study	n/a'	Sheets C-101 A2 thru C-106 A2	n/a
<p>·Line type for additional ROW is not the right line type. Fix in legend also. ·General note should say G-103 A on all sheets. ·Consider showing the legend on all 6 plan/profile sheets. ·On sheet C-104 A2, point L8, the baseline station shown on the plan conflicts with what is shown on Table G-103 A. ·On sheet C-105 A2, we cannot find point L15.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u>. Submitted On: 01-Aug-08</p>					
<p><b>1-0 Evaluation Concurred</b>                  a. This will be corrected. b. Note will be corrected. c. This will be corrected. d. Point L15 will be located on the plan and shown.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>					
<p><b>1-1 Backcheck Recommendation Close Comment</b></p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p> <p>Current Comment Status: <b>Comment Closed</b></p>					
2029698	Civil	Feasibility Study	n/a'	Sheet C-105 A2	n/a
<p>On the north side of the PS the transition call outs for the levee to T-wall are duplicated in the plan view and some are not correct.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u>. Submitted On: 01-Aug-08</p>					
<p><b>1-0 Evaluation Concurred</b>                  This will be corrected.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>					

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>				
Current Comment Status: Comment Closed					
2029699	Civil	Feasibility Study	n/a'	Sheet C-106 A2	n/a
<p>Levee to T-wall transitions are not shown in the profile view. It should be similar to that shown on C-105 A2 at the pump station.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b>                  This will be corrected.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>				
Current Comment Status: Comment Closed					
2029735	Civil	Feasibility Study	n/a'	Sheet C-310 A2	n/a
<p>-Quad D3 and D4 have text errors. "Exit Levee" should be "Exist Levee" and "Mulchint" should be "Mulching". ·Need to either show distance on berms or the elevations at all slope transitions otherwise there is not enough information to layout the levee. Also should show the required offset distance from the geotech report. -The overlapping of the 2nd lift with the 2057 final levee section makes this drawing very confusing. Additionally, it appears to incorrectly show the 2057 levee location. Although I have not seen your geotech data, if the 2nd lift has an offset shift to the landside than so it would seem that the final section did too. This means the layout in the plan/profile drawings and possibly ROW drawings needs to be modified.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b>                  a. and b. This will be corrected. c.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>				
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  It does not appear you finished your answer.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>				
2-0	<p><b>Evaluation Concurred</b>                  The text related items will be corrected. We will also put in berm lengths for all cross sections. As far as the overlapping of cross sections is concerned, we show the theoretical levee section that is in the location of where the first lift will occur (Net. 14.0). This cross section depicts what is theoretical based on the scope of work. This is also how it was shown to us in all example EARs provided to us by the COE. The second lift controls the R/W that is required for the alternative and its purpose is to show how the R/W line was developed. This information matches the information in the geotech report Appendix. During the comment phase for the 65% submittal, we were instructed by the N.O. Corps to only have one representative cross section per each alternative. By doing this, we were limited with what we could show in one cross-section drawing. This is the reason for the one drawing and why there is an overlap in information. There were originally 15 cross-section sheets and now there are 3. We will maintain what we have until instructed otherwise with the COE N.O. District.</p> <p>Submitted By: <u>Thomas L'Hoste</u> ((504)887-7045) Submitted On: 01-Aug-08</p>				

<b>2-1 Backcheck Recommendation Close Comment</b> ok, i agree.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08  Current Comment Status: <b>Comment Closed</b>					
2029736	Civil	Feasibility Study	n/a'	Sheet G-103 A	n/a
Disposition table – This appears to be the same table copied from the T-wall option with the same dispositions. On this earthen levee alternative, I do not believe utilities will be relocated through "wall sleeves in sheet pile" as it states.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> . Submitted On: 01-Aug-08					
<b>1-0 Evaluation Concurred</b> This will be corrected.  Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08					
<b>1-1 Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08  Current Comment Status: <b>Comment Closed</b>					
2029739	Civil	Feasibility Study	n/a'	Sheets C-101 A3 thru C-106 A3	n/a
Line type for additional ROW is not the right line type. Fix in legend also. General note should say G-104 A on all sheets. Consider showing the legend on all 6 plan/profile sheets.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> . Submitted On: 01-Aug-08					
<b>1-0 Evaluation Concurred</b> a. This will be corrected. b. The legend will be shown on the first P/P sheet only.  Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08					
<b>1-1 Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08  Current Comment Status: <b>Comment Closed</b>					
2029790	Civil	Feasibility Study	n/a'	Sheets C-106 A3	n/a
Levee to T-wall transitions are not shown in the profile view. It should be similar to that shown on C-105 A3 at the pump station.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> . Submitted On: 01-Aug-08					
<b>1-0 Evaluation Concurred</b> a. This will be corrected.  Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08					
<b>1-1 Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08  Current Comment Status: <b>Comment Closed</b>					
2029792	Civil	Feasibility Study	n/a'	Sheet C-310 A3	n/a

Quad D3 and D4 have text errors. "Exit Levee" should be "Exist Levee" and "Mulchint" should be "Mulching". The overlapping of the 2nd lift with the 2057 final levee section makes this drawing very confusing. Was there no levee offset for the reinforced alternative? None is shown. Need to either show distance on berms or the elevations at all slope transitions otherwise there is not enough information to layout the levee. There is a stray word in quad B4, "additional".

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  a. This will be corrected. b. c. This will be corrected. d. The word shall be deleted.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>
-----	---

2-0	<p><b>Evaluation Concurred</b>                  a. This will be corrected. b. c. This will be corrected. d. The word shall be deleted.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>
-----	--

Backcheck not conducted	
-------------------------	--

Current Comment Status: Comment Closed	
--	--

2029796	Civil	Feasibility Study	n/a'	Sheet G-104 A	n/a
---------	-------	-------------------	------	---------------	-----

Disposition table – This appears to be the same table copied from the T-wall option again with the same dispositions. On this reinforced earthen levee alternative, I do not believe utilities will be relocated through "wall sleeves in sheet pile" as it states.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  This will be corrected.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>
-----	---

Current Comment Status: Comment Closed	
--	--

2029803	Civil	Feasibility Study	n/a'	Sheet C-300	n/a
---------	-------	-------------------	------	-------------	-----

Typical Scour Protection – top of scour pad is called out as El 4.0. According to structural sheets, in some places the top of scour is 0.0, thus this isn't accurate for a "typical".

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  The elevation will be changed to "Elevation Varies".</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>
-----	---

Current Comment Status: Comment Closed	
--	--

2029806	Civil	Feasibility Study	n/a'	Sheet C-303	n/a
---------	-------	-------------------	------	-------------	-----

<p>There are 2 sections labeled "F". Not sure where they go to since the call out is sheet C1/C5. Please correct.</p>					
<p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b> This will be corrected.</p>				
<p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>					
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p>				
<p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>					
<p>Current Comment Status: Comment Closed</p>					
2029809	Civil	Feasibility Study	n/a'	Sheets S-101 and S-102	n/a
<p>T-Wall B and T-Wall A shown on sheets S-101 and S-102 do not correlate with the typical section T-Wall B and T-Wall A on sheet C-310 A1. Please refer to previous comment on this. Sheet project title in title block on these two sheets is shifted out of the title block.</p>					
<p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b> These details are correct as shown. The titles on sheet C-310 A1 will be switched to their correct position.</p>				
<p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>					
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p>				
<p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>					
2-0	<p><b>Evaluation Concurred</b> These details are correct as shown. The titles on sheet C-310 A1 will be switched to their correct position.</p>				
<p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>					
<p><i>Backcheck not conducted</i></p>					
<p>Current Comment Status: Comment Closed</p>					
2029810	Civil	Feasibility Study	n/a'	Sheets S-103 and S-104	n/a
<p>The section A on both sheets show the base width to be different dimensions. It is 11'-0" on one and 11'-6" on the other.</p>					
<p>Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08</p>					
1-0	<p><b>Evaluation Concurred</b> 11' -0" is correct. The drawing will be corrected.</p>				
<p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08</p>					
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p>				
<p>Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08</p>					
<p>Current Comment Status: Comment Closed</p>					
2029811	Civil	Feasibility Study	n/a'	Sheet G-102	n/a

There is no table for the perpetual easement. Points P1 thru P4.					
Submitted By: <u>Scott Chehardy (504-466-5667)</u> . Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> A table for perpetual easement shall be prepared.  Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029812	Civil	Feasibility Study	n/a'	Sheets C-101 A1 R/W thru C-106 A1 R/W	n/a
Consider showing the legend and note on all 6 plan/profile sheets. Existing R/W line type is wrong in the legend Additional R/W line type is wrong in the legend and drawing. It was correct on the plan/profile drawing (Sheet C-101 A1) Most of these 6 sheets have all the disposition table utility numbers missing. There is possibly a layer turned off.					
Submitted By: <u>Scott Chehardy (504-466-5667)</u> . Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> a. Legend will be shown on the first P/P sheet only. b. and c. This will be corrected. d. This will be checked.  Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b>  Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029814	Civil	Feasibility Study	n/a'	Sheets G-103	n/a
Disposition table – This appears to be the same table copied from the T-wall option with the same dispositions. Levee alternatives do not use sheet pile with sleeves.					
Submitted By: <u>Scott Chehardy (504-466-5667)</u> . Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> This will be corrected.  Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2029817	Civil	Feasibility Study	n/a'	Sheets C-101 A2 R/W thru C-106 A2 R/W	n/a
Consider showing the legend and note on all 6 plan/profile sheets. Parts of the legend are missing. Existing R/W line type is wrong in the legend Additional R/W line type is wrong in the legend and drawing. These 6 sheets have all the disposition table utility numbers missing. There is possibly a layer turned off. On sheet C-101 it states "Begin T-wall					

Construction". This is not correct.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  These will be checked and corrected as necessary.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	---

Current Comment Status: **Comment Closed**

2029818	Civil	Feasibility Study	n/a'	Sheets G-104	n/a
---------	-------	-------------------	------	--------------	-----

Disposition table – This appears to be the same table copied from the T-wall option with the same dispositions. Levee alternatives do not use sheet pile with sleeves.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  This will be checked.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	---

Current Comment Status: **Comment Closed**

2029819	Civil	Feasibility Study	n/a'	Sheets C-101 A3 R/W thru C-106 A3 R/W –	n/a
---------	-------	-------------------	------	---	-----

-Consider showing the legend and note on all 6 plan/profile sheets. -Parts of the legend are missing. -Existing R/W line type is wrong in the legend -Additional R/W line type is wrong in the legend and drawing. -On sheet C-101 it states "Begin T-wall Construction". This is not correct.

Submitted By: Scott Chehardy (504-466-5667). Submitted On: 01-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  These will be checked and corrected as necessary.</p> <p>Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 01-Aug-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>Scott Chehardy (504-466-5667)</u> Submitted On: 01-Aug-08</p>
-----	---

Current Comment Status: **Comment Closed**

2030518	Civil	Feasibility Study	n/a'	Report	n/a
---------	-------	-------------------	------	--------	-----

Very minor comments -Appendix does not list Appendix F mentioned on page 31 -page 20 states that second swing gate is at sta 504+00, but it appears to be sta 506+20 on plans. -Table of Contents has the words "Executive" and "Recommendations" spelled incorrectly

Submitted By: <u>Scott Chehardy</u> (504-466-5667). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> Corrections shall be made.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 01-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Scott Chehardy</u> (504-466-5667) Submitted On: 01-Aug-08				
Current Comment Status: Comment Closed					
2030840	Structural	Technical Report	n/a	n/a	n/a
Strongly recommend, at least in future, that you DO NOT use overstress factors for your load input into CPGA. Also OS factors are applied to all loads in a load case. It appears that you are applying OS to all loads EXCEPT the unbalanced forces.					
Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					
Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> Comment noted. We will address this during P&S phase.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030843	Structural	Technical Report	n/a	n/a	n/a
The unbalanced anchor force for the sheetpile is the TOTAL force for the wedge to meet the required factor of safety. The anchor force applied to the T-wall is actually lower---probably close to half.					
Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					
Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030844	Structural	Technical Report	n/a	n/a	n/a
Pile spacing is much too close for this size of pile, but probably OK for study estimate. Wider spacing will require more pile depth. Minor impact on costs considering the overall project.					
Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					
Revised 01-Aug-08.					

1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Open Comment</b>  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
1-2	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030847	Structural	Technical Report	n/a'	n/a	n/a
For Slab A "design", pile forces do not match Case 6 from CPGA. No major change in conclusion regarding slab depth, the forces just don't match.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08  Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030850	Structural	Technical Report	n/a'	n/a	n/a
1 on 2.4 is a pretty "odd" batter in wall section B. Recommend using 1:2.5 or 1 on 2.0. If changed, correct on typical drawings as well.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08  Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See responseto Comment No. 2030840  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030853	Structural	Technical Report	n/a'	n/a	n/a
On wall B, you could eliminate some of the piles (1/2) in the back row since the loads are quite low for all cases---spacing still only 5D.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					

Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030856	Structural	Technical Report	n/a'	n/a	n/a
On your typical T-wall sections, you show a settlement plate adjacent to the T-wall that's supporting much of the fill. This is probably not a good location to monitor settlement for payment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030857	Structural	Technical Report	n/a'	n/a	n/a
On Dwg. S-105, the gate diagonals should probably be tie rods, in lieu of the channels shown. Suggest changing if project moves forward.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					
Revised 01-Aug-08.					
1-0	<b>Evaluation Concurred</b> See response to Comment No. 2030840.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 04-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846) Submitted On: 04-Aug-08				
Current Comment Status: Comment Closed					
2030860	Structural	Technical Report	n/a'	n/a	n/a
On Dwg. S-106 the foundation plan for the gate doesn't appear to be as robust as expected. With only two rows of piles, there is little to no redundancy or excess stiffness. This is further compounded by having only 1 row of battered piles. If the project advances to a detailed level, I suggest, that the batters be increased from 1:6 to 1:3 to add overall foundation stiffness.  Submitted By: <u>Robert Yokum</u> ((985) 674-1846). Submitted On: 01-Aug-08					
Revised 01-Aug-08.					

1-0	<p><b>Evaluation Concurred</b> See response to Comment No. 2030840.</p> <p>Submitted By: <a href="#">Eugene Brian</a> (504-887-7045) Submitted On: 04-Aug-08</p>					
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">Robert Yokum</a> ((985) 674-1846) Submitted On: 04-Aug-08</p>					
Current Comment Status: Comment Closed						
2037993	<table border="1"> <tr> <td>Geotechnical</td> <td>Engineering Appendix</td> <td>n/a'</td> <td>n/a</td> <td>n/a</td> </tr> </table>	Geotechnical	Engineering Appendix	n/a'	n/a	n/a
Geotechnical	Engineering Appendix	n/a'	n/a	n/a		
<p>ITR of the geotechnical report was performed prior to submittal of the report. Comments were included in the Appendix of that report.</p> <p>Submitted By: <a href="#">Bruce Khosrozadeh</a> (9046411834). Submitted On: 07-Aug-08</p>						
1-0	<p><b>Evaluation Check and Resolve</b> Please attach the word or pdf file of your comments / resolutions. A record must be contained within this system.</p> <p>Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 13-Aug-08</p>					
1-1	<p><b>Backcheck Recommendation Close Comment</b> Comments by: Bruce Khosrozadeh Responses by: Carlos E. Cepero 1) Please revise Lift Construction Schedule Spreadsheet – correct Cc and eo for organics layers located in R3E, R4E and R5E. Corrections done. 2) Please revise Lift Construction Schedule Spreadsheet – correct Layer Midpoint Vertical Effective Stress calculation in R5E. Corrections done. 3) Please revise Lift Construction Schedule Spreadsheet – Layer Thickness at each lift now should be reduced to account for layer consolidation from previous lift. Corrections done. 4) Please, revise Lift Construction Schedule Spreadsheet – correct manually input Uz, Uavg values for R3E. Corrections done. 5) On consol. test data, please review &amp; modify accordingly Cc and Cv values in spreadsheet. Revisions made. 6) The stability analysis for the proposed lifts yields FS lower than the allowed minimum. Suggest increasing berm height and length. Will adjust berm size to satisfy minimum stability safety criteria for the lifts. 7) Table 12 – verify that all the stability analysis results where an actual value is reported are presented in the appropriate appendix. This comment applies to both Spencer's and MOP results. Explain why otherwise. Corrections done. 8) Algiers East Lift Schedule Related Changes: - Correct Tv Calcs in Spreadsheet to reflect consistent units of Ft<sup>2</sup>/Day. Corrections done. 9) Modify Spreadsheet to allow Single and Double Drainage Path capabilities . Spreadsheet modified. 10) Algiers East Lift Schedule Changes to Minimize Stability Berm Req's: Suggest Revising Scheduled Lift Dates for R4E to 2009/2012/2022/2037/2057 to minimize the required berm. Corrections done. 11) Algiers East Revisions to Appendix F, Pile Capacity and Modulus: -Add Steel Pipe Pile Driven Output results to each reach. Added. 12) Same Appendix - Move Khb and Soil Pressure Plots to end of appendix (were duplicated) - Revise R3E Khb Plot – (data labels and series definitions). Corrections made.</p> <p>Submitted By: <a href="#">Bruce Khosrozadeh</a> (9046411834) Submitted On: 15-Aug-08</p>					
1-2	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 15-Aug-08</p>					
Current Comment Status: Comment Closed						

There are currently a total of 279 users online as of 10:49 AM 29-Oct-08.

Patent 11/892,984. | [About ProjNet<sup>SM</sup>](#) | [About Us](#) | [Privacy Policy](#) | [Test Browser](#) | [Test Connection](#) | [Call Center](#) | [SBU Only](#) | SM property of ERDC since 2004.

Questions and comments to Call Center [staff@rcesupport.com](mailto:staff@rcesupport.com), 1-217-367-3273 or 1-800-428-HELP (4357)

Classified information is NOT permitted on this site. Do NOT share your ProjNet password.

**West Bank and Vicinity  
Hurricane Protection Project  
WBV 49.2 Algiers Canal (East)  
Hero Levee to Hwy 23**

**Plaquemines Parish, Louisiana**

## **APPENDIX G**

### **DRCHECKS REPORTS (COE REVIEW)**

Comment Report: All Comments

Project: WBV-49.2

Review: 65% Review

Displaying 129 comments for the criteria specified in this report.

2609 ms to run this page

Id ▲	Discipline	Section/Figure	Page Number	Line Number
1912377	Engineering Support	n/a'	n/a	n/a
<p>Drawings C-101 A2 through C-106 A2 show a geotextile fabric included in the elevation drawings. The description for Alternative 2 does not identify a geotextile fabric to be included in this alternative. Recommend revising drawing to exclude geotextile fabric.</p> <p>Submitted By: <a href="#">Jennifer Vititoe (504-862-1252)</a>. Submitted On: 15-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> CAD correction. Drawing layer will be removed for this option.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 27-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">Jennifer Vititoe (504-862-1252)</a> Submitted On: 29-May-08</p>			
<p>Current Comment Status: <b>Comment Closed</b></p>				
1912599	Engineering Support	n/a'	n/a	n/a
<p>EAR does not follow outlined identified in Appendix D of Task Order. Recommend structuring EAR to follow outline provided. The attachment provides a revised outline which includes boiler plate wording and paragraphs that should be included in the appropriate sections.</p> <p>(Attachment: <a href="#">EAR_Outline4.doc</a>)</p> <p>Submitted By: <a href="#">Jennifer Vititoe (504-862-1252)</a>. Submitted On: 16-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> Will review new outline and where applicable make adjustments for the 95% review.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 27-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">Jennifer Vititoe (504-862-1252)</a> Submitted On: 29-May-08</p>			
<p>Current Comment Status: <b>Comment Closed</b></p>				
1914038	Cost Engineering	n/a'	n/a	n/a
<p>Mobilization Costs – Recommend the 5% for mobilization not be applied to the rights of way costs in the Appurtenant Features of Construction sections.</p> <p>Submitted By: <a href="#">MIKE DANIELSON (504-862-2728)</a>. Submitted On: 16-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> Mobilization cost will not include R/W items.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 27-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">MIKE DANIELSON (504-862-2728)</a> Submitted On: 30-May-08</p>			

Current Comment Status: Comment Closed				
1914039	Cost Engineering	n/a'	n/a	n/a
Scour Protection – Alternative 1 uses \$150/cy for this item. Alternatives 2 and 4 use \$70/cy. Alternative 3 uses \$300/cy. Recommend using the \$300/cy price for this item. The concrete used for the stabilization slab for the T-walls is priced at \$150/cy. The scour protection will require more joint work and finishing than the stabilization slab and may require at least some reinforcement.				
Submitted By: MIKE DANIELSON (504-862-2728). Submitted On: 16-May-08				
1-0	<b>Evaluation Concurred</b> The \$300.00 / cy price will be used throughout for scour protection.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: MIKE DANIELSON (504-862-2728) Submitted On: 30-May-08			
Current Comment Status: Comment Closed				
1914040	Cost Engineering	n/a'	n/a	n/a
Miscellaneous Structural Metal Work – Recommend making this item Lump Sum instead of by the linear foot.				
Submitted By: MIKE DANIELSON (504-862-2728). Submitted On: 16-May-08				
1-0	<b>Evaluation Concurred</b> Will make this a LS item.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: MIKE DANIELSON (504-862-2728) Submitted On: 30-May-08			
Current Comment Status: Comment Closed				
1914041	Cost Engineering	n/a'	n/a	n/a
Steel Prices – Steel prices have experienced a sharp rise in recent months so the prices for the sheet pile and H-Pile may be out of date.				
Submitted By: MIKE DANIELSON (504-862-2728). Submitted On: 16-May-08				
1-0	<b>Evaluation Concurred</b> Based on ENR cost index adjustments, etc. we will add approximately 10% to the steel items. If available, please provide the magnitude of the most recent adjustments you are suggesting.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Open Comment</b> 10% sounds good for now. Our office is going to start calling suppliers monthly to keep a record of prices for steel shapes.  Submitted By: MIKE DANIELSON (504-862-2728) Submitted On: 30-May-08			
2-0	<b>Evaluation Concurred</b> Please keep us informed.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 20-Jun-08			
2-1	<b>Backcheck Recommendation Close Comment</b>			

Closed without comment.				
Submitted By: MIKE DANIELSON (504-862-2728) Submitted On: 24-Jun-08				
Current Comment Status: Comment Closed				
1914042	Cost Engineering	n/a'	n/a	n/a
T-wall duration – The production rate for T-walls of approximately two monoliths per week per crew may be too aggressive.				
Submitted By: MIKE DANIELSON (504-862-2728). Submitted On: 16-May-08				
1-0	Evaluation Concurred Will review construction schedule and adjust for 95% submittal.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 27-May-08				
1-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: MIKE DANIELSON (504-862-2728) Submitted On: 30-May-08				
1-2	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: MIKE DANIELSON (504-862-2728) Submitted On: 24-Jun-08				
2-0	Evaluation Concurred Please keep us informed.			
Submitted By: Eugene Brian (504-887-7045) Submitted On: 19-Jun-08				
Backcheck not conducted				
Current Comment Status: Comment Closed				
1915117	Environmental	n/a'	n/a	n/a
Status of National Environmental Policy Act (NEPA) Compliance: The subject work will be covered in the individual environmental report (IER) #12 entitled "Harvey and Algiers Canal Levee and Floodwalls, Jefferson, Orleans, and Plaquemines Parishes", which is scheduled to be completed August 2008. In addition, the comprehensive environmental document (CED) will have been prepared and include the subject work from IER #12. The subject work is not currently compliance with NEPA.				
Submitted By: Getrisc Coulson (504-862-1095). Submitted On: 19-May-08				
1-0	Evaluation Concurred Please keep us informed.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 27-May-08				
1-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: Getrisc Coulson (504-862-1095) Submitted On: 29-May-08				
Current Comment Status: Comment Closed				
1915194	Cost Engineering	n/a'	n/a	n/a
No further comments.				
Submitted By: MIKE DANIELSON (504-862-2728). Submitted On: 19-May-08				
1-0	Evaluation Concurred			

		No comment.		
		Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 27-May-08		
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">MIKE DANIELSON (504-862-2728)</a> Submitted On: 30-May-08			
	Current Comment Status: Comment Closed			
1915518	Real Estate	II., C., 2. Rights-of-Way	7	n/a
<p>I have a question about the T-Wall alternate requires least amount of additional ROW, (0.72 acres). Are we sure that the existing ROW allows for the construction of a floodwall, or is it for the earthen levee only? Could it be that the entire reach would need to be re-acquired for the construction of a floodwall? This is a determination to be made by Office of Counsel.</p> <p>Submitted By: <a href="#">Louis Cheek (504-862-1563)</a>. Submitted On: 19-May-08</p> <p>Revised 19-May-08.</p>				
1-0	<b>Evaluation Concurred</b> Legal question. No comment.			
	Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Open Comment</b> This is a legal question and should be addressed by OC.			
	Submitted By: <a href="#">Louis Cheek (504-862-1563)</a> Submitted On: 29-May-08			
1-2	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">Louis Cheek (504-862-1563)</a> Submitted On: 05-Jun-08			
	Current Comment Status: Comment Closed			
1915555	Real Estate	III., A. Alternative 1- T-Wall	15	n/a
<p>I question the statement about this alternative being built "mostly within the existing ROW" and "None of the residences...need to be acquired". The drawings are small, but it appears that the "existing ROW" is going to be in the back door of these homes. I also didnt see a line showing the "perpetual underground piling easement", which I am thinking might extend undernieth these homes. Cutting off direct access to their private dock facilities could also be a major consideration. Indicate in the drawings what right-of-way is required for the underground pile easement.</p> <p>Submitted By: <a href="#">Louis Cheek (504-862-1563)</a>. Submitted On: 19-May-08</p> <p>Revised 19-May-08.</p>				
1-0	<b>Evaluation Concurred</b> The batter pile layouts evaluated were intended to keep the toe of the piles within the R/W, requiring no perpetual easements. A legal opinion on this and other aspects of you concern may be required, since pile driving is not a exactly percise science.			
	Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Open Comment</b> The drawings provided show the existing and the required R/W as the same line and it is touching the rear part of the houses along this reach.			
	Submitted By: <a href="#">Louis Cheek (504-862-1563)</a> Submitted On: 29-May-08			

1-2		<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Louis Cheek</u> (504-862-1563) Submitted On: 05-Jun-08		
		Current Comment Status: Comment Closed		
1915560	Real Estate	n/a	n/a	n/a
Real Estate does not have records of having provided cost estimates for alternatives. Prior to the 95% submittal, PM should request that RE provide cost estimates of required ROW.  Submitted By: <u>Louis Cheek</u> (504-862-1563). Submitted On: 19-May-08  Revised 19-May-08.				
1-0		<b>Evaluation Concurred</b> Cost estimates to be provide to us by others.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 27-May-08		
1-1		<b>Backcheck Recommendation Open Comment</b> After speaking with Mr. Neilsen, I have the understanding that when he says "Cost estimates to be provide to us by others", he is speaking of getting the cost estimates from Real Estate Division.  Submitted By: <u>Louis Cheek</u> (504-862-1563) Submitted On: 29-May-08		
1-2		<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Louis Cheek</u> (504-862-1563) Submitted On: 29-May-08		
1-3		<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Louis Cheek</u> (504-862-1563) Submitted On: 05-Jun-08		
		Current Comment Status: Comment Closed		
1915709	CADD	n/a'	n/a	n/a
DF1 – No directory structure, no separation between models & sheet files, No separation between design and R/W dwgs.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0		<b>Evaluation Concurred</b> We will check provide information for range line data, etc. and make additions.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 28-May-08		
1-1		<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08		
		Current Comment Status: Comment Closed		
1915713	CADD	n/a'	n/a	n/a
DF2 – File names confusing, no way to separate models from sheet, no flow from beginning to end of set.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				

1-0	<p><b>Evaluation Potential Scope Impact Concurred</b>                  For the T-wall option, unless someone directs us to provide pedestrian or gates for auto access, the disposition will be to remove the ramps and leave the docks in place that can be identified from the aerial photo.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 28-May-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  Jens, Your responce to the comment does not fit. Which comment did you intend to address?</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08</p>			
2-0	<p><b>Evaluation Concurred</b>                  File/Model/Sheet flow will be checked.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 25-Jun-08</p>			
2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 26-Jun-08</p>			
Current Comment Status: Comment Closed				
1915716	CADD	n/a'	n/a	n/a
<p>DF3 – Each Alternative should have it's own model file, standards would not allow to have multiple alternatives in one file.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  Items 12 and 13 include the pump houses. These items will be seperated from the discharge piping items in the tables.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  Jens, the responce you've given does not match comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 24-Jun-08</p>			
2-0	<p><b>Evaluation Concurred</b>                  Mopdel/Sheet flow will be checked.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 25-Jun-08</p>			
2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 26-Jun-08</p>			
Current Comment Status: Comment Closed				
1915727	CADD	n/a'	n/a	n/a
<p>DF4 – All files need to be checked for CADD Standard Compliance, File attributes (global positioning, scale and working units) and Element attributes (Level, style, weight and color). Several Violations found.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  CADD Standard compliance will be checked.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b></p>			

Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 06-Jun-08				
Current Comment Status: Comment Closed				
1915732	CADD	n/a'	n/a	n/a
DF5 – Some sheet files reviewed have plan elements contained within that should be located in model file.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	Evaluation Concurred CADD compliance will be checked.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 06-Jun-08			
Current Comment Status: Comment Closed				
1915733	CADD	n/a'	n/a	n/a
DF6 – Location and Vicinity Map model File – Incorrect working units, Geographical Location and scale.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	Evaluation Concurred CADD compliance will be checked.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 06-Jun-08			
Current Comment Status: Comment Closed				
1915735	CADD	n/a'	n/a	n/a
DF7 – Typical Section model files – Incorrect working units.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	Evaluation Concurred CADD compliance will be checked.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 06-Jun-08			
Current Comment Status: Comment Closed				
1915737	Civil	n/a'	n/a	n/a
DC1 – Missing Dwg's in design set. Need to add Title Sheet and Sheet containing Index of Drawings, General Notes, Legend and Benchmark Info. Sheets that contain Tabulations of R/W, C/L & Relocations need to be added to the Design drawings.				

Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> R/W information will be repeated in the "Report" drawings, and other sheets added.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915738	Civil	n/a'	n/a	n/a
DC2 – References to Soils Reachs should be removed from dwg's. Baseline stationing should be used for limits of the design section.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> All references to soil reaches will be removed from drawings.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915739	Civil	n/a'	n/a	n/a
DC3 – For the 3 alternatives, if only 1 template is to be used for the length of the project area (2 for t-wall) then there is only need for 1 typical section to be presented in the set (2 for t-wall). Suggest that you pick the best cross section that represents the work to be preformed. Note the station limits of the full levee section while also identifying the limits of transitions and no work areas.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Sections will be consolidated.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915740	Civil	n/a'	n/a	n/a
DC4 – Remove bar scale from plan/profile dwg's. for the Profile (1"= 5', 1"= 200'). The profile grid itself is a scale.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Profile bar scale will be removed.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 27-May-08			

<p><b>1-1</b> Backcheck Recommendation <b>Close Comment</b>                  Closed without comment.                  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08</p>				
<p>Current Comment Status: <b>Comment Closed</b></p>				
1915742	Civil	n/a'	n/a	n/a
<p>DC5 – The Legend for Line styles and symbols should be located on 1 sheet for referencing. Should not be located on each dwg.                  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08</p>				
<p><b>1-0</b> Evaluation <b>Concurred</b>                  One legend will be placed on a separate drawing.                  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 27-May-08</p>				
<p><b>1-1</b> Backcheck Recommendation <b>Close Comment</b>                  Closed without comment.                  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08</p>				
<p>Current Comment Status: <b>Comment Closed</b></p>				
1915744	Civil	n/a'	n/a	n/a
<p>DC6 – On plan View dwg's there are a number of B/L P.I. Markers and Azimuths missing.                  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08</p>				
<p><b>1-0</b> Evaluation <b>Concurred</b>                  The B/L markers and Azimuths will be rechecked to conform to the plan provided.                  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 27-May-08</p>				
<p><b>1-1</b> Backcheck Recommendation <b>Close Comment</b>                  Closed without comment.                  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08</p>				
<p>Current Comment Status: <b>Comment Closed</b></p>				
1915745	Civil	n/a'	n/a	n/a
<p>DC7 – Check pen table that is being used for plotting. Line weights appear to be unusually thick.                  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08</p>				
<p><b>1-0</b> Evaluation <b>Concurred</b>                  CADD compliance will be checked.                  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>				
<p><b>1-1</b> Backcheck Recommendation <b>Close Comment</b>                  Closed without comment.                  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08</p>				
<p>Current Comment Status: <b>Comment Closed</b></p>				
1915746	Civil	n/a'	n/a	n/a
<p>DC8 – Inconsistent text sizes. (ex: If text style "proportional normal" is being used to identify a utility, then that style should be used to identify all utilities).</p>				

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> CADD compliance will be checked.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08</p>
-----	--

Current Comment Status: **Comment Closed**

1915747	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

DC9 – Inconsistent cell sizes. (ex: Arrow Heads used for callouts and dimensions should be the same size and filled throughout set).

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> CADD compliance wuill be checked.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08</p>
-----	--

Current Comment Status: **Comment Closed**

1915749	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

DC10 – Tabulation sheet should be positioned within the set to accompany their respective alignment.

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> Positioning will be within sets.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 27-May-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08</p>
-----	--

Current Comment Status: **Comment Closed**

1915751	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

DC11 - Ramp locations should be identified and tabulated with disposition.

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> Ramp tabulation will be provided.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 27-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p>
-----	--

Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 06-Jun-08				
Current Comment Status: <b>Comment Closed</b>				
1915753	Civil	n/a'	n/a	n/a
DC12 – Remove patterning for concrete in plan view, use linestyle with annotation.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Linestyle with annotation will be used. Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 06-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915755	Civil	n/a'	n/a	n/a
DC13 – Remove temp. access road from along alignments, 15' from toe of berm to remain clear.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Temporary access road will be removed. Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 07-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915756	Civil	n/a'	n/a	n/a
DC14 – Access roads leading to the project area should be identified and labeled.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Labels will be added. Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 07-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915759	Civil	n/a'	n/a	n/a
DC15 – Edit Text "Existing and Required R/W" to read "Existing R/W".				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				

1-0	Evaluation Concurred Text will be edited.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915762	Civil	n/a'	n/a	n/a
DC16 – The new Alternative C/L's should be visible in plan with P.I.'s and Pont Numbers.  Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	Evaluation Concurred Centerline points and Labels will be added.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915763	Civil	n/a'	n/a	n/a
DC17 – Point numbers for Additional R/W should be added to dwg's. Point numbers for Existing are not necessary to show, they can be removed to reduce clutter.  Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	Evaluation Concurred Will check and make adjustments.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915766	Civil	n/a'	n/a	n/a
DC18 – Utilities have been assigned Item No.'s in the tabulation charts, this should also be visible in plan.  Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	Evaluation Concurred Utility numbers will be added to R/W plans.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				

1915769	Civil	n/a'	n/a	n/a
DC19 – The text "Elevation In Feet – N.A.V.D.88" should be rotated 90^ and placed along vertical scale or profile on both sides.				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> This note will be rotated and relocated.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915770	Civil	n/a'	n/a	n/a
DC20 – Features within the project area should be labeled such as: Pump stations, Kostmeyer and Barriere Construction, Street Names (especially ones used for access or fall within effected areas.				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Some known street names will be added. The pumping station is called out in the profile and will be added to the plan view. Kostmeyer and Barriere will be labeled.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915772	Civil	n/a'	n/a	n/a
DC21 – Plan Views of Levee alternatives showing the design section should display slopes and elevations at least once per sheet.				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Slopes will be labeled for levees.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 27-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915775	Civil	n/a'	n/a	n/a
DC22 – In profile of T-Wall Alternative the elevations need to be clarified to read (ex: Top of Scour Protection EL. 4.0)				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				

1-0	Evaluation <b>Concurred</b> Labels will be amended.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 27-May-08			
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915776	Civil	n/a'	n/a	n/a
DC23 – T-wall should not have "Net Grade" Elevations.  Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 19-May-08				
1-0	Evaluation <b>Concurred</b> Net Grade will be removed.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 27-May-08			
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915777	Civil	n/a'	n/a	n/a
DC24 – T-Wall Alternative shows no transition between Wall A and Wall B.  Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 19-May-08				
1-0	Evaluation <b>Non-concurred</b> Both wall bases at at the same elevation. The alignment detail of the sheet piling, etc. can be shown on final plans.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 27-May-08			
1-1	Backcheck Recommendation <b>Open Comment</b> Grade for berm with scour protection on 1 wall is el. 4 the other wall shows elev. 0.0 for scour protection. There should be a distance showing the transision. There can not be a 4' drop off.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 07-Jun-08			
2-0	Evaluation <b>Non-concurred</b> Grade for berm with scour protection on 1 wall is el. 4 the other wall shows elev. 0.0 for scour protection. There should be a distance showing the transision. There can not be a 4' drop off.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 06-Jun-08			
<i>Backcheck not conducted</i>				
3-0	Evaluation <b>Concurred</b> A 50' transition will be shown.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 20-Jun-08			
3-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 23-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915778	Civil	n/a'	n/a	n/a

DC25 – No transitions are shown in plan/profile at beginning/end of project, at pump station, gates, ect..

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Non-concurred</b>                  Transition details will be provided in final plans, when more definite plans for what is being tied into are available. At the pumping station our T-Wall will tie into another, designed by others. At the beginning and end of the project, more detail is needed describing what is to be tied to.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 28-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Open Comment</b>                  Jens, I checked on it. It has been explained to me that you just need to state that it will be tied into existing T-Walls at the pumpstation and at Hwy 23. At the begining of the job you can show a 50' smooth transition from the existing ground line to the design grade.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Jun-08</p>
-----	--

2-0	<p><b>Evaluation Concurred</b>                  Will incorporate into plans.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 20-Jun-08</p>
-----	---

2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 23-Jun-08</p>
-----	--

Current Comment Status: Comment Closed	
--	--

1915779	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

DC26 – Gate at Barriere construction not shown.

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b>                  A field inspection indicates that there does not appear to be a levee crossing on Barriere's property. There is one just south that appears to be on Kostmeyer's property. A gated crossing is shown at this point for the T-Wall option. For the levee crossings, sloped ramps traverse the levee and tie to an existing roadway. All of these existing roads and the crossing appear to be on the Kostmeyer tract of land.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 28-May-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Jun-08</p>
-----	--

Current Comment Status: Comment Closed	
--	--

1915780	Civil	n/a'	C-101-A1	n/a
---------	-------	------	----------	-----

DC27 – DWG. C-101-A1: 1.Center profile on dwg. 2.coordinate grid ticks overlapping into title block.

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b>                  Profile will be moved to the right.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 28-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p>
-----	---

Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08				
Current Comment Status: Comment Closed				
1915782	Civil	n/a'	C-101-A2 thru C-106A2	n/a
DC28 - DWG.'S C-101-A2 thru C-106A2: 1.Remove Geotextile from profile. (Unreinforced Alternative)				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Drawing will be adjusted accordingly.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915784	Civil	n/a'	C-101-A2/A3 thru C-106A2/A3	n/a
DC29 - DWG.'S C-101-A2/A3 thru C-106A2/A3: 1.Remove text "Limit of Work" from toe of berm in plan view.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Limits will be removed (typical all plans at this location)  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915789	Civil	n/a'	C-310-A1	n/a
DC30 - DWG. C-310-A1: 1.In Typical Section hatching can be used to represent areas that are to be excavated and backfilled. With compacted fill and another hatch to represent areas that require additional compacted fill, the concrete pattern can also be used for T-Wall and Scour protection. 2.Rearrange text "Exist. Levee C/L" over to top of line. 3.Identify C/L of T-Wall. 4.Remove dim. From exist levee C/L to B/L. 5.15' should be shown from toe of berm. 6.Edit text to read "B/L" instead of "Exist. B/L". 7. Show limits of Clearing and Grubbing. 8.Show limits of Seeding, Fertilizing and Mulching. 9.Show location of Silt or Safety Fence. 10. All Elevations and Slopes should be labeled. 11. Edit text to remove the word "Net" from t-wall elevations. 12. Remove horizontal and vertical scales from sections. If labeled properly, they are not needed. 13.Add note "Slope to Drain" with arrow on Flood Side of T-wall between elev.'s 9.5 and 8.5. 14.Show Settlement Gage. 15.Add notes to reference details on other dwgs.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> The scales formats in the profile were forwarded by the Corps and used for another project, and the details such as silt fence, and settlement plates, etc. would be more applicable to final plans; however, the requested detailed drawing format and changes will be incorporated into this cost comparative report.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 28-May-08			

1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915792	Civil	n/a'	C-310-A1(cont.)	n/a
16. Note and detail features on existing ground linesuch as the "waters edge" and foreshore dike protection. 17.Add note that foreshore dike is not to be disturbed. 18.Show piles on T-Wall with slopes, note the tip elevations. 19. Show if additional R/W is required on section & pln/pro dwgs. because of a sub-surface easement from the piles. 20.Remove Access Road from sections. 21.Dimensions should not refer to Exist. Levee C/L. New C/L's and R/W should be tied to B/L.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> See response to comment 1915789.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915796	Civil	n/a'	C-310-A2	n/a
DC31 - DWG. C-310-A2: 1. In Typical Section hatching can be used to represent areas that are to be degraded if needed and another hatch to represent areas that require compacted fill. 2. Rearrange text "Exist. Levee C/L" over to top of line. 3. Place New Levee C/L text at top of line. 4. 15' should be shown from toe of berm. 5. Edit text to read "B/L" instead of "Exist. B/L". 6. Show limits of Clearing and Grubbing. 7. Show limits of Seeding, Fertilizing and Mulching. 8. Show location of Silt or Safety Fence. 9. All Elevations and Slopes should be labeled. 10. Remove dim. From exist. levee C/L to B/L. 11. Remove horizontal and vertical scales from sections. If labeled properly, they are not needed. 12. Show Settlement Gage. 13. Add notes to reference details on other dwgs. 14. Note and detail features on existing ground line such as the "waters edge" and foreshore dike protection. 15. Add note that foreshore dike is not to be disturbed. 16. Remove Access Road from sections. 17. Dimensions should not refer to Exist. Levee C/L. New C/L's and R/W should be tied to B/L.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Refer to Item 1915789 response.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915799	Civil	n/a'	C-310-A3	n/a
DC32 - DWG. C-310-A3: 1. In Typical Section hatching can be used to represent areas that are to be degraded if needed and another hatch to represent areas that require compacted fill. 2. Rearrange text "Exist. Levee C/L" over to top of line. 3. Place New Levee C/L text at top of line. 4. 15' should be shown from toe of berm. 5. Edit text to read "B/L" instead of "Exist. B/L". 6. Show limits of Clearing and Grubbing. 7. Show limits of Seeding, Fertilizing and Mulching. 8. Show location of Silt or Safety Fence. 9. All Elevations and Slopes should be labeled. 10. Remove dim. From exist. levee C/L to B/L. 11. Remove horizontal and vertical scales from sections. If labeled properly, they are not needed. 12. Show Settlement Gage. 13. Add notes to reference details on other dwgs. 14. Note and detail features on existing ground line such as the "waters edge" and foreshore dike protection. 15. Add note that foreshore dike is not to be disturbed. 16. Remove Access Road from sections. 17. Dimensions should not refer to Exist. Levee C/L. New C/L's and				

R/W should be tied to B/L. 18. Detail temporary levee (Elev., slopes, crown width, fill, distance to B/L, ect.) 19. Add note to Fabric (type, strength, ect.) and dimension distances from new C/L.

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> Refer to Item 1915789 response.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08</p>
-----	---

Current Comment Status: Comment Closed

1915806	Civil	n/a'	C-300	n/a
---------	-------	------	-------	-----

DC33 - DWG. C-300: 1. Remove access road detail. 2. Ramp crossing detail: a. what type of fabric? b. Edit text "Slope Varies" to read "Slope to Drain". c. What is layer located above the 10" coarse aggregate? 3. Typical Scour Protection Detail: a. Separator fabric?? b. Need key detail. c. Need expansion joint detail. d. Concrete reinforcement details? e. What is text "1/4" ft.??? f. Edit Text, Remove "Net" from elevations. 4. Suggestion: Good sheet to add missing Details.

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> 1. Road will be removed. 2 "Woven" fabric for road construction (spec item Mirafi 600X with a Grab Tensile Strength of 315lbs.)b. Slope to Drain will be added. c. Was asphalt (will remove). 3 a. b.c.,d. Suggest detailing on construction plans. e. Slope will be re- labeled. f. Text will be edited. 4. Suggest details be on final plans rather than in this report.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Jun-08</p>
-----	---

Current Comment Status: Comment Closed

1915808	Civil	n/a'	C-301 and C-302	n/a
---------	-------	------	-----------------	-----

DC34 – DWG.'S C-301 and C-302: 1. Ramp Profile Detail: a. Ramp Profile should be removed, profile does not show future levee conditions. b. If not removed dimensions need to be edited to have surfacing extend 5' past toe of ramp. c. What type of fabric being used? d. Remove existing R/W line, Plans indicate that additional R/W will be required. 2. Ramp Plan Details: a. Details need to display how ramp will interact with future levee conditions. b. Dimensions, offsets, elevations and slopes should be shown. c. Clean-up line work running thru text.

Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> a. and b. ramp section will be removed. c. See response to Item 1915806. d. R/W will be reviewed. 2. a. In our opinion the plans do show slopes related to the new levee, will re-check. b. and c. Will add to dimensions and clean-up as suggested.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Open Comment</b> a. re check ramp details, do not show berm. just shows 1:3 &amp; 1:4 running to exist. ground.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08</p>
-----	---

2-0	<p><b>Evaluation Concurred</b> Ramp details will be re-checked.</p>
-----	---

Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 25-Jun-08				
2-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 26-Jun-08				
Current Comment Status: Comment Closed				
1915826	Civil	n/a'	S-101 and S-102	n/a
DC35 – DWG.'S S-101 and S-102: 1. Show C/L of T-wall. 2. Show the presence of scour protection as it is present on both sections. 3. If at Elevation 4.0 the scour protection slopes at 1:10 then the slope also should be shown on the scour detail and typical sections. 4. Need concrete reinforcement details. 5. Inconsistencies in text sizes. 6. Arrow heads not filled.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0	Evaluation Non-concurred 4. Concrete reinforcement details should be final plans. Other detail adjustments will be reviewed and made where applicable.			
Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation Close Comment concur, Concrete reinforcement plans do not need to be shown at this time.			
Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 10-Jun-08				
2-0	Evaluation Non-concurred Do not understand the "non-Concur" entry. Do you agree that thereinforcement details are to be added to the plans?			
Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 06-Jun-08				
2-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 23-Jun-08				
3-0	Evaluation Concurred Suggested detail additions will be added.			
Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 23-Jun-08				
<i>Backcheck not conducted</i>				
4-0	Evaluation Concurred Suggested detail additions will be added.			
Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 23-Jun-08				
<i>Backcheck not conducted</i>				
Current Comment Status: Comment Closed				
1915829	Civil	n/a'	S-104 and S-105	n/a
DC36 - DWG.'S S-104 and S-105: 1. inconsistent text / cell sizes. 2. line work running through text.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 19-May-08				
1-0	Evaluation Concurred CADD compliance will be checked.			
Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation Close Comment			

Closed without comment.				
Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 07-Jun-08				
Current Comment Status: Comment Closed				
1915832	Civil	n/a'	G-101	n/a
DC37 – G-101- this sheet should also contain Legend, General notes and Benchmark Info.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Information will be moved to this sheet.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915838	Civil	n/a'	G-101	n/a
DC37 – G-101- this sheet should also contain Legend, General notes and Benchmark Info.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> See response to comment 1915832.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915840	Civil	n/a'	G-102 thru G-104	n/a
DC38 - DWG.'S G-102 thru G-104: 1. The word "Point No." is missing from the tables for Existing R/W. 2. The word "Alternative" is mis-spelled on all applicable tabulation charts. 3. Move benchmark info. To G-101. 4. Add existing ramps and boat docks to table with location and disposition. 5. Point Numbers for Additional R/W and New CL's should be different. Should not have the same characters and flow. 6. suggest to re-position sheets within set to follow their respective alternatives.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Suggested revisions will me made.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915843	Civil	n/a'	n/a	n/a

DC39 – Profiles not detailed properly, utilities, ramps, transitions, sheet pile not located or identified properly.				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Non-concurred</b> The elevations of all utilities are generally not known to show in profiles? Ramps and transitions and docks, etc. are or will be shown in plan and identified. It is not clear for many of your comments, as to which drawing sheet you are reviewing and commenting on?  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Open Comment</b> several, review your pln/pro dwgs, some pipelines are identified in pln and not profile. all pipelines and ramps that cross the levee should be identified in the profile. (example: c-103 a1, The tele. cable should be show as a pipeline like the 8" sewer line. Jet fuel line is not shown in profile). ramps should be called out in plan and pro (ex. c-106 a1).  Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08			
2-0	<b>Evaluation Non-concurred</b> several, review your pln/pro dwgs, some pipelines are identified in pln and not profile. all pipelines and ramps that cross the levee should be identified in the profile. (example: c-103 a1, The tele. cable should be show as a pipeline like the 8" sewer line. Jet fuel line is not shown in profile). ramps should be called out in plan and pro (ex. c-106 a1).  Submitted By: William Landry (504-862-1825) Submitted On: 06-Jun-08			
<i>Backcheck not conducted</i>				
3-0	<b>Evaluation Concurred</b> Utilities will be identified in plan and profile.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 23-Jun-08			
3-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 23-Jun-08			
Current Comment Status: Comment Closed				
1915844	Civil	n/a'	n/a	n/a
DC40 – No Tie-In Details. (ex: Levee to Wall)				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Non-concurred</b> These would be shown in the plans & specs phase.  Submitted By: Eugene Brian (504-887-7045) Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> concur, after checking on it it was told to me that tie-ins to twalls at the pump stations and at hwy 23 should be stated. A 50' smooth transition from existing ground to design grade can be shown at the beginning of the job.  Submitted By: William Landry (504-862-1825) Submitted On: 10-Jun-08			
2-0	<b>Evaluation Non-concurred</b> We show 30' embedment of wall into levee. Details should be part of final plans.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 28-May-08			
<i>Backcheck not conducted</i>				
3-0	<b>Evaluation Non-concurred</b> Tie-In details are not just part of P&S Phase. Tie in details should be included.			

Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 06-Jun-08				
<i>Backcheck not conducted</i>				
4-0	<b>Evaluation Concurred</b> Tie-in details will be expanded.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 23-Jun-08			
4-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 23-Jun-08			
Current Comment Status: Comment Closed				
1915846	Civil	n/a'	n/a	n/a
DC-41 – T-wall Alternative displays names for "Wall A" & "Wall B" in plan / profile. This is not shown on Typical Section dwg. Please edit plan / profile to read Typical Section 1 & 2.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Wording will be added as suggested.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915848	Real Estate	n/a'	n/a	n/a
DC42 – R/W Dwg.'s need grid coordinates and tick marks.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Coordinates will be added.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915851	Real Estate	n/a'	n/a	n/a
DC43 – R/W Dwg.'s missing Township, Ranges and Sections lines / id's				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 19-May-08				
1-0	<b>Evaluation Check and Resolve</b> This information was supplied to us on other projects. We cannot locate it in the information supplied. Can you assist?  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Open Comment</b>			

	it was supplied with the CADD dwgs on 1-14-08, the file name is TS&R.dgn. I will email it to you. Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 07-Jun-08			
2-0	<b>Evaluation Concurred</b> Township, range, and section lines will be added. Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 23-Jun-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 23-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915853	Civil	n/a'	n/a	n/a
DC44 - R/W Dwg.'s, Remove azimuths from "Additional R/W" in plan view. Not required, Controlled from B/L.  Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Azimuths will be removed. Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915855	Civil	n/a'	n/a	n/a
DC45 - R/W Dwg.'s, ramps and boat docks should be added to table with location and disposition.  Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Information will be added to R/W plans. Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b>  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1915858	Civil	n/a'	n/a	n/a
DC46 - R/W Dwg.'s- Point numbers for Existing R/W are not required, suggest removing from plan and tables to reduce clutter.  Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Will remove as directed. Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b>			

Closed without comment.				
Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08				
Current Comment Status: Comment Closed				
1915860	Geotechnical	n/a'	n/a	n/a
SR1 – Soil Reaches should be identified clearly with station limits on sub-surface profile and stability plates. The B/L is the control.				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Will label station limits on both geotechnical surface profiles and stability plates. Submitted By: Eugene Brian (504-887-7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915862	Geotechnical	n/a'	n/a	n/a
SR2 – Stability Plates should be labeled with elevations, slopes & offset distances It is important to easily verify if the section being used to build is the same in the soils report.				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> MOP results will be modified to incorporate design details as requested for ease of visualization and understanding. Submitted By: Eugene Brian (504-887-7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1915864	Geotechnical	n/a'	n/a	n/a
SR3 – Text in title blocks of Stability plates are overlapping lines.				
Submitted By: William Landry (504-862-1825). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Will revise title blocks. Submitted By: Eugene Brian (504-887-7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08			
Current Comment Status: Comment Closed				
1916154	Hydraulics	Design Considerations	n/a	n/a

The minimum 2057 hydraulic levee requirements are a height of 14ft and a 1:5 floodside slope.

Submitted By: Keely Crowder (504-862-2114). Submitted On: 19-May-08

1-0	<p><b>Evaluation Potential Scope Impact Potential Cost Impact Potential Time Impact Check and Resolve</b>                  Scope change: 1:4 was given in SOW.                  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  Concur with Ms. Crowder's comment. The difference in FOS between a 1:4 flood side slope and a 1:5 flood side slope would not affect the chosen alternative. Recommend that stability analyses not be re-run for flatter slope.                  Submitted By: Leeland Richard (504-862-2397) Submitted On: 30-May-08</p>
1-2	<p><b>Backcheck Recommendation Close Comment</b>                  Alternative means will need to be investigated at some time in the future to determine what changes may be needed to achieve/maintain requirements for certification. For 2011 and the near future, levee design is 10.5 ft with 1:4 slope and will meet certification requirements.                  Submitted By: Keely Crowder (504-862-2114) Submitted On: 11-Jun-08</p>
1-3	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.                  Submitted By: Keely Crowder (504-862-2114) Submitted On: 24-Jun-08</p>
2-0	<p><b>Evaluation Concurred</b>                  Additional stability analyses will not be run at this time.                  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 23-Jun-08</p>
	Backcheck not conducted
	Current Comment Status: Comment Closed

1916328	Geotechnical	n/a'	EAR, Write-Up, Pg 3, Par. A (Purpose and Scope), 1st Sent	n/a
---------	--------------	------	---	-----

It states "The purpose of the report...and construction costs for each...in Plaquemines Parish, Louisiana." Though it states that the alternatives and their construction costs are presented, shouldn't construction durations be included also? This may be needed in the design matrix to select the preferred alternative.

Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b>                  The wording will be adjusted to include construction duration.                  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.                  Submitted By: Leeland Richard (504-862-2397) Submitted On: 10-Jun-08</p>
	Current Comment Status: Comment Closed

1916331	Geotechnical	n/a'	EAR, Write-Up, Pg 7, 1st Par, 1st Sent	n/a
---------	--------------	------	--	-----

It states "The T-Wall alternative requires...a narrow strip...to accommodate the berm..." Recommend providing the stations for the additional right of way for the T-Wall alternative near the south end, as the stations for the ramps are stated.

Submitted By: <u>Leeland Richard</u> (504-862-2397). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Stationing will be provided.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Leeland Richard</u> (504-862-2397) Submitted On: 10-Jun-08			
Current Comment Status: Comment Closed				
1916333	Geotechnical	n/a'	EAR, Write-Up, Pg 10, 3rd Par, 2nd & 3rd Sent	n/a
It states "The former (Type A) is designed...(Type B) would be built from Station 527+00 and Hwy 23;" According to Plate C-101 A1, Type B is also to be used from Station 287+00 to 307+00. Therefore, these sentences need to be corrected.				
Submitted By: <u>Leeland Richard</u> (504-862-2397). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Sentences will be adjusted.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Leeland Richard</u> (504-862-2397) Submitted On: 10-Jun-08			
Current Comment Status: Comment Closed				
1916336	Geotechnical	n/a'	EAR, Write-Up, Pg 11, 2nd Par, 4th Sent	n/a
It states "The slab thickness was calculated in a likewise manner; this was computed to be 2'-6". Section 1 on Plate C-310-A1 and Sections 7 and 8 on Plate C-3113-A1 (i.e. all three are Type B T-Wall) have the slab thickness measuring 3'-0". Therefore, the text may need to be revised if the 3 feet is accurate.				
Submitted By: <u>Leeland Richard</u> (504-862-2397). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> The slab thickness shown on the cross section drawing will be checked and adjusted, if required. A 6" stabilization slab under the footing may have been included in the thickness shown.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Leeland Richard</u> (504-862-2397) Submitted On: 10-Jun-08			
Current Comment Status: Comment Closed				
1916337	Geotechnical	n/a'	EAR, Plates C-101 A1 and C-310-A1, Section 1	n/a
On both plates with respect to Section 1, it is not clear why additional Right-of-Way is needed since you elected to use Type B floodwall which is specifically designed with no protected side berm because it may not fit within the existing Right-of-Way line. (If this is true, on Pg 15 for the advantages of Alt. 1, it should be revised to state that it can all be built				

within existing right of way."

Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> The suggested revised statement will be added.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 28-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Leeland Richard (504-862-2397) Submitted On: 10-Jun-08</p>
-----	--

Current Comment Status: Comment Closed

1916339	Geotechnical	n/a'	EAR, Plates C-310-A1 through C-313-A1	n/a
---------	--------------	------	---------------------------------------	-----

For all sections, the center of the proposed floodwall should be measured/dimensioned from either the existing B/L or existing C/L and not the existing R/W line. If this is taken into account and because you show on every section the distance between the existing B/L and C/L varies, the need to have 8 sections for this alternative is unclear. Certainly, the need exists to depict the difference between Type A and Type B floodwalls (and the two different base widths of Type B shown in Sections 1&8 vs. 7), but the rest just seem unnecessary.

Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> The number of sections shown will be reduced to two, with stationing shown to describe limits.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 28-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Leeland Richard (504-862-2397) Submitted On: 10-Jun-08</p>
-----	--

Current Comment Status: Comment Closed

1916341	Geotechnical	n/a'	EAR, Plates C-310-A1 through C-313-A1	n/a
---------	--------------	------	---------------------------------------	-----

The slopes of the material placed between the floodwall and new flood side edge of crown (i.e. EI+9.5 and EI+8.5, respectively) for Alternative 1 shall be labeled on all sections because they measure differently. The protected side berm should be dimensioned on these sections if applicable.

Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> Only two sections will be shown, and on the flood side the distance varies and will be shown to slope to drain. Labeling will be added on the protected side berm.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 28-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Leeland Richard (504-862-2397) Submitted On: 10-Jun-08</p>
-----	--

Current Comment Status: Comment Closed

1916343	Geotechnical	n/a'	EAR, Plates C-101 A2 through C-106 A2, Profiles	n/a
---------	--------------	------	---	-----

On the Profiles section on these plates, the "geotextile fabric Elev. 3.0" needs to be removed since this is Alt. 2: Earthen Levee.

Submitted By: [Leeland Richard \(504-862-2397\)](#). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> ACAD error will be corrected.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 28-May-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 10-Jun-08</p>
-----	--

Current Comment Status: Comment Closed	
--	--

1916344	Geotechnical	n/a'	EAR, Plate C-104 A2	n/a
---------	--------------	------	---------------------	-----

If the Stations 444+00 to 465+00 are the limits for Section 5, according to the geologic profiles in the Geotechnical Appendix (Pgs 12 & 13 of 15), this label should be changed to state "(Soils Reaches 3 and 1)." This may apply to the other alternatives.

Submitted By: [Leeland Richard \(504-862-2397\)](#). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> Soil reach limits will be removed from the EAR report drawings per other comments.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 28-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 17-Jun-08</p>
-----	--

Current Comment Status: Comment Closed	
--	--

1916346	Geotechnical	n/a'	EAR, Plates C-310-A2 through C-317-A2	n/a
---------	--------------	------	---------------------------------------	-----

Since all sections seem to have the same typical proposed levee and berm, the need to have 8 sections for this alternative is not clear. Another, more clear way to present this is to just have one plate showing the typical proposed levee and berm rather than eight.

Submitted By: [Leeland Richard \(504-862-2397\)](#). Submitted On: 19-May-08

1-0	<p><b>Evaluation Concurred</b> One typical section with stationing will be shown rather than multiples.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 28-May-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 10-Jun-08</p>
-----	--

Current Comment Status: Comment Closed	
--	--

1916347	Geotechnical	n/a'	EAR, Plates C-310-A3 through C-317-A3	n/a
---------	--------------	------	---------------------------------------	-----

The dimensions and elevations for the "Temporary Levee" for this alternative should be included. Will this be degraded once the net levee elevation is reached? Also, dimensions (i.e. lengths) with respect to the existing B/L or C/L should be included on these plates for the geotextile fabric.

Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08

**1-0 Evaluation Check and Resolve**  
 The contractor will degrade the existing levee to Elevation 3 to install geotextile fabric. The degraded portion will be limited to 300' or replacement in 24 hours. The intention for the temporary levee would be to keep wave wash out of the area during levee construction (with a top elevation of 6.0 shown on the drawings). Detailing of this temporary feature should be done in final plans, after receiving comments in this report. It may be removed when the levee is finished. Dimensions for the geotextile fabric will be added to these drawings.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08

**1-1 Backcheck Recommendation Close Comment**  
 Closed without comment.  
 Submitted By: Leeland Richard (504-862-2397) Submitted On: 10-Jun-08

**2-0 Evaluation Concurred**  
 No further comment.  
 Submitted By: Eugene Brian (504-887-7045) Submitted On: 23-Jun-08

*Backcheck not conducted*

**3-0 Evaluation Concurred**  
 No further comment.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 23-Jun-08

**3-1 Backcheck Recommendation Close Comment**  
 Closed without comment.  
 Submitted By: William Landry (504-862-1825) Submitted On: 23-Jun-08

Current Comment Status: Comment Closed

1916349	Geotechnical	n/a'	EAR, Plates C-310-A3 through C-317-A3	n/a
---------	--------------	------	---------------------------------------	-----

On most of these plates (e.g. C-310-A3), the geotextile fabric extends past the proposed flood side toe of the levee and since all material will need to be degraded to place the geotextile, the way it is shown will not provide adequate cover for the geotextile. Thus, the geotextile could get damaged, etc.

Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08

**1-0 Evaluation Concurred**  
 The fabric will terminate having a minimum of 2' of cover near its intersection with the levee surface. This will be shown on plans.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08

**1-1 Backcheck Recommendation Open Comment**  
 It is my understanding that a minimum of 3' of cover needs to be maintained.  
 Submitted By: Leeland Richard (504-862-2397) Submitted On: 17-Jun-08

**2-0 Evaluation Concurred**  
 A minimum of 3' of cover will be provided.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 07-Jul-08

**2-1 Backcheck Recommendation Close Comment**  
 Closed without comment.  
 Submitted By: Leeland Richard (504-862-2397) Submitted On: 07-Jul-08

Current Comment Status: Comment Closed

			EAR, Plate C-300,	
--	--	--	-------------------	--

1916350	Geotechnical	n/a'	Section Crossing Ramp Detail	n/a
<p>It is not clear whether this detail is for a normal levee ramp or for a gate ramp, and it is not clear where the section is cut from. Possibly cutting a proper section on a plan detail and referencing to this detail would help clarify it. Also, it seems impractical to build the geotextile as shown (i.e. vertical) without having proper horizontal embedment to anchor it down.</p>				
<p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a>. Submitted On: 19-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  The typical section was intended to show the roadway cross section at both levee and gated crossings. The woven geotextile fabric generally goes up the vertical face of the excavation. The method used to accomplish this is normally left up to the contractor. The section will be clarified.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 10-Jun-08</p>			
<p>Current Comment Status: Comment Closed</p>				
1916352	Geotechnical	n/a'	EAR, Plates C-301 and C-302, Ramp Profile Section	n/a
<p>On these two details, is it correct that 7' of crushed stone will be placed above the woven geotextile fabric and the semi-compacted fill? If this is correct, it seems that on Plate C-300 (Section Crossing Ramp Detail) the '10" Course Aggregate' would have to agree with this. Also, on these sections, the lower geotextile is not shown as it is detailed on Plate C-300 (Section Crossing Ramp Detail).</p>				
<p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a>. Submitted On: 19-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  10" is correct. The drawings will be adjusted for thickness and fabric call out.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 10-Jun-08</p>			
<p>Current Comment Status: Comment Closed</p>				
1916354	Geotechnical	n/a'	EAR, Plate S-101, Section A	n/a
<p>This detail has the base width equaling 19'-0". However, Section 1 on Plate C-310-A1 and Section 8 on Plate C-313-A1 has the T-Wall B base width measuring 18'-6" (and Section 7 has it measuring 21'-6"). This may be due to the discrepancy of the dimension of the base from the protected side edge of the stem to the protected side edge of the base. Furthermore, on Plate S-101, it states the T-Wall B typical section goes from Sta. 527+00 to Sta. 570+90. Again, on C-313-A1, the type B t-wall on Section 7 (Sta. 527+00 to 553+00) is different than the type B t-wall on Section 8 (Sta. 553+00 to 572+50.58), and the ending stations need to agree.</p>				
<p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a>. Submitted On: 19-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  The dimensions shown on drawings will be checked and coordinated.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b></p>			

Closed without comment.				
Submitted By: Leeland Richard (504-862-2397) Submitted On: 10-Jun-08				
Current Comment Status: Comment Closed				
1916356	Geotechnical	n/a'	EAR, Plate S-101, Plan Detail	n/a
There should be a section cut through this plan detail and labeled as A-A since Section A is included on this plate. Also, the base width dimension of 10'-0" should be changed to agree with what is stated on Section A Detail on this plate (i.e. 19'-0" for now, but this should be checked also).				
Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> The section designation will be added, and dimensions checked.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
Submitted By: Leeland Richard (504-862-2397) Submitted On: 10-Jun-08				
Current Comment Status: Comment Closed				
1916358	Geotechnical	n/a'	EAR, Plate S-102, Section A Detail	n/a
On this section, the flood side base is 6'-0" and the protected side base is 2'-0" with a 2'-0" stem width for the Type A T-Wall. However, plates C-310-A1 through C-312-A1 have 5'-6" and 2'-6", respectively, with a 2'-0" stem width for the same Type A T-Wall.				
Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> The drawing dimensions will be coordinated.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
Submitted By: Leeland Richard (504-862-2397) Submitted On: 10-Jun-08				
Current Comment Status: Comment Closed				
1916359	Geotechnical	n/a'	EAR, Structural Calculations, T-Wall Type A, Pgs 4 & 5 of 36	n/a
Please explain why the pile capacity curves do not increase with depth at a greater rate than is shown here starting at a depth of approximately 82 feet.				
Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Pile design guidelines state that the vertical stress shall be limited to approximately 3500 psf. Any soils or analysis efforts that are stress dependent, such as cohesionless and effective stress, respectively, would be limited to that pressure. Additionally, the guidelines state that end bearing shall be ignored in material with $c < 1000$ psf. Also, only one boring extends to depths beyond elevation -80 ft (AACE-05CU), with only one lab test result, yielding $c = 506$ psf. We found this to be inconclusive to make any appropriate engineering judgment. Therefore, we had			

		<p>to make use of data provided for Algiers West, including the results of 4 CPTs (piezocones). These CPTs extended to 100 ft of depth or approximately -90 ft and generally yielded undrained shear strengths of the deepest clay between 1000 psf and 1300 psf, but without much vertical variation. Given the limited geotechnical information at this depth range, a strength of 1,100 psf was determined proper to estimate pile capacities.</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 29-May-08</p>		
1-1	Backcheck Recommendation <b>Open Comment</b>	<p>For the near vertical lines to occur (i.e. no gain in pile capacity with depth) below depth of 84', you would have to have strength in the soil equal to zero, which is obviously not the case at this depth.</p> <p>Submitted By: Leeland Richard (504-862-2397) Submitted On: 20-Jun-08</p>		
2-0	Evaluation <b>Concurred</b>	<p>We will evaluate pile capacity curves to ensure nothing has been omitted. If so, we will correct for and submit as part of the next submittal.</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 26-Jun-08</p>		
2-1	Backcheck Recommendation <b>Close Comment</b>	<p>Closed without comment.</p> <p>Submitted By: Leeland Richard (504-862-2397) Submitted On: 02-Jul-08</p>		
Current Comment Status: <b>Comment Closed</b>				
1916362	Geotechnical	n/a'	EAR, Structural Calculations, T-Wall Type A, Pg 6 of 36	n/a
<p>Between EI-65 and EI-85, is it necessary to break it into that many strata?</p> <p>Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08</p>				
1-0	Evaluation <b>Concurred</b>	<p>Yes. The profile was broken into that many substrata because the strength increases with depth. In order to account for this when estimating pile capacities, it was necessary to do so.</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 29-May-08</p>		
1-1	Backcheck Recommendation <b>Close Comment</b>	<p>Closed without comment.</p> <p>Submitted By: Leeland Richard (504-862-2397) Submitted On: 17-Jun-08</p>		
Current Comment Status: <b>Comment Closed</b>				
1916363	Geotechnical	n/a'	EAR, Geotechnical Appendix, Write-Up, Pg 16, Section 1.7.5	n/a
<p>The natural rate of subsidence should be included when determining total settlement over project life. We suggest a rate of 0.5 feet per 100 years.</p> <p>Submitted By: Leeland Richard (504-862-2397). Submitted On: 19-May-08</p>				
1-0	Evaluation <b>Concurred</b>	<p>Using the provided rate, for the year 2057 (48 years from present), the subsidence will be 0.22 ft or about 3 inches, therefore settlement calculations considered 3 inches of subsidence over that time period.</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 29-May-08</p>		
1-1	Backcheck Recommendation <b>Open Comment</b>	<p>It is unclear whether you are saying that you did this already in this submittal or will do it for the</p>		

	<p>next submittal. I don't recall it being included in this submittal.</p> <p>Submitted By: <u>Leeland Richard</u> (504-862-2397) Submitted On: 20-Jun-08</p>			
2-0	<p><b>Evaluation Concurred</b> Settlement due to subsidence will be accounted for. In general, this is diminutive when compared to the several feet of settlement that will take place at each reach within the project life.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 26-Jun-08</p>			
2-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Leeland Richard</u> (504-862-2397) Submitted On: 02-Jul-08</p>			
<p>Current Comment Status: Comment Closed</p>				
1916366	Geotechnical	n/a'	EAR, Geotechnical Appendix, Write-Up, Pgs 18-22	n/a
<p>The lift construction schedules should use true settlement curves instead of straight lines between lifts. The curves should be allowed to get closer to the "Required Net Elevation" lines which may result in fewer lifts and/or not-as-high lifts compared to what is shown. Also, to the best of my knowledge, no stability analyses are provided that show the levee being built with the overbuild specified here (i.e. anything above EI+14.0). This is imperative because we need to know that it is safe to do so. Also, it does not appear to be correct to have very little settlement for one lift then have a larger amount of settlement on a subsequent lift for a particular reach (e.g. RE1 2012 vs. 2027).</p> <p>Submitted By: <u>Leeland Richard</u> (504-862-2397). Submitted On: 19-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> a) We considered the curvature during our analysis. But in general, very little curvature (of the settlement plots) existed, especially for the thick clay layers, since the time intervals are not long enough to come anywhere near completion of primary consolidation for any of the lifts. True settlements were estimated for all lifts, depending on the time interval selected. This issue became more evident given that the profile extends to 120 ft, with several compressible soil layers, each one with its own consolidation characteristics. Therefore we were not able to select one curve that would represent all layers. Instead, the settlement that would take place within the selected lifts time schedule (for all layers) was estimated and plotted. Will revise curves to have the curves come closer to the "required net elevation". b) Will perform stability analysis to confirm that the lifts selected are appropriate from a stability perspective. c) Will review calculations (and revise if need be) to see why the differences in slope (flat vs. steeper).</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b> Once you get to Pleistocene, you should not consider settlement. It is certainly possible to create a time-rate settlement curve that encompasses the layers for one lift. This curve is plotted against the Required Net Elevation Line. Similarly, subsequent curves can be developed for subsequent lifts. Once first curve crosses the Req Net Elev Line, a lift is done and one of the subsequent curves is also plotted and allowed to cross the Req Net Elev Line.</p> <p>Submitted By: <u>Leeland Richard</u> (504-862-2397) Submitted On: 20-Jun-08</p>			
2-0	<p><b>Evaluation For Information Only</b> The lift schedule developed follows the 1-D consolidation theory for the determination of consolidation settlement. For each layer within each reach, the total consolidation settlement was estimated. Subsequently, considering possible levee construction methods, time intervals of approximately 15 yrs were selected and the settlement that would take place during this time period estimated. Lift heights that would settle to just above the required grade were selected in an iterative process. Stability analysis considering soils strength increase with time were then performed to ensure the lifts would satisfy the safety factor criteria. It is our view that this is likely to facilitate management of the construction of the individual lifts at fixed time intervals with only variations in the height of the lifts from one reach to the other. From conversations with the USACE, we also understand that when the project goes into the P&amp;S phase, one of</p>			

	the options to be presented in the DDR for the lift schedule will include fixed lift heights at different time intervals. Submitted By: <a href="#">Carlos Cepero (9046411834)</a> Submitted On: 10-Jul-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 11-Jul-08			
3-0	<b>Evaluation Concurred</b> no comment Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 17-Jul-08			
3-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 17-Jul-08			
Current Comment Status: <b>Comment Closed</b>				
1916369	Geotechnical	n/a'	EAR, Geotechnical Appendix, Appendix B, Topographic Cross Sections	n/a
ED-F's Comment #21 in the 30% ITR was not addressed. Therefore the comment remains.  Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> The topographic cross sections in Appendix B depict the existing levee and the final levee (in the year 2057) templates. Based on comment #21 of the 30% ITR, the "new levee" topography wording will be changed to "net earthen levee". Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 10-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
1916370	Geotechnical	n/a'	EAR, Geotechnical Appendix, Appendix B, Subsurface Profiles	n/a
ED-F's Comment #20 in the 30% ITR was not addressed. Therefore the comment remains.  Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> . Submitted On: 19-May-08				
1-0	<b>Evaluation Concurred</b> Comment #20 of the 30% ITR was concerning depositional units. Depositional units were provided in Appendix A under Geologic Profiles. Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 11-Jun-08			
Current Comment Status: <b>Comment Closed</b>				
			EAR, Geotechnical Appendix, Appendix B,	

1916372	Geotechnical	n/a'	Unit Weight Distribution Lines and Strength Lines	n/a
<p>In prior discussions between HPA and MVN-ED-F, it was asked that HPA provide the actual elevation/strata break that is to be used in design on either the unit weight line or the strength line plots, even though you make it clear that the strata varies based on the borings and testing. It was also asked that HPA consider rounding the selected strengths to the nearest 5 psf even though the model selects a more exact strength. It is noted here that neither was done.</p> <p>Submitted By: <u>Leeland Richard</u> (504-862-2397). Submitted On: 19-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> Will provide elevation of strata change chosen for analysis in either the unit weight or strength lines. Will also round up strengths to the nearest 5 psf, for presentation purposes only.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>Leeland Richard</u> (504-862-2397) Submitted On: 10-Jun-08</p>			
<p>Current Comment Status: Comment Closed</p>				
1916375	Geotechnical	n/a'	EAR, Geotechnical Appendix, Appendix D, Plate G-05, Reinforced No Berm	n/a
<p>This shows the factor of safety with no berm but with the reinforcement to be 1.08. Why was not a higher strength geotextile designed and used (as stated on Pg 17, 1.7.4.2) that would meet the required factor of safety before using a berm? Also, if a berm was added as stated in Table 12, why was this analysis not included in Appendix D? (This may apply to the other four reaches.)</p> <p>Submitted By: <u>Leeland Richard</u> (504-862-2397). Submitted On: 19-May-08</p>				
1-0	<p><b>Evaluation Concurred</b> a) We considered a value of 1250 lb/in at 5% strain, as was mutually agreed upon during the 30% ITR. Reach 4E, which is the most critical based on the stability analysis results, requires a geotextile with a breaking/tensile strength of 2450 lb/in if no berm is incorporated, based on MOP results. Therefore, a berm was required to meet the required safety factor. Similarly, Reach 3E, the least critical when no berm or reinforcement as part of the levee are considered, requires a geotextile with a strength of 1600 lb/in. Therefore, given the geotextile requirement for the least and the most critical of the reaches, by inspection it was observed that a berm is required. b) The analysis with a berm for reaches 1E, 2E and 3E was not performed because, by inspection, it became obvious during the design efforts that Reach 4E was most critical. Additionally, based on seepage, Reach 5 required a berm width 145 ft. If this berm or that for Reach 4 was applied to the rest of the reaches, the safety factors would be in excess of the required minimum.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b> Though in your evaluation above, you state that "by inspection..." and "it is obvious...", it is recommended to at least add something in the write-up describing this, if not providing the analyses that prove those statements</p> <p>Submitted By: <u>Leeland Richard</u> (504-862-2397) Submitted On: 20-Jun-08</p>			
2-0	<p><b>Evaluation Concurred</b> Revisions have been made to all 5 reaches depicting the actual required berm size when using the specified reinforcement. The most critical lift has been analyzed.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 26-Jun-08</p>			
2-1	<p><b>Backcheck Recommendation Close Comment</b></p>			

Closed without comment.				
Submitted By: Leeland Richard (504-862-2397) Submitted On: 02-Jul-08				
Current Comment Status: Comment Closed				
1917355	Civil	n/a'	C-01	n/a
1. Sht. C-01, Since the Sector gate south outcome will effect this project, when will this decision be made?				
Submitted By: Ennis Johnson (1-504-816-7311). Submitted On: 20-May-08				
1-0	Evaluation <b>Concurred</b> Please keep us informed.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation <b>Open Comment</b> When will this determination be made?			
Submitted By: Ennis Johnson (1-504-816-7311) Submitted On: 11-Jun-08				
1-2	Backcheck Recommendation <b>Close Comment</b> A meeting will take place in July to make a preliminary decision. The completion of this report is necessary in case it is not approved.			
Submitted By: William Landry (504-862-1825) Submitted On: 23-Jun-08				
Current Comment Status: Comment Closed				
1917358	Civil	n/a'	C-104A1	n/a
2. Sht. C-104A1, Concrete scour protection will not be grouted riprap? Recently saw the maint. problem that this leaves the levee districts after a growing season. Verified that it was concrete slab on Sht C-310.				
Submitted By: Ennis Johnson (1-504-816-7311). Submitted On: 20-May-08				
1-0	Evaluation <b>Concurred</b> Unreinforced concrete 6" thick per detail sheet C-300.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.			
Submitted By: Ennis Johnson (1-504-816-7311) Submitted On: 11-Jun-08				
Current Comment Status: Comment Closed				
1917362	Civil	n/a'	C-105	n/a
3. Sht. C-105 Belle Chasse Pump station is a no work area? Because of Fronting protection?				
Submitted By: Ennis Johnson (1-504-816-7311). Submitted On: 20-May-08				
1-0	Evaluation <b>Concurred</b> This project will tie to T-wall being designed by others.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.			
Submitted By: Ennis Johnson (1-504-816-7311) Submitted On: 11-Jun-08				
Current Comment Status: Comment Closed				

1917365	Civil	n/a'	C-106	n/a
4. Sht. C-106, Limits of work stops at the tunnel? Another project to go further east?				
Submitted By: <u>Ennis Johnson</u> (1-504-816-7311). Submitted On: 20-May-08				
1-0	<b>Evaluation Concurred</b> This project ends just south of the tunnel.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Ennis Johnson</u> (1-504-816-7311) Submitted On: 11-Jun-08			
Current Comment Status: Comment Closed				
1917367	Civil	n/a'	n/a	n/a
5. General note- During development of P&S- keep all state & Fed. Hwys clean during construction.				
Submitted By: <u>Ennis Johnson</u> (1-504-816-7311). Submitted On: 20-May-08				
1-0	<b>Evaluation Concurred</b> Specification item.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Open Comment</b> Needs to be in the specification and enforced.  Submitted By: <u>Ennis Johnson</u> (1-504-816-7311) Submitted On: 11-Jun-08			
1-2	<b>Backcheck Recommendation Close Comment</b> it will  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 23-Jun-08			
Current Comment Status: Comment Closed				
1917370	Civil	n/a'	n/a	n/a
6. General note- is the possibility of an aggregate surface on the crown a possibility for inspection purposes?				
Submitted By: <u>Ennis Johnson</u> (1-504-816-7311). Submitted On: 20-May-08				
1-0	<b>Evaluation Concurred</b> A paved crest will generally lead to erosion of the slopes due to excessive runoff.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Open Comment</b> The adding of crushed stone to the levee crown will enhance the ability to ride the crown after a storm passes. However, it has been the District's long standing policy that since the levee is not ridden during a storm a crushed stone surfacing is not required.  Submitted By: <u>Ellsworth Pilie</u> ((504) 862-2768) Submitted On: 29-May-08			
2-0	<b>Evaluation Concurred</b> Concur w/o comment.  Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 29-May-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			

Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 23-Jun-08				
Current Comment Status: Comment Closed				
1917373	Civil	n/a'	S-104	n/a
7. Sht. S-104, What entity will be closing the gates? How many gates are included in this contract?				
Submitted By: <a href="#">Ennis Johnson (1-504-816-7311)</a> . Submitted On: 20-May-08				
1-0	Evaluation Concurred Corps response required.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Open Comment Response??  Submitted By: <a href="#">Ennis Johnson (1-504-816-7311)</a> Submitted On: 11-Jun-08			
1-2	Backcheck Recommendation Open Comment Typically the Local Sponsor is responsible.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 23-Jun-08			
1-3	Backcheck Recommendation Close Comment Time limit has expired. Mr. Johnson has been unresponsive to emails.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 26-Jun-08			
Current Comment Status: Comment Closed				
1917374	Civil	n/a'	n/a	n/a
8. General note for final P&S- contractor shall clean and remove all trash in project limits prior to end of contract.				
Submitted By: <a href="#">Ennis Johnson (1-504-816-7311)</a> . Submitted On: 20-May-08				
1-0	Evaluation Concurred Spec. item.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: <a href="#">Ennis Johnson (1-504-816-7311)</a> Submitted On: 11-Jun-08			
Current Comment Status: Comment Closed				
1917375	Civil	n/a'	n/a	n/a
9. General note for final P&S- in reference to the maintenance of the area after completion of the project. Are the new provisions in place for the acceptance of grass growth on the levee?				
Submitted By: <a href="#">Ennis Johnson (1-504-816-7311)</a> . Submitted On: 20-May-08				
1-0	Evaluation Concurred Corps response required.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08			
1-1	Backcheck Recommendation Open Comment The specifications for construction will include the latest specs on Turfing and Turf Maintenance.			

Submitted By: Ellsworth Pilie ((504) 862-2768) Submitted On: 29-May-08				
1-2	Backcheck Recommendation <b>Close Comment</b> Closed without comment.			
Submitted By: William Landry (504-862-1825) Submitted On: 26-Jun-08				
Current Comment Status: Comment Closed				
1917377	Civil	n/a'	G-102	n/a
10. Sht. G-102, Benchmark table- NAVD 88, not labeled to latest epoch 2004.65?				
Submitted By: Ennis Johnson (1-504-816-7311). Submitted On: 20-May-08				
1-0	Evaluation <b>Concurred</b> The label will be adjusted.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.			
Submitted By: Ennis Johnson (1-504-816-7311) Submitted On: 11-Jun-08				
Current Comment Status: Comment Closed				
1917398	Civil	n/a'	Report Text	n/a
the report text is lacking detail. attached is a file of an accepted write up that may assist you with the substance.				
(Attachment: EARpart1-FINAL.doc)				
Submitted By: William Landry (504-862-1825). Submitted On: 20-May-08				
1-0	Evaluation <b>Concurred</b> The attachment will be reviewed and requested detail added.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.			
Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08				
Current Comment Status: Comment Closed				
1917819	Civil	n/a'	n/a	n/a
Pump Station at Drainline and Pump House for Jet Fuel Pipe should be Identified in relocations Table for Dwgs.				
Submitted By: William Landry (504-862-1825). Submitted On: 20-May-08				
1-0	Evaluation <b>Concurred</b> These are in table, but will be listed as separate items.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.			
Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08				
Current Comment Status: Comment Closed				
1917839	Project Management	n/a'	n/a	n/a

Based on the statement on Page 16 for Alternative 3 referring to the cost effectiveness of a reinforced levee section versus an unreinforced section, Alternative 4 could utilize a reinforced section which might have the potential of lowering the overall cost of this option.

Submitted By: [James McMenis \(225-274-4347\)](#). Submitted On: 20-May-08

Revised 22-May-08.

1-0	<p><b>Evaluation Potential Scope Impact Concurred</b>                  Added evaluation of Alternative 4, which was not included in the SOW, may require a contract modification?</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  Will Corps look at this alternative?</p> <p>Submitted By: <a href="#">James McMenis (225-274-4347)</a> Submitted On: 17-Jun-08</p>
1-2	<p><b>Backcheck Recommendation Open Comment</b>                  The Corps will look at all options. The current criteria does not allow floodwalls to be used for protection along navigation channels. This is one of the reasons the barge barrier is needed for the T-wall alternative.</p> <p>Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 24-Jun-08</p>
1-3	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <a href="#">James McMenis (225-274-4347)</a> Submitted On: 24-Jun-08</p>
<p>Current Comment Status: <b>Comment Closed</b></p>	

1917846	Project Management	n/a'	n/a	n/a
---------	--------------------	------	-----	-----

Is the earthen fill serving as a floodside barrier to barge impacts continuous for the entire length of the floodwall or are there gaps at set intervals?

Submitted By: [James McMenis \(225-274-4347\)](#). Submitted On: 20-May-08

1-0	<p><b>Evaluation Concurred</b>                  Continuous</p> <p>Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <a href="#">James McMenis (225-274-4347)</a> Submitted On: 29-May-08</p>
<p>Current Comment Status: <b>Comment Closed</b></p>	

1917852	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

Boring Locations not identified in Plan View of design dwgs. (do not show on R/W dwgs.)

Submitted By: [William Landry \(504-862-1825\)](#). Submitted On: 20-May-08

1-0	<p><b>Evaluation Concurred</b>                  The boring locations, legends, logs, etc. should be shown in the geotechnical appendix to this report. Will check for inclusion of these items.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b></p>

Closed without comment.				
Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08				
Current Comment Status: Comment Closed				
1917854	Civil	n/a'	n/a	n/a
Missing sheets that contain Boring logs.				
Submitted By: William Landry (504-862-1825). Submitted On: 20-May-08				
1-0	Evaluation Concurred See response to item 1917852.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08				
Current Comment Status: Comment Closed				
1917856	Civil	n/a'	n/a	n/a
Missing sheet - Boring Legend				
Submitted By: William Landry (504-862-1825). Submitted On: 20-May-08				
1-0	Evaluation Concurred See response to item 1917852.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: William Landry (504-862-1825) Submitted On: 07-Jun-08				
Current Comment Status: Comment Closed				
1919660	Construction Management	n/a'	n/a	n/a
It is confusing why an EAR presents 3 alternatives and RECOMMENDS a fourth be investigated. This report is the opportunity to present ALL alternatives for consideration and decision making. Recommend the 95% report be revised to evaluate all 4 alternatives equally.				
Submitted By: James Montegut (504-862-2929). Submitted On: 21-May-08				
1-0	Evaluation Potential Scope Impact Potential Time Impact Check and Resolve Scope Change: Further evaluation of Alernative 4 would require a scope change, as it is not part of the current SOW.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08				
1-1	Backcheck Recommendation Close Comment Noted. However now that a new alternative has been raised and presented it should be evaluated on an equal basis with the others. Otherwise state why it is not a viable alternative. Recommend USACE Eng. Div. issue a contract modification to amend the scope to include evaluation of the fourth alternative as part of the 95% EAR.			
Submitted By: James Montegut (504-862-2929) Submitted On: 13-Jun-08				
2-0	Evaluation Concurred			

	No further comment. Submitted By: Eugene Brian (504-887-7045) Submitted On: 23-Jun-08			
2-1	<b>Backcheck Recommendation Open Comment</b> The current criteria does not allow Floodwalls to be used along navigation canals. No Contract Modification needed. Submitted By: William Landry (504-862-1825) Submitted On: 24-Jun-08			
2-2	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: James Montegut (504-862-2929) Submitted On: 24-Jun-08			
Current Comment Status: Comment Closed				
1919690	Construction Management	n/a'	n/a	n/a
<p>"Construction Appendix", Paragraph A - Access to both ends of the project is noted however the actual limitations of each are not addressed. Walker Road becomes gravel at some point and will require significant maintenance especially for an alternative with large amounts of hauling. Barriere Road goes thru a residential neighborhood. Later, in Paragraph C, the schedules are based on 4 crews working concurrently along the 5.5 mile project. If access is only available at each end, the ability to get materials and equipment where they need to go, sufficient to support 4 separate operations, will be difficult. Verify this has been accounted for in the applicable cost estimates.</p> <p>Submitted By: James Montegut (504-862-2929). Submitted On: 21-May-08</p> <p>Revised 21-May-08.</p>				
1-0	<b>Evaluation Concurred</b> The scheduling and cost estimates will be checked after reviewing site access. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: James Montegut (504-862-2929) Submitted On: 13-Jun-08			
Current Comment Status: Comment Closed				
1919695	Construction Management	n/a'	n/a	n/a
<p>"Construction Appendix", Paragraph B - Building levees, especially with hauled fill, cannot reasonably be a 24 hour per day operation. For example: it will be difficult to obtain permission to haul on local streets around the clock. Recommend future schedules be adjusted to reflect a more realistic operation.</p> <p>Submitted By: James Montegut (504-862-2929). Submitted On: 21-May-08</p> <p>Revised 21-May-08.</p>				
1-0	<b>Evaluation Concurred</b> The scheduling will be reviewed. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: James Montegut (504-862-2929) Submitted On: 13-Jun-08			
Current Comment Status: Comment Closed				

1919700	Construction Management	n/a'	n/a	n/a
<p>Has a borrow source been identified? If not, how are hauling costs being estimated? Has the escalating cost of fuel been accounted for?</p> <p>Submitted By: James Montegut (504-862-2929). Submitted On: 21-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  No preferred borrow pit has been pointed out to date. Suggest using available current cost data for all options to make cost comparisons in this report.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Noted.</p> <p>Submitted By: James Montegut (504-862-2929) Submitted On: 13-Jun-08</p>			
<p>Current Comment Status: Comment Closed</p>				
1919954	Structural	n/a'	17/36 and	n/a
<p>When applying lateral soil loads to monolith, use effective soil weights. These issues were found in most of the TOW and SWE cases. Also if no load is to be applied to the structure please do not show diagram. This was found in the uplift analysis.</p> <p>Submitted By: Ira Dorsett (504-862-1116). Submitted On: 21-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  Effective soil weights were used in the spreadsheet calculations. The P/S lateral pressures have been revised to show water pressure at the top of the slab.</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 28-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: Ira Dorsett (504-862-1116) Submitted On: 29-May-08</p>			
<p>Current Comment Status: Comment Closed</p>				
1920257	Utilities Engineering	n/a'	n/a	n/a
<p>The AE should verify the owner of the 8" sewer line buried at approx. station 421+00. Be advise that there is a fiber optic line owned by Bellsouth and an electrical line owned by Entergy in the vicinity of the JRB fuel docks at approx. station 406+55.</p> <p>Submitted By: Gregory DeBose (504-862-2452). Submitted On: 22-May-08</p>				
1-0	<p><b>Evaluation Check and Resolve</b>                  Plaquemines Parish was consulted regarding the 8" sewer line, and denied any knowledge of it. The line is shown on levee construction plans. Per SOW, please forward B/L station locations and/or related data for the fiber optics and electrical line.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  I have no record of the 8" sewer line at station 421+87 in the older plans. If Plaquemines Parish denies that it exists, I think it should be removed. It might have been added to the plans as a mistake.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 23-Jun-08</p>			
1-2	<p><b>Backcheck Recommendation Open Comment</b></p>			

	Concur	Submitted By: Gregory DeBose (504-862-2452) Submitted On: 26-Jun-08		
2-0	<b>Evaluation Concurred</b> 8" sewer will not be shown on plan.	Submitted By: Jens Nielsen (504 887 7045) Submitted On: 23-Jun-08		
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.	Submitted By: William Landry (504-862-1825) Submitted On: 24-Jun-08		
2-2	<b>Backcheck Recommendation Close Comment</b> Closed without comment.	Submitted By: William Landry (504-862-1825) Submitted On: 30-Jun-08		
Current Comment Status: Comment Closed				
1921859	Structural	n/a'	C310-A1	n/a
Per latest guidance, F/S fill for wall along navigation channel should be up to SWL (11.0) or protective dolphins should be added				
Submitted By: David Lovett (504-862-2680). Submitted On: 22-May-08				
1-0	<b>Evaluation Potential Scope Impact Non-concurred</b> The original SOW calls for the fill as shown.	Submitted By: Eugene Brian (504-887-7045) Submitted On: 28-May-08		
1-1	<b>Backcheck Recommendation Open Comment</b> The SOW states that the existing levee would be used as a barge barrier. The existing levee would still be used as a barge barrier, just reshaped to the higher elevation as called for above.	Submitted By: David Lovett (504-862-2680) Submitted On: 09-Jun-08		
2-0	<b>Evaluation Potential Scope Impact Non-concurred</b> During the pre-proposal scope meetings concerning this project, HPAJV was instructed by MVN to begin the fill at the top of the existing levee and slope upward at a grade of 1V:40H until it met with the face of the T-wall (El. 9.5). We feel that any deviation from this direction would constitute a scope change, and thus would necessitate a contract modification.	Submitted By: Eugene Brian (504-887-7045) Submitted On: 17-Jun-08		
2-1	<b>Backcheck Recommendation Close Comment</b> If the Alternative is chosen, the P&S should be revised to include the berm to El. 11.0. Per Levees FTL, we will not pursue this any further in the EAR. The write-up should note that the criteria has changed since the SOW was negotiated and that because of the cost difference in the alternatives, it is not being explored any further.	Submitted By: David Lovett (504-862-2680) Submitted On: 25-Jun-08		
3-0	<b>Evaluation Concurred</b> No further comment	Submitted By: Eugene Brian (504-887-7045) Submitted On: 02-Jul-08		
3-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.	Submitted By: William Landry (504-862-1825) Submitted On: 02-Jul-08		
Current Comment Status: Comment Closed				
1921860	Structural	n/a'	C311-A2	n/a
Verify the F/S slope on the levee section. I believe 2057 is 1V:5H				

Submitted By: David Lovett (504-862-2680). Submitted On: 22-May-08

1-0	<p><b>Evaluation Non-concurred</b> The SOW calls for a 1:4 slope.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Per discussion with Billy Landy, ED-H has ok'd the 1V:4H</p> <p>Submitted By: <u>David Lovett</u> (504-862-2680) Submitted On: 09-Jun-08</p>
2-0	<p><b>Evaluation Concurred</b> No further comment.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 23-Jun-08</p>
2-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>David Lovett</u> (504-862-2680) Submitted On: 23-Jun-08</p>
Current Comment Status: Comment Closed	

1921862	Structural	n/a'	C311-A1	n/a
---------	------------	------	---------	-----

Consider only having a F/S berm on the T-Wall at 11.0 for 15 feet and then degrading. This may drastically reduce unbalanced loading

Submitted By: David Lovett (504-862-2680). Submitted On: 22-May-08

1-0	<p><b>Evaluation Potential Scope Impact Non-concurred</b> This would require a change in the SOW.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 28-May-08</p>
1-1	<p><b>Backcheck Recommendation Open Comment</b> The SOW states that the existing levee would be used as a barge barrier. The existing levee would still be used as a barge barrier, just reshaped to the higher elevation as called for in previous comment. A previous job has shown that this will significantly reduce the unbalanced loads</p> <p>Submitted By: <u>David Lovett</u> (504-862-2680) Submitted On: 09-Jun-08</p>
2-0	<p><b>Evaluation Potential Scope Impact Non-concurred</b> See response to Comment No 1921859.</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 17-Jun-08</p>
2-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>David Lovett</u> (504-862-2680) Submitted On: 25-Jun-08</p>
3-0	<p><b>Evaluation Concurred</b> No further comment</p> <p>Submitted By: <u>Eugene Brian</u> (504-887-7045) Submitted On: 02-Jul-08</p>
3-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Jul-08</p>
Current Comment Status: Comment Closed	

1921864	Structural	n/a'	S-101	n/a
---------	------------	------	-------	-----

1.) A 1:1.5 batter is not constructable. 2.) Consider reducing unbalanced load to reduce number of piling 3.) Why is fill degraded to 0 on this section on the P/S? 4.) 4' O.C. is tight for pile spacing

Submitted By: David Lovett (504-862-2680). Submitted On: 22-May-08

1-0	<p><b>Evaluation Concurred</b>                  1. The maximum batter has been changed to 1H:2V. 2. In this area, a "Type 2" T-wall was designed using Reach 2 unbalanced loads. 3. This was to keep construction within the R/W. 4. The T-wall has been redesigned using 24" steel pipe piles. The minimum spacing is 5 feet OC.</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 28-May-08</p>
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  4.) Pipe piling is not advisable for T-Walls. There are special handling concerns that may drastically increase costs</p> <p>Submitted By: David Lovett (504-862-2680) Submitted On: 09-Jun-08</p>
2-0	<p><b>Evaluation Non-concurred</b>                  Because of the unbalanced loads and the limited right-of-way, H-piles could not be used.</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 17-Jun-08</p>
2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: David Lovett (504-862-2680) Submitted On: 25-Jun-08</p>
3-0	<p><b>Evaluation Concurred</b>                  No further comment</p> <p>Submitted By: Eugene Brian (504-887-7045) Submitted On: 02-Jul-08</p>
3-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 02-Jul-08</p>
Current Comment Status: Comment Closed	

1921865	Structural	n/a'	S-103	n/a
---------	------------	------	-------	-----

Are ramp retaining walls necessary? Can F/S be degraded at ramps?

Submitted By: David Lovett (504-862-2680). Submitted On: 22-May-08

1-0	<p><b>Evaluation Non-concurred</b>                  There is limited room for the roadway on the flood side. The flood side slope is degraded to elevation 6 as shown. The protective berm on the flood side mandates the retaining walls.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-May-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: David Lovett (504-862-2680) Submitted On: 09-Jun-08</p>
2-0	<p><b>Evaluation Concurred</b>                  No further comment.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 23-Jun-08</p>
2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: David Lovett (504-862-2680) Submitted On: 23-Jun-08</p>
Current Comment Status: Comment Closed	

1921887	Project Management	n/a'	n/a	n/a
<p>Operation and Maintenance costs are not included for each of the proposed alternatives. Without the inclusion of these costs, it is unclear what is the true cost of the identified alternatives.</p> <p>Submitted By: <u>James McMenis (225-274-4347)</u>. Submitted On: 22-May-08</p>				
1-0	<p><b>Evaluation For Information Only</b>                  Our evaluation of operation and maintenance cost is beyond our scope input to this report.                  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  Depending on the alignment, factoring in operation and maintenance costs may preclude certain alignments from final analysis                  Submitted By: <u>James McMenis (225-274-4347)</u> Submitted On: 17-Jun-08</p>			
2-0	<p><b>Evaluation Concurred</b>                  Additional embankment, seeding, fertiliezing, etc. costs are added to the estimates for each alternate for future maintenance considerations.                  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 23-Jun-08</p>			
2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.                  Submitted By: <u>James McMenis (225-274-4347)</u> Submitted On: 24-Jun-08</p>			
<p>Current Comment Status: <b>Comment Closed</b></p>				
1921893	Project Management	n/a'	n/a	n/a
<p>As proposed, earthen material is placed up to an elevation of 9.5 Feet against the T-wall. Does this placement of material affect the stability of the T-Wall or the area behind the wall?</p> <p>Submitted By: <u>James McMenis (225-274-4347)</u>. Submitted On: 22-May-08</p> <p>Revised 22-May-08.</p>				
1-0	<p><b>Evaluation Concurred</b>                  Yes, it results in an increase of the unbalanced load, which is appropriately taken care by the foundation system.                  Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 29-May-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.                  Submitted By: <u>James McMenis (225-274-4347)</u> Submitted On: 09-Jun-08</p>			
<p>Current Comment Status: <b>Comment Closed</b></p>				
1921903	Project Management	n/a'	n/a	n/a
<p>Without Sector Gate South, stillwater elevations for events greater than the 1% Chance Storm Event would be potentially greater than the SWL of 11 feet in height for the project design. As proposed, impact barriers would not provide protection for storm events greater than 1% Chance Storm Event.</p> <p>Submitted By: <u>James McMenis (225-274-4347)</u>. Submitted On: 22-May-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  Comment noted.                  Submitted By: <u>Eugene Brian (504-887-7045)</u> Submitted On: 28-May-08</p>			

1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">James McMenis (225-274-4347)</a> Submitted On: 29-May-08			
Current Comment Status: Comment Closed				
1921914	Project Management	n/a'	n/a	n/a
The earthen material on the floodside that acts as an impact barrier for the floodwall is at elevation 9.5 feet which is below the still water elevation.  Submitted By: <a href="#">James McMenis (225-274-4347)</a> . Submitted On: 22-May-08				
1-0	<b>Evaluation Concurred</b> Comment noted.  Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 28-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">James McMenis (225-274-4347)</a> Submitted On: 29-May-08			
Current Comment Status: Comment Closed				
1921918	Project Management	n/a'	n/a	n/a
Will additional fill to raise the impact barrier to an elevation of at least 11 feet to meet the SWL cause stability problems?  Submitted By: <a href="#">James McMenis (225-274-4347)</a> . Submitted On: 22-May-08				
1-0	<b>Evaluation Potential Scope Impact Non-concurred</b> This will increase the unbalanced load, which will affect the structural design.  Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 29-May-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">James McMenis (225-274-4347)</a> Submitted On: 29-May-08			
2-0	<b>Evaluation Concurred</b> No further comment.  Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 23-Jun-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 24-Jun-08			
Current Comment Status: Comment Closed				

There are currently a total of 192 users online as of 08:31 AM 02-Oct-08.

[Patent 11/892,984](#) | [About ProjNet<sup>SM</sup>](#) | [About Us](#) | [Privacy Policy](#) | [Test Browser](#) | [Test Connection](#) | [Call Center](#) | **SBU Only** | SM property of ERDC since 2004.

Questions and comments to Call Center [staff@rcesupport.com](mailto:staff@rcesupport.com), 1-217-367-3273 or 1-800-428-HELP (4357)

Classified information is NOT permitted on this site. Do NOT share your ProjNet password.

Comment Report: All Comments

Project: WBV-49.2

Review: 95% Review

Displaying 143 comments for the criteria specified in this report.

2828 ms to run this page

Id ▲	Discipline	Section/Figure	Page Number	Line Number
2045964	Cost Engineering	n/a'	n/a	n/a
<p>In all alternatives was the cost for soil amending and mulching added into the Seeding and Fertilizer? If so, recommend naming item Fertilizing, Seeding, Soil Amending, and Mulching.</p> <p>Submitted By: <a href="#">Steven Lowrie (504-862-1302)</a>. Submitted On: 12-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b> Will adjust item description and modify pricing accordingly. Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 18-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">Steven Lowrie (504-862-1302)</a> Submitted On: 19-Aug-08</p>			
<p>Current Comment Status: Comment Closed</p>				
2045965	Cost Engineering	n/a'	n/a	n/a
<p>In alternative 3 the Geotextile unit cost may be low for 1800 #. Please Verify.</p> <p>Submitted By: <a href="#">Steven Lowrie (504-862-1302)</a>. Submitted On: 12-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b> Will adjust unit cost upward. Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 18-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b> Submitted By: <a href="#">Steven Lowrie (504-862-1302)</a> Submitted On: 19-Aug-08</p>			
1-2	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">Steven Lowrie (504-862-1302)</a> Submitted On: 19-Aug-08</p>			
<p>Current Comment Status: Comment Closed</p>				
2045966	Cost Engineering	n/a'	n/a	n/a
<p>In alternative 3, two types of geotextile are shown in the drawings on pages C-310-A3 and C-100. Recommend breaking geotextile into two items; geotextile 600# and geotextile1800#.</p> <p>Submitted By: <a href="#">Steven Lowrie (504-862-1302)</a>. Submitted On: 12-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b> Geotextile will be separated into two items. Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 18-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <a href="#">Steven Lowrie (504-862-1302)</a> Submitted On: 19-Aug-08</p>			

Current Comment Status: Comment Closed				
2045967	Cost Engineering	n/a'	n/a	n/a
In all alternatives, is Geotextile and Bedding estimated within Scour protection item? Please clarify.				
Submitted By: <u>Steven Lowrie</u> (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> Concrete scour protection, geotextile and bedding materials will be made seperate items. Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 18-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>Steven Lowrie</u> (504-862-1302) Submitted On: 19-Aug-08			
Current Comment Status: Comment Closed				
2045968	Cost Engineering	n/a'	n/a	n/a
In all alternatives, recommend the Geotextile and Bedding that is located under the scour protection be added as separate items.				
Submitted By: <u>Steven Lowrie</u> (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> Geotextile, and bedding will be made seperate items. Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 18-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>Steven Lowrie</u> (504-862-1302) Submitted On: 19-Aug-08			
Current Comment Status: Comment Closed				
2045970	Cost Engineering	n/a'	n/a	n/a
On page C-304 on the drawings, recommend stating the strength of the Geotextile.				
Submitted By: <u>Steven Lowrie</u> (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> Strength statement will be added to drawing. Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 18-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>Steven Lowrie</u> (504-862-1302) Submitted On: 19-Aug-08			
Current Comment Status: Comment Closed				
2045971	Cost Engineering	n/a'	n/a	n/a
Recommend having separate cost estimates for each lift within each alternative.				
Submitted By: <u>Steven Lowrie</u> (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b>			

	Will provide seperate cost estimates.			
	Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 25-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">Steven Lowrie</a> (504-862-1302) Submitted On: 16-Sep-08			
	Current Comment Status: Comment Closed			
2045973	Cost Engineering	n/a'	n/a	n/a
The item called "Painting Sheet Pile" looks low. Please check unit cost.				
Submitted By: <a href="#">Steven Lowrie</a> (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> Will check adjust unit cost as may be required.			
	Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 18-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">Steven Lowrie</a> (504-862-1302) Submitted On: 19-Aug-08			
	Current Comment Status: Comment Closed			
2045974	Cost Engineering	n/a'	n/a	n/a
In alternative 1, does "30' Swing Gate and Concrete monolith" include HP 14X73 cost under this item? If so, recommend making HP 14X73 an additional item.				
Submitted By: <a href="#">Steven Lowrie</a> (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> The piling are included in the pile item. A corresponding note will be added to the estimate.			
	Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 22-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">Steven Lowrie</a> (504-862-1302) Submitted On: 16-Sep-08			
	Current Comment Status: Comment Closed			
2045975	Cost Engineering	n/a'	n/a	n/a
Recommend adding silt fence as an additional item on the estimate.				
Submitted By: <a href="#">Steven Lowrie</a> (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> Silt fence item will be added as a seperate item.			
	Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 18-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">Steven Lowrie</a> (504-862-1302) Submitted On: 19-Aug-08			
	Current Comment Status: Comment Closed			

2045977	Cost Engineering	n/a'	n/a	n/a
<p>On page C-303 of the drawing semi compacted fill is found under the scour protection. The term semi compacted fill is not being used anymore. Recommend using compacted fill and stating percent of compaction in the embankment portion of the Specs.</p>				
<p>Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b> The term semi-compacted will be removed.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Steven Lowrie (504-862-1302) Submitted On: 19-Aug-08</p>			
<p>Current Comment Status: Comment Closed</p>				
2045997	Cost Engineering	n/a'	n/a	n/a
<p>On page C-304 of the drawings, the embankment located to the right of the concrete key is stated to be 90% compaction. Recommend stating this type of embankment as compacted fill and noting compaction percentage in the embankment portion of the Specs.</p>				
<p>Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b> Compaction description will be modified.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Steven Lowrie (504-862-1302) Submitted On: 19-Aug-08</p>			
<p>Current Comment Status: Comment Closed</p>				
2045999	Cost Engineering	n/a'	n/a	n/a
<p>Are piles tips included in the cost estimate of 24" Dia Steel H-Piles item? Please Verify.</p>				
<p>Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08</p>				
1-0	<p><b>Evaluation Check and Resolve</b> No the lower tips were to be left open, and the tops portion capped with concrete.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 22-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: Steven Lowrie (504-862-1302) Submitted On: 16-Sep-08</p>			
2-0	<p><b>Evaluation Concurred</b> No further comment.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08</p>			
2-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 24-Sep-08</p>			

Current Comment Status: Comment Closed				
2046001	Cost Engineering	n/a'	n/a	n/a
No reinforcement geotextile was found in the estimate for Alternative # 4. Please Check.				
Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> Will check, and adjust accordingly.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Steven Lowrie (504-862-1302) Submitted On: 19-Aug-08			
Current Comment Status: Comment Closed				
2046003	Cost Engineering	n/a'	n/a	n/a
No Drawings were found for Alternative # 4. Please Verify.				
Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Check and Resolve</b> Additional drawings for alternative four would require a scope change as stated in the 65% review.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 22-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Steven Lowrie (504-862-1302) Submitted On: 16-Sep-08			
2-0	<b>Evaluation Concurred</b> No further comment.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 24-Sep-08			
Current Comment Status: Comment Closed				
2046006	Cost Engineering	n/a'	n/a	n/a
No durations were for Alternative # 4. Please Verify.				
Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> An duration schedule will be included for Alternative 4.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 22-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Steven Lowrie (504-862-1302) Submitted On: 16-Sep-08			
Current Comment Status: Comment Closed				

2046008	Cost Engineering	n/a'	n/a	n/a
Duration appears to be low for Alternative 1&2. Please Clarify.				
Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> Will check and increase as may be required. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 22-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: Steven Lowrie (504-862-1302) Submitted On: 16-Sep-08			
Current Comment Status: Comment Closed				
2046010	Cost Engineering	n/a'	n/a	n/a
In the first lift please clarify the reason there is more dirt for Alternative # 4 than Alternative # 2.				
Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation Concurred</b> Will check quantities. First indications are that the required berms for Alternative 4 increased the embankment quantities considerably. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 22-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: Steven Lowrie (504-862-1302) Submitted On: 16-Sep-08			
Current Comment Status: Comment Closed				
2046012	Cost Engineering	n/a'	n/a	n/a
Is the relocation of the drainage pumping station at Station 524+00 required for alternative #4?				
Submitted By: Steven Lowrie (504-862-1302). Submitted On: 12-Aug-08				
1-0	<b>Evaluation For Information Only</b> No T-Walls are proposed in this area. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 22-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: Steven Lowrie (504-862-1302) Submitted On: 16-Sep-08			
2-0	<b>Evaluation Concurred</b> No further comment required. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: William Landry (504-862-1825) Submitted On: 24-Sep-08			
Current Comment Status: Comment Closed				
2049247	Construction	n/a'	n/a	n/a

Management				
<p>Refer to comment #1919660 made during the 65% EAR review. The final resolution of that comment stated, "current criteria does not allow Floodwalls to be used along navigation canals". If this is the case then recommend deleting all references to a fourth alternative, otherwise evaluate it.</p>				
<p>Submitted By: James Montegut (504-862-2929). Submitted On: 14-Aug-08</p>				
1-0	<p><b>Evaluation Check and Resolve</b>                  The scope and all related meetings, and discussions referenced evaluation of T-Walls protected from barge traffic by the existing levee to be one of three alternatives evaluated. We defer further explanation of the subject closing comment statement to the author. Further evaluation of Alternative 4, as stated in the 65% review would require a scope change.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 22-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  Current criteria does not allow I-walls along navigation canals. T-Walls with barge barrier in front is approved alternative. Please remove any references to I-walls being used as an alternative. No change to the scope required.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08</p>			
1-2	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: James Montegut (504-862-2929) Submitted On: 15-Sep-08</p>			
2-0	<p><b>Evaluation Concurred</b>                  No further comment required.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08</p>			
2-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 24-Sep-08</p>			
Current Comment Status: Comment Closed				
2049270	Construction Management	n/a'	n/a	n/a
<p>Reference Comment #1919700 made during the 65% EAR review. The 95% still indicates no borrow source identified. Recommend identifying an adequate borrow source before completing the 95% phase of the EAR. Without this information it is not possible to develop reasonable cost estimates and subsequent recommendations of alternatives consistent with a 95% level review.</p>				
<p>Submitted By: James Montegut (504-862-2929). Submitted On: 14-Aug-08</p>				
1-0	<p><b>Evaluation Check and Resolve</b>                  As stated in the 65% review no borrow area has been identified by the Corps, nor has any current materials cost data been supplied for a particular source to date.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 22-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  When alternative is selected for construction a borrow source will be provided and cost estimates will be revised. Source is not identified for study purpose.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08</p>			
1-2	<p><b>Backcheck Recommendation Close Comment</b>                  Noted.</p> <p>Submitted By: James Montegut (504-862-2929) Submitted On: 15-Sep-08</p>			
2-0	<p><b>Evaluation Concurred</b></p>			

	No further comment required.			
	Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 18-Sep-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 24-Sep-08			
	Current Comment Status: <b>Comment Closed</b>			
2049275	Construction Management	n/a'	n/a	n/a
Follow-up to comments # 1919690 & 1919695. Please verify the scheduling and cost estimates have been reviewed and revised as per the responses to these 2 65% EAR comments.				
Submitted By: <a href="#">James Montegut (504-862-2929)</a> . Submitted On: 14-Aug-08				
1-0	<b>Evaluation Concurred</b> Scheduled and cost estimates will be reviewed and adjusted as required.			
	Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 22-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">James Montegut (504-862-2929)</a> Submitted On: 15-Sep-08			
	Current Comment Status: <b>Comment Closed</b>			
2050425	Real Estate	n/a'	n/a	n/a
I have recieved and reviewed the 95% submittal and have no comments at this time.				
Submitted By: <a href="#">Louis Cheek (504-862-1563)</a> . Submitted On: 14-Aug-08				
1-0	<b>Evaluation Concurred</b> No further comment.			
	Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 18-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			
	Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 19-Aug-08			
	Current Comment Status: <b>Comment Closed</b>			
2050480	Structural	Appendix C	n/a	n/a
(Document Reference: Concrete Structures)				
In the t-wall alternative, are 24" pipe piles tipping out at -110 the only viable option.				
Submitted By: <a href="#">Ira Dorsett (504-862-1116)</a> . Submitted On: 14-Aug-08				
1-0	<b>Evaluation Concurred</b> Given the structural loading and deflection requirements it is probably the most cost effective from an engineering view point, but not the only viable alternative.			
	Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 22-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.			

Submitted By: <a href="#">Ira Dorsett (504-862-1116)</a> Submitted On: 16-Sep-08				
Current Comment Status: Comment Closed				
2050490	Structural	Appendix C	n/a	n/a
(Document Reference: Concrete Structures)				
<p>Make sure interference is not a problem. Typically we have been using 3 pile diameters as an absolute minimum but 4 is preferred. Also, each pile is permitted an installation tolerance of 3" plus a deviation or drift of 1/4" per foot.</p> <p>Submitted By: <a href="#">Ira Dorsett (504-862-1116)</a>. Submitted On: 14-Aug-08</p> <p>Revised 14-Aug-08.</p>				
1-0	<p><b>Evaluation Concurred</b>                  Comment noted. If this project should advance to plans and specifications stage, this will be addressed at that time.</p> <p>Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 22-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <a href="#">Ira Dorsett (504-862-1116)</a> Submitted On: 16-Sep-08</p>			
Current Comment Status: Comment Closed				
2050502	Structural	Appendix c	n/a	n/a
(Document Reference: Concrete Structures)				
<p>Plate S-102 does not match the diagram of the pile layout or the CPGA input.</p> <p>Submitted By: <a href="#">Ira Dorsett (504-862-1116)</a>. Submitted On: 14-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  Plate S-102 will be corrected to match calculations.</p> <p>Submitted By: <a href="#">Eugene Brian (504-887-7045)</a> Submitted On: 22-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <a href="#">Ira Dorsett (504-862-1116)</a> Submitted On: 16-Sep-08</p>			
Current Comment Status: Comment Closed				
2055014	Structural	n/a'	S-103	n/a
<p>It is not clear why the retaining wall system is still used for the gates. Why not taper this fill back to EI 9.5 as required to allow a normal gate crossing. The area without the F/S berm can be designed for barge impact. From S-104, it is not clear how the gate is opened/closed with a retaining wall in the way.</p> <p>Submitted By: <a href="#">David Lovett (504-862-2680)</a>. Submitted On: 18-Aug-08</p>				
1-0	<p><b>Evaluation Non-concurred</b>                  For the wall alternatives, given the existing elevation in the dock area on the flood side, Elevation 6.0 was selected to accommodate grades in the area. The F/S berm was a given parameter. The gate can be detailed to be fully passable with the gate opened against the retaining wall.</p>			

Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 22-Aug-08				
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>David Lovett</u> (504-862-2680) Submitted On: 15-Sep-08			
2-0	<b>Evaluation Concurred</b> No further comment required.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 18-Sep-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 24-Sep-08			
Current Comment Status: Comment Closed				
2056216	Electronic	n/a'	n/a	n/a
DF1 – (65% Comment – 1915709) No directory structure, no separation between models & sheet files in Civil General Details, Civil Typ Sec, General & Structural Directories. No separation between design and R/W sheet model files.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> The sheet and model files have been seperated.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056218	Electronic	n/a'	n/a	n/a
DF2 – (65% Comment – 1915713) File names confusing, In Folders Civil ROW & Civil Typ Sec there are multiple model files displaying the same features, only 1 file is needed. Some files appear to be back- ups with the word "old" in the file name. Please keep these for your back-up, we only require what is actually used for the final product. Please clean and organize.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> All unused files will be eliminated.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056220	Electronic	n/a'	n/a	n/a
DF3 – (65% Comment – 1915716) 1 model for each alternative. In review of the different alternative model files, noticed that all levels were not turned on. After levels turned on it was found to contain multiple occasions where double elements exist, elements pertaining to other alternatives and allot of other elements that didn't look like they applied to anything. These files will not be accepted by the Govt. in their current state.				

Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Unused levels will be cleared and/or eliminated.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056223	Electronic	n/a'	n/a	n/a
DF4 – (65% Comment – 1915727) All files need to be checked for CADD Standard Compliance. Element attributes (Level, style, weight and color). Several violations found. Make sure when elements are put on their level that the weights, color, and Style are set to "by level" mode. Several instances are present where elements were put on their correct level but style, weight and color are incorrect. Text should not be on the same level as line work. Different text descriptors has it's own unique level and attributes.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Cad compliance for attributes will be re-checked.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b>  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056225	Electronic	n/a'	n/a	n/a
DF5 – (65% Comment – 1915733) Location Map model file is not Geo-referenced and not to scale.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Scale and referencing will be adjusted.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056230	Electronic	n/a'	n/a	n/a
DF6 – Sheet-model file properties not defined with sheet size or scale.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Check and Resolve</b> Please be more specific. Do you mean the file names (WPC....."Plan50 Scale.dgn"), etc.?  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Open Comment</b>			

	When in Sheet File, in Microstation got to File - Models, on the models palette click on third icon "Model Properties" there you can set the Type to "Sheet" then "Name" , "description", "scale" and "sheet size". Submitted By: William Landry (504-862-1825) Submitted On: 02-Sep-08			
2-0	<b>Evaluation Concurred</b> Will check icon and adjust accordingly. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 19-Sep-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: William Landry (504-862-1825) Submitted On: 24-Sep-08			
Current Comment Status: Comment Closed				
2056235	Electronic	n/a'	n/a	n/a
DF7 – Incorrect Text being used (ex.: Index, General notes, Typical Sections, Structural dwgs. ect.) All text should be a "Text Style" (ex. Proportional Normal) with an aerial font. Stick fonts are not CADD compliant. Check all dwgs.  Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Text styles will be adjusted. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: William Landry (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056237	Electronic	n/a'	n/a	n/a
DF8 – Title block text: Use the supplied text styles and sizes. Titles not centered, inconsistent sizes & some bold (ex. Civil works, levee plan profile crossing). All dwgs show state and parish in wrong style / spacing.  Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Titles will be adjusted and centered. Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: William Landry (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056239	Electronic	n/a'	n/a	n/a
DF9 – (65% Comment – 1915732) Some sheet files reviewed have plan elements that should be contained within the model file.  Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Check and Resolve</b> Please be more specific. Will check, accordingly.			

	Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Open Comment</b> When sheet files are opened and references turned off, there are elements (linework, cells) in the sheet files that should be in the Model.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 02-Sep-08			
2-0	<b>Evaluation Concurred</b> Will check sheet file content.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 19-Sep-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 24-Sep-08			
Current Comment Status: Comment Closed				
2056240	Electronic	n/a'	n/a	n/a
DF10 – File names are missing from sheet info on all dwgs. Dates need to be updated.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Dates will be upraded and file names added in title block.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056242	Electronic	n/a'	n/a	n/a
DF11 – Files for Right-Of-Way and Design should be in separate directories.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Design/ROE files will be cheked for seperation.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056244	Civil	n/a'	n/a	n/a
GDC1 – The Dwg's C01 & G100A should be switched. Title sheet should come first.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Will change order.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 22-Aug-08			

1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 25-Aug-08</p>			
Current Comment Status: Comment Closed				
2056246	Civil	n/a'	n/a	n/a
<p>GDC2 – Why were benchmarks used that are not located near the limits of work. Benchmarks AC2, AC3 &amp; Bel1 are within the project limits. (applicable to plan and R/W dwgs).</p> <p>Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  The bench marks were government supplied survey control for this project. Please provide descriptions for the new bench marks for inclusion in final plans.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 22-Aug-08 (Attachment: plug.pdf)</p>			
Backcheck not conducted				
2-0	<p><b>Evaluation Concurred</b>                  The bench marks were government supplied survey control for this project. Please provide descriptions for the new bench marks for inclusion in final plans.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 22-Aug-08 (Attachment: plug1.pdf)</p>			
2-1	<p><b>Backcheck Recommendation Open Comment</b>                  The points mentioned are also included in the Govt. furnished surveys, they are in the file named (07002C_Survey_Report.pdf).</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 25-Aug-08</p>			
3-0	<p><b>Evaluation Concurred</b>                  Suggested bench marks will be incorporated.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 01-Oct-08</p>			
3-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Oct-08</p>			
Current Comment Status: Comment Closed				
2056248	Civil	n/a'	n/a	n/a
<p>GDC3 - The ground line in the profile for all 3 alternatives has been shifted south about approx 1000'. A good place to look is where the 18" Drainage pipe is. In plan it is located at approx Sta 524+00 and in profile you will see the "Spike" in the existing ground representing the pipe crossing at approx sta. 514+50 (check the survey file: 07002C_E.PRO, you will see that the pipeline is located at sta. 524+06.92). It is confusing to look at because there is a big low spot that would appear to be where the pump station is located but it is actually where the gate locations are for Kostmayer.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  On this one sheet the profile line was shifted. Will adjust.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 22-Aug-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b>                  Also with the shift on that one sheet a portion of the ground line that was not shown contained a hump that was the location of a buried communication cable located at approximate sta.487+00.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 25-Aug-08</p>			

2-0	<b>Evaluation Concurred</b> The buried communication cable will be shown in plan and profile.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 01-Oct-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 02-Oct-08			
Current Comment Status: Comment Closed				
2056249	Civil	n/a'	n/a	n/a
GDC4 – Missing Location / Vicinity map sheet for the Right-Of-Way Dwgs.  Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Location/Vicinity map will be duplicated in the ROW drawings.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056251	Civil	n/a'	n/a	n/a
GDC5 – Drawings supplied with report are not plotted to scale. The trim line of these plots at half scale should be at 11"x17".  Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Check and Resolve</b> When we set or plotter to 0,0, the prints plot properly to scale? In microstation, is there a specific setting required for corps related plot files?  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Open Comment</b> no specific settings for corps. Check the scale of the hard copy plots.. You will see that the trim line for the border sheet is not to full 11"x17" sheet. Do you have margin settings applied??  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 02-Sep-08			
2-0	<b>Evaluation Concurred</b> Will check printing settings and adjust.  Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 18-Sep-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 24-Sep-08			
Current Comment Status: Comment Closed				
2056253	Civil	n/a'	n/a	n/a
GDC6 - (65% Comment – 1915742) The Legend for Line styles and symbols should be located on sheet G01A & G101 for referencing. Should not be located on every dwg. Should also contain all the different types of line styles / cells and callouts for C/L, R/w, Utilities, ect. Used in the report.				

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Will relocate and expand legend</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 08-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08</p>
<p>Current Comment Status: Comment Closed</p>	

2056259	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

GDC7 - (65% Comment – 1915744) On all plan View dwg's there are a number of B/L P.I. Markers and Azimuths missing.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> B/L data will be checked and added to.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 08-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08</p>
<p>Current Comment Status: Comment Closed</p>	

2056260	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

GDC8 – (65% Comment – 1915746) Inconsistent text sizes. (ex: If text style "proportional normal" is being used to identify a utility, then that style should be used to identify all utilities).

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Text sizes and consistency will be checked and adjusted accordingly.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-Aug-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 02-Sep-08</p>
<p>Current Comment Status: Comment Closed</p>	

2056263	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

GDC9 - (65% Comment – 1915747) Inconsistent cell sizes. (ex: Arrow Heads used for callouts, dimensions and slopes should be the same size and filled throughout set).

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Cell sizes will be checked and modified.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-Aug-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b></p>

Closed without comment.				
Submitted By: William Landry (504-862-1825) Submitted On: 02-Sep-08				
Current Comment Status: Comment Closed				
2056264	Civil	n/a'	n/a	n/a
GDC10 – Inconsistent border sheets being used. Most sheets have the Aims Group Info. Added to the sheets and the Corps Castle somehow is unfilled and other border sheets do not have the Aims Group info and the Corps Castle is filled. Please fix.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> One border sheet will be used throughout.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056265	Civil	n/a'	n/a	n/a
GDC11 - (65% Comment – 1915762) On the different Alternative sheets the New Levee / T-Wall C/L should be visible in Plan View with P.I. Markers and their assigned Point number. Currently there is no P.I Marker and you have the point number, CL Levee, the baseline station and offset. That info. Is contained in the tabulation chart.. Please fix. Too cluttered.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Suggested clarifications and adjustments will be made.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 08-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08			
Current Comment Status: Comment Closed				
2056267	Civil	n/a'	n/a	n/a
GDC12 - (65% Comment – 1915762) Features within the project area should be labeled such as: Pump stations, Street Names (especially ones used for access or fall within effected areas).				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Identification labels will be ammended.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				

2056268	Civil	n/a'	n/a	n/a
GDC13 – (65% Comment – 1915776) T-wall should not have "Net Grade" Elevations in Profile.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> "Net Grade" will be removed.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056270	Civil	n/a'	n/a	n/a
GDC14 - (65% Comment – 1915843) Profiles not detailed properly, utilities, ramps, transitions. Also, pipelines should be shown as a section cut in profile not a line as shown in plan. All of the pipelines are also located below existing grade except for the 18" discharge.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Check and Resolve</b> Please be more specific and/or provide sample of your preferred drawing details or Corps standards. The elevation of the underground piping, telephone cables, et. are not always known. Please explain what is meant as a section line in the profile.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 12-Sep-08			
1-1	<b>Backcheck Recommendation Open Comment</b> in the profile pipe lines (drainage, fuel, comm., ect) should be shown as a ellipse like the one you have shown in the profile on dwg C-106-A1. you currently have other pipe lines shown as a straight line in like in plan view. All of the pipelines are buried except for the 18" drainage line at sta. 524+00. Buried pipelines should be located under the existing ground line, you currently have them located on top. Please let me know if more clarification is needed.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 15-Sep-08			
2-0	<b>Evaluation Concurred</b> Will adjust utility symbols accordingly.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 19-Sep-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 24-Sep-08			
Current Comment Status: Comment Closed				
2056272	Civil	n/a'	n/a	n/a
GDC15 - (65% Comment – 1915766) Utilities & Ramps have been assigned Item No.'s in the tabulation charts, this should also be visible in plan.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Utility numbers will be turned on in plan views for plan/profile sheets.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-Aug-08			

	1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 02-Sep-08
Current Comment Status: Comment Closed		
2056274	Civil	n/a' n/a n/a
GDC16 – Profile for T-Wall alternative. The Flood Side Embankment Grade line should be located at Elev. 9.5, You currently shown at elev. 10.5.  Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08		
	1-0	Evaluation <b>Concurred</b> Noted elevation will be changed.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 08-Sep-08
	1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 09-Sep-08
Current Comment Status: Comment Closed		
2056276	Civil	n/a' n/a n/a
GDC17 – Plan View for T-Wall alternative. There should be NO "Slope Varies", A specific section was designed for different reaches. Were "Varied Slopes" used in calculating your quantities??  Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08		
	1-0	Evaluation <b>Concurred</b> Slope varies shall be removed.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 08-Sep-08
	1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 09-Sep-08
Current Comment Status: Comment Closed		
2056280	Civil	n/a' n/a n/a
GDC18 - Plan & Profile T-Wall Alternative, Wall A has the Scour Protection on a berm at El. 4.0 & Wall B has the Scour Protection at El. 0.0. The Typical Sections on Dwg. C-310-A1 are reversed.. Which is correct? Make necessary changes.  Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08		
	1-0	Evaluation <b>Concurred</b> Will adjust typical sections, the section labels are reversed.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 22-Aug-08
	1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 25-Aug-08
Current Comment Status: Comment Closed		
2056281	Civil	n/a' n/a n/a

GDC19 - Plan T-Wall Alternative, The 2 sections used have different limits of work on the Protected side. Wall A has a berm, Wall B does not. Wall B not having a berm would make limits or toe much closer to the wall than Wall A. The "toe" in plan view remains constant through the whole alignment as if it had a berm. Is the need for additional Right-Of-Way in areas of Wall B required? Re-evaluate and make any necessary changes to the plans, R/W, cost & report. Revise your plan view to reflect the changes in the Toe.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> A 15' perpetual pile easment will be shown in the section for Wall B. Plans will be reviewed and adjusted.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Open Comment</b> it is only necessary to show the pile easement if it extends past the Existing Right-of-Way. The comment refers to the use of the protected side berm in plan for sections that do not require one.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08</p>
-----	---

2-0	<p><b>Evaluation Concurred</b> On the north end of the project the piling for Wall B extend beyond the R/W ( an easment is shown). The additional R/W near the south end includes the pile encroachment on the existing R/W.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 01-Oct-08</p>
-----	--

2-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Oct-08</p>
-----	--

Current Comment Status: Comment Closed	
--	--

2056282	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

GDC20 - (65% Comment – 1920257) 8" Sewer Line at approx. sta. 421+87. This comment was resolved by having that pipeline Removed from the plans. Pla. Ph. And the corps have no record of it's existence. Please remove it from the plans and tables.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Item will be removed from table.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-Aug-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Open Comment</b> please remove from plan/pro sheets also.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Sep-08</p>
-----	--

2-0	<p><b>Evaluation Concurred</b> The 8" line will be removed from the plan/profile sheets.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 01-Oct-08</p>
-----	--

2-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Oct-08</p>
-----	--

Current Comment Status: Comment Closed	
--	--

2056285	Civil	n/a'	n/a	n/a
---------	-------	------	-----	-----

GDC21 - (65% Comment – 1915853) R/W Dwg.'s, Remove azimuths from "Additional R/W" in plan view. Not required,

Controlled from B/L.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 18-Aug-08				
1-0	Evaluation <b>Concurred</b> Azimuths will be removed.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-Aug-08			
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056289	Civil	n/a'	n/a	n/a
GDC22 - (65% Comment – 1917819) Pump house for the Jet Fuel Pipeline Is still not Identified in plan or tables.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 18-Aug-08				
1-0	Evaluation <b>Concurred</b> Identifications will be added.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-Aug-08			
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056291	Civil	n/a'	n/a	n/a
GDC23 - Remove hatching for Access roads. Use applicable line styles to outline the road and identify the roads with appropriate callouts.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 18-Aug-08				
1-0	Evaluation <b>Concurred</b> Hatch symbol will be removed, and line style checked.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 29-Aug-08			
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056292	Civil	n/a'	n/a	n/a
GDC24 – (65% Comment – 1915789) T-Wall Alternative. Additional easement for piles is not shown on plan dwgs.				
Submitted By: <u>William Landry (504-862-1825)</u> . Submitted On: 18-Aug-08				
1-0	Evaluation <b>Concurred</b> Pile easment is shown of the ROW drawings, and will be added to the plan/provile sheets.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 09-Sep-08			

	1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 09-Sep-08
Current Comment Status: Comment Closed		
2056294	Civil	n/a' n/a n/a
GDC25 – Plan dwgs for all alternatives have a callout stating "New T-Wall" & "New Levee". Please edit to read "New T-Wall C/L" & "New Levee C/L".  Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08		
	1-0	Evaluation <b>Concurred</b> C/L addition will be made.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 29-Aug-08
	1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 02-Sep-08
Current Comment Status: Comment Closed		
2056296	Civil	n/a' n/a n/a
GDC26 – Unreinforced Levee Alternative has berm extending into canal for second lift. Section not displayed in plans as it is show in geotechnical report. Easement into the canal has to be established. Do Quantities account for the portion of the berm that extends below water line? Needs to be established in Plan and R/W. (Portions of Comment also submitted under Geotech. Can not construct.)  Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08  Revised 18-Aug-08.		
	1-0	Evaluation <b>Concurred</b> The section and quantities will be adjusted to that shown in the geotech report, with the berm terminating above water at Elev. 4.4 ,inside the existing armor on the flod side of the levee. It is assumed that any "easment", if required, is currently owned by the government.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 09-Sep-08
	1-1	Backcheck Recommendation <b>Open Comment</b> Easement is only required if levee extends past waters edge. If additional setback or corrections to the sections are used to keep levee inside the existing armor PLEASE NOTE: The levee can't terminate at the top of the foreshore protection. It is a rock dike.. no constructibility. I suggest you to increase the P/S levee offset to at least move the toe to the edge of the rock. An Easement is only necessary if the levee section extends past the water's edge. Althought all is federal the channel also has it's own R/W.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 16-Sep-08
	2-0	Evaluation <b>Concurred</b> The levee second lift and additional R/W line will be moved 60' toward the protected side to accomodate clearances for the rock dike.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 01-Oct-08
	2-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 02-Oct-08
Current Comment Status: Comment Closed		

2056317	Civil	n/a'	n/a	n/a
GDC27 – (R/W Dwgs) (65% Comment - ) Township Ranges need to be added to all plan views. The Section numbers and Lines have been placed but still missing: T ? S, R ? E. Info is located in file supplied to you.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> T and R labels will be added.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056319	Civil	n/a'	n/a	n/a
GDC28 – (R/W Dwgs) Plan view needs to be moved to top of page. (Typ.). Some views are missing the plan window.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Will move and add window.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 29-Aug-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Sep-08			
Current Comment Status: Comment Closed				
2056320	Civil	n/a'	(G101A)	n/a
DC1 – (G101A) 1. as stated previously Legend should be located on this sheet. 2. Right-Of-Way sheet info should not be located in the index, separate set of dwgs. 3. Table line work is on level for text. 4. wrong text styles.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Recommended adjustments will be made to the drawings.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08			
Current Comment Status: Comment Closed				
2056322	Civil	n/a'	(C101A1)	n/a
DC2 – (C101A1) 1. Double lines present. 2. Missing coordinate Grids. 3. Text rotated wrong. 4. Show station limits of transition in profile.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b>			

		Drawings will be adjusted accordingly.		
		Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 09-Sep-08		
1-1		Backcheck Recommendation <b>Close Comment</b> Closed without comment.		
		Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 09-Sep-08		
		Current Comment Status: <b>Comment Closed</b>		
2056325	Civil	n/a'	(C102A1)	n/a
DC3 – (C102A1) 1. Elements overlapping match lines in plan. 2. Double elements visible. 3. Floating line to the right and below the word Flood Side in plan View. 4. Match line text needs to be spaced away from line. 5. Text identifying Existing R/W need to be spaced out more. It's shown twice too close to each other.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
1-0		Evaluation <b>Concurred</b> Drawings will be adjusted accordingly.		
		Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 09-Sep-08		
1-1		Backcheck Recommendation <b>Close Comment</b> Closed without comment.		
		Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 09-Sep-08		
		Current Comment Status: <b>Comment Closed</b>		
2056327	Civil	n/a'	(C103A1)	n/a
DC4 – (C103A1) 1. Show transition into gate. 2. Flood side Embankment running through gate. 3. Top of gate is at El. 10?? 4. El. 6.0 on Gate does not match El. 6.0 on Profile Scale. 5. Missing Grids. 6. Double elements. 7. Inconsistent Text sizes. 8. R/W line on top of text.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
1-0		Evaluation <b>Concurred</b> 1. Some detail will be added at this small scale, and a note referencing the gate detail will be added. 2. thru 10.- drafting and elevation details will be adjusted.		
		Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 12-Sep-08		
1-1		Backcheck Recommendation <b>Close Comment</b> Closed without comment.		
		Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 15-Sep-08		
		Current Comment Status: <b>Comment Closed</b>		
2056328	Civil	n/a'	(C104A1)	n/a
DC5 – (C104A1) 1.Text rotated wrong. 2. Reference Trim window visible. Please remove or place on a "no-plot" level.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
1-0		Evaluation <b>Concurred</b> Drawing will be adjusted as recommended.		
		Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 09-Sep-08		
1-1		Backcheck Recommendation <b>Close Comment</b> Closed without comment.		

Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 09-Sep-08				
Current Comment Status: Comment Closed				
2056330	Civil	n/a'	(C105A1)	n/a
DC6 – (C105A1) 1. Label Wall A in profile on left side of Pump Station. 2. Lines running thru text in profile. 3. Show transitions where applicable. 4. Embankment running thru gate. 5. Show station limits on transition from wall A to B. 6. Pump Stations not Labeled. 7. Double text for Access Road. 8. Medal Of Honor park / Barriere lagoon not Identified. 9. Access road along Barriere Lagoon not identified. 10. Section Number located at top of plan view. Remove. 11. text overlapping text. 12. rotated text wrong. 13. grid lines overlapping plan window.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Drawings will be reviewed and adjusted.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 09-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 09-Sep-08			
Current Comment Status: Comment Closed				
2056332	Civil	n/a'	(C106A1)	n/a
DC7 – (C106A1) 1. Line work running thru text in plan view and profile.				
Submitted By: <a href="#">William Landry (504-862-1825)</a> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Line work will be adjusted.  Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 09-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 09-Sep-08			
Current Comment Status: Comment Closed				
2056337	Civil	n/a'	(C310A1)	n/a
DC8 – (C310A1) – (65% Comment – 1915789) 1. In Typical Section hatching can be used to represent areas that are to be excavated and backfilled. With compacted fill and another hatch to represent areas that require additional compacted fill, the concrete pattern can also be used for T-Wall and Scour protection. 2. All Elevations and Slopes should be labeled. There are places on the scour protection and berm that require elevations and slopes. "varies" can not be used in these areas. A specific slope was used for the stability analysis when the section was designed. 3. Add note to reference details on other dwgs. (both A&B) 4. Note and detail features on existing ground linesuch as the "waters edge" and foreshore dike protection. 5. Add note that foreshore dike is not to be disturbed. 6. Show if additional R/W is required on section & pln/pro dwgs. because of a sub-surface easement from the piles. 7. Wall A section is showing no berm and has a requirement of Additional R/W. There is substantial distance between the scour protection and the Existing R/W line. Check to see if you have the Additional R/W line on the correct section. 8. Label areas of: compacted fill, degrade and back fill, excavated (not replaced). 9. lines running thru text. 10. If slope to drain is used on flood side embankment. Can EL. 8.5 be removed from details? 11. What is tip El. For temporary Sheetpile.? Why is it not needed for the other detail? 12. Make note of the No Work Area. 13. Suggestion.. move notes and dimensions up or around to create space so everything can fit. There is open space on the dwg. You have everything so tight it is difficult to show all that needs to be shown. 14. No dimensions given for scour protection. There are 2 different ways it is shown. Need Dimensions and slopes where applicable. No dimensions are given on the scour protection detail to go by. 15. Tip Elevation not given for sheetpile.				

Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> 1. Hatching and patterns will be used. 2. Elevations and slopes will be noted. 3. Refernce notes will be added. 4.and 5. Foreshore protection will be noted. 6. Easment will be noted. 7.Will check R/W requirements. 8.and 9. Drafting will be modified. 10. El. 8.5 will be eliminated. 11. The temporay sheet pile flood protection (By Contractor) was shown in this report for estimating purposes only, and the method and/or location used should be a matter for final plans, if this alternate is selected. 12. No Work are at drainage pumping station will be noted. 13. Suggested open spacing will be checked. 14. Dimensions will be noted. 15. Tip elevation will be noted.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 12-Sep-08			
1-1	<b>Backcheck Recommendation Open Comment</b> 11. If temp. sheet pile is used by the contractor for flood fighting methods during construction it should be addressed in final plans. No need to show in the design section. it will be an item addressed in specs.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 15-Sep-08			
2-0	<b>Evaluation Concurred</b> The sheet pile will not be shown on these plans.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 01-Oct-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Oct-08			
Current Comment Status: Comment Closed				
2056344	Civil	n/a'	(G102A, G103A & G104A)	n/a
DC9 – (G102A, G103A & G104A) 1. Utilities Chart: a) Remove Sewer Line at Sta. 421+87. b) Item No.'s not shown on plan & pro dwgs. c) Utilities need to be put in order by station. Show flow from start to finish. d) Charts need to be checked for consistency, one has things accounted for others do not ( ex. fuel pump house at jet fuel line). e) Owner of Jet Fuel Pump house is Navy, not Pla. Ph. 2. C/L Tabulation Chart: Item No.'s should be shown in plan only. 3. Additional R/W Chart: a) Item No.'s should have a different prefix from the C/L. b.) Not shown in Plan. 4. Pile Easement: a) Not shown in plan. b) Acres not shown in table. 5. Will need table for Flood Side Construction Easement for Unreinforced Levee Alternative.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08  Revised 18-Aug-08.				
1-0	<b>Evaluation Check and Resolve</b> Concur 1.-6. will adjust accordingly. 7. By plotting the latest geotech data for the unreinforced levee, the berm will terminate at the existing foreshore dike protection at elevation 4.4. We were not made aware of the limits of your right-of-way on the flood side, and to date thought that it was all federal ROW on the flood side of the levee? Please clarify easment restrictions on the flood side of the levee.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 12-Sep-08			
1-1	<b>Backcheck Recommendation Open Comment</b> THIS IS ONLY 1-5. CHECK YOUR RESPONCE... PLEASE NOTE: The levee can't terminate at the top of the foreshore protection. It is a rock dike.. no constructibility. I suggest you to increase the P/S levee offset to at least move the toe to the edge of the rock. An Easement is only necessary if the levee section extends past the water's edge. Although all is federal the channel also has it's own R/W.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 24-Sep-08			
2-0	<b>Evaluation Concurred</b> The location of the landside toe of the rock is not apparent in all cross sections. The berm toe			

		will be adjusted based on the information at hand, and the R/W adjusted as may be required.		
		Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 19-Sep-08		
2-1	Backcheck Recommendation <b>Open Comment</b>	the toe of the rock is coded as "EOR" (Edge Of Rock) It is identified on all of the sections except for an area about 1000' north of the Pump Station. I suggest using the aerial photo and/or making a field verification.		
		Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 24-Sep-08		
3-0	Evaluation <b>Concurred</b>	The second lift for the levee section and additional R/W line will be shifted 60' toward the protected side to accomodate this requirement.		
		Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 01-Oct-08		
3-1	Backcheck Recommendation <b>Close Comment</b>	Closed without comment.		
		Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 02-Oct-08		
		Current Comment Status: <b>Comment Closed</b>		
2056352	Civil	n/a'	(C101A2)	n/a
DC10 – (C101A2) 1. B/L PI text missing leader lines. Be Consistent.. The only time change should occur is when conditions do not allow. 2. Text is rotated incorrectly. 3. Double Azimuth text. 4. Double elements. 5. Utility not identified. 6. Grid lines overlapping plan window. 7. No transition show in profile at beginning of job. Can't start with a 4' vertical face. 8. Replace Note 1 with a statement to see the Typical Section on sheet C310A2. 9. inconsistent cell sizes (slope arrows). 10. Limit of Con. & Match sta. text should be centered and have the same orientation.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	Evaluation <b>Concurred</b>	Additions and modifications will be checked and revised as required.		
		Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 15-Sep-08		
1-1	Backcheck Recommendation <b>Close Comment</b>	Closed without comment.		
		Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 15-Sep-08		
		Current Comment Status: <b>Comment Closed</b>		
2056358	Civil	n/a'	(C102A2)	n/a
DC11 – (C102A2) 1. Text is rotated incorrectly. 2. Match line at sta. 337+00: is short or move down and extend Additional R/W line to intersect. Other line work is overlapping. Center text. 3. Match line at sta. 387+00: extend line work to intersect & center text. 4. inconsistent cell sizes(slope arrows). 5. B/L PI text missing leader lines. 6. Replace Note 1 with a statement to see the Typical Section on sheet C310A2.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	Evaluation <b>Concurred</b>	Drawing adjustments will be made.		
		Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08		
1-1	Backcheck Recommendation <b>Close Comment</b>	Closed without comment.		
		Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08		
		Current Comment Status: <b>Comment Closed</b>		
2056360	Civil	n/a'	(C103A2)	n/a

DC12 – (C103A2) 1. Remove 8" sewer line at 421+87 2. Utilities Identified incorrectly and not Identified. 3. inconsistent text sizes. 4. inconsistent cell sizes(slope arrows). 5. Jet Fuel Pipeline identified 2 times in plan. 6. leader line and arrow floating in plan view. 7. Text is rotated incorrectly. 8. Algiers Canal not Identified. 9. Slope arrow head placed on B/L to the right of sta. 390+00. 10. line running thru levee to the right of sta. 420+00?, Remove. 11. Extend line work to intersect with match line. 12. Replace Note 1 with a statement to see the Typical Section on sheet C310A2. 13. B/L PI text missing leader lines.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Drawing adjustments will be made.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08</p>
-----	---

Current Comment Status: Comment Closed	
--	--

2056363	Civil	n/a'	(C104A2)	n/a
---------	-------	------	----------	-----

DC13 – (C104A2) 1. Remove text "Top of Levee". Be consistent. 2. Replace Note 1 with a statement to see the Typical Section on sheet C310A2. 3. B/L PI text missing leader lines. 4. Text is rotated incorrectly. 5. Line displayed in plan, has no value, looks like copy of B/L? Located at approx. sta. 475+00. Remove. 6. Grid lines overlapping plan window. 7. Photo not clipped to plan window. 8. Lines running thru levee to the left of stas. 450+00 & 472+27. Remove.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Drafting modications as suggested will be done.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08</p>
-----	---

Current Comment Status: Comment Closed	
--	--

2056364	Civil	n/a'	(C105A2)	n/a
---------	-------	------	----------	-----

DC14 – (C105A2) 1. Lines running thru text in profile and plan. 2. Text on top of text in plan. 3. Text is rotated incorrectly. 4. Replace Note 1 with a statement to see the Typical Section on sheet C310A2. 5. Additional should run continuous, do not cut back to P.S. 6. Show Transition of embankment line into t-wall. 7. Show t-wall in plan & profile. 8. Label Existing R/W. 9. Label Additional & Existing R/W on the left Side of P.S. 10. Inconsistent text sizes. 11. Inconsistent Cell Sizes. 12. Utilities, Pump Stas, and area features not labeled. 13. Access Road along Barriere Lagoon not used. 14. Lines running thru levee to the left of sta. 505+00. Remove.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Suggested mdifications will be incorporated into plan.</p> <p>Submitted By: Jens Nielsen (504 887 7045) Submitted On: 15-Sep-08</p>
-----	--

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: William Landry (504-862-1825) Submitted On: 15-Sep-08</p>
-----	---

Current Comment Status: Comment Closed	
--	--

2056366	Civil	n/a'	(C106A2)	n/a
<p>DC15 – (C106A2) 1. Replace Note 1 with a statement to see the Typical Section on sheet C310A2. 2. Text is rotated incorrectly. 3. Show Transition of embankment line into t-wall. 4. Show t-wall in plan &amp; profile. 5. Label Additional R/W. 6. Inconsistent text sizes. 7. Inconsistent Cell Sizes and some have no fill. 8. Lines running thru levee to the left of sta. 525+00. Remove. 9. Label affected streets &amp; Hwy. 23. 10. Grids overlapping plan window. 11. Line running thru text in profile.</p>				
<p>Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b> Suggeste drafting adjustments will be made.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08</p>			
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08</p>			
<p>Current Comment Status: Comment Closed</p>				
2056371	Civil	n/a'	(C310A2)	n/a
<p>DC16 – (C310A2) 1. In Typical Section hatching can be used to represent areas that are to be degraded if needed and another hatch to represent areas that require compacted fill. 2. Rearrange text "Exist. Levee C/L" over to top of line. 3. Place New Levee C/L text at top of line. 4. A 15' Dim. should be shown from toe of berm to the Additional R/W. 5. Typical section should have been shown on section that had survey info that extended to the center of the canal. Currently the section shows a straight line from the toe of the foreshore protection. The berm is extending out into the canal. 6. The 2nd lift levee is not dimensioned. 7. Plan View does not show easement on Flood Side. 8. Foreshore Protection and Water's Edge not shown. 9. Limits of Clearing &amp; Grubbing, Seeding &amp; Fertilizing should also include 2nd lift. 10. Label area of degrading. 11. Why is temporary sheet pile used? 12. If sheet pile is used, what is tip el? The placement needs to be adjusted. You have el. 3 even with top of existing levee. 13. Dim's that apply should be shown thru the entire section. 14. Leader lines overlapping on text.</p>				
<p>Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08</p>				
1-0	<p><b>Evaluation Check and Resolve</b> Concur with comments, with the following additions: 6. Lift dimentsions will be removed, scale, elevations, and slopes will be shown. 7. By plotting the latest geotech data for the unreinforced levee, the berm will terminate at the existing foreshore dike protection at elevation 4.4. We were not made aware of the limits of your right-of-way on the flood side, and to date thought that it was all federal ROW on the flood side of the levee? Please clarify easment restrictions on the flood side of the levee. 11. Temporary sheet pile protection will be removed for this alternate.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 16-Sep-08</p>			
1-1	<p><b>Backcheck Recommendation Open Comment</b> PLEASE NOTE: The levee can't terminate at the top of the foreshore protection. It is a rock dike.. no constructibility. I suggest you to increase the P/S levee offset to at least move the toe to the edge of the rock. An Easement is only necessary if the levee section extends past the water's edge. Although all is federal the navigation channel also has it's own R/W. Please contact me if furthur clarification is needed.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 16-Sep-08</p>			
2-0	<p><b>Evaluation Concurred</b> The location of the landside rock toe is not clearly defined in sections. Base on available information, the toe of the berm will be terminated landsid of the rock, and R/W adjusted accordingly.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 19-Sep-08</p>			
2-1	<p><b>Backcheck Recommendation Open Comment</b> the toe of the rock is coded as "EOR" (Edge Of Rock) It is identified on all of the sections</p>			

		except for an area about 1000' north of the Pump Station. I suggest using the aerial photo and/or making a field verification if the location is in question.		
		Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 24-Sep-08		
3-0	<b>Evaluation Concurred</b>	The second levee lift and related protected side additional R/W line will be moved 60' toward the protected side to have the berm clear the protected side of the rock dike.		
		Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 02-Oct-08		
3-1	<b>Backcheck Recommendation Close Comment</b>	Closed without comment.		
		Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 03-Oct-08		
Current Comment Status: Comment Closed				
2056374	Civil	n/a'	(C101A3)	n/a
DC17 – (C101A3) 1. Missing Limit Of Construction and Match Line Station Text. 2. inconsistent cell and text size. 3. line running thru text. 4. Move road name onto road. 5. remove section number from plan view. 6. No transition shown from existing grade to project grade. 7. Text "200" is floating in profile window to the right of station 305+00. Remove. 8. Mystery line running along the Flood Side of the alignment, very visible at sta. 310+00 9. Replace Note 1 with a statement to see the Typical Section on sheet C310A3.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b>	Suggested drafting adjustments will be done.		
		Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08		
1-1	<b>Backcheck Recommendation Close Comment</b>	Closed without comment.		
		Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08		
Current Comment Status: Comment Closed				
2056379	Civil	n/a'	(C102A3)	n/a
DC18 – (C102A3) 1. Inconsistent cell and text size. 2. Text is rotated incorrectly. 3. Line running on text. 4. Replace Note 1 with a statement to see the Typical Section on sheet C310A3.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b>	Drafting adjustments will be made.		
		Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08		
1-1	<b>Backcheck Recommendation Close Comment</b>	Closed without comment.		
		Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08		
Current Comment Status: Comment Closed				
2056382	Civil	n/a'	(C103A3)	n/a
DC19 – (C103A3) 1. Inconsistent cell and text size. 2. Text is rotated incorrectly. 3. Line running on text. 4. Replace Note 1 with a statement to see the Typical Section on sheet C310A3. 5. JRB Fuel Dock called out twice. 1 is floating on other side of canal. 6. Mystery line running along the Flood Side of the alignment, visible at Jet fuel pipeline. 7. Line running thru levee section to the right of station 420+00. 8. Remove 8" Sewer line.				

Submitted By: [William Landry \(504-862-1825\)](#). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Suggested drawing adjustments will be made.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 09-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 09-Sep-08</p>
Current Comment Status: Comment Closed	

2056386	Civil	n/a'	(C104A3)	n/a
---------	-------	------	----------	-----

DC20 – (C104A3) 1. Inconsistent cell and text size. 2. Text is rotated incorrectly. 3. Replace Note 1 with a statement to see the Typical Section on sheet C310A3. 4. Multiple mystery lines running along the Flood Side of the alignment. 5. Utilities identified and not identified properly in plan/pro.

Submitted By: [William Landry \(504-862-1825\)](#). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Drawing adjustments will be made.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 09-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 09-Sep-08</p>
Current Comment Status: Comment Closed	

2056387	Civil	n/a'	(C105A3)	n/a
---------	-------	------	----------	-----

DC21 – (C105A3) 1. Inconsistent cell and text size. 2. Text is rotated incorrectly. 3. Replace Note 1 with a statement to see the Typical Section on sheet C310A3. 4. Multiple mystery lines running along the Flood Side of the alignment. 5. Areas where there are callouts of "Begin/End Levee or T-wall" are not correct. Check and correct. 6. Edit 18" drain line in profile to read "Discharge" like in plan. 7. Lines running thru text in plan & Profile. 8. T-walls not detailed. 9. Transitions not shown. 10. access roads not labeled. 11. Features not labeled.

Submitted By: [William Landry \(504-862-1825\)](#). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> suggested drafting adjustments and checks will be made.</p> <p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 18-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 19-Sep-08</p>
1-2	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <a href="#">William Landry (504-862-1825)</a> Submitted On: 19-Sep-08</p>
Current Comment Status: Comment Closed	

2056388	Civil	n/a'	(C106A3)	n/a
---------	-------	------	----------	-----

DC22 – (C106A3) 1. Inconsistent cell and text size. 2. Text is rotated incorrectly. 3. Replace Note 1 with a statement to see the Typical Section on sheet C310A3. 4. Lines running thru levee section to the left of station 540+00. 5. Mystery line running along the Flood Side of the alignment. 6. Text on top of text. 7. Text for 8" Sewer Line in plan is incomplete. 8. Grids overlapping plan window. 9. line work overlapping match station. 10. PI marker floating to right of limits of work.

Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Drawings will be modified accordingly,  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08			
Current Comment Status: Comment Closed				
2056390	Civil	n/a'	(C310A3)	n/a
DC23 – (C310A3) 1. In Typical Section hatching can be used to represent areas that are to be degraded if needed and another hatch to represent areas that require compacted fill. 2. Rearrange text "Exist. Levee C/L" over to top of line. 3. Place New Levee C/L text at top of line. 4. A 15' Dim. should be shown from toe of berm to the Additional R/W. 5. The 2nd lift levee is not dimensioned, Labeled. 7. Foreshore Protection and Water's Edge not shown. 9. Limits of Clearing & Grubbing, Seeding & Fertilizing should also include 2nd lift. 10. Label area of degrading. 11. Why is temporary sheet pile used? 12. If sheet pile is used, what is tip el? The placement needs to be adjusted. You have el. 3 even with top of existing levee. 13. Dim's that apply should be shown thru the entire section. 14. Leader lines overlapping on text. 15. Limits for T-wall should match what in shown in plan and profile.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Drafting asjustments will be checked and modified. Temporary sheet piling protection apparently not needed in this case.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 18-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 19-Sep-08			
Current Comment Status: Comment Closed				
2056392	Civil	n/a'	(C300)	n/a
DC24 – (C300) 1. Ramp Crossing Detail, edit text Slope Varies to read "Slope to Drain", Strength of fabric? 2. Scour Protection detail, Need dimensions and slopes for both types displayed. of scour protection. Either here or in typical section. They need to be shown.				
Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Suggested details will be added to plans.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 12-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 15-Sep-08			
Current Comment Status: Comment Closed				
2056400	Civil	n/a'	(C301 & C302)	n/a
DC25 – (C301 & C302) (65% Comment 1915808) 1. Ramps are still not shown in relation to what is going to be built, no berms. 2. Should be a ramp detail for each alternative and labeled which alternative. Currently only have 2 for each site.				

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  Berms and details will be added, and one plan presented for each alternate.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 12-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 15-Sep-08</p>
<p>Current Comment Status: Comment Closed</p>	

2056406	Civil	n/a'	(C303)	n/a
---------	-------	------	--------	-----

DC26 – (C303) 1. Lines over text. 2. Section Cells.. Be consistent, make sure these cells are the same.. about 4 different styles shown in set.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  Suggested drafting modifications will be made.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08</p>
<p>Current Comment Status: Comment Closed</p>	

2056407	Civil	n/a'	(C304)	n/a
---------	-------	------	--------	-----

DC27 – (C304) 1. Note 3. Erosion Plan detail is not shown. Please edit note to give missing information.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  Note 3. will be removed as details are shown on this plan.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 12-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p> <p>Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 15-Sep-08</p>
<p>Current Comment Status: Comment Closed</p>	

2056408	Civil	n/a'	(S101)	n/a
---------	-------	------	--------	-----

DC27 – (S101) 1. C/L for T-wall not shown. 2. Label sheet pile in plan section. 3. Section view, missing leader for 4" stab. Slab. 4. Section Cells.. Be consistent.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b>                  Drafting adjustments will be done in accordance with comments.</p> <p>Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08</p>
1-1	<p><b>Backcheck Recommendation Close Comment</b></p>

Closed without comment.				
Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08				
Current Comment Status: Comment Closed				
2056411	Civil	n/a'	(S102)	n/a
DC27 – (S102) 1. C/L for T-wall not shown. 2. Label sheet pile in plan section. 3. Missing dim. from wall to end of slab on F/S. 4. Section Cells.. Be consistent. 5. Need Slope and El. For scour Prot. Can Not have Varies.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	Evaluation Concurred Drafting details will be modified accordingly.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 12-Sep-08				
1-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: William Landry (504-862-1825) Submitted On: 15-Sep-08				
Current Comment Status: Comment Closed				
2056413	Civil	n/a'	(S103)	n/a
DC28 – (S103) 1. Missing text for leader in middle of plan detail. 2. Line running thru text. 3. Inconsistencies in text and cell sizes.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	Evaluation Concurred Suggested drafting modifications will be made.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08				
1-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08				
Current Comment Status: Comment Closed				
2056414	Civil	n/a'	(S104)	n/a
DC29 – (S104) 1. Missing Labels and elevations.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	Evaluation Concurred Labels and elevations will be added.			
Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08				
1-1	Backcheck Recommendation Close Comment Closed without comment.			
Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08				
Current Comment Status: Comment Closed				
2056415	Civil	n/a'	(S105)	n/a
DC30 – (S105) 1. Lines running thru text. 2. Lines with Gaps (portion missing?).				

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	Evaluation <b>Concurred</b> Drafting adjustments will be made.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08
Current Comment Status: Comment Closed	

2056416	Civil	n/a'	(S106)	n/a
---------	-------	------	--------	-----

DC31 – (S106) 1. Missing C/L. 2. Section Cells.. Be consistent.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	Evaluation <b>Concurred</b> Drafting adjustments will be made.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08
2-0	Evaluation <b>Concurred</b> Drafting adjustments will be made.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08
<i>Backcheck not conducted</i>	
Current Comment Status: Comment Closed	

2056417	Civil	n/a'	(S107)	n/a
---------	-------	------	--------	-----

DC32 – (S107) 1. Text, Standards. 2. Center "C" in cell.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	Evaluation <b>Concurred</b> Text will be adjusted.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08
1-1	Backcheck Recommendation <b>Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08
Current Comment Status: Comment Closed	

2056423	Civil	n/a'	(G102, G103 & G104)	n/a
---------	-------	------	---------------------	-----

DC33 – (G102, G103 & G104) 1. Utilities Chart: a) Remove Sewer Line at Sta. 421+87. b) Item No.'s not shown on plan & pro dwgs. c) Utilities need to be put in order by station. Show flow from start to finish. d) Charts need to be checked for consistency, one has things accounted for others do not ( fuel pump house at jet fuel line). e) Owner of Jet Fuel Pump house in Navy, not plaq. Ph. 2. C/L Tabulation Chart: Item No.'s should be shown in plan only. 3. Additional R/W Chart: a) Item No.'s should have a different prefix from the C/L. b.) Not shown in Plan. 4. Pile Easement: a) Not shown in plan. b) Acres not shown in table. 5. Will need table for Flood Side construction easement for Unreinforced Levee Alternative.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

**1-0** **Evaluation Check and Resolve**  
 Concur 1.-4. will adjust accordingly. 5. By plotting the latest geotech data for the unreinforced levee, the berm will terminate at the existing foreshore dike protection at elevation 4.4. We were not made aware of the limits of your right-of-way on the flood side, and to date thought that it was all federal ROW on the flood side of the levee? Please clarify easment restrictions on the flood side of the levee. Also, Item 2. please clarify what is to be shown on the R/W plans: Do you want centerlines shown on these plans?  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 15-Sep-08

**1-1** **Backcheck Recommendation Open Comment**  
 Item 5. PLEASE NOTE: The levee can't terminate at the top of the foreshore protection. It is a rock dike.. no constructibility. I suggest you to increase the P/S levee offset to at least move the toe to the edge of the rock. An Easement is only necessary if the levee section extends past the water's edge. Although all is federal the channel also has it's own R/W. Item 2. Yes. I want you to show the center line with Pl's with Just the Item # pointing to the C/L Pl.. All of the other info (the C/L Levee Descriptor for Item#, B/L reference and offset) is located in the table. Please contact me if furthur clarification is needed.  
 Submitted By: William Landry (504-862-1825) Submitted On: 16-Sep-08

**2-0** **Evaluation Concurred**  
 5. Based on available information the toe of the berm will be adjusted accordingly. 2. The centerline and related anotations will be shown on the plan profile sheets.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 19-Sep-08

**2-1** **Backcheck Recommendation Close Comment**  
 Closed without comment.  
 Submitted By: William Landry (504-862-1825) Submitted On: 24-Sep-08

Current Comment Status: **Comment Closed**

2056435	Civil	n/a'	(C101A1R/W)	n/a
---------	-------	------	-------------	-----

DC34 – (C101A1R/W) 1. Section lines running thru text. 2. Access roads not identified.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

**1-0** **Evaluation Concurred**  
 Drafting adjustments will be made.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08

**1-1** **Backcheck Recommendation Close Comment**  
 Closed without comment.  
 Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08

Current Comment Status: **Comment Closed**

2056436	Civil	n/a'	(C102A1R/W)	n/a
---------	-------	------	-------------	-----

DC35 – (C102A1R/W) 1. Section lines running thru text.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

**1-0** **Evaluation Concurred**  
 Drafting adjustment will be made.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08

<p><b>1-1</b> Backcheck Recommendation <b>Close Comment</b>                  Closed without comment.                  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 09-Sep-08</p>				
<p>Current Comment Status: Comment Closed</p>				
2056440	Civil	n/a'	(C103A1R/W)	n/a
<p>DC36 – (C103A1R/W) 1. Section lines running thru text. 2. Text/cell Rotated incorrectly. 3. Inconsistent cells, not filled. 4. remove 8" sewer line.</p>				
<p>Submitted By: <u>William Landry (504-862-1825)</u>. Submitted On: 18-Aug-08</p>				
<p><b>1-0</b> Evaluation <b>Concurred</b>                  Drawing adjustments will be made.                  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 09-Sep-08</p>				
<p><b>1-1</b> Backcheck Recommendation <b>Close Comment</b>                  Closed without comment.                  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 09-Sep-08</p>				
<p>Current Comment Status: Comment Closed</p>				
2056443	Civil	n/a'	(C104A1R/W)	n/a
<p>DC37 – (C104A1R/W) 1. Section lines running thru text. 2. Text/cell Rotated incorrectly.</p>				
<p>Submitted By: <u>William Landry (504-862-1825)</u>. Submitted On: 18-Aug-08</p>				
<p><b>1-0</b> Evaluation <b>Concurred</b>                  Drafting adjustments will be made.                  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 09-Sep-08</p>				
<p><b>1-1</b> Backcheck Recommendation <b>Close Comment</b>                  Closed without comment.                  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 09-Sep-08</p>				
<p>Current Comment Status: Comment Closed</p>				
2056446	Civil	n/a'	(C104A1R/W)	n/a
<p>DC38 – (C105A1R/W) 1. Section lines running thru text. 2. Text/cell Rotated incorrectly. 3. Inconsistent cells, not filled. 4. Double text. Remove one. 5. Features and access not labeled.</p>				
<p>Submitted By: <u>William Landry (504-862-1825)</u>. Submitted On: 18-Aug-08</p>				
<p><b>1-0</b> Evaluation <b>Concurred</b>                  Drafting adjustments will be made.                  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 09-Sep-08</p>				
<p><b>1-1</b> Backcheck Recommendation <b>Close Comment</b>                  Closed without comment.                  Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 09-Sep-08</p>				
<p>Current Comment Status: Comment Closed</p>				
2056453	Civil	n/a'	(C106A1R/W)	n/a
<p>DC39 – (C106A1R/W) 1. Section lines running thru text. 2. Line work overlapping limits. 3. Inconsistent cells, not filled.</p>				

4. Remove Add. R/W, !5' Easement is shown. 5. Reference clip window or a block? Is shown. Remove. 6. Features and access not labeled.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Drafting adjustments will be made.</p> <p>Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 09-Sep-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 09-Sep-08</p>
-----	--

Current Comment Status: <b>Comment Closed</b>	
---	--

2056456	Civil	n/a'	(C101A2R/W)	n/a
---------	-------	------	-------------	-----

DC40 – (C101A2R/W) 1. Section lines running thru text. 2. Access roads not identified. 3. Lines running outside limits. 4. extend lines to intersect with limits.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Drafting adjustments will be made.</p> <p>Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 09-Sep-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 09-Sep-08</p>
-----	--

Current Comment Status: <b>Comment Closed</b>	
---	--

2056459	Civil	n/a'	(C102A2R/W)	n/a
---------	-------	------	-------------	-----

DC41 – (C102A2R/W) 1. Section lines running thru text. 2. Trim / extend lines to intersect with limits. 3. Identify road. 4. Double elements in plan view. 5. Bar Scale is doubled up on itself.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b> Drafting adjustments will be made.</p> <p>Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 09-Sep-08</p>
-----	---

1-1	<p><b>Backcheck Recommendation Close Comment</b> Closed without comment.</p> <p>Submitted By: <u>William Landry (504-862-1825)</u> Submitted On: 09-Sep-08</p>
-----	--

Current Comment Status: <b>Comment Closed</b>	
---	--

2056461	Civil	n/a'	(C103A2R/W)	n/a
---------	-------	------	-------------	-----

DC42 – (C103A2R/W) 1. Section lines running thru text. 2. Text/cell Rotated incorrectly. 3. Inconsistent cells, not filled. 4. remove 8" sewer line.

Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08

1-0	<p><b>Evaluation Concurred</b></p>
-----	------------------------------------

		Drafting adjustments will be made.		
		Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 09-Sep-08		
	1-1	<b>Backcheck Recommendation Close Comment</b>		
		Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 09-Sep-08		
		Current Comment Status: Comment Closed		
2056463	Civil	n/a'	(C104A2R/W)	n/a
DC43 – (C104A2R/W) 1. Section lines running thru text. 2. Existing R/W not labeled. 3. Additional R/W size is inconsistent.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
	1-0	<b>Evaluation Concurred</b>		
		Drafting changes will be added.		
		Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 12-Sep-08		
	1-1	<b>Backcheck Recommendation Close Comment</b>		
		Closed without comment.		
		Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 15-Sep-08		
		Current Comment Status: Comment Closed		
2056467	Civil	n/a'	(C105A2R/W)	n/a
DC44 – (C105A2R/W) 1. Section lines running thru text. 2. Text/cell Rotated incorrectly. 3. Inconsistent cells, not filled. 4. Remove R/W line Azimuths. 5. New R/W line should extend across canal between points L34 & L35. Should not cut back to the Levee. 6. Additional R/W not labeled. 7. Features and access not labeled. 8. Section No. 24 is repeated.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
	1-0	<b>Evaluation Concurred</b>		
		R/W will be extended across pumping station. Drafting changes will be incorporated.		
		Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 12-Sep-08		
	1-1	<b>Backcheck Recommendation Close Comment</b>		
		Closed without comment.		
		Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 15-Sep-08		
		Current Comment Status: Comment Closed		
2056473	Civil	n/a'	(C106A2R/W)	n/a
DC45 – (C106A2R/W) 1. Text on top of text. 2. Line work overlapping limits. 3. Inconsistent cells, not filled. 4. Remove Azimuth from new R/W. 5. Features and access not labeled.				
Submitted By: <a href="#">William Landry</a> (504-862-1825). Submitted On: 18-Aug-08				
	1-0	<b>Evaluation Concurred</b>		
		Drafting adjustments will be made.		
		Submitted By: <a href="#">Jens Nielsen</a> (504 887 7045) Submitted On: 09-Sep-08		
	1-1	<b>Backcheck Recommendation Close Comment</b>		
		Closed without comment.		
		Submitted By: <a href="#">William Landry</a> (504-862-1825) Submitted On: 09-Sep-08		

Current Comment Status: Comment Closed				
2056477	Civil	n/a'	(C101A3R/W)	n/a
DC46 – (C101A3R/W) 1. Double lines at limits. 2. Access roads not identified. 3. Grids overlapping limits. 4. extend lines to intersect with limits.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Suggested drafting changes will be made.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08			
Current Comment Status: Comment Closed				
2056480	Civil	n/a'	(C102A3R/W)	n/a
DC47 – (C102A3R/W) 1. Section lines running thru text. 2. Trim / extend lines to intersect with limits. 3. Identify road.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Drawing adjustments will be made.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08			
Current Comment Status: Comment Closed				
2056484	Civil	n/a'	(C103A3R/W)	n/a
DC48 – (C103A3R/W) 1. Remove azimuth fro new R/W line 2. Text/cell Rotated incorrectly. 3. Inconsistent cells, not filled. 4. remove 8" sewer line. 5. Trim / extend lines to intersect with limits.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Suggested drafting changes will be incorporated.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 09-Sep-08			
Current Comment Status: Comment Closed				
2056487	Civil	n/a'	(C104A3R/W)	n/a
DC49 – (C104A3R/W) 1. Section lines running thru text. 2. Mystery Line immediately left of match line at sta. 487+00.				
Submitted By: William Landry (504-862-1825). Submitted On: 18-Aug-08				

	<b>1-0</b>	<b>Evaluation Concurred</b> Drafting adjustments will be made.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08
	<b>1-1</b>	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08
Current Comment Status: Comment Closed		
2056489	Civil	n/a' (C105A3R/W) n/a
DC50 – (C105A3R/W) 1. Section lines running thru text. 2. Text/cell Rotated incorrectly. 3. Inconsistent cells, not filled. 4. New R/W line should extend across canal between points R34 & R35. Should not cut back to the Levee. 5. Features and access not labeled.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08		
	<b>1-0</b>	<b>Evaluation Concurred</b> R/W line will be extended across pumping station. Drafting modified as directed.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 12-Sep-08
	<b>1-1</b>	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 15-Sep-08
Current Comment Status: Comment Closed		
2056492	Civil	n/a' (C106A3R/W) n/a
DC51 – (C106A3R/W) 1. Text on top of text. 2. Line work overlapping limits. 3. Inconsistent cells, not filled. 4. Features and access not labeled.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08		
	<b>1-0</b>	<b>Evaluation Concurred</b> Suggested drafting changes will be incorporated.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 09-Sep-08
	<b>1-1</b>	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 09-Sep-08
Current Comment Status: Comment Closed		
2056497	Geotechnical	n/a' n/a n/a
SR1 – (65% Comment - 1915862) Berms are missing elevations, slopes. Unclear as to what the dimension on the berm is for?  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08		
	<b>1-0</b>	<b>Evaluation Concurred</b> Will add elevation at point where berm slope changes to 1V on 3H. All berm slopes are 1V:40H unless otherwise noted.  Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 18-Sep-08
	<b>1-1</b>	<b>Backcheck Recommendation Open Comment</b> If slopes are 1V on 40H unless otherwise noted. That should be noted on each plate or just

	annotate on the slope. Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 19-Sep-08			
2-0	<b>Evaluation Concurred</b> Slopes will be adjusted accordingly. Submitted By: <u>Thomas L'Hoste</u> ((504)887-7045) Submitted On: 03-Oct-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 07-Oct-08			
Current Comment Status: Comment Closed				
2056500	Geotechnical	n/a'	n/a	n/a
SR2 – Drawing plates in the soils Report not printed to scale, should be printed to 11" X 17", The plates are currently on 8.5"X11" and are difficult to read.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> 11 X 17 plates will be submitted. Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 19-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 19-Sep-08			
Current Comment Status: Comment Closed				
2056501	Geotechnical	n/a'	n/a	n/a
SR3 – Unreinforced Levee Alternative has berm extending into canal for second lift approx. 130 ft. with approx 12ft. of thickness in the canal. This Levee can not be built. Need section that does not close the canal. At the extreme limit the F/S toe should stop at the toe of the foreshore protection.  Submitted By: <u>William Landry</u> (504-862-1825). Submitted On: 18-Aug-08  Revised 16-Sep-08.				
1-0	<b>Evaluation Concurred</b> The toe of the berm will be kept landside of the toe of the riprap (which is not well defined in all cross sections), and the R/W adjusted accordingly. Submitted By: <u>Jens Nielsen</u> (504 887 7045) Submitted On: 19-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> there is about 1500' north of the pump station that isn't coded with the rock. The toe is coded as "EOR" for "Edge Of Rock". If area is in question I suggest using the aerial to see or maybe need to make field verification. Submitted By: <u>William Landry</u> (504-862-1825) Submitted On: 19-Sep-08			
Current Comment Status: Comment Closed				
2056865	Geotechnical	n/a'	EAR, Geot App, Write-Up, Pgs 6-8, Sections 1.6.3-1.6.7	n/a
The stations that each reach covers are listed under each reach's heading; however, Stations 554+00 to 555+00 is not covered by any. (According to Pg 22 of 22 of the Geologic profiles, it shows the limit to be Sta 554+00.) If this is a typo please correct either way.				

Submitted By: Leeland Richard (504-862-2397). Submitted On: 18-Aug-08

**1-0** **Evaluation Concurred**  
 Reach 2 covers station 554+00 to the end of project, at around 572+00. Text has been modified.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08

**1-1** **Backcheck Recommendation Close Comment**  
 Closed without comment.  
 Submitted By: Leeland Richard (504-862-2397) Submitted On: 26-Sep-08

Current Comment Status: Comment Closed

2056866	Geotechnical	n/a'	EAR, Geot App, Write-Up, Pg 13, 3rd Par, 2nd&3rd Sent	n/a
---------	--------------	------	---	-----

It states that "For reaches 1, 2, and 3...the first lift was the most critical...For reaches 2 and 4, the second lift controlled the design." There seems to be a duplication stated as to which lift governs for reach 2. Please correct or explain otherwise.

Submitted By: Leeland Richard (504-862-2397). Submitted On: 18-Aug-08

**1-0** **Evaluation Concurred**  
 Response by C.S.I. ; 1st Lift is critical for reaches 1, 3 and 5. Second lift was found to be critical for reaches 2 & 4. Text will be modified. ( The most critical case -second lift was used for design in all cases....J.N.)  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08

**1-1** **Backcheck Recommendation Close Comment**  
 Closed without comment.  
 Submitted By: Leeland Richard (504-862-2397) Submitted On: 26-Sep-08

Current Comment Status: Comment Closed

2056867	Geotechnical	n/a'	EAR, Geot App, Write-Up, Pgs 22 and 24	n/a
---------	--------------	------	--	-----

For Reaches 3 and 5 East for the Lift Schedule, having the 2nd lift at a lower elevation than the 1st lift does not seem correct or even feasible. If the lift was put to the highest elevation allowable, this could reduce the number of lifts.

Submitted By: Leeland Richard (504-862-2397). Submitted On: 18-Aug-08

**1-0** **Evaluation Concurred**  
 Response by CSI: Bringing the 2nd lift any higher will not satisfy safety factor criteria unless a bigger berm or other modifications are introduced, possibly leading to additional real estate requirements. The analysis was performed considering excess pore pressure dissipation and strength gain with time given the consolidation characteristics of each stratum.  
 Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08

**1-1** **Backcheck Recommendation Close Comment**  
 The status of your evaluation (i.e. Concur) doesn't seem to match your evaluation. Furthermore, I disagree with your evaluation, but I will close the comment.  
 Submitted By: Leeland Richard (504-862-2397) Submitted On: 02-Oct-08

Current Comment Status: Comment Closed

2056868	Geotechnical	n/a'	EAR, Geot App, Write-Up, Pg 25, 1st Par, 5th	n/a
---------	--------------	------	--	-----

Sent				
<p>It states that "Deeper subsurface information was obtained from five (5) deeper borings...advanced to depths up to about 120 feet." Recommend including these five borings in App. B, Boring Location Plans for reference.</p>				
<p>Submitted By: <u>Leeland Richard (504-862-2397)</u>. Submitted On: 18-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  Response by CSI: The text will be modified to read "three deep borings", these being ACW-12 CU, ACW-22CU and ACW 32 CU. These three borings will be added on a new sheet and placed at the end of the Appendix B.</p>			
<p>Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 18-Sep-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p>			
<p>Submitted By: <u>Leeland Richard (504-862-2397)</u> Submitted On: 26-Sep-08</p>				
<p>Current Comment Status: <b>Comment Closed</b></p>				
2056869	Geotechnical	n/a'	EAR, Geot App, App. B, Geologic Profiles, Pg 16 of 22	n/a
<p>The limit between Reaches 1 and 2 at Sta. 333+00 is not the same as what is stated on Pg 6 of the Write-Up.</p>				
<p>Submitted By: <u>Leeland Richard (504-862-2397)</u>. Submitted On: 18-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  Response by CSI: Sta 335+00 is correct, will modify applicable profile drawing.</p>			
<p>Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 18-Sep-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p>			
<p>Submitted By: <u>Leeland Richard (504-862-2397)</u> Submitted On: 26-Sep-08</p>				
<p>Current Comment Status: <b>Comment Closed</b></p>				
2056871	Geotechnical	n/a'	EAR, Geot App, App. D, Slope/W Reinforced Analyses	n/a
<p>Even though you do a "Block Specified" non-circular analysis for each case, it appears that the option to optimize the most critical surface has not been selected under Analysis Settings. Optimization needs to occur because it normally gives a more critical failure surface than what can be realized with Block-Specified alone, instead of just including a comparison in App. D.</p>				
<p>Submitted By: <u>Leeland Richard (504-862-2397)</u>. Submitted On: 18-Aug-08</p>				
1-0	<p><b>Evaluation Concurred</b>                  Response by CSI: Noted. We agree that optimized failure surfaces generally yield lower safety factors. This is why comparisons were provided in this and previous submittals to make it evident as to how the results may differ, in general by 10-20%, and how such may be incorporated into a more detailed design, such as a DDR phase level, if the optimized failure surface satisfies the design guidelines criteria.</p>			
<p>Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 18-Sep-08</p>				
1-1	<p><b>Backcheck Recommendation Close Comment</b>                  Closed without comment.</p>			
<p>Submitted By: <u>Leeland Richard (504-862-2397)</u> Submitted On: 26-Sep-08</p>				

Current Comment Status: Comment Closed				
2056872	Geotechnical	n/a'	EAR, Geot App, App. D, Slope/W Reinforced Analyses	n/a
It does not appear that these analyses are searching for or utilizing the Tension Crack option. This needs to occur.				
Submitted By: Leeland Richard (504-862-2397). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Response by CSI: Agree that a tension crack should be evaluated, especially if historic records show that they have formed in the New Orleans levees. However, that is a detailed design effort that we suggest be considered during the DDR for the plans and specifications stage.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Leeland Richard (504-862-2397) Submitted On: 26-Sep-08			
Current Comment Status: Comment Closed				
2056874	Geotechnical	n/a'	EAR, Geot App, App. D, Slope/W Reinforced Analyses	n/a
It is not clear how the Bond Skin Friction = Bond Resistance = 497 lbs/ft was developed and/or if you are counting on both sides of the geotextile or not.				
Submitted By: Leeland Richard (504-862-2397). Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Response by CSI: The bond resistance was based on the provided formula, $\tau = c + \sigma' \tan(\phi)$ . This value is used as the average through out the length of the reinforcement.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08			
1-1	<b>Backcheck Recommendation Open Comment</b> As shown above in your evaluation, the equation did not come through properly. Therefore, please resend. Also, the part of the comment regarding both sides of the geotextile does not appear to be answered.  Submitted By: Leeland Richard (504-862-2397) Submitted On: 02-Oct-08			
2-0	<b>Evaluation Concurred</b> Response by CSI: The equation referred to is the basic soil mechanics equation. In words, this states: shear strength = cohesion plus effective vertical stress times tangent of the internal friction angle. This is the same correlation that has been used in the past on similar projects and that was provided to us with examples to estimate the bond resistance. To further clarify the issue of bond skin on both sides of the geotextile, we contacted GeoSlope. Per communication with them, the program divides the input by 2 and applies the resultant along the top and bottom of the geotextile (half along top and half along bottom of the reinforcement).  Submitted By: Thomas L'Hoste ((504)887-7045) Submitted On: 07-Oct-08			
2-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: Leeland Richard (504-862-2397) Submitted On: 17-Oct-08			
Current Comment Status: Comment Closed				
2056875	Geotechnical	n/a'	EAR, Geot App, App. D, Slope/W Reinforced	n/a

		Analyses	
<p>On Pg 39 of 570 for example, it shows that you are using the Spatial Function. Please be aware that for design using Slope/W, functions that have correct linear variations need to be used.</p>			
<p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a>. Submitted On: 18-Aug-08</p>			
1-0	<p><b>Evaluation Concurred</b>                      Response by CSI: Noted. When using the spatial function in older versions of Geoslope, if enough points are introduced, the function closely matches linear interpolation.</p>	<p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 18-Sep-08</p>	
1-1	<p><b>Backcheck Recommendation Open Comment</b>                      The output shown doesn't match the results shown. These outputs have FOS that don't meet requirements and the spatial functions can't be verified against the results.</p>	<p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 29-Sep-08</p>	
2-0	<p><b>Evaluation Concurred</b>                      CSI Response: If reference is being made to the FOS of 1.41 shown on page 42 of 570, the following describes the process: The analysis yielded a minimum safety factor of 1.41, as shown in the attached result file. The resultant failure surface does not come near meeting the 0.7 H criteria for the neutral block and rendered possibly unrealistic given its steep geometry. The first failure surface to meet the criteria is the second most critical one, for which FOS = 1.51, as shown in the output sketch shown in the figure below. This was the safety factor documented in the text of the report and in the graphic Geoslope output in Appendix D. The Geoslope output text file presents only the lowest FOS estimated by the program (1.41), aside of whether the failure surface is judged to be realistic or not.</p>	<p>Submitted By: <a href="#">Thomas L'Hoste ((504)887-7045)</a> Submitted On: 07-Oct-08</p>	
2-1	<p><b>Backcheck Recommendation Close Comment</b>                      Closed without comment.</p>	<p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 10-Oct-08</p>	
<p>Current Comment Status: Comment Closed</p>			
2056876	Geotechnical	n/a'	EAR, Geot App, App. D, Slope/W Reinforced Analyses
<p>Since geotextile will be placed for these analyses, the new embankment material placed on top the geotextile should be assumed to have the properties of c=400 and unit wt=110 (instead of c=600 and unit wt=115) since we do not know if the material will come from the Bonnet Carre' or not. Assuming the 600/115 values for the existing levee was accepted only because the test data supported it, but that wouldn't be the case if the material is degraded.</p>			
<p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a>. Submitted On: 18-Aug-08</p>			
1-0	<p><b>Evaluation Concurred</b>                      Response by CSI: Noted. Fill material properties were established at the 30% submittal review. Changing it at this point will require re-running all the analyses. Also, the fill material's properties and composition can be controlled during construction and records (CPTs and lab test results of fill samples) indicate that higher strengths are obtained upon compaction.</p>	<p>Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 18-Sep-08</p>	
1-1	<p><b>Backcheck Recommendation Close Comment</b>                      Closed without comment.</p>	<p>Submitted By: <a href="#">Leeland Richard (504-862-2397)</a> Submitted On: 02-Oct-08</p>	
<p>Current Comment Status: Comment Closed</p>			
		EAR, Geot App, App. D, Slope/W Reinforced	

2056877	Geotechnical	n/a'	Analyses, Pg 10 of 570	n/a
It appears that the geotextile length is different from the high water case vs. the SWL case. Clarification is needed.				
Submitted By: <u>Leeland Richard (504-862-2397)</u> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Resposne by CSI: The geotextile for the water at +14 ft was extended to match that for SWL (+11 ft), which was found to be the most critical.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 18-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Leeland Richard (504-862-2397)</u> Submitted On: 26-Sep-08			
Current Comment Status: Comment Closed				
2056879	Geotechnical	n/a'	EAR, Geot App, App. D, Spencer's Method Geo-Studio Reports	n/a
Please note that in many cases, the cohesions stated under the "Cohesion Function" are not the same as those stated in Appendix C Shear and Unit Weight Strengthlines. For example, on Pg 58 of 570, the strengths at the centerline are 442 but in App C they are 440. All reaches' reports should be checked.				
Submitted By: <u>Leeland Richard (504-862-2397)</u> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Response by CSI: For presentation purposes, the cohesion values in the strength lines were rounded to the closest 5 psf. The actual values were utilized in the analysis. Please, be aware that the differences would be minimal (less than 4 psf) and the effects on the stability safety factors insignificant.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 18-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Leeland Richard (504-862-2397)</u> Submitted On: 26-Sep-08			
Current Comment Status: Comment Closed				
2056881	Geotechnical	n/a'	EAR, Geot App	n/a
For reinforce analyses, was there a different lift construction schedule developed since the existing material will be degraded?				
Submitted By: <u>Leeland Richard (504-862-2397)</u> . Submitted On: 18-Aug-08				
1-0	<b>Evaluation Concurred</b> Response by CSI: Only one lift schedule was developed. While the reinforcement would help to some degree in limiting lateral deformations, vertical settlement, being a function of vertical stress, would not differ whether the reinforcement is present or not.  Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 18-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment.  Submitted By: <u>Leeland Richard (504-862-2397)</u> Submitted On: 26-Sep-08			
Current Comment Status: Comment Closed				

2058609	Utilities Engineering	n/a'	n/a	n/a
Please remove the 8" sewer line at sta. 421+87 from the profile on drawing sheet C-103 A1. This line has never been field verified.				
Submitted By: Gregory DeBose (504-862-2452). Submitted On: 20-Aug-08				
1-0	Evaluation Concurred Will remove 8" line.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 16-Sep-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: Gregory DeBose (504-862-2452) Submitted On: 16-Sep-08			
Current Comment Status: Comment Closed				
2058666	Civil	n/a'	n/a	n/a
You need to check your quantities. I did a quick estimate based on the sections supplied and was not close to your numbers for embankment. I would like to see your cross sections with the templates for the lifts.				
Submitted By: William Landry (504-862-1825). Submitted On: 20-Aug-08				
1-0	Evaluation Concurred Checking and will forward cross section quantities and templates to verify quantities.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 18-Sep-08			
1-1	Backcheck Recommendation Close Comment Closed without comment.  Submitted By: William Landry (504-862-1825) Submitted On: 19-Sep-08			
Current Comment Status: Comment Closed				
2062227	Hydraulics	n/a'	n/a	n/a
Have H&H review selected alternative before begining plans and specs. The correct levee slopes should be used in the plans and specs.				
Submitted By: Keely Crowder (504-862-2114). Submitted On: 21-Aug-08				
1-0	Evaluation Concurred No further comment.  Submitted By: Jens Nielsen (504 887 7045) Submitted On: 09-Sep-08			
1-1	Backcheck Recommendation Close Comment ok  Submitted By: Keely Crowder (504-862-2114) Submitted On: 15-Sep-08			
Current Comment Status: Comment Closed				
2062513	Engineering Support	14. Quality Implementation	30	n/a
Section states that Quality Control Plan (QCP) can be found in Appendix E. Appendix E is titled "Construction Duration." Can not find an appendix which includes the QCP. Please add QCP, and amend section 14 to reference correct appendix.				

Submitted By: <u>Jennifer Vititoe (504-862-1252)</u> . Submitted On: 22-Aug-08				
1-0	<b>Evaluation Concurred</b> The appropriate section locations will be reviewed and adjusted as may be required. Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 19-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Submitted By: <u>Jennifer Vititoe (504-862-1252)</u> Submitted On: 25-Sep-08			
Current Comment Status: Comment Closed				
2062516	Engineering Support	Appendix	n/a	n/a
There is an Appendix titled "Construction Considerations and Construction Schedules." The Appendix is not properly labeled and is not listed on table of contents. Also this Appendix includes construction durations which differ from those included in appendix E. Which are the appropriate construction schedules? Suggest retitling the appendix, and removing the incorrect construction schedules.				
Submitted By: <u>Jennifer Vititoe (504-862-1252)</u> . Submitted On: 22-Aug-08				
1-0	<b>Evaluation Concurred</b> The Appendicies content and naming will be reviewed and adjusted. Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 19-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Closed without comment. Submitted By: <u>Jennifer Vititoe (504-862-1252)</u> Submitted On: 25-Sep-08			
Current Comment Status: Comment Closed				
2062518	Engineering Support	ITR Certification	n/a	n/a
EAR includes comments and responses from the ITR. Was an ITR certification completed? If yes then please include in EAR within Appendix F "Independent Technical Review."				
Submitted By: <u>Jennifer Vititoe (504-862-1252)</u> . Submitted On: 22-Aug-08				
1-0	<b>Evaluation Concurred</b> EAR will be incorporated into documents. Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 19-Sep-08			
1-1	<b>Backcheck Recommendation Close Comment</b> Submitted By: <u>Jennifer Vititoe (504-862-1252)</u> Submitted On: 25-Sep-08			
Current Comment Status: Comment Closed				
2062520	Engineering Support	n/a	n/a	n/a
Please include comments and responses from 65% EAR in the 95% EAR submittal.				
Submitted By: <u>Jennifer Vititoe (504-862-1252)</u> . Submitted On: 22-Aug-08				
1-0	<b>Evaluation Concurred</b> 65% EAR will be included in the 95% submittal. Submitted By: <u>Jens Nielsen (504 887 7045)</u> Submitted On: 19-Sep-08			

1-1		<b>Backcheck Recommendation Close Comment</b> Closed without comment.		
		Submitted By: <a href="#">Jennifer Vititoe (504-862-1252)</a> Submitted On: 25-Sep-08		
		Current Comment Status: Comment Closed		
2062797	Environmental	n/a'	n/a	n/a
IER 12 is being prepared to document environmental clearance for this project. The expected completion date is 23 Nov 08. This section does not currently have environmental clearance.				
Submitted By: <a href="#">Getrisc Coulson (504-862-1095)</a> . Submitted On: 22-Aug-08				
1-0		<b>Evaluation Concurred</b> No additional comment.		
		Submitted By: <a href="#">Jens Nielsen (504 887 7045)</a> Submitted On: 15-Sep-08		
1-1		<b>Backcheck Recommendation Close Comment</b> Closed without comment.		
		Submitted By: <a href="#">Getrisc Coulson (504-862-1095)</a> Submitted On: 19-Sep-08		
		Current Comment Status: Comment Closed		

There are currently a total of 289 users online as of 03:57 PM 20-Oct-08.

Patent 11/892,984. | [About ProjNet<sup>SM</sup>](#) | [About Us](#) | [Privacy Policy](#) | [Test Browser](#) | [Test Connection](#) | [Call Center](#) | **SBU Only** | SM property of ERDC since 2004.

---

Questions and comments to Call Center [staff@rcesupport.com](mailto:staff@rcesupport.com), 1-217-367-3273 or 1-800-428-HELP (4357)

---

Classified information is NOT permitted on this site. Do NOT share your ProjNet password.

**West Bank and Vicinity  
Hurricane Protection Project  
WBV 49.2 Algiers Canal (East)  
Hero Levee to Hwy 23**

**Plaquemines Parish, Louisiana**

## **APPENDIX H**

### **DESIGN QUALITY CONTROL PLAN (DQPC)**

**PREPARATION OF ENGINEERING ALTERNATIVE REPORT  
FOR  
WESTBANK AND VICINITY, NEW ORLEANS, LOUISIANA  
HURRICANE PROTECTION PROJECT  
PHASE 2 HURRICANE PROTECTION  
ALGIERS CANAL (EAST),  
HERO LEVEE TO HWY. 23  
WBV-49.2  
PLAQUEMINES PARISHES, LOUISIANA  
CONTRACT NO. W912P8-08-D-0002, TASK ORDER 3**

**DESIGN QUALITY CONTROL PLAN (DQCP)  
MARCH 2008**

**1. Product/Project Description**

- 1.1 Project Number: WBV-49.2.
- 1.2 Project Name: Engineering Alternative Report (EAR) for Phase 2 Hurricane 1.3 Protection, Algiers Canal (East), Hero Levee to Hwy. 23.
- 1.3 Project Location: This work is located in Plaquemines Parish, Louisiana, and is part of the East of Harvey Canal, Hurricane Protection Project. The East of Harvey Canal Hurricane Protection Project provides Standard Project Hurricane (SPH) protection for the East and West of Algiers Canal. The area addressed by this Scope of Work is the area bounded by LA. Hwy. 23 (Belle Chasse Hwy.) at the Northern limit, Bayou Barataria at the Southern limit, roughly paralleling the Algiers Canal on the Eastern side (Approx. B/L Sta. 287+00 To Approx B/L Sta. 572+00).
- 1.4 Project Description: Engineering Alternative Report (EAR) to explore alternative methods of raising the existing hurricane protection to provide the 100-year level of protection.
- 1.5 Project Work: Preparation of an EAR for replacement of the existing Hurricane Protection system with new protection designed for 100-year elevations.

**2. Purpose and Scope of DQCP**

- 2.1 Purpose - This DQCP outlines the professional expertise, technical criteria, and technical review processes that will be used to produce a quality product satisfying technical, functional, legal, safety and environmental requirements.
- 2.2 Scope - The scope of the proposed Task Order No. 3 consists of geotechnical, civil and structural analyses required to evaluate three (3) alternatives for an approximate 28,500 linear foot section of Algiers Canal Levee (East) from Station 287+00 to Station 572+00. The alternatives to be evaluated are:
  - a. All earthen levee, un-reinforced, with landside shift.
  - b. All earthen levee with reinforcing geotextile, with landside shift.

- c. Reinforced concrete T-Wall along landslide levee toe with existing levee as a barge barrier.

Design elevation shall be for the year 2057 level, top of levee elevation 14.0 NAVD 88. The design shall also consider the 2007 level, top of levee elevation 10.5 NAVD 88.

The EAR shall be performed utilizing Government furnished survey data and soil borings. The EAR shall consider existing and required right-of-way, required utility relocations and tie-in to existing walls at the pump station and the wall at Hwy 23. Separate Independent Technical Reviews (ITR) will be performed on the geotechnical, structural and civil aspects of the evaluation. These reviews will be performed by licensed professional engineers with the A/E prior to submittal to the Government. The technical review will consist of reviews performed by the A/E, the New Orleans District, and Local Sponsors.

### 3. Deliverables

Deliverables will be supplied at the 30%, 65%, 95% and 100% completion stages as follows:

Submittal	Document	Media			
		Blackline Prints		Electronic Doc. (PDF, DOC, DGN)	Bound Sets (Text)
		Full Size	Half Size		
5%	DQCP			1	1
	Proposed BMs			1	1
30%	Geotechnical Parameters and Example Analyses			1	2
65%	Engineering Alternative Report (Text)			1	10
	Geotechnical Report Appendix			1	10
	Engineering Appendix (Calcs.)			1	5
	Construction Duration Appendix			1	5
	Quantity and Cost Estimate Appendix			1	10
	Additional Survey Data			1	
	Sheets & ROW Drawings		15	1	
95%	Engineering Alternative Report (Text)			1	25
	Engineering Appendix (Calcs.)			1	10
	Construction Duration Appendix			1	25
	Quantity and Cost Estimate Appendix			1	25
	Sheets & ROW Drawings		15	1	
	ITR			1	5
100%	Engineering Alternative Report (Text)			1	10
	Engineering Appendix (Calcs.)			1	10
	Construction Duration Appendix			1	10
	Quantity and Cost Estimate Appendix			1	10
	Sheets & ROW Drawings		10	1	

#### **4. Customer Involvement**

The Product Delivery Team (PDT) will engage and involve other appropriate USACE organizations, Federal agencies, state and local governments, local utility and infrastructure agencies, and local citizens groups and associations, to keep them informed and to solicit their feedback and assistance. This involvement includes formal meetings and presentations, formal reviews, informal meetings and discussions, teleconferences, e-mails and telephone conversations. Customer involvement at all levels is vital to instill confidence that the customers' needs are being addressed and the recovery efforts are of high quality.

The following is a list of government authorities and affected utility owners that will be given an opportunity to review and comment on this alternative study. The need for additional agencies to review the project will be determined as the documents we developed.

1. U.S. Army Corps of Engineers
2. Plaquemines Parish Dept. of Public Works
3. West Jefferson Levee District
4. Louisiana Department of Transportation and Development
5. Known affected utility owners

#### **5. Metric System:**

- 5.1 Reference: CECW-CE, Engineering and Construction Bulletin, No. 2004-13, Issued 30 Aug 2004. This guidance states that the metric system shall be used unless such use leads to inefficiencies or is otherwise impracticable.
- 5.2 The existing hurricane protection projects were designed and constructed using the inch-pound system of measurement. It is not practicable to use metric on the continued design and construction of these projects due to inefficiencies.

#### **6. Technical Criteria**

- a. Hurricane Storm Damage Reduction System. Design Guidelines, New Orleans District, October 2007.
- b. ER 1110-1-12, Quality Management, 21 July 2006.
- c. Guidelines for Technical Documentation dated 30 March 2006.
- d. ER 1110-1-8159, Engineering and Design, Dr. Checks, 10 May 2001.
- e. American Association of State Highway and Transportation Officials, Standard Specifications for Highway Bridges, 17<sup>th</sup>, or latest, Edition.
- f. EM 1110-2-1902, Slope Stability, Oct. 03.
- g. EM 1110-2-1913, Design and Construction of Levees, Apr. 00.
- h. EM 1110-2-2502, Retaining and Flood Walls, Sept. 89.
- i. EM 1110-2-2504, Design of Sheet Pile Walls, March 94.
- k. EM 1110-2-2906, Design of Pile Foundations, Jan. 91.

- l. DIVR 1110-1-400, Soil Mechanic Data, Dec. 98.
- m. ETL 1110-2-569, Design Guidance for Levee Underseepage, May 05.
- n. ACI, American Concrete Institute.
- o. PCI, Prestressed and Precast Concrete.
- p. CRSI, Concrete Reinforcing Steel Institute, Manual of Practice.
- q. American Welding Society, Structural Welding Code, Steel (AWS-D1.1-02).
- r. EM 385-1-1 Safety and Health Requirements Manual, ENG Form 5044-R (Nov. 03),
- s. EM 1110-2-2000 Standard Practice for Concrete for Civil Works Structures Change 2 (Mar 01).
- t. EM 1110-2-2100 Stability Analysis of Concrete Structures (Dec 05).
- u. EM 1110-2-2102 Waterstops and Other Joint Materials (Sep 95).
- v. EM 1110-2-2104 Strength Design Criteria for Reinforced Concrete Hydraulic Structures (Jun 92, Aug 03).
- w. EM 1110-2-2105 Design of Hydraulic Steel Structures Change 1 (May 94).
- x. EM 1110-2-2400 Structural Design and Evaluation of Outlet Works (Jun 03).
- y. EM 1110-2-2503 Design of Sheet Pile Cellular Structures Cofferdams & Retaining Structures (Sep 89)
- z. EM 1110-2-2701 Vertical Lift Gates (Nov 97).
- aa. EM 1110-2-3102 General Principles of Pumping Station Design and Layout (Feb 95).
- bb. EM 1110-2-2902 Conduits, Culverts, and Pipes (Mar 98).
- cc. EM 1110-2-3102 General Principles of Pumping Station Design and Layout (Feb 95).
- dd. EM 1110-2-3104 Structural and Architectural Design of Pumping Stations (Jun 89).
- ee. American Association of State Highway and Transportation Officials, A Policy on Geometric Design of Highways and Streets, 4<sup>th</sup> Edition (The Green Book), 2001.
- ff. American Association of State Highway and Transportation Officials, Manual on Uniform Traffic Control Devices, 2001.
- gg. Louisiana Department of Transportation and Development, Bridge Design Manual (English).
- hh. Louisiana Department of Transportation and Development, Road Design Manual.
- ii. Louisiana Department of Transportation and Development, Standard Specifications for Roads and Bridges (LSSRB), 2006.
- jj. EM 1110-2-2610 Change 1, Lock and Dam Gate Operating and Control Systems (Dec 03, Apr 04).
- kk. EM 1110-2-2608 Navigation Locks – Fire Protection Provisions (Feb 94).
- ll. EM 1110-2-2703 Lock Gates and Operating Equipment
- mm. EM 1110-2-2704 Cathodic Protection Systems for Civil Works Structure (Jan 99).
- nn. EM 1110-2-3105 Mechanical and Electrical Design for Pumping Stations (Mar 94, Aug 94, Nov 99)
- oo. WES Technical Report H70-2 including Appendix A, Operating Forces on Sector Gates under Reverse Heads, March 70 and Dec. 71.

pp. NFPA 70, National Electric Code, 1999

**7. Vertical Datums:**

- The establishment and use of vertical datums in the design work will follow the guidance provided in CECW-CE, INTERIM GUIDANCE FOR A PRELIMINARY EVALUATION OF VERITCAL DATUMS ON FLOOD CONTROL, SHORE PROTECTION, HURRICANE PROTECTION, AND NAVIGATION PROJECTS, dated 31 October 2006
- Vertical datums were provided by the Government with the supplied survey drawings.
- No additional field survey work is proposed to be performed under this EAR.

**8. Product Delivery Team (PDT)**

The PDT is led by an experienced leader who has designed or led PDTs in the successful completion of similar work. Other PDT members have extensive professional experience in their assigned responsibilities. Should future requirements require the application of different skills or experience, appropriate personnel will be added to the PDT.

HPA will sub-contract the work to various team members. The individual firms involved in this task order and their responsibilities are as follows:

AIMS Group, Inc. (AIMS) – Lead Technical Engineer and Task Order Manager responsible for all civil/structural design including right-of-way drawings, utility relocations and report preparation.

Civil Services, Inc. (CSI) – All geotechnical design including geotechnical ITR.

Digital Engineering and Imaging, Inc. (DEII) – Overall contract management and task order QA/QC

Hartman Engineering, Inc. (HEI) – DQCP and Civil/Structural ITR.

The Task Order Manager shall be Mr. Tommy L'Hoste who serves as President of AIMS and is a licensed professional engineer with over 14 years of experience in the New Orleans area and will provide management and QA/QC of the interim and final submittals.

Mr. Jens Nielsen with AIMS is a licensed professional with 40+ years of experience. Mr. Nielsen will be responsible for developing the drawings and overall development of the report

Mr. Eugene Brian with AIMS is a licensed professional with 40+ years of experience. Mr. Brian will be responsible for structural analysis and design of the T-wall and gate structures.

Mr. Ramesh Kalvakaalva is a licensed professional engineer and Branch Manager of CSI, New Orleans. His experience is derived from working on various projects in Louisiana and the Southeast region, including the TVA, LaDOTD, Jacksonville COE, and Savannah COE. He will serve as the project manager for the Geotech effort

CSI's geotechnical efforts will be led by Mr. Carlos Cepero who will serve as Senior Geotechnical Engineer. Mr. Cepero is a licensed professional engineer in multiple states with 9 years of experience including 4 years of employment with the USACE Jacksonville District. He has been involved with over a dozen flood control embankment design projects.

Mr. Bruce Khosrozadeh who is a Vice-President of CSI is a licensed professional engineer with over 20 years experience and has worked on the Herbert Hoover Dike, Kissimmee River Restoration and Rio Descalabrado Flood Control projects for the USACE Jacksonville District, amongst others. Mr. Khosrozadeh will provide the geotechnical ITR.

DEII's team will be led by Mr. Thomas Hickey who serves as Executive Vice-President of DEII and also serves as contract manager for HPA. Mr. Hickey is a licensed professional engineer with over 25 years of experience in the New Orleans area and will provide QA/QC of the interim and final submittals.

Mr. Robert Yokum will provide the structural ITR for HEI. Mr. Yokum is a licensed professional engineer with an excess of 30 years experience including several years with the New Orleans District USACE.

Mr. Scott Chehardy will provide the civil ITR for HEI. Mr. Chehardy also is a licensed professional engineer and possesses over 13 years of experience in the New Orleans area.

## **9. Independent Technical Review (ITR)**

- Independent Technical Review will be performed on all products, following the guidance provided in ER 1110-1-12, Engineering and Design, QUALITY MANAGEMENT, dated 30 September 2005.
- As previously stated separate ITR's will be performed for the geotechnical, structural and civil portions of the work.
- Mr. Bruce Khosrozadeh will serve as the lead ITR for the geotechnical portion of the work.
- Mr. Scott Chehardy will serve as the lead ITR for the civil portion of the work, and Mr. Bob Yokum will be the lead structural ITR person.
- Reviews will be performed continuously throughout the project with one formal review being completed at the 95% review stage.
- Review comments and resolutions will be entered into Dr. Checks for the 95% review stage.

- Documentation will be provided for all ITRs, consisting of a completed (signed) statement of technical review and certification (ref. ER 1110-1-12), to which is attached all review comments (identified by the Reviewer) and the response of the designer to the comment. Documentation will be submitted concurrently with the final design product.

#### 10. **Biddability, Constructability, Operability and Environmental (BCOE) Review**

- The BCOE review will be performed by the Government (HPO/PRO) and other agencies.
- The names and disciplines of the BCOE reviewers are as follows:
  - ◆ William Landry, 12 yrs experience in Civil / Levees.
  - ◆ Leeland Richard, EIT, 3 yrs experience in Geotechnical Eng.
  - ◆ Keeley Crowder, PE, 10 yrs experience in Hydrology.
  - ◆ Ira Dorsett, 1 yr experience in Structural Eng.
  - ◆ David Lovett, PE, 5 yrs experience in Structural Eng.
  - ◆ Gregory DeBose, 8 yrs experience in Relocations.
  - ◆ Steven Lowrie, 1 yr experience in Cost Eng.
  - ◆ Jennifer Vititoe, 4 yrs experience in Civil Eng.
  - ◆ James Montegut, 30 yrs experience in Civil Eng.
  - ◆ Louis Cheek, 12 yrs experience as a Reality Specialist.
  - ◆ Timothy Connell, EIT, 3 yrs experience in Project Management.
  - ◆ Getrisc Coulson, 2 yrs experience in Environmental Eng.
- The names and disciplines of the reviewers from other agencies are as follows:
  - ◆ David J. Bindewald, President, South East Louisiana Flood Protection Authority, West Bank
  - ◆ Clyde P. Martin, PE, Chief, Federal Programs, Louisiana Department of Transportation and Development
  - ◆ Ennis Johnson, Water resources and Development Engineer, Louisiana Department of Transportation and Development
  - ◆ Michael Stack, District Administrator, District 2, Louisiana Department of Transportation and Development
  - ◆ Blair Rittner, Plaquemines Parish Government
  - ◆ Edward Preau, Director of Public Works and Flood Control
  - ◆ Jerry Sphorer, Executive Assistant, Board of Commissioners of the West Jefferson Levee District
- The designer will resolve comments from the BCOE review and provide to the HPO/PRO. All comments and comment resolution will be performed and documented in Dr Checks.

## 11. Schedule/Checklist

The task order is proposed to be completed within the following time frames:

<b>Work Item</b>	<b>Time Interval For Work Item In Calendar Days</b>	<b>Time in Calendar Days From Date of Acknowledgement of Receipt of Notice to Proceed</b>
Notice to Proceed		0
Pre-Work Conference	3	3
Submit DQCP	4	7
30% Submittal	10	17
30% Review	2	19
30% Comment Resolution/Decision Point	1	20
65% Submittal (EAR.)	25	45
65% Review	10	55
65% Comment Resolution/Decision Point	7	62
95% Submittal and ITR Submittal	12	74
95% Review	14	88
95% Comment Resolution	7	95
100% Submittal	7	102

## 12. Record Maintenance

The following QC documentation will be provided, in both hard copy and electronic format, to the HPO/PRO:

- The initial Design Quality Control Plan (within 7 days of commencing design) and any changes during the design process.
- ITR review comments, resolution of comments, and statement of technical review and certification (concurrent with final submittal of design product).
- Design Documentation Report, which includes the technical documentation of the design (e.g. calculations, load cases, etc. as required) plus the items above.

This DQCP has been reviewed and accepted by the following:

  
\_\_\_\_\_  
Tommy L. Hoste, P.E.  
AIMS Group, Inc., PDT Leader/Task Order Manager

4/16/08

Date

  
\_\_\_\_\_  
Scott G. Cho Hardy, P.E.  
Hartman Engineering, Inc., ITR Team Leader

4/16/08

Date

  
\_\_\_\_\_  
Thomas P. Hickey, P.E.  
Digital Engineering & Imaging, Inc., Contract Manager

4/16/08

Date

  
\_\_\_\_\_  
Ramesh Kalvakaalva, P.E.  
Civil Services, Inc., Project Manager

April 16, 2008

Date