

EUSTIS ENGINEERING SERVICES, L.L.C.

GEOTECHNICAL ENGINEERS

3011 25TH STREET

METairie, LOUISIANA

SITE VICINITY MAP

**BERTUCCI CONTRACTING CORPORATION
BANK STABILITY ANALYSES
JEFFERSON, LOUISIANA**

DRAWN BY: J.L.S.

PLOT DATE: 26 SEPT 11

CADD FILE:
SITE VICINITY.DGN

CHECKED BY: M.K.M.

JOB NO.: 21555

FIGURE 1



NOTES:

1. UPPER REACH ANALYSIS PERFORMED AT STATION 3+00 (SEE FIGURES 3 AND 5).
2. LOWER REACH ANALYSIS PERFORMED AT STATION 12+00 (SEE FIGURES 4 AND 6).

EUSTIS ENGINEERING SERVICES, L.L.C.

GEOTECHNICAL ENGINEERS

3011 28TH STREET

METairie, LOUISIANA

PLAN VIEW

BERTUCCI CONTRACTING CORPORATION
BANK STABILITY ANALYSES
JEFFERSON, LOUISIANA

DRAWN BY: J.L.S.

PLOT DATE: 14 DEC 11

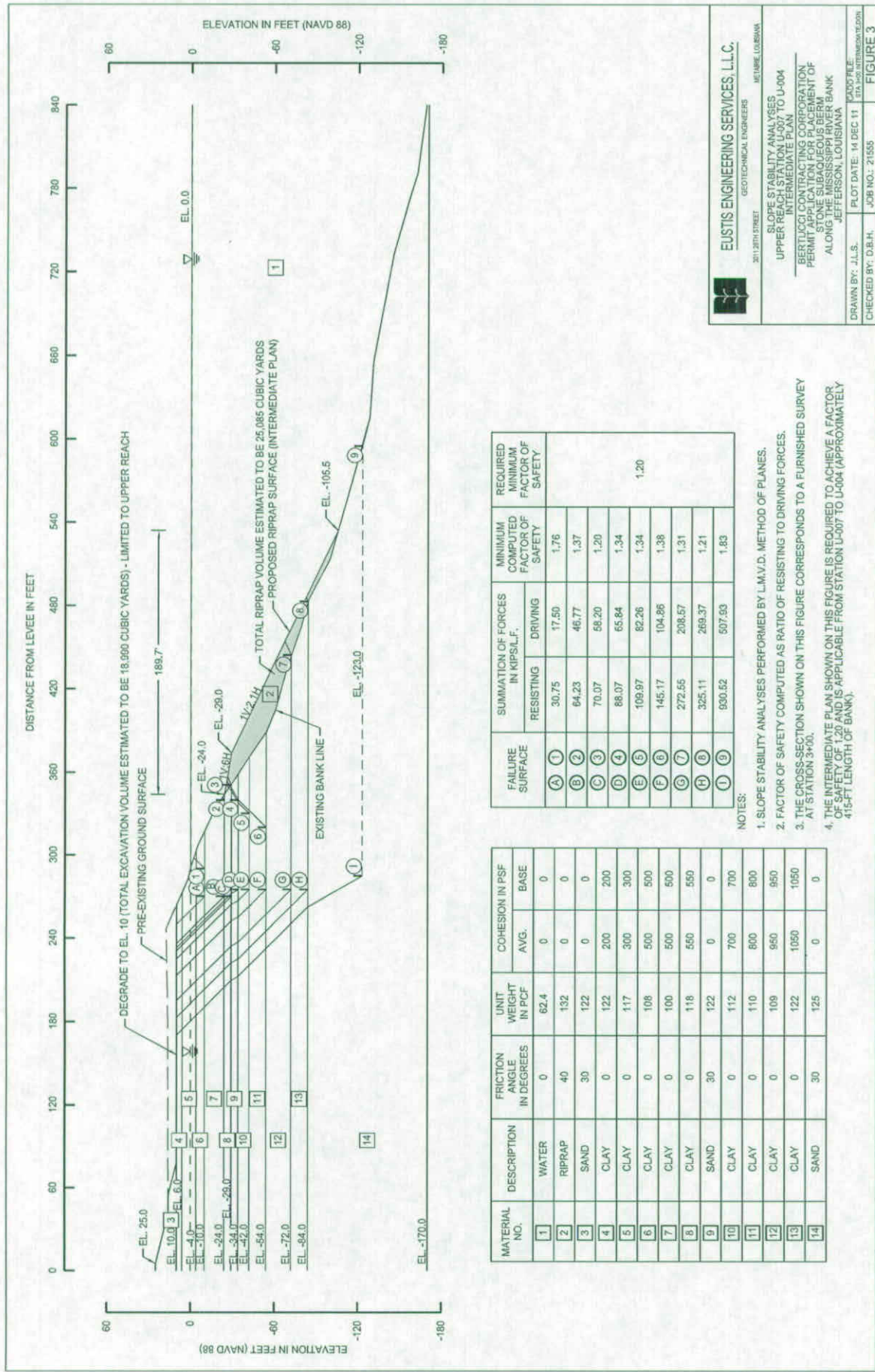
CADD FILE:

PLAN VIEW 12-13 DBH.DGN

CHECKED BY: J.J.H.

JOB NO.: 21555

FIGURE 2

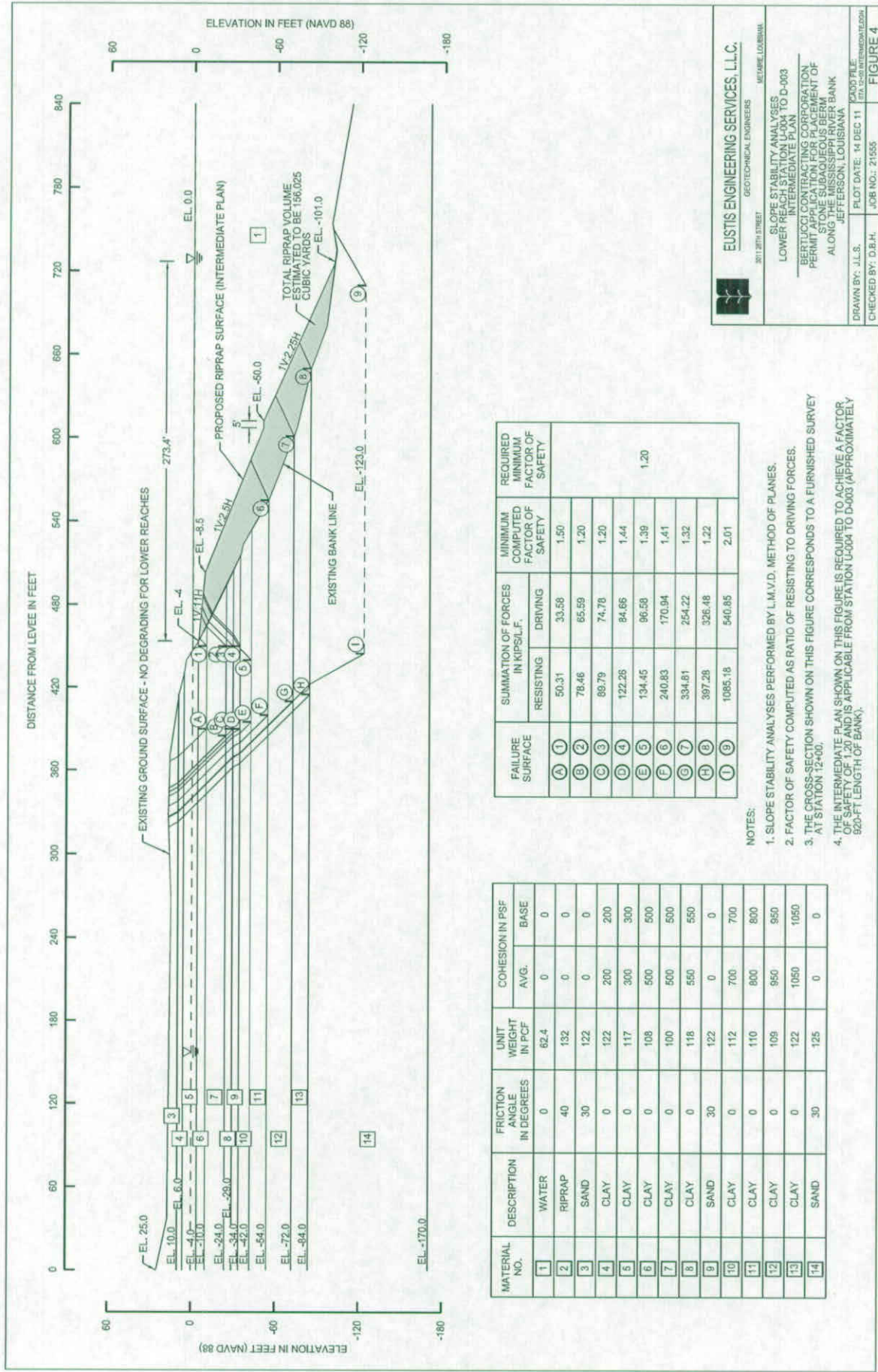


FAILURE SURFACE	SUMMATION OF FORCES IN KIPS/L.F.		MINIMUM COMPLETED FACTOR OF SAFETY	REQUIRED MINIMUM FACTOR OF SAFETY
	RESISTING	DRIVING		
(A) 1	30.75	17.50	1.76	1.20
(B) 2	64.23	46.77	1.37	
(C) 3	70.07	58.20	1.20	
(D) 4	88.07	65.84	1.34	
(E) 5	109.97	82.26	1.34	
(F) 6	145.17	104.86	1.38	
(G) 7	272.55	208.57	1.31	
(H) 8	325.11	269.37	1.21	
(I) 9	930.52	507.93	1.83	

NOTES:

- SLOPE STABILITY ANALYSES PERFORMED BY L.M.V.D. METHOD OF PLANES.
- FACTOR OF SAFETY COMPUTED AS RATIO OF RESISTING TO DRIVING FORCES.
- THE CROSS-SECTION SHOWN ON THIS FIGURE CORRESPONDS TO A FURNISHED SURVEY AT STATION 3+00.0.
- THE INTERMEDIATE PLAN SHOWN ON THIS FIGURE IS REQUIRED TO ACHIEVE A FACTOR OF SAFETY OF 1.20 AND IS APPLICABLE FROM STATION U-007 TO U-004 (APPROXIMATELY 415-FT LENGTH OF BANK).

MATERIAL NO.	DESCRIPTION	FRICTION ANGLE IN DEGREES	UNIT WEIGHT IN PCF	COHESION IN PSF	
				AVG.	BASE
1	WATER	0	62.4	0	0
2	RIPRAP	40	132	0	0
3	SAND	30	122	0	0
4	CLAY	0	122	200	200
5	CLAY	0	117	300	300
6	CLAY	0	108	500	500
7	CLAY	0	100	500	500
8	CLAY	0	118	550	550
9	SAND	30	122	0	0
10	CLAY	0	112	700	700
11	CLAY	0	110	800	800
12	CLAY	0	109	950	950
13	CLAY	0	122	1050	1050
14	SAND	30	125	0	0



MATERIAL NO.	DESCRIPTION	FRICTION ANGLE IN DEGREES	UNIT WEIGHT IN PCF	COHESION IN PSF	
				AVG.	BASE
1	WATER	0	62.4	0	0
2	RIPRAP	40	132	0	0
3	SAND	30	122	0	0
4	CLAY	0	122	200	200
5	CLAY	0	117	300	300
6	CLAY	0	108	500	500
7	CLAY	0	100	500	500
8	CLAY	0	118	550	550
9	SAND	30	122	0	0
10	CLAY	0	112	700	700
11	CLAY	0	110	800	800
12	CLAY	0	109	950	950
13	CLAY	0	122	1050	1050
14	SAND	30	125	0	0

FAILURE SURFACE	SUMMATION OF FORCES IN KIPLSF.		MINIMUM COMPUTED FACTOR OF SAFETY	REQUIRED MINIMUM FACTOR OF SAFETY
	RESISTING	DRIVING		
A 1	50.31	33.58	1.50	1.20
B 2	78.46	65.59	1.20	
C 3	89.79	74.78	1.20	
D 4	122.28	84.66	1.44	
E 5	134.45	96.58	1.39	
F 6	240.83	170.94	1.41	
G 7	334.81	254.22	1.32	
H 8	397.28	326.48	1.22	
I 9	1085.18	540.85	2.01	

