



Capital Development Authority (CDA)

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ENVIRONMENTAL IMPACT ASSESSMENT REPORT

Construction of Service Road (South) Blue Area from 9th Avenue to
F-10 Roundabout, Islamabad

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EXECUTIVE SUMMARY

The Capital Development Authority (CDA) as custodians of the capital is responsible for planning, development and maintenance of the city. CDA is planning according to vision of government to development of blue area on international standards as auction of commercial plots is going to be help on 14 to 16 April 2020, therefore the basic infrastructure needs to be developed of this area in order to facilitate general public as well as get attention of international and national business community. By keeping in view all the existing scenarios going to be help on ground later, Capital Development Authority (CDA) is going to construct service road (south) for the use of general public and future inhabitants of commercial building to be constructed in blue area. The road is being constructed in connection with development of G-9/F-9 portion of the Blue Area.

The overall objective of Environmental Impact Assessment (EIA) is to assess the environmental impacts arising from the project. The specific objectives of the EIA study of construction of service road (south) Blue area from 9th avenue to F-10 roundabout, Islamabad.

- Collection and synchronization of data related to physical, biological and socioeconomic environments of the project area and to prepare baseline environmental profile
- Identification, prediction and evaluation of environmental impacts of the proposed project
- Implementation of mitigation measures to minimize the adverse impacts
- Preparation of an Environmental Management and Monitoring Plan.

EIA is mandatory according to the Pakistan Environmental Protection Act (PEPA-1997), section 12 (1) of which states that:

“No proponent of a project shall commence construction or operation unless he has filed with the Federal Agency an initial environmental examination or, where the project is likely to cause an adverse environmental effect, an environmental impact assessment, and has obtained from the Federal Agency approval in respect thereof.”

This report will be submitted to “Pakistan Environmental Protection Agency (Pak-EPA)” for approval. After the approval of this Report, the Project Proponent and the Contractor will be bound to follow the conditions of approval of the EIA report during the execution of engineering activities on the site.

The Consultancy Agreement in terms of Environmental Impact Assessment includes the following:

- Collection of relevant data to establish baseline environmental conditions and an objective assessment of the impacts resulting from project activities covering all environmentally sensitive functions and activities.
- Conduct studies on all relevant environmental aspects (social, economic, cultural, physical and ecological) of the project.
- Determine potential impacts and identify mitigating measures to minimize the risk.
- Determine the requirements of an environmental management plan specifying mitigation measures for dealing with significant effects.

“All studies to be conducted in accordance with the EIA Guidelines for Transport Sector Pakistan issued by Pak-EPA, the guidelines of the major ISO Standards; and within the guidelines of the Land Acquisition Act, the Environmental Protection Act and the National and Provincial Conservation Strategy of Pakistan.”

The road is being constructed in connection with development of G-9/F-9 portion of the Blue Area. The service road will particularly facilitate the developers who will be starting their construction projects in the area after acquiring commercial plots. The construction of Service Road (South) Blue Area from 9th Avenue to F-10 Roundabout is part of comprehensive development of New Blue Area in line with policy of the government to promote construction industry.

The project is aimed to develop New Blue Area in accordance with the master plan of Islamabad City. The major components which will be covered under this project include construction of road work, drainage, footpaths, protection and retaining works, culverts, water supply, sewerage system, landscaping works, electrification works and provision of other allied facilities and the detail of road x-section is as under:

1	Total Length of Project	1.98KM
2	Total Cost of Project	243.9 Million
3	Width of Road	80 feet
4	Division of Road Width	<ul style="list-style-type: none"> • 22 feet Road • 19 feet parking on both side • 6 feet green area • 14 feet footpath
5	Culverts	<ul style="list-style-type: none"> • 01 Single cell • 01 Four cell

Capital Development Authority (CDA) has planned construction of remaining portion of service road (south) Blue area from 9th avenue to F-10 roundabout, Islamabad. The project is expected to benefit/facilitate inhabitants of commercial building Implementation of the project is envisaged to have the following objectives:

- To provide safe/friendly environment to road users and uninterrupted traffic flow.
- To develop basic infrastructure like roads, parking, footpath and drainage system according to development plan of CDA in the Capital City.
- To provide basic facilities to blue area plots which will be auctioned for high rise buildings, commercial centers in near future according to Government vision/policy.
- To provide safe car parking without disturbance of road traffic

Following Works will be completed in construction phase of the project.

- Road Work
- Footpath
- Drainage Work
- 2 RCC Box Culverts (1 Single Cell and 1 Four Cell)
- Protection Work
- Signage Work ,Lane Marking ETC

Islamabad is located at the edge of the Pothohar Plateau at the foot of the Margalla Hills. Its elevation is 507 meters (1,663 ft). In the extreme north, the hills rise more steeply. The highest point is 1600 meters above the sea level. Most of the Margalla range in the North West is composed of hill series belonging to the Eocene division of the tertiary period and are about 60 million years old. The proposed alignment falls in humid subtropical region with long and hot summers but short, mild and wet winters with annual rainfall up to 1000 mm. The land use changes from mild slope and highly urbanization conditions. The proposed alignment crosses the two Nullah one is single cell seasonal Nullah and other one is four cell perennial Nullah, carrying flood water from upland areas of Margalla hills and small streams etc.

Accordingly site investigation was carried out by digging three (03) No pits at different location within project alignment up to 10 ft. depth. Soil samples from pits were collected for analysis in CE laboratory. Results of these soil sample reveal that the soil underneath is of gravelly nature and is suitable after 5th depth, detail can be seen in Annex-4.

Environmental monitoring of project area has been conducted for four days in the month of March, 2021 on the basis of 24 hours study. The ground survey for sample collection has been made before mobilization of monitoring team. Environmental Services Pakistan has been engaged for this purpose. The scope that was included in monitoring of environment was collection and analysis of surface water ground water, monitoring noise level, ambient air and meteorological parameters.

The proposed service road started from the 9th Avenue and end near F-10 round about. The area is plain, having both natural and planted vegetation. The dominated planted vegetation included *Pinus roxburgii* (Cheer) whereas the dominant natural vegetation includes *Shisham* (*Dalbergia sisso*) and *Drek*. The floral diversity was divided into two main categories herbs and trees.

In the study area 6 herb species are found in the study area of proposed service road (South). The area is covered with different type of grasses and is unevenly distributed along the study area. Besides the above-mentioned tree species, *Jungi sehtoot* is also found on the study area. Besides natural vegetation, *Shuk chain* was also planted near the F-10 round about.

There are two Nullahs present along the proposed alignment. One Nullah is seasonal and other is perennial. No fish and amphibian were found in the Nullah as it contains wastewater from the adjacent areas

At the right side of the proposed alignment road, 15 seedling and sapling of the native species will be shifted in the new plantation row no will be cut down. From the left side of proposed service road, 10 tree will be cut down and approximately 20 seedling and sapling will be shifted in new plantation row. The total 10 trees will be affected due to proposed alignment of service road.

The particular process resolves around highlighting and listing down of individuals and groups who are associated or involved in the development of the project. The involvement of specific individuals and groups are considered as project stakeholders. The project stakeholders have direct or indirect link to the project and play significant role in the progress of the project. It is necessary to identify and categories various stakeholder as they are the ones who would likely to be affected by the development of the project. The sample size of stakeholder population taken in account as significant and sufficient for service road south was within the 100 meter radius from

the right of way. However, the field area visited had commercial/residential apartment's booking offices as encroachments and land acquisition as well resettlement does not apply, since the land is legally acquired part of capital development authority. Whereas, there is unanimous/undisputed understanding for the removal of encroached booking offices as soon the development of project is initiated. Nevertheless, the classification or categorization of stakeholder for the design of EIA is the following:

- **Non-Institutional Stakeholders:** Personals and community members located in the study area, the stakeholder identified during field activities belong from various background and domain such as nearby local resident, apartment owners, cricket sports ground players, pedestrians, traffic users which represent at large the general public.
- **Institutional Stakeholder:** The officials from government organization and non- governmental organization playing their due role to execute and provide their input in the development project. Institutional stakeholders identified and consulted for their valuable insights were associated from different government bodies such as community welfare Centre G9/2, Capital Development Authority environment wing, West Fatimah Jinnah Park Manager and a masjid/madrasah near the project site was taken as institution stakeholder.

There are two (02) types of Project corridors which have been used for the environmental baseline information, impacts assessment and mitigation purposes and is described briefly as under:

a) Corridor of Impact 1 (COI- 1)

Right of Way (ROW) is the corridor where direct impacts due to the construction of the proposed project are envisaged. ROW of the proposed project is 24 m which will be considered as COI-1.

b) Corridor of Impact 2 (COI-2)

The limit for COI- 2 for the proposed project is taken as 100 m on either side of the proposed service road for collection of baseline information, impacts assessment and mitigation measures of physical, ecological as well as social resources.

The adverse environmental impacts anticipated from the development of service road (1.98 km) include the following:

- Change in land use, especially the removal of green belt.
- Cutting of trees that fall within formation width that may reduce the minor ecological balance of the area.
- Noise, air and water pollution and disposal of construction waste, during construction, will cause nominal impact on both general public traveling along the Jinnah Avenue, Ibn - e Sina Road and residents residing in nearby communities. These latter effects, however, should be only temporary and reversible.
- Construction of culverts may enhance land use disturbance and reduce the micro level ecological balance of the area. Construction may also disturb the habitation of fauna coming to this area. These should, however, be only temporary/reversible effects.

Structures or places which are in close proximity of the proposed alignment and which can get influenced due to the construction or operation of the proposed project which is considered environmentally sensitive. These sensitive receptors are mentioned here:

Surface Water Bodies:

- Single Cell Nullah (33° 41' 28.5" N, 73° 1' 16.43" E)
- Four Cell Nullah (33° 41' 44.91" N, 73° 1' 47.6" E)

Sensitive Receptors within 100 m of ROW:

- Madrassa (33°41'43.5" N, 73°01'54.1" E)
- High rise buildings and commercial centers

Public Utilities within ROW:

- Tube Well
- Electric Pole (01 No.)

Environmental Management includes allocation of resources for mitigation of any potential environmental impact that may be caused due to the implementation of the project. For effective management of the environmental impacts identified in this EIA Report, a comprehensive Environmental Management Plan (EMP) is prepared and where required; to be followed during design, construction and operation phases of project. The objective of the EMP is to provide framework for the implementation of the proposed mitigation measures during all the three phases of the proposed project.

The proper implementation of the EMP will ensure that all the adverse environmental impacts identified in the EIA are adequately mitigated, either totally prevented or minimized to an acceptable level and required actions to achieve those objectives are successfully taken by the concerned institutions or regulatory agencies. The implementation of EMP should be carefully coordinated with the design and construction phase of the project to ensure that relevant mitigation measures are implemented at the appropriate stage and adequate resources are properly allocated to achieve the desired results.

For effective environmental management, Environmental Directorate of Capital Development Authority (CDA) should assign the necessary responsibilities to an Environmental Engineer (EE) and his team from design to operational phase. Thus, Environmental Engineer should be responsible for implementation of the EMP and environmental monitoring of the proposed project. The contractor will be responsible for the implementation of the proposed project under the supervision of the proponent. The contractor should be bound to follow the provisions of the contract documents especially about environmental and safety protection by applying good construction techniques and methodology without damaging the environment.

The overall goal of the environmental impact study (EIA) consisted of key features to achieve the project's set goals. The focus was to conduct a study on a new proposed road alignment and compare the results with standard parameters in order to overcome any obstacles or barriers to its rapid and expeditious development.

The methodology adopted to validate EIA study consisted of detailed field surveys, identification of impacts and mitigation of their adverse effects. Furthermore, to reduce and limit impacts, verification and assessment steps were executed and projected throughout the study. Moreover, the project service road south was carried out with support and collaboration of Capital Development Authority (CDA) as well, relevant concerned departments/officials. The valuable support acquired and provided through officials was the visit of Service Road south alignment and collection of data. However, the Environmental Impact Assessment (EIA) study over the project alignment of 1.98 KM demonstrates and indicates no major constraints exist, which can have adverse impact on natural, physical and social environment. Potential probability of impact or concerns is listed as following:

- The project route alignment does not fall within any environmentally sensitive, protected area, or biological corridor of the country.
- Potential Impacts on water quality, air pollution and disturbance to households due to noise, dust & air pollutants emanating from vehicle/machineries movements are mostly associated with construction activities and would affect the environment. The impacts are temporary in nature and can be managed and mitigated.