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ENVIRONMENTAL & SOCIAL MANAGEMENT PLAN:

FOR THE ALIGNMENT AND CONSTRUCTION OF PUBLIC ROADS AND THE
CONSTRUCTION OF INFRASTRUCTURE AS A RESULT OF TOWNSHIP
ESTABLISHMENT WITHIN STAMPRIET

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Title	Renewal of application for Environmental Clearance Certificate (ECC No. 3519) for the proposed Township Establishment on Portion 58 of Farm Stampried No. 132 (to be known as Soetdoringlaagte Extension 1) in the Hardap Region.
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Abbreviations and Acronyms

AoI	Area of Influence
CEO	Chief Executive Officer
DWN	Development Workshop Namibia
ECC	Environmental Clearance Certificate
EMP	Environmental Management Plan
E&S	Environmental and Social
E&S Manager	Environmental & Social Manager
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
H&S	Health and Safety
KP	Knight Piésold Consulting (Pty) Ltd
MEFT	Ministry of Environment, Forestry and Tourism
MURD	Ministry of Urban and Rural Development
PPE	Personal Protective Equipment
SDF	Shack Dwellers Federation
UDA	Urban Dynamics Africa

EXECUTIVE SUMMARY

The Soetdoringlaagte Extension 1 Township Establishment project in Stampriet aims to address housing needs, stimulate local economic development, and improve service delivery. The project includes the construction of roads, bulk infrastructure, and service installations within the township layout. The Environmental Management Plan (EMP) was developed to ensure that potential environmental and social impacts are effectively identified, mitigated, and monitored throughout planning, construction, and operational phases.

Key environmental and social risks include dust generation, noise and vibration, waste management, potential water contamination, and community health and safety concerns. The EMP provides mitigation measures for each risk area, ensuring compliance with national legislation and international standards, including the Namibian Environmental Management Act, the KfW Sustainability Guideline, and World Bank ESS.

The project also emphasises stakeholder engagement, local employment, and fair recruitment, supported by a grievance mechanism to address any community concerns. Detailed roles and responsibilities are defined for the Stampriet Village Council, Development Workshop Namibia (DWN), contractors, and other project partners.

Overall, the EMP aims to facilitate sustainable development while maximising socio-economic benefits for the community.

TABLE OF CONTENTS

1	INTRODUCTION	1
2	PROJECT DESCRIPTION.....	1
2.1	DESCRIPTION OF THE SITE	1
2.1.1	Location and Extent.....	1
2.1.2	Ownership And Site Status	2
2.1.3	Environmental Baseline.....	4
2.1.4	Topography and Drainage.....	4
2.1.5	Adjacent Land Use	4
2.1.6	Area of Influence	4
3	PROJECT ACTIVITIES.....	4
3.1	TYPE OF PROJECT	4
3.2	CURRENT AND PLANNED CONSTRUCTION ACTIVITIES	5
3.3	PROJECT PHASING AND SCALE.....	5
3.4	DEVELOPMENT STAKEHOLDERS.....	6
4	ROLES AND RESPONSIBILITIES	8
4.1	DEVELOPMENT WORKSHOP NAMIBIA (DWN).....	8
4.2	CONTRACTORS.....	8
4.3	OTHER ENTITIES.....	8
4.4	TRAINING	9
5	PROJECT STANDARDS AND LEGAL FRAMEWORK.....	9
5.1	NATIONAL AND LOCAL LEGISLATION & PERMIT REQUIREMENTS	9
5.2	INTERNATIONAL LENDER STANDARDS.....	12
5.2.1	KfW's Sustainability Guideline.....	12
5.2.2	World Bank Environmental and Social Framework (ESF)	12
5.2.3	Bank Environmental and Social Standards (ESS)	12
5.2.4	World Bank Environmental and Social Standards (2018).....	13
6	STAKEHOLDER ENGAGEMENT AND GRIEVANCE MECHANISM	13

7	REGISTER OF ENVIRONMENTAL AND SOCIAL ASPECTS.....	14
7.1	PLANNING AND DESIGN PHASE	14
8	ESMP MONITORING	14
8.1	A. GENERAL REQUIREMENTS FOR ESHS MANAGEMENT	15
8.2	B. PROTECTION OF THE ENVIRONMENT:	17
8.3	C. HEALTH AND SAFETY	22
8.4	D. LABOUR AND RELATIONS WITH LOCAL COMMUNITIES	25
9	CONCLUSION:	28

FIGURES

FIGURE 1: LOCALITY MAP	2
FIGURE 2: SOETDORINGLAAGTE EXTENSION 1 LAYOUT.....	3

LIST OF TABLES

TABLE 1: DEVELOPMENT STAKEHOLDERS	6
TABLE 2: NATIONAL AND ENVIRONMENTAL LEGISLATION	10
TABLE 3: INFRASTRUCTURE AND HAZARDOUS SUBSTANCES	10
TABLE 4: HEALTH, SAFETY, AND SOCIAL LEGISLATION	11
TABLE 5: OTHER RELEVANT FRAMEWORKS	11

ANNEXURES

Annexure 1: Code of Conduct

Annexure 2: Grievance Mechanism

Annexure 3: Health and Safety Plan

Annexure 4: Incident Reporting

Annexure 5: Draft Inspection Monitoring Table

Annexure 6: Locality Plan

1 INTRODUCTION

The Stampriet Village Council, in partnership with Development Workshop Namibia (DWN), is implementing the Soetdoringlaagte Extension 1 Land Delivery Project to service approximately 277 erven in Stampriet, Hardap Region. The project forms part of the Council's strategy to provide serviced land for low-income households through phased development.

The development involves the construction of bulk infrastructure including roads, water supply, electricity distribution, and stormwater management systems. Works are being carried out under DWN's Component 1: Land Delivery, with the main contractor [insert name] responsible for on-site implementation. Knight Piésold Consulting (Pty) Ltd serves as Implementation Consultant, supervising works and ensuring compliance with approved designs and technical standards.

Urban Dynamics Africa (UDA) has been appointed to prepare this EMP Renewal to ensure continued compliance with Namibia's Environmental Management Act, 2007 (Act No. 7 of 2007) and relevant international good practice during the ongoing construction phase. This renewal is required as the initial ECC period has lapsed while DWN continues to install infrastructure in phases, dependent on available funding.

2 PROJECT DESCRIPTION

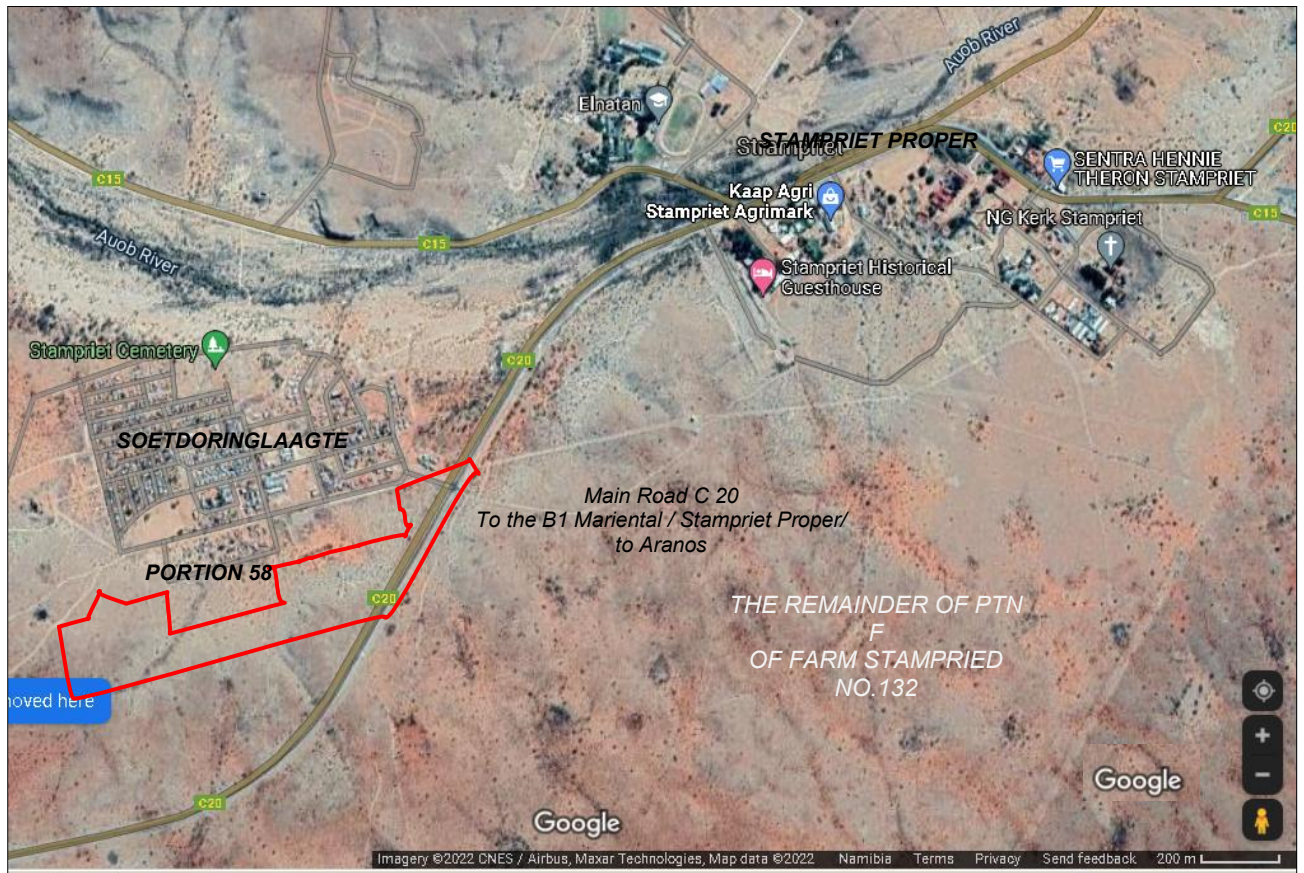
The Soetdoringlaagte Extension 1 project is a formally approved mixed-use township comprising Residential, Public Open Space, Business, and Local Authority erven. The renewal of this EMP applies only to the ongoing construction phase of bulk infrastructure; the operational phase will be managed by the Stampriet Village Council upon completion of servicing.

2.1 DESCRIPTION OF THE SITE

2.1.1 Location and Extent


The project is located on Portion 58 of the Remainder of Farm Stampriet No. 132 in Registration Division R, Hardap Region, north of the C20 road from Mariental to Aranos. Coordinates: - 24.351700 S, 18.392814 E. The development area covers approximately 17.1 hectares.

Figure 1: Locality Map



LEGEND:

— PORTION



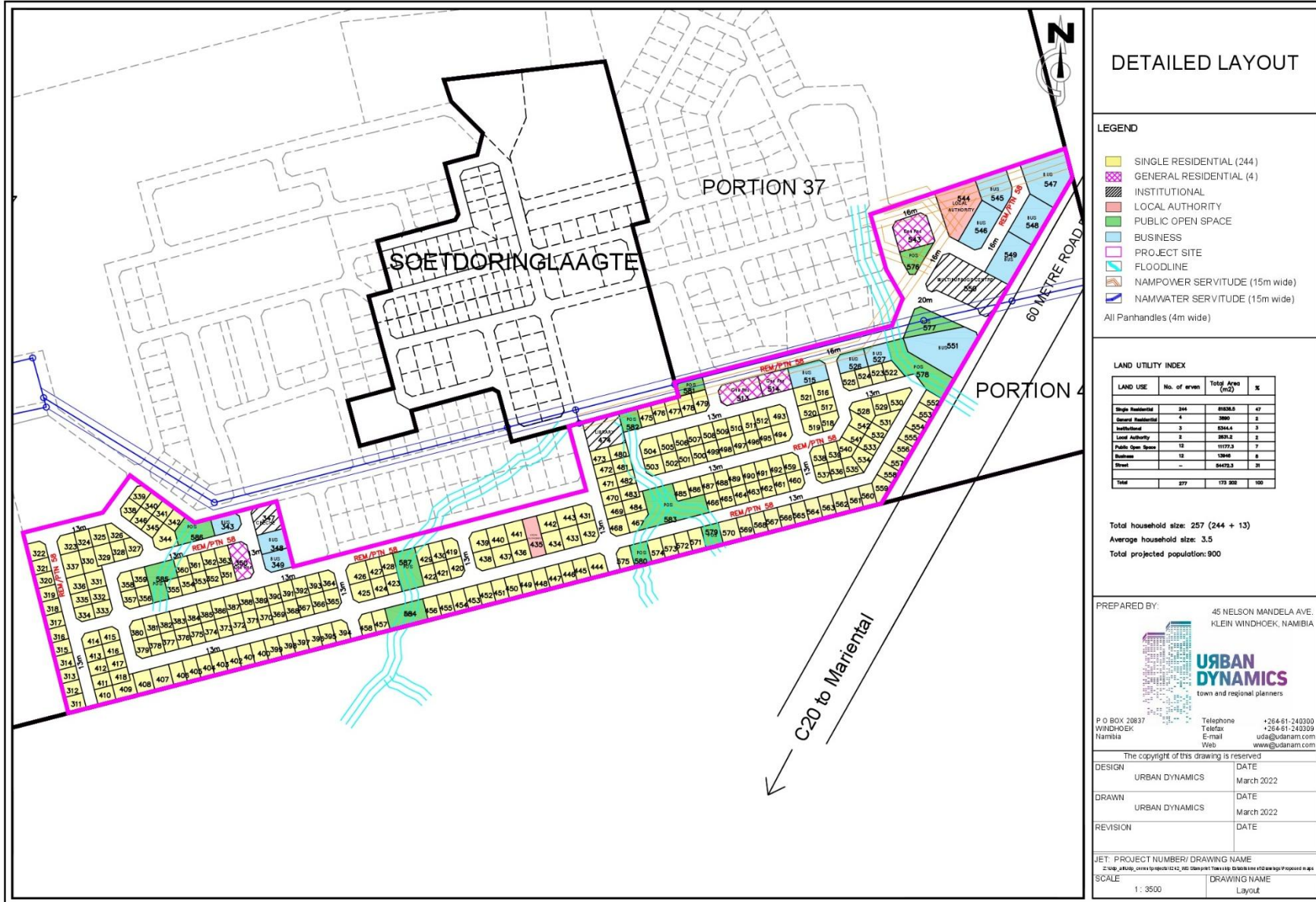
2.1.2 Ownership And Site Status

The Stampriet Village Council is the registered owner of the land. Several erven have been sold and are in the process of registration to private owners, while the remainder is retained by the Council for public facilities, roads, and bulk services. Existing developments include:

Thirteen (13) brick houses built by the Shack Dwellers Federation (SDF) and occupied.

- A Local Authority office and a community building.
- NamPower and NamWater service servitudes.
- Gravel and partially constructed roads providing access within the township.

Figure 2: Soetdoringlaagte Extension 1 Layout



2.1.3 Environmental Baseline

The area is semi-arid, with dwarf shrub savannah vegetation, average annual rainfall of 100–150 mm, high evaporation rates, and seasonal north-easterly winds. Vegetation is sparse due to prior clearance and existing developments. There are no known heritage sites, graves, or sensitive wildlife habitats within the site.

2.1.4 Topography and Drainage

The land slopes gradually east to west, intersected by five ephemeral streams that flows during heavy rainfall. A 5 m flood reserve on either side of the streams has been maintained to protect natural drainage and reduce flood risk.

2.1.5 Adjacent Land Use

To the north, the site borders Soetdoringlaagte Proper, a mixed-use residential area. The surrounding areas are predominantly undeveloped.

2.1.6 Area of Influence

The Area of Influence (AoI) includes all erven within Soetdoringlaagte Proper and Extension 1 and associated bulk service corridors. It also encompasses areas potentially affected by dust, noise, traffic, or other temporary construction impacts.

3 PROJECT ACTIVITIES

The Soetdoringlaagte Extension 1 development is a bulk infrastructure intervention aimed at unlocking serviced land for residential, business, institutional, and public purposes in Stampriet. It forms part of DWN's Component 1: Land Delivery, with servicing works implemented in phases as funding becomes available.

3.1 TYPE OF PROJECT

The project delivers core municipal services to the approved township, including:

- **Road infrastructure** – construction of gravel roads to urban service standards, with provision for future upgrading to bitumen.
- **Water supply reticulation** – including mainline connections, communal water points, and household-ready connections.
- **Electricity distribution** – overhead network installation, transformer bases, and provision for streetlighting.
- **Stormwater management** – utilising open channels and the existing ephemeral watercourse for drainage.

A full sewerage system is not included in this initial phase. Residents will use on-site sanitation solutions (e.g., septic tanks or dry systems). Servitude corridors for future sewer lines have been reserved in the layout for long-term upgrades.

3.2 CURRENT AND PLANNED CONSTRUCTION ACTIVITIES

The site has already undergone partial servicing. Completed works include some gravel access roads, initial water reticulation, and early-stage electrical connections. Ongoing and planned activities include:

- **Site clearance and preparation** – light bush removal, grading, and removal of informal waste.
- **Earthworks** – excavation, levelling, trenching, and backfilling.
- **Road construction** – further gravel road installation and compaction, linking to the existing Stampriet road network.
- **Water infrastructure** – extension of mainlines, installation of communal points, and individual erf connections.
- **Electrical infrastructure** – installation of poles, overhead cables, and transformer bases.
- **Stormwater works** – construction of culverts and channels to protect the existing drainage corridor.
- **Safety and signage** – installation of road signage, basic fencing, and temporary traffic control measures.

Construction uses heavy equipment including excavators, graders, tipper trucks, compactors, and water trucks.

3.3 PROJECT PHASING AND SCALE

Implementation is phased based on funding and technical priorities. The current phase focuses on completing Soetdoringlaagte Extension 1 servicing before extending works to future phases.

- Township layout was prepared by Urban Dynamics Africa (UDA) and approved by the Ministry of Urban and Rural Development (MURD).
- Cadastral surveying was carried out by Strydom & Associates Land Surveyors.
- Engineering designs were completed by Knight Piésold Consulting (KP), who also supervise and certify construction works.

3.4 DEVELOPMENT STAKEHOLDERS

The Table 1 summarise the main stakeholders involved in the project, including their roles, engagement activities, and an indicative timeline for involvement.

Table 1: Development Stakeholders

STAKEHOLDER	ROLE / RESPONSIBILITY	ENGAGEMENT OR KEY ACTIONS	INDICATIVE TIMELINE
STAMPRIET VILLAGE COUNCIL	Overall authority for township establishment, planning coordination, and approvals.	Planning and arranging development agreement with DWN; Approvals by CEO and Council resolutions; Technical arrangements with service providers and Engineering Department; Review and consent before MURD approval; Ongoing oversight and community liaison.	Planning to project handover.
DEVELOPMENT WORKSHOP NAMIBIA (DWN)	Implementation consultant, technical coordinator, and project facilitator.	Project conceptual planning support and strategy; Technical coordination with UDA, Knight Piésold, and surveyors; Stakeholder engagement and community consultation facilitation; Preparation and implementation of EMP and ESHS measures; On-site supervision and construction monitoring; Capacity building and training for contractors and local stakeholders.	Entire project lifecycle.
FUNDING & DEVELOPMENT PARTNERS	Provide financial and technical support.	Support for planning, design, and implementation.	All phases.
LOCAL COMMUNITIES AND RESIDENTS	Primary beneficiaries and directly affected stakeholders.	Public consultations, feedback meetings, grievance mechanism participation.	Throughout the project lifecycle.

STAKEHOLDER	ROLE / RESPONSIBILITY	ENGAGEMENT OR KEY ACTIONS	INDICATIVE TIMELINE
URBAN DYNAMICS AFRICA (UDA)	Township layout design, statutory planning application, and consultation.	Prepare and submit layout to Village Council for initial approval; Submit final layout to MURD for statutory approval; Prepare Screening Report and ECC application to MEFT; Facilitate community engagement during planning and approval stages.	Planning phase.
KNIGHT PIÉSOLD (KP) CONSULTING (KP)	Engineering design, monitoring and sign-off on construction activities.	Technical design, construction monitoring, and quality assurance.	Planning to construction phase.
MINISTRY OF URBAN AND RURAL DEVELOPMENT (MURD)	Approves township establishment application.	Review and statutory final approval.	During layout application stage.
MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM (MEFT)	Approves ECC and ensures environmental compliance.	ECC application review and decision-making.	Pre-construction phase.
STRYDOM & ASSOCIATES (LAND SURVEYOR)	Aerial photography, cadastral surveys, and final layout confirmation.	Provide aerial mapping for planning and design; Conduct cadastral surveys and confirm layout boundaries.	Planning stage.
CONVEYANCERS	Legal registration of townships and erven.	Registration of legal documents and follow-ups.	Post-approval phase.
CONTRACTORS (TBC)	Construction and infrastructure implementation.	EMP compliance, on-site environmental and social management.	Construction phase.

3.5 ROLES AND RESPONSIBILITIES

This section outlines the roles and responsibilities of key stakeholders involved in implementing and managing the EMP during the construction phase of the Township Establishment project. The EMP ensures compliance with environmental legislation and best practices while managing project-related environmental impacts. Successful implementation requires coordination between DWN, contractors, and other entities.

3.6 DEVELOPMENT WORKSHOP NAMIBIA (DWN)

DWN, as Implementation Consultant, is responsible for overall environmental management during construction, including:

- Ensuring compliance with national environmental legislation and EMP mitigation measures.
- Ensuring design and planning comply with national and international best practices.
- Monitoring contractor and subcontractor performance.
- Serving as the primary contact for stakeholder consultation and feedback.
- Providing training to construction workers on environmental management and EMP implementation.

The Programme Manager holds ultimate responsibility for EMP implementation, while the Health and Safety (E&S) Manager supports contractors and guides EMP adherence.

3.7 CONTRACTORS

The Contractor (name to be inserted) must fulfil EMP commitments and ensure subcontractors do the same. Responsibilities include:

- Conducting monitoring and site audits to verify EMP implementation, reporting findings to the Project Environmental Advisor (PEA).
- Promptly reporting environmental issues or incidents to DWN.
- Supporting DWN in training construction personnel on environmental management.

3.8 OTHER ENTITIES

Knight Piésold Consulting (Pty) Ltd (KP) will also undertake periodic site inspections during construction to monitor compliance with approved engineering designs and environmental standards. In addition, KP will provide sign-off on critical construction milestones to ensure that works are implemented according to technical and safety requirements.

The Stampriet Village Council will be informed about the EMP and involved as appropriate. Additional

roles for relevant authorities will be defined, as necessary.

3.9 TRAINING

DWN will provide Induction Training for all employees and contractors before construction begins, and for new personnel joining later. Training covers:

- EMP mitigation measures and on-site responsibilities.
- Environmental sensitivities of the project area.
- Occupational Health and Safety (H&S) rules (e.g., PPE, conduct, first aid).
- The Grievance Mechanism and workers' rights
- Handling public enquiries and grievances.
- Code of Conduct for interactions with nearby residents and managing unauthorised visitors.
- Procedures for unforeseen incidents or emergencies.
- Roles and responsibilities regarding environmental management.

DWN will keep training records and repeat sessions as needed. DWN and the contractor will prepare a detailed training plan including refresher courses.

4 PROJECT STANDARDS AND LEGAL FRAMEWORK

The development has undergone a Scoping assessment to identify potential environmental and social (E&S) risks associated with the construction phase. To ensure responsible and sustainable project delivery, it will comply with a comprehensive set of national, local, and international standards, guidelines, and regulatory requirements, which apply throughout both the construction and operational phases.

Adherence to this framework ensures the project meets Namibia's legal obligations, aligns with recognised international good practice, supports sustainable development objectives, and minimises adverse impacts on the environment and local communities.

4.1 NATIONAL AND LOCAL LEGISLATION & PERMIT REQUIREMENTS

The development will comply with all relevant Namibian national legislation and local planning instruments. These frameworks govern a wide range of aspects, including environmental protection, infrastructure development, occupational health and safety, social safeguards, land use planning, and the conservation of heritage resources. Tables 2 to 5 summarise the key legislative provisions and their implications for the project.

Table 2: National and Environmental Legislation

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
NATIONAL	Constitution of the Republic of Namibia (Amendment Act 34/1998)	Guarantees property rights (Art. 16(1)) and mandates sustainable ecosystem management (Art. 95(i))	Supports land ownership and mandates environmental sustainability.
ENVIRONMENTAL	Environmental Management Act, 7 of 2007	Requires Environmental Impact Assessments (Sec 27); mandates public participation (Sec 2(b-c))	Obtain Environmental Clearance Certificate (ECC) and hold consultations.
	Environmental Impact Assessment Regulations GN 57/2007	Lists activities requiring environmental clearance including roads and pipelines (Sec 10(1))	ECC and consultation processes are compulsory.
	Environmental Management Act, 7 of 2007	Regulates noise, dust control, and land rehabilitation.	Construction must mitigate noise, dust, and restore land.
	Environmental Impact Assessment Regulations GN 57/2007	Requires ECC for activities including construction affecting watercourses, canals, and wetlands (Sec. 10(1)(a)(b))	Must assess and mitigate impacts on watercourses; obtain ECC before commencement of such activities.
	Water Act, 54 of 1956	Regulates abstraction, diversion, and use of water resources.	Obtain water use permits for abstraction, diversion, or discharge; comply with water protection measures.

Table 3: Infrastructure and Hazardous Substances

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
INFRASTRUCTURE	EIA Regulations GN 57/2007	Covers pipelines and roads (Sec 10.1(a), 10.1(b))	ECC required for pipeline and road works.
HAZARDOUS SUBSTANCES	EIA Regulations GN 57/2007	Regulates hazardous materials handling and waste permits (Sec 9.1, 9.2)	Ensure safe storage, handling, and disposal of hazardous substances.

Table 4: Health, Safety, and Social Legislation

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
HEALTH & SAFETY	Labour Act, 11 of 2007	Regulates worker rights and prohibits child/forced labour.	Comply with labour laws; promote fair employment.
	Public and Environmental Health Act, 2015	Covers health standards, waste management, and water quality.	Maintain health and safety compliance.
	Health and Safety Regulations, 2011	Requires workplace safety measures, PPE, and accident prevention.	Implement occupational health and safety measures.

Table 5: Other Relevant Frameworks

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
FORESTRY	Forestry Act, 12 of 2001; Forest Regulations GN 170/2015	Protects red list trees; requires permits for removal.	Obtain permits before tree removal; implement safeguards.
SOIL CONSERVATION	Soil Conservation Act, 76 of 1969	Regulates erosion prevention and soil protection.	Apply erosion control measures.
WASTE MANAGEMENT	Waste Management and Pollution Control Act	Regulates disposal of solid and hazardous waste.	Comply with waste disposal and effluent discharge standards.
CHILD LABOUR	Labour Act, 11 of 2007; Child Care and Protection Act, 2015	Prohibits child labour; sets employment age limits.	Enforce zero tolerance on child labour.
WORKER RIGHTS	ILO Conventions (29, 87, 98, 100, 111)	Prohibits forced labour; guarantees union rights and equal pay.	Ensure fair and non-discriminatory working conditions.
ARCHAEOLOGY	National Heritage Act, 27 of 2004; Burial Place Ordinance	Protects heritage sites and graves.	Report findings; follow legal procedures for heritage sites.

4.2 INTERNATIONAL LENDER STANDARDS

The programme is funded by official development assistance from the Government of the Federal Republic of Germany through the Kreditanstalt für Wiederaufbau (KfW) Development Bank. As such, it must comply with international environmental and social standards required by KfW, which align with the World Bank's Environmental and Social Standards (ESS).

4.2.1 KfW's Sustainability Guideline

All financial cooperation measures financed by KfW are subject to assessment and implementation under the KfW Sustainability Guideline (2021), which sets out principles and procedures for evaluating environmental, social, and climate impacts. This guideline requires compliance with:

- Relevant national legislation and legal requirements;
- The ESS of the World Bank Group;
- World Bank's general and sector-specific Environmental, Health and Safety (EHS) Guidelines;
- ILO core labour standards;
- Human Rights Guidelines of the BMZ.

4.2.2 World Bank Environmental and Social Framework (ESF)

The ESF provides a comprehensive framework for managing environmental and social risks, enhancing transparency, accountability, and sustainable development outcomes through stakeholder engagement. While KfW requires only the ESS to be directly applied, the ESF underpins the broader approach to sustainable project delivery.

4.2.3 Bank Environmental and Social Standards (ESS)

The ESS consists of ten standards designed to:

- Support Borrowers in achieving good international practice for environmental and social sustainability;
- Help meet national and international environmental and social obligations;
- Enhance non-discrimination, transparency, participation, and accountability;
- Improve project sustainability through continuous stakeholder engagement.

A review will be conducted for each project intervention to confirm the relevance and applicability of each ESS based on specific site conditions, scope, and locality.

4.2.4 World Bank Environmental and Social Standards (2018)

The World Bank's ESS consists of ten standards as summarised below. Application of the standards intends to: (a) support Borrowers in achieving good international practice relating to environmental and social sustainability; (b) assist Borrowers in fulfilling their national and international environmental and social obligations; (c) enhance non-discrimination, transparency, participation, accountability, and governance; and (d) enhance the sustainable development outcomes of projects through ongoing stakeholder engagement.

KfW's Sustainability Guideline (2021) requires the application of the relevant ESS. The likely applicability of each standard to the DWN Programme is indicated. A review must be undertaken for each intervention to confirm (based on scope, locality, and site specifics) the applicability of the ESS.

5 STAKEHOLDER ENGAGEMENT AND GRIEVANCE MECHANISM

The Stampriet Village Council, Development Workshop Namibia (DWN), and Urban Dynamics Africa (UDA) led stakeholder engagement for the Soetdoringlaagte Extension 1 Township Establishment and Scoping Assessment process.

Engagement activities included:

- Initial scoping discussions with Stampriet Village Council (Property Management, Engineering, CEO's Office) to confirm development priorities and servicing requirements.
- Technical planning sessions with Knight Piésold Consulting (Pty) Ltd for engineering designs of bulk services.
- Public consultation meetings facilitated by UDA, DWN, and the Village Council during the township layout approval and Scoping Assessment for the Environmental Clearance Certificate (ECC).
- Ongoing communication with the Ministry of Urban and Rural Development (MURD) during the township application and approval process.
- ECC application submission to the Ministry of Environment, Forestry and Tourism (MEFT) and review feedback.
- Coordination with Strydom & Associates Land Surveyors for cadastral surveying and layout confirmation.

A formal **Grievance Mechanism** is in place to allow community members, workers, and other interested parties to raise concerns or provide feedback throughout the project lifecycle. The process includes:

- A dedicated contact person at DWN to receive and record grievances.
- Grievance forms available at the Stampriet Village Council offices and DWN site office.
- Public notices explaining how to submit complaints or suggestions.

- A standard response time of 20 working days, with actions documented and feedback provided to the complainant.
- Periodic public updates on resolved grievances to maintain transparency.

Stakeholder engagement and grievance handling will continue during construction and into the operational phase to ensure ongoing communication and community support.

6 REGISTER OF ENVIRONMENTAL AND SOCIAL ASPECTS

This EMP renewal identifies the environmental and social aspects of the Soetdoringlaagte Extension 1 bulk infrastructure project and sets out mitigation measures to manage potential impacts. The aspects and controls are based on the approved Environmental Scoping Report (Urban Dynamics Africa, 2022).

6.1 PLANNING AND DESIGN PHASE

Key risks and impacts identified during planning include:

- **Dust generation** – mitigated through water spraying, limiting vehicle speeds, and covering stockpiles.
- **Noise and vibration** – managed by equipment maintenance, restricted working hours, and PPE use.
- **Solid and hazardous waste** – controlled through segregation, secure on-site storage, and disposal at licensed facilities.
- **Water contamination risk** – reduced through designated refuelling/maintenance areas and spill prevention measures.
- **Occupational health and safety** – ensured by worker induction, PPE provision, and on-site first aid facilities.
- **Community health and safety** – protected through clear signage, restricted site access, and ongoing public communication.

Detailed mitigation measures for all project phases are presented in the Management and Mitigation Tables (Section 8). Annexes 2–3 contain the Code of Conduct, Grievance Mechanism, Health and Safety Plan, and Incident Reporting forms.

7 ESMP MONITORING

Monitoring will be continuous to ensure that mitigation measures are implemented effectively and adjusted where necessary. DWN and the appointed contractors will conduct regular site inspections, maintain environmental compliance records, and report progress to the Stampriet Village Council and funding partners.

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.1 A. GENERAL REQUIREMENTS FOR ESHS MANAGEMENT				
<u>A1. Responsibilities and Liabilities</u>	Ensure that all workers, suppliers and possible subcontractors are familiar and comply with the ESHS requirements and specifications of this EMP.	Induction training performed and recorded. Contracts with subcontractors and suppliers	Contractor/DWN	Review of training records Review of Contracts to ensure that Project requirements are included
	Adjust this ESMP template to be project specific, define the frequency of the monitoring procedure and share it with DWN and KfW. Identify if further Management Plans are required and prepare these.	Final Project-specific ESMP Requisite Management Plans	Contractor/DWN	Review final ESMP and Management Plans prior to commencement of work 'No objection' from KfW for final ESMP
<u>A2. Resources allocated to ESHS Management</u>	Assign ESHS responsible staff ¹ and define the requirements and responsibilities. Define person(s) responsible for contact with stakeholders (Relations officer or Community Liaison officer)	Document assigned responsibilities. Inform the relevant authorities/stakeholders about the ESHS responsible staff.	Contractor/DWN	Review assignment of ESHS responsibilities. Records of notification to stakeholders

¹ Note: in many legislations an ESHS manager is required on sites employing 50 workers or more

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.1 A. GENERAL REQUIREMENTS FOR ESHS MANAGEMENT				
A3. Reporting	Reporting of progress and incidents, accidents, observations, near misses.	Final Project-specific ESMP (note monitoring and reporting requirements) Records of ESHS and incident reporting	Contractor/DWN	Review E&S Monitoring Checklist E&S audits
A4. Code of Conduct	Establish a Code of Conduct taking into consideration legislation, safety rules, substance abuse, environmental sensitivity, communicable diseases, gender issues (sexual harassment), respect for local beliefs and customs, community interactions etc.	Code of Conduct in place and rules shared with personnel (see Annex A)	Contractor/DWN	Review of Code of Conduct induction records Review of reported punishable or misconduct behaviour Review of grievance records
A5. ESHS Training	Provide induction, training, and awareness to the workforce regarding ESHS risks and mitigation measures (including indirect workers) tailored to Project scope.	Training performed and recorded	Contractor/ DWN	Review of ESHS induction and training records

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.2 B. PROTECTION OF THE ENVIRONMENT:				
B1. Protection of adjacent areas	Ensure to keep the buffer distances from sensitive urban services and buildings (school, water supply for populations (borehole)); any housing.	Marking the borders of works site boundaries in line with given limits and usage of warning signs	Contractor/DWN	Site inspection prior to commencement of activities.
	Ensure that work site boundaries and limits are in accordance with plans agreed upon in advance. All construction activities should be carried out within boundaries.	Marking the borders of works site boundaries and usage of warning signs	Contractor/DWN	Site inspection prior to commencement of activities.
	Ensure that means of protection are in place to avoid or minimise adverse effects on vegetation, soils, groundwater and surface water, biodiversity, natural drainage and the water quality in areas within the works area. Construction methods to minimise impacts to the extent possible.	No impacts identified in the adjacent environment	Contractor/DWN	Site assessment prior to site selection. Site inspection prior to commencement of activities. Regular monitoring of adjacent natural resources.
	Protect excavation works with cut off ditches to prevent water from entering excavations.	No water entering excavations	Contractor/DWN	Site inspection
	Minimise visual impacts by good house-keeping and erecting screens if required.	Visual inspection and comparison with adjacent undisturbed areas.	Contractor /DWN	Site inspection Review of grievance records
	After construction, form reshaped land so that it is inherently stable, adequately drained and suitable for the desired long-term land use and allows natural regeneration of vegetation.	Visual inspection and comparison with adjacent undisturbed areas.	Contractor /DWN	Site inspection at completion

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.2 B. PROTECTION OF THE ENVIRONMENT:				
B2. Selection of borrow areas, backfill material stockpile sites and access road	Select areas to be excavated, backfill material stockpile locations and access roads if applicable to the project.	Designated areas selected	Contractor /DWN	Once during site selection
	Locate stockpile areas in areas where trees can act as buffers to prevent dust pollution	Designated areas selected	Contractor /DWN	Once during site selection
	Deposit any excess material in areas approved by local authorities	Designated areas selected	Contractor /DWN	Once during site selection
	Locate disposal site on low value land.	Designated areas selected	Contractor /DWN	Once during site selection
B3. Pollution prevention	Ensure all works carried out minimise pollution risk (e.g. liquid effluents, air emissions, noise and vibration management, vehicle and equipment maintenance and selection, fuel, oil and chemical storage and handling) including the whole duration of the Project.	Ensure that potential pollutants are not stored and handled within 50 m of sensitive receptors (particularly boreholes).	Contractor /DWN	Regular site inspection Review of grievance records
B4. Effluents	Ensure appropriate containment and storage of construction wastewater, including sanitary water. No untreated effluent is discharged.	No untreated wastewater discharge	Contractor/DWN	Regular site inspection Review of grievance records
B5. Emissions and dust	Best practice to ensure minimisation of dust emissions (e.g. proper stockpiling, watering etc.) during dry and windy conditions and transportation.	Watering conducted, no dust emissions are observed, no workers' grievances	Contractor /DWN	Regular site inspection Review of grievance records

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.2 B. PROTECTION OF THE ENVIRONMENT:				
	Ensure speed limits on site and when passing local receptor areas. Sensitise drivers.	Speed signs installed Training performed and recorded Accident/incident reports	Contractor/DWN	Random site inspection Review of grievance records Review of accident/incident records Review of training records
B6. Noise	Avoid operations and vehicle movements at night.	No work conducted between 17:00 pm and 8:00 am	Contractor/ DWN	Random site inspection Review of grievance records Review of accident/incident records Review of training records
	Locate stationary equipment (such as power generators) as far as possible from nearby receptors (e.g. worker resting areas, populated areas and environmentally sensitive areas).	Distances between equipment and receptors are kept	Contractor/ DWN	Review of grievance records Monitor noise levels in case of complaints
B7. Waste Management	Identify waste management facilities and waste management contractors. Ensure disposal through waste contractors licensed for treatment/removal/recycling of each of the waste types.	Waste management through licensed contractors, if feasible Waste management contracts Waste transfer notes	Contractor/ DWN	Inspect waste management facilities Proof of contractors' certifications Review of waste transfer records
	Ensure that all wastes produced are properly collected, segregated, stored, transported and treated	Waste collection areas existent, waste inventories Waste transfer notes	Contractor/ DWN	Regular site inspection Review of waste inventories Review of waste transfer records

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.2 B. PROTECTION OF THE ENVIRONMENT:				
	Minimise the waste production to the extent possible.	Records of waste production are kept Waste Management Plan Training performed and recorded	Contractor/ DWN	Monitor (e.g. monthly) the amount of waste produced Review of training records
	Document all waste related operations (type of wastes, quantities produced etc.).	Storage, transport and treatment of waste is documented Waste transfer notes Waste inventories	Contractor/ DWN	Review of waste transfer records Review of waste inventories
	Appropriate and safe storage of fuels, construction materials, wastes and any materials that can cause spills (e.g. batteries from energy generators).	Safe storage of materials Spill response procedure Spill response and remediation equipment in place.	Contractor/ DWN	Regular site inspection
B8. Vegetation clearing	Limit vegetation clearing to areas within the site boundary where it is strictly necessary.	Vegetation clearing minimal Marking the borders of works site boundaries	Contractor/ DWN	Site inspection prior to commencement of activities.
	Ensure that no chemicals/pesticides are used, burning of vegetation is restricted etc. Do not clear vegetation more than two months in advance of operations	No use of fires or chemicals on site Marking the borders of works site boundaries Usage of warning signs	Contractor/ DWN	Site inspection prior to commencement of activities. Site inspection during site clearance

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.2 B. PROTECTION OF THE ENVIRONMENT:				
B9. Site rehabilitation	Ensure that rehabilitated areas don't pose health and safety risks (such as holes, ponds).	Reinstatement completed	Contractor/ DWN	Site inspection at completion Inspection after heavy rainfalls
	Reinstatement of construction working area to the best possible after construction activities are completed.	Reinstatement completed	Contractor/ DWN	Site inspection at completion Inspection after heavy rainfalls
	Rehabilitate borrow areas, backfill material stockpile sites and access roads, where applicable.	Rehabilitation completed	Contractor/ DWN	Site inspection at completion
B11. Removal of sand deposit	Remove sand deposits obstructing culverts before rainy season	Site clearance reports; photographic evidence	Stampriet Village Council/ Contractor	Pre-rainy season inspection reports

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.3 C. HEALTH AND SAFETY				
C1. Health and Safety Plan	Develop a Health and Safety Plan to provide for a safe and healthy work environment, taking into account the ESHS impacts and risks level of the works.	H&S Plan in place	Contractor/ DWN	Review of H&S Plan
C2. Accident reporting	Ensure all H&S related incidents (e.g. observations, accidents) on site are recorded and followed up properly. (See Annex 4 – Incident Reporting)	Incident recording process in place	Contractor/ DWN	Check incident/accident records
C3. Personal protective equipment	Ensure the provision of Personal Protective Equipment (PPE) for workers (hardhats, masks, safety glasses, safety boots etc).	PPE used by everyone on-site Training performed and recorded	Contractor/Site Manager	Random site inspection Review training records
C4. Emergency scenarios prevention	Ensure immediate cleaning of any spills and remediation of contaminated areas after construction.	Workers trained Emergency Response Team (ERT) is in place	Contractor/ DWN	Random site inspection after spill events One-time inspection after construction Review of training records Review of ERT

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.3 C. HEALTH AND SAFETY				
	Provide necessary prevention equipment and teams on site in line with applicable regulations to respond to emergency scenarios e.g. fire, explosion, floods, natural hazards etc.	Prevention equipment and team is in place Training performed and recorded	Contractor/ DWN	Regular site inspection Review list of equipment Review of ERT Review of training records
	Maintain high standard in housekeeping on site. Construction materials and equipment should be stored properly.	Visual verification of good housekeeping on-site	Contractor/ DWN	Random site inspection
C5. First-aid	Ensure minimum first aid provisions on site (suitably stocked first-aid kits; a person, respectively an adequate number of first-aid helpers and ensure that staff and workers are informed about first-aid arrangements)	Suitable first aid kits on site Ensure the presence of first aid helpers in all shifts First aid certificates	Contractor/ DWN	Regular monitoring of first aid kits Review of first aider certificates Review of number of first aiders required by local legislation
C6. Access to health care	Ensure the workforce has access to primary healthcare on site, providing prescriptions.	Healthcare available on site Medical surveillance records	Contractor/ DWN	Random site inspection Review of grievance records Review of medical records (in case not confidential)
	In case more than 35 workers are present on site, ensure that a hospital, medical clinic or a health centre can be reached within a period of 45 minutes.	Medical centres in the proximity of the site.	Contractor/ DWN	Medical centres in the proximity of the site identified once prior the commencement of works

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.3 C. HEALTH AND SAFETY				
C7. Hygiene, accommodation and food	Ensure provision of Health and Safety (H&S) and hygienic and sanitary facilities at the site, including shaded welfare areas, bathrooms, changing rooms and potable water. Ensure toilets and changing rooms are separated between male and female employees.	Appropriate H&S and sanitary facilities provided at site	Contractor/ DWN	Campsite inspection prior to accommodation of the workers. Regular inspection Review of grievance records
	Ensure the provision of adequate space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, fire and disease-carrying animals, adequate sanitary and washing facilities, adequate lighting, and basic medical services, in accordance with all applicable health and safety regulations and norms.	Appropriate conditions for workers on site	Contractor/ DWN	Campsite inspection prior to accommodation of the workers. Regular inspection Review of grievance records
	Report any occurrence of any communicable diseases amongst the workforce (STD, HIV/AIDS, TB, malaria and Hepatitis B and C). Sensitise workers.	Communicable Diseases Register Training performed and recorded	Contractor/ DWN	Review of diseases register and disease prevention programme if available. Review of training records

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.4 D. LABOUR AND RELATIONS WITH LOCAL COMMUNITIES				
D1. Labour conditions	Ensure minimum legal labour standards as per ILO regulations (child/forced labour, sexual assault, no discrimination, equal opportunities, working hours, minimum wages) are met.	Grievance Mechanism Records, Training performed and recorded	Contractor/ DWN	Review of Inspection reports, Review of grievance records Review of training records
	Ensure that all direct and indirect workers have access to and are aware about the Grievance Mechanism were they can raise workplace relevant complaints anonymously. (See Annex 2 – Grievance Mechanism)	Grievance Mechanism in place and grievances recorded Training performed and recorded	Contractor/ DWN	Review of grievance register Review of training records
	Ensure all workers have the same rights and are treated equally.	Non-discrimination policy in place	Contractor/ DWN	Random site inspection Review of grievance register
D2. Local recruitment	Ensure local communities are preferred for the supply of goods and services to the Project and Project personnel, where appropriate.	Local Procurement and Employment Records	Contractor/ DWN	Review procurement and employment rules and records Review of grievance register

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.4 D. LABOUR AND RELATIONS WITH LOCAL COMMUNITIES				
D3. Community interaction	Engage/ communicate/inform communities. Ensure consultations with the local authorities and communities regarding the construction. Obtain local knowledge regarding chance finds and land acquisition matters.	Minutes of Meetings Grievance Mechanism	Contractor/ DWN	Review of grievance register Minutes of consultation meetings
	Initiate an efficient Grievance Mechanism to allow potentially affected individuals to raise their concerns	Grievance Mechanism in place (See Annexe 2). Grievances recorded	Contractor/ DWN	Review of grievance register
D4. Damage to people and property	Ensure all contractors implement Codes of Conduct concerning employment and workforce behaviour (including but not limited to safety rules, zero tolerance for substance abuse, environmental sensitivity of the area, dangers of sexually transmissible diseases and HIV/AIDS, gender equality and sexual harassment, respect for the beliefs and customs of the populations and community relations in general).	Code of Conduct (See Annexe 1). Grievance Mechanism records	Contractor/ DWN	Worker interviews, Review of grievance register

Item	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure
7.4 D. LABOUR AND RELATIONS WITH LOCAL COMMUNITIES				
	Ensure that site areas are provided with appropriate security, fencing, signage and lighting. Use hazard notices/signs/barriers to protect children and other vulnerable people from harm and prevent access to non-workers.	H&S planning of construction site done, items installed	Contractor/ DWN	Inspection prior to the activities. Regular site inspection Review of grievance register
D5. Traffic management	Ensure safe driving by Project personnel (e.g. through training or induction).	Driver Training Records as part of Induction training	Contractor/ DWN	Review of training records Review of grievance register
	Target signage and outreach activities to improve public awareness of traffic changes and potential hazards for high-risk sections of public roads, including near the site and lay down areas.	Warning signs Minutes of Meetings	Contractor/ DWN	Inspection if traffic routes, Review of grievance register
D6 Fossils/ Archaeological Chance Finds	Establish specific procedures to manage the protection of archaeological and historical sites, chance finds, and fossils. Ensure all finds of cultural heritage (e.g. graves, old ceramic, old building fragments) are reported immediately to the relevant authority and avoid excavation in the ultimate neighbourhood of a chance find, fence the chance find and await instructions from the competent authority.	Chance Finds Procedure Notification records to relevant authority Training records, Records about chance finds	Contractor/ DWN	Site inspection Review records of chance finds

8 CONCLUSION

The Environmental Management Plan (EMP) for the Soetdoringlaagte Extension 1 Township Establishment in Stampriet provides a structured framework to identify, manage, and monitor environmental and social risks across all phases of the project.

The EMP builds on approved Scoping Assessments, cadastral surveys, and stakeholder engagement to ensure that sustainability considerations are embedded from the outset. It sets out clear, practical measures to manage potential impacts during both construction and operation, including dust suppression, noise control, waste management, biodiversity protection, and occupational and community health and safety.

All mitigation actions are aligned with the requirements of the Namibian Environmental Management Act, as well as relevant international standards such as the KfW Sustainability Guideline and the World Bank Environmental and Social Standards (ESS).

Ongoing monitoring, transparent reporting, and a functional grievance mechanism will ensure accountability, community participation, and continual improvement. By implementing this EMP, the project will enable the delivery of much-needed serviced land while protecting environmental resources and maximising long-term socio-economic benefits for the Stampriet community.