ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) AND ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

FOR
THE PROPOSED REHABILITATION/UPGRADING OF VOI MAGISTRATE COURT TO A HIGH COURT

FINAL REPORT

Submitted to:
The Judiciary of Kenya
Supreme Court Building, City Hall Way,
P.O. Box 30041 – 00100
NAIROBI, KENYA

FEBRUARY, 2017
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

Client: THE JUDICIARY OF KENYA

Assignment: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) AND ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

Report Title: FINAL REPORT

Name and Address of Expert:

Naomi Gitau,
EIA Lead Expert (Reg. 0562)
P.O. Box 435 - 00216
TEL: 254 720 705850
EMAIL: nngitau@yahoo.com
GITHUNGURI, KENYA

Signed: _______________ Date: _______________

Name and Address of Proponent:

The Judiciary of Kenya
Supreme Court Building, City Hall Way,
P.O. Box 30041 – 00100
NAIROBI, KENYA

Signed: _______________ Date: _______________
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EXECUTIVE SUMMARY
The Republic of Kenya is implementing the Judicial Performance Improvement Project (JPIP). In line with the new Constitution in which the judicial reforms are anchored, the judiciary developed a comprehensive Judiciary Transformation Framework (JTF) 2012 – 2016, which laid the roadmap for an ambitious transformation agenda. JTF has been very successful in meeting its objectives. This is followed by Sustaining Judiciary Transformation (SJT), a service delivery agenda, 2017-2021.

Sustaining Judiciary Transformation (SJT): A Service Delivery Agenda, is the new blueprint which is meant to take judiciary to the next level. The Service Delivery Agenda, will shift focus away from institutional building and capacity enhancement to enhancing service delivery. The proposed JPIP components have also been reviewed and the court construction component now falls under two components: increase access to courts (for new court constructions) and improve timeliness of judiciary services (for rehabilitations). These facilities will be state of the art including ICT, protected witness rooms, adequate chambers and offices etc.

The objective of the JPIP is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner.

Both components of the JPIP, the Court construction components are likely to generate environmental and social impacts that will require environmental and social safeguards monitoring. The court construction component aims to overcome obstacles Kenyans face in obtaining access to justice, including access to courts. Under this component, with the World Bank financing the Judiciary shall rehabilitate 30 existing courts and construct eight (8) new High Courts and two (2) Magistrate Courts in Kenya.

The JPIP is rated Category B for environmental purposes. The project entails the construction and rehabilitation of courts and will trigger World Bank Safeguard Policies OP/BP 4.01 on Environmental Assessment (EA), OP/BP 4.11 on Physical Cultural Resources and this proposed project in Voi Township does not involve Involuntary Resettlement, since it will be located within Land owned by the Judiciary (within its boundaries).

Project Location
The proposed New Magistrate Court Voi will be located within the existing Voi Law Courts in Voi Town, Taita Taveta County, in Kenya. The proposed site is located on the following GPS Coordinates, Latitude 3° 23’ 20.53” S and longitude: 38° 33’ 47.17” E, Altitude 586 Meters Above Sea Level. The New Magistrate Court is located approximately 0.5 Km from Voi Town along Voi Town road off Mombasa Highway.
The project will involve construction of a New Magistrates Court in Voi on Plot No. TTA/PPD/64/2013/02 which measures approximately 0.15 hectares in size. The project activities will be according to conventional engineering scheduling, procedures and practices. The works will include but not limited to; -

- Development of a 5 storey building
- Connection to a septic tank and soak pit for disposing of sewage water
- Construction of a storm water outlet
- Development of external works/services – driveway, car parking lots, vehicular gate access, pedestrian access.
- Site landscaping

The project cost is estimated to be Kshs. 347,583,000.00 Million inclusive VAT.

The proponent has committed himself to undertake this EIA in accordance with Sections 58 and 138 of the Environmental Management and Coordination Act (EMCA) No. 8 of 1999 and its subsequent amendments in 2015, the World Bank operational safeguard policies on environmental and social Assessment, and Environmental Impact Assessment (EIA) and Environmental Audit (EA) Regulations 2003 (Legal No. 101).

The scope of this EIA covered the nature of the project; the location of the project including the physical area that may be affected by the project's activities; the activities that shall be undertaken during the project construction, operation and decommissioning phases; the design of the project; the materials to be used, products and by-products, including waste to be generated by the project and the methods of their disposal; the potential impacts of the project and the mitigation measures to be taken during and after implementation of the project; an action plan for the prevention and management of possible adverse impacts during the project cycle; a plan to ensure the health and safety of the workers and neighbouring communities; the economic and socio-cultural impacts to the local community and the nation in general; and the project budget.
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

The proposed project has the overall objective of construction of new judicial building to provide offices for improved judicial services and its own parking space for several cars. The consultant carried out the assessment guided by TOR given by the proponent and as per EIA guidelines as per National Environment Management Authority (NEMA) requirements be followed up to completion. It involved environmental screening and scoping to avoid unnecessary data. Data collection was carried out through questionnaires/standard interview schedules, use of checklists, observations and photography, site visits and desk environmental studies.

Relevant legislative and legal aspects should be taken into account when implementing the proposed housing project; they include, Environmental Policy Framework which primarily falls under EMCA and concerns environmental regulations that have to be adhered to, such as EIA; and Institutional Framework which concerns institutions that are relevant stakeholders in resources and environmental issues that affect the proposed project. In the proposed project they include National Environmental Council (NEC), National Environmental Management Authority (NEMA) and relevant conventions, which include Public Health Act (Cap. 242), Local Authority Act (Cap. 265), Physical Planning Act, 1999, Land Planning Act (Cap. 303), Water Act, 2002, Building Code 2000, Penal Code Act (Cap.63), Occupational Safety and Health Act, 2007.

During the public consultation several issues were raised including water demand, dust emissions, noisy operations, dilapidation of existing infrastructure, creation of employment, hygiene, security and effect on accessibility and roads. The project will have minor effects on the environment.

During construction phase, impacts anticipated include: Air pollution, Noise Pollution, Generation of Exhaust Emission, Worker Accidents and hazards when handling hazardous wastes, Populations of disease vectors, Generation of construction and demolition waste amongst other impacts.


The proponent of the proposed project acknowledges the fact that the proposed project activities will have some impacts on the biophysical environment, health and safety of its employees, and socio economic wellbeing of the residents in Voi County. Thus, the main focus will be on reducing the negative impacts and maximizing the positive impacts associated with the project activities through a programme of continuous improvement.

An environmental management/monitoring plan (EMP) has been developed during this study to assist the proponent in mitigating and managing environmental impacts for the project cycle. The EMP has been developed to provide a basis for an Environmental Management System (EMS; ISO 14001 principles) for the project. It is noteworthy that key factors and processes may change through the life of the project and considerable provisions have been
made for dynamism and flexibility of the EMP. As such, the EMP will be subject to a regular regime of periodic review.

The consultant finds the proposed project to be environmentally credible and socially friendly. Further, in view of the information collected, the consultant concludes that the proposed project is desirable and therefore it requires licensing to allow for its speedy implementation.
CHAPTER 1: INTRODUCTION
Project Background
The Republic of Kenya is implementing the Judicial Performance Improvement Project (JPIP). In line with the new Constitution in which the judicial reforms are anchored, the judiciary developed a comprehensive Judiciary Transformation Framework (JTF) 2012 – 2016, which laid the roadmap for an ambitious transformation agenda. JTF has been very successful in meeting its objectives. This is followed by Sustaining Judiciary Transformation (SJT), a service delivery agenda, 2017-2021.

Sustaining Judiciary Transformation (SJT): A Service Delivery Agenda, is the new blueprint which is meant to take judiciary to the next level. The Service Delivery Agenda, will shift focus away from institutional building and capacity enhancement to enhancing service delivery. The proposed JPIP components have also been reviewed and the court construction component now falls under two components: increase access to courts (for new court constructions) and improve timeliness of judiciary services (for rehabilitations). These facilities will be state of the art including ICT, protected witness rooms, adequate chambers and offices etc.

The objective of the JPIP is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner.

Both components of the JPIP, the Court construction components are likely to generate environmental and social impacts that will require environmental and social safeguards monitoring. The court construction component aims to overcome obstacles Kenyans face in obtaining access to justice, including access to courts. Under this component, with the World Bank financing the Judiciary shall rehabilitate 30 existing courts and construct eight (8) new High Courts and two (2) Magistrate Courts in Kenya.

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1.1 Scope of the ESIA Study
The key tasks will be to prepare an ESIA project report that has a detailed Environmental and Social Management Plan for the proposed construction of a new Voi Magistrate Court in Voi Town. The Consultant shall carry out the assignment and organize the required information to take into account the World Bank safeguard policies and the relevant legal and policy framework of the Government of Kenya as outlined in the ESMF, RFP and NEMA EIA/EA Regulation.
1.2 Project Budget
The project is estimated to cost Kenya Shillings 347,583,000.00 Million. The National Environment Management Authority (NEMA) has scrapped the EIA processing fees with effect from 1st January 2017, therefore the proponent will not be required to pay any submission fees to NEMA.

1.3 The EIA Objectives
In accordance with EMCA, 1999 and its subsequent amendments in 2015, all new projects must undergo an environmental impact assessment process and submit an EIA report to NEMA for review and approval. While complying with NEMA requirements, EIA process will also satisfy the conditions of the development partner and financier, The World Bank.

The proposed construction of the New Magistrate is expected to have significant linkages to environmental and social settings. The EIA task will be to quantify Environmental impacts associated with the project. Potential activities including excavations, spoil disposal, construction material deliveries and installations may be associated to social conflicts, safety risks, emissions, noise and environmental degradation at material sources to mention a few.

The main objective of the task is to carry out an EIA process on the proposed project for submission to NEMA for necessary review and approval in accordance to EMCA, 1999 and its subsequent amendments in 2015 and World Bank guidelines. Findings, cumulative impacts and mitigation measures from the assessments will be presented in an EIA report with among other key features;

(i) An Executive Summary
(ii) Project Description
(iii) Legal and Institutional Framework
(iv) Baseline Conditions
(v) Project Design and Implementation
(vi) Description of Potential and cumulative Impacts
(vii) Provision of Impacts Mitigation Measures
(viii) Analysis of Alternatives
(ix) Environmental and Social Management Plans
(x) Action Plans for mitigation of health and safety element

The ESIA study will include the following tasks:

- Review of the existing data on the proposed project and social economic activities in the project study area (data that will also be used for monitoring and evaluation of how well the mitigation measures are implemented during the project cycle);
- Collection of additional environmental, social, economic, and physical data that may be necessary to support a robust environmental and social impact assessment.
- Carry out an environmental assessment of the project area in relation to the proposed project leading to preparation of an Environmental Impact Assessment Report;
• Carry out a social impact assessment of the project;
• Review other ESIA reports that have been prepared for JPIP projects and together with data collected during this ESIA process, determine the cumulative environmental impacts of all the projects
• Verify compliance with the national environmental and social regulations and industry standards as well as safeguard policies and environmental and social assessment procedures;
• To recommend cost effective measures to be implemented to mitigate against the expected negative impacts;
• Make recommendations to JPIP on a programmatic approach to mitigating the cumulative impacts that have been identified
• To provide for consultation of all stakeholders, including communities to be affected by the project as well as other stakeholders in order to obtain their input during the Environmental and Social Impact Assessment (ESIA) process;
• To provide a platform for stakeholders to participate in the identification of mitigation measures for the negative environmental and social impacts of the project; and
• To prepare an Environmental and Social Impact Assessment (ESIA) project report and accompanying environmental and Social Management Plan (ESMP) in accordance with the Environmental Management and Coordination Act (1999) and the Environmental (Impact Assessment & Audit) regulations, 2003 detailing findings and recommendations.

1.4 Study Phasing

Phase 1:
Prepare comprehensive report on the understanding of the TOR, data and information requirements from JPIP and the methodologies to be adopted in the ESIA process and present to the Client as an Inception Report.

Phase 2:
Undertake an ESIA study as per the approved TOR and prepare an ESIA Project Report for submission to NEMA for review. A draft PR should be submitted to JPIP for review before preparation of the final EIA PR for submission to NEMA. The following tasks should be undertaken during this phase;

Task 1: Brief on Project Background
The Consultant shall provide brief description of the developer (this will be Judiciary), background to the project proposal and its justification, need and purpose of undertaking the ESIA study, ESIA study methodologies and approaches applied and structure of the report.
Task 2: Description of the Proposed Project

The Consultant shall describe project components and activities to be implemented in each phase(s) of the project life i.e. pre-construction, construction, operation and post-construction. This part is meant to give a general idea of what the project will entail. The description shall include the following information:

**Background information**

Background information shall include: Title of the proposed project and developer; Project justification and objectives; Funds and source of funding or financier(s); Project location including maps of appropriate scale; Project design, size, and capacity; Area of influence of the project works; Project life span and Project components; Land size required.

**Project activities**

Description of project activities shall be based on phases of project life cycle i.e. mobilization or pre-construction, construction, operation and maintenance.

**Mobilization or Pre-construction activities**

Description of activities pertaining to screening and scoping procedures, land acquisition (if any); construction camp and site workshop, site preparations, relocation of services and utilities, etc.

**Construction activities**

Description of all associated activities during construction work including construction materials indicating types and sources, expected products and by-products, technology to be used, etc. Other environmental issues to be addressed will include: Waste management – collection, handling, storage, transportation and disposal, Disaster preparedness and management, Noise and excessive vibration, Occupational Health, Safety at the construction phase, Socio-economic impacts, Ecological impacts including impacts on biodiversity, Environmental emergencies e.g. oil spills, Air quality and air pollution (local air quality), General effects on the landscape and natural environment.

**Operation and maintenance activities**

Identification and description of all the associated activities to be conducted during operation and maintenance of the project. These include but not limited to Liquid and Solid waste management plans, Occupational Health and safety, storm water, Effects of increased, if any, Levels of sanitation, water supply and water pollution, Fire hazards, Energy management. Further, make recommendations on long-term monitoring by undertaking regular audits
Demobilization Activities
Identification and elaboration on the activities to be conducted during
demobilization or Decommissioning of the project including movement and
demolition of constructed facilities, restoration of site, termination of the
operations, etc.

Project Requirements
Identify all types, sources and quantities of construction materials, equipment and chemicals
required by the project. Source and quantities of water, energy, manpower (staffing and
support) and other facilities and services required in each phase of project life etc. should be
discussed.

Task 3: Provide baseline environmental and social conditions
In order to forecast the impacts, it will be necessary to determine the initial reference or
baseline environmental conditions. It is therefore, required to describe the existing
environment that would be directly and/or indirectly affected by the construction and
operation of the proposed project, collectively known as receptors. The environment to be
affected must be based on the physical, biological socio-economic, cultural and historical
factors.

The environmental factors that are necessary for understanding the impacts of the planned
development should be clearly indicated. Assemble, evaluate, and present baseline data on
the relevant environmental characteristics of the study area. Inclusion of information on any
changes anticipated prior to the commencement of the project.

✓ Physical: covering factors such as geology, biodiversity, topography, soils, climate and
meteorology, ambient air quality, ambient noise and vibration levels, surface and ground
water hydrology, existing sources of air emissions, existing water pollution discharges,
receiving water quality, traffic data, current air space configuration, etc.

✓ Biological: inclusion of data on flora, fauna, rare, threatened or endangered species,
ecologically important or sensitive habitats, significant natural sites, species of commercial
importance and species with potential to become nuisances (of project site and potential
area of influence of the project).

✓ Socio-economic and socio-cultural environment: Population, land use, planned
development activities in the area, community structure, livelihood and customs,
employment, distribution of income, goods and services, recreation, public health,
Gender issues and HIV/AIDS, cultural / historic properties, security and community
safety, vulnerable and marginalized groups, attitudes to the project, water and sanitation,
transport and communication.

NOTE: Sources of data and methodologies used to acquire these data shall be
indicated.
Task 4: Describe the Policy, Legal and Institutional Framework

Description of policy, legal, institutional framework, regulations, guidelines, standards, International conventions and treaties that are of relevance to the environmental management of the proposed undertaking in particular. The objective of this section is to show how the developer would comply with the existing policies, laws and administrative/institutional conditions both at national and international levels. These will include but not limited to all the pertinent regulations and standards governing environmental quality, solid and liquid waste management, noise, air quality, health and safety, protection of sensitive areas, land use control at the national, County and local levels and ecological and socio-economic issues – stating compliance issues.

Task 5: Stakeholders’ Consultations and Public Involvement

The Consultant shall identify and consult all the relevant stakeholders. These will include but not limited to relevant Government Agencies, Voi Sub-County, NEMA, local NGOs including resident associations, affected groups and other interested parties in order to obtain their views regarding the proposed project. Indicate who they are, where they are, why they are important to this project, which issues are critical to them and how they will be involved in the ESIA study.

The Consultant shall describe methodology applied during stakeholder consultations and public participation such as consultative meetings, questionnaires, focus group interviews and other appropriate methods to establish public views on the proposed project. Meetings with local authorities and the public shall be held to obtain their views on the project and its implication to the environment and social aspects.

The Consultant shall propose public consultation programme during the ESIA study and the most appropriate methods to establish public views should be used. The consultation process should be open and transparent to ensure that the views of interested and affected parties are incorporated in the project design. A summary of issues and response in table form indicating sections which address them should be prepared.

There should be evidence in the ESIA to the effect that there was adequate stakeholder consultation at all levels. Photographs, minutes of the meetings, names and signatures of consulted people could be necessary in this regard.

Task 6: Analysis of Alternatives to the Proposed Project

The Consultant shall describe different project alternatives that were examined in the course of designing the proposed project and identify other alternatives, which would achieve the same objectives. The “No action” alternative is included to demonstrate environmental and social conditions without the implementation of this proposed project. The consideration of alternatives should include siting, design, technology, construction techniques, phasing and schedule, and operating and maintenance procedures.

Comparison of alternatives in terms of potential environmental and social impacts, capital and operating costs, suitability under local conditions and institutional, training, and
monitoring requirements will be necessary. To the extent possible, quantify the costs and/or benefits of each alternative, incorporating the estimated costs of any associated mitigation measures.

**Task 7: Impact Identification and Assessment**

The Consultant shall identify, analyse and assess environmental and social impacts (positive and negative) of the proposed project on physical environment, natural resources, human beings and the ecosystems based on the phases of project life cycle i.e. mobilization or pre-construction phase, construction phase, operation phase and decommissioning and demobilization phase. Methods applied in impact identification and the criteria used in evaluating significance of impacts must be specified.

The impact analysis should focus on both positive and negative impacts and be able to indicate which ones are positive or negative, direct or indirect, short term or long term, reversible or irreversible. The Consultant shall use the most up to date data and methods of analysing and assessing environmental impacts. Uncertainties concerning any impact shall be indicated.

The consultant shall assess impacts of the project on but not limited to the following aspects: Topography and geology, soil, erosion, groundwater, hydrology, fauna, flora, biodiversity, meteorology, landscape, air pollution, water contamination, soil pollution, waste generation and management, noise and vibration, social disruption.

**Task 8: Propose Impact Mitigation Measures**

The Consultant shall suggest cost-effective measures for minimizing or eliminating adverse impacts of the proposed project. Measures for enhancing positive or beneficial impacts should also be recommended. The costs of implementing these measures shall be estimated and presented as well as the responsible persons for their implementation.

**Task 9: Cost Benefit Analysis**

The Consultant shall undertake qualitative and quantitative analysis of costs and benefits to determine the viability of the proposed project on the environment, social and economic aspects.

**Task 10: Development of Environmental and Social Management and Monitoring Plan (ESMMP)**

The Environmental Management Plan will focus on three areas: implementation of mitigation measures, institutional strengthening and training, and monitoring. The Consultant shall prepare Environmental Management Plan which will include proposed work programme, budget estimates, schedules, staffing and training requirements and other necessary support services to implement the mitigation measures. Institutional arrangements required for implementing this management plan shall be indicated. The cost of implementing the monitoring and evaluation including staffing, training and institutional arrangements must be specified.
Where monitoring and evaluation will require inter-agency and inter-Governments collaboration, this should be indicated.

Identify institutional needs to implement environmental assessment recommendations. Review the authority and capability of institutions at local, regional, and national levels and recommend how to strengthen the capacity to implement the environmental and social management and monitoring plans.

The ESMMP should specify impact mitigation plan and environmental monitoring plan requirements - costs, responsibility and timeframe for mitigating each impact and monitoring of each environmental parameter. Impact Mitigation plan and monitoring plan should be based on the project phases i.e. Pre-construction, Construction, Operation and Demobilization.

1.5 Reporting

The ESIA should be concise and limited to significant environmental issues. The main text should focus on actions supported by summaries of the data collected and citations for any references used in interpreting data. The consultant should organize the ESIA report to include all items above and should adopt the format recommended in the EMCA, 1999 and its subsequent amendments in 2015, ESIA/EA Regulations of 2003.

The consultant is expected to submit the following reports:

- Inception Report
- Draft ESIA Report
- Final ESIA Project Report

Each report will be submitted to the client for review before finalization and submission to NEMA and World Bank.

1.6 Stakeholders Consultations

Consultations with the members of public and key stakeholders will be an important component of the study process. Following a comprehensive stakeholder analysis, various categories of stakeholders and public groups within the area influenced by the project will be established. The possible stakeholders would include among others;

(i) Government Departments
(ii) Institutional premises
(iii) Conservation areas
(iv) Commercial and industrial premises Operators,
(v) Health centres and facilities Managers,
(vi) Health practitioners,
(vii) Landowners
(viii) Residential area representatives
(ix) Administration Agencies

Appropriate questionnaires will be developed and distributed as among the tools to harness their opinions with respect to the subject. Environmental issues arising from the consultation
forums will provide a key element in the development of the Environmental management plan, part of which might involve actions by the stakeholders.

1.7 Data and Information Validation
Data and information gathered through documentary reviews, interview with the relevant government agencies, measurements on site (noise and air quality)

1.8 The Consultant
I am an independent Lead Expert, registered by NEMA (Registration No. 0562) to carry out Environmental Impact Assessments in Kenya, and has previously worked in the fields of environment in the following areas;

(i) Environmental assessments (Compliance EIAs, Strategic EIAs, Due Diligence Audits, Compliance Environmental Audits, Environmental Management Plans, Noise Audits, etc.),

(ii) Environmental impact assessment of policies, programmes and projects;

(iii) Waste management and audits (evaluation of pathways, waste characterization, waste audits, wastewater, solid wastes, hazardous wastes, waste management options),

(iv) Environmental sampling and management (noise, emissions, water, wastes, etc.),

(v) Implementation up to closure level EMP for various projects funded by World bank and other International Development Agencies

Attached in Annex 3 is the registration certificate of the Lead expert.

1.9 Work Plan and Deliverables
The assignment commenced upon receipt of the Contract. The main deliverables from the exercise include the following among others:

- Inception Report
- Draft ESIA Report
- Final ESIA Project Report

1.10 The Consultant Staff
The Consultant is working with the following staff cadres;

1. Naomi Gitau Environmentalist/Team Leader
2. Elvira Nalyanya Socio Scientist
CHAPTER 2: PROJECT DESCRIPTION

2.1 Project Location

The proposed New Magistrate Court Voi will be located within the existing Voi Law Courts in Voi Town, Taita Taveta County, in Kenya. The proposed site is located on the following GPS Coordinates, Latitude 3° 23' 20.53” S and longitude: 38° 33’ 47.17” E, Altitude 586 Meters Above Sea Level as shown on Figure 2 below. The New Magistrate Court is located approximately 0.5 Km from Voi Town along Voi Town road off Mombasa Highway.

![Google Earth excerpt showing the location of the proposed project site](image)

The proposed project area is surrounded by various developments: National Library (construction of a New Library is ongoing), County Commissioners Officer, Registration of Persons offices, Probation Offices and some residential houses. Therefore, the project is located in an area of similar character (with the surrounding buildings).
2.2 Brief Project Description
The project will involve construction of a New Magistrates Court in Voi on Plot No. TTA/PPD/64/2013/02 which measures approximately 0.15 hectares in size. The project activities will be according to conventional engineering scheduling, procedures and practices. The works will include but not limited to;

- Development of a 5 storey building
- Connection to a septic tank and soak pit for disposing of sewage water
- Construction of a storm water outlet
- Development of external works/services – driveway, car parking lots, vehicular gate access, pedestrian access.
- Site landscaping

The proposed Voi Magistrate Court project will consist of the following facilities:

1. Self-Contained Chambers--------3no.
2. Secretaries (Pooled) ----3no.
3. Court rooms -----------3no.
4. Kitchenette---------------1no.
5. Toilets (Staff, Handicapped and public)
6. Civil Registry------------1no.
7. Criminal Registry----------1no.
8. Traffic Registry-----------1no.
9. Archives Registry---------1no.
10. Prosecution Offices-------1no.
11. Cells(Adult—Male & Female
    Juvenile—Male & Female) -----2no.
12. Stores (Sizeable Procurement & Exhibit)----2no.
13. Executive Officer--------1no.
14. Allow for a small Server room----1no.
15. Accountant---------------1no.
16. Banking Hall-------------1no.
17. Waiting Bay--------------1no.
18. Multi-Purpose meeting Room for 30 no. people-------1no
19. A room with sink for breast-feeding mothers.---1 no.
20. Internal Access roads,
21. Open and Covered Parking,
22. Address Water supply,
23. Allow for Stone fencing,
24. Allow for incinerator,
25. Address power supply issues,
26. Attend to any matters arising from Environmental impact assessment report,
27. Allow for minimal Landscaping.
28. Allow for any other issue that is unique to the sites,

Figure 2: 3D Image of the Proposed New Voi Law Courts
Figure 3: Design of the proposed New Voi Law Courts
CHAPTER 3: POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

3.1 Introduction
There is a growing concern in Kenya and at global level that many forms of development activities cause damage to the environment. Development activities have the potential to damage the natural resources upon which the economies are based. A major national challenge today is how to maintain sustainable development without damaging the environment. The Environmental Impact Assessment is a useful tool for protection of the environment from the negative effects of developmental activities. There are many environmental problems and challenges in Kenya today. Among the cardinal environmental problems include: loss of biodiversity and habitat, land degradation, land use conflicts, human animal conflicts, water management and environmental pollution. This has been aggravated by lack of awareness and inadequate information amongst the public on the consequences of their interaction with the environment.

3.2 Policy Review

3.2.1 The Constitution of Kenya
Article 42 of the Bill of Rights of the Kenyan Constitution provides that ‘every Kenyan has the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations through legislative and other measures’. Part 2 of Chapter 5 of the constitution is dedicated to Environment and Natural Resources. Article 69 in Part 2 provides that the state shall;

i. Ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits

ii. Work to achieve and maintain tree cover of at least ten per cent of the land area of Kenya

iii. Encourage public participation in the management of, protection and conservation of the environment

iv. Protect genetic resources and biological diversity

v. Establish systems of environmental impact assessment, environmental audit and monitoring of the environment

vi. Eliminate processes and activities that are likely to endanger the environment

vii. Utilize the environment and natural resources for the benefit of the people of Kenya
3.2.2 Environmental Management and Coordination Act (1999) and its subsequent amendments in 2015

Section 72 of the EMCA, prohibits discharging or applying poisonous, toxic, noxious or obstructing matter, radioactive or any other pollutants into the environment. Section 73 require that operators of activities which discharges effluent or other pollutants to submit to NEMA accurate information about the quantity and quality of the effluent. Section 74 demands that all effluent generated from point sources are discharged only into the existing sewerage system upon issuance of prescribed permit from the local authorities.

Section 87 sub-section 1 states that no person shall discharge or dispose of any wastes, whether generated within or outside Kenya, in such a manner as to cause pollution to the environment or ill health to any person, while section 88 provides for acquiring of a license for generation, transporting or operating waste disposal facility. According to section 89, any person who owns or operates a waste disposal site or plant or generate hazardous waste, shall apply to the NEMA for a license. Sections 90 through 100 outline more regulations on management of hazardous and toxic substances including oils, chemicals and pesticides.

3.2.3 EMCA Regulations

Under EMCA, 1999, a set of regulations have been developed to address management and compliance in special aspects of the environmental. Among the regulations relevant in the proposed projects are listed here below;

**Water Quality Management Regulations, 2006 (Legal Notice No. 120)**

These regulations were drawn under section 147 of the Environmental Management and Coordination Act 1999. In accordance with the regulations, every person shall refrain from acts that could directly or indirectly cause immediate or subsequent water pollution and no one should throw or cause to flow into water resources any materials such as to contaminate the water. The regulation also provides for protection of springs, streams and other water sources from pollution. There are potential linkages during construction and use though mainly internal.

**Waste Management Regulations, 2006 (Legal Notice No. 121)**

The regulations are formed under sections 92 and 147 of the Environmental Management and Coordination Act, 1999. Under the regulations, a waste generator is defined as any person whose activities produces waste while waste management is the administration or operation used in handling, packaging, treatment, conditioning, storage and disposal of waste. The regulations requires a waste generator to collect, segregate and dispose each category of waste in such manners and facilities as provided by relevant local authorities. Regarding transportation, licensed persons shall operate transportation vehicles approved by NEMA and
will collect waste from designated areas and deliver to designated disposal sites. Appropriate management measures would be necessary throughout the project phases.

**Noise and Excessive Vibration Pollution Control Regulations, 2009**

Part II section 3(I) of these Regulations states that: no person shall make or cause to be made any loud, unreasonable, unnecessary or unusual noise which annoys, disturbs, injures or endangers the comfort, repose, health or safety of others and the environment and section 3(2) states that in determining whether noise is loud, unreasonable, unnecessary or unusual. Part II Section 4 states that: except as otherwise provided in these Regulations, no person shall;

(i) Make or cause to be made excessive vibrations which annoy, disturb, injure or endanger the comfort, repose, health or safety of others and the environment;

(ii) Cause to be made excessive vibrations which exceed 0.5cm per second beyond any source property boundary or 30m from any moving source.

Part III, Section 11(1) states that any person wishing to;

(i) Operate or repair any machinery, motor vehicle, construction equipment or other equipment, pump, fan, air-conditioning apparatus or similar mechanical device;

(ii) Engage in any commercial or industrial activity, which is likely to emit noise or excessive vibrations shall carry out the activity or activities within the relevant levels prescribed in the First Schedule to these Regulations. Any person who contravenes this Regulation commits an offence.

Section 13(1) states that except for the purposes specified in sub-Regulation (2) hereunder, no person shall operate construction equipment (including but not limited to any pile driver, steam shovel, pneumatic hammer, derrick or steam or electric hoist) or perform any outside construction or repair work so as to emit noise in excess of the permissible levels as set out in the Second Schedule to these Regulations. These purposes include emergencies, those of a domestic nature and /or public utility construction. Section 14 relates to noise, excessive vibrations from construction, demolition, mining or quarrying sites, and states that: where defined work of construction, demolition, mining or quarrying is to be carried out in an area, the Authority may impose requirements on how the work is to be carried out including but not limited to requirements regarding machinery that may be used and the permitted levels of noise as stipulated in the Second and Third Schedules to these Regulations. Noise regulations are perhaps the most relevant in respect of aviation operations.

**Environmental Management and Co-Ordination Act, 1999; Environment Co-Ordination (Air Quality) Regulations, 2008**

The government has gazetted the air quality regulations standards. The Environmental Management and Co-ordination (air quality Regulations). The regulation has provisions with
prohibitions of Priority air pollutants associated with machine operations and burning activities (general sources, mobile sources and Greenhouse gasses) outlined under the second schedule of the regulations. Tolerable air quality limits are provided under the first schedule of the regulation while lists specific limited for emissions from controlled and non-controlled facilities by sector. An operator of a site or equipment is required to obtain a license under the regulations and stipulated regulations. A compliance is also required as part of the emission license.

EMCA (Controlled Substances) Regulation, 2007
This regulation controls the production, consumption and exports and imports of controlled substances. This is an important aspect in aviation operations, but the projects may not have a direct linkage.

EMCA (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006
The regulation requires proponents to conduct ESIA if their activities may have adverse impacts on ecosystems or lead to unsustainable use of natural resources or/and lead to introduction of exotic species. The regulation aims at increasing the coverage of protected areas and establishing new special status sites by providing guidelines for protecting endangered species. There are no direct linkages to the proposed projects.

EMCA (Fossil Fuel Emission Control) Regulations, 2006
This Regulation aims at eliminating or reducing emissions generated by internal combustion engines to acceptable standards. The regulation provides guidelines on use of clean fuels, use of catalysts and inspection procedures for engines and generators. This regulation is triggered as the proponent would use vehicles and equipments that depend on fossil fuel as their source of energy. It is recommended the requirements of the regulation be implemented in order to eliminate or reduce negative air quality impacts. This would be relevant for construction equipment and vehicles and operations within the airport thereafter, and particularly with respect to aviation activities.

3.2.4 Occupational Safety and Health Act No. 15 of 2007
Locally, Occupational Safety and Health is governed by the Occupational Safety and Health Act (OSHA) of 2007. Salient features of the OSHA, 2007 relevant to the proposed project are detailed below.
General requirements of this Act vesting obligations to occupiers (Part II) in order to ensure the safety, health and welfare at work of persons employed and to prevent occupational accidents shall be followed and any situation potentially hazardous shall be rectified when detected. Section 44 of the Act requires contractors to register with the Directorate of Occupational Safety and Health Services before commencement of works on site. This requirement must be complied with to ensure that appropriate inspection and supervision is
done in order to minimize any adverse effects that may compromise safety and health of both workers and the environment. It is also expected of the contractor to comply with all safety precautions set forth by the proponent to ensure safety of work at the proponent's site. Any violations must be reported to the proponent and appropriate corrective measure taken to prevent future recurrence.

Competent persons shall be in charge of site safety and appropriate arrangements be made to ensure that safety and health committees are formed as provided for in Section 9 of OSHA and Section 4 of the Factories and Other Places of Work (Safety and Health Committees) Rules. All employees are expected to be made aware of their obligations to comply with provisions of the Act through appropriate trainings organized by the contractors. The trainings shall comply with provisions of section 12 of the Factories and Other Places of Work (Safety and Health Committees) Rules of 2004. Appropriate personal protective equipment shall be provided by the contractors to all employees so as to protect them from hazards associated with their work. These should include highly reflective jackets, helmets, dust masks, ear muffs, safety harnesses when working at heights, and protective clothing.

The contractor shall be required to cause to be carried out an external safety and health audit of the workplace at least once in every period of twelve months as provided in Section 11 of OSHA, and Section 13 of the Factories and Other Places of Work (Safety and Health Committees) Rules. Internal audits and inspections should be carried out by the safety and health committee constituted by the contractor as spelt out in Section 6 of the Safety and Health Committees Rules.

Section 55 specifies requirements for compliance with provisions of Machinery Safety. In construction sites of the proposed magnitude and nature, strict protocols need to be put in place to ensure all plants and equipment conforms to these requirements. These include earth moving equipment, chains, hoists, and lifting equipment including tower cranes. These equipments shall be maintained in accordance with provisions of the subsidiary legislation – The Occupational Safety and Health (Examination of Plant Order). The proponent shall ensure that the contractor provides proof of inspection of all plants to be used for work at her site. Special arrangements shall be made by the contractor, in consultation with the proponent, to provide appropriate warning signs for temporary structures that may violate aviation space during the construction phase. Particular structures may include cement silos and tower cranes.

Special care shall be taken by the contractor to ensure transport safety including maintenance of fleet and control of speeds so as not to foul the air with dust. Excessive dust may have dire consequences to aviation space and therefore must be checked through regular water sprinkling of routes used by trucks, or by application of appropriate hydroscopic materials on earth roads. In addition, the contractor must carefully select routes to be followed during
movement of construction materials. All drivers must have the requisite training and competence to operate stationary and mobile equipment, and appropriate procedures developed by the contractor must be observed at all times. These may include loading and unloading procedures. The contractor must ensure that pollution from trucks is controlled by limiting the loads carried and that maintenance is carried out as scheduled.

3.2.5 The Factories and Other Places of Work (Fire risk Reduction) Rules, 2007
Nationally, the Factories and Other Places of Work (Fire risk Reduction) Rules, 2007 provides statutory guidelines for the prevention, control and management of fires within workplaces, of which an airport is a part. Section 5 requires that suitable construction materials shall be used in the construction of workrooms where flammable substances are used, manufactured, or manipulated. Section 6 outlines conditions under which highly flammable substances must be stored, provided that no such store shall be so situated as to endanger the means of escape from a workplace or any part thereof in the event of a fire occurring in the store. Section 7 requires that every store room, cupboard, bin, tank or container used for storing highly flammable substances is clearly and boldly marked “Highly Flammable” in English or Kiswahili or otherwise with an appropriate indication of flammability.
Section 8 requires that every occupier shall ensure that the quantity of any highly flammable substance present at any one time in a workplace, shall be as small as is reasonably practical, having regard to the processes or operations being carried on. Section 9 also requires all occupiers to ensure that no means likely to ignite vapour from any highly flammable substances, are present where a dangerous concentration of vapour from flammable substances may reasonably be expected to be present. Further, Section 10 requires the occupier to continuously monitor the workplace with a view to assessing any possible fire risks and mitigate against them.

Section 12 requires the occupier to ensure that all necessary steps are taken to remove flammable gases of vapours in a workplace or render the gasses or vapours non-flammable where the operations or processes involve application of heat. In section 13, the occupier shall ensure that a workplace is kept in a clean state and that any accumulation of dirt and refuse is removed at least once a day, and that every store shall have a marked gangway of the prescribed dimensions. Where mobile equipment for transportation of materials is in store, a marked gangway shall be provided to accommodate the size of the equipment and for the use of persons working therein.

Fire escape exits shall be provided by the occupier in accordance with provisions of Section 17 at every workplace of at least 90 centimetres wide, as far away as possible from the ordinary exit, and locate in a manner that the exit will not lead any person to a trap in the workplace in the event of a fire breakout. Section 18 requires every occupier to ensure that any door of any
store where flammable substances are stored are constructed in a manner that the door shall be self-closing, opening outwards or sliding and capable of containing smoke from within the workroom, in the event of a fire.

Section 19 specifies that where a workplace is a storeyed building, every occupier shall ensure that a workplace is constructed in such a manner as to enable workers have access to other suitable outlet or exit for the evacuation other than the emergency exits. Section 20 requires occupiers to establish fire-fighting teams that shall be trained as specified in Section 21 and carry out functions outlined in section 22. Section 23 requires the occupier to ensure that fire drills are conducted at least once in every period of twelve months and a record of such drills kept available for inspection.

Section 24 requires that Fire Assembly Points be identified and located in the workplace where every worker shall assemble in the event of a fire. The occupier for the provision of First Aid shall make necessary arrangements to any person injured in a fire and in addition, arrangement for the transportation of the injured person to the nearest health facility as required in Section 25. Section 26 requires the occupier to provide suitable means of alerting persons in the workplace, in the event of a fire, and such means shall be made known to all workers.

Appropriate notices prohibiting smoking in areas where highly flammable or highly combustible substances are manufactured, used, handled or stored as specified in section 27. Fire detection systems shall be provided and maintained by the occupier, who shall ensure that fire detection appliances are located in the appropriate places for immediate activation of an alarm or automatic fire extinguishing systems as provided in section 28. Fire fighting appliances shall also be provided by the occupier for extinguishing fires at the workplace as required under Section 29. Such appliances shall be maintained as required in Section 30. Section 31 specifies that every occupier shall ensure that, in selection and distribution of fire extinguishers in the workplace, the distribution and selection is based on the classes of fire anticipated and the size and degree of hazard caused by a fire.

Colour coding of pipes carrying water for firefighting shall be painted red as specified in Section 32, while adequate water storage shall be provided and readily accessible in quantities as specified in Section 33. Section 34 requires the occupier to establish, implement and maintain a written fire safety policy, outlining the organization and arrangements for carrying out the policy. Every occupier shall notify any fire occurring in the workplace to the nearest Occupational Safety and Health area office within 24 hours as required under Section 35. Fire audits should be conducted in accordance with provisions of Section 36.

In addition to statutory requirements specified in the Factories and Other Places of Work (Fire Risk Reduction) Rules of 2007, internal Aerodromes Rescue and Fire Fighting Service
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procedure manual should be applied. To supplement these two, internationally accepted procedures as outlined in section 3.2 above shall be implemented.

3.2.6 The Occupational Safety and Health (Building Operations and Works of Engineering Construction) Rules 1984

These Rules apply to building operations and works of engineering construction undertaken by or on behalf of the Government and local authority, or a public body. It is part of the OSHA subsidiary legislation relevant to the construction phase.

Part II of the Rules requires every contractor to comply with the requirements of these Rules designed to ensure the safety, health and welfare of all persons engaged in building operations or works of engineering construction undertaken by him or in any activity incidental to and at the site of the building operations or works of engineering construction. Part II Section 6 requires the main contractor to send a notification in writing of commencement or taking over operations or works to the Director of Occupational Safety and Health Services (DOSHS) within seven days of commencement or undertaking building operations in the prescribed format. Section 7 requires every contractor who employs more than twenty persons to, for every site on which he is the contractor to appoint one or more persons experienced in the operations or works carried out at the site and suitably qualified for the purpose to advice the contractor as to the observance of the safety, health and welfare requirements under the Act, supervise and ensure the observance of those requirements and promote the safe conduct of work generally at sites.

Part III Section 8 requires the walls and roof of any excavation, shaft or earthwork or tunnel, deeper than 1.2m to be reinforced with the fervour of suitable quality or with other suitable material, so far as is reasonably practicable, to prevent danger of injury resulting from a fall or dislodgement of earth, or other matter from the walls or roof, to any person employed or making the inspection or examination under Rule 9. Rule 9 requires the safety supervisor appointed pursuant to Rule 7 to inspect every part of an excavation, shaft, earthwork or tunnel once in every day during which persons are employed; and at the commencement of every shift inspect the face of every tunnel, the working end of every trench which is more than two metres deep to ensure safe working conditions.

Section 10 provides that no timbering or other support for any part of any excavation, shaft, earthwork or tunnel shall be protected or be substantially added to, altered or dismantled except under the direction of the safety supervisor and so far as possible be competent workmen possessing adequate experience of that work. Any material to be used in adding to, altering or dismantling as above shall be inspected by the safety supervisor before being used and defective materials shall not be used. Timbering or other support of any excavation, shaft,
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earthwork or tunnel shall be of good construction, sound material, free from patent defect and of adequate strength for the purpose for which it is used and shall be properly maintained. All struts and braces in an excavation, shaft, earthwork or tunnel shall be properly and adequately secured so as to prevent their accidental displacement or fall.

Section 11 requires that in an excavation, shaft, earthwork or tunnel where there is reasonable danger of flooding by rising worker or irruption of water or other matter, a contractor shall provide, so far as is practicable, means to an able person employed therein reach positions of safety. Section 12 states that no excavation, shaft, earthwork or tunnel, which is likely to reduce the security or stability of any part of structure thereby endangering persons employed shall be commenced or continued unless adequate steps are taken to prevent danger to the person employed. Section 13 requires a contractor to ensure that any excavation, shaft, pit or opening in the ground more than two metres in depth shall be securely covered, fenced of otherwise provided the basic cable car when access by workmen, plant and equipment or material to it or from it is not necessary.

Section 14 requires that material shall not be placed or staked near the edge of any excavation, shaft, pit or opening in the ground so as to endanger persons employed below. It further prohibits placing or moving near the edge of the excavation, shaft, pit or opening any load, plant or equipment likely to cause a collapse of the side of an excavation, shaft, pit or opening.

The use of explosives in construction sites is primarily to break apart underlying rocks to pave way for construction. This will be highly discouraged for the proposed project site due to the sensitivity of the infrastructure already in place. Further, the resulting shock waves may interfere with buried services and cause damage to existing buildings and structures. Alternative methods for breaking the rocks should be explored including the use of pneumatic drills mounted on mobile earth moving equipment.

Part VI of the Building Operations and Works of Engineering Construction Rules requires that dangerous and unhealthy atmospheres be controlled. Specifically, the following measures shall be taken;

(i) In any building operation or work of engineering construction where dust or fumes likely to be injurious to the health of persons employed are given off, all reasonably practicable measures shall be taken to prevent the inhalation of dust or fumes by the person employed by ensuring adequate ventilation or provision of suitable respirators at the place where the operation or work is carried out.

(ii) Effective steps shall be taken to ensure and maintain adequate ventilation of every working place in any excavation, pit, hole, adit, tunnel, shaft or caisson and in any other enclosed or confined space where building operations or works of engineering construction are carried on and of every approach to those working places and enclosed or confined spaces so as to maintain an atmosphere which is fit for respiration, and to render harmless, so far as is
reasonably practicable, all fumes, dust or other impurities in the atmosphere therein which may
be dangerous or injurious to health and which are generated, produced or released by any
other means.

(iii) Where there is reason to apprehend that the atmosphere in any of the working places or
approaches thereto mentioned in 1 above is poisonous or asphyxiating, then, notwithstanding
the requirements of that paragraph, no person shall be employed in or allowed to enter the
working place or its approach until the atmosphere has been suitably tested by or under the
immediate supervisor of a competent person, and he is satisfied that the working place or
approach is for the time being free from the danger of a person being overcome by poisoning
or asphyxiation.

Section 22 on internal combustion engines requires that no stationary internal combustion
engine shall be used unless provision is made for conducting the exhaust gases from the engine
into the open air. Section 34 requires that mechanically propelled vehicles and mechanically
drawn trainers used in connection with building operations and works of engineering
construction, whether for the carriage of workmen or materials or not, shall, unless being
moved to a place for repairs; be in efficient state, efficient working order and in good repair;
not to be used in an improper manner; not to be loaded in such a manner as to such an extent
as to interfere with the safe driving or operation of the vehicle. Section 35 prohibits riding in
insecure positions on vehicles to which Section 34 applies.

Section 37 specifies that where a vehicle is used for tipping materials into an excavation or pit
or over the edge of an embankment or earthwork, adequate measures to prevent the vehicle
from over-running the edge of the excavation, pit, embankment or earthwork shall, where
necessary, be taken.

Part X Section 42 and 43 requires every machinery to be appropriately guarded to prevent
injury through access to dangerous or moving parts. Such parts shall be adequately secured
unless equipment is under repair, to which appropriate measures shall be taken not to injure
those undertaking such repairs. Section 45 requires contractors to take measures to prevent,
so far as practicable, steam, smoke or other vapour generated at the site where persons
employed are present from obscuring any part of the work or operation, any scaffolding,
machinery or other plant or equipment

Section 46 requires every contractor to, at any site where material including waste material,
scaffold material, tools or other objects and articles are likely to fall or drop or be thrown
down to take proper and adequate steps to prevent any person, whether employed and
working at the site or not, from being struck by a material, tool, object or article falling on or
within the close cartilage and precinct of the site.
While Section 47 requires provision of adequate and suitable lighting of the workplace, section 44 requires that any live electric cable or apparatus at a site which is liable to be a source of danger to persons employed to be rendered electrically dead or otherwise made safe by all practicable means.

Section 48 prohibits the placing of timber or material with projecting nails to be placed or be allowed to remain in any place at a site where they may be a source of danger to persons employed. The section also prohibits loose materials that is not required for use to be placed or left so as to unduly restrict the passage of persons upon platforms, gangways, floors or other places on the site, but shall be removed and be securely stocked in a place where they are not a danger or obstruction to persons employed and they do not render unsafe a floor, roof, or other part of a building or structure.

Part XII provides for the safe use of scaffolds and other working places including ladders used in scaffolds, cantilever, jib, suspended scaffolds, skips, cages, platforms, gangways, rungs and stairs to afford foothold, and ladders. It requires that these be of adequate strength, free from patent defects, of good construction, and sufficiently safe, properly maintained and inspected regularly. Only properly trained and experienced persons should be allowed to erect these structures, and their partial dismantling shall not be done unless it is then so erected or dismantled that it complies with these Rules as to safety.

Welfare facilities including toilets, clean drinking water and first aid facilities must be provided as specified in Part X – Welfare General Provision and Section 95 of OSHA, 2007; and the Occupational Safety and Health (First Aid) Rules of 1977.

**3.2.7 Work Injury Compensation Benefit Act 2007**
This act provides for compensation for employees on work related injuries and diseases contacted in the course of employment and for connected purposes. The act includes compulsory insurance for employees. The act defines an employee as any worker on contract of service with employer will be relevant during construction phase while operations will be blended with the normal airport procedures.

**3.2.8 Water Act 2002**
Section 73 of the Act of the Act allows a person with licensee to supply water to make regulations for purposes of protecting against degradation of water sources. Section 75 and sub-section 1 allows the licensee to construct and maintain drains, sewers and other works for intercepting, treating or disposing of any foul water arising or flowing upon land for preventing pollution of water sources within his/her jurisdiction. Section 76 states that no person shall discharge any trade effluent from any trade premises into sewers of a licensee without the
consent of the licensee upon application indicating the nature and composition of the effluent, maximum quantity anticipated, flow rate of the effluent and any other information deemed necessary. Under the Water Act 2002, Water Rules were developed to ensure sustainable and harmonized utilization of water resources throughout all sectors. The rules are summarized in the statement below;

### 3.2.9 Water Rules

One of the outcomes of the water sector reforms has been improved regulatory framework for water resource management and use. In addition to the Water Act 2002, the main document outlining the regulations is the Water Resource Management Rules 2007. The rules set out the procedures for obtaining water use permits and the conditions placed on permit holders. Sections 54 to 69 of the Water Resources Management Rules 2007 impose certain statutory requirements on dam owners and users in regard. These provisions address:

1. Technical design report in respect of the water use permit;
2. Operational information to be lodged with WRMA;
3. Dam safety measures and requirements for inspections;
4. Requirements for procedures to notify downstream communities in the event of unexpected releases.

Section 16 of the Water Rules requires approval from the Water Resources Management Authority (WRMA) for a variety of activities that affect the water resources, including the storage of water in dams and pans. Approval by WRMA is conferred through a Water Permit. A permit is valid for five years and must be renewed.

Section 104 of the Water Resource Management Rules requires certain water permit holders to pay water use charges. The intention of the water use charges was to raise revenue for water resource management, raise revenue for catchment conservation activities, improve efficiency of water resource abstraction and provide a system of data collection on water resource usage.

### 3.2.10 Public Health Act (Cap. 242)

Section 115 of the Act states that no person/institution shall cause nuisance or condition liable to be injurious or dangerous to human health. Section 116 requires Local Authorities to take all lawful, necessary and reasonably practicable measures to maintain their jurisdiction clean and sanitary to prevent occurrence of nuisance or condition liable for injurious or dangerous to human health. Such nuisance or conditions are defined under section 118 as waste pipes, sewers, drains or refuse pits in such a state, situated or constructed as in the opinion of the medical officer of health to be offensive or injurious to health. Any noxious matter or wastewater flowing or discharged from any premises into a public street or into the gutter or side channel or watercourse.
Other nuisances are accumulation of materials or refuse which in the opinion of the medical officer of health is likely to harbour rats or other vermin. On the responsibility of local authorities, Section 129 of the Act states in part “It shall be the duty of every local authority to take all lawful, necessary and reasonably practicable measures for preventing any pollution dangerous to health of any supply of water which the public within its County has a right to use and does use for drinking or domestic purposes…”. Section 136 states that all collections of water, sewage, rubbish, refuse and other fluids which permits or facilitate the breeding or multiplication of pests shall be deemed nuisances and are liable to be dealt with in the manner provided by this Act.

3.2.11 Physical Planning Act (Cap 286)
Section 24 of the Physical Planning Act gives provision for the development of local physical development plan for guiding and coordinating development of infrastructure facilities and services within the area of authority of County, municipal and town council and for specific control of the use and development of land. The plan shows the manner in which the land in the area may be used. Section 29 of the physical Planning Act gives the county councils power to prohibit and control the use of land, building, and subdivision of land, in the interest of proper and orderly development of its area. The same section also allows them to approve all development applications and grant development permissions as well as to ensure the proper execution and implications of approved physical development plans. On zoning, the act empowers them to formulate by-laws in respect of use and density of development.

Section 30 states that any person who carries out development within an area of a local authority without development permission shall be guilty of an offence and the development shall be invalid. The act also gives the local authority power to compel the developer to restore the land on which such development has taken place to its original conditions within a period of ninety days. If no action is taken, then the council will restore the land and recover the cost incurred thereto from the developer. In addition, the same section also states that no person shall carry out development within the area of a local authority without development permission granted by the local authority. At the same time, sub-section 5, re-enforce it further that, no licensing authority shall grant under any written law, a license for commercial use for which no development permission had been granted by the respective local authority.

Section 36 states that if in connection with development application a local authority is of the opinion that, the proposed activity will have injurious impact on the environment, the applicant shall be required to submit together with the application an Environmental Impact Assessment report. The environmental impact assessment report must be approved by the National Environmental Management Authority (NEMA) and followed by annual environmental audits as spelled out by EMCA. Section 38 states that if the local authority finds out that the development activity is not complying to all laid down regulations, the local authority may serve
an enforcement notice specifying the conditions of the development permissions alleged to have been contravened and compel the developer to restore the land to its original conditions.

3.3 The World Bank Environment Safeguards
OP/BP 4.01 (Environmental Assessment)

The World Bank has well-established environmental assessment procedures, which apply to its lending activities and to the projects undertaken by borrowing countries, in order to ensure that development projects are sustainable and environmentally sound. Although its operational policies and requirements vary in certain respects, the World Bank follows a relatively standard procedure for the preparation and approval of an environmental assessment study, which:

i. Identifies and assesses potential risks and benefits based on proposed activities, relevant site features, consideration of natural/human environment, social and trans-boundary issues
ii. Compares environmental pros and cons of feasible alternatives
iii. Recommends measures to eliminate, offset, or reduce adverse environmental impacts to acceptable levels (siting, design, technology offsets)
iv. Proposes monitoring indicators to implement mitigation measures
v. Describes institutional framework for environmental management and proposes relevant capacity building needs.

The environmental assessment evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. The assessment takes into account: the natural environment (air, water, and land); human health and safety) social aspects (involuntary resettlement, indigenous peoples, and physical cultural resources); and trans-boundary and global environmental aspects. Preventive measures are favoured over mitigation or compensatory measures, whenever feasible.

The World Bank considers environmental impact assessment (EIA) as one among a range of instruments for environmental assessment. Other instruments used by the World Bank include environmental management plan (EMP) among other studies. The Bank undertakes environmental screening of each proposed project to determine the appropriate extent and type of environmental assessment. Projects could be classified into one of three categories below, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts:
(i) Category A: the proposed project is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. For a Category A project, the Proponent is responsible for preparing an EIA report.

(ii) Category B: the proposed project has potential adverse environmental impacts on human populations or environmentally important areas such as wetlands, forests, grasslands, and other natural habitats - but these are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases, mitigation measures can be designed more readily than for Category A projects. Like Category A the environmental assessment examines the project's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.

(iii) Category C: the proposed project is likely to have minimal or no adverse environmental impacts. Beyond screening, no further environmental assessment action is required for a Category C project.

Environmental Assessments are used by the World Bank to identify, avoid and mitigate the potential negative environmental associated with Bank lending operations. The purpose of Environmental Assessment is to improve decision making, to ensure that project options under consideration are sound and sustainable and that potentially affected people have been properly consulted. The proposed project would be placed at Category B.

**OP/BP 4.04 (Natural Habitats)**
The policy is designed to promote environmentally sustainable development by supporting the protection, conservation, maintenance and rehabilitation of natural habitats and their functions. The policy seeks to ensure that World Bank-supported infrastructure and other development projects take into account the conservation of biodiversity, as well as the numerous environmental services and products which natural habitats provide to human society. The policy strictly limits the circumstances under which any Bank-supported project can damage natural habitats (land and water area where most of the native plant and animal species are still present. There are no direct or indirect interaction of the proposed projects with natural habitats. The proposed project has no interaction with the wildlife dispersal of wildlife moving from Tsavo East national park in search of fodder. Additionally, there are no breeding habitats around the proposed project site.
OP/BP 4.11 (Physical Cultural Resources)
This policy is meant to assist in preserving physical cultural resources including the movable or immovable (above or below ground, or under water) objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance including sites and unique natural values. Physical cultural resources are important as sources of valuable scientific and historical information, as assets for economic and social development, and as integral parts of a people’s cultural identity and practices. The objective of this policy is to avoid or mitigate adverse impacts on physical cultural resources from development projects. The proposed New Voi Magistrate Law Court has no direct linkage to a cultural resource. The aspect, therefore, will not be triggered.

OP/BP 4.12 (Involuntary Resettlement)
The policy states that “Where large-scale of population displacement is unavoidable, a detailed resettlement plan, timetable, and budget are required. Resettlement plans should be built around a development strategy and package aimed at improving or at least restoring the economic base for those relocated. Experience indicates that cash compensation alone is normally inadequate. Voluntary settlement may form part of a resettlement plan, provided measures to address the special circumstances of involuntary resettlers are included.

This proposed project under JPIP – Voi Magistrate Court is not likely to lead to any large scale acquisition of land or denial of access to people’s means of livelihood. The judiciary will only carry out construction within land that is owned by judiciary.
CHAPTER 4: BASELINE CONDITIONS

4.1 General Overview

The study area is located in the township of Voi, located South-Eastern Kenya in Taita Taveta County, 327 km South-East of Nairobi and 159 km North-West of Mombasa. Voi cover 2,972 km\(^2\) and it is situated at an altitude of approximately 580 MASL at the western edge of the Taru desert. It borders Tsavo East National Park in the north and east, and Sagala Hills in the south, and Voi Sisal Estates in the west.

![Figure 4: Map showing Voi](image)

The town started to grow at the end of the 19\(^{th}\) century when the Kenya-Uganda Railway was constructed. People moved in to work on the railway and the nearby sisal estates. However, township status with an area of about 16.27 Kms\(^2\) was not granted until 1932. The town has long since outgrown the original grant. Voi is the junction of the feeder railway line to Taveta, Kenya and Arusha, Tanzania with the main line being between Nairobi and Mombasa and thus Voi has a major railway station.

Voi town and its surroundings has got many environmental and social similarities with the rest of the Taita Taveta zone including geology and soils, vegetation types, hydrology, land use,
cultural trends as well as economic patterns. Within Voi town, economic demands and migration of different cultures into the town has led to land use change (heavy commercial focus and few settlement in the vicinity of the town). The pulling factors for in-migration include the much better job and education opportunities in Voi, compared to the surrounding periphery characterized by traditional agriculture and grazing.

During the evaluation of baseline conditions and field visits, physical inspection was backed up with literature of the wider Taita Taveta region. Social and cultural characteristics were also drawn from interviews and historical knowledge of Taita Taveta people and the transformation time. The following sections therefore briefly describe the general and site specific environmental and social status that also provides the base of the impacts identification.

4.2 Physical Environment:
4.2.1 Topography and Drainage
Voi Law Courts grounds, like the neighboring land has a mild slope toward the South-North with steep gradients on the slopes of the surrounding hills. It lies at the western edge of the Taru Desert, south and west of the Tsavo East National Park and Sagala Hills to the south. The extensive plateau gently slopes coast-wards ranging between 1000m and 300 MASL.

The highlands of the County are experiences high human population pressure and ongoing down-slope migration into the agro-Sahel (semi and lowlands). The larger part of Voi is covered by the Tsavo East National Parks thus further restricting settlements in the lowlands and creating an additional problem, the human-wildlife conflict. The study area lies on one of the three major geographical regions of Taita Taveta County i.e. the lowlands (Tsavo National Parks and rangelands) and bordered by the mountainous zone of the Taita Hills (Kasigau, Sagalla and Taita Ranges). To the east side of the airstrip lies the Tsavo East nation park while to the western lies the Sagala hills.

Plate 2: Typical Scenery of the county
4.2.2 Geology and Soils
The lowlands of which the study area lies are characterized by erosional and sedimentary plains of which is reddish, very deep and acid sandy–clayey soil (Ferralsols). The soils are found in most of the Tsavo National Park and the ranches. The soils are vulnerable to soil erosion, have a low water holding capacity and low soil fertility. At the valley bottoms, alluvial soils (fluvisols) are apparently, characterized by young soils with fertility being moderate to high. They receive fresh sediments and nutrients during regular floods and occur in all larger river basins of Bura, Lumi, Mbololo, Mwatate and Voi Rivers. The soil of the lowland underlain by the Precambrian basements system of rocks consisting mainly of crystalline limestones, gneisses and schists. The plateau surface is an erosion surface covered by recent and Pleistocene weathered soil and calcareous crustal deposits.

The Taita hills (Sagalla, Taita and Kasigau) are block-faulted basement (crystalline) rocks in the Mozambique belt composed of Precambrian paragneisses from metamorphosed pelitic arenaceous and calcareous sediments from about 290 to 180 million years ago. The dominant soils are cambisols and originate from weathered gneiss and are often gravelly to sandy–loamy and shallow and are well drained and moderately fertile. On steep slopes and transitional zones the dominant soil types are Regosols, which are shallow soils, have high permeability and low water holding capacity.

4.2.3 Climatic Conditions
The County has a bimodal rainfall pattern with two rain seasons. The long rains occur between March and May with a maximum in April. The short rains take place between October and December with a peak in November. The rainfall distribution varies depending on elevation and aspect. The annual potential evaporation (Eo) ranges from 1200 to 2100 mm. The lowlands where the study area lies receive a maximum of between 450 – 750 mm annually and rainfall is more unreliable in amount and distribution. The lower parts are hot with mean temperatures of about 30°C. The potential annual evaporation rate is about 1800 mm. There is therefore a net water deficit. All the rivers flowing through the lowlands are intermittent, with the exception of the Athi, Tsavo and Galana rivers.

Taita Hills receive the highest amount of rainfall. The high potential areas in the Taita Hills (LH2, UM) receive more than 900 mm of rainfall per annum. (E.g. Wundanyi 1300 mm, Wesu 1400 mm). The temperatures average 15 – 20°C. The medium potential areas receive 700 to 900 mm, with higher temperatures, and evaporation.

4.2.4 Hydrology
Voi River arises from the Taita hills and flows into Aruba dam in Tsavo East National Park. The Taita hills have a net water surplus for the county. Several rivers drain from the Taita hills (Bura, Kishushe, Mbololo, Mwatate, 10 Paranga and Voi Rivers). The rivers are perennial in their head waters in the highlands but become seasonal in the drier lowlands. The county of
Taita Taveta has several springs which includes salaita, Little Lumi, Njoro Kubwa and Kitobo. Several of the springs and the perennial river Lumi drain into Lake Jipe. Ruvu River springs from Lake Jipe and flows towards Tanzania. Lake Challa and Jipe are the two freshwater lakes in the County and are located right on the border to Tanzania.

Lumi river basin in Taveta division arises from Mt. Kilimanjaro in Tanzania and empties into Lake Jipe and the Ruvu River is a surface outlet of Lake Jipe flowing into Tanzania. There are 2 lakes within the Lumi basin. The Crater Lake Challa and Lake Jipe. Tsavo river basin in Taveta and Wundanyi division- Tsavo River arises from Njukini springs in Taveta Division. It flows into Athi River.

Mwatate river basin in Mwatate Division, Mwatate river has Bura river as its major tributary and flow southwards through the national park into Kwale County.

4.3 Biological Environment:
4.3.1 Flora
Taita Taveta County has total area of forest is currently 10,233.62 ha. Statistics on private forests are not available. They consist of exotic tree plantations and bush land but also pockets of indigenous forests. Of the total area, 41.5% are indigenous forests, 12% exotic forests, 1% contains endemic species and 46% are bush land. The flora of these Taita Taveta county mountains is characterized by a high level of species and generic endemism: the forest ecosystem has more the 2000 species of plants of which 25 to 30% are endemic. The Taita Hills forests fauna consists of over 400 species with at least 123 endemic plants. Ngangao and Mbololo forests have 7 of the endemic species. The midland of Taita Hills (<1200 MASL) are drier and are dominated by woodland formation and dry forests of Acacia – Euphorbia species, Commiphora sp., Ficus sp., Tamarindus indica and Terminalia brownii among others.

Voi and its surrounding lowlands is covered mainly by an Arid and semi-arid lands vegetation:- grass, wood and shrubs composed of savanna species (Acacia sp, Commiphora sp.) in some of the places where the where the groundwater table is high, riverine/permanent wetland vegetation types occur with Acacia xanthophloea, Milicia excelsa, albizia sp, Ficus sp. etc.
4.3.2 Fauna
Taita Taveta is characterized with some of the endemic species that call Taita hills home include Bird species like the Taita Thrush, the Taita White-eye and the Taita Apalis, a unique rear-fanged snake – Amblyodipsas teitana, an endemic toad – Bufo Teitensis, and butterflies; the Taita Glider, Taita Charaxes, Cymothoe teita, Papilio desmond teita and Taita Swallowtail. Tsavo National Park which hosts several wild animals and 600 bird species. Outside the park, the fauna comprise domestic animals. The main livestock breeds in the County include; dairy and beef cattle, sheep, goats and poultry. Beekeeping takes place around the drier lowlands.

4.3.3 Wildlife Conservation
Wildlife protection areas form an important land use type Taita Taveta. National Park such as Tsavo East and Tsavo West National Park are play an important role in wildlife conservation and promotion of tourism in Kenya. Tsavo East and Tsavo West National Parks in were gazetted back 1948, covering more than 62% of the county.

4.4 Human Environment:
4.4.1 Education
Voi has seven primary schools, two secondary schools, thirty nursery schools, a technical high school (Coast Institute of Technology), a catering school (at Tsavo Park Hotel), a youth polytechnic school, and a few private ones offering a wide range of educational services. All these schools have, naturally, a wide range of quality education.

The proposed project area is surrounded by various developments: National Library (construction of a New Library is ongoing), There is no school in the neighbourhood.
4.4.2 Population

The Population of Taita Taveta County was 284,657 (Male - 51.1%, Female - 48.9%) according to 2009 with a growth rate of 1.7% per annum.

Table 1: Population per constituency

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Area in Km²</th>
<th>Population(2009 Census)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taveta Constituency</td>
<td>3,501.8</td>
<td>67,665</td>
</tr>
<tr>
<td>Wundanyi Constituency</td>
<td>701.2</td>
<td>56,021</td>
</tr>
<tr>
<td>Mwatate Constituency</td>
<td>9,611.9</td>
<td>73,168</td>
</tr>
<tr>
<td>Voi Constituency</td>
<td>3,269.0</td>
<td>87,803</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17,083.9</td>
<td>284,657</td>
</tr>
</tbody>
</table>

4.4.3 Health

Taita Taveta County has three County hospitals (Moi, Wesu and Taveta), 8 health centres and 25 dispensaries supported by GOK. There are also a number of NGO supported dispensaries namely Wusi, Wutesia, Bura Mission, Vighombonyi and Eldoro Mission and three others are managed by the sisal estates, namely Teita Estate Sisal clinic, Ziwni Sisal Clinic and Taveta Sisal Clinic. Accessibility of health services is, however low. Majority of the population live over 10 kilometres to the nearest health facility. Accessibility of health services is, however low. Most of the facilities are characterized by shortage of staff with doctor patient ratio stands at 1: 41,000.

Although the area surrounding Ikanga airstrip is quite sparsely occupied characterized with very low population as most of the adjudicated land is yet to be occupied. The area has 1 health center and 1 dispensary with the later one being operational.

4.4.3.1 HIV/AIDS

HIV/AIDS prevalence, which currently stands at 14.3 per cent, is a key challenge because it is threatening the development initiatives of the County and the existence of the population. From records available from the MOH, bed occupancy from HIV/AIDS related illness stand at 60% in Voi, 50% in Wesu, and 55% in Taveta. The most affected age group is the economically active (15 – 40) a significant segment of the labour force. Between 50 – 60% of hospital beds in Taita Taveta County are occupied by HIV/AIDS patients. Cultural beliefs and poverty in the community are some of the major factors that have contributed to rise in infection rates in the County. This impact negatively on the ability of the County to produce goods and services leading to worsening poverty-related problems. The HIV/AIDS as a challenge is manifested in the entire social spectrum. From the household point of view, more resources are diverted to
treat ing HIV/AIDS related illness leaving little resources for other services, thus contributing to high incidences of poverty at family level. The challenge is how to provide for the extended families and take care of the widows and orphans. Children headed households are now emerging in the County and this poses a major challenge to the society.

4.4.4 Human Settlement

In the urban setting, it is estimated that some 75% of the total population of Voi town lives in informal settlements. Of the total housing units in Voi, 70% are constructed of temporary materials. A big squatter settlement can be found, for example, just a few kilometers west from Voi, in the land belonging to Mwatate Sisal Estates. In the urban setting, it is estimated that 75% of the total population of Voi town lives in informal settlements (VMC 1995:5. The majority of the migrants settle in informal settlements, because the rents is affordable, and also because there is no formal low-income housing available (VMC 1995). Furthermore, the majority of Voi’s population are from Taita and Sagala tribes.

Although each settlement has its distinctive characteristics, common characteristics shared by all informal settlements in Voi are (1) insecurity of tenure, (2) lack of planning, (3) lack of infrastructure (e.g. roads, water pipes, drainage systems, toilets, waste collection, electricity), (4) poor environmental condition, (5) lack of public facilities (schools, dispensaries), and (6) unemployment and poverty.

4.4.5 Poverty Aspects

Taita Taveta County has an absolute rural level of poverty of 66% contributing 1.26% to national poverty. One of the biggest obstacles for development in the developing county is rapid population growth. This, together with continuing poverty and a lack of basic needs for an acceptable life (e.g. food, clean water, shelter, basic health care, security of tenure) imposes a great challenge for sustainable development. The worst affected by poverty in the county include the aged, the disabled, small holders with less than 0.05 ha, landless and squatters, children, and female headed households. The distribution of poverty in the County is biased towards the marginal farming areas of Tausa, Mwatate, and Voi divisions.

Poverty is a major challenge to the demographic parameters in the county. Due to high poverty levels, the poor are not in a position to afford essential drugs, or transport to the nearest health facility, or a balanced diet. This contributes also to reduction in life expectancy and increase crude death rates, infant and under five mortality rates.

4.4.6 Land use

Most of the land around the Voi Law Court has a number of ongoing development activities such as the Kenya Library under construction.
4.5 Environmental Hazards and Disasters Aspects

4.5.1 Drought and Famine
Taita Taveta County is classified as a Semi-arid area and therefore drought and famine are fairly common occurrences. Droughts that have occurred in the County have had devastating impact on people’s livelihoods and general economic development of the County.

4.5.2 Land Slides
Landslides occur in Hilly areas of the County Particularly during the rainy Season. The main cause of landslides is the encroachment of mountainous areas for agricultural purposes and settlement. Deforestation of hilly areas has also contributed to loosening of the soils.

4.5.3 Infrastructure Aspects

4.5.3.1 Transport
Situated strategically, Voi lies at the crossroads of the Nairobi-Mombasa highway and the road leading to Taita Hills, the county capital Wundanyi, and Taveta, which is one of the border crossings between Kenya and Tanzania. Voi is also an old railway hub on the busy Nairobi-Mombasa and Voi-Taveta-Moshi railroads. Voi is favored as a stopping place by the truck drivers travelling between Mombasa and Nairobi. Buses operating on the Nairobi-Mombasa route also drive through the town, bringing much activity and business for the hawkers. Taita Taveta county has a total classified road network of 1038.1 km (150.6 km paved road, 268.7 km gravel and 585.8 km earth, and 33 km government access roads). Road infrastructure is poor and often non-existent in some parts of Voi. During rainy seasons, accessibility on the gravel and earth road network is very difficult.

4.5.4 Water resources
Voi town is supplied with water from Mzima springs. However, despite rapid population increase and demand, the water supply to Voi has never been improved since the Mzima – Mombasa pipeline was built in 1952. The supply from Mzima springs is not sufficient to meet the demands of Voi town. Two setbacks affecting mainly the ASAL areas have been the lack of sufficient supplies of water for household consumption and lack of animal watering points. Human Wildlife conflicts are a result of wildlife leaving the parks in search of water during dry seasons

4.5.5 Energy
The main source of energy is fuel wood (firewood and charcoal). Firewood is predominant in the rural areas while charcoal is common in the urban and pre-urban areas. Other energy sources utilized are electricity, Kerosene and liquefied petroleum gas (LPG). Renewable energy sources (solar, biogas and wind) are not exploited even though the potential for solar and biogas utilization appears to be high. There are three types of fuel wood sources in the County.
These are on-farm fuel wood collection, collection from rangelands and forests and purchases from markets.

4.5.6 Solid Waste management
Solid waste has been categorized as trade, industrial, municipal, agricultural institution, domestic, construction debris and waste from mining operations. Unsuitable patterns of production and consumption are increasingly generating large quantities of waste. At domestic level, solid waste is mainly managed by use of refuse pits that are then burnt or composted.

In urban centers, the business of handling solid wastes is vested to the local authorities. The collection service is not sufficient. Uncollected waste is found all over in play fields, between houses, along the roads, waterways, and sometimes on top of trees, collected solid wastes are disposed off in open dumps and burned. In health institutions, bio hazardous wastes are managed by crude burning.

4.5.7 Liquid Wastes Management
The main mode of liquid waste management in the County is through septic tanks and soakage pits. These are individually owned. Sikujua estate in Voi and Voi sisal estate use lagoons to manage their liquid wastes. Urban and industrial wastes are also gradually becoming environmental issues. This is because the urban centers in the County lack proper drainage and sewerage systems.

4.6 Social and Economic Environment
4.6.1 Agriculture
The main crop in the lower zones is maize that is often seriously affected by drought. Maize and beans are the most important food crops and are mainly grown for subsistence. Pulses are also grown and are mainly intercropped with maize. Beans and pulses such as green grams, pigeon peas and cowpeas are widespread. Cassava is also grown to supplement maize. Cotton used to be a cash crop for the lowland communities, but the marketing situation is poor and there is little production. The only large -scale farming is sisal growing. There are two sisal estates remaining, namely Teita and Voi sisal estates. These estates also practice fruit, beef, dairy and vegetable production to diversify and reduce reliance on sisal production alone.

4.6.2 Livestock production
In the lowlands of Taita Taveta county dairy production is low. Zebu breeds are preferred due to their better tolerance of prevailing harsh conditions, climate and diseases. The average milk production is low and milk is consumed locally. However Dairy production is more common in the upper zone of the Taita hills where the climatic condition and small land holdings are favorable for zero-grazing. The types of dairy cattle found in those areas are Friesian, Ayrshire, Guernsey and Jersey as well as crossbreeds.
4.6.3 Industrial activities

Around the project area most of the local people depend on farm employment to earn their living. Some depend on small-scale enterprise/industries to earn a living. Voi and Taita Taveta at large is characterized with small-scale enterprises that are geared to the needs and income of the local people and are mainly dependent on local markets. Taita Taveta county processing and fabricating industries are therefore mainly agricultural based. Industrial activities are distributed mainly in the urban centers in the form of production and service industries. The production embraces processing activities e.g. Jua Kali and sisal processing, processing of mining products and construction industry. The service industry comprises of, for instance, banking, insurance, and the hotel/lodge/restaurant trade.

Although the County has different geological resources namely, minerals, rocks and sand. Mining is done in the lowlands, where especially harvesting of gemstone attracts mainly people from outside the County.

4.6.4 Trade

There are different types of trade going on in the Voi town, which includes motor vehicles garages, Jua Kali workshops, carpentry workshops, supermarkets, wholesale shops, timber yards, retail shops/Kiosks, hotels/food kiosks, saloons and hawking among others.

The project area is characterized with very few business activities almost to none. Two Kilometres from the Ikanga airstrip towards Voi is one hotel, Coco cola distributors and one motel. As you progress toward Voi town the number of business tends to increase.

The potentials of economic activities are not fully exploited due to several setbacks, mainly poverty, low investment opportunities, poor infrastructure, marketing problems, land tenure and lack of adequate management and entrepreneurial skills. Furthermore, poor marketing guidance and channeling, lack of business-orientation and the poor co-operatives management are constraining Trade Development

4.6.5 Tourism

Voi is a major tourist hub. It neighbors the world famous Tsavo East National Park, and one entrance to the park is near the town. Ndololo Camp, Voi Safari Lodge, Voi Wildlife Lodge, Swahili Dishes, New Distar Hotel and Leopards Lodge are near-by.

4.6.6 Administrative

Voi Constituency covers Voi and Tausa divisions. There are three local authorities in the County. These are Voi Municipal Council, Taveta Town Council and Taita Taveta County Council, with a total of thirty-four electoral wards. The borders of Voi Township, however, were drawn back in 1932, the centre point being the Voi railway station in Voi, from where a full circle with 1-mile radius was drawn. It is clear that these administrative boundaries no longer serve their original purpose, because Voi has grown well outside the circle. Statistics based on administrative boundaries should thus be used with caution.
CHAPTER 5: PUBLIC CONSULTATION AND PARTICIPATION

It is a Government policy that beneficiaries and members of the public living within new or improvement project sites (both public and private) are consulted to seek their views and opinions regarding the projects before they are implemented. Consultative Public Participation is therefore an important process in ESIA studies. Through this process, stakeholders and the public have an opportunity to contribute to the overall project design by making recommendations and raising concerns. In addition, the process creates a sense of responsibility, commitment and local ownership for smooth implementation of the project.

The stakeholder and public consultation process adopted included:

i. Stakeholder Participation through questionnaires

ii. Public consultative meeting held at the proposed site

5.1 Participation

The participation involved stakeholder and consultative public participation meetings held on 19th December, 2016 with the opinion leaders of Voi town. The meeting was preceded by mobilization through the Consultant, Client and through the area chief. The session was used for sensitization, information sharing and soliciting comments from the participants as well as enhancing project ownership among the general public. The consultative public participation meeting was held at Voi Law Courts site.

The consultative meeting was well attended by opinion leaders from selected from business community, religious groups, farmers and government institutions and were represented as shown below:

Below are the public participation photographs showing activities during the Voi meeting.
Plate 3: Members of the public giving their written comments in regard to the proposed project

Plate 4: Members of the public keenly following the proceedings
Plate 5: NEMA County Director of Environment Voi giving his remarks

Plate 6: Area Chief giving his remarks
5.2 Consultative processes
The consultation process was facilitated by the consultants comprising of Lead Environmentalist/ESIA and the Sociologist. The stakeholder and public consultative processes followed the following steps:

5.2.1 Objectives of the consultation
The main objective of these briefings was to sensitize the participants and invite them to make recommendations and raise their fears and concerns in as far as the project is concerned.

5.2.2 Content of the presentations
During presentations, discussions entailed the following:

Scope of work
The participants were informed of the scope of work as follows. The proposed construction works will involve Development of a 5 storey building, Connection to a septic tank and soak pit for disposing of sewage surface and sludge water, Construction of a storm water outlet, Development of external works/services – driveway, car parking lots, vehicular gate access, pedestrian access, Site landscaping.

Environmental Issues
Feasibility study of the project also entails the undertaking of the Environmental and Social Impact assessment. Typical environmental issues will be addressed such as health and safety, excavations, spoil dumping areas, potential material sources, and disposal of the construction materials and the main sources of water for construction purposes. Appropriate mitigation measures will be prepared during and after the construction period.

Social Issues
The Environmental and social Impact Assessment is expected to be participatory through engagement of the locals and the stakeholders. Members presented indicated that the young people from Voi should be employed by the project, Women will be allowed to sell food to the construction workers, provision of toilet and water facilities will be availed. The representative of the client who was present in the meeting confirmed to the area chief that they will work together to address socio issues of the project.

5.3.1 Fears and concerns
(i) The residents were afraid that their youth would not be given employment during the construction and the operation of the New Courts. It was observed that reducing the crime rate in the areas could be enhanced through employment of the youths who will now have something to engage themselves in;
(ii) Members of the public wanted the locally available construction materials and casual jobs to be sourced locally so that the locals can benefit from the project.

(iii) The cutting down of indigenous trees to provide space for construction of the new court.

5.3.2 Recommendations

The following were among suggestions proposed by the members of public;

i. Voi Law Courts was asked to enhance her involvement with the communities and social groups in participation in social development projects and initiatives.

ii. The members of public also expressed the desire to be provided with opportunities at the during projects implementation. This would be through employment opportunities, material supplies and other services as may be necessary.

iii. The stakeholders requested that the contractor plant three indigenous trees for every one that is felled during the landscaping process.
CHAPTER 6: PROJECT ALTERNATIVES

The followings alternatives were considered during the preliminary planning phases.

6.1 The No Option Alternative
Not going ahead with the project will avoid all the potential environmental and social impacts but deny Voi and Taita Taveta County in general the economic growth that would come with the proposed construction of a New Magistrate Court. The New building is expected to promote business and also bring judicial services to the local people who have been travelling to Mombasa County to get these services. The nation would also be deprived of economic development which would come with paying of taxes. The locals will equally be deprived of the many employment opportunities.

6.2 Site Alternatives
This is the only site available for this project. The proposed site is owned by the Client. The proximity of the site to Voi Township is very good and is only 0.5km from the town centre. Other alternatives site would mean this project be constructed in another town.

6.5 The No Action Alternative
The No Action Alternative in respect to the proposed project implies that the status quo is maintained. This option is the most suitable alternative from an extreme environmental perspective as it ensures non-interference with the existing conditions. However, the project process has already started and the anticipated insignificant environmental impacts resulting from construction has already been experienced. This option will however, involve several losses both to the project proponent (The Judiciary) and the Kenyan society and Government. The property will remain under-utilized. The No Project Option is the least preferred from the socio-economic and partly environmental perspectives since if the project is not done it will hinder the growth of Taita Taveta county and Kenya Economy at large. The economic benefits especially during construction i.e. provision of jobs for skilled and non-skilled workers will not be realized. Following are other resultant effects

- There will be no improved judicial service delivery
- There will be no generation of income by the developer and the government.
- The government’s development policy may not be realized
- The socio-economic status of Kenyans and the local people would remain unchanged.
- The local skills would remain under utilized
- No employment opportunities will be created for Kenyans who will work in the project area.
- Discouragement for investors to produce this level of standard and affordable developments.
From the analysis above, it becomes apparent that the No Project Alternative is not the appropriate alternative to the local people, Kenyans, and the Government of Kenya.

6.6 Analysis of alternative

All the above alternatives were subjected to further scrutiny as shown in table below before the final selection of the appropriate site.

**Table 2: Ranking of Alternatives for the proposed New Voi Law Courts**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Reasons for rejection/accepting</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Project</td>
<td>Current challenges of seeking judicial services in other counties would continue hence affecting county economic development</td>
<td>5</td>
</tr>
<tr>
<td>Site of the current law courts</td>
<td>The current site provides the best option as it would entail minimal additional environmental impacts.</td>
<td>1</td>
</tr>
<tr>
<td>Construction of the New building</td>
<td>This would cost the proponent less but the status of Voi Law Courts would improve</td>
<td>1</td>
</tr>
</tbody>
</table>
CHAPTER 7: IDENTIFICATION OF ENVIRONMENTAL IMPACTS

This section identifies both negative and positive impacts associated with the proposed renovation and extension works. These are identified according to Phases namely: Construction Phase, Operational Phase and Decommissioning Phase.

7.1 Construction Phase
7.1.1 Positive Impacts
7.1.1.1 Creation of Jobs
There will be job opportunities especially to casual workers. Employment opportunities are a benefit both in economic and social sense. In the economic sense it means abundant unskilled labour will be used in economic production. Several workers including casual labourers, masons, carpenters, joiners, electricians and plumbers are expected to work on the site for a period that the project will start to the end. Apart from casual labour, semi-skilled and unskilled labour and formal employees are also expected to obtain gainful employment during the period of construction.

7.1.1.2 Gains in the Local and National Economy
There will be gains in the local and national economy. Through consumption of locally available materials including: concrete tiles, timber, cement, electrical insulation and partitioning materials. The consumption of these materials, fuel oil and others will attract taxes including VAT which will be payable to the government. The cost of the materials will be payable directly to the producers.

7.1.2 Negative Impacts
7.1.2.1 Noise pollution
The construction works will most likely be a noisy operation due to the moving machines (mixers, tippers), incoming vehicles to deliver construction materials, workers to site and other construction related activities. This will be a major source of disturbance since the proposed site borders other institutions.

7.1.2.2 Dust Emissions
Particulate matter pollution is likely to occur during the aggregate mixing, loading and transportation of the raw materials and construction waste. There is a possibility of PM$_{10}$ suspended and settle-able particulates affecting the site workers and even neighbours health.

7.1.2.3 Solid Waste Generation
Some amount of solid waste will be generated during the construction of the project. These wastes will/may include metal cuttings, paper bags, empty cartons, empty paint and solvent containers, broken glass among others. Solid wastes if not well managed have a potential of causing disease outbreaks due to suitable breeding conditions for vectors of diseases.
7.1.2.4 Increased water demand
Both the workers and the construction works will create an increased demand for water in addition to the existing demand. Water will be mostly used in the creation of aggregates for construction works and for wetting surfaces for softening or hardening after creating the formworks.

7.1.2.5 Building materials and energy used
Several building materials will be required for construction of the building and associated facilities. These will include sand, ballast, hard core, timber, cement, clay tiles, metal sheets, electrical gadgets, steel, plumbing materials, glass and paints among others. Most of these materials will be obtained locally within the surrounding areas. Air pollution from dust generation and vehicular emissions during construction materials deliveries through public access roads adjacent to public offices and commercial areas.

The main sources of energy that will be required for construction of the project will include mains electricity and fossil fuels (especially diesel). Electricity will be used for welding, metal cutting/grinding and provision of light. Diesel will run material transport vehicles and building equipment/machinery.

7.1.2.6 Workers accidents and hazards during construction
During construction of the proposed project, it is expected that construction workers are exposed to accidental injuries and hazards as a result of accidental occurrences, handling hazardous waste, lack or neglect of the use of protective wear etc. All necessary health and safety guidelines should be adhered to so as to avoid such circumstances. Workers are also likely to be exposed to diseases from contact with potentially harmful building materials.

7.1.2.7 Increased Traffic
During construction phase roads leading to the project site mainly Court Road will serve additional vehicles used for transportation of materials to site. Heavy trucks, when used, will impact on infrastructure through destruction of operational road network especially near project site and turning points. The overall increase in traffic along neighbouring roads mainly Court as a result of the proposed development may be estimated to be around 15 vehicles per day. This will however be insignificant.

7.1.2.8 Labour influx
Labour influx at the project site may result to the following:

- Increased pressure on social amenities such as housing and sanitary facilities including sewage, water etc. There could be increased insecurity due to increased population and incomes
- Increased social interactions may happen causing negative social impacts such as spread of communicable diseases e.g STDs and HIV/AIDS
An influx could also result into conflict between the locals and the immigrants.

During construction the contractor will use both skilled (including Engineer, Foreman, Site agent, Store Keeper) and unskilled workers (casuals). Voi is characterised by high unemployment rate (66%) and from the general assessment of the population characteristics there is sufficient local labour in Voi. Therefore it is expected all casual workers will be sourced locally. This project will thus create employment opportunities to the local people and hence improvement of living standards.

7.1.2.9 HIV/AIDS

HIV/AIDS has been declared a national disaster. Influx of workers from outside communities and within the community may bring the risk of spreading communicable diseases such as HIV/AIDS to local communities. These effects can be managed by appropriate consultations with local communities throughout project construction and operation as well as informing workers on local cultural sensitivities and health matters.

The contractor should ensure the following:

- No camps should be used that might attract concentration of sex workers.
- The contractor should, as part of each worker’s initial orientation, provide public information, education, and communication about HIV/AIDS prevention measures. Condoms should be made available to project workers at no cost.
- Both workers and communities should be made aware of health implications and preventative measures provided by the Project.

7.1.2.10 Social Vices

Construction activities will attract an influx of people to the project area. This may lead to social vices like drug abuse, spread of diseases like HIV and may pose security concerns. Sensitization and awareness creation need to be done.

7.2 Operation Phase

7.2.1 Positive Impacts

7.2.1.1 Employment Generation

Employment opportunities are one of the long-term major impacts of the project after construction and during the operation and maintenance of the proposed project. These will involve security personnel, solid waste management staff, persons employed within the proposed project and direct service provision to the house keeping sector.
7.2.1.2 Increase in Revenue
There will be positive gain for the revenue system arising from the operations of the establishment in the proposed project and this includes the rent the proposed business will pay.

7.2.1.3 Optimal use of Land
The proposed site is currently abandoned and the infrastructure dilapidated. Construction of the proposed project will ensure optimal use of land to the great benefit of the country and its people.

7.2.2 Negative Impacts
7.2.2.1 Electricity Consumption
The Judiciary Offices shall consume large amount of electricity due to the nature of operation of the facility being proposed and the activities that will take place once the project is complete. Since electric energy in Kenya is generated mainly through natural resources, namely water and geothermal resources, increased use of electricity have adverse impacts on these natural resources base and their sustainability.

7.2.2.2 Increased water demand
Once the building is occupied, tenants will create an increased demand for water in addition to the existing demand. Water will be mostly used for tasks such as washing, cleaning, drinking and for sanitary facilities.

7.2.2.3 Household solid waste
The tenants of the building are expected to generate a substantial amount of solid waste which may mainly be in the form of paper, plastics, cartons, etc which if not appropriately disposed may have a detrimental effect on the environment.

7.2.2.4 Increased runoffs
The proposed project will create roofs and impervious/paved areas with high runoff coefficients during precipitation events. Run offs may cause adverse impacts when the area is poorly drained. Poor drainage causes dampness to building structures as well as water stagnation resulting to breeding grounds for malaria and other diseases.

7.3 Decommissioning phase
7.3.1 Negative Impacts
7.3.1.1 Noise and vibration
The demolition works will lead to significant deterioration of the acoustic environment within the project site and the surrounding areas. This will be as a result of the noise and vibration that will be experienced as a result of demolishing the proposed project.
7.3.1.2 Solid waste generation
Demolition of the building and related infrastructure will result in large quantities of solid waste.

7.3.1.3 Dust
Large quantities of dust will be generated during demolition works. This will affect demolition staff as well as the neighbouring tenants.

7.3.2 Positive impacts
7.3.2.1 Rehabilitation
Upon decommissioning of the proposed project, rehabilitation of the project site will be carried out to restore the site to its original status or to a better state than it was originally. This will include replacement of topsoil and re-vegetation which will lead to improved visual quality of the area.

7.3.2.2 Employment Opportunities
For demolition to take place properly and in good time, several people will be involved. As a result, several employment opportunities will be created for the demolition staff during the demolition phase of the proposed project.
CHAPTER 8: IMPACT MITIGATION AND MONITORING

This section highlights the mitigation measures for the expected negative impacts of the proposed project. The potential impacts and the possible mitigation measures have herein been analyzed under two categories: Construction and Operational.

8.1 Construction related impacts

8.1.1 Management of construction waste

It is recommended that construction waste be recycled or reused to ensure that materials that would otherwise be disposed of as waste are diverted for productive uses. In this regard, the proponent is committed to ensuring that construction materials left over at the end of construction will be used in other projects rather than being disposed of. In addition, damaged or wasted construction materials will be recovered for refurbishing and use in other projects.

The proponent shall put in place measures to ensure that construction materials requirements are carefully budgeted and to ensure that the amount of construction materials left on site after construction is kept minimal. Additional recommendations for minimization of solid waste during construction of the project include:

i. Use of durable, long-lasting materials that will not need to be replaced as often, thereby reducing the amount of construction waste generated over time.

ii. Provision of facilities for proper handling and storage of construction materials to reduce the amount of waste caused by damage or exposure to the elements.

iii. Use of building materials that have minimal packaging to avoid the generation of excessive packaging waste.

8.1.2 Minimization of noise and vibrations pollution

The Contractor of the proposed Project shall put in place several measures that will mitigate noise and vibration pollution arising during the construction phase. The proponent shall ensure that he complies with all relevant requirements in the Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009.

8.1.3 Minimization of air pollution

Controlling dust during construction is useful in minimizing nuisance conditions and consequently health (respiratory and eye) complications. It is recommended that a standard set of feasible dust control measures be implemented for all construction activities. Emissions of other contaminants (Nitrogen oxides, Carbon dioxide, Sulphur oxides, and diesel related Particulate Matter PM$_{10}$) that would occur in the exhaust from heavy equipment are also included.

Dust emissions will be controlled by the following measures:
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

- Provide effective dust screens that shall be used on scaffolding erected around the perimeter of a buildings under construction
- Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least two feet of freeboard;
- Down wash of trucks (especially tyres) prior to departure from site;

8.1.4 Minimization of water use
Water at the site is supplied the County government. A combination of water saving appliances and water management measures can be planned in the proposed Project. The contractor shall ensure that water is used efficiently at the site by sensitizing construction staff to avoid irresponsible water usage.

8.1.5 Efficient sourcing and use of raw materials
The Proponent will source building materials such as sand, ballast and hard core from registered quarry and sand mining firms, whose projects have undergone satisfactory environmental impact assessment/audit and received NEMA approval. Since such firms are expected to apply acceptable environmental performance standards, the negative impacts of their activities at the extraction sites are considerably well mitigated. To reduce the negative impacts on availability and sustainability of the materials, the Proponent will only order for what will be required through accurate budgeting and estimation of actual construction requirements. Material delivery trucks shall be well maintained for low noise while traversing the residential areas,

8.1.6 Minimization of worker accidents and hazards
Necessary health and safety rules shall be enforced by the site clerk of works/foreman to ensure that all staff members adhere to these standards and are thus safe. Adequate collection and storage of waste on site and safe transportation to the disposal sites and disposal methods at designated area shall be provided. In addition, covers for refuse containers and appropriate personal protective equipment to be used by workers shall also be provided by the proponent.

8.1.7 Labour influx and socio issues
- Enhance safety and security screening at the entry points of the project site
- Contractor shall ensure observance of safety precautions at all times at their respective work areas
- Contractor shall enhance awareness on HIV/AIDS and other social infections to the workers and community in general,
- Enhance public utilities around the site including waste management, sanitation, foot path pavement, provide a public refreshment area, etc.
8.2 Operation Phase Impacts

8.2.1 Ensure efficient energy consumption
The proponent shall plan and install an energy-efficient lighting system at the building. This will contribute immensely to energy conservation during the operational phase of the project. In addition, occupants of the building will be sensitized to ensure energy efficiency in their operations. To complement these measures, it will be important to monitor energy use and set targets for efficient energy use.

8.2.2 Ensure efficient water use
The proponent shall conserve water by:

- Installing water-conserving push taps and toilets
- Install water efficient plumbing.  
- Fixing any water leaks through damaged pipes and faulty taps promptly by qualified staff
- Sensitize tenants to use water efficiently.

8.2.3 Ensuring efficient solid waste management
The proponent will be responsible for efficient management of solid waste generated by the project during its operation. In this regard, the proponent will provide waste handling facilities such as waste bins and skips for temporarily holding waste generated at the premises. In addition, the proponent will ensure that they are disposed of regularly and appropriately. It is recommended that the proponent puts in place measures to ensure that the occupants of the building manage their waste efficiently through recycling, reuse and proper disposal procedures. The waste that will have to be disposed, will be done through a NEMA licensed garbage handler in accordance with the waste regulation,2006.

8.2.4 Management of runoff
Good drainage system is used to prevent land near human settlement from becoming saturated with water which collects or accumulate/flood after a downfall or from other sources. The design of the drainage system should ensure that surface flow is drained suitably into the public drains provided to control flooding within the site. Drainage channels should be covered by approved materials to prevent occurrence of accidents and entry of dirt that would compromise flow of run-off. Additionally, the channels should ensure safe disposal of run-off/surface water and should be self-cleaning. Re-vegetation of the compound after construction should be done to reduce the impact of run-off water. Paving of the side walkways, driveways and other open area should be done using pervious materials to encourage recharge and thus reducing water run-off volume.

It is recommended that the client installs roof rainwater catchment and storage facilities for irrigation of lawns and flowers.
8.3 Decommissioning Phase Impacts

8.3.1 Efficient solid waste management
Solid waste resulting from demolition or dismantling works will be managed as described in Section 8.1.1.

8.3.2 Minimization of noise and vibration
Significant impacts on the acoustic environment will be mitigated as described in Section 8.1.2.

8.3.3 Reduction of dust concentration
High levels of dust concentration resulting from demolition or dismantling works will be minimized as described in Section 8.1.3.

8.3.4 Minimization of worker accidents and hazards
Demolition works will inevitably expose workers and the public to occupational health and public safety risks: in particular, working with heavy equipment, handling and use of tools engender certain risks. This will be minimized as described in Section 8.1.6.
CHAPTER 9: ENVIRONMENTAL MANAGEMENT PLAN

9.1 Significance of an EMP
The proponent of the proposed project acknowledges the fact that the proposed project activities will have some impacts on the biophysical environment, health and safety of its employees and members of the public, and socio economic wellbeing of the neighbours. Thus, the main focus will be on reducing the negative impacts and maximizing the positive impacts associated with the project activities through a programme of continuous improvement.

An environmental management/monitoring plan has been developed to assist the proponent in mitigating and managing environmental impacts associated with the life cycle of the project. It is noteworthy that key factors and processes may change through the life of the project and considerable provisions have been made for dynamism and flexibility of the EMP. As such, the EMP will be subject to a regular regime of periodic review.

Environmental Management Plan (EMP) for development projects provides a logical framework within which identified negative environmental impacts can be mitigated and monitored. EMP is a vital output of an EIA as it provides a checklist for project monitoring and evaluation. The EMP outlined in Tables 3, 4 and 5 has addressed the identified potential negative impacts and mitigation measures of the proposed project during construction, operational and decommissioning phases, based on the Chapters of Environmental Impacts and Mitigation Measures of the expected Negative Impacts.
### Table 3: Environmental Management Plan for the Construction Phase of the Proposed Project

<table>
<thead>
<tr>
<th>Expected Negative Impacts</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High demand of raw material</td>
<td>Source building materials from local suppliers who use environmentally friendly processes in their operations.</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Ensure accurate budgeting and estimation of actual construction material requirements to ensure that the least amount of material necessary is ordered.</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Ensure that damage or loss of materials at the construction site is kept minimal through proper storage.</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td>Increased solid waste generation</td>
<td>Through accurate estimation of the sizes and quantities of materials required, order materials in the sizes and quantities that will be needed</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>0</td>
</tr>
</tbody>
</table>
### Expected Negative Impacts

<table>
<thead>
<tr>
<th>Expected Negative Impacts</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ensure that construction materials left over at the end of construction will be used in other projects rather than being disposed of.</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Ensure that damaged or wasted construction materials will be recovered for refurbishing and use in other projects</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Use of durable, long-lasting materials hence reducing the amount of construction waste generated over time by replacement</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Provide facilities for proper handling and storage of construction materials to reduce the amount of waste caused by damage or exposure to the elements</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Use building materials that have minimal or no packaging to avoid the generation of excessive packaging waste</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
</tbody>
</table>

### 3. Minimization of noise and vibration

<table>
<thead>
<tr>
<th>Expected Negative Impacts</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise and vibration</td>
<td>Comply with maximum permissible noise levels for constructions sites as per Second Schedule of the Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Apply for a License from NEMA whereby maximum permissible noise levels are to be exceeded</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>5,000</td>
</tr>
<tr>
<td>Expected Negative Impacts</td>
<td>Recommended Mitigation Measures</td>
<td>Responsible Party</td>
<td>Time Frame</td>
<td>Cost (Ksh)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>Priority shall be given to the use of equipment designed with noise control elements</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Construction vehicles and machinery are to be switch off engines of vehicles or machinery not being used.</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>4. Reduce dust emissions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide 2.4 m high hoarding along site boundary</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>Provide effective dust screens that shall be used on scaffolding erected around the perimeter of the building under construction</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction of building envelope</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Water all active construction areas when necessary;</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least two feet of freeboard;</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Personal Protective equipment to be worn</td>
<td>Project Manager</td>
<td>Throughout construction period</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td><strong>5. Minimization of energy consumption</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased energy consumption</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Ensure electrical equipment, appliances and lights are switched off when not being used</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>0</td>
</tr>
<tr>
<td>Expected Negative Impacts</td>
<td>Recommended Mitigation Measures</td>
<td>Responsible Party</td>
<td>Time Frame</td>
<td>Cost (Ksh)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>Install energy saving fluorescent tubes at all lighting points instead of bulbs which consume higher electric energy</td>
<td>Project Manager &amp; Contractor</td>
<td>Throughout construction period</td>
<td>5,000</td>
</tr>
<tr>
<td>6 Minimize water consumption and ensure more efficient and safe water use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High water demand</td>
<td>Promptly detect and repair of water pipe and tank leaks</td>
<td>Proponent</td>
<td>Continuous</td>
<td>2,000/month</td>
</tr>
<tr>
<td></td>
<td>Sensitize construction workers on water conservation measures</td>
<td>Proponent</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ensure taps are not running when not in use</td>
<td>Proponent</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Install water conserving taps that turn-off automatically when water is not being used</td>
<td>Proponent</td>
<td>One-off</td>
<td>10-40 % higher than ordinary</td>
</tr>
<tr>
<td></td>
<td>Install a discharge meter at water outlets to determine and monitor total water usage</td>
<td>Proponent</td>
<td>One-off</td>
<td>5000</td>
</tr>
<tr>
<td>7. Minimize occupational health and safety risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval of building plans</td>
<td>Ensure that all building plans are approved by the Local Authority and the Local Occupational Health and Safety Office</td>
<td>Developer</td>
<td>One-off</td>
<td>-</td>
</tr>
<tr>
<td>Health and safety committee</td>
<td>Provisions must be put in place for the formation of a Health and Safety Committee, in which the employer and the workers are represented</td>
<td>Project Manager</td>
<td>One-off</td>
<td>25,000</td>
</tr>
<tr>
<td>Expected Negative Impacts</td>
<td>Recommended Mitigation Measures</td>
<td>Responsible Party</td>
<td>Time Frame</td>
<td>Cost (Ksh)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>------------------------------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>Sanitary conveniences</td>
<td>Suitable, efficient, clean, well-lit and adequate sanitary conveniences should be provided for construction workers</td>
<td>Project Manager</td>
<td>One-off</td>
<td>-</td>
</tr>
<tr>
<td>Machinery/equipment safety</td>
<td>Ensure machinery, equipment, PPE, appliances &amp; hand tools used in construction comply with the prescribed safety &amp; health standards &amp; are appropriately installed &amp; maintained &amp; safeguarded</td>
<td>Project Manager, Developer &amp; Contractor</td>
<td>One-off</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>Ensure that equipment and work tasks are adapted to fit workers &amp; their ability including protection against mental strain</td>
<td>Project Manager, Developer &amp; Contractor</td>
<td>Continuous</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>All machines and other moving parts of equipment must be enclosed or guarded to protect all workers from injury</td>
<td>Project Manager</td>
<td>One-off</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Arrangements must be in place to train and supervise inexperienced workers regarding construction machinery use &amp; procedures/operations</td>
<td>Project Manager</td>
<td>Continuous</td>
<td>5,000 per training</td>
</tr>
<tr>
<td></td>
<td>Equipment such as fire extinguishers must be examined by a licensed authority &amp; reports of examinations presented in prescribed forms, signed by the examiner &amp; attached to the general register</td>
<td>Project Manager</td>
<td>Continuous</td>
<td>5,000 per examination</td>
</tr>
<tr>
<td>Storage of materials</td>
<td>Ensure that materials are stored or stacked in such manner as to ensure their stability and prevent any fall or collapse</td>
<td>Project Manager</td>
<td>Continuous</td>
<td>35,000</td>
</tr>
<tr>
<td>Expected Negative Impacts</td>
<td>Recommended Mitigation Measures</td>
<td>Responsible Party</td>
<td>Time Frame</td>
<td>Cost (Ksh)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>----------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>Ensure that items are not stored/stacked against weak walls and partitions</td>
<td>Project Manager</td>
<td>Continuous</td>
<td>0</td>
</tr>
<tr>
<td>Safe means of access and</td>
<td>All floors, steps, stairs and passages must be of sound construction and properly maintained</td>
<td>Project Manager &amp; Contractor</td>
<td>Continuous</td>
<td>-</td>
</tr>
<tr>
<td>safe place of employment</td>
<td>Securely fence or cover all openings in floors</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Provide all staircases with suitable handrails</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Ensure that construction workers are not enclosed such that they would not escape in case of an emergency</td>
<td>Project Manager &amp; Contractor</td>
<td>Continuous</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>All ladders used in construction works must be of good construction and sound material of adequate strength and be properly maintained</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>10,000</td>
</tr>
<tr>
<td>Emergency preparedness</td>
<td>Design suitable documented emergency preparedness and evacuation procedures to be used during any emergency</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>65,000</td>
</tr>
<tr>
<td>and evacuation procedures</td>
<td>Such procedures must be tested at regular intervals</td>
<td>Project Manager &amp; Contractor</td>
<td>Every 3 months</td>
<td>25,000</td>
</tr>
<tr>
<td></td>
<td>Ensure that adequate provisions are in place to immediately stop any operations where there in an imminent and serious danger to health and safety and to evacuate workers</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>10,000</td>
</tr>
</tbody>
</table>
### Expected Negative Impacts

<table>
<thead>
<tr>
<th>Expected Negative Impacts</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First aid</td>
<td>Ensure that the most current emergency telephone numbers are prominently &amp; strategically displayed within construction site</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Provide measures to deal with emergencies &amp; accidents</td>
<td>Project Manager &amp; Contractor</td>
<td>Continuous</td>
<td>20,000</td>
</tr>
<tr>
<td>Fire protection</td>
<td>Well stocked first aid kit which is easily available &amp; accessible should be provided</td>
<td>Proponent &amp; Contractor</td>
<td>One-off</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Provision must be made for certified first aid personnel</td>
<td>Proponent &amp; Contractor</td>
<td>One-off</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Firefighting equipment such as fire extinguishers should be provided at strategic locations</td>
<td>Proponent &amp; Contractor</td>
<td>One-off</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Regular inspection &amp; servicing of the equipment must be undertaken by reputable service provider &amp; proper records maintained</td>
<td>Proponent &amp; Contractor</td>
<td>Every 3 months</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Signs such as “NO SMOKING” must be prominently displayed especially in parts where inflammable materials are stored</td>
<td>Proponent &amp; Contractor</td>
<td>One-off</td>
<td>10,000</td>
</tr>
<tr>
<td>Electrical Safety</td>
<td>Circuits must not be overloaded</td>
<td>Project Manager &amp; Contractor</td>
<td>Continuous</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Distribution board switches must be clearly marked to indicate respective circuits</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>There should be no live exposed connections</td>
<td>Project Manager &amp; Contractor</td>
<td>Continuous</td>
<td>-</td>
</tr>
<tr>
<td>Expected Negative Impacts</td>
<td>Recommended Mitigation Measures</td>
<td>Responsible Party</td>
<td>Time Frame</td>
<td>Cost (Ksh)</td>
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<td>--------------------------------------------------------------------------------------------------</td>
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<td>------------</td>
</tr>
<tr>
<td></td>
<td>Electrical fittings near all potential sources of ignition should be flame proof</td>
<td></td>
<td>One-off</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All electrical equipment must be earthed</td>
<td></td>
<td>One-off</td>
<td></td>
</tr>
<tr>
<td>Supply of clean drinking water</td>
<td>Ensure that construction workers are provided with an adequate supply of wholesome drinking water which should be maintained at suitable and accessible points.</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td></td>
</tr>
<tr>
<td>HIV / AIDS</td>
<td>The contractor should provide public education information about HIV/AIDS and other related diseases prevention measures. Condoms should be made available to project workers at no cost.</td>
<td>Project Manager &amp; Contractor</td>
<td>Continuous</td>
<td>30,000</td>
</tr>
</tbody>
</table>
9.2 Operational Phase EMP
The necessary objectives, activities, mitigation measures, and allocation of costs and responsibilities pertaining to prevention, minimization and monitoring of significant negative impacts and maximization of positive impacts associated with the operational phase of proposed Project are outlined in Table 4.

**Table 4: Environmental Management Plan for the Operational Phase of the Proposed Project**

<table>
<thead>
<tr>
<th>Expected Negative Impact</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Minimization of solid waste generation and ensuring more efficient solid waste management</td>
<td>Provide solid waste handling facilities e.g. waste bins, skips &amp; dustbin cubicles</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td>25,000</td>
</tr>
<tr>
<td></td>
<td>Ensure that solid waste generated at the site is regularly disposed of appropriately at authorized dumping sites by a NEMA licensed garbage collector</td>
<td>Proponent/ Property manager</td>
<td>Continuous</td>
<td>2,000/month</td>
</tr>
<tr>
<td></td>
<td>Ensure that occupants manage their waste efficiently through recycling, reuse and proper disposal procedures.</td>
<td>Proponent/ Property manager</td>
<td>Continuous</td>
<td>_</td>
</tr>
<tr>
<td>2. Minimize energy consumption</td>
<td>Sensitize occupants to switch off electrical equipment, appliances and lights when not being used</td>
<td>Proponent/ Property manager</td>
<td>Continuous</td>
<td>_</td>
</tr>
<tr>
<td></td>
<td>Install occupation sensor lighting at various locations such as storage areas which are not in use all the time</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td>10-40 % higher than ordinary</td>
</tr>
</tbody>
</table>
### ESIA and ESMP for the proposed construction of a new magistrate court in Voi

#### Expected Negative Impact

<table>
<thead>
<tr>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install energy saving fluorescent tubes/energy saving lights at all lighting points within the buildings</td>
<td>Proponent/Property manager</td>
<td>One-off</td>
<td>lighting</td>
</tr>
<tr>
<td>Monitor energy use during the operation of the project and set targets for efficient energy use</td>
<td>Proponent/Property manager</td>
<td>Continuous</td>
<td>500,000</td>
</tr>
<tr>
<td>Installation of Solar lighting/backup system</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Minimize water consumption and ensure more efficient and safe water use**

<table>
<thead>
<tr>
<th>Water consumption</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Promptly detect and repair water pipe and tank leaks</td>
<td>Proponent/Property manager</td>
<td>Continuous</td>
<td>40,000/month</td>
</tr>
<tr>
<td></td>
<td>Encourage tenants to conserve water</td>
<td></td>
<td></td>
<td>10,000/month</td>
</tr>
<tr>
<td></td>
<td>Ensure taps are not running when not in use</td>
<td>Proponent/Property manager</td>
<td>Continuous</td>
<td>20000/month</td>
</tr>
<tr>
<td></td>
<td>Install water conserving taps that turn-off automatically when water is not being used</td>
<td></td>
<td>One-off</td>
<td>10-40% higher than ordinary</td>
</tr>
<tr>
<td></td>
<td>Install a discharge meter at water outlets to determine and monitor total water usage</td>
<td>Proponent/Property manager</td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Rain Water harvesting and storage facilities</td>
<td></td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Empty septic tanks as necessary using a NEMA licenced exhausting company</td>
<td>Proponent/Property manager</td>
<td>As required</td>
<td>20,000</td>
</tr>
</tbody>
</table>

4. **First aid**
### 5. Fire protection

<table>
<thead>
<tr>
<th>Expected Negative Impact</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire outbreaks</td>
<td>Well stocked first aid kit which is easily available and accessible should be provided within the premises</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Firefighting equipment such as fire extinguishers, smoke detectors, should be provided at strategic locations such as each floors lobby, corridors</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Regular inspection and servicing of the equipment must be undertaken by a reputable service provider and records of such inspections maintained</td>
<td>Proponent/ Property manager</td>
<td>Every 3 months</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Provide emergency lighting on emergency staircase</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Signs such as “NO SMOKING” must be prominently displayed within the buildings where applicable</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td></td>
</tr>
</tbody>
</table>

### 6. Emergency preparedness and evacuation procedures

<table>
<thead>
<tr>
<th>Expected Negative Impact</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Design suitable documented emergency preparedness and evacuation procedures to be used during any emergency</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Provide measures to deal with emergencies and accidents including adequate first aid arrangements</td>
<td>Proponent/ Property manager</td>
<td>Continuous</td>
<td>5,000</td>
</tr>
</tbody>
</table>

### 7. Electrical Safety

<table>
<thead>
<tr>
<th>Expected Negative Impact</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Negative Impact</td>
<td>Recommended Mitigation Measures</td>
<td>Responsible Party</td>
<td>Time Frame</td>
<td>Cost (Ksh)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------</td>
<td>-------------------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Circuits must not be overloaded</td>
<td>Proponent/ Property manager</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution board switches must be clearly marked to indicate respective circuits</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There should be no live exposed connections</td>
<td>Proponent/ Property manager</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical fittings near all potential sources of ignition should be flame proof</td>
<td>Proponent/ Property manager</td>
<td>One-off</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Insecurity

<table>
<thead>
<tr>
<th>Expected Negative Impact</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure the general safety and security at all times by providing day and night security guards and adequate lighting within and around the premises.</td>
<td>Security Officer &amp; Police</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body-search the workers on entry, to avoid getting weapons on site, and leaving site to ensure nothing is stolen.</td>
<td>Security Officer</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure only authorized personnel get to the premises</td>
<td>Security Officer</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security alarms will be installed</td>
<td>Security Officer</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Minimization of health and safety impacts

<table>
<thead>
<tr>
<th>Expected Negative Impact</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement all necessary measures to ensure health and safety of the workers and the general public during operation of the project as stipulated in Occupational Health and Safety Act, 2007</td>
<td>Proponent/ Property manager</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11. Environmental monitoring of the project

An Initial Environmental Audit will be conducted in the first year of operation/occupation to confirm the efficacy and adequacy of the EMP and to propose a comprehensive operational Phase EMP in harmony with the buildings custom fittings. Thereafter, annual self-audits should be done and submitted to NEMA.

| Proponent, Firm of Experts and NEMA | Annually | - |

9.3 Decommissioning Phase

In addition to the mitigation measures provided in Tables 3 and 4, it is necessary to outline some basic mitigation measures that will be required to be undertaken once all operational activities of the proposed project have ceased. The necessary objectives, mitigation measures, allocation of responsibilities, time frames and costs pertaining to prevention, minimization and monitoring of all potential impacts associated with the decommissioning and closure phase of the proposed project are outlined in Table 5.
### Table 5: Environmental Management Plan for the Decommissioning Phase of the Proposed Project

<table>
<thead>
<tr>
<th>Expected Negative Impacts</th>
<th>Recommended Mitigation Measures</th>
<th>Responsible Party</th>
<th>Time Frame</th>
<th>Cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolition waste</td>
<td>All buildings, machinery, equipment, structures and partitions that will not be used for other purposes must be removed and recycled/reused as far as possible</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>All foundations must be removed and recycled, reused or disposed of at a licensed disposal site</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Where recycling/reuse of the machinery, equipment, implements, structures, partitions and other demolition waste is not possible, the materials should be taken to a licensed waste disposal site</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Donate reusable demolition waste to charitable organizations, individuals and institutions</td>
<td>Project Manager &amp; Contractor</td>
<td>One-off</td>
<td>0</td>
</tr>
</tbody>
</table>
CONCLUSION AND RECOMMENDATION

This EIA report has identified reasonable measures to mitigate the potential impacts arising from the construction and operation of the proposed New Voi Magistrate Court building and has assessed the significance of each of these impacts under both the pre- and post-migration of labour force scenarios. Professional experience, specialist knowledge, relevant literature and local knowledge of the area have all been used to assess the potential impacts associated with the proposed project.

The proposed court house will have a number of positive impacts including creation of employment, access to justice, local and national growth. The negative environmental impacts that will result from the establishment of the project include noise and dust pollution during both construction and decommissioning phases.

The proponent is advised that if new facilities such as an Incinerator are considered for installation, a separate new EIA must be conducted.

The proponent of the proposed project shall be committed to putting in place several measures to mitigate the negative environmental, safety, health and social impacts associated with the development cycle of the proposed development project. It is recommended that in addition to this commitment, the proponent shall focus on implementing the measures outlined in the EMP as well as adhering to all relevant national and international environmental, health and safety standards, policies and regulations that govern establishment and operation of such projects.

It is also recommended that the positive impacts that emanate from such activities shall be maximized as much as possible. It is expected that these measures will go a long way in ensuring the best possible environmental compliance and performance standards.

In conclusion, the Consultant finds the proposed project to be environmentally credible and socially friendly. Further, in view of the information collected and analysed, the consultant recommends that the proposed project is desirable for Voi Township and the County of Taita Taveta and therefore it requires licensing to allow for speedy implementation.
REFERENCES

- Kenya gazette supplement Acts Land Planning Act (Cap. 303). Government printer, Nairobi
- Kenya gazette supplement Acts The Occupational Safety and Health Act 2007, Government printer, Nairobi
- Kenya gazette supplement Acts Public Health Act (Cap. 242). Government printer, Nairobi
APPENDICES

Annex 1: Proof of Land Ownership (Letter of allotment)
Annex 2: Evidence of public consultations
Annex 3: Design Drawings of the proposed Project
Annex 4: Practicing Certificate of Lead expert
Annex 1: PROOF OF LAND OWNERSHIP

THE COUNTY GOVERNMENT OF TAITA TAVETA
MINISTRY OF LANDS & MINING
COUNTY PHYSICAL PLANNING OFFICE

95 DEC 2016

DIRECTOR OF PHYSICAL PLANNING
P.O. BOX 45205 - 00100
NAIROBI

RE: PART DEVELOPMENT PLAN (PDP) FOR PROPOSED EXTENSION OF VOI LAW COURTS - PDP/TTA/64/2013/02

Refer to your letter Ref. No. PPD/85/III/ (78) dated 20th June, 2016.

Enclosed are four print copies of the above PDP for your action after making the necessary corrections and comments from the relevant authorities.

[Signature]

For: COUNTY PHYSICAL PLANNING OFFICER
TAITA TAVETA COUNTY
MINISTRY OF LANDS AND PHYSICAL PLANNING

E-Mail: taitasurveyoffice@gmail.com

When replying please quote
REF: TT/CT/72 VOL VI/44

The County Physical Planner
Taita Taveta County

RE: TTA/PPD/64/2013/02-PART DEVELOPMENT PLAN (PDP) FOR PROPOSED EXTENSION OF VOI LAW COURTS

Your letter Ref: PPD/TTA/13/IV/II/17 dated 28th June 2016 refers.

From the survey point of view, this office recommends for the approval of the PDP for the law courts provided the buildings shown therein belongs to the Court

Sammy W. Juma
County Surveyor
Taita Taveta
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

MINISTRY OF LANDS, HOUSING AND URBAN DEVELOPMENT
DEPARTMENT OF PUBLIC WORKS

Telephone 0724698974
E.mail: cwotaitataveta@gmail.com
If calling or telephone ask

Ref. No: BD26/VOI/JDC/VOL2/30

COUNTY WORKS OFFICE
TAITA/TAVETA
P.O. Box 820-80300
VOI

6TH JULY, 2016

The County Physical Planning Officer
Ministry of lands and Mining
P.O.Box 1264
WUNDANYI.

RE: TTA/PPD/44/2013/02 PART DEVELOPMENT PLAN (PDP) FOR PROPOSED
EXTENSION OF VOI LAW COURTS

Your letter Ref: PPD/TTA/18//IV/II/17 dated 28th June,2016 refers.

This is to inform you that we have no objection to the part development plan for the proposed extension of the Voi Law Courts.

Arch. Samuel K. Kimanga
COUNTY WORKS OFFICER
TAITA/TAVETA

COUNTY WORKS OFFICER
TAITA/TAVETA
P.O. Box 820 VOI
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

THE NATIONAL LAND COMMISSION

THE SECRETARY
TAITA TAVETA COUNTY LAND
MANAGEMENT BOARD
P O Box 1066-80304
WUNDANYI

Ref: NLC/TT/ALLOCATIONS/VOL.1/29
DATE 11TH MAY, 2016

THE COUNTY PHYSICAL PLANNING OFFICER,
BOX 1264-80304
WUNDANYI

RE: PDP NO. TTA/64/2013/02 FOR PROPOSED EXTENSION OF VOI LAW COURTS- VOI MUNICIPALITY

I refer to your letter Ref. PPD/TTA/1/18/VI/11 dated 6th April, 2016 regarding the above subject matter.
The site falls on public land and was reserved for government offices.
Moreover, there is need to expand the law courts to meet the increasing demands for judicial services. The intended extension is therefore in order.

Consequently, this office has no adverse comments.

Patrick Waweru
Secretary, Taita Taveta CLMB
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

REPUBLIC OF KENYA
THE PRESIDENCY
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT
Deputy County Commissioner’s Office
Voi Sub County
P.O. Box 1 – 80300
Voi

When replying please quote:
Ref: P&W.16/Vol.I/20

4th August 2016

The County Physical Planning Officer
TAITA TAVETA COUNTY

RE: TTA/PFD/64/2013/02 – PART DEVELOPMENT PLAN (PDF) FOR PROPOSED EXTENSION OF VOI LAW COURTS

Reference to a letter dated 29th July 2016 from this office to your office copied to Principal Secretary, Ministry of Interior & Coordination of National Government and other offices on this issue.

Attached are the minutes of the meeting held on 26th July 2016 at Deputy County Commissioner’s Office Voi.

It was proposed that the Assistant County Commissioner Voi and the Administration Police be moved to the African Court while the African Court to be moved to the New High Court Complex which is about to be constructed.

From the above proposal therefore no (works) construction (development) is to be undertaken on the said Assistant County Commissioner’s Voi (office) land until an authority and approval is provided to this office from the Principal Secretary, Ministry of Interior & Coordination of National Government, P.O Box 30510-00100 – Nairobi.

JOSEPH MILE
DEPUTY COUNTY COMMISSIONER
VOI SUB COUNTY

C.C
The Principal Secretary
Ministry of Interior & Coordination
Of National Government
NAIROBI
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

Direcfor Land Administration
NATIONAL LAND COMMISSION
P.O. Box 141377
National 1
29th Aug 2016

Ref: Payment on Letter of Allotment

The scope subject material request

Reference to Notification Letter No. 209/63/11/14-51, we wish to make payment of amount Kshs. 687,745.20 charged No. 002504 against No 1 deposit No. and accept the conditions therein.

Thank you.

Yours faithfully,

[Signature]

Senior Principal Magistrate
Mau (Law) Courts
ESIA and ESMP for the proposed construction of a new magistrate court in Voi
LETTER OF ALLOTMENT

Ref. No. 209163/XIXA/51

Date: 22nd September, 2015

Dear Sir(s) Madam,

RE: EXISTING SITE FOR VOI LAW COURTS – TAITA TAVETA COUNTY.

I have the honor to inform you that the National Land Commission, on behalf of the County Government of Taita Taveta hereby offers you grant of the above plot shown edged red on the attached Plan No. 118 subject to your formal written acceptance of the following conditions and payment of charges as prescribed hereunder:

AREA: 0.15 hectares (approximately).

TERM: 99 years from the 01/11/2015...

STAND PREMIUM: NIL...Subject to adjustment on survey, but there is no claim for reduction in area on Survey.

ANNUAL RENT: 72/...there is no claim for reduction in area on Survey.

GENERAL: This Letter of Allotment is subject to, and the offer is made under the provisions of the Lands Act (No. 6 of 2012) and title shall be issued under the Land Registration Act (No. 3 of 2012) and SPECIAL CONDITIONS: See attached.

2. I should be glad to receive your acceptance of the attached conditions together with banker’s cheque for the amount as set out below within thirty (30) days of the postmark:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand Premium</td>
<td>24.00</td>
</tr>
<tr>
<td>Rent from 1/1/2015 to 31/12/2015</td>
<td>1,250.00</td>
</tr>
<tr>
<td>Conveyancing Fees</td>
<td>500.00</td>
</tr>
<tr>
<td>Registration Fees</td>
<td>100.00</td>
</tr>
<tr>
<td>Stamp Duty</td>
<td>5,000.00</td>
</tr>
<tr>
<td>Rates on demand Survey</td>
<td></td>
</tr>
<tr>
<td>Road and Road Drains</td>
<td></td>
</tr>
<tr>
<td>Others Approval fees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6,874.00</td>
</tr>
</tbody>
</table>

*delete as appropriate.

[Stamp and sign]

P.O.O

22 AUG 2016
If acceptance and payment respectively are not received within the said thirty (30) days from the date hereof the offer herein contained will be considered to have lapsed.

Kindly exercise the greatest care to ensure that any building or other works are contained within the boundaries of the plot for should you inadvertently overstep the aforesaid boundaries the cost of removal and reconstruction must be borne by you.

The issue of the Government lease will be undertaken as soon as circumstances permit.

Your full name(s) in BLOCK LETTERS should be given for the purpose of the grant which will be submitted later to you. The attached special conditions form part of the offer which should be accepted in writing. The Commission shall not accept any liability whatsoever in the event of prior commitment or otherwise.

I have the honour to be,
Sir(s) Madam,
Your obedient servant,

Authority: NLC Approval Vide
File No. 209163/XIXA
Minute No. 9/10/9/2015 of 10th September, 2015

Prepared by: ...ODIMA OTIENO

Serial No. LA/NLC 190/035

D.R. KITHUNKA
For: CHAIRMAN
NATIONAL LAND COMMISSION

TO: P/S Ministry of Lands, Housing and Urban Development
The Director of Survey, Nairobi.
The County Secretary…Taita Taveta...
The Director of Physical Planning, Nairobi
County Commissioner……Taita Taveta....
Rates Assistant,
The Accountant
O/C Records. )
Plan Records Officer. ) All to note.
Plot File. )
MINUTES OF MEETING HELD ON 26TH JULY 2016 AT THE DEPUTY COUNTY COMMISSIONER’S OFFICE REGARDING ASSISTANT COUNTY COMMISSIONER’S OFFICE VOI

MEMBERS PRESENT
1. Joseph L. Mite - Deputy County Commissioner - 0720694036
2. Justice Jacqueline Kamau – Judge of the High Court of Kenya- 0710220221
3. Augustine Mwamburi - DAPC Voi - 0710730470
4. Rukia Shakombo - DIV. Voi - 0724653281
5. Kenneth N. Karanja - Physical Planner- 0720932371
6. Mwamsindo Mwakisha- D/SCAP- 0728613202
7. Elena G. Nderitu- SPM - 0724020575
8. Isaac K. Mujesia- Assistant County Commissioner I- 0729443104
9. Abel Mwangemi- Senior Chief Voi- 0722906745

MIN.10/2016: CHAIRMAN’S REMARKS

The chairman called the meeting to order at 08.15 am with a word of prayer. He thanked the members for attending the meeting considering the seriousness of the matter.

MIN.11/2016: REGARDING THE CONFIRMATION OF PREVIOUS MINUTES

The Assistant County Commissioner I read the previous minutes of the two meetings which had been held earlier over the issue at hand. The minutes of the meeting held on 18th July 2016 were proposed by Hon. Justice Jacqueline Kamau and seconded by SPM Elena G. Nderitu.

The minutes of the meeting held on 28th July 2016 were proposed by Hon. Justice Jacqueline Kamau and seconded by Kenneth Karanja.

MIN.12/2016: WAY FORWARD

It was agreed that the entire team had to visit the site to enable them get a practical solution.

The Physical Planner gave details of the area FDP showing the boundaries of different National Government Departments. It was noted that the African Court had been constructed in the Deputy County Commissioner’s land.

It was also noted that the Radio Room and Administration Police Voi Division were still occupying the Assistant County Commissioner’s office.

A proposal was raised that the Assistant County Commissioner Voi and Administration Police be moved to the African Court while the African Court was to be moved to the new High Court complex which is about to be constructed.
However, a sequence of events had to be adhered to as follows:

- Construction work of the complex has to begin at the upper part of the High Court compound to enable the lower Courts to move in and pave way for the Assistant County Commissioner Voi, Radio Room and Administration Police to occupy the African Court.
- The Judiciary had to renovate the African Court in consultation with the public works in order to accommodate the Assistant County Commissioner Voi, Administration Police and Radio Room.
- The Judiciary has to also cater for the costs of transferring the Radio Room to the African Court.
- The perimeter wall surrounding the law courts has to be done last after the renovation of the African Court and moving in of Assistant County Commissioner Voi and the Administration Police.

The meeting ended at 9.00 am with a word of prayer by Kenneth Karanja.

Chairman:........................................

Date: 26/7/2016
Annex 3: Evidence of Public consultations
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JPIP) whose objective is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development? (Tick the most attractive advantages)
   - Finance
   - Location
   - Development
   - Security
   - Employment
   - Charges
   - More
   - Privacy

2. What do you view as the potential disadvantages?

3. What do you think should be done to minimize potential negative impacts?

4. Any other concerns?

Respondent Details (for purposes of Authenticity)

NAME: Samuel Makena

Residence or Place of work: Makeni

ID NO (Optional): 5243873

SIGNATURE:

DATE: 13/01/20...
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

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1. What do you view as the potential advantages of the proposed development? It will be a convenience for me because it is near and accessible...

2. What do you view as the potential disadvantages?
   - Noise...
   - It will congest the roads...

3. What do you think should be done to minimize potential negative impacts?
   - Teaching of water, electricity, and waste disposal...

4. Any other concerns...

Respondent Details (for purposes of Authenticity)

NAME: HARRY KISAGII TUNMBCA

Residence or Place of work: Location of the distance from the site: 1 km.

ID NO (Optional): 145151576

SIGNATURE: ______________________________

DATE: 19/12/2016
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

1. What do you view as the potential advantages of the proposed development? The potential advantages is that it will create jobs, development, and increase transport charges as it was previously.

2. What do you view as the potential disadvantages?
   - Pollution and Environmental plan

3. What do you think should be done to minimize potential negative impacts? We should work together with the person for the purpose of environmental impact.

4. Any other concerns?

Respondent Details (for purposes of Authenticity)

NAME: ____________________________ M. Rehaa

Residence or Place of work: Voi, Distance from the site: 1

ID NO (Optional): 1997, 1234

SIGNATURE: ____________________________

DATE: 19/12/2014

98
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JIP) whose objective is to improve the performance of the Judiciary in performing its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. Attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development?

The construction will benefit the residents by reducing waste collection costs and they will not be traveling far for the garbage collection.

2. What do you view as the potential disadvantages?

- They should not employ workers from outside counties.

3. What do you think should be done to minimize potential negative impacts?

- Noise from the machinery working
- Drainage

4. Any other concerns

- None

Respondent Details (for purposes of Authenticity)

NAME: Emmanuel Muthiga Selu

Residence or Place of work: Mauveni

ID NO (Optional): 18613943

SIGNATURE: 

DATE: 19/12/2016
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JPiP) whose objective is to improve the performance of the judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development?

2. What do you view as the potential disadvantages?

3. What do you think should be done to minimize potential negative impacts?

4. Any other concerns?

Respondent Details (for purposes of Authenticity)

NAME: NGELE WAKESHO

Residence or Place of work: ...

Distance from the site: ...

ID NO (Optional): ...

SIGNATURE: ...

DATE: ...
EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JPIP) whose objective is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. Attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development?...

2. What do you view as the potential disadvantages?

3. What do you think should be done to minimize potential negative impacts?...

4. Any other concerns...

Respondent Details (for purposes of Authenticity)

NAME: 

Residence or Place of work: Voi...

ID NO (Optional): 

SIGNATURE: 

DATE: 

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ESIA and ESMP for the proposed construction of a new magistrate court in Voi
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

**EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI**

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JPIP) whose objective is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. Attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development? 
   - [ ] Creation
   - [ ] [ ] [ ] [ ] [ ]

2. What do you view as the potential disadvantages? 
   - [ ] Increase in pollution
   - [ ] [ ] [ ] [ ]

3. What do you think should be done to minimize potential negative impacts? 
   - [ ] [ ] [ ] [ ] [ ]

4. Any other concerns? 
   - [ ] [ ] [ ] [ ] [ ]

**Respondent Details (for purposes of Authenticity)**

**NAME:** Felesina M. Mwambo

**Residence or Place of work:** [ ] [ ] [ ] [ ]

**Distance from the site:** 1 Km

**ID NO (Optional):** 30071914K

**SIGNATURE:** [ ] [ ] [ ] [ ]

**DATE:** 19-1-2014
EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JPIP) whose objective is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e., Attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development? (your view)
   Reduce movement and will help our town to grow

2. What do you view as the potential disadvantages?
   They should not build out side our courtyard

3. What do you think should be done to minimize potential negative impacts? (your view)
   Whoever is concerned should be designated

4. Any other concerns (your view)

Respondent Details (for purposes of Authenticity)

NAME: Gabriel Njangiria Kizaro

Residence or Place of work: Business Distance from the site: Zoom

ID NO (Optional): 6701418

SIGNATURE: ...

DATE: 19/12/2016
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JPIP) whose objective is to improve the performance of the judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. Attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development?

2. What do you view as the potential disadvantages?

3. What do you think should be done to minimize potential negative impacts?

4. Any other concerns

Respondent Details (for purposes of Authenticity)

NAME: JAMES M. MUGAMBA

Residence or Place of work: /

Distance from the site: 2 km

ID NO (Optional): 92199902

SIGNATURE: 

DATE: 20/8/12 19/17/01B

What the contractor should make sure that he has provided works with

preventive material, such as helmet, backs

cover.
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JIP) whose objective is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development?
   - ....

2. What do you view as the potential disadvantages?
   - ....

3. What do you think should be done to minimize potential negative impacts?
   - ....

4. Any other concerns?
   - ....

Respondent Details (for purposes of Authenticity)

NAME: Mariam Musale

Residence or Place of work: 

Distance from the site: 

ID NO (Optional): 

SIGNATURE: 

DATE: 

EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JPIP) whose objective is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. Attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development?
   - We can get jobs people who don't have job... go there
   - jobs they... can... work there

2. What do you view as the potential disadvantages?
   - They will make a lot of noise and dust...
   - in our inverness

3. What do you think should be done to minimize potential negative impacts?
   - Nothing every thing is good...

4. Any other concerns...
   - We are all happy for this... Thanks

Respondent Details (for purposes of Authenticity)

NAME: Judith Waki'o

Residence or Place of work: ... .......................... Distance from the site: Five km

ID NO (Optional): 222039 ........................................

SIGNATURE: ........................................................

DATE: 19/12/2016 .........................................
**EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI**

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1. What do you view as the potential advantages of the proposed development?

2. What do you view as the potential disadvantages?

3. What do you think should be done to minimize potential negative impacts?

4. Any other concerns?

**Respondent Details (for purposes of Authenticity)**

**NAME:** 

**Residence or Place of work:** 

**Distance from the site:** 

**ID NO (Optional):** 

**SIGNATURE:** 

**DATE:**
EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

The Judiciary of Kenya is proposing to construct a New Magistrate Court in Voi. The project is under the Judicial Performance Improvement Project (JPJP) whose objective is to improve the performance of the Judiciary to perform its services in the project areas in a more effective and accountable manner. Pursuant to provisions of the Environmental Management and Coordination Act (EMCA), 1999 and Environmental Impact Assessment and Audit Regulations 2003, it is a requirement that all projects with anticipated negative impacts to the environment should be subjected to Environmental Impact Assessments. This is aimed at promoting sustainable development i.e. Attainment of development while conserving our environment and resource base on which we depend. The purpose of this questionnaire is to involve neighboring community in the planning phase of the project by taking their views concerning the project into account to ensure that their right to a healthy and clean environment is not violated. In this regard, the following questionnaire has been provided to guide you. Kindly give your views by completing the same.

1. What do you view as the potential advantages of the proposed development? ...........................................

2. What do you view as the potential disadvantages?

3. What do you think should be done to minimize potential negative impacts? ..........................................

4. Any other concerns? .............................................

Respondent Details (for purposes of Authenticity)

NAME: .................................................................

Residence or Place of work: .................Distance from the site: ..........................................

ID NO (Optional): .............................................

SIGNATURE: ......................................................

DATE: ..............................................................
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

EIA QUESTIONNAIRE FOR THE PROPOSED CONSTRUCTION OF A NEW MAGISTRATE COURT IN VOI

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1. What do you view as the potential advantages of the proposed development?

2. What do you view as the potential disadvantages?

3. What do you think should be done to minimize potential negative impacts?

4. Any other concerns?

Respondent Details (for purposes of Authenticity)

NAME: Agnes Chisanga

Residence or Place of Work: Malindi. Distance from the site: 32 km.

ID NO (Optional): 33288849

SIGNATURE: ____________________________

DATE: 19-12-2016.
ESIA and ESMP for the proposed construction of a new magistrate court in Voi

Annex 3: Design Drawings of the proposed Project
Annex 4: NEMA PRACTISING LICENCE FOR THE LEAD EXPERT PLUS EVIDENCE OF RENEWAL FOR 2017

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)
The Environmental Management and Co-Ordination Act
ENVIRONMENTAL IMPACT ASSESSMENT/AUDIT (EIA/EA) PRACTICING LICENSE
License No.: NEMA/EIA/EPL/35/07
Application Reference No.: NEMA/EIA/EL/5050

Ms. Naomi Gitau
(individual or firm) of address
P.O Box 435 Githunguri

is licensed to practice in the capacity of a Lead Expert/Associate Expert/Firm of Experts registration number 562

in accordance with the provision of the Environmental Management and Coordination Act, 1999.

Issued Date: 3/30/2016  Expiry Date: 12/31/2016

Signature:

(Seal)
Director General
The National Environment Management Authority
ESIA and ESMP for the proposed construction of a new magistrate court in Voi