Project No. 03-859-030 Client: United States Army Corps of Engineers

Project: Corpus Christi Ship Channel Improvements - LaQuinta Extension; Contract DACW64-03-D-0008; Delivery Order 0030

Boring No.	Depth (feet)	Soil Description	USCS	Water Content (%)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plast. Index	Finer than #200 Sieve (%)	Uc/UU. Compr. (tsf)	Cell Press. (psi)	Failure Strain (%)	Failure Type
	4-6	Light gray and gray FAT CLAY; traces of calcareous nodules	CH	31.9									
	6-8	Light gray and gray FAT CLAY	CH	29.3									
	8-10	Light gray and tan FAT CLAY	CH	27.1									
	10-12	Tan FAT CLAY with SAND	CH	22.2		66	21	45	82.9				
04-187													
	0-2	Light gray and gray FAT CLAY	CH	20.5									
	2-4	Gray and dark gray FAT CLAY	CH	19.1									
	4-6	Light gray and tan FAT CLAY with SAND	CH	22.4		65	22	43	76.1				
	6-8	Tan FAT CLAY	CH	25.6									
	8-10	Tan and gray FAT CLAY	CH	22.2									
	10-12	Tan FAT CLAY	CH	23.8									

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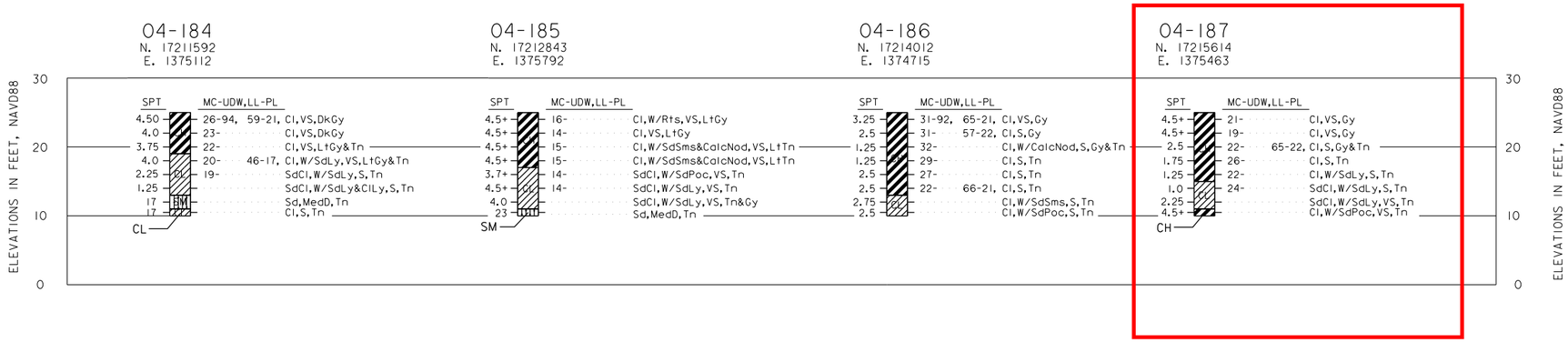
PLACEMENT AREA NO. 14



NOTE:
SEE DRAWING C-2 FOR BORING LOCATIONS.

BORING NOTES;

1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH ASTM 2487-93 "CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOILS CLASSIFICATION SYSTEM)". CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, LOOSE, DENSE, ETC., ARE RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED SHEAR STRENGTH OF THE MATERIAL AS DETERMINED BY VISUAL CLASSIFICATION POCKET PENETROMETER TESTS AND PENETRATION RESISTANCE DURING SAMPLING.
2. FIGURES TO THE RIGHT OF BORING LOGS ARE WATER CONTENTS IN PERCENT OF THE DRY WEIGHT, DRY DENSITY, LIQUID LIMIT, PLASTIC LIMIT, AND BAR LINEAR SHRINKAGE. (MC-UDW),(LL-PL),(B.L.S.)* FIGURES TO THE LEFT OF BORING LOGS ARE BLOWS PER FOOT OF PENETRATION FROM STANDARD PENETRATION TESTING.
3. BORINGS WERE DRILLED USING WET ROTARY DRILLING TECHNIQUES AND UNDISTURBED SAMPLES WERE RECOVERED WITH A 3-INCH DIAMETER THIN WALL SAMPLER WHERE COHESIVE MATERIALS WERE ENCOUNTERED.WHERE COHESIONLESS MATERIALS WERE ENCOUNTERED, DISTURBED SAMPLES WERE TAKEN WITH A SPLIT SPOON SAMPLER DURING PERFORMANCE OF STANDARD PENETRATION TESTING.
4. WATER TABLE LEVELS SHOWN ON BORING LOGS WERE DETERMINED AFTER DRILLING BORINGS BY MEASURING THE TOP OF FLUID LEVELS IN THE BORINGS. INASMUCH AS WET ROTARY DRILLING TECHNIQUES AND DRILLING MUD WERE USED TO DRILL THE HOLES, THE LEVEL OF DRILLING FLUIDS IN THE BORE HOLES MAY NOT HAVE STABLILIZED TO THE LEVEL OF THE ACTUAL WATER TABLE. ADDITIONALLY, WATER TABLES IN THE FIELD ARE LIKELY TO FLUCTUATE DEPENDING ON WEATHER CONDITIONS. THEREFORE, SOME VARIATION SHOULD BE ANTICIPATED BETWEEN WATER TABLES INDICATED AND WATER TABLES ENCOUNTERED IN THE FIELD.

LABORATORY CLASSIFICATION

CH INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.

CL INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, LEAN CLAYS.
CL-ML OR ML-CL CLAY AND SILT MIXTURES WITH SLIGHT PLASTICITY

ML INORGANIC SILTS AND VERY FINE SANDS, WITH SLIGHT PLASTICITY.

SC CLAYEY SANDS, SAND-CLAY MIXTURES.
SC-SM SLIGHTLT SILTY AND CLAYEY SAND, SAND WITH SILTS AND CLAYS.

SM SILTY SANDS, SAND-SILT MIXTURES.

SP POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.
SP-SM SLIGHTLY SILTY SANDS, SANDS WITH SOME SILTS.

VISUAL CLASSIFICATIONS:

Bn Brown(ish)	Gv Gravel(ly)	Si Silty
Calc Calcareous	H Hard	Sms Seams
Cl Clay(ey)	L Loose	So Soft
D Dense	Lt Light	Sta Stain(s)
Dk Dark	Med Medium	Tn Tan(nish)
Fer Ferrous	Nod Nodules	Tr Trace(s)
Fi Fine(s)	Poc Pocket(s)	V Very
F Firm	S Stiff	W With
Frag Fragment(s)	Sd Sand(y)	W.S. Water Surface
Gr Grained	Sh Shell(y)	
Gy Gray(ish)	Siks Slicken Sides	

SOLICITATION NO.
W912HY-
09-B-00

US Army Corps of Engineers
Galveston District

Rev.	Description	Date	By

TIME:$TIME$ DATE:$DATE$ BY:$USER$

Drawn by: P.N. Date: JULY, 2009 Rev. --
Designed by: R.B./J.D.
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U.S. ARMY ENGINEER DISTRICT, GALVESTON
CORPS OF ENGINEERS
GALVESTON, TEXAS

PREPARED UNDER THE DIRECTION OF
DAVID C. WESTON, COL., C.E.
DISTRICT COMMANDER

CORPUS CHRISTI SHIP CHANNEL, TEXAS
CHANNEL IMPROVEMENT PROJECT
LA QUINTA CHANNEL EXTENSION -
PLACEMENT AREA NO. 14

LOGS OF BORINGS P.A. NO.14,
BORING NOTES, & LEGEND

Drawing No.:
F-4
Sheet 8 of 13

File:$FILE$

File No. NUECES 803-334