



PROJECT INFRASTRUCTURE PLANNING

PROJECT DETAILS

Project Name	TEST_113
Location	Cape Agulhas Local Municipality
Sector	Ecological
Department	Department of Social Development
Project Owner	Poonam Yawalkar
Project Manager	Poonam Yawalkar

BACKGROUND & JUSTIFICATION

Rapid urbanisation, climate change, and historical land-use practices have resulted in significant ecological degradation and increasing pressure on existing infrastructure systems. Degraded ecosystems, including wetlands, river systems, forests, and coastal areas, have reduced their capacity to provide essential services such as flood regulation, water purification, soil stability, and biodiversity support. At the same time, ageing and climate-vulnerable infrastructure has increased risks to communities, economic activities, and public service delivery.

Traditional infrastructure development approaches have often treated environmental protection and infrastructure delivery as separate processes. This has led to unintended consequences such as habitat loss, increased flooding, water scarcity, higher maintenance costs, and reduced resilience to climate-related shocks. There is a growing recognition that infrastructure investments must be designed and implemented in harmony with natural systems to ensure long-term sustainability, cost-effectiveness, and environmental protection.

PROJECT SCOPE

1. Project Initiation & Planning

- Establish project governance, management structures, and reporting mechanisms
- Stakeholder identification and engagement, including government entities, communities, and private partners
- Review of relevant policies, legislation, and planning frameworks
- Development of detailed project implementation plan and work schedule

2. Baseline Assessments & Studies

- Environmental baseline assessments (land, water, biodiversity, soil, and ecosystems)
- Climate risk and vulnerability assessment
- Socio-economic and community needs assessment
- Infrastructure condition and capacity assessment
- Identification of priority restoration and infrastructure intervention areas

3. Integrated Design & Technical Planning

- Preparation of integrated ecological restoration and infrastructure master plans
- Development of nature-based and green infrastructure solutions
- Engineering designs incorporating low-carbon and climate-resilient principles
- Alignment with spatial development frameworks and municipal plans
- Cost estimation, phasing, and lifecycle cost analysis

4. Ecological Restoration Works

- Reforestation and rehabilitation using indigenous vegetation
- Wetland, riverbank, coastal, and catchment restoration
- Soil stabilization, erosion control, and land rehabilitation
- Invasive species removal and biodiversity enhancement
- Establishment of ecological corridors and buffer zones

5. Sustainable Infrastructure Development

- Construction or upgrading of climate-resilient public infrastructure
- Implementation of green roads, drainage, and stormwater systems
- Integration of renewable energy and energy-efficient systems
- Water-efficient infrastructure including harvesting, reuse, and treatment systems
- Use of environmentally sustainable construction materials and methods

OBJECTIVES & KEY FOCUS AREAS

OBJECTIVE	KEY FOCUS AREA
Infrastructure & Governance & Standards (IMC ITC RPG)	• Prioritising Infrastructure for Maximum Impact • Strengthening Municipal Infrastructure • Enhancing Private Sector Partnerships • Innovation & Futures Planning • Addressing Climate Change & Sustainability
Infrastructure linked to 5yr plans & their respective APPs, AOP's & AR's	• Strengthening Municipal Infrastructure • Enhancing Private Sector Partnerships
Infrastructure Monitoring & Evaluation	• Prioritising Infrastructure for Maximum Impact • Strengthening Municipal Infrastructure • Innovation & Futures Planning

PROJECT TIMELINE & COST

Estimated Duration	7 Year(s) & 6 Month(s)
Estimated Start Date	31 Jan 2026

Estimated Cost	R 17,519,534
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PROJECT STAGE-0 SUBMISSION & APPROVAL

Self Approved By: Poonam Yawalkar
Self Approved On: 30 Dec 2025 05:39:57 AM

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ENVIRONMENTAL & SOCIAL CONSIDERATIONS

ENVIRONMENTAL CONSIDERATIONS	SOCIAL CONSIDERATIONS
• Air, water, and soil pollution from industrial and agricultural activities • Greenhouse gas emissions and deforestation contributing to climate change • Overuse of natural resources leading to scarcity and degradation • Loss of biodiversity due to habitat destruction and fragmentation • Deforestation causing habitat loss, soil erosion, and climate impacts • Proper waste management to reduce pollution and health risks • Sustainable water management to protect quality and prevent scarcity • Preservation of ecosystem services like clean air, water, and climate regulation	• Respect for human rights including labor, land, and indigenous rights • Assessment of community impacts such as displacement and livelihood loss • Protection of health and safety from environmental hazards • Preservation of cultural heritage sites and artifacts • Promotion of social equity and fair distribution of development benefits • Engagement with stakeholders throughout the project lifecycle • Fair labor practices including wages, hours, and working conditions

REGULATORY & ENVIRONMENTAL APPROVALS

NATIONAL LEVEL	PROVINCIAL AND LOCAL LEVELS	OTHER RELEVANT ENTITIES
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• Department of Forestry, Fisheries and the Environment (DFFE): Responsible for environmental management, conservation, and protection in South Africa • National Climate Change Frameworks • Other_11 • South African National Biodiversity Institute (SANBI): Plays a leading role in biodiversity management and research • Environmental Management Inspectors (EMIs): Responsible for compliance and enforcement of environmental regulations • National Environmental Management Act (NEMA): Governs environmental management and authorization processes, including Environmental Authorizations (EAs) • Environmental Management Frameworks (EMFs): Strategic planning tools for land-use and environmental management decisions	• Provincial Environmental Departments: Implement and enforce environmental regulations within provinces • Other_11 • Municipalities: Play a role in environmental management, especially in land-use planning and development applications • Other_1 • Department of Infrastructure (DOI)	• Environmental Assessment Practitioners Association of South Africa (EAPASA): Voluntary certification body for Environmental Assessment Practitioners • Councils for the Built Environment Professions (CBEP): Regulates professions involved in the built environment • Wildlife and Environment Society of South Africa (WESSA): Non-profit organization involved in environmental conservation and education • description • Heritage Western Cape • Other_1
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IDENTIFY KEY STAKEHOLDERS

Government

NAME
Department of Agriculture
Department of Health Wellness
Department of Education
Department Of Infrastructure
Provincial Treasury
Local Government
Department of Mobility
Government Motor Transport
Department of Premier

NAME
Tourism, Environmental Affairs & Development Planning
Department of Social Development

State-Owned Entities

NAME	ENGAGEMENT STRATEGY
Development Bank of Southern Africa (DBSA)	The Development Bank of Southern Africa (DBSA) plays a critical role in financing and supporting infrastructure and development projects that promote sustainable economic growth and social development. Within this project, DBSA may provide development finance, project preparation support, and technical assistance for climate-resilient and environmentally sustainable infrastructure. DBSA's involvement strengthens project bankability, governance, and alignment with national development priorities.
Industrial Development Corporation (IDC)	The Industrial Development Corporation (IDC) supports industrial development and economic transformation through strategic investments. For this project, the IDC may facilitate funding for green industries, local manufacturing, and value-chain development linked to ecological restoration and sustainable infrastructure. IDC participation supports job creation, skills development, and local enterprise growth, particularly in green economy sectors.
Eskom	Eskom, as South Africa's national electricity utility, is a key stakeholder in the integration of reliable and sustainable energy solutions. Eskom's role may include grid connectivity, energy infrastructure upgrades, and collaboration on renewable and hybrid energy systems. Engagement with Eskom ensures alignment with national energy strategies, grid stability, and long-term energy security for project infrastructure.
Western Cape Archives and Records Service (WCARS)	The Western Cape Archives and Records Service (WCARS) is responsible for the preservation, management, and accessibility of public records within the Western Cape. WCARS contributes institutional knowledge, historical land-use records, environmental data, and planning documentation that inform project design and approvals. Their involvement supports regulatory compliance, informed spatial planning, and evidence-based decision-making.

Private Entities

NAME	ENGAGEMENT STRATEGY
Construction Companies	Construction companies will be responsible for the execution of civil, building, and infrastructure works in accordance with approved designs, environmental management plans, and quality standards. Their role includes on-site implementation, use of sustainable construction methods, local labour participation, and compliance with health, safety, and environmental regulations.
Engineering Firms	Engineering firms will provide multidisciplinary technical expertise, including civil, structural, electrical, mechanical, and environmental engineering services. They will lead feasibility studies, detailed designs, technical specifications, supervision, and certification to ensure climate-resilient, efficient, and compliant infrastructure delivery.
Financial Institutions	Financial institutions may provide project finance, blended finance solutions, guarantees, and advisory services. Their involvement supports project bankability, financial structuring, risk mitigation, and long-term sustainability, particularly for large-scale infrastructure and green economy investments.
Specialist archival systems suppliers & Commercial records storage providers	These suppliers will deliver purpose-built archival systems, secure storage solutions, and preservation technologies that meet regulatory and environmental standards. Their expertise ensures proper records management, long-term document preservation, digitisation readiness, and compliance with archival legislation and best practices.
Technology and ICT providers	Technology and ICT providers will support digital infrastructure, including data management systems, monitoring platforms, automation, cybersecurity, and smart facility solutions. Their role enhances operational efficiency, transparency, environmental monitoring, and long-term asset management.

Civil Entities

NAME	ENGAGEMENT STRATEGY
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Civil society organizations advocating for community needs	Civil society organizations (CSOs) play a critical role in representing community interests and ensuring inclusive, transparent, and equitable project outcomes. Their involvement supports meaningful community participation, social accountability, and alignment of project interventions with local needs. CSOs also assist in stakeholder mobilisation, social impact monitoring, and conflict mitigation throughout the project lifecycle.
Other_1	This category allows for the inclusion of additional stakeholders relevant to the project, such as traditional leadership structures, cultural organizations, environmental NGOs, youth and women's groups, or sector-specific advocacy bodies. These stakeholders will be identified during project initiation and engaged based on their relevance to implementation, governance, or community impact.

Other Stakeholders

NAME	ENGAGEMENT STRATEGY
Local Development Finance Institutions (DFIs)	Local Development Finance Institutions (DFIs) support infrastructure and development initiatives through financing, guarantees, and technical assistance at municipal, provincial, and regional levels. Their participation strengthens project preparation, co-financing, and risk-sharing mechanisms, particularly for sustainable infrastructure and ecological restoration initiatives. DFIs also play a role in aligning projects with local development priorities and improving financial viability.
Sustainable Infrastructure Development Symposium - South Africa (SIDSSA)	The Sustainable Infrastructure Development Symposium – South Africa (SIDSSA) serves as a national platform for collaboration, knowledge exchange, and policy dialogue on sustainable infrastructure development. Engagement with SIDSSA enables the project to align with emerging best practices, innovation trends, and policy frameworks, while facilitating partnerships between government, private sector, financiers, and technical experts. SIDSSA participation enhances visibility, credibility, and stakeholder coordination.

WCG SECTOR PRIORITIES

OUTCOMES	SOCIAL	ENERGY & WATER	ECONOMIC	TECHNOLOGY	ECOLOGICAL
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Households have increased access to basic services and improved shelter	Short Term 1-5 YRS	Short Term 1-5 YRS	Short Term 1-5 YRS	Short Term 1-5 YRS	Short Term 1-5 YRS
Infrastructure investment drives spatial transformation and improves spatial resilience	Short Term 1-5 YRS	Medium Term 5-15 YRS	Short Term 1-5 YRS	Medium Term 5-15 YRS	Short Term 1-5 YRS
Investment in social infrastructure improves access to health, education, social development, and recreation opportunities	Short Term 1-5 YRS	Short Term 1-5 YRS	Medium Term 5-15 YRS	Short Term 1-5 YRS	Short Term 1-5 YRS
Mobility systems and transportation corridors provide safe and efficient connectivity to opportunities, services, and facilities	Short Term 1-5 YRS	Short Term 1-5 YRS	Long Term 15-30 YRS	Short Term 1-5 YRS	Medium Term 5-15 YRS

INFRASTRUCTURE TYPE

• Hard

Hard infrastructure refers to tangible, physical assets required for service delivery and economic activity. These assets typically involve significant capital investment and long-term construction.

Examples include:

- Roads, bridges, and transport networks
- Buildings and facilities (archives, schools, hospitals, public offices)
- Water supply, wastewater, and stormwater systems
- Energy infrastructure (power generation, substations, transmission)
- Storage facilities and physical archival repositories

• Soft

Soft infrastructure includes systems, services, and institutional frameworks that support the effective use and management of physical infrastructure. These elements focus on human capital, governance, and service delivery.

Examples include:

- Digital systems and ICT platforms
- Records management and archival systems
- Policies, regulations, and governance frameworks
- Training, skills development, and capacity building
- Operational procedures and service delivery models

• Critical

Critical infrastructure comprises assets and systems essential to the functioning, security, and resilience of society and the economy. Disruption or failure of these systems would have significant social, economic, or environmental impacts.

Examples include:

- Energy generation and distribution systems
- Water supply and sanitation infrastructure
- Data centres, archival repositories, and information systems
- Emergency services and disaster management facilities
- Transport and logistics corridors essential for service delivery

PROJECT STAGE-1 SUBMISSION & APPROVAL

Self Approved By: **Poonam Yawalkar**

Self Approved On: **30 Dec 2025 05:52:02 AM**

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