



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

DUE AT 11:00 ON

(CLOSING DATE: 04 APRIL 2023)

BID DWS25 0223 WTE

**MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING
CONSTRUCTION OF 16 HOUSES OF 100M2 AND 1 OF 40M2 AREA
CONTRACT PERIOD: 10 MONTHS**

CIDB CONTRACTOR GRADING DESIGNATION OF 7GB OR HIGHER

SUBMIT BID DOCUMENTS TO:

POSTAL ADDRESS:
DIRECTOR-GENERAL: WATER AND SANITATION
PRIVATE BAG X313
PRETORIA, 0001

OR

TO BE DEPOSITED IN:
THE BID BOX AT THE ENTRANCE
OF ZWAMADAKA BUILDING
157 FRANCIS BAARD STREET
PRETORIA, 0002

Compulsory briefing session

Date: 07 March 2023

Time: 11:00am

Venue: Oakford Village Agricultural Hub, Oakford Road, Osindisweni, Iqadi, Durban, KZN

GPS Coordinates: -29.5585074, 31.0165372

BIDDER: (Company address and stamp)

COMPILED BY:
Chief Directorate: Infrastructure Development (Capital Projects)
Department of Water and Sanitation
4th Floor, Sedibeng Building, Francis Baard Street
Pretoria
0002

PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	DWS25 0223 WTE	CLOSING DATE:	04 April 2023	CLOSING TIME:	11H00
DESCRIPTION	Mdloti River Development: Hazelmere Dam Raising - Construction of 16 houses of 100m2 and 1 of 40m2 area. CIDB contractor grading designation of 7GB or higher				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
THE BID BOX AT THE ENTRANCE OF ZWAMADAKA BUILDING					
157 FRANCIS BAARD STREET					
PRETORIA , 0001					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON			CONTACT PERSON	Antony Bhasopo	
TELEPHONE NUMBER	012 336-6562 /7780 / 8241 / 7596		TELEPHONE NUMBER	012 336 8962	
FACSIMILE NUMBER			FACSIMILE NUMBER		
E-MAIL ADDRESS	BidenquiriesWTE@dws.gov.za		E-MAIL ADDRESS	BhasopoA@dws.gov.za	
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] ☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX] ☐ Yes ☐ No
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?		☐ Yes ☐ No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				☐ YES ☐ NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?				☐ YES ☐ NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				☐ YES ☐ NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				☐ YES ☐ NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				☐ YES ☐ NO	
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:
(Proof of authority must be submitted e.g. company resolution)

DATE:

TENDER NO: DWS25 0223 WTE**MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING
CONSTRUCTION OF 16 HOUSES OF 100M² AND 1 OF 40M² AREA****TABLE OF CONTENTS**

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TENDER SECURITY

TENDER SECURITY

TENDER NO: DWS25 0223 WTE

**Mdloti River Development: Hazelmere Dam Raising
Construction of 16 houses of 100m² and 1 of 40m² area**

to be provided to:

The Director General
Department of Water and Sanitation
ZwaMadaka Building
157 Francis Baard Street
PRETORIA
0002

(hereinafter called "the Employer") and

Whereas

(hereinafter called "the Tenderer")

has been invited by the **Department of Water and Sanitation (DWS)** to submit a tender for the execution of **Contract No. DWS25 0223 WTE: Mdloti River Development: Hazelmere Dam Raising - Construction of 16 houses of 100m² and 1 of 40m² area** (hereinafter called "the Works") and to submit the same for consideration of the Employer.

And whereas the Tenderer proposes to submit to the Employer a tender (hereinafter called "the Tender") in accordance with such invitation;

We, the undersigned

..... and
(Name 1) (Name 2)

acting herein in our respective capacities as

..... and
(Position 1) (Position 2)

Of.....
(Bank/Financial Institution)

(hereinafter called "the Bank/Financial Institution") and being duly authorised to sign and incur obligations in the name of the Bank/Financial Institution under and in terms of a Resolution of the Board of Directors of the Bank/Financial Institution, a notarised certified copy of which is annexed hereto, hereby irrevocably and unconditionally guarantee and undertake on behalf of the Bank/Financial Institution that:

1. The Bank/Financial Institution will:
 - 1.1 Pay to the Employer within 28 days of receipt of the Employer's first written demand and without proof of any breach of the Tender conditions by the Tenderer an amount not exceeding the sum of R300 000-00 (Three Hundred Thousand Rand); and
 - 1.2 Make such payment to the Employer at an address designated by the Employer for this purpose.
2. If the Tender is either:
 - 2.1 Accepted by the Employer within 90days from the date fixed for the receipt of the Tender or within such extended duration as may be agreed in writing between the Tenderer, the Bank/Financial Institution and the Employer, and the Tenderer has provided a Performance Security in accordance with its undertaking in Clause 4.2 of the Conditions of Contract respectively; or
 - 2.2 Not accepted by the Employer within 90days from the date fixed for the receipt of the Tender or within such extended duration as may be agreed in writing between the Tenderer, the Bank/Financial Institution and the Employer, or if before the expiration of that period of 90 days or such extended duration, a tender from another person for the execution of the works shall have been accepted by the Employer, then this Guarantee shall become null and void.
3. The demand for payment together with this guarantee shall constitute conclusive proof of the Bank/Financial Institution's indebtedness hereunder for the purposes of any proceedings including but not limited to provisional sentence proceedings instituted against the Bank/Financial Institution in any Court of Law having jurisdiction.
4. Neither the failure of the Employer to enforce strict or substantial compliance by the Tenderer with his obligations nor any act, conduct, or omission by the Employer will discharge the Bank/Financial Institution from any liability under this guarantee.
5. The guarantee shall:
 - 5.1 Exist independently of any contract (or any amendment, variation or novation thereof) between the Tenderer and the Employer;
 - 5.2 Be returned to the Tenderer on expiry or on its becoming null and void in accordance with Clause 2 above;
 - 5.3 Not be ceded or assigned by the Employer, or otherwise dealt with in any manner whatsoever which has or may have the effect of transferring or encumbering or alienating the Employer's rights hereunder; and
 - 5.4 Are deemed to have been made in Republic of South Africa and to be governed and construed by and in accordance with the laws of the Republic of South Africa to the jurisdiction of whose Court the Bank/Financial Institution irrevocably submits itself. The submission to such jurisdiction shall not (and shall not be construed so as to) limit the right of the Employer to take proceedings against the Bank/Financial Institution in any other court of competent jurisdiction nor shall the taking of proceedings in any one or more jurisdictions against the Bank/Financial Institution preclude the taking of proceedings against the Bank/Financial Institution in any other jurisdiction whether concurrently or not.
6. The Bank / Financial Institution having no presence within the jurisdiction of the South Africa Court hereby agrees that service on its correspondent Bank/Financial Institution (insert name of Bank / Financial Institution at an address in South Africa) shall constitute effective service on the Bank / Financial Institution.

SIGNED ON THIS..... DAY OF..... 20.....

AT
(Place)

..... and
(Signature 1) (Signature 2)

AS WITNESSES:

1. 2.

Attachment: Resolution of Board of Directors (Certified Copy)

LOCALITY PLAN



Figure 1.4.1: Location of Hazelmere Dam showing surrounding towns

TENDER NO: DWS25 0223 WTE

**Mdloti River Development: Hazelmere Dam Raising –
Construction of 16 houses of 100m² and 1 of 40m² area**

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C3 Scope of work

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C4 Site Information



Department of Water and Sanitation (DWS)

TENDER NO: DWS25 0223 WTE

Mdloti River Development: Hazelmere Dam Raising - Construction of 16 houses of 100m² and 1 of 40m² area

T1.1 Tender Notice and Invitation to Tender

The Department of Water and Sanitation (DWS) invites tenders, experienced in Engineer, Procure and Construct (EPC) contract for Mdloti River Development: Hazelmere Dam Raising - for the construction of Dam Operation Offices and storage facilities. The duration of the project is 8 months inclusive of design and construction works

It is estimated that the tenderers must have CIDB contractor grading designations from 7GB or Higher

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (August 2019) as published in Government Gazette No 42622, Board Notice 423 08 August 2019.

It is responsibility of the bidder to make sure that all the returnable documents and schedules as indicated in section Part T2 Returnable documents are up to date when submitting the bid.

The tenders will be evaluated for functionality, price and preference. Evaluation for preference and price will be 80/20 Preference Point system where a maximum of eighty (80) points will be awarded for price and twenty (20) points will be awarded for specific goals.

Queries relating to this tender may be addressed to:

Bidding procedure enquiries:	Technical enquiries:
Bidenquirieswte@dws.gov.za	Mr Antony Bhasopo Telephone: 012 336 8962 E-mail: Bhasopoa@dws.gov.za

Enquiries shall be sent within 7 (seven) calendar days after the compulsory briefing session during office hours only (between 8:00 to 16:30 hours on working days). Please note that response(s) to enquiries will be communicated only to those tenderers who would have made enquiries. Therefore, it is a responsibility of tenderers or their representatives to ensure that their emails were received by making telephonic enquiries.

A compulsory Clarification Meeting with representatives of the Employer will be held on **07 March 2023** starting at 11h00. The venue will be Oakford Village Agricultural Hub, Oakford, Oakfield Priority Street, Osindisweni, Iqadi Durban, KZN

The closing time for receipt of tenders is **11:00** am on **04 April 2023**. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted.

Tenders must only be submitted on the tender documentation that is issued.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

Issued by:

**Director-General
Department of Water and Sanitation**

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (August 2019) as published Board Notice 423 of 2019 in Government Gazette No 42622 of 08 August 2019.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

SANS 10845-3 makes several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the provisions of SANS 10845-3.

EVALUATION CRITERIA

Bids will be evaluated in accordance with the Preferential Procurement Regulations, 2022, using 80/20 preference points system as prescribed in the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000). The lowest acceptable bid will score 80 points for price and a maximum of 20 points will be awarded for specific goals. Bids received will be evaluated on the four (4) phases namely **Mandatory requirements, Administrative Compliance, Technical Evaluation, Price and Preference Points Claimed**.

Phase 1: Mandatory requirements

Failure to submit any of the documents listed below will render your bid non-responsive and will be disqualified.

Yes - list the relevant documents required on the table below

No	Criteria	Yes	No
1	Attendance of compulsory briefing session (Certificate of Attendance)		
2	Proof of registration with CIDB grading with a grading of 7 GB or higher		

Phase 2: Administrative Compliance:

Bidders are required to comply with the following listed below

No	Criteria	Yes	No
1	Companies must be registered with National Treasury's Central Supplier Database. Provide MAAA number on SBD1		
2	Tax compliance status pin code (to be verified through CSD or SARS)		
3	A valid letter of Good Standing with the Compensation Commissioner in terms of the Compensation for Occupational Injuries and Diseases Act No 130 of 1993 either from "Federated Employers Mutual Assurance (FEMA) and Compensation Fund "Department of Labour		
4	The bid must be signed by a director of the company or a duly authorised person, and proof of such authority must be submitted with the bid.		
5	A certified copy of B-BBEE Status Level Verification Certificate (failure to submit, the Bidder will forfeit the preferential points to be claimed)		
6	Complete, sign and submit SBD 1, SBD3.2 SBD 4, SBD 6.1		

Phase 3: Technical Evaluation

Important: These Technical Evaluation Criteria will be used by the Evaluator to score Tenderers. It is only provided to guide Tenderers during preparation of the Tender and should not be completed as part of the Tender submission.

Only tenderers who score a minimum of 70% for technical ability will be evaluated further on the basis of Price and Preference Points system

Table 1: Technical Evaluation Criteria

Technical Evaluation Criteria			Points	Tenderer's Score
1.	EVALUATION CRITERIA – TECHNICAL			
1.1	Personnel Capabilities (Form H)		30	
	Qualification and experience of the following key personnel to be indicated by the Tenderer (reference is made to the organogram) and CV's provided. <i>Note: Design and Construction of the offices</i>			
1.1.1	Functionality Criteria	Weighting and points		
1.1.1.1	Key Personnel Construction: Qualifications - Projects Implementation Experience - Construction Experience	Contracts Manager (weight = 5) : Must be professionally registered with ECSA and / or SACPCMP (Pr Eng / Pr Tech Eng / Pr Techni / Pr CPM or Pr CM only) Years of relevant experience - calculated post qualification:		

Technical Evaluation Criteria			Points	Tenderer's Score
		5 years and above = 5 4 years = 4 3 years = 3 2 years = 2 1 years = 1 No CV or qualification and relevant experience = 0		
		Construction Manager (senior site agent) (weight = 5): Must be professionally registered with ECSA and / or SACPCMP (Pr Eng / Pr Tech Eng / Pr Techni / Pr CPM or Pr CM only) Years of relevant experience - calculated post qualification: 5 years and above = 5 4 years = 4 3 years = 3 2 years = 2 1 years = 1 No CV or qualification and relevant experience = 0		
		Quantity Surveyor (weight = 5): Must be registered with SACQSP Years of relevant experience - calculated post qualification: 5 years and above = 5 4 years = 4 3 years = 3 2 years = 2 1 years = 1 No CV or qualification and relevant experience = 0		
1.1.1.2	Key Personnel Engineering: Qualifications Projects Implementation Experience Design Experience relevant to the scope of works	Design Civil / Structural Engineer (weight = 5): Must be registered with ECSA (Pr Eng / Pr Tech Eng) Years of relevant experience - calculated post qualification: 5 years and above = 5 4 years = 4 3 years = 3 2 years = 2 1 years = 1 No CV or qualification and relevant experience = 0		

Technical Evaluation Criteria			Points	Tenderer's Score
		Architect (weight = 5): Must be registered with SACAP Years of relevant experience - calculated post qualification: 5 years and above = 5 4 years = 4 3 years = 3 2 years = 2 1 years = 1 No CV or qualification and relevant experience = 0		
		Resident Engineer (Employer's Agent representative) (weight = 5): Must be registered with ECSA (Pr Eng / Pr Tech Eng) Years of relevant experience - calculated post qualification: 5 years and above = 5 4 years = 4 3 years = 3 2 years = 2 1 years = 1 No CV or qualification and relevant experience = 0		
	Note: All personnel to be in employ of the bidding enterprise or letter of intent for personnel outside the employ of the bidding enterprise to be included with CV. Bidding with multiple enterprises will not be allowed. The Department will disregard all experience of duplicated personnel. The Department reserve the right to assess the functionality ongoing to ensure compliance. The Department must be apprised immediately if there is any change to the personnel identified in the tender document. Failure to comply with this requirement shall lead to contract termination. Any replacement must have equal or higher experience.			
1.2	Equipment Capabilities (Form I)		10	
1.2.1	Capability to meet the construction equipment and facilities requirements for a project of this size and nature. (weight = 10)			
1.2.2	Minimum equipment required (owned or to be hired refer to Form I under returnable documents) • 1 x TLB • 1 x Water trucks • 2 x Surface Plate Vibrator • 2 x Concrete mixer • 2 x Vibratory Rammer • 1 x Tipper truck 2 x Service truck			

Technical Evaluation Criteria			Points	Tenderer's Score
1.2.3	100% and above of Equipment on the list 80-99% of Equipment on the list 60-79% of Equipment on the list 40-59% of Equipment on the list 39% and below of Equipment on the list	(10) (8) (6) (4) (2)		
1.3	Experience of Tenderer (Form J)		30	
1.3.1	Tenderers Relevant Experience:	List number of completed projects.		
1.3.1.1	<i>(Construction and Engineering) Previous Similar Projects</i> <i>The evaluation will consider the nature of the reference projects, scope of services provided, and Employer/ Client completion certificate.</i> <i>Appointment letters, Final Completion Certificates and Reference Letters to be provided with contact details of references. Projects completed older than 15 years will not be considered as proof of experience.</i> <i>NOTE: a bidder may tender as a Joint Venture/ Consortium or Single Entity. If it's a Single Entity bidder must provide evidence for engineering and construction experience as illustrated within the table on the right</i>	ENGINEERING EXPERIENCE (PSP experience if part of the JV/Consortium) (weight = 15): Appointment Letters and Reference Letters for 5 projects and above = 15 Appointment Letters and Reference Letters for 4 projects = 12 Appointment Letters and Reference Letters for 3 projects = 9 Appointment Letters and Reference Letters for 2 projects = 6 Appointment Letters and Reference Letters for 1 project = 3 Appointment Letters and Reference Letters for 0 projects = 0 CONSTRUCTION EXPERIENCE (Contractor experience if part of the JV/ Consortium) (weight = 15): Appointment Letters and Final Completion Certificates for 5 projects and above = 15 Appointment Letters and Final Completion Certificates for 4 projects = 12 Appointment Letters and Final Completion Certificates for 3 projects = 9 Appointment Letters and Final Completion Certificates for 2 projects = 6 Appointment Letters and Final Completion Certificates for 1 project = 3 Appointment Letters and Final Completion Certificates for 0 projects = 0		
1.4	Technical proposal		30	
1.4.1	Points will be awarded for the Contractor's Technical proposal (Form K)			

Technical Evaluation Criteria			Points	Tenderer's Score
	Proposed Approach and Methodology must include the following: Covering the whole project Lifecycle and meet all the technical and legal requirements (level of detail as per ECSA and FIDPM requirements as well as DWS standards and policies): • Project Approach • Relevant specialist's studies • Preliminary design • Detailed Design Development • Design documentation • Establishment (office and equipment) • Contract administration and execution of works • Performance indicators reporting • Management of quality • Management of time, (Programme of Works) • Management of budget (Cash Flow) • Construction regulations to OHS act • Environmental management and compliance • Subcontractor development and training • Handover • Close-out	The scoring for the Proposed Approach and Methodology is as follows: Weighting = 15 Points will be allocated as follows: Detailed technical approach and methodology that is aligned to the scope of work and covers all 15 elements = 15 Detailed technical approach and methodology that is aligned to the scope of work and covers 11 to 15 elements = 12 Detailed technical approach and methodology that is aligned to the scope of work and covers 7 to 10 elements = 9 Detailed technical approach and methodology that is aligned to the scope of work and covers 4 to 6 elements = 6 Detailed technical approach and methodology that is aligned to the scope of work and covers 1 to 3 elements = 3 No submission or irrelevant information provided = 0		
	TOTAL SCORE		100	

Phase 4: Evaluation of Price and Preference Points Claimed:

During this phase, bids that passed the phase three will be further evaluated based on the 80/20 preference points system in accordance with the PPPFA Act, where 80 points will be attained in respect of price and the maximum of 20 points will be awarded to a tenderer for the specific goals as follows:

- Who are women= 5 points
- Who has a disability= 5 points
- Who is a youth= 5 points
- Location enterprise (local equals province)= 2 points
- B-BBEE status level contributors from level 1 to 2 which are QSE or EME= 3 points

The definition and measurement of the goals above will be as follows:

- **Women, disability and youth**

This will be measured by calculating the pro-rata percentage of ownership of the bidding company which meets this criterion

- **Location of the enterprise**

Local equals province. Where a project cuts across more than one province, the bidder may be located in any of the relevant provinces to obtain the points

- **B-BBEE status level contributors from level 1 to 2 which are QSE or EME**

Measured in terms of B-BBEE requirements

Documents requirements for verification of Points allocation:

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

Procurement Requirement	Required Proof Documents
Women	Full CSD Report
Disability	Full CSD Report
Youth	Full CSD Report
Location	Full CSD Report
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	Valid certificate/ sworn affidavit Consolidated BEE certificate in cases of Joint Venture Full CSD Report

STANDARD CONDITIONS OF TENDER

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (August 2019) as published Board Notice 423 of 2019 in Government Gazette No 42622 of 08 August 2019.

Clause number	Tender Data
C.1.1	The employer is the Department of Water and Sanitation
C.1.2	The tender documents issued by the employer comprise the documents listed on the contents page
C.1.4	The employer's agent is: Name: Chief Directorate: Infrastructure Development – Department of Water and Sanitation Physical Address: 185 Francis Baard Street, Pretoria, 0001 Telephone: 012 336 8962 Email: bhasopoa@dws.gov.za
C.1.4	The language for communications is English

C.2.1	Only those tenderers who are registered (as “Active”) with the CIDB, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 7GB & higher class of construction work, or higher, are eligible to have their tenders evaluated. Joint ventures are eligible to submit tenders provided that: (a) Every member of the joint venture is registered (as “Active”) with the CIDB. (b) The lead partner has a contractor grading designation in the 6GB and Higher class of construction work and has a grading designation of not lower than one level below the required grading designation. (c) The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations (2013) is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 6GB and higher class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. The contractor shall achieve in the performance of the contract the Contract Skills Development Goal (CSDG) established in the Standard for Developing Skills through Infrastructure Contracts (published in GN 43495 of 3 July 2020). The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the CIDB Standard for Indirect Targeting for Enterprise Development through Construction works Contracts Gazette Notice No.36190 of 25 February 2013
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C.2.7	Compulsory Briefing Session and Site Inspection: Venue: Oakford Village Agricultural Hub Oakford Oakfield Priority Street Osindisweni, Iqadi KZN Coordinate: -29.5585074, 31.0165372 Date: 07 March 2023 Time: 11H00 Note: Bidders should confirm number of attendees at least 2 full working days in advance to: Name: Mr Bhasopo Antony Telephone: 012 336 8962 e-mail address: Bhasopoa@dws.gov.za Following an initial briefing to be held at Agricultural Hub Oakford, the proceedings will move to the Dam office site located adjacent to the dam. Prospective bidders shall be present for the full duration of the tender briefing and site inspection. The doors of the venue will be closed at 10:00 and no late arrivals will be permitted access. Bidders are accordingly advised to arrive early. All prospective Tenderers will be expected to provide their own transport to the site. The certificate of attendance (Returnable Form A) must be signed by the Employer's representative at both locations.
C.2.12	No alternative tender offers will be considered
C.2.13.5	The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are: Location of tender box: Ground Floor, Zwamadaka Building Physical address: Department of Water and Sanitation Entrance of Zwamadaka Building, 157 Francis Baard Street, Pretoria, 0002 Postal Address: Director General: Department of Water and Sanitation Private Bag X 313 Pretoria, 0001
C.2.15	Tenderers should ensure that the employer receives the bid offer at the address specified in the bid data not later than the closing time stated in the bid data.

C.2.13.5	Tender documents shall be submitted Sealed, the original and each copy of the tender document as separate packages marking the packages as "ORIGINAL" and "COPY".
C.2.13.	The tenderer is required to meet the following conditions in addition to the requirement for eligibility criteria as mentioned in Clause C.2.1.: (a) All declaration pages fully completed signed and submitted. (b) The tender documents completed in all respect, signed off by the authorised person of the tenderer wherever spaces are provided in permanent ink. (c) None of the documents have correction fluid on them. Any wrong entry, in case of correcting, stroked out by a single stroke and initialled by the Authorised signatory (d) The tender documents issued by DWS are not tampered with and the content remains unchanged. (e) Tenderers (including each member of joint venture or consortium or partnership agreement) must submit proof of registration with the National Treasury's Central Supplier Database (CSD). The CSD registration report must indicate but not limited to: Supplier Identification, Supplier Contact Information, Supplier Address, Supplier Bank Account, Tax Information and Company Directors). (f) The tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; (g) The tenderer has not: • Abused the Employer's Supply Chain Management System; or • Failed to perform on any previous contract and has been given a written notice to this effect; (h) The tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process; (i) The tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; (j) The employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
C.13.7	Seal the original tender document and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
C.2.13.9	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
C.3.4.1	Tenders will be opened immediately in the presence of tenderers who choose to attend at the time and place stated in the tender data.
C.2.16	The tender offer validity period is 90 days exclusive of closing date.
C.3.1.1	The employer will respond to requests for clarification received up to 5 working days before the tender closing time.

C.3.2	The employer shall issue addenda until 3 working days before tender closing time.
C.1.5	The employer reserve the right to cancel the tender
5.4	The time and location for opening of the Tender offers are as detailed in the Tender notice and invitation to tender (ref: T1.1) or in any addendum thereafter if applicable.
5.11.1	The financial offer will be reduced to a comparative basis using the Tender Assessment Schedule.
C.3.11	The procedure for the evaluation of responsive tenders is two methods of preference point system. One method will apply to scope of work that is less than R50,000,000 and the other method will apply to scope of work that is more than R50,000,000. The 80/20 preference points system will be used where the financial value (incl. VAT) of one or more responsive tender offers has a value that equals or is less than R 50,000,000. The 90/10 preference points system will be used where the financial value (incl. VAT) of all responsive tenders received have a value in excess of R50, 000,000. The Tenderer will be required to appoint Sub-Contractor from a list of Sub-Contractors identified Project Liaison Committee (PLC) and signed off by the Ward Councillor. The Tenderer will be required to provide a minimum Contract Participation Goal (CPG) of 5% of the total project value and develop targeted enterprises in two agreed developmental areas. The contractor shall appoint an Enterprise Development Co-ordinator who shall: • develop a project specific Enterprise Development plan to improve the targeted enterprise's performance in the identified developmental areas and shall allocate resources to monitor progress in relation to improved performance; and • submit to the employer's representative a monthly enterprise development report (Performa – ED105P) which documents all mentoring activities that have taken place during that month and the progress made in improving the targeted enterprise's performance in the agreed developmental areas, countersigned by the targeted enterprise. The Enterprise Development Co-ordinator shall have the following competencies: • Minimum experience of 5 years in the construction industry at Managerial level as a Site Agent, Contracts Manager, Site Manager, Construction Manager, Business Development Manager or Enterprise Development Manager. • Minimum experience of 2 years in training and development in Building or Construction; and National Diploma or B Degree in the Built Environment or Business Management

C.3.13	Tender offers will only be accepted if: a) the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/) unless it is a foreign supplier with no local registered entity b) the tenderer is in good standing with SARS according to the Central Supplier Database; c) the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; d) the tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; and e) the tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.
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T2 RETURNABLE DOCUMENTS

T2.1 LIST OF RETURNABLE DOCUMENTS

T2.2 RETURNABLE DOCUMENTS

T2.1 LIST OF RETURNABLE DOCUMENTS

FORMS REQUIRED FOR TENDER EVALUATION

A	CERTIFICATE OF ATTENDANCE	T2.4
B	INDEMNITY FORM.....	T2.5
C	CONTRACTOR'S CERTIFICATE OF REGISTRATION WITH CIDB	T2.6
D	CERTIFICATE OF GOOD STANDING WITH WORKMAN COMPENSATION COMMISSIONER (COIDA).....	T2.7
E		
F	CERTIFICATE OF AUTHORITY	T2.9
G	B-BBEE STATUS.....	T2.10
H	KEY PERSONNEL	T2.11
I	SCHEDULE OF PLANT AND EQUIPMENT	T2.12
J	EXPERIENCE OF TENDERER.....	T2.13
K	TECHNICAL PROPOSAL	T2.14
L	STATUS OF CONCERN SUBMITTING THE TENDER	T2.15
M	TAX COMPLIANT WITH SARS	T2.16
N	CERTIFICATE OF NON-COLLUSIVE TENDER.....	T2.17
O	BRIBERY AND CORRUPTION DECLARATION.....	T2.18
P	RECORD OF ADDENDA TO TENDER DOCUMENTS	T2.19
Q	FORM OF INTENT TO PROVIDE A PERFORMANCE SECURITY	T2.20
R	CERTIFICATE OF AUTHORITY FOR JOINT VENTURE.....	T2.21

SBD FORMS

SBD 1	INVITATION TO BID	T2.22
SBD 4	DECLARATION OF INTEREST.....	T2.23
SBD 6.1	PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022	T2.24

SOCIO ECONOMIC AND LOCAL ECONOMIC PARTICIPATION REQUIREMENTS

R1	SCHEDULE OF LABOUR CONTENT	T2.26
R2	PROPOSED MONTHLY LABOUR SUMMARY	T2.27
R3	CONTRACT SKILLS DEVELOPMENT GOAL (CSDG).....	T2.28

DWS FORM

DWS VENDOR MASTER.....	T2.29
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MANAGEMENT POLICIES..... T2.30

QUALITY MANAGEMENT SYSTEM
ENVIRONMENTAL MANAGEMENT SYSTEM
OCCUPATIONAL HEALTH AND SAFETY

Note: Wherever the words “plant” and “constructional plant” are used they shall have the same meaning as “Contractor’s Equipment” as defined in the Conditions of Contract.

T2.2 RETURNABLE DOCUMENTS**GENERAL**

The Tender Document must be submitted as a whole. All forms must be properly completed as required, and the document shall not be taken apart or altered in any way whatsoever. The Tenderer is required to complete each Schedule and Form listed below to the best of his ability as the evaluation of tenders and the eventual contract will be based on the information provided by the Tenderer. Failure of a Tenderer to complete the Schedules and Forms to the satisfaction of the Employer will inevitably prejudice the tender and may lead to rejection because the tender is not responsive.

NB: list of returnable documents are covered under administrative, functionality and mandatory compliance and on schedule 3

A CERTIFICATE OF ATTENDANCE AT TENDER BRIEFING AND SITE INSPECTION

**TENDER NO: DWS25 0223 WTE
MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING
CONSTRUCTION OF 16 HOUSES OF 100M2 AND 1 OF 40M2 AREA**

This is to certify that (*tenderer*)

.....
of (*address*)

.....

was represented by the person named below at the compulsory tender site inspection at the **Agricultural Hub Oakford** at **11h00 on 07 March 2023**

I acknowledge that the purpose of the meeting was to acquaint myself with the site conditions, scope of works, available site facilities in order for me to take account of everything necessary to compile a responsive bid, prepare methods a tender programme and to price realistic rates in the tender.

Particulars of person attending Tender Briefing:

Name: .. Signature:.....

Capacity:

Particulars of person attending Site Inspection:

Name: .. Signature:.....

Capacity:

Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:

Name: Signature:

Capacity: Date and Time:.....

B INDEMNITY FORM FOR SITE INSPECTION MEETING**TENDER NO: DWS25 0223 WTE****MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING
CONSTRUCTION OF 16 HOUSES OF 100M2 AND 1 OF 40M2 AREA****INDEMNITY FORM - INDIVIDUAL****TO WHOM IT MAY CONCERN**

The following persons will attend the compulsory site inspection to tender for Tender No. DWS25 0223 WTE - Mdloti River Development: Hazelmere Dam Raising - Construction of 16 houses of 100m2 and 1 of 40m2 area.

(Name) (ID)..... (Signature)

(Name) (ID)..... (Signature)

(Name) (ID)..... (Signature)

(Name) (ID)..... (Signature)

They will act as representatives of the Tenderer,

.....
(Name of Tenderer)Of
(Address of Tenderer)

(hereinafter called "the Tenderer"). The Tenderer hereby indemnifies the Employer and its personnel, contractors and agents from and against all liability in respect of their entering into and being conveyed by any vehicle airborne or otherwise and entering upon any premises or lands and will be responsible for personal injury (whether fatal or otherwise), loss of or damage to property and any other loss, damage, costs, and expenses however caused, which, but for the Employer's permission for the Tenderer to exercise the right to enter and be conveyed by any vehicle or otherwise or enter such premises or lands, would not have arisen and whether or not caused by the negligence of the Employer.

Signed on thisday of20.....

At
(Place)

C CONTRACTOR'S CERTIFICATE OF REGISTRATION WITH CIDB

Attached hereto is my / our Contractor's Certificate of Registration with CIDB. My failure to submit the certificate with my / our tender document will lead to the conclusion that I am / we are not registered with the CIDB and therefore not eligible to tender.

D CERTIFICATE OF GOOD STANDING WITH WORKMAN COMPENSATION COMMISSIONER (COIDA)

Tenderer to attach Certificate of Good Standing with Workman's Compensation Commissioner. A valid letter of Good Standing with the Compensation Commissioner in terms of the Compensation for Occupational Injuries and Diseases Act No 130 of 1993 either from "Federated Employers Mutual Assurance (FEMA) and Compensation Fund "Department of Labour". Validity of certificate will be verified online.

F CERTIFICATE OF AUTHORITY FOR SIGNATORY

Signatories for Companies, Partnerships or Close Corporations must establish their authority thereto by attaching a copy of the relevant resolution of their Board of Directors, Members or Partners duly signed and dated. An example is shown below for a Company:

"By resolution of the Board of Directors at a meeting on..... 20.... at
Mr/Ms.....
whose signature appears below, has been duly authorised to sign all documents in connection with this Tender
for and any contract which may arise there from, on behalf of (*company, block capitals*)
.....

SIGNATURE OF RESPONSIBLE PERSON OF COMPANY:

IN HIS CAPACITY AS:

DATE:

**SIGNATURE OF SIGNATORY AUTHORISED TO
SIGN ON BEHALF OF COMPANY:**

WITNESSES:

(NOTE: This is a typical example of an authority for signature. Signatures of both Responsible Person and authorised Signatory are required on the certificate provided by the Tenderer)

G Broad Based Black Economic Empowerment Status

Tenderer to attach Certified BEE Certificate or a sworn affidavit stating the BBBEE status in case of Exempted Micro Enterprise and Qualifying Small Enterprise.

H. KEY PERSONNEL

This Schedule shall form part of the Technical Evaluation

H1. KEY PERSONNEL - MANAGEMENT

The Tenderer must insert in the spaces provided below a list of the key personnel to be employed in the management of the construction of the Works, together with a resume of their experience with particular reference to the construction of similar Works.

The Tenderer shall attach the curriculum vitae of the listed key management personnel to the page included below for this purpose.

DESIGNATION	NAME	PROJECT TYPE	VALUE OF WORK	YEAR COMPLETED
CONTRACTS MANAGER				
CONSTRUCTION MANAGER				
QUANTITY SURVEYOR				
DESIGN CIVIL / STRUCTURAL ENGINEER				
ARCHITECT				
RESIDENT ENGINEER				

Attach additional pages if more space is required

SIGNATURE: DATE:
 (of person authorised to sign on behalf of the Tenderer)

H2:. Experience of key personnel

The experience of assigned staff member in relation to the scope of work will be evaluated from three different points of view:

General experience (total duration of professional activity), level of education and training and positions held of each discipline specific team leader.

- 1) The education, training, skills and experience of the Assigned Staff in the specific sector, field, subject, etc. which is directly linked to the scope of work.
- 2) The key staff members' / experts' knowledge of issues which the tenderer considers pertinent to the project
- 3) e.g. local conditions, affected communities, legislation, techniques etc.

A CV of the Lead project manager/Engineer, contract manager, construction manager design Civil / Structural Engineer /specialists, Architect, and Quantity Surveyor of not more than 3 pages each should be attached to this schedule:

Each CV should be structured under the following headings:

- 1) Personal particulars
 - a. name
 - b. date and place of birth
 - c. place (s) of tertiary education and dates associated therewith
 - d. professional awards
- 2) Qualifications (degrees, diplomas, grades of membership of professional societies and professional registrations)
- 3) Skills
- 4) Name of current employer and position in enterprise
- 5) Overview of postgraduate / diploma experience (year, organization and position)
- 6) Outline of recent assignments / experience that has a bearing on the scope of work
- 7) References

DECLARATION

I confirm that the above information contained in the CV is an accurate description of my experience and qualifications and that, at the time of signature, I am available and will to serve in the position indicated for me in this Project.

Signature of Staff Member

Date

Or authorized by _____ (person authorized to sign the tender)

I. SCHEDULE OF PLANT AND EQUIPMENT**This Schedule shall form part of the Technical Evaluation**

The following are lists of major construction equipment that I / we presently own or will acquire for this contract if my / our tender is accepted.

(a) Details of major construction equipment owned by me / us:

DESCRIPTION (type, size and capacity)	QUANTITY	YEAR OF MANUFACTURE

Attach additional pages if more space is required

(b) Details of major construction equipment that will be acquired: Bidders to attach hiring preapproval letter/agreement from supplier

DESCRIPTION (type, size and capacity)	QUANTITY	HOW ACQUIRED	
		HIRE	SOURCE

Attach additional pages if more space is required

SIGNATURE:DATE:

(of person authorised to sign on behalf of the Tenderer)

J EXPERIENCE OF TENDERER - APPLICABLE EXPERIENCE (DESIGN AND CONSTRUCTION)**J1- ENGINEERING EXPERIENCE - This Schedule shall form part of the Technical Evaluation**

EMPLOYER, CONTACT PERSON AND TELEPHONE NUMBER	CONSULTANT: CONTACT PERSON & TEL. NO.	DESCRIPTION OF PROJECT	VALUE OF WORK INCLUSIVE OF VAT (R MILLION)	CONTRACT PERIOD (MONTHS)	DATE COMPLETED/ DATE OF EXPECTED COMPLETION*

Attach additional pages if more space is required. Appointment letters, Reference Letters not older than 15 years per project must be attached with contact details of references.

Signed.....Date

Name.....Position.....

Tenderer.....

J2- CONSTRUCTION EXPERIENCE - This Schedule shall form part of the Technical Evaluation

EMPLOYER, CONTACT PERSON AND TELEPHONE NUMBER	CONTRACTOR: CONTACT PERSON & TEL. NO.	DESCRIPTION OF PROJECT	VALUE OF WORK INCLUSIVE OF VAT (R MILLION)	CONTRACT PERIOD (MONTHS)	DATE COMPLETED/ DATE OF EXPECTED COMPLETION*

Attach additional pages if more space is required. Appointment letters and Final Completion Certificates not older than 15 years per project must be attached with contact details of references.

Signed.....Date

Name.....Position.....

Tenderer.....

K. TECHNICAL PROPOSAL

The tenderer is required to submit a technical proposal which covers the following.

Approach and methodology

The approach paper must respond to the scope of work and outline the proposed approach / methodology relating to:

- Project Approach
- Relevant specialist's studies
- Preliminary design
- Detailed Design Development
- Design documentation
- Establishment (office and equipment)
- Contract administration and execution of works
- Performance indicators reporting
- Management of quality
- Management of time, (Programme of Works)
- Management of budget (Cash Flow)
- Construction regulations to OHS act
- Environmental management and compliance
- Subcontractor development and training
- Handover
- Close-out

The approach and methodology should articulate what value add the tenderer will provide in achieving the stated objectives for the project.

The tenderer must as such explain his / her understanding of the objectives of the assignment and the Employer's stated and implied requirements, highlight the issues of importance, and explain the technical approach they would adopt to address them. The approach paper should explain the methodologies which are to be adopted, demonstrate the compatibility of those methodologies with the proposed approach.

The tenderer must attach its approach paper to this page. The approach paper should not be longer than 16 pages.

L STATUS OF ORGANISATION SUBMITTING TENDER**1. General**

State whether the tenderer is a company, a closed corporation, a partnership, a sole practitioner or a joint venture:

(Mark the appropriate option below)

Public Company

Private Company

Closed Corporation

Partnership

Sole Proprietary

Joint Venture

Co-operative

2. Information to be Provided

If the Tendering Entity is a:		Documentation to be submitted with the tender
1	<u>Closed Corporation</u> , incorporated under the Close Corporation Act, 1984, Act 69 of 1984	CIPRO CK1 or CK2 (Copies of the founding statement) and list of members
2	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (including Companies incorporated under Art 53 (b))	Copies of: a) CIPRO CM 1 -Certificate of Incorporation b) CIPRO CM 29 – Contents of Register of Directors, Auditors and Officers c) Shareholders Certificates of all Members of the Company.
3	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 in which any, or all, shares are held by another Closed Corporation or company with, or without, share capital.	Copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies
4	<u>Public Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (including Companies incorporated under Art 21).	A signed statement of the Company's Secretary confirming that the Company is a public Company. Copy of CM 29
5	Sole Proprietary or a Partnership	Copy of the Identity Document of: a) such Sole Proprietary, or b) Each of the Partners in the Partnership Certified copy of the Partnership agreement

If the Tendering Entity is a:		Documentation to be submitted with the tender
6	Co-operative	CIPRO CR2 -Copies of Company registration document. (The percentage of work to be done by each partner must clearly be indicated on Form RDB1 (or RDB2 as applicable) of the tender document: MBD6.1 Preference Points Claim Form in terms of the Preferential Procurement Regulations 2011)
7	7 Joint Venture	All the documents (as described above) as applicable to each partner in the JV as well as a certified copy of the Joint Venture agreement. (The percentage of work to be done by each partner of the joint venture must clearly be indicated in the Joint Venture Agreement)

Note:

- 1.) If the shares are held in trust provide a copy of the Deed of Trust (only the front page and pages listing the trustees and beneficiaries are required) as well as the Letter of Authority as issued by the Master of the Supreme Court, wherein trustees have been duly appointed and authorised, must be provided.
- 2.) Include a copy of the Certificate of Change of Name (CM9) if applicable.

3. Registered For VAT Purposes In Terms Of The Value-Added Tax Act, (Act Nr. 89 of 1991)

(Make an X in the appropriate space below)

Yes

No

VAT REGISTRATION NO:

M. TAX COMPLIANT WITH SARS

Attach a copy of Tax Compliance status PIN. (Tax complaint to be verified through CSD and SARS).

N. CERTIFICATE OF NON-COLLUSIVE TENDER**DECLARATION IN RESPECT OF AN ENTERPRISE SUBMITTING A TENDER**

I/We certify that this is a bona fide tender.

I/We also certify that I/we have not done and I/we undertake not to do any of the following at any time before the hour and date specified for the closure of submission of tenders for this contract.

- (a) Fix or adjust the amount of this tender by or under or in accordance with any agreement or arrangement with any person or instance outside this enterprise;
- (b) communicate to a person or instance other than the instance calling for these tenders the amount or approximate amount of the proposed tender, except when the confidential disclosure of the approximate amount of the tender is necessary to obtain the insurance-premium quotations required for preparation of the tender;
- (c) cause or induce any other person or instance to communicate to me/us the amount or approximate amount of any rival tender for this contract;
- (d) enter into any agreement or arrangement with any other person or instance to induce him to refrain from tendering for this contract, or to influence the amount of any tender or the conditions of any tender to be submitted, nor cause or induce any other person or instance to enter into any such agreement or arrangement;
- (e) offer or pay or give or agree to pay or to give any sum of money or valuable consideration directly or indirectly to any person or instance for doing or having done or causing or having caused to be done in relation to any tender or proposed tender for this contract, any action similar to those described above.

In this certificate the term "person" includes any persons, body of persons or association, whether corporate or not, and the term "agreement or arrangement" includes any agreement or arrangement, whether formal or informal and whether legally binding or not.

SIGNATURE:DATE:
 (of person authorised to sign on behalf of the Tenderer)

Note: An enterprise includes single concerns as well as Joint Ventures or Consortiums

O. BRIBERY AND CORRUPTION DECLARATION

The Employer upholds a zero tolerance on bribery and corruption and maintains the highest standard of business ethics and corporate governance in the conduct of all facets of its business. In its business relationships and interactions with suppliers, service providers and business partners, it is a prerequisite that such entities demonstrate a commitment to similar ethical and business standards. In instances where a supplier, service provider or business partner fails to comply with acceptable standards in this regard, the Employer reserves the right to terminate any existing contractual relationship with such party, and to seek recourse for any damages, financial or otherwise, that may result from the termination of such a contractual relationship.

1. The Tenderer is required to provide the following information applicable in the last 5 (five) years in relation to each of its members and/or partners which shall include the directors, employees or agents of each member and/or partner where the conduct of such person rendered the tenderer directly and vicariously responsible ("members") whether individually or as part of any other entity:

		YES	NO
1.1	Have any of its members been charged with any act of bribery and/or corruption?		
1.2	Have any of its members been convicted of any act of bribery and/or corruption?		
1.3	Have any of its members been implicated in or alleged to have been involved in any corrupt practices, collusion, bribery or related practices?		
1.4	Is there any reason to believe that a charge will be laid against a member arising from an act of bribery and/or corruption?		

2. Should any of the above questions be answered in the affirmative, full details must be furnished:

2.1	the date of the charge and the nature thereof:
2.2	the current status of the charge:
2.3	the date of conviction (if any):
2.4	the court in which the charges are being/where prosecuted:
2.5	the details of the members convicted, the facts giving rise thereto, the charges preferred against the member and the details of any judgement by the relevant court:
2.6	full details of any contract which was or is alleged to have been affected by the act of bribery and/or corruption:
2.7	any sentence imposed on the member:
2.8	full and precise details of any members implicated in any corrupt practice, collusion, bribery or related practices:

2.9	if it is believed that a member will be charged, full details of the offence and the facts giving rise to it are required:
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Thus done and signed at _____ on this the _____ day of _____

SIGNATURE:DATE:

(of person authorised to sign on behalf of the Tenderer)

P. RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications amending the tender documents that we received from the Employer or his representative before the closing date for submission of this tender offer, have been taken into account in this tender offer.

ADDENDUM NO	DATE	TITLE OR DETAILS

SIGNATURE:
(of person authorised to sign on behalf of the Tenderer)

DATE:

Q FORM OF INTENT TO PROVIDE A PERFORMANCE SECURITY

1 With reference to the tender of
 (hereinafter referred to as the “**TENDERER**” for **Tender No. DWS25 0223 WTE- MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING - CONSTRUCTION OF 16 HOUSES OF 100M2 AND 1 OF 40M2 AREA** (hereinafter referred to as the “**CONTRACT**” for the **DEPARTMENT OF WATER AND SANITATION (DWS)** (hereinafter referred to as the “**EMPLOYER**” for the tender datedfor an amount equivalent to 10% of the total Tender Amount.

2 I/We in my/our capacity as and hereby representing

 (hereinafter referred to as the “**INSURER**” advise that the “**INSURER**” undertakes to provide a **Performance Security** to the **EMPLOYER** to the Employer’s format included in **Part C1.4** of this document within five (5) working days of the written acceptance of the contractor’s tender offer.

Thus done and signed at on 20

.....
 Name of signatory

.....
 Capacity of authorised signatory

.....
 As witness

.....
 for and on behalf of the **insurer**
 who by signature hereof warrants
 authorisation hereto

R. CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Document is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise Mr/Ms.....

..... authorised signatory of the company, acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
..... Lead Partner CIDB registration number:		 Signature Name Designation
..... Partner CIDB registration number:		 Signature Name Designation
..... Partner CIDB registration number:		 Signature Name Designation

SBD FORMS**SBD4****BIDDER'S DISCLOSURE****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

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.

SBD4

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:

.....

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 consortium² 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

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

SBD4

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

**DEPARTMENT OF WATER AND SANITATION (DWS) ANTI-CORRUPTION TOLL-FREE
HOTLINE - 0800 200 821**

The aim of the Hotline is to enhance an honest work ethic and simultaneously provide employees and persons not employed by the principal with a mechanism to bring any unethical business practices to the attention of management

DECLARATION REGARDING ANTI-CORRUPTION HOTLINE

I, THE UNDERSIGNED (NAME).....
CERTIFY THAT I AM AWARE OF THE DWS ANTI-CORRUPTION TOLL-FREE LINE, WHERE I
CAN FREELY REPORT POSSIBLE CORRUPT ACTIONS BY SUPPLIERS/SERVICE
PROVIDERS/CONTRACTORS OR POSSIBLE CORRUPT ACTIONS WITHIN THE DEPARTMENT
AT ANY TIME AND THAT THE DEPARTMENT WILL TREAT MY IDENTITY AS STRICTLY
CONFIDENTIAL

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

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

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

- 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
$Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$	or	$Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$

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
$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$	or	$Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$

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 (80/20 system) (To be completed by the tenderer)
Women Ownership	5	
Disability Ownership	5	
Youth Ownership	5	
Location of enterprise (local equals province) e.g., Mpumalanga	2	
B-BBEE status level contribution from level 1 to 2 which are QSE or EME	3	

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:.....

.....

SBD 6.2 DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:201x.

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9. (1) and 9. (3) make provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Regulation 9.(3) prescribes that where there is no designated sector, a specific bidding condition may be included, that only locally produced services, works or goods or locally manufactured goods with a stipulated minimum threshold for local production and content, will be considered.
- 1.4. Where necessary, for bids referred to in paragraphs 1.2 and 1.3 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.5. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.6. The local content (LC) as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 201x as follows:

$$LC = 1 - \left(\frac{x}{y} \right) \times 100$$

Where

x imported content

y bid price excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid as indicated in paragraph 4.1 below.

- 1.7. A bid will be disqualified if:
 - the bidder fails to achieve the stipulated minimum threshold for local production and content indicated in paragraph 3 below; and.
 - this declaration certificate is not submitted as part of the bid documentation.
2. Definitions
 - 2.1. **“bid”** includes advertised competitive bids, written price quotations or proposals;
 - 2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);
 - 2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
 - 2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

- 2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility (close corporation, partnership or individual).
- 2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
- 2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

3. The stipulated minimum threshold(s) for local production and content for this bid is/are as follows:

Description of services, works or goods	Stipulated minimum threshold
Timber	100%
Steel	100%
Bricks	100%
Cement	100%

4. Does any portion of the services, works or goods offered have any imported content?

YES / NO

- 4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.6 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za.

Indicate the rate(s) of exchange against the appropriate currency in the table below:

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID No.**ISSUED BY:** (Procurement Authority / Name of Institution):
.....

NB The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

I, the undersigned, (full names),
do hereby declare, in my capacity as
of(name of bidder entity), the
following:

(a) The facts contained herein are within my own personal knowledge.

(b) I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286.

(c) The local content has been calculated using the formula given in clause 3 of SATS 1286, the rates of exchange indicated in paragraph 4.1 above and the following figures:

Bid price, excluding VAT (y)	R
Imported content (x)	R
Stipulated minimum threshold for Local content (paragraph 3 above)	
Local content % , as calculated in terms of SATS 1286	

If the bid is for more than one product, a schedule of the local content by product shall be attached.

(d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Policy Framework Act (PPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____**DATE:** _____**WITNESS No. 1** _____**DATE:** _____**WITNESS No. 2** _____**DATE:** _____

SOCIO ECONOMIC AND LOCAL ECONOMIC PARTICIPATION REQUIREMENTS**R1 SCHEDULE OF LABOUR CONTENT**

The Tenderer must complete the table below to reflect the total work force anticipated on this Contract, including all personnel employed by Sub-contractors. The Tenderer shall take into account, as a minimum, details under **Scope of Works**.

EMPLOYMENT GROUP	ETHNIC GROUP			Black people (D)	Other (E)	Sub-Total (Person-Hours)
	eThekweni (A)	KwaZulu Natal Province (C)	Sub-Total (Person-Hours)			
1. Skilled labour black people						
2. Unskilled labour local						
3. Unskilled labour local black people						
4. Semi-skilled labour black people						
5. Semi-skilled labour black women						
6. Engineers						
7. Technicians						
8. Foremen						
TOTAL (Person-Hours)						

(Local: unskilled)_T = A / Sub-Total = _____ (%)

(KwaZulu Natal Province Semi-skilled)_T = B / Sub-Total = _____ (%)

(Black people: semi-skilled)_T = D / Sub-Total = _____ (%)

R2 PROPOSED MONTHLY LABOUR SUMMARY

MONTH	LOCAL LABOUR MAN DAYS			KWAZULU-NATAL PROVINCE MAN DAYS			OTHERS LABOUR MAN DAYS			TOTAL LABOUR		
	Unskilled	Semi-skilled	Skilled	Unskilled	Semi-skilled	Skilled	Unskilled	Semi-skilled	Skilled	Unskilled	Semi-skilled	Skilled
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												

CIDB SKILLS STANDARD BASELINE TRAINING PLAN

Contractor Details						
Contractor Name:						
CRS Number:						
Estimated start date						
Estimated Completion date						
Size of Organisation	Small (1-49 employees)		Medium (50-149 employees)		Large (≥150 employees)	

Contractor Contact Details	
Name of Contact Person	
Designation of Contact Person	
Contact Details	Cell Number:
	Landline Number:
	Email address:

Contract Data				
Project Name				
CIDB Contract Number				
Name of Client:				
Project Description				
Final Tender Sum				
Project Location				
Project duration				
Estimated start date				
Estimated Completion date				
Description	Designation	Project Value	CSDG %	Min CSDG Target
General Building	GB		0.50	
Total				

Construction Skills Development Goal (CSDG) Baseline Training Plan					
Training Method	Number of Employed Learners	Number of Unemployed Learners	Area/s of Specialisation/Trade	Duration of Placement	Total Notional Cost
Method 1: Skills Programme					
Method 2: FET College Graduates/ Apprenticeship					
Method 3: P1 and P2 learners or a 240 credit qualification					
Method 4: Candidacy with 360 credit qualification					
Total					

Note: Refer to Table 3 in the Standard for Developing Skills through Infrastructure Contracts Government Gazette 43495 of 3 July 2020 for the notional costs

Contractor's Representative Name: _____ Designation: _____

Signature: _____ Date: _____

DWS VENDOR MASTER

It is understood and agreed that, should this contract be awarded to this company a "Vendor Master" Database Registration form, as attached, will be completed in compliance with the requirements of the Employer.

.....
Signed (on behalf of the Tenderer)

.....
Date

.....
Position

.....
Name of Tenderer

VENDOR MASTER MAINTENANCE

OFFICE USE ONLY	Created by		Authorise by	
	Date created	d d m m y y	Date authorised	d d m m y y

SECTION A: OFFICE (DWS) REQUESTING VENDOR MASTER (For official use only)

Indicate with and X	New Vendor Information	Update Vendor Information	OFFICE DATE STAMP
Office			
Official's initials and Surname			
Official's Signature			
Telephone		Fax no	

SECTION B: PERSONAL DETAIL OF VENDOR

Registered Name of Vendor		SARS Office (if applicable)	
Trade name		VAT Number	
Payment Term		Title if Applicable	

SECTION C: ADDRESS OF VENDOR[illegible]**SECTION D: TELEPHONE/FAX NUMBERS (Vendor Contact Details)**

Contact Person (Vendor)											E-mail										
Telephone Number											Fax number										
Area Code with number																					
Mobile Number											Preferred method of communication (Please select only one)	Fax		E-mail		Post					

SECTION E: VENDOR DETAIL

Supporting documentation must accompany this form

Supplier Type	☐ Individual	☐ Department	☐ Partnership
	☐ Company	☐ Trust	☐ Partnership
	☐ CC	☐ Other (Specify)	

VENDOR MASTER MAINTENANCE (Continuation page)**SECTION F: Vendor's Bank Details**

I/We hereby request and authorise you to pay any amounts, which may accrue to me/us to the credit of my/our account with the mentioned bank.

I/We understand that the credit transfers hereby authorised will be processed by computer through a system known as the "ACB ELECTRONIC FUND TRANSFER SERVICE", and I/we also understand that no additional advice of payment will be provided by my/our bank, but details of each payment will be printed on my/our bank statement or any accompanying voucher. (This does not apply where it is not customary for banks to furnish bank statements)

I/We understand that the Department will supply a payment advice in the normal manner, and that it will indicate the date on which the funds will be made available in my/our account.

This authority may be cancelled by me/us by giving thirty (30) days notice by prepaid registered post.

Please ensure the information is valid as per required bank screens

I/We understand that bank details provided should be exactly as per the records held by the bank.

I/We understand that the Department will not assume responsibility for any delayed payments, as a result of incorrect information supplied.

Initials and Surname of Vendor	Authorised Signature of Vendor	d d m m y y
Registered name of Account Holder		
Bank Name		
Branch Name		
Branch Code		
Account Number		
*ID Number		*Compulsory for individuals
Passport Number		
**Company Registration Number	/	**Compulsory for Companies
***CC/CK Registration Number		
Practice Number		

TYPE OF ACCOUNT Indicate with X	It is hereby confirmed that the details have been verified against the following screens:	DATE STAMP OF BANK CERTIFIED AS CORRECT
☐ 1 Cheque Account	FNB ABSA - CIF Screen - Hogans System on the CIS4 STD Bank - Look - Up - Screen Nedbank - Banking Platform under the Client Details Tab	
☐ 2 Savings Account		
☐ 3 Transmission Account		

Initials and Surname (Bank Official) who verified information against the relevant Bank Screen	Bank Branch and Town/City where information has been verified	d d m m y y
Signature (Bank Official) who verified information	Telephone Number of Bank who verified information	

MANAGEMENT POLICIES

The Tenderer is required to append to his Tender submission his management policies/proposals on the following:

QUALITY MANAGEMENT SYSTEM

ENVIRONMENTAL MANAGEMENT SYSTEM

OCCUPATIONAL HEALTH AND SAFETY

THE CONTRACT

C1 AGREEMENTS AND CONTRACT DATA

C1.1 CONDITIONS OF CONTRACT

C1.2 CONTRACT DATA

C1.3 FORM OF OFFER AND ACCEPTANCE

C1.4 PERFORMANCE SECURITY

C1.5 AGREEMENT IN TERMS OF THE OHSA No 85 OF 1993

C1.6 RETENTION MONEY GUARANTEE

C1 AGREEMENTS AND CONTRACT DATA

	PAGE
C1.1	CONDITIONS OF CONTRACTC1.2
C1.2	CONTRACT DATAC1.3
C1.3	FORM OF OFFER AND ACCEPTANCEC1.23
C1.4	PERFORMANCE SECURITYC1.29
C1.5	AGREEMENT IN TERMS OF THE OHSA No 85 OF 1993C1.33
C1.6	RETENTION MONEY GUARANTEEC1.36

C1.1 CONDITIONS OF CONTRACT

This Contract will be based on the “General Conditions of Contract for Construction Works, Third Edition (2015)”, hereinafter referred to as the “GCC 2015”).

It is agreed that the only variations from the Conditions of Contract are those set out hereafter under "Contract Data of Contract".

C1.2 CONTRACT DATA

CONTENTS

C.1.2.1	Part 1:	Data provided by the Employer
C.1.2.1.1		Conditions of Contract
C.1.2.1.2		Contract-specific Data
C.1.2.1.2.1		Compulsory Data
C.1.2.1.2.2		Variations to the General Conditions of Contract
C.1.2.1.2.3		Additional Clauses to the General Conditions of Contract
C.1.2.2	Part 2:	Data provided by the Contractor
C.1.2.3	Part 3:	Corrigenda to GCC 2015 by SAICE
C.1.2.4	Part 4:	Corrigenda to GCC 2015 by Employer

C.1.2.1 Part 1: Data provided by the Employer

C.1.2.1.1 Conditions of Contract

The Conditions of Contract are

- the “General Conditions of Contract” as they appear in the commercially-available publication “*General Conditions of Contract for Construction Works, Third Edition (2015)*”, published by the South African Institution of Civil Engineering (SAICE) as the August 2015 print edition, hereinafter referred to as GCC 2015; and
- specific data as contained in this Contract Data.

The Contractor shall purchase three copies of the GCC 2015 for the Employer, from a duly authorised commercial vendor or directly from the publisher:

South African Institution of Civil Engineering
Private Bag X200
Halfway House 1685
South Africa

Tel +27 (0)11 805 5947

All of the following Notes apply:

NOTES

Note 1

The GCC 2015 makes several references to the Contract Data. The Contract Data shall take precedence over the GCC 2015 in the interpretation of any ambiguity or inconsistency.

Each item of data below is cross-referenced to the clause in the GCC 2015 to which it applies.

The documents forming the Contract are to be taken as mutually explanatory of one another.

Note 2

Certain pro-forma forms and pro-forma agreements contained in the GCC 2015 have been adapted for this particular contract. Those pro-forma forms and pro-forma agreements contained in the GCC 2015 do not apply where replaced by similar pro-forma forms and pro-forma agreements in this document.

C.1.2.1.2 Contract-specific Data

The following contract-specific data, referring to the GCC 2015, are applicable to this Contract:

C.1.2.1.2.1 Compulsory Data:

Clause	Data
1.1.1.13	The Defects Liability Period is 12 months
1.1.1.14	The time for achieving Practical Completion is 300 days (10 months), where Practical Completion shall constitute the following to be fully completed: • Design of the houses • Approval of drawings • Registration for construction • Construction • Supervision the works • Register the ownership for beneficiaries • Handover and close-out
1.1.1.15	The name of the Employer is the Department of Water and Sanitation (DWS), represented by the Director General.
1.1.1.16	Full names of the Employer's Agent: Family name: Bhasopo Given names: Antony In terms of the <i>Council for the Built Environment Act, Act 43 of 2000</i>, the full name of all relevant statutory councils where the Employer's Agent is registered as a professional person, and the relevant category: Engineering Council of South Africa (ECSA), established by the Engineering Profession Act, 2000; Category of professional registration of the Employer's Agent: Professional Engineer.
1.1.1.26	The Pricing Strategy of a Re-measurable Contract shall apply.

Clause	Data
1.2.1.2	The address of the Employer is: Physical address: Department of Water and Sanitations zwaMadaka Building 157 Francis Baard Street PRETORIA 0002 Postal address: Department of Water and Sanitations Private Bag X313 PRETORIA 0002 e-mail address: info@dws.gov.za Contact numbers: Corporate: 0800 200 200
1.2.1.2	The address of the Employer's Agent is: Physical address: Department of Water and Sanitations Sedibeng Building 185 Francis Baard Street PRETORIA 0002 Postal address: Chief Directorate: Infrastructure Development (Capital Projects) Department of Water and Sanitation 185 Francis Baard Street e-mail address: bhasopoa@dws.gov.za Contact numbers: Tel: 012 336 8962

3.2.3	The following Clauses of the Conditions of Contract govern certain functions and duties of the Employer's Agent. The list may not necessarily be complete:					
	Functions and duties of the Employer's Agent					
Clause No	Event	Maximum amount per event (R-c)	Total maximum amount for all events for contract (R-c)	Employer's prior written approval to Employer's Agent required	Requires EAWA*	Delegated to EAR*
1.2.1.2	Notice of change of address	NA	NA	N	Y	
2.4.1	Clarification of ambiguity in or discrepancy between documents	NA	NA	N	Y	
3.3.1	Notice of Employer's Agent's Representative's appointment and termination	NA	NA	N	Y	
3.3.4	Notice of Employer's Agent's Representative acting on Employer's Agent's behalf	NA	NA	N	Y	
3.3.6	Response to Contractor's request for Employer's Agent's Representative's orders or instructions causing dissatisfaction	NA	NA	N	Y	
4.3.1	Request for Contractor's proof of compliance with applicable laws	NA	NA	N	Y	
4.3.2	Request for Contractor's proof of good standing with payments in terms of legislation	NA	NA	N	Y	
4.5.4	Certification of payments due to the Contractor for Contractor paying for notices and fees	R 0	R 0	N	Y	
4.7.1	Instructions for dealing with fossils, etc. on Site	NA	NA	N	Y	
4.8.2	Instructions for facilities for others	NA	NA	N	Y	
4.9.1	Consent for removal of Construction Equipment from Site	NA	NA	N	Y	
4.10.1	Notice of approval for use of Site for Contractor's employees	NA	NA	N	N	

4.10.2	Instruction requiring Contractor's employee information	NA	NA	N	Y	
4.11.2	Instruction requiring removal of Contractor's employee from Works	NA	NA	N	Y	
4.11.2	Notice permitting re-employment of Contractor's employee	NA	NA	N	Y	
4.12.2	Notice of approval of Construction Manager	NA	NA	N	Y	
5.3.1	Instruction for commencement of executing the Works	NA	NA	N	Y	
5.6.3	Notice of approval of programme	NA	NA	N	Y	
5.6.4	Instruction for adjustment of programme	NA	NA	N	Y	
5.7.1	Notice of rate of progress causing programme to fall behind	NA	NA	N	Y	
5.7.1	Notice of approval of steps taken to expedite progress	NA	NA	N	Y	
5.7.2	Notice permitting work at night	R 0	R 0	N	Y	
5.7.3	Request for submission of revised program and cost for acceleration of rate of progress	NA	NA	N	Y	
	Notice of approval of adjustment of Due Completion Date due to acceleration of rate of progress	NA	NA	N	Y	
	Written conditions of agreement for payment of cost of acceleration of rate of progress	R 0	R 0	Y	Y	
5.8.1.1	Conditions and permission for work by Contractor during non-working times	R 0	R 0	N	Y	
5.9.1	Instructions and drawings on Commencement Date	NA	NA	N	Y	
5.9.2	Instructions and drawings necessary for proper and adequate construction of the Works	NA	NA	N	Y	
5.9.3	Instructions and drawings, in response to Contractor's timeous request for instructions and drawings	NA	NA	N	Y	

5.9.7	Notice of approval of Contractor's designs and details on drawings that provide full details, dimensions and particulars	NA	NA	N	Y	
5.9.7	Consent for departure from Contractor's designs after notice of approval by Employer's Agent	NA	NA	N	Y	
5.11.2	Order for suspension of the Works	NA	NA	N	Y	
5.11.3	Proceeding with Works after suspension	NA	NA	N		
5.12.4	Request for acceleration (instead of extension of time) and the cost of such acceleration	R 0	R 0	Y	Y	N
5.13.2	Notice of reduction in penalty	R 0	R 0	Y	Y	
5.14.1	List setting out the work to be completed for Practical Completion	NA	NA	N	Y	N
5.14.2	Certificate of Practical Completion	NA	NA	N	Y	N
	List setting out the work to be completed for Completion	NA	NA	N	Y	N
5.14.4	Certificate of Completion with List setting out work to be completed before expiry of Defects Liability Period	NA	NA	N		N
5.16.1	Final Approval Certificate	NA	NA	N		N
6.3.1	Variation order	R 0	R 0	Y		
6.3.2.1	Contradiction of Contractor's confirmation of a verbal Variation Order	NA	NA	N	Y	
6.4.1	Completed valuation of a Variation Order	NA	NA	N		
6.4.1.3	Notice of consultation of Employer's Agent with Contractor and Employer on methodology, pro forma and other means for valuation of a Variation Order	NA	NA	N		
6.4.1.4	Instruction for dayworks as a Variation Order for additional or substituted works	R 5 000	R 10 000	N		
6.4.2	Delivery notice of valuation of a Variation Order	NA	NA	N	Y	

6.5.1.3	Notice of determination of costs of plant hire rates for Construction Equipment rates for dayworks	NA	NA	N		
6.5.2	Notice of determination of costs of materials for dayworks	R2 000	R5 000	Y		
6.5.3	Approval of statement of costs for Workmen, materials and Construction Equipment used for dayworks	NA	NA	N		
6.6.1	Order for executing Provisional Sum work	NA	NA	Y		
6.6.3	Order for executing Prime cost work	NA	NA	Y		
6.7.2	Valuation of the Works	NA	NA	N		
6.7.3	Instruction for Contractor's measurement of work	NA	NA	N		
	Notice of requirements for Contractor's measurement of work	NA	NA			
6.7.4	Certificate of measurement by Employer's Agent					
6.8.4	Notice of consultation between Employer and Contractor on costs due to changes in legislation	NA	NA	N		
6.9.3	Order for steps to be taken for Plant and materials becoming property of Employer	NA	NA	N		
6.10.1	Monthly payment certificate	R 0	R 0	Y		
6.10.4	Delivery notice of monthly payment certificate	NA	NA	N		
6.10.7	Correction of previous payment certificate	NA	NA	N		
6.10.8	Requirement for further information after issue of Certificate of Completion	NA	NA	N		
6.10.9	Final payment certificate	NA	NA	N		
6.11.1	Notice of adjustments to General Items resulting from the total of all Variations exceeding a specified percentage	20%	20%	Y		
7.1.1	Order for removal of unsuitable Construction Equipment	NA	NA	N		

7.4.1	Instruction to Contractor for providing samples of materials	NA	NA	N		
7.4.2	Instruction to Contractor for taking and delivering test specimens	NA	NA	N		
7.4.3	Instruction to Contractor for doing tests	NA	NA	N		
7.4.5	Reports on tests	NA	NA	N		
7.5.1	Consent for covering up work	NA	NA	N		
7.5.2	Authorisation by Employer's Agent for Contractor's delivery of Plant to Site	NA	NA	N	Y	
7.5.3	Notice of testing or examining Plant, materials, excavations or other work	NA	NA	N	Y	
7.5.5	Order for uncovering work	NA	NA	N		
	Order for making one or more openings	NA	NA	N		
7.6.1	Order for making good and retesting of Plant	NA	NA	N	Y	
7.6.2	Instruction for further making good after retest failure	NA	NA	N		
	Acceptance of Plant subject to reduction in Contract Price	NA	NA	N		
7.6.3	Order for removal of unsuitable materials	NA	NA	N	Y	
	Order for removal and proper reconstruction of work	NA	NA	N	Y	
7.7.1	Order to search for defects	NA	NA	N	Y	
7.8.1	Order for making good of defects	NA	NA	N	Y	
7.9.1	Notification of urgent remedial work	NA	NA	N	Y	
	Notification of urgent emergency-related work	NA	NA	N	Y	
8.2.2.2	Order for repair of damage due to excepted risks	R 0	R 0	Y		
8.5.1	Instruction to submit a report on an occurrence of damage to property	NA	NA	N		
	Instruction to submit a report on an occurrence of injury to persons	NA	NA	N		

	Instruction to submit a report on an occurrence of loss of human life	NA	NA	N		
9.1.5.1	Certificate of amount payable in respect of General Items upon termination of Contract	NA	NA	N		
9.1.5.3	Certificate of balance amount payable upon termination of Contract in respect of reasonably incurred expenses in anticipation of completion of Contract	NA	NA	N		
9.2.1.3	Certificate of grounds for termination of contract	NA	NA	N	Y	N
10.1.3	Record of facts in prescribed pro forma to assess Contractor's claim	NA	NA	N	Y	N
10.1.5	Notice of consultation on Contractor's claim	NA	NA	N	Y	N
10.1.5	Ruling on Contractor's claim	R50 000	R 75 000	N	Y	N
10.2.3	Notice of consultation on dissatisfaction claim	NA	NA	N	Y	N
	Ruling on dissatisfaction claim	R50 000	R 75 000	Y	Y	N
TOTAL FOR CONTRACT			R665 000			
Redistribution of the "TOTAL FOR CONTRACT" shall be subject to prior written approval of the Employer. *The following abbreviations apply to the above table: EAR Employer's Agent's Representative EAWA Employer's Agent's Written Action N No NA Not Applicable Y Yes						
4	Additional Contractor's General Obligations 1. The contractor shall achieve in the performance of the contract the Contract Skills Development Goal (CSDG) established in the CIDB Standard for Developing Skills through Infrastructure Contracts, published in Gazette Notice No.43495 of 3 July 2020. 2. The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the CIDB Standard for Indirect Targeting for Enterprise Development through Construction works Contracts Gazette Notice No.36190 of 25 February 2013					

5.3.1	The documentation to be submitted by the Contractor before commencement with Works execution are: 1. Health and Safety Plan (Refer to Clause 4.3) 2. A signed Agreement between the Employer and the Contractor for the Works to be completed by the Contractor in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act No.85 of 1993) and the Construction Regulations promulgated thereunder (Refer to Clause 4.3). 3. Proof to the Employer, of payment, that the Contractor has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993 (Refer to Clause 4.3). 4. Initial programme (Refer to Clause 5.6) 5. Security (Refer to Clause 6.2) 6. Insurance (Refer to Clause 8.6) 7. Letter of Good Standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer) 8. Performance Guarantee (Refer to Clause 6.2.1) The documentation to be provided by the Employer to the Contractor before commencement with Works execution are: 1. Purchase Order 2. Acceptance Letter
5.3.2	The time to submit the documentation by either party required before commencement with Works execution is 28 Days.
5.3.3	Add the following paragraph: “If a construction work permit, in terms of Clause 3(1) of the Construction Regulations (2014), is applicable, the instruction to commence carrying out of the works may only be issued once the construction work permit has been obtained by the Employer’s Agent. If a construction work permit is applicable, the contractor shall allow for a minimum period of 37 days, after the submission (or re-submission) of the documentation referred to in Clause 5.3.1., for the issuing of the construction work permit.”

5.8.1	The non-working Days are Sundays The special non-working Days are: Any statutory public holiday in terms of the Public Holidays Act, and, where such statutory public holiday falls on a Sunday, and the next Monday subsequently becomes a statutory public holiday in terms of the Public Holidays Act, then both the relevant Sunday and the relevant Monday shall be special non-working days under the contract; and any proclaimed statutory day of mourning which is proclaimed as a statutory public holiday and any proclaimed statutory election day which is proclaimed as a statutory public holiday and all annual year-end shutdown periods as recommended by the South African Bargaining Council for the Civil Engineering Industry.								
5.13.1	The penalty for failing to complete the Works is R 6 000.00 per Day.								
5.16.3	The latent defect period is 5 years, commencing on the Day after the date of certification of Practical Completion.								
6.2.1	Security (Performance Guarantee): Delete the word “selected” and replace it with “stated”. The liability of the Performance Guarantee shall be as per the following table: <table border="1"> <thead> <tr> <th>Value of Contract (incl. VAT)</th><th>Performance Guarantee Required</th></tr> </thead> <tbody> <tr> <td>Less than or equal to R 1m</td><td>Nil</td></tr> <tr> <td>Greater than R 1m and less than or equal to R 10m</td><td>5%</td></tr> <tr> <td>Greater than R 10m</td><td>10%</td></tr> </tbody> </table>	Value of Contract (incl. VAT)	Performance Guarantee Required	Less than or equal to R 1m	Nil	Greater than R 1m and less than or equal to R 10m	5%	Greater than R 10m	10%
Value of Contract (incl. VAT)	Performance Guarantee Required								
Less than or equal to R 1m	Nil								
Greater than R 1m and less than or equal to R 10m	5%								
Greater than R 10m	10%								
6.5.1.2.3	The percentage allowance to cover overhead charges is: 10 per cent for labour; and 10 per cent for materials								
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%. Proof of ownership is required.								
6.10.3	The limit of retention money is 10% of the value of the Contract Price.								
8.6.1.1.2	The value of Plant and materials supplied by the Employer to be included in the insurance sum is R 2 000 000								
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is a maximum of 10% of the Contract Sum.								
8.6.1.3	The limit of indemnity for liability insurance is R 2 million for any single claim. The number of claims during the construction and Defects Liability Period shall be unlimited.								
10.5.1	Dispute resolution shall be by amicable settlement as per the SLA.								

10.5.3	N/A
10.7.1	The determination of disputes shall be in accordance with the SLA.

C.1.2.1.2.2 Variations to the General Conditions of Contract:

Add the following table

Clause	Data
3.2.4	Employer's Agent for Health and Safety <i>Replace Clause 3.2.4 with the following:</i> 'In terms of Clause 1.3.2, all parties to the Contract shall be subject to the relevant requirements of the Construction Regulations 2014 (as amended) of the Occupational Health and Safety Act, Act 85 of 1993 (as amended).'
	<i>Add the following at the end of the above new replacement Clause 3.2.4:</i> 'Where the Employer is obliged to appoint an Employer's Agent for Health and Safety in terms of the Construction Regulations 2014 (as amended) of the Occupational Health and Safety Act (Act 85 of 1993 as amended), and where such Employer's Agent for Health and Safety has complied with the registration requirements of a Construction Health and Safety Agent as a specified category in terms of section 18 (1) (c) of the Project and Construction Management Professions Act (Act 48 of 2000), the applicable clauses of the latest edition of the "Standard Scope Of Services for Construction Health and Safety Agents Registered In Terms Of Section 18(1)(c) of the Project And Construction Management Professions Act (Act No. 48 Of 2000)", including Clauses 2.2.5 "STAGE 5 - CONSTRUCTION DOCUMENTATION AND MANAGEMENT", and 2.2.6 "STAGE 6 - PROJECT CLOSE – OUT", and 2.2.7 "ADDITIONAL RELATED SERVICES", as published in "Registration Rules for Construction Health and Safety Agents in Terms of Section 18 (1) (c) of the Project and Construction Management Professions Act, 2000 (Act No. 48 of 2000)" by the South African Council for Construction and Project Management Professionals in terms of the Project and Construction Management Professions Act (Act 48 of 2000 as amended), shall be subject to all communication and other protocols as stipulated by the Employer's Agent, unless otherwise accorded by law.'
5.14.5.1	Consequences of Completion <i>Amend Clause 5.14.5.1 as follows:</i> <i>In the second line, substitute the word 'Guarantor' with 'Contractor'.</i>

6.3.1	Variations <i>Amend Clause 6.3.1, as follows:</i> <i>In the first paragraph, after the words "or for any reason appropriate", add the phrase ", including the limiting of contract expenditure so as not to exceed the Employer's budgeted project funding, "</i> <i>Add the following phrase to the last paragraph of Clause 6.3.1.6, after the words "ascertaining the amount of the Contract Price":</i> <i>", and no such variation shall give reason for consideration of any claim in terms of Clause 6.11"</i>
6.9.3	Identification of Plant and materials <i>Add the following at the end of Sub-Clause 6.9.3:</i> Storage of Plant In consideration of receiving, from the Employer, payment on account, after the deduction of retention monies, in respect of items of Plant stored at the Contractor's workshop or his suppliers' premises or his other storage facilities, the Contractor shall complete a standard Employer Certificate of Indemnity subject to the approval of the Employer's Agent. In so doing the Contractor: (a) acknowledges that the items of Plant are the sole property of, and are held on behalf of, the Employer; (b) indemnifies the Employer against any loss or damage whatsoever of or to the said items of Plant whilst in the Contractor's possession or in transit and undertakes to effect adequate insurance against these risks in the name of the Employer and to produce of such insurance to the Employer's Agent; (c) undertakes to deliver and install, at the site, the said Plant when required by the Employer; (d) undertakes that no payment has been received, in respect of the said items of Plant, from any other of his clients or employers and that the Employer has prior claim to the value of payments so received for same, prior to all others, from any assets of the Contractor's company; and (e) undertakes to act in accordance with such instructions as received from the Employer, through its officers, to protect the interests of the Employer. Payment for Plant stored at the Contractor's workshop or his suppliers' premises or his other storage facilities, shall be at the sole discretion of the Employer's Agent and the Employer's Agent reserves the right to amend the requirements of the standard Certificate of Indemnity.
6.10.6	Set-off and delayed payments <i>Amend Clause 6.10.6.2 as follows:</i> <i>Delete the words 'Contractor's Bank' and substitute with the words 'Employer's Bank'</i>

6.11	Variations exceeding 15 per cent <i>Replace the main heading, and the marginal heading with:</i> “Variations exceeding 20 per cent” <i>Replace “15 per cent” with “20 per cent” in the text of this Sub-Clause</i>
8.3.1	Excepted risks <i>Amend Clause 8.3.1.12 as follows:</i> <i>In the second line, delete the words ‘Employer or any of their’ and substitute with ‘or any of its’.</i>
8.6.2	Liability of deductibles <i>Deductibles for insurance of the works shall not be more than 5% of the total sum insured.</i>

C.1.2.1.2.3 Additional clauses to the General Conditions of Contract:

Add the following table

Clause	Data
1.1	Definitions <i>Add the following at the end of Sub-Clause 1.1.1:</i>
1.1.1.34	“Client”, as used in the Occupational Health and Safety Act and its Construction Regulations, means Employer.
1.1.1.35	“Principal Contractor”, as used in the Occupational Health and Safety Act - Construction Regulations, means Contractor.

	Corrupt Practices <i>Add the following new sub-clause:</i> 1.3.7 1.3.7.1 The warranty given by the Contractor herein includes the conduct of the following persons: 1.3.7.1.1 The Contractor and its directors, employees, shareholders or partners where the conduct of such persons would render the Contractor directly and vicariously responsible and/or 1.3.7.1.2 the Contractor's Joint Venture Member(s) and its/their directors, employees, shareholders or partners where the conduct of such persons would render the Contractor directly and vicariously responsible; 1.3.7.1.3 any agent of the Contractor, its joint venture member(s) or partners. 1.3.7.2 The Contractor warrants that it and/or any of the persons referred to in Sub-Clause 1.3.7.1 above: 1.3.7.2.1 have not been convicted of any charge relating to or concerning corruption, bribery or fraud during the 10 year period preceding the Base Date and not having disclosed same in Form L. 1.3.7.2.2 have not committed any act in the ten year period preceding the Base Date which could result in it and/or any of the persons referred to in Sub-Clause 1.3.7.1 above being convicted on a charge relating to or concerning corruption, bribery or fraud; 1.3.7.2.3 in relation to the Contract has not offered and/or paid (directly or indirectly) by way of a bribe, gift, gratuity, commission or other thing of value, an inducement or reward to enter into or influence the conclusion of the Contract; 1.3.7.2.4 will not commit any act which could result in it and/or any of the persons referred to in Sub- Sub-Clause 1.3.7.1 being convicted on a charge relating to or concerning corruption, bribery or fraud; 1.3.7.2.5 will not offer and/or pay (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as a reward or inducement to maintain or alter the Contract and/or for doing or forbearing to do any action in relation to the Contract and/or for showing or forbearing to show favour or disfavour to any person in relation to the Contract.
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	1.3.7.3 In addition to any right which the Employer may have to cancel, in the event of the Contractor and/or any of the persons referred to in Sub-Clause 1.3.7.1 above having been convicted on a charge relating to or concerning corruption, bribery or fraud during the ten year period preceding the Base Date and not having disclosed same in terms of Form T as contemplated in Sub-Clause 1.3.7.2 or being convicted on a charge relating to or concerning corruption, bribery or fraud or in the event of the Contractor and/or any of the persons referred to in Sub-Clause 1.3.7.1 above giving or offering to any 1 person any bribe, gratuity, commission or other thing of value as contemplated in Sub-Clause 1.3.7.2 or in the event of the Contractor and/or any of the persons referred to in Sub-Clause 1.3.7.1 above having offered or paid a reward to any person as an inducement to enter into or maintain or alter the contract as contemplated in Sub-Clause 1.3.7.2: 1.3.7.3.1 the Contractor shall forfeit any profit to be derived from this contract; 1.3.7.3.2 such profit will be deemed for the purpose hereof to be 5% of the total contract price; 1.3.7.3.3 the Contractor will make payment thereof on demand; and 1.3.7.3.4 the Employer shall be entitled to deduct such amount from any amount which is due or may become due and payable to the Contractor whether arising from this contract or any other contract between the Employer and the Contractor. 1.3.7.4 In the event of the Contractor, its agents or servants and/or its Joint Venture Member(s) its/their agents or servants having failed to make a complete, full and honest disclosure of the facts in Tender Form L regardless of whether or not the conviction has been appealed against or there is an intention to do so, the Employer shall be entitled, at its sole election, to terminate the Contract immediately without giving notice and, in which event, Clause 9 shall apply mutatis mutandis. 1.3.7.5 In the event of the Contractor and/or any of the persons referred to in Sub-Clause 1.3.7.1 offering and/or paying (directly or indirectly) by way of a bribe, gift, gratuity, commission or other thing of value, as an inducement or reward to enter into, maintain or alter the Contract, the Employer shall be entitled, at its sole election, to cancel the Contract immediately without giving notice and, in which event, Clause 9 shall apply mutatis mutandis."
4.11.1	Competent employees <i>Add the following to sub-clause 4.11.1:</i> "The Contractor shall at all times all take reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst Contractor's personnel, and to preserve peace and protection of persons and property on or near the Site. The misconduct referred to in the above paragraph shall be deemed to include discriminatory treatment, cultural or racial slurs, hate speech, incitement etc. The Contractor is to actively pursue the enhancement of the dignity of each person within a climate of mutual respect among all, and especially among persons of different background, race, colour, creed, sex, gender, opinion or orientation and shall include the awareness and promotion of such matters in all training and induction."

4.13	Additional clauses <i>Add the following sub-clauses at the end of sub-clause 4.12:</i> “The Contractor shall in all dealings with his staff and labour have due regard to all recognised festivals, days of rest and religious or other customs in the Country. No extension of time will be granted for the Contractor’s compliance with the demands of his staff or labour in this regard. The Contractor shall not import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal by Contractor’s Personnel. Arms and Ammunition shall not be permitted on the site except by authorised security personnel. The Contractor shall not give, barter or otherwise dispose of to any person, any arms or ammunition of any kind, or allow the Contractor’s Personnel to do so on site. The Contractor shall respect the Country’s recognised festivals, days of rest and religious or other customs. The Contractor shall not be required to obtain mining leases for material required for the works. The contractor shall source materials from existing and reputable suppliers.
6.10	Payments <i>Add the following at the end of Sub-Clause 6.10.4:</i> “No minimum amount of interim payment certificate will be applicable.”
8.6.8	Manufacturing and/or fabrication and storage at premises other than the Site <i>Add the following new Sub-Clause 8.6.8:</i> “Where the contract involves manufacturing and/or fabrication of the Works or part thereof at premises other than the Site, the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the Works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such Works during manufacture or fabrication then such interest shall be noted by endorsement to the Contractor’s policies of insurance.”

C.1.2.2 Part 2: Data provided by the Contractor

The *General Conditions of Contract*, as specified in Part 1, shall be used as a basis for this Data which is required to be completed.

Each item of data given below is cross-referenced to the clause in the Conditions of Contract to which it mainly applies.

Clause	Data
1.1.1.9	The Name of the Contractor is:
1.2.1.2	The address of the Contractor is: Physical address: Postal address: e-mail address: Contact numbers: Corporate: Direct: Mobile: Fax:

Clause	Data	
6.2.1	The security to be provided by the Contractor shall be the following:	
	Type of security (with Value Added Tax excluded from the Contract Sum and from the value of the Works for calculating the percentages)	Indicate "Yes" or "No"
	Fixed Performance Guarantee of 10% of the Contract Sum plus retention of 10% of the value of the Works.	Yes

C.1.2.3 Part 3: Corrigenda to GCC 2015 by SAICE

All updates, errata, corrections and other amendments to GCC 2015 published or prepared and released to purchasers of the GCC 2015 publication by SAICE, either on their website or otherwise, prior to the base month of this Contract, shall be deemed to form part of GCC 2015.

Each party to the Contract shall purchase its own copy of such updates, errata, corrections and other amendments to GCC 2015.

C.1.2.4 Part 4: Corrigenda to GCC 2015 by the Employer

None.

C1.3 FORM OF OFFER AND ACCEPTANCE

IMPORTANT NOTE:

The Form of Offer (Offer by Tenderer) MUST be completed and signed by all tenderers. Failure to properly complete and sign the Tender form will lead to disqualification of the tender.

The Acceptance form will be signed by the Employer to formalise the Contract Agreement after the successful tenderer has been formally notified of award.

C1.3 FORM OF OFFER AND ACCEPTANCE**TENDER NO: DWS25 0223 WTE**for the **MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING - CONSTRUCTION OF 16 HOUSES OF 100M² AND 1 OF 40M² AREA**To **THE DEPARTMENT OF WATER AND SANITATION (DWS)****OFFER**

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

Tender No: DWS25 0223 WTE – MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING - CONSTRUCTION OF 16 HOUSES OF 100M² AND 1 OF 40M² AREA

The Tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS

.....

..... Rand (in words);

R (n figures)

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 Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

For the Tenderer:

Signature:

Name:

Capacity:

Name and address of organisation:

.....

Witness:

Signature :.....

Name :.....

Date:

Mdloti River Development: Hazelmere Dam Raising - Construction of 16 houses of 100m² and 1 Of 40m² area Dec 2022

ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement, between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract, are contained in:

Part T1	Tendering Procedures
Part T2	Returnable Documents and Schedules
Part C1	Agreements and Contract Data, (which includes this Agreement)
Part C2	Pricing Data
Part C3	Scope of Work
Part C4	Site Information
Part C5	Drawings

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer 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 said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer 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 at, or just after, the date of this Agreement comes into effect. 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 on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within five days of the date of such receipt 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.

For the Employer:

Signature:

Name:

Capacity:

Name and address of organisation:

.....

Witness:

Signature :.....

Name :.....

Date:

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of, offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1	Subject
	Details
2	Subject
	Details
3	Subject
	Details
4	Subject
	Details
5	Subject
	Details
6	Subject
	Details

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from the 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 change 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.

For the Tenderer:..... **Signature**..... **Name**..... **Capacity****Name and address of organisation:**

.....

.....

.....

..... **Witness signature**..... **Witness name**..... **Date****For the Employer:**

.....

.....

.....

Name and address of organisation:

.....

.....

.....

.....

.....

.....

CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of the Agreement, including the Schedule of Deviations (if any) today:

the(day)

of(month)

20.....(year)

at (place)

For the Contractor:

Signature:

Name:

Capacity:

Signature and name of witness:

Signature:

Name:

C1.4 PERFORMANCE GAURANTEE

C1.4 PERFORMANCE GAURANTEE**TENDER NO . DWS25 0223 WTE****MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING - CONSTRUCTION OF 16
HOUSES OF 100M² AND 1 OF 40M² AREA****PERFORMANCEGUARANTEE (PRO FORM)**

For use with the General Conditions of Contract for Construction Works, Third Edition (2015).

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Employer's Agent" means:

"Works" means:

"Site" means:

"Contract" means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

"Contract Sum" means: The accepted amount inclusive of tax of R

Amount in words:

"Guaranteed Sum" means: The maximum aggregate amount of R.....

Amount in words:

Type of Performance Guarantee:

"Expire Date" means:

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Works as defined in the Contract.

1. VARIABLE PERFORMANCE GUARANTEE

1.1 Where a Variable Performance Guarantee has been selected, the Guarantor's liability shall be limited during the following periods of diminishing amounts of the Guaranteed Sum as follows:

1.1.1 From and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of the interim payment certificate certifying, for the first time, more than 50% of the Contract Sum:

R

(Amount in words)

1.1.2 From the day following the date of the said interim payment certificate up to an including the Expiry Date, or the date of issue by the Employer's Agent of the Certificate of Completion of the Works, whichever occurs first:

R

(Amount in words)

- 1.2 The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the interim payment certificate certifying, for the first time, more than 50% of the Contract Sum, has been issued and the date on which the Certificate of Completion of the Works has been issued.

2. FIXED PERFORMANCE GUARENTEE

- 2.1 Where a Fixed Performance Guarantee has been selected, the Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
- 2.2 The Guarantor's period of liability shall be from and excluding the date on which the Performance Guarantee is signed, up to and including the Expiry Date, or the date of issue by the Employer's Agent of the Certificate of Completion of the Works, or the date of payment in full of the Guaranteed Sum, whichever occurs first.
- 2.3 The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

3. CONDITIONS APPLICABLE TO VARIABLE AND FIXED PERFORMANCE GUARANTEES

- 3.1 The Guarantor hereby acknowledges that:
- 3.1.1 Any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.
- 3.1.2 Its obligation under this Performance Guarantee is restricted to the payment of money.
- 3.2 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 3.2.1 to 3.2.3:
- 3.2.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 3.2.2;
- 3.2.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 3.2.1 and the sum certified has still not been paid;
- 3.2.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 3.2.
- 3.3 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
- 3.3.1 The Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 3.3; or

- 3.3.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 3.3; and
- 3.3.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
- 3.4 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 3.2 and 3.3 shall not exceed the Guarantor's maximum liability in terms of 1. 1 or 2.1.
- 3.5 Where the Guarantor has made payment in terms of 3.3, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
- 3.6 Payment by the Guarantor in terms of 3.2 or 3.3 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 3.7 Payment by the Guarantor in terms of 3.3 will only be made against the return of the original Performance Guarantee by the Employer.
- 3.8 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
- 3.9 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 3.10 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 1.1.2 or 2.2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
- 3.11 This Performance Guarantee, with the required demand notices in terms of 3.2 or 3.3, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 3.12 Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at

Date

Guarantor's signatory: (1)

Capacity

Guarantor's signatory: (2)

Capacity

Witness signatory: (1)

Witness signatory: (2)

**C1.5 AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL
HEALTH AND SAFETY ACT No 85 OF 1993**

C1.5 AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT No 85 OF 1993

THIS AGREEMENT is made between the **DEPARTMENT OF WATER AND SANITATION (DWS)** (hereinafter called the EMPLOYER) of the one part, herein represented by:

.....
in his capacity as:

AND:

(hereinafter called the CONTRACTOR) of the other part, herein represented by

.....
in his capacity as:

duly authorized to sign on behalf of the Contractor.

WHEREAS the CONTRACTOR is the Mandatary of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of

TENDER NO. DWS25 0223 WTE

CONTRACT TITLE: MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING - CONSTRUCTION OF 16 HOUSES OF 100M² AND 1 OF 40M² AREA

for the construction, completion and maintenance of the works;

AND WHEREAS the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHSA Amendment Act No 181/1993 (hereinafter referred to as the ACT);

NOW THEREFORE the parties agree as follows:

1. The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting itself with such arrangements and procedures.
3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the Employer's CONSULTING ENGINEERS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
4. The CONTRACTOR agrees that any duly authorized officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and

2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.

5. The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at for and on behalf of the **CONTRACTOR**

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: .. 1.

2.

Thus signed at for and on behalf of the **EMPLOYER**

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

C1.6 RETENTION MONEY GUARANTEE

C1.6 RETENTION MONEY GUARANTEE**TENDER NO. DWS25 0223 WTE****MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING - CONSTRUCTION OF 16
HOUSES OF 100M² AND 1 OF 40M² AREA****RETENTION MONEY GUARANTEE**

To be provided to:

The Director General: Water and Sanitation
 Department of Water and Sanitation
 zwaMadaka Building,
 157 Francis Baard Street
PRETORIA
 0002

(whom the Contract defines as the Employer).

We have been informed that _____ (hereinafter called the "Principal") is your Contractor under such Contract and wishes to receive early payment of [part of] the retention money, for which the Contract requires him to obtain a guarantee.

At the request of the Principal, we (*name of bank*) _____ hereby irrevocably undertake to pay you, the Beneficiary/Employer, any sum or sums not exceeding in total the amount of _____ (the "guaranteed amount", say: _____) upon receipt by us of your demand in writing and your written statement stating:

- (a) that the Principal has failed to carry out his obligation(s) to rectify certain defect(s) for which he is responsible under the Contract, and
- (b) the nature of such defect(s).

At any time, our liability under this guarantee shall not exceed the total amount of retention money released to the Principal by you, as evidenced by your notices issued under Sub-Clause 6.10.3 of the Conditions of the Contract with a copy being passed to us.

Any demand for payment must contain your signature(s) which must be authenticated by your bankers or by a notary public. The authenticated demand and statement must be received by us at this office on or before (*the date 70 days after the expected expiry of the Defects Notification Period for the Works*) _____ (the "expiry date"), when this guarantee shall expire and shall be returned to us.

We have been informed that the Beneficiary may require the Principal to extend this guarantee if the performance certificate under the Contract has not been issued by the date 28 days prior to such expiry date. We undertake to pay you such guaranteed amount upon receipt by us, within such period of 28 days, of your demand in writing and your written statement that the performance certificate has not been issued, for reasons attributable to the Principal, and that this guarantee has not been extended.

This guarantee shall be governed by the laws of the Republic of South Africa and shall be subject to the Uniform Rules for Demand Guarantees, published as number 458 by the International Chamber of Commerce, except as stated above.

Date _____ Signature(s) _____

C2.1 PRICING INSTRUCTIONS
C2.2 BILL OF QUANTITIES

C2.1 PRICING INSTRUCTIONS

1. GENERAL

In this Bill of Quantities the headings and item descriptions identify the work covered by the respective items and shall be read in conjunction with those items contained in the Measurement and Payment Clauses of the various Specifications as cross referenced.

The quantities of work and material set forth in the Bill of Quantities are estimates set against abbreviated item descriptions.

The nature and extent of the work is to be ascertained by reference to all the documents comprising the Contract. Where Clause references are contained in item descriptions, these are given for guidance only and are not exclusive to other relevant provisions of the Contract.

The Conditions of Contract, special conditions of contract (if any), specifications and drawings are to be read in conjunction with this Bill of Quantities.

The rates and prices entered in the Bill of Quantities shall represent full compensation for executing and completing the work as specified or implied including inter alia the following, unless explicitly stated otherwise:

- General obligations, overheads, liaison, liabilities and risks involved in the proper management and execution of the Works as set forth in or reasonably to be implied from the Contract.
- All taxes, duties, surcharges, royalties and the like payable by the Contractor.
- Complying with Health and Safety, Environmental, Recruitment and Training and Quality Management provisions.
- All testing and quality control required for acceptance control as per the standards
- Engineering fees and costs
- The submission of Method Statements.
- The procurement and supply of materials and goods including purchase, loading, transport, delivery to and handling at Site, storage and eventual delivery to and handling at the point of incorporation in the Works. Taking delivery of materials and goods supplied by others, handling, storage and incorporation of materials and goods into the Works
- Obtaining natural material from borrow pits and the quarry, identification and demarcation of borrow areas, loading and transport of such material to the Works.
- Processing of goods and materials as specified and incorporation in the Works as specified such that the Works will be fit for the purpose for which they are being provided.
- Bulk earthworks and reconstruction of the house platforms
- Blasting and the removal and importation of material associated with blasting work (If needed)
- Temporary Works and infrastructure requirements.
- Local authority charges
- All additional requirements as described in Part C3: Scope of Works

The Bill of Quantities does not form the basis on which the Contractor shall order materials for the construction of the Works. Responsibility for the accuracy of quantities of materials ordered shall be solely that of the Contractor.

The contractor shall determine the contract skills participation goals, expressed in Rand, which shall not be less than the contract amount multiplied by a percentage (0.5%) factor.

Note:

The contractor must ensure that his unit prices are correct. The final tender price shall be calculated from unit prices and any mathematical errors shall be corrected in the tendered amount.

2. DESCRIPTION OF ITEMS

The contractor shall be responsible for and pay all costs associated with the development of the design, detail design and production of “as-built” designs for the following:

- Architectural Work based on the prototype design supplied by the DWS
- Civil Engineering work
- Structural Engineering work
- Electrical Engineering work
- Mechanical Engineering work (If needed)
- Temporary and permanent connections to municipal water, electricity and storm water reticulation.

3. MEASUREMENT OF COMPLETED WORK

Except where otherwise specified in the Measurement and Payment clauses contained in Volume 2, the measurement of work shall be calculated from the dimensions given on the Drawings.

4. PRICING OF ITEMS

A price or rate shall be entered against each item in this Bill of Quantities, whether or not quantities are stated.

Under certain categories of Part 1: General Requirements and Obligations, allowance has been made in terms of the Specification, for the Contractor to enter additional items, values and prices as necessary. Where utilized, such items shall be fully described and completed in a similar manner to the preceding billed items.

Where allowance is made in the Bill for the Contractor to enter items and the space provided is insufficient, the Contractor shall attach such additional Bill pages to the back of the relevant page of the Bill. Any such additions shall be clearly referenced and identified as additional pages and will be viewed to be an integral part of the Bill.

Rates and prices shall be expressed to two decimal places except in the case of a “NIL” rate or price.

5. USE OF ALTERNATIVE SPECIFIED MATERIALS

Where a choice of alternative materials is indicated for a given purpose, the description scheduled and the rates and prices inserted shall be deemed to cover any of the permitted alternative materials which the Contractor may elect to use.

6. UNITS OF MEASUREMENT

The following abbreviations may be used for the units of measurement:

UNIT	ABBREVIATION	UNIT	ABBREVIATION
Litre	ℓ	Megalitre	Mℓ
Millimetre	mℓ	Number	No
Metre	m	Hour	h
Cubic metre kilometre	m ³ .km	Day	d
Kilogram	kg	Week	wk
Square metre	m ²	Sum, Lump Sum	Sum
Cubic metre	m ³	Provisional sum	PS
Rate only	R/o	Extra over	E/o

C2.2 BILL OF QUANTITIES

PRICING SCHEDULE – NON-FIRM PRICES (PURCHASES) DWS25 0223 WTE				SBD 3.2		
MDLOTI RIVER DEVELOPMENT: HAZELMERE DAM RAISING CONSTRUCTION OF 16 HOUSES OF 100M2 AND 1 OF 40M2 AREA CONSTRUCTION OF 16 HOUSES OF 100M2 AND 1 OF 40M2 AREA CIDB CONTRACTOR GRADING DESIGNATION OF 7GB OR HIGHER NOTE: PRICE ADJUSTMENTS WILL BE ALLOWED AT THE PERIODS AND TIMES SPECIFIED IN THE BIDDING DOCUMENTS. IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT						
Name of Bidder Closing Time11H00 Closing Date: 04 April 2023						
OFFER TO BE VALID FOR 90 DAYS FROM CLOSING DATE OF BID <u>SCHEDULE OF QUANTITIES</u> <u>NB</u> TENDERERS MUST COMPLETE THE SCHEDULE OF QUANTITIES IN BLACK INK SECTION 1200 A						
ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1.01	SABS 1200 A	SECTION A: PRELIMINARY & GENERAL				
	8.3	Scheduled fixed-charge and value-related items:				
	PSA 8.3.1	1) Contractual Requirements:				
	PSA 8.3.2	a) General site supervision and overheads.	sum	1		
		b) Access control and security.	sum	1		
		c) Health and Safety as specified, including for Covid-19	sum	1		
		d) Environmental considerations.	sum	1		
		e) Survey consistency check.	sum	1		
		2) Establishment of Facilities for the Engineer on Site:				
	a) Furnished offices.	sum	1			
	b) Telephone and internet facilities.	sum	1			
	c) Nameboards.	sum	1			
	d) Car ports.	sum	1			
	e) Survey equipment.	sum	1			
		3) Establishment of Facilities for the Contractor on Site:				
	a) Offices and storage sheds.	sum	1			
	b) Workshops.	sum	1			
	c) Laboratories.	sum	1			
d) Living accommodation.	sum	1				
e) Sewage treatment and disposal.	sum	1				

		f) Tools and equipment.	sum	1		
		g) Water supplies.	sum	1		
		h) Access Roads.	sum	1		
		i) Communications.	sum	1		
	1200 A	Carried forward				

HazelmereHousing-BoQ_SANS 1200 - Unpriced Rev 1 -mk

SECTION 1200 A

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought forward				
1.03		e) Sewage treatment and disposal.	sum	1		
		f) Tools and equipment.	sum	1		
		f) Water supplies.	sum	1		
		f) Access Roads.	sum	1		
		f) Communications.	sum	1		
		f) Electric power and distributions.	sum	1		
		Enterprise Development				
		Enterprise Development of Targeted				
		1) Enterprise				
		Needs Analysis and Enterprise Development Plan per Targeted				
		a) Enterprise	No.	1		
		Monitoring and Interim reporting	Per			
		per targeted enterprise	Quarter	4		
		Project Completion report per				
		c) Targeted Enterprise	No.	1		
		d) Contract Participation Goal (CPG)	Prov sum	1	R 1,700,000.00	R 1,700,000.00
		Overheads, charges and profit on				
		e) (d) above	%			
TOTAL SECTION 1200 A CARRIED TO SUMMARY						

SECTION 1200 C

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	SANS 1200 C	<u>SITE CLEARANCE: 16 No. of 100 m² Houses at Oakford</u>				
2.01	PSC 8.2.1	Clear and grub:	m ²	8,064		
2.02	PSC 8.2.2	Remove and grub large trees and tree stumps of girth:				
		1) Over 1,0 m and up to and including 2,0 m.	No	10		
2.03	PSC 8.2.10	Remove topsoil to nominal depth of 150 mm and stockpile.	m ³	1,210		
	SANS 1200 C	<u>SITE CLEARANCE: 1 No. of 45 m² Houses at Oakford</u>				
2.05	PSC 8.2.1	Clear and grub:	m ²	504		
2.06	PSC 8.2.2	Remove and grub large trees and tree stumps of girth:				
		1) Over 1,0 m and up to and including 2,0 m.	No	-		
2.07	PSC 8.2.10	Remove topsoil to nominal depth of 150 mm and stockpile.	m ³	76		
TOTAL SECTION 1200 C CARRIED TO SUMMARY						

SECTION 1200 D

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.01	SANS 1200 D 8.3.2	<u>EARTHWORKS: 16 No. of 100 m² Houses at Oakford</u> Bulk excavation: 1) Excavate in all materials to level the platforms and dispose the surplus materials: a) Intermediate excavation b) Hard rock excavation c) Boulder excavation, class A d) Boulder excavation, class B	m ³	2,822.40 806.40 201.60 201.60		
3.02	PSD 8.3.3	Restricted excavation: 1) Excavate for foundation trenches in all materials, and use for backfill or embankment, or dispose: a) Depth up to 1,0 m	m ³	276.00		
3.03	PSD 8.3.4	Importing of materials: 1) Extra over for importation of G5 materials from commercial sources.	m ³	7,258.00		
3.04		Compaction: 1) Scarify and compact ground surfaces under floors, bottom of strip footings etc. for a depth of 900 mm in 150 mm layers, breaking down oversized material, adding suitable material where necessary and compact to 95% Modified AASHTO density and testing.	m ²	7,258.00		
3.05		Prescribed density tests on filling 1) Modified AASHTO Density tests	no	192		
3.06	PSD 8.3.10	Topsoiling:	m ³	1,693.44		
3.07	PSD 8.3.11	Grassing or other vegetation cover: 1) Hydroseeding	m ²	3,528.00		
	1200 DB	Carried Forward				

SECTION 1200 DB

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
3.08	SANS 1200 D 8.3.2	Soil Poisoning: 1) Soil insecticide including certificate of registration of the pest control operator as issued by the Department of Agriculture. a) Under floors etc. including forming and poisoning shallow furrows against foundation walls, etc., filling in walls and ramming.	m ²	5,080.60		
3.09	PSD 8.3.3	EARTHWORKS: 1 No. of 40 m² Houses at Oakford Bulk excavation: Excavate in all materials to level the platforms and dispose the surplus materials: 1)				
		a) Intermediate excavation	m ³	147.00		
		b) Hard rock excavation	m ³	42.00		
		c) Boulder excavation, class A	m ³	10.50		
		d) Boulder excavation, class B	m ³	10.50		
3.10	PSD 8.3.4	Restricted excavation: 1) Excavate for foundation trenches in all materials, and use for backfill or embankment, or dispose:				
		a) Depth up to 1,0 m	m ³	7.00		
3.11		Importing of materials: 1) Extra over for importation of G5 materials from commercial sources.	m ³	378.00		
3.12		Compaction: 1) Scarify and compact ground surfaces under floors, bottom of strip footings etc. for a depth of 900 mm in 150 mm layers, breaking down oversized material, adding suitable material where necessary and compact to 95% Modified AASHTO density.	m ²	93.47		
3.13	PSD 8.3.10	Prescribed density tests on filling 1) Modified AASHTO Density tests	no	12		
3.14	PSD 8.3.11	Topsoiling: Grassing or other vegetation cover: 1) Hydroseeding	m ³	88.20		
	1200 DB	Carried Forward				

SECTION 1200 DB

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
3.15		Soil Poisoning: 1) Soil insecticide including certificate of registration of the pest control operator as issued by the Department of Agriculture. a) Under floors etc. including forming and poisoning shallow furrows against foundation walls, etc., filling in walls and ramming.	m ²	264.60		
	TOTAL SECTION 1200 D CARRIED TO SUMMARY					

SECTION 1200 DB

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4.01	SANS 1200 DB	<u>EARTHWORKS (PIPE TRENCHES): 16 No. of 100 m² Houses at Oakford</u>				
	PSDB 8.3.2	<u>TRENCHES FOR WATER PIPES</u> Excavate in all materials for trenches, backfill, compact and dispose of surplus material: 1) Pipes up to 125 mm dia for depths: a) Up to 1,0 m b) Over 1,0 m up to 2,0 m	m m	384 77		
4.02	PSDB 8.3.2	Extra over item above for: 1) Intermediate excavation 2) Hand excavation and backfill where ordered by the Engineer	m ³ m ³	115 23		
	PSDB 8.3.2	<u>TRENCHES FOR SEWER PIPES</u> Excavate in all materials for trenches, backfill, compact and dispose of surplus material: 1) Pipes up to 125 mm dia for depths: a) Up to 1,0 m b) Over 1,0 m up to 2,0 m	m m	629 189		
4.03	PSDB 8.3.2	Extra over item above for: 1) Intermediate excavation 2) Hand excavation and backfill where ordered by the Engineer	m ³ m ³	189 38		
	PSDB 8.3.2	<u>TRENCHES FOR SEWER PIPES</u> Excavate in all materials for trenches, backfill, compact and dispose of surplus material: 1) Pipes up to 125 mm dia for depths: a) Up to 1,0 m b) Over 1,0 m up to 2,0 m	m m	629 189		
4.04	PSDB 8.3.2	Extra over item above for: 1) Intermediate excavation 2) Hand excavation and backfill where ordered by the Engineer	m ³ m ³	189 38		
	PSDB 8.3.2	<u>TRENCHES FOR SEWER PIPES</u> Excavate in all materials for trenches, backfill, compact and dispose of surplus material: 1) Pipes up to 125 mm dia for depths: a) Up to 1,0 m b) Over 1,0 m up to 2,0 m	m m	629 189		
4.05	SANS 1200 DB	<u>EARTHWORKS (PIPE TRENCHES): 1 No. of 40 m² Houses at Oakford</u>				
	PSDB 8.3.2	<u>TRENCHES FOR WATER PIPES</u> Excavate in all materials for trenches, backfill, compact and dispose of surplus material: 1) Pipes up to 125 mm dia for depths: a) Up to 1,0 m b) Over 1,0 m up to 2,0 m	m m	24 7		
	1200 DB	Carried Forward				

SECTION 1200 DB

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
4.06	PSDB 8.3.2	Extra over item above for: 1) Intermediate excavation 2) Hand excavation and backfill where ordered by the Engineer <u>TRENCHES FOR SEWER PIPES</u>	m ³ m ³	7 2		
4.07	PSDB 8.3.2	Excavate in all materials for trenches, backfill, compact and dispose of surplus material: 1) Pipes up to 125 mm dia for depths: a) Up to 1,0 m b) Over 1,0 m up to 2,0 m	m m	39 12		
4.08	PSDB 8.3.2	Extra over item above for: 1) Intermediate excavation 2) Hand excavation and backfill where ordered by the Engineer	m ³ m ³	12 2		
TOTAL SECTION 1200 DB CARRIED TO SUMMARY						

SECTION 1200 G

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5.01	SANS 1200 G 8.2.1	CONCRETE (STRUCTURAL): 16 No. of 100 m² Houses at Oakford <u>SCHEDULED FORMWORK ITEMS</u> Rough: 1) Vertical formwork to: a) Edges, risers, ends and reveals not exceeding 300 mm high or wide.	m ²	45		
5.02	8.3.1	<u>SCHEDULED REINFORCEMENT ITEMS</u> High-tensile steel bars in the following: 1) Slab Beams	t	16		
5.03	8.3.2	High-tensile welded mesh in the following: 1) Floor Slab 2) Apron Slabs 3) Water Tank Plinth	m ² m ² m ²	10,240 720 104		
5.04	8.4.2	<u>SCHEDULED CONCRETE ITEMS</u> Blinding layer: 1) Class 15 MPa/19 mm concrete of: a) 50 mm thickness	m ²	1,600		
5.05	8.4.3	Strength concrete: 1) Class 35 MPa/19 mm concrete in: a) Raft Foundation b) Apron Slabs c) Water Tank Plinth	m ³ m ³ m ³	532 71 16		
5.06	8.4.4	Unformed surface finishes: 1) Wood-floated finishes to: a) Water Tank Plinth b) Apron Slabs 2) Screed board finishes to: a) Top of raft foundation slab	m ² m ² m ²	54 710 1,600		
5.07		Concrete Tests: 1) Prepare set of three concrete cubes each size 150 x 150 x 150 mm and deliver to an approved laboratory for testing and pay all charges.	Sets	32		
	1200 G	Carried Forward				

SECTION 1200 G

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
5.08	SANS 1200 G 8.2.1	CONCRETE (STRUCTURAL): 1 No. of 40 m² Houses at Oakford <u>SCHEDULED FORMWORK ITEMS</u> Rough: 1) Vertical formwork to: a) Edges, risers, ends and reveals not exceeding 300 mm high or wide.	m ²	5		
5.09	8.3.1	<u>SCHEDULED REINFORCEMENT ITEMS</u> High-tensile steel bars in the following: 1) Slab Beams	t	0.3		
5.10	8.3.2	High-tensile welded mesh in the following: 1) Floor Slab 2) Apron Slabs 3) Water Tank Plinth	m ² m ² m ²	288 30 6		
5.11	8.4.2	<u>SCHEDULED CONCRETE ITEMS</u> Blinding layer: 1) Class 15 MPa/19 mm concrete of: a) 50 mm thickness	m ²	45		
5.12	8.4.3	Strength concrete: 1) Class 35 MPa/19 mm concrete in: a) Raft Foundation b) Apron Slabs c) Water Tank Plinth	m ³ m ³ m ³	13 3 1		
5.13	8.4.4	Unformed surface finishes: 1) Wood-floated finishes to: a) Water Tank Plinth b) Apron Slabs 2) Screed board finishes to: a) Top of raft foundation slab	m ² m ² m ²	4 29 45		
5.07		Concrete Tests: 1) Prepare set of three concrete cubes each size 150 x 150 x150 mm and deliver to an approved laboratory for testing and pay all charges.	Sets	2		
	TOTAL SECTION 1200 G CARRIED TO SUMMARY					

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
6.01	PD 10	<u>BUILDING WORK: 16 No. of 100 m² Houses at Oakford</u>				
		Brickwork:				
		1) 230 mm thick, non-facing plastered/ extra, engineering bricks	m ²	2,728		
		2) 115 mm thick, non-facing plastered/ extra, engineering bricks	m ²	444		
		Stock Bricks in Class 1 Mortar				
6.02		Brickwork Sundries:				
		1) 4 mm Galvanised wire ties 3 500 mm long built into foundation beam fastened around reinforcing bar and the other end wrapped around and spiked to rafter.	No	1,072		
		2) Cotts No. C2 or other approved high tensile steel brick reinforcement 75mm wide well lapped at all angles and passings and built into brick walls.	m	1,367		
		3) Cotts No. C2 or other approved high tensile steel brick reinforcement 150mm wide well lapped at all angles and passings and built into brick walls.	m	8,956		
		4) Prestressed concrete fabricated lintols of approved manufacture: 110 x 75mm Lintols in lengths not exceeding 3m.	m	762		
		5) Fibre-Cement Window Sills, Natural grey sills in single lengths bedded in Class 1 mortar including metal fixing lugs, etc: 15 x 150 mm wide sills set to slightly projecting outward.	m	170		
		6) Grille Blocks: 225 x 150 mm glazed clay vermin proof air bricks.	No	192		
6.03		Plaster work:				
		1) 12 mm thick, wood-float finish	m ²	2,728		
		2) 12 mm thick, steel-float finish	m ²	3,616		
6.04		Floor screeds:				
		1) 32 mm Screed to horizontal surfaces to receive tiles	m ²	1,600		
6.05		Damp proofing walls and floors:				
		1) One layer of 250 micron Polyethylene damp proof membrane sealed at laps with appropriate Superstik or equivalent tape. Damp proof membrane laid on filling under solid floors and beams, lapped 100mm and sealed at all joinings.	m ²	3,462		
	1200 PD	Carried Forward				

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
6.06		2) One layer of 375 micron Consol Plastics Brikgrip DPC or equivalent embossed damp proof course laid in walls horizontally and built into walls or stepped up cavity lapped 150mm at all angles and passings. 3) Prepare and apply approved polyurethane sealant in sealing contact joint between fittings and wall. 4) Sealing around window frames with Expandite Sealastic or equivalent gun applied sealing compound in joint sealing and pointing all round external window frames. Doors and Windows: 1) Steel door frames: a) 1,6 mm Thick double rebated pressed steel door frames with 1" pair hinges suitable for single brick wall and single door size: 2 032 mm x 813 mm x 40 mm. b) 1,6 mm Thick double rebated pressed steel door frames with 1" pair hinges suitable for double brick wall and single door size: 2 032 mm x 813 mm x 40 mm. 2) Steel window with frame, including glazing and sills: Note: All windows shall be painted as described and fitted with type BB1 burglar bars to opening sections only. All burglar bars shall be fitted before leaving the manufacturer's works. a) Standard window type NCT1S: 533 x 949 mm high. b) Standard window type NCTX7S: 1 022 x 949 mm high. c) Standard window type TD57S: 022 x 1 559 mm high. d) Standard window type TD51S51S: 1 511 x 1 264 mm high. e) Standard window type TD51S81S: 2 000 x 1 559 mm high.	m² m m No No No No No No No	315 63 315 80 32 16 32 16 32 32		
	1200 PD	Carried Forward				

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
6.07		Glazing: Glazing to steel with putty. 1) 4 mm Clear float glass: a) Panes not exceeding 0,5 m ² . b) Panes exceeding 0,5 m ² and not exceeding 2 m ² in fanlights. 2) 4 mm Obscure glass: a) Panes not exceeding 0,5 m ² . b) Panes exceeding 0,5 m ² and not exceeding 2 m ² in fanlights. 3) 4 mm Mirrors: a) Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete. Mirror size: 600 x 450 mm high including four screws.	m ² m ² m ² m ² No	87 91 11 10 32		
6.08		Timber Roof Construction: 1) The following trusses shall be "Mitek" or other approved engineering designed roof trusses manufactured from sawn S.A. Pine as described at average 700 mm centres to support concrete roof tile covering with fibre cement ceilings under, including hoisting and fixing in position approximately 3 145 mm above natural ground level. a) For design, supply and delivery of prefabricated timber roof truss system including trusses, bracings, valleys, hips, etc, to 17.5 degree pitch designed for truss loading (for 16 Houses each with a floor area of 100 m ²).	Sum	1		
6.09		Ceilings: 1) Fibre-cement ceiling 4 mm thick boards with 6 x 32 mm Meranti cover strips fixed to wooden branderings: 2) Sawn S A Pine brandering for ceiling formed with 38 x 38 mm battens at 450 mm centres in one direction, with cross brandering at intersections and ends of ceiling boards.	m ² m ²	1,600 1,600		
	1200 PD	Carried Forward				

PARTICULAR SPECIFICATION PD

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PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
		b) Sisalation 405 or Equivalent sheeting supported by 2 mm ϕ Galvanised straining wires spaced at 300 mm centres nailed on S.A.P. roof trusses.	m ²	2,545		
		c) Factory coloured concrete ridge tiles to match roofing tiles bedded and pointed in 1:3 cement mortar tinted to match tile colour.	m	256		
		d) Factory coloured concrete hip tiles to match roofing tiles bedded and pointed in 1:3 cement mortar tinted to match tile colour.	m	480		
		e) Purpose made tile to 3-way intersection of ridge with hips bedded and pointed in 1:3 cement mortar tinted to match tile colour.	No	64		
		f) Roof valley galvanised flashing	m	272		
		2) Roof Insulation High density 32-36 kg/m ³ rigid extruded polystyrene 100 % closed cell insulation boards 30 mm thick x 600 mm wide with tongue and groove joints glued to underside of roof covering with self adhesive glue all in accordance with manufacturer's specifications.	m ²	2,545		
		2) Rainwater Harvesting 0,8 mm commercial and industrial ogee chromadek seamless gutter, coated internally and externally in clour Okavango sunset with matching splash plate including mitred angles covered with a mitre strip externally, stop ends crimped and all sealed on the inside with appropriate silicone sealer.				
		a) 150 x 125 mm eaves gutter fixed to falls in continuous lengths at a spacing not exceeding 600 mm centres with and including approved gutter brackets.	m	904		
		b) 75 x 50 mm, 0,6 mm thick chromatek rainwater down pipes fixed to walls with and including approved holderbats at 500 mm centres in colour Okavango Sunset including all necessary bend, elbows, shoes, etc.	1 No	80		
		c) Gutter debris filter	No	32		
		d) First flush diverter	No	32		
	1200 PD	Carried Forward				

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
6.12		e) Supply and install 2 000 liter polyurethane water tank including construction of concrete plinth. Ironmongery: 1) Handles: Union CZ 682-24 SC or equivalent lever handles. 2) Locks a) 4-lever lockset Union 2247-78 or equivalent b) 2-lever lockset Union 2295-76 or equivalent 3) Union CZ8731SC or equivalent doorstops 4) Bathroom fittings a) 20 mm Diameter Chromium plated towel rail 300 mm long on type 162 brackets plugged and screwed to wall. b) 20 mm Diameter Chromium plated towel rail 600 mm long on type 162 brackets plugged and screwed to wall. c) Aluminium shower cubical, including all necessary fittings and sundry items (for 16 Houses each with a floor area of 100 m²). d) 400 x 600 mm High single door bathroom cabinet with mirror fixed to wall. 5) Natural anodised aluminium double curtain track including 14 rollers per metre, brackets, stopped ends, etc; and plugged to face of wall. 6) Washing lines, driers, etc: a) 50 x 50 x 4 mm Angle section brackets 1 200 mm long three times holed. b) M10 expansion eyebolt fixed to brickwork. c) 4 mm Diameter galvanised steel wire in long lengths tightly drawn with ends wrapped around and fixed to straining eye bolts. d) M4 eyebolt fixed to steel bracket.	No pairs No No No No No sum No m m No m No	16 112 32 80 96 16 16 1 16 211 38 96 96 96		
	1200 PD	Carried Forward				

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
6.13		Tiling: 1) Wall Tiling: Note: 200 x 200 x 5 mm Thick white glazed tiles or equal approved fixed to plastered surfaces (plaster measured elsewhere) with TAL or equivalent waterproof adhesive, smooth epoxy grouted joints and applied strictly according to manufacturer's instructions: a) Walls. m ² 625 b) Narrow widths not exceeding 300 mm wide. m ² 12 2) Floor Tiling: Note: 300 x 300 x 10 mm Thick unglazed porcelain floor tile fixed with Tal or equivalent tile adhesive on diagonal with straight joints in both directions and one tile width straight border, bedded in 3:1 plaster bedding to a total thickness of 32 mm on concrete (screed elsewhere measured) flush pointed and with TAL or equivalent tile grout prepared and applied strictly to manufacturer's instructions: a) Floors and landings, with continuous joints in both directions. m ² 1,600 b) Skirting, 100 mm high of cut tiles, recessed flush with wall tiles above. m 2,450 3) Sundries: a) White ceramic semi-recessed toilet roll holder. No 16 b) Single ceramic semi-recessed soap dish. No 16				
6.14	PD 10	<u>BUILDING WORK: 1 No. of 40 m² Houses at Oakford</u> Brickwork: 1) 230 mm thick, non-facing plastered/ extra, engineering bricks m ² 104 2) 115 mm thick, non-facing plastered/ extra, engineering bricks m ² 5 Stock Bricks in Class 1 Mortar				
	1200 PD	Carried Forward				

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
6.15		Brickwork Sundries: 1) 4 mm Galvanised wire ties 3 500 mm long built into foundation beam fastened around reinforcing bar and the other end wrapped around and spiked to rafter. 2) Cotts No. C2 or other approved high tensile steel brick reinforcement 75mm wide well lapped at all angles and passings and built into brick walls. 3) Cotts No. C2 or other approved high tensile steel brick reinforcement 150mm wide well lapped at all angles and passings and built into brick walls. 4) Prestressed concrete fabricated lintols of approved manufacture: 110 x 75mm Lintols in lengths not exceeding 3m. 5) Fibre-Cement Window Sills, Natural grey sills in single lengths bedded in Class 1 mortar including metal fixing lugs, etc: 15 x 150 mm wide sills set to slightly projecting outward. 6) Grille Blocks: 225 x 150 mm glazed clay vermin proof air bricks.	No m m m No	20 16 294 13 5 6		
6.16		Plaster work: 1) 12 mm thick, wood-float finish 2) 12 mm thick, steel-float finish	m ² m ²	104 114		
6.17		Floor screeds: 1) 32 mm Screed to horizontal surfaces to receive tiles	m ²	45		
6.18		Damp proofing walls and floors: 1) One layer of 250 micron Polyethylene damp proof membrane sealed at laps with appropriate Superstik or equivalent tape. Damp proof membrane laid on filling under solid floors and beams, lapped 100mm and sealed at all joinings. 2) One layer of 375 micron Consol Plastics Brikgrip DPC or equivalent embossed damp proof course laid in walls horizontally and built into walls or stepped up cavity lapped 150mm at all angles and passings.	m ² m ²	89 12		
	1200 PD	Carried Forward				

HazelmereHousing-BoQ_SANS 1200 - Unpriced Rev 1-mk

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
6.21		Timber Roof Construction: 1) The following trusses shall be "Mitek" or other approved engineering designed roof trusses manufactured from sawn S.A. Pine as described at average 700 mm centres to support concrete roof tile covering with fibre cement ceilings under, including hoisting and fixing in position approximately 3 145 mm above natural ground level. a) .For design, supply and delivery of prefabricated timber roof truss system including trusses, bracings, valleys, hips, etc, to 17.5 degree pitch designed for truss loading (for 1 Houses with a floor area of 45 m2).	Sum	1		
6.22		Ceilings: 1) Fibre-cement ceiling 4 mm thick boards with 6 x 32 mm Meranti cover strips fixed to wooden branderings: 2) Sawn S A Pine brander for ceiling formed with 38 x 38 mm battens at 450 mm centres in one direction, with cross brander at intersections and ends of ceiling boards.	m ²	45		
6.23		Joinery: 1) Items measured by number: a) Wrought Meranti framed, ledged and braced battened closed back door hung to steel door frames: 2 032 mm x 813 mm x 40 mm. b) Semi-Solid flush panel door with masonite finish and concealed hardwood edges hung to steel door frames: 2 032 mm x 813 mm x 40 mm. c) Extra over for ceiling opening for 600 x 600 mm trap door complete with trimmers, frame, cross branders, ceiling board, hinges, etc as described. d) 1 500 mm x 600 mm x 900 mm High floor drop-in cupboard including 16 mm Melamine shelves, edging, complete with locks, Formica worktop, etc. As per DWG 178 428/19. e) 1 500 mm x 600 mm x 2 100 mm High inbuilt wardrobes including door frame, 16 mm Melamine shelves, edging, complete with locks, etc. As per DWG 178 428/19.	No	2		
			No	3		
			No	1		
			No	1		
			No	2		
	1200 PD	Carried Forward				

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
6.24		2) Items measured by length: a) Rhino Gypsum plasterboard cornices: 75 mm Coved cornices. b) 19 x 76 mm Wrot Meranti skirting with 19 mm quadrant bead nailed to wall at 400 mm centres with 50 mm steel nail head holes filled and finished flush. Quadrant nailed to skirting with 25 mm headless nails at 300 mm centres. Nail head holes filled and finished flush. c) 15 x 250 mm pressed fibre cement fascia board drilled and brass screwed to and including 38 x 38 mm sawn softwood battens. d) 15 x 250 mm pressed fibre cement barge board drilled and brass screwed to and including 38 x 38 mm sawn softwood battens. Roofing: 1) Roof Covering: a) Factory coloured concrete roof tiles on 38 x 38 mm battens at centres according to supplier's specifications. b) Sisalation 405 or Equivalent sheeting supported by 2 mm ϕ Galvanised straining wires spaced at 300 mm centres nailed on S.A.P. roof trusses. c) Factory coloured concrete ridge tiles to match roofing tiles bedded and pointed in 1:3 cement mortar tinted to match tile colour. 2) Roof Insulation High density 32-36 kg/m³ rigid extruded polystyrene 100 % closed cell insulation boards 30 mm thick x 600 mm wide with tongue and groove joints glued to underside of roof covering with self adhesive glue all in accordance with manufacturer's specifications.	m	42		
			m	42		
			m	18		
			m	17		
			m ²	73		
			m ²	73		
			m	9		
			m ²	73		
	1200 PD	Carried Forward				

PARTICULAR SPECIFICATION PD

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
6.25		2) Rainwater Harvesting 0,8 mm commercial and industrial ogee chromadek seamless gutter, coated internally and externally in clour Okavango sunset with matching splash plate including mitred angles covered with a mitrestrip externally, stop ends crimped and all sealed on the inside with appropriate silicone sealer. a) 150 x 125 mm eaves gutter fixed to falls in continuous lengths at a spacing not exceeding 600 mm centres with and including approved gutter brackets. b) 75 x 50 mm, 0,6 mm thick chromatek rainwater down pipes fixed to walls with and including approved holderbats at 500 mm centres in colour Okavango Sunset including all necessary bend, elbows, shoes, etc. c) Gutter debris filter d) First flush diverter e) Supply and install 2 000 liter polyurethane water tank including construction of concrete plinth. Ironmongery: 1) Handles: Union CZ 682-24 SC or equivalent lever handles. 2) Locks a) 4-lever lockset Union 2247-78 or equivalent b) 2-lever lockset Union 2295-76 or equivalent 3) Union CZ8731SC or equivalent doorstops 4) Bathroom fittings a) 20 mm Diameter Chromium plated towel rail 300 mm long on type 162 brackets plugged and screwed to wall. b) 20 mm Diameter Chromium plated towel rail 600 mm long on type 162 brackets plugged and screwed to wall. c) Aluminium shower cubical, including all necessary fittings and sundry items (for 1 House with a floor area of 45 m²).	m 1 No No No No pairs No No No No No No sum	18 2 2 2 1 5 2 3 5 1 1 1		
	1200 PD	Carried Forward				

MS-Excel 97-1

HazelmereHousing-BoQ_SANS 1200 - Unpriced Rev 1-mk

	TOTAL PARTICULAR SPECIFICATION PD CARRIED TO SUMMARY								

DESIGN

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7.01		<u>DESIGN AND SUPERVISION COSTS</u> Work executed by direct Consultants in a JV and MOU with the Contractor The consultant will act as the Employer's Agent The professional works listed below should be undertaken by a team of professionally registered professionals under a duly registered Company/ CC with valid Professional Indemnity Insurance. Specification should be similar to house being implemented by Department of Human Settlement. The following drawings will be provided to be developed further. 1) 100m² floor area of a preliminary design 2) 40m² floor area of a preliminary design Final drawings must be approved by the 3) Department of water and Sanitation before submitting for council approval				
7.02		Review the existing preliminary design and conduct assessments (expropriation, identification of services, surveys, analysis of site and tests and site investigations required for design)	Sum	1		
		Prepare initial concept design and relevant documentation. establish any further surveys, tests and/or investigations.	Sum	1		
		Prepare detailed designs and drawings	Sum	1		
		Prepare Design Documentation (Tender documentation, construction drawings etc)	Sum	1		
		Supervision of the construction and contract administration	Sum	1		
		Close out (As-builts drawing, handover documentation to client and prepare final accounts for project)	Sum	1		
7.06		Profits and Overheads The Contractor to allow for profits and Overheads on the Consultants services	Sum	1		
	TOTAL SECTION : DESIGN CARRIED TO SUMMARY					



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Directorate: Capital Projects

Sub Directorate: Betterments

Hazelmere Dam: Resettlement Housing Project

Summary of Bill of Quantities

Value

SABS 1200 A: Preliminary & General	R
SABS 1200 C: Site Clearance	R
SABS 1200 D: Earthworks	R
SABS 1200 DB: Earthworks (Pipe Trenches)	R
SABS 1200 G: Concrete (Structural)	R
SABS 1200 PD: Building Work	R
Design and Supervision	R

TOTAL BoQ	R
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CALCULATION OF TENDER SUM

Contract Skills Development Goal (CSDG) minimum 0.5% of Total BoQ	R
10% Escalation of Total BoQ, Additional due to BoQ approximation	R

SUBTOTAL A R

CONTINGENCIES OF 10% OF SUBTOTAL A (The Sum provided here is under the sole control of the Employer's and may be deducted in whole or in part) R

SUBTOTAL B R

VALUE-ADDED TAX (VAT)

The tenderer shall add 15% of the subtotal B for value-added tax R

TENDER SUM CARRIED TO FORM OF OFFER AND ACCEPTANCE R

SIGNED ON BEHALF OF TENDERER: _____

C3 SCOPE OF WORK

C3.1 DESCRIPTION OF THE WORK

C3.2 ANNEXURE A - GENERAL SPECIFICATIONS

C3.3 ANNEXURE B - PARTICULAR SPECIFICATIONS

C3.1 DESCRIPTION OF THE WORK

C3.1 DESCRIPTION OF THE WORKS

EMPLOYER'S OBJECTIVES

The Department of Water and Sanitation (DWS) is in the process of raising Hazelmere Dam to increase its water storage capacity in order to meet the current and future water demands for the surrounding municipalities. However, raising of the dam has caused expansion of dam flood basin consequentially affecting communities that are situated within a new dam flood line. As a result, the Department has initiated a sub-project to relocate the affected communities to flood-safe areas. In this initiative, the Department is going to construct 17 houses as form of compensation for the affected families. The first 13 houses will be built in eThekweni Municipality and the last 4 will be built on Traditional Land.

OVERVIEW OF THE WORKS

The prospective Contractors will be expected to be capable of successfully implementation a project that involves designing and construction of 17 houses in eThekweni Municipality as shown in the table below. This includes emergency work that might be necessary and immediate resources reinforcement is required from Contractors.

Oakford Priory Housing Development Area	Ngonyama Trust land
13 x 100m ² floor area houses	3 x 100m ² floor area houses 1 x 40m ² floor area house

All designs/drawings and method statement to be approved before commencement of works. Works to comply with the SANS standards. Any change of scope/works/designs require prior approval from the client before commencement.

EXTENT OF THE WORKS

The bidder in his proposal must demonstrate the bidder's practical knowledge and experience of Works in line with the key areas as defined below:

- a) Initial site assessments, including but not limited to, inspection of existing house platform, expropriation documentation, identification of services and site and test investigations required for design.
- b) Preparation of initial concept design with relevant documentation
- c) Initial surveys
- d) Stakeholder engagement
- e) Application for construction work permit by registered personnel
- f) Detailed design report and drawings for design approval
- g) Prepare working drawings.
- h) Prepare procurement documents for required service providers and sub-contractors
- i) Establishment on site.
- j) Survey requirements.
- k) Construction of the following structures listed in the table above (Overview of the work section)
- l) Earthworks Including but not limited to earthworks, site clearance, tree removal, bulk excavations, excavations, filling, lateral support, ground anchoring, levels, bulk earthworks, etc
- m) Continuous quality control over materials and workmanship, and compliance with the Particular Specifications with regard to environmental management and occupational health and safety, during all the above construction activities.
- n) Removal of all site establishment facilities and constructional plant on completion of the Works. Removal to be compliant with the EIA and/or the Environmental Acts surrounding the project.
- o) Making good of any defects during the Defects Liability Period.
- p) Provide a maintenance plan.
- q) Compiling the close out reports together with material and drawing as-built. and hand over to the client with the necessary training if required.

- r) Register the ownership for beneficiaries
- s) Move beneficiaries from existing homes to new homes

Important to note, there will be one (same) design for 16 houses of 100m² floor area: and then the second design of a house of 40m² floor area.

Specifications for the Construction of 17 Houses

Specifications of the houses should be similar to existing houses in the neighbour implemented by Department of Human Settlement. The following information (drawings) will be provided to give guidance on the specifications required and to be developed further:

- (a) 40m² and 100m² floor area of a preliminary design of the houses.
- (b) General layout of the 13 houses. Layout of the other design to start from scratch.
- (c) Final drawings must be approved by the Department of water and Sanitation.

Specific Project Works

The professional works listed below should be undertaken by a Consultants with a team of professionally registered professionals under a duly registered Company/ CC with valid Professional Indemnity Insurance. The Consultant will also act as the Employer's Agent/ Employer's Agent Representative

- (a) Conduct assessments (expropriation, identification of services, surveys, analysis of site and conduct tests required/site investigations required for design) This stage is complete when the Initiation Report or Prefeasibility Report is approved by DWS.
- (b) Prepare initial concept design and relevant documentation. establish any further surveys, tests and/or investigations This stage is complete when the Concept Report or the Feasibility Report as per the Department's prescribed format, is approved.
- (c) Prepare detailed designs and drawings. This Stage is complete when the Design Development Report, as per the Department's prescribed format, is approved.
- (d) Prepare working drawings and approve method statements. This stage is complete when the Design Documentation Report is approved
- (e) Contract Administration and construction monitoring This stage is complete when the Practical Completion Certificate is issued, as per the GCC 2015 prescribed format, is approved and beneficiaries are moved from existing homes to new houses.
- (f) Close out (material and drawing as-builts, handover documentation to client and prepare final accounts for project) This stage is complete when the Final Completion Certificate is issued, and Close-out Report submitted and approved by the Department

1.1 Description of the Works

The following description is a broad outline of the works and does not limit the work to be executed by the Bidder in terms of the contract. The description of some of the major items/activities indicated in this section are indicative, not absolute, and are provided to define in general terms the overall scope of the project.

Activities of each type of work to be carried out in accordance with the contract documents are listed in the Bill of Quantities in Section C2.2.

This should cover the entire project life cycle from initial assessments and all statutory and legislative requirements, all specialist studies, concept designs, to final designs, implementation of designs through construction and close out of the project inclusive of any and all activities pertaining to this project. This must include any and all aspects of the project that will ensure a full and comprehensive complete delivery of a construction project

1.1.1 Demolition work

The Bidder is required to carry out any or all demolition work were needed and as necessary.

1.1.2 Spoiling of surplus material

Surplus material shall be spoiled in designated areas approved by the Employer.

1.1.3 Climate

Any and all climatic elements should be accommodated for, as per the average weather condition in the area, for the project. (Consider 3 – 5-year trend).

1.1.4 Environment

The Contractor's attention is called to the requirements of Part C: Environmental Management Specification contained in section C3.3.1 Particular Specifications.

1.1.5 Labour

A Project Liaison Committee (PLC) will be established and is a vital means of communication between all parties involved with the project. The composition of the PLC comprises representatives of the Employer and formal structures within the community.

The Bidder shall make use of these communication channels and shall appoint from amongst his site personnel a responsible person to participate in the affairs of the PLC, and this representative will be also required to attend the monthly PLC meetings.

It is mandatory that the Contractor shall interact with the community via proactive project liaison and project participation by its leaders and constituted organisations and forums, as well as through the employment of its people, and these activities shall constitute essential facets of the project.

Local labour is to be used and the employment of such labour is to be done in conjunction with the PLC

1.2 Temporary Works

All Temporary Works must be catered for and shall be removed from the Site on completion of the Contract at the discretion of the bidder as and when required.

1.3 Bill of Quantities and Programme required for construction

The bidder is responsible to provide a full and comprehensive bill of quantities containing all elements of the project including engineering fees and disbursements. This should be part of the Schedule C1 cost. A construction programme is also required to monitor milestones within the project.

1.4 Contractor's campsite

Possible locations for a campsite shall be pointed out by the client withing the confides of contract area.

The bidder shall make his own arrangements for the provision of his campsite and housing for construction personnel, but the chosen site shall be subject to the approval of the Employer the local authorities and, where applicable, the Project Liaison Committee (PLC) associated with the project.

The standard of the Contractor's camp, offices, accommodation, ablution, and other facilities must comply with

the requirements of all local authority, environmental and industrial regulations concerned. The Contractor is to fully familiarise himself with all local by-laws and Government regulations for the employment, transport and accommodation of labour on site.

The Contractor shall particularly note that there is a high risk of theft, vandalism and damage to property in this area and strict security will be required for all plant, establishment, temporary works and partially completed works. The Contractor shall be responsible for providing security for all plant, establishment, temporary works and partially completed works.

1.5 Additional requirements for construction activities

The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

1.6 Project programme

The Contractor shall submit a detailed project programme which clearly shows activities on the critical path and milestone dates that must be on or before the targeted dates of the department in terms of this project.

2. ENGINEERING

All engineering work must be in accordance with the Standards and Policies approved and used by the Department of Public Works. All designs and drawings are to be approved by the Employer before construction.

The contractor will be responsible for all environmental aspects, testing, investigations, surveys, analysis, services and all other relevant matters pertaining to the design of the project.

3. PROCUREMENT

The contractor shall procure goods and services according to the Employer's standards.

The contractor is to provide employment and skills development opportunities to targeted labour. All participation goals are to be met in line with the Employers policies and targets.

Goods are to be procured and obtained from local sources as stipulated within the content of this document.

4. CONSTRUCTION

4.1 Applicable SANS 2001 standards for construction work

All construction work must conform with the relevant SABS or SANS specifications'

5. MANAGEMENT

5.1 Applicable SANS 1921 standards

The following parts of SANS 1921 and associated specification data are applicable:

5.1.1.1 Additional clauses:

(a) Site meetings and procedures

Site meetings shall be convened monthly The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site memoranda book, a complete set of contract working drawings and a copy of the procurement document, and shall make these available at all reasonable times to all persons concerned with the contract.

(b) Water and electricity

The Employer does not warrant that any water or electricity supply that may exist is adequate for the

proper execution of the works. Where such supply is inadequate, the contractor shall provide an adequate supply at his own expense

5.1.1.2 SANS 1921-6 Part 6: HIV/AIDS awareness

The Contractor as an obligation of the contract is required to promote HIV/AIDS awareness in accordance with requirements of SANS 1921-6

5.2 Recording of weather

The Contractor shall erect a rain gauge and record the rainfall. This information together with other details of the prevailing weather conditions shall be recorded in the daily site diary.

5.3 Unauthorised persons

The Contractor shall keep unauthorized persons away from the Works at all times. Under no circumstances may the Contractor's personnel be accommodated on the site.

5.4 Management meetings

Meeting will be arranged at site handover

5.5 Forms for contract administration

The bidder is to provide three copies of GCC 2015, standard forms for 'Site Diary', 'Site Memoranda', 'Requests for Inspection' and any others deemed to be necessary during the contract.

5.6 Electronic payments

Payment to the contractor will be done as per the departmental financial systems.

5.7 Daily records

A site diary is to be compiled by the Construction Manager and the Contracts manager on site and is to be agreed and signed by both parties. The original signed copy is to be retained by the Employer.

The Contractor is to keep daily records of people and equipment on site in a format to be agreed by the Employer and is to provide copies to the Employer when requested.

5.8 Payment certificates

Details of measurements will be confirmed together with the bill of quantities and programme before payment is made within 30 days after the receipt of a valid payment certificate.

5.9 Permits

No security/entrance permits are required by the Contractor's personnel to enter the site.

5.10 Proof of compliance with the law

There are requirements for the Contractor to verify compliance with any legislation.

5.11 Submission of reports

The bidder should also submit monthly progress reports throughout the entire duration of the contract.

5.12 Skills Development

The contractor shall achieve in the performance of the contract the Contract Skills Development Goal (CSDG) established in the CIDB Standard for Developing Skills through Infrastructure Contracts, published in Gazette Notice No.43495 of 3 July 2020.

5.13 Contract Participation Goals

The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the CIDB Standard for Indirect Targeting for Enterprise Development through Construction works Contracts Gazette Notice No.36190 of 25 February 2013

C3.2 GENERAL SPECIFICATIONS

C3.2 GENERAL SPECIFICATIONS

The general specifications on which this contract is based are as per the following document as prepared by the Department of Public Works: General Specification (Edition 2; August 2014). This document can be found on the Website of the Department of Public Works: www.publicworks.gov.za.

C3.3 PARTICULAR SPECIFICATIONS

C3.3 PARTICULAR SPECIFICATIONS

In addition to the Standard Specifications and the Project Specifications, the following Particular Specifications shall apply to this contract and are bound in hereafter:

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION

C1. SCOPE

The Employer recognises environmental management as a key component of infrastructure development and as part of its environmental policy has developed this environmental management specification as a tool for continual improvement in environmental performance.

This environmental management specification prescribes the methods by which proper environmental controls are to be implemented by the Contractor. The duration over which the Contractor's controls shall be in place cover the construction period of the project

C2. ENVIRONMENTAL MANAGEMENT PLAN

In order to ensure that the construction work is carried out in an environmentally sensitive manner, strict compliance with the Environmental Management Plan (EMP) guidelines is required. The purpose of the EMP is to:

- Encourage good management practices through planning and commitment to environmental issues,
- Provide rational and practical environmental guidelines to:
 - (i) Minimise disturbance of the natural environment,
 - (ii) Prevent pollution of land, air and water,
 - (iii) Prevent soil erosion and facilitate re-vegetation.
- Adopt the best practicable means available to prevent or minimise adverse environmental impact,
- Develop waste management practices based on prevention, minimisation, recycling, treatment or disposal of wastes,
- Train employees and contractors with regard to environmental obligations.

C3. ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS

Environmental compliance is the contractor's responsibility in totality in relation to the project (e.g. EIA and WULA. etc.)

The appointment of an independent environmental control officer shall be the sole responsibility of the contractor.

The Contractor is responsible for the reviewing and amending the existing EMP if required and implementation of this EMP to ensure sound environmental management during the construction phase of a project.

The Contractor shall receive and implement any instruction issued by the Employer relating to compliance with the EMP including the removal of personnel or equipment.

Compliance with the provisions contained herein or any condition imposed by the environmental approvals, shall become the responsibility of the Contractor through an approved Environmental Officer (EO). The Contractor shall nominate a person from among his site personnel to fulfil this function and submit to the Employer for his approval the curriculum vitae of the proposed EO. This request for approval shall be given, in writing, at least fourteen days before the commencement of any construction activity clearly setting out reasons for the nomination, and with sufficient detail to enable the Employer to make a decision.

Once a nominated representative of the Contractor has been approved as the EO, the EO shall be the responsible person for ensuring that the provisions of this EMP are complied with for the duration of the contract. The EO shall submit monthly written reports of compliance with the EMP to the Employer.

In addition to the compliance duties relating to this EMP, the EO shall also provide full cooperation whenever the Contractor is subjected to regular environmental audits

C4. TRAINING AND INDUCTION OF EMPLOYEES

The Contractor has a responsibility to ensure that all those people involved in the project are aware of and familiar with the environmental requirements for the project (this includes subcontractors and local labour). The EMP shall be part of the terms of reference for all contractors, subcontractors and suppliers.

C5. COMPLAINTS REGISTER AND ENVIRONMENTAL INCIDENT BOOK

Any complaints received by the project team from the public will be recorded. The complaint should be brought to the attention of the Construction Manager, who will respond.

The following information must be recorded:

- Time, date and nature of the complaint,
- Type of communication (telephone, letter or email),
- Name, contact address and telephone number of the complainant,
- Response and investigation undertaken and
- Actions taken and by whom.

All complaints received will be investigated and a response given to the complainant within 14 days.

All environmental incidents occurring on the site will be recorded. The following information will be provided:

- Time, date, location and nature of the incident,
- Actions taken and by whom.

C6. SITE CLEANLINESS AND NEATNESS

- Location of a construction camp is to be approved by the Employer and is to be restored to its previous condition after completion of construction.
- The construction camp should preferably be fenced with a 1,8m diamond mesh fence or similar approved.
- All materials, equipment, plant and vehicles must be stored within the construction camp.
- A dedicated area must be made available for construction staff to change and store their personal belongings.

C7. ACCESS

- Access to existing roads, schools, buildings, shops and residential properties must not be impeded during construction.
- Access roads utilised by the Contractor must be maintained in good condition.

C8. BORROW PITS

- Mining authorisations (permits) for borrow pits must be obtained from the Department of Mineral Resources (DMR) in consultation with the Department of Water and Sanitation (DWS).
- Spoil dumps resulting from borrow pits must not interfere with any natural surface drainage.
- Borrow pits must be rehabilitated after use in accordance with the requirements of DMR and DWS.

C9. DUST CONTROL / AIR QUALITY

- Dust suppression measures must be implemented during construction by ensuring that all surfaces prone to dust generation are kept damp (e.g. use of water tanker).
- Ensure that vehicles and equipment are in good working condition and that emissions are not excessive.
- Special care must be taken in areas where the route passes close to schools and residential areas.
- The speed of construction vehicles must be reduced.

C10. FAUNA

- Contractors' and subcontractors' staff and workers may not chase, catch or kill animals encountered during construction.

C11. FIRE PREVENTION AND CONTROL

- Smoking is prohibited in the vicinity of flammable substances.
- The Contractor must ensure that fire-fighting equipment is available on site, particularly where flammable substances are being stored or used, and that construction staff are aware of where it is kept and how it is operated.
- Fires started for comfort (warmth) are prohibited, due to the risk of wild fires and risk to adjacent property owners' lands.

C12. GRAVE SITES

- Grave sites in close proximity to the project must not be disturbed during construction.

C13. MATERIALS HANDLING AND SPILLS MANAGEMENT

- Any hazardous materials to be used during construction (e.g. lime, fuel and paint) are to be stored in a designated area at the campsite.
- The storage containers/facilities (including any diesel or petrol tanks) must be placed on an impermeable surface and surrounded by a bund wall, in order to ensure that accidental spillage does not pollute the environment.
- Workers must at all times be made aware of the health and safety risks associated with any hazardous substances used (e.g. smoking near fuel tanks), and must be provided with appropriate protective clothing/equipment in case of spillages or accidents.
- Ensure all staff and contractors undergo relevant training in the maintenance of equipment to prevent the accidental discharge or spill of fuel, oil, lubricants and other chemicals.
- Any spill of potentially hazardous materials must be cleaned up immediately (potentially hazardous materials on site include paint, oil, grease, fuel and turpentine).
- The area of contaminated soil or spill must be deposited into the hazardous waste container(s).
- The Contractor should keep Peat Sorb or a similar absorbent on site to clean up any spills. The absorbent must be stored in a designated area and be available for inspection.
- All spills are to be recorded in the environmental incident book.

C14. NOISE

- Noise generating activities must be restricted to between 07:00 and 17:00 Monday to Friday, unless otherwise approved by the appropriate competent person in consultation with adjacent landowners/affected persons.
- All equipment, vehicles and machinery must be in good working condition and be equipped with sound mufflers if necessary.
- Construction staff must be trained and made aware of not creating unnecessary noise such as hooting and shouting.

C15. POLLUTION CONTROL

- Soil and water pollution through usage of fuel, oil, paint, bitumen or other hazardous substances must be avoided.
- All construction vehicles are to be maintained in good working order so as to prevent soil or water pollution from oil, fuel or other leaks, and to reduce noise pollution.

C16. RIVERS AND STREAMS

- During construction, there must be no obstruction of the water flow of rivers and streams.
- Excavated material must not be stockpiled on or near riverbanks, in order to prevent sedimentation occurring.

- Erosion control measures must be employed both during and after construction.
- No impediments to natural surface water flow, other than approved erosion control measures, must occur.

C17. SAFETY

- Safety measures, such as detour signs, must be implemented during construction to ensure the safety of workers, pedestrians and drivers/passengers in vehicles in the vicinity of construction work.
- Special care must be taken in the vicinity of schools to ensure the safety of children during construction.
- The relevant signage (e.g. speed control signs) must be erected alongside the road during the construction phase in order to control traffic.

C18. SOIL MANAGEMENT

- Storm water drainage pipes must be installed alongside the road in all areas susceptible to soil erosion.
- Erosion should be minimised by the construction of meadow drains and the planting of indigenous vegetation on the side slopes and drains to reduce flow velocity of storm water.
- Spoil from cuts may be used in existing erosion gullies.
- Stone pitching and gabions should be constructed at pipe culvert outlets.
- Accidental spills of contaminants onto the ground e.g. oil, concrete, fuel and chemicals should be removed together with the contaminated soil.
- If necessary, an absorbent such as Peat Sorb should be used to aid in cleaning up the spill. The contaminated soil should be disposed of in an appropriate container, depending on its classification.
- Servicing and refuelling of vehicles must only be carried out at the construction camp.

C19. WORKER CONDUCT

Code of Conduct for Construction Personnel:

- Do not leave the construction site untidy and strewn with rubbish which will attract animal pests.
- Do not set fires.
- Do not cause any unnecessary, disturbing noise at the construction camp/site or at any designated worker collection/drop off points.
- Do not drive a construction-related vehicle under the influence of alcohol.
- Do not exceed the speed limits on public roads or exceed the recommended speed limits on the site.
- Do not drive a vehicle which is generating excessive noise or gaseous pollution (noisy vehicles must be reported and repaired as soon as possible).
- Do not litter along the roadsides, including both the public and private roads.
- Do not pollute any water bodies (whether flowing or not).
- No member of the construction team is allowed to enter the areas outside the construction site.

C20. TRAFFIC DISTURBANCES AND DIVERSIONS

- Any traffic diversions must be undertaken with the approval of all relevant authorities and in accordance with all relevant legislation.
- Traffic diversion routes must be rehabilitated after use.

C21. VEGETATION

- Only vegetation falling directly on the route must be removed where necessary.
- Alien vegetation within the project must be eradicated, and management measures must be implemented for future control of these species.
- Vegetation that has been removed from large areas (e.g. on traffic diversion routes) during construction must be replaced with indigenous vegetation after construction has been completed.

C22. WASTE MANAGEMENT

- All general, non-hazardous waste must be placed in a skip container and disposed of at a registered waste disposal site.
- The Contractor is to ensure that the portable toilet facilities at the campsite are properly maintained and in working order.
- No disposal, or leakage, of sewage must occur on or near the site.
- All hazardous waste (e.g. oil, paint, empty lime bags, and contaminated wash water) must be stored in leakproof containers and disposed of at a registered hazardous waste disposal site.
- The contents of waste storage containers must, under no circumstances, be emptied to the surrounding area. In general, littering, discarding or burying of any materials is not allowed on site or along the route.
- Adequate waste receptacles must be available at strategic points around the construction camp and site for all domestic refuse and to minimise the occurrence of littering.
- Concrete rubble must be collected and disposed of as directed by the Employer.
- Each working area must be cleared of litter and building waste (e.g. rubble, wood and concrete packets) on completion of the day's work.
- Any spill around the container

C3.3.2 PARTICULAR SPECIFICATIONS

PART E: OHS 1993 HEALTH AND SAFETY SPECIFICATION

E1. SCOPE

This part covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy working environment for all employees, subcontractors, the Employer, inspectors and all other persons entering the site of works.

This specification shall be read in conjunction with the Occupational Health and Safety Act, 1993 (Act No 85 of 1993 and amendment Act No 181 of 1993) and the corresponding Construction Regulations 2014, and all other safety codes and specifications referred to in the said Act and Construction Regulations.

In terms of the OHS 1993 Agreement in Section C1.4 of the Contract document, the status of the Contractor as mandatory to the Employer (client) is that of an employer in his own right, responsible for compliance with all provisions of OHS 1993 and the Construction Regulations 2014.

This specification and the Contractor's own Health and Safety Plan as well as the Construction Regulations 2014, shall be displayed on site or made available for inspection by inspectors, the Employer, the Construction Health and Safety Agent, subcontractors, employees, representatives of trade unions and any other persons entering the site of works.

E2. DEFINITIONS

For the purpose of this contract the following shall apply:

E2.1 **"Construction Health and Safety Agent"** (CHSA) means any competent person who acts as a representative for the Employer in managing health and safety on a construction project for the Employer and who has satisfied the registration criteria of the SACPCMP to perform the required functions.

E2.2 **"Contractor"** where used in the contract documents and in this specification, means the Contractor as defined in the GCC 2015 and it shall have the exact same meaning as **"principal contractor"** as defined in the Construction Regulations 2014. **"Contractor"** and **"principal contractor"** are therefore interchangeable and shall be read in the context of the relevant document.

In this specification the terms **"principal contractor"** and **"contractor"** are replaced with **"Contractor"** and **"subcontractor"** respectively.

For the purpose of this contract the Contractor will, in terms of OHS 1993, be the mandatory, without derogating from his status as an employer in his own right.

E2.3 **"Employer"** where used in the contract documents and in this specification, means the Employer as defined in the GCC 2015 and it shall have the exact same meaning as **"client"** as defined in the Construction Regulations 2014. **"Employer"** and **"client"** are therefore interchangeable and shall be read in the context of the relevant document.

E2.4 **"Employer's Agent"** where used in this specification, means the Employer's Agent as defined in the GCC 2015 or the employer.

E3. EMPLOYER'S BASELINE RISK ASSESSMENT

E3.1 Risk information

The information presented in this clause is based on the Employer's baseline risk assessment prepared specifically for this contract.

This information describes the type of work required in terms of this contract that will be accompanied by dangers, hazards and risks which the Contractor shall be required to identify, analyse, manage, monitor and review in terms of the Health and Safety Plan and risk assessments.

This information is neither prescriptive nor exhaustive and is provided as a guideline to Tenderers in preparing their tender submissions, and to the successful Contractor as a basis for the preparation of the site-specific risk assessments to be performed by the Contractor in terms of Construction Regulation 9.

Tenderers shall make their own assessment of the dangers, hazards and risks that can be expected during the course of this contract, which may include dangers, hazards and risks not identified in the baseline risk assessment, including those that may arise from specific methods of construction employed by the Contractor, and shall make due allowance in their tendered rates and prices for all costs related to complying with the provisions of the Act and Construction Regulations.

This information is given in good faith for the guidance of Tenderers, and no additional payment shall be made as a result of any inaccuracies, discrepancies or omissions contained therein.

E3.2 Baseline risk assessment

The following is a list of risks identified which forms the Baseline Risk Assessment for the project prepared by the Employer in terms of Construction Regulation 5(1)(a).

E3.3 Guidelines for construction and maintenance projects under Covid-19 Lockdown

The Contractor shall comply with any COVID- 19 Regulations issued by Government.

E4. APPLICATION FOR CONSTRUCTION WORK PERMIT

Where the contract meets the requirements of Construction Regulation 3, the Employer must at least 30 days before commencement of the work and in accordance with the requirements of Construction Regulation 3, apply to the Provincial Director of the Department of Labour in writing for a construction work permit to perform construction work..

A copy of the construction work permit must be kept on site in the occupational health and safety file, available for inspection by inspectors, the Employer, the Employer's Agent, the Construction Health and Safety Agent, subcontractors, employees, representative trade unions and any other persons on the site. The Provincial Director will assign a site-specific number for each construction site, which must be conspicuously displayed at the main entrance to the site.

E5. NOTIFICATION OF CONSTRUCTION WORK

Where the contract meets the requirements of Construction Regulation 4, the Contractor shall, before commencement of the work and in accordance with the requirements of Construction Regulation 4, notify the Provincial Director of the Department of Labour of the intention to carry out the construction work.

A copy of the notification form must be kept on site, available for inspection by inspectors, the Employer, the Employer's Agent, the Construction Health and Safety Agent, subcontractors, employees, representative trade unions and any other persons on the site. A copy of the notification form shall also be kept on the health and safety file, and a further copy shall be forwarded to the Employer for his records.

E6. HEALTH AND SAFETY PLAN

Before commencement of any construction work, the Contractor shall prepare a project specific Health and Safety Plan complying with the requirements of Construction Regulation 7(1)(a) and this Health and Safety Specification.

The Health and Safety Plan must include a risk assessment performed and recorded in writing by a competent person as required in terms of Construction Regulation 9. The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards identified.

The Health and Safety Plan shall be available on site for inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees, representative trade unions, and health and safety representatives and committee members, and must be monitored and reviewed periodically by the Contractor.

E7. APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

E7.1 Appointments

The Contractor shall appoint in writing all employees.

The Contractor shall appoint in writing all subcontractors, and such appointments shall be in compliance with the requirements of Construction Regulation 7.

E7.2 Health and safety induction training

No person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site.

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo health and safety induction training by a competent person before commencement of construction work in compliance with Construction Regulations 7(5) and 9(3) and (4).

The Contractor shall ensure that all visitors to the construction site undergo health and safety induction and are provided with the necessary personal protective equipment in compliance with Construction Regulation 7(6).

E7.3 Medical certificate of fitness

The Contractor shall ensure that every employee, including subcontractors and their employees, has a valid medical certificate of fitness issued in compliance with Construction Regulation 7(1)(g) or 7(8) as applicable.

E8. APPOINTMENT OF SAFETY PERSONNEL

E8.1 Construction manager

Refer to Construction Regulation 8(1), (2), (3) and (4).

The Contractor shall appoint a full-time **Construction Manager** with the duty of managing all the construction work on the site, including the duty of ensuring occupational health and safety compliance.

The Contractor may also have to appoint one or more **assistant construction managers** to assist the Construction Manager where justified by the scope and complexity of the works.

E8.2 Construction health and safety officer

Refer to Construction Regulation 8(5) and (6).

Taking into consideration the size of the project and the dangers, hazards or risks that can be expected, the Contractor shall appoint in writing a full-time or part-time **construction health and safety officer** to assist in the control of all health and safety related aspects on the site. The construction health and safety officer shall be registered as required by the Chief Inspector of the Department of Labour and shall have the necessary competencies and resources to assist the Contractor.

E8.3 Construction supervisor

Refer to Construction Regulation 8(7), (8), (9) and (10).

The Contractor shall appoint a **construction supervisor** responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

The Contractor may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

E8.4 Health and safety representatives

In terms of Sections 17 and 18 of the Act (OHSA 1993) the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a health and safety representative whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 50 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery, etc. on a regular basis, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

E8.5 Health and safety committee

In terms of Section 19 of the Act (OHSA 1993), the Contractor (as employer) shall establish one or more **health and safety committees** where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

E8.6 Competent persons

The Contractor shall appoint in writing designated competent employees and/or other competent persons as required by the Act and Regulations. Such appointments shall be in accordance with the relevant applicable sections of the Act and Regulations as determined by the requirements of the contract.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work in all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities for compliance with **all** requirements of the Construction Regulations.

E9. RECORDS AND REGISTERS

The Contractor shall keep records and registers related to health and safety on site as required by the relevant applicable sections of the Act and Regulations as determined by the requirements of the contract. Such records and registers shall be available for periodic inspection by inspectors, the Employer, the Employer's Agent, the Construction Health and Safety Agent, subcontractors, employees and representatives of trade unions.

E10. CONTRACTOR'S RESPONSIBILITIES

For this contract the Contractor will be the mandatary of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2014.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) in terms of C1.4 'Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993', to confirm his status as mandatary (employer) for the contract under consideration.

The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations, as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations.

C4 SITE INFORMATION

C4.1 ENVIRONMENTAL MANAGEMENT PLAN

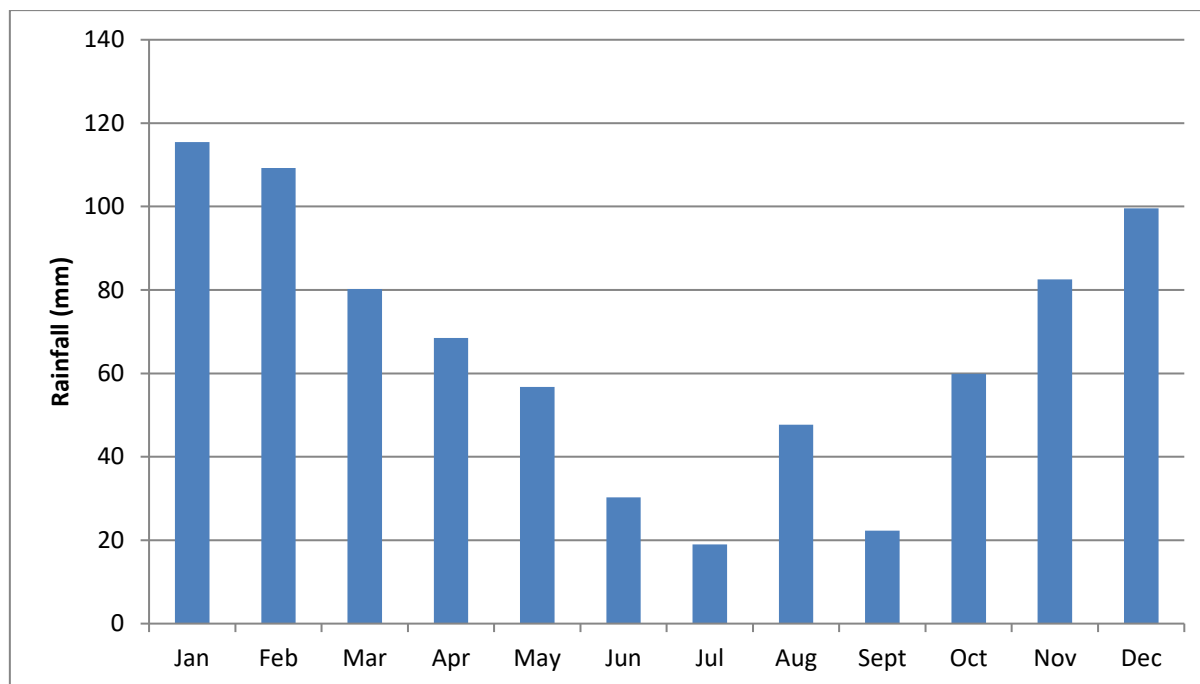
C4.2 HAZELMERE RAINFALL INFORMATION

C4.1 ENVIRONMENTAL MANAGEMENT PLAN

C4.1 ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Management Plan on which this contract is based is as per the following document as prepared by the eThekweni Municipality: Environmental Management – Oakford Priory Housing Development, Verulam, EThekweni Municipality, KwaZulu Natal Municipality, (2014). This document can be found on the Website of the eThekweni Municipality: www.durban.gov.za

C4.2 RAINFALL RECORDS

C4.2 RAINFALL RECORDS**Average Monthly Rainfall for Hazelmere from 2001 – 2017**

C5 DRAWINGS

C5.1 TENDER DRAWINGS

C5.1 TENDER DRAWINGS

LIST OF DRAWINGS			
SHEET NO.	DESCRIPTION	OTHER NO.	REG. NO.
1/10	LIST OF DRAWINGS AND GENERAL NOTES	HDH101	178 419/19
2/10	KEY PLAN	HDH102	178 420/19
3/10	PLATFORM DETAIL	HDH103	178 421/19
4/10	FLOOR PLAN, SECTION AND ELEVATIONS	HDH104	178 422/19
5/10	WINDOW, DOOR AND FINISHING SCHEDULE	HDH105	178 423/19
6/10	FOUNDATION PLAN & DETAILS	HDH106	178 424/19
7/10	SEWER AND WATER RETICULATION	HDH107	178 425/19
8/10	ELECTRIC CIRCUIT LAYOUT	HDH108	178 426/19
9/10	ROOF	HDH109	178 427/19
10/10	CUPBOARD DETAIL	HDH110	178 428/19

SECTIONS AND DETAILS			
DESCRIPTION	SHEET NO.	REG. NO.	
SECTION 01–01: SECTION ON BUILDING	4/10	178 422/19	
SECTION 02–02: RAFT FOUNDATION REINFORCEMENT	6/10	178 424/19	
SECTION 03–03: RAFT FOUNDATION REINFORCEMENT	6/10	178 424/19	
SECTION 04–04: TYPICAL RODDING EYE DETAIL AT HEAD OF SEWER	7/10	178 425/19	
SECTION 05–05: CEILING ACCESS DOOR DETAIL	9/10	178 427/19	
SECTION 06–06: BEDROOM CUPBOARDS	10/10	178 428/19	
SECTION 07–07: KITCHEN CABINET	10/10	178 428/19	
SECTION 08–08: PLATFORM PROFILE – CLAYEY SAND MATERIAL	3/10	178 421/19	
DETAIL "A": TYPICAL EXTERIOR WALL DETAIL	4/10	178 422/19	
DETAIL "B": GUTTER DETAIL	4/10	178 422/19	
DETAIL "C": TYPICAL EXCAVATION AND BACKFILL FOR 110 mm SEWER PIPE	7/10	178 425/19	
DETAIL "D": TYPICAL PLAN VIEW OF RODDING EYE AT HEAD OF SEWER	7/10	178 425/19	
DETAIL "E": CEILING CORNICE	9/10	178 427/19	
DETAIL "F": PLAN LAYOUT OF CEILING ACCESS DOOR	9/10	178 427/19	

NOTES ON BUILDING SPECIFICATIONS:

A. FOUNDATION REQUIREMENTS:

- A1. REFER TO NHBRC HOME BUILDING MANUAL:PART 1–3:SECTION 2 FOR ITEMS 1–5
1. DIG TEST PIT TO 1,8 m DEPTH ADJACENT TO DORMITORY POSITION
2. PROFILE IT ACCORDING TO GEOTECH TERMINOLOGY WORKSHOP STANDARDS
3. CARRY OUT A 1 000 mm DCP SOUNDING FROM 500 mm DEPTH
- 3.1. PENETRATION FOR 5 BLOWS SHOULD BE LESS THAN 125 mm.
- 3.2. IF PENETRATION IS GREATER THAN 125 mm PER 5 BLOWS A GEOTECHNICAL SPECIALIST NEED TO BE CALLED.
4. IF SAND IS PRESENT, AT 500 mm DEPTH DIG A 300 x 300 x 300 mm HOLE CAREFULLY. SAVE THE EXCAVATED MATERIAL FROM HOLE AND REPLACE IT INTO THE HOLE TRAMPING IT AS IT IS PLACED
- 4.1 IF SAND DOES NOT FILL THE HOLE A GEOTECHNICAL SPECIALIST NEED TO BE CALLED.
5. IF CLAY IS PRESENT CARRY OUT HAND TEST. TAKE A SAMPLE OF ABOUT 50 kg OF WET SOIL, WET IT AND ATTEMPT TO ROLL IT INTO A STRING LESS THAN 3 mm THICK AND 50 mm LONG. IF THIS IS POSSIBLE THE CLAY IS PROBABLY EXPANSIVE. IF THE CLAY IS SLICKENSIDED (SHINY, STRATED SURFACE IN CLAY) OR SHATTERED INTO DISCRETE GRAVEL SIZE BLOCKS THE CLAY IS PROBABLY EXPANSIVE
- 5.1 IN THE PRESENCE OF CLAY MATERIAL, THE CLAY MATERIAL MUST BE REMOVED AND A STONE LAYER MUST BE PLACED AND COMPACTED INTO THE REMAINING IN–SITU MATERIAL PRIOR TO APPLYING THE G5 BLANKET FILL MATERIAL REQUIRED FOR THE RAFT FOUNDATION. GUIDANCE FROM A GEOTECHNICAL SPECIALIST IS REQUIRED.
- 5.2 IN THESE CASES A GEOTECHNICAL SPECIALIST NEED TO BE CONTACTED.
- A2. A FOUNDATION INVESTIGATION IN TERMS OF MENTIONED ABOVE AND TO NHBRC GUIDELINES SHALL BE CARRIED OUT AT EACH SITE BY A GEOTECHNICAL SPECIALIST TO BE APPROVED BY IMPLEMENTING AGENT.
- A3. SHOULD THE RAFT CONSTRUCTION TECHNIQUE NOT BE SUITABLE, THE GEOTECHNICAL SPECIALIST MUST ADVISE SUITABLE METHOD.
- A4. CONCRETE RAFT FOUNDATION ACCORDING TO ENGINEER'S DESIGN SHOWN ON SHEET 5/9 (DRG REG. NO. 177 411/19). TOP OF RAFT FOUNDATION AT LEAST 100 mm ABOVE NGL.

C. EXTERIOR AND INTERIOR WALLS AND FINISHES TO WALLS:

- C1. BUILDING AND PLASTER BRICKS SHALL BE APPROVED HARD–BURNT CLAY BRICKS.
- C2. BRICK FORCE AND WALL REINFORCING SHALL BE INSTALLED ACCORDING TO THE RELEVANT DETAILS AS SHOWN ON DRAWINGS.
- C3. AS A GENERAL RULE, BRICK FORCE SHALL BE INSTALLED IN EVERY 5TH BRICK COURSE UNLESS OTHERWISE SPECIFIED.
- C4. INTERIOR WINDOW SILLS SHALL BE FIBRE CEMENT LENGTH TO SUIT 200 x 15 mm PAINT FINISH TO MATCH WALLS. TILED SILLS IN CLOAK ROOMS AND KITCHENS.
- C5. EXTERNAL WALL FINISH SHALL BE 10 TO 15 mm THICK WOOD TROWELLED PLASTER AND SHALL BE PRIMED WITH PLASTER PRIMER AND FINISHED WITH TWO TOP COATS WASH AND WEAR SUPERIOR MATT FINISH EMULSION PAINT. (COLOUR AS PER ENGINEER)
- C6. EXTERNAL WINDOW SILLS SHALL BE FIBRE CEMENT LENGTH TO SUIT 200 x 15 mm PAINT FINISH TO MATCH WALLS. TILED SILLS IN CLOAK ROOMS AND KITCHENS.
- C7. INTERIOR SKIRTINGS TO WALLS SHALL BE AS SPECIFIED IN SECTION "B" OF THE "PROJECT SPECIFICATIONS".

B. SURFACE BED, SCREED AND FLOOR FINISHES:

- B1. HARDCORE FILLING (G5) BELOW SURFACE BED COMPACTED IN LAYERS OF 150 mm MAXIMUM 95% MOD. AASHTO AND TREATED WITH SOIL POISONING AS SPECIFIED.
- B2. 250 MICRON POLYETHELINE MEMBRANE INSTALLED UNDERNEATH SURFACE BEDS. APPROVED DAMP PROOF COURSES INSTALLED UNDERNEATH ALL WALLS INTERIOIR AND EXTERIOR AT FLOOR LEVEL.
- B3. WHERE SPECIFIED: 35 MPa CONCRETE SURFACE BEDS 150 mm THICK INSTALLED ON HARDCORE FILLING AND REINFORCED WITH REF. 193 WELDED MESH.
- B4. CEMENT SCREED AS SPECIFIED (1 CEMENT: 4 SAND BY VOLUME) 30 mm THICK ON SURFACE BEDS WITH JOINTS ACCORDING TO DRAWINGS.

D. CEILING MATERIAL AND INSTALLATION:

- D1. 4 mm THICK FIBRE CEMENT BOARD CEILINGS NAILED TO 38 x 38 mm SA PINE BRANDERING WITH JOINTING STRIPS. BRANDERING SHALL BE SPACED AT 450 mm MAXIMUM CENTRES AND SHALL BE FIXED WITH AN ADDITIONAL NAIL TO EACH TRUSS DRIVEN IN AT AN ANGLE. 75 mm GYPSUM COVED CORNICES TO BE USED. CORNICES SHALL BE NAILED TO PLASTERED WALL WITH STEEL CUT NAILS. PAINT FINISH TO CORNICES SHALL ACCORDING TO THE DRAWINGS OR "PROJECT SPECIFICATIONS".
- D2. FIBRE CEMENT BOARDS, WHERE APPLICABLE 4 mm THICK WITH FIXING SPECIFICATIONS AND FINISHES AS PER D1.

GENERAL NOTES:

1. READ THIS DRAWING IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS, ARCHITECTURAL AND SERVICES DRAWINGS. ANY UNCERTAINTIES OR ANY DISCREPENCIES BETWEEN THE SPECIFICATIONS AND THE DRAWINGS MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.
2. NO DEVIATION FROM THE DETAILS ON THE DRAWINGS WILL BE ALLOWED WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.
3. THESE DRAWINGS MAY NOT BE COPIED OR RE–USED WITHOUT THE WRITTEN CONSENT OF THE DEPARTMENT OF WATER AND SANITATION AND RESPONSIBLE ENGINEER.
4. IN GENERAL, CONCRETE (STRUCTURAL) SHALL COMPLY WITH SANS 1200–G SERIES AND THE PARTICULAR SPECIFICATION DWS. 0750.
5. CONCRETE CLASS: MASS CONCRETE – CLASS A 10/19
BLINDING LAYER (COLUMN BASES) – CLASS C 15/19
STRIP FOOTINGS (BRICKWALLS) – CLASS E 35/19
SURFACE BEDS – CLASS E 35/19
COLUMN BASES AND COLUMNS – CLASS F 35/19
CONCRETE BEAMS AND CONCRETE SLABS – CLASS F 35/19
6. CONCRETE COVER TO REINF. : FOUNDATIONS – 50 mm
COLUMNS – 50 mm
CONCRETE SLABS – 50 mm
CONCRETE BEAMS – 50 mm
GROUND FLOOR SLABS (SURFACE BEDS)–AS SHOWN
7. ALL FOUNDATION EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE PLACING OF REINFORCEMENT OR CASTING OF CONCRETE. IF THE FOUNDING LEVEL AS PER DRAWING IS NOT SUITABLE, FURTHER EXCAVATIONS SHALL BE DONE TO A DEPTH AS DETERMINED BY THE ENGINEER ON SITE. THE ENGINEER MAY INSTRUCT THAT CERTAIN EXCAVATIONS BE BACKFILLED WITH MASS CONCRETE TO THE REQUIRED LEVEL. (CLASS AS PER ITEM 5 ABOVE).
8. AFTER PLACING, ALL REINFORCEMENT MUST BE CHECKED AND APPROVED BY THE ENGINEER ON SITE BEFORE CASTING OF CONCRETE.
9. NO HOLES OR NOTCHES SHALL BE CUT, CHIPPED OR FORMED IN CONCRETE UNLESS APPROVED BY THE ENGINEER.
10. DURING COLD OR WET WEATHER CONCRETE MUST BE HANDLED IN ACCORDANCE WITH SPECIFICATIONS.
11. LOADINGS ON STRUCTURES DURING CONSTRUCTION:
MAXIMUM ON SLABS = 100 kg/m.
12. REMOVAL OF SHUTTERING TO BE DONE IN ACCORDANCE WITH SPECIFICATIONS.
13. ALL EXPOSED SHARP CORNERS SHALL BE CHAMFERED AS FOLLOWS:
ALL CORNERS (EXCEPT WHERE OTHERWISE SHOWN) – 25 x 25 mm.
14. ALL WORK SHALL COMPLY WITH THE NATIONAL BUILDING REGULATIONS SANS 10400: 2012.
- ### BRICKWORK:
1. IN GENERAL, BRICKWALLS SHALL COMPLY WITH SANS 0400–1990 AND THE PARTICULAR SPECIFICATION DWS 1710.
2. WIRE TIES TO BE BUILT INTO CAVITY WALLS IN ACCORDANCE WITH THE SPECIFICATION.
3. MASONARY WORK:
a.) ALLOW FOR MOVEMENT JOINTS IN POSITIONS AS SHOWN ON THE DRAWINGS AND MARKED "MJ" ON DRAWING PLAN.
4. BRICKFORCE:
BRICKFORCE TO BE PLACED IN EVERY 5th LAYER AND IN EVERY LAYER FOR 3 LAYERS ABOVE AND BELOW CONCRETE SLABS, DOOR AND WINDOW OPENINGS. MINIMUM LAP LENGTH = 150 mm.
5. NO HOLES OR CUTS IN WALLS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
6. ALL BRICKWORK ON ONE FLOOR SHALL BE COMPLETED BEFORE COMMENCING WITH BRICKWORK ON THE NEXT FLOOR, WHERE APPLICABLE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
7. ALL LOADBEARING BRICKWALLS AS INDICATED MUST BE COMPLETED BEFORE ANY CONCRETE SLABS ARE CAST ON TOP.
8. MOVEMENT JOINTS:
a.) BRICKWORK BUTT–JOINTS MUST BE CLEAN AND FREE FORM ANY OBSTRUCTION.
b.) DEPTH 'd' OF SEALANT SHALL COMPLY WITH THE MANUFACTURER'S SPECIFICATIONS.
c.) IN ADDITION TO THE HOOP IRON WALL TIE, ALL BRICKFORCE MUST BE CONTINUOUS THROUGH ALL MOVEMENT JOINTS IN BRICKWALLS.
- ### STRUCTURAL STEELWORK: (WHERE APPLICABLE)
1. DESIGN AND MANUFACTURING OF ALL STRUCTURAL STEELWORK SHALL COMPLY WITH THE PROJECT SPECIFICATIONS SANS 10162–1, SANS 10162–2, SANS 1200H AND SANS 1200HA.
2. STRUCTURAL STEEL GRADE TO BE 300W, UNLESS SHOWN OTHERWISE.
3. ALL WELDS TO BE 6 mm CONTINUOUS FILLET WELDS, UNLESS SHOWN OTHERWISE.
4. HOLES FOR BOLTS SHALL BE BOLT DIAMETER + 2 mm.
5. COLD FORMED PROFILES SHALL COMPLY WITH A MINIMUM GUARANTEED TENSILE STRENGTH OF 250 MPa SANS 10162–2.
6. ALL SPACERS USED FOR ERECTION SHALL BE OF LAMINATED CUT–OFFS AND SHALL BE USED ONLY WHERE NECCESARY.
7. ALL WORKSHOP DETAIL DRAWINGS SHALL BE APPROVED BY THE ENGINEER BEFORE MANUFACTURING BEGINS.
8. ALL SITE WELDS SHALL BE DONE UNDER SUPERVISION OF A QUALIFIED WELDER.
9. ALL MEASUREMENTS TO BE CHECKED ON SITE BEFORE ERECTION COMMENCES.
10. PROTECTIVE TREATMENT:
a.) DECREASE ALL STEEL AND WIRE BRUSH TO SANS 12944–1: 1998.
b.) PAINT ALL STEEL WITH A 25 MICRON RED PRIMARY ETCH COAT, ACCORDING TO SANS 12944–1: 1998 – (APPLIED IN WORKSHOP).
- PAINTING AFTER ERECTION:
a.) PRIME WITH ONE COAT APPROVED PRIMER FOR STEEL ON SITE AFTER ERECTION. FINISHING PAINT TO BE TWO COATS POLYURETHANE ENAMEL COLOUR BY THE ENGINEER.
b.) ALTERNATIVELY PAINT SPECIFICATION AS SHOWN ON THE DRAWINGS.
- ### SUPERIMPOSED LOADS:
1. SAFE MAXIMUM ALLOWABLE EARTH PRESSURE = 150 kPa OR AS PER GEOTECHNICAL REPORT.
2. IMPOSED LOAD FOR ROOF SLABS = 1,5 kPa.
- ### ROOF SHEETINGS: (WHERE APPLICABLE)
- SISALATION SHALL BE SUPPORTED ON 2,0 mm Ø GALVANISED STRAIN WIRES FROM FRAME TO FRAME AT 300 mm CENTRES. SISALATION OVERLAP 200 mm MINIMUM.
- ### BACKFILL:
- BACKFILL BENEATH SURFACE BEDS TO BE G5 SELECTED GRANULAR MATERIAL COMPACTED IN 150 mm LAYERS TO 95% MOD. AASHTO DENSITY.
- ### GROUND FLOOR BEDDINGS:
- #### REINFORCED GROUND FLOOR BEDDINGS
- 150 mm THICK 35 MPa CONCRETE BEDDING REINFORCED WITH REF 193 MESH CAST ON 250 MICRON WATERPROOFING MEMBRANE IN BLOCK SIZES AS SHOWN ON DRAWINGS. SEE EXPANSION JOINT DETAIL WHERE APPLICABLE
- #### GROUND FLOOR BEDDINGS WITHOUT REINFORCING (WHEN APPLICABLE)
- 150 mm THICK 35 MPa CONCRETE BEDDING CAST ON 250 MICRON WATERPROOFING MEMBRANE ON BACKFILLING COMPACTED TO SPECIFICATION.
- ### SOIL POISONING:
- SOIL INSECTICIDE INCLUDING CERTIFICTE OF REGISTRATION OF THE PEST CONTROL OPERATOR AS ISSUED BY THE DEPARTMENT OF AGRICULTURE.

ONLY SABS/SANS APPROVED MATERIAL

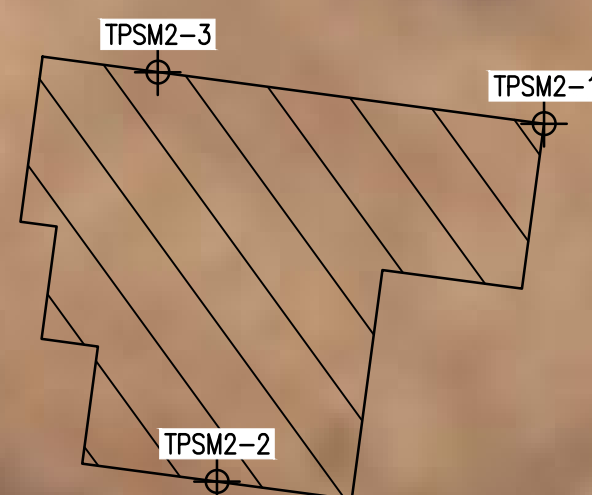
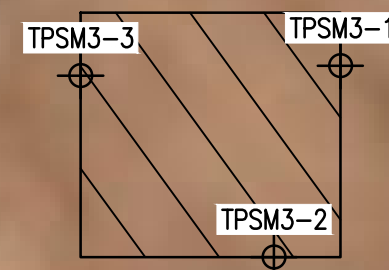
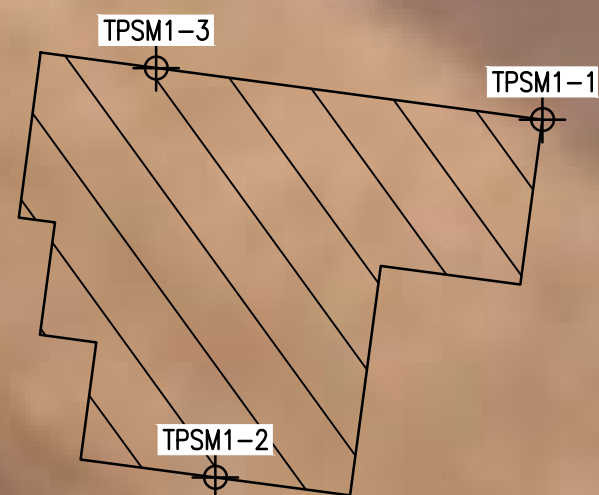
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MOD No.	DATE	DESCRIPTION	FOR	DWS
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DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA			
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDI BENQ BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336–7500	
CHECKED: _____		DESIGN: –	
		DRAWN: –	
		DATE: _____	
ENGINEER: _____	DATE: _____	EXT. APPROVAL / DESIGN CHECKED: _____	DATE: _____
CHIEF ENGINEER / APP (Pr. Eng): _____		DATE: _____	DIRECTOR (Pr. Eng): _____
		DATE: _____	

1/10		LIST OF DRAWINGS					HDH101		178 419/19			
SHEET		DESCRIPTION					OTHER No.		REG. No.			
LIST OF DRAWINGS												
HAZELMERE RESETTLEMENT HOUSING PROJECT												
OAKFORD PRIORITY HOUSING												
COVER PAGE – 40 SQUARE METER HOUSE												
PROVINCE: KWA–ZULU NATAL		DISTRICT: ETHEKWINI		KEYCODES:		RTR	HOU	–	–	–	OTHER NUMBER	HDH101
LOCALITY No.: U300–01		TENDER/ CONTRACT No. C/0339		SHEET		REG. No.						REV.
CALCULATION FILE: 20/2/U300–01/C/1/1				1 of 10		178 419/19				00		



SIMAMANE FAMILY



1/10	LIST OF DRAWINGS	HDH101	178 419/19
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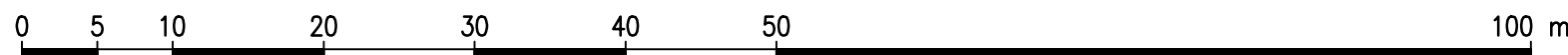
LIST OF DRAWINGS

HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD PRIORITY HOUSING

KEY PLAN – 40 SQUARE METER HOUSE

SCALE 1:500

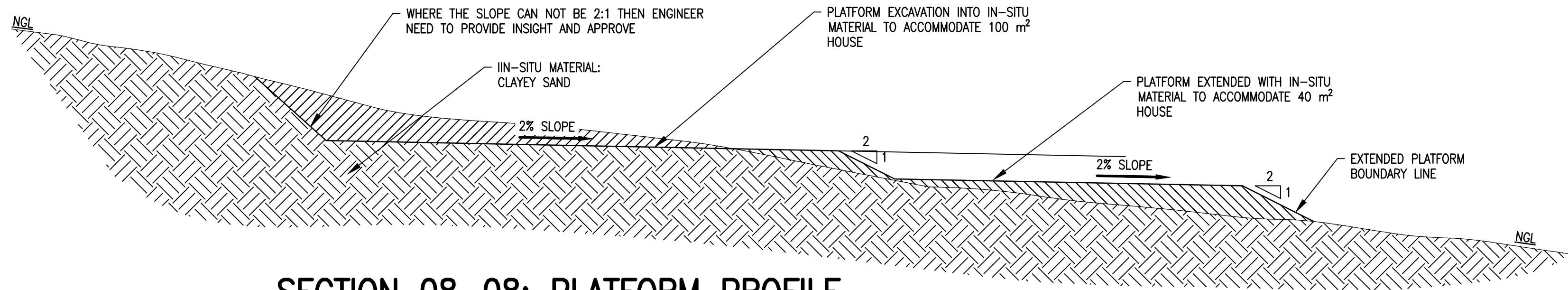


TENDER ONLY

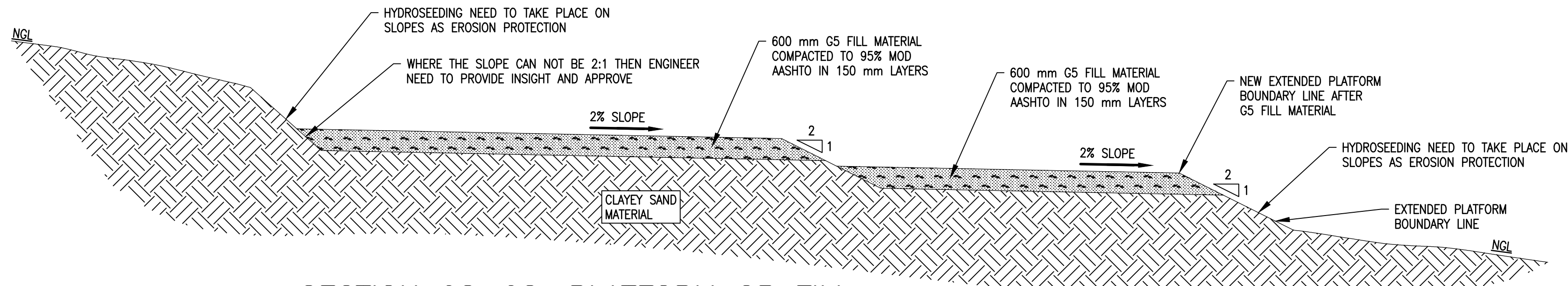
REVISION				
MOD No.	DATE	DESCRIPTION	FOR	DWS
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DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA			
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDIBENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500	
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ENGINEER:		EXT. APPROVAL / DESIGN CHECKED:	
DATE:		DATE:	
CHIEF ENGINEER / APP (Pr. Eng):		DIRECTOR (Pr. Eng):	
DATE:		DATE:	

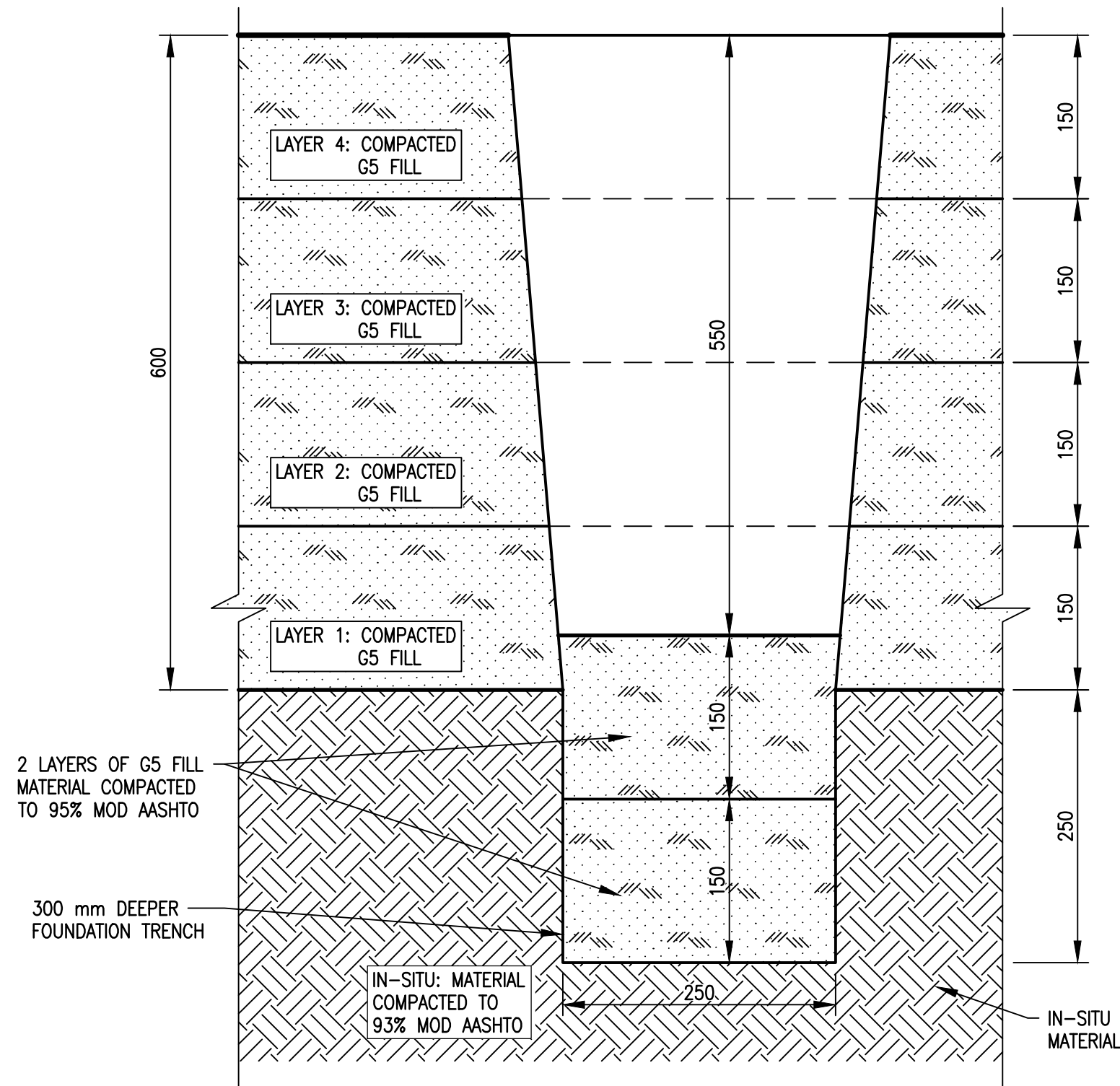
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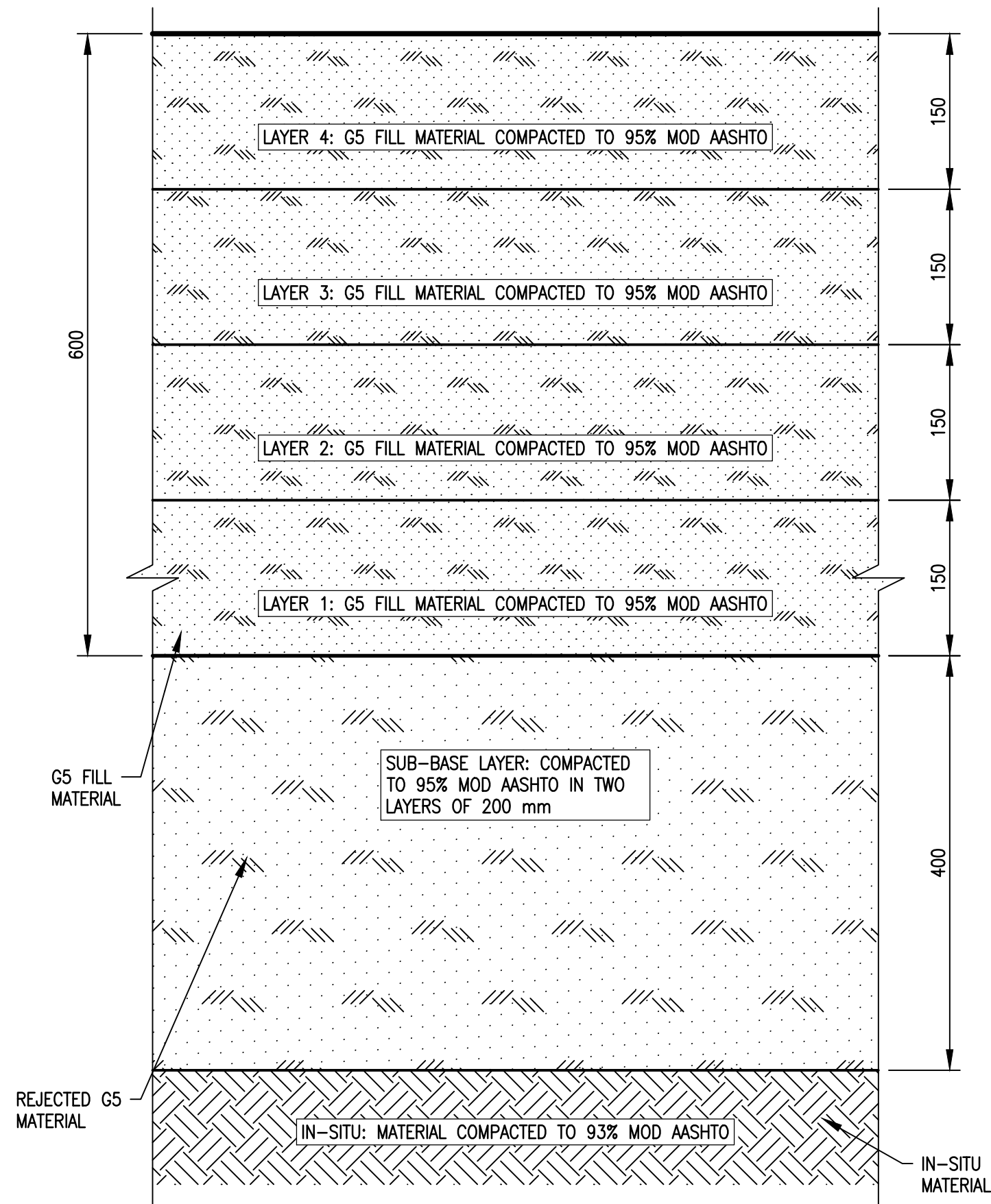
**SECTION 08-08: PLATFORM PROFILE –
CLAYEY SAND MATERIAL**
SCALE 1:100



**SECTION 08-08: PLATFORM G5 FILL
PROFILE – CLAYEY SAND MATERIAL**
SCALE 1:100

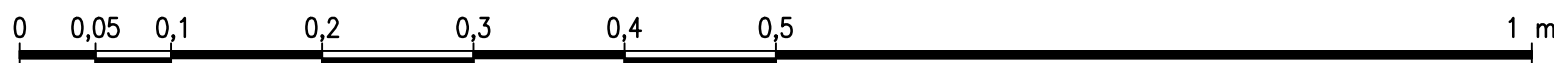


LAYER WORKS IN FOUNDATION TRENCH
SCALE 1:5

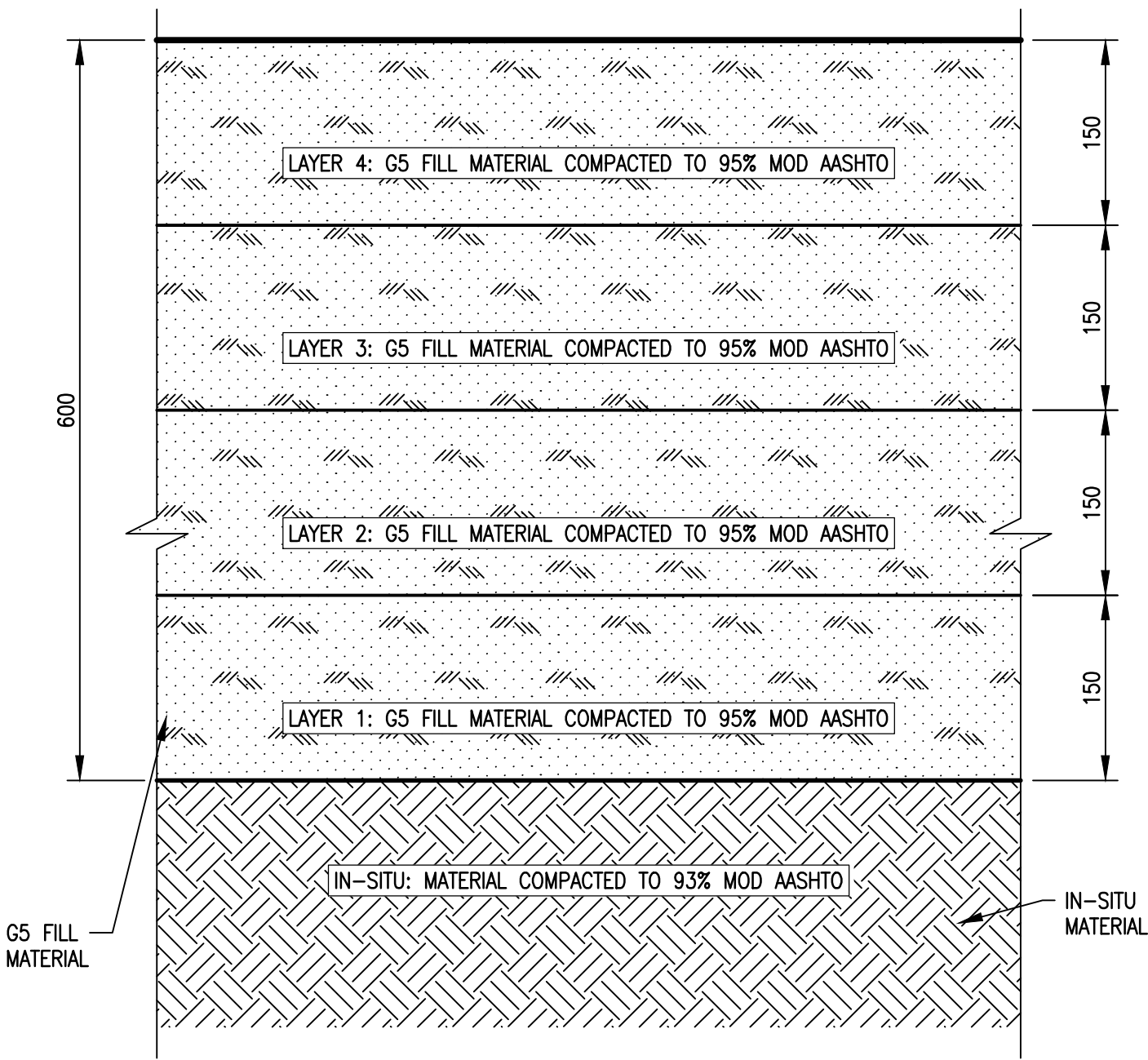
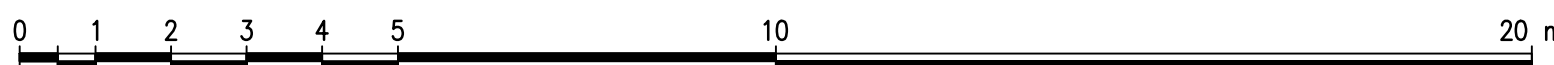


LAYER WORKS ON SOFT CLAY MATERIAL

SCALE 1:5

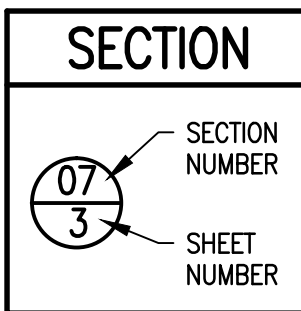


SCALE 1:100



**LAYER WORKS ON WEATHERED NON-CLAY
MATERIAL**

SCALE 1:5



TENDER ONLY

NOTES:

1. THE EXISTING PLATFORM NEED TO BE EXTENDED TO ACCOMMODATE A 100 m² HOUSE. 600 mm NEED TO BE REMOVED FROM THE SURFACE OF EXISTING PLATFORM AND SLIGHT CUT INTO THE EMBANKMENT. THE CUT FROM THE EXCAVATION TO BE USED AS FILL FOR EXTENDING THE PLATFORM.
2. AFTER THE REMOVAL OF THE 600 mm THE IN-SITU MATERIAL OF THE PLATFORM NEED TO BE COMPACTED TO 93% MOD AASHTO, THE EXTENDED FILL SECTION ALSO NEED TO BE COMPACTED TO 93% MOD AASHTO IN 150 mm LAYERS.
3. THE 600 mm NEED TO BE BACKFILLED WITH G5 SELECTED GRANULAR FILL MATERIAL COMPACTED TO 95% MOD AASHTO IN FOUR LAYERS OF 150 mm. (SEE GRADING EXAMPLE FOR A G5 FILL MATERIAL).
4. AT PLATFORMS WHERE SOFT CLAY IS IDENTIFIED AN EXTRA 300 mm OF IN-SITU SOIL NEED TO BE REMOVED AND A 300 mm LAYER OF ROCK MATERIAL NEED TO BE ROLLED AND COMPACTED INTO THE SOFT CLAY BEFORE THE G5 FILL CAN BE STARTED.
5. CUT AND FILL SECTIONS OF THE PLATFORM NEED TO HAVE A 1:2 SLOPE IN ORDER TO BE STABLE. WHERE THIS IS NOT PRACTICALLY EXECUTABLE THE ENGINEER NEED TO ADVISE WAY FORWARD.

G5 SIEVE ANALYSIS SAMPLE		
SIEVE SIZE	% PASSING	
75 mm	-	100
63 mm	-	100
50 mm	-	100
37.5 mm	-	97
28 mm	-	80
20 mm	-	66
14 mm	-	56
5 mm	-	35
2 mm	-	26
1 mm	-	26
0.425 mm	-	17
0.075 mm	-	7
GRADING MODULUS: 2.50		

1/10	LIST OF DRAWINGS	HDH101	178 419/19
SHEET	DESCRIPTION	OTHER No.	REG. No.

LIST OF DRAWINGS

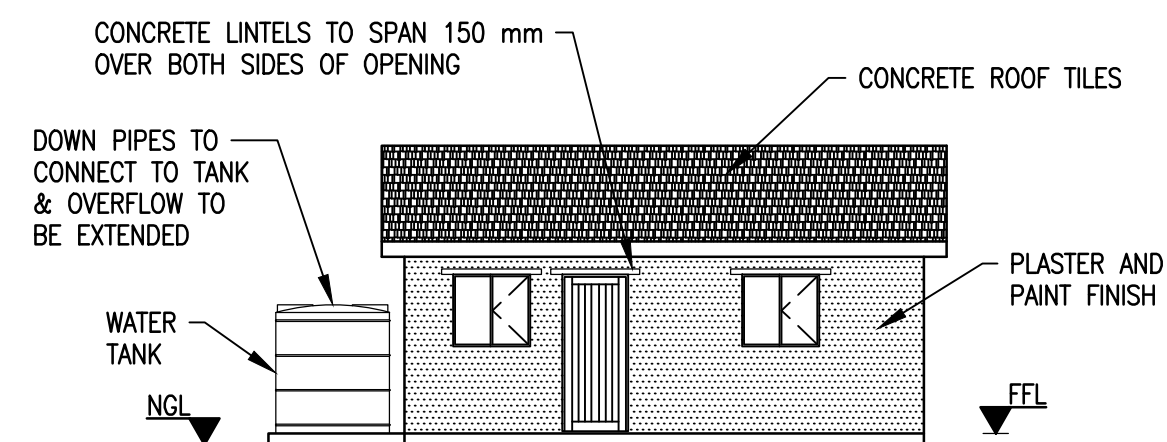
HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD PRIORITY HOUSING

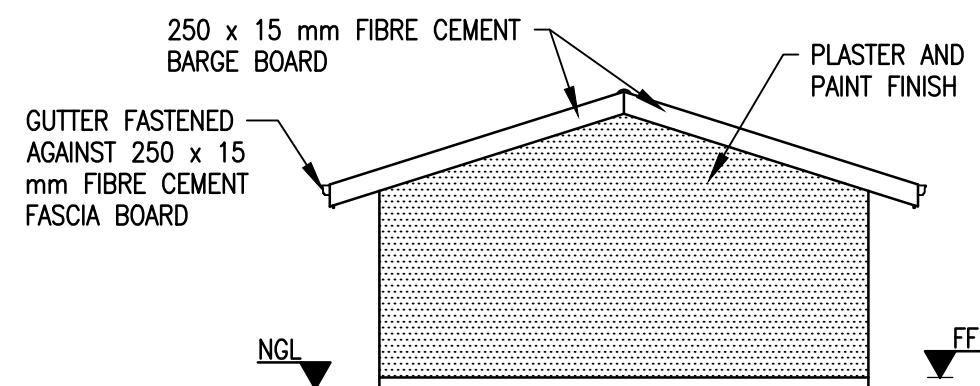
PLATFORM PREPARATION – 40 SQUARE METER HOUSE

DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA	
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001	SEDI BENG BUILDING 185 FRANCOIS BAARD STREET PRETORIA (012) 336-7500
CHECKED: _____	DESIGN: _____
ENGINEER: _____	DRAWN: _____
EXT. APPROVAL / DESIGN CHECKED: _____	DATE: _____
CHIEF ENGINEER / APP (Pr. Eng): _____	DATE: _____
DIRECTOR (Pr. Eng): _____	DATE: _____

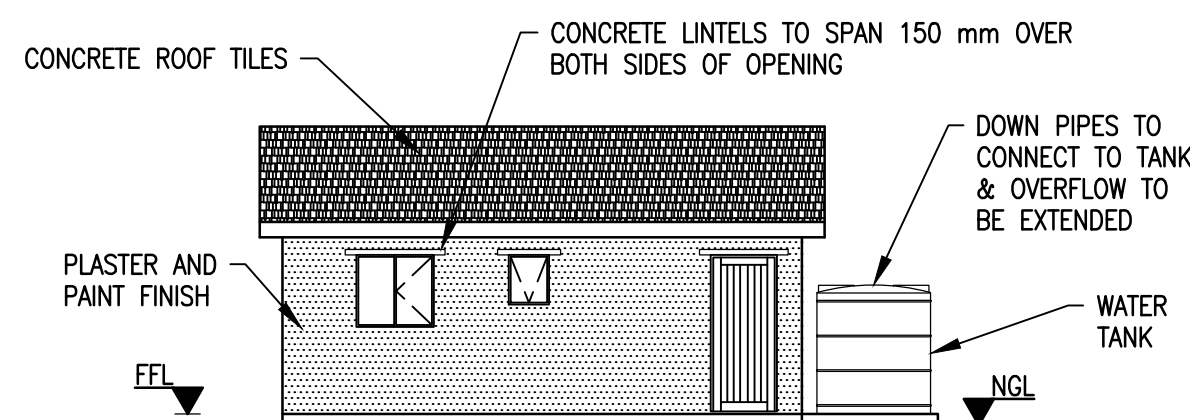
PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU - - -	OTHER NUMBER	HDH103
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET	REG. No.	REV.
CALCULATION FILE: 20/2/U300-01/C/1/1	3 of 10	178 421/19	00	



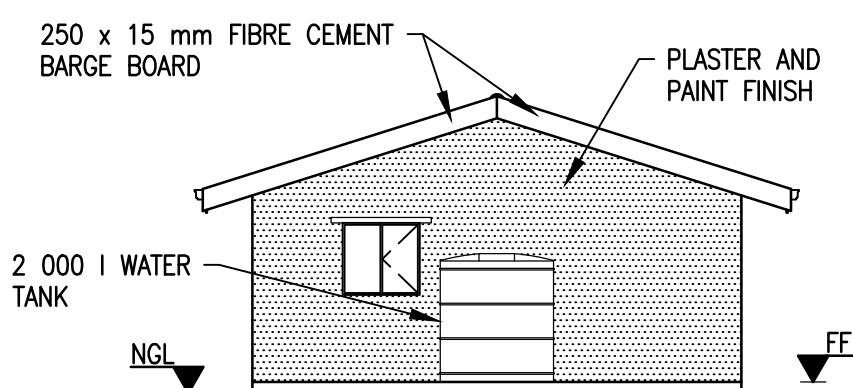
NORTHERN ELEVATION
SCALE 1:100



WESTERN ELEVATION
SCALE 1:100



SOUTHERN ELEVATION
SCALE 1:100



EASTERN ELEVATION
SCALE 1:100

CEILING:

FIBRE CEMENT CEILING BOARD WITH MERANTI COVER STRIPS ON 38 x 38 mm SAP BATTENS, 75 mm COVERED GYPSUM PLASTERBOARD CORNICE TO BE USED.

NOTE:

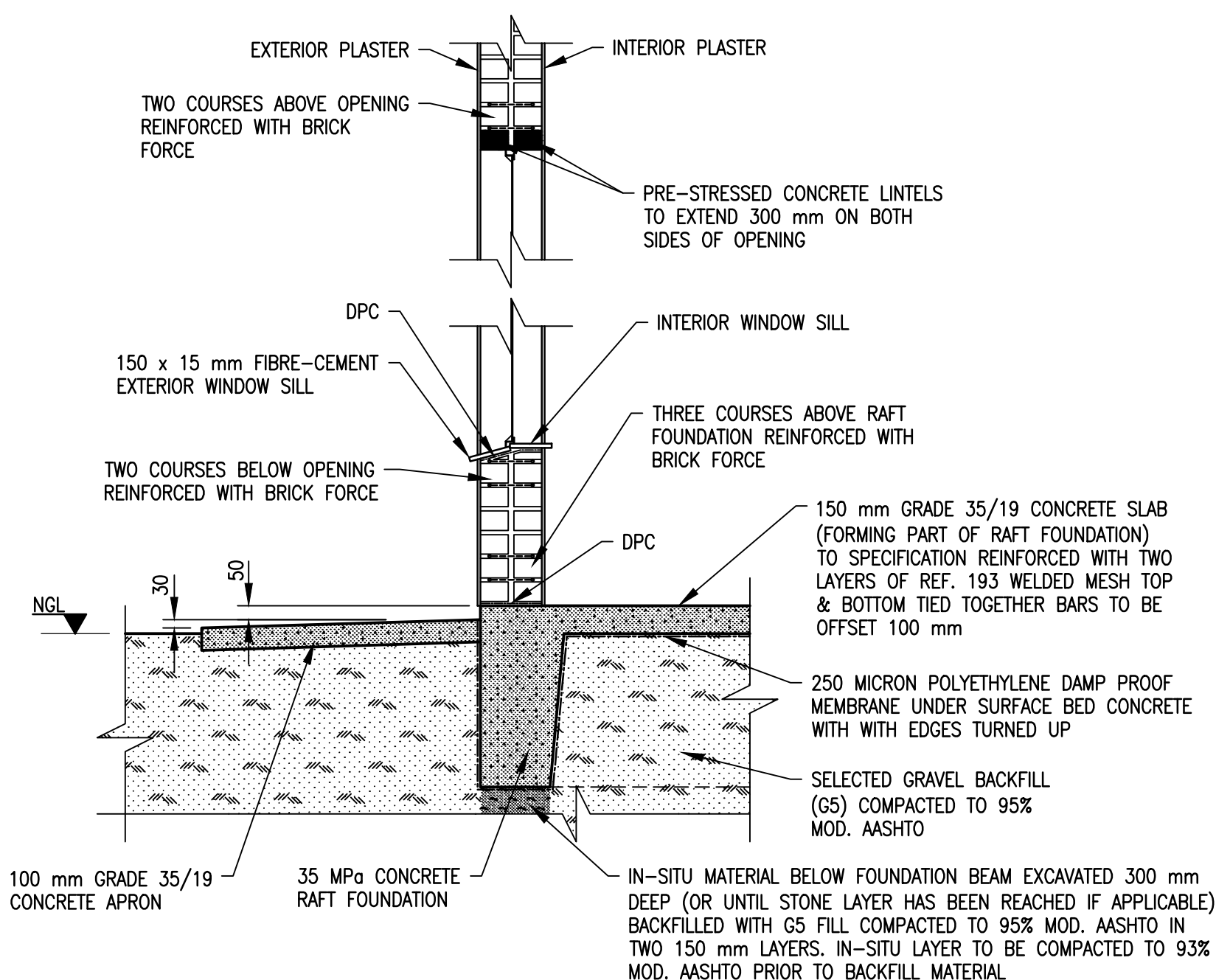
TIMBER ROOF STRUCTURE SHALL BE BRACED AND STIFFENED TO THE ENGINEER'S SATISFACTION AND APPROVAL, WITH THE PRE-FABRICATED TRUSSES, SHOP DRAWINGS SHALL BE SUBMITTED BY THE SUPPLIER AND THE ROOF STRUCTURE SHALL BE CERTIFIED BY A REGISTERED ENGINEER AS A SAFE STRUCTURE.

FOUNDATION AND FLOOR:

CONCRETE RAFT FOUNDATION SHALL BE AS SHOWN ON THE FOUNDATION DRAWING TO SUIT PREVAILING SOIL CONDITIONS. THE 150 mm FLOOR OF THE STRUCTURE FORMS PART OF THE FOUNDATION REINFORCED WITH REF. 193 WELDED MESH ON 250 MICRON POLYURETHANE MEMBRANE ON WELL COMPACTED FILLING. FLOOR FINISHES SHALL BE AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

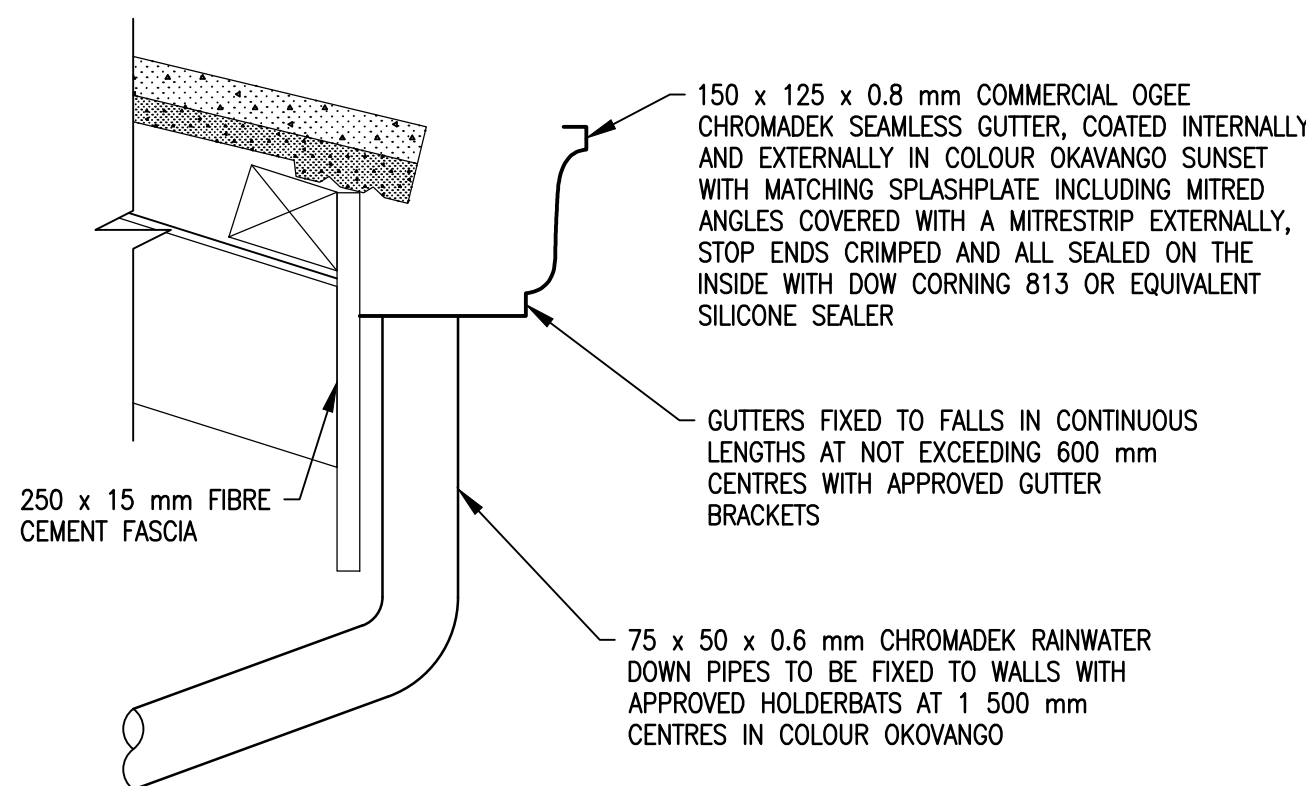
CONCRETE TILE COVERED ROOF:

SPECIFIED CEMENT TILES ON 38 x 38 mm BATTENS AT CENTRES ACCORDING TO SUPPLIERS SPECIFICATIONS ON SISALATION 405 RSA SUPPORTED BY 2 mm Ø GALV. STRAINING WIRES @ 300 mm CENTRES NAILED ON SAP ROOF TRUSSES. TRUSSES MANUFACTURED FROM GRADE 6 SA PINE AT 700 mm CENTRES ON 114 x 38 mm SA PINE WALL PLATES, FASTENED WITH 4 mm Ø GALV. WIRE TIES BUILT IN PROTRUDING FROM THE FOUNDATION BEAM.



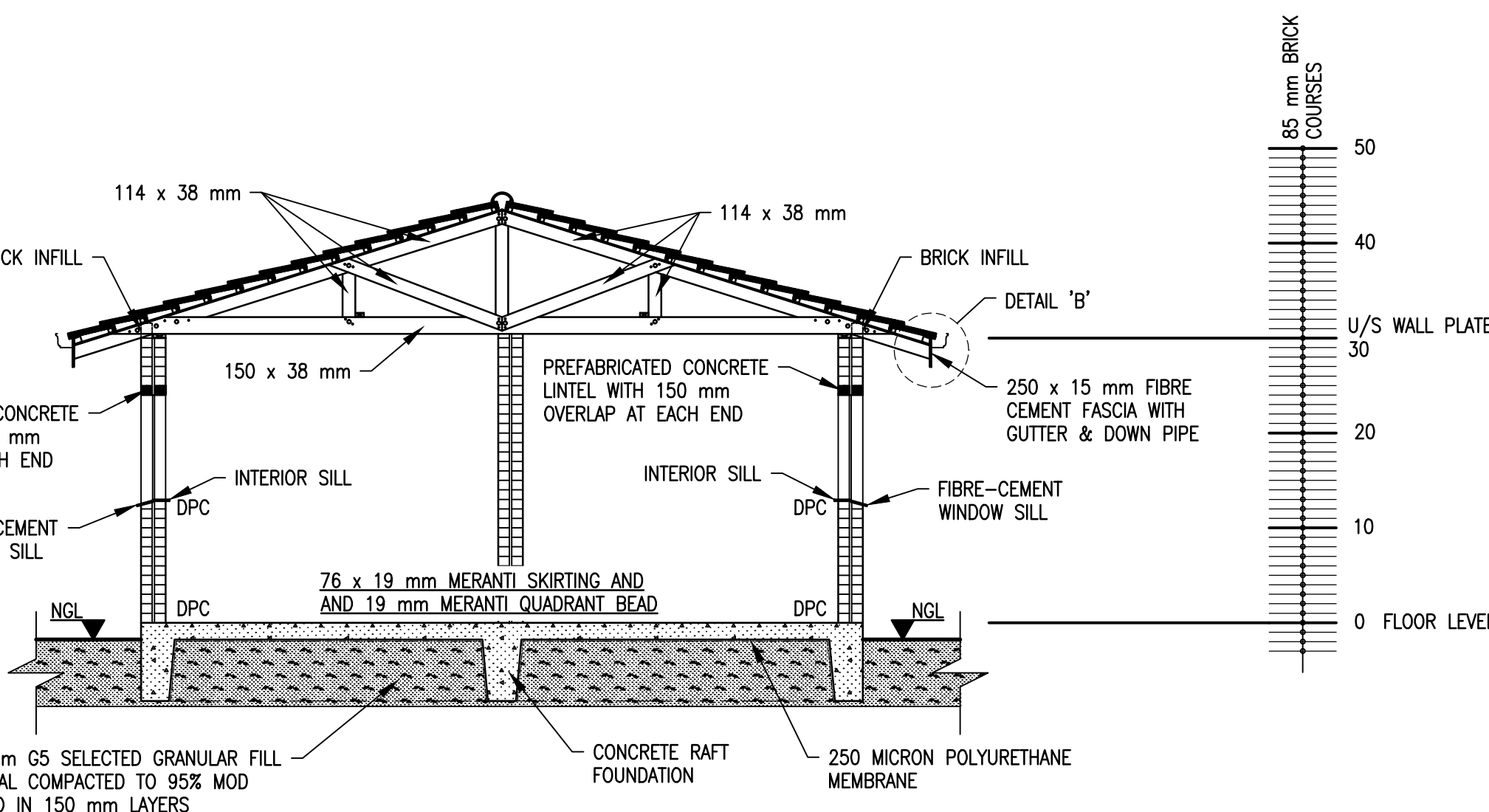
DETAIL 'A': SECTION ON TYPICAL REINFORCED RAFT FOUNDATION & WALLS

SCALE 1:20



DETAIL 'B': GUTTER DETAIL

SCALE 1:5



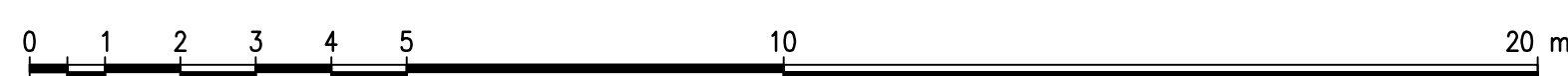
SECTION 01-01

SCALE 1:50

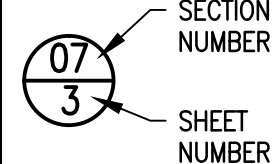
SCALE 1:50



SCALE 1:100



SECTION



TENDER ONLY

REVISION				
MOD No.	DATE	DESCRIPTION	FOR	DWS
00	11/20	ISSUED FOR INFORMATION	-	

DEPARTMENT OF WATER AND SANITATION
REPUBLIC OF SOUTH AFRICA

HEAD OFFICE
CIVIL ENGINEERING
PRIVATE BAG X313
PRETORIA 0001



SEDIENG BUILDING
185 FRANCOIS BAARD STREET
PRETORIA
(012) 336-7500

CHECKED:	DESIGN: -
ENGINEER:	DATE: -
EXT. APPROVAL / DESIGN CHECKED:	DATE: -
CHIEF ENGINEER / APP (Pr. Eng):	DATE: -
DIRECTOR (Pr. Eng):	DATE: -

HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD PRIORITY HOUSING

FLOOR PLAN, SECTION AND ELEVATIONS - 40 SQUARE METER HOUSE

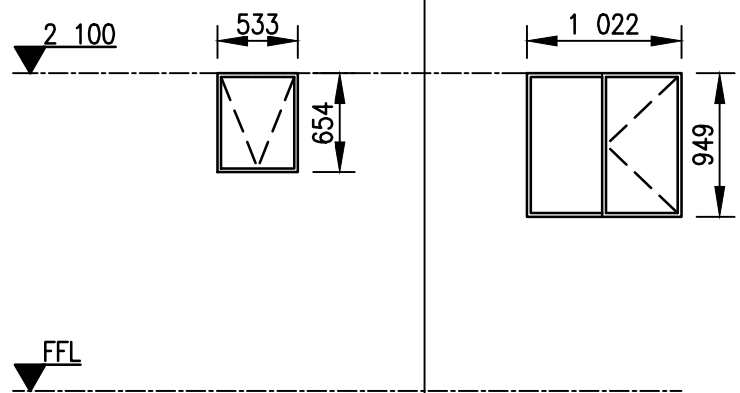
PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU - - - OTHER NUMBER HDH104
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET REG. No. 4 OF 10
CALCULATION FILE: 20/2/U300-01/C/1/1		178 422/19 00

1/10	LIST OF DRAWINGS	HDH101	178 419/19
SHEET	DESCRIPTION	OTHER No.	REG. No.
LIST OF DRAWINGS			

STEEL WINDOW FRAMES

NTS

WINDOW SCHEDULE



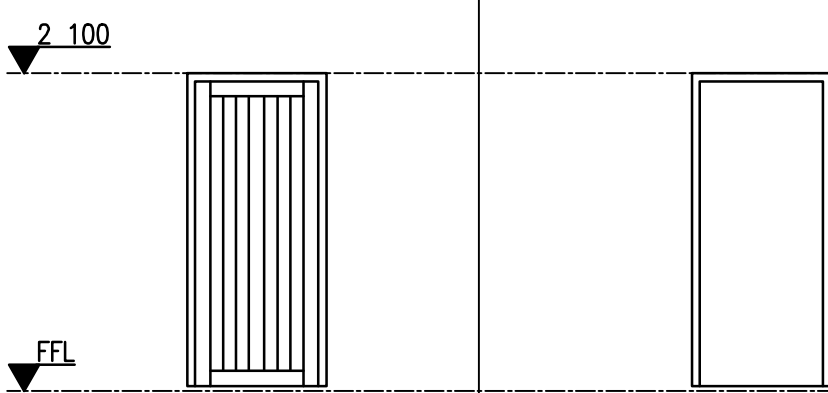
WINDOW REF.	W1	W2
TYPE	NE1	NC2
NO. REQUIRED	1	4
FRAME	STEEL	STEEL
GLAZING	4 mm FROSTED GLASS	4 mm FROSTED GLASS (W2a) 4 mm CLEAR GLASS (W2b)
BURGLAR PROOFING	TO ALL OPENING SECTIONS	TO ALL OPENING SECTIONS
FINISH	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND PAINT ONE UNDERCOAT (SANS 681:2014 TYPE 1) AND TWO COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND PAINT ONE UNDERCOAT (SANS 681:2014 TYPE 1) AND TWO COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)
LINTEL BEARING ON EACH SIDE MINIMUM (mm)	150	150
BRICK COURCES ABOVE LINTEL MINIMUM	4	4
SUPPORT/PROPS EVERY x METRES	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS

(REF: NHBRC PART 3, SEC 3 FEB 1999 REV NO. 1) FOR LINTEL DETAIL

TIMBER DOORS

NTS

FRAME WINDOW SCHEDULE



DOOR REF.	D1	D2
DOOR SIZE	2 032 x 813 mm	2 032 x 813 mm
TYPE	SOLID TIMBER MERANTI DOOR	HOLLOW CORE TIMBER DOOR
NO. REQUIRED	2	3
FRAME	STEEL DOUBLE REBATED	STEEL DOUBLE REBATED
DOOR FINISH	SAND AND STOP FINISH WITH THREE COATS CLEAR MATT EXTERIOR POLYURETHANE VARNISH	PRIMED WITH OIL WOOD PRIMER AND PAINT ONE UNDERCOAT AND TWO COATS HIGH GLOSS ENAMEL PAINT
FRAME FINISH	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND THREE COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND THREE COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)
LOCK	4 LEVER UPRIGHT MORTICE LOCK SET	2 LEVER UPRIGHT MORTICE LOCK SET
LINTEL BEARING ON EACH SIDE MINIMUM (mm)	150	150
BRICK COURCES ABOVE LINTEL MINIMUM	4	4
SUPPORT/PROPS EVERY x METRES	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS

(REF: NHBRC PART 3, SEC 3 FEB 1999 REV NO. 1) FOR LINTEL DETAIL

FOR COMPLETE DESCRIPTION OF FINISHES SEE DETAILED SPECIFICATION IN CONTRACT DOCUMENT

		LOUNGE/DINING ROOM	BED ROOMS	PASSAGE & ENTR.FOYER	BATHROOM	KITCHEN	EXTERNALLY	CONCRETE PLATFORMS
FLOOR	WOOD FLOAT FINISH (NON SLIP) NON-SLIP CERAMIC OR QUARRY TILES	•	•	•	•	•		•
SKIRTING	76 x 19 mm SKIRTINGS AND 19 mm QUADRANT ANGLE MOULDS (SA PINE) FLOOR TILE SKIRTING	•	•	•	•	•		
WALLS	CEMENT PLASTER	•	•	•	•	•	•	
WALL FINISHES	INTERIOR ACRYLIC PVA PAINT (WASHABLE) EXTERIOR ACRYLIC PVA PAINT (WASHABLE) EGGSHELL ENAMEL FOR UNTILED PLASTER SURFACES WALL TILES AREAS AS SPECIFIED	•	•	•			•	
TILES	FFL TO 1,5 m HIGH				•	•		
CURTAINS	CURTAIN RAILS	•	•	•	•	•		
CEILING	GYPSUM CEILING BOARD / FIBRE CEMENT CEILING BOARD GYPSUM PLASTERBOARD CORNICE (75 mm COVED)	•	•	•	•	•		
MISCELLANEOUS	SOAP DISH 750 x 20 mm [AND 450 x 20 mm [TOWEL RAILS (450 x 20 mm [IN KITCHEN) TOILET PAPER HOLDER (VITREOUS CHINA)				•			
SCHEDULE FOR FINISHES OF 40 SQUARE METER HOUSE								

SECTION

SECTION NUMBER
07
3
SHEET NUMBER

TENDER ONLY

DEPARTMENT OF WATER AND SANITATION
REPUBLIC OF SOUTH AFRICA

HEAD OFFICE
CIVIL ENGINEERING
PRIVATE BAG X313
PRETORIA 0001



SEDI BENG BUILDING
185 FRANÇOIS BAARD STREET
PRETORIA
(012) 336-7500

CHECKED: DATE: DESIGN: --
DRAWN: --

ENGINEER: DATE: EXT. APPROVAL / DESIGN CHECKED: DATE:

CHIEF ENGINEER / APP (Pr. Eng): DATE: DIRECTOR (Pr. Eng): DATE:

HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD PRIORITY HOUSING
WINDOW AND DOOR SCHEDULE – 40 SQUARE METER HOUSE

PROVINCE: KWA-ZULU NATAL DISTRICT: ETHEKWINI KEYCODES: RTR HOU -- -- -- OTHER NUMBER HDH105

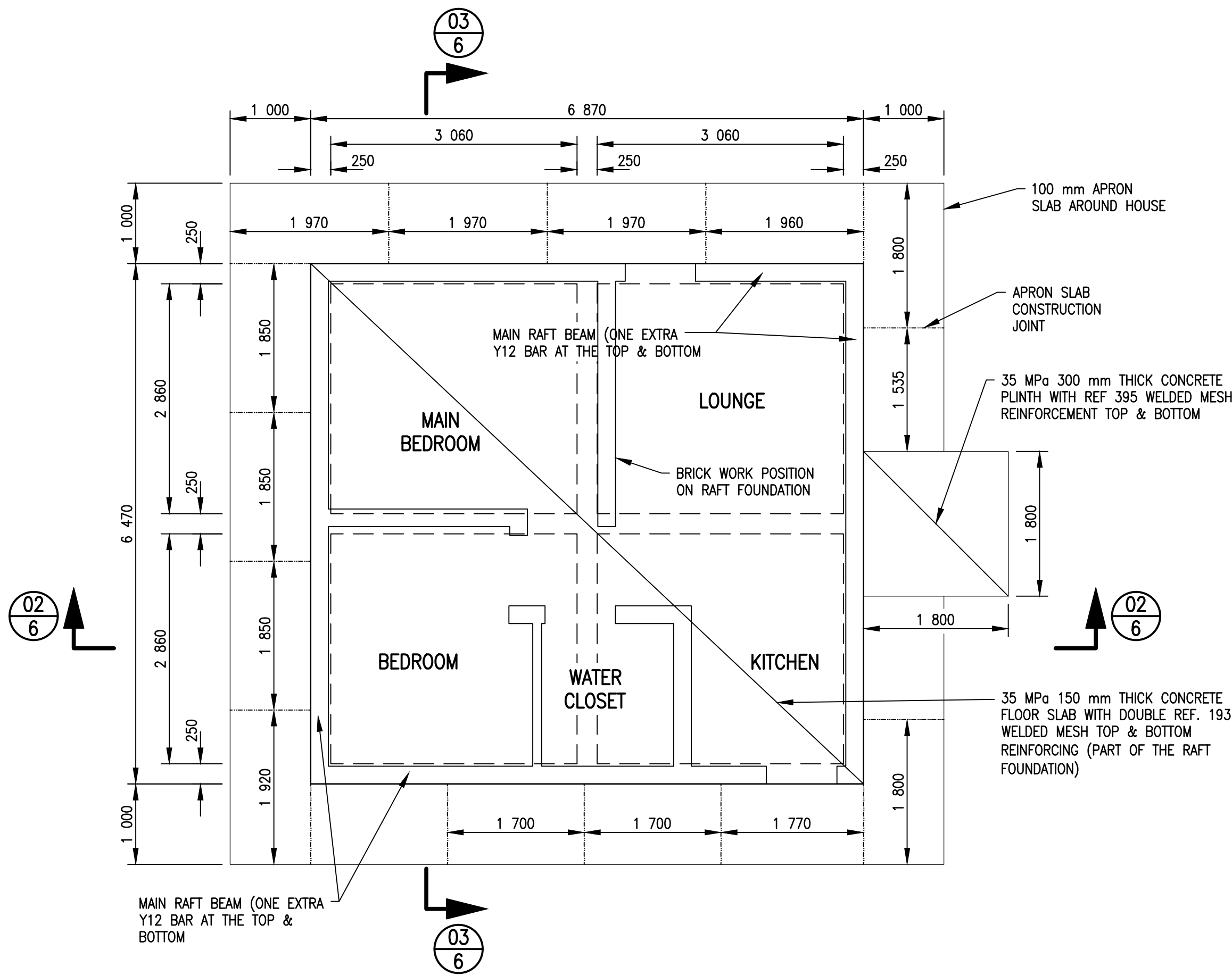
LOCALITY No.: U300-01 TENDER/ CONTRACT No. C/0339 SHEET REG. No. 5 of 10

CALCULATION FILE: 20/2/U300-01/C/1/1 178 423/19 00

1/10 LIST OF DRAWINGS HDH101 178 419/19

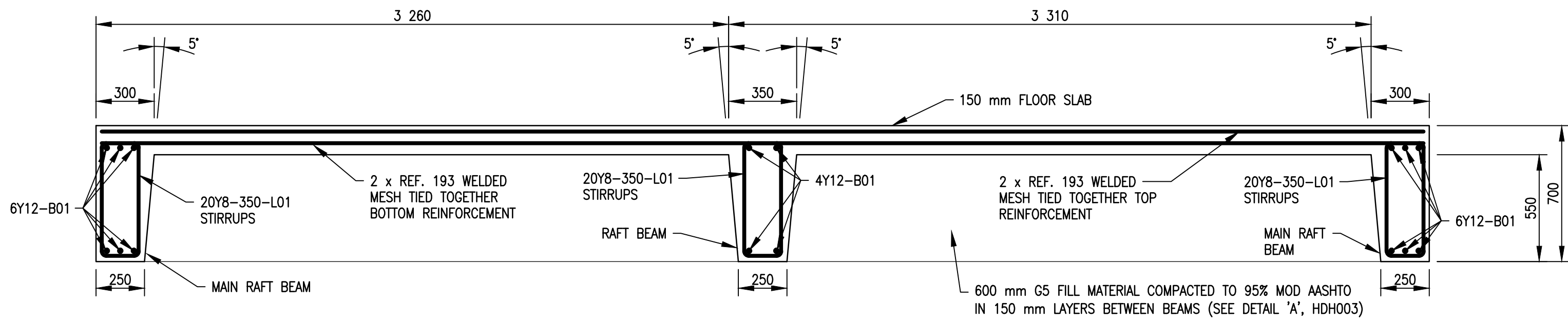
SHEET DESCRIPTION OTHER No. REG. No.

LIST OF DRAWINGS



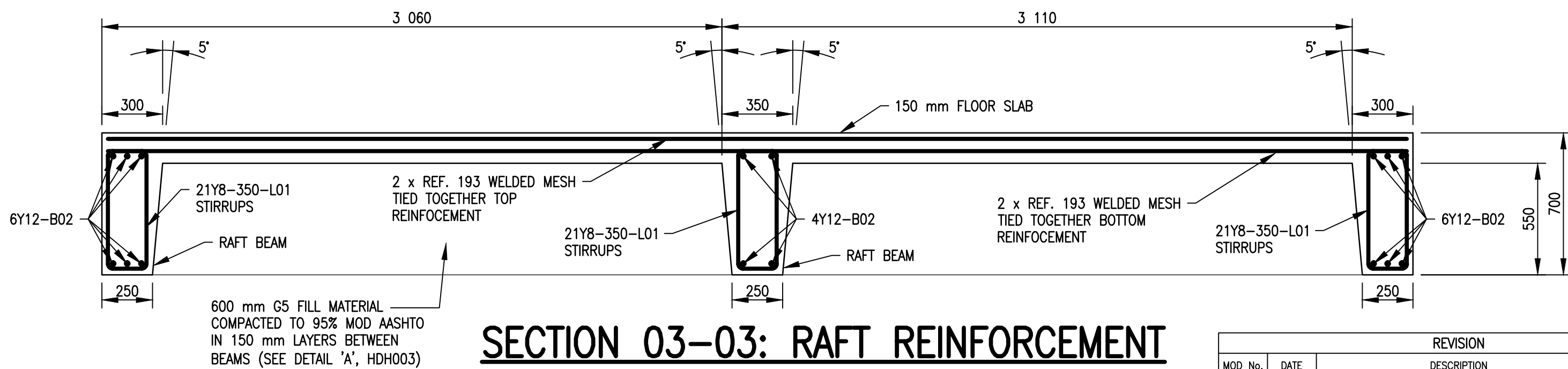
BRICK LAYOUT ON RAFT FOUNDATION

SCALE 1:50



SECTION 02-02: RAFT REINFORCEMENT

SCALE 1:20

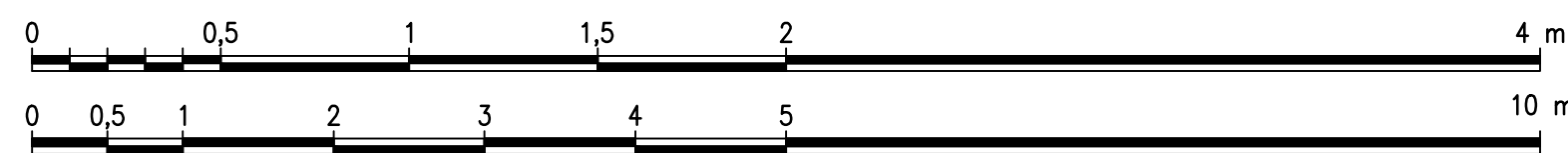


SECTION 03-03: RAFT REINFORCEMENT

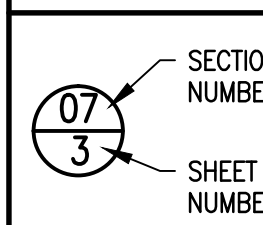
SCALE 1:20

SCALE 1:20

SCALE 1:50



SECTION



TENDER ONLY

DEPARTMENT OF WATER AND SANITATION BAR BENDING SCHEDULE

SCHEME HAZELMERE DAM RESETTLEMENT HOUSING PROJECT

SHEET 1/2

STRUCTURE RAFT FOUNDATION OF 40 m SQUARE HOUSES

DRAWN CW HATTINGH

PLAN REG NO. 178 424/19

CHECKED JF HATTINGH

Member Location	No. of	Type, Ø & mark	No. in each	Total no.	Cut length mm	Shape code	Bending Dimensions (mm)					Mass kg
							A	B	C	D	E/R	
FOUNDATION BEAMS	1	Y12, B01	16	16	6 400	20	6370					91
	1	Y12, B02	16	16	6 800	20	6770					97
	1	Y08, L01	123	123	1 600	60	570	150				78
	1	Y08, S01	20	20	1 100	83	500	70	250			9
REF.193	1	WM193	22	22	6 000	MESH	6 000	2 400				611
REF.395	1	WM395	1	1	6 000	MESH	6 000	2 400				28

Dimensions are given in mm and m
Dimensions of bars are overall

DEPARTMENT OF WATER AND SANITATION BAR BENDING SCHEDULE

SCHEME HAZELMERE DAM RESETTLEMENT HOUSING PROJECT

SHEET 2/2

STRUCTURE RAFT FOUNDATION OF 40 m SQUARE HOUSES

DRAWN CW HATTINGH

PLAN REG NO. 178 424/19

CHECKED JF HATTINGH

SUMMARY OF LENGTHS AND MASSES

Type Y			Type R			Type WELDED MESH		
Bars	L(m)	Mass (kg)	Bars	L(m)	Mass (kg)	Bars	L(m)	Mass (kg)
Y08	219	86				REF. 193	317	611
Y12	211	188				REF. 395	7	28
TOTAL MASS	(Kg)	274	TOTAL MASS	(Kg)		TOTAL MASS	(Kg)	639

NOTES:

- COVER TO ALL REINFORCEMENT IS 50 mm UNLESS OTHERWISE INDICATED.
- LAP LENGTHS = 40 X Ø.
- ANCHORAGE LENGTHS = 50 X Ø.
- CONCRETE GRADE 35/19.

EXCAVATION NOTES:

- THE DEPTH OF THE FOUNDATION TRENCHES FOR THE RAFT FOUNDATION SHALL BE THE DEPTH OF THE BEAMS UNDER THE FLOOR SLAB.
- THE EXCAVATION SHALL BE TRIMMED WITH 5° SLOPED SIDES AS INDICATED IN THE DRAWING. THE HORIZONTAL FLOOR OF THE TRENCH SHALL BE FLAT, OF EVEN SURFACE AND FREE FROM ANY LOOSE MATERIAL AND PROTRUDING ROCKS.
- ALL WATER SEEPAGE SHALL BE REMOVED, SOIL INSECTICIDE APPLIED AND DPC IN-PLACE BEFORE THE CASTING OF ANY CONCRETE.

Shape codes to SANS 282 (With latest amendments)

Preferred shapes				Other shapes
20	42	53	73	
36	43	54	74	
37	45	55	75	
38	48	60	83	
39	49	62	85	
41	52	65	86	
	72			

DIMENSIONS ARE GIVEN IN mm and m.
DIMENSIONS OF BARS ARE OVERALL OUTSIDE DIMENSIONS.

WHEN SO DESIRED, THE STANDARD RADIUS (r) FOR CORNERS MAY BE INCREASED, BUT SHALL NOT APPLY TO END ANCHORAGES DENOTED BY h OR n. THIS CHANGE SHALL BE INDICATED AS SHAPE CODE 99.

FOR WELDED MESH FABRIC, DIMENSIONS A & B DEFINE THE NET OVERALL AREA OF MESH. NO ALLOWANCE HAS BEEN MADE FOR LAPS.

NOTES:

- ALTHOUGH THE BENDING SCHEDULES WERE PREPARED WITH CARE, MISTAKES MAY HAVE BEEN MADE THEREFORE, BEFORE ORDERING AND BEFORE CUTTING AND BENDING OF REINFORCEMENT COMMENCES THE CONTRACTOR MUST CHECK ALL SCHEDULES TO ENSURE CORRECTNESS OF TYPE OF REINFORCEMENT AND BENDING DIMENSIONS.

IN CASE CHANGES ARE NECESSARY, THEY SHOULD CONFORM TO THE REQUIREMENTS SHOWN ON THE DRAWINGS AND BE IN ACCORDANCE WITH SANS 10144 (WITH THE LATEST AMENDMENTS).

ALL BENDING SHALL BE DONE IN ACCORDANCE WITH SANS 282 (WITH THE LATEST AMENDMENTS).
- FOUR TYPES OF REINFORCING STEEL CAN BE SPECIFIED ON REINFORCEMENT DRAWINGS AND BENDING SCHEDULES (IN ACCORDANCE WITH SANS 920 AND SANS 1024 WITH THE LATEST AMENDMENTS) viz.

R REINFORCEMENT SHALL BE TYPE A: HOT ROLLED MILD STEEL BARS OF PLAIN ROUND CROSS-SECTION HAVING A MINIMUM YIELD STRESS OF 250 MPa FOR BARS OF DIAMETER UP TO AND INCLUDING 20 mm AND HAVING A MINIMUM YIELD STRESS OF 230 MPa FOR BARS WITH DIAMETER GREATER THAN OR EQUAL TO 25 mm.

Z REINFORCEMENT SHALL BE TYPE B: GRADE 1: HOT ROLLED DEFORMED MILD STEEL BARS HAVING A MINIMUM YIELD STRESS AS FOR TYPE A.

Y REINFORCEMENT SHALL BE TYPE C: CLASS 2: GRADE 1: HOT ROLLED DEFORMED HIGH YIELD STRESS STEEL BARS HAVING A MINIMUM YIELD STRESS OR A MINIMUM 0,25% PROOF STRESS OF 450 MPa.

REF. ALL STEEL FABRIC SHALL BE IN ACCORDANCE WITH SANS 1024 (WITH THE LATEST AMENDMENTS) HAVING A MINIMUM 0,2% PROOF STRESS OF 480 MPa.

FOR EXAMPLE: R20 DENOTES A 20 mm DIAMETER PLAIN ROUND BAR OF MILD STEEL.
Z12 DENOTES A 12 mm DIAMETER DEFORMED BAR OF MILD STEEL.
Y25 DENOTES A 25 mm DIAMETER DEFORMED BAR OF HIGH TENSILE STEEL.
REF. 655 DENOTES FABRIC REFERENCE 655 (MESH).

REINFORCEMENT

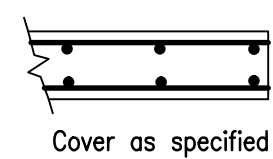
(To: SANS 920 With latest amendments)
R - Plain mild steel bars (Type A)
(fy=250 MPa ≤ 20 mm [and fy=230 MPa ≥ 25 mm [)
Z - Deformed mild steel
(fy=250 MPa ≤ 20 mm [and fy=230 MPa ≥ 25 mm [)
Y - High yield steel
(Type C : Class 2 : Grade 1 : fy=450 MPa)
Where: fy=Yield stress

EXAMPLE

20Y25-A63-150 T2

20 - Bars
Y - High yield steel
25 - Diameter in mm
A63 - Bar mark number
150 - Spacing c/c in mm
T2 - Location

NF - Near face IF - Inside face
FF - Far face OF - Outside face
EF - Each face T - Top
EW - Each way B - Bottom
CTF - Cut to fit CTL - Cut to length
ABR - Alternative bars reversed



1/10	LIST OF DRAWINGS	HDH101	178 419/19
SHEET	DESCRIPTION	OTHER No.	REG. No.

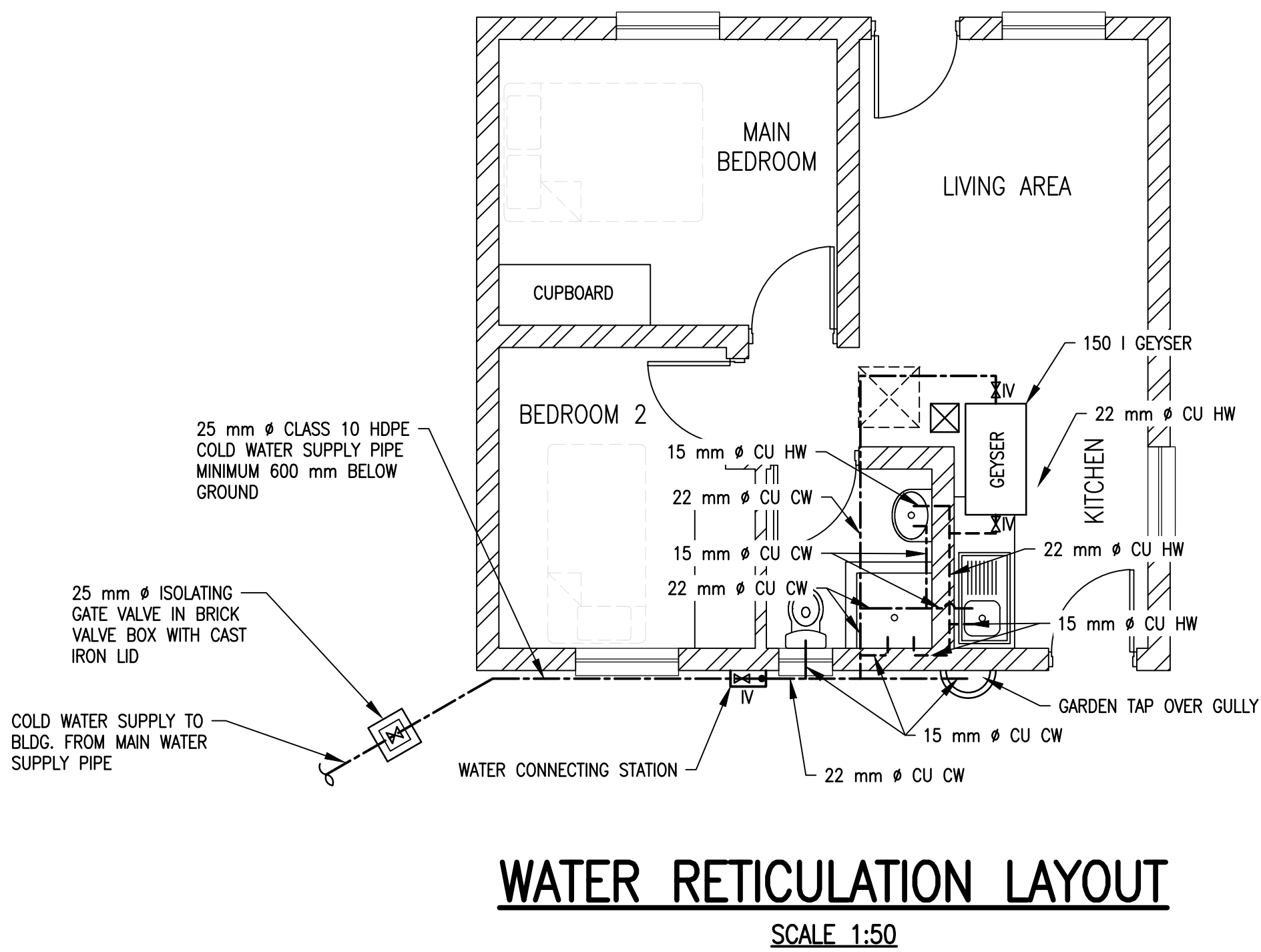
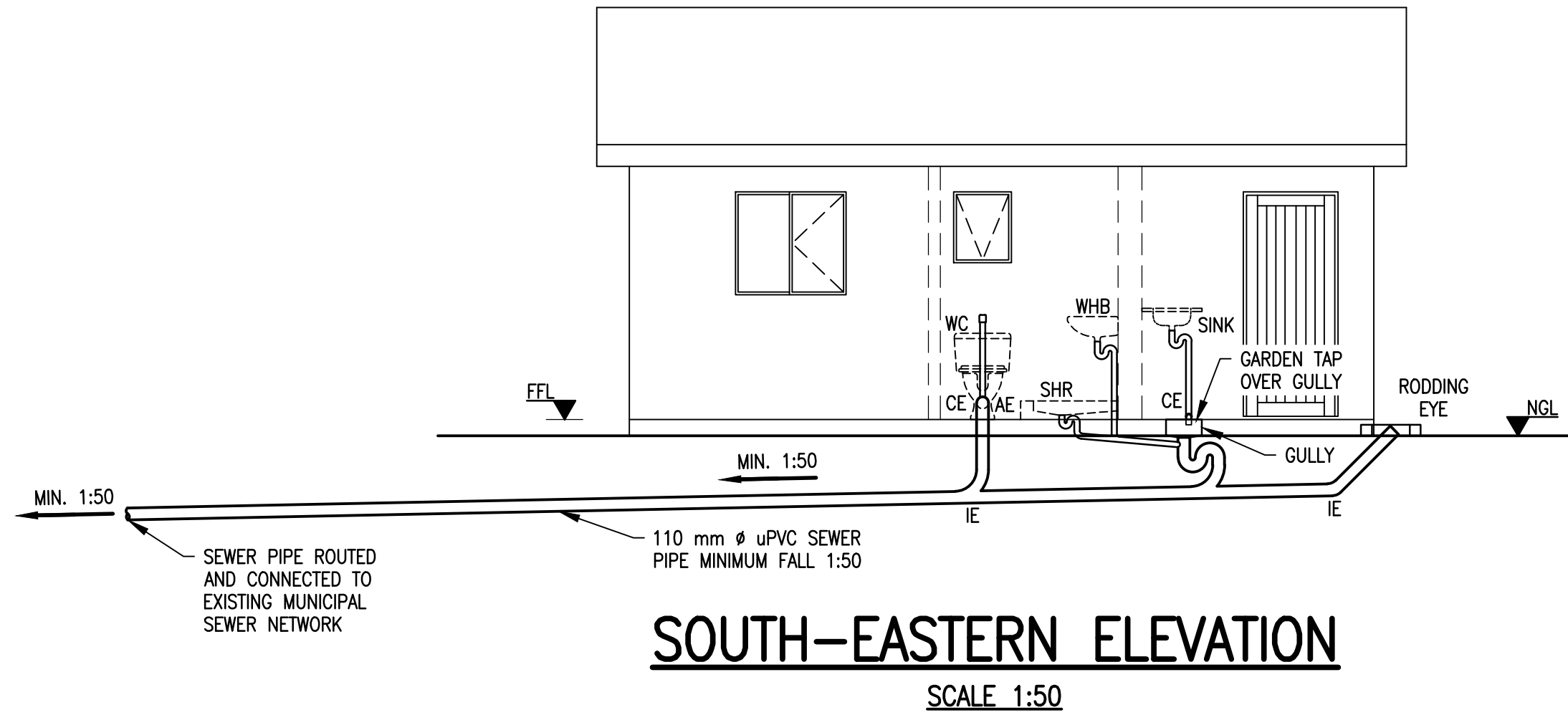
LIST OF DRAWINGS

HAZELMERE RESETTLEMENT HOUSING PROJECT

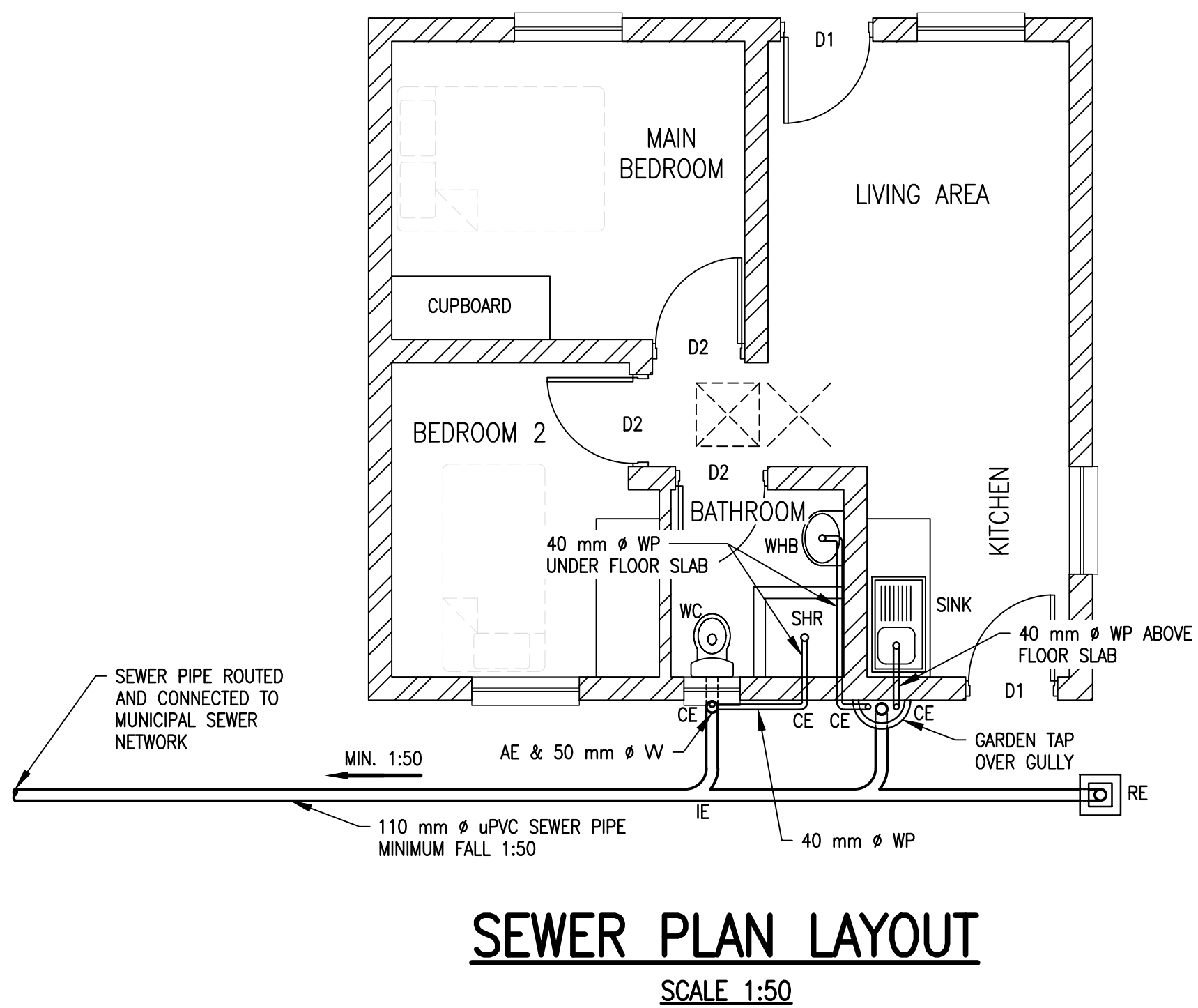
OAKFORD PRIORITY HOUSING FLOOR PLAN AND FOUNDATION SLAB - 40 SQUARE METER HOUSE

REVISION				DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA	
MOD No.	DATE	DESCRIPTION	FOR	DWS	
00	11/20	ISSUED FOR INFORMATION	-		
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001				SEDI BENG BUILDING 185 FRANCOIS BAARD STREET PRETORIA (012) 336-7500	
CHECKED:		DESIGN: -		DATE: DRAWN: -	
ENGINEER:		DATE:		EXT. APPROVAL / DESIGN CHECKED: DATE:	
CHIEF ENGINEER / APP (Pr. Eng):		DATE:		DIRECTOR (Pr. Eng): DATE:	

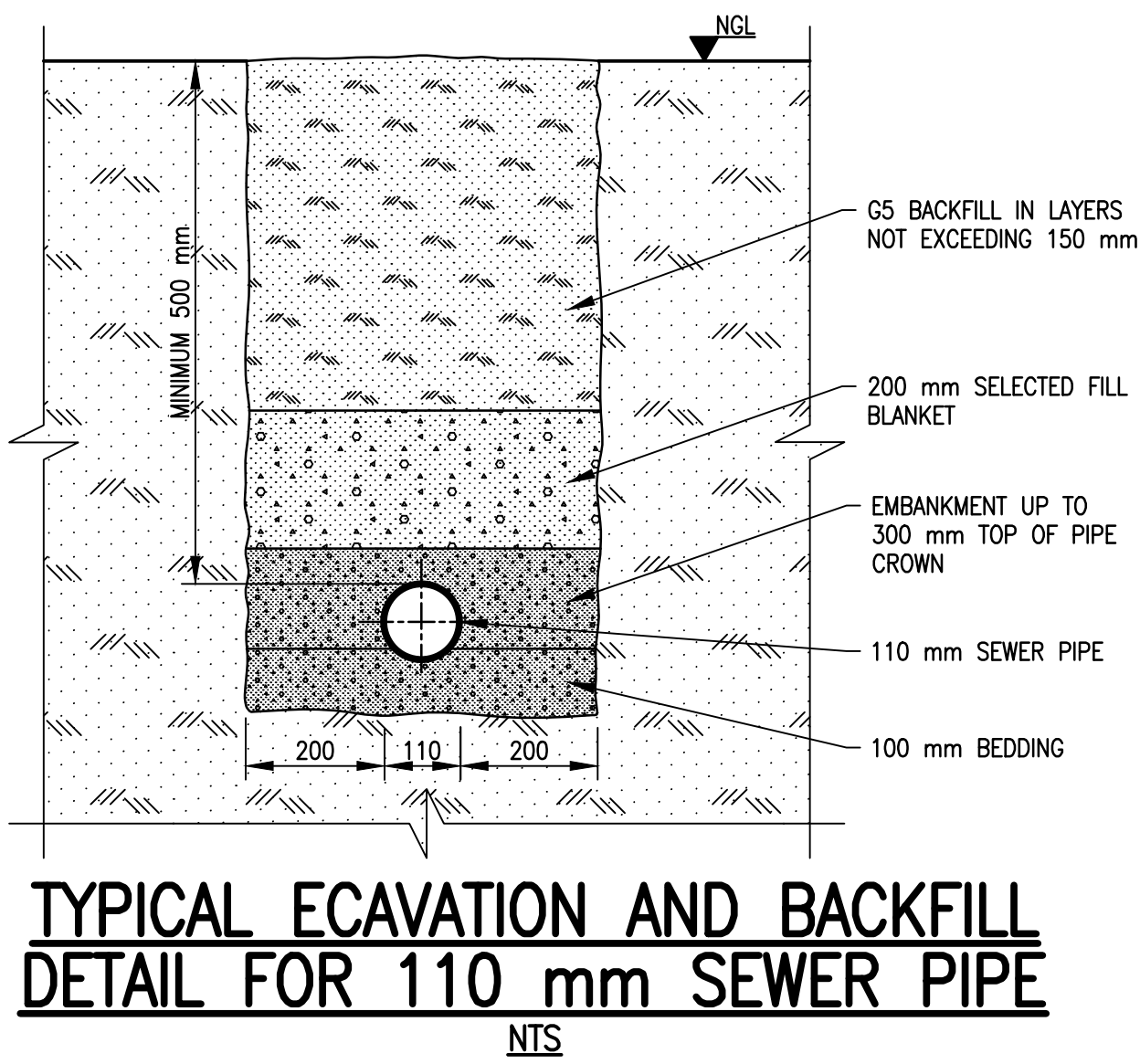
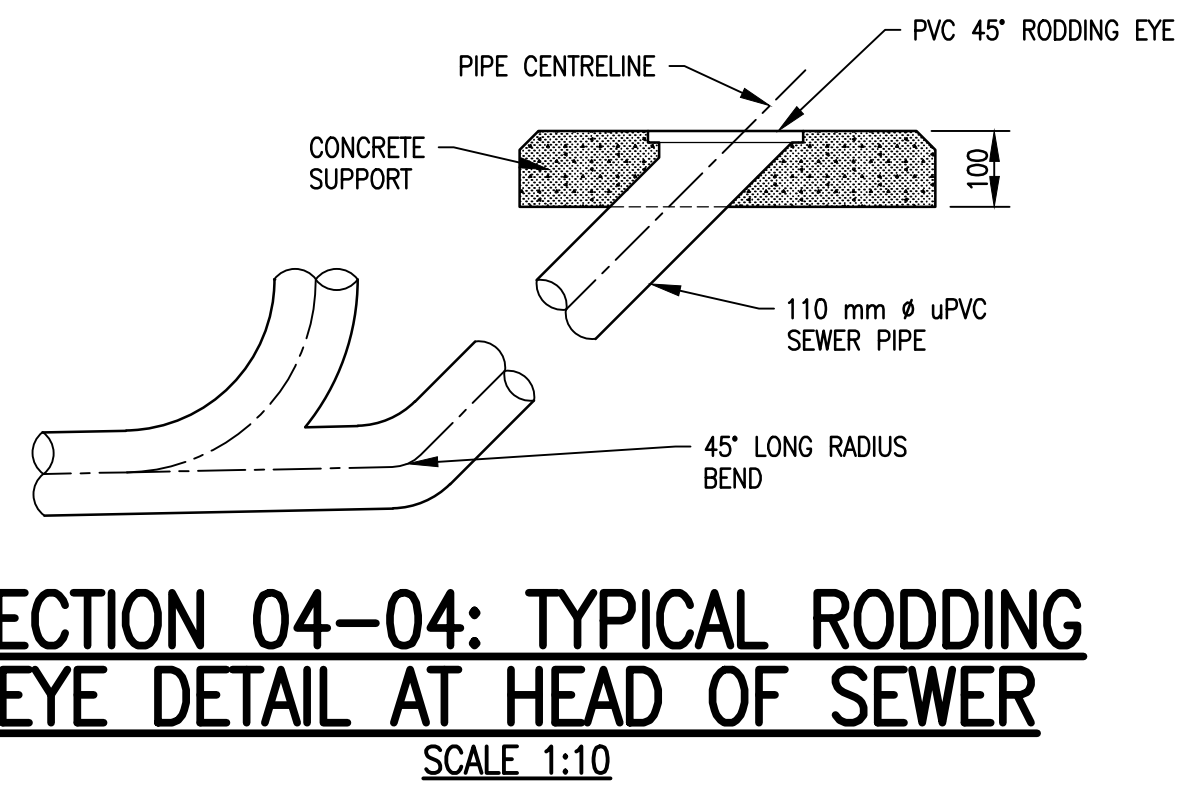
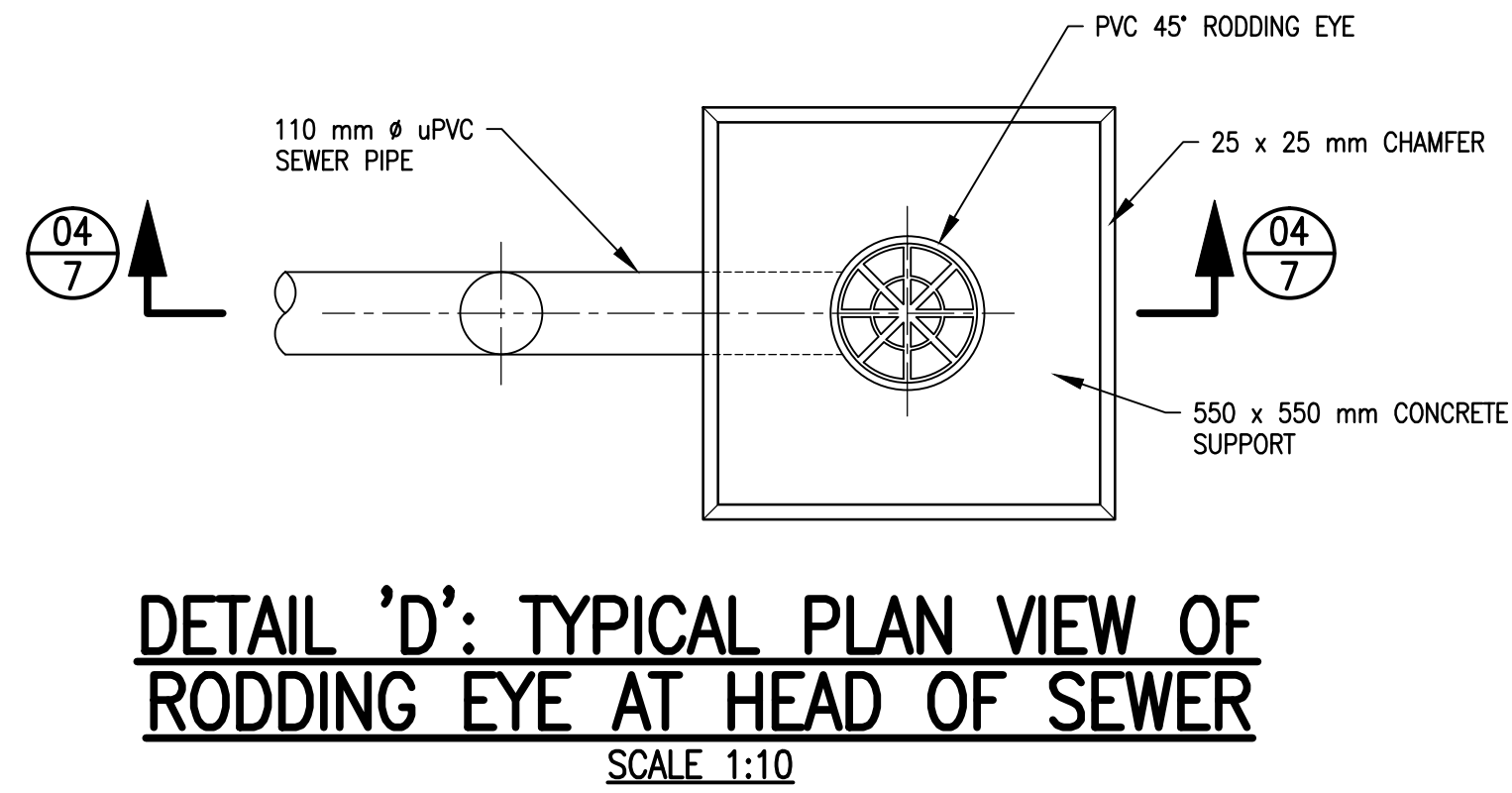
PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU - - - OTHER NUMBER	HDH106
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET REG. No.	REV.
CALCULATION FILE: 20/2/U300-01/C/1/1	6 of 10	178 424/19	00



- ### SEWERAGE RETICULATION NOTES:
1. ALL SANITARY FITTINGS SHALL BE PROVIDED WITH A WATER TRAP SEAL – TYPE AS SPECIFIED.
 2. ALL WASTE PIPES SHALL BE FULLY ACCESSIBLE FOR CLEANING AND MAINTENANCE PURPOSES.
 3. ALL SOIL PIPES ABOVE GROUND LEVEL SHALL BE PROVIDED WITH ACCESS EYES AND UNDERGROUND PIPES WITH RODDING EYES FOR CLEANING PURPOSES.
 4. WASTE PIPES SHALL DISCHARGE BELOW GULLY GRID
 5. SOIL AND WASTE PIPE MATERIALS SHALL BE SPECIFIED AND DESCRIBED AS SHOWN ON THE DRAWINGS.
 6. SOIL AND WASTE WATER PIPE LAYOUT SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS. ANY DEVIATION SHALL BE APPROVED BEFOREHAND BY THE ENGINEER.
 7. THE CONTRACTOR SHALL REQUEST THE ENGINEER TO CARRY OUT INSPECTIONS ON ALL COMPLETED WORK OR PARTIAL COMPLETED WORK BEFORE THE WORK IS CLOSED OFF BY BUILDING IN, PLASTERED IN, PANELED IN OR BACK FILLED.
 8. THE ENGINEER MAY ORDER THE OPENING-UP OF ANY CONCEALED WORK WHICH WAS NOT INSPECTED BY HIM, AT THE COST OF THE CONTRACTOR.
 9. WASTE PIPES FOR WASH HAND BASINS AND SINKS SHALL BE 40 mm Ø PVC.
 10. WASTE PIPES FOR URINALS AND SHOWERS SHALL BE 50 mm Ø PVC AND SHALL DISCHARGE INDEPENDENTLY IN THE SYSTEM AS SHOWN.
 11. BEDDING PREPARATION MUST BE IN ACCORDANCE WITH SANS CODE (SABS 1200) CLASS 6 BEDDING.
 12. MINIMUM COVER TO PIPES MUST BE 600 mm.



- ### WATER RETICULATION NOTES:
1. POSITION OF PIPE ROUTES SHALL BE THE SHORTEST AND MOST PRACTICAL ROUTES EITHER MOUNTED IN THE ROOF CONSTRUCTION, SURFACE MOUNTED ON EXTERIOR WALLS OR CHASED IN THE INTERIOR WALLS.
 2. ALL OTHER SPECIFICATIONS REGARDING ISOLATION VALVES, BALL STOPS, MINIMUM PIPE DIAMETERS, ETC, SHALL BE APPLICABLE.
 3. THE GEYSER SHALL BE HORIZONTAL MOUNTED IN THE CEILING ABOVE THE BATHROOM. MUST BE INSTALLED WITH A DRIP TRAY AND FREE FLOWING PIPE.
 4. MATERIAL FOR INTERNAL WATER RETICULATION PIPES SHALL BE COPPER CLASS 1 WITH CAPILARY JOINTS AND/OR RESISTANT COMPRESSION FITTINGS.
 5. THE COLD AND HOT WATER MAIN SUPPLY PIPES SHALL BE 22 mm Ø CU AND THE LAST LENGTH TO EACH SANITARY FITTING SHALL BE 15 mm Ø CU EXCEPT TO THE SHOWER AND BATH WHICH STAYS 22 mm Ø.
 6. FIT A BALL STOP ISOLATING VALVE TO COLD WATER SUPPLY PIPES TO WC AND TO HOT AND COLD WATER PIPES TO WHB TAPS.



ABBREVIATIONS:

- | | | | |
|------|------------------------|-------------------|---|
| WC | – WATER CLOSET | CU | – CLASS 1 COPPER PIPE WITH CAPILARY SOLDERED JOINTS OR COMPRESSION FITTINGS |
| B | – BATH | | |
| WHB | – WASH HAND BASIN | CW | – COLD WATER PIPE : ——— |
| SHR | – SHOWER | HW | – HOT WATER PIPE : - - - - - |
| SINK | – STAINLESS STEEL SINK | | |
| WP | – WASTE WATER PIPE | ISOLATING VALVE : | IV |
| VV | – VENT VALVE | | |
| CE | – CLEANING EYE | | |
| AE | – ACCESS EYE | | |
| IE | – INSPECTION EYE | | |
| RE | – RODDING EYE | | |
| G | – GULLY | | |

SECTION

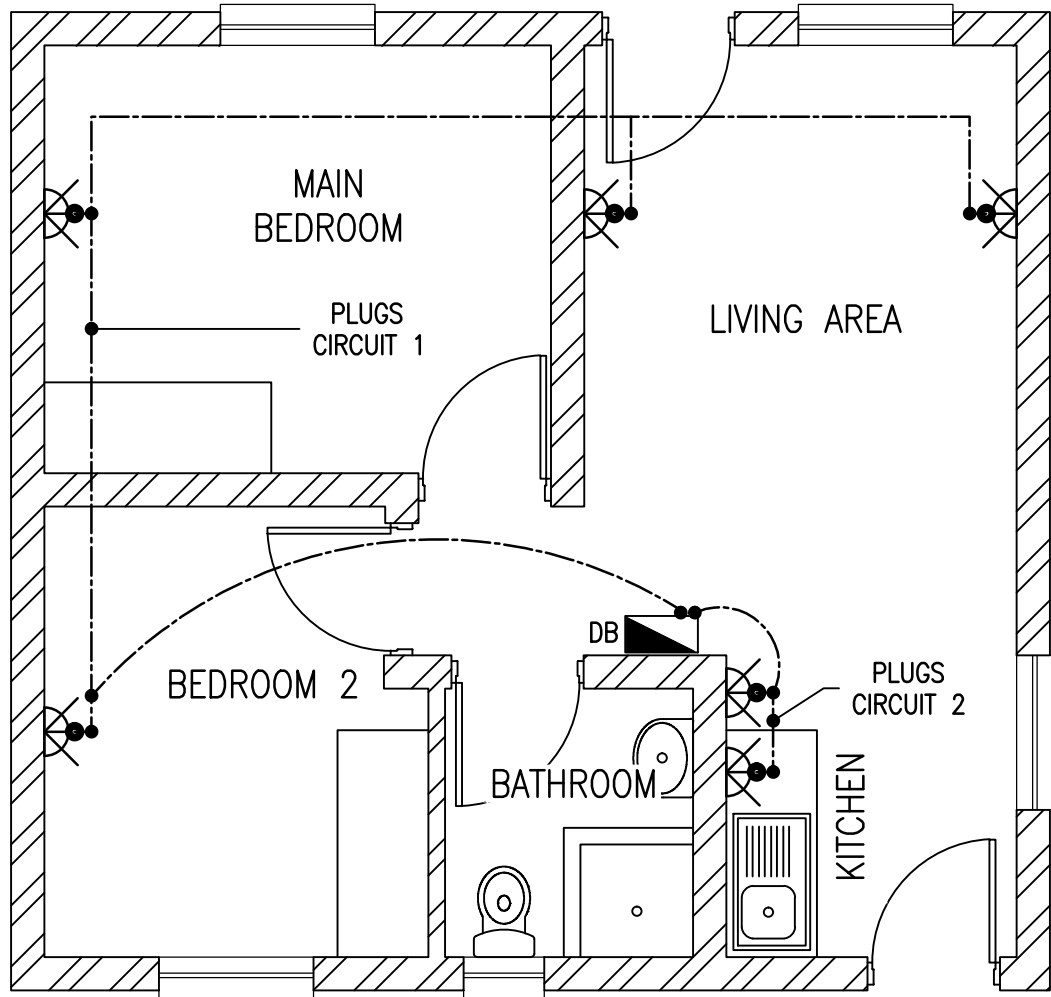
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07/3
SHEET NUMBER

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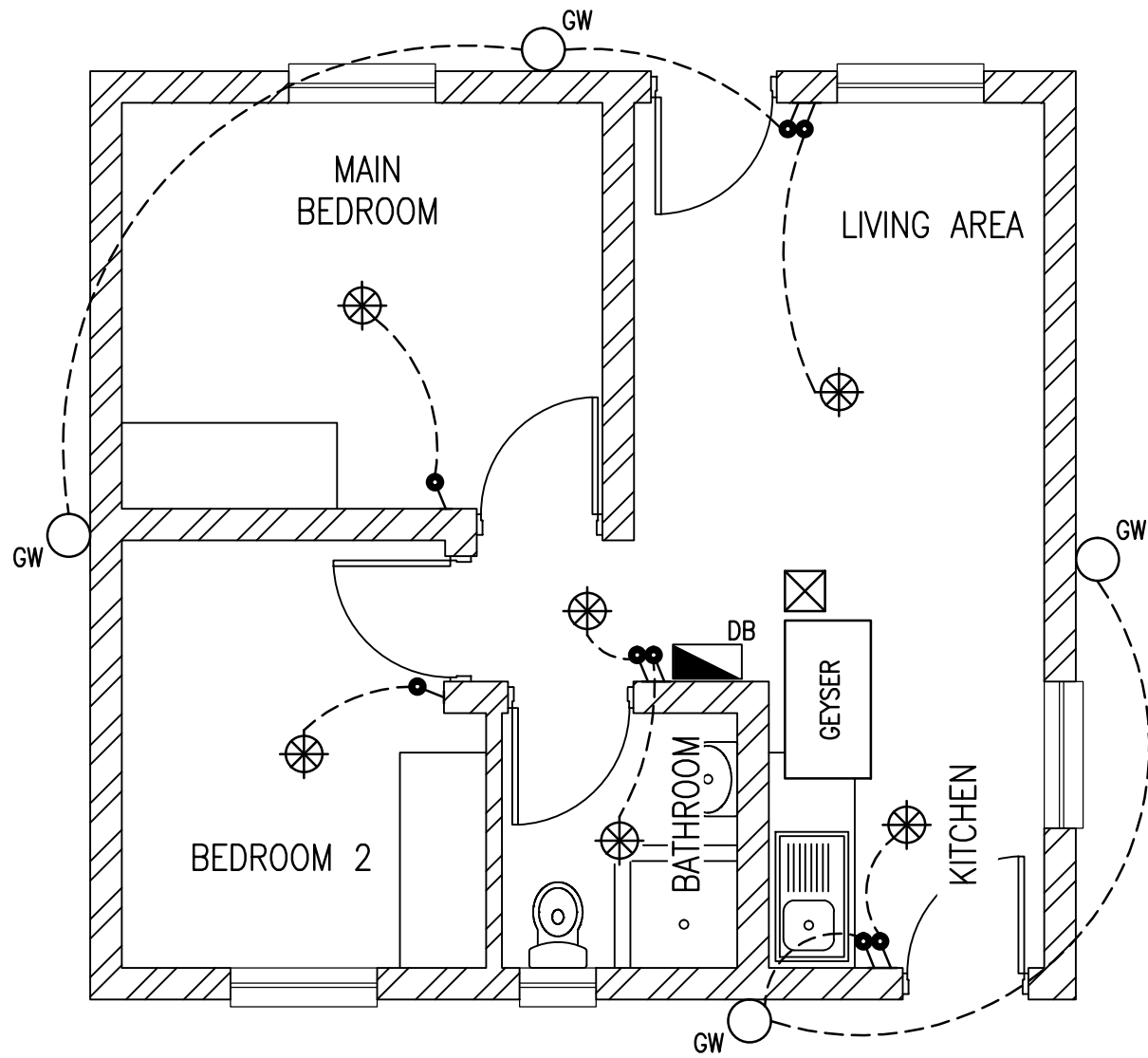
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MOD No.	DATE	DESCRIPTION	FOR	DWS
001	11/20	ISSUED FOR INFORMATION	–	–

DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA				
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDIENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500		
CHECKED:		DESIGN: — DRAWN: —		
ENGINEER:		DATE: EXT. APPROVAL / DESIGN CHECKED: DATE:		
CHIEF ENGINEER / APP (Pr. Eng):		DATE: DIRECTOR (Pr. Eng): DATE:		

1/10	LIST OF DRAWINGS	HDH101	178 419/19
SHEET	DESCRIPTION	OTHER No.	REG. No.
LIST OF DRAWINGS			
HAZELMERE RESETTLEMENT HOUSING PROJECT			
OAKFORD HOUSING			
SEWER AND WATER RETICULATION LAYOUT – 40 SQUARE METER HOUSE			
PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU – – –	OTHER NUMBER HDH107
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET REG. No.	REV.
CALCULATION FILE: 20/2/U300-01/C/1/1	7 of 10	178 425/19	00



FLOOR PLAN: POSITIONS OF PLUGS
SCALE 1:50



FLOOR PLAN: POSITIONS OF SWITCHES
AND LIGHT FITTINGS
SCALE 1:50

ELECTRICAL REFERENCE AND NOTES:

- 16A SINGLE SOCKET OUTLETS ON WALLS. 1 060 mm ABOVE FFL IN KITCHEN AND 460 mm ABOVE FFL ELSEWHERE.
- 16A DOUBLE SOCKET OUTLETS ON WALLS. 1 060 mm ABOVE FFL IN KITCHEN AND 460 mm ABOVE FFL ELSEWHERE.
- STOVE AND GEYSER ISOLATORS.
- 336 x 290 x 200 mm WALL MOUNTED LUMINAIRE (1 x 125 MV LAMP) WITH EYELID FOR DOWNWARD AND SIDEWAYS ILLUMINATION, ALUMINUM DIE-CAST BODY AND POLYCARBONATE DIFFUSER. COMPLETE WEATHER AND INSECT PROOF.
- DISTRIBUTION BOARD.
- LUMINAIRE SWITCH 1 200 mm ABOVE FFL.
- BULKHEAD LUMINAIRE MOUNTED TO THE CEILING

DISTRIBUTION BOARD:

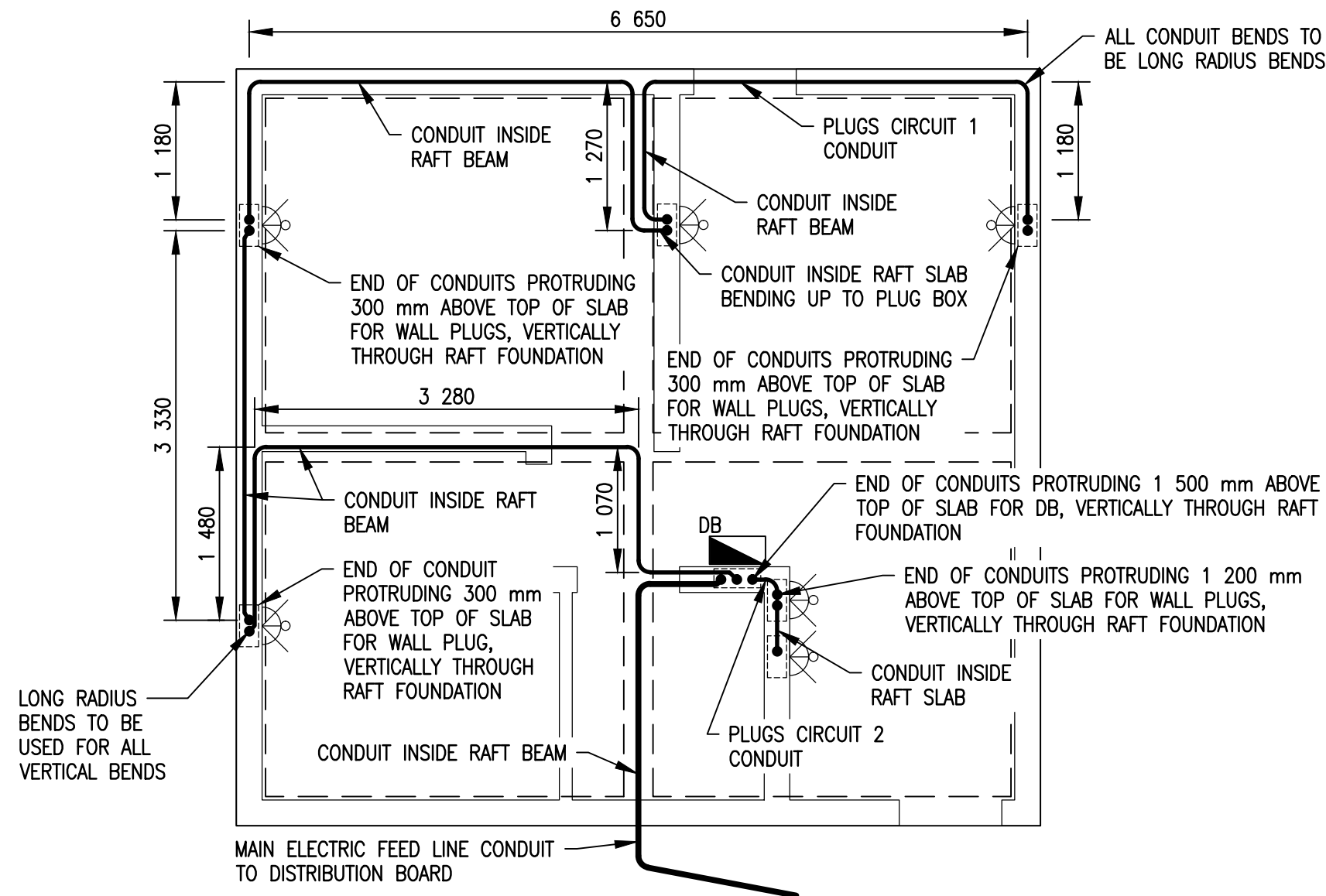
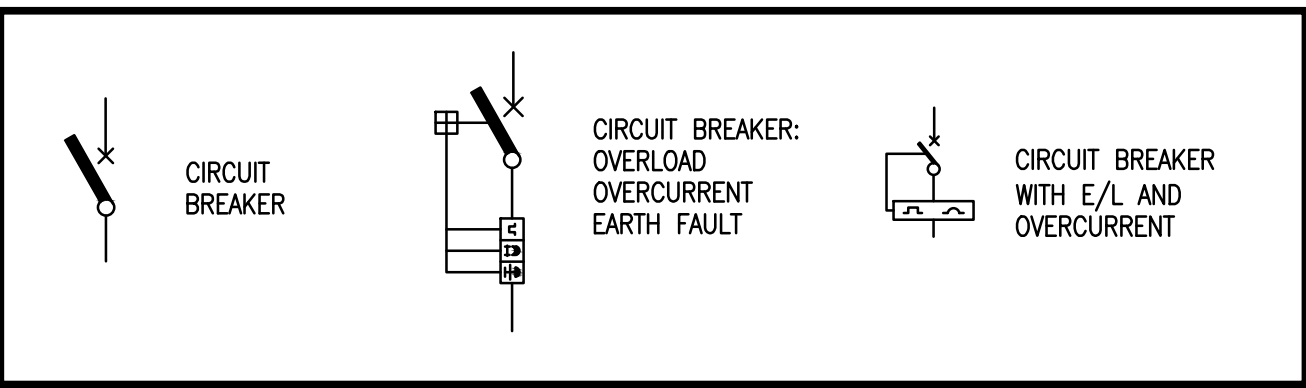
THE DISTRIBUTION BOARD SHALL BE POSITIONED BEHIND THE KITCHEN DOOR AS SHOWN ON THE DRAWINGS. CIRCUIT ISOLATORS, AMPERES, EARTH LEAKAGE, ETC. SHALL BE ACCORDING TO THE SPECIFICATIONS OF THE ELECTRICAL ENGINEER'S DESIGN.

EXTERIOR CABLE ENTRANCE CHAMBER TO DISTRIBUTION BOARD:

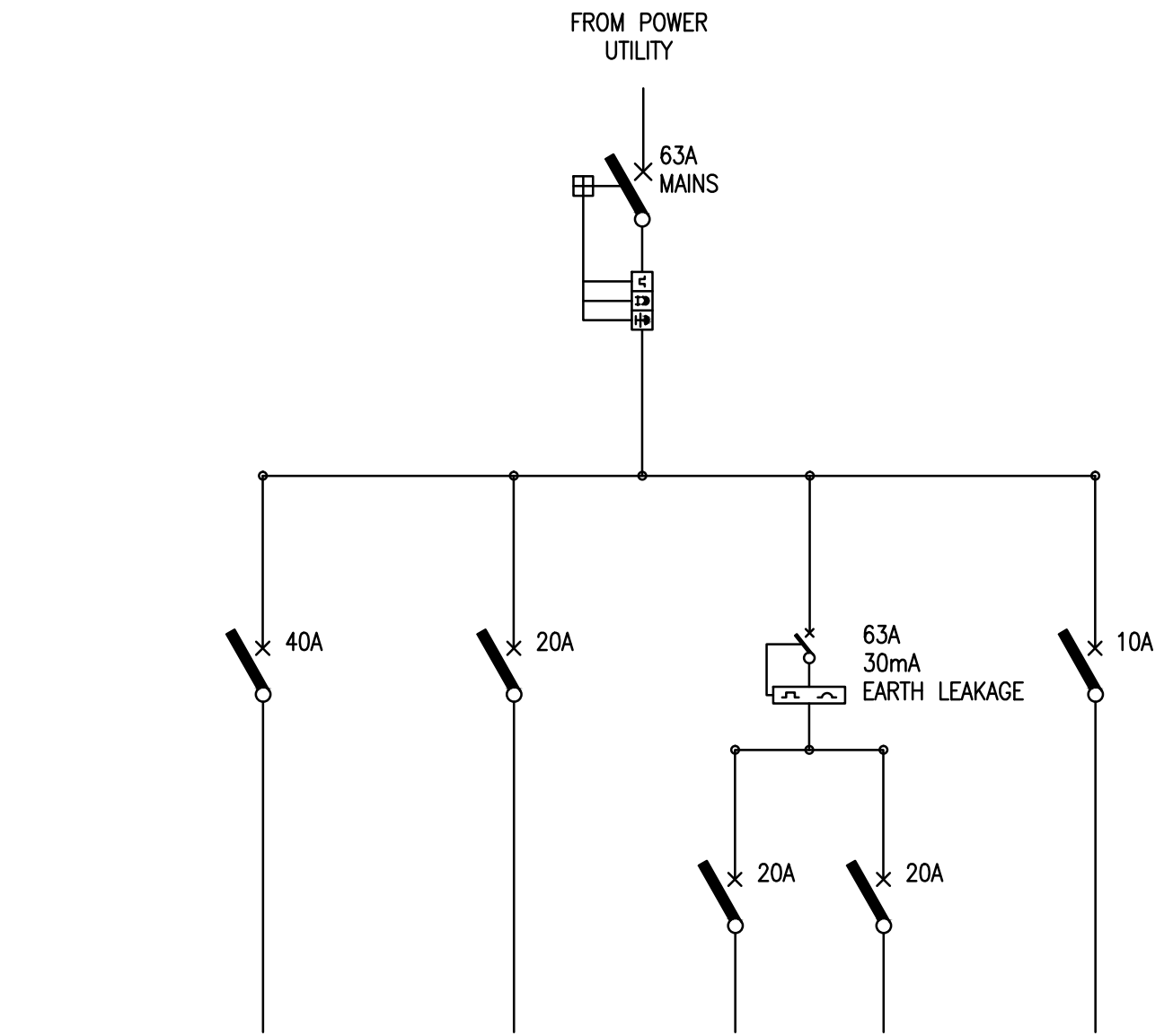
THE MAIN ELECTRICAL SUPPLY CABLE SHALL ENTER THE BUILDING FROM OUTSIDE TO THE DISTRIBUTION BOARD THROUGH A 50 mm Ø GALVANIZED MILD STEEL SLEEVE BELOW GROUND LEVEL ROUTED UNDER THE CONCRETE FLOOR BEDDING AND WITH A SLOW BEND CHASED VERTICAL UP THE WALL TO THE DISTRIBUTION BOARD. CABLE SIZE AND TYPE ETC. SHALL BE ACCORDING TO THE ELECTRICAL ENGINEER'S SPECIFICATION.

NOTES:

- NUMBER OF WIRING CIRCUITS, SPECIFICATIONS, POSITION OF CONDUITS AND COMPLETE RETICULATION LAYOUT SHALL BE ACCORDING TO THE ELECTRICAL ENGINEER'S DESIGN.
- ALL WORK SHALL COMPLY WITH THE "ELECTRICAL BOARD OF CONTROL" AND A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED WITHIN SEVEN DAYS AFTER THE FINAL SUCCESSFUL COMMISSIONING OF THE ELECTRICAL INSTALLATION.
- THE INSTALLATION OF MORE THAN ONE LUMINAIRE'S ON-OFF-SWITCH IN THE SAME POSITION SHALL BE INSTALLED AS A COMBINATION MULTI-SWITCH UNIT.
- ALL WORK SHALL BE DESIGNED AND INSTALLED BY A COMPETENT PERSON IN ACCORDANCE WITH SANS 10142-1: 2017 EDITION 2 THE WIRING OF PREMISES LOW VOLTAGE INSTALLATION.



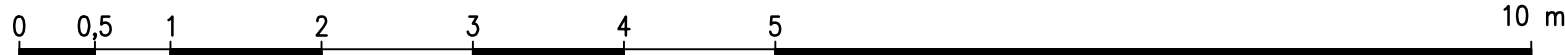
FLOOR PLAN: POSITION OF CONDUITS
IN FOUNDATION
SCALE 1:50



	STOVE	GEYSER (150 l)	PLUGS CIRCUIT 1	PLUGS CIRCUIT 2	LIGHTS (FOR NORMAL 100W BULB)
POWER	8 740 W	3 910 W	3 680 W	3 680 W	1 400 W
FLC (A)	38 A	17 A	16 A	16 A	6 A
CABLE SIZE	6 mm² PVC SWA	4 mm² PVC SWA	2.5 mm² PVC SWA	2.5 mm² PVC SWA	2.5 mm² PVC SWA

SINGLE LINE DIAGRAM
NTS

SCALE 1:50



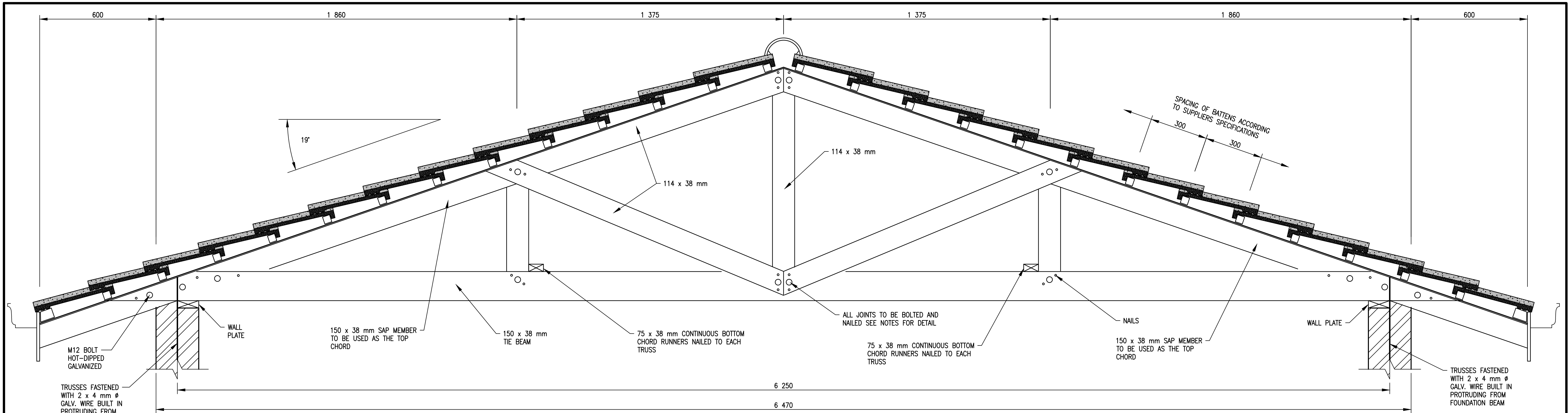
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DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA	
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001	SEDI BENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500
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ENGINEER:	EXT. APPROVAL / DESIGN CHECKED: — DATE: —
CHIEF ENGINEER / APP (Pr. Eng):	DIRECTOR (Pr. Eng): — DATE: —

HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD HOUSING
ELECTRIC CIRCUIT LAYOUT – 40 SQUARE
METER HOUSE

PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU — — —	OTHER NUMBER	HDH108
LOCALITY No.: U300-01	TENDER/ CONTRACT No. C/0339	SHEET	REV.	
CALCULATION FILE: 20/2/U300-01/C/1/1	8 of 10	178 426/19	00	

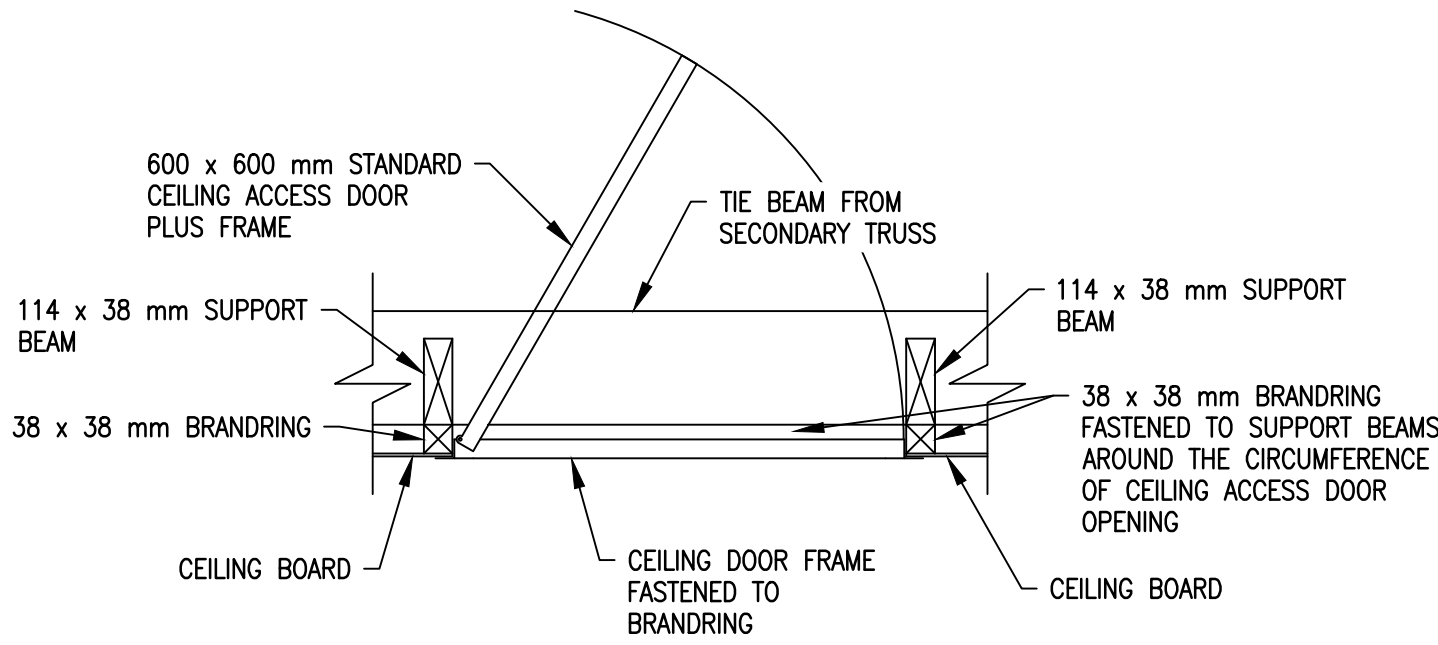


TRUSS ELEVATION

SCALE 1:20

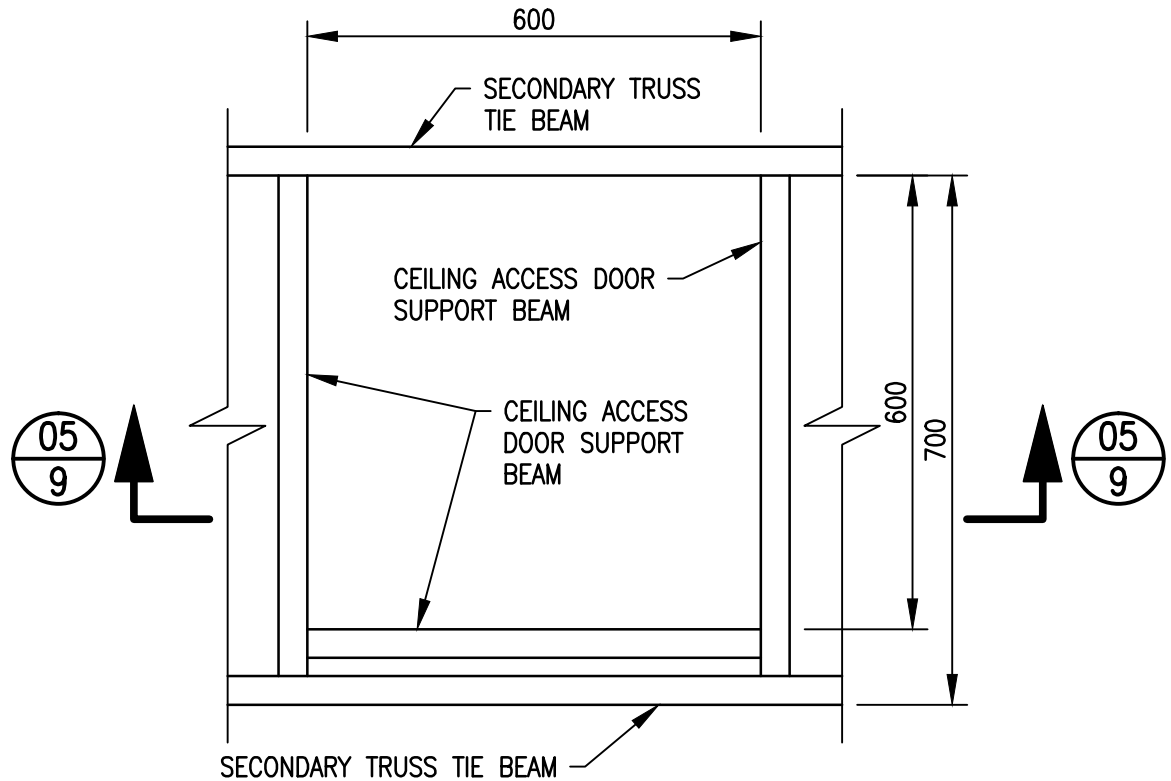
NOTES:

- FACTORY COLOURED CONCRETE TILES ON 38 x 38 mm BATTENS AT CENTRES ACCORDING TO SUPPLIER'S SPECIFICATIONS ON SISALATION 405 RSA SUPPORTED BY 2 mm Ø GALV. STRAINING WIRES @300 mm CENTRES NAILED ON SAP ROOF TRUSSES. TRUSSES MANUFACTURED FROM GRADE 6 SA PINE AT 750 mm MAX. CENTRES ON 75 x 38 mm SA PINE WALL PLATES, FASTENED WITH 4 mm Ø GALV. WIRE BUILT IN PROTRUDING FROM FOUNDATION BEAM.
- TIMBER ROOF STRUCTURE SHALL BE BRACED AND STIFFENED TO THE ENGINEER'S SATISFACTION AND APPROVAL. WHEN USING PRE-FABRICATED TRUSSES, SHOP DRAWINGS SHALL BE SUBMITTED BY THE SUPPLIER AND THE ROOF STRUCTURE SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER AS A SAFE STRUCTURE.
- ALL JOINTS SHALL BE BOLTED AND NAILED. BOLTS SHALL BE HOT-DIPPED GALVANIZED M12 OF APPROPRIATE LENGTH LEAVING MIN. 20 mm OF BOLT LENGTH FOR A FLAT WASHER AND NUT. NAILS SHALL BE WIRE CUT OF APPROPRIATE LENGTH LEAVING MIN. 25 mm FOR BENDING ON EXIT SIDE.
- CEILING CORNICE PAINT SPECIFICATION: SA PINE & MERANTI - PREPARE & SAND AND APPLY 3 COATS MATT POLY-URETHANE VARNISH.
ALTERNATIVELY FOR SA PINE - PRIME WITH PINK WOOD PRIMER AND APPLY 2 TOP COATS EGGSHELL OR GLOSS ENAMEL PAINT COLOUR TO MATCH CEILING.
- FOR ALL OTHER ROOFING DETAILS, GUTTERS, FASCIAS, SPECIFIC TYPE OF ROOF TILE, COLOUR, ETC. SEE SECTION OF BUILDING AND CONTRACT SPECIFICATIONS.



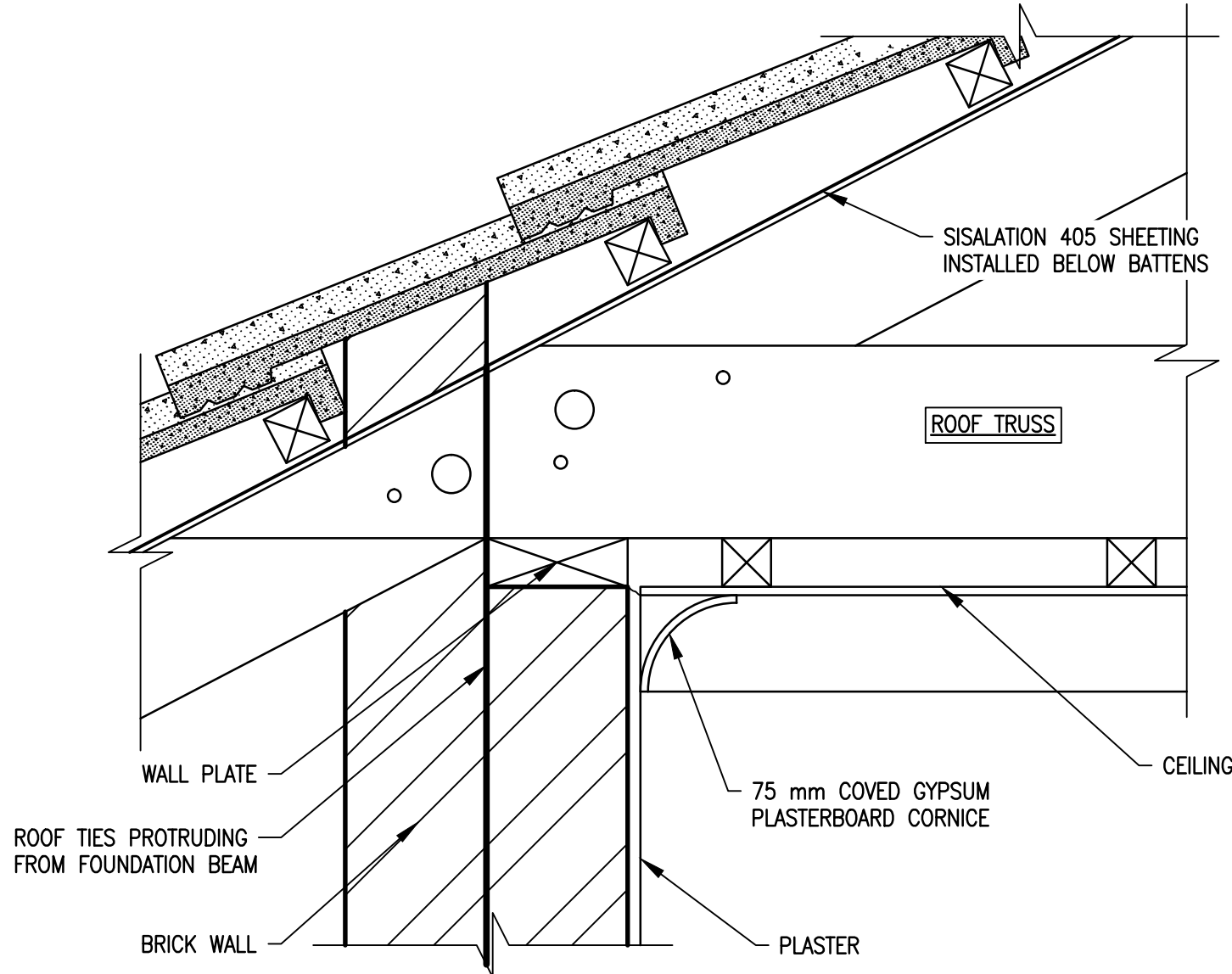
SECTION 05-05: STANDARD CEILING ACCESS DOOR

SCALE 1:10



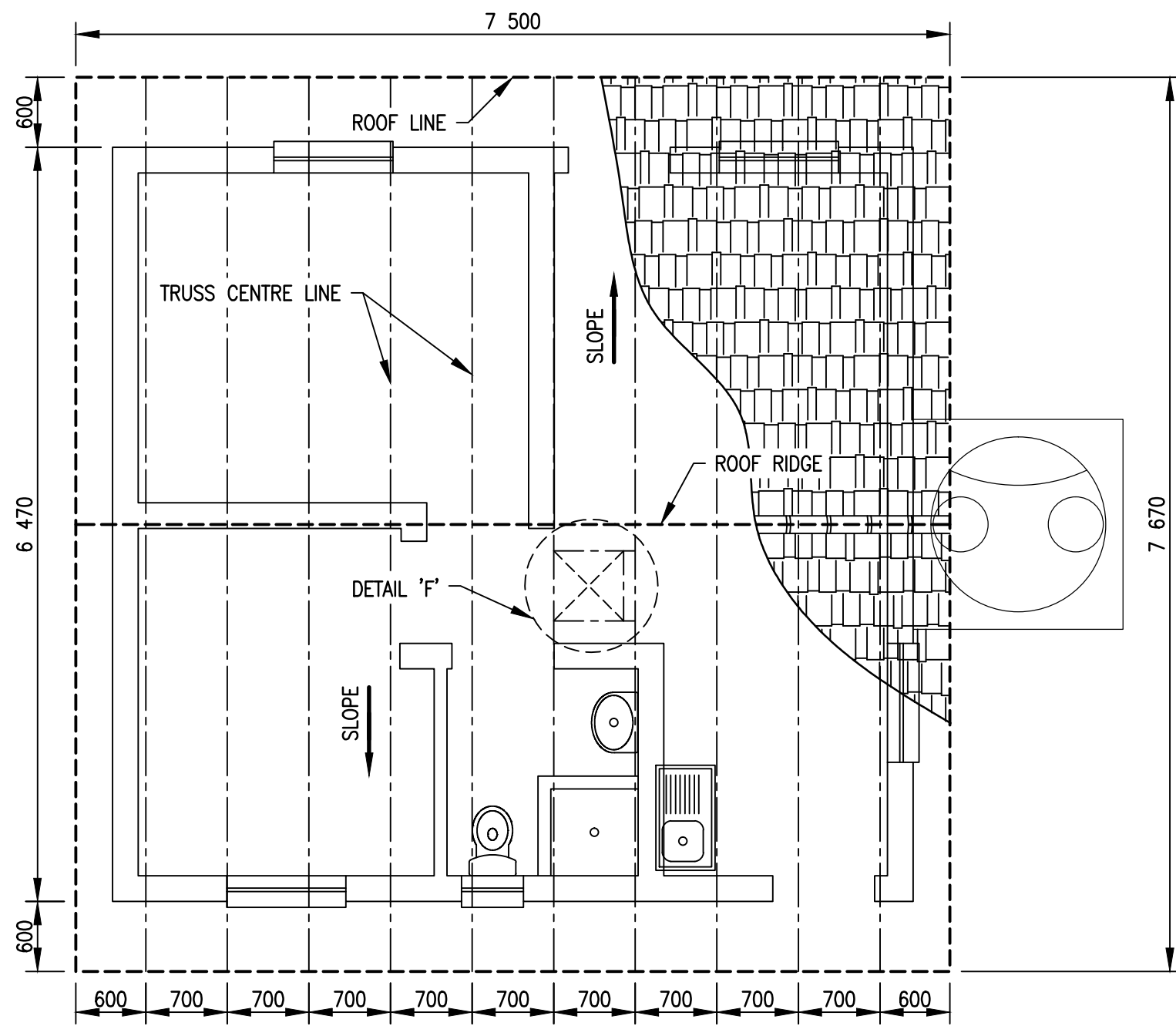
DETAIL 'F': PLAN LAYOUT OF CEILING ACCESS DOOR

SCALE 1:10



DETAIL 'E': CEILING CORNICE

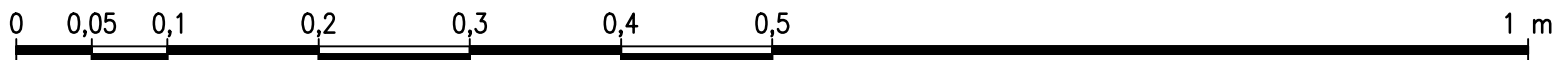
SCALE 1:5



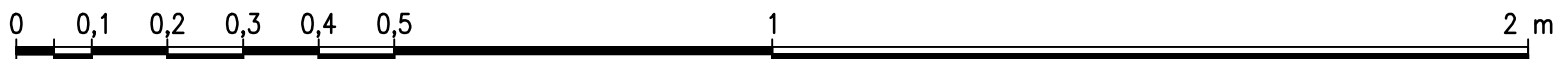
**ROOF PLAN TRUSS POSITIONS
CONCRETE ROOF TILES**

SCALE 1:50

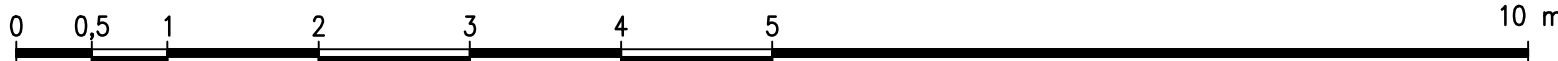
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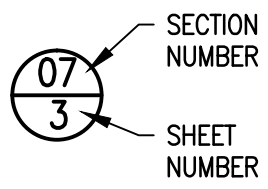
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SECTION



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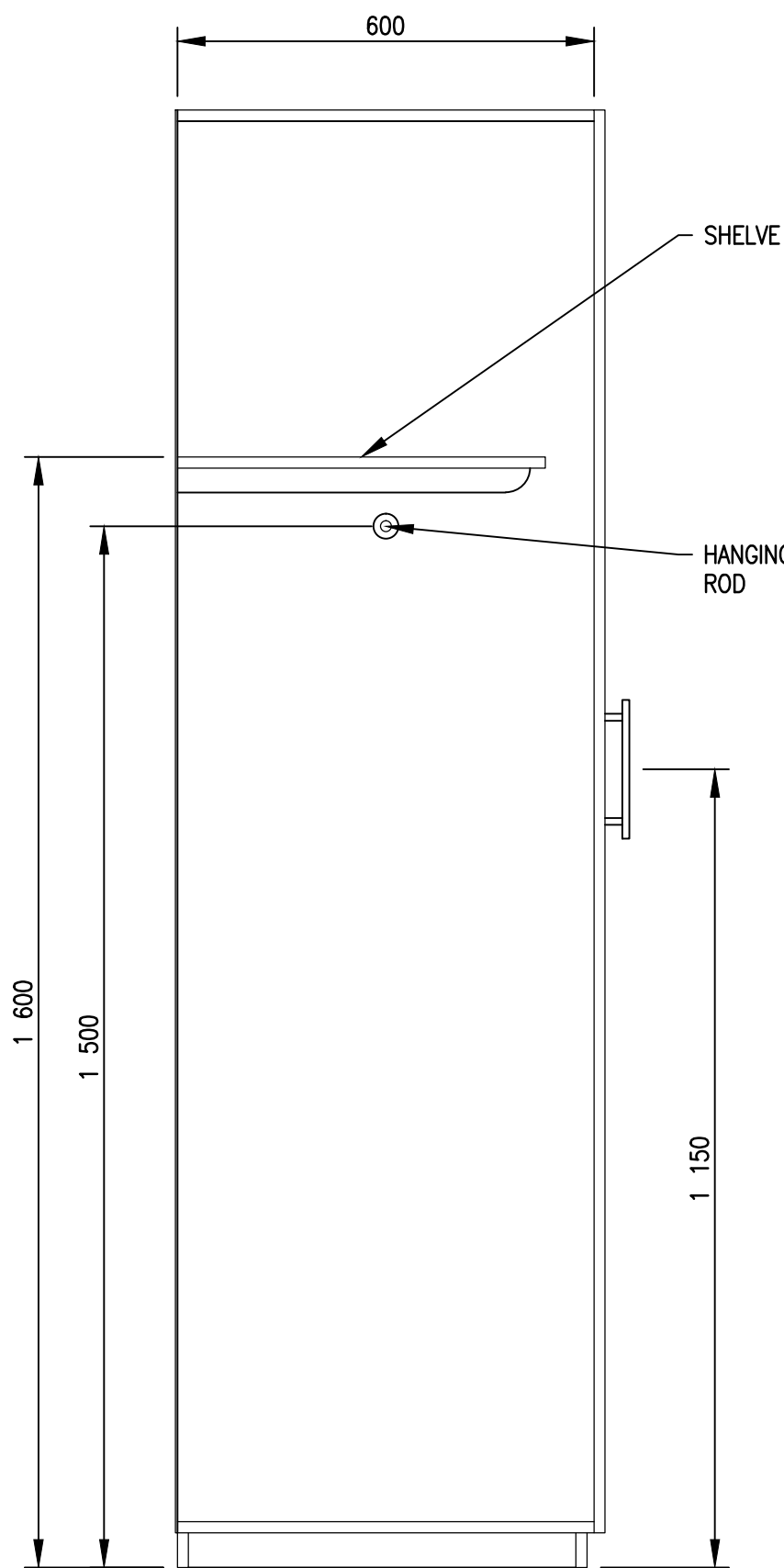
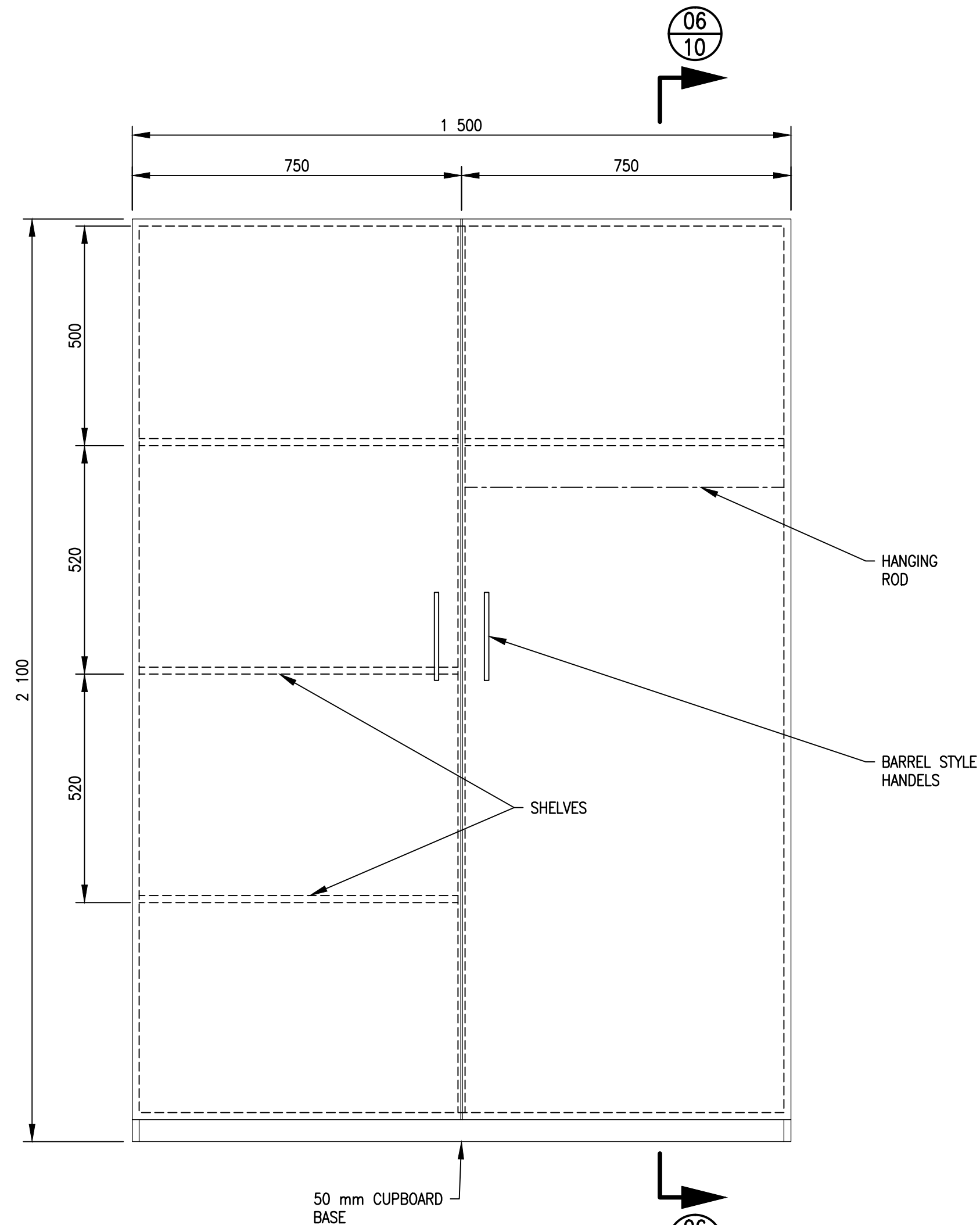
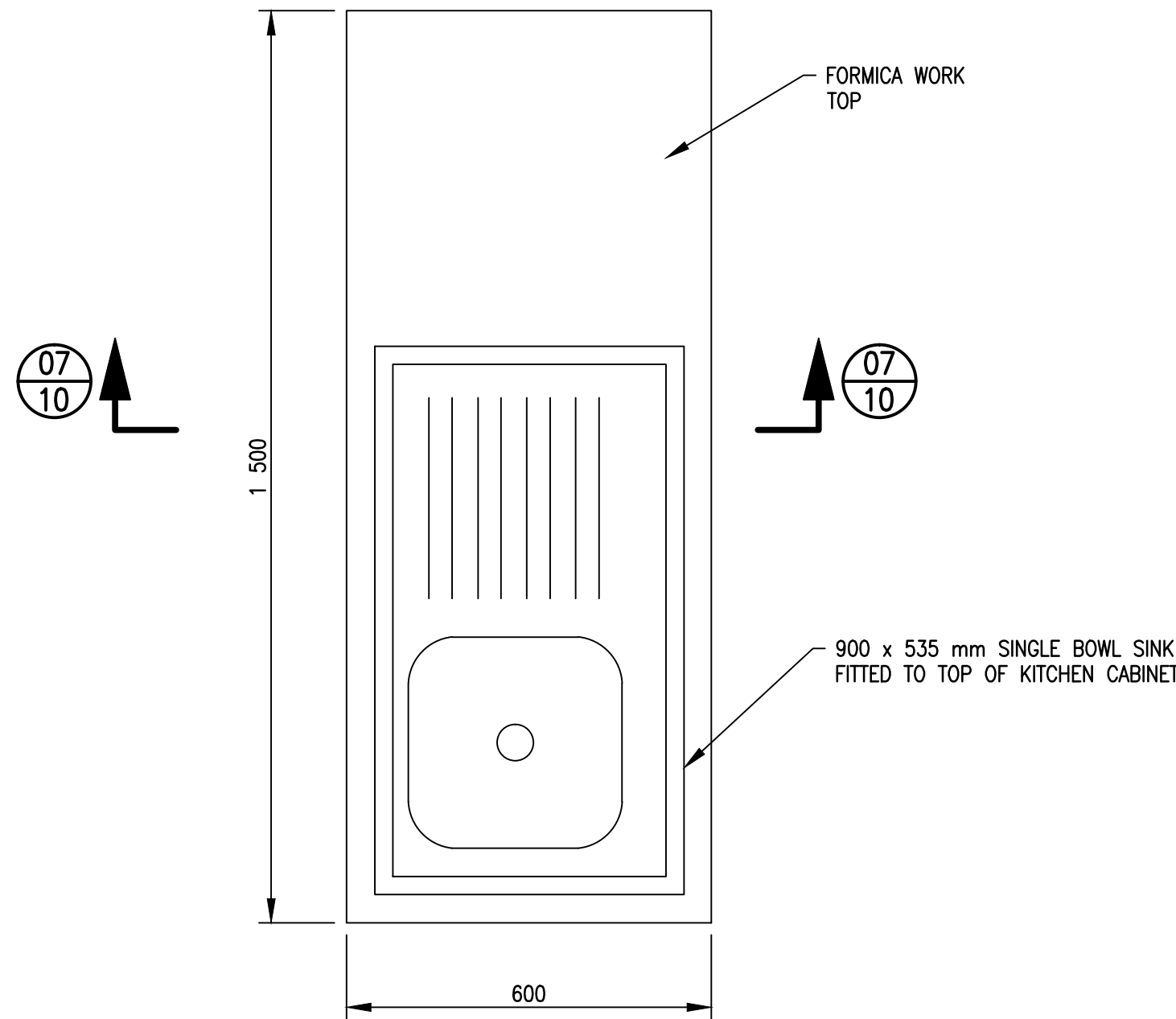
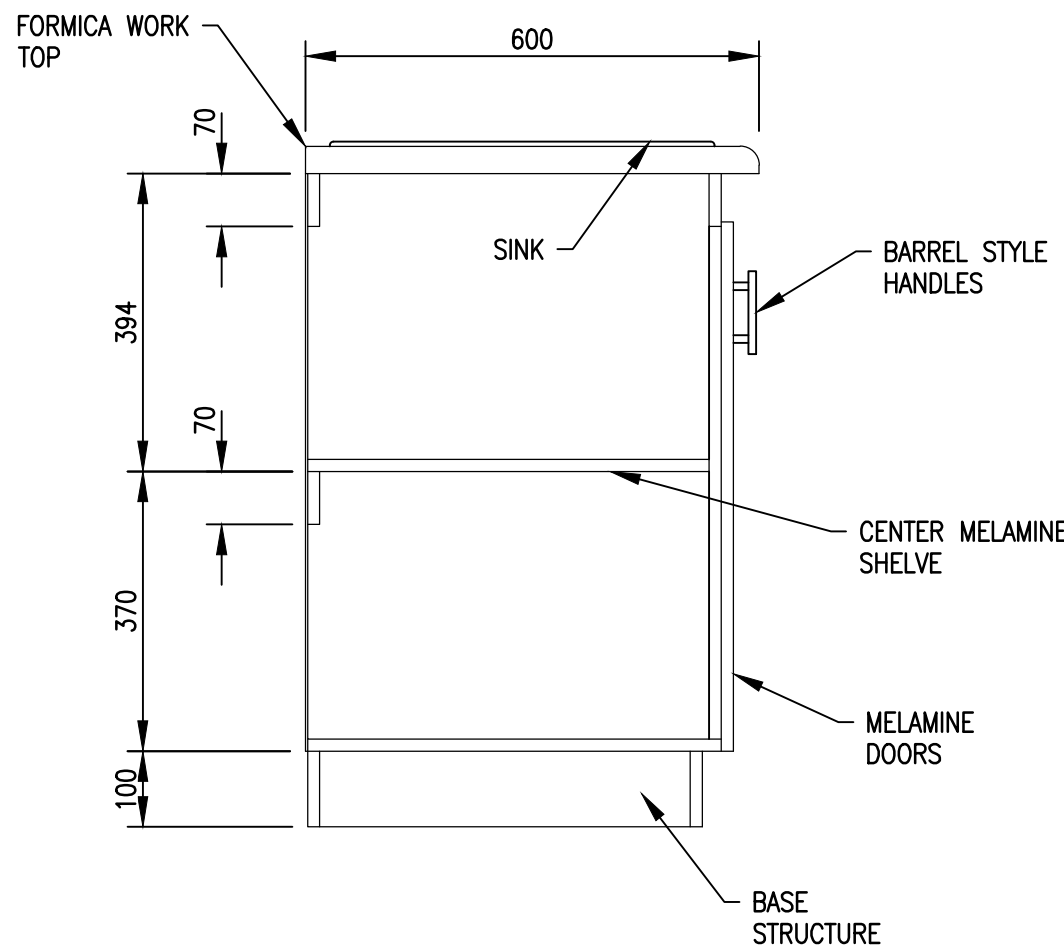
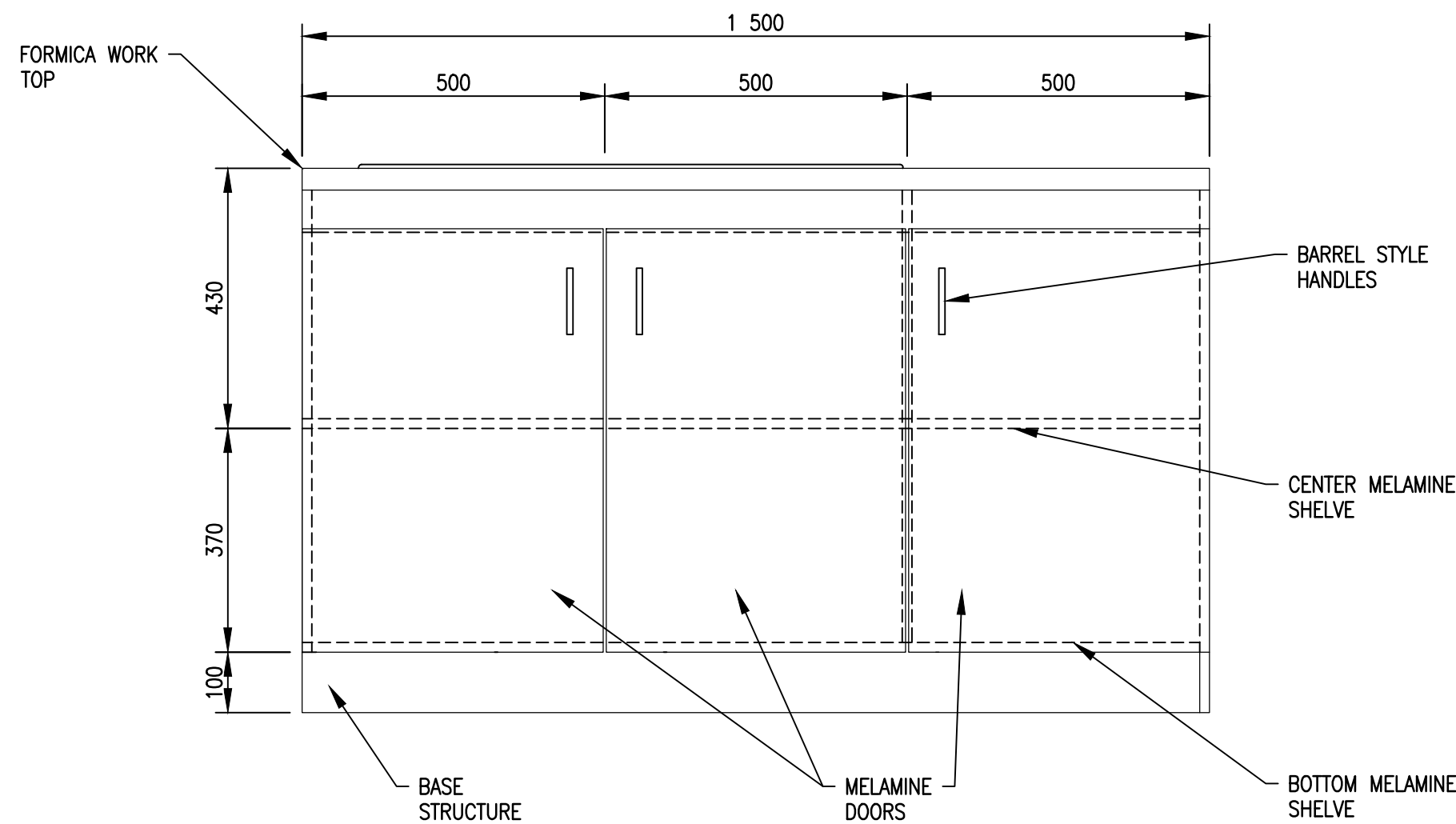
DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA				
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDIENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500		
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CHIEF ENGINEER / APP (Pr. Eng):		DATE: DIRECTOR (Pr. Eng): DATE:		

HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD PRIORITY HOUSING
ROOF PLAN AND TRUSS DETAIL - 40 SQUARE METER HOUSE

PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU - - - OTHER NUMBER HDH109
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET REG. No. 9 of 10
CALCULATION FILE: 20/2/U300-01/C/1/1		178 427/19 00

1/10	LIST OF DRAWINGS	HDH101	178 419/19
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NOTES:

- CARCASSES OF BEDROOM CUPBOARDS AND KITCHEN CABINETS SHALL BE WHITE MELAMINE, DOWELED AND GLUED FIXED COMPONENTS.
- DOORS OF CABINETS SHALL ALSO BE WHITE MELAMINE.
- BACKS SHALL BE WHITE MASONITE GROOVED IN.
- HINGES – CONCEALED METAL HINGES.
- HANDLES – 128 mm BARREL HANDLES.
- FOR KITCHEN CABINETS FORMICA WORK TOP TO BE USED.
- LOCKS WHERE APPLICABLE – CHROME CAMLOCKS.
- METAL ROLLER RUNNERS USED FOR DRAWERS.
- STOVE NOT INCLUDED IN PROVISIONS.

1/10	LIST OF DRAWINGS	HDH101	178 419/19
SHEET	DESCRIPTION	OTHER No.	REG. No.

LIST OF DRAWINGS

HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD PRIORITY HOUSING
CUPBOARDS DETAIL – 40 SQUARE METER HOUSE

PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU - - - OTHER NUMBER HDH110
LOCALITY No.: U300-01	TENDER/ CONTRACT No. C/0339	SHEET REG. No. 10 of 10
CALCULATION FILE: 20/2/U300-01/C/1/1	178 428/19	00

REVISION					FOR		DWS	
MOD No.	DATE	DESCRIPTION	FOR	DWS				
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DEPARTMENT OF WATER AND SANITATION
REPUBLIC OF SOUTH AFRICA

HEAD OFFICE
CIVIL ENGINEERING
PRIVATE BAG X313
PRETORIA 0001



SEDIBENG BUILDING
185 FRANCOIS BAARD STREET
PRETORIA
(012) 336-7500

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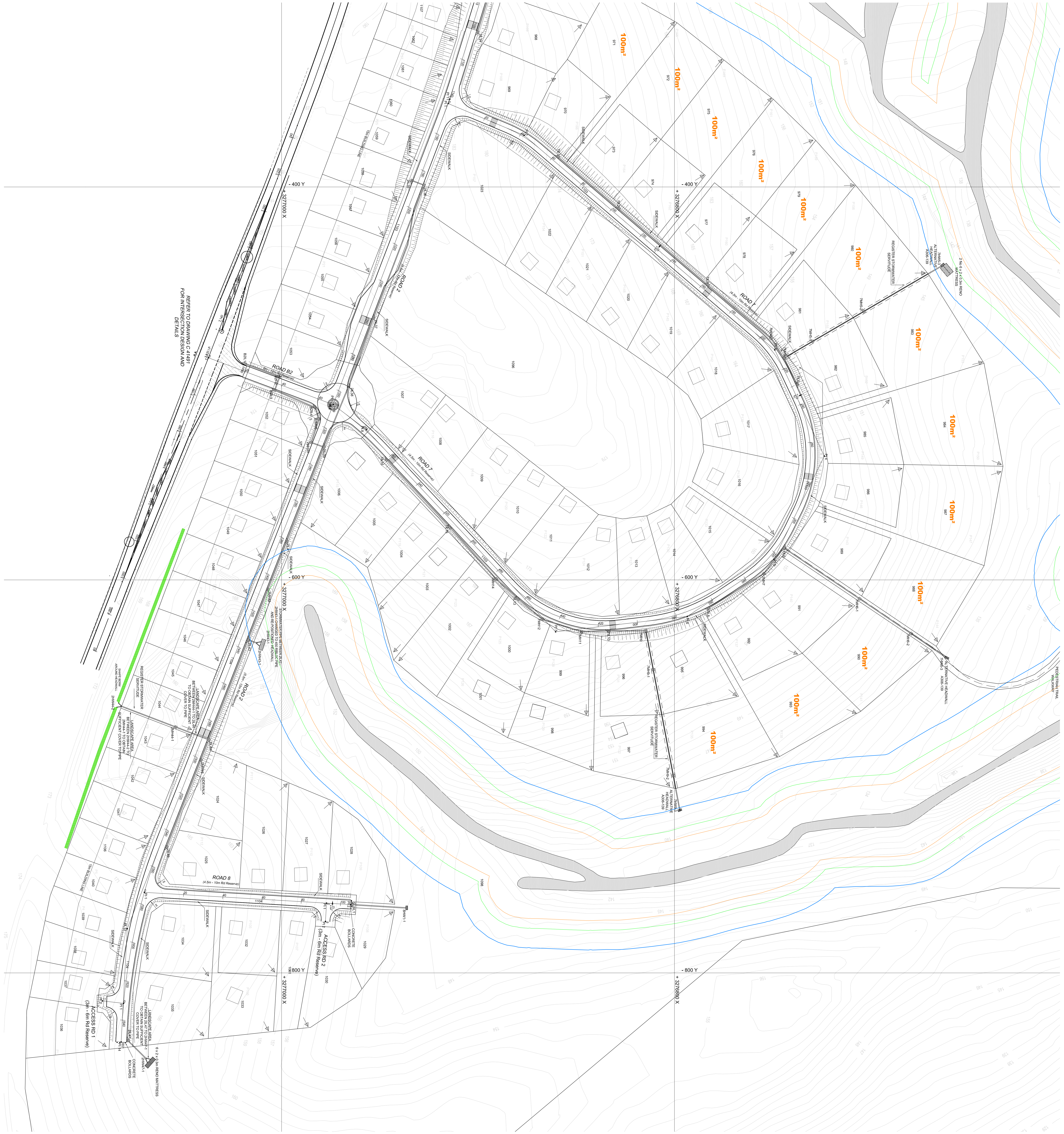
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SHEET NUMBER

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LIST OF DRAWINGS			
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1/10	LIST OF DRAWINGS AND GENERAL NOTES	HDH001	177 407/19
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3/10	PLATFORM DETAIL	HDH003	178 409/19
4/10	FLOOR PLAN, SECTION AND ELEVATIONS	HDH004	177 409/19
5/10	WINDOW, DOOR AND FINISHING SCHEDULE	HDH005	177 410/19
6/10	FOUNDATION PLAN & DETAILS	HDH006	177 411/19
7/10	SEWER AND WATER RETICULATION	HDH007	177 412/19
8/10	ELECTRIC CIRCUIT LAYOUT	HDH008	177 413/19
9/10	ROOF	HDH009	177 414/19
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SECTIONS AND DETAILS			
DESCRIPTION	SHEET NO.	REG. NO.	
SECTION 01–01: SECTION ON BUILDING	4/10	177 409/19	
SECTION 02–02: RAFT FOUNDATION REINFORCEMENT	6/10	177 411/19	
SECTION 03–03: RAFT FOUNDATION REINFORCEMENT	6/10	177 411/19	
SECTION 04–04: TYPICAL RODDING EYE DETAIL AT HEAD OF SEWER	7/10	177 412/19	
SECTION 05–05: CEILING ACCESS DOOR DETAIL	9/10	177 414/19	
SECTION 06–06: MAIN BEDROOM CUPBOARD	10/10	177 415/19	
SECTION 07–07: BEDROOM CUPBOARDS	10/10	177 415/19	
SECTION 08–08: KITCHEN CABINET	10/10	177 412/19	
SECTION 09–09: KITCHEN CABINET	10/10	177 415/19	
SECTION 10–10: KITCHEN CABINET	10/10	177 415/19	
SECTION 11–11: EXTENDED PLATFORM PROFILE – WEATHERED CLAYEY ROCK	3/10	178 409/19	
SECTION 12–12: EXTENDED PLATFORM PROFILE – SOFT CLAY MATERIAL	3/10	178 409/19	
DETAIL "A": TYPICAL EXTERIOR WALL DETAIL	4/10	177 409/19	
DETAIL "B": GUTTER DETAIL	4/10	177 409/19	
DETAIL "C": TYPICAL EXCAVATION AND BACKFILL FOR 110 mm SEWER PIPE	7/10	177 412/19	
DETAIL "D": TYPICAL PLAN VIEW OF RODDING EYE AT HEAD OF SEWER	7/10	177 412/19	
DETAIL "E": CEILING CORNICE	9/10	177 414/19	
DETAIL "F": PLAN LAYOUT OF CEILING ACCESS DOOR	9/10	177 414/19	

NOTES ON BUILDING SPECIFICATIONS:

A. FOUNDATION REQUIREMENTS:

- A1. REFER TO NHBRC HOME BUILDING MANUAL:PART 1–3:SECTION 2 FOR ITEMS 1–5
1. DIG TEST PIT TO 1,8 m DEPTH ADJACENT TO DORMITORY POSITION
2. PROFILE IT ACCORDING TO GEOTECH TERMINOLOGY WORKSHOP STANDARDS
3. CARRY OUT A 1 000 mm DCP SOUNDING FROM 500 mm DEPTH
- 3.1. PENETRATION FOR 5 BLOWS SHOULD BE LESS THAN 125 mm.
- 3.2. IF PENETRATION IS GREATER THAN 125 mm PER 5 BLOWS A GEOTECHNICAL SPECIALIST NEED TO BE CALLED.
4. IF SAND IS PRESENT, AT 500 mm DEPTH DIG A 300 x 300 x 300 mm HOLE CAREFULLY. SAVE THE EXCAVATED MATERIAL FROM HOLE AND REPLACE IT INTO THE HOLE TRAMPING IT AS IT IS PLACED
- 4.1 IF SAND DOES NOT FILL THE HOLE A GEOTECHNICAL SPECIALIST NEED TO BE CALLED.
5. IF CLAY IS PRESENT CARRY OUT HAND TEST. TAKE A SAMPLE OF ABOUT 50 kg OF WET SOIL, WET IT AND ATTEMPT TO ROLL IT INTO A STRING LESS THAN 3 mm THICK AND 50 mm LONG. IF THIS IS POSSIBLE THE CLAY IS PROBABLY EXPANSIVE. IF THE CLAY IS SLICKENSIDED (SHINY, STRATED SURFACE IN CLAY) OR SHATTERED INTO DISCRETE GRAVEL SIZE BLOCKS THE CLAY IS PROBABLY EXPANSIVE
- 5.1 IN THE PRESENCE OF CLAY MATERIAL, THE CLAY MATERIAL MUST BE REMOVED AND A STONE LAYER MUST BE PLACED AND COMPACTED INTO THE REMAINING IN–SITU MATERIAL PRIOR TO APPLYING THE G5 BLANKET FILL MATERIAL REQUIRED FOR THE RAFT FOUNDATION. GUIDANCE FROM A GEOTECHNICAL SPECIALIST IS REQUIRED.
- 5.2 IN THESE CASES A GEOTECHNICAL SPECIALIST NEED TO BE CONTACTED.
- A2. A FOUNDATION INVESTIGATION IN TERMS OF MENTIONED ABOVE AND TO NHBRC GUIDELINES SHALL BE CARRIED OUT AT EACH SITE BY A GEOTECHNICAL SPECIALIST TO BE APPROVED BY IMPLEMENTING AGENT.
- A3. SHOULD THE RAFT CONSTRUCTION TECHNIQUE NOT BE SUITABLE, THE GEOTECHNICAL SPECIALIST MUST ADVISE SUITABLE METHOD.
- A4. CONCRETE RAFT FOUNDATION ACCORDING TO ENGINEER'S DESIGN SHOWN ON SHEET 5/9 (DRG REG. NO. 177 411/19). TOP OF RAFT FOUNDATION AT LEAST 100 mm ABOVE NGL.

C. EXTERIOR AND INTERIOR WALLS AND FINISHES TO WALLS:

- C1. BUILDING AND PLASTER BRICKS SHALL BE APPROVED HARD–BURNT CLAY BRICKS.
- C2. BRICK FORCE AND WALL REINFORCING SHALL BE INSTALLED ACCORDING TO THE RELEVANT DETAILS AS SHOWN ON DRAWINGS.
- C3. AS A GENERAL RULE, BRICK FORCE SHALL BE INSTALLED IN EVERY 5TH BRICK COURSE UNLESS OTHERWISE SPECIFIED.
- C4. INTERIOR WINDOW SILLS SHALL BE FIBRE CEMENT LENGTH TO SUIT 200 x 15 mm PAINT FINISH TO MATCH WALLS. TILED SILLS IN CLOAK ROOMS AND KITCHENS.
- C5. EXTERNAL WALL FINISH SHALL BE 10 TO 15 mm THICK WOOD TROWELLED PLASTER AND SHALL BE PRIMED WITH PLASTER PRIMER AND FINISHED WITH TWO TOP COATS WASH AND WEAR SUPERIOR MATT FINISH EMULSION PAINT. (COLOUR AS PER ENGINEER)
- C6. EXTERNAL WINDOW SILLS SHALL BE FIBRE CEMENT LENGTH TO SUIT 200 x 15 mm PAINT FINISH TO MATCH WALLS. TILED SILLS IN CLOAK ROOMS AND KITCHENS.
- C7. INTERIOR SKIRTINGS TO WALLS SHALL BE AS SPECIFIED IN SECTION "B" OF THE "PROJECT SPECIFICATIONS".

B. SURFACE BED, SCREED AND FLOOR FINISHES:

- B1. HARDCORE FILLING (G5) BELOW SURFACE BED COMPACTED IN LAYERS OF 150 mm MAXIMUM 95% MOD. AASHTO AND TREATED WITH SOIL POISONING AS SPECIFIED.
- B2. 250 MICRON POLYETHELINE MEMBRANE INSTALLED UNDERNEATH SURFACE BEDS. APPROVED DAMP PROOF COURSES INSTALLED UNDERNEATH ALL WALLS INTERIOIR AND EXTERIOR AT FLOOR LEVEL.
- B3. WHERE SPECIFIED: 35 MPa CONCRETE SURFACE BEDS 150 mm THICK INSTALLED ON HARDCORE FILLING AND REINFORCED WITH REF. 193 WELDED MESH.
- B4. CEMENT SCREED AS SPECIFIED (1 CEMENT: 4 SAND BY VOLUME) 30 mm THICK ON SURFACE BEDS WITH JOINTS ACCORDING TO DRAWINGS.

D. CEILING MATERIAL AND INSTALLATION:

- D1. 4 mm THICK FIBRE CEMENT BOARD CEILINGS NAILED TO 38 x 38 mm SA PINE BRANDERING WITH JOINTING STRIPS. BRANDERING SHALL BE SPACED AT 450 mm MAXIMUM CENTRES AND SHALL BE FIXED WITH AN ADDITIONAL NAIL TO EACH TRUSS DRIVEN IN AT AN ANGLE. 75 mm GYPSUM COVED CORNICES TO BE USED. CORNICES SHALL BE NAILED TO PLASTERED WALL WITH STEEL CUT NAILS. PAINT FINISH TO CORNICES SHALL ACCORDING TO THE DRAWINGS OR "PROJECT SPECIFICATIONS".
- D2. FIBRE CEMENT BOARDS, WHERE APPLICABLE 4 mm THICK WITH FIXING SPECIFICATIONS AND FINISHES AS PER D1.

GENERAL NOTES:

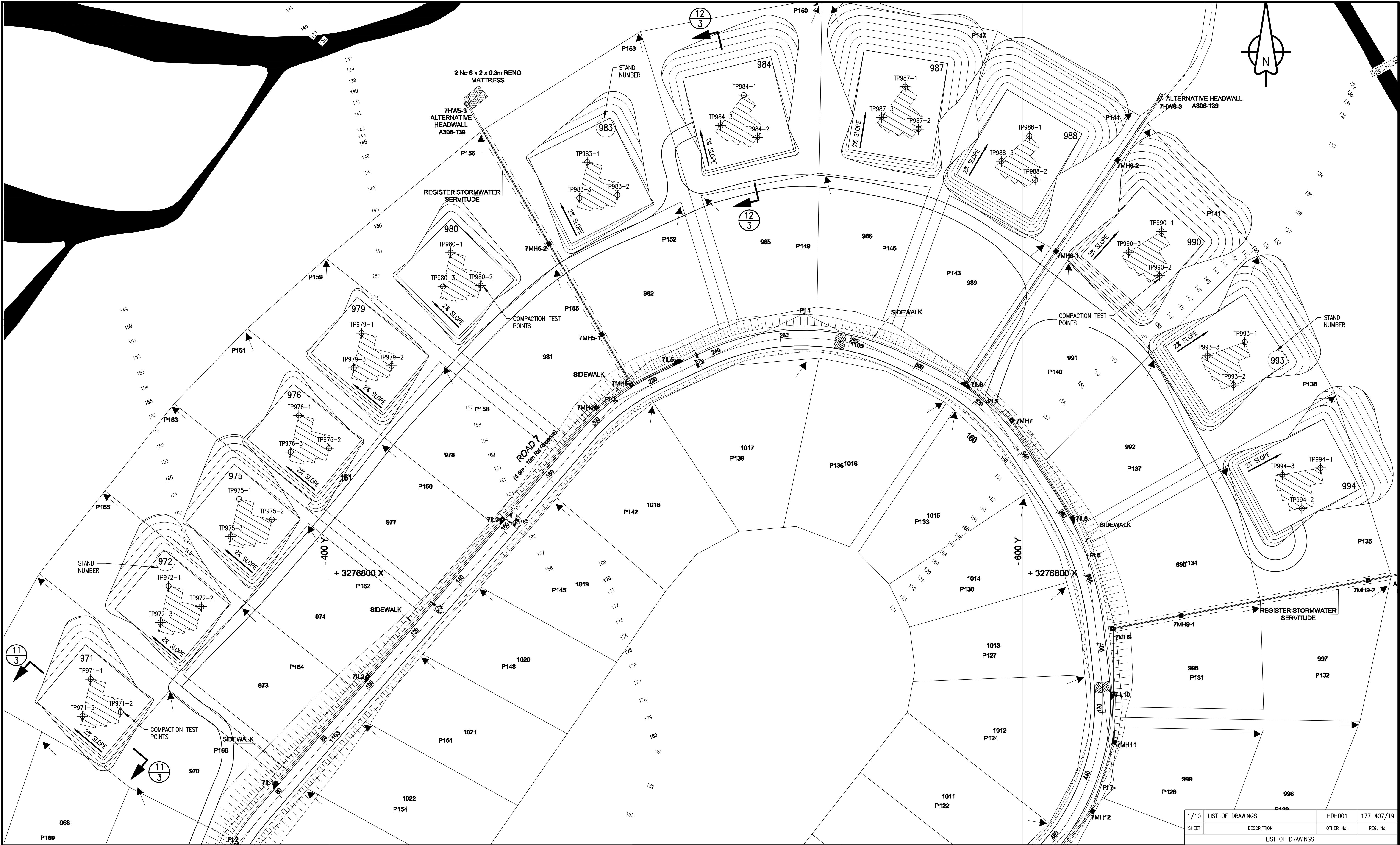
1. READ THIS DRAWING IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS, ARCHITECTURAL AND SERVICES DRAWINGS. ANY UNCERTAINTIES OR ANY DISCREPENCIES BETWEEN THE SPECIFICATIONS AND THE DRAWINGS MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.
2. NO DEVIATION FROM THE DETAILS ON THE DRAWINGS WILL BE ALLOWED WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.
3. THESE DRAWINGS MAY NOT BE COPIED OR RE–USED WITHOUT THE WRITTEN CONSENT OF THE DEPARTMENT OF WATER AND SANITATION AND RESPONSIBLE ENGINEER.
4. IN GENERAL, CONCRETE (STRUCTURAL) SHALL COMPLY WITH SANS 1200–G SERIES AND THE PARTICULAR SPECIFICATION DWS. 0750.
5. CONCRETE CLASS: MASS CONCRETE – CLASS A 10/19
BLINDING LAYER (COLUMN BASES) – CLASS C 15/19
STRIP FOOTINGS (BRICKWALLS) – CLASS E 35/19
SURFACE BEDS – CLASS E 35/19
COLUMN BASES AND COLUMNS – CLASS F 35/19
CONCRETE BEAMS AND CONCRETE SLABS – CLASS F 35/19
6. CONCRETE COVER TO REINF. : FOUNDATIONS – 50 mm
COLUMNS – 50 mm
CONCRETE SLABS – 50 mm
CONCRETE BEAMS – 50 mm
GROUND FLOOR SLABS (SURFACE BEDS)–AS SHOWN
7. ALL FOUNDATION EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE PLACING OF REINFORCEMENT OR CASTING OF CONCRETE. IF THE FOUNDING LEVEL AS PER DRAWING IS NOT SUITABLE, FURTHER EXCAVATIONS SHALL BE DONE TO A DEPTH AS DETERMINED BY THE ENGINEER ON SITE. THE ENGINEER MAY INSTRUCT THAT CERTAIN EXCAVATIONS BE BACKFILLED WITH MASS CONCRETE TO THE REQUIRED LEVEL. (CLASS AS PER ITEM 5 ABOVE).
8. AFTER PLACING, ALL REINFORCEMENT MUST BE CHECKED AND APPROVED BY THE ENGINEER ON SITE BEFORE CASTING OF CONCRETE.
9. NO HOLES OR NOTCHES SHALL BE CUT, CHIPPED OR FORMED IN CONCRETE UNLESS APPROVED BY THE ENGINEER.
10. DURING COLD OR WET WEATHER CONCRETE MUST BE HANDLED IN ACCORDANCE WITH SPECIFICATIONS.
11. LOADINGS ON STRUCTURES DURING CONSTRUCTION:
MAXIMUM ON SLABS = 100 kg/m.
12. REMOVAL OF SHUTTERING TO BE DONE IN ACCORDANCE WITH SPECIFICATIONS.
13. ALL EXPOSED SHARP CORNERS SHALL BE CHAMFERED AS FOLLOWS:
ALL CORNERS (EXCEPT WHERE OTHERWISE SHOWN) – 25 x 25 mm.
14. ALL WORK SHALL COMPLY WITH THE NATIONAL BUILDING REGULATIONS SANS 10400: 2012.
- ### BRICKWORK:
1. IN GENERAL, BRICKWALLS SHALL COMPLY WITH SANS 0400–1990 AND THE PARTICULAR SPECIFICATION DWS 1710.
2. WIRE TIES TO BE BUILT INTO CAVITY WALLS IN ACCORDANCE WITH THE SPECIFICATION.
3. MASONARY WORK:
a.) ALLOW FOR MOVEMENT JOINTS IN POSITIONS AS SHOWN ON THE DRAWINGS AND MARKED "MJ" ON DRAWING PLAN.
4. BRICKFORCE:
BRICKFORCE TO BE PLACED IN EVERY 5th LAYER AND IN EVERY LAYER FOR 3 LAYERS ABOVE AND BELOW CONCRETE SLABS, DOOR AND WINDOW OPENINGS. MINIMUM LAP LENGTH = 150 mm.
5. NO HOLES OR CUTS IN WALLS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
6. ALL BRICKWORK ON ONE FLOOR SHALL BE COMPLETED BEFORE COMMENCING WITH BRICKWORK ON THE NEXT FLOOR, WHERE APPLICABLE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
7. ALL LOADBEARING BRICKWALLS AS INDICATED MUST BE COMPLETED BEFORE ANY CONCRETE SLABS ARE CAST ON TOP.
8. MOVEMENT JOINTS:
a.) BRICKWORK BUTT–JOINTS MUST BE CLEAN AND FREE FORM ANY OBSTRUCTION.
b.) DEPTH 'd' OF SEALANT SHALL COMPLY WITH THE MANUFACTURER'S SPECIFICATIONS.
c.) IN ADDITION TO THE HOOP IRON WALL TIE, ALL BRICKFORCE MUST BE CONTINUOUS THROUGH ALL MOVEMENT JOINTS IN BRICKWALLS.
- ### STRUCTURAL STEELWORK: (WHERE APPLICABLE)
1. DESIGN AND MANUFACTURING OF ALL STRUCTURAL STEELWORK SHALL COMPLY WITH THE PROJECT SPECIFICATIONS SANS 10162–1, SANS 10162–2, SANS 1200H AND SANS 1200HA.
2. STRUCTURAL STEEL GRADE TO BE 300W, UNLESS SHOWN OTHERWISE.
3. ALL WELDS TO BE 6 mm CONTINUOUS FILLET WELDS, UNLESS SHOWN OTHERWISE.
4. HOLES FOR BOLTS SHALL BE BOLT DIAMETER + 2 mm.
5. COLD FORMED PROFILES SHALL COMPLY WITH A MINIMUM GUARANTEED TENSILE STRENGTH OF 250 MPa SANS 10162–2.
6. ALL SPACERS USED FOR ERECTION SHALL BE OF LAMINATED CUT–OFFS AND SHALL BE USED ONLY WHERE NECESSARY.
7. ALL WORKSHOP DETAIL DRAWINGS SHALL BE APPROVED BY THE ENGINEER BEFORE MANUFACTURING BEGINS.
8. ALL SITE WELDS SHALL BE DONE UNDER SUPERVISION OF A QUALIFIED WELDER.
9. ALL MEASUREMENTS TO BE CHECKED ON SITE BEFORE ERECTION COMMENCES.
10. PROTECTIVE TREATMENT:
a.) DECREASE ALL STEEL AND WIRE BRUSH TO SANS 12944–1: 1998.
b.) PAINT ALL STEEL WITH A 25 MICRON RED PRIMARY ETCH COAT, ACCORDING TO SANS 12944–1: 1998 – (APPLIED IN WORKSHOP).
- PAINTING AFTER ERECTION:
a.) PRIME WITH ONE COAT APPROVED PRIMER FOR STEEL ON SITE AFTER ERECTION. FINISHING PAINT TO BE TWO COATS POLYURETHANE ENAMEL COLOUR BY THE ENGINEER.
b.) ALTERNATIVELY PAINT SPECIFICATION AS SHOWN ON THE DRAWINGS.
- ### SUPERIMPOSED LOADS:
1. SAFE MAXIMUM ALLOWABLE EARTH PRESSURE = 150 kPa OR AS PER GEOTECHNICAL REPORT.
2. IMPOSED LOAD FOR ROOF SLABS = 1,5 kPa.
- ### ROOF SHEETINGS: (WHERE APPLICABLE)
- SISALATION SHALL BE SUPPORTED ON 2,0 mm Ø GALVANISED STRAIN WIRES FROM FRAME TO FRAME AT 300 mm CENTRES. SISALATION OVERLAP 200 mm MINIMUM.
- ### BACKFILL:
- BACKFILL BENEATH SURFACE BEDS TO BE G5 SELECTED GRANULAR MATERIAL COMPACTED IN 150 mm LAYERS TO 95% MOD. AASHTO DENSITY.
- ### GROUND FLOOR BEDDINGS:
- #### REINFORCED GROUND FLOOR BEDDINGS
- 150 mm THICK 35 MPa CONCRETE BEDDING REINFORCED WITH REF 193 MESH CAST ON 250 MICRON WATERPROOFING MEMBRANE IN BLOCK SIZES AS SHOWN ON DRAWINGS. SEE EXPANSION JOINT DETAIL WHERE APPLICABLE
- #### GROUND FLOOR BEDDINGS WITHOUT REINFORCING (WHEN APPLICABLE)
- 150 mm THICK 35 MPa CONCRETE BEDDING CAST ON 250 MICRON WATERPROOFING MEMBRANE ON BACKFILLING COMPACTED TO SPECIFICATION.
- ### SOIL POISONING:
- SOIL INSECTICIDE INCLUDING CERTIFICTE OF REGISTRATION OF THE PEST CONTROL OPERATOR AS ISSUED BY THE DEPARTMENT OF AGRICULTURE.

ONLY SABS/SANS APPROVED MATERIAL

REVISION				
MOD No.	DATE	DESCRIPTION	FOR	DWS
001	11/20	ISSUED FOR INFORMATION	–	

DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA			
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDI BENQ BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336–7500	
CHECKED:		DESIGN: –	
		DRAWN: –	
ENGINEER:		DATE:	EXT. APPROVAL / DESIGN CHECKED: DATE:
CHIEF ENGINEER / APP (Pr. Eng):		DATE:	DIRECTOR (Pr. Eng): DATE:

1/10		LIST OF DRAWINGS					HDH001	177 407/19			
SHEET		DESCRIPTION					OTHER No.	REG. No.			
LIST OF DRAWINGS											
HAZELMERE RESETTLEMENT HOUSING PROJECT											
OAKFORD PRIORITY HOUSING											
COVER PAGE – 100 SQUARE METER HOUSE											
PROVINCE: KWA–ZULU NATAL		DISTRICT: ETHEKWINI		KEYCODES:	RTR	HOU	–	–	–	OTHER NUMBER	HDH001
LOCALITY No.: U300–01		TENDER/ CONTRACT No. C/0339		SHEET	REG. No.						
CALCULATION FILE: 20/2/U300–01/C/1/1				1 of 10	177 407/19				00		



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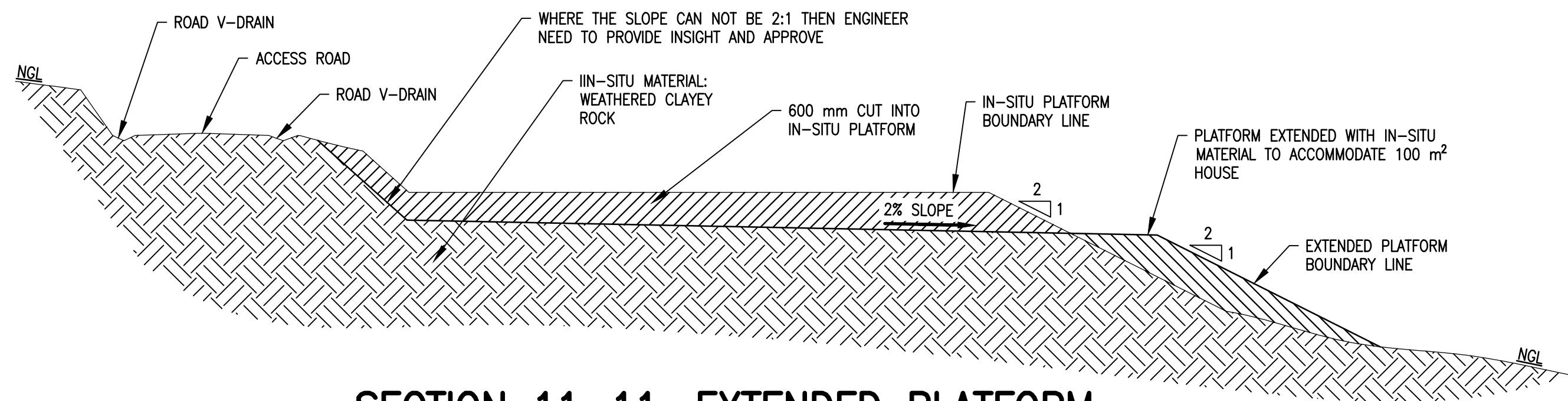
SECTION
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SECTION NUMBER
SHEET NUMBER

TENDER ONLY

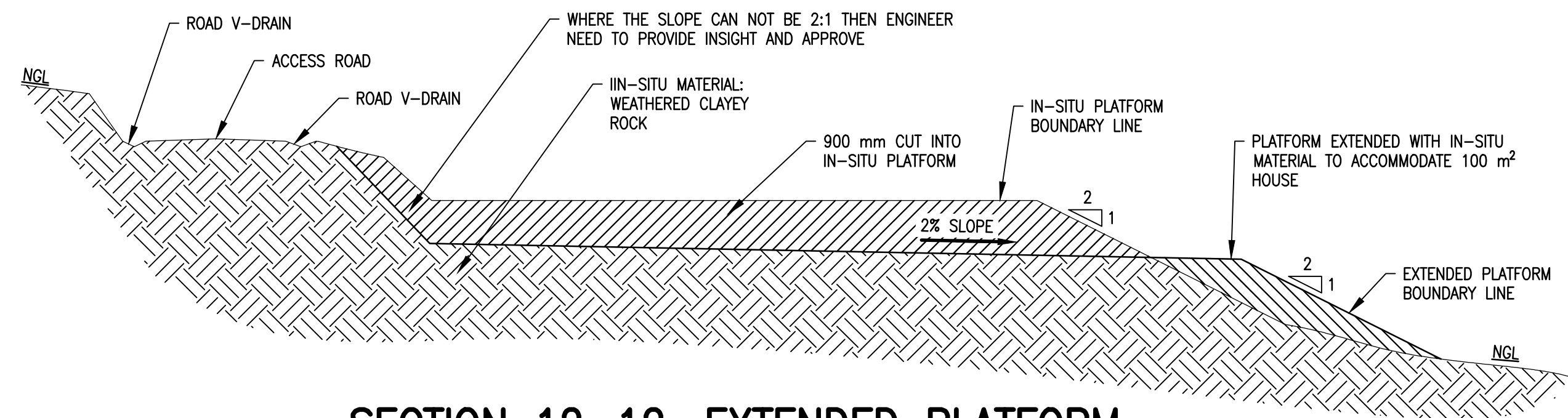
REVISION				
MOD No.	DATE	DESCRIPTION	FOR	DWS
00	11/20	ISSUED FOR INFORMATION	-	-

DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA				
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDI BENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500		
CHECKED:		DESIGN: - DATE: -		
ENGINEER:		EXT. APPROVAL / DESIGN CHECKED: DATE:		
CHIEF ENGINEER / APP (Pr. Eng):		DATE: DIRECTOR (Pr. Eng): DATE:		

HAZELMERE RESETTLEMENT HOUSING PROJECT									
OAKFORD PRIORITY HOUSING									
KEY PLAN - 100 SQUARE METER HOUSE									
PROVINCE: KWA-ZULU NATAL		DISTRICT: ETHEKWINI		KEYCODES: RTR HOU - - - OTHER NUMBER		HDH001 177 407/19			
LOCALITY No.: U300-01		TENDER/ CONTRACT No: C/0339		SHEET REG. No.		REV.			
CALCULATION FILE: 20/2/U300-01/C/1/1		2 of 10		177 408/19		00			

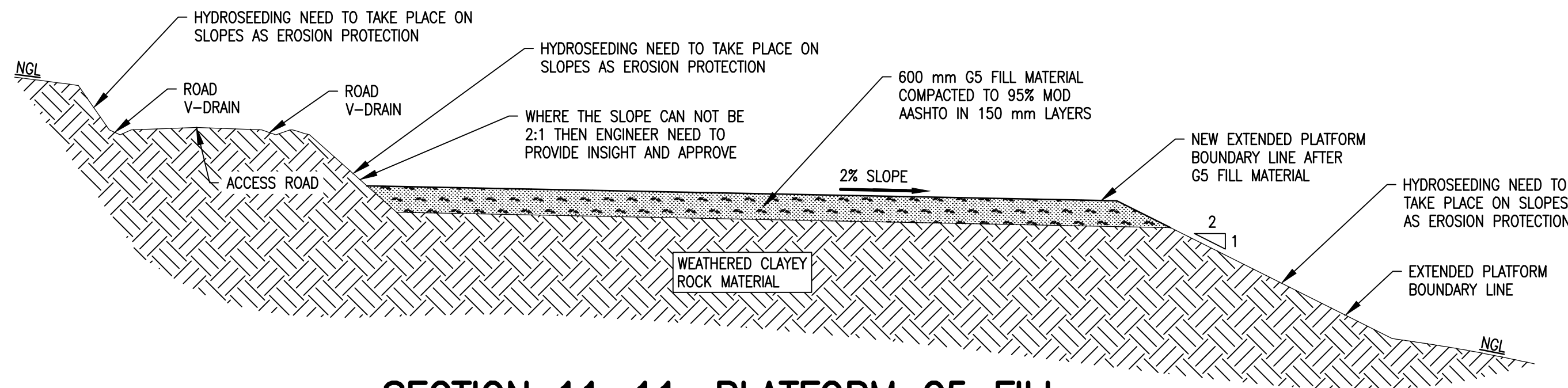


**SECTION 11-11: EXTENDED PLATFORM
PROFILE – WEATHERED CLAYEY ROCK**
SCALE 1:100

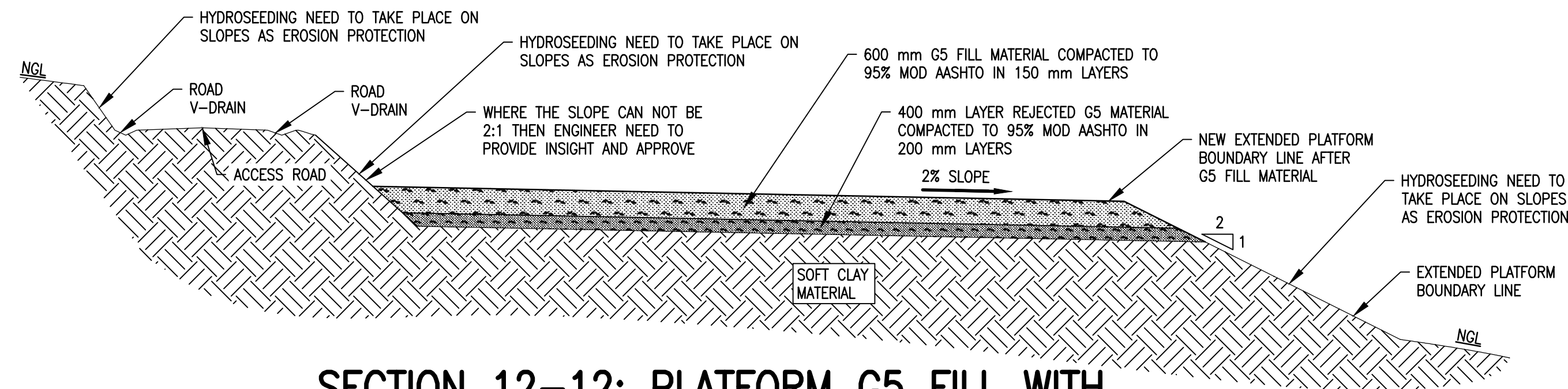


**SECTION 12-12: EXTENDED PLATFORM
PROFILE – SOFT CLAY MATERIAL**
SCALE 1:100

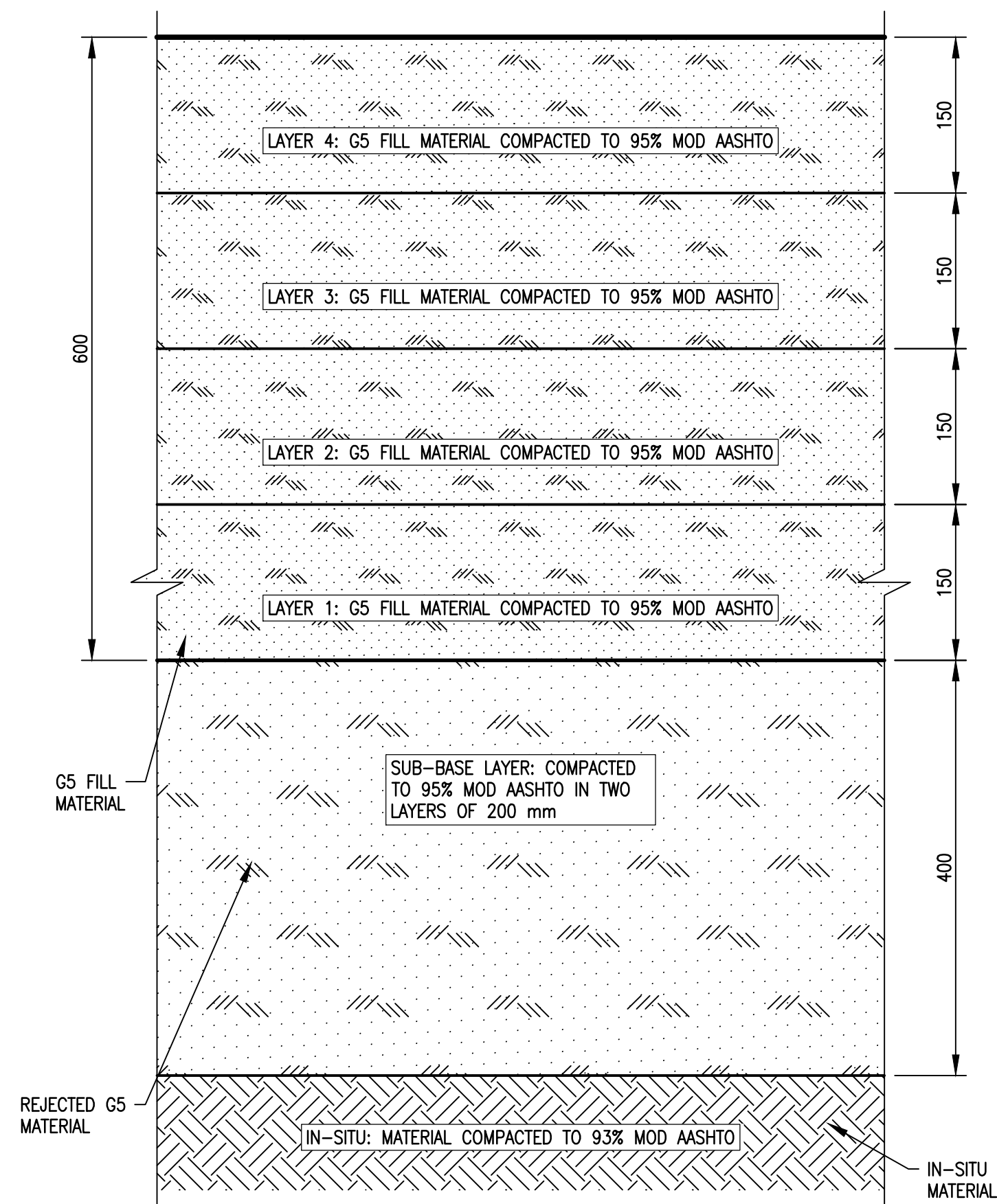
G5 SIEVE ANALYSIS SAMPLE		
SIEVE SIZE	% PASSING	
75 mm	100	
63 mm	100	
50 mm	100	
37.5 mm	97	
28 mm	80	
20 mm	66	
14 mm	56	
5 mm	35	
2 mm	26	
1 mm	26	
0.425 mm	17	
0.075 mm	7	
GRADING MODULUS: 2.50		



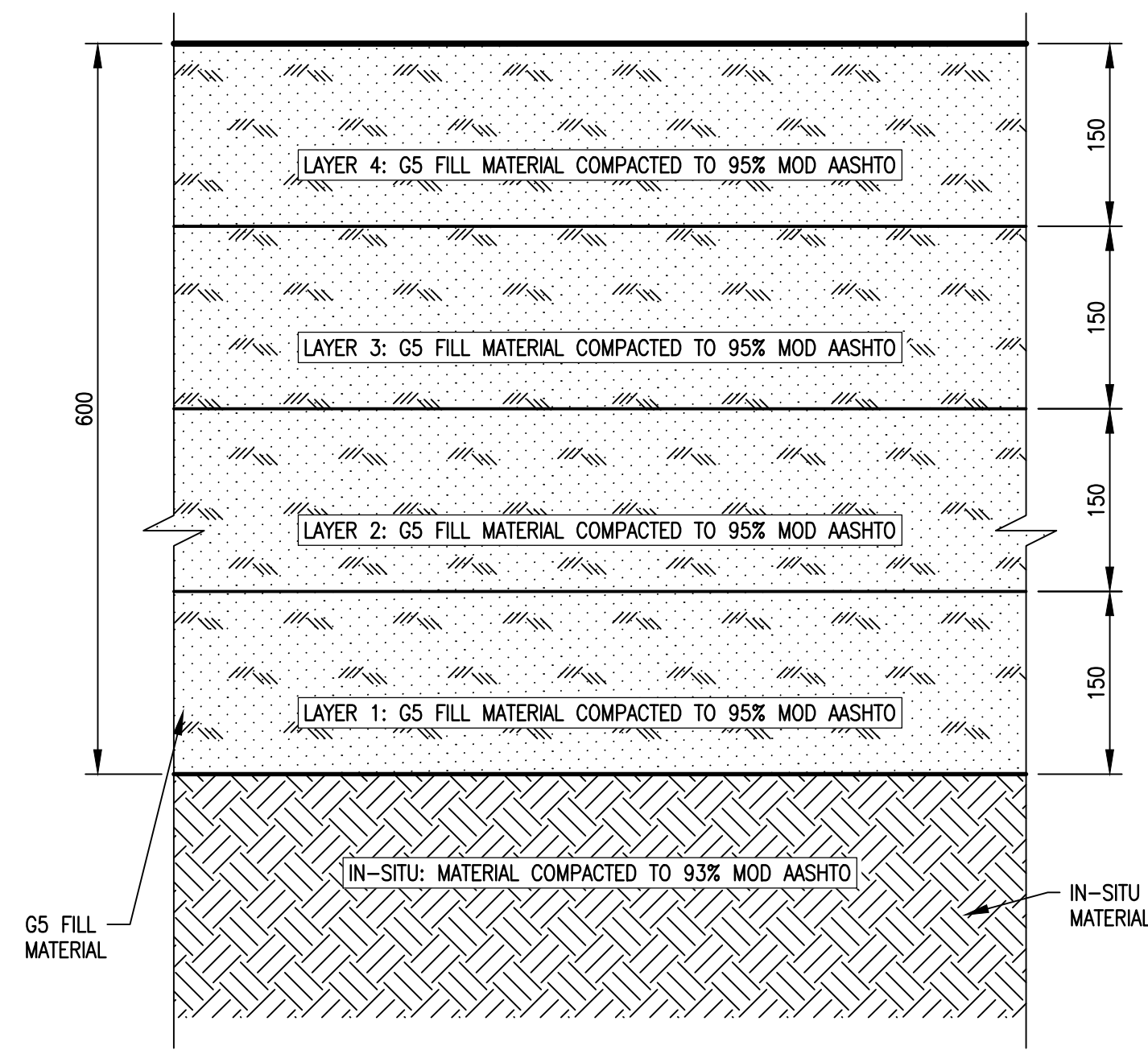
**SECTION 11-11: PLATFORM G5 FILL
PROFILE – WEATHERED CLAYEY ROCK**
SCALE 1:100



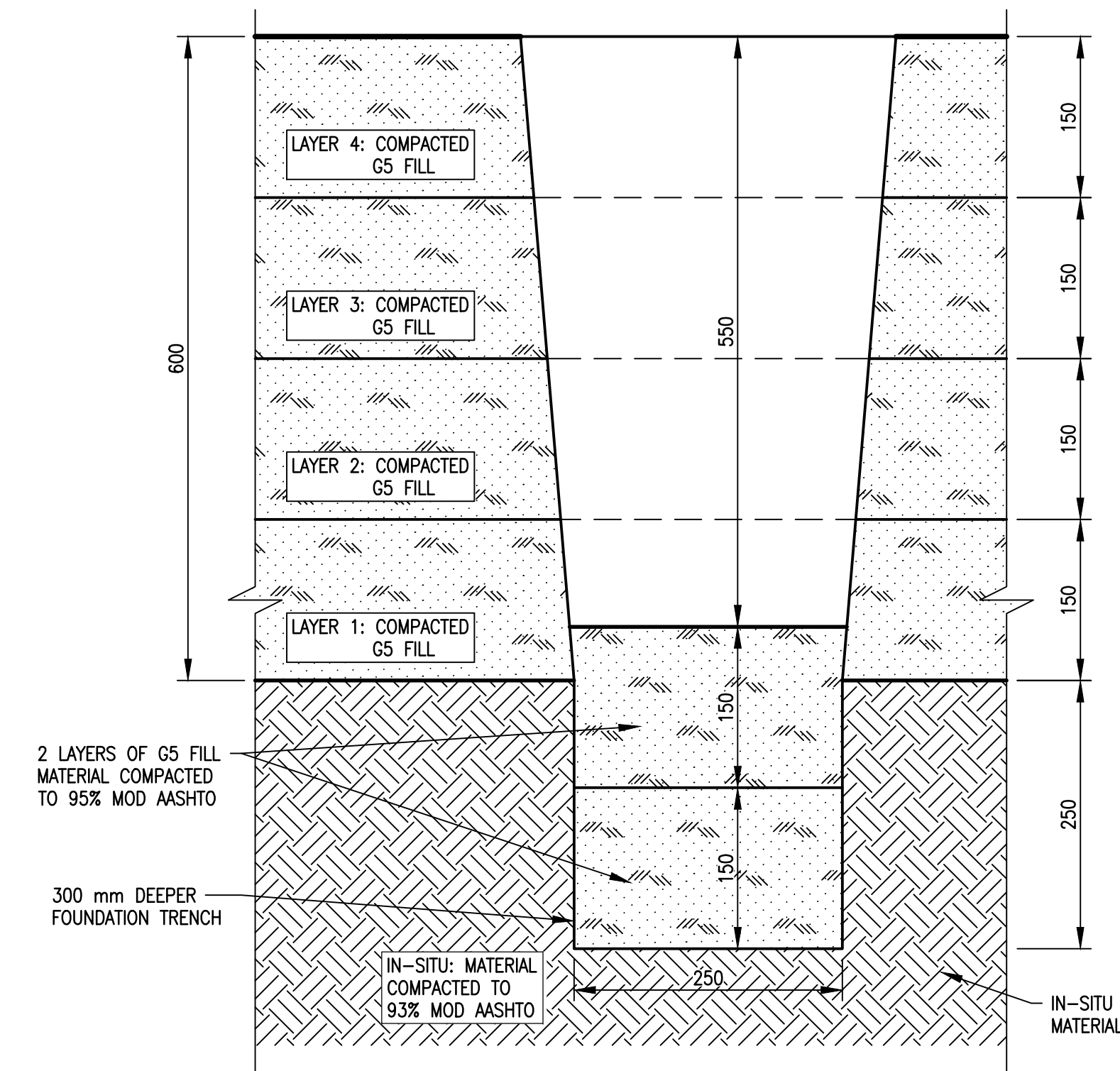
**SECTION 12-12: PLATFORM G5 FILL WITH
SUB-BASE MATERIAL PROFILE – SOFT CLAY
MATERIAL**
SCALE 1:100



LAYER WORKS ON SOFT CLAY MATERIAL
SCALE 1:5



**LAYER WORKS ON WEATHERED NON-CLAY
MATERIAL**
SCALE 1:5



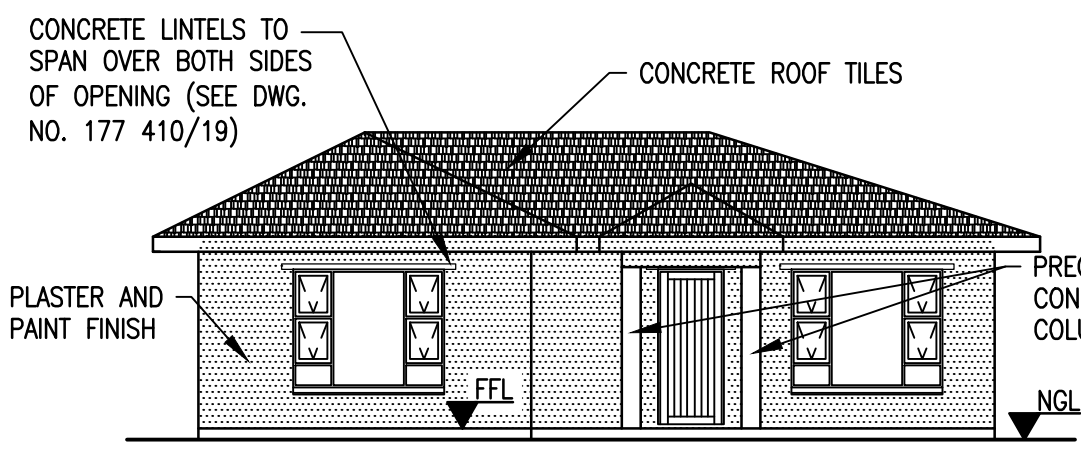
LAYER WORKS IN FOUNDATION TRENCH
SCALE 1:5

NOTES:

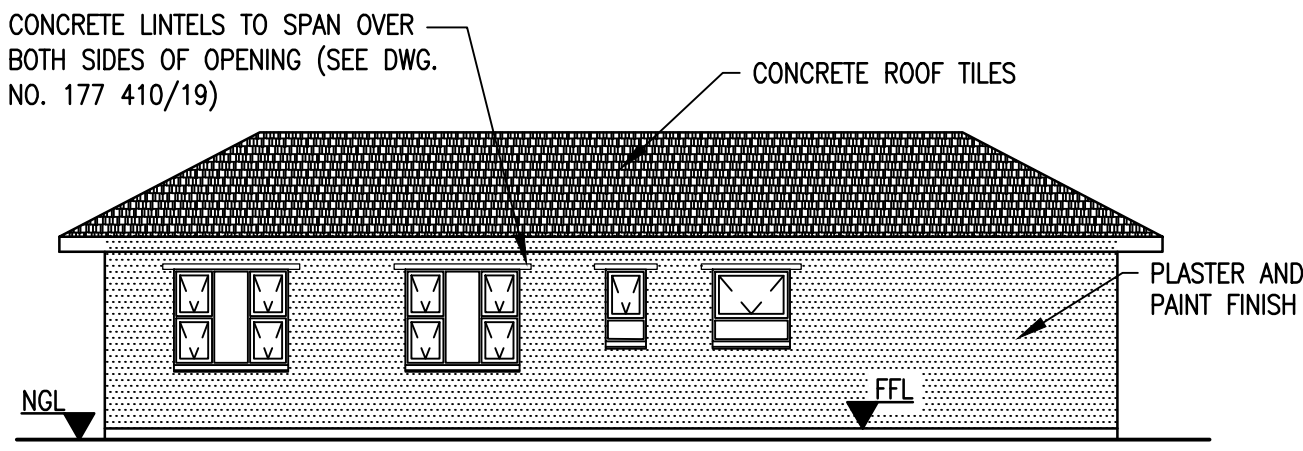
1. THE EXISTING PLATFORM NEED TO BE EXTENDED TO ACCOMMODATE A 100 m² HOUSE. 600 mm NEED TO BE REMOVED FROM THE SURFACE OF EXISTING PLATFORM AND SLIGHT CUT INTO THE EMBANKMENT. THE CUT FROM THE EXCAVATION TO BE USED AS FILL FOR EXTENDING THE PLATFORM.
2. AFTER THE REMOVAL OF THE 600 mm THE IN-SITU MATERIAL OF THE PLATFORM NEED TO BE COMPACTED TO 93% MOD AASHTO, THE EXTENDED FILL SECTION ALSO NEED TO BE COMPACTED TO 93% MOD AASHTO IN 150 mm LAYERS.
3. THE 600 mm NEED TO BE BACKFILLED WITH G5 SELECTED GRANULAR FILL MATERIAL COMPACTED TO 95% MOD AASHTO IN FOUR LAYERS OF 150 mm. (SEE GRADING EXAMPLE FOR A G5 FILL MATERIAL).
4. AT PLATFORMS WHERE SOFT CLAY IS IDENTIFIED AN EXTRA 300 mm OF IN-SITU SOIL NEED TO BE REMOVED AND A 300 mm LAYER OF ROCK MATERIAL NEED TO BE ROLLED AND COMPACTED INTO THE SOFT CLAY BEFORE THE G5 FILL CAN BE STARTED.
5. CUT AND FILL SECTIONS OF THE PLATFORM NEED TO HAVE A 1:2 SLOPE IN ORDER TO BE STABLE. WHERE THIS IS NOT PRACTICALLY EXECUTABLE THE ENGINEER NEED TO ADVISE WAY FORWARD.

1/10	LIST OF DRAWINGS	HDH001	177 407/19
SHEET	DESCRIPTION	OTHER No.	REG. No.

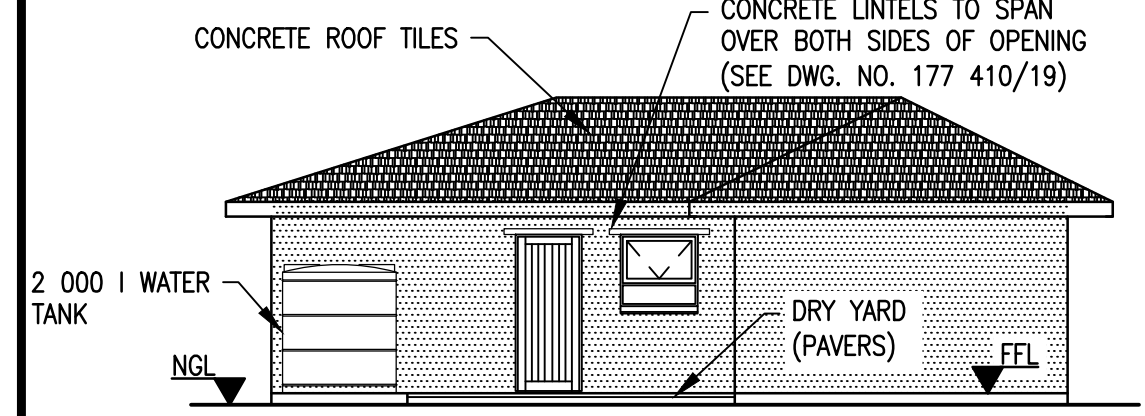
REVISION				DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA				HAZELMERE RESETTLEMENT HOUSING PROJECT			
MOD No.	DATE	DESCRIPTION	FOR	DWS	HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001	SEDIBENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500		OAKFORD PRIORITY HOUSING PLATFORM PREPARATION – 100 SQUARE METER HOUSE			
100	11/20	ISSUED FOR INFORMATION	–		CHECKED:	DESIGN: – DATE: DRAWN: –		PROVINCE: KWA-ZULU NATAL DISTRICT: ETHEKWINI			
					ENGINEER:	EXT. APPROVAL / DESIGN CHECKED: DATE:		LOCALITY No.: U300-01 TENDER/ CONTRACT No.: C/0339			
					CHIEF ENGINEER / APP (Pr. Eng):	DIRECTOR (Pr. Eng):		KEYCODES: RTR HOU – – – OTHER NUMBER HDH003			
								CALCULATION FILE: 20/2/U300-01/C/1/1			
								SHEET 3 OF 10			
								178 409/19			
								REV. 00			



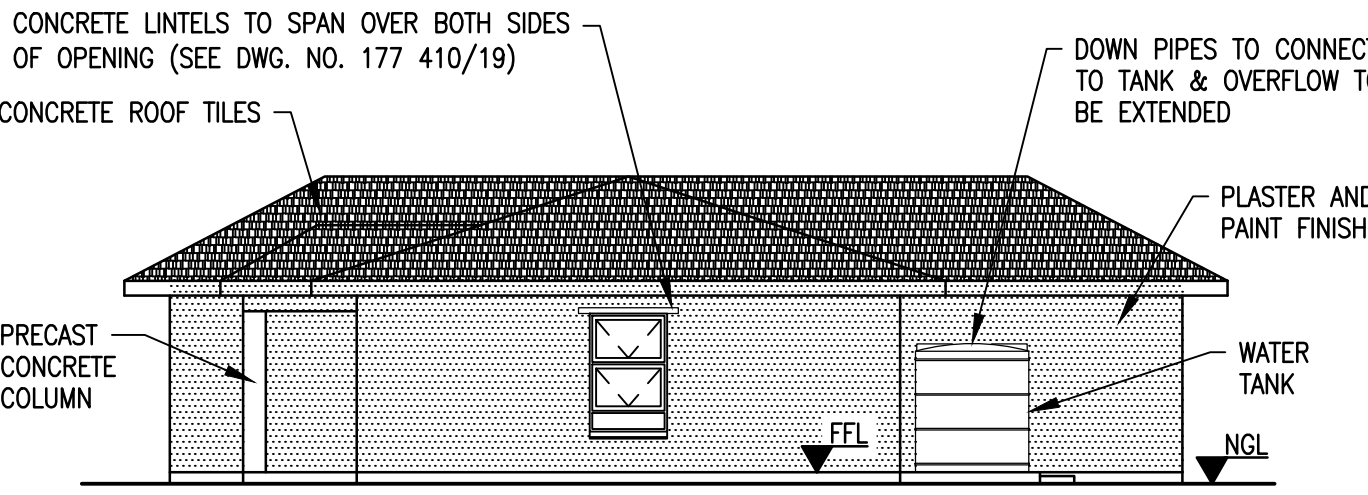
SOUTH-WESTERN ELEVATION
SCALE 1:100



NORTH-WESTERN ELEVATION
SCALE 1:100



NORTH-EASTERN ELEVATION
SCALE 1:100



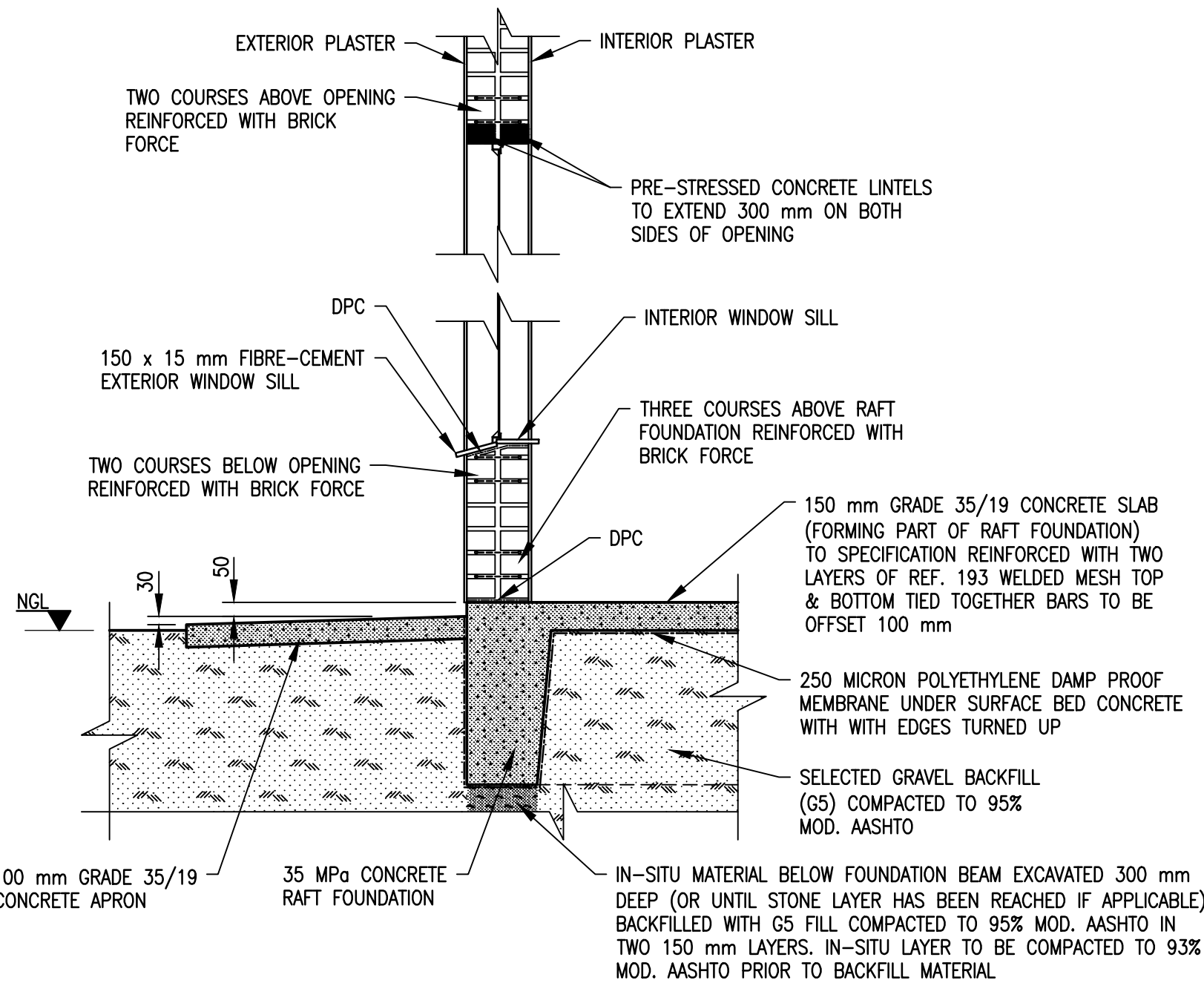
SOUTH-EASTERN ELEVATION
SCALE 1:100

CEILING:
FIBRE CEMENT CEILING BOARD WITH MERANTI COVER STRIPS ON 38 x 38 mm SAP BATTENS, 75 mm COVERED GYPSUM PLASTERBOARD CORNICE TO BE USED.

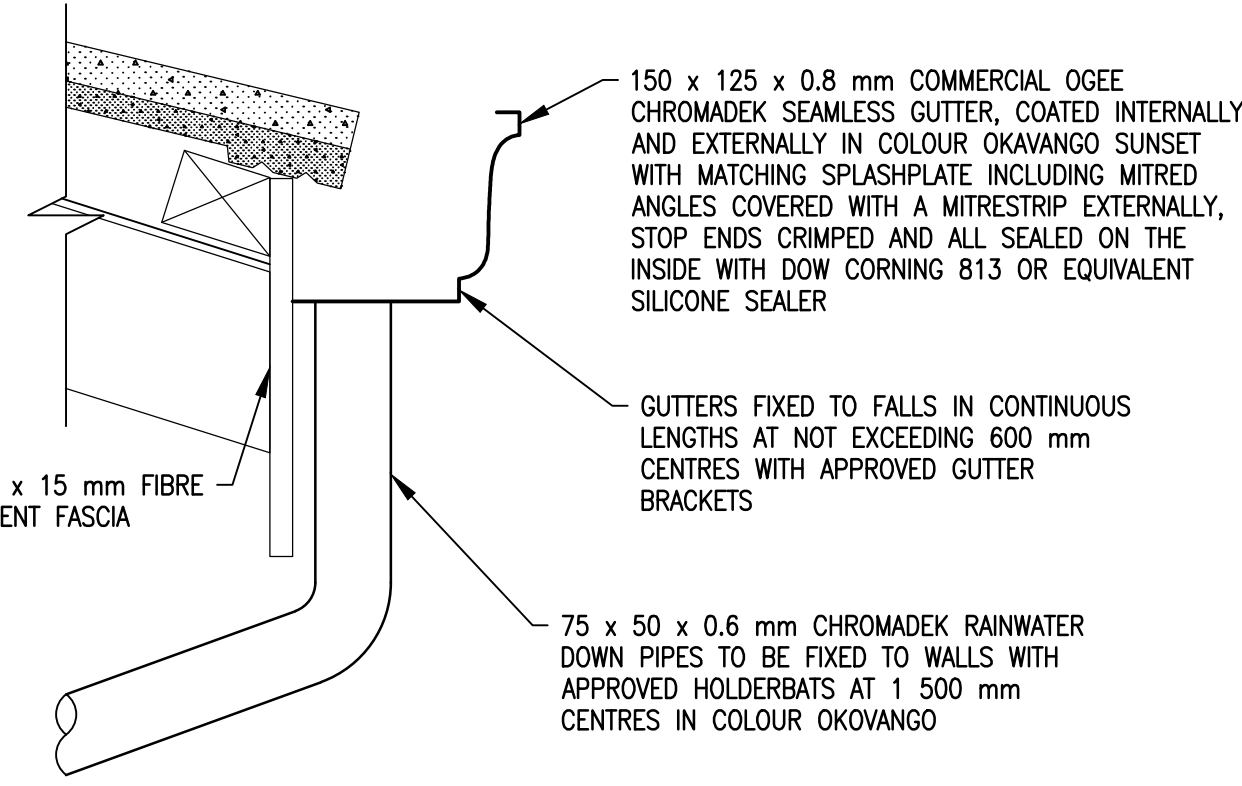
FOUNDATION AND FLOOR:
CONCRETE RAFT FOUNDATION SHALL BE AS SHOWN ON THE FOUNDATION DRAWING TO SUIT PREVAILING SOIL CONDITIONS. THE 150 mm FLOOR OF THE STRUCTURE FORMS PART OF THE FOUNDATION REINFORCED WITH REF. 193 WELDED MESH ON 250 MICRON POLYURETHANE MEMBRANE ON WELL COMPACTED FILLING. FLOOR FINISHES SHALL BE AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

CONCRETE TILE COVERED ROOF:
SPECIFIED CEMENT TILES ON 38 x 38 mm BATTENS AT CENTRES ACCORDING TO SUPPLIERS SPECIFICATIONS ON SISALATION 405 RSA SUPPORTED BY 2 mm Ø GALV. STRAINING WIRES @ 300 mm CENTRES NAILED ON SAP ROOF TRUSSES. TRUSSES MANUFACTURED FROM GRADE 6 SA PINE AT 700 mm CENTRES ON 114 x 38 mm SA PINE WALL PLATES, FASTENED WITH 4 mm Ø GALV. WIRE TIES BUILT IN PROTRUDING FROM THE FOUNDATION BEAM.

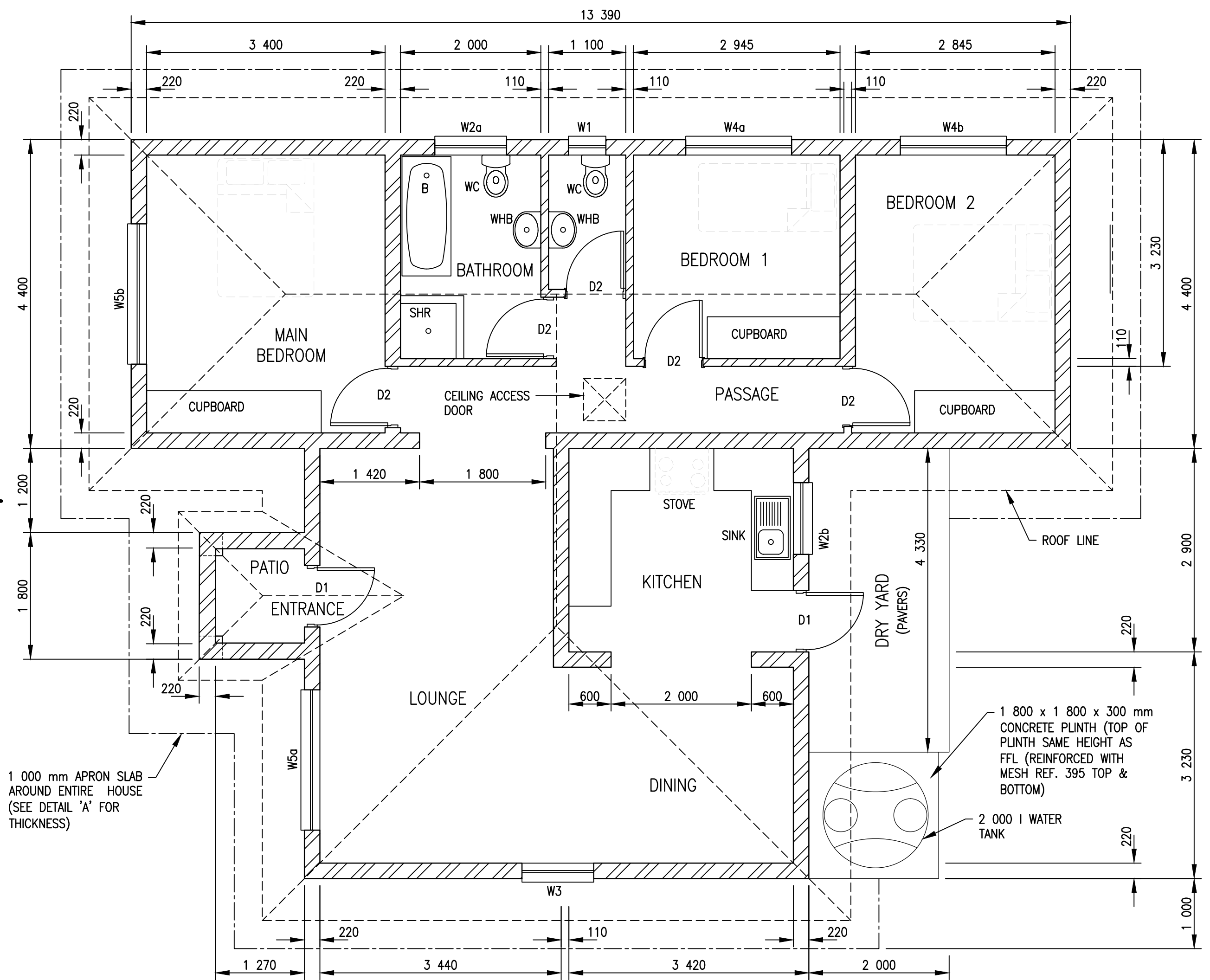
NOTE:
TIMBER ROOF STRUCTURE SHALL BE BRACED AND STIFFENED TO THE ENGINEER'S SATISFACTION AND APPROVAL, WITH THE PRE-FABRICATED TRUSSES, SHOP DRAWINGS SHALL BE SUBMITTED BY THE SUPPLIER AND THE ROOF STRUCTURE SHALL BE CERTIFIED BY A REGISTERED ENGINEER AS A SAFE STRUCTURE.



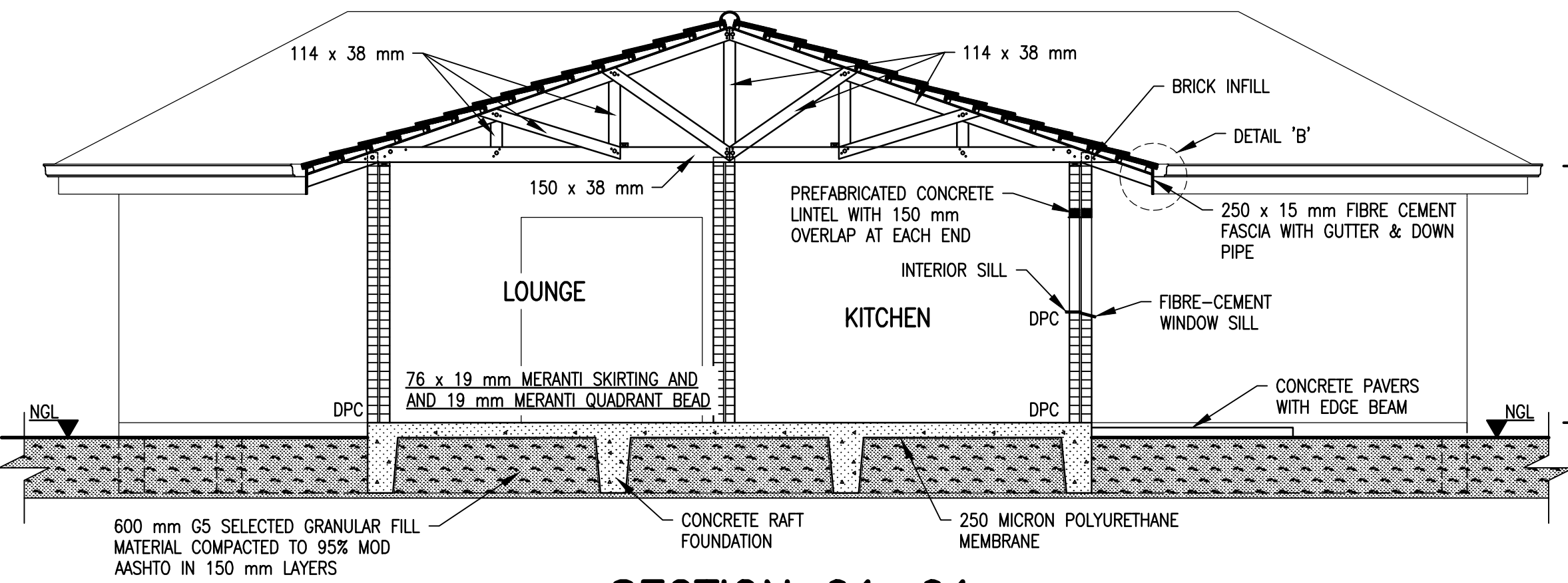
DETAIL 'A': SECTION ON TYPICAL REINFORCED RAFT FOUNDATION & WALLS
SCALE 1:20



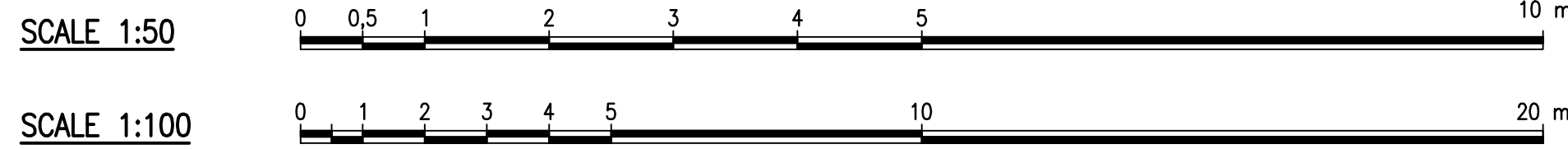
DETAIL 'B': GUTTER DETAIL
SCALE 1:5



FLOOR PLAN
SCALE 1:50



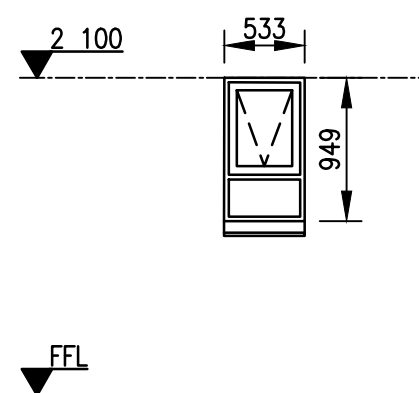
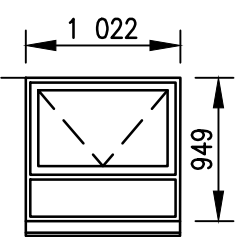
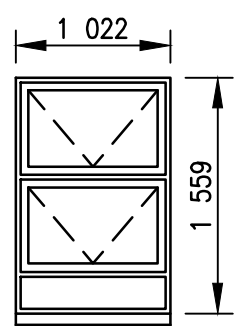
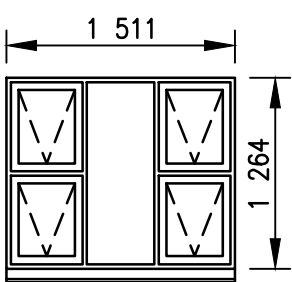
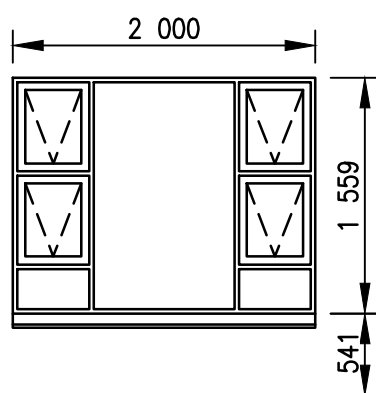
SECTION 01-01
SCALE 1:50



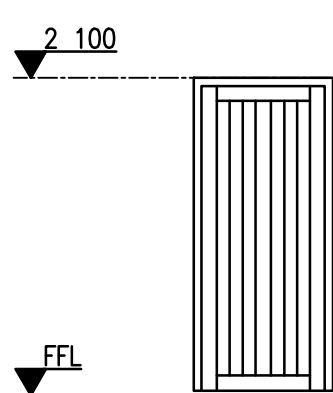
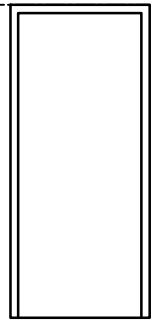
SECTION
SECTION NUMBER
07
SHEET NUMBER
3

TENDER ONLY

REVISION					DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA					HAZELMERE RESETTLEMENT HOUSING PROJECT										
MOD No.	DATE	DESCRIPTION		FOR	DWS	HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001					SEDIENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500			OAKFORD PRIORITY HOUSING						
00	11/20	ISSUED FOR INFORMATION		-										FLOOR PLAN, SECTION AND ELEVATIONS – 100 SQUARE METER HOUSE						
CHECKED:			DATE:	DESIGN: —			DRAWN: —			PROVINCE: KWA-ZULU NATAL DISTRICT: ETHEKWINI KEYCODES: RTR HOU - - - OTHER NUMBER: HDH004										
ENGINEER:			DATE:	EXT. APPROVAL / DESIGN CHECKED:			DATE:	LOCALITY No.: U300-01 TENDER/ CONTRACT No.: C/0339			SHEET 4 OF 10		REG. No. 177 409/19		REV. 00					
CHIEF ENGINEER / APP (Pr. Eng):			DATE:	DIRECTOR (Pr. Eng):			DATE:	CALCULATION FILE: 20/2/U300-01/C/1/1												

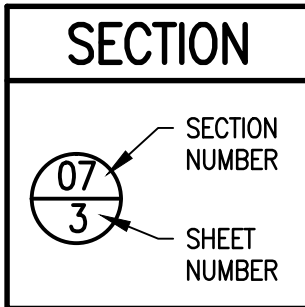
STEEL WINDOW FRAMES NTS	WINDOW SCHEDULE					
	WINDOW REF.	W1	W2a & W2b	W3	W4a & W4b	W5a & W5b
	TYPE	NCT1S	NCTX7S	TD57S	TD51S51S	TD51S81S
	NO. REQUIRED	1	2	1	2	2
	FRAME	STEEL	STEEL	STEEL	STEEL	STEEL
	GLAZING	4 mm FROSTED GLASS	4 mm FROSTED GLASS (W2a) 4 mm CLEAR GLASS (W2b)	4 mm CLEAR GLASS	4 mm CLEAR GLASS	4 mm CLEAR GLASS
	BURGLAR PROOFING	TO ALL OPENING SECTIONS	TO ALL OPENING SECTIONS	TO ALL OPENING SECTIONS	TO ALL OPENING SECTIONS	TO ALL OPENING SECTIONS
	FINISH	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND PAINT ONE UNDERCOAT (SANS 681:2014 TYPE 1) AND TWO COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND PAINT ONE UNDERCOAT (SANS 681:2014 TYPE 1) AND TWO COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND PAINT ONE UNDERCOAT (SANS 681:2014 TYPE 1) AND TWO COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND PAINT ONE UNDERCOAT (SANS 681:2014 TYPE 1) AND TWO COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND PAINT ONE UNDERCOAT (SANS 681:2014 TYPE 1) AND TWO COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)
	LINTEL BEARING ON EACH SIDE MINIMUM (mm)	150	150	150	250	250
	BRICK COURCES ABOVE LINTEL MINIMUM	4	4	4	5	5
	SUPPORT/PROPS EVERY x METRES	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS	1.5 m, SUPPORTED FOR A MINIMUM OF 7 DAYS	1.5 m, SUPPORTED FOR A MINIMUM OF 7 DAYS

(REF: NHBRC PART 3, SEC 3 FEB 1999 REV NO. 1) FOR LINTEL DETAIL

TIMBER DOORS NTS	FRAME WINDOW SCHEDULE		
	DOOR REF.	D1	D2
	DOOR SIZE	2 032 x 813 mm	2 032 x 813 mm
	TYPE	SOLID TIMBER MERANTI DOOR	HOLLOW CORE TIMBER DOOR
	NO. REQUIRED	2	5
	FRAME	STEEL DOUBLE REBATED	STEEL DOUBLE REBATED
	DOOR FINISH	SAND AND STOP FINISH WITH THREE COATS CLEAR MATT EXTERIOR POLYURETHANE VARNISH	PRIMED WITH OIL WOOD PRIMER AND PAINT ONE UNDERCOAT AND TWO COATS HIGH GLOSS ENAMEL PAINT
	FRAME FINISH	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND THREE COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)	PRIMED WITH RED OXIDE METAL ETCH PRIMER AND THREE COATS HIGH GLOSS ENAMEL PAINT (SANS 630:2009-TYPES 1 OR 2)
	LOCK	4 LEVER UPRIGHT MORTICE LOCK SET	2 LEVER UPRIGHT MORTICE LOCK SET
	LINTEL BEARING ON EACH SIDE MINIMUM (mm)	150	150
	BRICK COURCES ABOVE LINTEL MINIMUM	4	4
	SUPPORT/PROPS EVERY x METRES	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS	1 m, SUPPORTED FOR A MINIMUM OF 7 DAYS

(REF: NHBRC PART 3, SEC 3 FEB 1999 REV NO. 1) FOR LINTEL DETAIL

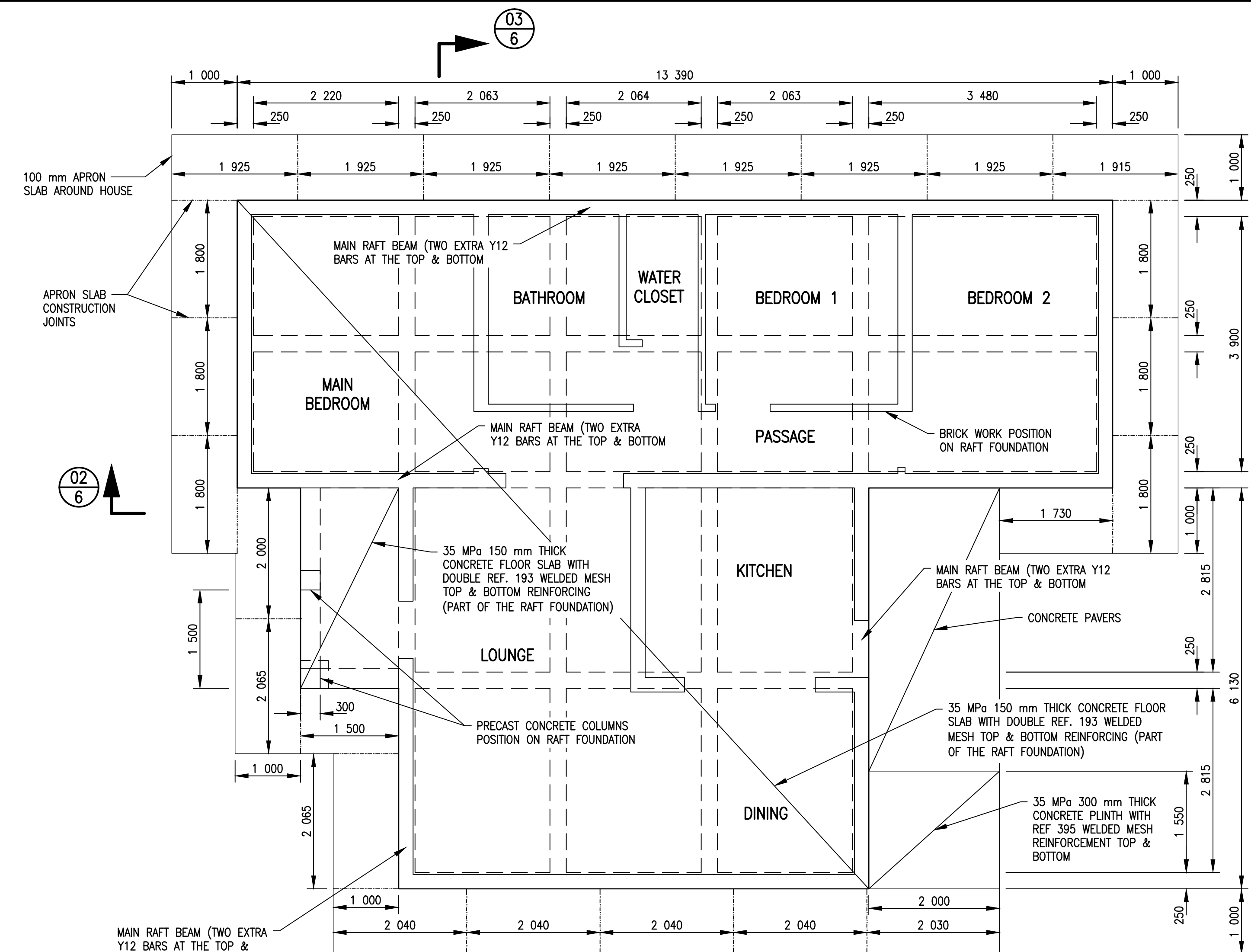
FOR COMPLETE DESCRIPTION OF FINISHES SEE DETAILED SPECIFICATION IN CONTRACT DOCUMENT		LOUNGE/DINING ROOM	BED ROOMS	PASSAGE & ENTR.FOYER	BATH ROOM	WC	KITCHEN	ENTRANCE PATIO	DRY YARD	EXTERNALLY	CONCRETE PLATFORMS
FLOOR	CONCRETE PAVERS								●		
	WOOD FLOAT FINISH (NON SLIP)							●			●
	NON-SLIP CERAMIC OR QUARRY TILES	●	●	●	●	●	●				
SKIRTING	76 x 19 mm SKIRTINGS AND 19 mm QUADRANT ANGLE MOULDS (SA PINE)	●	●	●	●	●	●				
	FLOOR TILE SKIRTING				●	●					
WALLS	CEMENT PLASTER	●	●	●	●	●	●	●		●	
WALL FINISHES	INTERIOR ACRYLIC PVA PAINT (WASHABLE)	●	●	●							
	EXTERIOR ACRYLIC PVA PAINT (WASHABLE)									●	
	EGGSHELL ENAMEL FOR UNTILED PLASTER SURFACES				●	●	●				
	WALL TILES AREAS AS SPECIFIED				●	●	●				
TILES	FFL TO 1,5 m HIGH				●	●	●				
CURTAINS	CURTAIN RAILS	●	●	●	●	●	●				
CEILING	GYPSUM CEILING BOARD / FIBRE CEMENT CEILING BOARD	●	●	●	●	●	●	●			
	GYPSUM PLASTERBOARD CORNICE (75 mm COVED)	●	●	●	●	●	●	●			
MISCELLANEOUS	SOAP DISH				●						
	750 x 20 mm [AND 450 x 20 mm [TOWEL RAILS (450 x 20 mm [IN KITCHEN)				●	●					
	TOILET PAPER HOLDER (VITREOUS CHINA)				●	●					
SCHEDULE FOR FINISHES OF 100 SQUARE METER HOUSE											



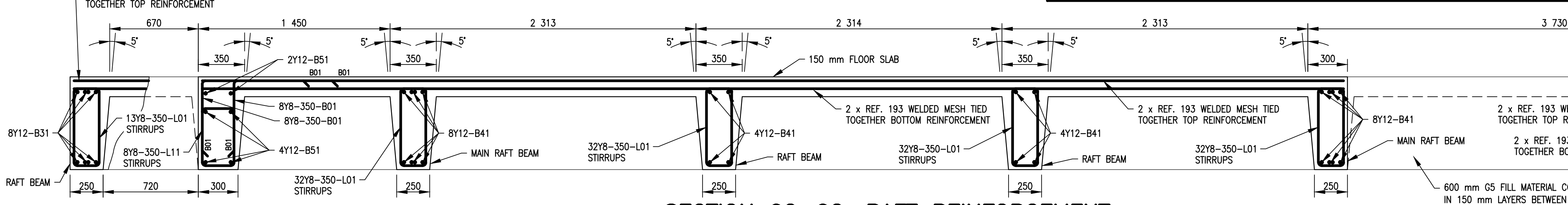
REVISION				
MOD No.	DATE	DESCRIPTION	FOR	DWS
001	11/20	ISSUED FOR INFORMATION	—	

TENDER ONLY

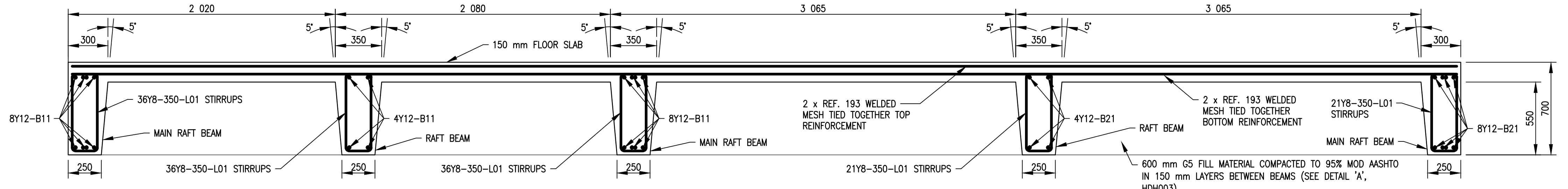
DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA				HAZELMERE RESETTLEMENT HOUSING PROJECT			
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDIBENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500		OAKFORD PRIORITY HOUSING WINDOW AND DOOR SCHEDULE – 100 SQUARE METER HOUSE			
CHECKED: _____		DESIGN: — DRAWN: —		PROVINCE: KWA-ZULU NATAL			
ENGINEER: _____		EXT. APPROVAL / DESIGN CHECKED: _____		DISTRICT: ETHEKWINI		KEYCODES: RTR HOU — — —	
CHIEF ENGINEER / APP (Pr. Eng): _____		DIRECTOR (Pr. Eng): _____		LOCALITY No.: U300-01		TENDER/ CONTRACT No. C/0339	
CALCULATION FILE: 20/2/U300-01/C/1/1		SHEET 5 of 10		REG. No. 177 410/19		REV. 00	



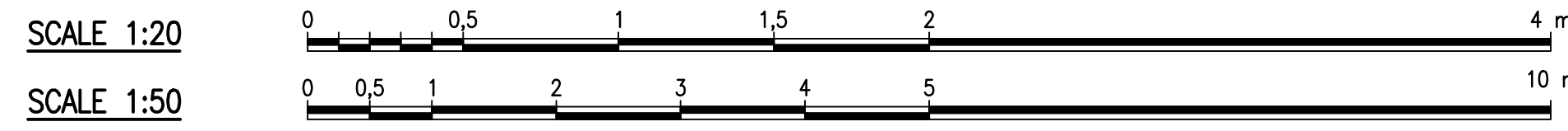
BRICK LAYOUT ON RAFT FOUNDATION
SCALE 1:50



SECTION 02-02: RAFT REINFORCEMENT
SCALE 1:20



SECTION 03-03: RAFT REINFORCEMENT
SCALE 1:20



SECTION
SECTION NUMBER
07
SHEET NUMBER
3

TENDER ONLY

DEPARTMENT OF WATER AND SANITATION												
BAR BENDING SCHEDULE												
SCHEME HAZELMERE DAM RESETTLEMENT HOUSING PROJECT							SHEET	1/2				
STRUCTURE RAFT FOUNDATION OF 100 m SQUARE HOUSES							DRAWN	CW HATTINGH				
PLAN REG NO. 177 411/19							CHECKED	JF HATTINGH				
Member Location	No. of	Type, Ø & mark	No.in each	Total no.	Cut length mm	Shape code	Bending Dimensions (mm)					Mass kg
							A	B	C	D	E/R	
	1	Y08, B01	24	24	1 000	37	500	500				9
	1	Y12, B11	48	48	7 250	37	7 050	200				309
	1	Y12, B21	24	24	4 250	37	4 050	200				91
	1	Y12, B31	16	16	4 700	38	4 300	200	200			66
	1	Y12, B41	48	48	5 750	37	5 550	200				245
	1	Y12, B51	6	6	3 500	38	3 200	150	150			25
	1	Y12, B61	4	4	2 300	38	2 000	150	150			8
	1	Y08, L01	304	304	1 600	60	570	150				192
	1	Y08, L11	12	12	1 700	60	420	200				8
1	Y08, S01	50	50	1 150	83	500	70	250			22	
REF.193	1	WM193	48	48	6 000	MESH	6 000	2 400				1 334
REF.395	1	WM395	1	1	6 000	MESH	6 000	2 400				28
Dimensions are given in mm and m												
Dimensions of bars are overall												

DEPARTMENT OF WATER AND SANITATION

BAR BENDING SCHEDULE

SCHEME HAZELMERE DAM RESETTLEMENT HOUSING PROJECT

SHEET 2/2

STRUCTURE RAFT FOUNDATION OF 100 m SQUARE HOUSES

DRAWN CW HATTINGH

PLAN REG NO. 177 411/19

CHECKED JF HATTINGH

SUMMARY OF LENGTHS AND MASSES

Type Y			Type R			Type WELDED MESH		
Bars	L(m)	Mass (kg)	Bars	L(m)	Mass (kg)	Bars	L(m)	Mass (kg)
Y08	586	231				REF. 193	691	1 334
Y12	837	743				REF. 395	7	28
TOTAL MASS	(Kg)	975	TOTAL MASS	(Kg)		TOTAL MASS	(Kg)	1 362

- EXCAVATION NOTES:**
- THE DEPTH OF THE FOUNDATION TRENCHES FOR THE RAFT FOUNDATION SHALL BE THE DEPTH OF THE BEAMS UNDER THE FLOOR SLAB.
 - THE EXCAVATION SHALL BE TRIMMED WITH 5° SLOPED SIDES AS INDICATED IN THE DRAWING. THE HORIZONTAL FLOOR OF THE TRENCH SHALL BE FLAT, OF EVEN SURFACE AND FREE FROM ANY LOOSE MATERIAL AND PROTRUDING ROCKS.
 - ALL WATER SEEPAGE SHALL BE REMOVED, SOIL INSECTICIDE APPLIED AND DPC IN-PLACE BEFORE THE CASTING OF ANY CONCRETE.

Shape codes to SANS 282 (With latest amendments)									
Preferred shapes								Other shapes	
20	42	53	73						
36	43	54	74						
37	45	55	75						
38	48	60	81						
41	49	62	83						
51	52	65	86						
52	72								

DIMENSIONS ARE GIVEN IN mm AND m.
DIMENSIONS OF BARS ARE OVERALL OUTSIDE DIMENSIONS.

WHEN SO DESIRED, THE STANDARD RADIUS (r) FOR CORNERS MAY BE INCREASED, BUT SHALL NOT APPLY TO END ANCHORAGES DENOTED BY h OR n. THIS CHANGE SHALL BE INDICATED AS SHAPE CODE 99.

FOR WELDED MESH FABRIC, DIMENSIONS A & B DEFINE THE NET OVERALL AREA OF MESH. NO ALLOWANCE HAS BEEN MADE FOR LAPS.

NOTES:

- ALTHOUGH THE BENDING SCHEDULES WERE PREPARED WITH CARE, MISTAKES MAY HAVE BEEN MADE THEREFORE, BEFORE ORDERING AND BEFORE CUTTING AND BENDING OF REINFORCEMENT COMMENCES THE CONTRACTOR MUST CHECK ALL SCHEDULES TO ENSURE CORRECTNESS OF TYPE OF REINFORCEMENT AND BENDING DIMENSIONS.
- IN CASE CHANGES ARE NECESSARY, THEY SHOULD CONFORM TO THE REQUIREMENTS SHOWN ON THE DRAWINGS AND BE IN ACCORDANCE WITH SANS 10144 (WITH THE LATEST AMENDMENTS).
- ALL BENDING SHALL BE DONE IN ACCORDANCE WITH SANS 282 (WITH THE LATEST AMENDMENTS).
- FOUR TYPES OF REINFORCING STEEL CAN BE SPECIFIED ON REINFORCEMENT DRAWINGS AND BENDING SCHEDULES (IN ACCORDANCE WITH SANS 920 AND SANS 1024 WITH THE LATEST AMENDMENTS) viz:
 - R REINFORCEMENT SHALL BE TYPE A: HOT ROLLED MILD STEEL BARS OF PLAIN ROUND CROSS-SECTION HAVING A MINIMUM YIELD STRESS OF 250 MPa FOR BARS OF DIAMETER UP TO AND INCLUDING 20 mm AND HAVING A MINIMUM YIELD STRESS OF 230 MPa FOR BARS WITH DIAMETER GREATER THAN OR EQUAL TO 25 mm.
 - Z REINFORCEMENT SHALL BE TYPE B: GRADE 1: HOT ROLLED DEFORMED MILD STEEL BARS HAVING A MINIMUM YIELD STRESS AS FOR TYPE A.
 - Y REINFORCEMENT SHALL BE TYPE C: CLASS 2: GRADE 1: HOT ROLLED DEFORMED HIGH YIELD STRESS STEEL BARS HAVING A MINIMUM YIELD STRESS OR A MINIMUM 0,25% PROOF STRESS OF 450 MPa.

REF. ALL STEEL FABRIC SHALL BE IN ACCORDANCE WITH SANS 1024 (WITH THE LATEST AMENDMENTS) HAVING A MINIMUM 0,2% PROOF STRESS OF 480 MPa.

FOR EXAMPLE: R20 DENOTES A 20 mm DIAMETER PLAIN ROUND BAR OF MILD STEEL.
Z12 DENOTES A 12 mm DIAMETER DEFORMED BAR OF MILD STEEL.
Y25 DENOTES A 25 mm DIAMETER DEFORMED BAR OF HIGH TENSILE STEEL.
REF. 655 DENOTES FABRIC REFERENCE 655 (MESH).

- NOTES:**
- COVER TO ALL REINFORCEMENT IS 50 mm UNLESS OTHERWISE INDICATED.
 - LAP LENGTHS = 40 X Ø.
 - ANCHORAGE LENGTHS = 50 X Ø.
 - CONCRETE GRADE 35/19.

REINFORCEMENT
(To: SANS 920 With latest amendments)
R - Plain mild steel bars (Type A)
(fy=250 MPa < 20 mm [and fy=230 MPa > 25 mm [)
Z - Deformed mild steel
(fy=250 MPa < 20 mm [and fy=230 MPa > 25 mm [)
Y - High yield steel
(Type C : Class 2 : Grade 1 : fy=450 MPa)
Where: fy=Yield stress

EXAMPLE
20Y25-A63-150 T2
20 - Bars
Y - High yield steel
25 - Diameter in mm
A63 - Bar mark number
150 - Spacing c/c in mm
T2 - Location

NF - Near face IF - Inside face
FF - Far face OF - Outside face
EF - Each face T - Top
EW - Each way B - Bottom
CTF - Cut to fit CTL - Cut to length
ABR - Alternative bars reversed

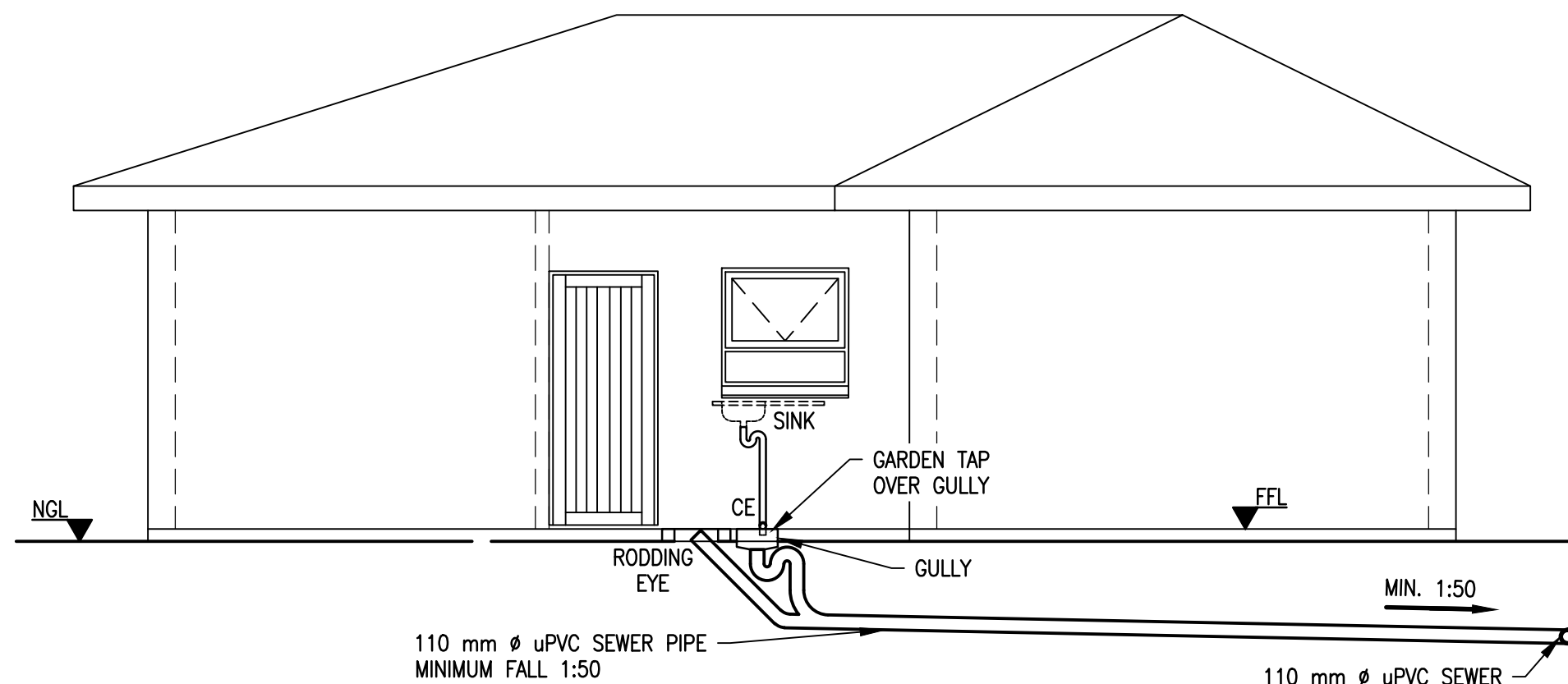
Cover as specified

1/10	LIST OF DRAWINGS	HDH001	177 407/19
SHEET	DESCRIPTION	OTHER No.	REG. No.

HAZELMERE RESETTLEMENT HOUSING PROJECT

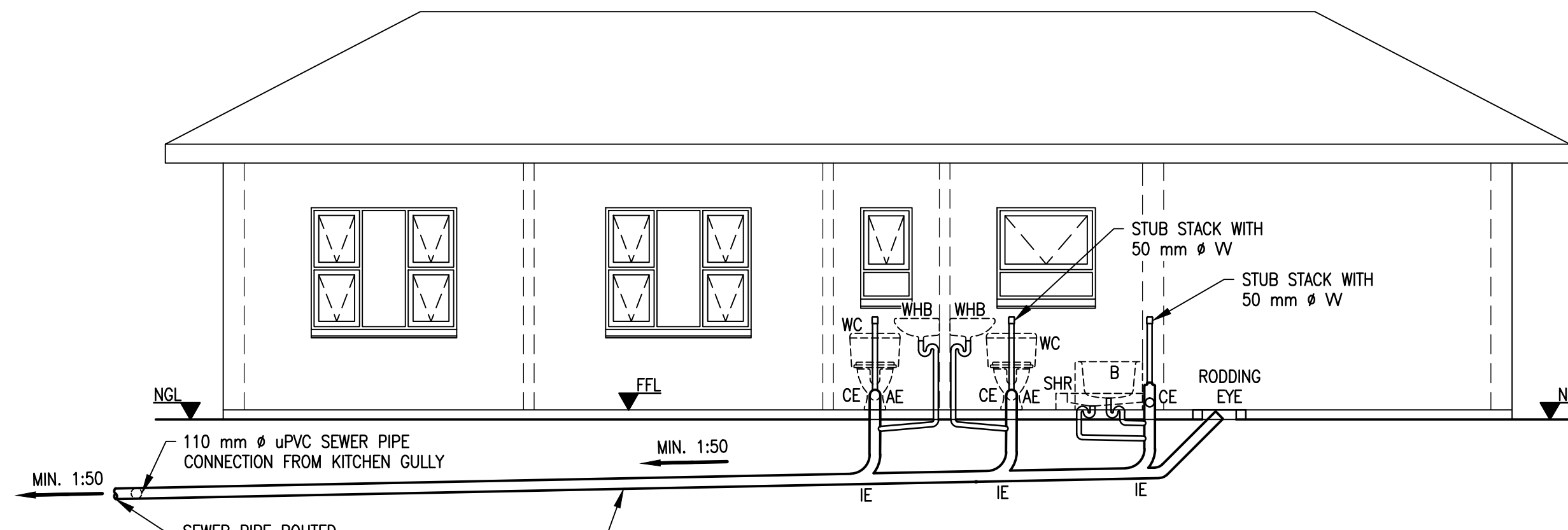
OAKFORD PRIORITY HOUSING
FLOOR PLAN AND FOUNDATION SLAB - 100 SQUARE METER HOUSE

PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU - - - OTHER NUMBER	HDH006
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET REG. No.	REV.
CALCULATION FILE: 20/2/U300-01/C/1/1	6 of 10	177 411/19	00



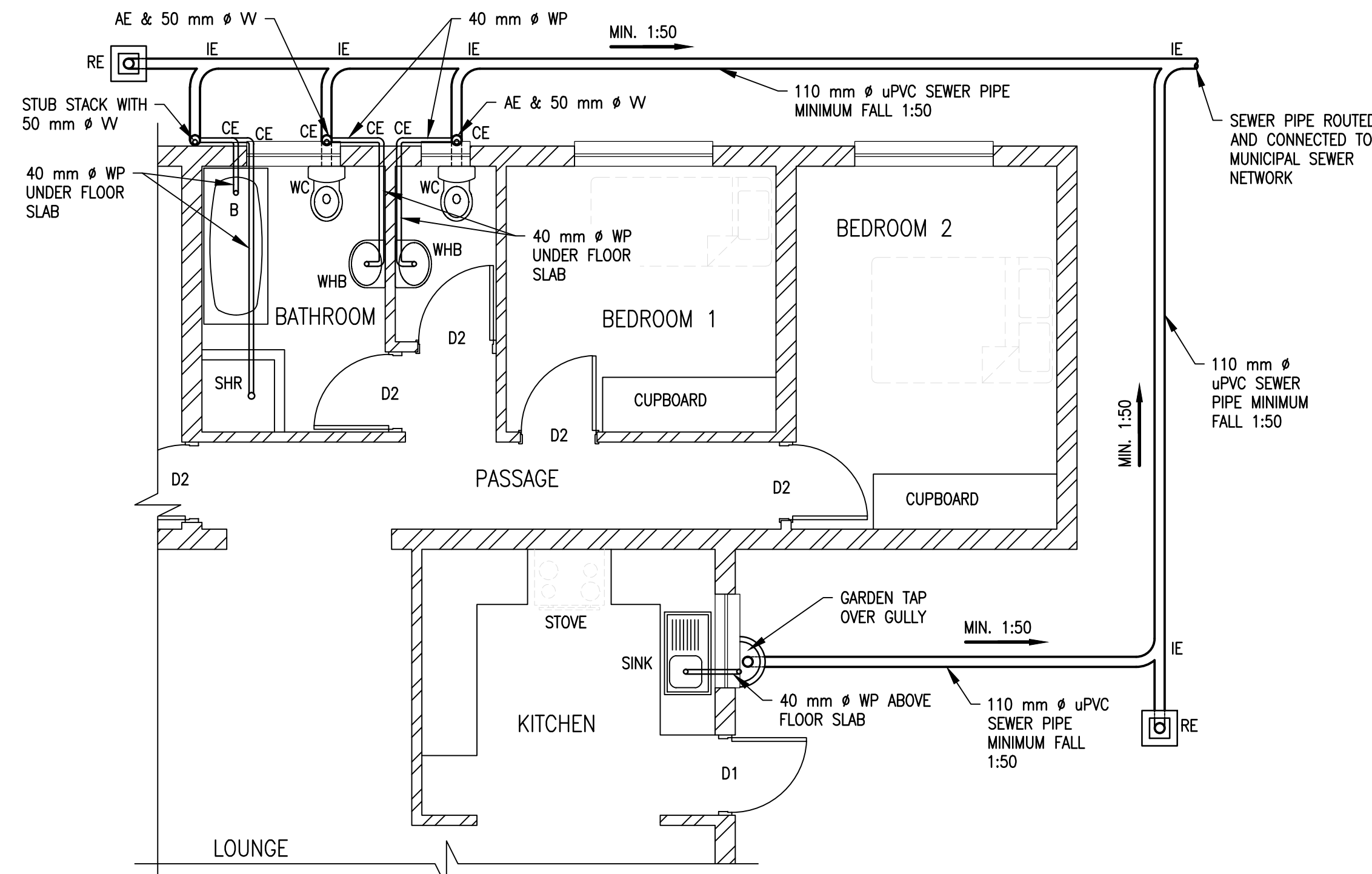
NORTH-EASTERN ELEVATION

SCALE 1:50



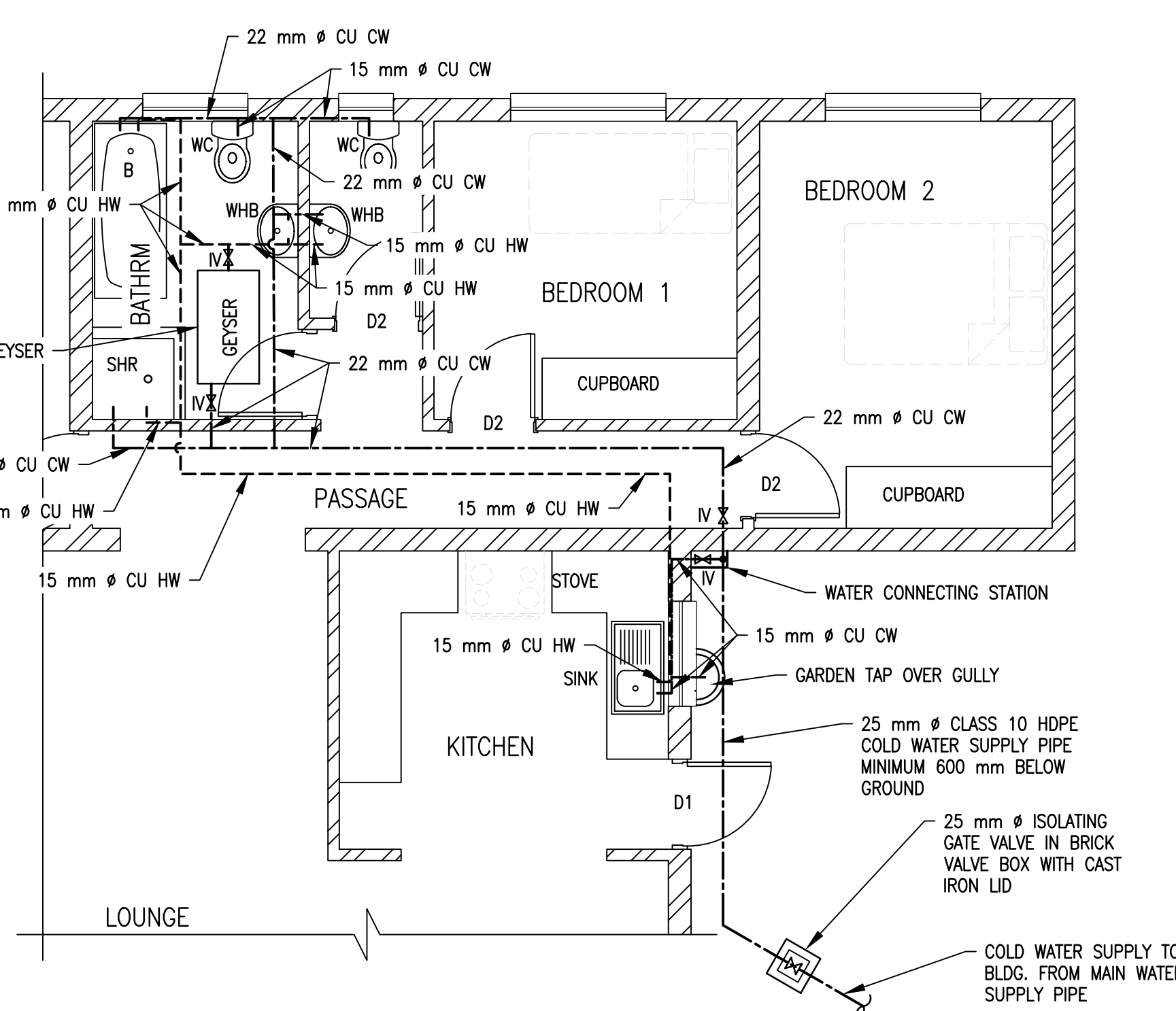
NORTH-WESTERN ELEVATION

SCALE 1:50



SEWER PLAN LAYOUT

SCALE 1:50



WATER RETICULATION LAYOUT

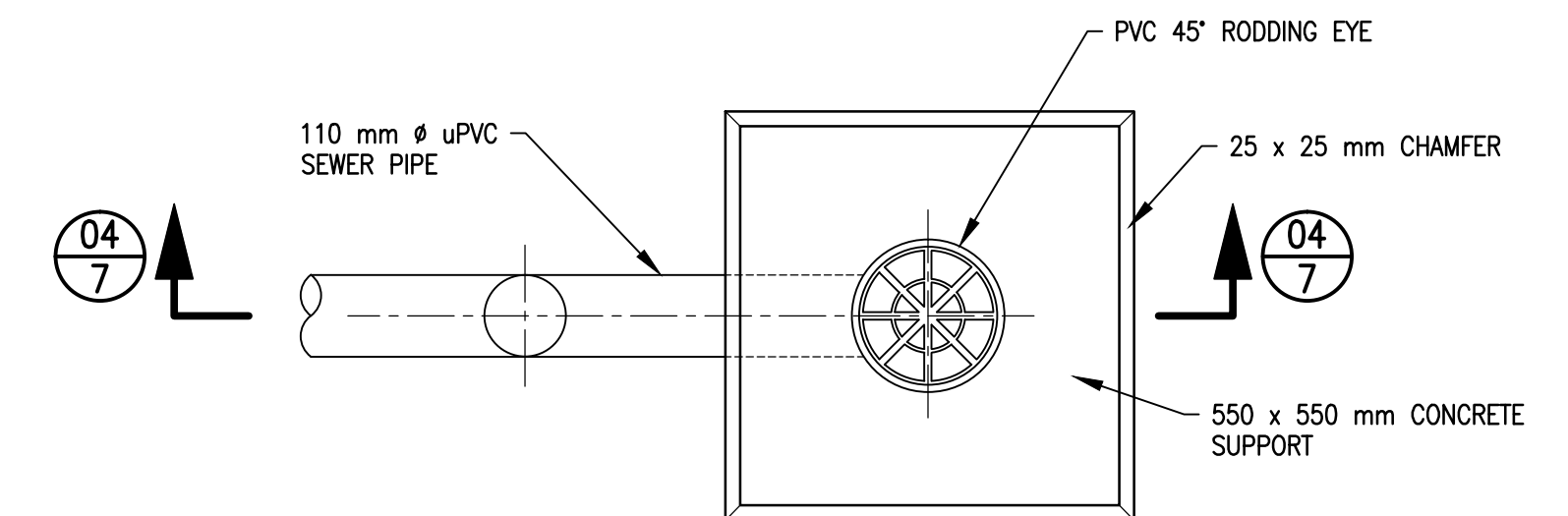
SCALE 1:50

WATER RETICULATION NOTES:

1. POSITION OF PIPE ROUTES SHALL BE THE SHORTEST AND MOST PRACTICAL ROUTES EITHER MOUNTED IN THE ROOF CONSTRUCTION, SURFACE MOUNTED ON EXTERIOR WALLS OR CHASED IN THE INTERIOR WALLS.
2. ALL OTHER SPECIFICATIONS REGARDING ISOLATION VALVES, BALL STOPS, MINIMUM PIPE DIAMETERS, ETC, SHALL BE APPLICABLE.
3. THE GEYSER SHALL BE HORIZONTAL MOUNTED IN THE CEILING ABOVE THE BATHROOM. MUST BE INSTALLED WITH A DRIP TRAY AND FREE FLOWING PIPE.
4. MATERIAL FOR INTERNAL WATER RETICULATION PIPES SHALL BE COPPER CLASS 1 WITH CAPILLARY JOINTS AND/OR RESISTANT COMPRESSION FITTINGS.
5. THE COLD AND HOT WATER MAIN SUPPLY PIPES SHALL BE 22 mm Ø CU AND THE LAST SANITARY FITTING SHALL BE 15 mm Ø CU EXCEPT TO THE SHOWER AND BATH WHICH STAYS 22 mm Ø.
6. FIT A BALL STOP ISOLATING VALVE TO COLD WATER SUPPLY PIPES TO WC AND TO HOT AND COLD WATER PIPES TO WHB TAPS.

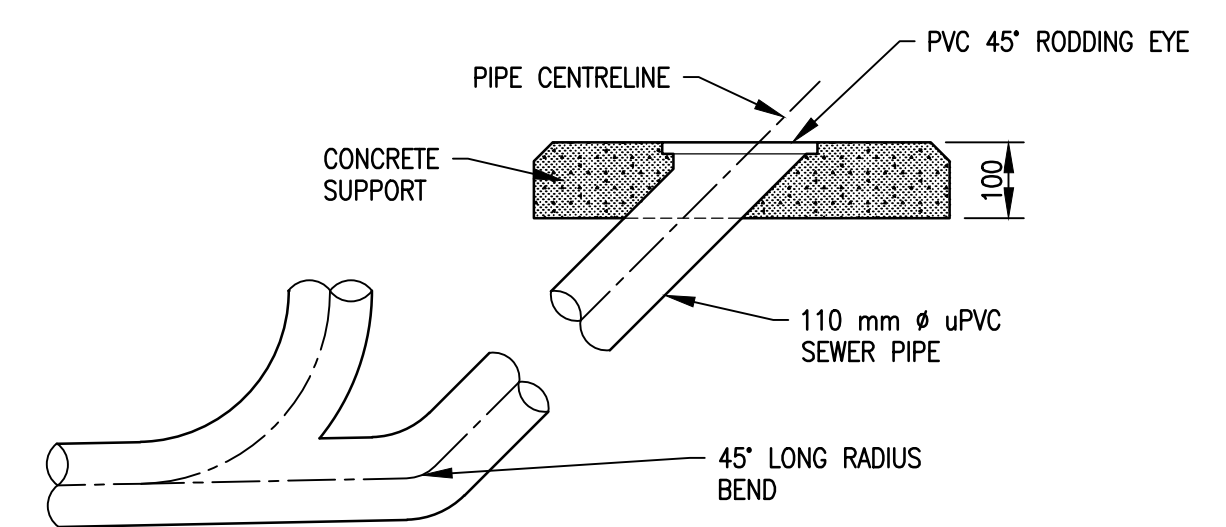
ABBREVIATIONS:

- | | |
|-----------------------------|---|
| WC – WATER CLOSET | CU – CLASS 1 COPPER PIPE WITH CAPILLARY SOLDERED JOINTS OR COMPRESSION FITTINGS |
| B – BATH | |
| WHB – WASH HAND BASIN | |
| SHR – SHOWER | |
| SINK – STAINLESS STEEL SINK | |
| WP – WASTE WATER PIPE | CW – COLD WATER PIPE : ——— |
| VV – VENT VALVE | HW – HOT WATER PIPE : - - - - - |
| CE – CLEANING EYE | ISOLATING VALVE : ——— IV ——— |
| AE – ACCESS EYE | |
| IE – INSPECTION EYE | |
| RE – RODDING EYE | |
| G – GULLY | |



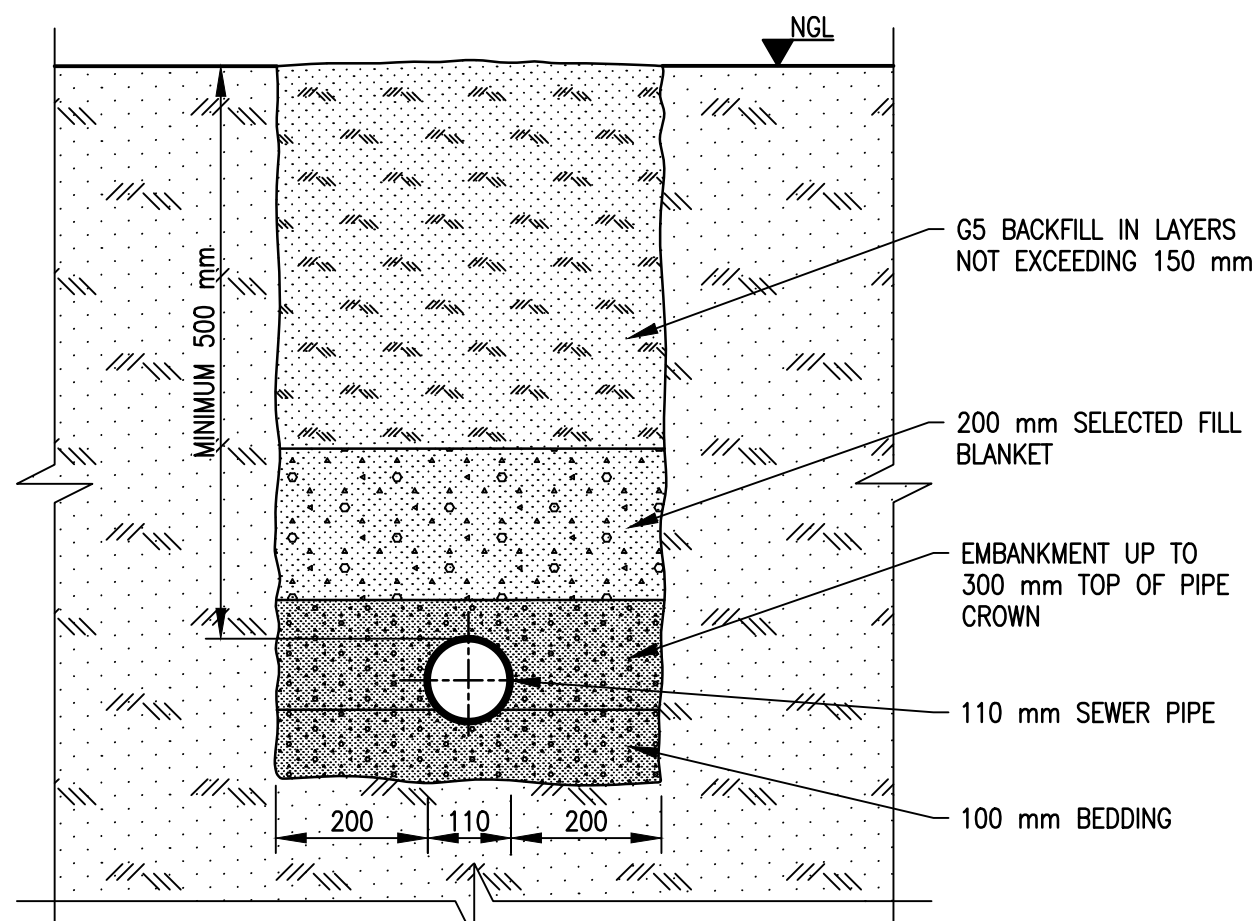
DETAIL 'D': TYPICAL PLAN VIEW OF RODDING EYE AT HEAD OF SEWER

SCALE 1:10



SECTION 04-04: TYPICAL RODDING EYE DETAIL AT HEAD OF SEWER

SCALE 1:10

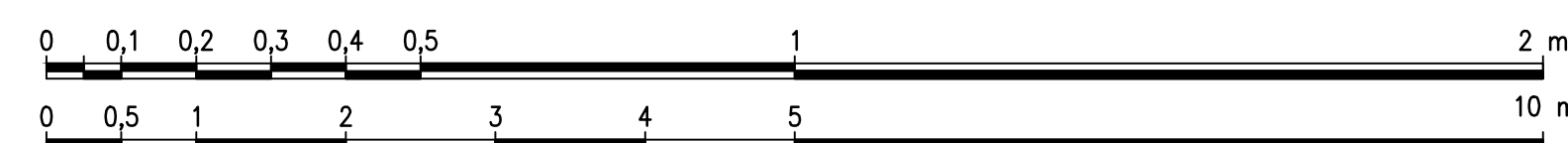


TYPICAL ECAVATION AND BACKFILL DETAIL FOR 110 mm SEWER PIPE

NTS

SCALE 1:10

SCALE 1:50



SECTION

SECTION NUMBER
07/3
SHEET NUMBER

TENDER ONLY

REVISION				
MOD No.	DATE	DESCRIPTION	FOR	DWS
001	11/20	ISSUED FOR INFORMATION	—	—

DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA				
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDI BENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500		
CHECKED: —		DESIGN: —		
ENGINEER: —		DRAWN: —		
EXT. APPROVAL / DESIGN CHECKED: —		DATE: —		
CHIEF ENGINEER / APP (Pr. Eng): —		DATE: —		

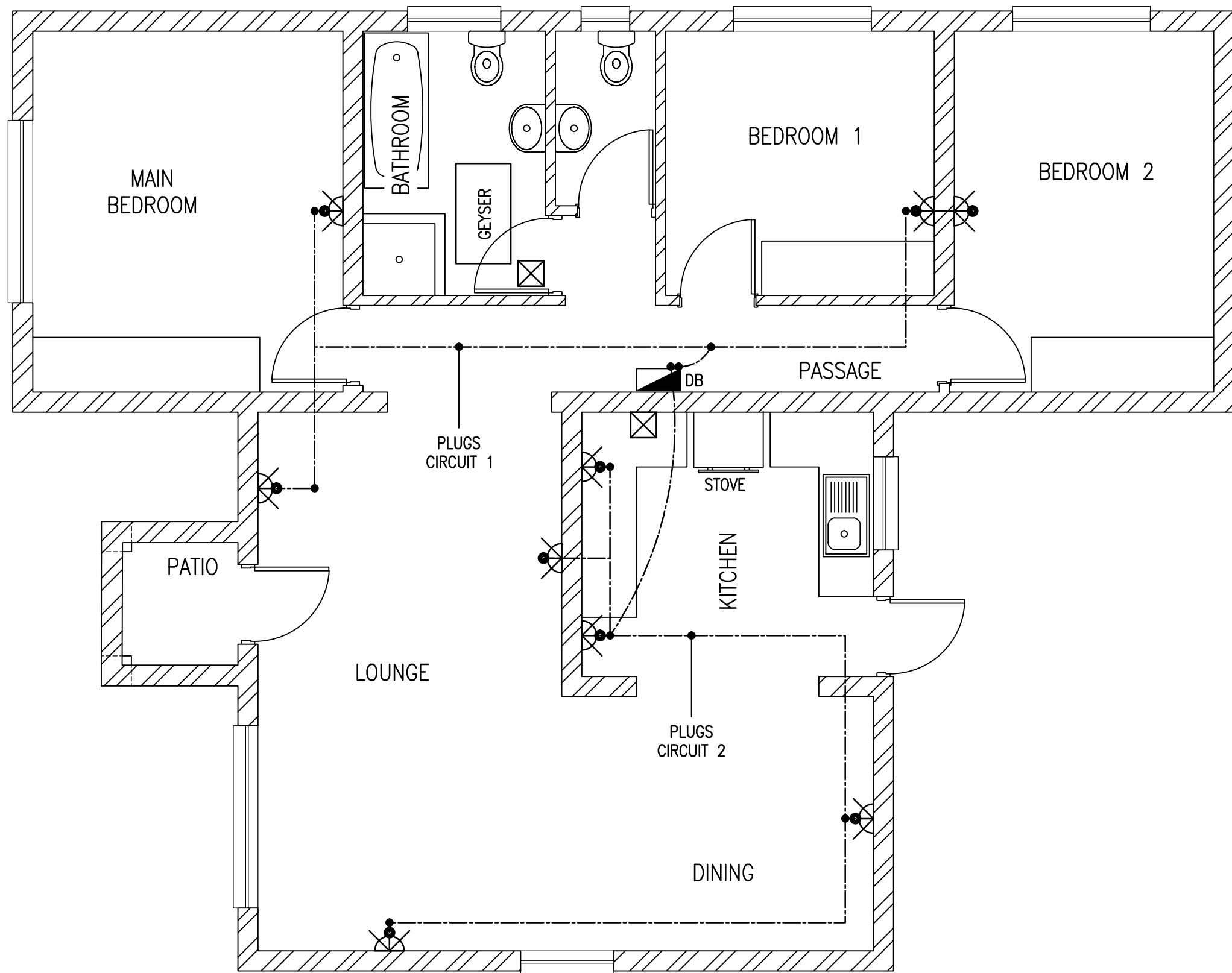
HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD HOUSING

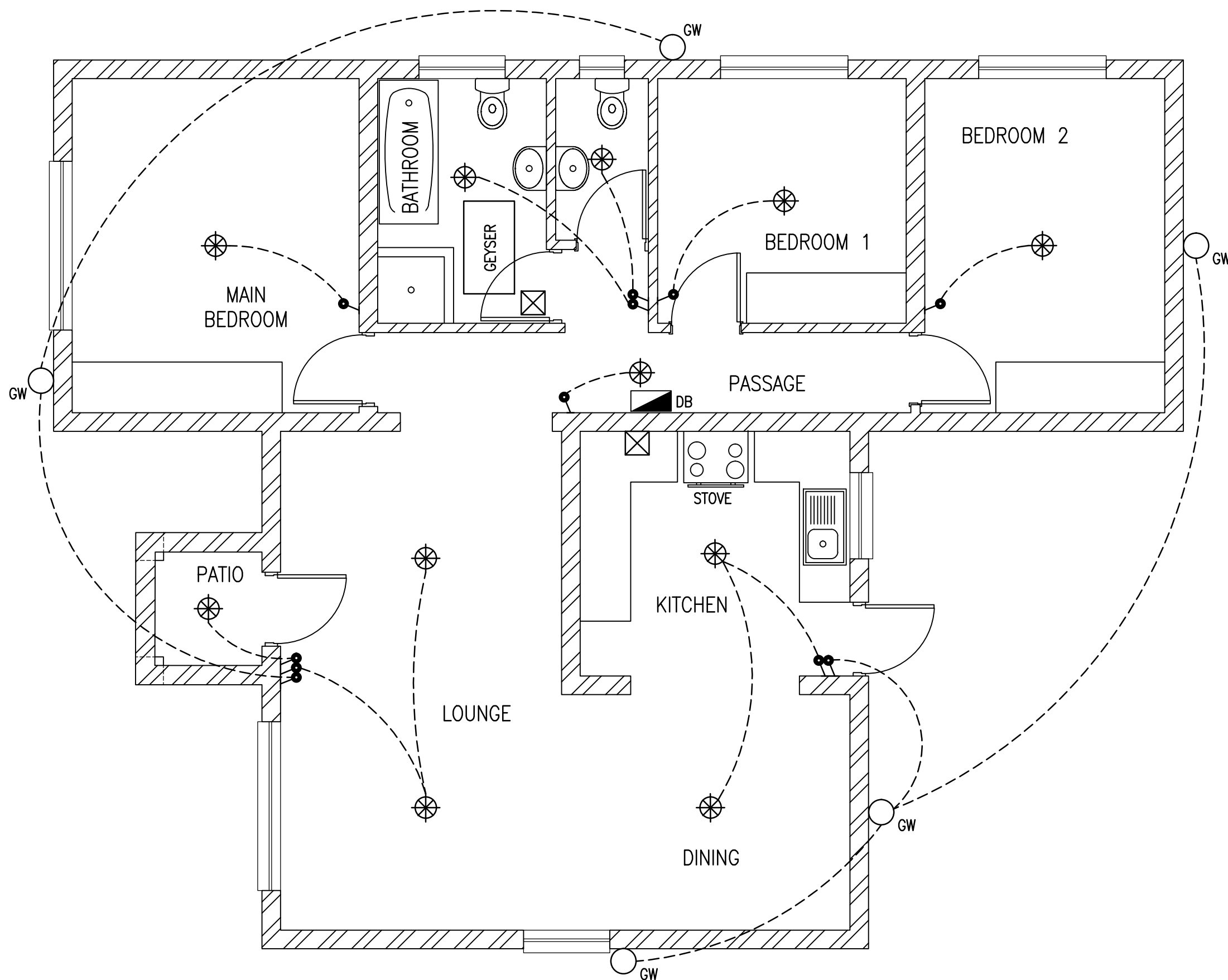
SEWER AND WATER RETICULATION LAYOUT –
100 SQUARE METER HOUSE

PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU — — —	OTHER NUMBER: HDH007
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET No.: 7 of 10	REV. No.: 00
CALCULATION FILE: 20/2/U300-01/C/1/1		177 412/19	

1/10	LIST OF DRAWINGS	HDH001	177 407/19
SHEET	DESCRIPTION	OTHER No.	REG. No.



FLOOR PLAN: POSITIONS OF PLUGS
SCALE 1:50



FLOOR PLAN: POSITIONS OF SWITCHES
AND LIGHT FITTINGS
SCALE 1:50

ELECTRICAL REFERENCE AND NOTES:

- 16A SINGLE SOCKET OUTLETS ON WALLS. 1 060 mm ABOVE FFL IN KITCHEN AND 460 mm ABOVE FFL ELSEWHERE.
- 16A DOUBLE SOCKET OUTLETS ON WALLS. 1 060 mm ABOVE FFL IN KITCHEN AND 460 mm ABOVE FFL ELSEWHERE.
- STOVE AND GEYSER ISOLATORS.
- 336 x 290 x 200 mm WALL MOUNTED LUMINAIRE (1 x 125 MV LAMP) WITH EYELID FOR DOWNWARD AND SIDEWAYS ILLUMINATION, ALUMINUM DIE-CAST BODY AND POLYCARBONATE DIFFUSER. COMPLETE WEATHER AND INSECT PROOF.
- DISTRIBUTION BOARD.
- LUMINAIRE SWITCH 1 200 mm ABOVE FFL.
- BULKHEAD LUMINAIRE MOUNTED TO THE CEILING.

DISTRIBUTION BOARD:

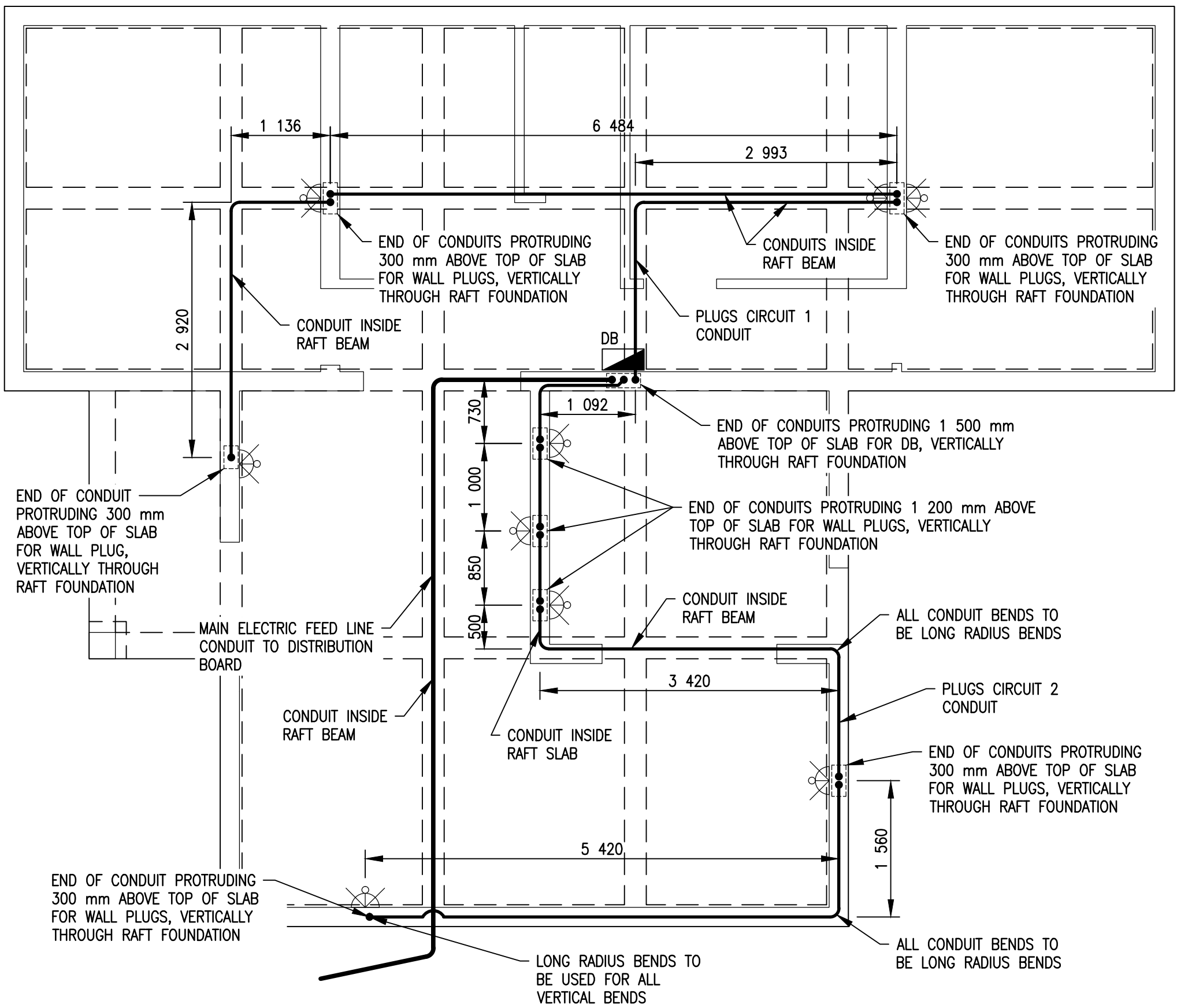
THE DISTRIBUTION BOARD SHALL BE POSITIONED BEHIND THE KITCHEN DOOR AS SHOWN ON THE DRAWINGS. CIRCUIT ISOLATORS, AMPERES, EARTH LEAKAGE, ETC. SHALL BE ACCORDING TO THE SPECIFICATIONS OF THE ELECTRICAL ENGINEER'S DESIGN.

EXTERIOR CABLE ENTRANCE CHAMBER TO DISTRIBUTION BOARD:

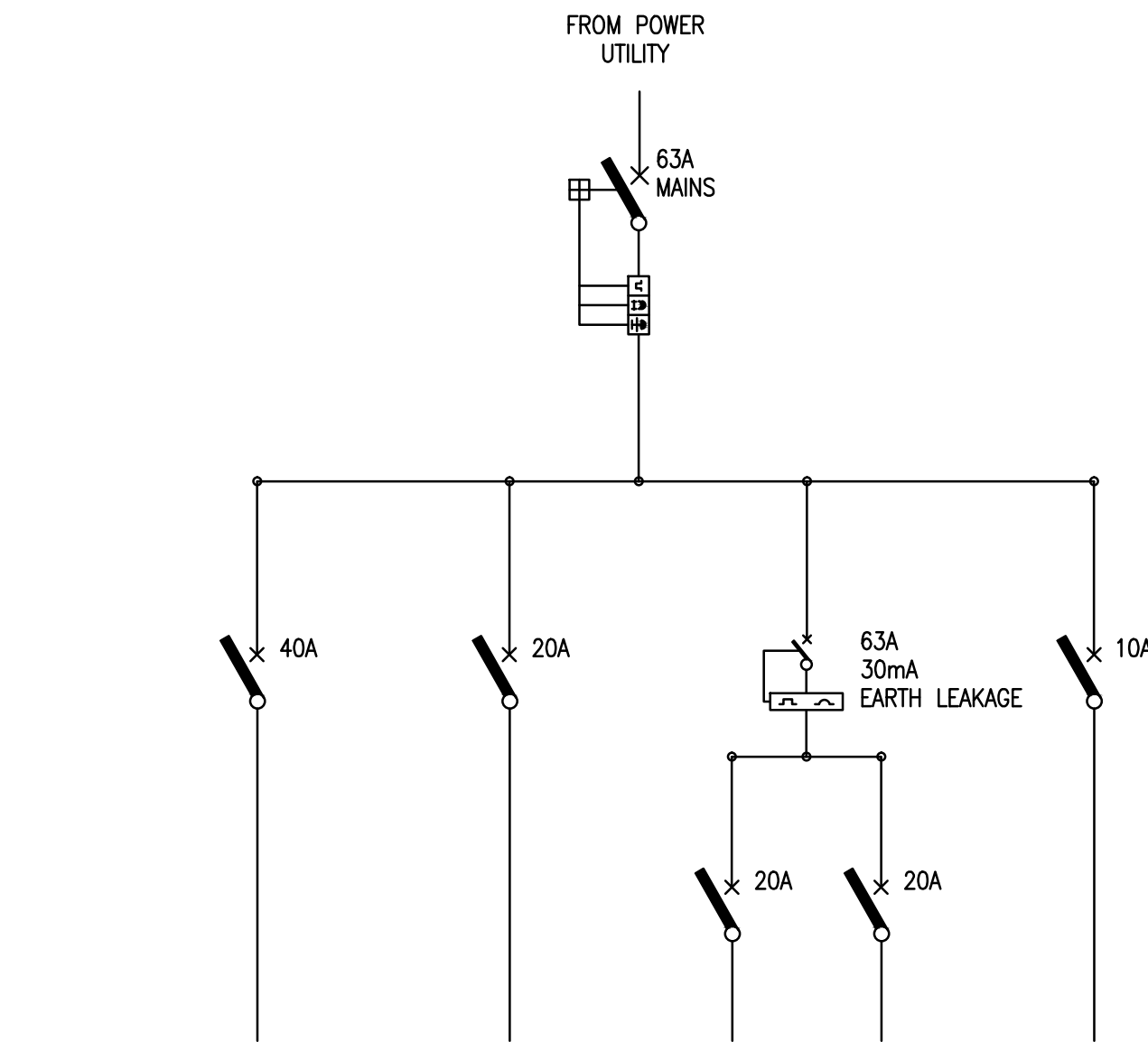
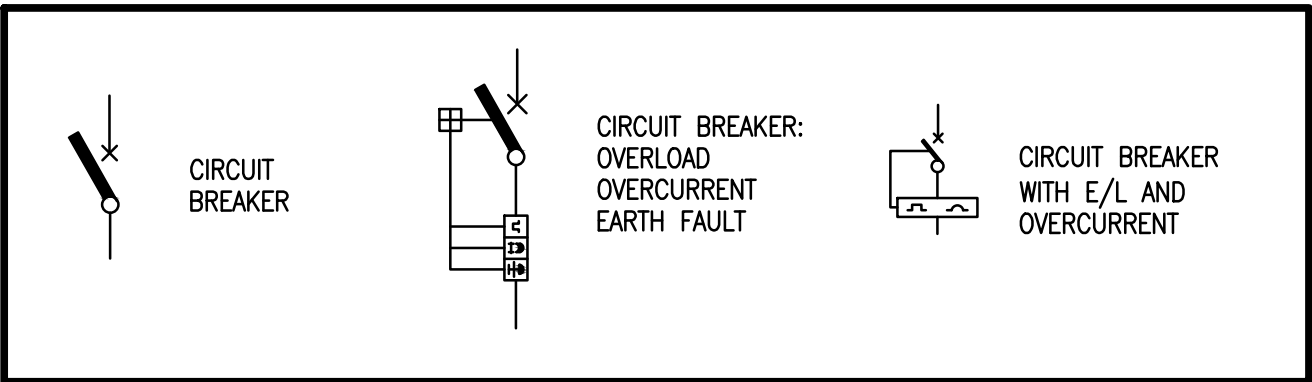
THE MAIN ELECTRICAL SUPPLY CABLE SHALL ENTER THE BUILDING FROM OUTSIDE TO THE DISTRIBUTION BOARD THROUGH A 50 mm Ø GALVANIZED MILD STEEL SLEEVE BELOW GROUND LEVEL ROUTED UNDER THE CONCRETE FLOOR BEDDING AND WITH A SLOW BEND CHASED VERTICAL UP THE WALL TO THE DISTRIBUTION BOARD. CABLE SIZE AND TYPE ETC. SHALL BE ACCORDING TO THE ELECTRICAL ENGINEER'S SPECIFICATION.

NOTES:

- NUMBER OF WIRING CIRCUITS, SPECIFICATIONS, POSITION OF CONDUITS AND COMPLETE RETICULATION LAYOUT SHALL BE ACCORDING TO THE ELECTRICAL ENGINEER'S DESIGN.
- ALL WORK SHALL COMPLY WITH THE "ELECTRICAL BOARD OF CONTROL" AND A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED WITHIN SEVEN DAYS AFTER THE FINAL SUCCESSFUL COMMISSIONING OF THE ELECTRICAL INSTALLATION.
- THE INSTALLATION OF MORE THAN ONE LUMINAIRE'S ON-OFF-SWITCH IN THE SAME POSITION SHALL BE INSTALLED AS A COMBINATION MULTI-SWITCH UNIT.
- ALL WORK SHALL BE DESIGNED AND INSTALLED BY A COMPETENT PERSON IN ACCORDANCE WITH SANS 10142-1: 2017 EDITION 2 THE WIRING OF PREMISES LOW VOLTAGE INSTALLATION.



FLOOR PLAN: POSITION OF CONDUITS
IN FOUNDATION
SCALE 1:50



	STOVE	GEYSER (150 l)	PLUGS CIRCUIT 1	PLUGS CIRCUIT 2	LIGHTS (FOR NORMAL 100W BULB)
POWER	8 740 W	3 910 W	3 680 W	3 680 W	1 400 W
FLC (A)	38 A	17 A	16 A	16 A	6 A
CABLE SIZE	6 mm² PVC SWA	4 mm² PVC SWA	2.5 mm² PVC SWA	2.5 mm² PVC SWA	2.5 mm² PVC SWA

SINGLE LINE DIAGRAM
NTS

SCALE 1:50



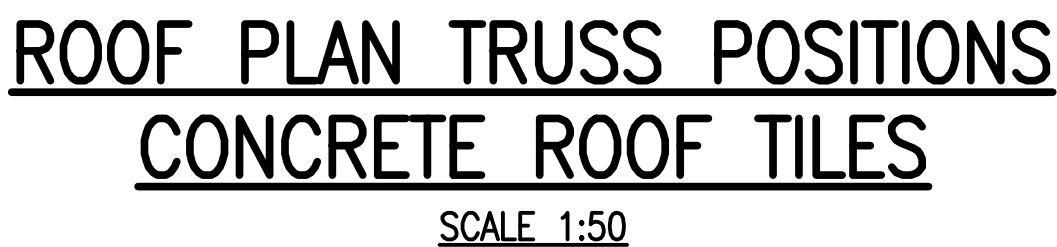
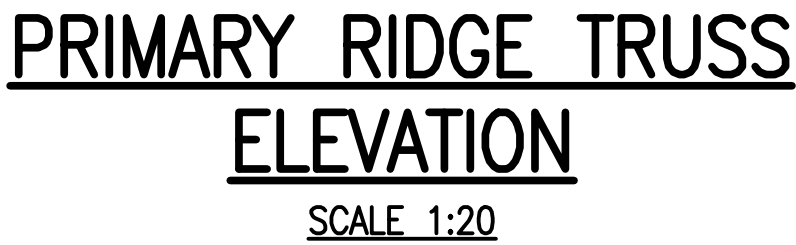
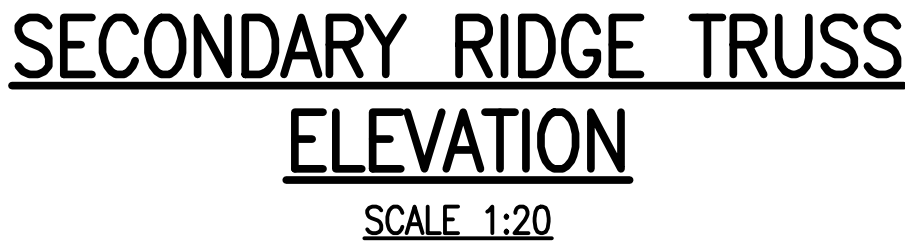
REVISION				
MOD No.	DATE	DESCRIPTION	FOR	DWS
001	11/20	ISSUED FOR INFORMATION	-	-

DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA				
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDIENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500		
CHECKED:		DESIGN: - DATE: DRAWN: -		
ENGINEER:		EXT. APPROVAL / DESIGN CHECKED: DATE:		
CHIEF ENGINEER / APP (Pr. Eng):		DATE: DIRECTOR (Pr. Eng): DATE:		

HAZELMERE RESETTLEMENT HOUSING PROJECT

OAKFORD HOUSING
ELECTRIC CIRCUIT LAYOUT - 100 SQUARE
METER HOUSE

PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU - - -	OTHER NUMBER: HDH008
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET REG. No.: 8 of 10	REV. 00
CALCULATION FILE: 20/2/U300-01/C/1/1		177 413/19	



1. FACTORY COLOURED CONCRETE TILES ON 38 x 38 mm BATTENS AT CENTRES ACCORDING TO SUPPLIER'S SPECIFICATIONS ON SISALATION 405 RSA SUPPORTED BY 2 mm ϕ GALV. STRAINING WIRES ϕ 300 mm CENTRES NAILED ON SAP ROOF TRUSSES. TRUSSES MANUFACTURED FROM GRADE 6 SA PINE AT 750 mm MAX. CENTRES ON 75 x 38 mm SA PINE WALL PLATES, FASTENED WITH 4 mm ϕ GALV. WIRE BUILT IN PROTRUDING FROM FOUNDATION BEAM.
2. TIMBER ROOF STRUCTURE SHALL BE BRACED AND STIFFENED TO THE ENGINEER'S SATISFACTION AND APPROVAL. WHEN USING PRE-FABRICATED TRUSSES, SHOP DRAWINGS SHALL BE SUBMITTED BY THE SUPPLIER AND THE ROOF STRUCTURE SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER AS A SAFE STRUCTURE.
3. ALL JOINTS SHALL BE BOLTED AND NAILED. BOLTS SHALL BE HOT-DIPPED GALVANIZED M12 OF APPROPRIATE LENGTH LEAVING MIN. 20 mm OF BOLT LENGTH FOR A FLAT WASHER AND NUT. NAILS SHALL BE WIRE CUT OF APPROPRIATE LENGTH LEAVING MIN. 25 mm FOR BENDING ON EXIT SIDE.
4. CEILING CORNICE PAINT SPECIFICATION: SA PINE & MERANTI - PREPARE & SAND AND APPLY 3 COATS MATT POLY-URETHANE VARNISH.

ALTERNATIVELY FOR SA PINE - PRIME WITH PINK WOOD PRIMER AND APPLY 2 TOP COATS EGGSHELL OR GLOSS ENAMEL PAINT COLOUR TO MATCH CEILING.
5. FOR ALL OTHER ROOFING DETAILS, GUTTERS, FASCIAS, SPECIFIC TYPE OF ROOF TILE, COLOUR, ETC. SEE SECTION OF BUILDING AND CONTRACT SPECIFICATIONS.

PROVINCE: KWA-ZULU NATAL		DISTRICT: ETHEKWINI		KEYCODES:		RTR	HOU	-	-	-	OTHER NUMBER	HDH009
LOCALITY No.: U300-01		TENDER/ CONTRACT No. C/0339		SHEET		REG. No.						REV.
CALCULATION FILE: 20/2/U300-01/C/1/1				9 OF 10		177 414/19				00		

REVISION				
MOD No.	DATE	DESCRIPTION	FOR	DWS
001	11/20	ISSUED FOR INFORMATION	-	
TENDER ONLY				

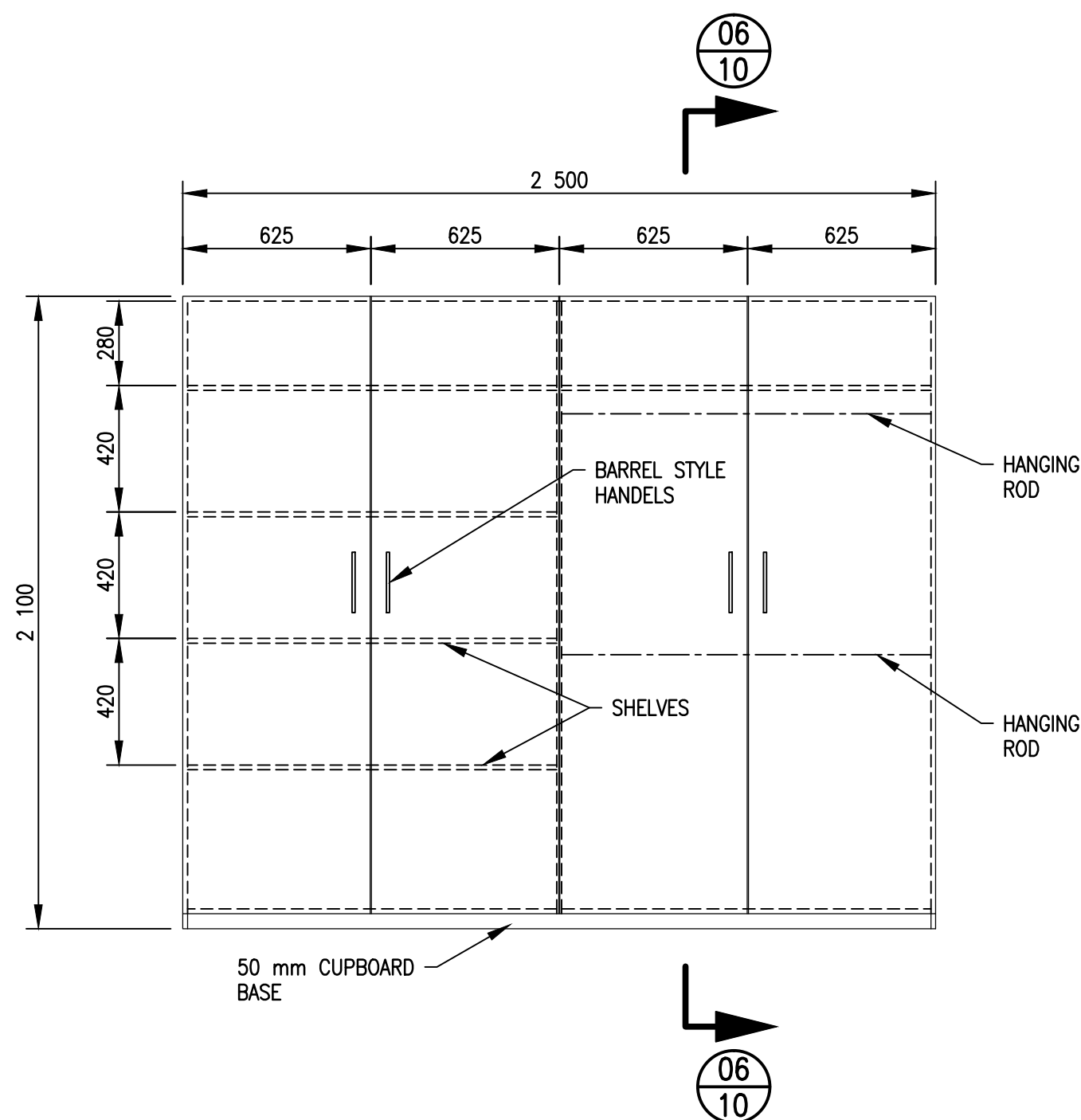
TENDER ONLY

CHIEF ENGINEER / APP (Pr. Eng): _____ DATE: _____ DIRECTOR (Pr. Eng): _____ DATE: _____

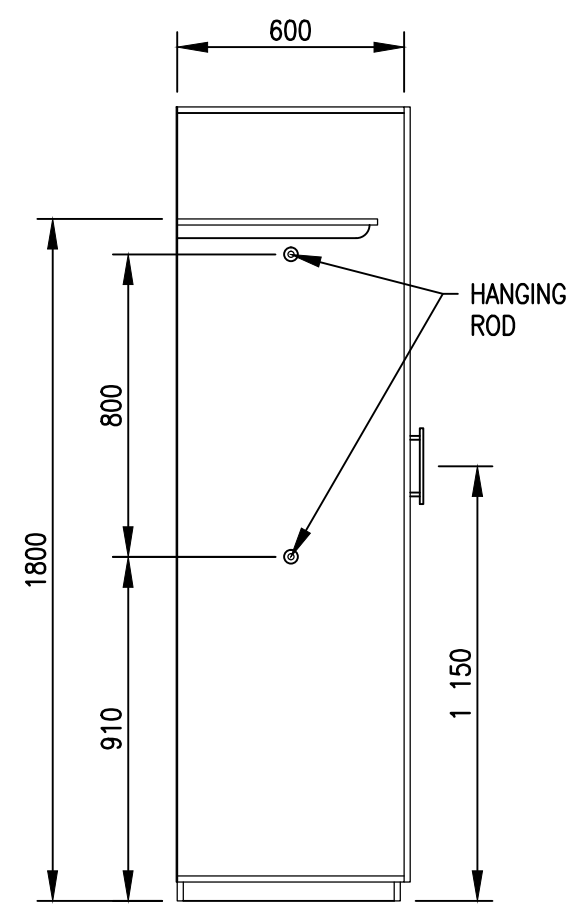
SCALE 1:50

A horizontal scale bar with markings at 0, 0.5, 1, 2, 3, 4, 5, and 10 m.

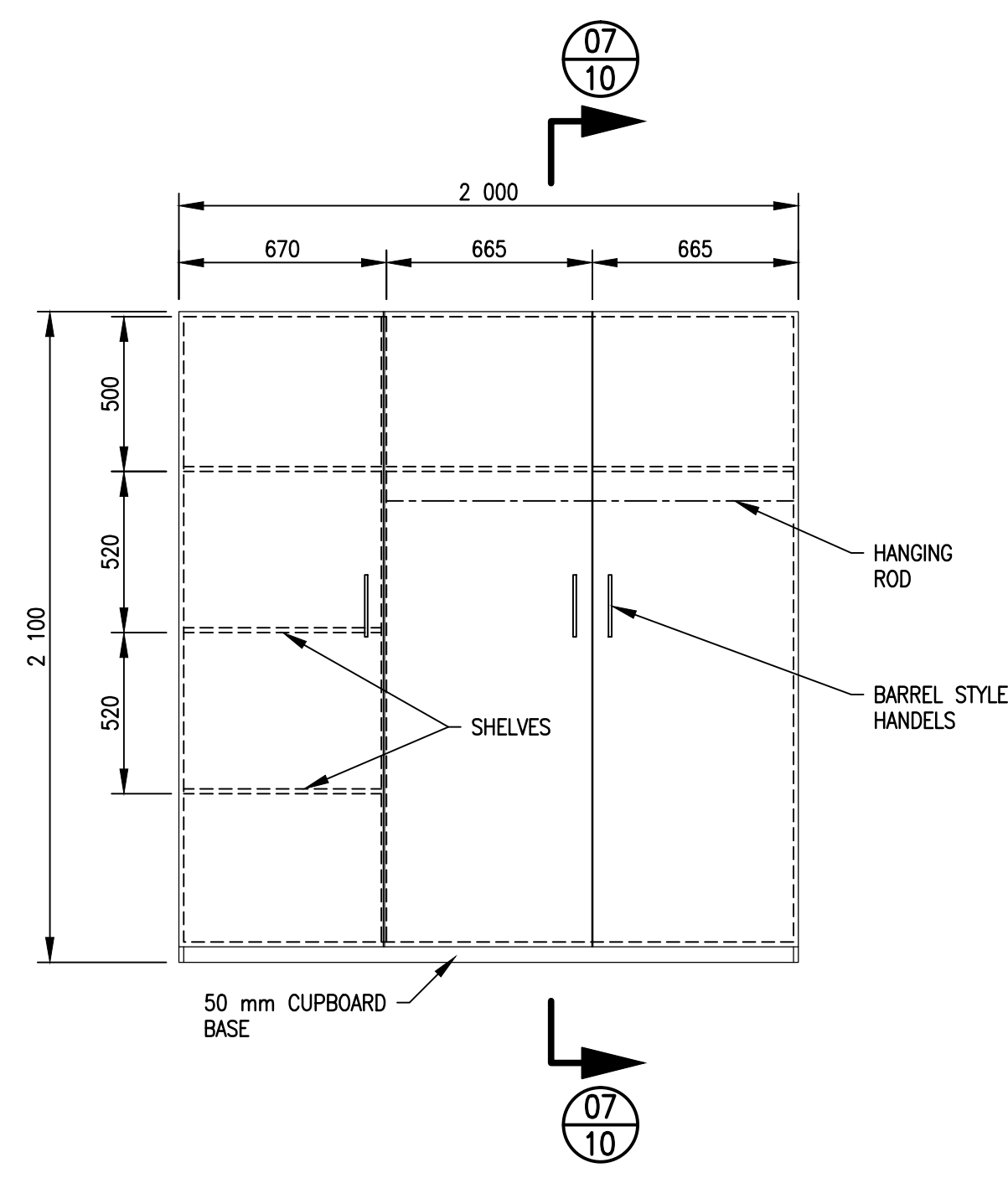
SHEET
NUMBER



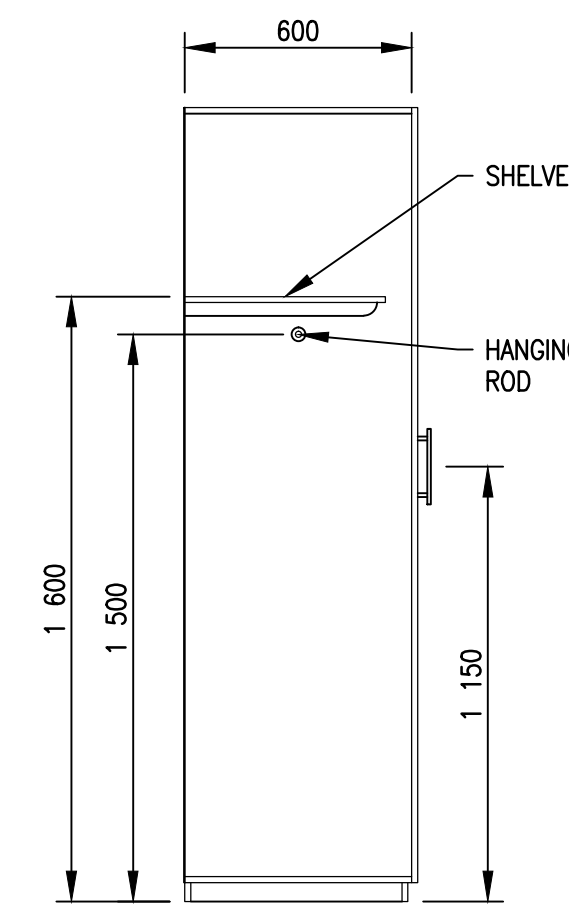
ELEVATION OF MAIN BEDROOM CUPBOARD
SCALE 1:20



SECTION 06-06
SCALE 1:20



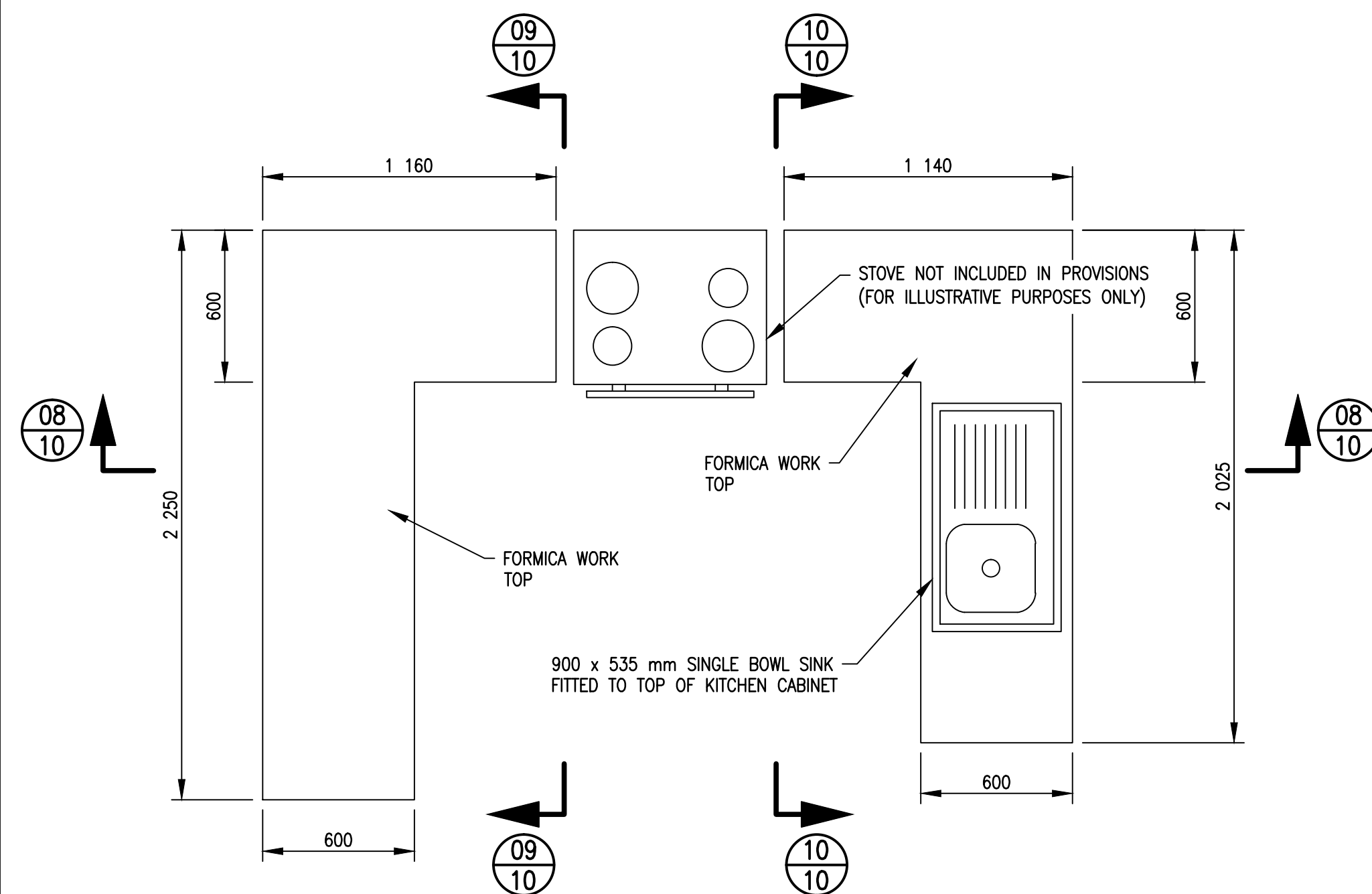
ELEVATION OF MAIN BEDROOM CUPBOARD
SCALE 1:20



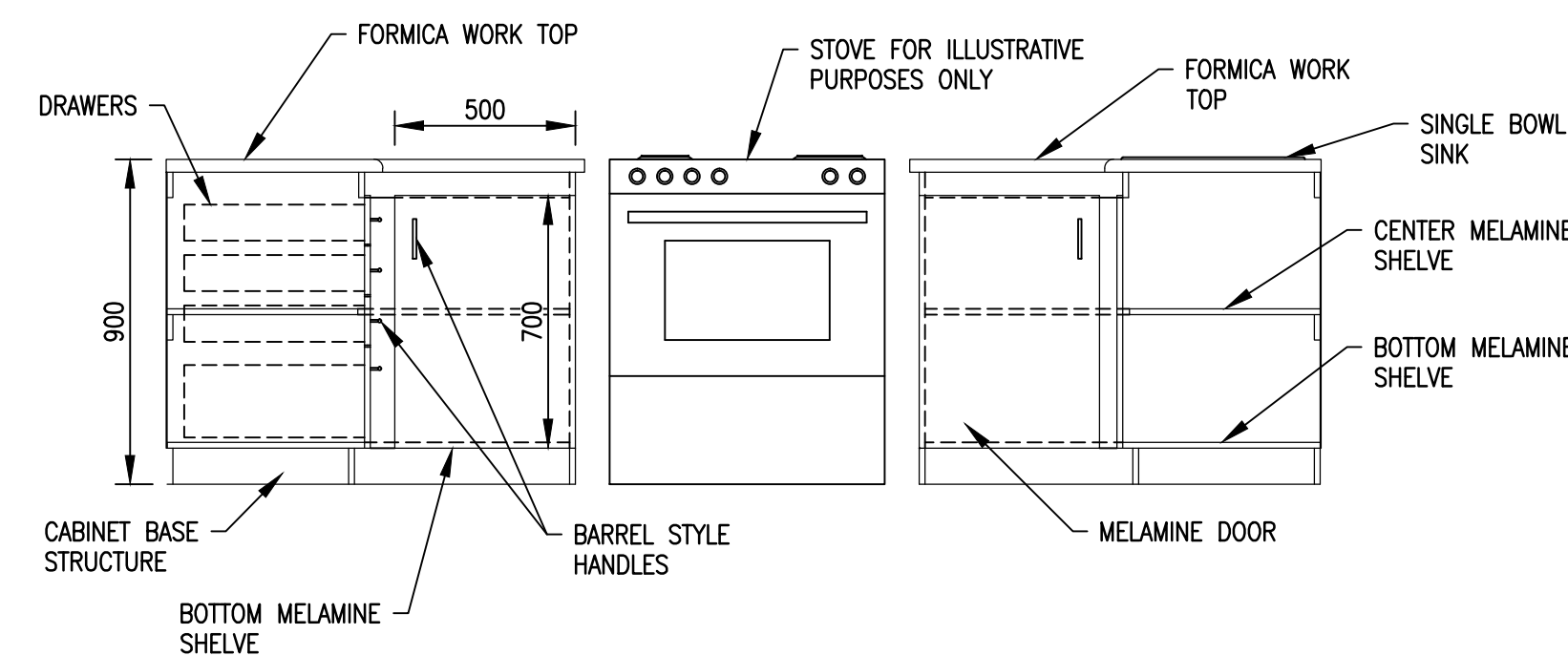
SECTION 07-07
SCALE 1:20

NOTES:

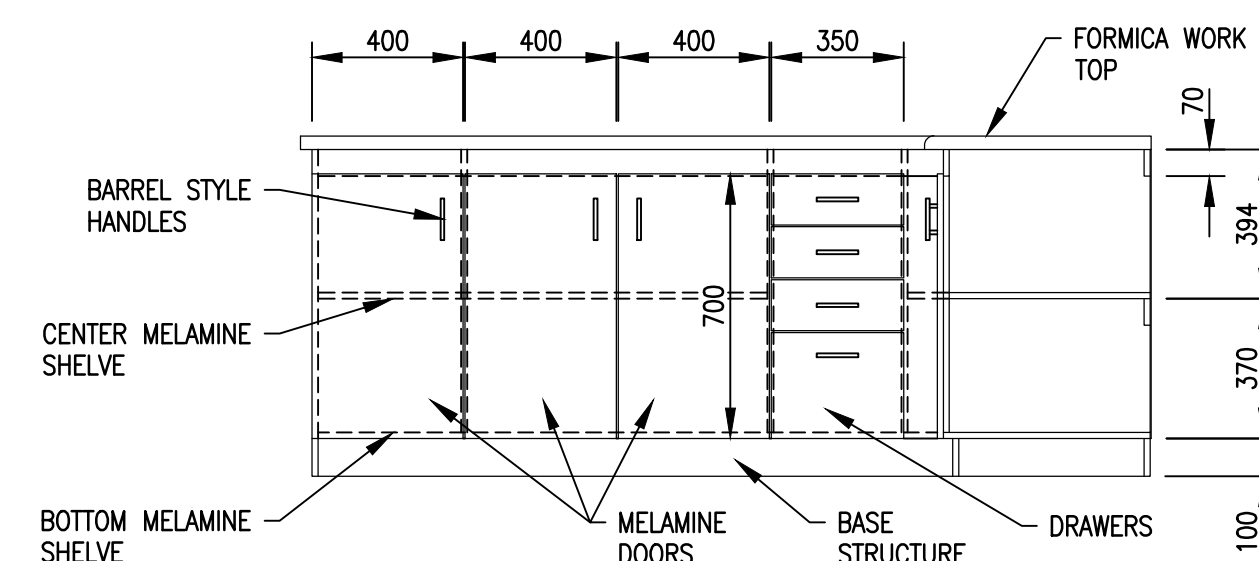
- CARCASSES OF BEDROOM CUPBOARDS AND KITCHEN CABINETS SHALL BE WHITE MELAMINE, DOWELED AND GLUED FIXED COMPONENTS.
- DOORS OF CABINETS SHALL ALSO BE WHITE MELAMINE.
- BACKS SHALL BE WHITE MASONITE GROOVED IN.
- HINGES – CONCEALED METAL HINGES.
- HANDLES – 128 mm BARREL HANDLES.
- FOR KITCHEN CABINETS FORMICA WORK TOP TO BE USED.
- LOCKS WHERE APPLICABLE – CHROME CAMLOCKS.
- METAL ROLLER RUNNERS USED FOR DRAWERS.
- STOVE NOT INCLUDED IN PROVISIONS.



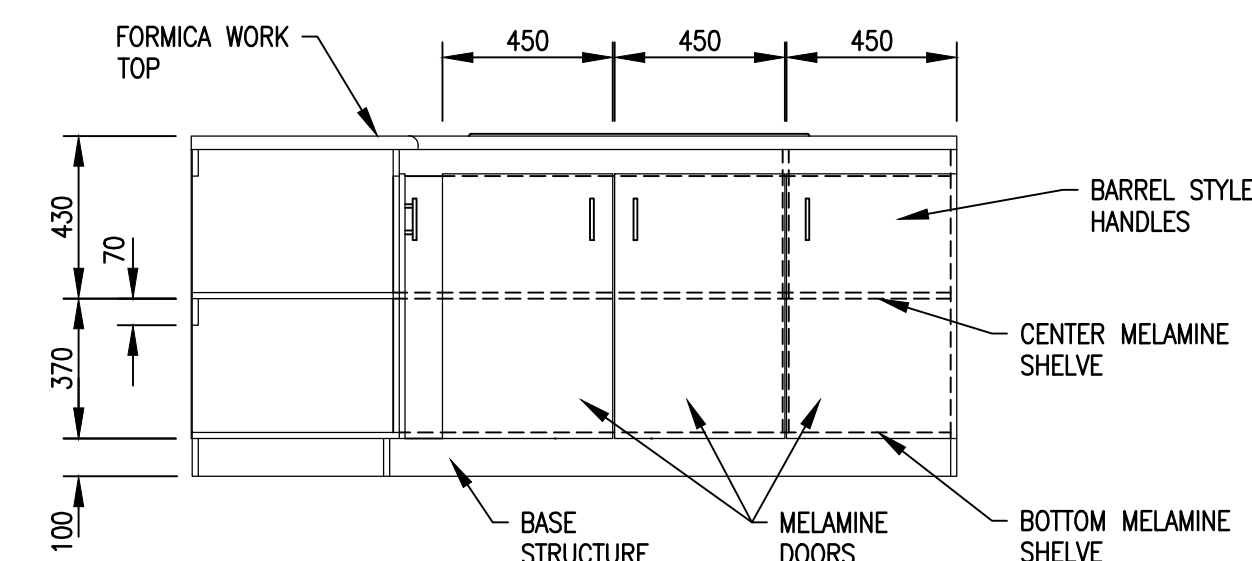
PLAN OF KITCHEN LAYOUT
SCALE 1:20



SECTION 08-08
SCALE 1:20

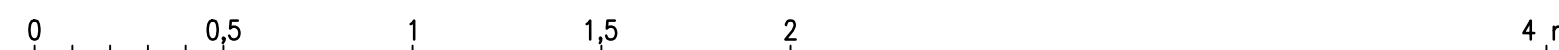


SECTION 09-09
SCALE 1:20



SECTION 10-10
SCALE 1:20

SCALE 1:20



SECTION
07/3
SECTION NUMBER
SHEET NUMBER

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MOD No.	DATE	DESCRIPTION	FOR	DWS
001	11/20	ISSUED FOR INFORMATION	—	—

DEPARTMENT OF WATER AND SANITATION REPUBLIC OF SOUTH AFRICA				
HEAD OFFICE CIVIL ENGINEERING PRIVATE BAG X313 PRETORIA 0001		SEDI BENG BUILDING 185 FRANCIS BAARD STREET PRETORIA (012) 336-7500		
CHECKED:		DESIGN: — DRAWN: —		
ENGINEER:		DATE: EXT. APPROVAL / DESIGN CHECKED: DATE:		
CHIEF ENGINEER / APP (Pr. Eng):		DATE: DIRECTOR (Pr. Eng): DATE:		

HAZELMERE RESETTLEMENT HOUSING PROJECT
OAKFORD PRIORITY HOUSING
CUPBOARDS DETAIL – 100 SQUARE METER HOUSE

PROVINCE: KWA-ZULU NATAL	DISTRICT: ETHEKWINI	KEYCODES: RTR HOU — — —	OTHER NUMBER	HDH010
LOCALITY No.: U300-01	TENDER/ CONTRACT No.: C/0339	SHEET	REG. No.	REV.
CALCULATION FILE: 20/2/U300-01/C/1/1		10 of 10	177 415/19	00

1/10	LIST OF DRAWINGS	HDH001	177 407/19
SHEET	DESCRIPTION	OTHER No.	REG. No.

LIST OF DRAWINGS