



**TERMS OF REFERENCE - TRANSACTION ADVISORY SERVICES FOR THE OPERATIONS, MAINTENANCE AND AFTER CARE
MANAGEMENT OF THE AYIDAN SANITARY LANDFILL**



GARID
GREATER ACCRA RESILIENT AND
INTEGRATED DEVELOPMENT



Greater Accra Resilient and Integrated Development Project

Terms of Reference:

**Transaction Advisory Services for the Operations, Maintenance and Aftercare
Management for the Ayidan Sanitary Landfill.**

September 2023



a. BACKGROUND

General Context

1. The Government of Ghana has secured funding from the World Bank to finance the Greater Accra Resilient and Integrated Development (GARID) Project. The project aims to improve flood risk management and solid waste management in the Odaw River Basin of the Greater Accra Region and improve access to basic infrastructure and services in targeted communities within the Basin.
2. Poor environmental sanitation is a key urban challenge for the Greater Accra Region (GAR) and has increasingly become a major contributor to flood risk over the past decade. The GAR generates between 3,000 and 4,000 tons of solid waste daily, out of which an estimated 80% is collected. It is estimated that 70% of waste is treated and effectively disposed. Incomplete waste collection and treatment have been exacerbated by challenges such as poorly managed land use, unregulated development of settlements, and lack of medium-to-long term planning for appropriately sited final disposal and treatment facilities for solid wastes. The problem is further worsened by the sprawling growth of the metropolitan area and the lack of commensurate engineered landfill capacity in appropriate locations to ensure balanced coverage of efficient and systematic citywide solid waste collection.
3. Presently the GAR, with a daytime population of approximately 3 million inhabitants, is served by one (1) un-engineered disposal site. In addition, there are several waste recycling facilities including three (3) supporting municipal waste management. The un-engineered disposal site and three recycling facilities are all privately-owned and operated.
4. The Ministry of Sanitation and Water Resources (MSWR) through the Environmental Health and Sanitation Directorate (EHSD) is the lead agency for policy formulation and monitoring of the sanitation and solid waste sub-sector. GARID investments will address the challenges of inadequate facilities for proper communal collection, haulage, treatment, recycling, and disposal of solid waste. Key investments include the construction of a solid waste landfill and supporting transfer stations. The Ayidan Landfill located in the GA South Municipality is among the first of such facilities aimed at contributing to improving the management of final placement of solid waste within the GAR.
5. The Detailed Engineering Design for the Ayidan Landfill is nearing completion. The design of all landfill facilities in the country are subject to Ghana Environment Protection Agency (EPA) approval after a thorough environmental and social impact assessment (ESIA) to ensure that technical designs, construction, operation, closure and after-care plans reflect the accepted and approved mitigation of environmental degradation and monitoring measures stipulated by the EPA.
6. Previous investments in final disposal and treatment facilities by the Government of Ghana (GoG), including with support from the International Development Association (IDA), have not



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yielded the desired long-term outcomes (e.g., Kpone Landfill).¹ Critically, planned monitoring and mitigation measures specified in ESIA reports were not adhered to, resulting in operational practices that did not support the overall sustainability of the investment. An important missing element in the development of such failed facilities was the establishment of a modality to assess and secure adequate financing for operations and maintenance (O&M), closure and after-care.

7. In addition, the coverage of the catchment of solid waste disposal sites was not well considered, leading to the rapid exhaustion of the design life of the disposal sites as patronage extended further than the waste shed limits and overwhelmed the capacity of the facilities. The Kpone Landfill site is a classic case in this regard, which was designed for a useful life of 15 years but exhausted within 5 years owing to unsatisfactory management by the operator and reception of waste from the whole of the Greater Accra Metropolitan Area (GAMA).²

8. The MSWR has prepared an integrated strategic, city-wide, environmental sanitation master planning of engineered landfills and related ancillary facilities such as waste transfer stations for GAMA. However, the plan does not include management optimization targets through which the design, procurement, operations, and maintenance is assessed and concluded based on scenarios and options featuring different arrangements of public sector and private sector capacities towards the optimal balance and sharing of risk, cost, expertise, and performance.

Objective of the Assignment

9. Based on the above lessons learned, the GoG is applying a range of approaches all aimed at achieving long term sustainable investment outcomes for final disposal and treatment facilities being developed under the GARID Project.

The objective of this assignment is to **develop a robust, sustainable model for the lifecycle operations and maintenance**, include closure and after-care management of the Ayidan Landfill as well as transaction support for the contracting of a private operator.

Specific Objectives

10. In order to achieve the overall objective, and based on existing studies, reports, and engineering designs, the Consultant is expected to:

PHASE 1: DUE DILIGENCE AND MODELING

- (i) **Consolidate and synthesize existing related information (as listed in Client's input)** to validate sector performance from waste generation to final disposal in the GAR including:
 - a. Characterization of sector participants, their roles, and existing contract modalities

¹ <https://documents1.worldbank.org/curated/fr/775731551156835790/pdf/AFR-Environmental-and-Social-Audit-Kpone-Landfill-Feb2019-P164330.pdf>

² <http://mswr.gov.gh/visit-to-kpone-landfill-site-re-engineering-of-kpone-sanitary-landfill-site-and-de-commissioning-works-friday-9th-april-2021/>



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- b. Definition of the waste market, existing infrastructure, population, waste volumes and composition, and projections over 20 years.
 - c. Project assumptions to be used based on diagnosis and sector assumptions
 - d. Applicable legal and regulatory framework.
- (ii) **Support the MSWR in the Selection of an Optimal Contractual Model** by validating the most relevant contractual structure taking into account all technical, legal and financial aspects of the operations, closure and aftercare management of the facility, including:
- e. Investment needs, operational cost estimates, performance requirements and assessment criteria
 - f. Business model alternatives and corresponding financial modeling with financial assumptions
 - g. Life cycle projections including service costs projections and long term financial sustainability requirements
- (iii) **Demonstrate Long-term Sustainability of the Sector within the GAMA area** based on the foregoing assessments and existing strategic plans to guide operations of the Ayidan Landfill including the necessary policy, legislation, regulatory, budgetary, and management measures to enhance implementation of the plan.
- h. Quantify service costs value chain, estimating potential of existing revenue tools, quantifying potential performance of new revenue tools applicable to the local market and legal framework, assess value of tariffs, fiscal policies and alternative subsidy mechanisms.
 - i. Assess capacity and willingness to pay.

PHASE 2: TRANSACTION APPROVAL PROCESS

- (iv) **Assist the MSWR to Seek Approval of the Procurement Approach** - to prepare a Project Concept note and Report with the recommended contractual arrangement of the procurement for the purpose of obtaining the opinion of Head of Entity Tender Committee, on the usefulness of using or not using a Public-Private Partnership (PPP) or performance-based contract for the transaction.

PHASE 3: TRANSACTION SUPPORT

- (v) **Support the MSWR in conducting the entire procurement process** including but not limited to: prequalification, process and documentation, bidding process along with accompanying documents from both a transaction and a project perspective, selection and negotiation process
- (vi) **Capacity Building** of relevant frontline stakeholders and authorities on competitive and performance-based contract development and management approach including the development of a contract user manual and facilitation of a training seminar.
- (vii) **Post-award support** including contract oversight and performance review



b. SCOPE OF SERVICES

The Assignment will base all modeling on the Detailed Engineering Design, Operation & Maintenance Plan, the Environmental and Social Impact Assessment and Monitoring Plan for the Ayidan Landfill

PHASE 1: DUE DILIGENCE AND MODELING

Task 1: Consolidate and Synthesize all relevant existing data to prepare Preliminary Analyses to validate sector performance from waste generation to final disposal in the GAMA including the following aspects:

- i. Documentation of sector participants, their roles and leading contracts and contract types across the waste value chain.
- ii. Assessment of the waste market, existing infrastructure, population, waste volumes and composition, and projections over 20 years. This will demonstrate the performance potential of the Landfill and the competing marketplace in which it will operate.
- iii. Specify all project assumptions and sector assumptions based on availability of information and advise on the imperatives for optimization of disposal capacity in the context of the city-wide demand for such services.
- iv. Document applicable legal and regulatory framework from an operational and regulatory oversight perspective.
- v. Determine the investment needs including quantification of the main cost items for operation and maintenance costs (OPEX), specifying performance requirements/criteria applied over the entire implementation of the proposed development (including any phased approach), operation and after-use period of the landfill.
- vi. Develop a performance regime and **Key Performance Indicators** for the operations, maintenance, closure and aftercare management of the Landfill including all responsibilities, performance indicators, penalty/incentive regime. Develop a plan for contract supervision for operational and maintenance phase of landfill including:
 - ✚ Ongoing and reliable funding source
 - ✚ Identify planning goals and objectives
 - ✚ Define baseline system requirements
 - ✚ Servicing and maintenance of fixed and mobile equipment
 - ✚ Upkeep and maintenance of structures
 - ✚ Adaptation and renewal of equipment
 - ✚ Technical and financial viability
 - ✚ Risk mitigation strategies to the financial plan
 - ✚ Monitoring and evaluation plan

Task 2: Support the MSWR in the Selection of an Optimal Contractual Model by validating the most relevant contractual structure taking into account all technical, legal and financial aspects of the operations, closure and aftercare management of the facility, including the following:

- i. Present business model alternatives and corresponding financial modeling with financial assumptions. Modeling will include institutional and management arrangements including financing options/mechanisms that will have to be considered for sustaining effective



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- operation and maintenance of the landfill for its entire operational life (including adherence to all environmental and social safeguarding activities, including repair and replacement of equipment, full performance of all environmental systems and regular monitoring and documentation), closure, and after-care management and use. Models will include performance-based payment modalities to ensure operator achieves contractual KPIs.
- ii. Life cycle projections, service cost projections and long-term financial sustainability requirements. This will include unit cost analysis.
 - iii. Model the distribution of responsibilities between the different actors (including the GoG, financier, landfill operator, transfer station operators, waste collectors, regulators, city authorities, community representatives/members and other relevant groups) under each contract scenario and an approximate idea of the potential financial flows between actors. Evaluate private sector risks and perform an analysis to determine the appropriate offer of guarantees to the private sector.
 - iv. Conduct workshop on contractual models to the MSWR, MOF, GARID PCU, and World Bank for final selection of an optimal contractual configuration. The presentation of options must clearly demonstrate the differences in institutional, organizational, economic and technical structures and performance, including risk transfer.

Task 3: Demonstrate Long-term Sustainability of the Sector based on the foregoing assessments to guide operations of the Ayidan Landfill including the necessary policy, legislation, regulatory, budgetary, and management measures to enhance implementation of the plan.

- i. Quantify service costs value chain, estimating potential of existing revenue tools, quantifying potential performance of new revenue tools applicable to the local market and legal framework, assess value of tariffs, fiscal policies and alternative subsidy mechanisms.
- ii. Assess capacity and willingness to pay
- iii. Risk analysis and mitigation measures considering which contractual actors have the greatest propensity to effectively mitigate and/or manage the identified risk, detailing legal and financial instruments to ensure accountability / de-risk payments

PHASE 2: TRANSACTION APPROVAL PROCESS

Task 4: Assist the MSWR to Seek Approval of the Procurement Approach – to prepare a preliminary assessment report with the recommended contractual arrangement of the procurement for the purpose of obtaining the opinion of Head of Entity Tender Committee on the usefulness of using or not a PPP or performance-based contract for the transaction.

Documentation will be required to demonstrate the economic, financial, legal, social, and environmental reasons allowing the MSWR to justify the use of the proposed contractual modality. Necessary documentation will include, without limitation, the following elements:

- ✚ a general presentation of the project and the contracting authority;
- ✚ a needs assessment of the contracting authority;
- ✚ a technical and financial feasibility study;



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- ✚ an evaluation the solutions envisaged and their economic, social and environmental impacts;
- ✚ a legal feasibility study;
- ✚ a risk matrix;
- ✚ a note justifying the use of the proposed contractual modality;
- ✚ a note motivating the proposed local content strategy and in particular the request for derogation relating to the minimum shareholding reserved for national economic operators, if applicable.

PHASE 3: TRANSACTION SUPPORT

Support the MSWR in conducting the entire procurement process including but not limited to the following tasks:

Task 5: Capacity Building on Contract Management and Oversight include contract oversight, performance review and capacity building on of MSWR/MMDA staff on contract development and oversight

The Consultant will organize a training seminar to enable the MSWR to appropriate the essential principles of contracts and related financial models. It will also produce a manual for contracts, the purpose of which is to facilitate contract management by the MSWR. This manual will be as didactic as possible and will aim to facilitate MSWR's understanding of the contracts. The user manual will contain in particular:

- ✚ a chronological representation of the main milestones of the contract (entry into force, achievement of key events, investment grant payments if applicable, etc.);
- ✚ a chronological representation of a typical year of performance of the contract during the operating period, summarizing in particular the actions expected of the private operator and the Contracting Authority;
- ✚ an explanation of the operation of the main contractual clauses which will record, where applicable, the spirit of the clause and its changes during the negotiation;
- ✚ model documents allowing the Contracting Authority to quickly carry out any repetitive task during the performance of the agreement (for example: the operating subsidy calculation model, the tariff revision calculation model, the certificate of payment, model formal notice, etc.).

Task 6: Pre-qualification including process and documentation. Development of a project perspective a prequalification file which will make it possible to draw up a shortlist of qualified operators for the performance of the services expected from the Project.

Task 7: Prepare a Bidding document along with accompanying documents including one (or more) Competitive Bidding File(s) for the implementation of the transaction and for the establishment of waste management infrastructure, the structure and content of which will comply with the national corpus relating to Public Procurement, PPPs (if applicable) and national regulatory provisions applicable to this Project. The Competitive Bidding Files (CBF) must include in particular:

- ✚ a description of the works and equipment or services;



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- ✚ the estimated framework (Unit Price Schedule, Quantitative and Estimated Details / information taken from the Feasibility Analysis and supporting documentation / preliminary works);
- ✚ environmental and social clauses;
- ✚ Health and Safety Plan;
- ✚ Quality Assurance Plan;
- ✚ execution times;
- ✚ the consultation rules, in particular a bid analysis grid with the rating criteria and weighting of each criterion;
- ✚ the draft delegated management agreement;
- ✚ the delegated management specifications;
- ✚ the requirements, technical specifications and technical performance of the expected processes and products (recycled materials, compost, target values, leachate, daily cover, landfill gas, etc.)
- ✚ the annexes to the previous documents, namely:
 - defining the scope of delegated management;
 - the framework of the investment program;
 - the framework of financial projections;
 - the framework of the technical and financial offers of the delegate;
 - definition of delegated management assets;
 - the detailed functional program of the basic infrastructures;
 - the infrastructure guide plans from the Preliminary Draft
- ✚ The CBF(s) will also have to integrate all the prescriptions of the donor, World Bank.³
- ✚ With the objective of attracting international companies to the Project, the CBF(s) will fit into the framework of international trade law (United Nations Commission on International Trade Law Model Legislative Provisions) and may (could) be inspired by PPP contracts recently awarded in a similar context in the waste sector.
- ✚ Finally, with the aim of promoting the participation of national companies, the CBF(s) will clarify the incentives for local content in accordance with the texts in force.

Task 8: Selection process bidding criteria support including development of all needed documentation.

- a. Organize conference for potential candidates to offer clarifications on the bidding documents within approximately **thirty (30) days** following transmission of the technical tender dossier (DAO-T) to the bidders, with the support of the MSWR. This conference will allow pre-selected companies and groups of companies to receive clarifications or additional information on the project, as well as to formulate comments or suggestions on the DAO-T. The questions, remarks and suggestions which will have been formulated by the potential Candidates, at the end of the conference, will be the subject of a written response addressed to all the tenderers. The Consultant will be responsible for performing the following tasks:
 - preparation of the organization of the conference;

³ https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/ppp_testdumb/documents/services%20contract%20schedules%20Lot%202.pdf



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- participation in the drafting of clarifications and additional information in response to questions, comments and suggestions made by potential Candidates;
 - taking into account, in the transactional documentation (Prequalification, DAO-T, DAO-F, etc.), any elements of modification relating to the comments and suggestions which will have been validated by the Contracting Authority.
- b. During the tender process, the Consultant will be responsible to:
- write the rules and procedures for the data sharing platform;
 - draft responses to candidates during the question and answer period on legal and technical aspects;
 - facilitate discussions with the Project Owner and provide the necessary written comments and advice to the Project Owner throughout the procurement process on the financial, legal and technical aspects relating to the selection of the successful bidder.

Task 9: Post-award support including contract oversight and performance review, and capacity building of MSWR staff on contract development and oversight.

C. OUTPUTS AND REVIEW PROCESS

The Consultant, during the Assignment, shall consult with the Solid Waste Specialist of GARID-PCU and agree on areas (and projects/reports/documents) to be reviewed and the additional background sources of information that will be required. The Consultant shall carry out the tasks outlined above, and prepare and submit all reports as indicated in the table below.

Deliverables	Timelines
PHASE 1: DUE DILIGENCE AND MODELING	
Task 0: Inception Report specifying the methodology, timelines and work plan as well as any constraints in the implementation of the Assignment	T0+ 2 weeks



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<p>Task 1: Confirm a situational analysis of the solid waste management sector within the GAR based upon existing literature and validation of understanding with the GoG and the World Bank Including a performance regime plan (with Key Performance Indicators) for contract supervision for operational and maintenance phase of landfill</p> <p>Task 2: Support the MSWR in the Selection of an Optimal Contractual Model by validating the most relevant contractual structure taking into account all technical, legal and financial aspects of the operations, closure and aftercare management of the facility,</p> <p>Task 3: Demonstrate Long-term Sustainability of the Sector based on the foregoing assessments to guide operations of the Ayidan Landfill including the necessary policy, legislation, regulatory, budgetary, and management measures to enhance implementation of the plan.</p>	<p>T0+ 6weeks</p> <p>T0+ 9 weeks</p> <p>T0+ 11 weeks</p>
<p>PHASE 2: TRANSACTION APPROVAL PROCESS</p>	
<p>Task 4: Assist the MSWR to Seek Approval of the Procurement Approach - to prepare a Technical paper/Concept note and Assessment report with the recommended contractual arrangement of the procurement for the purpose of obtaining the opinion of Head of Entity</p>	<p>T0+ 15weeks</p>
<p>PHASE 3: TRANSACTION SUPPORT</p>	
<p>Task 5: Capacity Building on Contract Management and Oversight include contract oversight, performance review and capacity building on of MSWR/MMDA staff on contract development and oversight</p> <p>Task 6: Pre-qualification including process and documentation</p> <p>Task 7: Bidding process along with accompanying documents from both a transaction and a project perspective</p> <p>Task 8: Selection process bidding criteria support including development of all needed documentation.</p> <p>Task 9: Post-award support including contract oversight and performance review and capacity building of MSWR staff on contract development and oversight.</p>	<p>T0 + 17 weeks</p> <p>T0 + 20 weeks</p> <p>T0 + 26 weeks</p> <p>T0 + 32 weeks</p> <p>6 months after Operator signs Contract (max 6 man-days per month)</p>

The Consultant shall prepare all reports and all workshop presentations in formats that can be transmitted electronically to the MSWR-EHSD and GARID-PCU. All reports shall be submitted in 4 hardcopies and 1 soft copy.



D. CLIENT, TIMING, AND BUDGET

- i. Funding for the Assignment will be provided under the GARID Project. MSWR-EHSD is the Client for this assignment. Both the Project Coordinator GARID-PCU and PIU Lead will be responsible for the final approval for payments and reviewing reports and organizing consultation sessions.
- ii. The Solid Waste Expert GARID-PCU, will have direct oversight for approving the Consultants' outputs and shall be responsible for the day-to-day supervision of the Consultants' work and provide direction so that the consultants' delivery of the assignment meets the set objectives and scheduled delivery dates.
- iii. The duration of the Assignment is eighteen (18) months and it is expected to be carried out from December 2023 to May 2025. The estimated professional time input is 20 man months.

E. CONSULTANT QUALIFICATIONS

The Assignment will be carried out by a firm or consortium of firms (the Consultant) with the requisite staff to define and analyze the viability of different business models for the O&M of the Ayidan Landfill. If the Consultant comes as a Consortium, it should be in the form of either a Joint Venture or a sub-consultancy.

The Consultant must have carried out consultancy assignments and transaction advisory mandates in the solid waste management sector, with specific experience in the contracting of operations for engineered landfills and Experience in Sub-Saharan Africa.

In the event of a Joint Venture, a Joint Venture agreement signed by the parties concerned must be produced. This agreement must clearly indicate the responsibilities of each member (financial, legal, technical) in the grouping as well as the person authorized to represent the said grouping.

The Consultant must demonstrate the following:

- ✦ at least ten (10) years of legal existence. In the case of Joint Venture, all members of the Joint venture must pass all criteria. In a sub-consultancy, the experience of the sub-consultants is not evaluated.;
- ✦ 10 years specific experience in providing financial and transactional advisory assignments relating to PPP projects in a leading role in all sectors
- ✦ Firm must have at least two (2) experiences in project financial advice and transaction completion in the field of solid waste management;
- ✦ It must also demonstrate experience in managing international bidding processes for PPP transactions including the complete drafting of all relevant document;
- ✦ Should have undertaken consultancy assignments relating to concession agreements for construction and operation of large scale engineering infrastructure including at least one PPP experience in Africa.



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Key Staff

The Consultant team shall comprise (i) Senior Financial Expert, (ii) Senior Legal Expert; (iii) Solid Waste Management Expert (Sanitary Engineer), and (iv) Contract Manager.

The Sanitary Engineer shall be the Team Leader, and shall be suitably qualified in delivering the assignments, manage the whole assignment, and be responsible for:

- + coordinating and managing Tasks 1-14 listed above to achieve the stated objectives;
- + ensuring that the overall assignment outputs effectively lead to the preparation of Contractual Model for the Sustainable Operations and Maintenance of the Ayidan Landfill Facility and contracting of a private operator;
- + delivering and ensuring quality of all outputs such as the inception, draft, meetings, stakeholder engagement and final reports; the general process and data management of the assignment
- + arranging technical and other inputs as required from MSWR-EHSD, GARID-PCU, the World Bank Group, and other relevant organizations; and
- + facilitating the organization and delivery of consultation workshops on the Contractual Model for the Sustainable Operations and Maintenance of the Ayidan Landfill Facility.

i. **Senior Financial Expert** in the field of financial structuring, conducting negotiations of Public-Private Partnership (PPP) agreements. The Expert will:

- + hold a Masters in Finance or economics or management or business administration or related;
- + have at least fifteen (15) years of general professional experience;
- + have 10 years relevant/specific experience as Principal Financial Advisor
- + have at least 3No. relevant experience related to preparing financial models for PPP contracts in the field of solid waste infrastructure management or the construction and operation of largescale water and waste treatment facilities,
- + Should have relevant experience in Sub-Saharan Africa;
- + have a perfect command of English

ii. **Senior Legal Expert** with specialization in legal structuring and conducting negotiations of Public-Private Partnership (PPP) agreements. The Expert will:

- + be a lawyer with a minimum of Master of Laws;
- + have at least fifteen (15) years of general experience;
- + have ten (10) years specific experience
- + should have at least five (5) PPP projects as Principal Legal Counsel relating to drafting of contractual documentation and the negotiation of contracts;
- + Should have undertaken at least two (2) assignment relating to concession for construction and operation of large-scale infrastructure, with at least one in Africa;
- + have a perfect command of English



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iii. **Solid Waste Management Expert** with environmental sanitation sector knowledge, municipal solid waste management (MSWM) unit cost analysis as well as policies and regulations. The Expert will:

- ✚ hold a minimum Bachelor degree civil engineering;
- ✚ hold a post-graduate qualification in environmental/public health/sanitary engineering, and practical experience in institutional design and managing environmental sanitation services;
- ✚ not less than 15 years of working experience in: (i) the development of waste management master plans, and (ii) the design and management of infrastructure for management, recovery, treatment and storage of household waste;
- ✚ be conversant with sanitation sector policies, plans and programmes and have international working experience, preferably in other African countries, and engaged in delivering similar assignments.

iv. **Contract Manager.** Should have the following qualifications and experience.

- ✚ hold a postgraduate qualification in Procurement or Contract management or related field
- ✚ not less than 12 years of relevant working experience with background experience in contracting and procurement of large sanitation infrastructural facilities such as wastewater treatment plants, landfills and material recovery facilities.
- ✚ have strong analytical skills in appraisal of contracts and their effects and impacts on plans, programmes and services in three large infrastructure projects.;
- ✚ have experience in the use of FIDIC Conditions of Contract
- ✚ have specific experience in drafting contracts and KPIs for the delivery of services.

7.0 BACKGROUND MATERIALS PROVIDED BY THE CLIENT

The client will provide the following documents:

- (i) GARID Project Appraisal Document
- (ii) GARID Solid Waste Management Strategy
- (iii) Greater Accra Metropolitan Area Integrated Urban Environmental Sanitation Master Plan
- (iv) Detailed Engineering Design Report (including an O&M manual) of the Ayidan landfill
- (v) Environmental and Social Impact Assessment and Management Plan of the Ayidan Landfill
- (vi) Technical Audit Report on Kpone landfill
- (vii) Economic and Financial Analysis of the Ayidan Landfill (CASTALIA 2021)
- (viii) Sector Level Analysis (CRISIL, 2023)



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Table 2: Documents to be provided by Client

Document Title (author, date)	Information included (relevance to task #)
GARID PAD	<ul style="list-style-type: none">• Provides broad overview of the GARID project• Includes funding allocation for various components• Highlights set of interventions to be undertaken to achieve project development objective of improved solid waste management and drainage in the Odaw Basin
Detailed Engineering Design Report (including an O&M manual) of the Ayidan landfill	<ul style="list-style-type: none">• Waste reception rates (Task 3)• KPIs (Task 3)• Staffing requirements (Task 3)• Task 6
GARID Solid Waste Management Strategy (MSWR, 2021)	<ul style="list-style-type: none">• Waste projections (Task 1)• Stakeholder mapping, roles & responsibilities (Task 3)
Environmental and Social Impact Assessment and Management Plan of the Ayidan Landfill	<ul style="list-style-type: none">• Legal and regulatory analysis (Task 3)• Task 6
Economic and Financial Analysis of the Ayidan Landfill (Castalia, 2021)	<ul style="list-style-type: none">• Sector payment modalities & financial flows (Task 3 & 4)
Sector Level Analysis Report (CRISIL, 2023)	<ul style="list-style-type: none">• Sector costs, revenues and funding sources (Task 4 & 5)
Technical Audit for Kpone landfill, 2013	<ul style="list-style-type: none">• Presents findings from audit undertaken on Kpone landfill, presents critical operation and maintenance challenges, contracting pitfalls and provides recommendations to guide future development of landfill in Ghana