



PROJECT IMPLEMENTATION UNIT (PIU), KWSSIP  
KARACHI WATER & SEWERAGE CORPORATION  
(KW&SC)



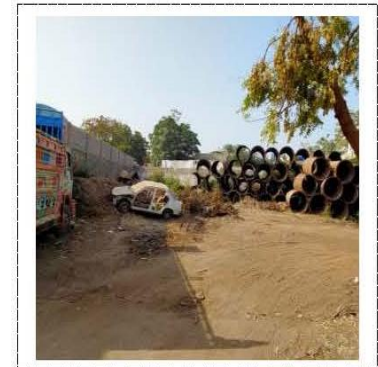
# Environmental & Social Screening Report



**KARACHI WATER & SEWERAGE SERVICES  
IMPROVEMENT PROJECT  
(KWSSIP)**

**PARKING SHEDS FOR KARACHI WATER AND  
SEWERAGE CORPORATION**

January 2024



**CONSTRUCTION OF PARKING SHED FOR KARACHI WATER & SEWERAGE  
CORPORATION (KW&SC) AT VARIOUS LOCATION KARACHI.**

**ENVIRONMENTAL AND SOCIAL SCREENING REPORT**

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## LIST OF ABBREVIATIONS / ACRONYMS

AED	Anti-Encroachment Drive
AIDS	Acquired Immune Deficiency Syndrome
ARAP	Abbreviated Resettlement Action Plan
CC	Construction Contractor
CCR	Community Complaints Register
CERRI	Center of Excellence Reform Research & Innovation
CHS	Community Health & Safety
DC	Design Consultant
E&S	Environment and Social
ESC	Environmental & Social Cell
ESMP	Environmental and Social Mitigation Plan
GBV	Gender-Based Violence
GFP	Grievance Focal Point
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
HIV	Human Immunodeficiency Viruses
KDA	Karachi Development Authority
KW&SC	Karachi Water & Sewerage Corporation
KWSSIP	Karachi Water and Sewerage Services Improvement Project
M&E	Monitoring & Evaluation
NOC	No Objection Certificate
OHS	Occupational Health & Safety
PAD	Project Appraisal Document
PAPs	Project Affected Persons
PIU	Project Implementation Unit
PM	Project Manager
PPE	Personal Protective Equipment
RAP	Resettlement Action Plan
SC	Supervision Consultant
SDS	Social Development Specialist
SEA/SH	Sexual Exploitation and Abuse/ Sexual Harassment
SEPA	Sindh Environmental Protection Agency
SEQs	Sindh Environmental Quality Standards
SOPs	Standard Operational Procedures
SSCF	Social Screening & Categorization Form
STP	Sewage Treatment Plant
TPV	Third Party Validation

## 1. INTRODUCTION

### 1.1 Overview

The Karachi Water & Sewerage Corporation (KW&SC) is a service-based consumer-oriented organization responsible for production, transmission and distribution of potable water to the citizens of Karachi, managing sewerage system within the city to ensure hygienic environment, development of schemes to cover short falls in services and collection of revenues for sustained economic viability. KW&SC has commitment to incorporate environmental sustainability and conservation measures into all aspects of its operations including implementing strategies to minimize water loss, promote water recycling and reuse, water conservation among Karachi citizens.

In addition to improvement in water, sanitation and metering systems under Karachi Water and Sewerage Services Improvement Project (KWSSIP), the KW&SC plans to construct parking sheds for the safety of sewage suction and jetting trucks and other vehicles. These parking sheds will provide the vehicles with effective protection against wear & tear which is causing deterioration of the vehicles.

### 1.2 Objectives

The following are the objectives of proposed Parking Shed design:

- To provide adequate parking facilities for the suction/jetting and other equipment of KW&SC;
- To avoid wear and tear of KW&SC's vehicles;
- To ensure safety of the vehicles and equipment;
- To ensure operational efficiency improvements, environmental protection during construction, and long-term sustainability of the parking facilities;
- To evaluate the operational improvements in context of the proposed facilities.

#### 1.2.1 Purpose of the Document

The environmental and social screening serves as the cornerstone in defining the category of the project, which sets out requirement for further studies. All the physical (e.g. air, water, soil etc.), biological (flora & fauna) and social parameters (accessibility, livelihoods etc.) are considered to assess the probability and magnitude of the impacts. The assessment is done by a dedicated team of environmental and social experts in liason with various stakeholders including line government departments and the local community. The current report presents findings of environmental and social screening for the proposed parking sheds at various locations of Karachi.

#### 1.2.2 Project Location

Five parking sheds will be will be built at the following locations in the city.

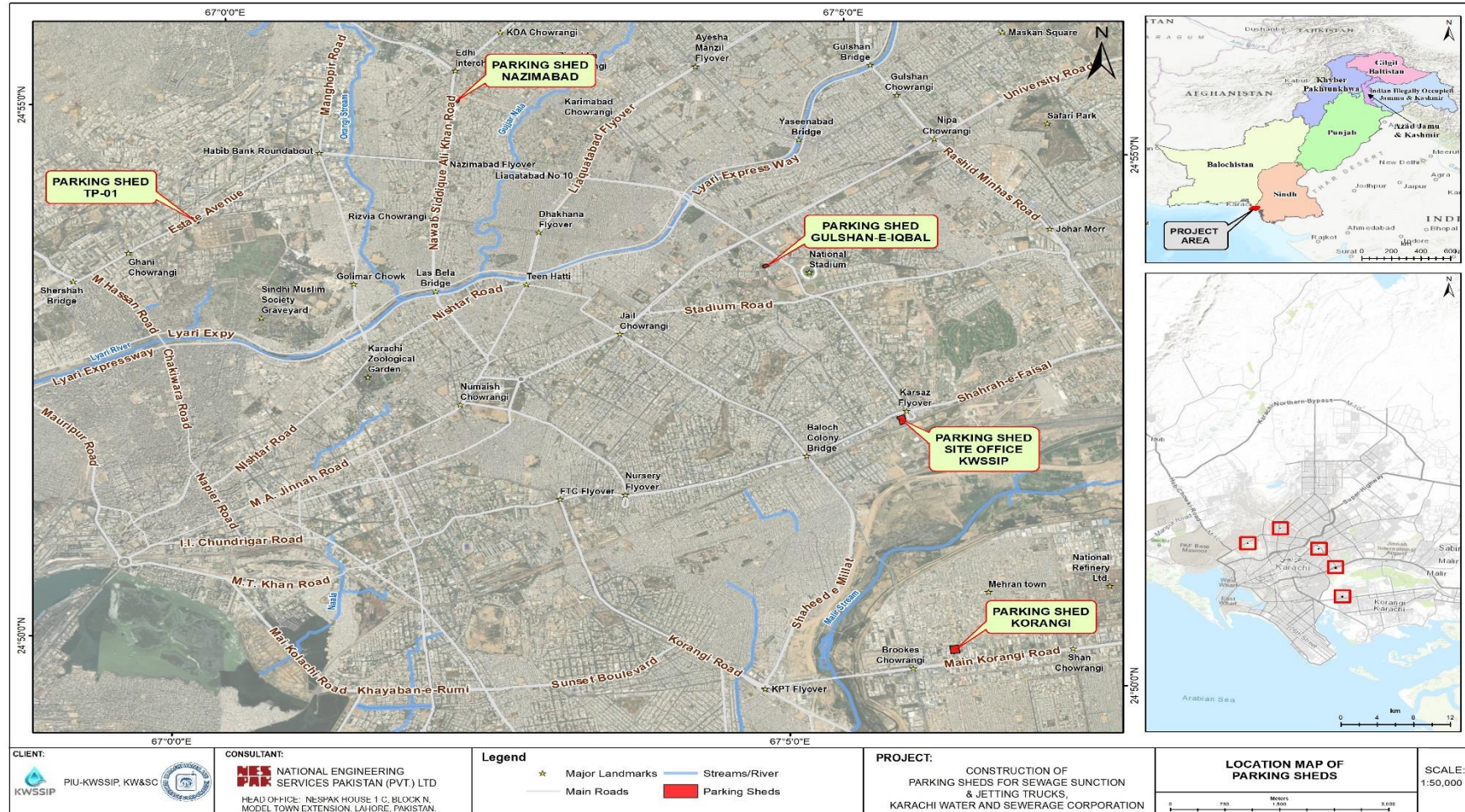
- Sewer Cleaning Equipment & Services (SCE&S) Division at KW&SC Central Workshop at 9th Mile Shahrah-e-Faisal
- Pumping Station - II (PS-II) Site at Korangi
- Sewage Treatment Plant (STP-I) Site at Shershah
- LSR Site near DC East Office Gulshan - e Iqbal
- Nazimabad Fire Station Site

The proposed sites for parking sheds are the property of the state (mostly owned by KW&SC), except the Nazimabad fire station site, which is owned by District Municipal Committee (DMC). However, no private land acquisition is involved in the project. PIU has initiated the process for acquisition of desired land from DMC on government-to-government basis. The location map of all the sites is shown in **Figure 1.1**. The individual location maps of the proposed sites are shown in **Figure 1.2 to Figure 1.6**.

Two sites i.e. TP 1 and LSR for Parking Sheds and Customer Service Centres share common. However, one combined ESSR has not been proposed in such case as these are distinct sub-projects, each requiring its own contractor. As a result, each contractor will be responsible for drafting their Bill of Quantities (BOQ) based on the Environmental and Social Safeguard (ESS) costs specific to their project. This arrangement may lead to variances in mobilization timelines among contractors. Each contractor will also have their own dedicated ESS Team to manage the ESS aspects on all sites.

Additionally, it's worth noting that these sub-projects, namely Parking Sheds and CSCs, fall under Category C, indicating minimal environmental impact. This designation holds true even if multiple projects are conducted on the same site, primarily because all sites are situated within KWSC's existing facilities, thereby keeping cumulative impacts limited.





**Figure 1.1: Location Map of Parking Sheds**



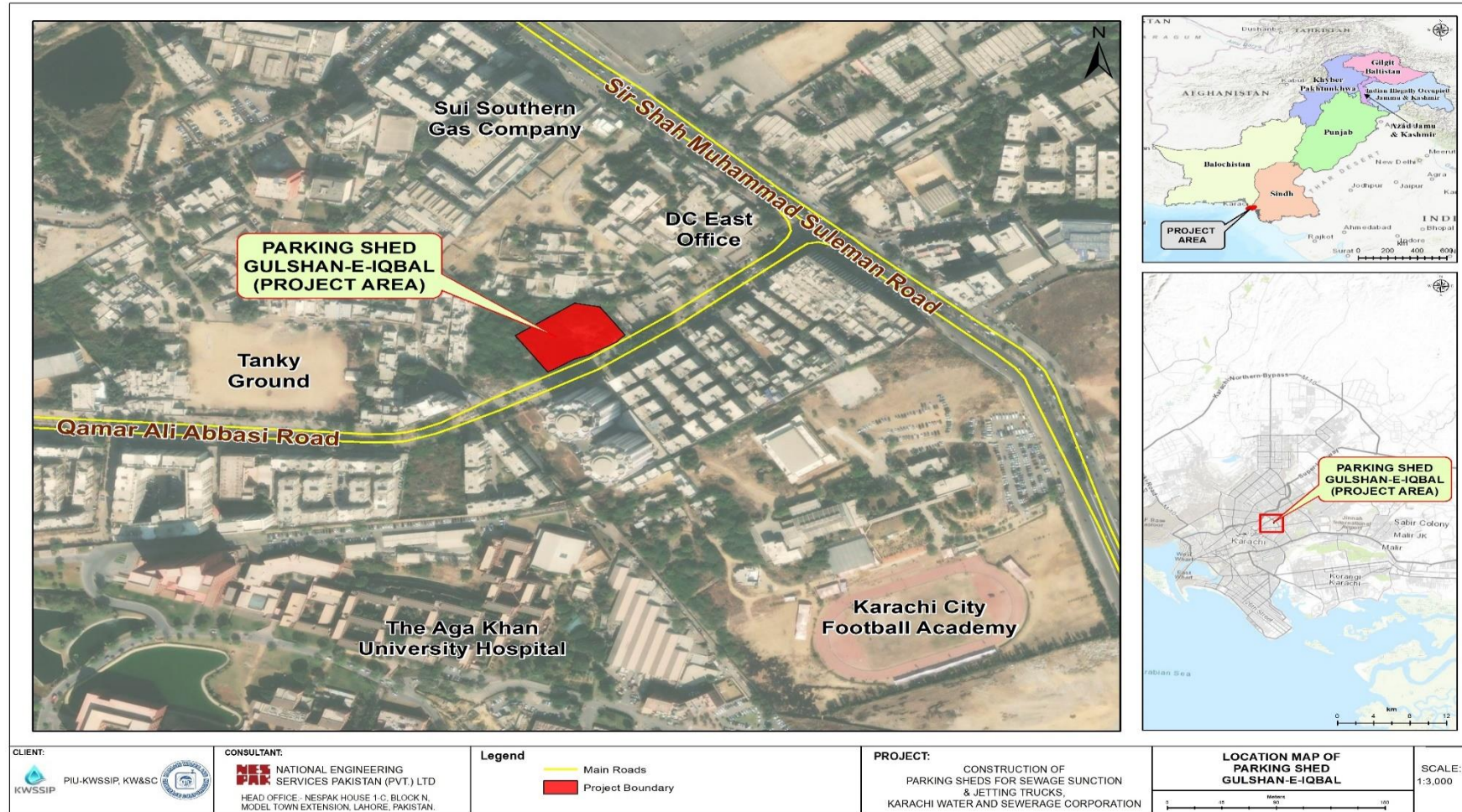
**Figure 1.2: Location Map of Parking Shed at SCE&S Division at KW&SC Central Workshop 9th Mile Shahrah-e-Faisal**



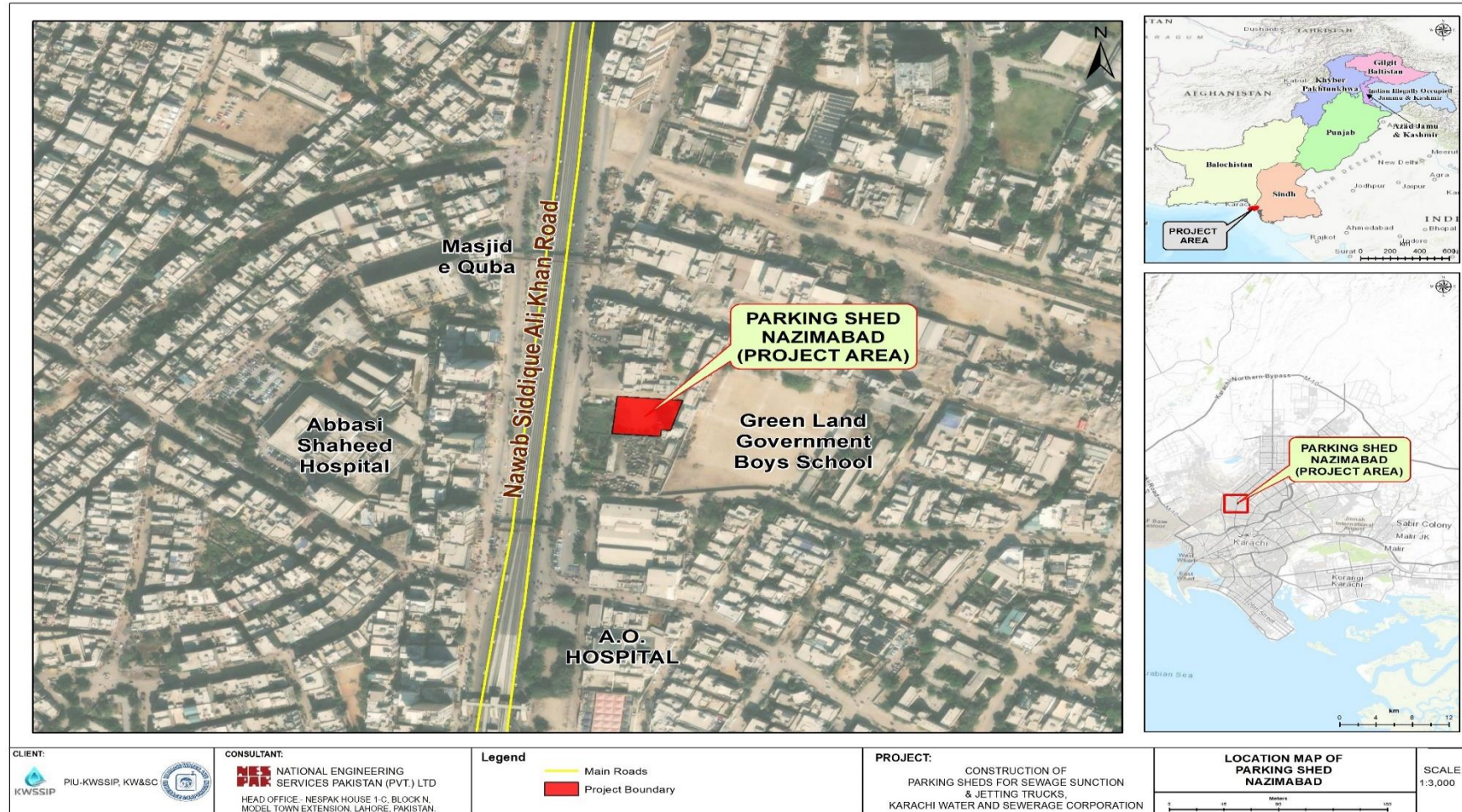
**Figure 1.3: Location Map of Parking Shed at PS-II Site Korangi**



**Figure 1.4: Location Map of Parking Shed at TP-I Site Shershah**



**Figure 1.5: Location Map of Parking Shed at LSR Site near DC East Office Gulshan - e Iqbal**



**Figure 1.6: Location Map of Parking Shed at Nazimabad Fire Station Site**

## 2. DESCRIPTION OF PROJECT

### 2.1 Description of Project

The project involves rehabilitation of parking shed at SCE&S Division at KW&SC Central Workshop at 9th Mile Shahrah-e-Faisal and construction of new parking sheds for sewage suction and jetting trucks, at PS-II Site Korangi, TP-I Site Shershah, LSR Site Gulshan e Iqbal and Nazimabad Fire Station Site. The parking shed will provide the vehicles with effective protection against wear & tear which is causing deterioration of vehicles.

#### 2.1.1 Land Requirement

The ground covered area of the proposed parking shed is summarized hereunder;

**Table 2.1: Land Requirement**

Sr. No	Location	Available Area (Square feet)	Required Area (Square feet)
1	SCE&S Division at KW&SC Central Workshop at 9th Mile Shahrah-e-Faisal	114,840.37	28,910
2	PS-II Site at Korangi	57,280.11	23,625
3	TP-I Site at Shershah	5,742,428	9,180.98
4	LSR Site near DC East Office Gulshan - e Iqbal	101,383	15,207.94
5	Nazimabad Fire Station Site	16,838.60	6,928.63

#### 2.1.2 Existing Site Conditions

##### i. SCE&S Division at KW&SC Central Workshop at 9th Mile, Shahrah-e-Faisal

Currently, the proposed land for the parking shed is under the control of Sewer Cleaning Equipment & Services (SCE&S) Division of KW&SC. There is existing workshop and parking space for the sewage suction and jetting trucks and other vehicles. However, the facilities are inadequate and the vehicles are parked under the open sky which is causing wear and tear of vehicles and other machinery. Existing office buildings and maintenance halls are obsolete and have weak structural strength. The approach road is the service lane along Shahrah e Faisal near Karsaz while no heavy load of traffic. The existing site conditions are presented in **Plate 2.1** below:



**Plate 2.1: Existing Site Conditions SCE&S Division at KW&SC Central Workshop at 9th Mile**

**ii. PS-II Site at Korangi**

The site proposed for the parking sheds in Korangi Division is the existing sewage pumping station i.e., PS-II Site, Korangi. The wet well and the dry wells are located in the corner of the facility and the pipes are underground, therefore, there is ample land available for the proposed interventions. The approach road is adequate and traffic load on the adjoining roads is very low. The existing site conditions are presented in **Plate 2.2** below:







**Plate 2.2: Existing Site Conditions PS-II Site at Korangi**

### iii. TP-I Site at Shershah

One of the parking shed is proposed within the premises of Sewage Treatment Plant – I (STP-I). The site is owned and operated by KW&SC itself. Ample land is available to construct the proposed facility. However, a few trees (06) will need to be cut during site preparations. The approach road is the arterial road connected to the main road of site area. There are heavy loads of traffic on the main road, however, the approach road is not much utilized by the commuters. The existing site conditions are presented in **Plate 2.3** below.



**Plate 2.3: Existing Site Conditions PS-II Site at Korangi**

### iv. LSR Site near DC East Office Gulshan - e Iqbal

The proposed site at LSR, Gulshan e Iqbal is owned by KW&SC. Currently, the site is not in any use but there is a thick plantation of trees at the proposed location. The approach is not very busy and receives small volumes of traffic of nearby residential communities. The existing site conditions are presented in **Plate 2.4** below. The details of trees are given in the proceeding section.



**Plate 2.4: Existing Site Conditions LSR Site near DC East Office Gulshan - e Iqbal**

#### **v. Nazimabad Fire Station Site**

The proposed parking shed in Nazimabad will be constructed along the existing fire station owned by District Municipal Committee (DMC). However, there will be separate access gates for each facility to avoid hindrance in the operations. Furthermore, there is a residential community at the rear side of the facility who share a common entrance to the place. Thus, a separate access will be required for the residents. Furthermore, the process for acquisition of land from DMC on government-to-government basis has been initiated by the PIU. Owing to its location adjacent to the water hydrant, the approach road usually remains busy. The existing site conditions are presented in **Plate 2.5** below. The details of trees are given in the proceeding section.

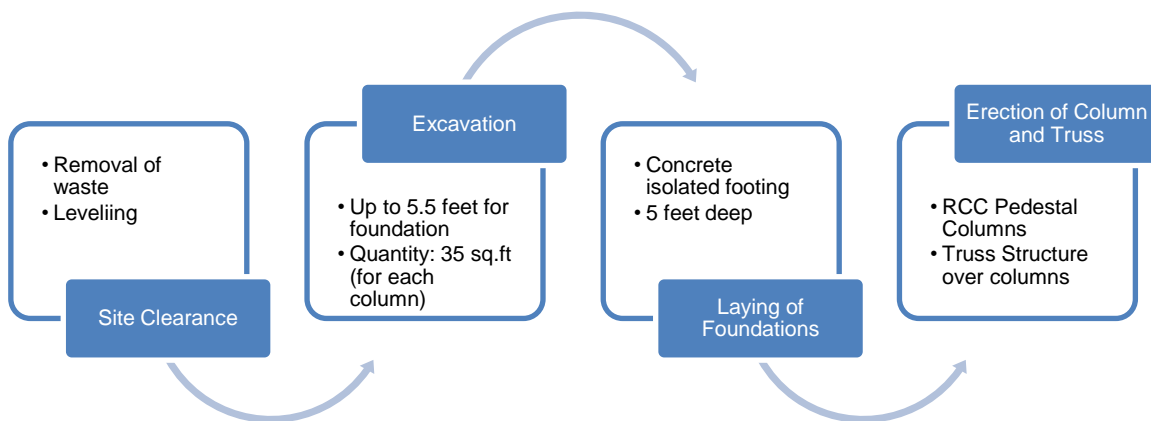




**Plate 2.5: Existing Site Conditions Nazimabad Fire Station Site**

### 2.1.3 Proposed Interventions

The footprint of the construction is very limited for the proposed parking facilities. The major activities involved in the project include the following:

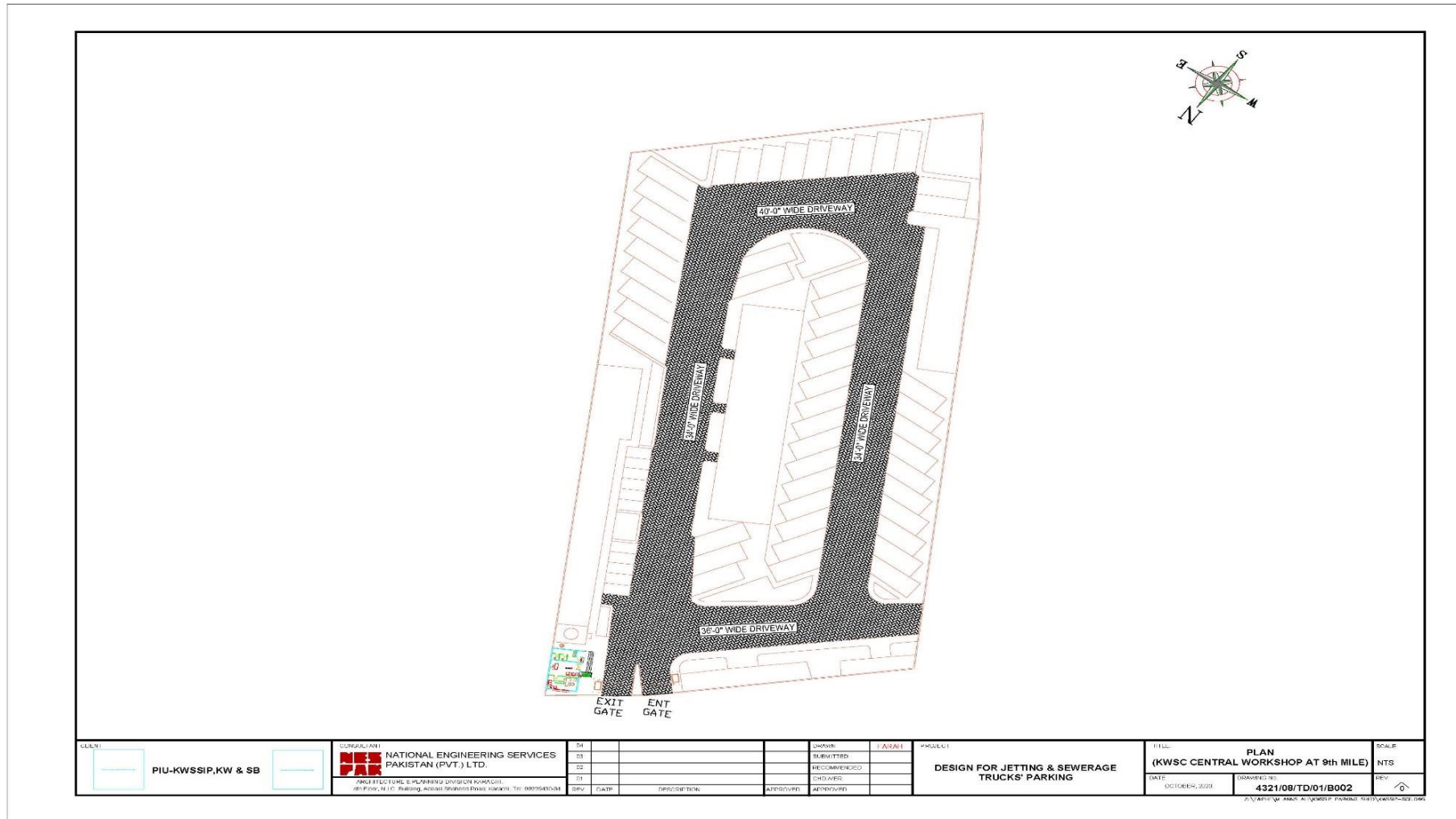


### 2.1.4 Duration of the Project

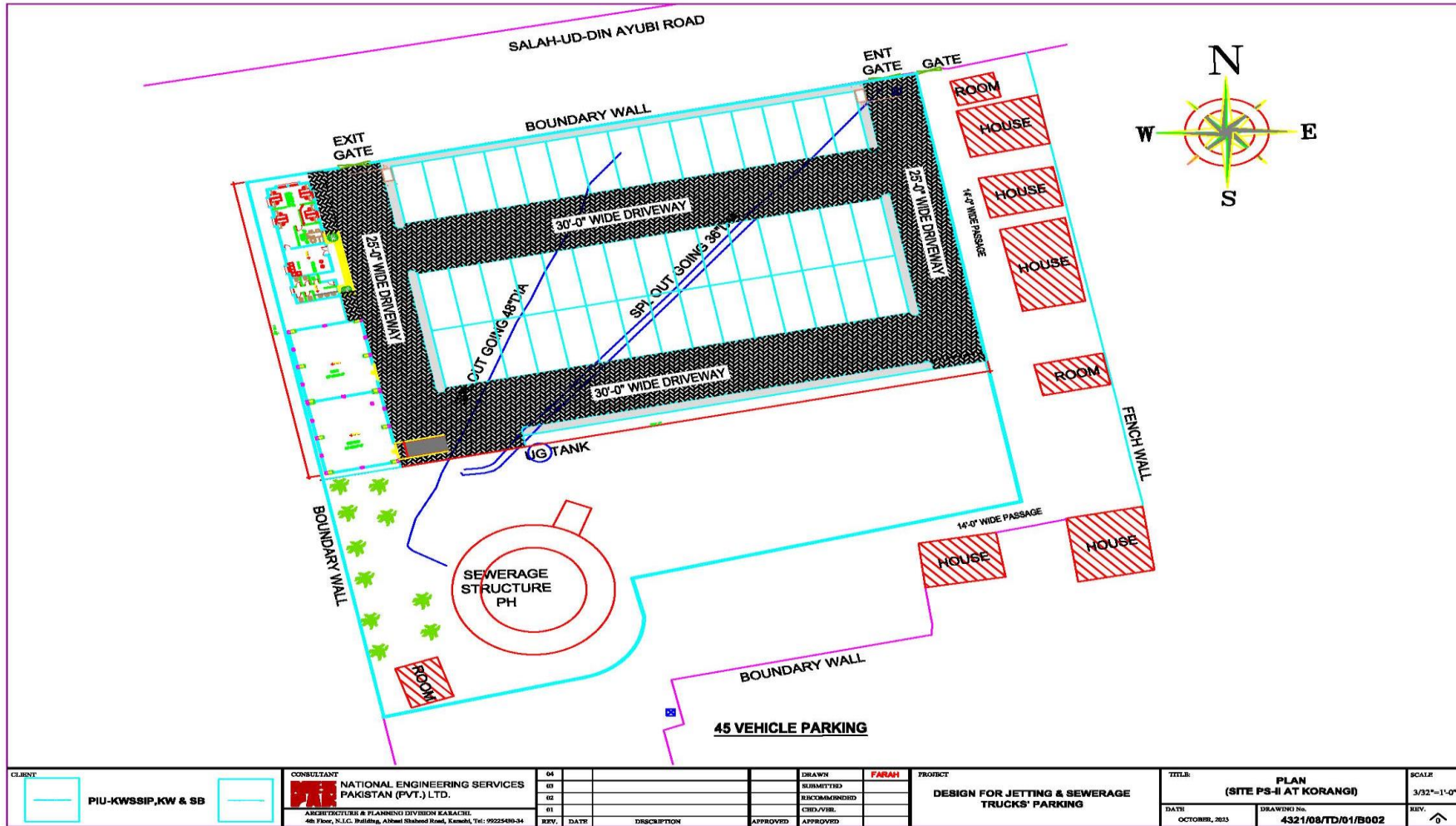
The project is expected to be completed within 12 months of its commencement.

### 2.1.5 Plans of Parking Sheds

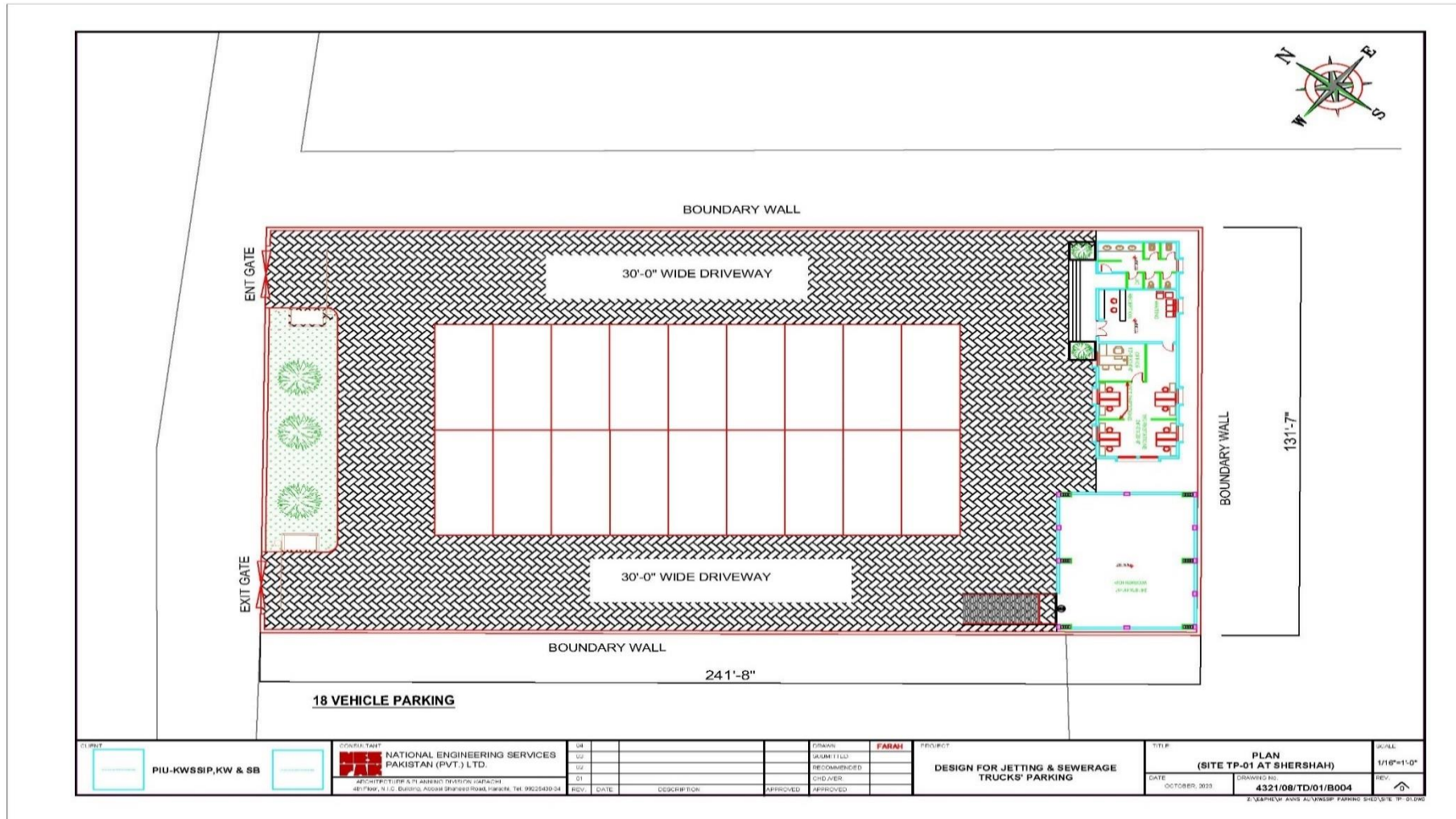
The proposed plans of all the proposed parking are shown below in **Figure: 2.1** to **Figure: 2.5**.



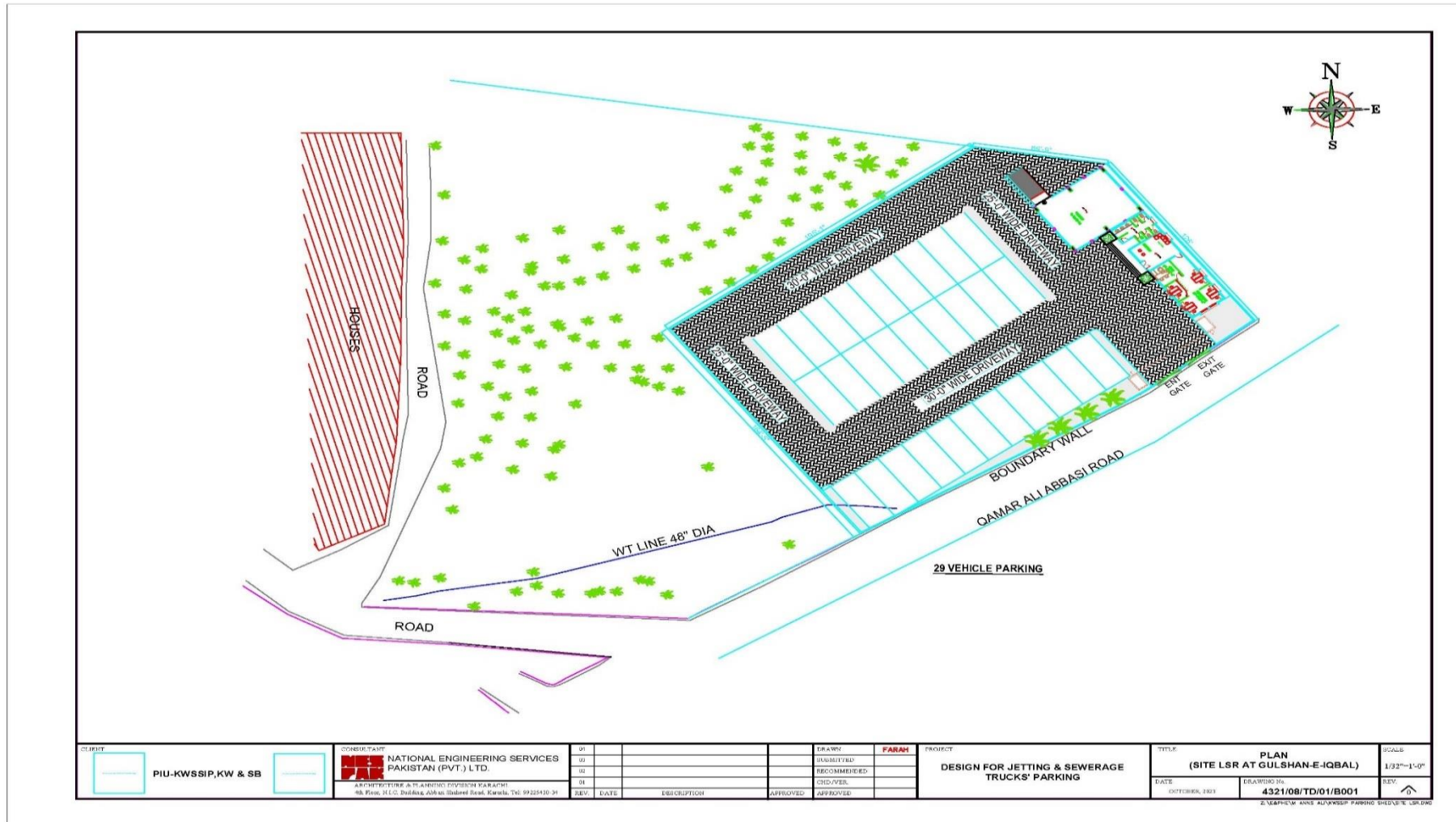
**Figure 2.1: Plan of Parking Shed at SCE&S Division at KW&SC Central Workshop at 9th Mile Shahrah-e-Faisal.**



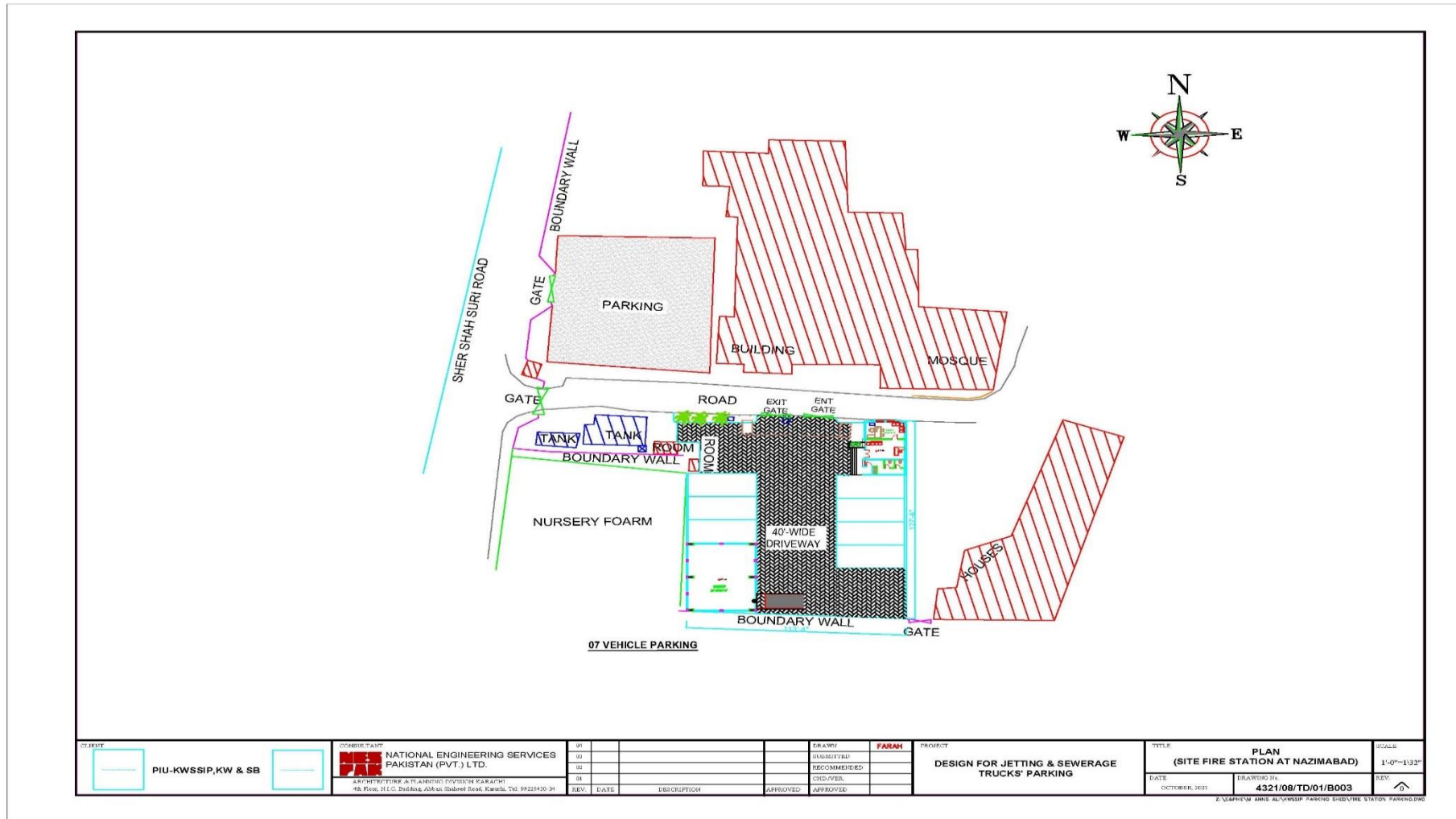
**Figure 2.2: Plan of Parking Shed at PS-II Site at Korangi.**



**Figure 2.3: Plan of Parking Shed at TP-I Site at Shershah**



**Figure 2.4: Plan of Parking Shed at LSR Site near DC East Office Gulshan - e Iqbal**



**Figure 2.5: Plan of Parking Shed at Nazimabad Fire Station Site**



### 3. REGULATORY REVIEW

#### 3.1 Overview

Three sets of laws, policies and strategies i.e., national, provincial, and World Bank Operational Policies (OPs) are applicable for the project. **Table 3.1** presents a list of these laws, policies and strategies that are applicable to the project.

**Table 3.1: Applicable Laws, Policies, Standards and Strategies**

<b>Key National Laws, Regulations and Policies</b>	1.	Pakistan Climate Change Act, 2016
	2.	Pakistan Penal Code 1860
	3.	Protection of Trees and Brushwood Act, 1949
	4.	Antiquities Act 1975
	5.	Pakistan Labor laws
	6.	Fatal Accidents Act 1855
<b>Key Provincial Laws, Regulations and Policies</b>	1.	Sindh Environmental Protection Agency (Environmental Assessment) Regulations, 2021
	2.	The Sindh Occupational Safety and Health Act, 2017
	3.	The Sindh Prohibition of Employment of Children Act, 2017
	4.	Sindh Environmental Quality Standards, 2016
	5.	Sindh Minimum Wages Act, 2015 (Sindh Act No. VIII of 2016)
	6.	Sindh Workers Compensation Act, 2015
	7.	Sindh Environmental Protection Act (SEPA), 2014
	8.	The Protection Against Harassment of Women at the Workplace Act, 2010
<b>Applicable World Bank Policies/ Framework</b>	1.	World Bank Operational Policies <i>Environmental Assessment (OP 4.01)</i> <i>Gender Policy (OP 4.20)</i> <i>Access to Information (BP 17.50)</i>
	2.	Managing the Risks of Adverse Impacts on Communities from Temporary Project Induced Labor Influx
	3.	Environmental, Health & Safety Guidelines

#### 4. PUBLIC CONSULTATIONS

The proposed parking sheds will be constructed within the premises of existing KW&SC facilities except for one i.e., the Nazimabad Fire Station Site. The project does not involve any private land acquisition as well as it is not envisaged to have any permanent or temporary loss to the businesses. However, the project activities may affect the KW&SC employees working in those facilities. Therefore, a consultative approach was adopted to take those employees on board and inform them about the proposed interventions. The photographs of consultation meetings are shown in **Plate 4.1** below. However, Assistant Director DMC Central and residents of Nazamabad-V Rotation Residential Staff Colony did not show their consent for pictorial evidence.



**Plate 4. 1: Glimpses of Consultation Meetings**

#### **4.1 Finding of the Consultation:**

All the project sites were visited and consultations were done with the available KW&SC staff. Following are the major findings of consultation meetings:

##### **i. Project Sites**

##### **SCE&S Division at KW&SC Central Workshop at 9th Mile Shahrah-e-Faisal**

- The workers ensured full cooperation despite temporary disturbances in the routine activities;
- The officials demanded the swift execution of the project to ensure protection of the fleet of vehicles newly procured by KW&SC.

##### **PS-II Site at Korangi**

- There are not too many staff employed at the PS-II, except an operator. Therefore, the social issues are not envisaged;
- Furthermore, the neighboring buildings are at an adequate distance and no hindrance is foreseen during the construction as well operation.

##### **TP-I Site at Shershah**

- The site is not in any use and there is an abundant space available for the proposed parking shed. The proposed site is owned by KW&SC and no land acquisition is involved.

##### **LSR, Gulshan - e Iqbal**

- The proposed site is owned by KW&SC but presently it is not in any use. None of the KW&SC staff is currently deployed there. There are residential apartments in the surroundings but the project activities are not envisaged to have any direct impact on them, as the scope of project is very limited and all the activities will be executed within the project area boundary.

##### **Nazimabad Fire Station Site**

- The land is owned by District Municipal Committee (DMC) Central and the process for acquisition of land from DMC on government-to-government basis has been initiated.
- The site is currently in use of the Fire Department to park their vehicles.
- There is residential area (Nazamabad-V Rotation Residential Staff Colony) in the vicinity of the project site.
- Accessibility issues are expected during the execution of the project, however, there are separate access gates for the fire vehicles and community.
- The proposed parking shed will also have a separate entrance gate to curtail the issue of accessibility.

**ii. Residents of Nazimabad-V Rotation Residential Staff Colony**

The residents were contacted and they did not express any concerns relating to the construction of parking sheds, but demanded to have a separate entrance gate for the vehicles to avoid accessibility issues. However, they did not show consent in capturing the photographs for official records.

**iii. DMC Central**

Consultation was carried out with Assistant Director, District Municipal Committee (DMC) Central. During the meeting, the consultant's team described the project location, proposed activities, land acquisition from DMC and asked their suggestion regarding the project. Assistant Director mentioned that discussions are underway among higher officials, and the process for acquisition of land from DMC to PIU on government-to-government basis has been initiated.

**iv. Sindh Environmental Protection Authority (SEPA)**

A consultation was held with SEPA to seek their advice on the required documentation for environmental clearance. It was advised that according to "Sindh Environmental Protection Agency (Environmental Assessment) Regulations, 2021", a project needs to file an Environmental Checklist if the covered area is between 60,000 to 100,000 square feet. However, in the present case all of the proposed parking sheds have covered area less than 60,000 square feet and hence do not require environmental clearance from SEPA.

## 5. SCREENING OF SUBPROJECT

### 5.1 ENVIRONMENTAL AND SOCIAL SCREENING

Environmental and Social Screening was carried out for the subproject to categorize it based on perceived environmental and social impacts due to execution of project activities.

Sub-projects under KWSSIP have a prior requirement of screening which is based on three categories; viz., nature of the project, size of the project and location of the project that is sensitive area criteria. Based on this assessment, sub-projects with potentially significant environmental/ social issues are identified at an early stage for detailed Environmental/ Social Impacts Assessment.

#### 5.1.1 Methodology of Environment and Social Screening Study

Following methodology was adopted for Environmental and Social Screening:

- Review of literature, policies and project related documents;
- Site visits;
- Consultations; and
- Screening checklist

#### 5.1.2 Environment and Social Issues

##### A. Environmental Issues

All the five proposed sites for parking shed are located within various facilities of the KW&SC (excluding Nazimabad site). The scope of the activities is minor as it pertains to construction of a parking shed at each site. The site-specific environmental issues are given hereunder:

##### ***SCE&S Division at KW&SC Central Workshop at 9th Mile, Shahrah-e-Faisal:***

The construction of proposed parking sheds are petty works having a very limited footprint. However, certain environmental issues are associated with the proposed interventions including waste management, dust and noise generation etc. However, there are no sensitive areas like specially protected areas or threatened or endangered endemic species in the project area.

The current land usage is not expected to be changed as the facility will retain its status of maintenance workshop and parking area. Furthermore, the perceived impacts are limited, site-specific and reversible in nature and are expected during construction stage of the project only.

### ***PS-II Site at Korangi:***

The proposed works will not require significant land clearance activities to construct the parking facility. As there is ample open space available for the proposed interventions. However, 05 trees might need to be cut which is an environmental concern. The existing sewage pumping station will be retained and there will be no major shift in the land usage. Furthermore, the wet well and the dry well are located in the corner of the facility and the pipes are underground, therefore, there will be no disruption to the existing amenities. Nevertheless, the existing amenities have been taken care of while designing the proposed facility. Compensatory trees will be planted around the vicinity of the project area. Nonetheless, environmental issues are anticipated which will be limited, site-specific and reversible in nature.

### ***STP-I Site at Shershah:***

The STP-I is a major facility of KW&SC where sufficient open spaces are available to establish the parking sheds. The site is flat land with a few trees in the surroundings. However, no major environmental issues are foreseen except the clearance of 06 trees. There will be temporary issues during the execution including waste generation, dust and noise etc., but all the impacts are low adverse and reversible in nature. There is adequate space available for material stockpiling, construction camp, movement of machinery and labors within the premises.

### ***LSR Site near DC East Office Gulshan - e Iqbal***

Major environmental issues associated with the proposed site is the removal of trees, as 22 trees are expected to be removed out of which 17 are Conocarpus, which are exotic and not suitable for the climate of Karachi. They are also being cut throughout the city and native species are being planted by the city administration. Rest of the five trees include Tamarind, Neem, Toot, and Beri. Though, they have an environmental worth but none of them is threatened specie. Furthermore, tree plantation is proposed to counter the impact of tree removal and for the environmental enhancement. Ten (10) trees will be planted in compensation of every single affected tree.

### ***Nazimabad Fire Station Site***

The proposed parking shed in Nazimabad will be constructed along the existing fire station. Environmentally, the site is suitable and no significant hazards are associated with the project. There is adequate open space available and no site clearance activities are involved. However, minor construction related impacts including dust, noise and waste generation etc. are associated with the project.

#### **i. Presence of Eco-sensitive Features/ Natural Habitats**

None of the declared eco-sensitive features or natural habitats were identified in the project area.

## ii. Clearance of Vegetation

Some trees will be cleared/removed prior to execution of the works. The details are summarized below in **Table 5.1**.

**Table 5.1: No. of Trees to be cleared**

Sr. No.	Location	Numbers	Types
1	Workshop at CWD 9th Mile	00	N/A
2	PS-II Site at Korangi.	05	Neem (1), Peepal (1), Cornocarpus (1), Gul Mohor (1), Bushes (1)
3	TP-I Site at Shershah	06	Neem (1), Peepal (1), Euclyptus (4)
4	LSR Site near DC East Office Gulshan - e Iqbal.	22	Tamarind (2), Neem (1), Toot (1), Beri (1), Conocarpus (17)
5	Nazimabad Fire Station Site	00	N/A

## iii. Noise & Dust

Noise and dust will be generated due to project activities and will require an adequate sprinkling of water.

## iv. Health & Safety of Workers

Health risks and worker's safety problems may result at the workplace if the working conditions provide an unsafe and/or unfavorable working environment. Health and safety issues are also associated with the operation of construction machinery and equipment, which may cause minor and severe injuries to workers. The inappropriate stockpiling of materials and parking of machinery may cause serious damage.

### B. Social Issues

#### i. Availability of Land

The proposed sites are under the ownership KW&SC and no land acquisition is involved except the Nazimabad fire station site, where the land is owned by District Municipal Committee (DMC) that will be transferred to KW&SC on government to government basis.

#### ii. Anti-Encroachment Drive (AED)

The project appraisal document (PAD) for KWSSIP outlines that any of the sub-project involving AED after October 2018 shall not be financed. However, as stated earlier, the proposed sites are under the KW&SC and do not require AED screening.

#### iii. Disruption to Traffic and Visitors

The project activities will be executed within the boundaries of KW&SC owned premises and hence will not create any disturbance to traffic and visitors.

#### iv. Access issues

The access will not be affected and people will not face any problems in traveling to their workplaces, business points or also to the religious and cultural sites.

#### 5.1.3 Findings of Environmental Screening

A summary of findings of Environmental Screening are given in **Table 5.2**: Findings of Environmental Screening for detailed checklists please refer to **Annex-I**.

**Table 5.2: Findings of Environmental Screening**

Screening Parameters	Workshop at CWD 9th Mile	PS-II Site at Korangi	TP-I Site at Shershah	LSR Site near DC East Office Gulshan - e Iqbal.	Nazimabad Fire Station Site
Presence of Eco Sensitive Receptors	x	x	x	x	x
Clearance of Vegetation	x	✓	✓	✓	x
Water Pollution	x	x	x	x	x
Flooding	x	x	x	x	x
Soil Contamination	✓	✓	✓	✓	✓
Noise & Dust	✓	✓	✓	✓	✓
Disruption to Traffic and Visitors	x	x	x	x	x
Damage to Existing Infrastructure	x	x	x	x	x
Health & Safety Issues	✓	✓	✓	✓	✓

#### Legend:

- ✓ = Impact triggers due to project activities
- x = Impact does not trigger due to project activities

#### A. Categorization Based on Environmental Screening

The sub-project activities are categorized in **Table 5.3** based on the findings of Environmental Screening.

**Table 5.3: Categorization Based on Environmental Screening**

Categorization	Studies Required
C	None (Current Environmental & Social Screening Report will serve the purpose)

#### 5.1.4 Findings of Social Screening

Summary of findings of Social Screening are given in **Table 5.4**. For Findings of Social Screening for detailed checklists please refer to **Annex-II**.



**Table 5.4: Initial Findings of Social Screening**

Screening Parameters	Workshop at CWD 9th Mile	PS-II Site at Korangi	TP-I Site at Shershah	LSR Site near DC East Office Gulshan - e Iqbal.	Nazimabad Fire Station Site
Land Acquisition	x	x	x	x	x
Loss of Shelter	x	x	x	x	x
Loss of Agriculture	x	x	x	x	x
Loss of crops, trees and fixed assets	x	✓	✓	✓	x
Loss of Business/Livelihood (Temporary)	x	x	x	x	x
Loss of Business/Livelihood (Permanent)	x	x	x	x	x
Loss of Sources of Income	x	x	x	x	x
Dislocation of People	x	x	x	x	x
Restriction of Access	x	x	x	x	x
Indigenous Peoples	x	x	x	x	x
Anti-Encroachment Drive	x	x	x	x	x

**Legend:**

- ✓ = Impact triggers due to project activities
- x = Impact does not trigger due to project activities

**A. Categorization Based on Social Screening**

The sub-project activities are categorized in **Table 5.5** based on the findings of social screening:

**Table 5.5: Categorization Based on Social Screening**

Categorization	Studies Required
C	None (Current Environmental & Social Screening Report will serve the purpose)

**5.1.5 Requirement of Further Studies**

The scope of the project is limited and minor environmental impacts are associated with the proposed activities. Although, removal of vegetation is involved, but majority of trees are Conocarpus. These trees are non-native trees and are being cut throughout the city by the District Administration due to their negative impacts on local species, environment as well as human health. However, a tree plantation plan is part of the report and new trees will be planted with the proposed Parking Shed. Overall, the impacts of the activities are insignificant and hence detailed environmental studies are not required.

According to World Bank Operational Policy, OP 4.12 (Involuntary Resettlement), a subproject will be considered a Category C project if the number of Project Affected Persons (PAPs) is zero and hence does not require RAP/ARAP.

## 6. ENVIRONMENTAL AND SOCIAL MITIGATION PLAN

To ensure environmental and social compliance with regulations and guidelines, a brief Environmental and Social Mitigation Plan has been prepared.

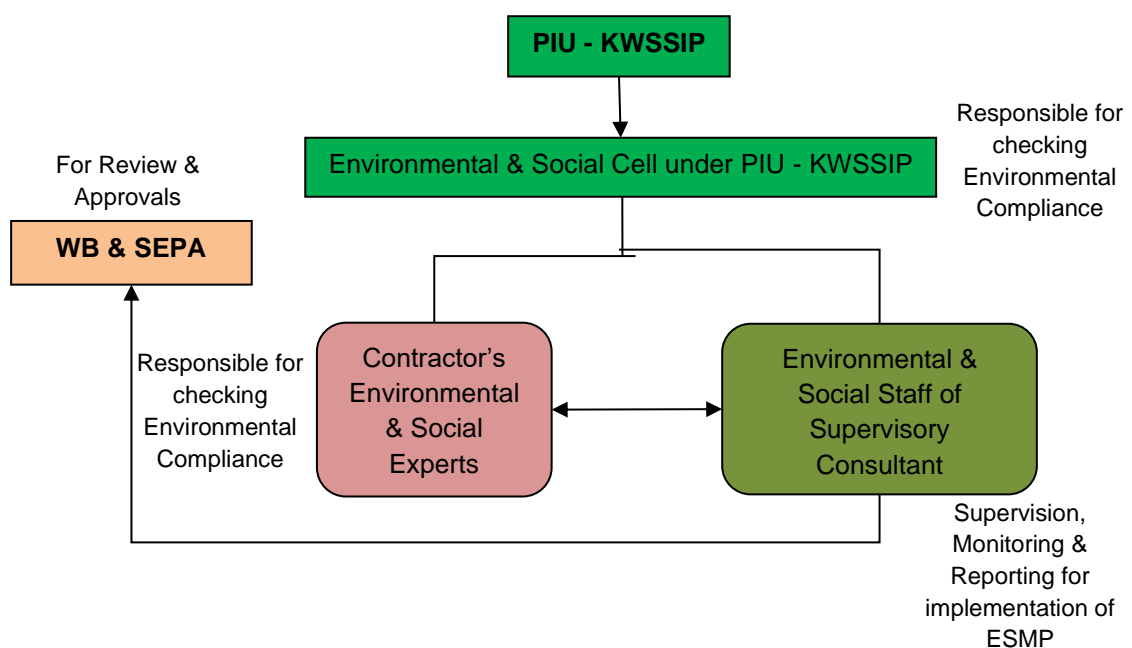
The objective of the Environmental and Social Mitigation Plan (ESSR) is to ensure implementation of the proposed mitigation measures during design, construction and operational phases of the proposed Project. The ESSR defines roles and responsibilities, reporting mechanism, training needs and schedules and budget to implement the ESSR.

The current screening report will be the part of bidding documents and its implementation will be the legal binding on the construction contractor (CC).

### 6.0 Implementation of ESMP

The institutional arrangement for the implementation of ESMP for the subproject is presented in **Figure 6.1**. The PIU-KWSSIP will be responsible for the compliance of environmental and social safeguard requirements of the KWSSIP.

The project activities will be monitored and managed by the PIU-KWSSIP. The Environmental and Social Cell (ESC) staffed by qualified environmental, social and gender specialists, has already been established under PIU-KWSSIP. The Environmental & Social Cell (ESC) will be the custodian of the ESMP. ESC will submit progress reports for the implementation of the ESMP to WB and Sindh Environmental Protection Agency (SEPA) as per environmental approval/ NOC conditions for the KWSSIP.



**Figure 6.1: Organizational Setup for Implementation of ESMP**

## 6.0.1 Roles and Responsibilities of the Functionaries involved in ESMP Implementation

### A. SEPA

As per Sindh Environmental Protection Act, 2014, SEPA is responsible for the approval of the Environmental Assessment reports.

### B. PIU-KWSSIP and ESC

Project Director of PIU-KWSSIP is the in-charge for the financial and technical matters related to this project. His responsibilities for monitoring the ESMP will consist of:

- To carrying out random site visits to the construction sites to review the environmental performance of the Contractor;
- Make sure that the Contractor is implementing the additional measures suggested by the Supervision Consultant (SC) in environmental monitoring reports;
- To assist Contractor for obtaining necessary approvals from the concerned departments.

### A. Environmental and Social Cell (ESC-PIU)

An ESC has already been established in PIU, which consists of three specialists – one environment specialist, one social safeguard specialist, and a gender specialist. The PIU will hire the services of an independent environmental and social consultancy firm for Third Party Validation (TPV). The PIU's responsibilities for monitoring the ESSR will consist of:

#### Environmental Specialist

- To carry out random visits to the construction sites to review the environmental performance of the Contractor;
- Review monitoring reports for the progress of environment and social management of the Project;
- Make sure that the Contractor is implementing the additional measures suggested by the Supervision Consultant (SC) in environmental and social monitoring reports;
- Make sure that all the contractual obligations related to the environmental and social compliance are met;
- Monitor the progress regarding implementation of environmental safeguards as provided in the ESSR;
- Oversee the compliance of all the monitoring programs as given in ESSR;
- Check randomly whether monitoring of the environmental aspects of the Project during construction and operational phases is being properly carried out;
- Report the status of ESSR compliance to Project Director, PIU-KWSSIP.

#### Social Development Specialist

- Monitor the progress regarding implementation of social safeguards as provided in the ESSR;

- Oversee the compliance of all the social monitoring programs as given in ESSR;
- Review the progress monitoring reports for the social management of the Project;
- Make sure that the Contractor is implementing the additional measures suggested by the Supervision Consultant (SC) in environmental and social monitoring reports;
- Ensure adequate site-level arrangements for GRM and dedicated and training work force for identifying, recording and monitoring complaints
- Monitor the complaints registration process under GRM and suggest corrective actions as necessary;
- Conduct periodic consultations with the primary stakeholders.

### **Gender Specialist**

- Resolve any GBV and SEA/SH related issues reported;
- Monitor the compliance of gender related measures;
- Oversee the gender issues reported through GRM.

### **C. Supervision Consultant (SC)**

Roles and responsibilities of SC will be:

- To oversee the performance of the Contractor to make sure that the Contractor is complying with ESSR;
- Ensuring that the day-to-day construction activities are carried out in an environmentally and socially sound and sustainable manner;
- Strong coordination with the Contractor and PIU-KWSSIP;
- Ensure the implementation of the mitigation measures suggested in ESSR;
- To supervise and monitor environmental and social activities being performed at site;
- Periodic reporting as mentioned in ESSR; and
- Suggest any additional mitigation measures (if required).

### **D. Construction Contractor (CC)**

The contractor will be primarily responsible for ensuring implementation of the mitigation measures proposed in the ESSR, which will be part of the contract documents and its implementation will be a contractual binding for the contractors. The provision of the environmental and social mitigation cost will be made in the total cost of project. However, if the contractor fails to comply with the implementation of ESSR and submission of the monthly compliance reports, deductions will be made from the payments to the Contractor claimed under the heads of environmental and social components.

Contractors will be bound to carry out the following activities:

- Implementation of the mitigation measures as detailed in ESSR at construction site;
- Contractor will be bound through contract to take actions against all the special and general provisions of the contract document;

- Contractor will make sure the compliance of ESSR requirements related with construction;
- Implementation of OCHS control measures including provision of proper Personal Protective Equipment (PPE) to the workers and train them for their proper use;
- Compliance with international best SOPs for COVID 19;
- To conduct the environmental and health and safety training to the workers/labour; and
- To assess the site-specific issues and implement mitigation measures accordingly
- Provide harassment free and safe secure environment for the labor and community specially community women and children.

**Table 6.1: Environmental and Social Mitigation and Monitoring Plan**

Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
<b>Design/ Pre-Construction Phase</b>						
1.	Layout Planning & Design	To ensure safe and efficient functioning of the facility	<ul style="list-style-type: none"> <li>All layout and engineering design of the project are in strict accordance with the applicable standards.</li> </ul>	Efficient and contemporary design prepared	PIU-KWSSIP	DC, PIU-KWSSIP
2.	Seismic Hazard	To keep the structures safe and intact in case of earthquakes.	<ul style="list-style-type: none"> <li>Seismic Building Code of Pakistan 2007 (SBC-07) has been adopted.</li> </ul>	Earthquake proof design prepared	PIU-KWSSIP	DC, PIU-KWSSIP
3.	Fire Fighting System	To combat fire hazard.	<ul style="list-style-type: none"> <li>An adequate firefighting system has been provided in the project design including DCP fire extinguishers and fire alarms etc.</li> </ul>	Firefighting arrangements in the design	PIU-KWSSIP	DC, PIU-KWSSIP
4.	Removal of Vegetation /Trees	To minimize the impact on flora due to project activities	<ul style="list-style-type: none"> <li>Compensatory plantation will be done against each tree that will be cut/ disturbed, i.e., 10 trees for each affected tree.</li> <li>A tree plantation plan has been proposed and given in the proceeding section for net environmental improvement in the project area.</li> </ul>	Number of trees planted; current health / status of planted trees; regular maintenance regime	PIU-KWSSIP	DC, PIU-KWSSIP
<b>Construction Phase</b>						
1.	Air Quality	To avoid air pollution	<ul style="list-style-type: none"> <li>All vehicles, machinery, equipment and generators used during construction activities will be kept in good working condition, properly</li> </ul>	Visual inspections	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP

Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
			<p>tuned and maintained to minimize the exhaust emissions;</p> <ul style="list-style-type: none"> <li>• Open burning of solid waste from the contractor's camps will be strictly banned;</li> <li>• SEQS applicable to gaseous emissions generated by construction vehicles, equipment and machinery will be enforced during construction works;</li> <li>• The vehicles carrying construction materials and the construction material storage areas will be covered with tarpaulin;</li> <li>• Regular water sprinkling of the site will be carried out to suppress excessive dust emission(s);</li> <li>• Construction workers will be provided with masks for protection against the inhalation of dust.</li> </ul>			
2.	Noise	To avoid noise pollution	<ul style="list-style-type: none"> <li>• Construction workers will be provided suitable hearing protection like ear cap, or earmuffs and training them in their use;</li> <li>• Selection of up-to-date and well-maintained equipment with reduced noise levels will be ensured by suitable in-built damping techniques or appropriate</li> </ul>	Elevated noise levels observed	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP



Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
			muffling devices; <ul style="list-style-type: none"> <li>Near the residential settlements, the fabric barriers will be provided to limit the dust and cut the line of sight for the noise generating sources.</li> <li>Confining of excessively noisy areas and limiting the work to normal working hours in the day.</li> </ul>			
3.	Disposal of Demolition / Construction Debris	To avoid/ minimize nuisance and environmental pollution in the project area due to solid waste	<ul style="list-style-type: none"> <li>The waste will be transferred to the secondary users (see <b>Annex-VI</b>, Waste Management Plan).</li> <li>Effective and instant removal of unusable construction wastes such as broken bricks/concrete blocks and leftover steel bars.</li> </ul>	Visual inspection	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP
4.	Biodiversity Conservation	To minimize the impact on flora due to project activities	<ul style="list-style-type: none"> <li>Construction vehicles, machinery and equipment will remain confined within their designated areas of movement;</li> <li>Mistreatment of animals will be prohibited</li> </ul>	Visual inspection	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP
	A. Flora			Visual inspection	SC, PIU-KWSSIP	
5.	Health and Safety	To minimize health risks to workers due to project activities	<ul style="list-style-type: none"> <li>Obligatory insurance against accidents for laborer/ workers and implementation of the provisions of Fatal Accidents Act;</li> <li>The site will be declared as 'no-go area' for general public;</li> <li>Providing basic medical training to</li> </ul>	Visual inspection, Incident reported	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP
	A. Occupational Health and Safety					

Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
			<p>specified work staff and basic medical service and supplies to workers;</p> <ul style="list-style-type: none"> <li>Implementation of Health and Safety Management Plan (<b>Annex – III</b>).</li> </ul>			
	B. Community Health and Safety	To minimize health risks to public due to project activities.	<ul style="list-style-type: none"> <li>Ensure that the site is restricted for the entry of irrelevant people particularly children;</li> <li>Efforts shall be made to create awareness about road safety among the drivers operating construction vehicles;</li> <li>Provision of proper safety signage, particularly at sensitive/accident-prone spots;</li> <li>The wastes will be temporarily stored at appropriate locations and then will be transferred to the ultimate disposal point;</li> <li>Safety signage will be provided along the approach road as well as the project site; and</li> <li>COVID-19 SOPs must be followed at work site and construction camps;</li> </ul>	Visual inspection, Incident reported	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP
	C. Emergency Response (Natural and	To eliminate/minimize natural and man-made hazards	<ul style="list-style-type: none"> <li>An Emergency Response Plan (<b>Annex - IV</b>) will be implemented;</li> <li>Emergency numbers will be clearly</li> </ul>	Visual inspection, Incident reported	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP

Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
	Man-Made Disasters)		<p>posted; and</p> <ul style="list-style-type: none"> <li>Minor incidents and near misses will be reported, and preventive measures will be formulated accordingly.</li> </ul>			
7.	Sanitation and Solid Waste Disposal	To avoid/ minimize nuisance and environmental pollution in the project area due to liquid & solid waste	<ul style="list-style-type: none"> <li>The ordinary solid waste such as bricks, metal, etc. will be handled and collected properly at site and will be transferred to the community container located near the project site.</li> <li>The liquid effluent will be transferred to a nearby manhole using a flexible pipe.</li> </ul>	Visual inspection	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP
9.	Soil Erosion	To avoid degradation of soil.	<ul style="list-style-type: none"> <li>Use of heavy machinery will be restricted as far as possible to avoid the destruction of soil structure;</li> <li>Confining excavations to the specified spots as per the approved engineering drawings and unnecessary excavations will be avoided;</li> <li>Stored excavated material will be covered and preferably reused, e.g., in construction as backfill etc.</li> </ul>			CC, SC, PIU-KWSSIP
10.	Soil Contamination	To avoid Contamination of soil.	<ul style="list-style-type: none"> <li>Store chemicals/ hazardous products and waste on impermeable surfaces in secure,</li> </ul>	Visual inspection	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP

Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
			<p>covered areas with clear labeling of containers and with a tray or bund to contain leaks;</p> <ul style="list-style-type: none"> <li>• Regularly remove all construction wastes from the site to approved waste disposal sites;</li> <li>• Washing yards will be paved to avoid seepage of runoff from the yard;</li> <li>• Awareness in emergency spill response procedures will be conducted;</li> <li>• Oil leakages, chemicals and other liquids spills will be avoided/minimized by providing appropriate storage places including closed containers depending on the type of material for storage.</li> </ul>			
11.	Construction Camps / Camp Sites	To avoid construction camp-related issues	<ul style="list-style-type: none"> <li>• Working hours of noisy activities will be limited to normal daytime working hours;</li> <li>• Construction camps will be established away from populated areas.</li> <li>• Regular training of workers will be carried out.</li> </ul>	Visual inspection	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP
12.	Water Quality	To avoid any water pollution	<ul style="list-style-type: none"> <li>• Stockpiles of construction materials will be kept covered when not being used;</li> </ul>	Visual inspection	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP

Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
			<ul style="list-style-type: none"> <li>No activity may be undertaken in monsoon and careful attention will be paid to weather forecast before excavation operations;</li> <li>All kinds of waste will be stored in covered containers and disposed of safely as soon as possible; and</li> <li>The contractor will ensure that construction debris do not find their way into the drainage which may get clogged.</li> </ul>			
13.	Municipal and Construction Waste/Wastewater	To prevent inconvenience arising from the disposal of liquid and solid and liquid wastes.	<ul style="list-style-type: none"> <li>Solid Waste generated during construction and campsites will be transferred to secondary users;</li> <li>Burning of waste will be prohibited;</li> <li>Proper labeling of containers, including the identification and quantity of the contents, hazard contact information etc.;</li> <li>Containers with covers will be provided on-site to store waste; and</li> <li>Training of work force involved in the storage, handling and transportation of hazardous material regarding emergency procedures.</li> </ul>	Visual inspection	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP
14.	Resource Conservation		<ul style="list-style-type: none"> <li>Wastage of water will be reduced by training the workers involved in</li> </ul>	Visual inspection	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP

Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
			<p>water use;</p> <ul style="list-style-type: none"> <li>• Source of water will be carefully selected. Water use will not disturb the existing community water supplies;</li> <li>• Reuse of construction waste materials will be considered;</li> <li>• Unnecessary equipment washings will be avoided;</li> <li>• The efficient and well-maintained equipment and machinery will be used;</li> <li>• The equipment and machinery will be turned off when not in use;</li> <li>• Regular maintenance of machinery to avoid fuel leakages.</li> </ul>			
15.	Flammable and Hazardous Materials	To avoid impacts of flammable and hazardous materials	<ul style="list-style-type: none"> <li>• For safety of construction labour, the contractor's staff will be trained about the procedures of safe use, handling and storage of materials;</li> </ul>	Visual inspection, Material Safety Data Sheets	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP
16.	Gender Based Violence	To avoid GBV related issues	<ul style="list-style-type: none"> <li>• The Contractor will make sure that no discrimination is made on the basis of gender while hiring of workers;</li> <li>• Contractor will take proper measures to address and resolve issues relating to harassment, intimidation, and exploitation, especially in relation to women;</li> </ul>	Incident reported	SC, PIU-KWSSIP	CC, SC, PIU-KWSSIP

Sr. No.	Parameters	Target	Mitigation	Monitoring Indicator	Monitoring Responsibility	Responsibility
<b>Operation Phase</b>						
1.	Noise Pollution	To avoid Noise pollution	<ul style="list-style-type: none"> <li>The ambient noise standards will be followed; and</li> <li>There will also be prohibition on the honking of horns in the parking area.</li> </ul>	Visual inspection	KW&SC	KW&SC
2.	Solid Waste	To avoid/ minimize nuisance and environmental pollution in the project area due to solid waste	<ul style="list-style-type: none"> <li>The waste will be segregated in separate containers, stored at designated sites and transported frequently to the designated dumping site either by the help of KMC or by hiring a dedicated waste collection contractor;</li> </ul>	Visual inspection	KW&SC	KW&SC
3.	Occupational Health & Safety	To ensure safety of workers	<ul style="list-style-type: none"> <li>Emergency response plan will be developed to ensure safety of workers/ drivers during emergency situations.</li> </ul>	Emergency response plan developed	KW&SC	KW&SC

**Legend:**

DC	Design Consultant	SC	Supervision Consultant
CC	Construction Contractor	PIU	Project Implementation Unit
KWSB	Karachi Water and Sewerage Board		

## 6.1 Monitoring

The overall objectives of the monitoring activities are to:

- Ensure regulatory requirements are met;
- Check that impacts do not exceed project standards and other environmental standards;
- Verify that mitigation measures are effective and implemented in the manner described in **Table 6.1**;
- Provide early warning of potential environmental impacts; and
- Inform future operations and contribute to continuous improvement in the management of environmental and social issues related to the project.

### 6.1.1 Monitoring Approach

Monitoring will be carried out by the Supervision Consultants (SC) and Project Implementation Unit (PIU), and its contractors pursuant to their contractual obligations to undertake inspections, monitoring and reporting. The following four types of inspections and monitoring will be employed.

- **Inspections** planned and conducted on a regular basis to ensure that mitigation measures and commitments are properly maintained and implemented, and that specific management procedures are being following (e.g., practices on waste storage and disposal).
- **Receptor monitoring** undertaken to verify predictions made in the screening report and to confirm that the activities at the site are not resulting in an unacceptable deterioration in the quality of habitats or infrastructure (e.g., monitoring disturbance to affected residents through a grievance mechanism).
- **Compliance monitoring** involving periodic sampling or continuous recording of specific environmental quality indicators or discharge levels to ensure compliance of discharges and emissions with project standards (e.g., produced water discharges and air emissions).

The frequency of inspections, monitoring and audits and subsequent reporting will be based on the project risks. The outputs will be used in the following ways.

- To provide early warning for site management and to adjust mitigation measures on a day-to-day basis to cater evolving conditions.
- To enable contractors to demonstrate that mitigation measures and procedures laid down in mitigation plans are being followed and operations are being conducted within compliance limits.



- To provide formal assurance to PIU that the project is compliant with regulations and agreed limits and that relevant mitigation / enhancement measures are being adhered to.

The monitoring checklist is attached as **Annex – V**.

## 6.2 Reporting

The contractor will prepare and submit monitoring reports for compliance of implementation to supervision consultant environmental team. The distribution of periodic reports is given in **Table 6.2**.

**Table 6.2: Distribution of Periodic Reports**

Report	Prepared by	Reviewed by	Distribution
Start of the Project	Contractor	Reviewed by PIU-Environmental, Social & Gender Unit; KWSSIP	The Engineer and Project Implementation Unit
End of the Project	Contractor	Reviewed by PIU-KWSSIP-Environmental Social & Gender Unit; KWSSIP	The Engineer, Project Implementation Unit and The World Bank

## 6.3 Grievance Redress Mechanism (GRM)

The purpose of the Grievance Redress Mechanism (GRM) is to receive, review and resolve grievances from project affectees or community members and ensure smooth and fair implementation of subproject activities. The Grievance Redress Committee (GRC) and Gender Based Violence (GBV) Committee have been established in PIU-KWSSIP through a notification.

### 6.3.1 GRM Principles

A GRM is established to address any complaints or grievances arising during the implementation period of the projects. People of the project area may perceive risks to themselves or their property or their legal rights or have concerns about the possible adverse environmental and social impact that a project may have. Any concerns or grievances will be addressed quickly and transparently, and without retribution to the project affectees or community members or complainant.

The primary principle of GRM is that all complaints or grievances are resolved as quickly as possible in a fair and transparent manner. All minor complaints regarding E&S issues, land or property issues or business/livelihood losses will be addressed immediately at community level Grievance Redress Committee (GRC) through involvement of project affectees and community members. In case the grievances cannot be resolved at the community GRC, the project affectees or community members may make a complaint to the project GRC and afterward at PIU-GRC, the details of which are provided under sub-sections. The focus of the

GRM is to resolve issues in a customarily appropriate fashion and record details of the complaint, the complainant and the resolution.

### **6.3.2 Objectives**

The objectives of the GRM are to:

- develop an organizational framework to address and resolve the grievances of individual(s) or community(s), fairly and equitably;
- provide enhanced level of satisfaction to the aggrieved;
- provide easy accessibility to the aggrieved/affected individual or community for immediate grievance redress;
- ensure that the targeted communities and individuals are treated fairly at all times;
- identify systemic flaws in the operational functions of the project and suggest corrective measures; and
- ensure that the operation of the project is in line with its conception and transparently to achieve the goals for sustainability of the project.

### **6.3.3 Type of Complaints**

The major complaints that may arise during the execution of the proposed project at site include but not limited to:

- Environment and social issues (dust, noise, air pollution, social and cultural issues);
- Damage and blockage of public utilities;
- Traffic inconvenience;
- GBV and harassment.
- Resettlement issues including loss of livelihood;
- Issues related to compensation of resettlement impacts.

### **6.3.4 Disclosure of GRM**

The GRM will be disclosed at PIU-KWSSIP, KWSB head offices, and concerned Executive Engineer (XEN) and Superintendent Engineer (SE) offices, KWSSIP website as well as on project sites.

### **6.3.5 Structure of Grievance Redress Mechanism**

The project will establish a three-tier GRM comprising Community GRC, project GRC; and PIU-GRC. These tiers are described below.

#### **A. Community GRC (Tier-1)**

The community-GRC will provide a platform for project affectees or community members to raise and discuss their concerns, resolve the E&S issues at the community level and coordinate with project management to communicate these E&S issues and concerns.

Community-GRC will be established to maintain a close rapport and coordination with affected persons and community members throughout the project implementation. The Social Development Specialist (SDS) of PIU will facilitate for the establishment of community-GRC that is representative of the ethno-cultural and gender diversity within the community. The community-GRC will comprise the following six members with one as the committee convener:

- Three female members (from the project affectees or community members); and
- Three male members (from project affectees or community members).

The project E&S and engineering staff will coordinate with community-GRC to review and resolve the E&S issue or concern related to resettlement planning or implementation as well as environmental and social concerns preferably within five (05) working days from receipt of the grievance. Any complaints that cannot be resolved at community-GRC will be forwarded to the next tier.

## **B. Project GRC (Tier-2)**

Project will constitute a GRC headed by concerned Project Manager (PM) to resolve all grievances and complaints of the project affectees or community members. Project GRC will comprise of the following members:

- Project Manager (PM), as head/convener of project GRC;
- Environment, SDS and Gender specialists of PIU;
- E&S specialists of Supervision Consultant (SC)
- Resident Engineer of supervision consultant;
- A representative (E&S specialist) of contractor will act as focal point; and
- A representative of local community.

Representative from any other district government department may be called as and when required by the project GRC. Environmental Specialist of PIU and SC will join project GRC meeting related to environmental issues only.

Project GRC will meet once a month and when the need arises. The project GRC will review grievances involving all E&S issues that may arise due to project implementation. Project GRC will perform following functions:

- Record, categorize and prioritize the grievances that need to be resolved by the committee and resolve them within ten (10) working days;
- Invite and hear aggrieved persons/parties to produce evidence of their claims and record their view point;
- Communicate its decisions and recommendations on all resolved issues to project executors and the aggrieved persons for smooth implementation;
- Forward the unresolved cases/ complaints to PIU-GRC within an appropriate time frame with reasons recorded and its recommendations;
- Develop an information dissemination system and acknowledge the aggrieved persons/parties about the development regarding their grievance;

- Maintain a complaint register accessible to the project affectees or community members with brief information about complaints and project GRC decision with status report; and,
- Maintain complete record of all complaints received by the project GRC with actions taken.

Any complaint that cannot be resolved by the project GRC, will be forwarded to the next tier – the PIU-GRC.

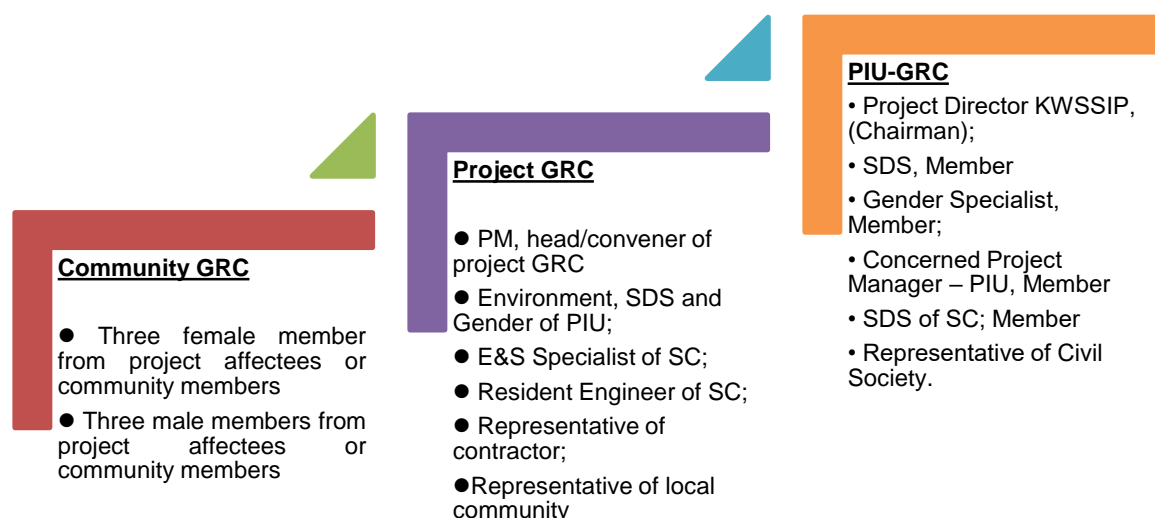
### C. PIU-GRC (Tier-3)

At the third tier, the PIU has constituted a GRC (PIU-GRC). The committee has the following composition:

- Project Director KWSSIP, (Chairman of PIU-GRC);
- SDS, Member Secretary
- Gender Specialist, Member;
- Concerned Project Manager – PIU, Member;
- SDS of SC, Member; and
- Representative of Civil Society.

Representative from any other district government department may be called as and when required by the PIU-GRC. Environmental Specialist of PIU and SC will join PIU-GRC meeting related to environmental issues only.

The PIU-GRC through authorized representative, will acknowledge the complainant about his/her complaint, scrutinize the record, investigate the remedies available and request the complainant to produce any record in favour of his/her claim. After thorough review and scrutiny of the available record on the complaint, field visit will be conducted to collect additional information, if required. Once the investigations are completed, the PIU-GRC will give decision within twenty (20) working days of receipt of the complaint. If the complainant is still dissatisfied with the decision, he/she can go to the court of law, if he/she wishes so. Organization of the GRM is shown in **Figure 5.2**.



**Figure 5.1: Organogram for GRM**

Gender representation will be ensured by inducting a female member in all GRCs. The mechanism will ensure the access of project affectees or community members to a GRM that openly and transparently deals with the grievances and makes decision in consultation with all concerned that are consistent with the WB requirements.

#### **D. Gender Based Violence (GBV) Committee**

Besides PIU-GRC, GBV committee has also been established and notified consisting of the following members;

- Concerned Project Manager, Head/ Convener of GBV Committee
- Gender Expert KWSSIP, Secretary
- SDS KWSSIP, Member

GBV Committee will address the gender related issues due to project activities during implementation.

#### **6.3.6 Grievance Redress Procedure**

The intention of GRM is to resolve a complaint as quickly and at as low a level as possible to avoid a minor issue becoming a significant grievance. Irrespective of the stage of the process, a complainant has the option to pursue the grievance through the court as is his/her legal right in accordance with law.

The GRCs will work at site, project and PIU levels. The E&S and engineering staff of PIU, in coordination with site staff will inform the project affectees and community members about the GRCs and its mechanism through consultations and by posting at prominent places. The complaints received through any media will be screened by type & category and registered in Community Complaints Register (CCR), where the name and address of complainant, date, description of complaint and action taken will be recorded. The Following procedure will be considered to redress the grievances:

- First, complaint resolution will be attempted to be addressed at community-GRC through the involvement of the field E&S/engineering staff. The community-GRC will give decision within 05 working days of receipt of the complaint. If unsettled, grievance can be lodged to the project GRC by the complainant to proceed under law and communicate decision in least possible time.
- Project GRC will acknowledge the receipt within 02 working days of lodging of complaint. Initial review and consultation with the project GRC will be conducted within 05 working days of receipt of complaint. If required, project GRC will advise the E&S/engineering specialists to conduct field visits in consultation with the aggrieved persons/parties and local community and submit a fact-finding report. Preferably, the fact finding will be completed within 08 working days from receipt of complaints. Subproject GRC will give decision within 10 working days of receipt of the complaint. If unresolved, a grievance will be lodged to the (PIU-GRC) by the complainant.

- The PIU-GRC will give decision within 20 working days of receipt of the complaint. If the complainant is still not satisfied, he/she can pursue further by submitting to the appropriate court of law.

All the E&S issues will be dealt according to the above GRM procedures. GRC will clarify the legal course of action and guide aggrieved persons/parties to approach appropriate legal forum. The GRCs will hear and clarify with the complainant (if required so) about the E&S issue and will conclude and communicate its recommendations for further implementation in due course of time. Complainant will be kept informed during the process and the GRC decision will be communicated accordingly. In case of any delay, the complainants will be informed on the progress and process about their grievances. The GRC proceedings will be documented step by step and all records will be maintained and summarized in the project progress and internal monitoring reports.

### 6.3.7 Lodging of Complaint

The complainant(s) can lodge their grievances by online, mail, phone, WhatsApp, e-mail and complaint box. Moreover, PIU has established E-Portal for filing and tracking progress of the application online the detail has been provided below:

- An electronic complaint lodging system (application) that will be accessible through a link on the PIU KWSSIP website;
- The focus of the e-portal is the quick complaint lodging for all types of primary stakeholders;
- Any project affectee or community member with internet access can lodge a complaint with option for anonymous complaints. Uploading of photos for better understanding of the problem will also be an option;
- Each complainant will get a unique Grievance Number to track their complaints through the e-portal;
- Each complaint will go through a quick resolution mechanism being managed by a dedicated team at the PIU. Each complainant will be contacted to ensure that his/her issue is resolved;
- The portal will differentiate between types of complaints for targeted decision-making and action on behalf of PIU; and
- The portal will allow a quick and easy method for monitoring of the entire complaint lodging and resolution mechanism.

**Direct workers' GRM structure:** To mitigate the risks related to direct workers a GRM for Direct Workers will be established. GRM structure for KWSSIP:

- **First level.** The Project Coordinator/Human Resources of PIU-KWSSIP depending on the nature of the issue raised will be responsible to receive, consider and address in a timely manner the grievances, including the concerns on unaccounted working hours and lack of compensation for overtime, delay in/nonpayment of salaries. If the issue cannot be resolved at the first level within 7 working days, then it will be escalated to the next level.

- **Second level.** The Project Director of KWSSIP is a second-level GRM for direct workers if there is a situation in which there is no response from HR or if the response is not satisfactory then complainants and feedback providers have the option to appeal directly to the Project Director to follow up on the issue. The complaints should be considered and feedback provided within the next 7 working days.

**Contracted worker’s GM structure:** To mitigate the risks related to direct workers a GM for Contracted Workers will also be established:

- **Contractor’s level.** Contractors should develop their own GRM and resolve the grievances of contracted workers. Grievance Focal Point (GFP) assigned by the Contractor will file the grievances and appeals of contracted workers and will be responsible to facilitate addressing the grievances. If the issue cannot be resolved at the contractor’s level within 7 working days, then it will be escalated to the PIU of the KWSSIP local level.
- **Local level.** The Social Specialist of PIU local level in Karachi will serve as Grievance Focal Point (GFP) to file the grievances and appeals of the project workers. He/She will be responsible to coordinate with relevant departments/organizations and persons to facilitate addressing these grievances. If the issue cannot be resolved at the PIU level within 7 working days, then it will be escalated to the Agency level.
- **Central level:** If there is a situation in which there is no response from the PIU Local level, or if the response is not satisfactory then complainants and feedback providers have the option to contact the Project Director of KWSSIP or Focal Person in KWSB Central Office directly to follow up on the issue.

## 6.4 E&S Budget

### 6.4.1 Health and Safety Cost

Cost of Health and Safety during the construction phase is worked out in **Table 6.3** below.

**Table 6.3: Health and Safety Cost during Construction**

Sr. No.	Description	Quantity	Unit	Rate (PKR)	Amount (PKR)
1	Medical screening for workers	50	Persons	5000	250000
2	Tarpaulins	5	L.S.	30,000	150000
3	Handling of hazardous material	12	L.S.	10,000	120000
4	Handling of solid waste	12	L.S.	2,000	24000
5	DCP Fire extinguishers in case of fire	10	Each	3,500	35000
	CO2 Fire extinguishers in case of fire	10	Each	10,000	100000
	Fire alarm	5	Each	10,000	50000
6	Special Measures for Covid-19		L.S.		300,000

Sr. No.	Description	Quantity	Unit	Rate (PKR)	Amount (PKR)
7	Cost of Personal Protective Equipment (PPE)*		L.S.		430,000
<b>Total Cost</b>					<b>1,459,000</b>

Details of PPE cost are given in **Table 6.4** below:

**Table 6.4: Break-up of PPEs Cost during the Construction Phase**

Item No.	Description	Quantity	Unit	Rate (PKR)	Amount
					PKR
1	Ear plugs	50	Each	100	5,000
2	Helmets	50	Each	1500	75,000
3	Safety shoes	50	Each	3000	150,000
4	Protective goggles	50	Each	2000	100,000
5	Gloves	100	Each	300	30,000
6	Dust Mask	200	Each	100	20,000
7	First Aid Kit	10	Each	5000	50,000
<b>Total</b>					<b>430,000</b>

The cost of Health and Safety during the operation phase is worked out in **Table 6.5** below.

**Table 6.5: Health and Safety Cost during Operation**

Sr. No.	Description	Quantity	Unit	Rate (PKR)	Amount (PKR)
1	Medical screening for workers	10	Persons	5000	50000
4	Handling of solid waste	12	L.S.	2,000	24000
5	DCP Fire extinguishers in case of fire	10	Each	3,500	35000
	CO2 Fire extinguishers in case of fire	10	Each	10,000	100000
	Fire alarm	5	Each	10,000	50000
6	Special Measures for Covid-19		L.S.		30,000
7	Cost of Personal Protective Equipment (PPE)*		L.S.		85,000
<b>Total Cost</b>					<b>374,000</b>

Details of PPE cost are given in **Table 6.6** below:

**Table 6.6: Break-up of PPEs Cost during the Construction Phases**

Item No.	Description	Quantity	Unit	Rate (PKR)	Amount
					PKR
1	Safety shoes	10	Each	3000	30,000
2	Gloves	10	Each	300	3,000



Item No.	Description	Quantity	Unit	Rate (PKR)	Amount
					PKR
3	Dust Mask	20	Each	100	2,000
4	First Aid Kit	10	Each	5000	50,000
<b>Total</b>					<b>85,000</b>

#### 6.4.2 Tree Plantation

Following tree plantation plan will be implemented to compensated the affected trees.

**Table 6.7: Cost of Tree Plantation**

Sr. #	Plants	Quantity	Unit	Rate (PKR)	Amount (PKR)
<b>1</b>	<b>Shady trees</b>				
1.1	Tree Native Species 18"(Bag)	330	Each	600	198,000
<b>Sub Total-A</b>					<b>198,000</b>
1.3	Transportation charges	-	%	5	9,900
1.4	Mortality	-	%	15	29,700
1.5	Contractors Profit (of total cost)	-	%	20	39,600
<b>Sub Total-B</b>					<b>79,200</b>
<b>2</b>	<b>Input Requirements</b>				
2.1	Fertilizer (NPK) (Transportation charges included)	10	Gram	0.20	2
2.2	FYM (Transportation charges included)	2	Kg	7	14
2.3	Pesticide	1	Each	10	10
2.4	Contractors Profit (of total cost)	20	%	-	5
<b>Sub Total (for 1 tree)</b>					<b>31</b>
<b>Sub Total - C (for 330 trees)</b>					<b>10,296</b>
<b>3</b>	<b>Development (For 1 Years)</b>				
3.1	Head Gardner	1	Man-Month	30,000	360,000
3.2	Gardner	1	Man-Month	22,000	264,000
<b>Sub Total - (D)</b>					<b>624,000</b>
3.3	Miscellaneous ( Vehicle expenditures, wear & tear of tools etc)	15	%	-	93,600
3.4	Contractors Profit (of total cost)	20	%	-	124,800
<b>Sub Total - (D)</b>					<b>842,400</b>
<b>Grand Total (Sub Total A+B+C+D)</b>					<b>1,129,896</b>
<b>Say</b>					<b>1,130,000</b>

#### 6.4.3 Institutional Strengthening

Following specialists will be require for the effective implementation of E&S requirements of the project.

**Table 6.8: Institutional Strengthening**

Sr. No.	Description (Position)	Quantity	Unit	Rate (PKR)	Amount (PKR)
<b>A. Construction Phase - 12 months (for contractor)</b>					
1	Environmental & Social Expert	12	Each	200,000	2,400,000
2	Health & Safety Expert	12	Each	200,000	2,400,000
<b>Total Cost</b>					<b>4,800,000</b>

#### 6.4.4 Summary of Cost

The total estimated cost for the implementation of ESMP is worked out to be PKR **8,151,150** /. Summary of cost is given in **Table 6.9**.

**Table 6.9: Summary of Cost**

Sr. No.	Description	Amount (Rs)	
		Construction	Operation
1	Tree Plantation	1,130,000	Nil
2	Health & Safety	1,459,000	374,000
3	Institutional Strengthening Cost	4,800,000	Nil
<b>Sub-Total</b>		<b>7,389,000</b>	<b>374,000</b>
Contingencies @ 5%		369,450	18,700
<b>Total</b>		<b>7,758,450</b>	<b>392,700</b>
<b>Grand Total</b>		<b>8,151,150</b>	

**Annex - I:**  
**Environmental Screening Checklist**

**Annex – I (A)**  
**Environmental Screening Checklist**  
**SCE&S Division at KW&SC Central Workshop,**  
**9th Mile Shahrah-e-Faisal**

## ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

<b>Project Name: Karachi Water and Sewerage Services Improvement Project (KWSSIP)</b>				
Subproject location (area/district/site): <b>SCE&amp;S Division at KW&amp;SC Central Workshop at 9th Mile Shahrah-e-Faisal</b>				
Subproject scope of work: <b>Construction of Parking Shed</b>				
Implementing Agency: <b>PIU - KWSSIP</b>				
Date of screening: 03.01.2024				
Responsible agency: KW&SB				
<b>Sr. No.</b>	<b>Screening Criteria</b>	<b>Assessment of Impact</b>	<b>Explanation</b>	<b>Mitigation Measures</b>
<b>ENVIRONMENT</b>				
1	Will the subproject create significant/limited/no environmental impacts?	Limited	Demolition of the existing office buildings, and maintenance halls and construction of a new parking shed will create temporary, site-specific, reversible impacts including dust, air pollution, noise, etc.	<ul style="list-style-type: none"> <li>• Demolition activities will be confined.</li> <li>• Targeted structures will be demolished and no other structures will be affected.</li> <li>• Confining construction to the specified area as per the approved engineering drawings.</li> </ul>
2	Is there any likelihood that the impacts are beyond the site boundary, or the impacts occurring during project implementation are beyond the planning area? Are such significant adverse environmental impacts considered irreversible? Please briefly describe:	No	The impacts will be localized in nature and will not cross the boundary of project area. The impacts are perceived to be temporary and reversible in nature.	NA
3	Does the sub-project involve any significant change or degradation to the critical/ non-critical natural habitats?	No	No critical/ non-critical natural habitats are present within and near the project area.	NA
4	Is the subproject in an eco-sensitive area or adjoining an eco-sensitive area or monument? (Yes/No) If yes, which is the area? Elaborate impact accordingly.	No	No eco-sensitive area is present near the project boundary.	NA
5	Will the proposed project result in significant greenhouse gas emissions?	Limited	Use of heavy vehicles for the transportation of construction materials and construction machinery may lead to greenhouse gas emissions.	<ul style="list-style-type: none"> <li>• Idling of vehicles will not be allowed</li> <li>• Properly tuned and well-maintained equipment and vehicles will be used</li> </ul>
6	Is the proposed project likely to directly or indirectly increase environmental and social vulnerability to climate	No	The proposed project is not likely to directly or indirectly increase the environmental and social vulnerability to	N/A

**Annex – I (A)**

	change now or in the future (also known as maladaptive practices)?		climate change at any stage.	
7	Will the sub-project cause			
	<ul style="list-style-type: none"> <li>• Clearance of vegetation/ tree-cover/other</li> </ul>	No	No trees will be cut during site clearance.	N/A
	<ul style="list-style-type: none"> <li>• Direct discharge of construction run-off, improper storage and disposal of excavation spoils, wastes and other construction materials adversely affecting water quality and flow regimes.</li> </ul>	No	No groundwater resource is present in and around the project area.	N/A
	<ul style="list-style-type: none"> <li>• Flooding of adjacent areas.</li> </ul>	No	The project activities are not expected to cause flooding in the project area.	N/A
	<ul style="list-style-type: none"> <li>• Improper storage and handling of substances leading to contamination of soil and water.</li> </ul>	Limited	However, no hazardous substances are envisaged to be used for the proposed construction activity. But the mishandling of different materials i.e. paints, and other materials may lead to soil contamination.	<ul style="list-style-type: none"> <li>• Waste materials and other substances will not be disposed of openly into the land.</li> <li>• All the materials will be handled properly based on the set protocols.</li> </ul>
	<ul style="list-style-type: none"> <li>• Elevated noise and dust emission.</li> </ul>	Yes	Construction activities, movement of vehicles, transportation of equipment and construction works etc. shall lead to elevated noise and dust emissions.	<ul style="list-style-type: none"> <li>• Muffling devices will be used in vehicles and machinery to reduce noise</li> <li>• Transportation of construction materials will be avoided in rush hours</li> <li>• Water sprinkling will be done over to lose soil to control dust emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>• Disruption to traffic and visitor's movements.</li> </ul>	No	The project activities will be executed within the premises of KW&SC owned area and hence there will be no effect on traffic and visitors' movement.	N/A
	<ul style="list-style-type: none"> <li>• Gas emissions</li> </ul>	No	No gas emissions are expected from the construction activities.	N/A
	<ul style="list-style-type: none"> <li>• Other, specify.</li> </ul>			
8	Does the subproject involve any prior clearance from the State Forest Department for either the	No	The project area is not the property of state forest land and it does not house any natural or manmade forest.	N/A

**Annex – I (A)**

	conversion of forest land or for tree-cutting? (Yes/ No). If yes, which?			
<b>CULTURAL HERITAGE</b>				
9	Will the subproject create significant/limited/no cultural properties impacts	No	No cultural properties shall be damaged or the access will not be affected due to project activities.	No
	<ul style="list-style-type: none"> <li>Involve significant excavations, demolition, movement of earth, flooding or other major environmental damages.</li> </ul>	No	No project activity shall cause demolition and damage to any of the cultural property	N/A
	<ul style="list-style-type: none"> <li>Is located within or in the vicinity of a recognized cultural property conservation area or heritage site.</li> </ul>	No	No recognized heritage site is available in the project area.	N/A
	<ul style="list-style-type: none"> <li>Is designed to support the management or conservation of a cultural property.</li> </ul>	No	The project does not support the management and conservation of any cultural property.	N/A
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
10	Does the subproject involve any prior clearance from the Archeology Department for either the conservation or management of heritage sites or vicinities? (Yes/ No). If yes, which?	No	No recognized heritage or archeological site is present in the project area.	N/A
<b>HEALTH AND SAFETY</b>				
11	Does the sub-project involve siting sanitation treatment facilities close to human settlements	No	The sub-project does not involve siting sanitation treatment facilities close to human settlements	N/A
12	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No	The proposed project is not susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions	N/A

## Annex – I (A)

13	Would the project cause increase in public health risks to contagious diseases or transmission (e.g., HIV/AIDS, Malaria, etc.) for project workers or communities in the project area, as a result of a change in living and working conditions?	Yes	Improper sanitation conditions and an unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in the spread of malaria, dengue, and other relevant diseases. Ignorance of the government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>• COVID-19 SOPs will be strictly followed</li> <li>• Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>• Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> <li>• Water stagnation will be avoided</li> </ul>
14	Will the proposed project require additional health services?	No	The project activities will be limited in an area and only require basic first aid facilities at the contractors' camps.	N/A
15	Discharge of hazardous material into sewers, resulting in damage to sewer system and danger to workers	No	No hazardous material will be discharged into the sewerage system.	N/A
<b>SOCIAL</b>				
16	Will the subproject create significant/limited/no social impacts?	No	No social impacts are envisaged due to the proposed project activities.	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in loss of income from agricultural land, plantation or other existing land.</li> </ul>	No	New land shall not be acquired for the proposed project.	N/A
	<ul style="list-style-type: none"> <li>• Impact on livelihood and economic activity.</li> </ul>	No	The project activities will not have an impact on the livelihood	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in the relocation of households.</li> </ul>	No	No households shall be relocated.	N/A
	<ul style="list-style-type: none"> <li>• Any reduction of access to traditional dependent communities (to areas where they earn for their primary or substantial livelihood).</li> </ul>	No	Access will not be affected as the project site is within the premises of KW&SC Central Workshop.	N/A
	<ul style="list-style-type: none"> <li>• Any displacement or adverse impact on tribal settlement(s).</li> </ul>	No	No tribal community is present ion the project area.	N/A



## Annex – I (A)

	<ul style="list-style-type: none"> <li>Adverse impacts to women, including economic and safety concerns.</li> </ul>	No	Gender issues are not envisaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Impact on infrastructure (roads, water supply, any other type of infrastructure)</li> </ul>	No	No infrastructure will be damaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Possible conflicts with and/or disruption to local community and/or visitors.</li> </ul>	No	No local community resides in the project area.	N/A
	<ul style="list-style-type: none"> <li>Health risks due to unhygienic conditions at workers 'camps.</li> </ul>	Yes	Improper sanitation conditions and unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in spread of malaria and dengue. Ignorance of government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>COVID-19 SOPs will be strictly followed</li> <li>Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> </ul>
	<ul style="list-style-type: none"> <li>Safety hazards during construction.</li> </ul>	Yes	Ignorance of safety protocols may lead to worksite accidents.	<ul style="list-style-type: none"> <li>Use of PPEs to be ensured.</li> <li>Emergency evacuation plans will be followed.</li> </ul>
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
<b>OVERALL ASSESSMENT</b>				
<input type="radio"/> Subproject is declined				
<input type="radio"/> Subproject is accepted				
<input type="radio"/> Subproject is classified as environmental Category A and requires an in-depth Environmental and Social Impact Assessment.				
<input type="radio"/> Subproject is classified as environmental Category B and requires an Environmental and Social Management Plan.				
<input type="radio"/> Subproject is classified as environmental Category C and does not require any further studies.				
The subproject is categorized as <b>Category C</b> project and does not require further studies.				

**Annex – I (B)**  
**Environmental Screening Checklist**  
**Pumping Station - II (PS-II) Site at Korangi**

## ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

<b>Project Name: Karachi Water and Sewerage Services Improvement Project (KWSSIP)</b>				
Subproject location (area/district/site): <b>Pumping Station - II (PS-II) Site at Korangi</b>				
Subproject scope of work: <b>Construction of Parking Shed</b>				
Implementing Agency: <b>PIU - KWSSIP</b>				
Date of screening: 03.01.2024				
Responsible agency: KW&SB				
<b>Sr. No.</b>	<b>Screening Criteria</b>	<b>Assessment of Impact</b>	<b>Explanation</b>	<b>Mitigation Measures</b>
<b>ENVIRONMENT</b>				
1	Will the subproject create significant/limited/no environmental impacts?	Limited	Construction footprint is limited and will create temporary, minor impacts including dust, air pollution, waste generation, etc.	<ul style="list-style-type: none"> <li>Limit the construction activities to the specified areas as per the approved engineering drawings.</li> </ul>
2	Is there any likelihood that the impacts are beyond the site boundary, or the impacts occurring during project implementation are beyond the planning area? Are such significant adverse environmental impacts considered irreversible? Please briefly describe:	No	The impacts will be localized in nature and will not cross the boundary of project area. The impacts are perceived to be temporary and reversible in nature.	NA
3	Does the sub-project involve any significant change or degradation to the critical/ non-critical natural habitats?	No	No critical/ non-critical natural habitats are present within and near the project area.	NA
4	Is the subproject in an eco-sensitive area or adjoining an eco-sensitive area or monument? (Yes/No) If yes, which is the area? Elaborate impact accordingly.	No	No eco-sensitive area is present near the project boundary.	NA
5	Will the proposed project result in significant greenhouse gas emissions?	Limited	Use of heavy vehicles for the transportation of construction materials and construction machinery may lead to greenhouse gas emissions.	<ul style="list-style-type: none"> <li>Idling of vehicles will not be allowed</li> <li>Properly tuned and well-maintained equipment and vehicles will be used</li> </ul>
6	Is the proposed project likely to directly or indirectly increase environmental and social vulnerability to climate change now or in the future (also known as maladaptive practices)?	No	The proposed project is not likely to directly or indirectly increase the environmental and social vulnerability to climate change at any stage.	N/A

**Annex – I (B)**

7	Will the sub-project cause			
	<ul style="list-style-type: none"> <li>• Clearance of vegetation/ tree-cover/other</li> </ul>	Yes	A few trees are envisaged to be cut.	Compensatory plantation of trees in place of every single tree that would be cut.
	<ul style="list-style-type: none"> <li>• Direct discharge of construction run-off, improper storage and disposal of excavation spoils, wastes and other construction materials adversely affecting water quality and flow regimes.</li> </ul>	No	No groundwater resource is present in and around the project area.	N/A
	<ul style="list-style-type: none"> <li>• Flooding of adjacent areas.</li> </ul>	No	The project activities are not expected to cause flooding in the project area.	N/A
	<ul style="list-style-type: none"> <li>• Improper storage and handling of substances leading to contamination of soil and water.</li> </ul>	Limited	However, no hazardous substances are envisaged to be used for the proposed construction activity. But the mishandling of different materials i.e., paints, and other materials may lead to soil contamination.	<ul style="list-style-type: none"> <li>• Waste materials and other substances will not be disposed of openly into the land.</li> <li>• All the materials will be handled properly based on the set protocols.</li> </ul>
	<ul style="list-style-type: none"> <li>• Elevated noise and dust emission.</li> </ul>	Yes	Construction activities, movement of vehicles, transportation of equipment and construction works etc. shall lead to elevated noise and dust emissions.	<ul style="list-style-type: none"> <li>• Muffling devices will be used in vehicles and machinery to reduce noise</li> <li>• Transportation of construction materials will be avoided in rush hours</li> <li>• Water sprinkling will be done over to lose soil to control dust emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>• Disruption to traffic and visitor's movements.</li> </ul>	No	The project activities will be executed within the premises of KW&SC owned area and hence there will be no effect on traffic and visitors' movement.	N/A
	<ul style="list-style-type: none"> <li>• Gas emissions</li> </ul>	No	No gas emissions are expected from the construction activities.	N/A
	<ul style="list-style-type: none"> <li>• Other, specify.</li> </ul>			
8	Does the subproject involve any prior clearance from the State Forest Department for either the conversion of forest land or	No	The project area is not the property of state forest land and it does not house any natural or manmade forest.	N/A

**Annex – I (B)**

	for tree-cutting? (Yes/ No). If yes, which?			
<b>CULTURAL HERITAGE</b>				
9	Will the subproject create significant/limited/no cultural properties impacts	No	No cultural properties shall be damaged or the access will not be affected due to project activities.	No
	<ul style="list-style-type: none"> <li>Involve significant excavations, demolition, movement of earth, flooding or other major environmental damages.</li> </ul>	No	No project activity shall cause demolition and damage to any of the cultural property	N/A
	<ul style="list-style-type: none"> <li>Is located within or in the vicinity of a recognized cultural property conservation area or heritage site.</li> </ul>	No	No recognized heritage site is available in the project area.	N/A
	<ul style="list-style-type: none"> <li>Is designed to support the management or conservation of a cultural property.</li> </ul>	No	The project does not support the management and conservation of any cultural property.	N/A
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
10	Does the subproject involve any prior clearance from the Archeology Department for either the conservation or management of heritage sites or vicinities? (Yes/ No). If yes, which?	No	No recognized heritage or archeological site is present in the project area.	N/A
<b>HEALTH AND SAFETY</b>				
11	Does the sub-project involve siting sanitation treatment facilities close to human settlements	No	The sub-project does not involve siting sanitation treatment facilities close to human settlements	N/A
12	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No	The proposed project is not susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions	N/A

## Annex – I (B)

13	Would the project cause increase in public health risks to contagious diseases or transmission (e.g., HIV/AIDS, Malaria, etc.) for project workers or communities in the project area, as a result of a change in living and working conditions?	Yes	Improper sanitation conditions and an unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in the spread of malaria, dengue, and other relevant diseases. Ignorance of the government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>• COVID-19 SOPs will be strictly followed</li> <li>• Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>• Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> <li>• Water stagnation will be avoided</li> </ul>
14	Will the proposed project require additional health services?	No	The project activities will be limited in an area and only require basic first aid facilities at the contractors' camps.	N/A
15	Discharge of hazardous material into sewers, resulting in damage to sewer system and danger to workers	No	No hazardous material will be discharged into the sewerage system.	N/A
<b>SOCIAL</b>				
16	Will the subproject create significant/limited/no social impacts?	No	No social impacts are envisaged due to the proposed project activities.	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in loss of income from agricultural land, plantation or other existing land.</li> </ul>	No	New land shall not be acquired for the proposed project.	N/A
	<ul style="list-style-type: none"> <li>• Impact on livelihood and economic activity.</li> </ul>	No	The project activities will not have an impact on the livelihood	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in the relocation of households.</li> </ul>	No	No households shall be relocated.	N/A
	<ul style="list-style-type: none"> <li>• Any reduction of access to traditional dependent communities (to areas where they earn for their primary or substantial livelihood).</li> </ul>	No	Access will not be affected as the project site is within the premises of KW&SC Central Workshop.	N/A
	<ul style="list-style-type: none"> <li>• Any displacement or adverse impact on tribal settlement(s).</li> </ul>	No	No tribal community is present ion the project area.	N/A

## Annex – I (B)

	<ul style="list-style-type: none"> <li>Adverse impacts to women, including economic and safety concerns.</li> </ul>	No	Gender issues are not envisaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Impact on infrastructure (roads, water supply, any other type of infrastructure)</li> </ul>	No	No infrastructure will be damaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Possible conflicts with and/or disruption to local community and/or visitors.</li> </ul>	No	No local community resides in the project area.	N/A
	<ul style="list-style-type: none"> <li>Health risks due to unhygienic conditions at workers 'camps.</li> </ul>	Yes	Improper sanitation conditions and unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in spread of malaria and dengue. Ignorance of government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>COVID-19 SOPs will be strictly followed</li> <li>Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> </ul>
	<ul style="list-style-type: none"> <li>Safety hazards during construction.</li> </ul>	Yes	Ignorance of safety protocols may lead to worksite accidents.	<ul style="list-style-type: none"> <li>Use of PPEs to be ensured.</li> <li>Emergency evacuation plans will be followed.</li> </ul>
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
<b>OVERALL ASSESSMENT</b>				
<input type="radio"/> Subproject is declined				
<input type="radio"/> Subproject is accepted				
<input type="radio"/> Subproject is classified as environmental Category A and requires an in-depth Environmental and Social Impact Assessment.				
<input type="radio"/> Subproject is classified as environmental Category B and requires an Environmental and Social Management Plan.				
<input type="radio"/> Subproject is classified as environmental Category C and does not require any further studies.				
The subproject is categorized as <b>Category C</b> project and does not require further studies.				

**Annex – I (C)**  
**Environmental Screening Checklist**  
**Sewage Treatment Plant (STP-I) Site at Shershah**



## ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

<b>Project Name: Karachi Water and Sewerage Services Improvement Project (KWSSIP)</b>				
Subproject location (area/district/site): <b>Sewage Treatment Plant (STP-I) Site at Shershah</b>				
Subproject scope of work: <b>Construction of Parking Shed</b>				
Implementing Agency: <b>PIU - KWSSIP</b>				
Date of screening: 03.01.2024				
Responsible agency: KW&SB				
<b>Sr. No.</b>	<b>Screening Criteria</b>	<b>Assessment of Impact</b>	<b>Explanation</b>	<b>Mitigation Measures</b>
<b>ENVIRONMENT</b>				
1	Will the subproject create significant/limited/no environmental impacts?	Limited	Construction footprint is limited and will create temporary, minor impacts including dust, air pollution, waste generation, etc.	<ul style="list-style-type: none"> <li>Limit the construction activities to the specified areas as per the approved engineering drawings.</li> </ul>
2	Is there any likelihood that the impacts are beyond the site boundary, or the impacts occurring during project implementation are beyond the planning area? Are such significant adverse environmental impacts considered irreversible? Please briefly describe:	No	The impacts will be localized in nature and will not cross the boundary of project area. The impacts are perceived to be temporary and reversible in nature.	NA
3	Does the sub-project involve any significant change or degradation to the critical/non-critical natural habitats?	No	No critical/ non-critical natural habitats are present within and near the project area.	NA
4	Is the subproject in an eco-sensitive area or adjoining an eco-sensitive area or monument? (Yes/No) If yes, which is the area? Elaborate impact accordingly.	No	No eco-sensitive area is present near the project boundary.	NA
5	Will the proposed project result in significant greenhouse gas emissions?	Limited	Use of heavy vehicles for the transportation of construction materials and construction machinery may lead to greenhouse gas emissions.	<ul style="list-style-type: none"> <li>Idling of vehicles will not be allowed</li> <li>Properly tuned and well-maintained equipment and vehicles will be used</li> </ul>
6	Is the proposed project likely to directly or indirectly increase environmental and social vulnerability to climate change now or in the future	No	The proposed project is not likely to directly or indirectly increase the environmental and social vulnerability to	N/A

## Annex – I (C)

	(also known as maladaptive practices)?		climate change at any stage.	
7	Will the sub-project cause			
	<ul style="list-style-type: none"> <li>• Clearance of vegetation/ tree-cover/other</li> </ul>	Yes	A few trees are envisaged to be cut.	Compensatory plantation of trees in place of every single tree that would be cut.
	<ul style="list-style-type: none"> <li>• Direct discharge of construction run-off, improper storage and disposal of excavation spoils, wastes and other construction materials adversely affecting water quality and flow regimes.</li> </ul>	No	No groundwater resource is present in and around the project area.	N/A
	<ul style="list-style-type: none"> <li>• Flooding of adjacent areas.</li> </ul>	No	The project activities are not expected to cause flooding in the project area.	N/A
	<ul style="list-style-type: none"> <li>• Improper storage and handling of substances leading to contamination of soil and water.</li> </ul>	Limited	However, no hazardous substances are envisaged to be used for the proposed construction activity. But the mishandling of different materials i.e., paints, and other materials may lead to soil contamination.	<ul style="list-style-type: none"> <li>• Waste materials and other substances will not be disposed of openly into the land.</li> <li>• All the materials will be handled properly based on the set protocols.</li> </ul>
	<ul style="list-style-type: none"> <li>• Elevated noise and dust emission.</li> </ul>	Yes	Construction activities, movement of vehicles, transportation of equipment and construction works etc. shall lead to elevated noise and dust emissions.	<ul style="list-style-type: none"> <li>• Muffling devices will be used in vehicles and machinery to reduce noise</li> <li>• Transportation of construction materials will be avoided in rush hours</li> <li>• Water sprinkling will be done over to lose soil to control dust emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>• Disruption to traffic and visitor's movements.</li> </ul>	No	The project activities will be executed within the premises of KW&SC owned area and hence there will be no effect on traffic and visitors' movement.	N/A
	<ul style="list-style-type: none"> <li>• Gas emissions</li> </ul>	No	No gas emissions are expected from the construction activities.	N/A

**Annex – I (C)**

	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
8	<p>Does the subproject involve any prior clearance from the State Forest Department for either the conversion of forest land or for tree-cutting? (Yes/ No). If yes, which?</p>	No	The project area is not the property of state forest land and it does not house any natural or manmade forest.	N/A
<b>CULTURAL HERITAGE</b>				
9	Will the subproject create significant/limited/no cultural properties impacts	No	No cultural properties shall be damaged or the access will not be affected due to project activities.	No
	<ul style="list-style-type: none"> <li>Involve significant excavations, demolition, movement of earth, flooding or other major environmental damages.</li> </ul>	No	No project activity shall cause demolition and damage to any of the cultural property	N/A
	<ul style="list-style-type: none"> <li>Is located within or in the vicinity of a recognized cultural property conservation area or heritage site.</li> </ul>	No	No recognized heritage site is available in the project area.	N/A
	<ul style="list-style-type: none"> <li>Is designed to support the management or conservation of a cultural property.</li> </ul>	No	The project does not support the management and conservation of any cultural property.	N/A
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
10	<p>Does the subproject involve any prior clearance from the Archeology Department for either the conservation or management of heritage sites or vicinities? (Yes/ No). If yes, which?</p>	No	No recognized heritage or archeological site is present in the project area.	N/A
<b>HEALTH AND SAFETY</b>				
11	Does the sub-project involve siting sanitation treatment facilities close to human settlements	No	The sub-project does not involve siting sanitation treatment facilities close to human settlements	N/A

## Annex – I (C)

12	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No	The proposed project is not susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions	N/A
13	Would the project cause increase in public health risks to contagious diseases or transmission (e.g., HIV/AIDS, Malaria, etc.) for project workers or communities in the project area, as a result of a change in living and working conditions?	Yes	Improper sanitation conditions and an unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in the spread of malaria, dengue, and other relevant diseases. Ignorance of the government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>• COVID-19 SOPs will be strictly followed</li> <li>• Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>• Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> <li>• Water stagnation will be avoided</li> </ul>
14	Will the proposed project require additional health services?	No	The project activities will be limited in an area and only require basic first aid facilities at the contractors' camps.	N/A
15	Discharge of hazardous material into sewers, resulting in damage to sewer system and danger to workers	No	No hazardous material will be discharged into the sewerage system.	N/A
<b>SOCIAL</b>				
16	Will the subproject create significant/limited/no social impacts?	No	No social impacts are envisaged due to the proposed project activities.	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in loss of income from agricultural land, plantation or other existing land.</li> </ul>	No	New land shall not be acquired for the proposed project.	N/A
	<ul style="list-style-type: none"> <li>• Impact on livelihood and economic activity.</li> </ul>	No	The project activities will not have an impact on the livelihood	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in the relocation of households.</li> </ul>	No	No households shall be relocated.	N/A

**Annex – I (C)**

	<ul style="list-style-type: none"> <li>Any reduction of access to traditional dependent communities (to areas where they earn for their primary or substantial livelihood).</li> </ul>	No	Access will not be affected as the project site is within the premises of KW&SC Central Workshop.	N/A
	<ul style="list-style-type: none"> <li>Any displacement or adverse impact on tribal settlement(s).</li> </ul>	No	No tribal community is present in the project area.	N/A
	<ul style="list-style-type: none"> <li>Adverse impacts to women, including economic and safety concerns.</li> </ul>	No	Gender issues are not envisaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Impact on infrastructure (roads, water supply, any other type of infrastructure)</li> </ul>	No	No infrastructure will be damaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Possible conflicts with and/or disruption to local community and/or visitors.</li> </ul>	No	No local community resides in the project area.	N/A
	<ul style="list-style-type: none"> <li>Health risks due to unhygienic conditions at workers 'camps.</li> </ul>	Yes	Improper sanitation conditions and unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in spread of malaria and dengue. Ignorance of government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>COVID-19 SOPs will be strictly followed</li> <li>Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> </ul>
	<ul style="list-style-type: none"> <li>Safety hazards during construction.</li> </ul>	Yes	Ignorance of safety protocols may lead to worksite accidents.	<ul style="list-style-type: none"> <li>Use of PPEs to be ensured.</li> <li>Emergency evacuation plans will be followed.</li> </ul>
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
<b>OVERALL ASSESSMENT</b>				
<ul style="list-style-type: none"> <li>Subproject is declined</li> </ul>				
<ul style="list-style-type: none"> <li>Subproject is accepted</li> </ul>				The project is accepted.
<ul style="list-style-type: none"> <li>Subproject is classified as environmental Category A and requires an in-depth Environmental and Social Impact Assessment.</li> </ul>				

**Annex – I (C)**

○ Subproject is classified as environmental Category B and requires an Environmental and Social Management Plan.	
○ Subproject is classified as environmental Category C and does not require any further studies.	The subproject is categorized as <b>Category C</b> project and does not require further studies.

**Annex – I (D)**  
**Environmental Screening Checklist**  
**LSR, Gulshan e Iqbal**

## ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

<b>Project Name: Karachi Water and Sewerage Services Improvement Project (KWSSIP)</b>				
Subproject location (area/district/site): <b>LSR, Gulshan e Iqbal</b>				
Subproject scope of work: <b>Construction of Parking Shed</b>				
Implementing Agency: <b>PIU - KWSSIP</b>				
Date of screening: 03.01.2024				
Responsible agency: KW&SB				
<b>Sr. No.</b>	<b>Screening Criteria</b>	<b>Assessment of Impact</b>	<b>Explanation</b>	<b>Mitigation Measures</b>
<b>ENVIRONMENT</b>				
1	Will the subproject create significant/limited/no environmental impacts?	Limited	Construction footprint is limited and will create temporary, minor impacts including dust, air pollution, waste generation, etc.	<ul style="list-style-type: none"> <li>Limit the construction activities to the specified areas as per the approved engineering drawings.</li> </ul>
2	Is there any likelihood that the impacts are beyond the site boundary, or the impacts occurring during project implementation are beyond the planning area? Are such significant adverse environmental impacts considered irreversible? Please briefly describe:	No	The impacts will be localized in nature and will not cross the boundary of project area. The impacts are perceived to be temporary and reversible in nature.	NA
3	Does the sub-project involve any significant change or degradation to the critical/non-critical natural habitats?	No	No critical/ non-critical natural habitats are present within and near the project area.	NA
4	Is the subproject in an eco-sensitive area or adjoining an eco-sensitive area or monument? (Yes/No) If yes, which is the area? Elaborate impact accordingly.	No	No eco-sensitive area is present near the project boundary.	NA
5	Will the proposed project result in significant greenhouse gas emissions?	Limited	Use of heavy vehicles for the transportation of construction materials and construction machinery may lead to greenhouse gas emissions.	<ul style="list-style-type: none"> <li>Idling of vehicles will not be allowed</li> <li>Properly tuned and well-maintained equipment and vehicles will be used</li> </ul>
6	Is the proposed project likely to directly or indirectly increase environmental and social vulnerability to climate change now or in the future	No	The proposed project is not likely to directly or indirectly increase the environmental and social vulnerability to	N/A



## Annex – I (D)

	(also known as maladaptive practices)?		climate change at any stage.	
7	Will the sub-project cause			
	<ul style="list-style-type: none"> <li>Clearance of vegetation/ tree-cover/other</li> </ul>	Yes	A few trees are envisaged to be cut.	Compensatory plantation of trees in place of every single tree that would be cut.
	<ul style="list-style-type: none"> <li>Direct discharge of construction run-off, improper storage and disposal of excavation spoils, wastes and other construction materials adversely affecting water quality and flow regimes.</li> </ul>	No	No groundwater resource is present in and around the project area.	N/A
	<ul style="list-style-type: none"> <li>Flooding of adjacent areas.</li> </ul>	No	The project activities are not expected to cause flooding in the project area.	N/A
	<ul style="list-style-type: none"> <li>Improper storage and handling of substances leading to contamination of soil and water.</li> </ul>	Limited	However, no hazardous substances are envisaged to be used for the proposed construction activity. But the mishandling of different materials i.e., paints, and other materials may lead to soil contamination.	<ul style="list-style-type: none"> <li>Waste materials and other substances will not be disposed of openly into the land.</li> <li>All the materials will be handled properly based on the set protocols.</li> </ul>
	<ul style="list-style-type: none"> <li>Elevated noise and dust emission.</li> </ul>	Yes	Construction activities, movement of vehicles, transportation of equipment and construction works etc. shall lead to elevated noise and dust emissions.	<ul style="list-style-type: none"> <li>Muffling devices will be used in vehicles and machinery to reduce noise</li> <li>Transportation of construction materials will be avoided in rush hours</li> <li>Water sprinkling will be done over to lose soil to control dust emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>Disruption to traffic and visitor's movements.</li> </ul>	No	The project activities will be executed within the premises of KW&SC owned area and hence there will be no effect on traffic and visitors' movement.	N/A
	<ul style="list-style-type: none"> <li>Gas emissions</li> </ul>	No	No gas emissions are expected from the construction activities.	N/A

**Annex – I (D)**

	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
8	<p>Does the subproject involve any prior clearance from the State Forest Department for either the conversion of forest land or for tree-cutting? (Yes/ No). If yes, which?</p>	No	The project area is not the property of state forest land and it does not house any natural or manmade forest.	N/A
<b>CULTURAL HERITAGE</b>				
9	Will the subproject create significant/limited/no cultural properties impacts	No	No cultural properties shall be damaged or the access will not be affected due to project activities.	No
	<ul style="list-style-type: none"> <li>Involve significant excavations, demolition, movement of earth, flooding or other major environmental damages.</li> </ul>	No	No project activity shall cause demolition and damage to any of the cultural property	N/A
	<ul style="list-style-type: none"> <li>Is located within or in the vicinity of a recognized cultural property conservation area or heritage site.</li> </ul>	No	No recognized heritage site is available in the project area.	N/A
	<ul style="list-style-type: none"> <li>Is designed to support the management or conservation of a cultural property.</li> </ul>	No	The project does not support the management and conservation of any cultural property.	N/A
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
10	<p>Does the subproject involve any prior clearance from the Archeology Department for either the conservation or management of heritage sites or vicinities? (Yes/ No). If yes, which?</p>	No	No recognized heritage or archeological site is present in the project area.	N/A
<b>HEALTH AND SAFETY</b>				
11	Does the sub-project involve siting sanitation treatment facilities close to human settlements	No	The sub-project does not involve siting sanitation treatment facilities close to human settlements	N/A

## Annex – I (D)

12	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No	The proposed project is not susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions	N/A
13	Would the project cause increase in public health risks to contagious diseases or transmission (e.g., HIV/AIDS, Malaria, etc.) for project workers or communities in the project area, as a result of a change in living and working conditions?	Yes	Improper sanitation conditions and an unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in the spread of malaria, dengue, and other relevant diseases. Ignorance of the government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>• COVID-19 SOPs will be strictly followed</li> <li>• Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>• Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> <li>• Water stagnation will be avoided</li> </ul>
14	Will the proposed project require additional health services?	No	The project activities will be limited in an area and only require basic first aid facilities at the contractors' camps.	N/A
15	Discharge of hazardous material into sewers, resulting in damage to sewer system and danger to workers	No	No hazardous material will be discharged into the sewerage system.	N/A
<b>SOCIAL</b>				
16	Will the subproject create significant/limited/no social impacts?	No	No social impacts are envisaged due to the proposed project activities.	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in loss of income from agricultural land, plantation or other existing land.</li> </ul>	No	New land shall not be acquired for the proposed project.	N/A
	<ul style="list-style-type: none"> <li>• Impact on livelihood and economic activity.</li> </ul>	No	The project activities will not have an impact on the livelihood	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in the relocation of households.</li> </ul>	No	No households shall be relocated.	N/A

## Annex – I (D)

	<ul style="list-style-type: none"> <li>Any reduction of access to traditional dependent communities (to areas where they earn for their primary or substantial livelihood).</li> </ul>	No	Access will not be affected as the project site is within the premises of KW&SC Central Workshop.	N/A
	<ul style="list-style-type: none"> <li>Any displacement or adverse impact on tribal settlement(s).</li> </ul>	No	No tribal community is present in the project area.	N/A
	<ul style="list-style-type: none"> <li>Adverse impacts to women, including economic and safety concerns.</li> </ul>	No	Gender issues are not envisaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Impact on infrastructure (roads, water supply, any other type of infrastructure)</li> </ul>	No	No infrastructure will be damaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Possible conflicts with and/or disruption to local community and/or visitors.</li> </ul>	No	No local community resides in the project area.	N/A
	<ul style="list-style-type: none"> <li>Health risks due to unhygienic conditions at workers 'camps.</li> </ul>	Yes	Improper sanitation conditions and unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitoes and can result in spread of malaria and dengue. Ignorance of government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>COVID-19 SOPs will be strictly followed</li> <li>Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> </ul>
	<ul style="list-style-type: none"> <li>Safety hazards during construction.</li> </ul>	Yes	Ignorance of safety protocols may lead to worksite accidents.	<ul style="list-style-type: none"> <li>Use of PPEs to be ensured.</li> <li>Emergency evacuation plans will be followed.</li> </ul>
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
<b>OVERALL ASSESSMENT</b>				
<ul style="list-style-type: none"> <li>Subproject is declined</li> </ul>				
<ul style="list-style-type: none"> <li>Subproject is accepted</li> </ul>				The project is accepted.
<ul style="list-style-type: none"> <li>Subproject is classified as environmental Category A and requires an in-depth Environmental and Social Impact Assessment.</li> </ul>				

**Annex – I (D)**

○ Subproject is classified as environmental Category B and requires an Environmental and Social Management Plan.	
○ Subproject is classified as environmental Category C and does not require any further studies.	The subproject is categorized as <b>Category C</b> project and does not require further studies.

**Annex – I (E)**  
**Environmental Screening Checklist**  
**Nazimabad Fire Station Site**

## ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

<b>Project Name: Karachi Water and Sewerage Services Improvement Project (KWSSIP)</b>				
Subproject location (area/district/site): <b>Nazimabad Fire Station Site</b>				
Subproject scope of work: <b>Construction of Parking Shed</b>				
Implementing Agency: <b>PIU - KWSSIP</b>				
Date of screening: 03.01.2024				
Responsible agency: KW&SB				
<b>Sr. No.</b>	<b>Screening Criteria</b>	<b>Assessment of Impact</b>	<b>Explanation</b>	<b>Mitigation Measures</b>
<b>ENVIRONMENT</b>				
1	Will the subproject create significant/limited/no environmental impacts?	Limited	Construction footprint is limited and will create temporary, minor impacts including dust, air pollution, waste generation, etc.	<ul style="list-style-type: none"> <li>Limit the construction activities to the specified areas as per the approved engineering drawings.</li> </ul>
2	Is there any likelihood that the impacts are beyond the site boundary, or the impacts occurring during project implementation are beyond the planning area? Are such significant adverse environmental impacts considered irreversible? Please briefly describe:	No	The impacts will be localized in nature and will not cross the boundary of project area. The impacts are perceived to be temporary and reversible in nature.	NA
3	Does the sub-project involve any significant change or degradation to the critical/non-critical natural habitats?	No	No critical/ non-critical natural habitats are present within and near the project area.	NA
4	Is the subproject in an eco-sensitive area or adjoining an eco-sensitive area or monument? (Yes/No) If yes, which is the area? Elaborate impact accordingly.	No	No eco-sensitive area is present near the project boundary.	NA
5	Will the proposed project result in significant greenhouse gas emissions?	Limited	Use of heavy vehicles for the transportation of construction materials and construction machinery may lead to greenhouse gas emissions.	<ul style="list-style-type: none"> <li>Idling of vehicles will not be allowed</li> <li>Properly tuned and well-maintained equipment and vehicles will be used</li> </ul>
6	Is the proposed project likely to directly or indirectly increase environmental and social vulnerability to climate change now or in the future	No	The proposed project is not likely to directly or indirectly increase the environmental and social vulnerability to	N/A

**Annex – I (E)**

	(also known as maladaptive practices)?		climate change at any stage.	
7	Will the sub-project cause			
	<ul style="list-style-type: none"> <li>Clearance of vegetation/tree-cover/other</li> </ul>	No	No trees will be cut during site clearance.	N/A
	<ul style="list-style-type: none"> <li>Direct discharge of construction run-off, improper storage and disposal of excavation spoils, wastes and other construction materials adversely affecting water quality and flow regimes.</li> </ul>	No	No groundwater resource is present in and around the project area.	N/A
	<ul style="list-style-type: none"> <li>Flooding of adjacent areas.</li> </ul>	No	The project activities are not expected to cause flooding in the project area.	N/A
	<ul style="list-style-type: none"> <li>Improper storage and handling of substances leading to contamination of soil and water.</li> </ul>	Limited	However, no hazardous substances are envisaged to be used for the proposed construction activity. But the mishandling of different materials i.e., paints, and other materials may lead to soil contamination.	<ul style="list-style-type: none"> <li>Waste materials and other substances will not be disposed of openly into the land.</li> <li>All the materials will be handled properly based on the set protocols.</li> </ul>
	<ul style="list-style-type: none"> <li>Elevated noise and dust emission.</li> </ul>	Yes	Construction activities, movement of vehicles, transportation of equipment and construction works etc. shall lead to elevated noise and dust emissions.	<ul style="list-style-type: none"> <li>Muffling devices will be used in vehicles and machinery to reduce noise</li> <li>Transportation of construction materials will be avoided in rush hours</li> <li>Water sprinkling will be done over to lose soil to control dust emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>Disruption to traffic and visitor's movements.</li> </ul>	No	The project activities will be executed within the premises of KW&SC owned area and hence there will be no effect on traffic and visitors' movement.	N/A
	<ul style="list-style-type: none"> <li>Gas emissions</li> </ul>	No	No gas emissions are expected from the construction activities.	N/A
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			



**Annex – I (E)**

8	Does the subproject involve any prior clearance from the State Forest Department for either the conversion of forest land or for tree-cutting? (Yes/ No). If yes, which?	No	The project area is not the property of state forest land and it does not house any natural or manmade forest.	N/A
<b>CULTURAL HERITAGE</b>				
9	Will the subproject create significant/limited/no cultural properties impacts	No	No cultural properties shall be damaged or the access will not be affected due to project activities.	No
	<ul style="list-style-type: none"> <li>Involve significant excavations, demolition, movement of earth, flooding or other major environmental damages.</li> </ul>	No	No project activity shall cause demolition and damage to any of the cultural property	N/A
	<ul style="list-style-type: none"> <li>Is located within or in the vicinity of a recognized cultural property conservation area or heritage site.</li> </ul>	No	No recognized heritage site is available in the project area.	N/A
	<ul style="list-style-type: none"> <li>Is designed to support the management or conservation of a cultural property.</li> </ul>	No	The project does not support the management and conservation of any cultural property.	N/A
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
10	Does the subproject involve any prior clearance from the Archeology Department for either the conservation or management of heritage sites or vicinities? (Yes/ No). If yes, which?	No	No recognized heritage or archeological site is present in the project area.	N/A
<b>HEALTH AND SAFETY</b>				
11	Does the sub-project involve siting sanitation treatment facilities close to human settlements	No	The sub-project does not involve siting sanitation treatment facilities close to human settlements	N/A
12	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence,	No	The proposed project is not susceptible to or lead to increased vulnerability to earthquakes, subsidence,	N/A

## Annex – I (E)

	landslides, erosion, flooding or extreme climatic conditions?		landslides, erosion, flooding or extreme climatic conditions	
13	Would the project cause increase in public health risks to contagious diseases or transmission (e.g., HIV/AIDS, Malaria, etc.) for project workers or communities in the project area, as a result of a change in living and working conditions?	Yes	Improper sanitation conditions and an unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in the spread of malaria, dengue, and other relevant diseases. Ignorance of the government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>• COVID-19 SOPs will be strictly followed</li> <li>• Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>• Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> <li>• Water stagnation will be avoided</li> </ul>
14	Will the proposed project require additional health services?	No	The project activities will be limited in an area and only require basic first aid facilities at the contractors' camps.	N/A
15	Discharge of hazardous material into sewers, resulting in damage to sewer system and danger to workers	No	No hazardous material will be discharged into the sewerage system.	N/A
<b>SOCIAL</b>				
16	Will the subproject create significant/limited/no social impacts?	No	No social impacts are envisaged due to the proposed project activities.	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in loss of income from agricultural land, plantation or other existing land.</li> </ul>	No	New land shall not be acquired for the proposed project.	N/A
	<ul style="list-style-type: none"> <li>• Impact on livelihood and economic activity.</li> </ul>	No	The project activities will not have an impact on the livelihood	N/A
	<ul style="list-style-type: none"> <li>• Land acquisition resulting in the relocation of households.</li> </ul>	No	No households shall be relocated.	N/A
	<ul style="list-style-type: none"> <li>• Any reduction of access to traditional dependent communities (to areas</li> </ul>	No	Access will not be affected as the project site is within the premises of KW&SC Central Workshop.	N/A

**Annex – I (E)**

	where they earn for their primary or substantial livelihood).			
	<ul style="list-style-type: none"> <li>Any displacement or adverse impact on tribal settlement(s).</li> </ul>	No	No tribal community is present in the project area.	N/A
	<ul style="list-style-type: none"> <li>Adverse impacts to women, including economic and safety concerns.</li> </ul>	No	Gender issues are not envisaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Impact on infrastructure (roads, water supply, any other type of infrastructure)</li> </ul>	No	No infrastructure will be damaged due to project activities.	N/A
	<ul style="list-style-type: none"> <li>Possible conflicts with and/or disruption to local community and/or visitors.</li> </ul>	No	No local community resides in the project area.	N/A
	<ul style="list-style-type: none"> <li>Health risks due to unhygienic conditions at workers 'camps.</li> </ul>	Yes	Improper sanitation conditions and unhygienic environment in construction camps may arise health risks. Wastes and unhealthy conditions may attract vectors and mosquitos and can result in spread of malaria and dengue. Ignorance of government's SOPs for control of COVID-19 may lead to its spread.	<ul style="list-style-type: none"> <li>COVID-19 SOPs will be strictly followed</li> <li>Sanitation plan will be devised and implemented to ensure cleanliness</li> <li>Waste products will not be dumped openly to avoid the attraction of mosquitoes and disease vectors</li> </ul>
	<ul style="list-style-type: none"> <li>Safety hazards during construction.</li> </ul>	Yes	Ignorance of safety protocols may lead to worksite accidents.	<ul style="list-style-type: none"> <li>Use of PPEs to be ensured.</li> <li>Emergency evacuation plans will be followed.</li> </ul>
	<ul style="list-style-type: none"> <li>Other, specify.</li> </ul>			
<b>OVERALL ASSESSMENT</b>				
o Subproject is declined				
o Subproject is accepted				
o Subproject is classified as environmental Category A and requires an in-depth Environmental and Social Impact Assessment.				
o Subproject is classified as environmental Category B and requires an Environmental and Social Management Plan.				
o Subproject is classified as environmental Category C and does not require any further studies.				
				The subproject is categorized as <b>Category C</b> project and does not require further studies.

**Annex - II:**  
**Social Screening Checklist**

**Annex – II (A)**  
**CE&S Division at KW&SC Central Workshop,**  
**9th Mile Shahrah-e-Faisal**

## Karachi Water and Sewerage Services Improvement Project (KWSSIP)

### Social Screening & Categorization Form (SSCF)

1. **Project Name:** Karachi Water and Sewerage Services Improvement Project (KWSSIP)

2. **Sub-Project Area:** SCE&S Division at KW&SC Central Workshop at 9th Mile Shahrah-e-Faisal

3. **Project Scope of Work (list the major interventions):** The project involves construction of a parking shed.

4. **Project Location /Administrative Boundary:** Karachi

5. **Will any land acquisition be required for the proposed project activity?**

YES \_\_\_\_\_ NO

If YES, please provide the following information:

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(i) **Is the site known?** YES \_\_\_ NO \_\_\_\_\_

If YES, please provide the details:

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(ii) **Is ownership status and current usage of land to be acquired known?**

YES \_\_\_ NO \_\_\_\_\_

If YES, please provide details

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(iii) **Will the existing Right of Way be used for the project works?**

YES \_\_\_ NO \_\_\_\_\_

If YES, please provide details:

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(iv) **Please state the type of losses expected due to the project development:**

Loss of shelter and residential land?	Yes ___	No <input checked="" type="checkbox"/>
Loss of Agricultural and other productive assets?	Yes ___	No <input checked="" type="checkbox"/>
Losses of crops, trees and fixed assets?	Yes ___	No <input checked="" type="checkbox"/>
Loss of Livelihood	Yes ___	No <input checked="" type="checkbox"/>
Loss of sources of income and means of livelihood?	Yes___	No <input checked="" type="checkbox"/>

Please provide details based on the responses provided above.

6. Will the proposed project activity require dislocation of people?

YES \_\_\_ NO

If YES, please mention the estimated number of people to be displaced and provide details of whether they are poor, female headed households or vulnerable to poverty risks?

7. Will the project activity cause the people to lose or restrict access to natural resources or communal facilities?

YES \_\_\_ NO

If YES, please provide details

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8. Will access to land and resources owned communally or by the state be restricted?

YES \_\_\_ NO

9. Is the sub-project area being affected by the Anti-Encroachment Drive in Karachi?

YES \_\_\_ NO

10. Will any indigenous people be impacted by the project activity?

YES \_\_\_ NO

11. Any estimate of the likely number of persons that will be affected by the Project?

Yes  No \_\_\_

If yes, approximately how many? 0

**Project Category Recommendation**

It is recommended that based on the available project information and subsequent analysis, the project should be placed in (please tick one):

Category 'A' \_\_\_

Category 'B' \_\_\_

Category 'C'

No PAPs

**Annex – II (B)**  
**Social Screening Checklist**  
**Pumping Station - II (PS-II) Site at Korangi**



## Karachi Water and Sewerage Services Improvement Project (KWSSIP)

### Social Screening & Categorization Form (SSCF)

12. **Project Name:** Karachi Water and Sewerage Services Improvement Project (KWSSIP)
13. **Sub-Project Area:** Pumping Station - II (PS-II) Site at Korangi
14. **Project Scope of Work (list the major interventions):** The project involves construction of a parking shed.
15. **Project Location /Administrative Boundary:** Karachi
16. **Will any land acquisition be required for the proposed project activity?**  
 YES \_\_\_\_\_ NO

If YES, please provide the following information:

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(v) Is the site known? YES \_\_\_\_\_ NO \_\_\_\_\_

If YES, please provide the details:

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(vi) Is ownership status and current usage of land to be acquired known?

YES \_\_\_\_\_ NO \_\_\_\_\_

If YES, please provide details

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(vii) Will the existing Right of Way be used for the project works?

YES \_\_\_\_\_ NO \_\_\_\_\_

If YES, please provide details:

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(viii) Please state the type of losses expected due to the project development:

Loss of shelter and residential land?	Yes _____	No <input checked="" type="checkbox"/>
Loss of Agricultural and other productive assets?	Yes _____	No <input checked="" type="checkbox"/>
Losses of crops, trees and fixed assets?	Yes <input checked="" type="checkbox"/>	No _____
Loss of Livelihood	Yes _____	No <input checked="" type="checkbox"/>
Loss of sources of income and means of livelihood?	Yes _____	No <input checked="" type="checkbox"/>

Please provide details based on the responses provided above.

17. Will the proposed project activity require dislocation of people?

YES \_\_\_ NO

If YES, please mention the estimated number of people to be displaced and provide details of whether they are poor, female headed households or vulnerable to poverty risks?

18. Will the project activity cause the people to lose or restrict access to natural resources or communal facilities?

YES \_\_\_\_\_ NO

If YES, please provide details

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19. Will access to land and resources owned communally or by the state be restricted?

YES \_\_\_\_\_ NO

20. Is the sub-project area being affected by the Anti-Encroachment Drive in Karachi?

YES \_\_\_\_\_ NO

21. Will any indigenous people be impacted by the project activity?

YES \_\_\_ NO

22. Any estimate of the likely number of persons that will be affected by the Project?

Yes  No \_\_\_

If yes, approximately how many? 0

**Project Category Recommendation**

It is recommended that based on the available project information and subsequent analysis, the project should be placed in (please tick one):

Category 'A' \_\_\_\_\_ Category 'B' \_\_\_ Category 'C'

No PAPs

**Annex – II (C)**  
**Social Screening Checklist**  
**Sewage Treatment Plant (STP-I) Site at Shershah**

## Karachi Water and Sewerage Services Improvement Project (KWSSIP)

Social Screening & Categorization Form (SSCF)

23. **Project Name:** Karachi Water and Sewerage Services Improvement Project (KWSSIP)

24. **Sub-Project Area:** Sewage Treatment Plant (STP-I) Site at Shershah

25. **Project Scope of Work (list the major interventions):** The project involves construction of a parking shed.

26. **Project Location /Administrative Boundary:** Karachi

27.

Will any

land acquisition be required for the proposed project activity?

YES \_\_\_\_\_ NO

If YES, please provide the following information:

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(ix) Is the site known? YES \_\_\_ NO \_\_\_\_\_

If YES, please provide the details:

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(x) Is ownership status and current usage of land to be acquired known?

YES \_\_\_ NO \_\_\_\_\_

If YES, please provide details

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(xi) Will the existing Right of Way be used for the project works?

YES \_\_\_ NO \_\_\_\_\_

If YES, please provide details:

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(xii) Please state the type of losses expected due to the project development:

Loss of shelter and residential land?	Yes ___	No <input checked="" type="checkbox"/>
Loss of Agricultural and other productive assets?	Yes ___	No <input checked="" type="checkbox"/>
Losses of crops, trees and fixed assets?	Yes <input checked="" type="checkbox"/>	No ___
Loss of Livelihood	Yes ___	No <input checked="" type="checkbox"/>
Loss of sources of income and means of livelihood?	Yes ___	No <input checked="" type="checkbox"/>

Please provide details based on the responses provided above.

28.

Will

the

proposed project activity require dislocation of people?

YES \_\_\_ NO

If YES, please mention the estimated number of people to be displaced and provide details of whether they are poor, female headed households or vulnerable to poverty risks?

29. Will the project activity cause the people to lose or restrict access to natural resources or communal facilities?

YES \_\_\_\_\_ NO

If YES, please provide details

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30. Will access to land and resources owned communally or by the state be restricted?

YES \_\_\_\_\_ NO

31. Is the sub-project area being affected by the Anti-Encroachment Drive in Karachi?

YES \_\_\_\_\_ NO

32. Will any indigenous people be impacted by the project activity?

YES \_\_\_ NO

33. Any estimate of the likely number of persons that will be affected by the Project?

Yes  No \_\_\_

If yes, approximately how many? 0

**Project Category Recommendation**

It is recommended that based on the available project information and subsequent analysis, the project should be placed in (please tick one):

Category 'A' \_\_\_\_\_ Category 'B' \_\_\_\_\_ Category 'C'

No PAPs

**Annex – II (D)**  
**Social Screening Checklist**  
**LSR, Gulshan e Iqbal**

## Karachi Water and Sewerage Services Improvement Project (KWSSIP)

Social Screening & Categorization Form (SSCF)34. **Project Name:** Karachi Water and Sewerage Services Improvement Project (KWSSIP)35. **Sub-Project Area:** LSR, Gulshan e Iqbal -e-Faisal36. **Project Scope of Work (list the major interventions):** The project involves construction of a parking shed.37. **Project Location /Administrative Boundary:** Karachi

38.

Will any

land acquisition be required for the proposed project activity?

YES \_\_\_\_\_ NO 

If YES, please provide the following information:

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(xiii) Is the site known? YES \_\_\_ NO \_\_\_\_\_

If YES, please provide the details:

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(xiv) Is ownership status and current usage of land to be acquired known?

YES \_\_\_ NO \_\_\_\_\_

If YES, please provide details

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(xv) Will the existing Right of Way be used for the project works?

YES \_\_\_ NO \_\_\_\_\_

If YES, please provide details:

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(xvi) Please state the type of losses expected due to the project development:

Loss of shelter and residential land?	Yes ___	No <input checked="" type="checkbox"/>
Loss of Agricultural and other productive assets?	Yes ___	No <input checked="" type="checkbox"/>
Losses of crops, trees and fixed assets?	Yes <input checked="" type="checkbox"/>	No ___
Loss of Livelihood	Yes ___	No <input checked="" type="checkbox"/>
Loss of sources of income and means of livelihood?	Yes ___	No <input checked="" type="checkbox"/>

Please provide details based on the responses provided above.

39. Will the proposed project activity require dislocation of people?

YES \_\_\_ NO

If YES, please mention the estimated number of people to be displaced and provide details of whether they are poor, female headed households or vulnerable to poverty risks?

40. Will the project activity cause the people to lose or restrict access to natural resources or communal facilities?

YES \_\_\_\_\_ NO

If YES, please provide details

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41. Will access to land and resources owned communally or by the state be restricted?

YES \_\_\_\_\_ NO

42. Is the sub-project area being affected by the Anti-Encroachment Drive in Karachi?

YES \_\_\_\_\_ NO

43. Will any indigenous people be impacted by the project activity?

YES \_\_\_ NO

44. Any estimate of the likely number of persons that will be affected by the Project?

Yes  No \_\_\_

If yes, approximately how many? 0

**Project Category Recommendation**

It is recommended that based on the available project information and subsequent analysis, the project should be placed in (please tick one):

Category 'A' \_\_\_ Category 'B' \_\_\_ Category 'C'

No PAPs



**Annex – II (E)**  
**Social Screening Checklist**  
**Nazimabad Fire Station Site**

## Karachi Water and Sewerage Services Improvement Project (KWSSIP)

### Social Screening & Categorization Form (SSCF)

45. **Project Name:** Karachi Water and Sewerage Services Improvement Project (KWSSIP)
46. **Sub-Project Area:** Nazimabad Fire Station Site
47. **Project Scope of Work (list the major interventions):** The project involves construction of a parking shed.
48. **Project Location /Administrative Boundary:** Karachi
49. **Will any land acquisition be required for the proposed project activity?**  
 YES \_\_\_\_\_ NO

If YES, please provide the following information:

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- (xvii) **Is the site known?** YES \_\_\_ NO \_\_\_\_\_

If YES, please provide the details:

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- (xviii) **Is ownership status and current usage of land to be acquired known?**

YES \_\_\_ NO \_\_\_\_\_

If YES, please provide details

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- (xix) **Will the existing Right of Way be used for the project works?**

YES \_\_\_ NO \_\_\_\_\_

If YES, please provide details:

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(xx) Please state the type of losses expected due to the project development:

Loss of shelter and residential land?	Yes ___	No <input checked="" type="checkbox"/>
Loss of Agricultural and other productive assets?	Yes ___	No <input checked="" type="checkbox"/>
Losses of crops, trees and fixed assets?	Yes ___	No <input checked="" type="checkbox"/>
Loss of Livelihood	Yes ___	No <input checked="" type="checkbox"/>
Loss of sources of income and means of livelihood?	Yes___	No <input checked="" type="checkbox"/>

Please provide details based on the responses provided above.

proposed project activity require dislocation of people?

YES \_\_\_ NO

If YES, please mention the estimated number of people to be displaced and provide details of whether they are poor, female headed households or vulnerable to poverty risks?

51. Will the project activity cause the people to lose or restrict access to natural resources or communal facilities?

YES \_\_\_\_\_ NO

If YES, please provide details

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52. Will access to land and resources owned communally or by the state be restricted?

YES \_\_\_\_\_ NO

53. Is the sub-project area being affected by the Anti-Encroachment Drive in Karachi?

YES \_\_\_\_\_ NO

54. Will any indigenous people be impacted by the project activity?

YES \_\_\_ NO

55. Any estimate of the likely number of persons that will be affected by the Project?

Yes  No \_\_\_

If yes, approximately how many? 0

**Project Category Recommendation**

It is recommended that based on the available project information and subsequent analysis, the project should be placed in (please tick one):

Category 'A' \_\_\_\_\_ Category 'B' \_\_\_\_\_ Category 'C'

No PAPs

**Annex - III:**  
**Health and Safety Management Plan**

## **Health & Safety Management Plan (HSMP)**

### **1.0 Introduction**

This health and safety management plan has been prepared to identify and outline the manner in which construction site health and safety aspects will be managed to ensure the safe and efficient performance of the construction phase activities and to minimize adverse effects on the existing community and workers arising from construction activities. HSMP plan is prepared under the guidelines given in Health and Safety Framework for South Asia Region by the World Bank.

This plan is designed to identify, evaluate, and control health and safety hazards for the purpose of protecting employees. The plan provides for emergency response activities at the job site as well as covering site hazard analysis, training requirements, engineering controls, materials handling, and safe construction operations. This plan is intended to provide guidance and information in dealing with the hazards that may be faced on the construction site by the contractor and its workers.

The consultant as a third-party validator will monitor the compliance of the plan by the contractor and its workers on each construction site.

The purpose of this plan is to illustrate safety issues specific to the KWSSIP. This plan is intended to maintain a safe work environment and effectively reduce the number of accidents resulting in personal injury, property damage, and damage to construction equipment.

### **2.0 Scope of Project**

#### **2.1 Scope of Work**

KWSB has conceived KWSSIP in the form of a series of projects (SOPs), which form a long-term program to address the serious water and sewerage service gaps in the rapidly growing city of Karachi.

This HSMP focuses on the health issues associated with the construction of Parking Shed.

#### **2.2 Site Location**

The parking sheds will be built at the following locations in the city.

- Sewer Cleaning Equipment & Services (SCE&S) Division at KW&SC Central Workshop at 9th Mile Shahrah-e-Faisal
- Pumping Station - II (PS-II) Site at Korangi
- Sewage Treatment Plant (STP-I) Site at Shershah
- LSR Site near DC East Office Gulshan - e Iqbal
- Nazimabad Fire Station Site

### **3.0 Health and Safety Responsibilities**

The effectiveness and success of the safety plan implementation depend upon the active participation and cooperation of all employees. The duties and responsibilities of all employees under this policy are the following:

#### **3.1 Project Engineer**

- Prepare the Site-Specific Safety Plan.
- Direct and coordinate health and safety regulations related to the construction site.
- Participate in post-accident investigations.
- Assist in formulating policy matters.
- Implement contractor Safety Program and Policy

#### **3.2 Foremen/Supervisors**

- Be familiar with, explain, and enforce health and safety plan under his jurisdiction.
- Direct and coordinate health and safety activities within the area or responsibility
- Ensure safety devices and proper PPE are used by employees under supervision.
- Instruct and train all employees within the area of responsibility in job health and safety requirements, including (but, not limited to) hazard recognition and avoidance. Also, foreman/front-line supervisors must require compliance by employees with the established safety rules.
- Direct the correction of unsafe conditions.
- Ensure safety equipment is available, maintained, used, and stored correctly.
- Ensure injuries are treated promptly and reported properly.
- Participate in post-accident investigations.
- Coordinate daily job site inspection.
- Implement health and safety plan at each site as per required.

#### **3.3 Construction Workers**

The main responsibility of every worker at the construction site will be to follow the health and safety instructions and procedures.

- Be familiar with and comply with proper health and safety practices.
- Use the required safety devices and proper PPE.
- Notify the supervisor immediately of unsafe conditions/- acts, accidents, and injuries.
- Implement the health and safety plan

#### **3.4 Subcontractors**

By the contract, the subcontractors will have to comply with and ensure the compliance of their employees with the provisions of health and safety policy as well as their own safety program.

Failure to fulfill this requirement is a failure to meet the conditions of the subcontract.

### **3.5 Supervision Consultant (SC)**

SC will validate the effective implementation of the health and safety plan at the site. PIU-KWSSIP will be overall responsible for the safe construction work at each site.

## **4.0 General Health and Safety Procedures**

### **4.1 Personal Protective Equipment (PPE)**

The contractor provides Personal Protective Equipment (PPE) to all employees. Hard hats, safety glasses, and safety work boots are required to be worn at all times when on the job site. Reflective vests are required when working outside around equipment or traffic. Exceptions may be made to this PPE requirement only under an approved contractor work plan. Employees learn where to get PPE during their new-hire orientation and are responsible for wearing and maintaining the required PPE. Additional PPE may be required depending on the task and if there is a potential for exposure to hazardous conditions. PPE requirements are reviewed by the foreman. Employees are expected to use reasonable judgment regarding whether additional PPE (beyond the required) is necessary for certain tasks. If employees are unsure of the type of PPE required for a specific task or job, they should ask the supervisor.

### **4.2 Equipment Use and Operation**

Equipment is used only for its intended use and as recommended by the manufacturer. Using equipment for purposes other than what it is designed for is prohibited. Employees are prohibited from operating a vehicle in a reckless manner or at a speed greater than is reasonable and proper, with due regard for weather, traffic, the character of roadway, load, type of vehicle, and any other conditions which may affect the safe operation of the vehicle. The vehicle must be kept under control at all times and special care is exercised when transporting personnel.

Employees may only ride equipment if there are seats or equal protection available for each person. Seatbelts are worn at all times while operating equipment with seats. No cell phone or earbud is used while operating equipment.

### **4.3 Repair**

Employees are prohibited from making repairs, alterations, or attachments to equipment in the field except with the permission of the superintendent, foreman, or equipment mechanic. Only qualified personnel will perform repairs on equipment. Such repairs, alterations, or attachments are documented on the appropriate shop forms.

Employees are prohibited from removing a guard, safety device, or appliance from equipment or machinery except to make repairs. While making repairs, employees use appropriate lockout/tag-

out procedures. When repairs are complete, the guard, safety device, or appliance is replaced immediately.

#### **4.4 Conduct**

The following conduct is prohibited and may result in discipline up to and including termination:

- Horseplay and scuffling on the job.
- Making a false report or misrepresentation.
- Fighting.
- Use of alcohol or any other drugs
- Dishonesty and theft of the property.
- Deliberate misuse of the equipment.
- Unnecessary risk-taking.
- Violating or disobeying any instruction given by a supervisor

#### **5.0 General Jobsite Procedures**

##### **5.1 New Hire Orientation**

New-hire orientation may consist of, but is not limited to, the following:

- Have the employee read the health and safety plan and other safety requirements, guidelines etc. Answer any questions the new hire may have about these policies and request a signature on the Statement of Understanding.
- Orient the employee to the job site indicating the location of the emergency facilities, portable fire extinguishers, first-aid station, emergency phone numbers, public notices, and any job site-specific information.
- Explain the injury and accident policy.
- Review the written hazard communication program. Discuss hazards, container labeling, and the use of protective equipment.
- Explain the emergency response plan for catastrophic events such as fire, explosion, etc.
- Issue PPE as required for the job

##### **5.2 Training**

Training and education are necessary for the success of this policy. Employees are trained to recognize job site hazards and the procedures to follow to minimize these hazards. Training may consist of (but is not limited to) the following:

- Weekly job site safety meetings.
- Orientation training for new hires.
- Individual job/task training, including the applicable regulations/standards for the specific job/task.



Supervisors and management receive ongoing safety training throughout the year.

### **5.3 Safety Meetings**

Weekly safety meetings are held on the job site. All employees and subcontractors are required to attend. The meetings may cover a range of safety-related topics. The format and content of the meetings are up to the discretion of the superintendent. Monthly safety meetings are held for all foremen, superintendents, project managers, project engineers, contractors, and other management personnel. These meetings are for the purpose of discussing companywide safety issues and providing continued safety training and education.

### **5.4 Safety Inspections**

The superintendent and foreman conduct an initial safety inspection at the beginning of each project. In addition, a daily safety inspection of the job site is conducted by the contractor employees, employees of a subcontractor, or some combination thereof. The inspection is rotated between all workers on the job site. Any safety concern found during the inspection is reported. If a worker is unclear about any safety aspect, the foreman or project Engineer helps. If the area being inspected requires a *competent person*, the employee conducts the inspection with the competent person. Also, if time allows, the foreman for the worker conducting the inspection is encouraged to walk through it with them.

### **5.5 Hazard Communication**

The contractor needs to develop a written hazard communication plan. It will be explained to each employee during the new-hire orientation. The purpose of the hazard communication plan is to provide employees with information on the chemical and physical hazards that may be present at the job site. Safety Data Sheets for all chemicals will be kept on site.

### **5.6 Job Hazard Analysis**

A job hazard analysis may be developed covering the major activities of construction, the hazards associated with these activities, and ways to mitigate these hazards.

### **5.7 Housekeeping**

Housekeeping is one of the most important factors for a safe job site. Form material should be scraped and all protruding nails pounded down. All other debris is cleared from work areas, passageways, and stairs. Excess materials are stacked neatly out of the way. Tools should be stored in the toolbox so these are available for all employees to use.

Combustible scrap and debris are removed at regular intervals during the course of construction. Containers with covers are provided for the collection and separation of waste, trash, oily and used rags, and other such refuse, which is removed safely and on a regular basis.

Foreign object and debris (FOD) is a significant concern in nearby occupied spaces and construction areas. It is extremely important to keep all trash and debris contained at this site. Housekeeping will be strictly enforced

## **5.8 Fall Protection**

The contractor provides fall protection when employees are exposed to fall hazards.

Fall protection may consist of, but is not limited to, the following:

- A stairway or ladder is provided at any point of access where there is a break in elevation of 19 inches or more.
- Guardrails are installed for all leading-edge work. For loading bay locations fall-arrest systems or fall-restraint systems are used.
- Safety harnesses with approved lanyards and tie-off points are used for all other fall protection unless an appropriate procedure or device was approved in advance by a competent person.
- Stilts may be used on job sites but work area floors must be clean/clear of all debris, materials, and equipment.

## **5.9 Electrical Safety**

Electrical safety may consist of, but is not limited to, the following:

- Live electrical parts are guarded against accidental contact by cabinets, enclosure, location, or guarding.
- Extension cords are kept in safe, working condition.
- All lamps for general illumination have the bulbs protected against breakage. All light sockets are filled with a working bulb.
- Employees will not work in such close (able to contact) proximity to any part of an electric power circuit unless the circuit is de-energized, grounded, or guarded by insulation.
- De-energized equipment or circuits are locked out and tagged out. The tags identify the equipment or circuits being worked on.
- All generators used for temporary power shall be grounded according to manufacturers' specifications.
- Equipment shall not be operated closer than 10 feet from power lines less than 50kV. Safe distance will increase near higher voltage power lines, (over 50kV)

## 5.10 Tools

The contractor provides tools for employees to use. Only trained employees are allowed to use such tools. The safe use of tools may consist of, but is not limited to the following:

- Unsafe or defective tools are removed from service and tagged out.
- Power tools are turned off and motion stopped before setting down.
- Tools are disconnected from the power source before changing drills, blades, or bits and before any repair or adjustment is made. Running tools are not left unattended.
- Portable abrasive grinders have guards installed covering the upper and back portions of the abrasive wheel.

## 5.11 Scaffolds

Scaffolds are erected, moved, dismantled, or altered under the supervision of a competent person for scaffolding. Scaffold use consists of, but is not limited to, the following procedures:

- Standard guardrails are installed on all open sides and ends of scaffold platforms and/or work levels more than ten feet below the ground.
- Scaffolds four to ten feet in height with a minimum horizontal dimension in any direction less than 45 inches have standard railings installed on all open sides/ends.
- Platforms at all working levels are fully planked. Planking is laid tight with no more than one inch space between them, overlap at least 12 inches, and extends over end supports 6-12 inches unless cleats are used.
- The front edge of all platforms is no more than 14 inches from the face of the work, except plastering/lathing may be 18 inches.
- Mobile scaffolds are erected no more than a maximum height of four times their minimum base dimension.
- Scaffold casters/wheels are locked whenever the platform is occupied.
- Scaffolds are not overloaded beyond their design loadings.
- Scaffold components are not used as tie-off/anchor points for fall-protection devices.
- Portable ladders, hook-on ladders, attachable ladders, integral prefabricated scaffold frames, walkways, or direct access from another scaffold or structure are used for access when platforms are more than two feet above or below a point of access.
- Cross braces are not used as a means of access to scaffolds.
- Scaffolds are not erected, used, dismantled, altered, or moved such that they or any conductive material handled on them might come close to exposed and energized power lines than the following:
  - Three feet from insulated lines of less than 300 volts;
  - Ten feet plus for any other insulated or uninsulated Lines

## **5.12 Excavation and Trenches**

Excavation and trenching are done in the presence of a competent person and in compliance with, but not limited to, the following procedures:

- Any excavation or trench five feet or more in-depth is provided cave-in protection through shoring, sloping, benching, or the use of hydraulic shoring, trench shields, or trench boxes. Trenches less than five feet in depth and showing potential of cave-in are also provided cave-in protection. Specific requirements of each system are dependent upon the soil classification as determined by a competent person.
- A competent person inspects each excavation/trench daily prior to the start of work, after every rainstorm or other hazard-increasing occurrence, and as needed throughout the shift.
- Any material and equipment are kept at least two feet from the edge of the trench or excavation.

## **5.13 Ladders**

Ladders are inspected during the weekly inspections to identify any unsafe conditions. Any ladders found to be unsafe are taken out of service. Extension ladders extend three feet above the work surface and are 100 percent tied off. Step ladders are only used in the open position. Ladders are stored lying down. No standing on the top step or first rung below the top of a step ladder.

## **5.14 Illumination**

Construction areas and storage areas where work is in progress are lighted with either natural or artificial illumination.

## **5.15 Motor Vehicles and Mechanized Equipment**

Vehicles and equipment are only operated by qualified persons (training or experience). All equipment operators are responsible for checking, on a daily basis, all fluid levels, drive components, and hydraulics. In addition, operators visually inspect the engine and look for structural breaks and cracks on the machine. Any and all deficiencies must be reported to a supervisor immediately.

When equipment is stopped or parked, parking brakes are set and other safety precautions are taken as required for the type of equipment such as placing the forks flat on the ground. Keys shall be removed from equipment at the end of each shift.

## **5.16 Severe Weather**

Outside construction operations including, but not limited to site work, and concrete work are suspended if severe wind or rain conditions present safety hazards at the worksite. Rain and wind storm hazards are evaluated and appropriate measures are taken to abate potential hazards.

## **5.17 Accident**

All accidents and near misses must be reported immediately to the foreman or superintendent. An accident report is then filled out by the employee and the supervisor. Filling out an accident report does not require the delay of medical attention. Any injury is treated first. Employees file such reports without fear of reprisal by management. The accident or incident may be discussed at weekly safety meetings to avoid that sort of accident in the future.

## **5.18 First Aid**

First-aid kits are available in the project office, at the appropriate and accessible locations as indicated during orientation. In addition, foremen and superintendents maintain current first aid boxes at the site.

## **5.19 Fire Protection**

The contractor maintains appropriate fire extinguishers at the fire-prone areas of the construction site. All equipment is fitted with portable fire extinguishers. Employees are instructed on the location and usage of these fire extinguishers. Emergency telephone numbers for fire protection and emergency medical services are posted on the field office bulletin board.

## **5.20 Emergency Action Plan**

Each job site develops an emergency action plan that is reviewed with each employee during orientation. The emergency action plan covers emergency escape procedures, procedures followed by employees remaining to operate critical operations before they evacuate, procedures to account for all employees, rescue and medical duties, and how to report emergencies.

## **5.21 Environmental Protection Plan**

This health and safety plan also contains an Environmental Protection Plan for the control, prevention, management, containment, cleanup, and disposal of petroleum products or other hazardous substances which may be generated on each project site. The Project Engineer directs measures to control and prevent accidental discharge of petroleum products or other hazardous substances during storage and transfer on all job sites. Any onsite storage is in approved containers. Absorbent pads and other recovery equipment shall be available to contain and recover any fuel accidentally spilled. Any spills and contaminated soils are cleaned and disposed of in accordance with applicable requirements.

## **5.22 Traffic and Pedestrian Control**

A traffic control plan will be developed and put in place prior to beginning work on the project for the protection of workers and the general public. Barricades and signage must be placed around job site areas to reroute vehicle traffic and keep pedestrians out of the job site.

Project Engineers and Superintendents will evaluate the site before work starts to plan site control. Fencing, signage, and barricades shall be erected and secured as to keep pedestrians out.

Any time while performing work near or on a roadway and a worker has a sense of traffic patterns not being controlled properly or speeds too extreme for conditions, the worker should remove himself from the area and notify Supervisor. The Project Engineer shall stress and discuss, at weekly meetings, for all workers to be aware of traffic hazards and pedestrians.

## **5.24 Concrete Work**

The project involves concrete work. There are many hazards associated with this work including but not limited to; Slips Trips, Falls, Strains and Sprains, Eye Injuries, Chemical Burns, and Silica Exposure. The risk assessment shall be performed for all concrete work to minimize the associated hazards

## **6.0 Monitoring and Reporting**

Monitoring the implementation of the health and safety plan and progress reporting will be very important for the effective enforcement of the plan. PIU project team along with the supervision consultant will validate effective reinforcement of HSMP. The supervision consultant will frequently visit the construction sites and monitor the effectiveness of the plan implementation. The status of implementation will be reported to the PIU fortnightly.

**Annex - IV:**  
**Emergency Response Plan**

## **Emergency Response Plan**

### **1. Introduction**

Emergency management can be defined as the organization, coordination and implementation of a range of measures to prevent, mitigate, respond to, overcome and recover from the consequences of emergency events affecting the community, its assets and the environment.

### **2. Purpose of Plan**

This plan intends to provide a framework for safety and security to infrastructure, people and vehicles. It assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in an emergency situation that exceeds the capability or routine responsibility of any one agency.

The emergency response plan provides guidance to;

- Prevent any potential sources causing hazard to the resources during all stages of the project;
- Coordinate between various organizations to take actions in case of emergencies;
- Protect people and property in emergencies and disasters;
- Develop procedures to respond to the emergencies efficiently;
- Identify and ensure availability of personnel, equipment, facilities, supplies, and other resources for use in order to provide timely and efficient response and recovery operations; and
- Confirm that measures taken in an incident are adequate to recover the affected resources or further improvements are needed.

### **3. Planning**

#### **i. Emergency Response Team**

A group/ team shall be dedicated to identify and control potential emergencies during the construction and operation of the project. The roles and responsibilities of the group members shall be clearly defined.

The primary responsibilities of the group are described below:

- Identify the potential hazard or risk sources that can lead to emergency situations; Ensure availability of adequate resources, procedures and communication system to deal with the identified emergency situations;
- Ensure awareness and training of the staff to facilitate implementation of the emergency response plan;
- Maintaining the records of any previous incidents; and
- Post-event analysis to bridge the gaps of the existing risk prevention procedures.



The emergency response team shall include but not limited to the following;



#### **A. Site Incharge**

- Approve/ modify devised measures to prevent or mitigate the risks associated with the identified risk sources;
- Arrange resources for dealing with potential emergencies including, financial, equipment and personnel required to deal with emergencies;
- Assure that the Emergency Response Plan is adequate, effective and implementable.

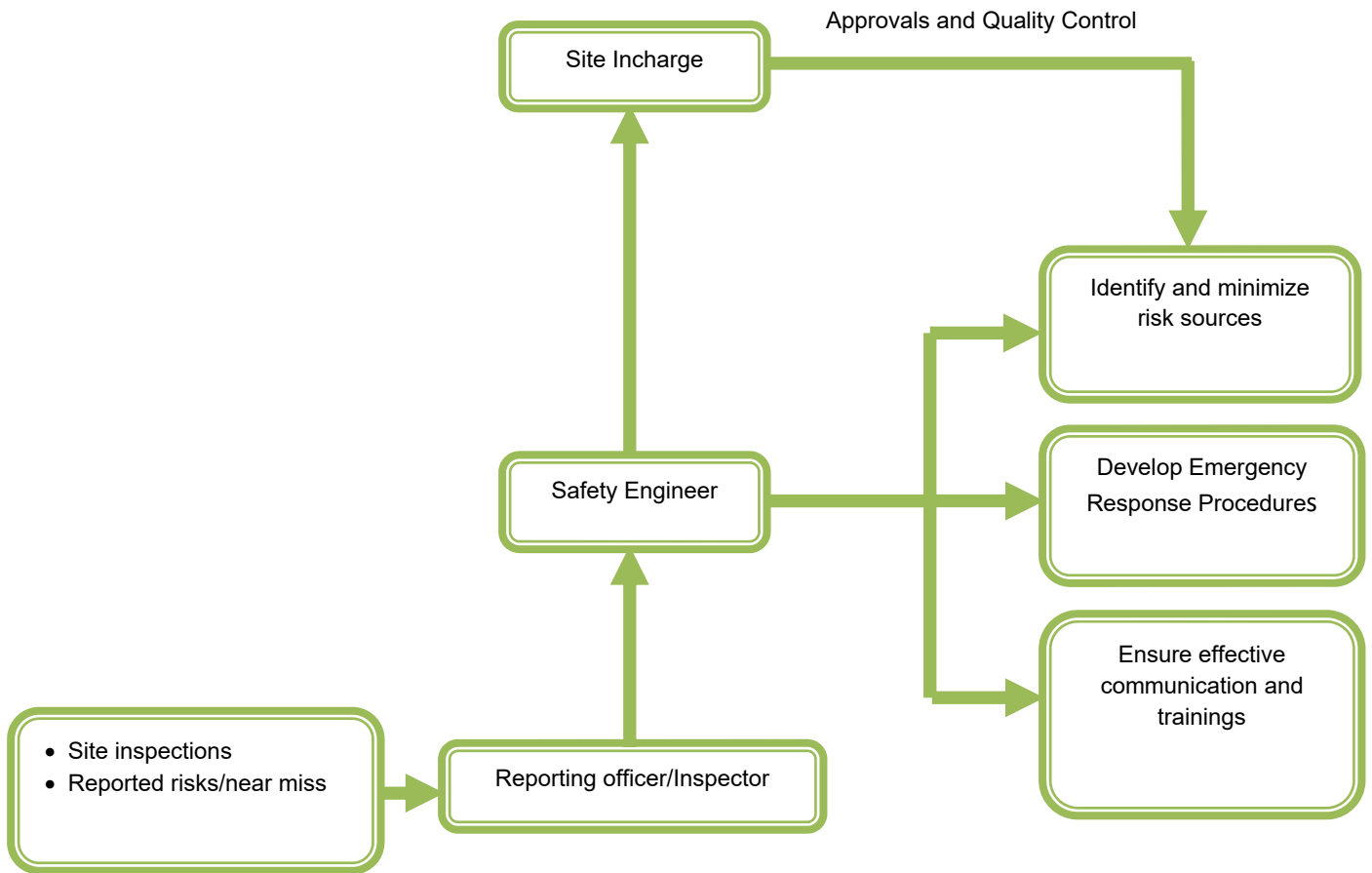
#### **B. Safety Engineer**

- Analyze the Identified risk sources and devise measures to prevent or mitigate the risks in close consultation with the Team Leader;
- Develop and implement the Emergency Response Procedures, in case of the possible emergencies arise;
- Ensure effective internal and external communication; and
- Provide regular trainings and arrange drills to make people aware of dealing with emergencies.

#### **C. Reporting officer/Inspector**

- Regular inspections of the site, to identify potential risks associated with equipment, materials and work practices;
- Anybody from the site can notify the reporting officer about potential risk and/ or near-misses on the site;
- Record any identified risks and mitigation measures to control the identified risk; and
- Notify the issue and control measures taken thereby to the safety engineer.

The designation, roles and responsibilities of each member shall be clearly defined and communicated to the employees. An outline of the framework of responsibilities is presented in the following organizational chart:



## ii. Hazard Identification

A comprehensive identification and evaluation of the hazards/ risks likely to cause an emergency shall be done by Emergency Response Team (ERT). Major potential emergencies identified in projects are as follows:

- Fire
- Earthquake
- Terrorism (including bombing)
- Disease Outbreak
- Structural failure
- Disruption of Utilities (Power, Water, Telecommunications, Gas, etc.)
- Accidents (falls, slips, electric shocks etc.)
- Vehicular accident
- Failure of trenches
- Power/ equipment failure
- Vandalism

### **iii. Prevention and Mitigation**

The ERT shall work to eliminate or reduce the impact of identified emergencies and increasing the resilience of an affected community to recover from the consequences of such events. These activities include:

- Design considerations to control flooding, earthquakes and adequate lightening for fog etc.;
- Regular inspection and maintenance of construction machinery and the structural integrity;
- Review of work schedules based on weather updates; and
- Security controls based on political situations.

## **4. Emergency Preparedness**

The ERT shall be prepared with all necessary resources and the personnel shall be trained regularly.

### **i. Resources**

#### **Finance and administration**

The financial resources shall be reserved for dealing with any emergencies arising on site during construction. Responsibilities of the person managing the resources in case of emergencies shall be clearly defined and the required resources shall be adequate and updated regularly.

#### **Equipment**

All the necessary equipment needed in an event of emergencies shall be made available, as a minimum, the equipment needed include;

- Personal Protective Equipment
- Alarms/ Warnings
- Fire extinguishers
- Crowd control, flashlights, signs, barricades
- First Aid Facility
- Detection instruments, e.g. personal alarm kits; smoke detection instruments
- Tools to fix minor vandalism

#### **Communication**

All external and internal communication systems shall be made available. Local emergency numbers shall be clearly posted and communicated to the personnel involved in construction.

The local emergency numbers are given below, which shall be regularly updated.

### **Emergency Numbers**

	<b>Service</b>	<b>Karachi (021)</b>
1	Edhi Services	241 3232
2	Edhi Ambulance	115
3	Emergency Police	15
4	Fire Brigade Center	16
5	Civil Hospital	021-99215740
6	Chippa Service	1020

### **Trainings**

Personnel shall be made aware of the importance of safety, potential emergencies and how to respond in case of emergencies. One day training and mock exercise shall be done to prepare, the personnel to deal with emergencies.

### **5. Emergency Response**

Response includes actions taken to reduce the impacts of an emergency event, and to limit the threat to life, property and the environment.

The emergencies can be dealt with:

- On-site Management of the situation
- Off-site coordination to arrange necessary resources to support the on-site management
- Providing advice and reports of the situation to stakeholders

#### **i. Emergency Response Procedure:**

Any person can report about an emergency, an on-site worker, an outside agency, or the public. Circumstances change during the course of an emergency in different events, thus, the procedure will vary as per the specific situation on ground. However, a basic action plan to be followed in an emergency is discussed below. This order of response is applicable to almost any emergency and should be followed in sequence.

#### **Assess the situation:**

The most important thing to do in case of emergency is to stay calm and avoid panic. Assess the situation, the cause and most immediate requirement to control, limit and/ or manage the immediate, ongoing, or further damage.

### **Immediate control:**

The most senior person on the scene should take control and contact, or delegate someone to contact emergency services as posted and communicated by ERT and inform the reporting officer of ERT and explain the situation. The area of emergency shall be restricted by barricades, tapes and adequate signage, if and as required.

### **Protection from further losses:**

- Once the site is restricted, to provide protection and reduce further losses, the source causing the emergency shall be controlled including equipment, materials, environment and accident scene from continuing damage or further hazards to the area and people. e.g.: suppress fire, prevent objects from falling, shut down equipment or utilities, and take other necessary measures as required depending upon the type of emergency
- Provide first aid if required or in doing so.
- Designate people to emergency duties. e.g: assign personnel to guide emergency services on arrival.
- Headcount People/ personnel to identify any missing persons.
- People/ personnel shall be directed to safe location.
- Arrange diversions for the traffic to reduce disturbance to the flow of traffic, if and as far as possible.
- Preserve the accident scene until experts mark it safe; only disturb what is essential to maintain life or relieve human suffering and prevent immediate or further losses.

### **ii. Communication:**

#### **Emergency service providers:**

The emergency service providers' needs to be kept informed of the situation. On site, personnel from the emergency services shall be guided towards the emergency scene, brief about the event, ongoing and potential hazards and cause(s), if known.

#### **Emergency Response Team and Management:**

Members of ERT shall be immediately informed and the management shall also be kept informed.

#### **Public:**

Timely notifications to public shall be disseminated through electronic and print media depending upon the requirement and urgency of the emergency so that they can adopt alternate routes and avoid the hazards associated with the emergency encountered.

### **Utilities:**

In case of disruption of utilities, the utility control authorities shall be immediately contacted to control the situation.

### **6. Recovery:**

Emergency affected individuals, communities and infrastructure shall be restored in terms of emotional, economic, and physical wellbeing including the following as a minimum:

- A detailed analysis and assessment of causes of emergency, extent of damage and gaps if any, in managing the emergency;
- Recovery/ replacement of the assets and infrastructure;
- Reinstatement of disrupted services;
- Updating of safety arrangements and Emergency response procedures to ensure better safety and security in any other arising emergencies.

**Annex - V:**  
**Monitoring Checklist**

## Monitoring and Supervision Checklist

Project				
Site Location				
Current Status				
Supervision Date				
Supervised By				
Inspection Items	Implementation			Remarks (i.e., specify location, good practices, problem observed, possible cause of nonconformity, and/or proposed corrective/preventative actions)
	Yes	No*	N/A	
<b>1. Air Pollution Control</b>				
1.1. Vehicle loads covered with any suitable material while transporting construction material?				
1.2. Are stockpiles of dusty materials covered or watered?				
1.3. Does the Construction Contractor (CC) have the proper material handling practices at the site?				
1.4. Others (please specify)				
<b>2. Surface and Ground Water Pollution Control</b>				
2.1. Area chemicals or hazardous material stored at designated places?				
2.2. Are effluents from the construction sites released to drinking water sources, cultivation fields, irrigation channels, and critical habitats?				
2.3. Does the CC have tarpaulin sheets available at the site?				
2.4. Others (please specify)				
<b>3. Noise Control</b>				
3.1. Are machinery operations and high noise activities carefully planned and scheduled?				
3.2. Are high noise activities ceased between 20:00 and 06:00hrs?				
3.3. Is the noise level monitoring carried out periodically? And is the monitoring register maintained?				
3.4. Others (please specify)				
<b>4. Solid Waste Management</b>				
4.1. Is recycling of solid waste carried out?				
4.2. Are the construction sites equipped with temporary refuse bins?				
4.3. Is the waste dumped or thrown				



around the project site?				
4.4. Is the waste tracking register maintained at the site?				
4.5. Is the waste properly disposed of in designated areas and not affecting the drinking water sources, cultivation fields, irrigation channels, natural drainage paths, the existing waste management system in the area, local routes, and the general aesthetic value of the area?				
4.6 Is Covid 19 prevention waste being handled and stored properly?				
4.7. Others (please specify)				
<b>5. Occupational Health and Safety</b>				
5.1. Are WB Group's Environment, Health, and Safety (EHS) Guidelines implemented in letter and spirit?				
5.2. Are appropriate personal protective equipment (PPE) provided to minimize risks, such as appropriate outerwear, boots, and gloves; safety helmets as well as per COVID-19 requirements?				
5.3. Are first-aid equipment at works provided?				
5.4. Is water stagnation observed near the construction site?				
5.5 Are protocols for slips and trips being followed?				
5.6. Are protocols for work at height being followed?				
5.7. Is training for workers for the use of PPE provided?				
5.8. Are procedures for documenting and reporting accidents, diseases, and incidents implemented at the site?				
5.9. Others (please specify)				
<b>6. Labor Issues</b>				
6.1. Are labor locally procured for the construction activities?				
6.2. Is there any child working?				
6.3. Others (please specify)				
<b>7. Project Exclusions</b>				
7.1. Are environment-friendly designs of proposed water supply and sewerage systems disseminated within the communities as a guide?				
7.4. Are women's and vulnerable groups' participation in consultation for project interventions ensured?				
7.5. Is the GRM implemented for				

the amicable resolution of disputes or conflicts?				
7.6. Others (please specify)				

**Annex - VI**  
**Solid Waste Management Plan**

### Administration

- The contractor will manage all the solid waste generated during the construction.

### Segregation

- The waste will be segregated.
- The reusable waste will be reused within the site.
- The excessive reusable waste will be transferred to the secondary users.

### Disposal

- The non-reuseable waste will be transferred to the SSWMB community bins.

### Recyclable Waste

- All the recyclable waste will be recycled and sold out to the vendors.