Program Safeguard Systems Assessment

Project Number: 55307-001
March 2023

Bangladesh: Improving Urban Governance and Infrastructure Program

I. PROGRAM SAFEGUARD SYSTEMS ASSESSMENT

A. Program Environmental and Social Impacts and Risks

1. The Improving Urban Governance and Infrastructure Program (IUGIP) under the Result Based Lending (RBL) modality will improve infrastructure facilities such as drains, roads, streetlights, low-income neighborhoods improvement (footpaths, drains, streetlights, tube wells, dustbins and community toilets), market centers and parks in selected 86 *Pourashavas*.

2. **Environment Impacts and Risks.** Due diligence conducted during program safeguard systems assessment (PSSA) in five sample program towns[1] indicates that the RBL Program activities are unlikely to have significant adverse impacts. Potential impacts are mainly related to construction and are short-term, localized and can be mitigated with good construction practices and measures. This is because the proposed RBL program activities are of small scale and located in and around urban areas. Program towns are characterized with centrally dense localities with narrow roads and medium to low dense outer areas. There are trees along the wider and outer roads, and water bodies (canals, rivers/streams and fishponds, etc.) that may be impacted. Groundwater, especially shallow waters, is contaminated with arsenic in several areas. Potential location/design impacts may arise from: tree cutting, disturbance to natural drainage, use of shallow groundwater as the water source, and potential groundwater contamination from seepage of toilets. Discharge of wastewater into storm water drains will degrade the water quality of receiving water bodies, affecting their usage, if any, and shall be prevented. Proper planning and design can avoid these impacts. Dismantling existing buildings/ market blocks to build new market centers shall ensure no damage to structures, if any, with heritage value. There is always a potential risk of dismantling asbestos-containing materials (ACMs) if such materials are present in existing buildings. Risk screening and measures need to be undertaken to mitigate risks if any. Any structures with religious activities shall be avoided or impact mitigated in prior consultation with affected communities. Availability of proper approach roads to new market centers shall be ensured to avoid traffic congestion during operation.

3. Roads, footpaths and drain works will be conducted along existing public road rights of way. Central roads are congested with people, activities and traffic. Other works will be confined to selected sites. Construction works likely to have adverse but temporary impacts arising mainly from: dust and noise; access impediment to residents, businesses, and utilities; traffic due to construction work; health and safety risks to workers, public and nearby buildings; drainage disruption and accumulation of water in trenches; disposal of construction debris/waste; increased traffic on local roads; soil erosion and silting of water bodies; and health and safety issues due to labor camps, including coronavirus disease risks. Although there are underground asbestos cement pipes, the risk of encountering them is negligible, and RBL program activities will avoid any disturbance to asbestos cement pipes. With proper design and construction, the infrastructure and facilities should operate with routine maintenance. However, substandard operation and maintenance of water supply, drains and toilets etc., may have health and environmental pollution risks. Solar panels in streetlights after their useful life shall be returned for recycling to avoid adverse impacts of improper disposal.

4. The RBL Program is category B for environment per Asian Development Bank Safeguards Policy Statement (ADB SPS). Activities that may have significant adverse impacts that are irreversible, diverse or unprecedented, and classified as category A for environment or category

[1] Chowmohoni, Rouzan, Araihazar, Naohata and Keshabpur

'Red' per the Government of Bangladesh's Environmental Conservation Rules 1997.[2] Environmentally sensitive locations will be avoided in implementing the program. A screening checklist to exclude such activities and locations is given in Appendix 1. Proposed program activities and baseline features of the proposed sites of sample towns are in Appendix 2.

5. **Involuntary resettlement**. The roads and drains will be constructed within the rights of way (ROW) of *Pourashava* roads, and low-income neighborhoods improvement works, markets and parks will be undertaken on *Pourashava* land. Initial assessment indicates that there will be no land acquisition, or physical displacement or permanent economic displacement of any individual, household, or community.[3] The program will screen the project activities triggering involuntary resettlement impacts in each *Pourashava*. No activities shall be permitted that may fall into category A for involuntary resettlement, as per ADB SPS. Screening checklist to exclude category A activities is given in Appendix 1. The program is classified as a category B for involuntary resettlement.[4] The impact will be assessed and confirmed for each proposed component based on final detailed design.

6. **Tribes, Minor Races, Ethnic Sects and Communities (TMRESC).** According to Bangladesh Bureau of Statistics 2011 census data, in 37 of 86 *pourashavas* under RBL program, the TMRESC constitute less than 1% (3,693) of total population 1,458,990 in all but two *Pourashavas* - Banskhali (3.91%) and Naohata (1.57%)**.** However, the TMRESC population is scattered around the *Pourashavas* (does not stay in cohesive TMRES communities or groups) in all most all the *pourashavas* and is well assimilated in urban society. The exceptions are Naohata and Banskhali *pourashavas,* where TMRESC live in small groups. *Pourashava* wise list of TMRESC population is given in Environmental and Social Management Framework (ESMF)**.** The project will have beneficial impact on the TMRES communities or groups hence, it is classified as Category B for Indigenous Peoples' safeguards. The program will screen the project activities for indigenous peoples impacts in each *Pourashava*. No activities shall be permitted that may fall into category A for indigenous peoples, as per ADB SPS.

B. Safeguard Policy Principles Triggered

7. The environmental, involuntary resettlement and indigenous peoples' safeguards principles likely to be triggered due to the RBL program activities are given in Table 1. Summary of Government of Bangladesh environmental and social regulatory framework and a comparative analysis with ADB policy principles is presented in Appendix 3. The program will screen out any high-risk activity that may fall under category A for environment, involuntary resettlement and indigenous peoples as defined in ADB SPS, 2009.

Table 1: Safeguard Policy Principles Triggered

Principles*	Description
Environment	

[2] According to ADB 2009, *Safeguard Policy Statement*, a proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required.

[3] Among the five sample Pourashavas assessed, temporary income loss to road-side shop owners is assessed in one Pourashava (Chowmohoni).

[4] According to ADB Safeguard Policy Statement 2009, a proposed project is classified as category A if it causes physical displacement or loss of 10% or more of productive, income-generating assets to 200 or more persons. Program activities are Category B if involuntary resettlement impacts are not deemed significant. The screening checklist for the program is attached in Appendix 4 of ESMF. When involuntary resettlement impacts are unavoidable resettlement plan will be prepared.

Principles*	Description
Principle 1: project screening process	**Triggered**. Potential environmental impacts of proposed RBL activities are likely to be minimal, Screening will be undertaken to exclude following activities: (i) classified as Category A under ADB SPS, and (ii) those classified as 'Red' category and requiring EIA study under Government of Bangladesh ECR 1997. A screening form, combining both ADB and ECR requirements, will be introduced.
Principle 2: Conduct of environmental assessment	**Triggered.** The environmental impacts of RBL activities during construction and operation needs to be assessed through conduct of environmental assessment. Per ECR 1997, some RBL activities fall under Orange-B category, requiring an IEE, and others do not attract ECR 1997, therefore, do not need IEE or EIA. A process/framework will be introduced so that all RBL activities go through environmental assessment, commensurate with potential risks.
Principle 3: Examine alternatives to the project	**Triggered.** RBL activities are simple and straight forward with minimal impacts. Examination of alternatives will further reduce the impacts in aspects like avoiding locations with trees, water bodies, arsenic contaminated water as water source, etc.,
Principle 4: Avoid, minimize, mitigate, and/or offset adverse impacts	**Triggered.** Program activities will require mitigation measures to address environmental impacts. EMP will be required as part of the IEE. EMP will need to clarify implementation arrangements and costs.
Principle 5: Carry out meaningful consultation	**Triggered.** Consultations will be required with the affected persons and stakeholders during the project preparation and implementation. Public feedback and grievance redress system is crucial for avoiding / reducing inconveniences and health and safety risks during construction.
Principle 6: Disclose a draft environmental assessment (including the EMP)	**Triggered.** Disclosure of documents is required to update the affected people and stakeholders on the proposed RBL activities, likely impacts, and mitigation and monitoring measures, and implementation arrangements. PSSA, IEEs, including EMPs, and monitoring reports during implementation will be disclosed.
Principle 7: Implement EMP and monitor its effectiveness	**Triggered.** Implementation of EMPs and monitoring effectiveness, reporting and disclosure is needed. Contractors will implement the EMPs, and LGED will monitor, report and disclose. Budget to implement EMP will be included in the project cost.
Principle 8: Avoidance of critical habitats	**Not Triggered.** The RBL program activities will be mostly confined to urban areas. No activities will be located in or near critical habitats**.**
Principle 9: Apply pollution prevention and control technologies and practices	**Triggered.** Given the small scale of construction activities, the potential for pollution is minimal, and is mostly confined to construction phase environment, health and safety impacts. RBL activities will need to be implemented applying government pollution control and EHS requirements, and World Bank Group's EHS guidelines. RBL activities unlikely to use or generate any notable hazardous materials or waste.
Principle 10: Workers' health and safety	**Triggered.** RBL activities involve construction and operation of infrastructure. Health and safety risks are inherent to civil works, both to workers, and surrounding community, especially since the works will be conducted in public areas.

Principles*	Description
Principle 11: Conserve physical cultural resources	**Triggered.** RBL program activities will not be implemented in or close to archeologically, historically sensitive sites. There may however be local religious/cultural places within the town and along the roads where infrastructure will be located. Necessary measures avoid any impacts, including chance-find procedures will be included in EMPs
Involuntary resettlement	
Principle 1: Project screening for involuntary resettlement impacts and risks.	**Triggered.** Screening needs to be undertaken to identify and exclude any activity that might lead to significant involuntary resettlement impacts (footnote 3). Any impact related to land acquisition will be screened, and activities with significant impact will not be considered under the project. The social safeguard screening checklists have been included in the ESMF.
Principle 2: Carry out meaningful consultations and establish a grievance redress mechanism	**Triggered.** Meaningful consultations will be carried out with the affected persons and stakeholders during project preparation and implementation phase. A system of public feedback and grievance redress will be crucial for avoiding / reducing social risks and impacts.
Principle 3: Improve, or at least restore, the livelihoods of all displaced persons	**Triggered.** Temporary income loss to road-side shops/businesses during construction due to access disruption is possible. The impacts during construction period are not likely to be significant. The executing agency/implementing agency will prepare a resettlement plan and ensure that all requirements specified in the resettlement plan are fulfilled.
Principle 4: Provide physically and economically displaced persons with needed assistance	**Triggered.** Implementation of RBL program is not likely to cause physical displacement, or permanent economic displacement. The executing agency/implementing agency will ensure that temporary economic impacts and any other minor construction related impacts are appropriately assessed and compensated prior to start of civil construction works.
Principle 5: Improve the standards of living of the displaced poor and other vulnerable groups to at least national minimum standards.	**Triggered.** The vulnerable[5] persons, will be identified during census and socio-economic survey of affected persons and preparation of resettlement plan. They will be compensated in accordance with provisions defined in the resettlement plan aligned with ADB SPS 2009.
Principle 6: Transparent, consistent, and equitable manner if land acquisition is through negotiated settlement	**Triggered**. Initial assessment indicates no private land acquisition or purchase through negotiated settlement. However, for the RBL program if any potential land acquisition is required, the executing agency/implementing agency will consider acquiring land through negotiated settlement based on meaningful consultation. An independent external party will be engaged by the executing agency/implementing agency to document the negotiation and settlement processes and to ascertain that the process is coercion free.
Principle 7: Displaced persons without titles to land or any recognizable legal rights to land are eligible	**Triggered.** The RBL program will recognise both titleholders and non-titleholders and will ensure payment

[5] Vulnerable displaced persons will include the following: persons falling below poverty line, persons with disabilities, landless or without title to land, female-headed households, elderly-headed household, children including child labour and orphans, and small ethnic communities. The eligibility for elderly will follow the definition of the Department of Social Service of Ministry of Social Welfare, Government of Bangladesh that uses 65 years age for man and 62 years age for woman to define elderly people.

Principles*	Description
for resettlement assistance and compensation for loss of non-land assets.	of compensation to both title holders and non-title holders for lost assets and involuntary resettlement impacts.
Principle 8: Preparation of resettlement plan	**Triggered.** LGED will prepare resettlement plans for *pourashavas*, where involuntary resettlement impacts are assessed.
Principle 9: Disclosure of resettlement plan	**Triggered.** The resettlement plan, DDR and PSSA documents will be disclosed on the website of LGED and ADB. The documents will also be translated in local language (Bangla). The entitlement matrix and the grievance redress mechanism will be disclosed with affected persons in *pourashavas* where involuntary resettlement impacts are identified and feedback from stakeholders to be updated.
Principle 10: Execution of involuntary resettlement plan and include full costs of resettlement in the presentation of project's costs and benefits.	**Triggered.** The resettlement plans will include resettlement cost estimates as per the policy principles outlined in the resettlement plan. The executing agency/implementing agency will bear all the costs required for resettlement. The resettlement budget will be part of program cost.
Principle 11: Payment of compensation and other resettlement entitlements before physical or economic displacement.	**Triggered.** Compensation to both titleholders and non-titleholders (in line with Principle 7) affected by the RBL program will be paid before start of civil construction work. The implementation of the resettlement plan will be monitored by LGED .
Principle 12: Monitor resettlement plan implementation and disclose monitoring reports.	**Triggered.** LGED will monitor resettlement plan implementation, prepare monitoring reports and disclose.
Indigenous Peoples	
Principle 1: Project screening for Indigenous Peoples impacts.	**Triggered.** All components or activities will be screened to determine whether any Indigenous Peoples/ TMRES communities are present and affected by the RBL program.
Principle 2: Undertake a culturally appropriate and gender-sensitive social impact assessment	**Triggered.** The RBL program envisages beneficial impact for Indigenous Peoples/ TMRES in towns such as Naohata and Banskhali *pourashavas*, where TMRESC live in small groups.
Principle 3: Undertake meaningful consultations with affected Indigenous Peoples communities and establish a culturally appropriate and gender inclusive grievance mechanism	**Triggered.** For any activity or component is undertaken in *Pourashvas*, where TMRESC (Indigenous Peoples) live in a cluster or small groups, consultations will be carried out to ensure that the RBL program benefits are accessible to Indigenous Peoples/ TMRES communities in a culturally appropriate manner.
Principle 4: Broad community support for project activities	**Not Triggered.** The RBL program will not take up any activity, which may cause the commercial development of the cultural or natural resources or traditional or customary lands.
Principle 5: Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources.	**Not Triggered.** The RBL program will exclude any such activity.
Principle 6: Preparation of IPP	**Triggered.** No adverse impacts to Indigenous Peoples/TMRESC are assessed under the RBL program; only beneficial impacts are assessed on Indigenous Peoples/ TMRESC in two *pourashavas*. A combined Resettlement and TMRESC Plan will be prepared, which will include a specific action plan for consultation and participation of indigenous peoples.
Principle 7: Disclose a draft and final IPP in form and language(s) understandable to affected Indigenous Peoples communities	**Triggered.** Any Resettlement and TMRESC Plan prepared will be disclosed on LGED website and to TMRESC, in language understood by them.

Principles*	Description
Principle 8: Prepare an action plan for legal recognition of customary rights to lands and territories or ancestral domains.	**Not Triggered.** The customary rights to lands and territories or ancestral domains will not be impacted under the program.
Principle 9: Monitor implementation of the IPP and disclosure of monitoring reports.	**Triggered.** The monitoring of the Indigenous Peoples related actions and measures will be conducted during the implementation of the RBL program by LGED.

DDR = due diligence report, EIA = environmental impact assessment, IEE = initial environmental examination, EHS = environmental, health and safety, IPP = indigenous people's plan, LGED = Local Government Engineering Department, PSSA = program safeguard systems assessment, RBL = results-based lending, TMRESC = Tribes, Minor Races, Ethnic Sects and Communities.
Source: Asian Development Bank, Safeguard Policy Statement, 2009.

C. Diagnostic Assessment

1. Assessment Methodology and Resources

8. The PSSA assesses the RBL program's social and environmental management mechanism for consistency with the safeguards policy principles (environment, involuntary resettlement, and Indigenous Peoples) of ADB and the Government of Bangladesh with an aim to minimize program risks and promote sustainable development. The PSSA is prepared to adhere to ADB's SPS, 2009. The assessment is prepared following ADB's Staff Guidance for Piloting Results-Based Lending for Programs (2013) and based on findings of (i) review of existing national safeguards related legal provisions and regulatory frameworks, comparison with the ADB SPS safeguard principles (related to environment, resettlement plan and indigenous peoples) and identifying gaps; (ii) consultation with central, district, level LGED Officials, Director (Environment Clearance), Department of Environment, Honourable Member of the Parliament, Honourable Mayors, elected *Pourashava* Ward Councillors and officials of the *pourashavas*, Low-income neighborhoods Improvement Committee (SIC) members, and other relevant stakeholders at the filed level; (iii) Review of Safeguards Documents prepared by PMU with support of Project Readiness Services Consultants (PRSC) for sample *pourashavas*; and (iv) assessment of the existing grievance redress system and institutional arrangement and institutional capacity of LGED to implement the RBL program. Details of consultations conducted during PSSA are in Appendix 4.

2. Environment

9. **Policy and legal frameworks.** Bangladesh's environmental regulatory framework is principally defined by the Environmental Conservation Act (ECA),1995, and various rules and guidelines issued under this Act. Besides, there are various other acts, policies and rules that deal with specific areas like forests, wildlife, coastal areas, labor welfare, and occupational health and safety. Section 12 of the ECA, stipulates obtaining Environmental Clearance Certificate (ECC) from the Department of Environment (DOE) to establish any industrial unit or project. The Environmental Conservation Rules (ECR) issued under ECA in 1997 and amended in 2002 and 2003 provides: (i) procedures for obtaining ECC, (ii) a scheduled list of projects/industries requiring ECC grouped into 4 categories (Red, Orange B, Orange A and Green), and (iii) requirement of Environmental Impact Assessment (EIA) study for Red and Initial Environmental Examination (IEE) for Orange-B category. It lays down a two-stage process[6] with timelines. Proposed RBL activities – roads improvement and community toilets fall under Orange-B, requiring ECC, while other components of drains, low-income neighborhoods improvement, and

[6] Location clearance certificate (LCC) followed by ECC, except for Green category to which an ECC issued directly. ECR Rule 7(4) also provides for issuance of ECC directly without pre LCC if DOE deems it appropriate for any project irrespective of category.

markets and parks development do not require ECC. Salient features of regulations are presented in Appendix 3.

10. There are no legal requirements of public consultation or disclosure in ECR though there is a mention of "public opinion" in ECA 1995, amended in 2010. The EIA Guidelines for Industries, issued by DOE in February 2021, however, requires public participation, disclosure, compliance monitoring and grievance redress. Guidelines also specify requirements for scoping, alternative analysis, impacts prediction methods and tools, EIA review, occupational health and safety, and environmental management plans. ECR also lays down drinking water standards, ambient environment and activity-wise discharge/emission standards for pollutants. There are specific legislations that deal with: noise (Noise pollution (control) Rules, 2006), encroachment of water bodies (Urban open fields, gardens, natural water bodies, protection Act, 2000), occupational health, safety, labour welfare and child labour (National building code, 2006, Labor Act, 2006 (and as amended in 2013), Labor Rules, 2015, National child labor elimination policy 2010; National occupational health and safety policy, 2013 and Public procurement rule, 2008). Environment Courts Act, 2010, provides mechanism to deal with environmental complaints and offenses. To safeguard public health from arsenic-contaminated groundwater, the government enacted the National Policy for Arsenic Mitigation in 2004 and put in place definite methods to identify and monitor by Water Quality Monitoring and Surveillance Circle of the Department of Public Health Engineering as nodal agency.

11. **Institutional Capacity and Implementation Practices.** LGED, the executing agency/implementing agency for the RBL Program, has significant experience in implementing multilateral funded projects. LGED has been implementing ADB funded Urban Governance and Infrastructure Improvement Project (UGIIP) and City Region Development Project (CRDP) since 2003, and successfully completed UGIIP-1 and 2, and CRDP-1, while UGIIP-3 and CRDP-2 are under implementation. LGED demonstrated its capacity to prepare, implement, monitor, and report projects in compliance with the ADB SPS and GOB regulatory framework.[7] In its current set up, LGED established separate project management units (PMU) headed by project directors to implement UGIIP and CRDP. Since the RBL program is continuation of UGIIP, the existing PMU of UGIIP will implement RBL Program. PMU is supported by project implementation units (PIUs), established in each Pourashava, and consultants. Contractors will be appointed to build the infrastructure. LGED's district level offices will also support PIUs. Safeguards Officer (Environment) in PMU, reporting to Deputy Project Director, leads the environmental safeguards tasks and ensures the compliance with ADB SPS and regulatory framework. This position is currently vacant, and a Senior Assistant Engineer is given additional charge to handle safeguards. In each PIU, an assistant engineer, on an additional charge, is responsible for safeguards. With extensive experience in ADB funded projects, PMU staff are aware of safeguards requirements, however with no dedicated staff with expertise in environmental safeguards, PMU and PIUs mostly rely on consultants to prepare, implement, monitor and report on safeguards. Capacity to manage safeguards tasks in *pourashavas* is very limited.

12. Department of Environment (DOE) is the enforcing agency for environmental regulations. With its headquarters in Dhaka, and network of 8 divisional and 52 district offices, DOE apprises the proposals, reviews the IEEs and EIAs and issues ECC. During the process, DOE conducts visits proposed project sites, if needed, and also requests for detailed presentations from the project proponents. The ECC process is decentralized with district offices empowered to issue ECC for Green and Orange-A Projects, Division Offices for Orange B, and Headquarters dealing

[7] There were some delays in obtaining ECC for Red category (SWM) projects in UGIIP-3, and LGED has taken corrective actions. No Red category activities are eligible for funding in RBL.

with only Red Category In practice, however, due to limited capacity, the district and divisional offices normally refer proposals to head quarters before issuing ECC. ECC for Orange and Red category industries is valid for 1 year, and project proponent needs to submit application for renewal which is issued by DOE based on compliance with ECC conditions. DOE stipulates submission quarterly environmental monitoring reports. DOE enforces ECC conditions, pollution control norms, and discharge standards etc., through its offices. It also takes cognisance of public complaints related to pollution or environmental degradation. DOE prioritizes category Red projects in enforcement. Given small scale and nature of RBL activities, DOE monitoring in RBL activities will be limited.

13. LGED, via PMU, complies with DOE requirements, and normally prepares a single report (IEE/EIA) that meets both the funding agency and DOE requirements with the help of consultants. As stated, all components do not require ECC, and normal practice of LGED is to submit combined application to DOE for all project components with 2-3 representative IEEs. Based on this, DOE issues ECC to Orange category components, stipulating various conditions to be complied with. ECC is valid for one year and needs to be renewed yearly. For Red category, LGED submits a TOR, upon approval, prepares and submits EIA for review and issuance of ECC by DOE. For EIA review, DOE constituted a review committee with experts. Scrutiny of DOE will be limited to Red category and limited orange category subprojects. LGED includes EMPs in bids and contracts, implemented by contractors, and monitored by consultants. PMU and PIU staff oversees compliance and play a major role in stakeholder consultation and grievance redress. Safeguards documents are disclosed on LGED and *pourashava* websites. DOE stipulates detailed requirements for monitoring and reporting, notifying of any environmental harm, and redressing and recording public complaints. However, DOE's compliance monitoring of small infrastructure projects is limited, and mostly based on public complaints. Given DOE capacity constraints and limited scrutiny, PMU needs enhanced capacity and institutionalized safeguards compliance.

14. **Consultation and grievance redress.** LGED has established robust public participation and grievance redress processes in all *pourashavas* and is being effectively utilized in ongoing projects. Projects in *pourashavas* are prepared with public participation, and active involvement of town-level coordination committees and elected members. Feedback is reflected in final project designs. Grievance redress systems exist at both *Pourashava* level and centrally at LGED, which effectively receive, record and redress grievances. The existing grievance redress system is summarized in Appendix 5.

15. **Gaps Identified.** The environmental regulatory framework currently in place in Bangladesh is aligned with ADB SPS principles and can be generally considered adequate. Gaps in legal requirements are addressed by guidelines and LGED practices in consultation, disclosure and grievance redress. Nevertheless, there are the following gaps: except roads and community toilets, RBL program components such as drains, low-income neighborhoods improvement, markets, and parks, do not require ECC, though these components may have some impacts and require an IEE. DOE review and monitoring oversight, especially on orange category projects, is limited. Given the RBL program's potential limited, short-term, and site-specific impacts, and extensive experience of LGED in ADB-funded projects, these gaps can be addressed by institutionalizing the safeguards process with necessary checks within PMU/LGED.

3. Involuntary Resettlement

16. **Policy and Legal Frameworks.** The RBL program implementation will be guided by the national law, the Acquisition and Requisition of Immovable Property Act (ARIPA), 2017 and ADB safeguards policy principles for involuntary resettlement and indigenous peoples.

17. **Land Acquisition**. Under the RBL Program, land acquisition is not envisaged; the roads, drains, low-income neighborhoods improvement works, market areas and parks proposed to be constructed within the ROW of *Pourashava* roads and within the boundaries of government or *Pourashava* land. During a field visit to five sample *Pourashavas*, it was confirmed that land acquisition will not be required. However, for the RBL program if any potential land acquisition is required, the executing agency/implementing agency will consider acquiring land through negotiated settlement based on meaningful consultation. In case of a negotiated settlement, an independent external party will be engaged by the executing agency/implementing agency to document the negotiation and settlement processes and to ascertain that the process is coercion free.

18. **Involuntary Resettlement Safeguard Requirements.** Field visit to sample *Pourashavas* identified involuntary resettlement impact in one out of five *pourahsavas* visited;[8] resettlement plans will be prepared wherever adverse social impacts are assessed.

19. For displaced persons (i.e., informal settlers) without any legal title to the land, the government is expected to compensate all assets other than land (i.e., informal settlers will be compensated for buildings, trees, crops, and businesses) at full replacement cost. The risk of opportunistic encroachment on land designated for acquisition by the project will be managed by a cut-off date. Compensation for all other assets is to be provided in cash at replacement cost without deductions for amortization, salvaged materials, and transaction costs as outlined in the entitlement matrix provided in Appendix 9 of ESMF. Mitigation Measures to avoid and minimize the involuntary resettlement Impacts will be adopted for the RBL program as per the policy principles outlined in the ESMF.

20. The Project Implementation Unit (PIU) and the Project Management Unit (PMU) will also ensure that all the necessary measures related to the safety and convenience of the community are duly followed by the contractor. LGED has previous experience of implementing the UGIIP, UGIIP-2, UGIIP-3 and CRDP-1 and CRDP-2, supported by ADB. LGED has demonstrated its capacity to prepare, implement, monitor, and report on these projects in line with the ADB SPS requirements for involuntary resettlement and GOB policy.

4. Tribes, Minor Races, Ethnic Sects and Communities

21. **Policy and Legal Frameworks**. The Constitution of Bangladesh ensures affirmative action for small ethnic community peoples and prohibits discrimination inter alia on grounds of race, religion or place of birth, Article 23A of which provides, "the State shall take steps to protect and develop the unique local culture and tradition of the tribes, minor races, ethnic sects and communities". It also spells out in Article 28 (4), "nothing in this Article shall prevent the State from making special provision in favor of women or children or for the advancement of any backward section of citizens".

[8] Temporary income loss to road-side shop owners is assessed in one sample Pourashava (Chowmohoni) during constriction of drains and roads, due to access disruption.

22. Many of the government laws that are related to the ownership of land and acquisition for the plain land are also applicable to SEC, ethnic minority (EM) and non-ethnic minority people. The laws include the (i) Code of Civil Procedure, 1908; (ii) the East Bengal State Acquisition and Tenancy Act, 1950; and (iii) ARIPA, 2017. According to the Gazette of Bangladesh Cultural Ministry, dated March 23, 2019Provisions for promoting Tribes, Minor Races, Ethnic Sects and Communities' (TMRESC' cultural practices, tradition, and knowledge are included in various policies, plans and program documents of Government of Bangladesh. Government provides special privileges for development of the TMRESCs and their integration with the mainstream population e.g., to enrol TMRESC students in public educational institutions, recruit employees in public sector jobs, among others. The identified policy gaps include SPS requirements for early screening, social impact assessment, consultations with TMRESC, grievance redress mechanisms, provisions for consent or broad community support, monitoring and reporting.

23. LGED recognizes the safeguard policies of ADB to foster full respect for indigenous peoples'/ TMRESCs identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by the indigenous peoples themselves so that they (i) receive culturally appropriate social and economic benefits, (ii) do not suffer adverse impacts as a result of projects, and (iii) can participate actively in projects that affect them. The ESMF prepared for this program outlines all indigenous peoples policy principles, applicable to TMRESC and addresses the identified policy gaps.

24. Among the project *pourashavas*, only Banskhali (3.91%) and Naohata *Pourashava* (1.57%) have slightly higher TMRESC population compared to others. It is expected that the RBL program will have beneficial impact on the TMRESC in these two *pourashavas*. Resettlement and Tribes, Minor Races, Ethnic Sects and Communities (RTMRESCP) Plan will be prepared as per the policy principles outlined in the ESMF.

25. The Government of Bangladesh believes that there is nothing more meaningful than offering productive and sustainable development efforts which in turn ensure the quality of services rendered by ministries/divisions and their associated agencies. Article 21(2) of the Bangladesh Constitution states that, "Every person in the service of the Republic has a duty to strive at all times to serve the people." Furthermore, instructions 262(1) and (2) of chapter 8 of the Secretariat Instructions 2014, instruct to make provisions for receiving opinions from citizens as well as redress grievances in a transparent and neutral manner and follow effective methods for conserving complaints. The Cabinet Division, on behalf of the Government of Bangladesh, took the first-ever initiative of a grievance redress system (GRS) in Bangladesh. In line with the above government order, LGED has an existing online grievance redress system.[9]

5. Grievance Redress Mechanism

26. LGED has a centralised existing online GRM. A dedicated web portal10 is being maintained where people can file their grievances. LGED will issue a notification to mandate the existing GRM to receive safeguards-related complaints. The RBL program will have both online as well as offline modes to receive the grievances. The portal will have a dedicated tab for receiving/filling grievances particular to the Improving Urban Governance and Infrastructure Program (this RBL Program). The existing grievance redress system is summarized in Appendix 5.

[9] LGED. Grievance Redress System.

27. The RBL program will also have an offline grievance filing system for those who do not have access to the internet. Each component or activity site will maintain a complaint register specific for lodging affected people's concerns, complaints, and grievances about the social, land, and environmental issues or concerns. The safeguard focal person/Project Director at PMU will ensure the follow-up of the grievance until resolved. The PMU will have a regular review to ensure that all grievances are resolved in time-bound and through a transparent mechanism. The affected person is free to access the country's legal system at any time and at any stage. The affected person also can use the ADB Accountability Mechanism through directly contacting (in writing) the Complaint Receiving Officer (CRO) at ADB headquarters or the ADB Bangladesh Resident Mission (BRM).

D. Assessment of Other Risks

28. The RBL Program was also assessed against institutional, contextual, and programmatic risks likely to occur during program delivery.

29. **Institutional risks.** The executing agency is LGED in the Ministry of Local Government, Rural Development and Cooperatives at the national level. LGED has extensive experience of implementing urban development projects funded multilateral funded agencies like the World Bank and ADB. At the LGED, a separate PMU has been established for ADB funded UGIIP, which will also implement the RBL Program. This PMU is being supported by consultants, including safeguards specialists. Safeguards Officers (Environment and Social) in PMU, reporting to Deputy Project Director, are responsible for safeguards tasks and to ensure compliance with ADB SPS and Bangladesh regulatory framework. These positions are currently vacant, and technical staff is given additional charge for safeguards, supported by consultants. In RBL program implementation, dedicated staff is needed to manage safeguards, including review of safeguard documents, overseeing consultants' inputs, and ensuring quality and timely compliance with ESMF, SPS and Bangladesh regulatory framework. PMU also needs to identify safeguards concerns or issues of non-compliance during implementation and initiate corrective actions. The proposed ESMF will institutionalize the implementation of safeguards in PMU. The capacity to manage safeguards tasks at Pourashavas is very limited. However, the RBL program will be implemented through PIUs established in each Pourashava, which will be staffed with a safeguard officer in charge, supported by consultants.

30. **Contextual risks.** The RBL program will mostly involve minor civil works in Program pourashavas to improve roads, drains, and infrastructure in low-income neighborhoods and to develop market centers and public parks. Based on due diligence of proposed RBL program activities in sample pourashavas, these will be built on government-owned lands and public road rights of way, located in urban areas. There are no sensitive environmental or social settings that may be adversely impacted by the program or impede its successful performance of the program. Locations of program interventions in environmentally sensitive areas (reserved forest/protected forest, national parks, sanctuaries, core zones biosphere reserves, world heritage sites etc.,) shall be excluded from the program. Acquisition of private land and /or assets for the program through the exercise of eminent domain will be excluded. The lands or assets with potential legacy or unresolved issues will not be considered for the program. The program will not support high-risk activities with significant adverse environmental and/or social impacts that may be classified as Category A per ADB SPS and those that may expose ADB to reputational risks.

31. **Programmatic risks.** LGED has experience of implementing the World Bank funded Program for Results. The proposed RBL modality is new to the PMU and PIUs that will implement the RBL Program. The PMU safeguards officers with the assistance of a consultant team will train

site-level LGED and PIU staff on environmental and social safeguards issues and compliance requirements during implementation. Necessary training will also be provided to Pourashavas during RBL implementation to encourage mainstreaming of safeguards in day-to-day Pourashava operations, and develop institutional capacity. The program activities are unlikely to have any interactions with other planned activities (construction of facilities with other ADB and other multilateral funding agencies' loan funding) that may trigger adverse impacts.

E. Safeguard Program Actions

32. The following program actions are suggested to mitigate the identified risks and strengthen the capacity of LGED to implement the RBL program:[11]

Table 2: Safeguard Program Action Plan

Actions	Responsible Agency	Time frame for implementation
1. Establish and operationalize environmental and social management framework (ESMF) for the RBL program and ensure compliance	LGED Pourashavas	Mar 2023 (Developed) Operationalized (implementation period)
2. Water quality test requirement practiced in the low-income neighborhoods under the Third UGIIP adopted and operationalized in 60 pourashavas.	LGED Pourashavas	Mar 2023 (adopted) Operationalized (implementation period)
3. Develop following protocols/guideline and follow in RBL implementation: a. identify and exclude tube wells/bore wells contaminated with arsenic (exceeding drinking water standards) from RBL program activities b. toilet / septic tank siting and design guidelines to prevent seepage and contamination of groundwater c. safe disposal/recycling of discarded and end-of-life solar panels in streetlights	LGED Pourashavas	April 2023 (developed) Followed (during implementation)
4. Department of environment clearance certificate (ECC) obtained and renewed timely as per DOE conditions; if a common environmental clearance certificate is obtained, ensure that all individual program activities to which ECC is applicable are specified in ECC.	LGED Pourashavas	Starting from July 2023 Yearly
5. Environmental and Social Safeguard focal persons or specialists are assigned to LGED Program Management Unit, and pourashavas to strengthen the coordination for environmental and social safeguards compliance. - Appoint dedicated environmental and social safeguards staff at PMU and build capacity to implement ESMF - Appoint safeguards staff in PIUs and build capacity for implementation of RBL program activities in compliance with ESMF	LGED Pourashavas	Mar/ July 2023
6. Model for social safeguards compliance with respect to market development under Third UGIIP adopted and operationalized.	LGED Pourashavas	July 2023 (adopted) July 2023-June 2028 (applicable to any market development under the RBL
7. Include a specific action plan for the effective participation of Tribes, Minor Races, Ethnic Sects, and Communities (TMRESC) (if any) in the design of proposed infrastructures in applicable social safeguards documents and ensure their inclusion in the program benefits.	LGED Pourashavas	July 2023–June 2028
8. Semi-annual reporting on implementation of environmental and social safeguard program actions.	LGED	Semi-annual during implementation

[11] The institutional measures and ESMF [para 32, (i)-(v)] will be established in advance of planning for and implementing civil works.

SCREENING CHECKLIST FOR EXCLUSION OF CATEGORY A ACTIVITIES

A. Environment Screening Checklist for Exclusion of Category A Activities

The following checklist shall be completed before inclusion of any activity/subproject in the RBL program. If Answer to any of the mentioned criteria is 'Yes' then such activity/subproject will not be eligible and shall be excluded from the RBL program.

QUESTIONS		RESPONSE		REMARKS / CLARIFICATIONS
		Yes	No	
1.	**Type and Nature of Subproject**			
1.1	Proposed activity / subproject classified under the Red Category per ECR 1997?			See Table 1 below for classification
1.2	Proposed activity / subproject include components involving prohibited investment activities per ADB SPS?			See Table 2 below for prohibited list
2.	**Location of Proposed Subproject**			
2.1	Proposed activity/subproject located in ecologically sensitive areas such as protected areas (national parks, wildlife sanctuaries), notified wetlands or wetlands of significant value, critical habitats?			
2.2	Proposed activity/subproject located in world heritage sites, and/or within 250 m from the core zone of outer boundary of the world heritage area			
2.3	Proposed activity located within monuments/sites protected by Department of Archeology, Government of Bangladesh?			
3.	**Potential impacts**			
3.1	Proposed activity/subproject may significantly impact mangroves, wetlands, estuaries, buffer zones of protected areas etc., ?			
3.2	Proposed activity/subproject may potentially lead to encroachment/damage of physical cultural resources with significant value and/or places recognized by government agencies (e.g., Department of Archeology), which may include places of worship, cultural heritage sites, graves/cemeteries, historical monuments, etc.			
3.3	Proposed activity/subproject likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented, and may affect an area larger than the sites or facilities subject to physical works (i.e., category A projects as per ADB SPS 2009)			

Table 1: Red Category Projects as per ECR, 1997

1. Tannery. 2. Formaldehyde. 3. Urea fertilizer. 4. T.S.P. Fertilizer. 5. Chemical dyes, polish, varnish, enamel. 6. Power plant. 7. All mining projects (coal, limestone, hard rock, natural gas, mineral oil, etc.) 8. Cement	37. Non-metallic chemicals not listed elsewhere. 38. Non-metals not listed elsewhere. 39. Industrial estate. 40. Basic industrial chemicals. 41. Non-iron basic metals. 42. Detergent. 43. Land-filling by industrial, household and commercial wastes. 44. Sewage treatment plant.

9. Fuel oil refinery. 10. Artificial rubber. 11. Paper and pulp. 12. Sugar. 13. Distillery. 14. Fabric dying and chemical processing. 15. Caustic soda, potash. 16. Other alkalis. 17. Production of iron and steel. 18. Raw materials of medicines and basic drugs. 19. Electroplating. 20. Photo films, photo papers and photo chemicals. 21. Various products made from petroleum and coal. 22. Explosives. 23. Acids and their salts (organic or inorganic). 24. Nitrogen compounds (Cyanide, Cyanamid etc.). 25. Production of plastic raw materials (PVC, PP/Iron, Polyesterin etc.) 26. Asbestos. 27. Fiberglass. 28. Pesticides, fungicides and herbicides. 29. Phosphorus and its compounds/derivatives 30. Chlorine, fluorine, bromine, iodine and their compounds/derivatives. 31. Industry (excluding nitrogen, oxygen and carbon dioxide). 32. Waste incinerator. 33. Other chemicals. 34. Ordnance. 35. Nuclear power. 36. Wine.	45. Life saving drugs. 46. Animal glue. 47. Rodenticide. 48. Refractories. 49. Industrial gas (Oxygen, Nitrogen & Carbon-dioxide). 50. Battery. 51. Hospital. 52. Ship manufacturing. 53. Tobacco (processing/cigarette/Biri-making). 54. Metallic boat manufacturing. 55. Wooden boat manufacturing. 56. Refrigerator/air-conditioner/air-cooler manufacturing. 57. Tyre and tube. 58. Board mills. 59. Carpets. 60. Engineering works: capital above 10 (ten) hundred thousand Taka. 61. Repairing of motor vehicles: capital above 10 (ten) hundred thousand Taka. **62. Water treatment plant.** 63. Sewerage pipe line laying/relaying/extension. **64. Water, power and gas distribution line laying/relaying/extension.** 65. Exploration/extraction/distribution of mineral resources. **66. Construction/reconstruction/expansion of flood control embankment, polder, dike, etc.** **67. Construction/reconstruction/expansion of road (regional, national & international).** **68. Construction/reconstruction/expansion of bridge (length 100 meter and above).** 69. Murate of Potash (manufacturing).

Source: ECR, 1997.

Table 2: Prohibited Investment Activities per ADB SPS

Prohibited list of activities
(i) production or activities involving harmful or exploitative forms of forced labor[12] or child labor[13];
(ii) production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements or subject to international phaseouts or bans, such as (a) pharmaceuticals[14], pesticides, and herbicides[15], (b) ozone-depleting substances[16], (c)

[12] Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.

[13] Child labor means the employment of children whose age is below the host country's statutory minimum age of employment or employment of children in contravention of International Labor Organization Convention No. 138 "Minimum Age Convention" (www.ilo.org).

[14] A list of pharmaceutical products subject to phaseouts or bans is available at http://www.who.int.

[15] A list of pesticides and herbicides subject to phaseouts or bans is available at http://www.pic.int.

[16] A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicized ozone holes is listed in the Montreal Protocol, together with target reduction and phaseout dates. Information is available at http://www.unep.org/ozone/montreal.shtml.

polychlorinated biphenyls[17] and other hazardous chemicals[18], (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora[19], and (e) transboundary trade in waste or waste products[20];
(iii) production of or trade in weapons and munitions, including paramilitary materials;
(iv) production of or trade in alcoholic beverages, excluding beer and wine[21];
(v) production of or trade in tobacco[20];
(vi) gambling, casinos, and equivalent enterprises[20];
(vii) production of or trade in radioactive materials[22], including nuclear reactors and components thereof;
(viii) production of, trade in, or use of unbonded asbestos fibers[23];
(ix) commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests; and
(x) marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats.

Source: Asian Development Bank Safeguard Policy Statement 2009, Appendix 5.

B. Involuntary Resettlement Screening Checklist

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
Involuntary Acquisition of Land				
1. Will there be land acquisition?				
2. Is the site for land acquisition known?				
3. Is the ownership status and current usage of land to be acquired known?				
4. Will easement be utilized within an existing Right of Way (ROW)?				
5. Will there be loss of shelter and residential land due to land acquisition?				
6. Will there be loss of agricultural and other productive assets due to land acquisition?				
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?				
8. Will there be loss of businesses or enterprises due to land acquisition?				
9. Will there be loss of income sources and means of livelihoods due to land acquisition?				

[17] A group of highly toxic chemicals, polychlorinated biphenyls are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.
[18] A list of hazardous chemicals is available at http://www.pic.int.
[19] A list is available at http://www.cites.org.
[20] As defined by the Basel Convention; see http://www.basel.int.
[21] This does not apply to project sponsors who are not substantially involved in these activities. Not substantially involved means that the activity concerned is ancillary to a project sponsor's primary operations.
[22] This does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment for which ADB considers the radioactive source to be trivial and adequately shielded.
[23] This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
Involuntary restrictions on land use or on access to legally designated parks and protected areas				
10.Will people lose access to natural resources, communal facilities and services?				
11.If land use is changed, will it have an adverse impact on social and economic activities?				
12.Will access to land and resources owned communally or by the state be restricted?				
Information on Displaced Persons:				
Any estimate of the likely number of persons that will be displaced by the Project? [ ] No [] Yes If yes, approximately how many?				
Are any of them poor, female-heads of households, or vulnerable to poverty risks? [] No [] Yes				
Are any displaced persons from indigenous or ethnic minority groups? [ ] No [] Yes				

Table 3: Project Categorization Criteria (Involuntary Resettlement)

Category A	A proposed subproject is classified as Category A if it is likely to have significant involuntary resettlement impacts. The involuntary resettlement impacts are considered significant, i.e. if 200 or more persons will experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their productive and income generating assets. The project would need to prepare a resettlement plan for all the sub - projects. (Subprojects that are classified as category A will not be considered under the IUGIP, RBL program).
Category B	A proposed subproject is classified as Category B if it includes involuntary resettlement impacts that are not deemed significant or major but nonetheless may need to be addressed through a resettlement plan. (Subprojects classified as Category B will be required to prepare a Resettlement Plan under IUGIP RBL program.)
Category C	A proposed subproject is classified as Category C if it is unlikely to have any involuntary resettlement impacts. Once the status of the subproject is established no further action will be required. (A Due Diligence Report (DDR) may be prepared for all subprojects classified under Category C).

C. Indigenous Peoples/ TMRESC Screening Checklist

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
A. Indigenous Peoples/ TMRESC Identification				
1. Are there socio-cultural groups present in or use the project area who may be considered as “tribes” (hill tribes, schedules tribes, tribal peoples), “minorities” (ethnic or national minorities), or “indigenous communities” in the project area?				

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
2. Are there national or local laws or policies as well as anthropological researches/studies that consider these groups present in or using the project area as belonging to “ethnic minorities”, scheduled tribes, tribal peoples, national minorities, or cultural communities?				
3. Do such groups self-identify as being part of a distinct social and cultural group?				
4. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?				-
5. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?				-
6. Do such groups speak a distinct language or dialect?				
7. Has such groups been historically, socially and economically marginalized, disempowered, excluded, and/or discriminated against?				
8.Are such groups represented as “TMRESC” or as “ethnic minorities” or “scheduled tribes” or “tribal populations” in any formal decision-making bodies at the national or local levels?				
B. Identification of Potential Impacts				
9.Will the project directly or indirectly benefit or target TMRESC?				
10.Will the project directly or indirectly affect TMRESC’ traditional socio-cultural and belief practices? (e.g. child-rearing, health, education, arts, and governance)				
11.Will the project affect the livelihood systems of TMRESCP? (e.g., food production system, natural resource management, crafts and trade, employment status)				
12.Will the project be in an area (land or territory) occupied, owned, or used by TMRESC, and/or claimed as ancestral domain?				
C. Identification of Special Requirements *Will the project activities include:*				
13. Commercial development of the cultural resources and knowledge of TMRESC?				--

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
14. Physical displacement from traditional or customary lands?				--
15.Commercial development of natural resources (such as minerals, hydrocarbons, forests, water, hunting or fishing grounds) within customary lands under use that would impact the livelihoods or the cultural, ceremonial, spiritual uses that define the identity and community of TMRESC?				--
16.Establishing legal recognition of rights to lands and territories that are traditionally owned or customarily used, occupied or claimed by TMRESC?				
17.Acquisition of lands that are traditionally owned or customarily used, occupied or claimed by TMRESC?				

Table 4: Project Categorization Criteria (Indigenous People)

Category A	A proposed project is classified as category A if it is likely to have significant impacts on Indigenous Peoples. An IPP, including assessment of social impacts, is required. (Subprojects that are classified as category A will not be considered under the IUGIP, RBL program).
Category B	A proposed project is classified as category B if it is likely to have limited impacts on Indigenous Peoples. An IPP, including assessment of social impacts, is required. The RBL program will have beneficial impact on the TMRES communities or groups, at least in two *pourashavas*, (Naohata and Banskhali), hence, it is classified as Category B for Indigenous Peoples' safeguards.
Category C	A proposed project is classified as category C if it is not expected to have impacts on Indigenous Peoples. No further action is required.

RBL ACTIVITIES AND ENVIRONMENTAL AND SOCIAL FEATURES OF THE PROPOSED PROGRAM SITES IN FIVE SAMPLE TOWNS

PART I: ENVIRONMENT FEATURES

I. PROPOSED RBL ACTIVITIES & SITE APPRECIATION –SAMPLE PROGRAM SITES

1. In this section description of baseline environment of Pourashavas selected for RBL program in general and five visited Pourashavas has been provided. The description is based on site visits and IEE reports being prepared by the LGED for the Pourashavas for the project interventions. This appendix is presented in following sections:

A. Baseline Environmental Features

2. **Topography, Soils and Geology** The Pourashavas selected under the RBL program have flat topography as these are located in flood plains of Meghna, Jamuna, Padma, and Brahamputra rivers and their tributaries. The elevation ranges from 7-11 m above mean sea level. Soils in the most of the Pourashavas are alluvial silt to medium grey, fine sandy to clay-lade silt and somewhat porous allowing some seepage of surface water into the soi but soils in some Pourashavas are also red. This is due to local topography being undulating. The soils are fertile in nature. The area in the most of Pourashavas is composed of uplifted terraces of Pleistocene sediments called Barind tracts and low-lying areas.

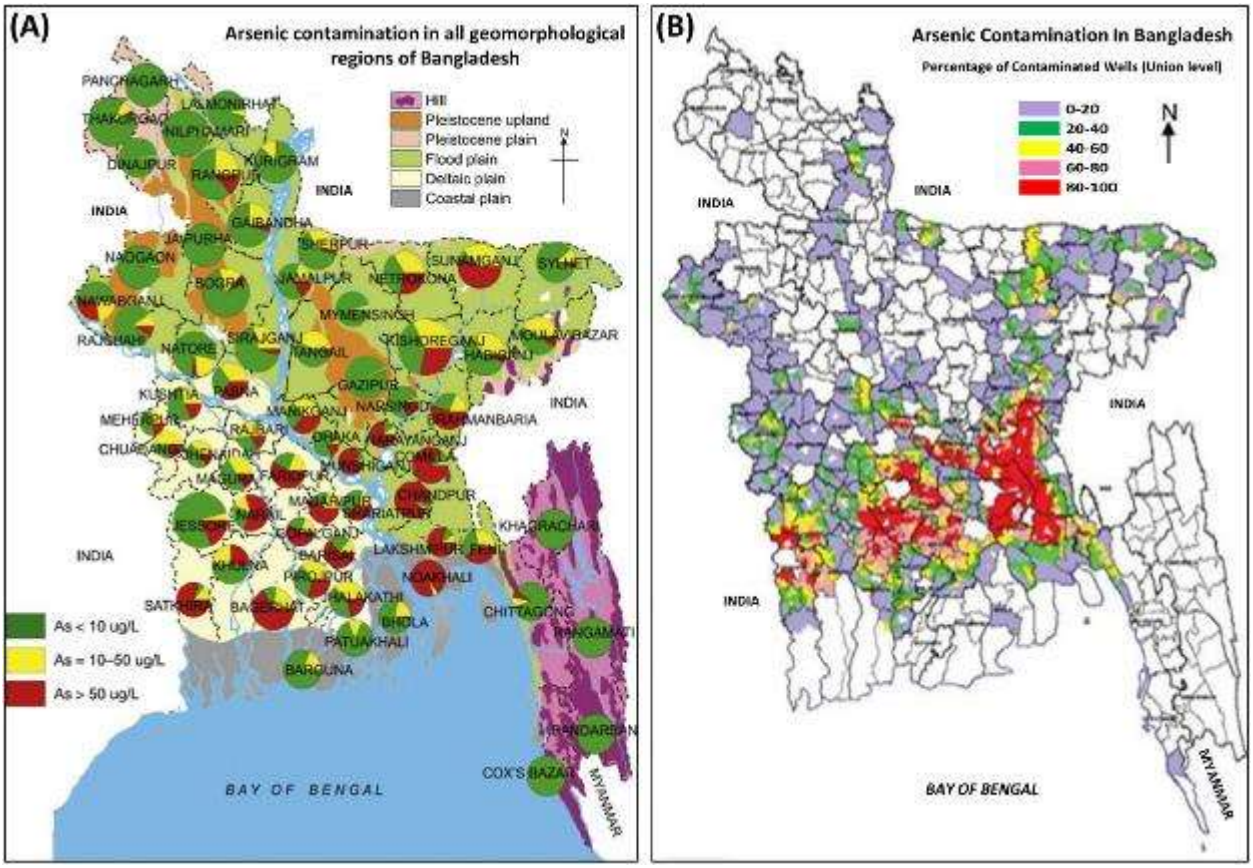
3. **Climatic Conditions.** There are two climatic seasons in Bangladesh namely winter and monsoon. The winter season starts from November and ends in March. The monsoon starts in April and ends in October. The annual rainfall ranges from 1600-2000 mm. The average temperature ranges from 12.00C in January to 38.00 C in May. The temperature occasionally reaches to 400C in May month in some of the Pourashavas. The average maximum humidity ranges from 94% to 97%, whereas the minimum average ranges from 31% to 64%. The wind speed range in Pourashavas selected for RBL program is 6-12 kmph and dominant wind direction is SSE.

4. **Ground Water Sources.** Majority of the population in Bangladesh relies on groundwater for drinking water. Irrigation needs are also significantly met by groundwater sources. It has been ascertained through various studies and research by the Government organizations and multilateral agencies such as USAID, DFID that groundwater do not meet the drinking water specified by the Department of Environment (DoE), and World Health Organization (WHO) for arsenic in most parts of the country. The following are the key conclusion of ground water quality in Bangladesh:

- About 11 % of the country population is exposed to arsenic contents above the DoE specified limit of 50 ppb and about 17.5 million population is exposed to concentration of 50 ppb and 27.5 million population to 10 ppb (*Ref: Key Findings from the Bangladesh Multiple Indicator Cluster Survey (MICS) 2019: Water quality Thematic Report prepared by the UK Aid, University of Oxford and Bangladesh Bureau of Statistics*)
- About 85 % area of Bangladesh is contaminated with Arsenic (Refer Map-1)
- The lead concentration is exceeding the DoE limit of 0.05 mg/l and WHO limit of 0.01 ppm at Dinajpur, Rajshahi, Monikganj, Singair, etc.
- Manganese concentration is exceeding the specified limits of DoE at many locations such as Singair, Cox Bazar beach, Rajshahi city and Chaudanga.

- At some locations especially in rural areas concentrations of micro-organism has been found
- Some of the RBL program covered Pourashavas in Dhaka, Khulna, and Rajshahi divisions may fall in Arsenic contaminated areas and drinking water quality from ground sources need testing for new tube wells.

Map-1: Arsenic Contaminated Areas in Bangladesh



(Source: Arsenic Contamination in Food Chain in Bangladesh -Hygiene and Environmental Health Advances - Journal, Volume-2, June 2022)

5. **Earthquake** All the visited Pourashavas are located in a seismic Zone II, referred to as the low-risk zone for earthquake in the country. But some of the Pourashavas included in the RBL program are located in Zone I and Zone II also. The country has been divided into three zones. The seismic map of Bangladesh is given in **Figure-2**. Seismic events in Bangladesh are relatively infrequent, but historically, have been severe, such as the earthquakes of 1930, 1950 & 2004. Necessary safety measures in design have been incorporated.

Figure-1: Sub-Project Location in Seismic Zoning of Bangladesh

6. **Ambient Air Quality** Air pollution sources other than local traffic do not exist in the Pourashavas visited. There are few industries outside municipal limits of Araihazar Pourashavas. The ambient air quality data for Pourashavas is not available. To establish baseline, ambient air quality monitoring will be conducted by the contractor in the pre-construction phase.

7. **Noise.** The noise sources in the Pourashavas are vehicular movement and household activities. The baseline data on noise levels is not available as the towns are small and no major establishment pertaining to industrial activity exists at the Pourashavas areas. The baseline monitoring by the contractor will be conducted in the pre- construction phase. Looking at the existing ambience and activities in the Pourashava towns, noise levels are anticipated to be in the stipulated limits.

8. **Ecological resources.** The ecological setting in the Pourashavas include aquatic life in local waterbodies, homestead and roadside vegetation, local domesticated fauna, etc. Homestead vegetation has a positive effect on improvement of soil moisture through the shading and mulching process. Trees growing at homesteads also provide easy access to fuel

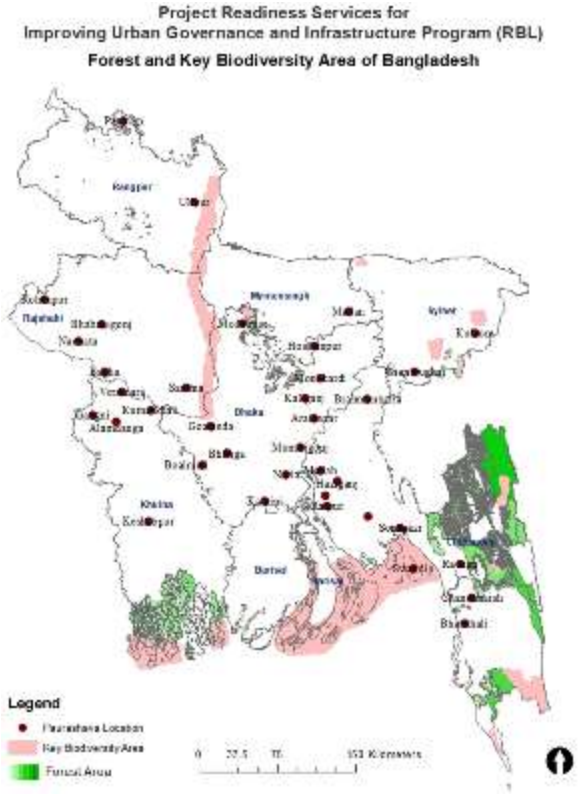
wood, fodder and other products. A large number of multipurpose trees (fruit, timber, fodder, medicine) are grown in the Pourashava areas. The most common among them are jackfruit, mango, lemon, banana, etc. Two major types of fauna viz. terrestrial and aquatic fauna have been identified in and around the area.

9. The Pourashava areas where construction works are to be taken up are urban areas and the areas in the immediate surroundings that were converted into urban use for years ago, and there is no natural habitat left in these areas. The common varieties of trees that are found in the Pourashavas are Mango (Mangifera indica), Jackfruits tree (Artocarpus heterophyllus), kalojam (Syzygium cumini), betelnut pulm (Areca catechu), coconut palm (cocos nucifera), guava (Psidium guajava), jambura (Citrus decumana), mandar (Erythrina veriegata), kadam (Anthocephalus cadamba), sheel koroy (Albizzia procera), sajna (Moringa obifera), dalim (Punica granatum), palash (Butea monosperna), tetul (Tamaraindus indica), neem (Azadirachta indica), hijol (Barringtonia acutangula), banyan (Ficus bengalensis), ashatha (Ficus religlosa), raintree (Samanca saman), pitraj (Aphanamixls polystachia), simul (Bobbax ceiba), krishnachura (Delonix regia), debdaru (Polyalathia longifolia) etc. No endangered/protected species of either flora are found in the Paurashavas or immediate surroundings.

10. The main types of terrestrial fauna in Pourashavas are amphibian, reptile, bird and mammal. Fish diversity in rivers and streams is decreasing due to heavy pollution in the aquatic bodies from industrial effluent. Beside domesticated mammals like cow, buffalo, goat, dog, cat etc. The recorded mammalian species in Pourashavas and surrounding etc. Indian pipistrelle (Pipistrellus coromandra), tickell's bat (hesperotenus tickIli), jackal or shial (Asiatic jackal), benji (Herpestes auropunctatus), dura kathbirali (Funambulus pennanti), rat (Bandicata bengalensis) house mouse (Mus musculus), metho indur (Mus booduga), ud biral (Aonyxe cincrea) etc. The common birds of the area include doel (Copsychus saularis), bhat shalik (Acredotheres tristis), tila ghugu (Streptopelia chinensis), tia (Psillacula Krameri), babui (ploceus philippinus), sparrow or charui (Domesticus), house crow (Corvus splendens), machhranga (Alcedo atthis), cuckoo (Cuculus microplerus), kali pencha (Glaucidium radiatum), choto fingey (Dicrurus macrocercus), haldey pakhi (Oriolus xanthornus), laxmi pencha (Tyto alba), water rail (Rallus aquaticus), kath thokra (Picus myrmecophoneus) etc. Some known reptiles of this area are ganges soft shell (Trionyse gangeticus), common roofed turtle (Kachuga tecta), yellow turtle (Morenia petersi), shanda (Gekko gecko), house lizard (hemidactylus brooki), ghargini shap (Lycodon jara), rat snake (Ptyas nigromarginatus) paina shap (Enhydris enhydris), banded krait (Bungarus fasciatus) and common cobra (Naja). Common amphibians include bull frog (Rana tigrina), skipper frog (Rana cyanophlyctis), cricket frog (Rana limnocharis) and common toad (Bufo melanostictus). The common fishes that are usually found here are hilsha (Hilsa ilisa), ruhi (Labeo ruhita), mrigel (Cirrhinus mrigala), katla (Catla catla), kalbaush (Labeo calbasu), chital (Notopterus chitala), pabda (Ompok pabda), pangas (Pangasius pangasius), shing (Heteropneustes fassilis), magur (Clarias batrachus), koi (anabas testudineus), boal (Wallago attu), gazar (Channa marulius), shoil (Channa striaxtus), tengra (Mystus vittatus), shar punti (Puntius sarana) etc. No endangered/protected species of either flora or fauna are observed in the Paurashavas or their immediate surroundings.

11. **Protected areas.** There are no protected areas (protected forests, wetlands, mangroves, or estuaries, National Parks, Bird Sancturaies, etc.) close to Pourashavas selected for the RBL program. The map showing forest and Key Biodiversity Area of Bangladesh is given below in **Figure-3**. The Pourashavas selected for RBL program have also been marked.

Figure-2: Forest and Key Biodiversity Area of Bangladesh



12. **Demography.** The population data of five Pourashavas visited has been summarized below in Table-4. It is clear from the table that maximum population is in Chowmuhani Pourashava among all the five visited.

Table-5: Population Data of Visited Pourashavas

Sl. No.	Name of Pourashava	Total number of Wards	Total Population	Male	Female	Population Density (per km^2)
1	Raozan	9	36569	19183	17386	2214
2	Naohata	9	57119	28826	28293	1239
3	Chowmuhani	9	122000	55510	66490	5893
4	Araihazar	9	25593	12898	12695	5893
5	Keshabpur	9	26229	13141	13088	1882
Source: IEE Reports prepared by the UGIIP III Consultants						

13. The average literacy rate of Pourashavas varies from 14- 52% (7+ years), male around 40% and female 27% and the national average of 30.4% literate. (BBS, 2011).

14. **Transport.** According to the field level survey, all the Pourashavas have main roads, general roads and access roads as per the local classification. Observably, most of these roads have uneven-rough surface, damaged topping and pavement sides owing to lack of maintenance, mostly narrow in width, hence incapable of accommodating generated traffic. While visiting different roads, the team observed that the surfaces are worn out partly and, in

some cases, entirely. Justifiably, they call for intervention varying from normal significant maintenance to large Rehabilitation/reconstruction.

15. **Economic development.** The economic development in all the Pourashavas is taking place at a faster pace. Many paddy huts, machine-operated rice mills, cold storages, bronze and brass industries, silk industries, textile industries and other business establishments are coming up. The Pourashavas cities are also expanding on all sides due to population pressure. The Paurashavas have insufficient capacity and resources and are finding it difficult to respond to the need for forward planning and investment in basic urban infrastructure and services.

16. **Agriculture, tourism and fishery.** Agricultural farming practices within country have adjusted to the agro climatic conditions prevailing in the Kharif (March-October) and the Rabi (November-February) seasons. The major agricultural crops of Pourashava districts are rice, wheat, jute, pulse, oilseed, vegetable, spice, sugarcane, tobacco, etc. Among rice crops aman occupies the largest area followed by aus and boro. The fruit crops are banana and coconut. In some of the districts of Pourashavas betel nut is also grown. The common fruits found are coconut (Cocos nucifera), date palm (Phoenix sylvestris), betel nut (Areca catechu), mango, pineapple, etc.

17. Tourism spots are not significant except near Naohata, and Pourashavas near coastal areas. Fisheries activity is prevailing all over due to presence of water bodies both man made (local ponds) and natural (natural streams and rivers).

18. **Historical, cultural and archeological sites**. The cultural sites in RBL Pourashavas mainly include religious structures such as mosques of local importance. There are no protected monuments or notable places of archeological or historical importance in five project towns. No tourism related activities are observed in the sample towns.

B. Field visit observations during PSSA to Sample Program Towns

19. 12-09-2022 Visit to Araihazar Pourashava

- No capacity on environmental safeguards at PIU level;
- No planned activities in environmental sensitive areas;
- Adequate width available for works, accidental tree cutting to be avoided;
- NOCs, Permissions and clearances yet to be obtained;
- Some of drain and road works will be near local ponds. Necessary protection measures are needed to avoid contamination;
- Proper work plan is needed to complete construction works in busy market areas;
- Tree cutting will not be required. If there is any need to cut, proper permission should be obtained from the competent authority; and
- Ownerships of outfall points of drains to be confirmed.

20. 13 and 14-09-2022 Visit to Naohata Pourashava sites (visit to all the proposed Road and Drain alignments and debriefing meeting with Pourashava team)

- No capacity on environmental safeguards at PIU level;
- No project related activity in environmental sensitive areas;

- Adequate width available for works, accidental tree cutting to be avoided. If there is any need for tree cutting, proper permission should be obtained from the competent authority;
- NOCs, Permissions and clearances yet to be obtained;
- Some of the drain and road works are proposed near local ponds/ water bodies; necessary protection measures are needed to avoid contamination;
- There are religious places and educational institute along one road, necessary measures must be adopted during construction activities to avoid any potential impacts;
- Some drains to be constructed in congested residential area. Necessary safety measures and work timings should be planned meticulously; and
- Ownerships of outfall points of drains to be confirmed.

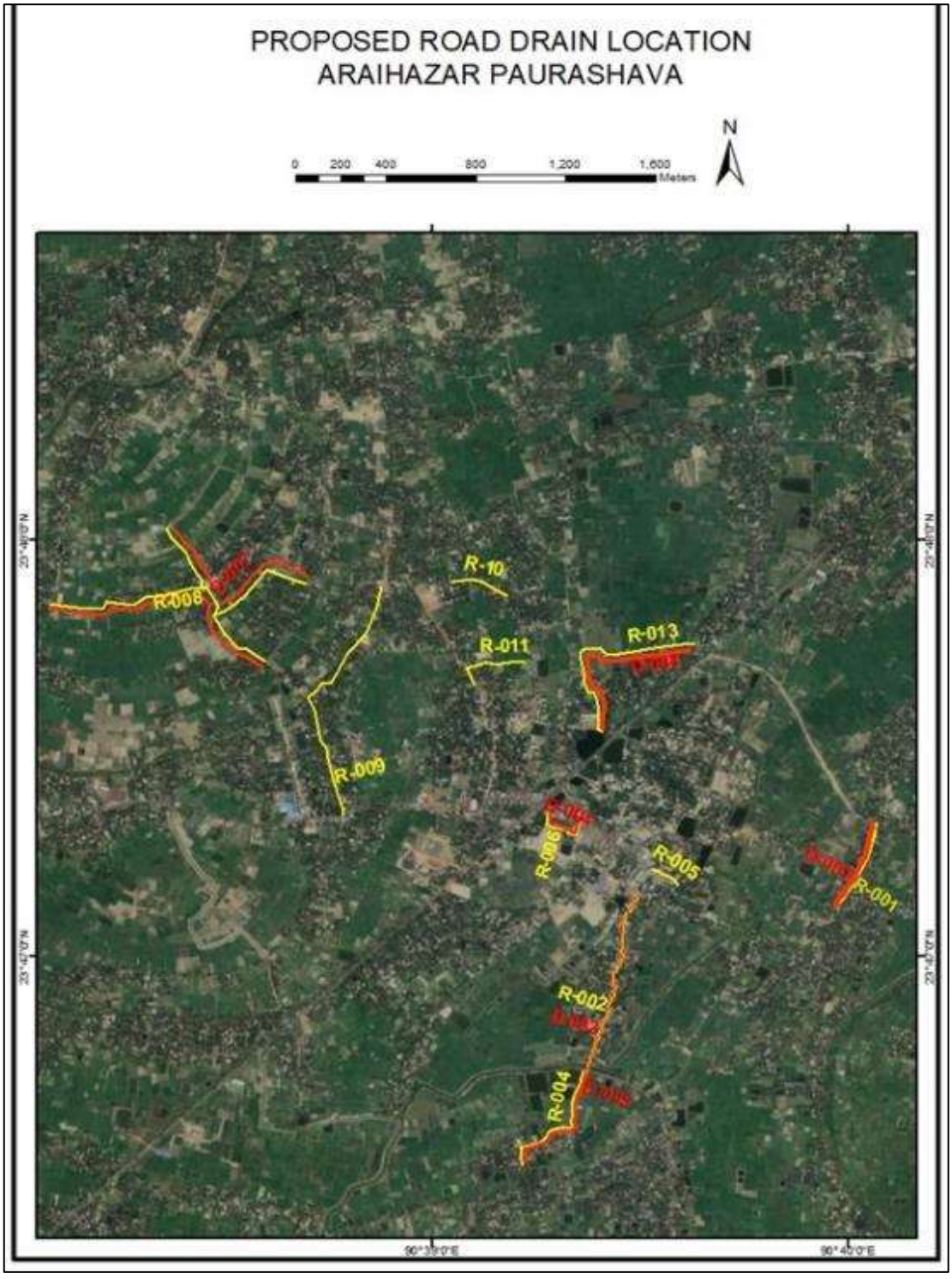
21. 15 and 16-09-2022 Visit to Keshabpur Pourashava sites (visit to all Road and Drain alignments and debriefing meeting with Pourashava team)

- No capacity on environmental safeguards at PIU level;
- No project related activity in environmental sensitive areas;
- Adequate width available for works, accidental tree cutting to be avoided. If there is any need to cut, proper permission should be obtained from the competent authority;
- NOCs, Permissions and clearances yet to be obtained;
- Some of drain and road works will be near local ponds/water bodies. Necessary protection measures should be adopted to avoid contamination;
- There are religious structures, health facility and educational institute near proposed alignments of roads and drain works, necessary protection for safety needed and post construction signage should be provided;
- Some portions of drains and /roads to be constructed in market area. Necessary safety measures and work timings should be planned to avoid adverse imapcts
- Ownerships of outfall points of drains to be confirmed.

22. Details of consultations conducted during PSSA is presented in Appendix 4. Based on the site visits, following section present baseline environmental features of the proposed program sites in five sample **pourashavas.**

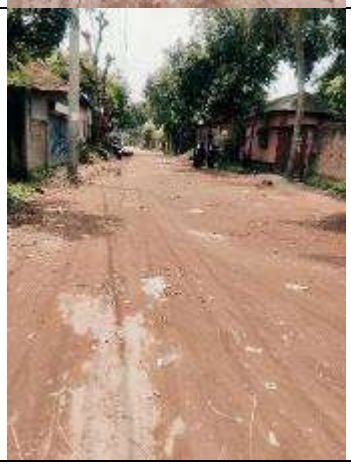
C. Environmental Features of Program Sites in Araihazar

Figure 3: Location of proposed roads and drains in Araihazar



Baseline Features on Proposed Roads and Drains in Araihazar

ARAI-R-001: Improvement of road by RCC from Sub-Registry Office to Lasardi Goalpara & installation of Street Light 13 nos. at Ward no - 8, Araihazar Paurashava, Narayanganj.			
1	Total Length (m)	370	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	No	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	yes	
8	Approximate number of trees	25	
9	Tree species	Timber	
10	Number of trees to be removed approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque, Madrasha and Schools.	

ARAI-R-002: Improvement of road by Dense Bituminous Carpeting from Shibpur mour to Shibpur bridge & installation of Street Light 30 nos. at Ward no - 08, Araihazar Paurashava, Narayanganj. Total Length = 860m.			
1	Total Length (m)	860	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	yes	
8	Approximate number of trees	12	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road	no	
14	Sensitive areas/structures along the road	Mosque	

ARAI-R-004: Improvement of road by RCC from Shibpur Bridge to Nagrapara last point of Paurashava including Protection Work & installation of Street Light 27 nos. at Ward no - 8, Araihazar Paurashava, Narayanganj. Total Length = 790m.			
1	Total Length (m)	790	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	yes	
8	Approximate number of trees	28	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
14	Sensitive areas/structures along the road	School	

ARAI-R-005: Improvement of road by RCC from South Side of Govt. Sofor Ali College & installation of Street Light 6 nos. including of Protection Work at (Ch. 75m to 145m, B/S) at Ward no - 8, Araihazar Paurashava, Narayanganj. Total Length = 145m.			
1	Total Length (m)	145	
2	Existing road width (m)	3.7	
3	Existing road surface	earthen road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	no	

8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffic	
14	Sensitive areas/structures along the road	Primary Schools	

ARAI-R-006: Improvement of road by RCC from Araihazar Market area a. (Ch. 0.00m - Ch. 155m), b. Link - 1 (Ch. 0.00m - Ch. 66m), c. Link - 2 ((Ch. 0.00m - Ch. 60m), & installation Of Street Light 13 nos. at Ward no - 8, Araihazar Paurashava, Narayanganj. Total Length = 281m.			
1	Total Length (m)	281	
2	Existing road width (m)	4.5	
3	Existing road surface	earthen road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	
14	Sensitive areas/structures along the road	no.	

ARAI-R-008: Improvement of road by RCC from Mozzakanda Bazar to Kamranirchar Soila house via Chamurkandi Sarker Bari Road a. (Ch. 0.00m to 1637m), b. Link - 1 (Ch. 0.00m to 390m), c. Link - 2 (Ch. 0.00m to 183m) including RCC Box Culvert at Ch. 1217m, Protection Work & installation of Street Light 77 nos. at Ward no - 1, 2 & 3, Araihazar Paurashava, Narayanganj. Total Length = 2210m.			
1	Total Length (m)	2210	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	32	
9	Tree species	Bamboo, timbers	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
14	Sensitive areas/structures along the road	religious places- Mosque.	

ARAI-R-009: Improvement of road by Dense Bituminous Carpeting from Jhoughora to Mozzakanda Bazar including of Protection Work at (Ch. 0m to 55m, L/S), (Ch. 225m to 250m, L/S), (Ch. 320m to 360m, L/S), (Ch. 650m to 700m, L/S) & installation of Street Light 40 nos. at Ward no - 2 & 5, Araihazar Paurashava, Narayanganj. Total Length = 1181m.			
1	Total Length (m)	1181	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	no	

6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	yes	
8	Approximate number of trees	14	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	Commercial & residential (moderately dense)	
13	Traffic on the road	moderate traffic	
14	Sensitive areas/structures along the road	religious places- Mosque & Graveyard	

ARAI-R-010: Improvement of road by RCC from Gazipura Fish Hatchery Main Road to Gazipura North Para Eidgah Road including Protection Work at (Ch. 230m to 250m, L/S) & installation of Street Light 9 nos. at Ward no - 6, Araihazar Paurashava, Narayanganj. Total Length = 250m.			
1	Total Length (m)	250	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	19	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	

13	Traffic on the road	no notable traffic / less traffic / moderate traffic / heavy traffic Any other activities on the road: hawkers / vendors etc	
14	Sensitive areas/structures along the road	religious places / hospitals / schools etc.	

ARAI-R-011: Improvement of road by RCC from Gazipura Primary School Road to Gazipura Middle Bari Mosque via Zainal house & installation of Street Light 9 nos. at Ward no - 6, Araihazar Paurashava, Narayanganj. Total Length = 250m.			
1	Total Length (m)	250	
2	Existing road width (m)	3.7	
3	Existing road surface	CC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	yes	
8	Approximate number of trees	8	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	

13	Traffic on the road	no notable traffic	
14	Sensitive areas/structures along the road	religious places- Mosque	

ARAI-R-013: Improvement of road by RCC from Baghar Khal to Choughoria road including RCC Box Culvert at Ch. 850m, Protection Work & installation of Street Light 30 nos. at Ward no - 9, Araihazar Paurashava, Narayanganj. Total Length = 875m.			
1	Total Length (m)	875	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	

14	Sensitive areas/structures along the road	Health Care Centre & schools	

ARAI-D-001: Construction of RCC Drain starting from Sub-registry Office to existing box culvert at Lasardi Goalpara road at Ward no - 08 under Araihazar Paurashava, Narayanganj. Total Length = 370m.	
ARAI-D-005: Construction of RCC Pipe Drain from Nagrapara near Shop of Shahidur Rahman to Shibpur Bridge at Ward no - 8 under Araihazar Paurashava, Narayanganj. Total Length = 790m	

1. Site for the Proposed Market centre in Araihazaran Pourashava,

- Proposed site is located close to Kamranirchar Road.
- This market currently has single story structures with premises provided to shops and other commercial establishments. Pourashava proposed to develop this into a commercial market centre with a multistorey building.
- The old buildings/shops is proposed for demolition, and new market centre will come up on the same land.
- The site is located on Kamranirchr Road. Approach road is narrow, and densely populated. Presently a bridge is under construction. Pourashava indicated that once the bridge is completed, the site accessibility will be improve significantly.

2. Proposed site for low-income neighborhoods infrastructure improvement, low-income neighborhoods near Ghazipura, Araihazar

- Proposed low-income neighborhoods is located near Ghazipur
- At present there are no proposed infrastructure
- It is proposed to provide water supply (tube well/bore well, community toilets, footpaths, streetlights and dust bins)
- Infrastructure will be constructed within the available government land/public road
- Arsenic is said to be found in shallow groundwater; no water quality monitoring information is available
- There are some trees along the footpaths; trees will be retained.
- Existing toilets are not in very poor condition.

D. Location and Environmental Features of Program Sites in Naohoata

Figure 4: Location of proposed roads and drains in Naohoata

Baseline Features of Proposed Roads in Naohata Paurashava

NAOH-R-01: Improvement of road by Dense Bituminous Carpeting from Naohata Anjuman Tohid Madrasah to Chomper Mour & installation of Street Light 45 nos., at Ward no - 1 & 8, Naohata Paurashava, Rajshahi. Total Length = 1320m.		 
1	Total Length (m)	1,320
2	Existing road width (m)	5
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	18
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no
NAOH-R-03: Rehabilitation of DC Road by Bituminous Dense Carpeting from Naohata Bagata Poshu Hospital to Paikpara to Naopara Madrasah including Protection Work at (Ch. 200m - 235m, R/S), (Ch. 250m - 300m, R/S), (Ch. 1200m - 1250m, L/S), (Ch. 1320m - 1380m, L/S), Retaining Wall at (Ch. 1380m - 1430m, R/S) & installation of Street Light 84 nos., at Ward no - 7, Naohata Paurashava, Rajshahi. Total Length = 2500m.		
1	Total Length (m)	2,500
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	yes

6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	32	
9	Tree species	Bamboo, timbers	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

NAOH-R-004: Rehabilitation of Road by Bituminous Dense Carpeting from Naohata Sapara mour to Dadpur end of Paurashava Boundary including Retaining Wall at (Ch. 900m - 960m, L/S), (Ch. 1460m - 1500m, R/S) & installation of Street Light 68 nos., at Ward no - 7, Naohata Paurashava, Rajshahi. Total Length = 2000m.			 
1	Total Length (m)	2,000	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	N/A	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	hawkers	
14	Sensitive areas/structures along the road	no	

NAOH-R-05: Rehabilitation of by Dense Bituminous Carpeting from Naohata Bridge Mour to Tanore Road Nobiullar Mour including Retaining Wall at (Ch. 1150m - 1250m, L/S) & installation of Street Light 79 nos., at Ward no - 7, Naohata Paurashava, Rajshahi. Total Length = 2350m.			 
1	Total Length (m)	2,350	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	Yes	
8	Approximate number of trees	34	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	No	
11	Utilities in the ROW	Yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	No	
14	Sensitive areas/structures along the road	No	

NAOH-R-21: Improvement of road by Dense Bituminous Carpeting from Northpara Mainul mile to East side H/O Kolimuddin & installation of Street Light 18 nos., at Ward no - 1, Naohata Paurashava, Rajshahi. Total Length = 500m			
1	Total Length (m)	500	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	

7	Trees within the ROW	yes
8	Approximate number of trees	21
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	less traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	Mosque

NAOH-R-59: Rehabilitation of Road by Bituminous Dense Carpeting from Puthiapara Ansar Camp RHD Road to Modunhati Government Primary School including Protection Work at (Ch. 2400m - 2425m, R/S), Retaining Wall at (Ch. 465m - 495m, L/S), (Ch. 480m - 510m, L/S), (Ch. 820m - 850, L/S) & Street Light 104 nos., at Ward no - 3, Naohata Paurashava, Rajshahi. Total Length = 3080m.

1	Total Length (m)	3,080
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	no
6	Water bodies within 100 m of the road	yes
7	Trees within the ROW	yes
8	Approximate number of trees	28
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes

12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

NAOH-R-63: Improvement of road by Dense Bituminous Carpeting from Alaibidirpur to Alaibidirpur Waterboard Badh including Protection Work at (Ch. 200m - 230m, L/S), (Ch. 300m - 330m, L/S), (Ch. 360m - 400m, R/S), (Ch. 420m - 470m, R/S) & installation of Street Light 26 nos., at Ward no - 3, Naohata Paurashava, Rajshahi. Total Length = 750m.			
1	Total Length (m)	750	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	22	
9	Tree species	Timber, Palm	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

NAOH -R-64: Improvement of Road by Dense Bituminous Carpeting from Alaibidirpur Waterboard Badh to East Puthiapara H/O Bacher including RCC Cross Drain at Ch. 900m, Ch. 1050m, Ch. 1300m, Ch. 1500m, Retaining Wall at (Ch. 0.00m - 30m, L/S), (Ch. 800m - 830m, L/S), (Ch. 2600m - 2630m,	

L/S) & installation of Street Light 89 nos., at Ward no - 3, Naohata Paurashava, Rajshahi. Total Length = 2650m.		
1	Total Length (m)	2,650
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	34
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no

NAOH-R-90: Improvement of Road by Dense Bituminous Carpeting from Modunhati West Para (Kamarpara) H/O Saiful to Water Board Badh including RCC Cross Drain at Ch. 1200m & installation of Street Light 58 nos., at Ward no - 3, Naohata Paurashava, Rajshahi. Total Length = 1700m.		
1	Total Length (m)	1,700
2	Existing road width (m)	4.3
3	Existing road surface	earthen road without side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	34
9	Tree species	Timber, Bamboos

10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

NAOH-R-107: Improvement of Road by Dense Bituminous Carpeting from Bagdhani Hat Bridge near H/O Kubbach to Belal Leader Via Sadik Shop to Tanore Road Munsur Shop & installation of Street Light 18 nos., at Ward no - 4, Naohata Paurashava, Rajshahi. Total Length = 500m.			 
1	Total Length (m)	500	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	hawkers	
14	Sensitive areas/structures along the road	no	

NAOHR-109: Rehabilitation of Road by Dense Bituminous Carpeting from Basontopur H/O Siraz to West Para Mosque near H/O Hima including RCC Cross Drain at Ch. 30m, Ch. 400m & installation of Street Light 18 nos., at Ward no - 4, Naohata Paurashava, Rajshahi. Total Length = 500m.

1	Total Length (m)	500
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	18
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (moderately dense)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	Mosque

NAOH-R-112: Rehabilitation & Improvement of Road by Dense Bituminous Carpeting from Choubaria - Darusa Road to Choubaria Paurashava out boundary near H/O Abul via Choubaria Government Primary School including RCC Cross Drain at Ch. 400m, Ch. 700m, Ch. 1100m Protection Work at (Ch. 1100m - 1150m, L/S), Retaining Wall at (Ch. 200m - 260m, L/S), (Ch. 1500m - 1540m, R/S) & Street Light 63 nos., at Ward no - 5, Naohata Paurashava, Rajshahi. Total Length = 1850m.

1	Total Length (m)	1,860
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain

5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	Yes	
8	Approximate number of trees	27	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Schools	

NAOH-R-116: Improvement of road by Dense Bituminous Carpeting from Bagsara Tanore Road to Bagsara central Jame Mosque & installation of Street light 58 nos., at Ward no - 03, Naohata Paurashava, Rajshahi. Total length = 1700m.			
1	Total Length (m)	1,700	
2	Existing road width (m)	3,5	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	9	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

NAOH-R-157 & 158: Rehabilitation of Road by Dense Bituminous Carpeting from Tanore Road via Girls School to Pakuria Government Primary School including Box Culvert at Ch. 1220m & Street Light 81 nos., at Ward no - 6, Naohata Paurashava, Rajshahi. Total Length = 2400m.		
1	Total Length (m)	2,400
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	34
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	Schools

NAOH-R-173: Improvement of road by Dense Bituminous Carpeting from Vogruil Mour Rajshahi Naogaon Road to Sontuspur Paurashava out boundary near H/O Entaj including Protection work at (Ch.800m - 860m, R/S), (Ch. 900m - 950m, R/S) & installation of Street light 51 nos., at Ward no - 07, Naohata Paurashava, Rajshahi. Total length = 1500m.		
1	Total Length (m)	1,500
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A

7	Trees within the ROW	yes
8	Approximate number of trees	22
9	Tree species	Timber, Palm
10	Number of trees to be removed (approximate)	
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	no notable traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	Mosque

Baseline Feature of Proposed Drains in Naohoata Pourashava

NAOH-D-256: Construction of RCC Drain starting from near Naohata T&T Para Halim Land to existing main drain via ATM Memorial (Ch. 0.00m to 710.00m), Link (i): From Pintu house to link drain (ii) (Ch. 60.00m - 0.00m) and Link (ii): From Motin house to proposed drain D-256 (Ch. 100.00m - 0.00m) including RCC Cross drain at (Ch. 425m to 431m) under Naohata Paurashava, Rajshahi. Total Length = 870m.		
1	Total Length (m)	870
2	Existing road width (m)	3.5
3	Existing road surface	BC road without side drains
4	Topography	Barind & Ganges River floodplain
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	13
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	less traffic
	Any other activities on the road:	no

14	Sensitive areas/structures along the road	Mosque	
NAOH-D-258: Construction of RCC Drain starting from Naohata Madrasha Para Salam House to existing main drain via Ali Hazi Mosque (Ch. 0.00m to 370.00m), under Naohata Paurashava, Rajshahi. Total Length = 370m.			
1	Total Length (m)	370	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	8	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

NAOH -D-271: Construction of RCC Drain from Vogruil Bottola Mour to Proposed drain D - 272 via Moddhopara Mosque Ch. 0.00m - 1000.00m, Under Naohata Paurashava, Rajshahi. Total length = 1000m.			
1	Total Length (m)	1,000	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	27	

9	Tree species	Timber, Palm	
10	Number of trees to be removed (approximate)		
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

NAOH -D-272: Construction of RCC Drain starting from Vogruil Dalan to existing Bathan Bari Drain, (Ch. 0.00m - 900.00m) including RCC Cross drain at (Ch. 380m to 388m), (Ch. 894m to 900m) under Naohata Paurashava, Rajshahi. Total Length = 900m.			
1	Total Length (m)	370	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	N/A	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

NAOH -D-276: Construction of RCC Drain starting from Shamim Market to existing drain via Vogruil Graveyard (Ch. 0.00m to 500.00m), under Naohata Paurashava, Rajshahi. Total Length = 500m.			
1	Total Length (m)	500	
2	Existing road width (m)	3.2	

3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	10	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Madrasa	

NAOH -D-278: Construction of RCC Drain from Modina Decorator house to existing RCC Drain via Naohata Madrasapara Zuta Hatem house Ch. 0.00m to 200m, under Naohata Paurashava, Rajshahi. Total length = 200m.			
1	Total Length (m)	200	
2	Existing road width (m)	3.25	
3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	13	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	

	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

NAOH -D-293: Construction of RCC Drain starting from near Putiyapara East Para Monar Garage to existing drain via East Putiyapara Jame Mosque (Ch. 0.00m to 500.00m) including RCC Cross drain at (Ch. 140m to 145m), (Ch. 490m to 500m) under Naohata Paurashava, Rajshahi. Total Length = 500m.			
1	Total Length (m)	500	
2	Existing road width (m)	3.25	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	14	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

NAOH -D-302: Construction of RCC drain from Naohata Bagata Jalal Rice Mill to Barnoy River via Shahapara Mour near house of Najmul Master Ch. 0.00m to 965m and Link drain from Water Pump to proposed Main drain D-302 Ch. 145m to 0.00m, under Naohata Paurashava, Rajshahi. Total length = 1110m.			
1	Total Length (m)	1,110	
2	Existing road width (m)	3.5	
3	Existing road surface	BC road with no side drains	

4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	N/A	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

NAOH-D-342: Construction of RCC Drain from near Shialbed house of Zoban existing RCC Drain to Doyar Bridge (Doyar Shaku Canal) Ch. 0.00m - 930.00m, under Naohata Paurashava, Rajshahi. Total length = 930.			
1	Total Length (m)	930	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	28	
9	Tree species	Palm, Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

Proposed Site for Market centre in Naohoata Pourashava,

- Proposed site is approachable from Naohoata main road (Rajshahi – Naogoan Highway)
- This existing building is 2-storey, with ground floor occupied with shops and first floor housing a mosque.
- An old single storey structure is also proposed for dismantling; Pourshava confirmed that this structure is not very old and is not a heritage building
- The existing structures are proposed for demolition, and new market centre will come up on the same land. It is proposed to build a multi-storey building to house commercial establishment.
- Per Pourashava, mosque will be temporarily shifted to nearby place, which will be arranged by Pourashava. This will be done in consultation with the community, and mosque will again be accommodated in the new building

E. Location and Environmental Features of Program Sites in Keshabpur

Figure 5: Location of proposed roads and drains in Keshabpur

Baseline Features on Proposed Roads in Keshabpur

KP-R-001: Improvement of Road by RCC Starting from South West Corner of Christen Mission School up to near the pond of Meher Morol (Ch. 0.00 to 985m) & Link Road towards Petrol Pump (Ch. 0 to 354m) including Protection work (Ch. 319-335m, R/S), (Ch. 527-542m, R/S), (, (Ch. 260-298m, L/S), RCC Cross Drain at Ch.120, Ch. 162, Ch. 429, Ch. 523, link road Ch. 275, Size (1m X 1m) & Installation of street Light 47 nos. at Keshabpur Paurashava, under Jashore District.			
1	Total Length (m)	1,339	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	

5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	12	
9	Tree species	Timber, palm & Bamboos	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	religious places / hospitals / schools etc.	

KP-R-02: Improvement of Road by RCC at Ward no -1 & 4 starting from Keshabpur Press Club towards Modhu Sarok to T&T Mour via Hatkhola Road Ch. 0.00 - 900m, link road Modhu Sarok to Tiger Point Ch. 0.00 - 95m & Dhanhatkhola link road Ch. 0.00 - 165m, installation of Street Light 42 nos. at Keshabpur Paurashava under Jashore District. Length = 1160m.			
1	Total Length (m)	1,339	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	Hawker	

14	Sensitive areas/structures along the road	Mosque	

KP-R-003: Improvement of RCC Road at Ward no - 07 (a) Tol Plaza, Jashore-Satkhira R&H Road to Hatath Para Jame Mosque Ch. 0.00 to 800m including protection work (Ch. 135-176m, L/S & Ch. 664 - 695m, R/S), and link road towards Moddokul Primary School Ch. 0.00-200m; (b) Moddokul Sardarpara to Moddokul Dafader Para Ch. 0.00 to 740m incl. 2 nos. (1.00m x 1.00m size) , RCC cross drain at Ch. 293m & Ch. 675m (link road,)) & installation of Street light 62 nos. under Keshabpur Paurashava, Jashore District.

1	Total Length (m)	1,740
2	Existing road width (m)	5.5
3	Existing road surface	BC road without side drains
4	Topography	Ganges Inactive floodplain
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	Yes
8	Approximate number of trees	12
9	Tree species	Timber, palm & Bamboos
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	less traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	Mosque & Primary School

KP-R-04: Improvement of Road by RCC at Ward no-08. Starting from Keshabpur Pilot School Moar Up to Brommaha Kati End including Protection work at (Ch. 664-695m, R/S), & Street Light 73 nos. at Keshabpur Paurashava under Jashore District. Length = 2165m.

1	Total Length (m)	2,165
2	Existing road width (m)	3.7

3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	25	
9	Tree species	Timber, palm & Bamboos	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Schools	

KP-R-05: Improvement of Road by RCC at Ward no-05. Starting from Altapol Biswaspara to Altapol Primary School End including Protection work at (Ch. 664-695m, R/S), (Ch. 1400-1450m L/s) & Street Light 53 nos. at Keshabpur Paurashava under Jashore District. Length = 1570mtrict.			
1	Total Length (m)	1,570	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	21	
9	Tree species	Timber, palm	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffic	

	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Schools	

KP-R-06: Improvement of Road by RCC Starting from Golaghata Mour up to Biddanondo Kathi RB High School including protection work (Ch. 130-149m, L/S), (Ch. 957-993m, L/S) & Street light 49 nos. at Keshabpur Paurashava, under Jashore District. Length = 1450m.			
1	Total Length (m)	1,450	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	12	
9	Tree species	Timber, palm	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Schools	

KP-R-07: Improvement of RCC road from Vogoti Primary School to Seatlatala Mour via Wadud Gazi house (Ch. 0.00m to 870m) including Protection Work at (Ch. 127m to 157m, R/S) & installation of Street Light 30 nos. at ward no - 02, Keshabpur Paurashava. Total Length = 870m.			
1	Total Length (m)	870	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	

6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	7	
9	Tree species	Timber, palm	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Primary School	

KP-R-08: Improvement of RCC road from Water Development Board Mour up to Baisa Mour South Para Eidgah (Ch. 0.00m to 1050) including Protection Work at (Ch. 943m to 973m, R/S) & installation of Street Light 36 nos. at ward no - 03, Keshabpur Paurashava. Total Length = 1050m.			
1	Total Length (m)	1,050	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	8	
9	Tree species	Palm, Bamboos	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW		
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	No	
14	Sensitive areas/structures along the road	No	

KP-R-09: Improvement of road by RCC from a. Dhanhata Bridge from Balidanga via near the house	

of Mr. Golam Rosul (Ch. 0.00m to 360m), b. (Ch. 0.00m to 60m) & installation of Street Light 15 nos. at Ward no-09, Keshabpur Paurashava. Total Length = 420m.			
1	Total Length (m)	420	
2	Existing road width (m)	3.5	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	Yes	
8	Approximate number of trees	6	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

KP-R-12: Improvement of Road by RCC at Ward No. 04 by (a) starting from Post Office Mour up to Thana Mour Ch. 0.00 to 440m, (b) Paradise Clinic up to Graveyard Road Ch. 0.00 to 710m, Link Road Ch. 0.00 to 200m, & Link Road U.N.O. Office to R&H Kalaroa Road Ch. 0.00 to 190m, installation of Street Light 56 nos. under Keshabpur Paurashava, Jashore District. Length = 1540m.			
1	Total Length (m)	1,540	
2	Existing road width (m)	4.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	

10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffi	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Clinic & Mosque	

Baseline Features of Proposed Drains in Keshabpur

KP-D-001: Part-1: Construction of RCC Drain Starting from the House of Mr. Aminuddin Master by the side of Ononta Sarok up to UGIIP-III Main Drain (Ch. 0.00 to 170.00m) Part-2: Starting from Keshabpur-Kalaroa Road to UGIIP-III Drain via Adv. Netay House (Ch. 565.00 to 170.00m) Link drain: Starting from Back side of Mintu Hotel to UGIIP-III Main Drain (Ch. 200.00 to 0.00m), Total Length 765m under Keshabpur Paurashava, Jashore.			
1	Total Length (m)	765	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with open brick drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	

	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

KP-D-002 (A): Construction of RCC Drain Starting near the House of Wadud via back side of Alia Madrasha to Baisa Road Cross Drain (Ch. 0.00 to 220.00m) & Link (i): Starting near Upazila Complex to Proposed Drain D-002(A) (Ch. 0.00 to 78.00m) Link (ii) : Starting near Upazila Pond to Proposed Drain D-002(A) (Ch. 0.00 to 198.00m), Total Length=496m, Under Keshabpur Paurashava, Jashore.			
1	Total Length (m)	496	
2	Existing road width (m)	2	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

KP-D-02 (B): Construction of RCC Drain Starting from Graveyard Road via back side of Upazila Complex to Burivadra River Ch. 0.00m to 740.00m and Link drain: Starting from Public Field to Proposed Drain D-002(B) Ch. 0.00 to 87.00m Total Length: 827.00m under Keshabpur Paurashava, Jashore.			
1	Total Length (m)	827	
2	Existing road width (m)	2.5	
3	Existing road surface	earthen road with open brick drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road	no	
14	Sensitive areas/structures along the road	Mosque	
KP-D-003 (A): Construction of RCC Drain Starting from old Animal Market near Sam Sen via Gom Potti up to Khozakhali Khal near Rokto Korobi Stage (Ch. 0.00 to 240.00m) and Link (i) Press Club Moure to proposed drain 003(A) Ch. 0.00 to 190.00m Link (ii) Pajia Road Moure to Proposed Drain 003(A) Ch. 0.00 to 45.00m, Link (iii) Sarno Potti Moure to Proposed Drain 003(A) Ch. 0.00 to 58.00m, Link(iv) Pajia Road to Proposed drain 003(A) Ch. 0.00 to 54.00m Total Length = 587.00m under Keshabpur Paurashava, Jashore.			
1	Total Length (m)	587	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	

5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road	no	
14	Sensitive areas/structures along the road	no	

KP-D-003 (B): Construction of RCC Drain Starting from Modhu Sarok in front of Altap Shoe Store to Bakso Potti via Fish Market up to Horihor River (Ch. 0.00 to 160.00m) and Link Drain: Starting in front of Bakso Potti to Proposed drain (3B) Ch. 0.00 to 200.00m Link(ii) Starting from backside of Bakso Potti to Proposed Drain (3B) Ch. 0.00 to 87.00m, Total Length: 447.00m under Keshabpur Paurashava, Jashore.			
1	Total Length (m)	447	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	

13	Traffic on the road	moderate traffic	
	Any other activities on the road	vendors	
14	Sensitive areas/structures along the road	no	

KP-D-004: Construction of RCC drain in front of Paikari Bazar via Old Murgihata Dhanhatkhola to Horihor River Ch. 0.00 to 205m and link drain starting from corner of New Vegetable Market to existing UGIIP - III drain Ch. 753 - 588m, Total Length = 370m under Keshabpur Paurashava, Jashore District.			
1	Total Length (m)	370	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	No	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	N/A	
12	Land use along the road	residential (thickly populated)	
13 14	Traffic on the road	no notable traffic	
	Any other activities on the road	hawkers	

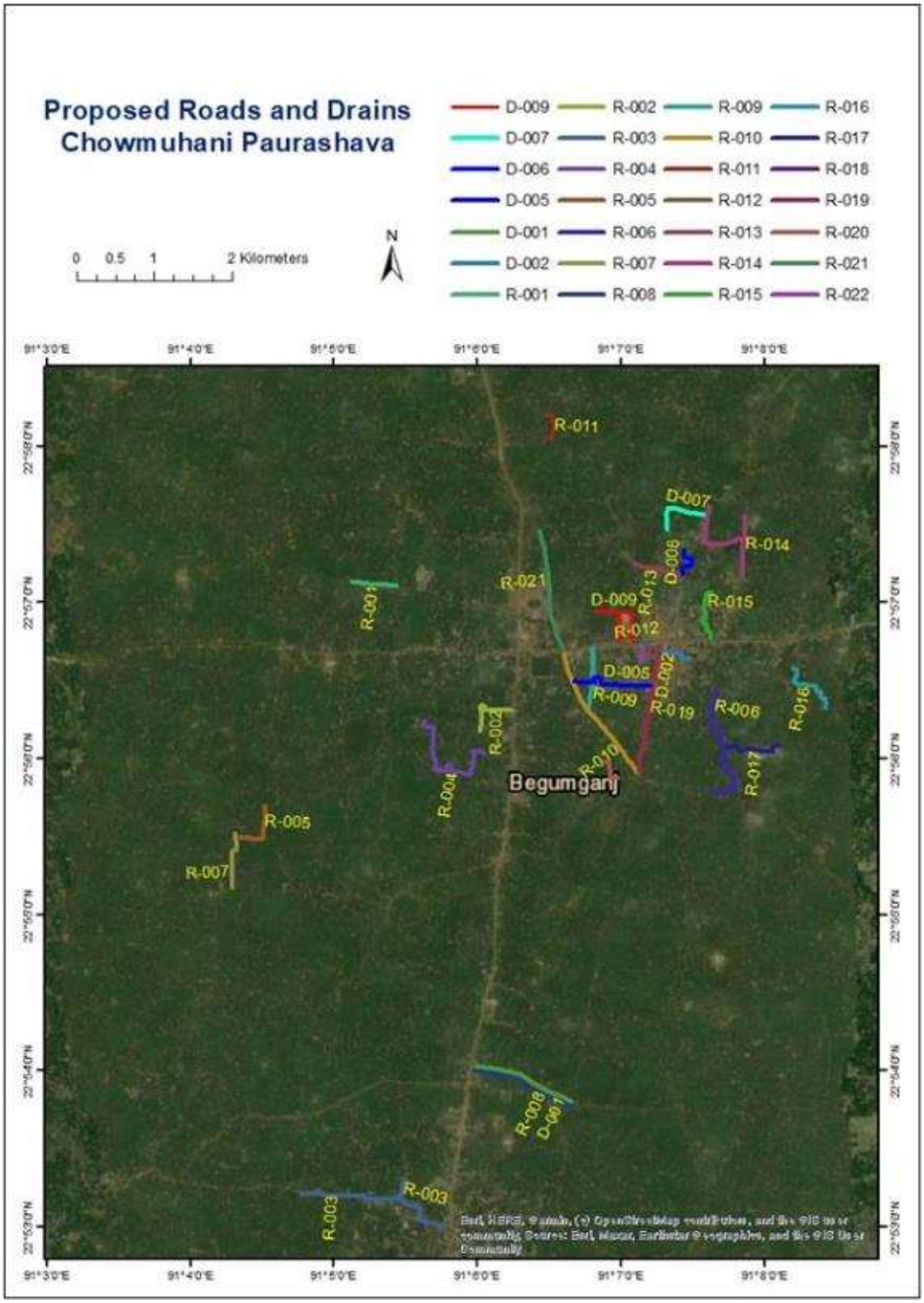
	Sensitive areas/structures along the road	no	

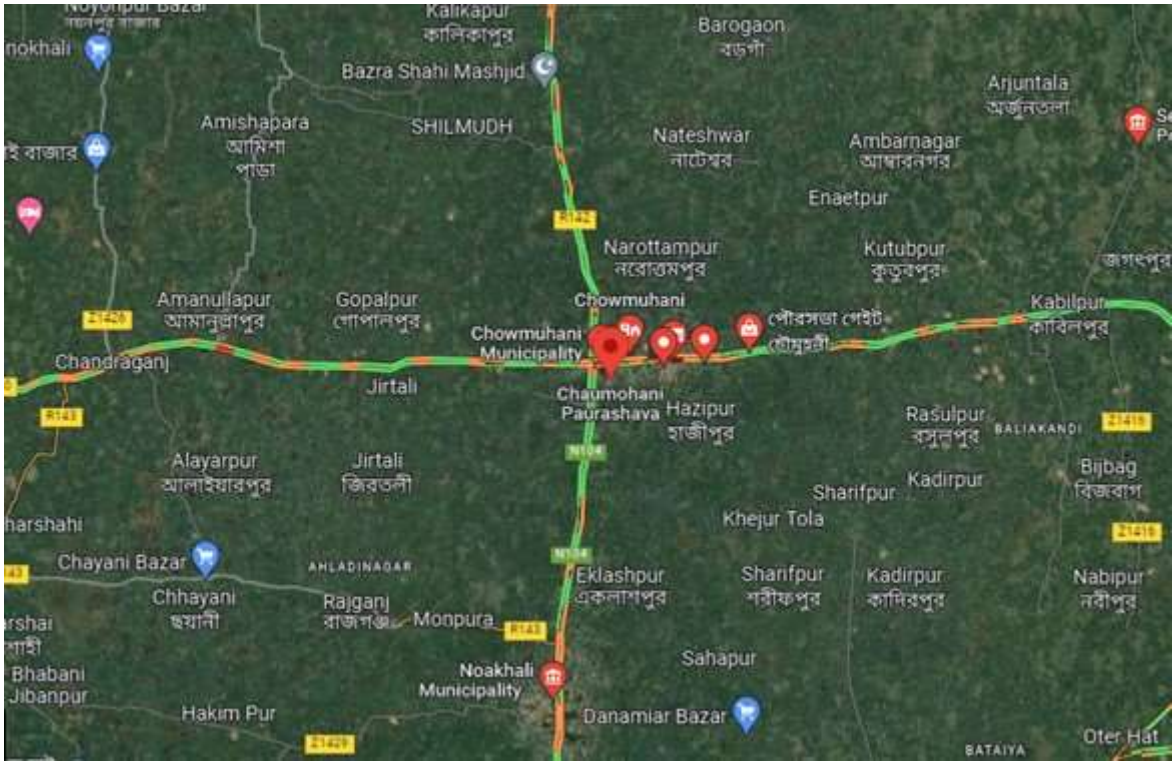
KP-D-12: Construction of RCC drain starting from Post Office Mour (R - 012, Right Side) to Dakbanglo via back side of WAPDA Colony to Boropit Khal Ch. 0.00 to 705m and link drain (i) starting from Tiger Point to proposed drain D - 012 Ch. 0.00 to 120m, link drain (ii) starting from corner of Upazila Mosque to existing culvert Ch. 0.00 to 137.00m, link drain (iii) starting from Upazila pond to proposed cross drain Ch. 0.00 to 220m, link drain (iv) starting from house of Mr. Polash to existing cross drain Ch. 0.00 to 55m. Total Length = 1237m under Keshabpur Paurashava, Jashore District.			 
1	Total Length (m)	1237	
2	Existing road width (m)	4.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	moderate traffic	
	Any other activities on the	vendors	
14	Sensitive areas/structures along the road	Mosque	

F.

F. Location and Environmental Features of Program Sites in Chowmuhani

Figure 6: Location of proposed roads and drains in Chowmuhani





Baseline Features of proposed Roads in Chowmuhani Paurashava

CHOW-R-01: Improvement of road by Dense Bituminous Carpeting from RHD Laksam road (Kalapol North Khalpar) to Paurashava Border Road & installation of Street Light 12 nos. at ward no - 1, Chowmuhani Paurashava, Noakhali.		
1	Total Length (m)	330
2	Existing road width (m)	6
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	9
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	Medical College

CHOW-R-02: Improvement of road by Dense Bituminous Carpeting (a) from RHD Maijdee road to ATI Mosjid (Ch-0.00m - Ch 435.00m) and (b) link road from ATI Mosjid to Zoinal Abedin Road (Ch 0.00m - Ch 265.00m) including Protection Work at (Ch. 65m - 80m, R/S) & installation of Street Light 26 nos. at ward no - 1, Chowmuhani Paurashava, Noakhali. Total Length = 700m.		
1	Total Length (m)	700
2	Existing road width (m)	7
3	Existing road surface	BC road without side drains

4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	religious places- Mosque.	
CHOW-R-03: Improvement of road by Dense Bituminous Carpeting (a) from RHD Maijdee road (Ramjanbibi Market) to Pesker market road Ch. 0 .00m to 1380.00m and (b) link road by RCC Refugee bari road Ch. 0.00m to 120.00m including protection work at (Ch. 36m to 148m, L/S), (Ch. 212m to 385m, L/S), (Ch. 455m to 540m, L/S), (Ch. 593m to 700m, L/S), (Ch. 920m to 934m, L/S), (Ch. 1065m to 1085m, B/S), (Ch. 23m to 45m, L/S), (Ch. 35m to 115m, L/S) & installation of street light 52 nos. at ward no - 02, Chowmuhani Paurashava, Noakhali. Total length = 1500m.			
1	Total Length (m)	1,550	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	

7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	hawkers	
14	Sensitive areas/structures along the road	Medical College playground.	
CHOW-R-04: Improvement of road by Dense Bituminous Carpeting (a) from RHD Maijdee road to Joinal Abedin road (Amin Member Dokan) (Ch. 0.00m – Ch. 1690m), and (b) Link Road from Moktarbari road (Ch. 0.00m – Ch. 280m) including RCC Cross Drain at Ch. 990m & installation of Street Light 67 nos. at ward no - 2, Chowmuhani Paurashava, Noakhali. Total Length = 1970m.			
1	Total Length (m)	1,970	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	24	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	

13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no.	
CHOW-R-05: Improvement of road by Dense Bituminous Carpeting from Moktarbari Amin member bari road to Ayesha Siddik Mohila Madrasha including Protection work at (Ch. 320m - 340m, R/S) & installation of Street Light 12 nos. at ward no - 2, Chowmuhani Paurashava, Noakhali. Total Length = 340m.			
1	Total Length (m)	340	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	17	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	High School	
CHOW-R-06: Improvement of road by RCC from South Bazar Shahi Mosque to Arif Hazir Pol including RCC Cross drain at Ch.1144m, Protection works at (Ch. 70m - 248m, R/S), (Ch. 545m - 569m, R/S), (Ch. 728m - 767m, L/S), (Ch.1265m - 1275m, L/S), (Ch. 1267m - 1295m, R/S), (Ch. 1386m - 1418m, R/S), (Ch. 1450m -			

1470m, R/S) & installation of street light 65 nos. at Ward - 9, Chowmuhani Paurashava, Noakhali. Total Length = 1920m.			
1	Total Length (m)	1,920	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	27	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	religious places Mosque.	
CHOW-R-07: Improvement of road by RCC from Joinal Abedin road to Moktar Bari Road via Begtola road (Ch. 0.00m – Ch. 420m), and by Dense Bituminous Carpeting Road (Ch. 420m – Ch. 645m) including Protection work at (Ch. 77m - 110m, R/S), (Ch. 219m - 243m, R/S) & installation of Street Light 23 nos. at ward no - 2, Chowmuhani Paurashava, Noakhali. Total Length = 645mi.			
1	Total Length (m)	645	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	

5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	21	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	
CHOW-R-08: Improvement of road by Dense Bituminous Carpeting from RHD maijdi road (Joinal Abedin Academy) to Momtaz Mia Sarok including protection work at (Ch. 360m to 378, B/S), (Ch. 435m to 462m, R/S), (Ch. 552m to 620m, B/S) & installation of street light 22 nos. at ward no - 03, Chowmuhani Paurashava, Noakhali. Total length = 625.			
1	Total Length (m)	625	
2	Existing road width (m)	4	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	
CHOW-R-09: Improvement of road by Dense Bituminous Carpeting from RHD Feni -Noakhali road to khalpar road via Singer Road including Street Light at 27 nos. at ward no - 4, Chowmuhani Paurashava, Noakhali. Total Length = 790m.			
1	Total Length (m)	790	
2	Existing road width (m)	5	
3	Existing road surface	BC road with drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	9	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	religious places- Mosque, Graveyard.	
CHOW-R-10: Improvement of road by Dense Bituminous Carpeting from Karimpur Graveyard Road (khalpar road) up to Atiabari bridge including Retaining wall at (Ch. 788m - 800m, R/S) & installation of Street Light 57 nos. at ward			

<table>
<tr><td colspan="3">no - 4, Chowmuhani Paurashava, Noakhali. Total Length = 1690m.</td><td rowspan="15">  </td></tr>
<tr><td>1</td><td>Total Length (m)</td><td>1690</td></tr>
<tr><td>2</td><td>Existing road width (m)</td><td>5.5</td></tr>
<tr><td>3</td><td>Existing road surface</td><td>BC road without side drains</td></tr>
<tr><td>4</td><td>Topography</td><td>Tippera Surface</td></tr>
<tr><td>5</td><td>Water bodies along the road</td><td>yes</td></tr>
<tr><td>6</td><td>Water bodies within 100 m of the road</td><td>N/A</td></tr>
<tr><td>7</td><td>Trees within the ROW</td><td>yes</td></tr>
<tr><td>8</td><td>Approximate number of trees</td><td>34</td></tr>
<tr><td>9</td><td>Tree species</td><td>Timber</td></tr>
<tr><td>10</td><td>Number of trees to be removed (approximate)</td><td>no</td></tr>
<tr><td>11</td><td>Utilities in the ROW</td><td>yes</td></tr>
<tr><td>12</td><td>Land use along the road</td><td>residential (sparsely developed)</td></tr>
<tr><td rowspan="2">13</td><td>Traffic on the road</td><td>moderate traffic</td></tr>
<tr><td>Any other activities on the road:</td><td>no</td></tr>
<tr><td>14</td><td>Sensitive areas/structures along the road</td><td>religious places- Graveyard</td></tr>
<tr><td colspan="3">CHOW-R-11: Improvement of road by RCC from Gonipur Vhaiyar Dhokan to Dhopabari road via Shohidhurer Bari (Ch. 0.00m – Ch. 555.00m) including Protection work at (Ch. 05m - 60m, R/S), (Ch. 170m - 305m, L/S), (Ch. 315m - 322m, R/S), (Ch. 429m - 453m, R/S), Retaining wall at (Ch. 10m - 35m, L/S), (Ch. 465m - 498m, L/S), RCC Box Culvert at Ch. 345m & installation of Street Light 20 nos. at ward no - 5, Chowmuhani Paurashava, Noakhali. Total Length = 555m.</td><td rowspan="4">  </td></tr>
<tr><td>1</td><td>Total Length (m)</td><td>555</td></tr>
<tr><td>2</td><td>Existing road width (m)</td><td>3</td></tr>
<tr><td>3</td><td>Existing road surface</td><td>BC road without side drains</td></tr>
</table>

4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	22	
9	Tree species	Timber, Palm	
10	Number of trees to be removed (approximate)		
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	
CHOW-R-12: Improvement of road by RCC from Rail Gate to Tokkar Pool Road & installation of street light 11 nos. at ward no - 6, Chowmuhani Paurashava, Noakhali. Total Length = 305m.			
1	Total Length (m)	305	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	25	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	
CHOW-R-13: Improvement of road by Dense Bituminous Carpeting from College Road to Rail line road (Hossain Road) & installation of street light 22 nos. at ward no - 6, Chowmuhani Paurashava, Noakhali. Total Length = 630m.			
1	Total Length (m)	630	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	14	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	
CHOW-R-14: Improvement of road by Dense Bituminous Carpeting (a) from Kismot Karimpur Govt. Primary school to Chowkider bari Paurashava border			

<table>
<tr><td colspan="3">(Ch.0.00m – Ch. 1250m), and (b) Link road from Kismot Karimpur Paurashava border to Paurashava border road (Murir Mill) (Ch. 0.00m – Ch. 265m) including Protection work at (Ch. 130m - 152m, R/S), (Ch. 187m - 224m, R/S), (Ch. 212m - 300m, L/S), (Ch. 386m - 417m, R/S), (Ch. 365m - 497m, L/S), (Ch. 680m - 803m, R/S), (Ch. 700m - 803m, L/S), (Ch. 900m - 942m, L/S), (Ch. 1020m - 1030m, L/S), (Ch. 1127m - 1147m, R/S), (Ch. 50m - 140m, L/S), (Ch. 190m - 230m, L/S) & installation of Street Light at 53 nos. at ward no - 7, Chowmuhani Paurashava, Noakhali. Total Length = 1515m.</td><td rowspan="15">  </td></tr>
<tr><td>1</td><td>Total Length (m)</td><td>1,515</td></tr>
<tr><td>2</td><td>Existing road width (m)</td><td>5</td></tr>
<tr><td>3</td><td>Existing road surface</td><td>BC road without side drains</td></tr>
<tr><td>4</td><td>Topography</td><td>Tippera Surface</td></tr>
<tr><td>5</td><td>Water bodies along the road</td><td>yes</td></tr>
<tr><td>6</td><td>Water bodies within 100 m of the road</td><td>N/A</td></tr>
<tr><td>7</td><td>Trees within the ROW</td><td>yes</td></tr>
<tr><td>8</td><td>Approximate number of trees</td><td>21</td></tr>
<tr><td>9</td><td>Tree species</td><td>Timber</td></tr>
<tr><td>10</td><td>Number of trees to be removed (approximate)</td><td>no</td></tr>
<tr><td>11</td><td>Utilities in the ROW</td><td>yes</td></tr>
<tr><td>12</td><td>Land use along the road</td><td>residential (sparsely developed)</td></tr>
<tr><td rowspan="2">13</td><td>Traffic on the road</td><td>moderate traffic</td></tr>
<tr><td>Any other activities on the road:</td><td>no</td></tr>
<tr><td>14</td><td>Sensitive areas/structures along the road</td><td>no</td></tr>
<tr><td colspan="3">CHOW-R-15: Improvement of road by RCC (a) from Kismot Karimpur Azims shop to Mondol Para road (Ch.0.00m – Ch. 820.00m), (b) Link - 1 from Mondolbari road (Ch.0.00m – Ch. 100.00m), (c) Link - 2 from Mondal Para road to Degree Hostel Road (Ch. 0.00m – Ch. 33.00m) including RCC Cross Drain at Ch. 720m &</td><td></td></tr>
</table>

installation of Street Light 34 nos. at ward no - 7, Chowmuhani Paurashava, Noakhali. Total Length = 953m.			
1	Total Length (m)	330	
2	Existing road width (m)	4	
3	Existing road surface	CC road with open brick drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	
CHOW-R-16: Improvement of road by Dense Bituminous Carpeting from Nozir Uddin bari road to Taltola Paurashava including Protection work at (Ch. 140m - 155m, L/S), (Ch.570m - 606m, R/S), (Ch. 612m - 640m, L/S), (Ch. 650m - 700m, B/S), (Ch. 730m - 750m, L/S) & installation of street light 31 nos. at ward no - 8, Chowmuhani Paurashava, Noakhali. Total Length = 885m.			
1	Total Length (m)	885	
2	Existing road width (m)	5.5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	

6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	14	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	
CHOW-R-17: Improvement of road by RCC from Hazipur Mowlana Kashem Sbs. Mosque to Bagan Bari including of RCC Cross Drain at Ch. 74m, RCC Retaining Wall at (Ch. 64m - 375m, R/S), Protection works at (Ch. 74m - 80m, L/S), (Ch. 160m - 174m, L/S), (Ch. 219m - 226m, L/S), (Ch. 246m - 272m, L/S), (Ch. 291m - 335m, L/S) & installation of Street Light 14 nos. at ward no - 9, Chowmuhani Paurashava, Noakhali. Total Length = 375m.			
1	Total Length (m)	375	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	yes	
8	Approximate number of trees	9	
9	Tree species	Bamboo, Palm	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	No	
CHOW-R-18: Improvement of road by RCC from RHD Bank Road to Golabari Kachabazar road installation of street light 09 nos. at ward no - 04, Chowmuhani Paurashava, Noakhali. Total length = 215m.			
1	Total Length (m)	215	
2	Existing road width (m)	4	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	7	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic c	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	
CHOW-R-19: Improvement of road by RCC from Atiabari bridge to Karimpur Rail station including Retaining wall at (Ch. 715m - 737m, L/S), (Ch. 811m - 831m, L/S), (Ch. 841m - 879m, L/S), Protection works at (Ch. 668m - 700m, L/S), (Ch. 1095m - 1200m, L/S) & installation of			

Street Light 41 nos. at ward no - 4, Chowmuhani Paurashava, Noakhali. Total Length = 1210m)		
1	Total Length (m)	1,219
2	Existing road width (m)	6
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	23
9	Tree species	Palm Tree
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (moderately dense)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no

CHOW-R-20: Improvement of road by Dense Bituminous Carpeting from Jalal Ahmed Road (Monnan Miar Pol) to Shofi Miar Culvert (Ch. 0.00m – Ch. 555.00m) including Protection work at (Ch. 90m - 105m, L/S), (Ch. 160m - 172m, L/S), (Ch. 375m - 393m, R/S), (Ch. 420m - 434m, R/S), (Ch. 535m - 550m, B/S), & installation of Street Light 20 nos. at ward no - 3, Chowmuhani Paurashava, Noakhali. Total Length = 555m.		
1	Total Length (m)	555
2	Existing road width (m)	5
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface

5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	23	
9	Tree species	Palm Tree	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	
CHOW-R-21: Improvement of road by RCC from Dhopabari Bridge to Stadium Bridge (Ch. 0.00m – Ch. 1390.00m) including RCC Box Culvert at Ch. 392m & installation of Street Light 47 nos. at ward no - 5, Chowmuhani Paurashava, Noakhali. Total Length = 1390m.			
1	Total Length (m)	1390	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	27	
9	Tree species	Timber, palm tree, Bamboo etc	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	religious places / hospitals / schools etc.	
CHOW-R-22: Improvement of road by RCC from RHD Feni- Noakhali road to Karimpur railway station (Ch. 0.00m – Ch. 210.00m) & installation of Street Light 8 nos. at ward no - 4, Chowmuhani Paurashava, Noakhali. Total Length = 210m.			
1	Total Length (m)	210	
2	Existing road width (m)	5.5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	yes	
14	Sensitive areas/structures along the road	no	

Baseline Features of proposed Drains in Chowmuhani Paurashava

CHOW-DR-01: Construction of RCC drain from Joynal Abedin to Noimuddin Khal Ch. 0.00m to 400.00m, under Chowmuhani Paurashava Noakhali. Total length = 400m.		
1	Total Length (m)	400
2	Existing road width (m)	4
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface
5	Water bodies along the road	no
6	Water bodies within 100 m of the road	yes
7	Trees within the ROW	no
8	Approximate number of trees	N/A
9	Tree species	N/A
10	Number of trees to be removed (approximate)	N/A
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no

CHOW-DR-02: Construction of RCC drain from RHD bank road to Baro Khal Ch. 0.00m to 500.00m, under Chowmuhani Paurashava Noakhali. Total length = 500m.		
1	Total Length (m)	500
2	Existing road width (m)	4
3	Existing road surface	BC road with open side drains block
4	Topography	Tippera Surface
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	no
8	Approximate number of trees	N/A
9	Tree species	N/A

10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

CHOW-DR-05: Construction of RCC drain from Ramjhan Ali Miar colony to WAPDA Khal Ch. 0.00m to 370.00m and link drain Ch. 117.00m to 0.00m, under Chowmuhani Paurashava Noakhali. Total length = 487m.			
1	Total Length (m)	487	
2	Existing road width (m)	3	
3	Existing road surface	Earthen road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated /)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

CHOW-DR-06: Construction of RCC drain from Profullo Shahar Bari to existing drain near Nobodhara Kindergarten Ch. 0.00m to 122.00m, under Chowmuhani Paurashava Noakhali. Total length = 122m.			
1	Total Length (m)	122	
2	Existing road width (m)	2	
3	Existing road surface	broken drain cum road	

4	Topography	Tippera Surface	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

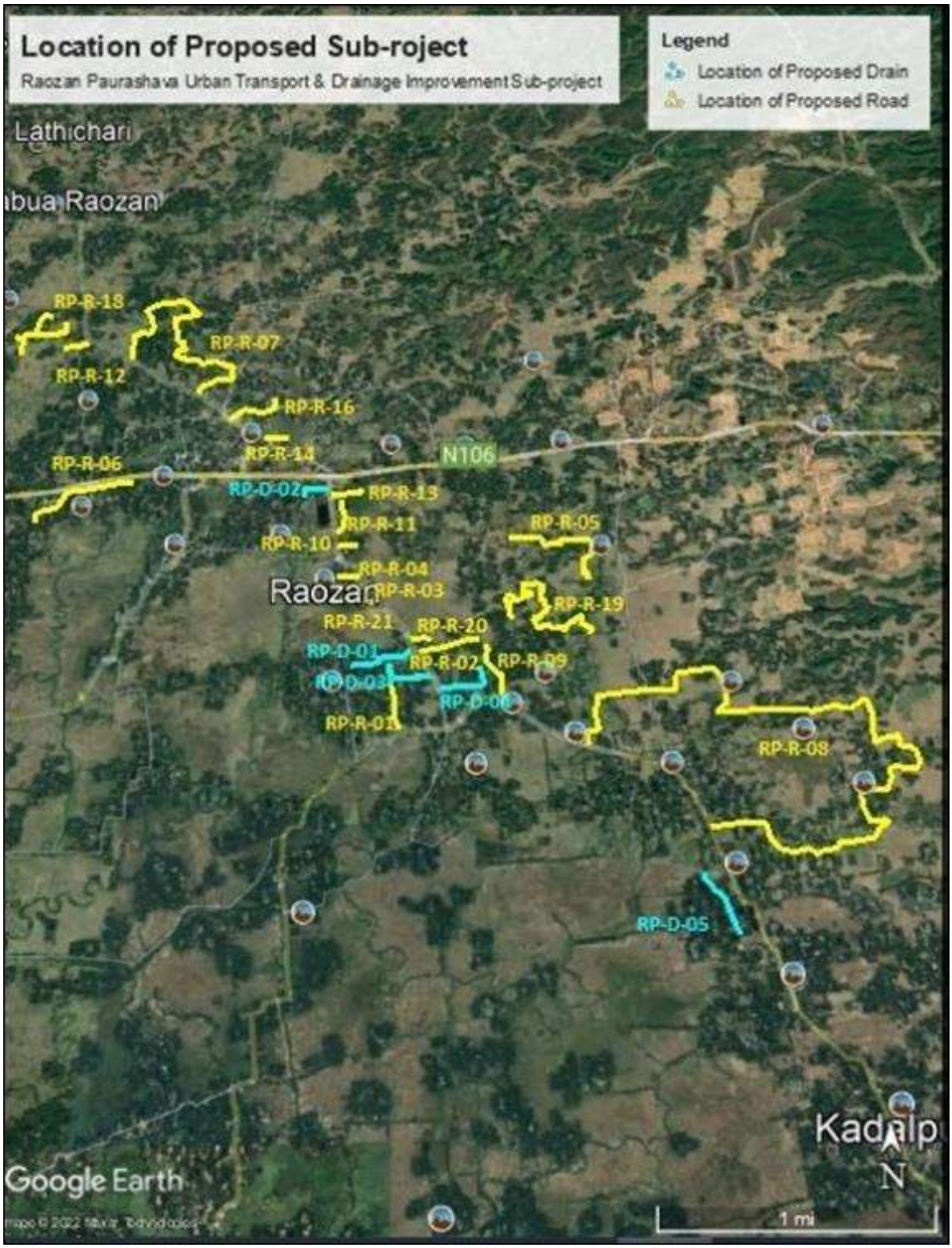
CHOW-DR-07: Construction of RCC drain from exiting drain near Daroga house to Khal near Kangali Mondol Bari Ch. 0.00m to 285.00m, under Chowmuhani Paurashava Noakhali. Total length = 285m.			
1	Total Length (m)	285	
2	Existing road width (m)	4	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

14	Sensitive areas/structures along the road	no	

CHOW-DR-09: Construction of RCC drain from backside of Pauro Banijjo Bitan to Khal Ch. 0.003 to 333.00m, under Chowmuhani Paurashava Noakhali. Total length = 333m.			
1	Total Length (m)	333	
2	Existing road width (m)	3	
3	Existing road surface	earthen road without side drains	
4	Topography	Tippera Surface	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	yes	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

G. Location and Environmental Features of Program Sites in Raozan

G.



Baseline Features of Roads in Raozan Paurashava

RAOZ-R-01: Improvement of Road by RCC (a) from Hazi Para to Chitiya Para via Sharif Para Ch. 0.00m to 1190.00m, (b) Link Road from Trimohoni, Abul Quasem's house to R&H road including Protection work at Cross Drain at Size at Ward No. - 06 & 08, Raozan Paurashava, Chattogram.		
1	Total Length (m)	1,930
2	Existing road width (m)	3.70
3	Existing road surface	earthen road without side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	8
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	no notable traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	Mosque

RAOZ-R-02: Improvement of Upazila Bypass Road by RCC from Darul Islam road to Dost Mohammed Road (near Raozan High School) including Protection work at. at Ward No. - 07.		
1	Total Length (m)	493
2	Existing road width (m)	5.5
3	Existing road surface	earthen road without side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A

7	Trees within the ROW	yes	
8	Approximate number of trees	6	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

RAOZ-R-03: Improvement of Tona Ma road by RCC from R&H road (Near fire service) to Afaz Daroga Bari & installation of street light 16 nos. at Ward No.- 06, Raozan Paurashava, Chattogram.			
1	Total Length (m)	450	
2	Existing road width (m)	3.00	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	yes	
8	Approximate number of trees	5	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	No	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

14	Sensitive areas/structures along the road	no	

RAOZ-R-04: Improvement of Jagath Dhar road by RCC from R&H road to Bot Tala & installation of street light 9 nos. at Ward No.- 04, Raozan Paurashava, Chattogram. (Length = 230 m).			
1	Total Length (m)	230	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	6	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	No	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

RAOZ-R-05: Improvement of Dost Mohammed Road by RCC from Bachu Miyar Shop to Connecting Sarok to Chikdair Union & installation of street light 23 nos. at Ward No.- 05.			
1	Total Length (m)	650	
2	Existing road width (m)	3.5	
3	Existing road surface	BC road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	

8	Approximate number of trees	15
9	Tree species	Timber
10	Number of trees to be removed (approximate)	No
11	Utilities in the ROW	yes
12	Land use along the road	residential (moderately dense)
13	Traffic on the road	no notable traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no

RAOZ-R-06: Improvement of Khan Bahadur Abdul Jabbar Road by RCC from Box Ali Chowdhury Bari Bridge to Sluice Gate including Protection work & installation of street light at Ward No. - 02.		
1	Total Length (m)	1,790
2	Existing road width (m)	3.7
3	Existing road surface	BC road with no side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	17
9	Tree species	Timber
10	Number of trees to be removed (approximate)	No
11	Utilities in the ROW	yes
12	Land use along the road	residential (moderately dense)
13	Traffic on the road	no notable traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no

RAOZ-R-07: Improvement of West Gohira Sikdar Bari Road by RCC from Rangamati R&H road (Near Hati company ghata) to Younus Sufia Primary School & installation of street light 33 nos. at Ward No.- 01, Raozan Paurashava, Chattogram.		
1	Total Length (m)	960
2	Existing road width (m)	3.3
3	Existing road surface	HBB road without side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	15
9	Tree species	Timber
10	Number of trees to be removed (approximate)	No
11	Utilities in the ROW	yes
12	Land use along the road	residential (moderately dense)
13	Traffic on the road	no notable traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no

RAOZ-R-09: Improvement of Dolilabad road by RCC from Shahid Jafar road (Near Raozan Mmodel Institute) to end of Paurashava, including Cross Drain at Ch. 291m, 333m, 442m & 1065m Size: & installation of street light 40 nos. at Ward. - 07.		
1	Total Length (m)	1,170
2	Existing road width (m)	3.7
3	Existing road surface	HBB road without side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	12
9	Tree species	Bamboo, timbers

10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

RAOZ-R-10: Improvement of West Side Road of Raozan Technical Government School & College by RCC from Rangamati R&H road through paddy field including Installation of street light 9 nos. at Ward No. - 03, Raozan Paurashava, Chattogram.			
1	Total Length (m)	250	
2	Existing road width (m)	3.7	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	12	
9	Tree species	Palm, timbers	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

RAOZ-R-11: Improvement of Road by RCC from Rangamati R&H road (near Gohira UP health center) to Asad Chowdhury Jame Mosque including Protection work at (& Installation of street light at Ward No. - 03, Raozan Paurashava, Chattogra.	

1	Total Length (m)	227	
2	Existing road width (m)	3.30	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	32	
9	Tree species	Bamboo, timbers	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

RAOZ-R-12: Improvement of road by RCC from Rangamati R&H to Abuddar Bari Sarok (near Miyar Ghata) Ch. 0-200m including 1 no Cross Drain Ch. 109m (Size: 1.0m X 1.0m) & Installation of street light 8 nos. at Ward No. - 01, Raozan Paurashava, Chattogram. (Length = 200 m).			
1	Total Length (m)	200	
2	Existing road width (m)	3.5	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	

8	Approximate number of trees	7	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

RAOZ-R-14: Improvement of road by RCC from East Side of Gohira F.K Jamel Ulum Bohumukhi Kamil Madrasa to Riyajul Jannah Mosque Ch. 0-200m including Installation of street light 8 nos. at Ward No. - 01, Raozan Paurashava, Chattogram.			
1	Total Length (m)	200	
2	Existing road width (m)	3.00	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	4	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

RAOZ-R-16: Improvement of road by RCC from Rangamati R&H road to Rokim Uddin Munsir Bari (Left Side of Graveyard) Ch. 0-200m including Installation of street light 8 nos. at Ward No. - 03,	

Raozan Paurashava, Chattogram. (Length = 200 m).		
1	Total Length (m)	200
2	Existing road width (m)	3.00
3	Existing road surface	HBB road without side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	6
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no

RAOZ-R-18: Improvement of Road by RCC (a) from Jagaran Sangho to Taltola Sarok and (b) Link Road, as connection of Jagaran Sangho - Taltola Sarok to Lokonath Mondir, Das Para, including Protection work, Box culvert Cross Drain & Installation of street light 45 nos. at Ward – 01.		
1	Total Length (m)	1,280
2	Existing road width (m)	3.00
3	Existing road surface	HBB road without side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	yes
6	Water bodies within 100 m of the road	N/A
7	Trees within the ROW	yes
8	Approximate number of trees	14
9	Tree species	Timber

10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Mosque	

RAOZ-R-19: Improvement of Road by RCC from Banik Para to Nandi Para including Protection work at (Ch.00m to 93m, L/S), Retaining wall (Ch. 520m to 544m, R/S), (Ch. 573 to 590, R/S), (Ch. 628m to 659m, R/S), (Ch. 673m to 722m, R/S), Cross Drain at Ch. 75m, 150m, 268m, & 545m (Size: 1.0m X 1.0m) & Installation of street light 26 nos. at Ward No. - 05, Raozan Paurashava, Chattogram.			
1	Total Length (m)	740	
2	Existing road width (m)	3.00	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	18	
9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

RAOZ-R-20: Improvement of road by RCC from Rangamati R&H road to Janali Munsir Bari Sarok Ch. 0-170m including Protection Work (Ch. 109m to	

170m, R/S) & Installation of street light 7 nos. at Ward No. - 07, Raozan Paurashava, Chattogram.		
1	Total Length (m)	170
2	Existing road width (m)	3.00
3	Existing road surface	HBB road without side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	no
6	Water bodies within 100 m of the road	no
7	Trees within the ROW	yes
8	Approximate number of trees	18
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no
14	Sensitive areas/structures along the road	no

RAOZ-R-21: Improvement of road by RCC from Rangamati R&H road to Absar Company Road (near Moyajjem Hosen Smriti Toron) Ch. 0-150m including Installation of street light 6 nos. at Ward No. - 06, Raozan Paurashava, Chattogram.		
1	Total Length (m)	150
2	Existing road width (m)	3.7
3	Existing road surface	HBB road without side drains
4	Topography	Chittagong Hill Tracts
5	Water bodies along the road	no
6	Water bodies within 100 m of the road	no
7	Trees within the ROW	yes
8	Approximate number of trees	13
9	Tree species	Timber
10	Number of trees to be removed (approximate)	no
11	Utilities in the ROW	yes

12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

Baseline Features of Drains in Raozan Paurashava

RAOZ-D-01: Construction of RCC Drain from Surjo Sen Gate Chattogram -Rangamati highway to old Kashkhali canal Ch. 0.00m - 635.00m, Total length = 635.00m..			
1	Total Length (m)	635	
2	Existing road width (m)	3.70	
3	Existing road surface	BC road with brick side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	No	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	no	

RAOZ-D-02: Construction of RCC Drain cum Road from corner of east side boundary wall of Gohira Degree College to existing box culvert on Chattogram - Rangamati highway Ch. 140m - 0.00m, Total length = 140.00m.			
1	Total Length (m)	140	
2	Existing road width (m)	3.70	
3	Existing road surface	BC road withoiut side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	no	

6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	College	

RAOZ-D-03 (A): Construction of RCC Drain starting from Hazi Para Md. Kutub Uddin Shaheb Mosque to Kashkali Canal Ch. 0.00 to 408.00m, Total Length: 408m under Raozan Paurashava, Chattogram.			
1	Total Length (m)	370	
2	Existing road width (m)	not available	
3	Existing road surface	BC road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	Yes	
8	Approximate number of trees	3	
9	Tree species	Palm	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
14	Sensitive areas/structures along the road	no	

RAOZ-D-03 (B): Construction of RCC Drain starting from Chattogram - Rangamati High way to Kashkhali Canal Ch. 0.00 to 290.00m and link drain: starting near Abul Kashem house to Kashkhali Canal Ch. 0.00 to 200.00m, Total Length: 490m under Raozan Paurashava, Chattogram.			
1	Total Length (m)	370	
2	Existing road width (m)	Not Available	
3	Existing road surface	BC road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	Hawker	
14	Sensitive areas/structures along the road	Mosque	

RAOZ-D-04: Part - 1: Construction of RCC Drain from Hazrat Shah Latif gate to Kacharapol canal; Part - 2: Construction of RCC drain from Kacharapole canal to Kash Khali canal; Part - 3: Construction of RCC drain from Kashkhali canal to Jalil Nagar existing culvert (both sides) via Jalil Nagar bus stand (R&H road) Link - (i); from Pauro Super Market to proposed drain Part - 1 via Pauro Kitchen Market mour, Link-(ii); from north side of Pauro Kitchen Market to proposed link drain Link - (iii); from Pauro Fish Market to link drain , Link - (iv); from Raozan Modormal Circle to existing Jalil Nagar culvert and installation of Street Light 57 nos.	

1	Total Length (m)	370	
2	Existing road width (m)	6	
3	Existing road surface	BC road with damaged side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	no	
6	Water bodies within 100 m of the road	no	
7	Trees within the ROW	no	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	
12	Land use along the road	residential & Commercial (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	Hawker	
14	Sensitive areas/structures along the road	Mosque	

RAOZ-D-05: Construction of RCC Drain beside Chattogram - Rangamati Highway via Bangamata Sheikh Fazilatunnesa Mujib Briddhashorm and Saima Wazed Putul Autism Centre up to existing box drain.			
1	Total Length (m)	201	
2	Existing road width (m)	Not Available	
3	Existing road surface	BC road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	No	
8	Approximate number of trees	N/A	
9	Tree species	N/A	
10	Number of trees to be removed (approximate)	N/A	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	no	
14	Sensitive areas/structures along the road	Old Home and Autism Centre	

PART II: SOCIAL FEATURES

I. SITE APPRECIATION – SAMPLE PROGRAM SITES

23. This section provides description on social baseline of *Pourashavas* selected for the RBL program in general and five sample *Pourashavas* visited in particular. The description is based on site visits and resettlement plan (RP)/ due diligence (DDR) reports being prepared by the LGED for the five sample *Pourashavas* for the project interventions. This appendix is presented in following sections:

H. Impacts and Baseline Social Features

24. **Involuntary resettlement**. The roads and drains will be constructed within the rights of way (ROW) of *Pourashava* roads, and low-income neighborhoods improvement works, markets and parks will be undertaken on *Pourashava* land. Initial assessment indicates that there will be no land acquisition, or physical displacement or permanent economic displacement of any individual, household, or community.[24] The program will screen the project activities triggering involuntary resettlement impacts in each *Pourashava*. No activities shall be permitted that may fall into category A for involuntary resettlement, as per ADB SPS. The program is classified as a category B for involuntary resettlement.[25] The impact will be assessed and confirmed for each proposed component based on final detailed design.

25. **Tribes, Minor Races, Ethnic Sects and Communities (TMRESC).** According to Bangladesh Bureau of Statistics 2011 census data, in 37 of 86 *pourashavas* under RBL program, the TMRESC constitute less tha*n* 1% (3,693) of total population 1,458,990 in all but two *Pourashavas* - Banskhali (3.91%) and Naohata *(*1.57%)**.** However, the TMRESC population is scattered around the *Pourashavas* (does not stay in cohesive TMRES communities or groups) in all most all the *pourashavas* and is well assimilated in urban society. The exceptions are Naohata and Banskhali *pourashavas,* where TMRESC live in small groups. *Pourashava* wise list of TMRESC population is given in ESMF**.** The project will have beneficial impact on the TMRES communities or groups hence, it is classified as Category B for Indigenous Peoples' safeguards. The program will screen the project activities for indigenous peoples impacts in each *Pourashava*. No activities shall be permitted that may fall into category A for indigenous peoples, as per ADB SPS.

26. **Demography.** The population data of five *Pourashavas* visited is summarized below in Table - 1. It is clear from the table that maximum population is in Chowmuhani *Pourashava* among all the five visited.

Table 6: Population Data of Visited Pourashavas

Sl. No.	Name of *Pourashava*	Total number of Wards	Total Population	Male	Female	Population Density (per km^2)
1	Raozan	9	36569	19183	17386	2214

[24] Among the five sample Pourashavas assessed, temporary income loss to road-side shop owners is assessed in one Pourashava (Chowmohoni).

[25] According to ADB Safeguard Policy Statement 2009, a proposed project is classified as category A if it causes physical displacement or loss of 10% or more of productive, income-generating assets to 200 or more persons. Program activities are Category B if involuntary resettlement impacts are not deemed significant. The screening checklist for the program is attached in Appendix 4 of ESMF. When involuntary resettlement impacts are unavoidable resettlement plan will be prepared.

2	Naohata	9	57119	28826	28293	1239
3	Chowmuhani	9	122000	55510	66490	5893
4	Araihazar	9	25593	12898	12695	5893
5	Keshabpur	9	26229	13141	13088	1882
Source: UGIIP III Consultants						

27. The average literacy rate of *Pourashavas* varies from 14- 52% (7+ years), male around 40% and female 27% and the national average of 30.4% literate. (Population and Housing Census, Bangladesh Bureau of Statistics (BBS), 2011).

28. **Transport.** According to the field level survey, all the *Pourashavas* have main roads, general roads and access roads as per the local classification. Observably, most of these roads have uneven-rough surface, damaged topping and pavement sides owing to lack of maintenance, mostly narrow in width, hence incapable of accommodating generated traffic. While visiting different roads, the team observed that the surfaces are worn out partly and, in some cases, entirely. Justifiably, they call for intervention varying from normal significant maintenance to large Rehabilitation/reconstruction.

29. **Economic development.** The economic development in all the *Pourashavas* is taking place at a faster pace. Many paddy huts, machine-operated rice mills, cold storages, bronze and brass industries, silk industries, textile industries and other business establishments are coming up. The *Pourashavas* cities are also expanding on all sides due to population pressure. The *Pourashavas* have insufficient capacity and resources and are finding it difficult to respond to the need for forward planning and investment in basic urban infrastructure and services.

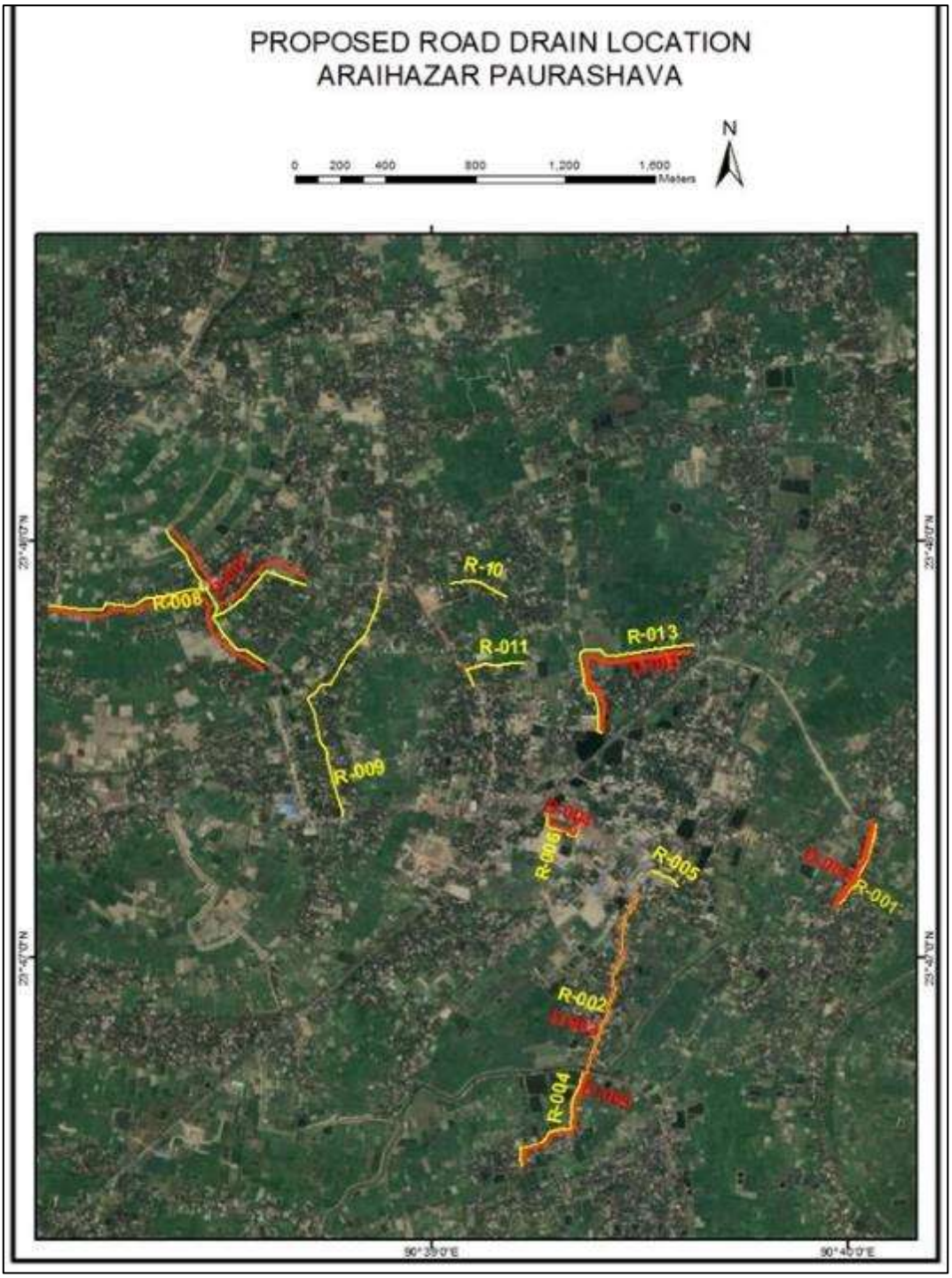
I. Field visit observations during PSSA to Sample Program Towns

30. 12-09-2022 to 19.09.2022 visit report for sample towns

- The team visited five RBL sample pourashavas (Chowmohoni, Rouzan, Araihazar, Naohata and Keshabpur) in two phases. Out of five towns; in Chowmohini, a resettlement plan needs to be prepared for potential adverse impacts to 7 households (temporary income loss due to access disruption). This had been discussed with the consultants in presence of the Project Director.
- It has been observed that there are communication gaps between Social and Environment team among the TA consultants related to project description, field visit findings, etc.
- It is advised that TA consultants prepare one IEE and one RP/DDR for each RBL project town considering all the project components proposed for the town. In all 37 IEEs and RP/DDRs will be prepared for all RBL project towns.
- All proposed roads and drains are under the ownership of respective *Pourashavas*; PMU to collect no objections (NOC) and any other relevant data from respective *Pourashavas,* the Consultants are suggested to incorporate them in the safeguard documents.
- In all *Pourashavas*, the proposed-out falls locations of all the drains are under the ownership of respective *Pourashavas*. Consultants are requested to collect and incorporate the data in the safeguard documents.
- It is suggested that construction activities should be undertaken during night time in the market places and congested places.

J. Features of Program Sites in Araihazar

Figure 7: Location of proposed roads and drains in Araihazar



Baseline Features on Proposed Roads and Drains in Araihazar

ARAI-R-001: Improvement of road by RCC from Sub-Registry Office to Lasardi Goalpara & installation of Street Light 13 nos. at Ward no - 8, Araihazar Paurashava, Narayanganj.		
1	Total Length (m)	370
2	Existing road width (m)	3.7
3	Existing road surface	BC road with no side drains
4	Topography	Old Brahmaputra and Meghna Floodplain
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no

ARAI-R-002: Improvement of road by Dense Bituminous Carpeting from Shibpur mour to Shibpur bridge & installation of Street Light 30 nos. at Ward no - 08, Araihazar Paurashava, Narayanganj. Total Length = 860m.		
1	Total Length (m)	860
2	Existing road width (m)	3.7
3	Existing road surface	BC road with no side drains
4	Topography	Old Brahmaputra and Meghna Floodplain
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	less traffic
	Any other activities on the road	no

ARAI-R-004: Improvement of road by RCC from Shibpur Bridge to Nagrapara last point of Paurashava including Protection Work & installation of Street Light 27 nos. at Ward no - 8, Araihazar Paurashava, Narayanganj. Total Length = 790m.		
1	Total Length (m)	790
2	Existing road width (m)	3.7
3	Existing road surface	BC road with no side drains
4	Topography	Old Brahmaputra and Meghna Floodplain

5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	

ARAI-R-005: Improvement of road by RCC from South Side of Govt. Sofor Ali College & installation of Street Light 6 nos. including of Protection Work at (Ch. 75m to 145m, B/S) at Ward no - 8, Araihazar Paurashava, Narayanganj. Total Length = 145m.			
1	Total Length (m)	145	
2	Existing road width (m)	3.7	
3	Existing road surface	earthen road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffic	

ARAI-R-006: Improvement of road by RCC from Araihazar Market area a. (Ch. 0.00m - Ch. 155m), b. Link - 1 (Ch. 0.00m - Ch. 66m), c. Link - 2 ((Ch. 0.00m - Ch. 60m), & installation Of Street Light 13 nos. at Ward no - 8, Araihazar Paurashava, Narayanganj. Total Length = 281m.			
1	Total Length (m)	281	
2	Existing road width (m)	4.5	
3	Existing road surface	earthen road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	

ARAI-R-008: Improvement of road by RCC from Mozzakanda Bazar to Kamranirchar Soila house via Chamurkandi Sarker Bari Road a. (Ch. 0.00m to 1637m), b. Link - 1 (Ch. 0.00m to 390m), c. Link - 2 (Ch. 0.00m to 183m) including RCC Box Culvert at Ch. 1217m, Protection Work & installation of Street Light 77 nos. at Ward no - 1, 2 & 3, Araihazar Paurashava, Narayanganj. Total Length = 2210m.			
1	Total Length (m)	2210	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	

8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	

ARAI-R-009: Improvement of road by Dense Bituminous Carpeting from Jhoughora to Mozzakanda Bazar including of Protection Work at (Ch. 0m to 55m, L/S), (Ch. 225m to 250m, L/S), (Ch. 320m to 360m, L/S), (Ch. 650m to 700m, L/S) & installation of Street Light 40 nos. at Ward no - 2 & 5, Araihazar Paurashava, Narayanganj. Total Length = 1181m.			
1	Total Length (m)	1181	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	Commercial & residential (moderately dense)	
13	Traffic on the road	moderate traffic	

ARAI-R-010: Improvement of road by RCC from Gazipura Fish Hatchery Main Road to Gazipura North Para Eidgah Road including Protection Work at (Ch. 230m to 250m, L/S) & installation of Street Light 9 nos. at Ward no - 6, Araihazar Paurashava, Narayanganj. Total Length = 250m.			
1	Total Length (m)	250	

2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic / less traffic / moderate traffic / heavy traffic Any other activities on the road: hawkers / vendors etc	

ARAI-R-011: Improvement of road by RCC from Gazipura Primary School Road to Gazipura Middle Bari Mosque via Zainal house & installation of Street Light 9 nos. at Ward no - 6, Araihazar Paurashava, Narayanganj. Total Length = 250m.			
1	Total Length (m)	250	
2	Existing road width (m)	3.7	
3	Existing road surface	CC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	

9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	

ARAI-R-013: Improvement of road by RCC from Baghar Khal to Choughoria road including RCC Box Culvert at Ch. 850m, Protection Work & installation of Street Light 30 nos. at Ward no - 9, Araihazar Paurashava, Narayanganj. Total Length = 875m.			
1	Total Length (m)	875	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Old Brahmaputra and Meghna Floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	

ARAI-D-001: Construction of RCC Drain starting from Sub-registry Office to existing box culvert at Lasardi Goalpara road at Ward no - 08 under Araihazar Paurashava, Narayanganj. Total Length = 370m.	
ARAI-D-005: Construction of RCC Pipe Drain from Nagrapara near Shop of Shahidur Rahman to Shibpur Bridge at Ward no - 8 under Araihazar Paurashava, Narayanganj. Total Length = 790m	

K. **Features of Program Sites in Naohoata**

Figure 8: Location of proposed roads and drains in Naohoata

Baseline Features of Proposed Roads in Naohata Paurashava

NAOH-R-01: Improvement of road by Dense Bituminous Carpeting from Naohata Anjuman Tohid Madrasah to Chomper Mour & installation of Street Light 45 nos., at Ward no - 1 & 8, Naohata Paurashava, Rajshahi. Total Length = 1320m.		
1	Total Length (m)	1,320
2	Existing road width (m)	5
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no

NAOH-R-03: Rehabilitation of DC Road by Bituminous Dense Carpeting from Naohata Bagata Poshu Hospital to Paikpara to Naopara Madrasah including Protection Work at (Ch. 200m - 235m, R/S), (Ch. 250m - 300m, R/S), (Ch. 1200m - 1250m, L/S), (Ch. 1320m - 1380m, L/S), Retaining Wall at (Ch. 1380m - 1430m, R/S) & installation of Street Light 84 nos., at Ward no - 7, Naohata Paurashava, Rajshahi. Total Length = 2500m.		
1	Total Length (m)	2,500
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated

9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH-R-004: Rehabilitation of Road by Bituminous Dense Carpeting from Naohata Sapara mour to Dadpur end of Paurashava Boundary including Retaining Wall at (Ch. 900m - 960m, L/S), (Ch. 1460m - 1500m, R/S) & installation of Street Light 68 nos., at Ward no - 7, Naohata Paurashava, Rajshahi. Total Length = 2000m.			 
1	Total Length (m)	2,000	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	N/A	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	hawkers	

NAOH-R-05: Rehabilitation of by Dense Bituminous Carpeting from Naohata Bridge Mour to Tanore Road Nobiullar Mour including Retaining Wall at (Ch. 1150m - 1250m, L/S) & installation of Street Light 79 nos., at Ward no - 7, Naohata Paurashava, Rajshahi. Total Length = 2350m.			 
1	Total Length (m)	2,350	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	Yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	No	

NAOH-R-21: Improvement of road by Dense Bituminous Carpeting from Northpara Mainul mile to East side H/O Kolimuddin & installation of Street Light 18 nos., at Ward no - 1, Naohata Paurashava, Rajshahi. Total Length = 500m			
1	Total Length (m)	500	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	

7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	less traffic
	Any other activities on the road:	no

NAOH-R-59: Rehabilitation of Road by Bituminous Dense Carpeting from Puthiapara Ansar Camp RHD Road to Modunhati Government Primary School including Protection Work at (Ch. 2400m - 2425m, R/S), Retaining Wall at (Ch. 465m - 495m, L/S), (Ch. 480m - 510m, L/S), (Ch. 820m - 850, L/S) & Street Light 104 nos., at Ward no - 3, Naohata Paurashava, Rajshahi. Total Length = 3080m.

1	Total Length (m)	3,080
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes

12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	no	

NAOH-R-63: Improvement of road by Dense Bituminous Carpeting from Alaibidirpur to Alaibidirpur Waterboard Badh including Protection Work at (Ch. 200m - 230m, L/S), (Ch. 300m - 330m, L/S), (Ch. 360m - 400m, R/S), (Ch. 420m - 470m, R/S) & installation of Street Light 26 nos., at Ward no - 3, Naohata Paurashava, Rajshahi. Total Length = 750m.			
1	Total Length (m)	750	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

NAOH -R-64: Improvement of Road by Dense Bituminous Carpeting from Alaibidirpur Waterboard Badh to East Puthiapara H/O Bacher including RCC Cross Drain at Ch. 900m, Ch. 1050m, Ch. 1300m, Ch. 1500m, Retaining Wall at (Ch. 0.00m - 30m, L/S), (Ch. 800m - 830m, L/S), (Ch. 2600m - 2630m, L/S) & installation of Street Light 89 nos., at Ward	

no - 3, Naohata Paurashava, Rajshahi. Total Length = 2650m.		
1	Total Length (m)	2,650
2	Existing road width (m)	4.3
3	Existing road surface	BC road with no side drains
4	Topography	Barind & Ganges River floodplain
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no

NAOH-R-90: Improvement of Road by Dense Bituminous Carpeting from Modunhati West Para (Kamarpara) H/O Saiful to Water Board Badh including RCC Cross Drain at Ch. 1200m & installation of Street Light 58 nos., at Ward no - 3, Naohata Paurashava, Rajshahi. Total Length = 1700m.		
1	Total Length (m)	1,700
2	Existing road width (m)	4.3
3	Existing road surface	earthen road without side drains
4	Topography	Barind & Ganges River floodplain
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes

12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH-R-107: Improvement of Road by Dense Bituminous Carpeting from Bagdhani Hat Bridge near H/O Kubbach to Belal Leader Via Sadik Shop to Tanore Road Munsur Shop & installation of Street Light 18 nos., at Ward no - 4, Naohata Paurashava, Rajshahi. Total Length = 500m.			 
1	Total Length (m)	500	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	hawkers	
NAOHR-109: Rehabilitation of Road by Dense Bituminous Carpeting from Basontopur H/O Siraz to West Para Mosque near H/O Hima including RCC Cross Drain at Ch. 30m, Ch. 400m & installation of Street Light 18 nos., at Ward no - 4, Naohata Paurashava, Rajshahi. Total Length = 500m.			
1	Total Length (m)	500	

2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH-R-112: Rehabilitation & Improvement of Road by Dense Bituminous Carpeting from Choubaria - Darusa Road to Choubaria Paurashava out boundary near H/O Abul via Choubaria Government Primary School including RCC Cross Drain at Ch. 400m, Ch. 700m, Ch. 1100m Protection Work at (Ch. 1100m - 1150m, L/S), Retaining Wall at (Ch. 200m - 260m, L/S), (Ch. 1500m - 1540m, R/S) & Street Light 63 nos., at Ward no - 5, Naohata Paurashava, Rajshahi. Total Length = 1850m.			
1	Total Length (m)	1,860	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	

5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH-R-116: Improvement of road by Dense Bituminous Carpeting from Bagsara Tanore Road to Bagsara central Jame Mosque & installation of Street light 58 nos., at Ward no - 03, Naohata Paurashava, Rajshahi. Total length = 1700m.			 
1	Total Length (m)	1,700	
2	Existing road width (m)	3,5	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	

NAOH-R-157 & 158: Rehabilitation of Road by Dense Bituminous Carpeting from Tanore Road via Girls School to Pakuria Government Primary School including Box Culvert at Ch. 1220m & Street Light	

81 nos., at Ward no - 6, Naohata Paurashava, Rajshahi. Total Length = 2400m.			 
1	Total Length (m)	2,400	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH-R-173: Improvement of road by Dense Bituminous Carpeting from Vogruil Mour Rajshahi Naogaon Road to Sontuspur Paurashava out boundary near H/O Entaj including Protection work at (Ch.800m - 860m, R/S), (Ch. 900m - 950m, R/S) & installation of Street light 51 nos., at Ward no - 07, Naohata Paurashava, Rajshahi. Total length = 1500m.			
1	Total Length (m)	1,500	
2	Existing road width (m)	4.3	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	

10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

Baseline Feature of Proposed Drains in Naohoata Pourashava

NAOH-D-256: Construction of RCC Drain starting from near Naohata T&T Para Halim Land to existing main drain via ATM Memorial (Ch. 0.00m to 710.00m), Link (i): From Pintu house to link drain (ii) (Ch. 60.00m - 0.00m) and Link (ii): From Motin house to proposed drain D-256 (Ch. 100.00m - 0.00m) including RCC Cross drain at (Ch. 425m to 431m) under Naohata Paurashava, Rajshahi. Total Length = 870m.			
1	Total Length (m)	870	
2	Existing road width (m)	3.5	
3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	

NAOH-D-258: Construction of RCC Drain starting from Naohata Madrasha Para Salam House to existing main drain via Ali Hazi Mosque (Ch. 0.00m to 370.00m), under Naohata Paurashava, Rajshahi. Total Length = 370m.			
1	Total Length (m)	370	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH -D-271: Construction of RCC Drain from Vogruil Bottola Mour to Proposed drain D - 272 via Moddhopara Mosque Ch. 0.00m - 1000.00m, Under Naohata Paurashava, Rajshahi. Total length = 1000m.			
1	Total Length (m)	1,000	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

NAOH -D-272: Construction of RCC Drain starting from Vogruil Dalan to existing Bathan Bari Drain, (Ch. 0.00m - 900.00m) including RCC Cross drain at (Ch. 380m to 388m), (Ch. 894m to 900m) under Naohata Paurashava, Rajshahi. Total Length = 900m.			
1	Total Length (m)	370	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	N/A	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

NAOH -D-276: Construction of RCC Drain starting from Shamim Market to existing drain via Vogruil Graveyard (Ch. 0.00m to 500.00m), under Naohata Paurashava, Rajshahi. Total Length = 500m.			
1	Total Length (m)	500	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Water bodies along the road	yes	
6	Water bodies within 100 m of the road	N/A	
7	Trees within the ROW	yes	
8	Approximate number of trees	10	

9	Tree species	Timber	
10	Number of trees to be removed (approximate)	no	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

NAOH -D-278: Construction of RCC Drain from Modina Decorator house to existing RCC Drain via Naohata Madrasapara Zuta Hatem house Ch. 0.00m to 200m, under Naohata Paurashava, Rajshahi. Total length = 200m.			
1	Total Length (m)	200	
2	Existing road width (m)	3.25	
3	Existing road surface	BC road without side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH -D-293: Construction of RCC Drain starting from near Putiyapara East Para Monar Garage to existing drain via East Putiyapara Jame Mosque (Ch. 0.00m to 500.00m) including RCC Cross drain at (Ch. 140m to 145m), (Ch. 490m to 500m) under Naohata Paurashava, Rajshahi. Total Length = 500m.			
1	Total Length (m)	500	
2	Existing road width (m)	3.25	

3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH -D-302: Construction of RCC drain from Naohata Bagata Jalal Rice Mill to Barnoy River via Shahapara Mour near house of Najmul Master Ch. 0.00m to 965m and Link drain from Water Pump to proposed Main drain D-302 Ch. 145m to 0.00m, under Naohata Paurashava, Rajshahi. Total length = 1110m.			
1	Total Length (m)	1,110	
2	Existing road width (m)	3.5	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	N/A	
12	Land use along the road	residential (sparsely developed)	

13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

NAOH-D-342: Construction of RCC Drain from near Shialbed house of Zoban existing RCC Drain to Doyar Bridge (Doyar Shaku Canal) Ch. 0.00m - 930.00m, under Naohata Paurashava, Rajshahi. Total length = 930.			
1	Total Length (m)	930	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road with no side drains	
4	Topography	Barind & Ganges River floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

L. Features of Program Sites in Keshabpur

Figure 9: Location of proposed roads and drains in Keshabpur

Baseline Features on Proposed Roads in Keshabpur

KP-R-001: Improvement of Road by RCC Starting from South West Corner of Christen Mission School up to near the pond of Meher Morol (Ch. 0.00 to 985m) & Link Road towards Petrol Pump (Ch. 0 to 354m) including Protection work (Ch. 319-335m, R/S), (Ch. 527-542m, R/S), (, (Ch. 260-298m, L/S), RCC Cross Drain at Ch.120, Ch. 162, Ch. 429, Ch. 523, link road Ch. 275, Size (1m X 1m) & Installation of street Light 47 nos. at Keshabpur Paurashava, under Jashore District.			
1	Total Length (m)	1,339	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	

6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	

KP-R-02: Improvement of Road by RCC at Ward no -1 & 4 starting from Keshabpur Press Club towards Modhu Sarok to T&T Mour via Hatkhola Road Ch. 0.00 - 900m, link road Modhu Sarok to Tiger Point Ch. 0.00 - 95m & Dhanhatkhola link road Ch. 0.00 - 165m, installation of Street Light 42 nos. at Keshabpur Paurashava under Jashore District. Length = 1160m.			
1	Total Length (m)	1,339	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	Hawker	

KP-R-003: Improvement of RCC Road at Ward no - 07 (a) Tol Plaza, Jashore-Satkhira R&H Road to Hatath Para Jame Mosque Ch. 0.00 to 800m including protection work (Ch. 135-176m, L/S & Ch.	

664 - 695m, R/S), and link road towards Moddokul Primary School Ch. 0.00-200m; (b) Moddokul Sardarpara to Moddokul Dafader Para Ch. 0.00 to 740m incl. 2 nos. (1.00m x 1.00m size) , RCC cross drain at Ch. 293m & Ch. 675m (link road,)) & installation of Street light 62 nos. under Keshabpur Paurashava, Jashore District.			 
1	Total Length (m)	1,740	
2	Existing road width (m)	5.5	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	

KP-R-04: Improvement of Road by RCC at Ward no-08. Starting from Keshabpur Pilot School Moar Up to Brommaha Kati End including Protection work at (Ch. 664-695m, R/S), & Street Light 73 nos. at Keshabpur Paurashava under Jashore District. Length = 2165m.			
1	Total Length (m)	2,165	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	

9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	

KP-R-05: Improvement of Road by RCC at Ward no-05. Starting from Altapol Biswaspara to Altapol Primary School End including Protection work at (Ch. 664-695m, R/S), (Ch. 1400-1450m L/s) & Street Light 53 nos. at Keshabpur Paurashava under Jashore District. Length = 1570mtrict.			
1	Total Length (m)	1,570	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	

KP-R-06: Improvement of Road by RCC Starting from Golaghata Mour up to Biddanondo Kathi RB High School including protection work (Ch. 130-149m, L/S), (Ch. 957-993m, L/S) & Street light 49 nos. at Keshabpur Paurashava, under Jashore District. Length = 1450m.			
1	Total Length (m)	1,450	
2	Existing road width (m)	3.7	

3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

KP-R-07: Improvement of RCC road from Vogoti Primary School to Seatlatala Mour via Wadud Gazi house (Ch. 0.00m to 870m) including Protection Work at (Ch. 127m to 157m, R/S) & installation of Street Light 30 nos. at ward no - 02, Keshabpur Paurashava. Total Length = 870m.			
1	Total Length (m)	870	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	

	Any other activities on the road:	no	

KP-R-08: Improvement of RCC road from Water Development Board Mour up to Baisa Mour South Para Eidgah (Ch. 0.00m to 1050) including Protection Work at (Ch. 943m to 973m, R/S) & installation of Street Light 36 nos. at ward no - 03, Keshabpur Paurashava. Total Length = 1050m.			
1	Total Length (m)	1,050	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW		
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	No	

KP-R-09: Improvement of road by RCC from a. Dhanhata Bridge from Balidanga via near the house of Mr. Golam Rosul (Ch. 0.00m to 360m), b. (Ch. 0.00m to 60m) & installation of Street Light 15 nos. at Ward no-09, Keshabpur Paurashava. Total Length = 420m.			
1	Total Length (m)	420	
2	Existing road width (m)	3.5	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	

7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	

KP-R-12: Improvement of Road by RCC at Ward No. 04 by (a) starting from Post Office Mour up to Thana Mour Ch. 0.00 to 440m, (b) Paradise Clinic up to Graveyard Road Ch. 0.00 to 710m, Link Road Ch. 0.00 to 200m, & Link Road U.N.O. Office to R&H Kalaroa Road Ch. 0.00 to 190m, installation of Street Light 56 nos. under Keshabpur Paurashava, Jashore District. Length = 1540m.			 
1	Total Length (m)	1,540	
2	Existing road width (m)	4.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffi	
	Any other activities on the road:	no	

Baseline Features of Proposed Drains in Keshabpur

KP-D-001: Part-1: Construction of RCC Drain Starting from the House of Mr. Aminuddin Master by the side of Ononta Sarok up to UGIIP-III Main Drain (Ch. 0.00 to 170.00m)

Part-2: Starting from Keshabpur-Kalaroa Road to UGIIP-III Drain via Adv. Netay House (Ch. 565.00 to 170.00m) Link drain: Starting from Back side of Mintu Hotel to UGIIP-III Main Drain (Ch. 200.00 to 0.00m), Total Length 765m under Keshabpur Paurashava, Jashore.

1	Total Length (m)	765
2	Existing road width (m)	3.7
3	Existing road surface	BC road with open brick drains
4	Topography	Ganges Inactive floodplain
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (moderately dense)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no

KP-D-002 (A): Construction of RCC Drain Starting near the House of Wadud via back side of Alia Madrasha to Baisa Road Cross Drain (Ch. 0.00 to 220.00m) & Link (i): Starting near Upazila Complex to Proposed Drain D-002(A) (Ch. 0.00 to 78.00m) Link (ii) : Starting near Upazila Pond to Proposed Drain D-002(A) (Ch. 0.00 to 198.00m), Total Length=496m, Under Keshabpur Paurashava, Jashore.

1	Total Length (m)	496
2	Existing road width (m)	2
3	Existing road surface	BC road without side drains
4	Topography	Ganges Inactive floodplain

5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

KP-D-02 (B): Construction of RCC Drain Starting from Graveyard Road via back side of Upazila Complex to Burivadra River Ch. 0.00m to 740.00m and Link drain: Starting from Public Field to Proposed Drain D-002(B) Ch. 0.00 to 87.00m Total Length: 827.00m under Keshabpur Paurashava, Jashore.			
1	Total Length (m)	827	
2	Existing road width (m)	2.5	
3	Existing road surface	earthen road with open brick drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road	no	
KP-D-003 (A): Construction of RCC Drain Starting from old Animal Market near Sam Sen via Gom Potti			

up to Khozakhali Khal near Rokto Korobi Stage (Ch. 0.00 to 240.00m) and Link (i) Press Club Moure to proposed drain 003(A) Ch. 0.00 to 190.00m Link (ii) Pajia Road Moure to Proposed Drain 003(A) Ch. 0.00 to 45.00m, Link (iii) Sarno Potti Moure to Proposed Drain 003(A) Ch. 0.00 to 58.00m, Link(iv) Pajia Road to Proposed drain 003(A) Ch. 0.00 to 54.00m Total Length = 587.00m under Keshabpur Paurashava, Jashore.			
1	Total Length (m)	587	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road	no	

KP-D-003 (B): Construction of RCC Drain Starting from Modhu Sarok in front of Altap Shoe Store to Bakso Potti via Fish Market up to Horihor River (Ch. 0.00 to 160.00m) and Link Drain: Starting in front of Bakso Potti to Proposed drain (3B) Ch. 0.00 to 200.00m Link(ii) Starting from backside of Bakso Potti to Proposed Drain (3B) Ch. 0.00 to 87.00m, Total Length: 447.00m under Keshabpur Paurashava, Jashore.			
1	Total Length (m)	447	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	

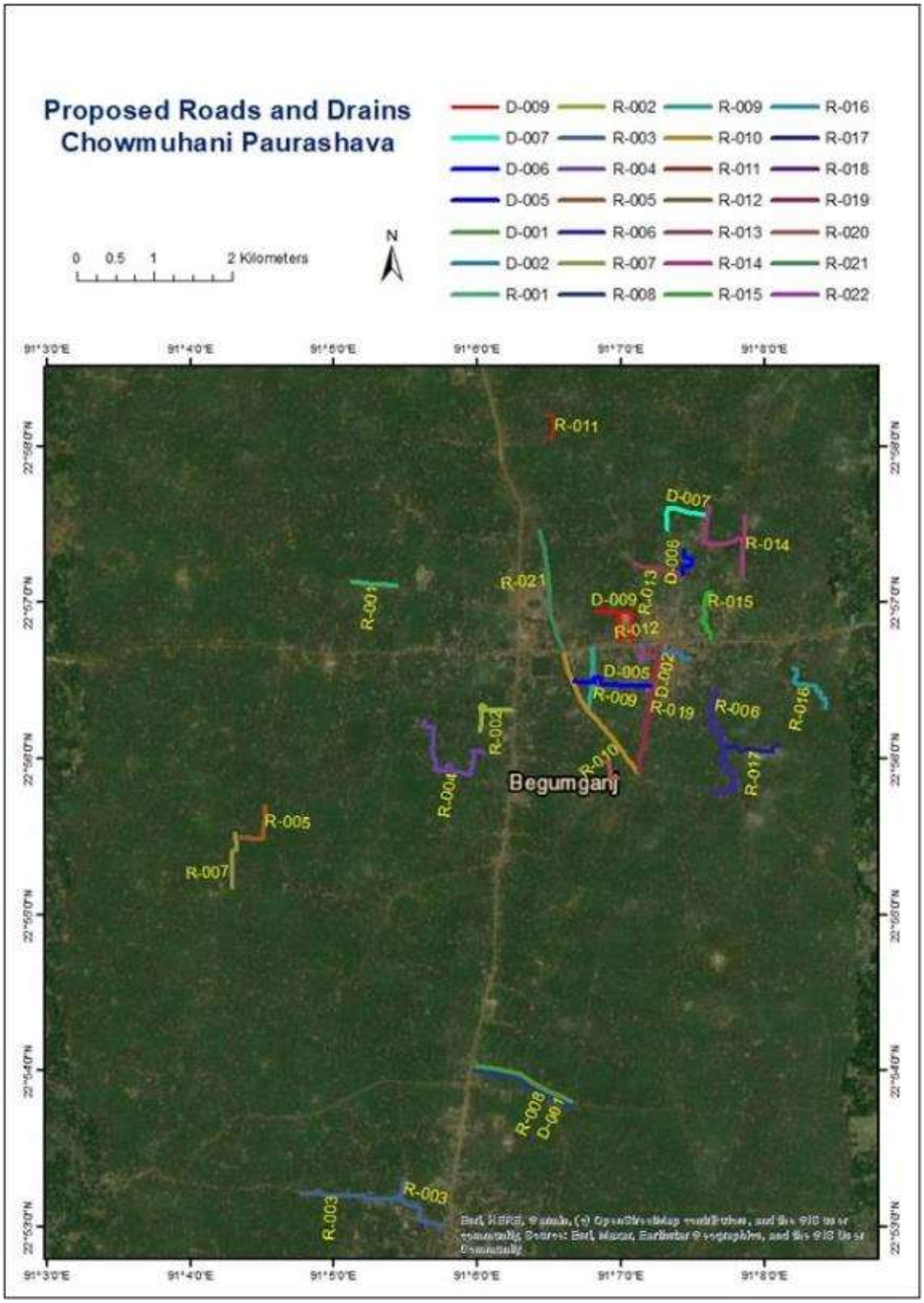
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road	vendors	

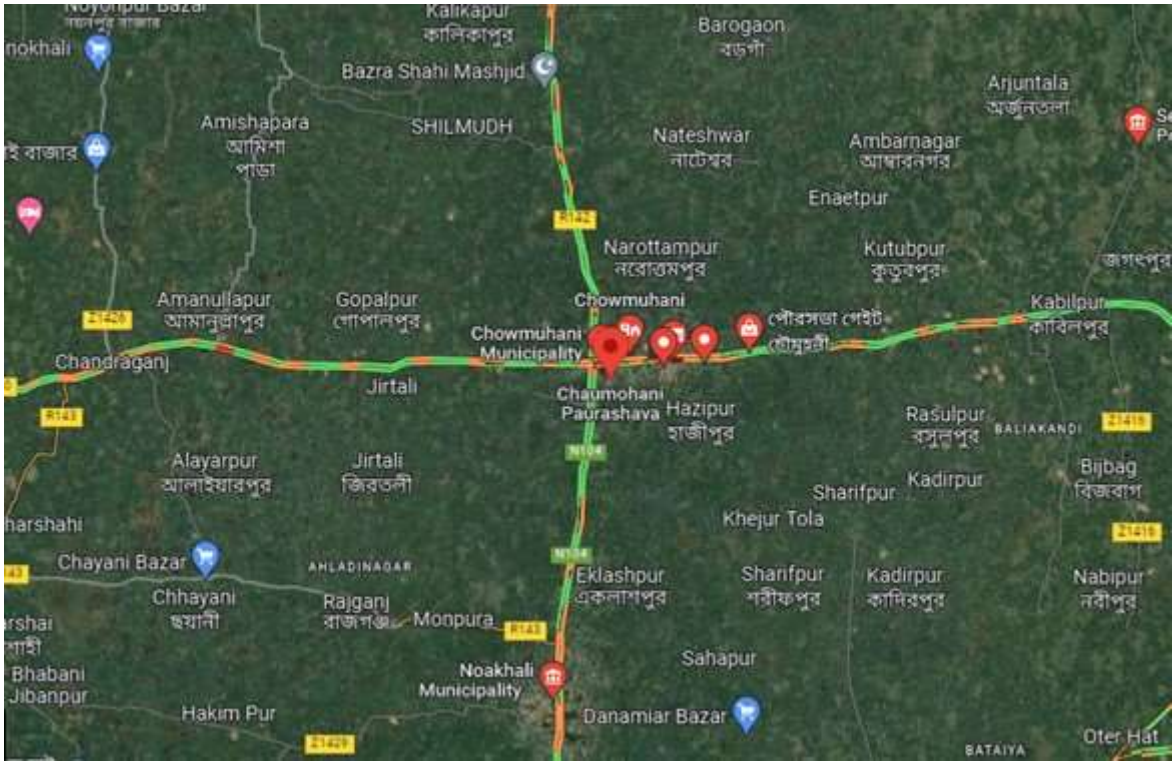
KP-D-004: Construction of RCC drain in front of Paikari Bazar via Old Murgihata Dhanhatkhola to Horihor River Ch. 0.00 to 205m and link drain starting from corner of New Vegetable Market to existing UGIIP - III drain Ch. 753 - 588m, Total Length = 370m under Keshabpur Paurashava, Jashore District.			
1	Total Length (m)	370	
2	Existing road width (m)	3.2	
3	Existing road surface	BC road without side drains	
4	Topography	Ganges Inactive floodplain	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	N/A	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road	hawkers	

<table>
<tr><td colspan="3">KP-D-12: Construction of RCC drain starting from Post Office Mour (R - 012, Right Side) to Dakbanglo via back side of WAPDA Colony to Boropit Khal Ch. 0.00 to 705m and link drain (i) starting from Tiger Point to proposed drain D - 012 Ch. 0.00 to 120m, link drain (ii) starting from corner of Upazila Mosque to existing culvert Ch. 0.00 to 137.00m, link drain (iii) starting from Upazila pond to proposed cross drain Ch. 0.00 to 220m, link drain (iv) starting from house of Mr. Polash to existing cross drain Ch. 0.00 to 55m. Total Length = 1237m under Keshabpur Paurashava, Jashore District.</td><td rowspan="6"> 
  </td></tr>
<tr><td>1</td><td>Total Length (m)</td><td>1237</td></tr>
<tr><td>2</td><td>Existing road width (m)</td><td>4.7</td></tr>
<tr><td>3</td><td>Existing road surface</td><td>BC road without side drains</td></tr>
<tr><td>4</td><td>Topography</td><td>Ganges Inactive floodplain</td></tr>
<tr><td>5</td><td>Acquisition of Private Land</td><td>Not applicable</td></tr>
<tr><td>6</td><td>Structure loss</td><td>Not anticipated</td></tr>
<tr><td>7</td><td>Permanent and significant livelihood impact</td><td>Not anticipated</td><td rowspan="8"></td></tr>
<tr><td>8</td><td>Loss of crops</td><td>Not anticipated</td></tr>
<tr><td>9</td><td>Potential temporary impacts</td><td>Not anticipated</td></tr>
<tr><td>10</td><td>Affected vulnerable affected persons</td><td>Not anticipated</td></tr>
<tr><td>11</td><td>Utilities in the ROW</td><td>yes</td></tr>
<tr><td>12</td><td>Land use along the road</td><td>residential (thickly populated)</td></tr>
<tr><td>13</td><td>Traffic on the road</td><td>moderate traffic</td></tr>
<tr><td></td><td>Any other activities on the</td><td>vendors</td><td></td></tr>
</table>

M. Features of Program Sites in Chowmuhani

Figure 10: Location of proposed roads and drains in Chowmuhani





Baseline Features of proposed Roads in Chowmuhani Paurashava

CHOW-R-01: Improvement of road by Dense Bituminous Carpeting from RHD Laksam road (Kalapol North Khalpar) to Paurashava Border Road & installation of Street Light 12 nos. at ward no - 1, Chowmuhani Paurashava, Noakhali.		
1	Total Length (m)	330
2	Existing road width (m)	6
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no

CHOW-R-02: Improvement of road by Dense Bituminous Carpeting (a) from RHD Maijdee road to ATI Mosjid (Ch-0.00m - Ch 435.00m) and (b) link road from ATI Mosjid to Zoinal Abedin Road (Ch 0.00m - Ch 265.00m) including Protection Work at (Ch. 65m - 80m, R/S) & installation of Street Light 26 nos. at ward no - 1, Chowmuhani Paurashava, Noakhali. Total Length = 700m.		
1	Total Length (m)	700
2	Existing road width (m)	7
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface
5	Acquisition of Private Land	Not applicable

6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
CHOW-R-03: Improvement of road by Dense Bituminous Carpeting (a) from RHD Maijdee road (Ramjanbibi Market) to Pesker market road Ch. 0 .00m to 1380.00m and (b) link road by RCC Refugee bari road Ch. 0.00m to 120.00m including protection work at (Ch. 36m to 148m, L/S), (Ch. 212m to 385m, L/S), (Ch. 455m to 540m, L/S), (Ch. 593m to 700m, L/S), (Ch. 920m to 934m, L/S), (Ch. 1065m to 1085m, B/S), (Ch. 23m to 45m, L/S), (Ch. 35m to 115m, L/S) & installation of street light 52 nos. at ward no - 02, Chowmuhani Paurashava, Noakhali. Total length = 1500m.			
1	Total Length (m)	1,550	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant	Not anticipated	

	livelihood impact		
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	hawkers	
CHOW-R-04: Improvement of road by Dense Bituminous Carpeting (a) from RHD Maijdee road to Joinal Abedin road (Amin Member Dokan) (Ch. 0.00m – Ch. 1690m), and (b) Link Road from Moktarbari road (Ch. 0.00m – Ch. 280m) including RCC Cross Drain at Ch. 990m & installation of Street Light 67 nos. at ward no - 2, Chowmuhani Paurashava, Noakhali. Total Length = 1970m.			
1	Total Length (m)	1,970	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	

11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
CHOW-R-05: Improvement of road by Dense Bituminous Carpeting from Moktarbari Amin member bari road to Ayesha Siddik Mohila Madrasha including Protection work at (Ch. 320m - 340m, R/S) & installation of Street Light 12 nos. at ward no - 2, Chowmuhani Paurashava, Noakhali. Total Length = 340m.			
1	Total Length (m)	340	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
CHOW-R-06: Improvement of road by RCC from South Bazar Shahi Mosque to			

<table>
<tr><td colspan="3">Arif Hazir Pol including RCC Cross drain at Ch.1144m, Protection works at (Ch. 70m - 248m, R/S), (Ch. 545m - 569m, R/S), (Ch. 728m - 767m, L/S), (Ch.1265m - 1275m, L/S), (Ch. 1267m - 1295m, R/S), (Ch. 1386m - 1418m, R/S), (Ch. 1450m - 1470m, R/S) & installation of street light 65 nos. at Ward - 9, Chowmuhani Paurashava, Noakhali. Total Length = 1920m.</td><td rowspan="14">  </td></tr>
<tr><td>1</td><td>Total Length (m)</td><td>1,920</td></tr>
<tr><td>2</td><td>Existing road width (m)</td><td>6</td></tr>
<tr><td>3</td><td>Existing road surface</td><td>BC road without side drains</td></tr>
<tr><td>4</td><td>Topography</td><td>Tippera Surface</td></tr>
<tr><td>5</td><td>Acquisition of Private Land</td><td>Not applicable</td></tr>
<tr><td>6</td><td>Structure loss</td><td>Not anticipated</td></tr>
<tr><td>7</td><td>Permanent and significant livelihood impact</td><td>Not anticipated</td></tr>
<tr><td>8</td><td>Loss of crops</td><td>Not anticipated</td></tr>
<tr><td>9</td><td>Potential temporary impacts</td><td>Not anticipated</td></tr>
<tr><td>10</td><td>Affected vulnerable affected persons</td><td>Not anticipated</td></tr>
<tr><td>11</td><td>Utilities in the ROW</td><td>yes</td></tr>
<tr><td>12</td><td>Land use along the road</td><td>residential (moderately dense)</td></tr>
<tr><td rowspan="2">13</td><td>Traffic on the road</td><td>moderate traffic</td></tr>
<tr><td>Any other activities on the road:</td><td>no</td></tr>
<tr><td colspan="3">CHOW-R-07: Improvement of road by RCC from Joinal Abedin road to Moktar Bari Road via Begtola road (Ch. 0.00m – Ch. 420m), and by Dense Bituminous Carpeting Road (Ch. 420m – Ch. 645m) including Protection work at (Ch. 77m - 110m, R/S), (Ch. 219m - 243m, R/S) & installation of Street Light 23 nos. at ward no - 2, Chowmuhani Paurashava, Noakhali. Total Length = 645mi.</td><td>  </td></tr>
</table>

1	Total Length (m)	645	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
CHOW-R-08: Improvement of road by Dense Bituminous Carpeting from RHD maijdi road (Joinal Abedin Academy) to Momtaz Mia Sarok including protection work at (Ch. 360m to 378, B/S), (Ch. 435m to 462m, R/S), (Ch. 552m to 620m, B/S) & installation of street light 22 nos. at ward no - 03, Chowmuhani Paurashava, Noakhali. Total length = 625.			
1	Total Length (m)	625	
2	Existing road width (m)	4	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	

7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
CHOW-R-09: Improvement of road by Dense Bituminous Carpeting from RHD Feni -Noakhali road to khalpar road via Singer Road including Street Light at 27 nos. at ward no - 4, Chowmuhani Paurashava, Noakhali. Total Length = 790m.			
1	Total Length (m)	790	
2	Existing road width (m)	5	
3	Existing road surface	BC road with drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	

11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
CHOW-R-10: Improvement of road by Dense Bituminous Carpeting from Karimpur Graveyard Road (khalpar road) up to Atiabari bridge including Retaining wall at (Ch. 788m - 800m, R/S) & installation of Street Light 57 nos. at ward no - 4, Chowmuhani Paurashava, Noakhali. Total Length = 1690m.			
1	Total Length (m)	1690	
2	Existing road width (m)	5.5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
CHOW-R-11: Improvement of road by RCC from Gonipur Vhaiyar Dhokan to			

Dhopabari road via Shohidhurer Bari (Ch. 0.00m – Ch. 555.00m) including Protection work at (Ch. 05m - 60m, R/S), (Ch. 170m - 305m, L/S), (Ch. 315m - 322m, R/S), (Ch. 429m - 453m, R/S), Retaining wall at (Ch. 10m - 35m, L/S), (Ch. 465m - 498m, L/S), RCC Box Culvert at Ch. 345m & installation of Street Light 20 nos. at ward no - 5, Chowmuhani Paurashava, Noakhali. Total Length = 555m.			
1	Total Length (m)	555	
2	Existing road width (m)	3	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
CHOW-R-12: Improvement of road by RCC from Rail Gate to Tokkar Pool Road & installation of street light 11 nos. at ward no - 6, Chowmuhani Paurashava, Noakhali. Total Length = 305m.			
1	Total Length (m)	305	
2	Existing road width (m)	6	

3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
CHOW-R-13: Improvement of road by Dense Bituminous Carpeting from College Road to Rail line road (Hossain Road) & installation of street light 22 nos. at ward no - 6, Chowmuhani Paurashava, Noakhali. Total Length = 630m.			
1	Total Length (m)	630	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	

9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	
CHOW-R-14: Improvement of road by Dense Bituminous Carpeting (a) from Kismot Karimpur Govt. Primary school to Chowkider bari Paurashava border (Ch.0.00m – Ch. 1250m), and (b) Link road from Kismot Karimpur Paurashava border to Paurashava border road (Murir Mill) (Ch. 0.00m – Ch. 265m) including Protection work at (Ch. 130m - 152m, R/S), (Ch. 187m - 224m, R/S), (Ch. 212m - 300m, L/S), (Ch. 386m - 417m, R/S), (Ch. 365m - 497m, L/S), (Ch. 680m - 803m, R/S), (Ch. 700m - 803m, L/S), (Ch. 900m - 942m, L/S), (Ch. 1020m - 1030m, L/S), (Ch. 1127m - 1147m, R/S), (Ch. 50m - 140m, L/S), (Ch. 190m - 230m, L/S) & installation of Street Light at 53 nos. at ward no - 7, Chowmuhani Paurashava, Noakhali. Total Length = 1515m.			
1	Total Length (m)	1,515	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	

9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
CHOW-R-15: Improvement of road by RCC (a) from Kismot Karimpur Azims shop to Mondol Para road (Ch.0.00m – Ch. 820.00m), (b) Link - 1 from Mondolbari road (Ch.0.00m – Ch. 100.00m), (c) Link - 2 from Mondal Para road to Degree Hostel Road (Ch. 0.00m – Ch. 33.00m) including RCC Cross Drain at Ch. 720m & installation of Street Light 34 nos. at ward no - 7, Chowmuhani Paurashava, Noakhali. Total Length = 953m.			
1	Total Length (m)	330	
2	Existing road width (m)	4	
3	Existing road surface	CC road with open brick drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	

12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
CHOW-R-16: Improvement of road by Dense Bituminous Carpeting from Nozir Uddin bari road to Taltola Paurashava including Protection work at (Ch. 140m - 155m, L/S), (Ch.570m - 606m, R/S), (Ch. 612m - 640m, L/S), (Ch. 650m - 700m, B/S), (Ch. 730m - 750m, L/S) & installation of street light 31 nos. at ward no - 8, Chowmuhani Paurashava, Noakhali. Total Length = 885m.			
1	Total Length (m)	885	
2	Existing road width (m)	5.5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	less traffic	
	Any other activities on the road:	no	
CHOW-R-17: Improvement of road by RCC from Hazipur Mowlana Kashem Sbs.			

Mosque to Bagan Bari including of RCC Cross Drain at Ch. 74m, RCC Retaining Wall at (Ch. 64m - 375m, R/S), Protection works at (Ch. 74m - 80m, L/S), (Ch. 160m - 174m, L/S), (Ch. 219m - 226m, L/S), (Ch. 246m - 272m, L/S), (Ch. 291m - 335m, L/S) & installation of Street Light 14 nos. at ward no - 9, Chowmuhani Paurashava, Noakhali. Total Length = 375m.			
1	Total Length (m)	375	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
CHOW-R-18: Improvement of road by RCC from RHD Bank Road to Golabari Kachabazar road installation of street light 09 nos. at ward no - 04, Chowmuhani Paurashava, Noakhali. Total length = 215m.			
1	Total Length (m)	215	
2	Existing road width (m)	4	

3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	less traffic c	
	Any other activities on the road:	no	
CHOW-R-19: Improvement of road by RCC from Atiabari bridge to Karimpur Rail station including Retaining wall at (Ch. 715m - 737m, L/S), (Ch. 811m - 831m, L/S), (Ch. 841m - 879m, L/S), Protection works at (Ch. 668m - 700m, L/S), (Ch. 1095m - 1200m, L/S) & installation of Street Light 41 nos. at ward no - 4, Chowmuhani Paurashava, Noakhali. Total Length = 1210m)			
1	Total Length (m)	1,219	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant	Not anticipated	

	livelihood impact		
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
CHOW-R-20: Improvement of road by Dense Bituminous Carpeting from Jalal Ahmed Road (Monnan Miar Pol) to Shofi Miar Culvert (Ch. 0.00m – Ch. 555.00m) including Protection work at (Ch. 90m - 105m, L/S), (Ch. 160m - 172m, L/S), (Ch. 375m - 393m, R/S), (Ch. 420m - 434m, R/S), (Ch. 535m - 550m, B/S), & installation of Street Light 20 nos. at ward no - 3, Chowmuhani Paurashava, Noakhali. Total Length = 555m.			
1	Total Length (m)	555	
2	Existing road width (m)	5	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable	Not anticipated	

	affected persons		
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	
CHOW-R-21: Improvement of road by RCC from Dhopabari Bridge to Stadium Bridge (Ch. 0.00m – Ch. 1390.00m) including RCC Box Culvert at Ch. 392m & installation of Street Light 47 nos. at ward no - 5, Chowmuhani Paurashava, Noakhali. Total Length = 1390m.			
1	Total Length (m)	1390	
2	Existing road width (m)	6	
3	Existing road surface	BC road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

CHOW-R-22: Improvement of road by RCC from RHD Feni- Noakhali road to Karimpur railway station (Ch. 0.00m – Ch. 210.00m) & installation of Street Light 8 nos. at ward no - 4, Chowmuhani Paurashava, Noakhali. Total Length = 210m.		
1	Total Length (m)	210
2	Existing road width (m)	5.5
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (thickly populated)
13	Traffic on the road	heavy traffic
	Any other activities on the road:	yes

Baseline Features of proposed Drains in Chowmuhani Paurashava

CHOW-DR-01: Construction of RCC drain from Joynal Abedin to Noimuddin Khal Ch. 0.00m to 400.00m, under Chowmuhani Paurashava Noakhali. Total length = 400m.		
1	Total Length (m)	400
2	Existing road width (m)	4
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no

CHOW-DR-02: Construction of RCC drain from RHD bank road to Baro Khal Ch. 0.00m to 500.00m, under Chowmuhani Paurashava Noakhali. Total length = 500m.		
1	Total Length (m)	500
2	Existing road width (m)	4
3	Existing road surface	BC road with open side drains block
4	Topography	Tippera Surface
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	4 affected persons
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes

12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

CHOW-DR-05: Construction of RCC drain from Ramjhan Ali Miar colony to WAPDA Khal Ch. 0.00m to 370.00m and link drain Ch. 117.00m to 0.00m, under Chowmuhani Paurashava Noakhali. Total length = 487m.			
1	Total Length (m)	487	
2	Existing road width (m)	3	
3	Existing road surface	Earthen road without side drains	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated /)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

CHOW-DR-06: Construction of RCC drain from Profullo Shahar Bari to existing drain near Nobodhara Kindergarten Ch. 0.00m to 122.00m, under Chowmuhani Paurashava Noakhali. Total length = 122m.			
1	Total Length (m)	122	
2	Existing road width (m)	2	
3	Existing road surface	broken drain cum road	
4	Topography	Tippera Surface	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	

9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

CHOW-DR-07: Construction of RCC drain from exiting drain near Daroga house to Khal near Kangali Mondol Bari Ch. 0.00m to 285.00m, under Chowmuhani Paurashava Noakhali. Total length = 285m.

1	Total Length (m)	285
2	Existing road width (m)	4
3	Existing road surface	BC road without side drains
4	Topography	Tippera Surface
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (thickly populated)
13	Traffic on the road	no notable traffic
	Any other activities on the road:	no

CHOW-DR-09: Construction of RCC drain from backside of Pauro Banijjo Bitan to Khal Ch. 0.003 to 333.00m, under Chowmuhani Paurashava Noakhali. Total length = 333m.

1	Total Length (m)	333
2	Existing road width (m)	3
3	Existing road surface	earthen road without side drains
4	Topography	Tippera Surface
5	Acquisition of Private Land	Not applicable

6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

N. Features of Program Sites in Raozan

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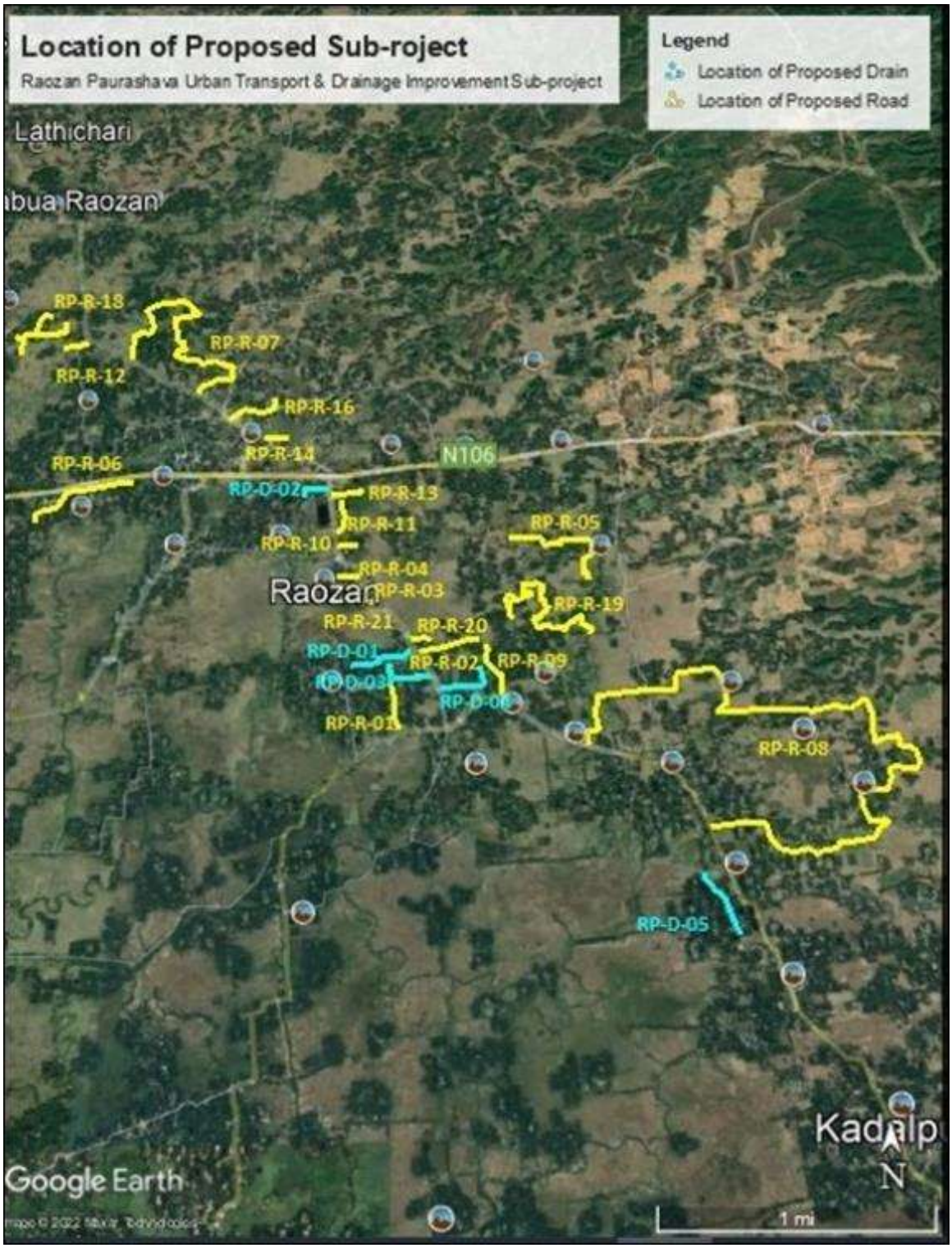


Baseline Features of Roads in Raozan Paurashava

RAOZ-R-01: Improvement of Road by RCC (a) from Hazi Para to Chitiya Para via Sharif Para Ch. 0.00m to 1190.00m, (b) Link Road from Trimohoni, Abul Quasem's house to R&H road including Protection work at Cross Drain at Size at Ward No. - 06 & 08, Raozan Paurashava, Chattogram.		
1	Total Length (m)	1,930
2	Existing road width (m)	3.70
3	Existing road surface	earthen road without side drains
4	Topography	Chittagong Hill Tracts
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	no notable traffic
	Any other activities on the road:	no

RAOZ-R-02: Improvement of Upazila Bypass Road by RCC from Darul Islam road to Dost Mohammed Road (near Raozan High School) including Protection work at. at Ward No. - 07.		
1	Total Length (m)	493
2	Existing road width (m)	5.5
3	Existing road surface	earthen road without side drains
4	Topography	Chittagong Hill Tracts

5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

RAOZ-R-03: Improvement of Tona Ma road by RCC from R&H road (Near fire service) to Afaz Daroga Bari & installation of street light 16 nos. at Ward No.- 06, Raozan Paurashava, Chattogram.			
1	Total Length (m)	450	
2	Existing road width (m)	3.00	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

RAOZ-R-04: Improvement of Jagath Dhar road by RCC from R&H road to Bot Tala & installation of street light 9 nos. at Ward No.- 04, Raozan Paurashava, Chattogram. (Length = 230 m).		
1	Total Length (m)	230
2	Existing road width (m)	3.7
3	Existing road surface	BC road without side drains
4	Topography	Chittagong Hill Tracts
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (moderately dense)
13	Traffic on the road	no notable traffic
	Any other activities on the road:	no

RAOZ-R-05: Improvement of Dost Mohammed Road by RCC from Bachu Miyar Shop to Connecting Sarok to Chikdair Union & installation of street light 23 nos. at Ward No.- 05.		
1	Total Length (m)	650
2	Existing road width (m)	3.5
3	Existing road surface	BC road without side drains
4	Topography	Chittagong Hill Tracts
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated

10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

RAOZ-R-06: Improvement of Khan Bahadur Abdul Jabbar Road by RCC from Box Ali Chowdhury Bari Bridge to Sluice Gate including Protection work & installation of street light at Ward No. - 02.			
1	Total Length (m)	1,790	
2	Existing road width (m)	3.7	
3	Existing road surface	BC road with no side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

RAOZ-R-07: Improvement of West Gohira Sikdar Bari Road by RCC from Rangamati R&H road (Near Hati company ghata) to Younus Sufia Primary School & installation of street light 33 nos. at Ward No.- 01, Raozan Paurashava, Chattogram.			
1	Total Length (m)	960	
2	Existing road width (m)	3.3	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	

5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	no notable traffic	
	Any other activities on the road:	no	

RAOZ-R-09: Improvement of Dolilabad road by RCC from Shahid Jafar road (Near Raozan Mmodel Institute) to end of Paurashava, including Cross Drain at Ch. 291m, 333m, 442m & 1065m Size: & installation of street light 40 nos. at Ward. - 07.			
1	Total Length (m)	1,170	
2	Existing road width (m)	3.7	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	

9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-R-10: Improvement of West Side Road of Raozan Technical Government School & College by RCC from Rangamati R&H road through paddy field including Installation of street light 9 nos. at Ward No. - 03, Raozan Paurashava, Chattogram.			
1	Total Length (m)	250	
2	Existing road width (m)	3.7	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	

10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-R-11: Improvement of Road by RCC from Rangamati R&H road (near Gohira UP health center) to Asad Chowdhury Jame Mosque including Protection work at (& Installation of street light at Ward No. - 03, Raozan Paurashava, Chattogra.			
1	Total Length (m)	227	
2	Existing road width (m)	3.30	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	

11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-R-12: Improvement of road by RCC from Rangamati R&H to Abuddar Bari Sarok (near Miyar Ghata) Ch. 0-200m including 1 no Cross Drain Ch. 109m (Size: 1.0m X 1.0m) & Installation of street light 8 nos. at Ward No. - 01, Raozan Paurashava, Chattogram. (Length = 200 m).			
1	Total Length (m)	200	
2	Existing road width (m)	3.5	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-R-14: Improvement of road by RCC from East Side of Gohira F.K Jamel Ulum Bohumukhi Kamil Madrasa to Riyajul Jannah Mosque Ch. 0-200m including Installation of street light 8 nos. at Ward No. - 01, Raozan Paurashava, Chattogram.			
1	Total Length (m)	200	
2	Existing road width (m)	3.00	

3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-R-16: Improvement of road by RCC from Rangamati R&H road to Rokim Uddin Munsir Bari (Left Side of Graveyard) Ch. 0-200m including Installation of street light 8 nos. at Ward No. - 03, Raozan Paurashava, Chattogram. (Length = 200 m).			
1	Total Length (m)	200	
2	Existing road width (m)	3.00	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	

	Any other activities on the road:	no	

RAOZ-R-18: Improvement of Road by RCC (a) from Jagaran Sangho to Taltola Sarok and (b) Link Road, as connection of Jagaran Sangho - Taltola Sarok to Lokonath Mondir, Das Para, including Protection work, Box culvert Cross Drain & Installation of street light 45 nos. at Ward – 01.			
1	Total Length (m)	1,280	
2	Existing road width (m)	3.00	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

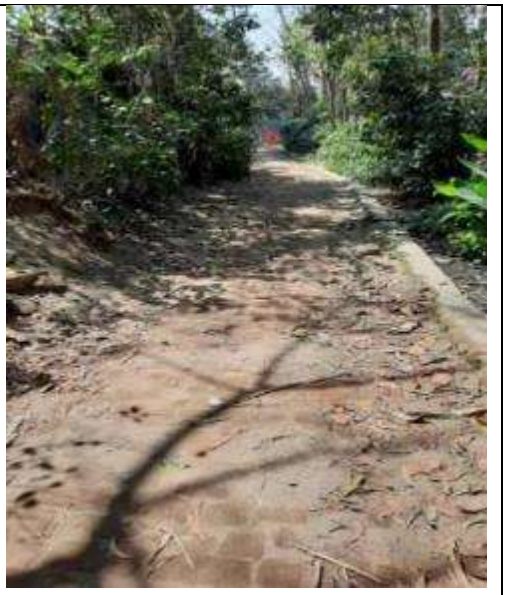
RAOZ-R-19: Improvement of Road by RCC from Banik Para to Nandi Para including Protection work at (Ch.00m to 93m, L/S), Retaining wall (Ch. 520m to 544m, R/S), (Ch. 573 to 590, R/S), (Ch. 628m to 659m, R/S), (Ch. 673m to 722m, R/S), Cross Drain at Ch. 75m, 150m, 268m, & 545m (Size: 1.0m X 1.0m) & Installation of street light 26 nos. at Ward No. - 05, Raozan Paurashava, Chattogram.			
1	Total Length (m)	740	
2	Existing road width (m)	3.00	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	

6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-R-20: Improvement of road by RCC from Rangamati R&H road to Janali Munsir Bari Sarok Ch. 0-170m including Protection Work (Ch. 109m to 170m, R/S) & Installation of street light 7 nos. at Ward No. - 07, Raozan Paurashava, Chattogram.			
1	Total Length (m)	170	
2	Existing road width (m)	3.00	
3	Existing road surface	HBB road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (sparsely developed)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-R-21: Improvement of road by RCC from Rangamati R&H road to Absar Company Road (near Moyajjem Hosen Smriti Toron) Ch. 0-150m including Installation of street light 6 nos. at Ward No. - 06, Raozan Paurashava, Chattogram.	

1	Total Length (m)	150
2	Existing road width (m)	3.7
3	Existing road surface	HBB road without side drains
4	Topography	Chittagong Hill Tracts
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (sparsely developed)
13	Traffic on the road	moderate traffic
	Any other activities on the road:	no



Baseline Features of Drains in Raozan Paurashava

RAOZ-D-01: Construction of RCC Drain from Surjo Sen Gate Chattogram -Rangamati highway to old Kashkhali canal Ch. 0.00m - 635.00m, Total length = 635.00m..

1	Total Length (m)	635
2	Existing road width (m)	3.70
3	Existing road surface	BC road with brick side drains
4	Topography	Chittagong Hill Tracts
5	Acquisition of Private Land	Not applicable
6	Structure loss	Not anticipated
7	Permanent and significant livelihood impact	Not anticipated
8	Loss of crops	Not anticipated
9	Potential temporary impacts	Not anticipated
10	Affected vulnerable affected persons	Not anticipated
11	Utilities in the ROW	yes
12	Land use along the road	residential (moderately dense)

13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-D-02: Construction of RCC Drain cum Road from corner of east side boundary wall of Gohira Degree College to existing box culvert on Chattogram - Rangamati highway Ch. 140m - 0.00m, Total length = 140.00m.			
1	Total Length (m)	140	
2	Existing road width (m)	3.70	
3	Existing road surface	BC road withoiut side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	
	Any other activities on the road:	no	

RAOZ-D-03 (A): Construction of RCC Drain starting from Hazi Para Md. Kutub Uddin Shaheb Mosque to Kashkali Canal Ch. 0.00 to 408.00m, Total Length: 408m under Raozan Paurashava, Chattogram.			
1	Total Length (m)	370	
2	Existing road width (m)	not available	
3	Existing road surface	BC road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	

9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	moderate traffic	

RAOZ-D-03 (B): Construction of RCC Drain starting from Chattogram - Rangamati High way to Kashkhali Canal Ch. 0.00 to 290.00m and link drain: starting near Abul Kashem house to Kashkhali Canal Ch. 0.00 to 200.00m, Total Length: 490m under Raozan Paurashava, Chattogram.			
1	Total Length (m)	370	
2	Existing road width (m)	Not Available	
3	Existing road surface	BC road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	Hawker	

RAOZ-D-04: Part - 1: Construction of RCC Drain from Hazrat Shah Latif gate to Kacharapol canal; Part - 2: Construction of RCC drain from Kacharapole canal to Kash Khali canal; Part - 3: Construction of RCC drain from Kashkhali canal to Jalil Nagar existing culvert (both sides) via Jalil Nagar bus stand (R&H road) Link - (i); from Pauro Super Market to proposed drain Part - 1 via Pauro Kitchen Market mour, Link-(ii); from north side of Pauro Kitchen Market to proposed link drain Link - (iii); from Pauro Fish Market to link drain , Link - (iv); from Raozan Modormal Circle to existing Jalil Nagar culvert and installation of Street Light 57 nos.			
1	Total Length (m)	370	

2	Existing road width (m)	6	
3	Existing road surface	BC road with damaged side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential & Commercial (thickly populated)	
13	Traffic on the road	heavy traffic	
	Any other activities on the road:	Hawker	

RAOZ-D-05: Construction of RCC Drain beside Chattogram - Rangamati Highway via Bangamata Sheikh Fazilatunnesa Mujib Briddhashorm and Saima Wazed Putul Autism Centre up to existing box drain.			
1	Total Length (m)	201	
2	Existing road width (m)	Not Available	
3	Existing road surface	BC road without side drains	
4	Topography	Chittagong Hill Tracts	
5	Acquisition of Private Land	Not applicable	
6	Structure loss	Not anticipated	
7	Permanent and significant livelihood impact	Not anticipated	
8	Loss of crops	Not anticipated	
9	Potential temporary impacts	Not anticipated	
10	Affected vulnerable affected persons	Not anticipated	
11	Utilities in the ROW	yes	
12	Land use along the road	residential (moderately dense)	
13	Traffic on the road	heavy traffic	

	Any other activities on the road:	no	

APPENDIX 3: BANGLADESH LEGAL AND POLICY FRAMEWORK

A. LEGAL AND POLICY FRAMEWORK (ENVIRONMENT)

1. Implementation of RBL Program activities will be governed by the environmental acts, rules, policies, and regulations of the Government of Bangladesh. These regulations impose restrictions on the activities to minimize/mitigate likely impacts on the environment. Many of these are cross-sectoral and several of them are directly related to environmental issues. Summary of prevailing laws and policies are provided below:

A. Environmental Assessment Requirements

2. **National Environmental Policy 1992.** The concept of environmental protection through national efforts was first recognized and declared in Bangladesh with the adoption of the Environment Policy, 1992 and the Environment. The major objectives of Environmental policy are to i) maintain ecological balance and overall development through protection and improvement of the environment; ii) protect country against natural disaster; iii) identify and regulate activities, which pollute and degrade the environment; iv) ensure environmentally sound development in all sectors; v) ensure sustainable, long term and environmentally sound base of natural resources; and vi) actively remain associate with all international environmental initiatives to the maximum possible extent. The policy also states that EIAs should be conducted before projects are undertaken and the DOE is directed to review and approve all EIAs.

3. **Environmental Conservation Act (ECA), 1995.** The ECA is currently the main legislation relating to environment protection in Bangladesh. This Act is promulgated for environment conservation, environmental standards development and environment pollution control and abatement.

4. The main objectives of ECA are: conservation and improvement of the environment; and control and mitigation of pollution of the environment. The main focuses of the Act can be summarized as:

- Declaration of ecologically critical areas and restriction on the operations and processes, which can or cannot be carried out/ initiated in the ecologically critical areas (ECA).
- Regulations in respect of vehicles emitting smoke harmful for the environment.
- Environmental clearance.
- Regulation of industries and other development activities' discharge permits.
- Promulgation of standards for quality of air, water, noise, and soil for different areas for different purposes.
- Promulgation of a standard limit for discharging and emitting waste; and
- Formulation and declaration of environmental guidelines.

5. Following are the main provisions of the Act:

(i) Section 4. Powers of the Director General (DG) Department of Environment, to enforce various provisions of the Act including setting rules and regulations for environmental conservation and protection.

(ii) Section 4A. Powers given to the DG to seek the assistance of other enforcement authority (or authorities) in its enforcement. Done indirectly by way of disconnecting power, gas, or water supply to the user.

(iii) Section 7. Allows the DG to seek compensation in cases of damage to the ecosystem or injury to person(s), whether directly or indirectly caused by a person or persons. He may also require that corrective or remedial action be taken to mitigate or ameliorate the situation.
(iv) Section 8. Allows any person affected or likely to be affected as a result of pollution or degradation of the environment to apply to the DG for remedy of the damage or apprehended damage.
(v) Section 9. DG can require person responsible and the person in charge of the place of occurrence of an accidental pollution take measures to control or mitigate the environmental pollution.
(vi) Section 12. Requires that an Environmental Clearance Certificate be obtained before an industrial unit or project can be established or undertaken.
(vii) Section 13. Formulate and publish environmental guidelines relating to the control and mitigation of environmental pollution, conservation and improvement of the environment.
(viii) Section 14. Allows appeal against grievances to the Appellate Authority. Subsequently, MOEFCC constituted Appellate Authority in 1997
(ix) Section 15. Allows the imposition of penalties for various offences.
(x) Section 20. Power to make rules for various purposes including the setting of EIA procedures.

6. The following are the amendments to this Act:

7. **Environmental Conservation Act (Amendment 2000)**.This amendment to the act focuses on ascertaining responsibility for compensation in case of damage to ecosystems, increased provision of punitive measures both for fines and imprisonment and the authority to take cognizance of offences.

8. **Environmental Conservation Act (Amendment 2002.)**This Amendment to the ECA elaborates on the following parts of the Act:

- Restrictions on polluting automobiles.
- Restrictions on the sale, production of environmentally harmful items like polythene bags.
- Assistance from law enforcement agencies for environmental actions.
- Break up of punitive measures; and
- Authority to try environmental cases.

9. **Environmental Conservation Act (Amendment 2010).** This amendment of the act introduces new rules and restriction on:

- No individual or institution (Gov. or Semi Govt., / Non-Govt. / Self Governing) can cut any Hill and Hillock. In case of national interest; it can be done after getting clearance from respective the department.
- Owner of the ship breaking yard will be bound to ensure proper management of their hazardous wastes to prevent environmental pollution and Health Risk.
- No remarked water body cannot be filled up/changed; in case of national interest; it can be done after getting clearance from the respective department; and
- Emitter of any activities/incident will be bound to control emission of environmental pollutants that exceeds the existing emission standards.

10. Section 12 (4) of the act as amended in 2010 specifies consideration of public opinion during the environmental clearance process. It specifies surveying public opinion, getting information from public.

11. **Environment Conservation Rules, 1997 and as amended in 2002).** These are a set of rules, promulgated under the ECA, 1995 and its amendments. The Environment Conservation Rules provide categorization of industries and projects and identify types of environmental assessment required against respective categories of industries or projects. The Rules set:

- The National Environmental Quality Standards (NEQS) for ambient air, various types of water, industrial effluent, emission, noise, vehicular exhaust etc.
- The requirement for and procedures to obtain environmental clearance; and
- The requirement for IEE and EIA according to categories of industrial and other development interventions.

12. The Environment Conservation Rules, 1997 were issued by the GoB in exercise of the power conferred under the Environment Conservation Act (Section 20), 1995. Following are the important provisions of the rules:

(i) Rule 3. Outlines factors (such as human habitat, archaeological site, ancient monument, national park, mangrove, etc) that the Government will take into account to declare an area as Ecologically Critical Area (ECA) and specify the activities or processes that cannot be continued or initiated in an ECA.
(ii) Rule 5. Outlines procedures for any person affected or likely to be affected as a result of pollution or degradation of the environment to apply to the DG for remedy of the damage or apprehended damage.
(iii) Rule 7. Outlines procedures for obtaining an Environmental Clearance Certificate (ECC).
(iv) Rule 7(1). Classification of industrial units and projects for purpose of issuance of into four categories:- (a) Green; (b) Orange – A; (c) Orange – B; and (d) Red.
(v) Rule 7(4). For Orange-A, Orange-B, and Red categories, require a Site Clearance Certificate (SCC) and thereafter an ECC to be obtained.
(vi) Rule 7(5). Prescribed form for application of SCC or ECC.
(vii) Rule 7(6). Outlines documents for various categories of industrial units and projects. Those within Orange-B and Red categories require submission of an Initial Environmental Evaluation (IEE), while an Environmental Impact Assessment (EIA) report is required for the latter category.
(viii) Rule 7(9). Specifies type of activities that may be undertaken with approval of SCC.
(ix) Rule 8. Indicates period of validity of ECC for Green projects (3 year), and for others (5 year). Renewal is to be made at least 30 days before expiry of certificate.
(x) Rule 9. Sets procedures for appeal against any notice, order or directive to the Appellate Authority.
(xi) Rule 12 & 13. Prescribed emission and environmental standards to be complied with are outlined in various schedules.
(xii) Rule 14. Schedule 13 - prescribes fees for issuance or renewal of ECC.
(xiii) Rule 16. Outline of procedures for payment of fees.
(xiv) Rule 17. Require any accident that poses serious threat to the environment to be informed to the DG.

13. Rule 3 defines the factors to be considered in declaring an 'ecologically critical area' as per Section 5 of the ECA (1995). It empowers the Government to declare the area as the Ecologically Critical Areas (ECA), if it is satisfied that the ecosystem of the area has threatened to reach a critical state or condition due to environmental degradation. The Government is

also empowered to specify which of operations may be carried out or may not be initiated in the ecologically critical area. Under this mandate, the Ministry of Environment, Forest and Climate Change (MoEFCC) has declared Sundarbans, Cox's Bazar-Teknaf Sea Shore, Saint Martin Island, Sonadia Island, Hakaluki Haor, Tanguar Haor, Marzat Baor & Gulshan-Baridhara Lake as ecologically critical areas & prohibited certain activities in those areas.

14. Rule 7 of the 1997 ECR provides a classification of industrial units and projects into four categories, depending on environmental impact and location. These categories are:

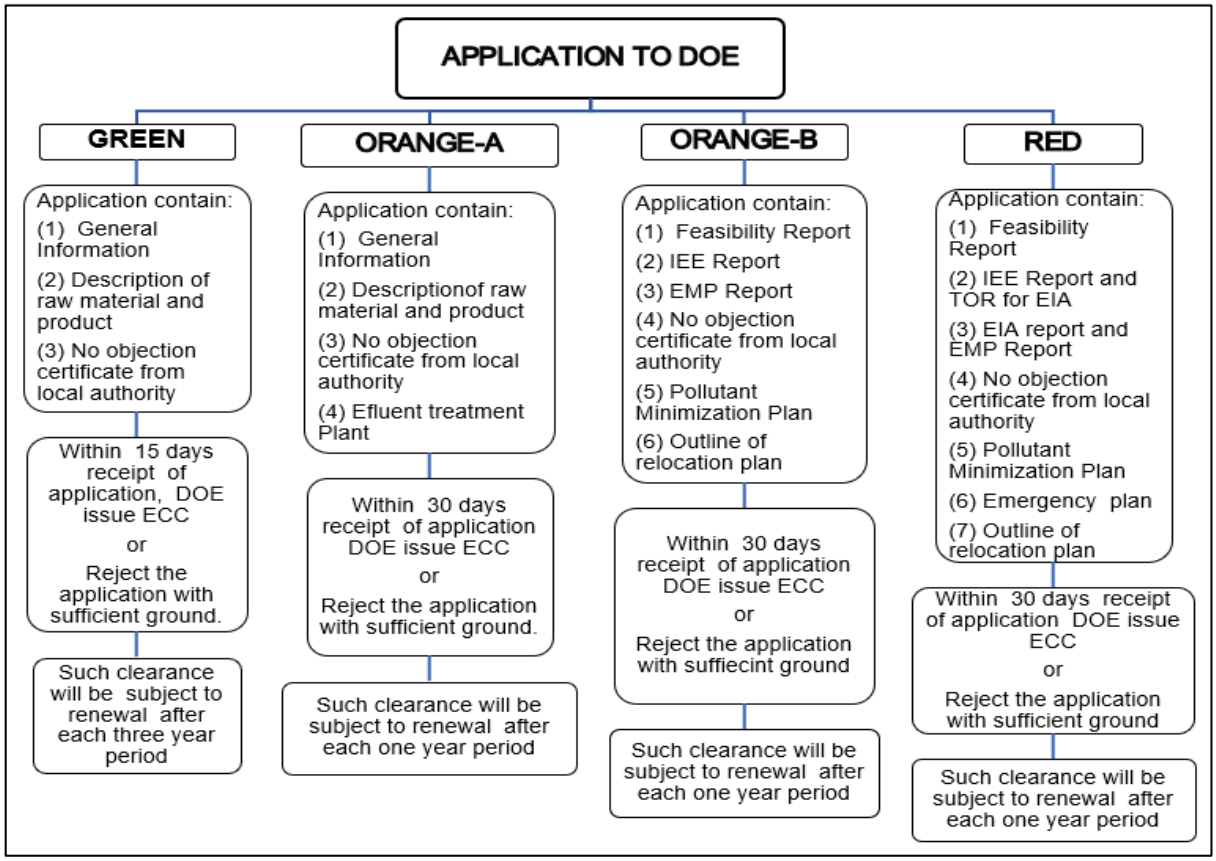
- Green.
- Orange A.
- Orange B; and
- Red.

15. The categorization of a project determines the procedure for issuance of an Environmental Clearance Certificate (ECC). All proposed industrial units and projects that are considered to be low polluting are categorized under "Green" and shall be granted Environmental Clearance. These are Orange B for work that requires Initial Environmental Examination (IEE) and Red for work that requires full environmental assessment. A detailed description of those four categories of industries has been given in Schedule-1 of ECR'97. Apart from general requirement, for every ‘Red’ category proposed industrial unit or project, the application must be accompanied with feasibility report on Initial Environmental Examination, Environmental Impact Assessment based on approved TOR by DOE, Environmental Management Plan (EMP), etc.

16. Depending upon location, size, and severity of pollution loads, projects/activities have been classified in ECR, 1997 into four categories: Green, Orange A, Orange B, and Red respectively, to nil, minor, medium, and severe impacts on important environmental components (IECs).

17. **Environmental Clearance Procedure.** Environmental clearance process is outlined in **Figure 1**.

Figure-11: Government of Bangladesh Environmental Clearance Process



18. **Category of RBL Program Activities per ECR, 1997.** Following table shows the proposed RBL program activities and corresponding category per ECR 1997, and the environmental assessment requirements to obtain environmental clearance certificate (ECC) where required. As presented, only two of the five type of activities / components proposed under RBL fall under the ambit of ECR, 1997.

Table-7: Category Proposed RBL Activities per ECR, 1997 & Assessment Requirements

RBL Program activity	Equivalent in Schedule I of ECR	DoE Classification	Assessment & clearance requirements
Urban roads improvement	Construction, re-construction and extension of roads (feeder road, local roads)	Orange- B	IEE Report ECC
Urban drains	Not specified	Not applicable	Not applicable
Low-income neighborhoods infrastructure improvement (water supply (tube wells/bore wells, toilets, footpaths, drains, dust bins, street lights)	Community toilets (other components are not specified)	Orange- B	IEE Report ECC (applicable for community toilets only)
Market centres	Not specified	Not applicable	Not applicable
Public parks	Not specified	Not applicable	Not applicable

B. Other Acts and Policies relevant to Environmental Safeguards of RBL Program

19. In addition to the Environmental Conservation Act and Rules, there are several other Acts, Rules and policies dealing especially with water supply, sanitation, noise, forests, wildlife, labour welfare and occupational health and safety.

20. **National Water Policy 1999.** The policy aims to provide guidance to the major players in water sector for ensuring optimal development and management of water. The policy emphasizes efficient and equitable management of water resources, proper harnessing and development of surface and ground water, availability of water to all concerned and institutional capacity building for water resource management. It also addresses issues like river basin management, water rights and allocation, public and private investment, water supply and sanitation and water need for agriculture, industry, fisheries, wildlife, navigation, recreation, environment, preservation of wetlands, etc. The policy has several clauses related to the project for ensuring environmental protection.

21. **National Safe Drinking Water Supply and Sanitation Policy of 1998.** The objectives of the Policy are to improve the standard of public health and to ensure improved environment. Policy envisages the following to achieve these objectives: (a) facilitating access of all citizens to basic level of services in water supply and sanitation; (b) bringing about behavioral changes regarding use of water and sanitation; (c) reducing incidence of water borne diseases; (d) building capacity in local governments and communities to be effectively with problems relating to water supply and sanitation; (e) promoting sustainable water and sanitation services; (f) ensuring proper storage, management and use of surface water and preventing its contamination; (g) taking necessary measures for storage and use of rain water; h)ensuring storm-water drainage in urban areas. In urban area specifically, the Policy is target it to “make safe drinking water available to each household in the urban areas” and “ ensuring sanitary latrine within easy access of every urban household through technology options ranging from pit latrines to water borne sewerage”. Policy also targets to ensuring supply of water meeting quality standards and also removal of “arsenic from drinking water and supply of arsenic free water from alternate sources in arsenic affected areas”.

22. **The Forest Act, 1927, (amended in 1989)** is the main legislation dealing with protection and management of forests. The Act grants the government basic powers for conservation and protection of forests. Various rules and regulations are notified under this act for specific categories: Prohibition and Rules affecting Protected Forests in Sundarbans Division (1959); Rules for the Preservation of Trees and Timbers belonging to the Government in the District of Chittagong; the Sylhet Forest (Protection from Fire) Rules, 1954; and Chittagong and Chittagong Hill Tracts Reserved Forests Fire Protection Rules, 1958.

23. **Bangladesh Wildlife (Conservation and Security) Act 2012**, has been promulgated for the conservation and protection of wildlife. The legislation is within the purview of the Forestry Department.

24. **Coastal Zone Policy (CZP) 2005.** Policy promotes participatory and integrated approach in the management and development of the coastal zone to reduce conflicts in the utilization of coastal resources and to optimize exploitation of opportunities.

25. **Noise pollution (control) Rules, 2006).** Notified under the provisions of Environment Conservation Act, 1995, these rules provide for standard limits of noise level of vehicles and ambient noise levels in designated areas. The rules also do not allow use of brick crushers and cement mixers within 500 meter radius of a residential area. The rules stipulate safety and precautionary measures in workplaces, designated authorities for allowing noise generating appliances.

26. **The Environment Court Act, 2000 and subsequent amendment in 2003.**

27. **The Urban Open-fields, Garden and Natural Water Bodies Protection Act, 2000.** This Act is enacted to preserve areas of open space from encroachment or conversion to other uses. With proper implementation of the law, the respective authorities can protect the open spaces natural water bodies including the flood plains of the urban areas from filing up for the sake of urbanization and development.

28. **The Labour Act 2006 (as amended in 2013) and Labour Rules, 2015**. This an integrated Act for labour and workplace related legislations in Bangladesh, consolidating the provisions in various acts into a single labour Act. Act stipulates obligations on the part of the employer on the conditions of service and employment including wages and payment, employment of young people, maternity benefits, working hours and leave; trade unions and industrial relations; and, occupational health, safety, hygiene, and welfare of workers, and compensation for injury. The Act sets occupational safety and health standards, compensation for injury and accidents in the workplace, maternity benefits, factory inspectorate and restrictions on child labour. This Act applies to all "establishments" which are defined widely and include construction sites, commercial and industrial establishments (must employ more than five laborers), plantations, docks, transport services, and "any premises in which laborers are employed for the purposes of carrying on any industry." Department of Labor (DOL) and the Department of Inspection for Factories and Establishments (DIFE) of the Ministry of Labor and Employment (MOLE) are mandated to implement this Act. The DOL is mainly responsible for facilitation of effective labour management relations, collective bargaining and negotiations and ensures prompt and efficient settlement of labour disputes. DIFE is responsible for ensuring workplace safety including fire safety, structural integrity of workplace buildings and welfare of workers. It conducts inspections of factories, shops, industries and commercial establishments, tea gardens, railway, internal water transport and road transport.

29. **Labor Appeal Tribunal/Labor Court.** The labor courts deal with both industrial disputes and individual workers/labourers grievances.

30. **National Occupational Health and Safety Policy, 2013.** Policy promotes improvement of occupational health and safety management system of the establishments to prevent or reduce workplace fatalities and work-related diseases. Policy specifies the obligations of all relevant stakeholders and organizations in promoting and enforcing occupational health and safety. The key provisions include accident prevention, prevention of workplace hazards, disease prevention and safeguards, record keeping and planning, rehabilitation and awareness building. The National OSH Policy also covers safety in transportation, maintenance and use of chemicals used in the production process.

31. **National Building Code, 2006.** With reference to safety, the Code provides standards for structural integrity; adequate, accessible and discernible means of exit/escape in buildings; fire extinguishing system.

32. **Fire Prevention and Extinction Act 2003 Fire Prevention and Extinction Rules 2014.** Requires the owner of a building to apply for Occupancy Certificate to ensure compliance with the relevant provisions of the Building Code

33. **Public Procurement Rule (PPR) 2008.** This rule applies to the Procurement of Goods, Works or Services by any government, semi- government or any statutory body established under any law. The Rule requires contractors to provide for adequate measures regarding the "Safety, Security and Protection of the Environment' in the construction works. It requires contractors to take all reasonable steps to: (i) safeguard the health and safety of all

workers working on site and other persons authorized to be in it; (ii) to keep the site in an orderly state; and (iii) to protect the environment on and off the site; to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of the Contractors methods of operation.

34. **National Child Labour Elimination Policy 2010.** The main objective of this policy is "to make meaningful changes in the lives of the children by withdrawing them from all forms of child labour including the hazardous work and worst forms of child labour. Per the Bangladesh Labour Act 2006, a person who has attained the age of 14 but below the age of 18 is considered to be an "adolescent" and a person not attaining the age of 14 is defined as a "child". Policy provides for: classification of working children and child labour; wages and working hours; education, health and nutrtion requirements etc., The policy proposes a pragmatic strategy to eliminate child labour. The Policy: bars employing children below 14 years as a regular employee; the children at domestic work not to perform any hazardous work; to provide them with proper food and accommodation, education, recreation since they work full time; and, refraining from subjecting child workers to physical, mental and sexual persecution and abuse.

35. Legislations and applicability is presented in the below table.

Table-8: Summary of Applicable Environmental Legislations

Sl. No.	Environmental Legislation / Act	Objective	Relevance to the Project	Responsible Institution
1	National Environmental Policy, 1992	The objective is ensured that development activities do not pollute the environment or degrade resources. It sets out the basic framework for environmental actions together with a set of broad sectoral action guidelines.	Restriction on operations which cannot be initiated in ecological critical areas Regulations on vehicles emitting smoke which is harmful to the environment Compliance with standards on quality of air, water, noise and soil during construction Sets limits for discharging and emitting waste	Ministry of Environment and Forests, and Climate Change
2	National Environmental Management Action Plan (NEMAP), 1995	An action plan to identify key environmental issues affecting Bangladesh, identifies actions for reducing the rate of environmental degradation and improve quality of life.	Sectoral agencies to coordinate with MoEFCC in preparing environmental guidelines	Ministry of Environment and Forests, and Climate Change
3	Environment Court Act, 2000 and subsequent amendments in 2003	Establishment of Environment Court for trial of an offence or for compensation under	Legal option to affected persons for grievances related to environment	Ministry of Environment and Forests, and Climate Change

Sl. No.	Environmental Legislation / Act	Objective	Relevance to the Project	Responsible Institution
		environmental law, such as environment pollution.	safeguards. In the current project this one of the option available to the aggrieved person	
4	The Forest Act (1927) and Forest (Amendment) Act (2000)	An act to control trespassing, illegal resource extraction and provide a framework for the forestry revenue collection system;	For clearance requirement for any project related activity within forest areas and clearances for any tree felling, extraction, and transport of forest produce.	Department of Forests
5	National Forest Policy (1994)	To conserve existing forests and bring about 20% of the country's land area under the Forestation Programme and increase reserved forests by 10% per year until 2015	Possibility of additional tree planting in the project. Clearance for any felling, extraction, and transport of forest produce	Department of Forests
6	The Bangladesh Wildlife (Conservation & Security) Act, 2012	To conserve and protect wildlife in Bangladesh including designation of protected areas. Protection of wildlife is provided with lists of species with four schedules: first, second, third and fourth schedule. The fourth schedule species have the highest level of protection.	Consultation and necessary permits required if the project related activities have any direct or indirect impacts on wildlife in the project area and surroundings.	Department of Forests
7	National Safe Drinking Water Supply and Sanitation Policy of 1998	Ensures access to safe water and sanitation services at an affordable cost	Paurashavas and water sanitation authorities will take actions to prevent wastage of water. They will take necessary steps to increase public awareness to prevent misuse of water and will make available safe water Paurashavas shall be responsible for solid waste collection, disposal, and their management	Ministry of Local Government, Rural Development, and Cooperatives

Sl. No.	Environmental Legislation / Act	Objective	Relevance to the Project	Responsible Institution
8	National Water Act 2013	Ensures Bangladesh water sources are free from any type of pollution. Pollution from water in urban outfalls and reservoirs, e.g., lakes, canals, ponds and ditches may result in amenity losses, fisheries depletion, health problems, fish, and aquatic species contamination.	Secure clearance certificate on water resource development subprojects	Ministry of Water Resources
9	Wetland Protection Act 2000	Advocates protection against degradation and resuscitation of natural waterbodies such as lakes, ponds, beels[26], khals, tanks, etc. affected by man-made interventions or other causes. Prevents the filling of publicly owned water bodies and depressions in urban areas for preservation of the natural aquifers and environment. Prevents unplanned construction on riverbanks and indiscriminate clearance of vegetation on newly accreted land.	To avoid impacts on waterbodies in Pourashava area during construction.	Ministry of Water Resources
10	Bangladesh Labor Law, 2006	It is a comprehensive law covering labour issues such as: conditions of service and employment, youth employment, benefits including maternal benefits, compensation for injuries, trade unions and industrial relations, disputes, participation of workers in company's profits, regulation of safety of dock workers, penalty procedures, administration and inspection. This Act pertains to the occupational rights and safety of factory workers and the provision of a	Compliance to provisions on employment standards, occupational health and safety, welfare and social protection, labor relations and social dialogue, and enforcement required during construction. Prohibition of employment of children and adolescents to be ensured in construction.	Ministry of Labour and Employment

[26] A beel is a billabong or a lake-like wetland with static water (as opposed to moving water in rivers and canals - typically called khals), in the Ganges - Brahmaputra flood plains of the Eastern Indian states of West Bengal, and Assam and in the country of Bangladesh.

Sl. No.	Environmental Legislation / Act	Objective	Relevance to the Project	Responsible Institution
		comfortable environment for working. It also includes rules on registration of labourers, misconduct rules, income and benefits, health and fire safety, factory plan		
11	Bangladesh Labor Rules, 2015	Includes rules on registration of laborers, misconduct rules, income and benefits, health and fire safety, factory plan	Contractors to implement occupational health and safety measures during construction Contractor will be liable for compensation for work-related injuries	Department of Labor
12	The Paurashava Act 2009 / Ordinance issued for the amendment of local government (municipality) ordinance, 2009 and 2010; The Paurashava Ordinance, 1977; Municipal Administration Ordinance, 1960	Provides guidance for subproject integrated community and workers health and hygiene at the construction and operation and maintenance stages of the project	This is relevant as works are planned in Pourashavas. Proper coordinate needed among Paurashava committees on disaster management measures, water and sanitation and waste management	Local Authorities
13	Bangladesh Climate Change Strategy and Action Plan of 2009	Enhances the capacity of government ministries, civil society and private sector to meet the challenges of climate change	Integrate adaptation measures in design for infrastructures in consideration of extreme climatic events	Ministry of Environment, Forests and Climate Change
14	National Disaster Management Act of 2012	Establishes a framework for managing disasters in a comprehensive way.	Setting-up emergency response procedures	Ministry of Disaster and Relief

II. AMBIENT AIR QUALITY, AMBIENT NOISE LEVEL AND WATER QUALITY STANDARD

a) Ambient Air Quality Standards

Pollutant	Bangladesh Standard	WHO Guideline	Average time
Carbon Monoxide (CO) (mg/m^3)	10 (9 ppm) 40 mg/m^3 / (35 ppm)	10 30	8 hours (a) 1 hour (a)
Oxide of Nitrogen (NOx) ($\mu g/m^3$)	100 $\mu g/m^3$ (0.053 ppm)	-	Annual
Particular (PM10) ($\mu g/m^3$)	50 $\mu g/m^3$ 150 $\mu g/m^3$	15 50	Annual (b) 24 hours (c)
Fine Particulate (PM2.5) ($\mu g/m^3$)	15 $\mu g/m^3$ 65 $\mu g/m^3$	10 25	Annual 24 hours
Ozone (O_3) ($\mu g/m^3$)	235 $\mu g/m^3$ / (0.12 ppm) 157 $\mu g/m^3$ / (0.08 ppm)	- 100	1 hour (d) 8 hours
Sulphur dioxide ($SO_{2)}$ ($\mu g/m^3$)	80 $\mu g/m^3$ / (0.03 ppm) 365 $\mu g/m^3$ / (0.14 ppm)	- 20	Annual 24 hours (a)

b) Ambient Noise Level Standards, 2006

S/N	Category of areas	Standard determined at day (in DB)	Standard determined at night (in DB)
1	Silent Zone	50	40
2	Residential Area	55	45
3	Mixed Area. (Mainly residential also used for commercial and Industrial purposes)	60	50
4	Commercial Area	70	60
5	Industrial Area	75	70

c) Water Quality Standards

Water Quality Parameters Bangladesh Standards & WHO Guide Lines

Sl. No.	Water Quality Parameters	Bangladesh Standards (mg/L)	WHO Guide Line	Methods/ Equipment
01	Aluminum	0.2	-	Atomic Absorption Apectrophotometer (AAS)
02	Ammonia	0.5		UV-VIS
03	Arsenic	0.05	0.01	AAS
04	Barium	0.01	0.7	AAS
05	Benzene	0.01	0.01	Gas Chromatograph
06	BOD 5 Day, 200C	0.2	-	5 days Incubation
07	Boron	1.0	-	UV-VIS
08	Cadmium	0.005	0.003	AAS
09	Calcium	75	-	AAS
10	Chloride	150-600	-	Titrimetric
11	Chlorinated Alkenes			
11.1	Carbontetrachloride	0.01	0.004	Gas Chromatograph
11.2	1.1 Dichloroethelene	0.001	0.03	Gas Chromatograph
11.3	1.2 Dichloroethelene	0.03	0.03	Gas Chromatograph
11.4	Tetrachloroethelene	0.03	0.04	Gas Chromatograph
11.5	Trichloroethelene	0.09	0.07	Gas Chromatograph
12.1	Pentachlorophrnol	0.03	0.009	Gas Chromatograph
12.2	2,4,6-Trichlorophenol	0.03	0.2	Gas Chromatograph
13	Chlorine (Residual)	0.2	-	Titrimetric
14	Chloroform	0.09	0.2	Gas Chromatograph
15	Chromium (Hexavelent)	0.05	-	Iron Chromatograph
16	Chromium (Total)	0.05	0.05(P)	AAS
17	COD	4	-	Closed Reflux Method
18	Coli form (Faecal)	0 CFU (N/100mL)	0	Membrane Filtration Method
19	Coli form (Total)	0 CFU (N/100mL)	0	Membrane Filtration Method
20	Colour	15 Hazen	-	Colour Comparator
21	Copper	1	2	AAS
22	Cyanide	0.1	0.07	UV-VIS/Specific Ion Electrode
23	Detergent	0.2	-	UV-VIS
24	DO	6	-	Multimeter
25	Electric Conductivity	-us/cm	-	Multimeter
26	Fluoride	1	1.5	UV-VIS
27	Hardness as CaCO3	200-500	-	Titrimetric
28	Iodine	200-500	-	Titrimetric
29	Iron	0.3-1.0	-	AAS
30	Kjelhl Nitrogen (Total)	1	-	UV-VIS/ Digestion
31	Lead	0.05	0.01	AAS
32	Magnesium	30-35	-	AAS
33	Manganese	0.1	-	AAS
34	Mercury	0.001	0.001	Mercury Analyzer

35	Nickel	0.1	0.02(P)	AAS
36	Nitrate	10	50.0 as N	UV-VIS
37	Nitrite	<1	3.0(0.2)	UV-VIS
38	Odour	Odourless	-	Threshold Method
39	ORP (Eh)	-	-	ORP meter
40	Oil and Grease	0.01	-	Oil and Grease meter
41	pH		6.5-8.5	pH Meter
42	Phenolic Compounds	0.002	-	Gas Chromatograph
43	Phosphate	6	-	UV-VIS
44	Phosphorus	0	-	Digestion
45	Potassium	12	-	AAS
46	Radioactive Materials (Gross Alpha Activity)	0.01 Bq/L	0.5 Bq/L	-
47	Radioactive Materials (Gross Beta Activity)	0.1 Bq/L	1.0 Bq/L	-
48	Salinity	-%0	-	Multimeter
49	Selenium	0.01	0.01	AAS
50	Silver	0.02	-	AAS
51	Sodium	200	-	AAS
52	Suspended Solids	10	-	Filtration and Drying
53	Sulphide	0	-	UV-VIS
54	Sulphate	400	-	UV-VIS
55	Taste	-	-	Threshold Method
56	Total Alkalinity	-	-	Titrimetric
57	Total Dissolved Solid	1000	-	Multimeter
58	Temperature	20-30C		Thermometer
59	Tin	2	-	AAS
60	Turbidity	10 NTU	-	Turbidity meter
61	Zinc	5	-	AAS

Note: *UV-VIS : UV-Visible Spectrophotometer*
AAS : Atomic Absortion Spectrophotometer
ORP : Oxidation-Reduction Potential

C. **Equivalance of Government of Bangladesh Environmental Regulatory Framework and ADB SPS Policy Princples**

36. The level of compatibility between ADB' SPS principles and environmental policy and regulatory framework is described below in Table-3. In this table gap analysis has also been provided.

Table-9: Gap Analysis of Environmental Safeguard Regulatory Framework Requirement, Institutional Capacity And Recommendations To Address Gap

ADB Policy Principle	Triggered by the RBL Program	Equivalence of GOB Environmental Regulatory Framework	Addressing Gap for RBL Program
1-Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment so that adequate studies are undertaken to commensurate with the significance of potential environmental impacts and risks.	Yes	GOB regulatory framework is generally equivalent to ADB. Environmental Conservation Act (ECA), 1995 and Environmental Conservation Rules, (ECR), 1997 stipulates the environmental assessment requirements. ECR stipulates screening process to classify the project and identify the environmental assessment requirements. This is in line with ADB SPS policy principle. ADB SPS classification of A, B or C is based on significance of potential impacts. The ECR classifies projects/activities into four categories (Green, Orange-A, Orange-B and Red). Considering the site and impact on the environment, schedule 1 of the ECR provides a list of projects (include industrial establishment and infrastructure projects) under each category. Thus, depending on the type and scale of the project, a prefixed category will apply. In general, category A, B and C or ADB SPS corresponds to 'Red', 'Orange' and 'Green' category per ECR 1997.	Potential environmental impacts of proposed RBL activities are likely to be minimal. Screening needs to be undertaken to exclude following activities: (i) classified as Category A under ADB SPS, and (ii) those classified as 'Red' category and requiring EIA study under GOB ECR 1997. A screening form, combining both ADB and ECR requirements, will be introduced.
2-Conduct an environmental assessment for each proposed project to identify potential direct, indirect, cumulative, and induced impacts and risks to physical, biological,	Yes	GOB regulatory framework is generally equivalent to ADB. GOB regulatory framework requires conduct of environmental assessment of projects. Based on the	The environmental impacts of RBL activities during construction and operation needs to be assessed through conduct of environmental assessment.

ADB Policy Principle	Triggered by the RBL Program	Equivalence of GOB Environmental Regulatory Framework	Addressing Gap for RBL Program
socio-economic and physical cultural resources in the context of the project's area of influence.		project classification, assessment requirements are defined. This is similar to ADB SPS. The category with highest potential to have environmental impacts (Red category), requires an environmental impact assessment (EIA). 'Orange' category projects require an initial environmental examination (IEE). DOE issues environmental clearance certificate (ECC) based on the review and approval of EIA/IEE, which is needed prior to start of construction. "Green" category projects do not require any study and based on submission of necessary information in the requisite format application, DOE issues environmental clearance certificate.	Although GOB requirements for conducting environmental assessment for proposed projects is similar to ADB SPS, the applicability of ECR is limited only to few activities proposed in RBL (roads and community toilets), remaining activities (drains, low-income neighborhoods infrastructure, markets and parks) are not in the ECR schedule, and therefore do not require screening, environmental assessment or ECC. A framework approach will be introduced so that all RBL activities go through environmental assessment, commensurate with potential risks.
3-Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed. Also consider the no project alternative.	Yes	ECR 1997 do not specify examination of alternatives during the EIA or project development process. Therefore, there is no established regulatory process for the examination of alternatives including for location, design, technology etc., The EIA Guidelines issued by Department of Environment (DOE) in February 2021 specifies examination of alternatives as part of EIA and project planning process. It requires, at minimum, two alternatives to be examined (with and without project) for any project. Although guidelines are not a legal instrument, DOE requires project proponents to follow	RBL activities are simple and straight forward with minimal impacts. Examination of alternatives will further reduce the impacts in aspects like avoiding locations with trees, water bodies, arsenic contaminated water as water source, etc., Although DOE EIA guidelines, 2021 require alternatives examination, it is only applicable to Red category projects requiring EIA studies. This is not applicable to "Orange" category projects that require IEE. Since RBL activities are of category B, guidelines are not applicable.

ADB Policy Principle	Triggered by the RBL Program	Equivalence of GOB Environmental Regulatory Framework	Addressing Gap for RBL Program
		guidelines while preparing an EIA.	A framework approach will be introduced so that alternatives are examined during the project preparation and IEE.
4-Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an EMP that includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators.	Yes	ECR 1997 require preparation of environmental management plan (EMP) for Red and Orange-B category projects. There is no requirement of EMP for Orange-A, and Green projects. The Rules however do not elaborate on the contents or provisions to be included in the EMP. No monitoring requirements or institutional capacity building or training measures are specified in the Rules. The EIA Guidelines of DOE, 2021 specifies detailed coverage of EMP, including mitigation measures, monitoring, surveillance and auditing actions, contingency measures, organization responsibilities, capacity building and training, and budget and implementation schedule of EMP.	Program activities will require mitigation measures to address environmental impacts. EMP will be required as part of the IEE. EMP will need to clarify implementation arrangements and budget. DOE EIA guidelines, 2021 is not applicable to RBL program activities that "Orange" category projects that require IEE. A framework approach will be introduced so that alternatives are examined during the project preparation and IEE.
5-Carry out meaningful consultation with affected people and all other stakeholders. Continue consultations during project implementation and grievance redress mechanism	Yes	The Environmental Conservation Act, 1995 as amended in 2010 specifies consideration of public opinion during the environmental clearance process. It specifies surveying public opinion, getting information from public. The Act provision do not specify any details	**Triggered.** Consultations will be required with the affected persons and stakeholders during the project preparation and implementation. Public feedback and grievance redress system is crucial for avoiding / reducing inconveniences and health and safety risks during construction.

ADB Policy Principle	Triggered by the RBL Program	Equivalence of GOB Environmental Regulatory Framework	Addressing Gap for RBL Program
		such as when, with whom, process, etc.. The environmental clearance provisions of this Act are implemented through ECR; however, no Rules are not yet amended with this provision. The EIA Guidelines of DOE, 2021 comprehensively covers stakeholder consultation process to be conducted as part of the EIA process. It specifies public consultation and participation, methods, project information to be provided and documenting consultations and including EIA report. **Grievance redress:** ECA has provisions for grievance redress. ECR specifies that any person affected or likely to be affected by a project may approach DOE for remedy. Aggrieved parties can also approach Environment Courts established with specific purpose to conduct trail of environmental related offences or for compensation.	Although public opinion is mandated in ECA, it is not yet reflected in ECR. DOE EIA guidelines, 2021 is not applicable to RBL program activities that "Orange" category projects that require IEE. A framework approach will be introduced so that meaningful public consultation is conducted during the project preparation and IEE.
6.Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment, and its updates if any, to affected	Yes	There is no requirement for disclosure of environmental assessment documents or related information per ECR, 1997. There are legal instruments like Right to Information Act, 2009 through which public can access information. The EIA Guidelines of DOE, 2021	Disclosure of documents is required to update the affected people and stakeholders on the proposed RBL activities, likely impacts, and mitigation and monitoring measures, and implementation arrangements.

ADB Policy Principle	Triggered by the RBL Program	Equivalence of GOB Environmental Regulatory Framework	Addressing Gap for RBL Program
people and other stakeholders.		specifies that public information to be provided but does not specifically provide for disclosure of environmental assessment documents.	Although public opinion is mandated in ECA, it is not yet reflected in ECR. DOE EIA guidelines, 2021 is not applicable to RBL program activities that "Orange" category projects that require IEE. A framework approach will be introduced to ensure timely disclosure of the necessary documents. IEEs, including EMPs, and monitoring reports during implementation will be disclosed.
7.Implement the EMP and monitor its effectiveness. Document monitoring results, including the development and implementation of corrective actions and disclose monitoring reports.	Yes	EMP is a requirement under the ECR, 1997. Monitoring its effectiveness, documentation and reporting is not stipulated in detail. It however requires informing DOE in case of any pollution related incidents or accidents due to the project. The EIA Guidelines of DOE, 2021 specifies post EIA environmental monitoring and reporting to be included as part of the EMP.	**Triggered.** Implementation of EMPs and monitoring effectiveness, reporting and disclosure is needed. Contractors will implement the EMPs, and LGED will monitor, report and disclose. Budget to implement EMP will be included in the project cost. Although environmental monitoring is specified in DOE EIA guidelines, 2021, it is not applicable to RBL program activities that "Orange" category projects that require IEE. A framework approach will be introduced to ensure EMP implementation and to monitor its effectiveness, and reporting.
8. Do not implement project activities in areas of critical habitats. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the	No	**Not Triggered.** The RBL program activities will be mostly confined to urban areas. No activities will be located in or near critical habitats**.**	Not applicable to the RBL program

ADB Policy Principle	Triggered by the RBL Program	Equivalence of GOB Environmental Regulatory Framework	Addressing Gap for RBL Program
protected area. Use a precautionary approach to the use, development, and management of renewable natural resources.		Project is critical habitats will be excluded from the RBL program	
9.Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health, and Safety Guidelines. Adopt cleaner production processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gases emissions, waste generation, and release of hazardous materials from their production, transportation, handling, and storage. Avoid the use of hazardous materials. Purchase, use, and manage pesticides based on integrated pest management approaches and reduce reliance on synthetic chemical pesticides.	Yes	ECR 1997 stipulates standards for environmental parameters, emissions and discharges including for air, water, noise, odour etc., The standards are normally less stringent when compared to those internationally recognized standards such as WBG's EHS Guidelines.	Given the small scale of construction activities, the potential for pollution is minimal, and is mostly confined to construction phase environment, health and safety impacts. RBL activities will need to be implemented applying government pollution control and EHS requirements, and World Bank Group's EHS guidelines. RBL activities unlikely to use or generate any notable hazardous materials or waste, and will not involve use or management of pesticides. RBL will adapt GOB standards.
10.Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures.	Yes	There are various laws and policies that deal with or have provisions for workers health and safety: The Labour Act 2006 (amended in 2013) ,and Rules, 2015, Labor Appeal Tribunal/Labor Court, National Occupational Health and Safety Policy, 2013, National Building Code, 2006, Fire	**Triggered.** RBL activities involve construction and operation of infrastructure. Health and safety risks are inherent to civil works, both to workers, and surrounding community, especially since the works will be conducted in public areas.

ADB Policy Principle	Triggered by the RBL Program	Equivalence of GOB Environmental Regulatory Framework	Addressing Gap for RBL Program
		Prevention and Extinction Act 2003 and Rules, 2014, Public Procurement Rule (PPR) 2008, National Child Labour Elimination Policy 2010, etc., Bangladesh has ratified seven fundamental Conventions of the International Labor Organization (Declaration). The ILO Office works in close collaboration with its tripartite constituents and social partners towards achieving Bangladesh's decent work objectives. With these provisions, the Bangadesh's regulatory framework is in general in line with ADB SPS policy principles	
11.Conserve physical, cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of "chance find" procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.	yes	ECR, 1997 stipulates consideration of ancient monuments, archeological sites in notifying ecologically critical areas. Antiquities Act, 1968, and Antiquities Ordinance 1976, This act covers physical cultural resources including movable or immovable resources, art, architecture, craft, culture, ancient sites of historical or other importance, archeological deposits on land or under water, etc., Act empowers government to take necessary actions to preserve and protection of such antiquity and declare it as a "protected antiquity". As per this Act, the Ancient Monuments declared as protected monuments under the erstwhile Ancient Monuments Preservation Act, 1904 are also deemed as protected antiquities and provisions of Antiquities Act	RBL program activities will not be implemented in or close to archeologically, historically sensitive sites. Exclusion criteria will be followed in RBL to exclude activities located in or may potential damage protected sites. There may however be local religious/cultural places within the town and along the roads where infrastructure will be located. Necessary measures avoid any impacts, including chance-find procedures will be included in EMPs .

ADB Policy Principle	Triggered by the RBL Program	Equivalence of GOB Environmental Regulatory Framework	Addressing Gap for RBL Program
		will apply. Act imposes restriction on conducted any activity within the protected area without a license granted by the Director. Other physical cultural resources, not notified under this Act, are not subject to any safeguards.	

B. LEGAL AND POLICY FRAMEWORKS (SOCIAL SAFEGUARDS)

The RBL program implementation will be guided by the national law, the Acquisition and Requisition of Immovable Property Act (ARIPA), 2017 and ADB safeguards policy principles for involuntary resettlement and indigenous peoples.

D. National Land Acquisition Law

37. **Acquisition and Requisition of Immovable Property Act, 2017 (ARIPA** As per the law, the owners affected due to acquisition will be eligible to receive compensation for (i) land permanently acquired (including standing crops, trees, houses); and (ii) any other impact and damages caused by such acquisition. The ARIPA 2017, however, does not cover the project affected persons such as informal settlers/squatters or persons without titles or ownership records. The compensation payment for land must be assessed by an appropriate authority (Property Valuation Advisory Committee (PVAC)) to ensure that it constitutes replacement cost of the property acquired, in line with ADB policy. In case of difference between the policies of ADB and the government, the ADB policy will prevail.

38. Under the RBL Program, IUGIP, it is confirmed by LGED that, land acquisition is not envisaged; the roads, and drains proposed to be constructed under the project will be undertaken within the ROW of *Pourashava* roads and within the boundaries of government or *Pourashava* land. If any potential land acquisition is required, the Executing Agency/Implementing Agency (EA/IA) will consider acquiring land through negotiated settlement based on meaningful consultation as outlined In ADB SPS 2009. In case of negotiated settlement, an independent external party will be engaged by the EA/IA to document the negotiation and settlement processes and to ascertain that the process is coercion free.

E. ADB's Safeguard Policy Statement, 2009 (Involuntary Resettlement),

39. The objectives of ADB's Safeguard Policy Statement (SPS) 2009 with regard to involuntary resettlement are:(i) to avoid involuntary resettlement wherever possible; (ii) to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons in real terms relating to pre-project levels; and (iii) to improve the standards of living of the displaced poor and other vulnerable groups.

40. ADB's Safeguard Policy Statements covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary. Following are the basic policy principles of ADB's SPS, 2009:

(i) Screen the project early for identification of past, present, and future involuntary resettlement impacts and risks and determination of the scope of resettlement planning;
(ii) Carry out meaningful consultations with all stakeholders and affected persons.
(iii) Improve the standards of livingt or at least restor of the livelihoods of all displaced persons and other vulnerable groups by providing all necessary support as deemed appropriate;
(iv) Development of procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement;
(v) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets;
(vi) Preparation of a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule;
(vii) Disclosure of resettlement plan, including documentation of the consultation process in a timely manner to affected persons and other stakeholders;
(viii) Execution of involuntary resettlement as part of a development project or program.
(ix) Payment of compensation and provide other resettlement entitlements before physical or economic displacement; and
(x) Monitoring and assessment of resettlement outcomes, their impacts on the standards of living of displaced persons.

F. **Safeguard Policy Principles Triggered**

41. The involuntary resettlement principles likely to be triggered due to the RBL program activities are given in Table 1. The program will screen out any high-risk activity that may fall under category A for involuntary resettlement and indigenous peoples as defined in ADB SPS, 2009.

Table 10: Safeguard Policy Principles Triggered

Principles*	Description
Involuntary resettlement	
Principle 1: Project screening for involuntary resettlement impacts and risks.	**Triggered.** Screening needs to be undertaken to identify and exclude any activity that might lead to significant involuntary resettlement impacts (footnote 3). Any impact related to land acquisition will be screened, and activities with significant impact will not be considered under the project. The social safeguard screening checklists have been included in the ESMF.

Principles*	Description
Principle 2: Carry out meaningful consultations and establish a grievance redress mechanism	**Triggered.** Meaningful consultations will be carried out with the affected persons and stakeholders during project preparation and implementation phase. A system of public feedback and grievance redress will be crucial for avoiding / reducing social risks and impacts.
Principle 3: Improve, or at least restore, the livelihoods of all displaced persons	**Triggered.** Temporary income loss to road-side shops/businesses during construction due to access disruption is possible. The impacts during construction period are not likely to be significant. The EA/IA will prepare a resettlement plan and ensure that all requirements specified in the resettlement plan are fulfilled.
Principle 4: Provide physically and economically displaced persons with needed assistance	**Triggered.** Implementation of RBL program is not likely to cause physical displacement, or permanent economic displacement. The EA/IA will ensure that temporary economic impacts and any other minor construction related impacts are appropriately assessed and compensated prior to start of civil construction works.
Principle 5: Improve the standards of living of the displaced poor and other vulnerable groups to at least national minimum standards.	**Triggered.** The vulnerable[27] persons, will be identified during census and socio-economic survey of affected persons and preparation of resettlement plan. They will be compensated in accordance with provisions defined in the resettlement plan aligned with ADB SPS 2009.
Principle 6: Transparent, consistent, and equitable manner if land acquisition is through negotiated settlement	**Triggered**. Initial assessment indicates no private land acquisition or purchase through negotiated settlement. However, for the RBL program if any potential land acquisition is required, the EA/IA will consider acquiring land through negotiated settlement based on meaningful consultation. An independent external party will be engaged by the EA/IA to document the negotiation and settlement processes and to ascertain that the process is coercion free.
Principle 7: Displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.	**Triggered.** The RBL program will recognise both titleholders and non-titleholders and will ensure payment of compensation to both title holders and non-title holders for lost assets and involuntary resettlement impacts.
Principle 8: Preparation of resettlement plan	**Triggered.** LGED will prepare resettlement plans for *pourashavas*, where involuntary resettlement impacts are assessed.
Principle 9: Disclosure of resettlement plan	**Triggered.** The RP, DDR and PSSA documents will be disclosed on the website of LGED and ADB. The documents will also be translated in local language (Bangla). The entitlement matrix and the grievance redress mechanism will be disclosed with affected persons in *pourashavas* where involuntary resettlement impacts are identified and feedback from stakeholders to be updated.

[27] Vulnerable displaced persons will include the following: persons falling below poverty line, persons with disabilities, landless or without title to land, female-headed households, elderly-headed household, children including child labour and orphans, and small ethnic communities. The eligibility for elderly will follow the definition of the Department of Social Service of Ministry of Social Welfare, Government of Bangladesh that uses 65 years age for man and 62 years age for woman to define elderly people.

Principles*	Description
Principle 10: Execution of involuntary resettlement plan and include full costs of resettlement in the presentation of project's costs and benefits.	**Triggered.** The resettlement plans will include resettlement cost estimates as per the policy principles outlined in the resettlement plan. The EA/IA will bear all the costs required for resettlement. The resettlement budget will be part of program cost.
Principle 11: Payment of compensation and other resettlement entitlements before physical or economic displacement.	**Triggered.** Compensation to both titleholders and non-titleholders (in line with Principle 7) affected by the RBL program will be paid before start of civil construction work. The implementation of the resettlement plan will be monitored by LGED .
Principle 12: Monitor resettlement plan implementation and disclose monitoring reports.	**Triggered.** LGED will monitor resettlement plan implementation, prepare monitoring reports and disclose.

Source: * Asian Development Bank, Safeguard Policy Statement, 2009

G. **Comparative Analysis between ADB SPS, 2009 and National Laws**

42. Gap analysis between policy principles on involuntary resettlement safeguards outlined in ADB SPS, 2009 and GOB Legislation and regulations was conducted as part of the PSSA diagnostic assessment. The results of the comparative analysis indicate that there are gaps between the two applicable legal frameworks mentioned above. Unlike the requirements of ADB's SPS, the government's ARIPA, 2017 do not cover affected persons without titles or ownership record, such as informal settler/squatters, tenants and leaseholders (except for bargadars or share croppers). ARIPA, 2017 covers the legal compensation for land, structures, crops and trees, and has no provision for loss of income, livelihood restoration and transfer or shifting allowance, reconstruction and vulnerability assistance measures. Further, in most of the cases, the compensation paid does not constitute replacement cost of the property acquired, but is based on predetermined rates defined by the government. In case of difference between the policies of ADB and the government, the ADB policy will prevail. A detailed comparative analysis between ARIPA 2017 and ADB's SPS requirements is presented in **Table 2**.

Table 11: Comparative Analysis of Social Safeguard Regulatory Framework Requirement, Institutional Capacity and Recommendations to Address Gap (Safeguards Requirement 2)

ADB Policy Principle	Triggered by the RBL Program (Yes/No)	Equivalence of GOB Legislation, ARIPA, 2017	Addressing Gap for RBL Program
Principle 1 - Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.	Yes	The ARIPA 2017, does not mention about early screening of project.	Screening needs to be undertaken to identify and exclude any activity that might lead to significant involuntary resettlement impacts (footnote 3). Any impact related to land acquisition will be screened, and activities with significant impact will not be considered under the project. The social safeguard screening checklists have been included in the ESMF.
Principle 2 - Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement	Yes	The ARIPA, 2017 has no specific provisions for stakeholder consultations. Affected persons may raise objections to land acquisition only after section 5 Notice is issued, while disputes over land acquisition have to be settled through an arbitrator or the courts of law. Instructions 262(1) and (2) of chapter 8 of the Secretariat Instructions 2014, instruct to make provisions for receiving opinions from citizens as well as redress grievances in a transparent and neutral manner and follow effective methods for conserving complaints. Grievance Redress System Guidelines, 2015 (Revised 2018), mandates formation of a grievance redress system in all government departments and offices.	Meaningful consultations will be carried out with the affected persons and stakeholders during project preparation and implementation phase. A system of public feedback and grievance redress will be crucial for avoiding / reducing social risks and impacts.

ADB Policy Principle	Triggered by the RBL Program (Yes/No)	Equivalence of GOB Legislation, ARIPA, 2017	Addressing Gap for RBL Program
decisions should be preceded by a social preparation phase.			
Principle 3 - Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.	Yes	The government laws (ARIPA 2017), does not have provisions for livelihood restorations of affected persons.	The RBL program will exclude subprojects involving land acquisitions and any impacts triggering permanent economic displacements and physical displacement. Temporary income loss to road-side shops/businesses during construction due to access disruption is possible. The impacts during construction period are not likely to be significant. The EA/IA will prepare a resettlement plan and ensure that all requirements specified in the resettlement plan are fulfilled.
Principle 4 - Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.	Yes	The government laws (ARIPA 2017), does not have provisions for providing relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically to the physically or economically displaced persons.	Implementation of RBL program is not likely to cause physical displacement, or permanent economic displacement. The EA/IA will ensure that temporary economic impacts and any other minor construction related impacts are appropriately assessed and compensated prior to start of civil construction works.

ADB Policy Principle	Triggered by the RBL Program (Yes/No)	Equivalence of GOB Legislation, ARIPA, 2017	Addressing Gap for RBL Program
Principle 5 - Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.	Yes	The Government laws does not have any provision for improving the standards of living of the displaced poor and other vulnerable.	The vulnerable[28] persons, will be identified during census and socio-economic survey of affected persons and preparation of resettlement plan. They will be compensated in accordance with provisions defined in the resettlement plan aligned with ADB SPS 2009.
Principle 6 - Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.	Yes	The Government laws does not have any provision for negotiated purchase of land from the land owners.	For the RBL program if any potential land acquisition is required, the EA/IA will consider acquiring land through negotiated settlement based on meaningful consultation. An independent external party will be engaged by the EA/IA to document the negotiation and settlement processes and to ascertain that the process is coercion free.
Principle 7 - Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets.	Yes	ARIPA, 2017 of the GOB does not have provisions for compensation to the persons who do not have legal title of the lands/ assets to be acquired. It recognizes only the entitlements of the legal titleholders who are capable of establishing their ownership rights. The only exception is for sharecroppers who have cultivated standing crops under a legally constituted written agreement; they are entitled	The RBL program will recognize both titleholders and non-titleholders and will ensure payment of compensation to both title holders and non-title holders for lost assets and involuntary resettlement impacts.

[28] Vulnerable displaced persons will include the following: persons falling below poverty line, persons with disabilities, landless or without title to land, female-headed households, elderly-headed household, children including child labour and orphans, and small ethnic communities. The eligibility for elderly will follow the definition of the Department of Social Service of Ministry of Social Welfare, Government of Bangladesh that uses 65 years age for man and 62 years age for woman to define elderly people.

ADB Policy Principle	Triggered by the RBL Program (Yes/No)	Equivalence of GOB Legislation, ARIPA, 2017	Addressing Gap for RBL Program
		to a part of the compensation money as provided for in the written agreement.	
Principle 8 - Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule**.**	Yes	The government laws does not have any provision for preparing resettlement plans. For land acquisition the concern department under Deputy Commissioner prepares a award for the lost assets based on which the valuation of lost asset is calculated and shared with affected land owner as per ARIPA 2017.	LGED will prepare resettlement plans for *pourashavas*, where involuntary resettlement impacts are assessed.
Principle 9 - Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.	Yes	The government law does not have any such provision.	The RP, DDR and PSSA documents will be disclosed on the website of LGED and ADB. The documents will also be translated in local language (Bangla). The entitlement matrix and the grievance redress mechanism will be disclosed with affected persons in *pourashavas* where involuntary resettlement impacts are identified and feedback from stakeholders to be updated.
Principle 10 - Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.	Yes	The ARIPA, 2017 provides compensation cost for affected land and structures, other assets attached to the land to the affected land owners.	The resettlement plans will include resettlement cost estimates as per the policy principles outlined in the resettlement plan. The EA/IA will bear all the costs required for resettlement. The resettlement budget will be part of program cost.
Principle 11 - Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close	Yes	As per ARIPA, 2017, all affected land owners should be provided with land acquisition compensation for lost land and assets, before transferring of land to government. However,	Compensation to both titleholders and non-titleholders (in line with Principle 7) affected by the RBL program will be paid before start of

ADB Policy Principle	Triggered by the RBL Program (Yes/No)	Equivalence of GOB Legislation, ARIPA, 2017	Addressing Gap for RBL Program
supervision throughout project implementation.		due to ownership issues, often the process of compensation disbursement is delayed. As per the ARIPA 2017 guidelines, the compensation amount would be kept at an escrow account by the Deputy Commissioner.	civil construction work. The implementation of the resettlement plan will be monitored by LGED.
Principle 12 - Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.	Yes	The government law does not have provisions on regular monitoring.	LGED will monitor resettlement plan implementation, prepare monitoring reports and disclose.

H. **Involuntary Resettlement Policy Principles for the IUGIP, RBL Program**

43. .The project will recognize both titleholders with legal rights to land and non-titleholders who have neither formal legal rights nor recognized or recognizable claims to such land. The involuntary resettlement requirements apply to both displaced persons. It also applies to economically displaced persons – those facing temporary income loss.

44. For any ADB financed projects requiring involuntary resettlement, resettlement planning is an integral part of project design, to be dealt with from the earliest stages of the project cycle, taking into account the following basic principles:

(i) Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
(ii) Carry out meaningful consultations with affected persons, host communities, concerned nongovernment organizations and other relevant stakeholders. Inform all displaced and affected persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population.
(iii) Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.
(iv) Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
(v) Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards.
(vi) Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
(vii) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
(viii) Prepare a resettlement plan for all packages with resettlement impacts elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.

(ix) Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.
(x) Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
(xi) Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.
(xii) Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

I. Government of Bangladesh and ADB Safeguard Policies on Tribes, Minor Races, Ethnic Sects and Communities (TMRESC)

45. TMRESC are culturally distinct societies and communities. The land on which they live and the natural resources on which they depend are inextricably linked to their identities, cultures, livelihoods, as well as their physical and spiritual well-being. They hold vital ancestral knowledge and expertise on how to adapt, mitigate, and reduce risks from climate change and natural disasters.[29]

46. The Constitution of Bangladesh ensures affirmative action for small ethnic community peoples and prohibits discrimination inter alia on grounds of race, religion or place of birth, Article 23A of which provides, "the State shall take steps to protect and develop the unique local culture and tradition of the tribes, minor races, ethnic sects and communities". It also spells out in Article 28 (4), "nothing in this Article shall prevent the State from making special provision in favor of women or children or for the advancement of any backward section of citizens".

47. Many of the government laws that are related to the ownership of land and acquisition for the plain land are also applicable to Tribes, Minor Races, Ethnic Sects and Communities (TMRESC) and non-ethnic minority people. The laws include the (i) Code of Civil Procedure, 1908; (ii) the East Bengal State Acquisition and Tenancy Act, 1950; and (iii) ARIPA, 2017. In Bangladesh, a large proportion of indigenous people/ TMRESC live in Chittagong Hill Tracts (CHT) and has separate set of laws applicable only to this region only. The Chittagong Hill Tracts (CHT) Regulation, 1900 is the single most important law for the CHT. The CHT Regulation, 1900 functions in the nature of a constitutional legal instrument and vets the application of other laws that apply to CHT, among others, by specifying the nature and extent of application of those laws. In addition to CHT Regulation, 1900 the other special laws that apply to the CHT include: (i) CHT Land Acquisition Regulation, 1958; (ii) Hill District Councils Acts, 1989; (iii) CHT Regional Council Act of 1998, (iv) CHT Land Disputes Resolution Commission Act of 2001 and (v) Chittagong Hill Tracts (Land Acquisition) (Amendment) Ordinance, 2018. According to the Gazette of Bangladesh Cultural Ministry, dated March 23, 2019, 50 types of small ethnic communities live in Bangladesh. The List of TMRESC recognized in the Bangladesh Gazette, Cultural Ministry, 23 March 2019 is provided in **Appendix 6a**.

[29]http://www.worldbank.org/en/topic/indigenouspeoples

48. **Indigenous Peoples Safeguards, ADB Safeguard Policy Statement, 2009.** The Indigenous Peoples safeguards are triggered if a project directly or indirectly affects the dignity, human rights, livelihood systems, or culture of Indigenous Peoples or affects the territories or natural or cultural resources that Indigenous Peoples own, use, occupy, or claim as an ancestral domain or asset.

ADB SPS, 2009 uses the term Indigenous Peoples in a generic sense to refer to a distinct, vulnerable, social, and cultural group possessing the following characteristics in varying degrees:

i. self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;
ii. collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;
iii. customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
iv. a distinct language, often different from the official language of the country or region.

49. The Government of Bangladesh policies and legal instruments for TMRESC are supplemented by ADB SPS, 2009. ADB SPS, 2009 ensures equality of opportunity to be derived from project interventions for TMRESC. ADB SPS, 2009 emphasizes that development interventions will be planned in a manner consistent with the needs and aspirations of affected indigenous peoples, and compatible in substance and structure with affected TMRESC's culture and social and economic institutions.

Table 12: Safeguard policy Principles Triggered

Principles*	Description
Indigenous Peoples	
Principle 1: Project screening for Indigenous Peoples impacts.	**Triggered.** All components or activities will be screened to determine whether any Indigenous Peoples/ TMRES communities are present and affected by the RBL program.
Principle 2: Undertake a culturally appropriate and gender-sensitive social impact assessment	**Triggered.** The RBL program envisages beneficial impact for Indigenous Peoples/ TMRES in towns such as Naohata and Banskhali *pourashavas*, where TMRESC live in small groups.
Principle 3: Undertake meaningful consultations with affected Indigenous Peoples communities and establish a culturally appropriate and gender inclusive grievance mechanism	**Triggered.** For any activity or component is undertaken in *Pourashvas*, where TMRESC (Indigenous Peoples) live in a cluster or small groups, consultations will be carried out to ensure that the RBL program benefits are accessible to Indigenous Peoples/ TMRES communities in a culturally appropriate manner.
Principle 4: Broad community support for project activities	**Not Triggered.** The RBL program will not take up any activity, which may cause the commercial development of the cultural or natural resources or traditional or customary lands.
Principle 5: Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources.	**Not Triggered.** The RBL program will exclude any such activity.
Principle 6: Preparation of Indigenous Peoples plan (IPP)	**Triggered.** No adverse impacts to Indigenous Peoples/TMRESC are assessed under the RBL program; only beneficial impacts are assessed on Indigenous Peoples/ TMRESC in two *pourashvas*. A combined Resettlement and TMRESC Plan will be

Principles*	Description
	prepared, which will include a specific action plan for consultation and participation of indigenous peoples.
Principle 7: Disclose a draft and final IPP in form and language(s) understandable to affected Indigenous Peoples communities	**Triggered.** Any Resettlement and TMRESC Plan prepared will be disclosed on LGED website and to TMRESC, in language understood by them.
Principle 8: Prepare an action plan for legal recognition of customary rights to lands and territories or ancestral domains.	**Not Triggered.** The customary rights to lands and territories or ancestral domains will not be impacted under the program.
Principle 9: Monitor implementation of the IPP and disclosure of monitoring reports.	**Triggered.** The monitoring of the Indigenous Peoples related actions and measures will be conducted during the implementation of the RBL program by LGED.

Source: * Asian Development Bank, Safeguard Policy Statement, 2009

Table 13: Gap Analysis on National Policies (Government of Bangladesh) on TMRESC and ADB SPS 2009 (safeguards requirement 3)

ADB Indigenous Peoples Policy Principles	Triggered by RBL Program (Yes/No)	Government of Bangladesh (GOB) Policies	Gap Analysis and Measures to Bridge the Gaps
Policy Principle 1: Screen early on to determine (i) whether Indigenous Peoples are present in, or have collective attachment to, the project area; and (ii) whether project impacts on Indigenous Peoples are likely.	Yes	**Constitution of Bangladesh** ensures affirmative action for small ethnic community peoples and prohibits discrimination inter alia on grounds of race, religion or place of birth, **Article 23A** of which provides, "the State shall take steps to protect and develop the unique local culture and tradition of the tribes, minor races, ethnic sects and communities".	The Constitution of Bangladesh does not specify on early screening of projects for indigenous people, termed as 'Tribes, Minor Races, Ethnic Sects and Communities (TMRESC) ' by the Constitution. The Project shall screen the projects early to determine the presence of TMRESCs. Projects activities involving significant or adverse impacts to TMRESC should be avoided.
Policy Principle 2: Undertake a culturally appropriate and gender-sensitive social impact assessment or use similar methods to assess potential project impacts, both positive and adverse, on Indigenous Peoples. Give full consideration to options the affected Indigenous Peoples prefer in relation to the provision of project benefits and the design of mitigation measures. Identify social and economic benefits for	Yes	**Article 28 (4) of the Constitution of Bangladesh** mentions, "nothing in this Article shall prevent the State from making special provision in favor of women or children or for the advancement of any backward section of citizens" **Bangladesh Environment Conservation Act (BECA), 1995,** mandates obtaining environmental	Although the Constitution of Bangladesh mentions about making special provisions for women, children and any backward section of citizens, it or any Act, under GOB does not speak about conducting social impact assessment. Partial equivalence is noted in conducting social impact assessment, which is included in the EIA and mitigation plans prepared accordingly. The project will conduct social impact assessment in a culturally appropriate and

ADB Indigenous Peoples Policy Principles	Triggered by RBL Program (Yes/No)	Government of Bangladesh (GOB) Policies	Gap Analysis and Measures to Bridge the Gaps
affected Indigenous Peoples that are culturally appropriate and gender and intergenerational inclusive and develop measures to avoid, minimize, and/or mitigate adverse impacts on Indigenous Peoples.		clearance from the Director General, Department of Environment for which detailed rules on, inter alia, Environmental Impact Assessment (EIA) is specified in the **Environment Conservation Rule, 1997.** The EIA requires to carry out baseline data generation and impact assessment including the social receptors; this helps in generating socio-economic profile of the area and it assists the project developers in identifying priority areas for their socioeconomic development programs.	gender-sensitive manner. The SIA will capture both positive and adverse impacts due to the project on TMRESC s and will include measures to avoid, minimize and/or mitigate any adverse impacts to TMRESCs.
Policy Principle 3: Undertake meaningful consultations with affected Indigenous Peoples communities and concerned Indigenous Peoples organizations to solicit their participation (i) in designing, implementing, and monitoring measures to avoid adverse impacts or, when avoidance is not possible, to minimize, mitigate, or compensate for such effects; and (ii) in tailoring project benefits for affected Indigenous Peoples communities in a culturally appropriate manner. To enhance Indigenous Peoples' active participation, projects affecting them will provide for culturally appropriate and gender inclusive capacity development. Establish a culturally appropriate	Yes	**Acquisition and Requisition of Immovable Property Act 2017** states that affected persons may raise objections to land acquisition only after section 5 Notice is issued, while disputes over land acquisition have to be settled through an arbitrator or the courts of law.	No provisions for consultations with TMRESC s or to establish a grievance redress mechanism to facilitate resolution of grievances received from TMRESC. There is no specific mention of TMRESC s in ARIPA 2017. The project will undertake meaningful consultation with the Tribes, Minor Races, Ethnic Sects and Communities, in a culturally appropriate manner at a location suitable for the TMRESC community to attend the meetings. The meetings will be conducted in a language understandable to the TMRESC community. The grievance redress committee at the PMU level (3rd level grievance) will have a representative from Tribes, Minor Races, Ethnic Sects and Communities.

ADB Indigenous Peoples Policy Principles	Triggered by RBL Program (Yes/No)	Government of Bangladesh (GOB) Policies	Gap Analysis and Measures to Bridge the Gaps
and gender inclusive grievance mechanism to receive and facilitate resolution of the Indigenous Peoples' concerns.			
Policy Principle 4: Ascertain the consent of affected Indigenous Peoples communities to the following project activities: (i) commercial development of the cultural resources and knowledge of Indigenous Peoples; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that would impact the livelihoods or the cultural, ceremonial, or spiritual uses that define the identity and community of Indigenous Peoples. For the purposes of policy application, the consent of affected Indigenous Peoples communities refers to a collective expression by the affected Indigenous Peoples communities, through individuals and/or their recognized representatives, of broad community support for such project activities. Broad community support may exist even if some individuals or groups object to the project activities.	No	Many of the government laws that are related to the ownership of land and acquisition for the plain land are also applicable to SEC, ethnic minority (EM) and non-ethnic minority people; these include the (i) **Code of Civil Procedure, 1908**; (ii) the **East Bengal State Acquisition and Tenancy Act, 1950**; and (iii) **ARIPA, 2017**. These laws do not apply in Chittagong Hill Tracts (CHT), where a large proportion of indigenous people (IP) live. The **CHT Regulation, 1900** is the single most important law. CHT Regulation, 1900 the other special laws that apply to the CHT include: (i) **CHT Land Acquisition Regulation, 1958**; (ii) **Hill District Councils Acts, 1989**; (iii) **CHT Regional Council Act of 1998**, (iv) **CHT Land Disputes Resolution Commission Act of 2001** and (v) **Chittagong Hill Tracts (Land Acquisition) (Amendment) Ordinance, 2018**. SEC customary use of land in the CHT is not recognized by the	There is no provision to take consent of affected TMRESCs or broad community support for any project activities under the law. Clearance for a project is given by Department of Environment based on environment and social impact assessment. For projects that involve commercial development of cultural resources and knowledge of TMRESC/IPs, or physical displacement from traditional or customary lands, or commercial development of natural resources within customary lands, the project will seek broad community support of TMRESC and will be appropriately documented.
Policy Principle 5: Avoid, to the maximum extent possible, any restricted access to and physical displacement	No		Restricted access and physical displacement from customary land and natural resources will be avoided to the maximum extent

ADB Indigenous Peoples Policy Principles	Triggered by RBL Program (Yes/No)	Government of Bangladesh (GOB) Policies	Gap Analysis and Measures to Bridge the Gaps
from protected areas and natural resources. Where avoidance is not possible, ensure that the affected Indigenous Peoples communities participate in the design, implementation, and monitoring and evaluation of management arrangements for such areas and natural resources and that their benefits are equitably shared**.**		government and is considered as unclassified forest, village common forest, and government (*khas*) lands, although different groups of SEC of the CHT have been using such lands from immemorial times as common land or ancestry land of common use.	possible. Where unavoidable, affected TMRESCs/ communities will actively participate in the design, implementation and monitoring and evaluation of management arrangements. Benefits from the project will be equitably shared.
Policy Principle 6: Prepare an Indigenous Peoples plan (IPP) that is based on the social impact assessment with the assistance of qualified and experienced experts and that draw on indigenous knowledge and participation by the affected Indigenous Peoples communities. The IPP includes a framework for continued consultation with the affected Indigenous Peoples communities during project implementation; specifies measures to ensure that Indigenous Peoples receive culturally appropriate benefits; identifies measures to avoid, minimize, mitigate, or compensate for any adverse project impacts; and includes culturally appropriate grievance procedures, monitoring and evaluation arrangements, and a budget and time-bound actions for implementing the planned measures.	Yes	-	Provision for preparation of IPP is not specified under the law. The project authority will prepare Tribes, Minor Races, Ethnic Sects and Communities Plan (TMRESCP) or Resettlement and Tribes, Minor Races, Ethnic Sects and Communities Plan (RTMRESCP) for projects where indigenous peoples' safeguards are triggered.

ADB Indigenous Peoples Policy Principles	Triggered by RBL Program (Yes/No)	Government of Bangladesh (GOB) Policies	Gap Analysis and Measures to Bridge the Gaps
Policy Principle 7: Disclose a draft IPP, including documentation of the consultation process and the results of the social impact assessment in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected Indigenous Peoples communities and other stakeholders. The final IPP and its updates will also be disclosed to the affected Indigenous Peoples communities and other stakeholders.	Yes	Under **ARIPA 2017, Section 4**, the Deputy Commissioner, whenever it appears to him that any property in any locality is needed or is likely to be needed for any public purpose or in public interest, will cause a notice, to be published at convenient places on or near the property in the prescribed form and manner stating that the property is proposed to be acquired.	There is no provision for preparation or disclosure of IPP under the law. Both draft and final TMRESCP /RTMRESCPs will be disclosed in the communities and on the Project and ADB websites.
Policy Principle 8: Prepare an action plan for legal recognition of customary rights to lands and territories or ancestral domains when the project involves (i) activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, or (ii) involuntary acquisition of such lands.	No		Although TMRESCs are recognized, there is no mention of ancestral domains or customary lands or territories of TMRESCs in the national laws. TMRESC customary use of land in the Chittagong Hill Tracts (CHT) is not recognized by the government and is considered as unclassified forest, village common forest, and government (*khas*) lands, although different groups of TMRESC of the CHT have been using such lands from immemorial times as common land or ancestry land of common use. A TMRESC Specific Action Plan will be prepared for legal recognition of customary rights to lands and territories or ancestral domains when the project involves (i) activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples/TMRESCs have traditionally owned or

ADB Indigenous Peoples Policy Principles	Triggered by RBL Program (Yes/No)	Government of Bangladesh (GOB) Policies	Gap Analysis and Measures to Bridge the Gaps
			customarily used or occupied; or (ii) involuntary acquisition of such lands is involved.
Policy Principle 9: Monitor implementation of the IPP using qualified and experienced experts; adopt a participatory monitoring approach, wherever possible; and assess whether the IPP's objective and desired outcome have been achieved, taking into account the baseline conditions and the results of IPP monitoring. Disclose monitoring reports.	Yes	-	There is no such provision for monitoring under the law, as there is no requirement for TMRESC preparation and implementation. Implementation of TMRESCDPs/RTMRESCDPs will be covered by regular internal monitoring activities. Monitoring indicators will be included in semi-annual social monitoring reports, which will be disclosed.

J. Indigenous Peoples Safeguards Policy Principles for the IUGIP, RBL Program

50. The objective of the indigenous peoples/TMRESC safeguards is to design and implement projects in a way that fosters full respect for indigenous people' identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by the TMRESC themselves so that they (i) receive culturally appropriate social and economic benefits; (ii) do not suffer adverseimpacts as a result of projects; and (iii) can participate actively in projects that affect them. In considering these characteristics, national legislation, customary law, and any international conventions to which the country is a party will be taken into account.

51. The following indigenous people safeguard policy principles are applied in ADB financed projects and will apply to IUGIP, RBL Program:

(i) Screen early on to determine (i) whether indigenous people are present in, or havecollective attachment to, the project area; and (ii) whether project impacts on indigenous people are likely;

(ii) Undertake a culturally appropriate and gender-sensitive social impact assessmentor use similar methods to assess potential project impacts, both positive and adverse, on indigenous people. Give full consideration to options the affected indigenous people prefer in relation to the provision of project benefits and the design of mitigation measures. Identify social and economic benefits for affected Indigenous People that are culturally appropriate and gender and inter- generationally inclusive and develop measures to avoid, minimize, and/or mitigateadverse impacts on indigenous people;

(iii) Undertake meaningful consultations with affected indigenous people's communities and concerned indigenous people organizations to solicit their participation (i) in designing, implementing, and monitoring measures to avoid adverse impacts or, when avoidance is not possible, to minimize, mitigate, or compensate for such effects; and (ii) in tailoring project benefits for affected

indigenous people communities in a culturally appropriate manner. To enhance indigenous people' active participation, projects affecting them will provide for culturally appropriate and gender inclusive capacity development. Establish a culturally appropriate and gender inclusive grievance mechanism to receive and facilitate resolution of the indigenous people' concerns;

(iv) Ascertain the consent of affected Indigenous People communities to the followingproject activities: (i) commercial development of the cultural resources and knowledge of indigenous people; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that would impact the livelihoods or the cultural, ceremonial, or spiritual uses that define the identity and community of indigenouspeople.

(v) Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources. Where avoidance is not possible, ensure that the affected indigenous people communities participate in the design, implementation, and monitoring and evaluation of management arrangements for such areas and natural resources and that their benefits are equitably shared;

(vi) Prepare a Indigenous Peoples plan (IPP) or TMRESCDP that is based on the social impact assessment with the assistance of qualified and experienced experts and that draw on indigenous knowledge and participation by the affected indigenous people communities. The IPP includes a framework for continued consultation with the affected indigenous people communities during project implementation; specifies measures to ensure that Indigenous People receive culturally appropriate benefits; identifies measures to avoid, minimize, mitigate, or compensate for any adverse project impacts; and includes culturally appropriate grievance procedures, monitoring and evaluation arrangements, and a budget and time-bound actions for implementing the planned measures;

(vii) Disclose a draft and updated TMRESCDP, including documentation of the consultation process and theresults of the social impact assessment in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable toaffected indigenous people’s communities and other stakeholders.

(viii) Prepare an action plan for legal recognition of customary rights to lands and territories or ancestral domains when the project involves (i) activities that are contingent on establishing legally recognized rights to lands and territories that indigenous people have traditionally owned or customarily used or occupied, or (ii)involuntary acquisition of such lands; and

(ix) Monitor implementation of the TMRESCDP using qualified and experienced experts; adopt a participatory monitoring approach, wherever possible; and assess whether the TMRESCDP 's objective and desired outcome have been achieved, considering the baseline conditions and the results of TMRESCDP monitoring. Disclose monitoring reports.

Appendix 4: Consultations Conducted during PSSA

A. Consultations Conducted

1. The dates of consultations and stakeholders consulted are summarized in **Table 1**. The views, comments and suggestions of stakeholders and their incorporation in project design are presented in **Tables 2 and 3 for local consultations in *Pourashavas* and institutional level consultations respectively** The records of consultations (list of participants with signatures) and consultation photographs are also given**.**

Table 14: Dates and Stakeholders Consulted

Sl. No.	Stakeholders Consulted	Dates of Consultations
1	LGED Office	3 July 2022
2	Chowmuhani *Pourashava*	04 July 2022
3	Raozan *Pourashava*	05 July 2022
4	Araihazar *Pourashava*	11September 2022
5	Naohata *Pourashava*	12 and 13 September 2022
6	Bhairomara *Pourashava*	14 September 2022
7	Keshabpur *Pourashava*	15 and 16 September 2022
8	Department of Environment	18 September 2022
9	Project Director's Office	19 September 2022
10	Director (Environmental Clearance), Department of Environment	7 November 2022
11	Project director and PMU technical safeguard staff on environmental safeguards	7 – 9 November 2022

Table 15: Views, Comments, and Suggestions of Stakeholders During Pourashava Visits

Sl. No.	Place	Date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and implementation
1	Chowmuhani *Pourashava*	4-5 July 2022	With local people residing/doing business near roads and drains, Mayor and elected *Pourashava* members	Project components, benefits of project, environmental and social impacts during project implementation, etc.	1. Chowmuhani *Pourashava* Mayor and elected ward councilors welcomed the project interventions planned and assured all help during project implementation. The environmental and social specialists (ADB project preparation consultant) and LGED officials thanked the *Pourashava* office bearers. 2. The Mayor suggested that more numbers of roads and drains should be included in the project so that local population is benefitted. The LGED officials replied that roads and drains have been selected as per recommendation and suggestions of local level technical team. However, request will be considered as per the feasibility. 3. The locals residing near one of the selected roads suggested that necessary safety measures for the movement of locals during the construction works should be taken up. The ADB environmental consultant replied that necessary safety measures will be taken and for this an environmental management plan will be prepared and implemented. 4. Some of local shopkeepers, at location of drain construction opined that construction works in market area should be planned on weekly holidays and early morning and late evening hours so that business loss is minimum. The social safeguard consultant ADB replied that suggestion is noted and project implementing team will do every effort to minimize loss to business hours. 5. The environmental specialist solicited view of participants for the environmental protection during the project implementation. The local participants replied that necessary dust suppression measures should be taken up and in operation phase drains should be properly maintained. The environmental specialist replied that EMP will be prepared and the EMP implementation will ensure mitigation measures for dust suppression.
2	Raozan *Pourashava*	July 5-6, 2022	With local people residing/doing business near roads and drains, Member of	Project components, benefits of project, environmental	1- The Member of Parliament, Mayor and elected ward councilors welcomed RBL Project proposals and assured of all help. The LGED officials and 2- During site visits environmental specialist enquired about tree saving during construction works for the roads as trees are on the edge. The *Pourashava* officials replied that trees will not be disturbed.

Sl. No.	Place	Date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and implementation
			Parliament, Mayor and elected *Pourashava* members	and social impacts during project implementation, etc.	3- The social safeguard specialist asked the shopkeepers in market area about their willingness to shift their materials during drain construction. They replied that they will cooperate during the construction works and will adjust their activities for smooth implementation of construction works. 4- The environmental specialist enquired about overtopping or flooding issues at roads during the monsoon months. Locals replied that such issues are not normally faced. 5- The environmental specialist enquired about the preference for the covered and open drains. The locals replied that covered drains should be provided for better safety. The LGED officials replied that drains will be covered in the built up area.
3	Araihazar	September 12, 2022	With local people residing/doing business near roads and drains, Member of Parliament, Mayor and elected *Pourashava* members	Project components, benefits of project, environment and social impacts during project implementation, etc.	1- The Member of Parliament, *Pourashava* elected members and local officials from the Government welcomed the project support for the town and requested for the early start of construction works. The LGED officials replied that works project is under preparatory stage and once approved from ADB, construction works will start. 2- There are road side ponds along some of the roads selected for improvements. The environmental specialist advised that there should be no contamination of pond water during construction and necessary safety protection measures should be provided during construction. The *Pourashava* technical team noted the suggestions. 3- The drainage and road works are planned in congested market area. The stakeholders at the market area suggested for proper scheduling of construction works to avoid business hour losses and inconvenience to the public. The environmental specialist replied that suggestion has been noted. 4- The local residents near one of the project road suggested that work should be started early so that local travel becomes convenient. 5- The environmental specialist enquired from stakeholders for the suggestions for the environment protection during the project implementation. The participants suggested for better barricading of site and measures for dust suppression and noise reduction from sites. The environmental specialist replied that suggestions have been noted.
4	Naohata	September 13-14, 2022	With local people residing/doing business Mayor and elected	Project components, benefits of project, environment	1 – All the *Pourashava* officials, elected representatives and Mayor welcomed the project and assured all possible help during project implementation. 2- The informed that all roads and drains selected for the inclusion in the project will not require any involuntary resettlement and tree cutting.

Sl. No.	Place	Date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and implementation
			Pourashava members	and social impacts during project implementation, etc.	3- During site visits, environmental and social specialists enquired about the project awareness from the locals residing along the project road. They were not aware. The social safeguard specialist explained them project features. The locals were very happy that road will be improved in their area and assured all cooperation. 4-In one of the road selected for improvement, school gate is located at the entrance gate. The environmental specialist suggested for widening of road in additional width in front of gate so that school bound vehicles can safely stop for alighting. The technical team of *Pourashava* and LGED officials accepted the suggestions.
5	Keshabpur	September 15-16, 2022	With local people residing/doing business near roads and drains, Member of Parliament, Mayor and elected *Pourashava* members	Project components, benefits of project, environment and social impacts during project implementation, etc.	1-The Member of Parliament, Mayor and *Pourashava* elected members welcomed the project and enquired about coverage of project in Bangladesh and schedule of implementation. The LGED officials explained them coverage (*Pourashavas*) and probable project implementation schedule. 2-In this *Pourashava* also, there is one school along the road, but its gate opens on other street. On suggestions of locals, a signage at school planned to alert the road users so that they drive cautiously near the school. Similarly, there is existence of mosque at one of the road selected for improvement. A signage has also been planned at this mosque. 3- The locals during consultations requested for inclusion of more number of roads and drains in the *Pourashava*. The LGED officials replied that suggestions has been noted and will be considered. 4- The environmental specialist solicited suggestions for the protection of environment from the participants. The participants suggested that the drains should be maintained properly for efficient discharge of storm water. The environmental specialist replied that suggestion has been noted.

Table 16: **Summary of Stakeholder Consultations at Institutional Level**

Sl. No.	Place and date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and Implementation
1.	Project Director's Office in LGED Bhaban	Project Director, PMU Team Members, UGIIP III Consultants	Project components, Capacity of PMU in environmental and social safeguards, quality of safeguards documents under preparation by the UGIIP III	1. The ADB environmental and social safeguard consultants enquired about availability of environmental and social experts in the PMU Team. The PMU officials replied that there are no permanent environmental and social experts in PMU team.

Sl. No.	Place and date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and Implementation
	03July 2022, 11 and 18-19 September 2022	Team, and ADB Mission Team	consultants, information /data on environmental and social components, NOC, clearances and permissions required	2. The environmental consultant of ADB team enquired about environmental clearance status for the RBL project components in targeted *Pourashavas*. The UGIIP III consultants' team replied that application submission process to DoE is not yet started. 3. The environmental and social specialists of ADB enquired about safeguards document preparation for each *Pourashava*. The consultants replied that IEE and social due diligence reports are being prepared components wise for each Pourashava. The ADB environmental and social consultants suggested that for each *Pourashava* a single document should be prepared to minimize multiple documents for a single *Pourashava*. 4. The Project Director informed that NOCs, clearances and permissions if required will be obtained after due consultations with the authorities. 5. The UGIIP III Consultants team of environmental and social specialists requested for some guidance on coverage of IEE and Social Due Diligence Report documents. Necessary guidance for improvement in quality of safeguards documents was provided by the ADB consultants.
2.	Department of Environment 18 September 2022	Mr. Iqbal Mohammad Shamim (Director DoE, GoB), Project Manager, UGIIP III, FSM Specialist, A.E. UGIIP-III, Environmental Specialist and Mr. Shreenivas Verma (ADB Environmental consultant)	Clearances requirements for RBL program works	1. The environmental consultant of ADB briefed the DoE director about RBL program activities. The PMU officials from LGED elaborated on *Pourashavas* being included in RBL program. The environmental specialist enquired from the DoE Director about clearances and permissions needed for the project. The DoE director replied that for drains improvement works, there is no need for obtaining clearance from DoE.

Sl. No.	Place and date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and Implementation
3	Department of Environment 7 November 2022	Mr. Iqbal Mohammad Shamim (Director DoE, GoB), A.E. UGIIP-III, Environmental Specialist and Achyutha Aleti (Environmental Specialist, SAUW, ADB)	Environmental assessment and environmental clearance certificate procedures Institutional capacity Implementation and monitoring of EMP	ADB Environmental Specialist met with the Director, DOE, in charge of Environmental Clearance division. Discussion on the ECC procedures, environmental categories, and environmental assessment requirements; proposed update to ECR Organizational structure and approval and monitoring methods RBL programs and like category Ongoing UGIIP implementation and compliance with GOB regulations
4	PGED PMU, PIUs 7-9 November 2022	Project Director, Deputy Project Director, Technical staff, Environmental Safeguards Officer, PMU Safeguards consultant on Environment, and consultants engaged by PMU for preparation of safeguards	Current practices in complying with GOB regulations, obtaining ECC Implementation effectiveness Institutional capacity	PD informed that currently environmental clearance certificate is obtained at project level combinedly for all projects together For Red category projects, EIA studies are conducted, and ECC obtained separately (such as for solid waste management projects) Given large number small components, PMU prefer to obtain combined ECC for all projects together; DOE is also issuing the ECC in same way No dedicated staff for environment, senior assistant engineer is made in charge of environmental safeguards supported by a consultant Safeguards document preparation, implementation and monitoring and reporting is done with the support of consultants to comply with ADB SPS in ongoing UGIIP3. Similar approach adapted in previous 2 UGIIP projects

Note: It has been noted during consultation process that, at *Pourashava* level no planned periodic consultations are held. To mitigate this gap, *Pourashava* wise periodic consultation process should be initiated for establishing a robust consultation process for information dissemination and disclosure.

B. **Stakeholder Consultations Photographs And Attendance Sheet**




Photographs of Stakeholder Consultation Meetings with Mayor, Panel Mayor, Secretary, Councillors, TLCC, WC Members and Concerned Engineers and *Pourashava* Officials of Chowmuhani and Naohata *Pourashava*


Meeting at Araihazar *Pourashava* with the Honorable Mayor, concerned Engineers and officials and Ward Councilors; Date:24.05.2022

Meeting at Araihazar *Pourashava* with the Honorable Mayor, concerned Engineers and officials and ward Councilors; Date:24.05.2022

Meeting at Keshabpur *Pourashava* with the Honorable Mayor, concerned Engineers and officials; Date:13.02.2022

Meeting at Keshabpur *Pourashava* with the Honorable Mayor concerned Engineers and officials; Date:13.02.2022

Photographs of Focus Group Discussion in Chowmuhani *Pourashava*

Photographs of Focus Group Discussion in Naohata *Pourashava*

Photographs of Focus Group Discussion in Araihazar *Pourashava*

Photographs of Focus Group Discussion participants in Keshabpur *Pourashava*

a) Stakeholder Consultations Signature Sheet

Local Government Engineering Department (LGED)
Urban Governance and Infrastructure Improvement Programme (Project Readiness Services)

Paurashava: Chowmuhani **Date:** 11-05-2022
Location: Road location of Ward 1
Ward No. 1

Attendance Sheet

Sl No	Name of Participant	Mobile No	Signature	Remarks
1	[illegible]	01746122122	[illegible]	
2	[illegible]	01864988588	[illegible]	
3	[illegible]		[illegible]	
4	[illegible]	01813380810	[illegible]	
5	[illegible]	01893262998	[illegible]	
6	[illegible]	01855277409	[illegible]	
7	[illegible]	01830620640	[illegible]	
8	[illegible]	01820954978	[illegible]	
9	[illegible]	01835005222	[illegible]	
10	[illegible]	01815827043	[illegible]	
11	[illegible]	01866516805	[illegible]	
12	[illegible]		[illegible]	
13	[illegible]	01813940065	[illegible]	

Muleka Rehman SSS.

Local Government Engineering Department (LGED)
Urban Governance and Infrastructure Improvement Programme (Project Readiness Services)

Paurashava: Choumuhani Date: 11-05-2023
Location: Ward area Road side
Ward No. 2

Attendance Sheet

Sl No	Name of Participant	Mobile No	Signature	Remarks
১	আবদুল করিম	01835005987	আঃ করিম	
2	ইউনুছ মিয়া	01845411640	ইউনুছ	
৩	[illegible]		[illegible]	
৪	মোঃ ফারুক	0	[illegible]	
৫	অপরূপা	01777833254	অপরূপা	
৬	[illegible]	01813080434	[illegible]	
৭	[illegible]	01818163857	[illegible]	
৮	[illegible]	01863195985	[illegible]	
৯	আবদুল খালেক	01815375639	আবদুল	
১০	[illegible]	01784104744	[illegible]	
১১	[illegible]	01843451195	[illegible]	
১২	[illegible]	01832859328	[illegible]	
১৩	[illegible]	01829616823	[illegible]	

Malika Rahman ESS
A. Rayhan, Envt. S.

Local Government Engineering Department(LGED)
Urban Governance and Infrastructure Improvement Programe (Project Readiness Services)

Pourashava : Naohata Date : 20.5.2022
Location: Pourashava Jami Mosque
Ward No. 1

Attendance Sheet

Sl No	Name of Participant	Occupation	Mobile No	Signature	Remarks
১।	[illegible]	[illegible]	01730-171676	[signature]	
২।	মো: আবু তালেব	ব্যবসা	01923052543	[signature]	
৩।	মোঃ হাবিবুর রহমান	ব্যবসা	01736-631256	[signature]	
৪।	[illegible]	[illegible]	[illegible]	[signature]	
৫।	[illegible]	[illegible]	[illegible]	[signature]	
৬।	[illegible]	[illegible]	01871943533	[signature]	
৭।	[illegible]	[illegible]	01711410974	[signature]	
৮।	[illegible]	[illegible]	01733870522	[signature]	
৯।	[illegible]	[illegible]	01725-085287	[signature]	
১০।	[illegible]	[illegible]	01967965	[signature]	
১১।	[illegible]	[illegible]	01774815796	[signature]	
১২।	[illegible]	[illegible]	01735 [illegible]	[signature]	
১৩।	[illegible]	[illegible]	01767278054	[signature]	

Local Government Engineering Department(LGED)
Urban Governance and Infrastructure Improvement Programe (Project Readiness Services)

Pourashava : Naohata

Date : 19.5.22

Location: Vogruil Bottola Kobirrar mor

Ward No. 7

Attendance Sheet

Sl No	Name of Participant	Occupation.	Mobile No	Signature	Remarks
১।	মো: আবু সুফিয়ান [illegible]	কাঠমিস্ত্রি	01790-319977	সুফিয়ান	
২।	মো: রবি [illegible]	ব্যবসা	01920-37294	রবি	
৩।	মো: [illegible]	[illegible]	0171224122	[illegible]	
৪।	মো: [illegible]	ছাত্র	01761263935	[illegible]	
৫।	মো: আব্দুল্লাহ আল মামুন	চাকুরী	[illegible]	[illegible]	
৬।	মো: [illegible]	ব্যবসা	01925-281359	[illegible]	
৭	মোস্ত [illegible]	[illegible]	[illegible]	[illegible]	
৮	মো: [illegible]	ব্যবসা	[illegible]	[illegible]	
৯	মো: [illegible]	ছাত্র	[illegible]	[illegible]	
১০	মো: [illegible]	[illegible]	[illegible]	[illegible]	
১১।	মো: [illegible]	চাকুরী	01881070102	[illegible]	
১২।	মো: [illegible]	[illegible]	[illegible]	[illegible]	
১৩।	মো: [illegible] ইসলাম	কৃষি	01923-335518	[illegible]	

Public Consultation Meeting for social and Environmental safeguards

Name of the Pourashava: Araihazar

Name of Location: Dighirpar (Lastardi) Ward No 08

Visit/ Meeting Date: 24/05/2022 Time: 12:15 Pm

List of Participants

Serial (ক্রমিক)	Name(নাম)	Address/ Contact No(ঠিকানা,মোবাইল)	Age(বয়স)	Occupation(পেশা)	Signature (স্বাক্ষর)
১	Apu	01989920581	20	Student	APU
২	MD ABU HANIF	01714258779	28	Business	
৩	Swapan Chandra	01740	51	Business	
৪	SANAULLAH	01315890901	46	Business	
৫	Shanti Kor Shil	01724203212	40	Business	
৬	Tapon Bhattacharjee	01751914989	42	Business	
৭	Chandan	01716724469	35	"	
৮	Iqbal Hosain	01855046755	27	"	
৯	Abdul Matin	01966635696	58	"	
১০	MD. Selim	01784406062	25	"	
১১	Shafi	01917011925	26	"	
১২		01929		"	
১৩					
১৪					
১৫					

Public Consultation Meeting for social and Environmental safeguards

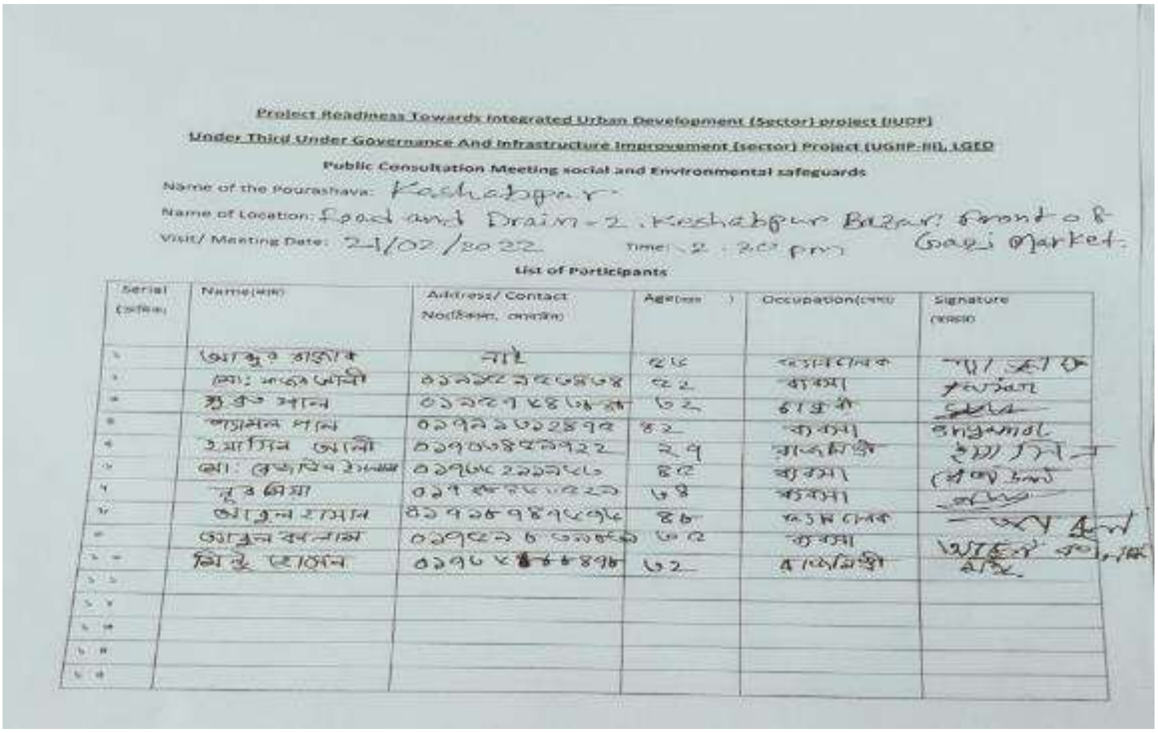
Name of the Pourashava: Anwara Zar

Name of Location: Goal para / Bottola Ward No 08

Visit/ Meeting Date: 24.05.2022 Time: 11.25 AM

List of Participants

Serial (ক্রমিক)	Name(নাম)	Address/ Contact No(ঠিকানা,মোবাইল)	Age(বয়স)	Occupation(পেশা)	Signature (স্বাক্ষর)
১	Abdul Samad	Goal para	70	—	
২	MD. Zakir Hosain	০১৯১৪৯২৪২২৯	50	Business	
৩	Ali Azgar	〃	37	—	
৪	Helena Begum	〃	45		
৫	Efran Ali	〃 ০১৮১১৪৫৭০৪২	52	Business	
৬	Mamun	〃 ০১৭১২৪৭৭৪৭২	36	Business	
৭	Pradip	〃 ০১৭৭৪৫৬২২৩২	52	Business	
৮	Gul jar	〃 ০১৯৫৭১৩৬৭০০	31	Business	
৯	MD Imam Hasan	〃 ০১৮১২৫১৬১৬৩	43	—	Imam Hasan
১০	Bappy Malla	〃 ০১৭২৮৫৫৯০৩০	32	—	
১১					
১২					
১৩					
১৪					
১৫					



Project Readiness Towards Integrated Urban Development (Sector) project (IUDP)

Under Third Under Governance And Infrastructure Improvement (sector) Project (UGIIP-III), LGED

Public Consultation Meeting social and Environmental safeguards

Name of the Pourashava: Keshabpur

Name of Location: Road and Drain-2, Keshabpur Bazar, Front of Gazi Market.

Visit/ Meeting Date: 21/02/2022 Time: 2:20 pm

List of Participants

Serial (ক্রমিক)	Name (নাম)	Address/ Contact No (ঠিকানা, মোবাইল)	Age (বয়স)	Occupation (পেশা)	Signature (স্বাক্ষর)
১	আব্দুর রাজ্জাক	নাই	[illegible]	[illegible]	[illegible]
২	মো: [illegible] আলী	[illegible]	[illegible]	ব্যবসা	[illegible]
৩	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
৪	[illegible]	[illegible]	[illegible]	ব্যবসা	[illegible]
৫	ইয়াসিন আলী	[illegible]	[illegible]	[illegible]	[illegible]
৬	মো: [illegible] ইসলাম	[illegible]	[illegible]	ব্যবসা	[illegible]
৭	নুর মিয়া	[illegible]	[illegible]	ব্যবসা	[illegible]
৮	আব্দুর রহমান	[illegible]	[illegible]	[illegible]	[illegible]
৯	[illegible]	[illegible]	[illegible]	ব্যবসা	[illegible]
১০	মিন্টু হোসেন	[illegible]	[illegible]	[illegible]	[illegible]
১১					
১২					
১৩					
১৪					
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Appendix 5: Existing Grievance Redress Mechanism in PMU, LGED and *Pourashavas*

1. **Grievance Redress Mechanism**. LGED has a centralized existing online GRM.A dedicated web portal[30] is being maintained where people can file their grievances. LGED will issue a notification to mandate the existing GRM to receive safeguards-related complaints. The RBL program will have both online as well as offline mode to receive the grievances. The portal will have a dedicated tab for receiving/filling grievances particular to the Improving Urban Governance and Infrastructure Program (this RBL Program).

2. The RBL program will also have an offline grievance filing system for those who do not have access to the internet. Each component or activity site will maintain a complaint register specific for lodging affected people's concerns, complaints, and grievances about the social, land, and environmental issues or concerns. The safeguard focal person/Project Director at PMU will ensure the follow-up of the grievance until resolved. The PMU will have a regular review to ensure that all grievances are resolved in time-bound and through a transparent mechanism. The affected person is free to access the country's legal system at any time and at any stage. The affected person also can use the ADB Accountability Mechanism (AM) through directly contacting (in writing) the Complaint Receiving Officer (CRO) at ADB headquarters or the ADB Bangladesh Resident Mission (BRM).

3. Affected persons will have the flexibility of conveying grievances /suggestions by dropping grievance redress/suggestion forms in complaints/suggestion boxes that will be installed by PIU at PIU office or respective *pourashava* or through telephone 02-44826177 at accessible locations, by e-mail to pd.ugiip3@gmail.com[31,] by post, or by writing in a complains register in PIU or *Pourashava* office. As per the Grievance Redress System Guidelines, 2015 (Revised 2018), and as a constitutional requirement, every *pourashava* has established grievance redress system. An aggrieved person can register complaint through telephone, mobile, or email. As per the GRS guidelines (Section 5) every government office department (including city corporations and *pourashava*) should form a grievance management cell. The grievance management cell has a Grievance Redress Officer (GRO) and an Appeal Officer (a senior person by position and authority). In absence of the GRO, another focal person will be designated by the Appeal Officer to execute the responsibilities of GRO. The *Pourashavas* also have grievance/ complaint receiving boxes. Usually, the following steps are followed at the *pourashava* level as grievance redress system:

(i) Aggrieved person approaches *pourashava* helpdesk/reception or the concerned municipal ward councillor to state or register complaint.
(ii) After hearing the complaint, the ward councillor/focal person, takes decision to register the complaint and requests the complainant to give a written complaint to the *pourashava*.
(iii) The complaint file is then presented to the Mayor, who sends it to the concerned department.
(iv) The concerned department and grievance management cell tries to resolve the issue or takes decision for hearing.
(v) The focal person of *pourashava* verbally discuss with both parties (plaintiff and defendant) to fix a date for the hearing.
(vi) The *pourashava*, Grievance Management Cell gives notice to both parties for a hearing. (Sometimes it takes more than one hearing to resolve the complaint).
(vii) The complainant may be asked to submit documents, if required.

[30]http://oldweb.lged.gov.bd/commentgrslged.aspx
[31] Project Director of UGIIP 3 project is overseeing the proposed RBL project.

(viii) The complaint/grievance may be brought upto the Mayor, if required.
(ix) Finally, the grievance management cell provides a report on the complaint.

Citizens (complainants) are made aware about the grievance management cell through various channels like *pourashava*'s citizen charter, working signboards, leaflets.

As per the Grievance Redress System Guidelines, 2015 (Revised 2018), any complaint must be resolved maximum within 30 working days; if the complaint matter is considered for investigation, then it should be resolved within additional 10 working days (Section 7.4.1) A

Consultations carried out by *Pourashavas*.

Periodic community level discussions or meetings regarding potential concerns or issues of the public are not conducted by the *pourashavas*. Discussions on grievances are held when complaints are raised. Minor issues are resolved by the ward level committee. Ward level committees are headed by the ward councillor. Generally, the committee records minutes of meeting and forwards the same to *pourashava*. Critical issues are forwarded and resolved at *pourashava* level, in meetings chaired by the Mayor. A grievance redress cell (GRC) focal point keeps record of all meetings. Each ward level (community level) has a general committee called Ward Committee; the committee members meet on a quarterly basis. Different issues including the GRM system are discussed in Ward Committee meetings at the community level.