



Karachi Neighborhood Improvement Project (KNIP) Phase - II



ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN



Redevelopment of Neighborhood Roads and
Upgradation of Open Public Spaces including
Grounds and Parks in Malir Cluster

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Acronyms

ADP	Annual Development Program
BOD	Biological Oxygen Demand
CC	Construction Contractor
CSO	Civil Society Organizations
COD	Chemical Oxygen Demand
DMC	District Municipal Corporations
DOH	Department of Health
EA	Environmental Assessment
EHS	Environment, Health, and Safety
EIA	Environmental Impact Assessment
EMMP	Environmental Management and Monitoring Plan
EPA	Environmental Protection Agency
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRU	Environmental Social Resettlement Unit
FGD	Focus Group Discussion
FMEA	Failure Mode and Effects Analysis
GRC	Grievance Redressal Committee
GRFP	Grievance Redress Focal Person
GRM	Grievance Redressal Mechanism
HAZID	Hazard Identification
HAZOP	Hazardous Operations Analysis
JHA	Job Hazard Analysis
KE	Karachi Electric
KCD	Karachi City Diagnostic
KMC	Karachi Municipal Corporation
KW&SB	Karachi Water & Sewerage Board
KNIP	Karachi Neighborhood Improvement Project
LAA	Land Acquisition Act
LGD	Local Government Department
MoCC	Ministry of Climate Change
MM	Modified Mercalli
NW	North West
OHS	Occupational Health & Safety
OPs	Operational Policies
O & M	Operation & Maintenance
P&DD	Planning & Development Department
PAD	Project Appraisal Document
Pak-EPA	Pakistan Environmental Protection Agency

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PAPs	Project Affected Persons
PBS	Pakistan Bureau of Statistics
PCRs	Physical Cultural Resources
PIU	Project Implementation Unit
PM	Particulate Matter
PMD	Pakistan Meteorological Department
PPEs	Personal Protective Equipments
PSC	Project Supervision and Contract
RPF	Resettlement Policy Framework
SEPA	Sindh Environmental Protection Agency
SEQs	Sindh Environmental Quality Standards
SLGA	Sindh Local Government Act 2013
SMMP	Social Management and Monitoring Plan
SSDWQ	Sindh Standards for Drinking Water Quality
SSWMB	Sindh Solid Waste Management Board
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
UTC	Universal Time Coordinated
WB	World Bank

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EXECUTIVE SUMMARY

ES-1: Government of Sindh (GoS) with the support of the World Bank (WB) is implementing “Karachi Neighborhood Improvement Project” (hereinafter referred to as KNIP). This project aims to improve mobility and quality of life for local residents and to provide quality public spaces to meet citizen’s needs. These includes improvement in footpaths, service roads, parking lanes; enhancement in food-street with canopies, furniture; connecting streets and green belts.

ES-2: The overall project has three key components¹and sub-project Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Grounds and Parks in Malir Cluster falls under component.

Component 1. Public Space and Mobility Improvements in Selected Neighborhoods: The component aims to enhance the usability, safety and attractiveness of public spaces, improve mobility and pedestrian access and improve traffic safety

Component 2. Support to Improved Administrative Services and City Capacity Development: The Component aims to support the sustainability of component 1 investments, lay the foundations for better city management, and improve selected citizen services in Karachi.

Component 3. Support to Implementation and Technical Assistance: The component aims to focus on the technical assistance and advisory services to the Project Implementation Unit (PIU) and Karachi Transformation Steering Committee.

ES-3: The Sub-project ‘Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Grounds and Parks in Malir Cluster’ is a part of Union Council (UC) 5 and 12, District Malir, Karachi Division. It is also one of the sub-projects of KNIP Phase-II. Total length of sub-project roads is estimated as **10.7 km** which also forms sub-project boundary.

ES-4: The specific interventions under this sub-project include Rehabilitation and up-gradation of existing four parks, three playgrounds and a library, and redevelopment of Malir Cluster neighborhoods roads. Brief Profile and Specific Interventions of sub-project site are as under:

- Rehabilitation and Up-gradation of existing Four (04) Parks (Abshar Park, Madina Park, Shaheen Park and Shaheed Muhammad Khashkeli Park)
- Rehabilitation and up-gradation of existing 3 grounds (two football and one cricket ground)
- Renovation of Existing Library
- Rehabilitation and up-gradation of neighbourhood roads with facilities

ES-5: The World Bank requires Environmental and Social Assessment (ESA) of projects proposed for Bank financing to help ensure that they are environmentally and socially sound and sustainable, and thus improve decision making process. This sub-project has triggered the Bank’s Policy OP 4.01 on Environmental Assessment, and World Bank Policy on Access to information 2010. There is no PCR is present within the project boundary. However, OP/BP 4.11 Policy on Physical and Cultural Resources might be triggered due to the possible discovery of archaeological sites or random findings during the

¹ <https://knip.gos.pk/>

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execution of civil works. This will require measures to manage chance finds. This ESMP includes "Chance Find" procedures for protection of cultural property. This sub-project ESMP has fulfilled the requirements of the applicable acts, regulations and operational policies².

ES-6: After identification of sub-project, Rapid Environmental and Social Screening was conducted which suggested that environmental and social impacts of sub-project are minor to medium, temporary in nature and can be mitigated and managed with indigenous and prevailing civil construction measures.

ES-7: This ESMP report presents the sub-project site-specific socio-economic and environment baseline data. The environmental data collected for air, water and land. Besides this, identification, assessment and evaluation of sub-project impacts and preparation of environmental management and monitoring plan for mitigation of adverse impacts that may arise due to the proposed project interventions are also included in this ESMP. Primary information for the sub-project area was collected through detailed environmental and social surveys by the Consultant team. The environmental survey focused on collection of specific baseline information of the sub-project area including meteorology, air quality and noise assessment, floral species present in the area including trees, traffic situation and topography of the area. The area has a total of 376 trees along the roads and in the playground and stadium. Unnecessarily cutting of trees will be avoided, in the case if cutting a tree becomes essential plant saplings will be planted as per SEPA guidelines. Additionally, the plantation of plant saplings is already included as a key intervention for provision of environment friendly urban spaces in the sub-project area. The sub-project proposes the plantation of 770 plant saplings. The ambient air and noise quality presented in the baseline of this ESMP shows that the air quality and noise levels meet the required Sindh Environmental Quality Standards (SEQS) limits. The residents of the area informed that besides using water supply through KW&SB and water tankers, they also use groundwater with moderate salinity in washing and cleaning purposes.

ES-8: The Socio-economic baseline data was collected through survey in the proposed sub-project area which includes health and education facilities, infrastructure and utilities, sewerage and solid waste management and land use survey. The beneficial impacts of the sub-project include provision of recreational facilities for men, women, youth and children of the area which will also contribute for good health and wellbeing of the community. The ease of mobility with improved safety features for pedestrians with special attention to gender will be noticeable. Overall, these interventions will not only increase environmental and aesthetic quality of the area, but will also provide a space to connect and perform various activity for the various age groups of the community. However, during construction phase, there could be potential (low level and reversible) negative environmental and social impacts such as air quality deterioration due to dust and exhaust emissions during construction activities, traffic congestion and management due to road closure which will be address through mitigation and monitoring plan. These mitigation measures are elaborated in chapter 6 and exhibited in the form of Environmental Management and Monitoring Plan (EMMP) and Social Management and Monitoring Plan (SMMP) in Chapter 10 and 11 of the report, respectively. There is no land acquisition and displacement of any kind impacting the livelihood of the community. This step was followed by extensive consultation with sub-project stakeholders.

² Presently, the ESF implemented by the Bank in October 2018 is in practice. But the ESMP under review follows the old safeguard policies. Here it should be clarified that as the ESMF of the project was prepared and approved before the promulgation of ESF, which was based on old safeguard policies of the Bank, the ESMP follows the provisions of that ESMF.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

ES-9: The Grievance Redressal Mechanism (GRM) is also proposed for sub-project implementation to cater all sub-project related complaints. The GRM will address the concerns of stakeholders and protecting the interests of directly and indirectly affected beneficiaries. The overall objective of GRM is to make the KNIP Project Implementation Unit (PIU) more accessible for project-affected communities, particularly vulnerable groups, and to provide a robust system of procedures and processes for rapid resolution of citizen's concerns and complains related to the sub-project. The GRM will be accessible to all members of the community, including women, senior citizens and other vulnerable groups. Information about the grievance redress processes will also be translated in the national language and signboards with contact information will be displayed at the construction sites in local language and Urdu. The Grievance Redress Focal Person (GRFP) in PIU will be responsible for providing oversight on the entire GRM process at a strategic level, monitoring of complaints management and will have the overall responsibility for GRM. The GRM will be consistent with the requirements of the World Bank safeguard policies as well as local laws including the 'Protection Against Harassment of Women at the Workplace Act 2010' to ensure mitigation of community concerns, risk management, protection against women harassment at workplace and maximization of environmental and social benefits.

ES-10: The consultant team, comprised of Design and Safeguard professionals conducted consultative meetings, Focused Group Discussion (FGDs), and In-depth Interviews (IDPs) with the sub-project stakeholders including local communities' / residents (male and female), mobile vendors / small carts owners, NGO/CBO, representatives from educational and health care facilities, members of sports and youth group, government departments (District Council, Municipal Corporations (DMCs), Karachi Municipal Commission (KMC), Karachi Water and Sewerage Board (KWSB), Karachi Electric (KE) and Elected Representatives.

The purpose of the consultations were to share sub-project conceptual design with the stakeholders and acquire their feedback to incorporate in sub-project interventions (planning and design phase); as well as to know concerns related to the sub-project and record their suggestions / recommendations. Majority of the respondents appreciated the development objectives of the KNIP and proposed interventions as they were not satisfied with the current situation of roads and limited public green spaces and sports facilities in their areas. The suggestions and concerns of stakeholders were considered and addressed through design modifications (where appropriate). The respondents from utility agencies emphasized that coordination between the concerned departments and project developers should be established during construction phase. All the stakeholders ensure their full support during construction phase.

ES-11: The sub-project ESMP hard copies will be sent to all institutional stakeholders including relevant KMC / DMC offices. A copy of the ESMP will also be available with the contractor on the site. Before start of physical works, the Executive Summary of the sub-project ESMP will be translated into local languages and communicated to all primary stakeholders. and will be uploaded on the KNIP website.

ES-12: The ESMP implementation cost of 'Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Grounds and Parks in Malir Cluster' sub-project has been estimated to be **PKR 6.9729 million**.

Chapter 1

INTRODUCTION

1.1. Background

1. Karachi's development and economic growth in recent decade's vis-à-vis its role as the economic and commercial centre of the country is gaining increasing attention. The policies and programs for Karachi development are also highlighted due to recent improvements in its security environment as well as new and dynamic political leadership and commitment in Sindh. Government of Sindh (GoS) has announced strong commitment & interest in, and support for, sustainable development in Karachi and has requested the World Bank to provide support in transforming the city to a liveable city³. A detailed Karachi City Diagnostic study⁴ was conducted by the World Bank to provide a multi-sector assessment of the infrastructure, service delivery and institutional gaps of the city. The Diagnostic, based on the framework of improving prosperity, liveability and social inclusion, found that the complex political economy and institutional fragmentation within Karachi, have led to poor liveability indicators for all segments of the population. The Diagnostic showed that to close its urban infrastructure gaps, Karachi requires large investments (estimated at about US\$10 billion over the next ten years) along with substantial institutional development and policy reforms.⁵

Karachi Neighbourhood Improvement Project (KNIP) is the first project which was started in June 2017 with the collaboration of the World Bank to improve the urban spaces and infrastructure of selected neighbourhood of Karachi and selected administrative services. The project has following three components.

1. Public Space and Mobility Improvements in Selected Neighborhoods
2. Support to Improved Administrative Services and City Capacity Development
3. Support for Implementation and Technical Assistance

Under Component 1, three neighborhoods in Karachi city, located within i) Saddar downtown area, ii) Korangi District, and iii) **Malir District** have been identified by the GoS.

4. After the successful completion of KNIP Phase - I, and positive response from Community, the Government of Sindh (GoS) initiated KNIP Phase – II to improve liveability, safety and inclusion in targeted areas through public space enhancements and improved access to citizen services in selected neighbourhoods. The sub-project financed under Phase-II of KNIP is '**Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster**' (hereinafter referred to as "Sub-project"). The objective of this sub-project is to improve mobility and quality of life for local residents, provide quality public spaces to meet citizen's needs. This further includes provision of

³ Transforming Karachi into a Liveable and Competitive Megacity. A City Diagnostic and Transformation Strategy. 2018. International Bank for Reconstruction and Development. The World Bank, Washington, DC. 20433. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/29376/9781464812118.pdf?sequence=2&isAllowed=y>

⁴ Karachi City Diagnostic and Transformation Strategy - <https://elibrary.worldbank.org/doi/pdf/10.1596/978-1-4648-1211-8>

⁵ Ibid

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

recreational facilities for the residents of the area for improved sports activities opportunities through rehabilitation of two football grounds and one Cricket Ground.

5. This ESMP report presents the sub-project site-specific socio-economic and environmental baseline data collected for air, water, land, biological and socio-economic situation of the sub-project area. Besides this, identification, prediction and evaluation of project impacts and preparation of environmental and social management and monitoring plan for mitigation of adverse impacts that may arise due to the proposed sub-project interventions.



Figure 1: Sub-Project sites at District Malir, Karachi

1.2. Sub-project Overview

6. Malir is a dense, mixed-use area with low-income communities. It is characterized by an arterial corridor and a number of existing open spaces that are severely degraded. The sub-project area is part of Union Council 5 and 12 of District Malir, Karachi Division. The sub components of this sub-project cover:

- ▶ Rehabilitation and up-gradation of existing four (04) Parks, three playgrounds (two Football and one Cricket ground) , and a library;
- ▶ Redevelopment of existing Neighborhoods Roads.

7. The specific interventions under this sub-project are provided in Chapter-2.

1.3. Environment and Social Management Plan (ESMP)

8. “Environmental and Social Management Plan (ESMP) is an instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

environmental & Social impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures”.

9. The Environmental and Social Management Framework (ESMF)⁶ of KNIP sets out the principles, rules, guidelines and procedures to assess the environmental and social impacts of all the proposed sub-project based on the World Bank operational policies to satisfy Bank’s ESA requirements and applicable legal legislations. This ESMP has been developed based on the principals and guidelines provided in the KNIP, ESMF. The ESMP also takes into account the provincial environmental requirements defined through Sindh Environmental Protection Act of 2014, subsequent regulations and guidelines, and also the provincial Acts and Regulations.

1.4. Objectives of the study

10. The objective of the study is to prepare a detailed ESMP to address the anticipated environmental and social impacts of the sub-project ‘Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Grounds and Parks in Malir Cluster’.

1.5. Study Methodology

11. Methodology for the ESMP comprises a series of integrated tasks including fieldwork (e.g., surveys, consultations etc.) and desk reviews as deemed necessary to meet the needs of the ESMP.

1.5.1. Desk Research for Secondary Data Analysis

12. Prior to the detailed site investigations, an extensive literature review was conducted to obtain environmental and social baseline information of the sub-project site. In addition to that the applicable provincial policies, guidelines, legislations and World Bank Operational Policies (OPs) were also studied. This information is collected and analysed as part of ESMP process. The following documents were considered.

- ▶ KNIP Project Appraisal Document (PAD)
- ▶ KNIP Environmental and Social Management Framework (ESMF)
- ▶ KNIP Resettlement Policy Framework (RPF)
- ▶ Karachi Transformation Strategy: Transforming Karachi into a Liveable and Competitive Megacity - A City Diagnostic and Transformation Strategy
- ▶ World Bank Safeguards Policies and EHS Guidelines
- ▶ Relevant provincial laws, regulations, policies, guidelines, and standards

⁶ The ESMF for KNIP prepared and approved in 2017 was based on old safeguard policies of the WB. However, the Bank implemented a comprehensive Environmental and Social Framework (ESF) in October 2018 by replacing the old safeguard policies. After the promulgation of ESF by the Bank, all the projects under IPF are processed by applying the provisions of the relevant Environmental and Social Standards (ESSs) as embedded in the ESF. Hence, it is clarified that as the ESMF of the project was prepared and approved in 2017 before the promulgation of ESF, which was based on old safeguard policies of the Bank, the ESMP follows the provisions of that ESMF.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

1.5.2. Development of Survey Tools

13. Participatory approach was used for data collection purposes through extensive consultations and field visits. To achieve this goal, the environment and social safeguard team developed certain tools for sub-project’s screening, baseline data collection and consultations in order to meet the environment and social safeguard requirements of the World Bank operational policies.

1.5.3. Primary Data Collection

14. A comprehensive field data gathering exercise was carried out to assess the existing environmental and social conditions in the sub-project that may potentially be affected by the proposed interventions along with the potential mitigation measures to counter those impacts.

During environmental and social baseline surveys, the proposed interventions and sub-project designs were shared with the respondents to avoid or minimize impacts.

1.5.4. Environmental and Social Screening of Projects

15. Environmental and Social Screening is a basic step to identify and assess environmental and social impacts, as elaborated in the World Bank Safeguard policies, the approved ESMF & RPF of this project.

1.5.5. Environmental and Social Baseline Survey

16. For baseline data collection quantitative and qualitative techniques of data collection were utilized. The safeguard surveys team visited sites and collected baseline information through environmental and social baseline data collection forms attached as Annex V.

17. The environment survey focused on collection of site-specific baseline information of the sub-project area including soil, water quality, air quality, solid waste, climate, floral species, fauna species, ecosystem habitat, land-use, water and sanitation services, recreational areas, historical/cultural/archaeological areas, traffic situation and topography of the area. The social survey was focused on the specific aspects of sub-project area socio-economic profile of the households and businesses in the sub-project areas, a comprehensive profiling of existing infrastructure and their status as well as information related to social organizations and political pattern in the areas.

1.5.6. Environmental Quality Monitoring as per SEQs

18. Environmental quality parameters are considered pivotal in establishing baseline environmental datasets and will be monitored as a part of primary data collection.

19. Section 11 of Sindh Environmental Protection Act, 2014 which is the prime legislation on environmental protection and enforcement of environmental measures states that: “no person shall discharge or emit or allow the discharge or emission of any effluent, waste, pollutant, noise or any other



Figure 2: ESMP Methodology

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

matter that may cause or likely to cause pollution or adverse environmental effects, in an amount, concentration or level which is in excess to that specified in Sindh Environmental Quality Standards (SEQS).

20. Under this ESMP, ambient air quality, ambient noise, drink water and waste water quality were measured as per defined parameters of Sindh Environmental Quality Standards (SEQS).

1.5.7. Stakeholder Consultations and Participation

21. Stakeholder consultations were carried out during preparation of ESMP. A series of scoping sessions were undertaken with primary stakeholders which are the direct beneficiaries of the sub-project including local communities' / residents (male and female), mobile vendors / small carts owners, representatives from educational and health care facilities, NGO/CBO, members of sports and youth group, government departments (District Council, Municipal Corporations (DMCs), Karachi Municipal Commission (KMC), Karachi Water and Sewerage Board (KWSB), Karachi Electric (KE) and Elected Representatives. Meetings were held with institutional stakeholders and key environmental and social issues were discussed.

22. The prime objective of these consultations was to disseminate information on the objectives of the sub-project and its proposed interventions. These meetings enabled interested and affected parties to contribute their views, concerns and opinions on the proposed interventions, at an early stage of the sub-project design preparation.



Figure 3: Consultation with stakeholders at sub-project site

1.6. Identification and Assessment of Environmental & Social Impacts and Mitigation Measures:

23. The sub-project was assessed for the severity and extent of environmental and social impacts, based on stakeholder's views and concerns once the design is finalized. After this exercise, specific mitigation measures were also proposed to minimize the significant environmental and social impacts. Environmental Management and Monitoring Plan (EMMP) and Social Management and Monitoring Plan

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

(SMMP) were also developed for the implementation of the mitigation measures identified during the study.

1.7. ESMP Implementation Budget:

24. Budgetary requirements have been proposed against implementation of safety for workers and community, environmental quality the monitoring, training of workers and staff, and reporting activities proposed for the sub-project.

1.8. Compliance of ESMP

25. This site-specific ESMP forms made part of the Request for Proposals Package/ Bid Documents and its compliance is mandatory by the contractor.

26. The contractor will be required to undertake mitigation and monitoring measures as proposed in the EMMP and SMMP in this document. This site specific ESMP will be embedded into the civil works contracts and therefore will be legally binding on the contractor. The site specific ESMP must be submitted to the PIU/Supervising Consultant for review and clearance within 30 days of the signing of the contract or before mobilization on site, which ever date is earlier.

1.9. Layout of ESMP

27. ESMP layout is as follows;

- ▶ Chapter 1: Provides the introduction and background of the project and sub-project.
- ▶ Chapter 2: Provides a detailed description of the sub-project and the implementation Requirements to execute the sub-project.
- ▶ Chapter 3: Provides relevant local legislative requirements and WB operational policies applicable for development and implementation of ESMP.
- ▶ Chapter 4: Covers the environmental baseline conditions of sub-project area.
- ▶ Chapter 5: Provides the social-economic profile of sub-project area.
- ▶ Chapter 6: Covers the assessment of environmental and socioeconomic impacts along with their mitigation measures.
- ▶ Chapter 7: Explains Grievance Redressal Mechanism
- ▶ Chapter 8: Focus on training, capacity building and awareness raising requirements
- ▶ Chapter 9: Covers the stakeholder consultations and information disclosure component.
- ▶ Chapter 10: Provides the Environmental Management and Monitoring Plan
- ▶ Chapter 11: States the Social Management and Monitoring Plan
- ▶ Chapter 12: Provides the ESMP budgetary requirements.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Chapter 2

Overview Sub-Project

28. The sub-project '**Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster**' aims to improve the neighbourhood roads for better mobility and rehabilitation for playgrounds in order to provide better facilities to the local community.

29. The sub-project is dense, mixed-use area with low and middle income communities. The objective of this sub-project is to improve the mobility and quality of life for local residents, and to provide quality public spaces to meet citizen's needs. This further includes provision of recreational facilities for the residents of the area (with special emphasis on women, children and elderly people needs) which will play a positive role in maintaining good health and wellbeing of the people.

30. Specifically, the ease of mobility, improved safety features for pedestrians, such as street lamps, improved footpaths, etc. with special attention to the gender are the substantial beneficial impacts on the socioeconomic environment of the sub-project neighbourhoods. Hence, these interventions will not only increase environmental and aesthetic quality of the area, but will also enhance community wellness and provide a space to connect and perform various activity for the age groups.

2.1 Sub-Project Boundary The total length of sub-project roads is estimated as 10.917 km which also forms sub-project boundary, which is exhibited below;

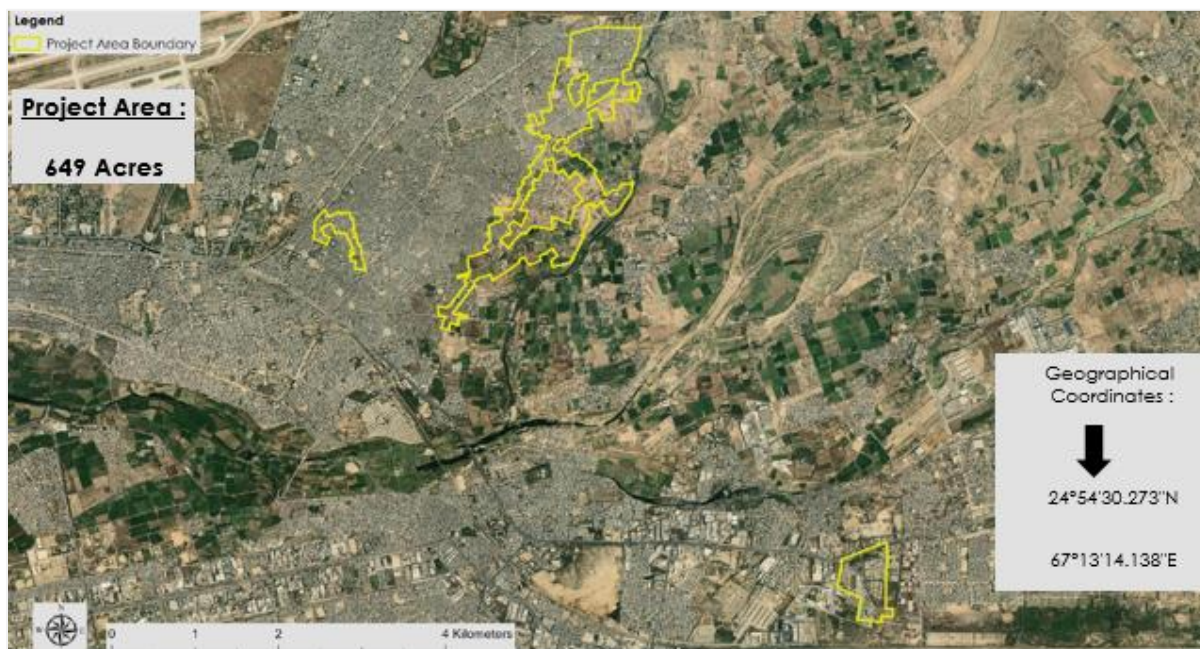


Figure 3: Sub-Project Boundary

32. There are multiple roads which are connecting with the sub-project area, as shown below;

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

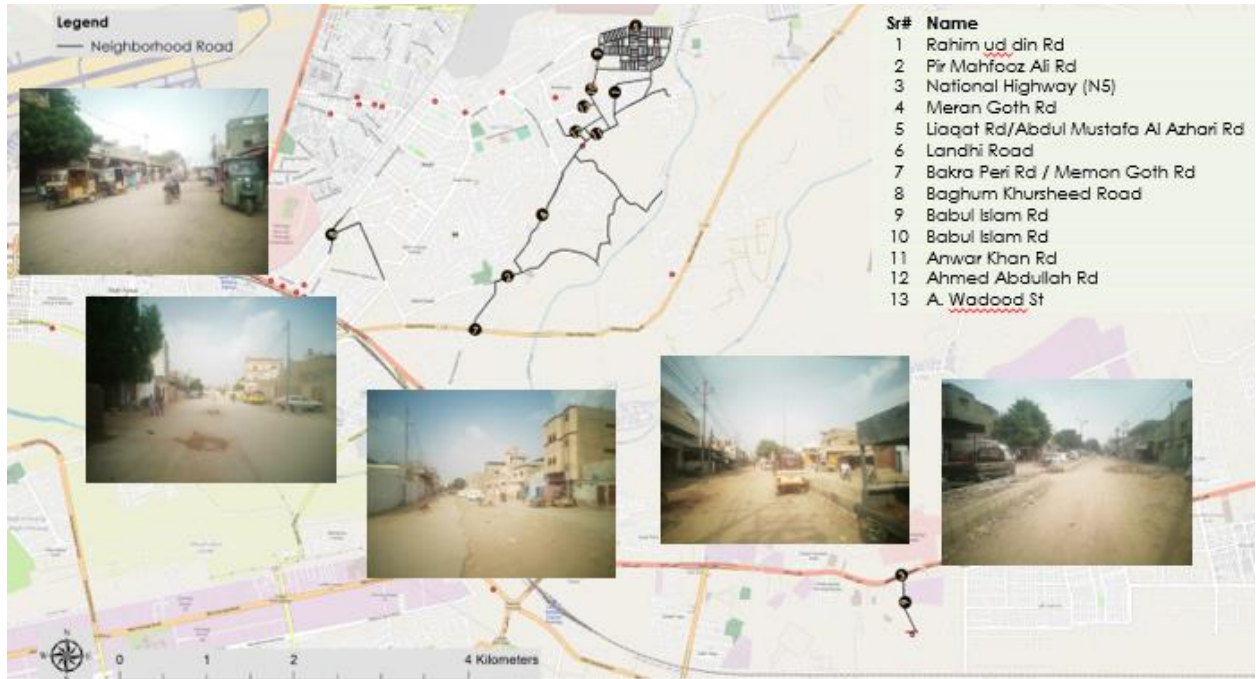


Figure 4: Existing Roads within the Project Boundary



Road of L3

Road of L3

Road of L3

Babul Islam Road

Figure 5: Snapshots of Existing Roads in the Sub-Project Area

2.2 Salient Features

33. Overall sub-project area is 649 acres and has residential and commercial (mixed) land use. The coordinates for key sub-project components within start and end boundaries include; Latitude 24° 54' 38.33''N Longitude 67° 13' 29.63''E and Latitude 24° 50' 52.88''N Longitude 67° 15' 7.28''E respectively.

34. The proposed plan of Abshar Park and Mehfooz Football ground along with the brief profile of all 4 parks, 3 playgrounds and a library as well as 13 small sections of neighbour is provided in the subsequent sections.

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

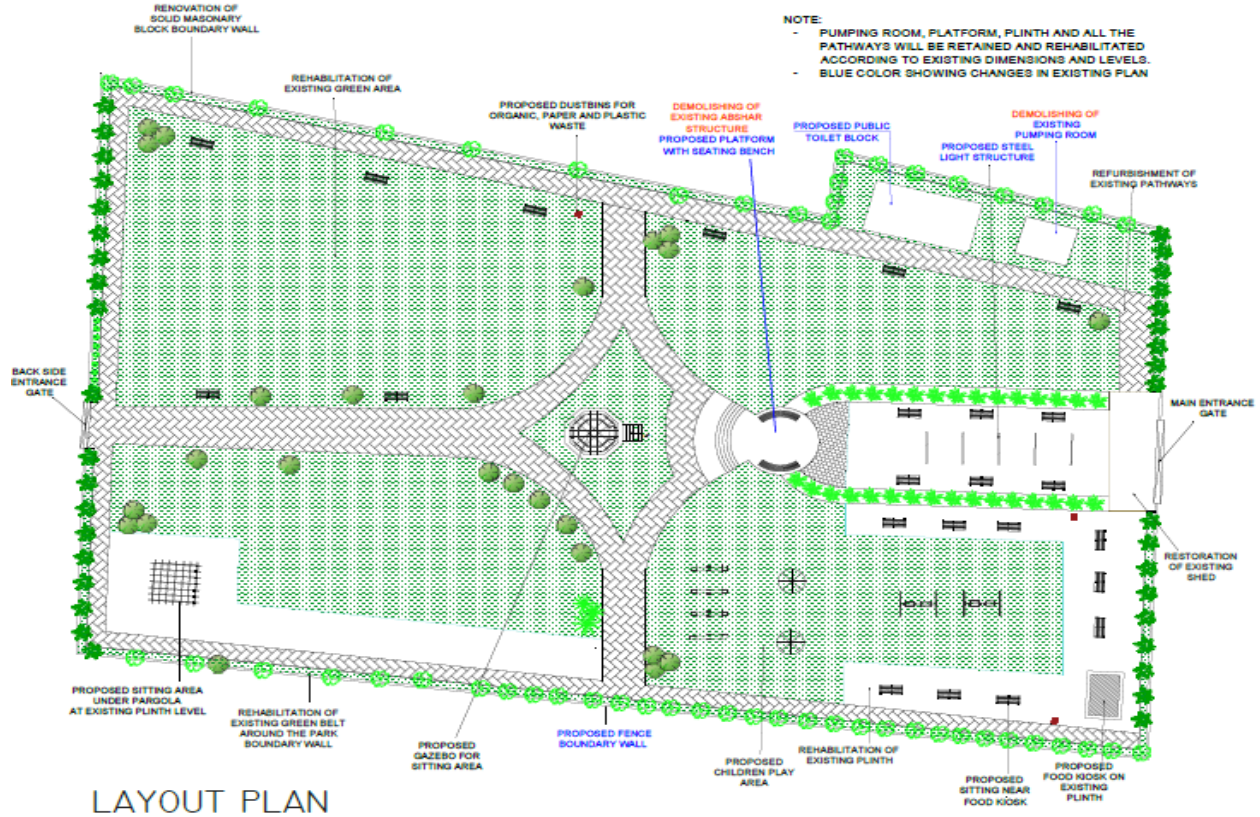


Figure 6: Proposed Plan of Abshar Park

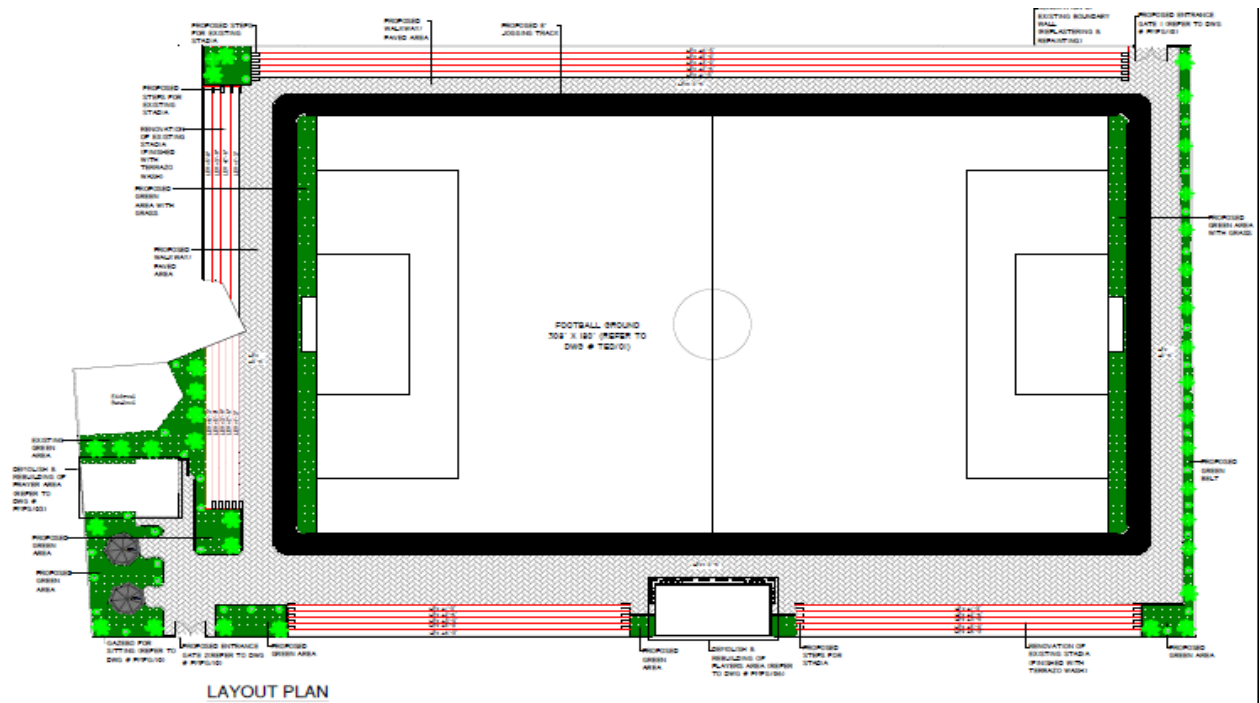


Figure 7: Proposed Layout Plan of Mehfooz Football Ground

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster



Figure 8: Proposed Plan of Madina Park

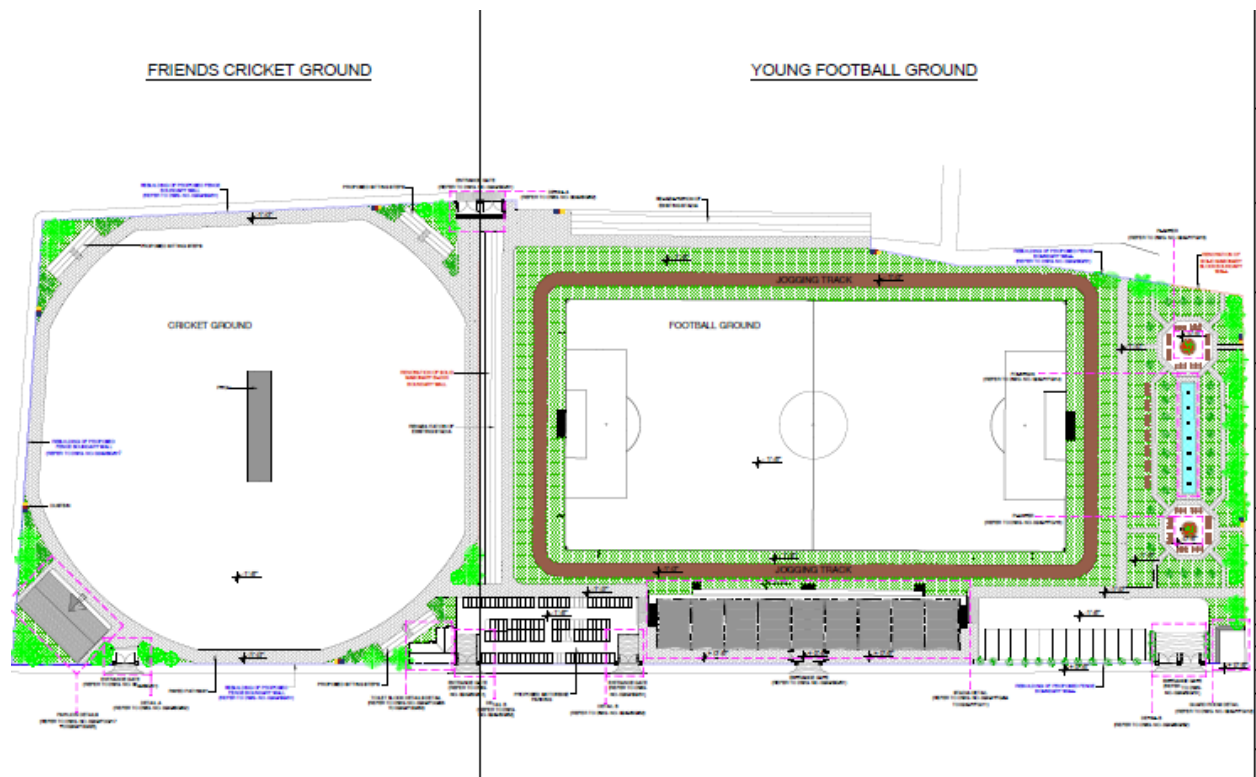


Figure 9: Proposed Plan of Friends Cricket Ground and Young Football Ground

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster



Figure 10: Proposed Plan of Shaheen Park

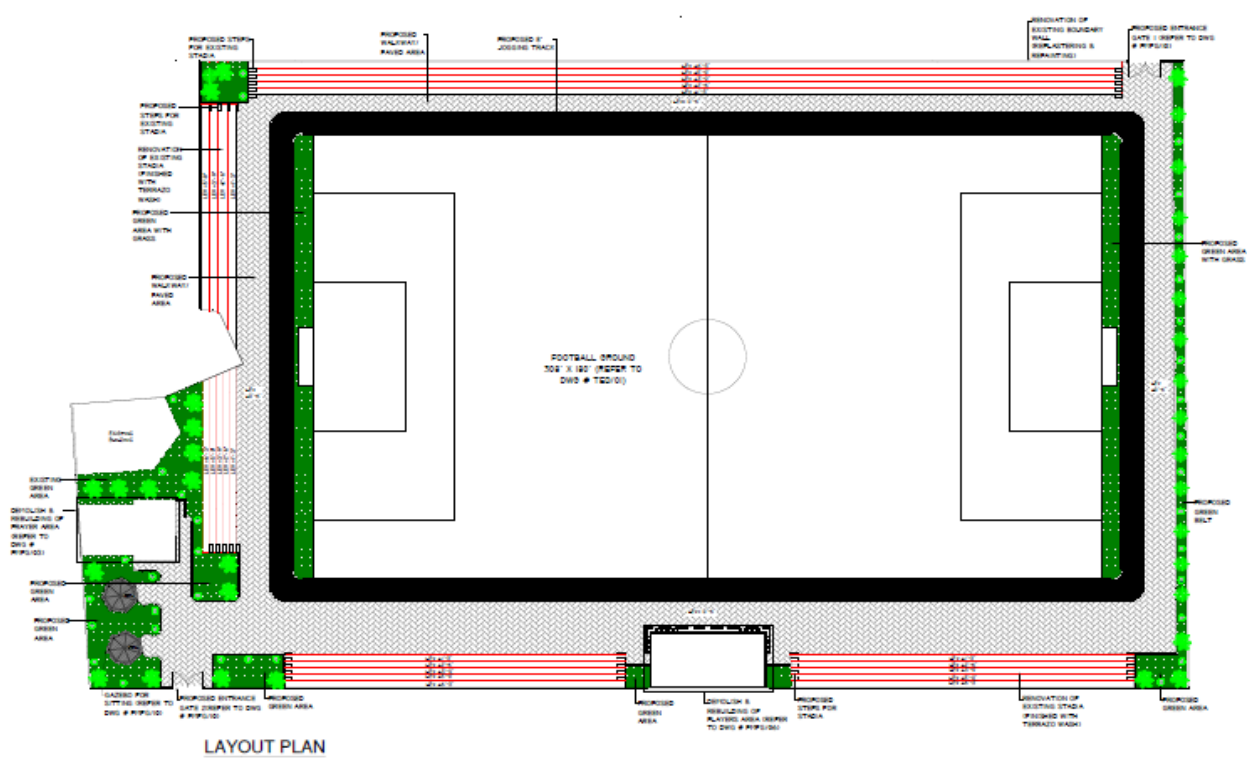


Figure 11: Proposed Plan of Pir Mehfooz Football Ground

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

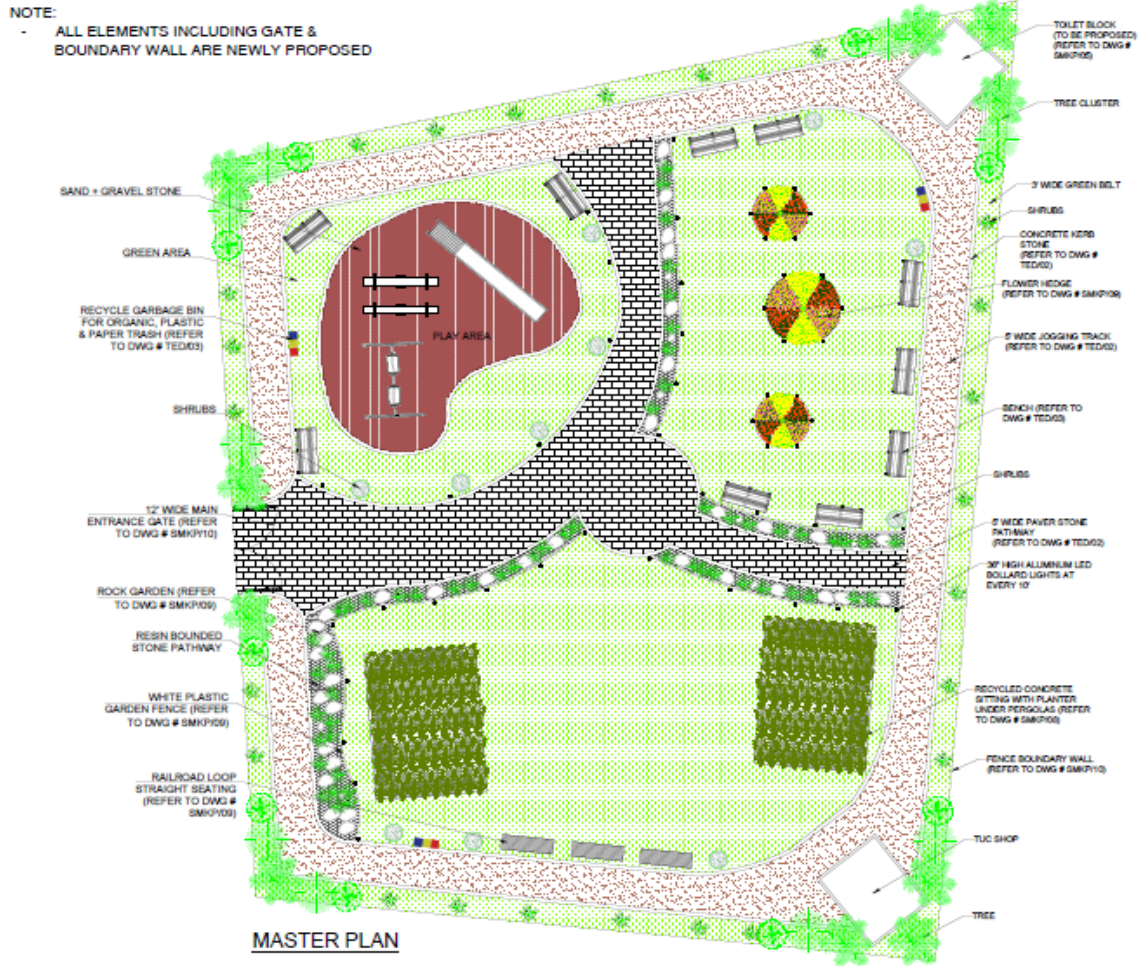


Figure 12: Proposed Plan of Shaheed Muhammad Khaskeli Park

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

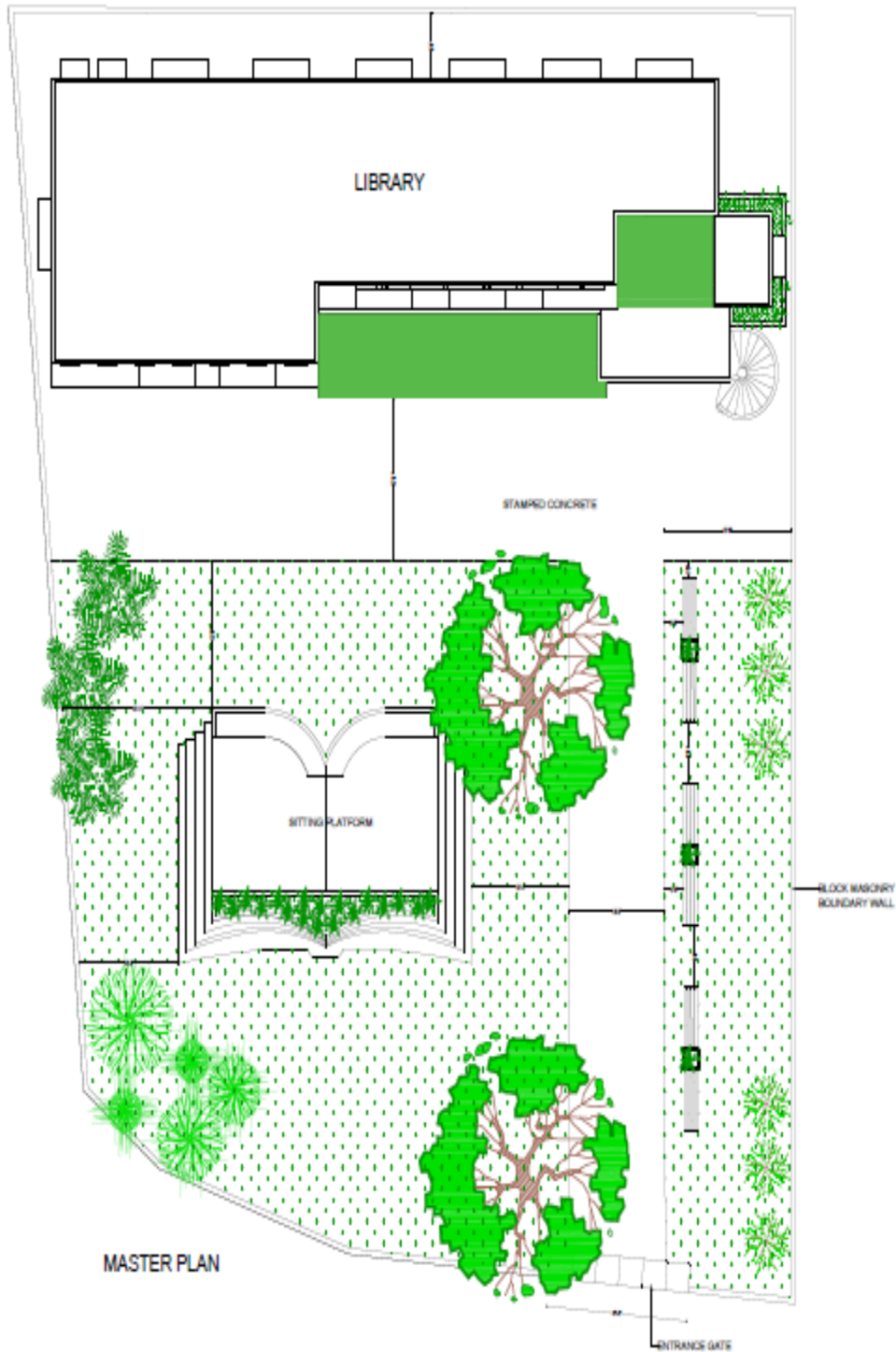


Figure 13: Proposed Plan of Shaheed Muhammad Khaskeli Library

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

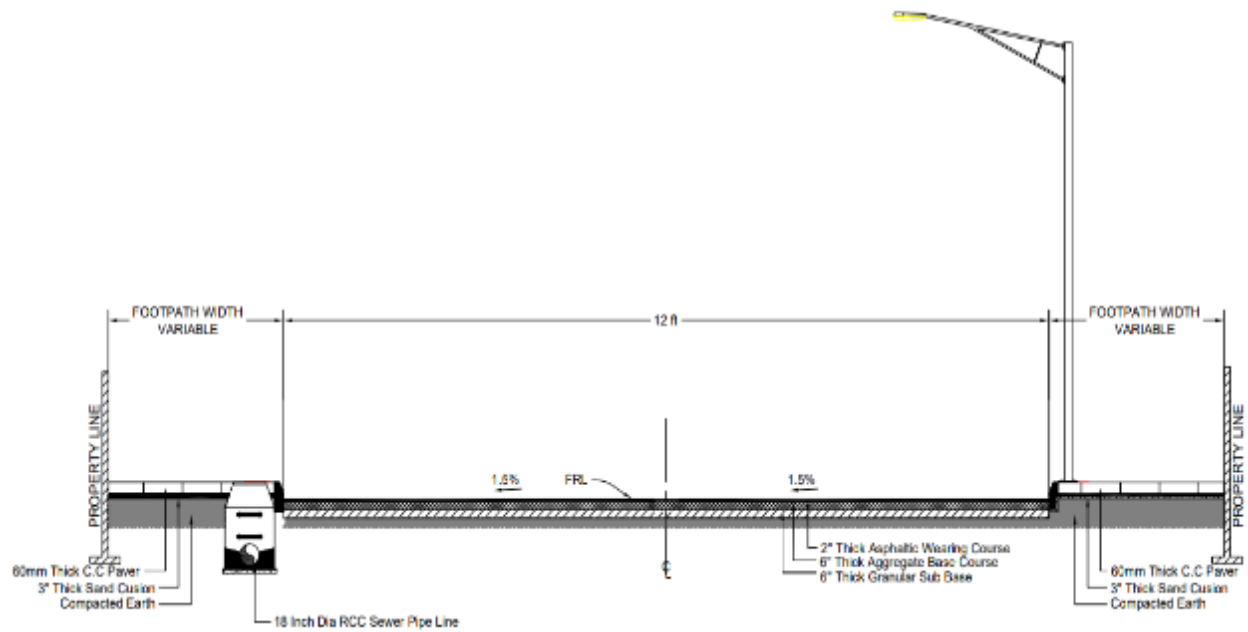


Figure 14: 12' Wide Road (Single Carriageway) Cross section

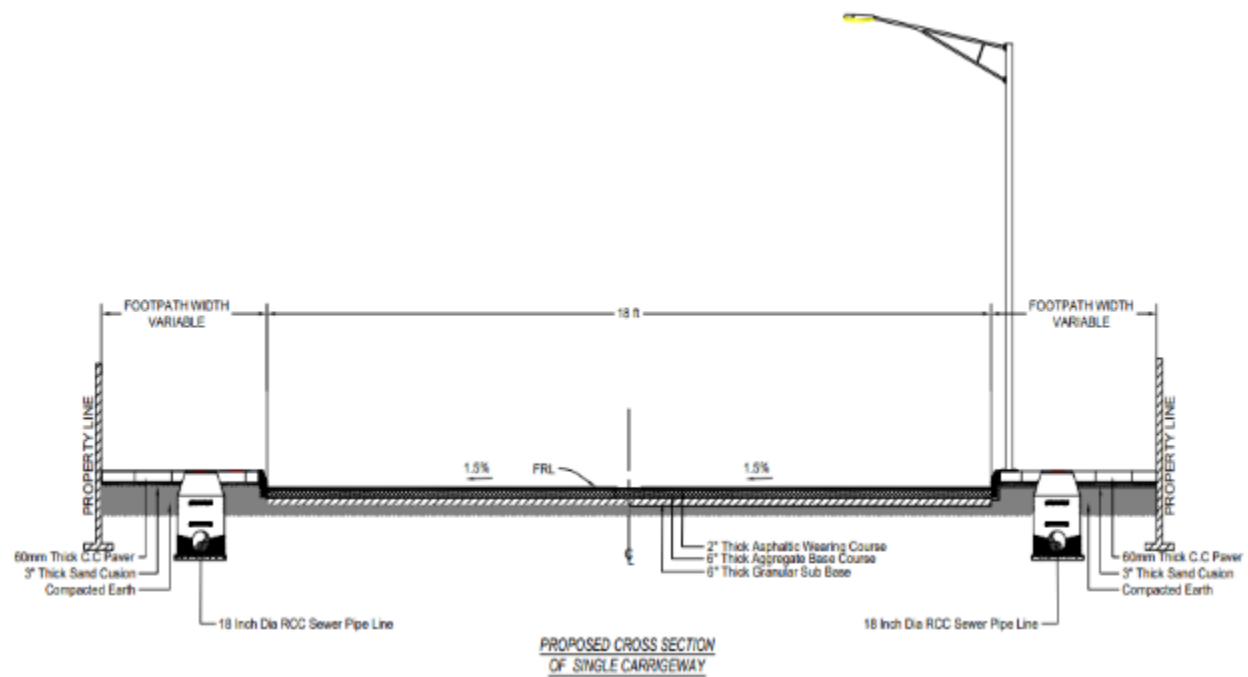


Figure 15: 18' Wide Road (Single Carriageway) Cross section

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

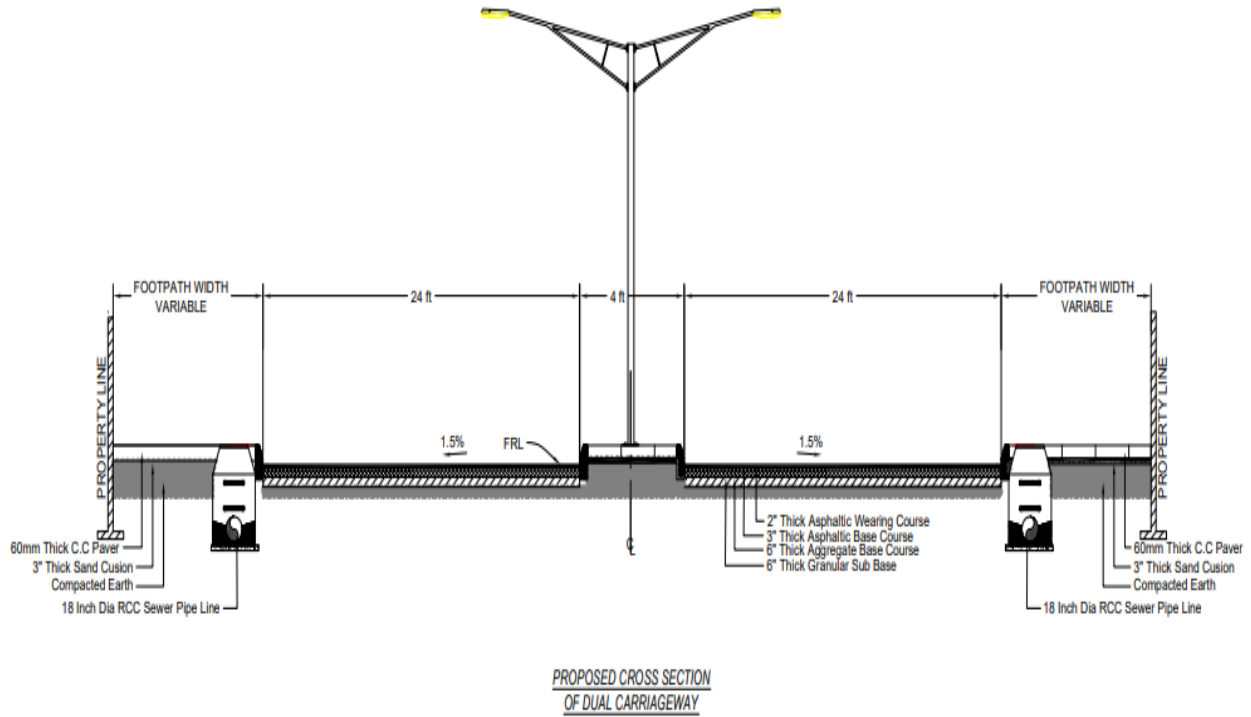


Figure 16: 24' Wide Road (Dual Carriageway) Cross section

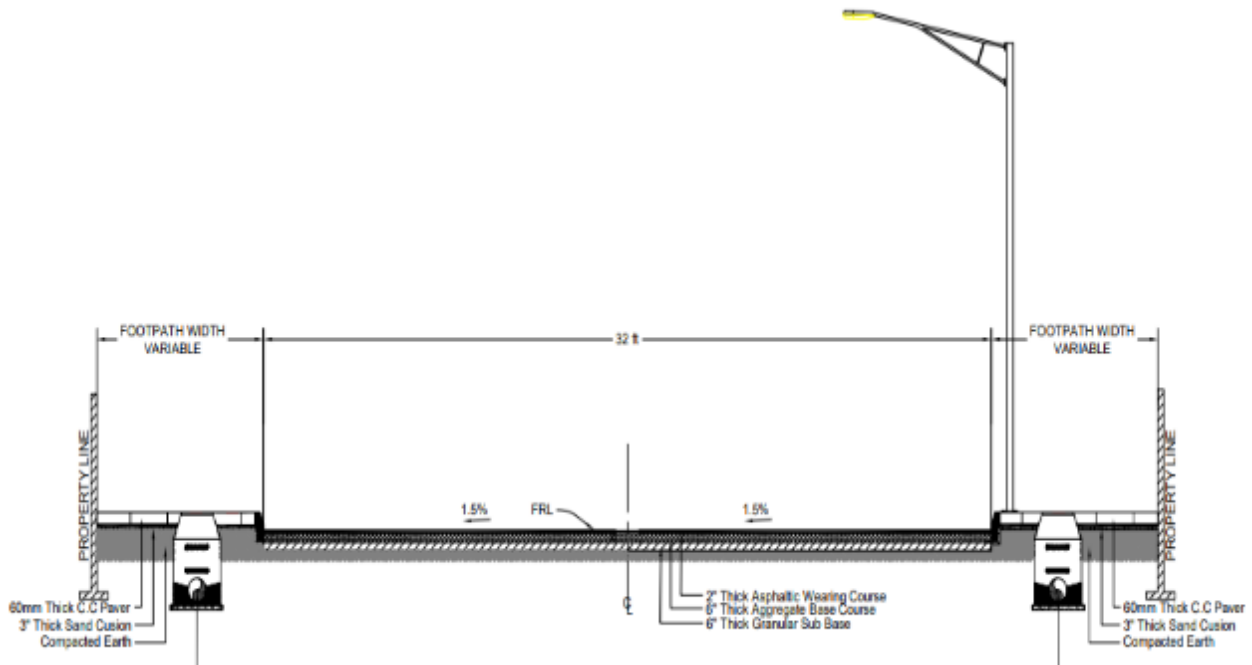


Figure 17: 32' Wide Road (Single Carriageway) Cross section

35. The specific interventions under this sub-project are explained below:

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster



Table 1. Brief Profile and Specific Interventions of Sub-Project Site

Sr. No	Name	Brief Profile				Proposed interventions
		Area (acres) / Length (km)	Timings	Estimated Number of Visitors	Major Sports / Activities	
PARKS						
1.	Khokhara Para A - Area Park (Abshar Park)	1.5	Open 24 hrs.	20-30	Not in use for any major activity except for children playing cricket.	<ul style="list-style-type: none"> ▶ Demolition of Abshar Structure ▶ Rehabilitation of Existing Abshar Platform and Ground ▶ Renovation of Existing Gate and Solid Boundary Wall ▶ Proposed Fenced Wall on Selected Areas ▶ Proposed Public Toilet Block for Male/ Female/ Handicapped ▶ Proposed Benches, Dustbin, Garden Lights ▶ Proposed Gazebo, Kiosk, Sitting with Pergola ▶ Proposed Steel Structure Light Elements
2.	Madina Park	1.4	Open 24 hrs.	10-15	No any major activity	<ul style="list-style-type: none"> ▶ Ladies Park with Jogging Track, Landscape, Sitting Areas & Public Toilets ▶ Gents Park with Jogging Track, Landscape, Sitting Areas & Public Toilets ▶ Eidgah with Mehrab ▶ Proposed Gate And Boundary Walls in all 3 above spaces
3.	Shaheen Park	0.6	Open 24 hrs.	10-15	Not in use for any major activity except for children playing cricket.	<ul style="list-style-type: none"> ▶ Renovation of Existing Pathway ▶ Proposed New Pathway ▶ Male/Female Toilet Block ▶ Proposed Sitting with Pergolas ▶ Proposed Children Play Area ▶ Proposed Benches, Dustbin, Bollard Lights ▶ Proposed Entrance Gate and Boundary Wall
4.	Shaheed Muhammad Khashkeli Park	0.21	Open 24 hrs.	20-30	Not in use for any major activity except for children playing cricket	<ul style="list-style-type: none"> ▶ Proposed Boundary Wall & Main Gate ▶ Landscaping Work ▶ Furniture Such as (Fibre Benches, Concrete Benches, Canopies) ▶ Artwork on Walls ▶ Play Area for Children ▶ Fancy Lights ▶ Walk/ Jogging Track ▶ Kiosk/Tuck Shop ▶ Public Toilets
PLAYGROUNDS						


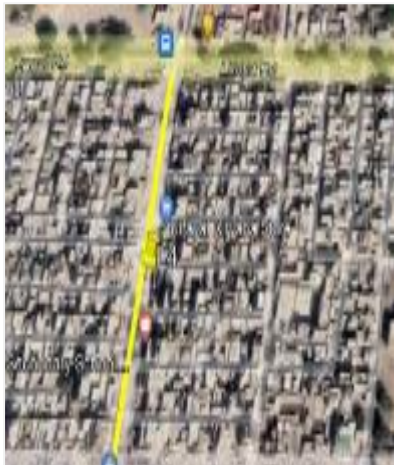

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Sr. No	Name	Brief Profile				Proposed interventions
		Area (acres) / Length (km)	Timings	Estimated Number of Visitors	Major Sports / Activities	
5.	Friends Cricket Ground	2.1	Open 24 hrs.	50-70 in evening	Children playing cricket	<ul style="list-style-type: none"> ▶ Proposed Pavilion with Player Lounges, Changing Room, Toilet, Kitchen, Canteen and Office ▶ Proposed Sitting Steps ▶ Proposed Benches & Dustbin ▶ Proposed Entrance Gate and Boundary Wall ▶ Proposed Toilet Block For Male/ Female/ Handicapped
6.	Young Football Ground	3	Open 24 hrs.	70-80 in evening	Children playing Football and Cricket	<ul style="list-style-type: none"> ▶ Proposed Stadia with Male/Female Player Lounge, Changing Rooms, Toilet, Kitchen, Team Officials, Store, Public and Handicapped Toilet, And Conference Room ▶ Renovation of Existing Sitting steps ▶ Car and Motorbike Parking ▶ Football Ground with Jogging Track ▶ Proposed Benches & Dustbin ▶ Proposed Entrance Gate and Boundary Wall ▶ Guard Room with Toilet & Kitchen
7.	Mehfooz Football Ground	2.4	Open 24 hrs.	5-10	Not in use for any major activity	<ul style="list-style-type: none"> ▶ Renovation of Existing Sitting Steps ▶ Demolition & Rebuilding of existing Changing Rooms, Player Lounges, Prayer Area, Store & Toilet Blocks ▶ Football ground with Jogging Track ▶ Landscape, Food kiosks & eating points, ▶ Proposed Benches & Dustbins ▶ Proposed Entrance Gate and Boundary Wall
LIBRARY						
8.	Shaheed Muhammad Khashkeli Library	0.19	Non-functional		Not in use for any major activity	<ul style="list-style-type: none"> ▶ Proposed Layout Plans of existing building as per Library concept ▶ Proposed Tile Work ▶ Proposed Plumbing work ▶ Proposed Colours of building ▶ Repair of Room walls ▶ Repair work of washrooms ▶ Doors and windows of whole building ▶ Underground, Overhead tank should be repaired ▶ Concrete floor in front of building should be repaired ▶ Main Gate of building ▶ Landscaping of green space currently present in library ▶ Paver should be replaced which are already present at library ▶ Boundary wall ▶ Whole electric work of building

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Sr. No	Name	Brief Profile				Proposed interventions
		Area (acres) / Length (km)	Timings	Estimated Number of Visitors	Major Sports / Activities	
						<ul style="list-style-type: none"> ▶ Repairing of Stairs ▶ Furniture for Building ▶ Furniture for Green Area Such as (Fibre benches, C/C benches, Canopy) ▶ Fancy pole For Green Space
ROADS						
9.	L-1 (Main chaman colony road)	0.58				<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, and Earth Work. ▶ Footpath Both side and Street Lamp with single arm at Footpath only side will be provided. ▶ Sewerage Line on both Side of the Road, Water supply line, will be provided on only side. ▶ Large size dust bins. ▶ Ancillary work ▶ Landscaping ▶ Furniture ▶ Dust bins
10.	L-2 (Back side of Khokhrapar Park)	0.32				<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, and Earth Work. ▶ Footpath Both side and Street Lamp with single arm at Footpath only side will be provided. ▶ Sewerage Line on both Side of the Road, Water supply line, will be provided on only side. ▶ Ancillary work ▶ Landscaping ▶ Furniture ▶ Dust bins




Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Sr. No	Name	Brief Profile			Proposed interventions
		Area (acres) / Length (km)	Timings	Estimated Number of Visitors	
11.	L-3 (Connecting Khokhrapar Park and Madina Park)	0.81			<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, and Earth Work. ▶ Footpath both side, Median, Street Lamp Dual arm at median will be provided. ▶ Sewerage Line, Water supply line, will be providing. ▶ Large size dust bins. ▶ Ancillary work ▶ Landscaping ▶ Furniture ▶ Dust bins ▶ Art Work
12.	L-4 (Main Road Connecting Shaheen Park and Football Ground)	0.63			<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath Both side and Street Lamp with Single arm at Footpath on only Side will be provided. ▶ Sewerage Line on Both Side of the Road, Water supply line, will be provided on only side. ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins ▶ Art Work
13.	L-5 (Dual Carriage Way)	1.15			<ul style="list-style-type: none"> ▶ Complete Road Dual Carriage way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath both side, Median, Street Lamp Dual Arm at median will be provided. ▶ Sewerage Line, Water supply line, will be provided on only side of both ways. ▶ Large size Dust bins ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins



Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Sr. No	Name	Brief Profile				Proposed interventions
		Area (acres) / Length (km)	Timings	Estimated Number of Visitors	Major Sports / Activities	
14.	L-6	0.3				<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath Both side and Street Lamp with Single arm at Footpath on only Side will be provided. ▶ Sewerage Line on Both Side of the Road, Water supply line, will be provided on only side. ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins
15.	L-7	0.77				<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath Both side and Street Lamp with Single arm at Footpath on only Side will be provided. ▶ Sewerage Line on Both Side of the Road, Water supply line, will be provided on only side. ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins
16.	L-8 (connecting Library towards Abul Qasim Park)	0.64				<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath Both side and Street Lamp with Single arm at Footpath on only Side will be provided. ▶ Sewerage Line on Both Side of the Road, Water supply line, will be provided on only side. ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Sr. No	Name	Brief Profile			Proposed interventions	
		Area (acres) / Length (km)	Timings	Estimated Number of Visitors		Major Sports / Activities
17.	L-9	3.26				<ul style="list-style-type: none"> ▶ Complete Road Dual Carriage way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath both side, Median, Street Lamp Dual Arm at median will be provided. ▶ Sewerage Line, Water supply li will be provided on only side of both ways. ▶ Large size Dust bins ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins
18.	L-10	0.50				<ul style="list-style-type: none"> ▶ Complete Road Dual Carriage way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath both side, Median, Street Lamp Dual Arm at median will be provided. ▶ Sewerage Line, Water supply line, will be provided on only side of both ways. ▶ Large size Dust bins ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins
19.	L-11 (On back Side Of Mahfouz Football Ground)	0.12				<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath Both side and Street Lamp with Single arm at Footpath on only Side will be provided. ▶ Sewerage Line on Both Side of the Road, Water supply line, will be provided on only side. ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Sr. No	Name	Brief Profile				Proposed interventions
		Area (acres) / Length (km)	Timings	Estimated Number of Visitors	Major Sports / Activities	
20.	L-12 (Connecting Begum Khurshheed Road To Main Malir 15 Road)	1.02				<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath Both side and Street Lamp with Single arm at Footpath on only Side will be provided. ▶ Sewerage Line on Both Side of the Road, Water supply line, will be provided on only side. ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins
21.	L-13 (Parallel to Malir Central Jail)	0.68				<ul style="list-style-type: none"> ▶ Complete Road Single Carriage Way (Asphaltic Wearing Course, Asphaltic Base Course, Aggregate Base Course, Sub Base, Earth Work) ▶ Footpath Both side and Street Lamp with Single arm at Footpath on only Side will be provided. ▶ Sewerage Line on Both Side of the Road, Water supply line, will be provided on only side. ▶ Ancillary Work ▶ Landscaping ▶ Furniture ▶ Dust Bins

2.3 Details of Utilities

36. A variety of utility lines run along the with the sub-project site which includes electricity, gas, water supply and sewerage. Generally utility lines are located along the main roads. K-Electric will provide electricity, to the sub-project. Water requirement will be taken care of by Karachi Water & Sewerage Board (KW&SB. Gas will be acquired from Sui Southern Gas Company (SSGC) Pakistan.

2.4 Daily Water Requirements

37. The estimated daily water requirement during the operational phase of the sub-project is approximately 4000 Gallons/day⁷ respectively. The water is supplied by piped network of KWSB and the current water supply of Malir Town is 300,000 Gallons/day.

⁷ National Reference Manual on Planning and Infrastructure Standards

Chapter 3

ENVIRONMENT AND SOCIAL MANAGEMENT REQUIREMENT

38. This section presents an overview of the policy and legal framework relevant to the environmental and social aspects of the sub-project. As the sub-project is to be implemented by the Government of Sindh and funded by the World Bank, so following are reviewed:

- ▶ Government of Pakistan Policies and Legislations
- ▶ Government of Sindh Policies and Legislations, and
- ▶ The World Bank Guidelines, Policies and Directives

3.1 National Laws and Regulations

39. National legal landscape for environmental and social safeguards is discussed below:

Table 2. Legal Framework at National Level

Legal Framework	Description
National Environmental Policy, 2005	The National Environmental Policy, 2005 aims to protect, conserve and restore Pakistan’s environment in order to improve the quality of life for the citizens through sustainable development. It provides an overarching framework for addressing the environmental issues facing Pakistan, particularly pollution of fresh water bodies and coastal waters, air pollution, lack of proper waste management, deforestation, loss of biodiversity, desertification, natural disasters and climate change. It also gives direction for addressing the cross sectorial issues as well as the underlying causes of environmental degradation and meeting international obligations.
The Land Acquisition Act (LAA) 1894	The Land Acquisition Act (LAA) of 1894 is the key legislation that has direct relevance to resettlement and compensation in Pakistan. The LAA (Part II, V & VI) and its implementation rules require that before implementation of any development project the privately-owned land and crops are compensated to titled landowners and/or registered tenants/users. The act clearly outlines the boundary for the affected and non-affected persons. Considering this act, no person will be affected through implementation of sub-project, because the land required for the proposed sub-project is State owned land.
Employment of Child Act, 1991	Article 11(3) of the constitution of Pakistan prohibits employment of children below the age of 14 years in any factory, mine, or any other hazardous employment. Keeping in view this law, child labour will be completely prohibited.
Pakistan Environmental Protection Act, PEPA – 1997	PEPA 1997 is the apex environmental law in the country which provides for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution, and for promotion of sustainable development. Its Section 12 requires preparation of Environmental Impact Assessment (EIA) or Initial Environmental Examination (IEE) before commencement of projects likely to cause adverse environmental effects. Although, there are only two categories of environmental assessment in the act, however it

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Legal Framework	Description
	does not nullify the fact that impact assessment is integral for better environmental management.
Pakistan Environmental Protection Agency Review of IEE & EIA Regulations, 2000	These Regulations define procedures for preparation, review and approval of environmental assessments. Although, development of ESMPs does not part of these regulation, but they still provide a guideline for environmental assessments, monitoring and reporting.
National Environmental Quality Standards, 2000	Compliance to all statutory requirements at national level is integral. National Environmental Quality Standards provides a threshold limit for various parameters related to noise, water, ambient air, motor vehicles exhaust and municipal and liquid industrial effluents. These standards apply to the gaseous emissions and liquid effluents discharged by construction and post construction activities. The standards for vehicles will apply only during the construction phase of the sub-project. Standards for ambient air quality are also applicable.
Pakistan Environmental and Social Guidelines such as Policy and Procedures for Filing, Review and Approval of Environmental Assessments, 1997; Guidelines for the Preparation and Review of Environmental Reports, 1997 and Guidelines for Public Consultation, 1997	These are the set of guidelines for conducting environmental and social assessments from the project pre-feasibility stage to the approval of the environmental report. Whereas, Public Consultation guidelines provide appropriate approaches to public consultation along with the tools and techniques for designing an effective consultation program for all major stakeholders and also focus on the incorporation of stakeholders concerns in the impact assessment, mitigation and management report.
The Protection Against Harassment Of Women At Workplace Act 2010	The Act to make provisions for the protection against harassment of women at the workplace and the constitution of the Islamic Republic of Pakistan recognizes as the fundamental rights of citizens to dignity of person. The law is expedient to make this provision for the protection of women from harassment at the workplace.

3.2 Provincial laws and Regulations

40. This section covers the provincial level legislation and regulations related to environmental and social components to be considered for the design, construction and operation of the proposed sub-project. The key applicable environmental regulations and legislations are listed and detailed as follows:

Table 3. Legal Framework at Provincial Level

Legal Framework	Description
Review of EC, IEE & EIA Regulation 2021	<p>The proposed sub-project will be implemented on Government Owned Land. The sub-project will cause low (to moderate) level of environmental or social impacts as per assessment carried out with the help of a checklist.</p> <p>As per Schedule I of Review of EC, IEE and EIA Regulations, 2021, the projects which have minimal impact will be assessed on the basis of screening checklist. According to this regulation of Sindh EPA, the sub-project falls under Schedule I; section (b) Reconstruction / rehabilitation of small roads in urban area, this requires preparation of Environmental Checklist, Hence, the SEPA requirements could be fulfilled based on a checklist only considering the small scale interventions of this sub-project. However, an ESMP has been prepared</p>

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Legal Framework	Description
	to fulfil the requirements of the World Bank operational policies. The ESMP will be submitted to SEPA to obtain NOC.
Sindh Occupational Safety and Health Rules 2019	Sindh Occupational Safety and Health Rules, 2019 provides general duties of employer, self-employed, employer to the persons other than their workers, workers and volunteer etc. to enforce the regulations, standards, guidelines and code of practices related to occupational safety and health. It also provides guidelines related to safety and health covered under Section 10 of Sindh Occupational Safety and Health Act 2017. This Rule exhibits sample forms for certification, reporting and monitoring.
Sindh Occupational Safety and Health Act 2017	The Sindh Occupational Safety and Health Act, 2017 was passed to make provision for occupational safety and health conditions at all workplaces for the protection of persons at work against risk of injury arising out of the activities at work places and for the promotion of safe, healthy and decent working environment adapted to the physical, physiological and psychological needs of all persons at work. It is expedient to make provision for occupational safety health conditions at all workplace for the protection of persons at work against risk of injury arising out of the activities at work places and for the promotion of safe, healthy and decent working environment adapted to the physical, physiological and psychological needs of all persons at work and to provide for all matters connected therewith or ancillary.
Sindh Prohibition of Employment of Children Act, 2017	The act establishes that no child (less than 14 years) shall be employed or permitted to work in any establishment and no adolescent (between ages of 14-18) shall be employed or permitted to work in any hazardous work included in the Schedule. The labour register is to be maintained showing the name, date of birth, local/non-local, and type of worker either skilled or non-skilled and no. of holidays specifically for adolescents. The law is relevant to the implementation of proposed sub-project and employment of children less than 14 will not be allowed and work limits for adolescents will be strictly followed. Compliance to Act will be mandatory on the PIU and sub-project contractors (s).
Sindh Minimum Wages Act 2015	This act was promulgated to provide for the regulation of minimum rates of wages and various allowances for different categories of workers employed in certain industrial and commercial undertakings and establishments. It is expedient to provide for regulation of minimum rates of wages and various allowances for different categories of workers employed in certain industrial and commercial undertakings and establishments and for matters connected therewith and ancillary. The increase in the minimum wage rate to Rs.25000 per month for next financial year 2021-22 by Government of Sindh was announced on July 9, 2021.
Sindh Environmental Quality Standards, 2015	<p>With the SEPA Act, 2014 the Sindh EPA revised the Environmental Quality Standards (EQS) with full consultation of the private sector, industrialist, trade and business associations and NGOs and approval of Sindh Environmental Protection Council has developed Sindh Environmental Industrial Wastewater, Effluent, Domestic Sewerage, Industrial Air Emission, Ambient Air, Noise for vehicles, Air Emissions for Vehicles and Drinking Water Quality Standards 2015 vide Notification No. EPA/TECH/739/2014.</p> <p>Sub-project Contractor(s) is liable to follow the SEQs in letter and spirit.</p>

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Legal Framework	Description
Sindh Environmental Protection Act (SEPA), 2014	SEPA 2014 provides the framework for protection and conservation of species, wildlife habitats and biodiversity, conservation of renewable resources, establishment of standards for the quality of the ambient air, water and land, establishment of Environmental Tribunals, appointment of Environmental Magistrates, Initial Environmental Examination (IEE) and EIA approval. Penalties have been prescribed for those contravene the Act. The categories are defined in the Sindh Environmental Protection Agency (SEPA). The sub-project is a sub-component of Karachi Neighborhood Project (KNIP). The ESMP will be submitted to SEPA to obtain NOC. The sub-project includes small scale interventions. and according to SEPA, it is categorized in Schedule III, which requires environmental screening (through check list).
Sindh Forest Act, 2012	The sub-project will be executed in accordance with the Forest Act, 2012 and no unauthorized tree cutting will be allowed to be cut by worker or labour. Additionally, the plantation of plant saplings is already included as a key intervention for provision of environment friendly urban spaces in the sub-project area. The sub-project proposes the plantation of 770 plant saplings including; neem (<i>Azadirachta indica</i>), peepal (<i>Ficus religiosa</i>), amaltas (<i>Cassia fistula</i>), gulmor (<i>Delonix regia</i>), bougainvillea (Pink, Magenta, Orange & Red) and khalifa (<i>Acalypha wilkesiana</i>) respectively.
Sindh Public Property (Removal of Encroachment) Act 2010	This act was passed to provide measures for removal of encroachment from public property and to retrieve possession. It is expedient to provide measures for removal of encroachment from public property and to retrieve possession and for matters ancillary. It gives powers to Government or any authority or officer authorized by Government in this behalf may require the person directly or indirectly responsible for encroachment to remove such encroachment together with the structure, if any, raised by him on the public property, within the period not less than two days as may be specified in the order.
Sindh Cultural Heritage (Preservation) Act, 1994	<p>Sindh Cultural Heritage (Preservation) Act of 1994 was passed by the Provincial Assembly in February 1994 and was enacted in April 1994. This act aims to preserve and protect ancient places and objects of architectural, historical, archaeological, artistic, ethnological anthropological and national interest in the Province of Sindh.</p> <p>The act states that if it is apprehended that any person intends to destroy, remove, alter, deface or imperil the protected heritage or to build on or near the site thereof in contravention of the terms of an agreement for its preservation under section 8 of the act, the Committee may issue an order prohibiting any such contravention. There is no restriction of distance from construction activity to a PCR protected under this Act.</p>
Sindh Local Government Act, 2013	<p>Sindh Local Government Act was passed in 2013 and extends to the whole of Sindh Province. It aims to establish an elected local government system to devolve political, administrative and financial responsibility and authority to the elected representatives of the local governments; to promote good governance, effective delivery of services and transparent decision making through institutionalized participation of the people at local level; and, to deal with ancillary matters.</p> <p>Metropolitan governance in Karachi is framed by the Sindh Local Government Act 2013 (SLGA 2013), with a metropolitan entity for the entire city area and</p>

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Legal Framework	Description
	district-level municipal entities under it. Newly elected local governments (LG) for Karachi came into office in August 2016 after a gap of six years. LGs in Karachi include the Karachi Metropolitan Corporation (KMC – headed by elected Mayor and Deputy Mayor) at the metropolitan level and six District Municipal Corporations (DMCs – headed by elected Chairmen and Vice Chairmen) at the district level.
Sindh Solid Waste Management Board Act, 2014	The SSWMB Act, 2014 enacted to establish a board for collection and disposal of all solid waste, to arrange effective delivery of sanitation services, to provide pollution free environment and to deal with other relevant matters. SSWMB is managing the waste in sub-project area. Compliance to Act will be mandatory on the PIU and sub-project contractors (s).

3.3 World Bank Operational Policies

41. The application of World Bank Operational Policies is described below:

Table 4: Applicability of the World Bank’s Safeguard Policies

S. No.	Subject	Policy Reference	Triggered	Relevance to sub-project
1	Environmental Assessment	OP/BP 4.01	✓	This Sub-project is classified as “Category B” project per the WB Environment Category since the activities under the project would-be small-scale interventions
2	Natural Habitats	OP/BP4.04	X	No Natural Habitats are present at the sub-project site.
3	Pest Management	OP 4.09	X	This policy is not triggered since the project components do not involve the use pesticide / pest management.
4	Indigenous People	OP/BP 4.10	X	There are no known indigenous people as defined by OP 4.10 in Karachi District project area .
5	Physical Cultural Resources	OP/BP 4.11	✓	There is no PCR is present within the sub-project boundary. However, this policy is triggered due to the possible discovery of archaeological sites or random findings during the execution of civil works on roads. This will require measures to manage chance finds. This ESMP includes "Chance Find" procedures for protection of cultural property.
6	Involuntary Resettlement	OP/BP4.12	X	As per ESMF The OP/BP 4.12 is triggered for KNIP, since the sub-project will be undertaken on government land and existing ROW of sub-project roads/streets. According to a detailed social survey conducted by consultant, there will be no impacts on the existing grounds and neighborhood area. The interventions will also not have a temporary impact on livelihoods. No involuntary resettlement will occur in this sub-project.

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S. No.	Subject	Policy Reference	Triggered	Relevance to sub-project
				The specific interventions sites are outside the anti-encroachment drive (Annex S and T). All the subproject sites for KNIP Phase-II have been selected after taking assurance from administrative authorities (DMCs, District Council and DCs) that no anti-encroachment drive were taken or planned to take in future in the selected sub-project areas of Phase-II, so this OP is not relevant for this sub-project.
7	Forestry	OP 4.36	X	This OP is not triggered since the sub-project is not located in the forest areas.
8	Safety of Dams	OP/BP4.37	X	This OP is not relevant since the sub-project does not involve construction of dams.
9	Project in International water ways	OP/BP7.50	X	As per ESMF, the OP/BP 7.50 is triggered for KNIP, since the sub-project interventions do not pollute the tributaries of Indus River System which as per Indus Water Treaty is designated as International Waterway between India and Pakistan, so this OP is not relevant for this sub-project.
10	World Bank Policy on Access to Information 2010		✓	The World Bank's disclosure policy requires the environmental and social assessment report to be disclosed to public and before the Bank commences the project appraisal, a copy of the report is to be sent to the Bank's Info Shop, In accordance with this Policy, ESMP of this sub-project is to be disclosed to public and placed on World Bank website.

3.4 Institutional and Administrative Framework

42. Environmental issues are governed by Provincial Governments. The Provincial Environmental Protection Agencies (EPAs) are formed by the respective Provincial Governments. Prime function of Provincial EPA is to act as a regulator for regulation and enforcement of environmental laws and regulation.

43. The Government of Sindh (GOS) has designated its department called Sindh Environmental Protection Agency to administer environment related matters in Sindh.

3.5 Study Team

44. This report has utilised the baseline data collected for "Environmental and Social Management Framework (ESMF) for KNIP Project" at its inception stage via assessing the project's environmental and social viability through various environmental and social components to undertake "Karachi Neighborhood Improvement Project (KNIP)" during 2017. The additional field surveys have also been

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conducted during months of July to September 2021 by ESU-G3ECs with the coordination of ESRU-PIU team. The list of team members includes:

Table 5: List of Team Members for the ESMP Study

S. No.	Name	Designation	Organization
1.	Dr. Ghulam Rasool Keerio	Environmental Specialist	G3ECs
2.	Muhammad Ali Khawaja	Social Safeguards and Resettlement Specialist	G3ECs
3.	Ajmal Abbasi	Environment Specialist	G3ECs
4.	Israr Hussain Korejo	Environmental Officer	G3ECs
5.	Rozina Ghanghiro	Gender & Communication Specialist	G3ECs
6.	Abdul Razaq	Ecologist	G3ECs

Chapter 4

ENVIRONMENTAL BASELINE

45. This section of the Report presents specific existing environmental conditions of the sub-project. Available secondary data from published literature and previous studies conducted by the Consultant in the sub-project area and existing situation of sub-project roads/streets and playgrounds through detailed environmental surveys⁸ has been collected to develop the baseline profile.

4.1 Physical Environment

46. Baseline data of physical environment that includes climate, water, geology, hydrology and seismicity. These physical parameters are collected through secondary sources and published literature while quality of environmental parameters is collected through both published data and environmental monitoring in the field. Description of these parameters are discussed as under;

4.1.1 *Climate*

47. The climate of project area is arid to semi-arid with hot summers and mild winter. Scanty and erratic rainfall is received in monsoon.

4.1.1.1 *Temperature*

48. The air temperature in Karachi Division and its coastal areas are generally moderate throughout the year due to presence of sea. Climate data generated by the meteorological station at Karachi Air Port represents climatic conditions for the region. The mean monthly maximum and minimum temperatures, recorded during the last 20 years in Karachi is obtained to describe the weather conditions are shown in Figure below. The tables indicate that the mean monthly maximum temperature in Karachi ranged between 24.3°C and 39.9°C during the 2001-2020 periods, while the mean monthly minimum temperature ranged between 9.9°C and 29.8°C.

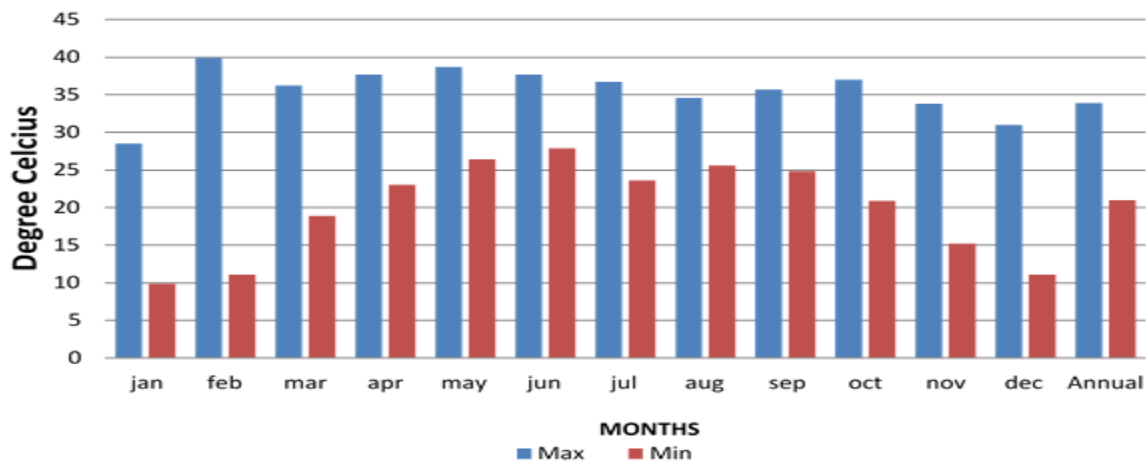


Figure 18: Mean Monthly Maximum Temperature °C of Karachi⁹ (2001-2020)

⁸ After initial information was collected and reviewed, detailed environmental survey in sub-project area was conducted by Consultant on July and August 2021 to collect primary information and screening for the sub-project.

⁹ Pakistan Metrological Department

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4.1.1.2 Precipitation

The main source of precipitation is rainfall which is received mostly in the months of July to September due to South West Monsoon winds. It is very erratic as some years are very dry and there is no rain. The maximum rainfall in Karachi recorded during month of August is 366.8 mm. Occasional winter rains are also received in the months of December – February as result of NE winds which count 15-25% of total rainfall. The record for rainfall of PMD at Karachi Airport (2001-2020) suggests that July and August are the wettest months. The rainfall inundates the sub-project area for only a few ours as informed by the DMC South. The rainwater flushes through KW&SB sewerage system without causing any harm to the dwellers of sub-project. It is unlikely that precipitation will have any negative impact on construction schedule and traffic management during implementation of sub-project works. The average monthly precipitation (mm) recorded in Karachi by PMD during 2001-2020 period is shown in below table.

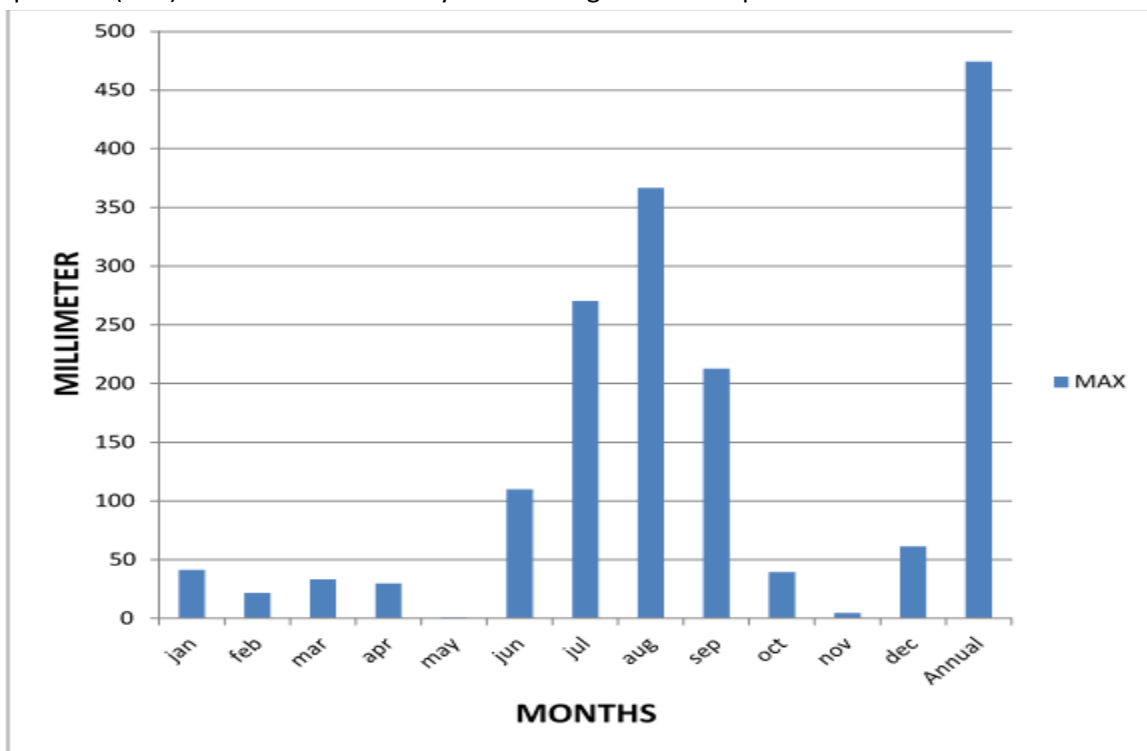


Figure 19: Average Monthly Precipitation (mm) at Karachi¹⁰(2001-2020)

4.1.1.3 Wind Speed and Direction

49. The wind direction and speed between summer and winter monsoon seasons are rather unsettled and large variations are noted both with respect to speed and direction. The past twenty years’ data of wind velocity (2001-2020) indicates that the average monthly wind velocity varies and ranges between 1.0 m/s to 13.7 m/s.

¹⁰ Ibid

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Table 6. Average Monthly Wind Speed (m/s) at 12:00 UTS¹¹

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2001	2.6	3.4	4.3	5.6	7.5	8.1	6.8	7.3	5.5	3.7	2.0	2.4	4.9
2002	3.6	3.9	4.0	6.5	8.5	8.2	9.8	7.3	7.7	3.3	2.9	3.2	5.7
2003	4.0	5.0	5.4	5.2	7.7	8.8	6.7	7.1	6.0	3.2	3.1	3.0	5.4
2004	3.4	3.7	4.0	6.0	8.0	9.0	10.0	9.5	7.3	3.8	1.0	2.5	5.7
2005	3.6	4.2	4.8	5.1	7.1	7.5	9.0	6.9	6.4	3.9	2.0	1.5	5.2
2006	2.0	3.0	3.0	6.2	8.0	7.7	8.3	6.2	4.7	4.2	2.2	3.0	4.9
2007	2.0	3.7	4.0	4.0	6.0	6.3	N.A	N.A	N.A	N.A	N.A	N.A	4.3
2008	4.3	7.6	8.2	10.5	12.6	7.6	11.0	9.3	8.7	6.6	5.1	3.9	7.9
2009	7.0	7.2	7.9	9.3	9.8	9.7	9.5	9.3	9.1	6.1	5.0	3.9	7.8
2012	5.8	6.6	9.3	9.8	12.3	12.8	13.1	11.2	8.4	7.1	5.7	5.8	9.0
2013	5.2	6.9	9.0	10.3	11.5	10.8	12.0	11.2	10.3	7.7	5.1	4.5	8.7
2014	5.9	8.9	8.6	11.5	12.4	13.4	12.8	11.6	11.7	8.3	6.0	4.5	9.6
2015	6.9	10.3	10.1	11.5	12.8	12.3	13.7	12.3	10.5	8.7	5.6	5.8	10.0
2016	7.5	8.7	4.8	1.1	13.0	11.7	11.8	10.5	12.1	9.2	5.5	5.2	8.4
2017	7.0	8.0	10.8	12.1	12.8	11.5	12.1	10.3	8.7	8.5	5.4	7.4	6.9
2018	6.3	7.0	9.5	10.2	10.8	11.1	12.3	12.4	12.2	8.7	6.1	6.8	9.4
2019	6.7	8.9	10.2	11.7	12.1	11.7	13.7	9.1	8.5	8.0	6.9	7.4	9.6
2020	9.0	9.4	9.0	10.5	13.3	10.9	10.1	8.9	9.4	7.3	6.2	5.5	9.1
Min	2.0	3.0	3.0	1.1	6.0	6.3	6.7	6.2	4.7	3.2	1.0	1.5	4.3
Max	9.0	10.3	10.8	12.1	13.3	13.4	13.7	12.4	12.2	9.2	6.9	7.4	10.0
Avg.	5.2	6.5	7.1	8.2	10.3	10.0	10.7	9.4	8.7	6.4	4.5	4.5	7.4

Table 7. Wind Direction at 12:00 UTS¹²

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2001	S54W	S43W	S42W	S45W	S46W	S45W	N52W	S59W	S44W	N56W	S45W	S06W
2002	S67W	S52W	S51W	S55W	S51W	S42W	S54W	S45W	S48W	S56W	N54W	S41W
2003	S60W	N50W	S45W	S48W	S45W	S68W	S60W	S47W	S43W	S54W	S50W	S27W
2004	N27E	S46W	S53W	S49W	S52W	S54W	S54W	S62W	S56W	S47W	S45W	N86E
2005	N63E	S51W	S50W	S52W	S63W	S48W	S54W	S49W	S87W	S54W	S52W	N23W
2006	S48W	S62W	S50W	S57W	S64W	S60W	S67W	S78W	S51W	S53W	S49W	N79E
2007	S30W	S62W	S47W	S55W	S58W	S47W	S41W	S55W	S60W	S48W	S48W	N45E
2008	N45E	S47W	S54W	S51W	S52W	S39W	S50W	S52W	S46W	S39W	S38W	-
2009	N45E	S45W	S41W	S58W	S46W	S46W	S56W	S49W	S56W	S42W	S39W	S45E
2012	S3E	N56E	S62W	S46W	S61W	S51W	S66W	S51W	S53W	S41W	S41W	N9W
2013	N39W	S54W	S56W	S54W	S61W	S40W	S53W	S52W	S55W	S47W	S17W	N50W
2014	S72E	S54W	S43W	S46W	S46W	S45W	S54W	S48W	S85W	S45W	S49W	S45E
2015	S72E	S54W	S43W	S48W	S50W	S40W	S54W	S55W	S50W	S41W	-	S58W
2016	S43W	S36W	S48W	S54W	S54W	S45W	S48W	S36W	S51W	S45W	S43W	S36W
2017	S83E	S56W	S51W	S45W	S45W	S44W	S66W	S57W	S48W	S51W	S59W	N45E
2018	S39W	S39W	S46W	S51W	S50W	S45W	S45W	S48W	S46W	S46W	S42W	S18W
2019	S24W	S65W	S45W	S44W	S42W	S37W	S48W	S46W	S53W	S35W	N59E	N55E
2020	N31E	S12W	S52W	S55W	S49W	S44W	S47W	S55W	S47W	S38W	S4E	N35E

¹¹ Ibid at 10

¹² Ibid at 10

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

50. General trends of wind speed and wind direction for whole of a year in Karachi:
- ▶ During mid- March to Mid- June the wind speed in summer is variable. It is around 2.5 m/s in March and rises up to 18 m/s in April and drops to 4 m/s for the rest of the season. The direction mostly remains blowing from West.
 - ▶ During mid- June to mid- September, the wind direction in the monsoon is mostly blowing from East.
 - ▶ During mid- September to November, the wind speed in September is around 3.7 m/s and drops to 1.4 m/s in November.
 - ▶ During December to mid-March, the wind speed in the winter season increases from 1.4 m/s in December to 2.6 m/s in March. The wind direction for most part winter season is blowing from NE and changes its course to blowing from West in early March.

4.1.1.4 Humidity

51. The relative humidity typically ranges from 25% (dry) to 70% (humid) over the course of a year, rarely dropping below 20% (very dry) and reaching as high as 90% (very humid).

Table 8. Mean Monthly Relative Humidity (%) at 12:00 UTC¹³

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2014	25.0	27.0	35.0	47.0	57.0	61.0	64.0	61.0	60.0	36.0	36.0	31.0	45.0
2015	38.0	41.0	37.0	45.0	60.0	56.0	69.0	67.0	56.0	47.0	28.0	31.0	48.0
2016	46.0	25.0	41.0	47.0	60.0	60.0	68.0	70.0	63.0	57.0	34.0	38.0	51.0
2017	38.0	25.0	36.0	44.0	59.0	62.0	70.0	67.0	63.0	44.0	29.0	20.0	46.0
2018	36.0	37.0	33.0	45.0	46.0	65.0	65.0	68.0	63.0	40.0	32.0	30.0	47.0
2019	40.4	33.9	36.6	48.0	55.6	58.8	64.8	72.6	67.6	41.1	34.6	29.7	48.6
2020	29.9	28.1	34.2	44.4	57.1	56.8	65.0	74.8	62.4	38.1	32.9	29.1	46.1
Min.	25.0	25.0	33.0	44.0	46.0	56.0	64.0	61.0	56.0	36.0	28.0	20.0	45.0
Max.	46.0	41.0	41.0	48.0	60.0	65.0	70.0	74.8	67.6	57.0	36.0	38.0	51.0
Avg.	36.2	31.0	36.1	45.8	56.4	59.9	66.5	68.6	62.1	43.3	32.4	29.8	47.4

4.1.2 Ambient Air Quality

52. The ambient air quality monitoring and ambient noise monitoring was conducted through an EPA certified laboratory (Annex A) on October 18-19, 2021 at Young football ground. The prime objective of the baseline air quality study was to establish the existing ambient air quality and ambient noise of the subproject area. The readings were recorded at an interval of 15 minutes over a period of 24 hours. The ambient air quality was monitored for the priority pollutants such as; sulphur dioxide (SO₂), nitrogen oxide (NO), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone (O₃), suspended particulate matter (SPM), particulate matter (PM₁₀ and PM_{2.5}), lead and noise respectively.

53. Overall air quality was satisfactory and under the threshold limit defined by SEQs. The results are presented at Table below.

¹³ Ibid at 1

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

4.1.3 Ambient Noise Quality

54. Noise monitoring at commercial and residential zones are conducted in the sub-project area. Three points were monitored within the sub-project area record the noise quality as per SEQS. All the results of noise monitoring confirmed that they are within the permissible to SEQS and acceptable.



Figure 20: Ambient Air and Noise Quality Monitoring at project site

Table 9: Analysis of Ambient Air and Noise Quality Results at Project Site

Date	Time	SO2	NO	NO2	CO	O3	PM 10	PM 2.5	Noise	SPM	Lead
		(µg/m ³)							(dB)	(µg/m ³)	
18-10-2021	10:00	62.3	13.5	44.9	2.3	58.2	115.0	29.0	56.0	412	ND
18-10-2021	11:00	57.2	13.3	39.6	2.6	63.5	125.0	27.0	58.0		
18-10-2021	12:00	55.6	12.5	40.8	2.1	70.7	120.0	26.0	54.0		
18-10-2021	13:00	57.8	13.5	45.3	2.7	63.5	122.0	25.0	52.0		
18-10-2021	14:00	56.7	15.2	43.6	2.6	70.9	124.0	26.0	56.0		
18-10-2021	15:00	57.2	13.3	40.8	2.1	75.7	120.0	24.0	52.0		
18-10-2021	16:00	56.7	12.9	38.0	2.0	72.4	123.0	28.0	65.0		
18-10-2021	17:00	55.0	12.4	39.6	1.8	67.3	125.0	29.0	58.0		
18-10-2021	18:00	57.2	11.7	33.5	1.7	53.4	124.0	32.0	54.0		
18-10-2021	19:00	60.6	13.1	36.3	2.0	39.2	120.0	35.0	52.0		
18-10-2021	20:00	56.7	12.5	37.4	1.8	30.0	120.0	32.0	52.0		
18-10-2021	21:00	60.9	11.7	40.0	1.7	21.5	111.0	30.0	48.0		
18-10-2021	22:00	66.0	12.0	36.3	1.5	20.9	126.0	32.0	47.0		
18-10-2021	23:00	59.5	11.5	37.6	2.0	17.9	132.0	36.0	45.0		
19-10-2021	0:00	56.7	12.5	35.5	1.7	13.3	125.0	35.0	48.0		
19-10-2021	1:00	53.3	12.0	39.2	1.8	12.2	124.0	32.0	47.0		
19-10-2021	2:00	49.4	13.5	33.5	2.0	13.5	120.0	30.0	45.0		
19-10-2021	3:00	43.1	14.0	31.1	2.1	12.4	120.0	36.0	46.0		
19-10-2021	4:00	40.9	14.9	31.3	1.8	13.9	115.0	38.0	48.0		
19-10-2021	5:00	40.0	14.4	30.0	2.0	17.7	120.0	35.0	47.0		
19-10-2021	6:00	37.2	15.3	30.9	1.7	16.0	111.0	32.0	45.0		
19-10-2021	7:00	42.0	14.7	35.5	2.2	26.4	120.0	30.0	48.0		
19-10-2021	8:00	46.2	16.2	39.4	2.0	37.8	118.0	28.0	52.0		
19-10-2021	9:00	52.5	14.7	37.1	2.3	49.6	120.0	26.0	54.0		
SEQS (2016)		120	40	80	10	130	150	75	75	500	1.5
Min		37.2	11.5	30.0	1.5	12.2	111.0	24.0	45.0	412	ND
Max		66.0	16.2	45.3	2.7	75.7	132.0	38.0	65.0		
Average		53.4	13.4	37.4	2.0	39.1	120.8	30.5	51.2		

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Ambient Air Quality and Noise Monitoring by EPA Certified Laboratory

EPA Certified Lab
 EPA/LAB/Certificate-14/2020

Customer's Ref: 10405/EGEL/G3/2021/WD/02

Date: 26-10-2021

Report to: **M/s. G3 Engineering Consultant's Pvt Ltd.**
 House No. 41, Khayaban-e-Rizwan,
 Phase-7, DHA Karachi.

SAMPLE DESCRIPTION	
Sample ID: <u> </u> Air Quality Test	Sample Type: <u> </u> Ambient Air
Sampling Start Date: <u>18-10-2021</u> Time: <u>10:00 AM</u>	Sampling Stop Date: <u>19-10-2021</u> Time: <u>09:00 AM</u>
Sampling Duration: <u> </u> 24 hrs.	Lab Report Ref. No.: <u>28371/EGEL/G3/2021/AA/03</u>
Project ID: <u> </u> Malir Sub Project	Coordinates: Latitude <u>24°54'21.81"N</u>
Sampling Location: <u>Friends Cricket and Young</u>	Longitude <u>67°13'0.83"E</u>
Football Grounds, near Babul Ismal Road Malir	

AMBIENT AIR TEST REPORT

Date	Time	SO ₂ (µg/m ³)	NO (µg/m ³)	NO ₂ (µg/m ³)	CO (mg/m ³)	O ₃ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	Noise (dB)	SPM (µg/m ³)	Lead (µg/m ³)
18-10-2021	10:00	62.3	13.5	44.9	2.3	58.2	115.0	29.0	56.0	412	ND
18-10-2021	11:00	57.2	13.3	39.6	2.8	63.5	125.0	27.0	58.0		
18-10-2021	12:00	55.6	12.5	40.8	2.1	70.7	120.0	26.0	54.0		
18-10-2021	13:00	57.8	13.5	45.3	2.7	63.5	122.0	25.0	52.0		
18-10-2021	14:00	56.7	15.2	43.6	2.6	70.9	124.0	26.0	56.0		
18-10-2021	15:00	57.2	13.3	40.8	2.1	75.7	120.0	24.0	52.0		
18-10-2021	16:00	56.7	12.9	38.0	2.0	72.4	123.0	28.0	65.0		
18-10-2021	17:00	55.0	12.4	39.6	1.8	67.3	125.0	29.0	58.0		
18-10-2021	18:00	57.2	11.7	33.5	1.7	63.4	124.0	32.0	54.0		
18-10-2021	19:00	60.6	13.1	36.3	2.0	39.2	120.0	35.0	52.0		
18-10-2021	20:00	56.7	12.5	37.4	1.8	30.0	120.0	32.0	52.0		
18-10-2021	21:00	60.9	11.7	40.0	1.7	21.5	111.0	30.0	48.0		
18-10-2021	22:00	66.0	12.0	36.3	1.5	20.9	126.0	32.0	47.0		
18-10-2021	23:00	59.5	11.5	37.6	2.0	17.9	132.0	36.0	45.0		
19-10-2021	0:00	56.7	12.5	35.5	1.7	13.3	125.0	35.0	48.0		
19-10-2021	1:00	53.3	12.0	39.2	1.8	12.2	124.0	32.0	47.0		
19-10-2021	2:00	49.4	13.5	33.5	2.0	13.5	120.0	30.0	45.0		
19-10-2021	3:00	43.1	14.0	31.1	2.1	12.4	120.0	36.0	46.0		
19-10-2021	4:00	40.9	14.9	31.3	1.8	13.9	115.0	38.0	48.0		
19-10-2021	5:00	40.0	14.4	30.0	2.0	17.7	120.0	35.0	47.0		
19-10-2021	6:00	37.2	15.3	30.9	1.7	16.0	111.0	32.0	45.0		
19-10-2021	7:00	42.0	14.7	36.5	2.2	26.4	120.0	30.0	48.0		
19-10-2021	8:00	46.2	16.2	39.4	2.0	37.8	118.0	28.0	52.0		
19-10-2021	9:00	52.5	14.7	37.1	2.3	49.6	120.0	26.0	54.0		
SEQS (2014)		120	40	80							
Min		37.2	11.5	30.0	1.5	12.2	111.0	24.0	45.0		
Max		66.0	16.2	45.3	2.7	75.7	132.0	38.0	65.0	412	ND
Average		53.4	13.4	37.4	2.0	39.1	120.8	30.5	51.2		

* SEQS - Sindh Environmental Quality Standards (The Gazette of Pakistan) Registered No. EPA/TECH/29/2016

Note:

- Selected measurement units were µg/Nm³ otherwise stated.
- Quality was assured through self-calibration of the instrument.
- The values were representing of process conditions when monitoring was carried out.

Remarks: The average Ambient air concentration calculated for the 24 hours are well within guideline values set by SEQS.

Prepared By	Section Incharge (EGEL)
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The Analyser based on source (s) provided to us by the Client. The interpretation of response expressed represent the best judgment. We have no responsibility and warranty or representation in connection with which such report is used.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Table 10. Analysis of Ambient Noise Quality Results at Project Site

Commercial-cum-Resident Zone						
Location	SEQS (Limit in dB (A) Leq)		Measured Concentration		GPS Location	
	Day Time	Night Time	Day Time	Night Time	N	E
Pir Mehfooz Ground	65	55	36.5	34.5	24°53'14.00"	67°11'13.56"
Young Football Ground	65	55	38.1	34.8	24°54'22.95"	67°13'2.76"
Friends Cricket Ground	65	55	37.8	34.5	24°54'22.92"	67°12'59.15"
Shaheen Park	65	55	36.1	34.0	24°54'22.38"	67°13'18.02"
Shaheed M. Khaskheli Park & Library	65	55	36.2	34.2	24°54'14.00"	67°13'26.16"
At Bakra Pari Road	65	55	38.8	36.5	24°52'43.97"	67°12'8.84"

4.1.4 Drinking Water Quality

55. Drinking water quality analysis was carried out in the sub-project area as part of the ESMP study. For this purpose, a water sample was taken from Malir piped water source being supplied by KWSB (resident building). The current water supply to Malir Town is 300,000 Gallons/day. Different parameters were analysed and thereafter compared with Sindh Standards for Drinking Water Quality (SSDWQ).

56. The water quality included physical, chemical and biological parameters (Coliforms /E. Coli). The results showed that the values of physical, chemical and radioactive are within permissible limits, whereas Coliforms and E. coli are present in water, which means that water is contaminated with faeces.

57. According to WHO there should be no Coliforms /E. Coli in 100 ml of water. The microbiological analysis showed that the drinking water is contaminated and all the three parameters i.e. total coliform, faecal coliform and Escherichia coli are beyond the permissible limit, as shown in 3rd Party reports.

58. The availability of safe drinking water during the construction phase will be ensured by the contractor by providing bottle water to the workers.

Table 11: Drinking Water Quality of Sub-Project Area

Parameters	SSDWQ	Units	Results
pH value	6.5-8.5	SU	8.3
Odour	Non Objectionable	Physically	Acceptable
Taste	Non Objectionable	Physically	Acceptable
Color	≤ 15	TCU	0.1
Turbidity	< 5	NTU	0
Total Dissolved Solids (TDS)	< 1000	mg/l	271
Total Hardness (as CaCO3)	≤ 500	mg/l	105
Fluoride	≤ 1.5	mg/l	1.1
Chloride	< 250	mg/l	45
Nitrate	≤ 50	mg/l	1.6
Nitrite	≤ 3	mg/l	0.018
Cyanide	≤ 0.05	mg/l	BDL
Phenolic Compound	-	mg/l	BDL
Aluminum	≤ 0.2	mg/l	BDL
Antimony	≤ 0.005	mg/l	BDL
Arsenic	≤ 0.05	mg/l	BDL
Cadmium	0.01	mg/l	BDL

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Parameters	SSDWQ	Units	Results
Chromium	≤ 0.05	mg/l	BDL
Copper	2	mg/l	0.014
Lead	≤ 0.05	mg/l	BDL
Mercury	≤ 0.001	mg/l	BDL
Selenium	0.01	mg/l	BDL
Nickel	≤ 0.02	mg/l	BDL
Boron	0.3	mg/l	BDL
Residual Chlorine	0.2-0.5	mg/l	ND
Zinc	5	mg/l	0.05
Manganese	≤ 0.5	mg/l	BDL
Barium	0.7	mg/l	BDL
Pesticides	-	mg/l	BDL
Polynuclear Aromatic Hydrocarbon	-	g/l	ND
Alpha Emitters	0.1	Bg/l	BDL
Beta Emitters	1.0	Bg/l	BDL
Microbiological Analysis Report			
Total Coliform	0cfu/100ml	Cfu	63
Fecal Coliform	0cfu/100ml	Cfu	38
Escherichia Coli	0cfu/100ml	Cfu	16



Figure 21: Drinking water sampling from water tank and waste water sampling at Thado Nallah

4.1.5 Waste Water Quality

59. Wastewater analysis of underground wastewater drain in sub-project area was tested. The parameters included analysis of Temperature (°C), pH Value (acidity/basicity), 5-days Biochemical Oxygen Demand (BOD) (mg/l) at 20°C, Chemical Oxygen Demand (COD) (mg/l) and Total Suspended Solids (TSS) (mg/l). The results showed that Biochemical Oxygen Demand (BOD₀, Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are beyond the permissible limit and need treatment, as shown in Third Party Reports.

Table 12: Waste Water Quality of Sub-Project Area

Parameters	SEQS	Units	Result
Temperature	40	°C	20.1
pH Value	6-9	(acidic/basic)	8.1
Biochemical Oxygen Demand (BOD)	80	mg/l	132.1

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Parameters	SEQS	Units	Result
Chemical Oxygen Demand (COD)	150	mg/l	471.3
Total Suspended Solids (TSS)	200	mg/l	128.4
Total Dissolved Solids (TDS)	3500	mg/l	601

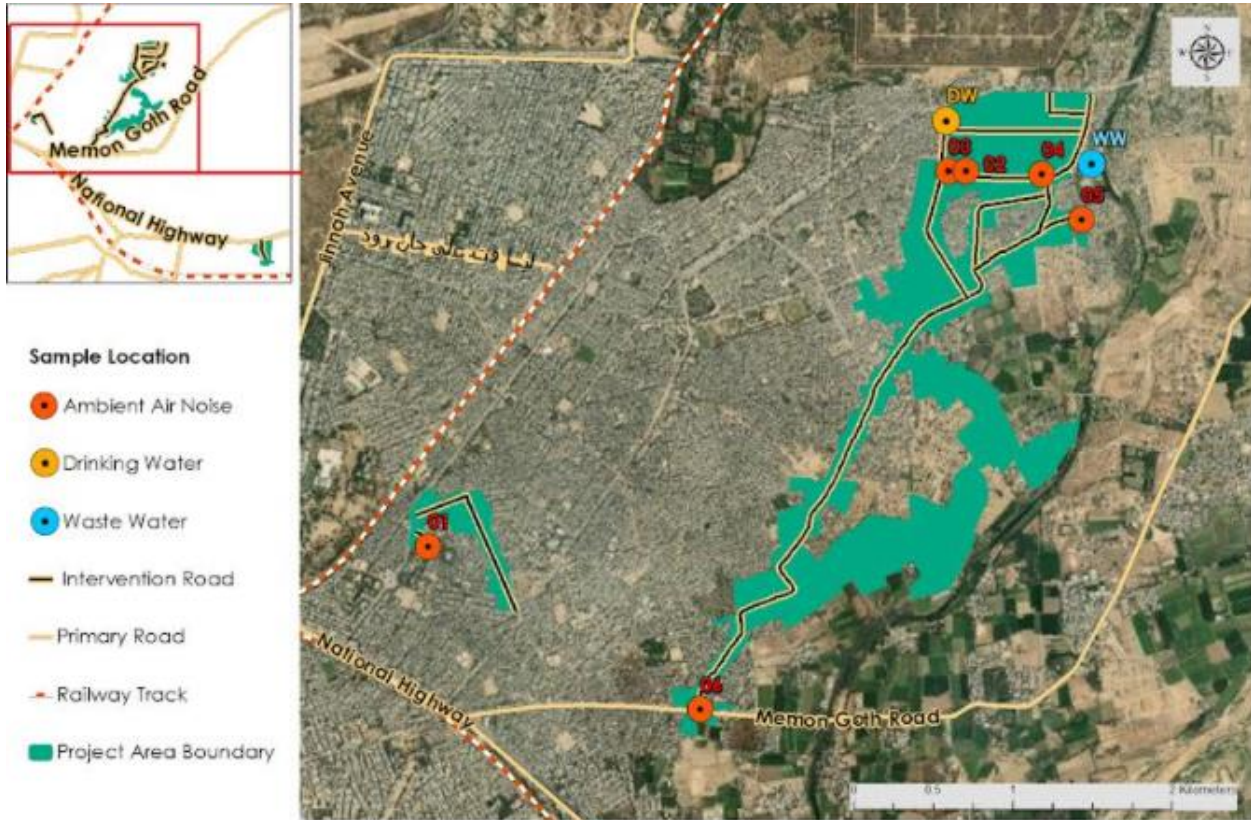


Figure 22: Environmental Quality Monitoring Map of Sub-Project Area

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Drinking Water Quality Testing by EPA Certified Laboratory

EPA Certified Lab
 EPA/LAB/Certificate-14/2020



Customer's Ref: 10405/EGEL/G3/2021/WD/02

Date: 23-07-2021

Report to: **M/s. G3 Engineering Consultant's Pvt Ltd.**
 House No. 41, Khayaban-e-Rizwan,
 Phase-7, DHA Karachi

Date of Sample Collection: 16-07-2021
 Date of Sample Received: 16-07-2021
 Samples collected / send by: Collected by Client
 Sample type: Drinking Water Sampling

Site ID: Malir Pipe line.
 Lab. Rpt. Ref. No.: 28371/EGEL/G3/2021/WD/022

ANALYTICAL TEST REPORT

ANALYTICAL TEST REPORT					
S. NO.	PARAMETERS	STANDARDS SSDWQ - LIMITS	UNITS	RESULTS	TEST METHOD
1	pH value	6.5 - 8.5	SU	8.3	USEPA 150.1
2	Odour	Non Objectionable / Acceptable	Physical	Acceptable	Physical
3	Taste	Non Objectionable / Acceptable	Physical	Acceptable	Physical
4	Color	≤ 15	TCU	0.1	APHA-2020 B/C
5	Turbidity	≤ 5	NTU	0.0	APHA-2130 B
6	Total Dissolved Solids(TDS)	≤ 1000	mg/L	271	Hach 8160
7	Total Hardness as CaCO ₃	≤ 500	mg/L	105	EDTA Titration Hach-8213
8	Fluoride(as F ⁻)	≤ 1.5	mg/L	1.1	USEPA 340.1
9	Chloride(as Cl ⁻)	≤ 250	mg/L	45	Hach 8206
10	Nitrate (NO ₃)	≤ 50	mg/L	1.6	Hach-8019
11	Nitrite (NO ₂)	≤ 3	mg/L	0.018	Hach - 8153
12	Cyanide(as CN ⁻)total	≤ 0.05	mg/L	BDL	Hach 8027
13	Phenolic Compound as (Phenols)		mg/L	BDL	USEPA-420.1
14	Aluminum (Al)	≤ 0.2	mg/L	BDL	APHA-3111 D
15	Antimony (Sb)	≤ 0.05	mg/L	BDL	APHA-3111 B
16	Arsenic	≤ 0.05	mg/L	BDL	APHA-3120 B
17	Cadmium	0.01	mg/L	BDL	ASTM D-3557
18	Chromium , Total	≤ 0.05	mg/L	BDL	ASTM D-1087
19	Copper	2	mg/L	0.014	Hach 8506
20	Lead	≤ 0.05	mg/L	BDL	ASTM D-3555
21	Mercury	≤ 0.001	mg/L	BDL	ASTM D-3223
22	Selenium	0.01	mg/L	BDL	ASTM D-3859
23	Nickel	≤ 0.02	mg/L	BDL	ASTM D-1888
24	Boron	0.3	mg/L	BDL	ASTM D-3032
25	Residual Chlorine	0.2-0.5 at Consumer End	mg/L	ND	Hach - 8167
26	Zinc	5.0	mg/L	0.05	USEPA 3500 Zn B
27	Manganese	≤ 0.5	mg/L	BDL	Hach 8034
28	Barium	0.7	mg/L	BDL	Hach 8014
29	Pesticides		mg/l	BDL	Hach 8014
30	Polynuclear Aromatic Hydrocarbon (as PAH)		µg/l	ND	USEPA 8061-A
31	Alpha Emitters	0.1	Bq/l	BDL	GC-APHA-4440
32	Beta Emitters	1.0	Bq/l	BDL	Detector (PalmRAD 907) Detector PalmRAD 907)
MICROBIOLOGICAL ANALYSIS REPORT					
33	Total Coliform	0cfu/100ml	cfu	63	APHA-SM9221B
34	Fecal Coliform	0cfu/100ml	cfu	38	APHA-SM9221F
35	Escherichia Coli(E-Coli)	0cfu/100ml	cfu	16	APHA-SM9221F

SSDWQ=Sinch Standard for Drinking Water Quality
 USEPA=United State Environmental Protection Agency method
 Hach USA method
 BDL=Below Detection Limit
 ND= Not Detected

- This report is not valid for any negotiations
- Report is valid for current batch/sample
- The remaining portion of the sample will be discarded after 07 days unless otherwise instructed

Remarks: The Drinking Water Sampling results are well within guideline values set by SEQs except Microbiological Parameter

[Signature]
 Prepared By

[Signature]
 Section In-charge
 (EGEL)



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Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Waste Water Quality Testing by EPA Certified Laboratory

EPA CERTIFIED LAB
EPA/LAB/Certificate-14/2020

Evergreen Environmental Laboratory
Environments

Customer's Ref: 10405/EGEL/G3/2021/WD/02 Date: 23-07-2021

Report to: M/s. G3 Engineering Consultant's Pvt Ltd.
House No. 41, Khayaban-e-Rizwan,
Phase-7, DHA Karachi

Date of Sample Collection: 16-07-2021
Date of Sample Received: 16-07-2021
Samples collected/sent by: Collected by Client
Sample type: Waste Water Sampling

Site ID: Malir Trade Dam,
Lab. Rpt. Ref. No.: 28371/EGEL/G3/2021/WD/023

ANALYTICAL TEST REPORT

S. No	Parameters	Results	SEQS Limits	Method Reference
1	Temperature °C	20.1	40	ASTM D 6764-02 (2007)
2	pH Value (acidity/basicity)	8.1	6-9	ASTM D 6764-02 (2007)
3	5-days Biochemical Oxygen Demand (BOD) (mg/l) at 20°C	132.1	80	HACH METHOD 1009
4	Chemical Oxygen Demand (COD) (mg/l)	471.3	150	ASTM D 1252-00
5	Total Suspended Solids (TSS) (mg/l)	128.4	200	HACH, USA Method#8006
6	Total Dissolved Solids (TDS)(mg/l)	601	3500	HACH Method#8006

* SEQs - Sindh Environmental Quality Standards (The Gazette of Pakistan Registered No. EPA/TECH/1719/2018)
 * ND: NOT Detect

Note:

- This report should be reproduced as a whole and not in parts.
- The responsibility of the ethical use of the results reported in this report lies with the client.
- The left over samples (if so available) shall be retained for fifteen days after the issuance of the report unless otherwise Negotiated between the client and the laboratory.


Remarks: The Effluent water Sampling results are not well within guideline values set by SEQs

[Signature]
Prepared By

[Signature]
Section Incharge
(EGEL)

The Analysis based on sample(s) provided to us by the Client. The interpretation or opinion expressed represent the best judgment. We hold no responsibility or warranty or representation or guarantee with respect to each report or test.

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

4.1.6 Topography

60. The topography of Karachi includes the large shallow intertidal and sub-tidal areas spreading out to 1-5 km with a very gentle surface gradient of about 1:50. The coastal region of the synclinorium is seismically active and has been undergoing continuing uplift. The uplift has already resulted in the formation of rocky headlands and in exposing portions of continental shelf. Protected pocket bays and lagoons between the nearly formed headlands have been rapidly filled by alluvial and fluvial deposits. The material brought to the coast was taken over by currents and wind for the formation of wide sandy beaches and migrating sand dunes.

61. The average elevation of sub-project intervention area is **33 meters** from mean slop elevation. The slope in the sub-project area is gentle. The elevation profile of the project area is provided below:

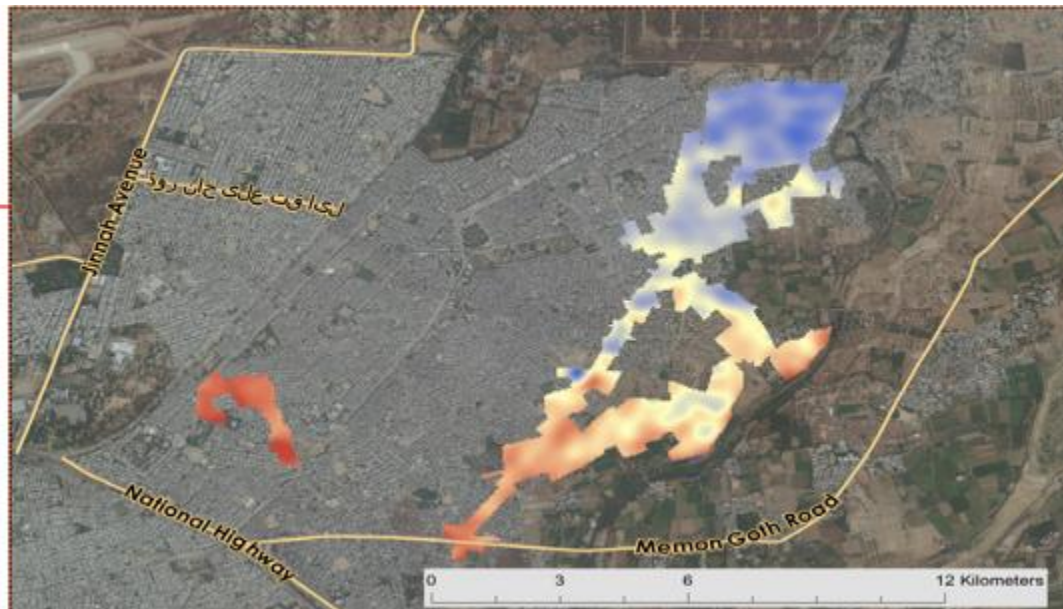


Figure 23: Elevation profile of sub-project area

4.1.7 Surface Water Resources

62. The surface water resource available in the macro-environment is seawater. There are no surface water resources exist in sub-project location.

4.1.8 Geology¹⁴

63. The geological structural setup of Karachi region belongs Southern Indus Basin which is a result of the rifting during the Late-Cretaceous and Paleogene, and by post collision deformation during Neogene and Quaternary periods. Tectonically, the counter clockwise movement of Indian plate during Eocene time, after its collision with Eurasian plate, has resulted in the formation of Karachi Embayment.

¹⁴ Preparatory Survey (II) on Karachi Circular Railway Revival Project, 2013, prepared by JICA

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

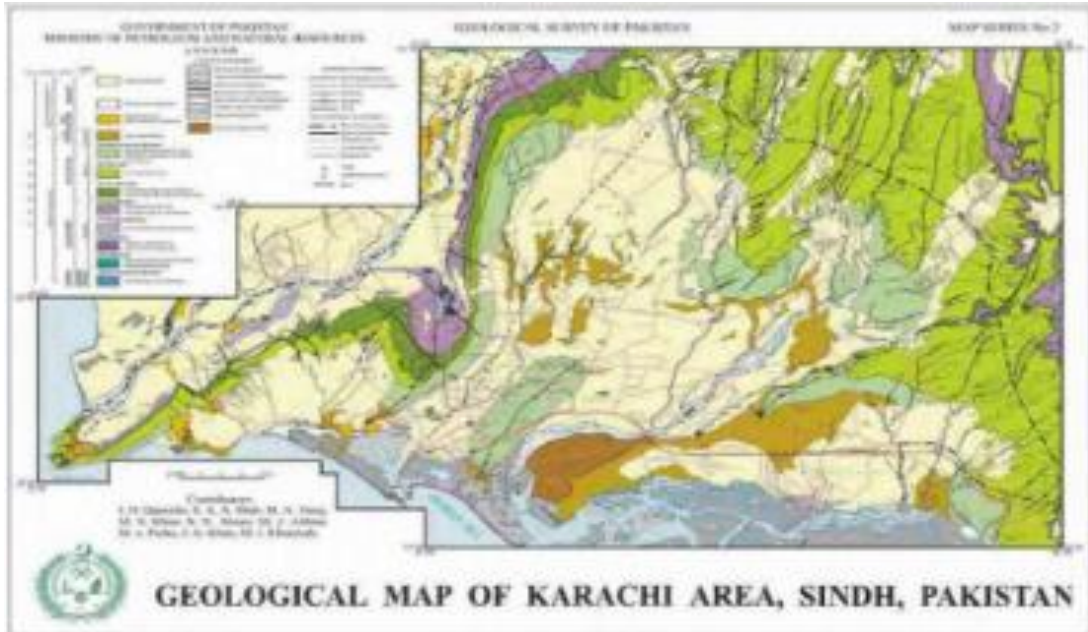


Figure 24: Geological Map of Karachi¹⁵

4.1.9 Seismicity

64. According to the seismic classification, the sub-project site would be placed in Zone 2B corresponding to Modified Mercalli (M.M) intensity scale i.e., minor to moderate damage, distinct earthquakes may cause damage to structures with fundamental period corresponds to intensity IV- VII the M.M Scale.



Figure 25: Seismic Zones between Karachi¹⁶

¹⁵ Pakistan Metrological Department

¹⁶ Map data source(s): PMD, GSP, Pakistan Engineering Council – Prepared by Al-Hasan Systems Private Limited

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

65. Karachi is situated close to the junction of three tectonic plates (Indo-Pakistan, Arabian and Eurasian Plates). The significant faults in the vicinity include Rann of Katch Fault in east and Pub-Null Fault in west. The Rann of Kutch-Karachi fault, also known as Karachi Jati-Allah Bund fault, passes close to the Eastern Industrial Zone of Port Qasim. It has three other segments namely the Jhampir fault, the Pab fault, and the Surjani fault. The historical data of earthquake near Karachi are presented below;

Table 13. Recent Earthquakes near Karachi¹⁷

Date	Location	Epicenter location		Magnitude	
		Lat-N	Lat-E	Depth (km)	Richter Scale
31-05-2012	Karachi, Sindh	24.602	67.092	10	4.0
17-04-2010	Uthal, Baluchistan	25.368	66.468	29	4.4
15-11-2008	Ormara, Baluchistan	24.38	65.517	10	3.9
08-12-2007	Sehwan, Sindh	26.037	67.742	10	3.7
13-10-2007	Uthal, Baluchistan	25.428	66.556	10	4.0
21-04-2007	Karachi, Sindh	24.038	66.745	10	3.9
17-06-2006	Uthal, Baluchistan	25.756	66.407	10	3.7

4.1.10 Physical Cultural Resources (PCRs)

66. The Office of the Directorate General, Antiquities, Government of Sindh has notified 643 archaeological buildings with architectural value in Karachi District as Protected Cultural Heritage buildings under Sindh Cultural Heritage (Preservation) Act, 1994¹⁸. Most of them are in the old parts of the city, out of which none of the archaeological buildings with architectural value falls under this sub-project.

67. The possible discovery of archaeological sites or random findings during the execution of civil works is considered in the ESMP which will require measures to manage chance finds. Relevant mitigation measures are addressed in the EMMP of this report.

4.2 Ecological Environment¹⁹

4.2.1 Flora of Sub-Project Area

68. The number of available plants in the sub-project is about 376 within the proposed sites of the sub-project area. The species observed during enlisting of flora and fauna activity included; *Azadirachta indica*, *Cocos nucifera L.*, *Zizyphus mauritiana Lam*, *Ficus religiosa*, *Bougainvillea glabra* and *Syzygum cumini Skeels*. The floral inventory is presented in the following table:

Table 14. Tree Inventory of Sub-Project Area

S. No.	Location	Family Name/Plant Species	Local Name	Life Form / Habit	Life Span	No of Trees /Location
1		<i>Azadirachta indica</i>	Neem	Tree	Perennial	14

¹⁷ <https://earthquaketrack.com/pk-05-karachi/recent>

¹⁸ <https://antiquities.sindhculture.gov.pk/index.php/publication/notifications>

¹⁹ Environmental Impact Assessment of proposed Bus Rapid Transit Project in Karachi, August 2014; Client: Karachi Metropolitan Corporation and prepared by EMC Pakistan Pvt. Ltd.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S. No.	Location	Family Name/Plant Species	Local Name	Life Form / Habit	Life Span	No of Trees /Location
	Mehfooz Ground	<i>Syzygium cumini (L.) Skeels.</i>	Jaman/Jamu	Tree	Perennial	1
2	L-12 (Connecting Begum Khursheed Road To Main Malir 15 Road)	<i>Zizyphus mauritiana Lam.</i>	Ber	Tree	Perennial	1
		<i>Cocos nucifera L.</i>	Narel	Palm tree	Perennial	1
		<i>Conocarpus lancifolius</i>	Cono	Tree	Perennial	1
		<i>Syzygium cumini (L.) Skeels.</i>	Jaman / Jamu	Tree	Perennial	2
		<i>Eucalyptus globulu</i>	Sufedo	Tree	Perennial	3
		<i>Moringa oleifera Lam.</i>	Sohanjaro	Tree	Perennial	3
		<i>Cocos nucifera L.</i>	Narel	Palm tree	Perennial	1
		<i>Conocarpus lancifolius</i>	Cono	Tree	Perennial	3
		<i>Azadirachta indica</i>	Neem	Tree	Perennial	2
		<i>Ficus virens</i>	Pilkhan	Tree	Perennial	3
3	L-7	<i>Azadirachta indica</i>	Neem	Tree	Perennial	4
		<i>Ficus virens</i>	Pilkhan	Tree	Perennial	5
		<i>Moringa oleifera Lam.</i>	Sohanjaro	Tree	Perennial	1
		<i>Zizyphus mauritiana Lam.</i>	Ber	Tree	Perennial	4
4	L-9	<i>Phoenix dactylifera</i>	Khaji	Tree	Perennial	1
		<i>Moringa oleifera Lam.</i>	Sohanjaro	Tree	Perennial	2
		<i>Ficus virens</i>	Pilkhan	Tree	Perennial	5
		<i>Azadirachta indica</i>	Neem	Tree	Perennial	3
5	L-1 (Main Chaman colony road)	<i>Azadirachta indica</i>	Neem	Tree	Perennial	11
		<i>Ficus virens</i>	Pilkhan	Tree	Perennial	7
		<i>Conocarpus lancifolius</i>	Cono	Tree	Perennial	3
6	L-3 (Connecting Khokhrapar Park)	<i>Azadirachta indica</i>	Neem	Tree	Perennial	17
		<i>Ficus virens</i>	Pilkhan	Tree	Perennial	6
		<i>Ficus religiosa</i>	Pepur	Tree	Perennial	3
		<i>Moringa oleifera Lam.</i>	Sohanjaro	Tree	Perennial	1
		<i>Alstonia scholaris</i>	blackboard tree	Tree	Perennial	2
		<i>Ficus bengalensis</i>	Bar	Tree	Perennial	1
		<i>Lignum vitae</i>	Lignum	Tree	Perennial	2
7		<i>Lignum vitae</i>	Lignum	Tree	Perennial	31

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S. No.	Location	Family Name/Plant Species	Local Name	Life Form / Habit	Life Span	No of Trees /Location
	Khokhara Para A - Area Park (Abshar Park)	<i>Nerium oleander</i>	kaneer	Shrub or small tree	Perennial	2
		<i>Bougainvillea glabra</i>	Paper flower	Shrub	Perennial	2
		<i>Azadirachta indica</i>	Neem	Tree	Perennial	5
		<i>Alstonia scholaris</i>	blackboard tree	Tree	Perennial	4
		<i>Ulta Ashok</i>	Ashok	Tree	Perennial	1
		<i>Ficus bengalensis</i>	Bar	Tree	Perennial	1
		<i>Albizia lebbeck Linn.</i>	Sarenh	Tree	Perennial	1
		<i>Conocarpus lancifolius</i>	Cono	Tree	Perennial	5
		<i>Eucalyptus globulu</i>	Sufedo	Tree	Perennial	4
8	Madina Park	<i>Azadirachta indica</i>	Neem	Tree	Perennial	14
		<i>Eucalyptus globulu</i>	Sufedo	Tree	Perennial	1
		<i>Nerium oleander</i>	kaneer	Shrub or small tree	Perennial	1
9	Shaheed Muhammad Khashkeli Park	<i>Eucalyptus globulu</i>	Sufedo	Tree	Perennial	3
10	Library area	<i>Azadirachta indica</i>	Neem	Tree	Perennial	5
		<i>Ficus virens</i>	Pilkhan	Tree	Perennial	1
		<i>Zizyphus mauritiana Lam.</i>	Ber	Tree	Perennial	1
11	L-11 (On back Side Of Mahfouz Football Ground)	<i>Ficus virens</i>	Pilkhan	Tree	Perennial	8
		<i>Azadirachta indica</i>	Neem	Tree	Perennial	20
		<i>Conocarpus lancifolius</i>	Cono	Tree	Perennial	99
		<i>Lignum vitae</i>	Lignum	Tree	Perennial	6
		<i>Eucalyptus globulu</i>	Sufedo	Tree	Perennial	2
		<i>Phoenix dactylifera Linn.</i>	Khaji	Tree	Perennial	10
		<i>Prosopis juliflora (Swartz) DC.</i>	Devi	Shrub	Perennial	13
		<i>Tamarindos indicus</i>	Amlı	Tree	Perennial	3
		<i>Calotropis procera (Willd.) R. Br.</i>	AK	Shrub	Perennial	2
<i>Abutilon indicum (L.) Sweet</i>	Pat -teer	Shrub	Perennial	7		
12	L-10	<i>Ficus virens</i>	Pilkhan	Tree	Perennial	3
		<i>Azadirachta indica</i>	Neem	Tree	Perennial	6
		<i>Delonix regia (Boj. Ex Hook.) Raf.</i>	Gul Muhar	Tree	Perennial	2
Total						376

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

69. **No tree will be cut during the construction phase. All necessary mitigation measures (given in EMMP) will be taken for the management of existing trees / flora.** The location of existing trees is presented in the following map;

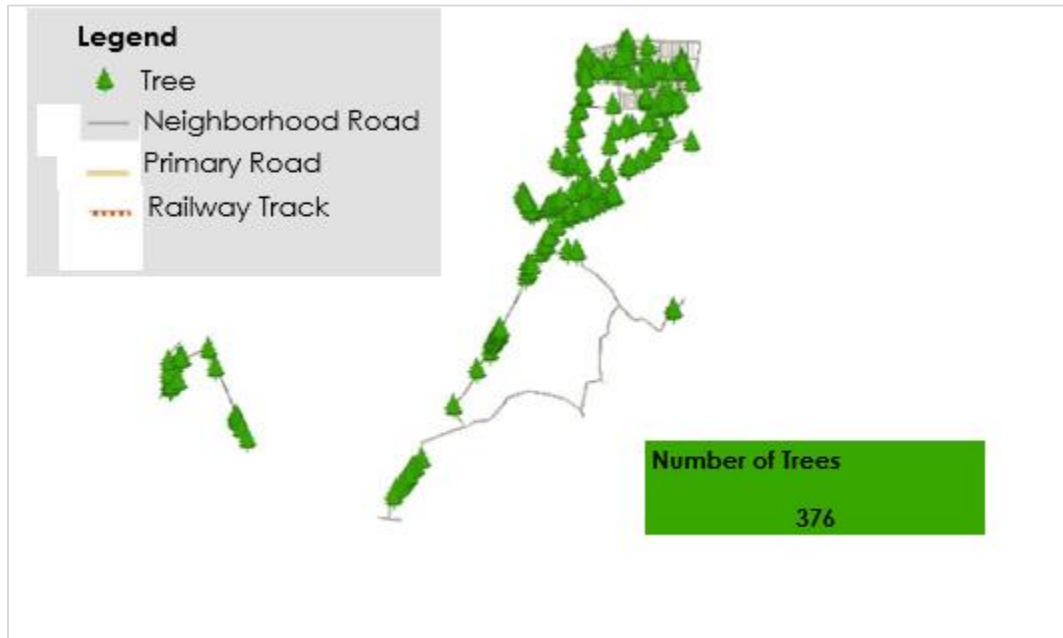


Figure 26: Location of Trees in sub-project area



Figure 27: Some glimpses of existing flora in the sub-project area

70. No mangroves are present within the sub-project boundary.

4.2.2 Fauna of Sub-Project Area

71. The common fauna in the project area are mainly stray dogs and cats. Other species include striped palm squirrel (*Funambulus pennantii*), Indian gerbil (*Tatera indica*), House mouse (*Mus musculus*), Little Indian field mouse (*Mus booduga*) and Small Indian mongoose (*Herpestes auropunctatus*). The birds common to the area are Black myna (*Acridotheres javanicus*), Black crowned Finch Lark (*Eremopterix*

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

nigreps), Black Drongo / King Crow (*Dicrurus macrocercus*), Black Kite (*Milvus migrans*), Collared Dove (*Streptopelia decaocto*), House Crow (*Corvus splendens*), House Sparrow (*Passer domesticus*), Indian Myna/Common Myna (*Acridotheres tristis*) Little Green Bee-eater (*Merops orientalis*), Red vented Bulbul (*Acrocephalus Agricola*) and White-cheeked Bulbul (*Pycnonotus leucogenys*). Table below shows the species of birds recorded in the project area including their status and listing.

Table 15. List of birds Observed in the Project Area & Surroundings

S No.	Common Name	Scientific Name	Status		Occurrence				Listing			
			Migratory	Resident	Common	Abundant	Less Common	Rare	WPO/Act	IUCN Red List	CMS Appendix	CITES Appendix
1	Bank Myna	<i>Acridotheres ginginianus</i>		x	x							
2	Black crowned Finch Lark	<i>Eremopterix nigreps</i>		x	x							
3	Black Drongo / King Crow	<i>Dicrurus macrocercus</i>		x	x							
4	Black Kite	<i>Milvus migrans</i>		x	x				x			x
5	Collared Dove	<i>Streptopelia decaocto</i>		x	x							
6	House Crow	<i>Corvus splendens</i>		x	x							
7	House Sparrow	<i>Passer domesticus</i>		x	x							
8	Indian Myna/Common Myna	<i>Acridotheres tristis</i>		x	x							
9	Little Green Bee-eater	<i>Merops orientalis</i>		x	x							
10	Red vented Bulbul	<i>Acrocephalus agricola</i>		x			x					
11	White-cheeked Bulbul	<i>Pycnonotus leucogenys</i>		x	x							

Chapter 5

SOCIO-ECONOMIC BASELINE OF SUB-PROJECT AREA

72. This section of the report presents specific existing socio-economic conditions of the sub-project Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Grounds and Parks in Malir Cluster. **The baseline profile is developed through detailed social surveys conducted by the social team to collect primary information for the sub-project area through simple random sampling technique.** Besides this, secondary data from published literature, and previous studies related to the sub-project area were also reviewed.

73. The social survey focused on specific aspects of the sub-project area including health, education, infrastructure, utilities, population, sewerage, solid waste management and usage of land for commercial and residential purposes.

5.1 Demographic Profile

74. The sub-project is located in Union Council 5 and 12 of Malir Town, District Malir, Karachi Division. According to the 2017 Census²⁰ the population of District Malir is 1,924,346, as shown in below table. According to Union Council administration, the average population of UC 5 and 12 is about 60,000 and 56,000 respectively. The estimated population in the sub-project area is approximately 53,538.

Table 16: Demographic Profile of Karachi Malir District as per Population Census 2017²¹

Admin-unit	Area (sq.km)	Population - 2017 (Malir District - Karachi)							
		Overall & Gender Wise Total		Sex ratio	Population density per sq. Km	Urban proportion	Avg. HH Family Size	Population 1998	Avg. Annual Growth Rate
Malir District, Karachi	2160	All sexes	1,924,346	114.9	890.90	55.43	5.87	914,765	3.99
		Male	1,028,865						
		Female	895,329						
		Transgender	152						

75. The projected population of the current year (2021) of District Malir, Karachi Division is 2,250,347 (for all sexes) with 1209351 (54%), 1040802 (46%), and 178 (0.008%) for male, female and transgender respectively. The Census Population 2017 is projected on a 3.99 average annual population growth rate, as given in Census 2017 for District Malir, Karachi Division.

5.1.1 Socio-Economic Profile of Households

76. The information related to the socio-economic profile of households was gathered through a socio-economic survey. The sub-project area is a mix of residential and commercial areas. The existing socio-economic profile of households is summarized below;

²⁰ http://www.pdma.gos.pk/new/Docs/c-2017_01-04-2020.pdf

²¹ Population Census 2017

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

- ▶ The estimated number of houses and multi-story buildings within the sub-project boundary is 8,923 and 287 (avg. 2 floors) respectively.
- ▶ Almost 31% of the property is on government land and the rest 69% are on private land. The majority of the households are on private property.
- ▶ The estimated Households size of the sub-project area is about 6,
- ▶ The general source of income and livelihoods of the residents is associated with Private jobs, Businesses, Agriculture, and Government jobs.

77. The details of the respondents and their feedback on the sub-project are provided in Chapter 9.

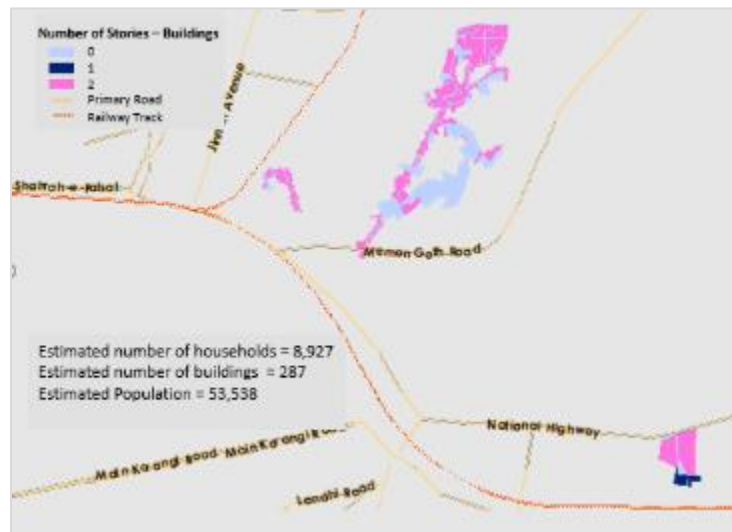


Figure 28: Demographic Map of Sub-Project Area

5.1.2 Language and Ethnicity:

78. The residents of the sub-project area belong to various lingual and ethnic groups including; *Sindhi, Punjabi, Muhajir, Kashmiri, Seraiki, Pakhtuns, and Balochi* are common. Whereas, majority of the residents are Muslims, followed by Hindus and Christians. According to Sindh urban population by religion²² the percentage of each segment is Muslim (94.67%), Hindu (3.22%) including Scheduled Castes, Christian (1.84%), and others (0.27%) respectively.

5.1.3 Poverty

79. The income of the surveyed households and businesses/shops is above Rs. 25,000/- (minimum wage rate) as per field survey data attached as Annex U. Moreover, the main users of the area also fall in the income category which is above the poverty line. The Government of Sindh has announced and fixed the minimum wage rate to Rs.25000 per month during the financial year 2021-22, this was as announced on 9-7-2021.

5.1.4 Katchi Abadi/ Slums

²² <https://www.pbs.gov.pk/sites/default/files//tables/POPULATION%20BY%20RELIGION.pdf>

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

80. There are no *Katchi Abadis*, Slums, or Goths (villages) located in the sub-project area.

5.1.5 Security & Law and Order Situation

81. The Security and Law & Order Situation is fair, however, and there are no CCTV Cameras in the sub-project areas. However, regular spot checks by security personnel have been done which includes spot-checking and regular visits at several points within the jurisdiction by the Sindh Police and Rangers.

5.1.6 Existing Profile of Businesses

82. There are multiple businesses in the sub-project area such as mobile shops, grocery stores, vegetable shops, chicken/meat shops, auto mechanic shops, juices shops, private clinics, fast food shops, books, and stationery shops, etc. Average number of employees in small businesses are either 1 or 2 whereas in medium scale businesses, the number rises to 10 employees. These businesses will not be adversely affected by the project activities.

5.1.7 Existing Land Use

83. According to a topographic survey by the technical team of Consultants that almost 53% of land in the sub-project area is occupied with buildings, followed by Roads (13%) and Parks (2.3%). Vacant area is around 30.5% of the total sub-project area.

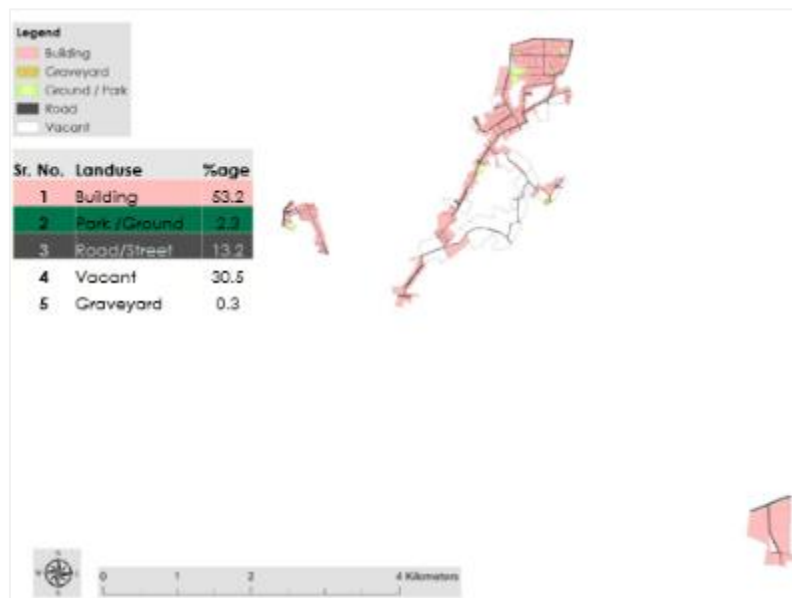


Figure 29: Existing Land-Use of Sub-Project Area

84. More than 69% of the land is owned as property by the private owners as exhibited below. The proposed interventions are planned on government-owned land comprised of public parks/grounds, library, and roads/streets.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster



Figure 30: Existing Land Use and Property Type

5.1.8 Infrastructure Profile

85. The infrastructure profile covers civic amenities and other infrastructure present in the sub-project area. Details are as follows

5.1.8.1 Civic Amenities

87. The Civic Amenity Infrastructure in the Sub-Project area includes telephone, electric, light poles, water tanks, Sewerage system, drains, culverts, waste containers and waste bins, etc. Water is applied by piped network of KWSB, wastewater is discharged through open and closed drains being discharged to Thado Nallah.

88. Maps of some of these amenities are exhibited in the following figures;

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

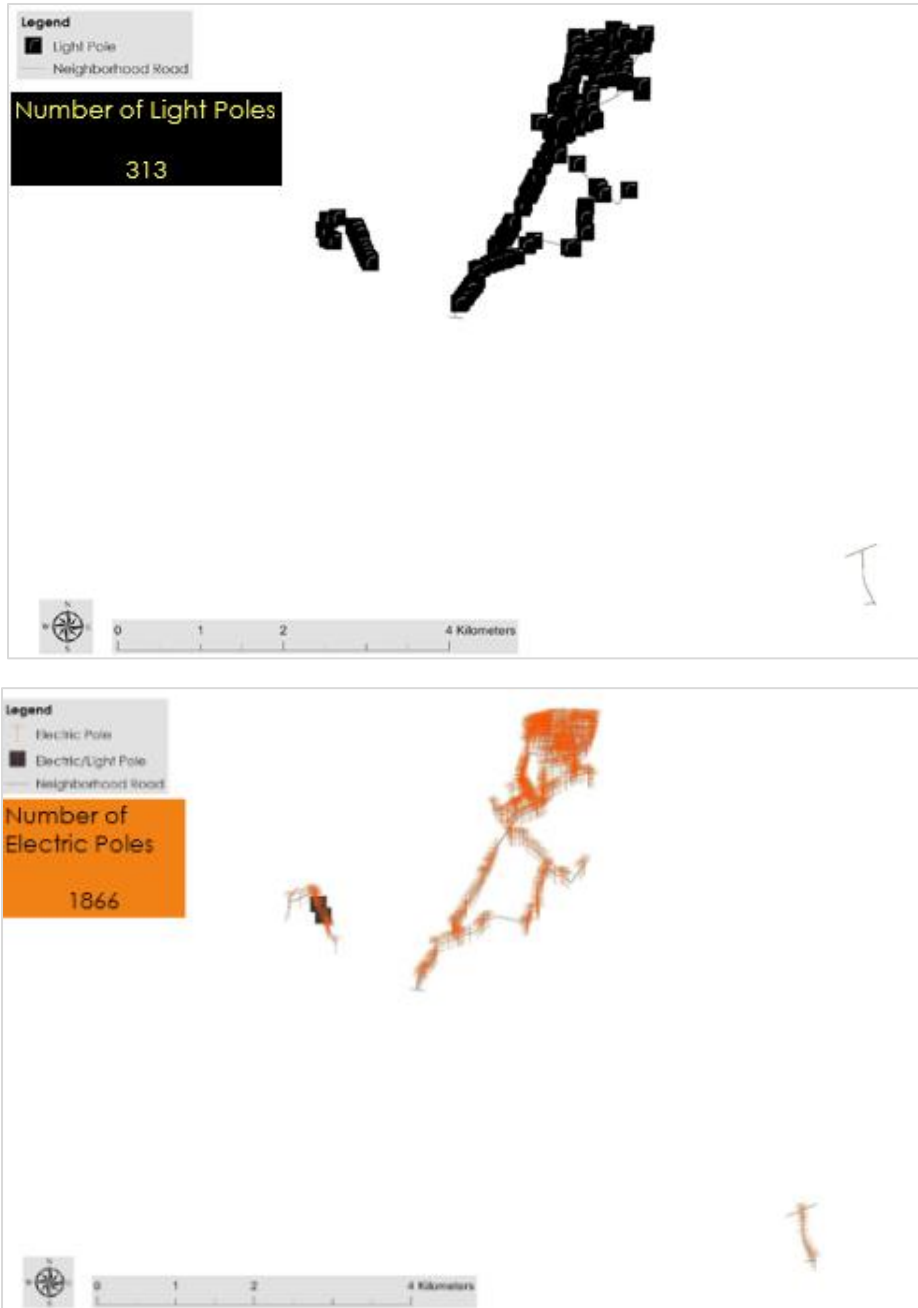


Figure 31: Number of Light Poles and Electric Poles in the Sub-Project Area

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

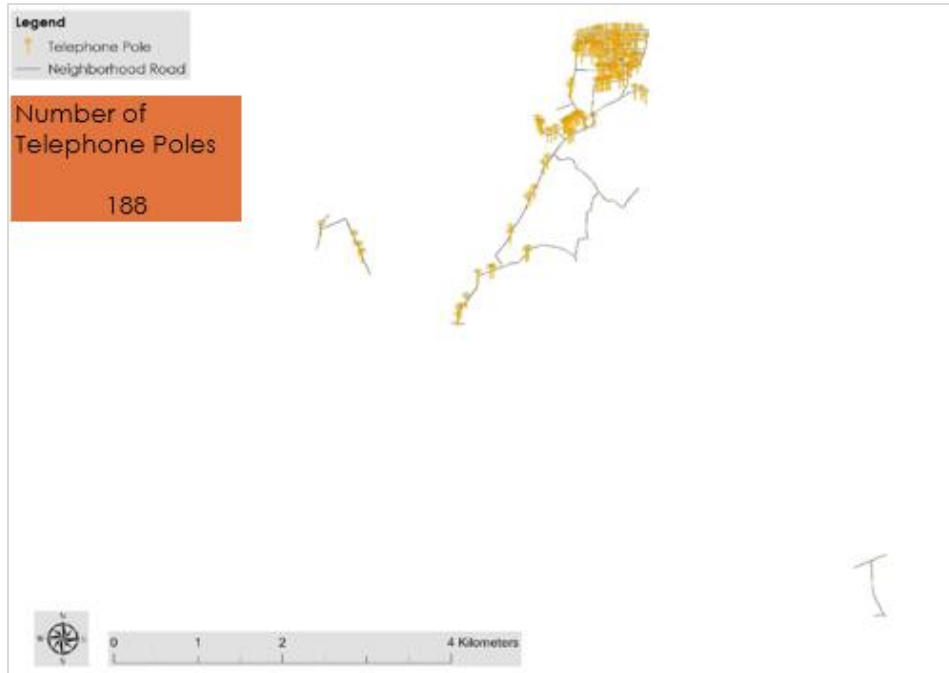


Figure 32: Number of Telephone Poles in the Sub-Project Area

89. These issues are addressed in EMMP and SMMP sections of the report.

5.1.8.2 Road Infrastructure

90. Narrow residential roads are serving the high densely populated neighborhood. The footpaths are damaged with bike parking over the internal streets. The road infrastructure is summarized in the following table;

Table 17. Road Infrastructure in the sub-project area

Road Infrastructure			
No. of Lanes	3	No. of Parking Plazas	0
No. of Electric Poles	1866	No. of Green Belts	6
No. of Light Poles	313	Median (main road)	Yes (1 at Chaman Road)
No. of Telephone Pole	188	Foot Path	Yes (11.7 km)
No. of Pedestrian Crossing	0	Street Lights	112
No. of Manholes (cover)	903	Bus Stops	2

91. The footpaths and the curb lines are limited along the major thoroughfares of the sub-project area, which have crumbling structures and need improvements. The length of footpath to be paved is 11.7 km.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster



Figure 33: Paved Surface and Footpaths within the Project Boundary

92. Generally, Traffic flow is low at internal streets, moderate at service lanes, and heavy at Main Chaman Colony Road. The main cause for congestion in the traffic is lack of civic sense and poor roads infrastructure. Based on the traffic flow, volume, and the number of visitors, social issues like traffic congestions, nuisance, noise pollution, etc. are addressed in the EMMP of this report.

93. The traffic and pedestrian count survey was conducted thrice a day i.e. Morning (8:30 – 9:30 a.m.), Noon (12:00 – 1:00 p.m.), and Evening (5:0 – 6:00 p.m.) between 13-10-2021 to 15-10-2021. The analysis revealed that the motorbikes (30%), light vehicles including load carriers (30%), rickshaws (10%), taxis

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

(10%), public buses (15%), and trucks (5%) respectively, whereas the pedestrians were adults having the majority of males. The data is provided below;

Table 18: Traffic Volume in the Sub-Project Area

Location	Morning Peak Traffic Volume	Noon Peak-Time Traffic Volume	Evening Peak Traffic Volume
Time	8:30 – 9:30 a.m.	12:00 – 1:00 p.m.	5:00 – 6:00 p.m.
Chaman Colony Road	40 vehicles / min	50 vehicles / min	70 vehicles / min
Babul Islam Road	20 vehicles / min	25 vehicles / min	30 vehicles / min
Road connecting babul Islam road to Bakra Peri Road	20 vehicles / min	25 vehicles / min	25 vehicles / min

Table 19. Pedestrian Volume in the Sub-Project Area

Location	Morning Peak Time Pedestrian Volume	Noon Peak Time Pedestrian Volume	Evening/Night Peak Time Pedestrian Volume
Time	8:30 – 9:30 a.m.	12:00 – 1:00 p.m.	5:00 – 6:00 p.m.
Chaman Colony Road	50 Pedestrian / min	35 Pedestrian / min	15 Pedestrian / min
Babul Islam Road	30 Pedestrian / min	20 Pedestrian / min	20 Pedestrian / min
Road connecting babul Islam road to Bakra Peri Road	25 Pedestrian / min	15 Pedestrian / min	20 Pedestrian / min

5.1.8.3 Healthcare Facilities

94. Health problems in the sub-project area are generally associated with lifestyle. The health institutions and residents reported that the common diseases in the sub-project are hypertension, heart attack, diabetes, depression, and obesity.

95. Currently, there are 2 Hospitals i.e. Sindh Government Behbehani Hospital and TB Chest Hospital, some private clinics, and 1 pharmacy/medical store. All these infrastructures are considered while developing the environmental and social management plan of this sub-project.



Figure 34: Healthcare facilities in the Sub-Project Area

5.1.8.4 Religious / Archaeological Sites

96. There are 34 religious sites in the sub-project namely; Jamia Masjid Hussaini o Imaam Bargagh, Noor Mosque, Ismaili Jamatkhana, Ali Bin Abe-Talib Imam Bargha, Madrassah Arabia, Jamia Masjid Meboob e Subhani, Masjid Abu Bakar, Jamia Masjid Dar ul Taqwa, Malir Jamat Khana, Mustafa Masjid, Jamia Tul Madina, Kutchi Muslim Sanghaar Jamaat, Ghosia Masjid Khokhrapar, Sanghaar Jamat Malir

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Branch, Jamia Masjid Firdous, Jamia Masjid Momin, Momin Masjid, Jamaia Masjid Wazir Begham, Iqra Quran Academy, Masjid Fayyaz, Jamia Masjid Ameer Hamza, Jamia Masjid Toheed, Jamia Masjid Mustafa, Jama Mosque Zakria, Gousia Masjid, Jamia Masjid-e-Rabbani, Madina Masjid, Madrasatul Madina Eid gah, Hari Makki Masjid, Jama Masjid Qadriya, Nadi Kinara, Madrsa Ashrafia and a church and a Eid Gah.



Figure 35: Some of the Religious Sites in the Sub-Project Area

97. The sub-project interventions will not put any adverse social impact on these religious places. Potential impacts are addressed in the EMMP of this report.

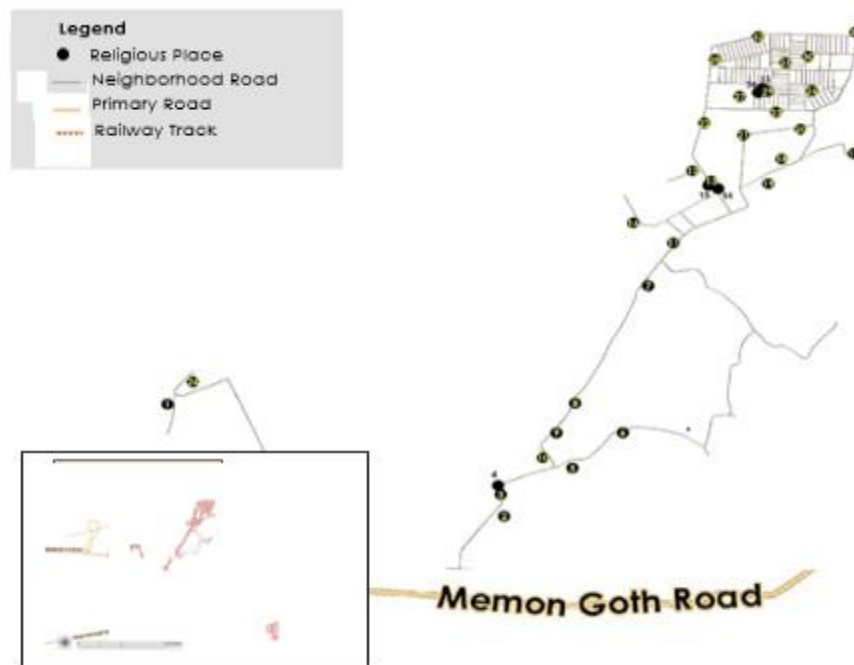


Figure 36: Location of Mosques in the Sub-Project Area

5.1.8.5 Educational Facilities

98. There are about 17 educational institutes within the sub-project area including Nai Roshni School (Government), Government Girls & Boys School, Government Ayesha Boys Secondary School, Innovative Public School, Public High School, Government Girls Secondary School, Education Institute, Public High School, Government Boys Secondary School, Government Girls/Boys Primary School, Korango Public School, Korangi Public School, Al Riyadh Grammar School, Al-Kamram Coaching Center Khokhrapar, Green

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Peace Public High School, Government Girls Secondary Campus School Azamabad and Government Boys/Girls Secondary School Village Sahibdad.



Figure 37: Some of the Schools in the Sub-Project Area

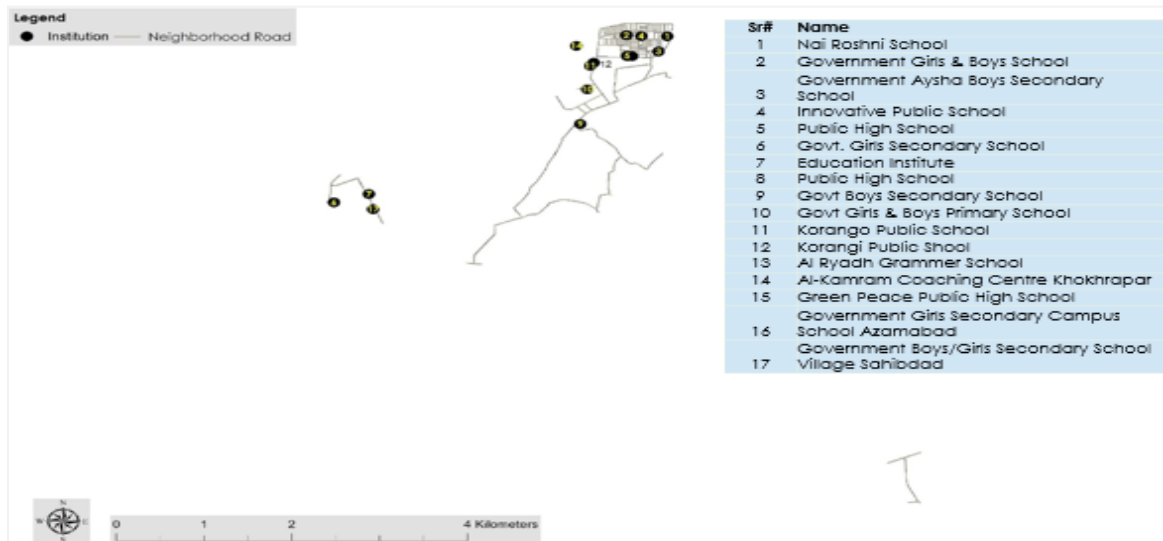


Figure 38: Location of Educational Institutes in the Sub-Project Area

99. These educational institutes were also visited. The EMMP and SMMP consider the post lockdown situation in designing the mitigation measures.

5.1.8.6 Water Supply

100. The water table depth of the area is 30-35 ft as per data gathered during field survey. Ground water is available and is marginally sweet and used both for drinking and agriculture purposes. The residents of the sub-project area mainly depend upon pipe water from KWSB and water supplied by private water tankers.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster



Figure 39: Location of Water Tanks and Hand Pumps in the Sub-Project Area

5.1.8.7 Drainage and Sewerage

101. The sewerage system is also provided in the area with 903 Manholes along with one open drain in the sub-project area i.e. Thado Nallah. There are open as well as closed drainage system in the area discharging effluent to Thado Nallah. The current sewerage drainage network in the area require revamping.

102. The number and location of manholes and culverts are shown below.



Figure 40: Number of Manholes in the Sub-Project Area

5.1.8.8 Solid Waste management

103. The Sindh Solid Waste Management Board is responsible for the collection and disposal of solid waste. Waste bins are available at some locations of the sub-project site. However, the solid waste of the sub-project area is mostly dumped at a Temporary Garbage Station, located at 100 Quarters (an area in Korangi), from where it is dumped at Jam Chakiro Landfill Site at Surjani, Karachi. The overall situation of cleanliness and solid waste collection needs major improvement. The solid waste is scattered all along the roads.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster



Figure 41: Situation of Solid Waste in the Sub-Project Area

104. About 24.8 tons/day of solid waste is generated from the area of Malir Cluster as per SSWMB staff which mainly include organic waste, plastic bottles, trash/garbage, etc. Internal streets are filled with garbage.

5.1.8.9 Other Substructures

105. Other infrastructure in the sub-project area includes banks, markets, small shops, educational institutes, hospitals, pharmacies, parlours, bakeries, and hotels. These businesses / commercial units are mapped below;

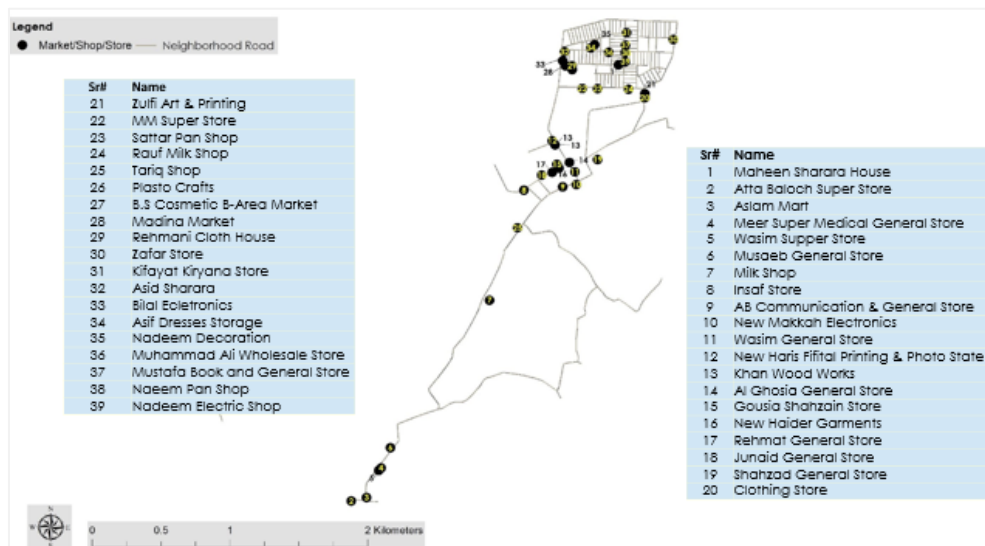


Figure 42: Number of Commercial Units in the Sub-Project Area

106. The neighborhood of Malir Cluster is comprised of multiple food points and a few banks.

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

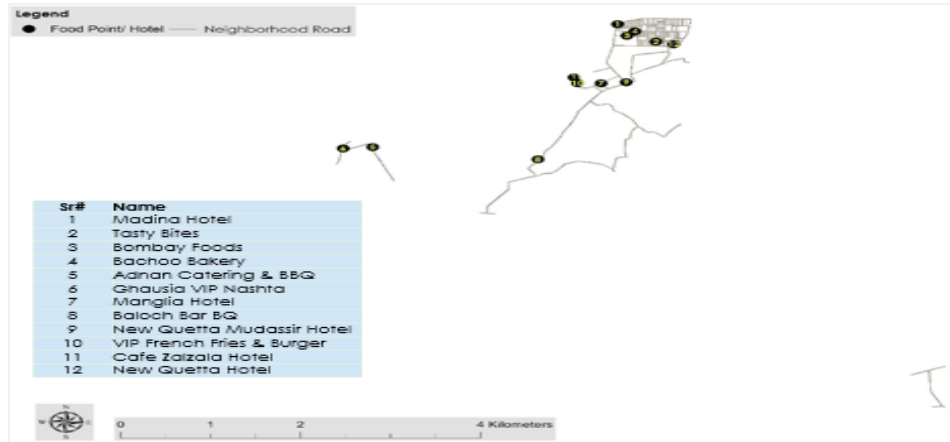


Figure 43: Food Points in the Sub-Project Area

107. There are number of Sheds found the in the sub-project area.



Figure 44: Number of Sheds and Seating Areas in the Sub-Project Area

Chapter 6

IMPACTS AND MITIGATION

108. This Chapter assesses the potential environmental and social impacts and mitigation measures of the proposed sub-project on the environment and community. The mitigation measures propose to minimize the potentially negative impacts, to ensure that the interventions proposed under the sub-project do not cause irreversible environmental and social impacts beyond the acceptable levels.

6.1 Environmental safeguard assessment steps

109. Implementation of ESMP after its preparation will require the following steps closely linked with activity planning, design, and implementation steps.

- ▶ **Step 1:** Screening of sub-projects for impacts
- ▶ **Step 2:** Inclusion of Environmental and Social Management Plan in Supervision Consultant/Contractor(s) Bidding Documents
- ▶ **Step 3:** Compliance and Monitoring

6.2 Screening of Impacts

110. All sub-projects under KNIP interventions have to undergo initial screening through a number of filters that include screening environmental and social impacts. Sub-projects with any significant, long-term, or medium-term, irreversible environmental and social negative impacts will be avoided to the extent possible. The ESMF of KNIP categorizes sub-projects based on their nature of activities and potential impacts on the environment and or people. The ESMF presents a rapid assessment checklist for screening of sub-projects which is used here to screen the impact of the Malir Sub-project and filled as per the environmental and social survey conducted for the sub-project area:

6.2.1 Environment and Social Screening Checklist

111. The rapid assessment checklist as presented in project ESMF is used here and divided into two parts i.e. A) screening of environmental impacts screening, while B) is Social Screening.

Table 20. Environmental Impact Screening

Project Categorization: B

SCREENING QUESTIONS	Yes	No	REMARKS (describing distributes and attributes)
A. Sub Project Setting			
Is the Sub-Project area?			
-Presence of any environmentally sensitive areas?		X	The sub-project Redevelopment of Neighborhood Roads and Upgradation of Open Spaces Including grounds and parks in Malir Cluster is not located within or nearby any Environmental Sensitive Area.
- Protected area		X	The sub-project is not located within or nearby any Gazette Protected Area.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

- Wetland		X	No wetland within the sub-project area.
- Mangrove		X	No Mangroves within the sub-project area.
- Estuarine		X	The sub-project is not located near the estuarine habitat.
- Buffer zone of protected area		X	The sub-project is not located inside or near any buffer zone of the protected area.
- Special area for protecting biodiversity		X	The sub-project is not located inside or near any special area for protecting biodiversity area.
- Physical Cultural Resources / Heritage sites		X	The sub-project is not located inside or near any physical cultural resources/heritage site.

B. Potential Environmental Impacts

Will the project cause...

Impediments to movements of local people? Including women, the elderly and children		X	It is envisaged that during construction of sub-project redevelopment of roads and up-gradation of open spaces including grounds and parks may hinder movement if no mitigation measures will be applied. Traffic and pedestrian diversions will be provided to re-route the vehicular and pedestrian traffic. The up-gradation of open spaces including grounds and parks is not likely to affect the movement as the activity will be planned
Noise and dust from construction activities?		X	It is envisaged that during the construction of sub-project redevelopment of roads and up-gradation of open spaces including grounds and parks, noise and dust will be generated. Mitigation measures will be applied by the contractor & supervised by the Supervisory Consultant.. It will be ensured that the noise/dust emissions from the sub-project will remain within an acceptable level.
Alteration of surface water hydrology of waterways?		X	Not envisaged. There is <i>Thadho</i> tributary of Malir River running east of the sub-project area. Malir River is a seasonal river located in Karachi. It passes through the city of Karachi from the northeast, through the center, and drains into the Arabian Sea. It has two main tributaries, the <i>Thadho</i> and the <i>Sukhan</i> . In the rainy season, this river experiences heavy water flow, emptying into the Arabian Sea. The sub-project interventions are not likely to affect Malir

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Aggravation of solid waste problems in the area?	X		There is no proper municipal solid waste collection system in sub-project area. However, the problems of solid waste will be decreased significantly as a result of sub-project intervention.
Social conflicts arising from economic displacement of businesses/communities?		X	No economic displacement of businesses is envisaged for the sub-project.
Conflicts in abstraction of raw water for water supply with other beneficial water uses for surface and ground waters?		X	It is envisaged that the water requirements of the sub-project will be minimal and will be fulfilled through bowsers and water tankers available in Karachi City and it will not create a local water shortage. The drinking water source available in the area is piped water supplied by KW&SB.
Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents?	X		It is likely that due to construction activities, which may be due to accumulation of stormwater or inadequate wastewater disposal. Mitigation Measures will be adhered to to avoid the accumulation of water.
Inadequate protection of sewage collection, leading to pollution of water supply?	X		It is envisaged during the construction phase of the sub-project may have limited chances to damage the existing sewage system, leading to pollution of water supply. Mitigation measures will be suggested to avoid damage to existing sewage and water supply lines.
Hazardous driving conditions where construction interferes with pre-existing roads?	X		It is most likely that the construction phase may create a hazardous driving condition, especially in residential areas. The Traffic management plan will be implemented to manage the smooth flow of vehicular traffic and to avoid traffic-related incidents and accidents.
Increased noise and air pollution resulting from traffic volume?	X		It is envisaged that during the up-gradation of the sub-project, noise and dust will be generated. Mitigation measures will be followed by CC. It will be ensured that the noise/dust emissions from the sub-project will remain within the acceptable level.
Large population influx during project construction and operation that causes an increased burden on social infrastructure and services (such as water supply and sanitation systems)?		X	Not envisaged. Priority in employment will be given to local residents which are available in the sub-project area. The requirement of water for labor will be fulfilled through bowsers and water tankers available in Karachi City and it will not create a local water shortage.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

<p>Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project commencement?</p>	<p>X</p>	<p>It is envisaged that during rehabilitation and construction of sub-projects, low-level safety risk will be there for community members. The construction site will be cordoned off properly with safety signs. After construction, the improved roads and their geometric design and information sign will provide better and enhanced safety features on existing roads for community.</p>
<p>Are there any demographic or socio-economic aspects of the Project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illegal settlements, ethnic minorities, women or children)?</p>	<p>X</p>	<p>Not envisaged. The interventions proposed for the sub-project will neither affect any socio-economic activity negatively in the sub-project nor result in any land acquisition or resettlement.</p>

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Table 21. Social Screening Checklist

Screening Questions	Yes/No	Estimated Numbers	Remarks
A. Socio-Economic Situation of the Sub-Project Area			
1. Are there any of the following structures or resources in the sub-project construction area?			
(i) Type of area (Urban, Semi-urban, Rural, Industrial, other)	Yes		Rural
(ii) Estimated Households	Yes	8923	The sub-project is located in UC 12 and 05, District Malir of Karachi Division. The sub-project is densely populated, buildings with mostly 2 floors. The estimated number of households is 8,923. The estimated population of the sub-project area is about 53,538.
(iii) Estimated businesses points (shops etc.)	Yes	500	The sub-project area comprises of residential buildings, shops, and restaurants. A small portion of the sub-project area is also utilized for agricultural purposes. There are also different types of shops are available in the market area within the proposed sub-project area.
(iv) Road/s, footpath/s and streets	Yes	3	The 03 main roads are, Main Chaman Colony Road, Babul Islam Road, and Road connecting babul Islam Road to Bakra Peri Road. There are 09 internal roads and streets within the sub-project connected to Parks and main roads.
(v) Informal businesses / Hawkers / Mobile vendors	Yes	17	6 fruit carts, 4 pan carts, 3 vegetable carts, 2 biryani carts and 2 tea carts.
(vi) Drinking Water Points	No	01	There is only one drinking water point. The residents of sub-project area depend upon pipe water from KWSB.
Significant sites			
a) Cultural Sites	No	-	The sub-project area does not have any cultural site.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Screening Questions	Yes/No	Estimated Numbers	Remarks
b) Religious Sites ²³	Yes	34	<ol style="list-style-type: none"> 1. Jamia Masjid Hussaini o Imaam Bargagh 2. Noor Mosque 3. Ismaili Jamatkhana 4. Ali Bin Abe-Talib, Mosque - Imam Bargha 5. Madrassah Arabia 6. Church 7. Jamia Masjid Meboob e Subhani 8. Masjid Abu Bakar 9. Jamia Masjid Dar ul Taqwa 10. Malir Jamat Khana 11. Mustafa Masjid 12. Jamia Tul Madina 13. Kutchi Muslim Sanghaar Jamaat 14. Ghosia Masjid Khokhrapar 15. Sanghaar Jamat Malir Branch 16. Jamia Masjid Firdous 17. Jamia Masjid Momin 18. Momin Masjid 19. Jamaia Masjid Wazir Begham 20. Iqra Quran Academy 21. Masjid Fayyaz 22. Jamia Masjid Ameer Hamza 23. Jamia Masjid Toheed 24. Jamia Masjid Mustafa 25. Jama Mosque Zakria 26. Gousia Masjid 27. Jamia Masjid-e-Rabbani 28. Madina Masjid 29. Madrasatul Madina Eid gah 30. Hari Makki Masjid 31. Jama Masjid Qadriya Nadi Kinara 32. Madrsa Ashrafia 33. Eid Gah 34. Madrasatul Madina Eid Gah
c) Heritage Sites	No	-	There is no any heritage site within the sub-project area.
d) Health facility	Yes	03	<ol style="list-style-type: none"> 1. Sindh Government Hospital 2. Al Amin Medical Store 3. TB Chest Hospital 4. Kousar Homeo Clinic, Malir

²³ Mosque, Shrine, Temple, Church

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Screening Questions	Yes/No	Estimated Numbers	Remarks
e) Educational Institute/s	Yes	17	<ol style="list-style-type: none"> 1. Nai Roshni School (Government) 2. Government Girls & Boys School 3. Government Ayesha Boys Secondary School 4. Innovative Public School 5. Public High School 6. Government Girls Secondary School 7. Education Institute 8. Public High School 9. Government Boys Secondary School 10. Government Girls/Boys Primary School 11. Korango Public School 12. Korangi Public School 13. Al Riyadh Grammar School 14. Al-Kamram Coaching Center Khokhrapar 15. Green Peace Public High School 16. Government Girls Secondary Campus School Azamabad 17. Government Boys/Girls Secondary School Village Sahibdad
f) Skill Development Institute/s	No	-	No
(vii) Others (Shades / Sitting Bench/ Park/Green belt/Space)	Yes	8923	The sub-project is located in UC 12 and 05, District Malir of Karachi Division. The sub-project is densely populated, buildings with mostly 2 floors. The estimated number of household is 8,923. The
(viii) Additional Remarks / Information: No any.			
B. Potential social impacts of the sub-project			
2. WILL THE SUB-PROJECT CAUSE:			
(i) Loss of land?		No	The existing parks and corridors will be used for the sub-project interventions.
(ii) Loss of structure/s?		No	The sub-project will not cause any loss of structures.
(iii) Dislocation or involuntary resettlement required?		No	The sub-project will not cause any dislocation or involuntary resettlement.
(iv) If dislocation/Resettlement is evident, is it temporary or permanent?			Not Applicable
(v) Is there any dislocation of any business structure, squatter, hawker?		No	The sub-project does not cause temporary shifting of hawkers and mobile vendors during the up gradation of neighborhood roads for short duration of time and will be given back the same place.
(vi) If yes, is it temporary or permanent?		-	
(vii) Impact on income and livelihoods of affected people/households?		No	No any impact on livelihoods anticipated as the activity will be scheduled in the manner to avoid business hours.
(viii) Impact on women of the sub-project area?		No	The sub-project will pose positive impact on women of the sub-project area.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Screening Questions	Yes/No	Estimated Numbers	Remarks
(ix) Impact on vulnerable group such as beggars, homeless people (sleeping on foot paths) or poverty group?		No	The sub-project will not cause any loss of agriculture.
(x) Impact on ethnic groups or indigenous people?		No	The sub-project will pose no negative impact on the ethnic group or indigenous people of the sub-project area.
(xi) Impact on other vulnerable groups?		No	The sub-project will pose positive impact on women of the sub-project area.
C. Proposed social safeguard document/s			
(i) Proposed safeguard document in the light of social screening being prepared		An ESMP will be required. Social Impacts will be addressed in Social Management and Monitoring Plan (SMMP) of ESMP.	

6.3 Environmental and Social Impacts and Mitigation Measures

112. The impacts associated with this sub-project activity are temporary such as traffic congestion, dust and air emissions, water/groundwater contamination, soil contamination, solid waste, noise pollution, traffic management, occupational and community risks with regards to health and safety and restriction of access for commuters including residents and businesses.

113. Following is a description of impacts on each environmental and social component along with the specific mitigation measures:

6.3.1 *Impact on Residents, Businesses and Visitors*

114. As the sub-project is situated within the densely populated urban settlements, it is comprising of variety of businesses, religious sites, educational institutes, health care facilities and so forth. The proposed interventions are planned along the Chaman Colony Main Road and multiple internal streets of the neighbourhood along with rehabilitation of four parks and three grounds. There is a possibility of hindrances to the local residents and business such as traffic congestion, dust and noise pollution, restricted access or temporary issues to pedestrians, etc. However, these impacts will be minimal and temporary.

Mitigation Measures

- ▶ The construction contractor will follow construction schedule (Annex B) and implement mitigation measures according to proposed construction works, so that residents, pedestrians, visitors and business community may be able to continue their daily routine life.
- ▶ Access will be provided to pedestrians as well as residents and businesses located nearby in all interventions.
- ▶ For rehabilitation of roads, one track of sub-project road at a time will be used for construction and the other for traffic diversion and pedestrian movement. However, the specific traffic management plan will be developed by Construction Contractor (CC) based on the detailed

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

construction plan. The activities will be planned in a way that minimum traffic/pedestrian disturbance during the office/school hours (morning time and noon time). Alternative traffic arrangement/detours will be done so that traffic can be distributed and move on different roads; and ensure that public/residents association is informed about such traffic diversions. The specific traffic management plan will be developed by CC based on the detailed construction plan.

- ▶ Similar approach will be used for the rehabilitation works in parks and grounds. Phase wise approach will help to cordon off small patches of parks and grounds so that impacts on the visitors could be minimal.
- ▶ Indicators/signboards (in English and Urdu or local language Sindhi) regarding alternate routes will be provided along the roads at proper distance to avoid accidents. Likewise, indicators and signboards will be placed in parks, playgrounds and library to avoid any inconvenience to the visitors and management.
- ▶ A site plan showing the sub-project area and planned interventions, and a tentative schedule of construction activities will be also displayed prominently in all sites of the sub-project.
- ▶ It will be ensured that the construction site is appropriately cordoned off with a hard barricade (as shown as an example below and it will be ensured that safe and continuous access to all adjacent shops and residences during construction will be provided. To cover all the construction sites of the sub-project area, the road portion under rehabilitation will be barricaded. The work on all areas of the sub-project will not be underway at once and will be planned as per the detailed construction plan.



Figure 45: Hard barricade for construction site along the road with access to pedestrian

- ▶ Information to the public through notice board –Schedule of work and alternative routes.
- ▶ As mentioned above and in EMMP, all measures will be taken to avoid any impacts on the visitor's mobility and nuisance due to construction activities.

6.3.2 Land Acquisition and Encroachments

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

115. The sub-project interventions are planned on existing ROW of roads and on the spaces of government acquired land. Therefore, no involuntary resettlement / land acquisition or impacts of livelihoods is involved.

Mitigation Measures

- ▶ Since there is no impact, mitigation measures are not required.

6.3.3 Impact on PCRs

116. There is no PCR in the sub-project area. The OP/BP 4.11 Policy is triggered because of the possible discovery of archaeological sites or random findings during the execution of civil works. This will require measures to manage chance finds.

Mitigation Measures

117. A guideline for the protection of PCRs for the subproject is provided in Annex C. It also includes "Chance Find" procedures for the protection of cultural property and bidding documents for Contractors will include "Chance Find" procedures.

6.3.4 Air Quality Deterioration

118. The use of heavy construction machinery operated on diesel can generate exhaust emissions including SO₂, NO_x, Smoke and Particulate Matter (PM). Similarly, construction of roads and internal streets, improvement /enhancement of parks, play grounds, and a library will generate dust emissions.

119. Dust plumes from construction activities including earthworks (dismantling, grading, shaping), haulage, and dumping of soil generate may generate excessive dust in and around the project site that can possibly lead to short-term respiratory problems e.g. cough. Furthermore, rerouting of traffic and diversions may lead to traffic congestion on roads, resulting in increased dust and exhaust emissions from vehicles.

120. Another possible cause of air deterioration is the handling of construction material. Construction works may lead to dust generation and nuisance to the public, commuters, pedestrians, and nearby households. However, these impacts will be temporary and localized to the sub-project area.

121. Below figure describes the location of sub-project activities and wind direction. In Karachi, wind blows from SW direction over 9 month's period and NE direction in 3-month period.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

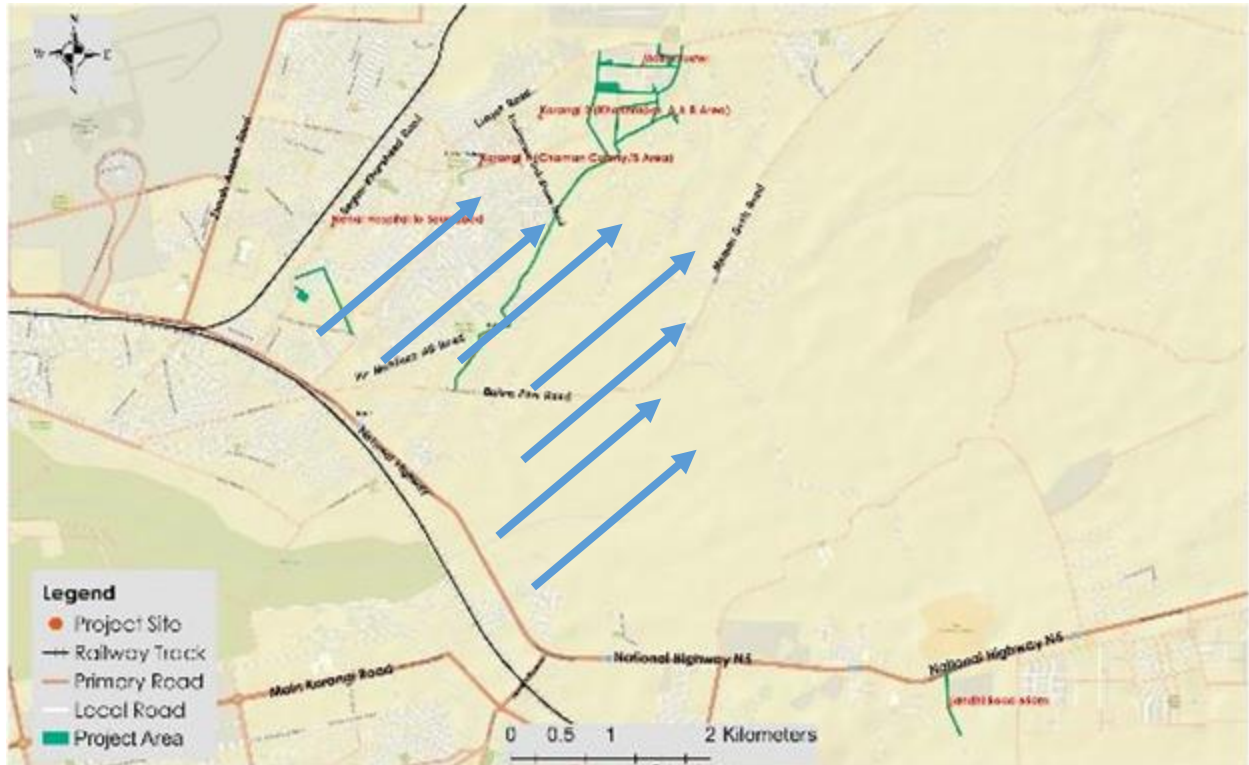


Figure 46: Location of significant construction activity proposed (Blue arrows show the direction of average wind direction from SW to NE)

Mitigation Measures

122. Different options are available to control dust and exhaust pollution. They are listed below:

- ▶ PVC Laminated Polyester Fireproof Mesh Sheet (with small mesh size) which is easily available in the local market can be used to minimize dust at the construction site.
- ▶ The work on all areas of the sub-project shall not be underway at once and will be planned as per the detailed construction plan.
- ▶ The exposure of construction workers to dust will be minimized by the provision of dust masks and mandating the workers to wear them.



Figure 47: Dust Containment Measures (example)

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

- ▶ Water will be sprinkled to wet all the exposed surfaces, twice a day.
- ▶ Use of water suppression for control of loose materials on paved or unpaved road surfaces. Oil and oil by-products are not a recommended method to control road dust²⁴.
- ▶ Truck loads will be covered with tarpaulin.
- ▶ Construction site including soil and material piles at the site will be barricaded to avoid material escape, generation of dust.
- ▶ Ready-mix can be used in the stages of the project wherever and whenever required and deemed appropriate.
- ▶ Careful handling and working under moist conditions and monsoon season will be avoided as much as possible.

Exhaust Emission Reduction Measures

- ▶ Construction machinery, vehicles will be properly tuned and kept in good working condition, minimizing exhaust and vehicular emissions. It will be ensured that exhausts from these equipment and vehicles comply with relevant SEQS.
- ▶ Excessive engine idling will be discouraged and machinery causing excessive pollution (i.e., visible clouds of smoke) will be banned from sites.
- ▶ Open burning of solid wastes, whether hazardous or non-hazardous, is not considered good practice and will be avoided, as the generation of polluting emissions from this type of source cannot be controlled effectively²⁵.

6.3.5 Noise

123. During the construction works, the noise will be generated from the operation of machinery, project-related vehicles, and material transport. These activities may cause discomfort to local residents, customers, visitors, shops, and pedestrians and may exacerbate noise pollution in the sub-project area. Vibrations can be produced due to the working of heavy machinery that may create disturbance for a nearby community.

124. Such activities which create noise pollution will be strictly banned during library opening time.

125. A number of educational institutes, Hospitals, clinics, religious sites, and multiple businesses are present in this residential cum commercial area of the sub-project vicinity. Therefore, careful consideration will be done at the construction site to minimize noise pollution as per the SEQS. The L-2 road of this sub-project is facing Sindh Government Behbehani Hospital, construction and traffic management plan should consider the smooth flow of ambulances and other vehicles to the hospitals as well as minimal noise during working hours.

Mitigation Measures

126. Different options are available to control noise and vibrations. They are listed below:

²⁴ WBG EHS Guidelines

²⁵ Ibid

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- ▶ Noise levels will be checked periodically for a different type of construction activity through a hand-held noise meter. If the noise levels exceed the SEQs levels, construction activity will be halted and the Polyester sheets will be replaced with noise deflectors / acoustic barriers.
- ▶ High noise activities should cease between 22:00 and 06:00 hrs.
- ▶ Equipment and vehicle noise can be reduced at source by regular maintenance & repair of construction machinery and equipment.
- ▶ Replace unnecessarily noisy vehicles and machinery.
- ▶ Vehicles and machinery to be turned off when not in use.
- ▶ Mufflers or silencers will be mandatory to be equipped with all project-related vehicles.

6.3.6 Storm water drainage

127. The monsoon period starts from May, lasts till August and can be prolonged till September. The interventions of this project will be commenced in winters, therefore, there will be less chance of flooding of existing roads during rain as the existing drainage may be blocked due to digging/excavation of soil.

Mitigation Measures

- ▶ It will be ensured that solid and liquid waste produced during sub-project interventions will be properly stored at the site.
- ▶ The waste produced at the site will then be transferred to government-approved landfill site
- ▶ Capacity building programs for the construction and supervision staff will be initiated for the proper collection and transportation towards the safe side.
- ▶ Signpost will also be applied within sub-project areas to disseminate the information regarding proper disposal of waste.
- ▶ Waste and soil piles will be barricaded and covered with tarpaulin to avoid erosion and clogging of the existing sewerage system.
- ▶ Manhole will not be opened for more than 24 hrs, during this period barrier will be provided and temporary barricaded tapes will be used. The public will be informed timely.

6.3.7 Surface and Ground Water Quality

128. Spills of fuel/oil from vehicles during construction may result in contamination of soil and groundwater. In post-monsoon season; inadequate storage at construction waste can result in contamination of land, a nuisance to the public, pedestrians, and residents.

Mitigation Measures

- ▶ It will be ensured that the wastes generated from construction activities will be stored in a proper interim location onsite which will be adequately barricaded and covered to avoid ingress of storm water.
- ▶ Excavation material /civil works related to solid waste will be properly maintained at site.
- ▶ Organize and cover material storage areas, isolate concrete asphalt and other works from water course by using sealed covers.
- ▶ Isolate wash down areas of concrete and asphalt trucks and other equipment form the watercourse by selecting areas for washing that are not free draining directly into the watercourse.

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- ▶ Operate construction site in a way to reduce the risk of generating sediments that may pollute receiving water bodies.
- ▶ Control of sewerage water with Sucker machines to avoid ground water contamination, if needed.
- ▶ There will be no labour camp for residing the workers. Only Porta cabins of Resident Engineers and PIU staff. Therefore, no generation of wastewater will be envisaged.
- ▶ Water quality shall be tested as per Sindh Environmental Standard for drinking water quality to ensure a safe supply of water.
- ▶ If relevant and applicable drinking water quality standards are not met, bottled (certified) water will be provided to the labors.

6.3.8 Impacts from Generation of Wastewater

129. Wastewater will be generated from toilets.

Mitigation Measures

- ▶ Municipal wastewater will be routed and connected to the sewerage. The municipal wastewater normally complies with SEQS and therefore it can be connected to the sewerage system.

6.3.9 Excavation

130. Construction activities will require excavation which can pose the following impacts:

- ▶ Person falling into the pit.
- ▶ Contact with buried utility lines.
- ▶ Flooding in the pit due to excessive rains / underground water.
- ▶ Stability of nearby structures
- ▶ Material handling
- ▶ Movement of vehicles/equipment close to the edge of the pit.

Mitigation Measures

- ▶ The excavation pit will also be protected with shoring protection or if recommended by PSC structural engineer, by a retaining wall. The excavated soil will be temporarily stored at nearby ground away from the pit before disposal.
- ▶ Regarding the utility lines, all utility agencies will be taken on board before construction to locate any existing utilities and provide a suggestion for their protection.
- ▶ Digging will be done manually near buried utilities to locate the exact position.
- ▶ Suitable size of the dewatering pump will be installed if groundwater is found during excavation or rainwater ingress. The water will be discharged into the existing KW&SB sewerage network.
- ▶ At least 2m distance will be maintained for vehicles to operate near the excavation pit.

6.3.10 Utilities

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131. Interruption of electricity and water availability is envisaged due to propose interventions i.e. provision of sewerage line, water supply line, storm water drain. There is a possibility that the water mains may get damaged and water supply may get contaminated with excavated soil or sewerage.

Mitigation Measures

- ▶ Relevant institutions such as KE and KWSB will be taken on-board before and during the commencement of any activities and their recommendations will be well- incorporated.
- ▶ While working near water mains, KWSB will be taken on-board and KWSB site engineers will be present at the site to locate the water mains.
- ▶ Project activities will be appropriately planned to avoid potential interruption in utilities. If water lines/mains get damaged, it will be repaired without delay and as per KWSB practices.
- ▶ Nearby communities will be pre-informed regarding any disruption in the supply of utilities.

6.3.11 Waste Management

132. Typical solid waste generated during construction includes empty cement bags, excavated material, other waste generated by general site practices at site. Solid waste has the potential to cause a negative impact on the surroundings if not properly managed and disposed of. It is likely to block nearby sewerage systems that can ultimately cause localized flooding during the monsoon and nuisance to the public. Such practices would result in short-term negative impact on the aesthetics of the surrounding, but can also deteriorate air quality.

Mitigation Measures

- ▶ Broken Pipes should be disposed-off properly
- ▶ All hazardous waste like Paint Waste (Waste Paint, Drums, and Rollers/ Brushes), will be handled via EPA certified hazardous waste contractor hired by CC.
- ▶ Recycling of solid waste will be carried out as far as possible and practical like cement bags, steel scaffoldings, empty drums, wood planks, discarded bricks etc.
- ▶ Training will be provided to working personnel for identification, segregation, and management of waste.
- ▶ The sub-project waste management plan will be developed by CC.
- ▶ Bitumen waste will be stored in closed containers and placed in a fenced storage area with a paved floor.
- ▶ Scattered solid waste will be properly managed to avoid contamination and disturbance to the community.
- ▶ Immediately transport the accumulated construction waste to the designated site at Jam Chakiro Landfill Site at Surjani, Karachi.
- ▶ Cleaning of sites upon completion of the scheme.

6.3.12 Waste Segregation

133. All hazardous waste if found shall be segregated from non-hazardous wastes at the point of generation of waste. During construction phase, suitable containers with following colour coding shall be kept to collect and segregate common wastes at all facilities:

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Table 22. Color Coding of Waste Material

Waste material	Color code
Concrete Debris	Blue
Metal	Orange
Plastic	White
Oily Rags	Black
Used Oil	Red
Rubbish/Trash	Yellow
Organic Waste	Green
Inorganic Waste	Brown

6.3.13 Recycling and Re-use

134. There is a great recycling potential for few of these wastes in the recycling market at Karachi. Waste shall be sold to third-party contractors/ companies, who have proper recycling facilities. CC will suggest/recommend recycling of the paper, glass, plastic wastes in their respective processing units. Iron/steel waste would be sent to re-rolling mills.

135. Recycling and reusing minimize the quantity of waste requiring disposal. Some of the wastes can be reused within the construction site while others can only be recycled. Category-wise waste management options are given in the following table.

Table 23. Category Wise Waste Management Options

Sr.	Waste Type	Category	Disposal Options
1	Excavation Material	Non-hazardous	Reuse for backfill
2	Construction debris including Scrap	Non-hazardous	Recycle, reuse, or sell to third-party contractor.
3	Metals	Non-hazardous	Store cuttings in designated area for reuse. Remove surplus materials and use them at other sites, where feasible.
4	Concrete	Non-hazardous	Store unused concrete blocks for later reuse. Recycle, reuse, or sell to third-party contractor.
5	Bricks/pavers	Non-hazardous	Reuse for footings and broken bricks.
6	Plastic and vinyl	Non-hazardous	Recycle, reuse, or sell to third-party contractor.
7	Woods	Non-hazardous	Recycle
8	Empty Drums & Containers	Non-hazardous	Disposed them off through recycler.
9	Oily Rags (Used)	Non-hazardous	Dispose to Sanitary Landfill.
10	Asphalt	Hazardous	Most asphalt and bituminous material can be recycled, which is cheaper than reconstruction, can reduce demand for raw materials. In case of recycling or safe disposal, EPA certified waste contractor will be hired by CC.

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Sr.	Waste Type	Category	Disposal Options
11	Paint Waste (Waste Paint, Drums and Rollers/ Brushes)	Hazardous	Handled and disposed of through incineration via EPA certified waste contractor hired by CC.
12	Expired Batteries and used tires (such as nickel-cadmium or lead acid)	Hazardous	Handled and disposed of via EPA certified waste contractor hired by CC.
13	Sanitary Wastewater	Non- hazardous	Collect wastewater in septic tanks before disposal
14	Trash	Non-hazardous	<ol style="list-style-type: none"> 1. Segregate glass, metal, plastic from trash. 2. Recycle all recyclable items. 3. Designed landfill.

6.3.14 Soil Contamination

136. Soil at the construction site can get contaminated from either spills, due to stagnant water or degradation due to activities in the microenvironment of the site.

Mitigation Measures

- ▶ In order to avoid soil contamination Fuel oils and lubricants for construction machinery will be regularly filled from filling station, as there would be no room for fuel storage or uses drip tray method will be used for fuelling.
- ▶ Since the sub-project area is thick populated and congested area so washing and maintenance of vehicles will be done at a service station and the contractor is mandated to get the entry of well-maintained and cleaning machinery.
- ▶ Regular inspections will be carried out to detect leakages in construction vehicles and equipment.
- ▶ Appropriate implements such as shovels, plastic bags, and absorbent materials will be made available near fuel and oil storage areas for the removal of oil and contaminated soil.
- ▶ .
- ▶ Mitigation measures will be taken to minimize loss of topsoil and erosion during site preparation and from stockpiling for extended periods in the park and playground.

6.3.15 Traffic Management

137. As the sub-project interventions include the redevelopment of existing roads and streets under Malir Cluster sub-project, it is envisaged that there would be potential traffic disruption, congestion, diversion and spill over effect during the construction activities.

138. Vehicular traffic management will have to be undertaken seriously to restrain unnecessary traffic jams that may annoy the commuters as they project intervention activities may encompass residential, commercial, and business areas of Karachi.

Mitigation Measures

- ▶ A detailed traffic management plan will be developed by CC and implemented in letter and spirit.

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- ▶ Traffic management and diversion plan would be prepared in consultation with Project Manager of the Contractor.
- ▶ Regarding parking for a different type of project/construction vehicles, the specific area will be designated including existing sub-project roads can be used which are the property of the Government of Sindh.
- ▶ Speed limits suitable for the size and type of construction vehicles, and current traffic patterns will be developed, posted, and enforced on all roads used by construction vehicles.
- ▶ Traffic Management Plan will be introduced to manage the smooth flow of vehicular traffic and to avoid traffic jam and long queues in all main roads and streets.
- ▶ Traffic management plan will also cater the pedestrian movement and nearby schools (Boys & girls), hospitals and other institutes.
- ▶ Sign postings, warning signs, diversion signs and barriers will be installed to alert public of all potential hazards including limited access to construction sites.
- ▶ Ensure safe and continuous access to all shops and residences during construction.
- ▶ The movement of construction material to the sub-project sites will be planned in a way that it will not hamper major transport activity e.g. during the night time or early in the morning when the local trips are minimum. However, care must be taken at residential locations, near hospitals, educational institutes, and library and the transfer of material should not be done during late hours.

6.3.16 Seismic Hazard

Mitigation Measures

139. No specific mitigation measure required in accordance with the Unified Building Codes and Karachi lies on Seismic Zone 2B as per the Codes for which the Peak Ground Acceleration' (PGA) value of 0.20g is expected.

6.3.17 Impacts on Flora

140. As the sub-project includes interventions at multiple neighbourhood roads/streets, parks, playgrounds and green spaces along the library, following mitigation measures will be taken to avoid the impacts on flora and fauna of the sub-project area.

Mitigation Measures

- ▶ There are 376 trees in the sub-project sites. The species observed during enlisting of flora activity included *Azadirachta indica*, *Cocos nucifera* L., *Zizyphus mauritiana* Lam, *Ficus religiosa*, *Bougainvillea glabra* and *Syzygium cumini* Skeels. No Trees will be cut due to Project Intervention
- ▶ All trees will be cordoned off with fencing and their root to be protected.
- ▶ Damage to trees will be avoided and trees located along roadside / streets will be protected during construction.
- ▶ The BOQ for the Neighborhood Roads and Upgradation of Open Spaces including Grounds and Parks in Malir Cluster, sub-project involves of 770 plant saplings including; neem (*Azadirachta indica*), peepal (*Ficus religiosa*), amaltas (*Cassia fistula*), gulmor (*Delonix regia*), bougainvillea (Pink, Magenta, Orange & Red) and khalifa (*Acalypha wilkesiana*) respectively.

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- ▶ As per "National Reference Manual on Planning and Infrastructure Standards", the irrigation water requirement during the operational phase would be around 4000 gallons/day. This includes 770 proposed plant saplings, small plants to be planted into planters over an area of 15,000 square feet.
- ▶ Surface earthworks or vegetation clearing may be required for construction activity at park and playground.

6.4. Occupational Health and Safety Issues

141. The construction of civil works may pose an inherent risk of injury to labour from accidents. Poor housekeeping practices will lead to stagnant water as breeding grounds for insect vectors (causing malaria etc.). Hazards from handling equipment, ergonomic stress, lifting heavy materials etc. may cause injury to the Labour.

Mitigation Measures

142. Occupational Health and Safety Plan will be prepared by the construction contractor. The contractor's OHS plans will be prepared using the World Bank's Environmental Health and Safety Guidelines²⁶ (Annex D), international standards and following the Sindh Occupational Safety and Health Act 2017²⁷. Further, the construction contractor will get help from the I World Bank Health and Safety guidance manual and 29 CFR 1926

143. The plan is based on the risk assessment related to sub-project activities with respect to site specifics. The plan will ensure risk mitigation and management related to project activities and proper housekeeping practices at site. Site-specific labour health and safety hazards are also critical to identify based on job safety analysis or comprehensive hazard or risk assessment. Health and safety management planning will include the adoption of a systematic and structured approach for the prevention and control of physical, chemical, and biological health and safety hazards. Use of PPE will be made mandatory. The experienced crane, forklift, etc. operators will be hired. The construction contractor will ensure that Job Hazard Analysis (JHA) is performed prior to commencing jobs. The plan is based on the risk assessment (Annex G) related to sub-project activities with respect to site specifics.

144. The construction contractor will ensure that Job Hazard Analysis (JHA) is performed prior to commencing jobs. The construction contractor will also ensure that the JHA is reviewed after the following:

- ▶ JHA will be reviewed after every accident whenever work is stopped
- ▶ Every time work conditions, or the job scope changes
- ▶ Persons working the job shall review and acknowledge the JHA by their signature after every accident.

²⁶ <https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf>

²⁷ http://sindhlaws.gov.pk/setup/publications_SindhCode/PUB-NEW-19-000060.pdf

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- ▶ In case of any serious injury or fatality occurs, it would be immediately reported within 24 hours to the Supervision Consultant and PIU.
- ▶ OHS Management Plan and risk register will be reviewed on regular basis.
- ▶ The root cause analysis will also be conducted after major accident, if happens any during implementation of proposed works.

145. Upon mobilization, and within 15 days of commencement, the Contractor shall prepare an Occupational Health and Safety Plan comprised of the following key headings and OHS management plan must be cleared by the supervision consultant;

- ▶ Objectives
- ▶ Scope of work
- ▶ Regulatory Compliances and Conformance Standards
- ▶ Health and safety management structure
- ▶ Hazards identification and risks assessments including; health risks and safety risks
- ▶ Hazard Register and Risk Matrix
- ▶ Proposed measures to reduce the risk of identified hazards
- ▶ HSE Procedures and supporting documents
- ▶ Incident, accident and near misses reporting
- ▶ Plan for emergency transfer of staff or public from site to medical facilities
- ▶ Fire and emergency procedures
- ▶ Site security
- ▶ Trainings and Inductions
- ▶ Internal Review and Audits

6.4.1 Safety Measures for Alone Worker

146. The workers who work by themselves without close or direct supervision are alone or lone workers. They need specific attention by themselves to minimize the OHS risks during performing their assigned tasks. The hazards that lone workers may encounter include:

- ▶ Accidents or emergencies arising out of the work, including the inadequate provision of first aid
- ▶ Sudden illnesses
- ▶ Inadequate provision of rest, hygiene, and welfare facilities
- ▶ Physical violence from members of the public and/or intruders

Mitigation measures

- ▶ Avoid having a lone worker whenever possible, especially for jobs with a recognized risk.
- ▶ Provide appropriate training and education to both the lone worker and the person tasked to respond if there is concern. Training may include how to assess the hazards of the workplace / construction site; what corrective actions to be taken to prevent or minimize the potential risks of working alone; How to report all situations, incidents or 'near misses' where being alone in order to avoid the severity of the situation.

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- ▶ CC to Schedule higher risk tasks to be done during normal business hours, or when another worker capable of helping in an emergency is present.

6.4.2 Crane and Lifting Operations

147. For all Crane & Lifting Operations shall be carried out only through qualified and licenced crane operators. The construction contractor shall ensure full compliance with standard operating procedures. The experienced crane operators will be allowed to operate.

148. All lifting and rigging activities shall be supervised and conducted by a competent person or team, CC shall maintain a lifting gear registry for all lifting gear on-site inclusive of a listing of all lifting gear, copies of equipment certificates (manufacturer, safe working load, serial number) and the inspection/recertification frequency.

6.4.3 Forklifts and Non-Road Vehicles

149. CC should ensure forklift and non-road vehicles are fit for purpose and operated according to manufacturer's requirements. Only competent operators are permitted to operate forklifts and non-road vehicles. At minimum, all forklifts and non-road vehicles shall be equipped with seat belts, horns, emergency brake, wheel chock, labelled controls, fire extinguishers, first aid kit and back-up alarm.

6.4.4 Scaffolding

150. CC is responsible to establish periodic inspection, certification and recertification program for scaffold works. Only qualified worker is authorized to erect, inspect, and certify scaffold. All scaffolds should have a guardrail system on each open side, up to the access point. It will be equipped with toe boards having suitable access ladder.

6.4.5 Trenching Activities

- ▶ The unprotected trench will be avoided to access.
- ▶ Always a protective system will be used for trenches feet deep or greater.
- ▶ Protection of the workers will be ensured by shoring through installing supports to prevent soil movement for trenches that do not exceed 20 feet in depth.
- ▶ A way to exit a trench--such as a ladder, stairway, or ramp--no more than 25 feet of lateral travel for labours in the trench will be planned and provided.
- ▶ The spoils will be kept at least two feet back from the edge of a trench.
- ▶ The trenches will be inspected by a competent person prior to entry and after any hazard-increasing event such as a rainstorm, vibrations or excessive surcharge loads.

6.4.6 Over-exertion

151. Over-exertion, and ergonomic injuries and illnesses, such as repetitive motion, over-exertion, and manual handling, are among the most common causes of injuries at construction site.

Mitigation Measures

Recommendations for their prevention and control include:

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- ▶ Workers will be trained with lifting and materials handling techniques before the construction of the project, including the placement of weight limits above which mechanical assists or two-person lifts are necessary.
- ▶ Work site layout will be planned to minimize the need for manual transfer of heavy loads.
- ▶ Tools will be selected to reduce force requirements and holding times, which promote improved postures.
- ▶ Administrative controls, such as job rotations and rest or stretch breaks will be implemented into the work processes.

6.4.7 House keeping

152. Slips and falls on the same elevation associated with poor housekeeping, such as excessive waste debris, loose construction materials, liquid spills, and uncontrolled use of electrical cords and ropes on the ground, are also among the most frequent cause of lost time accidents at construction site.

Mitigation Measures

Recommended methods for the prevention of slips and falls from, or on, the same elevation include:

- ▶ Good house-keeping practices, such as the sorting and placing loose construction materials in established areas away from foot paths, would be implemented.
- ▶ Excessive waste debris and liquid spills will be cleaned up regularly.
- ▶ Electrical cords and ropes will be located in common areas and marked corridors.
- ▶ Slip retardant footwear will be used.

6.4.8 Work at Heights

153. Falls from elevation associated with working with ladders and scaffolding are among the most common cause of fatal or permanently disabling injury at the construction site. If fall hazards exist, a fall protection plan will be in place which includes one or more of the following aspects, depending on the nature of the fall hazard.

Mitigation Measures

- ▶ Training and use of temporary fall prevention devices, such as rails or other barriers able to support a weight of 200 pounds, when working at heights equal or greater than two meters or at any height if the risk includes falling into operating machinery, into water or other liquid, into hazardous substances, or through an opening in a work surface.
- ▶ Training and use of personal fall arrest systems, such as full body harnesses and energy absorbing lanyards as well as fall rescue procedures to deal with workers whose fall has been successfully arrested.
- ▶ Use of control zones and safety monitoring systems to warn workers of their proximity to fall hard zones, as well as securing, marking, and labelling covers for openings in floors, roofs, or walking surfaces.

6.4.9 Struck by Objects

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154. Construction activities of the project may pose significant hazards related to the potential fall of materials or tools, as well as ejection of solid particles from abrasive or other types of power tools which can result in injury to the head, eyes, and extremities.

Mitigation Measures

Techniques for the prevention and control of these hazards include:

- ▶ The trained and certified operator will be allowed to carry out work.
- ▶ Assign proper labeling on the objects.
- ▶ Maintaining clear traffic ways to avoid driving of heavy equipment over loose scrap.
- ▶ Temporary fall protection measures in scaffolds and out edges of elevated work surfaces would be used, such as hand rails and toe boards to prevent materials from being dislodged.
- ▶ Appropriate PPE such as safety glasses with side shields, face shields, hard hats, and safety shoes, would be worn.

6.4.10 Moving Machinery

155. Vehicle traffic and the use of lifting equipment in the movement of machinery and materials on a construction site may pose temporary hazards, such as physical contact, spills, dust, emissions, and noise.

156. Heavy equipment operators have limited fields of view close to their equipment and may not see pedestrians close to the vehicle. Center-articulated vehicles create a significant impact or crush hazard zone on the outboard side of a turn while moving.

Mitigation Measures

157. Techniques for the prevention and control of these impacts include:

- ▶ The location of vehicle traffic, machine operation, walking areas, and controlling vehicle traffic will be planned and segregated using one-way traffic routes, the establishment of speed limits, and on-site trained flag-people wearing high-visibility vests or outer clothing covering to direct traffic.
- ▶ The visibility of personnel will be ensured using high visibility vests when working in or walking through heavy equipment operating areas as well as training of workers to verify eye contact with equipment operators before approaching the operating vehicle.
- ▶ Inspected and well-maintained lifting devices will be used that are appropriate for the load, such as cranes, and securing loads when lifting them to higher job-site elevations.

6.5. COVID-19 SOPs for Construction Related Works

158. The contractor will ensure following precautionary measures for keeping workforce safe from effects and spreading of pandemic COVID-19;

- ▶ The Contractor's work force will be fully vaccinated and hold Vaccination Certificate,
- ▶ The contractor's workforce will strictly follow using of face masks especially in closed and crowded places;
- ▶ The site staff will regularly be checked for fever through thermometer;

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- ▶ The workforce will avoid sitting at crowded places, visiting at public spaces and unnecessary social gatherings, especially events with large numbers of people or crowds;
- ▶ The contractor will ensure water, sanitation, health and hygiene practices during sub-project life cycle, especially washing hands for at least 20 seconds or use hand sanitizer;
- ▶ The workforce of sub-project area will be strictly advised to avoid contact with anyone having symptoms of respiratory diseases.
- ▶ Promote communication with staff to inform if anyone in their contact (such as within their residential area, community, market area, place of visit for work/ meeting/ religious gathering) has developed any symptoms of COVID-19 and restrict their entry to workplace or meeting with staff.
- ▶ If an individual's temperature is on the higher side and exhibits symptoms of high fever, he will be investigated by a medical doctor for further symptoms of COVID-19.
- ▶ If an individual after examination exhibits all the symptoms of COVID-19 immediate attention will be given and contact Pak Corona Helpline (1166) for further guidance on an immediate basis.
- ▶ Install sanitizer dispensers at the workplace and ensure these dispensers are regularly refilled.
- ▶ Ensure that face masks and / or paper tissues are available at workplaces, for those who develop a runny nose or cough at work, along with closed bins for hygienically disposing of them.
- ▶ Signage in local language promoting regular hand washing will be displayed at prominent locations, occupational health and safety officer and Social Officer shall make sure this.
- ▶ All persons including officers, labour etc. should frequently wash hands for more than 20 seconds regularly with soap or hand sanitizer.
- ▶ All bench tops, door handles, working tables, chairs, etc. will be sanitized regularly.
- ▶ COVID-19 waste should not dispose in an open area, and it must be contained properly and disposed of properly, through incineration only.
- ▶ All staff members will be trained for the COVID-19 waste management.
- ▶ All the waste such as face masks, gloves, and other items generated at office will be stored in a labelled marked container (Hazardous Waste) and will be stored separately in isolation after disinfection. The waste once accumulated will be disposed of via SEPA, certified contractor for Incineration.
- ▶ In case of any worker/staff members develops the symptoms of COVID-19 he will be referred to the nearest Government facility for the testing.
- ▶ If any worker found suspected should not be allowed on-site for work and after examination exhibits all the symptoms of COVID-19 immediate attention will be given and contact Pak Corona Helpline 1166 for further guidance on immediate basis.
- ▶ Daily toolbox talk should include COVID-19 preventive measures on a regular basis and preventive measures will be made mandatory for the contractors and subcontractors.
- ▶ Adopt staggered work schedules, e.g., provide alternating workdays or extra shifts, to reduce the total number of employees on a job site at any given time and to ensure physical distancing.

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6.6. Dengue Management at Construction Site

159. Due to an increase in the cases of dengue in Karachi, construction sites could be a potential source of such viruses and may spread diseases among workers / labors and the neighborhood community. The transmission process of dengue virus between the construction site and the neighboring community is exhibited below;

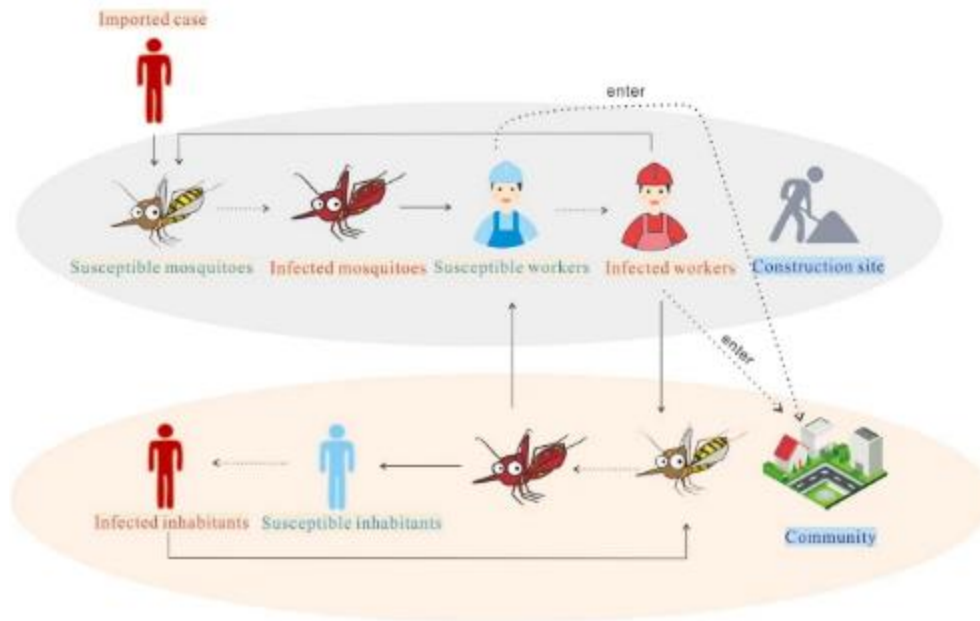


Figure 48: Dengue Fever Transmission Process²⁸

160. Hence, an effective way to improve the construction site’s condition is to implement the concept of ‘Hierarchy of Prevention’ which states elimination, substitution, engineering and administrative controls and use of Personal Protective Equipment (PPE). The contractor will ensure following precautionary measures for keeping workforce (and community) safe from spreading of Dengue Virus;

- ▶ All unnecessary equipment, containers, plastic receptacles etc. around the construction site should be removed.
- ▶ The waste containers to collect on-site waste should be covered to avoid water accumulation.
- ▶ CC and Supervision Consultant will inspect the site on daily basis for potential breeding sites and eliminate such potential sites.
- ▶ CC and Supervision Consultant will keep the cleanliness and good housekeeping at construction sites.
- ▶ Space spray / outdoor fogging will be conducted on frequent basis keeping in view the intensity of outbreak.

²⁸ Liu, X., Zhang, M., Cheng, Q. et al. Dengue fever transmission between a construction site and its surrounding communities in China. *Parasites Vectors* 14, 22 (2021).

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- ▶ Use of repellents (long lasting) for workers will be compulsory to prevent mosquito bites.
- ▶ Encourage workers to wear long sleeves, socks, trousers, light colour clothing to avoid mosquito bites.
- ▶ In case of any worker/staff members develops the symptoms of dengue fever, he will be referred to the nearest Government facility for the testing and will only be able to join the site after full recovery.
- ▶ CC and Supervision Consultant may call on Health department's Helpline number 1025 for further guidance.
- ▶ In case of any worker/staff members develops the symptoms of communicable disease, he will be referred to the nearest Government facility for the testing.
- ▶ If any worker found suspected should not be allowed on-site for work until full recovery. Other workers closely working with the infected person will be screened for testing and other works will be strictly monitored for any possible symptoms.
- ▶ Implementation of hand hygiene practices and use of PPE will be ensured and strictly monitored.

6.7. Heatwave Issues and Mitigations Measures

This impact will be minimal as construction is planned during winters. However,

- ▶ The heatwave and weather impacts would be prioritized for labor and other workforce.
- ▶ Weather information alerts on weather conditions and heat health for labourers will be regularly updated to the work force.
- ▶ Ensure availability of filtered drinking water at site will be mitigated from waterborne issues for labour during implementation of proposed sub-project works.
- ▶ The proper work time rotation for the labour and limit working in extreme weather conditions will be planned by the contractor.

6.8. Harassment of women at the workplace

161. In consideration with 'The Protection against Harassment of Women at Workplace Act 2010', a Code of Conduct at the Workplace will be developed by CC in consideration of World Bank Good Practice Note on addressing Gender-Based Violence (GBV)²⁹ to provide protection and safety to women.

162. Workers must be well informed (in a language they understand) about the code of conduct before signing it. It will be posted in places visible to all workers so that awareness is continuous.

163. Contractor's key staff will be trained on Gender Based Violence and learnings will be transformed to construction workforce too.

²⁹ <https://documents1.worldbank.org/curated/en/399881538336159607/Environment-and-Social-Framework-ESF-Good-Practice-Note-on-Gender-based-Violence-English.pdf>

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6.9. Community Health and Safety Issues

164. During the sub-project activities, it is important to ensure the health and safety of the community from potential risk due to construction and rehabilitation activities. Community awareness session on OHS will be carried out before state of the work to minimize the HSE issues during implementation of the sub-project.

Mitigation Measures

- ▶ Construction and Rehabilitation areas will be cordon-off for any kind of movement.
- ▶ Proper signage will be displayed at the appropriate location and in the local language.
- ▶ Safe passage will be given to the community living nearby or use that space for movement.
- ▶ Information on activities will be shared with the local residents well before time.
- ▶ First Aid Box will be present at the site.

Chapter 7

Grievance Redressal Mechanism (GRM)

165. KNIP has devised a Grievance Redress Mechanism to address the concerns of its stakeholders and protecting the interests of directly and indirectly affected beneficiaries. The overall objective of GRM is to make the KNIP Project Implementation Unit (PIU) more accessible for project-affected communities, particularly vulnerable groups, and to provide a robust system of procedures and processes for rapid resolution of citizen's concerns and project-related complaints. A well designed and properly implemented GRM can help project management significantly by enhancing operational efficiency in a variety of ways:

- ▶ Mitigating risk- Deterring fraud and corruption
- ▶ Providing project staff with practical suggestion/ feedback that allows more accountability and responsiveness to beneficiaries
- ▶ Assessing the effectiveness of internal organizational processes
- ▶ Increasing stakeholder involvement in the project
- ▶ Analysing information to recognize grievance patterns, identify any systemic causes of grievances, promote transparency, publicize how complaints are being handled,
- ▶ Data Monitoring and periodically evaluating the overall functioning of the mechanism; including the periodic reports to the contractor(s) and in compliance monitoring report to the World Bank.

7.1 Approach

166. The following approach has been adopted to identify, track and resolve grievances of effected people. The approach proposes interlinked steps:

- ▶ **Proactive Assessment of Risks and Potential Grievances/Disputes:** an in- depth review of stakeholder consultations, institutional capacity and understanding the issues that are, or are likely to be, at the heart of disputes related to the project.
- ▶ **Accessibility:** Is sufficient assistance provided to those who face barriers such as language, literacy, awareness and fear reprisal? Access ensured for vulnerable groups including women, minorities, the poor, elderly, physically disabled etc.
- ▶ **Predictability:** Clear timeframes for procedures.
- ▶ **Fairness:** Procedures should be fair for meaningful participation in the decision-making process.
- ▶ **Transparency:** Procedures and outcomes transparent enough to meet public interest concerns at stake.
- ▶ **Capacity:** Technical, Human and Financial resources should be available to deal with grievances and related issues.

167. The GRM will be accessible to all members of the community and the workers including women, senior citizens and other vulnerable groups. Information about the grievance redress processes will also be translated in the national language and Signboards with contact information (dedicated phone line, email, webpage and postal mail address) will be displayed at the construction sites. Website, leaflets and discussions during stakeholder consultations will further assist in informing the concerned citizens

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regarding the mechanism and creating awareness. Once a complaint will be received through either of the uptake channels, the complainant will receive a tracking number, through which their complaints will be tracked.

7.2 Institutional arrangements

168. The GRM will be accessible to all members of the community, including workers, women, senior citizens and other vulnerable groups. Information about the grievance redress processes will also be translated in the national language and Signboards with contact information (dedicated phone line, email, webpage and postal mail address) will be displayed at the construction sites. Website, leaflets and discussions during stakeholder consultations will further assist in informing the concerned citizens regarding the mechanism and creating awareness.

169. Staff implementing the GRM (receiving and registering complaints, investigating complaints etc.) will be trained to engage with complainants by the GRM Focal person in PIU.

The Grievance Redress Focal Person (GRFP) in PIU will be responsible for providing oversight on the entire GRM process at a strategic level, monitoring of complaints management and will have the overall responsibility for GRM. She/he will determine the severity or risk associated with a complaint and decide the level at which the complaint needs to be resolved. The Project Director and Deputy Project Director would monitor the GRFP to ensure the complaints are handled efficiently. Staff implementing the GRM (receiving and registering complaints, investigating complaints etc.) will be trained to engage with complainants by the GRM Focal person in PIU. Every effort will be made to address and resolve grievances within a fixed timeframe.

170. The GRFP will investigate the complaint to determine its validity and to determine whether the source of the problem is due to project activities and identify appropriate corrective measures. The investigation will include collecting and review of relevant documents (supporting evidence is not necessary but may be helpful in reviewing and resolving the complaint), site visits, consulting appropriate internal staff, contacting external stakeholders, interviewing the complainant, if required. The GRFP will be responsible for handling the complaints received through telephone line, providing information and responses to complainants, entering and updating the complaints received through the above- mentioned uptake channels into an electronic GRM database. Once a complaint will be received through either of the uptake channels, the complainant will receive a tracking number, through which their complaints will be tracked. This will be an indicator of how well and effectively the system is performing

171. The GRM electronic database will include information such as: complaint ID, basic details of complainant and the complaint, time for resolution and complainant's satisfaction with the process. This data will be useful for tracking individual complaints and will be maintained at the PIU. These reports will be reviewed by the Monitoring and Evaluation Consultant on a monthly basis for Compliance and Audit measures.

172. A 3 Tier mechanism has been designed where complaints received will be addressed at 3 levels:

- I. At Field Level
- II. At Stakeholder Level, and

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III. At Department Level

7.3. Field Level Mechanism

173. Complainants will be able to register their grievance at the field or project site. An easily accessible and identified focal point and user-friendly help desk would be set up on the sub-project site. A specific staff would be hired by the Contractor for Grievance Registration. A set of Registration Forms with specific serial numbers would be used and concerned citizens can register their complaints.

174. A drop-box would also be placed on the Sub-project site, where a set of registration forms with separate serial numbers would be available. These would help to distinguish complaints received from the Helpdesk. Citizens who do not want to disclose their identity would have the option of Dropbox facility.

175. All complaints received at the field level will be brought to the notice of the GRFP who will decide if the complaint can be dealt with at the field level or if it needs to be escalated to a higher level.

176. On the other hand, complaints that are directly received in PIU (through telephone line, postal mail, e-mail and web link) will be assessed first by GRFP. In case the complaint is of a minor nature and can be resolved on site, the GRFP will inform the field level committee to proceed with the resolution process.

177. Once a complaint has been resolved, the GRFP who will, in turn, contact the complainant to determine satisfaction with both the process and the outcome. Information in this regard will be maintained in the GRM database.

178. The GRFP will monitor the timeline and if complaint cannot be resolved on spot or within a timeframe of Five (5) working days, the GRFP will then coordinate with the relevant PIU staff to address the issue.

179. Complaints that cannot be resolved on the spot or within a time frame of Five (05) working days on site will be directed back to the GRFP in the PIU who will assess the issue and coordinate with relevant PIU staff to address the issue.

180. The PIU team would try to ensure that grievances should be resolved at their initial Field Level. However, if the nature of the complaint cannot be addressed on Tier 1, within Five (5) working days, the issue would then be escalated to the Stakeholder Level by the GRFP.

7.3.1 Field Level Committee Members:

- ▶ Grievance Redress Focal Person - PIU
- ▶ Senior Engineer – PIU
- ▶ Resident Site Engineer – Supervising Consultant
- ▶ Contractor

7.4 PIU Stakeholder Level:

- ▶ This is the second stage of our Grievance Redress Mechanism, where outside stakeholders and civil society would be brought on board by the GRFP to resolve the grievance.

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- ▶ Additional members would be added so non-availability should not affect the quorum. This committee would have 7 working days to reach a decision to address the issue, however if solution is not attained within the required timeline, the grievance would be escalated to Department Level.

7.4.1 Stakeholder Committee Members:

- ▶ Deputy Project Director PIU
- ▶ Grievance Redress Focal Person – PIU
- ▶ Concerned PIU Specialist/Staff
- ▶ Local Community and Civil Society Representatives for Project Sites

7.5. Department Level:

- ▶ All efforts would be made to resolve the grievance on the Field and Stakeholder levels. However, grievances that cannot be resolved, it would be addressed at the Department Level to reach a satisfactory conclusion.

7.5.1 Department Committee Members

- ▶ Project Director - PIU
- ▶ Municipal Commissioner
- ▶ Grievance Redress Focal Person-PIU
- ▶ Concerned PIU Specialist/Staff

181. The Grievance Redress Mechanism has been designed to resolve the complaints within a maximum timeframe of 21 working days. Grievance registration and satisfaction forms and Contact Details for Grievance Redressal are attached at Annex I, J and K.

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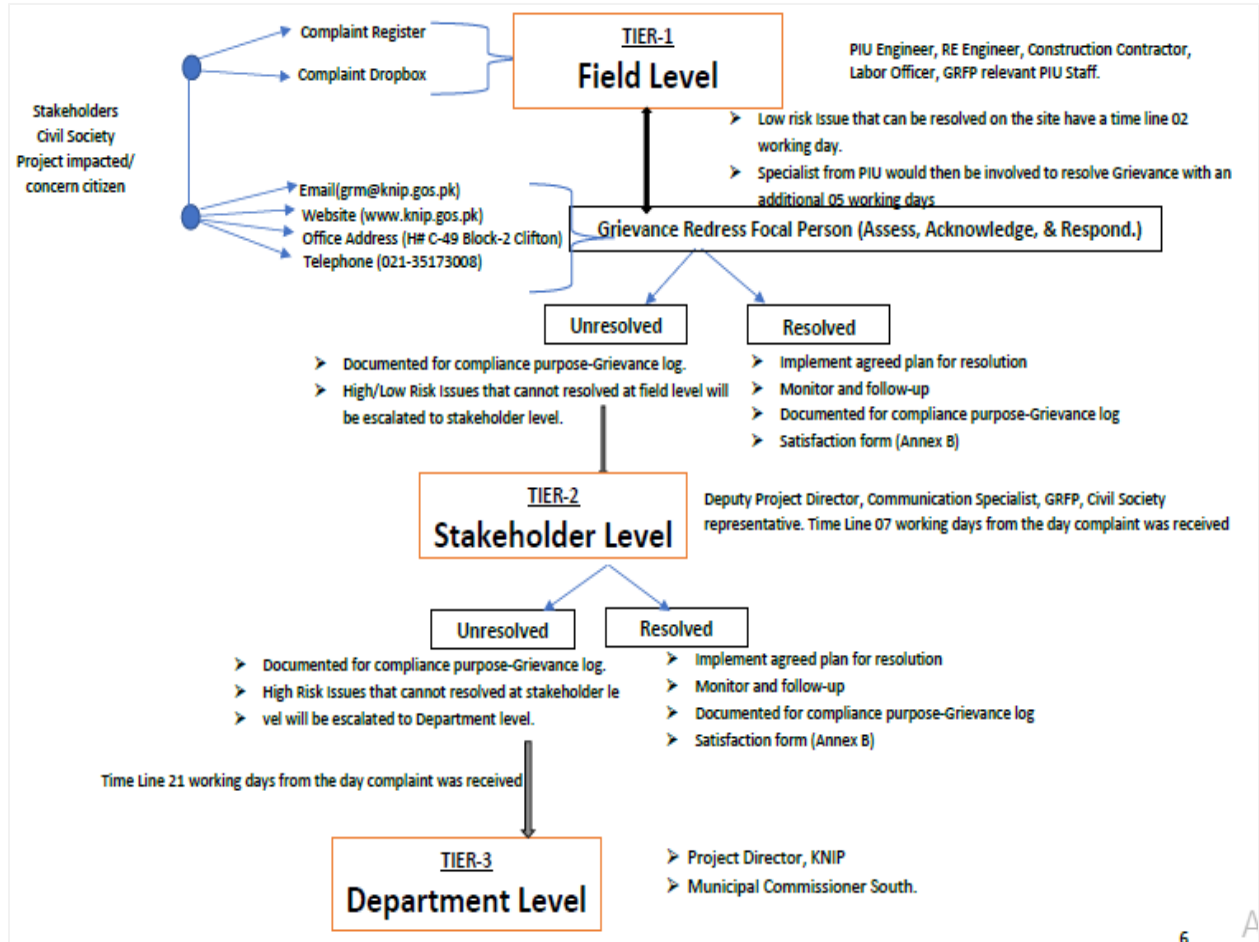


Figure 49: Grievance Redressal Mechanism

Chapter 8

Training, Capacity Building & Awareness Raising Requirements

182. To ensure the successful implementation of the ESMP and GRM strengthening the competencies of the relevant staff is of prime importance. The objectives of the environmental and social trainings are to provide basic knowledge and information on the key environmental and social issues associated with the proposed interventions. The project personnel involved in the environmental and social management of the sub-project including the PIU, Contractor(s) staff, and public.

183. The environmental and social aspects identifications and mitigations integrated with the training effort will equip the sub-project implementers for a keen sight of project component related environmental issues and their solutions.

184. Project Supervision and Contract Management Consultant (PSC) / Construction Contractor(s) (CC) will execute the training programs. PSC will also be responsible for preparing the reports for each of the trainings conducted. Additionally, Construction Contractor (CC) will be responsible to provide trainings to their field staff and workers under supervision of PSC and they will also document the trainings. The manuals and materials of capacity building, awareness raising, and detailed training will be prepared by PSC / CC before the start of training program.

185. Different groups of participants required different type of training session like detailed trainings, capacity building or awareness raising. The requirements for the trainings for these various groups is presented in the training plan presented below, which provides the training requirements, their frequency, training responsibility for various groups. However, the list of trainings mentioned here is only indicative and subject to change as per requirements of the PSC/CC during the implementation phase.

Table 24. Training Plan

Training Aspects	Targeted Groups	Frequency of Trainings	Training Responsibility
1 Implementation of ESMP	Construction Contractors (CC) & ESS Staff of PIU	Weekly/fortnightly session with staff and workers and daily tool box talk during the construction	Project Supervision Consultant
2 Grievance Redressal Mechanism	Construction Contractors (CC)/workers	Continuous throughout the sub-project execution	Project Supervision Consultant
3 Environment Mitigation & Management at site	Construction Contractors (CC)/workers & ESS Staff of PIU	Weekly/fortnightly session with staff and workers and daily tool box talk during the construction	Project Supervision Consultant
4 Occupational Health & Safety	Construction Contractors (CC)	Three time before commencement of construction, fortnightly/monthly session with staff and workers and daily tool box talk during the construction.	Project Supervision Consultant
5 Labour / OHS Issues	Construction Contractors (CC)/workers &	Conducted on JHA based or as per site demand	Project Supervision Consultant

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Training Aspects	Targeted Groups	Frequency of Trainings	Training Responsibility
	ESS Staff of PIU		
6 Protection of women and other vulnerable groups from Gender Based Violence (GBV) during execution of sub-project	Construction Contractors (CC)/workers &	One time before starting of construction work and one time during the period of construction	Project Supervision Consultant/PIU
7 Code of conduct	Construction Contractors (CC) & workers	One time before commencement of construction	Contractors & trainers

Chapter 9

STAKEHOLDER CONSULTATIONS

186. This chapter provides an overview of the stakeholder consultation process that was adopted by the consultants and presents the findings of the stakeholder engagements with stakeholders. The key aspects, including consultation objectives, consultation tools/methodologies and stakeholders’ feedback are discussed in the following sections.

9.1 Objectives and Purpose of Consultation

187. The overall purpose of the consultation was to disseminate information about Karachi Neighborhood Improvement Project (KNIP) and its’ sub-project in a specific area among stakeholders. The specific objectives of the consultation are following:

- ▶ To share sub-project Conceptual design with stakeholders and acquire their feedback to incorporate in sub-project interventions (planning and design phase).
- ▶ To gain the consent of all the stakeholders for carrying out sub-project interventions
- ▶ To know concerns related to the sub-project and record their suggestions / recommendations.

9.2 Group of Stakeholders

188. The consultant team, comprised of Design and Safeguard officials conducted various consultations in the form of Consultative Meetings, Focused Group Discussion (FGDs), and In-depth Interviews (IDPs) with stakeholders.

189. Following are the group of stakeholders with whom consultation was conducted.

- ▶ Local Residents (male and female)
- ▶ Mobile Vendors and Small Cart Owners
- ▶ Members of Sports and Youth Group
- ▶ NGO/CBO
- ▶ Government Departments (Local Govt. DMCs, KMC) and Utilities Agencies
- ▶ Representatives from Educational Institutes and Health Care Facilities
- ▶ Elected Representatives

190. Summary of consultation is provided below:

Table 25. Number of Respondents

Target Group												Sub-project Total	
Residents		NGO/CBO		Sports/ Youth Group		Mobile Vendors		Government Departments		Elected Representatives		M	F
M	F	M	F	M	F	M	F	M	F	M	F	M	F
252	125	11	0	41	9	18	0	40	4	57	4	419	142
												561	

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9.3 Proceedings of Consultations

191. The team visited various prominent places in the sub- project area to meet with the target audience along with coloured hard copies of the sub-project design to get their feedback.

192. During the consultations, overall KNIP project and proposed intervention of sub-project were introduced to the stakeholders. Subsequently, detailed designs of proposed interventions were explained in a simple and non-technical language by using hard copies of drawings and maps. This exercise helped to get stakeholders’ concerns and feedback / recommendations.

193. These concerns and suggestions were recorded in field notes. Due to cultural sensitivity, female team members conducted consultations with female residents. The premises for public consultation meetings were selected as per the convenience of stakeholders.

9.4 Findings of Consultations

194. The findings of consultation meeting with various stakeholders are summarized below:

9.4.1 Consultative Meetings with Local Residents and Players (Male)

Date: Thursday, July 14, 2021

Location: **Young Football Ground**

195. A Consultative meeting with men residents and players conducted at **Malir Cluster** to disseminate information on the sub-project and its proposed design. The purpose of meeting was to gather information on relevant issues and concerns, so that the feedback could be received and addressed at an early stage.

196. A summary of the issues/concerns and suggestions is provided in the table below:

Table 26. Consultation and Design Modification Matrix (Local Residents– Male)

Name	Category	Recommendation/Suggestions	Action to be taken	Design Modification
Respondent 1	Resident	Suggested to rehabilitate the Young Iqbal football ground on priority basis.	It was informed that the project will be commenced from December 2021 and the proposed interventions at the Young Iqbal Playground include proposed stadia with male/female player lounge, changing rooms and showers, toilet, kitchen, team officials, message rooms, store, public and handicapped toilet, and conference room, renovation of existing stadia, car and motorbike parking area, jogging track, etc.	No design modifications required.
Respondent 2	Resident	He suggested to rehabilitate the parks and grounds in the area to facilitate local residents.	No action required. All proposed interventions of each park and playground was provided to the respondent.	No design modifications required.

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Name	Category	Recommendation/Suggestions	Action to be taken	Design Modification
Respondent 3	Resident	He suggested mechanism should be in place to operate and maintain the parks and grounds.	KNIP is working to develop O&M mechanism for all it's sub-projects.	No design modifications required.
Respondent 4	Foot Ball Player	He suggested that there is no proper changing room available for the players in Mehfooz Foot Ball Ground to facilitate the players.	Included in the design.	No design modifications required.
Respondent 5	Foot Ball Captain	He suggested that there is no proper sitting area for the audience or local people who come and see the match in grounds.	Proper setting arrangements including in the design	No design modifications required.
Respondent 6	Resident	He suggested that the footpath must be available for the walking area which is beneficial for local residents and players.	Included in the design.	No design modifications required.
Respondent 7	Resident	He suggested that there is issue of sewerage line. Every time waste water is standing on the road and ground of the playing areas, which is mentioned in the pictures.	The Sewerage issue related to the Ground will be addressed.	No design modifications required.
Respondent 8	Resident	He emphasized on the upgrade the level of ground as compared with the level of road, otherwise water of rain percolate in the ground.	Ground is designed in a way that rain water will not percolate into ground.	No design modifications required.
Respondent 9	Resident	He suggested proper lighting in parks and grounds.	Included in the design.	No design modifications required.
Respondent 10	Resident	He suggests grass grounds instead to hard surface.	Included in the design.	No design modifications required.
Respondent 11	Resident	He suggests that at the time of lunch or dinner preparing the Gas pressure is very low and face difficulty to make food.	Consultant informed that the provisions of the sub-project is rehabilitation of parks, grounds and roads only in the area. However, concerns will be shared with the concerned department.	
Respondent 12	Resident	Load shedding is a major issues.	Consultant informed that the provisions of the sub-project is rehabilitation of parks, grounds and roads only in the area. His complain will be shared with the concerned department. However, generator will be provided In the parks and playgrounds.	No design modifications required.
Respondent 13	Resident	He suggests that there is no separate family park for female.	The provision is available in the proposed interventions.	No design modifications required.
Respondent 14	Resident	He suggested that the proper street lighting must be available	Included in the design.	No design modifications required.

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Name	Category	Recommendation/Suggestions	Action to be taken	Design Modification
		on the roads, grounds and parks.		



Figure 50: Consultation Meetings with Local Residents and Players (Male)

Attendance sheet is attached at Annex L.

9.4.2 Consultative Meeting with Local Residents (Female)

Date: Thursday, July 15, 2021

Location: **Malir Residence**

197. A Consultative meeting with women residents conducted for Redevelopment of neighborhood roads and upgradation of Open Public Spaces Including grounds and Parks in **Malir Cluster** to disseminate information on the sub-project and its proposed design. The purpose of meeting was to gather information on relevant issues and concerns, so that the feedback could be received and addressed at an early stage.

198. A summary of the issues/concerns and suggestions is provided in the following table:

Table 27. Consultation and Design Modification Matrix (Local Residents – Female)

Name	Category	Recommendation/Suggestions	Action to be taken	Design Modification
Respondent 1	Home Maker	She emphasized on the filtered water in the public areas for easy access to safe and potable drinking water.	Filtration plant to be provided in the Parks.	Incorporated
Respondent 2	Home Maker	She shares the thought that they are in a quite backward area and the majority of women are uneducated and remain mainly at home due to unavailability of family parks. Parks are important for them.	Consultant informed that these includes family parks to facilitate the womenfolk of the area. Included as an inclusive design approach	Incorporated
Respondent 3	Home Maker	She emphasizes on basic facilities for females in these parks.	Consultant informed that these basic provisions will be included in the parks	Incorporated

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			to facilitate family scale visits. Included as an inclusive design approach	
Respondent 4	Home Maker	She suggested proper lighting, CCTV coverage and exit control in the parks.	Included as an inclusive design approach	Incorporated
Respondent 5	Home Maker	She suggested that there should be park for the youth/boys, wherein they can involve themselves in healthy activities i.e.; sports. As most of the boys in the the area are indulged in bad practices.	Included as an inclusive design approach	Incorporated
Respondent 6	Home Maker	She suggested that the sewerage system in the area is very unsatisfactory, the rain water remains for days on the roads and streets which hampers the mobility of residents in the area.	Consultant informed them they will convey their suggestion to the relevant departments. In sub-project component sewerage system and storm water drainage system is provided for parks and grounds. This problem to some extent will be resolved due to these interventions.	Incorporated
Respondent 7	Home Maker	She suggested that the sub-project should have a provision of repairing roads in the area to avoid the accidents which are witnessed almost on daily basis due to poor condition of roads.	Consultant informed that the rehabilitation of roads included in the sub-project interventions. Included as an inclusive design approach through information signs and geometric design to avoid accidents	Incorporated
Respondent 8	Home Maker	She suggested that there should be more provision of employment for the residents of the area, as the markets in the area are not the capital markets.	Consultant informed preference for employment will be given to locals.	Incorporated
Respondent 9	Home Maker	She suggested that the plan must include the removal of solid waste material in the area and add the provision of dustbins in the public places.	Included in the plan.	Incorporated

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Figure 51: Consultations with Female Residents at Malir Cluster

Attendance sheet is attached at Annex M.

9.4.3 Consultations with Representatives from Health Care Facility

Date: Thursday, Oct 12, 2021

Location: **Khokhra Par Dispensary, UC 12**

199. A Consultative meeting with staff Nurse who has acting charge of doctor was conducted at Khokhra Par Dispensary UC 12 to disseminate information on the sub-project and its proposed design. The purpose of meeting was to gather information on relevant issues and concerns, so that the feedback could be received and addressed at an early stage. As per the information received, the Hospital has;

- ▶ Outpatient Department: 8am - 1:30pm
- ▶ Per day Patients: 80 to 100
- ▶ Paramedic Staff: 08

200. A summary of the issues/concerns and suggestions is provided below:

Table 28. Consultation and Design Modification Matrix – Healthcare Facilities

Name	Recommendation/Suggestions	Action to be taken	Design Modification
Respondent 1	The improvement of drainage system and solid waste management system in the area.	This element is also part of the sub-project activities which will improve the drainage and solid waste issues in the area.	No design modifications required.
	Increase plantation in vicinity of the hospital in order to provide fresh oxygen and shadow to the patients. It would enhance the beauty of the area.	This element is also part of the sub-project activities. Almost 770 plants will be planted at this sub-project site.	No design modifications required.
	Poor infrastructure of roads consumes high time to reach the hospital.	Complete new roads are planned for Chaman Colony Main Road and related internal streets which connects the hospital with main areas of the city. In addition to that, the phase wise construction approach and a traffic management plan will help in managing the traffic flow, specifically the ambulances.	No design modifications required. This issue is addressed in the EMMP and SMMP of this report.

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Figure 52: Consultations with Staff Nurse at Khokra Par Dispensary Hospital, Malir Cluster

9.4.4 Consultations with Educational Facilities

9.4.4.1. Meeting 1:

Date: Thursday, Oct 12, 2021

Location: Government Girls and Boys School Campus

201. A Consultative meeting with Government Girls and Boys School Staff was conducted to disseminate information on the sub-project and its proposed design and to gather information on relevant issues and concerns. The school has;

- ▶ **Total Enrolment:**
 - Morning Shift: 350 students which includes 50% boys and 50% girl’s ratio.
 - Evening Shift: 250 students which includes 50% boys and 50% girl’s ratio.
- ▶ **Total Staff:**
 - Morning Shift: 8 teaching and 5 non-teaching staff.
 - Evening Shift: 2 teaching and 2 non-teaching staff.

202. A summary of the issues/concerns and suggestions is provided below:

Table 29. Consultation and Design Modification Matrix - Government Girls and Boys School Campus

Name	Category	Recommendation/Suggestions	Action to be taken	Design Modification
Respondent 1	Principal	He suggested the execution be planned in manner to avoid disturbance to the school and students.	Included in the plan.	No design modifications required.
Respondent 2	General Secretary PPP/Social Worker	He suggested the timely completion of the sub-project interventions, enabling the residents to get benefit of the project.	Included in the plan. Strict adherence to the construction schedule will be done.	No design modifications required.
Respondent 3	Teacher	He emphasized that the rain water remains for days on the roads and streets. Which is the main cause of hampering the smooth mobility of students to the school.	The consultant informed that the grounds will be provided with storm water drain to avoid water accumulation.	Incorporated.

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Respondent 4	Clerk	He suggested that the renovation of ground would also benefits the students of the school because the existed grounds in the school do not have the capacity to accommodate large number of students.	No action required.	No design modifications required.
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203. Attendance Sheet is attached at Annex – N.



Figure 53: Consultations with Government Girls and Boys School Staff

9.4.4.2. Meeting 2:

Date: **Thursday, Oct 12, 2021**

Location: **Government Girls School Campus Azamabad**

204. A Consultative meeting with Government Girls School Campus Azamabad Staff was conducted to disseminate information on the sub-project and its proposed design and to gather information on relevant issues and concerns. The school has;

- ▶ Total Enrolment:
 - 750 students which includes 172 boys and 578 girls.
- ▶ Total Staff:
 - 38 female and 5 male staff members.
- ▶ School Timings:
 - 8am-1:30pm

205. A summary of the issues/concerns and suggestions is provided below:

Table 30. Consultation and Design Modification Matrix - Government Girls School Campus

Name	Category	Recommendation/Suggestions	Action to be taken	Design Modification
Respondent 1	Principal	She suggested that there should be proper drainage system for wiping out rain water. So that it does not stay on roads for number of days and hampers the mobility of students of the school.	Consultant informed that the storm water drain will be given to avoid accumulation.	No design modifications required.
Respondent 2	PST teacher	He suggested that sewerage system is not satisfactory in the area.	Consultant informed that sewerage system is not in the scope of interventions,	No design modifications required.

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			however the concerned department will be informed of this suggestion.	
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206. Attendance Sheet is attached at Annex – O.



Figure 54: Consultations with Government Girls School Campus Azamabad Staff

9.4.4.3. Meeting 3:

Date: **Thursday, Oct 12, 2021**

Location: **Nishan Hyderi School**

207. A Consultative meeting with Nishan Hyderi School Principal was conducted to disseminate information on the sub-project and its proposed design and to gather information on relevant issues and concerns.

208. A summary of the issues/concerns and suggestions is provided in the table.

Table 31. Consultation and Design Modification Matrix - Nishan Hyderi School

Name	Category	Recommendation/Suggestions	Action to be taken	Design Modification
Respondent 1	Principal	He suggested that project must be complete in short period and speedy work must be implemented to avoid any disturbance to the students of school, otherwise student will face the problem to attend the school.	Included in the plan. Strict adherence to the construction schedule will be done.	No design modifications required.

209. Attendance Sheet is attached at Annex – P.

9.4.5 Consultation with Small Cart Owners / Mobile Vendors

210. The mobile vendors whose businesses are located close to sub-project site were also consulted. Owners of mobile carts did not show any serious concern about the sub-project interventions, since their businesses are very mobile and can easily be shifted to relatively undisturbed sites within the same area which will also not affect their income.

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211. The small business owners / mobile vendors / hawkers acknowledged the sub-project interventions. They highlighted that the local residents / general public and mobile vendors are facing serious mobility issues due to poor road conditions. Moreover, they annotated that improvement in neighbourhood especially public parks and play grounds conditions will cause positive impact on their businesses.

212. Although, the proposed interventions will not halt mobile vendors / small cart owner’s businesses. However, traffic congestions, noise pollution, dust, restricted access are some of the impacts which are already address in EMMP and SMMP of the report.

Table 32. Consultations with business owners / Mobile Vendors and design modifications

Name	Category	Recommendation/Suggestions	Action to be taken	Design Modifications
Respondent 1	Mobile Vendor (Biryani Cart)	Safety concern is major problem. Inconvenience to pedestrians must be avoided.	This issue has addressed in EMMP and SMMP section of the report. All mitigation measures will be taken to avoid this issue.	No design modifications requires.
Respondent 2	Mobile Vendor (Pan Cabin)	Traffic congestions might be an issue during construction phase.	This is a high priority issue and relevant mitigation measures are addresses in the EMMP of the report.	No design modification required.
Respondent 3	Mobile Vendor (Pan Cabin)	When the construction work of the park is being in process then you must have put the barriers and indicate the safety signs for the precaution and careful.	This issue has addressed in EMMP section of the report. All mitigation measures will be taken to avoid this issue.	No design modifications requires.
Respondent 4	Tea Stall	Noise could be an issue during construction phase.	Noise pollution will be monitored. In case of noise level exceeded SEQs limit, all construction activities will be halt. Relevant mitigation measures are addresses in the EMMP of the report.	Included in the compliance monitoring section of EMMP. No design modification required.
Respondent 5	Mobile Vendor (Vegetables Cart)	Congestion of traffic could be a problem.	This is a high priority issue and a Traffic Management Plan (TMP) will be developed before execution of work and all the stakeholders were informed about traffic diversion plan through pamphlet and local TV cable.	No design modification required.
Respondent 6	Mobile Vendor (Fruits Cart)	Dust could be a major problem.	This is a high priority issue and a Traffic Management Plan (TMP) will be developed before execution of work and all the stakeholders were informed about traffic diversion plan through display of information boards, pamphlets and local TV cable. Dust related mitigation measures are addressed in EMMP.	No design modification required.

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Name	Category	Recommendation/Suggestions	Action to be taken	Design Modifications
Respondent 7	Mobile Vendor (Fruits Cart)	Traffic management is needed to avoid congestion.	This is a high priority issue and a Traffic Management Plan (TMP) will be developed before execution of work and all the stakeholders were informed about traffic diversion plan through pamphlet and local TV cable. Relevant mitigation measures are also addressed in the EMMP of the report.	No design modification required.
Respondent 7	Mobile Vendor (Fruits Cart)	Traffic management is needed to avoid inconvenience.	This is a high priority issue and a Traffic Management Plan (TMP) will be developed before execution of work and all the stakeholders were informed about traffic diversion plan through pamphlet and local TV cable. Relevant mitigation measures are addresses in the EMMP of the report.	No design modification required.
Respondent 8	Mobile Vendor (Vegetables Cart)	Traffic management is needed to avoid inconvenience.	This is a high priority issue and a Traffic Management Plan (TMP) will be developed before execution of work and all the stakeholders were informed about traffic diversion plan through pamphlet and local TV cable. Relevant mitigation measures are addresses in the EMMP of the report.	No design modification required.
Respondent 9	Mobile Vendor (Pan Cabin)	Noise and vibrations should be avoided during working hours.	Relevant mitigation measures are addresses in the EMMP of the report.	No design modification required.
Respondent 10	Mobile Vendor (Vegetables Cart)	Traffic management is needed to avoid inconvenience. Noise and vibrations should be avoided during working hours.	This is a high priority issue and a Traffic Management Plan (TMP) will be developed before execution of work and all the stakeholders were informed about traffic diversion plan through pamphlet and local TV cable. Relevant mitigation measures are addresses in the EMMP of the report.	No design modification required.
Respondent 11	Mobile Vendor (Vegetables Cart)	Safety concern is major problem.	This issue has addressed in EMMP section of the report. All mitigation measures will be taken to avoid this issue.	No design modifications requires.
Respondent 12	Mobile Vendor (Fruits Cart)	Traffic management is needed to avoid inconvenience.	This is a high priority issue and a Traffic Management Plan (TMP) will be developed before execution of work and all the stakeholders were informed about traffic diversion plan through pamphlet and local TV	No design modification required.

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Name	Category	Recommendation/Suggestions	Action to be taken	Design Modifications
			cable. Relevant mitigation measures are addresses in the EMMP of the report.	
Respondent 13	Mobile Vendor (Fruits Cart)	Put the barriers and signboards to indicate the safety signs for the people safety.	This issue has addressed in EMMP section of the report. All mitigation measures will be taken to avoid this issue.	No design modifications requires.
Respondent 14	Mobile Vendor (Pan Cabin)	Noise and traffic congestion should be managed carefully.	Relevant mitigation measures are addresses in the EMMP of the report.	No design modification required.
Respondent 15	Mobile Vendor (Biryani Cart)	Dust could be a major problem.	Dust related mitigation measures are addressed in EMMP.	No design modification required.
Respondent 16	Tea Stall	During construction work at the park and playground, the safety barriers should be installed for safety of everyone.	This concern has already been addressed. All construction sites will be cordon off.	No design modification required.



Figure 55: Consultations with Mobile Vendors and Small Cart Owners

9.4.6 Consultative Meetings with Government Departments and Utility Agencies

213. Consultation meetings with Karachi District Council, K-Electric (KE) and Karachi Water and Sewerage Board (KWSB) were also held. Besides this, a field visit along with Government officials, Elected Representatives for NA-238 and PS-91 was also conducted for Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Grounds and Parks in Malir Cluster. During visit along with the Elected Representatives, a good number of local residents, social workers, youth leaders, sports players and government officials, team of PIU-KNIP and Consultants were also participated. The Consultant team briefed the scope of works of the sub-project. During meeting and field visit the following points were discussed:

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- ▶ Detailed discussion about the Concept Design of the Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Grounds and Parks in Malir Cluster was held.
- ▶ The officials of District Council admired the interventions and ensured their coordination for smoothly implementation of the sub-project.
- ▶ The representatives from K-Electric ensured the support and cooperation from the organization for GIS mapping of the wiring network as per K-Electric's Master Plan.



- (a) Joint Field Visit by Elected Persons, District Administration, Karachi District Council, KNIP-PIU and Consultants
(b) Meeting with Official of Karachi District Council
(c) Meeting with Health Staff
(d) Meeting with UC-12 Malir Staff
(e) Meeting with UC-5 Malir Staff

Figure 56: Consultations with Government Departments and Utility Agencies

9.4.7 Consultative Meetings on Final Designs

214. The consultative meetings on final design were conducted with group of Stakeholders to inform them about the final design through presentations, display of 3D models to seek their feedback, comments. The findings of consultative meetings on final designs of all components under Malir Cluster are summarized as follows;

9.4.7.1 Consultative Meetings with Local Residents, Social Workers and Sports Persons @ Govt. Boys Secondary School Sahibdad Baloach Goth (Male and Female Groups)

Date: **Wednesday, 08.12.2021**

Location: **GBSS-Sahibdad Goth for Pir Mahfoz Football Ground**

215. The consultative meetings with male and female residents, social workers and sports persons were conducted for Pir Mehfoz Football Ground and Road works as sub-component of Malir Cluster to disseminate information on **final designs** of the sub-project and its proposed design.

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The summary of the issues/concerns and suggestions is provided in the table below;

S. No.	Name	Category	Recommendation/Suggestions	Action to be taken	Design Modifications
1	Muhammad Ramzan	Resident	He appreciated the proposed design and efforts of team to brief the residents. He informed that road safety features may be inculcated for the safety of residents specially students who usually walk from home to school.	The safety signs are included in the design and crossings near schools will be provided with speed breaks. Also provision of Zebra crossing is included in the design near schools.	No design modifications required
2	Allah Bux	Resident	He informed that the area is neglected with reference to proper utilization of the open spaces for recreational activities. The proposed interventions are most likely to improve the liveability of the residents. He suggested the construction activity may be planned in manner to avoid disturbance to the residents.	The anticipated impacts associated with the construction activities are assessed and mitigation measures are suggested in ESMP to minimize the impact as low as reasonably practicable (ALARP).	No design modifications required
3	Altaf Hussain	Resident	He appreciated the designs of proposed interventions and suggested that there should be a mechanism in place to record and resolve residents issue, if any.	The mechanism is in place Grievance Redressal Mechanism (GRM) to record and resolve such issues.	No design modifications required
4	Kamran Soomro	Resident	He suggested plantation of trees along the roads and parks/grounds and avoid cutting of existing trees.	The inventory of existing trees is maintained and cutting of existing trees is not envisaged. However the project proposes the plantation of 770 plant saplings.	No design modifications required
5	Murad Bux	Resident	He emphasized on need to provide facilities like potable water in parks/grounds.	The water treatment units are proposed to provide potable to the players and visitors.	No design modifications required
6	Mahnoor Baloch	Resident	She informed that the area is neglected with reference to proper utilization of the open spaces for recreational activities. She suggested proper utilization of open spaces will definitely improve the Liveability of surrounding area. She emphasized on early start of the proposed intervention and timely completion, enabling the residents to get maximum benefit.	The project is in its final stage and the construction activity will be scheduled in manner to timely complete the project interventions.	No design modifications required
7	Saira Bano Baloch	Resident	She appreciated the designs of proposed interventions and suggested to female toilets in the interventions parks and grounds.	The design caters with the requirements such as separate toilets for females in the proposed interventions.	No design modifications required
8	Rasheeda	Resident	Suggested to include provision to lightening in ground/parks/roads, which will secure women mobility at night time as well.	The design caters with the requirement of proper lighting.	No design modifications required

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S. No.	Name	Category	Recommendation/Suggestions	Action to be taken	Design Modifications
9	Mehar Bibi	Resident	She emphasized on need to provide basic facilities for disabled in parks and grounds to facilitate their visitation.	Universal design concept is used to ease accessibility for people with disabilities	No design modifications required
10	Sobia Nawaz	Resident	She suggested that there should be proper route for locals so that they can reach easily without any hurdle to the ground.	The footpaths and access roads are included in the sub-project which will eventually ease the movement in the area.	No design modifications required
11	Benazir	Resident	She suggested revamping of sewerage system along the proposed roads.	The interventions include rehabilitation of sewerage system along the proposed roads. The sewerage lines are proposed to be underground to avoid nuisance to the residents.	No design modifications required
12	Saba	Resident	She highly appreciated the subproject. She suggested alternate route to commute during construction of roads.	The alternate routes will be suggested during construction phase in consultation with local traffic police to avoid disturbance to the residents	No design modifications required

Attendance Sheet of Consultative meeting with male and female groups @ GBSS-Sahibdad Goth for Pir Mahfooz Football Ground is attached as Annex – R (I) and R (II) respectively.



(a) Consultation with Female Group @ GBSS-Sahibdad Goth for Pir Mahfooz Football Ground

(b) Consultation with Female Group @ GBSS-Sahibdad Goth for Pir Mahfooz Football Ground

Figure 57: Consultative Meetings with Local Residents, Social Workers and Sports Persons for Pir Mahfooz Football Ground and Road works, Malir Cluster

9.4.7.2 Consultative Meetings with Local Residents, Social Workers and Sports Persons for Young Iqbal Football and Friends Cricket Grounds (Male and Female Groups)

Date: **Thursday, 09.12.2021 (Male Group) & 09.12.2021 (Female Group)**

Location: **Kachi Muslim Mandhira Jamiat Hall Hingora Goth and Otaq of Baba Younis Gharibabad**

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216. The consultative meetings with male and female residents, social workers and sports persons were conducted for Young Iqbal Football and Friends Cricket Grounds and Road works as sub-components of Malir Cluster to disseminate information on **final designs** of the sub-project and its proposed design.

The summary of the issues/concerns and suggestions is provided in the table below;

S. No.	Name	Category	Recommendation/Suggestions	Action to be Taken	Design Modifications
1	Peer Muhammad	Resident	Highly appreciated the proposed design, however suggested timely completion of the work to facilitate users.	The activities will be planned as scheduled and monitored to check compliance with target dates.	No design modifications required
2	Ahmed Ali	Resident	He emphasized on providing skilled and unskilled jobs to residents.	Preference for skill and unskilled jobs will be given to residents.	No design modifications required
3	Din Muhammad	Resident	He appreciated the proposed interventions and suggested to have adequate waste bins in parks /grounds to cater with waste issues in the existing parks/grounds.	The proposed design caters with the requirements.	No design modifications required
4	Ameer Bux	Resident	He suggested proper mitigation measures to avoid excessive dust during construction phase.	The mitigation measures are suggested in the ESMP to minimize dust. Further the team will monitor the construction activity to ensure compliance of the mitigation measures. .	No design modifications required
5	Muhammad Ramzan	Resident	He emphasized on beautification of the parks/grounds/streets through plantation.	The project proposes plantation of 770 plant saplings in the area	No design modifications required
6	Usman Ghani	Resident	He appreciated the proposed design. However, informed that the area lacks with a proper community hall where the residents could arrange small gatherings and ceremonials. The residents have also formally requested to the DMC which is working on this as well.	The proposed interventions caters with the basic requirements to improve recreational activities and family scale visitations.	No design modifications required
7	Ahmed	Resident	He suggested that the boundary wall of Young Football Ground be designed to avoid nearby residential area.	The boundary is designed to avoid residential area.	No design modifications required
8	Kainat	Resident	She informed that the sewerage and water lines are available in Young football ground which may be connected with the main system.	The new sewerage and water lines will be connected to the main system.	No design modifications required

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S. No.	Name	Category	Recommendation/Suggestions	Action to be Taken	Design Modifications
9	Zainab	Resident	She suggested that there should be separate sewerage and water lines for the family park.	The new sewerage line is in the scope and will be provided.	No design modifications required
10	Asghar Ali	Resident	He suggested to include provision to lightening in the ground/park, which will secure women mobility at night time as well.	The design caters with the requirement of proper lighting.	No design modifications required
11	Nadia	Resident	She suggested that there should be separate toilets for females in the family park.	The separate toilets are provided.	No design modifications required
12	M.Younis	Resident	He emphasized on the installation of CCTV cameras in the family park.	The design caters with the requirement.	No design modifications required
13	Aslam	Resident	He suggested that there is load shading in the area. There should be electricity backup in the ground/park.	Generators are planned to be installed in ground/park.	No design modifications required

Attendance Sheets of the Consultative meeting with male and female groups @ Kachi Muslim Mandhira Jamiat Hall Hingora Goth and Otaq of Baba Younis Gharibabad for Young Iqbal Football and Friends Cricket Grounds are attached as Annex – R (III) and R (IV) respectively.



(a) Consultative Meeting with Male group @ Kachi Muslim Mandhira Jamiat Hall Hingora Goth for Young Iqbal Football and Friends Cricket Grounds, Malir Cluster



(b) Consultative Meeting with Male & Female (Joint Group) @ Otaq of Baba Younis Gharibabad for Young Iqbal Football and Friends Cricket Grounds, Malir Cluster

Figure 58: Consultative Meetings with Local Residents, Social Workers and Sports Persons for Young Iqbal Football, Friends Cricket Grounds and Road works, Malir Cluster

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9.4.7.3 Consultative Meetings with Local Residents, Social Workers, Government Officials and Youth for Shaheed Muhammad Khashkeli Park and Library (Male and Female Groups)

Date: Friday, 09.12.2021 (Male Group) & Friday and Wednesday, 09 & 15.12.2021 (Female Group)

Location: Shaheed Muhammad Khashkeli Park/ Library, Ramzan Laasi Goth, Khokhirapar, Malir.

217. A Consultative meeting with male and female residents, social workers and sports persons conducted for **Shaheed Muhammad Khashkeli Park and Library** and Road works as sub-components of Malir Cluster to disseminate information on **final designs** of the sub-project and its proposed design.

The summary of the issues/concerns and suggestions is provided in the table below;

S. No.	Name	Category	Recommendation/Suggestions	Action to be TAKen	Design Modifications
1	Nazir Ahmed Memon	Residents	He informed that the name of the park must checked and refer the official name in the documents.	Consultant has rechecked and officially name of park is Shaheed Muhammad Khashkeli Park.	No design modifications required
2	Wajid Hussain	Residents	He appreciated the design and suggested proper supervision to have replica of the design on ground.	The project will be supervised and monitored to have the same on ground.	No design modifications required
3	Qadir Bux	Residents	He suggested different time for male and females to play in the grounds.	The management committee will be formed which will look into these suggestions. However, basic facilities for females are provided in the grounds to facilitate womenfolk of the area.	No design modifications required
4	Inayatullah Qambrani	Residents	He suggested monitoring of the project during construction phase to avoid disturbance to residents.	The activities will be monitored to check compliance with the suggested mitigation measures in ESMP.	No design modifications required
5	Muhammad Musa	Residents	Suggested implementation of the project schedule to avoid delay in the execution of project.	The project schedule will be monitored to avoid delays.	No design modifications required
6	Haleema Suleman	Resident	She emphasized on the maintenance of the grounds/parks after completion of the work.	The Operation and Maintenance (O&M) is part of the sub-project for the sustainability of the project.	No design modifications required
7	Samina Shahid	Resident	She appreciated the proposed designs and suggested that the women in the project area is mostly are housewives. Therefore, could get the maximum benefits of specially parks to walk and have family	The parks are provided with separate basic facilities to facilitate womenfolk visitation	No design modifications required

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S. No.	Name	Category	Recommendation/Suggestions	Action to be TAKen	Design Modifications
			scale visitations subject to availability of basic facilities. . .		
8	Kulsoom	Resident	She appreciated the interventions which will be beneficial for the residents. However, informed that the major issue being faced by residents is load shedding, availability of water and gas in the area.	The new water supply lines are proposed to improve the water supply system in the area.	No design modifications required
9	Areeba	Resident	She suggested proper lighting in grounds/parks, to facilitate female movement at night time as well.	The design caters with the requirements.	No design modifications required
10	Kulsom	Resident	She appreciated the intervention to include Library which would be beneficial for residents of the area. However, informed that currently this place is uninhabited and used by drug addicts..	The sub-project interventions will improve the liveability of the area.	No design modifications required
11	Shahida	Resident	She appreciated the Intervention and proposed design. She suggested to focus on revamping dispensaries and hospitals which requires maintenance and rehabilitation.	Keeping in view availability of uninhabited open spaces, interventions were proposed to improve family scale visitations such as parks/grounds and library to help.	No design modifications required
12	Bilqees	Resident	She appreciated the interventions which will be beneficial for the residents. However, she raised concerned about the load shading of gas in the area.	Consultant informed that this is not part of the interventions.	No design modifications required
13	Aqsa	Resident	She emphasized on the security problems restricting residents to visit parks. .	CCTVs are proposed along with controlled gates to enter and exit.	No design modifications required
14	Nimra	Resident	She appreciated the proposed designs and suggested separate sitting arrangement for women in the library.	The design caters with the requirements.	No design modifications required
15	Parveen	Resident	She was concerned that there should be a separate entrance gate for women so that they can easily enter and exit the library.	The suggestion is noted and will be added in the construction drawing.	Construction drawing will be revised
16	Aneela Qayoom	Resident	She emphasized that the park should be used only for family and kids otherwise, it will again be in the hands of drug addicts.	The proposed park is family park.	No design modifications required
17	Saba	Resident	She emphasized that sometimes there is load shading in the area.	Generators is planned to be installed in ground/park.	No design modifications required

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S. No.	Name	Category	Recommendation/Suggestions	Action to be TAKen	Design Modifications
			There should be electricity backup in the ground/park.		

Attendance Sheets of the Consultative meeting with male and female groups @ for Shaheed Muhammad Khashkeli Park and Library and Road works as sub-components of Malir Cluster are attached as Annex – R (V) and R (VI) respectively.



(a) Consultative Meeting with Female Group for Shaheed Muhammad Khashkeli Park and Library, Malir Cluster



(b) Consultative Meeting with Female Group for Shaheed Muhammad Khashkeli Park and Library, Malir Cluster

Figure 59: Consultative Meetings with Local Residents, Social Workers, Government Officials and Youth for Shaheed Muhammad Khashkeli Park and Library and Road works, Malir Cluster

9.4.7.4 Consultative Meetings with Local Residents, Social Workers, Media Persons and Youth Group for Aabishaar Park (Male and Female Groups)

Date: **Wednesday, 14.12.2021 (Male and Female Groups)**

Location: **Dispensary Beside Abshar Park, Khkhirapar No. 4, Malir**

218. The consultative meetings with male and female residents, social workers, youth and media persons were conducted for Abshar Park, Khkhirapar No. 4, Malir and Road works as sub-components of Malir Cluster to disseminate information on **final designs** of the sub-project and its proposed design.

219. The summary of the issues/concerns and suggestions is provided in the table below;

S. No.	Name	Category	Recommendation/Suggestions	Action to be taken	Design Modifications
1	Mr. Din Muhammad	Resident	He highly appreciated the design of the Abshar Park but suggested boundary wall for security purpose.	The design caters with the requirement.	No design modifications required

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S. No.	Name	Category	Recommendation/Suggestions	Action to be taken	Design Modifications
2	Mr. Irfan	Resident	He emphasized on the issue of the wastewater which accumulates on streets due to old system of sewerage.	The new sewerage system is included in the design.	No design modifications required
3	Waqar Khan	Resident	He appreciated the sub-project of the Malir cluster and suggests that there should be guard for security purpose.	The controlled entrance and exit gates will be provided along with CCTV Camera for security reasons.	No design modifications required
4	Muhammad Yasin	Resident	He appreciated the sub-project of Abshar Park and suggested to have proper lighting, enabling womenfolk safety visit the parks.	The design caters with the requirements.	No design modifications required
5	Mr. Ghayyour	Resident	He suggested that construction activities be planned to minimize its impacts to the residents.	Impact assessment carried out to identify anticipated impacts during construction phase and mitigation measures suggested to minimize impacts in the ESMP.	No design modifications required
6	Azmi Khan	Resident	He suggested operational and maintenance budget after completion of the project.	The O&M budget is proposed for the sustainability of the project.	No design modifications required
7	Noman Qudoos	Resident	He emphasized on the installation of CCTV cameras in the Abshar park with entrance and exist control management.	The design caters with the requirements.	No design modifications required
8	Kalsum	Resident	She appreciated the efforts of consultant for briefing the proposed design of the interventions. This practice is never witnessed before in this area.	As per World Bank policy, the design is to be shared with the male and female residents of the area to record their views/concerns, if any, to be addressed at an early stage.	No design modifications required
9	Shazia	Resident	She appreciated the proposed designs and informed that due to lack of facilities this park is currently used by the drug addicts.	The redevelopment of Abshar Park will definitely promote healthy activities which will eventually improve the living conditions of residents.	No design modifications required
10	Farzana	Resident	She appreciated the interventions which will be beneficial for the residents. However, she suggested locals to be considered for employment.	Preference will be given to locals for skilled and unskilled jobs.	No design modifications required
11	Shumaila	Resident	She suggested timely completion of the activates, enabling residents to get maximum benefit of the facilities.	Project schedule will be followed and monitored for timely completion of the activities.	No design modifications required

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S. No.	Name	Category	Recommendation/Suggestions	Action to be taken	Design Modifications
12	Sumera		She emphasized that the ground should be designed with drainage system to avoid accumulation of rain water.	The grounds/parks will be provided with drainage network to avoid accumulation of water during rain.	No design modifications required
13	Naila		She appreciated the proposed designs and was concerned about the lighting system in the ground.	The lighting is already planned in the interventions of sub-project.	No design modifications required
14	Saba Jilani		She suggested CCTV cameras in the parks for the security purpose.	The design caters with the requirement.	No design modifications required
15	Kinza		She emphasized that there should be some rides and swings in the ground.	The design caters with the requirement.	No design modifications required
16	Amina		She emphasized that sometimes there is load shading in the area. There should be electricity backup in the ground/park.	Consultant informed that the provision of generators available.	No design modifications required

Attendance Sheets of the Consultative meeting with male and female groups @ for Aabishaar Park and road works as sub-components of Malir Cluster are attached as Annex – R (VII) and R (VIII) respectively.



(a) Consultative Meeting with Male Group for Aabishaar Park, Malir Cluster



(b) Consultative Meeting with Female Group for Aabishaar Park, Malir Cluster

Figure 60: Consultative Meetings with Local Residents, Social Workers, Youth and Media Persons for Abshar Park, Khkhirapar No. 4, Malir and Road works, Malir Cluster

9.4.7.5 Consultative Meeting with Male and Female Local Residents, Social Workers, Media Persons and Youth Group for Shaheen Park, UC # 12, Gharibabad

Date: **Wednesday, 15.12.2021 (Male and Female Joint Group)**

Location: **Shaheen Park, UC # 12, Gharibabad, Malir**

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220. The consultative meeting was conducted jointly with male and female residents, social workers and youth for Shaheen Park and Road works as sub-components of Malir Cluster to disseminate information on **final designs** of the sub-project and its proposed design.

221. Overall the participants approved the proposed interventions.

Attendance Sheets of the Consultative meeting with male and female groups for Shaheen Park and road works as sub-components of Malir Cluster are attached as Annex – R (IX)



Figure 61: Joint Consultative Meetings with male and female residents, social workers and youth for Shaheen Park and Road works as sub-components of Malir Cluster

9.4.7.6 Consultative Meeting with Male and Female Local Residents, Social Workers, Media Persons and Youth Group for Madina Park and Eidgah

Date: **Monday, 13.12.2021 (Male and Female Joint Group)**

Location: **Bachoo Bakery Street, Khokhirapar # 4, Malir**

222. The consultative meeting was conducted jointly with male and female residents, social workers and youth for Madina Park, Eidgah and Road works as sub-components of Malir Cluster to disseminate information on **final designs** of the sub-project and its proposed design.

223. The summary of the issues/concerns and suggestions is provided in the table below;

S. No.	Name	Category	Recommendation/Suggestions	Action to be Taken	Design Modifications
1	Mr. Muhammad Umer	NGOs / CBOs: Vice President Madina Masjid Committee	He highly appreciated the sub-project of Malir, besides that he suggested to relocate the entrance of Eidgah linear to the main gate of Madina Masjid.	The suggestion is noted and will revise our drawing accordingly.	Drawing will be revised
2	Mr. Muhammad Aneel	Resident	He highly appreciated the sub-project and suggested that there was lack of any recreational place in the area.	The interventions are planned to improve family scale visitations.	No design modifications required

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S. No.	Name	Category	Recommendation/Suggestions	Action to be Taken	Design Modifications
			The family park would be very beneficial for the residents.		
3	Mr. Muhammad Iqbal Kachi	NGOs / CBOs: Social Worker	He highly appreciated the sub-project of Malir, besides that he suggested that there should be provision of community hall at one side of proposed park.	The proposed interventions caters with the basic requirements to improve recreational activities and family scale visitations.	No design modifications required
4	Mr. Habib Rehman	Resident	He appreciated the proposed interventions and suggested to have adequate waste bins in parks /grounds to cater with waste issues in the existing parks/grounds.	The proposed design caters with the requirements.	No design modifications required
5	Mr. Muhammad Younis	Mr. Muhammad Younis	He highly appreciated the design of the Madina Park and Eidgah, but suggested that rear wall of the park and Eidgah may be provided with complete concrete wall instead of iron grills. However, iron grill should be provided in front and side walls, this was suggested to observe pardah from main road.	The suggestions is noted and the boundary wall will be provided.	Concrete wall will be provided
6	Mr. Muhammad Isamil	Resident	He suggested that there should be proper route for locals so that they can reach easily without any hurdle to the ground.	The footpaths and access roads are included in the sub-project which will eventually ease the movement in the area.	No design modifications required
7	Mr. Muhammad Hussain	Resident	He emphasized on the poor sewerage system in the area, the water remains on streets and road for several days which hampers the mobility of residents. He suggested the sewerage system should be made underground.	The interventions include rehabilitation of sewerage system along the proposed roads. The sewerage lines are proposed to be underground to avoid nuisance to the residents.	No design modifications required
8	Mr. Abdul Ghani	Resident	He suggested that the residents should be given responsibility to own the grounds and parks and to maintain the areas which are included in the sub-project proposed design.	The committee will comprise of the locals with DMC officials to maintain the park and Eidgah.	No design modifications required

Attendance Sheets of the Consultative meeting with male groups for Madina Park, Eidgah and road works as sub-components of Malir Cluster are attached as Annex – R (X)

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Figure 62: Consultative Meeting with Local Residents, Social Workers and Sports Persons for Madina Park, Eidgah and Road works, Malir Cluster

1 Chapter 10

2 ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN

3 224. The sub-project-specific mitigation plan prepared based on impact assessment (discussed in the previous section) is presented in section
4 10.1. This sub-project ESMP shall form part of the project contract specifications.

5 **10.1 Environmental Mitigation and Monitoring Plan**

6 225. The below table presents mitigation measures of each environmental effect and monitoring parameters with responsibilities defined
7 separately for each aspect during the construction phase.

8 Table 33. Environmental Mitigation and Monitoring Plan during Design Phase

Sr. No.	Environmental Effect	Potential Significance	Pre-Construction Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Responsibility
1.	Impact on PCRs during Construction	No Impact	Ensure that PCRs are excluded from the project and not included in the technical drawings.	PSC	Tender Documents	PIU
2.	Preference for construction material that don't contain hazardous (asbestos) materials	Medium	Include provision in the bidding document that discourages use of hazardous construction materials especially asbestos.	PSC	Tender Documents	PIU
3.	Preparation of Site-Specific Plans (such as OHS Plan, Traffic Management Plan, Diversion Plan, Trees Management Plan, machinery maintenance, plan, and any other necessary for implementation of this ESMP).	Medium	Contractor to prepare site specific plans for implementation of this ESMP.	PSC	Tender Documents	PIU

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Sr. No.	Environmental Effect	Potential Significance	Pre-Construction Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Responsibility
4.	Compliance with local environmental regulations and WB safeguard policies and EHS guidelines	Medium	This ESMP to be made part of the bidding/tender documents. The bid documents shall note that Pakistani laws and regulations and WB EHS guidelines (attached as Annex D relating to the environment, labour and working conditions, health and safety, gender equality, child protection, and the code of conduct will be followed during the construction phase.	PSC	Tender Documents	PSC/PIU

9

Table 34. Environmental Mitigation and Monitoring Plan during Construction Phase

Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
1.	Impact on PCRs during construction	No Impact	<ul style="list-style-type: none"> ▶ Intrusion into PCRs will not take place as project interventions are outside of the PCR limits. ▶ A guideline for the protection of PCRs for the subproject is provided in Annex-C. It also includes "Chance Find" procedures for the protection of cultural property and bidding documents for Contractors will include "Chance Find" procedures. ▶ In case if any finding will appear, then it will be informed to the responsible 	CC	Construction near PCRs	Quarterly certification by PSC that intrusion into PCRs is not taken place	PSC	Nil

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<p>authority (Sindh Culture and Heritage Department).</p> <ul style="list-style-type: none"> ▶ All material with pictures will be documented, the site will be cordoned off and resolved as per Sindh Cultural Heritage (Preservation) Act 1994 or Antiquities Act 1975 located in sub-project. ▶ The contractor will inform the implementing agency for coordination with the heritage department. 					
2.	Air Quality deterioration due to dust and exhaust emissions	Medium	<ul style="list-style-type: none"> ▶ Use PVC Laminated Polyester Fireproof Mesh Sheet , locally available, (with small mesh size) can be installed and usewater bowser twice a day. 	CC	Check the adequacy and integrity of barricades and mesh sheet.	Daily	PSC	Cost of barricade and PVC laminated sheets will be included in Contractual Cost is borne by CC and will be assessed after finalization of construction plan
			<ul style="list-style-type: none"> ▶ The exposure of construction workers to dust is minimized by provision of dust masks and mandating the workers to wear them. ▶ Truck loads will be covered with tarpaulin. ▶ Construction site including soil and material piles at the site will be barricaded to avoid 	CC	Ambient Air Quality parameters (SPM, NO, NO ₂ , SO ₂ , PM ₁₀ , CO, PM _{2.5}) – Mobile air quality Van will be used. Vehicular Emissions for	The barricading and other day to day activities will be performed on daily basis, however,	PSC	Cost is given in Chapter 12.

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<p>material escape, generation of dust.</p> <ul style="list-style-type: none"> ▶ Activities on roads/streets will be carefully planned and scheduled and when the traffic movement is minimal e.g. early morning and late night. ▶ Careful handling and working under moist conditions and monsoon season will be avoided as much as possible. ▶ Construction machinery, vehicles will be properly tuned and kept in good working condition, minimizing exhaust and vehicular emissions. It will be ensured that exhausts from this equipment and vehicles comply with relevant SEQs. ▶ Excessive engine idling will be discouraged and machinery causing excessive pollution (i.e. visible clouds of smoke) will be banned from sites. ▶ Open burning of solid wastes, whether hazardous or non-hazardous, is not considered good practice and will be avoided, as the generation of polluting emissions from this type of source cannot be controlled effectively. 		<p>Construction Vehicles (Smoke, CO, NOx, PM, Noise) – Mobile exhaust analyzers will be used.</p> <p>Monitoring conducted as per SEQs.</p> <p>The location of air quality monitoring is presented below the location plan.</p>	<p>ambient air and noise will be conducted quarterly through 3rd party approved lab.</p>		

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<ul style="list-style-type: none"> ▶ According to weather conditions water will be sprinkled or whenever there is dust problem on all exposed surfaces to suppress the emission of dust. 	CC	Monitor Dust Emissions (SPM) Monitoring conducted as per SEQs	Quarterly	PSC	Cost is given in Chapter 12.
3.	Traffic Management / Mobility Issues	High	<ul style="list-style-type: none"> ▶ The specific area shall be designed for parking to avoid traffic congestion. ▶ At a time, one lane of subproject roads/streets will be open for traffic movement. 	CC and Traffic Flag-officer	Designated Parking Spaces	Weekly	PSC	Nil
			<ul style="list-style-type: none"> ▶ Traffic management plan will be introduced in consultation with traffic police. The contractor will hire Traffic Management Personnel (Flag-Officer) to manage the smooth running of vehicle and pedestrian traffic. ▶ Sign postings, warning signs, diversion signs and barriers will be installed to alert public of all potential hazards including limited access to construction sites. ▶ It is suggested that the work on connecting roads should not be done consecutively. ▶ Movement of construction material to the project sites will be planned in that way it will not hamper major transport activity e.g. material 	CC and Traffic Flag-officer	Flow of routine traffic	Daily	PSC	Cost of sign postings and diversion aids will be included in Contractual Cost is borne by Contractor and will be assessed after finalization traffic management plan. Cost is given in Chapter 12.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<p>may be transported at night time or early in the morning when the local trips are minimum. However, care must be taken at locations where residents are located and the transfer of material should not be happened during sleeping hours. The residents must be informed of the working times.</p>					
			<ul style="list-style-type: none"> ▶ Ensure safe and continuous access to all shops and residences during construction It is suggested that interventions that involves traffic management like provision of parking spaces, designated parking, prioritization of roads/streets for pedestrian only will be implemented first to avoid traffic congestion while civil works on roads. 	CC	-	Before/during implementation of Project activities	PSC	Nil
			<ul style="list-style-type: none"> ▶ Similar approach will be used for the rehabilitation works in parks and grounds. Phase wise approach will help to cordon off small patches of parks and grounds so that impacts on the visitors could be minimal. ▶ Indicators and signboards will be placed in parks, playgrounds and library to 	CC	-	Before/during implementation of Project activities	PSC	Nil

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<p>avoid any inconvenience to the visitors and management.</p> <ul style="list-style-type: none"> ▶ A site plan showing the sub-project area and planned interventions, and a tentative schedule of construction activities will be also displayed prominently in all sites of the sub-project. 					
4.	Storm water drainage	Medium	<ul style="list-style-type: none"> ▶ The waste generated at project site will be properly stored at site. ▶ In case of non-compliance, the contractor will be responsible for cleaning of specified area of drain advised by the Client. 	CC	Proper management of transportation of garbage	Weekly	PSC	Cost is given in the Table at Chapter 12.
			<ul style="list-style-type: none"> ▶ Capacity building programs for the construction workers will be initiated for the proper dumping of garbage within the waste bins placed by Sindh Solid Waste Management ▶ Sign post will also be applied over the drains to disseminate the information. 	CC	Sign post Placement and dissemination of knowledge.	Quarterly and spot checks	PSC	Nil
			<ul style="list-style-type: none"> ▶ Waste and soil pile will be barricaded and covered with tarpaulin to avoid erosion and clogging of existing drains. ▶ Manholes will not be opened more than 24 hrs, during this period barriers will be provided and reflective tapes will be used. The public will be informed timely. 	CC	Check construction plans, check any obstruction in existing drains due to construction.	Quarterly and spot checks	PSC	Nil

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
5.	Excavation at Sub-project site	High	<ul style="list-style-type: none"> ▶ The excavation pit will be cordoned off with warning signage to avoid falling of the construction crew as well. ▶ The excavation pit will also be protected with shoring protection or if recommended by project manger, protected by a retaining wall. The excavated soil will be temporarily stored at nearby grounds away from the pit before disposal. ▶ Regarding the utility lines, all utility agencies will be taken on-board before construction for burying the existing utilities and provide suggestion for their protection. ▶ Digging will be done manually to locate the exact position of buried utilities and thereafter use of mechanical means. ▶ Suitable size of dewatering pump will be installed if groundwater found during excavation or rainwater ingress. The water will be discharge into the existing storm water drains. ▶ At least 2m distance will be maintained for vehicles to operate near the excavation pit. 	CC	<p>Sign post placement adequacy of guard rails, shoring protection and / or retaining wall.</p> <p>Checking of coordination with utility agencies and presence in the meeting with the agencies before excavation</p> <p>Check dewatering Operations and water disposal into the drains.</p>	Daily	PSC	Cost of guardrails shoring protection/ retaining walls will be included in Contractual Cost borne by Contractor and will be assessed after finalization of construction plan

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<ul style="list-style-type: none"> In case of strong winds or possible storm, operations on the construction site will be stopped to avoid blowing dirt, dust, and any unpleasant incident. 					
6.	Surface and Ground Water Quality deterioration due to spills from construction equipment, fuel, inadequate disposal of waste material	High	<ul style="list-style-type: none"> Wastes generated from construction activities will be stored in a proper interim location on site which will be adequately barricaded and covered to avoid ingress of stormwater Excavation material /civil works related to solid waste will be properly maintained at the site. Organize and cover material storage areas, isolate concrete asphalt and other works from the watercourse by using sealed covers. Operate construction site in a way to reduce the risk of generating sediments that may pollute receiving water bodies Apply best engineering practices in storage and handling of lubricants, fuels and solvents. There will be no labour camp for residing the workers as local labour will be hired. Only Porta cabins of Resident 	CC	Check surface/ground water quality parameters (pH, TDS, TSS, Oil & Grease, Turbidity, Total Hardness, As, Pb, Coliform) – Grab samples will be taken and samples tested as per SEQS in EPA certified Laboratory.	Quarterly	PSC	<p>Waste disposal cost is included in Contractual Cost borne by Contractor and will be assessed after finalization of construction plan</p> <p>Rs.20,000 per grab sample for water quality analysis.</p>

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<p>Engineers and PSC staff. Therefore, no generation of wastewater will be envisaged.</p> <ul style="list-style-type: none"> ▶ Use of secondary containment for chemicals and oils. ▶ Water quality shall be tested as per WHO guidelines and local requirements (Sindh Environmental Standard for Drinking Water Quality) to ensure a safe supply of water. ▶ If relevant and applicable drinking water quality standards are not met, suitable mitigation measures will be taken. 					
7.	Waste Management during construction	High	<ul style="list-style-type: none"> ▶ Construction sites will be equipped with temporary refuse bins. 	CC	Temporary refuse bins/On-site waste collection facility	Weekly	PSC	Included in Contractual Cost borne by Contractor
			<ul style="list-style-type: none"> ▶ A waste management plan will be prepared for the construction phase and implemented in letter and spirit. ▶ Broken Pipes will be disposed-off properly ▶ Recycling of solid waste will be carried out as far as possible and practical like cement bags, steel scaffoldings, empty drums, wood planks, discarded bricks, etc. 	CC	As per Waste management plan prepared by the contractor and approved by PIU/PSC	Monthly	PSC	Nil

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<ul style="list-style-type: none"> ▶ No wastes will be dumped at any location outside the site boundary/designated disposal site. 					
			<ul style="list-style-type: none"> ▶ All hazardous waste if found shall be segregated from non-hazardous wastes at the point of generation of waste. ▶ . ▶ Immediately transport the accumulated construction waste to a site identified by the implementing authority or other concerned authority ▶ Scattered solid waste be properly managed in order to avoid contamination and disturbance to the community. 	CC	As per Waste management plan prepared by the contractor and approved by PIU/PSC	Monthly	PSC	Nil
			▶	CC	As per Waste management plan prepared by contractor and approved by PIU/PSC	As per weather conditions (Rainfall and strong winds / storms)	PSC	Nil
			▶ Training will be provided to working personnel for identification, segregation, and management of waste.	CC	Check training reports and records	Quarterly	PSC	Cost is given in Chapter 12.
8.	Noise emissions from running of construction machinery and works	High	▶ Check the noise levels periodically for a different types of construction activity through a hand-held noise meter. If the noise levels exceed the SEQs levels,	CC	Check the Adequacy and integrity of noise barriers and mesh sheets while	Weekly	PSC	Cost of acoustic barriers and PVC laminated sheets will be included in Contractual

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			construction activity will be halted and the Polyester sheets will be replaced with noise deflectors / acoustic barriers.		monitoring noise levels as per SEQs.			Cost borne by Contractor and will be assessed after finalization sub-project plans
			▶ Machinery operation and high noise activities will be carefully planned and maintained as per checklist prepared by the contractor.	CC	Ambient Noise Monitoring (dB(A)) as per SEQs near residents and businesses – Handheld noise meter will be used for measurement The location of noise monitoring is presented below location plan.	Fortnightly	PSC	Cost is given in Chapter 12.
			▶ Mufflers or silencers will be used by project related vehicles.	CC	Noise emissions of construction vehicles as per SEQs	Fortnightly	PSC	Included in Contractual Cost borne by Contractor
			▶ High noise activities should cease between 22:00 and 06:00 hrs. Special consideration will be given in the areas where hospitals and schools are present in the close vicinity.	CC	Check working hours	Weekly	PSC	Nil

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
9.	Soil Contamination due to fuel spills or ponding of water or degradation due to activities	Low	<ul style="list-style-type: none"> ▶ Fuel oils and lubricants for construction machinery will be stored in covered diked areas, underlain with HDPE membrane and preventive actions by provision proper ventilation will be provided to minimize the explosion from direct sunlight and rain. ▶ Regular inspections will be carried out to detect leakages in construction vehicles and equipment. ▶ Appropriate implements such as shovels, plastic bags and absorbent materials will be made available near fuel and oil storage areas for removal of oil and contamination soil. ▶ Mitigation measures will be taken to minimise loss of topsoil and erosion during site preparation and from stockpiling for extended periods in the park and playground. 	CC	Inspection of Fuel and lubricant storage areas, construction site, and project vehicle Parking areas	Weekly	PSC	Inspection cost and HDPE lining cost is included in Contractual Cost borne by Contractor and will be assessed after finalization of construction plan
10.	Impacts on Flora and Fauna	Low	<ul style="list-style-type: none"> ▶ Damage to trees will be avoided and trees located along roadside will be protected during construction. ▶ All the works along the roads on footpaths will be done outside these tree fences. 	CC	Inventory for the identification of road side trees, Tree monitoring	Weekly	PSC	Nil

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<ul style="list-style-type: none"> ▶ Trees will be marked and cordoned off with fencing and their roots will be protected. ▶ In case if any tree need to be cut, then the compensatory ratio for tree plantation will be 1:5 as per the standard defined in the ESMF KNIP project documents. ▶ There are 376 trees in the sub-project sites. Where required, the trees will be cordoned off with fencing and their root to be protected. ▶ Construction activities shall not cause the introduction or spread of pest species. ▶ Fencing of construction worksite boundaries shall be done to separate fauna from construction works. ▶ CC shall include of construction workers about native fauna being protected and procedures to avoid harming local fauna. ▶ Surface earthworks or vegetation clearing may be required for construction activity at park and playground. 					
11.	Contamination of water supply due to	Medium	▶ While working near water mains, KW&SB will be taken on-board and KW&SB site engineers will be present at	CC	Check random sampling for water quality parameters at	While working near water mains and	PSC	Cost is given in Chapter 12.

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
	damage to water mains		<p>the site to locate the water mains.</p> <ul style="list-style-type: none"> ▶ Water supply will be cut down while rehabilitation and connecting of new water supply lines to water mains as well as working near the water mains. ▶ If water mains get damaged, it will be repaired without delay and as per KWSB practices. 		outlets of water mains (pH, TDS, TSS, Oil & Grease, Turbidity, Total Hardness, Coliform) – Grab samples will be taken and samples tested as per SEQS in EPA certified Laboratory	rehabilitation of water supply system		
12.	Community Health and Safety	Medium	<ul style="list-style-type: none"> ▶ Construction and Rehabilitation areas will be cordoned off for any kind of movement. ▶ Proper signage will be displayed at appropriate location and in local language. ▶ Activity area will be properly barricaded. ▶ Safe passage will be given to the community ▶ Information on activities will be shared with the local resident well before time. ▶ First Aid Box will be present at the site. ▶ Avoid peak hours for sub-project activities 	CC	Check implementation of HSE plan throughout the sub-project activity.	Weekly monitoring during the sub-project activity	PSC	Cost is given in Chapter 12.
13.	Occupational Health and Safety	High	<ul style="list-style-type: none"> ▶ Follow up of OHS Plan. 	CC	Check implementation of HSE plan	Weekly monitoring during the	PSC	Cost is given in Chapter 12.

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
					throughout the sub-project activity.	sub-project activity		
			▶ Ensure proper housekeeping.	CC	Review and check the adequacy of the plan	Before the commencement of civil works	PSC	Nil
			▶ Identif the hazardous	CC	Check CC staffing details	Before the commencement of civil works	PSC	Nil
			▶ Report any serious injury or fatality to the KNIP /project supervision consultant within 24 hours.	CC	Audit WB EHS guidelines provisions	Monthly	PSC	Nil
			▶ Only labour trained to use construction equipment and machinery at the site will be allowed to operate	CC	physical assessment/IQ based examination	At the time of induction	PSC	Ni;
			▶ The PSC will include appropriate clauses to protect the environment and public health. The present ESMP will be Included in the bidding document.	PSC	Appropriate clauses in the bidding documents will be checked by supervision/monitoring consultant	At the finalization of Contractor(s)	PIU ESS staff	Nil
			▶ Ensure the provision of appropriate personal protective equipment (PPE) to minimize risks, such as but not limited to appropriate apron/coverall, boots and impervious gloves; eye	CC	Supervision/monitoring Consultant will check provision of PPE for	Daily	PSC	Cost is provided in Chapter 12

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Sr. No.	Environmental Effect	Potential Significance	Mitigation Measures	Mitigation Responsibility	Monitoring Parameters/ Location	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			protection, ear protection, face masks and safety helmets;		construction workers			
			▶					
			▶					
14	Working alone	Low	<ul style="list-style-type: none"> ▶ Avoid having a lone worker whenever possible, especially for jobs with a recognized risk. ▶ Provide appropriate training and education to both the lone worker and the person tasked to respond if there is concern. Training may include how to assess the hazards of the workplace / construction site; what corrective actions to be taken to prevent or minimize the potential risks of working alone; How to report all situations, incidents or 'near misses' where being alone in order to avoid the severity of the situation. ▶ CC to Schedule higher risk tasks to be done during normal business hours, or when another worker capable of helping in an emergency is present. 	CC	Check Incident/accident record and list of workers working alone	Daily/Weekly	PSC	Nil

Chapter 11

SOCIAL MANAGEMENT AND MONITORING PLAN

226. This Chapter presents the positive and negative social impacts of the sub-project along with a comprehensive Social Management and Monitoring Plan (SMMP) for the proposed sub-project.

11.1 Social Impacts of Sub-Project

227. Most of the Project's socioeconomic impacts will be beneficial, for instance, the ease of mobility, improved road / streets conditions and reduced air and noise emissions after upgradation of roads and rehabilitation of parks, more safety after installation of streetlights etc. The beneficial impacts described briefly hereunder:

- ▶ Improvement of grounds will boost the sports activities in the area. It will increase environmental and aesthetic quality and enhance community wellness. Rehabilitation of these grounds will provide a space to local community to connect and perform various activity for all age groups. In a broader way, such interventions can also play positive role in increasing the property value of that area.
- ▶ Rehabilitation of parks will have increased social interaction, physical activity, reduced stress and improve overall quality of the environment and aesthetic beauty of the sub-project area.
- ▶ The sub-project will improve safety features for pedestrians, such as street lighting, improved footpaths and so on with special attention to gender.
- ▶ Employment generation for the businesses is also envisaged from the proposed sub-project as the potential workforce may commute with ease and more frequently between their residences and businesses.
- ▶ Overall, improvement in the infrastructure in the neighbourhoods of Malir will contribute towards improved economy of the city and will benefit directly to women, children and elderly people.

11.1.1 Impacts on Sports activities at Friends Cricket Ground, Young Football Ground and Mahfooz Foot Ball Ground

228. In order to understand the sports activities, overall plan/calendar and number of visitors/spectators and players, a detailed meeting was held with the Management of all three grounds during the construction period. Major points of the meeting are as follows;

- ▶ The overall proposed completion period for the sub-project is about 08 months.
- ▶ For minimal impact on the sports activities, phase wise construction will be done. The Construction Schedule is attached as Annex – B.
- ▶ As the Playground management do not have any sponsorship, they don't have any schedule to play matches.
- ▶ During the construction phase, the fitness and warm-up exercise activities will be continued at the corners of football grounds, this will help sports persons to maintain their fitness level.
- ▶ Player's association informed that they will plan their sports activity in such a way that no matches will be organized during the period when ground level intervention will be done. However, in case

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of any sports activity planned in that specific period, complete facilitation will be provided to the playground management such as temporary arrangements in nearby playground.

- ▶ During regular matches the number of spectators is 50-60 while in final match it is almost 400-500. However, this number has been reduced due to prevailing pandemic situation and restrictions. Females usually don't participate or watch matches due to lack of basic facilities.
- ▶ During the sports activities, the construction area will be properly cordon-off and separate / clear route will be provided to the players and spectators to avoid any inconvenience / nuisance.
- ▶ Proper banners and direction signs will also be displayed for facilitation.
- ▶ Close coordination with the ground management will be maintained to avoid any health and safety and social issues.
- ▶ OHS training and toolbox talk will be carried out with the labours for effective implementation of construction and environmental social mitigation plan.
- ▶ Strict monitoring will be done on daily basis.

229. The below table presents mitigation measures of each potential (adverse) socio-economic impacts and monitoring parameters with responsibilities defined separately for each aspect.

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Table 35. Social Mitigation and Monitoring Plan

S#	Socio-economic Effect	Potential Significance	Mitigation Measure(s)	Mitigation Responsibility	Monitoring Parameters	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
1	Mobility of women and specially abled persons along sub-project roads	Medium	<ul style="list-style-type: none"> ▶ Adequate crossing facilities will be developed and included in the sub-project for pedestrians as well as walkways will be improved. ▶ Adequate crossing facilities during construction will also be provided by taking care of women, children and specially abled persons have better access to crossing facilities and walkways. 	CC	Monitoring of crossing facilities and diversions	Weekly	PSC & PIU	Nil
2	Impacts on Sports Activities	Medium	<ul style="list-style-type: none"> ▶ Phase wise construction will be carried out to avoid any impact on the on-going sports activities. ▶ Construction area will be cordon off in such a way that doesn't impact the mobility of the players and audience and also provide enough space for sports or any related activity. ▶ Banners will be displayed for information of players and visitors. ▶ Close coordination with Playground Management will be maintained to avoid any health and safety and social issues. ▶ The playing activity will be halted mainly during Astro turf laying activity. 	CC and Design Consultant	Monitoring of construction activities and successful implementation of EMMP and SMMP.	Daily	PSC & PIU	Nil

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S#	Socio-economic Effect	Potential Significance	Mitigation Measure(s)	Mitigation Responsibility	Monitoring Parameters	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			However, player’s association informed that they will lessen their playing during construction. All facilitation will be provided during that specific period, for instance, sport activity arrangements (temporary) in a nearby playground.					
3	Interruption of Utilities	High	<ul style="list-style-type: none"> ▶ Relevant institutions such as KE, KWSB, telecommunication companies, etc. will be well-informed and taken on-board beforehand and during the burying activities, their recommendations will be well incorporated. ▶ A communication plan including schedule of interruption will be made by Consultant in association with PIU; and the residents and the communities will be informed. 	CC and PSC	Coordination with utility agencies and communities and incorporation of recommendations provided by them	As per Work	PSC & PIU	Nil
4	Restriction of access to the sites	High	<ul style="list-style-type: none"> ▶ It will be ensured that the construction site is appropriately cordoned off with hard barricade and it will also be ensured that safe and continuous access to all adjacent shops and residences during construction will be provided. 	CC	traffic diversion sites, check access routes of pedestrians, check traffic management plan and construction sites, check	Daily	PSC & PIU	Cost of hard barricade will be included in Contractual Cost borne by Contractor and

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S#	Socio-economic Effect	Potential Significance	Mitigation Measure(s)	Mitigation Responsibility	Monitoring Parameters	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<ul style="list-style-type: none"> ▶ Work on all areas of sub-project shall not be undertaken in one go but will be planned as per detailed Construction Schedule. ▶ Provide alternative traffic arrangement/detours, if necessary, so that traffic cannot be distributed and move on different roads; and ensure that public / residents association is informed about such traffic diversions. ▶ A detailed traffic management plan to manage the pedestrian interventions at sub-project site. ▶ All activities will be done phase wise for minimal impacts to the public and vendors. 		consultation records			will be assessed after finalization of construction plan
			<ul style="list-style-type: none"> ▶ Consultations with stakeholders will be a continuous activity during construction of sub-project. These were also carried out during design phase and their feedback, concerns and input will also be taken into account in the sub-project communication plan during execution phase. 	CCand PSC		Before the start of activity and during	PIU	Nil

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S#	Socio-economic Effect	Potential Significance	Mitigation Measure(s)	Mitigation Responsibility	Monitoring Parameters	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<ul style="list-style-type: none"> ▶ Provide information to the public through local cable services about the need and schedule of work, and alternative routes. ▶ Leaflets on road diversions and traffic rerouting will be disseminated to residents, nearby shops and institutions. ▶ The effectiveness of the implementation of the GRM will be ensured. ▶ Mobile vendors will not be dislocated as they move their carts along different roads within the sub-project area. ▶ In case of any temporary provision of sites to street vendors, whether titled or licensed or not, it will be ensured that the alternative sites must be comparable in business potential to the lost location. Such movement from one place to the other will be for a short span. 					
5	Impacts on Women, Children, and Vulnerable Groups	Low	<ul style="list-style-type: none"> ▶ In awareness raising, women will be targeted. ▶ Ensure participation of women in sub-project activities through consultations, to ensure planned investments take 	PSC reporting to PIU	Consultation records, awareness raising records	Monthly	PIU	Nil

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S#	Socio-economic Effect	Potential Significance	Mitigation Measure(s)	Mitigation Responsibility	Monitoring Parameters	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			the well-being of such groups into consideration					
6	Concerns/ views, participation of Women and other Groups.	Low	<ul style="list-style-type: none"> ▶ Hold meetings with all community groups, wherever possible, involving active women to encourage participation of female residents in all stages of the sub-project. ▶ Identify the communication mechanisms most commonly used by women and ensure these are used to impact and receive information throughout the sub-project execution. 	PSC reporting to PIU	Consultation records, awareness raising records	Quarterly	PSC & PIU	Nil
7	Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA)	Low	<p>The contractor shall:</p> <ul style="list-style-type: none"> ▶ Awareness raising and training of the workers regarding Gender Based Violence and Sexual Exploitation and Abuse, Sexual Harassment (SH), Child Abuse, Human Trafficking for reducing risk of GBV and SEA. <p>and code of conduct to be signed by them.</p> <ul style="list-style-type: none"> ▶ Issues of Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) will also be mitigated through the GRM. 	CC and PSC	Fortnightly/ Monthly	Weekly	PSC & PIU	Nil

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S#	Socio-economic Effect	Potential Significance	Mitigation Measure(s)	Mitigation Responsibility	Monitoring Parameters	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
8	Other labour related issues	Medium	<ul style="list-style-type: none"> ▶ Preference will be given to labour from locally skilled and unskilled workers of Karachi. ▶ No bonded and child labour will be allowed at site; ▶ Major labour laws will be followed e.g. Minimum Wage, Hours of work, Overtime Payment; harassment of women in the workplace. ▶ Also, labourers will be trained on appropriate interaction with local people especially women; 	CC	Occupational health and safety of labor including PPE, consultation records	Daily	PSC & PIU	Nil
			<ul style="list-style-type: none"> ▶ The PSC will include appropriate clauses to protect environment and public health. The present ESMP will be Included in the bidding document. 	PSC	Appropriate clauses in the bidding documents will be checked by supervision/monitoring consultant	At the finalization of Contractor(s)	PIU ESS staff	Nil
			<ul style="list-style-type: none"> ▶ Avoid stagnation of water and initiate Drainage / clean-up of stagnant water. 	CC	Supervision consultant will check signs of water accumulation at construction site	Fortnightly	PSC	Nil

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S#	Socio-economic Effect	Potential Significance	Mitigation Measure(s)	Mitigation Responsibility	Monitoring Parameters	Monitoring Frequency	Monitoring Responsibility	Cost and Source of Funds
			<ul style="list-style-type: none"> ▶ Ensure the provision of appropriately stocked first-aid equipment at work sites 	CC	Supervision/monitoring consultant will check First aid measures at construction site	After every accident,	PSC & PIU	Cost is provided in Chapter 12
9	Heat stress	Health issues among workforce is minimal	<ul style="list-style-type: none"> ▶ The workforce will be updated about weather alerts regularly ▶ Availability of drinking water ▶ Proper time rotation for the work force, if required. 	CC	Supervision consultant will check regular weather forecast	Daily	PSC & PIU	Nil

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster
Chapter 12
ESMP Implementation Budget

230. The cost estimates to implement ESMP are provided in the below table. The ESMP implementation cost is made part of bidding document and overall sub-project implementation cost also includes the ESMP implementation cost. The environmental and social safeguard staff hired by PIU is adequate and no further position is suggested in the current ESS setup and the remunerations of these staff will be included in the project cost. Therefore, the capacity building cost is not being suggested under ESMP budget. Besides this the budget for Covid testing is not proposed and the workforce will be vaccinated through Government's well managed vaccination centres for free of cost. However, budget for safety mitigation is proposed for medical masks, sanitizers and soaps (kit per head).

Table 36. Environmental and Social Management and Monitoring Cost


S. No.	Items	Unit	Unit Cost	Quantity	Frequency	Amount
			A	C	B	A x B x C
1	Occupational Health & Safety Trainings	No.	50000	8	Monthly	400,000
2	Water Sprinkling through water tankers	No.	2000	360	Twice a day	720,000
3	Community Awareness Boucher in Urdu and other language Pamphlets	No.	2000	200	One Time	400,000
4	Traffic Management Cost through hiring of traffic management personnel/Warden	No.	50000	8	Monthly	400,000
5	Environmental Monitoring: Diesel Generators & Construction Machinery and Vehicular Exhaust Emission Monitoring	Lump sum	25000	12	Quarterly	300,000
6	Drinking and Waste Water Quality Monitoring (During Construction)	No.	30000	4	Bi monthly	120,000
7	Personal Protective Equipment's including; ear muffs, safety shoes, masks, gloves, safety helmets, safety vests, warning tapes and safety signage, Harness belts	Lump sum for six months	-	-	-	1,115,000
8	Divergence Equipments including; Jersey Barriers, Safety Cones, Hard barricades	Lump sum for six months	-	-	-	1,000,000
9	First aid box (2), quality first aid medicines containing antibiotics and other seasonal medicine for seasonal diseases, flue, fever and scabies etc. (09 months) and temperature gun/infrared thermometers	No.	5000	12	One Time	60,000
10	Medical masks, sanitizers, and soaps (kit per head)	No.	30	480	Daily	432,000

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

S. No.	Items	Unit	Unit Cost	Quantity	Frequency	Amount
			A	C	B	A x B x C
11	Fire Fighting Equipment purchase and six-monthly refilling	No.	10000	12	One Time	120000
12	Health & Hygiene including; provision of waste collection bins, cleaning of site and dormitory areas, use of disinfectants and solid waste management	No.	Lump sum	-	-	200,000
13	Ambient Air and Noise Monitoring for 24 hrs; Pre-Construction (once), During construction (once) and after construction (once)	No.	40000	3	Quarterly	120,000
14	Environmental Health & Safety Officer (One Post), Coomunity Liason / Grievance Redressal Officer (One Post)	No.	50000	2	6	600,000
Total - A			6,339,000			
Contingency (10%) on A - B			633,900			
Total (in Rs.)			6,972,900			
Total (in Million Rs.)			6.9729			

231. Therefore, the Budget for ESMP implementation will be PKR **6.9729** million.

Reference No: SEPA/ LAB/LC/EGEL/16/14/3030



SINDH ENVIRONMENTAL PROTECTION AGENCY
GOVERNMENT OF SINDH

HEAD OFFICE:
Plot # ST-2/1, Sector- 23, Shari Chowrang,
Korangi Industrial Area, Karachi.
Ph:35065050, 35065598, 35065532
epasindh.gov.pk
Facsimile: 35065940

CERTIFICATE AS AN ENVIRONMENTAL LABORATORY

In exercise of power conferred by clause (k) of sub section (1) of section 6 of the Sindh Environmental Protection Act-2014, Environmental Protection Agency, Sindh is pleased to certify the laboratory mentioned below as an Environmental Laboratory.

Name: M/s Evergreen Environmental Laboratory
Address: Office No.M-4,6&7 in FORT SULTAN, Opp, Airport
Telephone Exchange Shar-e-Faisal
Karachi,Pakistan ,Ph.021-34686002
Certificate: EPA/LAB Certificate-14/2020

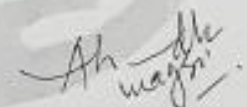
1. This certificate is valid for testing of parameters as per available facilities mentioned in the application:

- 1.Liquid effluent/ Wastes.
- 2.Potable water.
- 3.Stack & Vehicular Emission.
- 4.Ambient Air Quality.
- 5.Noise Levels.
- 6.Indoor Air Quality.
- 7.Soil Analysis.

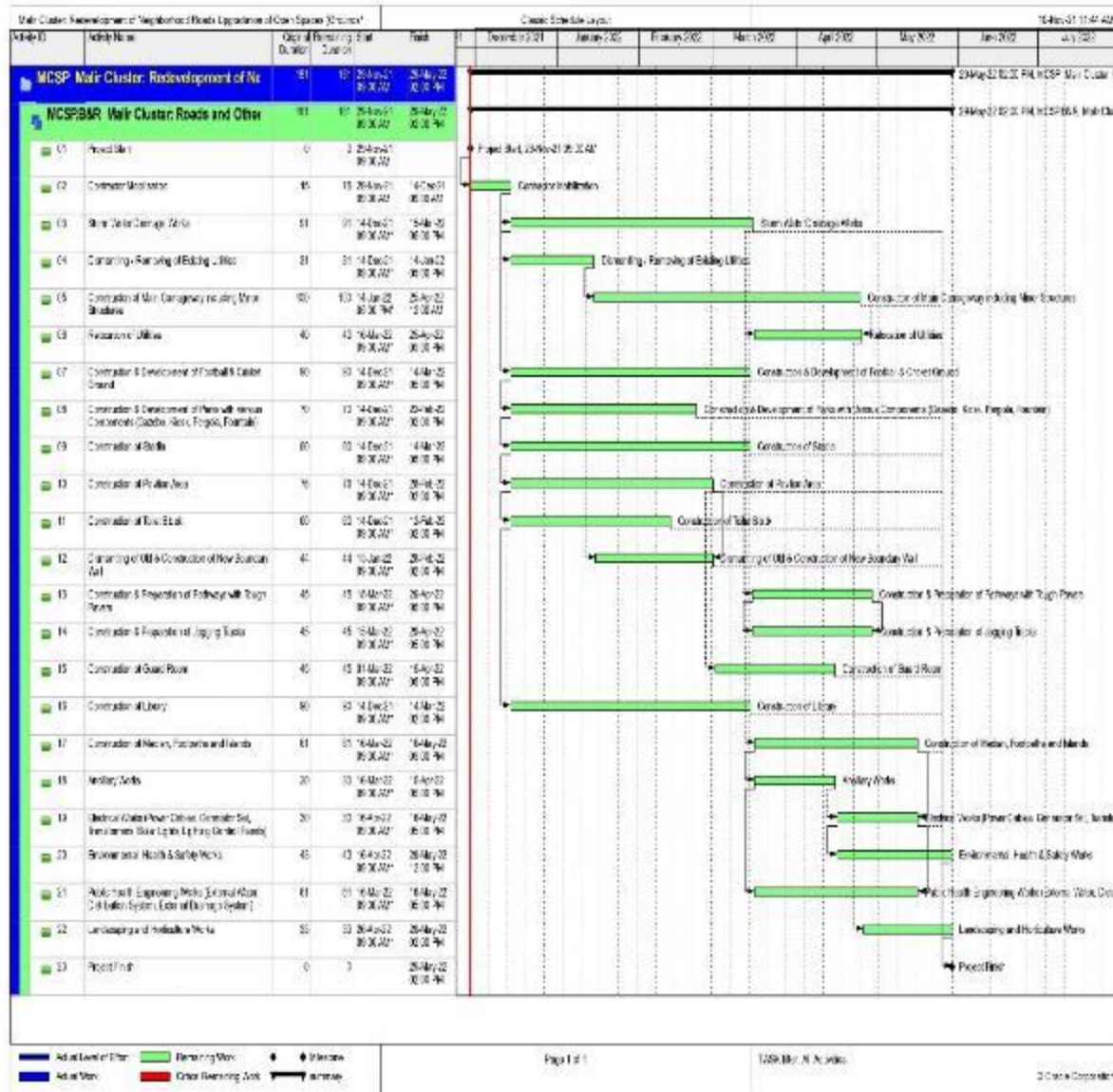
2. This certification is subject to the conditions laid down in regulation 9 of the Sindh Environmental Quality Standards (Certification of Environmental Laboratories) Regulations, 2014.

4. This Certificate is valid for two (02) years w.e.f. 19-01-2020 to 19-01-2022 unless earlier suspended or revoked

Date of issue:
16-01-2020


Director/Deputy Director Lab
Environmental Protection Agency
Government of Sindh

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster
Annex B – Construction Schedule



Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex C - Guidelines for Physical and Cultural Resources

As stated in the World Bank Physical and Cultural Resources (PCR) Safeguard Policy Guidebook, the PCR policy applies to projects having any one or more of the following three features: (i) Subprojects involving significant excavations, demolition, movement of earth, flooding or other major environmental changes; (ii) Subprojects located within or in the vicinity of a recognized PCR conservation area or heritage site; and (iii) Subprojects designed to support the management or conservation of PCR.

The subprojects under the proposed project will involve excavation works, movement of earth and will be located in the vicinity of PCRs. An impact assessment of Physical Cultural Resources is outlined below.

Chance Find Procedures

"Chance find" procedures apply when subprojects are identified as potentially impacting Physical or Cultural Resources either during the screening phase or during the actual construction period. In the event of finding of properties of cultural value during construction, the following procedures for identification, protection from theft, and treatment of discovered sites or artifacts should be followed and included in Contractor(s) bidding document.

- ▶ Stop the construction activities in the area of the chance find
- ▶ Delineate the discovered site or area
- ▶ Secure the site to prevent any damage or loss of removable objects
- ▶ Notify the ESS staff/ Supervisory Engineer who in turn will notify the Antiquities Department
- ▶ Antiquities Department would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures
- ▶ Decisions on how to handle the finding shall be taken by the PIU and the Antiquities Department. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance), conservation, restoration and salvage.
- ▶ Implementation of the authority decision concerning the management of the finding shall be communicated in writing by the relevant Ministry.
- ▶ Construction work could resume only after permission is given from the Antiquities Department concerning safeguard of the heritage.
- ▶ These procedures must be referred to as standard provisions in construction contracts. During project supervision, the ESS staff shall monitor the above regulations relating to the treatment of any chance find encountered. Relevant findings will be recorded in Progress Reports.

Completion Reports will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as appropriate.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex D - Environmental, Health, and Safety General Guidelines

General Approach to the Management of EHS Issues at the Facility or Project Level

Effective management of environmental, health, and safety (EHS) issues entails the inclusion of EHS considerations into corporate and facility-level business processes in an organized, hierarchical approach that includes the following steps:

- ▶ Identifying EHS project hazards and associated risks as early as possible in the facility development or project cycle, including the incorporation of EHS considerations into the site selection process, product design process, engineering planning process for capital requests, engineering work orders, facility modification authorizations, or layout and process change plans.
- ▶ Involving EHS professionals, who have the experience, competence, and training necessary to assess and manage EHS impacts and risks, and carry out specialized environmental management functions including the preparation of project or activity-specific plans and procedures that incorporate the technical recommendations presented in this document that are relevant to the project.

Understanding the likelihood and magnitude of EHS risks, based on:

- ▶ The nature of the project activities, such as whether the project will generate significant quantities of emissions or effluents, or involve hazardous materials or processes;
- ▶ The potential consequences to workers, communities, or the environment if hazards are not adequately managed, which may depend on the proximity of project activities to Defined as “threats to humans and what they value” (Kates, et al., 1985).
- ▶ Defined as “quantitative measures of hazard consequences, usually expressed as conditional probabilities of experiencing harm” (Kates, et. al., 1985) people or to the environmental resources on which they depend.
- ▶ Prioritizing risk management strategies with the objective of achieving an overall reduction of risk to human health and the environment, focusing on the prevention of irreversible and / or significant impacts.
- ▶ Favouring strategies that eliminate the cause of the hazard at its source, for example, by selecting less hazardous materials or processes that avoid the need for EHS controls.
- ▶ When impact avoidance is not feasible, incorporating engineering and management controls to reduce or minimize the possibility and magnitude of undesired consequences, for example, with the application of pollution controls to reduce the levels of emitted contaminants to workers or environments.
- ▶ Preparing workers and nearby communities to respond to accidents, including providing technical and financial resources to effectively and safely control such events, and restoring workplace and community environments to a safe and healthy condition.
- ▶ Improving EHS performance through a combination of ongoing monitoring of facility performance and effective accountability.

https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines - These guidelines will be followed in the sub-project implementation.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex E - Occupational Health and Safety (OHS) Code of Conduct³⁰

Workplace safety is an important part of any job and requires that everyone in the company adhere to the safety guidelines and policies in place. Carefully following appropriate safety guidelines can go a long way toward preventing workplace injuries. Here are some ways you can work to stay safe on the job.

Be Aware

Always be alert to what’s happening in your surroundings; remember that your safety is your responsibility. Understand the particular hazards related to your job or workplace, and keep clear of potentially hazardous areas or situations. Be awake and attentive on the job, and be particularly aware of machinery. Avoid going to work under the influence of alcohol or drugs, which can compromise your concentration, coordination, judgment, motor control and alertness.

Maintain Correct Posture

Use correct posture to protect your back while at work. If you sit at a desk, keep your shoulders and hips in line and avoid hunching over. Use correct form when lifting objects and avoid twisting and stooping. The following tips provide information about lifting correctly:

- ▶ Use both hands to lift or carry a heavy object.
- ▶ Adopt a proper lifting stance by putting the strain on your legs, keeping your back straight and not bending at the waist.
- ▶ Wear a back brace for heavy work.
- ▶ Test the weight before picking up the item.
- ▶ Lift items smoothly and slowly.
- ▶ Move your feet instead of your back when traveling or turning with a heavy object.
- ▶ Hold the load close to your body.
- ▶ Ask for help to move loads that are too heavy for you.

Take Breaks Regularly

Feeling tired and burned out makes you less likely to be aware of your surroundings and is a common cause of workplace injuries. Regular breaks help you stay fresh and alert on the job. It is particularly important to take short breaks when you have a task that requires repetitive movements over a long period of time.

Use Equipment Properly

Always take the proper precautions when operating machinery or using tools. Taking shortcuts is a leading cause of workplace injuries. Use the appropriate tool for the job, and use it in the right way. When using tools and machinery, put safety first with the following tips:

- ▶ Only use machinery you are trained and authorized to use.
- ▶ Keep tools clean and in good working order.
- ▶ Organize tools and always return them to their proper place.
- ▶ Make sure the machine operator sees you, don’t approach from a blind spot or from behind.
- ▶ Only perform tasks you have been properly trained to perform.
- ▶ Never leave machinery unattended while it is running.
- ▶ Always obey operating instructions.

³⁰ <https://www.slma.cc/occupational-health-safety-tips/>

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

- ▶ Never remove or tamper with safety guards.
- ▶ If something seems wrong, immediately stop the machine and get assistance.
- ▶ Communicate with those around you.
- ▶ Never walk in front of heavy equipment.
- ▶ Read and follow all labels and instructions.
- ▶ Don't tamper with hazardous items, including cords, switches and electric controls.
- ▶ Wear appropriate and compact clothing; loose, billowing clothing and accessories can easily get caught in moving parts.
- ▶ Never place fingers or other objects into moving machinery.
- ▶ Turn off equipment before moving, cleaning, adjusting, oiling or un-jamming.

Locate Emergency Exits

Always know where emergency exits are located and keep the path to them clear. You should also have clear access to emergency shutoffs on machinery.

Report Safety Concerns

If you notice a potential safety hazard or risk, report it to your supervisor immediately so they can address the situation. Keep communication lines open and work as a team to create a safe working environment.

Practice Effective Housekeeping

Maintain a clean and organized workplace environment. Make housekeeping an ongoing project that everyone is involved in and keep these tips in mind:

- ▶ Prevent trips, slips and falls by keeping all floors clean and dry.
- ▶ Eliminate fire hazards by removing combustible materials and storing flammable materials away from sources of ignition.
- ▶ Control dust accumulation.
- ▶ Avoid tracking materials and cross contamination by keeping mats clean and having separate cleaning protocols for different areas.
- ▶ Use appropriate procedures to prevent falling objects.
- ▶ Keep the workplace clutter free.
- ▶ Store all materials and equipment properly.
- ▶ Regularly inspect tools and personal protective equipment to make sure they are in good working order.

Make Use of Mechanical Aids

Take the extra time to obtain a wheelbarrow, crank, conveyor belt, forklift or other mechanical aid to assist you in lifting heavy objects. Attempting to lift something that is too heavy can cause injuries that could have been avoided.

Reduce Workplace Stress

Stress can contribute to difficulty concentrating and depression, which make it hard to be alert at work. There are many causes of stress at work including conflicts with others, heavy workloads, long hours and job insecurity. If you are experiencing workplace stress, talk to your supervisor about ways to address your concerns.

Use Appropriate Safety Equipment

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

It is important to use the proper safety equipment for a task to help protect yourself from injury:

- ▶ Wear appropriate clothing and shoes for your job.
- ▶ Know the location of fire extinguishers and first aid kits.
- ▶ Use a hard hat if there is a risk of falling objects.
- ▶ Wear gloves when handling toxic substances or sharp objects.
- ▶ Wear goggles when there is a hazard to your eyes.
- ▶ Use safety harnesses if there is a danger of falling.
- ▶ Wear non-skid shoes when working on slippery surfaces or lifting heavy objects.
- ▶ Wear a breathing mask.
- ▶ Use all protective equipment intended for your task including seat belts, protective headgear or clothing and safety glasses.

Creating an environment that is safe is the responsibility of everyone; do your part by following safety guidelines and policies. If you are injured on the job, notify your supervisor immediately and get assistance. Avoid taking risks when it comes to safety, be aware and do your part to maintain a safe workplace environment. If you've been injured on the job, call to schedule an appointment to see how our team of specialists can help to get you feeling better and back to work!

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex F - ISO 45001:2018 – OHS Management System

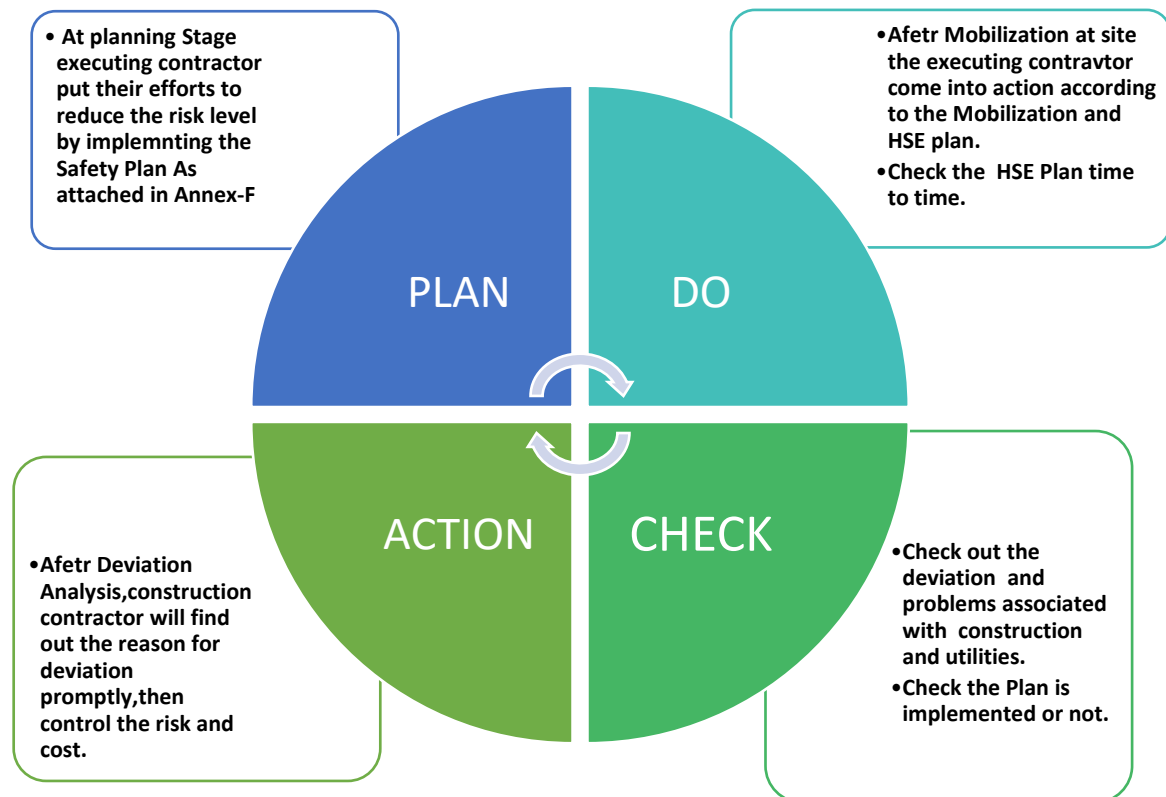
ISO 45001:2018 specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance.

The ISO 45001 puts more focus on both; the leadership and the workforce. ISO 45001 is the world's international standard for occupational health and safety, issued to protect employees and visitors from work-related accidents and diseases.

No organization is required by law to implement ISO 45001 or other similar management standards, but they can help provide a structured framework for ensuring a safe and healthy workplace. The elements of the ISO 45001:2018 standard where the changes are most significant include;

- Context of the Organization
- Leadership and Worker Participation
- Planning
- Support
- Operation
- Performance Evaluation
- Improvement

Strong believe in Plan-Do-Check-Act cycle



Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex G - Template for Risk Assessment

RISK ASSESEMNT FORM

Date:	Time:
Contractor/Sub Contractor	
Name of Assessor	
Working Area/Activity	
Frequency:	

Type of Hazardous	Effectuated Activity	Effectuated person	Existing Control measures	Risk Rating			Action required/Mitigation measures
				H	M	L	
Review Date:							
Responsible Personnel							
Signature							

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex H - Template for Injury and Incident

Injury Investigation Form			
1.	Name of Injured Person		
2.	Age:	Telephone Number:	
3.	Gender:	Address:	
4.	Date of Injury:	Time of Injury:	
5.	Exact Location of Event:		
6.	What part of the body was injured? Describe in detail.		
7.	What was the nature of the injury? Describe in detail.		
8.	Describe step by step what led up to the injury. <i>(Describe fully how the accident happened? What was employee doing prior to the event? What Equipment, tools being using? Were safety regulations in place and used? If not, what was wrong? Availability of first aid box at site?/ Please Continue on the back if necessary)</i>		
9.	In case Employee went to doctor/hospital...	Doctor's Name:	
		Hospital/Clinic Name:	
10.	Recommended preventive action to take in the future to prevent reoccurrence.		
11.	Names of all witnesses: <i>Provide Name, CNIC No. and relevance to construction site.</i>		

Contractor's Signature

Date

Incident Investigation Report

Incident Investigation Report			
Incident details			
Name of person involved in the incident (Affected)		Date of incident:	
Location of incident:		Activity:	
Incident investigation team Members:			
Name:		Designation:	
1.			
2.			
3.			
What task was being performed at the time of the incident?			
What happened? Type of incident:			
Causes of incident?			
Environment:		Equipment/materials:	
<input type="checkbox"/> Noise	<input type="checkbox"/> Layout / design	<input type="checkbox"/> Wrong equipment for the job	<input type="checkbox"/> Equipment failure
<input type="checkbox"/> Lighting	<input type="checkbox"/> Dust / fume	<input type="checkbox"/> Inadequate maintenance	<input type="checkbox"/> Material / equipment too heavy / awkward
<input type="checkbox"/> Vibration	<input type="checkbox"/> Slip / trip hazard	<input type="checkbox"/> Inadequate guarding	<input type="checkbox"/> Inadequate training provided
<input type="checkbox"/> Damaged / unstable floor	<input type="checkbox"/> Other	<input type="checkbox"/> Other	
Work systems:		People:	
<input type="checkbox"/> Hazard not identified	<input type="checkbox"/> No / inadequate risk assessment conducted	<input type="checkbox"/> Procedure not followed / no procedure exists	<input type="checkbox"/> Drugs / alcohol
<input type="checkbox"/> No / inadequate safe work procedure	<input type="checkbox"/> No / inadequate controls implemented	<input type="checkbox"/> Fatigue	<input type="checkbox"/> Time / production pressures
<input type="checkbox"/> Hazard not reported	<input type="checkbox"/> Inadequate training / supervision	<input type="checkbox"/> Change of routine	<input type="checkbox"/> Distraction / personal issues / stress
<input type="checkbox"/> Other		<input type="checkbox"/> Lack of communication	<input type="checkbox"/> Other
Worker Response			
<input type="checkbox"/> Detecting a hazard, but not correcting it		<input type="checkbox"/> Ignoring safety rules and regulations for production	
<input type="checkbox"/> Removing safeguards from machines & equipment		<input type="checkbox"/> Ignoring safety rules and regulations	
Ratings			
<input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> Medium			

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex I – Grievance Registration Form

GRIEVANCE REGISTRATION FORM

Name

CNIC Number

Date

DOB

Gender

Occupation

Phone Number

Email Address

Postal Address

Complaint submitted by

- Self
 Representative

Reasons

Signature _____

Activate Windows

Annex J – Grievance Satisfaction Form

SATISFACTION FORM

Name

CNIC Number

Date

DOB

Gender

Occupation

Phone Number

Email Address

Postal Address

Satisfaction Level

- Satisfied
- Extremely
- satisfied Slightly
- Satisfied Not Satisfied

Reasons

Signature _____



 **Karachi Neighborhood Improvement Project** 
Planning & Development Department
Government Of Sindh

Karachi Neighborhood Improvement Project has devised a Grievance Redress Mechanism to address the concerns of its stakeholders. We are now just a step away, you can register your grievances


	At the Project Site
	grm@knip.gos.pk
	knip.gos.pk/grm
	+92 21 35173008
	C-49, Block 2, Clifton, Karachi

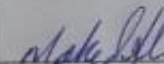
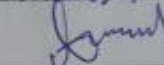
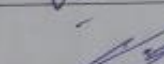

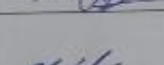
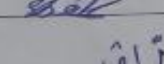
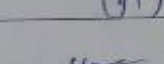
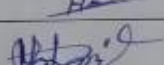
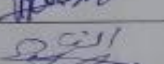

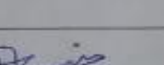
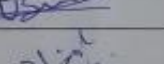
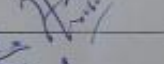


Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex L – Consultation with Residents and Players (Male)

Karachi Neighborhood Improvement Project (KNIP)




Date of Visit	14-07-2021			
Name of Sub-project	G3EC KNIP			
Location of Meeting	Malir Cluster			
	at Young Iqbal Football Stadium.			
No.	Name of Participant	Location	Mobile Number	Signature
1	M. Ali	Grasulo Abad	0311 2903332	
2	M. Arif	Khokhrapar NO. 4	0321 2510838	
3	M. Ayub	Khokhrapar B-Area	0315 3539914	
4	M. Iqbal	=	03129245297	
5	Shoeb Kachhi	Football Player	0311 2886701	
6	Ak Razzaq	Captain	# —	
7	Ahmed Lala	Khokhrapar B Area	0333 3181427	
8	Den Muhammad	Naor Afshan Colony	0315 3519726	
9	Haseeb Ansari	Momin Abad Society	0332 3077864	
10	Ghayyoor Ansari	Naor Afshan Colony	03051302002	
11	Azmi	=	03042451432	
12	Shah Faisal	Haji Sakhi Goto	03154020015	
13	M. Younis	Basmabad B-Area U.C. 12	0346 2209231	
14	Abrahim, president	// //	—	
15	M. Adam Sultan	// //	03112957963	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	14-07-2021			
Name	G3EC KNIP			
Name of Sub-project	Malir Cluster			
Location of Meeting	At Young Iqbal-football stadium.			
No.	Name of Participant	Location	Mobile Number	Signature
16	Usman Ghani	Khoshnawar National Football stadium.	03113565031.	
17	Kamran	Player	031324123966.	
18	Faraz Ahmad	Khoshnawar No-06	03163023950.	
19	Siddique Shah	Ex-UK-12 chairman	0333-3635156	
20	M. Hussen Mangiso	President-UK-12	0345-2426893.	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex M – Consultation with Local Residents (Female)

Karachi Neighborhood Improvement Project (KNIP)


Date of Visit	15/7/21			
Name of Sub-Project	G-3 Engineering Consultants Malir cluster			
Location of Meeting	Khotkhara per B area			
No.	Name of Participants	Location	Mobile Number	Signature
1	Zainab	Khotkhara per B area	Zainab	
2	Ameera	=		
3	Maryam	=		
4	Shahela	=		
5	Meharishw	=		
6	Zoya	=		
7	Fozia	=		
8	Hawa bibi	=		
9	Hajran	=		

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex O – Consultation with Govt. Girls & Boys Secondary School


Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	12-10-2021			
Form	G-3 Ec.			
Name of Sub-Project	Malir cluster			
Location of Meeting	Govt Boys/Girls Secondary School Sahibabad village			
No.	Name of Participants	Location	Mobile Number	Signature
	LAL BANOON GUJARO	G.B.S. Sahibabad girls	0301-2504009	[Signature]
	Muhammad Sajid Hyder	G.B. U.C. 10 P.P.	032-12825628	MB
	AKBAR ALI	G.B.S. Sahibabad girls	0311-7347697	[Signature]
	Altaf Ahmed	G.B.S.S. Sahibabad girls	03463643241	[Signature]

Environment and Social Management Plan (ESMP): Sub-Project of KNIP Phase - II
Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex P – Consultation with Govt. Girls Secondary School

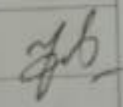
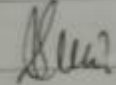
Karachi Neighborhood Improvement Project (KNIP) 

Date of Visit: 12-10-2021

Name of Sub-Project: G-3 Ec

Name of Meeting: Malir cluster

Location of Meeting: G.G.S Campus Azamabad Malir

Name of Participants	Location	Mobile Number	Signature
Ms. Nafayat	G.G.S Campus Azamabad.	03343578008	
M. Shams Butt (PSI)	" "	0317-2099627	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex Q – Consultation with Nishan Hyderi School

Karachi Neighborhood Improvement Project (KNIP)




Date of Visit		12-10-2021		
Team		G-3 Ec		
Name of Sub-Project		Malir cluster		
Location of Meeting		G.G.S Campus Azamabad Malir & Nishan Hyderi School.		
S.No.	Name of Participants	Location	Mobile Number	Signature
1.	ms. Nafayat	G.G.S Camps Azamabad.	03343570400	[Signature]
2.	M. Shams Butt (PST)	" " "	0317-2099627	[Signature]
3.	M. Faruq Khan	B-34 Shadmans Town	0311-2656428	[Signature]

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (I) – Consultation with Male Group @ GBSS-Sahibdad Goth for Pir Mahfooz Football Ground

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit		08/12/2021		
Team		G3 E.C.S.		
Name of Sub-Project		Malir Cluster (Male Group)		
Location of Meeting		GBSS - Sahibdad Goth near Pir Mahfooz		
S.No.	Name of Participants	Location	Mobile Number	Signature
1	M. Ravi	Resident	0343519416	M. Ravi
2	MUHAMMAD	"	0335747353	[Signature]
3	Atta Mohd.	"	03012476260	[Signature]
4	Ansar Ali	Sports	0300363029	[Signature]
5	Roshan Ali	"	-	[Signature]
6	Mohammad Khan	o/b "	-	[Signature]
7	Abdul	"	0311-0829936	[Signature]
8	Muhammad Ramzan	Senior player	0300 1119593	[Signature]
9	Muhammad Azeem	Resident		
10	Lal Bux	Resident		
11	Allah Bakhsh	Sports	03052047930	[Signature]
12	Ajmal S.	Sport	03412713389	[Signature]
13	Shafi Muha	Resident		
14	Shaukat	Resident		[Signature]
15	Farooq	Sport		[Signature]

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit		08/12/2022		
Team		R3ECs. (Male Group)		
Name of Sub-Project		Malir Cluster		
Location of Meeting		GBSS - Sahibdad Goth near Pishin		
S.No.	Name of Participants	Location	Mobile Number	Signature
16	Noman Sabwat	Politation / Social Worker	0315-2609068	[Signature]
17	Muhammad Sajid	"	03212225628	[Signature]
18	Abdul Azeez	Sports Member	0322-2253476	[Signature]
19	Altaf Hussain	Sports man	03152498949	[Signature]
20	AMISAD Noshad	Residence	03042394118	[Signature]
21	Muhammad Faris	Sports man	03222585546	[Signature]
22	Farooq Soomro	Footballer	03071154224	[Signature]
23	Jawad Soomro	Sports man	03004766625	[Signature]
24	محمد الیاس	PPO	03212548637	[Signature]
25	Aftab	Sports man	0311234339	[Signature]
26	Murad Bux	Resident	0	[Signature]
27	Bakhtawar	"	0311-2972200	[Signature]
28	Ramzan Ali	Resident	0322-2196306	[Signature]
29	M. RAFIQ	Resident	03102309319	[Signature]
30	محمد	Resident		[Signature]

G3 Engineering Consultants (Pvt.) Ltd.

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)




S.No.	Name of Participants	Location	Mobile Number	Signature
Date of Visit		08/12/2021		
Team		G3ECs		
Name of Sub-Project		Malir Cluster (Male Group)		
Location of Meeting		GBSS - Sahibdad Goth near Pir Mehfooz Football Ground		
31	Achil	Resident	0311-3812731	Achil
32	Aamir Saleem	Poltrou	03162386652	Aamir
33	Sagheer Ahmed	Sportman	03042071061	Sagheer
34	Hasnain Ali	Sportman	03172944681	Hasnain
35	Muhammad Hussain	CHP	03012838738	Muhammad
36	Arif	Resident	0	Arif
37	Talat Amin	Government Enclav	0835-810073	Talat Amin
38	Noor Hassan	Diobad	0302238351	Noor Hassan
39	Sikandar Ali		0313101208	Sikandar
40	Murtaza ul Hassan	Bildes	03363307355	Murtaza
41	M. Abbas	Inspireti	03341689751	M. Abbas
42	Wali Muhammad	Social works, G. sector	03142107452	Wali
43	Akber Ali	Education, Social work	0311-7347697	Akber
44	M. Tanveer		0322-210207	Tanveer
45	Rozee Khan	Sahibdad Goth	03442393727	Rozee




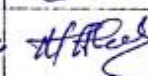
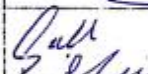
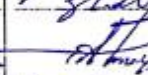
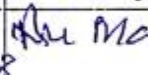




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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit		08/12/2021.		
Team		G3 E.C.S.		
Name of Sub-Project		Malir Cluster (Male Group)		
Location of Meeting		GBSS - Sahibzad Goth near Pir Mehriz Foot Ball		
S.No.	Name of Participants	Location	Mobile Number	Signature
46	NADEEM SULTAN	Malir	03002386224	
47	سید		0323872235	سید
48	فاروق		0327-1214899	
49	Khalil	Malir Sports Person	-	
50	Rehmat Ali	Malir	03162018120	RACI
51	واسیل	"	-	-
52	Mansoor Ahmed	Malir Resident	0349-1866744	
53	Gulzar	Malir Resident	03112903663	
54	Mushtaq Ahmed	Malir Resident	03112329775	
55	M. M. M. M.	Sports person	03082221478	
56	Munawar	"	-	-
57	AbdulMalik	Teacher	0313021493	
58	Ibrahim Raza	MT Student		
59	Owais	Student		
60	ILAHi Bakhsh	Student	03122669542	@
61	M. YOUNIS	Sports person	0302 246985	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)

Date of Visit	08/12/2021			
Team	G3ECs. (Male Group)			
Name of Sub-Project	Malir Cluster			
Location of Meeting	GBSS-Sahibdad Goth near Pir Mehfooz football ground			
S.No.	Name of Participants	Location	Mobile Number	Signature
62	Abdullah Hashed	8/6/68 Peshawar	0300-2838161	[Signature]
63	M. SALMAN	Residency	0302-9239610	[Signature]
64	Majeed	Residence	0318-2244391	[Signature]
65	Ali	Residence	0312-1255685	ALI
66	Nazam Muht	Residence	0300 7057697	[Signature]
67	Jameel Ahmad	---	03222059092	[Signature]
68	Rashid Karzem	Sports person	0333-2484321	Rashid
69	Abdullah	Sportsman	03408638041	Abdullah
70	Talha Shahzad	Sportsman	0 -	[Signature]
71	Majeed	Student	-	[Signature]
72	Khalid Ahmed	Resident	0314 2104489	[Signature]
73	Ubaid Din	Residing	03052608109	[Signature]
74	Muhammad Akram	Captain Mehfooz club	0300 3749661	[Signature]
75	Anwar Baloch	Social Worker	0315 8397458	[Signature]
76	Naveed	Social Worker	031 52938504	[Signature]
77	Nabeel Ahmed	Resident	0318 2834070	[Signature]
78	Muhammad Ali	Social Safeguards Sp	0300 2380416	[Signature]

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (II) – Consultation with Femle Group @ GBSS-Sahibdad Goth for Pir Mahfooz Football Ground

Karachi Neighborhood Improvement Project (KNIP)



S.No.	Name of Participants	Location	Mobile Number	Signature
	Date of Visit	8/12/2021		
	Team	G3 E&S (Female Group)		
	Name of Sub-Project	Malir cluster		
	Location of Meeting	GBSS-Sahibdad Goth near Pir Mahfooz		
1	Fazal Badack	MPA President branch	0300-8224905	
2	ماء بانو بلوچ	UC-Member (Vice)	0333-3466931	
3	سائبر بانو بلوچ	UC-Member (Vice)	0300-2827611	
4	فائزہ		—	
5	شہیدہ بانو	UC-Member (Ex)	03101277310	
6	سابعہ	Resident	03187397897	
7	شہینہ	"	—	
8	نور بی بی	"	03362752997	
9	مادی	"	—	
10	شہیدہ	"	—	
11	سعیدہ بی بی	"	03003482103	
12	شہناز	"	0311236829	
13	نہالہ	"	—	
14	سعیدہ	"	03242611828	
15	جان بی بی	"	—	
16	سجود	"	—	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)

Date of Visit		08/12/2021		
Team		E/ECs		
Name of Sub-Project		Malir Cluster (Female Group) Group		
Location of Meeting		SBSS - Sahil Road - Gith near Pt. Mehru Football		
S.No.	Name of Participants	Location	Mobile Number	Signature
			03252153485	
17	گل بیوان	Resident	—	
18	راضی	"	03170888711	
19	مہر بی بی	"	03152958864	
20	نسرتین	"	03242619431	نسرتین
21	منشاء	"	—	Mansha
22	مہر بی بی	"	—	Mehru
23	نور بانو	"	—	
24	راجہ بی بی	"	—	
25	رشیدہ سلاسی	"	—	
26	سہارہ بی بی	"	03116357424	Sahar
27	فانمہ گوس	Social worker	—	Encha Batima
28	رقیہ	Resident	—	Raqia
29	مدیحی	"	—	Madeetha
30	نور فاطمہ	"	—	Noorfatima
31	بیتلیبرا	"	0321274646	Benazir

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	08/12/2021			
Team	S3ECS			
Name of Sub-Project	Malir Cluster (Female Group) Ground			
Location of Meeting	SBS - Sahibdad Goth near Pir Mehroz Football			
S.No.	Name of Participants	Location	Mobile Number	Signature
32	ب. ا. ع. ل.	Resident	03131755025	
33	انجی	"	-	
34	رائسہ	"	-	Laiba
35	شمیم	"	-	
36	حفیظہ	"	-	
37	نوشہ	"	-	Nousheen
38	نسرتین گھومٹی	"	-	
39	لفورالنسار	"	-	
40	مگ بانو	"	-	
41	فہمیدہ عبد النبی	"	-	Fahim
42	صبا	"	0315-2948249	Saba*
43	آمنہ	"	-	Amin
44	جمیلہ	"	-	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (III) – Consultation with Male Group @ Kachi Muslim Mandhira Jamiat Hall Hingora Goth for Young Iqbal Football and Friends Cricket Grounds

Karachi Neighborhood Improvement Project (KNIP)

Date of Visit	9/12/2021			
Team	G3 E&S (Male Group)			
Name of Sub-Project	Malir Cluster			
Location of Meeting	Kachi Muslim Mandhira Jamiat Hall, Mandhira Goth			
S.No	Name of Participants	Location	Mobile Number	Signature
		Profession		
1	Noman Sams	Social Worker	0315-269008	[Signature]
2	Pero Muhammad Shabbir	Adam Hingora Goth K. In 26/10/2021	0335-3635182	[Signature]
3	M. Hoshia Kachi	Adam Hingora Goth	03132673859	[Signature]
4	M. Rafique	Arib Khushkhaty Goth	03222855782	[Signature]
5	Ahmed Lala	B. Area, 404 block	03152359403	[Signature]
6	Muhammad	Resident - UC ^{Malir} ward (2)	0321-8135534	[Signature]
7	GHAFOUR ANSARI	A. AREA 5 NO	0300-1108808	[Signature]
8	Abdus Rehman Hasan	ward, 1	0344-3070510	[Signature]
9	Ahmed Ali	ward, 2	0306-2915302	[Signature]
10	Azmi Khan	ward, 2	0304-2451432	[Signature]
11	Aslam Waqheer	ward, 1	0321-2639409	[Signature]
12	Iqbal Iqbal Kotesari	ward, 1		
13	M. Hussain Mangrio	President UC (12)	03452426593	[Signature]
14	Abdul Kareem	Rafata Residence	0306-2064944	[Signature]
15	Abdullah Wada	GS. 15 Post malir UC-dy, 6/15/21	03212085786	[Signature]

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	09/12/2021			
Team	ERECs (Male Group)			
Name of Sub-Project	Malir Cluster			
Location of Meeting	Kachi Muslim Mandliwa Jamaat Hall, Malir East			
S.No.	Name of Participants	Location	Mobile Number	Signature
16	Jain Mukhammad	Resident	0315-3519724	[Signature]
17	Yasir Kutchi	Resident	0314-2196506	[Signature]
18	[Signature]	Resident	0321-0123900	[Signature]
19	Kamran Mughal	color	0313-8928209	[Signature]
20	Muhammad Hussain	Resident	0348-2514625	[Signature]
21	Abdul Hakim	Resident	0300-2818094	[Signature]
22	Ameer Bux	Resident	0301-2377883	[Signature]
23	Muhammad Rafiq	Labourer	0321-8968119	[Signature]
24	Akhlaq Badshah	Resident	0322-3048771	[Signature]
25	Ramzan Ali	[Signature]	0322-3210368	[Signature]
26	[Signature]	[Signature]	03212463483	[Signature]
27	[Signature]	[Signature]	03171098428	[Signature]
28	Muhammad Ramzan	Residence	0311-8191150	[Signature]
29	Ayub	Resident	0331-2717276	[Signature]
30	Ismail	Resident	0345-3199020	ESMAIL

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



S.No.	Name of Participants	Location	Mobile Number	Signature
Date of Visit		09/12/2021		
Team		Malir Cluster (Male Group)		
Name of Sub-Project		G3E Es.		
Location of Meeting		Kachi Muslim Mandhira Jamaat Hall, Hingor Pot		
31	Aslam	Resident		
32	Muhammad Sajid	Resident	03212825828	
33	Farooq Ahmed	Sold Worker	0316302395	
34	Haseeb Anvari	Social Worker	03323077869	
35	Allah Dino Mangiyo	Social Worker	03470126100	
36	Gul Habib Jalbani	Information Secy	0313-26635	
37	عبدالله قریبی	سول ورکر	03092190579	
38	Usman Ghani	Sports person	0311-3565031	
39	Ataid	Captain Young ^{Footy} Ball	0313-2836451	
40	Abdul Raay	Sports person	0-	Ab Raay
41	M.G.F. Qureshi	Sports person	0317-2972771	
42	Asghar Ali	Sports person	0312-2200426	Asghar
43	Punhoo	Resident	0311-8951478	
44	Makool	Resident	0311-3107383	
45	Johanzib Ali	info Sec PS88(PYO)	0342-20095413	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	08/12 (2021)			
Team	G3ECS (Male Group)			
Name of Sub-Project	Malir Cluster			
Location of Meeting	Kachi Muslim Mandhira Jamaat Hall, Hingoro Goth			
S.No.	Name of Participants	Location	Mobile Number	Signature
46	Sunil Khan	Malir UC 12/1	03102828132	[Signature]
47	A. wabid	malir. U2 4/	0322-2060980	[Signature]
48	Abdul IQBAL		0312-9245297	[Signature]
49	Ahmed Ali	Resident	0344-2418180	[Signature]
50	Qais Samra	Resident	0300-2990000	[Signature]
51	Ramzan	Social Worker	U k's U	
52	Shaher nuyazi	Khokanpur national Cricket Council	0313-2343300	[Signature]
53	Muhammed Ali	Social Safeguard & Resettlement Sp.	03002380416	[Signature]

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (IV) – Consultation with Male & Female Joint Group @ Otaq of Baba Younis Gharibabad for Young Iqbal Football and Friends Cricket Grounds

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit		18/12/2021		
Team		S3E5 (Male & Female Joint Session)		
Name of Sub-Project		Malir Cluster		
Location of Meeting		Otaq of Baba Younis, Young Iqbal Football & Friends Cricket Grounds		
S.No.	Name of Participants	Location / Profession	Mobile Number	Signature
1	Kainat	Youth 10-th	03162685597	Kainat
2	Nadia	Youth 11th	03172532936	Nadia
3	Asiba	Youth / Female Activist	03343d7872	Asiba
4	SHAMEEM	Street 5, Bachor Bakery	03118957762	SHAMEEM
5	Zinab	"	-	-
6	Hanifa bano	"	-	-
7	Ahmed	Business man	0315-2359403	Ahmed
8	Abdul Sattar	Govt. Servant	0312257707	Abdul Sattar
9	Mr. Qasim	Govt Servant	0315-2520262	Mr. Qasim
10	Abdul Rehman	Labour	0344-3070590	Abdul Rehman
11	Mr. Younis	Resident	0346-2209231	Mr. Younis
12	Aghwan Ali	Labour	0309232482	Aghwan Ali
13	Ruffarvse	Labour	-	Ruffarvse
14	Abdul kareem	Resident	0306-2069941	Abdul kareem
15	Amir Yousof	Govt Servant	03456411209	Amir Yousof
16	Anwar Jemal	Resident	03122294702	Anwar Jemal

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)

Date of Visit		18/12/2021		
Team		G3 E.C.S.		
Name of Sub-Project		Malir Cluster (Male & Female Joint Session)		
Location of Meeting		Otaqi of Baba Younis, Young Iqbal & Friends Park		
S.No.	Name of Participants	Location	Mobile Number	Signature
17	Abdul Shekhor	Labour	0310 26 18670	
18	Shauib Sodo	Shop keeper	0311-2886701	
19	Ramzan Anwar	Labour	-	(Blank)
20	Zoran Ahmed	-	03062138257	
21	Ramzan	Resident	-	
22	Samiullah	Resident	0317-2571628	
23	Muhammad Imtiaz	Resident	0324-2485769	
24	Idrees	Resident	-	
25	Hamza Raza	Manag: Football	0311 2417500	
26	Ghulam Ali	Resident		
27	Muhammad	Football chairman	0324-2209083	
28	Adam	Football g-conts V. Chairman	0323-3356278	
29	Aslam	"	0321-2639409	
30	Muhammad Ali	Social 0300 2380410	-	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (V) – Consultative Meetings with Male Group for Shaheed Muhammad Khashkeli Park and Library

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	10-12-2021			
Team	G3 EC			
Name of Sub-Project	Malir Cluster (Male Group).			
Location of Meeting	Shaheed Muhammad Khashkeli Library & Park			
S.No.	Name of Participants	Location	Mobile Number	Signature
01	Nazir Ahmed Meemon	SSA Bacha P Goth	0300 3787645	[Signature]
02	Noman Saeed	Ranza Lari Silli.	0315-2609068	[Signature]
03	Kamran Soomro	Rum Zoy Lari Goth	03071454224	[Signature]
04	M. Isfan	= =	03177564582	[Signature]
05	Wajid Hussain	A-Arca Nadi Kinara	0312-2822566	[Signature]
06	M. Rafiq	Arib Khashkeli Goth	03222855722	[Signature]
07	[Signature]	= =		
08	Sameel Ayoub	Ramzan Lari Goth	03011022223	[Signature]
09	Radiy Bux	Ramzan Lari Goth	030026170946	[Signature]
10	Inayatullah Qambrani	Ramzan Lari Goth	0312-2772811	[Signature]
11	Abid Abbasi	Ramzan Lari Goth	03083499660	[Signature]
12	Zahid Baluch	Ramzan Lari Goth	0333 2152912	[Signature]
13	[Signature]	= =	03062645101	[Signature]
14	[Signature]	= =		[Signature]
15	[Signature]	" "	03202012320	[Signature]

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	10-12-2021			
Team	G3 EC			
Name of Sub-Project	Malir Cluster (Male Group)			
Location of Meeting	Shahed Muhammad Khushkeli Library & Park			
S.No.	Name of Participants	Location	Mobile Number	Signature
16	نارنگی	رمضان لاسی	03171009432	[Signature]
17	Jamshid	رمضان لاسی	03121255788	[Signature]
18	Tofoeal	رمضان لاسی	0303-2335886	[Signature]
19	Habibulceel	Ramzan Lasi	0312-8267418	[Signature]
20	Zubair	= =	-	[Signature]
21	Zohaib	Ramzan Lasi	-	[Signature]
22	سید علی	= =	-	[Signature]
23	مجاہد	= =	03128681717	[Signature]
24	نعیم	= =	-	[Signature]
25	سینزل	= =	03118930379	[Signature]
26	و بیگ	= =	03100227144	[Signature]
27	برادر شکر طیب	= =	0322-2024140	[Signature]
28	Suhjul	= =	03171189460	[Signature]
29	ایاز کانیو	= =	0302 0000998	[Signature]
30	Sajid Mangi AHC.	= =	0313 91298905	[Signature]
31	Ameer Bux Khushkeli	= =	03112577883	[Signature]

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)

Date of Visit		G3 10-12-2021		
Team		Shahid Muhammad Abbas G3EC		
Name of Sub-Project		Malir Cluster		
Location of Meeting		Shahid Muhammad Khaskamp. Library & Park		
S.No.	Name of Participants	Location	Mobile Number	Signature
32	M. Ishaq	Ramzan Lasi Gothi	0317-29028908	M. Z. Shah
33	Mitho Khan	"	"	"
34	Zeeshan	"	"	"
35	Abdul Ali	"	0336 8114760	"
36	Muhammad Mosa.	"	0316- 126788	"
37	Allah Belesh	"	0312 36334518	"
38	Shahid	"	0308 9697726	"
39	Bilwal	"	0316 1071940	"
40	Khadem Hussain	"	0316 4581158093	"
41	Alan Lasi	"	"	"
42	Rasool Belesh	"	0311 2677689	"
43	Azeem	"	0324 2894748	"
44	Gulzar Ali	"	"	"
45	Imtiaz Ali	"	03022562157	"
46	Hyder Ali	"	0316-0326678	"

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	10-12-2021			
Team	G3EC			
Name of Sub-Project	Malir Cluster			
Location of Meeting	Shahid Muhammad Khaskheli Library & Park			
S.No.	Name of Participants	Location	Mobile Number	Signature
47	Wajid Ali	Ramzaan Lassi Path	-	
48	Manzoor	"	0315 2582355	
48	Aslam	"	0300 7847880	
50	Sajjad	"	0322 0238056	
51	Abdul waheed	"	0312 8647341	
52	Sadom Hussain	"	0310 2838099	
53	Dilshad	"	-	
54	Shabir	"	0712 38 8341314	
55	Umar	"	0313 2067710	
56	Adrees	"	-	
57	Habib Ali	"	0310 28264479	
58	Sameer	"	0318 9920897	
59	Hyder Ali	"		
60	Kanin Ali	"	0322 2285207	
61	Dilshad	"	-	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	10-12-2021			
Team	G3EC			
Name of Sub-Project	Malir Cluster			
Location of Meeting	Shaheed Muhammad Khushkeli Library & Park			
S.No.	Name of Participants	Location	Mobile Number	Signature
62	Fateh M. Khushkeli	Kamran Khushkeli Goth.	0321 23 68605	[Signature]
63	Gh. Saimur Mirani	= Hyderabad	0315 34 70236	[Signature]
64	Nabe Arshe &	Ramban Lassi Goth.	N/A	[Signature]
65	M. Essa Lassi	= =	0313 26 36 987	[Signature]
66	Mr. Shoib	= =	0316 21 66 637	[Signature]
67	Gh. Ali	= =	-	[Signature]
68	Roshan	= =	-	
69	Mr. Azeem ^{Khushkeli}	= =	0314 22 37 039	[Signature]
70	Mr. Ajeer Ahmed Lashari	Bachel Goth	0311 35 85 144	[Signature]
71	Imam Bux Lassi	Laasi Goth	-	
72	Muhammad Shafiq ^{Khushkeli}	Laasi Goth	-	[Signature]
73	Muhammad Hakim	Laasi Goth	0321 30 4 945 0321 30 4 9421	[Signature]
74	Rasool Bux Muskhairi	Laasi Goth	0302 24 75 283	[Signature]
75	Muhammad Ali Consultant		0300 2 38 04 10	[Signature]

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (VI) - Consultative Meeting with Female Group for Shaheed Muhammad Khashkeli Park and Library

Karachi Neighborhood Improvement Project (KNIP)




Date of Visit	10-12-2021			
Team	G3ECS			
Name of Sub-Project	Malir Cluster (Female Group)			
Location of Meeting	Shaheed Muhammad Khashkeli Library & Park			
S.No.	Name of Participants	Location	Mobile Number	Signature
1	Haleema Suleman	Shahid Khashkeli Library	03172460850	Haleema
2	Saima Shahid	"	03152520663	Saima
3	Asma Fazal	"	03422416026	Asma
4	Saima Ayub	"	0310-2713140	Saima
5	Shehnaaz A. Majeed	"	03131833400	Shehnaaz
6	Kulsoom	"	0312-8371876	Kulsoom
7	Samina Akbar	"	0315-8650541	Samina
8	Alicia	"	0316-2690969	Alicia
9	Rozina	"	0313-2549274	Rozina
10	Areeba	"	0316-2690969	Areeba
11	Zareena	"	0313-2549274	Zareena
12	Kareema	"		
13	Anila	"	0310-1006260	Anila
14	Rozina Chughturo	Gender Sp.	03000111250	—
15	Israr Korejo	Environment Officer	03061548113	—

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)







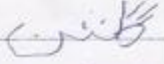


Date of Visit	15-12-2021			
Team	G3 EC			
Name of Sub-Project	Malir cluster			
Location of Meeting	Shaheed Muband Iqbal Khali Library Malir			
S.No.	Name of Participants	Location	Mobile Number	Signature
1	Haleema	Community hall	03172460850	Haleema
2	Asma	=	03422416026	Asma
3	Kulsoom	=	0312-8371876	Kulsoom
4	Samina	=	-	Samina
5	Saima Ayub	=	03102713140	Saima
6	Ateeza	=	0316-2690969	Ateeza
7	Shahida	=	03102595598	Shahida
8	Zakiya	=	-	Zakiya
9	Zaroon	=	03118930181	Zaroon
10	Bilvees	=	03431219604	Bilvees
11	Aarisa	=		Aarisa
12	Kulsoom	=		Kulsoom
13	Khairun nisa	=		Khairun nisa
14	Zarina	=		Zarina
15	Rehana	=	032322627	Rehana

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	15-12-2021			
Team	G3EC			
Name of Sub-Project	Malir Cluster			
Location of Meeting	Shehad Muhammad Khan Kheli Park & Library			
No.	Name of Participants	Location	Mobile Number	Signature
16	Roshna	=	=	
17	Shehnaaz A. Majeed	=	=	03131838400 Shehaz
18	Saba	=	=	031812 
19	Nimra	=	=	
20	Gulshan	=	=	
21	Saba Ibrahim	=	=	03152891741 Saba
22	Parveen	=	=	Parveen
23	Aneela Qayoom	=	=	0310-1006260 Anilla
24	Yasmeen Kulsoom	=	=	
25	Saima Sahid	=	=	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (VII) – Consultative Meeting with Male Group for Aabishaar Park and Road Works


Karachi Neighborhood Improvement Project (KNIP)

Date of Visit	14-12-2021			
Team	G3 Engineering Consultant			
Name of Sub-Project	Malir Cluster			
Location of Meeting	Aabishaar Park			
S No.	Name of Participants	Location	Mobile Number	Signature
1	Jamshaid	UC12 Ward 2	—	Jamshaid
2	Deen M. Jokhio	Sadar Ward 2	—	Deen M. Jokhio
3	Siraj Ahmad	Ward 2	—	Siraj Ahmad
4	Idrees bandhani	Ward 2	—	Idrees bandhani
5	Irfan	Ward 2	03158924656	Irfan
6	محمد انور	Resident Ward 2	03222289683	محمد انور
7	عبدالغفار	Resident Ward 2	—	—
8	عبدالحق	"	—	—
9	ابوبکر	"	—	—
10	وقار خان	"	—	وقار خان
11	Iqbal	"	03129245297	Iqbal
12	فرید الدین	"	—	—
13	محمد یونس	"	—	—
14	سعید الدین	"	—	سعید الدین
15	Afzaul Ahmed	"	03122936119	Afzaul Ahmed







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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	11-12-2021			
Team	G3 Engineering Consultant			
Name of Sub-Project	Malir cluster			
Location of Meeting	Abshar Park			

S No.	Name of Participants	Location	Mobile Number	Signature
16	Haris	Abshar Park Kofar	—	Haris
17	Ghayour	Ward.2 Abshar Park	0300-1108808	
18	AZMI KHAN	Ward.2 Abshar Park	0304-2451432	
19	DR. FARUKH	ABSHAR PARK KOKHAR	0345-3169-316	
20	Noman Sakat	Abshar Park	0315-2609068	
21	Hasnab Ansari	Abshar Park	03172910952	
22	Farooq Ahmed	Ward - 2	03163023950	
23	Noman Andoo	Govt. Employee	0315-2052877	
24	Rozina Ghauri	Social & General sp	0331-3549119	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (VIII) – Consultative Meeting with Female Group for Aabishaar Park and Road Works

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit		14/12/2021		
Team		G3, ECS		
Name of Sub-Project		Malir cluster		
Location of Meeting		Aabishaar Park		
S.No.	Name of Participants	Location	Mobile Number	Signature
01	Shah Bano	MCH khokhrapay	030821206225	
02	Amreen Rameez	"	0311-1825031	
03	Saba Jilani	MCH Khokhrapay	0336-1130701	
04	Musarat	"	03130229011	
05	Samina	"		
06	Kulsoom	"		
07	Kinza	"	03132871726	
08	Aiman	"	03142722350	
09	Sabat	"	03440201707	
10	Nazma	"	03440201707	
11	Sayma	"	—	
12	Koseeb	"	—	
13	Arbina Kouseeb	"	—	
14	Shazia	"	—	
15	کینزا	"	03227971367	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



S.No.	Name of Participants	Location	Mobile Number	Signature
	Date of Visit	14/12/2021.		
	Team	G3 E.C.s.		
	Name of Sub-Project	Malir Cluster		
	Location of Meeting	Aabshar Park		
16	منزبانہ	MCH - Kholihrap	-	منزبانہ
17	کوئٹہ	"	-	کوئٹہ
18	سہیلہ	"	-	
19	Errom	"	-	
20	Naila	"	-	
21	Errom	"	-	
22	سہارنیق	Mch Kholihrap	0314-2047321	
23	فرین سعید	"	03200890627	شہانہ
24	شہانہ	"	-	شہانہ
25	سمیرہ	"	-	سمیرہ
26	Rozina Chughto	Social & Gender sp	0331-8549119	

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (IX) – Consultative Meeting with Male and Female Groups for Shaheen Park and Road Works

Karachi Neighborhood Improvement Project (KNIP)

Date of Visit	15-12-21.			
Team	G3EC			
Name of Sub-Project	Shaheen Malir cluster			
Location of Meeting	Shaheen Park			
S No.	Name of Participants	Location	Mobile Number	Signature
1	Faryz Ahmed	Shaheen Park	0246 3023950	
2	Haji Hidayatullah	=	0323 3784705	
3	M. Junaid	=	0308 2396103	
4	Ali Khan	=	0317 2685873	
5	M. Anwar	=	0309 2181038	1.4.11.11.11.11
6	Ghulam Rasool	=	0313 2778540	
7	M. Riaz	=	0303 643	
8	Irfan Hussain	=	0315 8924656	
9	Muhammad Hassan	=	0313 2225071	Muhammad Hassan
10	M. Rashid	=	0314 2213275	
11	M. Rafique	=	0322 2855782	
12	M. Adnan	=	0301 0123900	
13	PLN Mahmood	=	0315 3519726	
14	Muhammad Sulaiman	=	0321-2110136	

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster


Karachi Neighborhood Improvement Project (KNIP)

Date of Visit	15-12-2021			
Team	G3EC			
Name of Sub-Project	Malir cluster			
Location of Meeting	Shaheen Park			
S.No.	Name of Participants	Location	Mobile Number	Signature
15	ARIF YOUSUF	Govt Employee Education Deptt	0345-6411209	<i>Arif</i>
16	AHMED LALA	Shaheen Park	0315-2359403	<i>Ahmed</i>
17	Muhammad Qasim	=	0315-2520862	<i>M. Qasim</i>
18	Abdul Kareem	=	0306 2064941	<i>Abdul Kareem</i>
19	Muhammad Aslam	COMMUNITY PRESIDENT WAGHEER	0311-0257787	<i>M. Aslam</i>
20	Humza	Shaheen Park	0311-241759	<i>Humza</i>
21	Muhammad Iqbal	Social Worker	0312-9245297	<i>M. Iqbal</i>
22	M. ASLAM	Shaheen Park	03212639409	<i>M. Aslam</i>
23	AZMI KHAN	=	0304-2451432	<i>Azmi Khan</i>
24	Afzaal Ahmed	=	0312-2936119	<i>Afzaal Ahmed</i>
25	GHAYYUR ANSARI	ANSARI COMMUNITY	0300-1108808	<i>Ghayyur Ansari</i>
26	SAW	Shaheen Park	03158918543	<i>Saw</i>
27	SUMMAID	=	0318	<i>Summaid</i>
28	Imdad Ahmad	=	3480822	<i>Imdad Ahmad</i>
29	M. Yousaf	=	0321 2957373	<i>M. Yousaf</i>

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit		15-12-21		
Team		G3EC		
Name of Sub-Project		Malir cluster		
Location of Meeting		Sheheen park		
S.No.	Name of Participants	Location	Mobile Number	Signature
1	Rukhsana	Sheheen park	0313977856	رخصا
2	Sajda	=		Sajida
3	Shahnaz	=		شہناز
4	Zakia	-	03213433271	Zakia
5	Aqsa	=		اقسا
6	Asma	=		اسما
7	Annobe	-		انوبہ
8	Noor Jehan	-		نورجہاں
9	Talheedan			تالحدان
10	Mumtaz			ممتاز
11	Annobe			انوبہ
12	Hafeeza			Hafeeza
13	Azra			آزرا
	T			

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex R (X) – Consultative Meeting with Male Group for Madina Park, Eidgah and Road Works

Karachi Neighborhood Improvement Project (KNIP)

Date of Visit	13/12/2021			
Team	G3 E.C.S.			
Name of Sub-Project	Malir Cluster			
Location of Meeting	I Chokhranpur No. 4, near Madina Masjid.			
S.No.	Name of Participants	Location	Mobile Number	Signature
1-	Muhammed Umey General Secretary	Govt. Eng. Deptt	03222476192	[Signature]
2-	Abdul Aziz President Jamiya Masjid	Govt. Eng. Deptt	03002177727	[Signature]
3-	Mehmoed Affari	Govt. Eng. Deptt	0321-2310075	[Signature]
4-	Muhammed Adam	Govt. Eng. Deptt	03118957963	[Signature]
5-	Muhammed Qasim	Govt. Eng. Deptt RBLD Helud	0315-2520862	[Signature]
6-	Muhammed Hussain	Govt. Eng. Deptt	0315-2426893	[Signature]
7-	Abdul Rehman	Resident	0344-3070590	[Signature]
8-	Muhammed Aneel	Resident	0315-2017823	[Signature]
9-	Abdul Kameem	Resident	0306-2064941	[Signature]
10-	Muhammed Zubair	Govt. Eng. Deptt Local Deptt	0321-2040086	[Signature]
11-	Ahmed	Resident	0315-2359403	[Signature]
12-	Abdullah	Resident	-	[Signature]
13-	Abdul Chasri	Labour	03481278388	[Signature]
14-	Abdul Raheem	Worker/Labour	0311-2516181	[Signature]
15-	Saleh Muhammad	Labour	-	[Signature]

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)

Date of Visit		13/12/2021		
Team		G3 ECS		
Name of Sub-Project		Malir cluster		
Location of Meeting		Khokhra Park No. 4, near Madina Masjid		
S.No.	Name of Participants	Location	Mobile Number	Signature
16-	Abdul Sattar	Local Govt Employee Deptt Education	0300-2446456	
17-	Arif Yousuf	Govt. Employee Deptt Education	0345-6411209	
18-	Imran Ahmed	PS. MPA Yousuf Murtaza Isak Khan	0306-2138227	
19-	Anwar Jamil	Resident		Anwar
20-	Muhsen	"	03152363134	
21-	Muhammad	"	-	not
22-	Muhammad Arbab	"	031219245277	
23-	Ramjan	Labour		Umar
24-	Muhammad Younas	Resident	0346-2209231	Younis
25-	Rajjave	"		31/1
26-	Arshad	"		Arshad
27-	Shoaib Sado	"	0311-2886701	
28-	Muhammad Anwar	"	0345-34093513	A.S
29-	Sajid Saleh	"	03181275902	
30-	Muhammad Ismail	Labourer	0321-2297949	Ismail

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



Date of Visit	13/12/2021			
Team	G3.ECS			
Name of Sub-Project	Malir Cluster			
Location of Meeting	Khokhva park No.4, near madina masjid			
S.No.	Name of Participants	Location	Mobile Number	Signature
31-	M. Ayoub	Social Activist	0303-2681974	[Signature]
32-	Asghar	Social Activist	03009232481	[Signature]
33-	Danfom	"	03242059152	[Signature]
34-	Sajjad	"	30102349113	[Signature]
35	Shehzeib	"	0215-2411197	[Signature]
36-	Habibur Rehman Khemani	Resident	0265-2430248	[Signature]
37-	M. Hussain	Resident	0300-3906070	[Signature]
38-	Zubair	"	0311-2423121	[Signature]
38-	Hussain Ali	"	0224-2108262	[Signature]
40	M. Sabeen	"	03223902648	[Signature]
41	Muhammed Ali	Social Safeguard Stakeholder Sp	03002380410	[Signature]

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Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex S – NOC - District Municipal Corporation Malir for Encroachment Drive



**DISTRICT MUNICIPAL CORPORATION
MALIR KARACHI**

DMC secretariat, Main Younus Chowrangi, Landhi Karachi.

No. MC/DMC/MALIR/ 904 /2021

Dated: 03/08 /2021

To,

The Social development Specialist
Project Implementation Unit
Karachi Neighborhood Improvement Project
Planning and Development department
Government of Sindh.

SUBJECT: - NOC FOR UPCOMING PHASE-II SUB-PROJECTS WORKS UNDER KARACHI NEIGHBORHOOD.

With reference to your office letter No. P&D/PIU/KNIP/SDS/627-21/1041. Dated 30-06-2021, The District Municipal Corporation Malir has NO OBJECTION to carryout works Upcoming Phase-II Sub-Projects works under Karachi Neighborhood Improvement Project (KNIP) within the jurisdiction of DMC Malir as per following list of Phase-II Sub-Projects.

S #	Sub Projects	Location	Distt/ DMC	Scope	Remarks
1.	Sherpao Ground (Star ground)/ neighborhood/ SSES1-Landhi Road 650 mtrs	UC-01 Sherpao colony	Malir/ DMC Malir	Parks Upgradation Development of Ground Roads & Footpaths Upgradation, urban elements	As per Provided map.
2.	Malir cluster/ neighborhood Upgradation	DMC Malir	Malir/ DMC Malir	Upgradation of main streets & roads, Parks/Play grounds, Sidewalks/Pedestrian Paths & connecting Minor streets, Upgradation of Roads	Detailed list of Schemes (17 Nos) under this cluster is here by attached along with ref. maps.

**Municipal Commissioner
DMC, Malir**

Copy to

1. The Deputy Commissioner District Malir Karachi
2. The Administrator DMC, Malir.
3. The Superintending Engineer (B&R) DMC Malir
4. Office / Record Copy

**Municipal Commissioner
DMC, Malir**

INWARD
Diary No. 1947
Date: 05-08-2021
PIU-KNIP, P&D, Department, G-5

PIU-KNIP
Diary No. 3162
Date: 03-08-2021

P. Proves
SDS / UPDO
cc. S.C.TE
9/9/21

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex T - NOC from Mukhtiarkar Office for No Any Anti-Encroachment Drive



OFFICE OF THE MUKHTIARKAR

TALUKA IBRAHIM HYDERI, DISTRICT MALIR KARACHI

No.Mukh/I.H/Malir/1044/2021 Karachi Dated: 15/10/2021

Office Address: Opp: Main Dawood Chowranghi Landhi Karachi

CERTIFICATE

This is to certify that the Record of this office has been checked that there is no any encroachment drive in respect of mentioned below Projects has been carried out from 27-10-2018 till today.

S#	SUB-PROJECT	LOCATION
01	Sherpao Ground (Star Ground/Neighbourhood SSES1-Landhi Road No. 650 m	UC-01 Sherpao Colony
02.	Malir Cluster/Neighbour hood upgradation	DMC Malir
03.	Ibrahim Hyderi Neighbourhood, Football Ground and Omar Colony Road	Ibrahim Hyderi

This Certificate issued in response to letter No.P&D/PIU-KNIP/SDS/627-21/1130 dated: 30-09-2021 from Social Development Specialist PIU-KNIP, Project Implementation Unit Karachi Neighborhood Improvement Project Planning & Development Department, Government of Sindh.

MUKHTIARKAR
TALUKA IBRAHIM HYDERI
DISTRICT MALIR KARACHI

ASISTANT COMMISSIONER/21.
SUB-DIVISION IBRAHIM HYDERI
DISTRICT MALIR KARACHI

Annex U - Socio-Economic Baseline Data Collection Form

Karachi Neighborhood Improvement Project (KNIP)



Socio-Economic Baseline Data Collection Form

Name of Enumerator: **Khawaja Muhammad Ali**

Date: **October 13, 2021**

DMC: **Malir** District: **Malir** Sub-Project: **REDEVELOPMENT OF NEIGHBORHOOD ROADS AND UPGRADATION OF OPEN SPACES INCLUDING GROUNDS AND PARKS IN MALIR CLUSTER**

Note: This form is designed to fetch data regarding Socioeconomic Profile of the Sub-Project Area. The form will be filled during interviewing the notables or community / area representatives of the target area and general observations of the enumerator.

A. SOCIO-ECONOMIC PROFILE OF HOUSEHOLDS		
1. Estimated no. of houses in the Sub-project area:	8923	
2. Housing structure	<input checked="" type="checkbox"/> houses <input type="checkbox"/> Semi-pacca houses _____ <input type="checkbox"/> Kutcha Houses / Informal Settlement _____ <input checked="" type="checkbox"/> Multi Story Buildings 287 <input type="checkbox"/> Thatched Structures _____ <input type="checkbox"/> Others _____	
3. Estimated Households size:	6	
4. Estimated Population: (Household size x No. of houses/flats)	53,538	
5. Average Household Income:	18,000 to 50,000	
6. Ownership Status of Households:	Owners	
7. General Source of Income and Livelihoods:	Private jobs, Business, Agriculture and Government jobs	
8. Culture and Languages:	Language	Muhajirs, kutchis, Sindhis, Punjabis, Kashmiris, Seraikis, Pakhtuns, Balochis, and Memons, etc.
	Religion	Muslims, Hindu, Christian
	Caste	Khaskheli, Sama, Ansari, Rajput, Sodha, Patni, Paryat, etc.
	Ethnicity	i) Sindhis, ii) Punjabis iii) Muhajir iv) Kashmiris v) Seraikis vi) Pakhtuns

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



vii) Balochis

B. PROFILE OF BUSINESSES IN THE AREA

<p>9. Type of Businesses:</p>		Mobile Shop	Grocery Stores	Vegetable shops
		Chicken/Meat Shops	Auto Mechanic shops	Juices Shop
		Private clinic	Fast food shops	Book & Stationary Shops
		Private Schools	Private Clinics	Mobile Repair Shop
		Electronic Market	Banks	
<p>10. Average Income of the Shopkeepers / Business owners (Range can be given)</p>		50,000 to 150,000		
<p>11. Average no. of employees in small businesses</p>		1 to 2		
<p>12. Average no. of employees in large scale businesses</p>		3- 5		
<p>13. Types and Number of Unregistered Street Vendors in the sub-project site.</p>		Fruit carts, pan carts, vegetable carts, biryani carts and pan carts .		
<p>14. Types and Number of Unregistered / Registered Daily Waged Earners in the sub-project site.</p>		Laborers		
C. INFRASTRUCTURE PROFILE				
<p>15. Civic Amenity Infrastructure in the Sub-project Area:</p>		<input type="checkbox"/> Truck / bus terminals No	<input type="checkbox"/> Railway tracks No	
		<input checked="" type="checkbox"/> Gas pipelines Underground connection	<input checked="" type="checkbox"/> Telephone lines Yes	
		<input checked="" type="checkbox"/> Electricity Transmission Lines Overhead	<input checked="" type="checkbox"/> Telephone Towers Yes	
		<input checked="" type="checkbox"/> Tube wells Yes	<input type="checkbox"/> KWSB or MC /Other disposal stations KWSB Underground line	
		<input checked="" type="checkbox"/> Sewerage system Yes	<input type="checkbox"/> Drains (open/closed) Closed	
		<input type="checkbox"/> Storm water drains No	<input type="checkbox"/> Hand Pumps No	

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



	<input checked="" type="checkbox"/> Waste Containers Yes	<input checked="" type="checkbox"/> Waste Bins Yes
	<input type="checkbox"/> Others _____	
16. Other Infrastructure in the Sub-project Area:	<input type="checkbox"/> Banks Yes	<input checked="" type="checkbox"/> Markets Yes
	<input type="checkbox"/> Parking Plazas No	<input type="checkbox"/> Shopping Plazas / Malls No
	<input type="checkbox"/> Community Based Parking Areas No	<input checked="" type="checkbox"/> Shops Yes
	<input checked="" type="checkbox"/> Hospitals Yes 03	<input checked="" type="checkbox"/> Educational Institutes Yes There are about 17 educational institutes within the sub-project area including; 07 Government, 08 Private and 02 institutes (private)
	<input checked="" type="checkbox"/> Pharmacies 01	<input checked="" type="checkbox"/> Grocery Stores
	<input checked="" type="checkbox"/> Food Stalls / Kiosks	<input checked="" type="checkbox"/> Hotels / Motels
	<input checked="" type="checkbox"/> Restaurants	<input checked="" type="checkbox"/> Cafeterias
	<input checked="" type="checkbox"/> Parlors	<input checked="" type="checkbox"/> Parks / Gardens
	<input checked="" type="checkbox"/> Community Halls	<input type="checkbox"/> Marriage Halls No
	<input type="checkbox"/> Sports Complex No	<input checked="" type="checkbox"/> Bakeries
	<input type="checkbox"/> Theaters / Cinemas No	<input type="checkbox"/> Nurseries No
		<input type="checkbox"/> Others _____ <p style="text-align: center;">No any</p>
17. Status of Basic Social Amenities enlisted here;		
(i) Electricity	<input checked="" type="checkbox"/> Satisfactory	<input type="checkbox"/> Non-Satisfactory
(ii) Sui Gas	<input checked="" type="checkbox"/> Satisfactory	<input type="checkbox"/> Non-Satisfactory
(iii) Water Supply	<input type="checkbox"/> Satisfactory	<input checked="" type="checkbox"/> Non-Satisfactory
(iv) Telephone	<input checked="" type="checkbox"/> Satisfactory	<input type="checkbox"/> Non-Satisfactory
(v) Sewerage/Drainage	<input type="checkbox"/> Satisfactory	<input checked="" type="checkbox"/> Non-Satisfactory
(vi) BHU/Women Health care Centers	<input checked="" type="checkbox"/> Satisfactory	<input type="checkbox"/> Non-Satisfactory
(vii) School	<input checked="" type="checkbox"/> Satisfactory	<input type="checkbox"/> Non-Satisfactory
(viii) Any Other	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Non-Satisfactory

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



C1. Physical Cultural/Archeological Resources				
18. Cultural/Religious/Archeological Sites	Status	Name	No. of visitors	
Mosques	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 33			
Shrines	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No No _____			
Churches	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No. 01			
Temples	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No _____			
Forts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No _____			
Historical Monuments	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No _____			
Graveyards	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No No.3 Lalshah Graveyard Jalban Graveyard Dilbot Goth Graveyard	<input checked="" type="checkbox"/> Muslims <input type="checkbox"/> Christians <input type="checkbox"/> Non-Muslims <input type="checkbox"/> Others		
C2. Healthcare Facilities				
19. Type and Number of Healthcare facility	<input checked="" type="checkbox"/> Hospitals No. 2	<input type="checkbox"/> Dispensaries No.		
	<input checked="" type="checkbox"/> Clinics No.1	<input type="checkbox"/> Health care units No.		
	<input checked="" type="checkbox"/> Pharmacies No.1	<input type="checkbox"/> Others		
C3. Educational Institutes				
20. Type of Educational Institute	Name of School / College / University / Vocational Training Institute	Public / Private	Estimated No of Students (M/F)	Opening & Closing Time
	Nai Roshni School (Government)	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Girls & Boys School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Ayesha Boys Secondary School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Innovative Public School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Public High School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



	Government Girls Secondary School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Education Institute	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Public High School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Boys Secondary School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Girls/Boys Primary School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Korango Public School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Korangi Public School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Al Ryadh Grammar School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Al-Kamram Coaching Center Khokhrapar	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Green Peace Public High School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Girls Secondary Campus School Azamabad	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Boys/Girls Secondary School Village Sahibdad	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
C4. Offices				
21. Type and Number of Offices	Name of Offices	Public / Private	Estimated No of Employees	Opening & Closing Time

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



	Government Girls Secondary School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Education Institute	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Public High School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Boys Secondary School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Girls/Boys Primary School	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Korango Public School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Korangi Public School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Al Riyadh Grammar School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Al-Kamram Coaching Center Khokhrapar	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Green Peace Public High School	P	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Girls Secondary Campus School Azamabad	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
	Government Boys/Girls Secondary School Village Sahibdad	G	Closed due to Covid during field visit	08:00 A.M. to 01:00 P.M
C4. Offices				
21. Type and Number of Offices	Name of Offices	Public / Private	Estimated No of Employees	Opening & Closing Time

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



	Chaman Colony Road	40 vehicles / min	50 vehicles / min	70 vehicles / min	
	Babul Islam Road	20 vehicles / min	25 vehicles / min	30 vehicles / min	
	Road connecting babul Islam road to Bakra Peri Road	20 vehicles / min	25 vehicles / min	25 vehicles / min	
25. Pedestrian Volume	Location	Morning Peak Time Pedestrian Volume:	Noon Peak Time Pedestrian Volume:	Evening/Night Peak Time Pedestrian Volume:	
	Chaman Colony Road	50 Pedestrian / min	35 Pedestrian / min	15 Pedestrian / min	
	Babul Islam Road	30 Pedestrian / min	20 Pedestrian / min	20 Pedestrian / min	
	Road connecting babul Islam road to Bakra Peri Road	25 Pedestrian / min	15 Pedestrian / min	20 Pedestrian / min	
D. SOCIAL ORGANIZATIONS					
26. Categories of Social Organizations in the area and their status		No.	Name	Registered/ Unregistered	Functions
(i) Religious	34		<ol style="list-style-type: none"> 1. Jamia Masjid Hussaini o Imaam Bargagh 2. Noor Mosque 3. Ismaili Jamatkhana 4. Ali Bin Abe-Talib, Mosque - Imam Bargha 5. Madrassah Arabia 6. Church 7. Jamia Masjid Meboob e Subhani 8. Masjid Abu Bakar 9. Jamia Masjid Dar ul Taqwa 10. Malir Jamat Khana 11. Mustafa Masjid 12. Jamia Tul Madina 13. Kutchi Muslim Sanghaar Jamaat 14. Ghosia Masjid Khokhrapar 15. Sanghaar Jamat Malir Branch 16. Jamia Masjid Firdous 17. Jamia Masjid Momin 18. Momin Masjid 19. Jamaia Masjid Wazir Begham 20. Iqra Quran Academy 21. Masjid Fayyaz 22. Jamia Masjid Ameer Hamza 	Registered	Functional

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Karachi Neighborhood Improvement Project (KNIP)



	<input type="checkbox"/> Land Lord / Lumber Dar	
	<input type="checkbox"/> School Teacher	
	<input type="checkbox"/> Community Leader	
	<input type="checkbox"/> Government Official	
	<input type="checkbox"/> Retd. Government Official	
	<input type="checkbox"/> Head of Tribe	
	<input type="checkbox"/> Any other (specify)	
28. Were their decisions considered final and implemented successfully?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
(i) Level of acceptability	Percentage 80%	
(ii) Successful implementation	Percentage 70%	
29. Are the general relationships among people in the locality essentially based upon?	<input type="checkbox"/> Competition	<input type="checkbox"/> Conflict
	<input checked="" type="checkbox"/> Co-operation	<input type="checkbox"/> Don't Know

Signature of Enumerator

Date: _____

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Annex V – Environmental Baseline Data Collection Form

Location: UC: Union Council 5 and 12 of District Malir, Karachi Division

Project name: REDEVELOPMENT OF NEIGHBORHOOD ROADS AND UPGRADATION OF OPEN SPACES INCLUDING GROUNDS AND PARKS IN MALIR CLUSTER

Sub component:

1. The rehabilitation and up-gradation of 04 existing parks and 3 grounds.
 - KHOKHARAPAR A AREA PARK (ABSHAR PARK)
 - MADINA PARK
 - YOUNGS FOOTBALL GROUND
 - FRIENDS CRICKET GROUND
 - SHAHEEN PARK
 - SHAHEED MUHAMMAD KHASHKELI PARK AND LIBRARY
 - PIR MEHFOOZ FOOTBALL GROUND
2. 01 Library
3. The rehabilitation and up-gradation of neighborhood roads

Name & designation of assessor: Israr Hussain

Date: July 15, 2021

Details of Significant Aspects relevant for Assessment		Remarks		Observations
		Yes	No	
PHYSICAL ENVIRONMENT				
SOIL	Soil quality		X	
	Soil erosion	X		During the rehabilitation of the road, parks and grounds, Soil erosion may be caused by the exposure of soil surfaces to rain and wind during site clearing, earth moving.
	Soil type <ul style="list-style-type: none"> • Fertile • Non-fertile 			Non-fertile mostly except for small patch of fertile land
	Soil characteristics <ul style="list-style-type: none"> • Sand • Clay • Silt 			Sand, Sandy Gravel and Silty Clay

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Details of Significant Aspects relevant for Assessment		Remarks		Observations
		Yes	No	
	<ul style="list-style-type: none"> Gravel 			
WATER	Water Availability			The drinking water source available in the area is piped water supplied by KWSB.
	Surface water quality			There is Thadho tributary of Malir River running east of the sub-project area. Malir River is a seasonal river located in Karachi. It passes through the city of Karachi from the northeast, through the center, and drains into the Arabian Sea. It has two main tributaries, the Thadho and the Sukhan. In the rainy season, this river experiences heavy water flow, emptying into the Arabian Sea. The sub-project interventions are not likely to affect Malir River and its distributaries.
	Ground water quality			Ground water is available and is marginally sweet and used both for drinking and agriculture purpose.
	Drinking water quality			Marginally Sweet
	Water collection system			Under and overhead tanks. Underground Piped network, tube wells
	Water supply system			Available
	Water harvesting facilities			No
	Waterlogging			No
	Water pollution <ul style="list-style-type: none"> Industrial Agricultural 			Domestic

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Details of Significant Aspects relevant for Assessment		Remarks		Observations
		Yes	No	
	<ul style="list-style-type: none"> • Domestic • Any other 			
	Water table depth			30-35 ft.
AIR	Air pollution sources a. Burning of waste b. Traffic Emissions c. Industrial Emissions d. Road Dust e. Any Other			Traffic Road dust
SOLID WASTE	Types of solid waste			Food waste, plastic bottles, trash or garbage
	Amount of solid waste to be generated(0.44kg per capita)			About 24.8 tons/day of solid waste is generated from the area of Malir Cluster as per SSWMB staff which mainly include organic waste, plastic bottles, trash/garbage, etc. Internal streets are filled with garbage.
	Which body is responsible for waste collection & transportation			The Sindh Solid Waste Management Board is responsible for the collection and disposal of solid waste. The solid waste is mostly dumped at a Temporary Garbage Station (TGS) for Malir Cluster at Sharafi Village, which is about 3.5 km away from sub-project area.
	Waste disposal (location & area)			Waste drums are available at different locations
CLIMATE	Temperature			The mean monthly maximum temperature in Karachi ranged between 24.3°C and 39.9°C during the 2001-2020 periods, while the mean monthly minimum temperature ranged between 9.9°C and 29.8°C.
	Wind direction			The wind direction and speed between summer and winter monsoon seasons

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Details of Significant Aspects relevant for Assessment		Remarks		Observations
		Yes	No	
				are rather unsettled and large variations are noted both with respect to speed and direction. The past twenty years' data of wind velocity (2001-2020) indicates that the average monthly wind velocity varies and ranges between 1.0 m/s to 13.7 m/s.
	Relative humidity			The relative humidity typically ranges from 25% (dry) to 70% (humid) over the course of a year, rarely dropping below 20% (very dry) and reaching as high as 90% (very humid).
	Annual rainfall			The main source of precipitation is rainfall which is received mostly in the months of July to September due to South West Monsoon winds. It is very erratic as some years are very dry and there is no rain. The maximum rainfall in Karachi recorded during month of August is 366.8 mm.
BIOLOGICAL ENVIRONMENT				
FLORA – Site Specific	a. Trees (number & types)	Yes		The number of available plants in the sub-project is about 376 within the proposed sites of the sub-project area. The species observed during enlisting of flora and fauna activity.
	b. Shrubs			No
	c. Grass			No
	d. Crops			No
	h. Endangered species			No
	i. Native species			<i>Azadirachta indica, Cocos nucifera L., Zizyphus mauritiana Lam, Ficus religiosa, Bougainvillea glabra and Syzygium cumini Skeels.</i>

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Details of Significant Aspects relevant for Assessment		Remarks		Observations
		Yes	No	
FAUNA – Site Specific	a. Birds			The birds common to the area are Black myna (<i>Acridotheres javanicus</i>), Black crowned Finch Lark (<i>Eremopterix nigreiceps</i>), Black Drongo / King Crow (<i>Dicrurus macrocercus</i>), Black Kite (<i>Milvus migrans</i>), Collared Dove (<i>Streptopelia decaocto</i>), House Crow (<i>Corvus splendens</i>), House Sparrow (<i>Passer domesticus</i>), Indian Myna/Common Myna (<i>Acridotheres tristis</i>) Little Green Bee-eater (<i>Merops orientalis</i>), Red vented Bulbul (<i>Acrocephalus Agricola</i>) and White-cheeked Bulbul (<i>Pycnonotus leucogenys</i>).
	b. Land animals, including reptiles			Striped palm squirrel (<i>Funambulus pennantii</i>), Indian gerbil (<i>Tatera indica</i>), House mouse (<i>Mus musculus</i>), Little Indian field mouse (<i>Mus booduga</i>) and Small Indian mongoose (<i>Herpestes auropunctatus</i>).
	e. Insects			
	f. Domestic			Dogs and cats
	h. Endangered species			No any
ECOSYSTEM – Site Specific	a. Habitat			
	b. Wetlands			No any wetland within the sub-project area.
	c. Mangroves			No any Mangroves within the sub-project area.
	d. Forest			No
	e. Estuaries			No

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Details of Significant Aspects relevant for Assessment		Remarks		Observations
		Yes	No	
	f. Protected Area or its buffer			No
	g. Sensitive ecosystem			No
SOCIAL ENVIRONMENT				
LAND USE	a. Dumping Site			No
	b. Forestry			No
	c. Grazing			No
	d. Agriculture / Horticulture			No
	e. Residential			Mix of Residential and commercial area
	f. Commercial			Yes
	g. Any Other			No
WATER & SANITATION	Existing Sewerage system • Open drain • Closed			Yes One open drain in the sub-project area name is Thado Nalo
	Mode of Defecation			Underground
	Existence of water supply line			Yes
	Filtration Plants/ Water Storage			Yes
	Final disposal of waste water			To Sea
RECREATION	Any Recreational Site			No
HISTORICAL	Any Cultural/historical/archaeological site			No
Natural Hazards	• Cyclones • Earthquake • Floods			No

Redevelopment of Neighborhood Roads and Upgradation of Open Spaces including Playgrounds and Parks in Malir Cluster

Details of Significant Aspects relevant for Assessment		Remarks		Observations
		Yes	No	
	<ul style="list-style-type: none"> • Droughts • Heat Waves • Any Other 			
Health	<ul style="list-style-type: none"> • Water borne diseases • Infectious • Vector • If any 			No

Additional Remarks/ Observations

N/A

Signature of Enumerator

Date: July, 15 2021