Monitoring Period: (From) Date 14/09/2022, (To) Date 15/09/2022 . "Monitoring measurements" Location: (Station and near sensitive receptors): Station No. 01 HADEAK AL ASHGAR / MOUNTIN IN VIWE city Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	d Value	National	Referred	Standards for	Remarks	(Check Box where appl	icable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	65.5	۳۹۱	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment.	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM₁₀ (Particulate Matter less than 10µm)	µg/m3	65.7	178	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> ·From Sta 5 El Remavah till	-Critical activities are as follows: <u> _1</u> :Diaphragm wall construction	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental Protection
CO (Carbon Monoxide)	PPM	0.13	0.16	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u></u>	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and re-	Agency)
NO2 (Nitrogen Dioxide)	µg/m3	36.8	241.29	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	µg/m3	0.86	0.93	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area

Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.

Monitoring Period: (From) Date 15/09/2022, (To) Date 16/09/2022 . "Monitoring measurements" Location: (Station and near sensitive receptors): Station No. 02 HADEAK AL AHRAM Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	d Value	National	Referred	Standards for	Remarks	(Check Box where appl	icable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	65.5	346	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment.	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM10 (Particulate Matter less than 10μm)	µg/m3	70.7	159	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> ·From Sta 5 El Remavah till	-Critical activities are as follows: <u> □1</u> : Diaphragm wall construction	and/or High-Volume Sampler, EPA Reference method (EPA: United State Environmental Protection
CO (Carbon Monoxide)	PPM	0.58	1.47	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u></u>	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and re-	Agency)
NO2 (Nitrogen Dioxide)	µg/m3	7.58	12.82	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	µg/m3	31.85	183.95	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area

Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.

<u>Monitoring Period:</u> (From) <u>Date</u> 10/10/2022, (To) <u>Date</u> 11/10/2022. "Monitoring measurements" <u>Location: (Station and near sensitive receptors):</u> Station No. 03 El NASR...located in Cairo governorate, nearby Al Haram secondary school

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	ed Value	National	Referred	Standards for	Remarks (Check Box where applicable)		licable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	75.5	775	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment.	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM10 (Particulate Matter less than 10μm)	µg/m3	71.7	221	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remavah till	-Critical activities are as follows: <u>□1</u> : Diaphragm wall construction	and/or High-Volume Sampler, EPA Reference method (EPA: United State Environmental Protection
CO (Carbon Monoxide)	PPM	0.34	2.76	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u> <u> <u> </u>Section 4</u> :Sta.16 El Malek El Salah and, <u> </u>Turp. Back Point at Eurtat</u>	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and re	Agency)
NO2 (Nitrogen Dioxide)	µg/m3	2.25	3.19	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	µg/m3	2.5	3.55	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area
 Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
 *** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by

Monitoring Period: (From) Date 11/10/2022, (To) Date 12/10/2022. "Monitoring measurements" Location: (Station and near sensitive receptors): Station No. 04 G. E MUSUEM ... located in Cairo governorate, nearby

residential area

<u>Remarkable main emission source (Working Machines)</u>: The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	d Value	National	Referred	Standards for	Remarks	(Check Box where app	licable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	90.5	577	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment.	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM10 (Particulate Matter less than 10μm)	µg/m3	85.7	179	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remavah till	-Critical activities are as follows: <u>□1</u> : Diaphragm wall construction	and/or High-Volume Sampler, EPA Reference method (EPA: United State Environmental Protection
CO (Carbon Monoxide)	PPM	0.13	0.58	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u> DSection 4</u> Sta.16 El Malek El Salah and, Turn-Back Point at Eustat	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and re-	Agency)
NO2 (Nitrogen Dioxide)	µg/m3	7.7	13.2	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	µg/m3	4.98	18.42	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area
 Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
 *** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by

Monitoring Period: (From) Date 09/05/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 05 EL REMAYA /

<u>Remarkable main emission source (Working Machines)</u>: The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	ed Value	National	Referred	Standards for	Is for Remarks (Check Box where applicable)		
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	65.5	298	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment.	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM ₁₆ (Particulate Matter less than 10μm)	µg/m3	70.2	211	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remavah till	-Critical activities are as follows: <u>□1</u> :Diaphragm wall construction	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental Protection
CO (Carbon Monoxide)	PPM	3.80	4.71	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u> <u> <u> </u>Sta.15 EL Roda <u> </u>Sta.16 El Malek El Salah and, <u> </u>Turn-Back Point at Eustat</u></u>	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and re-	Agency)
NO2 (Nitrogen Dioxide)	µg/m3	49.6	70.5	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	µg/m3	65.7	99.32	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.

Monitoring Period: (From) Date 09/05/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 06 AL AHRAMAT / EL HARAM St.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	ed Value	National	Referred	Standards for	Remarks	(Check Box where applied	cable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	189.6	390.1	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM ₁₆ (Particulate Matter less than 10μm)	µg/m3	124.5	250.5	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>⊐Section 3</u> :From Sta.5 El Remavah till	follows: <u>□1</u> :Diaphragm wall construction □2: Excavation of stations	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental
CO (Carbon Monoxide)	PPM	2.05	2.69	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u>Section 4</u> :Sta.16 El Malek El Salah and, Turn Back Point at Eustat	□3: Concrete pouring of slab. □4: Backfilling and re-	Protection Agency)
NO2 (Nitrogen Dioxide)	µg/m3	40	75.7	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	μg/m3	3.2	20.4	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approx

Monitoring Period: (From) Date 09/05/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No 07. Maryoutia / EL HARAM St.

<u>Remarkable main emission source (Working Machines)</u>: The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	d Value	National	Referred	Standards for	Remarks	(Check Box where applied	cable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	189.6	298.1	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM ₁₆ (Particulate Matter less than 10μm)	µg/m3	124.5	211	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>⊐Section 3</u> :From Sta.5 El Remavah till	follows: <u>□1</u> :Diaphragm wall construction □2: Excavation of stations	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental
CO (Carbon Monoxide)	PPM	3.80	4.71	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u> <u> <u> </u>Section 4</u> :Sta.16 El Malek El Salah and, Turn Back Point at Fustat</u>	□3: Concrete pouring of slab. □4: Backfilling and re-	Protection Agency)
NO2 (Nitrogen Dioxide)	µg/m3	49.6	65.61	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	μg/m3	65.7	99.32	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approx

Monitoring Period: (From) Date 06/07/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No 08. AL ARISH / EL HARAM St.

<u>Remarkable main emission source (Working Machines)</u>: The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	ed Value	National	Referred	Standards for	s for Remarks (Check Box where applica		cable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	189.6	201.3	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM ₁₆ (Particulate Matter less than 10μm)	µg/m3	1.02	124.34	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>⊐Section 3</u> :From Sta.5 El Remavah till	follows: <u>□1</u> :Diaphragm wall construction □2: Excavation of stations	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental
CO (Carbon Monoxide)	PPM	4.38	3.6	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u> Gesetion 4</u> Sta.16 El Malek El Salah and, Turn-Back Point at Fustat	□3: Concrete pouring of slab. □4: Backfilling and re-	Protection Agency)
NO2 (Nitrogen Dioxide)	µg/m3	27.0	36.1	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station where the mest constitute	instatement works.	
SO2 (Sulphur Dioxide)	μg/m3	30.0	30.4	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area
 Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
 *** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by

Monitoring Period: (From) Date 19/04/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No 09. EL MATBA'A / EL HARAM St.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	d Value	National	Referred	Standards for	Remarks	(Check Box where applied	cable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	189.6	209.7	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM ₁₆ (Particulate Matter less than 10μm)	µg/m3	89	130	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>⊐Section 3</u> :From Sta.5 El Remavah till	follows: <u>□1</u> : Diaphragm wall construction □2: Excavation of stations	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental
CO (Carbon Monoxide)	PPM	2.58	3.04	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u> Gection 4</u> Sta.16 El Malek El Salah and, Turn-Back Point at Fustat	<u>3</u> : Concrete pouring of slab. <u>4</u> : Backfilling and re-	Protection Agency)
NO2 (Nitrogen Dioxide)	µg/m3	41.7	56	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	µg/m3	5.3	16.5	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods annor

Monitoring Period: (From) Date 02/04/2022, (To) Date 06/07/2022 . "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 10 EL TALBIA / EL HARAM St.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	ed Value	National	Referred	Standards for	Remarks	(Check Box where applied	cable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	189.6	420	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM ₁₆ (Particulate Matter less than 10μm)	µg/m3	124.5	355	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>⊐Section 3</u> :From Sta.5 El Remavah till	follows: <u>□1</u> :Diaphragm wall construction □2: Excavation of stations	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental
CO (Carbon Monoxide)	PPM	1.999	3.432	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u> <u> <u> </u>Sta.15 EL Roda <u> </u>Sta.16 El Malek El Salah and, <u> </u>Turn-Back Point at Fustat</u></u>	□3: Concrete pouring of slab. □4: Backfilling and re-	Protection Agency)
NO2 (Nitrogen Dioxide)	µg/m3	109.5	190.8	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	μg/m3	8.8	46.1	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approx

Monitoring Period: (From) Date 03/04/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 11 MADKOUR / EL HARAM St.

<u>Remarkable main emission source (Working Machines)</u>: The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	d Value	National	Referred	Standards for	Remarks	(Check Box where applied	cable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	245.8	530.4	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM ₁₆ (Particulate Matter less than 10μm)	µg/m3	105.4	372.6	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>⊐Section 3</u> :From Sta.5 El Remavah till	follows: <u>□1</u> :Diaphragm wall construction □2: Excavation of stations	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental
CO (Carbon Monoxide)	PPM	0.63	1.16	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u></u>	□3: Concrete pouring of slab. □4: Backfilling and re-	Protection Agency)
NO2 (Nitrogen Dioxide)	µg/m3	36.8	144.55	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	µg/m3	3.4	11	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approx

Monitoring Period: (From) Date 11/09/2022, (To) Date 12/09/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 12 AI MESHAH / EL HARAM St.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest level.

Items/	Unit	Measure	d Value	National	Referred	Standards for	Remarks	(Check Box where applied	cable)
Parameter		Mean	Max	Standard	International Standards	Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodology of sampling and analyzing
TSP (Total Suspended Particular)	µg/m3	75.25.8	315	230 (24 hrs)	-	230 (24 hrs)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as	-Executive Regulation Law No.4/1984 Annex5 -Automatically Analyzer
PM ₁₆ (Particulate Matter less than 10μm)	µg/m3	88.5	190.6	150 (24 hrs)	50 (24 hrs Mean)	150 (24 hrs)	El Naser and, Sta.4 G.E.Musuem <u>⊐Section 3</u> :From Sta.5 El Remavah till	follows: <u>□1</u> :Diaphragm wall construction □2: Excavation of stations	and/or High Volume Sampler, EPA Reference method (EPA :United State Environmental
CO (Carbon Monoxide)	PPM	0.51	2.69	30 (1 hr MAX) 10 (8hr)	-	30 (1 hr MAX) 10 (8hr)	Sta.15 EL Roda <u></u>	□3: Concrete pouring of slab. □4: Backfilling and re-	Protection Agency)
NO2 (Nitrogen Dioxide)	µg/m3	8.56	18.82	300 (1 hr MAX) 150 (24hr)	200 (1 hrs Mean)	300 (1 hr MAX) 150 (24hr)	-For the choosing of the monitoring location, it could be at the monitoring station	instatement works.	
SO2 (Sulphur Dioxide)	μg/m3	46.36	163.71	300 (1 hr MAX) 125 (8hr)	500 (24 hrs Mean) 20 (24 hrs Mean)	300 (1 hr MAX) 125 (8hr)	receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.		

Note; * National Standard: Law4/1994.

** International Standard: WHO guideline Global update 2005

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.
**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Belevant Begulation or Global Standard. Other equivalent methods appro-

Monitoring Period:(From) Date15/09/2022(To) Date16/09/2022. "Monitoring measurements"Location:(Station and near sensitive receptors):Station No. 01 HADEAK AL ASHGAR / MOUNTIN IN VIWE cityRemarkable main emission source(Working Machines):The activities at the time of the monitoring was at the lowest

level.

		Measu	red Value				Remarks (Ch	neck Box where app	licable)
Items/ Parameter	Unit	Day Time	Night Time	National Standards	Referred International Standards	Standards for Monitoring	Details of location	Frequency/Dura tion	Relevant Regulation and Methodology of sampling and analyzing
LAeq (Equivilant continuous A-weighted sound pressure Level)	dB(A)	56.51 "Average of reading from 10:00 am to 10"00 pm	63.06 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>□1</u> :Diaphagm wall	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications ISO 9612/ISO 1996 (Parts 1 and 2) or Egyptian specifications No.2836
L _{Amax} (Maximum level)	dB(A)	88.22 ""Average of reading from 10:00 am to 10"00 pm	87.55 Average of reading from 11:00 pm to 11"00 am	135	-	135	□Section 4 :Sta.16 El Malek El Salah and, Turn-Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors	construction <u>2</u> : Excavation of stations <u>3</u> : Concrete pouring of slab. <u>4</u> : Backfilling and re-instatement	(Parts 1 and 2) and No.5525
L _{AS} (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	(hospital, schools, etc.) exist and considering the actual distance from the construction.	works.	

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.

Monitoring Period: (From) <u>Date</u> 16/09/2022, (To) <u>Date</u> 17/09/2022. "Monitoring measurements" Location: (Station and near sensitive receptors): Station No. 01 HADEAK AL AHRAM

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest

level.

		Measu	red Value				Remarks (Ch	eck Box where app	licable)
ltems/ Parameter	Unit	Day Time	Night Time	National Standards	Referred International Standards	Standards for Monitoring	Details of location	Frequency/Dura tion	Relevant Regulation and Methodology of sampling and analyzing
LAeq (Equivilant continuous A-weighted sound pressure Level)	dB(A)	57.78 "Average of reading from 10:00 am to 10"00 pm	59.76 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remayah till Sta 15 El Roda	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: u1-Diaphragm wall	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications ISO 9612/ISO 1996 (Parts 1 and 2) or Egyptian specifications No 2836
L _{Amax} (Maximum level)	dB(A)	80.55 ""Average of reading from 10:00 am to 10"00 pm	80.9 Average of reading from 11:00 pm to 11"00 am	135	-	135	<u>Sta.15 E Roda</u> <u>Section 4</u> :Sta.16 El Malek El Salah and, Turn-Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where	Image: Diaphragin wait construction Image: Excavation of stations Image: Diaphragin wait Image: Diaphragin wait	(Parts 1 and 2) and No.5525
Las (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	the most sensitive receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.	re-instatement works.	

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Source: JICA Design Consultant and Environics

Monitoring Period: (From) Date 10/10/2022, (To) Date 11/10/2022 . "Monitoring measurements" Location: (Station and near sensitive receptors): Station No. 03 EL NASR / EL RMAYA BUILDING Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest

level.

		Mea	sured Value			k Box where appli	cable)		
ltems/ Parameter	Unit	Day Time	Night Time	National Standards	Referred International Standards	Standards for Monitoring	Details of location	Frequency/Dur ation	Relevant Regulation and Methodology of sampling and analyzing
LAeq (Equivilant continuous A-weighted sound pressure Level)	dB(A)	62.09 "Average of reading from 10:00 am to 10"00 pm	60.1 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows:	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications ISO 9612/ISO 1996 (Parts 1 and 2) or Egyptian specifications No 2836
Lamax (Maximum level)	dB(A)	86.7 "Average of reading from 10:00 am to 10"00 pm	85.7 "Average of reading from 11:00 pm to 11"00 am	135	-	135	<u>InSection 4</u> :Sta.16 El Malek El Salah and, Turn- Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most	wall construction <u>2</u> : Excavation of stations <u>3</u> : Concrete pouring of slab. <u>4</u> : Backfilling	(Parts 1 and 2) and No.5525
L _{AS} (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	sensitive receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.	and re- instatement works.	

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am. 135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.

Monitoring Period: (From) Date 11/10/2022, (To) Date 12/10/2022 . "Monitoring measurements" Location: (Station and near sensitive receptors): Station No. 04 G.E MUSEUM

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest

level.

	Measured Value						Remarks (Ch	eck Box where app	licable)
ltems/ Parameter	Unit	Day Time	Night Time	National Standards	Referred International Standards	Standards for Monitoring	Details of location	Frequency/Dura tion	Relevant Regulation and Methodology of sampling and analyzing
LAeq (Equivilant continuous A-weighted sound pressure Level) LAmax (Mavimum	dB(A) dB(A)	63.1 "Average of reading from 10:00 am to 10"00 pm 91 ""Average	55.59 "Average of reading from 11:00 pm to 11"00 am 78.37 Average of	Day 50-70 Night 40-60 (Depending on the type of area) 135	30-55	Day 50-70 Night 40-60 (Depending on the type of area) 135	-At one monitoring station for each following section <u>Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda <u>Section 4</u>	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>□1</u> :Diaphragm wall construction =2: Evenuation of	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications ISO 9612/ISO 1996 (Parts 1 and 2) or Egyptian specifications No.2836 (Parts 1 and 2) and No.555
(Maximum level)		of reading from 10:00 am to 10"00 pm	reading from 11:00 pm to 11"00 am				:Sta.16 El Malek El Salah and, Turn-Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most consitive recentors	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and	No.5525
Las (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	(hospital, schools, etc.) exist and considering the actual distance from the construction.	works.	

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.
 135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

*** Except Section 1 (Sta.1 Hadaek El Ashgar), where is desert area Section 3 will be divided in accordance with contract-packages, and each contractor select one station from each package to conduct the monitoring tests.

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent

methods approved by the Department may be used.

Monitoring Form: Noise (Construction)

Monitoring Period: (From) Date 02/04/2022, (To) Date 03/04/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 05 EL REMAYA.

<u>Remarkable main emission source (Working Machines)</u>: The activities at the time of the monitoring was at the lowest level.

		Measure	d Value				Remarks (Check Be	eck Box where applicable)			
Items/ Paramete r	Unit	Day Time	Night Time	National Standards	Referred Internationa I Standards	Standards for Monitorin g	Details of location	Frequency/Duration	Relevant Regulation and Methodolog y of sampling and analyzing		
L _{Aeq} (Equivilant continuous A-weighted sound pressure Level)	dB(A)	65.7 "Average of reading from 10:00 am to 10"00 pm	69.2 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda <u>□Section 4</u>	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>□1</u> :Diaphragm wall construction	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications ISO 9612/ISO		
L _{Amax} (Maximum level)	dB(A)	93 "Average of reading from 10:00 am to 10"00 pm	95.1 "Average of reading from 11:00 pm to 11"00 am	135	-	135	:Sta.16 El Malek El Salah and, Turn-Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors	<u>□2</u> : Excavation of stations <u>□3</u> : Concrete pouring of slab. <u>□4</u> : Backfilling and re-instatement works.	1996 (Parts 1 and 2) or Egyptian specifications No.2836 (Parts		
Las (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	(hospital, schools, etc.) exist and considering the actual distance from the construction.		1 and 2) and No.5525		

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Monitoring Form: Noise (Construction)

Monitoring Period: (From) Date 02/04/2022, (To) Date 03/04/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 06 AL AHRAMAT.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest

level.

		Measured Value Remarks (Check Box where applicable)							
Items/ Paramete r	Unit	Day Time	Night Time	National Standards	Referred Internationa I Standards	Standards for Monitorin g	Details of location	Frequency/Duration	Relevant Regulation and Methodolog y of sampling and analyzing
LAeq (Equivilant continuous A-weighted sound pressure Level)	dB(A)	63.2 "Average of reading from 10:00 am to 10"00 pm	61.5 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda □Section 4	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>-1</u> :Diaphragm wall construction	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications
L _{Amax} (Maximum level)	dB(A)	89.8 "Average of reading from 10:00 am to 10"00 pm	90.7 "Average of reading from 11:00 pm to 11"00 am	135	-	135	:Sta.16 El Malek El Salah and, Turn-Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and re-instatement works.	1996 (Parts 1 and 2) or Egyptian specifications No.2836 (Parts
Las (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	1 (hospital, schools, etc.) exist and considering the actual distance from the construction.		1 and 2) and No.5525

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Monitoring Form: Noise (Construction)

Monitoring Period: (From) Date 02/04/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 07 MAROUTIA.

<u>Remarkable main emission source (Working Machines)</u>: The activities at the time of the monitoring was at the lowest level.

	Measured Value Remarks (Check Box where applicable)								
Items/ Paramete r	Unit	Day Time	Night Time	National Standards	Referred Internationa I Standards	Standards for Monitorin g	Details of location	Frequency/Duration	Relevant Regulation and Methodolog y of sampling and analyzing
L _{Aeq} (Equivilant continuous A-weighted sound pressure Level)	dB(A)	69.1 "Average of reading from 10:00 am to 10"00 pm	64.9 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda □Section 4	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>□1</u> :Diaphragm wall construction	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications
Lamax (Maximum level)	dB(A)	94.1 "Average of reading from 10:00 am to 10"00 pm	89.9 "Average of reading from 11:00 pm to 11"00 am	135	-	135	:Sta.16 El Malek El Salah and, Turn-Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and re-instatement works.	1996 (Parts 1 and 2) or Egyptian specifications No.2836 (Parts
LAS (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	(hospital, schools, etc.) exist and considering the actual distance from the construction.		1 and 2) and No.5525

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Monitoring Form: Noise (Construction)

Monitoring Period: (From) Date 06/07/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 08 AL ARISH.

<u>Remarkable main emission source (Working Machines)</u>: The activities at the time of the monitoring was at the lowest level.

	Measured Value Remarks (Check Box where app						ox where applicable)		
Items/ Paramete r	Unit	Day Time	Night Time	National Standards	Referred Internationa I Standards	Standards for Monitorin g	Details of location	Frequency/Duration	Relevant Regulation and Methodolog y of sampling and analyzing
L _{Aeq} (Equivilant continuous A-weighted sound pressure Level)	dB(A)	66.3 "Average of reading from 10:00 am to 10"00 pm	67 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda □Section 4	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>□1</u> :Diaphragm wall construction	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications
Lamax (Maximum level)	dB(A)	89.7 "Average of reading from 10:00 am to 10"00 pm	94.4 "Average of reading from 11:00 pm to 11"00 am	135	-	135	ISECTION 4 :Sta.16 El Malek El Salah and, Turn-Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors	<u>□2</u> : Excavation of stations <u>□3</u> : Concrete pouring of slab. <u>□4</u> : Backfilling and re-instatement works.	1996 (Parts 1 and 2) or Egyptian specifications No.2836 (Parts
LAS (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	(hospital, schools, etc.) exist and considering the actual distance from the construction.		1 and 2) and No.5525

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Monitoring Form: Noise (Construction)

Monitoring Period: (From) Date 09/05/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 09 AL MABA'A.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest level.

Remarks (Check Box where applicable) Measured Value Relevant Standards Regulation Items/ Referred for National and Paramete Unit Internationa Dav Night Standards Monitorin **Details of location** Frequency/Duration Methodolog I Standards Time Time r g y of sampling and analyzing dB(A) 66.3 63.1 Day 50-70 30-55 Day 50-70 -At one monitoring station for each -24 hours/station at the -Executive LAea "Average of "Average of Night 40-60 Night 40-60 following section start of the critical **Regulation Law** (Equivilant reading from reading from (Depending on (Depending activities for the No.4/1984 □Section 2 continuous 10:00 am to 11:00 pm to the type of on the type : Sta.2 Hadaek Al Ahram, Sta.3 El Naser environment. Annex7 A-weighted 10"00 pm 11"00 am area) of area) and. Sta.4 G.E.Musuem -Critical activities are as -The sound □Section 3 follows: International pressure :From Sta.5 El Remayah till Sta.15 EL Roda □1:Diaphragm wall Specifications Level) construction ISO 9612/ISO □Section 4 dB(A) 89.7 87.4 135 135 <u>□2</u>: Excavation of stations Amax :Sta.16 El Malek El Salah and. Turn-Back 1996 (Parts 1 "Average of "Average of □3: Concrete pouring of and 2) or (Maximum Point at Fustat reading from reading from -For the choosing of the monitoring slab. Egyptian level) 10:00 am to 11:00 pm to location, it could be at the monitoring □4: Backfilling and respecifications 10"00 pm 11"00 am instatement works. No.2836 (Parts station where the most sensitive receptors (hospital, schools, etc.) exist and 1 and 2) and dB(A) Not Applicable 85 85 Las No.5525 considering the actual distance from the (the level construction. exceed for 5% of the time)

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Monitoring Form: Noise (Construction)

Monitoring Period: (From) Date 27/04/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 10 EL TALBIA / EL HARAM St.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest

level.

		Measure	ed Value				Remarks (Check B	ox where applicable)	
Items/ Paramete r	Unit	Day Time	Night Time	National Standards	Referred Internationa I Standards	Standards for Monitorin g	Details of location	Frequency/Duration	Relevant Regulation and Methodolog y of sampling and analyzing
L _{Aeq} (Equivilant continuous A-weighted sound pressure Level)	dB(A)	67.4 "Average of reading from 10:00 am to 10"00 pm	67.5 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>□Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>□Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda :Section 4	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>n1</u> :Diaphragm wall construction	-Executive Regulation Law No.4/1984 Annex7 -The International Specifications
L _{Amax} (Maximum level)	dB(A)	85.8 "Average of reading from 10:00 am to 10"00 pm	91.6 "Average of reading from 11:00 pm to 11"00 am	135	-	135	ISECUME Sta.16 El Malek El Salah and, Turn-Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors	□2: Excavation of stations □3: Concrete pouring of slab. □4: Backfilling and re-instatement works.	1996 (Parts 1 and 2) or Egyptian specifications No.2836 (Parts
Las (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	(hospital, schools, etc.) exist and considering the actual distance from the construction.		1 and 2) and No.5525

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Monitoring Form: Noise (Construction)

Monitoring Period: (From) Date 27/04/2022, (To) Date 06/07/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 11 MADKOUR / EL HARAM St.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest

level.

		Measur	ed Value				Remarks (Check Box where applicable)				
ltems/ Parameter	Unit	Day Time	Night Time	National Standards	Referred Internation al Standards	Standards for Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodolog y of sampling and analyzing		
L _{Aeq} (Equivilant continuous A- weighted sound pressure Level)	dB(A)	67.9 "Average of reading from 10:00 am to 10"00 pm	67 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>Section 3</u>	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>D1</u> :Diaphragm wall	-Executive Regulation Law No.4/1984 Annex7 -The International		
L _{Amax} (Maximum level)	dB(A)	86.9 "Average of reading from 10:00 am to 10"00 pm	66.3 "Average of reading from 11:00 pm to 11"00 am	135	-	135	 From Sta.5 El Remayah till Sta.15 EL Roda <u>□Section 4</u> Sta.16 El Malek El Salah and, Turn-Back Point at Fustat For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors (hospital, schools, etc.) exist 	construction <u>□2</u> : Excavation of stations <u>□3</u> : Concrete pouring of slab. <u>□4</u> : Backfilling and re- instatement works.	Specifications ISO 9612/ISO 1996 (Parts 1 and 2) or Egyptian specifications No.2836 (Parts		
L _{AS} (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	and considering the actual distance from the construction.		1 and 2) and No.5525		

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Source: JICA Design Consultant

Monitoring Form: Noise (Construction)

Monitoring Period: (From) Date 11/09/2022, (To) Date 12/09/2022. "BASE LINE MEASURMENTS" Location: (Station and near sensitive receptors): Station No. 12 AI MESAHA / EL HARAM St.

Remarkable main emission source (Working Machines): The activities at the time of the monitoring was at the lowest

level.

		Measur	ed Value				Remarks (Check Box	where applicable)	
ltems/ Parameter	Unit	Day Time	Night Time	National Standards	Referred Internation al Standards	Standards for Monitoring	Details of location	Frequency/Duration	Relevant Regulation and Methodolog y of sampling and analyzing
L _{Aeq} (Equivilant continuous A- weighted sound pressure Level)	dB(A)	72.5 "Average of reading from 10:00 am to 10"00 pm	71.53 "Average of reading from 11:00 pm to 11"00 am	Day 50-70 Night 40-60 (Depending on the type of area)	30-55	Day 50-70 Night 40-60 (Depending on the type of area)	-At one monitoring station for each following section <u>Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>Section 3</u>	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>□1</u> :Diaphragm wall	-Executive Regulation Law No.4/1984 Annex7 -The International
L _{Amax} (Maximum level)	dB(A)	94.48 "Average of reading from 10:00 am to 10"00 pm	94.27 "Average of reading from 11:00 pm to 11"00 am	135	-	135	 From Sta.5 EI Remayah till Sta.15 EL Roda <u>Section 4</u> Sta.16 El Malek El Salah and, Turn-Back Point at Fustat For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors (hospital, schools, etc.) exist 	construction <u>□2</u> : Excavation of stations <u>□3</u> : Concrete pouring of slab. <u>□4</u> : Backfilling and re- instatement works.	Specifications ISO 9612/ISO 1996 (Parts 1 and 2) or Egyptian specifications No.2836 (Parts
L _{AS} (the level exceed for 5% of the time)	dB(A)			Not Applicable	85	85	and considering the actual distance from the construction.		1 and 2) and No.5525

Note; * National Standard: Law4/1994, Daytime: 7am to 10pm, Night time: 10pm to 7am.

135dB (A) is for reference value, since this is medium noise level value applied to permissible limits of the level of sound inside place of work and indoor Place.

** International Standard: LAeq is evaluated by WHO Guideline 1990, L₁₀ is evaluated by Japanese Noise Regulation Regarding Specified Construction Work, Amended 2011

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used.

Source: JICA Design Consultant

Monitoring Form: Vibration (Construction)

Monitoring Period:	(From) <u>Date</u>	Month	Year ,	(To) <u>Date</u>	Month	Year .
Location: (Station and	d near sensitive red	ceptors):				<u>.</u>
Remarkable emission	source (Working N	Machines):				•

	Referred		Remarks (Chec	k Box where applica	ble)			
Items / parameter	Unit	Measured Values	National Standards	International Standards	Standards for monitoring	No. of Monitoring points Data/Location	Frequency Duration	Relevant Regulation and Methodology of sampling analyzing
-L _{Max} , L ₁₀ (Maximum Level and the level exceed for 10 of the time)	dB		Not Applicable	$\frac{\text{Evaluated in}}{\text{PPY}} (\text{Peak})$ Particle Velocity) i) < 10 Hz: 5 mm /s ii) 10-50Hz: 5-10 mm/s iii) 50-100Hz: 15-20 mm/s $\frac{\text{Evaluated in } L_{16}}{\text{:75 dB}}$ (Vibration Acceleration $L_{\text{vel}}=10 \ \mu\text{m/s}^2$)	Evaluated in PPY (Peak Particle Velocity) i) < 10 Hz: 5 mm /s ii) 10-50Hz: 5-10 mm/s iii) 50-100Hz: 15-20 mm/s Evaluated in L_{16} :75 dB (Vibration Acceleration $L_{vel}=10 \ \mu m/s^2$)	-At one monitoring station for each following section <u>Section 2</u> : Sta.2 Hadaek Al Ahram, Sta.3 El Naser and, Sta.4 G.E.Musuem <u>Section 3</u> :From Sta.5 El Remayah till Sta.15 EL Roda <u>Section 4</u> :Sta.16 El Malek El Salah and, Turn- Back Point at Fustat -For the choosing of the monitoring location, it could be at the monitoring station where the most sensitive receptors (hospital, schools, etc.) exist and considering the actual distance from the construction.	-24 hours/station at the start of the critical activities for the environment. -Critical activities are as follows: <u>1</u> :Diaphragm wall construction <u>2</u> : Excavation of stations <u>3</u> : Concrete pouring of slab. <u>4</u> : Backfilling and re- instatement works.	C

Note; * National Standard: There is no applicable regulation in Egypt

** International Standard: PPV is evaluated by DIN 4150 (1986), German standardization L₁₀ is evaluated by Japanese Vibration Regulation Specified construction Work, Amended. 1995

**** Sampling and analysis methodology shall be adopted in accordance with Egyptian Relevant Regulation or Global Standard. Other equivalent methods approved by the Department may be used. Source:

JICA Design Consultant and Environics

Monitoring Form: Groundwater Level (Construction)

Monitoring Period:	(From) <u>Date</u>	Month	Year	<u>,</u> (To) <u>Date</u>	Month	Year .
Location (Station):	_Station 04 MUSEME ,	Station 06 A	L AHRMAT , St	ation 07 EL MARYOU ^T	TIA & Station 08EL A	RISH . Reports
has been submitted incl	uding the reading.					

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Remarkable main emission source (Working Machines):

	Bottom		Initia	al Location			Investiga	ation Date/Piezon	nete	er Po	oint	
Investigation NO.	depth (meter from ground level)	Description	Latitude	Longitudinal	Start Date	End Date	DD/MM/YYYY	DD/MM/YYYY				
PZ 1 (PZ-01)	15 meter	Station 04 MUSEME	Elevation 19.50 m	E :626591.7530 N:80541.8270	Tue 27/04/2021	-						
PZ 2 (PZ-02)	15 meter	Station 04 MUSEME	Elevation 19.60 m	E :626802.4450 N:809334.8840	Sun 25/04/2021	-						
PZ 3 (PZ-11A)	11.5 meter	Station 06 AL AHRMAT	Elevation 21.835 m	E :628367.0843 N:808462.2857	Thu 29/04/2021	-						
PZ 4(PZ-11B)	25 meter	Station 06 AL AHRMAT	Elevation 21.850 m	E :628368.2438 N:808459.6545	Sat 01/05/2021	-						
PZ 5(PZ-12 A)	11.5 meter	Station 06 AL AHRMAT	Elevation 22.050 m	E :628163.8450 N:808394.7860	Sun 25/04/2021	-						
PZ 6 (PZ-12 B)	25 meter	Station 06 AL AHRMAT	Elevation 22.050 m	E :628162.3490 N:808394.6440	Mon 26/04/2021	-						
PZ 7 (PZ-SC16)	31 meter	Station 07 EL MARYOUTIA	Elevation 20.9 m	E :629314.116 N:629484.150	29/11/2021	-						
PZ 8 (PZ-SC17)	21 meter	Station 07 EL MARYOUTIA	Elevation 21.640 m	E :629484.150 N:808983.160	1/12/2021	-						
PZ 9 (PZ-SC20)	18.5 meter	Station 08 EL ARISH	Elevation 21.100 m	E :630133.635 N:809229.040	12/12/2021							

	19.0 motor	Station 08	Elevation	E :630476.076	11/12/2021				
PZ 10(PZ-3CZZ)	18.0 meter	EL ARISH	21.080 m	N:809378.360	14/12/2021				

Note; Monitoring Location : Set one piezometer between stations ,and two piezometers next to constructed stations (at least)

Frequency: Weekly (at least)

Duration: Monitoring station shall be set as soon as possible before excavation activities. Monitoring of groundwater levels after construction should be continued until the water level reaches the steady state at no-damaged piezometer.

Source: JICA Design Consultant and Environics

Monitoring Form: Check List for Soil Conservation (Construction)Monitoring Period:(From) 01/03/2022 ,(To) 10/04/2022.Location: HADEAK AL SHGAR station 01Description of work:Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Soil Conservation (Construction)

<u>Monitoring Period:</u> (From) <u>01/03/2022</u>, (To) <u>10/04/2022</u>. <u>Location: HADEAK AL AHRAM station 02</u> Description of work: Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items

Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Soil Conservation (Construction)Monitoring Period:(From) 01/03/2022 ,(To) 10/04/2022.Location: EL NASR station 03Description of work:Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items

Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Soil Conservation (Construction)Monitoring Period:(From) 01/03/2022 ,(To) 10/04/2022.Location: GE.MUSEM station 04Description of work:Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items

Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Soil Conservation (Construction)Monitoring Period:(From) 01/03/2022 ,(To) 10/04/2022.Location: EL REMAYA station 05Description of work:Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items

Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Soil Conservation (Construction)Monitoring Period:(From) 01/03/2022 ,(To) 10/04/2022.Location: AL AHRMAT station 06Description of work:Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items

Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Soil Conservation (Construction)Monitoring Period:(From) 01/03/2022 ,(To) 10/04/2022.Location: AL MARYUOTIA station 07Description of work:Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items

Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Soil Conservation (Construction)Monitoring Period:(From) 01/03/2022 ,(To) 10/04/2022.Location: EL ARISH station 08Description of work:Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items

Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Soil Conservation (Construction)Monitoring Period:(From) 01/03/2022 ,(To) 10/04/2022.Location: AL MATBA'A station 09Description of work:Steel fixing , concrete casting , formworks and others .

S.N	Items	Check-Point	Remark/Description
1	Condition on excavated materials (diaphragm walls, station box and tunnels).	Are the Unusual signs on the characteristic of excavation materials?	□ Yes / <mark>□ No</mark> (□ Contamination / □ Smell / □ Color / □ Rheology / □ Others)
2	Soil erosion/slope stability	Are there instability signs on the site, especially storage condition of excavation materials? (Diaphragm walls, station box and tunnels)	□ Yes/ <mark>□ No</mark> (□ Soil erosion / □ Slope stability / □ Water sediment loads / □ Others)
3	Soil conservation measures	Is a soil conservation measure effective (if any)?	□ Yes / <mark>□ No</mark> (□ Crack / □ Water leakage / □ Others)
4	Soil conservation measures	Is it necessary to prepare the additional soil conservation measures?	□ Yes / <mark>□ No</mark>
5	Size of soil erosion / land slide (if any) Nearest Past record (if any)	N/A	m x m.
6	Reason of land slide/soil erosion (if any)	N/A	There are no land slides or soil erosion
7	Nearest water source(if any)	Has the nearest water source been confirmed before excavation activities?	□ Yes / □ No (Nos., kind)

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items

Methodology : Visual check and/or Photographic record

Monitoring Form: Check List for Flora and Fauna (Construction)

Monitoring Period:	(From) <u>Date</u>	Month	Year ,	(To) <u>Date</u>	Month	Year .
Location:		<u>, Constru</u>	iction Bloc	k:		<u> </u>
Description of work:	Presentation	on Work / 🗆	Reinstater	nent Work / 🗆 O	thers ().
Visual Inspection						

S.N	Items	Check-Point	Remark/Description
1	Biodiversity changes	Has number of pests (rodents, insects, etc.) increased apparently due to the impertinent management of the labor's waste?	🗆 Yes / 🗆 No
2	Cutting trees	Is there a possibility of cutting trees?	\Box Yes / \Box No (The case falling under Yes: Conduct Tree Census)
3	Supervision of proper removal and re-plantation of valuable trees	Is there valuable tree in proposed area?	\Box Yes / \Box NO (Check with the result of the Tree Census)
4	Restoration of green areas	(If accepted by the concerned authority)	🗆 Yes / 🗆 NO

Tree Census (if there is a possibility of cutting trees)

S. N	Tree species	Category	Number s	H2eight of trees (m)	Diameter of height (DBH)(cm)	Aged trees	Growth	Status	Remark
		🗆 Common			□ < 25 cm	□ Young	□ Excellent	🗆 Cut	
		🗆 Valuable			□ 25-50 cm	🗆 Adult	□ Good	Repaint	
		()			□ > 50 cm	□ Old	□ Poor	□ Untouched	

Note; Monitoring Location : Constructed Site

Frequency : Periodical Check Daily/Weekly/Monthly in accordance with items Detail Check items and Frequency shall be finalized by Contractor.

Source: JICA Design Consultant and Environics

Item/Parameter	Location	Frequency
Safety -Regular visual inspection and medical checkups -Usage of safety and protective gear	 HSE site visit inspection is held on a regular basis with the join of the contractor, Engineer, and NAT at all stations. 	Weekly basis and Monthly

*Location of the Monitoring Wells (G1-G3) is shown in the Map.

<u> </u>	Monitoring Form: A	Air Quality (Co	<u>nstruction)</u>			
Monitoring Period:	(From) <u>Date</u>	Month	Year ,	(To) <u>Date</u>	Month	Year .
Location:						
Description of Work:						•

<mark>ltems</mark>	Detail Check Items	Provided/ Good/ Compliance	Not Provided/ Poor/ Not-Compliance	Remarks/Recommendations
1.Safety Signs				
2.Public Safety				
3.Excavation and others				
4.Houses keeping				
5. Personal Protected Equipment				
6.Fire Protection and Control				
7.Eqiupment Fund at Project Site				
8.Medical and Emergency Capabilities				

9.Number of Employees on Site		

Note; Check location : Constructed Site Frequency : Periodical Check Daily/Weekly/Monthly Detail Check items and Frequency shall be arranged by Contractor.

Source: JICA Design Consultant and Environics