



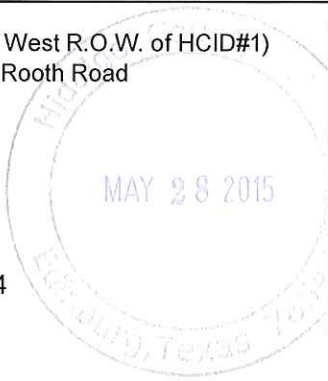
# INVOICE

1506 Mid Cities Dr.  
Pharr, TX 78577  
956-283-8254

Project Mgr: Juan Borjon

**Project:** Mile 17.5 (btwn Ware Rd and West R.O.W. of HCID#1)  
Mile 17.5 between Ware and Rooth Road  
Edinburg, TX 78539

**To:** Hidalgo County  
Attn: Veronica Davis  
1051 N. Doolittle Rd.  
Hidalgo County Precinct #4  
Edinburg, TX 78542



<b>REMIT TO:</b>
<b>Invoice Number: T644257</b>
<b>Terracon Consultants, Inc.</b>
<b>PO Box 843358</b>
<b>Kansas City, MO 64184-3358</b>
<b>Federal E.I.N.: 42-1249917</b>

P.O. Number: 705563

Project Number:	88141019
Invoice Date:	5/18/2015
Services Through:	5/16/2015

Date	Report	Description of Services	Quantity	Rate	Total
4/30/15	88141019.0011	Project Manager, per hour	0.25	\$90.00	\$22.50
4/30/15	88141019.0011	Engineering Technician, hour	3.00	\$43.00	\$129.00
4/30/15	88141019.0011	Engineering Technician, hour	2.00	\$43.00	\$86.00
4/30/15	88141019.0011	Trip Charge/Vehicle Charge, each	1.00	\$20.00	\$20.00
4/30/15	88141019.0011	Atterberg Limit, per test	1.00	\$60.00	\$60.00

**Invoice Total \$317.50**

TERMS: DUE UPON PRESENTATION OF INVOICE

Zimbra

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**Mile 17-1 / 2 Rd. Paving and Drainage Improvements**

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**From :** Jose Alvarez <jose.alvarez@co.hidalgo.tx.us>

Thu, Apr 30, 2015 09:59 AM

**Subject :** Mile 17-1 / 2 Rd. Paving and Drainage Improvements

**To :** Juan Borjon <jmborjon@terracon.com>

**Cc :** jose alvarez <jose.alvarez@co.hidalgo.tx.us>, Areanna E. Yzaguirre <areanna.yzaguirre@co.hidalgo.tx.us>, raul sesin <raul.sesin@hcdd1.org>, Maria Lulu Lucio <maria.lucio@co.hidalgo.tx.us>, Veronica Lopez <veronica.lopez@co.hidalgo.tx.us>

Good Morning Juan,

Please see below for testing request,

Date of Service Requested: [04/30/2015 Thursday](#)

Project : Mile 17-1 / 2 Paving and Drainage Improvements

Time of Needed Services: [10:00AM](#)

Type of Service Requested: [Caliche Proctor Sample Pickup @ Project Site](#)

Note : Time has already been coordinated with J. Borjon

Thank You

Jesse Alvarez  
Construction Inspector  
County of Hidalgo Engineering Projects Office  
301 East State St.  
Pharr, Texas 78577  
956-292-7000 Ext. 2029  
956-533-3992 mobile  
Jose.alvarez@co.hidalgo.tx.us

Sent from my Samsung Galaxy S5  
T-Mobile 4G LTE Device

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# PLASTICITY TEST REPORT

**Report Number:** 88141019.0011  
**Service Date:** 04/30/15  
**Report Date:** 05/05/15  
**Task:** Soils



1506 Mid Cities Dr.  
Pharr, TX 78577  
956-283-8254 Reg No: F-3272

## Client

Hidalgo County  
Attn: Veronica Davis  
1051 N. Doolittle Rd.  
Hidalgo County Precinct #4  
Edinburg, TX 78542

## Project

Mile 17.5 (btwn Ware Rd and West R.O.W. of HCID#1)  
Mile 17.5 between Ware and Rooth Road  
Edinburg, TX 78539

Project Number 88141019

## Material Information

**Source of Material:** Frontera Materials  
**Proposed Use:** Flex Base  
**Soil Description:** Poorly graded gravel  
  
**Classification:** GP

## Sample Information

**Sample Location:** On-site  
  
**Sampled By:** Adrian Rodriguez  
**Sample Date:** 04/30/15

## Laboratory Test Data

	<u>Result</u>	<u>Requirements</u>
<b>Liquid Limit:</b>	37	
<b>Plastic Limit:</b>	20	
<b>Plasticity Index:</b>	17	
<b>In-Place Moist. (%):</b>		

**Liquid Limit Method:** Method A  
**Sample Preparation:** Wet

**Comments:** The flex base material does not meet project requirements. The max PI should be a 12 as per project plans.

**Services:** Obtain sample of proposed flexible base material from the project site and return it to the laboratory. Prepare and test the sample for plasticity index.

**Terracon Rep.:** Adrian Rodriguez

**Reported To:** Jesse Alvarez w/Hidalgo County

**Contractor:**

### Report Distribution:

(1) Hidalgo County, Veronica Davis	(1) City of McAllen, Emailed
(1) City of McAllen, Emailed	(1) Hidalgo County, Emailed
(1) Hidalgo County, Emailed	(1) Hidalgo County, Emailed
(1) Hidalgo County, Emailed	

**Reviewed By:** Juan Borjon  
Juan Borjon  
Project Manager I-Professional

### Test Methods: ASTM D4318

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

# PLASTICITY TEST REPORT

**Report Number:** 88141019.0011  
**Service Date:** 04/30/15  
**Report Date:** 05/06/15 Revision 1 - Input Gradation Table  
**Task:** Soils

# Terracon

1506 Mid Cities Dr.  
Pharr, TX 78577  
956-283-8254 Reg No: F-3272

## Client

Hidalgo County  
Attn: Veronica Davis  
1051 N. Doolittle Rd.  
Hidalgo County Precinct #4  
Edinburg, TX 78542

## Project

Mile 17.5 (btwn Ware Rd and West R.O.W. of HCID#1)  
Mile 17.5 between Ware and Rooth Road  
Edinburg, TX 78539

Project Number 88141019

## Material Information

**Source of Material:** Frontera Materials  
**Proposed Use:** Flex Base  
**Soil Description:** Poorly graded gravel with clay  
**Classification:** GP-GC

## Sample Information

**Sample Location:** On-site  
**Sampled By:** Adrian Rodriguez  
**Sample Date:** 04/30/15

## Laboratory Test Data

	<u>Result</u>	<u>Requirements</u>
<b>Liquid Limit:</b>	37	
<b>Plastic Limit:</b>	20	
<b>Plasticity Index:</b>	17	
<b>In-Place Moist. (%):</b>		
<b>Passing #200 (%):</b>	6.0	

**Liquid Limit Method:** Method A  
**Sample Preparation:** Wet

**Comments:** The flex base material does not meet project requirements. The max PI should be a 12 as per project plans.

**Services:** Obtain sample of proposed flexible base material from the project site and return it to the laboratory. Prepare and test the sample for plasticity index.

**Terracon Rep.:** Adrian Rodriguez

**Reported To:** Jesse Alvarez w/Hidalgo County

**Contractor:**

### Report Distribution:

(1) Hidalgo County, Veronica Davis	(1) City of McAllen, Emailed
(1) City of McAllen, Emailed	(1) Hidalgo County, Emailed
(1) Hidalgo County, Emailed	(1) Hidalgo County, Emailed
(1) Hidalgo County, Emailed	

**Reviewed By:** Juan Borjon

rvw2: aas

Juan Borjon

Project Manager I-Professional

### Test Methods: ASTM D4318

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# PLASTICITY INDEX OF SOILS REPORT



**Report Number:** 88141019.0011  
**Service Date:** 04/30/15  
**Report Date:** 05/06/15 Revision 1 - Input Gradation Table  
**Task:** Soils

1506 Mid Cities Dr.  
 Pharr, TX 78577  
 956-283-8254 Reg No: F-3272

## Client

Hidalgo County  
 Attn: Veronica Davis  
 1051 N. Doolittle Rd.  
 Hidalgo County Precinct #4  
 Edinburg, TX 78542

## Project

Mile 17.5 (btwn Ware Rd and West R.O.W. of HCID#1)  
 Mile 17.5 between Ware and Rooth Road  
 Edinburg, TX 78539

Project Number: 88141019

**Sample I.D.:** Flex Base Material  
**Sample Source:** Frontera Materials  
**Date Sampled:** April 30, 2015  
**Sampled By:** Adrian Rodriguez

FLEXBASE SIEVE ANALYSIS (Type D Grade 6) (Plans)		
Sieve Size	Percent Retained	Specification
2"	0	0%
1/2"	40	20% to 60%
No. 4	62	40% to 75%
No. 40*	89	75% to 85%

Atterberg Limits		Specifications
Liquid Limit	37	--
Plasticity index*	17	Max. 12

**Note:** The Flex Base Material Atterberg Limits and Sieve Analysis does not meet Specifications for Type D Grade 6 materials as per project plans.

**Services:** Obtain sample of proposed flexible base material from the project site and return it to the laboratory. Prepare and test the sample for plasticity index.

**Terracon Rep.:** Adrian Rodriguez

**Reported To:** Jesse Alvarez w/Hidalgo County

**Contractor:**

**Report Distribution:**

- (1) Hidalgo County, Veronica Davis
- (1) City of McAllen, Emailed
- (1) City of McAllen, Emailed
- (1) Hidalgo County, Emailed
- (1) Hidalgo County, Emailed
- (1) Hidalgo County, Emailed
- (1) Hidalgo County, Emailed

**Reviewed By:**  
 rvw2: aas

Juan Borjon

Project Manager I-Professional

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.