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**From:** Ashley Stephens <[REDACTED]>  
**Sent:** Monday, June 29, 2020 2:57 PM  
**To:** Besherse, Christopher  
**Subject:** [EXTERNAL] Orion Marine - Epic plans  
**Attachments:** 23 20200623\_POCCA DREDGE DWG SET APPROVED.pdf

[Use caution with links/attachments]

Chris,

I've attached the latest plans. Page 2 shows existing pipelines in blue, I'm assuming a couple of those are yours. Page 3 shows our new dredge prism for phase II of dredging. It looks as though we will be about 60' off the shoreline, and the areas where the shoreline and pipelines are furthest in the water (closest to the new template), we have already completed dredging to grade (where the dock platform is on page 3) so there shouldn't be a need for concern.

Let me know what you think.

Ashley

**Ashley Stephens**  
**Project Engineer**  
**Orion Marine Group – Dredging Operations**

**O:** [REDACTED] | **C:** [REDACTED]

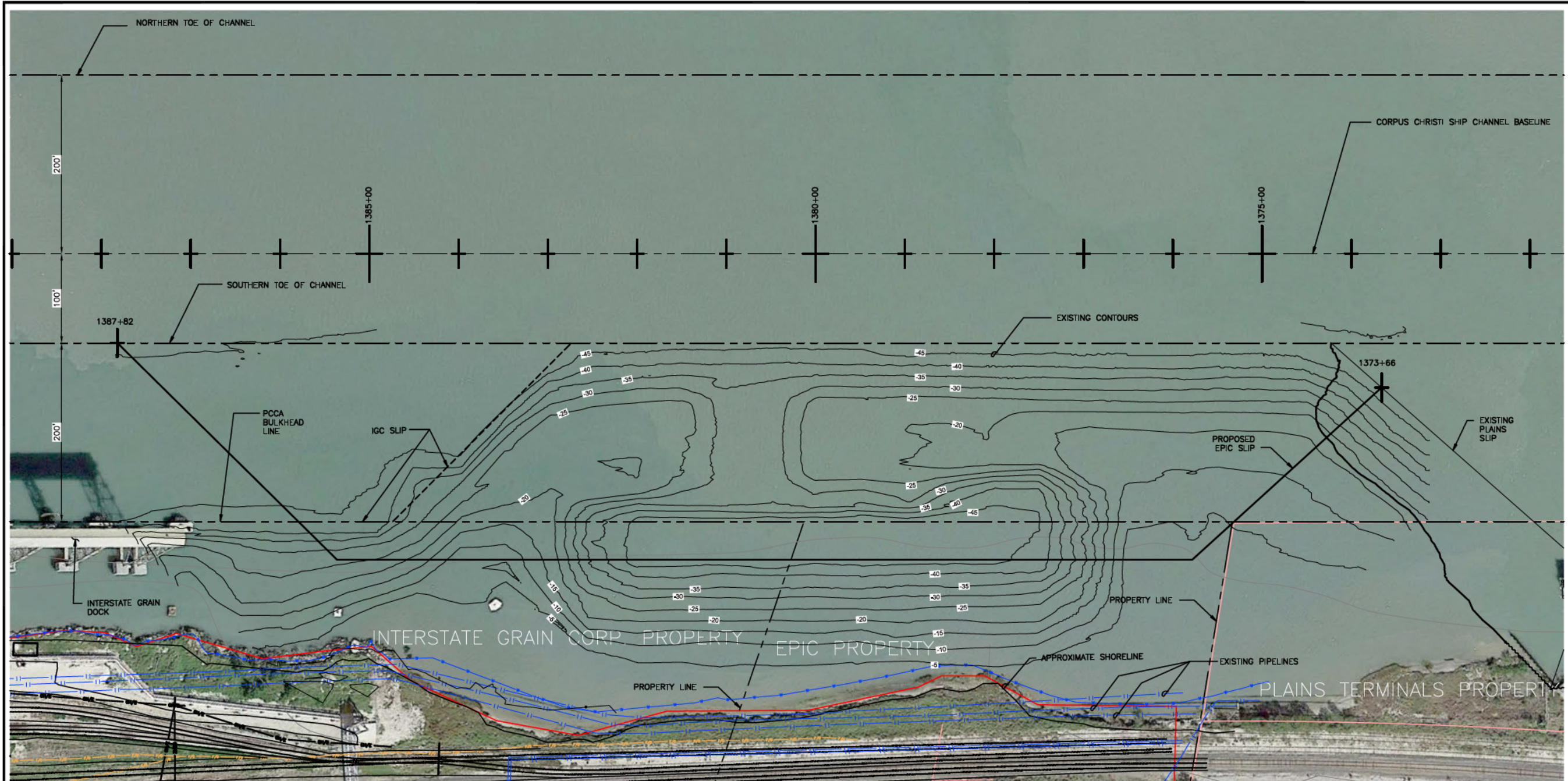
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Plot Time: Tuesday, June 23, 2020 - 9:31am - Plotted by: edebreu  
 File Name: I:\Projects\10P00230 - EPIC CRUDE TERM CORPUS CHRISTI\4.0 Drawings\4.10 Working\DREDGE CONST DWGS\10P230\_dg2\_1\_EXISTING\_SITE\_PLAN\_WITH\_CONTOURS.dwg Layout Name: MISC




June 23, 2020

P.E. NO.	
Designed	MHC
Drawn	ACD
Checked	SAW
Approved	GLS

PREPARED FOR:



PREPARED BY:



5430 West Tyson Ave.  
Tampa, FL 33611  
Texas Certificate of Authorization Number, F-14492

**EPIC MARINE TERMINAL  
DREDGING CONSTRUCTION PLANS  
CORPUS CHRISTI, TEXAS**  
 EXISTING  
SITE PLAN

ISSUED FOR CONSTRUCTION	PROJ. NO. 10P-00230 DRAWING NO. G2.1
	0 IFC DREDGE PLANS AT 22" x 34" BAR IS ONE INCH
	6/22/20 WJC

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**PROJECT INFORMATION**

1. THIS PROJECT SCOPE CONSISTS OF DREDGING THE EPIC MARINE TERMINAL WITHIN THE CORPUS CHRISTI SHIP CHANNEL.
2. BATHYMETRIC SURVEY DATA IS FROM ORION MARINE GROUP SURVEY ENTITLED, "ORION MARINE GROUP SINGLE BEAM SURVEY", 6-12-2020.
3. COORDINATES ARE BASED UPON THE TEXAS STATE PLANE COORDINATE SYSTEM FOR THE LAMBERT SOUTH ZONE NAD83 EPOCH 2002. ELEVATIONS ARE BASED ON MLLW AND MEASURED FROM A TIDE STAFF SET FROM USACE TIDE STAFF.
4. THE DESIGN DREDGE DEPTH FOR THE TERMINAL IS EL. -46.5 FT. MLLW, WITH AN ALLOWABLE 1 FT. OF OVER DREDGE.

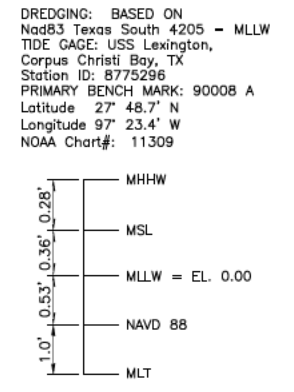
**GENERAL REQUIREMENTS**

1. ALL DREDGING ACTIVITIES SHALL BE IN CONFORMANCE TO ALL PROJECT PERMIT REQUIREMENTS. REFER TO U.S. ARMY CORPS OF ENGINEERS PERMIT NO. SWG-2014-00559.
2. DREDGING ACTIVITIES SHALL NOT BLOCK OR IMPAIR SHIP TRAFFIC ALONG THE NAVIGATION CHANNEL.

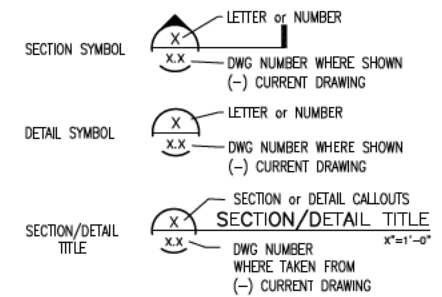
**GENERAL REQUIREMENTS**


3. ALL BARGES AND FLOATING EQUIPMENT SHALL HAVE NAVIGATIONAL LIGHTS IN ACCORDANCE TO US COAST GUARD (USCG) REQUIREMENTS.
4. DREDGE PIPELINES THAT ARE FLOATING OR SUPPORTED ON TRESTLES SHALL DISPLAY PROPER LIGHTING DURING NIGHT AND RESTRICTED VIABILITY PERIODS. SUBMERGED PIPELINES SHALL BE MARKED WITH LIGHTED BUOYS.
5. DREDGE PIPELINES CROSSING ROADWAYS OR ACCESS ROUTES SHALL HAVE ADEQUATE FILL/COVER TO MAINTAIN ACCESS ON EITHER SIDE OF PIPELINE.
6. DREDGE MATERIAL PLACEMENT AREA OUTFALL WILL BE MAINTAINED AND OPERATED TO MEET OUTFALL WATER QUALITY STANDARDS LESS THAN 300 MG/L EFFLUENT DENSITY AS REQUIRED IN TECHNICAL SPECIFICATIONS AND USACE PERMIT NO. SWG-2014-00559.
7. CONTRACTOR SHALL COORDINATE WITH PORT OF CORPUS CHRISTI AUTHORITY AND UNITED STATES ARMY CORPS OF ENGINEERS RESIDENT ENGINEER TO CONFIRM DMPA NO. 2 (HERBIE A. MAURER DMPA) INGRESS AND EGRESS PRIOR TO WORK BEING DONE.
8. UPDATED BD/AD BATHYMETRIC SURVEY OF BEFORE DREDGING AND AFTER DREDGING SHALL BE SUBMITTED TO PCCA.

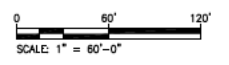
**ELEVATION DATUM:**



**SECTION/DETAIL KEY:**

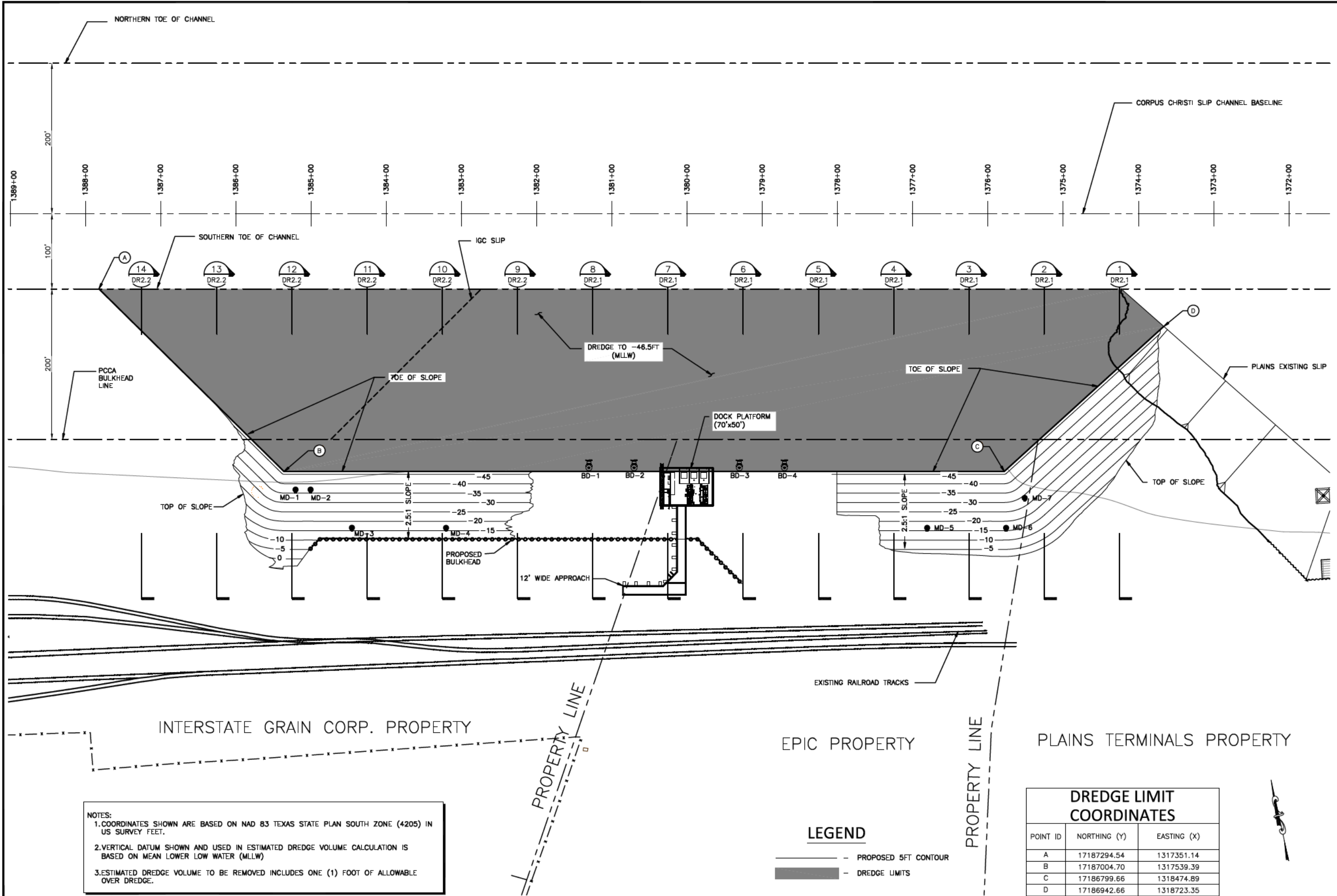



**EXISTING SITE PLAN**  
 1"=60'-0"





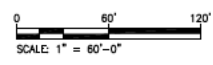
Plot Time: Tuesday, June 23, 2020 - 9:33am - Plotted by: edebreu  
 File Name: I:\Projects\10P00230 - EPIC CRUDE TERM CORPUS CHRISTI\4.0 Drawings\4.10 Working\DREDGE CONST DWGS\10P230 DR1\_1 DREDGE SITE PLAN.dwg Layout Name: MISC



**NOTES:**  
 1. COORDINATES SHOWN ARE BASED ON NAD 83 TEXAS STATE PLAN SOUTH ZONE (4205) IN US SURVEY FEET.  
 2. VERTICAL DATUM SHOWN AND USED IN ESTIMATED DREDGE VOLUME CALCULATION IS BASED ON MEAN LOWER LOW WATER (MLLW)  
 3. ESTIMATED DREDGE VOLUME TO BE REMOVED INCLUDES ONE (1) FOOT OF ALLOWABLE OVER DREDGE.

**LEGEND**  
 - - - - - PROPOSED 5FT CONTOUR  
 [SHADING] DREDGE LIMITS

DREDGE LIMIT COORDINATES		
POINT ID	NORTHING (Y)	EASTING (X)
A	17187294.54	1317351.14
B	17187004.70	1317539.39
C	17186799.66	1318474.89
D	17186942.66	1318723.35



**DREDGE SITE PLAN**  
 1"=60'-0"

June 23, 2020

DESIGNED: MHC  
 DRAWN: ACB  
 CHECKED: SAW  
 APPROVED: GLS

PREPARED FOR:

5430 West Tyson Ave.  
 Tampa, FL 33611  
 Texas Certificate of Authorization Number, F-14492

ISSUED FOR CONSTRUCTION

EPIC MARINE TERMINAL  
 DREDGING CONSTRUCTION PLANS  
 CORPUS CHRISTI, TEXAS

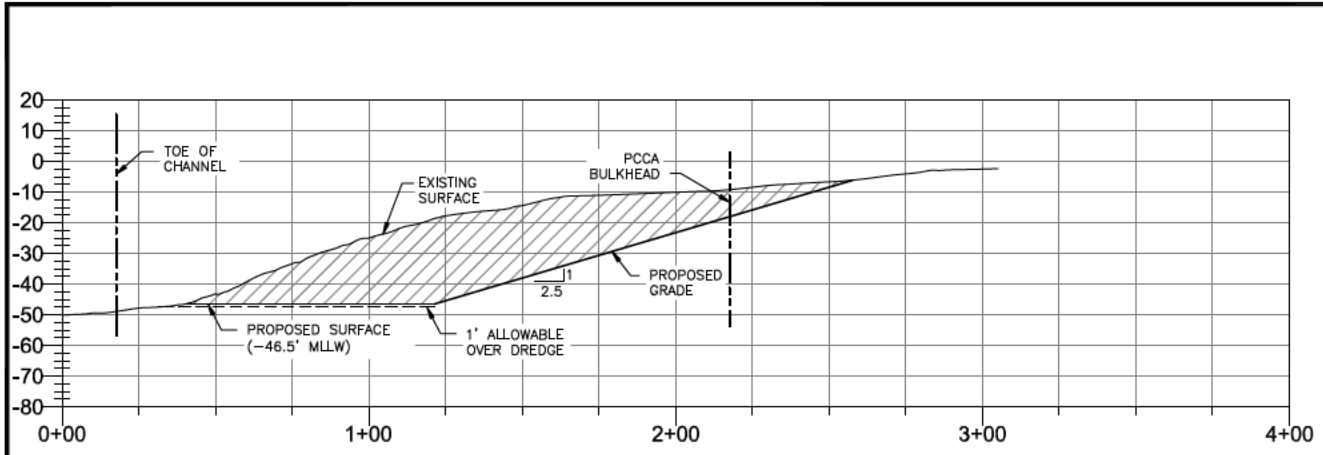
DREDGE  
 SITE PLAN

	PROJ. NO. 10P-00230 DRAWING NO. DR1.1 DATE: 6/22/20 W/C
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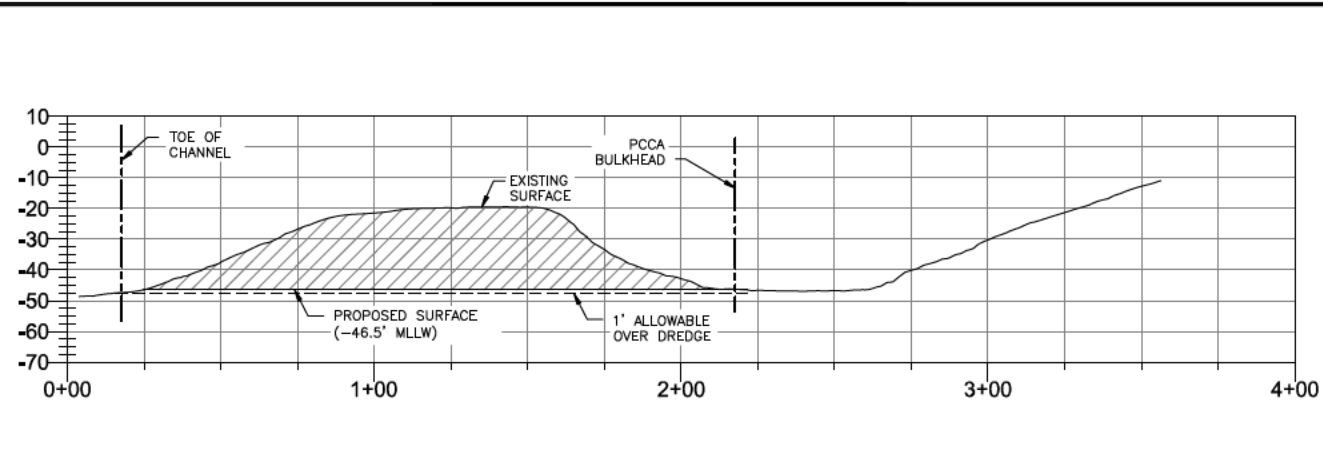
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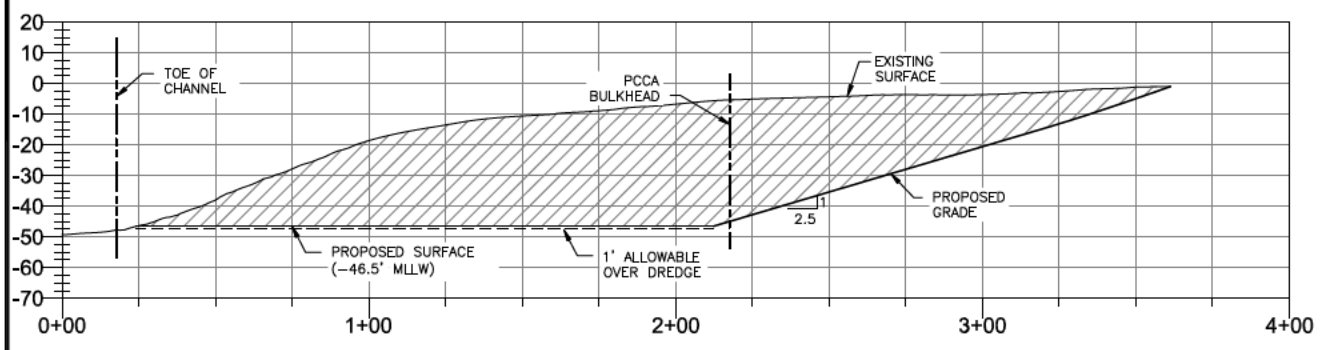
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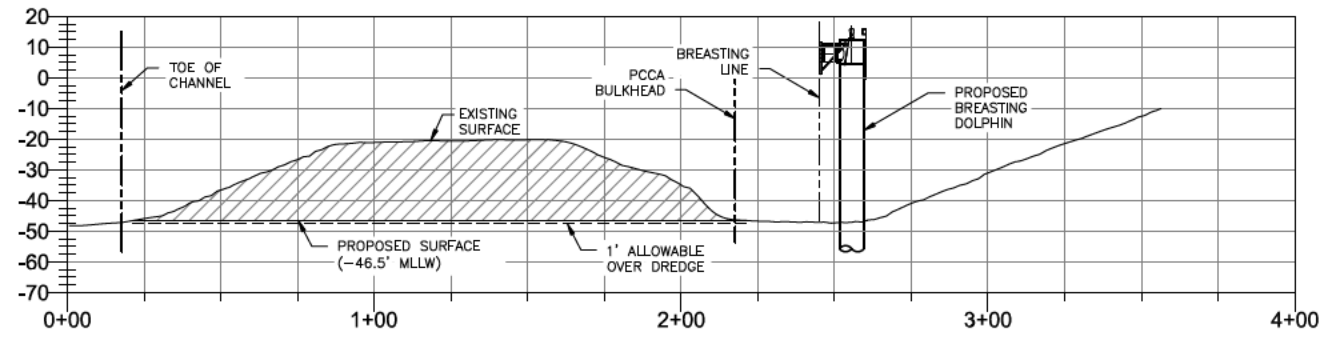
1 STA 1374+25  
 DR1.1 1"=30'



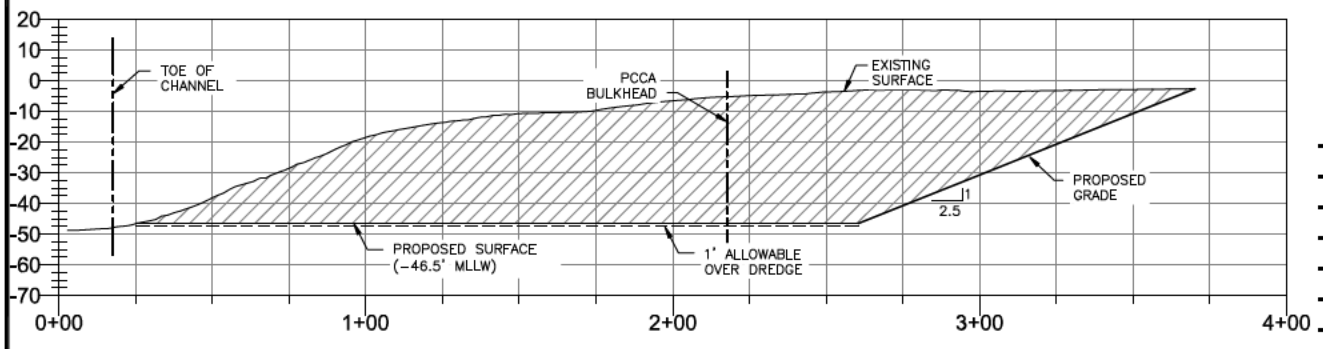
5 STA 1378+25  
 DR1.1 1"=30'



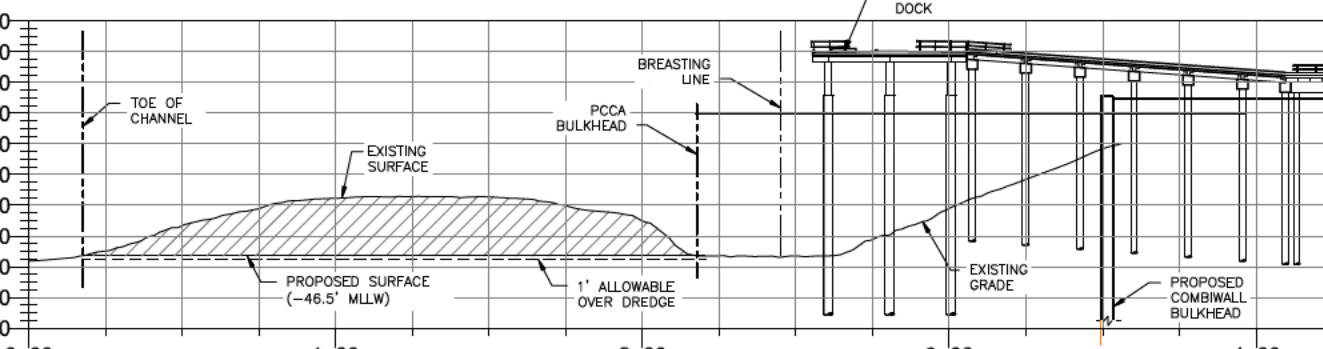
2 STA 1375+25  
 DR1.1 1"=30'



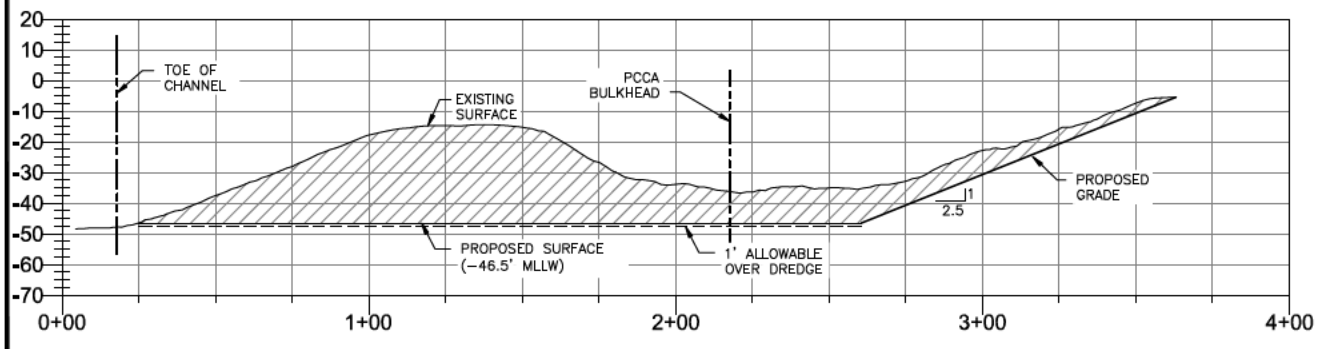
6 STA 1379+25  
 DR1.1 1"=30'



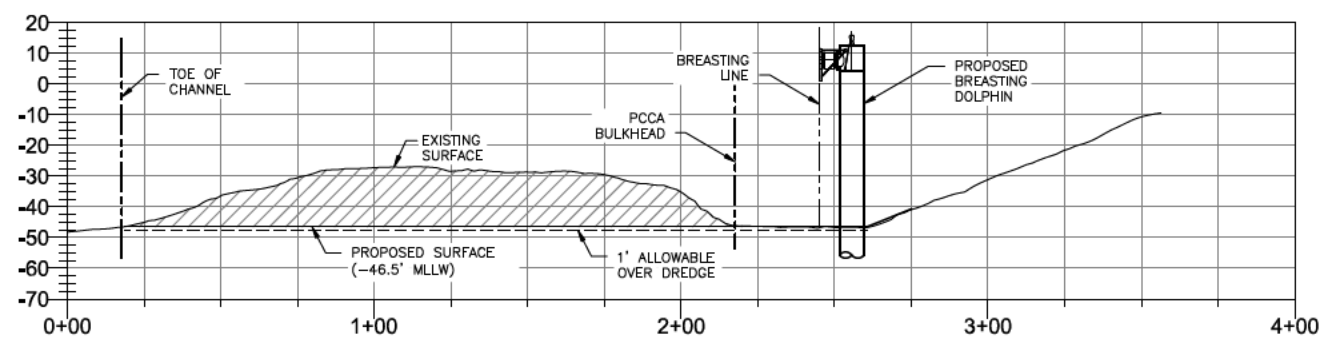
3 STA 1376+25  
 DR1.1 1"=30'



7 STA 1380+25  
 DR1.1 1"=30'



4 STA 1377+25  
 DR1.1 1"=30'



8 STA 1381+25  
 DR1.1 1"=30'

June 23, 2020  
 P.E. No. [blank]  
 Designed: WHC  
 Drawn: ACD  
 Checked: SAW  
 Approved: GLS



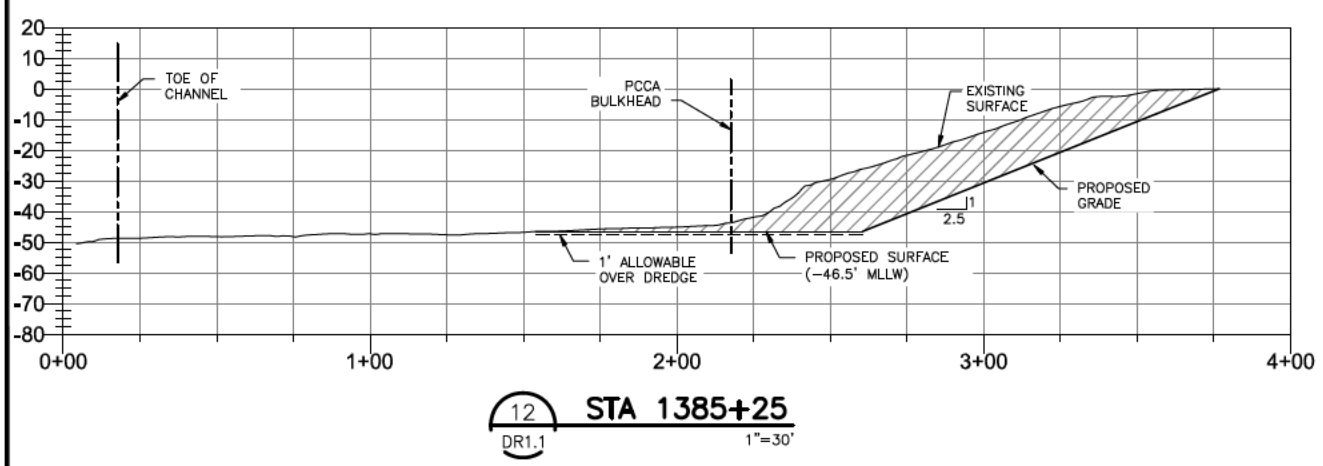
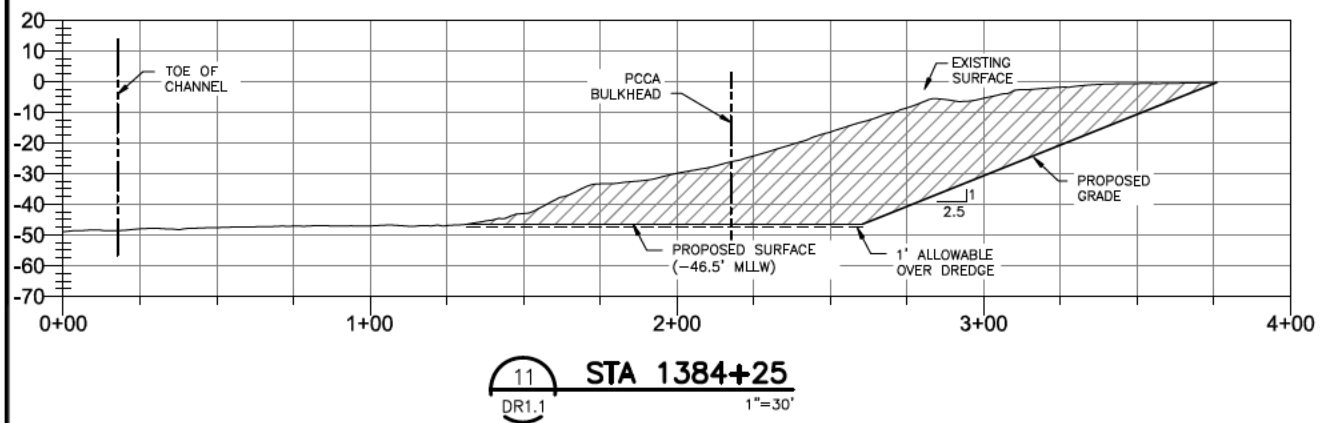
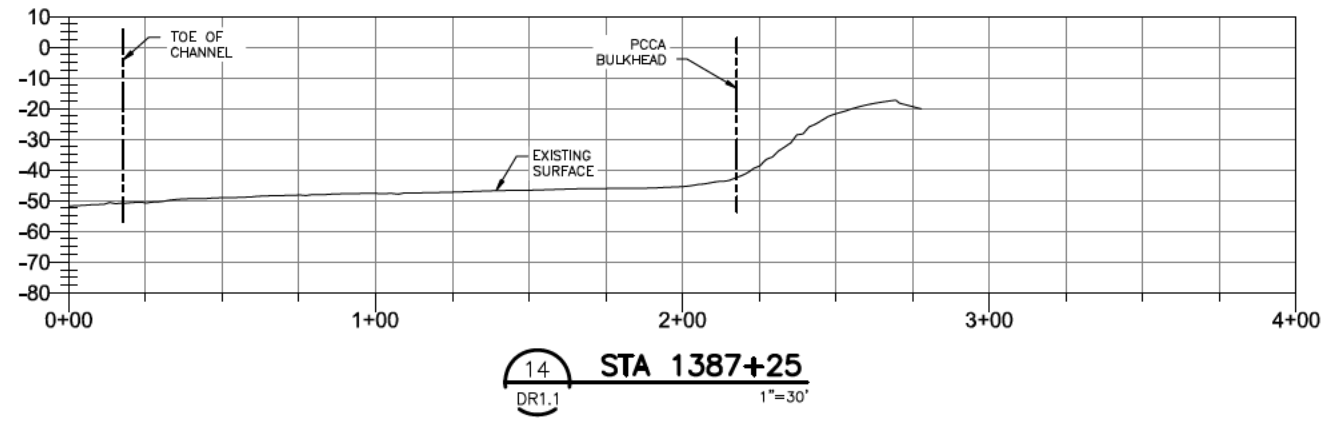
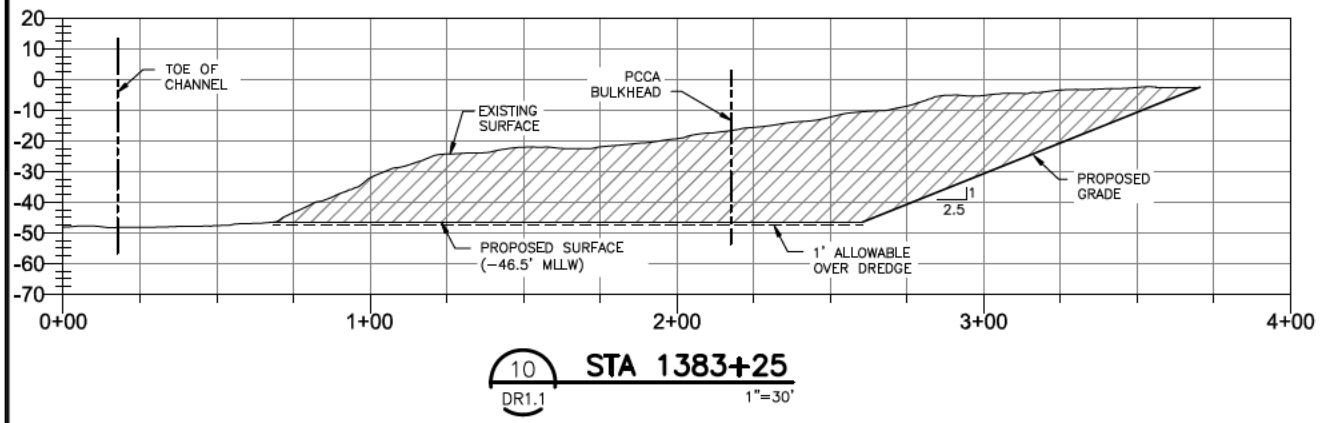
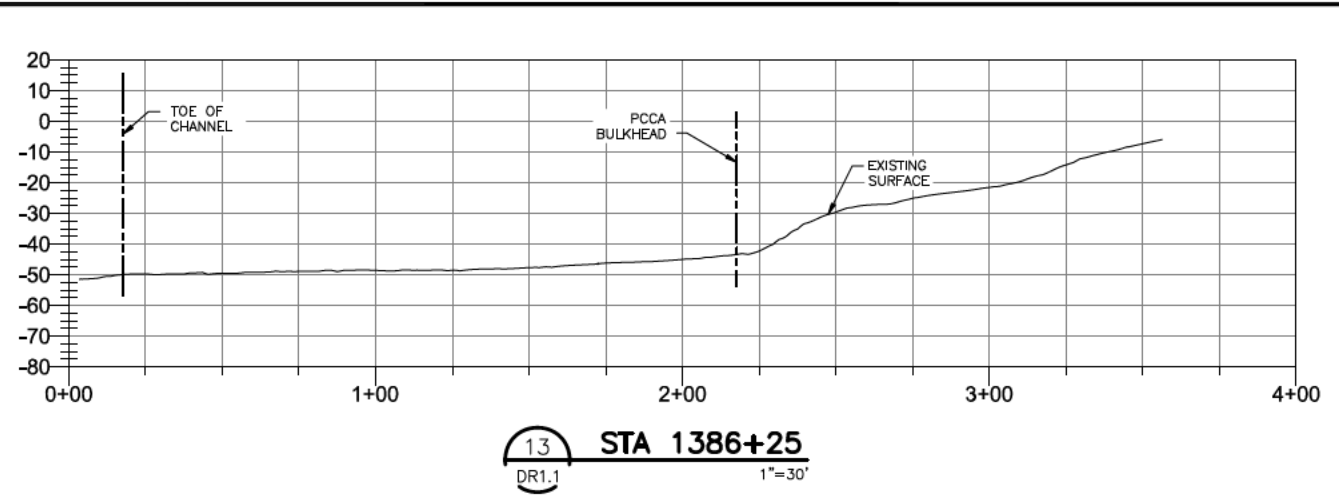
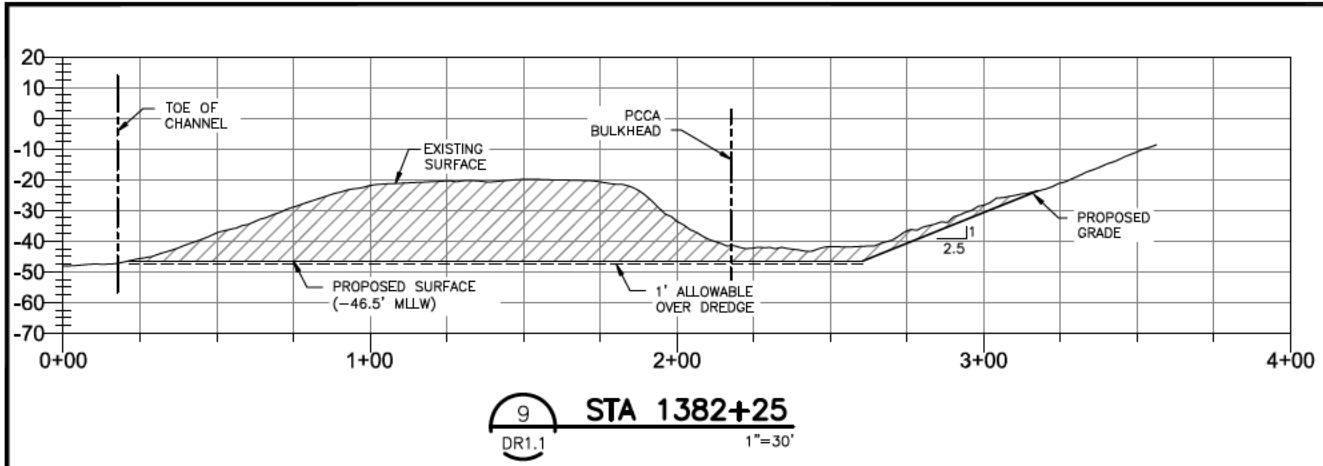
PREPARED FOR:  
**SCHNEIDER ENGINEERING & CONSULTING**  
 5430 West Tyson Ave.  
 Tampa, FL 33611  
 Texas Certificate of Authorization Number, F-14492

EPIC MARINE TERMINAL  
 DREDGING CONSTRUCTION PLANS  
 CORPUS CHRISTI, TEXAS  
 EPIC DOCK  
 CROSS SECTIONS - 1

ISSUED FOR CONSTRUCTION

PROJ. NO.	10P-00230
DRAWING NO.	DR2.1
DATE	6/22/20
BY	WHC
SCALE	AT 22" x 34" BAR IS ONE INCH

Plot Time: Tuesday, June 23, 2020 - 9:53am Plotted by: adebreu  
 File Name: I:\Projects\10P00230 - EPIC CRUDE TERM CORPUS CHRISTI\4.0 Drawings\4.10 Working\DREDGE CONST DWGS\10P230 DR2\_1 CROSS SECTIONS.dwg Layout Name: DR2\_2



ESTIMATED DREDGE VOLUMES			
STATION	AREA (SF)	VOLUME (CY)	CUMULATIVE VOLUME (CY)
1373+66	0.00		
1374+25	3263.83	3566.04	3566
1375+25	8160.69	21156.52	24722.56
1376+25	9384.35	32490.81	57213.37
1377+25	4902.24	26456.65	83670.02
1378+25	3122.29	14860.24	98530.26
1379+25	3494.13	12252.63	110782.89
1380+25	2788.01	11633.59	122416.48
1381+25	2738.28	10233.87	132650.35
1382+25	3927.36	12343.78	144994.13
1383+25	6579.37	19456.91	164451.04
1384+25	4328.48	20199.72	184650.76
1385+25	2127.70	11955.89	196606.65
1386+25	0.00	3940.19	200546.83
1387+25	0.00	0.00	200546.83
1387+82	0.00	0.00	200546.83

ESTIMATED TOTAL DREDGE QUANTITIES:  
 DREDGE DEPTH TO EL. -46.5' MLLW = 200546.83  
 ALLOWABLE 1' OVER DREDGE = 10816.2  
 TOTAL VOLUME = 211363.03

June 23, 2020

P.E. NO. 120976  
 WILLIAM L. CHRISTI  
 PROFESSIONAL ENGINEER

DESIGNED: WHC  
 DRAWN: WHC  
 CHECKED: ACB  
 APPROVED: SWW  
 GLS

**ORION**

PREPARED FOR:  
**SCHNEIDER ENGINEERING & CONSULTING**  
 5430 West Tyson Ave.  
 Tampa, FL 33611  
 Texas Certificate of Authorization Number, F-14492

ISSUED FOR CONSTRUCTION

EPIC MARINE TERMINAL  
 DREDGING CONSTRUCTION PLANS  
 CORPUS CHRISTI, TEXAS

EPIC DOCK  
 CROSS SECTIONS - 2

PROJ. NO. 10P-00230  
 DRAWING NO. DR2.2

6/22/20 WHC

0 IFC DREDGE PLANS  
 AT 22" x 34" BAR IS ONE INCH

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Plot Time: Tuesday, June 23, 2020 - 9:34am Plotted by: adebbreu  
 File Name: I:\Projects\10P00230 - EPIC CRUDE TERM CORPUS CHRISTI\4.0 Drawings\4.10 Working\DREDGE CONST DWGS\10P230 DR3.1 DREDGE DISCHARGE PIPELINE ROUTE.dwg Layout Name: Plotting



**DREDGE PIPELINE ROUTE**  
 NTS

- NOTES:
1. CONTRACTOR TO COORDINATE DREDGE OPERATIONS WITH PCCA AND PCCA'S GEOTECHNICAL INVESTIGATION CONTRACTOR.
  2. CONTRACTOR SHALL ENSURE DREDGE PIPELINE DOES NOT ENCR OACH ON PRIVATE PROPERTY OR OBSTRUCT OTHER DOCKS.
  3. THERE ARE NO FLOATING DREDGE PIPE LINES.

ISSUED FOR CONSTRUCTION

PROJ. NO.	10P-00230
DRAWING NO.	DR3.1
DATE	6/22/20
BY	WJC
SCALE	AS SHOWN
AT 22" x 34" BAR IS ONE INCH	

EPIC MARINE TERMINAL  
 DREDGING CONSTRUCTION PLANS  
 CORPUS CHRISTI, TEXAS  
 DREDGE PIPELINE ROUTE

PREPARED BY:  
**SCHNEIDER ENGINEERING & CONSULTING**  
 5430 West Tyson Ave.  
 Tampa, FL 33611  
 Texas Certificate of Authorization Number, F-14492

PREPARED FOR:  
**ORION**

June 23, 2020  
 P.E. NO.  
 Designed: WJC  
 Drawn: ACD  
 Checked: SWW  
 Approved: GLS



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