PROJECT NO.	:	ZNB 5647/2023-H
DESCRIPTION OF SERVICE	:	APPOINTMENT OF AN NEC3 PROJECT MANAGER AND NEC3 SUPERVISOR, FOR THE DEVELOPMENT AND CONSTRUCTION OF NEW VRYHEID M2 FORENSCIC MOTUARY
DISCIPLINE	:	PROFESSIONAL PROJECT MANAGER NEC3 PROJECT MANAGER AND PROFESSIONAL ARCHITECT AS NEC3 SUPERVISOR;

DEPARTMENT OF HEALTH
CENTRAL SUPPLY CHAIN MANAGEMENT DIRECTORATE
Private Bag X9051
Pietermaritzburg 3200

PLEASE NOTE THAT THIS BID IS SUBJECT TO TREASURY REGULATIONS 16A ISSUED IN TERMS OF THE PUBLIC FINANCE MANAGEMENT ACT, 1999, THE KWAZULU-NATAL SUPPLY CHAIN MANAGEMENT POLICY FRAMEWORK AND THE GENERAL CONDITIONS OF CONTRACT PRESCRIBED BY PROVINCIAL TREASURY.

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SECTION A
INVITATION TO BID

DESCRIPTION:

APPOINTMENT OF AN NEC3 CONSTRUCTION PROJECT MANAGER AND NEC3 SUPERVISER, FOR THE DEVELOP AND CONSTRUCTION OF NEW VRYHEID M2 FORENSCIC MORTUARY

Project Number : ZNB 5647/2023-H
Closing Date : 07 September 2023
Closing Time : 11:00

Compulsory Briefing : Yes
Date : 23 August 2023
Time : 11:00
Venue : Vacant plot, Erf 6048 Vryheid, Handel Street, Vryheid. (Next to M&H Testing Centre)

Bid Validity Period: <u>84 days</u>

THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM

BID DOCUMENTS MAY BE POSTED TO:

HEAD: DEPARTMENT OF HEALTH
CENTRAL SUPPLY CHAIN MANAGEMENT DIRECTORATE
PRIVATE BAG X9051
PIETERMARITZBURG, 3200

OR

DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS):

SUPPLY CHAIN MANAGEMENT
OLD BOYS SCHOOL
310 JABU NDLOVU STREET
PIETERMARITZBURG
3201

Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.

The bid box is generally open 24 hours a day, 7 days a week.

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

THE FOLLOWING PARTICULARS MUST BE FURNISHED (FAILURE TO DO SO WILL RESULT IN YOUR BID BEING DISQUALIFIED)

NAME OF BIDDER: ....

POSTAL ADDRESS: ....

....

....

Code: ....

STREET ADDRESS: ....

....

Code: ....

TELEPHONE: Code: .... Number: ....

CELL PHONE : Code: .... Number: ....

FACSIMILE NUMBER: Code: .... Number: ....

E-MAIL ADDRESS: ....

VAT REGISTRATION NUMBER: ....

SIGNATURE OF BIDDER: ....

DATE: ....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

....

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Department : KZN - DEPARTMENT OF HEALTH
Contact Person : Junitha Sookraj
Tel : (033) 815 8369
E-mail address : junitha.sookraj@kznhealth.gov.za

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

Department : KZN - DEPARTMENT OF HEALTH
Contact Person : Raswai Potsane
Tel : (033) 940 2559
E-mail address : raswai.potsane@kznhealth.gov.za

SECTION B

SPECIAL INSTRUCTIONS AND NOTICES TO BIDDERS REGARDING THE COMPLETION OF FORMS

PLEASE NOTE THAT THIS BID IS SUBJECT TO TREASURY REGULATIONS 16A ISSUED IN TERMS OF THE PUBLIC FINANCE MANAGEMENT ACT, 1999, THE KWAZULU-NATAL SUPPLY CHAIN MANAGEMENT POLICY FRAMEWORK AND THE GENERAL CONDITIONS OF CONTRACT.

1. Unless inconsistent with or expressly indicated otherwise by the context, the singular shall include the plural and vice versa and with words importing the masculine gender shall include the feminine and the neuter.

2. Under no circumstances, whatsoever may the bid forms be retyped or redrafted. Photocopies of the original bid documentation may be used, but an original signature must appear on such photocopies.

3. The bidder is advised to check the number of pages and to satisfy himself that none are missing or duplicated.

4. Bid submitted must be complete in all respects.

5. Bid shall be lodged at the address indicated not later than the closing time specified for their receipt, and in accordance with the directives in the bid documents.

6. Each bid shall be addressed in accordance with the directives in the bid documents and shall be lodged in a separate sealed envelope, with the name and address of the bidder, the bid number and closing date indicated on the envelope. The envelope shall not contain documents relating to any bid other than that shown on the envelope. If this provision is not complied with, such bids will be rejected as being invalid.

7. A specific box is provided for the receipt of bids, and no bid found in any other box or elsewhere subsequent to the closing date and time of bid will be considered.

8. No bid sent through the post will be considered if it is received after the closing date and time stipulated in the bid documentation, and proof of posting will not be accepted as proof of delivery.

9. No bid submitted by telefax, telegraphic or other electronic means will be considered.

10. Bid documents must not be included in packages containing samples. Such bids will be rejected as being invalid.

11. Any alteration made by the bidder must be initialled.

12. Use of correcting fluid is prohibited and will render the bid invalid.

13. If it is desired to make more than one offer against any individual item, such offers should be given on a photocopy of the page in question. Clear indication thereof must be stated on the schedules attached.

SECTION C
REGISTRATION ON THE CENTRAL SUPPLIERS DATABASE

1. **In** terms of the Public Finance Management Act (PFMA), 1999 (Act No 1 of 1999) Section 38 (1) (a) (iii) and 51 (1) (iii) and Section 76 (4) of PFMA National Treasury developed a single platform, The Central Supplier Database (CSD) for the registration of prospective suppliers including the verification functionality of key supplier information.

2. Prospective suppliers will be able to self-register on the CSD website: www.csd.gov.za

3. Once the supplier information has been verified with external data sources by National Treasury a unique supplier number and security code will be allocated and communicated to the supplier. Suppliers will be required to keep their data updated regularly and should confirm at least once a year that their data is still current and updated.

4. Suppliers to provide their CSD supplier number and unique security code to organs of state to view their verified CSD information.

....

CSD NUMBER

SECTION D

DECLARATION THAT INFORMATION ON CENTRAL SUPPLIER DATABASE IS CORRECT AND UP TO DATE

(To be completed by bidder)

This is to certify that I

....

(name of bidder / authorised representative)

Who represents

....

(state name of bidder)

Am aware of the contents of the Central Supplier’s Database with respect to the bidder’s details and registration information, and that the said information is correct and up to date as on the date of submitting this bid.

In addition, I am aware that incorrect or outdated information may be a cause for disqualification of this bid from the bidding process, and/or possible cancellation of the contract that may be awarded on the basis of this bid.

....

Name of bidder

....

Signature of bidder or authorised representative

....

Date

SECTION E

SECTION D: BIDDER'S DISCLOSURE (SBD 4)

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest1 in the enterprise, employed by the state? YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

FULL NAME	IDENTITY NUMBER	NAME OF STATE INSTITUTION

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? YES/NO

2.2.1 If so, furnish particulars:

………………………………………………………………………………………
………………………………………………………………………………………

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? YES/NO

2.3.1 If so, furnish particulars:

…………………………………………………………………………….
…………………………………………………………………………….

[1] the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

3 DECLARATION

I, the undersigned, (name)………………………………………………………………… in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

3.1 I have read and I understand the contents of this disclosure;

3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;

3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium will not be construed as collusive bidding.

3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 AND 3 ABOVE IS CORRECT.
I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

……………………………… ………………………………………………
Signature Date

……………………………… ………………………………………………
Position Name of bidder

SECTION F
FORM OF OFFER AND ACCEPTANCE

1. Offer

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

An Entity to provide NEC3 Construction Project Manager and NEC3 Supervisor

For the project: **DEVELOPMENT AND CONSTRUCTION OF NEW MTUBATUBA M2 FORENSCIC MORTUARY**

The bidder, identified in the offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the bidder, deemed to be duly authorized, signing this part of this form of offer and acceptance, the bidder offers to perform all of the obligations and liabilities of the Service Provider under the Contract including compliance with all its terms and conditions according to their true intent and meaning for remuneration to be determined in accordance with the conditions of Contract identified in the Contract Data.

2. Price

The offered price for NEC3 Construction Project Manager and NEC3 Supervisor, inclusive of value added tax, is

R (in figures) ....

and,

....

Rand (in words) ....

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the bidder before the end of the period of validity stated in the Tender Data, whereupon the bidder becomes the party named as the Service Provider in the conditions of Contract identified in the Contract Data.

3. This offer is made by the following Legal Entity: **(please cross out the block that in not applicable)**

Company or Close Corporation	or	Natural person or Partnership

Registration number:	Identity number:
Income Tax Reference number:	Income Tax Reference number:

and who is (if applicable):

Trading under the name and style of:

and who is:

Represented herein, and who is duly authorised to do so, by:

In his/her capacity as:

Note: A resolution / power of attorney, signed by all the directors / members / partners of the legal entity must accompany this offer, authorising the representative to make this offer.

4. Signed for the bidder:

Name of representative

Signature

Date

5. Witnessed by:

Name of representative

Signature

Date

6. Domicilium Citandi Et Executandi

The bidder elects as its domicilium citandi et executandi in the Republic of South Africa, where any and all legal notices may be served, as (physical address):

Street address::			
	Code:		
Postal address			
	Code:		
Telephone:	Code:	Number:	
Cell phone :	Code:	Number:	
Facsimile number:	Code:	Number:	
E-mail address:			

Banker:

Branch:

7. Acceptance

By signing this part of this form of offer and acceptance, the Employer identified below accepts the bidder's offer. In consideration thereof, the Employer shall pay the Service Provider the amount due in accordance with the conditions of Contract identified in the Contract Data. Acceptance of the bidder's offer shall form an agreement between the Employer and the bidder upon the terms and conditions contained in this agreement and in the Contract that is the subject of this agreement.

8. The terms of the Contract

The terms of the Contract are contained in:

Part C1 Agreements and Contract Data, (which includes this agreement) Part C2 Pricing Data

and;

Documents or parts thereof, which may be incorporated by reference into Parts C1 to C2 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the bidder and the Employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from set documents are valid unless contained in this schedule.

The bidder shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of Contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect, if sent by registered post, 4 days from the date on which it was posted, if delivered by hand, on the day of delivery, provided that it has been delivered during ordinary business hours, or if sent by fax, the first business day following the day on which it was faxed. Unless the bidder (now Service Provider) within seven working days of the date of such submission notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

9. Signed for the Employer:

Name of representative

Signature

Date

Street address:				
	Code:			
Telephone:	Code:		Number:	
Facsimile number:	Code:		Number:	

10. Witnessed by:

Name of representative

Signature

Date

11. Schedule of Deviations

1 Subject ……………………………………………………………………………………………….

Details ……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….

2 Subject ………………………………………………………………………………………………..

Details ……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….

3 Subject ……………………………………………………………………………………………….

Details ……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….

4 Subject ……………………………………………………………………………………………….

Details ……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….

5 Subject ……………………………………………………………………………………………….

Details ……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….
……………………………………………………………………………………………….

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

SECTION G
SPECIFICATIONS, SCOPE, EVALUATION

AN ENTITY TO PROVIDE AN NEC3 CONSTRUCTION PROJECT MANAGER AND NEC3 SUPERVISOR

Project Description:

Umkhanyakude District- New Vryheid M2 Forensic Mortuary

1. Project Background and Specification

The Department has embarked upon the Rationalization of Health facilities in order to maximize services at the appropriate levels of service delivery in accordance with the classification of the health facilities. This will improve the quality of services, access to services and contribute to the overall health and wellbeing of the communities we serve.
The Department's aim was to maintain the gains already made and further focus on interventions to accelerate health system effectiveness and further improve health outcomes and public satisfaction.

With improved leadership and clinical governance, the Department will do this by ensuring that it will robustly monitor implementation of the Turn-Around Strategy to inter alia, improve audit outcomes; improve financial and supply chain management and human resource management services; rationalize hospital services to improve efficiencies and equitable access to clinical services; strengthen governance, leadership and oversight; and re-position infrastructure development as integral part of improved service delivery.
The construction of brick and mortar buildings are then required. These require design, documentation, construction and close-out.

A contractor is to be appointed where he will responsible for the development and construction of the new Community Health Centre, the professional team will assist with design development, design documentation, construction and close-out of the project. A project brief has been approved internally with sufficient information but where the design team feels there is information missing, this can be incorporated into the design development report.

2. Detailed Project Scope of Work

National Cabinet approved the transfer of Medico-Legal Mortuaries from the South African Police Services (SAPS) to Provincial Health Departments in May 2000, and in July 2000 approved a framework to guide the development of detailed province-specific implementation plans. In May 2005, guided by the National Health Act, 2003 (Act 61 of 2003) the KwaZulu-Natal Department of Health commenced with preparation for the take-over of this function to 'provide and coordinate forensic pathology, forensic clinical medicines and related services including the provision of Medico-Legal Mortuaries and Medico-Legal Services'. In April 2006, the Forensic Service and Bioethics Directorate assumed responsibility of the SAPS mortuaries, hospital mortuaries and undertaker's premises utilised for the rendering of autopsy services.

The Forensic Pathology Service handed over by the SAPS was an under-resourced and not a fully functional and developed service. The following list basically summarises the state of the service under the control of the SAPS:

- Dilapidated facilities;
- Inadequate space in facilities;
- Poor staff morale- forensic pathology services tended to be used as a dumping ground for problematic staff in police;
- Almost non-existent psychological support for staff;
- Poor provision of equipment and protective equipment etc;
- Poor service to the bereaved and community in general.

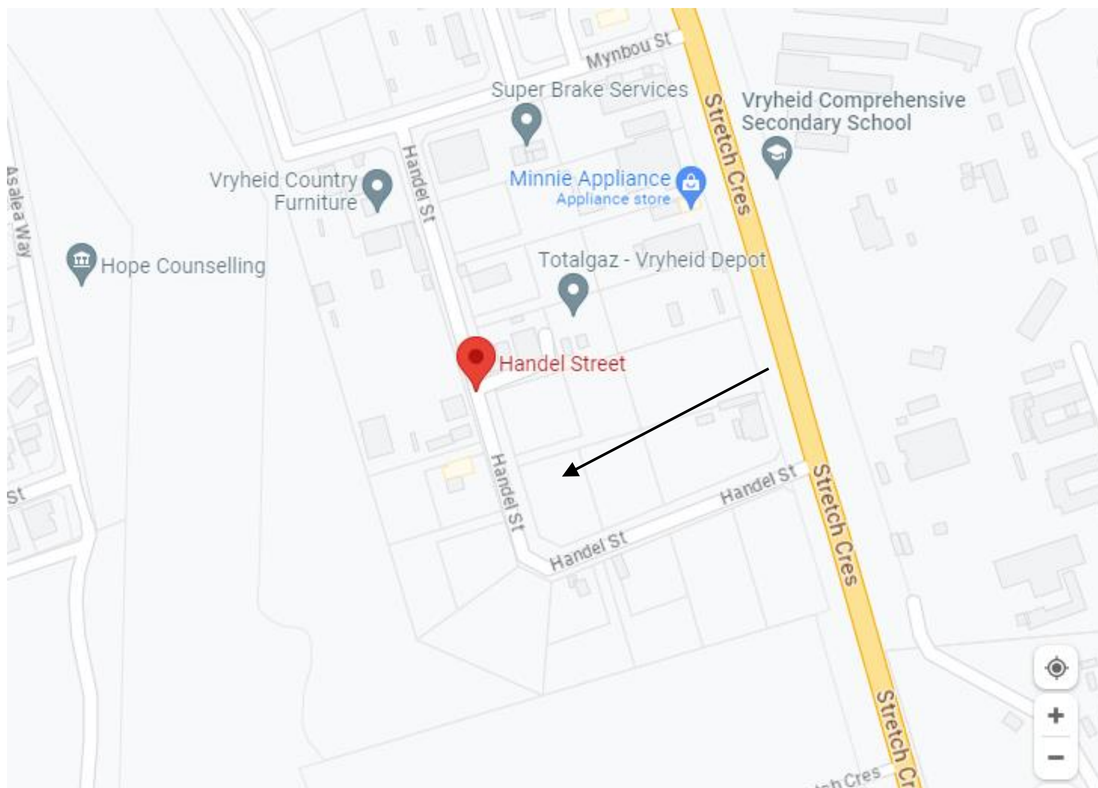
In order to address these shortcomings, a decision was taken to hand the service over to the Department of Health. In order to facilitate the hand-over, and also to achieve the collection of impartial professional forensic evidence for the criminal justice system concerning death due to causes other than natural, a conditional grant was given to the Department of Health.

The purpose of this grant was to develop and provide adequate Forensic Pathology Services in all provinces. The main objectives of the grant were to:

- Improve infrastructure, fleet and equipment;
- Improve human resource management;
- Professionalise the service by introducing training of mortuary personnel.

The Site:

The proposed new Vryheid M2 Forensic Mortuary is situated in Vryheid Town in Handel Street, ERF 6048, and is in close proximity of the Vryheid South African Police Services (SAPS). Vryheid is in the Zululand Health District.



Map 1: Location of proposed Vryheid Medico-Legal Mortuary site.

Facility Name:	Vryheid Medico-Legal Mortuary			
Owner:	Ingonyama Trust – Trustees			
Street Address (or directions):	Handel Street, Vryheid, Kwazulu-Natal.			
Postal Address:	New facility – Postal address to be confirmed			
Telephone Number:	New facility – Telephone to be confirmed			
Facility Manager:	Mr. V.S. Vilakazi			
Cadastral Description:	Latitude:	-	Longitude:	
Zoning:				
Planning restrictions:	Nil			
Existing Infrastructure				

Locality Map:

Aerial View 1

SOURCE: Google Earth

1. Project Outcomes:

- Promote safer facility to carry out emergency medical services
- Provide conducive working environment
- Improve staff morale
- Improve service delivery
- Trainings which are required weekly will be conducted through an appropriate training room
- Meetings to be held as frequently as required with an appropriate boardroom as currently the hospital boardroom is utilized with limitations.

2. Project Objectives:

- To build a new fully resourced M2 Medico-Legal Mortuary.
- To enhance uMkhanyakude district MLM services.
- To ensure compliance National Code of Guidelines for Forensic Pathology Services.
- To ensure that the environment is conducive in terms of OHS for staff working at the facility and to ensure dignity and privacy for public utilising the facility.
- To ensure that the dignity and the rights of the deceased are maintained.

3. Project Success Criteria:

- The success criteria will be that the project will assist the Department to address the delays experienced in the provision of Pathology Services.
- The project output will be a completed M2 Forensic Mortuary in the North Coast Region of the province, Abaqulusi District, Vryheid location.
- Completion of project within the agreed time-scales, budget and required quality.

4. Scope of Works of the Construction Project:

Please refer to the Project Brief attached as Appendix D for the proposed full scope of the project. The project will be based on the NEC3 Option B April 2013 Contract utilising a Develop and Construct contracting strategy. The appointed Principal Contractor will therefore be responsible for appointing the relevant professionals to produce the design on the project

4.1. Project Manager:

Design Development:

- Assist the client in the procurement of the balance of the consultants including the clear definition of their roles, responsibilities and liabilities.
- Establish and co-ordinate the formal and informal communication structure, processes and procedures for the design development of the project.

- Prepare, co-ordinate and agree a detailed Design and Documentation Programme, based on an updated Indicative Construction Programme, with all consultants.
- Manage, co-ordinate and integrate the design by the consultants in a sequence to suit the project design, documentation programme and quality requirements.
- Conduct and record the appropriate planning, co-ordination and management meetings.
- Facilitate any input from the design consultants required by Construction Manager on constructability.
- Facilitate any input from the design consultants required by Health and Safety consultant 3.8. Manage and monitor the timeous submission by the design team of all plans and documentation to obtain the necessary statutory approvals.
- Establish responsibilities and monitor the information flow between the design team, including the cost consultants.
- Monitor the preparation by the cost consultants of cost estimates, budgets, and cost reports.
- Monitor the cost control by the cost consultants to verify progressive design compliance with approved budget, including necessary design reviews to achieve budget compliance.
- Facilitate and monitor the timeous technical co-ordination of the design by the design team.
- Facilitate client approval of all Stage 3 documentation

Design Documentation:

- Select, recommend and agree the Procurement Strategy for contractors, subcontractors and suppliers with the client and consultants.
- Prepare and agree the Project Procurement Programme.
- Co-ordinate and monitor the preparation of the tender documentation by the consultants in accordance with the Project Procurement Programme.
- Facilitate and monitor the preparation by the Health and Safety Consultant of the Health and Safety Specification for the project.
- Manage the tender process in accordance with agreed procedures, including calling for tenders, adjudication of tenders, and recommendation of appropriate contractors for approval by the client.
- Advice the client, in conjunction with other consultants on the appropriate insurances required for the implementation of the project.
- Monitor the reconciliation by the cost consultants of the tender prices with the project budget.
- Agree the format and procedures for monitoring and control by the cost consultants of the cost of the works.
- Facilitate client approval of the tender recommendation(s).

Construction

- Instruct the contractor on behalf of the client to appoint subcontractors.
- Receive, co-ordinate, review and obtain approval of all contract documentation provided by the contractor, subcontractors, and suppliers for compliance with all of the contract requirements.

- Monitor the ongoing projects insurance requirements.
- Facilitate the handover of the site to the contractor.
- Establish and co-ordinate the formal and informal communication structure and procedures for the construction process.
- Regularly conduct and record the necessary site meetings.
- Monitor, review and approve the preparation of the Contract Programme by the contractor.
- Regularly monitor the performance of the contractor against the Contract Programme.
- Review and adjudicate circumstances and entitlements that may arise from any changes required to the Contract Programme.
- Monitor the preparation of the contractor's Health and Safety Plan and approval thereof by the Health and Safety Consultant.
- Monitor the auditing of the Contractors' Health and Safety Plan by the Health and Safety Consultant.
- Monitor the compliance by the contractors of the requirements of the Health and Safety Consultant.
- Monitor the production of the Health and Safety File by the Health and Safety Consultant and contractors.
- Monitor the preparation by the Environmental Consultants of the Environmental Management Plan.
- Establish the construction information distribution procedures.
- Agree and monitor the Construction Documentation Schedule for timeous delivery of required information to the contractors.
- Expedite, review and monitor the timeous issue of construction information to the contractors.
- Manage the review and approval of all necessary shop details and product propriety information by the design consultants.
- Establish procedures for monitoring, controlling and agreeing all scope and cost variations.
- Agree the quality assurance procedures and monitor the implementation thereof by the consultants and contractors.
- Monitor, review, approve and certify monthly progress payments.
- Receive, review and adjudicate any contractual claims.
- Monitor the preparation the preparation of monthly cost reports by the cost consultants.
- Monitor long lead items and off-site production by the contractors and suppliers.
- Prepare monthly project reports including submission to the client.
- Manage, co-ordinate and monitor all necessary testing and commissioning by consultants and contractors.
- Co-ordinate, monitor and issue the Practical Completion Lists and the Certificate of Practical Completion.
- Co-ordinate and monitor the preparation and issue of the Works Completion List by the consultants to the contractors.

- Monitor the execution by the contractors of the defect items to achieve Works Completion.
- Facilitate and co-ordinate adequate access with the occupant for the rectification of defects by the contractors.

Close-out

- Issue the Works Completion Certificate.
- Manage, co-ordinate and expedite the preparation by the design consultants of all as-built drawings and design documentation.
- Manage and expedite the procurement of all operating and maintenance manuals as well as all warrantees and guarantees.
- Manage and expedite the procurement of all statutory compliance certificates and documentation.
- Manage the finalization of the Health and Safety File for submission to the Client.
- Co-ordinate, monitor and manage the rectification of defects during the Defects Liability Period.
- Manage, co-ordinate and expedite the preparation and agreement of the final account by the cost consultants with the relevant contractors.
- Co-ordinate, monitor and issue the Final Completion Defects list and Certificate of Final Completion.
- Prepare and present Project Closeout Report.

4.2. Supervisor:

Construction

- Administer the building contract.
- Give possession of the site to the contractor.
- Issue construction documentation.
- Review sub-contractor designs, shop drawings and documentation for conformity of design intent.
- Inspect the works for conformity and quality with the contract documentation and acceptable quality in terms of industry standards.
- Administer and perform the duties and obligations assigned to the principal agent in the building contract.
- Manage the completion process of the project.
- Assist the client to obtain the required documentation necessary for the client to obtain the occupation certificate.

Close-out

- Facilitate the project close-out including the collation of the necessary documentation to effect completion, handover and operational manual of the project.

- When the contractor's obligations with respect to the building contract have been fulfilled, the architectural professional shall issue the certificates related to the contract completion.
- Provide the client with construction record documentation and the relevant technical and contractual undertakings by the contractor and sub-contractors.

It is to be noted that the Supervisor must be always on site to monitor the quality of work being executed on site.

Deliverables of each stage are to be adhered to as per the relevant discipline gazette. Reference is to be made to the project brief at all times to ensure correct information is incorporated into reports of each stage. NB: A brief is guideline where other options are available, they should be explored in consultation with the employer / end-user.

5. **Statutory Requirements**:

Legislation:	All applicable Acts and Regulations pertaining to the Health Environment; OHS Act and Regulations; and All applicable Acts and Regulations for the various Professional Consultancy Services
Norms:	Infrastructure Unit Support Systems (IUSS) guidelines
Standards:	Infrastructure Unit Support Systems (IUSS) guidelines; Standard for Infrastructure Procurement and Delivery Management; Framework for Infrastructure Delivery and Procurement Management (FIDPM) and all applicable standards, regulations and/or specifications of KZN Department of Health
Policies:	All applicable policies of KZN Department of Health
Other Requirements:	Relevant SANS codes All applicable standards, regulations and/or specifications of KZN Department of Health

6. Required Professional Services/Disciplines Composition

- NEC3 Project Manager (Registered Professional Architect with Registration with SACPCMP or Registered Construction Project Manager with Registration with SACPCMP)
- NEC3 Supervisor (Registered Professional Architect)

7. Scope of Services required from Construction Project Manager:

a. NEC3 Project Manager

The Project Manager shall be responsible for all deliverables in terms of the Gazzette, FIDPM and NEC 3 – Option B contract (Stage 3-7 stages) including of assessing the designs and estimates/costings produced by the contractor, facilitating the development of the designs, presenting and recommending these designs for approval to the Department of Health at the designated forum, HIAC (Health Infrastructure Approval Committee). The Project Manager shall further facilitate and co-ordinate any amendments required by HIAC up until the point that approval is received for the design and costings

by Head of Department: Health or his delegated authority.

It is explicitly stated that given the public sector nature of this project and the rules, regulations and policies of the Department of Health, the Project Manager CANNOT GRANT APPROVAL for any items/aspects relating to an increase in cost, time or approval of designs of the appointed contractor. The Project Manager's role will be to assess the aforementioned items and provide a written recommendation and motivation to the Department of Health for the approval by the Head of Department: Health or his delegated authority.

No claims for additional fees shall be entertained other than what have been allowed for in the pricing of this bid, by the bidder, to perform the stated duties on the project.
If suitably qualified and experienced, the Project Manager may serve as both NEC3 Project Manager and NEC3 Supervisor on the project.

b. NEC3 Supervisor

Provision of all services, roles and responsibilities as stated in the NEC3 Option B April 2013 contract. The Supervisor shall issue reports (including reports relating to quality requirements by DoH) at no greater interval than bi-weekly covering all aspects of their duties from the date at which the contractor commences works on site up until all construction is complete and all defects are rectified. Should the Department of Health, through its own assessment, deem the Supervisor has not performed their duties in terms of the contract, penalties as detailed in Appendix C of this contract shall be applied.

c. Other Required Resources

Any additional Professional resources which the Project Manager requires to perform his/her duties are to be indicated on Form A and must be allowed for in the total percentage pricing offered. No requests for increases to the tendered value will be considered for any additional resources required post award.

In addition to the above, the scope of services for all consultants will include the corresponding deliverables as stated in the Standard for Infrastructure Procurement and Delivery Management and the Framework for Infrastructure Delivery and Procurement Management (FIDPM).

8. Additional items on Services required from Professional Service Providers (PSP):

8.1. Extensive consultation is to take place over all construction stages which will include (but is not exclusive) consultation with:

- The Facility
- Emergency Medical Services
- DOH District
- DOH Head Office
- Local authority
- Other Authorities
- Statutory bodies

- Other Departments

a. All consultants will be required to present end of stage deliverables for review and recommendations to the Health Infrastructure Approval Committee according to FIDPM and KZN DOH policies.

b. All additional required presentations to be done as may be required

c. All approvals to be acquired as may be required

8.2. Multiple awards and Contractor Partnerships on the same project:

- If each professional is appointed to provide professional services on this project, they are not to be appointed to provide any other professional services for the same project as sub-consultants/sub-contractors to the principal contractor appointed for the same project.(and form part of a consortium).
- Multiple awards for projects identified by the Department of Health as “priority projects” shall not be applicable for this project. This has been implemented in order to ensure that priority projects are implemented with limited delays.

9. Planning and Programming

The Employer is desirous that the project follow the timelines shown below. However, should the bidder feel that these timelines are not achievable then the Bidder must submit a motivation as to why it considers them not achievable and must propose alternative timelines for the Employer’s consideration and approval.

PSP Deliverables according to FIDPM stages of work	Duration to present recommendations from documents received from design team to DOH project leader
Stage 1: Inception	N/A
Stage 2: Concept & Viability Report	N/A
Stage 3: Design Development Report & Stage 4: Documentation & Procurement	3 months
Stage 5: Works	24 months
Stage 6: Handover	TBC
Stage 7: Project Close Out	3 months

The Project Manager is required to submit for approval a formal programme listing activities, level of detail, critical path activities and their dependencies, frequency of updating key dates, particulars of phased completion, programme constraints, milestone dates for completion, etc. including the activities to be carried out by the Employer or by others.

10. Software Application for documents

- Programming software shall be the latest version of MS Projects
- Drawing programme software will be the latest version/s of Autodesk AutoCAD and/or Revit
- General software will be MS Office based software and Adobe Acrobat

11. Use of Reasonable Skill and Care

The Project Manager and individual team members are to consist of one or more Registered Professionals as per the relevant Councils. They are required to perform the required service with reasonable skill, care and diligence.

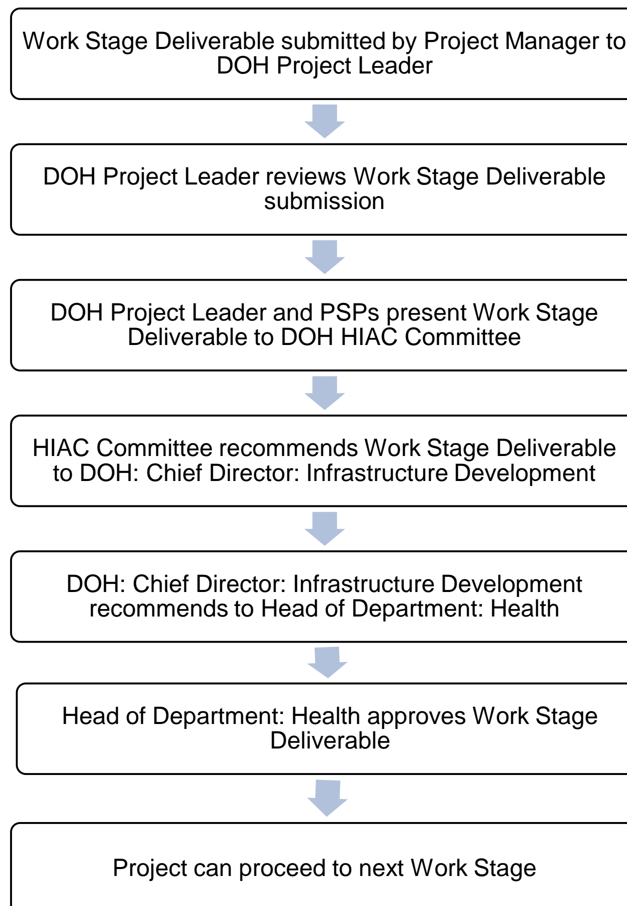
12. Co-operation with Other Service Providers and Affected Parties

The Project Manager is required to identify other service providers and affected parties on the project and establish how interactions are to take place.

13. Copyright

Copyright of all documents provided by the Consultant team will vest with the KwaZulu-Natal Department of Health.

14. General Approval Process per Work Stage



15. Access to Land / Buildings / Sites

Arrangements for access to land / buildings / sites and any restrictions thereto shall be the responsibility of the Employer. However, the Project Manager shall be aware of such arrangements and advise the Employer's internal Project Leader timeously to prevent any delays that may arise due to restricted access.

16. Quality Management

The Bidder must have a detailed and appropriate quality assurance plan and control procedures in place. This document may be requested by the employer for review at any time.

17. Format of Communications

As detailed in the Contract Data and CIDB Standard Professional Services Contract July 2009.

18. Key Personnel

Changes to key personnel shall only be effected once authorisation has been obtained from the Employer.

19. Management Meetings

Project Management meetings to monitor project progress will take place every 14 calendar days

20. Forms for Contract Administration

Standard forms of contract administration purposes will be made available to the successful bidder upon award where applicable and available.

21. Daily Records

Daily time sheets of all personnel on the project shall be kept by the Project Manager and will be made available as required to the Employer. Time sheets are to clearly state work performed.

22. Fee Claims and Apportionment of Fees

Receipt and subsequent approval (by Head of Department: Health or his designated relevant authority) of all deliverables as stipulated under the relevant Construction Work Stage (Work Stages 3,4,5 and 6) of the relevant gazettes as stated in point 9 above and corresponding FIDPM Stages (3 to 7), is a prerequisite for payment of said stage. Only Construction Work Stage 5 will receive interim payments on a quarterly basis based on the proportion of the value of construction work completed at the time of invoice.

Payment of disbursements is based on a proven cost basis only in accordance with the National Department of Public Works, Rates for Reimbursable Expenses. Further clauses relating to the claiming and payment of fees and disbursements are stated in under point 28 and C2. PRICING DATA.

Should deliverables as referenced under the Scope of Services (Section G, Item 9) not be required, fees will be adjusted downwards to align with the reduced scope of work.

Payment of fees shall be apportioned to Construction Work Stages (Stages 3-6) in accordance with the tables below:

22.1 Construction Project Manager

Stage 1	N/A
Stage 2	N/A
Stage 3	30%
Stage 4	15%
Stage 5	45%
Stage 6	10%

Payment of fees shall be apportioned to Construction Work Stages (Stages 5-6) for Supervision in accordance with the tables below:

22.2 Supervisor (Architectural Fees)

Stage 1	N/A
Stage 2	N/A
Stage 3	N/A
Stage 4	N/A
Stage 5	30%
Stage 6	3%

22.4 Supervisor

The payment of fees for work performed by the Supervisor shall only occur is Construction Stages 5. The Supervisor shall be entitled to claim fees at no shorter interval than every 2 months from the date upon which construction begins. The value of fees payable to the Supervisor shall be in proportion to the percentage completion of the construction works by the Contractor and as confirmed by the Project Manager, up to a maximum of 90% during Stage 5. The remaining 10% shall be claimable upon issue of the Defects Certificate by the Supervisor.

22.5 Others

All other resources required by the Project Manager in fulfilment of his/her duties shall be included in the Project Managers fee allocation and will be dispersed in accordance with the apportionment table stated above (24.1 Construction Project Manager).

23. Use of Documents by the Employer

Critical information, which will track the progress of the project, will be recorded and updated by the Project Manager on a monthly basis. These will be presented to the Employer as required, by the Project Manager and other relevant professionals and may include but not be limited to the following documents:

- Progress reports
- Financial control methodology - cost reports and cash flows
- Risk registers including full risk assessments and mitigating action
- Issue registers including full analysis and action plans
- Project programmes

24. Mentorship of Employers Trainees / Interns

From time to time, the Employer may second trainees / interns to the Consultant/s. The Consultant/s shall provide structured mentorship and exposure to seconded trainees / interns. A training / activity schedule shall be prepared for each trainee / intern for the duration of his or her stay on the project. The schedule shall have clear targets and objectives, which will be measured at the end of the training period. The Consultant/s shall allocate a mentor for each trainee / intern who will be responsible for the learning outcomes for the period of secondment.

The mentorship and training falls beyond the Consultant/s obligations in terms of criteria under Section G – Specifications.

A separate training and mentorship agreement will be concluded with the Consultant/s at the time of placing trainees / interns.

25. Estimated Project Construction Cost

The estimated project works value is R 77 000 000.00 (Seventy Seven Million Rand, exclusive of 15% VAT) with the scope of the being as detailed in the attached Project Brief and Concept Report see (Appendix D).

26. Cost and pricing of the project

The professional services of the NEC project manager and supervisor shall be tendered as a **PERCENTAGE** based on the value of the construction works. The percentage shall then be apportioned by percentage amongst the two professional disciplines. The percentage shall remain fixed for the entire project however the apportionment amongst the various disciplines may change should it be required. Changes to the apportionment are to be agreed by the two disciplines and the Employer is to be duly informed in writing by an official letter from the DoH Project Manager, prior to any further payments.
Disputes relating to the apportionment of total fees are to be resolved by the two professional disciplines.

The tendered percentage is to include <u>for any and all surcharges</u> applicable to the project for all professionals and **THE TENDERED PERCENTAGE SHALL REMAIN UNCHANGED FOR THE DURATION OF THE PROJECT**.

Should deliverables as referenced under the Scope of Services (Section G, point 9) not be required,

fees will be revised to align with the reduced scope of work.

All other adjustment of fees for each professional discipline will be regulated by the relevant Government Gazette (as stated in point 9 above).

27. Project Details

a. You are requested to quote for NEC3 Project Manager and NEC3 Supervisor.

The Professional Architect (NEC3 Project Manager) may also assume the role of Supervisor if suitably qualified and experienced as per the stated requirements.
The relevant Guidelines are as per the following:

Construction Project Manager	South African Council for the Project and Construction Management Professions, Board Notice 168 of 2019 Government Gazette No. 42697 of 13 September 2019

b. Consultants will be expected to attend all necessary meetings with various stakeholders as reasonably required.

c. Consultants will be expected to attend a minimum of two (2) site meetings per month during the construction stage.

d. Disbursements as published in the monthly National Department of Public Works "Rates for Reimbursable Expenses" shall be used as guideline. Discount can also be offered in this regards, but a maximum rate applicable shall be for vehicles up to 2150 cc.

e. Please note that total final fees payable will be calculated on final value of contract for "fee purposes" only or final contract cost estimates for "fee purposes" only - whichever may be applicable at the time.

f. You are requested to submit your bid using the FEE BASED QUOTE PROFORMA (Appendix A, Tables 1 & 2), stamped utilizing your official company stamp and duly signed by the Registered Lead Professional who will be dedicated to this project and is based at the office address where the project is intended to be awarded.

28. Conditions Of Appointment

a. The Entity must have within their employment or display their ability to have access to the professional consultants as listed in paragraph 29.1 above. Construction Project Management Services cannot be outsourced and must be provided in-house by the bidding entity. Bidders are to provide a letter outlining the services to be provided in-house by the bidding entity, as well as letters of agreement securing Professional Services for those professional disciplines to be provided by others. Outsourced services agreement letters are to be signed by the bidder and the Principal of the outsourced firm and be on the bidder's official company letterhead. Furthermore, Form A must be completed confirming the firm and Registered Professional proposed to the project for each service.

b. The Professional individuals named as part of the project team (as per Form A) must

play an active and visible role on the project. The stated Professional individuals must attend a minimum of 70% of all meetings in which they are required. Failure to comply with this condition will constitute a breach of this contract.

c. Consultants must submit all returnable documents as listed on Appendix B herein. Failure to submit all the requested documents will result in the bid not being considered.

d. The Department of Health reserves the right to place the project on hold or cancel the project at ANY POINT.

29. Evaluation Criteria

The evaluation of bids will be conducted in three (3) phases:

PHASE 1: Responsiveness

- Correctness of bid document
- Compliance with SCM regulations (registration with Central Suppliers Database (CSD), Tax compliance, other prescripts requirements and submission of all documentation and information as per Appendix G)

PHASE 2: Eligibility and Quality/Functionality Evaluation

Eligibility Criteria

In order to be eligible to be awarded this bid, the following criteria MUST be satisfied:
The professional services must consist of:

- NEC3 Project Manager (Registered Professional Construction Project Manager registered with SACPCMP)
- NEC3 Supervisor (Registered Professional Architect registered with SACAP)
- Any other entity in which services may be required in good standing with their respective regulatory bodies and having been approved by the Department of Health.

The Project Manager (NEC3 Project Manager) may also assume the role of Supervisor if suitably qualified and experienced as per the stated requirements.

All Professionals are to be registered with the applicable South African regulating body/council for their Professional discipline. All Professionals must be Registered Professionals with a minimum of 5 years' experience post registration. Where the professional is a Technologist a minimum of 6 years experience post registration is required, for Health and Safety Agent 3 years in experience post registration will be considered.

All Registered Professionals must be in good-standing with their respective council and their membership must be valid.

Proof of Registration for each discipline shall be attached under the appropriate cover page provided under Appendix H. Failure to attach the valid Proof of Registrations in the provided designated sections will render the bid non-responsive and result in the bid being excluded from further consideration.

- Proof of all the relevant valid Professional Indemnity Insurance must be provided as per the list below:
    - Project Manager: R 5,0 million
    - Supervisor (as an Architect): R 5,0 million

Proof of valid Professional Indemnity Insurance for each discipline shall be attached under the appropriate cover page provided under Appendix H. Failure to attach the valid Proof of Professional Indemnity Insurance in the provided designated sections will render the bid non-responsive and result in the bid being excluded from further consideration.

Professional Indemnity Insurance for all Professionals is to remain valid and in force for the full duration of the project and for the minimum amounts stated above. Failure to provide proof of valid and compliant Professional Indemnity Insurance Policies for all consultants, at any stage during the project when requested, will result in termination of services and damages claimable.

All eligibility criteria returnables should be tabbed, labelled and included in the designated areas as per the instructions below.

Eligibility criteria	**Documentation to be provided**	**FOR EVALUATION COMMITTEE USE ONLY**	
		Eligibility Criteria Met (Yes/No)	**Comments**
1. The Construction Project Manager must be a; Registered Professional Construction Project Manager with SACPCMP (NEC3 Project Manager) and be in good standing with SACPCMP as at the closing date of the tender 2. The Supervisor must be a; • Registered Professional Architect with SACAP (NEC3 Supervisor) and be in good standing with SACAP as at the closing date of the tender -with a minimum of 5 years post professional registration experience.	**TAB LABEL: G-1** 1.1 Valid Proof of Registration and a letter of good standing (registration from the applicable South African regulating body/council for their Professional discipline) for each Professional Lead Member per discipline shall be attached under the appropriate cover page provided under Appendix H. 1.2 Completed Form A (Appendix E)		
2. Proof of all the relevant valid Professional Indemnity Insurance must be provided as per the list below: • Project Manager: R 5,0 million • Supervisor (as an Architect): R 5,0 million	**TAB LABEL: G-2** Proof of valid Professional Indemnity Insurance for each applicable discipline complying with the minimum amounts stated shall be attached under the appropriate cover page provided under Appendix H		

Quality/Functionality Criteria

Each bid is required to meet the minimum qualifying evaluation score of 60 points as per criteria below. All functionality/quality returnables should be tabbed, labelled and included in the designated areas as per the instructions below.

Evaluation criteria	Documentation to be provided	Points allocated
1. Bidder to demonstrate Technical Competency and relevant Project Experience relating construction projects in General Building Projects specifically, with a value of over R10 million in the past 10 years. (i.e. Project Manager, Supervisor/Architect)	**TAB LABEL: H-1** 1.1 Bidder to complete Curriculum Vitae (CV) for the allocated Lead Professional per discipline. The following conditions must be met to receive points in this category: 1.1.1 CVs must be filled and submitted on the provided template and inserted under the provided cover pages as Appendix **I**. Please refer to Appendix F for the CV template. Documents requested in 1.1.4. & 1.1.5. to be inserted under the provided cover pages as Appendix **I** 1.1.2 One CV (if NEC3 Project Manager also assumes role of NEC3 Supervisor). Two CVs must be provided if NEC3 Project Manager and Supervisor are different individuals. 1.1.3. CVs provided must align with the information submitted in Form A (Appendix E) 1.1.4. Completion certificates per project must be provided to obtain points for past project experience (Maximum 3 projects and relevant to the Professional per discipline and must align with project experience stated on CV) 1.1.5. Contractor award letters **OR** signed final account summaries **OR** signed reference letters from the client; clearly stating the project value must be provided to prove value of projects (Maximum 3 projects and relevant to the Professional per discipline and must align with project experience stated on CV) Only the first 3 stated past projects per professional CV will be evaluated as per the CV template Failure to meet the requirements of points 1.1.1 to 1.1.3 above will result in 0 points being awarded. Allocation of points will be as follows: - 7 points will be awarded per completed compliant CV per discipline up to a maximum of 14 points. **AND** - 12 points will be awarded per past project in General Building (one of the three is from the Health Sector), is greater than R60 million in value and has been completed in the past 10 years - 10 points will be awarded per past project in General Building (one of the three is from the Health Sector), is greater than R40 million in value and has been completed in the past 10 years	14 72

Evaluation criteria	Documentation to be provided	Points allocated
	- 8 points will be awarded per past project in General Building (one of the three is from the Health Sector), is greater than R20 million in value and has been completed in the past 10 years - 6 points will be awarded per past project in General Building (one of the three is from the Health Sector), is greater than R10 million in value and has been completed in the past 10 years. -0 points will be awarded past project in General Building (none of the three is from the Health Sector), is less than R10 million and has been completed in over 10 years. **Note: If NEC3 Project Manager assumes Supervisor role, double points will be allocated for this individuals CV and project experience to account for the dual roles**	
2. Organogram of Resources Proposed for the Project	**TAB LABEL: H-2** 2. One team organogram displaying the Project Manager and Supervisor. The organogram should also clearly state the role of each individual on the project and must include ALL of the individuals stated on Form A. Allocation of points will be as follows: - 14 points will be awarded for a submitted organogram with a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered Director, a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered organization member, a SACPCMP (project manager) and/or SACAP (Supervisor) candidate registered organization member and a technician which fully complies with the requirements listed above with responsibilities of each individual member. - 10 points will be awarded for a submitted organogram with a Director who is not professionally registered, a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered organization member, a SACPCMP (project manager) and/or SACAP (Supervisor) candidate registered organization member and a technician which fully complies with the requirements listed above with responsibilities of each individual member. - 8 points will be awarded for a submitted organogram with a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered Director, a SACPCMP (project manager) and/or SACAP (Supervisor) candidate registered organization member and a technician which fully complies with the requirements listed above with responsibilities of each individual member. - 4 points will be awarded for a submitted organogram with a SACPCMP (project manager) and/or SACAP (Supervisor)	14

Evaluation criteria	Documentation to be provided	Points allocated
	professionally registered Director and a technician which fully complies with the requirements listed above with responsibilities of each individual member. - 0 points will be awarded for an incomplete, irrelevant or no submission	

PHASE 3: Price and Preference

- Tendered Price and preference points
- Evaluation using the Point System

The following special conditions are applicable to the evaluation of this tender:

- The Department reserves the right not to award to the lowest bidder.
- The Department will conduct a detailed risk assessment prior to the award.

NB: For internal use only by the evaluation committee

1	CV SUBMISSIONS	SUBMISSION OF A COMPLIANT CV OF EACH DISCIPLINE	REQUIRED POINTS	POINTS ALLOCATED
		Professional Project Manager	7 Points	
		Professional Architect/Supervisor	7 Points	
		Non-submission or submission of non-compliant CV	0 Points	
	Total Points allocated in this section		**14 Points**	
2	PROJECT EXPERIENCE	EXPERIENCE IN OFFICE ACCOMMODATION (Max 3 Projects)	REQUIRED POINTS	POINTS ALLOCATED
	2 disciplines x 3 projects each x 12 points per project	12 points will be awarded per past project in General Building (one of the three is from the Health Sector), is greater than R60 million in value and has been completed in the past 10 years	72 points	
	2 disciplines x 3 projects each x 10 points per project	10 points will be awarded per past project in General Building (one of the three is from the Health Sector), is greater than R40 million in value and has been completed in the past 10 years	60 points	
	2 disciplines x 3 projects each x 8 points per project	8 points will be awarded per past project in General Building (one of the three is from the Health Sector), is greater than R20 million in value and has been completed in the past 10 years	48 points	
	2 disciplines x 3 projects each x 6 points per project	6 points will be awarded per past project in General Building (one of the three is from the Health Sector), is greater than R10 million in value and has been completed in the past 10 years	36 Points	
		-0 points will be awarded past project in General Building (none of the three is from the Health Sector),	0 Points	

		is less than R10 million and has been completed in over 10 years.		
	Total Points allocated in this section		**72 Points**	
3	ORGANOGRAM COMPLIANCE	ORGANOGRAM SUBMISSION	REQUIRED POINTS	POINTS ALLOCATED
		14 points will be awarded for a submitted organogram with a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered Director, a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered organization member, a SACPCMP (project manager) and/or SACAP (Supervisor) candidate registered organization member and a technician which fully complies with the requirements listed above with responsibilities of each individual member.	14 points	
		10 points will be awarded for a submitted organogram with a Director who is not professionally registered, a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered organization member, a SACPCMP (project manager) and/or SACAP (Supervisor) candidate registered organization member and a technician which fully complies with the requirements listed above with responsibilities of each individual member.	10 points	
		8 points will be awarded for a submitted organogram with a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered Director, a SACPCMP (project manager) and/or SACAP (Supervisor) candidate registered organization member and a technician which fully complies with the requirements listed above with responsibilities of each individual member.	8 points	
		4 points will be awarded for a submitted organogram with a SACPCMP (project manager) and/or SACAP (Supervisor) professionally registered Director and a technician which fully complies with the requirements listed above with responsibilities of each individual member.	4 points	
		0 points will be awarded for a submitted organogram with insufficient details and does not comply with the requirements listed above. No submission of the requested will also lead to 0 points allocation	0 points	
			14 Points	
	Total Points allocated in this section	**SUB-TOTAL POINTS**	**100 Points**	

SBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

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1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 **To be completed by the organ of state**

(*delete whichever is not applicable for this tender*).

a) The applicable preference point system for this tender is the 80/20 preference point system.
b) Either the 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

(a) Price; and

(b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	**100**

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

(a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;

(b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;

(c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

(d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and

(e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 **or** **90/10**

$$Ps = 80\left(1 - \frac{Pt - P\,min}{P\,min}\right) \text{ or } \qquad Ps = 90\left(1 - \frac{Pt - P\,min}{P\,min}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 **or** **90/10**

$$Ps = 80\left(1 + \frac{Pt - P\,max}{P\,max}\right) \text{ or } \qquad Ps = 90\left(1 + \frac{Pt - P\,max}{Pmax}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	**Number of points allocated (80/20 system) (To be completed by the organ of state)**	**Number of points claimed (90/10 system) (To be completed by the tenderer)**
Companies who are at least 51% Owned by Black People	10	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm……………………………………………………………………….

4.4. Company registration number: …………………………………………………………...

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

i) The information furnished is true and correct;

ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

(a) disqualify the person from the tendering process;

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

(d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary.

……………………………………….
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME: ……………………………………………………….
DATE: ……………………………………………………….

ADDRESS: ……………………………………………………….

……………………………………………………….

……………………………………………………….
……………………………………………………….

SECTION H
OFFICIAL BRIEFING SESSION / SITE INSPECTION CERTIFICATE

Bid No:	ZNB 5647/2023-H
Service:	APPOINTMENT OF AN NEC3 PROJECT MANAGER AND NEC3 SUPERVISOR, FOR THE DEVELOPMENT AND CONSTRUCTION OF NEW VRYHEID M2 FORENSCIC MOTUARY
Date:	23 August 2023
Time:	11:00
Venue:	Vacant plot, Erf 6048 Vryheid, Handel Street, Vryheid. (Next to M&H Testing Centre)

This is to certify that

....
(name)

On behalf of

....

Visited and inspected the site on

....
(date)

And is therefore familiar with the circumstances and the scope of the service to be rendered.

Signature/s of Bidder/s	Departmental Representative
(Print Name)	(Print Name)
	Departmental Stamp (Optional)
Date:	Date:

SECTION I

TAX COMPLIANCE STATUS (TCS)

1. The State / Province may not award a contract resulting from the invitation of bids to a bidder who is not properly registered and up to date with tax payments or, has not made satisfactory arrangements with SA Revenue Services concerning due tax payments.

30. The South African Revenue Services (SARS) has phased out the issuing of paper Tax Clearance Certificates. From 18 April 2016, SARS introduced an enhanced Tax Compliance system. The new system allows taxpayers to obtain a Tax Compliance Status (TCS) PIN, which can be utilized by authorized third parties to verify taxpayers' compliance status on line via SARS e-filing.
31. Bidders are required to apply via e-filing at any SARS branch office nationally. The Tax Compliance Status (TCS) requirements are also available to foreign bidders / individuals who wish to submit bids.
32. SARS will then furnish the bidder with a Tax Compliance Status (TCS) PIN that will be valid for a period of 1 (one) year from the date of approval.
33. In bids where Consortia / Joint Venture / Sub-contractors are involved, each party must submit a separate Tax Compliance Status (TCS) PIN.
34. Application for Tax Compliance Status (TCS) PIN can be done via e-filing at any SARS branch office nationally or on the website www.sars.gov.za.
35. Tax Clearance Certificates may be printed via e-filing. In order to use this provision, taxpayers will need to register with SARS as an e-Filer through the website www.sars.gov.za.
36. Tax Compliance Status is not required for services below R 30 000.00 ITO Practice Note Number: SCM 13 of 2007.
37. Kindly either provide an original tax clearance certificate, your tax number or pin number.

TAX NUMBER:

PIN NUMBER:

SECTION J
AUTHORITY TO SIGN A BID

A Companies

If a Bidder is a company, a certified copy of the resolution by the board of directors, personally signed by the chairperson of the board, authorising the person who signs this bid to do so, as well as to sign any contract resulting from this bid and any other documents and correspondence in connection with this bid and/or contract on behalf of the company must be submitted with this bid, that is before the closing time and date of the bid

Authority by Board of Directors

By resolution passed by the Board of Directors on

....

(date)

....

(name and whose signature appears below)

has been duly authorised to sign all documents in connection with this bid on behalf of

....

(Name of Company)

In his/her capacity as:

....

Signed on behalf of Company:

....

(print name)

....

Signature of signatory:

....

Date:

Witnesses:

1. ....

2. ....

B **Sole proprietor** (one - person business)

I, the undersigned

....
(name)

Hereby confirm that I am the sole owner of the business trading as

....
(name)

....
Signature of signatory:

....
Date

C **Partnership**

The following particulars in respect of every partner must be furnished and signed by every partner:

Full name of partner	Residential address	Signature

We, the undersigned partners in the business trading as

(name)

hereby authorized

(name)

to sign this bid as well as any contract resulting from the bid and any other documents and correspondence in connection with this bid and /or contract on behalf of:

(print name)

Signature of signatory:

Date:

(print name)

Signature of signatory:

Date:

(print name)

Signature of signatory:

Date:

D **Close Corporation**

In the case of a Close Corporation submitting a bid, a certified copy of the Founding Statement of such corporation shall be included with the bid, together with the resolution by its members authorising a member or other official of the corporation to sign the documents on their behalf.

Authority to sign on behalf of the Close Corporation

....

By resolution of members at a meeting on

....

(date)

....

(name and whose signature appears below)

has been duly authorised to sign all documents in connection with this bid on behalf of

....

(Name of Closed Corporation)

In his/her capacity as:

....

Signed on behalf of Closed Corporation:

....

(print name)

....

Signature of signatory:

....

Date:

Witnesses:

1. ....

2. ....

E **Co-Operative**

A certified copy of the Constitution of the Co-operative must be included with the bid, together with the resolution by its members authoring a member or other official of the co-operative to sign the bid documents on their behalf.

Authority to sign on behalf of the Co-Operative

....

By resolution of members at a meeting on

....

(date)

....

(name and whose signature appears below)

has been duly authorised to sign all documents in connection with this bid on behalf of

....

(Name of Co-Operative)

In his/her capacity as:

....

Signed on behalf of Co-Operative:

....

(print name)

....

Signature of signatory:

Date:

....

Witnesses:

1.

....

2.

....

F Joint Venture

If a bidder is a joint venture, a certified copy of the resolution/agreement passed/reached signed by the duly authorised representatives of the enterprises, authorising the representatives who sign this bid to do so, as well as to sign any contract resulting from this bid and any other documents and correspondence in connection with this bid and/or contract on behalf of the joint venture must be submitted with this bid, before the closing time and date of the bid.

Authority to sign on behalf of the Joint Venture

By resolution/agreement passed/reached by the Joint Venture partners on

....

(date)

....

(name and whose signature appears below)

....

(name and whose signature appears below)

....

(name and whose signature appears below)

....

(name and whose signature appears below)

has been duly authorised to sign all documents in connection with this bid on behalf of

....

(Name of Joint Venture)

In his/her capacity as:

....

Signed on behalf of Joint Venture:

....

(print name)

....

Signature of signatory:

....

Date:

(print name)

Signature of signatory:

Date:

(print name)

Signature of signatory:

Date:

(print name)

Signature of signatory:

Date:

G **Consortium**

If a bidder is a Consortium, a certified copy of the resolution/agreement passed/reached signed by the duly authorised representatives of concerned enterprises, authorising the representatives who sign this bid to do so, as well as to sign any contract resulting from this bid and any other documents and correspondence in connection with this bid and/or contract on behalf of the consortium must be submitted with this bid, before the closing time and date of the bid.

Authority to sign on behalf of the Consortium

By resolution of the members on

....

(date)

....

(name and whose signature appears below)

has been duly authorised to sign all documents in connection with this bid on behalf of

....

(Name of Consortium)

In his/her capacity as:

....

Signed on behalf of Consortium:

....

(print name)

....

Signature of signatory:

....

Date:

....

(print name)

....

Signature of signatory:

....

Date:

(print name)

Signature of signatory:

Date:

SECTION M
RECORD OF ADDENDA

<table>
<tr><td colspan="4">The undersigned confirm that the following communications received from the employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:</td></tr>
<tr><th></th><th>Date</th><th>Title or Details</th><th>No. of Pages</th></tr>
<tr><td>1</td><td></td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td><td></td></tr>
<tr><td>3</td><td></td><td></td><td></td></tr>
<tr><td>4</td><td></td><td></td><td></td></tr>
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<tr><td>10</td><td></td><td></td><td></td></tr>
<tr><td>11</td><td></td><td></td><td></td></tr>
<tr><td>12</td><td></td><td></td><td></td></tr>
<tr><td>13</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Attach Additional Pages if more space is required</td></tr>
<tr><td colspan="4">Bidder to attach proof of receipt of above listed addenda</td></tr>
</table>

Signed:		**Date:**	
Name:		**Position:**	
Bidder:			

APPENDICES

APPENDIX A - BID PROFORMA

General Notes -

- Bidders are requested to complete Table 1 and Table 2 of Appendix A. The total fees from Table 1 must be carried to the form of offer.
- Preference Points and Total Percentage offered take precedence over any additional detailed fee calculations submitted, where there is any ambiguity
- Bidders are to tender a total percentage (to 2 decimal places) for the entire team based on the value of work for fees estimate. This percentage will remain fixed throughout the project and is deemed to include for all surcharges
- Disbursements shall be allowed for at the stated amount but shall be claimed and paid on a PROVEN COST BASIS ONLY. Disbursement rates as published in the monthly National Department of Public Works "Rates for Reimbursable Expenses" shall be used for claiming.
- Table below is NOT to be modified by Tenderer

TABLE 1

Value of Work for Fees	R 77 000 000.00
Total Tendered Fee Percentage for all disciplines (to 2 decimal places)	%
Total Fees for all disciplines	R
ADD Allowance for Disbursements (Proven Costs)	R 3,850 000.00
Sub-Total 1	R
ADD VAT at 15%	R
GRAND TOTAL (to be carried to the Form of Offer and Acceptance)	**R**

COMPANY STAMP:
DATE:

TABLE 2 – APPORTIONMENT OF FEES

NEC3 Project Manager	%
NEC3 Supervisor	%
TOTAL TENDERED FEE PERCENTAGE FOR TEAM (to 2 decimal places)	**%**

COMPANY STAMP:
DATE:

APPENDIX B – RETURNABLE DOCUMENTS

CHECKLIST OF RETURNABLE DOCUMENTS			
Item No.	Required Documents	Tick	
		Yes	No
Please ensure the following items are fully completed and complied with:			
1.	Valid SARS Tax Clearance Pin Number, Tax number or original tax Clearance certificate (Tax clearance certificate to be included under Appendix G)		
2.	Authority to Sign A Bid		
3.	Declaration of bidders Past Supply Chain Management practice – SBD 8		
4.	Certificate of Independent Bid Determination – SBD 9		
5.	Declaration of interest by Consultant – SBD 4		
6.	Central Supplier Database Registration with National Treasury (Unique Reference Number & Supplier Number)		
7.	Bid from the Consultant (Attach Appendix A – Stamped and dated)		
The following documents are to be submitted under Appendix: G			
8.	Proof of Registration with Companies and Intellectual Property Commission (CIPC) (printout not older than 1 month)		
9.	Original certified copy of BBBEE Certificate		
10.	Proof of Residential Address (Municipality Rates Bills, Telephone Bill, or current lease agreement letter from Ward councillor or affidavit from Commissioner of oaths, if office is in an area where rates are not paid)		
The following documents are to be submitted under Appendix H under the relevant cover pages:			
11.	Proof of Registration with Council / Professional Body for all Lead Professionals (Attach Letter of Good standing with the relevant council if applicable dated during the year of Bid)		
12.	Proof of the relevant professional Indemnity Insurance – NEC 3 Project Manager: R 5,0 million Supervisor (Architect) : R 5,0 million		
The following documents are to be submitted under Appendix I under the relevant cover pages:			
13.	CV per Professional including supporting documentation (completion certificates and award letters / signed final accounts / reference letters)		
14.	Organogram for reporting structure		

BIDDERS TO NOTE

Submission of the above returnable documents is mandatory. Failure to submit all the requested documents will result in the tender not being considered.

APPENDIX C - CONTRACT DATA

C1. Contract Data

C1.1 Standard Professional Services Contract

The conditions applicable to this Contract are the Standard Professional Services Contract (July 2009) Third Edition of CIDB document 1015, published by the Construction Industry Development Board.

C1.1.1 Data provided by the Employer

Clause	
	The General Conditions of Contract in the Standard Professional Services Contract (July 2009) make several references to the Contract Data for details that apply specifically to this tender. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract. Each item of data given below is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.
	The Employer is the KZN Department of Health.
3.4 and 4.3.2	The authorised and designated representative of the Employer is the departmental project manager, details of whom are as indicated in the Notice and Invitation to Tender.
1	The Project is for the provision of Construction Project Manager and Supervisor for the Develop and Construct New M2 Mortuary
1	The Period of Performance is from inception of this Contract until the Service Provider has completed all Deliverables in accordance with the Scope of Services listed in Section G of the bid document.
1	The Start Date is the date from which this contract is fully signed and accepted by the KZN Department of Health
3.4.1	Communications by facsimile is not permitted.
3.5	The Services shall be executed in the Service Provider's own office and on the Project site as described in Section G. No portion of the work may be performed by a person employed by the State. No portion of the work may be sublet to any other person or persons without the prior written approval of the Employer.
3.6	Omit the following: "... within two (2) years of completion of the Service ...".
3.12	Period of Performance shall be sub dividable in separate target dates according to the programme to be submitted in terms of SECTION G part 7 hereof. A Penalty amount of R500.00 per day will be applicable per target date, to a maximum equal to R50,000.00, after which the contract may be terminated.
3.15.1	The programme shall be submitted within 14 days of the award of the contract.
3.15.2	The Service Provider shall update the programme at intervals not exceeding 8 weeks.
3.16	Time-based fees are not applicable to this appointment and therefore no adjustments for inflation are applicable.
5.4.1	The Service Provider is required to provide professional indemnity cover as set out in the Professional Indemnity Schedule as per point 12 of Appendix B.

Clause	
5.5	The Service Provider is required to obtain the Employer's prior approval in writing before taking any of the following actions: a) Deviate from the programme (delayed or earlier); b) Deviate from or change the Scope of Services; c) Change Key Personnel on the Service.
8.1	The Service Provider is to commence the performance of the Services immediately after the Contract becomes effective and execution to be as per the programme.
8.4.3 (c)	The period of suspension under clause 8.5 is not to exceed two (2) years.
9.1	Copyright of documents prepared for the Project shall be vested with the Employer.
12.1.	Interim settlement of disputes is to be by mediation.
12.2. / 12.3.	Final settlement is by litigation.
12.2.1	In the event that the Parties fail to agree on a mediator, the mediator is to be nominated by the president of the Association of Arbitrators (Southern Africa).
13.1.3	All partners in a joint venture or consortium shall carry the same professional indemnity insurance as per clause 5.4.1 of the General Conditions of Contract.
13.5.1	The amount of compensation is unlimited.
13.6	The provisions of 13.6 do not apply to the Contract.
15	In respect of any amount owed by the Service Provider to the Employer, the Service Provider shall pay the Employer interest at the rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No 1 of 1999).

C1.2.3 Data provided by the Service Provider

Clause	
	Each item of data given below is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.
1	The Service Provider is the company, close corporation, natural person, consortium, joint venture or partnership named in Form of Offer and Acceptance by the tendering Service Provider.
5.3	The authorised and designated representative of the Service Provider is the Lead Consultant / Professional Architect named on the Project by the Service Provider
5.4.1	Indemnification of the Employer I, the undersigned, being duly authorized by the Service Provider, in terms of the completed resolution ……………………………………………………… (Name of authorized person) hereby confirm that the Service Provider known as: ……………………………………………………… (Legal name of entity tendering herein) ………………………………………………………

Clause	
5.4.1	Tendering on the project: .... (Name of project as per Form of Offer and Acceptance) holds professional indemnity insurance cover, from an approved insurer, duly registered with the Finance Services Board, of not less than the amount required as cover relative to the size of project, with the first amount payable not exceeding 5% of the value of indemnity. I further confirm that the Service Provider will keep such professional indemnity fully subscribed. I further confirm that should the professional indemnity insurance, with no knowledge of the Employer, be allowed to lapse at any time or in the event of the Service Provider cancelling such professional indemnity insurance, with no knowledge of the Employer, at any time or if such professional indemnity cover is not sufficient, then the Service Provider, i. accepts herewith full liability for the due fulfilment of all obligations in respect of this Service; and ii. hereby indemnifies, and undertakes to keep indemnified, the Employer in respect of all actions, proceedings, liability, claims, damages, costs and expenses in relation to and arising out of the agreement and/or from the aforesaid Service Provider's intentional and/or negligent wrongful acts, errors and/or omissions in its performance on this Contract. I confirm that the Service Provider undertakes to keep the Employer indemnified, as indicated above, beyond the Final Completion Certificate/Final Certificate by the Employer (whichever is applicable) for a period of five (5) years after the issue of such applicable certificate. I confirm that the Service Provider renounces the benefit of the *exception is non causa debiti, non numeratae pecuniae* and *excussionis* or any other exceptions which may be legally raised against the enforceability of this indemnification. Notwithstanding the indemnification required above, the Employer reserves the right to claim damages from the Service Provider for this Project where the Service Provider neglects to discharge its obligations in terms of this agreement. .... Name: .... Signature: .... Capacity:

<table>
<tr><th>Clause</th><th colspan="3"></th></tr>
<tr><td rowspan="12">7.1.2</td><td colspan="3">As an extension of the definitions contained in clause 1 hereof, Key Persons must, for the purposes of this Contract, include one or more of the professionally registered principal(s) of the Service Provider, and/or, one or more professional(s) employed to render professional services, for whom certified copies of certificates or other documentation clearly proving current professional registration with the relevant council, including registration numbers, must be included with the tender as part of the returnable documentation.

The Key Persons and their jobs / functions in relation to the Services are:</td></tr>
<tr><td>Name</td><td>Principal and/or employed professional(s)</td><td>Specific duties</td></tr>
<tr><td>1.</td><td></td><td></td></tr>
<tr><td>2.</td><td></td><td></td></tr>
<tr><td>3.</td><td></td><td></td></tr>
<tr><td>4.</td><td></td><td></td></tr>
<tr><td>5.</td><td></td><td></td></tr>
<tr><td>6.</td><td></td><td></td></tr>
<tr><td>7.</td><td></td><td></td></tr>
<tr><td>8.</td><td></td><td></td></tr>
<tr><td>9.</td><td></td><td></td></tr>
<tr><td>10.</td><td></td><td></td></tr>
<tr><td>7.2</td><td colspan="3">A Personnel Schedule is not required.</td></tr>
<tr><td></td><td colspan="3">If the space provided in the table above is not sufficient to describe the specific duties, this space may be utilized for such purpose</td></tr>
</table>

C2: PRICING DATA

C2.1 Pricing Instructions

C2.1.1 Basis of remuneration, method of tendering and estimated fees

C2.1.1.1 Professional fees for the Multi-Disciplinary Services will be paid on Value basis.

The words “value based” and “percentage based” used in connection with fee types in this document or any documents referred to in this document are interchangeable and are deemed to have the same meaning.

C2.1.1.2 Tenderers are to tender:
A value based fee utilizing the stated estimated project construction value multiplied by a fixed tendered percentage which is then apportioned amongst the multi-disciplinary team.

C2.1.1.3 The amount tendered herein (*Section F – Form of Offer and Acceptance*) is for tender purposes only and will be amended according to the application of the actual cost of construction.

C2.1.1.4 Reimbursable rates for typing, printing and duplicating work shall be in accordance with the conditions laid out under section C2.1.5

C2.1.1.5 Disbursements in respect of all travelling and related expenses including all travelling costs, time charges and subsistence allowances related thereto will not be paid for separately except for attending off-site meetings at the request of the employer where only travelling costs (mileage only) shall be claimable in accordance with the rules set out in C2.1.6.3

The site must be visited as often as the works require for the execution of all duties on the Project. The Service Provider must be available at 24 hours’ notice to visit the site if so required. All costs in this regard will be deemed to be included in the tendered fees as stated in C2.1.1.1

C2.1.1.6 N/A

C2.1.1.7 All fee accounts need to be signed by a principal of the Service Provider and submitted in original format, failing which the accounts will be returned. Copies, facsimiles, electronic and other versions of fee accounts will not be considered for payment.

C2.1.1.8 For all Services provided on a time basis, time sheets giving full particulars of the work, date of execution and time duration, should be submitted with each fee account.

C2.1.1.9 Payments to the Service Provider will be made electronically according to the banking details furnished by the Service Provider. Any change in such banking details must be communicated to the departmental project manager timeously. Fee accounts, correct in all respects, will be deemed submitted when received by the Employer and settled when electronically processed by the Employer. The Employer reserves the right to dispute the whole account, any item or part of an item at any time and will deal with such case in terms of clause 14.3 of the General Conditions of Contract.

C2.1.1.10 Accounts for Services rendered may be submitted on the successful completion of each stage of work. Interim accounts will only be considered during the construction stage of the works and then not more frequently than quarterly except if otherwise agreed between the authorised and designated representative of the Service Provider and the Employer. Payment of accounts rendered will be subject to the checking thereof by the departmental project manager. The Employer reserves the

right to amend the amounts claimed in order to conform to the rates stipulated in this Contract and make payment on the basis of the balance of the account in accordance with clause 14.3 of the General Conditions of Contract.

C2.1.2 Value based fees

C2.1.2.1 Fees for work done under a value based fee shall be calculated according to the tendered percentage for fees for the team and apportioned to construction stages(for each professional discipline) according to the relevant stated tariff of fee guide as stated in *Section G,* of this document.

C2.1.2.2 Interim payments to the Service Provider
For the purposes of ascertaining the interim payments due, the cost of the works, which shall exclude any provisional allowances made to cover contingencies and escalation, shall be:

- the applicable portion of the net amount of the accepted tender

C2.1.2.3 Fees for documentation for work covered by a provisional sum
Where a provisional sum is included in the bills of quantities for work to be documented at a later stage, the documentation fee in respect of such work shall be remunerated at the time when the documentation has been completed.

C2.1.2.4 Time charges for work done under a value based fee (upon approval by Head of Department: Health)
Time charges are reimbursable at rates applicable at the time of the actual execution of the specific service adjustable utilizing the discount for time based fees offered within the tender document. The "Rates for Reimbursable Expenses" as amended from time to time and referred to below, is obtainable on the Website: *http://www.publicworks.gov.za/* under “Documents”; “Consultants Guidelines”; item 1.

C2.1.2.5 Unless otherwise specifically agreed in writing, remuneration for the time expended by principals in terms of time based fees on a project shall be limited to 5 per cent of the total time expended for time charges in respect of the Project. Any time expended by principals in excess of the 5 per cent limit shall be remunerated at the rates determined in (ii) or (iii) above.

C2.1.3 Additional Services

C2.1.3.1 Additional Services pertaining to all Stages of the Project
Unless separately provided for hereunder and scheduled in the Activity Schedule, no separate payment shall be made for the additional services specified in the relevant tariff of fees guide. The cost of providing these services shall be deemed to be included in the value based fee tendered for normal services.

C2.1.3.2 Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
No separate payment shall be made. The cost of providing this service shall be deemed to be included in the value based fee tendered for normal services.

C2.1.3.3 Quality Assurance System
No separate payment shall be made for the implementation of a quality management system. The cost of providing this service shall be deemed to be included in the value based fee tendered for normal services.

C2.1.3.4 Lead Consulting Engineer
No separate payment shall be made for assuming the leadership of an Employer specified joint venture, consortium or team of consulting engineers. The cost of providing this service shall be deemed to be included in the value based fee tendered for normal services.

C2.1.3.5 Principal Agent of the Client
No separate payment shall be made for assuming the role of principle agent. The cost of providing this service shall be deemed to be included in the value based fee tendered for normal services.

C2.1.3.6 Environmental Impact Assessment
Not applicable for this project.

C2.1.4 Set off
The Employer reserves the right to set off against any amount payable to the Service Provider, any sum which is owing by the Service Provider to the Employer in respect of this or any other project.

C2.1.5 Typing, printing and duplicating work

C2.1.5.1 Reimbursable rates
The costs of typing, printing and duplicating work in connection with the documentation which must of necessity be done, except those which must in terms of the relevant Manual or other instructions be provided free of charge, shall be reimbursable at rates applicable at the time of the execution of such work. The document "Rates for Reimbursable Expenses" as amended from time to time and referred to below, is obtainable on the Website: *: http://www.publicworks.gov.za/* under “Documents”; “Consultants Guidelines”; item 1.

C2.1.5.2 Typing and duplicating
If the Service Provider cannot undertake the work himself, he may have it done by another service provider which specializes in this type of work and he shall be paid the actual costs incurred upon submission of statements and receipts which have been endorsed by him confirming that the tariff is the most economical for the locality concerned subject to the maximum tariffs per A4 sheet as set out in Table 1 in the “Rates for Reimbursable Expenses".

If the Service Provider undertakes the work himself, he shall be paid in respect of actual expenses incurred subject to the maximum tariffs per A4 sheet as set out in Table 1 in the “Rates for Reimbursable Expenses".

Typing and duplicating expenses shall only be refunded in respect of the final copies of the following documents namely formal reports, formal soil investigation reports, specifications, feasibility reports, bills of quantities, material lists, minutes of site meetings and final accounts. The cost of printed hard covers shall only be paid in respect of documents which will be made available to the public such as bills of quantities and specifications or where provision of hard covers is specifically approved.

The typing of correspondence, appendices and covering letters are deemed to be included in the value based fees and time based fees paid.

C2.1.6 Travelling and subsistence arrangements and tariffs of charges
Notwithstanding the ruling in C2.1.1.5 above (regarding disbursements and travelling expenses which will not be paid separately), when the Service Provider is requested in writing by or obtained prior approval in writing from the Employer to attend specific meetings at any of the Employer’s offices or any extraordinary meetings on site or elsewhere, he will be remunerated according to the provisions under C2.1.6.1 to C2.1.6.3 herein.

C2.1.6.1 General
The most economical mode of transport is to be used taking into account the cost of transport, subsistence and time. Accounts not rendered in accordance herewith may be reduced to an amount determined by the Employer.

As the tariffs referred to hereunder are adjusted from time to time, accounts must be calculated at the

tariff applicable at the time of the expenditure.

Where journeys and resultant costs are in the Employer's opinion related to a Service Provider's mal- performance or failure, in terms of this Contract, to properly document or co-ordinate the work or to manage the Contract, no claims for such costs will be considered.

C2.1.6.2 Travelling time
No travelling time shall be paid on this project.

C2.1.6.3 Travelling costs
Fees for travelling costs are as set out in Table 3 in the "Rates for Reimbursable Expenses".

Travelling costs will be refunded for the full distance covered per return trip measured from the office of the Service Provider appointed provided that the destination is greater than 50km away (one way) from the Service Provider's stated office address at the time of tender. Travelling costs related to trips to the site shall not be claimable and will be deemed to be included in your tendered professional fee, Travel costs will only be considered where the Service Provider has been requested to attend an off-site meeting with the destination being further than 50km (one way) from the Service Provider's office.

Compensation for the use of private motor transport will be in accordance with the Government tariff for the relevant engine swept volume, up to a maximum of 2150 cubic centimetres, prescribed from time to time and as set out in Table 3 in the "Rates for Reimbursable Expenses".

C2.2 Activity Schedule

C2.2.1 Activities

C2.2.1.1 For services where the apportionment of fees is not provided for in SECTION G, proportioning of the fee for normal services over the various stages shall be as set out in the relevant Government Gazetted Tariffs.

C2.2.1.2 The tenderer must make provision for all activities necessary for the execution of the service as set out in the Scope of Services.

APPENDIX D:

PROJECT BRIEF

APPENDIX E:

FORM A - SCHEDULE OF TEAM MEMBERS PROPOSED FOR THE PROJECT

FORM A

SCHEDULE OF TEAM MEMBERS PROPOSED FOR THE PROJECT

Please note that if any of the information disclosed in the table below is found to be dishonest or inaccurate, this may result in the withdrawal of any award already and a repudiation of this agreement. Further appropriate action may also be taken.

PROPOSED TEAM MEMBERS	REGISTERED WITH RELEVANT PROFESSIONAL COUNCIL (YES/NO)	DATE OF REGISTRATION AS A PROFESSIONAL / CANDIDATE	PROFESSIONAL REGISTRATION IN GOOD STANDING (YES/NO)	PROFESSIONAL REGISTRATION NUMBER	YEARS OF POST REGISTRATION EXPERIENCE
Construction Project Manager Firm:					
• Lead Professional:					
• Support Professionals/Candidates:					

PROPOSED TEAM MEMBERS	REGISTERED WITH RELEVANT PROFESSIONAL COUNCIL (YES/NO)	DATE OF REGISTRATION AS A PROFESSIONAL / CANDIDATE	PROFESSIONAL REGISTRATION IN GOOD STANDING (YES/NO)	PROFESSIONAL REGISTRATION NUMBER	YEARS OF POST REGISTRATION EXPERIENCE
Supervisor/A Firm:					
• Lead Professional:					
• Support Professionals/Candidates:					

APPENDIX F:

CURRICULUM VITAE TEMPLATE

CURRICULUM VITAE TEMPLATE

1. Personal Details

Name:	
Date of Birth:	
Current Employer:	
Current Position Held:	
Period with Current Employer: (mm-yyyy to mm-yyyy)	
Previous Employer:	
Position Held with Previous Employer:	
Period with Previous Employer: (mm-yyyy to mm-yyyy)	

2. Education (Degrees, Diplomas, BTech and Post Graduate Qualifications ONLY)

Qualification	Year Obtained	Institution

3. Professional Registration/s

Professional Body	Year Obtained	Expiry Date	Category of Professional Registration

4. Relevant Project Experience (Provide a maximum of 3 relevant projects)

Name of Project	Client	Project Start Date	Project End Date	Project Value	Role on Project

APPENDIX G:

RETURNABLES – RESPONSIVENESS

APPENDIX H:

RETURNABLES – ELIGIBILITY CRITERIA

REGISTERED PROFESSIONAL CONSTRUCTION PROJECT MANAGER CERTIFICATE AND PROFESSIONAL INDEMNITY

REGISTERED PROFESSIONAL ARCHITECT AND PROFESSIONAL INDEMNITY (AS SUPERVISOR)

APPENDIX I:

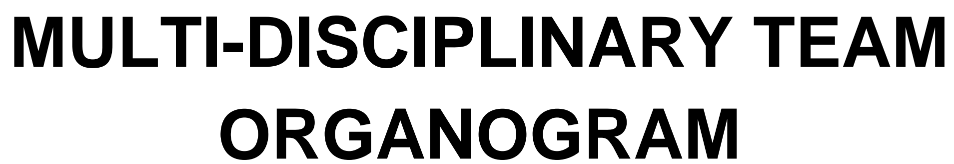
RETURNABLES – FUNCTIONALITY CRITERIA

NEC 3 PROJECT MANAGER CV

NEC 3 PROJECT MANAGER COMPLETION CERTIFICATES, LETTERS OF AWARD / SIGNED FINAL ACCOUNT SUMMARIES / REFERENCE LETTERS

SUPERVISOR (ARCHITECT) CV

SUPERVISOR (ARCHITECT) PROJECT COMPLETION CERTIFICATES, LETTERS OF AWARD / SIGNED FINAL ACCOUNT SUMMARIES / REFERENCE LETTERS


MULTI-DISCIPLINARY TEAM
ORGANOGRAM

KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Postal Address: Private Bag X9051, Pietermaritzburg, 3200
Physical Address: Block 1, Townhill Office Park, Townhill hospital, 35 Hyslop Road, Pietermaritzburg
Tel: 033 940 2558 Email address: deon.vanwyk@kznhealth.gov.za
www.kznhealth.gov.za

DIRECTORATE:
INFRASTRUCTURE
PIETERMARITZBURG HUB

CLINICAL BRIEF AND OPERATIONAL NARRATIVE, AND PROJECT TECHNICAL BRIEF

VRYHEID FORENSIC MORTUARY

PROPOSED NEW M2 FORENSIC MORTUARY

Drafted by:	MR. D. VAN WYK	Signed:	
	Control Architectural Technologist	Date:	23 MAY 2023
	Pietermaritzburg Infrastructure Hub		
Recommended by:	MR. R. POTSANE	Signed:	
	Acting Director: Pietermaritzburg Infrastructure Hub	Date:	2023/06/09
Approved by:	MR S T MHLONGO	Signed:	
	Acting Chief Director: Infrastructure Development	Date:	11/07/2023

Document Control

Revision Number	Date	Initials
Draft 1	28 March 2023	DVW

Vryheid Forensic Mortuary: Proposed New M2 Forensic Mortuary: Clinical Brief and Operational Narrative, and Project Technical Brief signoff

Date:	Signature:	Name:	Designation:

Purpose of this document

The purpose of this document is to define the level of services that will be provided at the proposed new Vryheid M2 Forensic Mortuary. It outlines the operational, functional and the physical requirements for the building and engineering services. The objective is to provide the design team with adequate information to produce concept, detail design and implement the project.

This document is separated into:

A. A strategic analysis investigates the current services and the need of the proposed new Vryheid M2 Forensic Mortuary. In determining the need for the unit, the current epidemiological situation in the community and current utilisation of the services are investigated.

B. A clinical brief providing an outline of the services to be offered in the proposed new Vryheid M2 Forensic Mortuary

C. An operational narrative which provides guidance for the planning and design of the replacement facility and the required resources.

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
BSC	Bid Specification Committee
BEC	Bid Evaluation Committee
BAC	Bid Adjudication Committee
CVD	Cerebrovascular Disease
CHC	Community Health Centre
DPME	Department Of Planning, Monitoring And Evaluation
DM	Diabetes Mellitus
DHIS	District Health Information System
FIDPM	Framework for Infrastructure Delivery and Procurement Management
GVA	Gross Value Added
HP	High Pressure
MLM	Medico Legal Mortuary
HFRG	Health Facility Revitalisation Grant
HIAC	Health Infrastructure Approval Committee
HIV	Human Immunodeficiency Virus
HTH	Hypertensive Heart Disease
HIS	Hospital Information System
HH	Households
HVAC	Heating, Ventilation, and Air Conditioning
IHRM-F	Ideal Hospital Realisation and Maintenance Framework
ISH	Ischaemic Heart Disease
IPV	Interpersonal Violence
IUSS	Infrastructure Unit Support Systems
IDMS	Infrastructure Delivery Management System
IEQ	Indoor Environment Quality
IPC	Infection Prevention Control
IPMP	Infrastructure Programme Management Plan
KZN	Kwazulu-Natal
LI	Labour Intensive
LP	Low Pressure
LV	Low Voltage
MDG	Millennium Development Goals
MTSF	Medium Term Strategic Framework

MEC	Member of the Executive Council
NDP	National Development Plan
NDOH	National Department Of Health
NHLS	National Health Laboratory Services
OOM	Order of Magnitude
OHSC	Office of Standards Compliance
PAS	Patient Administration System
PACS	Picture Archiving And Communication System
PSP	Professional Service Provider
PG	Procurement Gate
RIS	Radiology Information System
SPLUMA	Spatial Planning and Land Use Management Act
SDG	Sustainable Development Goals
SCM	Supply Chain Management
TB	Tuberculosis
UPS	Uninterrupted Power Supply
YLL	Years of Life Lost

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EXECUTIVE SUMMARY

The proposed new Vryheid M2 Forensic Mortuary will provide mush needed pathology services in the Zululand Health District.

This project will aim to provide a salutogenic and fully compliant state of the art forensic mortuary which will contribute to KZN-DOH achieving improved management of pathology services. Furthermore, this facility will increase the value of the Department of Health's Infrastructure.

The projected milestones are as follows:

Professional Milestones	FIDPM	Milestone	Date	% Project Complete
		PROJECT START DATE	01/01/2023 – 28/02/2023	0%
Stage 1	Stage 1	PRE-FEASIBILITY	28/02/2023 – 30/04/2023	3%
Procurement		AWARD (PSP)	FEASIBILITY	1/05/2023
Stage 2	Stage 2	DESIGN	30/06/2024	30%
Stage 3	Stage 3	TENDER	01/01/2025	40%
Stage 4	Stage 4	CONSTRUCTION	17/01/2025	81%
Procurement		Construction 0 - 25%	16/07/2025	51%
Stage 5	Stage 5	Construction 26 - 50%	16/01/2026	61%
		Construction 51 - 75%	16/07/2026	70%
		Construction 76 - 100%	16/01/2027	81%
		PRACTICAL COMPLETION	16/01/2027	81%
		HANDED OVER	31/01/2027	84%
		WORKS COMPLETION	15/04/2027	91%
	Stage 6	FINAL COMPLETION	14/04/2028	96%
Stage 6	Stage 7	PROJECT START DATE	01/01/2023 – 28/02/2023	0%
		PRE-FEASIBILITY	28/02/2023 – 31/01/2023	3%

The project will be financed from the Health Facility Revitalisation Grant and is expected to cost approximately R 75 146 803.00 including VAT (Including Operational Cost and Health Technology and Commissioning).

PART A – PROJECT CHARTER

1. PROJECT NAME

Vryheid Forensic Mortuary: Proposed New M2 Forensic Mortuary

2. THE FACILITY

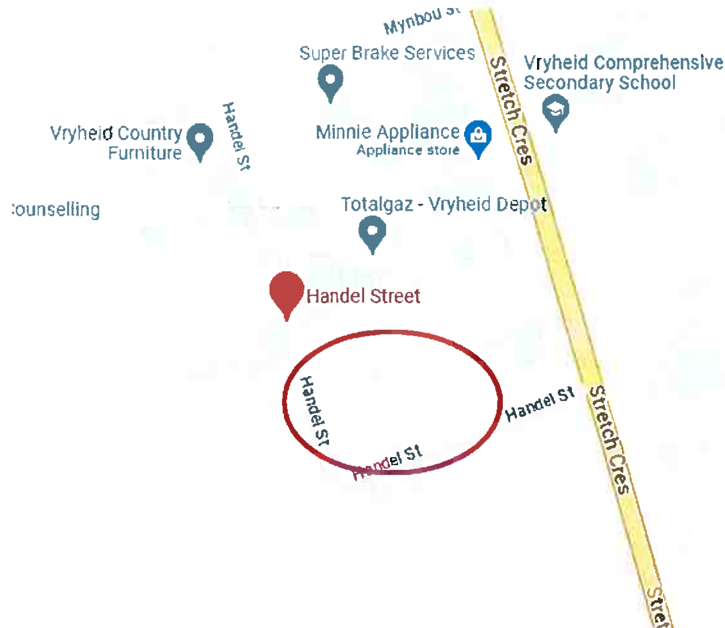
- Facility Name: Vryheid Medico-Legal Mortuary
- Facility Number: New facility – Number to be confirmed
- Facility Type: Medico-Legal Mortuary
- Facility Owner: KZN Dept of Health
    - Deeds Description: ERF 6048, Vryheid
    - Title Deed Number:

3. LOCATION

The proposed new Vryheid M2 Forensic Mortuary is situated in Vryheid Town in Handel Street, ERF 6048, and is in close proximity of the Vryheid South African Police Services (SAPS). Vryheid is in the Zululand Health District.

- Province: Kwazulu-Natal
- District Municipality: Zululand
- Local Municipality: AbaQulusi Municipality
- Cadastral description:
    - Latitude -27.781542
    - Longitude: 30.812176
- Street address (or directions): Handel Street, Vryheid, Kwazulu-Natal.
- Postal address: New facility – Postal address to be confirmed
- Telephone number: New facility – Telephone number to be confirmed

Map 1: Proposed location of new Vryheid M2 Forensic Mortuary
Source: Google Maps



4. PROJECT PURPOSE

The mission of Forensic Pathology Service according to National Code of Guidelines for Forensic Pathology Practice in South Africa[1] aim to:

"Forensic Pathology Service has as its primary objective the rendering of a medico-legal investigation of death service that serves the judicial process. It is essential that standardised and uniform protocols and procedures are followed nationally, rendering objective, impartial and scientifically accurate results. A contemporary medico-legal investigation of death service should be manifestly independent, objective, professional and not aligned with (or even perceived to be aligned with) the interests of a particular party (including that of the State).
This Service is in the first instance a specialised medical competence and must not be performed by an agency which may at any time have a vested interest in the outcome of such investigations.
For this reason, impartiality and objectivity as well as scientific rigour and professional competence, should be regarded as "non-negotiable" prerequisites in the organization and rendering of such a service.

The Mission[1] of Forensic Pathology aims to:

1 (Draft) NATIONAL CODE OF GUIDELINES FOR FORENSIC PATHOLOGY PRACTICE IN SOUTH AFRICA - (To be read in conjunction with the Regulations of the National Health Act 61 of 2003)

- *promote the recognition, value, and confidence in medico-legal death investigation to the families, the justice system, public health agencies, governmental officials and the public;*
- *develop uniform professional standards and guidelines to ensure excellence in the medico-legal death investigation;*
- *promote the highest practice of professional and ethical conduct;*
- *promote appropriate education and training for all staff involved in rendering the Service;*
- *ensure the education of all forensic medical practitioners in forensic medicine and pathology;*
- *ensure that appropriate research is performed in this Service environment;*
- *ensure the development of a just South African society and protect the rights of persons;*
- *assist in the prevention of and fight against crime;*
- *assist in the prevention of unnatural deaths;*
- *establish the independence of professionals in the Service*
- *ensure that the Service is rendered within a uniform system;*
- *provide for participation of stakeholders in the Service;*
- *ensure the Service is equitable, efficient and cost-effective;*
- *rectify the deprived state of the Service;*
- *provide for the specific needs of those persons rendering the Service, and*
- *establish adequate data collection and processing.*

5. FUTURE STATE

The proposed new Vryheid M2 Forensic Mortuary will provide mush needed pathology services in the Zululand Health District.

This project will aim to provide a salutogenic and fully compliant state of the art forensic mortuary which will contribute to KZN-DOH achieving improved management of pathology services. Furthermore, this facility will increase the value of the Department of Health's Infrastructure.

6. THE PROJECT DETAILS

• Project Name	Vryheid Forensic Mortuary: Proposed New M2 Forensic Mortuary
• KZN-DOH Project Number	TBC
• Project Code	TBC
• Project Details / Scope	Proposed New M2 Forensic Mortuary
• Project Type	Infrastructure Development - Projects
• Budget Programme Number	Health Facilities Management
• Budget Programme Name	Programme 8
• Sub-programme	Other – Forensic Mortuaries
• Infrastructure Programme Name	Not part of a Programme
• Nature of Investment:	Upgrades and Additions

- Nature of Investment Sub- status: Additions
- Is this an EPWP (LI) Project: No
- Economic Classification: Buildings and other fixed structures
- Proposed Funding Source: Health Facility Revitalization Grant (HFRG)

7. OVERSIGHT TEAM

- Provincial Champion: Mr. S.T. Mhlongo (Acting Chief Director - Infrastructure Development)
- Provincial Power User: Ms. M. de Goede (Director: Planning)
- Facility Management
  - Facility Management: New Facility and thus Acting Director will oversee.
  - Forensic Pathology Services: Mr K. Bentley
  - Zululand District: Mr. V.S. Vilakazi
  - IT Services: Dr L. L. V. Magaqa
  - Security Services: Major General Dladla
  - Infection Prevention Control (IPC): Ms. R. Misra

8. MEASURABLE OBJECTIVES AND SUCCESS CRITERIA

The success criteria will be that the project will assist the Department to address the delays experienced in the provision of Pathology Services.

The Measurable objectives will be:

- To build a new fully resourced M2 Medico-Legal Mortuary (MLM).
- To enhance Zululand district MLM services.
- To ensure compliance National Code of Guidelines for Forensic Pathology Services.
- To ensure that the environment is conducive in terms of OHS for staff working at the facility and to ensure dignity and privacy for public utilising the facility.
- To ensure that the dignity and the rights of the deceased are maintained.
- Deliver the project in time, on budget and compliant to specifications

9. HIGH-LEVEL SCOPE AND BOUNDARIES

The scope of the project is to construct a new M2 Forensic Mortuary in the Zululand District which will be supported by administrative and support areas and with security, access roads, pathways and parking.

10. HIGH-LEVEL RISKS

The risks that carry the highest impact include the continued delays of service delivery.

Furthermore, the high cost of construction is of concern and may impact the future of the project.

11. SUMMARY MILESTONE SCHEDULE

Initiation and planning	03 months
Design and procurement	09 months
Construction	12 months
Hand Over	1 month
Retention and Close Out	15 months
Total project duration	**40 months**

12. SUMMARY BUDGET

The project will be financed from the Health Facility Revitalisation Grant and is expected to cost R75 146 803.00 including VAT (Including Operational Cost and Health Technology and Commissioning)

13. STAKEHOLDERS

The following stakeholders have been identified and is further defined under item 2.1.6.1 below

- National Department of Health
- Provincial Department of Health
- Zululand District
- Vryheid Community
- Vryheid Local Authority
- Home Affairs
- Daprtment of Justice (DoJ)

- South African Police Service (SAPS)

14. PROJECT APPROVAL REQUIREMENTS

The project will be implemented utilising the Infrastructure Delivery Management System (IDMS) and the Framework for Infrastructure Delivery and Procurement Management (FIDPM).

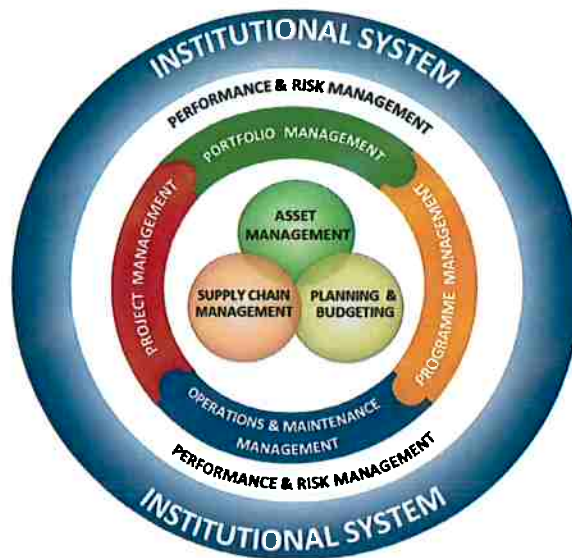


Figure 1: IDMS

Responding to the FIDPM, the approval process will be managed through the Health Infrastructure Approval Committee (HIAC) as spelled out in the Policy and Procedure document.

Furthermore, the following approvals have been identified:

(i) Spatial Planning and Land Use Management Act (SPLUMA)

15. ASSIGNED PROJECT MANAGER

The Project Manager will be Mr. Deon P. van Wyk from KZN Dept of Health: Infrastructure Development.

16. NAME AND AUTHORITY OF SPONSOR

Clinical Support Services: Acting Chief Director: Mr L. Langa

17. SUMMARY OF THE PROJECT

Name	Vryheid Medico-Legal Mortuary
District Name	Zululand District
Local authority	Vryheid
Population served	
Projected overall project cost (all components)	R 75,146,803.00 inclusive of VAT
Estimated cost breakdown	
Construction cost	R 59 596 903.00
Fees	R 8 422 400.00
Health Technology	R 3 927 500.00
Commissioning	R 3 200 000.00
Estimation of project timelines	
Brief and Operational narrative	28/02/2023 – 30/04/2023
Planning and design	30/06/2024 – 01/01/2025
Construction and retention	17/01/2025 – 16/01/2028
Hand over and close out	31/01/2027 – 14/04/2027
Estimation of annual infrastructure maintenance	R 2 105 600.00 @ 5% of facility value.
Estimation of annual health technology maintenance	R 196 375.00 @ 5% of equipment value.
Estimation of annual operational budget	R 11 707 000.00

PART B - CLINICAL SERVICES BRIEF

1. INTRODUCTION

The Department has embarked upon the Rationalization of Health facilities in order to maximize services at the appropriate levels of service delivery in accordance with the classification of the health facilities. This will improve the quality of services, access to services and contribute to the overall health and wellbeing of the communities we serve.

The Department's aim was to maintain the gains already made and further focus on interventions to accelerate health system effectiveness and further improve health outcomes and public satisfaction.

With improved leadership and clinical governance, the Department will do this by ensuring that it will robustly monitor implementation of the Turn-Around Strategy to inter alia, improve audit outcomes; improve financial and supply chain management and human resource management services; rationalize hospital services to improve efficiencies and equitable access to clinical services; strengthen governance, leadership and oversight; and re-position infrastructure development as integral part of improved service delivery.

2. STRATEGIC BACKGROUND

Vryheid Forensic Mortuary will be located at ERF 6048, Handel Street, Vryheid. It is a new facility and will be serving the Zululand District.

Due to the lack of a functional MLM in Vryheid District, service delivery is severely delayed.

2.1. STRATEGIC SERVICE GOALS AND OBJECTIVES

2.1.1. SUSTAINABLE DEVELOPMENT GOALS

The government's National Development Plan (NDP) 2030 envisions a health system that works for everyone and produces positive health outcomes, accessible to all, "A long and Healthy Life for All South Africans"[2]. Key interventions to improve life expectancy include addressing the social determinants of health, promoting health as well as reducing the burden of disease from both Communicable Disease and Non-Communicable Diseases. The plan asserts that health care can be improved through decreasing mortality by combating infectious disease such as tuberculosis and HIV/AIDS and emerging tide of non-communicable diseases. The government's objective is aimed at

2 National Department Of Health, 2007

reducing child and infant mortality, maternal mortality and combating HIV/AIDS and other diseases by 2030.

There are 17 SDG built on Millennium Development Goals, Goal 3 is about ensuring healthy lives and wellbeing of all ages.

Figure 2: Sustainable Development goals

2.1.2. NATIONAL DEVELOPMENT PLAN

The National Development Plan charts a new path for South Africa and seeks to eliminate poverty and reduce inequality by 2030. It defines a desired destination and identifies the role different sectors of society need to play in order to achieve its goals. With specific reference to health the NDP goals are:

- Life expectancy of at least 70 years for men and women
- A generation of under-20s that is largely free of HIV and AIDS
- The quadruple burden of disease that is radically reduced compared to the two previous decades
- An infant mortality of less than 20 deaths per 1,000 live births
- An under five mortality rate of less than 30 per 1,000
- A significant shift in equity, efficiency, effectiveness and quality of health care provision
- Availability of universal health care coverage; and
- Significant reduction of risks posed by social determinants of diseases and adverse ecological factors

The National Development Plan proposes to achieve these health goals by:

- Addressing social determinants of health

- Reducing disease burden to manageable levels
- Building human capital
- Strengthening the National Health System with particular reference to eliminating infrastructure backlogs and increasing the use of ICT to treat and manage health conditions; and
- Implementing the National Health Insurance Scheme with particular reference to improving the quality and care at public health care facilities

Universal health coverage has been shown to contribute to improvement in key indicators such as life expectancy through reduction in morbidity especially maternal and child mortality.

Table 1: The SDGs and NDP Alignment

SDGs Goal:	**Goal 3. Ensure healthy lives and promote well-being for all at all ages [3]**
NDP Goal:	**Chapter 10. Healthcare for all**
SDGs Targets	**NDP Objectives**
3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	Reduce maternal, infant and child mortality
3.2 By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under 5 mortalities to at least as low as 25 per 1,000 live births	Reduce maternal, infant and child mortality
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	Progressively improve TB prevention and cure
3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing	Significantly reduce prevalence of non-communicable chronic diseases
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	Reduce injury, accidents and violence by 50 percent from 2010 levels
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	Increase average male and female life expectancy at birth to 70 years. Deploy primary healthcare teams provide care to families and communities
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	

3 https://sdgs.un.org/goals

DOH contributes directly to the realisation of Priority 3 (education, skills and health) of government's 2019-2024 Medium Term Strategic Framework (MTSF), and the vision set out in chapter 10 of the National Development Plan (NDP).

DOH is the custodian of South Africa's national health system, and contributes to the goals, indicators and actions of chapter 10 of the NDP. This includes reducing the burden of disease and strengthening the provision of healthcare to improve the lives and lifespans of the country's citizens. As per the National Health Act of 2003, provincial departments of health are mandated to provide healthcare services. The National department is responsible for policy formulation, coordination and support to provincial departments, as well as the monitoring, evaluation and oversight of the sector.

2.1.3. PROVINCIAL STRATEGY ALIGNMENT TO THE REVISED DRAFT DEPARTMENT OF PLANNING, MONITORING AND EVALUATION (DPME) PLANNING FRAMEWORK

The following Impact and Outcomes were adopted by The KwaZulu-Natal Department of Health for the 2020/21 to 2024/25 planning cycle. The Impact and Outcomes are listed below:

- Impact: Increased Life Expectancy
  - Outcome: Universal Health Coverage
  - Outcome: Improved Client Experience of Care
  - Outcome: Reduced Morbidity and Mortality

The impact and outcomes were confirmed through consultations at cluster planning workshops (Cluster sessions held between 21 August 2019 and 6 September 2019) and the Provincial Strategic planning workshop (12-13 October 2019).

2.1.4. HEALTHCARE SERVICES IN SOUTH AFRICA

Healthcare services for all South Africans are underpinned by the National Health Act, 61 of 2003 (as amended). In 2011 the National Department of Health published the National Core Standards for Health Care Establishments, The NCS has 7 key Domains:[4]

(i) Patients' Rights

(ii) Patient Safety, Clinical Governance and Care

(iii) Clinical Support Services

4 ohsc.org. (Office of Standards Compliance)

(iv) Public Health

(v) Leadership and Corporate Governance

(vi) Operational Management and

(vii) Facilities and Infrastructure

2.1.5. NATIONAL CODE OF GUIDELINES FOR FORENSIC PATHOLOGY PRACTICE IN SOUTH AFRICA

(This draft Code to be read in conjunction with the Regulations of the National Health Act 61 of 2003)

This document is intended for all persons employed by the Forensic Pathology Services, including administrative, support, scientific, and professional staff and serves to describe, direct and standardise the general and specific aspects of the Service.
This document replaces the Manual for Performance of Post Mortem Examination GW7/71 and SAPS Special Force Order 05C/1992.
This Code is the National Code of Guidelines supplementing the National Health Act, 2003 (Act 61 of 2003) and should be read in conjunction with the Regulations Regarding the Rendering of Forensic Pathology Service (hereinafter referred to as "the Regulations").
The Code may be amended from time to time by the National Forensic Pathology Services Committee.

This Code mainly on operational and clinical management, however covers key deliverables for infrastructure and built environment. These have been included into the space and technical specifications guidance below.

2.2. KWAZULU-NATAL DATA

The province of KwaZulu-Natal, also referred to as KZN and known as "the garden province"; is a province of South Africa that was created in 1994 when the Zulu Bantustan of KwaZulu ("Place of the Zulu") and Natal Province were merged. It is located in the southeast of the country, enjoying a long shoreline beside the Indian Ocean and sharing borders with three other provinces, namely Free State, Eastern Cape and Mpumalanga; and the countries of Mozambique, Eswatini and Lesotho. Its capital is Pietermaritzburg, and its largest city is Durban. It is the second-most populous province in South Africa, with slightly fewer residents than Gauteng.

Two areas in KwaZulu-Natal have been declared UNESCO World Heritage Sites: the iSimangaliso Wetland Park and the uKhahlamba Drakensberg Park. These areas are extremely scenic as well as important to the surrounding ecosystems.

During the 1830s and early 1840s, the northern part of what is now KwaZulu-Natal was established as the Zulu Kingdom while the southern part was, briefly, the Boer Natalia Republic before becoming the British Colony of Natal In 1843. The Zulu Kingdom remained independent until 1879.

KwaZulu-Natal is roughly around 92,100 km^2. It has three different geographic areas. A lowland region along the Indian Ocean coast which is extremely narrow in the south, widening in the northern part of the province, while the central Midlands consists of an undulating hilly plateau rising toward the west. Two mountainous areas, the western Drakensberg Mountains and northern Lebombo Mountains form, respectively, a solid basalt wall rising over 3,000 m beside Lesotho border and low parallel ranges of ancient granite running southward from Eswatini. The area's largest river, the Tugela, flows west to east across the centre of the province.

The coastal regions typically have subtropical thickets and deeper ravines; steep slopes while the midlands have moist grasslands. The north has a primarily moist savanna habitat, whilst the Drakensberg region hosts mostly alpine grassland.

KwaZulu-Natal has a varied yet verdant climate thanks to diverse, complex topography. Generally, the coast is subtropical with inland regions becoming progressively colder. Durban on the south coast has an annual rainfall of 1009 mm, with daytime maxima peaking from January to March at 28 °C with a minimum of 21 °C, dropping to daytime highs from June to August of 23 °C with a minimum of 11 °C. Temperature drops towards the hinterland, with Pietermaritzburg being similar in the summer, but much cooler in the winter. Ladysmith in the Tugela River Valley reaches 30 °C in the summer, but may drop below freezing point on winter evenings. The Drakensberg can experience heavy winter snow, with light snow occasionally experienced on the highest peaks in summer. The Zululand north coast has the warmest climate and highest humidity, supporting many sugar cane farms around Pongola.

Source: Wikipedia

2.2.1. DEMOGRAPHIC PROFILE

The following figures depict the demographics of KwaZulu-Natal:

Source: Wazimap

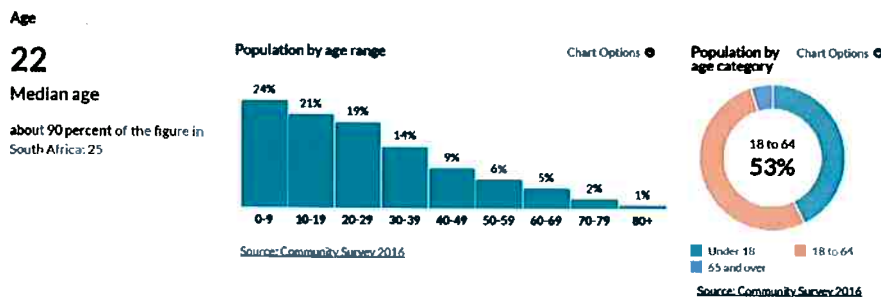


Figure 3: KZN Age analysis

Population

11 065 240

People

about one-fifth of the figure in South Africa: 55,653,654L

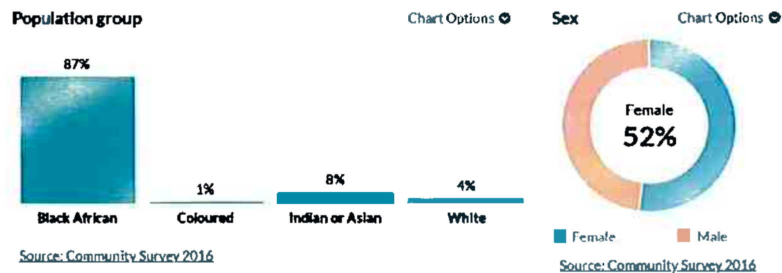


Figure 4: KZN Population analysis

2.2.2. SOCIAL DETERMINANTS OF HEALTH

The following figures depict the social determinants of health in KwaZulu-Natal:

Source: Wazimap

Households

2 875 843

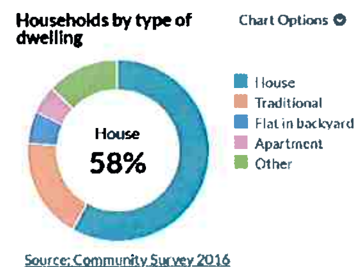
Households

about one-fifth of the figure in South Africa: 16,923,307L

8.5%

Households that are informal dwellings (shacks)

about two-thirds of the rate in South Africa: 12.96%

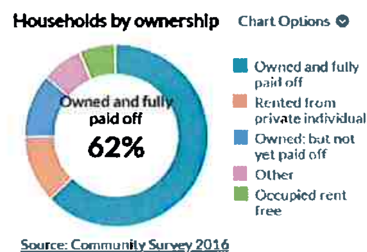


Household ownership

73%

Households fully owned or being paid off

about 10 percent higher than the rate in South Africa: 64.97%



Leave a Mess

Head of household

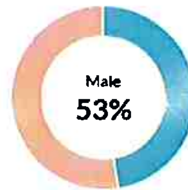
47.4%

Households with women as their head

about 20 percent higher than the rate in South Africa: 41.32%

Head of household by gender

Chart Options



Female
Male

Source: Community Survey 2016

20 048

Households with heads under 18 years old

about one-fifth of the figure in South Africa: 111 471

Figure 5: KZN Household analysis

Households headed by children under 18 years old

20 048

Households with heads under 18 years old

about one-fifth of the figure in South Africa: 111 471L

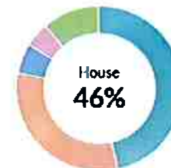
8.5%

Child-headed households that are informal dwellings (shacks)

about three-quarters of the rate in South Africa: 11.01%

Child-headed households by type of dwelling

Chart Options



House
Traditional
Flat in backyard
Apartment
Other

*Universe: Households headed by children under 18

Source: Community Survey 2016

Head of household

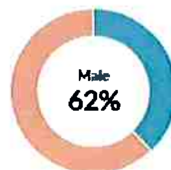
37.7%

Child-headed households with women as their head

about the same as the rate in South Africa: 38.18%

Head of child-headed household by gender

Chart Options



Female
Male

*Universe: Households headed by children under 18

Source: Community Survey 2016

Figure 6: KZN Children headed household analysis

Employment

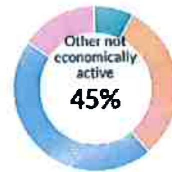
31.5%

Employed

about 80 percent of the rate in South Africa: 38.87%

Population by employment status

Chart Options



Discouraged work seeker
Employed
Other not economically active
Unemployed
Unspecified

* Universe: Individuals 15 and older

Source: Census 2011

Sector of employment

Chart Options

Do not know
In the formal sector
In the informal sector
Private household
Unspecified

* Universe: Workers 15 and older

Source: Census 2011

Annual income

R30 000

Average annual income

about the same as the amount in South Africa: R30 000

Employees by annual income

Chart Options

* Universe: Employed Individuals

Source: Census 2011

Figure 7: KZN Economic analysis

Educational level

72.4%

Completed Grade 9 or higher

about the same as the rate in South Africa: 71.77%

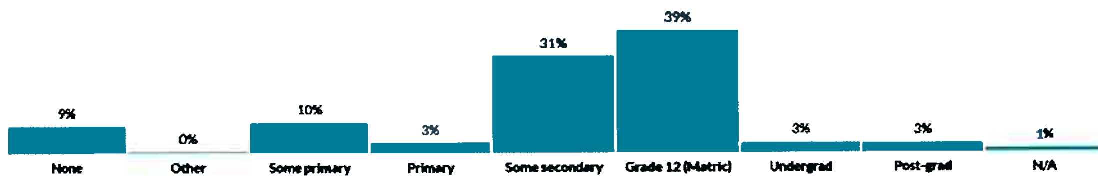
45.9%

Completed Matric or higher

a little higher than the rate in South Africa: 43.37%

Population by highest educational level

Chart Options



* Universe: Individuals 20 and older

Source: Community Survey 2016

Figure 8: KZN Education analysis

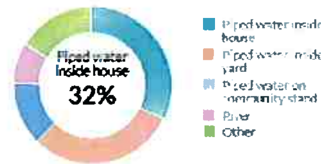
Water

83.4%

Are getting water from a regional or local service provider

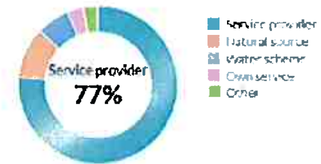
a little less than the rate in South Africa: 86.2%

Population by water source Chart Options



Source: Community Survey 2016

Population by water supplier Chart Options



Source: Community Survey 2016

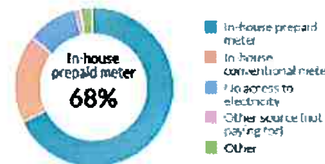
Electricity

10.6%

Have no access to electricity

about 1.5 times the rate in South Africa: 7.29%

Population by electricity access Chart Options



Source: Community Survey 2016

Toilet facilities

55.7%

Have access to flush or chemical toilets

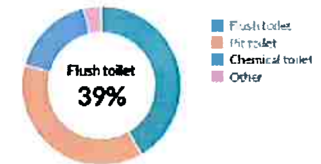
about 90 percent of the rate in South Africa: 63.53%

2.7%

Have no access to any toilets

about 10 percent higher than the rate in South Africa: 2.39%

Population by toilet facilities Chart Options



Source: Community Survey 2016

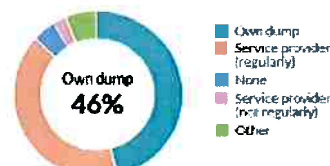
Refuse disposal

43.3%

Are getting refuse disposal from a local authority, private company or community members

about three-quarters of the rate in South Africa: 59.37%

Population by refuse disposal Chart Options



Source: Community Survey 2016

Figure 9: KZN Service delivery analysis

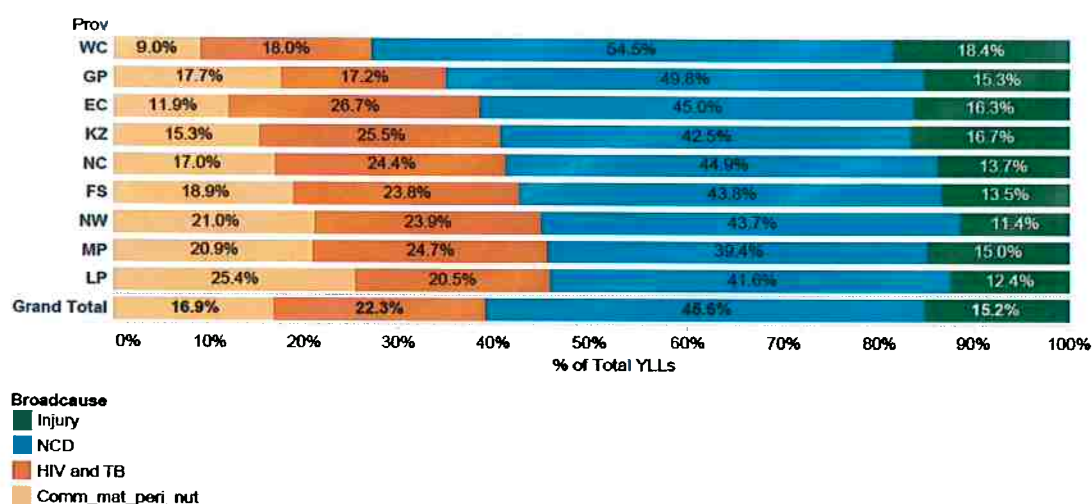
Health is influenced by the environment in which people live and work as well as societal risk conditions such as polluted environments, inadequate housing, poor sanitation, unemployment, poverty, racial and gender discrimination, destruction and violence (National Department of Health, 2019).

Globally, it is recognised that health and health outcomes are not only affected by health care or access to health services. They result from multidimensional and complex factors linked to the social determinants of health, which include a range of social, political, economic, environmental, and cultural factors, including human rights and gender equality (National Department of Health, 2019).

South Africa is classified as an upper-middle-income country with a per capita income of R55,258. Despite the perceived wealth, most of the country's households are plagued by poverty. Although significant progress was made prior to the economic crisis in addressing poverty, many South African households have fallen back or still remain in the trap of poverty through inadequate access to clean water, proper health care facilities and household infrastructure (Provincial Treasury, 2019).

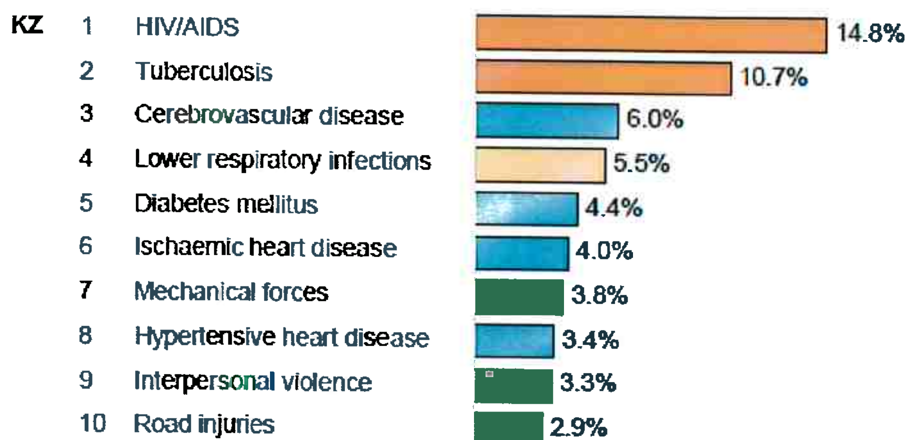
2.2.3. EPIDEMIOLOGY AND QUADRUPLE BURDEN OF DISEASE

The graph below provides the National broad cause of years of life lost in 2017. A major proportion of years of life lost is actually due to non-communicable diseases (45.6%) followed by HIV and TB (22.3%). This was followed by communicable, maternal, perinatal and nutrition (16.9%) and injuries (15.2%). The KZN profile showed a similar trend in the years of life lost.



Graph 1: Percentage of years of life lost by broad cause by province, 2017 (Neethling, Groenewald et al. 2020)

Zooming into the individual leading causes of death provides a good picture of the leading causes of years of Life Lost (YLL). In 1997, 2007 and 2017, the three leading causes of YLL in South Africa were conditions relating to HIV, TB and pneumonia. This is interpreted to mean that Mortality related to HIV remained a leading cause of YLL in most districts in SA. Cardiovascular conditions also ranked high (top 10) leading causes of YLL. Interpersonal violence and road injuries also featured among the top 10 causes of YLL. The KZN picture differs only slightly from other Provinces disease profile in the following way: Endocrine, nutritional, blood and immune conditions rank in the top 10 for all provinces except KwaZulu- Natal and the Western Cape (DHB, 2019/20).



Graph 2: Ten leading causes of years of life lost by province (KZN), 2017 (Neethling, Groenewald et al. 2020).

Between 2010 and 2017, HIV moved from second to first place in the ranking for premature mortality in South Africa, displacing TB; this reflects increased reporting of HIV on death certificates rather than an increase in mortality from HIV. Cerebrovascular disease displaced diarrhoea and moved into fourth place in 2017, while diarrhoea moved out of the top 10 YLL's in 2016 and 2017. Diabetes mellitus moved from eighth to fifth place between 2010 and 2017, while ischaemic heart disease remained in seventh place (Neethling, Groenewald et al. 2020).

When looking at the burden of disease categories collectively, in **Error! Reference source not found.**, it can be seen that HIV related illnesses were predominantly responsible for premature mortality in the province since it made up 31% of the burden of disease (HIV, TB and lower respiratory infections). This is due to this category of diseases being infectious and transmissible. Whilst 17.8% of the burden of disease in the province consisted of cardiovascular conditions (cerebrovascular disease, diabetes mellitus, hypertensive disorders and ischaemic heart disease) which form part of non-communicable diseases. The remaining burden of disease was due to injuries (10%) (Mechanical forces, interpersonal violence and road injuries). The last two categories, viz., cardiovascular conditions and injuries are mainly preventable.

Trends in leading causes of premature mortality at Districts in the KwaZulu-Natal Province between 2010 and 2017.

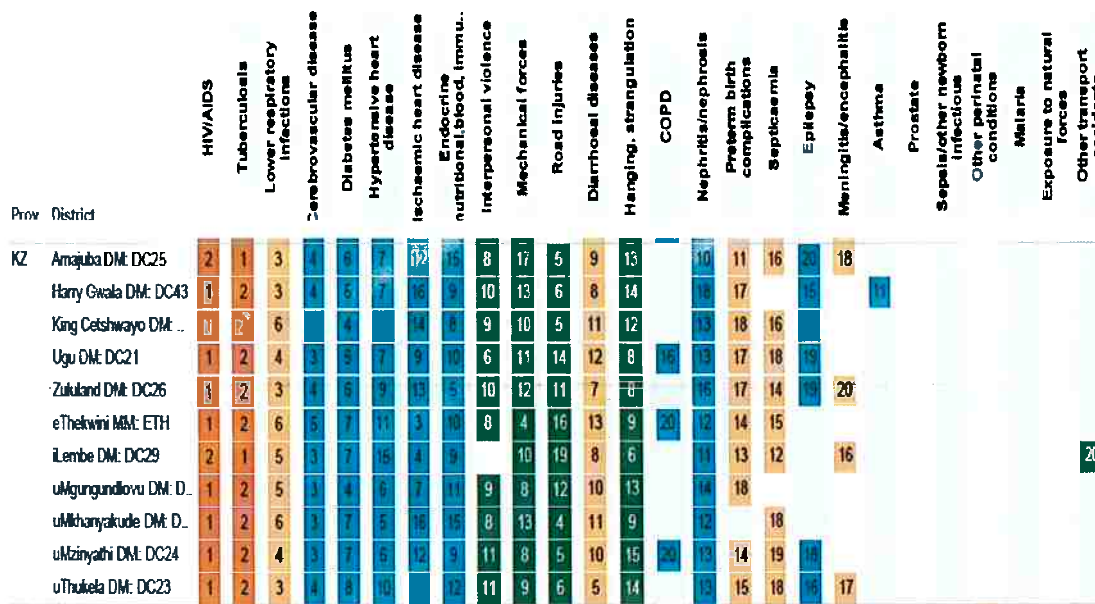


Figure 10: Ranking of 20 leading causes of years of life lost by each district in KZN, 2017 (Neethling, Groenewald et al. 2020)

Ranking of Districts is as per

Figure 10 in the DHB. Proportions were not provided hence, results are analysed according to rank in Table 2.

Table 2: Provincial overview in the trends in leading causes of premature mortality between 2010 and 2017

RANK:	1	2	3	4	5	6	7	8	9	10
KZN	HIV/AIDS	Tuberculosis (TB)	Cerebrovascular disease (CVD)	Lower respiratory infections (LRI)	Diabetes mellitus (DM)	Ischaemic heart disease (ISH)	Mechanical forces	Hypertensive heart disease (HTH)	Interpersonal violence (IPV)	Road injuries
	14.8%	10.7%	6.0%	5.5%	4.4%	4.0%	3.8%	3.4%	3.3%	2.9%
Amajuba	TB	HIV	LRI	CVD	Road Injuries	Diabetes	Hyper-tensive	IPV	Diarrhoea	Nephritis
eThekwini	HIV	TB	Ischaemic heart	Mechanical	CVD	LRI	Diabetes	IPV	Hanging	Endocrine
Harry Gwala	HIV	TB	LRI	CVD	Diabetes	Road Injuries	Hyper-tensive	Diarrhoea	Endocrine	IPV
ILembe	TB	HIV	CVD	Ischaemic heart	LRI	Hanging	Diabetes	Diarrhoea	Endocrine	Mechanical Forces
King Cetshwayo	HIV	TB	CVD	Diabetes	Road Injuries	LRI	Hyper-tensive	Endocrine	IPV	Mechanical Forces
Ugu	HIV	TB	CVD	LRI	DM	IPV	Hypertensive	Hanging	Iso-schemic	Endocrine
uMgungundlovu	HIV	TB	CVD	Diabetes	LRI	Hypertensive	Iso-schemic	Mechanical	IPV	Diarrhoea
uMkhanyakude	HIV	TB	CVD	Road Injuries	Hypertensive	LRI	Diabetes	IPV	Hanging	

RANK:	1	2	3	4	5	6	7	8	9	10
KZN	HIV/AIDS	Tuberculosis (TB)	Cerebrovascular disease (CVD)	Lower respiratory infections (LRI)	Diabetes mellitus (DM)	Ischaemic heart disease (ISH)	Mechanical forces	Hypertensive heart disease (HTH)	Interpersonal violence (IPV)	Road injuries
	14.8%	10.7%	6.0%	5.5%	4.4%	4.0%	3.8%	3.4%	3.3%	2.9%
uMzinyathi	HIV	TB	CVD	LRI	Road Injuries	Hypertensive	Diabetes	Mechanical	Endocrine	Diarrhoea
uThukela	HIV	TB	LRI	CVD	Diarrhoea	Road Injuries	Ischaemic	Diabetes	Mechanical	Hyper-tensive
Zululand	HIV	TB	LRI	CVD	Endocrine	Diabetes	Diarrhoea	Hanging	Hyper-tensive	IPV

The table above provides the provincial overview of the trends of the leading causes of premature death between 2010 and 2017. Overall, all Districts were shown to have suffered premature mortality due to HIV and related illnesses such as TB and lower respiratory infections. This is similar to the Provincial profile depicted in Figure 1. Five out of the 11 Districts mirrored the Provincial top three leading causes of premature mortality (HIV, TB and cerebrovascular disease). These were the King Cetshwayo, Ugu, uMgungundlovu, uMkhanyakude and uMzinyathi Districts. The remaining causes of premature mortality at Districts were non-communicable diseases and injuries which is similar to the Provincial profile.

Some Districts such as EThekwini, ILembe, Ugu, uMkhanyakude and Zululand experienced self-harm injuries such as hanging as one of the leading causes of premature mortality which is different to the Provincial profile. Seven of the Districts suffered premature mortality as a result of diarrheal diseases, which is in contrast to the Provincial profile. Diarrhoeal diseases, which is a communicable disease, is usually found in children under 5 years. This may be linked to water and sanitation as well as nutrition (https://www.who.int/news-room/fact-sheets/detail/diarrhoeal-disease). Access to adequate sanitation may be poor in urban districts such as UMgungundlovu where the rate of diarrhoeal diseases was high, as well as in rural districts. A high prevalence of diarrheal disease may also be due to the high number of people living with HIV (https://www.who.int/news-room/fact-sheets/detail/diarrhoeal-disease).

Other conditions which appear different to the Provincial profile of the leading causes of premature mortality is Nephritis at the Amajuba District and endocrine disorders found at EThekwini, Harry Gwala, ILembe, King Cetshwayo, Ugu, UMzinyathi and Zululand Districts.

The rise in hanging injuries, diarrheal diseases, and endocrine disorders as leading causes of premature mortality at Districts needs to be investigated. These may provide insight into underlying conditions such as mental health, poor nutrition, diet and obesity, high cholesterol, lack of physical activity and may also be indicators of pre-existing diseases.

In summary, whilst the province has implemented prevention, treatment and care interventions for achieving the UNAIDS 90-90-90 targets and is working towards attaining the Sustainable Development Goals (SDG) that were adopted, the Provincial and District profile of the leading causes of premature mortality show that we are still far from realising the SDG goals. These goals include SDG .3.3 which

aims to end the epidemics of Acquired Immune Deficiency Syndrome (AIDS), tuberculosis, malaria and neglected tropical diseases and hepatitis, water-borne diseases and other communicable diseases by 2030 (Neethling, Groenewald et al. 2020). Non-communicable conditions and injuries are largely preventable and the Province and Districts need to focus on improving interventions that would decrease the burden of disease. Further investigations are required in the rise of other condition at the district level.

2.3. ZULULAND DISTRICT DATA

The district is approximately 14 810 km², and consists of five local municipalities namely, Abaqulusi local municipality, eDumbe local municipality, Nongoma local municipality, Ulundi local municipality, and uPhongolo local municipality. The main access to the district is via the N2 from Gauteng in the north-west, which connects to Durban in the south. The Zululand district municipality has a population of 868 031 amounting to 7.8% of the total KZN population after uMgungundlovu and King Cetshwayo. Zululand's total population contributes 22% to the provincial population. The district has a total number of 178 516 households with an average of 5 person per household. The average largely reflects those in rural areas, since a majority of the households are located within the rural areas of the municipality. 53.8% of the households are headed by women. There are 2 034 child headed households and 33.4% of the child-headed households have women as their head. As at 17 June 2020 there were 4 238 confirmed cases as well as 73 deaths and 2 133 recoveries in KZN. There are seven quarantine facilities in Zululand with 194 beds combined. Four of the facilities have been activated as at 29 May 2020. The economy of Zululand district is driven by the tertiary sector, with community services having the highest contribution at 31%, followed by finance at 18% and trade at 12%. This can be attributed to the presence of government departments in Zululand district. The draft National Spatial Development Framework, identifies Ulundi in the Zululand district as a national network of regional development anchors, seeks to prioritise and strengthen strategically located regional development anchor towns in productive rural regions and priority national development, trade and transport corridors to provide a range of services within the specific towns/cities and surrounding network of settlements and productive rural regions.

2.3.1. DEMOGRAPHIC PROFILE

The following figures depict the demographics of Zululand District:

Source: Wazimap

Age

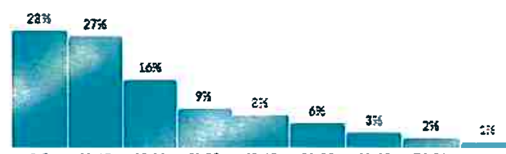
19

Median age

about 80 percent of the figure in KwaZulu-Natal: 23

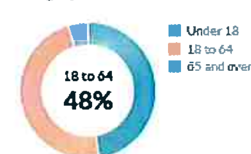
about three-quarters of the figure in South Africa: 25

Population by age range Chart Options



Source: Census 2011

Population by age category Chart Options



Source: Census 2011

Population

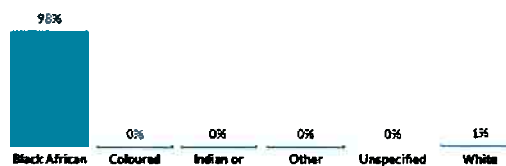
803 575

People

about 10 percent of the figure in KwaZulu-Natal: 10,267,300L

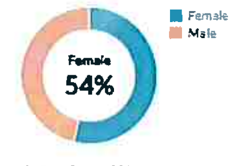
less than 10 percent of the figure in South Africa: 51,770,560L

Population group Chart Options



Source: Census 2011

Sex Chart Options



Source: Census 2011

Figure 11: Zululand Age and Population analysis

Error! Bookmark not defined. *The settlement type in UKDM dominated by population residing in traditional; areas, which is in excess of 90%, and is by far the highest figure of all districts within the province. Fifty five (55.7%) of land cover within the district is natural land. Approximately 17.9% of the District is being used for agricultural purposes, with the majority of agricultural land being focused within the Vryheid Local Municipality (LM). Wetland accounts for 26.2% of the land in within the Big 5 False Bay Local Municipality. Approximately 33.2% of the District is formally protected and forms part of Nature Reserves.*

Table 3: District Population Density – 2018/19

Sub-District	Area km	Population	Population Density per km2
KZN Big 5 Hlabisa Local Municipality	3,466	112,921	32,6
KZN Jozini Local Municipality	3,442	207,415	60,3
KZN Vryheid Local Municipality	1,970	206,675	104,9
KZN uMhlabuyalingana Local Municipality	4,977	175,459	35,3
District	**13,855**	**702,470**	**50,7**

2.3.2. SOCIAL DETERMINANTS OF HEALTH

The following figures depict the social determinants of health in Zululand District:

Source: Wazimap

Households

178 516

Households

less than 10 percent of the figure in KwaZulu-Natal: 2,875,843L

less than 10 percent of the figure in South Africa: 16,923,307L

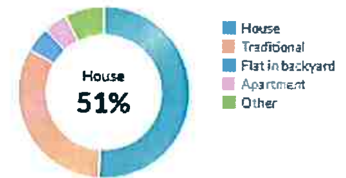
5.2%

Households that are informal dwellings (shacks)

about three-fifths of the rate in KwaZulu-Natal: 8.53%

about two-fifths of the rate in South Africa: 12.96%

Households by type of dwelling Chart Options



Source: Community Survey 2016

Household ownership

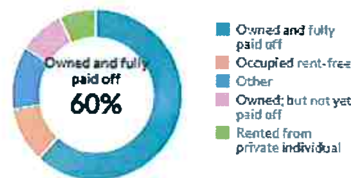
68.5%

Households fully owned or being paid off

a little less than the rate in KwaZulu-Natal: 73.02%

a little higher than the rate in South Africa: 64.97%

Households by ownership Chart Options



Source: Community Survey 2016

Figure 12: Zululand Household analysis

With 178,516 households, 51% reside in a house, 32% in a traditional dwelling, 5.2% in an informal dwelling (shack), 5% in a flat in a backyard and only 5% in an apartment. Ulundi local municipality had the highest number of households residing in a traditional dwelling at 36%, followed by Nongoma at 26% and eDumbe (25%). The district records a migratory pool to uPhongolo and Abaqulusi local municipalities, which exerts pressure on housing, especially informal settlements and demand for public service (Zululand Profile and Analysis, COGTA WEBPAGE, 2020).

Head of household

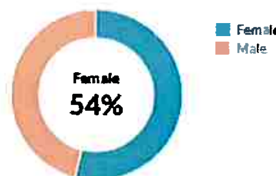
53.8%

Households with women as their head

about 10 percent higher than the rate in KwaZulu-Natal: 47.44%

about 1.3 times the rate in South Africa: 41.32%

Head of household by gender Chart Options



Source: Community Survey 2016

2 034

Households with heads under 18 years old

about 10 percent of the figure in KwaZulu-Natal: 20,048

less than 10 percent of the figure in South Africa: 111,471

Figure 13: Zululand Woman headed household analysis

The majority of households (54%) are women-run. Much of the interest in the gender of the household head arises because of perceived differences between households headed by women and those headed by men. Across the world, woman-headed households are perceived as being 'vulnerable'. Woman-headed households have been used as a proxy for the missing gender breakdowns. Overall woman-headed households are often financially worse off than other households. Data from the South African Income and Expenditure Survey of October 1995 showed that the mean monthly income from wages, salaries and self-employment earned in households headed by women were less than a third (R1,178) of the amount earned by those headed by men (R3,767)

Source: StatsSA, http://www.statssa.gov.za/publications/DiscussHouseholdHead/DiscussHouseholdHead.pdf)

Employment

18.6%

Employed

about three-fifths of the rate in KwaZulu-Natal: 31.51%

about half the rate in South Africa: 38.87%

Population by employment status

Chart Options

Discouraged work-seeker
Employed
Other not economically active
Unemployed
Unspecified

* Universe: Individuals 15 and older

Source: Census 2011

Sector of employment

Chart Options

Do not know
In the formal sector
In the informal sector
Private household
Unspecified

* Universe: Workers 15 and older

Source: Census 2011

Annual income

R15 000

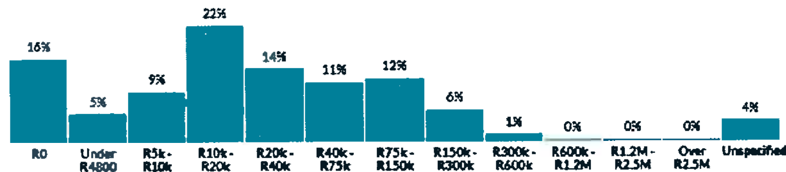
Average annual income

about half the amount in KwaZulu-Natal: R30 000

about half the amount in South Africa: R30 000

Employees by annual income

Chart Options



* Universe: Employed individuals

Source: Census 2011

Figure 14: Zululand Economic analysis

Educational level

67.4%

Completed Grade 9 or higher

about 90 percent of the rate in KwaZulu-Natal: 72.42%

a little less than the rate in South Africa: 71.77%

39.8%

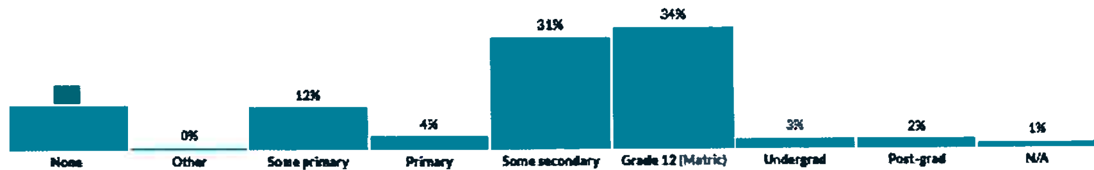
Completed Matric or higher

about 90 percent of the rate in KwaZulu-Natal: 45.85%

about 90 percent of the rate in South Africa: 43.37%

Population by highest educational level

Chart Options



* Universe: Individuals 20 and older

Source: Community Survey 2016

Figure 15: Zululand Education analysis

The Intensity of Poverty Index in Zululand (42.8%) is worse that the Provincial Poverty Index of 42.5%. In 2019 there were 722 000 people living below the upper bound poverty line of R1 227 per person per month, this is just above 83% of the population and 70 000 more people than in 2009, showing an 1,82% increase. Using the lower poverty line of R810 per person per month 69.6% of the population are living in poverty. This is the third highest nationally, following Alfred Nzo district municipality (71.5%)

and uMkhanyakude district municipality at 70.3%. Zululand's poverty rate is higher than the provincial rate which is at 53.4%. In terms of its municipalities, eDumbe poverty rate was at 74.8%, Nongoma at 72.2%, uPhongolo at 71.8%, Abaqulusi at 64.4% and Ulundi recording the lowest at 69.7%. The traditional and rural areas are the most poverty stricken

Source: Zululand Profile and Analysis, COGTA WEBPAGE, 2020

Water

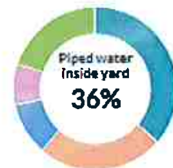
59.7%

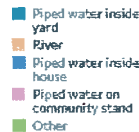
Are getting water from a regional or local service provider

about three-quarters of the rate in KwaZulu-Natal: 83.35%

about two-thirds of the rate in South Africa: 86.2%

Population by water source Chart Options





Source: Community Survey 2016

Population by water supplier Chart Options

Source: Community Survey 2016

Electricity

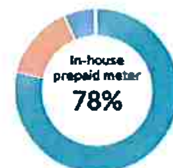
14.8%

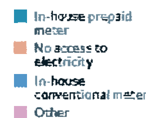
Have no access to electricity

about 1.4 times the rate in KwaZulu-Natal: 10.58%

about double the rate in South Africa: 7.29%

Population by electricity access Chart Options





Source: Community Survey 2016

Toilet facilities

39.3%

Have access to flush or chemical toilets

about two-thirds of the rate in KwaZulu-Natal: 55.74%

about three-fifths of the rate in South Africa: 63.53%

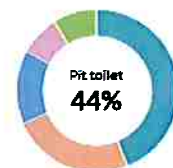
8.2%

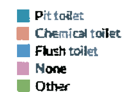
Have no access to any toilets

more than double the rate in KwaZulu-Natal: 2.67%

more than double the rate in South Africa: 2.39%

Population by toilet facilities Chart Options





Source: Community Survey 2016

Refuse disposal

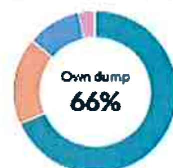
17.8%

Are getting refuse disposal from a local authority, private company or community members

about two-fifths of the rate in KwaZulu-Natal: 43.31%

about one-third of the rate in South Africa: 59.37%

Population by refuse disposal Chart Options



Source: Community Survey 2016

Figure 16: Zululand Service delivery analysis

Zululand District Municipality has a total number of 92 ,233 (10%) households with piped water inside the dwelling, a total of 323 751 (36%) households had piped water inside the yard, 92 233 (25%) from a river and a total number of 71 363 (8%) from a communal stand. The urban

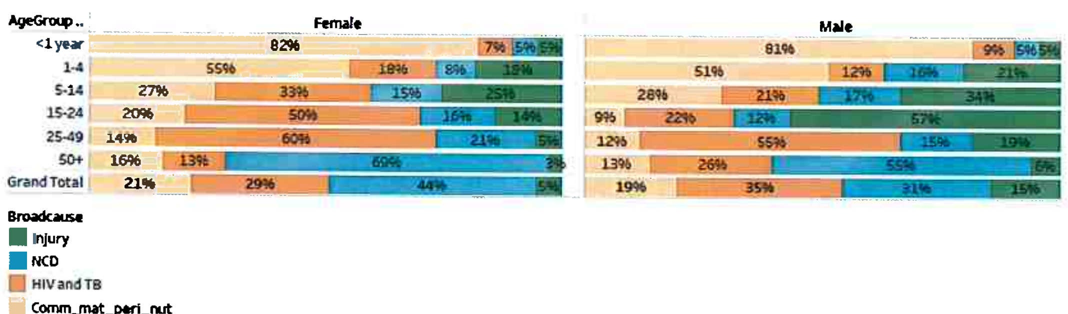
areas have sanitation systems, but the rural areas rely on septic tanks, pit latrines or no system at all. This places tremendous strain on the environment. The biggest concentration of backlogs for water and sanitation services is located in the Ulundi (36, 8%), Nongoma (58,4%) and uPhongolo (30,2%) local municipalities.

In 2016, 66% (587,370) of the population remove their refuse personally (own dump) 17% while (147 450) of the population in Zululand district municipality are getting refuse disposal from a local authority, private company or community members. Nongoma Municipality has the largest backlog of household refuse removal at 95% whilst Abaqulusi has the least backlog at 59.3%. It is clear that all the municipalities in Zululand still have a lot of work to do in dealing with the solid waste removal (

Source: Zululand Profile and Analysis, COGTA WEBPAGE, 2020

2.4. Burden of Disease

Zululand: DC26



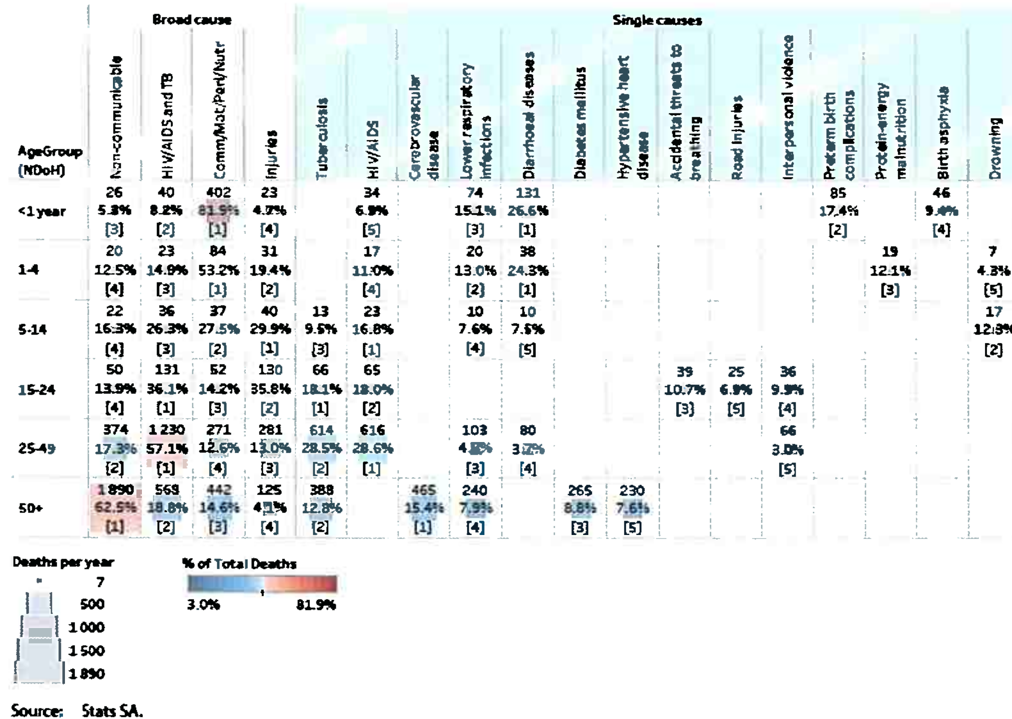
Source: Stats SA.

Figure 17: Zululand Broad causes by sex and age group, 2013–2015

Source: District Health Barometer 2018-19

The top two leading causes of death for children below the age of 5 is diarrhoeal diseases (24.3%) and lower respiratory infections (15.8%). For the elderly, cerebrovascular disease, such as strokes (18.9%) followed by Tuberculosis and lower respiratory infections both at 9.6% were the leading causes of death. In terms of maternal conditions, indirect maternal conditions (28.9%) and hypertension (19.9%) account for the leading causes of death for women in the 1549 age category. Maternal Mortality Ratio (per 100,000 live births) is 75, Ulundi had the highest at 129.4 and Nongoma lowest at 19.8.

Zululand: DC26



AgeGroup (NDoH)	Broad cause: Non-communicable	Broad cause: HIV/AIDS and TB	Broad cause: Comm/Mat/Peri/Nutr	Broad cause: Injuries	Single causes: Tuberculosis	Single causes: HIV/AIDS	Single causes: Cerebrovascular disease	Single causes: Lower respiratory infections	Single causes: Diarrhoeal diseases	Single causes: Diabetes mellitus	Single causes: Hypertensive heart disease	Single causes: Accidental threats to breathing	Single causes: Road injuries	Single causes: Interpersonal violence	Single causes: Preterm birth complications	Single causes: Protein-energy malnutrition	Single causes: Birth asphyxia	Single causes: Drowning
<1 year	26 5.3% [3]	40 8.2% [2]	402 81.9% [1]	23 4.7% [4]		34 6.9% [5]		74 15.1% [3]	131 26.6% [1]						85 17.4% [2]		46 9.4% [4]	
1-4	20 12.5% [4]	23 14.9% [3]	84 53.2% [1]	31 19.4% [2]		17 11.0% [4]		20 13.0% [2]	38 24.3% [1]							19 12.1% [3]		7 4.3% [5]
5-14	22 16.3% [4]	36 26.3% [3]	37 27.5% [2]	40 29.9% [1]	13 9.5% [3]	23 16.8% [1]		10 7.6% [4]	10 7.5% [5]									17 12.8% [2]
15-24	50 13.9% [4]	131 36.1% [1]	52 14.2% [3]	130 35.8% [2]	66 18.1% [1]	65 18.0% [2]						39 10.7% [3]	25 6.9% [5]	36 9.9% [4]				
25-49	374 17.3% [2]	1 230 57.1% [1]	271 12.6% [4]	281 13.0% [3]	614 28.5% [2]	616 28.6% [1]		103 4.8% [3]	80 3.7% [4]					66 3.0% [5]				
50+	1 890 62.5% [1]	569 18.8% [2]	442 14.6% [3]	125 4.1% [4]	388 12.8% [2]		465 15.4% [1]	240 7.9% [4]		265 8.8% [3]	230 7.6% [5]							

Figure 18: Zululand Leading causes of death by age group (Broad cause & Single causes), 2013–2015 Average number of deaths per year, percentage of total and [rank] per age group

Source: District Health Barometer 2018-19

Zululand District Municipality is currently at 93-78-91 in terms of performance against 90-90-90 across its total population using data available in the public sector only. Results for each of the sub-populations vary, with adult females at 95-83-96, adult males at 92-72-83, and children at 80-52-67.

For adult males and females, focus must be placed not only on initiation onto ART, but also on ensuring that clients are retained in care. There is a growing number of adults who have been previously diagnosed, but are not on ART. This includes those who had started ART and defaulted, as well as those who were never initiated.

There are gaps across the cascade for children under 15 years. Case finding, ART initiation and retention have all underperformed and should be addressed through focused interventions.

To achieve 90-90-90 targets, Zululand must increase the number of adult men on ART by 7 031, the number of adult women on ART by 2 239, and the number of children on ART, by 3 904, by December 2020. Data available in the private sector indicate that an additional 85 children, 3 438 adult females, and 1 860 adult males are receiving ART through private medical aid schemes.

Quality of care

Deaths in facility

		2016/17					2017/18					2018/19				
		PHC/CHC/MOU	District hospital	Regional hospital	Central/Tertiary Hospital	Total	PHC/CHC/MOU	District hospital	Regional hospital	Central/Tertiary Hospital	Total	PHC/CHC/MOU	District Hospital	Regional hospital	Central/Tertiary hospital	Total
Maternal	Maternal death in facility	0	16		0	16	1	12		0	13	5	11		0	16
Maternal	Live birth in facility	1 627	13 772		0	15 399	1 803	14 287		0	16 090	1 922	14 134		0	16 056
Maternal	Still birth in facility	26	260		0	286	13	331		0	344	26	295		0	321
Child (<5 years) / Infant (<1 year) / Neonatal	Death in facility 0-7 days	1	151		0	152	3	167		0	170	5	168		0	173
Child (<5 years) / Infant (<1 year) / Neonatal	Death in facility 8-28 days	0	24		0	24	1	26		0	27	0	24		0	24
Child (<5 years) / Infant (<1 year)	Death in facility 29 days - 11 months	1	79		0	80	0	58		0	58	0	70		0	70
Child (<5 years)	Death in facility 12-59 months	0	49		0	49	0	23		0	23	0	39		0	39
Other	Diarrhoea death under 5 years	1	34		0	35	0	9		0	9	0	13		0	13
Other	Pneumonia death under 5 years	0	26		0	26	0	10		0	10	0	16		0	16
Other	Severe acute malnutrition death under 5 years	1	46		0	47	0	12		0	12	0	11		0	11
	Inpatient deaths - total	886	2 976		0	3 862	44	2 706		0	2 750	24	16		0	40

Source: DHIS.

Source: District Health Barometer 2018-19

The graphs show the leading causes of death in Zululand district stratified by age and gender. In children under 5 mortality is usually caused by birth asphyxia, diarrhoea, pneumonia, congenital abnormalities and malaria (WHO: Children: improving survival and well-being). All of these conditions can be treated or prevented by access to affordable simple interventions such as adequate nutrition, immunization, safe food and water and care by a health care provider whenever required (WHO: Children: improving survival and well-being)

The data from the district shows that that these are also the conditions that caused most of the deaths in the hospital in both males and females, with the addition of HIV among the major causes of death.

Among the older children the pattern of death changes with more accidents and injuries taking the lead as shown in the graph. This is more marked in males with HIV causing the highest mortality among both genders (WHO: Children: improving survival and well-being).

In the young and older adults TB and HIV are the biggest causes of death as shown in the graphs below. In people older than 65, deaths occur as a result of chronic conditions such as cerebrovascular accidents and hypertensive diseases. This is also shown in a report by WHO in which 36 million out of 57 (63%) occurred as a result of non-communicable diseases (WHO Burden: mortality, morbidity and risk factors, 2008). Even though currently there is still more deaths from infectious diseases than non-communicable diseases it is expected to exceed common causes of death by 2030 (Burden: mortality, morbidity and risk factors, 2008).

The data below shows a high number of accidents and injuries from the age of 5 onwards, especially among males. Cerebrovascular accidents are also relatively high from young adulthood, 25 years and over. Both of these conditions may require specialized care provided at the regional hospital level. A study of a district hospital in Cape Town (Meintjes G, 2015), found that 60% of medical admissions was

due to HIV, with one third requiring readmission. At 90 days mortality reached 15% with TB being the leading cause of death, burdening the overstretched public health service. This necessitates ART programmes to be functioning optimally, integration of TB and ART programmes and surveillance at the hospital level (Meintjes G, 2015). In order for Zululand District to meet the needs of the population in terms of its burden of disease, it is recommended that Vryheid hospital be upgraded to a regional level.

Source: South Africa: Consolidated Regulations, 2012, South African legal information institute, REGULATIONS RELATING TO CATEGORIES OF HOSPITALS

2.5. Number of facilities by level of care

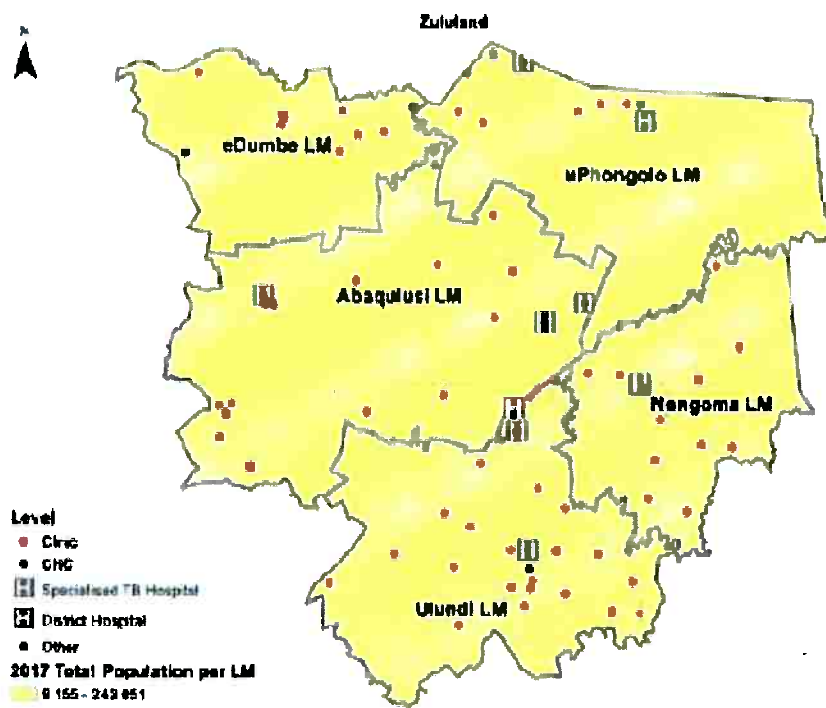
Service delivery platform

Facilities by level

		District	LM2016				
		DC26	KZN261	KZN262	KZN263	KZN265	KZN266
		Zululand DM	eDumbe LM	uPhongolo LM	Abaqulusi LM	Nongoma LM	Ulundi LM
Clinic	Mar 2019	73	6	10	16	15	26
CHC/CDC	Mar 2019	1	1				
District Hospital	Mar 2019	5		1	1	1	2
Regional Hospital	Mar 2019						
Central/Tertiary Hospital	Mar 2019	0	0	0	0	0	0
Other Hospitals	Mar 2019	5	1	0	1	1	2

Source: DHIS.

Source: District Health Barometer 2018-19

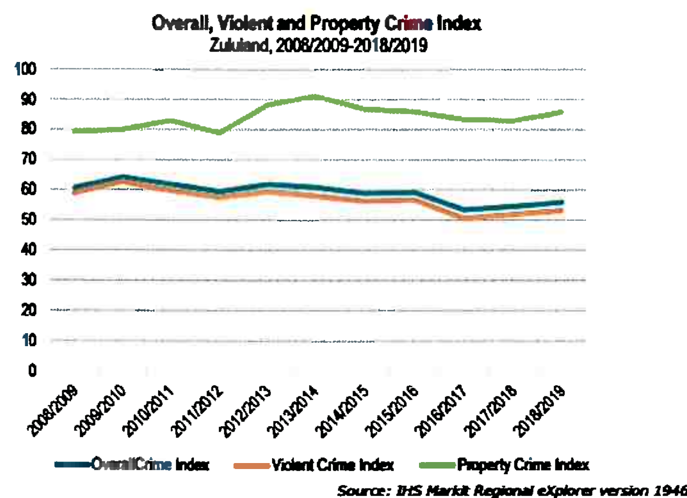


Map 2: Health facilities in relation to households / population

Source: Zululand District Municipality DISTRICT HEALTH PLAN 2020/21-2024/25

2.5.1. CRIME

For the period 2008/2009 to 2018/2019 overall crime has decrease at an average annual rate of 0.81% within the Zululand District Municipality. Violent crime decreased by 1.03% since 2008/2009, while property crimes increased by 0.78% between the 2008/2009 and 2018/2019 financial years.



According to the Growth and Development Plan for the district, there are 14 police stations within the Zululand District, with a further 149 required. With the district being predominantly rural, access to the police stations becomes a challenge. The Ncome Prison is the main medium/maximum security prison located in Vryheid. The prison has an official capacity of 1359.

Station	2018-2019	2017-2018	2016-2017	2015-2016	2014-2015
Emanguzi	3,262	3,088	3,039	2,825	2,971
Ezibayeni	430	357	414	417	392
Hlabisa	1,550	1,626	1,432	1,234	1,330
Hluhluwe	2,184	2,021	2,081	2,478	2,623
Ingwavuma	1,449	1,418	1,396	1,614	1,625
Jozini	2,919	2,849	2,868	3,061	2,765
Kwamsane	5,822	5,839	5,482	5,278	5,365
Mbazwana	1,525	1,150	2,197	2,562	2,388
Mkhuze	1,293	1,247	1,156	1,321	1,272
Vryheid	5,037	4,978	5,621	6,059	5,642
Ndumo	919	988	870	802	715
Total	**26,390**	**25,561**	**26,556**	**27,651**	**27,088**

2.6. FORENSIC PATHOLOGY SERVICES

2.6.1. A SHORT HISTORY OF FORENSIC PATHOLOGY SERVICES

National Cabinet approved the transfer of Medico-Legal Mortuaries from the South African Police Services (SAPS) to Provincial Health Departments in May 2000, and in July 2000 approved a framework to guide the development of detailed province-specific implementation plans. In May 2005, guided by the National Health Act, 2003 (Act 61 of 2003) the KwaZulu-Natal Department of Health commenced with preparation for the take-over of this function to 'provide and coordinate forensic pathology, forensic clinical medicines and related services including the provision of Medico-Legal Mortuaries and Medico-Legal Services'. In April 2006, the Forensic Service and Bioethics Directorate assumed responsibility of the SAPS mortuaries, hospital mortuaries and undertaker's premises utilised for the rendering of autopsy services.

The Forensic Pathology Service handed over by the SAPS was an under-resourced and not a fully functional and developed service. The following list basically summarises the state of the service under the control of the SAPS:

- Dilapidated facilities;
- Inadequate space in facilities;
- Poor staff morale- forensic pathology services tended to be used as a dumping ground for problematic staff in police;
- Almost non-existent psychological support for staff;
- Poor provision of equipment and protective equipment etc.;
- Poor service to the bereaved and community in general.

In order to address these shortcomings, a decision was taken to hand the service over to the Department of Health. In order to facilitate the hand-over, and also to achieve the collection of impartial professional forensic evidence for the criminal justice system concerning death due to causes other than natural, a conditional grant was given to the Department of Health.

The purpose of this grant was to develop and provide adequate Forensic Pathology Services in all provinces. The main objectives of the grant were to:

- Improve infrastructure, fleet and equipment;
- Improve human resource management;
- Professionalise the service by introducing training of mortuary personnel.

2.6.2. MANDATE OF THE FORENSIC PATHOLOGY SERVICES

The Mandate of the Forensic Pathology Services is to ensure impartial, professional medico-legal death examination and evidence collection for the Criminal Justice System in cases where death is due to other than Natural Causes

The Forensic Pathology Service (FPS) deals with the investigation of deaths deemed to be due to other than natural causes as contemplated in the Inquests Act,1959(No 58 of 1959). The corpse/human remains therefore constitute evidence in the resultant police investigation.

2.6.3. GRADING SYSTEM FOR MEDICO LEGAL MORTUARIES IN ACCORDANCE WITH THE NATIONAL CODE OF GUIDELINES FOR FORENSIC PATHOLOGY PRACTICE IN SOUTH AFRICA, AUG 2007.

The size of a medico legal mortuary (MLM) is based on the maximum number of bodies handled annually. (Post mortem examination process) This is referred to from a M1 up to a M6 grade.

- M1 processes up to 250 bodies per annum
- M2 processes up to 500 bodies per annum
- M3 processes up to 1000 bodies per annum
- M4 processes up to 1500 bodies per annum
- M5 processes up to 2000 bodies per annum
- M6 processes more than 2000 bodies per annum

Source: National Code of Guidelines for Forensic Pathology Services.

Table 4: Grading of Existing Medico Legal Mortuaries in Kwazulu-Natal

DISTRICT	NAME OF MLM	M- GRADE
UGU	Port Shepstone	M3
	Harding	M1
	Park Rynie	M4
UMGUNGUNDLOVU	Howick	M1
	New Hanover	M1
	Richmond	* Holding facility
	Pietermaritzburg	M5
UTHUKELA	Estcourt	M2
	Ladysmith	M3
UMZINYATHI	Dundee	M1
	Greytown	M2
AMAJUBA	Madadeni	M2
	Dannhauser	*Holding facility
	Newcastle	M1
ZULULAND	Nongoma	M1
	Ulundi	*Funeral undertaker
	Pongola	*Funeral undertaker
	Paulpietersburg	*Holding facility
	Vryheid	*Funeral undertaker
UMKHANYAKUDE	Mtubatuba	*Funeral undertaker
	Mkuze	*Hospital mortuary
	Manguzi	*Hospital mortuary
	Mosvold	*Hospital mortuary
KING CETSHWAYO	Eshowe	M2
	Richardsbay	M3
ILEMBE	KwaDukuza	M3
HARRY GWALA	Kokstad	M1
	Ixopo	M1
	Bulwer	*Holding facility
	uMzimkhulu	M1
ETHEKWINI	Pinetown	M5
	Phoenix	M6

* Facility that is purely utilised for storage of bodies which are transported to a MLM for post mortem examination.

Map 3: KZN Health Districts

2.6.4. RECENT FACILITIES BUILT BY THE DEPARTMENT OF HEALTH

The following MLM facilities have been constructed in the last 20 years.

DISTRICT	MLM	YEAR	CLOSEST OTHER MLM FACILITY AND DISTANCE
Ugu	Park Rynie	2011	Port Shepstone, 60 km
Harry Gwala	Kokstad	2008	uMzimkhulu, 84 km
uMgungundlovu	Pietermaritzburg	2010	Howick, 25km
eThekwini	Phoenix	2015	Pinetown, 31 km
uThukela	Estcourt	2010	Ladysmith, 77 km
uMzinyathi	Dundee	2010	Greytown, 127 km
	Greytown	2013	Dundee, 127 km
Amajuba	Madadeni	2010	Newcastle, 15 km
King Cetshwayo	Eshowe	2011	Richards Bay, 94 km

2.6.5. FACILITIES BASED WITHIN SAPS PREMISES

A number of MLM's are still situated inside SAPS premises.

Table 5: MLM in SAPS premises

MEDICO LEGAL MORTUARIES BASED ON SAPS PREMISES			
DISTRICT	STILL IN USE	VACATED PREMISES AWAITING HANDOVER	HANDED BACK TO PUBLIC WORKS
Ugu	Port Shepstone		Scottburgh
	Harding		
Harry Gwala	Bulwer		
	uMzimkhulu		
	Ixopo		
uMgungundlovu	New Hanover	Mooiriver	Alexandra road
	Richmond		
	Howick		
eThekwini	Pinetown		Phoenix
	Gale St		
uThukela	Ladysmith		Estcourt
uMzinyathi		Greytown	
		Nqutu	

MEDICO LEGAL MORTUARIES BASED ON SAPS PREMISES			
DISTRICT	**STILL IN USE**	**VACATED PREMISES AWAITING HANDOVER**	**HANDED BACK TO PUBLIC WORKS**
Amajuba	Newcastle	Utrecht	Madadeni
	Dannhauser		
King Cetshwayo	Richards Bay		Eshowe
Zululand	Paulpietersburg		
	Nongoma		
	Pongola		
uMkhanyakude	Mtubatuba		

It is a well-known fact that none of the facilities inherited from the SAPS were anywhere near a condition that could be remotely construed as legally compliant. However, The KwaZulu-Natal Department of Health cannot continue indefinitely to knowingly and wilfully provide Forensic Pathology Services from non-compliant facilities.

There has been increasing pressure from SAPS and National Public Works for the remaining Medico-Legal Facilities to vacate SAPS property due to ongoing upgrades of SAPS facilities.

Risk factors of facilities based on the SAPS premises are as follows:

- Facilities do not have all the minimum requirements as required by the National code for guidelines for FPS and applicable legislation.
- Space is limited, not all facilities have X-Ray facilities for gunshot victims and then have to either be transferred to a facility that has or sometimes is not at the closest hospital.
- Very few facilities have backup generators
- No access control.
- No security.
- Parking is often limited
- Aged body cabinets often break down.

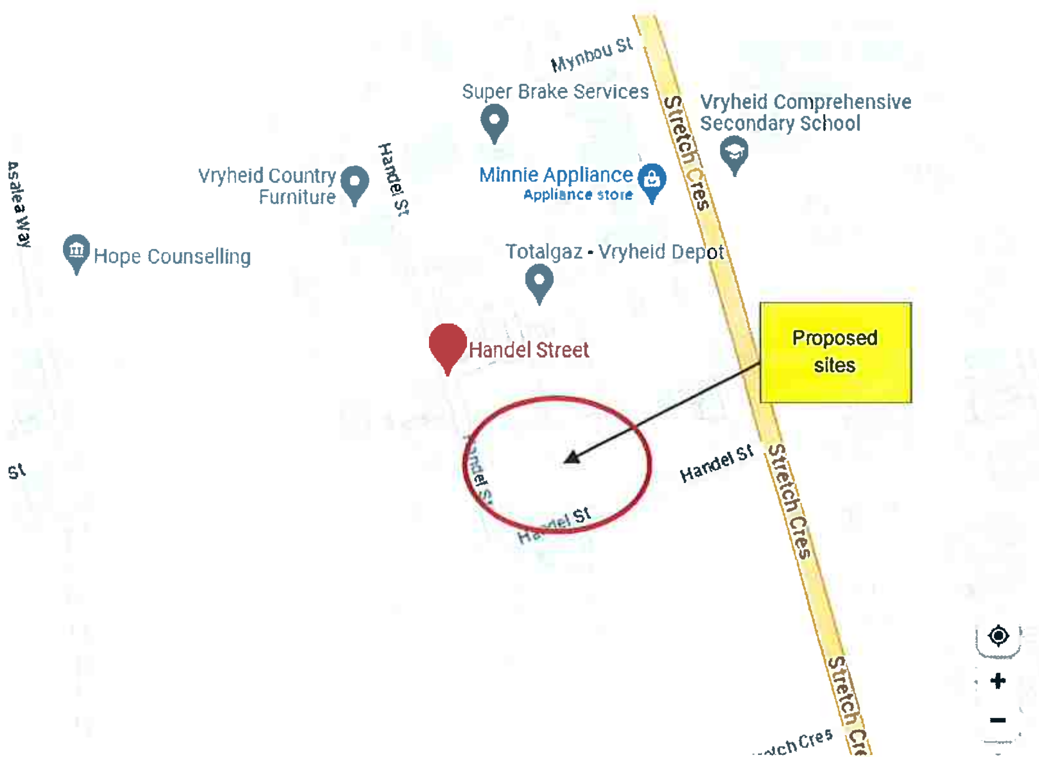
These non-compliant facilities not only violate the basic Occupational Health and Safety requirements of our personnel, but it is an indictment of our responsibility as a department and a gross violation of our Justice and Human Rights imperatives to the public we serve.

The negative impact of these non-compliant facilities on service delivery are numerous and range from chain of evidence violations (no access control to bodies due to forced sharing of refrigeration space with funeral undertakers and hospitals) to potential risks of litigation on many fronts.

2.7. VRYHEID MEDICO-LEGAL MORTUARY

2.7.1. LOCATION

The proposed Vryheid Medico-Legal Mortuary will be located on ERF 6048, Handel Street, Vryheid. It is within close access to a busy transport route for ease of public access and also to other major role players such as Home Affairs and the SAPS.



Map 4: Location of proposed Vryheid Medico-Legal Mortuary site.

Source: Google Maps

2.8. CLINICAL SERVICES

The objective of the project is to create a one-stop forensic pathology centre to serve the community of Zululand District.

A. **Clinical Services**

The following Clinical services is required:

- Body preparation area
- Autopsy area

B. **Clinical support Services**

- Body storage
- Layout room

C. **Administration**

- Office/Administration
- Staff facilities
- Visitor's facilities

D. **General Support Services**

The following general support will be required:

- Security
- Porter Services
- Drop- off and Pick-up points
- Parking

2.9. REVISED REFERRAL PATHWAYS

The proposed new Vryheid MLM will require adjusted referral pathways. This include that all Health facilities in the Zululand district refer forensic pathology cases to the new MLM instead of Richards Bay.

2.10. PROPOSED PACKAGE OF SERVICE

2.10.1. CURRENT SITUATION

The need to prioritize a DoH permanent structure for a Medico Legal Mortuary in the Zululand District was identified by Forensic Pathology Services in 2006 when the service was transferred from the SAPS to the KZN Dept of Health. Due to the Conditional Grant that was funding the drive originally, and the availability of land at that stage, other Medico Legal Mortuary projects received priority.

The Vryheid facility was initially operating from privately owned funeral undertakers and KZN Health were paying for rental office space, body storage and for conducting autopsies. The Vryheid facility currently operates from Masons Street clinic, where the FPS staff use park homes for offices, store the bodies in a container and transport the bodies to a funeral undertaker to conduct autopsies. When bodies are offloaded or loaded from mortuary service vehicle and admitted to container this is in full view from the street. There are also no viewing facilities for families when they identify the human remains The aforementioned is not conforming to the minimum requirements as stipulated in the National Code of guidelines for Forensic Pathology Services.

The recent accident which occurred on the N2 between Pongola and Tshelimnyama resulted in 20 fatalities, which due to lack of suitable facilities to store the bodies together and to autopsy all the bodies, the bodies had to be transported to another district (King Cetshwayo) for storage and autopsy purposes.

- There is no medical legal mortuary built according to specifications in Zululand
- A site consisting of two plots of land was identified and purchased from the Vryheid Transitional Local Council at a cost of R600,000 for the building of a new Medico Legal Mortuary.
- These properties were subsequently registered in the name of the province and allocated to the Department of Health on 22 May 2018.
- The two properties Erf 2491 and 2492 were consolidated to form Erf 6048 on the 22 October 2020

- This facility works with the following stake holders to fully perform its mandate -:
  - i. SAPS who investigate the circumstances of death.
  - ii. Department of home affairs for registration of deaths.
  - iii. Department of Justice for conducting trials and prosecution on inquest and criminal cases.
  - iv. Vryheid municipality for pauper burials.
  - v. Department of social development for social support services.
  - vi. Local hospitals for referred cases
  - vii. Foreign embassies for deaths of foreign nationals
  - viii. Local community and funeral undertakers who have their relatives and client admitted in the mortuary
  - ix. Non-government organizations who assist with humanitarian aid and religious structures to offer spiritual support.

- Vryheid FPS is servicing the following SAPS station -:
  - Vryheid
  - Mondlo
  - Gluckstadt
  - Hlobane
  - Ngobane
  - Louwsberg
  - Paulpietersberg

- And some stations not mentioned here above in case of death in transit when the client demise on an ambulance during transfer.

- Vryheid medico-legal mortuary has the legal mandate to investigate death due to other than natural causes which include the following
  - Motor vehicle accidents
  - Suicide e.g. Poisoning, hanging, etc
  - Murder e.g. Gunshot, stabbing, etc
  - Electrocution
  - Obstetric related deaths
  - Sudden death without medical history etc

VRYHEID FPS CATCHMENT AREA

- The Vryheid medico legal mortuary catchment area covers the Mondlo, Gluckstadt, Hlobane, Ngobane, Louwsberg and Paulpietersburg communities.

Mondlo SAPS	Gluckstadt SAPS	Hlobane SAPS	Ngobane SAPS	Louwsberg SAPS	Paulpietersburg SAPS
44km	37km	23km	68km	63km	53km

Work load for the nearby facilities and Vryheid Forensic Pathology services for 2021

Facility	2021
Vryheid	245
Ulundi	164
Nongoma	168
Paulpietersburg	60
Pongola	161

Paulpietersburg bodies are also stored at Vryheid and autopsied in Vryheid, this results in the facility processing over 300 bodies a month.

EXPENDITURE OF NEIGBOURING FACILITIES INCLUDING VRYHEID FPS FOR THE 2019/20 FINANCIAL YEAR

Facility	Compensation of employees	Goods and services
VRYHEID	3 572 937.00	534 084.00
PONGOLA	2 113 420.00	394 601.00
NONGOMA	3 698 798.00	291 911.00
PAUPLPIETERSBURG	785 861.00	40 000.00
ULUNDI	2 170 287.00	154 074.00

CHALLENGES

The Vryheid facility currently operates from Masons Street Clinic, where the FPS staff use park homes for offices, store the bodies in a container and transport the bodies to a funeral undertaker to

conduct autopsies. When bodies are offloaded or loaded from mortuary service vehicle and admitted to container this is in full view from the street. There are also no viewing facilities for families when they identify the human remains The above is not conforming to the minimum requirements as stipulated in the National Code of guidelines for Forensic Pathology Services.

Due to the medico legal nature of the service it is vital that the premises is secure and that records are protected. There are also no washing facilities for vehicles at the premises.

The recent accident which occurred on the N2 between Pongola and Tshelimnyama resulted in 20 fatalities, which due to lack of suitable facilities to store the bodies together and to autopsy all the bodies, the bodies had to be transported to another district (King Cetshwayo) for storage and autopsy purposes.

2.10.1.1. Current Statistics

Autopsy statistics over 5-year period.

Table 6: District and Provincial View.

District	Population estimation 2021 as per DHIS	Autopsies per annum	Number of MLM's conducting autopsies
Amajuba	604,743	684	2
eThekwini	3,888,452	5,400	2
Harry Gwala	531,630	590	3
iLembe	735,030	823	1
King Cetshwayo	1,025,730	1,170	2
uGu	812,184	2,490	3
uMgungundlovu	1,216,569	2,270	3
uMkhanyakude	719,574	667	0
uMzinyathi	588,405	664	2
uThukela	782,136	1,070	2
Zululand	917,598	798	[illegible]
Total	**11,822,051**	**16,626**	**21**

2.10.1.2. Calculations

A. <u>Autopsy bed calculation</u>

Utilising the Grading system, (see below) and the statistics above, Vryheid MLM will be a M2 facility

- M2 processes up to 500 bodies per annum
- M3 processes up to 1,000 bodies per annum

B. <u>Body storage calculation</u>

The number of body trays can be calculated from Equation 1 below.

$$BT=(D\times S)/(365\times R)$$ - Equation 1

Where:
BT = Number of body trays
D = Number of deaths per year requiring body trays
S = Average length of stay (in days)
R = Required body tray occupancy rate

> The number of body trays required in a hospital that records **800** deaths per year (not necessarily all within the hospital per se but including bodies delivered to the hospital), with the average length of time that a body remains in the mortuary being **8** days and with a body tray occupancy rate of **80%**.
> With body cabinets generally having a storage capacity of three bodies per cabinet the calculated required capacity should be *rounded up* to the nearest multiple of three

Thus:

(667 x 8) / 365 x 80%) = 18 Trays

Source: INFRASTRUCTURE UNIT SUPPORT SYSTEMS (IUSS) PROJECT Health Facility Guides: Hospital Mortuary Services [Gazetted, 30 June 2014]

Note that the above calculation is for hospital-based mortuaries. Similar already built facilities that carry an M2 status are:

Estcourt M1 Medico-Legal Mortuary- 36 Coldroom Trays and 6 Freezer trays for decomposed bodies

Dundee M2 Medico Legal Mortuary – 72 Coldroom Trays and 6 Freezer trays for decomposed bodies

Park Rynie M3 Medico Legal Mortuary – 132 Coldroom Trays and 12 Freezer trays for decomposed bodies

Phoenix M6 Medico Legal Mortuary - 500 Coldroom Trays and 15 Freezer trays for decomposed bodies

2.10.2. SUMMARY OF SERVICE REQUIREMENTS

In summary, the following proposed services are required:

Table 7: Proposed Services to be rendered in the Medico-Legal Mortuary

Service to be rendered	Current number	Proposed number	Level of Service	Comment
Clinical Services				
Autopsy suite				
Autopsy tables	0	2	District	Franke Stainless Steel
Clinical Services Support				
Preparation area	0	2	District	2x Reconstruction sinks and trolleys.

Service to be rendered	Current number	Proposed number	Level of Service	Comment
Coldroom Body storage	0	72	District	To accommodate some obese trays.
Freezer Room Body storage	0	12	District	To accommodate some obese trays.
Viewing Room	0	2	District	

2.11. SERVICE COMMISSIONING PROCESS

The project is envisaged to be done as a single project and will not require any decanting plans.

2.12. OCCUPATIONAL DEVELOPMENT PLAN

Human Resource provisioning will require adjustment to the existing HR Plan and the operational budget. The operational budget for the MLM will be determine at the onset of the commissioning of project. Please refer to the HR plan and operational budget attached.

The organizational development, quality assurance and change management interventions discussed under Organizational Development and Quality Assurance below.

2.13. SUPPORT SERVICES

The new Vryheid MLM will require the following support services:

- Office/Administration
- Staff facilities
- Visitor's facilities
- Security
- Porter Services
- Drop- off and Pick-up points
- Parking

3. PLANNING-, DESIGN GUIDELINES AND FUNCTIONAL SPATIAL RELATIONSHIP

The project objective is to:

- To build a new fully resourced M2 Medico-Legal Mortuary.
- To enhance Zululand district MLM services.
- To ensure compliance National Code of Guidelines for Forensic Pathology Services.
- To ensure that the environment is conducive in terms of OHS for staff working at the facility and to ensure dignity and privacy for public utilising the facility.
- To ensure that the dignity and the rights of the deceased are maintained.

The success criteria of this project will be the reduction delays in forensic pathology service.

3.1.1. PLANNING AND DESIGN GUIDELINES

The new Vryheid MLM will consist of Body preparation and autopsy area, admin areas, visitor's area and housekeeping areas.

The planning and design of the facility shall be informed by consultation with clinicians, stakeholders and all the relevant bodies during the planning and design phase. The following principles will apply:

- Meet legal compliance (deemed to satisfy or rational design). Right sized to avoid over or under capacity and over or under utilisation.
- Designed to deliver appropriate levels of emergency preparedness and resilience. Design that is flexible and adaptable to future change.
- Ensure building respond to the climate and the ventilation requirements for such a facility and application of "Green design" principals. Designing close relationships with nature.
- Integrated external and internal Recreation areas.
- Functional zoning, separating user's areas from facility management and administration requirements.
- Appropriate space norms and room design. The design of a building that is appropriate for the functions intended to be carried out within the spaces designed.
- An ergonomically safe and risk-free work and healing environment.
- Compliance with quality assurance principals.
- Design that balance requirements for clinical need and capital, and recurrent budget considerations.
- Be physical accessible and welcoming to the community they serve, facilitates access to and within the area for physically and sensory impaired people, consideration should be given to a wide range of disabilities.
- Ensuring that the functional and aesthetic requirements of furniture and fittings, fabric and finishes are met.
- Use of latest technology and innovations to aid in healing.
- Promote occupational health, wellbeing and motivation to staff.

A. **General Aspects**

- Enough space to walk freely inside
- Finishes for easy maintenance without moving through the user areas
- Privacy
- Panic buttons to be installed at strategic intervals
- Windows and doors to be burglar proofed
- Main entrance to be security controlled
- Glass should be safety glass
- Windows to allow for enough lighting
- Rooms to be well ventilated
- Floors: slip resistant
- Electrical fittings: water resistant in wet areas
- Toilets and showers: privacy
- Toilets, baths and showers: tamperproof
- Hot water: in designated areas only
- Staff rest room & ablutions
- Infection control policies to be observed and implemented
- Intercom connected at main gate and at delivery area.

B. **NON-NEGOTIABLE REQUIREMENTS**

- Fire detection systems
- Panic buttons
- Central / electrical lock/release mechanism for all doors
- Fire protection equipment such as fire-hose reels and fire extinguishers
- Fire / disaster plan
- Uninterrupted power supply
- CCTV monitoring in areas of the users
- Non-combustible materials
- Electrical distribution boards to be built into walls and locked

3.1.2. AREA SUBDIVISION

See details in table below:

Table 8: Division of Care for the new Vryheid MLM

Type of Service		Service Area	Security grading
BODY PREPARATION AND AUTOPSY AREA	Public Support	Procedures	High security
	Administration	Work station Ablutions	Medium security
	Unit Support	Utilities, stores and cleaning services	Low security
BODY STORAGE	Public Support	Storage	High security
	Administration	Reception/ Waiting /Dispatch Ablutions	Medium security
	Unit Support	Utilities, stores and cleaning services	Low security

The MLM generally provides a 24hr service and generally services the general public during office hours of 8-hours a day.

Table 9: Clinical Areas Subdivisions

Clinical & Household Areas	Day Time Areas	Night Time Areas
AUTOPSY AREA		
Preparation area Autopsy Room Support areas Staff areas	All areas	Nil
BODY STORAGE		
Reception/Waiting/Dispatch Stores Support areas Staff areas	All areas	On demand for emergencies

3.1.2.1. Intradepartmental relationships and functional zones

The MLM will be separated into functional zones or specific spaces that support flow patterns in the mortuary:

(i) Public zone - site access, parking, waiting areas, ablutions, reception and records;

(ii) Patient (Clinical) Zone – receiving, body preparation and autopsy area and dispatch;

(iii) Shared clinical support spaces – body storage;

(iv) Administration spaces - offices;

(v) Staff spaces- staff room and ablutions;

(vi) Service support spaces- utilities, stores and housekeeping services.

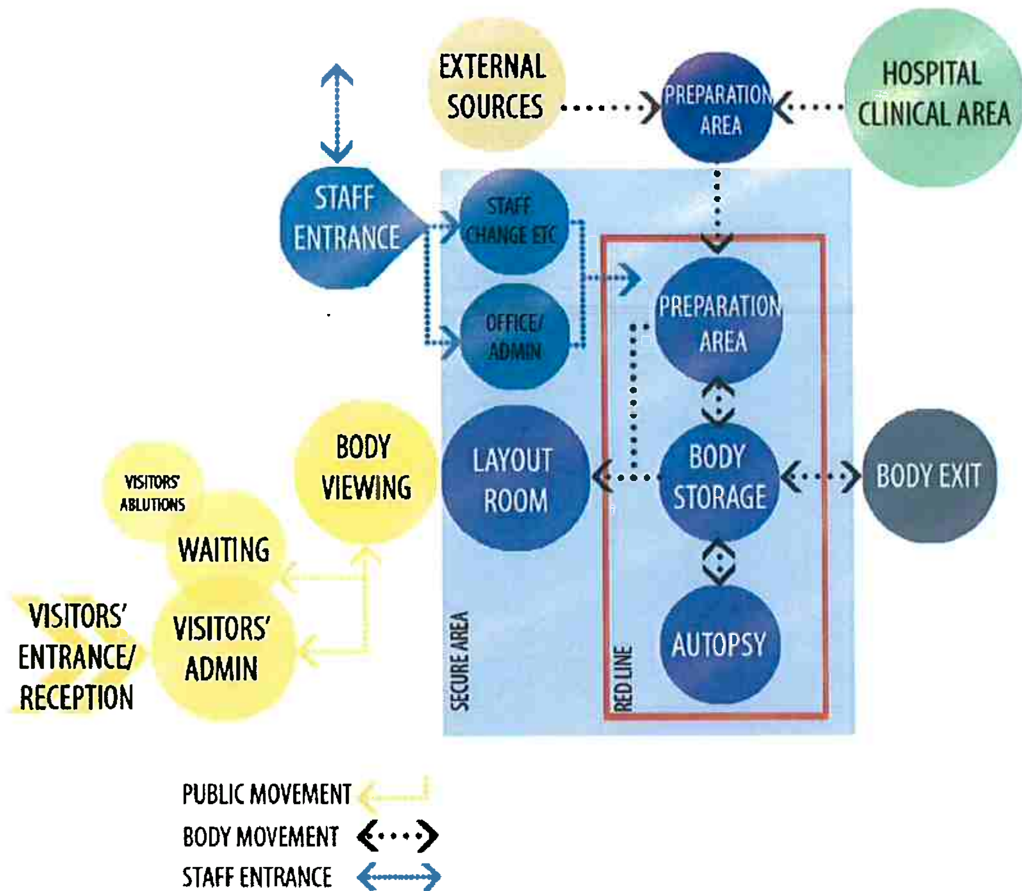


Figure 19: Access and movement in a mortuary. (adopted from IUSS)

Source: INFRASTRUCTURE UNIT SUPPORT SYSTEMS (IUSS) PROJECT Health Facility Guides: Hospital Mortuary Services [Gazetted, 30 June 2014]

3.1.2.2. Functional Areas

All areas can be differentiated from each other based on the specific functions. The clinical areas can be further subdivided. See details in tables below:

Table 10: Functional Areas

Outside area	Admin area	Public area
Deliveries Maintenance staff Plant Room Entrance to facility Public Security	Offices Board Room Store Rooms Staff Kitchenette	Reception / waiting Interview Room Body Viewing Room Bier Room

Table 11: Autopsy Area

Body reception / Dispatch area	Body Storage area	Autopsy area
Reception Loading / Off Loading area Weigh / Measure area Medical Waste	Cold-room Freezer	Autopsy Room Observation area

3.1.2.3. Key Adjacencies

The critical adjacencies are as follows:-

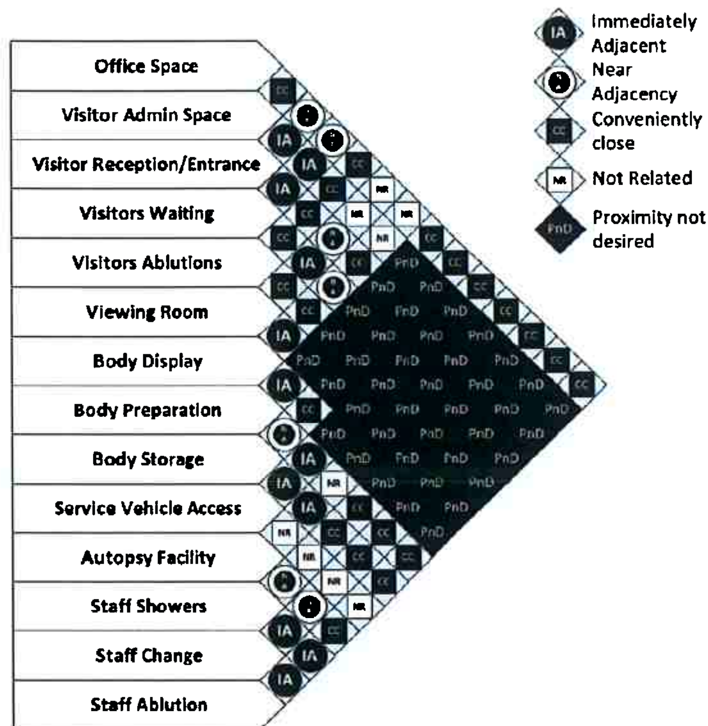


Figure 20: Adjacency Diagram

Source: INFRASTRUCTURE UNIT SUPPORT SYSTEMS (IUSS) PROJECT Health Facility Guides: Hospital Mortuary Services [Gazetted, 30 June 2014

3.1.2.4. Critical Departmental Relationships

The critical departmental relationships are depicted below:

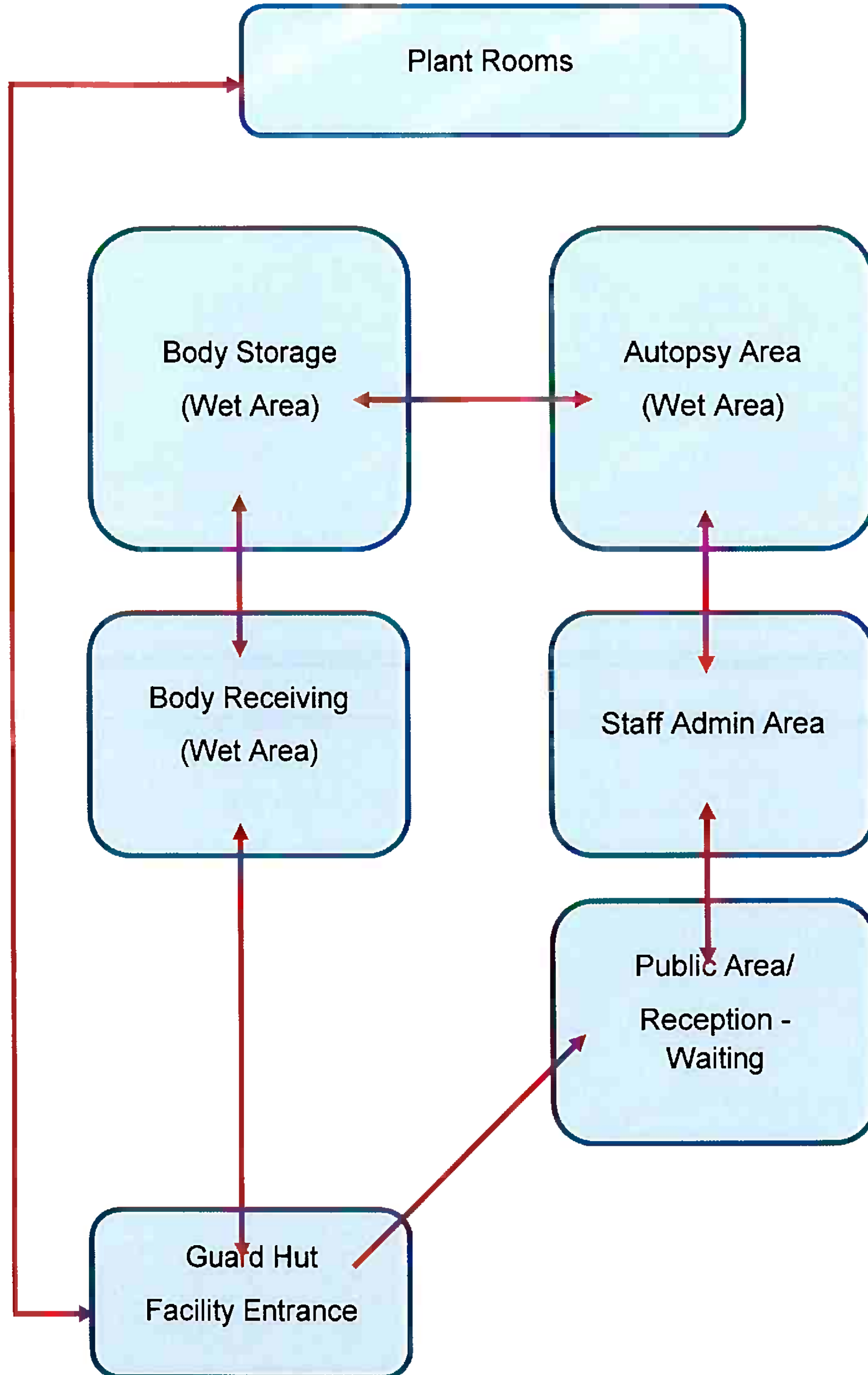


Figure 21: Departmental relationships

3.2. COMMUNICATION AND CONTROL

The following guidelines is provided Communication and Communication systems:

- Planning should take into consideration the fact that telephones are required throughout the facility to facilitate good communication. This needs to be planned in conjunction with the system to be used throughout the mortuary;
- Phones need to be accessible;
- Effective communication system and information systems that will support body management and administration (radio or telephone). Personal telephones replacing some aspects of call systems;
- Receptions must be immediately visible upon entry should contains a desk/counter, chair and telephone with communication through to the relevant areas;
- IT & communication requirements especially related to the digital platform;
- The workstations in the autopsy area for Doctors to sit or stand and write up notes, fill in forms, phone or discuss cases;
- Appropriate communication, whether radio or telephone, should be in place, so that mortuary vehicles can be called to transport body as the need arise as well as to be aware of incoming cases.
- Other systems required include:
  - WI-FI
  - Bar coding for supplies and X-rays / records
  - Computer network connections in all management and patient administration and information system
  - Electronic Patient Records
  - Patient Administration System (PAS)
  - Radiology Information system (RIS) (Digital x-rays and Picture Archiving)
  - Communication System (PACS)
  - Alarm - HVAC

PART C – TECHNICAL BRIEF

1. PROJECT SCOPE

1.1. PROJECT OVERVIEW

1.1.1. INTRODUCTION AND BACK GROUND

Vryheid Medico-Legal Mortuary is situated in Zululand District in Vryheid town. It is strategically sited close to the main road through the town and other strategic role players.

There is currently no compliant existing Medico-Legal facility in Vryheid and the service is being delivered from park homes and cold room container storage at the Vryheid Clinic.

1.1.2. OVERALL STRATEGY

1.1.2.1. Project Management Life Cycle

The Project Management Life Cycle is a structure with a set of stages that will be required to transform the idea of the Maternity and Neonatal Units into reality in an organised and efficient manner. The project will follow the Infrastructure Delivery Management System (IDMS) and the Framework for Infrastructure Delivery and Procurement management (FIDPM).

1.1.2.2. Project Logistics

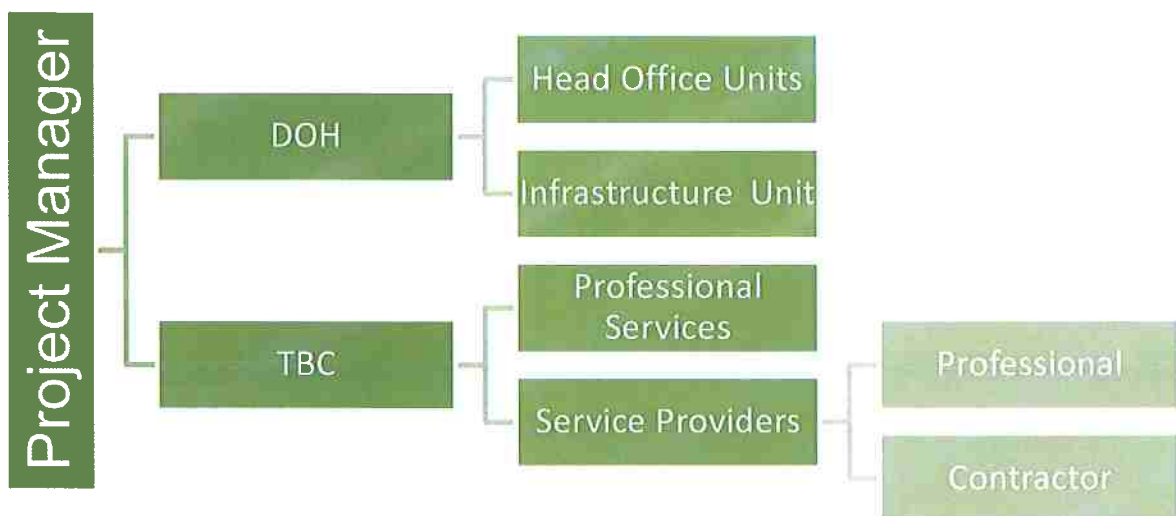
Project logistics involve the managing of resources, which will have a bearing on the project finance, including the following:

- Project Team: the right mix of stakeholder, professionals, contractors and administrative resources that is required for the project;
- Physical Infrastructure: the best suited spaces for the office team to perform duties in relation to the project;
- Computing infrastructure: required integrated business management system for the project execution phase;
- Communication infrastructure: required communication systems and facilities to allow communication at all levels;
- Accessibility: required access to transport, housing, commerce (all related) and medical facilities
- Waste management: requirement for proper waste management; including sustainable practices

1.1.3. PROJECT ORGANIZATION

The project organization is structured to facilitate the coordination and implementation of project activities thereby creating an environment that fosters interactions among the team.

The following structure is proposed which need to be developed further:



1.1.4. ASSUMPTIONS

The following assumptions have been made:

- Supply Chain Management (SCM) - It is assumed that KZN-DoH SCM will be responsible for the management of procurement processes and Contract Management; and will provide support in developing the necessary tender and contractual documentation;
- Department of Health Head Office - It is assumed that KZN-DOH Head Office staff, as identified under items 2.1.6 and 2.1.6.1 below, will be accessible to be able to provide input on designs quickly and respond to queries timeously;
- Forensic Pathology Services Management - It is assumed that the Management will be accessible to be able to approve designs quickly and respond to queries timeously;
- KZN-DOH Infrastructure Unit - It is assumed that the required complement of staff will be available to provide project services as indicated in item 2.1.6.1 below;

- Operational budget - It is assumed that the required additional operational budget will be available to run unit after completion;
- KZN-DOH staff - It is assumed that the required complement of staff will be available to provide service and to manage the unit after completion of the infrastructure works; and
- Project funding - It is assumed that Project funding will be available to fund this project.

1.1.5. CONSTRAINTS

The main constraints of the project is time as there is no existing facility and service delivery is impacted.

1.1.6. DEPENDENCIES

No particular dependencies have be identified at this time.

1.2. PROJECT REQUIREMENTS

Stakeholders have been consulted and the following requirements have been identified:

- Design and construct a new mortuary complete with:
  - Public zone/Outer zone
    - Security, Reception, waiting, viewing, security and access roads, pathways and parking, and so on
  - Clinical zone/Intermediate zone
    - Drop off and dispatch
    - Body storage
  - Inner zone/Nucleus
    - Body preparation area
    - Autopsy area
  - Administration zone
    - Offices, meeting room
  - Service support zone
    - Storage areas, Waste management facilities, Plant rooms and other services

1.2.1. ORIENTATION AND RATIONAL PLANNING PRINCIPALS

For the purpose of this section, a designated facility in the FPS includes a medico-legal mortuary and undertakers' premises that are contracted by the FPS for purposes of storing bodies, and where applicable, to perform post mortem examinations and autopsies.

- All designated facilities are primarily controlled and managed in accordance with the provisions of the National Health Act, 2003 and the Occupational Health and Safety Act.
- All designated facilities must comply with the provisions of the section 8(1) of the Occupational Health and Safety Act No of 1993 which states that the employer shall provide and maintain a working environment that is safe and without the risk to the health of his / her employee.
- The mortuary is to be erected, equipped and maintained to:
  - Perform medico-legal post-mortem examinations.
  - Serve as a storage place for bodies of dead persons and human remains.
  - To maintain body tissues in a condition whereby the maximum scientific information can be obtained from a post-mortem examination and subsequent investigations.
  - To provide facilities for bodies to be viewed or identified by relatives or friends.
  - To prevent tissue decomposition while burial or cremation arrangements are made.
  - To hold bodies and the occasional specimen for longer periods in conditions of security.
  - Teach and train health care practitioners (medical practitioners, nurses, paramedics, forensic officers and health sciences students) and
  - Harvest human tissue for transplantation, teaching and research purposes.
  - Maintain a database with relevant records.

The following principals must be applied:

- Basic Human Rights
- Meet legal compliance (deemed to satisfy or rational design).
- Safe And secure environment with differentiated security features.
- Designed to deliver appropriate levels of resilience.
- Ensure building respond to the climate and the ventilation requirements of the facility;
- Appropriate space norms and room design;
- The design of a building that is appropriate for the functions intended to be carried out within the spaces designed;
- An ergonomically safe and risk-free work environment;
- Compliance with quality assurance principals;
- Design that balance requirements for clinical need and capital, and recurrent budget considerations;
- Designing close relationships with nature;

- Design with enviro-friendly efficiency as primary goal;
- Design that is flexible and adaptable to future change;
- Be physical accessible and welcoming to the community they serve, facilitates access to and within the area for physically and sensory impaired people, consideration should be given to a wide range of disabilities
- Ensuring that the functional and aesthetic requirements of furniture and fittings, fabric and finishes are met;
- Use of latest technology and innovations to aid in healing;
- Integrated external and Internal Recreation areas; and
- Promote occupational health, wellbeing and motivation to staff.

1.2.1.1. Phasing, Decanting and Redundancies

A. Phasing

No phasing is considered

B. Decanting

No decanting will be required.

C. Contingencies

No specific contingencies are required.

D. Redundancies

No redundancy has been identified.

1.2.1.2. Space requirements

It is important to adhere to certain general considerations. This includes considerations pertaining to layout and design, to the building itself, to accessibility, to the patient, to the staff, to security, to fire fighting and prevention, to general aspects, to information technology and specific to seclusion rooms. Please take note that these general considerations are applicable to all areas and buildings. Reference must be made to all current legislation, policies and guidelines in order that compliance is achieved.

1.2.1.3. Considerations for Layout & Design

The mortuary is a new facility and the dimensions, health technology, mechanical, electrical and wet services, lighting, HVAC, finishes and colour will be determined in relation to KZN-DOH specifications and IUSS guidelines.

1.2.1.4. Area requirement and related costing guidance

The mortuary is a new facility and area requirement and related costing guidance, must be determined in relation to KZN-DOH specifications and IUSS guidelines.

1.2.1.5. Standard specifications for the use of materials in the building

The mortuary is a new facility and specifications for the use of materials in the building must be determined in relation to KZN-DOH specifications and IUSS guidelines.

Material and construction technology is dependent on availability, applicability, labour intensives, maintenance requirements and innovative use of materials. Energy considerations are also to be adopted in the construction technology and material use.

1.2.1.6. Branding/aesthetic design preferences and requirements

The mortuary is a new facility and the branding/aesthetic design preferences and requirements must be determined in relation to KZN-DOH specifications. Language preference will be both English and isiZulu.

1.2.1.7. Future Expansion and Adaptability

The mortuary is a new facility and should be designed to be adaptable, flexible in use, to respond to change and to enable possible future expansion or repurposing.

1.2.1.8. Dignity, Privacy, Satisfaction of Individuals

The design of the building must by primarily be focused on staff and visitors. Services to be integrated so that they experience service Excellency.

Spaces are required offer privacy, where dignity is respected. The spaces should be reasonably soundproof, partitioned and screened from activities in the units.

Information technology should be maximised to ensure that where possible information is shared efficiently between all clinicians in a patient-focused manner.

1.3. SCOPE OF THE WORKS

1.3.1. THE SITE

The proposed site for the new mortuary has been identified.

1.3.1.1. Strategic location of site:

The need to prioritize a DoH permanent structure for a Medico Legal Mortuary in the Zululand District was identified by Forensic Pathology Services in 2006 when the service was transferred from the SAPS to the KZN Dept of Health. Due to the Conditional Grant that was funding the drive originally, and the availability of land at that stage, other Medico Legal Mortuary projects received priority.

The Vryheid facility was initially operating from privately owned funeral undertakers and KZN Health were paying for rental office space, body storage and for conducting autopsies. The Vryheid facility currently operates from Masons Street clinic, where the FPS staff use park homes for offices, store the bodies in a container and transport the bodies to a funeral undertaker to conduct autopsies. When bodies are offloaded or loaded from mortuary service vehicle and admitted to container this is in full view from the street. There are also no viewing facilities for families when they identify the human remains The aforementioned is not conforming to the minimum requirements as stipulated in the National Code of guidelines for Forensic Pathology Services.

The recent accident which occurred on the N2 between Pongola and Tshelimnyama resulted in 20 fatalities, which due to lack of suitable facilities to store the bodies together and to autopsy all the bodies, the bodies had to be transported to another district (King Cetshwayo) for storage and autopsy purposes.

- There is no medical legal mortuary built according to specifications in Zululand
- A site consisting of two plots of land was identified and purchased from the Vryheid Transitional Local Council at a cost of R600,000 for the building of a new Medico Legal Mortuary.
- These properties were subsequently registered in the name of the province and allocated to the Department of Health on 22 May 2018.
- The two properties Erf 2491 and 2492 were consolidated to form Erf 6048 on the 22 October 2020

- This facility works with the following stake holders to fully perform its mandate -:
    i. SAPS who investigate the circumstances of death.
    ii. Department of home affairs for registration of deaths.
    iii. Department of Justice for conducting trials and prosecution on inquest and criminal cases.
    iv. Vryheid municipality for pauper burials.
    v. Department of social development for social support services.
    vi. Local hospitals for referred cases
    vii. Foreign embassies for deaths of foreign nationals
    viii. Local community and funeral undertakers who have their relatives and client admitted in the mortuary
    ix. Non-government organizations who assist with humanitarian aid and religious structures to offer spiritual support.

- Vryheid FPS is servicing the following SAPS station -:
    - Vryheid
    - Mondlo
    - Gluckstadt
    - Hlobane
    - Ngobane
    - Louwsberg
    - Paulpietersberg
    - And some stations not mentioned here above in case of death in transit when the client demise on an ambulance during transfer.

- Vryheid medico-legal mortuary has the legal mandate to investigate death due to other than natural causes which include the following
    - Motor vehicle accidents
    - Suicide e.g. Poisoning, hanging, etc
    - Murder e.g. Gunshot, stabbing, etc
    - Electrocution
    - Obstetric related deaths
    - Sudden death without medical history e.t.c

1. **VRYHEID FPS CATCHMENT AREA**

- The Vryheid medico legal mortuary catchment area covers the Mondlo, Gluckstadt, Hlobane, Ngobane, Louwsberg and Paulpietersburg communities.

Mondlo SAPS	Gluckstadt SAPS	Hlobane SAPS	Ngobane SAPS	Louwsberg SAPS	Paulpietersburg SAPS
44km	37km	23km	68km	63km	53km

2. **Work load for the nearby facilities and Vryheid Forensic Pathology services for 2021**

Facility	2021
Vryheid	245
Ulundi	164
Nongoma	168

Paulpietersburg	60
Pongola	161

Paulpietersburg bodies are also stored at Vryheid and autopsied in Vryheid, this results in the facility processing over 300 bodies a month.

3. EXPENDITURE OF NEIGBOURING FACILITIES INCLUDING VRYHEID FPS FOR THE 2019/20 FINANCIAL YEAR

Facility	Compensation of employees	Goods and services
VRYHEID	3 572 937.00	534 084.00
PONGOLA	2 113 420.00	394 601.00
NONGOMA	3 698 798.00	291 911.00
PAUPLPIETERSBURG	785 861.00	40 000.00
ULUNDI	2 170 287.00	154 074.00

4. CHALLENGES

The Vryheid facility currently operates from Masons Street linic, where the FPS staff use park homes for offices, store the bodies in a container and transport the bodies to a funeral undertaker to conduct autopsies. When bodies are offloaded or loaded from mortuary service vehicle and admitted to container this is in full view from the street. There is also no viewing facilities for families when they identify the human remains The above is not conforming to the minimum requirements as stipulated in the National Code of guidelines for Forensic Pathology Services.

Due to the medico legal nature of the service it is vital that the premises is secure and that records are protected. There are also no washing facilities for vehicles at the premises.

The recent accident which occurred on the N2 between Pongola and Tshelimnyama resulted in 20 fatalities, which due to lack of suitable facilities to store the bodies together and to autopsy all the bodies, the bodies had to be transported to another district (King Cetshwayo) for storage and autopsy purposes.

Photo 1: Aerial view of site location

SOURCE: Google Maps

1.3.1.2. Site orientation

The site is located in the South-Eastern side of Vryheid. It is a slightly sloping site. The site is located in an industrial area which have all the normal municipal services.

1.3.1.3. Planning restrictions

No planning restrictions are known.

1.3.1.4. Land use definition

Civic and Social

1.3.1.5. Heritage components

There are no known heritage components on the site.

1.3.1.6. The conditions of the site

A full cadastral survey and general site inspection will be required.

1.3.1.7. Geo-technical information

A Geo-tech investigation will be required prior to planning commencing.

1.3.1.8. Traffic impact study

A traffic impact study should not be required.

1.3.1.9. SPLUMA Application

The Vryheid MLM is a new facility and a SPLUMA application will be required.

1.3.1.10. Climatic conditions

The climate in Vryheid is warm and temperate. The summers here have a good deal of rainfall, while the winters have very little. This climate is considered to be Cwb according to the Köppen-Geiger climate classification. In Vryheid, the average annual temperature is 16.6 °C | 61.9 °F. About 962 mm | 37.9 inch of precipitation falls annually.

Vryheid is in the Southern Hemisphere. Summer begins in December and ends at the end of January.

The months of summer are: December, January, February, March.

SOURCE: https://en.climate-data.org/africa/south-africa/kwazulu-natal/vryheid-26543/

1.3.1.11. Aviation for emergency aircraft

Not required for this service.

1.3.1.12. Seismic activity

No known significant seismic activity

1.3.1.13. Radio towers

No known radio towers

Existing infrastructure

There is currently no infrastructure on site.

1.3.1.14. Bulk Services

Bulk services are available on site and the facility will connect into the existing services however all services must be tested and verified to ensure that the existing services are functional and sufficiently sized to accommodate the extra load. If insufficient, provision must be made for upgrading. Services required (not inclusive) include:

- Electrical systems
- Water
  - Potable water
  - Fire Water
  - Sewer
  - Storm water
- Telecommunications
- IT Communications

1.3.1.15. Department orientation and positioning relative to entrances

The buildings are to be orientated to utilise natural lighting and ventilation as applicable to various areas.

1.3.2. PHYSICAL INFRASTRUCTURE PLANNING AND DESIGN

Please refer to Part B - Clinical brief above but the following is highlighted:

1.3.2.1. Special Design Considerations

Please refer to the relevant IUSS guidelines for specific design considerations.

A. **General Aspects**

- Choice of materials, finishes and workmanship must be durable and cleanable especially in wet areas.
- Landscaping of the gardens must be built into the contract to ensure gardens are both easy to maintain. This should be accommodated in the landscape plans, and sited correctly.
- All areas must be well ventilated, if possible air-conditioned. Care should be taken when designing HVAC systems to accommodate higher and lower pressure areas both for infection prevention and also odour control.
- Good use of familiar non institutionalised materials, colour and finishes.
- Appropriate, durable and cost-effective finishes are required. It is important that the types and quality of finishes are researched and approved by the service practitioners who can also advise on the colour and colour scheme suitable.
- Buildings also need to be efficient and cost effective and should not accommodate redundant or concealed areas. Maintenance must be considered when planning the building. Building with face bricks, although more expensive, saves on painting in the future. Ensuring that pipes are accessible will assist with future maintenance, the safety of the maintenance staff must also be considered in

the design. Electrical, plumbing and mechanical fittings must be vandal-proof. Electrical fittings must be tamper proof.

- Adequate housekeeping spaces must be provided in appropriate and secured spaces. The building should be easy to clean and to maintain. Finishes and detail should not collect dirt in crevices and joints.
- Normal disabled friendly design to be implemented.
- The facility must have proper and good illumination at night.
- The site preparation, construction and operation / maintenance of the building itself must be environmentally friendly and compliant with all environmental legislation.
- Energy and water efficiency and the use of solar to be considered in the design.
- Paint used on walls to be washable paint.
- Internal layout of the building must be such that the number of internal spaces requiring forced ventilation shall be minimised. While this would be the preferred design option, it must at all times be taken into account that the provision of open window spaces and the design thereof are restricted and limited by the nature of the service provided and that security and safety standards according to the level of daily operations, must at all times outrank the requirement for reduced forced ventilation.

B. Orientation

Maximisation of building orientation is necessary for thermal control and building usage. The thermal control, maximising the relationship between external and internal views is important for staff and visitors. Thus, all staff areas, including waiting areas may offer un-obstructed visual and physical access to the external environment.

Wind direction will pay an important role in building orientation when ventilation calculations are done.

C. Building Construction Technology and Material Usage

Material and construction technology is dependent on availability, applicability, labour intensives, maintenance requirements and innovative use of materials. Energy considerations are also to be adopted in the construction technology and material use.

KwaZulu-Natal specification documents must be used in determining material and construction technology usage.

D. Structure

The structure is expected to consist of a multi-storey concrete structure with brick infill building/s.

Foundations are to be determined on site depending on the geotechnical information.

Roofs

Please note the following:

- Flat roofs and box gutters are specifically prohibited.
- Roofs may be used to promote natural ventilation including passive extraction.

- Care to be taken to design to extreme weather events as applicable including severe hail storms.
- Roof designs to be a simple as possible and to be highly maintainable.
- Provision to be made for all necessary rainwater goods that promote ease of maintenance.
- Provision for services are to be considered in the roof void.

There should be ease of access into the roof space and a minimum of 450mm wide walkway with lighting shall be provided for maintenance personnel within the roof void. Enough headroom shall be provided to allow for maintenance personnel.

The required roof space configuration should allow:

- Space for the electrical spine.
- Space for hot and cold-water pipe work.
- Space for ventilation fans and ductwork.
- Space for hide-way air conditioning unit and ductwork.
- Access to all the above for servicing, maintenance and additional services (long life and loose fit).
- Thermal regulation of the accommodation below by adequate natural ventilation of the roof space.
- Roofs material to be metal sheeting as per KZN DOH specifications

External Openings

Adequate natural daylight – 150 lux is required in the patient day room. External doors to be protected, as the doors are vulnerable to damage and need adequate protection.

All doors to be access controlled except for dedicated fire escape door that must be fitted with the required access control systems.

Internal Openings

A minimum clear width for the movement of a stretcher is 1400mm where no turning is necessary in the doorway i.e. a corridor width of 2200mm. The preferred door width to rooms should allow for wheelchair access of 915- 1220mm.

Doors and door frames to comply with KZN DOH specifications.

E. The mortuary

- Facilities for the loading and unloading of corpses.
- Refrigeration facilities for the refrigeration of corpses and human remains.
- A preparation room or autopsy room for the preparation or examination of corpses.
- Separate male and female change rooms for use by employees.
- Public and staff toilets.

- A designated area for the storage of all waste produced on the premises.
- A designated area for the washing, cleansing, and storage of equipment and items used inside the building in conjunction with the activities or business performed on the premise.
- A facility for the cleansing of vehicles used in the performance of activities.
- An area defined for administration separate from above areas.
- A facility for the identification and viewing of the deceased.
- An appropriate secure clean "drying room" for clothing with potential evidentiary value, which additionally ensures non-contamination.
- Ready access to X-Ray / Radiographic Body Imaging services for M-1 to M-2 facilities.
- On-site X-Ray / Radiographic Body Imaging services for M-3 and above facilities.
- Ready or on-site access to all ancillary laboratory services.

Any area at the mortuary may not be used for any purpose other than the purpose for which it is intended and an act unrelated to that purpose may not occur in that area.

F. <u>Clean and dirty areas</u>

The mortuary must be demarcated into 'wet' or dirty (potentially infectious) and 'dry' or clean areas, in line with health and safety regulations. And the wet areas must be designated as access-controlled areas.

Areas in the mortuary, where there may be a risk of acquiring an occupationally related infection, should be designated as 'wet' areas. There should be a clear demarcation between the dry and wet working areas of the designated facility. This will be provided by a form of physical barrier and should be adequate to deter casual entry by unauthorized persons.

Warning notices should be positioned at the points of access to and exits from the dirty areas. Where barriers are in use, these must be clearly visible to avoid accidents. It will be necessary for all persons entering wet areas in the designated facility to change into appropriate protective clothing. Types of clothing and protective equipment to be used will be specified in local rules for the various duties and locations.

G. <u>Preparation area or autopsy room</u>

A preparation area or autopsy room must be so designed as to-

- Ensure that the interior is completely out of sight of any public person or administrative staff.
- Enable noxious odours and vapours to be adequately treated.
- Be sufficiently lighted and ventilated and not be ventilated via any other rooms in an administrative area, and
- Provide a disrobing area with a boot washing facility.
- A preparation room or autopsy room must have a floor built to specifications which fulfil the provisions of the Occupational Health and safety Act and conform to international norms.
- All shelves and counters to be of grade 304 stainless steel.

- Autopsy Tables to be locally manufactured Franke Systems with a 100mm drain connected to 110mm municipal sewer line.
- Reconstruction sinks to be locally manufactured and of 304 stainless steel.
- Autopsy / Delivery / Wet areas to be fitted with retractable hose reels for cleaning purposes.

H. Administration, changing and washing facilities

The forensic pathologist, forensic medical officer or authorised person and their assistants will require office space for the preparation and keeping of records and, in the case of the forensic pathologist, forensic medical officer or authorised person, for consultation. The size of this accommodation will vary with the number of forensic pathologists, forensic medical officers or authorised persons, technicians and others likely to be employed at any one time in the designated facility. The same considerations will apply to the provision of washing and changing facilities.

I. Accessibility

External circulation should maximise safety and security, convenience, demarcation of spaces, external entrance and exits, fire control designs as well as efficient and effective vehicle movement.

Design of delivery, emergency, non-emergency, pedestrian movement should be designed in such a way that it's separated but co-ordinated.

Use of signage should emphasize and inform, control and direct movement.

Approach from road to building entrance

- The surface must be a compact surface
- Where required kerb cuts must be provided
- The kerb cuts must have a slip-resistant surface

Parking for people with disabilities

- There must be at least one parking space reserved for every 25 (or less) parking bays.
- The parking space must be not less than 3,5m wide.
- The parking space must be situated on a level surface.
- The parking space must be as close as possible to the nearest accessible entrance.
- The parking space must be clearly demarcated as being intended for the use of disabled persons only (Sign at the front of the space and on the ground surface in yellow road marking).

Ramps

- The gradient of the ramp or walkway must not be more than 1:12.
- The ramp must have an unobstructed width of not less than 1100mm.

- The ramp must have a landing at the top and the bottom of the ramp not less than 1,2m in length (clear of any door swing) and the width not less than the ramp.
- The surface of the ramp must be slip-resistant.
- The angle of approach to the ramp must be zero.
- The ramp must have a handrail 850 – 1000mm above the surface.
- The end of the handrail must extend beyond the end of the ramp by at least 300mm.
- No door leaf or window shall open onto a ramp or landing.

Entrance

- There must be at least one entrance accessible for use by a person in a wheelchair.
- The accessible entrance must be identified by the international symbol of Accessibility.
- The door handle must be pull / lever type.
- If the main entrance is not accessible, then there must be directional signs to the accessible entrance and a sign "Not Accessible for wheelchairs".

Reception facility

- There must be a clear space under the counter / desk of not less than 450mm deep.
- The counter / desk must have a knee height of at least 750mm from floor level.
- The counter / desk must have a minimum width of 760mm.
- The counter / desk (or portion of it), must have a height of not more than 915mm above floor level.
- The public phone must be positioned so that the top of the handset is not higher than 1 200mm above floor level.

Path of travel between rooms

- If there is a difference in floor level of more than 25mm, there must be a suitable ramp.
- Where there is hanging signs, lights, awnings or protruding objects, there must be a clearance of at least 2000mm above the trafficable surface.
- If the protrusion is unavoidable, there must a cane detectable barrier not more than 300mm above floor level.
- If there is a difference in floor level, it must be indicated by means of different floor covering.
- All walking surfaces must have a minimum of 900mm clear width.
- All the floors must be non-slip.
- All areas must be well-lit.
- All light switches must be not higher than 1 200mm above floor level.

Signage and signals

- All signs must be clear and legible with large characters / numbers / pictures
- All numbers etc. must provide a strong contrast to the background
- The signs must be continuous in all routes
- All emergency warning signals must be both audible and visual
- Do signs that provide information on permanent routings and direction must have raised tactile lettering

Doors

- The widths of all door openings must be a minimum of 750mm
- The door handles must be pull / lever type
- The door handles must be situated not more than 1 200mm above floor level
- Thresholds must not be more than 15mm in height
- Doors must not open across a hallway, corridor, stair or ramp so that it obstructs circulation
- Gardens must be low maintenance, no grass if possible

Windows

- Must have blinds

Stairs

- The handrails and tread noses must have a contrast in colour to the surface
- The handrails must have a minimum extension of 300mm beyond the top and bottom of the staircase
- The stairs must have handrails on both sides

Lifts (if required)

- The lift must have a minimum internal dimension of 1 100mm in width and1400mm in depth
- The lift must have a doorway with an unobstructed width of not less than 800mm
- The lift must have handrails on both sides at a height of between 850mm and 1 000mm above the floor level of the lift
- There must be audible and visual warnings in the lift and lobby to indicate the opening of the lift doors
- The lift must have a wall-mounted mirror at the back with a minimum height of 900mm from the floor
- The control buttons must have raised tactile characters or Braille numbering
- The control buttons must not be higher than 1 200mm above the floor level of the lift
- The floor number must be audible and visually indicated inside and outside the lift

- Kitchen: Hydro-boil not kettle

Toilet facilities

- There must be at least one unisex toilet available (per floor) for use by people with disabilities
- The toilet must clearly be signposted with the international symbol for Accessibility
- The toilet cubicle must be a minimum of 1 800mm x 1 700mm in size
- The door of the toilet must be a sliding door OR outward opening door of at least 750mm wide
- The door must have lever type handles with a height of 800 – 1 200mm above floor level
- Where a locking device is fitted, it must have an external emergency override facility
- It must have a suitable means of indicating if the toilet is occupied
- There must be a distance of 450mm – 500mm between the centre line of the toilet pan and the nearest side wall
- There must be grab rails fixed to the wall closest to the toilet and the rear wall
- The handrails must not be more than 800mm above floor level
- The distance from the front edge of the pan to the rear wall must be a minimum of 660mm
- The top surface of the seat pan must be between 460mm and 480mm above the floor level
- The lid and seat must remain upright when raised – only admin areas
- The flush handle must be lever type and extended
- The toilet paper holder must be on the side wall closest to the toilet seat within easy reach
- The height of the washbasin from the floor to the top edge must not be more than 830mm
- The washbasin must have a vertical clearance of 650mm from under the basin to the floor
- The water taps must be clearly marked hot / cold
- The cold-water tap must be within easy reach of the person sitting on the toilet
- There must be a fixed mirror above the washbasin with the lower edge not higher than 900mm above floor level
- The hand drying facilities must be accessible from a wheelchair
- Paper towel dispenser should be a standard specification, readily available paper towel

J. Staff areas

- Ensure efficiency of staff by minimizing distances travelled between different areas.
- Redundant spaces and concealed areas to be avoided as these can result in ambush situations.
- Panic buttons to be positioned in appropriate areas.
- The safety of the maintenance staff must be considered in the design and maintenance should be possible from the exterior of the building. Plumbing must be on the exterior face of the building and therefore due consideration in the design shall be given to eliminating all internal pipe work. Flat

roofs and box gutters must be avoided. All roofs to be suitably pitched and a service walkway provided inside the roof space for effective maintenance of the building. The pitch at the roof trusses must be at least 2 m high to walk up right along the length of the building. Routing of wastewater pipe work in ceiling spaces, overhead voids or through occupied patient spaces must be avoided.

K. Ablution facilities

Non slip low maintenance floor covering is required in bathrooms and wall tiles in ablution areas. All toilets to be low maintenance and vandal-proof (i.e. Geberit type or similar).

Toilet cubicles to provide for privacy.

Bathroom facilities and appliances to be especially tamper proof. Shower facilities to ensure privacy but at the same time safety and security (Bathrooms, showers and toilets do not have central TV monitoring).

L. Plant Rooms

The number and sizes of plant rooms will be determined by the engineers. Refer to IUSS guidelines "Engineering Services" Plant rooms comprise all areas housing mechanical, electrical and civil services.

M. External Circulation to Site, Roads and Parking

Existing Entrances

The proposed new Vryheid MLM will have its main entrance off Handel Street which is a provincial road.

Vehicular and Pedestrian Access and Parking

The scope of the project includes access roads as required, official vehicles, staff and visitor's parking.

Also refer to Part B - Clinical Brief above for circulation and movement.

Entrance Design

A new entrance to the mortuary will need to be provided for both for pedestrians and vehicles.

Parking

Staff and visitor parking areas will be required and this must be clearly signposted to direct traffic to appropriate parking areas.

Mortuary vehicles and Official Parking

Access for mortuary vehicles be separate from visitors and staff

Manoeuvring areas and parking area for vehicles be designed to allow vehicles to enter and exit in a forward direction and allow the largest vehicle or disaster vehicles using the facility to turn around.

Parking for emergency vehicles should be considered, if not already available on site.

Lockable covered parking is required for Official Vehicles

Public Parking

Visitor's parking must be provided on site (integrated with existing visitor's parking). Public parking may have to be provided outside of the main entrance off the road and this will have to be negotiated with the local authority.

Staff Parking

Secure staff parking located separately from visitor's parking. The staff parking area must be secure with well-lit adequate walkways to the unit. It is proposed that staff parking be undercover with metal sheet cover as per KZN DOH specifications.

Roads

New roads to be considered as required.

N. Aesthetics

All materials used, must comply to the SANS requirements and other legislative instruments applicable. Durable, sustainable and applicable aesthetic finishes should be applied.

O. Finishes And Materials

The goal of the design is to provide an interior that is salutogenic. Design concepts should create a calming atmosphere. This can be achieved by using materials that are based on nature and have subtle colour following evidence-based theory.

- It must be agreed at the beginning of the contract, that the type of finishes, fixtures and colour schemes, to be used in the facility must be approved.
- Finishes should be customised to the area, i.e. in the admission area, wet areas.
- All fixtures and finishes must be firmly fixed and secured.
- Colour used on walls and fabrics must be therapeutic and compatible. The architect can suggest colour schemes, but the ultimate decision will rest with Hospital Management and hospital staff.
- Durability, cleanliness and timelessness are qualities that should be incorporated into all material selections.
- All finishes and materials to comply with KZN DOH specifications.

P. Joinery

Work surfaces at desk height should be made of solid surface materials which resist chipping and staining. Consider including task lighting built under the transaction counter. Co-ordinate locations of computers, printers, keyboards, power and data ports as required by unit's needs. Provide accessible countertop heights for wheelchair patients. Hardware accessible type should be used throughout.

Joinery to comply with KZN DOH specifications.

Q. Safety and Controlled Access Systems

The mortuary will require security as this is a high-risk facility. Security Services from Department of Health must be consulted to finalise requirements

- Security services and related physical infrastructure of the site must provide a safe environment to staff, patients and the public at large, on a 24-hour basis. Security personnel will be responsible for the safety and control of the flow of between entrances and public spaces and service spaces.
- Security staff may be required to assist in controlling difficult situations anywhere in the building especially where the public or the patient's behaviour is such that the clinical personnel require support.
- Building must have electronic access control with smart identity cards. Biometrics will be required for high security areas and where items of high value or sensitive nature are located within the building. Offices within a building which meet the same criteria will also have to be secured with biometrics.
- All buildings must have security cameras that can monitor movement within buildings and all movement leading into and from the building. All patient, storage, drop off and dispatch areas (excluding ablution facilities) will be monitored with cameras. These cameras will be recording on a Digital Video Recorder (DVR henceforth) and will link to the DVR at the security station.
- Panic buttons to be provided
- All windows to have burglar bars and external door security gates
- Privacy to be observed as required
- Fire resistant materials to be used
- Glass should be safety glass
- The KZN Department of Health security specifications are to be applied
- Signage to body admission/weigh area to have signage "no unauthorised access."

R. Fire Fighting, Prevention & Detection

- It is important to appoint a Fire Consultant to design the fire detection, fighting / prevention and control system.
- The Fire Consultant to draw up an evacuation plan, together with the architect and Management of FSPC.
- The necessary signage and escape routes to be identified in the plan.
- Fire-fighting equipment and fire hose fittings should not be accessible to patients and should be recessed.
- Smoke detectors, fire sprinkler system and fire alarm system to be installed.

- Fire dampers are to be able to electronically reset.

S. Way Finding

The way finding and signage design must be fully compliant with the KZN Department of Health Communications requirements and must be bilingual as approved.

- Way finding and signage must be considered from inception and be integrated with the Interior Decorating. It must cater for the needs of different groups of people that will access the facility.
- Each unit, centre and ward must be individually and clearly marked. Patient journeys should be easily understood and clearly identified.
- The use of cost-effective, electronic signage systems in main admission/wait areas must complement the overall way-finding strategy.
- Signage must be clear and according to universal signage, to assist the illiterate as well as accommodate the blind.
- A direction-finding system should be posted near the entrance / lifts and must indicate the route to each building.
- Signage to be standard as far as possible and must accommodate possible future changes (also refer to Part C I above - accessibility criteria)
- Signage to dirty area "no unauthorised access"

T. Interior Design

The interior design strategy must reflect the public, semi-public, private and restricted nature of the mortuary. The creation of individual identities or themes for the different areas in the mortuary is encouraged.

Holistic and creative approaches must be applied to the selection of colours, symbols, artwork, graphics, soft furnishings, fixtures and fabrics. The procurement, durability, maintenance and cleaning of specified interior design materials and elements is critical. Consideration also to be given to performance of materials to reduce the risk of heat trapment and transfer by convection and conduction due to the choice of materials and their properties.

U. Information- and Communication Technology

The building must have emergency power.

All rooms must have double power skirting in with the bottom channel used for wall boxes and the top channel used for power supply.

All buildings must have saturated cabling, meaning that there must be enough network points in each office for one computer, one telephone and one network printer, and in open offices each workstations must have two network points (one for the PC/laptop and one for the telephone) and one wall box per workstation on the power skirting for printers.

Ceilings must have rodent stations in to prevent rodents from destroying the cables.

Considerations Specific to Autopsy Rooms

All shelves and counters to be of grade 304 stainless steel.

Autopsy Tables to be locally manufactured Franke Systems with a 100mm drain connected to 110mm municipal sewer line.

Reconstruction sinks to be locally manufactured and of 304 stainless steel.

Autopsy / Delivery areas to be fitted with retractable hose reels for cleaning purposes.

Ceilings

Wet areas to receive fibre cement skimmed ceilings.

Admin areas to received ceiling grid and drop-in ceilings size 600x1 200mm.

Temperature and ventilation

Temperature must be comfortable.

Air conditioning is preferable. If air conditioning cannot be provided or in cases when the air-conditioning is not working, provision to be made for ventilation and fresh air by a window with restricted opening – not more than 125mm. Windows to be constructed in such a way to minimize breakage. (Architect to consult Fire consultant)

Lighting

Adequate lighting and positioning to be planned in consultation with DoH Project Manager.

Ideally, as much natural lighting as possible to be incorporated into the room.

Floors

Floors in all wet areas to have floor drains cast "in situ".

Drains and floors to be finished with 4mm self-levelling epoxy. Floor covering to be seamless

A non-slip polyurethane screed floor

Skirting not be used, floor should cut in, under wall

V. Engineering services

The engineering services required include heating, lighting and other electrical supplies, ventilation and adequate drainage for the disposal of large quantities of biological waste.

Electrical safety

Specially protected electrical equipment will be required in areas such as the body preparation or autopsy room and body store where splashing with fluids can occur. The standards for such installations must be rigorously applied.

Electric saw and other power-operated equipment must be checked frequently by a competent electrician. The results of checks should be recorded in a logbook, which will be regularly inspected by the safety supervisor.

Ventilation

The body store, body preparation or autopsy room, specimen store and dirty utility room (including biological waste) must have a dedicated supply and extract ventilation system. Although natural ventilation may be appropriate for areas in the designated facility which workers visit infrequently and which are designated as being clean (e.g. the body viewing room and access corridors), controlled mechanical ventilation is preferred.

Drainage

Special consideration needs to be given to drainage. The primary objective is to provide an internal drainage system that uses the minimum of pipe work, remains water and airtight at joints and connections, and is easy to maintain.

Body storage

Cold-room- Bodies will normally be stored in a refrigeration facility at a reduced temperature (optimally 2°C - 4°C).

Freezer- Bodies will normally be stored in a freezer facility at a reduced temperature (optimally -20*C).

The body store should provide direct access to the body preparation and/or autopsy room. Storage compartments should be designed to be easily accessible for both regular cleaning and maintenance.

Specimen storage

Where necessary, a separate room should be set aside for the storage of organs and body tissues in fixative, usually formalin. The room should be provided with adequate and secure storage space. (Lockable.)

The room must be mechanically ventilated to ensure that concentrations of fixative vapour do not exceed the permitted levels (maximum exposure limit for formaldehyde is 2 ppm for any period of exposure). A continuously operating extract ventilation system will be required.

A warning notice should be posted on the specimen store door alerting staff that they should not enter unless the ventilation system is operational.

Observation areas within the autopsy room

Whenever practicable, a properly designed observation area overlooking the examination tables should be provided. Access to the area should not be via any demarcated wet / dirty area in the designated facility. If an observation area cannot be provided, observers may be allowed to enter the autopsy room, but will first be required to put on appropriate protective clothing as specified in the local protocols.

Medical Waste Area

Should be mechanically ventilated at 18°C – 22°C, as well as a backup air conditioner.

X-Ray Room

X-Ray Room to be accessible from the autopsy area but not lead straight into the autopsy area.

1.3.2.2. Building Services

The mortuary is a new facility requiring a number of systems. Existing systems must be investigated to determine suitability and capacity and should it be found to be inadequate, provision to be made for augmentations or upgrades.

The following building services is to be considered (not inclusive) bearing in mind that all exiting services must be investigated and upgraded if required:

A. Mechanical Services

Where possible, the design should maximise the use of natural ventilation. Where required, a mixed-mode operation may be selected. Mixed mode operation uses mechanical systems when ambient and internal conditions require this, but otherwise rely on passive system to maintain thermal comfort and meet ventilation rate requirements.

Natural ventilation need to take cognisance of the geographical location, surrounding infrastructure and the site orientation of the mortuary.

A wind load and pattern study be conducted justify the choice of ventilation design. Furthermore, the temperature profile must be provided to investigate and advise on suitability of natural ventilation.

Consideration should also be given to utilise solar water heating systems to heat the domestic water.

B. Air-Management

Air-conditioning must be provided to offices, selected stores, meeting rooms, body preparation and autopsy areas.

General improvement of air management in patient waiting areas, nursing stations and consulting rooms.

Air Quality and Distribution

In general, clean areas shall be maintained at positive air balance and dirty area shall be maintained at negative air balance with respect to the adjoining areas.

The focus must remain on natural ventilation which can be augmented with ventilation and extraction as required.

Corridors may not be used to supply or exhaust/return air from adjacent rooms.

Heating, Ventilation and Air-conditioning

General Air conditioning system may be provided to heat, cool and ventilate the clinical service areas as required by SANS 10400. The air-conditioning system shall be designed to operate in occupied and unoccupied modes to suit applicable schedule. VRV systems may not be used.

The focus must remain on natural ventilation which can be augmented with ventilation and extraction as required.

Exhaust System

Controlling odour with proper exhaust is critical with dirty areas. The HVAC design shall provide for exhaust air from spaces to control the transfer of odours and provide proper room pressurization and proper air changes per hour that may be required per code standards.

The focus must remain on natural ventilation which can be augmented with extraction as required.

Table 12: Risk Allocation for Airborne Transmission

RISK ALLOCATION FOR AIRBORNE TRANSMISSION		
LOW	**MEDIUM**	**HIGH**
Cleaner Room	Reception	Body preparation are
Dirty Utility	Waiting areas	Autopsy area
Storerooms	Drop-off	Body storage
Record room	Dispatch	Layout room
Staff rooms		

Table 13: Risk Allocation for Droplet and Contact Transmission

RISK ALLOCATION FOR DROPLET AND CONTACT TRANSMISSION		
LOW	**MEDIUM**	**HIGH**
Storerooms	Reception	Body preparation are
Offices	Waiting areas	Autopsy area
Record rooms	Drop-off	Body storage
Staff rooms		Layout room

Medical Gases

No Medical gasses required.

C. Electrical Services

Power supply to be provided from existing services.

The main distribution board shall be split into essential and non-essential supplies. All the space heating and cooling shall be connected to the non-essential side of the main distribution boards and shall not be supplied from the standby power generator. All electrical power to the rest of the facility shall be deemed essential and shall be connected to the standby generator.

Low Voltage (LV)

- The Low Voltage (LV) switchgear must be installed in accordance with SANS 10142- Part 1: Code of Practice for The Wiring of Premises: Low Voltage installations.
- The LV board shall be split into essential and non-essential supplies.
- All the space heating and cooling shall be connected to the non-essential side of the main distribution boards and shall not be supplied from the standby power generator.
- All electrical power to the rest of the facility shall be deemed essential and shall be connected to the standby generator.

Standby Power

The provision of a generator must be subject to the capacity.

The standby generator must serve loads, such as lighting systems, air handling units, alarms (fire, medical gases, nurse call, burglar/intruder), socket outlets in the critical areas, exit signs, plant rooms, communications systems (Public Address, IT server rooms, access control / CCTV, PABX), ventilation and smoke removal systems, sewage disposal, fire-fighting operations, pumps (generator fuel, sewage, water, sumps), X-Ray machines, and body storage.

The standby generator has to comply with the following:

- The standby diesel generator shall be housed in a weather-proof with sound proof attenuated canopy.
- The standby diesel generator shall be provided complete with an Automatic Mains Failure (AMF) Panel with a changeover switch.
- The engine shall have sufficient capacity to start up and shall within 15 seconds from mains failure, supply the full rated load at the specified voltages and frequency.
- Bulk fuel tank and day tank incorporated into the generator base which enables the generator to run at full load for 72 hours.
- The standby diesel generator has to be remote monitored and operated for maintenance purposes.
- The standby diesel generator bulk tank and canopy shall be of the rust resistant type for coastal area to avoid rust.

Uninterrupted Power Supply (UPS) Power

The UPS system must be installed in the administration area to provide continuous power supply. The UPS system must be supplied by essential supply and provide power for least 30 minute backup on full load. The UPS unit shall be housed in an air-conditioned environment and shall have a separate battery cabinet. The system shall comprise of a Rectifier/charger, inverter, by pass switch, control and monitoring all contained in a free-standing floor mounted panel. This unit shall operate as a fully on-line automatic system.

Solar voltaic panels should be considered to charge the UPS batteries during daytime if failed the backup generator should take over.

IT Switches and Servers in Mini IT Suite

- Under floor air conditioner under raised floor
- UPS power to each unit
- Data terminals

Communication Services

Communication systems to be provided at every desk/workstation and the business centre. The following must be provided:

- **Telephone Service**
  - Cabling & telephone terminals as per provincial requirements for telephones
  - PABX/VOIP to be provided as per provincial requirements and integrated to the existing Hospital system. The telephone receiving room to be placed in an area that is occupied 24/7

- **Data Network**

Data cabling and terminals as per provincial requirements for computers, printers

- **Intercom**

  An intercom system to be installed to facilitate communication between individual rooms, areas & staff.

- **Wi-Fi**

  A Wi-Fi system may be considered for the mortuary

- **Lightning Protection**

  The Lightning Protection system shall be installed to provide external structural protection. The system shall consist of a number of earth electrodes that connect to a lattice of conductors forming an earth mat. The earth mat shall be connected to the re-enforcing steel of the structure.

  The system shall comply with the requirements of the SABS 0313:1999 and SANS 10142.

D. Water

Domestic Water

The mortuary is to have a 72-hour domestic water tank.

Solar Heating

Serious consideration should be given to utilize solar water heating systems to heat the domestic warm water.

Heat pumps

Heat pump systems can be considered for water heating.

Fire Water

A fire water reservoir that complies with the relevant local authorities' regulation is available

Sewer system

Sewer to be connected to the existing system. If natural gravitation will not provide the required pressure, booster pumps must be installed.

Storm Water Drains

The storm water drains must be designed and constructed that they can be cleaned of ground, sand and other waste with relative ease.

1.3.2.3. Infection Prevention and Control

Design and development on infection prevention and control are to be based on optimal space integration, surface finishes and ventilation systems. Optimal space integration and separation must assist with the control of the disease spread and promote the demarcation of various clinical spaces, support services, clean and dirty spaces.

The zoning of different spaces must integrate with a circulation system to ensure efficient access to and between the spaces. The use of finishes must meet the standard IUSS requirements, KZN specifications and other applicable regulations.

Natural ventilation should be maximised in the design of the facility, however where required negative and positive ventilation system will be applied. An open window policy is encouraged although it may be difficult in areas with extreme weather conditions.

General hygiene supported by strategically positioned hand wash basins and / or sanitising stations in clinical areas and in public ablutions are key components in the reduction of cross contamination in the facility. Critical, hand-washing basins are required at the entrance and exit of the units and staff stations.

Clinical hand wash basins are to be provided in accordance with the following:

- No integral splash backs
- Passive infra-red taps are not acceptable
- Faucets should not be fitted with low-flow, aerating devices which may increase the rate of aeroionisation
- Water flow from tap must be directed away from drain
- No overflows
- Elbow-action faucets, preferably separate hot and cold taps

The waste from the mortuary will be classed as general waste or medical waste and should be disposed of according to the department's waste policy.

Clean in, dirty out principle, is required where possible. Clean supplies should enter be stored in clean storage spaces. The resultant waste products discarded into a medical waste area which should be positioned close to the exit doors, to enable waste removal staff to readily retrieve waste without entering the core clinical areas in the facility.

1.3.3. ACCOMMODATION

The following is not inclusive but some areas are highlighted:

1.3.3.1. Reception area

Provision should be made for a small reception area where public will report and be directed to the appropriate administration area.

- It should be big enough to accommodate 10 or more persons waiting.
- It should have a counter where one staff member will be seated on a swivel chair.
- A panic button is required and good telephone communication.
- Additional intercom system facilities to main gate, body delivery area.

Administration point

Provision should be made for an admission point. Public will report to the administration point where the referral documents will be verified. If correct, a file will be opened/obtained by the administrative clerk. Public will be directed to wait at the appropriate waiting area or waiting room.

- It should be big enough to accommodate 10 or more persons queuing.
- It should have a counter where two staff members will be seated on swivel chairs.
- The counter must be wide enough to accommodate a computer and printer in a secured unit and have the necessary links to plugs and points.
- A panic button is required and good telephone communication.
- Additional intercom system facilities should be available with separate facilities to be used in different areas. This should be linked with the central intercom system within the unit.

Waiting room/area

Provision should be made for open waiting areas or waiting rooms areas as specified in the accommodation schedules. The space should be adequate for the public.

- A waiting area is needed where indicated on the accommodation schedule.
- Adjacent to it should be toilet facilities separate for males, females and disabled persons.

1.3.3.2. Administration

Office for management

An office is required in clinical areas for managerial purposes. This will be used by the Operational Manager. See sketch for layout.

- Space of 16 m^2 needed based on functions.
- Space for desk, swivel chair and one office chair
- Space for round table with four chairs
- Separate workspace or computer stand for a computer and a network printer
- Computer point and plugs
- Space for four filing cabinets
- Space for one double door cupboard
- Wall mounted white board and notice board
- Telephone, intercom and panic alarm facilities

Office for administration

An office is required for the purpose of administrative functions. This will be used for clerks. An office will be allocated per person unless indicated differently on the accommodation schedule. See sketch for layout.

- Space of 14 m2needed based on functions.
- Space for desk, swivel chair and two office chairs
- Separate workspace or computer stand for a computer and a network printer
- Computer point and plugs
- Space for four filing cabinets
- Space for one double door cupboard
- Space for multi-purpose open shelves for storage of records
- Wall mounted white board and notice board

Admin office open plan

It will be used for administrative functions

- The office should accommodate 4 clerks.
- Space per person for desk x1, cabinets x2, swivel chair x1, office chair x1 and computer x1
- Separate workspace for a network printer
- Computer point and plugs
- Telephone, intercom and panic alarm facilities
- Wall mounted white board and notice board

Meeting room

This room is used by management for discussions and personnel meetings. This cannot be shared as the functions differ. This will also be used for meetings with groups of visitors (e.g. personnel from another hospital for benchmarking).

- It must accommodate 20 people seated next to rectangular tables.
- The room must have appropriate audio-visual facilities, including computerised communication means.

General store room

- As per IUSS
- A general ward room to be utilised as a clean utilities storage room for supplies
- The storage room must be lockable with fit for purpose shelves and cupboards.
- It should have adequate lighting and ventilation.

Stationary store room/records room

- A stationary store room is needed for different stationary items. This is a separate room adjacent to the reception. It can be utilised for a stationary room as well as a records room.
- It should have space for new documents and bulk of stationary items.
- It should have space for "used" books, registers and documents to be kept for a period of three years in the ward.
- The storage room must be lockable with fit for purpose shelves and cupboards.
- It should have adequate lighting and ventilation.
- It should be fire proof.

Staff room with kitchenette

The staff room is to be away from the nurses' station. This should be seen as a multi-purpose room to be used for tea, dining and relaxing. It will also be used by large groups of students.

- The staff room should have at least 8 comfortable chairs and 2 round tables with 4 chairs each.
- The furniture should be suitable for dining and relaxing.
- The staff room should have separate multi-tier lockers with lockable shelves for personal belongings.
- There should be a staff kitchenette area with tea making facilities and facilities for preparation of food. Equipment should include fridge, hydro boil, plugs, microwave, toaster, snack witch and tea trolley.
- There should be lockable cupboards for crockery and eating utensils.
- There should be adequate sink facilities for hand-washing as well as facilities for cleaning of crockery.

Staff toilets

Separate male and female toilets are required for staff members with separate entrances to male and female toilets.

- The toilets must be separate from the staff room and entrances to toilets should not lead off from the staff room.
- Hand-wash basins, mirrors, soap dispensers, paper towel dispensers and paper waste bin with movable lid should be provided.
- Closed bins for sanitary napkins to be provided in female toilets.
- Numbers to comply with SANS 10400.

1.3.3.3. Housekeeping

Sluice room

- As per IUSS.
- It should be provided with a slop-hopper, a double-bowl sink with work top.
- If possible it should be linked to an outside yard area and holding area for waste.

Cleaners' room

- As per IUSS
- Small lockable cleaners' storage room required with open shelves for storage of polishers, brooms, cleaning trolley and cleaning equipment.
- It should have lockable cupboards with fit for purpose shelves for storage of different cleaning materials
- Hands-free wash basin is required with soap and paper towel dispensers
- Basin for cleaning of equipment

Launderette

Washing of personal belongings are regarded as essential activities to be done by staff.

- The launderette should have space to sort dirty clothing, space for a washing machine and space for a tumble drier.
- The ward launderette should have a big double basin for washing and rinsing of clothes separately.
- Facilities for cold water and hot water to be available at the basins as well as for the washing machine.
- Lockable cupboards for washing powder, etc.

1.3.3.4. Public Areas

Counselling room

Counselling rooms are utilised by different clinical staff per rotation basis to interview patients and or family. See sketch for layout.

- Space of 16 m^2 needed based on functions
- Space for small desk and five office chairs
- Space for one filing cabinets
- Space for one double door cupboard
- Wall mounted white board and notice board
- Telephone, intercom and panic alarm facilities
- Non-threatening space with furniture that supports communication

Public toilets

- Separate male and female toilets are required for visitors with separate entrances to male and female toilets.
- The toilets must be adjacent to the reception / waiting area. Entrances to visitors' toilets should not lead off from these rooms.
- Hand-wash basins, mirrors, soap dispensers, paper towel dispensers and paper waste bin with movable lid should be provided.
- Closed bins for sanitary napkins to be provided in female toilets.

1.3.3.5. Reception / Entrance

Security Control point

A security control point is recommended. This should be situated at the entrance of the facility.

- It should be big enough to accommodate one security staff seated on swivel chair type at the counter and one security staff standing next to the counter at the same time.
- This area is to have a worktop counter and lockable storage facilities for security records.
- The counter must be wide enough to accommodate a CCTV monitor for access control and it should have the necessary links to plugs and points. Security staff should advise on the appropriate security features in relation to high, medium or low security wards.

2. PROJECT MANAGEMENT PLAN

2.1. PROJECT MANAGEMENT AND CONTROLS

2.1.1. PROJECT INTEGRATION MANAGEMENT

It is important that this project and the various processes be integrated and managed as a holistic whole. Project integration management is necessary so that the project team will work together seamlessly. The Integration management plan must include the various processes, systems, and methodologies that follows to develop cohesive strategy.

The Project Integration Management plan must identify, describe, combine, unify, and coordinate the project processes and related activities with project team. The following processes have been identified for this project:

- Scope Management
- Time Management
- Cost Management
- Quality Management
- Resource Management
- Communication Management
- Risk Management
- Stakeholders Management
- Change Management

Also included is the Procurement Strategy and Management plan

The project will be managed, and will required sign-off and/or approvals, utilising the Infrastructure Delivery Management Systems which included seven (7) stages, as detailed in the Framework for Infrastructure Delivery and Procurement Management (FIDPM) below:

Table 14: IDMS Stages

Stage	Name	End of Stage Deliverables
1	Initiation	Initiation Report or Prefeasibility Report
		(i) The Initiation Report, which defines project objectives, needs, acceptance criteria, department's priorities and aspirations, procurement strategies, and which sets out the basis for the development of the Concept Report.
		Or
		(ii) A Prefeasibility Report, is required on mega capital projects to determine whether or not to proceed to the Feasibility Stage, where sufficient information is presented to enable a final decision to be made regarding the implementation of the project.
		Stage 1 for this project is complete when the Clinical brief and project brief has been approved.
2	Concept	Concept Report or Feasibility Report
		(i) The Concept Stage represents an opportunity for the development of different design concepts to satisfy the project requirements, as developed during Stage 1. It also presents, through the testing of alternative approaches, an opportunity to select a particular conceptual approach. The ultimate objective of this stage is to determine whether the project is viable to proceed, with respect to available budget, technical solutions, time-frame and other information that may be required.

Stage	Name	End of Stage Deliverables
		(ii) The Concept Report should as a minimum, provide the following information:
		a) Document the initial design criteria, cost plan, design options and the selection of the preferred design option, or the methods and procedures required to maintain the condition of infrastructure for the project.
		b) Establish the detailed brief, scope, scale, form and cost plan for the project, including, where necessary, the obtaining of site studies and construction and specialist advice.
		c) Provide an indicative schedule for documentation and construction or maintenance services, associated with the project.
		d) Include a site development plan, or other suitable schematic layouts of the works.
		e) Describe the statutory permissions, funding approvals and utility approvals required to proceed with the works associated with the project.
		f) Include a baseline risk assessment for the project, and a health and safety plan, which is a requirement of the Construction Regulations, issued in terms of the Occupational Health and Safety Act.
		g) Contain a risk report linked to the need for further surveys, tests, other investigations and consents and approvals, if any, during subsequent stages and identified health, safety and environmental risk.
		(iii) A Feasibility Report shall, as a minimum, provide the following information:
		a) Details regarding the preparatory work covering:
		• A needs and demand analysis with output specifications.
		• An options analysis.
		b) A viability evaluation covering:
		• A financial analysis.
		• An economic analysis, if necessary.
		c) A risk assessment and sensitivity analysis;
		d) A professional analysis covering:
		• A technology options assessment.
		• An environmental impact assessment.
		• A regulatory due diligence.
		e) An implementation readiness assessment covering:
		• Institutional capacity.
		• A procurement plan.
		Stage 2 for this project is complete when the Concept Report (utilising the prescribed HIAC Stage 2 report) is complete and approved.
3	Design Development	Design Development Report
		(i) The Design Development Report shall as necessary:
		a) Develop in detail the approved concept to finalise the design and definition criteria.
		b) Establish the detailed form, character, function and costings.
		c) Define all components in terms of overall size, typical detail, performance and outline specification.
		d) Describe how infrastructure or elements or components thereof are to function, how they are to be safely constructed, how they are to be maintained and how they are to be commissioned.
		e) Confirm that the project scope can be completed within the budget or propose a revision to the budget.

Stage	Name	End of Stage Deliverables
		Stage 3 for this project is complete when the Design Development Report (utilising the prescribed HIAC Stage 3 report) is approved.
4	Design Documentation	Design Documentation
		(i) Design documentation provides the:
		a) production information that details, performance definition, specification, sizing and positioning of all systems and components that would enable construction;
		b) manufacture, fabrication and construction information for specific components of the work informed by the production information.
		Stage 4 for this project, is complete when the Design Documentation Report (utilising the prescribed HIAC Stage 4 report) is approved.
5	Works	Completed Works capable of being used or occupied
		(i) The following is required for completion of the Works Stage:
		a) Completion of the works is certified in accordance with the provisions of the contract; or
		b) The goods and associated services are certified as being delivered in accordance with the provisions of the contract.
		Stage 5 is complete when the Works Completion Report (utilising the prescribed HIAC Stage 5 report) is approved.
6	Handover	Works which have been taken over by user or owner; completed training; Record Information
		(i) The following activities shall be undertaken during the handover stage:
		a) Finalise and assemble record information which accurately reflects the infrastructure that is acquired, rehabilitated, refurbished or maintained;
		b) Hand over the works and record information to the user organisation and if necessary, train end user staff in the operation of the works.
		Stage 6 is complete when the Handover/Record Information Report (utilising the prescribed HIAC Stage 6 report) is approved.
7	Close-Out	Defects Certificate or Certificate of Final Completion; Final Account; Close-Out Report
		(i) The Close-Out Stage commences when the end user accepts liability for the works. It is complete when:
		a) Record information is archived;
		b) Defects certificates and certificates of final completion are issued in terms of the contract;
		c) Final amount due to the contractor is certified, in terms of the contract;
		d) Close-Out Report is prepared by the Implementer and approved by the Client Department.
		Stage 7 is complete when the Close-out Report (utilising the prescribed HIAC Stage 7 report) is approved.

2.1.2. PROJECT SCOPE MANAGEMENT

The following broad Scope Management Plan has been formulated:

2.1.2.1. Project Objectives, Deliverables and Critical Success Factors

The following project objectives have been identified:

- To build a new fully resourced M2 Medico-Legal Mortuary.

- To enhance Zululand district MLM services.
- To ensure compliance National Code of Guidelines for Forensic Pathology Services.
- To ensure that the environment is conducive in terms of OHS for staff working at the facility and to ensure dignity and privacy for public utilising the facility.
- To ensure that the dignity and the rights of the deceased are maintained.

The project deliverables have been identified as follows:

(i) To complete the Clinical and Project briefs and received approval thereof;
(ii) To appoint Implementing Agent to undertake the implementation of the project;
(iii) To develop a feasibility study and concept development and received approval thereof;
(iv) To Design and document the project for work implementation and received approval thereof;
(v) To construct the new mortuary and received approval of the works;
(vi) To finalise the hand over, completion and close out of the project.

The following success factors will be applied to this project:

- The project must be lead, managed and planned to ensure that the objective are met. This will be monitored in line with the Department's reporting systems;
- The correct and suitable persons be appointed to the project team to ensure the successful completion of the project and to ensure that opportunities be created at all levels for learning and development;
- Operations and Work processes must be put in place to ensure smooth, integrated and managed project implementation on all levels;
- Sufficient Stake holder engagements to take place so that the project is implemented successfully; and
- Project finances as managed to ensure appropriated application thereof.

2.1.2.2. Scope Control and close-out

Scope control involves the tracking, managing and monitoring the progress of the project and include tracking and filing documentation, managing scope creep, monitor the work during each phase, and disapproving/approving any deviation/changes along the way and at the end of each stage. The project will be presented to HIAC at the end each stage and the required prescripts need to be adhered to including requirements included in the "End-of-Stage" reports.

The scope of the works will be "closed" at the end of each stage. It is not expected that the scope will change beyond IDMS Stage 3. Deviations will be approved at the end of each stage. During the Close-out Stage of the project, the "wrap up" part of the process, which involves an audit of the project deliverables, lessons learned and the development of a Post Occupancy Report.

2.1.2.3. Work Breakdown Structure

The following is a high-level Work Breakdown Structure and must be developed further to include required structures. The WBS below only detail Stage 1 progress.

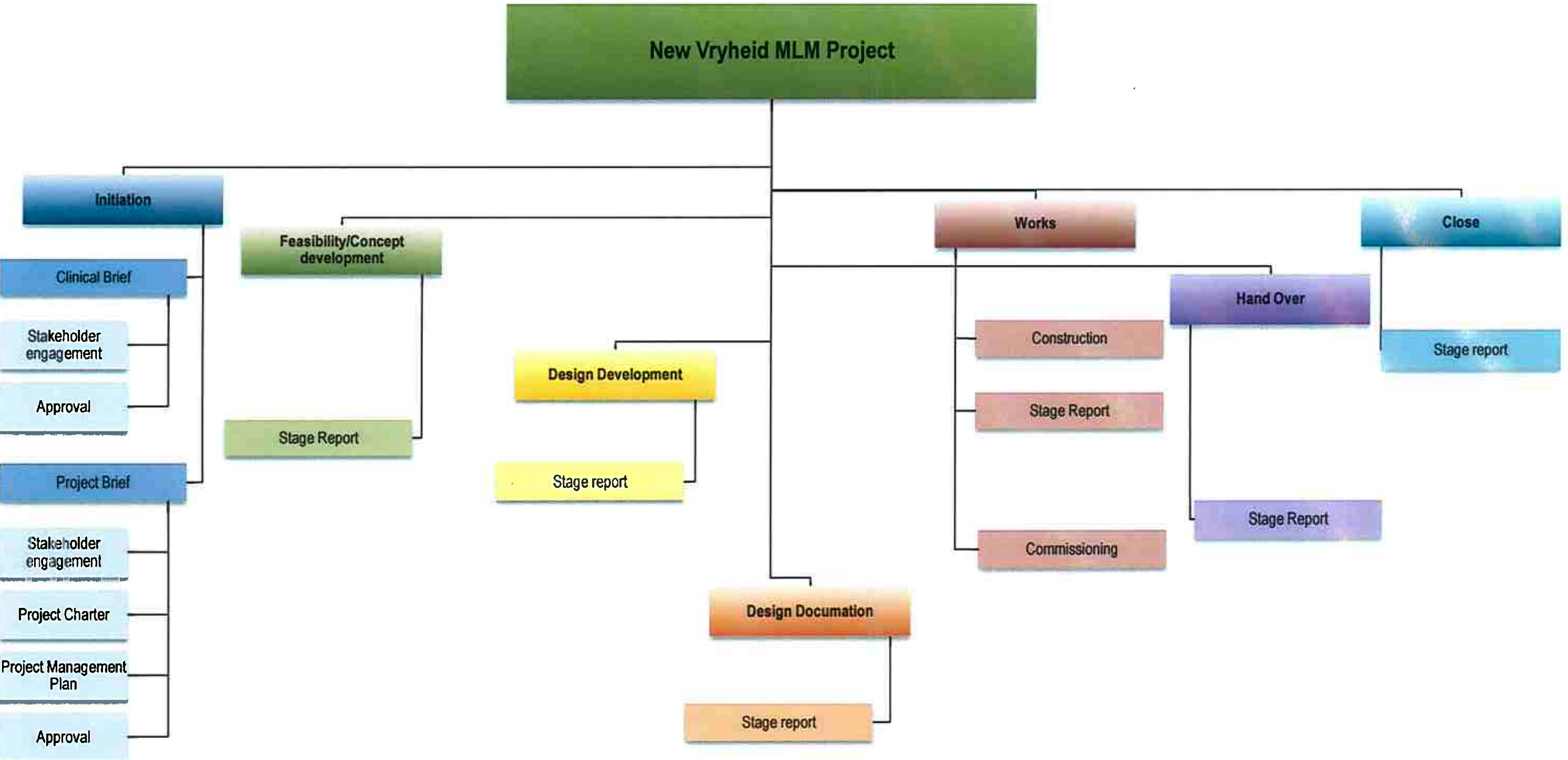


Figure 22: Work Breakdown Structure

2.1.2.4. Roles and Responsibilities of the Project Team

A. Appointment of External Service Providers

The KZN-DOH will enter into a legally binding agreement with each Professional Service Provider (PSP). However, over and above the agreement, the following expectations by KZN-DOH from the PSP's are highlighted:

- Cost effective proposals including where possible alternative economical proposals
- A Maintenance conscious facility and including a baseline maintenance plan at the end of the project
- An Environmental conscious facility
- A Facility to promote healing
- A Facility that will stand the test of time
- Consideration to alternative, but tested and accepted construction methods, systems and installations
- Timeous response time and provision of documents including the following:
  - Programmes and milestones
  - Designs, reports and specifications
  - Cost reports
  - EPWP reports
  - Completion certificates
  - As-built drawings, specifications, manuals, baseline maintenance plan, certificate
  - Close-out report
- Compliance to Legislative requirements
- Compliance to Policies
- Compliance to Norms and Standards (both National and Provincial)

B. Appointment of Contractors or Suppliers

The KZN-DOH will enter into a legally binding agreement with the Contractor or Supplier. However, over and above the agreement, the following expectations by KZN-DOH from the Contractor or Supplier are highlighted:

- Effective Time management
- Effective Project Management
- Effective Cost Management
- Effective Resource Management
- Effective Communication
- Adherence/Compliance to all applicable Legislation
- Adherence/Compliance to all applicable policies

- Adherence/Compliance to all applicable norms and standards

2.1.2.5. Roles and Responsibilities of the Department of Health

Over and above the SLA as noted under A. above the following roles and responsibilities are highlighted:

- Effective management and co-ordination of all stages of the project
- Effective management and co-ordination to al legislative requirements
- Quality control and compliance.
- Effective manage Procurement preparation processes in terms of the PFMA, SIPDM and Treasury Regulations.
- Contract and project management
- Effective Financial management.
- Effective Time Management
- Manage completion processes and retention periods.
- Manage timeous and complete Close-out of Project including as-built documentation, manuals compliance certificates and related documentation.
- Manage all required reporting, documentation and archiving of documents
- KZN-DOH will have an oversight role

2.1.2.6. Approval process

The approval process involves the tracking, managing and monitoring the progress of the project and include tracking and filing documentation, managing scope creep, monitor the work during each phase, and disapproving/approving any deviation/changes along the way and at the end of each stage. The project will be presented to the Health Infrastructure Approval Committee (HIAC) at each stage and the required prescripts need to be adhered to including requirements included in the Stage reports.

The scope of the works will be "closed" at the end of each stage. It is not expected that the scope will change beyond stage 3. Deviations will be approved at the end of each stage. During the Close-out Stage of the project, the "wrap up" part of the process, which involves an audit of the project deliverables, lessons learned and the development of a Post Occupancy Report.

2.1.2.7. Change requests

Any change request must be a formal submission that is submitted to KZN-DOH for approval. Changes may include: Scope changes, budgetary changes or time changes.

The approval process will follow the guidelines as is contained in the Project Procedure Manual & IDMS Guidelines as approved on 04 April 2020.

2.1.3. PROJECT TIME MANAGEMENT

The project will rely on several different timelines and the schedules of multiple people. Therefor effective time management is critical. A Time Management plan is required and a tool such a Gantt chart is recommended to augment the plan. It is recommended that the plan be monitored on a bi-weekly basis.

The following time line is recommended:

Table 15: Milestones and Tasks

Professional Milestones	FIDPM	Milestone	Date	% Project Complete
		PROJECT START DATE	01/01/2023 – 28/02/2023	0%
Stage 1	Stage 1	PRE-FEASIBILITY	28/02/2023 – 31/01/2023	3% 31/03/2023
Procurement		AWARD (PSP)	FEASIBILITY	
Stage 2	Stage 2	DESIGN	30/06/2024	30%
Stage 3	Stage 3	TENDER	01/01/2025	40% 81% 51%
Stage 4	Stage 4	CONSTRUCTION	17/01/2025	
Procurement		Construction 0 - 25%	16/07/2025	
Stage 5	Stage 5	Construction 26 - 50%	16/01/2026	61%
		Construction 51 - 75%	16/07/2026	70%
		Construction 76 - 100%	16/01/2027	81%
		PRACTICAL COMPLETION	16/01/2027	81%
		HANDED OVER	31/01/2027	84%
		WORKS COMPLETION	15/04/2027	91%
	Stage 6	FINAL COMPLETION	14/04/2028	96%
Stage 6	Stage 7	PROJECT START DATE	01/01/2023 – 28/02/2023	0%
		PRE-FEASIBILITY	28/02/2023 – 31/01/2023	3%

2.1.4. PROJECT COST MANAGEMENT

The project budget is estimated however throughout the project various estimates will be required and will conclude with the final account/s. As a minimum, the following minimum will be required as part of the End Stage reports:

Stage 1: Initial estimate as per item

Stage 2: Preliminary Estimate (OOM)

Stage 3: Detailed Estimate (Elemental estimate)

Stage 4: Bill of Quantities

Stage 5: Monthly Payments

Monthly Cashflows

Variations

Draft re-measurements

Stage 6: Nil

Stage 7 Final Account/s

2.1.4.1. Budget Control

The following amounts are included for reference purposes and adjusted estimates will be approved during the various End Stage approvals. The cost are reflected as follows:

(vii) Infrastructure component

- Fees, Building and related infrastructure bulk services
- HT (furniture, medical equipment, IT hardware and software, linen & crockery and cutlery)
- Commissioning costs
- Operating costs

The Project Manager will be responsible to ensure that necessary controls are in place and that the budgets are not exceeded without a fully motivated and approved submission to the KZN-DOH CFO and HOD.

2.1.4.2. Fees, Building and related infrastructure bulk services

The Funding Source for the project is the Health Facility Revitalisation Grant.

Building Cost (incl. VAT)		
Funding source		
Budgetary Item	Amount	Explanatory Notes
Current Estimated Building Cost	R 42 112 000.00	Date of estimate: 14 March, 2023
Pre-tender escalation	R 3 032 000.00	0.3 % per month for 24 months
Post-tender escalation	R 1 819 239.00	0.3 % for 24 months x 0.6
Estimated Fees	R 8 422 400.00	20 % of construction cost
Contingency	R 4 211 200.00	10 % provision
Estimated Building Cost (incl. VAT)	**R 59 596 903.00**	
Estimated Building Rate per m2 (incl. VAT)	**R 63 118 / m²**	

2.1.4.3. Health Technology

HT (Furniture & Equipment) Cost (incl. VAT)		
Funding source		
Budgetary Item	Amount	Explanatory Notes
Current estimate for HT (Equipment)	R 3 027 500.00	
Current estimate for Furniture	R 400 000.00	
Provision for Escalation	R 0.00	
Estimated fees	R 0.00	
Estimated Commissioning Cost	R 500 000.00	
Estimated escalation	R 0.00	
Estimated additional Operational Cost	R 0.00	

HT (Furniture & Equipment) Cost (incl. VAT)	
Estimated HT (Furniture & Equipment) Cost (incl. VAT)	**R 3 927 500.00**

2.1.4.4. Commissioning

Commissioning (incl. VAT)			
Funding source			
Budgetary Item	Amount		Explanatory Notes
Current estimate for Commissioning (Salaries only)	R	2 000 000.00	Additional expenditure for salaries only.
Provision for Escalation	R	200 000.00	@ 5% per year
Estimated fees	R	1 000 000.00	Estimate fees for 2026/27 financial year
Estimated Commissioning Cost (incl. VAT)	**R**	**3 200 000.00**	

2.1.4.5. Operational Cost

The estimated additional operational cost for the Vryheid MLM is as follows:

Annual Operating Cost (incl. VAT) – 2018/19 Financial Year		
Funding source	Budget control head office	
Budgetary Item	**Amount**	**Explanatory Notes**
Salaries	R 5 775 394.00 p/a	Provide breakdown
Electricity, water, medical gases, fuels	R 520 000.00 p/a	Using global expenses
Security services	R 900 000.00 p/a	Using global expenses
Rates & taxes	R 1 820 000.00 p/a	
Estimated Annual Operating Cost (incl. VAT)	**R 9 015 394.00 p/a**	

2.1.4.6. Multi-year budget for the project

The estimated budget (excluding Operational Cost) for the MTEF is as follows:

MTEF and beyond	**Fees**	**Construction**	**Total**
Yr 22/23	R 0.00	R 0.00	R 0.00
Yr 23/24	R 0.00	R 0.00	R 0.00
Yr 24/25	R 2 000 000.00	R 1 000 000.00	R 3 000 000.00
Yr 25/26	R 3 000 000.00	R 32 000 000.00	R 35 000 000.00
Yr 26/27	R 2 000 000.00	R 15 174 503.00	R 17 174 503.00
Yr 28/29	R 1 422 400.00	R 3 000 000.00	R 4 422 400.00
Yr 29/30	R 0.00	R 0.00	R 0.00
TOTAL	**R8 422 400.00**	**R 51 174 503.00**	**R 59 596 903.00**

2.1.5. PROJECT QUALITY MANAGEMENT

Project Quality Management is required to continually monitor the quality of all activities and taking corrective action if need be. Quality management include cost control of the project, establishment and requirement to achieve standards, which will lower the risks. Project Quality Management must include the following:

2.1.5.1. Quality control

The Quality Management Plan must monitor and document the successful completion of the Medico-Legal Mortuary and that it is fully compliant to specification and guidelines.

The plan must monitor the following:

- Compliance to standards (Please refer to the IUSS HEALTH FACILITY GUIDES as applicable)
- Deviations
- Variations
- Acceptance by End-User
- Patient satisfaction

2.1.5.2. Quality assurance

Quality assurance require documentary evidence that the project activities are implement as defined and promised. A measurement system must be developed to monitor

- Data accuracy for Precision
- Data to measure
- Successive measurements of Reproducibility – different appraisers measuring the same item get the same result

2.1.5.3. Quality control

Quality control involves the required operational techniques meant to ensure quality standards. This includes identifying, analysing, and correcting problems.

While quality assurance occurs before a problem is identified, quality control is reactionary and occurs after a problem has been identified, and suggests methods of improvement.

Quality control monitors specific project outputs and determines compliance with applicable standards. It also identifies project risk factors, their mitigation, and looks for ways to prevent and eliminate unsatisfactory performance.

Quality control can also ensure that the project is on budget and on schedule. Monitoring the project outputs can be done through peer reviews and testing. By catching deliverables that aren't meeting the agreed upon standards throughout, you'll be able to simply adjust your direction rather than having to entirely redo certain aspects.

Ensuring quality measures and controls are adhered to, requires a multi-disciplinary team approach.

Benefits of project quality management:

- Quality products
- Customer satisfaction
- Increased productivity
- Financial gains
- Removes silos/better teamwork
- Discrepancy

2.1.6. RESOURCE MANAGEMENT

It is expected that the Project Manager will manage all resources that would be required to complete the project, including People, Equipment, Facilities, and Budget. The required resources must be deployed to achieve the planned outcome. A resource plan must be prepared and managed accordingly.

2.1.6.1. Project Team

The project team must, as a minimum, consist of the following, but this must be adjusted throughout the duration of the project as applicable:

KZN Department of Health - Infrastructure Development

Team Member	Skill level required
Project Leader	Project Management skill required
Architect	Level 12: Architect
Electrical Engineer	Level 10: Engineer
Mechanical Engineer	Level 12: Engineer
Civil/Structural Engineer	Level 10: Engineer
Quantity Surveyor	Level 10: Quantity Surveyor
Health and Safety Liaison	Level 10: Health and Safety Officer
Administrative support	Finance, Admin and PMIS skills required

KZN Department of Health – General

Team Member	Skill level required
Specialised and Clinical Support Liaison	Must have knowledge of provincial and departmental policies re Forensic Pathology Services
Forensic Pathology Services Liaison	Must have knowledge of provincial and departmental policies re Forensic Pathology Services
IT Services Liaison	Must have knowledge of provincial and departmental policies re IT services

Team Member	Skill level required
Security Services Liaison	Must have knowledge of national, provincial and departmental policies re security, level of security required
Infection Prevention Control (IPC) Liaison	Must have knowledge of national, provincial and departmental policies re IPC, materials and fittings for accommodation
UMkhanyakude Health District Liaison	Must have decision-making delegations Must have knowledge of provincial and departmental policies re Forensic Pathology Services Must have knowledge of Hospital Infrastructure and Maintenance plans

External Resources may only be procured if there is insufficient in-house skills available within the Implementing Agent. Justification must be provided in terms of National treasury Instruction No 2 of 2017/2018 and specifically item 4. Should external resource be required, it is recommended that the following be considered (as is required to augment any In-house capacity):

Team Member	Skill level required
Principal Agent	University degree, Professional registration and 6 years post registration experience Project Management skill required. 5 years' experience in the Health planning environment
Architect	University degree, Professional Architect registration and 6 years post registration experience in the health field
Electrical Engineer	University degree, Professional registration and 3 years post registration experience
Mechanical Engineer	University degree, Professional Engineer registration and 6 years post registration experience in the health field
Civil/Structural Engineer	University degree, Professional Engineer registration and 3 years post registration experience
Quantity Surveyor	University degree, Professional QS registration and 6 years post registration experience
Land Surveyor	5 Years' Experience in the Surveying Field
Geotechnical Engineer	University degree, Professional **Engineer** registration and 3 years post registration experience
Sustainable Specialist	5 Years' Experience in the Infrastructure environment
General building contractor	CIBD 8GB
Community Liaison Officer	Experience and knowledge of applicable legislations and policies Management capabilities is recommended

2.1.7. PROJECT COMMUNICATION PLAN

The Project Manager must develop a Project Communication Plan that must be managed throughout the project. As a minimum the plan must cover the following

- Strategies

In order to ensure good communication, frequent engagement will take place though out the project life cycle. The engagements include:

- o Stakeholder engagement meetings
- o Planning meetings
- o Update meetings
- o Report back meetings
- o Site meetings
- o No media communication except by KZN-DOH Communication

- Methodologies

Communication will be done though the following methods:

- o Meetings that will either be Face to Face or via on-line programme MS Teams
- o Minutes (all meetings to be minuted)
- o Telecommunication
- o E-mails
- o Reports
- o Letters
- o Feedback information

- Delivery

Communication will be delivered through:

- o Telecommunication
- o E-mails and other on-line systems
- o Internal registry services

- Personnel

Communication will be between KZN-DOH Infrastructure Development and:

- o National Department of Health
- o KZN-DOH Head Office directorates
- o KZN-DOH Zululand District Office

- o KZN-DOH Head Office Forensic Pathology Services
- o KZN-DOH Head Office and Professional Service Providers
- o KZN-DOH Head Office and Forensic Pathology Services
- o KZN-DOH Head Office and Contractor/s

- Communication is expected to take place between:
  - KZN-DOH Zululand District and Forensic Pathology Services as well as Vryheid Communities
  - Between Professional Service Providers

- Media

Communication will be delivered through:

- E-mails and other on-line systems - Ms Outlook MS Teams
- Documents – Hard copy and electronic (Micro Soft Word, Excel, Project), Adobe Acrobat PDF
- Drawings – Autodesk AutoCAD, Revit
- Bills of Quantities – Win QS

2.1.8. RISK MANAGEMENT PLAN

Informed decision-making is critical to the success of any project. Crucial to this success is the identification of risks and how they will be managed through the Risk Management Plan. The risk plan will deal with current issues as well as identified risks.

2.1.8.1. Issue Management

Current issues need to be managed by monitoring, acting and tracking progress. Issue log needs to be monitored, updated and revised as required for the duration of the project. The following Issues are identified:

Table 16: Issue Log

Issue Category	Issue	Owner	Actions
Existing facility	Deteriorating existing facility	DOH	Project to be implemented as soon as possible
Existing facility	Long distances of travel to render service to the public	DOH	Project to be implemented as soon as possible

2.1.8.2. Identified risks

The following is some of the risk identified for this project. These risks are not all inclusive and the log needs to be monitored, updated and revised as required for the duration of the project.

Table 17: Risk Log

Risk Category	Identified Risk	Risk Analysis			
		Probability	Consequence	Impact	Risk Mitigation Measure
Institutional Arrangements	Changing Environment, i.e. Changing National & Departmental Policies and Norms	Low	Changes to designs and cost implications decision	Low	Ensure proper signoff by National , eg Peer Review, and Provincial structures; Adequate lead time is being built into planning and execution
	Poorly defined relations between the stakeholders	Low	Delays in obtaining input and approvals	High	Roles & responsibilities to be to clearly defined Sufficient planning and consultation meetings
Project Procurement	Delays with procurement processes	High	Delays to project	High	Suitable procurement strategies to be followed and well prepared documentation to be compiled
Project Procurement	Experienced and qualification of consultants	Medium	Inappropriate and/or costly structures Delays to project Poorly run projects	Medium	Clear requirements and functionality requirements to be included in procurement documents. Also refer to item2.1.6.1 above
	Experienced and qualification of contractors	Medium	Delays to project Poorly run projects Substandard workmanship	Medium	Clear requirements and functionality requirements to be included in procurement documents
Project implementation	Contractor Default; Contract cancellation	Medium	Project delays	High	Provide appropriate and reasonable assistance to contractors Re-tender as soon as possible
	Delays: Inclement weather Strikes, political, acts of God, litigation etc	Medium	Project delays	Medium	Plan ahead for projects to start outside of the highest rain months where possible; Tight management of the programme
	OHS & Construction Regulations non-compliance	Low	Safety compromised Delays due to problems with Labour	Low	Monthly monitoring and evaluation
	Delays in supply of materials (long lead times) and cost increases	Low	Project delays	Low	Proper planning for such items. Ensure proper controls and monitoring of projects
HTS	Procurement of medical equipment for facilities	Low	Delays to project	Low	Suitable procurement strategies to be followed and well prepared documentation to be compiled
Financial management	Increasing Budget constraints; Over/under delivery and expenditure	Low	Requirement for Variations	Low	On-going management of Project and estimate Ensure proper controls and monitoring of project
	Delays in payments to consultants and contractors	Low	Hardship to contractors and consultants and possible project delays	Low	Ensure timeous payments to consultants and contractors
Human Resources	Inadequate human resources in terms of capacity and skills	Medium	Delays to project	Medium	Project team to be appointed as per item2.1.6.1 above Clear requirements and functionality requirements to be included in procurement documents.

Risk Category	Identified Risk	Risk Analysis			
		Probability	Consequence	Impact	Risk Mitigation Measure
	Labour relations	Low	Poor labour relations result in labour disturbances and poor labour productivity; Strikes on site will delay projects	Low	Ensure good labour relations by compliance with the relevant Act/s and ensuring that the working conditions are satisfactory and disciplinary procedures are applied where appropriate
Programme systems	Updating the WIMS and PMIS systems on the part of project office staff; incl. inaccurate capturing of data	Medium	Incomplete project database	Medium	Continuous management of project updating
Environmental	Adverse site conditions as it is a green fields site Non approval of PDA, EIA's, etc	Low	Delays to project Costly solutions	Low	Careful planning and monitoring; Site investigations to be done
Pandemic	World-wide outbreak of disease	Low	Delays due to: - Curfew - Availability of materials	Low	Careful planning and monitoring Timeous ordering of materials and equipment
Beneficiary management	Employment within communities	Low	Unacceptable interference from the community affecting progress on the project	Low	Effective communication of the project activities and programme addressed with the community
Litigation	Disputes	Low	Delays and budget impact	Low	Careful planning and effective monitoring and communication
Programme closure	Poor documentation, failure to acknowledge lessons learnt & no proper closure Delays in preparation of Final accounts	Medium	Effect on general administration efficiency; Effect on future project planning	Medium	Ensure proper controls and monitoring of projects
	Delays in getting defects attended to in the defects liability period	Medium	Maintenance problems for the client & Inconvenience for the users	Medium	Ensure that defects are attended to by careful checking and ensuring that Draft retention payments are not made until the defects have been rectified

2.1.9. PROCUREMENT MANAGEMENT PLAN

2.1.9.1. FIDPM Procurement gates

The FIDPM procurement gates must be implemented. The FIDPM states:

6.1.1 Infrastructure procurement shall be undertaken in accordance with all applicable Infrastructure Procurement-related legislation and this Framework.

6.1.2 Infrastructure procurement shall be implemented in accordance with procurement gates prescribed in clause 6.2 and the CIDB prescripts. If deemed necessary by the institution, Accounting Officer or Accounting Authority can, over and above procurement gates prescribed in clause 6.2, introduce additional procurement gates.

6.1.3 Procurement Gate 1 and 2 shall be informed by the Programme Management Control Point Deliverables in terms of Section 5.2 above.

6.1.4 Given the peculiarity of the institution, the procurement of Professional Service Providers (PSPs) and Contractors can occur at any points in the IDM Processes.
6.1.5 The Accounting Officer or Accounting Authority must ensure that a budget is available and cash flow is sufficient to meet contractual obligations and pay contractors within the time period provided for in the contract.
6.1.6 Procurement gates provided in 6.2 shall be used, as appropriate, to:

Infrastructure Procurement Requirements
a) Authorise commencement to the next control gate;
b) Confirm conformity with requirements; and/or
c) Provide information, which creates an opportunity for corrective action to be taken.

The following Procurement gates are applicable to the project:

Table 18: Procurement Gates

FIDPM Gate	Procurement Gate	Description	Approval process
Stage 1	PG 1	Obtain permission to start with the procurement process	IPMP document
	PG 2	Obtain approval for procurement strategies that are to be adopted	Approval of Project brief HIAC approval certificate Stage 1
Stage 4	PG 3	Obtain approval for procurement documents	Approval of Project Design Development. HIAC approval certificate Stage 4
	PG 4	Confirm that cash flow is sufficient to meet projected contractual obligations	Infrastructure Cash flow Committee (minuted) NSI issued
	PG 5	Solicit tender offers	SCM – Adverts, quotations, etc Bid specification Committee (BSC) (minuted meeting)
	PG 6	Evaluate tender offers in terms of undertakings and parameters established in procurement document	SCM - Evaluation Departmental Bid Evaluation Committee (BEC) (minuted meeting)
	PG 7	Award the contract	SCM - Award Departmental Bid Adjudication Committee (BAC) (minuted meeting) Signed by Accounting Officer
Stage 5 Stage 6 Stage 7	PG 8	Administer the contract and confirm compliance with all contractual requirements	Approval of stages 5 - 8 HIAC approval certificates Stages 4 to stage 8

2.1.9.2. Procurement Gate 1 (PG1): Obtain permission to start with the procurement process

A. <u>The following need to be procured:</u>

- Professional Service Providers (if required). Please refer to item 2.1.6.1 above
- Contractors and Sub-Contractors
- Suppliers and installers

B. **The scope for the project is as defined under item 1.1 above.**

C. <u>Estimate costs are as follows:</u>

- Professional Service Providers R 8 422 400.00
- Contractors and Sub-Contractors R 51 174 503.00
- HTS R 3 927 500.00
- Commissioning R 3 200 000.00

D. The project is included in the B5

E. PG 1 will be complete when HIAC approves gate 1.

2.1.9.3. Procurement Gate 2 (PG2): Approval for procurement strategies that are to be adopted

Due to the deteriorating of the existing facility it is proposed that the project be accelerated as far as possible;

Preferential procurement in line with legislative provisions and the Construction Sector Code must be included in the procurement documents

A. <u>Procurement Strategy</u>

The Procurement Strategy is prepared by the Department of Health as part of the annual Infrastructure Programme Management Plan (IPMP). It sets out the Delivery Management Strategy as well as the Procurement and Contracting Arrangements proposed for each project requiring the procurement of Consultants (Professional Services) or Contractors (Works) during the ensuing 3 year period.

B. <u>Formulation Process</u>

The 5-step process for the preparation of the Delivery Management Strategy and the Procurement and Contracting Arrangements is summarised below:

- Establish the Base Information
  - The scope of the project is described in item **Error! Reference source not found.**
  - The CIDB grading for the Contractor will be 8GB

- Delivery Plan information
  - Expenditure Analysis – This project does not form part of a programme and shall be implemented as an individual project

- Organisational Analysis – The project shall be reviewed against organisational goals and priorities to ensure it is consistent with the strategic plans of the Department

- Market Analysis – Tenders shall be based on an open procedure to test the market for both professional services and construction.
- Procurement objectives
  - Delivery procurement objectives:

    The primary objective of the project is the delivery of functional infrastructure including buildings, plant and equipment, roads, electricity supply, water supply and so on; s within budget, to the required standard and within the specified timeframe.

- Developmental procurement objectives

  The project must, where possible, incorporate secondary (or developmental) socio-economic objectives as follows:

  - Promotion of black economic empowerment
  - Promotion of gender equality
  - Promotion of work opportunities for SMMEs
  - Alleviation poverty
  - Promotion of local economic development
  - Development of CIDB registered contractors
  - Skills development
  - Reduction of environmental impacts

- The Delivery Management Strategy for Works

  It must be noted that this project cannot be done in a package as there is not similar project in the area, thus it will be done as an individual project.

- Delivery management arrangements

  It is expected that this project will be delivered through:

  - Implementing Agent
  - Outsourcing (Works)
  - Outsourcing (Professional Services)

- Contracting Arrangements for Works
  - Service Requirements Options for Works: General contractor
  - Contracting Strategy: Develop and Construct Option B.

- Pricing Strategy: Bills of Quantities
- Form of Contract: GCC or NEC

- Procurement Strategy for Works
  - Procurement Arrangements for Works Contractors
    - Functionality Criterion Requirements:
      - Skills
      - Experience
      - Previous work successfully complete
      - Resources
  - Procurement Procedure: Public Open Tender
  - Targeted Procurement Procedure: Standard DOPW SCM Targeted Procurement
  - Procurement Document: Standard DOPW Bid Document
  - Tender Evaluation Criterion:
    - Responsiveness
    - Quality Evaluation
    - Price and Preference
    - Minimum score must be 70%

- Contracting Arrangements for Services
  - External Resources may only be procured if there are insufficient in-house skills available within the Implementing Agent. Justification must be provided in terms of National Treasury Instruction No 2 of 2017/2018 and specifically item 4.
  - Should external resource be required, it is recommended that the following be considered (as is required to augment any In-house capacity):

- Contracting Arrangements for Professional Services
  - Professional Service Areas: Full Service
  - Contracting Strategy: Traditional, separate as per item 2.1.6.1 above
  - Pricing Strategy: Gazetted rates
  - Form of Contract: CIDB PSP Document

- Procurement Strategy for Professional Services
  - Procurement Arrangements for Service Providers
    - Functionality Criterion Requirements (also refer to item 2.1.6.1 above):
      - Skills
      - Experience with Health projects
      - Previous work successfully complete
      - Resources
  - Procurement Procedure: Public Open Tender

- Targeted Procurement Procedure: Standard DOH SCM Targeted Procurement
- Procurement Document: Standard DOH Bid Document
- Tender Evaluation Criterion:
  - Responsiveness
  - Quality Evaluation
  - Price and Preference
  - Minimum score must be 70%

- Updating and Revising the Delivery Management Strategy

  The above Procurement Strategy deviates from the IPMP because the existing facility is deteriorating rapidly and this project is to be implement as soon as possible.

PG 2 is complete when procurement strategies that are to be adopted are approved at the approval of Stage 2.

2.1.9.4. Procurement Gate 3 (PG3): Approval for procurement documents

The Implementation Agent must prepare procurement documents that are compatible with the approved procurement strategies.

PG 3 is complete when the procurement document is approved at the approval of Stage 4.

2.1.9.5. Procurement Gate 4 (PG4): Confirmation of cash flow

The Implementation Agent must confirm sufficient cash flow to meet contractual obligations prior to proceeding to tender

The Implementation Agent must also establish control measures for payment of contractors within the time period provided for in the contract.

PG 4 is complete when cash flow is approved

2.1.9.6. Procurement Gate 5 (PG 5): Solicit tender offers

The Implementation Agent must solicit tender as follows and within the recommended timeframes:

• Prepare tender specification report	2 weeks	2 weeks	
• Submit tender specification to BSC	1 week	3 weeks	
• Approval by BSC		1 week	4 weeks
• Invite tenders		1 week	5 weeks
• Receive tenders		3 weeks	8 weeks
• Record tenders		1 day	concurrent

- Prepare report on tenders received 1 week 9 weeks

PG 5 is complete when all received tender offers are duly accounted for

2.1.9.7. Procurement Gate 6 (PG 6): Evaluation of tender offers in terms of undertakings and parameters established in procurement documents.

- Verify completion of tenders 1 week 10 weeks
- Determine if tenders are responsive 1 week 11 weeks
- Evaluate tenders 3 weeks 14 weeks
- Perform risk assessment 1 week 15 weeks
- Prepare tender evaluation report 1 week 16 weeks
- Submit tender evaluation report to BEC 1 week 17 weeks
- Recommendation by BEC 1 week 18 weeks
- Prepare submission to BAC 1 week 19 weeks
- Submit submission to BAC 1 week 20 weeks
- Recommendation by BAC 1 week 21 weeks
- Prepare submission to HOD 1 week 22 weeks
- Submit submission to HOD 1 week 23 weeks
- Approved by HOD 1 week 24 weeks

PG 6 is complete when the evaluation report is reviewed and recommendations is ratified.

2.1.9.8. Procurement Gate 7 (PG7): Award the contract

- Notify tenderers of outcome 1 week 25 weeks
- Appeals period 2 weeks 27 weeks
- Acceptance by contractor 1 week 28 weeks
- Receive compulsory documentation 1 week 29 weeks
- Prepare contract documentation 1 week 30 weeks
- Accept and Sign Contract documentation
  by Contractor 1 week 31 weeks
- Sign Contract documentation by HOD 1 week 32 weeks

PG 7 is complete when the tenderer has provided evidence of complying with all requirement stated in the tender data and formally accepts the tender offer in writing and issues the contractor with a signed copy of the contract

2.1.9.9. Procurement Gate 8 (PG 8): Administer the contract and confirm compliance with all contractual requirements

This gate will include:

- Capturing of the contract award data
- Administration contract in accordance with the terms and provisions of the contract
- Ensuring compliance with contractual requirements.

PG 8 is complete when contract completion/termination data is captured.

2.1.10. STAKEHOLDER MANAGEMENT

The stakeholder management plan outlines how the project team plans to manage the goals and expectations of key stakeholders during the project lifecycle.

Stakeholders have been identified as defined by their interests, involvement, interdependencies, influence, and potential impact on the project success. The early identification benefit is that it will enables the project team to identify the appropriate focus for engagement of each stakeholder or group of stakeholders. This process must be revised periodically throughout the project as needed. The following plan must be monitored, updated and revised as required but at least on a monthly basis.

Table 19: Stakeholder plan

STAKEHOLDER	ROLE	INTEREST LEVEL (H/L)	EXPECTATIONS	WHERE ARE THEY NOW	WHERE ARE THEY NEEDED	STAGE & PRIORITY	HOW DO THEY GET THERE	COMMUNICATION			
								METHOD	FREQUENCY	LAST	NEXT
National Department of Health											
Infrastructure											
Mr N Mphaphuli	Director: Revitalisation Projects	H	Timely updates on project progress Successful completion of project Value for money Compliance	Clinical brief submitted, Review in progress	Clinical Brief Approval	Stage 1	Regular communications	Email Telephonic Meetings Reports	-		
					Guidance on Norms and standards	Stage 2			Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
					Oversight	Duration of project			Ad hoc		
Provincial Department of Health											
Head Office											
Dr T S Tshabalala	Head of Department	H	Successful completion of project	Aware of the project, no formal communication	Approval of clinical brief Approval of Project Brief	Stage 1	Approval submissions	Submissions Telephonic Meetings Reports	Ad hoc		
						Stage 4			Ad hoc		
						Duration of project			Ad hoc		
Mr K B L Vilakazi	Chief Financial Officer	H	Effective management of project budgets and compliance	Aware of the project, no formal communication	Support for approval of clinical brief Support for approval of Project Brief	Stage 1	Approval submissions	Submissions Telephonic Meetings Reports	Ad hoc		
						Stage 4			Ad hoc		
						Duration of project			Ad hoc		

STAKEHOLDER	ROLE	INTEREST LEVEL (H/L)	EXPECTATIONS	WHERE ARE THEY NOW	WHERE ARE THEY NEEDED	STAGE & PRIORITY	HOW DO THEY GET THERE	COMMUNICATION			
								METHOD	FREQUENCY	LAST	NEXT
Acting Chief Director: Mr L Langa	Acting Chief Director: Specialised Services and Clinical Support Services	H	Provision of facility for implementation of services to community	Aware of the project, no formal communication	Support for approval of clinical brief Support for approval of Project Brief	Stage 1	Approval submissions	Submissions Telephonic Meetings Reports	Ad hoc		
						Stage 4			Ad hoc		
						Duration of project			Ad hoc		
						Stage 4			Ad hoc		
						Duration of project			Ad hoc		
Mr S Mhlongo	Acting Chief Director: Infrastructure Development	H	Successful completion of project	Aware of the project, no formal communication	Support Approval of stages Oversight	Stage 1	General correspondence Reports Submissions	Email Telephonic Meetings Reports	Ad hoc		
						Stage 2			Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		
Ms M de Goede	Director: Infrastructure Planning	H	Successful completion of project	Planner	Planning Budget control Approvals Oversight	Stage 1	General correspondence Planning documents Reports Submissions	Email Telephonic Meetings Reports	Ad hoc		
						Stage 2			Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		

STAKEHOLDER	ROLE	INTEREST LEVEL (H/L)	EXPECTATIONS	WHERE ARE THEY NOW	WHERE ARE THEY NEEDED	STAGE & PRIORITY	HOW DO THEY GET THERE	COMMUNICATION			
								METHOD	FREQUENCY	LAST	NEXT
Ms Y Thambiran	Deputy Director: Quality Assurance	H	Successful completion of project Commissioning of facility	Consulted and assisting with planning	Planning Support Commissioning Oversight	Stage 1	General communication Planning documents Reports Submissions	Email Telephonic Meetings Reports	Ad hoc		
						Stage 2			Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		

STAKEHOLDER	ROLE	INTEREST LEVEL (H/L)	EXPECTATIONS	WHERE ARE THEY NOW	WHERE ARE THEY NEEDED	STAGE & PRIORITY	HOW DO THEY GET THERE	COMMUNICATION			
								METHOD	FREQUENCY	LAST	NEXT
Mr. T. Sosiba	Deputy Director: Organizational Development	H	Successful completion of project Commissioning of facility Organizational Development	Consulted and assisting with planning	Planning Support Commissioning Oversight	Stage 1 Stage 5 Stage 6	General communication Planning documents Reports Submissions	Email Telephonic Meetings Reports	Ad hoc Ad hoc Ad hoc		
Mr. T. Ngidi	Acting Director: Health Technology	H	Equipping the facility	Consulted and assisting with planning	Oversight Support Guidance on Norms and standards	Stage 1 Stage 4 Stage 5 Stage 6 Stage 7	General communication Planning documents Reports Submissions	Email Telephonic Meetings Reports	Ad hoc Ad hoc Ad hoc Ad hoc Ad hoc		
Mr. K. Bentley	Acting Director: Forensic Pathology Services	H	Successful completion of project Commissioning of facility	Consulted and assisting with planning	Oversight Support Guidance on Norms and standards		General communication Planning documents Reports Submissions	Email Telephonic Meetings Reports			
Mr. K. Mtshali	Chief Director: Supply Chain Management	H	Effective management of project procurement and contract administration and compliance	Unaware of the project, no formal communication	Support for approval of clinical brief Support for approval of Project Brief Procurement strategy	Stage 1 Stage 4 Stage 5 Duration of Contract Stage 2	Approval submissions	Submissions Telephonic Meetings Reports	Ad hoc Ad hoc Ad hoc Ad hoc Ad hoc		

STAKEHOLDER	ROLE	INTEREST LEVEL (H/L)	EXPECTATIONS	WHERE ARE THEY NOW	WHERE ARE THEY NEEDED	STAGE & PRIORITY	HOW DO THEY GET THERE	COMMUNICATION			
								METHOD	FREQUENCY	LAST	NEXT
					Procurement process	Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		
Maj. Genl. MM Dladla	Director: Security Services	M	Compliance to Department Security Policies	Unaware of the project, no formal communication	Oversight Support Guidance on Norms and standards	Duration of project	General correspondence	General communication	Ad hoc		
Miss. B. Mhlongo	Environmental Health / Waste Management	M	Compliance to Department Waste Management Policies	Unaware of the project, no formal communication	Oversight Support Guidance on Norms and standards	Duration of project	General correspondence	General communication	Ad hoc		
Zululand Health District											
Mr. V. S. Vilakazi	Zululand District: District Director	H	Successful completion of project	Consulted and assisting with and is aware of the project.	Support Guidance on Norms and standards	Stage 1	General communication Planning documents Reports Submissions	General communication	Ad hoc		
						Stage 2			Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		

STAKEHOLDER	ROLE	INTEREST LEVEL (H/L)	EXPECTATIONS	WHERE ARE THEY NOW	WHERE ARE THEY NEEDED	STAGE & PRIORITY	HOW DO THEY GET THERE	COMMUNICATION			
								METHOD	FREQUENCY	LAST	NEXT
VRYHEID FORENSIC MORTUARY											
Mr. N. Zulu	Facility Manager	H	Successful completion of project	Consulted and assisting with and is aware of the project.	Support Guidance on Norms and standards	Stage 1	General correspondence Reports Submissions	Email Telephonic Meetings Reports	Ad hoc		
						Stage 2			Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		
Pietermaritzburg Infrastructure Management Hub											
Mr R. Potsane	Acting Director	H	Successful implementation of project	Consulted	Support Implementation & Project Management Oversight	Stage 1	General correspondence Reports Submissions	Email Telephonic Meetings Reports	Ad hoc		
						Stage 2			Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		

STAKEHOLDER	ROLE	INTEREST LEVEL (H/L)	EXPECTATIONS	WHERE ARE THEY NOW	WHERE ARE THEY NEEDED	STAGE & PRIORITY	HOW DO THEY GET THERE	COMMUNICATION			
								METHOD	FREQUENCY	LAST	NEXT
Implementing Agent											
TBC	TBC	H	Successful implementation of project	Consulted	Implementation & Project Management Oversight	Stage 2	General correspondence Reports Submissions	Email Telephonic Meetings Reports	Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		
Professional Service Providers											
TBC	TBC	H	Successful implementation of project	Previously appointed, no communication yet	Implementation & Project Management	Stage 2	General correspondence Reports Submissions	Email Telephonic Meetings Reports	Ad hoc		
						Stage 3			Ad hoc		
						Stage 4			Ad hoc		
						Stage 5			Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		
Contractor											
TBC	TBC	H	Successful implementation of project	TBC	Implementation	Stage 5	General correspondence Reports Submissions Minutes	Email Telephonic Meetings Reports	Ad hoc		
						Stage 6			Ad hoc		
						Stage 7			Ad hoc		

STAKEHOLDER	ROLE	INTEREST LEVEL (H/L)	EXPECTATIONS	WHERE ARE THEY NOW	WHERE ARE THEY NEEDED	STAGE & PRIORITY	HOW DO THEY GET THERE	COMMUNICATION			
								METHOD	FREQUENCY	LAST	NEXT
Other interested parties											
Vryheid Community	TBC	M	Improve health care to community	No communication yet	Consultation when required Employment	Duration of project	General correspondence	General communicatio n	Ad hoc		
The Vryheid Local Authority	TBC	M	Improve health care to community	No communication yet	Consultation when required Approvals	Duration of project	General correspondence	General communicatio n	Ad hoc		

2.2. ORGANISATIONAL DEVELOPMENT

The specific interventions for Forensic Pathology Services include care, surveillance and investigations. These interventions are rendered through a multidisciplinary approach by medical practitioners, SAPS, etc.

MLM's are managed by professional unit managers, supported by medical staff and support at unit. There is an existing staff establishment; and it must be noted, there is a shortage of critical posts. For effective and efficient management and commissioning of the mortuary additional human resources will be required.

2.2.1. KEY ELEMENTS FOR A SUCCESS

- Prompt and accurate diagnoses
- Guidelines or protocols for clinical management
- Effective advocacy, communication and social mobilisation

2.2.2. STAFFING SITUATION AND ADDITIONAL STAFFING REQUIRED

Table 20: Existing Staff Establishment

STAFF ESTABLISHMENT: VRYHEID MEDICO-LEGAL MORTUARY			
DETAIL	**SERVICE AREA**	**NO OF STAFF**	**RANK OF STAFF**
Medical Service	Medico-Legal Mortuary	1	Medical Officer (Contracted)
Facility Manager and Admin Support	Medico-Legal Mortuary	1 4 5	Assistant Director Level 10 (Vacant) Forensic Pathology Officers Grade 1 Forensic Pathology Officers Grade 2

Table 21: Additional Staff Required

STAFF ESTABLISHMENT: VRYHEID MEDICO-LEGAL MORTUARY					
DETAIL	**SERVICE AREA**	**NO OF STAFF (clinical)**	**RANK OF STAFF**	**NO OF STAFF**	**RANK OF STAFF (non-clinical)**
Medical Service	Medico-Legal Mortuary.	1	Medical Officer	1	
Admin Support.	Medico-Legal Mortuary.	1	Assistant Director Forensic Pathology Officer	1 1	Level 10 Level 5

2.3. CHANGE MANAGEMENT

Change management is a systematic approach to successfully implement changes that this project will bring about. The purpose of change management is to implement steps to effect change, control change and to help people to adapt to the change.

The change Management plan will consist of:

- Preparing the Forensic Pathology Service, District and the Department for the change,
- Developing a plan for the change,
- Implement for the change,
- Entrench the change in the Department.
- Review progress and analyse results.

Change can be a time of exciting opportunity for some and a time of loss, disruption or threat for others. Change is an inherent characteristic of any organisation, all organisations whether in the public or private sector must change to remain relevant. Change can originate from external sources through technological advances, social, political or economic pressures, or it can come from inside the organisation as a management response to a range of issues such as human resource issues or reconfiguration of the infrastructure e.g. construction of the new mortuary. It can affect one small area or the entire organisation. Nevertheless, all change whether from internal or external sources, large or small, involves adopting new mind-sets, processes, practices and behaviour.

Irrespective of the way the change originates, change management is the process of taking a planned and structured approach to help align an organisation with change. In its most simple and effective form, change management involves working with an organisation's stakeholder groups including staff to help them understand what change means for them, helping them make and sustain the transition and working to overcome any resistance. The basic goal of all change management is to secure buy-in to the change, and to align individual behaviour and skill with the change.

Ultimately, the goal of change is to improve organisation by altering how work is done. Change impacts the following four parts of how the organisation operates:

- Processes
- Systems
- Organisational Structure, and
- Job roles

The new mortuary will require the new ways of operating and a common understanding between management and the staff has to be developed. It is therefore important that Change Management Plan be developed and implemented to create a common understating amongst all end users. Staff management plan ensures the organisation has an adequate human capacity to support its post change needs. The plan should also address the issue of redirecting resources in situations where the change

creates a gap in the skills and needs of the Hospital. Planning for change implementation generally involves understanding where the organisation is currently and identifying aspects that need to change in order to take the organisation from its current state to its desired state.

2.4. OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

"The aim of the OHS Act is to provide for the safety and health of persons at work and in connection with the use of plant and machinery. It further provides for the protection of people other than people at work from hazards arising out of or in connection with the activities from people at work."

Source: https://www.labourguide.co.za

A Safety plan will be required from the start of the project and must be managed and reported on a monthly basis. The following minimum Occupation Health and Safety requirements is applicable to this project:

- The project must comply with the requirements of the Occupational Health & Safety Act 85 of 1993 and its regulations, an subsequent revisions
- A Construction Work Permit will be required as the current estimated project value is over the stipulated R 40 million.

The following reporting requirements: must be adhered to:

- Employment Contracts for construction staff
- Copies of ID documents
- Half cut photographs of employees
- Proof of daily attendance
- Proof of wage payments

2.5. STATUTORY REQUIREMENTS

2.5.1. LEGISLATION

Legislation: Minimum applicable legislation (latest version) include:

- Inquest Act, (Act 58 of 1959)
- National Health Act, Act 63 of 2003.
- Births and Deaths Registration Act, (Act 51 of 1992.)
- Health Professions Act, (Act 56 of 1974.)
- Health Professions Amendment Act, (Act 29 of 2007.)
- Correctional Services Act, (Act 111 of 1998.)

- Occupational Health and Safety Act, (Act 85 of 1993.)
- Occupational Diseases in Mines and Works Act, (Act 78 of 1973.)
- Public Finance Management Act, (Act 29 of 1999.)
- SANS 10400
- Kwazulu-Natal Planning and Development Act, 2008 (Act No. 06 of 2008) (PDA)

2.5.2. NORMS AND STANDARDS

Minimum applicable Norms and Standards

- National code of guidelines for Forensic Pathology Practice in South Africa.

2.6. SOCIAL IMPACT MANAGEMENT

Social Impact Management covers a wide field but for the purpose of this project the focus is on the following:

2.6.1. EXPANDED PUBLIC WORKS

In the National Development Plan 2030, the EPWP is positioned to contribute to Government's goals of alleviating poverty, developing local communities, providing work opportunities and enhancing social protection. The Department of Health is actively involved in the EPWP programme since 2011.

The project team must develop a plan to manage the EPWP component of this project and have to report as follows:

Table 22: EPWP Requirements

EPWP Minimum Requirement Between	100 Million and above
Reporting	All required
Local Area	South Africa 80% KwaZulu-Natal 60% District Municipality 40% Local Municipality
Branding	Site, Uniform and tender documentation
Recruitment	According to DOPW Recruitment guideline document
PSC	Full PSC, CIDB Guidelines to be followed
CLO	Required
Tender Specification	Required

2.6.2. TARGETED JOB OPPORTUNITIES

Over and above, the project must report on the following:

- No of local people employed
- No of local youth employed
- No of Person days of employment
- No of Woman employed
- No of disabled people employed
- Total payments to local communities
- Total payments to local material suppliers
- Total no of DPI Contractor / Sun-contractor

The report must be done monthly and is not exclusive to contractors.

2.6.3. CAPACITATION

While employment goes a long way, it is also important that the workforce and the team be capacitated. Therefore, the team must report on the following as applicable:

- Project Management training
- Construction Management training
- Financial management training
- Construction skills training HIV/AIDS awareness training
- GBV awareness training

The list above is not inclusive

2.7. GREEN BUILDING DESIGN

The climate of the world is changing and therefore it is crucial that the construction industry as well as Department of Health adapt accordingly.

It is not required to achieve this project achieve a Green Star rating, however it is proposed that the essence of a 4-Star green rating be applied, with specific focus on the following:

- Indoor Environment Quality (IEQ)
- Energy

- Water
- Materials
- Emissions
- Innovation

2.8. HEALTH TECHNOLOGY SERVICES

The Health Technology Unit is responsible for providing a professional, cost effective and safe Clinical Engineering Service to all Health Institutions and Auxiliary Medical Services in the Province of KwaZulu-Natal, in line with the Departmental vision of ensuring quality health-care for all citizens of the Province.

Health Technology covers a wide range of apparatus, consumables, devices, equipment and instruments. Planning and budgeting have to be considered jointly for it to be effective and need to take place within the context of policy, financial, and other constraints.

Based on this information, the Essential Service Packages must be developed into:

- human resource requirements, and training needs;
- space requirements, and facility and service installation needs; and
- equipment requirements.

2.8.1. STANDARD EQUIPMENT LIST

The tool used in the process of defining what equipment is needed for the Maternity and Neonatal unit is a Standard Equipment List. This is:

- a list of equipment typically required for each healthcare intervention (such as a healthcare function, activity, or procedure). This list will show all equipment required organised by activity space or room and by department;
- developed for the relevant level of healthcare delivery
- usually made up of everything including furniture, fittings and fixtures, in order to be useful for planners, architects, engineers and purchasers, and
- a tool which allows healthcare managers to establish if it economically viable.

The Standard Equipment List reflect the level of technology of the equipment and describe only technology that the facility can sustain (in other words, equipment which can be operated and maintained by existing staff, and for which there are adequate resources for its use).

It is important that any equipment listed:

- will fit into the rooms and space to be provided and reference is made to any building norms defining room sizes, flow patterns, and requirements for water, electricity, light levels and so on;
- will indicate the necessary utilities and associated plant (such as the power, water, waste management systems) to be made available for it
- can be operated and maintained by existing staff and skill levels, or for which the necessary training is available and affordable.

The Standard Equipment List is an aid to the planning process. In order to plan what equipment to purchase, awareness of any shortfalls in equipment is needed. To determine such shortfalls, the existing equipment Inventory needs to be compared with the Standard Equipment List. This will indicate whether any equipment is currently missing or needs to be purchased. It will thus assist in determining what equipment, is:

- necessary;
- surplus;
- extravagant; and
- missing

The initial HTS list is below and will be required to be updated and/or revised.

Table 23: Preliminary HTS Equipment list

PHASE 1: PLANNING (PART A)					
SECTION	**ROOM**	**ITEM DESCRIPTION**	**QUANTITY**	**ESTIMATED COST**	
				Per each	**Total**
Office manager	Office manager	Office chairs	1	R3,000.00	R3,000.00
Office manager	Office manager	Visitors chairs	2	R1,000.00	R2,000.00
Office manager	Office manager	Office paper bins	1	R500.00	R500.00
Office manager	Office manager	PC	1	R20,000.00	R20,000.00
Office manager	Office manager	desk printer	1	R20,000.00	R20,000.00
Office manager	Office manager	desk and four chairs	1	R20,000.00	R20,000.00
Office manager	Office manager	Filling cabinets	4	R2,000.00	R8,000.00
Office manager	Office manager	double door cupboard	1	R500.00	R500.00
Office manager	Office manager	White board and notice board	1	R500.00	R500.00
Launderette	Launderette	Washing machine, 10kg	1	R10,000.00	R10,000.00
Cleaners room	Cleaners room	Polishers	1	R5,000.00	R5,000.00
Cleaners room	Cleaners room	Cleaning trolley, Jolliy trolley	1	R2,000.00	R2,000.00

Reception / waiting	Reception / waiting	waiting chairs, 20	1	R20,000.00	R20,000.00
Reception / waiting	Reception / waiting	White board and notice board	1	R1,000.00	R1,000.00
Reception office	Reception office	Office chairs	1	R3,000.00	R3,000.00
Reception office	Reception office	Office paper bins	2	R500.00	R1,000.00
Reception office	Reception office	Visitors chairs	2	R1,000.00	R2,000.00
Kitchenette	Kitchenette	Domestic microwave	1	R1,800.00	R1,800.00
Kitchenette	Kitchenette	Domestic fridge/ freezer	1	R4,000.00	R4,000.00
Kitchenette	Kitchenette	kitchen utensils	1	R5,000.00	R5,000.00
Kitchenette	Kitchenette	Bread bin	1	R200.00	R200.00
Kitchenette	Kitchenette	Toaster	1	R500.00	R500.00
Kitchenette	Kitchenette	Snack witch	1	R500.00	R500.00
Kitchenette	Kitchenette	Domestic kettle	2	R200.00	R400.00
Kitchenette	Kitchenette	Dining table and chairs	2	R10,000.00	R20,000.00
Kitchenette	Kitchenette	lazy boy	2	R10,000.00	R20,000.00
Office clerks	Office clerks	Office chairs	4	R3,000.00	R12,000.00
Office clerks	Office clerks	Visitors chairs	2	R1,000.00	R2,000.00
Office clerks	Office clerks	Office paper bins	4	R500.00	R2,000.00
Office clerks	Office clerks	PC	4	R20,000.00	R80,000.00
Office clerks	Office clerks	Printer, share	1	R100.00	R100.00
Office clerks	Office clerks	Filling cabinets	4	R2,000.00	R8,000.00
Office clerks	Office clerks	double door cupboard	1	R500.00	R500.00
Office clerks	Office clerks	White board and notice board	1	R500.00	R500.00
Meeting room	Meeting room	Projector complete with screen	1	R5,000.00	R5,000.00
Meeting room	Meeting room	Meeting table and 20 chairs	1	R20,000.00	R20,000.00
Counselling room	Counselling room	Visitors chairs	20	R2,000.00	R40,000.00
Counselling room	Counselling room	desk and four chairs	20	R2,500.00	R50,000.00
Counselling room	Counselling room	Office paper bins	1	R14,000.00	R14,000.00
Counselling room	Counselling room	Filling cabinets	1	R8,000.00	R8,000.00
Public toilets	Public toilets	toilet brush and holder	15	R200.00	R3,000.00
Reception/entrance	Reception/entrance	Office chairs	1	R1,000.00	R1,000.00
Reception/entrance	Reception/entrance	Office paper bins	1	R500.00	R500.00

Autopsy area	Autopsy area	Autopsy drill	1	R20,000.00	R20,000.00
Autopsy area	Autopsy area	C-arm	1	R2,000,000.00	R2,000,000.00
Curtains	Curtains	Curtains	1	R 500,000.00	R500,000.00
Autopsy area	Autopsy area	Handle blue PM40	10	R200.00	R2,000.00
Autopsy area	Autopsy area	(box of 10)	100	R200.00	R20,000.00
Autopsy area	Autopsy area	Swann-Moton Scalpes Handle	20	R200.00	R4,000.00
Autopsy area	Autopsy area	Organ Knife	10	R200.00	R2,000.00
Autopsy area	Autopsy area	brain Knife	10	R200.00	R2,000.00
Autopsy area	Autopsy area	Large Organ Scissors Straight Blunt/blunt 10"/255mm	10	R200.00	R2,000.00
Autopsy area	Autopsy area	Straibismus-Straight 4.5'/114mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Metzenbaum- Straight 4.5"/114mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Metzenbaum- Straight 7.5"/190mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Bowel Guarded points 7.5"/195mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Dissecting - Open Shank Sharp/probe 5"/127mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Iris - Straight 4.5"/114mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Forceps Ramseys - 1x2 teeth 7"/177mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Forceps Trevess - 1x2 teeth 7"/177mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Spencer Well Artery Forceps- Straight 7"/177mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Spencer Well Artery Forceps- Curverd 7"/177mm	1	R200.00	R200.00

Autopsy area	Autopsy area	Dura Mater Stripping Forceps-Straight	1	R200.00	R200.00
Autopsy area	Autopsy area	Rib Shears- Eslander 8.25"/215mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Rib Shears- Pollocks 12.25"/311mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Forceps Bone Holding - Ferguson 8"/203mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Forceps Bone Cutting - Straight 9"/228mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Horsley Compound Action - Straight 10.5"/266mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Chisel - Straight 1"/25mm	1	R200.00	R200.00
Autopsy area	Autopsy area	Chisel - T Shape Standard	1	R200.00	R200.00
Autopsy area	Autopsy area	Mallets - Army Pattern	1	R200.00	R200.00
Autopsy area	Autopsy area	Ladle - Stainless steel 3"/76mm dia	1	R200.00	R200.00
Autopsy area	Autopsy area	Chain- mail clove single small	1	R200.00	R200.00
Autopsy area	Autopsy area	Chain- mail clove single Medium	1	R200.00	R200.00
Autopsy area	Autopsy area	Chain- mail clove single Large	1	R200.00	R200.00
The first-aid box	The first-aid box	Instruction sheet giving general guidance	1	R200.00	R200.00
The first-aid box	The first-aid box	Individually-wrapped sterile adhesive dressings in a variety of sizes	1	R200.00	R200.00
The first-aid box	The first-aid box	Sterile eye-pads with attachment bandages	1	R200.00	R200.00
The first-aid box	The first-aid box	Triangular bandages	1	R200.00	R200.00
The first-aid box	The first-aid box	Sterile wound coverings	1	R200.00	R200.00

The first-aid box	The first-aid box	Safety pins	1	R200.00	R200.00
The first-aid box	The first-aid box	A selection of sterile but unmedicated wound dressings	1	R200.00	R200.00
The first-aid box	The first-aid box	An authoritative first-aid manual, e.g. one issued by the International Red Cross	1	R200.00	R200.00
The first-aid box	The first-aid box	Several pairs and varieties of forceps including a pair of 8 inch curved artery forceps for stripping the dura, as well as an 8 inch toothed tissue forceps;	1	R200.00	R200.00
The first-aid box	The first-aid box	Tooth retractor;	4	R200.00	R800.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	· · Long and short handled scissors (blunt tipped), including 6 inch and 8 inch Mayo Scissors as well as 8 inch enterotomy scissor with hook;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	1 Pair of nail-cutting scissors;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Rib shears;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Bone nibbler;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Scalpel handle and -blades;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Dissection knife and PM 40(B) handle and -blades;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Skull key;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	1 Coronet;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Brain knife;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Power operated oscillating saw with vacuum extractor;	1	R20,000.00	R20,000.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Hand saw;	1	R20,000.00	R20,000.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	30cm Carbon steel ruler;	1	R200.00	R200.00

Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	1 X 2 metre stainless steel/aluminium etched T-ruler.	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	500ml and 1000ml stainless steel measuring jug;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	2 Large rectangular stainless steel organ trays;	2	R200.00	R400.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	1 Round stainless steel organ basin;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Mallet and bone chisel;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	5 Post mortem curved needles and needle holders;	5	R200.00	R1,000.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	30cm stainless steel probes;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	50cm stainless steel probes;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Knife-sharpener;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Stainless steel ladle;	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Head rest.	1	R200.00	R200.00
Forensic Pathology Officer kit:	Forensic Pathology Officer kit:	Lockable instrument case	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Several pairs and varieties of forceps including a pair of 8 inch curved artery forceps for stripping the dura, as well as an 8 inch toothed tissue forceps and 6 inch toothless forceps;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	4-Tooth retractor;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Long and short handled scissors (blunt tipped), including 6 inch and 8 inch Mayo Scissors as well as bowel scissors and 1 pair of coronary artery scissors;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	1 Pair of nail-cutting scissors;	1	R200.00	R200.00

basic authorised person's kit:	basic authorised person's kit:	Rib shears;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Bone nibbler;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Scalpel handle and -blades;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Dissection knife and PM 40(B) handle and -blades;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Brain knife;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Knife sharpener;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	30 cm Carbon steel ruler;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Photographic rulers;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	1 Vernier callipers;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	1 Speculum;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	1 Hand lens;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	3 metre steel retractable tape measure;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	500ml stainless steel measuring jug;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	1000ml stainless steel measuring jug;	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	30cmstainless steel probes.	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	50cm stainless steel probes.	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Lockable instrument case	1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:		1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:		1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:		1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:		1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:		1	R200.00	R200.00
basic authorised person's kit:	basic authorised person's kit:	Curtains	1	R200.00	R200.00
			TOTAL	**R2,800,600.00**	**R3,027,500.00**

2.8.2. HEALTH TECHNOLOGY SERVICES IN THE CONTRACT

A full list of HTS requirements will be developed and items that need to be included in the contract will be identified.

2.9. COMPARATIVE EXAMPLES

2.9.1. Fort Napier M6 Medico-Legal Mortuary.

It is a much larger facility than required for this project. Older DoH Standard drawings are available although they should be completely re-visited however, many specifications can be applied.

Drawings of facility, drawings of equipment, photos and a site visit can be arranged.

2.9.2. Dundee M2 Medico-Legal Mortuary.

It is a similar facility to the required one for this project and is generally quite functional. Older DoH Standard drawings are available although they should be completely re-visited however, many specifications can be applied.

Drawings of facility, drawings of equipment, photos and a site visit can be arranged.

2.10. PROPOSED SCHEDULE OF ACCOMMODATION

The following is an estimated requirement and must be verified and adjust as required.

Table 24: Proposed schedule of accommodation

DESCRIPTION	NO OF	FUNCTION	ROOM SIZE (SQ.M)	REMARKS / NARRATIVE
External Area / Ancillary / Support areas				
Site entrance security / Guard Hut	1	Security control	25	
Public Parking	20	Public Parking	312	
Staff Parking	5	Staff Parking	78	
Official Vehicle Parking	8	Official Vehicle Parking	125	
Vehicle Wash Bay	1		30	
Generator	1	Generator plinth	13	
Domestic Waste area	1	Designated waste area	6	
Plant Rooms				
HVAC Plant Room	1	To house HVAC Plant. Allow for maintenance.	25	
Cold room Plant Room	1	To house HVAC Plant. Allow for maintenance. (12 bodies)	35	
Freezer Room Plant	1	To house HVAC Plant. Allow for maintenance. (12 bodies)	15	

DESCRIPTION	NO OF	FUNCTION	ROOM SIZE (SQ.M)	REMARKS / NARRATIVE
External Area / Ancillary / Support areas				
Receiving / Collection				
Entrance Yard	1		127	
Medical Waste area	1		3	
Body Receiving area	1		50	
Trolley wash area	1		20	
Operational Staff Rest Room	1		20	
Male Toilets	1		10	SANS 10400
Female Toilets	1		10	SANS 10400
Laundry	1		18	
General Store	1		10	
Registration Office	1		12	
Receiving Lobby	1		36	
Weigh-in / Measuring	1		10	
Personal Belongings	1		8	
X-Ray Suite – C-Arm	1		45	
Cleaners Store	1		6	
Freezer Room (Decomposed Bodies)	1		15 (12 Bodies)	
Body view cubicle	2		3	
Autopsy Area				
Main Autopsy area	1		110	
Scribes / viewing area (Autopsy)	1		15	
Reconstruction Area	1		26	
Cleaners Store	1		6	
Dirty Laundry	1		2	
Boot wash area	1		4	
Cold Room for 72 Body Storage	1		90	
Public Area				
Reception	1		12	
Waiting	1		15	
Public Toilets Male Female Disabled	1 1 1 1		 7 7 4	
Interview Room	1		12	
Counselling Office	1		16	
Facility Managers Office	1		12	
SAPS Office	1		12	
Identification Room	1		3	
Identification / Bier Room	1		16	
Strong Room / Death Certificates	1		10	

DESCRIPTION	NO OF	FUNCTION	ROOM SIZE (SQ.M)	REMARKS / NARRATIVE
External Area / Ancillary / Support areas				
IT Hub Room	1		1	
Admin Office	1		12	
MLM Staff Only Area				
Admin Staff Rest Room/ Boardroom/ Training Room	1	To accommodate staff compliment	15	
Pathologist Office	1		16	
Records Room	1		10	
General Store Room	1		10	
Clothing Store Room	1		5	
Staff Toilets:			10	SANS 10400
Male	1		7	
Female	1		7	
Change Rooms: Male Female	 1 1		20 10 10	SANS 10400
Cleaners Room	1		20	
Estimated Total			**948**	

ACKNOWLEDGEMENTS

Stakeholder	Authority	Contact Person
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PART D – SIGNATURES

Signatories

The following Facilities, Programmes and their Managers, Directors or Leaders have been fully advised and have read and understood the contents of this document.

Name: K. J. BENTLEY

Designation: ACTING DIRECTOR: FORENSIC PATHOLOGY SERVICES

Date: 23 MAY 2023

Signature:

Name:

Designation

Date:

Signature:

Name:

Designation

Date:

Signature: