



MEMO

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FROM: Darmawan Ludirdja
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DATE: January 27, 2009

SUBJECT: Project 11-12.4 Woodbridge Plant – CRCA Fine Aggregate –
 Physical Tests, Proctor and CBR

CC: Teck Chua, Clark Lamb, Daniel Thomas, Don Powell

The Physical tests, proctor and CBR have been completed. The results are shown in Tables 1-2 and also Figures 1-2.

Figure 1. Gradation of Woodbridge Plant - CRCA Fine Aggregate

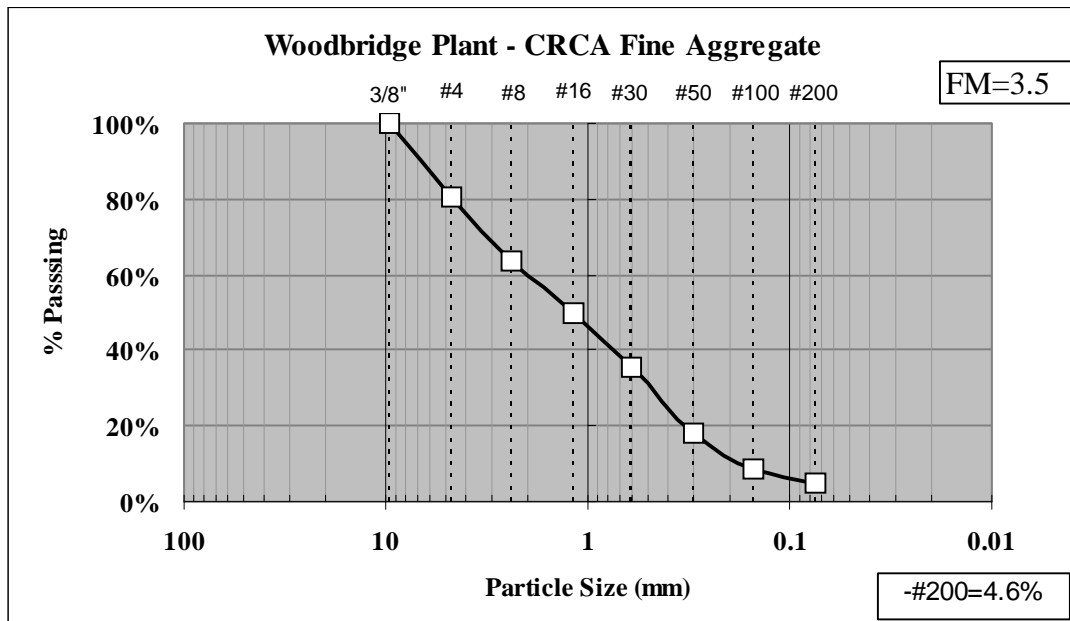


Table 1: Moisture content and Plasticity index results

Test Method	Results
AASHTO T-265, Moisture Content, %	14.2%
VTM 7(AASHTO T-89 & T-90), Plasticity Index	NP
AASHTO T-84, Specific Gravity of Soils (apparent)	2.606

Figure 2: AASHTO T-99 Proctor result

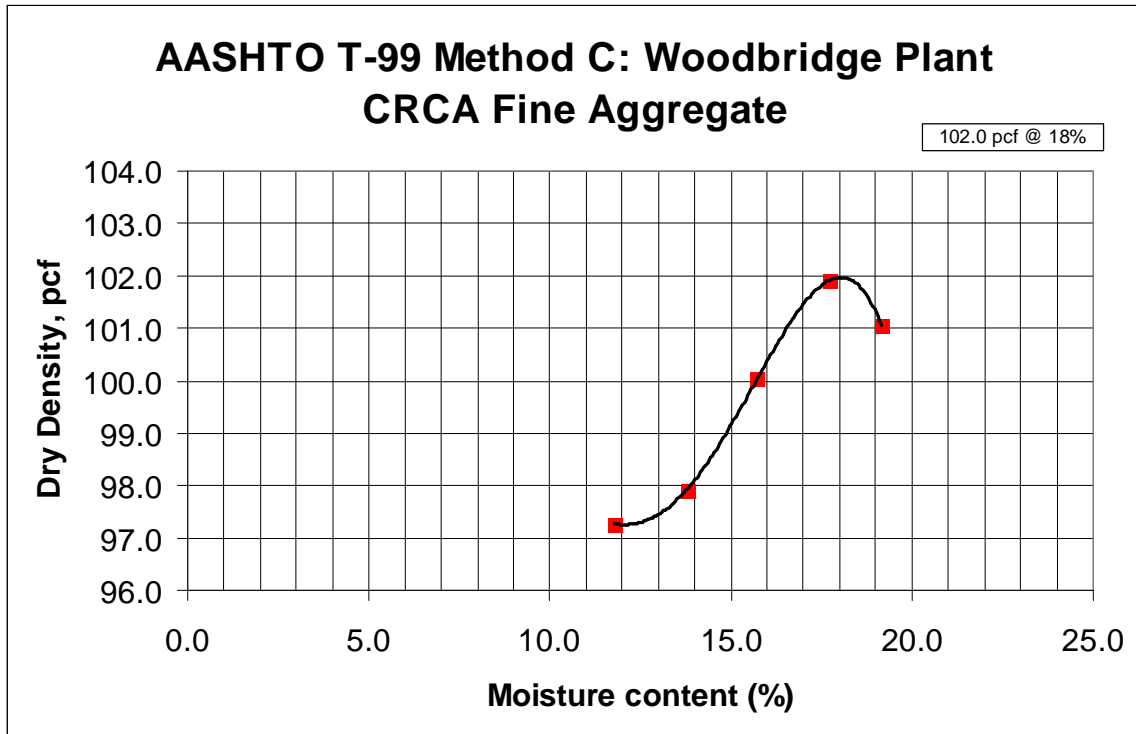
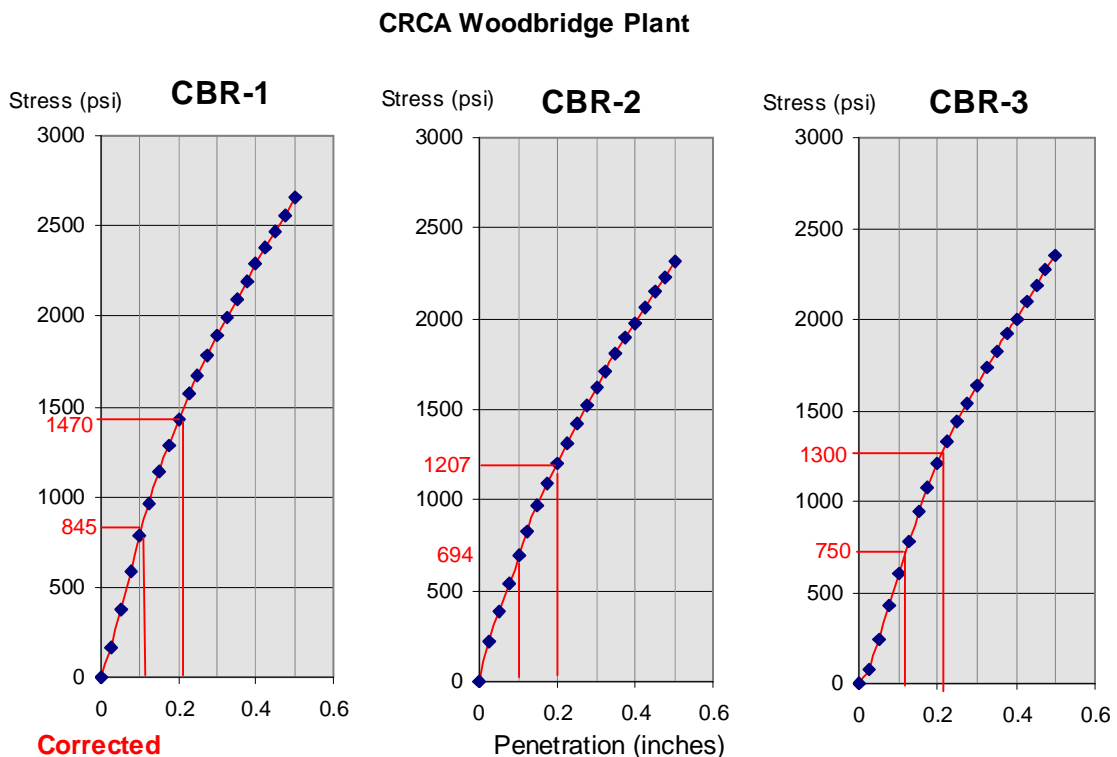


Figure 2. CBR Stress – penetration curves



Corrected by adjusting the origins



Table 2. CBR results

AASHTO T 193 CBR of Laboratory-Compacted Soils				
Data Before Soak				
Sample identification	CBR-1	CBR-2	CBR-3	
Moist density, pcf	121.2	120.4	121.1	
Dry density, pcf	102.7	101.8	102.5	
Moisture content, %	18.0%	18.3%	18.2%	
Data After Soak				
Moist density, pcf	122.7	122.3	122.8	
Dry density, pcf	102.8	102.2	102.7	
Water content from top 1", %	19.4%	19.7%	19.5%	
Swell, %	0.04%	-0.02%	-0.09%	
Corrected CBR Values, %				AVG
@ 0.1 in.	84.5	69.4	75.0	76.3
@ 0.2 in.	98.0	80.5	86.7	88.4

According to ASTM D 2487, Classification of Soils for Engineering Purposes (USCS), the material is categorized as SW (well graded sand).

This completes all of the testing for the project. Please let me know if you have any question / comment.