

السيد المهندس / رئيس قطاع التنفيذ والمناطق

تحية طيبة وبعد ,,,,,,,,,,

عشرف ان نرفق لسيادتكم المقياسية المعدلة الخاصة بمشروع اعمال الجسر الترابي للخط
الثانى لمشروع القطار الكهربائى السريع القطاع الرابع (جرجا / قوص) المسافة من الكم
622,997 الى الكم 624,300 بطول 1,30 كم .

- من الكم 622+997 حتى الكم 624+300 بطول 1.3 كم .

اعداد المكتب الاستشارى الهندسى الأستاذ الدكتور / خالد قنديل وعلى مسئوليته

تنفيذ شركة / الرؤى للمقاولات العمومية والتوريدات

برجاء التكرم بالعلم والتوجيه بالالزام

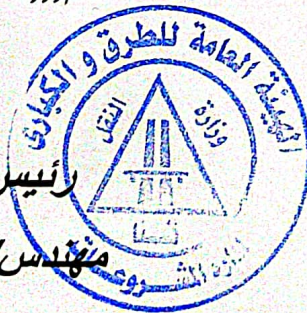
وتفضلو بقبول وافر التحية والاحترام ,,,,,

تحريرا فى 2023/ 06/ 28

المرفقات عدد (1) مقياسه

رئيس الإدارة المركزية

مهندس /
عماد حسين



مقايمة محللة طبقا للمقايضة ٢٠٢٤

شهادة الترخيص
مهندس التربة المدنية
الهندسة
للتنقيب
للمصاولات العمومية
س/ت ٩٥٣٧٦ ب/س ٦٦٧/٧٧٦/٧٠٥

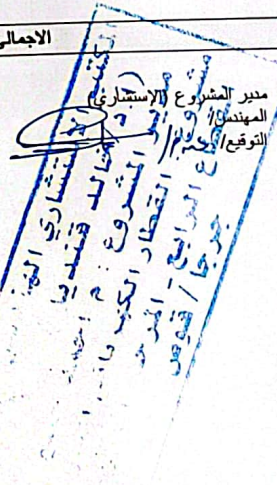
مشروع اعمال الجسر الترابي للخط الثاني لمشروع القطار الكهربائي السريع القطاع الرابع (جرجا / قوص) المصافة من الكم ٦٢٢,٩٩٧ الى الكم ٦٢٤,٣٠٠ بطول ١,٣٠ كم
البداية (E=488842 , N=2880144) ، النهاية (E=489149 , N=2878878)
تنفيذ شركة / الروى للمقاولات العمومية والتوريدات - اشرف عثمان على خليل .
مقايضة معدلة طبقا للمفاضلة ٢٠٢٤

رقم البند	بيان الأعمال	الوحدة	الكمية	سعر الفئة	الاجمالي
٣-٢	بالعمر المكعب اعمال حفر باستخدام المعدات الميكانيكية في التربة شديدة التماسك (تربة متحجرة او) عند التربة الصخرية (باستخدام البلدوزر) وتسوية السطح بالآلات التسوية والرش بالمياه الاصلية للوصول الى نسبة الرطوبة المطلوبة والدمك الجيد بالهراسات للوصول الى أقصى كثافة جافة (95% من الكثافة الجافة القصوى) ومحمل على البند تحميل ونقل الأتربة الزائدة لمسافة ٥٠٠ متر من محور الطريق ويتم التنفيذ طبقاً للمناسيب التصميمية والقطاعات العرضية النموذجية والرسومات التفصيلية المعتمدة والبند بجميع مشتملاته طبقاً لأصول الصناعة ومواصفات الهيئة العامة للطرق والكبارى وتعليمات المهندس المشرف. - يتم تحديد نوع التربة طبقاً لمعاملات التنفيذ باستخدام البلدوزر والتي تحدد بمعرفة المنطقة المشرفة والاستشارى . - علاوة ١ جنيه/كم لمسافة نقل ناتج الحفر وتصيب ١,١ جنيه /كم ابتداء من ٢٠٢٣/٥/٤ .	م ^٣			
١-٢-٢	السعر في مايو ٢٠٢٣	م ^٣	3,762.00	34.7	130,541.40
٢-٢-٢	السعر في يونيو ٢٠٢٣	م ^٣	3,762.00	35.2	132,422.40
٣-٢-٢	السعر في يوليو ٢٠٢٣	م ^٣	1,134.00	35.4	40,143.60
٤-٢-٢	السعر في اغسطس ٢٠٢٣	م ^٣	7,560.00	36.9	278,964.00
٥-٢-٢	السعر ابتداء من سبتمبر ٢٠٢٣ حتى ٢٠٢٤-٢-٢٢	م ^٣	52,900.00	37	1,957,300.00
٣	اعمال الردم Embankment				
١-٣	اعمال تحميل وتوريد ونقل أتربة مطابقة للمواصفات وتشغيلها باستخدام آلات التسوية بسمك لا يزيد عن ٥٠ سم حتى منسوب (٢- متر) أسفل منسوب القرمه و بسمك لا يزيد عن ٢٥ سم اعلى من منسوب (٢- متر) من منسوب القرمه لاستكمال المنسوب التصميمى لتشكيل الجسر والاكتاف (نسبة تحمل كالفورنيا حتى ٢٠%) ورشها بالمياه الاصلية للوصول الى نسبة الرطوبة المطلوبة والدمك الجيد بالهراسات للوصول الى أقصى كثافة جافة (95% من الكثافة الجافة القصوى) ويتم التنفيذ طبقاً للمناسيب التصميمية والقطاعات العرضية النموذجية والرسومات التفصيلية المعتمدة والبند بجميع مشتملاته طبقاً لأصول الصناعة ومواصفات الهيئة العامة للطرق والكبارى وتعليمات المهندس المشرف. - في حالة طلب جهاز الإشراف زيادة نسبة الدمك عن ٩٥% بحسب زيادة ١ جنيه على زيادة نسبة الدمك لكل ١% . - مسافة النقل حتى ٢ كم ويتم احتساب علاوة ١,٤ جنيه لكل كم بالزيادة او النقصان ونصيح ١,٥ جنيه لكل كم اعتباراً من ٢٠٢٣/٥/٤ . - السعر يشمل عمل تشوينات و تخليط واختبارات ونقل لموقع العمل حتى مسافة ٢ كم. - والبند لا يشمل القيمة الحجرية.	م ^٣			
١-١-٣	المنفذ ابتداء من سبتمبر ٢٠٢٣ حتى ٢٠٢٤-٢-٢٢	م ^٣	62,683.25	71.7	4,494,389.03
٢-١-٣	المنفذ ابتداء من ٢٠٢٤-٢-٢٢	م ^٣	3,142.50	74.5	234,116.25
٣-١-٣	علاوة مسافة نقل ٥ كم	م ^٣	24,652.00	4.5	110,934.00
	الاجمالي				11,300,000 ج.م

رئيس الإدارة المركزية المنطقة الثامنة بقنا
يتمدد!!!!

السيد المهندس / عماد حسين

مهندس الهيئة
المهندس /
التوقيع





مهلة إضافية

واردة من منطقة :- المنطقة الثامنة (قنا)

اسم العملية :- اعمال الجسر الترابي للخط الثاني لمشروع القطار الكهربائي القطاع الرابع (جرجا / قوص) المسافة من الكم ٦٢٢,٩٩٧ الي الكم ٦٢٤,٣٠٠ بطول ١.٣ كم
اسم الشركة المنفذة :- شركة الرؤي للمقاولات العمومية والتوريدات " اشرف عثمان علي خليل "
عقد العملية :- (٢٠٢٤/٢٠٢٣/٣٠٧) بتاريخ ٢٠٢٣/٩/٤
قيمة العملية المسندة في التعاقد :- ١١,٣٠٠ مليون جنيه
تاريخ بدء العملية :- ٢٠٢٣/٩/١٠
تاريخ النھو طبقا للعقد :- ٢٠٢٤/٥/٩

المطلوب

- مد مدة العملية مدة قدرها (٦ أشهر) طبقا لما ورد بكتاب المنطقة المشرفة ليصبح تاريخ النھو ٢٠٢٤/١١/٩ .

المبررات

- بناءا علي قرار مجلس الوزراء بجلسته رقم (٢٥٤) المنعقدة بتاريخ ٢٠٢٣/٨/٣٠ بالموافقة علي تعديل البند رقم (١) من الكتاب الدوري بشأن ما قرره مجلس الوزراء بجلسته رقم (٢٣٠) المنعقدة بتاريخ ٢٠٢٣/٢/٢٢ بشأن الموافقة علي توجيه السلطة المختصة بالجهات الادارية بمفهومها المحدد بقانون تنظيم التعاقدات التي تبرمها الجهات العامة الصادر بالقانون رقم (١٨٢) لسنة ٢٠١٨ باعمال سلطتها التقديرية المقررة بمقتضي المادة رقم (٤٨) من القانون المذكور والمادة رقم (٩٨) ولائحته التنفيذية .
- وكذلك للأسباب الاتية :-
- ١- تأخير التنفيذ بسبب تحرير سعر الصرف .
- ٢- زيادة تكلفة المواد الخام وارتفاع اسعار نقلها .
- ٣- نقص الدعم الدولارى بالاسواق .
- ٤- ارتفاع اسعار قطع الغيار وندرة توافرها بالاسواق .

اعداد مهندس:

مدير عام (صيانة/التنفيذ)

رئيس الإدارة المركزية للشئون المالية :

رأى الشئون القانونية :

المورد / ماود / جيلستة :

رئيس الإدارة المركزية لتنفيذ وصيانة الطرق :

رئيس قطاع التنفيذ والمناطق :

الهيئة المذكورة المطالب بها عدم كسح مقابل اعتماد

تأخير من الشركة لعدم توافر مناظ

ذلك ١٠٩ س م

تحريرا في ٢٠٢٤/٧/١٤

٢٠٢٤/٧/١٤

التوقيع

لواء مهندس / حسام الدين مصطفى

رئيس الهيئة العامة للطرق والكباري

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	13/4/2023	code	ZONE		
LOCATION	624+000 Left	RW-S-4	Material	تراب	
NAME COMPANY	الروزي		Description	مشون	

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		25471.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	2930.0	2605.0	3735.0	1285.0	1885.0	685.0	1350.0		A-1-a	
Cumulative Retained (g)	2930.0	5535.0	9270.0	10555.0	12440.0	13125.0	14475.0		PRO	2.303
Cumulative Retained %	11.5	21.7	36.4	41.4	48.8	51.5	56.8		WC	6.20
Cumulative Passing %	88.5	78.3	63.6	58.6	51.2	48.5	43.2		CBR	32.20

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	94.00	200.00	332.00					
Cumulative Retained %	18.80	40.00	66.40					
Cumulative Passing %	81.20	60.00	33.60					

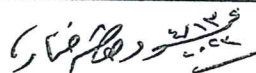
C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	88.5	78.3	63.6	58.6	51.2	48.5	43.2	35.1	25.9	14.5

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

Contractor

Consultant





PROCTOR TEST

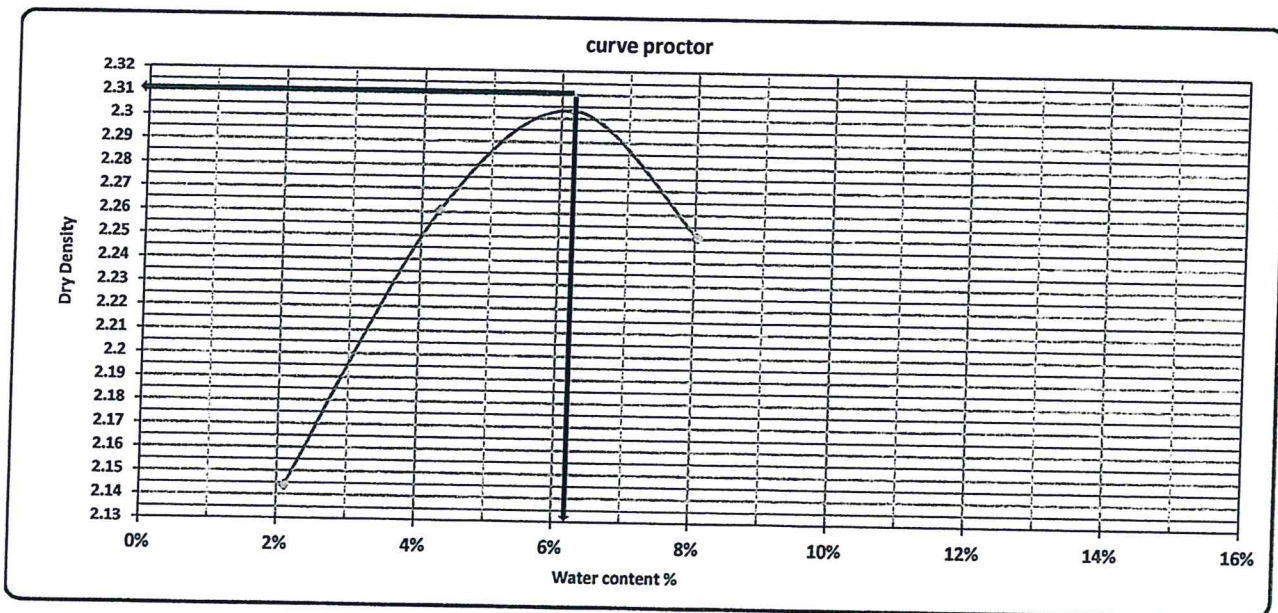
TESTING DATE:	13/4/2023	code	Station
LOCATION	624+000 Left	RW-S-4	Material
NAME COMPANY	الروي		Description
			تراب مشون

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.303
Water content %	6.2

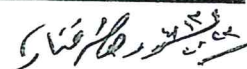
trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10640.0	10990.0	11175.0	11145	
WT. WET SOIL	4565.0	4915.0	5100.0	5070.0	
Wt. Density	2.189	2.357	2.446	2.432	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	16.74	16.43	21.16	26.67	44.95	44.02	43.6	42.81		
Wt. Of wet soil & tare	84.3	78.5	251.4	245.0	187.1	213.5	233.3	206.4		
Wt. Of dry soil & tare	83.3	76.8	240.9	237.0	178.3	204.1	219.2	189.4		
Wt. Of water	1.0	1.7	10.4	8.0	8.7	9.4	14.0	17.0		
Wt. Of dry soil	66.6	60.4	219.8	210.3	133.4	160.1	175.6	210.0		
Water content %	1.4%	2.8%	4.8%	3.8%	6.6%	5.8%	8.0%	8.1%		
AV. Water content %	2.1%	4.3%	6.2%	8.0%						
Dry Density	2.144	2.261	2.303	2.251						



Contractor

Consultant



 محمد بن عبد الله

California Bearing Ratio TEST

Testing Date :	16/4/2023	Code	FROM STA :	TO STA :
Location :	624+000 Left	RW-S-4	Material :	تراب
NAME COMPANY	الرؤي		Description	مشون

Test Results :-

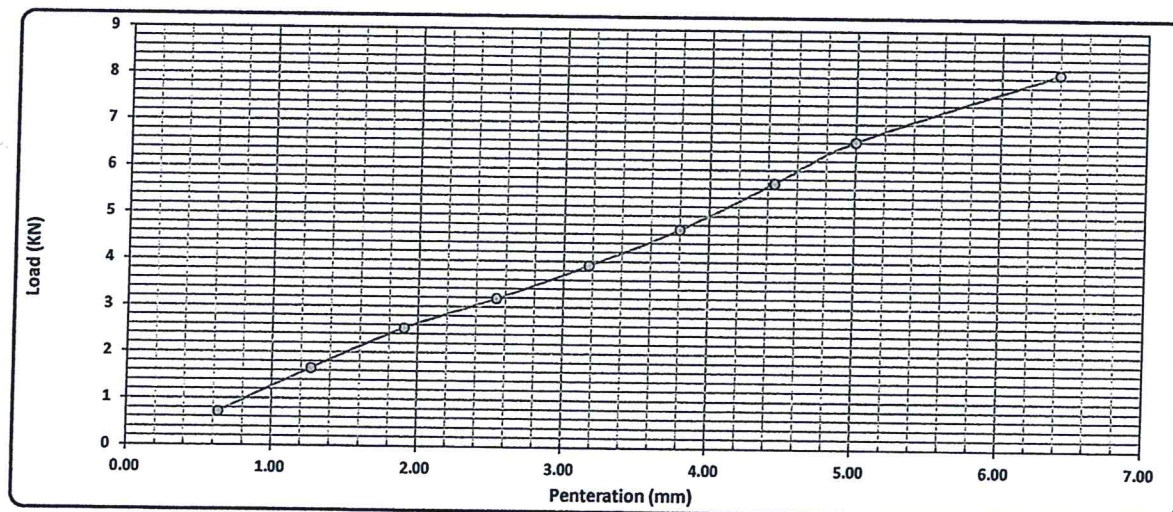
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2021
Mold WT. (gm)	15700
Mold WT. + Wet WT. (gm)	20500
Wet WT. (gm)	4800
Wet Density (g/cm ³)	2.375
Dry Density (g/cm ³)	2.241
Proctor Density (g/cm ³)	2.303
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	30
Tare WT. + Wet WT. (gm)	203.5
Tare WT. + Dry WT. (gm)	193.7
Water WT. (gm)	9.8
Dry WT. (gm)	163.7
Moisture Content %	6.0

Swelling	
Mold No.	1
Date	16/4/2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Pentration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	72.00	168.00	257.00	324.00	398.00	479.00	582.00	674.00	825.00
Load (KN)	0.7	1.6	2.5	3.2	3.9	4.7	5.7	6.6	8.1



Calculations :-

Pentration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	% عند نسبة 95
2.50	3.18	13.4	23.8%	97	95	23.2%
5.00	6.61	20.0	33.0%			32.2%

Lab. Specialist

Name :

Sign :

Lab. Engineer

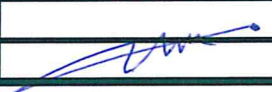
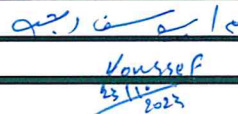
Name :

Sign :

Consultant Engineer

Name :

Sign :

	Electric Express Train - HSR					
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	From Station 623+020 To Station 626+020					
Testing Date :	23/10/2023		Company :	الرؤي		
Material :	fill layer upper embankment			Code	RW-UE-1	
Location :	623+020		to	623+180		length (m)
Layer Thickness :	25m		Level layer	-1.25		
Station	623+030	623+055	623+080	623+105	623+130	623+155
Hole no	1	2	3	4	5	6
Bulk density specifid	1.49	1.49	1.49	1.49	1.49	1.49
wt .of sand befor test	9940	9912	9857	9768	9857	9689
WT .of sand after test	6012	6008	5891	6234	6019	6234
WT . Of sand fill cone	1434	1434	1434	1434	1434	1434
WT . Of sand in hole	2494	2470	2532	2100	2404	2021
Volume of hole	1674	1658	1699	1409	1613	1356
WT . Of sample from	3925	3898	3987	3325	3887	3245
Bulk density of soil	2.34	2.35	2.35	2.36	2.41	2.39
Average water conter	6.3	6.2	6.3	6.1	6	6.2
Dry density (gm/cm3)	2.21	2.21	2.21	2.22	2.27	2.25
Max dry density	2.303	2.303	2.303	2.303	2.303	2.303
% Compaction ratio	95.8	96.1	95.8	96.5	98.7	97.8
Observations						
Lab Engineer :			Consultant Eng. :			
Sign :			Sign :			

 	Electric Express Train - HSR				 
	From 6 October City To Abu simbel				
	section -4 From Sohage To Qena				
	From Station 623+020 To Station 626+020				
Testing Date :	23/10/2023	Company :	الرؤي		
Material :	fill layer upper embankment		Code	RW-UE-1	
Location :	623+020	to	623+180	length (m)	160
Layer Thickness :	25m	Level layer	-1.25		
Station	623+170				
Hole no	7				
Bulk density specifid	1.49				
wt .of sand befor test	9940				
WT .of sand after test	6012				
WT . Of sand fill cone	1434				
WT . Of sand in hole	2494				
Volume of hole	1674				
WT . Of sample from	3925				
Bulk density of soil	2.34				
Average water conter	6.3				
Dry density (gm/cm3)	2.21				
Max dry density	2.303				
% Compaction ratio	95.8				
Observations					
Lab Engineer :			Consultant Eng. :		
Sign :			Sign :		

23/10/2023

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي د. خالد قنديل	 SYSTRA & SHAKER	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+020	 الهيئة العامة للقناة (S.A.S.C.A)
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	15/5/2023	code	ZONE		
LOCATION	623+400 Left	RW-S-5	Material	تراب	
NAME COMPANY	الرؤي		Description	مشون	

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		20000.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify
Mass retained (g)	2142.0	1765.0	3023.0	1465.0	1752.0	867.0	1142.0		A-1-a
Cumulative Retained (g)	2142.0	3907.0	6930.0	8395.0	10147.0	11014.0	12156.0	PRO	2.215
Cumulative Retained %	10.7	19.5	34.7	42.0	50.7	55.1	60.8	WC	6.40
Cumulative Passing %	89.3	80.5	65.4	58.0	49.3	44.9	39.2	CBR	30.10

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	68.00	159.00	368.00					
Cumulative Retained %	13.60	31.80	73.60					
Cumulative Passing %	86.40	68.20	26.40					

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 %	89.3	80.5	65.4	58.0	49.3	44.9	39.2	33.9	26.7	10.4

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

Contractor

Consultant




PROCTOR TEST

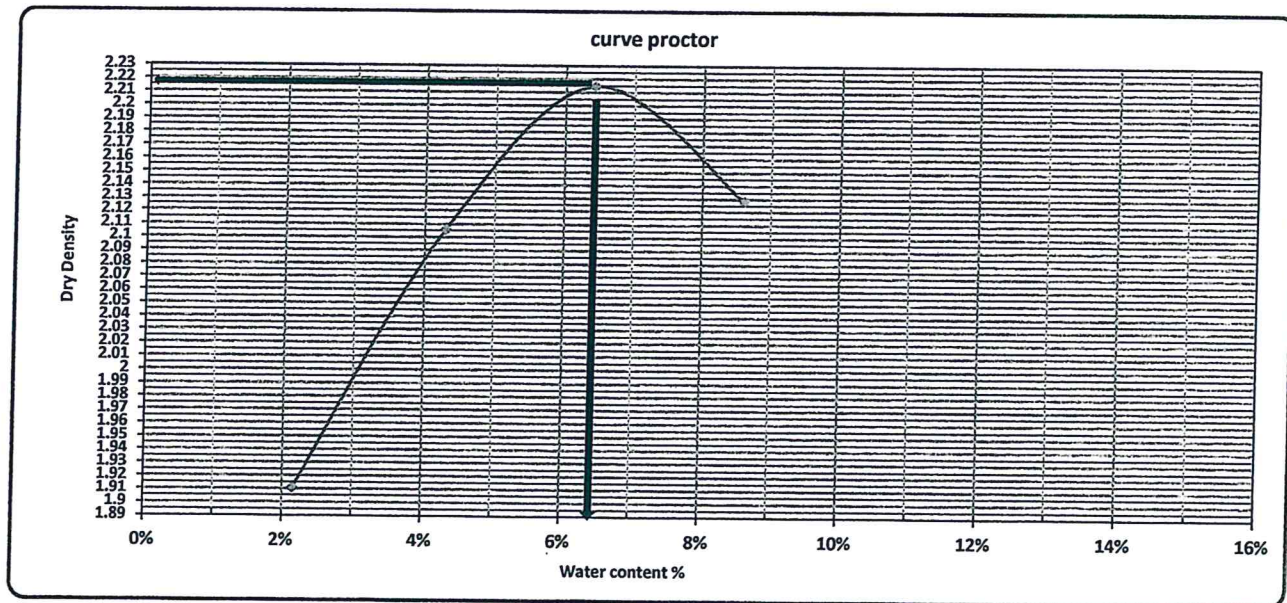
TESTING DATE:	15/5/2023	code	Station	
LOCATION	623+400 Left	RW-S-5	Material	تراب
NAME COMPANY	الرؤي		Description	مشون

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.215
Water content %	6.4

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10145.0	10655.0	10990.0	10895	
WT. WET SOIL	4070.0	4580.0	4915.0	4820.0	
Wt. Density	1.952	2.197	2.357	2.312	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	16.43	16.87	16.74	17.01	16.2	16.09	15.9	16.4		
Wt. Of wet soil & tare	84.3	78.5	91.8	85.0	81.7	76.6	88.3	90.4		
Wt. Of dry soil & tare	82.9	77.1	88.1	82.7	77.3	73.3	82.5	84.5		
Wt. Of water	1.3	1.4	3.7	2.3	4.4	3.3	5.8	5.9		
Wt. Of dry soil	66.5	60.2	71.4	65.7	61.1	57.2	66.6	68.1		
Water content %	2.0%	2.3%	5.1%	3.5%	7.2%	5.7%	8.6%	8.6%		
AV. Water content %	2.2%	4.3%	6.4%	8.6%						
Dry Density	1.911	2.106	2.215	2.128						



Contractor

Consultant

[Signature]

[Signature]

California Bearing Ratio TEST

Testing Date :	18/4/2023	Code	FROM STA :	TO STA :
Location :	623+400 Left	RW-S-5	Material :	تراب
Layer No. :	الرضي		Description	مشن

Test Results :-

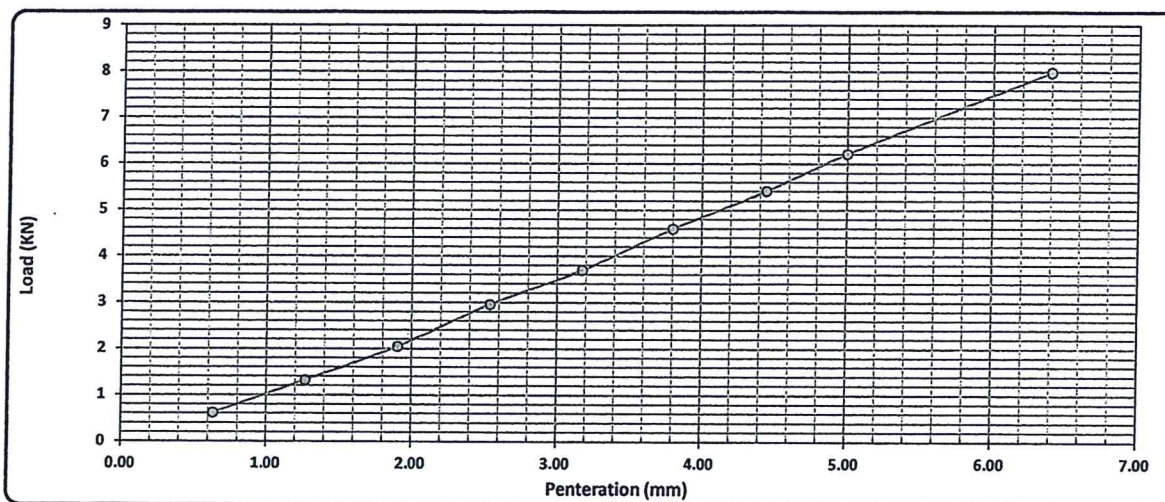
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2021
Mold WT. (gm)	15858
Mold WT. + Wet WT. (gm)	20500
Wet WT. (gm)	4642
Wet Density (g/cm ³)	2.297
Dry Density (g/cm ³)	2.166
Proctor Density (g/cm ³)	2.215
Compaction %	98

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	27
Tare WT. +Wet WT. (gm)	150
Tare WT. +Dry WT. (gm)	143
Water WT. (gm)	7.0
Dry WT. (gm)	116.0
Moisture Content %	6.0

Swelling	
Mold No.	1
Date	18/4/2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Pentration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	62.00	134.00	208.00	301.00	376.00	468.00	551.00	633.00	814.00
Load (KN)	0.6	1.3	2.0	2.9	3.7	4.6	5.4	6.2	8.0



Calculations :-

Pentration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	95 عدد نسبة 95
2.50	2.95	13.4	22.1%	98	95	21.5%
5.00	6.20	20.0	31.0%			30.1%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :

 SYSTFA SHAKER ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	Electric Express Train - HSR				 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) الهيئة العامة للمطرق والكباري والنقل البري (GARBLT)	
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	From Station 623+020 To Station 626+020					
Testing Date :	1/11/2023	Company :	الرؤي			
Material :	fill layer upper embankment			Code	RW-UE-6	
Location :	624+040	to	624+180	length (m)	140	
Layer Thickness :	25m	Level layer	-1.25			
Station	624+050	624+075	624+100	624+125	624+150	
Hole no	1	2	3	4	5	
Bulk density specifid	1.49	1.49	1.49	1.49	1.49	
wt .of sand befor test	9585	9565	9546	9696	9456	
WT .of sand after test	6020	5891	5858	6121	6108	
WT . Of sand fill cone	1434	1434	1434	1434	1434	
WT . Of sand in hole	2131	2240	2254	2141	1914	
Volume of hole	1430	1503	1513	1437	1285	
WT . Of sample from	3310	3468	3521	3341	2968	
Bulk density of soil	2.31	2.31	2.33	2.33	2.31	
Average water conter	6.4	6.5	6.3	6.5	6.4	
Dry density (gm/cm3)	2.18	2.17	2.19	2.18	2.17	
Max dry density	2.215	2.215	2.215	2.215	2.215	
% Compaction ratio	98.2	97.8	98.9	98.6	98.0	
Observations						
Lab Engineer :	Consultant Eng. :		ع/ يوسف / شبع			
Sign :	Sign :		Youssef 1/11/2023			

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	 SVSTRA SHAKER	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+020	 الهيئة العامة للغمر والملاحة الهيئة العامة للغمر والملاحة (CAPSIT)
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	24/6/2023	code	ZONE		
LOCATION	624+360 Right	RW-S-6	Material		تراب
NAME COMPANY	الروزي		Description		مشون

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		23000.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify
Mass retained (g)	2546.0	2458.0	3854.0	1398.0	1964.0	721.0	1324.0		A-1-a
Cumulative Retained (g)	2546.0	5004.0	8858.0	10256.0	12220.0	12941.0	14265.0	PRO	2.236
Cumulative Retained %	11.1	21.8	38.5	44.6	53.1	56.3	62.0	WC	6.20
Cumulative Passing %	88.9	78.2	61.5	55.4	46.9	43.7	38.0	CBR	32.30

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	94.00	218.00	327.00					
Cumulative Retained %	18.80	43.60	65.40					
Cumulative Passing %	81.20	56.40	34.60					

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 %	88.9	78.2	61.5	55.4	46.9	43.7	38.0	30.8	21.6	13.1

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

Contractor



Consultant



PROCTOR TEST

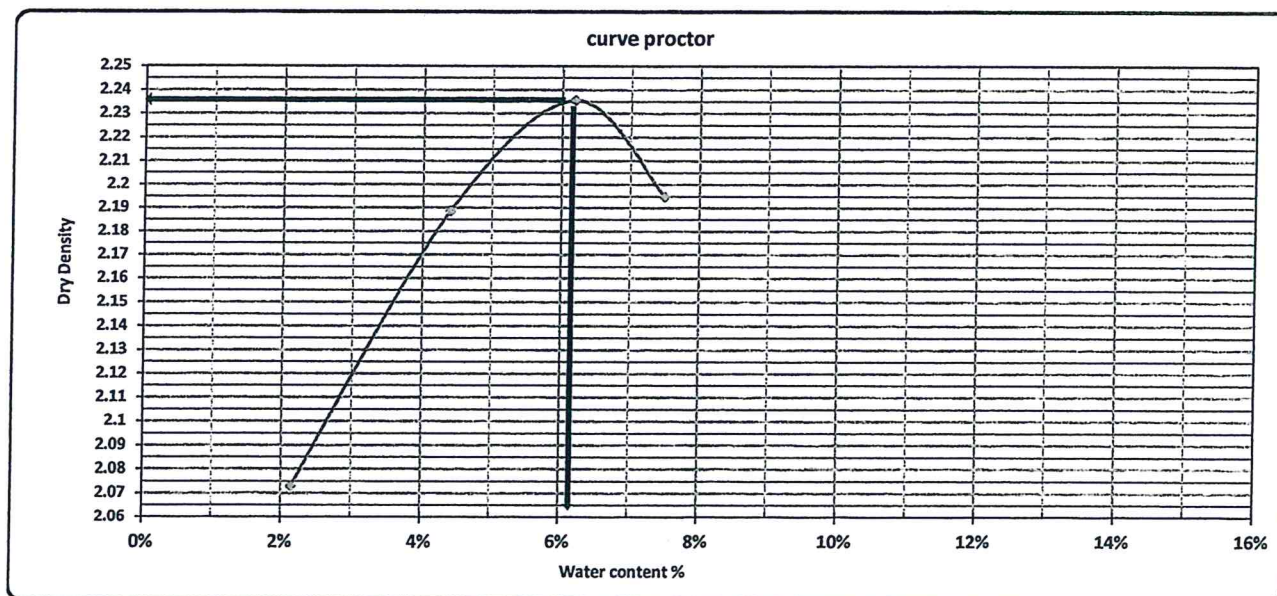
TESTING DATE:	24/6/2023	code	Station		
LOCATION	624+360 Right	RW-S-6	Material	تراب	
NAME COMPANY	الروي		Description	مشون	

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.236
Water content %	6.2

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10490.0	10840.0	11025.0	10995	
WT. WET SOIL	4415.0	4765.0	4950.0	4920.0	
Wt. Density	2.118	2.285	2.374	2.360	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	16.74	16.43	21.16	26.67	44.95	44.02	43.6	42.81		
Wt. Of wet soil & tare	84.3	78.5	253.4	247.0	187.1	213.5	232.3	206.4		
Wt. Of dry soil & tare	82.9	77.1	242.1	239.1	178.3	204.1	219.2	190.5		
Wt. Of water	1.3	1.4	11.3	7.9	8.7	9.4	13.0	16.0		
Wt. Of dry soil	66.2	60.7	220.9	212.4	133.4	160.1	175.6	210.0		
Water content %	2.0%	2.3%	5.1%	3.7%	6.6%	5.8%	7.4%	7.6%		
AV. Water content %	2.2%		4.4%		6.2%		7.5%			
Dry Density	2.073		2.189		2.236		2.195			

**Contractor**

Consultant

7.443
C.C.

California Bearing Ratio TEST

Testing Date :	27/6/2023	Code	FROM STA :	TO STA :
Location :	624+360 Right	RW-S-6	Material :	تراب
Layer No. :	البرقي		Description	مشون

Test Results : -

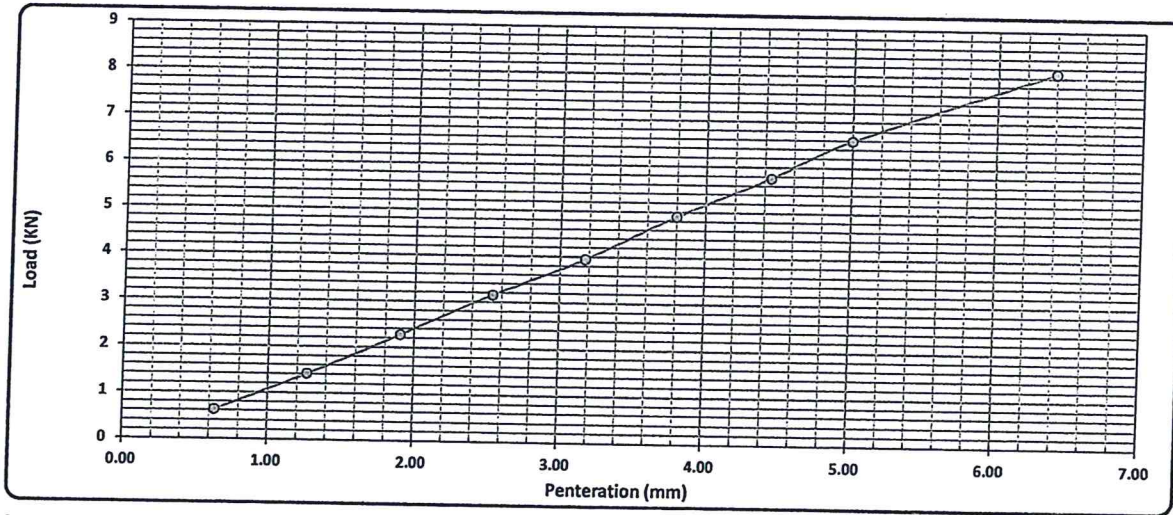
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2021
Mold WT. (gm)	15700
Mold WT. + Wet WT. (gm)	20500
Wet WT. (gm)	4630
Wet Density (g/cm ³)	2.291
Dry Density (g/cm ³)	2.161
Proctor Density (g/cm ³)	2.236
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	27
Tare WT. +Wet WT. (gm)	150
Tare WT. +Dry WT. (gm)	143
Water WT. (gm)	7.0
Dry WT. (gm)	116.0
Moisture Content %	6.0

Swelling	
Mold No.	1
Date	27/6/2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	63.00	144.00	231.00	321.00	402.00	499.00	587.00	671.00	825.00
Load (KN)	0.6	1.4	2.3	3.1	3.9	4.9	5.8	6.6	8.1



Calculations : -

Penetration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	% عند نسبة 95
2.50	3.15	13.4	23.6%	97	95	23.2%
5.00	6.58	20.0	32.8%			32.3%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

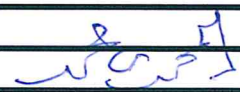
Sign :

Consultant Engineer

Name :

Sign :

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	Electric Express Train - HSR			 الهيئة القومية للأنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) الهيئة العامة لطرق و الكبارى و النقل البرى (GARBLT)		
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	From Station 623+020 To Station 626+020					
Testing Date :	25/11/2023	Company :	الرؤى			
Material :	fill layer upper embankment		Code	RW-UE-11		
Location :	624+300	to	624+480	length (m)	180	
Layer Thickness :	25m	Level layer	-1.00			
Station	624+310	624+335	624+360	624+385	624+410	624+435
Hole no	1	2	3	4	5	6
Bulk density specifid	1.53	1.53	1.53	1.53	1.53	1.53
wt .of sand befor test	8978	8456	9854	9423	9321	10074
WT .of sand after test	5214	4689	6123	5869	5867	6897
WT . Of sand fill cone	1434	1434	1434	1434	1434	1434
WT . Of sand in hole	2330	2333	2297	2120	2020	1743
Volume of hole	1523	1525	1501	1386	1320	1139
WT . Of sample from	3523	3522	3458	3190	3064	2589
Bulk density of soil	2.31	2.31	2.30	2.30	2.32	2.27
Average water conter	6.2	6.2	6.3	6.4	6.3	6.1
Dry density (gm/cm3)	2.18	2.17	2.17	2.16	2.18	2.14
Max dry density	2.236	2.236	2.236	2.236	2.236	2.236
% Compaction ratio	97.4	97.3	96.9	96.8	97.6	95.8
Observations						
Lab Engineer :	[Signature]		Consultant Eng. :	[Signature]		
Sign :			Sign :			

 	Electric Express Train - HSR		 																																																																							
From 6 October City To Abu simbel		section -4 From Sohage To Qena																																																																								
From Station 623+020																																																																										
To Station 626+020																																																																										
Testing Date :	25/11/2023	Company :	الرؤي																																																																							
Material :	fill layer upper embankment		Code	RW-UE-11																																																																						
Location :	624+300	to	624+480	length (m)																																																																						
Layer Thickness :	25m	Level layer	-1.00																																																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Station</td> <td style="width: 10%;">624+460</td> <td style="width: 10%;">624+475</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>Hole no</td> <td style="text-align: center;">7</td> <td style="text-align: center;">8</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bulk density specifid</td> <td style="text-align: center;">1.53</td> <td style="text-align: center;">1.53</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>wt .of sand befor test</td> <td style="text-align: center;">9896</td> <td style="text-align: center;">9522</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WT .of sand after test</td> <td style="text-align: center;">6541</td> <td style="text-align: center;">5981</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WT . Of sand fill cone</td> <td style="text-align: center;">1434</td> <td style="text-align: center;">1434</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WT . Of sand in hole</td> <td style="text-align: center;">1921</td> <td style="text-align: center;">2107</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Volume of hole</td> <td style="text-align: center;">1256</td> <td style="text-align: center;">1377</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WT . Of sample from</td> <td style="text-align: center;">2944</td> <td style="text-align: center;">3231</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bulk density of soil</td> <td style="text-align: center;">2.34</td> <td style="text-align: center;">2.35</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Station	624+460	624+475					Hole no	7	8					Bulk density specifid	1.53	1.53					wt .of sand befor test	9896	9522					WT .of sand after test	6541	5981					WT . Of sand fill cone	1434	1434					WT . Of sand in hole	1921	2107					Volume of hole	1256	1377					WT . Of sample from	2944	3231					Bulk density of soil	2.34	2.35				
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Average water conter</td> <td style="width: 10%;">6</td> <td style="width: 10%;">6.2</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>Dry density (gm/cm3)</td> <td style="text-align: center;">2.21</td> <td style="text-align: center;">2.21</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Max dry density</td> <td style="text-align: center;">2.236</td> <td style="text-align: center;">2.236</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>% Compaction ratio</td> <td style="text-align: center;">98.9</td> <td style="text-align: center;">98.8</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Observations</td> <td colspan="6"></td> </tr> </table>					Average water conter	6	6.2					Dry density (gm/cm3)	2.21	2.21					Max dry density	2.236	2.236					% Compaction ratio	98.9	98.8					Observations																																									
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Sign :			Sign :																																																																							

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي ل.د. خالد قنجل	 SVSTFA SHAKER	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+020	 جمهورية مصر العربية وزارة النقل الهيئة العامة للإسكان (1987)
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	12/7/2023	code	ZONE		
LOCATION	623+460 Right	RW-S-7	Material	تراب	
NAME COMPANY	الروبي		Description	مشون	

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		23000.00		gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS		soil classify
Mass retained (g)	1987.0	2785.0	3854.0	1325.0	1758.0	718.0	1333.0			A-1-a
Cumulative Retained (g)	1987.0	4772.0	8626.0	9951.0	11709.0	12427.0	13760.0		PRO	2.245
Cumulative Retained %	8.6	20.7	37.5	43.3	50.9	54.0	59.8		WC	6.20
Cumulative Passing %	91.4	79.3	62.5	56.7	49.1	46.0	40.2		CBR	33.50

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	94.00	223.00	347.00					
Cumulative Retained %	18.80	44.60	69.40					
Cumulative Passing %	81.20	55.40	30.60					

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 %	91.4	79.3	62.5	56.7	49.1	46.0	40.2	32.6	22.3	12.3

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

Contractor

Consultant




PROCTOR TEST

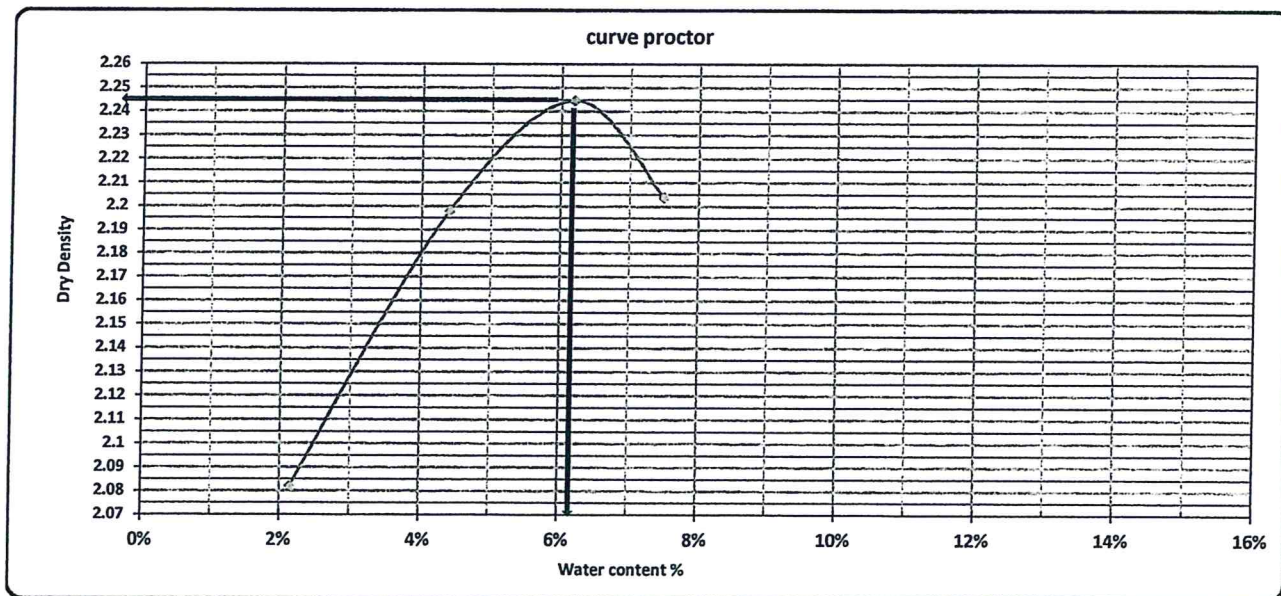
TESTING DATE:	2023/12/07	code	Station	
LOCATION	623+460 Right	RW-S-7	Material	تراب
NAME COMPANY	الروزي		Description	مشون

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.245
Water content %	6.2

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10510.0	10860.0	11045.0	11015	
WT. WET SOIL	4435.0	4785.0	4970.0	4940.0	
Wt. Density	2.127	2.295	2.384	2.369	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	16.74	16.43	21.16	26.67	44.95	44.02	43.6	42.81		
Wt. Of wet soil & tare	84.3	78.5	253.4	247.0	187.1	213.5	232.3	206.4		
Wt. Of dry soil & tare	82.9	77.1	242.1	239.1	178.3	204.1	219.2	190.5		
Wt. Of water	1.3	1.4	11.3	7.9	8.7	9.4	13.0	16.0		
Wt. Of dry soil	66.2	60.7	220.9	212.4	133.4	160.1	175.6	210.0		
Water content %	2.0%	2.3%	5.1%	3.7%	6.6%	5.8%	7.4%	7.6%		
AV. Water content %	2.2%		4.4%		6.2%		7.5%			
Dry Density	2.082		2.198		2.245		2.204			



Contractor



Consultant



California Bearing Ratio TEST

Testing Date :	15/7/2023	Code	FROM STA :	TO STA :
Location :	623+460 Right	RW-S-7	Material :	تراب
NAME COMPANY	الروبي		Description	مشون

Test Results :-

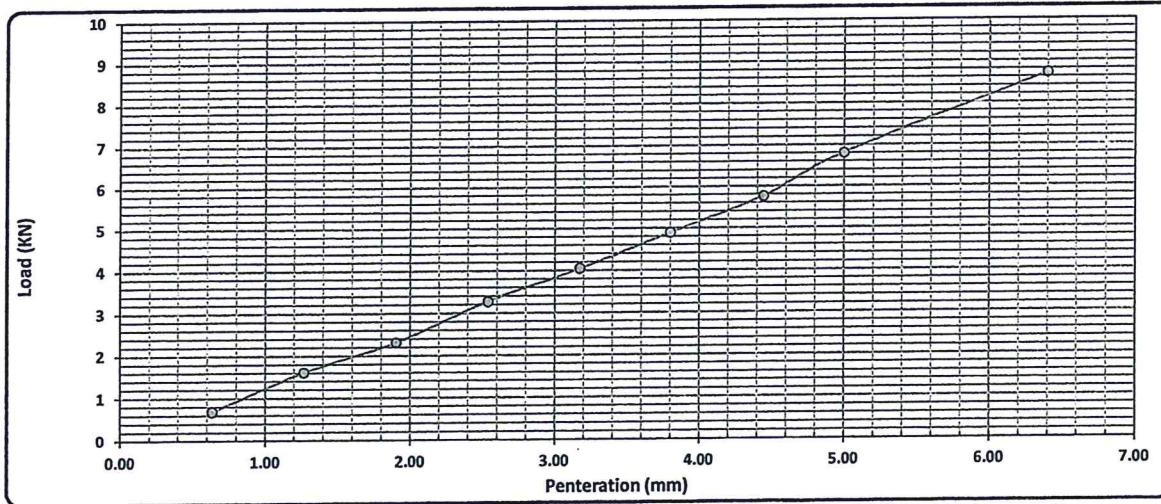
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2021
Mold WT. (gm)	15700
Mold WT. + Wet WT. (gm)	20500
Wet WT. (gm)	4630
Wet Density (g/cm ³)	2.291
Dry Density (g/cm ³)	2.161
Proctor Density (g/cm ³)	2.245
Compaction %	96

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	27
Tare WT. + Wet WT. (gm)	150
Tare WT. + Dry WT. (gm)	143
Water WT. (gm)	7.0
Dry WT. (gm)	116.0
Moisture Content %	6.0

Swelling	
Mold No.	1
Date	15/7/2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Pentration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	69.00	164.00	235.00	333.00	412.00	498.00	587.00	693.00	887.00
Load (KN)	0.7	1.6	2.3	3.3	4.0	4.9	5.8	6.8	8.7



Calculations :-

Pentration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	% عند نسبة 95
2.50	3.26	13.4	24.4%	96	95	24.1%
5.00	6.79	20.0	33.9%			33.5%

Lab. Specialist

Name :

Sign :

Lab. Engineer

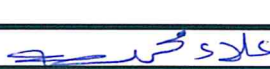
Name :

Sign :

Consultant Engineer

Name :

Sign :

  المكتب الاستشاري الهندسي ا.د. خالد قنديل	Electric Express Train - HSR				 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT)	
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	From Station 623+020 To Station 626+020					
Testing Date :	25/11/2023	Company :	الرؤي			
Material :	fill layer upper embankment			Code	RW-UE-14	
Location :	623+840	to	623+920	length (m)	80	
Layer Thickness :	25m	Level layer	-1.25			
Station	623+845	623+870	623+895	623+915		
Hole no	1	2	3	4		
Bulk density specifid	1.53	1.53	1.53	1.53		
wt .of sand befor test	9282	9383	9717	8520		
WT .of sand after test	5467	5647	5961	5123		
WT . Of sand fill cone	1434	1434	1434	1434		
WT . Of sand in hole	2381	2302	2322	1963		
Volume of hole	1556	1505	1518	1283		
WT . Of sample from	3546	3567	3558	3031		
Bulk density of soil	2.28	2.37	2.34	2.36		
Average water conter	6.3	6.2	6.3	6.1		
Dry density (gm/cm3)	2.14	2.23	2.21	2.23		
Max dry density	2.245	2.245	2.245	2.245		
% Compaction ratio	95.5	99.4	98.2	99.2		
Observations						
Lab Engineer :			Consultant Eng. :			
Sign :			Sign :	25-11-2023		



Electric Express Train - HSR
From 6 October City To Abu simbel
section -4 From Sohage To Qena

From Station 623+020
To Station 626+020



PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	9/10/2023	code	ZONE	
LOCATION	624+360 Right	RW-S-9	Material	تراب
NAME COMPANY	الروزي		Description	مشون

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		15000.00	gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify
Mass retained (g)	2165.0	1091.0	1268.0	988.0	1241.0	521.0	721.0	6998.0	A-1-a
Cumulative Retained (g)	2165.0	3256.0	4524.0	5512.0	6753.0	7274.0	7995.0		2.279
Cumulative Retained %	14.4	21.7	30.2	36.7	45.0	48.5	53.3		6.00
Cumulative Passing %	85.6	78.3	69.8	63.3	55.0	51.5	46.7		37.50
								PRO	
								WC	
								CBR	

B-soft material gradation				WT.OF sample		500.00	gm
sieve size	10	40	200				
Cumulative Retained (g)	88.98	160.52	379.18				
Cumulative Retained %	17.80	32.10	75.84				
Cumulative Passing %	82.20	67.90	24.16				

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 %	85.6	78.3	69.8	63.3	55.0	51.5	46.7	38.4	31.7	11.3

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

Contractor

Consultant

PROCTOR TEST

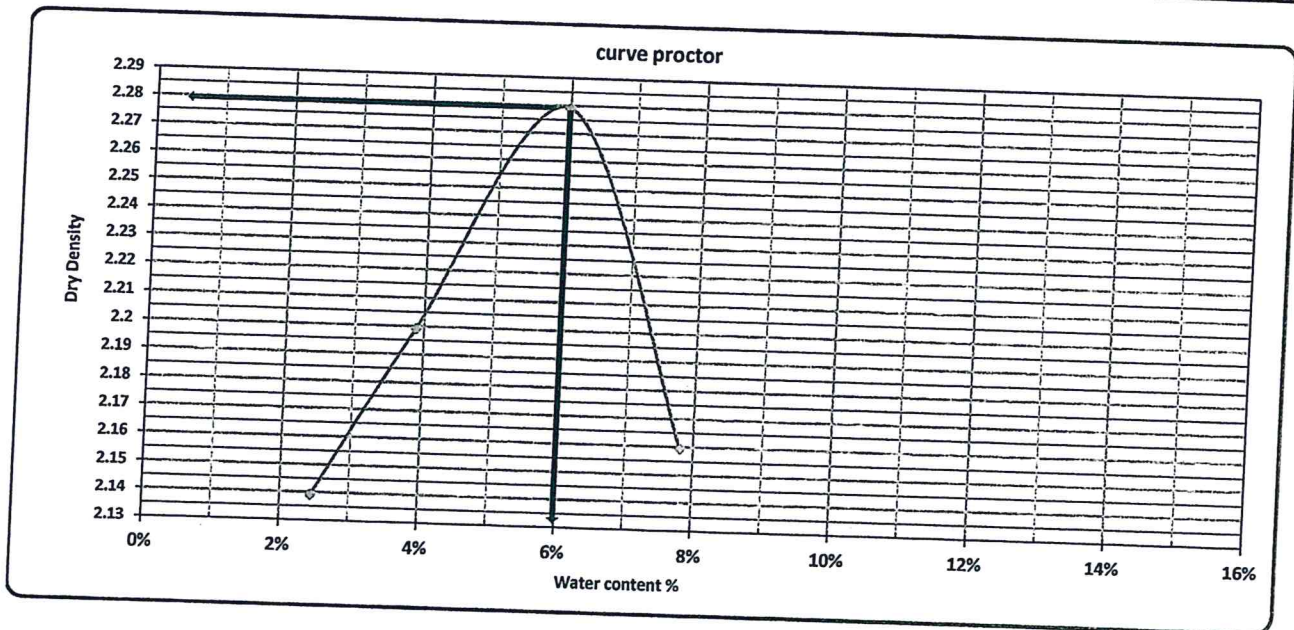
TESTING DATE:	9/10/2023	code	Station	
LOCATION	624+360 Right	RW-S-9	Material	
NAME COMPANY	الروفي		Description	تراب
				مشون

Weight of empty mold :	5857.0
Mold Volume:	2065.0

MAX Dry Density	2.279
Water content %	6

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10383.0	10575.0	10846.0	10665	
WT. WET SOIL	4526.0	4718.0	4989.0	4808.0	
Wt. Density	2.192	2.285	2.416	2.328	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	44.76	44.95	44.02	44.81	42.6	43.05	44.2	44.06		
Wt. Of wet soil & tare	289.2	274.2	280.1	273.2	236.8	273.5	252.1	245.3		
Wt. Of dry soil & tare	283.4	268.7	271.1	264.7	226.1	260.0	233.0	233.7		
Wt. Of water	5.8	5.6	8.9	8.5	10.7	13.5	19.1	11.6		
Wt. Of dry soil	238.6	223.7	227.1	219.9	183.5	216.9	188.8	210.0		
Water content %	2.4%	2.5%	3.9%	3.9%	5.8%	6.2%	10.1%	5.5%		
AV. Water content %	2.5%		3.9%		6.0%		7.8%			
Dry Density	2.139		2.199		2.279		2.159			



Contractor

[Signature]

Consultant

[Signature]

California Bearing Ratio TEST

Testing Date :	12/10/2023	Code	FROM STA :	TO STA :
Location :	624+360 Right	RW-S-9	Material :	تراب
NAME COMPANY	الرؤي		Description	مشون

Test Results :-

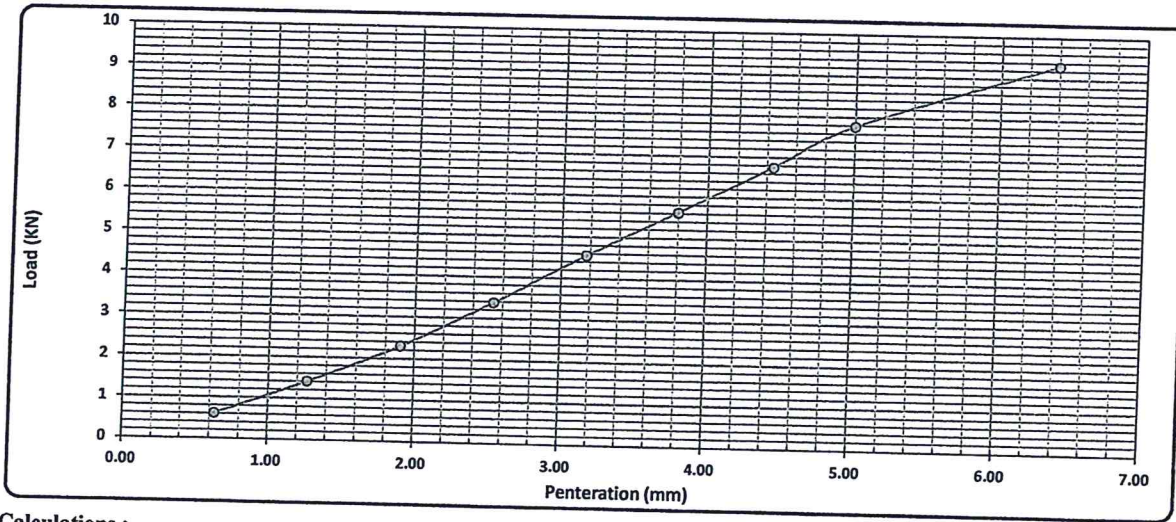
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	3180
Mold WT. (gm)	16036
Mold WT. + Wet WT. (gm)	23594
Wet WT. (gm)	7558
Wet Density (g/cm ³)	2.377
Dry Density (g/cm ³)	2.242
Proctor Density (g/cm ³)	2.279
Compaction %	98

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	44.32
Tare WT. + Wet WT. (gm)	248.25
Tare WT. + Dry WT. (gm)	236.68
Water WT. (gm)	11.6
Dry WT. (gm)	192.4
Moisture Content %	6.0

Swelling	
Mold No.	1
Date	12/10/2023
Initial Height (mm)	2.40
Final Height (mm)	2.45
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Pentration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	62.00	143.40	233.80	343.68	464.10	572.90	688.00	792.90	950.00
Load (KN)	0.6	1.4	2.3	3.4	4.5	5.6	6.7	7.8	9.3



Calculations :-

Pentration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	% عند نسبة 95
2.50	3.37	13.4	25.2%	98	95	24.4%
5.00	7.77	20.0	38.8%			37.5%

Lab. Specialist

Lab. Engineer

Consultant Engineer

Name :

Name :

Name :

Sign :

Sign :

Sign :

 	Electric Express Train - HSR				 	
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	From Station 623+020 To Station 626+020					
Testing Date :	24/12/2023	Company :	الرؤي			
Material :	fill layer upper embankment				Code	RW-UE-18
Location :	624+220	to	624+480	length (m)	260	
Layer Thickness :	25m	Level layer	-0.50			
Station	624+230	624+255	624+280	624+305	624+330	624+355
Hole no	1	2	3	4	5	6
Bulk density specifid	1.53	1.53	1.53	1.53	1.53	1.53
wt .of sand befor test	8794	9875	9547	9687	9458	9328
WT .of sand after test	5254	6123	6138	6231	5741	5852
WT . Of sand fill cone	1434	1434	1434	1434	1434	1434
WT . Of sand in hole	2106	2318	1975	2022	2283	2042
Volume of hole	1376	1515	1291	1322	1492	1335
WT . Of sample from	3232	3584	3031	3145	3454	3137
Bulk density of soil	2.35	2.37	2.35	2.38	2.31	2.35
Average water conter	6	6.1	5.9	5.9	6	6.2
Dry density (gm/cm3)	2.22	2.23	2.22	2.25	2.18	2.21
Max dry density	2.279	2.279	2.279	2.279	2.279	2.279
% Compaction ratio	97.2	97.8	97.3	98.6	95.8	97.1
Observations						
Lab Engineer :	[Signature]		Consultant Eng. :	[Signature]		
Sign :			Sign :	24-12-2023		



Electric Express Train - HSR

From 6 October City To Abu simbel

section -4 From Sohage To Qena

From Station 623+020
To Station 626+020



Testing Date :

24/12/2023

Company :

الرؤي

Material :

fill layer upper embankment

Code

RW-UE-18

Location :

624+220

to

624+480

length (m)

260

Layer Thickness :

25m

Level layer

-0.50

Station	624+380	624+405	624+430	624+455	624+475	
Hole no	7	8	9	10	11	
Bulk density specifid	1.53	1.53	1.53	1.53	1.53	
wt .of sand befor test	9745	9685	9647	9764	9137	
WT .of sand after test	5967	6160	6217	6385	5858	
WT . Of sand fill cone	1434	1434	1434	1434	1434	
WT . Of sand in hole	2344	2091	1996	1945	1845	
Volume of hole	1532	1367	1305	1271	1206	
WT . Of sample from	3546	3207	3031	2959	2820	
Bulk density of soil	2.31	2.35	2.32	2.33	2.34	

Average water conter	6	6.2	6.1	6	5.9	
Dry density (gm/cm3)	2.18	2.21	2.19	2.20	2.21	
Max dry density	2.279	2.279	2.279	2.279	2.279	
% Compaction ratio	95.8	97.0	96.1	96.4	96.9	
Observations						

Lab Engineer :

Consultant Eng. :

Sign :

Sign :

24-12-2023

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+020	 الهيئة العامة للإحصاء الجمهورية العربية السورية
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	19/11/2023	code	ZONE		
LOCATION	624+500 Right	RW-S-10	Material	تراب	
NAME COMPANY	الروبي		Description	مشون	

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		15000.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	4541.0	991.0	3026.0	1184.0	1431.0	455.0	690.0	2658.0	A-1-a	
Cumulative Retained (g)	4541.0	5532.0	8558.0	9742.0	11173.0	11628.0	12318.0		PRO	2.220
Cumulative Retained %	30.3	36.9	57.1	64.9	74.5	77.5	82.1		WC	4.80
Cumulative Passing %	69.7	63.1	42.9	35.1	25.5	22.5	17.9		CBR	38.20

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	97.68	164.52	331.18					
Cumulative Retained %	19.54	32.90	66.24					
Cumulative Passing %	80.46	67.10	33.76					

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 %	69.7	63.1	42.9	35.1	25.5	22.5	17.9	14.4	12.0	6.0

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	16.50	13.50	3.00

Contractor

Consultant

PROCTOR TEST

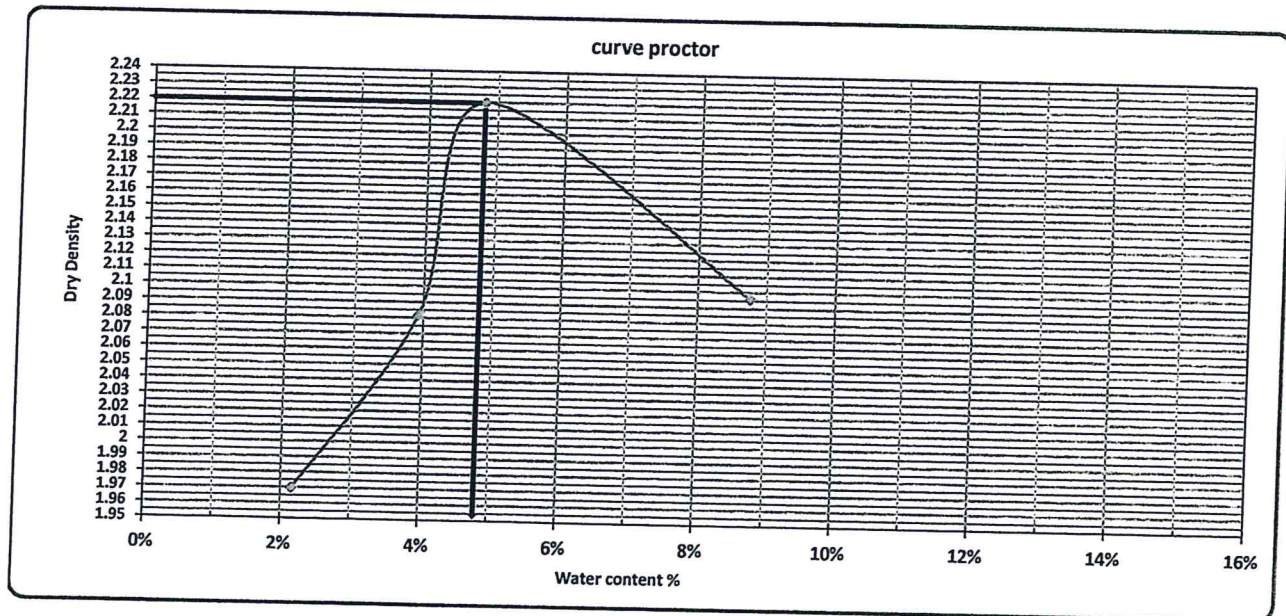
TESTING DATE:	19/11/2023	code	Station	
LOCATION	624+500 Right	RW-S-10	Material	تراب
NAME COMPANY	الروي		Description	مشون

Weight of empty mold :	5857.0
Mold Volume:	2065.0

MAX Dry Density	2.220
Water content %	4.8

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10013.0	10325.0	10662.0	10565	
WT. WET SOIL	4156.0	4468.0	4805.0	4708.0	
Wt. Density	2.013	2.164	2.327	2.280	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	44.76	44.95	44.02	44.81	42.6	43.05	44.2	44.06		
Wt. Of wet soil & tare	291.6	272.7	282.2	273.2	234.2	271.2	254.2	246.3		
Wt. Of dry soil & tare	286.3	267.8	273.0	264.7	226.0	260.0	233.0	233.0		
Wt. Of water	5.2	4.9	9.2	8.5	8.2	11.2	21.2	13.3		
Wt. Of dry soil	241.6	222.9	229.0	219.9	183.4	216.9	188.8	210.0		
Water content %	2.2%	2.2%	4.0%	3.9%	4.5%	5.2%	11.2%	6.3%		
AV. Water content %	2.2%	3.9%	4.8%	8.8%						
Dry Density	1.970	2.082	2.220	2.096						



Contractor

Consultant

 	Electric Express Train - HSR	 
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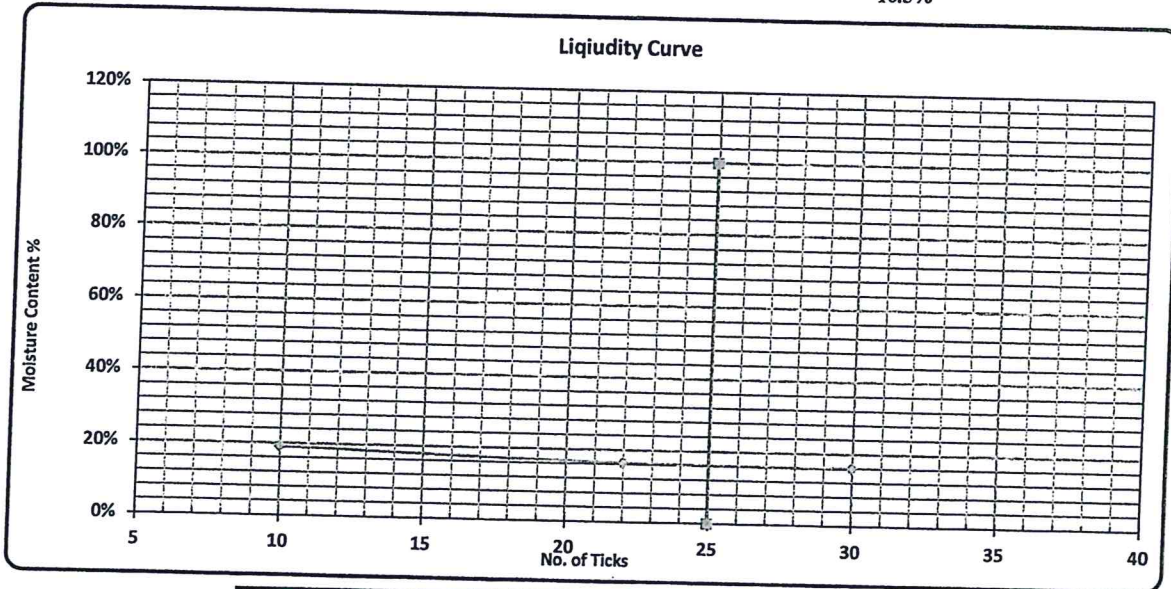
Plasticity and Liquidity Test -Atterberg Limits

Testing Date:	19/11/2023	Code:	FROM STA:	TO STA:
Location:	624+500 Right	RW-S-10	Material:	تراب
NAME COMPANY	الرؤى		Description	مشون

Testing Results :-

Test	Liquid Limit				Plastic Limit	
No. of Ticks	10	22	30		-	-
Tare No.	1	2	3		1	2
Tare WT. (gm)	44.06	43.06	44.82		16.41	17.02
Tare WT. + Wet WT. (gm)	86.84	80.40	93.32		20.00	19.63
Tare WT. + Dry WT. (gm)	80.00	75.14	86.62		19.56	19.33
Water WT. (gm)	6.84	5.26	6.70		0.44	0.30
Dry WT. (gm)	35.94	32.08	41.80		3.15	2.31
Moisture Content %	19.0%	16.4%	16.0%		14.0%	13.0%
Average %					13.5%	

16.5%



L.L	P.L	P.I
16.5%	13.5%	3.0%

Lab. Specialist	Lab. Engineer	Consultant Engineer
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Name :

Name :

Name :

Sign :

Sign :

Sign :

California Bearing Ratio TEST

Testing Date :	22/11/2023	Code	FROM STA :	TO STA :
Location :	624+500 Right	RW-S-10	Material :	تراب
NAME COMPANY	الرؤي		Description	مشون

Test Results :-

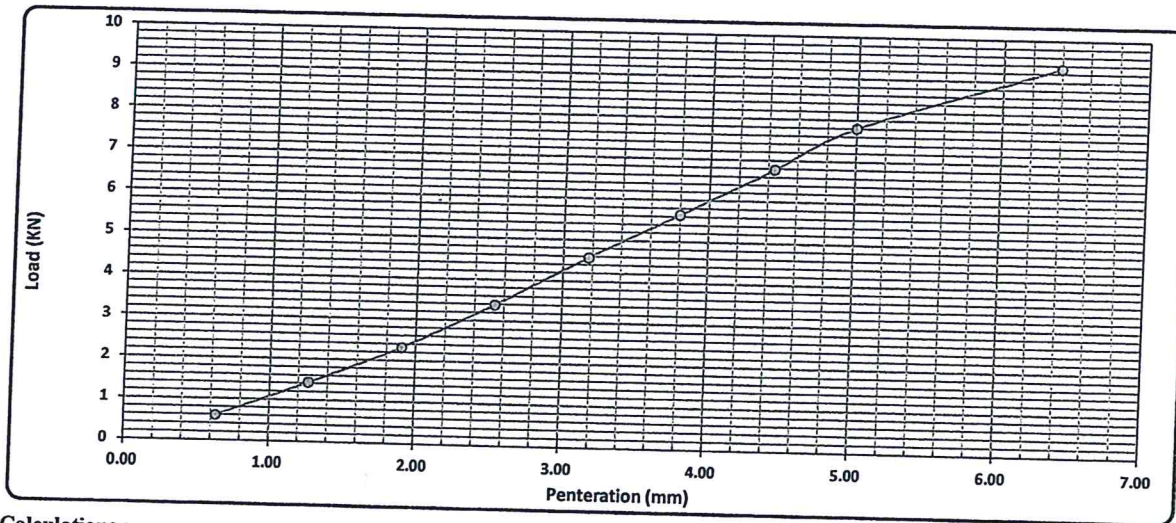
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	3180
Mold WT. (gm)	16036
Mold WT. + Wet WT. (gm)	23214
Wet WT. (gm)	7178
Wet Density (g/cm ³)	2.257
Dry Density (g/cm ³)	2.150
Proctor Density (g/cm ³)	2.220
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	44.32
Tare WT. +Wet WT. (gm)	248.25
Tare WT. +Dry WT. (gm)	236.68
Water WT. (gm)	11.6
Dry WT. (gm)	192.4
Moisture Content %	5.0

Swelling	
Mold No.	1
Date	22/11/2023
Initial Height (mm)	17.50
Final Height (mm)	18.00
Difference	1
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	60.00	145.00	235.00	345.00	465.00	575.00	690.00	795.00	950.00
Load (KN)	0.6	1.4	2.3	3.4	4.6	5.6	6.8	7.8	9.3



Calculations :-

Penteration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR
2.50	3.38	13.4	25.3%	97	95	95 عند نسبة 95
5.00	7.79	20.0	38.9%			24.8%
						38.2%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :

 SYSTRA SHAKER ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	Electric Express Train - HSR		 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) المسح العامة للمطرق والكبارى والنقل البرى (GARBLT)			
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	To Station 626+020					
Testing Date :	8/1/2024	Company :	الرؤى			
Material :	Upper Embankment		Code	RW-UE-24		
Location :	623+920	to	624+220	length (m)	300	
Layer Thickness :	25 cm	Level layer	-0.50			
Station	623+930	623+955	623+980	624+005	624+030	624+055
Hole no	1	2	3	4	5	6
Bulk density specifid	1.53	1.53	1.53	1.53	1.53	1.53
wt .of sand befor test	9456	9578	9465	9687	9247	9674
WT .of sand after test	6324	6047	5874	6678	5648	6012
WT . Of sand fill cone	1434	1434	1434	1434	1434	1434
WT . Of sand in hole	1698	2097	2157	1575	2165	2228
Volume of hole	1110	1371	1410	1029	1415	1456
WT . Of sample from	2561	3145	3258	2347	3175	3286
Bulk density of soil	2.31	2.29	2.31	2.28	2.24	2.26
Average water conten	4.8	4.9	4.7	5	4.8	4.8
Dry density (gm/cm3)	2.20	2.19	2.21	2.17	2.14	2.15
Max dry density	2.22	2.22	2.22	2.22	2.22	2.22
% Compaction ratio	99.2	98.5	99.4	97.8	96.4	97.0
Observations						
Lab Engineer :	Consultant Eng. :					
Sign :	Sign :					

	Electric Express Train - HSR					
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	To Station 626+020					
Testing Date :	8/1/2024		Company :	الرؤي		
Material :	Upper Embankment			Code	RW-UE-24	
Location :	623+920		to	624+220		length (m)
Layer Thickness :	25 cm		Level layer	-0.50		
Station	624+080	624+105	624+130	624+155	624+180	624+205
Hole no	7	8	9	10	11	12
Bulk density specifid	1.53	1.53	1.53	1.53	1.53	1.53
wt .of sand before test	9574	9384	8974	9687	8865	10089
WT .of sand after test	6245	6008	5489	6489	5378	6598
WT . Of sand fill cone	1434	1434	1434	1434	1434	1434
WT . Of sand in hole	1895	1942	2051	1764	2053	2057
Volume of hole	1239	1269	1341	1153	1342	1344
WT . Of sample from	2821	2899	3078	2677	3033	3107
Bulk density of soil	2.28	2.28	2.30	2.32	2.26	2.31
Average water content	4.6	5.1	4.9	4.8	4.7	4.8
Dry density (gm/cm3)	2.18	2.17	2.19	2.22	2.16	2.21
Max dry density	2.22	2.22	2.22	2.22	2.22	2.22
% Compaction ratio	98.1	97.9	98.6	99.8	97.2	99.3
Observations						
Lab Engineer :				Consultant Eng. :		
Sign :				Sign :	8-1-2024	

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	 SYSTRA SHAKER	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+020	المملكة للمحيطات والبحار والري (CAPSULT) الهيئة العامة للتقانة مصر
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TESTING DATE:	22/11/2023	code	ZONE		
LOCATION	624+200 Left	RW-S-11	Material	تراب	
NAME COMPANY	الرؤي		Description	مشون	

2-Gradient test

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	20.10	16.70	3.40

Consultant



51

PROCTOR TEST

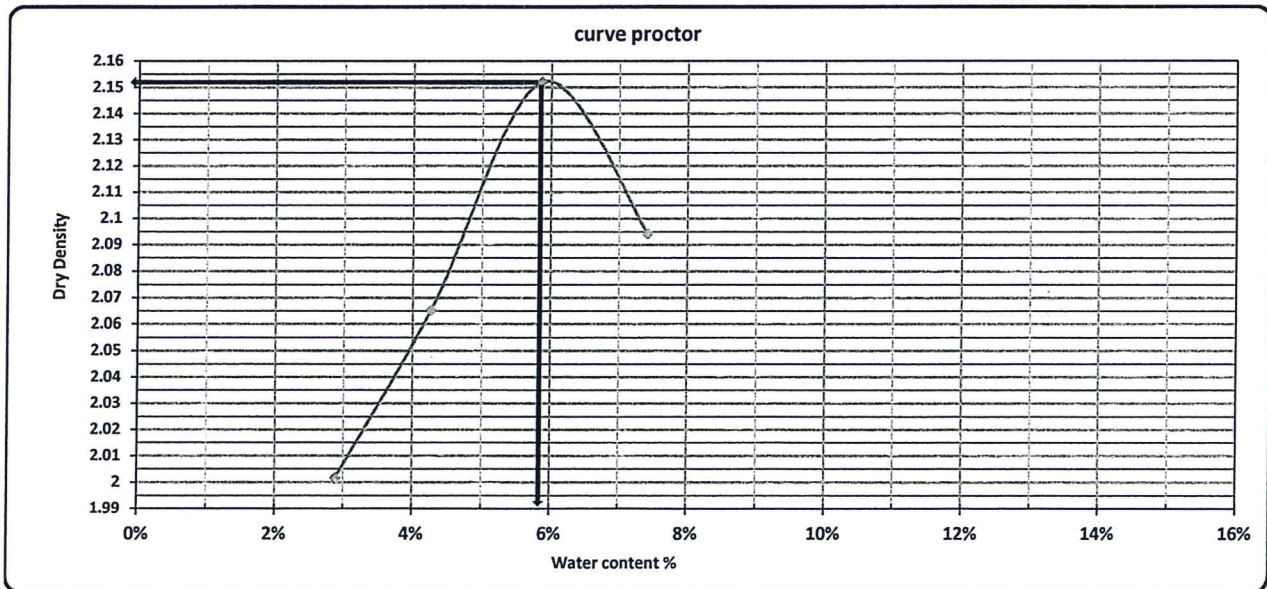
TESTING DATE:	22/11/2023	code	Station	
LOCATION	624+200 Left	RW-S-11	Material	تراب
NAME COMPANY	الروي		Description	مشون

Weight of empty mold :	5857.0
Mold Volume:	2065.0

MAX Dry Density	2.152
Water content %	5.9

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10110.0	10304.0	10562.0	10503	
WT. WET SOIL	4253.0	4447.0	4705.0	4646.0	
Wt. Density	2.060	2.154	2.278	2.250	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	16.74	16.43	21.16	26.67	44.95	44.02	43.6	42.81		
Wt. Of wet soil & tare	84.3	78.5	251.4	245.0	187.1	213.5	233.3	206.4		
Wt. Of dry soil & tare	82.3	76.8	240.9	237.0	178.3	205.1	219.2	192.0		
Wt. Of water	2.0	1.7	10.4	8.0	8.7	8.4	14.0	14.4		
Wt. Of dry soil	65.6	60.4	219.8	210.3	133.4	161.1	175.6	210.0		
Water content %	3.0%	2.8%	4.8%	3.8%	6.6%	5.2%	8.0%	6.9%		
AV. Water content %	2.9%		4.3%		5.9%		7.4%			
Dry Density	2.002		2.065		2.152		2.094			



Contractor

Consultant

[Signature]

[Signature]

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد فاضل	 SHAKER	Electric Express Train - HSR	 الهيئة العامة للطرق والمواصلات (GAT)	 الهيئة العامة للمياه (MWR)
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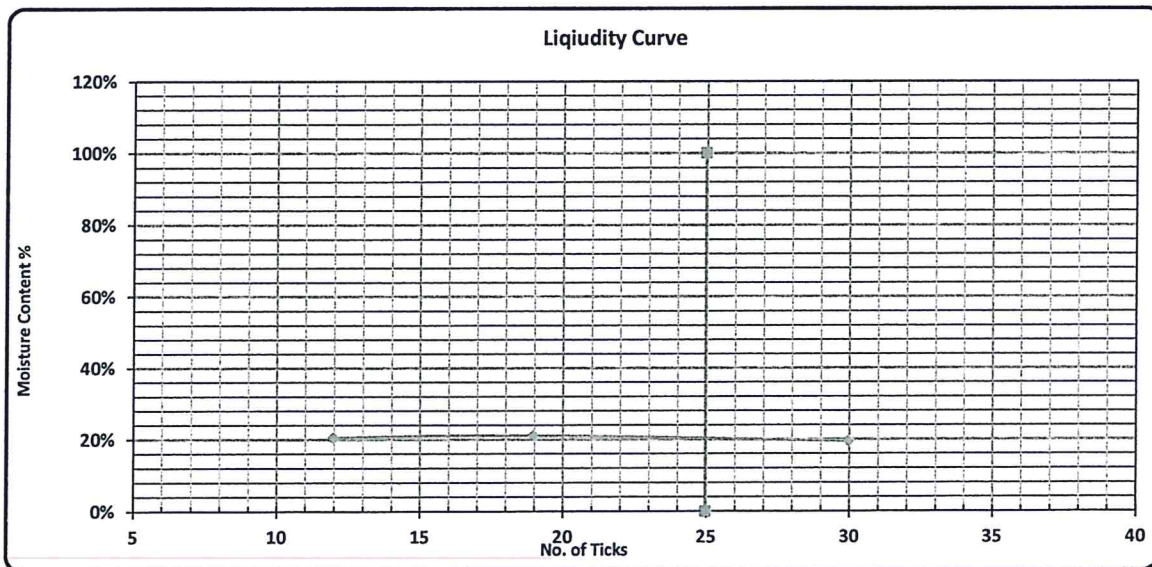
Plasticity and Liquidity Test -Atterberg Limits

Testing Date:	22/11/2023	Code:	FROM STA:	TO STA:
Location:	624+200 Left	RW-S-11	Material:	تراب
Layer No. :	الرؤي		Description	مشون

Testing Results :-

Test	Liquid Limit				Plastic Limit	
No. of Ticks	12	19	30		-	-
Tare No.	1	2	3		1	2
Tare WT. (gm)	44.92	43.13	44.05		15.78	17.01
Tare WT. + Wet WT. (gm)	87.20	81.00	80.36		18.42	19.49
Tare WT. + Dry WT. (gm)	80.00	74.41	74.44		18.06	19.12
Water WT. (gm)	7.20	6.59	5.92		0.36	0.37
Dry WT. (gm)	35.08	31.28	30.39		2.28	2.11
Moisture Content %	20.5%	21.1%	19.5%		15.8%	17.5%
Average %					16.7%	

20.1%



L.L	P.L	P.I
20.1%	16.7%	3.4%

Lab. Specialist	Lab. Engineer	Consultant Engineer
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Name :

Name :

Name :

Sign :

Sign :

Sign :

California Bearing Ratio TEST

Testing Date :	25/11/2023	Code	FROM STA :	TO STA :
Location :	624+200 Left	RW-S-11	Material :	تراب
NAME COMPANY			Description	مشون

Test Results :-

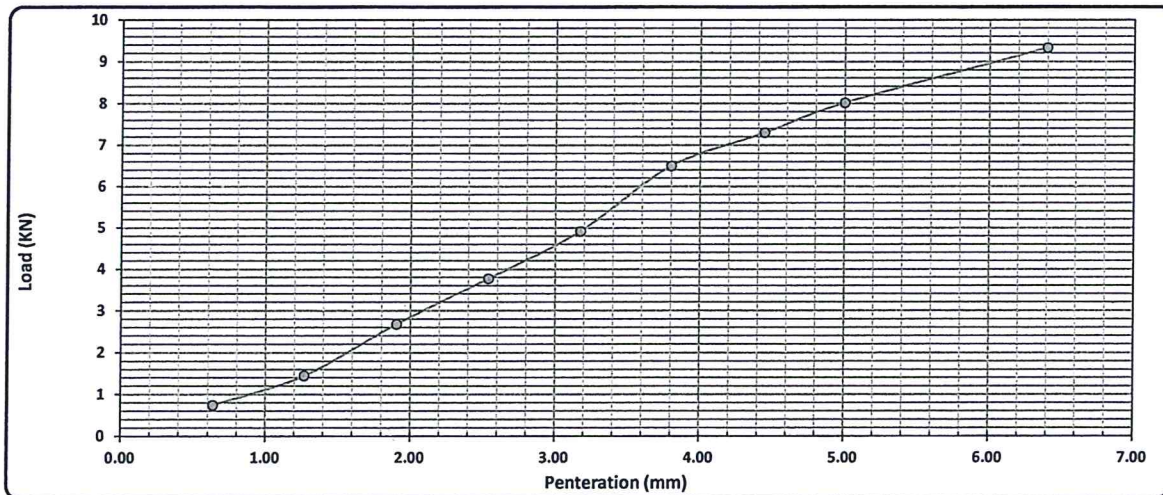
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm ³)	3180
Mold WT. (gm)	16033
Mold WT. + Wet WT. (gm)	23134
Wet WT. (gm)	7101
Wet Density (g/cm ³)	2.233
Dry Density (g/cm ³)	2.109
Proctor Density (g/cm ³)	2.152
Compaction %	98

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	30
Tare WT. +Wet WT. (gm)	203.5
Tare WT. +Dry WT. (gm)	193.9
Water WT. (gm)	9.6
Dry WT. (gm)	163.9
Moisture Content %	5.9

Swelling	
Mold No.	2
Date	25/11/2023
Initial Height (mm)	0.00
Final Height (mm)	0.35
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	75.00	147.00	272.00	384.00	501.00	662.00	744.00	817.00	951.00
Load (KN)	0.7	1.4	2.7	3.8	4.9	6.5	7.3	8.0	9.3



Calculations :-

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	95 عند نسبة 95
2.50	3.76	13.4	28.2%	98	95	27.3%
5.00	8.01	20.0	40.0%			38.7%

Lab. Specialist

Name :

Sign :

Lab. Engineer

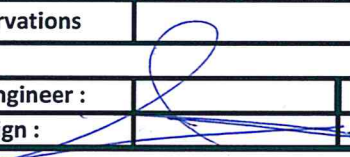
Name :

Sign :

Consultant Engineer

Name :

Sign :

 SYSTRA SHAKER ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد فليفل	Electric Express Train - HSR					 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) الهيئة العامة لطرق الكباري والنقل البري (GARBLT)																																																																						
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Testing Date :	27/04/2024	Company :	الرؤي																																																																									
Material :	fill layer upper embankement			Code	RW-UE-22																																																																							
Location :	623+020 to 623+320			length	300m																																																																							
Layer Thickness :	25cm	Level layer	-0.50																																																																									
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 SYSTRA SHAKER ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد منديل	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 480+000 To Station 630+000	 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) المهنة العامة للمرور والكباري والنقل البري (GARBLT)																																																																										
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Sign :			Sign :																																																																									

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	27/12/2023	code	ZONE	
LOCATION	625+900 Left	RW-S-13	Material	تراب
NAME COMPANY	الرؤي		Description	مشون

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		20000.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify
Mass retained (g)	3623.0	2200.0	3038.0	1797.0	2064.0	1131.0	1901.0		A-1-a
Cumulative Retained (g)	3623.0	5823.0	8861.0	10658.0	12722.0	13853.0	15754.0	PRO	2.282
Cumulative Retained %	18.1	29.1	44.3	53.3	63.6	69.3	78.8	WC	6.60
Cumulative Passing %	81.9	70.9	55.7	46.7	36.4	30.7	21.2	CBR	38.50

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	55.00	135.00	315.00					
Cumulative Retained %	11.00	27.00	63.00					
Cumulative Passing %	89.00	73.00	37.00					

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 %	81.9	70.9	55.7	46.7	36.4	30.7	21.2	18.9	15.5	7.9

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

Contractor

Consultant

PROCTOR TEST

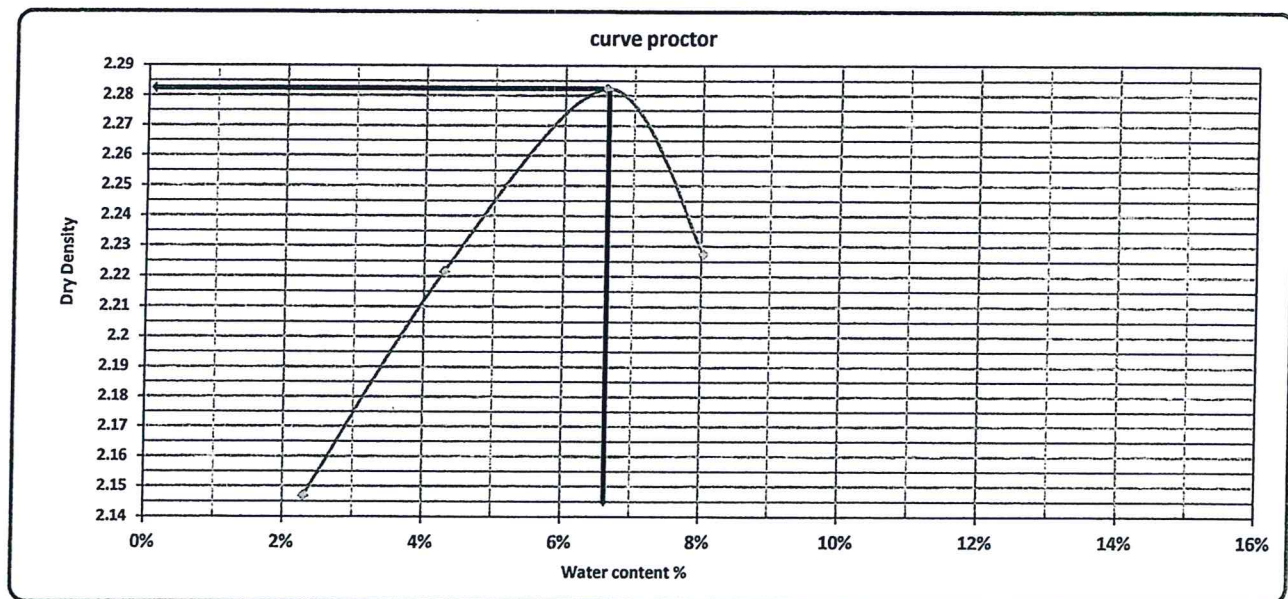
TESTING DATE:	27/12/2023	code	Station	
LOCATION	625+900 Left	RW-S-13	Material	تراب
NAME COMPANY	الروبي		Description	مشون

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.282
Water content %	6.6

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10655.0	10906.0	11148.0	11093	
WT. WET SOIL	4580.0	4831.0	5073.0	5018.0	
Wt. Density	2.197	2.317	2.433	2.407	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	44.26	44.78	43.89	44.98	44.32	43.76	44.23	43.17		
Wt. Of wet soil & tare	88.8	81.6	91.1	85.1	79.9	77.7	86.2	90.4		
Wt. Of dry soil & tare	87.9	80.7	89.4	83.3	77.7	75.6	83.0	86.9		
Wt. Of water	0.9	0.9	1.7	1.8	2.2	2.1	3.2	3.5		
Wt. Of dry soil	43.6	35.9	45.5	38.3	33.4	31.8	38.8	43.7		
Water content %	2.0%	2.6%	3.8%	4.8%	6.5%	6.7%	8.2%	7.9%		
AV. Water content %	2.3%		4.3%		6.6%		8.0%			
Dry Density	2.147		2.221		2.282		2.228			



Contractor



Consultant



California Bearing Ratio TEST

Testing Date :	30/12/2023	Code	FROM STA :	TO STA :
Location :	625+900 Left	RW-S-13	Material :	تراب
NAME COMPANY	الروبي		Description	مشون

Test Results :-

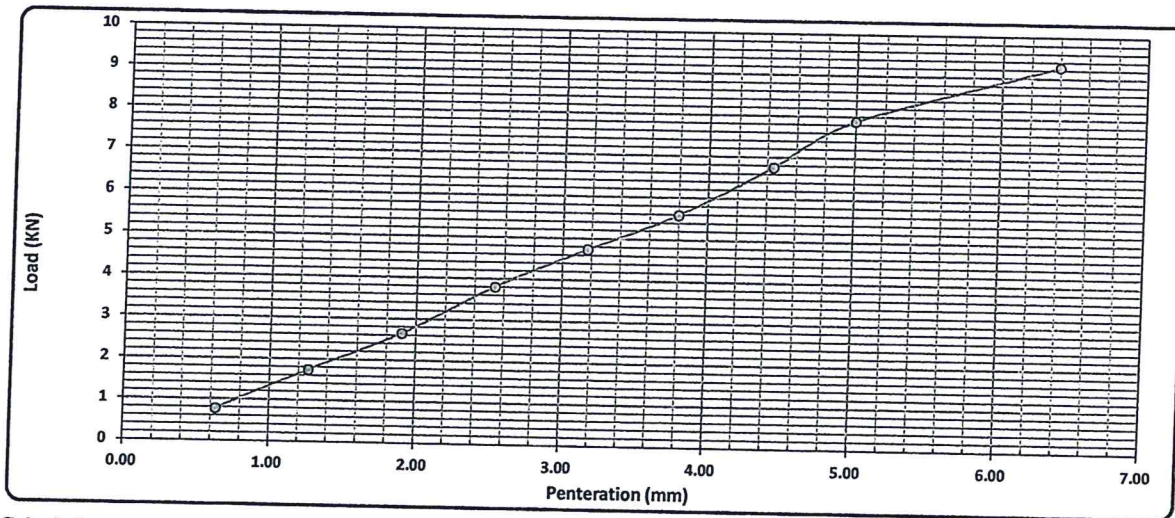
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	3150
Mold WT. (gm)	16033
Mold WT. + Wet WT. (gm)	23458
Wet WT. (gm)	7425
Wet Density (g/cm ³)	2.357
Dry Density (g/cm ³)	2.215
Proctor Density (g/cm ³)	2.282
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	27
Tare WT. + Wet WT. (gm)	150
Tare WT. + Dry WT. (gm)	142.6
Water WT. (gm)	7.4
Dry WT. (gm)	115.6
Moisture Content %	6.4

Swelling	
Mold No.	1
Date	30/12/2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	78.00	176.00	269.00	387.00	482.00	569.00	688.00	803.00	945.00
Load (KN)	0.8	1.7	2.6	3.8	4.7	5.6	6.7	7.9	9.3



Calculations :-

Penetration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(Ib)	(%)	(%)	(%)	% عند نسبة 95
2.50	3.79	13.4	28.4%	97	95	27.8%
5.00	7.87	20.0	39.3%			38.5%

Lab. Specialist

Lab. Engineer

Consultant Engineer

Name :

Name :

Name :

Sign :

Sign :

Sign :

 SYSTRA SHAKER ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد فتيدل	Electric Express Train - HSR				 الهيئة القومية للأنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) الهيئة العامة للمطرق والكبارى والنقل البرى (GARBLT)	
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	From Station 623+020 To Station 626+020					
Testing Date :	11/1/2024	Company :	الرؤى			
Material :	Middle embankment			Code	RW-ME-20	
Location :	625+860	to	625+960	length (m)	100	
Layer Thickness :	50m	Level layer	-2.50			
Station	625+870	625+915				
Hole no	1.	2				
Bulk density specifid	1.53	1.53				
wt .of sand befor test	9845	9651				
WT .of sand after test	6685	6312				
WT . Of sand fill cone	1434	1434				
WT . Of sand in hole	1726	1905				
Volume of hole	1128	1245				
WT . Of sample from	2687	2969				
Bulk density of soil	2.38	2.38				
Average water conter	6.6	6.5				
Dry density (gm/cm3)	2.23	2.24				
Max dry density	2.282	2.282				
% Compaction ratio	97.9	98.1				
Observations						
Lab Engineer :			Consultant Eng. :			
Sign :			Sign :			

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد فتحي	 SYSTRA SHAKER	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+020	 الهيئة العامة للإنتاج المخطط والمطور (م.ت.م.د.)
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	9/1/2024	code	ZONE	
LOCATION	625+900 Left	RW-S-14	Material	تراب
NAME COMPANY	الروزي		Description	مشون

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		22517.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify
Mass retained (g)	1702.0	1923.0	2855.0	1445.0	2372.0	1306.0	2715.0		A-1-a
Cumulative Retained (g)	1702.0	3625.0	6480.0	7925.0	10297.0	11603.0	14318.0		PRO 2.272
Cumulative Retained %	7.6	16.1	28.8	35.2	45.7	51.5	63.6		WC 6.20
Cumulative Passing %	92.4	83.9	71.2	64.8	54.3	48.5	36.4		CBR 39.50

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	55.27	125.11	409.45					
Cumulative Retained %	11.05	25.02	81.89					
Cumulative Passing %	88.95	74.98	18.11					

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 %	92.4	83.9	71.2	64.8	54.3	48.5	36.4	32.4	27.3	6.6

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

Contractor



Consultant


 14-1-2024

PROCTOR TEST

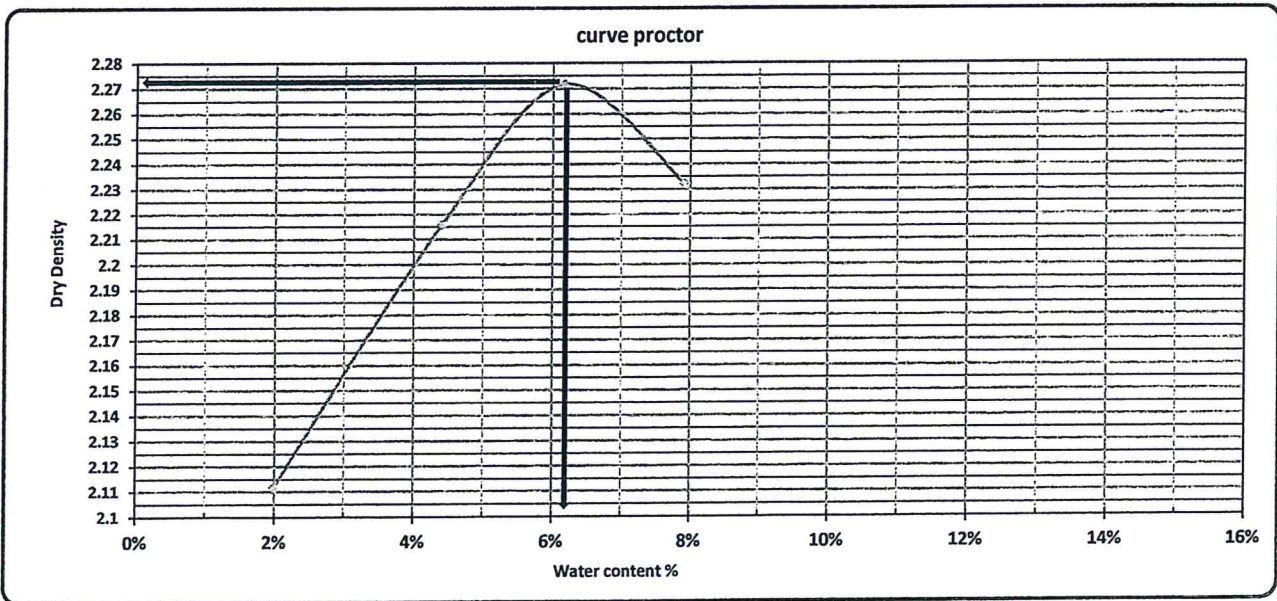
TESTING DATE:	10/1/2024	code	Station	
LOCATION	625+900 Left	RW-S-14	Material	تراب
NAME COMPANY	الروزي		Description	مشون

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.272
Water content %	6.2

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10567.0	10899.0	11104.0	11098	
WT. WET SOIL	4492.0	4824.0	5029.0	5023.0	
Wt. Density	2.154	2.314	2.412	2.409	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	44.1	44.89	43.82	43.11	42.68	26.59	17.65	17.53		
Wt. Of wet soil & tare	210.0	207.1	173.1	197.8	174.6	148.0	162.9	153.4		
Wt. Of dry soil & tare	206.9	203.8	167.9	191.0	167.2	140.6	152.4	143.3		
Wt. Of water	3.1	3.3	5.2	6.9	7.4	7.3	10.5	10.1		
Wt. Of dry soil	162.8	158.9	124.1	147.9	124.5	114.1	134.7	125.8		
Water content %	1.9%	2.1%	4.2%	4.6%	5.9%	6.4%	7.8%	8.0%		
AV. Water content %	2.0%		4.4%		6.2%		7.9%			
Dry Density	2.112		2.216		2.272		2.232			



Contractor

Consultant

[Signature]

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14-1-2024

California Bearing Ratio TEST

Testing Date :	14/1/2024	Code	FROM STA :	TO STA :
Location :	625+900 Left	RW-S-14	Material :	تراب
NAME COMPANY	الروزي		Description	مشون

Test Results :-

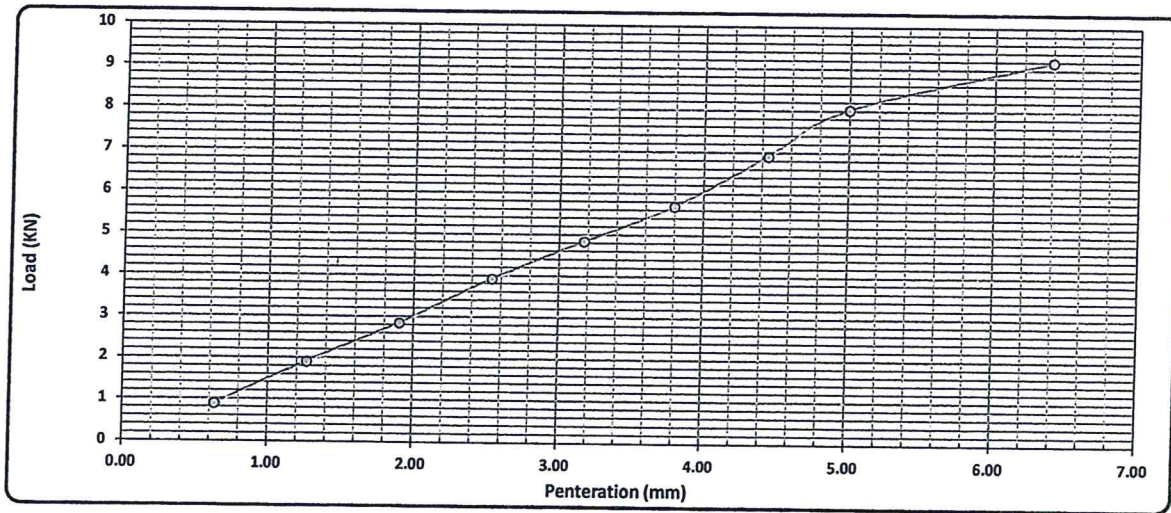
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	3150
Mold WT. (gm)	16033
Mold WT. + Wet WT. (gm)	23335
Wet WT. (gm)	7302
Wet Density (g/cm ³)	2.318
Dry Density (g/cm ³)	2.182
Proctor Density (g/cm ³)	2.272
Compaction %	96

Moisture Ratio After Compacted Mold	
Tare No.	1
Tare WT. (gm)	27
Tare WT. +Wet WT. (gm)	150
Tare WT. +Dry WT. (gm)	142.8
Water WT. (gm)	7.2
Dry WT. (gm)	115.8
Moisture Content %	6.2

Swelling	
Mold No.	1
Date	14/1/2024
Initial Height (mm)	2.00
Final Height (mm)	2.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	89.00	193.00	289.00	398.00	492.00	579.00	703.00	817.00	936.00
Load (KN)	0.9	1.9	2.8	3.9	4.8	5.7	6.9	8.0	9.2



Calculations :-

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	% عند نسبة 95
2.50	3.90	13.4	29.2%	96	95	28.9%
5.00	8.01	20.0	40.0%			39.5%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

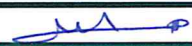
Sign :

Consultant Engineer

Name :

Sign :

14-1-2024

 المكتب الاستشاري الهندسي أ.د. خالد فتحي	Electric Express Train - HSR				 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (GARBLT)
	From 6 October City To Abu simbel				
	section -4 From Sohage To Qena				
	From Station 623+020 To Station 626+024				
Testing Date :	14/1/2024	Company :	الرؤى		
Material :	Middle embankment			Code	RW-ME-24
Location :	625+560	to	625+580	length (m)	20
Layer Thickness :	50m	Level layer	-3.50		
Station	625+570				
Hole no	1				
Bulk density specifid	1.53				
wt .of sand befor test	8751				
WT .of sand after test	5409				
WT . Of sand fill cone	1434				
WT . Of sand in hole	1908				
Volume of hole	1247				
WT . Of sample from	2864				
Bulk density of soil	2.30				
Average water conter	6.2				
Dry density (gm/cm3)	2.16				
Max dry density	2.272				
% Compaction ratio	95.2				
Observations					
Lab Engineer :		Consultant Eng. :			
Sign :		Sign :			

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد فتحي	 SYSTRA SHAKER	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+020	 الهيئة العامة للتخطيط والتنمية الاقتصادية الهيئة العامة للتخطيط والتنمية الاقتصادية
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	10/1/2024	code	ZONE		
LOCATION	625+900 Left	RW-S-15	Material	تراب	
NAME COMPANY	الروزي		Description	مشون	

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		22892.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	310.0	2051.0	4021.0	1939.0	2766.0	1539.0	2371.0		A-1-a	
Cumulative Retained (g)	310.0	2361.0	6382.0	8321.0	11087.0	12626.0	14997.0		PRO	2.290
Cumulative Retained %	1.4	10.3	27.9	36.3	48.4	55.2	65.5		WC	6.30
Cumulative Passing %	98.6	89.7	72.1	63.7	51.6	44.8	34.5		CBR	37.70

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	140.09	247.55	397.48					
Cumulative Retained %	28.02	49.51	79.50					
Cumulative Passing %	71.98	50.49	20.50					

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 %	98.6	89.7	72.1	63.7	51.6	44.8	34.5	24.8	17.4	7.1

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

Contractor

Consultant




 14-1-2024

PROCTOR TEST

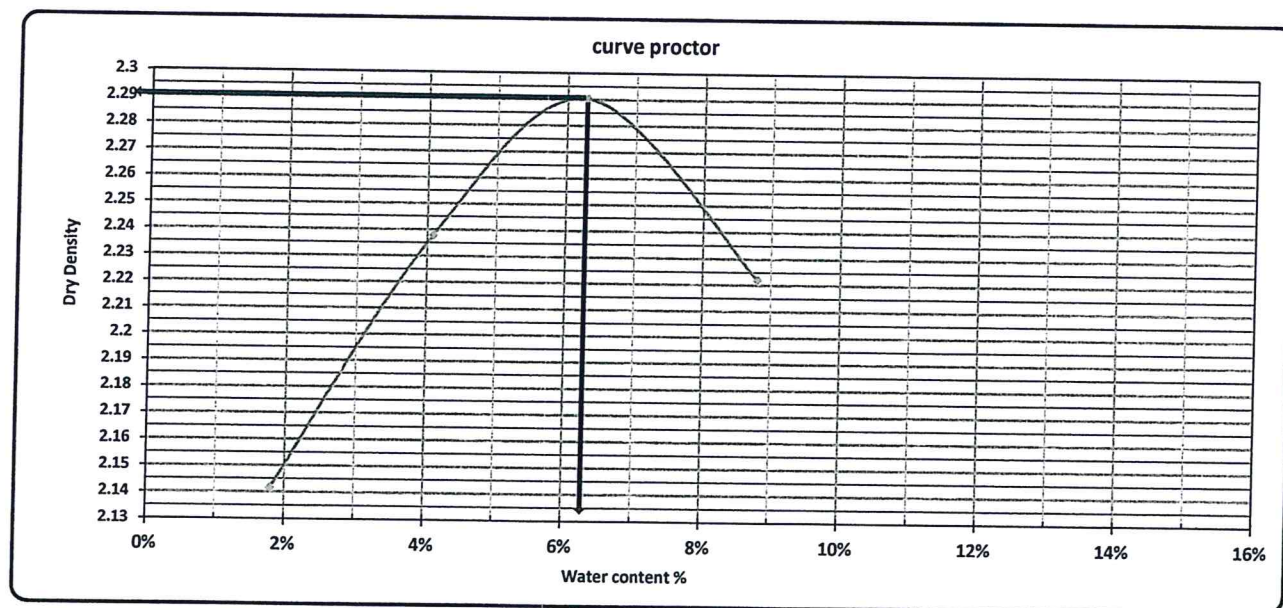
TESTING DATE:	10/1/2024	code	Station	
LOCATION	625+900 Left	RW-S-15	Material	تراب
NAME COMPANY	الروي		Description	مشون

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.290
Water content %	6.3

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10621.0	10932.0	11151.0	11116	
WT. WET SOIL	4546.0	4857.0	5076.0	5041.0	
Wt. Density	2.180	2.329	2.435	2.418	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	15.76	15.56	16.43	14.57	44.77	44.86	21.1	16.73		
Wt. Of wet soil & tare	97.5	95.8	102.9	104.2	182.4	201.5	179.0	110.0		
Wt. Of dry soil & tare	95.7	94.8	99.6	100.6	174.3	192.1	166.7	102.1		
Wt. Of water	1.8	1.1	3.4	3.6	8.0	9.4	12.3	7.8		
Wt. Of dry soil	79.9	79.2	83.1	86.0	129.6	147.3	145.6	85.4		
Water content %	2.3%	1.3%	4.1%	4.1%	6.2%	6.4%	8.4%	9.2%		
AV. Water content %	1.8%		4.1%		6.3%		8.8%			
Dry Density	2.141		2.238		2.290		2.222			



Contractor

[Signature]

Consultant

[Signature]
14-1-2024

California Bearing Ratio TEST

Testing Date :	14/1/2024	Code	FROM STA :	TO STA :
Location :	625+900 Left	RW-S-15	Material :	تراب
NAME COMPANY	الروي		Description	مشون

Test Results :-

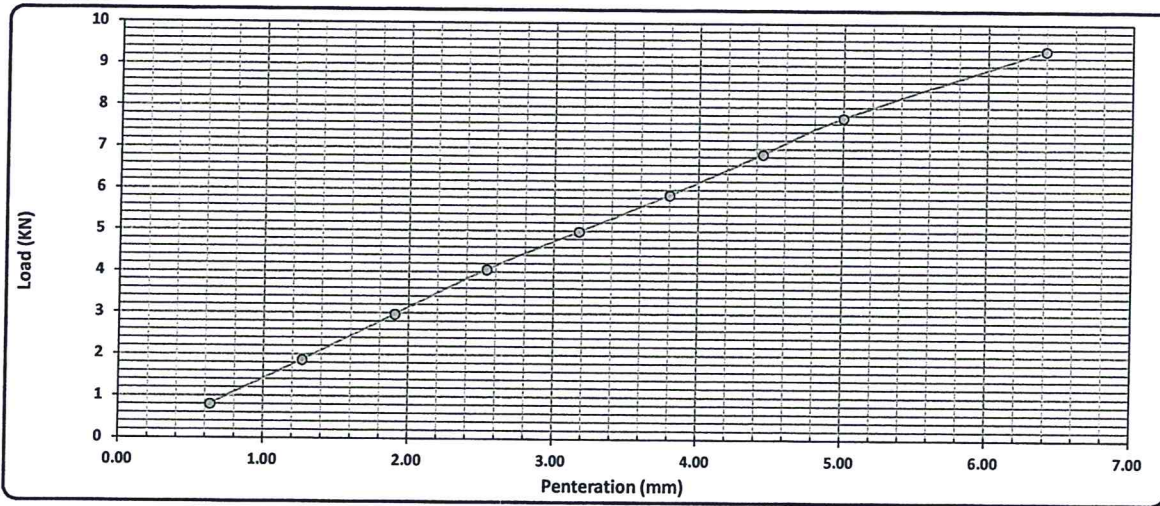
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm ³)	3150
Mold WT. (gm)	16093
Mold WT. + Wet WT. (gm)	23558
Wet WT. (gm)	7465
Wet Density (g/cm ³)	2.370
Dry Density (g/cm ³)	2.229
Proctor Density (g/cm ³)	2.290
Compaction %	97

Mositure Ratio After Compacted Mold	
Tare No.	2
Tare WT. (gm)	27
Tare WT. +Wet WT. (gm)	150
Tare WT. +Dry WT. (gm)	142.7
Water WT. (gm)	7.3
Dry WT. (gm)	115.7
Moisture Content %	6.3

Swelling	
Mold No.	2
Date	14/1/2024
Intial Height (mm)	4.18
Final Height (mm)	4.18
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	81.00	189.00	301.00	412.00	507.00	598.00	699.00	789.00	955.00
Load (kN)	0.8	1.9	2.9	4.0	5.0	5.9	6.9	7.7	9.4



Calculations :-

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	95 عند نسبة 95
2.50	4.04	13.4	30.2%	97	95	29.5%
5.00	7.73	20.0	38.6%			37.7%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

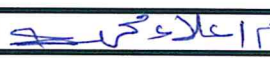
Sign :

Consultant Engineer

Name :

Sign :

14-1-2024

 	Electric Express Train - HSR				 	
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	From Station 623+020 To Station 626+024					
Testing Date :	22/1/2024		Company :	الرؤى		
Material :	Middle embankment				Code	RW-ME-28
Location :	625+460		to	625+660		length (m) 200
Layer Thickness :	50m		Level layer	-2.00		
Station	625+470	625+520	625+570	625+620		
Hole no	1	2	3	4		
Bulk density specifid	1.52	1.52	1.52	1.52		
wt .of sand befor test	9125	9584	9687	9321		
WT .of sand after test	5879	6312	6198	5974		
WT . Of sand fill cone	1434	1434	1434	1434		
WT . Of sand in hole	1812	1838	2055	1913		
Volume of hole	1189	1206	1348	1255		
WT . Of sample from	2810	2889	3120	3019		
Bulk density of soil	2.36	2.40	2.31	2.41		
Average water conter	6.2	6.1	6.2	6.3		
Dry density (gm/cm3)	2.23	2.26	2.18	2.26		
Max dry density	2.29	2.29	2.29	2.29		
% Compaction ratio	97.2	98.6	95.1	98.8		
Observations						
Lab Engineer :			Consultant Eng. :			
Sign :			Sign :	22-1-2024		

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	17/1/2024	code	ZONE	
LOCATION	625+900 Left		Material	تراب
NAME COMPANY	الروزي		Description	مشون

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		20209.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	2094.0	1661.0	3400.0	1427.0	2673.0	1159.0	1742.0		A-1-a	
Cumulative Retained (g)	2094.0	3755.0	7155.0	8582.0	11255.0	12414.0	14156.0		PRO	2.268
Cumulative Retained %	10.4	18.6	35.4	42.5	55.7	61.4	70.0		WC	5.90
Cumulative Passing %	89.6	81.4	64.6	57.5	44.3	38.6	30.0		CBR	40.00

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	155.23	265.11	388.79					
Cumulative Retained %	31.05	53.02	77.76					
Cumulative Passing %	68.95	46.98	22.24					

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 %	89.6	81.4	64.6	57.5	44.3	38.6	30.0	20.7	14.1	6.7

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

Contractor



Consultant



21-1-2024

PROCTOR TEST

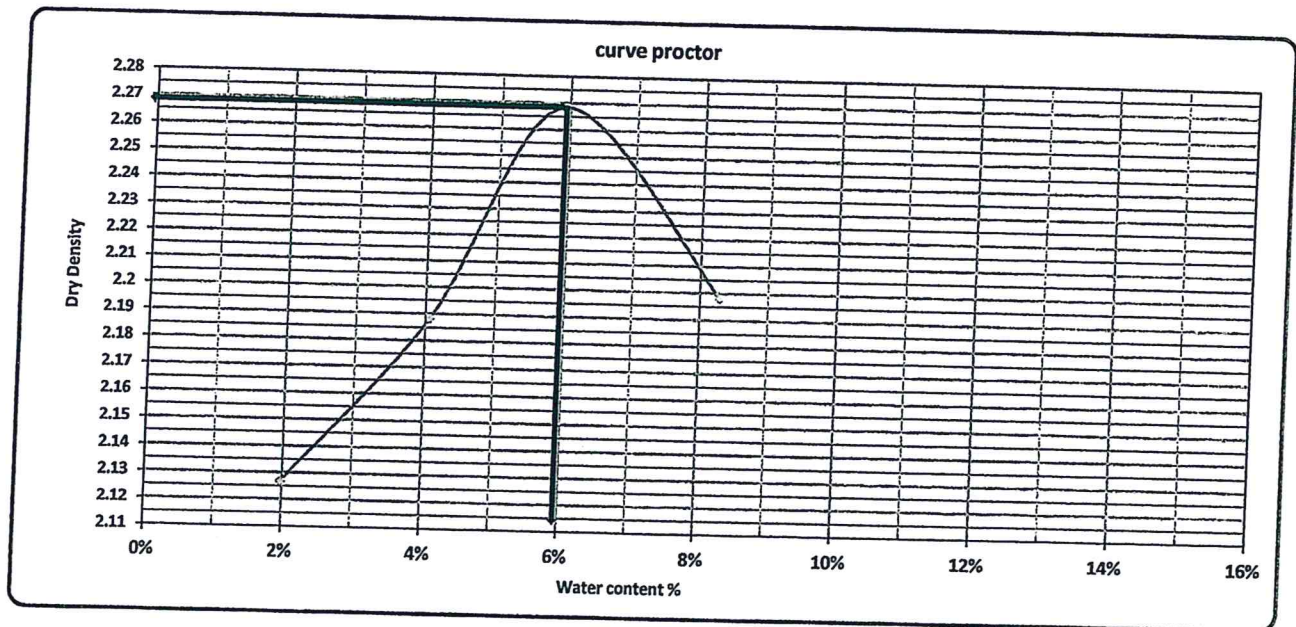
TESTING DATE:	17/1/2024	code	Station	
LOCATION	625+900 Left	RW-S-16	Material	تراب
NAME COMPANY	الروبي		Description	مشون

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.268
Water content %	5.9

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10597.0	10823.0	11085.0	11038	
WT. WET SOIL	4522.0	4748.0	5010.0	4963.0	
Wt. Density	2.169	2.277	2.403	2.380	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	44.12	44.28	44.36	44.87	43.25	44.12	45.98	43.75		
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	147.9	148.0	145.7	146.1	144.1	144.0	141.8	142.1		
Wt. Of water	2.1	2.0	4.3	3.9	5.9	6.0	8.2	7.9		
Wt. Of dry soil	103.8	103.7	101.3	101.2	100.8	99.9	95.8	98.3		
Water content %	2.1%	1.9%	4.3%	3.9%	5.9%	6.0%	8.5%	8.1%		
AV. Water content %	2.0%		4.1%		5.9%		8.3%			
Dry Density	2.127		2.188		2.268		2.198			



Contractor

[Signature]

Consultant

[Signature]
21-1-2024

California Bearing Ratio TEST

Testing Date :	21/1/2024	Code	FROM STA :	TO STA :
Location :	625+900 Left	RW-S-16	Material :	تراب
NAME COMPANY	الرؤي		Description	مشون

Test Results :-

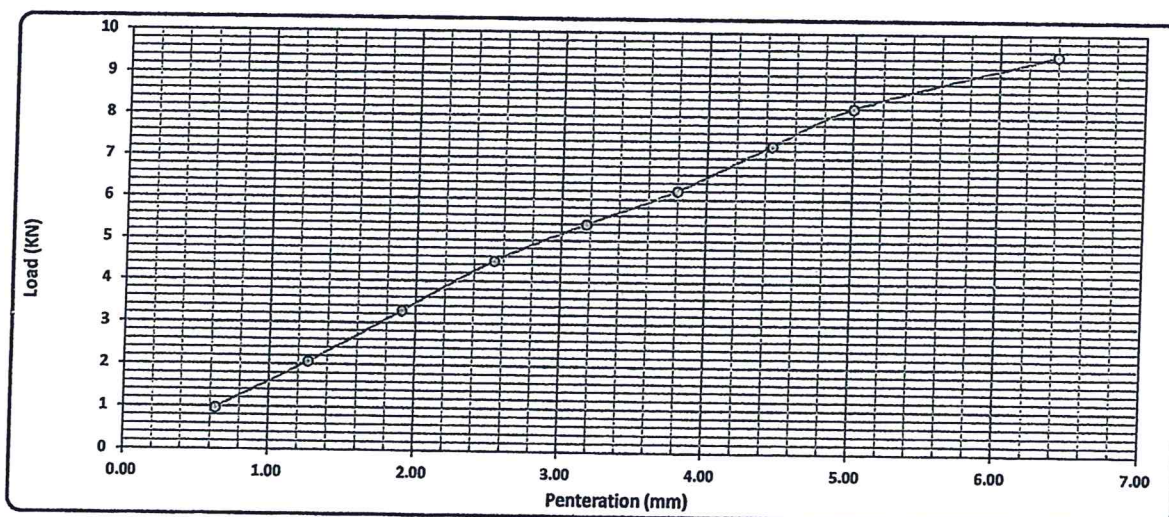
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm^3)	3180
Mold WT. (gm)	16033
Mold WT. + Wet WT. (gm)	23446
Wet WT. (gm)	7413
Wet Density (g/cm^3)	2.331
Dry Density (g/cm^3)	2.202
Proctor Density (g/cm^3)	2.268
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	6
Tare WT. (gm)	44.32
Tare WT. +Wet WT. (gm)	150
Tare WT. +Dry WT. (gm)	144.14
Water WT. (gm)	5.9
Dry WT. (gm)	99.8
Moisture Content %	5.9

Swelling	
Mold No.	1
Date	21/1/2024
Initial Height (mm)	2.00
Final Height (mm)	2.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	97.00	209.00	333.00	456.00	549.00	632.00	744.00	836.00	968.00
Load (KN)	1.0	2.0	3.3	4.5	5.4	6.2	7.3	8.2	9.5



Calculations :-

Penetration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	% عند نسبة 95
2.50	4.47	13.4	33.5%	97	95	32.8%
5.00	8.19	20.0	40.9%			40.0%

Lab. Specialist

Name: _____

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :

21-1-2024

    المكتب الاستشاري الهندسي أ.د. خالد قنديل	Electric Express Train - HSR				 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAAT)  الهيئة العامة لطرق الكباري والنقل البري (GARBLT)																																																																							
	From 6 October City To Abu simbel																																																																											
	section -4 From Sohage To Qena																																																																											
	From Station 623+020 To Station 626+024																																																																											
Testing Date :	4/2/2024	Company :	الرؤي																																																																									
Material :	Middle embankment				Code	RW-ME-36																																																																						
Location :	625+460	to	625+680	length (m)	220																																																																							
Layer Thickness :	25cm	Level layer	-1.75																																																																									
<table border="1"> <tr> <td>Station</td> <td>625+470</td> <td>625+520</td> <td>625+570</td> <td>625+620</td> <td>625+670</td> <td></td> </tr> <tr> <td>Hole no</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td></td> </tr> <tr> <td>Bulk density specifid</td> <td>1.52</td> <td>1.52</td> <td>1.52</td> <td>1.52</td> <td>1.52</td> <td></td> </tr> <tr> <td>wt .of sand befor test</td> <td>9951</td> <td>9841</td> <td>9632</td> <td>8564</td> <td>9841</td> <td></td> </tr> <tr> <td>WT .of sand after test</td> <td>6467</td> <td>6397</td> <td>6149</td> <td>5289</td> <td>6309</td> <td></td> </tr> <tr> <td>WT . Of sand fill cone</td> <td>1434</td> <td>1434</td> <td>1434</td> <td>1434</td> <td>1434</td> <td></td> </tr> <tr> <td>WT . Of sand in hole</td> <td>2050</td> <td>2010</td> <td>2049</td> <td>1841</td> <td>2098</td> <td></td> </tr> <tr> <td>Volume of hole</td> <td>1345</td> <td>1319</td> <td>1344</td> <td>1208</td> <td>1377</td> <td></td> </tr> <tr> <td>WT . Of sample from</td> <td>3185</td> <td>3121</td> <td>3123</td> <td>2894</td> <td>3174</td> <td></td> </tr> <tr> <td>Bulk density of soil</td> <td>2.37</td> <td>2.37</td> <td>2.32</td> <td>2.40</td> <td>2.31</td> <td></td> </tr> </table>							Station	625+470	625+520	625+570	625+620	625+670		Hole no	1	2	3	4	5		Bulk density specifid	1.52	1.52	1.52	1.52	1.52		wt .of sand befor test	9951	9841	9632	8564	9841		WT .of sand after test	6467	6397	6149	5289	6309		WT . Of sand fill cone	1434	1434	1434	1434	1434		WT . Of sand in hole	2050	2010	2049	1841	2098		Volume of hole	1345	1319	1344	1208	1377		WT . Of sample from	3185	3121	3123	2894	3174		Bulk density of soil	2.37	2.37	2.32	2.40	2.31	
Station	625+470	625+520	625+570	625+620	625+670																																																																							
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<table border="1"> <tr> <td>Average water conter</td> <td>5.9</td> <td>6.1</td> <td>6</td> <td>6.1</td> <td>6</td> <td></td> </tr> <tr> <td>Dry density (gm/cm3)</td> <td>2.24</td> <td>2.23</td> <td>2.19</td> <td>2.26</td> <td>2.18</td> <td></td> </tr> <tr> <td>Max dry density</td> <td>2.268</td> <td>2.268</td> <td>2.268</td> <td>2.268</td> <td>2.268</td> <td></td> </tr> <tr> <td>% Compaction ratio</td> <td>98.6</td> <td>98.3</td> <td>96.6</td> <td>99.6</td> <td>95.9</td> <td></td> </tr> <tr> <td>Observations</td> <td colspan="6"></td> </tr> </table>							Average water conter	5.9	6.1	6	6.1	6		Dry density (gm/cm3)	2.24	2.23	2.19	2.26	2.18		Max dry density	2.268	2.268	2.268	2.268	2.268		% Compaction ratio	98.6	98.3	96.6	99.6	95.9		Observations																																									
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Lab Engineer :			Consultant Eng. :																																																																									
Sign :			Sign :																																																																									

 	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+020	
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	20/1/2024	code	ZONE		
LOCATION	625+900 Left	RW-S-17	Material	تراب	
NAME COMPANY	الروبي		Description	مشون	

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		21746.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	1068.0	1978.0	3888.0	2067.0	3039.0	1208.0	1876.0		A-1-a	
Cumulative Retained (g)	1068.0	3046.0	6934.0	9001.0	12040.0	13248.0	15124.0		PRO	2.271
Cumulative Retained %	4.9	14.0	31.9	41.4	55.4	60.9	69.5		WC	6.00
Cumulative Passing %	95.1	86.0	68.1	58.6	44.6	39.1	30.5		CBR	37.70

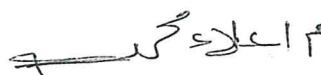
B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	131.00	219.00	368.00					
Cumulative Retained %	26.20	43.80	73.60					
Cumulative Passing %	73.80	56.20	26.40					

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 %	95.1	86.0	68.1	58.6	44.6	39.1	30.5	22.5	17.1	8.0

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

Contractor

Consultant

23-1-2024

PROCTOR TEST

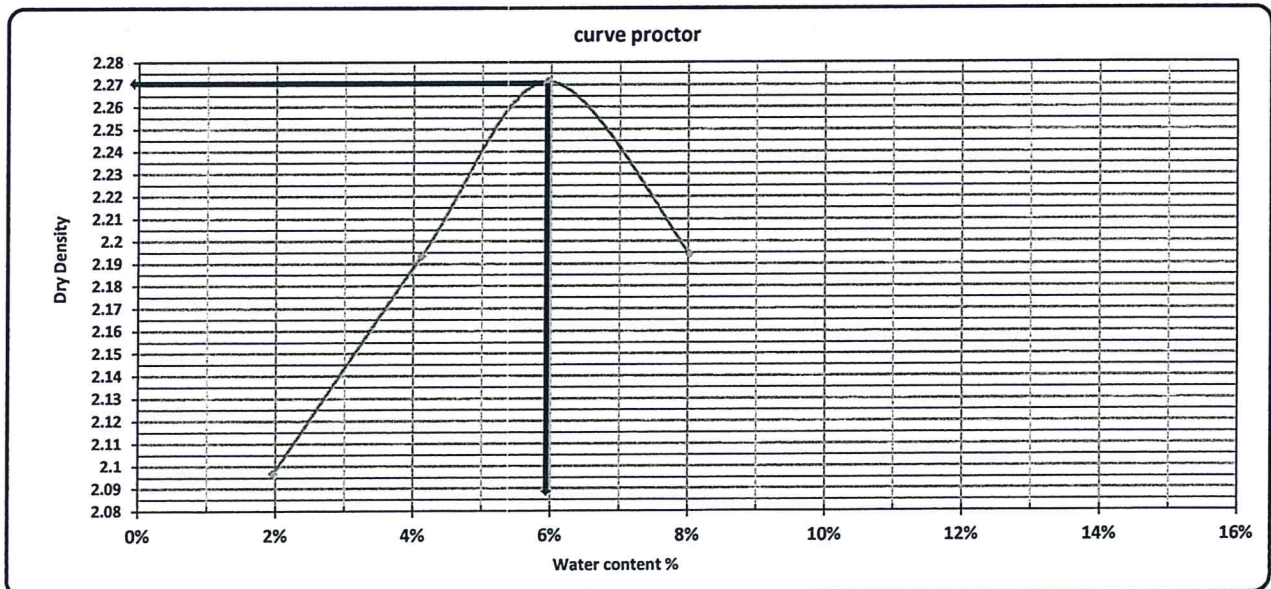
TESTING DATE:	20/1/2024	code	Station	
LOCATION	625+900 Left	RW-S-17	Material	تراب
NAME COMPANY	الرؤى		Description	مشون

Weight of empty mold :	6075.0
Mold Volume:	2085.0

MAX Dry Density	2.271
Water content %	6

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10533.0	10837.0	11093.0	11017	
WT. WET SOIL	4458.0	4762.0	5018.0	4942.0	
Wt. Density	2.138	2.284	2.407	2.370	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	44.84	44.36	43.27	45.87	43.68	16.37	16.45	17.54		
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	148.0	147.9	145.9	145.8	144.1	142.4	140.2	140.1		
Wt. Of water	2.0	2.1	4.1	4.2	5.9	7.6	9.8	9.9		
Wt. Of dry soil	103.2	103.6	102.6	99.9	100.4	126.0	123.7	122.5		
Water content %	1.9%	2.0%	4.0%	4.2%	5.9%	6.0%	8.0%	8.1%		
AV. Water content %	2.0%		4.1%		6.0%		8.0%			
Dry Density	2.097		2.193		2.271		2.194			



Contractor

Consultant

23-1-2024

California Bearing Ratio TEST

Testing Date :	23/1/2024	Code	FROM STA :	TO STA :
Location :	625+900 Left	RW-S-17	Material :	تراب
NAME COMPANY	الرؤى		Description	مشون

Test Results :-

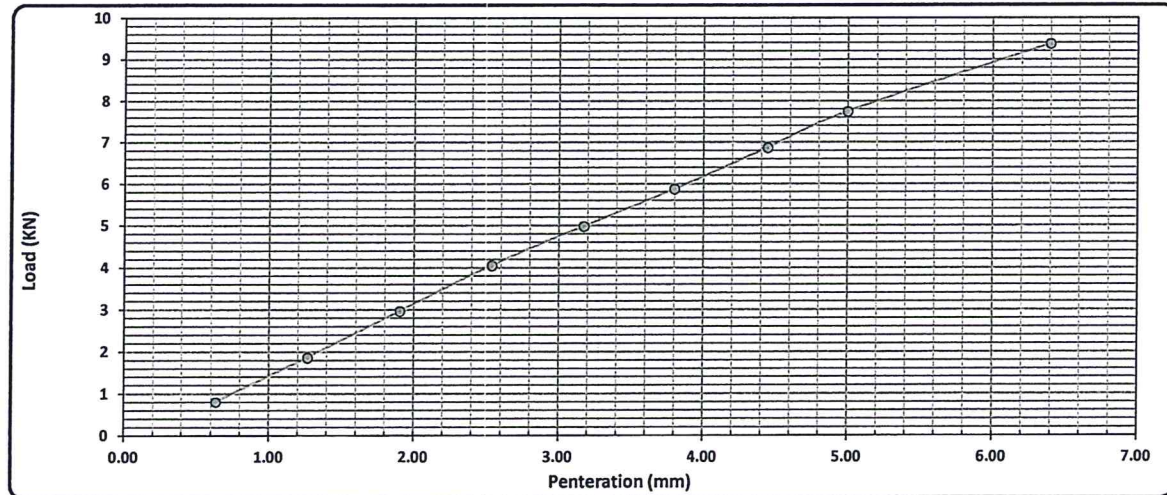
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm ³)	3180
Mold WT. (gm)	16033
Mold WT. + Wet WT. (gm)	23470
Wet WT. (gm)	7437
Wet Density (g/cm ³)	2.339
Dry Density (g/cm ³)	2.209
Proctor Density (g/cm ³)	2.271
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	2
Tare WT. (gm)	44.24
Tare WT. + Wet WT. (gm)	150
Tare WT. + Dry WT. (gm)	144.13
Water WT. (gm)	5.9
Dry WT. (gm)	99.9
Moisture Content %	5.9

Swelling	
Mold No.	2
Date	23/1/2024
Initial Height (mm)	1.00
Final Height (mm)	1.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	81.00	189.00	301.00	412.00	507.00	598.00	699.00	789.00	955.00
Load (KN)	0.8	1.9	2.9	4.0	5.0	5.9	6.9	7.7	9.4



Calculations :-

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	% عند نسبة 95
2.50	4.04	13.4	30.2%	97	95	29.5%
5.00	7.73	20.0	38.6%			37.7%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :

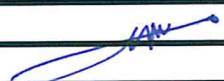
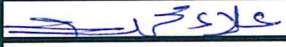
23-1-2024
 23-1-2024

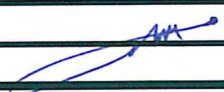
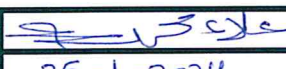
	Electric Express Train - HSR From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+024		
Testing Date :	28/1/2024	Company :	الرؤى
Material :	Middle embankment		Code RW-ME-32
Location :	625+680	to	626+020 length (m) 340
Layer Thickness :	25cm	Level layer	-1.75

Station	625+690	625+740	625+790	625+840	625+890	625+940
Hole no	1	2	3	4	5	6
Bulk density specifid	1.52	1.52	1.52	1.52	1.52	1.52
wt .of sand befor test	9652	9945	9632	8564	9841	8965
WT .of sand after test	6167	6397	6149	5289	6309	5759
WT . Of sand fill cone	1434	1434	1434	1434	1434	1434
WT . Of sand in hole	2051	2114	2049	1841	2098	1772
Volume of hole	1346	1387	1344	1208	1377	1163
WT . Of sample from	3185	3201	3123	2894	3164	2741
Bulk density of soil	2.37	2.31	2.32	2.40	2.30	2.36

Average water conter	5.9	5.8	6	6.1	6	5.9
Dry density (gm/cm3)	2.23	2.18	2.19	2.26	2.17	2.23
Max dry density	2.271	2.271	2.271	2.271	2.271	2.271
% Compaction ratio	98.4	96.0	96.5	99.4	95.5	98.0
Observations						

Lab Engineer :		Consultant Eng. :	
Sign :		Sign :	28-1-2024

    ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي ا.د. خالد قنديل	Electric Express Train - HSR				 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT)
	From 6 October City To Abu simbel				
	section -4 From Sohage To Qena				
	From Station 623+020 To Station 626+024				
Testing Date :	28/1/2024	Company :	الرؤى		
Material :	Middle embankment			Code	RW-ME-32
Location :	625+680	to	626+020	length (m)	340
Layer Thickness :	25cm	Level layer	-1.75		
Station	626+000				
Hole no	1				
Bulk density specifid	1.52				
wt .of sand befor test	9652				
WT .of sand after test	6167				
WT . Of sand fill cone	1434				
WT . Of sand in hole	2051				
Volume of hole	1346				
WT . Of sample from	3185				
Bulk density of soil	2.37				
Average water conter	5.9				
Dry density (gm/cm3)	2.23				
Max dry density	2.271				
% Compaction ratio	98.4				
Observations					
Lab Engineer :			Consultant Eng. :		
Sign :			Sign :	28-1-2024	

 SYSTRA SHAKER ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	Electric Express Train - HSR				 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) الهيئة العامة للمطرق والكبارى والنقل البرى (GARBLT)	
	From 6 October City To Abu simbel					
	section -4 From Sohage To Qena					
	From Station 623+020 To Station 626+024					
Testing Date :	25/1/2024	Company :	الرؤى			
Material :	Middle embankment			Code	RW-ME-32	
Location :	625+680	to	626+020	length (m)	340	
Layer Thickness :	25cm	Level layer	-1.75			
Station	625+700	625+750	625+800	625+850	625+900	625+950
Hole no	1	2	3	4	5	6
Bulk density specifid	1.52	1.52	1.52	1.52	1.52	1.52
wt .of sand befor test	9652	9651	8756	9874	9295	8197
WT .of sand after test	5697	5951	5554	6313	6007	4894
WT . Of sand fill cone	1434	1434	1434	1434	1434	1434
WT . Of sand in hole	2521	2266	1768	2127	1854	1869
Volume of hole	1654	1487	1160	1396	1217	1226
WT . Of sample from	3354	3410	2759	2927	2856	2741
Bulk density of soil	2.03	2.29	2.38	2.10	2.35	2.24
Average water conter	5.9	5.8	6	6.1	6	5.9
Dry density (gm/cm3)	1.91	2.17	2.24	1.98	2.21	2.11
Max dry density	2.271	2.271	2.271	2.271	2.271	2.271
% Compaction ratio	84.3	95.5	98.8	87.0	97.5	92.9
Observations						
Lab Engineer :			Consultant Eng. :			
Sign :			Sign :	25-1-2024		

 Electric Express Train - HSR	From 6 October City To Abu simbel section -4 From Sohage To Qena From Station 623+020 To Station 626+024		 الهيئة القومية للإنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) الهيئة العامة لطرق والكبارى والنقل البرى (GARBLT)
Testing Date :	25/1/2024	Company :	الرؤى
Material :	Middle embankment		Code RW-ME-32
Location :	625+680	to 626+020	length (m) 340
Layer Thickness :	25cm	Level layer	-1.75
Station	626+000		
Hole no	1		
Bulk density specifid	1.52		
wt .of sand befor test	10068		
WT .of sand after test	6299		
WT . Of sand fill cone	1434		
WT . Of sand in hole	2335		
Volume of hole	1532		
WT . Of sample from	3428		
Bulk density of soil	2.24		
Average water conter	5.9		
Dry density (gm/cm3)	2.11		
Max dry density	2.271		
% Compaction ratio	93.0		
Observations			
Lab Engineer :		Consultant Eng. :	
Sign :		Sign :	25-1-2024

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	27/1/2024	code	ZONE	
LOCATION	625+900 Left		Material	تراب
NAME COMPANY	الرؤي	RW-S-18	Description	مشون

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		23988.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	
Mass retained (g)	2154.0	2280.0	2667.0	1361.0	2275.0	1346.0	2546.0	9348.0	
Cumulative Retained (g)	2154.0	4434.0	7101.0	8462.0	10737.0	12083.0	14629.0		
Cumulative Retained %	9.0	18.5	29.6	35.3	44.8	50.4	61.0		PRO
Cumulative Passing %	91.0	81.5	70.4	64.7	55.2	49.6	39.0		WC
									CBR
									51.07%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	120.15	246.27	386.00					
Cumulative Retained %	24.03	49.25	77.20					
Cumulative Passing %	75.97	50.75	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 %	91.0	81.5	70.4	64.7	55.2	49.6	39.0	29.6	19.8	8.9

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

Contractor

Consultant

31-1-2024

PROCTOR TEST

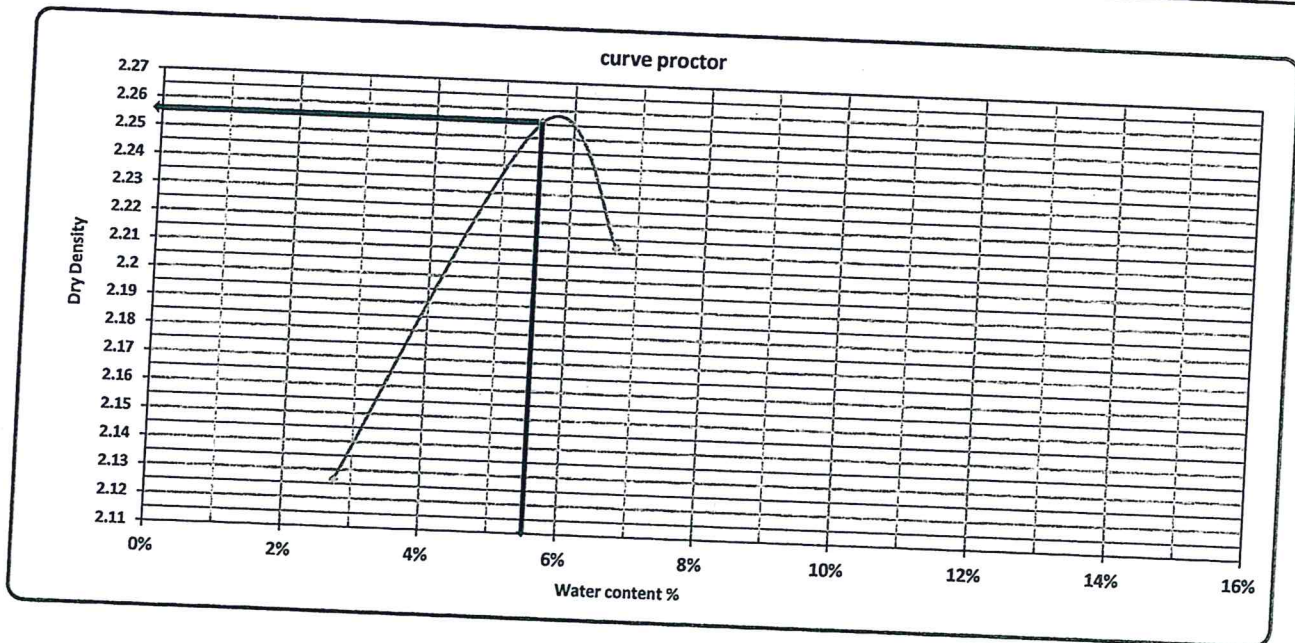
TESTING DATE:	28/1/2024	code	Station	
LOCATION	625+900 Left		Material	تراب
NAME COMPANY	الروى	RW-S-18	Description	مشون

Weight of empty mold :	5846.0
Mold Volume:	2144.0

MAX Dry Density	2.256
Water content %	5.5

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10531.0	10950.0	10907.0		
WT. WET SOIL	4685.0	5104.0	5061.0		
Wt. Density	2.185	2.381	2.361		

Tare No.	1	2	3	4	5	6				
Tare wt.	45.1	42.64	44.02	44.81	44.7	43.17				
Wt. Of wet soil & tare	150.0	150.0	150.0	150.0	150.0	150.0				
Wt. Of dry soil & tare	147.14	147.15	144.47	144.44	143.60	143.05				
Wt. Of water	2.9	2.8	5.5	5.6	6.4	6.9				
Wt. Of dry soil	102.0	104.5	100.5	99.6	98.9	99.9				
Water content %	2.8%	2.7%	5.5%	5.6%	6.5%	7.0%				
AV. Water content %	2.8%		5.5%		6.7%					
Dry Density	2.126		2.256		2.212					



Contractor

[Signature]

Consultant

[Signature]
31-1-2024

California Bearing Ratio TEST

Testing Date :	31/1/2024	Code	FROM STA :	TO STA :
Location :	625+900 Left	RW-S-18	Material :	تراب
NAME COMPANY	الروزي		Description	مشتون

Test Results :-

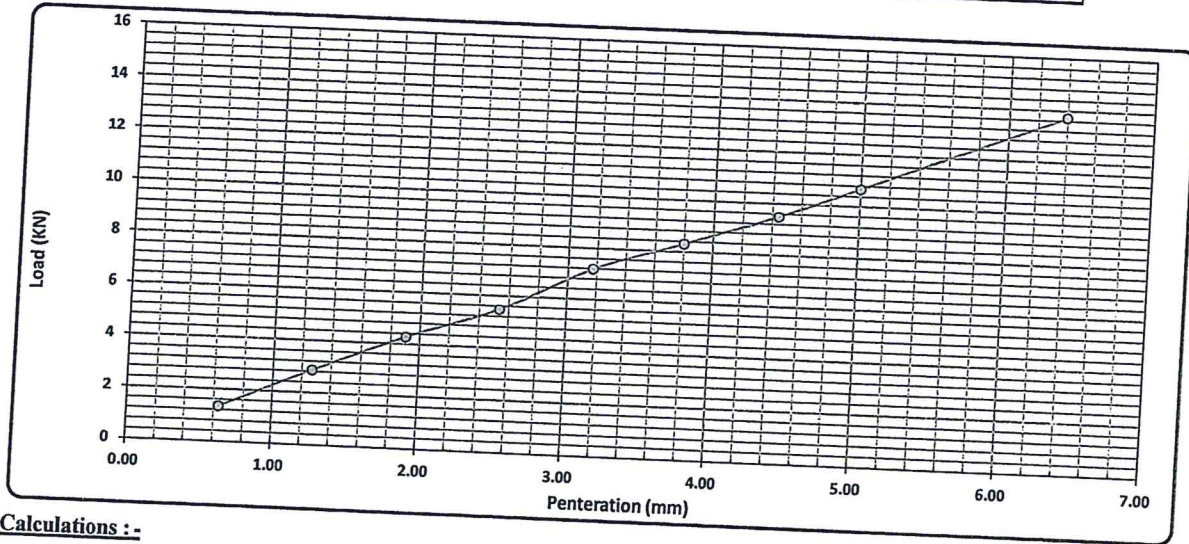
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2146
Mold WT. (gm)	16033
Mold WT. + Wet WT. (gm)	21084
Wet WT. (gm)	5051
Wet Density (g/cm ³)	2.354
Dry Density (g/cm ³)	2.234
Proctor Density (g/cm ³)	2.256
Compaction %	99

Moisture Ratio After Compacted Mold	
Tare No.	6
Tare WT. (gm)	44.32
Tare WT. + Wet WT. (gm)	150
Tare WT. + Dry WT. (gm)	144.64
Water WT. (gm)	5.4
Dry WT. (gm)	100.3
Moisture Content %	5.3

Swelling	
Mold No.	1
Date	31/1/2024
Initial Height (mm)	2.00
Final Height (mm)	2.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	136.00	291.00	434.00	557.00	732.00	847.00	967.00	1088.00	1399.00
Load (KN)	1.3	2.9	4.3	5.5	7.2	8.3	9.5	10.7	13.7



Calculations :-

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR (%)
2.50	5.46	13.4	40.9%	99	95	95 عند نسبة 95
5.00	10.66	20.0	53.2%			39.2%
						51.07%

Lab. Specialist

Lab. Engineer

Consultant Engineer

Name :

Name :

Name :

Sign :

Sign :

Sign :

31-1-2024

 SYSTRA SHAKER ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد قنديل	Electric Express Train - HSR				 الهيئة القومية للأنفاق NATIONAL AUTHORITY FOR TUNNELS (NAT) الهيئة العامة للطرق والكبارى والنقل البرى (GARBLT)
	From 6 October City To Abu simbel				
	section -4 From Sohage To Qena				
	From Station 623+020 To Station 626+024				
Testing Date :	7/2/2024	Company :	الرؤى		
Material :	Middle embankment			Code	RW-ME-40
Location :	625+380	to	625+460	length (m)	80
Layer Thickness :	50cm	Level layer	-2.00		
Station	625+390	625+440			
Hole no	1	2			
Bulk density specifid	1.52	1.52			
wt .of sand befor test	8976	9541			
WT .of sand after test	5521	6210			
WT . Of sand fill cone	1434	1434			
WT . Of sand in hole	2021	1897			
Volume of hole	1326	1245			
WT . Of sample from	3065	2891			
Bulk density of soil	2.31	2.32			
Average water conter	5.6	5.4			
Dry density (gm/cm3)	2.19	2.20			
Max dry density	2.256	2.256			
% Compaction ratio	97.0	97.7			
Observations					
Lab Engineer :			Consultant Eng. :		
Sign :			Sign :	7-2-2024	

TESTING DATE:	28/1/2024	code	ZONE	
LOCATION	625+900 Left	RW-S-19	Material	تراب
NAME COMPANY	الروزي		Description	مشون

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		26535.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	
Mass retained (g)	1479.0	1750.0	3306.0	2142.0	2869.0	1678.0	2866.0	10437.0	soil classify
Cumulative Retained (g)	1479.0	3229.0	6535.0	8677.0	11546.0	13224.0	16090.0		A-1-a
Cumulative Retained %	5.6	12.2	24.6	32.7	43.5	49.8	60.6		2.265
Cumulative Passing %	94.4	87.8	75.4	67.3	56.5	50.2	39.4		5.40
								PRO	50.55%
								WC	
								CBR	

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	128.08	258.15	405.08					
Cumulative Retained %	25.62	51.63	81.02					
Cumulative Passing %	74.38	48.37	18.98					

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 %	94.4	87.8	75.4	67.3	56.5	50.2	39.4	29.3	19.0	7.5

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

Contractor

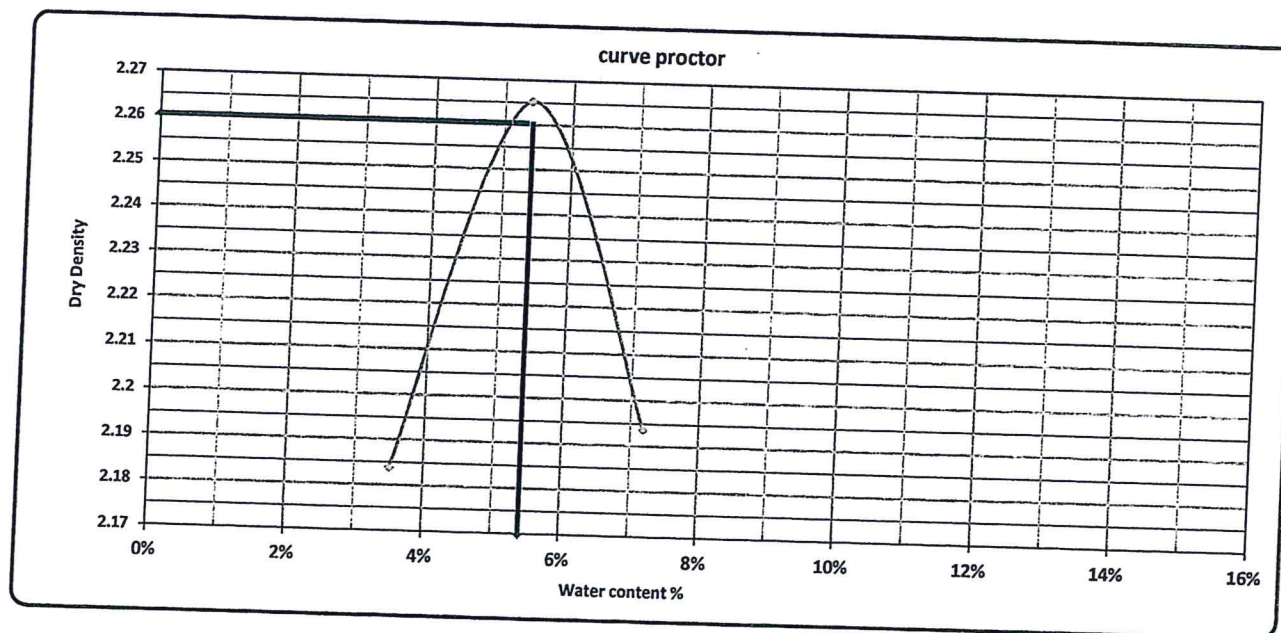
Consultant

Weight of empty mold :	5856.0
Mold Volume:	2144.0

MAX Dry Density	2.265
Water content %	5.4

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10703.0	10975.0	10898.0		
WT. WET SOIL	4847.0	5119.0	5042.0		
Wt. Density	2.261	2.388	2.352		

Tare No.	1	2	3	4	5	6				
Tare wt.	17.66	16.77	16.48	17.04	17.5	14.46				
Wt. Of wet soil & tare	100.0	100.0	100.0	100.0	100.0	100.0				
Wt. Of dry soil & tare	97.45	96.92	96.32	95.16	94.01	94.72				
Wt. Of water	2.6	3.1	3.7	4.8	6.0	5.3				
Wt. Of dry soil	79.8	80.2	79.8	78.1	76.5	80.3				
Water content %	3.2%	3.8%	4.6%	6.2%	7.8%	6.6%				
AV. Water content %	3.5%		5.4%		7.2%					
Dry Density	2.184		2.265		2.194					



Contractor

Consultant

Test Results :-

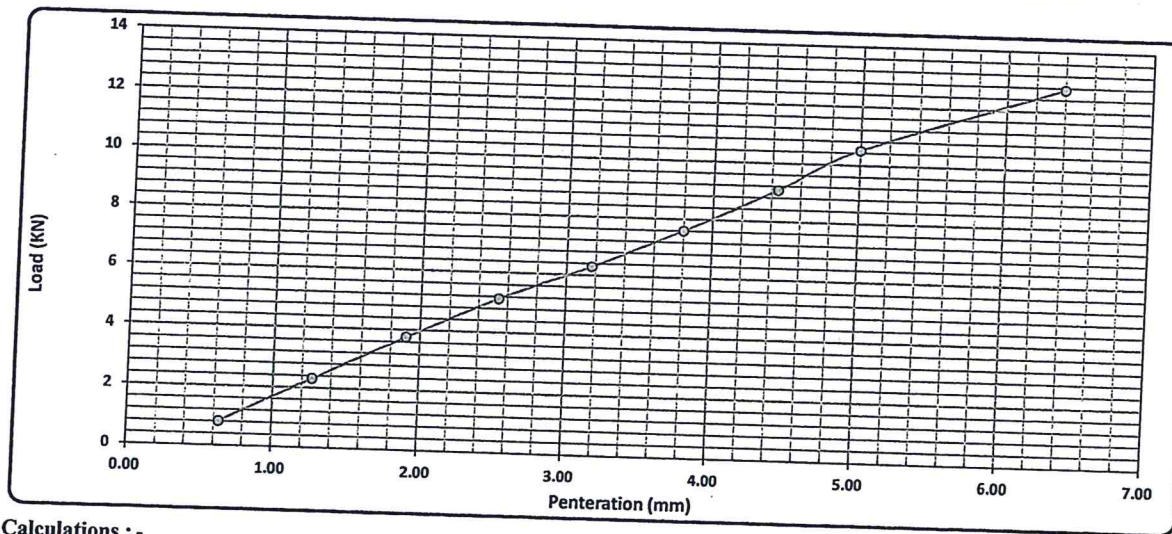
Compaction % for Mold	
Mold No.	2
Mold Vol.(cm ³)	2146
Mold WT. (gm)	16033
Mold WT. + Wet WT. (gm)	21077
Wet WT. (gm)	5044
Wet Density (g/cm ³)	2.350
Dry Density (g/cm ³)	2.227
Proctor Density (g/cm ³)	2.265
Compaction %	98

Mositure Ratio After Compacted Mold	
Tare No.	2
Tare WT. (gm)	44.84
Tare WT. +Wet WT. (gm)	150
Tare WT. +Dry WT. (gm)	144.49
Water WT. (gm)	5.5
Dry WT. (gm)	99.7
Moisture Content %	5.5

Swelling	
Mold No.	2
Date	1/2/2024
Intial Height (mm)	1.00
Final Height (mm)	1.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	81.00	234.00	383.00	522.00	642.00	774.00	924.00	1069.00	1299.00
Load (KN)	0.8	2.3	3.8	5.1	6.3	7.6	9.1	10.5	12.7



Calculations :-

Penteration (mm)	Load (Kn)	Standard Load (Ib)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR % عند نسبة 95
2.50	5.12	13.4	38.3%	98	95	37.0%
5.00	10.48	20.0	52.3%			50.55%

Lab. Specialist

Lab. Engineer

Consultant Engineer

Name :

Name :

Name :

Sign :

Sign :

Sign :

1-7-2024

From Station 480+000
To Station 630+000

(GARBLT)



Testing Date :	٢٠٢٤/٠٣/٠٦	Company :	الرؤي
Material :	middle empankement	Code	RW-ME-45
Location :	625+240 TO 625+380	length	140M
Layer Thickness :	50cm	Level layer	3-

Station	625+260	625+320	625+360			
Hole no	1	2	3			
Bulk density specifid	1.49	1.49	1.49			
wt .of sand befor test	10155	9890	9234			
WT .of sand after test	7055	5867	5202			
WT . Of sand fill cone	1430	1430	1430			
WT . Of sand in hole	1670	2593	2602			
Volume of hole	1121	1740	1746			
WT . Of sample from	2550	3986	4100			
Bulk density of soil	2.28	2.29	2.35			

Average water content	4.9	5.1	5.2			
Dry density (gm/cm3)	2.17	2.18	2.23			
Max dry density	2.265	2.265	2.265			
Compaction ratio %	95.8	96.2	98.5			

Observations

Lab Engineer :	محمد عبدالخالق	Consultant Eng. :	
Sign :		Sign :	

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	7/2/2024	code	ZONE	
LOCATION	625+900 Left	RW-S-20	Material	تراب
NAME COMPANY	الروزي		Description	مشتون

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		19382.00		gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify	
Mass retained (g)	1305.0	1388.0	1955.0	1745.0	2223.0	1585.0	2316.0	6865.0	A-1-a	
Cumulative Retained (g)	1305.0	2693.0	4648.0	6393.0	8616.0	10201.0	12517.0		PRO	2.249
Cumulative Retained %	6.7	13.9	24.0	33.0	44.5	52.6	64.6		WC	5.30
Cumulative Passing %	93.3	86.1	76.0	67.0	55.5	47.4	35.4		CBR	52.94%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	99.57	248.26	392.47					
Cumulative Retained %	19.91	49.65	78.49					
Cumulative Passing %	80.09	50.35	21.51					

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 %	93.3	86.1	76.0	67.0	55.5	47.4	35.4	28.4	17.8	7.6

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

Contractor

Consultant

PROCTOR TEST

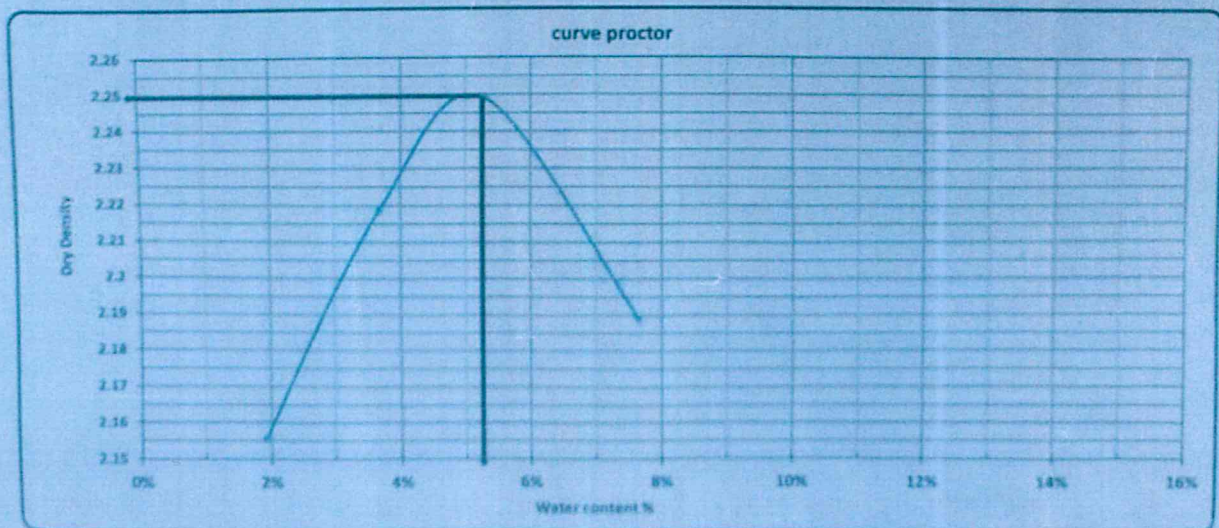
TESTING DATE:	8/2/2024	code	Station	
LOCATION	625+900 Left	RW-S-20	Material	تراب
NAME COMPANY	الروي		Description	مشون

Weight of empty mold :	5856.0
Mold Volume:	2144.0

MAX Dry Density	2.249
Water content %	5.3

trial no :	1	2	3	3	5
Wt. Of Mold+ wet soil	10567.0	10788.0	10933.0	10909.0	
WT. WET SOIL	4711.0	4932.0	5077.0	5053.0	
Wt. Density	2.197	2.300	2.368	2.357	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	44.23	44.69	45.78	42.45	45.74	44.56	43.76	44.11		
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	147.88	148.12	146.12	146.37	144.87	144.61	142.23	142.67		
Wt. Of water	2.1	1.9	3.9	3.6	5.1	5.4	7.8	7.3		
Wt. Of dry soil	103.7	103.4	100.3	103.9	99.1	100.1	98.5	98.6		
Water content %	2.0%	1.8%	3.9%	3.5%	5.2%	5.4%	7.9%	7.4%		
AV. Water content %	1.9%		3.7%		5.3%		7.7%			
Dry Density	2.156		2.219		2.249		2.189			



Contractor

Consultant



Electric Express Train - HSR



California Bearing Ratio TEST

Testing Date :	11/2/2024	Code	FROM STA :	TO STA :
Location :	625+900 Left	RW-S-20	Material :	تراب
NAME COMPANY	الروبي		Description	مستون

Test Results :-

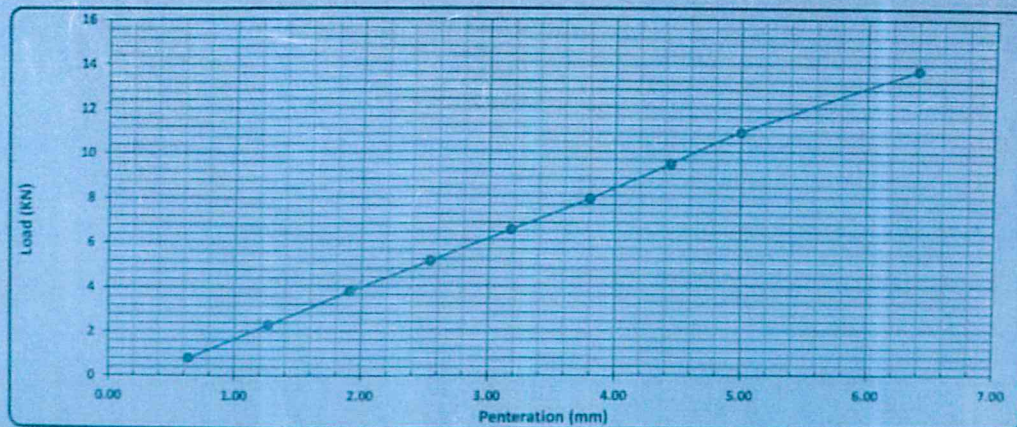
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2145
Mold WT. (gm)	16033
Mold WT. + Wet WT. (gm)	20979
Wet WT. (gm)	4946
Wet Density (g/cm ³)	2.305
Dry Density (g/cm ³)	2.190
Proctor Density (g/cm ³)	2.240
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	2
Tare WT. (gm)	16.13
Tare WT. + Wet WT. (gm)	180
Tare WT. + Dry WT. (gm)	95.84
Water WT. (gm)	4.2
Dry WT. (gm)	79.7
Moisture Content %	5.2

Swelling	
Mold No.	1
Date	11/2/2024
Initial Height (mm)	1.00
Final Height (mm)	1.00
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	81.00	234.00	383.00	522.00	662.00	804.00	964.00	1109.00	1399.00
Load (KN)	0.8	2.3	3.8	5.1	6.5	7.9	9.4	10.9	13.7



Calculations :-

Penetration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(KN)	(lb)	(%)	(%)	(%)	% حد لدية 95
2.50	5.12	13.4	38.3%	97	95	37.4%
5.00	10.87	20.0	54.3%			52.94%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :



Electric Express Train - HSR

From 6 October City To Abu simbel

section -4 From Sohage To Qena

From Station 480+000
To Station 630+000

الهيئة القومية للإنفاق

NATIONAL AUTHORITY FOR TUNNELS

الهيئة العامة
للمطرق والكبارى والنقل البرى
(GARBLT)



Testing Date :

28/04/2024

Company :

الرؤى

Material :

fill layer upper embankement

Code

RW-UE-32

Location :

623+840 to 623+920

length

80m

Layer Thickness :

25cm

Level layer

-0.50

Station	623+850	623+870	623+890	623+110		
Hole no	1	2	3	4		
Bulk density specifid	1.49	1.49	1.49	1.49		
wt .of sand befor test	9765	9110	8543	8319		
WT .of sand after test	6822	6143	5684	5168		
WT . Of sand fill cone	1430	1430	1430	1430		
WT . Of sand in hole	1513	1537	1429	1721		
Volume of hole	1015	1032	959	1155		
WT . Of sample from	2287	2322	2177	2588		
Bulk density of soil	2.25	2.25	2.27	2.24		

Average water content	5	5.1	5	4.8		
(gm/cm3)Dry density	2.14	2.14	2.16	2.14		
Max dry density	2.249	2.249	2.249	2.249		
Compaction ratio %	95.4	95.2	96.1	95.1		
Observations						

Lab Engineer :

Sign :

Consultant Eng. :

Sign :



PROJECT: E.T.P. No. 11281
 From 9 October 2024 To 14 October 2024
 Section: 4 From Substation To Canal
 From Station 825+000 To Station 826+000



PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	7/2/2024	code	ZONE	
LOCATION	825+000 Left		Material	تراب
NAME COMPANY	التراب		Description	ملوث

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT (g)		16635.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify
Mass retained (g)	1292.0	980.0	1856.0	1410.0	1840.0	1275.0	2123.0	5854.0	A-1-a
Cumulative Retained (g)	1292.0	2272.0	4128.0	5538.0	7378.0	8653.0	10781.0		PRO 2.258
Cumulative Retained %	7.8	13.7	24.8	33.3	44.4	52.0	64.8		WC 5.40
Cumulative Passing %	92.2	86.3	75.2	66.7	55.6	48.0	35.2		CBR 54.65%

B-soft material gradation				WT. OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	89.78	259.74	402.37					
Cumulative Retained %	17.96	51.95	80.47					
Cumulative Passing %	82.04	48.05	19.53					

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 %	92.2	86.3	75.2	66.7	55.6	48.0	35.2	26.9	16.3	6.9

ATTENDING LIMITS	MAXIMUM PERCENT	MINIMUM PERCENT	PERCENT
	N.P	N.P	N.P

Contractor

Consultant



PROCTOR TEST

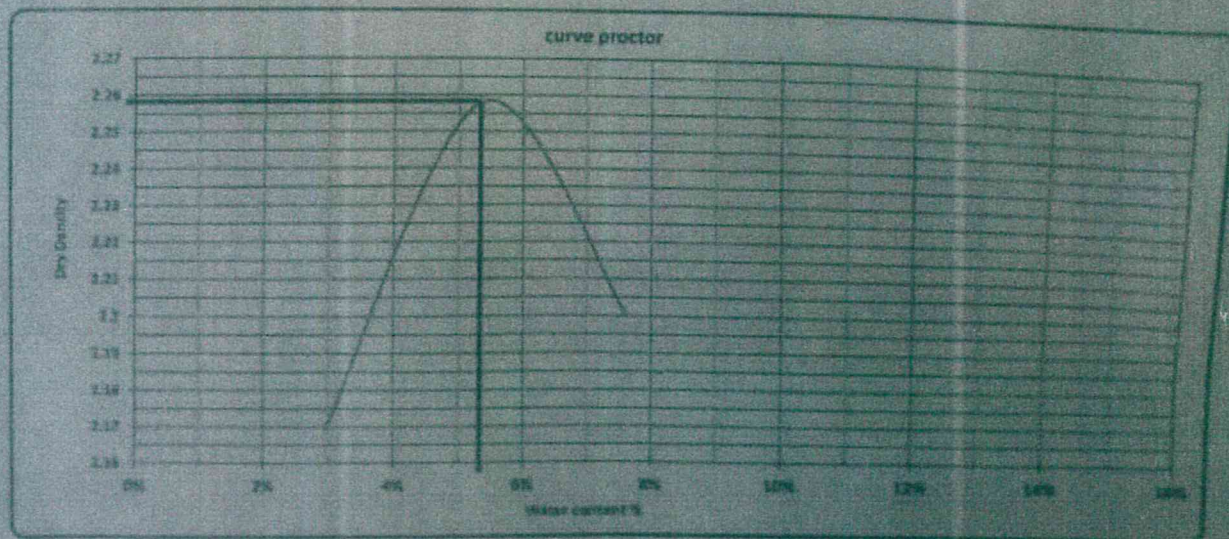
TESTING DATE:	8/2/2014	COTE	Station	
LOCATION	625-980 Let	RVN-S-25	Material	
NAME COMPANY	313		Description	

Weight of empty mold /	5856.0
Mold Volume:	2144.0

MAX Dry Density	2.28
Water content %	5.5

trial no :	1	2	3		
Wt. Of Mold + wet soil	10647.0	10958.0	10935.0		
WT. WET SOIL	4791.0	5102.0	5077.0		
Wt. Density	2.235	2.380	2.364		

Tare No.	1	1	3	4	5	6				
Tare wt.	16.23	37.17	15.24	16.38	17.64	17.11				
Wt. Of wet soil & tare	100.0	100.0	100.0	100.0	100.0	100.0				
Wt. Of dry soil & tare	97.51	97.67	95.77	95.64	94.22	94.10				
Wt. Of water	2.5	2.3	4.2	4.4	5.8	5.9				
Wt. Of dry soil	81.2	80.5	80.5	79.3	76.6	77.0				
Water content %	3.15%	2.9%	5.3%	5.5%	7.5%	7.7%				
AV. Water content %	3.0%		5.4%		7.6%					
Dry Density	2.170		2.258		2.281					



Contractor

Consultant



Electric Express Train - HSR

California Bearing Ratio TEST

Testing Date:	11/2/2024	Core:	Y101-21A	Material:	Y101-21A
Location:	625+900 Left	RW-S-21		Description:	
NAME COMPANY:	J.J.S				

Test Results:

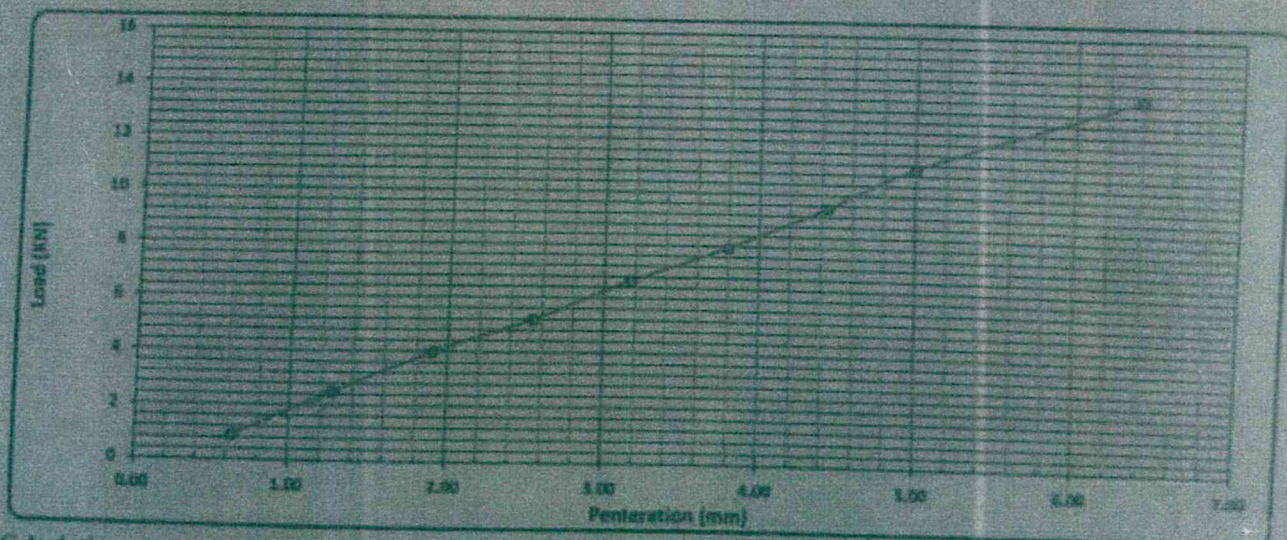
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2160
Mold WT. (gm)	18040
Mold WT. + Wet WT. (gm)	19831
Wet WT. (gm)	1807
Wet Density (g/cm ³)	2.279
Dry Density (g/cm ³)	2.143
Theoretical Density (g/cm ³)	2.358
Compaction %	90

Moisture Ratio After Compacted Mold	
Tare No.	2
Tare WT. (gm)	17.19
Tare WT. + Wet WT. (gm)	106
Tare WT. + Dry WT. (gm)	95.79
Water WT. (gm)	10.2
Dry WT. (gm)	78.7
Moisture Content %	5.4

Swelling	
Mold No.	1
Date	11/2/2024
Initial Height (mm)	1.00
Final Height (mm)	1.00
Differs	0
Sample Weight (mm)	120
Swelling Ratio %	0%

Loading Reading:

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	5.40
Load Reading (kg)	92.00	252.00	405.00	578.00	678.00	826.00	970.00	1126.00	1406.00
Load (KN)	0.9	2.5	4.0	5.2	6.6	7.9	9.3	11.0	13.8



Calculations:

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold Compaction (%)	Compaction (%)	CBR (%)
2.54	5.17	13.4	38.2%	90	90	38.4%
5.00	11.03	28.5	55.1%			54.6%

Lab. Specialist

Lab. Engineer

Construction Engineer



Electric Express Train - HSR

From 6 October City To Abu simbel

section -4 From Sohage To Qena

From Station 480+000
To Station 630+000



Testing Date :	07/05/2024	Company :	الرؤي		
Material :	fill layer upper embankement			Code	RW-UE-35
Location :	623+840 to 623+920			length	80m
Layer Thickness :	25cm	Level layer	-0.25		

Station	623+840	623+865	623+890	623+915	623+915	
Hole no	1	2	3	4	5	
Bulk density specifid	1.49	1.49	1.49	1.49	1.49	
wt .of sand befor test	9765	9110	8543	8319	8311	
WT .of sand after test	6822	6143	5684	5168	5216	
WT . Of sand fill cone	1430	1430	1430	1430	1425	
WT . Of sand in hole	1513	1537	1429	1721	1670	
Volume of hole	1015	1032	959	1155	1121	
WT . Of sample from	2287	2352	2177	2618	2620	
Bulk density of soil	2.25	2.28	2.27	2.27	2.34	

average water content	5	5.1	5	4.8	5.2	
(gm/cm3)Dry density	2.14	2.17	2.16	2.16	2.22	
Max dry density	2.258	2.258	2.258	2.258	2.258	
Compaction ratio %	95.0	96.1	95.7	95.8	98.4	
Observations						

Lab Engineer :

Sign :

Consultant Eng. :

Sign :

 	Electric Express Train - HSR From 6 October City To Abu section 4 From Sohage To Gena From Station 480+000 To Station 630+000	
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PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	21/04/2024	code	ZONE	624+580
LOCATION	624+580	RW-S-22	Material	A - 1 - a
NAME COMPANY	الروى		Description	مشون ترابى يمين القطاع

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		17162.00	gm	table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify
Mass retained (g)	307.0	1773.0	2753.0	1723.0	2485.0	1216.0	1846.0	5060.0	A - 1 - a
Cumulative Retained (g)	301.0	2074.0	4827.0	6550.0	9035.0	10251.0	12097.0		PRO 2.287
Cumulative Retained %	1.8	12.1	28.1	38.2	52.6	59.7	70.5		WC 6.1%
Cumulative Passing %	98.2	87.9	71.9	61.8	47.4	40.3	29.5		CBR 51.5%

B-soft material gradation				WT.OF sample		500.00	gm
sieve size	10	40	200				
Cumulative Retained (g)	52.00	151.00	326.00				
Cumulative Retained %	10.40	30.20	65.20				
Cumulative Passing %	89.60	69.80	34.80				

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	87.9	71.9	61.8	47.4	40.3	29.5	26.4	20.6	10.3

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	15.9%	14.4%	1.5%

Contractor

Consultant





 	Electric Express Train - HSR From October City To Abu section 4 From Sohage To Gena From Station 487+000 To Station 486+000	 
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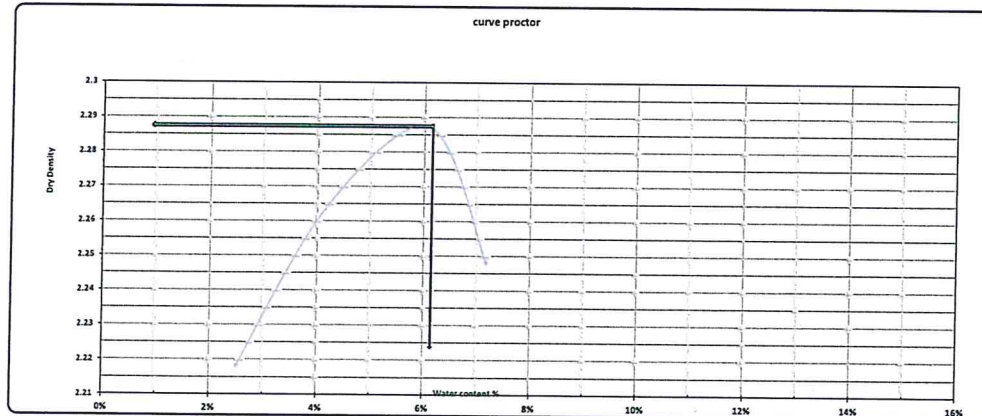
PROCTOR TEST

TESTING DATE:	21/04/2024	code	Station	624+580
LOCATION	624+580	RW-S-22	Material	A - 1 - a
NAME COMPANY	الرؤى		Description	مشون ترابي يمين القطاع

Weight of empty mold :	6279.9	MAX Dry Density	2.287
Mold Volume:	2067.9	Water content %	6.1%

trial no :	1	2	3	4	
Wt. Of Mold+ wet soil	10973.9	11151.9	11288.9	11253.0	
WT. WET SOIL	4703.0	4881.0	5018.0	4983.0	
Wt. Density	2.275	2.361	2.428	2.411	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	44.00	43.00	45.00	44.00	43	44.00	45	47.00		
Wt. Of wet soil & tare	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00		
Wt. Of dry soil & tare	147.00	147.79	145.70	145.79	143.89	143.90	143.00	143.00		
Wt. Of water	3.0	2.3	4.3	4.3	6.2	6.1	7.0	7.0		
Wt. Of dry soil	103.0	104.7	100.7	101.7	100.8	99.9	98.0	96.0		
Water content %	2.9%	2.2%	4.3%	4.2%	6.2%	6.1%	7.1%	7.3%		
AV. Water content %	2.6%		4.2%		6.1%		7.2%			
Dry Density	2.219		2.265		2.287		2.248			



Contractor

[Signature]

Consultant

١٥ علاء شكري ٢٠٢٤

 	Electric Express Train -HSR From 6 October City To Abu simbel section 4 From sohage To Qena From Station 487+000 To 496+000	 
	California Bearing Ratio TEST	

TESTING DATE:	25/04/2024	Code	Station	624+580
LOCATION	624+580	RW-S-22	Material	A - 1 - a
NAME COMPANY	الرؤى		Description	مشون ترابي يمين القطاع

Test Results :

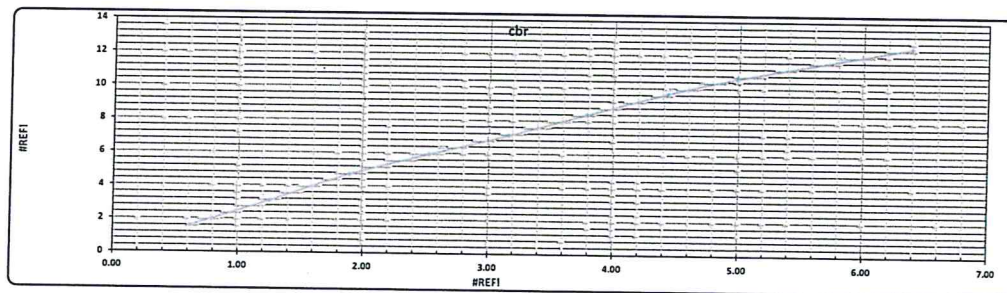
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2224.6
Mold WT. (gm)	4775
Mold WT. + Wet WT. (gm)	10072
Wet WT. (gm)	5296
Wet Density (g/cm ³)	2.38
Dry Density (g/cm ³)	2.24
Proctor Density (g/cm ³)	2.287
Compaction %	98.1

Moisture Ratio After Compacted Mold	
Tare No.	3
Tare WT. (gm)	45
Tare WT. + Wet WT. (gm)	150
Tare WT. + Dry WT. (gm)	144
Water WT. (gm)	6
Dry WT. (gm)	99.00
Moisture Content %	6.1

Swelling	
Mold No.	1
Date	25/04/2024
Initial Height (mm)	0
Final Height (mm)	0.21
Difference	0.21
Sample Height (mm)	120
Swelling Ratio %	0.18

Pentration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	167.00	323.00	487.00	612.00	731.00	861.00	992.00	1088.00	1280.00
Load (kN)	1.6	3.2	4.8	6.0	7.2	8.4	9.7	10.7	12.5

Loading Reading :



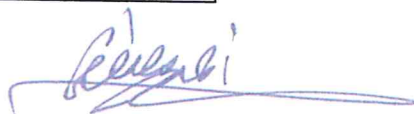
Calculations :

Pentration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	CBR (%)	Mold - Compaction (%)	CBR عند نسبة ٩٥ %
2.50	6.00	13.35	44.9%	98.1	95	43.5%
5.00	10.66	20.025	53.2%			51.5%

Lab. Engineer

Name :

Sign :



Consultant Engineer

Name :

Sign :



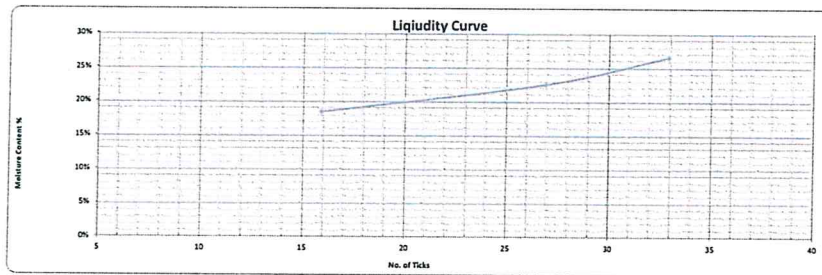
		Electric Express Train - HSR From 6 October City To Abu section 4 From Sohage To Qena From Station 487+000 To Station 496+000	
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Plasticity and Liquidity Test -Atterberg Limits

TESTING DATE:	21/04/2024	code	Station	624+580
LOCATION	624+580	RW-S-22	Material	A - 1 - a
NAME COMPANY	الرؤى		Description	مشون ترابي يمين القطاع

Testing Results :-

Test	Liquid Limit				Plastic Limit	
No. of Turns	16.00	27.00	33.00			
Tare No.	5.00	8.00	6.00		6.00	7.00
Tare WT. (gm)	47.49	45.93	46.93		47.97	49.29
Tare WT. + Wet WT. (gm)	73.49	77.18	81.01		51.43	51.70
Tare WT. + Dry WT. (gm)	69.43	71.42	73.85		50.91	51.46
Water WT. (gm)	4.06	5.76	7.16		0.52	0.24
Dry WT. (gm)	21.94	25.49	26.92		2.94	2.17
Moisture Content %	0.19	0.23	0.27		0.18	0.11
Average %					0.14	



L.L	P.L	P.I
15.9%	14.4%	1.5%

Lab. Engineer

Name :

Sign :

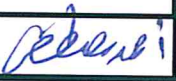
[Signature]

Consultant Engineer

Name :

Sign :

[Signature]

	Electric Express Train - HSR																																																																											
	From 6 October City To Abu simbel																																																																											
	section -4 From Sohage To Qena																																																																											
Testing Date :	20/05/2024	Company :	الرؤي																																																																									
Material :	A-1-a			Code	RW-UE-41																																																																							
Location :	From 623+320 To 623+440			length	120m																																																																							
Layer Thickness :	0.25	Level layer	fill layer upper Embankment(-0.5)																																																																									
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>Station</td> <td>623+340</td> <td>623+365</td> <td>623+385</td> <td>623+410</td> <td>623+435</td> <td></td> </tr> <tr> <td>Hole No</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td></td> </tr> <tr> <td>Bulk density specifid sand</td> <td>1.49</td> <td>1.49</td> <td>1.49</td> <td>1.49</td> <td>1.49</td> <td></td> </tr> <tr> <td>wt .of sand befor test</td> <td>10231</td> <td>10158</td> <td>10108</td> <td>10098</td> <td>9879</td> <td></td> </tr> <tr> <td>WT .of sand after test</td> <td>7179</td> <td>7194</td> <td>7068</td> <td>6792</td> <td>6608</td> <td></td> </tr> <tr> <td>WT . Of sand fill cone</td> <td>1427</td> <td>1427</td> <td>1427</td> <td>1427</td> <td>1427</td> <td></td> </tr> <tr> <td>WT . Of sand in hole</td> <td>1625</td> <td>1537</td> <td>1613</td> <td>1879</td> <td>1844</td> <td></td> </tr> <tr> <td>Volume of hole</td> <td>1091</td> <td>1032</td> <td>1083</td> <td>1261</td> <td>1238</td> <td></td> </tr> <tr> <td>WT . Of sample from</td> <td>2549</td> <td>2437</td> <td>2541</td> <td>2986</td> <td>2876</td> <td></td> </tr> <tr> <td>Bulk density of soil (gm/cm3)</td> <td>2.34</td> <td>2.36</td> <td>2.35</td> <td>2.37</td> <td>2.32</td> <td></td> </tr> </table>							Station	623+340	623+365	623+385	623+410	623+435		Hole No	1	2	3	4	5		Bulk density specifid sand	1.49	1.49	1.49	1.49	1.49		wt .of sand befor test	10231	10158	10108	10098	9879		WT .of sand after test	7179	7194	7068	6792	6608		WT . Of sand fill cone	1427	1427	1427	1427	1427		WT . Of sand in hole	1625	1537	1613	1879	1844		Volume of hole	1091	1032	1083	1261	1238		WT . Of sample from	2549	2437	2541	2986	2876		Bulk density of soil (gm/cm3)	2.34	2.36	2.35	2.37	2.32	
Station	623+340	623+365	623+385	623+410	623+435																																																																							
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