HENLEY
JOHNSTON
& ASSOCIATES, INC.
engineering geoscience consultants

30 September 2004

City of Dallas
Public Works and Transportation Department
320 E. Jefferson Blvd.
Room 321
Dallas, Texas 75203

Attention: Ms. Liong T. So, P.E.

Re: Harlandale Avenue
QC Testing - ROADBOND EN-1
HJA 7693

Dear Ms. So:

We have completed the 7 and 28-day testing of samples from Harlandale Avenue. We have two samples remaining, and plan to test those samples at 90 and 180 days. We have performed Unconfined Compression Tests in general accordance with ASTM D 2166 and One-dimensional Swell Tests in general accordance with a modified ASTM D 4546. Two sets of illustrations are presented herein. The first set includes summaries of results from the 7-day tests and the second, the results of the 28-day tests. The ages of the samples are noted on the summary sheets.

The average Peak Stress from the 7-day tests is 54.1 psi. The average peak stress for the 28-day tests is 69.3 psi. This indicates an increase in strength in the 21-day interval of about 28 percent. From HJA Report No. 7682, the average strength of the dark gray clay untreated at about Optimum Moisture Content and Maximum Dry Density by ASTM D 698 was indicated to be about 30 psi.

The swell tests vary significantly. Comparing only the samples at 2410N, the swell pressure and percent swell increased over the 28-day interval. However, there is some indication when looking at the six 28-day tests that there is some decrease in both parameters when averaging the 28-day tests and comparing to the 7-day test. Unfortunately, we do not have multiple samples at one location to be able to determine if one or more of the tests is an anomaly. The comparable swell test parameters (percent swell and swell pressure) from the natural clay at the site, as reported in HJA Report No. 7682, were lower than any of the values obtained from this investigation.

telephone (214) 941-3808 fax (214) 943-7645 235 Morgan Ave., Dallas, Texas 75203-1088

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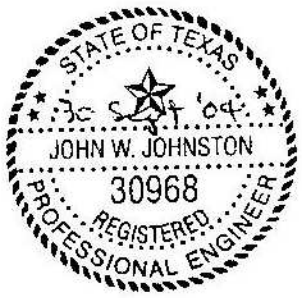
Public Works and Transportation Department
Ms. Liong T. So, P.E.
30 September 2004

We will test the 90 and 180-day samples and send those results when they become available.

We trust this provides the information you need at this time. Please call us if you have any questions or need additional information.

Sincerely,



John W. Johnston, P.E.
Executive Vice President
Henley-Johnston & Associates, Inc.

Enclosures

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28 October 2004

City of Dallas
Public Works and Transportation Department
320 E. Jefferson Blvd.
Room 321
Dallas, Texas 75203

Attention: Ms. Liong T. So, P.E.

Re: Harlandale Avenue
QC Testing - ROADBOND EN-1
HJA 7693

Dear Ms. So:

We have completed the 7, 28 and 56-day testing of samples from 2410N Harlandale Avenue. We have three samples remaining, and plan to test those samples at 112 days, 180 days and 365 days. We have performed Unconfined Compression Tests in general accordance with ASTM D 2166 and One-dimensional Swell Tests in general accordance with a modified ASTM D 4546. Three illustrations are presented herein. The first illustration is a summary of results from the 56-day tests. The stress-strain curve for the Unconfined Compression Test is presented on Plate 2 and the results of the Swell Test are presented graphically on Plate 3. We have not repeated the illustrations which accompanied our letter dated 30 September 2004.

As stated in the 30 September 2004 letter, the average Peak Stress from the 7-day tests is 54.1 psi, and the average peak stress for the 28-day tests is 69.3 psi. For the 2410N address, the values at 7 and 28 days were 85.3 psi and 98.1 psi, respectively. The 56-day value is 110.4 psi. This indicates an continuing increase in strength in the treated material. From HJA Report No. 7682, the average strength of the dark gray clay untreated at about Optimum Moisture Content and Maximum Dry Density by ASTM D 698 was indicated to be about 30 psi.

The swell tests appear to be increasing also. Comparing only the samples at 2410N, the swelf pressure and percent swell increased over the 7 to 28-day interval, and again over the 28 to 56-day interval. The comparable swell test parameters (percent swell and swell pressure) from the natural clay at the site, as reported in HJA Report No. 7682, were lower than any of the values obtained from this investigation.

We will test the 112, 180 and 360-day samples and send those results when they become available.

We trust this provides the information you need at this time. Please call us if you have any questions or need additional information.

Sincerely,

John W. Johnston, P.E.
Executive Vice President
Henley-Johnston & Associates, Inc.

Enclosures

HARLANDALE AVENUE
QC SERVICES
DALLAS, TEXAS

SUMMARY OF LABORATORY TESTS

SUMMARY OF LABORATORY STRENGTH TEST

STREET ADDRESS	SAMPLE NUMBER	AGE (days)	MOISTURE CONTENT (%)	DRY UNIT WEIGHT (pcf)	PEAK STRESS (psi)	FAILURE STRAN (%)	TANGENT MODULUS (ksi)
2410 N	13	56	28.6	91.3	110.4	3.2	7.7

SUMMARY OF PRESSURE - SWELL TEST

STREET ADDRESS	SAMPLE NUMBER	AGE (days)	MC (%)	LL (%)	PI	DUW (pcf)	SWELL (%)	SWELL PRESSURE (psf)	MATERIAL DESCRIPTION
2410 N	13	56	27.1	73	46	95.6	11.04	10554.7	Dark brown clay (CH) w/FOADBOND EN

HENLEY
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engineering geotechnical consultants

DATE

HARLANDALE AVENUE
QC SERVICES
DALLAS, TEXAS

SUMMARY OF LABORATORY TESTS

SUMMARY OF LABORATORY STRENGTH TEST

STREET ADDRESS	SAMPLE NUMBER	AGE (days)	MOISTURE CONTENT (%)	DRY UNIT WEIGHT (pcf)	PEAK STRESS (psi)	FAILURE STRAIN (%)	TANGENT MODULUS (ksi)
2410 N	14	90	26.9	95.2	158.5	4.0	8.40

SUMMARY OF PRESSURE - SWELL TEST

STREET ADDRESS	SAMPLE NUMBER	AGE (days)	MC (%)	LL (%)	PI	DUW (pcf)	SWELL (%)	SWELL PRESSURE (psf)	MATERIAL DESCRIPTION
2410 N	14	90	29.0	77	50	92.2	10.59	10606.5	Dark brown clay (CH), w/ROADBOND EN 1