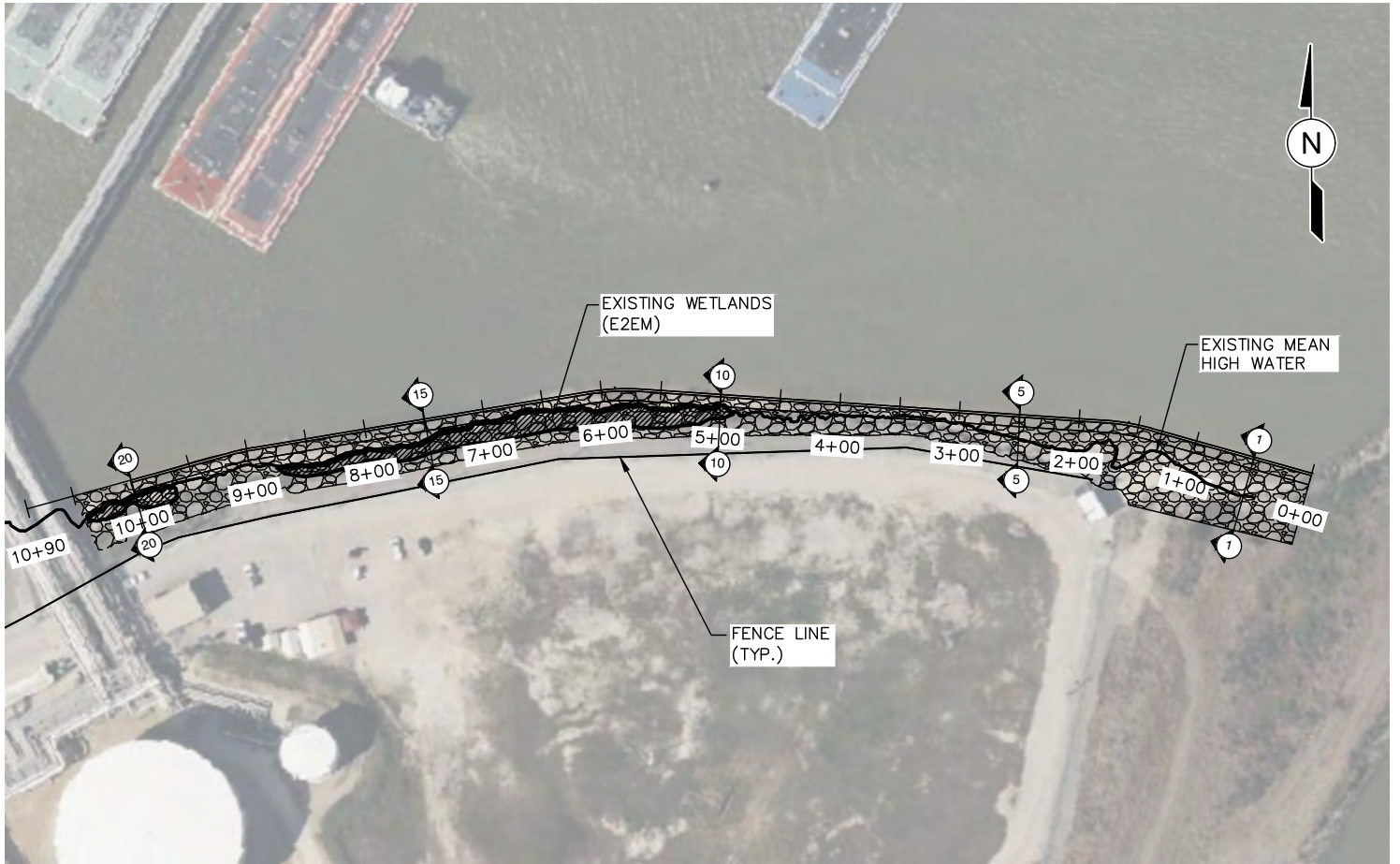


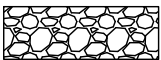




FILE NAME: L:\LEI Projects\KinderMorgan\BOSTCO Shoreline Protection\6.0 Drawings\6.4 Permits\05-08-2023\03 OVERALL RIPRAP LAYOUT.dwg LAYOUT NAME: 03 OVERALL RIPRAP LAYOUT PLOTTED: Tuesday, May 09, 2023 - 11:27am USER: jv

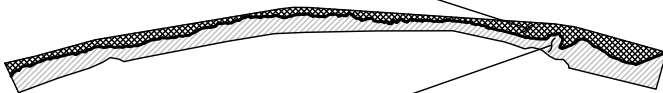


**LEGEND**



(SHORELINE PROTECTION) (1048 LF)  
APPROX. OVERALL RIP-RAP QTY.  
1530 CU.YD.

RIP-RAP BELOW MHW  
(551 CU.YD.)



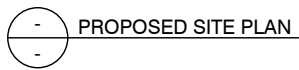
RIP-RAP ABOVE MHW  
(977 Cu.Yd.)



EXISTING WETLANDS (E2EM) (5450 SQ. FT.)  
(RIP-RAP 202 CU. YD.)



EXISTING MEAN HIGH WATER



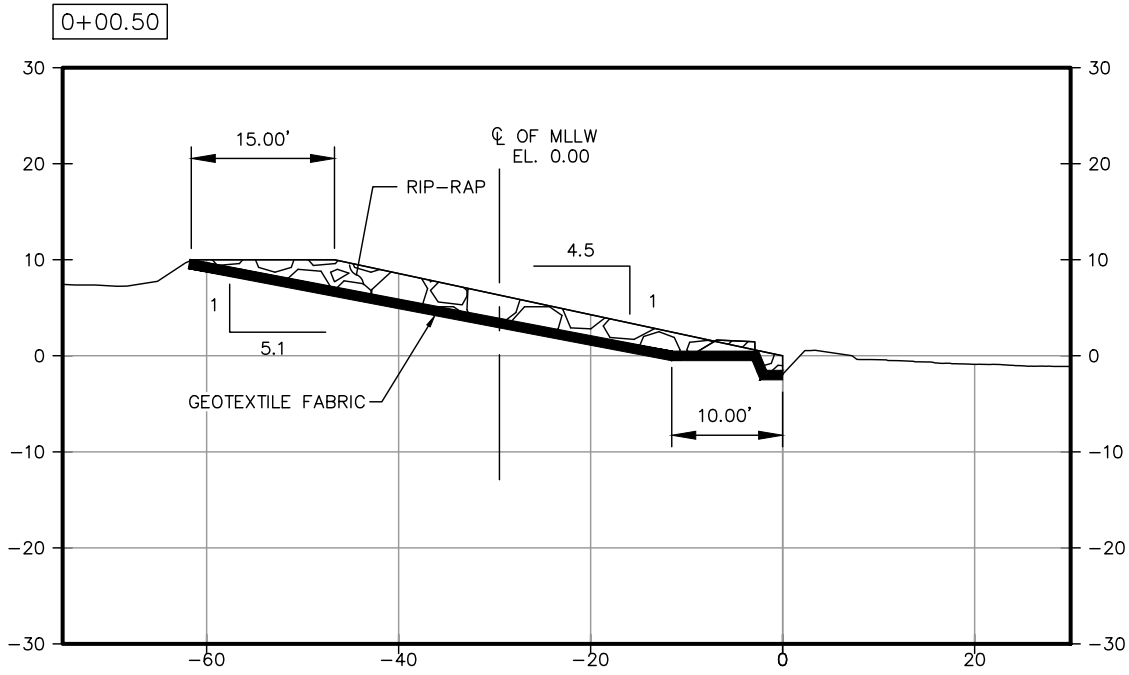
PROPOSED SITE PLAN

PURPOSE:	USACE PERMIT MODIFICATION BOSTCO SHORELINE PROTECTION
LOCATION:	HOUSTON, TX

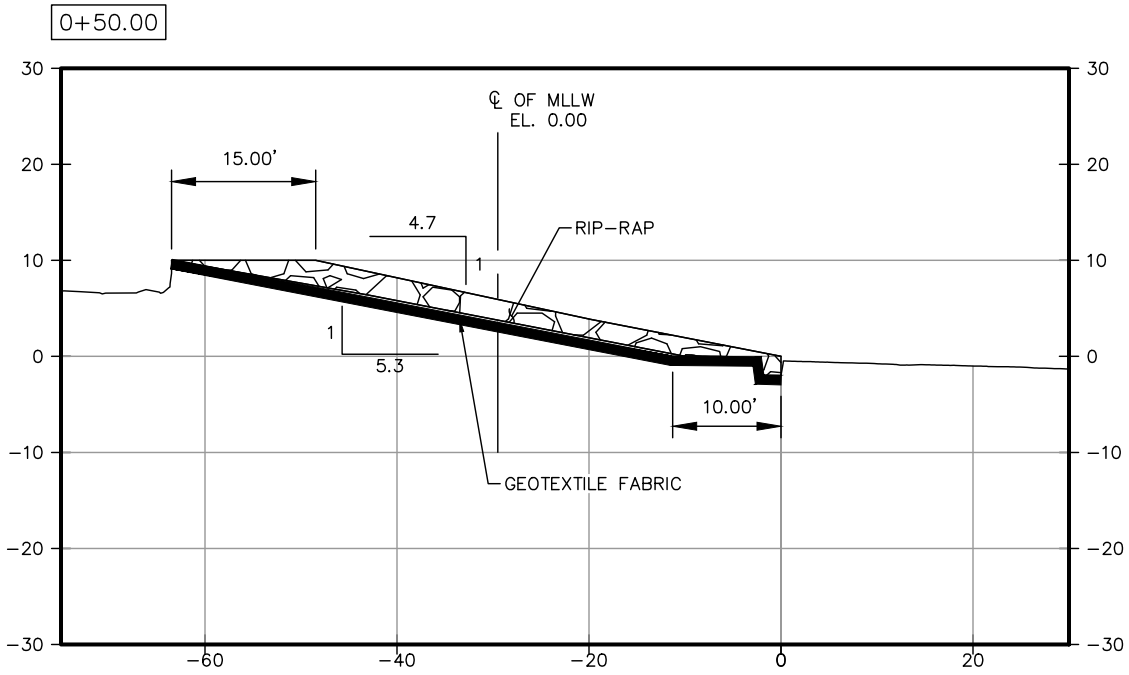
OWNER:	BATTLEGROUND OIL SPECIALTY TERMINALS
APPLIED BY:	LLOYD ENGINEERING, INC.
APPLIC. No:	SWG-2011-00011
COUNTY:	HARRIS
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW

DESIGN BY:	V
DRAWN BY:	JV
SCALE:	AS NOTED
DATE:	05-04-23
SHEET No:	03

FILE NAME: L:\LEI Projects\KinderMorgan\BOSTCO Shoreline Protection\6.0 Drawings\6.4 Permits\05-08-2023\04 RIPRAP CROSS SECTIONS.dwg LAYOUT NAME: 04 RIPRAP CROSS SECTIONS (SHEET 1 OF 6) PLOTTED: Tuesday, May 09, 2023 - 11:27am USER: jv



SECTION 1  
SCALE 1:20



SECTION 2  
SCALE 1:20

LEGEND	
	CUT
	FILL

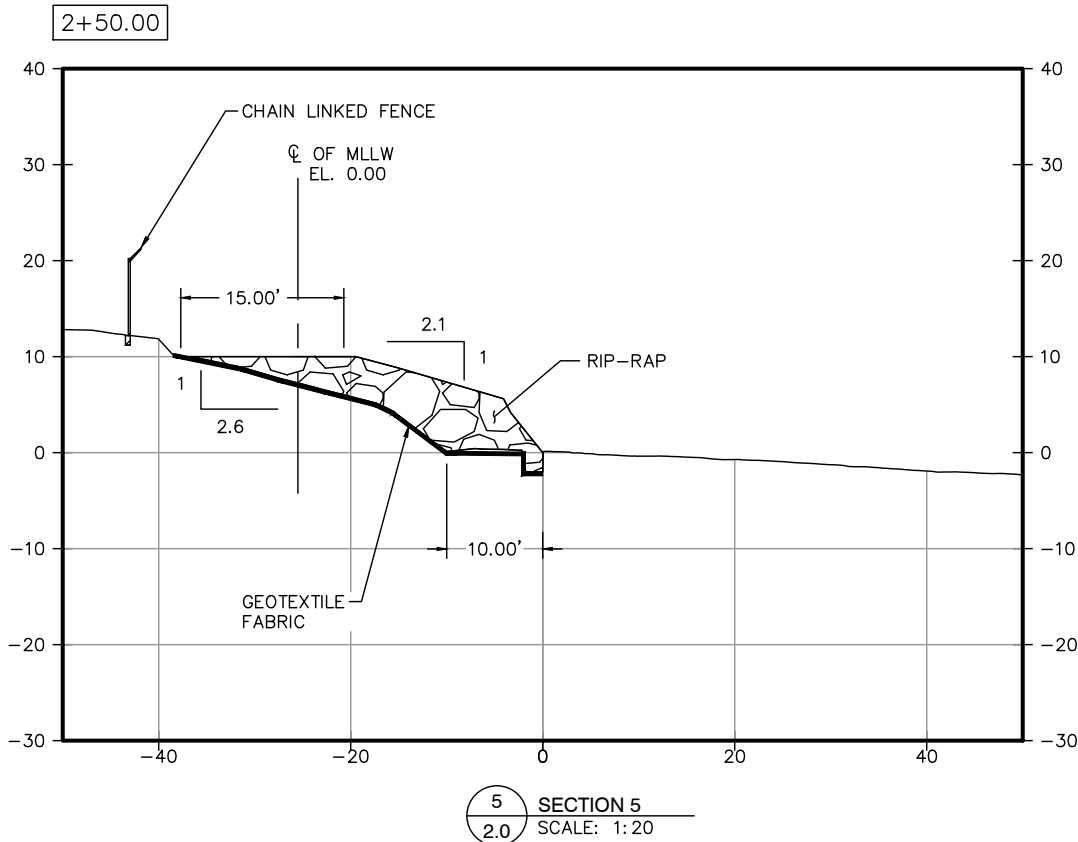
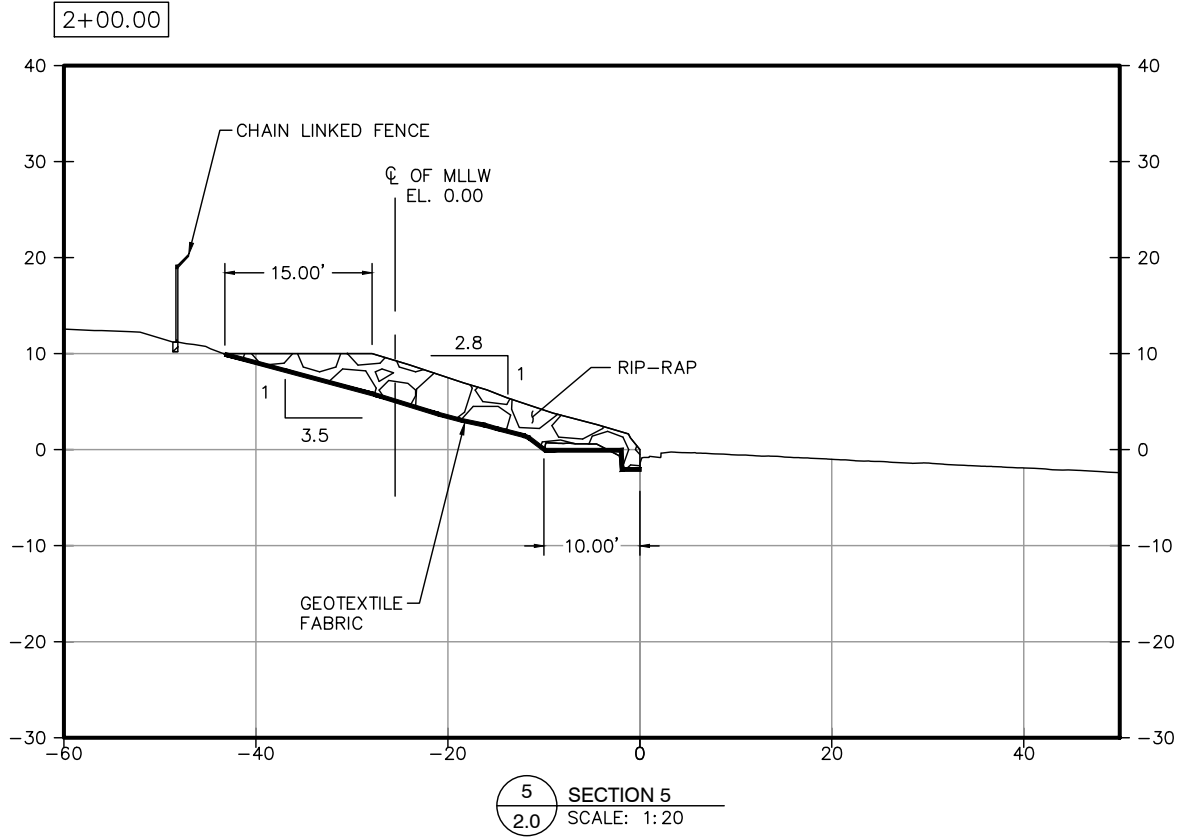
PURPOSE:	USACE PERMIT MODIFICATION BOSTCO SHORELINE PROTECTION
LOCATION:	HOUSTON, TX

OWNER:	BATTLEGROUND OIL SPECIALTY TERMI
APPLIED BY:	LLOYD ENGINEERING, INC.
APPLIC. No:	SWG-2011-00011
COUNTY:	HARRIS
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW


**LLOYD**  
ENGINEERING, INC  
STATE OF TEXAS, USA  
LICENSE NO. F-002846


DESIGN BY:	V
DRAWN BY:	AC
SCALE:	AS NOTED
DATE:	05-04-23
SHEET No:	04

FILE NAME: L:\LEI Projects\KinderMorgan\BOSTCO Shoreline Protection\6.0 Drawings\6.4 Permits\05-06-2023\05 RIPRAP CROSS SECTIONS.dwg LAYOUT NAME: 05 RIPRAP CROSS SECTIONS (SHEET 2 OF 5) PLOTTED: Tuesday, May 09, 2023 - 11:28am USER: jv



**LEGEND**

 CUT

 FILL

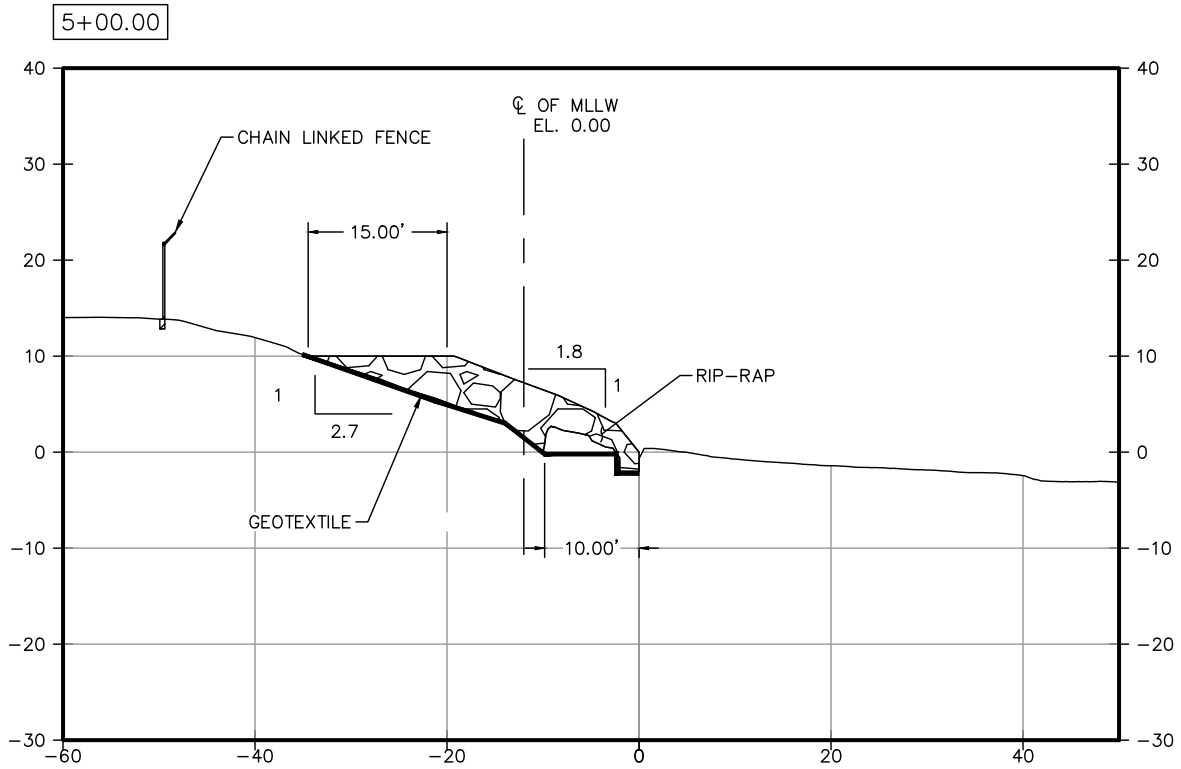
PURPOSE:	USACE PERMIT MODIFICATION BOSTCO SHORELINE PROTECTION
LOCATION:	HOUSTON, TX

OWNER:	BATTLEGROUND OIL SPECIALTY TERMINALS
APPLIED BY:	LLOYD ENGINEERING, INC.
APPLIC. No:	SWG-2011-00011
COUNTY:	HARRIS
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW

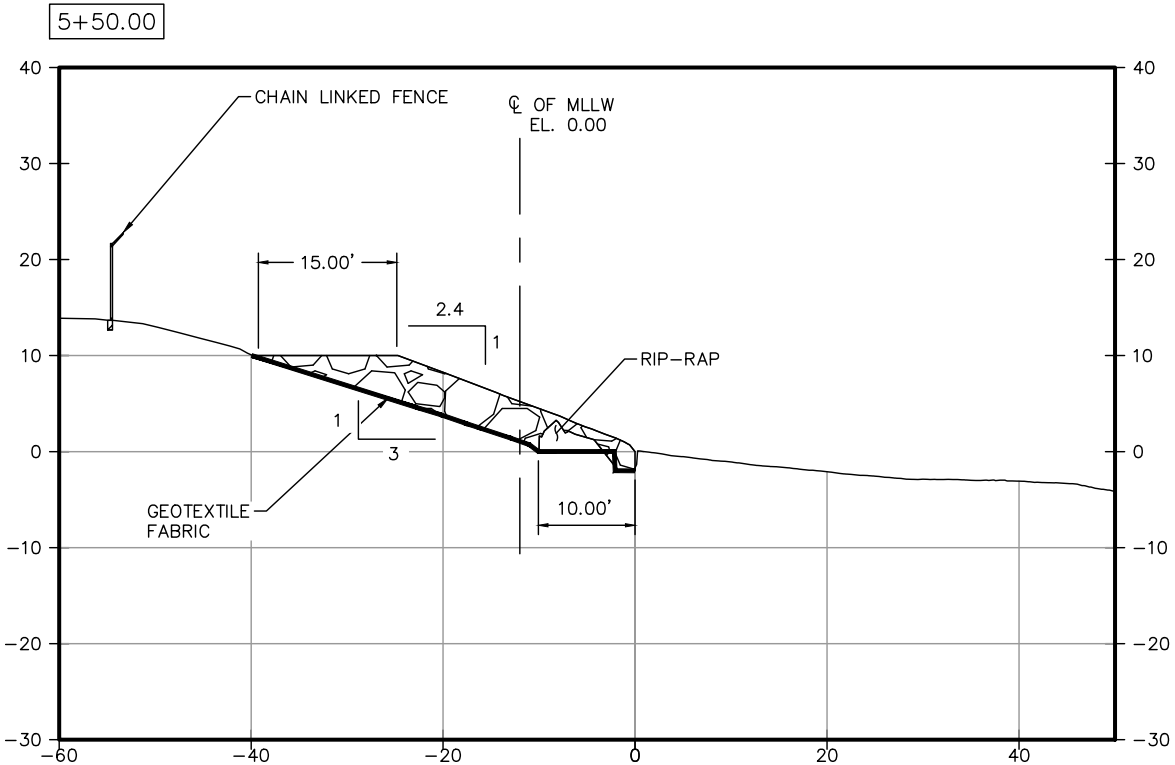
**LLOYD ENGINEERING, INC**  
STATE OF TEXAS, USA  
LICENSE NO. F-002846

DESIGN BY:	v
DRAWN BY:	AC
SCALE:	AS NOTED
DATE:	05-04-23
SHEET No:	05

FILE NAME: L:\LEI Projects\KinderMorgan\BOSTCO Shoreline Protection\6.0 Drawings\6.4 Permits\05-06-2023\06 RIPRAP CROSS SECTIONS.dwg LAYOUT NAME: 06 RIPRAP CROSS SECTIONS (SHEET 3 OF 5) PLOTTED: Tuesday, May 09, 2023 - 11:28am USER: JV





11 SECTION 11  
2.0 SCALE 1:20



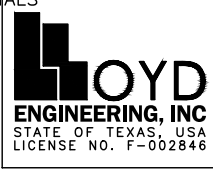
12 SECTION 12  
2.0 SCALE 1:20

LEGEND

-  CUT
-  FILL

PURPOSE:	USACE PERMIT MODIFICATION BOSTCO SHORELINE PROTECTION
LOCATION:	HOUSTON, TX

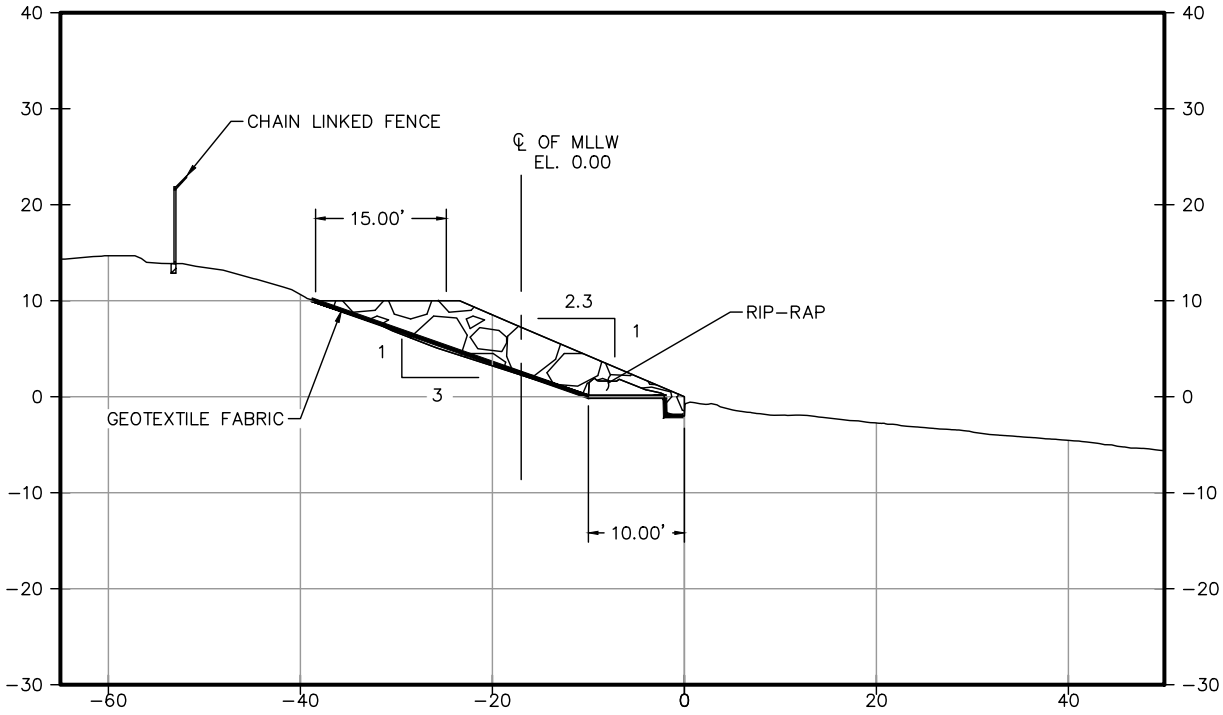
OWNER:	BATTLEGROUND OIL SPECIALTY TERMINALS
APPLIED BY:	LLOYD ENGINEERING, INC.
APPLIC. No:	SWG-2011-00011
COUNTY:	HARRIS
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW



DESIGN BY:	V
DRAWN BY:	AC
SCALE:	AS NOTED
DATE:	05-04-23
SHEET No:	06

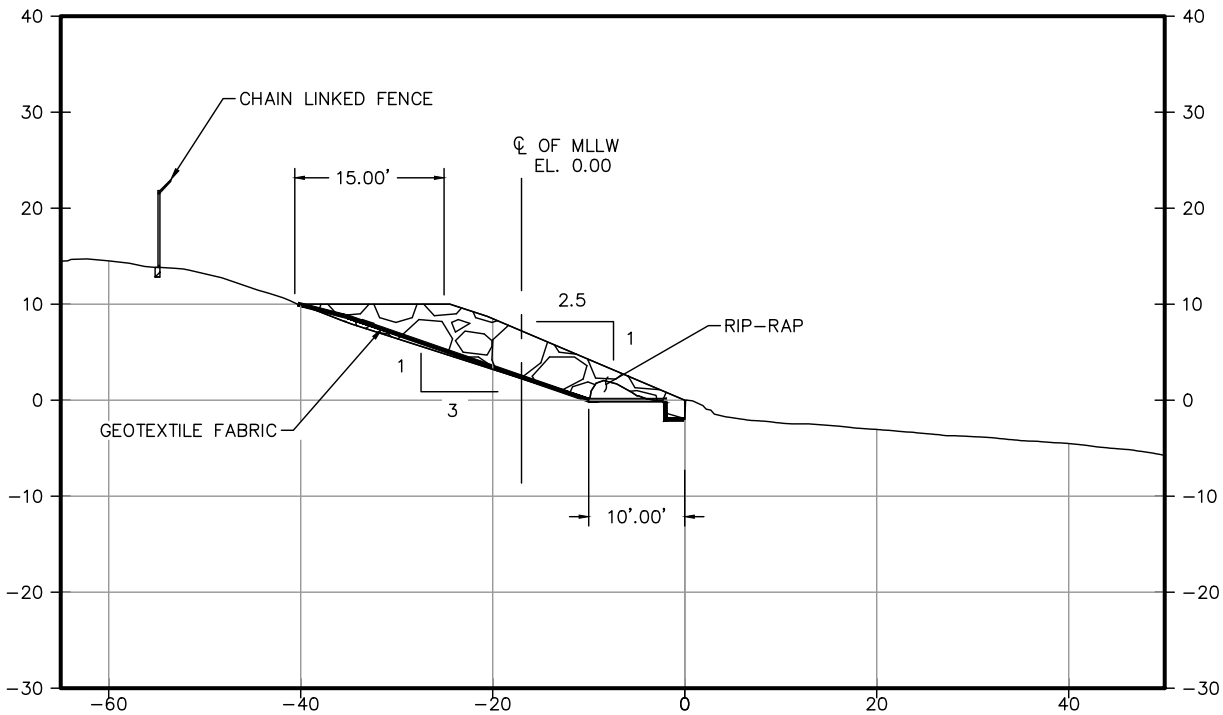
FILE NAME: L:\LEI Projects\KinderMorgan\BOSTCO Shoreline Protection\6.0 Drawings\6.4 Permits\05-06-2023\07 RIPRAP CROSS SECTIONS.dwg LAYOUT NAME: 07 PLOTTED: Tuesday, May 09, 2023 - 11:28am USER: jr

7+00.00



15 SECTION 15  
2.0 SCALE: 1:20

7+50.00



16 SECTION 16  
2.0 SCALE: 1:20

LEGEND	
	CUT
	FILL

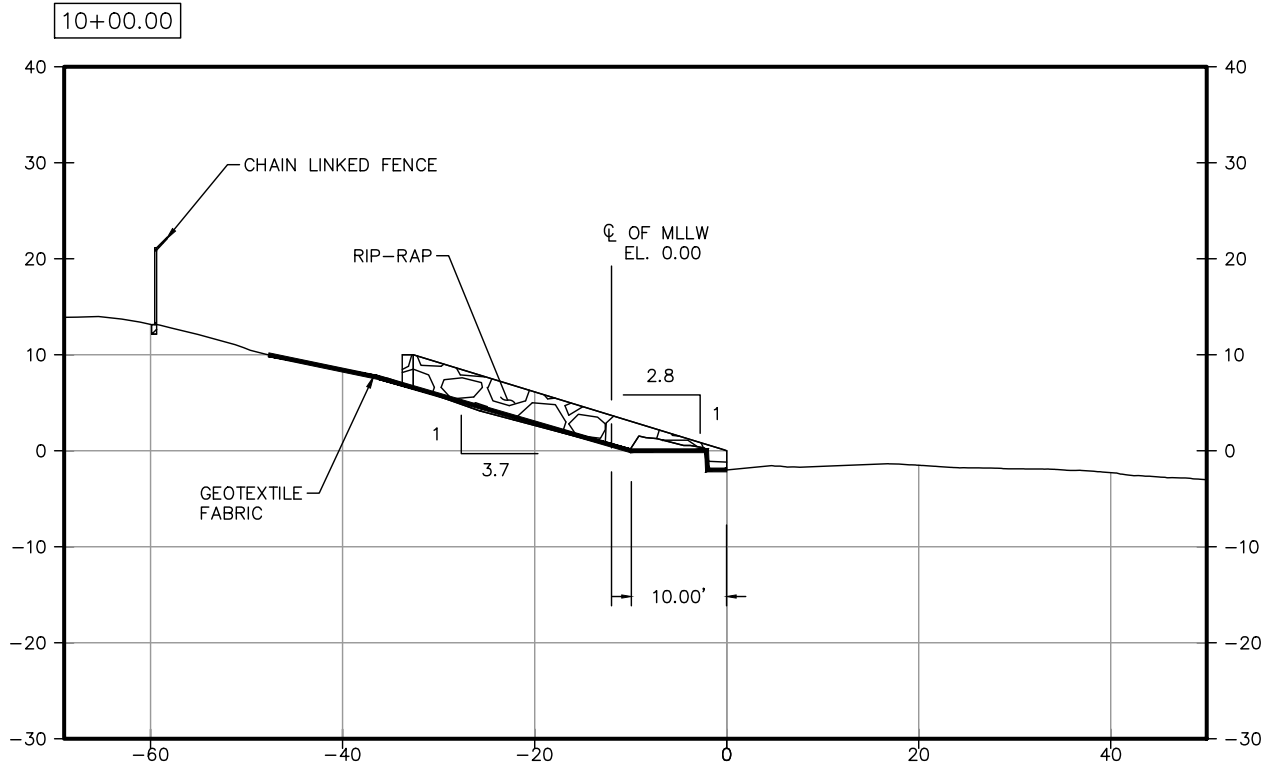
PURPOSE:	USACE PERMIT MODIFICATION BOSTCO SHORELINE PROTECTION
LOCATION:	HOUSTON, TX

OWNER:	BATTLEGROUND OIL SPECIALTY TERMS
APPLIED BY:	LLOYD ENGINEERING, INC.
APPLIC. No:	SWG-2011-00011
COUNTY:	HARRIS
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW

**LLOYD**  
ENGINEERING, INC  
STATE OF TEXAS, USA  
LICENSE NO. F-002846



DESIGN BY:	v
DRAWN BY:	AC
SCALE:	AS NOTED
DATE:	05-04-23
SHEET No:	07

FILE NAME: L:\LEI Projects\KinderMorgan\BOSTCO Shoreline Protection\6.0 Drawings\6.4 Permits\05-06-2023\08 RIPRAP CROSS SECTIONS.dwg LAYOUT NAME: 08 RIPRAP CROSS SECTIONS (SHEET 5 OF 5) PLOTTED: Tuesday, May 09, 2023 - 11:28am USER: JV



20 SECTION 21  
2.0 SCALE: 1:10

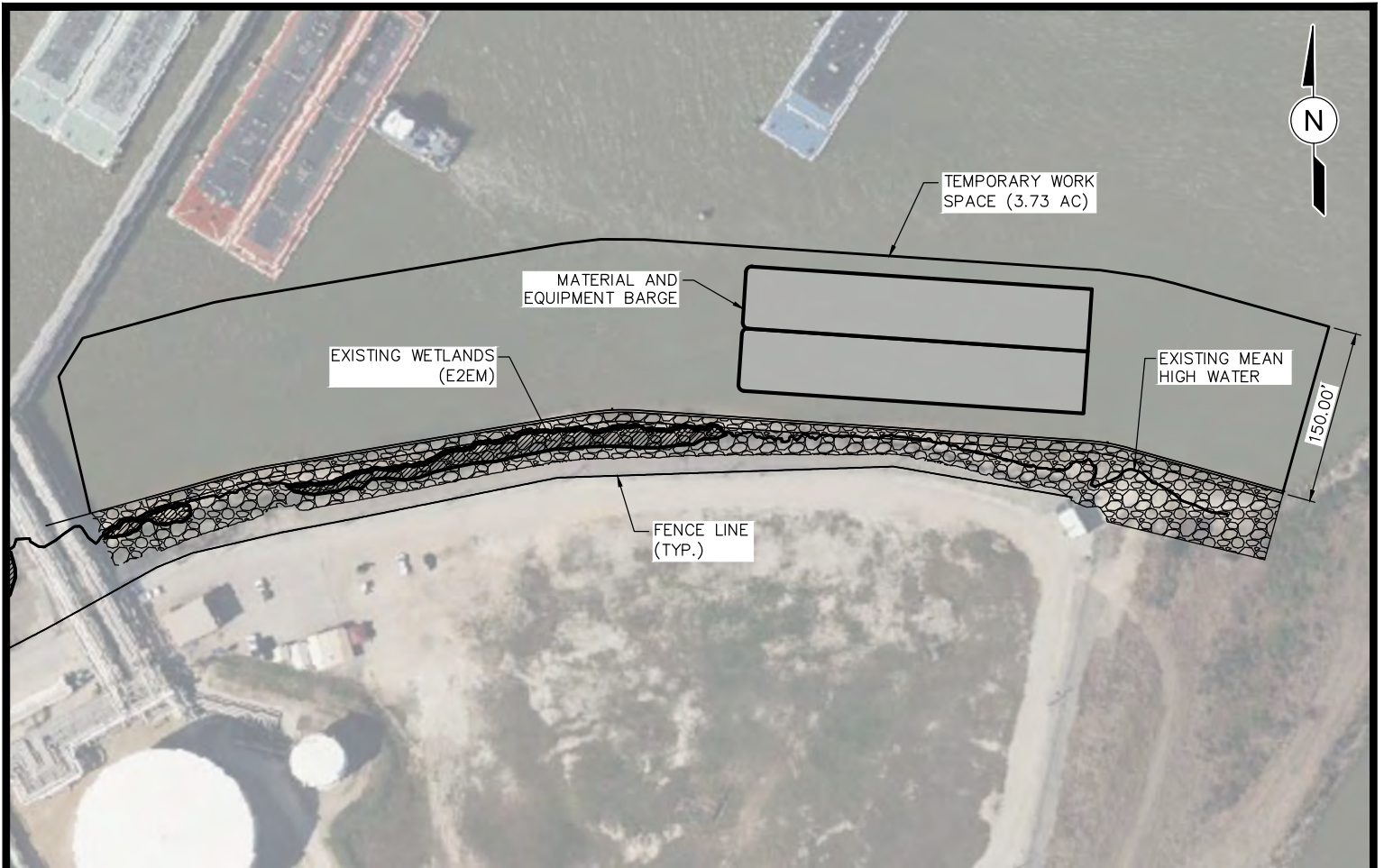
LEGEND

-  CUT
-  FILL

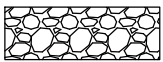
PURPOSE:	USACE PERMIT MODIFICATION BOSTCO SHORELINE PROTECTION	OWNER:	BATTLEGROUND OIL SPECIALTY TERMS	 <p>LLOYD ENGINEERING, INC. STATE OF TEXAS, USA LICENSE NO. F-002846</p>	DESIGN BY:	V	
	LOCATION:	HOUSTON, TX	APPLIED BY:		LLOYD ENGINEERING, INC.	DRAWN BY:	AC
			APPLIC. No:	SWG-2011-00011	SCALE:	AS NOTED	
		COUNTY:	HARRIS	DATE:	05-04-23	SHEET No:	08
		WATER BODY:	HOUSTON SHIP CHANNEL				
		DATUM:	MLLW				



FILE NAME: L:\LEI Projects\KinderMorgan\BOSTCO Shoreline Protection\6.0 Drawings\6.4 Permits\09 WORK SPACE SITE LAYOUT.dwg LAYOUT NAME: 15 OVERALL SITE LAYOUT - RIPRAP PLOTTED: Wednesday, June 14, 2023 - 1:38pm USER: jb

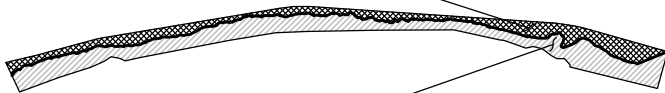


**LEGEND**



(SHORELINE PROTECTION) (1048 LF)  
APPROX. OVERALL RIP-RAP QTY.  
1530 Cu.Yd.

RIP-RAP BELOW MHW  
(551 Cu.Yd.)



RIP-RAP ABOVE MHW  
(977 Cu.Yd.)



EXISTING WETLANDS  
(E2EM)



EXISTING MEAN  
HIGH WATER



**PROPOSED SITE PLAN**

PURPOSE:	USACE PERMIT MODIFICATION BOSTCO SHORELINE PROTECTION
LOCATION:	HOUSTON, TX

OWNER:	BATTLEGROUND OIL SPECIALTY TERMINALS
APPLIED BY:	LLOYD ENGINEERING, INC.
APPLIC. No:	SWG-2011-00011
COUNTY:	HARRIS
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW

**LLOYD ENGINEERING, INC.**  
STATE OF TEXAS, USA  
LICENSE NO. F-002846

DESIGN BY:	V
DRAWN BY:	JV
SCALE:	AS NOTED
DATE:	05-04-23
SHEET No:	<b>09</b>