MATERIAL INSPECTION REQUEST

Contractor Company	IBRAHEEM NASSAR			Designer Company									
Issued by Contractor	Name	Sign		Date						Time			
	Eng/Shehab Hamdi	2023		03/09/2023									
Contractor Refrence	IN-51												
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM		
							03	09	2023				

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	Fill Material Result
Location to be Used	519+980 TO 520+040 -4.50 519+980 TO 520+040 -4.00 519+980 TO 520+040 -3.50 519+980 TO 520+040 -3.00 519+980 TO 520+020 -2.50

MAR Approval No	IN-51	Date	
Supplier Name			
Test Requirement		Specification	Clause
Reference Photos	Yes attached / No	Other	

Item	Description	Unit	Quantity	Arrival Date	Note
1	L.L & P.L & O.M.C %	m3	5000	31-08-2023	
2	Proctor	m3	5000	02-09-2023	
3	Classification	m3	5000	31-08-2023	
4	Sieve Analysis	m3	5000	31-08-2023	
5	C.B.R	m3	5000	03-08-2023	

Comments by:	Comments by:

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Shehab Hamdi	2023		
QA/QC *	Hassan	3/9/2023		
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Location Name	Contractor Company			Designer Company
Electric express train	IBRAHEEM NASSAR			k.k
Issued by Contractor	Name: Eng/Shehab Hamdi	Sign: 2023	Date: 03/09/2023	Time:
Contractor Reference	IN-51			
Received by ER			MAR	C1 C2 C3 DD: 03 MM: 09 YY: 2023 HH: MM:

The Following Test Result are Attached For Review	
Description of Materials	Soil (A-1-a)
Location Of Stock	520+000

Item		Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	11.0 %	
4	ASTM D 4318	Atterberg limit	4.6	
5	ASTM D 2974	Moisture content	8.1 %	
6	ASTM D 1557	Modified proctor	2.194	
7	ASTM D 1883	CBR	86.3 %	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi	2023		
QA/QC *	Hassan	2023		
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

Operating Lab	Negida Central Lab

PARTICLE SIZE DISTRIBUTION OF SOIL

Description of Materials	Embankment

Testing Date	31-08-23	code	Zone	From Station		TO Station
Location	K.P 520+000	IN-51		519+500		520+500
Company Name	Ibraheem Nassar					

1-visual inspection test :-

2-Gradient test :-

A-gradation of bulk materials

SAMPLE WEIGHT (g)	23083.00	gm

sieve size	2	1.5	1	3/4	1/2	3/8	# 4	PASS
Mass retained (g)	464.0	920.0	1766.0	1848.0	3935.0	2291.0	3640.0	
Cumulative Retained (g)	464.0	920.0	2686.0	4534.0	8069.0	10360.0	14000.0	
Cumulative Retained %	2.0	4.0	11.6	19.6	35.0	44.9	60.7	
Cumulative Passing %	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

table classify	
soil classify	
A-1-a	
PRO	2.194
WC	8.1
CBR	86.3%

B-soft material gradation

WT.OF sample	500.00	gm

sieve size	10	40	200					
Cumulative Retained (g)	65.00	239.00	360.00					
Cumulative Retained %	13.00	47.80	72.00					
Cumulative Passing %	[illegible]	[illegible]	[illegible]					

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 %	[illegible]									

ATTERBERG LIMTS	LIQUID LIMIT (L.L)	PLASTIC LIMIT (P.L)	PLASTIC INDEX (P.I.)
	24.5%	19.9%	4.6%

Contractor
Mohamed Hamed
2023

Consultant
Hassan
3/9/2023

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 559+177

PROCTOR TEST

Testing Date	02-09-23	code	Zone	From Station	To Station
Location	K.P 520+000	IN-51		519+500	520+500
Ibraheem Nasser	Ibraheem Nasser				

Weight of empty mold	5652.0
Mold Volume	2125.0

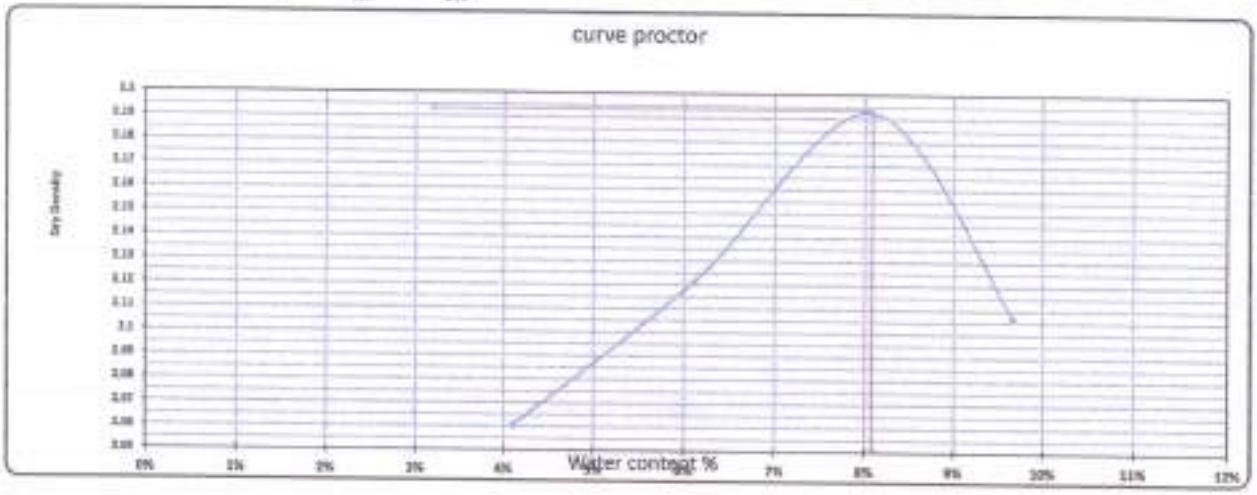
MAX Dry Density	2.194
Water content %	8.1

trial no :	1	2	3	4	
Wt. Of Mold+ wet soil	10210.0	10434.0	10688.0	10562.0	
WT. WET SOIL	4558.0	4782.0	5036.0	4910.0	
Wt. Density	2.145	2.250	2.370	2.311	

Tare No.	8	6	7	4	5	6	7	8		
Tare wt.	36.26	38.82	35.99	36.28	35.35	35.8	36.25	36.7		
Wt. Of wet soil & tare	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0		
Wt. Of dry soil & tare	155.08	155.27	152.94	152.81	150.89	150.51	149.03	149.18		
Wt. Of water	4.9	4.7	7.1	7.2	9.1	9.5	11.0	10.8		
Wt. Of dry soil	118.8	116.5	117.0	116.5	115.5	114.7	112.8	112.5		
Water content %	4.14%	4.06%	6.04%	6.17%	7.88%	8.27%	9.73%	9.62%		
A.V.Water content %	4.11%		6.10%		8.08%		9.67%			
Dry Density	2.060		2.233		2.193		2.107			

65 259 368

curve proctor



Contractor
Mohamed Hamed
2023

Consultant
8/9/2023

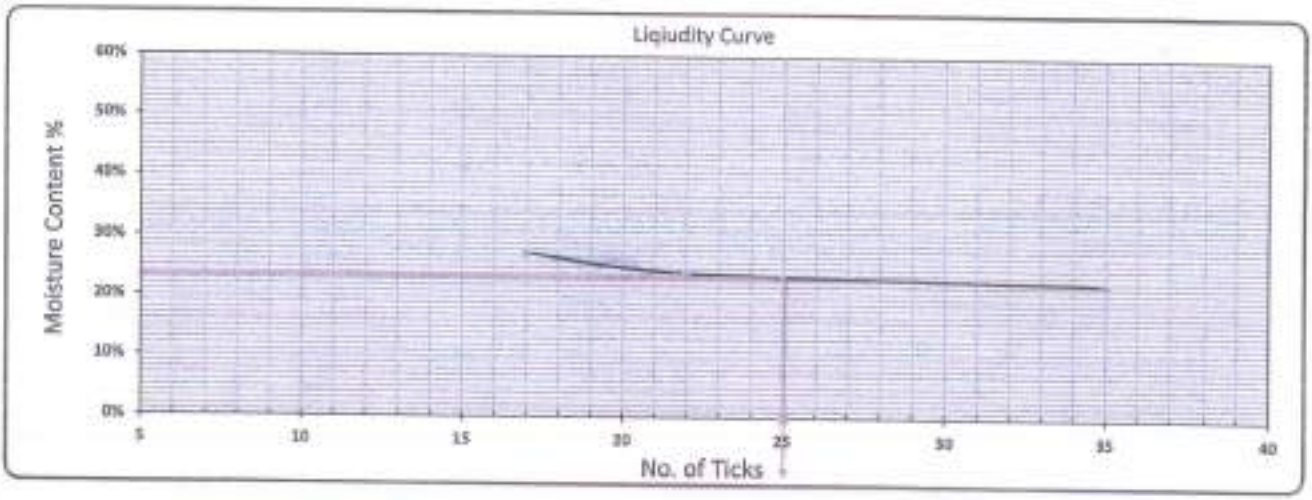
Electric Express Train - HSR

Plasticity and Liquidity Test -Atterberg Limits

Testing Date	02-09-23	Code	Zone	From Station		To Station
Location	K.P 520+000	IN-51		519+500		520+500
Company Name	Ibraheem Nassar					

Testing Results :-

Test	Liqiud Limit				Plastic Limit	
No. of Ticks	35	22	17		-	-
Tare No.	8	6	7		5	6
Tare WT. (gm)	36.26	35.82	35.99		35.35	35.80
Tare WT. + Wet WT. (gm)	54.12	53.88	52.38		44.41	48.41
Tare WT. + Dry WT. (gm)	50.84	50.38	48.87		42.85	46.40
Water WT. (gm)	3.28	3.50	3.51		1.56	2.01
Dry WT. (gm)	14.58	14.56	12.88		7.50	10.60
Moisture Content %	22.5%	24.0%	27.2%		20.8%	19.0%
Average %					19.9%	



L.L	P.L	P.I
24.5%	19.9%	4.6%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name :
Sign :	Sign :	Sign :

Electric Express Train - HSR

California Bearing Ratio TEST

Testing Date	3-9-2023	[illegible]		From Station		To station
Location	K.P 520+800	IR-S1	Zone	519+500		520+500
Company Name	Ibraheem Nassar					

Test Results:

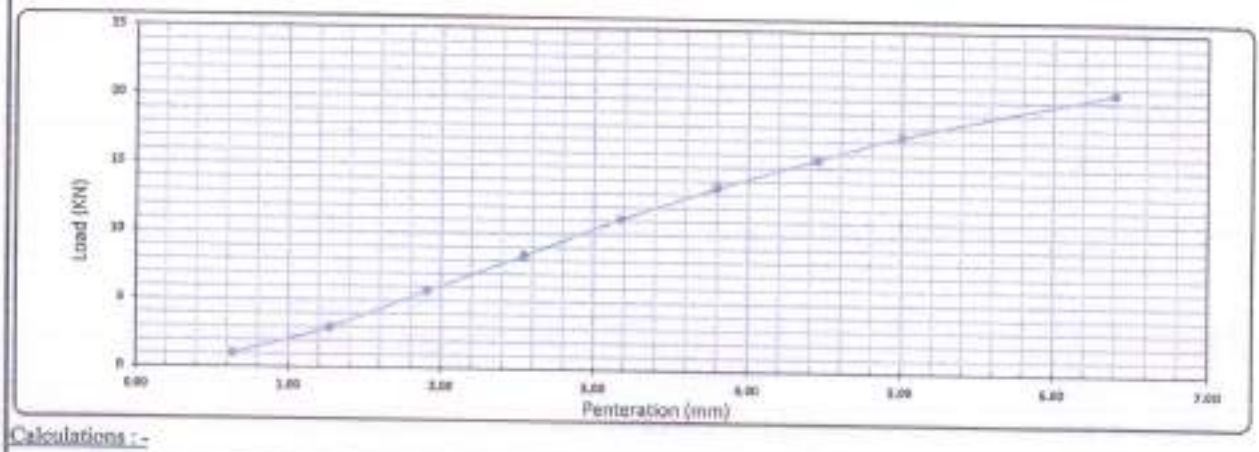
Compaction % for Mold	
Mold No.	5
Mold Vol.$^{(cm^3)}$	2058
Mold WT. (gm)	8047
Mold WT. + Wet WT. (gm)	12847
Wet WT. (gm)	4800
Wet Density$^{(g/cm^3)}$	2.332
Dry Density$^{(g/cm^3)}$	2.159
Procter Density$^{(g/cm^3)}$	2.194
Compaction %	98

Moisture Ratio After Compacted Mold	
Tare No.	7
Tare WT. (gm)	36.25
Tare WT. +Wet WT. (gm)	223.6
Tare WT. +Dry WT. (gm)	209.7
Water WT. (gm)	13.9
Dry WT. (gm)	173.5
Moisture Content %	8.01

Swelling	
Mold No.	5
Date	3-9-2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0.00
Sample Height (mm)	116.40
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.82	4.45	5.08	6.40
Load Reading (kg)	[illegible]								
Load (KN)									



Calculations : -

Penteration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR عند نسبة 98 %
2.50	8.39	13.4	62.8%	98	98	62.6%
5.00	17.36	20.0	86.7%			86.3%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name : Hassan
Sign :	Sign : 2023	Sign : 9/9/2023

MATERIAL INSPECTION REQUEST

Contractor Company	IBRAHEEM NASSAR				Designer Company							
Issued by Contractor	Name	Sign			Date						Time	
	Eng/Shehab Hamdi				10/09/2023							
Contractor Refrence	IN-52											
Received by ER			MIR		C1	C2	C3	DD	MM	YY	HH	MM
								10	09	2023		

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	Fill Material Result		
Location to be Used	520+020	520+040	-2.50
	519+980	520+040	-2.00
	519+980	520+040	-1.75
	519+980	520+040	-1.50
	519+980	520+040	-1.25
	519+980	520+040	-1.00
	519+980	520+040	-0.75
	519+980	520+040	-0.50
	519+980	520+040	-0.25
	519+980	520+040	0.00
	519+500	519+560	-1.25

MAR Approval No	IN-52	Date	
Supplier Name			
Test Requirement		Specification	Clause
Reference Photos	Yes attached / No	Other	

Item	Description	Unit	Quantity	Arrival Date	Note
1	L.L & P.L & O.M.C %	m3	5000	8-9-2023	
2	Proctor	m3	5000	9-9-2023	
3	Classification	m3	5000	8-9-2023	
4	Sieve Analysis	m3	5000	8-9-2023	
5	C.B.R	m3	5000	10-9-2023	

Comments by:	Comments by:

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Shehab Hamdi			
QA/QC *	Ahmed Abo Zaid			
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Location Name	Contractor Company			Designer Company							
Electric express train	IBRAHEEM NASSAR			k.k							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/Shehab Hamdi		10/09/2023								
Contractor Reference	IN-52										
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM
							10	09	2023		

The Following Test Result are Attached For Review				
Description of Materials	Soil (A-1-a)			
Location Of Stock	520+000			
Item		Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	11.6 %	
4	ASTM D 4318	Atterberg limit	N.P	
5	ASTM D 2974	Moisture content	7.7 %	
6	ASTM D 1557	Modified proctor	2.20	
7	ASTM D 1883	CBR	66.5 %	
Comments by:			Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
QA/QC *	Ahmed Abo Zaid			
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

Operating Lab	Negida Central Lab

PARTICLE SIZE DISTRIBUTION OF SOIL

Description of Materials	Embankment

Testing Date	08-09-23	code		Zone	From Station		TO Station
Location	K.P 520+000	IN-52			519+500		520+500
Company Name	Ibraheem Nassar						

1-visual inspection test :-

2-Gradient test :-

A-gradation of bulk materials

SAMPLE WEIGHT (g)	30249.00	gm

sieve size	2	1.5	1	3/4	1/2	3/8	# 4	PASS
Mass retained (g)	0.0	450.0	1611.0	1466.0	3658.0	2873.0	4592.0	
Cumulative Retained (g)	0.0	450.0	2061.0	3527.0	7385.0	10258.0	14850.0	
Cumulative Retained %	0.0	1.5	6.8	11.7	24.4	33.9	49.1	
Cumulative Passing %	[illegible]							

table classify	
soil classify	
A-1-a	
PRO	2.200
WC	7.7
CBR	66.5%

B-soft material gradation

WT.OF sample	500.00	gm

sieve size	10	40	200					
Cumulative Retained (g)	50.00	239.00	386.00					
Cumulative Retained %	10.00	47.80	77.20					
Cumulative Passing %	[illegible]							

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 %	[illegible]									

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

Contractor

Consultant

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	09-09-23	code		From Station	To Station
Location	KP 520+000	IN-52	Zone	519+500	520+500
Ibraheem Nassar	Ibraheem Nassar				

Weight of empty mold	5652.0
Mold Volume	2125.0

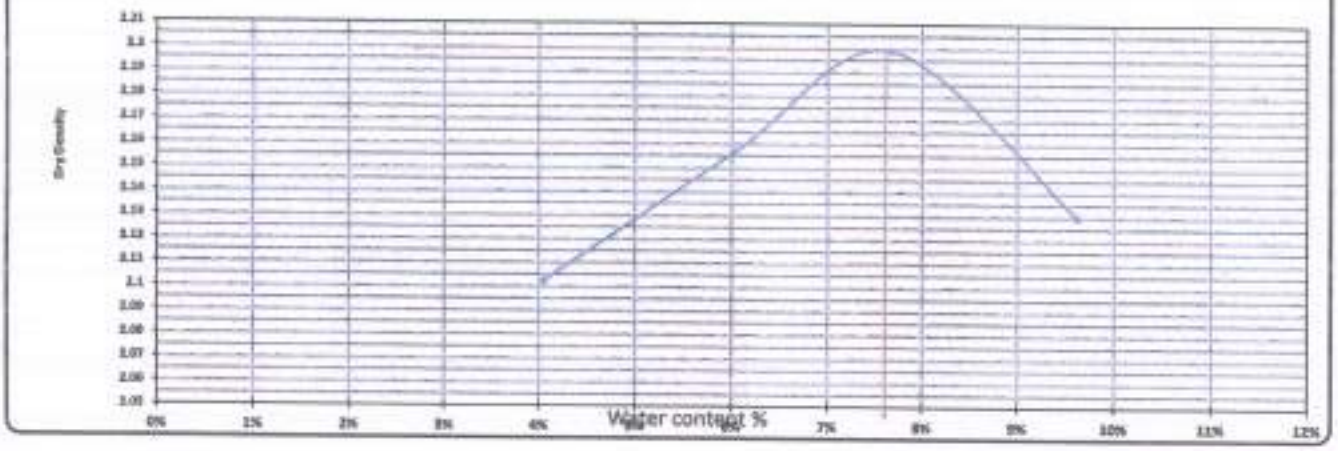
MAX Dry Density	
Water content %	

trial no :	1	2	3	4	
Wt. Of Mold+ wet soil	10301.0	10511.0	10684.0	10614.0	
WT. WET SOIL	4649.0	4859.0	5032.0	4962.0	
Wt. Density	2.188	2.287	2.368	2.335	

Tare No.	8	6	7	4	5	6	7	8		
Tare wt.	36.26	38.82	35.99	36.28	35.35	35.8	36.25	36.7		
Wt. Of wet soil & tare	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0		
Wt. Of dry soil & tare	155.14	155.32	152.99	152.93	151.06	151.22	149.10	149.20		
Wt. Of water	4.9	4.7	7.0	7.1	8.9	8.8	10.9	10.8		
Wt. Of dry soil	118.9	116.5	117.0	116.7	115.7	115.4	112.9	112.5		
Water content %	4.09%	4.02%	5.99%	6.06%	7.73%	7.61%	9.66%	9.60%		
AV.Water content %										
Dry Density										

65 239 360

curve proctor



Contractor

Consultant

Electric Express Train - HSR

California Bearing Ratio TEST

Testing Date	11-9-2023	code	Zone	From Station		To station
Location	K.P 520+000	IN-52		519+500		520+500
Company Name	Ibraheem Nasser					

Test Results:

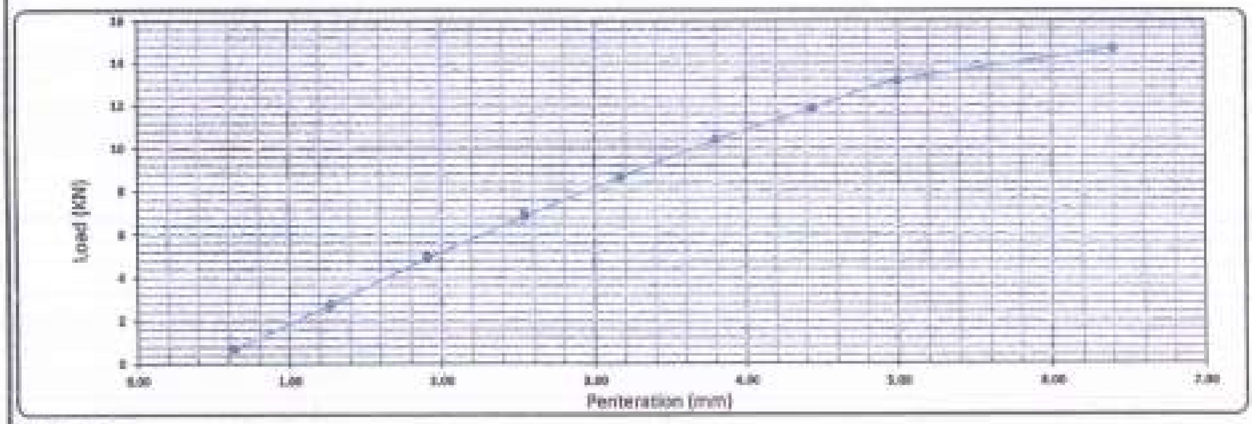
Compaction % for Mold	
Mold No.	5
Mold Vol. $^{(cm^3)}$	2058
Mold WT. (gm)	8047
Mold WT. + Wet WT. (gm)	12779
Wet WT. (gm)	4732
Wet Density $^{(g/cm^3)}$	2.299
Dry Density $^{(g/cm^3)}$	2.133
Proctor Density $^{(g/cm^3)}$	2.200
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	4
Tare WT. (gm)	36.28
Tare WT. +Wet WT. (gm)	188.69
Tare WT. +Dry WT. (gm)	177.65
Water WT. (gm)	11.0
Dry WT. (gm)	141.4
Moisture Content %	7.81

Swelling	
Mold No.	5
Date	11-9-2023
Intial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0.00
Sample Height (mm)	116.40
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.08	6.40
Load Reading (kg)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Load (KN)	0.7	2.8	4.9	[illegible]	8.7	10.4	11.9	[illegible]	14.7



Calculations :-

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	عند نسبة 98 %
2.50	6.87	13.4	51.3%	97	98	52.0%
5.00	13.17	20.0	65.8%			66.5%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

MATERIAL INSPECTION REQUEST

Contractor Company	IBRAHIM NASSAR			Designer Company								
Issued by Contractor	Name	Sign		Date	Time							
	Eng/Shehab Hamdi			31-08-2023								
Contractor Refrence	IN -SUB 1											
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM	
							31	08	2023			

CODE-1	S1 to S21 Station Reference	D1 to D9 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	Cursched Stone Subballast Material Result				
Location to be Used	519+590	519+700	0.70+		
	519+700	519+960	0.70+		
	519+590	519+700	0.90+		
	519+700	519+960	0.90+		
	520+050	520+200	0.70+		
	520+200	520+372	0.70+		
	520+372	520+500	0.70+		
	520+050	520+200	0.90+		
	520+200	520+372	0.90+		
	520+372	520+500	0.90+		
MAR Approval No	IN-SUB 1		Date		
Supplier Name					
Test Requirement		Specification	Clause		
Reference Photos	Yes attached / No	Other			

Item	Description	Unit	Quantity	Arrival Date	Note
1	L.L & P.L & O.M.C %	m3	5000	29-08-2023	
2	Proctor	m3	5000	29-08-2023	
3	Classification	m3	5000	29-08-2023	
4	Sieve Analysis	m3	5000	29-08-2023	
5	C.B.R	m3	5000	31-08-2023	
6	L.A	m3	5000	30-08-2023	

Comments by:	Comments by:

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Shehab Hamdi			
QA/QC *	Abdallah Samy			
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Location Name	Contractor Company		Designer Company	
Electric express train	IBRAHEEM NASSAR		k.k	
Issued by Contractor	Name	Sign	Date	Time
	Eng/Shehab Hamdi		31-08-2023	
Contractor Reference	IN-SUB 1			
Received by ER			MAR	

CY	CX	CI	DD	MM	YY	HH	MM
			31	08	2023		

The Following Test Result are Attached For Review				
Description of Materials	SUB (A-1-a)			
Location to be Used	520+000			
Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	5.7 %	
4	ASTM D 4318	Atterberg limit	N.P	
5	ASTM D 2974	Moisture content	8.1 %	
6	ASTM D 1557	Modified proctor	2.220	
7	ASTM D 1883	CBR	110.12%	
8	AASHTO-T96	L.A	24 %	
Comments by:			Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
QA/QC *	Abdallah Samy			
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

Operating Lab: Negida Central Lab

PARTICLE SIZE DISTRIBUTION OF PREPARED SUBGRADE

TESTING DATE:	29-082023	Code	Zone	FROM STATION	TO STATION
LOCATION	KP 520+000	IN-SUB 1		519+500	520+500
COMPANY KAME	IBRAHEEM NASSAR				
MATERIALS	SUB BALLAST				

1-visual inspection test

1948.00

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT (g)		36440.00		gm	Table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	Soil Classify	A-1-a
Mass retained (g)	0.0	702.0	4023.0	5425.0	2130.0	2905.0	7905.0		PRO	2.220
Cumulative Retained (g)	0.0	702.0	4725.0	10150.0	13280.0	16185.0	23990.0		WC	5.10
Cumulative Retained %	0.0	1.9	13.0	27.9	36.4	44.4	65.8		CBR	110.12%
Cumulative Passing %	100.0	98.1	87.0	72.1	63.6	55.6	34.2		Los Angles	24
									specific gravity	2.653

B-soft material gradation				WT.OF simple		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	159.00	319.00	417.00					
Cumulative Retained %	31.80	63.80	83.40					
Cumulative Passing %	68.20	36.20	16.60					

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 %	100.0	98.1	87.0	72.1	63.6	55.6	34.2	23.3	12.4	5.7
SPECIFICATION	——	97	——	70 — 75	——	15 — 60	——	0 — 35	——	0—7

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

Contractor

Consultant

Electric Express Train - HSR

From El Alin El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA TO MARSA MATROUH

From Station 514+000 To station 520+000

PROCTOR TEST (PREPARED SUBGRADE)

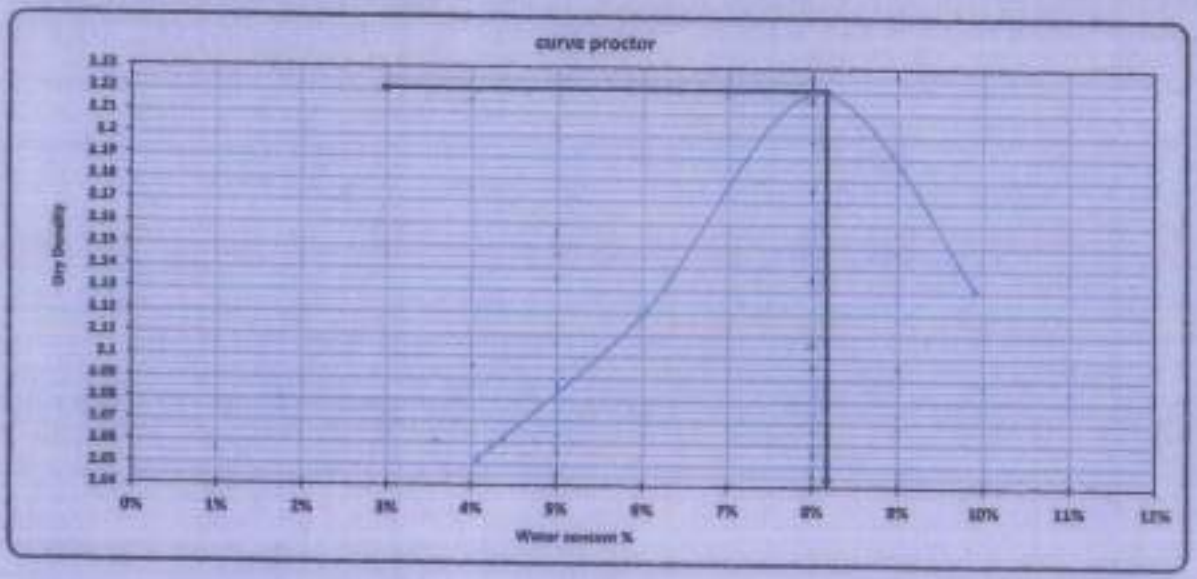
TESTING DATE:	29-8-2023	Code	zone	FROM	TO
LOCATION	520+000	[illegible]		519+500	520+500
COMPANY NAME	IBRAHEEM NASSAR				

Weight of empty mold	5887.0
Mold Volume:	2129.0

MAX Dry Density	2.12
Water content %	8.1

trial no :	1	2	3	4	
Wt. Of Mold+ wet soil	10354.0	10591.0	10913.0	10794	
WT. WET SOIL	4567.0	4704.0	5108.0	4907.0	
Wt. Density	2.126	2.347	2.399	2.302	

Tare No.	7	15	13	17	19	48	31	32		
Tare wt.	42.3	44.1	53.6	53.2	39.9	46.2	89.7	82.7		
Wt. Of wet soil & tare	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0		
Wt. Of dry soil & tare	145.20	144.80	142.71	142.51	140.22	139.91	136.80	137.50		
Wt. Of water	4.8	5.2	7.3	7.5	9.8	10.1	13.2	12.4		
Wt. Of dry soil	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0		
Water content %	3.9%	4.2%	5.9%	6.1%	7.6%	8.2%	9.7%	10.1%		
AY.Water content %	4.1%		6.0%		7.7%		9.9%			
Dry Density	2.052		2.120		2.220		2.131			



Contractor

Consultant

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 359+000 To Station 388+177

Absorbtion & Aggregate specific gravity AASHTO-T85

PREPARED SUBGRADE

TESTING DATE:	30-08-2023	code	zone	FROM	TO
LOCATION	520+000	IN-SUB 1		519+500	520+500
COMPANY NAME	IBRAHEEM NASSAR				

Weight of sample Before Test	——	gm
Weight of saturated -dry surface sample (B)	3193	gm
Weight of saturated sample in water (C)	1949	gm
Weight of dry sample after heating (A)	3126	gm

Results:-

Bulk specific gravity = A / (B-C)	2.503	
Apparent specific gravity = A /(A-C)	2.656	
Asorbtion = (B-A)/A	2.303	%

Los Angios abrasion AASHTO-T96

Results:-

Weight of sample before test (gm)	Weight of sample after test (gm)	Abrasion ratio (%)
5000	3800	24

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :

Electric Express Train - HSR

Operating Lab: AL Mishy Central Lab

California Bearing Ratio TEST

PREPARED SUBGRADE

Testing Date :	31-08-2023	Code	ZONE	FROM	TO
Location :	520+000	IN-SUB 1		519+500	520+500
COMPANY NAME	IBRAHEEM NASSAR				

-: Test Results

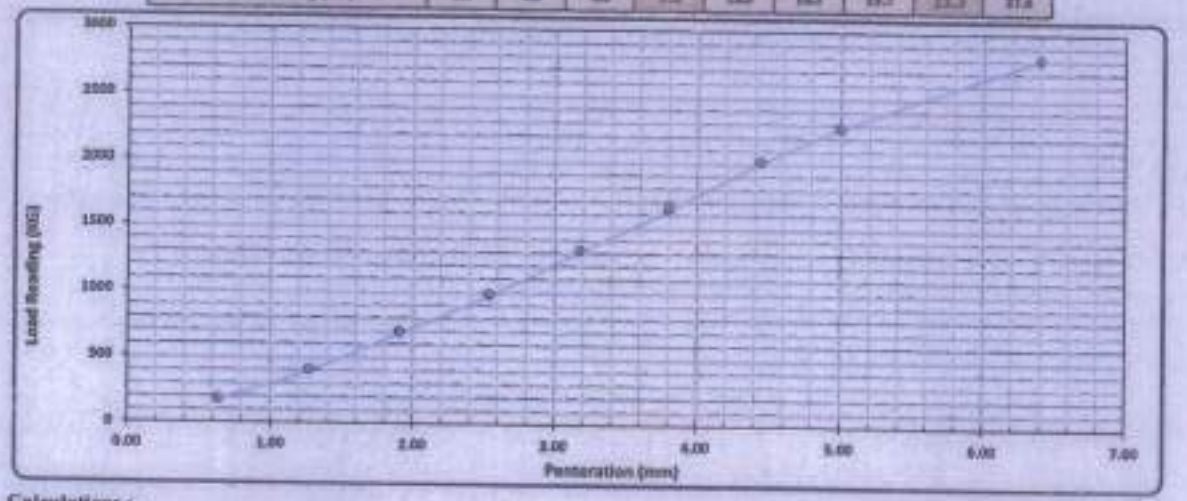
Compaction % for Mold	
Mold No.	4
Mold Vol.(cm^3)	3888
Mold WT. (gm)	8906
Mold WT. + Wet WT. (gm)	13816
Wet WT. (gm)	4968
Wet Density (g/cm^3)	1.379
Dry Density (g/cm^3)	2.207
Proctor Density (g/cm^3)	2.229
Compaction %	99

Moisture Ratio After Compacted Mold	
Tare No.	7
Tare WT. (gm)	42.2
Tare WT. +Wet WT. (gm)	168.62
Tare WT. +Dry WT. (gm)	177.8
Water WT. (gm)	10.8
Dry WT. (gm)	135.6
Moisture Content %	8.0

Swelling	
Mold No.	4
Date	31-08-2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	116.40
Swelling Ratio %	0.0%

Loading Reading :

Penetration (mm)	0.63	1.27	1.91	2.54	3.18	3.80	4.45	5.08	6.35
Load Reading (KG)	183.0	405.0	694.0	994.3	1321.0	1645.0	2015.0	2279.0	2817.0
Load Reading (lb/in)	1.0	4.0	6.0	9.0	13.0	16.3	19.7	23.3	27.6



Calculations : -

Penetration	Load	Standard Load	CBR	Moist - Compaction	Compaction	CBR
(mm)	(lbs)	(lb)	(%)	(%)	(%)	(%)
2.50	9.60	13.4	71.3%	99	99	71.3%
5.00	22.33	19.3	115.8%			115.8%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+050	TO	520+200
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+075

Loading Stage No	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	AVE. Sett. mm
0.000	0.0	0.000	0.00	8.61	8.40		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.57	8.37		0.040	0.030		0.035
2.000	7.9	5.652	0.08	8.54	8.33		0.070	0.070		0.070
0.080	15.8	11.304	0.16	8.49	8.26		0.120	0.140		0.130
4.000	24.7	17.663	0.25	8.42	8.17		0.190	0.230		0.210
5.000	32.6	23.315	0.33	8.34	8.07		0.270	0.330		0.300
6.000	41.5	29.673	0.42	8.27	7.97		0.340	0.430		0.385
7.000	49.4	35.325	0.50	8.17	7.89		0.440	0.510		0.475
8.000	24.7	17.663	0.25	8.19	7.90		0.420	0.500		0.460
9.000	12.4	8.831	0.12	8.23	7.92		0.380	0.480		0.430
9.000	1.0	0.707	0.01	8.27	7.97		0.340	0.430		0.385
10.000	1.0	0.707	0.01	8.27	7.97		0.340	0.430		0.385
11.000	7.9	5.652	0.08	8.24	7.93		0.370	0.470		0.420
12.000	15.8	11.304	0.16	8.20	7.90		0.410	0.500		0.455
13.000	24.7	17.663	0.25	8.16	7.86		0.450	0.540		0.495
14.000	32.6	23.315	0.33	8.13	7.82		0.490	0.580		0.530
15.000	41.5	29.673	0.42	8.10	7.77		0.510	0.630		0.570

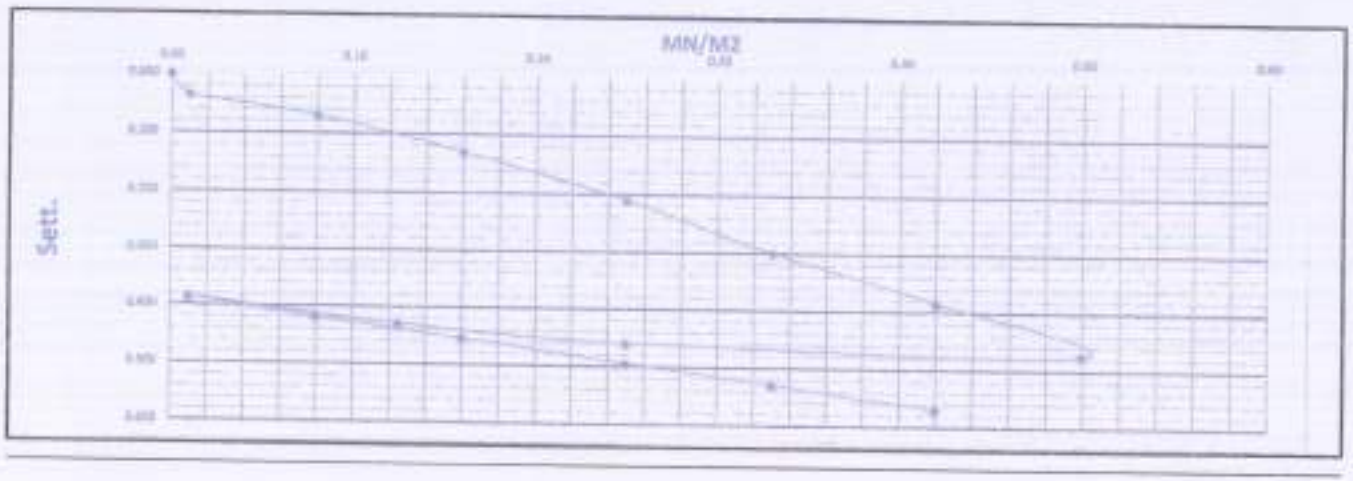
$0.7\,\sigma_2$	0.35	0.30625	0.18375	0.2
$0.3\,\sigma_1$	0.15	0.1225		
$0.7\sigma_1$	0.35	0.53889	0.08389	0.2
$0.3\sigma_1$	0.15	0.455		
D (mm)	300			
E_{V_1}	244.90			
E_{V_2}	536.45			
Area (πr^2)	0.07065			

E_{V2}/E_{V1}	2.19		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+050	TO	520+200
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+100

Loading Stage No.	Load Bar	Load kN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg Sett. mm
0.000	0.0	0.000	0.00	8.51	8.23		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.47	8.19		0.040	0.040		0.040
2.000	7.9	5.652	0.08	8.43	8.15		0.080	0.080		0.080
3.000	15.8	11.304	0.16	8.39	8.07		0.120	0.160		0.140
4.000	24.7	17.663	0.25	8.32	7.96		0.190	0.270		0.230
5.000	32.6	23.315	0.33	8.26	7.89		0.250	0.340		0.295
6.000	41.5	29.673	0.42	8.22	7.83		0.290	0.400		0.345
7.000	49.4	35.325	0.50	8.12	7.72		0.390	0.510		0.450
8.000	24.7	17.663	0.25	8.13	7.75		0.380	0.480		0.430
9.000	12.4	8.831	0.12	8.16	7.77		0.350	0.460		0.405
9.000	1.0	0.707	0.01	8.19	7.81		0.320	0.420		0.370
10.000	1.0	0.707	0.01	8.19	7.81		0.320	0.420		0.370
11.000	7.9	5.652	0.08	8.18	7.79		0.330	0.440		0.385
12.000	15.8	11.304	0.16	8.16	7.76		0.350	0.470		0.410
13.000	24.7	17.663	0.25	8.15	7.73		0.360	0.500		0.430
14.000	32.6	23.315	0.33	8.13	7.70		0.380	0.530		0.455
15.000	41.5	29.673	0.42	8.11	7.67		0.400	0.560		0.480

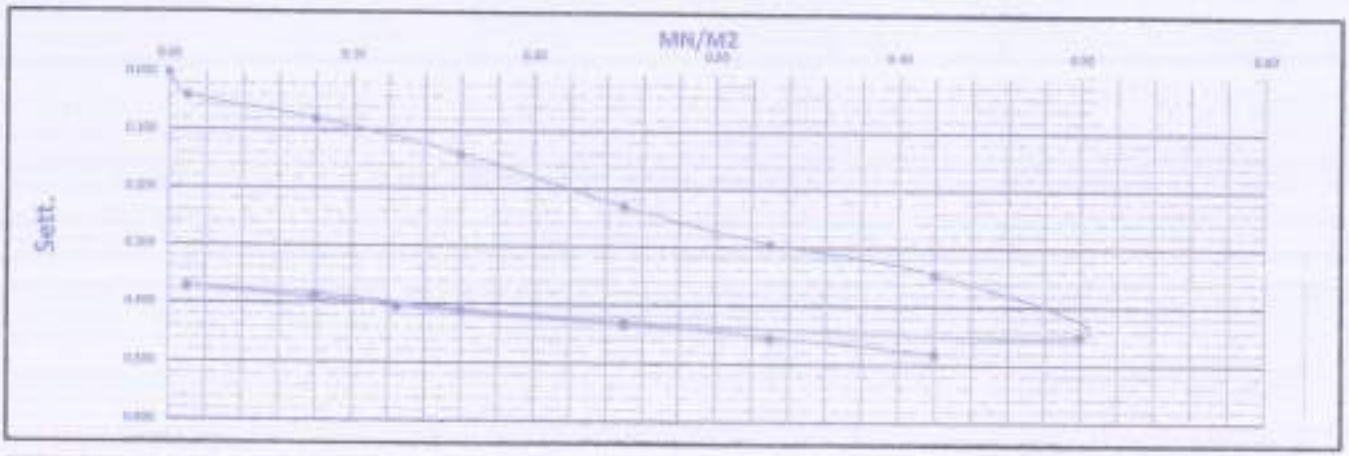
		E	ΔS	Δε
$0.7\sigma_1$	0.35	0.25312	0.12062	0.2
$0.3\sigma_1$	0.15	0.1325		
$0.7\sigma_2$	0.35	0.46056	0.06055	0.2
$0.3\sigma_2$	0.15	0.4		
D (mm)	300			
Ev_1	373.86			
Ev_2	743.14			
Area (Sq.m)	0.07065			

Ev2/Ev1	1.99		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+050	TO	520+200
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	518+125

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.82	8.37		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.78	8.34		0.040	0.030		0.035
2.000	7.9	5.652	0.08	7.74	8.30		0.080	0.070		0.075
0.000	15.8	11.304	0.16	7.68	8.22		0.140	0.150		0.145
4.000	24.7	17.663	0.25	7.61	8.13		0.210	0.240		0.225
5.000	32.6	23.315	0.33	7.55	8.01		0.270	0.360		0.315
6.000	41.5	29.673	0.42	7.49	7.93		0.330	0.440		0.385
7.000	49.4	35.325	0.50	7.40	7.84		0.420	0.530		0.475
8.000	24.7	17.663	0.25	7.42	7.87		0.400	0.500		0.450
9.000	12.4	8.831	0.12	7.45	7.91		0.370	0.460		0.415
9.000	1.0	0.707	0.01	7.49	7.96		0.330	0.410		0.370
10.000	1.0	0.707	0.01	7.49	7.96		0.330	0.410		0.370
11.000	7.9	5.652	0.08	7.48	7.95		0.340	0.420		0.380
12.000	15.8	11.304	0.16	7.45	7.92		0.370	0.450		0.410
13.000	24.7	17.663	0.25	7.41	7.88		0.410	0.490		0.450
14.000	32.6	23.315	0.33	7.38	7.85		0.440	0.520		0.480
15.000	41.5	29.673	0.42	7.33	7.84		0.490	0.530		0.510

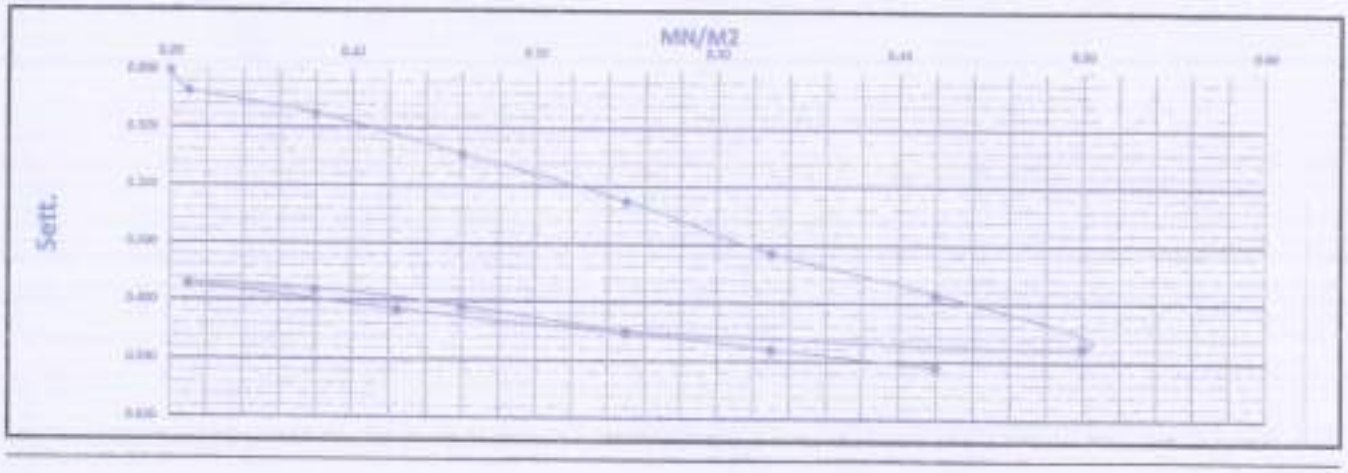
		δ	ΔS	$\Delta\sigma$
$0.7\sigma_1$	0.35	0.38625	0.17	0.2
$0.3\sigma_1$	0.15	0.13625		
$0.7\sigma_2$	0.35	0.48667	0.49667	0.2
$0.3\sigma_2$	0.15	0.39		
D (mm)	300			
Ev_1	264.71			
Ev_2	465.52			
Area (Sq.m)	0.07065			

Ev2/Ev1	1.76		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+050	TO	520+200
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+130

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	8.37	7.66		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.34	7.64		0.030	0.020		0.025
2.000	7.9	5.652	0.08	8.29	7.60		0.080	0.060		0.070
3.000	15.8	11.304	0.16	8.25	7.55		0.120	0.110		0.115
4.000	24.7	17.663	0.25	8.19	7.47		0.180	0.190		0.185
5.000	32.6	23.315	0.33	8.12	7.38		0.250	0.280		0.265
6.000	41.5	29.673	0.42	8.03	7.27		0.340	0.390		0.365
7.000	49.4	35.325	0.50	7.96	7.19		0.410	0.470		0.440
8.000	24.7	17.663	0.25	7.98	7.21		0.390	0.450		0.420
9.000	12.4	8.831	0.13	8.01	7.24		0.360	0.420		0.390
9.000	1.0	0.707	0.01	8.08	7.28		0.290	0.380		0.335
10.000	1.0	0.707	0.01	8.08	7.28		0.290	0.380		0.335
11.000	7.9	5.652	0.08	8.07	7.27		0.300	0.390		0.345
12.000	15.8	11.304	0.16	8.04	7.23		0.330	0.430		0.380
13.000	24.7	17.663	0.25	8.01	7.20		0.360	0.460		0.410
14.000	32.6	23.315	0.33	7.98	7.17		0.390	0.490		0.440
15.000	41.5	29.673	0.42	7.97	7.12		0.400	0.540		0.470

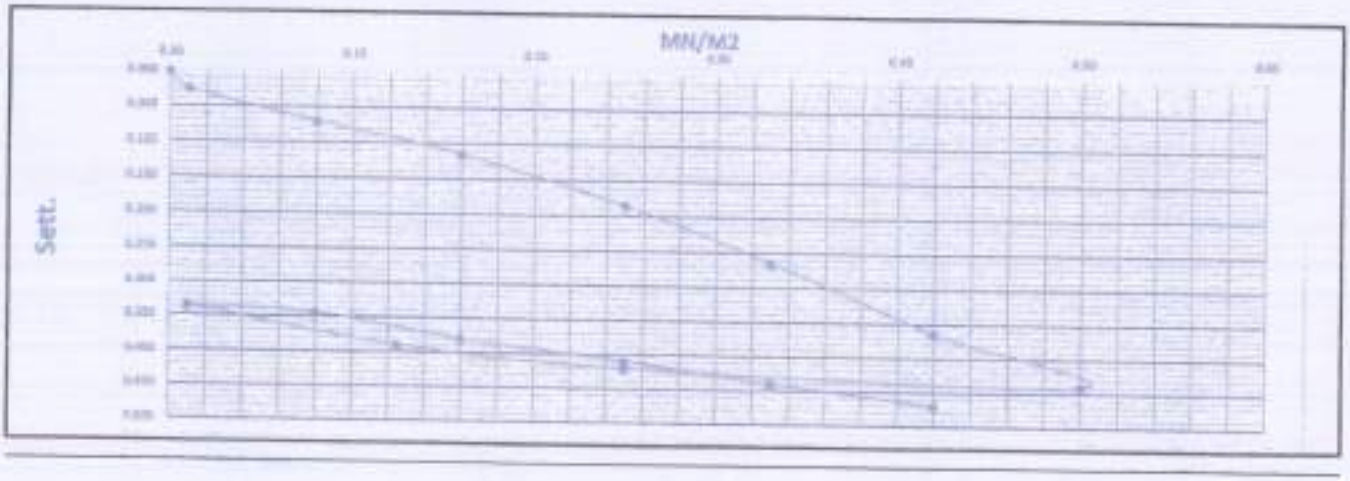
		s	ΔS	Δσ
$0.7\sigma_2$	0.35	0.29938	0.19	0.2
$0.3\sigma_1$	0.15	0.10938		
$0.7\sigma_2$	0.35	0.44667	0.09167	0.2
$0.3\sigma_1$	0.15	0.355		
D (mm)	300			
Ev_1	236.84			
Ev_2	430.91			
Area (Sq.m)	0.07069			

Ev2/Ev1	2.07		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign	Sign :

Contractor

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+050	TO	520+200
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+175

Loading Stage No.	Load Rec	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.43	6.57		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.39	6.54		0.040	0.030		0.035
2.000	7.9	5.652	0.08	7.36	6.49		0.070	0.080		0.075
0.000	15.8	11.304	0.16	7.31	6.42		0.120	0.150		0.135
4.000	24.7	17.663	0.25	7.25	6.33		0.180	0.240		0.210
5.000	32.6	23.315	0.33	7.19	6.21		0.240	0.360		0.300
6.000	41.5	29.673	0.42	7.10	6.12		0.330	0.450		0.390
7.000	49.4	35.325	0.50	7.02	6.03		0.410	0.540		0.475
8.000	24.7	17.663	0.25	7.04	6.05		0.390	0.520		0.455
9.000	12.4	8.831	0.12	7.08	6.09		0.350	0.480		0.415
9.000	1.0	0.707	0.01	7.13	6.15		0.300	0.420		0.360
10.000	1.0	0.707	0.01	7.13	6.15		0.300	0.420		0.360
11.000	7.9	5.652	0.08	7.10	6.12		0.330	0.450		0.390
12.000	15.8	11.304	0.16	7.06	6.09		0.370	0.480		0.425
13.000	24.7	17.663	0.25	7.01	6.04		0.420	0.530		0.475
14.000	32.6	23.315	0.33	6.98	6.00		0.450	0.570		0.510
15.000	41.5	29.673	0.42	6.94	5.96		0.490	0.610		0.550

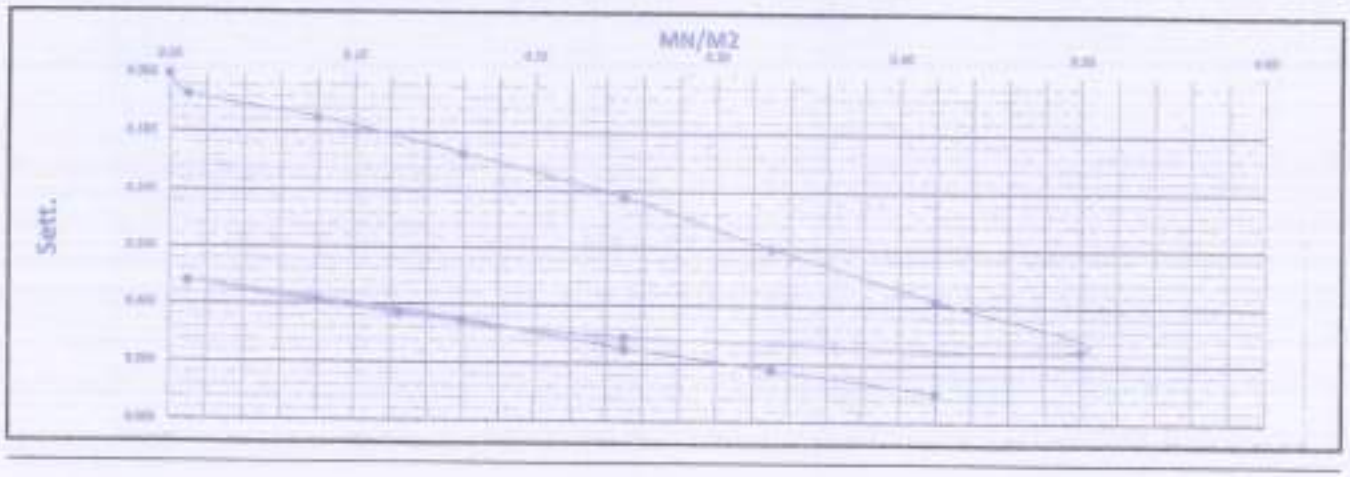
			x	ΔS	Δσ
$0.7\,\sigma_1$	0.35	0.31563		0.18813	0.2
$0.3\,\sigma_1$	0.15	0.1275			
$0.7\sigma_2$	0.35	0.51889		0.09889	0.2
$0.3\sigma_2$	0.15	0.41			
D (mm)	300				
Ev_1	239.20				
Ev_2	455.87				
Area (Sq.m)	0.07065				

Ev2/Ev1	1.90		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor

Plate Load Test Results

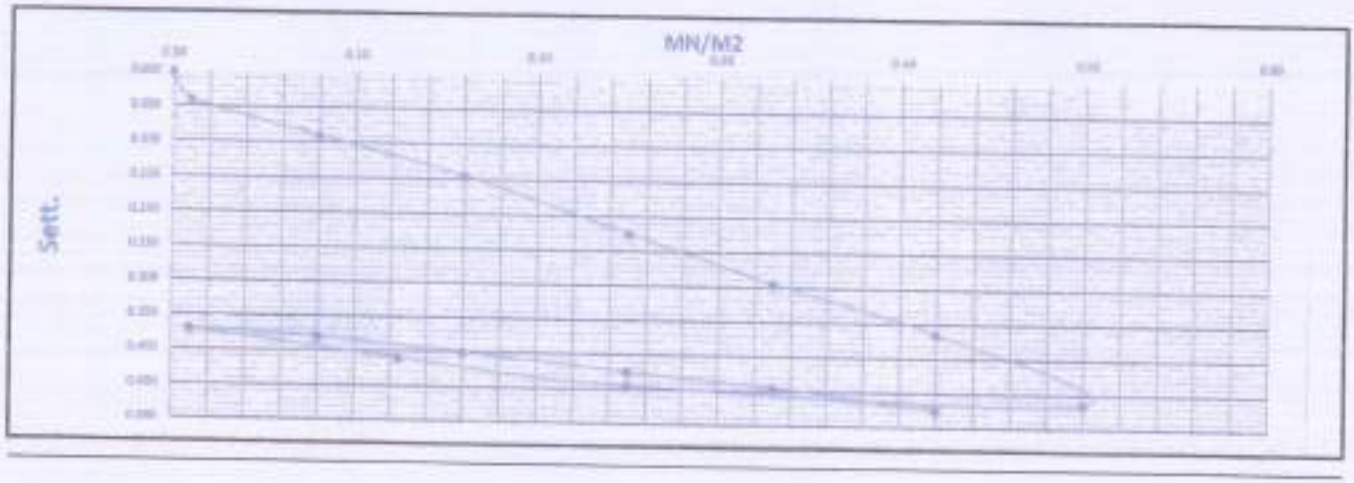
Layer:	SUB-BALLAST 2		0.90÷
Station:	520+050	TO	520+200
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+200

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	8.43	7.65		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.39	7.61		0.040	0.040		0.040
2.000	7.9	5.652	0.08	8.33	7.57		0.100	0.080		0.090
0.080	15.8	11.304	0.16	8.28	7.51		0.150	0.140		0.145
4.000	24.7	17.663	0.25	8.21	7.42		0.220	0.230		0.225
5.000	32.6	23.315	0.33	8.14	7.35		0.290	0.300		0.295
6.000	41.5	29.673	0.42	8.10	7.25		0.330	0.400		0.365
7.000	49.4	35.325	0.50	8.01	7.14		0.420	0.510		0.465
8.000	24.7	17.663	0.25	8.03	7.16		0.400	0.490		0.445
9.000	12.4	8.831	0.12	8.07	7.19		0.360	0.460		0.410
9.000	1.0	0.707	0.01	8.11	7.23		0.320	0.420		0.370
10.000	1.0	0.707	0.01	8.11	7.23		0.320	0.420		0.370
11.000	7.9	5.652	0.08	8.10	7.22		0.330	0.430		0.380
12.000	15.8	11.304	0.16	8.08	7.20		0.350	0.450		0.400
13.000	24.7	17.663	0.25	8.06	7.17		0.370	0.480		0.425
14.000	32.6	23.315	0.33	8.04	7.15		0.390	0.500		0.445
15.000	41.5	29.673	0.42	8.01	7.12		0.420	0.530		0.475

		i	Δδ	Δσ
$0.7\sigma_1$	0.35	0.2775	0.13933	0.2
$0.3\sigma_1$	0.15	0.13813		
$0.7\sigma_2$	0.35	0.45167	0.06167	0.2
$0.3\sigma_2$	0.15	0.39		
D (mm)	300			
Ev_1	323.87			
Ev_2	729.74			
Area (Sq.m)	0.07068			

E_{v2}/E_{v1}	2.26		



LOAD

UN LOAD

RE LOAD

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+200	TO	520+372
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+225

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Stat 1 mm	Stat 2 mm	Stat 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg Sett. mm
0.000	0.0	0.000	0.00	7.57	7.59		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.53	7.54		0.040	0.050		0.045
2.000	7.9	5.652	0.08	7.50	7.48		0.070	0.110		0.090
0.080	15.8	11.304	0.16	7.42	7.39		0.150	0.200		0.175
4.000	24.7	17.663	0.25	7.35	7.28		0.220	0.310		0.265
5.000	32.6	23.315	0.33	7.30	7.19		0.270	0.400		0.335
6.000	41.5	29.673	0.42	7.25	7.09		0.320	0.500		0.410
7.000	49.4	35.325	0.50	7.15	6.95		0.420	0.640		0.530
8.000	24.7	17.663	0.25	7.16	6.96		0.410	0.630		0.520
9.000	12.4	8.831	0.12	7.18	7.00		0.390	0.590		0.490
9.000	1.0	0.707	0.01	7.20	7.03		0.370	0.560		0.465
10.000	1.0	0.707	0.01	7.20	7.03		0.370	0.560		0.465
11.000	7.9	5.652	0.08	7.18	7.02		0.390	0.570		0.480
12.000	15.8	11.304	0.16	7.16	6.99		0.410	0.600		0.505
13.000	24.7	17.663	0.25	7.15	6.96		0.420	0.630		0.525
14.000	32.6	23.315	0.33	7.13	6.92		0.440	0.670		0.555
15.000	41.5	29.673	0.42	7.12	6.88		0.450	0.710		0.580

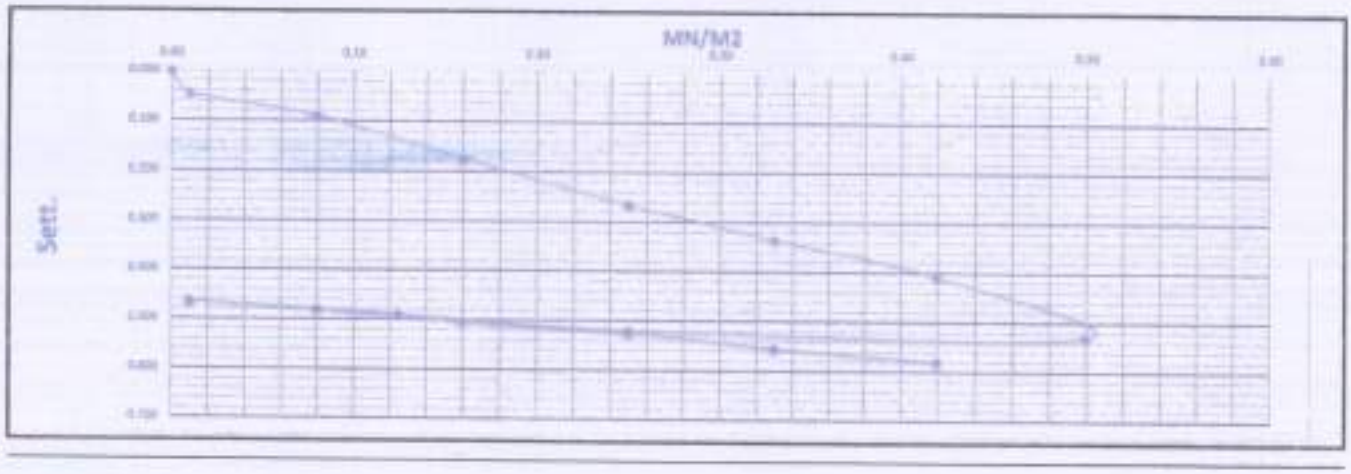
		x	ΔS	$\Delta \sigma$
$0.7\ \sigma_1$	0.35	0.385	0.14063	0.2
$0.3\ \sigma_1$	0.15	0.16438		
$0.7\sigma_2$	0.35	0.56856	0.86555	0.2
$0.3\sigma_2$	0.15	0.495		
D (mm)	300			
Ev_1	320.00			
Ev_2	686.46			
Area ($Sq.m$)	0.07065			

Ev2/Ev1	2.15		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

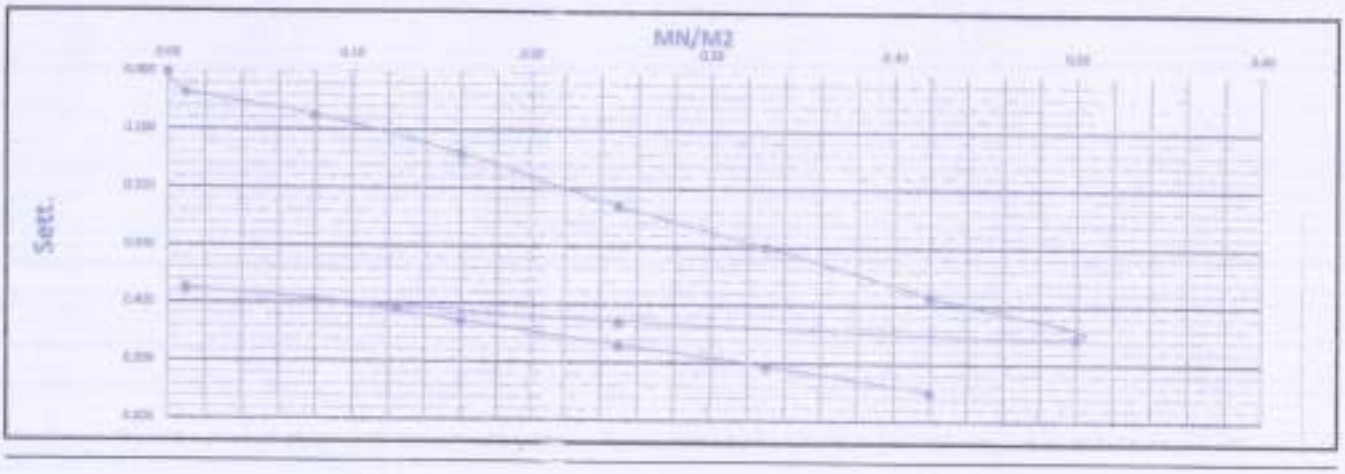
Layer:	SUB-BALLAST 2		0.90+
Station:	520+200	TO	520+372
Date:	25-09-23		

COMPANY	IBRAHIM NASSAB
Location	520+250

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Ave. Sett. mm
0.000	0.0	0.000	0.00	8.30	7.53		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.26	7.50		0.040	0.030		0.035
2.000	7.9	5.652	0.08	8.23	7.45		0.070	0.080		0.075
0.080	15.8	11.304	0.16	8.19	7.36		0.110	0.170		0.140
4.000	24.7	17.663	0.25	8.12	7.25		0.180	0.280		0.230
5.000	32.6	23.315	0.33	8.06	7.17		0.240	0.360		0.300
6.000	41.5	29.673	0.42	7.98	7.08		0.320	0.450		0.385
7.000	49.4	35.325	0.50	7.92	7.00		0.380	0.530		0.455
8.000	24.7	17.663	0.25	7.94	7.03		0.360	0.500		0.430
9.000	12.4	8.831	0.12	7.96	7.06		0.340	0.470		0.405
9.000	1.0	0.707	0.01	7.99	7.09		0.310	0.440		0.375
10.000	1.0	0.707	0.01	7.99	7.09		0.310	0.440		0.375
11.000	7.9	5.652	0.08	7.98	7.06		0.320	0.470		0.395
12.000	15.8	11.304	0.16	7.95	7.02		0.350	0.510		0.430
13.000	24.7	17.663	0.25	7.92	6.97		0.380	0.560		0.470
14.000	32.6	23.315	0.33	7.88	6.94		0.420	0.590		0.505
15.000	41.5	29.673	0.42	7.83	6.90		0.470	0.630		0.550

				ΔS	Sr
0.7 σ_1	0.35	0.32375		0.19187	0.2
0.3 σ_1	0.15	0.13188			
0.3 σ_2	0.35	0.515		0.3	0.2
0.3 σ_2	0.15	0.415			
D (mm)	300				
Ev_1	234.53				
Ev_2	458.01				
Area (Sq.m)	0.07065				

Ev2/Ev1	1.92		



LOAD

UN LOAD

RE LOAD

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant

Contractor

Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+200	TO	520+372
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	[illegible]

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.33	6.92		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.24	6.81		0.090	0.110		0.100
2.000	7.9	5.652	0.08	7.16	6.73		0.170	0.190		0.180
0.080	15.8	11.304	0.16	7.05	6.66		0.280	0.260		0.270
4.000	24.7	17.663	0.25	6.93	6.58		0.400	0.340		0.370
5.000	32.6	23.315	0.33	6.84	6.50		0.490	0.420		0.455
6.000	41.5	29.673	0.42	6.76	6.43		0.570	0.490		0.530
7.000	49.4	35.325	0.50	6.70	6.33		0.630	0.590		0.610
8.000	24.7	17.663	0.25	6.74	6.35		0.590	0.570		0.580
9.000	12.4	8.831	0.12	6.78	6.39		0.550	0.530		0.540
9.000	1.0	0.707	0.01	6.81	6.42		0.520	0.500		0.510
10.000	1.0	0.707	0.01	6.81	6.42		0.520	0.500		0.510
11.000	7.9	5.652	0.08	6.78	6.38		0.550	0.540		0.545
12.000	15.8	11.304	0.16	6.74	6.34		0.590	0.580		0.585
13.000	24.7	17.663	0.25	6.71	6.29		0.620	0.630		0.625
14.000	32.6	23.315	0.33	6.67	6.27		0.660	0.650		0.655
15.000	41.5	29.673	0.42	6.64	6.23		0.690	0.690		0.690

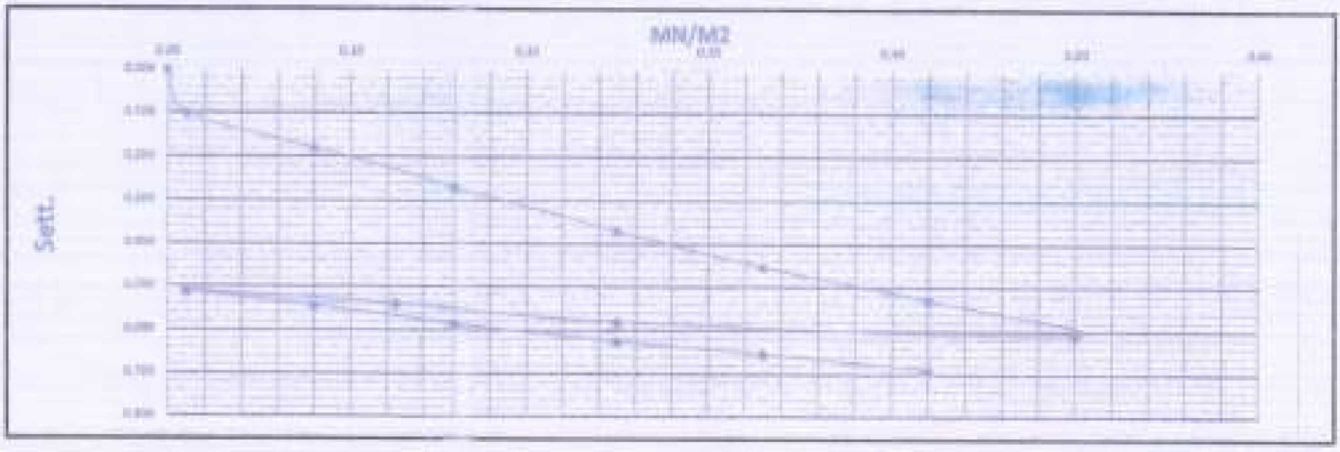
		s	a1	a2
$0.7\sigma_1$	0.35	0.46	0.20125	0.2
$0.3\sigma_1$	0.15	0.25875		
$0.7\sigma_2$	0.35	0.66278	0.08277	0.2
$0.3\sigma_2$	0.15	0.58		
D (mm)	300			
Ev_1	223.66			
Ev_2	547.65			
Area (Sq.m)	0.07069			

Ev2/Ev1	[illegible]		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant Contractor Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+200	TO	520+372
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+200

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	5.91	6.44		0.000	0.000		0.000
1.000	1.0	0.707	0.01	5.84	6.35		0.070	0.090		0.080
2.000	7.9	5.652	0.08	5.77	6.30		0.140	0.140		0.140
0.080	15.8	11.304	0.16	5.70	6.22		0.210	0.220		0.215
4.000	24.7	17.663	0.25	5.63	6.14		0.280	0.300		0.290
5.000	32.6	23.315	0.33	5.55	6.06		0.360	0.380		0.370
6.000	41.5	29.673	0.42	5.48	5.98		0.430	0.460		0.445
7.000	49.4	35.325	0.50	5.41	5.90		0.500	0.540		0.520
8.000	24.7	17.663	0.25	5.44	5.94		0.470	0.500		0.485
9.000	12.4	8.831	0.12	5.49	5.97		0.420	0.470		0.445
9.000	1.0	0.707	0.01	5.53	6.01		0.380	0.430		0.405
10.000	1.0	0.707	0.01	5.53	6.01		0.380	0.430		0.405
11.000	7.9	5.652	0.08	5.50	5.97		0.410	0.470		0.440
12.000	15.8	11.304	0.16	5.48	5.92		0.430	0.520		0.475
13.000	24.7	17.663	0.25	5.45	5.88		0.460	0.560		0.510
14.000	32.6	23.315	0.33	5.42	5.85		0.490	0.590		0.540
15.000	41.5	29.673	0.42	5.39	5.83		0.520	0.610		0.565

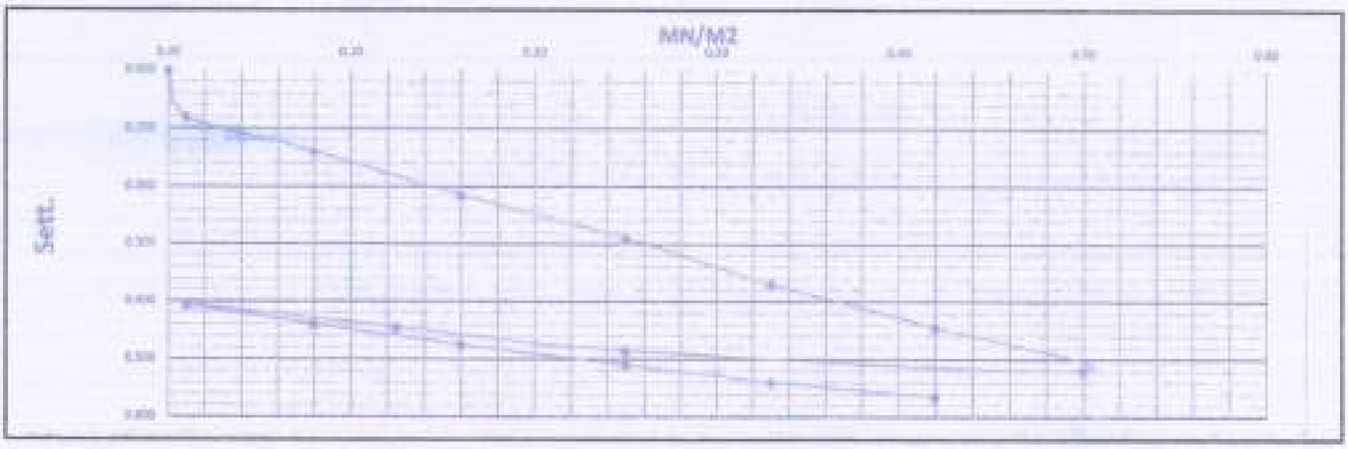
		s	ΔS	Δσ
0.7 σ_1	0.35	0.37938	0.17375	0.2
0.3 σ_1	0.15	0.20563		
0.7σ_2	0.35	0.54556	0.07055	0.2
0.3σ_2	0.15	0.475		
D (mm)	300			
Ev_1	258.99			
Ev_2	637.83			
Area (Sq.m)	0.07068			

Ev2/Ev1	2.46		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor

Plate Load Test Results

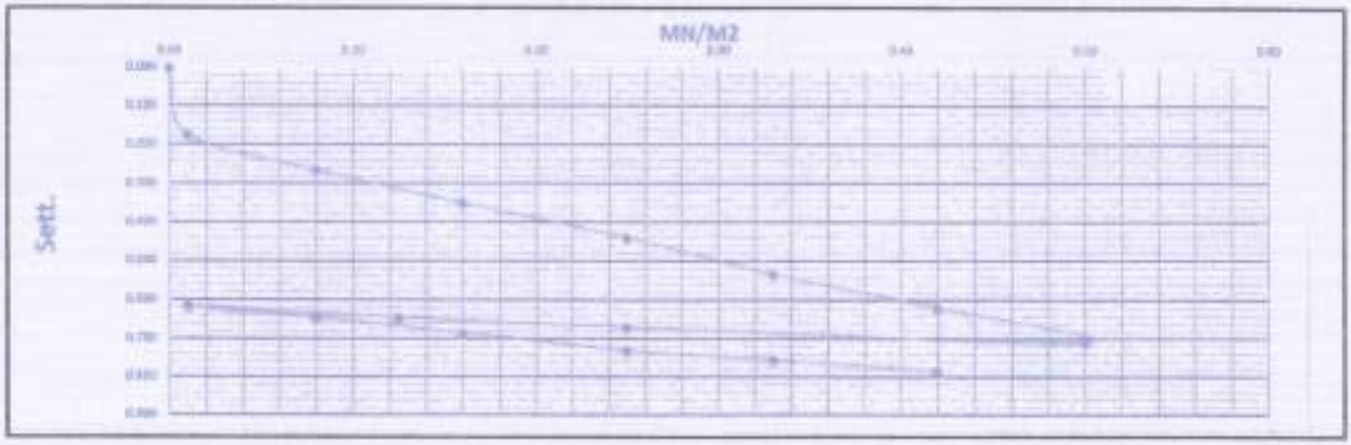
Layer:	SUB-BALLAST 2		0.90+
Station:	520+200	TO	520+372
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+[illegible]

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	6.44	7.08		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.34	6.83		0.100	0.250		0.175
2.000	7.9	5.652	0.08	6.25	6.74		0.190	0.340		0.265
0.080	15.8	11.304	0.16	6.17	6.65		0.270	0.430		0.350
4.000	24.7	17.663	0.25	6.07	6.57		0.370	0.510		0.440
5.000	32.6	23.315	0.33	5.97	6.48		0.470	0.600		0.535
6.000	41.5	29.673	0.42	5.88	6.40		0.560	0.680		0.620
7.000	49.4	35.325	0.50	5.81	6.29		0.630	0.790		0.710
8.000	24.7	17.663	0.25	5.84	6.34		0.600	0.740		0.670
9.000	12.4	8.831	0.12	5.86	6.37		0.580	0.710		0.645
9.000	1.0	0.707	0.01	5.89	6.40		0.550	0.680		0.615
10.000	1.0	0.707	0.01	5.89	6.40		0.550	0.680		0.615
11.000	7.9	5.652	0.08	5.86	6.37		0.580	0.710		0.645
12.000	15.8	11.304	0.16	5.82	6.33		0.620	0.750		0.685
13.000	24.7	17.663	0.25	5.78	6.28		0.660	0.800		0.730
14.000	32.6	23.315	0.33	5.76	6.25		0.680	0.830		0.755
15.000	41.5	29.673	0.42	5.73	6.22		0.710	0.860		0.785

		s	σ_S	σ_P
$0.7\,\sigma_1$	0.35	0.54125	0.20188	0.2
$0.3\,\sigma_1$	0.15	0.33938		
$0.7\sigma_2$	0.35	0.76167	0.08666	0.2
$0.3\sigma_2$	0.15	0.675		
D (mm)	300			
E_{V1}	232.91			
E_{V2}	519.25			
Area (Sq.m)	0.07065			

Ev2/Ev1	2.23		



LOAD
UN LOAD
RE LOAD

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant — Contractor — Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+200	TO	520+372
Date:	25-09-23		

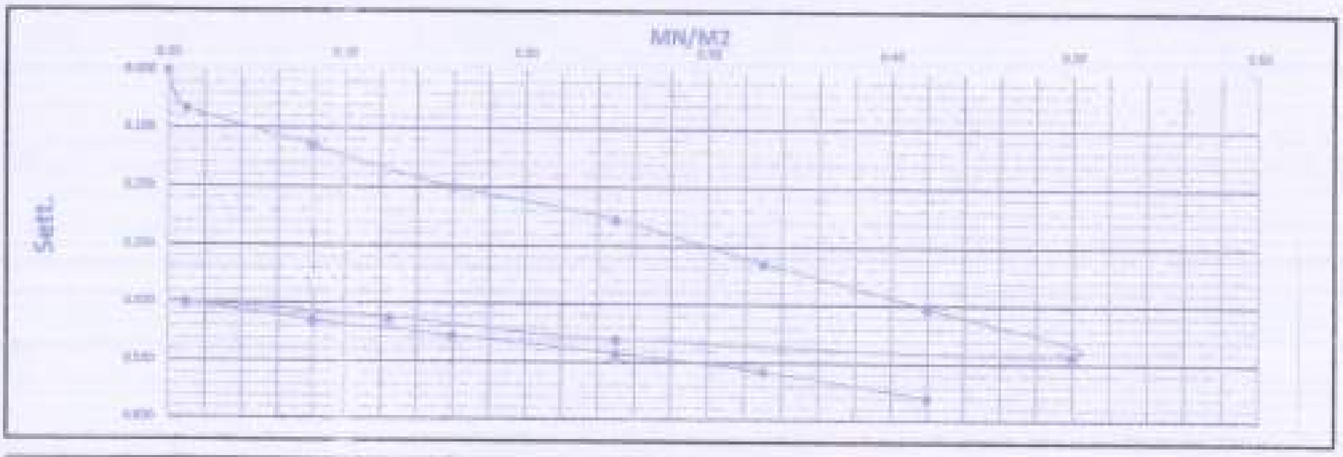
COMPANY	IBRAHIM NASSAR
Location	520+350

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	AVG. Sett.
Stage No.	Bar	KN	MN/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.30	7.39		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.25	7.31		0.050	0.080		0.065
2.000	7.9	5.652	0.08	7.19	7.24		0.110	0.150		0.130
0.080	15.8	11.304	0.16	7.12	7.17		0.180	0.220		0.200
4.000	24.7	17.663	0.25	7.06	7.12		0.240	0.270		0.255
5.000	32.6	23.315	0.33	7.00	7.03		0.300	0.360		0.330
6.000	41.5	29.673	0.42	6.93	6.95		0.370	0.440		0.405
7.000	49.4	35.325	0.50	6.84	6.88		0.460	0.510		0.485
8.000	24.7	17.663	0.25	6.86	6.91		0.440	0.480		0.460
9.000	12.4	8.831	0.12	6.89	6.95		0.410	0.440		0.425
9.000	1.0	0.707	0.01	6.91	6.98		0.390	0.410		0.400
10.000	1.0	0.707	0.01	6.91	6.98		0.390	0.410		0.400
11.000	7.9	5.652	0.08	6.87	6.96		0.430	0.430		0.430
12.000	15.8	11.304	0.16	6.85	6.93		0.450	0.460		0.455
13.000	24.7	17.663	0.25	6.83	6.89		0.470	0.500		0.485
14.000	32.6	23.315	0.33	6.80	6.86		0.500	0.530		0.515
15.000	41.5	29.673	0.42	6.76	6.81		0.540	0.580		0.560

		s	ΔS	Δσ
$0.7\sigma_1$	0.35	0.335	0.14375	0.2
$0.3\sigma_1$	0.15	0.19125		
$0.7\sigma_2$	0.35	0.525	0.065	0.2
$0.3\sigma_2$	0.15	0.46		
D (mm)	300			
Ev_1	313.04			
Ev_2	692.34			
Area (Sq.m)	0.07065			

Ev2/Ev1	2.21		

LOAD
UN LOAD
RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+200	TO	520+372
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+370

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MN/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.26	8.06		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.20	8.01		0.060	0.070		0.065
2.000	7.9	5.652	0.08	8.16	7.98		0.100	0.100		0.100
0.080	15.8	11.304	0.16	8.11	7.92		0.150	0.160		0.155
4.000	24.7	17.663	0.25	8.05	7.86		0.210	0.220		0.215
5.000	32.6	23.315	0.33	8.00	7.77		0.260	0.310		0.285
6.000	41.5	29.673	0.42	7.91	7.70		0.350	0.380		0.365
7.000	49.4	35.325	0.50	7.89	7.66		0.370	0.430		0.400
8.000	24.7	17.663	0.25	7.96	7.72		0.300	0.360		0.330
9.000	12.4	8.831	0.12	8.01	7.77		0.250	0.310		0.280
9.000	1.0	0.707	0.01	8.09	7.89		0.170	0.190		0.180
10.000	1.0	0.707	0.01	8.09	7.89		0.170	0.190		0.180
11.000	7.9	5.652	0.08	8.05	7.88		0.210	0.200		0.205
12.000	15.8	11.304	0.16	7.99	7.86		0.270	0.220		0.245
13.000	24.7	17.663	0.25	7.90	7.85		0.360	0.230		0.295
14.000	32.6	23.315	0.33	7.85	7.82		0.410	0.260		0.335
15.000	41.5	29.673	0.42	7.83	7.75		0.430	0.330		0.380

		s	ΔS	Δσ
0.7 σ_1	0.35	0.33458	0.18625	0.2
0.3 σ_1	0.15	0.14813		
0.7 σ_2	0.35	0.345	0.115	0.2
0.3 σ_2	0.15	0.23		
D (mm)	300			
Ev_1	241.61			
Ev_2	391.31			
Area (Sq.m)	0.07069			

Ev2/Ev1	1.62		

LOAD
UN LOAD
RE LOAD

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+372	TO	520+500
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+388

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	8.15	8.75		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.11	8.73		0.040	0.020		0.030
2.000	7.9	5.652	0.08	8.07	8.69		0.080	0.060		0.070
0.080	15.8	11.304	0.16	8.01	8.65		0.140	0.100		0.120
4.000	24.7	17.663	0.25	7.92	8.60		0.230	0.150		0.190
5.000	32.6	23.315	0.33	7.83	8.53		0.320	0.220		0.270
6.000	41.5	29.673	0.42	7.74	8.45		0.410	0.300		0.355
7.000	49.4	35.325	0.50	7.64	8.43		0.510	0.320		0.415
8.000	24.7	17.663	0.25	7.66	8.47		0.490	0.280		0.385
9.000	12.4	8.831	0.12	7.69	8.51		0.460	0.240		0.350
9.000	1.0	0.707	0.01	7.73	8.55		0.420	0.200		0.310
10.000	1.0	0.707	0.01	7.73	8.55		0.420	0.200		0.310
11.000	7.9	5.652	0.08	7.72	8.52		0.430	0.230		0.330
12.900	15.8	11.304	0.16	7.79	8.49		0.450	0.270		0.360
13.000	24.7	17.663	0.25	7.67	8.44		0.480	0.310		0.395
14.000	32.6	23.315	0.33	7.64	8.40		0.510	0.350		0.430
15.000	41.5	29.673	0.42	7.60	8.36		0.550	0.390		0.470

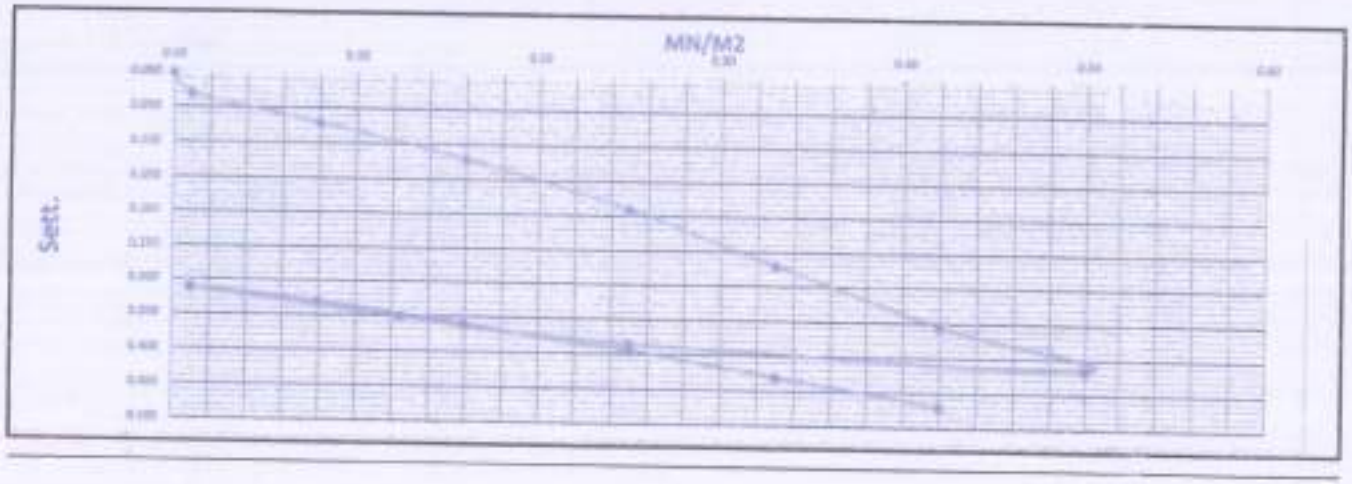
		t	Δδ	Δσ
$0.7\,\sigma_1$	0.35	0.3025	0.18875	0.2
$0.3\,\sigma_1$	0.15	0.11375		
$0.7\sigma_2$	0.35	0.43889	0.08889	0.2
$0.3\sigma_2$	0.15	8.35		
D (mm)	300			
Ev_1	238.41			
Ev_2	506.26			
Area (Sq.m)	0.07065			

$K=\Delta/E_{v1}$	2.12		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

المعمل المركزي

Contractor Consultant | Consultant | Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+372	TO	520+500
Date:	25-09-23		

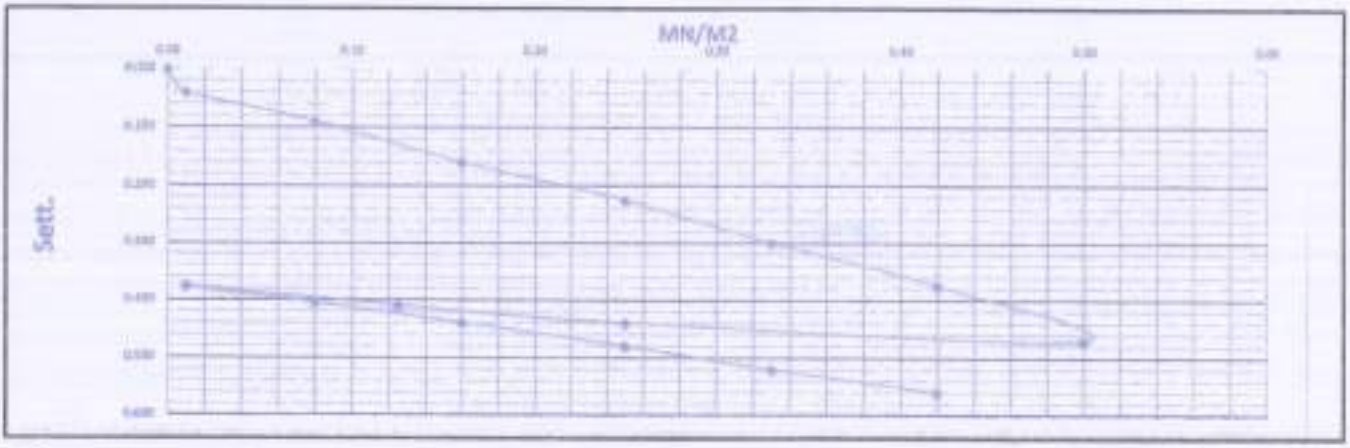
COMPANY	IBRAHIM NASSAR
Location	520+405

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.78	7.54		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.74	7.50		0.040	0.040		0.040
2.000	7.9	5.652	0.08	7.69	7.45		0.090	0.090		0.090
0.000	15.8	11.304	0.16	7.61	7.39		0.170	0.150		0.160
4.000	24.7	17.663	0.25	7.54	7.33		0.240	0.210		0.225
5.000	32.6	23.315	0.33	7.43	7.29		0.350	0.250		0.300
6.000	41.5	29.673	0.42	7.35	7.22		0.430	0.320		0.375
7.000	49.4	35.325	0.50	7.21	7.17		0.570	0.370		0.470
8.000	24.7	17.663	0.25	7.24	7.20		0.540	0.340		0.440
9.000	12.4	8.831	0.12	7.26	7.24		0.520	0.300		0.410
9.000	1.0	0.707	0.01	7.30	7.27		0.480	0.270		0.375
10.000	1.0	0.707	0.01	7.30	7.27		0.480	0.270		0.375
11.000	7.9	5.652	0.08	7.28	7.23		0.500	0.310		0.405
12.000	15.8	11.304	0.16	7.27	7.17		0.510	0.370		0.440
13.000	24.7	17.663	0.25	7.22	7.14		0.560	0.400		0.480
14.000	32.6	23.315	0.33	7.17	7.11		0.610	0.430		0.520
15.000	41.5	29.673	0.42	7.14	7.06		0.640	0.480		0.560

		s	ΔS	Δσ
0.7 σ_1	0.35	0.29188	0.14863	0.2
0.3 σ_1	0.15	0.13125		
0.7σ_2	0.35	0.52889	0.09389	0.2
0.3σ_2	0.15	0.435		
D (mm)	300			
E_{V_1}	320.00			
E_{V_2}	479.31			
Area (Sq.m)	0.07065			

E_{V_2}/E_{V_1}	1.50		

LOAD
UN LOAD
RE LOAD



Lab Specialist	Lab Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+372	TO	520+500
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+430

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	8.80	8.56		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.78	8.55		0.020	0.010		0.015
2.000	7.9	5.652	0.08	8.76	8.51		0.040	0.050		0.045
0.000	15.8	11.304	0.16	8.70	8.44		0.100	0.120		0.110
4.000	24.7	17.663	0.25	8.62	8.35		0.180	0.210		0.195
5.000	32.6	23.315	0.33	8.53	8.24		0.270	0.320		0.295
6.000	41.5	29.673	0.42	8.44	8.16		0.360	0.400		0.380
7.000	49.4	35.325	0.50	8.35	8.05		0.450	0.510		0.480
8.000	24.7	17.663	0.25	8.36	8.12		0.440	0.440		0.440
9.000	12.4	8.831	0.12	8.39	8.16		0.410	0.400		0.405
9.000	1.0	0.707	0.01	8.43	8.20		0.370	0.360		0.365
10.000	1.0	0.707	0.01	8.43	8.20		0.370	0.360		0.365
11.000	7.9	5.652	0.08	8.40	8.17		0.400	0.390		0.395
12.000	15.8	11.304	0.16	8.36	8.14		0.440	0.420		0.430
13.000	24.7	17.663	0.25	8.32	8.11		0.480	0.450		0.465
14.000	32.6	23.315	0.33	8.29	8.06		0.510	0.500		0.505
15.000	41.5	29.673	0.42	8.25	8.01		0.550	0.550		0.550

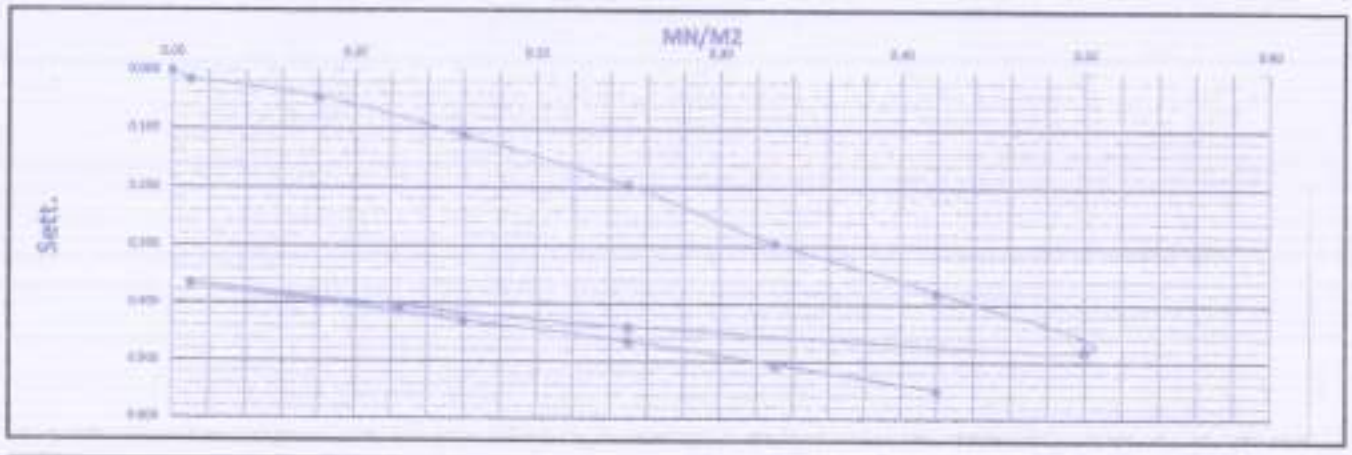
0.7 σ_1	0.35	0.2925		0.19063	0.2
0.3 σ_1	0.15	0.10188			
0.7σ_2	0.35	0.525		0.09	0.2
0.3σ_2	0.15	0.425			
D (mm)	300				
E_{V1}	226.07				
E_{V2}	569.02				
Area (Sq.m)	0.07065				

E_{V2}/E_{V1}	2.11		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+372	TO	520+500
Date:	25-09-23		

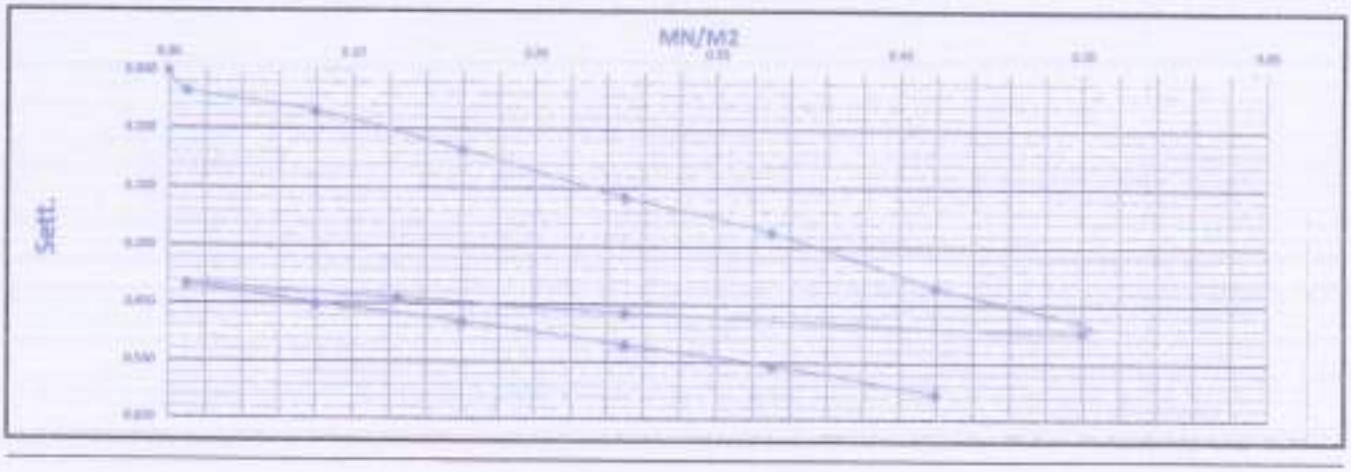
COMPANY	IBRAHIM NASSAR
Location	520+455

Loading Stage No.	Load Bar	Load kN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.30	8.10		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.27	8.06		0.030	0.040		0.035
2.000	7.9	5.652	0.08	7.23	8.03		0.070	0.070		0.070
3.000	15.8	11.304	0.16	7.14	7.99		0.160	0.110		0.135
4.000	24.7	17.663	0.25	7.04	7.93		0.260	0.170		0.215
5.000	32.6	23.315	0.33	6.97	7.88		0.330	0.220		0.275
6.000	41.5	29.673	0.42	6.85	7.81		0.450	0.290		0.370
7.000	49.4	35.325	0.50	6.77	7.74		0.530	0.360		0.445
8.000	24.7	17.663	0.25	6.78	7.79		0.520	0.310		0.415
9.000	12.4	8.831	0.12	6.79	7.83		0.510	0.270		0.390
9.000	1.0	0.707	0.01	6.82	7.85		0.480	0.250		0.365
10.000	1.0	0.707	0.01	6.82	7.85		0.480	0.250		0.365
11.000	7.9	5.652	0.08	6.78	7.82		0.520	0.280		0.400
12.000	15.8	11.304	0.16	6.74	7.80		0.560	0.300		0.430
13.000	24.7	17.663	0.25	6.70	7.76		0.600	0.340		0.470
14.000	32.6	23.315	0.33	6.65	7.74		0.650	0.360		0.505
15.000	41.5	29.673	0.42	6.61	7.68		0.690	0.420		0.555

			v	Δδ	Δσ
$0.7\,\sigma_1$	0.35	0.30438	0.1775		0.2
$0.3\,\sigma_1$	0.15	0.12688			
$0.7\sigma_2$	0.35	0.51611	0.08111		0.2
$0.3\sigma_2$	0.15	0.435			
D (mm)	300				
Σv_1	253.52				
Σv_2	554.82				
Area (54.pi)	0.07065				

Ev2/Ev1	2.19		

LOAD
UN LOAD
RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant Consultant Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+372	TO	520+500
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+480

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.35	8.22		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.31	8.20		0.040	0.020		0.030
2.000	7.9	5.652	0.08	7.27	8.18		0.080	0.040		0.060
0.080	15.8	11.304	0.16	7.23	8.14		0.120	0.080		0.100
4.000	24.7	17.663	0.25	7.16	8.08		0.190	0.140		0.165
5.000	32.6	23.315	0.33	7.08	8.04		0.270	0.180		0.225
6.000	41.5	29.673	0.42	6.98	7.98		0.370	0.240		0.305
7.000	49.4	35.325	0.50	6.91	7.95		0.440	0.270		0.355
8.000	24.7	17.663	0.25	6.93	7.97		0.420	0.250		0.335
9.000	12.4	8.831	0.12	6.95	8.00		0.400	0.220		0.310
9.000	1.0	0.707	0.01	7.00	8.03		0.350	0.190		0.270
10.000	1.0	0.707	0.01	7.00	8.03		0.350	0.190		0.270
11.000	7.9	5.652	0.08	6.96	8.00		0.390	0.220		0.305
12.000	15.8	11.304	0.16	6.94	7.93		0.410	0.290		0.350
13.000	24.7	17.663	0.25	6.90	7.88		0.450	0.340		0.395
14.000	32.6	23.315	0.33	6.88	7.82		0.470	0.400		0.435
15.000	41.5	29.673	0.42	6.85	7.77		0.500	0.450		0.475

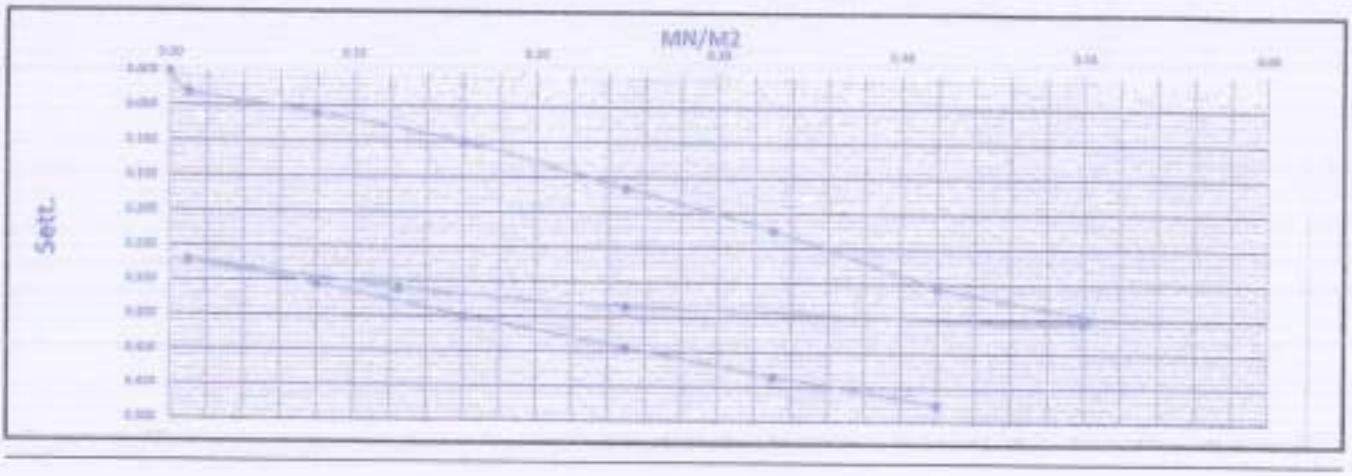
		k	ΔS	Δσ
$0.7\,\sigma_1$	0.35	0.26125	0.16625	0.2
$0.3\,\sigma_1$	0.15	0.895		
$0.7\sigma_2$	0.35	0.64389	0.10389	0.2
$0.3\sigma_2$	0.15	0.54		
D (mm)	300			
Ev_1	270.68			
Ev_2	433.17			
Area (S_4 m)	0.07065			

Ev2/Ev1	1.60		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant

Contractor

Owner

Plate Load Test Results

Layer:	SUB-BALLAST 2		0.90+
Station:	520+372	TO	520+500
Date:	25-09-23		

COMPANY	IBRAHIM NASSAR
Location	520+495

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.10	7.99		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.05	7.94		0.050	0.050		0.050
2.000	7.9	5.652	0.08	6.97	7.90		0.130	0.090		0.110
0.080	15.8	11.304	0.16	6.88	7.82		0.220	0.170		0.195
4.000	24.7	17.663	0.25	6.78	7.74		0.320	0.250		0.285
5.000	32.6	23.315	0.33	6.66	7.69		0.440	0.300		0.370
6.000	41.5	29.673	0.42	6.56	7.62		0.540	0.370		0.455
7.000	49.4	35.325	0.50	6.47	7.54		0.630	0.450		0.540
8.000	24.7	17.663	0.25	6.50	7.56		0.600	0.430		0.515
9.000	12.4	8.831	0.12	6.54	7.59		0.560	0.400		0.480
9.000	1.0	0.707	0.01	6.60	7.63		0.500	0.360		0.430
10.000	1.0	0.707	0.01	6.60	7.63		0.500	0.360		0.430
11.000	7.9	5.652	0.08	6.58	7.62		0.520	0.370		0.445
12.000	15.8	11.304	0.16	6.54	7.61		0.560	0.380		0.470
13.000	24.7	17.663	0.25	6.51	7.57		0.590	0.420		0.505
14.000	32.6	23.315	0.33	6.48	7.53		0.620	0.460		0.540
15.000	41.5	29.673	0.42	6.43	7.50		0.670	0.490		0.580

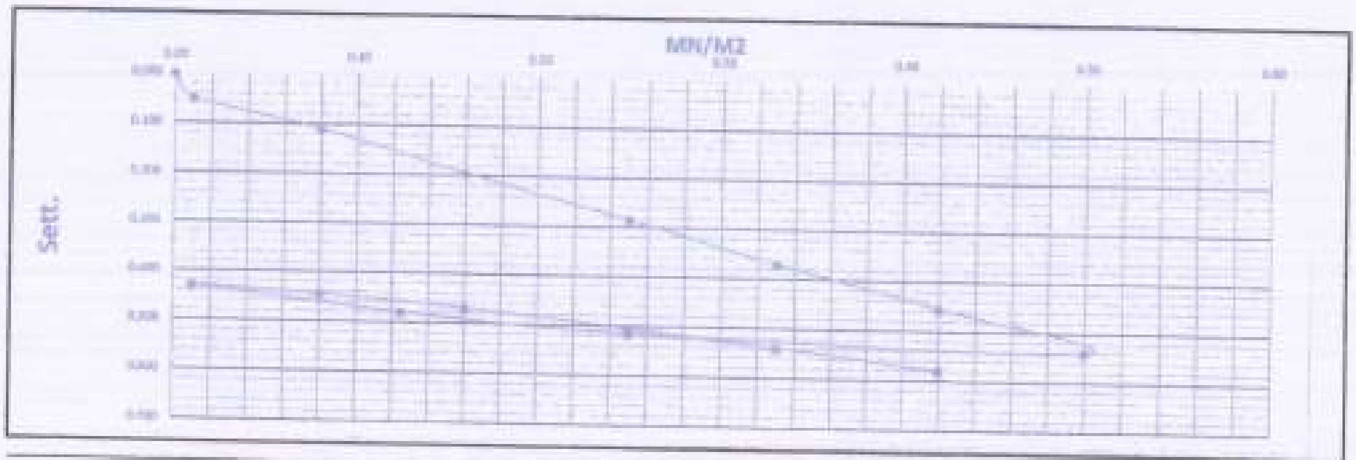
		s	ΔS	Δσ
$0.7\sigma_1$	0.35	0.38063	0.19625	0.2
$0.3\sigma_1$	0.15	0.18438		
$0.7\sigma_2$	0.35	0.54889	0.08889	0.2
$0.3\sigma_2$	0.15	0.46		
D (mm)	300			
Ev_1	229.30			
Ev_2	506.26			
Area (Sq.m)	0.07065			

Ev2/Ev1	2.21		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

مشروع القطار السريع/ هوكة - مطروح

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	FERMA	0.00	
Station:	519+980	TO	520+040
Date:	27-09-23		

COMPANY	IbrahoemNassar
Location	520+080

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.61	8.24		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.56	8.19		0.050	0.050		0.050
2.000	7.9	5.652	0.08	7.49	8.12		0.120	0.120		0.120
0.080	15.8	11.304	0.16	7.40	8.04		0.210	0.200		0.205
4.000	24.7	17.663	0.25	7.31	7.94		0.300	0.300		0.300
5.000	32.6	23.315	0.33	7.22	7.85		0.390	0.390		0.390
6.900	41.5	29.673	0.42	7.13	7.75		0.480	0.490		0.485
7.000	49.4	35.325	0.50	7.06	7.68		0.550	0.560		0.555
8.000	24.7	17.663	0.25	7.08	7.71		0.530	0.530		0.530
9.000	12.4	8.831	0.12	7.11	7.75		0.500	0.490		0.495
9.000	1.0	0.707	0.01	7.16	7.81		0.450	0.430		0.440
10.000	1.0	0.707	0.01	7.16	7.81		0.450	0.430		0.440
11.000	7.9	5.652	0.08	7.09	7.74		0.520	0.500		0.510
12.000	15.8	11.304	0.16	7.02	7.68		0.590	0.560		0.575
13.000	24.7	17.663	0.25	6.96	7.60		0.650	0.640		0.645
14.000	32.6	23.315	0.33	6.90	7.54		0.710	0.700		0.705
15.000	41.5	29.673	0.42	6.83	7.49		0.780	0.750		0.765

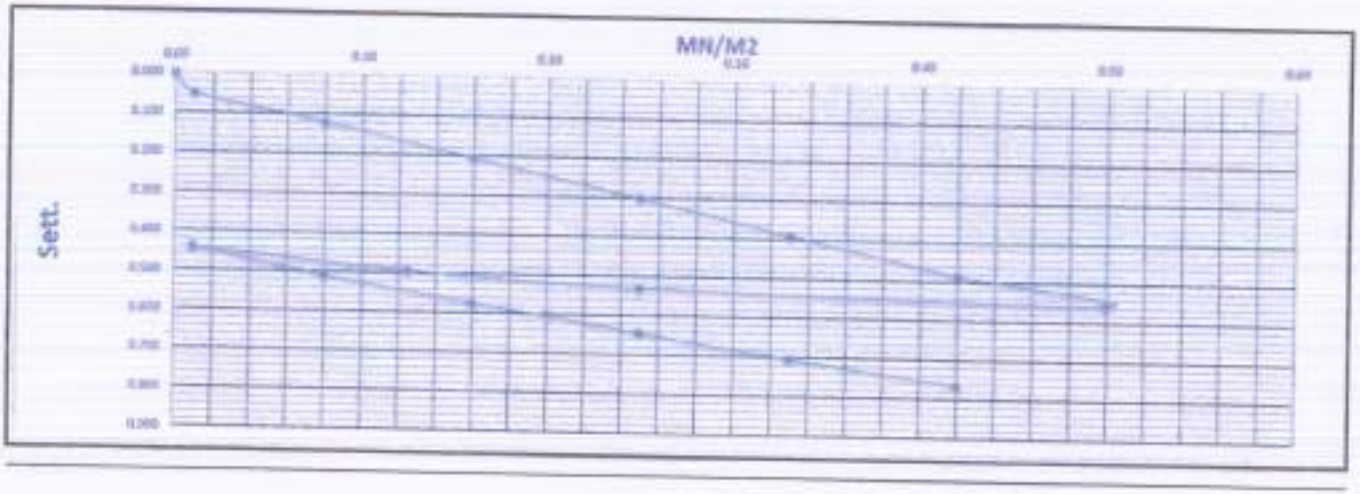
		π	ΔS	$\Delta\sigma$
$0.7\ \sigma_1$	0.35	0.42375	0.22938	0.2
$0.3\ \sigma_1$	0.15	0.19438		
$0.7\sigma_2$	0.35	0.71833	0.13833	0.2
$0.3\sigma_2$	0.15	0.58801		
D (mm)	300			
Es_1	196.19			
Es_2	329.32			
Area (Sq.m)	0.07065			

Es_2/Es_1	1.66		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

9 2023

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	FERMA	0.00	
Station:	519+980	TO	520+040
Date:	27-09-23		

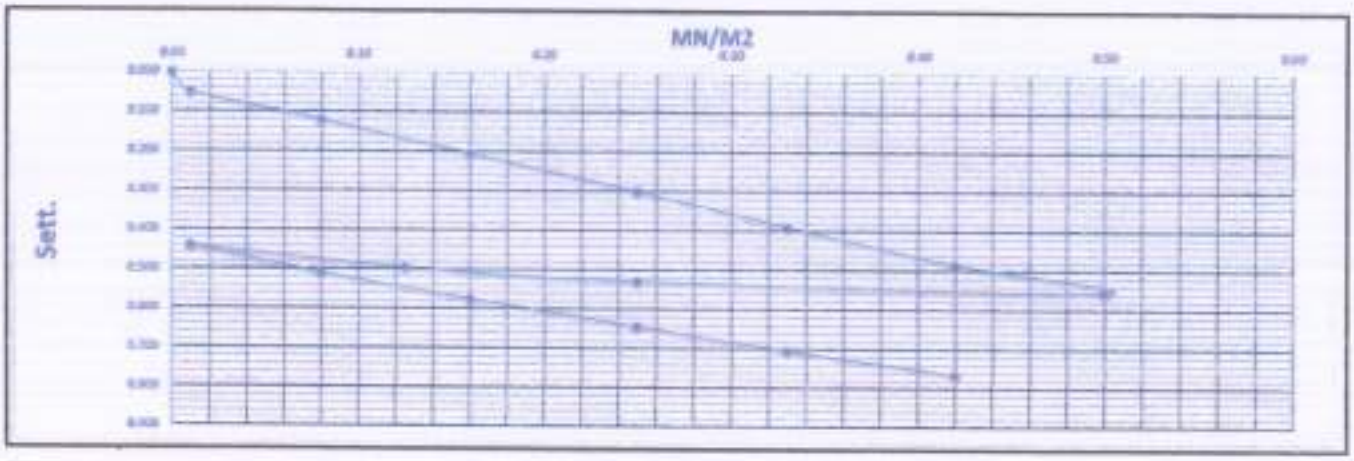
COMPANY	IbrabeemNasser
Location	520+000

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg Sett. mm
0.000	0.0	0.000	0.00	7.61	8.24		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.56	8.19		0.050	0.050		0.050
2.000	7.9	5.652	0.08	7.49	8.12		0.120	0.120		0.120
0.080	15.8	11.304	0.16	7.40	8.04		0.210	0.200		0.205
4.000	24.7	17.663	0.25	7.31	7.94		0.300	0.300		0.300
5.000	32.6	23.315	0.33	7.22	7.85		0.390	0.390		0.390
6.000	41.5	29.673	0.42	7.13	7.75		0.480	0.490		0.485
7.000	49.4	35.325	0.50	7.06	7.68		0.550	0.560		0.555
8.000	24.7	17.663	0.25	7.08	7.71		0.530	0.530		0.530
9.000	12.4	8.831	0.12	7.11	7.75		0.500	0.490		0.495
9.000	1.0	0.707	0.01	7.16	7.81		0.450	0.430		0.440
10.000	1.0	0.707	0.01	7.16	7.81		0.450	0.430		0.440
11.000	7.9	5.652	0.08	7.09	7.74		0.520	0.500		0.510
12.000	15.8	11.304	0.16	7.02	7.68		0.590	0.560		0.575
13.000	24.7	17.663	0.25	6.96	7.60		0.650	0.640		0.645
14.000	32.6	23.315	0.33	6.90	7.54		0.710	0.700		0.705
15.000	41.5	29.673	0.42	6.83	7.49		0.780	0.750		0.765

				Δδ	Δσ
0.7 σ_1	0.35	0.42375		0.22938	0.2
0.3 σ_1	0.15	0.19438			
0.7σ_2	0.35	0.71833		0.13833	0.2
0.3σ_2	0.15	0.58001			
D (mm)	300				
Ev_1	196.19				
Ev_2	325.32				
Area (Sq.m)	0.07065				

Ev2/Ev1	1.66		

LOAD
UN LOAD
RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

المعمل المركزي
مشروع القطار السريع / فوكة - مطروح

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer: FERMA

Station: 520+040 TO 520+232

Date: 20-08-23

COMPANY	IBRAHIM NASSAR
Location	520+060

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.72	7.43		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.68	7.40		0.040	0.030		0.035
2.000	7.9	5.652	0.08	7.61	7.36		0.110	0.070		0.090
0.080	15.8	11.304	0.16	7.55	7.31		0.170	0.120		0.145
4.000	24.7	17.663	0.25	7.48	7.25		0.240	0.180		0.210
5.000	32.6	23.315	0.33	7.39	7.18		0.330	0.250		0.290
6.000	41.5	29.673	0.42	7.28	7.11		0.440	0.320		0.380
7.000	49.4	35.325	0.50	7.18	7.03		0.540	0.400		0.470
8.000	24.7	17.663	0.25	7.20	7.04		0.520	0.390		0.455
9.000	12.4	8.831	0.12	7.24	7.06		0.480	0.370		0.425
9.000	1.0	0.707	0.01	7.29	7.09		0.430	0.340		0.385
10.000	1.0	0.707	0.01	7.29	7.09		0.430	0.340		0.385
11.000	7.9	5.652	0.08	7.28	7.09		0.440	0.340		0.390
12.000	15.8	11.304	0.16	7.26	7.07		0.460	0.360		0.410
13.000	24.7	17.663	0.25	7.23	7.04		0.490	0.390		0.440
14.000	32.6	23.315	0.33	7.19	7.00		0.530	0.430		0.480
15.000	41.5	29.673	0.42	7.16	6.98		0.560	0.450		0.505

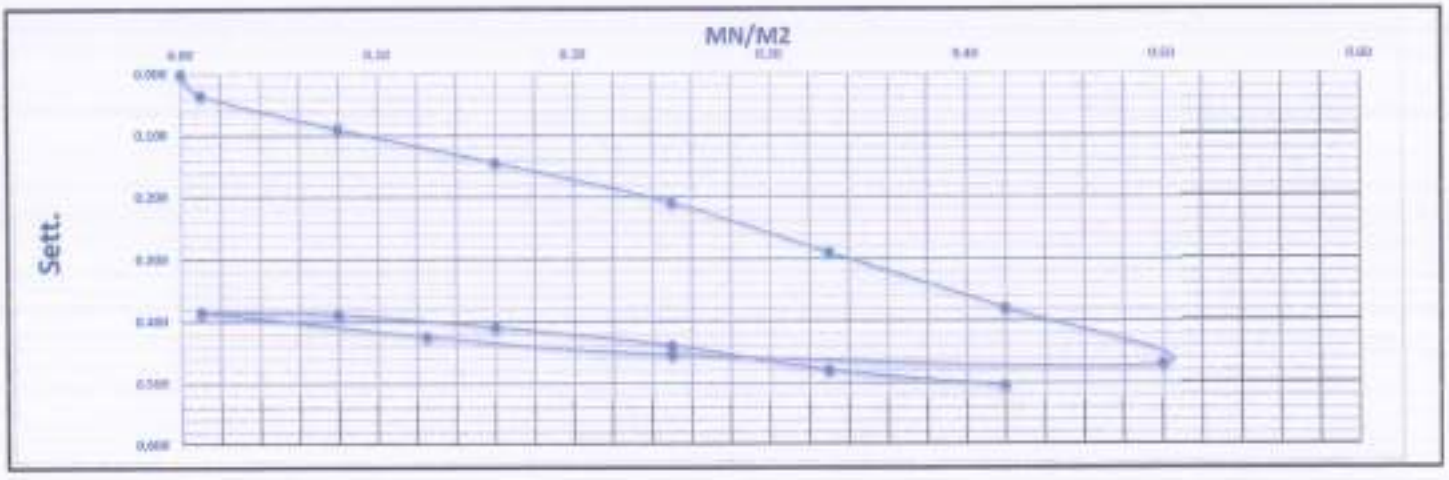
		s	ΔS	Δσ
$0.7\ \sigma_1$	0.35	0.30125	0.16312	0.2
$0.3\ \sigma_1$	0.15	0.13813		
$0.7\sigma_2$	0.35	0.48556	0.09056	0.2
$0.3\sigma_2$	0.15	0.395		
D (mm)	300			
Ev_1	275.86			
Ev_2	496.94			
Area (Sq.m)	0.07065			

Ev2/Ev1	1.80		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name : Youssef Rajab
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer: FERMA

Station: 520+040 TO 520+232

Date: 20-08-23

COMPANY	IBRAHIM NASSAR
Location	520+110

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett . 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	8.24	6.40		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.12	6.31		0.120	0.090		0.105
2.000	7.9	5.652	0.08	8.04	6.27		0.200	0.130		0.165
0.080	15.8	11.304	0.16	7.95	6.23		0.290	0.170		0.230
4.000	24.7	17.663	0.25	7.82	6.17		0.420	0.230		0.325
5.000	32.6	23.315	0.33	7.71	6.10		0.530	0.300		0.415
6.000	41.5	29.673	0.42	7.60	6.04		0.640	0.360		0.500
7.000	49.4	35.325	0.50	7.48	5.97		0.760	0.430		0.595
8.000	24.7	17.663	0.25	7.56	6.02		0.680	0.380		0.530
9.000	12.4	8.831	0.12	7.65	6.10		0.590	0.300		0.445
9.000	1.0	0.707	0.01	7.75	6.19		0.490	0.210		0.350
10.000	1.0	0.707	0.01	7.75	6.19		0.490	0.210		0.350
11.000	7.9	5.652	0.08	7.71	6.17		0.530	0.230		0.380
12.000	15.8	11.304	0.16	7.67	6.11		0.570	0.290		0.430
13.000	24.7	17.663	0.25	7.61	6.06		0.630	0.340		0.485
14.000	32.6	23.315	0.33	7.56	6.05		0.680	0.350		0.515
15.000	41.5	29.673	0.42	7.50	6.00		0.740	0.400		0.570

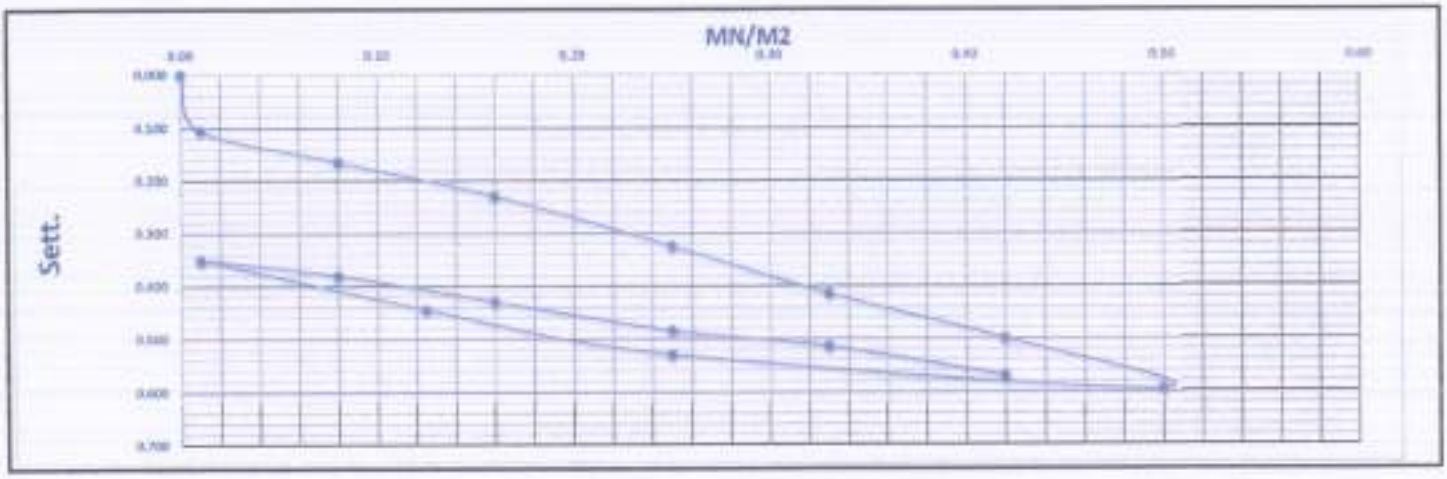
		s	ΔS	Δσ
$0.7\ \sigma_1$	0.35	0.41688	0.105	0.2
$0.3\ \sigma_1$	0.15	0.22188		
$0.7\sigma_2$	0.35	0.52722	0.11722	0.2
$0.3\sigma_2$	0.15	0.41		
D (mm)	300			
Ev_1	230.77			
Ev_2	383.90			
Area (Sq.m)	0.07065			

Ev2/Ev1	1.66		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name : Youssef R-Sab
Sign :	Sign :	Sign : Youssef

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	FERMA		
Station:	520+040	TO	520+232
Date:	20-08-23		

COMPANY	IBRAHIM NASSAR
Location	520+160

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.35	8.17		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.29	8.06		0.060	0.110		0.085
2.000	7.9	5.652	0.08	7.19	7.96		0.160	0.210		0.185
0.080	15.8	11.304	0.16	7.03	7.79		0.320	0.380		0.350
4.000	24.7	17.663	0.25	6.87	7.62		0.480	0.550		0.515
5.000	32.6	23.315	0.33	6.75	7.48		0.600	0.690		0.645
6.000	41.5	29.673	0.42	6.61	7.34		0.740	0.830		0.785
7.000	49.4	35.325	0.50	6.52	7.20		0.830	0.970		0.900
8.000	24.7	17.663	0.25	6.54	7.22		0.810	0.950		0.880
9.000	12.4	8.831	0.12	6.58	7.27		0.770	0.900		0.835
9.000	1.0	0.707	0.01	6.66	7.35		0.690	0.820		0.755
10.000	1.0	0.707	0.01	6.66	7.35		0.690	0.820		0.755
11.000	7.9	5.652	0.08	6.64	7.33		0.710	0.840		0.775
12.000	15.8	11.304	0.16	6.60	7.30		0.750	0.870		0.810
13.000	24.7	17.663	0.25	6.56	7.27		0.790	0.900		0.845
14.000	32.6	23.315	0.33	6.52	7.22		0.830	0.950		0.890
15.000	41.5	29.673	0.42	6.47	7.16		0.880	1.010		0.945

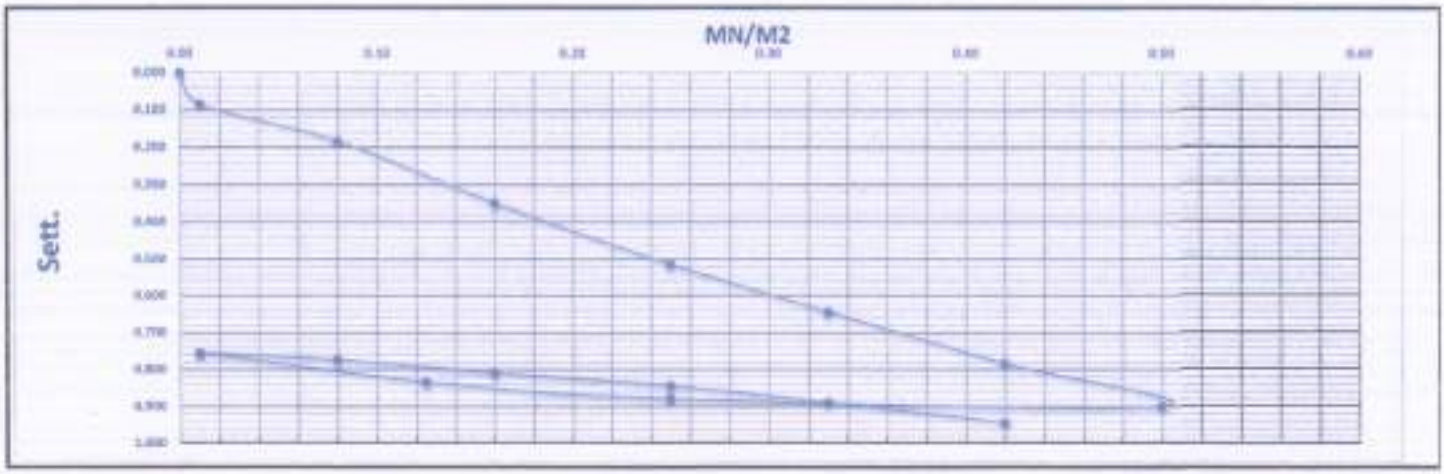
		x	AS	As
$0.7\,\sigma_1$	0.35	0.68438	0.355	0.2
$0.3\,\sigma_1$	0.15	0.32938		
$0.7\sigma_2$	0.35	0.90222	0.10722	0.2
$0.3\sigma_2$	0.15	0.795		
D (mm)	300			
Ev_1	126.76			
Ev_2	419.70			
Area (Sq.m)	0.07065			

Ev2/Ev1	3.31		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name : Youssef Ragab
Sign :	Sign :	Sign : Youssef 20-8-23

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer: FERMA

Station: 520+040 TO 520+232

Date: 20-08-23

COMPANY	IBRAHIM NASSAR
Location	520+210

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.05	6.84		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.90	6.79		0.150	0.050		0.100
2.000	7.9	5.652	0.08	6.77	6.75		0.280	0.090		0.185
8.000	15.8	11.304	0.16	6.56	6.67		0.490	0.170		0.330
4.000	24.7	17.663	0.25	6.36	6.58		0.690	0.260		0.475
5.000	32.6	23.315	0.33	6.16	6.50		0.890	0.340		0.615
6.000	41.5	29.673	0.42	5.97	6.42		1.080	0.420		0.750
7.000	49.4	35.325	0.50	5.79	6.37		1.260	0.470		0.865
8.000	24.7	17.663	0.25	5.82	6.41		1.230	0.430		0.830
9.000	12.4	8.831	0.12	5.91	6.46		1.140	0.380		0.760
9.000	1.0	0.707	0.01	6.02	6.52		1.030	0.320		0.675
10.000	1.0	0.707	0.01	6.02	6.52		1.030	0.320		0.675
11.000	7.9	5.652	0.08	5.99	6.50		1.060	0.340		0.700
12.000	15.8	11.304	0.16	5.95	6.47		1.100	0.370		0.735
13.000	24.7	17.663	0.25	5.89	6.45		1.160	0.390		0.775
14.000	32.6	23.315	0.33	5.83	6.41		1.220	0.430		0.825
15.000	41.5	29.673	0.42	5.78	6.28		1.270	0.560		0.915

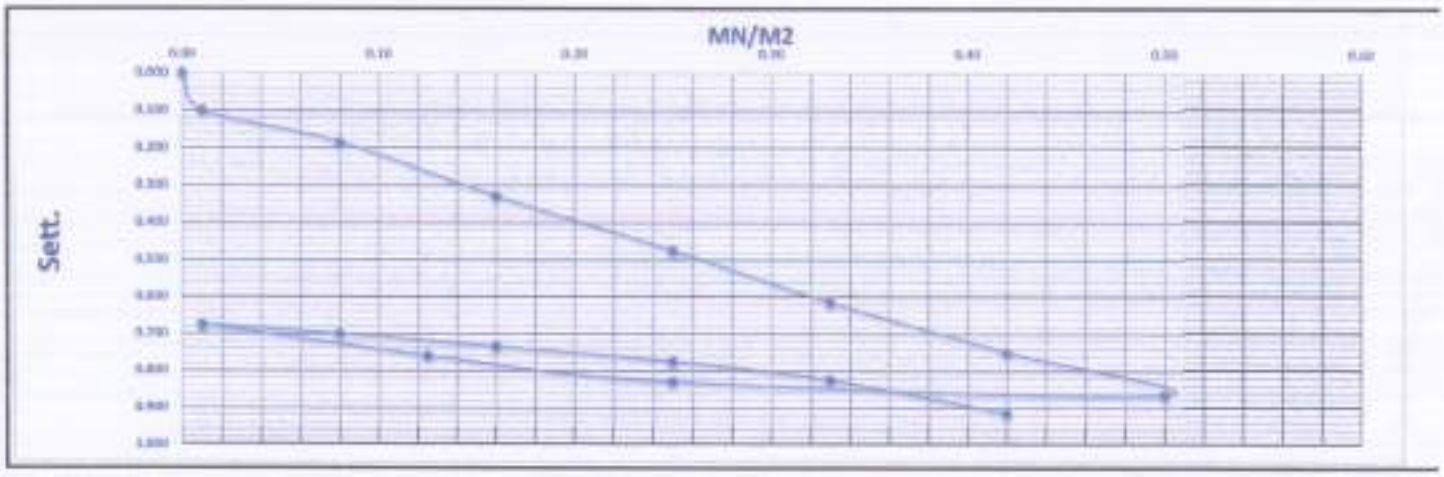
		s	ΔS	Δσ
$0.7\ \sigma_1$	0.35	0.64938	0.3375	0.2
$0.3\ \sigma_1$	0.15	0.31188		
$0.7\sigma_2$	0.35	0.845	0.12	0.2
$0.3\sigma_2$	0.15	0.725		
D (mm)	300			
Ev_1	133.33			
Ev_2	375.01			
Area (Sq.m)	0.07065			

Ev2/Ev1	2.81		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name : Youssef Ragab
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	-1.5		
Station:	519+980	TO	520+040
Date:	17-09-23		

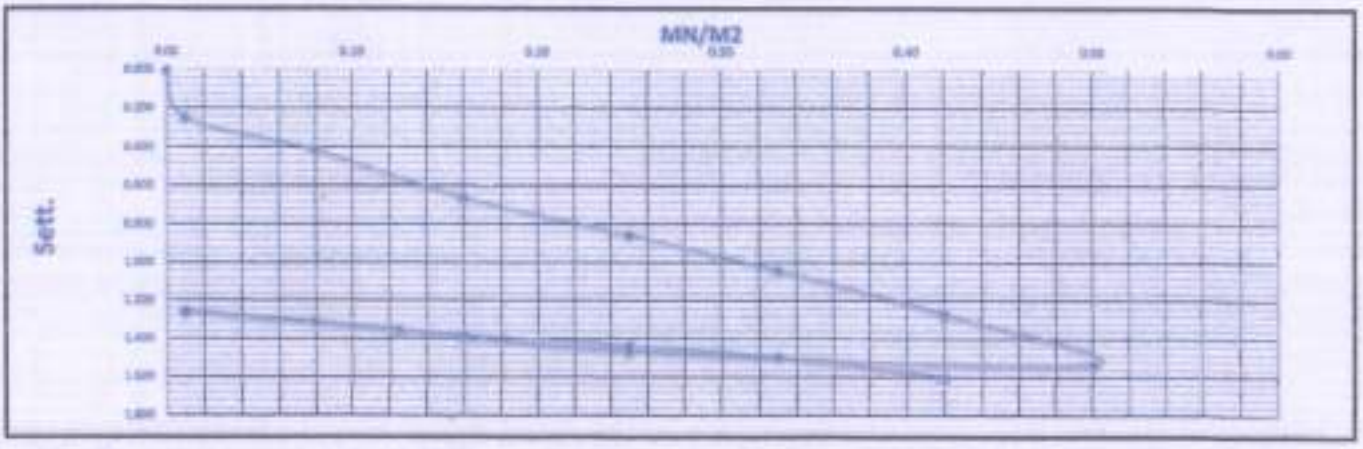
COMPANY	IBRAHIM NASSAR
Location	520+000

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	5.71	5.95		0.000	0.000		0.000
1.000	1.0	0.707	0.01	5.47	5.70		0.240	0.250		0.245
2.000	7.9	5.652	0.08	5.30	5.53		0.410	0.420		0.415
0.000	15.8	11.304	0.16	5.04	5.30		0.670	0.650		0.660
4.000	24.7	17.663	0.25	4.83	5.12		0.880	0.830		0.855
5.000	32.6	23.315	0.33	4.63	4.95		1.080	1.000		1.040
6.000	41.5	29.673	0.42	4.35	4.77		1.360	1.180		1.270
7.000	49.4	35.325	0.50	4.06	4.53		1.650	1.420		1.535
8.000	24.7	17.663	0.25	4.11	4.62		1.600	1.330		1.465
9.000	12.4	8.831	0.12	4.19	4.76		1.520	1.198		1.355
9.000	1.0	0.707	0.01	4.32	4.83		1.390	1.120		1.255
10.000	1.0	0.707	0.01	4.32	4.83		1.390	1.120		1.255
11.000	7.9	5.652	0.08	4.26	4.78		1.450	1.170		1.310
12.000	15.8	11.304	0.16	4.20	4.70		1.510	1.250		1.380
13.000	24.7	17.663	0.25	4.15	4.64		1.560	1.310		1.435
14.000	32.6	23.315	0.33	4.07	4.60		1.640	1.350		1.495
15.000	41.5	29.673	0.42	3.93	4.53		1.780	1.420		1.600

		s	ΔS	Δs
$0.7\,\sigma_1$	0.35	1.03813	0.40875	0.2
$0.3\,\sigma_1$	0.15	0.62938		
$0.7\sigma_2$	0.35	1.51833	0.15333	0.2
$0.3\sigma_2$	0.15	1.36501		
D (mm)	300			
E_{V1}	110.89			
E_{V2}	293.49			
Area (πr^2)	0.07065			

E_{V2}/E_{V1}	2.67		

LOAD
UN LOAD
RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name : Hassan
Sign :	Sign :	Sign : 243

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	EMBANKMENT -5.5		
Station:	519+980	TO	520+040
Date:	29-08-23		

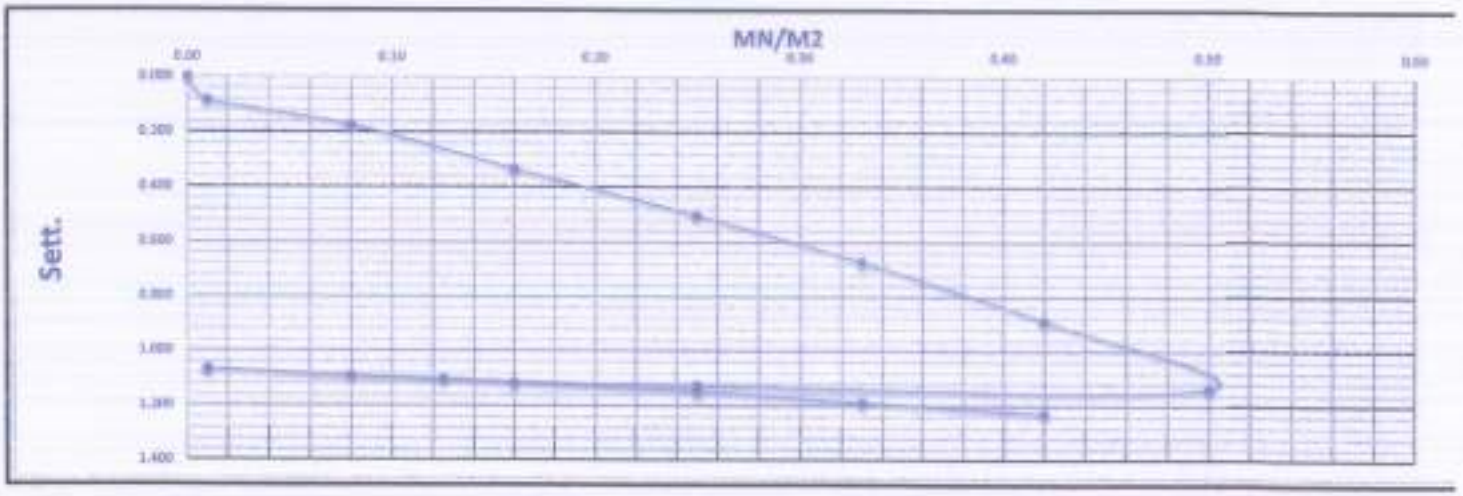
COMPANY	IbraheemNassa
Location	520+030

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.16	7.29		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.07	7.21		0.090	0.080		0.085
2.000	7.9	5.652	0.08	7.00	7.10		0.160	0.190		0.175
0.080	15.8	11.304	0.16	6.88	6.90		0.280	0.390		0.335
4.000	24.7	17.663	0.25	6.72	6.72		0.440	0.570		0.505
5.000	32.6	23.315	0.33	6.60	6.50		0.560	0.790		0.675
6.000	41.5	29.673	0.42	6.42	6.25		0.740	1.040		0.890
7.000	49.4	35.325	0.50	6.21	5.96		0.950	1.330		1.140
8.000	24.7	17.663	0.25	6.22	5.97		0.940	1.320		1.130
9.000	12.4	8.831	0.12	6.25	5.99		0.910	1.300		1.105
9.000	1.0	0.707	0.01	6.28	6.03		0.880	1.260		1.070
10.000	1.0	0.707	0.01	6.28	6.03		0.880	1.260		1.070
11.000	7.9	5.652	0.08	6.26	6.00		0.900	1.290		1.095
12.000	15.8	11.304	0.16	6.23	5.98		0.930	1.310		1.120
13.000	24.7	17.663	0.25	6.20	5.95		0.960	1.340		1.150
14.000	32.6	23.315	0.33	6.16	5.91		1.000	1.380		1.190
15.000	41.5	29.673	0.42	6.12	5.87		1.040	1.420		1.230

		S	ΔS	Δσ
0.7 σ_1	0.35	0.67125	0.35625	0.2
0.3 σ_1	0.15	0.315		
0.7σ_2	0.35	1.19889	0.07889	0.2
0.3σ_2	0.15	1.12		
D (mm)	300			
Ev_1	126.32			
Ev_2	570.44			
Area (Sq.m)	0.07065			

Ev2/Ev1	4.52		

LOAD
UN LOAD
RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	PREPARED SUBGRADE 2		0.50+
Station:	520+372	TO	520+500
Date:	28-08-23		

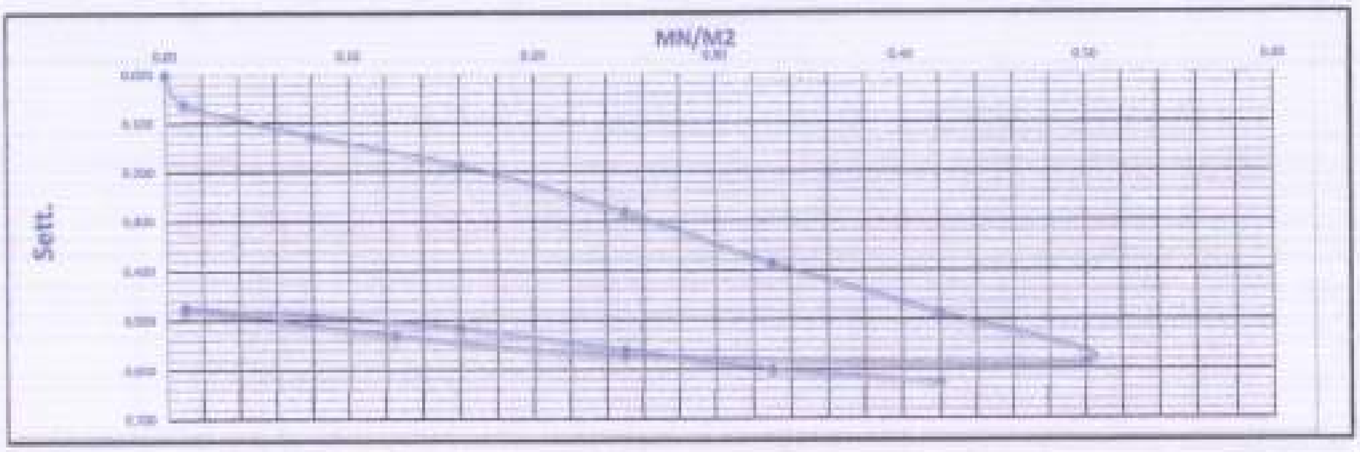
COMPANY	IBRAHIM NASSAR
Location	520+375

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	8.52	7.84		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.46	7.78		0.060	0.060		0.060
2.000	7.9	5.652	0.08	8.39	7.72		0.130	0.120		0.125
0.000	15.8	11.304	0.16	8.31	7.68		0.210	0.160		0.185
4.000	24.7	17.663	0.25	8.22	7.58		0.300	0.260		0.280
5.000	32.6	23.315	0.33	8.13	7.46		0.390	0.380		0.385
6.000	41.5	29.673	0.42	8.02	7.37		0.500	0.470		0.485
7.000	49.4	35.325	0.50	7.90	7.29		0.620	0.550		0.585
8.000	24.7	17.663	0.25	7.91	7.31		0.610	0.530		0.570
9.000	12.4	8.831	0.12	7.94	7.36		0.580	0.480		0.530
9.000	1.0	0.707	0.01	7.99	7.42		0.530	0.420		0.475
10.000	1.0	0.707	0.01	7.99	7.42		0.530	0.420		0.475
11.000	7.9	5.652	0.08	7.97	7.41		0.550	0.430		0.490
12.000	15.8	11.304	0.16	7.95	7.38		0.570	0.460		0.515
13.000	24.7	17.663	0.25	7.91	7.33		0.610	0.510		0.560
14.000	32.6	23.315	0.33	7.86	7.30		0.660	0.540		0.600
15.000	41.5	29.673	0.42	7.84	7.27		0.680	0.570		0.625

		s	ΔS	Δσ
$0.7\sigma_1$	0.35	0.3975	0.22	0.2
$0.3\sigma_1$	0.15	0.1775		
$0.7\sigma_2$	0.35	0.60556	0.10055	0.2
$0.3\sigma_2$	0.15	0.505		
D (mm)	300			
Ev_1	204.55			
Ev_2	447.52			
Area (Sq.m)	0.07065			

Ev2/Ev1	2.19		

LOAD
UN LOAD
RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed ...	Name :
Sign :	Sign :	Sign :

مشروع القطار السريع / فوكة - مطروح

Contractor Consultant | Consultant | Owner

Plate Load Test Results

Layer:	PREPARED SUBGRADE 2		0.50+
Station:	520+372	TO	520+500
Date:	28-08-23		

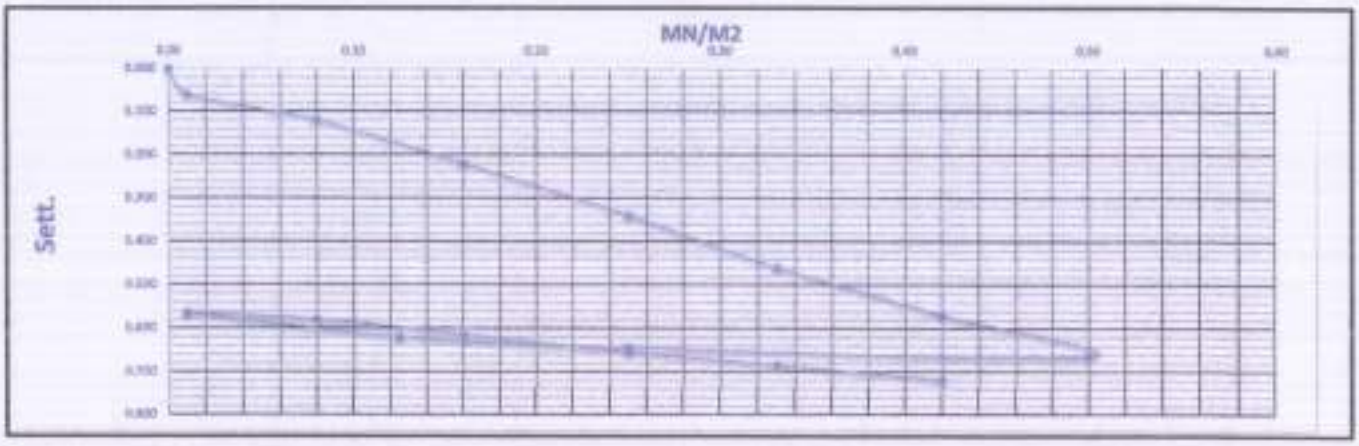
COMPANY	IBRAHIM NASSAR
Location	520+390

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	8.29	7.46		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.22	7.41		0.070	0.050		0.060
2.000	7.9	5.652	0.08	8.17	7.34		0.120	0.120		0.120
0.080	15.8	11.304	0.16	8.11	7.20		0.180	0.260		0.220
4.000	24.7	17.663	0.25	8.01	7.06		0.280	0.400		0.340
5.000	32.6	23.315	0.33	7.94	6.89		0.350	0.570		0.460
6.000	41.5	29.673	0.42	7.84	6.77		0.450	0.690		0.570
7.000	49.4	35.325	0.50	7.77	6.65		0.520	0.810		0.665
8.000	24.7	17.663	0.25	7.80	6.66		0.490	0.800		0.645
9.000	12.4	8.831	0.12	7.83	6.68		0.460	0.780		0.620
9.000	1.0	0.707	0.01	7.90	6.72		0.390	0.740		0.565
10.000	1.0	0.707	0.01	7.90	6.72		0.390	0.740		0.565
11.000	7.9	5.652	0.08	7.89	6.70		0.400	0.760		0.580
12.000	15.8	11.304	0.16	7.85	6.67		0.440	0.790		0.615
13.000	24.7	17.663	0.25	7.81	6.63		0.480	0.830		0.655
14.000	32.6	23.315	0.33	7.78	6.60		0.510	0.860		0.685
15.000	41.5	29.673	0.42	7.74	6.57		0.550	0.890		0.720

		x	ΔS	λ_e
$0.7\,\sigma_1$	0.35	0.48688	0.27938	0.2
$0.3\,\sigma_1$	0.15	0.2975		
$0.7\sigma_2$	0.35	0.69278	0.09778	0.2
$0.3\sigma_2$	0.15	0.595		
D (mm)	300			
E_{V1}	181.07			
E_{V2}	468.23			
Area (S_4)	0.07065			

Ev2/Ev1	2.86		

LOAD
UN LOAD
RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

Contractor Consultant

Contractor

Owner

Plate Load Test Results

Layer:	PREPARED SUBGRADE 2		0.50+
Station:	520+372	TO	520+500
Date:	28-08-23		

COMPANY	IBRAHIM NASSAR
Location	520+415

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MN/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.41	8.34		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.36	8.28		0.050	0.060		0.055
2.000	7.9	5.652	0.08	8.27	8.21		0.140	0.130		0.135
0.080	15.8	11.304	0.16	8.17	8.13		0.240	0.210		0.225
4.000	24.7	17.663	0.25	8.05	8.04		0.360	0.300		0.330
5.000	32.6	23.315	0.33	7.91	7.96		0.500	0.380		0.440
6.000	41.5	29.673	0.42	7.76	7.88		0.650	0.460		0.555
7.000	49.4	35.325	0.50	7.61	7.79		0.800	0.550		0.675
8.000	24.7	17.663	0.25	7.62	7.81		0.790	0.530		0.660
9.000	12.4	8.831	0.12	7.65	7.84		0.760	0.500		0.630
9.000	1.0	0.707	0.01	7.71	7.88		0.700	0.460		0.580
10.000	1.0	0.707	0.01	7.71	7.88		0.700	0.460		0.580
11.000	7.9	5.652	0.08	7.70	7.86		0.710	0.480		0.595
12.000	15.8	11.304	0.16	7.68	7.83		0.730	0.510		0.620
13.000	24.7	17.663	0.25	7.64	7.80		0.770	0.540		0.655
14.000	32.6	23.315	0.33	7.61	7.77		0.800	0.570		0.685
15.000	41.5	29.673	0.42	7.57	7.74		0.840	0.600		0.720

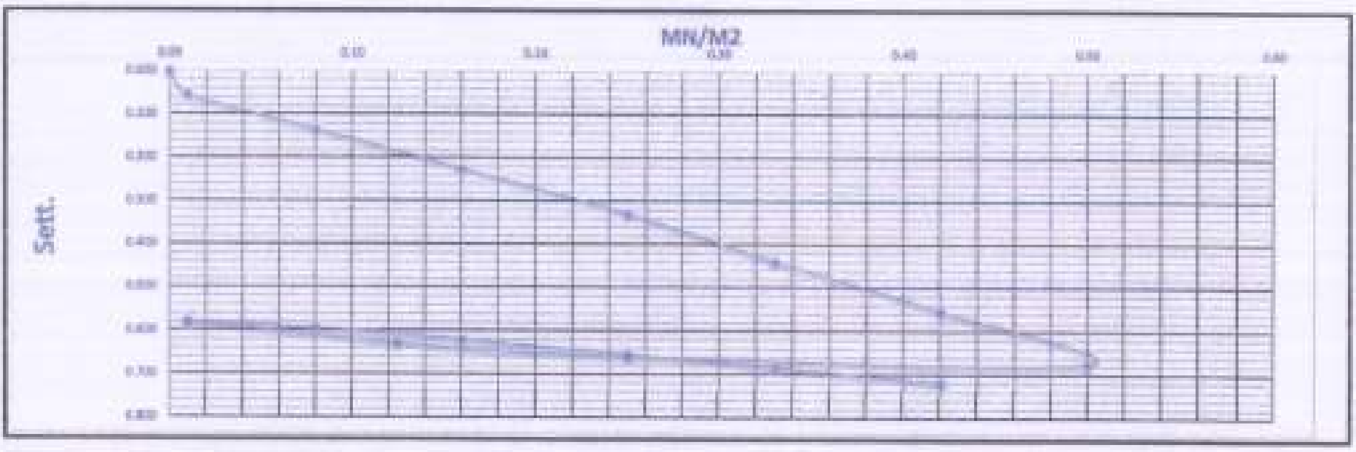
		s	ΔS	Δσ
$0.7\,\sigma_1$	0.35	0.45	0.23625	0.2
$0.3\,\sigma_1$	0.15	0.21375		
$0.7\sigma_2$	0.35	0.69278	0.08278	0.2
$0.3\sigma_2$	0.15	0.61		
D (mm)	300			
Ev_1	190.48			
Ev_2	543.63			
Area (Sq.m)	0.07065			

Ev2/Ev1	2.85		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name :
Sign :	Sign :	Sign :

مشروع القطار السريع / فوكة - مطروح

Contractor

Plate Load Test Results

Layer:	PREPARED SUBGRADE 2		0.50+
Station:	520+372	TO	520+500
Date:	28-08-23		

COMPANY	IBRAHIM NASSAR
Location	520+440

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	8.17	7.93		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.11	7.89		0.060	0.040		0.050
2.000	7.9	5.652	0.08	8.01	7.83		0.160	0.100		0.130
3.000	15.8	11.304	0.16	7.92	7.77		0.250	0.160		0.205
4.000	24.7	17.663	0.25	7.80	7.69		0.370	0.240		0.305
5.000	32.6	23.315	0.33	7.66	7.59		0.510	0.340		0.425
6.000	41.5	29.673	0.42	7.51	7.48		0.660	0.450		0.555
7.000	49.4	35.325	0.50	7.37	7.40		0.800	0.530		0.665
8.000	24.7	17.663	0.25	7.39	7.43		0.780	0.500		0.640
9.000	12.4	8.831	0.12	7.43	7.46		0.740	0.470		0.605
9.000	1.0	0.707	0.01	7.48	7.49		0.690	0.440		0.565
10.000	1.0	0.707	0.01	7.48	7.49		0.690	0.440		0.565
11.000	7.9	5.652	0.08	7.47	7.48		0.700	0.450		0.575
12.000	15.8	11.304	0.16	7.43	7.45		0.740	0.480		0.610
13.000	24.7	17.663	0.25	7.40	7.41		0.770	0.520		0.645
14.000	32.6	23.315	0.33	7.36	7.38		0.810	0.550		0.680
15.000	41.5	29.673	0.42	7.32	7.34		0.850	0.590		0.720

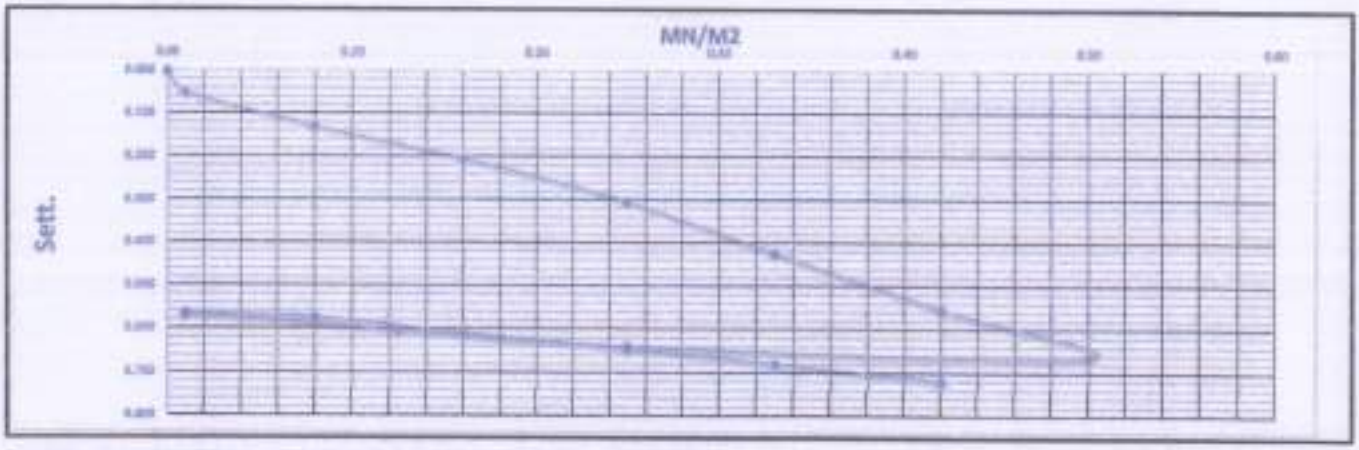
		z	Δδ	Δσ
$0.7\,\sigma_1$	0.35	0.45875	0.26313	0.2
$0.3\,\sigma_1$	0.15	0.19563		
$0.7\sigma_2$	0.35	0.68889	0.10389	0.2
$0.3\sigma_2$	0.15	0.585		
D (mm)	300			
E_{V_1}	171.82			
E_{V_2}	433.16			
Area (Sq.m)	0.07065			

E_{V2}/E_{V1}	2.52		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name :
Sign :	Sign :	Sign :

Contractor Consultant | Contractor | Owner

Plate Load Test Results

Layer:	PREPARED SUBGRADE 2		0.50+
Station:	520+372	TO	520+500
Date:	28-08-23		

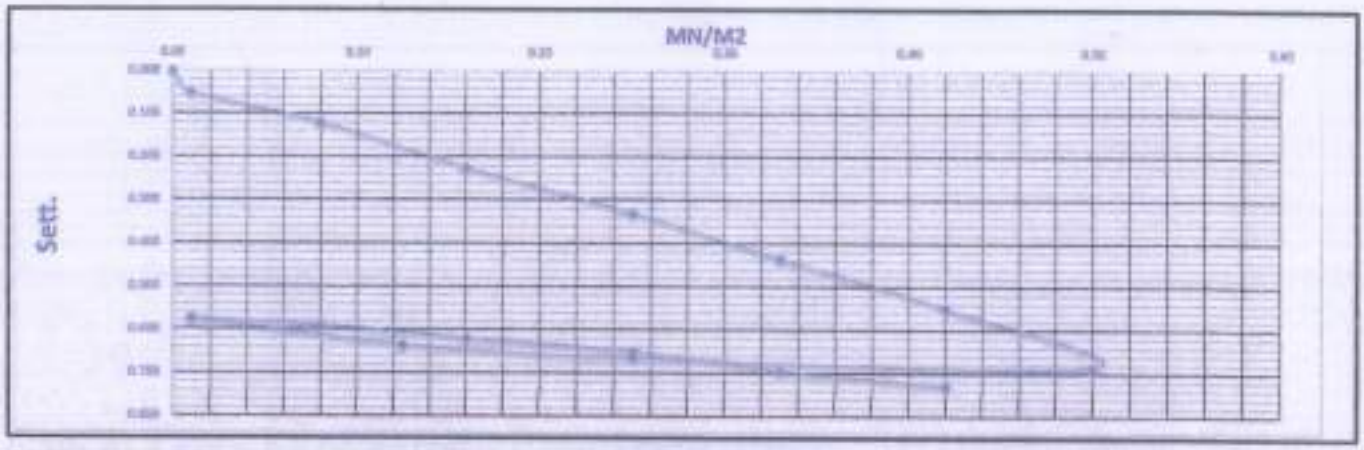
COMPANY	IBRAHIM NASSAR
Location	520+465

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Ave Sett. mm
0.000	0.0	0.000	0.00	7.82	8.41		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.76	8.37		0.060	0.040		0.050
2.000	7.9	5.652	0.08	7.68	8.31		0.140	0.100		0.120
3.000	15.8	11.304	0.16	7.54	8.24		0.280	0.170		0.225
4.000	24.7	17.663	0.25	7.40	8.17		0.420	0.240		0.330
5.000	32.6	23.315	0.33	7.26	8.10		0.560	0.310		0.435
6.000	41.5	29.673	0.42	7.11	8.02		0.710	0.390		0.550
7.000	49.4	35.325	0.50	6.95	7.91		0.870	0.500		0.685
8.000	24.7	17.663	0.25	6.97	7.93		0.850	0.480		0.665
9.000	12.4	8.831	0.12	6.99	7.97		0.830	0.440		0.635
9.000	1.0	0.707	0.01	7.05	8.03		0.770	0.380		0.575
10.000	1.0	0.707	0.01	7.05	8.03		0.770	0.380		0.575
11.000	7.9	5.652	0.08	7.04	8.01		0.780	0.400		0.590
12.000	15.8	11.304	0.16	7.01	7.98		0.810	0.430		0.620
13.000	24.7	17.663	0.25	6.98	7.95		0.840	0.460		0.650
14.000	32.6	23.315	0.33	6.93	7.91		0.890	0.500		0.695
15.000	41.5	29.673	0.42	6.90	7.87		0.920	0.540		0.730

		s	ΔS	Δσ
$0.7\,\sigma_1$	0.35	0.43188	0.22	0.2
$0.3\,\sigma_1$	0.15	0.21188		
$0.7\sigma_2$	0.35	0.70278	0.89778	0.2
$0.3\sigma_2$	0.15	0.695		
D (mm)	300			
E_{v1}	304.55			
E_{v2}	460.33			
Area (Sq.m)	0.07065			

E2/E1	1.51		

LOAD
UN LOAD
RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name :
Sign :	Sign :	Sign :

مشروع الكتار السريع / طوكة - مطروح

Contractor Consultant

Contractor

Plate Load Test Results

Layer:	PREPARED SUBGRADE 2	0.50+	
Station:	520+372	TO	520+500
Date:	28-08-23		

COMPANY	IBRAHIM NASSAR
Location	520+490

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dial 1 mm	Dial 2 mm	Dial 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	6.68	8.05		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.60	7.99		0.080	0.060		0.070
2.000	7.9	5.652	0.08	6.49	7.97		0.190	0.080		0.135
0.000	15.8	11.304	0.16	6.35	7.93		0.330	0.120		0.225
4.000	24.7	17.663	0.25	6.19	7.88		0.490	0.170		0.330
5.000	32.6	23.315	0.33	6.01	7.79		0.670	0.260		0.465
6.000	41.5	29.673	0.42	5.85	7.73		0.830	0.320		0.575
7.000	49.4	35.325	0.50	5.70	7.63		0.980	0.420		0.700
8.000	24.7	17.663	0.25	5.71	7.65		0.970	0.400		0.685
9.000	12.4	8.831	0.12	5.75	7.69		0.930	0.360		0.645
9.000	1.0	0.707	0.01	5.79	7.72		0.890	0.330		0.610
10.000	1.0	0.707	0.01	5.79	7.72		0.890	0.330		0.610
11.000	7.9	5.652	0.08	5.78	7.72		0.900	0.330		0.615
12.000	15.8	11.304	0.16	5.76	7.71		0.920	0.340		0.630
13.000	24.7	17.663	0.25	5.72	7.69		0.960	0.360		0.660
14.000	32.6	23.315	0.33	5.68	7.65		1.000	0.400		0.700
15.000	41.5	29.673	0.42	5.62	7.62		1.060	0.430		0.745

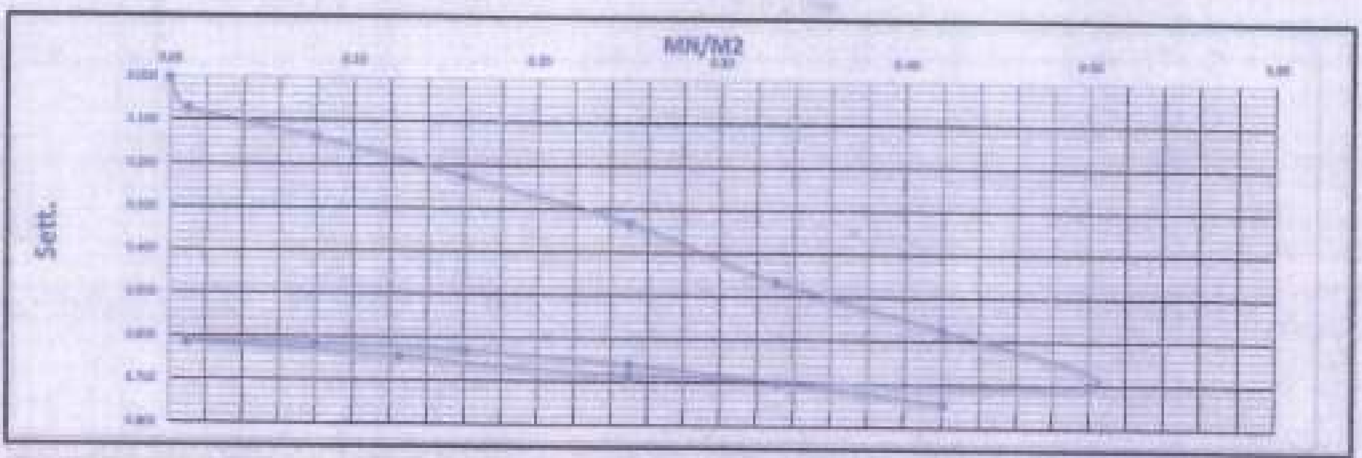
		s	ΔS	Δσ
0.7 σ_1	0.35	0.46563	0.25188	0.2
0.3 σ_1	0.15	0.21375		
0.7 σ_2	0.35	0.71	0.09	0.2
0.3 σ_2	0.15	0.62		
D (mm)	300			
Ev_1	178.66			
Ev_2	[illegible]			
Area (Sq.m)	0.07065			

E·2/Ev1	2.06		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : Mohamed Hamed	Name :
Sign :	Sign :	Sign :

مشروع القطار السريع / فوكة - مطروح

الهيئة العامة
للطرق والكباري

محضر استلام موقع

مشروع:أعمال الجسر الترابي لمشروع القطار الكهربائى السريع قطاع فوكة - مطروح فى المسافة من كم 500+519 الى كم 500+520 بطول 1 كم اتجاه العلمين .

تنفيذ: مكتب ابراهيم نصار حسن منصور للمقاولات العامة والتوريدات

إشراف : المنطقة الخامسة – منطقة غرب الدلتا

طبقاً للعقد رقم (2024/2023/159) بتاريخ : 2023/08/8

إنه في يوم الثلاثاء الموافق 2023/09/12 اجتمع كل من:-

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2- السيد المهندس /إبراهيم عبد الله الحناوي — مهندس العملية - الهيئة العامة للطرق والكباري

3- السيد المهندس / ضياء الدين عبدالله بسيوني — مدير مشروع - مكتب ابراهيم نصار حسن منصور للمقاولات العامة والتوريدات.

وذلك للمرور على مسار العملية المذكورة عاليه لاستلام الموقع :-

وقد تبين أن الموقع خالياً من العوائق الظاهرية ويسمح بالبدء في التنفيذ وبناء عليه يعتبر تاريخ 2023/09/12 هو تاريخ استلام الموقع وبدء الأعمال بالعملية.

واقفل المحضر على ذلك ووقع الحضور

التوقيعات

3- ضياء الدين عبدالله بسيوني

2-

1-

رئيس الإدارة المركزية

منطقة غرب الدلتا

الاسكندرية – مرســـــى مطروح

حميد . مهندس /

"هاني محمد محمود طه"

ENGINEERING CONSULTING OFFICE
المكتب الاستشاري الهندسي
أ.د. خالد قنديل

وزارة النقل
الهيئة العامة للطرق والكباري

مشروع القطار السريع(فوكة - مطروح)

شركة مكتب ابراهيم نصار حسن منصور للمقاولات العامة و التوريدات - من المحطة 519+500 الى المحطة 520+500

محضر تحديد مسافة نقل

(نقل الاتربة))

انه في يوم الثلاثاء الموافق :- 2023/3/21

- بناء على طلب المقاول شركة مكتب ابراهيم نصار حسن منصور للمقاولات العامة و التوريدات لتحديد مسافة نقل الاتربة من محجر (المصرية)

على طريق وادى النطرون العلمين للمشروع المذكور أعلاه.

تم زيارة المحجر من قبل:-

1- السيد المهندس / يحيى زكريا عبد الرحمن مهندس الاستشارى مكتب د.خالد قنديل

2- السيد المهندس / ضياء الدين عبدالله بسيوني مدير مشروع شركة مكتب ابراهيم نصار حسن منصور للمقاولات العامة و التوريدات

وتبين ان المحجر علي مسافة 299 كم من منتصف قطاع شركة مكتب ابراهيم نصار حسن منصور للمقاولات العامة و التوريدات .

احداثي المحجر N 30 ° 33 ' 19 . 7 " E 29 ° 45 ' 06 . 7 "

وعلي ذلك تم توقيع،،

2- ضياء الدين عبدالله بسيوني

1- يحيى زكريا عبدالرحمن