

364,160,250,000 ريال سعودي فقط

عشرون مليون جنسها فقط لاغير

شركة ايجي كونتراك
لإنشاء الطرق
EGCONTRACT
مصر - القاهرة



کے ہمارے

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (501+000): (504+000)
Delivery Date : 12/09/2022
Reporting Date : 18/09/2022
Reporting No. : 58
Sample No. : 06

Dear Gentleman,

Attached here with the Soil Embankment delivered on 12/09/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557
6. CBR according to ASTM D-1883

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken



Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (501+000): (504+000)
Delivery Date : 12/09/2022
Reporting Date : 18/09/2022
Reporting No. : 58
Sample No. : 06

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	91.6
25	85.9
19	76.4
12.50	60.2
9.50	45.1
4.75	36.8
2.36	33.6
2.00	29.6
1.18	24.8
0.600	20.8
0.425	19.3
0.300	16.9
0.150	13.3

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ر.م. محمد مصطفى 227 - 001 - 218
ش.م. هادي : 2 شارع بنك الاهل - القاهرة - مصر

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (501+000): (504+000)
Delivery Date : 12/09/2022
Reporting Date : 18/09/2022
Reporting No. : 58
Sample No. : 06

**Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.**

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ M (No.200)	11.2

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Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (501+000): (504+000)
Delivery Date : 12/09/2022
Reporting Date : 18/09/2022
Reporting No. : 58
Sample No. : 06

**Results of liquid limit and plasticity index
of soils according to ASTM D-4318**

Test	Results (%)
Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

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رقم التسجيل 219-001-027
مقر العمل : 3 شارع مكة المكرمة - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (501+000): (504+000)
Delivery Date : 12/09/2022
Reporting Date : 18/09/2022
Reporting No. : 58
Sample No. : 06

Soil Classification According to Project Specs (Embankment)

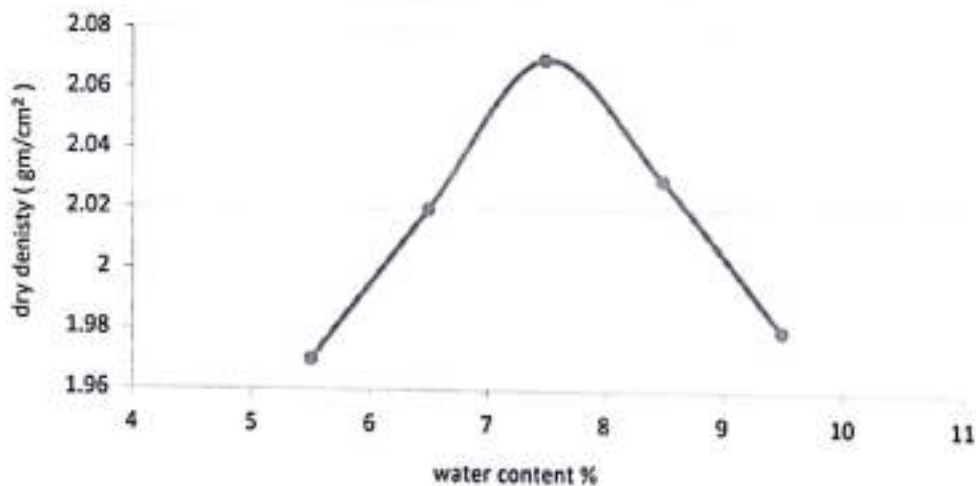
TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	29.6	Max 50 %	-----
0.425 mm (No. 40).	19.3	Max 30 %	Max 50 %
0.075 mm (No. 200).	11.2	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	NP	-----	-----
Plasticity index	NP	Max 6 %	Max 6 %

The test results are (☒ Comply - ☐ Not Comply) with specifications limits

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31 شارع الملك ابي بكر - 3 - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (501+000): (504+000)
Delivery Date : 12/09/2022
Reporting Date : 18/09/2022
Reporting No. : 58
Sample No. : 06

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.07
- Optimum moisture content % : 7.5

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رقم التسجيل 827 - 891 - 819
مصر - القاهرة : شارع الملك فيصل - الملك - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (501+000): (504+000)
Delivery Date : 12/09/2022
Reporting Date : 18/09/2022
Reporting No. : 58
Sample No. : 06

Test Results of California Bearing Ratio on Base Materials
ASTM D 1883

penetration		stress on piston (Mpa)
mm	Inch	
0.64	0.025	1.88
1.27	0.050	2.08
1.91	0.075	2.28
2.54	0.100	2.49
3.18	0.125	2.69
3.81	0.150	2.84
4.45	0.175	2.99
5.08	0.200	3.14
5.71	0.225	3.25
6.35	0.250	3.35

CBR Result	Stress (Mpa)		CBR %
At 0.1 inch (2.54 mm) penetration	St. Value	Sample results	36.0
	6.90	2.49	

Notes :

- 1- Attached graph shows penetration resistance versus penetration magnitude.
- 2- The sample was compacted to dry density of 2.07 (gm /cm³) at 7.5 % optimum water content.
- 3- Surcharge load 4.50 Kg

Signature /

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مكتب معامل الاستشارات الهندسية
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219-094-037 - 011-27367231
شركة هيس : 3 شارع هبة كمال - القاهرة - مصر

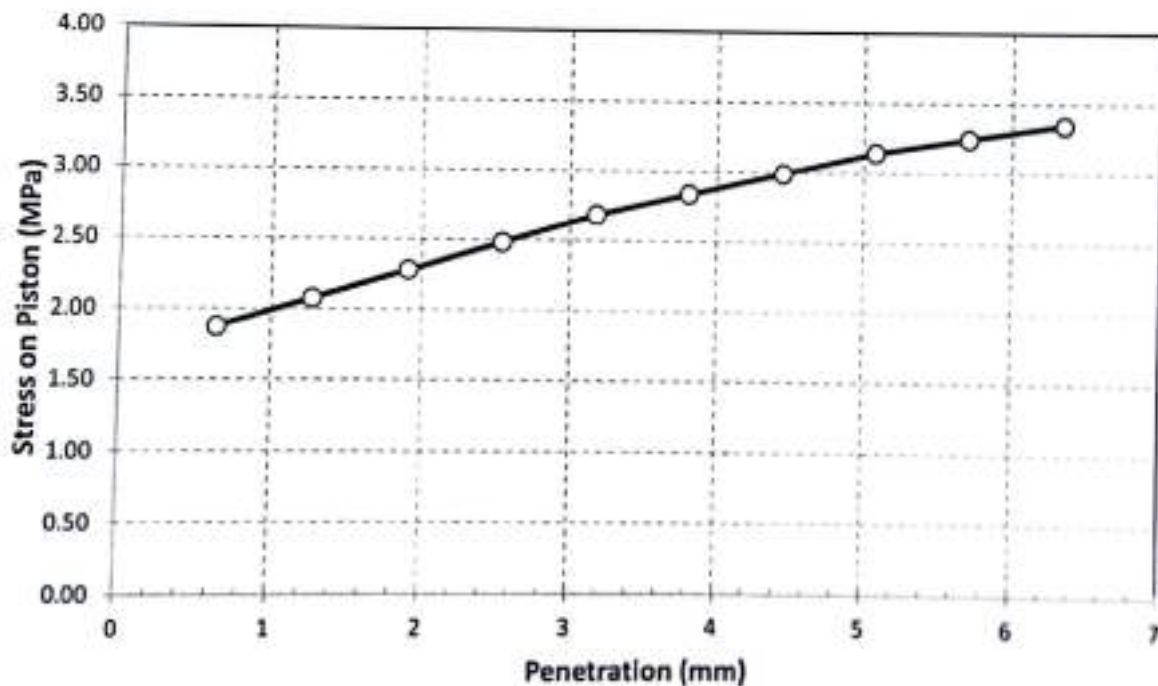
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Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (501+000): (504+000)
Delivery Date : 12/09/2022
Reporting Date : 18/09/2022
Reporting No. : 58
Sample No. : 06

Load Penetration Curve of CBR Test
ASTM D-1883



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بمصر
210-201-237
شارع فيصل - القاهرة - مصر

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 59
Sample No. : 07

Dear Gentleman,

Attached here with the Soil Embankment delivered on 17/09/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken

CEL
مكتب معامل الاستشارات الهندسية
Signature / *[Signature]*
د. محمد عبد الله
219-801-827
3 شارع شوكه الفضل - الزمالك - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 59
Sample No. : 07

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	92.6
25	84.4
19	72.5
12.50	64.6
9.50	48.8
4.75	32.9
2.36	30.3
2.00	27.1
1.18	21.7
0.600	19.6
0.425	17.2
0.300	14.4
0.150	12.5

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210-501-520
3 شارع الملك الأفضل - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 59
Sample No. : 07

**Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.**

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	10.1

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رقم سجل المصداقية: 210-201-827
جوليا شوكس : 3 شارع الملك ابي الفضل - القليوباء - مصر

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 59
Sample No. : 07

Results of liquid limit and plasticity index
of soils according to ASTM D-4318

Test	Results (%)
Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP



Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 59
Sample No. : 07

Soil Classification According to Project Specs (Embankment)

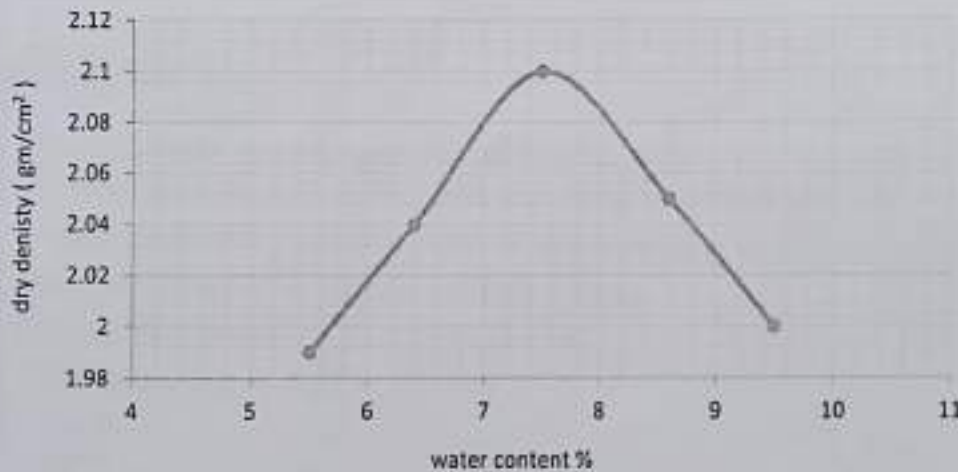
TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	27.1	Max 50 %	-----
0.425 mm (No. 40).	17.2	Max 30 %	Max 50 %
0.075 mm (No. 200).	10.1	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	NP	-----	-----
Plasticity index	NP	Max 6 %	Max 6 %

The test results are ☒ Comply - ☐ Not Comply) with specifications limits

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213-301-327
شارع الملك الأفندي - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 59
Sample No. : 07

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.10
- Optimum moisture content % : 7.5

Signature / **CEL**
المهندس محمد السيد محمد الهنسي
المستشار الفني
رقم التسجيل 219 - 221 - 227
جهاز القياس 31 - 34 - 35 - 36 - 37

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 60
Sample No. : 08

Dear Gentleman,

Attached here with the Soil Embankment delivered on 17/09/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557
6. CBR according to ASTM D-1883

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken



Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 60
Sample No. : 08

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	97.2
25	82.1
19	70.8
12.50	60.6
9.50	46.3
4.75	37.1
2.36	33.9
2.00	30.5
1.18	26.3
0.600	20.0
0.425	19.3
0.300	16.3
0.150	12.4

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شارع النيل - القاهرة - مصر

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 60
Sample No. : 08

**Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.**

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	11.4

CEL
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Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 60
Sample No. : 08

**Results of liquid limit and plasticity index
of soils according to ASTM D-4318**

Test	Results (%)
Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

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رقم التسجيل 219-001-037
شركة القابضة : شارع قناة السويس - القاهرة - مصر

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 60
Sample No. : 08

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	30.5	Max 50 %	-----
0.425 mm (No. 40).	19.3	Max 30 %	Max 50 %
0.075 mm (No. 200).	11.4	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	NP	-----	-----
Plasticity index	NP	Max 6 %	Max 6 %

The test results are (☒ Comply - ☐ Not Comply) with specifications limits

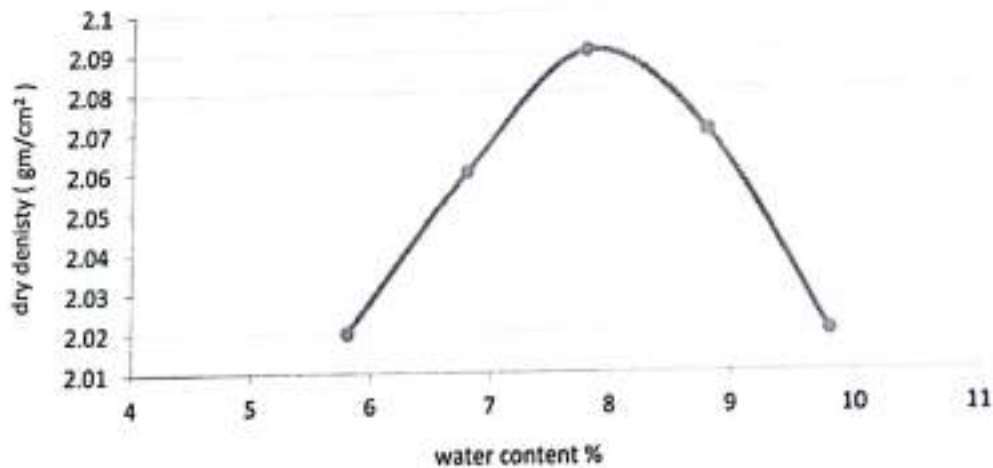
Signature 
CEL
مكتب معامل الاستشارات الهندسية
212 - 201 - 207
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Zamalek, Cairo.
Tel.& Fax : 27367231 - 27363093



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تليفون : ٢٧٣٦٧٢٣١ - ٢٧٣٦٣٠٩٣
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Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 60
Sample No. : 08

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.09
- Optimum moisture content % : 7.8

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Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 60
Sample No. : 08

Test Results of California Bearing Ratio on Base Materials
ASTM D 1883

penetration		stress on piston (Mpa)
mm	Inch	
0.64	0.025	2.13
1.27	0.050	2.33
1.91	0.075	2.54
2.54	0.100	2.74
3.18	0.125	2.94
3.81	0.150	3.14
4.45	0.175	3.35
5.08	0.200	3.55
5.71	0.225	3.75
6.35	0.250	3.96

CBR Result	Stress (Mpa)		CBR %
At 0.1 inch (2.54 mm) penetration	St. Value	Sample results	39.7
	6.90	2.74	

Notes :

- 1- Attached graph shows penetration resistance versus penetration magnitude.
- 2- The sample was compacted to dry density of 2.09 (gm /cm³) at 7.8 % optimum water content.
- 3- Surcharge load 4.50 Kg.

Signature / ...

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مكتب معامل الاستشارات الهندسية
إ.ع. محمد عبد الحليم
رقم سجل تجاري: 27367231 - 27363093
شركة رئيس 31 شارع عبد الفضل - الزمالة - القاهرة

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Zamalek, Cairo.
Tel.& Fax : 27367231 - 27363093

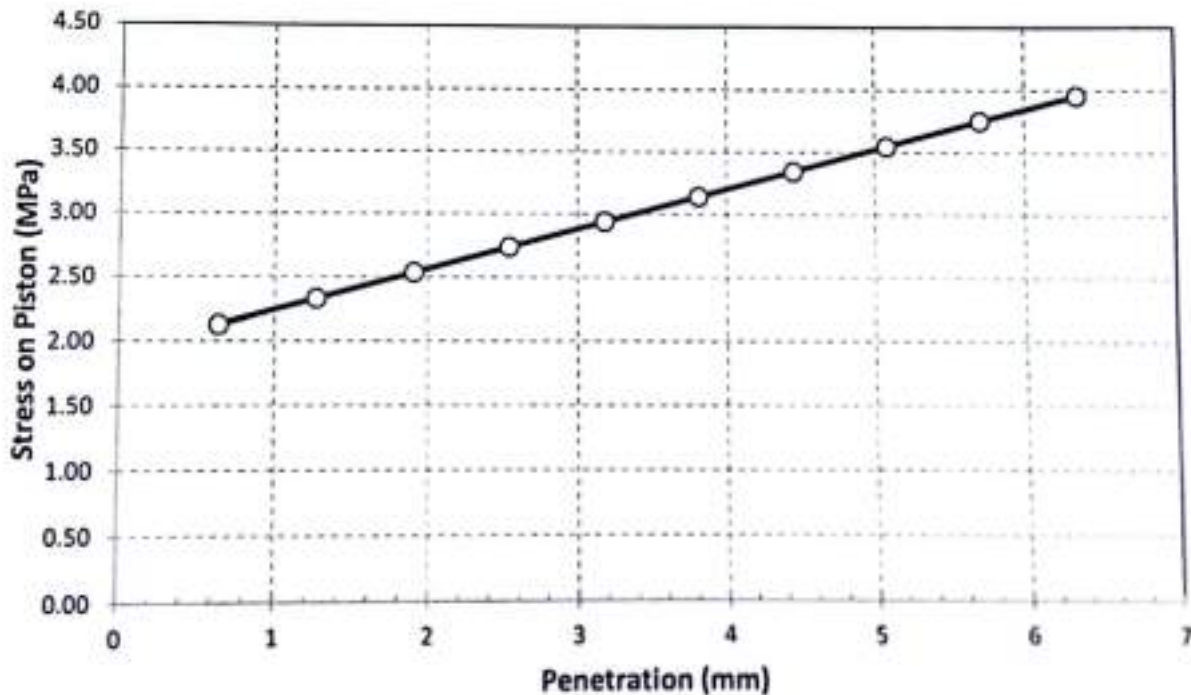
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Testing Laboratory

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www.cel-egypt.com

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+000): (501+800)
Delivery Date : 17/09/2022
Reporting Date : 23/09/2022
Reporting No. : 60
Sample No. : 08

Load Penetration Curve of CBR Test
ASTM D-1883



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Signature / info@cel-egypt.com
رقم التسجيل: 2736-0994-0225
أستاذة رئيسة: د. منال محمد رمضان - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 61
Sample No. : 09

Dear Gentleman,

Attached here with the Soil Embankment delivered on 26/09/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken

Signature / 
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التمثيل
218-991-897
جوليا ماس 1 شارع شوك الاصل - القاهرة - مصر

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 61
Sample No. : 09

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	95.5
25	82.8
19	73.9
12.50	59.1
9.50	40.8
4.75	28.6
2.36	25.0
2.00	23.3
1.18	20.5
0.600	17.5
0.425	14.5
0.300	13.4
0.150	12.1

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Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 61
Sample No. : 09

Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	9.6

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المهندس /...
219-091-837 - 819-091-837
3 شارع الملك الأفطس - الزمالك - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 61
Sample No. : 09

Results of liquid limit and plasticity index
of soils according to ASTM D-4318

Test	Results (%)
Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

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المعامل الشمالية
Signature /
د. محمد عبد الله - رئيس
م. أحمد عبد الله - نائب رئيس

Company Name : EG CONTRACK
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Type of sample : Soil Embankment – middle embankment
 Location : St (500+800): (504+160)
 Delivery Date : 26/09/2022
 Reporting Date : 02/10/2022
 Reporting No. : 61
 Sample No. : 09

Soil Classification According to Project Specs (Embankment)

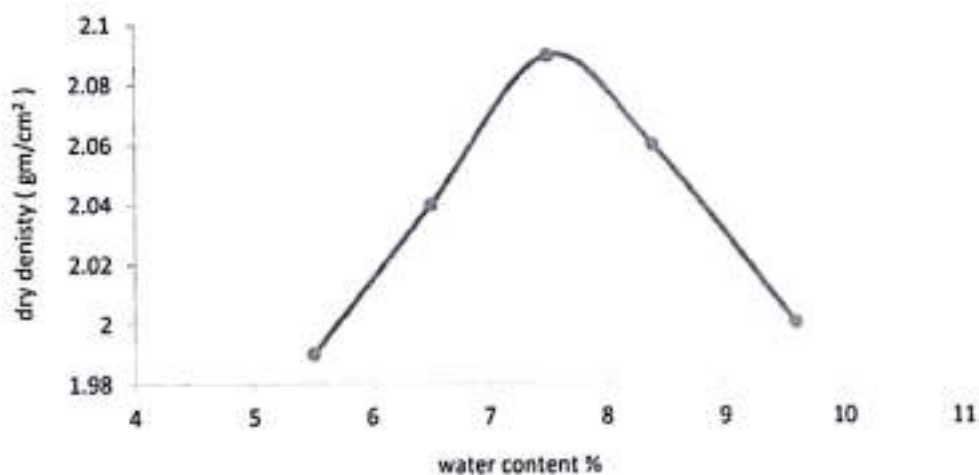
TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	23.3	Max 50 %	-----
0.425 mm (No. 40).	14.5	Max 30 %	Max 50 %
0.075 mm (No. 200).	9.6	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	NP	-----	-----
Plasticity index	NP	Max 6 %	Max 6 %

The test results are (☒ Comply - ☐ Not Comply) with specifications limits

Signature / 
 The stamp contains the text:
 - CEL
 - مكتب معامل الاستشارات الهندسية
 - المعامل الشمالي
 - رقم ترخيص: 27363093 - 2019
 - صلاحيته: 2024
 - القاهرة - الجيزة

Company Name : EG CONTRACK
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Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 61
Sample No. : 09

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.09
- Optimum moisture content % : 7.5

Signature /



Company Name : EG CONTRACK
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Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 62
Sample No. : 10

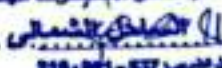
Dear Gentleman,

Attached here with the Soil Embankment delivered on 10/09/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557
6. CBR according to ASTM D-1883

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken

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رقم التسجيل 219-091-837
3 شارع الملك الأفندي - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 62
Sample No. : 10

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	95.1
25	84.9
19	75.1
12.50	61.7
9.50	43.5
4.75	34.6
2.36	30.3
2.00	28.2
1.18	25.2
0.600	22.2
0.425	17.5
0.300	15.1
0.150	13.7

Signature



Company Name : EG CONTRACK
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Reporting No. : 62
Sample No. : 10

**Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.**

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	11.7

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البريد الإلكتروني: cel@cel-egypt.com
رقم هاتف القاهرة: 27367231 - 27363093
فريق العمل: 3 شارع بنك الكحل - الزمالة - القاهرة

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 62
Sample No. : 10

Soil Classification According to Project Specs (Embankment)

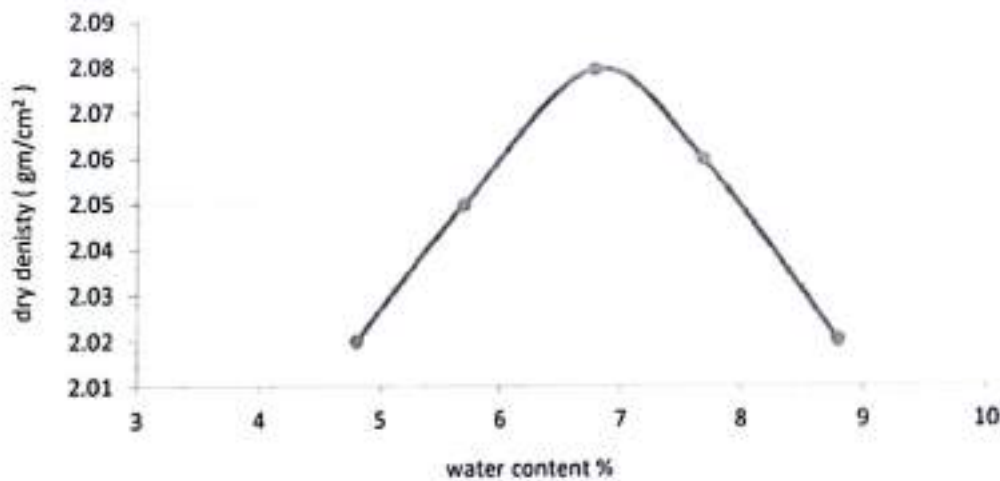
TEST	Results (%)	Limits according Projects Specs	
		(A-1-a)	(A-1-b)
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	28.2	Max 50 %	-----
0.425 mm (No. 40).	17.5	Max 30 %	Max 50 %
0.075 mm (No. 200).	11.7	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	NP	-----	-----
Plasticity index	NP	Max 6 %	Max 6 %

The test results are (☒ Comply - ☐ Not Comply) with specifications limits

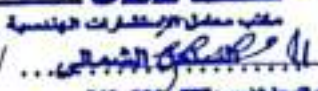
Signature 

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 62
Sample No. : 10

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.08
- Optimum moisture content % : 6.8

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219 - 901 - 837
شارع النيل - القاهرة - 11511

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
Location : St (500+800): (504+160)
Delivery Date : 26/09/2022
Reporting Date : 02/10/2022
Reporting No. : 62
Sample No. : 10

Test Results of California Bearing Ratio on Base Materials
ASTM D 1883

penetration		stress on piston (Mpa)
mm	Inch	
0.64	0.025	1.80
1.27	0.050	2.00
1.91	0.075	2.21
2.54	0.100	2.41
3.18	0.125	2.64
3.81	0.150	2.79
4.45	0.175	2.94
5.08	0.200	3.04
5.71	0.225	3.14
6.35	0.250	3.25

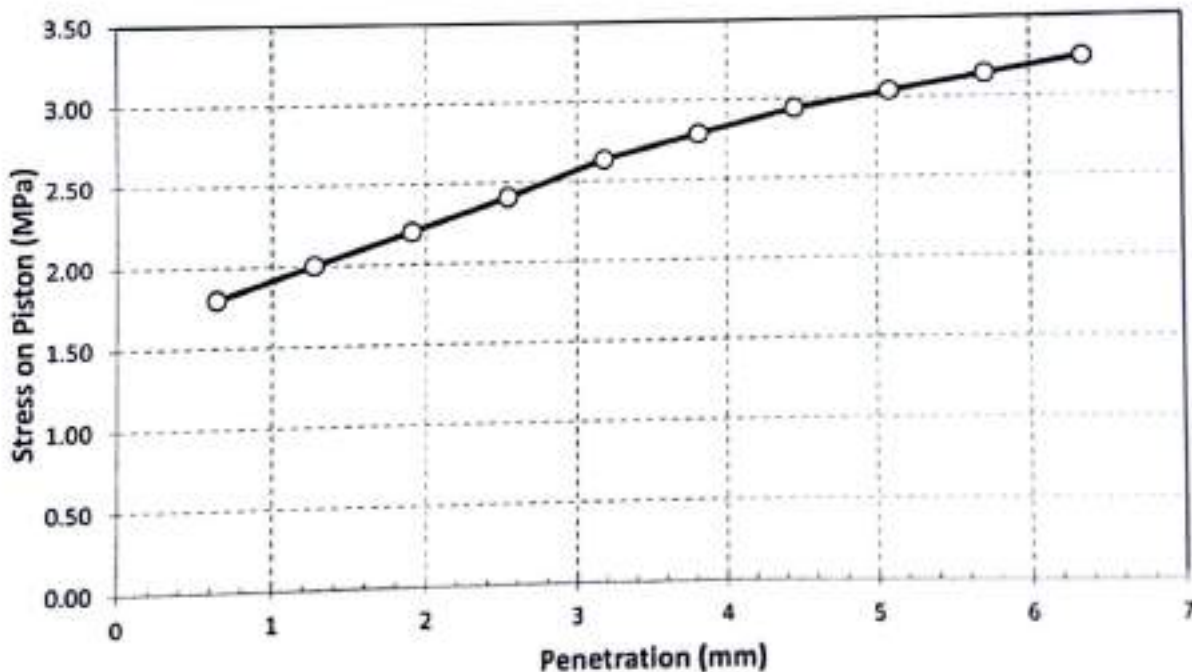
CBR Result	Stress (Mpa)		CBR %
At 0.1 inch (2.54 mm) penetration	St. Value	Sample results	34.9
	6.90	2.41	

Notes :

- 1- Attached graph shows penetration resistance versus penetration magnitude.
- 2- The sample was compacted to dry density of 2.08 (gm /cm³) at 6.8 % optimum water content.

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المنطقة الشمالية
بدرية - مصر

Company Name : EG CONTRACK
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment – middle embankment
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Reporting No. : 62
Sample No. : 10

Load Penetration Curve of CBR Test**ASTM D-1883**

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Signature: *[Signature]*
219-091-827
3 El Malek El Afdal Street - Zamalek - Cairo



الهيئة العامة للطرق والكبارى والنقل البرى
منطقة غرب الدلتا - وزارة الترانزيت

تاريخ الاستلام: ٢٠١٢/٠٩/٢٤
رقم التقرير: ١٠١٢٠١٠
تاريخ التقرير: ٢٠١٢/٠٩/٢٤
من ك. ١٠٠٠ الى ك. ١٠١٦

مهندس الاستشارى
أحمد كوتتره لاشاء الطريق
القطار السريع من ك. ١٠٠٠ الى ك. ١٠١٦
الأحمد الشافعى
subballast

١- التحليل المنطى للمواد الخبيطة والمواد الرقيقة طبقاً لطريقة الأشتو رقم (٣١١-٣١٧) :-

المهونة	وزن المحجوز	نسبة المحجوز لكل مائة %	نسبة المحجوز لكل مائة %	نسبة المحجوز لكل مائة %	نسبة المحجوز لكل مائة %
٣	٠	٠.٠	٠.٠	١٠٠.٠	١٠٠.٠
١/٢"	٠	٠.٠	٠.٠	١٠٠.٠	١٠٠.٠
٣/٤"	٠	٠.٠	٠.٠	١٠٠.٠	١٠٠.٠
١/٢"	٣٥٠	١.٢	١.٢	٩٨.٨	٩٨.٨
١"	٧١٠٠	٢٣.٧	٢٤.٩	٧٥.١	٧٥.١
٣/٤"	٧٨٠٠	٢٦.٠	٥٠.٩	٤٩.١	٤٩.١
١/٢"	٨٠٠	٢.٧	٥٣.٦	٤٦.٤	٤٦.٤
٣/٨"	٣٤٠٠	١١.٤	٦٤.٩	٣٥.١	٣٥.١
رقم ٤	٤٥٠٠	١٥.٠	٨٠.٠	٢٠.٠	٢٠.٠
القاعم	٦٠٠٠	٢٠.٠	١٠٠.٠	١١.٩	١١.٩
رقم ١٠	٢٠٢	٤٠.٤		٥.٨	٥.٨
رقم ٤٠	٣٥٦	٧١.٢		٢.٥	٢.٥
رقم ٢٠٠	٤٣٧	٨٧.٤			
حد السيولة	٠				
حد التلونة	٠				

ملاحظات:-

- العينة مسئولية لدى احضرها.
- العينة لامتثال لاختبارها.
- القصم - ١١٨٥.٠٠ جنيه

مهندس عام لمشروعات

رئيس الإدارة المركزية لمنطقة غرب الدلتا

عبد مهندس
هاني محمد محمود طه

قبل الاختبار	٦٥٠٠	بعد الاختبار	٦٥٠٠
الوزن	٦٥٥٩	الوزن	٦٥٥٩
الوزن	١٥٩٣	الوزن	١٥٩٣

لا تزيد عن ٢٥ %

لا تزيد عن ٢٥ %

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لا تزيد عن ٢٥ %

