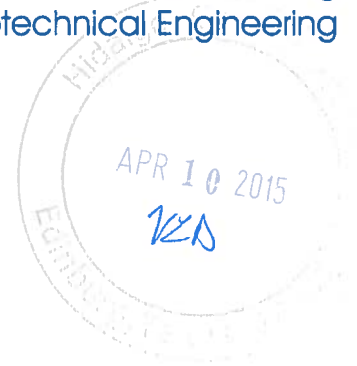


# L&G Engineering Laboratory

Construction Material Testing  
Geotechnical Engineering

March 27, 2015



Commissioner Joseph Palacios  
Attn: Maria "LuLu" Lucio  
Hidalgo County, Pct. #4  
1102 N. Doolittle Rd.  
Edinburg, Texas 78539

**RE: Linn San Manuel Facility**

Dear Ms. Lucio:

Included for your use with this letter are test reports **R044 thru R048** for **Construction Material Testing** performed on the above referenced project. As noted on **R048**, several locations failed to meet requirements. L&G will coordinate with the County to schedule re-test.

L&G Engineering Laboratory appreciates the opportunity to serve your material testing needs on this project and we look forward to working with you in the future.

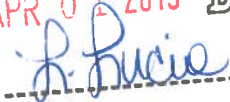
If you have any questions, feel free to contact me at 956-565-0760.

Sincerely,

  
Ricardo A. Gil  
General Manager

Attachments

CC: JCON Construction, LLC, Mr. Juan Jose Pena Jr.

RECEIVED  
APR 01 2015  
BY: 



**PROCTOR**  
**TEST REPORT**

Project Description: Linn San Manuel Facility  
 Client: Hidalgo County Pct. #4  
 Contractor: JCON Construction, LLC

L&G Project Number: L1301404  
 L&G Report Number: R044  
 Sample Date: 03/06/2015  
 Date Reported: 03/06/2015

Client PO: 713423

Page 1 of 1

Compaction Method: TEX 113  
 Material Description: Base Material (Caliche)

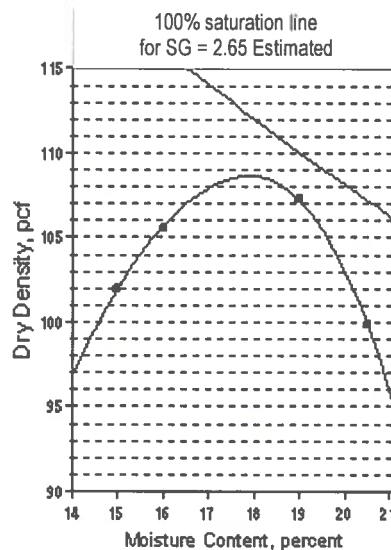
Specific Gravity: 2.65

Liquid Limit: 34  
 Plastic Limit: 19  
 Plasticity Index: 15

Group Symbol: CL

Specimen No.:	1	2	3	4
Moisture, %:	14.9	16.1	19.1	20.4
Dry Density (pcf):	101.5	105.5	107.2	100.5

Maximum Dry Density in P.C.F.: 108.6  
 Optimum Moisture (%): 18.0



Remarks: Sampled from Martin Marieta Pit  
 Test Method: TEX 113-E, TEX 104-E, TEX 105-E, TEX 106-E

*Moisture Density, Determination of Liq. limit of soils, Atterberg Limits*

Orig: Hidalgo County Pct. #4 (Gen.) (Hidalgo County Pct. #4)  
 (Edinburg, TX) Attn: Raul Sesin  
 (1-cc copy)  
 1-cc JCON Construction, LLC  
 Attn: Juan Jose Pena Jr.  
 1-cc Laboratory

Respectfully Submitted,  
 L&G Engineering Laboratory

Ricardo A. Gil, Lab Manager

## Celia Almaguer

---

**From:** Jesus Ozuna [jesus.ozuna@co.hidalgo.tx.us]  
**Sent:** Thursday, March 05, 2015 4:01 PM  
**To:** Rick Gil  
**Cc:** Celia Almaguer; Domingo; roman rodriguez; Hector Rene Garcia  
**Subject:** Linn San Manuel Emergency Services Facility - Testing Needed

Good Afternoon Ric,

RO44-RO46

As per your on call contract C-13-220-08-13 (Work Authorization #6 Linn San Manuel Emergency Service Facility), we would like to request the following:

1. A proctor sample of Caliche to be used for the parking lot flexible base ✓ 44
2. Perform a compaction test for the asphalt paving subgrade on the south side of the building. 46

Please begin testing Friday, March 6, 2015 at 11:00 a.m. A representative from the Precinct and Contractor will be there. Should you have any questions or need anything else please let me know. Thank you, have a great day!

Thank you,

## Jesse Ozuna

Hidalgo County Pct. 4  
956.383.3112 (o)  
956.648.3493 (c)  
[jesse.ozuna@co.hidalgo.tx.us](mailto:jesse.ozuna@co.hidalgo.tx.us)



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# L&G Engineering Laboratory

Construction Material Testing  
Geotechnical Engineering

2100 W. Expressway 83 Mercedes, TX 78570 (956) 565-0760  
900 S. Stewart Rd. Ste. 6 Mission, TX 78572 (956) 583-7117  
3388 US Hwy 277 Carrizo Springs, TX (888) 565-9813

## SIEVE ANALYSIS TEST REPORT

Project Description: Linn San Manuel Facility  
Client: Hidalgo County Pct. #4  
Contractor: JCON Construction, LLC

L&G Project Number: L1301404  
L&G Report Number: R045  
Sample Date: 03/06/2015  
Date Reported: 03/06/2015

Client PO: 713423

Page 1 of 1

Material: Base Material (Caliche)

<u>Sieve</u>	<u>% Retained</u>	<u>Required</u>
2 in	0	0
1/2 in	24	20-60
No. 4	52	40-75
No. 40	84	70-90

Remarks: Texas Wetball Mill Value - 40.6% (MAX 50)  
Test Method (As Applicable): Tex Method 110-E, Tex Method 116-E

*Sieve Analysis  
Texas Wetball (Base Material)*

Orig: Hidalgo County Pct. #4 (Gen.) (Hidalgo County Pct. #4)  
(Edinburg, TX) Attn: Raul Sesin  
(1-cc copy)  
1-cc JCON Construction, LLC  
Attn: Juan Jose Pena Jr.  
1-cc Laboratory

Respectfully Submitted,  
L&G Engineering Laboratory

Ricardo A. Gil, Lab Manager

## Celia Almaguer

---

**From:** Jesus Ozuna [jesus.ozuna@co.hidalgo.tx.us]  
**Sent:** Thursday, March 05, 2015 4:01 PM  
**To:** Rick Gil  
**Cc:** Celia Almaguer; Domingo; roman rodriguez; Hector Rene Garcia  
**Subject:** Linn San Manuel Emergency Services Facility - Testing Needed

Good Afternoon Ric,

RD44-RD46

As per your on call contract C-13-220-08-13 (Work Authorization #6 Linn San Manuel Emergency Service Facility), we would like to request the following:

1. A proctor sample of Caliche to be used for the parking lot flexible base
2. Perform a compaction test for the asphalt paving subgrade on the south side of the building.

Please begin testing Friday, March 6, 2015 at 11:00 a.m. A representative from the Precinct and Contractor will be there. Should you have any questions or need anything else please let me know. Thank you, have a great day!

Thank you,

## Jesse Ozuna

Hidalgo County Pct. 4  
956.383.3112 (o)  
956.648.3493 (c)  
[jesse.ozuna@co.hidalgo.tx.us](mailto:jesse.ozuna@co.hidalgo.tx.us)



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**FIELD DENSITIES**  
**TEST REPORT**

Project Description: Linn San Manuel Facility  
 Client: Hidalgo County Pct. #4  
 Contractor: JCON Construction, LLC

L&G Project Number: L1301404  
 L&G Report Number: R046  
 Sample Date: 03/06/2015  
 Date Reported: 03/06/2015

Client PO: 713423

Page 1 of 1

Material Description Subgrade  
 Required % Proctor 95 Moisture Tolerance -2+3

Proctor No	Optimum % Moisture	Opt. Density, LB/CF
L1301404-30	10.1	113.8

Test No.	Test Location	Proctor No	Moisture Content	Dry Density	Percent Compaction	Depth (inch)
1	NE Corner of Parking Driveway 30ft S of 186	IS MD4	9.0%	116.1 pcf	102.0% (Pass)	6"
2	SW Corner of Parking Driveway 200ft S x 25ft W of 186	IS MD4	9.8%	114.9 pcf	101.0% (Pass)	6"
3	SE Corner of Parking Lot 100ft N. of Bldg. Pad	IS MD4	9.1%	112.3 pcf	98.7% (Pass)	6"

Remarks: Test results are in general compliance with the project specifications except as noted.  
 Test Methods: ASTM D2922, D3017

*Field Density*

Orig: Hidalgo County Pct. #4 (Gen.) (Hidalgo County Pct. #4)  
 (Edinburg, TX) Attn: Raul Sesin  
 (1-cc copy)  
 1-cc JCON Construction, LLC  
 Attn: Juan Jose Pena Jr.  
 1-cc Laboratory

Respectfully Submitted,  
 L&G Engineering Laboratory

Ricardo A. Gil, Lab Manager

## Celia Almaguer

---

**From:** Jesus Ozuna [jesus.ozuna@co.hidalgo.tx.us]  
**Sent:** Thursday, March 05, 2015 4:01 PM  
**To:** Rick Gil  
**Cc:** Celia Almaguer; Domingo; roman rodriguez; Hector Rene Garcia  
**Subject:** Linn San Manuel Emergency Services Facility - Testing Needed

Good Afternoon Ric,

RD44 - RD46

As per your on call contract C-13-220-08-13 (Work Authorization #6 Linn San Manuel Emergency Service Facility), we would like to request the following:

1. A proctor sample of Caliche to be used for the parking lot flexible base
2. Perform a compaction test for the asphalt paving subgrade on the south side of the building.

Please begin testing Friday, March 6, 2015 at 11:00 a.m. A representative from the Precinct and Contractor will be there. Should you have any questions or need anything else please let me know. Thank you, have a great day!

Thank you,

## Jesse Ozuna

Hidalgo County Pct. 4  
956.383.3112 (o)  
956.648.3493 (c)  
[jesse.ozuna@co.hidalgo.tx.us](mailto:jesse.ozuna@co.hidalgo.tx.us)



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# L&G Engineering Laboratory

Construction Material Testing  
Geotechnical Engineering

2100 W. Expressway 83  
900 S. Stewart Rd. Ste. 6  
3388 US Hwy 277

Mercedes, TX 78570 (956) 565-0760  
Mission, TX 78572 (956) 583-7117  
Carrizo Springs, TX (888) 565-9813

## FIELD DENSITIES TEST REPORT

Project Description: Linn San Manuel Facility  
Client: Hidalgo County Pct. #4  
Contractor: JCON Construction, LLC

L&G Project Number: L1301404  
L&G Report Number: R047  
Sample Date: 03/24/2015  
Date Reported: 03/24/2015

Client PO: 713423

Page 1 of 2

Specification No.	Specification Required	Moisture Tolerance	
	% Proctor	Minimum	Maximum
1	98	16.0	21.0
2	95	7.6	12.6

Proctor No	Optimum % Moisture	Opt. Density, LB/CF
BASE MD5	18.0	108.6
IS MD1	9.6	119.5

### Material Description Base Material

Test No.	Test Location	Proctor No	Spec. No.	Moisture Content	Dry Density	Percent Compaction	Depth (inch)
1	25ft. S. from NW Corner of Driveway	BASE MD5	1	16.2%	114.6 pcf	105.5% (Pass)	4"
2	100ft. S. from NW Corner of Driveway	BASE MD5	1	16.8%	109.9 pcf	101.2% (Pass)	4"
3	25ft. E. x 30ft N. from SW Corner of Driveway	BASE MD5	1	16.1%	108.3 pcf	99.7% (Pass)	4"

### Material Description In-Situ Subgrade

Test No.	Test Location	Proctor No	Spec. No.	Moisture Content	Dry Density	Percent Compaction	Depth (inch)
4	SE Corner of Parking Lot	IS MD1	2	10.1%	121.2 pcf	101.4% (Pass)	6"
5	100ft E. x 25ft N. from SW Corner of Parking Lot	IS MD1	2	9.1%	120.2 pcf	100.6% (Pass)	6"
6	NW Corner of Parking Lot	IS MD1	2	10.6%	118.8 pcf	99.4% (Pass)	6"

Orig: Hidalgo County Pct. #4 (Gen.) (Hidalgo County Pct. #4)  
(Edinburg, TX) Attn: Raul Sesin  
(1-cc copy)  
1-cc JCON Construction, LLC  
Attn: Juan Jose Pena Jr.  
1-cc Laboratory

Respectfully Submitted,  
L&G Engineering Laboratory

Ricardo A. Gil, Lab Manager



# L&G Engineering Laboratory

Construction Material Testing  
Geotechnical Engineering

2100 W. Expressway 83 Mercedes, TX 78570 (956) 565-0760  
900 S. Stewart Rd. Ste. 6 Mission, TX 78572 (956) 583-7117  
3388 US Hwy 277 Carrizo Springs, TX (888) 565-9813

## FIELD DENSITIES TEST REPORT

Project Description: Linn San Manuel Facility  
Client: Hidalgo County Pct. #4  
Contractor: JCON Construction, LLC

L&G Project Number: L1301404  
L&G Report Number: R047  
Sample Date: 03/24/2015 ✓  
Date Reported: 03/24/2015

---

Client PO: 713423

Page 2 of 2

Remarks: Test results are in general compliance with the project specifications except as noted.  
Test Methods: ASTM D2922, D3017

*Field Density*

Orig: Hidalgo County Pct. #4 (Gen.) (Hidalgo County Pct. #4)  
(Edinburg, TX) Attn: Raul Sesin  
(1-cc copy)  
1-cc JCON Construction, LLC  
Attn: Juan Jose Pena Jr.  
1-cc Laboratory

Respectfully Submitted,  
L&G Engineering Laboratory

---

Ricardo A. Gil, Lab Manager

## Celia Almaguer

---

**From:** Jesus Ozuna [jesus.ozuna@co.hidalgo.tx.us]  
**Sent:** Monday, March 23, 2015 4:58 PM  
**To:** Rick Gil  
**Cc:** Celia Almaguer; Lulu Lucio; domingo; Hector Rene Garcia  
**Subject:** Services needed for testing

Good Afternoon Ric,

2047

As per your on call contract C-13-220-08-13 (Work Authorization #6 Linn San Manuel Emergency Service Facility), we would like to request the following:

1. Compaction/Density testing for flexible base on the south side of the building.
2. Compaction test for subgrade on the north side of the building. ✓

Please begin testing Tuesday, March 24, 2015 at 4:00 p.m. A representative from the Precinct and Contractor will be there. Should you have any questions or need anything else please let me know. Thank you, have a great day!

Thank you,

## Jesse Ozuna

Hidalgo County Pct. 4  
956.383.3112 (o)  
956.648.3493 (c)  
[jesse.ozuna@co.hidalgo.tx.us](mailto:jesse.ozuna@co.hidalgo.tx.us)



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# L&G Engineering Laboratory

Construction Material Testing  
Geotechnical Engineering

2100 W. Expressway 83  
900 S. Stewart Rd. Ste. 6  
3388 US Hwy 277

Mercedes, TX 78570 (956) 565-0760  
Mission, TX 78572 (956) 583-7117  
Carrizo Springs, TX (888) 565-9813

## FIELD DENSITIES TEST REPORT

Project Description: Linn San Manuel Facility  
Client: Hidalgo County Pct. #4  
Contractor: JCON Construction, LLC

L&G Project Number: L1301404  
L&G Report Number: R048  
Sample Date: 03/26/2015  
Date Reported: 03/26/2015

Client PO: 713423

Page 1 of 2

Specification No.	Specification Required % Proctor	Moisture Tolerance	
		Minimum	Maximum
1	98	16.0	21.0
2	95	8.1	13.1

Proctor No	Optimum % Moisture	Opt. Density, LB/CF
BASE MD3	14.7	113.3
L1301404-30	10.1	113.8

### Material Description Base Material

Test No.	Test Location	Proctor No	Spec. No.	Moisture Content	Dry Density	Percent Compaction	Depth (inch)
1	Parking Lot 20ft E. x 5ft N. of SW Final Lift	BASE MD3	1	12.9%	112.7 pcf	99.5% (Fail)	4"
2	Parking Lot 40ft E. x 10ft S. of NW Corner Final Lift	BASE MD3	1	14.4%	114.3 pcf	100.9% (Fail)	4"

### Material Description Subgrade

Test No.	Test Location	Proctor No	Spec. No.	Moisture Content	Dry Density	Percent Compaction	Depth (inch)
3	Driveway CL 1st Lift 20ft S x FM 186	L1301404-30	2	8.7%	121.5 pcf	106.8% (Pass)	6"
4	Driveway CL 1st Lift 35ft S of FM 186	L1301404-30	2	8.6%	120.7 pcf	106.1% (Pass)	6"
5	Driveway CL 1st Lift 55ft S. of FM 186	L1301404-30	2	7.5%	118.2 pcf	103.9% (Fail)	6"

Orig: Hidalgo County Pct. #4 (Gen.) (Hidalgo County Pct. #4)  
(Edinburg, TX) Attn: Raul Sesin  
(1-cc copy)  
1-cc JCON Construction, LLC  
Attn: Juan Jose Pena Jr.  
1-cc Laboratory

Respectfully Submitted,  
L&G Engineering Laboratory

Ricardo A. Gil, Lab Manager



# L&G Engineering Laboratory

Construction Material Testing  
Geotechnical Engineering

2100 W. Expressway 83  
900 S. Stewart Rd. Ste. 6  
3388 US Hwy 277

Mercedes, TX 78570 (956) 565-0760  
Mission, TX 78572 (956) 583-7117  
Carrizo Springs, TX (888) 565-9813

## FIELD DENSITIES TEST REPORT

Project Description: Linn San Manuel Facility  
Client: Hidalgo County Pct. #4  
Contractor: JCON Construction, LLC

L&G Project Number: L1301404  
L&G Report Number: R048  
Sample Date: 03/26/2015  
Date Reported: 03/26/2015

---

Client PO: 713423

Page 2 of 2

Remarks: Test results are in general compliance with the project specifications except as noted.  
Test Methods: ASTM D2922, D3017

Orig: Hidalgo County Pct. #4 (Gen.) (Hidalgo County Pct. #4)  
(Edinburg, TX) Attn: Raul Sesin  
(1-cc copy)  
1-cc JCON Construction, LLC  
Attn: Juan Jose Pena Jr.  
1-cc Laboratory

Respectfully Submitted,  
L&G Engineering Laboratory

---

Ricardo A. Gil, Lab Manager

## Celia Almaguer

---

**From:** Jesus Ozuna [jesus.ozuna@co.hidalgo.tx.us]  
**Sent:** Wednesday, March 25, 2015 9:16 AM  
**To:** Rick Gil  
**Cc:** Celia Almaguer; Lulu Lucio; Hector Rene Garcia; domingo  
**Subject:** Services needed for testing

Good Afternoon Ric,

R048

As per your on call contract C-13-220-08-13 (Work Authorization #6 Linn San Manuel Emergency Service Facility), we would like to request the following:

1. Compaction/density testing for asphalt paving flexible base at north side of the building.

Please begin testing Thursday, March 26, 2015 at 9:00 a.m. A representative from the Precinct and Contractor will be there. Should you have any questions or need anything else please let me know. Thank you, have a great day!

Thank you,

## Jesse Ozuna

Hidalgo County Pct. 4  
956.383.3112 (o)  
956.648.3493 (c)  
[jesse.ozuna@co.hidalgo.tx.us](mailto:jesse.ozuna@co.hidalgo.tx.us)



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# L&G Engineering Laboratory

## Construction Material Testing Geotechnical Engineering

2100 W. Expressway 83  
Mercedes, TX 78570  
Office (956) 565-0760 Fax (956) 565-6746

Client Address: Hidalgo County Pct. #4  
1102 N. Doolittle Rd.  
Edinburg, TX. 78539



# INVOICE

Invoice Date: 03/27/2015  
Invoice No: 15-3-000017

Page 1 of 2

Account No.: L130  
Project No: L1301404  
Project Desc.: Linn San Manuel Facility

Due Date: UPON RECEIPT  
Budget/Remaining: \$49,207.32 / \$31,804.10  
PO: 713423

===== Invoice Summary by Billing Code =====

	<u>Unit Rate</u>	<u>Qty</u>	<u>Extension</u>
910:91004 - Atterberg Limits Det	\$78.48	1.00	\$78.48
910:91009 - M-D ASTM D698 (Standard Proctor) (each)	\$202.78	1.00	\$202.78
910:91011 - Field Density	\$23.56	11.00	\$259.16
910:91014 - Sieve Analysis (Dry & 4 Sieve)	\$58.85	1.00	\$58.85
940:94046 - Eng. Tech. (Soils/Lab) (Hr.)	\$47.14	1.00	\$47.14
940:94048 - Eng. Tech. (Soils / SP.)	\$47.14	10.75	\$506.76
940:94054 - Engineering Specialist	\$117.75	1.25	\$147.20
940:94055 - Engineer / P.E.	\$157.08	1.25	\$196.35
950:95058 - Vehicle Trip Charge	\$0.52	580.00	\$301.60
950:95061 - Test Report	\$23.24	5.00	\$116.20
<b>Total for this Invoice:</b>			<b>\$1,914.52</b>

===== Invoice Detail by Report =====

<u>Report No.</u>	<u>Sampled</u>	<u>Qty</u>	<u>Billing Code</u>	<u>Unit Type</u>	<u>Unit Rate</u>	<u>Extension</u>
R044	03/06/2015	1.00	910:91004 - Atterberg Limits Det	Each	\$78.48	\$78.48
R044	03/06/2015	1.00	910:91009 - M-D ASTM D698 (Standard Proctor) (each)	Each	\$202.78	\$202.78
R044	03/06/2015	3.00	940:94048 - Eng. Tech. (Soils / SP.)	Hour	\$47.14	\$141.42
R044	03/06/2015	0.25	940:94054 - Engineering Specialist	Hour	\$117.75	\$29.44
R044	03/06/2015	0.25	940:94055 - Engineer / P.E.	Hour	\$157.08	\$39.27
R044	03/06/2015	145.00	950:95058 - Vehicle Trip Charge	Mile	\$0.52	\$75.40
R044	03/06/2015	1.00	950:95061 - Test Report	Each	\$23.24	\$23.24
Report Number R044 for a Subtotal of:						\$590.03

REMIT TO: 2100 W. Expressway 83  
Mercedes, TX 78570  
Office (956) 565-0760 Fax (956) 565-6746

Net 30 Days

PAST DUE BALANCES SUBJECT TO 1.5% SERVICE CHARGE PER MONTH  
PLEASE REFERENCE INVOICE NUMBER WITH PAYMENT



# L&G Engineering Laboratory

## Construction Material Testing Geotechnical Engineering

2100 W. Expressway 83  
Mercedes, TX 78570  
Office (956) 565-0760 Fax (956) 565-6746



# INVOICE

Invoice Date: 03/27/2015  
Invoice No: 15-3-000017

Page 2 of 2

===== Invoice Detail by Report =====

<u>Report No.</u>	<u>Sampled</u>	<u>Qty</u>	<u>Billing Code</u>	<u>Unit Type</u>	<u>Unit Rate</u>	<u>Extension</u>
R045	03/06/2015	1.00	910:91014 - Sieve Analysis (Dry & 4 Sieve)	Each	\$58.85	\$58.85
R045	03/06/2015	1.00	940:94046 - Eng. Tech. (Soils/Lab) (Hr.)	Hour	\$47.14	\$47.14
R045	03/06/2015	0.25	940:94054 - Engineering Specialist	Hour	\$117.75	\$29.44
R045	03/06/2015	0.25	940:94055 - Engineer / P.E.	Hour	\$157.08	\$39.27
R045	03/06/2015	1.00	950:95061 - Test Report	Each	\$23.24	\$23.24
Report Number R045 for a Subtotal of:						\$197.94
R046	03/06/2015	3.00	910:91011 - Field Density	Each	\$23.56	\$70.68
R046	03/06/2015	3.00	940:94048 - Eng. Tech. (Soils / SP.)	Hour	\$47.14	\$141.42
R046	03/06/2015	0.25	940:94054 - Engineering Specialist	Hour	\$117.75	\$29.44
R046	03/06/2015	0.25	940:94055 - Engineer / P.E.	Hour	\$157.08	\$39.27
R046	03/06/2015	145.00	950:95058 - Vehicle Trip Charge	Mile	\$0.52	\$75.40
R046	03/06/2015	1.00	950:95061 - Test Report	Each	\$23.24	\$23.24
Report Number R046 for a Subtotal of:						\$379.45
R047`	03/24/2015	6.00	910:91011 - Field Density	Each	\$23.56	\$141.36
R047`	03/24/2015	2.50	940:94048 - Eng. Tech. (Soils / SP.)	Hour	\$47.14	\$117.85
R047`	03/24/2015	0.25	940:94054 - Engineering Specialist	Hour	\$117.75	\$29.44
R047`	03/24/2015	0.25	940:94055 - Engineer / P.E.	Hour	\$157.08	\$39.27
R047`	03/24/2015	145.00	950:95058 - Vehicle Trip Charge	Mile	\$0.52	\$75.40
R047`	03/24/2015	1.00	950:95061 - Test Report	Each	\$23.24	\$23.24
Report Number R047` for a Subtotal of:						\$426.56
R048	03/26/2015	2.00	910:91011 - Field Density	Each	\$23.56	\$47.12
R048	03/26/2015	2.25	940:94048 - Eng. Tech. (Soils / SP.)	Hour	\$47.14	\$106.07
R048	03/26/2015	0.25	940:94054 - Engineering Specialist	Hour	\$117.75	\$29.44
R048	03/26/2015	0.25	940:94055 - Engineer / P.E.	Hour	\$157.08	\$39.27
R048	03/26/2015	145.00	950:95058 - Vehicle Trip Charge	Mile	\$0.52	\$75.40
R048	03/26/2015	1.00	950:95061 - Test Report	Each	\$23.24	\$23.24
Report Number R048 for a Subtotal of:						\$320.54
<b>Total for this Invoice:</b>						<b>\$1,914.52</b>

REMIT TO:2100 W. Expressway 83  
Mercedes, TX 78570  
Office (956) 565-0760 Fax (956) 565-6746

Net 30 Days

PAST DUE BALANCES SUBJECT TO 1.5% SERVICE CHARGE PER MONTH  
PLEASE REFERENCE INVOICE NUMBER WITH PAYMENT

**Pavement Thickness / Asphalt Quality**

**FY 2014      FY 2015**

Coring – ACP Thickness	ASTM D 3549	\$65.49/Ea.	\$66.47/Ea.
Pavement Thickness Determination (Full Depth)	ASTM	\$87.14/Ea.	\$88.45/Ea.
Density of Asphaltic Cores (4 or 6 inch)	Tex-207-F	\$71.96/Ea.	\$73.04/Ea.
Extraction/Sieve Analysis/Asphalt Content	Tex-210-F / Tex-200-F	\$229.04/Ea.	\$232.48/Ea.
Asphalt Rolling Pattern (Nuclear Method)	Tex-207-F – Part IV	\$39.27/Ea.	\$39.86/Ea.
Eff. Of Water on Asphalt Mixtures (As Rec'd)	Tex-531-C	\$85.12/Ea.	\$86.40/Ea.

**Pavement Investigation**

**FY 2014      FY 2015**

Core Existing Asphalt for Thickness, Perform Caliche Base Thickness, Sieve Analysis and Plasticity Index, Stabilized Subgrade Thickness and Plasticity Index		\$490.72 Ea	\$498.08 Ea.
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L&G Engineering provides Technical and Engineering services at the rates listed below.

<b><u>Personnel:</u></b>	Engineer (Principal).....	\$157.08/Hr.	\$159.44/Hr.
	Engineering Specialist.....	\$117.75/Hr.	\$119.52/Hr.
	Technician (Soils).....	\$ 47.14/Hr.	\$47.85/Hr.
	Technician (Concrete).....	\$ 60.18/Hr.	\$61.08/Hr.
	Technician (Asphalt).....	\$ 60.18/Hr.	\$61.08/Hr.

**Engineering Review, Evaluation, Management & Administration**

**FY 2014      FY 2015**

Test Report.....	\$ 23.24/Ea.	\$23.59/Ea.
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The specific hourly rate within each classification listed above depends on the experience, training, and qualifications of the personnel. A two (2) hour minimum billing at the applicable rate will be assessed per visit to project site.

Services provided on Saturday, Sunday and all work in excess of "normal" work hours will be invoiced at an overtime rate 1.5 times the applicable rate for the work performed. The cost of services is based upon the assumption that services will be provided during "normal" working hours. Normal working hours are between 7:00 a.m. and 6:00 p.m., Monday through Friday.

<b><u>Expenses:</u></b>	Mileage.....	.52/Mi.	.53/Mi.
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All other project specific, third-party costs will be charged at cost plus 10 percent. Invoices will be submitted monthly for work in progress in our standard format. They are due and payable upon receipt and become due 30 days after the billing date. Past due invoices may be subject to late charges at the rate of 1 ½ percent per month (18 percent per annum). In the event that the State of Texas legislates a sales tax on Professional Services, the amount of the tax will be added to the appropriate service rate charged. Our invoices are due and payable upon receipt at 2100 W. Expressway 83, Mercedes, Texas 78570.

^^Fees adjusted approximately 1.5% annually.

# Exhibit A

## L & G Engineering

Consulting Engineers

### EXHIBIT "C" L&G ENGINEERING CONSTRUCTION MATERIALS TESTING LABORATORY RATES FOR FY 2014-2015

#### Soils Testing

		<b>FY 2014</b>	<b>FY 2015</b>
Moisture Content Determination	ASTM D2216 - Tex-103-E	\$10.40 Ea	\$10.55/Ea
Determination of Liquid Limit of Soils	Tex-104-E	\$52.37/Ea.	\$53.15/Ea
Determination of Plastic Limit of Soils	Tex-105-E	\$52.58/Ea.	\$53.37/Ea
Atterberg Limits of Soils	ASTM D 4318 - Tex-106-E	\$78.48/Ea.	\$79.66/Ea.
Bar Linear Shrinkage of Soils	Tex-107-E	\$65.49/Ea.	\$66.47/Ea.
Material Finer #200 Sieve	ASTM D 1140 -Tex-111-E	\$65.49/Ea.	\$66.47/Ea
Lime Series Testing	Tex-112-E	\$529.04/Ea.	\$536.97/Ea.
Moisture-Density Relationship (TxDOT)	Tex-113-E / Tex-114-E	\$209.45/Ea.	\$212.59/Ea.
Standard Proctor	ASTM D 698	\$202.78 /Ea.	\$205.82/Ea.
Modified Proctor	ASTM D 1557	\$209.36 /Ea.	\$212.50 /Ea.
Field Density Test (Nuclear)	ASTM D 2922 - Tex-115-E	\$23.56/Ea.	\$23.91 /Ea
Determination of Soil pH	Tex-128-E	\$85.12/Ea.	\$86.40/Ea
Soil-Lime Testing	Tex-121-E	\$157.08/Ea.	\$159.44/Ea.
Resistivity of Soils	Tex-129-E	\$95.22/Ea.	\$96.65/Ea.
Sieve Analysis (Dry)(4 Sieves)	ASTM C 136 - Tex-110-E	\$58.85/Ea.	\$59.73/Ea.
Sieve Analysis (Washed)(4 Sieve)	ASTM C 136 - Tex-110-E	\$71.20/Ea.	\$72.27/Ea.
Sieve Analysis (Additional Sieves)	ASTM C 136 - Tex-110-E	\$13.11/Ea.	\$13.31/Ea.
Texas Wet Ball Mill (Base Material Quality)	Tex-116-E	\$229.11/Ea.	\$232.55/Ea.

#### Coarse & Fine Aggregate Quality Testing

Decantation Test (Conc. Aggr.)	ASTM C117 - Tex-406-A	\$45.81/Ea.	\$46.50/Ea.
Specific Gravity/Absorp. (Conc. Aggr)	ASTM C127 - Tex-403-A	\$71.91/Ea.	\$72.99/Ea.
5 Cycle Magnesium Soundness	ASTM C88 - Tex-411-A	\$556.21/Ea.	\$564.55/Ea.
SSD Unit Weight of Aggregates	ASTM C29 - Tex-404-A	\$65.49/Ea.	\$66.47/Ea.
Percent Voids/Solids in Conc. Aggr.	Tex-405-A	\$13.05/Ea.	\$13.25/Ea.
<b>*(In Conjunction w/ SSD Unit Wt of Aggregates)</b>			
Sand Equivalent	ASTM D 2419 - Tex-203-F	\$71.91/Ea.	\$72.99/Ea.
Specific Gravity / Absorption (Fine Aggr.)	ASTM C 128 - Tex -403-A	\$78.49/Ea.	\$79.67/Ea.
Organic Impurities in Fine Aggregate	ASTM C 87 - Tex -408-A	\$45.81/Ea.	\$46.50/Ea.
Fineness Modulus of Fine Aggregate	Tex-402-A	\$15.71/Ea.	\$15.95/Ea.
Acid Insoluble of Fine Aggregate	Tex-612-J	\$85.12/Ea.	\$86.40/Ea.

#### Concrete/Masonry Field & Laboratory Testing

Slump Test	ASTM C 143 - Tcx-415-A	<b>Sno charge</b>	<b>Sno charge</b>
Air Content (Pressure Method)	ASTM C 138 - Tex-416-A	\$23.51/Ea.	\$23.86/Ea.
Air Content (Volumetric)	ASTM C 173	\$26.17/Ea.	\$26.56/Ea.
Casting of Concrete Cylinders	ASTM C 31	<b>Sno charge</b>	
Compressive Strength of Cyl. Specimen	ASTM C 39 - Tex-418-A	\$15.68/Ea.	\$15.92/Ea.
Cylindrical Specimen Prep./Hold/Cure	ASTM C 192	\$11.83/Ea.	\$12.00/Ea.
Casting of Grout Prisms	ASTM C 1019	<b>Sno charge</b>	
Grout Prism Prep./Cure/Compressive Strength	ASTM C 39	\$32.74/Ea.	\$33.23/Ea.
Casting of Mortar Cubes	ASTM C 780	<b>Sno charge</b>	
Mortar Cube Prep./Cure/Compressive Strength	ASTM C 109	\$32.00/Ea.	\$32.48/Ea.
Masonry Unit Prep. /Compressive Str. (Set of 3)	ASTM C 140	\$228.98/Ea.	\$232.41/Ea.
Masonry Unit SPG/Abs./Unit Wt. (Set of 3)	ASTM C 140	\$228.98/Ea.	\$232.41/Ea.

**\*(In Conjunction w/ Field Inspection)**

L&G Engineering  
Hidalgo County Pct. #4

Exhibit "C"  
Page 1 of 2

