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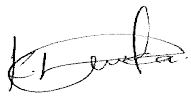		
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SCOT Study Committee : **Geotechnical Study Committee (SF10B)**

CONTENTS

1. INTRODUCTION

1.1 BASIC REQUIREMENTS

This document provides guidelines for the planning and execution of a geotechnical investigation once client requirements have been received. In the planning of a geotechnical site investigation, it is essential that the objectives of the investigation are clearly understood. This requires the geotechnical engineer/engineering geologist obtaining clear terms of reference from the requestor regarding the project phase, pertinent scope inputs and the level of detail required for the intended project.

From these, the geotechnical engineer/engineering geologist can adequately plan and execute the geotechnical investigation.

The planning of an investigation is dependent upon a number of factors including:

- nature and complexity of the development,
- stage of development,
- size of the area to be investigated,
- the regional geology and geo-hydrology

These factors determine the type and extents of investigative methods used and form the basis for geotechnical design.

1.2 UNITS OF MEASUREMENT

SI units shall be used for all surveys and related activities.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document specifies requirements and gives recommendations for the survey and investigation activities required for obtaining data with respect to the physical site conditions which will affect a construction project.

This document specifies the geotechnical requirements for survey and site investigation to gain design parameters, and also identify possible conditions which may affect construction.

2.1.1 Purpose

a. The purpose of a site investigation is to acquire and interpret reliable information for one or more of the following phases of a construction project:
    - feasibility;
    - basis of design;
    - safe and economic design of facilities;
    - identification of geotechnical hazards;
    - location of resources and / or construction materials (e.g. sources of sand or aggregates);
    - assessment of nature of materials to be excavated;
    - tendering and construction;
    - operation and maintenance;

- extension/upgrading;
- de-commissioning;

b. It is important that those involved in procuring, supervising, interpreting and using data from site investigations work within the allowable limits of latest applicable standards. Site investigations and the interpretation thereof shall be designed to be robust under these circumstances and to give reliable data despite these constraints.

c. This standard provides guidelines for execution of site investigation, the full accountability still lies with the individual undertaking the activity.

2.1.2 Applicability

This document shall apply throughout Eskom Holdings Limited Divisions.

2.2 NORMATIVE/INFORMATIVE REFERENCES

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

[1] ISO 9001 Quality Management Systems.

[2] SAICE Site Investigation Code of Practice 2010

[3] Rock core logging conducted in accordance with: Brink, A.B.A, & Bruin, R.M.H, (2002) Second Impression: “Guidelines for Soil and Rock Logging in South Africa, Proceedings of Geoterminology Workshop 1990”.

[4] Drilling in accordance with CSRA: Standard Specification for Sub-Surface Investigations, 2010

[5] All laboratory testing shall be conducted in accordance with the latest standard methods and procedures as outlined by the proper authorities (SABS/SANS, BS/ EuroCode equivalent, ASTM, AASHTO, ISRM).

[6] Byrne, G & Berry, A.D.,(2019) “A Guide To Practical Geotechnical Engineering in Southern Africa” 5th Edition.

[7] All work shall be conducted in accordance with Occupational Health and Safety Act (Act 85 of 1993) as amended

[8] 240-91244751 Specification for Geotechnical Investigations Standard

[9] 240-98349953 Checklist for Geotechnical Investigations

[10] 240-57127955 Geotechnical and Foundation Engineering Standard

2.2.2 Informative

[11] ISRM (1985), "Suggested Methods for Determining Point Load Strength", Int. Jnl. Rock Mech. Min. Sci. and Geomechanical Abstr., Vol. 22, No. 2, pp. 51-60.

[12] Abbs, A.F. (1985), "The Use of the Point Load Index in Weak Carbonate Rocks", ASTM STP 883 Strength Testing of Marine Sediments: Laboratory and In-Situ Measurements, R.C. Chaney and K.R. Demars, Eds, pp. 413-421.

[13] Byrne, G. &, Berry, A.D., “Franki: A Guide to Practical Geotechnical Engineering in Southern Africa, 5 th Edition (2019)”.

This document makes reference to compliance to all latest national and international standards. The Contractor informs the Client of any deviations or substitutions to latest national and international standards and shall make reference to all standards used.

2.3 DEFINITIONS

2.3.1 General Definitions:

Definition	Description
Shall	Indicates a requirement
Should	Indicates a recommendation
The Contractor	The Contractor is the party which carries out all or part of the design, engineering, procurement, construction, commissioning or management of a project or operation of a facility. The Principal may sometimes undertake all or part of the duties of the Contractor.
The Principal	The Principal is the party which initiates the project and ultimately pays for its design and construction. The Principal will generally specify the technical requirements. The Principal may also include an agent or consultant, authorised to act for, and on behalf of, the Principal. The Principal is recognised as the Engineer responsible for the oversight of the engineering project. The Principal will manage the deadlines, budget and other managerial tasks, and lead the engineering team.
The Manufacturer/Supplier	The Manufacturer/Supplier is the party which manufactures or supplies equipment and services to perform the duties specified by the Contractor.

2.3.2 Specific Definitions:

Definition	Description
Ground	Soil, rock and fill existing in place prior to the execution of the site investigation or construction project
Survey Contractor	Party appointed by the Principal or the Contractor which carries out one or more of the site investigation activities.

2.3.3 Disclosure Classification

Controlled disclosure: controlled disclosure to external parties (either enforced by law, or discretionary).

2.4 ABBREVIATIONS

Abbreviation	Description
CPT	Cone Penetration Test
DCP	Dynamic Cone Penetration Test
DPSH	Dynamic Probing Super Heavy
EDWL	Engineering Design Work Lead
HAT	Highest Astronomical Tide
LAT	Lowest Astronomical Tide

Abbreviation	Description
MHHW	Mean Highest High Water
MHW	Mean High Water
MLLW	Mean Lowest Low Water
MLW	Mean Low Water
MSL	Mean Sea Level
PGE	Project Geotechnical Engineer
ROC	Required Operational Capability
SASW	Spectral analysis of surface waves
SPT	Standard Penetration Test

2.5 ROLES AND RESPONSIBILITIES

The principal should appoint or nominate a Project Geotechnical Engineer (PGE) at the start of the project, who remains the Principal's focal point for all geotechnical matters for the duration of the contract, thereby promoting continuity. Similarly, the Survey Contractor (and/or main engineering Contractor) shall have continuity in the geotechnical engineer(s) responsible for the relevant parts of the project.

The role of the Engineering Centres of Excellence is provided below:

- Apply its expertise, skill and processes to produce a high-quality output in line with governing standards and the organizational requirement.
- Assist in providing project activities and man hours for project preplanning
- Provide engineering resources to perform the engineering effort

2.5.1 The Engineering Design Work Lead (EDWL)

- The EDWL has the following reporting lines:
- Accountable for the strategy and all design related activities to the Generation Engineering General Manager. The Centre of Excellence Engineering Manager will prepare, review, assess and score the performance contract of the EDWL.
- The EDWL is appointed by the Engineering Work Delivery Unit Manager in conjunction with the relevant Centres of Engineering Excellence (CoE's) and Authorised by the Generation Engineering General Manager (GM).
- Reports to the Project Engineering Practitioner for technical delivery achieved to baseline scope, schedule and cost.
- The principal should appoint or nominate a Project Geotechnical Engineer (PGE) at the start of the project, who remains the principal's focal point for all geotechnical matters for the duration of the contract, thereby promoting continuity. Similarly, the Survey Contractor (and/or main engineering Contractor) shall have continuity in the geotechnical engineer(s) responsible for the relevant parts of the project.

2.6 PROCESS FOR MONITORING

None

2.7 RELATED/SUPPORTING DOCUMENTS

None

3. STANDARD FOR THE EXECUTION OF SITE INVESTIGATIONS

3.1 GEOTECHNICAL INVESTIGATION REQUIREMENTS

A geotechnical investigation is conducted to assess the ground conditions, and determine (through intrusive, laboratory and geophysical methods) the geotechnical parameters required for the civil engineering design and construction considerations. In some instances, a geotechnical investigation will be conducted to determine the extent, severity and risks of a geological hazard i.e. faults/dykes/sinkholes.

When planning a geotechnical investigation, certain minimum inputs are required to ensure that the investigation is planned and executed according to the requestor's requirements. Section 3.1 below outlines these minimum requirements.

3.1.1 MINIMUM REQUIREMENTS

3.1.1.1 Clients Objective

The Client advises on the basis for the geotechnical investigation. The client will provide all details required for the geotechnical investigation. These details include but are not limited to the structure type, size and associated infrastructure.

3.1.1.2 ROC

Before a site investigation can been initiated, a signed Required Operational Capability (ROC) must be submitted. The clients' requirements are translated to the ROC, which will cover the purpose of the investigation, appropriate time frames, site limitations and budget constraints.

3.1.1.3 Site Accessibility

The client is responsible to obtain the necessary permissions to access the site for the proposed geotechnical investigation. This may include but obtaining the necessary permissions to work within or in close proximity to existing road/rail servitudes, under transmission servitudes, as well as permission from private land owners.

3.1.1.4 Health, Safety and Environment

Geotechnical investigations must comply with legislation; in particular; the Occupational Health and Safety Act (Act 85 of 1993). It is the responsibility of the client to obtain any site specific SHEQ/ HSE specifications and to make these available in the ROC. Safety inductions are site specific, and the client will therefore be responsible for arranging the relevant safety inductions.

All work shall be carried out in a safe manner. The relevant health, safety and environmental warnings in the applicable external standards shall be heeded. To mitigate Eskom risk, all personnel conducting site investigations shall familiarise themselves with the site OHS requirement. The site specific OHS (where applicable) will advise as to the necessary PPE requirement and safety considerations Existing services and facilities
In the event of site investigations within or in close proximity to existing services and facilities, adequate precautions shall be taken to protect such services and facilities from damage or interference during the execution of the work.

3.1.1.5 Presence of Existing Services

If detection of existing services is not included within the client's request, it is the client's responsibility to indicate the location of existing services on the proposed site. This may include fuel lines, gas lines, telecommunication lines, power lines and water lines. For areas containing existing services, it is the client's responsibility to apply for and obtain the necessary excavation permits. The structural layout of existing services should be provided by the client.

3.1.1.6 Socio-political Considerations

A site may be located in an area which is populated by local communities. The client (after liaising with the geotechnical engineer/engineering geologist) needs to inform the local community of the nature and extent of the investigation; as well as any disturbances which may be incurred by the local community (where applicable).

3.1.1.7 Environmental Considerations

The investigation must conform to national and provincial environmental laws. The necessary environmental permits and/or interfaces with the necessary authorities need to be obtained by the client. For larger environmental authorisations, should the client require the geotechnical consultant to engage the necessary authorities for approval; this should be clearly stated in the ROC.

3.2 SITE INVESTIGATION CRITERIA

3.2.1 GENERAL

The type and scope of a site investigation depends on the purpose for which the investigation is required and on the circumstances under which it is to be carried out. The various types and scopes of site investigations are described in (4.2).

The tools or techniques available for a site investigation consist of:

- Desktop / feasibility studies.
- Reconnaissance / Site walk-over
- Field survey by excavation, visual inspection, in-situ testing and sample collection
- Laboratory testing of disturbed and undisturbed samples collected during a field survey.
- Data processing, integration, and interpretation techniques for reporting purposes.

Note: Based on the existing geotechnical information and Scope or Works the Project Geotechnical Engineer may decide not to conduct a Geotechnical Investigation.

Consideration shall be given to:

- Obtaining adequate site investigation data at an early stage in the project,
- Providing specialist supervision of the Survey Contractor's field survey activities, in order to help in ensuring that the objectives are met (e.g., by adjusting the investigation plan and identifying any deficiencies);
- Preserving samples of ground or groundwater and, retaining specific monitoring instruments for ongoing or near future use.
- All field investigation shall be conducted in compliance with the latest national and/or international standards for site investigation and ground classification techniques (this includes sample acquisition and laboratory testing).

3.2.2 LEVELS OF GEOTECHNICAL INVESTIGATION

3.2.2.1 Phasing

For each project stage a certain amount of detail may be required. If the investigations for previous stages provide a significant level of detail, no further investigations will be required.

The geotechnical engineer decides the stage of the project at which the geotechnical investigation will be required.

The ultimate intention of the geotechnical investigation is to ensure that a re-work is not required. Therefore, the initial investigation shall be aimed at attaining the maximum amount of reliable information as possible.

The timeline for a geotechnical investigation will be dependent on the scope of works required. The geotechnical engineering and the principal engineer will decide on an adequate timeframe for the intended works.

3.2.2.2 Pre-Feasibility investigation

A preliminary investigation is normally carried out in the initial stages of the project. The objective is to give a general indication of ground conditions and to identify any potential problems. Other surveys which may be carried out at this stage include topography, bathymetry, seismic hazard or other geo-hazard, especially when little information is available from other sources.

3.2.2.3 Feasibility investigation

The feasibility Investigation is a preliminary investigation is normally carried out in the initial stages of the project. The objective is to give a general indication of ground conditions and to identify any potential problems. Other surveys which may be carried out at this stage include topography, bathymetry, seismic hazard or other geo-hazard, especially when little information is available from other sources.
Preliminary site investigations are conducted typically to determine the feasibility of the site for the intended construction. They are primarily adopted for larger projects such as Ash Facilities or Pump Storage Schemes. This level of an investigation involves a comprehensive desk study and limited investigations (as deemed required by size of project).

3.2.2.4 Detailed site investigation

The detailed site investigation (investigation for detailed design) has the objective of producing all data required for detailed design. The layout of plant and equipment is known at this time.

Detailed investigations are conducted including geophysical (where required), in-situ testing and laboratory testing. Interpretive and factual reports are compiled, geotechnical recommendations are made. Geological hazards are identified.

3.2.2.5 Verification investigation

The objective of a 'verification survey' is to verify the data established by earlier investigations and to confirm the basis on which the relevant recommendations have been made. The scope should therefore be limited to what is considered necessary in this respect. The verification investigation may be conducted if the existing geotechnical information and associated recommendations are deemed unreliable or un-usable.

A verification investigation may also be required during the construction phase. If it becomes evident that survey data from investigation, analysis or observation appear to contradict the corresponding equivalent data obtained from other or earlier surveys, a 'clarification survey' shall be performed.

The scope of such a clarification shall be determined by the geotechnical engineer and the principal.

Verification survey results shall not absolve the Contractor from responsibility for all geotechnical data and interpretation he uses.

3.2.2.6 Monitoring investigations

Construction monitoring may include activities such as checks on fill compaction, ground water levels, logging of ground conditions in foundation excavations etc. Recommendations on monitoring programmes should be part of interpretative survey reports and/or method statements.

3.3 INVESTIGATION METHODOLOGY

3.3.1 DESK STUDY

A desk top study entails a review of known literature, and regional data for the geology, geo-hydrology, climatology and vegetation of the intended area. The desk top study will broadly categorise a site in terms of the geological condition and give a general idea of the probable potential geotechnical hazards. Desk top assessments may be conducted at the pre-feasibility stage of a project.

Data typically available are:

- topographical maps.
- geological maps.
- geological records.
- engineering geological maps.
- previous ground investigation reports.
- construction records (e.g., pile driving and test pile records).
- seismic risk maps + earthquake data.
- soil survey maps (for agriculture).
- borehole history and records.
- mining records.
- water authority records.
- local government records.
- historical data (old maps, previous use, changed landforms).
- utilities crossing the site.
- aerial and other photographs.
- meteorological records.
- flood records.
- newspaper and technical journal records of other related hazards such as landslides and mudslides
- Internet sites.

Typical sources of data are:

- local authorities.
- geological survey (government body).
- local museums.
- client (if site is being extended and previous geological data can be sourced).
- utilities companies.
- government mining office.
- mining companies.
- staff who have been in the area employee familiarity with the proposed area.

- local residents.
- building regulations.
- site visit/walkover survey.
- old newspapers (newspaper record departments).

3.3.2 GEOTECHNICAL FIELD INVESTIGATION

The geotechnical investigation is planned and executed based on the client requirements. Geotechnical investigations will typically comprise of intrusive field investigations coupled by laboratory tests. Laboratory tests are selected based on the geotechnical information requirements of the project.

The type and scope of a site investigation depends on the purpose for which the investigation is required and on the circumstances under which it is to be carried out.

The tools or techniques available for a site investigation consist of:

- Desk-top / feasibility studies.
- Reconnaissance / Site walk-over
- Field survey by excavation, visual inspection, in-situ testing and sample collection
- laboratory testing of disturbed and undisturbed samples collected during a field survey.
- data processing, integration and interpretation techniques for reporting purposes.

Note: Based on the existing geotechnical information and Scope or Works the Project Geotechnical Engineer may decide not to conduct a Geotechnical Investigation

Consideration shall be given to:

- obtaining adequate site investigation data at an early stage in the project,
- providing specialist supervision of the survey contractor's field survey activities, in order to help in ensuring that the objectives are met (e.g., by adjusting the investigation plan and identifying any deficiencies).
- preserving samples of ground or groundwater and, retaining specific monitoring instruments for ongoing or near future use.
- All field investigation shall be conducted in compliance with the latest national and/or international standards for site investigation and ground classification techniques (this includes sample acquisition and laboratory testing).

The bullet points below outline the approach to executing a geotechnical field investigation:

- The geotechnical engineer/engineering geologist familiarises themselves on the client requirements and the geological history of the area (where available),
- A test layout is produced based on the site layout provided by the client. This layout will aim to provide test numbers and their locations. Test layouts must consider existing services.
- Necessary safety files and permits are completed. Required inductions are conducted.
- In areas where potential existing services may occur, or voiding is present, geophysical tests are adopted to ensure these are located.

- Intrusive tests are conducted, the intrusive tests are conducted through the soil and/or rock layers as required. The required plant for the intrusive testing is determined by the depth of testing required and the hardness of the material expected upon excavation.
- Upon excavation, the soil and/or rock is classified using accepted guidelines, standards and best practise.

Laboratory samples are collected, labelled and transported to an accredited laboratory (as required). A guideline for the selection of the laboratory testing regime is provided in Section 5.3 below.

3.3.3 LABORATORY TESTING

The following table indicates the various geotechnical parameters which can be achieved with laboratory testing. Tests are conducted according to the relevant applicable standards.

Table 1: Planning Soil Investigations on Stable Soil Profiles above the water table (Byrne, et.al. ,2019)

Parameter	Field test	Laboratory test
Description of Soil Profile	Test pits Auger Trial Holes Boreholes with SPT Seismic survey	
Consistency of soil profile	In suit tests – DCP /DPSH/ SPT/CPTU In-situ profiling of trial holes/test pits Sand replacement tests	Density of undisturbed samples (oedometer)
Undrained Shear Strength	Undisturbed samples from auger holes/test pits/borehole Vane shear tests in boreholes/trial hole	Undrained triaxial Unconfined compression
Effective angle of friction/effective cohesion	Undisturbed samples from auger holes/test pits/borehole	Drained triaxial Drained shearbox Undrained triaxial with measure of pore water pressure
Modulus of compressibility (stiffness at appropriate strain level)	Cross-hole jacking/plate load/ pressure meter Small strain stiffness – SASW dilatometer	Oedometer Triaxial with local strain measurement Bender element
Index properties	Disturbed samples from auger holes/test pits/borehole	Grading analysis Atterberg Limits Moisture content Foundation Indicator
Permeability	Undisturbed samples from auger holes/test pits/borehole	Falling or constant head permeability

	CPTU Lugeon testing	
Collapse	Undisturbed samples from auger holes/test pits/borehole	Double oedometer/collapse potential
Heave	Undisturbed samples from auger holes/test pits/borehole	Double oedometer swell under load/ index testing (including hydrometer) on disturbed samples
Level of water table	Percolation test – in situ	Degree of saturation
Soil suction pressure	Filter paper test	

Table 2. Planning Soil Investigations in Saturated, Variable Soils (Coastal areas / adjacent to water courses) (Byrne, et.al. ,2019)

Parameter	Field test	Laboratory test
Description of soil profile	Borehole with SPT and/or rotary drilled cores	
Consistency of soil profile	DPSH CPT/CPTU Borehole with SPT	
Undrained Shear Strength	Vane shear tests in borehole Correlation of vane shear tests with in-situ penetrometer tests Recover undisturbed samples from borehole	Undrained triaxial tests Unconfined compression tests
Drained shear strength Effective angle of friction – φ' Effective cohesion – c'	Recover undisturbed samples from borehole Correlation of vane shear tests with in-situ penetrometer tests (for sandy soils)	Drained triaxial test Drained shear box test Undrained triaxial test (with measure of pore water pressure)
Modulus of compressibility (stiffness at appropriate strain level)	Pressuremeter tests Correlation with in –situ penetrometer tests Small strain stiffness - SASW	Oedometer tests Triaxial tests with local strain measurement
Index property tests	Disturbed samples from borehole	Grading analysis + Atterberg Limits + Moisure content = Foundation Indicator
Permeability	Undisturbed samples from borehole CPTU Lugeon test	Falling Or constant head permeability

Collapse	Undisturbed samples from borehole	Double oedometer Collapse potential test
heave	Undisturbed and/or disturbed samples from borehole	Double oedometer Swell under load test Index property tests on disturbed samples
Level of water table	Drill a borehole and installation of piezometer	

3.3.4 DELIVERABLES

The result of a site investigation is usually a report and/or a series of reports. It is essential that the reports are of a high standard, fully describing the site conditions and highlighting any places where the data may be uncertain, incorrect or possibly misleading (the latter may occur for example if it was impossible to access the worst part of site, because samples of weaker materials were too weak to test etc.), fact and interpretation shall be clearly distinguished within the report along with a list of assumptions [where applicable]. External standards usually provide detailed specifications for the presentation of factual data. The consultant shall be responsible for providing a reference as to which method was adopted when interpreting geological results.
In general, reporting requirements shall be specified and shall include:

a. the purpose of the report in relation to the project.
b. summary descriptions of work carried out, adopted practice, procedures or method statements, with references to local and international standards where appropriate.
c. information on climate, local and regional geology, seismic zoning, vegetation and current use of the site area, adjacent land uses [where applicable]
d. a list of previous investigations carried out at the site and of sources of information consulted.
e. results with clear distinguishability between interpreted and factual results
f. engineering recommendations, where required.
g. geotechnical risks and associated mitigation, where required.
h. hard copies of draft and final report.
i. electronic copy of final report.
j. comments on circumstances that may lead to defective, irrelevant, insufficient, or inaccurate data.

If the reliability of the conclusions and recommendations may be inhibited by insufficient tangible evidence or experience, the Contractor shall identify where additional studies are required in order to provide the required degree of confidence.
Particular consideration shall be given to specification of the scope (number and type of analyses, detailed advice, recommendations etc.) and the required level of detail and sophistication of interpretative analysis. The scope of works compiled by the engineering geologist and the principal shall identify outputs and formats to which the Contractor deliverables must conform.

4. AUTHORISATION

This document has been seen and accepted by:

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5. REVISIONS

Date	Rev.	Compiler	Remarks
November 2012	0.0	M Were	Draft Document for review
May 2013	1	M Were	Final Document approved
August 2014	1.1	B.W. Thomas	Content was revised, based on newer information and best practice
March 2015	2	B.W. Thomas	Final Rev 2 Document for Authorisation and Publication
September 2017	2.1	L. Mudzanani	Revised document for internal geotechnical review
October 2017	2.2	L. Mudzanani	Final Draft for Comments Review Process
November 2017	2.3	L. Mudzanani	Final Updated Draft after Comments Review Process
November 2017	3	L. Mudzanani	Final Rev 3 Document for Authorisation and Publication
October 2022	3.1	K. Kwinika	Revised document for review final Draft
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December 2022	4	K. Kwinika	Final Rev 4 Document for Authorisation and Publication

6. DEVELOPMENT TEAM

The following people were involved in the development of this document:

- Kellie Kwinika

7. ACKNOWLEDGEMENTS

- Funeka Grootboom

APPENDIX A
Check sheet for Minimum Geotechnical Investigation Requirements

Signed ROC	☐	
Safety and Health Specifications	☐	
Site Description • General Location • Co-ordinates if Available • Existing Structures (Temporary and Permanent) • Vegetation • General Climate, Rainfall data/average • Temperatures if available • Drainage and Catchment Areas • Existing Geotechnical information and/or Reports	☐	
Previous Land Use (where applicable)	☐	
Adjacent Land uses • Pollution Control Sites • Municipal • Recreation	☐	
Nature of the Development • Size of the Structure/Development • Loading (if available) • Design Life • Purpose of the Structure/Development	☐	
Purpose of the Investigation • Site Selection • Feasibility • Detailed Design		
Site Accessibility	☐	
Preliminary (Factual) Report if applicable	☐	

Final (Interpretive) Report Eskom Engineering Review		
Proposed Time Frames	☐	
Budget Allocation	☐	
Access Requirement (Inductions, permits, medicals)	☐	
Additional Notes/Comments		