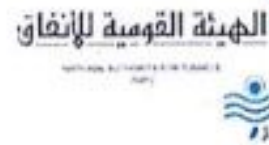


MATERIAL INSPECTION REQUEST



Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/ Omar										
Contractor reference	MB-(13) 9-3-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)				
Location to be Used	From	To		From	To
	558+280	558+340	(-1.25)	557+640	557+680 (-8)
	558+180	558+280	(-0.25)	558+180	558+280 (Ferma)
	557+700	558+780	(-5.5)		
	557+960	558+120	(-1.25)		
558+280	558+340	(-1)			
MAR Approval No				Date	
Supplier Name					
Test Requirement	Specification			Clause	
Reference Photos	Yes attached / No	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	SIEVE ANALYSIS	M3	5000		
2	CLSSIFICATION	M3	5000		
3	PROCTOR & O.M.C	M3	5000		
4	L.L & P.L & PI	M3	5000		
5	C.B.R	M3	5000		
Comments by:			Comments by:		
APPROVAL STATUS					
Organisation	Name	Sign	Date	A-AWC-R	
Contractor	Omar				
QA/QC *	Shahed Zaky				
GARB**					
Employers Representative					

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST



الهيئة القومية للإنفاق
NATIONAL AUTHORITY FOR BRIDGES



Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/ Omar										
Contractor reference	MB-(13) 9-3-2023										
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (558)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TO SPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 13.5% ATTEBERG LIMIT NP MOISTURE CONTENT 6.5% MODIFIED PROCTOR 2.15 CBR 59%
Test Samples Results	Yes attached / No	Other	
Comments by:		Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Omar			
QA/QC *	Rehman Zaki			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي ا.د. خالد قنديل	 SYSTRA SHAKER	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA To MARSA MATROUH From Station 504+000 To Station 568+177	 الهيئة القومية للإنتاج وزارة التخطيط
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	8/3/2023	code		ZONE	557+500	559+000
location	K.P 558+000	MB-13				
NAME COMPANY	Magdi Bkheet					
1-visual inspection test	operate by	GOMAA BADR LAB				

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		38914.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	2536.0	5525.0	3256.0	2836.0	3681.0	4256.0	4957.0		A-1-a	
Cumulative Retained (g)	2536.0	8061.0	11317.0	14153.0	17834.0	22090.0	27047.0		PRO	2.152
Cumulative Retained %	6.5	20.7	29.1	36.4	45.8	56.8	69.5		WC	6.5
Cumulative Passing %	93.5	79.3	70.9	63.6	54.2	43.2	30.5		CBR	59.0%

B-soft material gradation			WT.OF sample		500.00		gm
sieve size	10	40	200				
Cumulative Retained (g)	45.72	144.25	278.30				
Cumulative Retained %	9.14	28.85	55.66				
Cumulative Passing %	90.86	71.15	44.34				

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	93.5	79.3	70.9	63.6	54.2	43.2	30.5	27.7	21.7	13.5

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor
المعمل المركزي
شركة جمعه بدر نوح
Ramallah Taha

Consultant
Abdellah SAMU

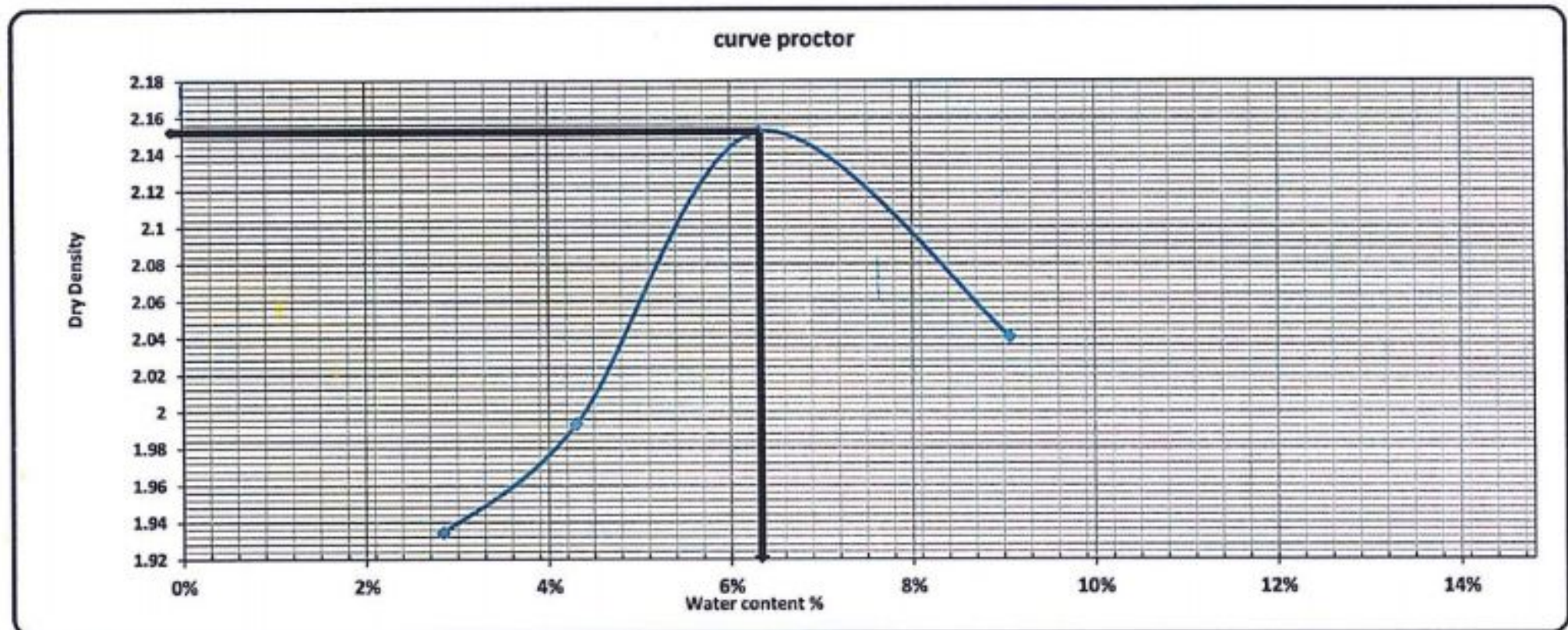
	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA TO MARSA MATROUH From Station 504+000 To Station 568+177			

PROCTOR TEST

TESTING DATE:	8/3/2023	code			
location	K.P 558+000	MB-13	ZONE	557+500	559+000
NAME COMPANY	Magdi Bkheet				
	operate by	GOMAA BADR LAB			
Weight of empty mold :	6490.0		MAX Dry Density		
Mold Volume:	2104.9		Water content %		

trial no :	1	2	3	4		
Wt. Of Mold+ wet soil	10685.0	10874.0	11315.0	11182		
WT. WET SOIL	4195.0	4384.0	4825.0	4692.0		
Wt. Density	1.993	2.083	2.292	2.229		

Tare No.	30	30	1	1	10	10	15	15				
Tare wt.	27.34	27.34	26.83	26.83	26.42	26.42	27.51	27.51				
Wt. Of wet soil & tare	162.3	162.3	101.8	101.8	99.1	99.1	125.2	125.2				
Wt. Of dry soil & tare	158.27	158.27	98.52	98.52	94.65	94.65	116.89	116.89				
Wt. Of water	4.0	4.0	3.2	3.2	4.4	4.4	8.3	8.3				
Wt. Of dry soil	130.9	130.9	71.7	71.7	68.2	68.2	89.4	89.4				
Water content %	3.0%	3.0%	4.5%	4.5%	6.5%	6.5%	9.3%	9.3%				
AV. Water content %	3.0%		4.5%		6.5%		9.3%					
Dry Density	1.934		1.993		2.152		2.040					



Contractor
المعمل المركزي
شركة جمعه بدر نوح
Remah Taha

Consultant
Abdallah K. M. U.



Electric Express Train - HSR



California Bearing Ratio TEST

TESTING DATE	9/3/2023	code		ZONE	557+500	559+000
location	K.P 558+000	MB-13				
NAME COMPANY	Magdi Bkheet	operate by	GOMAA BADR LAB			

- : Test Results

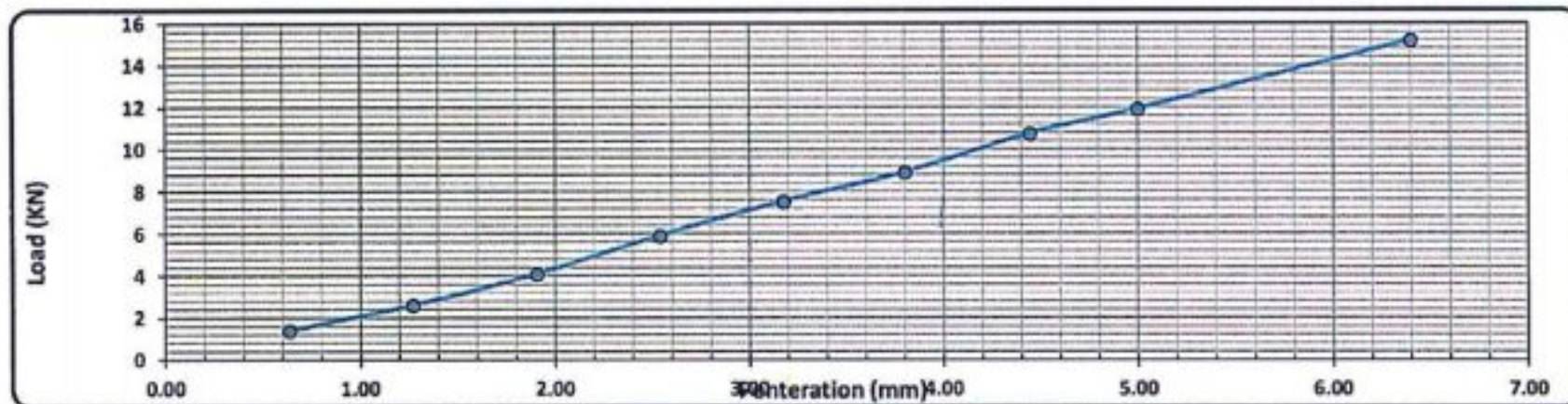
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm ³)	2177.5
Mold WT. (gm)	16444
Mold WT. + Wet WT. (gm)	21458
Wet WT. (gm)	5014
Wet Density (g/cm ³)	2.303
Dry Density (g/cm ³)	2.165
Proctor Density (g/cm ³)	2.152
Compaction %	101

Mositure Ratio After Compacted Mold	
Tare No.	12
Tare WT. (gm)	26.32
Tare WT. + Wet WT. (gm)	148.21
Tare WT. + Dry WT. (gm)	140.95
Wt. Of water	7.3
Dry WT. (gm)	114.6
Moisture Content %	6.3

Swelling	
Mold No.	2
Date	
Initial Height (mm)	
Final Height (mm)	
Difference	0
Sample Height (mm)	
Swelling Ratio %	

Loading Reading :

penetration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	140.00	265.00	415.00	600.00	765.00	905.00	1094.00	1214.00	1547.00
Load (KN)	1.4	2.6	4.1	5.9	7.5	8.9	10.7	11.9	15.2



Calculations :-

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR
2.50	5.88	13.4	44.0%	101	100	43.8%
5.00	11.90	20.0	59.4%			59.0%

Lab. Specialist
Name: **المعمل المركزي**
Sign: **شركة جمعه بدر نوح**

Ramiah Tareq

Consultant Engineer
Name: **Abdullah SAMU**
Sign: *[Signature]*

MATERIAL INSPECTION REQUEST



Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/ Omar										
Contractor reference	MB-(14) 13-3-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)					
Location to be Used	From	To				
	557+700	557+800	(-5)			
	558+280	558+340	(-0.75)			
	557+940	558+120	(-1)			
	557+700	557+780	(-4.5)			
	557+640	557+680	(-7.5)			
MAR Approval No				Date		
Supplier Name						
Test Requirement	Specification			Clause		
Reference Photos	Yes attached / No	Other				
Item	Description	Unit	Quantity	Arrival Date	Note	
1	SIEVE ANALYSIS	M3	5000			
2	CLSSIFICATION	M3	5000			
3	PROCTOR & O.M.C	M3	5000			
4	L.L & P.L & PI	M3	5000			
5	C.B.R	M3	5000			
Comments by:			Comments by:			
APPROVAL STATUS						
Organisation	Name	Sign	Date	A-AWC-R		
Contractor	Omar					
QA/QC *	Khaleel Zaki					
GARB**						
Employers Representative						

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST



Contractor Company	Magdy Bekhet		Designer Company	
Issued by Contractor	Name	Sign	Date	Time
	Eng/ Omar			
Contractor refrence	MB-(14) 13-3-2023			
Received by ER			MAR	

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (558)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TO SPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 14% ATTEBERG LIMIT NP MOISTURE CONTENT 6.5% MODIFIED PROCTOR 2.13 CBR 55%
Test Samples Results	Yes attached / No	Other	
Comments by:		Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	I			
QA/QC *	Khalid Zaki			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only



Electric Express Train - HSR
From El Ain El Sokhna City To El Alamein - MATROUH
Section - 7 From FOKA To MARSA MATROUH
From Station 504+000 To Station 568+177



PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	12/3/2023	code	ZONE	557+500	559+000
location	K.P 558+000	MB-14			
NAME COMPANY	Magdi Bkheet				
1-visual inspection test	operate by	GOMAA BADR LAB			

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		21610.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	
Mass retained (g)	2658.0	2696.0	4124.0	1948.0	1054.0	578.0	1380.0		soil classify
Cumulative Retained (g)	2658.0	5354.0	9478.0	11426.0	12480.0	13058.0	14438.0		A-1-a
Cumulative Retained %	12.3	24.8	43.9	52.9	57.8	60.4	66.8		2.130
Cumulative Passing %	87.7	75.2	56.1	47.1	42.2	39.6	33.2		6.5
									55.0%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	70.13	173.00	289.00					
Cumulative Retained %	14.03	34.60	57.80					
Cumulative Passing %	85.97	65.40	42.20					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	87.7	75.2	56.1	47.1	42.2	39.6	33.2	28.5	21.7	14.0

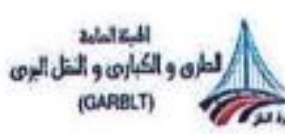
ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor
المعمل المركزي
شركة جمعه بدر نوح

Ramadan 1445

Consultant

Madallah SAMY

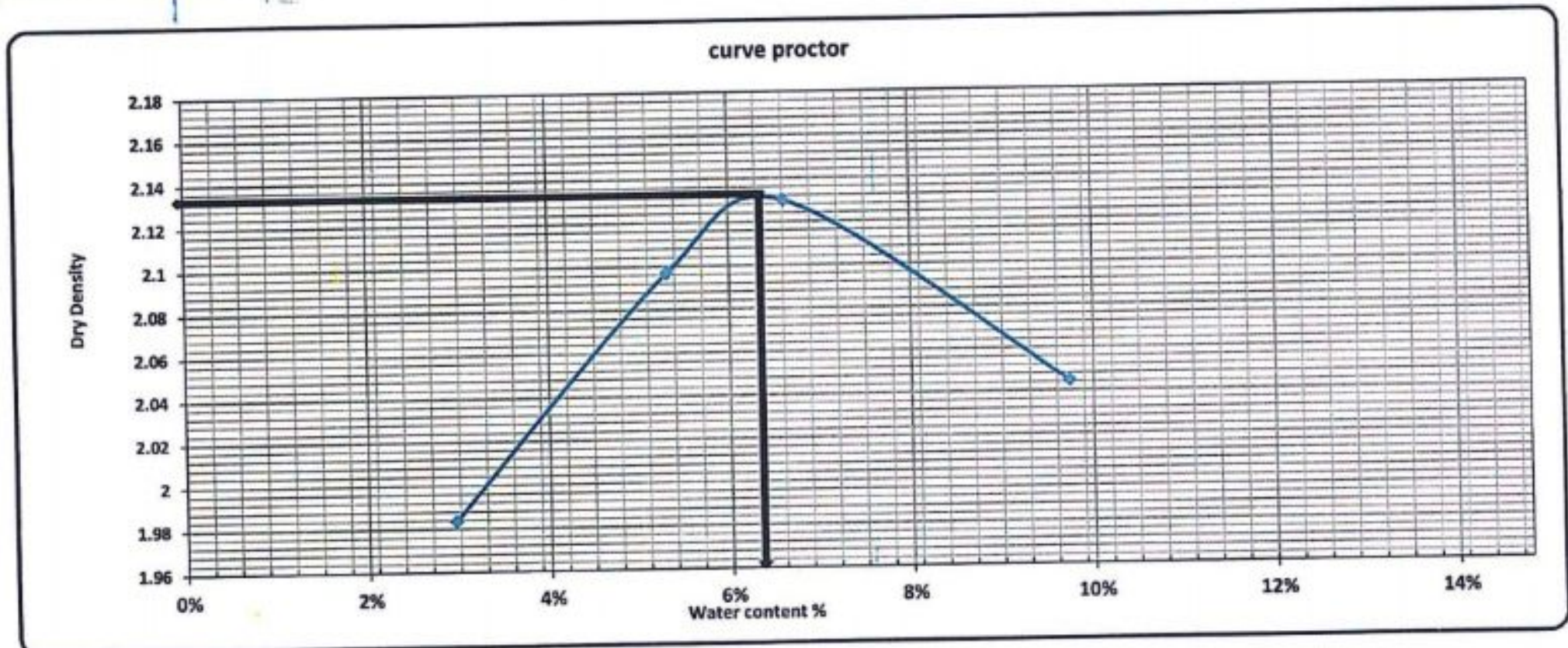
	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA TO MARSA MATROUH From Station 504+000 To Station 568+177				

PROCTOR TEST

TESTING DATE:	12/3/2023	code		ZONE	557+500	559+000
location	K.P 558+000	MB-14				
NAME COMPANY	Magdi Bkheet					
	operate by	GOMAA BADR LAB				
Weight of empty mold :	6450.0			MAX Dry Density	2.130	
Mold Volume:	2104.9			Water content %	6.50	

trial no :	1	2	3	4		
Wt. Of Mold+ wet soil	10756.0	11106.0	11238.0	11181		
WT. WET SOIL	4306.0	4656.0	4788.0	4731.0		
Wt. Density	2.046	2.212	2.275	2.248		

Tare No.	9	9	2	2	8	8	12	12				
Tare wt.	26.25	26.25	24.25	24.25	26.4	26.4	26.33	26.33				
Wt. Of wet soil & tare	162.4	162.4	110.2	110.2	105.2	105.2	126.3	126.3				
Wt. Of dry soil & tare	158.24	158.24	105.74	105.74	100.2	100.2	117.28	117.28				
Wt. Of water	4.2	4.2	4.5	4.5	5.0	5.0	9.0	9.0				
Wt. Of dry soil	132.0	132.0	81.5	81.5	73.8	73.8	91.0	91.0				
Water content %	3.2%	3.2%	5.5%	5.5%	6.8%	6.8%	9.9%	9.9%				
AV. Water content %	3.2%		5.5%		6.8%		9.9%					
Dry Density	1.983		2.096		2.130		2.044					



Contractor

المعمل المركزي
شركة جمعه بدر نوح

Remerh Taha

Consultant

Abdullah SAMY



Electric Express Train - HSR



California Bearing Ratio TEST

TESTING DATE	13/3/2023	code		ZONE	557+500	559+000
location	K.P 558+000	MB-14				
NAME COMPANY	Magdi Bkheet	operate by	GOMAA BADR LAB			

- : Test Results

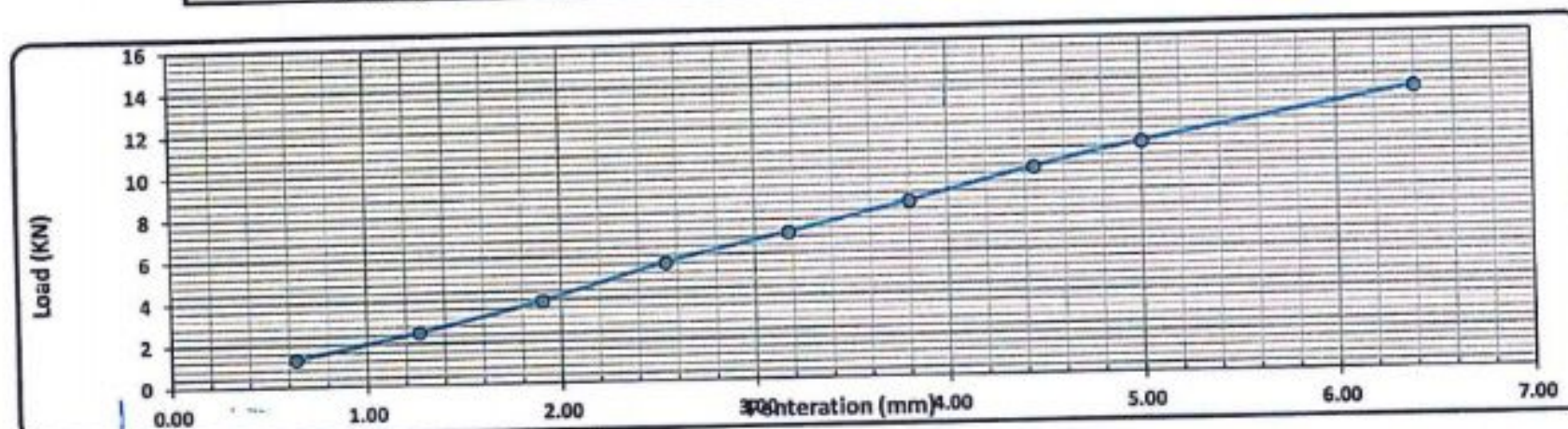
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm ³)	2177.5
Mold WT. (gm)	16444
Mold WT. + Wet WT. (gm)	21312
Wet WT. (gm)	4868
Wet Density (g/cm ³)	2.236
Dry Density (g/cm ³)	2.108
Proctor Density (g/cm ³)	2.130
Compaction %	99

Moisture Ratio After Compacted Mold	
Tare No.	11
Tare WT. (gm)	25.24
Tare WT. + Wet WT. (gm)	150.1
Tare WT. + Dry WT. (gm)	143
Wt. Of water	7.1
Dry WT. (gm)	117.8
Moisture Content %	6.0

Swelling	
Mold No.	2
Date	
Initial Height (mm)	
Final Height (mm)	
Difference	0
Sample Height (mm)	
Swelling Ratio %	

Loading Reading :

penetration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	132.00	255.00	400.00	574.00	711.00	852.00	1005.00	1120.00	1365.00
Load (KN)	1.3	2.5	3.9	5.6	7.0	8.3	9.8	11.0	13.4



Calculations :-

Penetration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR % 100 نسبة
2.50	5.63	13.4	42.1%	99	100	42.6%
5.00	10.98	20.0	54.8%			55.4%

Lab. Specialist

Name :

المعمل المركزي
شركة جمعه بدر نوح

Remarh

Consultant Engineer

Name :

Sign :

Wadeh SAKY

MATERIAL INSPECTION REQUEST



الهيئة القومية للإنفاق
National Authority for Financials



Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/ Omar										
Contractor reference	MB-(16) 28-3-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)					
Location to be Used	From	To				
	557+700	557+780	(-3.5)			
	557+280	557+340	(Ferma)			
	558+640	558+680	(-6.5)			
	557+940	557+120	(-0.25)			
	557+940	557+120	(Ferma)			
557+640	557+680	(-6)				
MAR Approval No				Date		
Supplier Name						
Test Requirement	Specification			Clause		
Reference Photos	Yes attached / No	Other				
Item	Description	Unit	Quantity	Arrival Date	Note	
1	SIEVE ANALYSIS	M3	5000			
2	CLASSIFICATION	M3	5000			
3	PROCTOR & O.M.C	M3	5000			
4	L.L & P.L & PI	M3	5000			
5	C.B.R	M3	5000			
Comments by:			Comments by:			
APPROVAL STATUS						
Organisation	Name	Sign	Date	A-AWC-R		
Contractor	Omar					
QA/QC *	Khaleel Zaki					
GARB**						
Employers Representative						

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST



الهيئة القومية للإنفاق
GARBILT



Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/ Omar										
Contractor reference	MB-(16) 28-3-2023										
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (558)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TOSPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 13.9 ATTEBERG LIMIT 4.5 MOISTURE CONTENT 7.1% MODIFIED PROCTOR 2.15 CBR 51.8%
Test Samples Results	Yes attached / No	Other	
Comments by:		Comments by: مناقشة المهندس مطالبه للمواصفات ٢٠٢٣/٠٣/٢٨	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Omar			
QA/QC *	Khaled Zakari			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي د. خالد قنديل	 SVSTRA SHAKER	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA To MARS MATROUH From Station 504+000 To Station 568+177	 الهيئة القومية للإنفاق وزارة التخطيط (GARBLT)
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	26/3/2023	code	ZONE	557+500	559+000
location	K.P 558+000	MB-16			
NAME COMPANY	Magdi Bkheet				
1-visual inspection test	operate by	GOMAA BADR LAB			

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		21920.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	125.0	906.0	2950.0	1418.0	1820.0	930.0	1414.0		A-1-a	
Cumulative Retained (g)	125.0	1031.0	3981.0	5399.0	7219.0	8149.0	9563.0		PRO	2.151
Cumulative Retained %	0.6	4.7	18.2	24.6	32.9	37.2	43.6		WC	7.1
Cumulative Passing %	99.4	95.3	81.8	75.4	67.1	62.8	56.4		CBR	51.8%

B-soft material gradation			WT.OF sample		500.00		gm
sieve size	10	40	200				
Cumulative Retained (g)	102.60	254.60	376.60				
Cumulative Retained %	20.52	50.92	75.32				
Cumulative Passing %	79.48	49.08	24.68				

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	99.4	95.3	81.8	75.4	67.1	62.8	56.4	44.8	27.7	13.9

ATTERBERG LIMTS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	24.5%	20.0%	4.5%

Contractor

المعمل المركزي
شركة جمعه بدر نوح

Consultant

Abdallah S. AMY

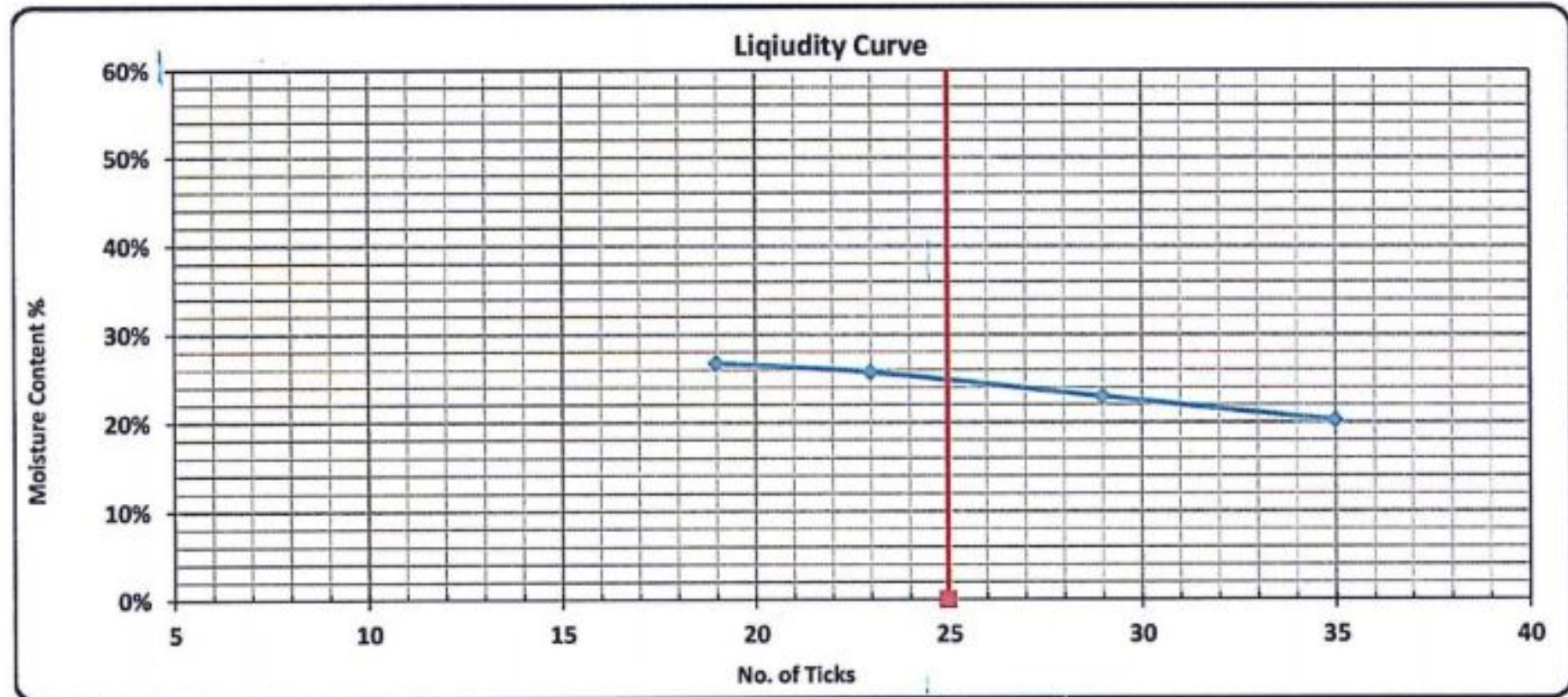
 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	 SVSRA SHAKER	Electric Express Train - HSR	 الهيئة العامة للإنتاج البنية التحتية وزارة النقل (DARBLT)
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Plasticity and Liquidity Test -Atterberg Limits

TESTING DATE:	26/3/2023	code	ZONE	557+500	559+000
location	K.P 558+000	MB-16			
NAME COMPANY	Magdi Bkheet				

Testing Results :-

Test	Liquidity Limit				Plastic Limit	
No. of Ticks	35	29	23	19	-	-
Tare No.	6	7	46	3	O	C
Tare WT. (gm)	22.90	25.40	27.18	16.43	12.13	13.36
Tare WT. + Wet WT. (gm)	36.72	37.69	44.11	44.19	12.81	14.15
Tare WT. + Dry WT. (gm)	34.40	35.40	40.65	38.34	12.70	14.02
Water WT. (gm)	2.32	2.29	3.46	5.85	0.12	0.13
Dry WT. (gm)	11.50	10.00	13.47	21.91	0.57	0.66
Moisture Content %	20.2%	22.9%	25.7%	26.7%	20.4%	19.7%
Average %					20.0%	



L.L	P.L	P.I
24.5%	20.0%	4.5%

Lab. Specialist	Lab. Engineer	Consultant Engineer
-----------------	---------------	---------------------

Name :

Sign :

المعمل المركزي
شركة جمعة بدر نوح

Name :

Sign :

Name :

Sign :

Abdullah SAMY

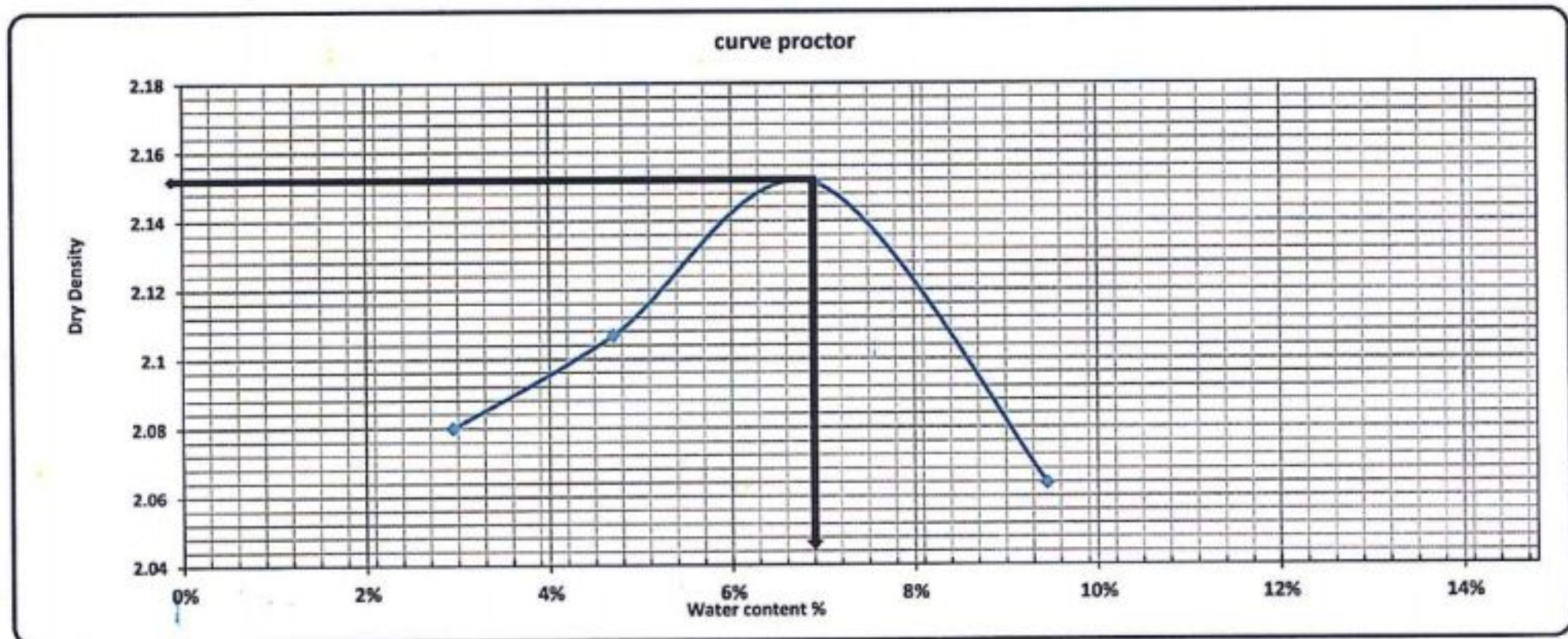
 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي ل.د. خالد خليل	 SYSTRA SHAKER	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA TO MARSA MATROUH From Station 504+000 To Station 568+177	الهيئة العامة لطرق و الكباري و النقل البري (GARBLT)  الهيئة القومية للإنفاق National Authority for Tunnels (NAT)
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PROCTOR TEST

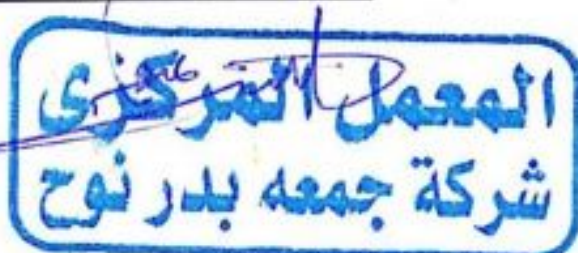
TESTING DATE:	27/3/2023	code	ZONE	557+500	559+000
location	K.P 558+000	MB-16			
NAME COMPANY	Magdi Bkheet				
	operate by	GOMAA BADR LAB			
Weight of empty mold :	6162.0		MAX Dry Density	2.151	
Mold Volume:	2104.9		Water content %	7.10	

trial no :	1	2	3	4		
Wt. Of Mold+ wet soil	10678.0	10814.0	11012.0	10925		
WT. WET SOIL	4516.0	4652.0	4850.0	4763.0		
Wt. Density	2.145	2.210	2.304	2.263		

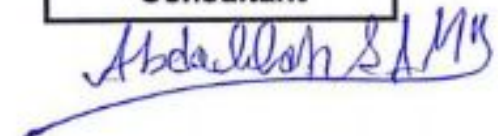
Tare No.	6	6	3	3	9	9	10	10				
Tare wt.	26.25	26.25	26.43	26.43	26.99	26.99	26.45	26.45				
Wt. Of wet soil & tare	162.4	162.4	112.4	112.4	116.7	116.7	113.7	113.7				
Wt. Of dry soil & tare	158.24	158.24	108.35	108.35	110.75	110.75	106	106				
Wt. Of water	4.2	4.2	4.0	4.0	6.0	6.0	7.7	7.7				
Wt. Of dry soil	132.0	132.0	81.9	81.9	83.8	83.8	79.6	79.6				
Water content %	3.2%	3.2%	4.9%	4.9%	7.1%	7.1%	9.7%	9.7%				
AV. Water content %	3.2%		4.9%		7.1%		9.7%					
Dry Density	2.080		2.107		2.151		2.064					



Contractor


المعمل المركزي
شركة جمعه بدر نوح

Consultant


Abdallah S.M.



Electric Express Train - HSR



California Bearing Ratio TEST

TESTING DATE	28/3/2023	code		ZONE	557+500	559+000
location	K.P 558+000	MB-16				
NAME COMPANY	Magdi Bkheet	operate by	GOMAA BADR LAB			

- : Test Results

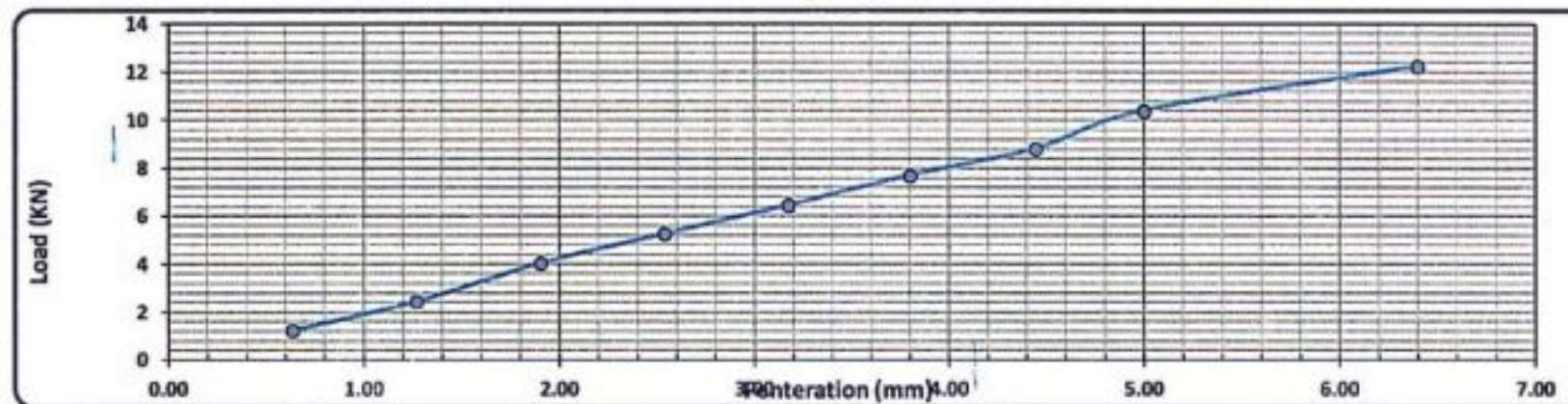
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm ³)	2177.5
Mold WT. (gm)	16444
Mold WT. + Wet WT. (gm)	21406
Wet WT. (gm)	4962
Wet Density (g/cm ³)	2.279
Dry Density (g/cm ³)	2.136
Proctor Density (g/cm ³)	2.151
Compaction %	99

Moisture Ratio After Compacted Mold	
Tare No.	8
Tare WT. (gm)	24.63
Tare WT. + Wet WT. (gm)	158.25
Tare WT. + Dry WT. (gm)	149.85
Wt. Of water	8.4
Dry WT. (gm)	125.2
Moisture Content %	6.7

Swelling	
Mold No.	2
Date	
Initial Height (mm)	
Final Height (mm)	
Difference	0
Sample Height (mm)	
Swelling Ratio %	

Loading Reading :

penetration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	124.00	247.00	410.00	535.00	657.00	783.00	898.00	1058.00	1247.00
Load (KN)	1.2	2.4	4.0	5.2	6.4	7.7	8.8	10.4	12.2



Calculations :-

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR عند نسبة 100 %
2.50	5.24	13.4	39.3%			39.6%
5.00	10.37	20.0	51.8%	99	100	52.2%

Lab. Specialist

Name :

Sign :

المعمل المركزي
شركة جمعه بدر نوح

Consultant Engineer

Name :

Sign :

Abdallah SAMY

MATERIAL APPROVAL REQUEST



الهيئة القومية للإنفاق
MAGDY BEKHET CONSULTING OFFICE



Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/ Omar										
Contractor reference	MB-(17) 3-4-2023										
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (558)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TOSPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 8.2 ATTEBERG LIMIT NP MOISTURE CONTENT 6.8% MODIFIED PROCTOR 2.16 CBR 47.8%
Test Samples Results	Yes attached / No	Other	
Comments by:		Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Omar			
QA/QC *	Khaled Zaki			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

MATERIAL INSPECTION REQUEST



Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/ Omar										
Contractor reference	MB-(17) 3-4-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)				
Location to be Used	From	To			
	558+280	558+340	(Ferma)		
	557+700	557+780	(-3)		
	557+700	557+800	(-2.5)		
	557+700	557+780	(-2)		
	557+640	557+700	(-5.5)		
MAR Approval No			Date		
Supplier Name					
Test Requirement	Specification		Clause		
Reference Photos	Yes attached / No	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	SIEVE ANALYSIS	M3	5000		
2	CLSSIFICATION	M3	5000		
3	PROCTOR & O.M.C	M3	5000		
4	L.L & P.L & PI	M3	5000		
5	C.B.R	M3	5000		
Comments by:		Comments by:			
APPROVAL STATUS					
Organisation	Name	Sign	Date	A-AWC-R	
Contractor	Omar				
QA/QC *	Khaled Zaki				
GARB**					
Employers Representative					

* Designer

** Alignment / Bridges: Culvert Only

NO	STATION		TEST							QUANTITY TEST
	FORM	TO	PROCTOR	SEIVE ANALYSES	LL.PL.PI	OMC	CBR	SIEVE NO .200	SOIL CLASSIFICATION	
16	557+700	557+800	2.15		4.5	7.10%	52%	13.90%	A-1-A	5000 m ³
	558+280	558+340								
	557+940	558+120								
	557+700	557+780								
	557+640	557+680								
	557+940	558+120								
17	557+940	558+120	2.16		NP	6.80%	48%	8.20%	A-1-A	5000 m ³
	557+700	557+800								
	558+280	558+340								
	557+940	558+120								
	557+640	557+680								
18	557+700	557+780	2.16		5.4	6.60%	52%	14.50%	A-1-A	5000 m ³
	558+280	558+340								
	557+640	557+680								
	557+940	558+120								
	557+940	557+120								
	557+640	557+680								

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي د. خالد قنديل	 SYSTRA	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA To MARS MATROUH From Station 504+000 To Station 568+177	 الهيئة القومية للإنفاق وزارة التخطيط
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE	2/4/2023	code			
location	K.P 558+200	MB-17	ZONE	557+500	559+000
NAME COMPANY	Magdy Bekhet				
1-visual inspection test	operate by	Gomaa Bader Lab			

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		22790.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	420.0	4426.0	5616.0	1386.0	1086.0	588.0	1052.0		A-1-a	
Cumulative Retained (g)	420.0	4846.0	10462.0	11848.0	12934.0	13522.0	14574.0		PRO	2.164
Cumulative Retained %	1.8	21.3	45.9	52.0	56.8	59.3	63.9		WC	6.8
Cumulative Passing %	98.2	78.7	54.1	48.0	43.2	40.7	36.1		CBR	47.8%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	58.00	232.00	386.00					
Cumulative Retained %	11.60	46.40	77.20					
Cumulative Passing %	88.40	53.60	22.80					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	98.2	78.7	54.1	48.0	43.2	40.7	36.1	31.9	19.3	8.2

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

Consultant

المعمل المركزي
 شركة جمعه بدر نوح

Abdallah SAMY

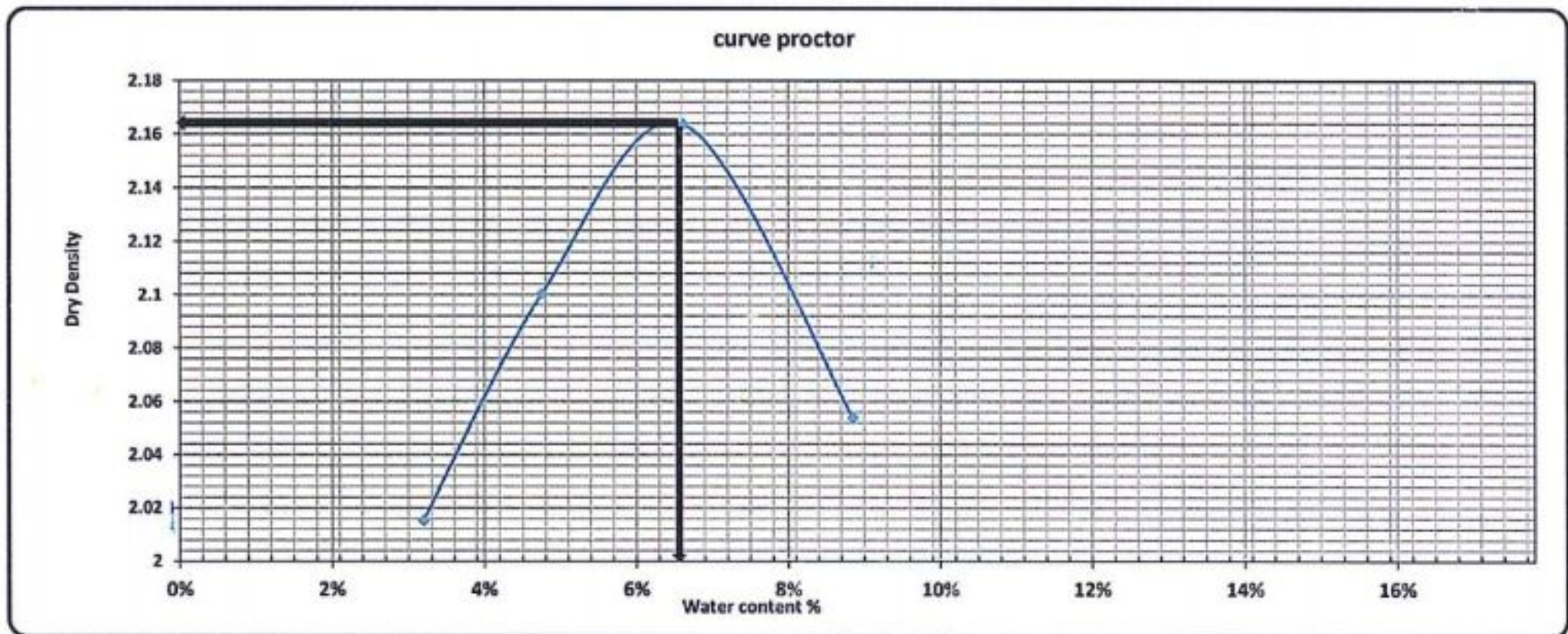
 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي د. خالد قنديل	 SVS/TA SHAKER	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA TO MARSA MATROUH From Station 504+000 To Station 568+177	الهيئة العامة لطرق و الكبارى و النقل البحرى (GARBLT)  الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TOLL (NAT)
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PROCTOR TEST

TESTING DATE	2/4/2023	code	ZONE	557+500	559+000
location	K.P 558+200	MB-17			
NAME COMPANY	Magdy Bekhet				
	operate by	Gomaa Bader Lab			
Weight of empty mold :	6150.0		MAX Dry Density	2.164	
Mold Volume:	2104.9		Water content %	6.80	

trial no :	1	2	3	4		
Wt. Of Mold+ wet soil	10536.0	10790.0	11015.0	10864		
WT. WET SOIL	4386.0	4640.0	4865.0	4714.0		
Wt. Density	2.084	2.204	2.311	2.240		

Tare No.	16	16	3	3	9	9	13	13				
Tare wt.	24.31	24.31	26.39	26.39	26.91	26.91	22.64	22.64				
Wt. Of wet soil & tare	124.64	124.64	116.77	116.77	119.59	119.59	134.16	134.16				
Wt. Of dry soil & tare	121.34	121.34	112.5	112.5	113.67	113.67	124.9	124.9				
Wt. Of water	3.3	3.3	4.3	4.3	5.9	5.9	9.3	9.3				
Wt. Of dry soil	97.0	97.0	86.1	86.1	86.8	86.8	102.3	102.3				
Water content %	3.4%	3.4%	5.0%	5.0%	6.8%	6.8%	9.1%	9.1%				
AV. Water content %	3.4%		5.0%		6.8%		9.1%					
Dry Density	2.015		2.100		2.164		2.054					



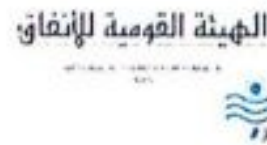
Contractor

المعمل المركزى
 شركة جمعه بدر نوح

Consultant

Asdallah AMU

MATERIAL INSPECTION REQUEST



Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/ Omar										
Contractor reference	MB-(1) 6-3-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)					
Location to be Used	From	To		From	To	
	558+840	559+000	(+0.25)	558+500	558+700	(+0.5)
	558+340	558+500	(+0.25)	558+120	558+180	(+0.25)
	558+500	558+720	(+0.25)	558+180	558+280	(+0.5)
	558+840	559+000	(+0.5)			
558+340	558+500	(+0.5)				
MAR Approval No				Date		
Supplier Name						
Test Requirement	Specification			Clause		
Reference Photos	Yes attached / No	Other				
Item	Description	Unit	Quantity	Arrival Date	Note	
1	SIEVE ANALYSIS	M3	5000			
2	CLSSIFICATION	M3	5000			
3	PROCTOR & O.M.C	M3	5000			
4	L.L & P.L & PI	M3	5000			
5	C.B.R	M3	5000			
Comments by:			Comments by:			
APPROVAL STATUS						
Organisation	Name	Sign	Date	A-AWC-R		
Contractor	Omar					
QA/QC *	Khalid Zakir					
GARB**						
Employers Representative						

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST



الهيئة القومية للإنفاق



Contractor Company	Magdy Bekhet		Designer Company	
Issued by Contractor	Name	Sign	Date	Time
	Eng/ Omar			
Contractor reference	MB-(1) 6-3-2023			
Received by ER			MAR	

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp XXX Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (558)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TO SPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 5.9% ATTEBERG LIMIT NP MOISTURE CONTENT 6.7% MODIFIED PROCTOR 2.175 CBR 60%
Test Samples Results	Yes attached / No	Other	
Comments by:		Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Omar			
QA/QC *	Khaled Zaki			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي ا.د. خالد فؤاد	 SYSTRA SHAKER	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA To MARS MATROUH From Station 504+000 To Station 568+177	 الهيئة القومية للإنتاج (GABRI)
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE	4/3/2023	code	ZONE	557+500	559+000
location	K.P558+000	MB-1	Material	prepared sub grade	
NAME COMPANY	Magdi Bkheet				
1-visual inspection test	operate by	GOMAA BADR LAB			

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		37611.00		gm	table classify
sieve size	5	4	3	1 1/2	3/4	3/8	# 4	PASS	soil classify
Mass retained (g)	0.0	0.0	0.0	3453.0	15267.0	9632.0	3040.0		A-1-a
Cumulative Retained (g)	0.0	0.0	0.0	3453.0	18720.0	28352.0	31392.0		2.175
Cumulative Retained %	0.0	0.0	0.0	9.2	49.8	75.4	83.5		6.7
Cumulative Passing %	100.0	100.0	100.0	90.8	50.2	24.6	16.5		60.0%

B-soft material gradation			WT.OF sample		500.00		gm
sieve size	10	40	200				
Cumulative Retained (g)	82.00	236.00	321.00				
Cumulative Retained %	16.40	47.20	64.20				
Cumulative Passing %	83.60	52.80	35.80				

C-General gradient										
sieve size(in)	5	4	3	1 1/2	3/4	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	100.0	100.0	100.0	90.8	50.2	24.6	16.5	13.8	8.7	5.9
	100	100 - 95	99 - 75	90 - 50	75 - 20	60 - 15		35 - 0		0 - 12

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

Consultant

المعمل المركزي
شركة جمعه بدر نوح

Abdallah SAMY

Ramadan 1444

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	 SYSTA	Electric Express Train - HSR	 الهيئة العامة للقواصط الحديديّة
		From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA To MARSA MATROUH From Station 504+000 To Station 568+177	
Absorbition & Aggregate specific gravity AASHTO-T85			

TESTING DATE:	6/3/2023	code	ZONE	557+500	559+000
LOCATION	K.P558+000	MB-1	Material	prepared sub grade	
NAME COMPANY	Magdi Bkheet				

Weight of sample	2000.00	gm
Weight of saturated -dry surface sample (B)	2074.40	gm
Weight of saturated sample in water (C)		gm
Weight of dry sample after heating (A)	1993.50	gm

Results:-

Bulk specific gravity = A / (B-C)	0.961	
Apparent specific gravity = A / (A-C)	1.000	
Asorbtlon = (B-A)/A	4.058	%

Los Anglos abrasion AASHTO-T96

Results:-

Weight of sample before test (gm)	Weight of sample after test (gm)	Abrasion ratio (%)
5000	3652	26.96

Lab. Engineer

Name :

المعمل المركزي
شركة جمعه بدر نوح

Sign :

Ramadan Tawfik

OPERATE BY
GOMAA BADR LAB

Consultant Engineer

Name :

Sign :

Abdallah SANEY

	Electric Express Train - HSR			
	From El Ain El Sokhna City To El Alamein - MATROUH			
	Section - 7 From FOKA TO MARS MATROUH			
From Station 504+000 To Station 568+177				

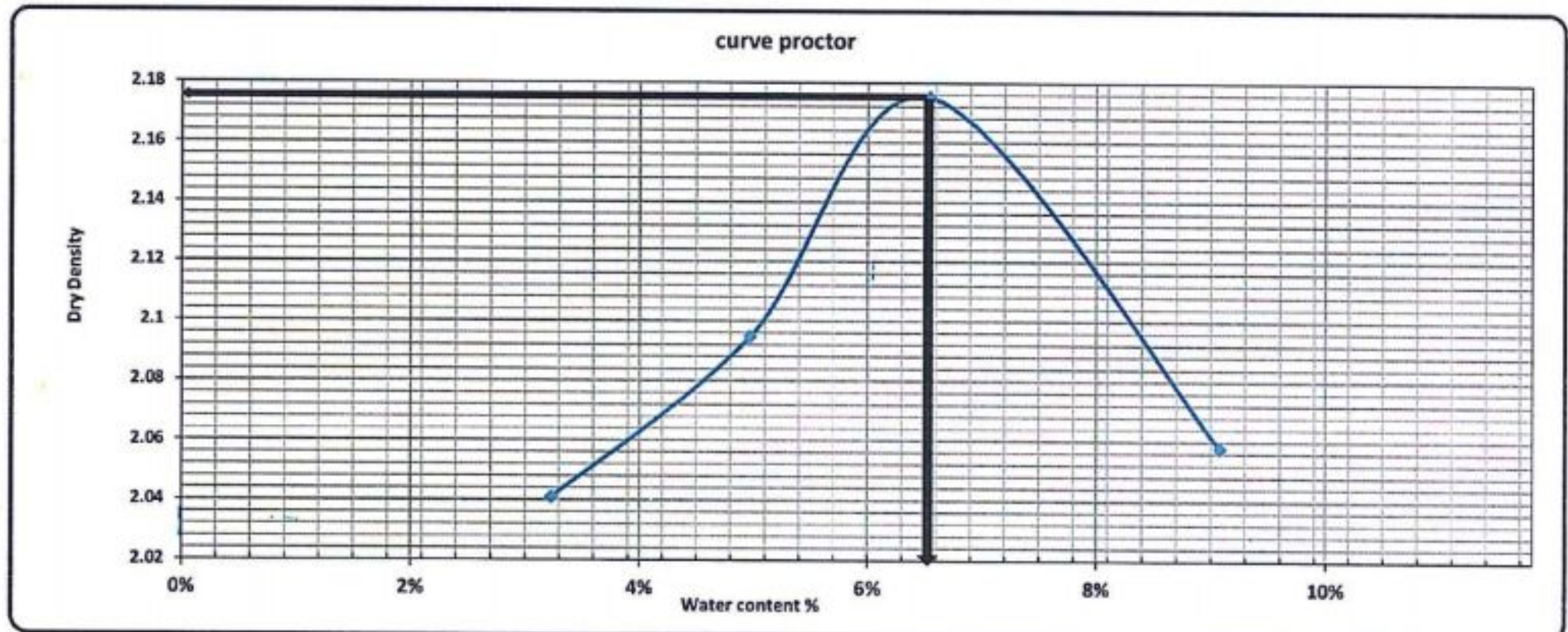
PROCTOR TEST

TESTING DATE	5/3/2023	code	ZONE	557+500	559+000
location	K.P558+000	MB-1	Material	prepared sub grade	
NAME COMPANY	Magdi Bkheet				

	operate by	GOMAA BADR LAB		
Weight of empty mold :	6417.0		MAX Dry Density	2.175
Mold Volume:	2104.9		Water content %	6.70

trial no :	1	2	3	4		
Wt. Of Mold+ wet soil	10860.0	11054.0	11304.0	11150		
WT. WET SOIL	4443.0	4637.0	4887.0	4733.0		
Wt. Density	2.111	2.203	2.322	2.249		

Tare No.	5	5	11	11	14	14	30	30				
Tare wt.	27.41	27.41	24.34	24.34	22.9	22.9	25.83	25.83				
Wt. Of wet soil & tare	145.23	145.23	116.23	116.23	111.03	111.03	109.18	109.18				
Wt. Of dry soil & tare	141.32	141.32	111.71	111.71	105.46	105.46	102.1	102.1				
Wt. Of water	3.9	3.9	4.5	4.5	5.6	5.6	7.1	7.1				
Wt. Of dry soil	113.9	113.9	87.4	87.4	82.6	82.6	76.3	76.3				
Water content %	3.4%	3.4%	5.2%	5.2%	6.7%	6.7%	9.3%	9.3%				
AV. Water content %	3.4%		5.2%		6.7%		9.3%					
Dry Density	2.041		2.095		2.175		2.058					



Contractor
المعمل المركزي
شركة جمعه بدر نوح
Ramah Taha

Consultant
Abdallah Samy

California Bearing Ratio TEST

TESTING DATE	6/3/2023	code	ZONE	557+500	559+000
location	K.P558+000	MB-1	Material	prepared sub grade	
NAME COMPANY	Magdi Bkheet				
	operate by	GOMAA BADR LAB			

Test Results

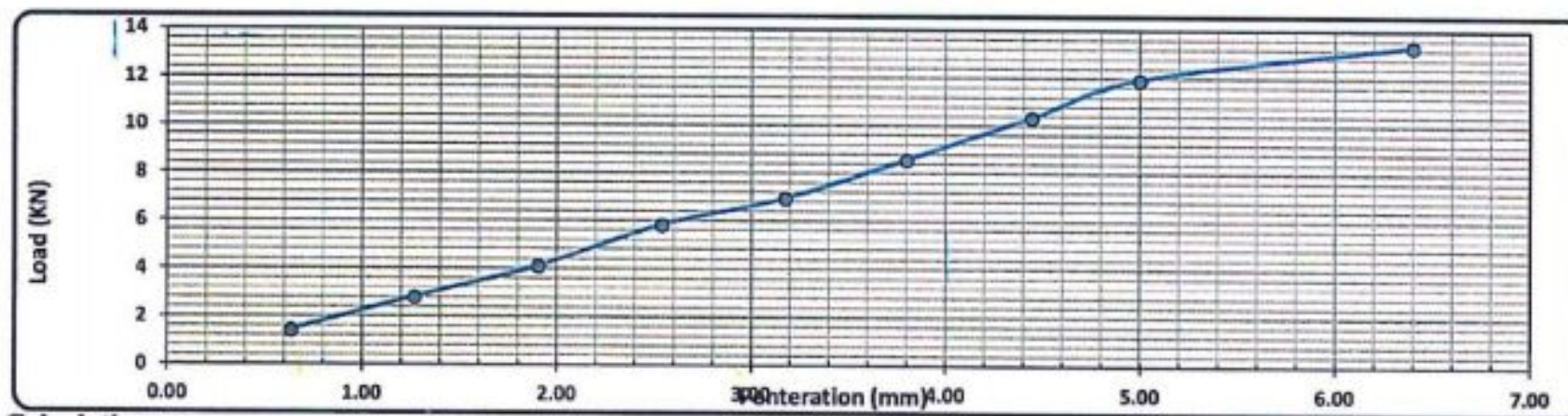
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm ³)	2177.5
Mold WT. (gm)	16444
Mold WT. + Wet WT. (gm)	21386
Wet WT. (gm)	4942
Wet Density (g/cm ³)	2.270
Dry Density (g/cm ³)	2.136
Proctor Density (g/cm ³)	2.175
Compaction %	98

Moisture Ratio After Compacted Mold	
Tare No.	15
Tare WT. (gm)	27.51
Tare WT. + Wet WT. (gm)	153.26
Tare WT. + Dry WT. (gm)	145.87
Wt. Of water	7.4
Dry WT. (gm)	118.4
Moisture Content %	6.2

Swelling	
Mold No.	2
Date	
Initial Height (mm)	
Final Height (mm)	
Difference	0
Sample Height (mm)	
Swelling Ratio %	

Loading Reading :

penetration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	143.00	284.00	416.00	592.00	706.00	872.00	1053.00	1215.00	1359.00
Load (KN)	1.4	2.8	4.1	5.8	6.9	8.5	10.3	11.9	13.3



Calculations :-

Penetration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR
2.50	5.80	13.4	43.5%	98	100	44.2%
5.00	11.91	20.0	59.5%			60.5%

Lab. Specialist

Name : **المعمل المركزي**
 Sign : **شركة جمعه بدر نوح**

Ramallah Tarek

Consultant Engineer

Name : **Abdelhak SAMY**
 Sign : *Abdelhak SAMY*

MATERIAL INSPECTION REQUEST



Contractor Company	Magdy Bekhit		Designer Company	K.K			
Issued by Contractor	Name	Sign	Date	Time			
	Eng. Omar Abd El-Hakem	<i>[Signature]</i>	03-08-2023				
Contractor reference	MB-SB-1 03-08-2023						
Received by ER		MIR	C1	C2	C3	DD	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp 558 Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Replacement Fill Material Results				
Location to be Used	558+500	558+700	(+0.70)		
	558+840	559+000	(+0.70)		
MAR Approval No				Date	
Supplier Name					
Test Requirement	Specification			Clause	
Reference Photos	Yes attached / No	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	Sieve analysis	M3	1000		
2	Classification	M3	1000		
3	Proctor & O.m.c	M3	1000		
4	L.L & P.L & PI	M3	1000		
5	C.B.R	M3	1000		
Comments by:			Comments by:		
APPROVAL STATUS					
Organisation	Name	Sign	Date	A-AWC-R	
Contractor	<i>[Signature]</i>	<i>[Signature]</i>			
QA/QC *	<i>[Signature]</i>	<i>[Signature]</i>			
GARB**					
Employers Representative					

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST



Contractor Company	Magdy Bekhit		Designer Company	K.K
Issued by Contractor	Name	Sign	Date	Time
	Eng. Omar Abd El-Hakem		03-08-2023	
Contractor Reference	MB-SB-1 03-08-2023			
Received by ER		MAR	C1	C2
			C3	DD
			MM	YY
			HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp 558 Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Replacement Fill Material Results		
Location to be Used	KP. 558		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TO SPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 5.00 ATTEBERG LIMIT NP MOISTURE CONTENT 7.40 % MODIFIED PROCTOR 2.211 CBR 87.70 %
Reference Photos	Yes attached / No	Other	
Comments by:		Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor				
QA/QC *				
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد فنديل	 SYSTRA SHAKER	Electric Express Train - HSR		 الهيئة العامة للإتقان (GAPBT)
		From El Ain El Sokhna City To El Alamein - MATROUH		
		Section - 7 From FOKA To MARSA MATROUH		
From Station 504+000 To Station 568+177				

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE	3/8/2023	code	ZONE	558+120	558+320
location	K.P 558+320	MB-SB-1	Material	Sub Ballast	
NAME COMPANY	Magdi Bkheet				
1-visual inspection test	operate by	Gomaa Bader Lab			

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		22725.00		gm	table classify
sieve size	3	1 1/2	1	3/4	1/2	3/8	# 4	PASS	soil classify
Mass retained (g)	0.0	692.0	2280.0	2800.0	3135.0	3330.0	5185.0		A-1-a
Cumulative Retained (g)	0.0	692.0	2972.0	5772.0	8907.0	12237.0	17422.0	PRO	2.211
Cumulative Retained %	0.0	3.0	13.1	25.4	39.2	53.8	78.7	WC	7.4%
Cumulative Passing %	100.0	97.0	86.9	74.6	60.8	46.2	23.3	B.S.G	2.522
								CBR	87.7%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	175.51	304.00	392.50					
Cumulative Retained %	35.10	60.80	78.50					
Cumulative Passing %	64.90	39.20	21.50					

C-General gradient										
sieve size(in)	3.0	1 1/2	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	100.0	97.0	86.9	74.6	60.8	46.2	23.3	15.1	9.1	5.0

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

المعمل المركزي
شركة جمعة بدر نوح

Consultant

Youssef Bayab
2023

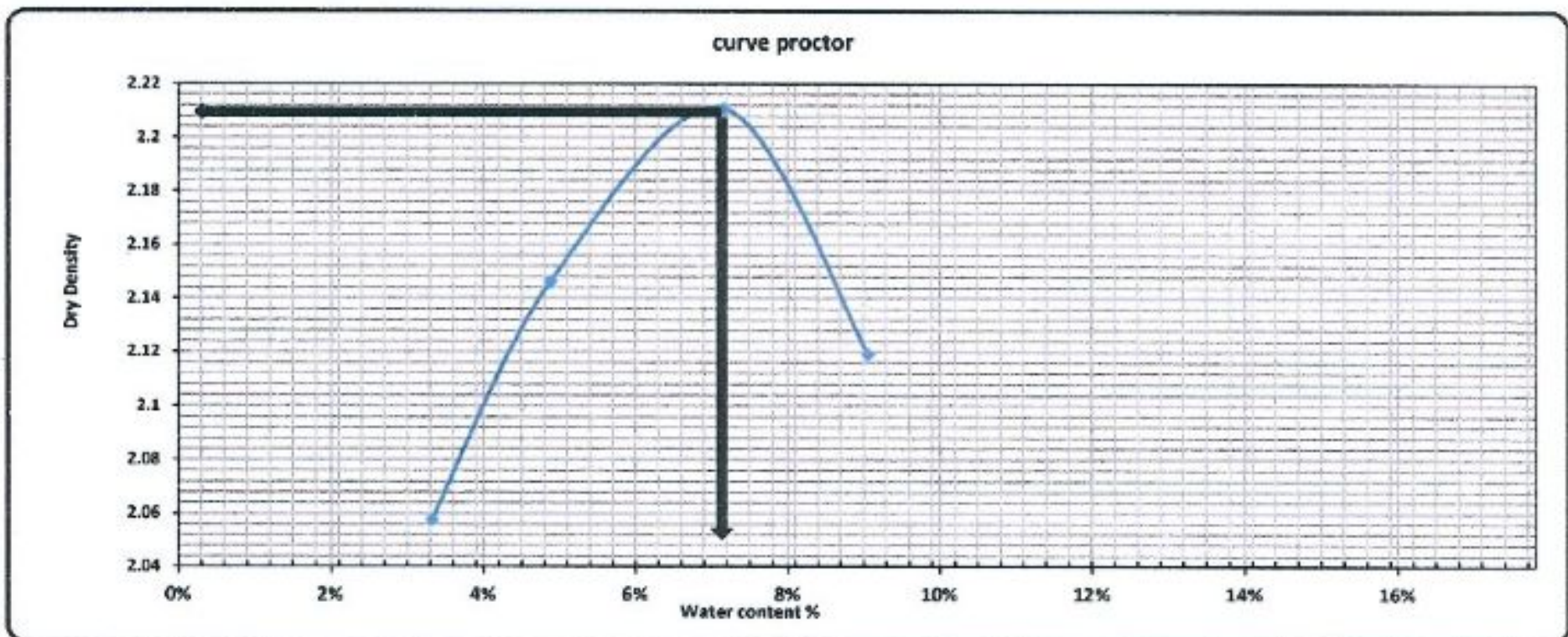
	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA TO MARSA MATROUH From Station 504+000 To Station 568+177	
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PROCTOR TEST

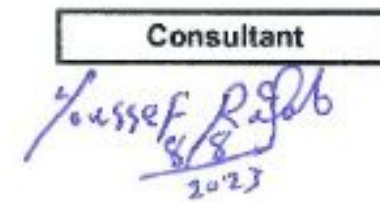
TESTING DATE	3/8/2023	code	ZONE	558+120	558+320
location	K.P 558+320	MB-SB-1	Material	Sub Ballast	
NAME COMPANY	Magdi Bkheet				
		operate by	Gomaa Bader Lab		
Weight of empty mold :	6210.0			MAX Dry Density	2.211
Mold Volume:	2104.9			Water content %	7.40

trial no :	1	2	3	4		
Wt. Of Mold+ wet soil	10694.0	10958.0	11206.0	11084		
WT. WET SOIL	4484.0	4748.0	4996.0	4874.0		
Wt. Density	2.130	2.256	2.374	2.316		

Tare No.	5	5	12	12	15	15	20	20				
Tare wt.	25.64	25.64	26.36	26.36	27.09	27.09	22.69	22.69				
Wt. Of wet soil & tare	138.36	138.36	142.36	142.36	147.36	147.36	152.36	152.36				
Wt. Of dry soil & tare	134.52	134.52	136.74	136.74	139.11	139.11	141.36	141.36				
Wt. Of water	3.8	3.8	5.6	5.6	8.3	8.3	11.0	11.0				
Wt. Of dry soil	108.9	108.9	110.4	110.4	112.0	112.0	118.7	118.7				
Water content %	3.5%	3.5%	5.1%	5.1%	7.4%	7.4%	9.3%	9.3%				
AV. Water content %	3.5%		5.1%		7.4%		9.3%					
Dry Density	2.058		2.146		2.211		2.119					



Contractor


Consultant


 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	 Syster	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH	 الهيئة العامة للنقل
		Section - 7 From FOKA To MARSA MATROUH From Station 504+000 To Station 568+177	
Absorbition & Aggregate specific gravity AASHTO-T85			

TESTING DATE:	5/8/2023	code	ZONE	558+120	558+320
LOCATION	K.P 558+320	MB-SS-1	Material	Sub Ballast	
NAME COMPANY	Magdi Bkheet				

Weight of sample	2000.00	gm
Weight of saturated -dry surface sample (B)	2029.62	gm
Weight of saturated sample in water (C)	1239.30	gm
Weight of dry sample after heating (A)	1993.10	gm

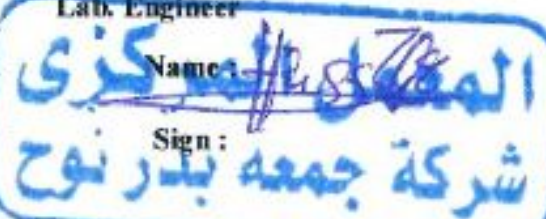
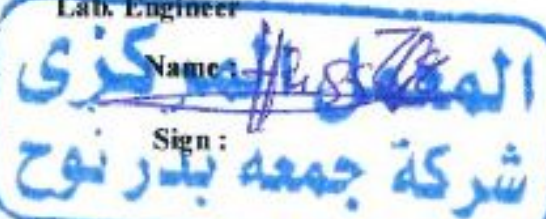
Results:-

Bulk specific gravity = A / (B-C)	2.522	
Apparent specific gravity = A / (A-C)	2.644	
Asorbition = (B-A)/A	1.832	%

Los Anglos abrasion AASHTO-T96

Results:-

Weight of sample before test (gm)	Weight of sample after test (gm)	Abrasion ratio (%)
5000	3726	25.48

Lab Engineer
Name: 
Sign: 
المهندس المختبري
شركة جمعه بدر نوح

OPERATE BY
GOMAA BADR LAB

Consultant Engineer
Name: 
Sign: 
Youssef R. Badr
5/8/2023



Electric Express Train - HSR



California Bearing Ratio TEST

TESTING DATE:	5/8/2023	code	ZONE	558+120	558+320
location	K.P 558+320	MB-SB-1	Material	Sub Ballast	
NAME COMPANY	Magdi Bkheet				
- : Test Results		operate by	GOMAA BADR LAB		

- : Test Results

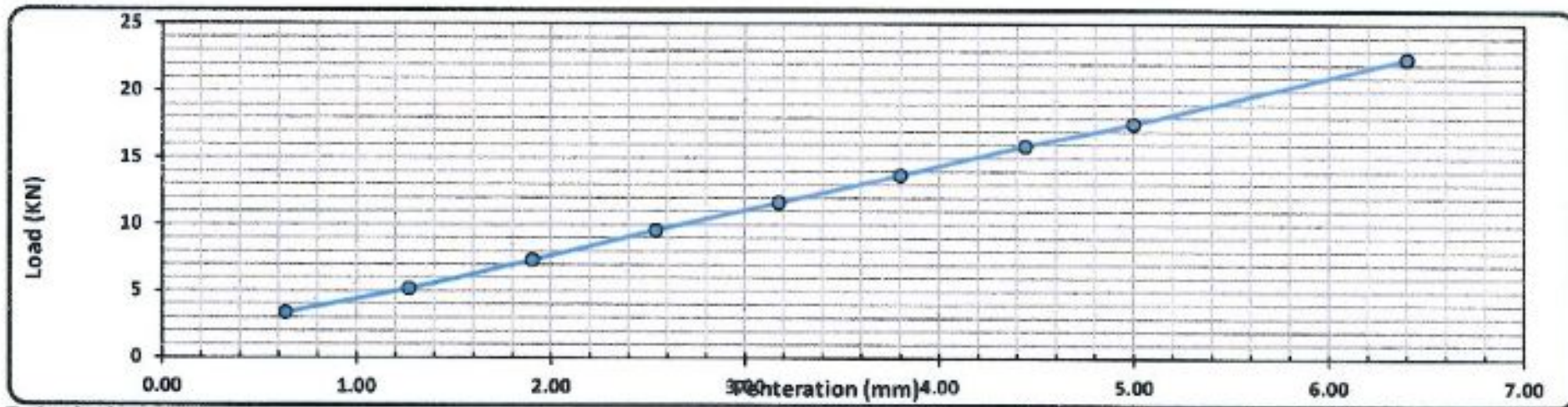
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2177.5
Mold WT. (gm)	16553
Mold WT. + Wet WT. (gm)	21636
Wet WT. (gm)	5083
Wet Density (g/cm ³)	2.334
Dry Density (g/cm ³)	2.179
Proctor Density (g/cm ³)	2.211
Compaction %	99

Mositure Ratio After Compacted Mold	
Tare No.	2
Tare WT. (gm)	26.3
Tare WT. +Wet WT. (gm)	182.36
Tare WT. +Dry WT. (gm)	171.96
Wt. Of water	10.4
Dry WT. (gm)	145.7
Moisture Content %	7.1

Swelling	
Mold No.	1
Date	24h
Initial Height (mm)	8.72
Final Height (mm)	8.74
Difference	0
Sample Height (mm)	180.00
Swelling Ratio %	0%

Loading Reading :

penetration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	341.00	525.00	745.00	973.00	1186.00	1396.00	1621.00	1792.00	2287.00
Load (KN)	3.3	5.1	7.3	9.5	11.6	13.7	15.9	17.6	22.4



Calculations :-

Penetration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR (%)
2.50	9.54	13.4	71.4%	99	100	72.5%
5.00	17.56	20.0	87.7%			89.0%

Lab. Specialist
 Name : *المهندس محمد بن عبد الله*
 Sign : *محمد بن عبد الله*

Consultant Engineer
 Name : *Youssef R. Gab*
 Sign : *Youssef R. Gab*



Electric Express Train - HSR



California Bearing Ratio TEST

TESTING DATE	3/4/2023	code			
location	K.P 558+200	MB-17	ZONE	557+500	559+000
NAME COMPANY	Magdy Bekhet				
	operate by	Gomaa Badr Lab			

-: Test Results

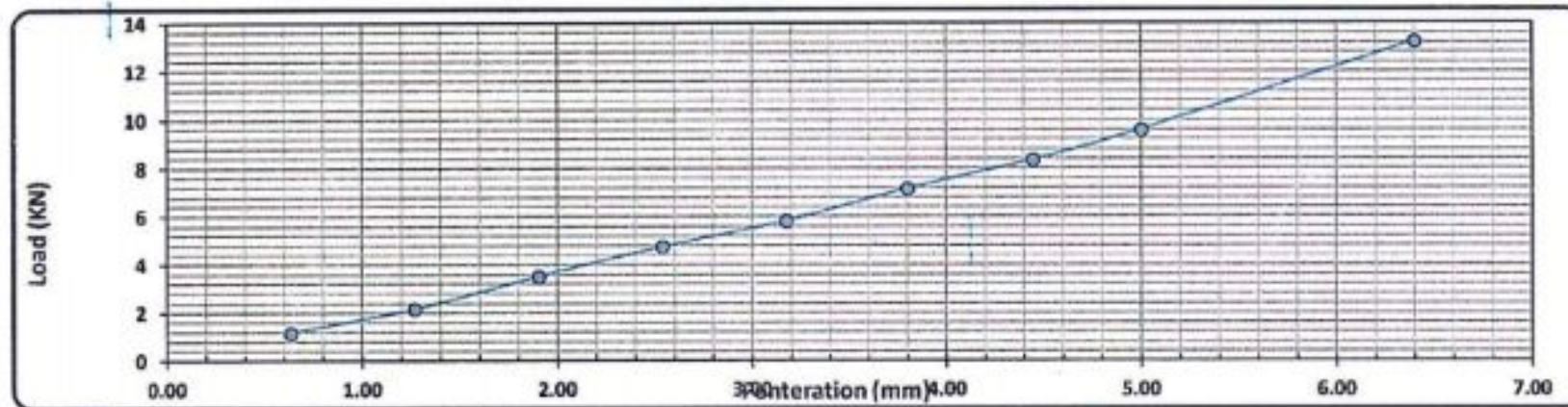
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm ³)	2177.5
Mold WT. (gm)	16444
Mold WT. + Wet WT. (gm)	21406
Wet WT. (gm)	4962
Wet Density (g/cm ³)	2.279
Dry Density (g/cm ³)	2.139
Proctor Density (g/cm ³)	2.164
Compaction %	99

Moisture Ratio After Compacted Mold	
Tare No.	10
Tare WT. (gm)	25.64
Tare WT. + Wet WT. (gm)	167.64
Tare WT. + Dry WT. (gm)	158.94
Wt. Of water	8.7
Dry WT. (gm)	133.3
Moisture Content %	6.5

Swelling	
Mold No.	2
Date	2023/04/04
Initial Height (mm)	0.00
Final Height (mm)	0.40
Difference	0
Sample Height (mm)	181.00
Swelling Ratio %	0%

Loading Reading :

penetration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	118.00	219.00	357.00	483.00	591.00	727.00	849.00	976.00	1348.00
Load (KN)	1.2	2.1	3.5	4.7	5.8	7.1	8.3	9.6	13.2



Calculations :-

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR
2.50	4.73	13.4	35.5%	99	100	35.9%
5.00	9.56	20.0	47.8%			48.3%

Lab. Specialist

Name :
المعمل المركزي
شركة جمعه بدر نوح

Consultant Engineer

Name :
Sign : *Abdallah SAMER*