

Sri Lanka: Legal and Judicial Infrastructure and Development Project

Environmental Safeguards Management Framework

**Ministry of Justice and Law Reform
Project Management Unit
Government of Sri Lanka
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The Environmental Safeguards Management Framework (ESMF) provides the guidelines and procedures to be followed in order to safeguard the environmental aspects related to the civil works to be carried out under the Legal and Judicial Reforms Project II.

1. Background

The project development objective is to strengthen the foundation for a long-term modernization process in the legal and judicial sector. Specific objectives include enhancing access to the courts and improving efficiency and transparency in the sector. This is to be specifically carried through: (a) The formulation of a comprehensive judicial sector development strategy with substantial stakeholders consultations; (b) Through the improvement of skills and knowledge of judges, judicial officers, and other state agencies (i.e. Attorney General's department, Legal Draftsman's department) in the legal and judicial sector; (c) Improving the access to courts through decentralized infrastructure, improved administration and information on judicial processes through ICT; (d) Better disclosure of judicial statistics via, *inter alia*, the web; and (e) Legislative and institutional reforms to reduce transaction costs.

The project will therefore support the Government of Sri Lanka's long-term legal and judicial reforms program, and will include a selected set of priority activities identified by the Government as Phase II - Legal and Judicial Reforms being the follow-up phase of a program, which originally commenced in the year 2000 under the ongoing Legal and Judicial Reforms Project

2. Project Description

The project consists of the five major components given below

Component 1: *Judicial Sector development Strategy*: This component will produce a sector development strategy to guide the country's judicial reform process in the medium term. The strategy will contain a vision for the future of the judiciary and other judicial sector agencies in Sri Lanka and a mission statement on how particularly a modernized judiciary can contribute to the country's development. The strategy will be developed using a participatory process through the membership of the Legal Cluster of the National Council for Economic Development and the judiciary and other major departments in the judicial sector such as the Attorney General's Department and the Legal Draftsman's Department, supported by technical assistance where desired by the Government of Sri Lanka. An assessment will be made with inputs from the diverse sector representations through the membership of the Legal Cluster of the National Council for Economic Development and findings and statistics to be developed through the Statistics Department, to establish a judicial statistical base.

Component 2: *Judicial Human Resource Development*: In order to strengthen human resources management in the sector, this component seeks to support financing for a diverse set of needs, including training and infrastructure support at the national and decentralized levels.

a. **Professional Development.** This sub-component aims at providing continuous training to improve and update the skills of the judiciary and the state legal agencies. Training will focus on various modern-day practices such as mechanisms to maintain high disposal rates and low backlog. Delays in case disposal present a deterrent to economic development since firms cannot count on the judicial system to resolve possible disputes

in a timely fashion. The increased number of cases pending in courts reflects a certain dependency on the judiciary for dispute resolution, but the delays involved also reflect an inadequate court and case management capacity, inadequately trained human capital and insufficient physical infrastructure.

b. Judicial Training Institute. This sub-component provides for more sustainable and effective training programs through a modern judicial training institute. In addition, although the majority of judges are not from the Western Province, no accommodation is currently provided when they attend training programs. The judicial training institute would also be used by other sector institutions, thus bringing providing economies of scale to the GOSL and a benefit for the legal and judicial sector as a whole.

c. Modern court complexes for selected Provincial High Courts. This sub-component provides assistance to improve physical infrastructure in Provincial High Courts at four geographic locations in the Southern, Western and North Western provinces. The expansion of the jurisdiction of High Courts into the Provinces has many advantages: it will substantially reduce case backlog; enhance physical access; reduce costs of litigation; and will further complement court automation. However, in order to respond to this additional mandate, Provincial High Courts will need adequate and modern office equipment. The component also funds minor refurbishments in other provinces and will provide equipment to ensure successful implementation of the decentralization process.

Component 3: *Modern Court Administration/Case Management:* This component will support a unit within the JSC for improved court administration, including technical assistance and IT expertise to develop an ICT strategy. It will also finance technical assistance for the development of appropriate software, hardware and maintenance agreements to benefit the judiciary and JSC. Drawing lessons from the previous project, this component will introduce automation (such as automated file tracking systems) in selected courts, a phased manner. In addition, the company registry will be automated to reduce transactions and facilitate entry and exit mechanisms for firms. This component also will support expanding the automation in AG's Department by computerizing the library. Finally, this component will enhance 'LAWNET' by incorporating regulations into a database, which will, in turn, increase access to laws by legal and non-legal communities.

Component 4: *Legislative Reforms for Reducing Transaction Costs*

a. Legislative reform to procedural law and processes. This sub-component supports technical assistance for the drafting of revised procedural laws to align with recent legislative changes and prepare the regulatory framework, inter alia to facilitate further of automation, case management and IT systems.

b. Law revision. This sub-component supports the Legal Draftsman's Department in updating and codifying legislation and translating (as appropriate) into Sinhala, Tamil and English so that these communities' linguistic access to justice is enhanced.

c. Public legal outreach: The sub-component will support introducing a loose leaf legislation system and other innovative approaches to assist in informing the public and legal-community of amended laws and other legislation in a more user-friendly way.

Component 5: *Project Management:* Since the Project seeks to assist a number of agencies in the legal and judicial sector, a project coordination unit (PCU), under the purview of the Ministry of Justice and Judicial Reform, will be responsible for the administration of procurement, financial management and disbursements and day-to-day management of the Project. The Secretary, Ministry of Justice will be the ChIef

Accounting Officer of the PCU. The regular reporting of the PCU will be to the Steering Committee of which such Secretary is a member, which will facilitate and guide the PCU in respect of policy clearances administrative matters and staffing, administrative and other expenses of the PCU.

3. Project Location: The project will be implemented throughout Sri Lanka.

4. Environmental Safeguards

Projects and Programs financed with IDA resources need to comply with World Bank Operational Policies. Therefore, project components and activities eligible for funding under this project will be required to satisfy the World Bank's safeguard policies, in addition to conforming to environmental legislation of the Government of Sri Lanka (GOSL). World Bank policies and guidelines, pertaining to environmental safeguards, which may require consideration under this project is OP/BP/GP 4.01 Environmental Assessment; there is no likelihood that any other safeguard policies will be applicable to the project. As specific civil work activities are yet to be identified, detailed environmental and social issues cannot be identified at this stage. Therefore, an Environmental Safeguards Management Framework (ESMF) has been prepared based on which safeguards assessments will be conducted for the civil works financed under the project. In such circumstances, according to OP 4.01, the ESMF will require to identify the implementation and institutional arrangements upon which the environmental screening, EA review and implementation of mitigation and monitoring plans related to the construction work will be carried out. The ESMF has formed the basis for appraising the environmental and social aspects of the project.

Considering the nature and magnitude of the limited scale of construction and renovation works, simple site specific Environmental Management Plans based on an environmental analysis of the potential impacts through an Environmental Information Questionnaire would be adequate for routine building construction. The details of the process are described below.

5. Project Components with Potential for Environmental and Social Impacts

Based on the scope of the project, the sub-component that may result in environmental and social issues is:

(i) *Infrastructure Improvement:* This component will finance the construction of a well equipped modern judicial training centre, support the proposed decentralization through the Provincial High Courts in four selected locations in the Southern, Western and North Western provinces which may include construction of new court houses and related infrastructure and the renovations of certain other Court Houses.

6. Potential Environmental and Social Impacts and its Mitigation for Civil Works supported under the Project

Considering the nature and magnitude of potential environmental impacts from the relatively limited scale of construction and renovation works, the proposed operation is to be classified as category 'B'. The sub-component described above is the only activity under the Project that may have the potential for adverse environmental and social impacts. Considering the nature of the civil works proposed to be financed under the project, it is not anticipated that there will be significant and/or irreversible adverse environmental and social impacts. Therefore, full Environmental Impact Assessments (EIA) will not be needed for the construction of new buildings.

Sri Lanka has a well established construction industry and the country has institutionalized a process for obtaining building approval which ensures that the proposed construction follows Building specifications and other relevant regulatory requirements of the Urban Development Authority. Therefore, it is proposed that Environmental Management Plans (EMP) based on an environmental analysis of the potential impacts identified through an Environmental Information Questionnaire would be undertaken for the routine building constructions, instead of EIAs. In the event that any land-filling of low lying land and/or land located in environmentally sensitive areas is proposed for any building construction a full EIA is a pre-requisite. The Terms of Reference (TOR) for such an EIA needs IDA approval and the EIA needs to be reviewed and cleared by IDA. These are pre-requisites for fund disbursement for the civil works under these circumstances.

Environmental Information Questionnaire: An Environmental Information Questionnaire, which is similar to the Initial Environmental Examination format of the Central Environmental Authority, will be required to be completed for each site. A model Environmental Information Questionnaire is attached in Annex 1. The Questionnaire should contain information on the site locations, geography, political/administrative aspects, physical nature of the site (such as topography, slope, soil, water) Ecological (environmentally sensitive habitats, protected areas etc) features of the site and overall environment such as sewage disposal, water supply, sanitation etc. In addition, it would identify the environmental impacts from the construction activities.

Environmental Management Plan: Based on the information obtained from the Environmental Information Questionnaire, site specific Environmental Management Plans will be prepared. The EMP will indicate the impacts predicted, mitigation measures to minimize the impacts, identify the institutional arrangements for undertaking the mitigation measures and monitoring arrangements, implementation schedules of the mitigation arrangements and reporting requirements and cost estimates and sources of funds. The EMP will also include specific guidelines for debris disposal as well as resource extraction for all specific construction activities financed under the project. Some of the additional issues to be considered during the preparation of the EMP are contained in Annex 2. Considering the scattered nature of construction anticipated under the project, it is not expected that there will be significant accumulated environmental damage due to project activities. The recent Tsunami related reconstruction has created a demand for construction material such as sand, clay for bricks and timber. In order to avoid encouraging illegal extraction of such resources, all construction contracts under this project will include clauses in the contracts to ensure that sand; clay and timber are obtained from authorized locations and sources that are licensed by relevant GOSL authorities.

Construction Specifications: Though construction activities per se, are likely to have minimal on site environmental impacts, most of the negative environmental impacts are likely to be seen off site, where construction materials such as sand, clay for bricks and timber will be sourced. Therefore, all tender/bidding documents for construction/renovation activities will include clauses to (a) ensure that contractors obtain construction materials from authorized sites with proper licenses, (b) ensure that they will adhere, to the construction specifications developed by the Institute for Construction, Training and Development (ICTAD) and adhere to relevant regulations of the Urban Development Authority and other agencies involved in providing building approval/renovation permits. A list of some of the ICTAD specifications and additional items to be addressed in an EMP are contained in Annexure 2 (c) ensure that all GOSL approval permits for construction of buildings for the respective civil works will be obtained (d) In addition, for the construction of new buildings, the contractors will be required to adhere to the mitigation measures contained in the EMPs, which will form part of the contract conditions.

Since the locations of the proposed new constructions are not known, site specific EMPs and stakeholder consultations have not been undertaken at this stage. Once the sites have been

identified and during the preparation of the EMPs all relevant stakeholders will be consulted (according to the World Bank guidelines). The EMPs will be prepared by the Borrower and approved by IDA prior to fund disbursement.

7. Social Aspects

The project is expected to yield positive social development outcomes. It aims to improve the existing governance structure including the legal and judicial framework, by making it more efficient, transparent and responsive to the needs of the people, including the most poor and vulnerable. Improvements in the efficiency, predictability, access and transparency of the legal and judicial system are essential to the equitable delivery of basic services and more effective protection of the rights of citizens. Specifically, through increased access to justice, both in terms of physical accessibility through the construction of Regional Courts for decentralization of the appellate process as well as reduction in the cost of judicial services through more efficient dispensation of cases will have positive social impacts by removing socio-economic barriers for the poor and vulnerable to access justice services. **In addition, surveys/ assessments will be done as setout in 2. Project Description – Component 1 in page 2 hereof.**

Although the project supports infrastructure improvements through the construction of a judicial training center and regional courts to decentralize the appellate process, agreement has been reached with the Government that only publicly owned land free of any squatters or encroachers will be used for these interventions. No acquisition of privately owned land or displacement of people is expected under the project. The Policy on Involuntary Resettlement OP 4.12 is not triggered by the project.

8. Institutional Arrangements for Implementation and Monitoring the Environmental Management Plans

As the Project Coordination Unit (PCU) is responsible for coordinating the relevant tasks in the Project, they are required to follow the procedure outlined in the ESMF. The PCU will take the responsibility to procure the necessary expertise to complete the Environmental Information Questionnaire and based on its findings, prepare EMP for each site. The PCU will be responsible to ensure that all GOSL approval permits for construction/renovation of buildings are obtained prior to any fund disbursements for the respective civil works. The construction specifications specified by ICTAD and the EMP will form part of the Conditions of Contract for all civil works contracts. Non-compliance with these conditions should be linked to financial penalty clauses in the contract as well. Compliance monitoring of the building codes and the EMP will be the responsibility of the PCU and the Supervisory Consultants. Compliance will also be monitored during IDA supervision missions.

9. Consultation and Public Disclosure

The ESMF will be disclosed in-country and in IDA's Public Information Center in accordance with BP 17.50 requirements of disclosure. Since most building construction will be within existing court premises, there is no necessity for in-country disclosure of the EMPs. In the event that there are any affectees identified in the EMPs, such EMPs will be placed for public comment.

Since the locations of the proposed constructions are not known at this stage site specific stakeholder consultations have not been undertaken. Once the sites are identified and the Environmental Management Plans are being developed, all relevant stakeholders will be consulted (according to the World Bank guidelines).

Environmental Checklist for Assessing the Suitability of a Site for the Construction Work Financed under the Legal and Judicial Reforms Project II

To be filled by an authorized official

(Where choices are given please circle the most appropriate entry or entries. If the space provided for responses is not sufficient, please state the information on another sheet of paper)

No	Item	Details			
INTRODUCTION					
1	Name of the Site				
2	Province				
3	District				
4	Divisional Secretary Division (s)				
5	Local Authority				
6	Grama Niladari Division (s)				
7	Brief description of the project (Be as brief as possible, confining to main elements only, If Possible, provide a 1:10,000 scaled site map inclusive of area within 500m radius from the project site; if this information cannot be obtained, provide a sketch of the site area)				
8	Does the site /project require any;	Yes	No	If yes give the extent (in ha)	
	Reclamation of land, wetlands				
	Clearing of forest				
	Felling of trees				
9	Minimum land area required for the proposed development (based on UDA guidelines) (ha)				
10	Available total land area within the identified location (ha)				
11	Expected construction period				
12	Anticipated Date of Completion				
13	Present Land Ownership	State	Private	Other (specify)	
14	Total Cost of the Project				
DESCRIPTION OF THE ENVIRONMENT					
PHYSICAL					
15	Topography & Landforms (map)	Attach an extract from relevant 1: 50,000 topographic sheet/ if detailed maps are available provide them. If this information is unavailable, please describe the location.			
16	Relief (difference in elevation)	Low <20m	Medium 20-40m	High 40-60	>60m
17	Slope	Low <30%	Medium 30-40 %	High 40-60 %	Very High > 60%
18	Position on Slope	Bottom	Mid-slope	Upper-slope	
19	Soil (Great Soil Group) – Pls see the list below				
20	Depth of top soil	Shallow < 20cm	Moderate 20 – 100 cm	Deep >100cm	

21	Soil Erosion (this information will be based on the site and surrounding environment)	Low	Medium			High
22	Climate	Wet Zone	Intermediate Zone	Dry Zone/ Semi Arid Zone		
23	Annual dry period					
24	Source of fresh Surface Water	Spring/canal	Tank/Reservoir	Perennial Stream	Seasonal Stream	No ne
25	Distance from the coast line (m) (based on the high water mark line or vegetation line)					
26	Surface Water Use (at the site and/or surrounding environment)	Domestic	Washing/Bathing	Irrigation	Animal use	N/A
27	Surface Water Quality	Poor		Moderate	Good	
28	Ground Water Availability	Dug Well	Tube Well		Other (specify)	
29	Ground Water Use	Domestic	Washing/Bathing	Irrigation	Animal use	
30	Ground Water Quality	Poor		Moderate	Good	
31	Incidence of Natural Disasters	Floods	Prolonged droughts	Cyclones/tidal waves	Other (specify)	
32	Geological Hazards	Landslides	Rock falls	Subsidence	Other (specify)	
ECOLOGICAL						
33	Habitat Types in the Project Site (indicate the approximate % of each habitat type)	Natural forest (%), degraded forest(%), natural scrubland(%), degraded scrubland(%), riverine forest, grassland(%), abandoned agricultural land(%), marsh(%), lagoon(%), estuary(%), coastal scrub(%), mangrove(%), salt marsh(%), home-gardens(%), Other (%) (List)				N/A
34	Habitat types within 500m radius from the site periphery (indicate the approximate % of each habitat type)	Natural forest (%), degraded forest(%), natural scrubland(%), degraded scrubland(%), riverine forest, grassland(%), abandoned agricultural land(%), marsh(%), lagoon(%), estuary(%), coastal scrub(%), mangrove(%), salt marsh(%), home-gardens(%), Other (%) (List)				N/A
35	Are there any environmentally and culturally sensitive areas within 250m?	Protected Areas	Migratory pathways of animals	Archeological sites	Wetlands	Mangroves strands
36	Are there any plants of conservation importance within 250m (endemic and threatened species)? If yes, encouraged to provide a list					
37	Are there any animals of conservation importance within 250m (endemic and threatened species)? If yes, encouraged to provide a list					

ENVIRONMENTAL SENSITIVITY							
38	Does the project wholly or partly fall within any of the following areas?						
	Area	Yes	No	Unaware			
39	100m from the boundaries of or within any area declared under the National Heritage Wilderness Act No 4 of 1988						
	100m from the boundaries of or within any area declared under the Forest Ordinance (Chapter 451)						
a	Coastal zone as defined in the Coast Conservation Act No 57 of 1981						
b	Any erodable area declared under the Soil Conservation Act (Chapter 450)						
c	Any Flood Area declared under the Flood Protection Ordinance (Chapter 449)						
d	Any flood protection area declared under the Sri Lanka Land Reclamation and Development Corporation Act 15 of 1968 as amended by Act No 52 of 1982						
e	60 meters from the bank of a public stream as defined in the Crown Lands Ordinance (Chapter 454) and having width of more than 25 meters at any point of its course						
f	Any reservations beyond the full supply level of a reservoir						
g	Any archaeological reserve, ancient or protected monument as defined or declared under the Antiquities Ordinance (Chapter 188).						
h	Any area declared under the Botanic Gardens Ordinance (Chapter 446).						
i	Within 100 meters from the boundaries of, or within, any area declared as a Sanctuary under the Fauna and Flora Protection Ordinance (Chapter 469)						
j	100 meters from the high flood level contour of or within, a public lake as defined in the Crown Lands Ordinance (Chapter 454) including those declared under section 71 of the said Ordinance						
k	<i>Within a distance of one mile of the boundary of a <u>National Reserve</u> declared under the Fauna and Flora Protection Ordinance</i>						
l	ENVIRONMENTAL IMPACT AND MITIGATION/ENHANCEMENT DURING THE CONSTRUCTION PERIOD						
m	IMPACT					MITIGATION/ENHANCEMENT	
		High	Med.	Low	N/A		
40	Soil erosion						
41	Water pollution						
42	Noise pollution						
43	Solid waste generation						

44	Sewage generation					Cess Pool		Sewage Pond	
						Septic Tank		Other	
45	Loss of vegetation cover								
46	Habitat loss or fragmentation								
47	General disturbance to animal behaviour								
48	Interference with normal movement of animals								
49	Irreversible/irreparable environmental change								
IMPACT									
MITIGATION/ENHANCEMENT									
50	Sewerage Disposal	Cess Pool				Sewage Pond			
		Septic Tank				Other			
51	Solid Waste Disposal								
52	Drinking Water Supply	Common Dug Well	<i>Yes / No</i>	Individual dug well	<i>Yes / No</i>				
		Common Tube Well	<i>Yes / No</i>	Town supply – pipe	<i>Yes / No</i>				
		Spring	<i>Yes / No</i>	Town supply – Stand post	<i>Yes / No</i>				
53	Alteration to storm water drainage pattern	No changes			No major Changes	Major changes			
54	OVERALL OBSERVATIONS AND RECOMMENDATIONS								
(a)	Does this site require IEE/EIA or any other environmental assessments under the <i>local regulations (CEA, Provincial Environmental Authority or any other)</i> ; please state the reasons.								
(b)	Although local regulations may not require IEE/EIA at this Site, are there environmental issues which need to be addressed through further environmental investigations and/or EA? If the answer is “Yes” briefly describe the issues and type of investigations that need to be undertaken.								
(c)	Will this site be abandoned after this Analysis; please state the reasons.								
(d)	Does the proposed site meet the urban planning requirements under the UDA and Local Authority regulations? if the answer is “No”, what needs to be done to meet these requirements; if the answer is “Yes”, has the project site obtained the necessary approvals?								

(e)	In addition to the above issues, please indicate any additional observations, recommendations if any	
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55	ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN (please insert more lines if required)
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Please provide information for this section based on the following aspects:

1. Onsite and off site impacts to the Environment
2. Approvals/licenses obtained/required to carry out the civil works and resource extraction/purchase (eg: Sand, timber, clay for bricks)
3. Impacts on the Environment during the construction and operation phases.
4. Information from Items 40 – 53, above can be included here

Activity	Potential Impacts/Issues	Mitigation Measures	Monitoring Requirements and Indicators	Budget for mitigation measures and sources of funds	Reporting Procedure (for Mitigation and Monitoring)

57	Name of the officer completed the form (From the Developer)	
58	Designation and contact Information	
59	List of team members	
60	Overall observation and recommendation	
61	Signature and date	
62	Name and Contact Information of the officer who checked this form	
63	Signature and Date	

****Great Soil Groups of Sri Lanka**

1	RBE	Reddish Brown Earths	4	RYL	Red- Yellow Latosols	7	R	Regosols
2	LHG	Low Humic Gley	5	A	Alluvial Soils	8	G	Grumusols
3	NBS	Noncalcic Brown Soils	6	SS	Solodized Solonetz	9	IBL	Immature Brown Soil

Legal and Judicial Reforms Project II

Information that should be followed during the Civil Works

Safeguards Procedures for Inclusion in the Technical Specifications of Contracts for civil works

I General

1. In order to avoid encouraging illegal extraction of such resources, all construction contracts under this project will include clauses in the contracts to ensure that sand, clay and timber are obtained from authorized locations and sources that are licensed by relevant GOSL authorities. All building construction and renovation will adhere to the existing building and other applicable codes of practice in Sri Lanka. To ensure that the building contractor is responsible for adherence to the following Institute for Construction Training and Development (ICTAD) specifications which will be included in the contract documents:

SCA/3/1	-	Irrigation and land Drainage
SCA/3/2	-	Water Supply, Sewerage & Storm Water Drainage
SCA/3/3	-	Reclamation Works
SCA/3/4	-	Ground Water Exploration & Exploitation
SCA/4	-	Building Works (Vol I)
SCA/4	-	Building Works (Vol II)
SCA/6	-	Coastal Harbour Engineering Works
SCA/8	-	Electrical & Mechanical Works

2. Any other Standard Specifications approved by the Government of Sri Lanka.

3. In addition, the contractor is required to pay attention to and address the following in the Environmental Management Plan:

1. Electromagnetic radiation– issues such as the location of telecommunication towers and consequences of permitting such towers to be built on top of school buildings, buildings near H/T cables etc.
2. Addressing noise pollution during construction activities.
3. Cultural Features preservation of culturally significant buildings.
4. Ecological issues of the sites
5. Transport and access to site.
6. Overshadowing and access to daylight and sunlight, with possible options for passive solar design and its effect on site layouts.
7. External appearance (aesthetics)
8. Floodwater protection provisions.
9. Designing appropriate landscaping.
10. Energy conservation and efficiency.
11. Waste disposal, salvage, re-use and recycling of materials.
12. Avoidance of hazardous materials.
13. Safety, security and fire.
14. Energy efficient lighting options.
15. Potential for sick building syndrome

4. The Contractor and his employees shall adhere to the mitigation measures set down and take all other measures required by the Engineer to prevent harm, and to minimize the impact of his operations on the environment.
5. The Contractor shall limit construction works to between 6 am and 7 pm if it is to be carried out in or near residential areas.
6. The Contractor shall avoid the use of heavy or noisy equipment in specified areas at night, or in sensitive areas such as near a hospital.
7. To prevent dust pollution during dry periods, the Contractor shall carry out regular watering of earth and gravel haul roads and shall cover material haulage trucks with tarpaulins to prevent spillage.

II. Transport

1. The Contractor shall use selected routes to the project site, as agreed with the Engineer, and appropriately sized vehicles suitable to the class of road, and shall restrict loads to prevent damage to roads and bridges used for transportation purposes. The Contractor shall be held responsible for any damage caused to the roads and bridges due to the transportation of excessive loads, and shall be required to repair such damage to the approval of the Engineer.
2. The Contractor shall not use any vehicles, either on or off road with grossly excessive, exhaust or noise emissions. In any built up areas, noise mufflers shall be installed and maintained in good condition on all motorized equipment under the control of the Contractor.
3. Adequate traffic control measures shall be maintained by the Contractor throughout the duration of the Contract and such measures shall be subject to prior approval of the Engineer.

III. Workforce

1. The Contractor should whenever possible locally recruit the majority of the workforce and shall provide appropriate training as necessary.
2. The Contractor shall install and maintain a temporary septic tank system for any residential labor camp and without causing pollution of nearby watercourses.
3. The Contractor shall establish a method and system for storing and disposing of all solid wastes generated by the labor camp and/or base camp.
4. The Contractor shall not allow the use of fuelwood for cooking or heating in any labor camp or base camp and provide alternate facilities using other fuels.
5. The Contractor shall ensure that site offices, depots, asphalt plants and workshops are located in appropriate areas as approved by the Engineer and not within 500 meters of existing residential settlements and not within 1,000 meters for asphalt plants.
6. The Contractor shall ensure that site offices, depots and particularly storage areas for diesel fuel and bitumen and asphalt plants are not located within 500 meters of watercourses, and are operated so that no pollutants enter watercourses, either overland or through groundwater

seepage, especially during periods of rain. This will require lubricants to be recycled and a ditch to be constructed around the area with an approved settling pond/oil trap at the outlet.

7. The contractor shall not use fuelwood as a means of heating during the processing or preparation of any materials forming part of the Works.

IV. Quarries and Borrow Pits

1. Operation of a new borrow area, on land, in a river, or in an existing area, shall be subject to prior approval of the Engineer, and the operation shall cease if so instructed by the Engineer. Borrow pits shall be prohibited where they might interfere with the natural or designed drainage patterns. River locations shall be prohibited if they might undermine or damage the river banks, or carry too much fine material downstream.

2. The Contractor shall ensure that all borrow pits used are left in a trim and tidy condition with stable side slopes, and are drained ensuring that no stagnant water bodies are created which could breed mosquitoes.

3. Rock or gravel taken from a river shall be far enough removed to limit the depth of material removed to one-tenth of the width of the river at any one location, and not to disrupt the river flow, or damage or undermine the river banks.

4. The location of crushing plants shall be subject to the approval of the Engineer, and not be close to environmentally sensitive areas or to existing residential settlements, and shall be operated with approved fitted dust control devices.

V. Earthworks

1. Earthworks shall be properly controlled, especially during the rainy season.

2. The Contractor shall maintain stable cut and fill slopes at all times and cause the least possible disturbance to areas outside the prescribed limits of the work.

3. The Contractor shall complete cut and fill operations to final cross-sections at any one location as soon as possible and preferably in one continuous operation to avoid partially completed earthworks, especially during the rainy season.

4. In order to protect any cut or fill slopes from erosion, in accordance with the drawings, cut off drains and toe-drains shall be provided at the top and bottom of slopes and be planted with grass or other plant cover. Cut off drains should be provided above high cuts to minimize water runoff and slope erosion.

5. Any excavated cut or unsuitable material shall be disposed of in designated tipping areas as agreed to by the Engineer.

6. Tips should not be located where they can cause future slides, interfere with agricultural land or any other properties, or cause soil from the dump to be washed into any watercourse. Drains may need to be dug within and around the tips, as directed by the Engineer.

VI. Historical and Archeological Sites and Cultural Property

1. Cultural property include monuments, structures, works of art, or sites of significance points of view, and are defined as sites and structures having archaeological, historical, architectural, or religious significance, and natural sites with cultural values. This includes cemeteries, graveyards and graves. The following procedures for identification, protection from theft, and treatment of discovered artifacts should be followed and included in standard bidding documents.

If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:

- (a) Stop the construction activities in the area of the chance find.
- (b) Delineate the discovered site or area.
- (c) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the staff of the Ministries of Cultural Affairs and National Heritage take over;
- (d) Notify the supervisory Engineer who in turn will notify the responsible local authorities and the staff of the Ministries of Cultural Affairs and National Heritage immediately (less than 24 hours).
- (e) Contact the responsible local authorities and the staff of the Ministries of Cultural Affairs and National Heritage who would be in charge of protecting and preserving the site before deciding on the proper procedures to be carried out. This would require a preliminary evaluation of the findings to be performed by the archeologists of the Ministries of Cultural Affairs and National Heritage (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage, including the aesthetic, historic, scientific or research, social and economic values.
- (f) Ensure that decisions on how to handle the finding be taken by the responsible authorities and the staff of the Ministries of Cultural Affairs and National Heritage. This could include changes in the layout (such as when the finding is an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage.
- (g) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Ministry of Cultural Affairs and National Heritage; and
- (h) Construction work will resume only after authorization is given by the responsible local authorities and the Ministry of Cultural Affairs and National Heritage concerning the safeguard of the heritage.

3. During project supervision, the Site Engineer shall monitor the above regulations relating to the treatment of any chance find

4. Relevant findings will be recorded and submitted to the World Bank.

VII. Disposal of Construction and Vehicle Waste

1. Debris generated due to the dismantling of the existing structures shall be suitably reused, to the extent feasible, in the proposed construction (e.g. as fill materials for embankments). The disposal of remaining debris shall be carried out only at sites identified and approved by the project engineer. The contractor should ensure that these sites (a) are not located within designated forest areas; (b) do not impact natural drainage courses; and (c) do not impact

endangered/rare flora. Under no circumstances shall the contractor dispose of any material in environmentally sensitive areas.

2. In the event any debris or silt from the sites is deposited on adjacent land, the Contractor shall immediately remove such, debris or silt and restore the affected area to its original state to the satisfaction of the Supervisor/Engineer.

3. Bentonite slurry or similar debris generated from pile driving or other construction activities shall be disposed of to avoid overflow into the surface water bodies or form mud puddles in the area.

4. All arrangements for transportation during construction including provision, maintenance, dismantling and clearing debris, where necessary, will be considered incidental to the work and should be planned and implemented by the contractor as approved and directed by the Engineer.

5. Vehicle/machinery and equipment operations, maintenance and refueling shall be carried out to avoid spillage of fuels and lubricants and ground contamination. An 'oil interceptor" will be provided for wash down and refueling areas. Fuel storage shall be located in proper bunded areas.

6. All spills and collected petroleum products shall be disposed of in accordance with standard environmental procedures/guidelines. Fuel storage and refilling areas shall be located at least 300m from all cross drainage structures and important water bodies or as directed by the Engineer.