مشروع القطار السريع(الطبين -أوكة) شركة لاتتعاركس العقاولات العامة سعن المعطة42004420 الى المعطة425+600

محضر تحديد مسافة ثلل

(تلل الاثرية)

الله أي يوم الريعاء الموافئ - 18/2025

- بناء على طب المدول غركة الانعار عن المقاوات العلمة التعبد مسافة للل الادية من محجر (المصرية) على طريق واذى النطرون الطمين للمشروع المذكور أعلاه.

تع زيارة المحجر من قبل:

معثل الهيلة العقبة الطزل والكباري

ممثل الاستشاري مكتب درمنط الجيوشي

سأل استشاري السبلعة ٢٧٧

مئتوب شركة لانتعاركس للمقاولات العلمة

1- السود المهلس / ابراهيم العلاق

2. الميد المهنس / مصطلى نجم

3۔ امید امہنس / محمد خابل

ب ضرد ثمینس إمصد علل

ونين أن المحجر على مسافة 155 كم من منتصف أطاع شركة الادماركس المقاولات العامة

N 30 *33 '19.7" E 29 45 '06.7"

لط اثى العجير

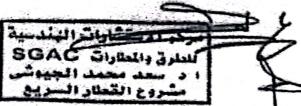
N 30° 58' 03.77" E 28° 43' 21.29 "

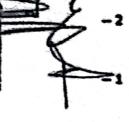
احداثي منتصف القطاع

وعلى ثلك تم توقيع،،



و محرفيلل







محضر استلام موقع

مشروع:أعمال الجسر الترابي والاعكال الصناعية لمشروع القطار الكهرباني السريع (العين السخنة العاصمة الإدارية العلمين مطروح) قطاعات غرب النيل نتنفيذ المسافة من انكم 424,600 الى كم 425,600 بطول 1 كم اتجاة الطريق الساحلي.

> تَنْفَيدُ: شركة لاتدماركس للمقاولات العمومية اشراف: المنطقة الخامسة - منطقة غرب الدلتا طبقا للعقد رقم (2023/2022/2189) بتاريخ

> > إنه في يوم الاربعاء الموافق 14-06-2023 اجتمع كل من:-

1- السيد المهندس المحمد حسني فياض

2- الميد المهندس /إبراهيم عيد الله الحناوي

3- السيد المهندس /احمد أبي بكر

مدير عام المشروعات ـ الهيئة العامة للطرق والكباري

مهندس العملية ـ الهينة العامة تلطرق والكباري

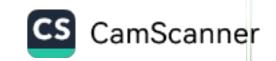
مدير مشروع - شركة لالدماركس للمقاولات العمومية

وذلك للمرور على مسار العملية المذكورة عاليه لاستلام الموقع وقد تبين أن الموقع خالياً من العوانق الظاهرية ويسمح بالبدء في التنفيذ وبناء عليه يعتبر تاريخ 14-06-2023 هو تاريخ استلام الموقع وبدء الأعمال بالعملية واقفل المحضر على ذلك ووقع الحضور

التوقيعات

3۔ ژعدابوںکر

رئيس الإدارة المركزية منطقة غرب الطتار الاسكندرية - مرسسسي مطروح ت عبيد مهندس / 🤄 "هاين محمد محمود طه" ^





Company : Land marks Co.

Project : Electric Express Train, Al Ain Sokhna to Marsa Matrouh Priority Sector (6)

Alamein to Foka

Subject : Determine the deformation and strength characteristics of soil by the plate

loading test according specifications DIN 18134:2012-04 and project requirements

Test Location: Station (425 + 120 to 425 + 290) .

Test Date : 11/1/2024 Repot Date : 13/1/2024

Type of soil :---

Test level ; prepared (Sub grade) (+0.5)

Report No. : 94:100

Dear Gentleman,

According to the above mentioned subject the test performed as follows:-

Apparatus

- 1. Loading plates consists of two plates with 600 mm and 300 mm diameter
- 2. The thickness of plates 30 mm
- 3. Dial gauges with accuracy 0.01 mm to measuring the settlement
- 4. Steel straightedges with magnetic supports to fixed the dial gauges
- 5. Hydraulic jack with pump to transfer reactive loads to the loading plates
- Dial indicator measuring device with scale capacity 700 Bar (Enerbac)
- 7. Reaction loading system by roller compactor with weight approximately 15 ton
- 8. Calibration certificates are attached

Test Procedure

- 1. Clean the ground on test area to the required level with undisturbed soil
- 2. Install loading plates 600 mm and 300 mm diameter, hydraulic jack and 3 dial gauges
- 3. Prior to starting the test applied preloading about 30 seconds.
- 4. The strain gauge and the dial gauge shall be set to zero
- For a 600 mm loading plate, the limit values are 2.5 kg/cm²
- The load shall be applied in six stages, in approximately equal increments, until the required maximum normal stress is reached.
- 7. Each change in load (from stage to stage) shall be completed within one minute
- 8. The load shall be released in 3 stages, to 50 %, 25 %, and approximately 2 % of the maximum load.
- 9. Following unloading: a further (2nd) loading cycle shall be carried out, in which, however, the load is to be increased only to the penultimate stage of the first cycle (so that the full load is not reached).
- At each stage the load shall be maintained until the rate of settlement of the plate becomes less than 0.02 mm/min.

210-991-5371 yearsh

different - perfect of one part of a

ti. Remove the loads





Report

- 1. Evaluation and representation of results
- 2. Load Settlement curve
- The test report content the following:-
- · location of test site Dimension of loading plate
- · Measuring device used Type of soil
- · Type of Bedding material below the plate -Weathering condition
- . Time and date of measurements Unusual observation made during test
- Dial gauge reading and corresponding normal stress Loading-settlement curve
- · Description of the soil condition below the plate after testing

Report

Job requirement : Ev2 > (80 MPa).

1 46 14
Natural Soil
Sunny
600
11/1/2024
NO
No deformation

Evaluation and representation of results

Test	Sta	tion	First Cycle Second Cycle		Evz/ Evs	
No.	From	To	Ev1(Mpa)	Ev2 (Mpa)	Ratio	
1	425+120	425+145	128	217	1.7	
2	425+145	425+1/0	116	207	1.8	
3	425+170	425+195	112	199	1.8	
4	425+195	425+220	120	219	1.8	
5	425+220	425+245	128	207	1.6	
6	425+245	425+270	111	215	1.9	
7	425+270	425+290	103	210	2.0	

Signature / ...

الاستشارات المعملية عداد المعملية المعملية عداد المعملية المعملية عداد المعملية الم



Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Ain Sokhna to Narsa Matroun Priority Sector (8) - Alamein to Foka

Test Date

: 11/1/2024

report date

: 13/1/2024 :Station 425+120 to 425+145

Location Test No.

1

Nonrepetitive Static Plate Load Tests of Soils

DIN 18134

Data sheet

Loading Stage (1)

Loading 5	Stress	Dial 1	Settlement	Dial 2	Settlement	Pilet 2	Settlement	Assessmen
	Kg/cm2	Dial 1	mm	Litar Z	mm	Diat 3	mm	Average
.0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.06
1	0.42	19.82	0.18	19.73	0.27	19.80	0.20	0.22
2	0.83	19.70	0.30	19.54	0.40	19.65	0.35	0.37
3	1.25	10.50	0.41	26,41	0.50	19.44	0.58	0.52
4	1.67	19.45	0.54	19.29	0.71	19.27	0.73	0.66
5	2.08	19.30	0.70	19.17	0.81	19.16	0.84	0.79
6	2.50	19.13	0.87	25.01	0.99	19.03	0.97	0.94

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	1956 9	Settlement	Plant W	Settlement	*********
rosoud .	Kg/cm2	Dist	mm	Dial 2	mm	Dial 3	mm	Average
1	2.50	19.13	0.87	15.01	0.99	19.03	0.97	0.94
2	1.25	19.17	0.83	15.05	0.95	19.08	0.92	0.96
3	0.625	19.22	0.78	19.10	0.90	19.14	0.86	0.86
4	0.01	19.51	0.49	15.42	0.58	19.36	0.84	0.57

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
101-12	Kg/cm2	Dial 1	mm	min x	mm	Diar 5	mm	
0	0.42	19.44	0.56	15.33	0.87	19.28	0.72	0.85
1	0.83	19.37	0,63	19.22	0.78	19.22	0.78	0.73
2	1.25	19.28	0.72	19.13	0.87	39.14	0.86	0.82
3	1.67	19.21	0.70	19.04	0.96	19.05	0.94	0,90
4	2.08	19.13	0.87	18.92	1.08	18.54	1.05	1.00







Company Name

Project Test Date 1 Land marks Co.

Electric Express Train, from Al Ain Solithna to Marsa Matrouth Priority Sector (6) - Alamein to Foka

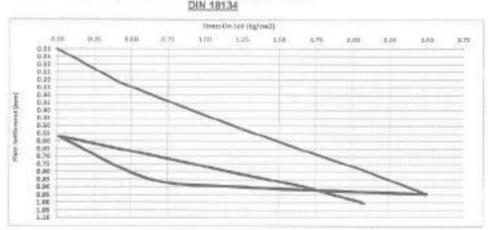
11/1/2024

13/12026

report date Station 495-120 to 425-145 Location

Test No.

Nonrepetitive Static Plate Load Tests of Soils



Loading (1)	0	1	- 2	3	4	- 5	- 6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	6878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2:50
Settlement (mm)	0.00	0.22	0.37	0.52	0.66	0.79	0.94

UnLoading (1)	1	2	1	4
Stage(Kg)	7065	2533	1768	- 0
Stress (Kg/sm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.94	0.90	0.85	0.57

0 (mm) =	600	\$1.6mm(*)	0.34	\$200m/=	0.09	A9 **	0.35
Ext (Wpai=	(0.75°D'A09A3		128	1			

Loading (2)	.0	1	2	-3	4	- 5
Stage(Kg)	D	1186.92	1345.6	3512.5	4718.4	5578.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.87	2.00
Sattlement (mm)	0.57	0.65	0.73	0.82	0.90	1.00

		A least later					
D (mm) =	800	81 (mm/×	0.21	52(mm)=	0.52	AS =	0.20
Es2 (Mpa)=	(0.75°D*A0)/AS		217				

Ev2/Ev1 = 1.7

5v1 - Modulus of deformation during the leading stage.

Ev2 - Medulio of deformation during the Releading stage.

D ~ Plato diameter (mm)

Da = The difference between 0.3 and 9.7 from the maximum loading (enex) (kg/se/*)

DS = Difference in settlements corresponding to 0.3 and 6.7 from the reasonum loading (more





Company Name

Land marks Co.

Project

Electric Express Train, from Al Ain Solvina to Blana: Maircult Priority Sector (6) - Alamein to Fokal

Test Date

: 11/1/2024 13/1/2024

report date

Station 425+145 to 425+170

Location Test No.

: 002

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dist 0	Settlement	4vantes	
- 3	Kg/cm2	Gridi 1	mm	Diat 2	mm	mm	Dial 3	mm	Average
0	0.00	20.00	0.00	20.00	0.00	10.00	0.00	0.00	
4	0.42	15.84	0.16	15.70	0.30	19.69	0.31	0.28	
2	0.83	19.71	0.29	19.50	0.50	19.48	0.52	0.44	
3	1.25	19.95	0.45	19.35	0.65	19.32	0.68	0,69	
4	1.67	19.41	0.59	19.19	0.81	19.15	0.85	0.75	
5	2.08	19.23	0.77	19.05	0.94	18.98	1.02	0,91	
6	2.50	19.11	0.89	18.92	1.08	18.83	1.17	1.05	

Unloading Stage (1)

Landina	Stress	Dial 1	Settlement	milet a	Settlement	D1-1 D	Settlement	
Loading	Kg/cm2	Dim	mm	Dial 2	mm		mm	Average
- 1	2.50	19.11	0.89	18.92	1.08	18.83	1,17	1.65
2	1.25	19.15	0.85	18.96	1.04	18.89	1.11	1.00
3	0.625	19.20	0.80	19.03	0.97	18.94	1.06	0.94
4	0.01	19.47	0.53	15.27	0.73	19.25	0.74	0.87

Loading	5tress	Dial 1	Settlement	Dial 2	Settlement	Divi a	Settlement	47.000.0	
	Kg/cm2	Dian 1	mm	Diai 2	mm	Dial 3	mm	Average	
0	0.42	1941	0,59	19.21	0.79	19.20	0.80	0.73	
- 1	0.83	19.34	0.86	19.14	0.86	19.11	0.89	0.80	
2	1.25	19.23	0.77	15.05	0.95	19.04	0.96	0.89	
3	1.67	19.15	0.85	18.98	1.02	78.55	1.97	0.98	
4	2.08	19.04	0.96	18.87	1,13	18.82	1.18	1.09	





Company Name Project Teet Date report date

Location

: Land marks Co.

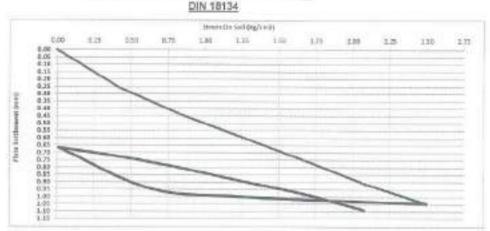
r Electric Express Tmin, from Al Aln Sokhos to Marsa Matrouti Priority Sector (8) - Alamein to Foka

11/1/2024 + 13/1/2024

:Station 425+145 to 425+170

Test No. + 00F

Nonrapatitiva Static Plate Load Tests of Spils



Loading (1)	0.	1	. 2	3	4	5	- 1
Stage(Kg)	. 0.	1186.92	2345.6	3532.5	4719.4	5878.1	7065
fitness (Kg/cm2)	0,00	0.42	0.82	1.20	1.67	2,08	2.50
Sattlement [mm]	0.00	5.26	0.44	0.53	0.75	0.91	1.00

UnLoading (1)	1	1	- 3	4
Stage(Kg)	7065	3633	1768	- 0
Stress (Kg/cm2)	2.60	1.25	0.625	0.01
Settlement (nim)	1.05	1.00	11.94	0.67

Q (mm) =	605	\$1 (mm)=1	0.60	52jevoje	9.76	AS=	0.38
Evt (Mpa) =	0.79"0"50)58		116	1			

Loading (2)	- 0	4	2	. 2	4	- 5
Stage(Kg)	.0	1186.82	2345.6	3532.5	4719.6	5878.5
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.67	0.73	0.80	0.88	0.88	1.09

D (mm)=	500	81 (mm(=	0.78	#2(rent)=	1,00	AS=	0.21
Ev2 (Mpa) =	(0.73°D*A=)AS		207				

Ev2/Ev1 = 1.8

SV1 * Modulus of disformation during the leading stage.

8v2 - Medulus of deformation during the Releading stage.

O = Mails diameter (mm)

Ds = The difference between 0.3 and 8.7 from the maximum loading (smoot) (signer) 0.05 = Difference in settlements corresponding to 0.3 and 0.7 from the materials loading (pm)

مكتب متامل الاستشارات الهنده الاغتبارات المحملية 210-901-517: yearly cause - authorities - cause

3 El Malck El Afdal Street Zamalek, Cairo.





Company Name

: Land marks Co.

Project

Electric Express Train, from Al Ain Soldma to Blanca Matrouti Priority Soctor (6) - Alameiro to Foko

Test Date report date

: 11/1/2024 : 13/1/2024

Location

:Station 425+170 to 425+195

Test No.

:003

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dist a	Settlement	W100000	
	Kg/cm2	Dia 1	mm	Dial 2	mm	Dial 3	mm	Average	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00	
1	0.42	-19.77	0.23	19.81	0.19	19.90	0.10	0.17	
2	0.83	19.63	0.37	19.66	0.34	15.68	0.32	0.34	
3	1.25	19.51	0.49	19.42	0.58	19.44	0.55	0.54	
.4	1.67	19.39	0.61	19,27	0.73	19.31	0.69	0.66	
5	2.08	19.24	0.76	19.16	0.84	19.17	0.83	0.81	
6	2.50	19.11	0.89	19.04	0.96	19.06	0.94	0.93	

Unloading Stage (1)

Loading	Stress	Dial 1	al 1 Settlement Dial 2 Settlement Dial 3		Settlement Settlement		Settlement	*********
Kg/cm2	Diat 1	mm	Diat 2	mm	Dial 3	mm	Avarage	
1	2.50	1911	0.89	19.04	0.96	19.06	0.94	0.93
2	1,25	19.13	0.85	15.08	0.92	19.10	0.90	0.89
3	0.625	19.72	0.78	19.14	98.0	19.15	0.85	0.83
4	0.01	1934	0.46	19.35	8.64	19.41	0.59	0.56

Loading Stage (2)

Leading	Leading Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement		
	Kg/cm2	Dial 1	mm	DISI 2	mm	Diai 3	mm	Average	
0	0.42	29,45	0.55	19.29	0.71	19.35	0.65	9:64	
1	0.83	19.38	0.62	19.21	0.79	19.25	0.74	0.72	
2	1.25	19.26	0.74	19.12	88.0	19.20	0.80	0.81	
3	1.67	19.75	0.85	19.03	0.97	19:11	0.89	0.90	
4	2.08	19.03	0.87	18.94	1.06	19.07	0.98	1.00	







Company Name

Test Date report date

Project.

Location Total No.

II Land marks Co.

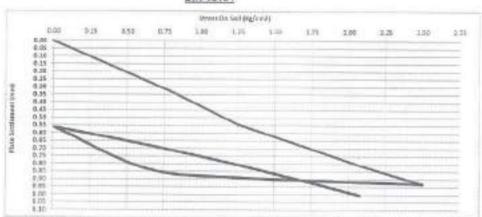
Electric Express Train, from Al Ain Soldhea to Marsa Matroutt Priority Sector (6) - Alamein to Foka

11/1/2004 13/1/2024

Station 425+170 to 425+195

1000

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	.0.	4.	2	3	4	- 15	. 6
Stage(Kg)	-0	1186.92	2345.6	3532.5	4719.4	5876.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	5.08	2.50
Settlement (mm)	0.00	0.17	0.34	0.54	0.68	0.81	0.90

Unicosting (1)	31	2	3	4
Stage(Kg)	7065	2533	1768	0
Stress (Kg/cm2)	1.00	1.26	9,625	0.01
Settlement (mm)	0.63	0.89	0.93	0.56

	1.00000177	000000000000000000000000000000000000000	1.1752.17				
D (mm) =	600	[51(mm)=	0.21	Szornie J	5.70	45=	0.39
	BAY00'97'91		112	2 miles			-

Loading (2)	- 6	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.0	3512.5	4718.4	5878.
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.56	0.64	0.72	0.81	0.90	1.00

Total Control of the	
v2/E∨ =	1.8

D (mm) =	809	Stimuj-	8.79	82(mm)= E.X	2 AS=	0.22
Ev2 (Mpa) =	(0.76° D*&a)/AS		191			

Evil v Mindulus of deformation during the leading stage.

EV2 = Motalus of deformation during the Releading stage.

D = Plata diarector (mrv)

Ds = The difference between 0.3 and 0.7 from the maximum loading (array) (egic inf)

DS = Difference in settlements corresponding to it is and 0.7 them the maximum leading (mm)

مكتب معتمل الاستشارات الهندس الاختيارات المعمثية 219-991-537; 10-04 City of the party of the party

3 El Malek El Afdal Street Zamalek, Cairo.





Company Name

: Land marks Co.

Project

Electric Express Train, from Al Air Soldma to Blanca Motoruli Priority Sector (6) - Alamein to Foku

Test Date

±11/1/2024 ±13/1/2024

Location

:Station 425+195 to 425+220

Test No.

:004

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress		Settlement	Dial 2	Settlement	Dist. 2	Settlement	
	Kg/cm2	Diai 1	mm	Dial 2	mm	Dial 3	mm	Average
0	0.00	20000	0.00	20.00	0.00	10.00	0.00	0.00
1	0.42	19.76	0.24	19.67	0.33	19.82	0.18	0.25
2	0.83	19.62	0.38	19.44	0.56	15.70	0.30	0.41
3	1.25	19,49	0.51	19.25	0.75	19.55	0.45	0.57
4	1.67	19.32	0.88	19.13	0.87	19.40	0.60	0.72
5	2.08	19.16	0.64	18.97	7.03	19.21	0.79	0.89
6	2.50	39.02	0.98	18.81	1.19	19.07	0.93	1.03

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	more a	Settlement	#0161250H
conding	Kg/cm2	Diat 1	mm	Dial 2	mm	Dial 3	mm	Average
1	2.50	1902	0.98	18.81	1.19	19.07	0.93	1.03
2	1.25	1908	0.92	18.87	1.13	19.31	0.89	0.98
3	0.625	1934	0.86	18.92	1.08	19.18	0.82	0.92
4	0.01	1935	0.65	10.26	0.72	19.41	0.59	0.66

Loading	ng Stress	Dial 1	Settlement	Dial 2	Settlement	B1-1-0	Settlement	1/8/2002/02
Market Market	Kg/cm2	Dial 1	mm	Dial 2	mm	Dial 3	mm	Average
0	0.42	19.29	0.71	19.19	0.81	19.34	0.68	0.73
1	0.83	19.71	0.79	19.12	0.88	19.27	0.73	0.80
2	1.25	19 14	0.86	19,03	0.97	19.18	0.82	0.88
3	1.67	19.06	0.94	18.95	1.05	19.09	0.91	0.97
4	2.08	18.94	1.06	10.54	1.16	19.01	0.99	1.07





Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Ala Sokhna to Marsa Matrouh Priority Sector (6) - Alamoin to Foku

Test Date

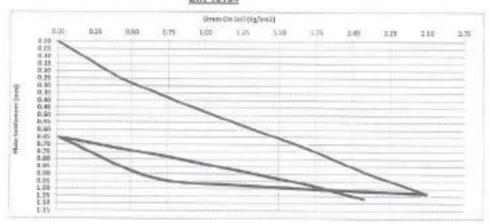
: 11/1/2024

report date Location Lest No.

:Station 425+195 to 425+229

-004

Nonrepetitive Static Plate Load Tests of Suits DIN 18134



Leading (1)	. 0	1.	.2	3	36	- 5	6
Stage(Kg)	.0	1186.92	2345.S	3532.5	4719.4	5878.1	7865
Stress (Kg/cm2)	0.00	0.41	0.33	1.25	1.67	9.08	2.50
Settlement (mm)	8.00	0.25	8.41	0.52	0.72	0.69	1.03

UnLoading (1)	T.	2	- 5.	4
Stage(Kg)	7088	3633	1768	0
Stress (Kg/cm2)	2.50	1,25	0.625	0.01
Settlement (mm)	1.03	0.04	0.92	0.65

Pi Internal or	205	Chi Institut	2.55	Tellinoin 18:20	1 58.	2.00
P (1000) =	600	1-21 (martin)	9,35	52 mm/= 5,2)	1.05=	9/37
Evi (Mpa) =	(0.75°D A0) 63	HAVE	120	The second second		7777-50

Loading (2)	0	1	2	-30	4	- 5
Stage(Kg)	.0	1186.92	2345.6	3532.5	4719,4	5578.1
Stress (Kg/cm2)	0.01	0.42	0.53	1.25	1.67	2.08
Settlement (mm)	0.55	0.73	0.80	0.88	0.87	1.07

	_
m. with a	4.4
DV2/EV1 =	1:8

D (mm) >	900	Stimme	0.79	32(mm)=	0.55	A8 =	0.20
E <2 (Nps) =	19.78°D'A+WAS		219				-1.01

Exit - Microbia of detarmation during the leading elega-

Ev2 = Modulus of deformation during the Releading stage.

() = Plate diameter (mm)

Dis = The difference between 6.3 and 8.7 from the maximum leading (seque) (kgiom²)

DB = Difference in settlements corresponding to 5.2 and 8.7 Non-the maximum looking time;



3 El Malek El Afdal Street Zamolek, Cairo.





Company Name

: Land marks Co.

Project

Electric Express Train, from All Alin Soldme to Marker Matmuth Priority Soutor (6) - Alimoin to Foka

Test Date

: 11/1/2024

report date

: 13/1/2024

Location

:Station 425+220 to 425+245

Test No. : 005

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Sattlement	Dial 3	Settlement		
	Kg/cm2		mm	Diai 2	mm	DIES 3	mm	Average	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00	
1	0.42	19.85	0.15	19.75	0.25	19.74	0.26	0.22	
2	0.83	19.73	0.27	18.63	0.37	15.55	0.41	0.35	
3	1.25	19.61	0.39	19.47	0.53	19.41	0.59	0.50	
4	1.67	19.48	0.52	19.31	0.69	19.28	0.72	0.64	
5	2.08	19:35	0.65	29.18	0.82	19.14	0.88	0.78	
. 6	2.50	19.22	0.78	19.04	0.06	18.97	1.03	0.92	

Unloading Stage (1)

Loading Stress Kg/cm2	Stress	Dist 1	Settlement	Dial 2	Settlement	m	Settlement	94303933
	D161 1	mm	Dial 2	mm	Dial 3	mm	Average	
1	2.50	19.22	0.78	19.04	0.96	18.97	1.03	0.82
2	1.25	19.27	0.73	15.09	0.91	19.01	0.99	0.88
3	0.625	19.92	0.68	10.16	0.84	19.07	0.93	0.82
4	0.01	19.66	0.34	19.45	0.55	19.31	0.69	0.69

Loading	Stress	Dial 1	Sattlement	Dist N	Settlement	B1-1-5	Settlement	Average
2011/10/2015	Kg/cm2	Dies.	mm	Dial 2	mm	Dial 3	mm	
0	0.42	1955	0.45	19.38	0.62	19.23	0.77	6.61
1	0.83	19.49	0.51	1932	0.68	19.14	0.86	0.68
2	1.25	19.41	0.59	19.24	0.76	19.06	0.94	0.78
3	1.67	1932	0.68	19.15	0.86	18.95	1.05	0.86
4	2.08	19.20	0.60	15.03	0.97	28.86	1.14	0.97





Company Name

I Land marks Ca.

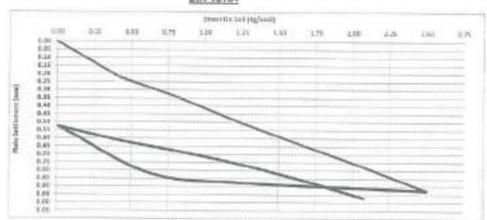
Project Test Date I Electric Express Train, free Al Ala Sokhna to Marca Matroub Priority Sector (8) Alamain to Feisa

Tast Date report date 1.11/4/2024 1.13/4/2024

Location Station 425+220 to 425+245

Fest No. 1806

Nonrepetitive Static Plate Load Tests of Soils QIN 18134



Loading (1)	0.	- 1	2	- 3	4	:#	. 16
Stage(Kg)		1188.92	2345.6	3532.5	4719.4	5876.1	7065
Stress (Kg/cm2)	0.00	The second				2.06	
Settlement (mm)	0.00	0.22	0.35	0.50	0.64	0:78	0.92

Unicording (1)	1.1	1	1	4
Stage(Kg)	7065	3513	1708	0
Stress (Kg/cm2)	2.00	1.26	0.625	0.01
Sattlement (mm)	0.92	0.68	0.82	0.53

D(mm) =	600	S1mml=	0.32	[52(rem)= 5.67	I &5 =	0.34
	15.75°D'Aaya5					-

Loading (2)	0	1	2.	- 3	4	- 5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.
Stress (Kg/cm2)	0.01	4.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.53	0.61	0.68	0.78	0.88	0.97

Ev2/Ev1 =	5.6

D (mm) =	500	Stimme	0.67	830 mp 8.88	A5 =	0.21
Ev2 (Mpa) =	(0.78°0°A/r)/AS		207			

Ex1 = Modulus of deformation making the leading stape.

Ev2 = Modulus of deformation during the Reloading stage.

0 = Fiste diameter (mm)

Da = The difference between 9.3 and 0.7 from the maximum loading (argus) audion*[

ER = Difference in sattlements corresponding to 6.2 and 6.7 from the maximum leading (print)

مكتب محادل الاستشارات الملسسية الإشبارات المحجلية المتسبيل السور 2377 - 201 أسبر المسيد السور المرسدة

3 El Malek El Afdal Street Zamalek, Cairo.





Company Name

Lond marks Co.

Project

: Electric Express Train, from A) Aim Solding to Marson Matrouth Priority Sector (6) - Alemein to Foka

Test Date report date

: 11/1/2024

Location

:Station 425+245 to 425+270

Test No.

:006

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dist o	Settlement		
-01	Kg/cm2	Dia 1	mm	Dial 2	mm	Dial 3	mm	Average	
0	0.00	20.00	0.00	20.00	0.00	10:00	0.00	0.00	
- 1	0.42	19.71	0.29	19.82	0.18	19.45	0.35	0.27	
2	0.83	15.50	0.50	19.66	0.34	19.52	0.45	0.44	
3	1.25	19.29	0.71	19.51	0.49	19.33	0.67	0.62	
4	1.67	19,17	0.83:	19.35	0.65	19.15	0.85	0.78	
5	2.08	19.03	0.97	19.21	0.78	18.98	1.02	0.93	
6	2.50	18.88	1.12	19.05	0.95	18.83	1.17	1.08	

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dist a	Settlement	2000000
Lusturing		Diat 1	mm	Dial 2	mm	Dial 3	mm	Average
1	2.50	18.88	1.12	25/05	0.95	18.83	1.17	1:08
2	1.25	18-97	1.03	15.11	0.89	18.89	1.11	1.01
3	0.625	19.00	1,00	15.19	0.81	18:95	1.05	0.95
4	0.01	19.25	0.75	19.44	0.56	19.28	0.72	0.88

Loading .	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dian 1	mm	Dial 2	mm	Diai 3	mm	
0	0.42	39,19	0.81	19.39	0,61	19.22	0,78	0.73
1	0.83	19.11	0.89	19.32	0.68	19.12	0.88	0.82
2	1.25	19.04	0.96	19.23	0.77	19.04	0.96	0.90
3	1.67	18.03	1.07	19.15	0.85	18.95	1.04	0.99
4	2.08	18.81	1.19	19.06	0.94	18.88	1,12	1.08





Company Name

I Land marks Co.

Project Test Date I Electric Express Train, from At Ain Sekhna to Marka Mutrouli Priodity Rector (6) Alemein to Foka. 111/1/2004

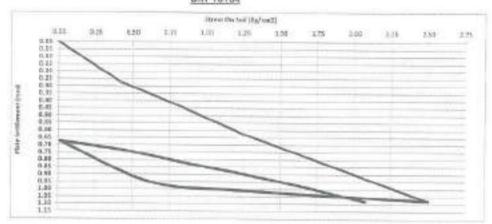
report date Location Last No.

Station 425+245 to 425+276

11000

1.13/1/2024

Nonrepetitive Static Plate Load Tests of Suits DIN 18134



Loading (1)	- 0	1	2	3	4.	5	. 0
Stage(Kg)	0	1186.92	2345.6	3532.5	4710.4	5878.1	7095
Strass (Kg/cm2)	0.00	0.42	0.12	1.35	1.57	2.09	2.50
Settlement (mm)	0.03	0.27	0.44	0.62	0.78	0.93	1.88

contact and							
Dámm) =	600 T	[51 (mm)=]	0.81	S25mmje	8.81	Δ9 =	0.40
Evr. Beautic	OR TECHNOLOGIAN		4.64				

Loading (2)	- 6	1	2	3.	4	- 5
Stage(Kg)	- 4	1186.92	2345.6	3512.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.53	1.25	1.67	2.01
Settlement (mm)	0.66	0.73	0.82	0.90	0.99	1.08

D (mei) =	800	\$1 prings	1.50	52)mm(= 1.01	Δ5 =	0,21
Ev2 (Mpn) =	10.76°D*AnyAs	211111	215			

2

3533

1.25

7065

2

1768

0.625

4

0

0.01

UnLoading (1)

Stage(Kg)

Stress (Kg/cm2)

Settlement (rum)

Ev2/Ev1 =

Do't a Materia of deformation survey the looking stage.

Ev2 = Modulus of Reformation during the Releasing stage.

D = Plots diameter (mm)

Do = The difference between 0.3 and 0.7 from the maximum loading (umax) (kg/cm²).

DS = Difference in actifements corresponding to 3.3 end 9.7 from the maximum loading down.

مكتب معامل الثممتشارات الهندس الاعتبارات المحملية 219 -991 -537 gapital 1944 CALCON PROPERTY COME

3 El Malek El Afdal Street Zamalek, Cairo.





Company Name

Land marks Co.

Project

: Electric Ezymes Trein, from Af Aln Soldma to Manua. Matrouit Priority Sector (6) - Alamoin to Folia

Test Date

11/1/2024

report date Location

Station 425+270 to 425+290

Test No.

: 007

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dist 0	Settlement	HI-LA	Settlement	4500000	
	Kg/cm2	Dial 1	mm	Dial 2	mm	Dial 3	mm	Average	
0	0.00	20.00	0.00	70.00	0.00	20.00	0.00	0.00	
1	0.42	19.81	0.19	19.64	0.36	19.60	0.40	0.32	
2	0.83	19.68	0.32	19.49	0.51	19.41	0.59	0.47	
3	1.25	19.44	0.56	19.31	0.69	19.23	0.77	0.67	
- 4	1.67	19.27	0.73	19.15	0.85	19.05	0.95	0.84	
- 5	2.08	19.15	0.85	19.01	0.99	1851	1.09	0.98	
- 6	2.50	19.02	0.98	1K94	1.16	18.78	1.22	1.12	

Unloading Stage (1)

Loading	Stress	Diat 1	Settlement	Dial 2	Settlement		Settlement	10000000
Loading.	Kg/cm2	Diet 1	mm	Dial 2	mm	Dial 3	mm	Average
1	2.50	19.02	0.98	38.84	1,16	18.78	1.22	7:12
2	1.25	19.07	0.93	18.95	1.10	18.83	1.17	1.67
3	0.825	19:13	0.88	18.07	1.03	18.92	1.08	1.00
4	0.01	1935	0.65	15.74	0.76	19.21	0.79	0.73

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement		Settlement	1749335676
3000 SS 2004	Kg/cm2 mm		Dial 2	mm	Dial 3	mm	Average	
0	0.42	19.27	0.73	19.18	0.82	19.13	0.87	0.81
1	0.83	19.18	0.82	19.09	0.91	19/02	0.95	0.90
2	1.25	19.09	0.91	19,01	0.99	18.93	1.07	0.99
3	1,67	19.01	0.99	18.94	1.06	18.82	1.18	1.08
4	2.08	1891	5.09	18.85	1,15	18.71	1.27	1.17





Company Name

: Land marks Co.

Project Test Date

: Flectric Express Train, from Al Ain Sokhna to Marsa Mulmouti Princity Sector (6) - Alamein to Foka

report date

± 1479/2024 113/1/2024

: 007

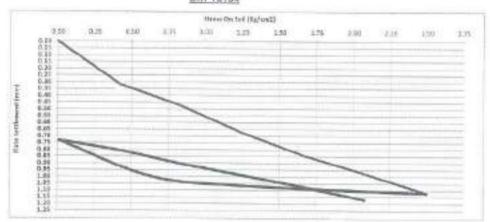
Location

Station 425+270 to 425+290

Lest No.

Nonrepetitive Static Plate Load Tests of Soils

DIN 18134



Loading (1)		1	2	3	4	- 5	. 0
Siuge(Kg)	- 0	1186.92	2345,6	3512.5	4710.4	\$878.1	7095
Stress (Kg/am2)	0.00	0.42	0.33	1.35	1.67	2.08	2.50
Sattlement (mm)	0.00	0.32	0.47	0.67	0.84	0.08	1.12

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1798	0
Strees (Kglum2)	2.60	1:25	0.625	0.01
Settlement (mm)	1.12	1.07	1.00	0.73

$\Pi(mm) =$	600	51 (mm)=	9,44	Sübrinle	1.87	0.8	* :	0.43
Evil (Mea) =	(0.75"0"50355		103					200

Looding (2)	0	1	.2	3	4	6
Stage(Kg)	0	1106.92	2345,6	3512.5	4719,4	\$878.
Stress (Kg/cm2)	0.01	0.42	0.63	1.25	1.67	2.08
Settlement (mm)	0.78	0.81	0.90	0.99	1.08	1.17

Ev2/	Evi:-	2.0

D (mm) =	800	St jmerje	5.86	52(mm)#	1.39	ΔS=	0.21
Ext (Mpa) =	10.76°D*80'Y88		210				-

Ext + Medicine of deformation suring the loading stage.

Ev2 - Modulus of deformation suring the Reloading stage.

D = Flate diameter (mm)

0s = The difference between 0.3 and 0.7 from the maximum fooding jurises (log/cm²).

DB = Difference in sentencents corresponding to 3.2 and 9.7 from the maskpatt backing (ten)

مكتب محامل الاستشارات الهندس الاختيارات المعملية 219-591-537+ pull-handleh ching-markha-date

3 El Malek El Afdal Street Zamalek, Cairo.





Company : Land marks Co.

Project

: Electric Express Train, Al Ain Sokhna to Marsa Matrouh Priority Sector (6)

- Alamein to Foka

Subject

: Determine the deformation and strength characteristics of soil by the plate

loading test according specifications. DIN 18134:2012-04 and project requirements.

Test Location: Station (427 + 780 to 424 + 905) .

Test Date

: 5/1/2024

Repot Date

: 6/1/2024

Type of soil :----

Test level

: Sub grade

Report No.

: 85 89

Dear Gentleman,

According to the above mentioned subject the test performed as follows:-

Apparatus

- Loading plates consists of two plates with 600 mm and 300 mm diameter
- 2. The thickness of plates 30 mm
- 3. Dial gauges with accuracy 0.01 mm to measuring the settlement
- 4. Steel straightedges with magnetic supports to fixed the dial gauges
- 5. Hydraulic jack with pump to transfer reactive loads to the loading plates
- 6. Dial indicator measuring device with scale capacity 700 Bar (Enerbac)
- 7. Reaction loading system by roller compactor with weight approximately 15 ton
- 8. Calibration certificates are attached

Test Procedure

- 1. Clean the ground on test area to the required level with undisturbed soil
- 2. Install loading plates 600 mm and 300 mm diameter, hydraulic jack and 3 dial gauges
- Prior to starting the test applied preloading about 30 seconds.
- 4. The strain gauge and the dial gauge shall be set to zero
- For a 600 mm loading plate, the limit values are 2.5 kg/cm²
- 6. The load shall be applied in six stages, in approximately equal increments, until the required maximum normal stress is reached.
- 7. Each change in load (from stage to stage) shall be completed within one minute
- 8. The load shall be released in 3 stages, to 50 %, 25 %, and approximately 2 % of the maximum load.
- 9. Following unloading, a further (210) loading cycle shall be carried out, in which, however, the load is to be increased only to the secutimate stage of the first cycle (so that the full load is not reached).
- 10. At each stage the load shall be maintained until the rate of settlement of the plate becomes 4. less than 0.02 mg/min
- 11. Remove the loads





Report

- 1. Evaluation and representation of results
- 2. Load Settlement curve
- 3. The test report content the following:-
- · location of test site Dimension of loading plate
- · Measuring device used Type of soil
- · Type of Bedding material below the plate -Weathering condition
- · Time and date of measurements Unusual observation made during test
- Dial gauge reading and corresponding normal stress Loading-settlement curve
- · Description of the soil condition below the plate after testing

Report

Job requirement: Ev2 > (80 MPa).

Item	Descriptions
- Type of bedding material below the plate	Natural Soil
- Weather condition	Sunny
- Plate Diameter (mm)	600
- date of measurement	5/01/2024
- Unusual observation made during test	NO
- Description of the soil conditions below the plate after testing	No deformation

Evaluation and representation of results

Test	Sta	tion	First Cycle	Second Cycle	Eval Eva	
No.	From	To	Ev1(Mpa)	Eva (Mpa)	Ratio	
1	424+780	424+805	100	157	1.6	
2	424+805	424+830	122	159	1.3	
3	424+830	424+855	100	221	2.2	
4	424+855	424+880	136	181	1.3	
5	424+880	424+905	110	189	1.7	





Company Name

: Land marks Co.

Project

Electric Express Train, from Al Ain Sokhna to Marse Matrouti Priority Sector (6) - Alamein to Foka

Test Date

: 5/1/2024

report date

: 6/1/2024

Location Test No. :Station 424+780 to 424+805

Nonrepetitive Static Plate Load Tests of Solls DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Pint 9	Settlement	Pilot a	Settlement	The sales
111000000000	Kg/cm2	Dias 1	mm	Dial 2	mm	Dial 3	mm	Avurage
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
-1	0.42	19.87	0.13	19.89	0.11	19.85	0.15	0.13
2	0.83	19.76	0.24	19.70	0.30	19.71	0.29	0.28
3	1.25	19.48	0.52	19.51	0.49	19.50	0.50	0.50
4	1.67	19.34	0.68	19,33	0.67	19.35	0.65	0.56
5	2.08	15.18	0.82	19.16	0.84	19.20	0.80	0.82
6	2.50	19.04	0.96	18.98	1.02	19.08	0.92	0.97

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dist a	Settlement	**********	
Committed	Kg/cm2	52101.2	mm	Dial 2	mm	Dial 3	mm	Average	
31	2.50	19.04	0.96	18.98	1.02	19.08	0.92	0.97	
2	1.25	19.17	0.83	19.13	0.87	19.12	0.88	0.86	
3	0.625	19.32	0.68	15.29	0.71	19.22	0.78	0.72	
4	0.01	1957	0.43	15.59	0.41	19.65	0.35	0.40	

Loading Stage (2)

Loading	Stress	Diel 1	Settlement	Dial 2	Settlement	D: 1 0	Settlement	
	Kg/cm2	Dia 1	mm	Dial 2	mm	Dial 3	mm	Average
0	0.42	16.50	0.50	19.52	0.48	19.51	0.49	0.40
1	0.83	19.40	0.60	19.43	0.57	19.35	0.62	0.60
2	1.25	19.75	0.74	19.28	0.72	19.26	0.74	0.73
3	1.67	1917	0.83	19.14	0.86	19.18	0.82	0.84
4	2.08	19.03	0.97	19.08	0.92	19.06	0.94	0.94



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Company Name Project Yest Date : Land marks Co.

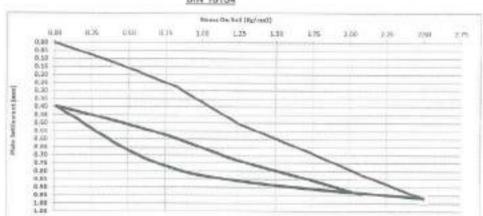
: Electric Eagress Train, from Al Ain Soldma to Marsar Materials Priority Sector (b) - Alamein to Poka

: 5/1/2024

report date : 6/1/2024 Location : Station 424+780 to 424+805

Test No.

Nonrepetitive Static Plate Load Tests of Solls DIN 18134



Loading (1)	0	1	2	. 1	4	. 5	6
Stage(Kg)	- 0	1186.92	2345.6	3522.5	4719.4	1.8788	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.36	2.50
Settlement (mm)	0.00	0.13	0.28	0.50	17.66	0.82	0.97

UnLoading (1)	1	2	3	4
Stage(Kg)	7965	3533	1758	0
Stress (Kg/cm2)	2.50	1.25	ti.825	0.01
Settlement (mm)	0.97	0.86	0.72	0.40

D (max) =	600	S1 (mm)=	0.25	1821mm)=	6,00	AS =	0.44
Evi (Mpa) =							

Loading (2)	8	3	- 2	3	4	- 5
Stage(Kg)	п	1186.92	2345.6	3632.6	4719.4	5879.1
Stress (Kg/cm2)	.0.01	6.42	0.85	1.25	1.67	-2.08
Settlement (mm)	0.40	E-49	0.60	0.75	0.84	0.94

D (mm) #	600	51 (mm)=	0.59	S2(mm)=	98.9	A8 =	0.28
et 16 to 2 to 10 to	(0.75°0°40)/48						

Ev2/Ev1 = 1.5

Ev1 - Modulus of deformation during the looding stage.

Ev2 - Madulus of deformation during the fletoeding sterys.

D = Plano starrette: (mer)

Ds = The attherance between 0.5 and 1.7 from the maximum locating (smax) region?)

DS =Difference in settlements corresponding to 0.5 and 0.7 from the maximum leading (mm)



3 El Malek El Afdal Street Zamalek, Cairo.





Company Name

Land marks Co.

Project

I Electric Express Trein, from Al Ain Sokhna to Narea. Matrouth Priority Sector (6) - Alemain to Poka.

Test Date

: 5/1/2024

report date Location

:6/1/2024

Test No.

:Station 424+805 to 424+830

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	00-1-4	Settlement	
	Kg/cm2	Dian 1	mm	Dial 2	mm	Dial 3	mm	Average
0	0.00	20.00	0.00	20:00	0.00	20.00	0.00	0.00
.1	0.42	19.85	0.15	16.82	0.18	19.80	0.20	0.18
2	0.83	19.68	0.32	19.51	0.49	19.66	0.34	0.38
3	1.25	19.44	0.56	19.40	0.60	19.48	0.52	0.56
- 4	1.67	19.34	0.66	15.32	88.0	19.31	0.69	0.68
5	2.08	1936	0.84	15.17	0.83	19.19	0.81	0.83
6	2.50	1897	1.03	19.03	0.97	19.06	0.94	0.98

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Piller II	Settlement	/ series
a continuity	Kg/cm2	Diai 1	mm	Diai 2	mm	Dial 3	mm	Average
-1.	2.50	38.97	1.03	19.03	0.97	19,06	0.94	0.98
2	1,25	19/89	0.91	19.12	0.88	19:14	0.86	0.88
3	0.625	19.23	0.77	19.26	0.74	19.29	9.71	0.74
4	0.01	19.52	0.48	19.47	0.53	19:54	0.46	0.49

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dist a	Settlement	***********
	Kg/cm2	Diet 1	mm	Dian 2	mm	Dial 3	mm	Average
0	0.42	19.41	0.59	1939	0.61	19.47	0.53	0.58
1	0.83	1931	0.69	19.26	0.74	19.37	0.63	0.69
2	1.25	2921	0.79	39.13	0.87	19.26	0.74	0.90
3	1.67	19.10	0.90	1901	0.99	19.12	0.88	0.82
4	2.08	19.00	1.00	18.91	1.09	19.01	0.99	1.03





Company Name Project Tost Date report date

Location

Test No.

: Land marks Co.

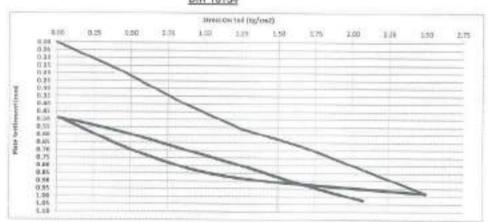
: Electric Express Train, from Al Ain Sokhra to Marsa Matrouti Priority Sociae (8) Alameirs to Poke

+6842024

Station 424+805 to 424+830

2

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)		1	2	3	4	- 5	. 0
Stage(Kg)		1186.92	2345.6	3532.5	4712.4	5076.1	7865
Stress (Kg/cm2)	0.00			THE PERSON NAMED IN	1.67	-	
Settlement (mm)	0.00	0.18	0.08	0.66	0.68	6.83	0.08

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	2533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Sattlement (elen)	60.03	0.88	0.74	0.45

D from a	600	\$1 (mm)+)	9.34	\$2jmmje	8.71	ΔS=	0.36
Ev1 (Mpa) =	(0.78° D*0#) 65		122				
Loading (2) 0	1	2	3	4	S	

Loading (2)	0	1	2	. 1	4	8
Stage(Kg)	0	1186.92	2345.6	3532.5	4719,4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.26	1.67	2.01
Settlement (mm)	0.49	0.58	0.69	0.80	0.92	1.03

D (mm) =	E00	\$1.[mm]=	8.87	\$2(mn)=	0.94	A8 =	0.28
	19.78°D*A03A8		150	-		-	

Ev2/Ev1 = 1.3

Ev1 = Modulus of deformation during the loading atage. Ev2 = Modulus of deformation during the Reloading stage.

0 = Plate Stameter (mm)

3u = The difference between <math display="inline">3.3 and 0.7 from the maximum loading (sings) $(\log km^2)$

00 - Ofference Insettlements acrosponding to 1.3 and 6.7 from the maximum loading (1981)





Company Name

Land marks Co.

Project

- Electric Express Train, from Al Ain Soklars to Marias Metrough Printity Sector (6) - Alameta to Pokis

Test Date

: 5/1/2024 : 6/1/2024

report date Location

:Station 424+830 to 424+855

Test No.

.

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	mint a	Settlement	
	Kg/cm2	Diar 1	mm	Dia 2	mm	Dial 3	mm	Average
0	0.00	20.00	0.00	20.0C	0.00	-20:00	0.00	0.00
1	0.42	19.83	0.17	19.80	0.20	19.82	0.18	0.18
2	0.83	19.68	0.32	19.66	0.34	19.70	0.30	0.32
3	1.25	19.47	0.53	25,44	0.56	19.52	0.48	0.52
4	1.87	19.26	0.74	15.30	0.70	19.31	0.69	6.71
5	2.08	19/15	0.87	19.16	0.84	19.18	0.82	0.64
6	2,50	18.95	1.04	19.04	0.96	19.07	0.93	0.95

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	mile a	Settlement	10000
Loading	Kg/cm2	Count 1	mm	Dian 2	mm	Dial 3	mm	Averago
- 1	2.50	18.96	1.04	19.04	0.96	19:07	0.93	0.98
2	1.25	39(80)	1.00	19.08	0.92	1931	0.89	0.94
3	0.825	19.08	0.92	19.15	0.65	19.17	0.63	0.87
4	0.01	19.17	0.63	19.45	0.55	19,43	0.57	0.58

Loading	Stress	Diel 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	(4000000
	Kg/cm2	LYIGH E	mm	Dia 2	min	Diai a	mm	Average
0	0.42	19.27	0.73	1939	0.61	19.37	0.63	0.66
1	0.83	1920	03.0	19.29	0.71	19.31	0.69	0.73
2	1,25	1911	0.89	19.25	0.75	19.22	0.78	0.81
3	1.67	19100	1.00	19.17	0.83	19.13	0.87	0.90
4	2.08	1891	1.07	19.08	0.92	19.01	0.99	0.99





Company Name Project Test Date

st Date | 3/1/2024

report data Location Test No. Blockric Express Train, from Al Alis Sublines to Marses Matroub Priority Sector (6) — Alametri to Folia: Antonia.

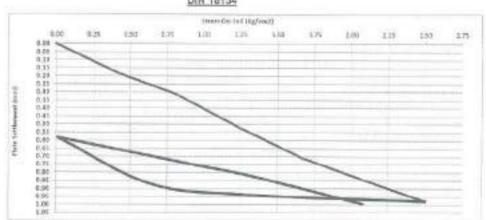
+ 6/1/2024

: Land marks Co.

Stirlion 424+830 to 424+855

1

Nonrepatitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	. 0	1	2	3	4	5	- 6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719,4	5878.1	7065
Stress (Kg/cm2).	0.00	0.42	0.83	1.305	1.87	2.06	2.80
Sottlement (mm)	0.00	0.18	0.32	0.52	0.71	0.04	0.90

UnLoading (1)	1	2	3	. 4
Stage(Kg)	7065	3633	1768	0
Stress (Kg/cm2)	2.50	1.25	0.825	0.01
Settlement (mm)	11.98	0.34	0.87	0.55

D (mm) =	600	\$1 (mm)*	0.28	\$20mm #	0.54	AS =	0.44
Ext (Mpn) =	(0.75°D°A0)/AS		100				

Leading (2)	-0	1	. 2	. 3	4	5
Stage(Kg)	. 0	1186.92	23/5.€	3512.5	4759.4	5878.
Stress (Kg/cm2)	0.01	0.42	0.13	1.25	1.67	2.08
Settlement (mm)	0.58	0.68	0.73	0.81	0.90	0.59

		-					
D(mm)=	500	81 [mn]=	0.72	S2(rmje	1.02	AS+	0.20
E+2 (Mps) =	[0,78°D'A#)/A5		221				

Ev2/Ev1 = 2.2

Ext = Modulus of coformation during the loading stage.

Ev2 - Modulus of deformation during the Releasing stage.

D = Plate diameter (mm)

Os # The difference between 6.3 and 6.7 from the maximum loading (smart) (kg/cm²)

DS = Difference in settlements corresponding to 3.3 and 6.7 from the maximum loading (mm)



3 El Malek El Afdal Street Zamulek, Cairo.





Company Name

Land marks Co.

Project

: Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (R) - Alamein to Foto

Test Date

: 5/1/2024 : 6/1/2024

report date

:Station 424+855 to 424+880

Location Test No.

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dist. 0	Settlement		
110	Kg/cm2	Chair 1	mm	Dial 2	mm	Dial 3	mm	Average	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00	
1	0.42	19.84	0.16	19.91	0.09	19.87	0.13	0.15	
2	0.83	19.71	0.29	19.70	0.21	19.63	0.37	0.29	
3	1.25	19.59	0.41	19.61	0.39	19.54	0.46	0.42	
4	1.67	19.43	0.57	19.45	0.54	19.43	0.57	0:56	
5	2.08	19.32	88.0	1936	0.64	19.28	0.72	0.68	
6	2.50	19.13	0.87	19.21	0.79	19.20	0.80	0.82	

Unloading Stage (1)

andless	Stress	Dial 1	Settlement	Dial 2	Settlement	m-10	Settlement	
Loading	Kg/cm2	Dian 1	mm	Dial 2	mm	Dial 3	mm	Average
. 18	2.50	19.13	0.87	19.21	0.79	19.20	0.80	0.62
2	1.25	19.17	0.83	19.28	0.72	19.27	0.73	4,76
3	0.625	19.76	0.74	19.35	0.65	19.33	0.67	0.68
-4	0.01	19.52	0.48	10.56	0.44	19.50	0.50	0.47

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement		
	Kg/cm2	5161	mm	Dist 2	mm	Dial 3	mm	Average	
0	0.42	1943	0.57	19.45	0.55	19.41	0.59	0.57	
1	0.83	1931	0.69	19.33	0.67	19.30	0.70	0.89	
2	1.26	19.19	0.81	19.21	0.79	29.26	0.74	0.78	
3	1,67	19.08	0.92	15.07	0.93	29.18	0.82	0.59	
4	2.08	3894	1.88	19.00	1.00	19.11	0.89	0.98	





Company Name Project Test Date report date Location

Test No.

: Land marks Co.

. Electric Express Train, from Al Alir Schlina to Marsa. Matrouti Priority Sector (6) - Alameh to Foka

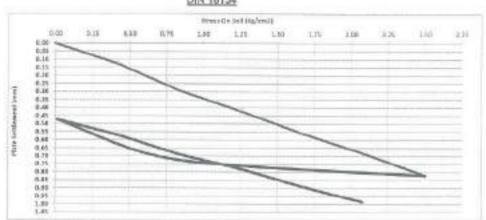
: 17172024

67572024

:Station 424+855 to 424+880

4

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)		. 1	2	3	4	5	- 6
Stage(Kg)	. 0	1186,92	2345.8	3532.5	4719.4	1070.1	7065
Strass (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.13	0.20	0.42	0.56	0.65	0.82

UnLoading (1)	1	2	3	4
Stage(Kg)	7965	3533	1798	. 0
Stress (Kg/cm2)	2.40	1.25	0.625	0.01
Settlement (mm)	0.82	0.70	0.49	0.47

D.(mm) =	500 I	S1 (mmle)	0.28	[82(mm)=	0.50	AS:W	0.33
Erf (Mpa) =	0.79"0"00)\05		126				

Loading (2)	0	1	2	1	4	. 5
Singe(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cmZ)	0.01	0.42	0.82	1.25	1.67	2.08
Settlement (mm)	0.47	0.57	0.68	0.78	98.0	0.08

12 (mm) =	500	31 mn)=	9.66	\$2(mm)=	121	A8 =	0.24
Sur Hallerick or	(0.78°C*A+)(6.5)		181		-	***************************************	

Ey2/Ev1 = 1.3

Ext * Modulus of deformation during the loading stage.

6v2 - Medulos of deformation during the Ralpoding stage.

D = Plate diameter (mm)

Dis \times The difference between 6.5 and 0.7 from the maximum leading (array) (agicm)

D6 = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading tree.



3 El Malek El Afdal Street Zamalek, Cairo.





Company Name

Land marks Co.

Project

i Electric Express Train, from Al Ain Sukhnutu Marus. Metrouit Priority Sector (6) - Alemetroto Foka

Test Date

5/1/2024

report date Location 6/1/2024

Test No.

Station 424+880 to 424+905

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stross	Dial 1	Settlement	Dist 2	Settlement	Dial 3	Settlement	Accessor
	Kg/cm2	Dim 1	mm	DIST &	mm	Diat 3	mm	Average
0	0.00	20.00	0.00	20:00	0.00	20.00	0.00	0.00
1	0.42	19.80	0.20	19.75	0.25	19.83	0.17	0.21
2	0.83	19.69	0.31	19.56	0.44	19.78	0.22	0.32
3	1.25	19.60	0.40	19.41	0.59	19.53	0.47	0.49
4	1.67	19.42	0.58	19.28	0.72	19.29	0.71	0.67
5	2.08	19.28	0.72	19.09	0.91	19.11	0.89	0:64
6	2.50	15.10	0.90	18.98	1.02	19.00	1.00	0.97

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	
Kg/cm2	Local 1	mm	Dim S	mm	Diai 3	mm	Avorago	
-1	2.50	19.10	0.90	18.98	1.02	19.00	1.00	0.97
2	1.25	19.18	0.82	15.09	0.91	19.06	0.94	0.89
3	0.825	19.30	0.70	19.22	0.78	19.17	0.83	0.77
4	0.01	19.54	0.46	19.52	0.48	19,42	0.58	0.51

Loading	ng Stress Dial	Dist 4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
		Diai 1	mm	Dial 2	mm	Diai 3	mm	Wassille
0	0.42	19.45	0.55	19.45	0.55	19.38	0.62	0.57
1	0.83	1936	0.64	19.32	0.68	19.31	0.69	0.67
2	1.25	19.25	0.75	19.19	0.81	19.21	0.70	0.78
3	1.67	15.19	0.81	19.11	0.89	15:10	0.90	0.87
4	2.08	19.09	0.91	19.01	0.99	19.03	0.97	0:98





Company Name Project Test Date

report date

: Land marks Co.

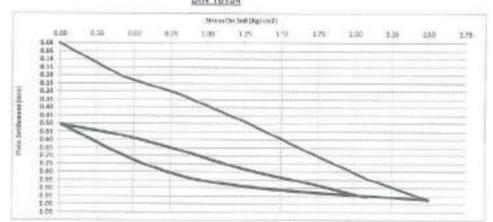
: Electric Express Train, from Al Alm Goldma to Marsa Matrools Priority Sector (6) - Alamelis to Police

: 5/1/2024 : 6/1/2024

:Station 424+880 to 424+905

Location Test No.

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	0	1	2	3	4		. 0
Stage(Kg)	0	1186.52	2345.6	3532.5	4719.4	5678.1	7,045
Stress (Kg/cm2)	0.00	0.42	0.83	1.28	1.67	2.05	2.50
Settlement (rem)	0.00	0.21	0.92	0.40	0.67	0.84	0.97

UnLoading (1)	1	. 2	3	- 4
Stage(Kg)	7945	3533	1758	.0
Stress (Kg/cm2)	2.60	1.29	0.825	0.01
Sottlement (mm)	0.97	0.65	0.77	0.51

D (mm) =	600	81.jmm(=)	0.38	\$21mmi= 0.7	D AS=	0.40
	10.78°0°40'V48		110			-

Loading (2)	- d	-4	. 2	- 3	4	. 5
Stage(Kg)	0	1186,92	2345.6	3532.5	4719.4	5878.
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.51	0.57	0.67	0.78	0.07	0.96

D (mim) =	600	51 jmmin	0.65	52(mm)= 6,03	£5 =	0.23
	70.75° D' 40)			-		

Evit + Missurus of deformation during the heading stage:

Ey2 > Moth/Lis of deformation during the Releading stage.

D = Plate diameter (mm)

Ds = The difference between 0.3 and 0.7 from the maximum backing (error) jug/cm²)

DS = Difference in settlements corresponding to 3.3 and 0.7 fres the maximum loading (nm).

Ev2/Ev1 = 1.7



3 El Malek El Afdal Street Zumalek, Cairo.





Company : Land marks Co.

Project : Electric Express Train, Al Ain Sokhna to Marsa Matrouh Priority Sector (6)

Alamein to Foka

Subject : Determine the deformation and strength characteristics of soil by the plate

loading test according specifications. DIN 18134:2012-04 and project requirements

Test Location: Station (425 + 000 to 425 + 100) -

Test Date : 9/1/2024 Repot Date : 10/1/2024

Type of soil :----

Test level : prepared (Sub grade) (+0.5)

Report No. : 90:93

Dear Gentleman,

According to the above mentioned subject the test performed as follows:-

Apparatus

- 1. Loading plates consists of two plates with 600 mm and 300 mm diameter
- 2. The thickness of plates 30 mm
- 3. Dial gauges with accuracy 0.01 mm to measuring the settlement
- 4. Steel straightedges with magnetic supports to fixed the dial gauges.
- 5. Hydraulic jack with pump to transfer reactive loads to the loading plates
- Dial indicator measuring device with scale capacity 700 Bar (Enerbac).
- 7. Reaction loading system by roller compactor with weight approximately 15 ton
- 8. Calibration certificates are attached

Test Procedure

- 1. Clean the ground on test area to the required level with undisturbed soil
- 2. Install loading plates 600 mm and 300 mm diameter, hydraulic jack and 3 dial gauges
- 3. Prior to starting the test applied preloading about 30 seconds.
- 4. The strain gauge and the dial gauge shall be set to zero
- For a 600 mm loading plate, the limit values are 2.5 kg/cm²
- The load shall be applied in six stages, in approximately equal increments, until the required maximum normal stress is reached.
- 7. Each change in load (from stage to stage) shall be completed within one minute
- 8. The load shall be released in 3 stages, to 50 %, 25 %, and approximately 2 % of the maximum load.
- 9. Following unloading, a further (2nd) loading cycle shall be carried out, in which, however, the load is to be increased only to the penultimate stage of the first cycle (so that the full load is not reached).
- At each stage the load shall be maintained until the rate of settlement of the plate becomes less than 0:02 mm/min.
- 11. Remove the loads 12 931 5371





Report

- 1. Evaluation and representation of results
- 2. Load Settlement curve
- 3. The test report content the following:-
- . location of test site Dimension of loading plate
- · Measuring device used Type of soil
- · Type of Bedding material below the plate -Weathering condition
- . Time and date of measurements Unusual observation made during test
- Dial gauge reading and corresponding normal stress Loading-settlement curve
- · Description of the soil condition below the plate after testing

Report

Job requirement : Ev2 > (80 MPa).

Item	Descriptions
- Type of bedding material below the plate	Natural Soil
- Weather condition	Sunny
- Plate Diameter (mm)	600
- date of measurement	9/1/2024
- Unusual observation made during test	NO
- Description of the soil conditions below the plate after testing	No deformation

Evaluation and representation of results

Test No. Fro	Sta	tion	First Cycle	Second Cycle	Ev2/ Ev
	From	To	Ev1(Mpa)	Ev2 (Mpa)	Ratio
1	425+000	425+025	105	198	1,9
2	425+025	425+050	106	210	2.0
3	425+050	425+075	101	151	1,5
4	425+075	425+100	115	224	1,9

Signature /

219-21-537; postume



Company Name

: Land marks Co.

Project

Ellectric Express Train, from Al Ain Sokhna to Massa. Motorub Priority Sector (6) -- Alumein to Foka

Test Date report date : 9/1/2024

Location

:Station 425+000 to 425+025

Test No.

1

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Print 3	Settlement	mar a	Sattlement	¥/2013031
	Kg/cm2	Dia 1	mm	Dial 2	mm	Dial 3	mm	Average
0	0.08	20.00	0.00	20.00	0.00	20.00	0.00	0.00
-1	0.42	19.91	0.08	19.86	0.14	19.81	0.19	0.94
2	0.83	19.83	0.17	19.68	0.32	19.60	9.40	0.30
3	1,25	19.71	0.29	19.50	0.50	19.37	0.63	0.47
4	1.67	19.54	0.46	19.33	0,67	19.18	0.62	0.65
5	2.08	19.33	0.07	23.10	0.84	18.98	1.02	0.84
6	2.50	19.17	0.83	39/02	0.98	18.85	1.14	0.98

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dist. 0	Settlement	(Administration
Londing	Kg/cm2	GHAI. 1	mm	Dia 2	mm	Dial 3	mm	Avarage
35	2,50	19.17	0.83	15.02	0.96	18.86	1.14	0.98
2	1.25	20.20	0.80	15.18	0.82	18.96	1.04	0.69
3	0.625	19.26	0.74	10.33	0.67	19:30	0.90	0.77
4	0.01	1947	0.53	19.66	0.34	19.42	0.58	0.48

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	D2-1-9	Settlement	/ #2000000
2000001211	Kg/cm2	Dia 1	mm	Dial 2	mm	Dial 3	mm	Average
0	0.42	19.41	0.59	19.54	0.46	19.33	0.67	0.57
1	0.83	1933	0.67	19.40	0.60	19.20	0.80	0.69
2	1.25	1927	0.73	19.29	0.71	19.08	0.92	0.78
3	1.67	1921	0.79	19.19	0.81	38.99	1.01	0.87
4	2.08	19.08	0.92	19.10	0.90	18.90	1.10	0.97





Company Name

± Land marks Ce.

Project

Electric Express Train, from Al Ala Soldana to Marsa. Matroub Priority Sector (E) - Alamein to Folia

Test Date report date

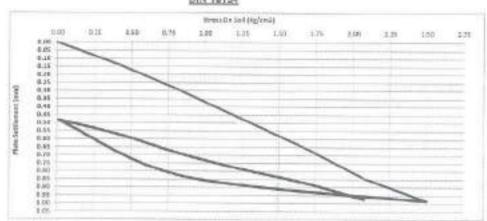
1.9/1/2024 10/1/2024

Location

Station 425+000 to 425+025

Test No.

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	- 3	1	.2	3	4	. 5	- 14
Stage(Kg)	0	1186.92	2345.8	3632.6	4719.4	5878.1	7065
Stress (Kglcm2)	0.00	1.42	0.63	1.25	1.07	2.08	2.50
Settlement (mm)	0.00	0.14	0.90	0.47	0.65	0.84	0.98

UnLoading (1)	31	2	3.	- 4
Stage(Kg)	7065	3635	1758	. 0
Stress (Kg/om2)	2.80	1.25	0,625	0.01
Settlement (mm)	0.98	0.89	0.77	0.48

-		-				March Co.	
D(mm) =	500	31 (med=)	0.27	820mmi=	1.62	ΔS =	0.42
Evt (Mpa) ≈	(D.75*D*Ac)(AS		105		5,500		

Loading (2)	0	1	.2	3	4	- 5
Stage(Kg)	. 0	1186.92	2345.6	3532.5	4719.4	\$878.1
Stress (Kg/cm2)	0.01	0.42	0.63	1.25	1.67	2.08
Settlement (mm)	D.48	0.57	0.59	0.78	0.87	0.97

0.67

188

Ev2/Ev1 =	1.5

Pull + Michigue of deformation curing the loading stage.

16.78° D* A+ NAS

600

EvG = Medialus of deformation during the Releading stage.

D = Plate diameter (mm)

D (mm) =

Ev2 (Maa) =

On - The difference between 0.5 and 0.7 from the regionsm leading (smaz) (kg/cm²)

BS = Difference in settlements corresponding to 3.3 and 8.7 from the meximum (seeing (mm)



32(ren)= 1.55 \ \ \ \ \ \ \ \ \ \ \ =

0.22

3 El Malek El Afdal Street Zamalek, Cairo.





Company Name

: Land marks Co.

Project

Electric Express Train, from Al Ain Soldine to Marss Matrouth Friority Sector (6) - Alamain to Foka

Test Date report date : 9/1/2024

Location

:Station 425+025 to 425+050

Test No.

2

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Loading Stress	Diai 1	Settlement	Dial 2	Settlement	Dist a	Settlement	
Kg/cm2	Dian 1	mm	Diai 2	mm	Dial 3	mm	Average	
0	0.00	20.00	0.00	29.00	0.00	20.00	0.00	0.00
1	0.42	19.81	0.19	19.74	0.26	19.78	0.22	0.22
2	0.83	19,69	0.31	19.63	0.37	19.64	0.36	0.35
3	1.25	19.54	0.46	19.48	0.62	19.49	0.51	0.50
4	1.67	19.32	0.68	19.26	0.74	19.30	0.70	0.71
5	2.08	19.16	0.84	19.11	0.89	19.13	0.87	0.67
6	2.50	18.99	1.01	38.95	1.05	18.06	1.04	1.03

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dist o	Settlement	A. (1995)	
conding	Kg/cm2	Diat 1	mm	Dial 2	mm	Dial 3	mm	Avarage	
1	2.50	18.99	1.01	18.95	1.05	18.96	1.04	1.03	
2	1.25	19.06	0.94	15.02	0.98	19.04	0.96	0.96	
3	0.825	19.1/1	0.86	19.11	0.89	19.12	0.88	0.88	
4	0.01	19.39	0.61	10.23	0.67	19.36	0.64	0.84	

Loading	Loading Stress	Dial 1	Settlement	Dist of	Settlement	Dist o	Settlement	1180000000
-100MH 077/ES	Kg/cm2	Dian 1	mm	Dial 2 mm	Dial 3	mm	Average	
0	0.42	1933	0.67	19-25	0.75	19.30	0.70	0.71
1	0.83	1925	0.75	19.16	0.84	19.21	0.79	0.79
2	1.25	1917	0.83	19.07	0.93	19.10	0.90	0.89
3	1,67	19.09	0.91	18.99	1.01	19.01	0.99	0.97
4	2.08	19.00	7.00	18.91	1.09	18-92	1.08	1.00





Company Name

Project Lest Date

Test No.

Test Date report date Location : Land marks Co.

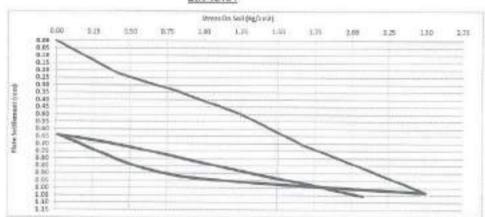
: Flexistic Express Train, from Al Aln Scidera to Marca, Matroub Priority Sector (6) - Alamoin to Foka.

10/1/2024

Station 425+025 to 425+050

- 96

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	- 0.	4	2	3	4	-5	- 6
Stage(Kg)	п	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	6.25	1.67	2.08	2.50
Settlement (mm)	0.00	5.22	0.25	0.50	0.75	0.67	1.03

and the same of th	All Control of the	Call Part III Control					
Ditremot =	E00 1	\$1 (mt) =	0.22	520mm/= 4	74	Δ5 =	0.42
	10.75°0°00 pall						

Loading (2)	0.	1	2	-3	4	- 5
Stage(Kg)	. 6	1186.92	2345.6	3512.5	4719,4	1878.1
Stress (Kg/cm2)	0,01	0.42	0.83	1.25	1.67	2.08
Sattlement (mm)	0.64	0.71	0.79	0.89	0.97	1.06

D (mm) =	600	\$1 [most=	0.78	52(mm)=	0.99	.C.15 =	0.21
Ev2 (Mpa) =	0.75° D*A+y\0.5		211				

by the Mindulus of deformation during the loading stage.

Ev2 = Modulus of deformation during the Reloading staps.

D = Piero diameter (mm)

Ds = The difference between 0.3 and 0.7 from the maximum loading (amax) (kg/cm²)

DS = Difference in settlements corresponding to 1.3 and 6.7 from the electrical leading (her).

UnLoading (1)	1	2	3	.4	
Stags(Kg)	7065	3833	1766	. 0	
Stress (Kg/cm2)	2.00	1.25	0.625	0.01	
Sattlement (mm)	1,000	0.96	0.88	0.64	

Ev2/Ev1 = 2.0



3 El Malek El Afdul Street Zamalek, Cairo.





Company Name

Land morks Co.

Project Test Date : Electric Express Train, from Al Ain Sokhna to Marsa. Metrouls Priority Sector (6) - Alamein to Foka

: 9/1/2024

report date

: 10/1/2024

Location Test No.

Station 425+050 to 425+075

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Diat 1	Settlement	Diai 2	Settlement	Pilot 9	Settlement	1000000	
	Kg/cm2	Diei 1	mm	Dial 2	mm	Dial 3	mm	Average	
0	0.00	20.00	0.00	200.00	0.00	20:00	0.00	0.00	
1	0.42	19.86	0.14	19.87	0.13	19.80	0.20	0.16	
2	0.83	19.75	0.25	19,66	0.34	19.63	0.37	0.32	
3	1.25	1951	0.39	19,52	0.47	19.44	0.55	0.47	
4	1.67	19.43	0.57	19.27	0.73	19.27	0.73	0.68	
5	2.08	19.26	0.74	18.94	1.00	19.06	0.94	0.91	
6	2.50	19.03	0.97	18.74	1.26	18.06	1.04	1.00	

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Pite I in	Settlement	VOM SINGERS	
Luading	Kg/cm2	Dian 1	mm	Dial 2	mm	Dial 3	mm	Average	
1	2.50	19.02	0.97	18.74	1.26	18.96	1.04	1.08	
2	1.25	19:10	0.90	18.83	1,17	15.18	0.82	0.96	
3	0.625	19.19	0.81	18.91	1.09	19.36	0.64	0.85	
4	0.01	19.44	0.56	19.38	0.62	19.65	0.35	0.61	

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	1410,000	
-100 J. XXII-113	Kg/cm2	Dist. 1	mm	Dial 2	mm	Dial 3	mm	Average	
0	0.42	1937	0,63	19,29	0.71	19.57	0.43	0.69	
1	0.83	1923	0.77	19.18	0.82	19.43	0.57	0.72	
2	1.25	1915	0.85	19.05	0.95	19.26	0.74	0.65	
3	1.67	19.05	0.95	18.94	1.06	10.12	0.88	0.98	
4	2.08	18.91	1.00	18.84	1.16	19.01	0.99	1.08	





Company Name

Project

Test Date ruport date

Location Test No.

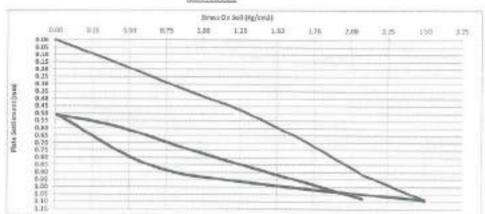
Land marks Co.

Electric Express Train, from Al Ain Scichrus to Morse. Matrout: Priority Sector (5) - Alamein to Foka.

10/1/2024

Station 425+050 to 425+075

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	- 0	1.	- 2	3	40	13	
Stage(Kg)	3	1186.92	2345.6	3532.5	4719.4	8878.1	7005
Strees (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2,03	2.60
Settlement (mm)	0.00	0.36	0.33	0.47	0.68	-0.01	1.09

UnLoading (1)	1	2	3	- 4
Stage(Kg)	7045	3533	1756	0
Strees (Kg/cm2)	2.00	1.25	0.625	0.01
Settlement (mm)	1.00	0.98	0.85	0.51

D (mm) =	602	Stimme-	0.29	32(mm)=	8.72	Δ5 =	0.43
	(0.76°0°&0'\&5		409		22272		-

Loading (2)	0	1	2	- 3	4	- 5
Stage(Kg)	. 0	1188.92	2345.6	3532.5	4719,4	1878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.51	0.59	0.72	0.85	0.95	1.08

D (mm) =	600	ST (mm(=	0.89	921mm(# 9.99	48=	0.29
Ev2 (Mpa) -	(0.75°D' 40 V43	O HOME	101			7,7

Ev2/Ev1 =

First - Madulus of Reformation during the loading stage.

Ev2 = Moturus of deformation during the italicating stage.

0 = Plate diameter (wm)

Ds = The difference between 0.2 and 0.7 from the maximum leading (areas) (kg/cm²)

0.5 - Difference in autiliamenta corresponding to 8.2 and 6.7 from the medimen touring (rem)



3 El Malek El Afdal Street

Zanmlek, Cairo.

Tel.& Fex: 27367231 - 27363093





Company Name

; Land marks Co.

Project

Electric Express Train, from Al Ain Solding to Blanca Midrouh Primity Sector (6) - Alametr to Folia

Test Date report date : 9/1/2024

Location

: 10/1/2024 :Station 425+075 to 425+100

Test No.

100

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dist a	Settlement	must a	Settlement	20000000	
	Kg/cm2	Dia 1	mm	Dial 2	nom	Dial 3	mm	Average	
0	0.00	50.00	0.00	20,00	0.00	20.00	0.00	0.00	
1	0.42	19.84	0.16	19.81	0.19	19.77	0.23	0.19	
2	0.83	19.72	0.28	19.58	0.32	19.61	0.39	0.33	
3	1.25	19.59	0.41	1951	0.49	19.47	0.53	0.48	
4	1.87	19.42	0.58	19.32	0.68	19.28	0.72	0.66	
5	2.08	15.25	0.76	19.19	0.81	19:16	0.84	0.80	
6	2,50	19.16	0.64	19.06	0.94	19.01	0.99	0.92	

Unloading Stage (1)

Loading	Stress	Dial 1	Sattlement	Dial 2	Settlement	PI-1 9	Settlement	********	
Localing	Kg/am2	Die 1	mm	Diai 2	mm	Dial 3	mm	Average	
1	2,50	19:16	0.84	39,06	0.94	19/01	0.99	0.92	
2	1.25	1920	0.80	19.10	0.90	19.05	0.05	68.0	
3	0.625	19.27	0.73	15.14	0.88	19.12	0.88	0.82	
4	0.01	1959	0.47	19.45	0.54	19,40	0.60	0.54	

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Pisto	Settlement	o wommon	
13.03	Kg/cm2	Diet 1	mm	Diai 2	mm	Dial 3	mm	Average	
0	0.42	19,45	0,55	19.38	0.62	19.32	0.68	0.62	
1	0.83	19.37	0.63	19.31	0.69	19.25	0.74	0.69	
2	1.25	19.29	0.71	19.23	0.77	19.19	0.81	0.76	
3	1,87	19.20	0.80	19.15	0.85	19:10	0.90	0.85	
4	2.08	19.09	0.91	19.04	0.96	19.01	0.99	0.96	





Company Name

Project

Teet No.

Test Date report date Location

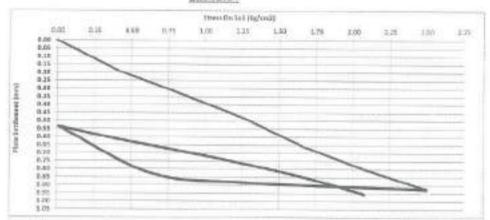
: Land marks Co.

: Electric Express Train, from Al Aix Suitine to Manus Matrouth Priority Sector (5) - Alemein to Foke

1 9/1/2024 110/1/2024

Station 425+075 to 425+100

Nonrepetitive Static Plate Load Tests of Solls DIN 18134



Loading (1)	.0	1	.2	3	4	- 6	4
Stage(Kg)	. 0	1186.92	2345.6	3512.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Sattlement (mm)	0.00	0.19	0.33	0.46	0.66	0.80	0.92

UnLoading (1)	31-	2	3	14.
Stage(Kg)	7065	3533	1708	0
Stress (Kg/cm2)	0.00	1.25	0.625	0.01
Settlement (mm)	0.52	0.88	0.82	0.54

D (mm) =	500	Stown;=	8.30	520mm)=	1.03	ΔS =	0.38
Evt (Mpa) =	(0.75°0°&+9&8		115		555	7	777

Loading (7)	.0	1	2	3	4	.5
Stage(Kg)	. 4	1186.92	2345.8	3532.5	471B,4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.34	0.67	0.79	0.78	0.85	0.95

D (mm) =	808	\$1 [non]+	8.87	82(nm)=	0.47	A5 =	0.20
Ev2 (Mns) v	(0.75°D°An)/05		224	1.00			

Ev2/Ev1 = 1.9

Evil a Motorus of deformation coming the loading stage.

Ev2 = Modulus of Jeformation during the Ratioading steps.

D = Plate diameter (mm)

Be #The difference between 0.3 and 0.7 from the maximum loading (smax) (legism's

DS = Difference in settlements corresponding to 3.3 and 6.7 from the maximum (seding (ran))

مكتب معامل الاستشارات الهتمس الاختمارات المتعفوة 219-901-5371 youlde CELL CONTRACTOR - CONTRACTOR Min

3 El Malek El Afdal Street Zamalek, Cairo.

Tel.& Fax: 27367231 - 27363093



: Land marks Co. Company

: Electric Express Train, Al Ain Sokhna to Marsa Matrouh Priority Sector (6) Project

- Alamein to Foka

: Determine the deformation and strength characteristics of soil by the plate Subject

loading test according specifications DIN 18134:2012-04 and project requirements

Test Location: Station (425+020 to 425+270)

: 108:115

: 16/01/2024 Test Date Repot Date : 17/01/2024 Type of soil : Sub ballast Test level : (+0.90)

Dear Gentleman,

According to the above mentioned subject the test performed as follows:-

Apparatus

Report No.

- Loading plates consists of two plates with 600 mm and 300 mm diameter
- 2. The thickness of plates 30 mm
- Dial gauges with accuracy 0.01 mm to measuring the settlement
- Steel straightedges with magnetic supports to fixed the dial gauges
- Hydraulic jack with pump to transfer reactive loads to the loading plates
- Dial indicator measuring device with scale capacity 700 Bar (Enerbac)
- Reaction loading system by roller compactor with weight approximately 15 ton
- 8. Calibration certificates are attached

Test Procedure

- 1. Clean the ground on test area to the required level with undisturbed soil
- Install loading plates 600 mm and 300 mm diameter, hydraulic jack and 3 dial gauges
- Prior to starting the test applied preloading about 30 seconds.
- 4. The strain gauge and the dial gauge shall be set to zero
- For a 600 mm loading plate, the limit values are 2.5 kg/cm²
- The load shall be applied in six stages, in approximately equal increments, until the required maximum normal stress is reached.
- Each change in load (from stage to stage) shall be completed within one minute
- The load shall be released in 3 stages, to 50 %, 25 %, and approximately 2 % of the maximum load.
- Following unloading, a further (2nd) loading cycle shall be carried out, in which, however, the load is to be increased only to the penultimate stage of the first cycle (so that the full load is not reached).
- 10. At each stage the load shall be maintained until the rate of settlement of the plate becomes less than 0.02 mm/min. 219-901-537; postder grayn - animomy party
- 11. Remove the loads





Report

- 1. Evaluation and representation of results
- 2. Load Settlement curve
- 3. The test report content the following:-
- location of test site Dimension of loading plate
- Measuring device used Type of soil
- Type of Bedding material below the plate -Weathering condition
- Time and date of measurements Unusual observation made during test
- Dial gauge reading and corresponding normal stress Loading-settlement curve
- Description of the soil condition below the plate after testing

Report:

Test level : Sub ballast

Job requirement: Ev2 > (120 MPa)., Ev2/Ev1≤2.2

Item	Descriptions
- Type of bedding material below the plate	Natural Soil
- Weather condition	Sunny
- Plate Diameter (mm)	600
- date of measurement	16/01/2024
- Unusual observation made during test	NO
- Description of the soil conditions below the plate after testing	No deformation

Evaluation and representation of results

Test	Stat	ion	First Cycle	Second Cycle	Ev2/ Evs	
No.	From	To	Evi (Mpa)	Ev2 (Mpa)	Ratio	
1	425+020	425+045	81	143	1.8	
2	425+045	425+070	86	182	2.1	
3	425+070	425+095	71	182	2.6	
4	425+095	425+120	98	183	1.9	
5	425+120	425+145	64	141	2.2	
6	425+145	425+170	70	115	1.6	
7	425+170	425+195	58	102	1.8	
8	425+195	425+220	82	137	1.7	
9	425+220	425+245	70	127	1.8	
10	425+245	425+270	67	142	2.1	

Signature / Khaled and the same of the sam



Company Name

± Land marks Co.

Project

: Electric Express Train, from Al Ain Solitina to Marsa Matrouti Priority Sector (6) - Alamein to Foka

Test Date

: 16/01/2024

report date

: 17/01/2024

Location

:Station 425+920 to 425+045

Test No.

: 001

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	munus.	Settlement	DI-1 2	Settlement	Dint 3	Settlement	Average
- committee	Kg/cm2	Dial 1	mm	Dial 2	mm	Dian 3	mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	08.0
1	0.42	19,68	0.32	19.53	0.37	19.85	0.15	0.28
2	0.83	19,43	0.57	19.36	0.64	19.50	0.50	0.57
3	1.25	19.17	0.83	19.08	0.92	19.25	0.75	0.83
4	1.67	18.99	1.01	18.86	1.14	19.07	0.93	7.03
- 5	2.08	13.86	1.14	18.67	1.33	18.88	1.12	1.20
B	2.50	13.71	1.29	18.48	1.52	18.73	1.27	1.38

Unloading Stage (1)

	Stress		Settlement	Mist a	Settlement	Dial 3	Settlement	Average
Loading	Kg/cm2	Dial 1	mm	Dial 2	mm	Unas a	mm	Average
1	2.50	18.71	1.29	18.48	1.52	18.73	1.27	1,36
2	1.25	18.76	1.24	18.64	1.36	18.79	1.21	1,27
3	0.625	18.98	1.02	18.90	1.10	18.93	1.07	1.08
4	0.01	19.30	0.70	19.45	0.55	19.16	0.84	0.70

Loading	Stress	no. i.e.	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	nım	Diai 2	mm	som o	mm	- Treinigh
0	D.42	19.17	88.0	19.17	0.83	19.13	0.87	0.86
1	0.83	19.00	1.00	18.97	1.03	19.04	0.96	1.00
2	1.25	11.89	1.11	18.81	1.19	18.03	1.07	1,12
3	1,67	18.76	1.24	15.55	1.35	18.80	1.20	1.26
4	2.08	18.69	1.31	1855	1.45	18.73	1.27	1,34





Company Name

Project

Location Test No.

Test Date report date Land marks Co.

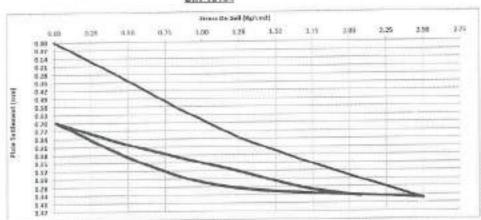
: Electric Express Train, from Al Ain Sothna to Manus Mulrouh Priority Sector (6) - Alamein to Foka

: 16/01/2024

17/01/2024 Station 425+020 to 425+045

:001

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Leading (1)	0	1	2	3	4	5	- 0
Stage(Kg)	0	1186.82	2345.6	3532.5	4719.4	5873,1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1,07	2.08	2.50
Settlement (mm)	0.00	0.25	0.57	0.03	1.00	1,30	1.06

UnLoading (1)	1	2	3	4
Stage(Kg)	7060	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.05
Settlement (rum)	1.36	1.27	1.06	0.70

	170.00000000000000000000000000000000000						-
D (mm) =	500	St.)mmtc.	0.51	52 mm =	1.16	A8 =	0.55
	10.75°0° Δα ΧΔ5						

Loading (2)	0	1	2	2	- 4	5
Stage(Kg)	0	1186.92	2345.6	3532,5	4719.4	5870.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	3.70	0.86	1.00	1.12	1.26	1.34

- 17	Ev2/Ev1 =	1.8
.1	1000000	

D (mm) = 60	G B1 (mm):	0.97	S2)mm/a	1.26	AS-	0.31
Ev2 (Mpa) = (0.7	5°0°40'X48	543				

Ext - Modulus of deformation during the loading stage.

Ev2 - Modelus of deformation during the Reloading slage.

D = Plate d'ameter (mm)

Ds = The difference between 0.3 and 0.7 from the maximum loading (immi) (hg/cm²)

 ${\rm DS}$ = 0 Merence in settlements corresponding to 0.3 and 0.7 from the maximum loading imms

مكتب محادل الاستشارات الهندسية الاختيارات المعملوة 229-991-537; positionship eyneyin-pathyaning-ti-fy



Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Am Soldma to Marse Matrouh Priority Sector (6) - Alamein to Foka

Test Date

: 16/01/2024

report date

: 17/01/2024

Location

:Station 425+045 to 425+070

Test No.

: 002

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dist 4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Dial 2	mm	Didi 3	mm	Artenage
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.76	0.24	19.65	0.35	19.54	0.46	0.35
2	0.83	19.54	0.46	19,47	0.53	19.38	0.62	0.54
3	1.25	19.36	0.64	19.21	0.79	19.15	0.85	0.76
4	1.67	19.11	0.89	19.03	0.97	18.96	1.04	0.97
5	2.08	18.92	1.08	18.86	1.14	18.63	1.37	1.20
6	2.50	18.76	1.24	18.72	1.28	18.31	1.69	1.40

Unloading Stage (1)

	Stress		Settlement	Dial 2	Settlement	Dial 3	Settlement	Average	
Loading	Kg/cm2	Dial 1	mm	Lital 2	mm	Dien 3	mm	predicago	
1	2.50	18.76	1.24	18.72	1.28	18.31	1.69	1.40	
2	1.25	18.98	1.02	18.93	1,07	18.52	1.48	1.19	
3	0.625	19.32	0.65	19.25	0.75	18.67	1.33	0.92	
4	0.01	19.57	0.43	19.39	0.61	19.03	0.97	.0.67	

Loading	Stress	Dist 4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai 3	mm	vianiaña
0	0.42	19,17	0.83	19.09	0.91	18.92	1.08	0.94
1	0.83	19.04	0.96	18.96	1.04	13.82	1.18	1.08
2	1.25	18.97	1.03	18.89	1.11	18.76	1.24	1.13
3	1.67	18.88	1.12	18.82	1.18	18.57	1.48	1.26
4	2.08	18.79	1.21	18.75	1.25	18.34	1.62	1.36





Company Name

: Land marks Co.

Project Test Cate : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) - Alamein to Foka

Test Date

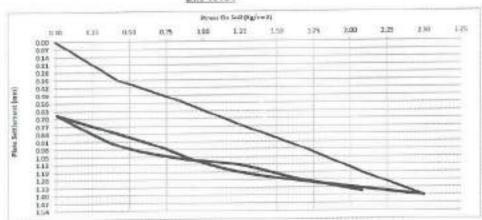
: 16/01/2024

report date Location : 17/01/2024 :Station 425+045 to 425+670

Test No.

:002

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	. 0	1	. 2	3	4	5	- 6
Stage(Kg)	0	1186.92	2345.6	3832.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.63	1.25	1.67	2,08	2.50
Settlement (mm)	0.00	6:35	0.54	0.78	0.97	1.20	1.40

UnLoading (1)	1	2	- 3	4
Stage(Kg)	7065	3533	1765	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	1.40	1.19	0.92	0.67

D.Imm) =	500	St brmb=	0.50	Simml*	1.01	ΔS=	0.51
Evi (Man) -	600 (0.78°D°A+)/A5		36.				

Loiding (2)	0	1	2	3	4	- 5
Stage(Kg)	D.	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kp/cse2)	0.01	0.42	0.83	1.25	1.67	2.68
Settlement (mm)	0.67	0.94	1.06	1.13	1.26	1.35

D (mm) = 600	\$1 (mm)=	1.04	S2(mm)=	1.21	ΔS=	0.24
Ev2 (Man) = 61.79 D*A=VA	8	182				

Ev2/Ev1 = 2.1

Ex1 = Modulus of deformation during the loading stage.

Exit # Modulus of deformation during the Reloading stage.

D = Plate dismutar (mm)

Os = The difference between 0.3 and 0.7 from the maximum loading (uman) (kg/km²)

CS = Difference in cellbrownts corresponding to 0.5 and 0.7 from the maximum loading (mm)

CEL

Appeared adjusted for a part of the second adjusted for a part of the



Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Am Soldino to Morsa Malmouh Priority Sector (6) « Alemein to Foka

Test Date

: 16/01/2024

report date

: 17/01/2024

Location

:Station 425+970 to 425+095

Test No.

: 003

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress		Settlement	Dist 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai 3	mm	
0	0.00	20.00	0.00	20:00	0.00	20.00	0.00	0.00
1	0.42	19,68	0.32	19.88	0.12	19.75	0.25	0.23
2	0.83	10.51	0.49	19.45	0.55	19.43	0.57	0.54
3	1.25	19.27	0.73	19.15	0.85	19.19	0.81	0.80
4	1.67	19.08	0.92	18.80	1.20	18.92	1.08	1.07
5	2.08	18.98	1.02	18.59	1.41	18.74	1.26	7.23
6	2.50	18.73	1.27	18.26	1.74	18.46	1.54	1,52

Unloading Stage (1)

	Stress		Settlement	Dist 2	Settlement	Dial 3	Settlement	Average
Looding	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai 3	mm	hisosoffe
1	2.50	18.73	1.27	18.26	1.74	18.46	1,54	1.52
2	1.25	18.84	1.16	18.34	1.66	18.51	1.49	1.44
3	0.625	18.98	1.02	18.59	1.41	18.67	1,33	1.25
4	0.01	19.39	0.61	18.99	1.01	19.01	0.99	0.87

Loading	Stress		Settlement	Dist 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai 3	mm	Lannage
0	0.42	19,36	0.64	18.92	1.08	18.96	1.04	0.92
1	0.83	19.20	0.80	18.86	1.14	18.82	1.18	1.04
2	1.25	19.08	0.92	18.74	1.26	18.74	1.26	1.15
3	1.67	18,97	1.03	18,58	1,32	18,66	1.34	1.23
4	2.08	18.81	1.19	18.53	1.47	18.53	1.47	1.38







Company Name

: Land marks Co.

: Electric Express Train, from Al Ain Sokhns to Mansa Matrouh Priority Sector (6) - Alamain to Foka

Project Test Date

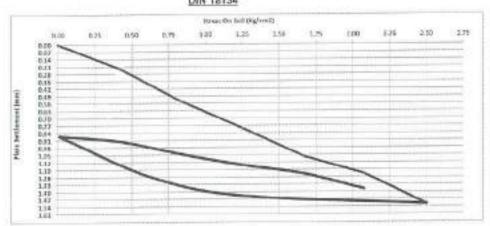
: 16/01/2024

report date Location : 17/01/2024 :Station 425+070 to 425+095

Test No.

: 863

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	0	1	2	3	4	5	- 6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5873.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1,67	2.08	2.50
Settlement (mm)	9.00	0.23	0.54	0.80	1.07	1,23	1.52

UnLoading (1)	. 3	2	3	4
Stage(Kg)	7065	3533	1763	0
Stress (Kg/cm2)	2.50	1,25	0.625	0.01
Settlement (mm)	1.62	1,41	1.25	0.67

D (mm) =	500	51 (mm)=	6.43	[S29mm]=	1.10	AS=	0.62
Evi (Mps) =	[0.75°0" An YAS		71				

Loading (2)	0	1	2	3	4	- 5
Sings(Kg)	0	1186.92	2345.6	3532,6	4719.4	5873.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1,67	2.08
Settlement (mm)	0.87	0.92	1.04	1.15	1.23	1.28

D (mm) =	500	53 (mni)*	1.02	52(mm)=	1.25	AS=	0.24
- Leoliti Pal	[0.75°0°Aa](AS		182				

Ev2/Ev1 = 2.6

Ev1 - Modulus of deformation during the leading stage.

Ev2 - Modulus of deformation during the Reloading stage.

D = Plate Clameter (mm)

Ds = The difference between 0.3 and 0.7 from the maximum loading (arrest Deplore²)

DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading imm;

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Company Name

Land marks Co.

Project

: Electric Express Train, from Al Ain Sokhna to Marca Matrouh Priority Sector (6) - Alameis to Foks

Test Date

: 16/01/2024

report date

17/01/2024

Location

:Station 425+095 to 425+120

Test No.

:004

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	2016	Settlement	Dist 2	Settlement	Dial 3	Settlement	Average
VI-1-11-12-20-2-2	Kg/cm2	Dial 1	mm	Dial 2	mm	Dim 3	mm	Chernite
0	0.00	19.60	0.00	19.66	0.00	19.70	0.00	0,00
1	0.42	19.23	0.37	19.43	0.23	19.51	0.19	0.26
2	0.83	18.89	0.71	19.35	0.31	19.41	0.29	0.44
3	1.25	18.57	1.03	19.22	0:44	19.29	0.41	0.63
4	1.87	18.35	1.25	19.06	0.60	19.09	0.61	0.82
5	2.08	18.20	1.40	18.88	0.78	18.94	0.76	0.98
6	2.50	17.99	1.61	18.58	1.10	18.63	1.07	1,28

Unloading Stage (1)

	Stress		Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
Loading	Kg/cm2	Dial 1	mm	Dia 2	mm	Dian 3	mm	rivoringe
1	2.50	17.99	1.61	18.56	1.10	18.63	1.07	1.26
2	1.25	18.04	1.56	18.62	1.04	18.67	1.03	1,21
3	0.625	18.23	1.37	18.75	0.91	18.75	0.95	1:08
4	0.01	18.69	0.91	18.84	0.82	18.92	0.78	0:84

Loading	Stress		Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Diai 2	mm	Diai 3	mm	Cranade
0	0.42	18.52	1.08	18.80	0.86	18.84	0.86	0.93
1	0.83	18.42	1.18	18.72	0.94	18.79	0.91	1,01
2	1.25	18.25	1.35	1861	1.05	18.71	0.99	1.13
3	1.67	15.11	1.49	1855	1.11	18.65	1.05	1.22
4	2.08	17.97	1.53	18.48	1.18	18.56	1.14	1.32







Conspany Name

: Land marks Co.

Project

: Electric Express Train, from Al Ain Soithna to Marsa Matrouh Priority Sector (6) - Alamein to Foka

Test Date

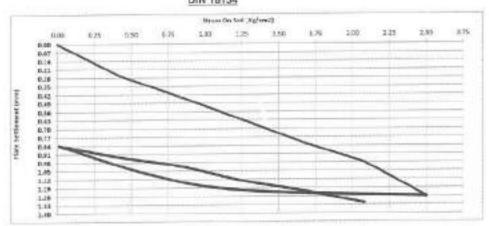
16/01/2024 17/01/2024

report date Location

Station 425+095 to 425+120

Test No.

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.00	2.00
Settlement (mm)	0.00	0.26	0.44	0.63	0.82	0.00	1.28

Unit,cading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stream (Kg/cm2)	2,50	1.25	0.825	0.01
Settlement (mm)	1.26	1.21	\$.0B	0.84

D (mm)=	500	51 (mm)=	0.60	SZimmi-	8.85	45 m	0.45
Evt (Mpa) =	(0.78°0"&ey&8		68				

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2346,6	3532.5	4719.4	587E,1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.06
Settlement (mm)	0.84	0.93	1.01	1.13	1.22	1.32

E-21E-1 -	1.8
CONTROL CONTROL	

D (mm) =	€00	ST (mm)=	1,00	S2(mm)=	1.24	∆S =	0.24
Ev2 (Mpa) =	(0.75"0"04)/03	9	183				

Evt - Modulus of deformation during the loading stage.

Ev2 = Modulus of deformation during the Releasing stage

D = Plate diameter (mm)

Ds = The difference between 9,3 and 0.7 from the maximum leading (smox) (kg/cm²)

DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum looking (mm)

مكتب محامل الاستشارات الهندسيا Adamali of July 219-9511-5574 emolyles PRED-DETRIBUTED.



Company Name

: Land marks Co.

Project

; Electric Express Train, from Al Ain Soldine to Marse Metrouil Priority Sector (6) - Alemein to Foks

Test Date

: 16/01/2024

report date

: 17/01/2024

Location

:Station 425+120 to 425+145

Test No.

: 005

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	m	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
To a little of the	Kg/cm2	Dial 1	mm	Dias 2	mm	Diai 3	mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.72	0.28	19.47	0.53	19.24	0.76	0.52
2	0.83	19.55	0.45	19.04	0.96	13.98	1.02	0.81
3	1.25	19.36	0.84	18.84	1.16	18.63	1.37	1.06
4	1.67	18.83	1.17	1853	1.47	18.45	1.55	1.40
5	2.08	1X.51	1,49	18.29	1.71	18.30	1.70	1.63
6	2.50	18.23	1.77	18.02	1.98	18:09	1.91	1.89

Unloading Stage (1)

V 25	Stress	2	Settlement	Part of the	Settlement	Dial 3	Settlement	Average
Loading	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai 3	mm	Atterage
1	2.50	18.23	1.77	18.02	1.98	58.09	1.91	1,89
2	1.25	18.32	1.69	18.30	1.70	18.24	1.76	1.72
3	0.625	1850	1.50	18.37	1.63	38.47	1.53	1.55
4	0.01	18.02	1.08	18.49	1.51	18.52	1.38	1.32

Loading	Stress	DI-1 4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Diai 2	mm	Diar 3	mm	
0	0.42	18.87	1.13	18.42	1.58	18.51	1.49	1.40
1	0.83	18.65	1.35	18.28	1.72	38.34	1,66	1.58
2	1.25	18.48	1.52	18.01	1.99	18.26	1.74	1.75
2	1.67	18.36	1.64	17.97	2.03	18.17	1.83	1.83
4	2.08	18.24	1.76	17.91	2.09	18.03	1.97	1.94





Company Name

Project

; Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka ; 16/01/2024

Trent Date

17/01/2024

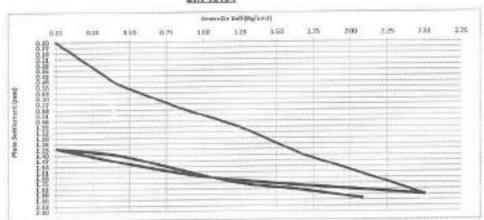
report date Location

:Station 425+120 to 425+145

Test No.

: 005

Nonrepetitive Static Plata Load Teets of Soils DIN 18134



Leading (1)	. 0	1	2	3	4	5	6
Stage(Kg)	-0	1186.92	2345.6	3532.5	4719.4	5878.1	7965
Stress (Kglcm2)	0,00	0.42	0.83	1.20	1.67	2.05	2.50
Settlement (mm)	0.00	0.52	0.81	1.06	1.40	1.63	1.88

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1788	-0
Stress (Kylom2)	2.50	1.25	0.625	0.01
Settlement (mm)	1.89	1.72	1.56	1.32

D (mm) =	600.1	St (mente)	0.75	520nm #	1.24	AS=	0.69
Evit (Mpa) =	(0.75°0°A0)/AS		64				

Leading (2)	. 0	1	2	3	4	- 5
Stage(Kg)	0	1106.92	2345.6	3532.5	4719.4	9876.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1,67	2.03
Settlement (mm)	132	1.40	1.58	1.75	1,83	1.94

				100	
D (mm) = 600	St (mes)e	1.14	52(mm)= 1.85	45=	0.31
W-755514-W	ee l	440			

2.2 Ev2/Ev1 =

Evil # Modulus of determation during the leading stage.

this is feedulus of deformation during the Releasing sleeps.

D v Plate dismorar (rem)

Ds = The difference between 0.3 and 0.7 from the maximum leading (umax) (kg/cm²)

DS = Difference in wellfurcents corresponding to 0.3 and 0.7 from the maximum loading (mm)





Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Ain Soldwar to Marka Matrouth Priority Sector (6) - Alemein to Poke

Test Date

: 16/01/2024

report date

17/01/2024

Location

:Station 425+145 to 425+170

Test No.

±006

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading Stress	Stress	not a	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
THE SAME	Kg/cm2	Dial 1		Dial 2	mm	200	mm	. transga
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.78	0.22	19.71	0.29	19.67	0.33	9.28
2	0.83	10.53	0.47	19.50	0.50	19.46	0,54	0.50
3	1.25	19.35	0.65	19.25	0.74	19.12	0.88	0.76
4	1.67	19.06	0.94	18.98	1.02	-18.84	1.16	1.04
. 5	2.08	18.85	1.14	18.76	1.24	18.54	1.46	1.28
6	2.50	18.63	1.37	18.37	1.63	18.15	1.85	1,62

Unloading Stage (1)

-	Stress		Settlement	Dist 2	Settlement	Dial 3	Settlement	Average
Loading Kg/cm2	Dial 1	mm	Dial 2	mm	Diat 3	mm	Titologe	
1	2.50	18.53	1.37	18.37	1.63	18:15	1.85	1.62
2	1.25	18.69	1.31	18.54	1.46	18.34	1.66	1.48
3	0.625	18.82	1,18	18.76	1.24	18.49	1.51	1,31
4	0.01	19.03	0.97	18.98	1.02	18.87	1.13	1.04

Loading	Stress	Dist a	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average	
	Kg/cm2	Dial 1	mm	Diai 2	mm	510.	mm		
0	0.42	18.97	1.03	18.88	1.12	18.82	1.18	1:11	
1	0.83	18.90	1.10	18.81	1.19	18.54	1.36	1.22	
2	1.25	18.78	1.22	18.58	1.42	18.42	1.58	1,41	
3	1.67	18.68	1.32	18.42	1.58	1821	1.79	1.56	
4	2.08	18.63	1.37	1833	1.67	18.09	1.91	1,65	





Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Ain Sokhna to Marsa Metrouh Priority Sector (6) - Alumein to Foka

Test Date

; 16/01/2024 17/01/2024

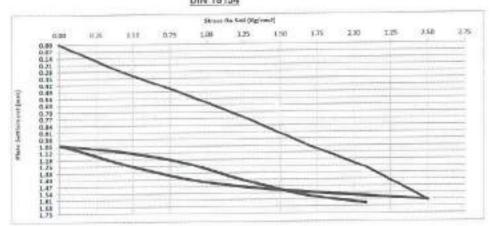
report date Location

:Station 425+145 to 425+178

Test No.

: 000

Nonrepatitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	0	1	2	. 3	4	5	6
Stage(Kg)	D	1186.32	2345.6	3512.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.03	1,26	1.67	2.06	2.50
Settument (mm)	0.00	0.26	0.50	0.76	1.04	1.20	1.62

UnLoading (1)	1	2	3	- 4
Stage(Kg)	7065	3533	1768	0
Stress (Kgfcm2)	2.50	1.25	0.626	0.01
Sattlement (mm)	1.62	1.48	1.31	1:04

D (mm) =	600 (0,75°D'Ae)/68	S1 (mm)a	0.46	\$2(mm)=	1.09	∆S =	0.63
Ev1 (Mpa) =	(0,75°D'Ao)/AB		70				

Loading (2)	0	1	2	3	4	. 5
Stage(Ka)	.0	1188.92	2345.6	3512.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.06
Settlement (mm)	1.04	1.11	1.22	1.41	1.56	1.65

B. 400 4 4	1.0
EASSEAL II	17/11

D (mm) =	600	81 (mm/a	1,20	\$2(mm)=	1.68	ΔS =	0.38
Eu2 (Mina) #	60.75° D* A 0 7 A 5		115				

Ex1 = Modulus of deformation during the lossing stage.

Ex2 = Modulus of deformation during the Releading stage.

D = Plata diameter (mm)

Die n The difference between 6.3 and 0,7 from the maximum loading (smart) legicm⁶)

DS = Difference in settlements corresponding to 9.3 and 9.7 from the maximum loading (now)

مكتب معامل التصنشارات المتدسية الاعتبارات المعملية 210-991-537 government of PERSONAL PROPERTY OF THE PERSON NAMED AND PARTY.



Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Ain Solding to Maries Matrouth Priority Sector (6) - Alamain to Foke

Test Date

: 16/01/2024

report date

: 17/01/2024

Location

Station 425+170 to 425+195

Test No.

: 007

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	D1.1.4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
no draining	Kg/cm2	Dial 1	mm	Dia 2	mm	Driet 5	mm	
0	0.00	20.00	0.00	20.00	0,00	26.00	0.00	0.00
1	0.42	19.57	0.43	19.63	0.37	19.72	0.28	0.38
2	0.83	1936	0.64	19.26	0.74	19.41	0.59	0.55
3	1.25	18.97	1.03	18.98	1.02	19.23	0.77	0.94
4	1.67	18.65	1.35	18.74	1.26	18.69	1,31	1.31
5	2.08	1851	1.49	18.38	1.62	18.47	1.53	1.05
.6	2.50	18.11	1.89	18.14	1.86	18.14	1.86	1,87

Unloading Stage (1)

Stress		Settlement	Dial 2	Settlement	Dial 3	Settlement	Average	
Loading	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai 3	mm	Areinge
1	2.50	18.11	1.89	18.14	1.86	18.14	1.86	1,87
2	1.25	18.22	1.78	18.18	1.82	18.37	1.83	1.74
3	0.625	18.50	1.50	18.35	1.65	18.53	1.47	1,54
4	0.01	18.78	1.22	18.70	1.21	18.94	1.06	1,16

Loading	Stress		Settlement	Dial 2	Settlement	Dial 3	Settlement	Average	
000	Kg/cm2	Dial 1	mm	Dian &	mm	Diai 9	mm		
0	0.42	18.73	1.27	18.68	1.32	18.82	1,18	1.28	
3	0.83	18.63	1.37	18.54	1.46	18.68	1.32	1.38	
2	1.25	18.47	1.53	18.47	1.53	18.50	1,50	1,52	
3	1.67	18.20	1.80	1820	1.80	18.27	1.73	1.78	
4	2.08	18.16	1.84	18.08	1.92	18.23	1.77	1.84	





Company Name

Project

Test Date

report date Legation

Test No.

Land marks Co.

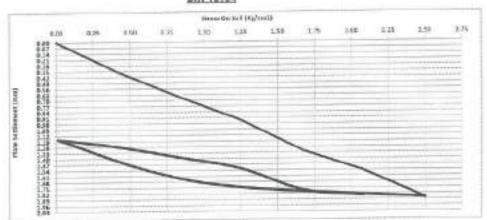
: Electric Express Train, from Al Ain Sokhna to Marsa Matrouli Priority Sector (6) - Alamein to Foka

; 16/01/2024

17/01/2024 Station 425+170 to 425+195

: 007

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	.0	1	2	3	4	5	6
Stage(Kg)	-0	1186.92	2345.6	3532.5	4719.4	5874.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1,25	1.67	2.08	2.50
Settlement (mm)	0.00	0.36	0.00	0.94	1.211	1.86	1.67

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	. 0
Stress (Kg/cm2)	2,50	1.25	0.825	0,01
Settlement (mm)	1.87	1.74	1.54	1.16

		and the same of th						-	·
1	D (mmi =	400	81-immin	0.99	S2(mm)2	1.35	AS =	0.75	ı
		(0.75°D"Δ0)/AS							

Loading (2)	0	1	. 2	3	4	6
Stage(Kg)	0	1186.92	2346.6	3532.5	4719.4	5078.1
Stress (Kg/cm2)	70.0	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	1.16	1.25	1,38	1,52	1.78	1.84

D (mm) = 600	St (met)=	1.36	\$20mm(# 1,79	AS =	0.43
Ev2 (Mpa) = (0.75°D*&e)/	2.6	112			

Ev2/Ev1 = 1.5

Ext a Hodulus of deformation during the loading stage.

Ev2 = 18 od stors of deformation during the Releveling stores.

() a Plate diameter (mm)

Da = The difference between 0.3 and 0.7 from the maximum leading (arras) (kg/km²)

DS = CMTerrings in autiliaments corresponding to 0.3 and 0.7 from the maximum leading (mm)

discollately. 219-991-537 i you have to



Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Ain Sokhus is Manus Matroub Priority Sestor (ii) -- Alamcin to Foka

Test Date

: 16/01/2024

report date

17/01/2024

Location

:Station 425+195 to 425+220

Test No.

- 003

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dist 4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average	
7.000000000	Ka/cm2	Dial 1	mm	Dia 2	mm	Diat 3	mm		
0	0.00	20.00	0.00	20.00	0.00	20,00	0.00	0:00	
1	0.42	15.68	0.32	19.65	0.35	19.58	0.42	0.36	
2	0.83	19.46	0.54	1933	0.67	19.20	0.80	0.67	
1	1.25	19.22	0.78	19.22	0.78	18.82	1.18	0.91	
4	1.67	19.03	0.97	18.87	1.13	18.75	1.25	1.12	
5	2:08	18.91	1.09	18.63	1.37	18.63	1.37	1.28	
6	2.50	18.68	1.32	18.40	1.60	18.09	1.91	1.61	

Unloading Stage (1)

	Stress	2	Settlement	Diet 2	Settlement	Dist 3	Settlement	Average	
Loading	Kg/cm2	Dial 1	mm	Dial 2	mm	Diat 3	mm	Avelage	
1	2.50	18.68	1.32	18.40	1.60	18.09	1.91	1,61	
2	1.25	18.73	1.27	18.48	1.52	18.15	1.85	1.55	
3	0.625	18.88	1.12	1857	1.43	18.34	1.66	1.40	
4	0.01	19.40	0.60	18.90	1.10	18.70	1.30	1.00	

Loading	Stress	W1.1.4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average	
	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai J	mm	1/2000	
0	0.42	19.31	0.69	18.85	1.15	18.55	1,44	1.09	
4	0.83	19.15	0.85	18.76	1.24	18.47	1,53	1.21	
2	1.25	18.98	1.02	1863	1,37	18.30	1.70	1,38	
3	1.67	18.87	1.13	18.40	1.51	18.19	1.81	1.48	
4	2.08	18.72	1.28	18.40	1.60	18.05	1.94	1.61	







Company Name

: Land marks Co.

Project

: Electric Express Train, from Al Ain Sokhna to Manus Matrouti Priority Sector (6) - Alamain to Foka

Test Date

: 18/01/2024

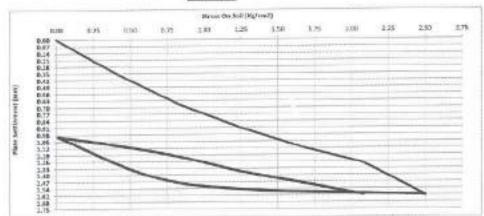
: 008

report data Location : 17/01/2024 :Station 425+195 to 425+220

Test No.

Nonrepetitive Static Plate Load Tests of Soils

DIN 18134



Loading (1)	0	1	2	3	4	5	- 0
Stage(Kg)	0	1186.92	2345,6	3532.8	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0,42	0.83	1,25	1,87	2.08	2.50
Settlement (mm)	0.00	0.36	0.57	0.91	1.12	1,29	1.61

UnLoading (1)	1	2	3	4
Stagu(Kg)	7065	3633	1768	0
Stress (Kg/cm2)	2,50	1.25	0.825	0.01
Settlement (mm)	1,61	1.55	1.40	1.00

D (mm) =	600	51 (mm)=	1.61	\$2imm)= 1.5	5	AS=	0.54
fiw1 (Mgra) =	(0.75°0°Ac)(AS		82				

Loading (2)	0	1	2	3	4	. 5
Stage(Kg)	0	1186.92	2345.6	3632.6	4719.4	5978.1
Stress (Kg/cm2)	0.04	0.42	0.83	1.25	1.67	2.08
Sattlement (min)	1.00	1.09	1.21	1.38	1.48	1.61

D (mm) =	600	51 (mm)=	1.18	82(mm)=	1.51	AS =	0.32
	10.75°0°000	AS .	137				

Ev2/Ev1 - 1.7

Evt - Mudulus of deformation during the Irrafling stage.

Ev2 = Modulus of deformation during the Reloading stage.

D = Plate diameter (mm)

Ds = The difference between 1.3 and 6.7 from the maximum loading (amon) deployed

D5 = Difference in settlements corresponding to 0.3 and 0.7 from the recommunicating (mm)





Company Name

: Land marks Co.

Project

Electric Express Train, from Al Ain Soldme to Merse. Metrouh Priority Sector (6) - Alemein to Foka

Test Date

: 16/01/2024

report date

: 17/01/2024

Location

:Station 425+220 to 425+245

Test No.

: 009

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

0	Kg/cm2 0.00	Dial 1	mm	Dial 2	mm	Dial 3	Charles .	Average
0.	0.00	-			10000	1	mm	10-15-100
		-20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	10.35	0.65	19.57	0.43	19.64	0.36	0.48
2	0.83	19.08	0.92	1935	0.64	19.29	0.71	0.76
3	1.25	13.69	1.31	19.05	0.94	19.09	0.91	1.05
4	1,67	18.47	1.53	18.74	1.26	18.93	1.07	1.29
5	2.08	18.32	1.68	18.50	1.50	18.61	1.39	1.02
6	2.50	15.13	1.87	18.29	1,71	38,94	1.66	1.75

Unloading Stage (1)

	Stress	2	Settlement	D1.1.0	Settlement	Dial 3	Settlement	Average
Loading	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai 3	mm	Average
- 1	2.50	-18.13	1.87	16.29	1.71	18.34	1.66	1,75
2	1.25	18.26	1.74	18.33	1.67	18:89	1.01	1.87
3	0.625	18.48	1.52	16.50	1.50	18.66	1.34	1,45
4	0.01	18.94	1.06	18.99	1.02	19.07	0.93	1.00

Loading	Stress	Dist 4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average	
	Kg/cm2	Dial 1	mm	Diai 2	mm	Dian 3	mm	- Trendge	
0	0.42	18.76	1.24	18.87	1.13	18.94	1.06	1.14	
1	0.83	18,64	1,36	18.67	1.33	18.76	1.24	1.31	
2	1.25	18.47	1.53	18.54	1.46	18.68	1.32	1.44	
3	1.67	18.28	1.72	18.36	1.64	18.55	1.44	1.60	
4	2.08	18.17	1.83	18.25	1.75	18.40	1.60	1.73	







Company Name

Land marks Co. : Electric Express Train, from Al Ain Soldma to Marsa Matrouh Priority Sector (6) - Mamein to Foka

Project Test Date

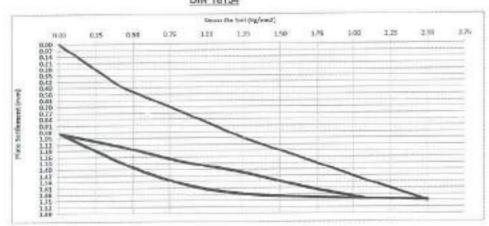
: 16/01/2024

report date

17/01/2024 :Station 425+220 to 425+245

Location Test No.

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1,67	2.08	2.50
Settlement (mm)	0.00	0.46	0.76	1.09	1.25	1.52	1.75

Unit,oading (1)	1	2	3	4
Stage(Kg)	7065	3533	1763	0
Strees (Kg/cm2)	2.50	1.25	0.825	0.01
Sattlement (mm)	1.75	1.67	1.45	1.00

Difference at	\$00	\$1 (mm)	0.70	52(mm)=	1.33	∆5 ×	0.63
Ev1 (Mpa) =	[D.76*0*Ao)(0.5		70				

Loading (2)	0	.1	2	. 3	4	5
Stage(Kg)	0	1196.92	2345.6	3532.5	4719.4	5873.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1,67	2.08
Settlement (mm)	1.00	1.14	131	1.44	1.60	1.73

D (mm) =	600	\$1 (mm)**	120	\$2)mm(= 1.62	ΔS=	0.35
----------	-----	------------	-----	---------------	-----	------

Ev2/Ev1 - 1.8

Ext = Modulus of deformation during the leading stage.

Ex2 = Medulus of deformation during the Releading stage.

D + Plate diameter (wm)

Ds = The difference between 0.3 and 0.7 from the maximum loading (smaz) (kg/cm²)

DS = Ofference in settlements corresponding to 4.3 and 0.7 from the meximum leading (week)





Company Name

: Land marks Co.

Project

; Electric Express Train, from Al Ain Sustana to Marsia Motrouth Priority Sector (6) - Alamein to Foka

Test Date

: 16/01/2024

report date

: 17/01/2024

Location

:Station 425+245 to 425+270

Test No.

: 010

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dist 4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Lital 2	mm	Diai 3	mm	, it can ge
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.55	0.49	19.67	0.33	19.72	0.28	0.37
2	0.83	19.07	0.93	19.07	0.93	19,43	0.57	0.81
3	1.25	18.67	1.33	18.80	1.20	19.29	0.71	1.08
4	1.67	18.33	1.87	18.45	1.55	19.17	0.83	1.35
5	2.08	18.19	1.81	18.23	1.77	19/04	0.96	1.51
6	2.50	18.06	1.94	18.02	1.98	18.75	1.25	1,72

Unloading Stage (1)

	Stress		Settlement	Dist o	Settlement	Dial 3	Settlement	Average
Loading	Kg/cm2	Dial 1	mm	Dial 2	nim	Diai a	mm	Average
- 1	2.50	18.06	1.94	18.02	1.98	18.75	1.25	1,72
2	1.25	18.15	1.85	18.09	1.91	18,94	1.06	1.61
3	0.625	18.29	1.71	16.35	1.65	19.08	0.92	1.43
4	0.01	18.43	1.57	18.58	1.42	19.37	0.63	1,21

Loading	Stress	Dist.	Settlement	Diel 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Dial 2	mm	Enias 2	mm	Average
0	0.42	18,37	1.63	1852	1.48	19.10	0.90	1.34
1	0.83	18.22	1.78	18.42	1.58	18.98	1.02	1,46
2	1.25	18.08	1.92	1820	1.76	18.86	1.14	1.61
3	1.67	17.96	2.04	1810	1.90	16.75	1.25	1.73
4	2.06	17.88	2.12	18:00	2.00	18.67	1.33	1,82







Company Name

Project Test Date : Land marks Co.

: Electric Express Train, from Al Ain Sokhna to Manua Matroub Priority Sector (6) - Alamnin to Foka

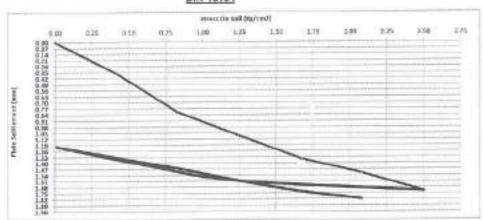
: 16/01/2024

report date : 17/01/2624 Location :Station 425+245 to 425+270

Location Test No.

:010

Nonrepositive Static Plate Load Tests of Soils DIN 18134



Loading (1)	0	. 1	2	3	4	5	-
Stage(Kg)	- 0	1186.92	2345,6	3532.5	4719.4	5878.1	7965
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1:07	2.00	2.50
Bettlement (min)	0.00	0.37	0.01	1.00	1.35	1.51	1.72

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	9
Stress (Kg/cm2)	2.50	1,25	0.625	0.01
Settlement (rem)	1.72	1,61	1.43	1.21

D (mm) =	(00)	Et (mm)+	1.72	SZ[min]=	1,38	AS=	0.66
Evt Most =	ID.75*0*ΔeVΔ8		- 67				

Loading (2)	0	1.	2	3	4	. 6
Stage(Kg)	0	1188.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2,08
Settlement (mm)	1.21	1.34	1.46	1.61	1.73	1.82

the state of the	44
Ev2/Ev1 =	2.1

D (aum) =	800	81 (mm)=	1.44	52(mm)=	1.75	AS =	0.35
Ev2 (Mpa) =	(0.76°D*AnyAS		142				

Ev1 = Modulus of deformation during the leading stage.

Ev2 = Modulus of deformation during the Relabding staps.

D + Flate dismotor (mm

 $D_{\rm H}$ = The difference between 1.3 and 9.7 from the maximum loading (areas) (kg/tim²)

DE = Officence in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)





Company Name

: Land marks Co.

Project

: Electric Express Train, from At Am Soldmano Marsa Matrouh Priority Sector (6) - Alamein to Foka

Test Date

: 11/1/2024

report date

: 13/1/2024

Location

:Station 425+270 to 425+290

Test No.

007

Nonrepetitive Static Plate Load Tests of Soils DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	21-1-4	Settlement	Dist 9	Settlement	Dial 3	Settlement	Average
-	Kg/cm2	Dial 1	mm	Dial 2	mm	Diai 3	mm	Average
0	0.00	28.00	0.00	20.00	0.00	20:00	0.00	0.00
1	0.42	19.81	0.19	19.64	0.36	19.60	0.40	0.32
2	0.83	19.58	0.32	19.49	0.51	19.41	0.59	0.47
3	1.25	19.44	0.56	19.31	0.69	19.23	0.77	0.67
4	1.67	19.27	0.73	19.15	0.85	19.05	0.95	0.84
5	2.08	19.15	0.85	19.01	0.99	18.91	1.09	0.86
8	2.50	19.02	0.98	18.84	1.16	18.78	1.22	1.12

Unloading Stage (1)

	Stress		Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
Loading	Kg/cm2	Dial 1	mm	Lital Z	mm	Diai 3	mm	Media
-1	2.50	19.02	0.98	18.84	1.18	18.78	1.22	1.12
2	1.25	19.07	0.93	18.90	1.10	18.83	1.17	1.07
3	0.625	19.12	0.65	1897	1.03	38.92	1.08	1.00
4	D.01	19.35	0.65	19.24	0.76	19.21	0.79	0.73

Loading	Stress	Birt 4	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2	Dial 1	mm	Dia 2	mm	Diai 3	mm	Average
0	0.42	19.27	0.73	19.18	0.82	19.13	0.87	0.81
1	0.83	39.18	0.82	19.09	0.91	19.02	0.98	0.90
2	1.25	19.09	0.91	19.01	0.99	18.93	1.07	0.99
3	1.67	19.01	0.99	18.04	1.06	18.82	1.18	1.08
4	2.08	18.91	1.09	18.85	1.15	18.73	1.27	1.17





Company Name

Project.

Test Date

report date Location Test No. Land marks Co.

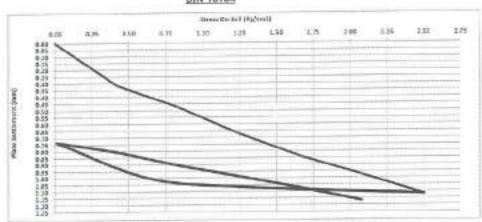
: Electric Express Train, from Al Ain Sokhna to Marsa Matrouit Priority Sector (6) - Alamein to Foka

: 11/1/2024

: 13/1/2024 :Station 425+270 to 425+290

: 007

Nonrepetitive Static Plate Load Tests of Spils DIN 18134



Loading (1)	0	1	2	3	4	5	- 6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.53	1.25	1,67	2.08	2.50
Settlement (mm)	0.00	0.32	0.47	0.67	0.84	0.96	1,12

UnLoading (1)	3	2	3	4
Stage(Kg)	7085	3533	1768	0
Stress (Kg/om2)	2.50	1.25	0.625	0.01
Settlemont (mm)	1.12	1.07	1.00	0.73

1	D/mml=	600	51 (mm)+	9.44	\$2(mm)=	1.37	I ΔS π	0.43
1	Evt (Mpa) =	(0.75°D*An)/AS		103				

Loading (2)	0	1	2	3	4	5
Stage(Kg)	.0	1186.92	2345,6	3632.4	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Sattlement (mm)	0.73	18.0	0.90	0.99	1.08	1.17

D (mm) =	600	51 (mm)=	0.68	\$2(mm)*	1.09	ΔS =	0.23
Ew2 (Mina) =	(0.76-0-00)AS		210				

Ev2Ev1 = 2.0

Evt = Madulus of deformation during the leading stage.

Ev2 = Madulus of deformation during the Releading stage.

D = Plate diameter (mm)

Ds = The difference between 3.3 and 6.7 from the maximum loading (smax) (signer)

DS = Difference in suttlements corresponding to 0.2 and 0.7 from the recommendating (min)

مكتب محامل الاستشارات الهنمسية الاختبارات المعملية رام تعطرانسيو ، 137 - 139 - 159 الليل



الممسوحة ضوتيا بـ CamScanner

Company Name: Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Sub-Ballast

Location : St. (424+600) : (425+600)

Delivery Date : 15/03/2023

Reporting Date : 22/03/2023

Reporting No. : 21

Sample No. : 01

Dear Gentleman,

Attached here with the Sub-Ballast delivered on 15/03/2023

Materials test

- Sieve analysis according to ASTM D-422.
- Material finer than sieve No. 200 according ASTM D-1140
- Liquid limits and plasticity index of soil according to ASTM D-4318.
- Proctor test according to ASTM D-1557.
- Specific Gravity & Absorption according to ASTM C-127 & D 6473.
- CBR according to ASTM D-1883
- Los Anglos according to ASTM C-131.

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 : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Sub-Ballast

Location : St. (424+600) : (425+600)

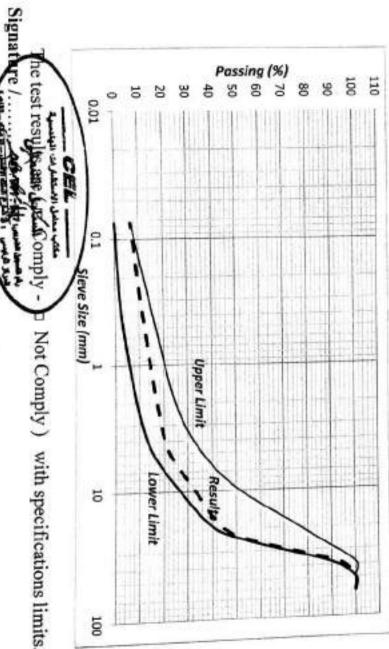
Delivery Date : 15/03/2023 Reporting Date : 22/03/2023

Reporting No. : 21

Sample No. : 01

Results of sieve analysis according to ASTM D-422

Sieve Size	(mm)	63.5	50	38	25	19	12.5	9.5	4.75	2.00	0.425	0.075
Passing %		100	100	93.1	56.8	43.7	34.9	32.3	22.0	17.2	11.7	6.8
Job specific (ASTM	Min.	100	100	90	55	40		26	15	9	3	0
Job specification limits (ASTM D-422)	Max.	100	100	100	85	75		50	35	25	16	7



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Tel.& Fax: 27367231 - 27363093

ACCREDITED.

۴ ش الملك الأفضل الزمائك - القاهرة تليفون + فاكس ، ۲۷۳۹۷۲۳۱ - ۲۷۳۹۲۳۳ تليفون + فاكس ، ۳۳۳۳.cel-egypt.com



Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Sub-Ballast

Location : St. (424+600) : (425+600)

Reporting Date Delivery Date : 22/03/2023 15/03/2023

Reporting No. : 21

Sample No. 9

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

Percentage of material finer than Sieve Size 75 μΜ (No.200)	Test
6.8	Results (%)



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الممسوحة ضوئيا بـ CamScanner

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Sub-Ballast

Location : St. (424+600) : (425+600)

Delivery Date : 15/03/2023 Reporting Date : 22/03/2023

Reporting No. : 21

Sample No. : 01

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

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



4



الممسوحة ضوئيا بـ CamScanner

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Sub-Ballast

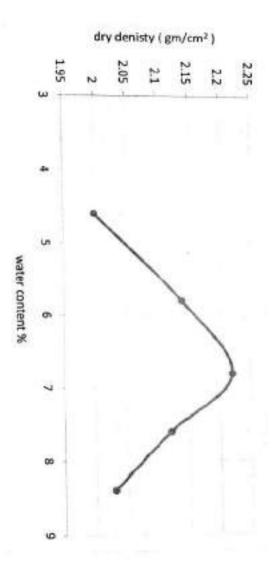
Location : St. (424+600) : (425+600)

Reporting Date Delivery Date : 22/03/2023 : 15/03/2023

Reporting No. : 21

Sample No. :01

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



Max dry density (gm/cm2)

: 2.22

: 6.8

Optimum moisture content %

Signature



مكتب ممامل الإستشارات الهندسية

الممسوحة ضوتيا بـ CamScanner

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Sub-Ballast

Location : St. (424+600) : (425+600)

Delivery Date : 15/03/2023

Reporting Date : 22/03/2023

Reporting No. : 21

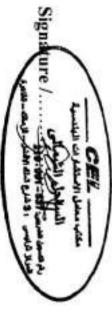
Sample No. ::

Results of Specific Gravity and Absorption of Course Aggregate ASTM C127 & D 6473

Absorption %	Apparent Specific Gravity.	Bulk Specific Gravity (SSD)	Bulk Specific Gravity (OD)	Test
2.41	2.52	2.40	2.32	Results

Note:

- (OD) Refer to Oven Dry.
- (SSD) Refer to Saturated Surface Dry.





الممسوحة ضوتيا بـ CamScanner

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Sub-Ballast

Location : St. (424+600) : (425+600)

Delivery Date : 15/03/2023

Reporting Date : 22/03/2023

Reporting No. : 21

Sample No. :01

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

CBR %	Stress (Mpa)	CBB Besult
40.0	0.250	6.35
8 63	200	3.71
8.11	0.225	17.3
7.01	0.200	5.08
7.10	0.175	4.45
710	0.150	3.81
650	0.125	3.18
2.30	0.100	2.54
2.10	0.075	1.91
4.39	0.050	1.27
4.07	0.025	0.64
407	Inch	mm
stress on piston (Mpa)	ration	penetration

At 0.1 inch (2.54 mm) CBK Kesuli penetration St. Value 6.90 Sample results 5.58 80.9

Notes :

7 Attached graph shows penetration resistance versus penetration magnitude

density of 2.22 (gm/cm3)

17 at 6.8 % operations water content

Surcharge Jang 1150 Kgs

Signatur

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Tel.& Fax: 27367231 - 27363093



٣ ش العلك الأفضل الزمالك - القاهرة

تليفون + فاكس ، ٢٢٢١٧٢١ - ٢٢٠٩٢٢ www.cel-egypt.com

Company Name : Land Marks

project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Sub-Ballast

Location : St. (424+600) : (425+600)

Delivery Date : 15/03/2023

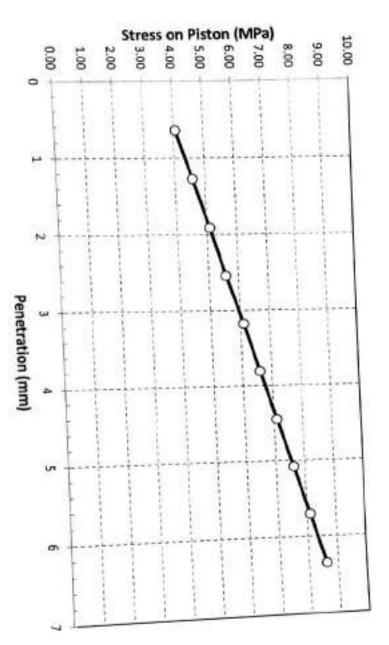
Reporting Date : 22/03/2023

Sample No. : 01

Reporting No.

: 21

Load Penetration Curve of CBR Test ASTM D-1883







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Consulting Engineering Bureau & Laboratories مكتب معامل الإستشارات الهندسية

الممسوحة ضوتيا بـ CamScanner

Company:

Land marks

Delivery Date Project : Electric express train. : 06/04/2023

Report Date : 12/04/2023

Type Sample Id Coarse Aggregate Sub-ballast sample No.1

Source Site

Report No.

OF SMALL SIZE AND IMPACT IN LOS ANGELES MACHINE RESISTANCE TO DEGRADATION AGGREGATE BY ABRASION **ASTM C 535**

Coarse Aggregate	Amount of loss by abrasion and impact (%)	Test
	19.7	Results

According to project specs:

The amount of loss by abrasion and impact for moderate weathering:

Shall not exceed 30 % (when Subjected to 500 revolutions)

Signa The Test Results is Comply

> Not Comply) with Spec. Limits

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٢ ش العلك الأفضل الزمالك - القاهرة

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Consulting Engineering Bureau & Laboratories مكتب معامل الإستشارات الهندسية

لممسوحة ضوئيا بـ CamScanner

Company Name: Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Prepared Subgrade

Delivery Date : 13-04-2023

Reporting Date : 17-04-2023

Reporting No. : 23

Sample No. : 02

Dear Gentleman,

Attached here with the Prepared Subgrade delivered on 13-04-2023

Materials test

- Sieve analysis according to ASTM D-422.
- Material finer than sieve No. 200 according ASTM D-1140
- Liquid limits and plasticity index of soil according to ASTM D-4318
- Proctor test according to ASTM D-1557.
- CBR according to ASTM D-1883
- Los Anglos according to ASTM C-131.

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



ا في البلك الأفضل الزمالك - القاهرة تليفون - فاكس ، ا۲۲۲۲۲۲ - ۲۲۲۲۲۲ تليفون - فاكس ، ۲۲۲۲۲۲۱

الممسوحة ضوئيا بـ CamScanner

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Prepared Subgrade

Delivery Date : 13-04-2023

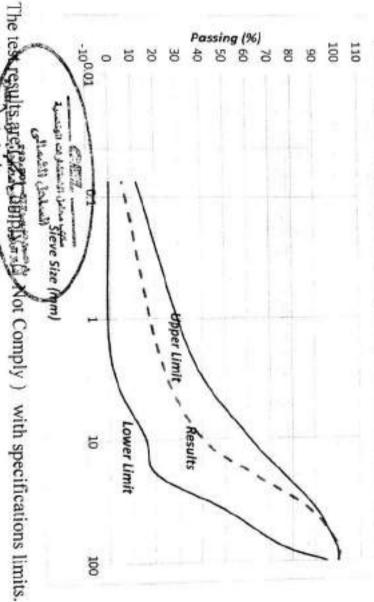
Reporting Date : 17-04-2023

Reporting No. : 23

Sample No. : 02

Results of sieve analysis according to ASTM D-422

Sieve Size	Passing %	Job specification limits (ASTM D-422)	D-422
(11111)		Min.	
100	100	90	
75	100	75	
50	100	+	
<u>ن</u>	86.9	50	
25	72.3	1	
19	61.6	20	
12.5	43.2		
9.5	39.2	15	
4.75	24.6	1	
2.00	21.3	0	
0.425	15.0	0	
0.075	6.5	0	



Signature /...

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Prepared Subgrade

Delivery Date : 13-04-2023

Reporting Date : 17-04-2023

Reporting No. : 23

Sample No. : 02

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

Percentage of material finer than Sieve Size 75 μΜ (No.200)	Test
5.9	Results (%)



Consulting Engin مكتب معامل الإستشارات الهندسية eering Bureau & Laboratories

الممسوحة ضوئيا بـ CamScanner

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Prepared Subgrade

Delivery Date : 13-04-2023

Reporting Date : 17-04-2023

Reporting No. : 23

Sample No. . 02

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

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



Consulting Engineering Bureau & Laboratories مكتب معامل الإستشارات الهندسية

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Prepared Subgrade

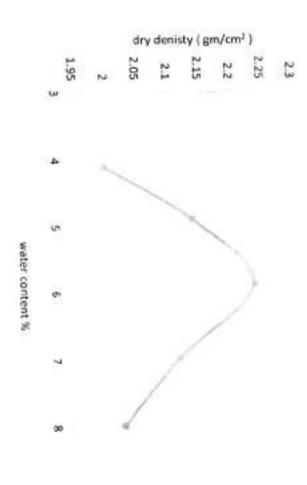
Delivery Date : 13-04-2023

Reporting Date : 17-04-2023

Reporting No. : 23

Sample No. : 02

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



9

Max dry density (gm/cm2)

: 2.24

Optimum moisture content %

5.9

THE REPORT OF THE Secondary Second السلطل القمال CEL

Signature /



Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Prepared Subgrade

Delivery Date : 13-04-2023

Reporting Date : 17-04-2023

Reporting No. : 23

Sample No. : 02

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

7.48	0.250	6.35
7.09	0.225	5.71
6.64	0.200	5.08
6.14	0.175	4.45
5.70	0.150	3.81
5.40	0.125	3.18
4.91	0.100	2.54
4.56	0.075	1.91
4.34	0.050	1.27
4.06	0.025	0.64
	Inch	mm
stress on piston (Mpa)	penetration	pene

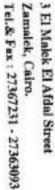
penetration	At 0.1 inch (2.54 mm)	CBR Result
6.90	St. Value	S
4.91	Sample results	Stress (Mpa)
****	717	CBR %

Notes :

- Attached graph shows penetration resistance versus penetration magnitude
- 2 The sample was compacted to do, density of 2.24 (gm/cm²) at 5.9% optioning was compacted to do.
- 3. Surcharge load 4.50 Kg.

Signature / State of the contraction







الممسوحة ضوئيا بـ CamScanner

Company Name : Land Marks

Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh

Type of sample : Prepared Subgrade

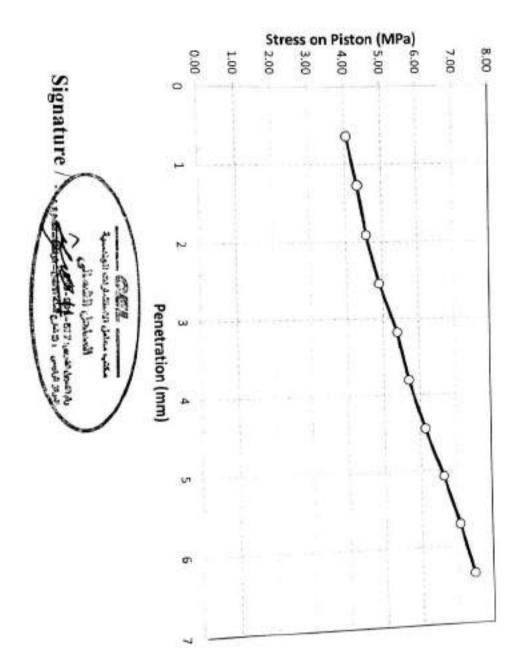
Delivery Date 13-04-2023

Reporting Date 17-04-2023

Reporting No. : 22

Sample No. :01

Load Penetration Curve of CBR Test ASTM D-1883



27262003



Consulting Engineering Bureau & Laboratories مكتب معامل الإستشارات الهندسية

الممسوحة ضوتيا بـ CamScanner

Company:

Land marks

Project : Electric express train.

Delivery Date 01/05/2023

Report Date Sample Id Prepared subgrade sample No.2 15/05/2023

Type : Coarse Aggregate

Source Site

Report No. 2

OF SMALL SIZE AND IMPACT IN LOS ANGELES MACHINE RESISTANCE TO DEGRADATION ALL SIZE AGGREGATE BY ABRASION ASTM C 535

Coarse Angregate	Test
23.2	Results

According to project specs :

The amount of loss by abrasion and impact for moderate weathering:

Shall not exceed 40 % (when Subjected to 500 revolutions)

The Test Results is A LONGY

Signature /...

راي الأمامان القريس 127-239 (1940). والإدارة الأرابس 13 شارع الماطاطي

Not Comply) with Spec. Limits

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تليفون - فاكس ، ١٣٣١٧٣١ - ٢٧٣١٣٠٩٣ www.cel-egypt.com ٣ ش الملك الأفضل الزمالك - القاهرة



مشروع: أعمال الجسر الترابي والأعمال الصناعية لمشروع القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين - مطروح) قطاع غرب النيل لتنفيذ المسافة من الكم ٢٠٤٠٦٠٠ إلى الكم ٢٠٠٠٦٠٠ بطول ١ كم اتجاه الطريق الساحلي

رقم البند و بيانه : (١-٤) اعمال توريد وفرش طبقة الأساس (PREPARED SUBGRADE)

تنفيذ: شركة لاندماركس للمقاولات العمومية

مقدار العمل السابق:

الایماد (متر) الکمیة		الموقع الكينومتري		بيان الإعمال بالمقايسة	
	مساحة المقطع	طول	الى	عن ــــــــــــــــــــــــــــــــــــ	and many Day to Did
£-1A,0-	۸,۰۲۷	0	170+1	£7£+1	القطاع الأول
£ - \A,o -	A, - TV	0	170+7	£10+1	القطاع الثاني
X-7Y		ية (م٣)	المستخلص الحال	الكميات خلال فترة	اجمالي
A-174		الاجمالـي الكلـي (م٢)			

مهتلس الهيئة

مهندس الاستشاري

مكتب د/سعد الجيوثي

مهندس الإستشاري

مكتب XYZ

مهتنس الشركة

م/ احمد ابوبكر



مشروع: أعمال الجسر الترابي والأعمال الصناعية لمشروع القطار الكهربائي السريع. (العبن السخنة -العاصمة الادارية -العلمين - مطروح) قطاع غرب النيل لتنفيذ المسافة من الكم ٢٠٤٠٦٠٠ إلى الكم ٢٥٠١٦٠٠ بطول ١ كم اتجاه الطريق الساحلي رقم البند و بيانه : (٤-١) علاوة تحصيل رسوم الكارتة والموازين طبقا للائحة الشركة الوطنية

تنفيذ: شركة لاندماركس للمقاولات العمومية

مقدار العمل السابق:

الابعاد (متر) الكمية		الموقع الكيلومةري الإبعاد (مقر)		الموقع ال	بيان الاعمال بالمقايسة
3.00	مساحة المقطع	طول	ال	i)a	and month Dress 24 Odd
£ - 1A,0 -	A, . TV	0	£Y0+1	£7£+1	القطاع الأول
£ - 1A, 0 -	۸,۰۳۷	0	£Y0+7	£Y0+1	القطاع الثاني
A-YV		بية (م٣)	المستخلص الحاا	الكميات خلال فأترة	اجمالي
A-TV			الكلسي (م۲)	الاجمالي	

مهتنس الاستشاري

مكتب د/سعد الجيوشي

م/مسطفی تجم –

مهتدس الاستشاري

مكتبُ XYZ

مهندس الشركة

م/ احمد ابوبكر

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مشروع: أعمال الجسر الترابي والأعمال الصناعية لمشروع القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين - مطروح) قطاع غرب النبل لتنفيذ المسافة من الكم ٢٠٤+٦٠٠ الى الكم ٢٠٠+٤٢٥ بطول ١ كم انجاه الطريق الساحلي

رقم البند و بيانه : (١-٤) علاوة مسافة النقل ١٤٧ كم

تنفيذ: شركة لاندماركس للمقاولات العمومية

14

مقدار العمل السابق:

الكمية	الابعاد (مار)	الإبعاد (Theta F	بيان الاعمال بالمقايسة
	مساحة المقطع	deb	الى	Ún.	aminori Ores 21 Gir
E-1A,0.	۸,-۲۷	0	£70+1	£Y£+7	القطاع الأول
E-1A,0-	۸,-۲۷	0.,	140+1	£Y0+1	القطاع الثاني
A-TV		ية (١٣)	ذالمستخلص الخاا	الكميات خلال فترة	اجمالي
A-TY		الاجمالـي الكلـي (م٣)			

مهتدس الهيئة

مهتدس الاستشاري

مكتب د/سعد الجيوشي

م/مصطفی نجم

مهندس الإستشاري

XYZ مکتب

مهندس الشركة

م/احمدايوبكر

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مشروع: أعمال الجسر الترابي والأعمال الصناعية لمشروع القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين - مطروح) قطاع غرب النيل لتنفيذ المسافة من الكم ٢٠٤+٦٠٤ الى الكم ٢٠٠+٤٢٥ بطول ١ كم اتجاه الطريق الساحلي

رقم البند و بيانه : (١-٤) قيمة المادة المحجرية

تـنفيـد : شركة لاندماركس للمقاولات العمومية

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مقدار العمل السابق:

الكمية	الابعاد (مار)	الانبعاد (مار)		الموقع ال	بيان الإعمال بالمقايسة
-	مساحة المقطع	طول	الى	Úª.	Andread Demokration
£ - 1A, 0 -	A, -TV	0	£70+1	£Y£+7++	القطاع الأول
£-1A,0-	A,-TV	0	£Y0+7	£10+1	القطاع الثاني
A-TY		ية (م٢)	المستخلص الحال	الكميات خلال فترة	اجمالي
A-TY		الاجمالي الكليي (م٢)			

مهتدس الهيئة

مهندس الاستشاري

مكتب د/سعد الجيوشي

م/سطاق نجم

مهندس الإستشاري

موکتب XYZ

مهندس الشركة

م/ احمد ابوبكر

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مشروع: أعمال الجسر الترابي والأعمال الصناعية لمشروع القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين - مطروح) قطاع غرب النيل لتنفيذ المسافة من الكم ٢٠٠-٤٢٤ الى الكم ٢٠٠-٤٢٥ بطول ١ كم اتجاه الطريق الساحلي

رقم البند و بيانه : (٢-٤) اعمال توريد وفرش طبقة الأساس (SUB BALLAST)

تنفيذ: شركة لاندماركس للمقاولات العمومية

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مقدار العمل السابق:

الكبية	الابعاد (متر)	الابعاد (متر)		الموقع ال	بيان الإعمال بالمقايسة
377	مساحة المقطع	طول	ال	i)a	Carried Comp. Dir.
TYVA,A-	0,100	07.	£Y0+17.	£7£+1	القطاع الأول
TYVA,A-		اجمالي الكميات خلال فترة المستخلص الحالية. (م٣)			اجمالي
TYVA,A-			الكلس (م۲)	الإجماليي	

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مهتدس الاستشاري

مكتب د/سعد الجيوشي

م/مصطفی نجم

مهندس الاستشارى

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مشروع: أعمال الجسر الترابي والأعمال الصناعية لمشروع القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين - مطروح) قطاع غرب النيل لتنفيذ المسافة من الكم ٢٤+٦٠٠ الى الكم ٢٠٠-٤٢٥ بطول ١ كم اتجاه الطريق الساحلي

رقم البند و بيانه : (٢-٤) علاوة تحصيل رسوم الكارتة والموازين طبقا للائحة الشركة الوطنية تنفيذ: شركة لاندماركس للمقاولات العمومية

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مقدار العمل السابق:

الكمية	الإيماد (متر)	الايماد (متر)		الموقع ال	بيان الاعمال بالمقايسة	
The state of the s	مساحة المقطع	طول	الى	i) a	متاريد ومعال أومه المعالية	
TYVA,A.	0,400	07.	£70+17-	£7£+7	القطاع الأول	
TYVA,A-	á	لية (م٣)		اجمالي الكميات خلال فترة المستخلص الحا		
TYVA,A-			الإجمالـي الكلـي (م٣)			

مهندس الاستشاري

مكتب د/سعد الجيوشي

م/مصطفى لجم

مهندس الاستشاري

مكتب ۲۲۲

مهندس الشركة

م / أحمد أيوبكر

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مشروع: أعمال الجسر الترابي والأعمال الصناعية لمشروع القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين - مطروح) قطاع غرب النيل لتنفيذ المسافة من الكم ٢٠٠+٤٢٤ إلى الكم ٢٠٠+٤٢٥ بطول ١ كم اتجاه الطريق الساحلي

رقم البند و بيانه : (٢-٤) علاوة مسافة النفل ١٤٧ كم

تنفيذ: شركة لاندماركس للمقاولات العمومية

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مقدار العمل السابق:

الكمية	الابعاد (مار)	الإيماد (مثر)		الموقع ال	a di li Washing	
3000	مساحة المقطع	طول	ال	04	يران الاعمال بالمقايسة	
*****	0,100	07.	140+17.	£Y£+l	القطاع الأول	
TYVA,A-	لية (م۲) -۸۸۸		اجمالي الكميات خلال فترة المستخلص الحاأ			
TYVA,A-		الاجماليي الكليي (م٣)				

مهندس الاستشاري

مكتب د/سعد الجيوشي

م/مصطفى نجم

مهندس الاستشاري

مكتب XYZ

مهندس الشركة

م / احمد ابوبكر

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مشروع: أعمال الجسر الترابي والأعمال الصناعية لمشروع القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين - مطروح) قطاع غرب النيل لتنفيذ المسافة من الكم ٢٠٤+٦٠٤ الى الكم ٢٠٠+٤٢٥ بطول ١ كم اتجاه الطريق الساحلي

رقم البند و بيانه : (٢-٤) قيمة المادة المحجرية

تنفيذ: شركة لاندماركس للمقاولات العمومية

Te.

مقدار العمل السابق:

(لکمیة	الایعاد (متر)	الایعاد (متر)		الموقع ال	بيان الاعمال بالمقايسة	
	مساحة المقطع	طول	હા	Úª.	unimed Out 1 Off	
YYYA,A+	0,100	٠٢٥.	170+17-	£Y£+l	القطاع الأول	
لية (م٢) ٢٢٧٨.٨٠		اجمالي الكميات خلال فترة المستخلص الحال				
TYVA.A.			الاجمالــي الكلــي (م٢)			

مهتلس الهيئة

مهندس الاستشاري

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مكتب xyz مكتب د/سعد الجيوشي

م/سطق لحم

مهندس الشركة مهندس الاستشاري

م / احمد ایوبکر

ا حصد انو نکر



المنطقة الخامسة - (غرب الدلتا)

السيد المهندس / رئيس قطاع التنفيذ والمناطق

تحية طيبة.. وبعد،،

بالإحالة إلى مشروع القطار الكهرباتي فاق السرعه (العلمين - فوكة) (القطاع السادس) نتشرف بأن نرفق لسيادتكم طيه المقايسة المعدلة بعد المفاوضة لبنود الأعمال بتاريخ ١٨-١٢-٢٣ للقطاع الآتي:

الاتجاه	إلى المحطة	من المحطة	اسم الشركة	مسلسل
الطريق السلطي		175+7	لانتماركس للمقاولات العمومية	,

برجاء من سيادتكم التفضل بالأحاطه والتوجيه بالازم

وتفضلوا بقبول فانق الأحترام والتقدير،،،

رنيس الإدارة المركزية

المنطقة الخامسة غرب الدلتا

عمید مهندس/ حمد محمود طه "











مشروع الشغل الكوريقي فنق السرعة قطاع (العلمين - فوكة) المقايسة المعنة بحد المقاوضة بتاريخ ٢٠١٧-١٠١ ليتود ١٤عمل تنفيذ شركة الادماركس للمقاولات الصومية انجام الطريق السلطى القطاع من المحطة ١٠٠٠ على ١٠٠٠ على ١٠٠٠ على ١٠٠٠ على ١٠٠٠ على ١٠٠٠ على ١٠٠٠ ع

alph p	July 19 and 19 a	145,61	اللبية	- CED	(Vesto)
t	طيقت الاساس				
lut	يقشر المكتب العمل توريد وفرش طبقة الاساس (prepared Subgrade) من الاحجاز المشتب العمل المربوات ١٠٠ من الاحجاز المشتبة قدائر من المربوات والمطابقة المواسقات وأقمى حجم الحبيبات ١٠٠ من والا تزيد نسبة المدر عن المستب العمل ١٠٠ عن ١٠ يا و الاقراع الواسقات وأقمى حجم الحبيبات ١٠٠ عن ١٠ يا و الاقراء نسبة الملك بحجاز لوب الجنباس عن ٢٠٠ يا والاقراء نسبة الملك بحجاز لوب الجنباس عن ٢٠٠ يا والاقراء معمل المربوة (٢٠٤ عن نجرية أوح الامعل عن ١٠٠ ميوابطان ويتم فريعة أوح الامعلى عن ١٠٠ ميوابطان ويتم فريعة عن ١٠٠ من من المعلى عن ١٠٠ ميوابطان المربوبة المحلوبة المحلوبة المحلوبة والمسالم المربوبات عن ١٠٠ يا من المتلافة والمحلوبة ويتم التنفية طبقا العمول المسابقة والمحلوبة والمسابقة والمحلوبة المحلوبة المحل	**	A.TY	165,6+	1,147,174
	قية شنة شميرية	r,	A-TV	111	1.247,407
	مارية مسافة الكر ١١٧ كم مارية مسافة الكر ١١٧ كم	Tr.	A-TV	120,10	1,771,4.4
	عائرة تعصيل رموم الكارثة والموازين طيقا للائحة الشركة فوطلية	7,	A.FV	10	1,110
Yes	ياشش المكتب اعمال توريد وقرش طبقة اساس من الاحجاز المشبة استدرجة نقح تتسير المسئية استدرجة نقح تتسير المسئية استدرجة نقح تتسير المسئية استدرجة نقح المرواة بإرية المسئية المنارجة بالمواجعة والمسئية والمسئية المواجعة المواجعة والمسئية المسئية المس	Te	TT\$0,1.00	141,7	190,019
	قبة شاة شجية	T _p	7710,1.00	1461+	441,717
	هدي د سنطة تفكل ١٤٧ كم	re	F110,1.00	110,1	******
	هائرة تمصيل رسوم الكارثة والموازين طبقا للامة الشركة الوطلية	Te	**140,1.00	7.0	AT,YYA
	الإجعالي				o,V,

(خمسة مليون و سيع مقة الف جنوه فقط لاغور)

SGACSULLAIS

مدير المشروع المقاول

م / أحمد أبويكر

مقارات العمومية واعمال متكاملة وتجريدات 701-VA7-709:00

منهر تمشروع الاستقماري مدير المشروع الهينة

مدير علم مشروعات الهيلة

م امدمد حسلي فياض

يعتبد رئيس الأفارة المرازية متطلة غرب البلتا