

# ***Summary File ONLY***

**PLEASE BE AWARE THAT  
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CANNOT BE PRINTED**

**IT IS BROWSABLE ON-SCREEN ONLY AND IS PROVIDED  
FOR YOUR INFORMATION TO DECIDE WHETHER TO  
BECOME A PROSPECTIVE TENDERER ONLY**

Note: This file may contain a brief scope statement, or an extract from the RFT documents, or a full exhibited copy – depending on the specific circumstances.

To participate in this tender process you **MUST** first download or order a full copy of the Request for Tender (RFT) documents, including the responsible components, and any addenda issued to date.

To do this return to the RFT web page on this web site and copy the RFT documents to your own computer or network – the blue “**DOWNLOAD A SOFT COPY**” link at the bottom provides access to the page from which you can do this.

**RFT Document**  
**for**  
**3 New houses at Tabulam**  
**RFT Id: 0901085**  
**May 2009**  
**NSW Department of Commerce**

This Specification has been produced using NATSPEC

by: GHD

Subscriber Number: 93 06 06 46

Consultants: GHD Pty Ltd



# TABLE OF CONTENTS

Page Number.

## **Tendering**

CONDITIONS OF TENDERING

C-1 to C-8

TENDER SCHEDULES

T-1 to T-19

## **Specification**

1. GENERAL CONDITIONS OF CONTRACT AND ANNEXURE

1-1 to 1-23

2. PRELIMINARIES

2-1 to 2-22

3. TECHNICAL SPECIFICATION

### APPENDICES:

Appendix D1 - Basix certificate Lot 101

Appendix D2 - Basix certificate Lot 103

Appendix D3 - Basix CertRev

### DRAWINGS:

Appendix E1 - 41 12221-Gundingbo Street

Appendix E2 - 41-12221-LOT 103 WALKER ST

Appendix E3 - 41-12221-LOT 101 WALKER ST



# **TENDERING**



# CONDITIONS OF TENDERING

This section includes notices to tenderers.

The Conditions of Tendering section does not form part of the Contract.

## 1 GENERAL

### 1.1 CONTACT PERSON

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Refer requests for information about the Tender to:

Name: Mr Lyndon Clem  
Telephone number: 07 3316 3648  
Facsimile number: 07 3316 3333  
E-mail address: lyndon.clem@ghd.com.au

### 1.2 NSW GOVERNMENT CODE OF PRACTICE FOR PROCUREMENT

Tenderers must comply with the NSW Government *Code of Practice for Procurement*, which is available on the Internet at:

[www.treasury.nsw.gov.au/procurement/cfp\\_ig](http://www.treasury.nsw.gov.au/procurement/cfp_ig)

Lodgement of a tender is evidence of the Tenderer's agreement to comply with the Code for the duration of any contract awarded as a result of the tender process. If a tenderer fails to comply with the Code, the Principal may take the failure into account when considering this or any subsequent tender from the tenderer, and may pass over such the tender.

## 2 TENDERER ELIGIBILITY

### 2.1 ACCEPTABLE LEGAL ENTITIES

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The Principal contracts only with recognised and acceptable legal entities. The Principal does not contract with firms under any form of external administration. Any tender submitted by an unincorporated business such as a sole trader, partnership, or business name must identify the legal entity that proposes to enter the contract.

If the Tenderer is a trustee, the Principal may require:

- an unconditional undertaking in accordance with Preliminaries Clause - **Additional security and obligations for trustees**; and
- a signed statement from the Tenderer, provided before the Contract is awarded, making the following undertaking:

'If (insert the legal name of the Tenderer) is awarded Contract No (insert the contract number) for (insert the contract description) it will provide security in the amount of (insert the amount of security advised by the Principal) in accordance with Preliminaries clause - **Additional security and obligations for trustees**, and it undertakes to ensure that, for the duration of the Contract, the total value of the trust beneficiaries' loans to the trustee is always greater than the total value of trust beneficiaries' loans from the trustee.'



Failure to provide the signed statement may result in the Tender being passed over.

## 2.2 QUALITY MANAGEMENT

The Principal may elect to pass over a tender from a tenderer that does not demonstrate the capacity to systematically plan and manage the quality of its work in accordance with the NSW Government *Quality Management Systems Guidelines*, which are available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

Submit with the Tender the information identified in Tender Schedules - **Schedule of Quality Management Information.**

## 2.3 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

Tenderers must demonstrate their capacity to manage occupational health and safety in accordance with the NSW Government *Occupational Health and Safety Management Systems Guidelines 4<sup>th</sup> Edition (OHSM Guidelines)*. The *OHSM Guidelines* are available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

Submit with the Tender the information identified in Tender Schedules - **Schedule of Occupational Health and Safety Management Information.**

If the Tenderer does not have an accredited Corporate OHS Management System, submit with the Tender an undertaking that the Tenderer's Corporate OHS Management System will be revised to comply with the *OHSM Guidelines* and submitted to the Department of Commerce for accreditation within two (2) weeks after the close of tenders.

## 2.4 ENVIRONMENTAL MANAGEMENT

Tenderers must demonstrate their capacity to manage environmental matters in accordance with the NSW Government *Environmental Management Systems Guidelines (EMS Guidelines)* available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

Submit the information identified in Tender Schedules - **Schedule of Environmental Management Information.**

## 2.5 FINANCIAL ASSESSMENT CRITERIA

The main criteria considered in financial assessment of tenderers are:

- Net Worth (total assets, excluding any assets of company directors, less total liabilities less intangible assets);
- Current Ratio (ratio of current assets to current liabilities); and
- Working Capital (current assets less current liabilities).

The Principal considers tenders with the following financial capacity, and no other significant detrimental financial characteristics to be financially satisfactory in respect of tenders:

- Net Worth exceeds 5% of the Contract Sum or initial Contract Price;
- Current Ratio exceeds 1; and

- Working Capital exceeds 10% of the Contract Sum or initial Contract Price.
- Where a tenderer is a trustee the total value of trust beneficiaries' loans to the trustee must be greater than the total value of trust beneficiaries' loans from the trustee.

Deviations below these indicative criteria will not necessarily prevent the Principal from considering any tender.

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## 3 CONTRACT DETAILS

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### 3.1 INSURANCE

#### Works and public liability insurance

The Principal will arrange insurance of the Works (and any temporary works) and public liability, as required under General Conditions of Contract clause **Insurance**. Tenderers are not required to allow in tenders for payment of premiums for insurance of the Works or public liability.

The insurance policy is available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_contract\\_management\\_insurance\\_policies.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_contract_management_insurance_policies.doc)

The insurance broker is Jardine Lloyd Thompson Pty Ltd.

#### Other Insurance

The Contractor must arrange and pay all premiums for all other insurance required under General Conditions of Contract clause – **Insurance**.

For professional indemnity insurance, a Certificate of Currency or evidence of the ability to obtain the required insurance, such as a letter from a broker or insurer, may be required as a condition of acceptance of tender.

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## 4 CURRENT POLICIES

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### 4.1 GOODS AND SERVICES TAX

The tendered lump sum and/or rates must include GST if it is payable.

### 4.2 NSW GOVERNMENT PREFERENCE SCHEME

#### Preference

The Principal will give a preference advantage to goods of Australian and New Zealand origin over imported goods supplied under the Contract. NSW country manufacturers may be eligible for an additional preference under the Country Industries Preference Scheme (CIPS). Details of these schemes may be obtained from the Department of State and Regional Development, telephone (02) 9338-6780; facsimile (02) 9338-6676.

The Industry Capability Network Office has been established to provide assistance in planning for, purchasing and using Australian and New Zealand made products. The office can provide professional advice on local industry capability and on the availability and efficiency of local supplies suited to Australian conditions, while retaining commercial confidentiality. The Industry Capability Network Office may be contacted on: telephone (02) 9819 7200; facsimile (02) 9181 3321; e-mail [enquiry@icnsw.org.au](mailto:enquiry@icnsw.org.au); internet [www.icnsw.org.au](http://www.icnsw.org.au).

### Imported Goods

Where imported goods are proposed, complete the Tender Schedules - **Schedule of Imported Materials and Equipment**. Provide details of alternatives to such goods which are of Australian or New Zealand origin, or give reasons why such alternatives cannot be supplied by completing the Tender Schedules - **Schedule of Alternatives to Imported Goods**.

The Principal may, but is not bound to, negotiate a reduction in price to accept the imported goods, but the reduction will be not less than 20% of the Principal's estimate of the imported value of the goods.

Refer to Preliminaries clause - **Australian and New Zealand Goods**.

### NSW Country Manufactured Goods

If the tenderer wishes to seek preference under the NSW Country Industries Preference Scheme, submit Tender Schedules – **Schedule of NSW country manufactured goods** with the tender.

## 4.3 DISCLOSURE OF TENDER AND CONTRACT INFORMATION

Details of this tender and contract awarded as a result of this tender process must be disclosed in accordance with the *Freedom of Information Act 1989* (NSW), Premier's Memorandum 2007-01 and the NSW Government Tendering Guidelines which are available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

## 4.4 EXCHANGE OF INFORMATION BETWEEN GOVERNMENT AGENCIES

By submitting a tender, the Tenderer authorises the Principal to gather, monitor, assess, and communicate to other NSW Government agencies or local government authorities information about the Tenderer's financial position and its performance in respect of any contract awarded as a result of the tender process. Such information may be used by those agencies or authorities in considering whether to offer the Tenderer future opportunities for work.

## 4.5 FINANCIAL ASSESSMENT

By tendering for this Contract, the Tenderer agrees that the Principal may engage private sector consultants to financially assess tenderers. Financial details of tenderers may be obtained by an external Financial Assessor for assessment. Financial Assessors have a contract with the Principal to safeguard the financial details obtained. Financial Assessors must not disclose such details, either in whole or in part to any party other than NSW Government departments or agencies without the express written permission of the tenderer.

The Financial Assessor is Kingsway Financial Assessment PTY LTD

Submit, when requested by the Financial Assessor or Principal, the Financial Assessment information shown in Tender Schedules - **Schedule of Financial Assessment Information**.

## 4.6 INDUSTRIAL RELATIONS MANAGEMENT

Tenderers must demonstrate their capacity to plan and manage industrial relations (IR) and implement effective IR plans in accordance with the NSW Government *Industrial Relations Management Guidelines*. The Guidelines are available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

Submit when requested:

- Copies of any enterprise, workplace or other enforceable industrial relations agreements to which the Tenderer is bound; and
- Tender Schedules - **Schedule of Industrial Relations Information**.

#### 4.7 UNCONDITIONAL UNDERTAKINGS - APPROVED INSTITUTIONS

For the purpose of giving unconditional undertakings, the Principal has approved banks, building societies, credit unions and insurance companies listed by the Australian Prudential Regulation Authority (APRA) as being regulated by the APRA. Lists appear at the APRA website at:

[www.apra.gov.au/](http://www.apra.gov.au/)

The Principal is prepared to consider proposals from tenderers for the approval of Unconditional Undertakings by substantial financial institutions, not registered by APRA, which lawfully carry on business in Australia. The Principal may require the submission of evidence demonstrating the substance and status of any proposed financial institution without cost to the Principal.

#### 4.8 ABORIGINAL PARTICIPATION

Tenderers must demonstrate their commitment and capacity to create and extend opportunities for Aboriginal people and enterprises through the Contract, in accordance with the NSW Government *Aboriginal Participation in Construction Guidelines*, which are available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

Submit with the Tender the information and undertakings identified in Tender Schedules – **Schedule of Aboriginal Participation Information** and as discussed in Section 4 Aboriginal Employment and Training Strategy

### 5 FURTHER INFORMATION

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#### 5.1 ADDENDA TO TENDER DOCUMENTS

If, as a result of a request for clarification from a tenderer or for any other reason, the Principal issues an instruction amending the tender documents, the instruction will be issued in writing to all tenderers in the form of an Addendum, which becomes part of the tender documents. Written Addenda issued by the Principal are the only recognised explanations of, or amendments to, the tender documents.

### 6 PREPARATION OF TENDERS

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#### 6.1 ALTERNATIVE TENDERS

The Principal may consider alternative tenders, provided the alternative tender meets the scope, functional intent and design concept expressed in the tender document. Where an alternative tender is proposed, submit a detailed description of the alternative stating clearly the manner in which it differs from the detailed requirements of the tender documents and including separate tender schedules applicable to the alternative.

Alternative tenders will not be considered unless the Tenderer has submitted a conforming tender.

## **7 SUBMISSION OF TENDERS**

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### **7.1 DOCUMENTS TO BE SUBMITTED**

The following documents must be completed and submitted by the Tenderer:

- Tender form
- Tender schedule
- Schedule of Imported Materials and Equipment
- Schedule of Alternatives to Imported Goods
- Schedule of NSW Country Manufactured Goods
- Schedule of Quality Management Information
- Schedule of Occupational Health and Safety Management Information
- Schedule of Aboriginal Participation Information

Where applicable, refer to each Addendum and state that the Tender allows for the instructions given in the Addendum.

### **7.2 SUBMISSION PROCEDURE**

Submit the Tender Form, Tender Schedules marked 'Submit with the Tender Form' and other required documents or information by the date and time given in the advertisement or invitation, by any of the following methods:

- eTendering Tenedr Box,
- Physical Tender Box,
- Facsimile Tenedr Box.

If more than one tender submission is made, mark each submission clearly as to whether it is a copy, an alternative tender, or whether the submission supersedes another submission.

Submit when requested, by the date, time and method stipulated in the request, Tender Schedules marked 'Submit when requested' and any other information required to allow further consideration of the Tender. Failure to meet this requirement may result in the Tender being passed over.

### **7.3 ETENDERING**

Tenderers are encouraged to obtain Requests for Tenders (RFT) and submit tenders through NSW Government online eTendering at:

<https://tenders.nsw.gov.au/commerce>

#### **Legal status**

Tenders submitted electronically will be treated in accordance with the *Electronic Transactions Act 2000* (NSW), and given no lesser level of confidentiality, probity and attention than tenders submitted by other means.

Tenderers, by electronically submitting a tender, are taken to have accepted any conditions shown on the NSW Government eTendering web site.

The Principal may decline to consider for acceptance, tenders that cannot be effectively evaluated because they are incomplete or corrupt.

### **Electronic Format for Submissions**

Tenders submitted electronically must be in a file format that can be read, formatted, displayed and printed by Microsoft Word 2003, or any format required by the RFT.

### **File Compression**

Tenderers may compress electronic tenders in any format that can be decompressed by WinZip. Tenderers must not submit self-extracting (\*.exe) zip files.

### **Change of Tender Form Text**

Tenderers must not change existing text in electronic tender forms other than to insert required information.

## **7.4 TENDER BOX**

The Tender may be submitted in the Tender Box at <https://tenders.nsw.gov.au/commerce>

Submit the Tender addressed to the Tender Box - 0901085 ACDP – 3 New Houses at Tabulam

## **7.5 FACSIMILE TENDER BOX**

The Tender may be submitted to the following facsimile number:

02 9372 8974

Address the Tender to the Secretary of the Tender Opening Committee and mark the first page of the facsimile with Tender for Tabulam ACDP – 3 New Houses at Tabulam – Contract No 0901085' and the closing date and time.

Tenders sent by facsimile and not completely received by the close of tenders may be excluded from consideration for acceptance even if transmission or receipt is delayed due to the receiving facsimile machine being engaged, faulty or otherwise inoperative.

## **7.6 LATE TENDERS**

In accordance with the NSW Government *Code of Practice for Procurement*, available on the Internet at:

[www.treasury.nsw.gov.au/procurement/cpfp\\_ig](http://www.treasury.nsw.gov.au/procurement/cpfp_ig)

late tenders will not be accepted, except where the integrity and competitiveness of the tendering process will not be compromised.

# **8 PROCEDURES AFTER CLOSING OF TENDERS**

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## **8.1 EVALUATION OF TENDERS**

In evaluating tenders, the Principal may take into consideration factors including, but not limited to: whole of life costs; ability to meet requirements of the NSW Government *Code of Practice for Procurement*; innovation; delivery time; quality offered; previous performance;

experience; capability; occupational health and safety performance; industrial relations performance; environmental management performance; community relations; value adding including economic, social and environmental initiatives; and conformity.

Tenders will be assessed using a weighted scoring process based on information provided with the Tender. The ratio of price to non-price criteria will be 95% priced 5% non priced »

The non-price criteria will be as set out in Tender Schedule 11 – Schedule of Aboriginal Participation Information:

:

- Management Statement of Support for Aboriginal Participation
- Statement of Opportunities for Aboriginal Participation
- Aboriginal Participation Plan for this Contract »

The Principal may treat any detail required by the tender documents which is omitted, illegible or unintelligible as failing to fulfil the relevant requirement.

## **8.2 ACCEPTANCE OF TENDER**

The Principal may accept tenders that do not conform strictly with all requirements of the tender documents.

The Principal is not bound to accept the lowest or any tender. Tenders which do not comply with any requirement of, or which contain conditions or qualifications not required or allowed by, the tender document may be passed over.

No tender, or qualification or departure from a contract condition or specification, is accepted unless the Principal gives an acceptance or formal agreement in writing.

## **8.3 PROTECTION OF PRIVACY**

The Tenderer warrants, in respect of any personal information provided in this Tender or any contract arising from this Tender, that the information is accurate, up to date and complete, and that nominated individuals authorise its collection and are aware:

- that the information is being collected for the purpose of evaluating tenders and administering any contracts arising from those tenders and may be made available to other NSW government agencies or local government authorities for those purposes;
- whether the supply of the information by the individual is required by law or is voluntary, and any consequences for the individual if the information (or any part of it) is not provided; and
- of the existence of any right of access to, and correction of, the information.

**END OF SECTION – CONDITIONS OF TENDERING.**

## **TENDER SCHEDULES**

**THERE ARE 19 PAGES IN THIS SECTION**



**1 TENDER FORM**

Location and Fax No. of  
Tender Closing Office: »

Name of Tenderer  
(in block letters): .....

A.B.N.  
(if applicable): .....

Address: .....

Telephone number: .....

Facsimile number: .....

e-mail address: .....

hereby tender(s) to perform the work for

Tabulam ACDP Program - Construction of 3 houses in Tabulam  
(Contract No 0080 1212)

in accordance with the following documents:

SPECIFICATION

DRAWINGS as listed within the specification

and Addenda Numbers: .....

For the lump sum of: .....

(\$.....) including GST being the  
total price for the three houses. Refer attached tender schedules for  
each separate house price.

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*Tabulam ACDP Program*

## 2 TENDER SCHEDULES

### Lot 101 – Walker Street, Tabulam

Item	Description	Quantity	Unit	Rate (\$)	Amount
1	Preliminaries (includes all Council fees, long service levy and Insurances)		Item		
2	Site Preparation		Item		
3	Concrete footings, blockwork, posts and floor framing		Item		
4	Flooring (Ply, FC)		Item		
5	External Walls and Lining		Item		
6	Internal Walls incl Lining		Item		
7	Roofing and Plumbing		Item		
8	Vinyl Floor Sheeting		Item		
9	Doors		Item		
10	Windows		Item		
11	Security Screens		Item		
12	Ceiling Finishes		Item		
13	Sanitary Fixtures and Plumbing		Item		
14	Tiling (wall and floor)		Item		
15	Joinery		Item		
16	Painting Internal		Item		
17	Painting External		Item		
18	Fans		Item		
19	Electric Lights and Power		Item		
20	Concrete Driveway, paths, slabs and crossing		Item		
21	External Stormwater Drainage		Item		
22	External Sewer Drainage		Item		
23	External Water Supply		Item		
24	Miscellaneous Items		Item		
25	Landscaping	Provisional Sum			2000
				Sub Total	
				GST	
				Total	

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*Tabulam ACDP Program*

Contract No: Contract No 00801212 - 3 New Houses at Tabulam

Revision Date: 27/05/09

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# TENDER SCHEDULES

## Lot 103 – Walker Street, Tabulam

Item	Description	Quantity	Unit	Rate (\$)	Amount
1	Preliminaries (includes all Council fees, long service levy and Insurances)		Item		
2	Site Preparation		Item		
3	Concrete footings, blockwork, posts and floor framing		Item		
4	Flooring (Ply, FC)		Item		
5	External Walls and Lining		Item		
6	Internal Walls incl Lining		Item		
7	Roofing and Plumbing		Item		
8	Vinyl Floor Sheeting		Item		
9	Doors		Item		
10	Windows		Item		
11	Security Screens		Item		
12	Ceiling Finishes		Item		
13	Sanitary Fixtures and Plumbing		Item		
14	Tiling (wall and floor)		Item		
15	Joinery		Item		
16	Painting Internal		Item		
17	Painting External		Item		
18	Fans		Item		
19	Electric Lights and Power		Item		
20	Concrete Driveway, paths, slabs and crossing		Item		
21	External Stormwater Drainage		Item		
22	External Sewer Drainage		Item		
23	External Water Supply		Item		
24	Miscellaneous Items		Item		
25	Landscaping	Provisional Sum			2000
				Sub Total	
				GST	
				Total	

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

Tabulam ACDP Program

Contract No: Contract No 00801212 - 3 New Houses at Tabulam

Revision Date: 27/05/09

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*TENDER SCHEDULES*

**Lot 40 Gundingbo Street, Tabulam**

Item	Description	Quantity	Unit	Rate (\$)	Amount
1	Preliminaries (includes all Council fees, long service levy and Insurances)		Item		
2	Site Preparation		Item		
3	Concrete footings, blockwork, posts and floor framing		Item		
4	Flooring (Ply, FC)		Item		
5	External Walls and Lining		Item		
6	Internal Walls incl Lining		Item		
7	Roofing and Plumbing		Item		
8	Vinyl Floor Sheeting		Item		
9	Doors		Item		
10	Windows		Item		
11	Security Screens		Item		
12	Ceiling Finishes		Item		
13	Sanitary Fixtures and Plumbing		Item		
14	Tiling (wall and floor)		Item		
15	Joinery		Item		
16	Painting Internal		Item		
17	Painting External		Item		
18	Fans		Item		
19	Electric Lights and Power		Item		
20	Concrete Driveway, paths, slabs and crossing		Item		
21	External Stormwater Drainage		Item		
22	External Sewer Drainage		Item		
23	External Water Supply		Item		
24	Miscellaneous Items		Item		
25	Landscaping	Provisional Sum			1,500
				Sub Total	
				GST	
				TOTAL	

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*Tabulam ACDP Program*

Contract No: Contract No 00801212 - 3 New Houses at Tabulam

Revision Date: 27/05/09

File R:\Old Structure\PORTSTR\ACDP\Priority Communities\Tabulam\Tender 3 Houses\Commercial Conditions.doc Page T-5

### 3 SCHEDULE OF IMPORTED MATERIALS AND EQUIPMENT

(SUBMIT WITH TENDER FORM)

Provide brief details of all imported materials and equipment to be supplied or incorporated into the Works, and country of manufacture or origin. Do not include goods manufactured in New Zealand.

The value of the imported content must be the estimated duty paid value inclusive of the value of any services (eg. overseas freight and insurance, software in computer tenders, consultancy or engineering fees) or any charges of overseas origin, together with customs clearing charges.

This is not a Schedule of Rates within the meaning of the Construction Contract Conditions. See also Preliminaries Clause - **Australian and New Zealand goods.**

Description	Country of Origin	Value A\$
.....	.....	\$ .....
.....	.....	\$ .....
.....	.....	\$ .....
.....	.....	\$ .....
.....	.....	\$ .....
.....	.....	\$ .....
.....	.....	\$ .....

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*Tabulam ACDP Program*

#### 4 SCHEDULE OF ALTERNATIVES TO IMPORTED GOODS

(SUBMIT WITH TENDER FORM)

Provide brief details of materials and equipment of Australian and/or New Zealand manufacture as alternatives to imported materials and equipment as listed in the SCHEDULE OF IMPORTED MATERIALS AND EQUIPMENT, or give reasons why such alternatives cannot be provided.

The Principal may accept a tender specifying all or any of the items listed below, with an adjustment to the contract price based on the difference between the prices listed in this Schedule and the SCHEDULE OF IMPORTED MATERIALS AND EQUIPMENT.

Description of Australian and/or New Zealand manufactured Alternatives	Value A\$
.....	\$ .....
.....	\$ .....
.....	\$ .....
.....	\$ .....
.....	\$ .....
.....	\$ .....
.....	\$ .....
.....	\$ .....

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*Tabulam ACDP Program*

## 5 SCHEDULE OF NSW COUNTRY MANUFACTURED GOODS

(SUBMIT WITH TENDER FORM)

Complete the Schedule if you wish to seek preference under the NSW Country Industry Preference Scheme (CIPS.). The preference may be given only to a Tenderer who is a NSW manufacturer registered under the scheme.

State your CIPS. registration number. Give details of the materials and equipment to be supplied or incorporated into the Works, the place of manufacture, the percentage(s) applicable for preference purposes and the value added content at the Tenderer's works for the material or equipment manufactured by the Tenderer for incorporation in the Works.

This is not a Schedule of Rates within the meaning of the Construction Contract Conditions.

C.I.P.S. Registration No.: .....

Description	Place of Manufacture	% Applicable	Value Added Content \$
.....	.....	.....	\$ .....
.....	.....	.....	\$ .....
.....	.....	.....	\$ .....
.....	.....	.....	\$ .....
.....	.....	.....	\$ .....

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

Tabulam ACDP Program

## 6 SCHEDULE OF QUALITY MANAGEMENT INFORMATION

---

(SUBMIT WITH TENDER FORM)

Submit one of the following, to demonstrate the capacity to plan and manage the quality of work:

- evidence of current full certification of the Tenderer's Quality Management System to AS/NZS ISO 9001:2000 by a certifying body registered with the Joint Accreditation System - Australia and New Zealand (JAS-ANZ); **or**
- evidence that the Tenderer's Quality Management System complies with the NSW Government *Quality Management Systems Guidelines (QMS Guidelines)*; **or**
- a minimum of three (3) completed examples of Inspection and Test Plans used on recent past projects and complying with the requirements of the *QMS Guidelines*.

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

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*Tabulam ACDP Program*



## 7 SCHEDULE OF OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT INFORMATION

(SUBMIT WITH TENDER FORM)

Provide documents and information indicated below in accordance with Conditions of Tendering clause – **Occupational health and safety management.**

### Evidence of satisfactory OHS management

Nominate at least three contracts/projects completed within the last two years that demonstrate successful management of occupational health and safety by the Tenderer:

Client	Name & location of contract <i>Eg. Sutherland Hospital Carpark; Dubbo Water Treatment Plant; Tamworth Coles shopping Centre; 3 Storey Unit Block, Penrith.</i>	Contract Price/ Project Value	Start Date	Completion Date

**WHEN REQUESTED**, submit the following additional information for each of three contracts/projects selected from the above list:

- a. a client referee report (which may be a NSW Government agency Contractor Performance Report) commenting on the Tenderer's performance in relation to occupational health and safety management, identifying the referee's name, position, organisation and telephone and email contact details; **or**
- b. a third party audit report or internal audit report; **or**
- c. a site safety inspection report; **or**
- d. a Safety Management Plan; **or**
- e. three Safe Work Method Statements; **or**
- f. minutes of three Toolbox meetings.

### Recent OHS prosecutions and fines

Provide:

- a statement confirming that the Tenderer is not in default of any fine issued for a breach of the OHS legislation; **AND**
- details of every OHS prosecution and fine imposed on the Tenderer in Australia during the last two years, together with a description of actions taken by the Tenderer in response to each prosecution and fine; **or**
- a statement that the Tenderer incurred no prosecutions or fines during the last two years.

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*TENDER SCHEDULES*

**Occupational Health and Safety Management Monthly Report**

The Tenderer undertakes, if awarded the Contract, to provide Monthly OHS Management Reports as described in Preliminaries clause – **Occupational Health and Safety Management**.

**Independent certification of formwork**

The Tenderer undertakes, if awarded the Contract, to provide evidence of independent certification of formwork as required by Preliminaries clause – **Occupational Health and Safety Management**.

Signed for the Tenderer by: ..... Date:.....  
Name (in block letters): ..... (Authorised Officer)  
In the Office Bearer capacity of: .....

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*Tabulam ACDP Program*

## 8 SCHEDULE OF ENVIRONMENTAL MANAGEMENT INFORMATION

(SUBMIT WITH TENDER FORM)

Provide the documents and information specified below in accordance with Conditions of Tendering clause - **Environmental management**.

### Recent prosecutions and fines

Submit:

- a statement confirming that the Tenderer is not in default of any fine issued for a breach of environmental legislation; **and**
- details of every prosecution and fine incurred by the Tenderer during the last two years under the *Protection of the Environment Operations Act 1997 (POEO Act)* or other Australian environmental legislation, together with a description of the actions taken by the Tenderer in response to each prosecution and fine; **or**
- a statement that the Tenderer incurred no prosecutions or fines under environmental legislation during the last two years.

### Evidence of satisfactory environmental management

Nominate at least three contracts/projects, for work of comparable nature to the Works and completed within the last two years, that demonstrate successful environmental management by the Tenderer:

Client	Name & location of contract <i>Eg. Concord Hospital Carpark; Dubbo Water Treatment Plant; Tamworth Coles shopping Centre; 3 Storey Unit Block, Penrith.</i>	Contract Price/ Project Value	Start Date	Completion Date

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*Tabulam ACDP Program*

Contract No: Contract No 00801212 - 3 New Houses at Tabulam

Revision Date: 27/05/09

File R:\Old Structure\PORTSTR\ACDP\Priority Communities\Tabulam\Tender 3 Houses\Commercial Conditions.doc Page T-12

## 9 SCHEDULE OF FINANCIAL ASSESSMENT INFORMATION

(SUBMIT WHEN REQUESTED BY PRINCIPAL OR FINANCIAL ASSESSOR)

Provide documents and information listed below in accordance with Clause Conditions of Tendering - **Financial assessment.**

1. Financial Statements for last three years for the entity under consideration, including:
  - i) Balance Sheets;
  - ii) Profit and Loss Statement;
  - iii) detailed Profit and Loss Statement;
  - iv) statement of Cash Flows;
  - v) notes to and Forming Part of the Accounts;
  - vi) an Accountant's Report; and
  - vii) where existing, Auditor's Reports.

Consolidated accounts of a parent organisation or group to which the entity belongs are not acceptable.
2. Where latest financial statement is more than 6 months old, the latest management report showing:
  - i) a trading statement;
  - ii) a profit and loss statement; and
  - iii) a trial balance.
3. Where the company is required to lodge audited financial statements with ASIC, copies of these statements for the last three years.
4. Where any financial statement supplied is not audited, copies of the entity's tax returns for last three years.
5. A letter from the Tenderer's banker providing details of overdraft and guarantee facilities including:
  - i) Bank, Branch, and Account Names,
  - ii) type and limit of bank overdraft facility,
  - iii) type and limit of bank guarantee facility,
  - iv) current bank overdraft balance,
  - v) number and amount of bank guarantees outstanding; and
  - vi) details of other bank funding facilities available to the Tenderer, such as term loans, lines of credit, commercial bills and other debt instruments.
6. Current and projected cash flows for all work on hand.
7. Forecast budget for forthcoming financial year including Revenue and Profit and Loss.
8. Names and contact numbers of:
  - i) major suppliers; and
  - ii) major subcontractors.
9. Details relating to the Tenderer's history and Directors Profiles.

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

## 10 SCHEDULE OF INDUSTRIAL RELATIONS INFORMATION

(SUBMIT WHEN REQUESTED)

List the Federal and NSW awards to which the Tenderer is bound:

### **Federal and NSW awards**

.....

.....

.....

.....

.....

.....

.....

.....

List the enterprise, workplace or other enforceable industrial relations agreements to which the Tenderer is bound, and attach copies of those agreements to this Schedule

### **Enterprise, workplace and other enforceable industrial relations agreements**

.....

.....

.....

.....

.....

.....

.....

.....

### **Undertaking to Provide information**

The Tenderer, if awarded the contract, will, on request, provide appropriate information to verify compliance with these awards, enterprise or workplace agreements and all other legal obligations relating to employment.

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

## 11 SCHEDULE OF ABORIGINAL PARTICIPATION INFORMATION

(SUBMIT WITH TENDER FORM)

Refer to Conditions of Tendering clause – **Aboriginal participation.**

Tenderers note that this tender is a CATEGORY 1 tender as defined in the NSW Government *Aboriginal Participation in Construction Guidelines*,

### Management Statement of Support for Aboriginal Participation

The Tenderer is committed to creating and expanding opportunities for Aboriginal people and enterprises through undertaking this contract in accordance with the specific requirements set out in Section 3 (Employment and Training Strategy) - of this specification.

This commitment is demonstrated by performance on past contracts. Name at least two contracts performed by the Tenderer which has included Aboriginal participation, with a contact phone number for a referee on each project:

Project 1:

Name of Project	
Description of Works	
Referee and Contact Phone Number	

Project 2:

Name of Project	
Description of Works	
Referee and Contact Phone Number	

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*Tabulam ACDP Program*

Contract No: Contract No 00801212 - 3 New Houses at Tabulam

Revision Date: 27/05/09

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*TENDER SCHEDULES*

**Statement of Opportunities for Aboriginal Participation**

In accordance with Section 4 of this specification, the Tenderer is required to provide employment opportunities to the residents of Jubullum Village in the first instance, either full time or part time as may be available under the contract. In addition the tender may be able to provide some short term training opportunities during the course of the contract.

Detail below the opportunities the Tenderer proposes to provide during the course of this contract eg position/s or work proposed, training proposed, mentoring etc.

Opportunities	Description

Signed for the Tenderer by: ..... Date:.....

Name (in block letters): ..... (Authorised Officer)

In the Office Bearer capacity of: .....

*Tabulam ACDP Program*

*Contract No: Contract No 00801212 - 3 New Houses at Tabulam*

*Revision Date: 27/05/09*

*File R:\Old Structure\PORTSTR\ACDP\Priority Communities\Tabulam\Tender 3 Houses\Commercial Conditions.doc Page T-16*

**Aboriginal Participation Plan for this Contract**

Identify for the opportunities identified above:

- Roles and responsibilities proposed for Aboriginal personnel:
- Performance targets/indicators for Aboriginal participation:
- Potential corrective action to maintain Aboriginal participation:

NOTE: A statement is required to accompany each monthly progress claim detailing the extent of Aboriginal employment/training during that month and identifying any issues arising or initiatives developed in that period.

Signed for the Tenderer by: ..... Date:.....  
Name (in block letters): ..... (Authorised Officer)  
In the Office Bearer capacity of: .....



**12 UNDERTAKING TO COMPLY WITH THE NSW GOVERNMENT  
CODE OF PRACTICE FOR PROCUREMENT .**

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(SUBMIT WHEN REQUESTED)

The Tenderer, if awarded the Contract, will comply with the NSW Government *Code of Practice for Procurement*.

Signed for the Tenderer by: ..... Date:.....  
Name (in block letters): ..... (Authorised Officer)  
In the Office Bearer capacity of: .....

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*Tabulam ACDP Program*

*TENDER SCHEDULES*

**END OF SECTION –TENDER SCHEDULES**

## *TENDER SCHEDULES*

# SPECIFICATION



# GENERAL CONDITIONS OF CONTRACT AND ANNEXURE

[THERE ARE 23 PAGES IN THIS SECTION](#)

## GENERAL CONDITIONS OF CONTRACT - MINOR WORKS

### 1 DEFINITIONS

- 1.1** The Principal is as stated in the Annexure.
- 1.2** The Principal's Representative is as stated in the Annexure and is the person appointed by the Principal to act with its full authority in all matters relating to the Contract.
- 1.3** The Principal's Agent is as stated in the Annexure.
- 1.4** The Works means the whole of the work to be carried out and materials and services to be provided under the Contract.
- 1.5** The Contract Sum means:
- (a) where the Principal accepted a lump sum, the lump sum;
  - (b) where the Principal accepted rates, the amount calculated by firstly multiplying the rates by their respective quantities in the schedule of rates and then adding those products;
- but excluding any additions or deductions which are made under the Contract.
- 1.6** day means calendar day.
- 1.7** Site means the lands and other places made available to the Contractor by the Principal for the purpose of the Contract.
- 1.8** Text within the following format denotes a definition:



### 2 CONTRACT

**2.1** The written agreement between the Principal and the Contractor for the performance of the Works, including all documents and parts of documents to which reference may properly be made to determine the rights and obligations of the parties (the Contract Documents) shall evidence the Contract.

**2.2** The Contract Documents shall be taken as mutually explanatory and anything contained in one but not in another shall be treated as if contained in all.

**2.3** If the Contractor finds any discrepancy, error or ambiguity in or between the Contract Documents, the Contractor is to inform the Principal's Representative before starting such work and follow the directions given by the Principal's Representative.

**DESIGN AND  
CONSTRUCTION**

**3.1** The Contractor is to supply all materials and construct the Works in accordance with the Principal's design and any further development of the design allowed under the Contract. Minor items not included in the Principal's design which are needed for the satisfactory completion of the Works are to be provided by the Contractor.

**3.2** If the Contractor is to undertake design as part of the Works, the Contractor is to develop the Principal's design and submit the completed design comprising drawings, specifications, calculations and any statutory certificates required to the Principal's Representative within the period stated in the Annexure.

**3.3** The Contractor is not to depart from the Principal's design, unless directed by the Principal's Representative.

**3.4** The Contractor's completed design is to comply with the Contract and be fit for the intended purpose of the Works which can be reasonably inferred from the Contract Documents.

**3.5** The Principal is not bound to check the completed design for errors, omissions or compliance with the requirements of the Contract. The Principal is not liable to the Contractor for any claim whatsoever due to the Principal not detecting or notifying the Contractor of any errors, omissions or non-compliance with the requirements of the Contract in the completed design.

**3.6** Responsibility for the completed design and its satisfaction of the Contract requirements remains solely with the Contractor and the Principal is relying on the Contractor's knowledge, skill and judgment to carry out this responsibility.

**3.7** The Contractor is to grant to the Principal an irrevocable licence to use the Contractor's design for the Works. Such licence is also to include any subsequent repairs to, maintenance or servicing of (including the supply of replacement parts) or additions or alterations to the Works.

#### 4. CARE OF THE WORKS AND OTHER PROPERTY

**4.1** From and including the date the Site is made available to the Contractor to the date of Completion of the Works, the Contractor is responsible for the care of the Works, constructional plant and things entrusted to the Contractor by the Principal for the purpose of the Works.

The Contractor is to make good at the Contractor's expense any damage which occurs to the Works while responsible for their care.

The Contractor is also liable for damage caused by the Contractor during the Defects Liability Period.

**4.2** The Contractor is to indemnify and keep the Principal indemnified against any loss or damage to the property of the Principal (including existing property in, about or adjacent to the Works) and against any legal liability for injury, death or damage to property of others arising from the performance of the Works.

**4.3** Nothing in Clause 4 relieves the Principal from liability for the Principal's own default and defaults of others for whom the Principal is liable.



**5. INSURANCE**

**5.1** On acceptance of the tender, the Contractor is to hold or take out an insurance policy covering Workers Compensation in the State of NSW and shall also ensure that every subcontractor, who is not taken to be a worker employed by the Contractor in accordance with the *Workplace Injury Management and Workers Compensation 1998* (NSW) Schedule 1, must hold or take out insurance covering Workers Compensation.

If insurance of the Works and public liability is to be arranged by:  
the Principal, go to **5.2**  
the Contractor, go to **5.3**

**5.2** If insurance of the Works and public liability is to be arranged by the Principal (see the Annexure) the Principal must effect insurance of the Works and public liability.

The Principal must make a copy of the policy for insurance of the Works and public liability available to the Contractor.

Go to **5.4**

**5.3** If insurance of the Works and public liability is to be arranged by the Contractor, (see the Annexure) then, before commencing work on the Site, the Contractor is to hold or take out policies of insurance covering the Contractor, Principal and subcontractors for:

(a) public liability to an amount of not less than \$5,000,000 for any single occurrence; and

(b) loss or damage to the Works, any temporary works and all materials, constructional plant and other things that are brought onto the Site by or on behalf of the Contractor or are entrusted to the Contractor by the Principal. The amount insured is not to be less than the Contract Sum.

The Principal is to be named as an insured in the policies.

The policies must include cross liability and waiver of subrogation clauses under which the insurer, in respect of liability, agrees that the term 'insured' applies to each of the persons covered as if a separate insurance policy had been issued to each of them and generally agrees to waive all rights of subrogation or action against any of the persons covered.

Go to **5.4**

**5.4** If the Works include work described in (a) or (b) below, the Contractor is to take out the following additional insurance policies before starting such work:

- (a) For the use of water-borne craft in excess of 8 metres in length: marine liability insurance;
- (b) For design of the Works undertaken by the Contractor: professional indemnity insurance.

The policy under (a) is to be in the name of the Contractor with the Principal as an additional name insured and is to cover the Contractor, the Principal, and all subcontractors employed from time to time in relation to the Works for their respective rights and interests and cover their liabilities to third parties. The policy is to be for an amount not less than \$5,000,000 for any one occurrence and shall include cross-liability and waiver of subrogation clauses under which the insurer, in respect of liability, agrees that the term 'insured' applies to each of the persons covered as if a separate insurance policy had been issued to each of them and generally agrees to waive all rights of subrogation or action against any of the persons covered.

The policy under (b) is to cover the Contractor for liability to the Principal for a minimum amount of \$500,000 or 20% of the Contract Sum, whichever is greater, to a maximum of \$5,000,000 for loss (whether economic loss only or other loss) in a single occurrence arising from errors or omissions in design of the Works carried out by the Contractor or any subcontractor.

Go to **5.5**



**5.5** The required policies are to be with insurers and in terms approved by the Principal's Representative. Approvals will not be withheld unreasonably.



**5.6** The Contractor is responsible for making and managing claims and meeting the costs of any deductibles.



**5.7** The Contractor is to maintain all required insurance policies until the end of the Defects Liability Period, or Completion if there is no Defects Liability Period.



**5.8** If, when required in writing by the Principal to do so, the Contractor fails to produce evidence of having paid insurance premiums and other compliance with insurance obligations under General Conditions of Contract Clause 5, to the satisfaction of the Principal, the Principal may effect or maintain the insurance and pay any premiums. The Contractor is to pay the Principal the amount of any premiums paid by the Principal plus an amount of \$250 to cover the Principal's costs.

## 6. SITE AND POSSESSION

**6.1** The Principal is to give the Contractor possession of the Site by the time stated in the Annexure.



**6.2** The Principal is to give the Contractor sufficient possession to allow the Contractor to perform the Works but is not required to give the Contractor sole or uninterrupted possession of or access to the Site.



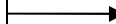
**6.3** The Contractor is to begin work on the Site as soon as practicable after being given possession of the Site by the Principal.



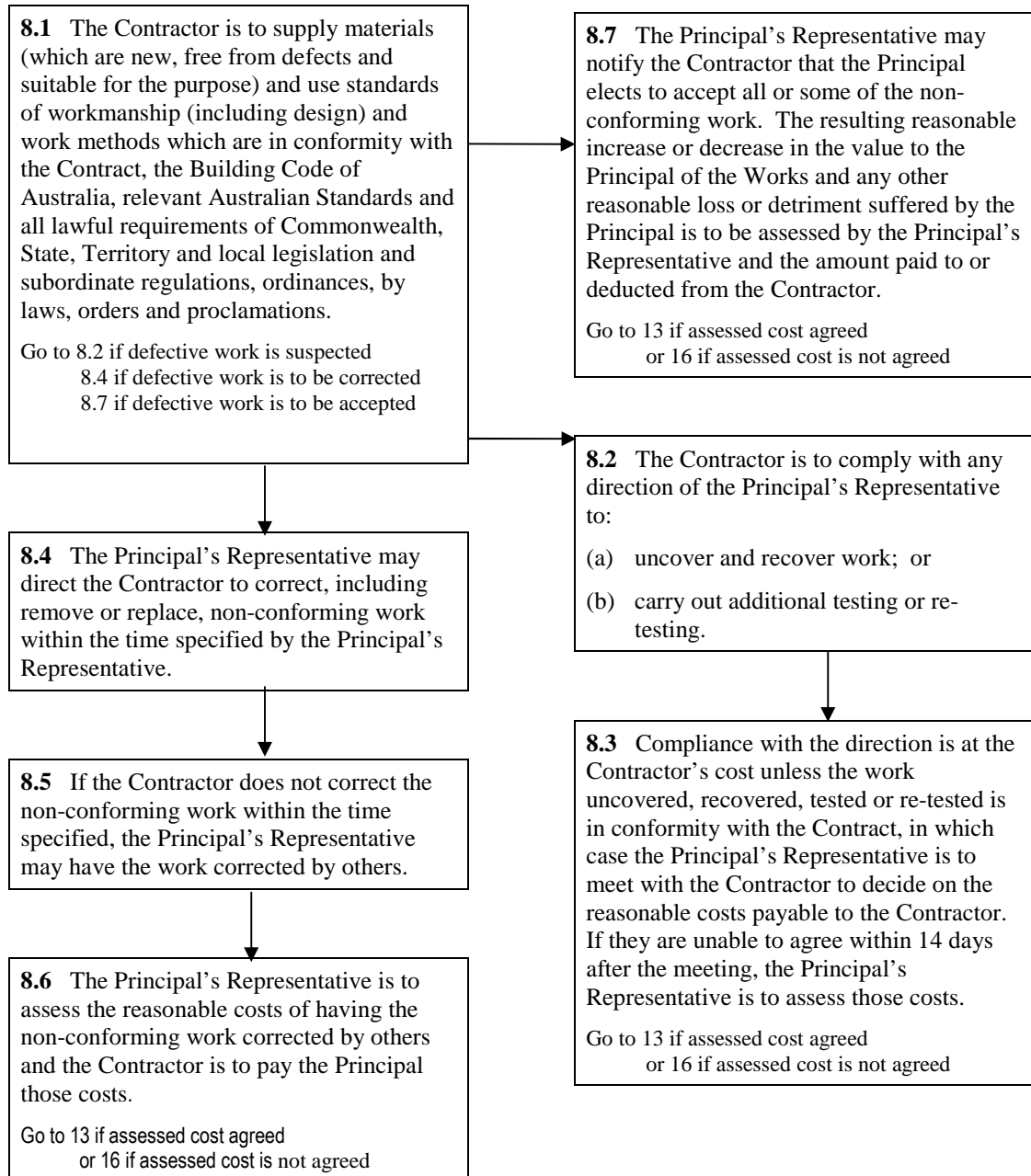
**6.4** The Contractor is to give the Principal's Representative, agents and contractors reasonable access to the Site for any purpose.

## 7. SITE CONDITIONS

**7.1** If the Contractor discovers that the conditions on, about or below the Site differ from what ought to have reasonably been anticipated at Tender time the Contractor is to inform the Principal's Representative immediately and, where possible, before the conditions are disturbed.



**7.2** The Contractor is not entitled to any extra payment for the different Site conditions. If the different conditions are such that the Principal's Representative directs the Contractor to carry out a variation, the procedure in Clause 9 is then to be followed.

**8. NON-CONFORMING WORK**

**9. VARIATIONS**

**9.1** The Principal's Representative may direct the Contractor to carry out a variation and the Contractor is to carry out the direction.

**9.3** A variation is any change to the character, form, quality and extent of the Works directed in writing by the Principal's Representative. A variation shall not invalidate the Contract.

**9.2** The Principal's Representative and Contractor are to meet to agree on the reasonable amount payable to or deducted from the Contractor for the variation. If they do not agree within 14 days after the meeting, the Principal's Representative is to assess that amount.

Go to 13 if assessed amount agreed  
or 16 if assessed amount is not agreed

**10. SUSPENSION**

**10.1** The Principal's Representative may direct the Contractor to suspend all or part of the Works and the Contractor is to carry out the direction.

**10.2** If the direction to suspend the work is due to any act or omission of the Principal, the Principal's Representative and Contractor are to meet to agree on the reasonable extra costs payable to the Contractor which resulted from the suspension. If they do not agree within 14 days after the meeting, the Principal's Representative is to assess those extra costs.

Go to 13 if assessed cost agreed  
or 16 if assessed cost is not agreed

**10.3** The Contractor is to recommence the Works as soon as practicable after being directed to do so by the Principal's Representative.

## 11. COMPLETION OF THE WORKS

**11.1** The Contractor is to Complete the Works within the period stated in the Annexure which starts on the date of being given possession of the Site.

**11.2** The Contractor is to inform the Principal's Representative when, in the Contractor's opinion the Works have reached Completion.

**11.4** The Works have reached Completion and are Complete when the Works are capable of use for their intended purpose, and should be free from any omissions or defects, and the Contractor has made good the Site and its surroundings.

**11.3** The Principal's Representative is to:

- (a) determine if the Works have reached Completion, and if so, the date of Completion; and
- (b) give the Contractor written notice of the determination.

## 12. DELAY IN COMPLETION

**12.1** If the Contractor is delayed in reaching Completion then the Contractor is to notify the Principal's Representative within 14 days after the commencement of the delay and to meet with the Principal's Representative to determine the cause of delay. Where such a delay is caused by:

- (a) a direction given by the Principal's Representative except under:
  - Clause 8; or
  - Clause 10 where the event giving rise to the direction was not beyond the control of the Contractor; or
- (b) a breach of the Contract by the Principal; or
- (c) any event beyond the control of the Contractor,

the period for Completion is to be extended.

**12.2** If the Principal's Representative and the Contractor do not agree on an extension to the period for Completion within 14 days of the meeting to determine the cause of delay, the Principal's Representative is to assess a reasonable extension of time. The Principal's Representative may for any reason and at any time extend the period for Completion.

Go to 16 if assessed extension of time is not agreed.

**12.3** If the Contractor does not Complete the Works by the last day of the period for Completion then the Contractor is to pay to the Principal liquidated damages from, but excluding that date, to and including the date the Works are Complete at the rate stated in the Annexure.

### 13. PAYMENT AND RETENTION

**13.1** *If the Contract has substantial Demolition and the 'Amount of Security' in the Annexure is >\$0:*

Before commencing any work on the Site, the Contractor is to provide security in the amount stated in the Annexure and in the form as detailed in Schedule - Unconditional Undertaking.

**13.2** *If the Contract requires the Contractor to pay the Contract Sum to the Principal:*

Before commencing any work on the Site, the Contractor is to pay the Principal the Contract Sum.

**13.3** *If the Contract requires the Principal to pay the Contract Sum to the Contractor:*

The Contractor is to give the Principal's Representative a written claim for payment when a Milestone stated in the Annexure is reached. The claim is to identify the Milestone, the amount claimed, how the amount is calculated, deductions to which the Principal is entitled and, when additions are claimed, the legal and factual basis of the claim. Additions are extra costs or other amounts to which the Contractor is entitled under or in connection with the subject matter of the Contract.

When a Milestone is reached the amount which the Contractor is entitled to claim, and be paid, is the sum of:

- for work for which the Principal accepted rates, an amount calculated by applying the rates to the quantities of work carried out to that date;
- for work for which the Principal accepted a lump sum, the percentage stated in the Annexure for the Milestone;
- for any additions for which the Principal has approved an amount in writing or for which an amount has been finally determined by an Expert under Clause 16, the amount approved or determined;

less payments previously made (including under Clause 16), costs payable by the Contractor to the Principal and deductions to which the Principal is entitled under or in connection with the subject matter of the Contract, including but not limited to retention moneys, liquidated damages and other damages whether liquidated or unliquidated.

With each claim for payment, and at any other time as requested by the Principal's Representative, the Contractor is to give the Principal's Representative a completed statutory declaration, as detailed in Schedule - Statutory Declaration.

Within 10 business days after receipt of the Contractor's payment claim, the Principal is to provide to the Contractor a payment schedule identifying the progress claim to which it relates and stating the payment, if any, which the Principal will be making. If the payment is to be less than the amount claimed by the Contractor the payment schedule is to indicate why it is less. For the purposes of this clause a business day is any day other than a Saturday, Sunday, public holiday or 27, 28, 29, 30 or 31 December.

**13.3 (Continued)**

Payment is to be made:

- within 20 business days after receipt of the Contractor's written payment claim; or
- within 5 business days after the statutory declaration is received; or
- by the specified time after any action required prior to payment has been carried out,

whichever is the latest. If the Contractor breaches the requirement to submit a completed statutory declaration the Principal is not obliged to make any payment to the Contractor while the breach continues.

Any claim by the Contractor on the Principal is to be made within 28 days after the date of the Principal's Representative's written notice of Completion under Clause 11.3. All claims whatsoever by the Contractor against the Principal made after that time are barred. However, if the contract includes a Defects Liability Period, and the Contractor has a claim against the Principal under Clause 14.4 or because of an event which occurred during the Defects Liability Period, the Contractor may make that claim up to 28 days after the end of the Defects Liability Period. If the claim is made after that time it is barred.

Unless stated otherwise, all payments by the Principal to the Contractor are to be made by Electronic Funds Transfer to a bank, building society or credit union account nominated by the Contractor. No payment is due to the Contractor until details of the nominated account (name of financial institution, account name and account number) are notified in writing to the Principal's Representative. The Contractor is to promptly notify the Principal's Representative in writing of any changes to the nominated account and the Principal is not responsible for any payments made into a previously nominated account before notification of such change is received by the Principal's Representative.

Payment is not evidence of the value of work or an admission of liability or that the work is satisfactory but is a payment on account only.

**13.4** *When the Works are Complete and the Contract requires Security:*

When the Contractor has provided an Unconditional Undertaking for Security (Annexure 13.1) the Principal is to return the Unconditional Undertaking, less any amounts the Contractor is to pay the Principal, within 14 days of Completion.

**13.5** *When the Works are Complete and the Contract has a Defects Liability Period:*

An amount of 2.5% of the Contract Sum is to be retained by the Principal against the due and proper performance of the Contract, except when there is no Defects Liability Period.

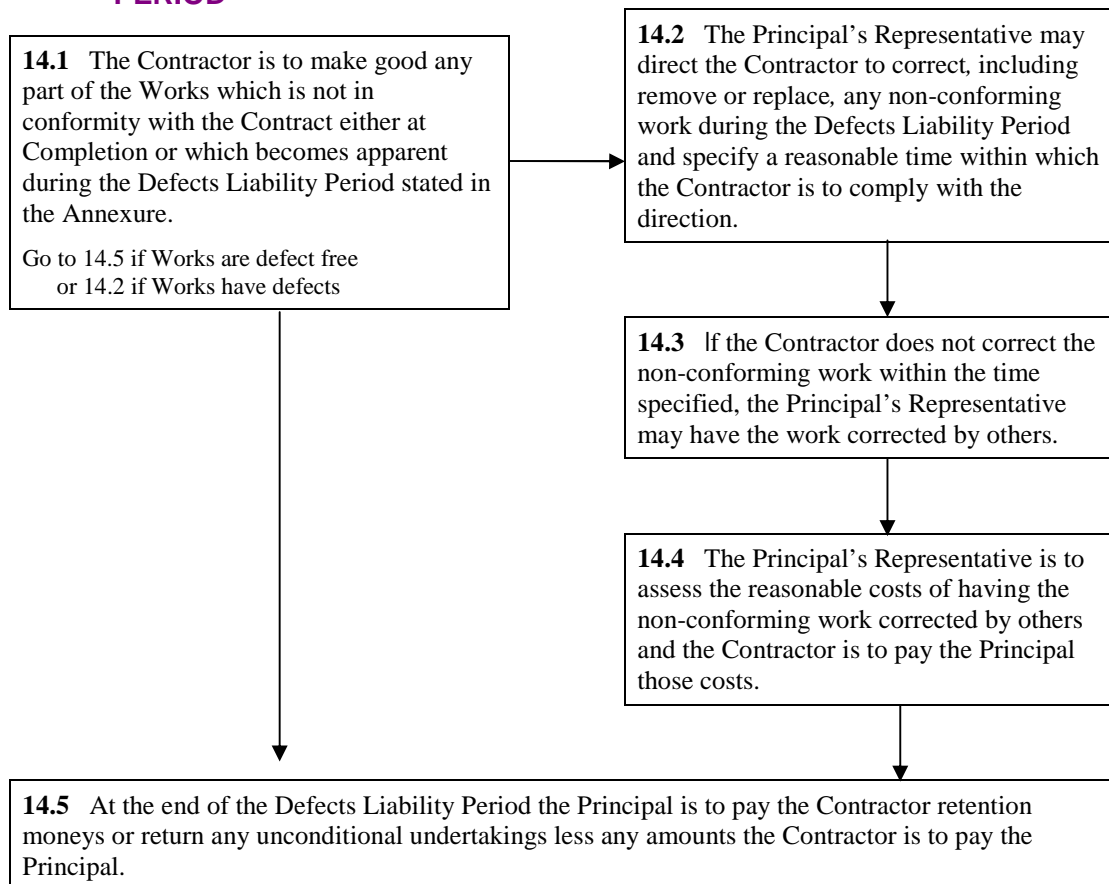
The Contractor may, instead of the retention, provide security in the amount of the retention in the form as detailed in Schedule – Unconditional Undertaking.

**13.6** *If an Unconditional Undertaking is required:*

All Undertakings must be provided by a financial institution acceptable to the Principal.



## 14. DEFECTS LIABILITY PERIOD



**15. DEFAULT AND INSOLVENCY**

**15.1** Without prejudice to any other rights which the Principal has, if the Contractor commits a substantial breach of the Contract, including:

- (a) failing to carry out a direction of the Principal's Representative within the time specified or if no time is specified, within a reasonable time;
- (b) not progressing Works at a reasonable rate,

the Principal may, in writing, specify the breach and ask the Contractor to give reasons why the Principal should not take further action.

**15.2** If the Contractor is wound up or declared insolvent then:

**15.4**

- (a) The Principal may immediately take over the uncompleted Works by notice in writing; and
- (b) suspend payments due or which would become due under Clause 13; and
- (c) have the Works Completed by others.

**15.3** If the Contractor either fails to give a written response within 7 days of receiving the Principal's notice, or fails to give reasons satisfactory to the Principal, then:

Go to 15.5 for Termination option  
or 15.4 for Takeover option

**15.5** The Principal, may immediately terminate the Contract by notice in writing to the Contractor, in which case the respective rights and liabilities of the parties shall be the same as they would be at common law if the Contractor had wrongfully repudiated the Contract.

**15.7** If the calculation results in a shortfall to the Principal, the Contractor is to pay the amount of the shortfall to the Principal within seven days of a written demand for payment.

**15.6** The Principal's Representative is to calculate the difference between:

- (a) the costs of having the Works Completed by others; and
- (b) the amount of suspended payments and retention moneys held by the Principal.

Go to 15.7 Contractor to pay  
or 15.8 Principal to pay

**15.8** If the calculation results in an excess to the Principal, the Principal is to pay the amount of the excess to the Contractor.

**16. DISPUTES**

**16.1** If either party is dissatisfied with an act or omission of the other party in connection with the Contract, including assessment of a claim, failure to agree, or an instruction, that party is to notify the Principal's Agent and the other party in writing of a dispute within 14 days of the act or omission. The notifying party is to provide particulars, including the factual and legal basis of any claimed entitlement.

If a party gives notice of a dispute but not within the time provided by this Clause 16.1, then it is not entitled to interest for the period before the party gave notice.

**16.2** Within 7 days of the giving of the notice, the Contractor and Principal's Agent are to meet to attempt to resolve the dispute.

**16.3** If the dispute is not resolved within 14 days after the notice providing particulars of the dispute, the parties are to appoint an independent Expert.

If the parties fail to agree upon an Expert, either may request the Chief Executive Officer of the Australian Commercial Disputes Centre Ltd Sydney to nominate an Expert. If there is no Chief Executive Officer or the Chief Executive Officer fails to make a nomination within a reasonable time, the Principal is to nominate an Expert.

**16.4** The person nominating the Expert is not to nominate:

- an employee of the Principal or Contractor,
- a person who has been connected with the Contract, or
- a person upon whose appointment the Principal and the Contractor have previously failed to agree.

**16.5** When the person to be the Expert has been agreed on or nominated, the Principal, on behalf of both parties is to appoint the expert in writing, with a copy to the Contractor, setting out:

- the dispute being referred to the Expert for a decision,
- the Expert's fees,
- the procedures detailed in this Clause 16, and
- any other matters which are relevant to the engagement.

**16.6** The Principal and the Contractor are to share equally the Expert's fees and out-of-pocket expenses, including security deposit if required. Each party is to otherwise bear their own costs and share equally any other costs of the process.



**16.7** Each party is to make written submissions to the Expert and provide a copy to the other party as follows:

- (a) Within 7 days after the appointment of the Expert, the notifying party is to submit details of the claimed act or omission.
- (b) Within 14 days after receiving a copy of that submission, the other party is to submit a written response. That response can include cross-claims.

**16.8** The Expert is to decide whether the claimed event, act or omission did occur and, if so:

- when it occurred,
- what term of the Contract or other obligation in law, if any, requires the other party to pay the claimant money in respect of it, and
- the merits in law of any defence or cross-claim raised by the other party.

The Expert then decides the amount, if any, which one party is legally bound to pay the other on account of the event, act or omission.

The Expert is also to decide any other questions required by the parties, as set out in the dispute referred to the Expert at Clause 16.5.

**16.9** In making the decision, the Expert acts as an expert and not as an arbitrator and is:

- (a) not liable for acts, omissions or negligence;
- (b) to make the decision on the basis of the written submissions from the parties and without formalities such as a hearing;
- (c) required within 35 days of appointment to give the decision in writing, with brief reasons, to each party; and
- (d) bound by the rules of natural justice.

**16.10** If the Expert decides that one party is to pay the other an amount exceeding \$250,000 (calculating the amount without including interest on it), and within 14 days of receiving the decision of the Expert, either party gives notice in writing to the other that the party is dissatisfied, the decision is of no effect and either party may then commence litigation.

**16.11** Unless a party has a right to commence litigation under Clause 16.10:

- (a) The parties are to treat each determination of the Expert as final and binding and give effect to it.
- (b) If the Expert decides that one party owes the other party money, that party is to pay the money within 14 days of the receiving the decision of the Expert.

## 17. TERMINATION FOR THE PRINCIPAL'S CONVENIENCE

**17.1** The Principal may terminate the Contract by giving notice with effect from the date stated in the notice, for its convenience and without the need to give reasons. The Contractor must leave the Site by the date stated in the termination notice and remove all plant, equipment and amenities it has brought onto the Site for the construction of the Works.

If the Contract is terminated for the Principal's convenience, the Principal must pay the Contractor:

- the value of all work carried out (as determined in clause 13) up to the date of the termination notice takes effect; plus
- 2% of the difference between the Contract Sum, adjusted by any amounts agreed or assessed under clause 9.2 or finally determined under clause 16, and the total of all amounts paid and payable to the contractor for payment claims.

The payments referred to in this Clause are full compensation under this Clause, and the Contractor has no claim for damages or other entitlement whether under the Contract or otherwise.

The Contractor must, wherever possible, include in all subcontracts and supply agreements an equivalent provision to this Clause.

**SCHEDULE 1**

**APPROVED FORM OF UNCONDITIONAL UNDERTAKING**

*[To be submitted on a Financial Institution's letterhead and show, at a minimum, the Financial Institution's name and address]*

At the request of ..... ('the Contractor')  
and in consideration of ..... ('the Principal')  
accepting this undertaking in respect of the contract for  
..... ('the Contract'),  
..... ('the Financial Institution')  
unconditionally undertakes to pay on demand any sum or sums which may from time to time be  
demanded by the Principal to a maximum aggregate sum of  
.....(\$.....)('the Sum').

*The undertaking is to continue until notification has been received from the Principal that the Sum is no longer required by the Principal or until this undertaking is returned to the Financial Institution or until payment to the Principal by the Financial Institution of the Sum or such part as the Principal may require. The Principal must not assign the unconditional undertaking without the prior **written** agreement of the Financial Institution, which must not be unreasonably withheld.*

*Should the Financial Institution be notified in writing, purporting to be signed by or for and on behalf of the Principal that the Principal requires payment to be made of the whole or any part or parts of the Sum, it is unconditionally agreed that the Financial Institution will make the payment or payments to the Principal forthwith without reference to the Contractor and notwithstanding any notice given by the Contractor not to pay same.*

*Provided always that the Financial Institution may at any time without being required so to do pay to the Principal the Sum less any amount or amounts it may previously have paid under this undertaking or such lesser sum as may be required and specified by the Principal and thereupon the liability of the Financial Institution hereunder shall immediately cease.*

DATED at ..... this ..... day  
of ..... 20 .....

.....  
[Signature]

.....  
[Print name of person signing the Undertaking]

.....  
[Position / Title]

**SCHEDULE 2****Statutory Declaration***Oaths Act 1900  
(NSW)***Definitions**

*The Principal is* .....

*The Contractor is* .....

ACN/ABN.....

*The Contract is* Contract No. ....

Contract Title.....

dated .....(Date of Contract) between the party identified as the Principal and the party identified as the Contractor.

**Declaration**

*Full name* **I,** .....

*Address* of .....  
.....

do hereby solemnly declare and affirm that:

*Insert position title of the Declarant* **1** I am the representative of the Contractor in the Office Bearer capacity of .....

**2** I am in a position to make this statutory declaration about the facts attested to.

**REMUNERATION OF CONTRACTOR'S EMPLOYEES ENGAGED TO CARRY OUT WORK IN CONNECTION WITH THE CONTRACT**

- 3** All remuneration payable to the Contractor's relevant employees for work done in connection with the Contract to the date of this statutory declaration has been paid and the Contractor has made provision for all other benefits accrued in respect of the employees.
- Relevant employees are those engaged in carrying out the work done in connection with the Contract.

Remuneration means remuneration or other amounts payable to relevant employees by legislation, or under an industrial instrument, in connection with work done by the employees [s127(6) of the *Industrial Relations Act 1996* (NSW)].

**REMUNERATION OF THE EMPLOYEES OF SUBCONTRACTORS ENGAGED TO CARRY OUT WORK IN CONNECTION WITH THE CONTRACT**

- 4** The Contractor *is/is not* a principal contractor for the work done in connection with the Contract, as defined in section 127 of the *Industrial Relations Act 1996* (NSW).
- 5** Where the Contractor is also a principal contractor for work done in connection with the Contract, the Contractor has been given a written statement in its capacity of principal contractor under section 127(2) of the *Industrial Relations Act 1996* (NSW) by each subcontractor in connection with that work stating that all remuneration payable by each subcontractor to the subcontractor's relevant employees for work done in connection with the Contract to the date of this declaration has been paid, and each subcontractor has made provision for all other benefits accrued in respect of each subcontractor's employees.
- 6** I am aware that the *Industrial Relations Act 1996* (NSW) requires any written statement provided by subcontractors must be retained for at least 6 years after it was given and declare that the Contractor has accordingly made arrangements for

Delete the words  
*in italics* that are  
not applicable.

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## 1. GENERAL CONDITIONS OF CONTRACT AND ANNEXURE

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the secure retention of the written statements.

### **WORKERS COMPENSATION INSURANCE OF THE CONTRACTOR'S WORKERS**

- 7 All workers compensation insurance premiums payable by the Contractor to the date of this statutory declaration in respect of the work done in connection with the Contract have been paid. This statutory declaration is accompanied by a copy of any relevant certificate of currency in respect of that insurance.

### **WORKERS COMPENSATION INSURANCE FOR WORKERS OF SUBCONTRACTORS**

- 8 The Contractor *is / is not* a principal contractor for work done in connection with the Contract, as defined in section 175B of the *Workers Compensation Act 1987* (NSW).
- 9 Where the Contractor is also a principal contractor for work done in connection with the Contract, the Contractor has been given a written statement under section 175B of the *Workers Compensation Act 1987* (NSW) in the capacity of principal contractor in connection with that work to the intent that all workers compensation insurance premiums payable by each subcontractor in respect of that work done to the date of this statutory declaration have been paid, accompanied by a copy of any relevant certificate of currency in respect of that insurance.
- 10 I am aware that the *Workers Compensation Act 1987* (NSW) requires any written statement provided by subcontractors and any related certificate of currency must be retained for at least 7 years after it was given and declare that the Contractor has accordingly made arrangements for the secure retention of the written statements.

Delete the words *in italics* that are not applicable.

### **EMPLOYER UNDER THE PAYROLL TAX ACT**

- 11 The Contractor *is registered as / is not required to be registered as* an employer under the *Payroll Tax Act 2007* (NSW).
- 12 All payroll tax payable by the Contractor in respect of wages paid or payable to the relevant employees for work done in connection with the Contract to the date of this statutory declaration has been paid.
- 13 The Contractor *is / is not* a principal contractor for work done in connection with the Contract, as defined in section 17 of Schedule 2 to the *Payroll Tax Act 2007* (NSW).
- 14 Where the Contractor is also a principal contractor for work done in connection with the Contract, the Contractor has been given a written statement under section 18 of Schedule 2 to the *Payroll Tax Act 2007* (NSW) in the capacity of principal contractor in connection with that work to the intent that all payroll tax payable by each subcontractor in respect of the wages paid or payable to the relevant employees for that work done to the date of this statutory declaration has been paid.
- 15 I am aware that the *Payroll Tax Act 2007* (NSW) requires any written statement provided by subcontractors must be retained for at least 5 years after it was given and declare that the Contractor has accordingly made arrangements for the secure retention of the written statements.

Delete the words *in italics* that are not applicable.

Delete the words *in italics* that are not applicable.

### **PAYMENTS TO SUBCONTRACTORS**

- 16 The Contractor has paid every subcontractor, supplier and consultant all amounts payable to each of them by the Contractor as at the date of this statutory declaration with respect to engagement of each of them for the performance of work or the supply of materials for or in connection with the Contract.
- 17 The provisions of clause "SECURITY OF PAYMENT", if included in the Contract, have been complied with by the Contractor.
- 18 The Contractor has been informed by each subcontractor and consultant to the Contractor (except for subcontracts and agreements not exceeding \$25,000 at their commencement) by written statement in equivalent terms to this declaration (made no earlier than the date 14 days before the date of this declaration):
- .1 that their subcontracts with their subcontractors, consultants and suppliers comply with the requirements of clause "SECURITY OF PAYMENT", if included



## 1. GENERAL CONDITIONS OF CONTRACT AND ANNEXURE

in the Contract, as they apply to them; and

.2 that all of their employees, subcontractors, consultants and suppliers, as at the date of the making of such a statement have been paid all remuneration and benefits due and payable to them by, and had accrued to their account all benefits to which they are entitled from, the subcontractor or consultant of the Contractor or from any other of their subcontractors or consultants (except for their subcontracts and agreements not exceeding \$25,000 at their commencement) in respect of any work for or in connection with the Contract.

19 I am not aware of anything to the contrary of any statutory declaration referred to in paragraph 18 of this declaration and on the basis of the statements provided, I believe the matters set out in paragraph 18 to be true.

20 And I make this solemn declaration, as to the matters aforesaid, according to the law in this behalf made, and subject to the punishment by law provided for any wilfully false statement in any such declaration.

Signature of  
Declarant .....

declared at

Place .....

Date on.....

before me

Signature of legally  
authorised person\*  
before whom the  
declaration is made .....

Name and title of  
person\* before  
whom the declaration  
is made .....

### Notes:

1. In this declaration:

- (a) the words “principal contractor”, “employee”, “employees” and “relevant employees” have the meanings applicable under the relevant Acts;
- (b) the word “subcontractor” in paragraphs 5, 6, 9, 10, 14 and 15 has the meaning applicable under the relevant Act; and
- (c) otherwise the words “Contractor”, “subcontractor”, “supplier” and “consultant” have the meanings given in or applicable under the Contract.

2. \* The declaration must be made before one of the following persons:

(a) where the declaration is sworn within the State of New South Wales:

- (i) a justice of the peace of the State of New South Wales;
- (ii) a solicitor of the Supreme Court of New South Wales with a current practising certificate;
- (iii) a notary public; or
- (iv) another prescribed person legally authorised to administer an oath under the *Oaths Act 1900* (NSW);

or

(b) where the declaration is sworn in a place outside the State of New South Wales:

*1. GENERAL CONDITIONS OF CONTRACT AND ANNEXURE*

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- (i) a notary public; or
- (ii) any person having authority to administer an oath in that place.

## **ANNEXURE TO GENERAL CONDITIONS OF CONTRACT - MINOR WORKS**

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### **Clause**

#### **1.1**

The Principal is The Minister for Commerce for the State of NSW.

### **Notices and Submissions to the Principal**

Notices and Submissions to the Principal must go to the Principal's Representative.

#### **1.2**

The Principal's Representative is GHD Pty Ltd (Greg Paulsen)  
and is located at GPO Box 668 Brisbane QLD 4001

#### **1.3**

The Principal's Agent is Manager Disputes Resolution – Department of Commerce  
and is located at McKell Building 2-24 Rawson Place Sydney 2000 ,change the person for  
any reason whatsoever by giving written notice.

#### **3.2**

The period to submit the completed design is NOT APPLICABLE

#### **5.2**

The Principal has arranged insurance of the Works and public liability through insurance  
broker Jardine Lloyd Thompson Pty Ltd.

The insurance policy is available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_contract\\_management\\_insurance\\_policies.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_contract_management_insurance_policies.doc)

#### **6.1**

The time to give possession of Site is 14 days after the Principal accepted the tender.

#### **11.1**

The period for Completion is 18 calendar weeks.

#### **12.3**

The rate per day of liquidated damages is: » \$ .

If no rate is stated common law damages are to apply.

#### **13.1**

The amount of Security is: NIL

#### **13.3**

The Milestones and Percentages are as below:

Milestone	Percentage
»Floor	»15
»Frame	»40
»Lock up	»65
»Completion	»100

#### 14.1

The Defects Liability Period, which commences at Completion of the Works is: 26 weeks

**END OF SECTION – GENERAL CONDITIONS OF CONTRACT AND ANNEXURE**



# PRELIMINARIES

*THERE ARE 22 PAGES IN THIS SECTION*

## 1 ADMINISTRATION AND CONTRACTING

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### 1.1 ELECTRONIC COMMUNICATIONS

The parties agree and consent that notices and communications may be by electronic communication in accordance with the *Electronic Transactions Act 2000* (NSW).

### 1.2 USE OF QUALIFIED TRADEPERSONS

Use qualified tradepersons when completing the Works. The use of such persons shall not relieve the Contractor of liability for the fitness of the Works for the purposes required by the Contract.

### 1.3 LONG SERVICE LEVY

Before commencing the works, the Contractor must:

- pay to the Building and Construction Industry Long Service Payments Corporation or the Corporation's agent the amount of the long service levy payable under the *Building and Construction Industry Long Service Payments Act 1986* (NSW); and
- produce to the Principal the document evidencing payment of the levy.

Additional information and the Levy Payment Form are available on the Internet at:

[www.lspc.nsw.gov.au](http://www.lspc.nsw.gov.au)

### 1.4 COLLUSIVE ARRANGEMENTS

The Contractor must comply with the NSW Government *Code of Practice for Procurement*, which is available on the Internet at:

[www.treasury.nsw.gov.au/procurement/cpfp\\_ig](http://www.treasury.nsw.gov.au/procurement/cpfp_ig)

### 1.5 CONTRACTOR PERFORMANCE REPORTING

During the course of the Contract, the Contractor's performance may be monitored and assessed in accordance with the *Performance management system guidelines* which are available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_performance\\_management.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_performance_management.doc)

### 1.6 EXCHANGE OF INFORMATION BETWEEN GOVERNMENT AGENCIES

The Contractor authorises the Principal and its employees and agents to make information concerning the Contractor and its performance available to other NSW government agencies and local government authorities, which may take such information into account in considering whether to offer the Contractor future opportunities for work.

The Principal regards the provision of information about the Contractor to any NSW government agency or local government authority as privileged under the *Defamation Act*

2005. The Contractor agrees that it will have no entitlement to make any claim against the Principal in respect of any matter arising out of the provision or receipt of such information.

## 1.7 NATSPEC SUBSCRIPTION

If any of the Contractor's Documents are based on NATSPEC, then the Contractor must provide to the Principal proof of the Contractor's current NATSPEC subscription.

## 1.8 GOODS AND SERVICES TAX

All prices, rates and other amounts referred to under the Contract must include GST if it is payable.

The Principal will issue payment schedules in the form of Recipient Created Tax Invoices. The Contractor must not issue Tax Invoices in respect of the Contract.

The Principal will issue Adjustment Notes in respect of adjustment events known to the Principal. The Contractor must notify the Principal of details of any adjustment event not known to the Principal.

Each party warrants it is registered for GST at the time of entering into the Contract, and must notify the other party if it ceases to be registered for GST or to satisfy any requirements for the issue of Recipient Created Tax Invoices.

## 1.9 AUSTRALIAN AND NEW ZEALAND GOODS

Do not supply or incorporate into the Works any items imported into Australia except:

- items manufactured in New Zealand;
- items included in Tender Schedules - **Schedule of Imported Materials and Equipment** lodged with the Tender and accepted by the Principal;
- a single item with an imported content valued at less than 2% of the Contract Sum or \$20,000, whichever is the lesser. If an item is one of a group of similar items, the group shall be considered as one single item.

The Principal will not pay for imported goods supplied or incorporated into the Works in breach of the provisions of this clause.

## 1.10 QUALITY MANAGEMENT REQUIREMENTS

### Design Plan

Prior to commencing design work, prepare and implement a Design Plan complying with the NSW Government *Quality Management Systems Guidelines (QMS Guidelines)*, covering each phase of design and addressing the key activities.

The *QMS Guidelines* are available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

### Inspection and Test Plans

Prepare and implement Inspection and Test Plans, complying with the *QMS Guidelines*, incorporating the Hold and Witness points specified in the Contract.

Submit copies of Inspection and Test Plans and checklists not less than 7 days before commencing the work to which they apply. Also submit certification that the relevant Inspection and Test Plans of Subcontractors and Consultants meet the requirements of the *QMS Guidelines*. Do not start any work before this documentation is submitted.

Give at least 24 hours notice prior to reaching a Hold or Witness point.

The Contractor must not proceed beyond a Hold point without endorsement by the Principal or its authorised representative.

The Principal, at its discretion, may inspect the work at a Witness point, but work may proceed without endorsement.

Endorsement by the Principal at a Hold or Witness point does not release the Contractor from its obligations to achieve the specified requirements of the Contract.

Surveillance (monitoring) by the Principal will apply to all work associated with the Contract.

### Conformance records

Submit copies of conformance records as specified, including:

Conformance records	Time when records are required
Completed Inspection & Test Plans and associated checklists	With each Payment Claim
»	»

### Failure to Comply

If the Contractor fails to comply with the requirements of this clause, the Principal may implement such inspections and tests as the Principal determines and the cost incurred by the Principal shall be a debt due from the Contractor.

## 1.11 SECURITY OF PAYMENT

### General

In this clause “subcontract” includes an agreement for supply of goods or services (including professional services and plant hire) or both and “subcontractor” includes a supplier of goods or services (including professional services and plant hire) or both.

The Contractor shall ensure that each subcontract, whether written or oral, entered into by the Contractor or any subcontractor in respect of the work under the Contract and which has a value of \$25,000 or more at the commencement of the subcontract, includes provisions in the form or to the effect of the form, as the case may be, of those contained in this clause, including the provisions of this subclause.

### Options as to Form of Security

Each subcontract which -

- requires the subcontractor to provide a cash security to its principal;
- allows the subcontractor's principal to deduct retention moneys from any payment made by it to the subcontractor; or
- provides for both of the above

shall allow the subcontractor the option at any time to provide an unconditional undertaking or unconditional undertakings in lieu of a cash security or retention moneys. To the extent that the subcontractor provides an unconditional undertaking or undertakings, the subcontractor's principal shall not deduct retention moneys and shall forthwith release to the subcontractor any retention moneys or cash security then held.

### Trust for Cash Security and Retention Moneys

Each subcontract shall include a provision having the effect that:



- When a party receives or retains security in cash or converts security to cash, that security is held in trust by the security holder from the time of receipt, retention or conversion, as the case may be, and the security holder must forthwith deposit the money into a trust account in a bank selected by that party;
- the moneys shall be held in trust for whichever party is entitled to receive them until they are paid in favour of that party and the security holder shall maintain proper records to account for such moneys; and
- any interest earned by the trust account shall not be held in trust, and shall be owned by the party holding the security.

If the party holding security has a policy of insurance protecting subcontract payments due to the other party which is equivalent to the HIA Security of Payment Bond, then compliance with the above of this subclause is not required.

Whenever requested by the Principal to provide evidence verifying that the Contractor is holding in trust an amount which the Contractor should be holding in trust, the Contractor shall provide evidence to the reasonable satisfaction of the Principal that the amount is held in trust. If the Contractor fails to do so then, in addition to any other remedy which the Principal may have against the Contractor, the Principal may withhold an equivalent amount from payments to the Contractor.

### Payments

Each subcontract shall include:

- an obligation, which takes precedence over any inconsistent provision of the subcontract, for the subcontractor's principal to pay the subcontractor regular progress payments of 100% of the value of work, goods or services provided by the subcontractor less only retention moneys, if any, paid into the trust account referred to in subclause - **Trust for cash security and retention moneys;**
- an entitlement to progress payments within the following periods after the date upon which a progress claim is lodged by the Contractor with the Principal's Representative:
  - in the case of the Contractor's subcontractors, 28 days;
  - in the case of all other subcontractors, 35 days,

Compliance with this subclause shall not prevent the Contractor from paying a subcontractor an amount in excess of that claimed from the Principal, or paying before the time stipulated in this subclause.

### Alternative Dispute Resolution

Each subcontract shall include provisions incorporating the dispute resolution procedures outlined in the Contract except that, in each case, it shall not be mandatory for the subcontractor to pursue the contractual dispute resolution mechanism if the only remedy sought by the subcontractor is an order that the subcontractor's principal pay to it an amount which is not disputed to be due and payable under the subcontract.

### Documents to be Provided to Subcontractors

Each subcontract shall include a provision which requires the subcontractor's principal to provide to the subcontractor, before the subcontractor commences work under the subcontract, a copy of the following provisions of the contract between the subcontractor's principal and its principal:

- the provision equivalent to this Preliminaries clause - **Security of Payment;** and
- the clauses relating to proof of payment of subcontractors, times for payment claims and payment and alternative dispute resolution.

### Register of Subcontracts

Maintain a register of all subcontracts which have a value of \$25,000 or greater showing brief details of the subcontract work, the name, address and telephone number of the subcontractor, and provide an up to date copy of the register when requested by the Principal's Representative.

If further requested by the Principal's Representative, provide an unpriced copy of the subcontract agreement within 14 days of such request.

## 1.12 ADDITIONAL SECURITY AND OBLIGATIONS FOR TRUSTEES

If the Contractor is a trustee:

- before commencing the Works, the Contractor must give the Principal an unconditional undertaking as security for any amount previously agreed in writing by the parties. The unconditional undertaking must be in the form detailed in Schedule 1- **Approved Form of Unconditional Undertaking** and from a financial institution acceptable to the Principal.
- The security will be retained by the Principal against the due and proper performance of the Contract by the Contractor. Unless the Principal has made or intends to make a demand against the unconditional undertaking, the Principal will return the unconditional undertaking within 14 days after the date of Completion of the Works determined or agreed by the Principal.
- The Contractor must not prevent the Principal making any demand against the unconditional undertaking, or prevent the provider of an unconditional undertaking complying with the unconditional undertaking or any demand by the Principal, but the Contractor may seek damages if the Principal makes a demand in breach of the Contract.
- The Contractor must ensure that, for the duration of the Contract, the total value of the trust beneficiaries' loans to the trustee is always greater than the total value of trust beneficiaries' loans from the company.

## 1.13 INDUSTRIAL RELATIONS MANAGEMENT

### Requirement

The Contractor must comply with the NSW Government *Industrial Relations Management Guidelines*.

### Verification of Compliance with Industrial Relations Obligations

Submit before beginning works on the Site, a statement on the Contractor's letterhead, signed by an authorised person, attesting to the Contractor's compliance, in the preceding twelve months, with all employment and legal obligations including, but not limited to:

- payment of remuneration to employees
- annual leave
- Long Service Leave Payment Scheme registration
- workers' compensation insurance, including self- insurance arrangements
- superannuation fund membership and contributions
- over-award payments such as redundancy fund contributions

If the Contractor engages an independent industry or employer association or other specialist organisation to provide an auditing service to verify compliance with employment and legal obligations, a statement or declaration from that organisation may be submitted instead of the statement by the Contractor.

### Project IR Management Details

Submit, before beginning work on the Site, a statement detailing:

- the location of time and wage records and other documents that are required to be kept to verify ongoing compliance with all employment and legal obligations; and
- the names of Federal or NSW awards that are likely to cover subcontractors and other contractors on the project.
- the names of those responsible for coordinating industrial relations on the project;
- an outline of:
  - the Contractor's consultation and communication mechanisms with workers, unions, and employer or industry associations
  - the measures to be implemented to coordinate the interface on the project with subcontractors, unions and other contractors
  - the measures for assessing subcontractor's ability to comply with industrial relations and employment obligations
  - the measures to monitor and verify subcontractors' ongoing compliance

### Failure to comply

If at any time the Contractor has not carried out its obligations under this clause - **Industrial Relations Management**, then notwithstanding any other provision of the Contract, no payment is due to the Contractor until the 7<sup>th</sup> day after the required action has been carried out.

## 1.14 ABORIGINAL PARTICIPATION

### Requirement

The Contractor must comply with the NSW Government *Aboriginal Participation in Construction Guidelines*, available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

Submit a Statement of Opportunities for Aboriginal Participation and an Aboriginal Participation Plan before starting work on the Site.

Implement the Aboriginal Participation Plan and demonstrate compliance to the Principal whenever requested.

### Failure to comply

If at any time the Contractor has not carried out its obligations under this clause – **Aboriginal participation**, then notwithstanding any other provision of the Contract, no payment shall be due to the Contractor until the 7<sup>th</sup> day after the required action has been carried out.

## 1.15 AUDIT AND REVIEW

Make available, on request, all records, including those of or relating to Subcontractors or suppliers, relevant to compliance with requirements of the Contract, for the purposes of audit, review or surveillance. Provide all reasonable assistance during the audits or reviews including attendance by the Contractor.

Promptly implement effective corrective action on matters disclosed by audit or review.

## 2 SITE AND WORKS

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### 2.1 WORKING HOURS AND WORKING DAYS

Unless the Contract provides otherwise the Site is available to the Contractor to perform the Works between 7 am and 5 pm Monday to Friday but excluding public holidays.

The Principal's Representative may approve additional working hours or working days, subject to conditions which may include, but are not limited to:

- restrictions on the performance of work which requires supervision; and
- a requirement that the Contractor meet the costs of supervision, by or on behalf of the Principal, of work performed during the additional working hours or working days.

### 2.2 EXISTING SERVICES

#### Locating Existing Services – Dial Before You Dig

The Contractor is responsible for locating services and in doing so, must comply with the WorkCover Work Near Underground Assets Guideline, which is available on the Internet at:

[www.workcover.nsw.gov.au/NR/rdonlyres/96ACDD20-8FC0-4583-A6F4-97292055A954/0/work\\_near\\_underground\\_asset\\_1419.pdf](http://www.workcover.nsw.gov.au/NR/rdonlyres/96ACDD20-8FC0-4583-A6F4-97292055A954/0/work_near_underground_asset_1419.pdf)

Before commencing excavation the Contractor must obtain, from the Dial Before You Dig information service or relevant public authorities or owners of underground services, written confirmation of the exact positions of all underground services at and around the Site, and verify and prominently mark the locations of the underground services on the Site.

#### Dealing with Existing Services

Existing services (such as drains, watercourses, public utilities, telecommunications and other services) obstructing the Works or if damaged in the course of the Contract, must be dealt with as follows:

- if the service is to be continued: repair, divert, relocate as required;
- if the service is to be abandoned: cut and seal or disconnect and make safe as required;

#### Cost and Delay

Where an existing service is damaged by the Contractor for any reason whatsoever, the Contractor shall bear all costs and any delays for repairing or disconnecting the service.

#### Notification

Notify the Principal's Representative immediately upon the discovery of services obstructing the Works not shown in the Contract documents.

### 2.3 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

#### Specification and Statutory Requirements

The Contractor must comply with the NSW Government *Occupational Health and Safety Management Systems Guidelines 4<sup>th</sup> Edition* (OHSM Guidelines) and all statutory requirements including, but not limited to, the *Occupational Health and Safety Act 2000* (NSW) and *Occupational Health and Safety Regulation 2001* (NSW). In the event of any inconsistency, the Contractor must comply with the statutory provisions.

### Appointment as principal contractor

The Contractor, having responsibility for the construction work at all times until the work is completed under the Contract, is appointed principal contractor and controller of the premises for the construction work under Clause 210 of the *Occupational Health and Safety Regulation 2001* (NSW), and is authorised to exercise such authority of the owner as is necessary to enable it to discharge the responsibilities of principal contractor and controller of premises imposed by the *Occupational Health and Safety Act 2000* (NSW) and Chapter 8 of the *Occupational Health and Safety Regulation 2001* (NSW).

### Design

The Contractor must ensure that systematic assessments are undertaken in carrying out any design required, that:

- identify hazards and analyse the associated risks, probability and consequences of injury or illness;
- involve consultation with appropriate people on the safe construction, use and maintenance of the designed asset;
- establish a Design Hazard Register for the designed asset to record any hazards not eliminated in the design that may impose a risk to those constructing, using or maintaining the asset.

An up to date copy of the Design Hazard Register must be provided to the Principal at the date of Completion of the Works or the date the Works are occupied or taken over, whichever is earlier.

### Site-specific Safety Management Plan

Develop and implement a Site-specific Safety Management Plan that complies with the *OHSM Guidelines*.

Submit the Site-specific Safety Management Plan no later than 14 days before construction work commences. Do not start construction work before a complying Site-specific Safety Management Plan has been submitted.

Ensure the following risks are covered in the Site-specific Safety Management Plan:

- Working at heights
- Site security

This list of risks is not exhaustive and must not be relied upon by the Contractor. The Contractor must undertake its own detailed analysis of all occupational health and safety risks under the Contract.

### Site Safety Rules

Develop site safety rules that are equal to or better than the following minimum set of site safety rules, include them in the Site-specific Safety Management Plan and ensure implementation.

Site safety rules must make it a condition of entry to the applicable work site that all employees and visitors comply with their provisions, including:

- **Construction OHS Induction.** All persons must display evidence of completing OHS Induction training prior to being inducted to commence work on the Site.
- **Site Induction.** All persons working on the Site must attend a Site Induction prior to entering it. Visitors may enter a work site if, either, they first attend a Site

Induction, or if they are accompanied by a person who has attended a Site Induction. All persons each day must sign in and out on the Site Register.

- **Safe Work Method Statements.** Safe Work Method Statements must be prepared and used for all work activities assessed as having a safety risk.
- **Toolbox Talks.** Weekly or more regular discussions must be held with workers to consult on site safety matters.
- **Safety Helmets, Safety Footwear and Safety Vests.** Safety helmets and steel-capped safety footwear must be worn by all supervisors, employees, and visitors in the construction area at all times. The footwear must comply with AS 2210. Safety vests must be worn when moving plant is present or work is undertaken near traffic.
- **Personal Protective Equipment (PPE).** PPE, such as safety eye protection, hearing protection, safety gloves and masks and the like, must be worn when welding, drilling and with all other tasks with similar risks.
- **Accidents and Incidents.** Accidents, incidents and injuries must be reported immediately to the Contractor's and applicable subcontractor's site representative in charge.
- **Alcohol and Drugs.** The consumption of, or being under the influence of, alcohol and illegal drugs on the Site is prohibited.
- **Amenities.** Access to clean toilets and meal facilities, cool, clean drinking water, and the other requirements of the WorkCover [Code of practice: Amenities for construction work](#) must be provided for all persons.
- **Electrical.** All electrical work and electrical plant must comply with the WorkCover [Code of practice: Electrical practices for construction work](#).
- **Emergency evacuation.** Arrangements must be included in the Site Induction and clearly identified.
- **Excavations.** Barricading and signage for all excavations must be provided, with excavations 1.5 metres or more deep also to be benched, battered or shored. See the WorkCover [Code of practice: Excavation](#).
- **Fire Prevention.** Fire prevention must be used by all persons on the Site. An appropriate fire extinguisher must be on hand for all welding sets and oxy acetylene work.
- **First Aid.** All persons requiring first aid treatment must contact the first aid officer who will administer the treatment and record the injury in the WorkCover Register of Injuries, including the person's name and the nature of the injury.
- **Hazardous Substances.** Chemicals and hazardous substances must be used and stored in compliance with up to date Material Safety Data Sheets (MSDS) and details recorded in the Register of Hazardous Substances.
- **Housekeeping.** Work areas must be kept clean and tidy, with rubbish and other safety hazards cleaned up promptly. All protruding nails must be removed immediately from timber.
- **Leads and Power Tools.** All leads, power tools and electrical equipment must be inspected and tagged by a qualified person prior to their use and then at monthly

intervals. See the WorkCover [Code of practice: Electrical practices for construction work](#).

- **Mobile Plant.** Every owner of plant must ensure plant is registered with WorkCover when required and operators are appropriately qualified. Plant must be fitted with working hazard lights/reversing lights and beepers. See the WorkCover [Code of Practice for Moving Plant on Construction Sites](#).
- **Overhead Power Lines.** The requirements of the WorkCover [Code of Practice – Work near Overhead Power Lines](#) must be complied with.
- **Site Security and Public Access.** Security measures, including perimeter fencing, must be used to prevent unauthorised access to construction areas and ensure safe access and passage for all those on and adjacent to the Site. Security must comply with Clause 235 of the OHS Regulation 2001 and the WorkCover [Position paper: The requirements for fencing](#).
- **Underground Services.** Prior to any underground work being carried out, services must be located using Dial Before You Dig, a services locator, potholing and the other precautions identified in the WorkCover [Work Near Underground Assets Guideline](#).
- **Working at Height.** Working at heights must be in accordance with WorkCover requirements, including certification of formwork and scaffolding. See the WorkCover [Guide to Safe Working at Heights](#).

### **OHS Management Monthly Report**

Submit, no later than the seventh (7<sup>th</sup>) day of each month, an OHS Management Monthly Report, detailing *Inspection, testing and servicing* activities, *Internal reviews* and *Incident management and corrective action*, and including the information listed below, as evidence of the implementation of the Site-specific Safety Management Plan during the previous month.

#### **Contract Details**

- Contract
- Contractor
- Contractor's representative
- Signature and Date
- Period Covered

#### **Implementation of Risk management** (*OHSM Guidelines* Section 5, element 1)

Summary of OHS inspections and reviews carried out to identify risks and hazards and ensure risk management controls are being implemented for:

- plant and equipment
- incoming products
- work site conditions
- adherence to and completeness of Risk Assessments, Safe Work Method Statements and Site Safety Rules
- work site access and exits
- personal protective equipment



**Implementation of *OHS training*** (*OHSM Guidelines* Section 5, element 3)

An up to date copy of the Induction Register and details of OHS training carried out.

**Implementation of *Incident management*** (*OHSM Guidelines* Section 5, element 4)

Details of:

- any OHS incidents or OHS issues, including non-compliance with OHS procedures and near misses
- implementation of incident management
- implementation of corrective action
- OHS statistics for entire the Contract including:

	This Month	Total Cumulative
Number of Lost Time Injuries		
Number of Hours Worked		
Number of Hours Lost Due to Injury		
Lost Time Injury Frequency Rate LTIFR		
Number of OHS Management Audits		
Number of OHS Inspections		

**Implementation of *Safe Work Method Statements*** (*OHSM Guidelines* Section 5, element 6)

An up to date copy of the register of Safe Work Method Statements, including confirmation that the principal contractor has ensured that all Safe Work Method Statements comply with the *OHS Regulation 2001* and that their implementation is being monitored.

**Incident Reports**

Ensure compliance with the notification and other requirements of *OHS Regulation 2001* Clauses 341 and 344 for accidents, incidents and non-disturbance occurrences, including immediate notification of WorkCover where required.

Immediately notify the Principal of any accident or incident defined in *OHS Regulation 2001* Clauses 341 and 344.

Provide a written report to the Principal within twenty-four hours of the incident, giving details of the incident and evidence that notification requirements have been met.

When requested, provide an incident investigation report, including identification of the cause of the incident and corrective actions taken, in the form directed.

**Prohibition and Improvement Notices and On-The-Spot Fines**

Immediately notify the Principal of any Prohibition and Improvement Notice (PIN) or on-the-spot fine issued by WorkCover. Provide the Principal with a copy of the PIN or fine notice and written details of the corrective action taken by the Contractor and/or the applicable subcontractor to rectify the breach and to prevent recurrence.

**Electrical work on electrical installations**

In compliance with section 207 of the *OHS Regulation 2001*, ensure that electrical work on an electrical installation is not carried out while the circuits and apparatus of the part of the installation that is being worked on are energised, unless it is necessary to do so in the interests of safety and the risk of harm would be greater if the circuits and apparatus were de-energised before work commenced.



### Independent Certification of Formwork

In this clause, the terms “qualified engineer” and “formwork” have the meanings given in Clause 209 of the *OHS Regulation 2001*. “Related Entities” means businesses, one of which is owned wholly or in part by the other or that have proprietors, directors, officers, shareholders or employees in common.

Inspection and certification of formwork, if required by Clause 233 of the *OHS Regulation 2001*, must be carried out by a qualified engineer who is not a proprietor, director, officer, or employee either of the entity carrying out the formwork erection or a Related Entity to that entity. In addition, if the Contractor carries out the design of the formwork, then the qualified engineer must not be a proprietor, director, officer or employee either of the Contractor or a Related Entity to the Contractor.

If such inspection and certification are required, the Contractor and any subcontractors involved must include the inspection and certification as actions in Safe Work Method Statements for the erection and use of formwork, and they must be hold points in the Contractor’s and subcontractors’ Inspection and Test Plans.

Submit formwork certification before commencing the use of the formwork. Do not use the formwork before this certification is submitted.

### Failure to Comply

If at any time the Contractor has not carried out its obligations under the Contract in relation to occupational health and safety management, then notwithstanding any other provisions of the Contract, no payment will be due to the Contractor until the 7<sup>th</sup> day after the required action has been carried out.

## 2.4 HAZARDOUS SUBSTANCES

### Definition

Hazardous Substance means a substance that is listed in the document entitled *List of Designated Hazardous Substances* published by Worksafe Australia; or a substance that fits the criteria for a hazardous substance set out in the document entitled *Approved Criteria for Classifying Hazardous Substances* published by Worksafe Australia.

Asbestos, material containing asbestos, polychlorinated biphenyl (PCB) and lead based paints are recognised as hazardous substances. Other substances in certain situations are also considered hazardous and therefore require controlled handling. Examples are glues, solvents, cleaning agents, paints, and water treatment chemicals.

Work involving stone, rock, concrete, masonry and such materials containing silica, is work under the Contract whether explicitly identified in the Specification or not. The Contractor is responsible for the control of any hazard which may arise from the presence of silica.

### Response to Unexpected Discovery

If any hazardous substance not specified in work under the Contract is discovered on the Site the Contractor must suspend all work which may result in exposure to such hazardous substance and notify the Principal’s Representative immediately of the type of substance and its location.

With the initial notification, or as soon as practicable thereafter, submit details, including:

- the additional work and additional resources the Contractor estimates to be necessary to deal with the substance so that work and subsequent use of the Works may proceed safely and without risk to health
- the time the Contractor anticipates will be required to deal with the substance and the expected delay in achieving Completion;

- the Contractor's estimate of the cost of the measures necessary to deal with the substance; and
- other details reasonably required by the Principal's Representative

The Contractor must, in planning and carrying out any work dealing with the substance take all reasonable steps:

- to carry out the work concurrently with other work wherever possible; and
- to otherwise minimise effects of the work on the Contractual Completion Date.

### Responsibility For Decontamination

Control and decontamination of any hazardous substances is the responsibility of:

- the Principal, in respect of any such substances not identified in the Contract Documents, which are discovered on the Site; and
- the Contractor, in respect of any such substances identified in the Contract Documents.

### Decontamination By Principal

Where the Principal is responsible for the control and decontamination of any hazardous substances, the Principal's Representative may suspend the whole or any part of the Works until the hazardous substances are isolated or removed.

### Decontamination By Contractor

Where the Contractor is responsible for the control and decontamination of the Site following the discovery of hazardous substances, handle, use, isolate, remove and dispose of such substances in accordance with statutory requirements.

The Environment Protection Authority or Waste Service NSW may advise of suitable disposal sites.

## 2.5 ENVIRONMENTAL MANAGEMENT

### Requirement

The Contractor must comply with the NSW Government *Environmental Management Systems Guidelines* which are available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/system/index\\_procurement\\_guideline\\_documents.doc](http://www.managingprocurement.commerce.nsw.gov.au/system/index_procurement_guideline_documents.doc)

### Environmental Management Plan

Develop and implement an Environmental Management Plan that complies with the *EMS Guidelines*.

The Contractor may elect to complete Schedule to Preliminaries - **Environmental Management Plan**, adding objectives and actions as required to suit the risks/hazards associated with the work under the Contract, and implement the completed version as the Environmental Management Plan.

Submit the Environmental Management Plan no later than 7 days before construction work commences. Do not start construction work before a complying Environmental Management Plan has been submitted.

The Environmental Management Plan must address the following risks:

- Removal of rubbish material from the site

- Removal of soil on vehicles

This list of risks is not exhaustive and must not be relied upon by the Contractor. The Contractor must undertake its own detailed analysis of all environmental risks under the Contract.

### **Incident reports**

Ensure compliance with the notification and other requirements of the *Protection of the Environment Operations Act 1997 (POEO Act)*.

Immediately notify the Principal of any pollution incident that may cause material harm to the environment, providing evidence that notification requirements of the POEO Act have been met, where applicable.

Report immediately the details of any waste removed from the Site and not disposed of at a lawful facility.

When requested, provide an incident investigation report, including identification of the cause of the incident and corrective actions taken, in the form directed.

### **Failure to comply**

If at any time the Contractor has not carried out its environmental management obligations under the Contract, then notwithstanding any other provisions of the Contract, no payment is due to the Contractor until the 7<sup>th</sup> day after the required action has been carried out.

## **2.6 ECOLOGICALLY SUSTAINABLE DEVELOPMENT**

### **Requirement**

Apply strategies to maximise the achievement of ecologically sustainable development in the design, construction and operation of the Works, including reducing pollutants, greenhouse gas emissions and demand on non-renewable resources such as energy sources and water.

### **Restricted timbers**

Do not use the following timbers or their products for work under the Contract:

- rainforest timbers, unless certification is provided that they are plantation grown;
- timber from Australian high conservation forests.

## **2.7 WASTE MANAGEMENT**

### **Requirement**

Implement waste minimisation and management measures, including:

- recycling and diverting from landfill surplus soil, rock, and other excavated or demolition materials, wherever practical;
- separately collecting and streaming quantities of waste concrete, bricks, blocks, timber, metals, plasterboard, paper and packaging, glass and plastics, and offering them for recycling where practical.

Ensure that no waste from the Site is conveyed to or deposited at any place that cannot lawfully be used as a waste facility for that waste.

### **Monitoring**

Monitor and record the volumes of waste and the methods and locations of disposal.

Submit a progress report every two months, and a summary report before Completion, on the implementation of waste management measures, including the total quantity of material purchased, the quantity purchased with recycled content, the total quantity of waste generated, the total quantity recycled, the total quantity disposed of and the method and location of disposal in the form of a *Waste Recycling and Purchasing Report* available on the Internet at:

[www.managingprocurement.commerce.nsw.gov.au/contract\\_management/cm\\_sf\\_waste\\_recycling\\_and\\_purchasing\\_report.doc](http://www.managingprocurement.commerce.nsw.gov.au/contract_management/cm_sf_waste_recycling_and_purchasing_report.doc)

With the *Waste Recycling and Purchasing Report*, submit waste disposal certificates and/or company certification confirming appropriate, lawful disposal of waste.

## 2.8 PEST CONTROL

Do not use any chemical pesticides or termiticides for new construction work. Use preventive treatment by physical means to minimise the risk of pest infestations.

Chemical treatments may be used in existing buildings only as a last resort for the eradication of pest and termite infestations. Chemical pesticides used for this purpose must be registered by the National Registration Authority for Agricultural and Veterinary Chemicals and applied by a Pest Control Operator licensed by WorkCover.

Pest preventive methods must comply with AS 3660.1-2000 Protection of Buildings from Subterranean Termites (except for references to chemical soil barriers), as well as supplementary standards for existing buildings.

## 2.9 WORK METHOD

If the Contract prescribes a particular work method or the Principal or Principal's Representative directs that a particular work method must be used to the exclusion of the other work methods, then that work method is part of the Contract.

Otherwise, the work method is not part of the Contract and the Contractor is free to use any work method. This is so even though, before or after acceptance of the tender, the Contractor made known to the Principal the Contractor's proposed work method and the Principal accepted or approved it.

If the work method is not part of the Contract, the fact that the proposed work method is impractical or impossible or the Contractor, with or without the approval of the Principal's Representative, uses another work method will:

- not entitle the Contractor to make a claim on the Principal;
- not be grounds for an extension of time for Completion;
- not cause the Contract to be frustrated.

## 2.10 STANDARDS

Where the Contract requires compliance with a standard or Code, unless otherwise specified that Standard or Code shall be the one current at the closing date for tenders, except for the Building Code of Australia, which shall be the one current at the Date of Completion.

Where the Contract refers to an Australian Standard it does not preclude the adoption of a relevant international standard.

## 2.11 CLEANING UP

All visible external and internal surfaces, including fittings, fixtures and equipment, must be free of marks, dirt, dust, vermin and unwanted materials, at Completion.

## 2.12 PROPRIETARY ITEMS

Identification by the Principal of a proprietary item does not necessarily imply exclusive preference for that item, but indicates the required properties of the item.

The Contractor may offer an alternative to any proprietary item. Apply in writing for approval to use the alternative. The request must be accompanied by all available technical information and describe how, if at all, the alternative differs from the proprietary item and how it will affect other parts of the Works and performance of the Works.

Except to the extent that the approval, if any, of the Principal's Representative includes a contrary provision, the approval shall be deemed to include the conditions that:

- use of the alternative must not directly or indirectly result in any increase in the cost to the Principal of the Works;
- the Contractor must indemnify the Principal against any increase in costs;
- use of the alternative must not directly or indirectly cause any delay to the Works and if it does, the Contractor will compensate the Principal for any loss which the delay causes.

## 2.13 GUARANTEES

### Generally

Obtain and ensure that Tabulam LALC will have the benefit of warranties or guarantees as specified in the Contract or offered by suppliers, including warranties or guarantees that are obtained by, or offered to the subcontractors of the Contractor.

### Floor Coverings

Ensure that Tabulam LALC will have the benefit of, all warranties and guarantees in State Contracts Control Board *Standing Offer Agreements* in respect of floor coverings listed in those *Standing Offer Agreements* which are provided under this Contract.

## 2. PRELIMINARIES

### 2.14 SCHEDULE TO PRELIMINARIES - ENVIRONMENTAL MANAGEMENT PLAN

(Note: Refer to Preliminaries clause – **Environmental Management** where the Contractor elects to adopt this Plan. The Contractor must complete the Environmental Management Plan by inserting contract-related requirements as necessary, or 'NA' where a particular item is not applicable.)

#### IMPLEMENTATION

ENVIRONMENTAL OBJECTIVES	ACTION TO BE TAKEN	WHEN ACTION WILL BE TAKEN	PERSON RESPONSIBLE	ACTION COMPLETED
<b>1. CONSERVATION OF PLANTS &amp; WILDLIFE</b>				
1.1 Protect flora and fauna	Protect existing trees and plants at and around the Site from damage unless approved by the Principal			
	Do not remove trees and plants without approval from the Principal			
	Control weeds on the Site			
	Protect birds, fish and animals at and around the Site from harm			
	Do not remove birds, fish and animals from the Site without the written agreement of the Principal			
	Do not bring birds, fish, animals and plants onto the Site without written agreement from the Principal			
	Minimise the use of pesticides and herbicides for minimal impact on the environment			
1.2 Control movement of pedestrians, materials, vehicles and plant to minimise damage to the environment	Use only designated routes for access to the Site			
	Use designated site roads and access routes for all movements on and adjacent to the Site			
	Locate compounds, and park all vehicles and plant, in designated areas on the Site			
<b>2. CONSERVATION OF RESOURCES</b>				
2.1 Design for energy efficiency	Adopt energy efficiency, environmental enhancement and waste minimisation as design criteria			
	Use low energy usage construction, fittings and appliances (including heating/cooling and lighting)			
2.2 Select materials to minimise: 1. resource use	Incorporate conservation of resources obligations into subcontracts			
	Reuse all topsoil on the Site and minimise the use of imported topsoil			
	Mulch and chip cleared vegetation as appropriate			

## 2. PRELIMINARIES

ENVIRONMENTAL OBJECTIVES	ACTION TO BE TAKEN	WHEN ACTION WILL BE TAKEN	PERSON RESPONSIBLE	ACTION COMPLETED
and waste 2. ozone depleting effects 3. detrimental effects on air, water, and land quality  2.3 Conserve heritage items and other physical attributes of the Site	Maximise use of materials that are recyclable or from a sustainable source			
	Use timber from sustainable managed sources only			
	Implement a strategy to reduce the quantity of waste, including minimising and recycling packaging			
	Use low water demand fittings & appliances (dual flush toilets, water conserving shower roses & taps)			
	Minimise the use of solvents, glues, paints and other materials which release odours or vapour			
	Comply with statutory requirements for conservation of heritage items			
	Manage the conservation of physical attributes of the Site, including (LIST THE ATTRIBUTES):			
	•			
<b>3. POLLUTION CONTROL</b>				
3.1 Control discharges and emissions from vehicles and plant to minimise damage to the environment	Do not use vehicles, plant or equipment that produce excessive emissions			
	Monitor emissions from vehicles and plant			
	Do not bring vehicles or plant and equipment with hydraulic fluid, fuel or oil leaks to the Site			
	Wash down vehicles, plant and equipment only in controlled areas acceptable to the Principal			
	Prevent and clean up any spills from transport vehicles			
3.2 Prevent pollution of stormwater and adverse effects on land and vegetation by control of cleaning activities and discharges	Use only water based, non-toxic paints and use only water to clear point brushes and rollers			
	Control all run-off from cleaning activities			
	Discharge only non-toxic cleaning products generally			
3.3 Control soil erosion	Identify the existing drainage paths on the Site and protect them against siltation			
	Protect vulnerable and exposed surfaces and stockpiles against scouring			

## 2. PRELIMINARIES

ENVIRONMENTAL OBJECTIVES	ACTION TO BE TAKEN	WHEN ACTION WILL BE TAKEN	PERSON RESPONSIBLE	ACTION COMPLETED
	Install the following sediment control devices before starting construction (LIST THE DEVICES):			
	•			
	Monitor and manage the effectiveness of sediment control devices			
	Remove sediment control devices when no longer required			
3.4 Prevent release of soil contamination to the environment	Establish, before commencing work on the Site, in consultation with the Principal, if contaminated soil is present at the Site			
	If contaminated soil is present, manage the work to prevent release to the environment			
3.5 Manage refrigerants and other dangerous goods to meet statutory requirements	Ensure the procedures used for the charging and disposal of refrigerants and use of dangerous goods meet statutory obligations			
	Use appropriately trained employees			
	Obtain the licences required			
	Document dangerous goods identification, disposal and management, and retain the documentation			
3.6 Minimise noise and vibration impacts on neighbours, occupants and users of any facility	Comply with noise limits and conditions prescribed by the EPA, Department of Environment and Conservation and Council (as applicable)			
	Use equipment in good repair and condition			
	Use noise suppression equipment (e.g. silencers on compressors) and acoustic barriers as required			
	Do not expose workers, neighbours or visitors to excessive noise, and cooperate and coordinate with operators of any neighbouring facility			
	Do not expose people or property to excessive vibrations			
3.7 Comply with Trade Waste Licence conditions applicable	Implement procedures to avoid breaches of the Trade Waste Licence conditions (may apply to discharges from cooling water systems, condenser water systems, heating water systems, cooking facilities, engine discharges, water treated with chemicals or where large sediment loads exist)			



## 2. PRELIMINARIES

ENVIRONMENTAL OBJECTIVES	ACTION TO BE TAKEN	WHEN ACTION WILL BE TAKEN	PERSON RESPONSIBLE	ACTION COMPLETED
to the facility				
3.8 Minimise air pollution from dust and emissions	Minimise areas of exposed earth and stockpiles			
	Cover and secure materials in open transport			
	Use water sprays and/or other means to control dust			
	Keep emissions within statutory or other required limits			
	Minimise fire risks, and prevent and control fires			
3.9 Dispose of waste in accordance with statutory requirements	Implement appropriate disposal procedures for all waste items, including using lawful places for disposal, recording and reporting on the method and location of disposal and any non-conformances			
	<b>EITHER</b> Provide valid disposal certificates for each applicable item <b>OR</b> Provide company certification of appropriate disposal of the following (LIST THE ITEMS): <ul style="list-style-type: none"> <li>• Packaging materials</li> <li>• Replaced or redundant materials</li> <li>• Chemicals</li> <li>• Oils and greases from machinery, cooking and other processes</li> <li>• Paints and solvents, including those used to clean equipment, tools and brushes</li> <li>• Cleaning materials and rags</li> <li>• Materials unsuitable for re-use, including hazardous materials such as asbestos</li> </ul>			
3.10 Minimise damage to the environment from	Document emergency procedures to manage all reasonably foreseeable harm, including spills and other environmental emergencies			
	Ensure emergency procedures are followed			

## 2. PRELIMINARIES

ENVIRONMENTAL OBJECTIVES	ACTION TO BE TAKEN	WHEN ACTION WILL BE TAKEN	PERSON RESPONSIBLE	ACTION COMPLETED
emergencies	Obtain the agreement of the Principal to procedures for handling oil, chemicals and other dangerous goods before placing them on the Site, including secure storage arrangements			
	Re-instate and clean damaged areas and features, including work areas			
	Re-instate damaged eco-systems and features to their previous condition			
	Identify key contacts: (LIST NAMES and ROLES) •			
3.11 Comply with environmental requirements and rectify breaches	Inspect the Site daily to ensure appropriate environmental controls are in place and operating effectively, and that all environmental management requirements are being met			
	Cooperate with environmental audits by others			
	Rectify any environmental breaches identified within the time specified in an audit or by the Principal			
<b>4. RECORDS AND REPORTING</b>				
4.1 Provide sufficient documentation to demonstrate appropriate environmental management, including:	Prepare, submit and update the Environmental Management Plan			
	Maintain and submit records of environmental training			
	Report on implementation of the Environmental Management Plan			
	Submit applicable waste disposal certificates and/or company certification of appropriate disposal			
	Submit to the Principal copies of correspondence with regulators, including incident reports and notification of non-compliances or fines			
	Submit documentation evidencing that the causes of non-compliances have been corrected			
	Keep records for inspection securely filed using an effective document retrieval system			
4.2 Report environmental incidents				
	Immediately report all environmental incidents to the Principal			
	Immediately report environmental incidents as otherwise required			

**END OF SECTION - PRELIMINARIES**

### 3 -ABORIGINAL EMPLOYMENT AND TRAINING STRATEGY

The Contractor is required to provide employment and training opportunities to the local Tabulam Aboriginal community as detailed in this section. Notwithstanding these requirements, it remains the Contractor's responsibility to ensure time, cost and quality requirements of the tender documents are met.

If the Contractor is unable to ensure these requirements are met under the employment strategy, he shall immediately discuss the issue with the Principal's Representative and agree on a course of action to overcome the deficiencies.

#### 3.1. ABORIGINAL EMPLOYMENT AND TRAINING ARRANGEMENTS

There may be Aboriginal Apprentices and or Trainees available that were previously employed by GN Constructions that can be offered employment and training, in their former capacity, for the duration of this project. There may also be other residents that could be employed. The local contact to advise on availability is Mr Ross James - phone number (02) 6666 1337

There are a number of work packages that may be able to be carried out by Aboriginal residents under the supervision of the Contractor. Such work may be continuous or on demand. The work packages that may be available include

- Fencing ;
- Site Filling;
- Preparation and laying of turf;
- Installation of clothes lines ;
- Forming and installation of paths;
- Forming and installation of driveways;
- Building rubbish removal.

For Aboriginal residents employed, the Contractor shall meet all requirements for workers compensation, superannuation, long service leave payment scheme etc. The Contractor will ensure workers employed have a "General Induction Certificate for Construction Work" issued by Workcover as appropriate.

If suitable arrangements cannot be made with Aboriginal residents to carry out any of the above work packages, the Contractor is to arrange for the work to be carried out by other labourers or qualified sub-contractors or staff.

The Tenderer shall detail proposed Aboriginal employment in Returnable Schedule

#### 3.2 MONTHLY REPORTS

Monthly reports are to be submitted to GHD Pty Ltd with each progress claim detailing the number of local indigenous employment/training personnel engaged as well as the use of local suppliers and equipment. (Refer Schedule of Aboriginal Participation Information)

## *2. PRELIMINARIES*

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**NSW Department of  
Commerce**

**Technical Specification for  
Tabulam ACDP Program  
3 New Houses at Tabulam**

May 2009



# Contents

1.	General Requirements	1
	General Requirements	1
2.	Termite Control	6
2.1	General	6
3.	Earthworks, Foundations and Footings	7
3.1	General	7
3.2	Site Clearing and Preparation	7
3.3	Design for Footings	7
3.4	Driveways and Carpark Areas	7
3.5	Existing Services	8
3.6	Excess Soil and Spoil	8
4.	Concrete	9
5.	Drainage	10
5.1	General	10
5.2	Workmanship	10
6.	Sanitary Plumbing	11
6.1	General	11
6.2	Fixtures and Fittings	11
6.3	Tapware	11
6.4	Floor Wastes	11
6.5	Fixture Wastes, Traps and Vents	11
7.	Hydraulic Services	12
7.1	General	12
7.2	Quality	13
7.3	Execution	13
8.	Electrical and Cabling	18
8.1	General	18



8.2	TV Outlets	18
8.3	Telephone	18
9.	Blockwork Construction	19
9.1	Cross References	19
9.2	Standard	19
9.3	Quality	19
9.4	Materials and Components	19
9.5	Blockwork	20
9.6	Facework	21
9.7	Reinforced and Grouted Blockwork	21
9.8	Schedules	22
10.	Adhesives, Sealants and Fasteners	23
10.1	General	23
10.2	Materials and Components	23
11.	Light Timber Framing	25
11.1	General	25
11.2	Quality	25
11.3	Submissions	25
11.4	Materials and Components	26
11.5	Sheet Products	27
11.6	Framing	28
11.7	Roof and Ceiling Framing	29
11.8	Trusses	30
11.9	Completion	31
12.	Metal Fixtures	32
12.1	General	32
12.2	Quality	32
12.3	Materials	32
12.4	Execution	32
12.5	Stainless Steel Fabrication	32
13.	Timber Fixtures	33





13.1	General	33
13.2	Materials and Components	33
13.3	Furniture	34
13.4	Domestic Kitchen Assemblies	35
14.	Waterproofing	36
14.1	General	36
14.2	Materials And Components	36
14.3	Execution	36
14.4	Residential Wet Areas	36
15.	Roofing	38
15.1	General	38
15.2	Materials And Components	38
15.3	Execution	38
15.4	Sheet Metal Roofing and Cladding	38
15.5	Roof Lights	39
15.6	Roof Plumbing	39
16.	Cladding	41
16.1	General	41
16.2	Quality	41
16.3	Materials And Components	41
16.4	Execution	41
17.	Doors and Hatches	42
17.1	General	42
17.2	Execution	42
17.3	Timber Doors	42
17.4	Steel Door Frames	43
17.5	Security Screen Doorsets	43
17.6	Aluminium Doorsets	44
18.	Windows	45
18.1	General	45
18.2	Standards	45



18.3	Performance	45
18.4	Materials and Components	45
18.5	Execution	45
19.	Glazing	47
19.1	General	47
19.2	Design	47
19.3	Standard	47
19.4	Materials And Components	47
19.5	Glazing Materials	47
19.6	Mirrors	47
19.7	Installation	48
19.8	Fixing Mirrors	48
19.9	Completion	48
20.	Door and Window Hardware	49
20.1	General	49
20.2	Materials	49
20.3	Components	49
20.4	Hinges	49
20.5	Keying	50
20.6	Locks and Latches	51
20.7	Execution	51
21.	Lining	53
21.1	General	53
21.2	Quality	53
21.3	Materials And Components	53
21.4	Execution	53
21.5	Plasterboard Lining	54
21.6	Fibre Cement Lining	54
22.	Insulation and Barriers	56
22.1	General	56
22.2	Interpretation	56
22.3	Quality	56



22.4	Execution	56
22.5	Wall Insulation	57
22.6	Roof Insulation	57
22.7	Underfloor Insulation	57
23.	Tiling	58
23.1	General	58
23.2	Materials and Components	58
23.3	Adhesives	58
23.4	Mortar	58
23.5	Grout	59
23.6	Execution	59
23.7	Tiling Generally	59
23.8	Setting Out	60
23.9	Falls and Levels	60
23.10	Grouted and Caulked Joints	61
23.11	Joint Accessories	61
24.	Resilient Finishes	62
24.1	General	62
24.2	Standard	62
24.3	Quality	62
24.4	Execution	62
24.5	Sheet Installation	62
24.6	Vinyl Sheeting	63
24.7	Joints and Accessories	63
24.8	Completion	63
25.	Painting	64
25.1	General	64
25.2	Standards	64
25.3	Quality	64
25.4	Materials and Components	64
25.5	Execution	65
25.6	Paint Systems	66



26. Landscaping	70
26.1 General	70
27. Drawings	71

## Appendices

- A Sample Test Plans
- B Schedule of Products
- C Sample of Safe Working Method Statements
- D Basix Certificates
- E Drawings



This Page Not Used



# 1. General Requirements

## General Requirements

### 1.1.1 General

#### **Precedence**

Requirements of individual technical sections of the specification override conflicting requirements in this section.

### 1.1.2 Referenced Documents

#### ***Current Editions***

General: Use referenced documents which are editions, with amendments, current one month before the closing date for tenders, except where other editions or amendments are required by statutory authorities.

Site copies: AS 1428.1

#### ***Contractual relationships***

Responsibilities and duties of the principal, contractor and contract administrator are not altered by requirements in referenced documents.

### 1.1.3 Interpretation

#### **General**

Unless the context otherwise requires, the following definitions apply:

- Supply: "Supply", "furnish" and similar expressions mean "supply only".
- Provide: "Provide" and similar expressions mean "supply and install".
- Approved: "Approved", "reviewed", "directed", "rejected", "endorsed" and similar expressions mean "approved (reviewed, directed, rejected, endorsed) in writing by the contract administrator".
- Give notice: "Give notice", "submit", "advise", "inform" and similar expressions mean "give notice (submit, advise, inform) in writing to the contract administrator".
- Obtain: "Obtain", "seek" and similar expressions mean "obtain (seek) in writing from the contract administrator".
- Proprietary: "Proprietary" mean identifiable by naming manufacturer, supplier, installer, trade name, brand name, catalogue or reference number.
- Samples: Includes samples, prototypes and sample panels.

#### ***Technical***

Zinc-coated steel: Includes zinc-coated steel, zinc/iron alloy-coated steel, and aluminium/zinc-coated steel.

Pipe: Includes pipe and tube.



### ***Maintenance Period***

Co-extensive with the defects liability period.

#### **1.1.4 Contract Documents**

##### ***General***

Diagrammatic layouts: Layouts of service lines, plant and equipment shown on the drawings are diagrammatic only, except where figured dimensions are provided or calculable. Before commencing work, obtain measurements and other necessary information.

Levels: Spot levels take precedence over contour lines and ground profile lines.

#### **1.1.5 Design**

##### ***Space requirements***

Check space requirements of equipment and services indicated diagrammatically in the contract documents and submit a report on consequent variations to the design.

#### **1.1.6 Quality**

##### ***Notice***

Witness points: If notice of inspection is to be given in respect of parts of the works, advise if and when those parts are to be concealed.

Hold points: If notice of inspection is to be given in respect of parts of the works, do not conceal those parts without approval.

Minimum notice for inspections to be made: 4 hours for on-site inspectors, otherwise 2 working days.

Concealed services: Give notice so that inspection may be made of services to be concealed.

#### **1.1.7 Samples**

##### ***Timing***

Delays: Coordinate submissions of related samples. Do not cause delays by making late submissions or submitting inadequate samples.

##### ***Quantity***

General: Submit a sample of each designated item and 2 copies of supporting documentation. Include ancillary items such as fasteners, flashings and seals.

##### ***Identification***

Identify the project, contractor, subcontractor or supplier, manufacturer, applicable product, model number and options, as appropriate and include pertinent contract document references. Include service connection requirements and product certification. Identify non-compliances with project requirements, and characteristics which may be detrimental to successful performance of the completed work.



### ***Approval***

General: Do not commence work affected by samples until the samples have been approved. Submit further samples as necessary.

### ***Retention***

Keep approved samples in good condition on site, until practical completion.

## **1.1.8 Submissions**

### ***Timing***

General: Submit documents in a timely manner, to suit the construction program. Advise if any of the documents are to be returned.

Delays: Coordinate submissions of related items. Do not cause delays by making late or inadequate submissions.

### ***Identification***

Identify the project, contractor, subcontractor or supplier, manufacturer, applicable product, model number and options, as appropriate and include pertinent contract document references. Include service connection requirements and product certification. Identify non-compliances with project requirements, and characteristics which may be detrimental to successful performance of the completed work.

### ***Endorsement***

Witness points: Give notice before commencing work affected by contractor's submissions, unless the submissions have been endorsed as satisfactory.

Hold points: Do not commence work affected by contractor's submissions until, if appropriate, the submissions have been endorsed as satisfactory,

Errors: If a document contains errors, submit a new or amended document as appropriate, indicating changes since the previous submission.

## **1.1.9 Materials and Components**

### ***Proprietary Items***

Implication: Identification of a proprietary item does not necessarily imply exclusive preference for the item so identified, but indicates the necessary properties of the item.

Alternatives: If alternatives are proposed, submit proposed alternatives and include samples, available technical information, reasons for proposed substitutions and cost. If necessary, provide an English translation. State if use of proposed alternatives will necessitate alteration to other parts of the works and advise consequent cost savings. Alternatives will be reviewed but not necessarily approved.

### ***Manufacturers' or suppliers' recommendations***

General: Select, if no selection is given, and transport, deliver, store, handle, protect, finish, adjust, prepare for use, and use manufactured items in accordance with the current written recommendations and instructions of the manufacturer or supplier.





#### **1.1.10 Execution**

##### ***General***

Arrangement: Arrange services so that services running together are parallel with each other and with adjacent building elements. Under raked timber floors, keep services snug to the underside of sub-floor framings and ensure access is not impeded.

#### **1.1.11 Services Connections**

##### ***Statutory authorities' requirements***

If the authorities elect to perform or supply part of the works, make the necessary arrangements. Install equipment supplied, but not installed, by the authorities.

##### ***Connections***

Connect to statutory authorities' services or service points. Excavate to locate and expose connection points. On completion reinstate the surfaces and facilities which have been disturbed.

#### **1.1.12 System Integration**

##### ***General***

Interconnect system elements so that the installations perform their designated functions.

#### **1.1.13 Building Penetrations**

##### ***Piping sleeves***

General: Provide metal or uPVC sleeves formed from pipe sections, for piping penetrations through building elements.

Finish: Prime paint ferrous surfaces.

#### **1.1.14 Marking**

##### ***General***

General: Mark equipment, electrical wiring, piping, valves, conduits and ducts, to provide a ready means of identification.

Piping, conduits and ducts: To AS 1345, as applicable.

##### ***Labels***

Type: Select from the following:

- » For indoor applications only, engraved two-colour laminated plastic.
- » Engraved and black filled lettering on stainless steel or brass, minimum thickness 1 mm.
- » Cast metal.

##### ***Fixing***

General: Provide mechanical fixing. Do not penetrate vapour barriers.



Valves: Screw fix to body or attach by key ring to valve handwheels.

***Piping***

Identify throughout its length, including in concealed spaces.

***Electrical***

Mark operable control devices, indicators, isolating switches and outlets to provide a ready means of identification.



## 2. Termite Control

### 2.1 General

#### **Cross References**

Refer to the *General Requirements* section.

#### **Standard**

Termite barriers: To AS 3660.1.

#### 2.1.1 Quality

##### ***Witness Points***

Give sufficient notice so that inspection may be made of the completed termite barriers.

##### ***Material***

Use either Termimesh, Trithor or Kordon to slab edges, joints and under plates in accordance with Local Authority requirements and manufacturer's recommendations to create a permanent barrier.



## 3. Earthworks, Foundations and Footings

### 3.1 General

Excavate and backfill as required for all work shown on the drawings and/or included in the project documentation. Earthworks shall be in accordance with AS 3798 and as follows

### 3.2 Site Clearing and Preparation

Remove all stumps and roots over the area of the building and clear all trees and shrubs within 3 metres of the building.

Where applicable remove all existing concrete slabs and footings from the site. Grade the ground under the building to ensure water drains away from the building and doesn't pool under the floor areas.

For concrete slabs on ground, clear the building area of the topsoil containing vegetable and organic matter, roots, etc. The contractor shall check all excavations for organic material and rubbish, if any of this material is found, it should be removed from the works to a place designated by the Superintendent.

For a building with a suspended floor, grade the surface under the building to prevent ground and surface water ponding.

### 3.3 Design for Footings

Footing design shall comply with the Project Drawings and Geotechnical report is available for viewing if required and is for tender information only.

The Geotechnical report provided by Barnson shall not form any part of Contract pursuant to this tender.

### 3.4 Driveways and Carpark Areas

Unless noted otherwise on the Project Drawings, driveways and carpark areas shall be founded on compacted material or controlled fill compacted in accordance with the following as appropriate for material type:

Sands with 5% fines or less, field density index not less than 65% of laboratory reference density determined in accordance with AS 1289.E5.1

Silts and sand with more than 5% fines, dry density ratio of not less than 98% of laboratory reference density determined in accordance with AS 1289.5.1.1

Clays, dry density ratio of not less than 95% of laboratory reference density determined in accordance with AS 1289.5.1.1. clay fill should be moist to allow compaction and reduce subsequent movement; reactive clay fill should be avoided.

Unless noted otherwise on the Project Drawings, driveways and carpark areas shall be cast on a minimum thickness of 50 mm of bedding sand, with a field density index not less than 65% of laboratory reference density determined in accordance with AS 1289.E5.1.



### **3.5 Existing Services**

Obtain the required approval from the Local Authority or Service Authority before altering or covering up any service encountered during the excavation.

### **3.6 Excess Soil and Spoil**

Any excess soil and spoil from excavations, footing, drainage or other works shall be spread evenly over the site unless otherwise specified in the project documentation. Ensure finished surface grades away from building with no areas of ponding.



## 4. Concrete

### 4.1.1 General

Provide concrete work as shown on the project drawings/documentation. All workmanship and materials shall be in accordance with As 3600 and AS 2870 as appropriate.



## 5. Drainage

### 5.1 General

Provide sewerage and wastewater treatment system for household waste and/or stormwater drainage as shown on the drawings, approved drainage plan and/or included in the project documentation.

Note! Based on available site records there is no existing sewer drainage system servicing Lots 101, 103. This contract requires the construction of a sewer line from the existing sewer manhole located in the valley behind Lot 104 to the new septic tank being provided on Lot 101. The exact location of the existing sewer line and manhole is to be confirmed on site.

The contractor is to provide capped stubs for drainage connections from Lots 102, 103, 104. The costs for this new sewer line is to be included in the tender schedule for Lot 101.

On completion on works the Contractor is to provide a survey in autocad format that shows location of new line and capped stubs.

Any costs associated with shoring or dewatering of trenches is deemed to be included in the Contractors lump sum price.

### 5.2 Workmanship

All household drainage shall be carried out by a licensed Drainer in accordance with the Standard Sewerage By-laws and Local Authorities requirements. Given the required notice to the Local Authority concerned before covering up pipework and at other stages required for tests and obtain a certificate of satisfactory completion of drainage from the Local Authority.

Effectively divert all seepage and/or surface water clear of the building footings.

The position of drainage shall not be varied from that shown on the project drawings unless approved by the Superintendent.



## **6. Sanitary Plumbing**

### **6.1 General**

Install all fixtures and fittings and provide sanitary plumbing, and water services as shown on the drawings and/or included in the project documentation.

All sanitary plumbing shall be installed and tested by a licensed tradesman.

### **6.2 Fixtures and Fittings**

Provide sanitary grade fixtures and fittings to positions shown on drawings and in accordance with the relevant Australian Standards. Install in accordance with manufacturer's specifications.

Type and colour of fixtures and fittings to be as shown on project drawings and/or noted in the project documentation.

### **6.3 Tapware**

Install hot and cold water taps and fittings as nominated on the project drawings and/or noted in the project documentation. (Schedule of Products and Fixtures).

### **6.4 Floor Wastes**

Reuse floor wastes as shown on the project drawings/documentation.

### **6.5 Fixture Wastes, Traps and Vents**

All wastes shall be trapped and connected to drains as required by the Standard Sewerage By-laws. Provide vermin seals to all pipe penetrations.





## 7. Hydraulic Services

### 7.1 General

#### 7.1.1 Cross References

##### **General**

Conform to the *General Requirements* worksection.

##### **Related Worksections**

Conform to associated worksections as follows:

- » *Adhesives, sealants and fasteners.*
- » *Metals and pre-finishes* for off-site painting and electroplated or in-line galvanized finishes.
- » *Service trenching.*
- » *Roofing* for roof plumbing.

#### 7.1.2 Standards

##### **General**

Authorised products: To AS/NZS 3718 and SAA MP52, unless otherwise required by the statutory authority.

Copper pipe and fittings-installation and commissioning: To AS 4809.

Microbial control: To AS/NZS 3666.1 and AS/NZS 3666.2.

Plumbing and drainage: To AS/NZS 3500.0, AS/NZS 3500.1, AS/NZS 3500.2, AS/NZS 3500.3 and AS/NZS 3500.4.

#### 7.1.3 Performance

##### **Qualification**

Use only appropriately experienced and qualified persons to undertake the hydraulic design work on the systems documented.

##### **Description of Hydraulic Systems**

Design, install, test and commission the following complete systems subject to the site and other constraints below:

- » Cold water services: Connect the cold water supply system to the statutory authority's main through a stop valve and meter. Provide the cold water installation from the meter to the draw-off points or connections to other services.
- » Hot water services: Provide the hot water installation from the cold water connection points to the draw-off points or connections to other services.



- » Sanitary plumbing and drainage: Connect to main line in accordance with local authority requirements. Note Supply and install a concrete septic tank on the waste line to primary treat all solids prior to discharging into the main line all in accordance with the Local Authority requirements. Inspection openings and manhole to be located above the finished ground line. Inspection openings to be made secure.
- » Stormwater: Connect to kerb and gutter. Use galv. RHS at kerb location. Modify existing concrete kerb as required and make good.
- » Where indicated on the drawings supply and fix a rainwater tank on a galvanised tank stand. Downpipe connection to tank to incorporate a first flush system complete with leaf disbursement at gutter. Refer Schedule of Products for specification. Overflow to connect to stormwater line.

Submissions: Make submissions (including notices) to authorities relating to the works.

## **7.2 Quality**

### **7.2.1 Inspection**

#### ***Witness Points***

- » Excavated surfaces.
- » Concealed or underground services.

#### ***Testing***

Hydrostatic tests: Do not install insulation until the piping has been tested. Pressure test cold and hot water services to AS/NZS 3500.1 Section 16. Include pipe joints, valve seats, tap washers and strainers. Repair as necessary, replace if damaged and retest.

## **7.3 Execution**

### **7.3.1 Installation**

#### ***Accessories***

Provide the accessories and fittings necessary for the proper functioning of the systems, including taps, valves, outlets, pressure and temperature control devices, strainers, gauges and pumps.

Isolating valves: In addition to valves required to meet statutory requirements, provide valves so that isolation of parts of the system for safe isolation of the system in the event of leaks or maintenance causes a minimum of inconvenience to building occupants.

#### ***Arrangement***

Locate and arrange all services and equipment so that:

- » Failure of plant and equipment (including leaks) does not create a hazard for the building occupants and causes a minimum or no damage to the building, its finishes and contents.



- » Inspection and maintenance operations can be carried out in a safe and efficient manner, with a minimum of inconvenience and disruption to building occupants and without damaging adjacent structures, fixtures or finishes.

### ***Connections to Authorities' Mains***

Excavate to locate and expose the connection points and connect to the authorities' mains. On completion, backfill and compact the excavation and reinstate surfaces and elements which have been disturbed such as roads, pavements, kerbs, footpaths and nature strips.

### ***Embedded Pipes***

Do not embed pipes that operate under pressure in concrete or surfacing material of a building without prior written approval. If embedding is approved:

- » Install in continuous lengths without fittings.
- » Do not lay across joints between adjoining sections of concrete through which reinforcement does not extend.
- » Use only copper pipe with the minimum number of joints.
- » Conform to AS 2896 clause 4.3.3.3.
- » Pressure test and rectify leaks before the concrete is poured.

### ***Penetrations and Fixing***

Fixing: If non-structural building elements are not suitable for fixing equipment and services to, subject to prior approval, fix directly to structure and trim around holes or penetrations in non-structural elements.

Limitations: Do not penetrate or fix to the following without prior approval:

- » Structural building elements including external walls, fire walls, fire doors and access panels, other tested and rated assemblies or elements, floor slabs and beams.
- » Membrane elements including damp-proof courses, waterproofing membranes and roof coverings.

Membranes: If approval is given to penetrate membranes, provide a waterproof seal between the membrane and the penetrating component.

Non-fire rated building elements: Seal penetrations around conduits and sleeves. Seal around cables within sleeves. If the building element is acoustically rated, maintain the rating.

Pipe sleeves: If piping or conduit penetrates building elements, provide metal or UPVC sleeves formed from oversize pipe sections.

### ***Piping***

General: Install piping in straight lines, plumb and to uniform grades. Arrange and support the piping so that it remains free from vibration and water hammer, while permitting movement in both structure and services. Keep the number of joints to a minimum. Prevent direct contact between incompatible metals.

Concealment: If practicable, conceal piping and fittings requiring maintenance or servicing so that they are accessible within non-habitable enclosed spaces such as roof spaces, subfloor spaces and ducts. Keep pipelines in subfloor spaces at least 150 mm above ground and ensure access can be provided



throughout for inspection. Provide at least 25 mm clearance between adjacent pipelines (measured from the piping insulation where applicable).

Cover plates: Where exposed piping emerges from wall, floor or ceiling finishes, provide cover plates of stainless steel or non-ferrous metal finished to match the piping.

Differential movement: If the geotechnical site investigation report predicts differential movements between buildings and the ground in which pipes are buried, provide movement control joints in the pipes.

Pipe support materials: To be the same as the piping or galvanized or non-ferrous metals, with bonded PVC or glass fibre woven tape sleeves where needed to separate dissimilar metals.

### **7.3.2 Painting, Finishes and Marking**

#### ***Exceptions***

Do not paint chromium or nickel plating, anodised aluminium, glass reinforced plastic, stainless steel, non-metallic flexible materials and normally lubricated machined surfaces.

#### ***Finishes***

General: Finish exposed piping, including fittings and supports, as follows:

- » In internal locations such as toilet and kitchen areas: Chrome plate copper piping to AS 1192 service condition 2, bright.
- » Externally and steel piping and iron fittings internally: Paint.
- » In concealed but accessible spaces (including cupboards and non-habitable enclosed spaces): Leave copper and plastic unpainted except for identification marking. Prime steel piping and iron fittings.

Valves: Finish valves to match connected piping.

### **7.3.3 Hot and Cold Water Services**

#### ***Fittings and Accessories***

General: Provide the fittings necessary for the proper functioning of the water supply system, including taps, valves, backflow prevention devices, pressure and temperature control devices, strainers, gauges and automatic controls and alarms.

Note: Provide water service to Evaporative Air Cooler.

#### ***Hot Water Temperature***

Standard: To AS/NZS 3500.4.

#### ***Line Strainers***

Type: Low resistance, Y-form bronze bodied type, with screen of dezincification resistant brass, stainless steel or monel.

Screen perforations: 0.8 mm maximum.



### ***Pressure Control Valves***

Provide reduction valves, pressure limiting valves or ratio valves, which produce the necessary reduction in pressure.

### ***Piping Insulation***

Standard: To AS/NZS 3500.4 Section 8.

Application: Fit insulation tightly to piping surfaces without gaps. Minimise number of joints. Insulate fittings for the same thermal resistance as the piping insulation. Install the insulation on unions and other items requiring service so that it is readily removable. Provide supports formed to fit around the insulation so the insulation thickness is reduced by < 10%.

Material: Select from the following:

- » Polyester in moulded tubular sections faced with factory bonded aluminium foil laminate or integral polyester scrim.
- » Polyolefin foam: Cross linked closed cell polyolefin foam faced with factory bonded aluminium foil laminate.
- » Elastomeric foam insulation: Chemically blown closed cell nitrile rubber in tubular sections to ASTM C534. Use only solvent-based adhesive supplied by insulation manufacturer and designed specifically for the material being used.

Fire hazard properties:

- » Spread of flame index: 0.
- » Smoke developed index:  $\leq 3$ .

### ***Tapware***

General: Provide the tapware in accordance with the Schedule of Products.

Tap positions: Locate hot tap to the left of or above, the cold tap. If there is sufficient space, install with valve spindles vertical.

### ***Tempering Valves***

General: Water temperature regulated by a single control, capable of delivering water at a set temperature.

Controls: Incorporate the following:

- » A temperature sensitive automatic control which maintains temperature at the pre-selected setting and rapidly shuts down the flow if either supply system fails or if the normal discharge water temperature is exceeded. To be fitted to all hot water services to wet areas only, not to be fitted to laundry tubs, washing machine or kitchen service.
- » Hot water flush facility.

## **7.3.4 Water Heaters**

### ***Standard***

Energy performance: To AS 1056.1.



Refer drawings for location and Schedule of Products for type.

#### ***Tariff***

Install so that the heating system qualifies for the tariff concession or subsidy offered by the statutory authority.

### **7.3.5 Stormwater**

#### ***Cleaning***

During construction, use temporary covers to openings and keep the system free of debris.

#### ***Pipelaying***

Lay pipelines with the spigot ends in the direction of flow.

#### ***Downpipe Connections***

Turn up drain branch pipelines to finish 50 mm above finished ground or pavement level.

#### ***Stormwater Drains***

General: Provide stormwater drains to connect downpipes, surface drains, subsoil drains and drainage pits to the outlet point or point of connection.

Downpipe connections: Turn up branch pipelines with bends to meet the downpipe, finishing 50 mm (nominal) above finished ground or pavement level. Seal joints between downpipes and drains.

### **7.3.6 Sanitary Plumbing and Drainage**

#### ***Vent Pipes***

Staying to roof: If fixings for stays penetrate the roof covering, seal the penetrations and make watertight.

Terminations: Provide bird-proof vent cowls of the same material and colour as the vent pipe.

#### ***Sanitary Fixtures***

Provide sanitary fixtures in the Schedule of Products complete with all accessories necessary for correct installation and use.

### **7.3.7 Completion**

#### ***Completion***

Hot and cold water services: On completion, flush pipelines using water and leave them clean.

Stormwater and wastewater services: On completion, flush the system using water and leave clean.

#### ***Charging***

On completion of installation, commissioning, testing and disinfection, fill the hot and cold water systems with water, turn on control and isolating valves and the energy supply and leave the water supply system in full operational condition.



## **8. Electrical and Cabling**

### **8.1 General**

Work to be carried out by a licensed tradesman in accordance with the relevant Australian Standards.

Carry out testing on all installations and lodge necessary test notices with electrically supply authority.

Provide facilities for attachment, support or protection of the services line and connect from consumers' terminals to meter and switchboard.

Install meter box and switchboard. Allow for single phase power unless otherwise noted on the project drawings or in the project documentation.

Install all lights, power outlets and electrical appliances nominated on the project drawings or in the project documentation. The position of all outlets and switches shall be as per the project drawings or as directed by the Superintendent.

Install direct wired smoke detectors to rooms using type specified in schedule of products.

Install all fixtures included on the project drawings or in the project documentation.

### **8.2 TV Outlets**

Provide coaxial cable from the position of TV outlet/s to external aerial. Provide external aerial in optimum position for receiving transmission. Adjust aerial for best reception.

### **8.3 Telephone**

Provide concealed conduit and cabling from the Telecom lead-in cable to the telephone outlet points shown on the drawings and/or noted in the project documentation.



## 9. Blockwork Construction

### 9.1 Cross References

#### 9.1.1 General

Refer to the *General Requirements* worksection.

#### 9.1.2 Related Worksections

Refer to the following worksections: >Concrete, painting

### 9.2 Standard

#### 9.2.1 General

Materials and construction: To AS 3700.

### 9.3 Quality

#### 9.3.1 Inspection

**Hold points** Reinforcement before pouring of concrete

#### 9.3.2 Witness Points

Stages: Give sufficient notice so that inspection may be made at the following stages:

Bottoms of block cores, after cleaning out;

Bottoms of core holes, before grouting;

Structural steelwork, reinforcement, including bolts and shelf angles, in position.

### 9.4 Materials and Components

#### 9.4.1 Blocks

Standard: To AS/NZS 4455.

#### 9.4.2 Connectors and Accessories

Standard: To AS/NZS 2699.2.

#### 9.4.3 Mortar Mixing

Measure volumes using buckets or boxes. Machine mix for at least six minutes.





#### 9.4.4 Mortar Materials

Additives or admixtures:

- Air-entraining agents: To AS 1478.1.
- Methyl-cellulose water thickeners: To be designed for use in brickwork or blockwork.

Lime: To AS 1672.1.

Masonry cement: To AS 1316.

Portland cement: To AS 3972.

- Type: GP.

Proportions: Conform to the **Mortar Mix table**.

Sand: To be fine aggregate with a low clay content and free from efflorescing salts, selected for colour and grading.

Water: To be clean and free from any deleterious matter.

#### Mortar Mix Table

Mortar Class to AS 3700	Water Thickener	
	Concrete	
M4	1:0:4	Yes

#### 9.4.5 Protection From Contamination

Protect masonry materials and components from ground moisture and contamination.

### 9.5 Blockwork

#### 9.5.1 Bond

Stretcher bond.

#### 9.5.2 Construction at Different Rates to Times

If two or more adjoining sections of masonry are constructed at different rates or times, rake back or tie the intersections between those sections so that monolithic structural action is obtained in the completed work.

#### 9.5.3 Holes and Chases

Do not cut holes and chases.



#### **9.5.4 Joints**

Lay solid and cored units on a full bed of mortar. Face-shell bed hollow units. Fill perpend solid. Cut mortar flush.

- Externally: Tool to give a dense water-shedding finish.
- Thickness: 10 mm.

#### **9.5.5 Joints and Cutting**

Set out blocks with joints of uniform width and minimise cutting of masonry units.

#### **9.5.6 Rate of Construction**

Regulate the rate of construction to eliminate joint deformation, slumping or instability.

#### **9.5.7 Rods**

190 mm high units: 3 courses to 600 mm.

#### **9.5.8 Weather Protection**

Keep the top surface of blockwork covered to prevent the entry of rainwater.

### **9.6 Facework**

#### **9.6.1 Cleaning**

Clean progressively as the work proceeds to remove mortar smears, stains and discolouration. Do not use acid. Do not erode blockwork.

#### **9.6.2 Colour Mixing**

If the colour of the face units is visible, evenly distribute the colour range of units and prevent colour concentrations and "banding".

#### **9.6.3 Commencement**

Commence at least 1 full course for blockwork, below adjacent finished ground level.

#### **9.6.4 Perpends**

Vertically align perpends in alternate courses.

### **9.7 Reinforced and Grouted Blockwork**

#### **9.7.1 General**

Provide reinforcement and/or grouting in conformance with the General Notes and Drawings.



### 9.7.2 Cleaning Core Holes

Provide purpose-made cleanout blocks or machine cut a cleaning hole at the base of each reinforced core. Locate on the side of the wall which is to be rendered or otherwise concealed. Cover the hole with formwork and grout the core.

### 9.7.3 Grouting

Commencement: Do not commence until grout spaces have been cleaned out and the mortar joints have attained sufficient strength to resist blow-outs.

Height of lift: Limit the height of individual lifts in any pour to ensure that the grout can be thoroughly compacted to fill all voids and ensure bond between grout and masonry. Compact by vibration or by rodding.

Topping up: On the completion of the last lift, top up the grout after 10 min to 30 min, and vibrate or rod to merge with the previous pour.

## 9.8 Schedules

### Block Construction Schedule

Type or Location	
Location	Retaining walls under ground slabs
Characteristic unconfined compressive strength	15
Dimensional category	390 x 190w x 190h and modules of it
Name or type	Hollow – smooth both faces
Colour	Natural



## 10. Adhesives, Sealants and Fasteners

### 10.1 General

#### ***Cross Reference***

Refer to the *General Requirements* section.

### 10.2 Materials and Components

#### ***Adhesives***

Provide adhesives capable of transmitting imposed loads, sufficient to ensure the rigidity of the assembly, and which will not cause discolouration of finished surfaces.

#### ***Adhesive Types***

Mastic adhesive: To AS 2329.

Non-structural adhesive for timber: To AS 2754.3.

Polymer emulsion adhesive for timber: To AS 2754.2, not inferior to Type 3 if required to be water-resistant.

#### ***Elastomeric Sealants***

Sealing compound (polyurethane, polysulphide, acrylic):

» Single component: To TT-S-00230C.

Sealing compound (silicone):

» Single component: To TT-S-001543A.

#### ***Fasteners***

Provide fasteners capable of transmitting the loads imposed, and sufficient to ensure the rigidity of the assembly.

#### ***General***

Masonry anchors: Purpose-made proprietary expansion or chemical types.

Metal washers: To AS 1237.

» General: Provide washers to the heads and nuts of bolts and coach screws.

Plugs: Purpose-made plastic.

Powder-actuated fasteners: To AS/NZS 1873.4.

Steel nails: To AS 2334.

» Length: At least  $2\frac{1}{2}$  x the thickness of the member being secured, and at least 4 x the thickness if the member is plywood or building board <10 mm thick.

Unified hexagon bolts, screws and nuts: To AS/NZS 2645.



### ***Bolts***

Coach bolts: To AS/NZS 1390.

Hexagon bolts Grades A and B: To AS 1110.1.

Hexagon bolts Grade C: To AS 1111.1.

### ***Nuts***

Hexagon champered thin nuts Grades A and B: To AS 1112.4.

Hexagon nuts Style 1 Grades A and B: To AS 1112.1.

Hexagon nuts Style 2 Grades A and B: To AS 1112.2.

Hexagon nuts Grade C: To AS 1112.3.

### ***Screws***

Coach screws: To AS/NZS 1393.

Hexagon screws Grades A and B: To AS 1110.2.

Hexagon screws Grade C: To AS 1111.2.

Hexagon socket screws: To AS/NZS 1420 and AS/NZS 1421.

Machine screws: To AS/NZS 1427.

Self-drilling screws: To AS 3566.

» Minimum corrosion resistance Class: 2.

Tapping screws: To AS/NZS 4402 – AS/NZS 4410.

### ***Finishes***

Electroplating:

» Metric thread: To AS 1897.

» Imperial thread: To AS 4397.

Galvanising:

» Threaded fasteners: To AS 1214.

» Other fasteners: To AS/NZS 4680.

Mild steel fasteners: Galvanise where:

» Exposed to weather;

» Embedded in masonry;

» In external timbers such as weatherboards or decking; or in contact with chemically treated timber.



## 11. Light Timber Framing

### 11.1 General

#### ***Cross Reference***

Refer to the *General requirements* section.

#### ***Related Sections***

Refer to the Schedule of Products

#### ***Standards***

Light timber framing: To AS 1684 Parts 2, 3 or 4, as appropriate.

Design: To AS 1720.1.

### 11.2 Quality

#### ***Witness Points***

Give sufficient notice so that the following may be inspected:

- » Structural woodwork after erection but before it is covered.
- » Prefabricated items before priming or water-repellent treatment.
- » Bolts after final tightening.
- » Prefabricated fixtures before installation.

### 11.3 Submissions

#### ***Design***

Raised floor system similar to Lysaght Quika-Floor Flooring System and roof trusses.

#### ***Shop Drawings***

General: For items designed by the contractor, submit shop drawings certified by a structural engineer to AS 1720.1 for the span, spacing, and loading, and showing the following:

- » Arrangement of members.
- » Location of the members in the building.
- » Loading parameters and bracing lengths assumed in the design.
- » Species, stress grade, strength group and joint group of timber.
- » Size of each member.
- » Tolerances on member sizes.
- » Joint details including connector plates.
- » Lifting points.



- » Method of fixing and bracing.
- » Preservative treatment, if any.
- » Long term deflection.
- » Moisture content at time of manufacture.
- » Method of fabrication.

Trusses: Show the following additional information:

- » Camber in bottom cord.

### ***Materials***

Identification:

- » Certification: Submit a supplier's certificate (which may be included on an invoice or delivery docket) verifying that the timber complies with the specification.
- » Inspection: Submit the inspection authority's certificate verifying that the timber complies with the specification.

Moisture content: Submit evidence of moisture content.

## **11.4 Materials and Components**

### ***Timber Grades***

Structural timbers: Appearance grade if exposed to view in the finished work. Otherwise stud grade or lintel grade, as appropriate.

### ***Structural Timber Grading Standards***

Hardwood: To AS 2082.

Softwood: To AS 2858.

Mechanical stress grading: To AS/NZS 1748.

Machine proof-grading: To AS 3519.

### **Identification**

Method: Identify timber using branding, certification or both.

Branding: Brand structural timber, under the authority of a recognised product certification program applicable to the product. Locate the brand mark on faces or edges which will be concealed in the works. Include the following data:

- » Stress grade.
- » Method of grading.
- » "Seasoned" or "s".
- » The certification mark of the product certification program.
- » The applicable standard.



Recognised product certification programs:

- » Pine framing: Plantation Timber Certification.
- » Finger jointed structural timber: Plantation Timber Certification.

Certification:

- » Timber to be certified: >Stud framing, trusses and roof beams

Inspection: If neither branding nor certification is adopted, have an independent inspecting authority inspect the timber.

## 11.5 Sheet Products

### **Structural Plywood**

Standard:	To AS/NZS 2269.
Bond:	Marine Type A.
Flooring:	Tongued and grooved.
Veneer quality to visible surfaces:	C (minimum).
Application:	Wall Bracing, Flooring
Bracing thickness (mm):	6
Face veneer:	D (bracing), C (flooring)
Back veneer quality:	D
Stress grade:	F14

### **Identification**

Method: Identify plywood using branding, certification or both.

Branding: Brand structural plywood, under the authority of a recognised product certification program applicable to the product. Locate the brand mark on faces or edges which will be concealed in the works. Include the following data:

- » Stress grade.
- » Method of grading.
- » The certification mark of the product certification program.
- » The applicable standard.

Recognised product certification programs:

- » Plywood: Plywood Association of Australia (PAA) Quality control and Product Certification Scheme.

Certification:

- » Plywood to be certified:

Inspection: If neither branding nor certification is adopted, have an independent inspecting authority inspect the plywood.





## 11.6 Framing

### **Wall Framing**

Note – Certain sections of the walls require ply bracing to meet the code requirements for bracing. Where walls are required to be lined with cladding/sheeting over the ply bracing the contractor is to fabricate the walls with gauged studs and portion of top and bottom plates as required to enable the ply bracing to finish flush with the adjacent studwork.

Gauging: Provide gauged timbers in studs, noggings and plates for double faced walls.

Timber species or group:	Cypress or Treated pine
Grade:	F5 (Walls) F11(Beams)
Preservative treatment (if applicable):	LOSP or T2
Minimum sizes (mm):	As nominated on drawings
» Studs:	min 90 x 35
» Bottom plates:	min 90 x 35
» Top plates:	min 2/90 x 45
» Sill trimmers:	min 90 x 35
» Lintels:	Refer drawings
» Eaves beams:	Refer drawings
» Verandah plates:	Refer drawings
» Verandah posts:	Refer drawings
<b>Stud spacing (maximum) (mm):</b>	<b>400</b>
Bracing material:	Ply and metal strapping
Fixing details:	As per AS 1684.2

### **Additional Support**

General: Provide additional support in the form of noggings, trimmers and studs for fixing lining, cladding, hardware, accessories, fixtures and fittings as required.

Maximum spacing of noggings                      600 and 1200 mm centres above floor

### **Vermin Barriers**

Stud wall barrier: Metallic-coated steel sheet, 600 mm wide x 0.6 mm thick, fixed to each side of the external stud wall frame at the base. Lap joints 25 mm.

### **Flashings**

Material: To AS/NZS 2904.

Type:    Alcor or colorbond zincalume



Location: Provide flashings to external openings sufficient to prevent the entry of moisture. Form trays at the ends of sill flashings.

## 11.7 Roof and Ceiling Framing

### ***Nailing Strips***

Where timber joists, rafters or purlins bear on steel members, provide 50 mm thick nailing strips bolted to the flange of the steel member at 450 mm maximum centres.

### ***Beam Framing***

General: Construct framing for flat or pitched roofs where the ceiling follows the roof line, consisting of rafters or purlins acting as beams to support both ceiling and roof covering.

Timber species or group:	Cyprus , LOSP or T2 Treated timber
Stress grade:	F8
Sizes (mm):	As per drawings
» Principals (beams):	As per drawings
» Rafters:	As per drawings located at max 600 centres
» Purlins:	As per drawings

Blocking: Where the depth of rafters or purlins is at least 4 x width, provide solid blocking between them at the support points and at 1.8 m maximum intervals between supports.

Ridge straps:	Butt ends of rafters together at ridge, and strap each pair together with 900 mm long steel strap passing over the ridge, triple nailed to each rafter.
» Ridge strap material:	Galvanised 30mm bracing strap with tensioning device
Bracing type:	Ply or metal bracing as shown on drawings
Fixing details:	As per AS1684.2

### ***Supports for Water Containers***

Where a water container or heater is located in the roof space provide a support platform to AS/NZS 3500.4.2 clause 4.5.

### ***Additional Support***

Provide a frame member behind every joint in fibre cement sheeting or lining.

### ***Anti-Ponding Boards***

Standard: To AS/NZS 4200.2.

Material:	LOSP or T2 treated pine or Cyprus
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### ***Fascia, Barge and Eaves Boards***

Hardwood:	AS 2796.1.
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» Grade to AS 2796.2:	>
Seasoned cypress pine:	AS 1810.
» Grade	F5
Softwood:	To AS 4785.1
» Grade:	To AS 4785.2:

## 11.8 Trusses

### ***Fabrication***

Assembly:	Factory assembled trusses.
Camber:	10 mm upward in bottom chord.
Connections:	Connector plates pressed to contact with the truss members. No knots in plate area.
Joints:	No gaps greater than 2 mm.
Overhangs:	Free from spring or splits.
Bow in chords (maximum):	Where L is chord length, L/200 or 50 mm, whichever is less.

### ***Supports for Water Containers***

Where a water container or heater is located in the roof space provide a support platform to AS/NZS 3500.4.2 clause 4.5.

### ***Marking***

Permanently mark each truss, on faces or edges which will be concealed in the works, to show

- » Manufacturer;
- » Timber species;
- » Grade;
- » Location;
- » Pitch and span;
- » Support points; and
- » Trusses designed for additional loading such as water heater support.

### ***Installation***

General: To AS 4440

Support: Support trusses on bottom chord at two points only, unless designed for additional support.

Plumb: Within H/200, where H is the height.

Vertical movement: Over internal walls provide at least 10 mm vertical clearance and use bracing methods which allow for vertical movements.



### ***Roof Truss Schedule***

Spacing (mm):	Max 600 centres
Roof pitch (°):	As shown on drawings
Roofing (kg/m <sup>2</sup> ):	15
Ceiling (kg/m <sup>2</sup> )	15
Design wind speed (m/s):	N2 – refer Structural Notes
Purlins:	As per drawings
Ceiling battens:	Not applicable
Overhand (mm):	As shown on drawings
» Overhang propped by eaves sprocket:	Refer drawings
» Structural fascia:	Refer drawings
Top chord restraint spacing (mm):	As per Truss Manufacturer's requirements
Bottom chord design restraint spacing (mm)	As per Truss Manufacturer's requirements

## **11.9 Completion**

### ***Tightening***

Tighten bolts, screws and other fixings so that joints and anchorages are secure at practical completion.



## 12. Metal Fixtures

### 12.1 General

#### ***Cross References***

Refer to the *General Requirements* section.

#### ***Related Sections***

Refer to the Schedule of Products.

### 12.2 Quality

#### ***Witness Points***

Give sufficient notice so that inspection may be made of the following:

Shop fabricated or assembled items ready for delivery to the site.

### 12.3 Materials

#### ***Materials and Components***

##### **Metals**

Performance: Provide metals suited to their required function, finish and method of fabrication, in sections of strength and stiffness adequate for their purpose.

### 12.4 Execution

#### ***Construction Generally***

##### **Metals**

Performance: Provide metals so that they transmit the loads imposed and ensure the rigidity of the assembly without causing deflection or distortion of finished surfaces.

Incompatible metals: Separate using concealed layers of suitable materials in appropriate thicknesses.

#### ***Welding and Brazing***

##### **General**

Quality: Provide finished welds which are free of surface and internal cracks, slag inclusion, and porosity.

Site welds: Do not weld on site.

Butt weld quality level: Not inferior to the appropriate level recommended in AS 1665 Appendix A.

### 12.5 Stainless Steel Fabrication

#### ***Welding Stainless Steel***

Certification of welders: To AS 1796.



## 13. Timber Fixtures

### 13.1 General

#### ***Cross References***

Refer to the *General Requirements* section.

#### ***Related Sections***

Refer to the Schedule of Products.

### 13.2 Materials and Components

#### ***Joinery Timber***

Seasoned hardwood: To AS 2796.3.

Seasoned Cypress pine: To AS 1810.

Australian grown conifers, other than radiata pine and cypress pine: To AS 1786.

#### ***Plywood***

Interior use generally: To AS/NZS 2270.

Interior use, exposed to moisture: To AS/NZS 2271.

#### ***Particleboard***

Standard: To AS/NZS 1859.1.

Melamine overlaid particleboard: Particleboard overlaid on both sides with low pressure melamine.

#### ***Medium Density Fibreboard***

Standard: To AS/NZS 1859.2.

Melamine overlaid medium density fibreboard: Medium density fibreboard overlaid on both sides with low pressure melamine.

#### ***Decorative Overlays***

Standard: To AS/NZS 1859.3.

#### ***High-Pressure Decorative Laminate Sheets***

Standard: To AS/NZS 2924.1.

Thickness (minimum):

- » For horizontal surfaces fixed to a continuous background: 1.2 mm.
- » For vertical surfaces fixed to a continuous background: 0.8 mm.
- » For post formed laminate fixed to a continuous background: 0.8 mm.
- » For vertical surfaces fixed intermittently (e.g. to studs): 3.0 mm.



- » For edge strips: 0.4 mm.

### **13.3 Furniture**

#### ***Construction Generally***

Accuracy: Build components square and install plumb.

Joints: Provide materials in single lengths whenever possible. If joints are necessary make them over supports.

Framing: Frame and trim where necessary for openings, including those required by other trades.

#### **Accessories and Trim**

Provide accessories and trim necessary to complete the installation.

#### **Fasteners**

Visibility: Do not provide visible fixings except in the following locations:

- » Inside cupboards and drawer units.
- » Inside open units in which case provide proprietary caps to conceal fixings.

Visible fixings: Where fastenings are unavoidable on visible joinery faces, sink the heads below the surface and fill the sinking flush with a material compatible with the surface finish. In surfaces which are to have clear or tinted finish provide matching wood plugs showing face grain (not end grain). In surfaces which are to have melamine finish provide proprietary screws and caps finished to match.

Fixing to building structure: Provide screws with washers for fixing into timber or steel framing.

#### **Adhesives**

General: Provide adhesives to transmit the loads imposed and to ensure the rigidity of the assembly, without causing discolouration of finished surfaces.

Decorative laminated sheets: Provide contact adhesive to AS 2131.

#### **Finishing**

Junctions with structure: Scribe benchtops, splashbacks, ends of cupboards, kickboards and returns to follow the line of structure.

Joints: Scribe internal and mitre external joints.

Edge strips: Finish exposed edges of sheets with edge strips which match sheet faces.

Refer drawings for type and extent.

Matching: For surfaces which are to have clear or tinted finish, arrange adjacent pieces to match the grain and colour.

#### **Labelling**

Permanently mark each unit of furniture with the manufacturer's name, on an interior surface.



## **13.4 Domestic Kitchen Assemblies**

### ***Standard***

General: To AS/NZS 4386.1.

Refer to drawings for kitchen type.





## 14. Waterproofing

### 14.1 General

#### ***Cross References***

Refer to the *General Requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 14.2 Materials And Components

#### ***Seamless Membranes***

Membranes applied in liquid or gel form and air cured to form a seamless film.

### 14.3 Execution

#### ***Substrates for Membranes***

General: Apply membranes to dry, smooth, firm, continuous surfaces, clean and free from loose or foreign matter. Provide coving or fillets on internal corners. Round or arris external corners and edges.

Dryness tests for substrates: To AS 1884 Appendix A.

### 14.4 Residential Wet Areas

#### ***Waterproofing***

Standard: To AS 3740.

#### ***Membrane***

Type: Proprietary liquid applied membrane system such as Davco Dampflex, which:

- Has a current Australian Building Product and Systems Certification Scheme certificate; or
- Has a current technical opinion issued by the Australian Building Systems Appraisal Council stating that the system is suitable for use as a waterproofing system for use in wet areas, shower recess bases and associated floors and wall/floor junctions which are to be tiled.

#### ***Installation***

Applicators: Use suitably qualified applicators.

Floor wastes: Turn membrane down onto the floor waste puddle flanges, and adhere.

Shower Recesses: To the full extent of shower walls up to 2000 mm high. Protect with ceramic tiles as scheduled.

Floors: To the full extent of bathroom and laundry floors. Turn up behind skirting tiles and bath hob. Fall to floors in accessible bathroom.



Walls: Apply behind splashbacks to bath to 450 mm high.

Curing: Allow membrane to fully cure before tiling.



## 15. Roofing

### 15.1 General

#### ***Cross References***

Refer to the *General Requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 15.2 Materials And Components

#### ***Fasteners***

Self-drilling screws: Corrosion resistance Class 3.

Finish: Prefinish exposed fasteners with an oven baked polymer coating to match the roofing material, or provide matching purpose-made plastic caps.

Fastenings to timber battens: Provide fastenings just long enough to penetrate the thickness of the batten without piercing the underside.

### 15.3 Execution

#### ***Installation***

General: Keep the roofing and rainwater system free of debris and loose material during construction, and leave them clean and unobstructed on completion. Repair damage to the roofing and rainwater system.

Touch up: If it is necessary to touch up minor damage to prepainted metal roofing, do not overspray onto undamaged surfaces.

### 15.4 Sheet Metal Roofing and Cladding

#### ***General***

Type: Provide a proprietary system of preformed sheet and purpose-made accessories.

Prepainted and organic film/metal laminate products: To AS 2728.

#### ***Ridges and Eaves***

Treat ends of sheets as follows:

- Project sheets 50 mm into gutters.
- Provide pre-cut notched eaves flashing and bird-proofing where necessary.
- Close off ridges with purpose-made ridge fillers of closed cell polyethylene.



### ***Ridge and Barge Capping***

Finish off along ridge and verge lines with purpose-made ridge and barge capping.

### ***Metal Separation***

Prevent direct contact between incompatible metals, and between green hardwood or chemically treated timber and aluminium or coated steel, by either:

- Applying an anti-corrosion, low moisture transmission coating to contact surfaces; or
- Inserting a separation layer.

## **15.5 Roof Lights**

### ***Standard***

General: To AS 4285.

### ***Description***

General: A proprietary rooflight system including framing, fixing, trim, accessories and flashings as specified in Schedule of Products and Finishes and location shown on drawings.

## **15.6 Roof Plumbing**

### ***General***

Standard: To AS/NZS 3500.3.2.

General: Provide the flashings, cappings, gutters, rainwater heads, outlets and downpipes necessary to complete the roof system.

### ***Materials***

Metal rainwater goods: To AS/NZS 2179.1.

### ***Jointing Sheet Metal Rainwater Goods***

Butt joints: Make joints over a backing strip of the same material.

Soldered joints: Do not solder aluminium or aluminium/zinc coated steel.

Sealing: Seal fasteners and mechanically fastened joints. Fill the holes of blind rivets with silicone sealant.

### ***Flashings and Cappings***

Flashing material: To AS/NZS 2904.

Installation: Flash roof junctions, upstands, abutments and projections through the roof. Preform to required shapes where possible. Notch, scribe, flute or dress down as necessary to follow the profile of adjacent surfaces. Mitre angles and lap joints 150 mm in running lengths. Provide matching expansion joints at 6 m maximum intervals.

Upstands: Flash projections above or through the roof with two part flashings, consisting of a base flashing and a cover flashing, with at least 100 mm vertical overlap. Provide for independent movement between the roof and the projection.



### ***Gutters***

General: Prefabricate gutters to the required shape where possible. Form stop ends, downpipe nozzles, bends and returns. Dress downpipe nozzles into outlets. Provide overflows to prevent back-flooding.

### ***Downpipes***

General: Prefabricate downpipes to the required section and shape where possible. Connect heads to gutter outlets.

Downpipe support: Provide supports and fixings for downpipes.



## 16. Cladding

### 16.1 General

#### ***Cross References***

Refer to the *General Requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 16.2 Quality

#### ***Witness Points***

Give sufficient notice so that inspection may be made of framing complete with sarking and flashings ready to receive cladding.

### 16.3 Materials And Components

#### ***Plywood and Blockboard***

Exterior use: To AS/NZS 2271.

Marine plywood: To AS/NZS 2272.

Presealed plywood: Plywood presealed both sides and edges with a machine applied sealer.

#### ***Fibre Cement***

Standard: To AS/NZS 2908.2.

Cladding and eaves and soffit linings: Type A Category 3.

#### ***Reconstituted Timber***

Standard: To AS/NZS 1859.4:1997

### 16.4 Execution

#### ***Substrates or Framing***

Before fixing cladding check and, if necessary, adjust the alignment of substrates or framing.

#### ***Fixing***

Nail to timber framing, screw to steel framing all in accordance with manufacturers specification.

#### ***Accessories and Trim***

Provide accessories and trim necessary to complete the installation.



## 17. Doors and Hatches

### 17.1 General

#### ***Cross References***

Refer to the *General Requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 17.2 Execution

#### ***Construction Generally***

##### **Installation**

Install doors so that the frames:

- are plumb, level, straight and true within acceptable building tolerances;
- are adequately fixed or anchored to the building structure; and
- will not carry any building loads, including loads caused by structural deflection or shortening.

##### **Joints**

Make accurately fitted tight joints so that neither fasteners nor fixing devices such as pins, screws, adhesives and pressure indentations are visible on exposed surfaces.

##### **Operation**

Ensure moving parts operate freely and smoothly, without binding or sticking, at correct tensions or operating forces and that they are lubricated where appropriate.

### 17.3 Timber Doors

#### ***Standards***

Flush doors and joinery doors: To AS 2688.

Solid core doors to all door opening except toilet doors and cupboards which are to be honey comb core.

Installation: To AS 1909.

Undercut: Under and over cut doors to toilets to enable doors to be lifted off

#### ***Door Thickness (minimum)***

Generally: 40 mm externally and 35mm internally.

#### ***Priming***

Prime timber doors on top and bottom edges before installation.



## **17.4 Steel Door Frames**

### ***General***

Type: Assemble frames from coated steel sections, including necessary accessories such as buffers, strike plates, spreaders, mortar guards, switch boxes, fixing ties or brackets, and cavity flashing with suitable provision for fixing hardware; prefinished with protective coatings, built in or fixed to prepared openings.

### ***Sections***

Rebates: Incorporate rebates or double rebates where required for side hung doors.

Coated steel sheet: To AS 1397.

Minimum steel sheet thickness:

- Generally: 1.1 mm.
- Security doorsets: 1.6 mm.

### ***Assembly Methods***

Mechanical: Site assemble from “knocked down” components by mechanical methods, e.g. slot and lug joints.

Welded: Shop assemble fire rated and heavy duty frames by continuous welding. Grind the welds smooth and cold galvanize the welded joints before shop priming.

### ***Finish***

Prefinish: Zinc-iron.

Shop priming: Shop prime the sections for the painting system.

### ***Hardware and Accessories***

General: Provide for fixing hardware including hinges and closers, using 4 mm backplates and lugs. Screw fix the hinges into tapped holes in the back plates.

Lift-off Hinges: Provide lift-off rising butt hinges to toilet doors.

### ***Installation***

Fixing to stud frames: Clip galvanized brackets to frame stiles at 600 mm maximum centres and fasten to the stud frame.

## **17.5 Security Screen Doorsets**

### ***Hinged Security Screen Doorsets***

Type: Proprietary system comprising a metal screen door side hung in a metal frame and inclusive of insect screen, security screen and the necessary hardware and accessories.

Hinged security screen doors: To AS/NZS 2803.1.

Installation: To AS/NZS 2804.1.





### ***Sliding Security Screen Doorsets***

Type: Proprietary system comprising a metal sliding screen door and frame and inclusive of insect screen, security screen and the necessary hardware and accessories.

Sliding security screen doors: To AS/NZS 2803.2.

Installation: To AS/NZS 2804.2.

## **17.6 Aluminium Doorsets**

### ***General***

Type: Proprietary doorset system comprising an aluminium framed glazed sliding doors, supported by a fixed aluminium door frame, inclusive of the necessary hardware and accessories.

Selection and installation: AS 2047.



## 18. Windows

### 18.1 General

#### ***Cross References***

Refer to the *General requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 18.2 Standards

#### ***Windows***

Selection and installation: To AS 2047.

### 18.3 Performance

#### ***Australian Window Association (AWA) Labelling Scheme***

Serviceability design wind pressure (Pa) (minimum): 400

### 18.4 Materials and Components

Standard: To AS/NZS 2904.

Materials: Provide flashings and weatherings which are corrosion resistant, compatible with the other materials in the installation, and coated with a non-staining compound where necessary.

### 18.5 Execution

#### ***Installation***

Install windows so that the frames

- » are plumb, level, straight and true within acceptable building tolerances;
- » are adequately fixed or anchored to the building structure; and
- » will not carry any building loads, including loads caused by structural deflection or shortening.

#### ***Joints***

General: Make accurately fitted tight joints so that neither fasteners nor fixing devices such as pins, screws, adhesives and pressure indentations are visible on exposed surfaces.

Sealants: If priming is recommended, prime surfaces in contact with jointing materials.

#### ***Operation***

Ensure moving parts operate freely and smoothly, without binding or sticking, at correct tensions or operating forces and that they are lubricated where appropriate.



### ***Trim***

General: Provide mouldings, architraves, reveal linings, and other internal trim using materials and finishes matching the window frames. Install to make neat and clean junctions between frames and the adjoining building surfaces.

### ***Flashing and Weatherings***

Install flashings, weather bars, drips, storm moulds, caulking and pointing so that water is prevented from penetrating the building between the window frame and the building structure under the prevailing service conditions, including normal structural movement of the building.

### ***Fixing***

Packing: Pack behind fixing points with durable full width packing.

### ***Security Screens***

Type: Proprietary system comprising a Aluminium metal frame and inclusive of insect screen, security screen to both fixed and sliding section. Note provide hinged fire escape panel to each bedroom complete with the necessary hardware and accessories.

Security Screen: To AS/NZS 2803..

Installation: To AS/NZS 2804.1.



## 19. Glazing

### 19.1 General

#### ***Cross References***

Refer to the *General Requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 19.2 Design

#### ***Glass Type and Thickness***

Standard: To AS 1288, where no glass type or thickness is given.

### 19.3 Standard

Materials and installation: To AS 1288.

Cut-to-size quality: To AS/NZS 4667.

Laminated and toughened glass process: To AS/NZS 4667.

### 19.4 Materials And Components

#### ***Glass***

##### **Glass and Glazing Materials**

Glass and glazing materials generally: Free from defects which detract from appearance or interfere with performance under normal conditions of use.

Glazing plastics: Free from surface abrasions, and warranted by the manufacturer for 10 years against yellowing or other colour change, loss of strength and impact resistance, and general deterioration.

### 19.5 Glazing Materials

#### ***General***

Glazing materials (including putty, glazing compounds, sealants, gaskets, glazing tapes, spacing strips, spacing tapes, spacers, setting blocks and compression wedges): Appropriate for the conditions of application and the required performance.

### 19.6 Mirrors

#### ***Reflective Surface***

Type: Silver layer deposited on the glass or glazing plastic.



Protective coatings: Electrolytic copper coating at least 5 µm thick, and 2 coats of mirror backing and edge sealing paint having a total dry film thickness of at least 50 µm.

## **19.7 Installation**

### ***General***

General: Install the glass so that:

- each piece is held firmly in place by permanent means which enable it to withstand the normal loadings and ambient conditions at its location without distortion or damage to glass and glazing materials;
- building movements are not transferred to the glass; and
- external glazing is watertight and airtight.

Temporary marking: Use a method which does not harm the glass. Remove marking on completion.

## **19.8 Fixing Mirrors**

### ***Screw Fixing***

Direct to wall plugs with dome-headed chromium-plated screws in each corner and at 900 mm maximum centres around perimeter. Provide polyethylene sleeves and washers to prevent contact between screw and glass. Do not over-tension the screws.

## **19.9 Completion**

### ***Cleaning***

Replace damaged glass and leave the work clean, polished, free from defects, and in good condition.



## 20. Door and Window Hardware

### 20.1 General

#### ***Cross References***

Refer to the *General Requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 20.2 Materials

#### ***Metal Finishes***

Generic items: The following minima apply to the relevant finishes on hardware items described in generic terms (i.e. not as proprietary items):

- Coating class for steel sheet: At least Z275.
- Anodising class for internal applications: At least AA15.

Clear lacquer: Provide a factory applied clear lacquer finish on copper alloy surfaces liable to corrosion.

### 20.3 Components

#### ***General***

Hardware specified generically: Provide hardware of sufficient strength and quality to perform its function, appropriate to the intended conditions of use, suitable for use with associated hardware, and fabricated with fixed parts firmly joined.

#### ***Operation***

Ensure working parts are accurately fitted to smooth close bearings, without binding or sticking, free from rattle or excessive play, lubricated where appropriate.

### 20.4 Hinges

#### ***Butt Hinge Sizes***

General: Minimum sizes are those in **Hinge Table A** and **Hinge Table B** (not applicable to cupboard doors), in which length (l) is the dimension along the knuckles, not including hinge tips, if any, and width (w) is the dimension across both hinge leaves when opened flat.

Steel, stainless steel, brass, bronze butt hinges for timber doors in timber or steel frames: To **Hinge Table A**.

Aluminium hinges for aluminium doors, or for doors of other materials in aluminium frames: To **Hinge Table B**.



**Hinge Table A**

Nominal hinge size l x w x t (mm)	Door leaves not exceeding any of the following:		
	Mass (kg)	Width (mm)	Thickness (mm)
70 x 50 x 1.6	16	620	30
85 x 60 x 1.6	20	820	35
100 x 75 x 1.6	30	920	40
100 x 75 x 2.5	50	920	50
100 x 75 x 3.2	70	1020	50
125 x 100 x 3.2*	80	1220	50

\* stainless steel only.

**Hinge Table B**

Nominal hinge size l x w x t (mm)	Door leaf not exceeding mass (kg)	Minimum construction	
		Knuckles	Screws/hinge leaf
100 x 70 x 3	30	3	3
100 x 80 x 3.5	50	5	4

Note: Provide lift off hinges to toilet doors.

### **Number of Hinges**

Small door leaves: Door leaves not exceeding any of the following may have 2 hinges each:

- 2040 mm high.
- 820 mm wide.
- 30 kg mass.

Other door leaves: Provide 3 hinges for leaves between 2040 mm and 2340 mm high.

## **20.5 Keying**

### **Key Material**

Pin tumbler locks: Nickel alloy, not brass.

Lever locks: Malleable cast iron or mild steel.

### **Identification**

Supply four (4) keys per house with a purpose-made plastic or stamped metal label legibly marked to identify the key, attached to the key by a metal ring.

### **Group Keying**

Keying control security system: All external locks on each individual house to be keyed alike. Lock to security door to be keyed to match doors.

Stamping: Stamp keys and lock cylinders to show the key codes.



### ***Contractor's Keys***

Master key systems: Do not use any key under a master key system.

### ***Delivery***

Keys: Arrange for the manufacturer or supplier to deliver direct to the principal/proprietor.

### ***Windows***

Where window locks are included in building key code groups, provide cylinder or pin tumbler locks coded accordingly.

## **20.6 Locks and Latches**

### ***Mechanical Locksets***

Standard: To AS 4145.2.

### ***Furniture***

Provide lock and latch furniture suitable for use with the lock or latch to which it is installed.

## **20.7 Execution**

### ***Fixings***

General: Provide materials compatible with the item being fixed, matching where exposed, and of sufficient strength, size and quality to perform their function. Provide a corrosion resistant finish to concealed fixings, and match exposed fixings to the material fixed.

Support: Provide appropriate back support (for example lock stiles, blocking, wall noggings and backing plates) for hardware fixings.

Hollow metal sections: Provide backing plates drilled and tapped for screw fixing, or provide rivet nuts with machine thread screws, not self tapping screws or pop rivets.

Security: Locate exposed fixings to lock furniture on the inside faces of external doors and on the inside faces of internal doors to lockable rooms.

### ***Window Hardware***

Proprietary window systems: Provide the standard hardware.

### ***Door Hardware***

Proprietary doorsets: Provide the standard hardware.

Mounting heights: Mount locks and latches so that the centreline of the door knob or lever spindle is 1000 mm above finished floor.

### ***Hinges***

Timber doorsets: Install butt hinges in housings equal in depth to the thickness of the hinge leaf (except for hinges designed for mounting without housing), and fix with countersunk screws.

Metal frames: Fix hinges using metal thread screws.





### ***Door stops***

General: Fix on the floor or on the skirting, as appropriate, to prevent the door furniture striking the wall or other surface.

## **20.7.1 Completion**

### ***Record Documents***

Door hardware schedule: Submit an amended schedule, prepared by the door hardware supplier, showing changes to the contract door hardware schedule caused by:

- the approval of a hardware sample;
- the acceptance of an equivalent to a specified proprietary item; or
- a contract variation to a door hardware requirement.

Key codes: Submit the lock manufacturer's record of the key coding system showing each lock type, number and type of key supplied, key number for re-ordering, and name of supplier.

### ***Maintenance Manual***

General: Submit the manufacturer's published recommendations for use, care and maintenance.

### ***Keys***

Contractor's keys: Immediately before practical completion, replace cylinders to which the contractor has had key access during construction with new cylinders which exclude the contractor's keys.

Keys: For locks keyed to differ and locks keyed alike, verify quantities against key records, and deliver to the contract administrator at practical completion.

### ***Adjustment***

General: Leave the hardware properly adjusted with working parts in working order, and clean, undamaged, properly adjusted, and lubricated where appropriate.



## 21. Lining

### 21.1 General

#### ***Cross References***

Refer to the *General Requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 21.2 Quality

#### ***Witness Points***

Give sufficient notice so that inspection may be made of substrate or framing before installation of linings.

### 21.3 Materials And Components

#### ***Plasterboard***

Standard: To AS/NZS 2588.

#### ***Fibre Cement***

Standard: To AS/NZS 2908.2.

Wall and ceiling linings: Type B category 2.

Minimum thickness: 6 mm.

### 21.4 Execution

#### ***Construction Generally***

##### **Substrates or Framing**

Before fixing linings check and, if necessary, adjust the alignment of substrates or framing.

##### **Battens**

Fix at each crossing with structural framing members, or direct to solid walls or ceilings. Provide wall plugs in solid backgrounds. Do not provide explosive powered fastenings.

##### **Ceiling Linings**

Do not install until at least 14 days after the timber roof structure is fully loaded.

##### **Accessories and Trim**

Provide accessories and trim necessary to complete the installation.



## **21.5 Plasterboard Lining**

### ***Supports***

General: Install timber battens or proprietary cold-formed galvanized steel furring channels:

- where framing member spacing exceeds the recommended spacing; and/or
- where direct fixing of the plasterboard is not possible due to the arrangement or alignment of the framing or substrate.

Transverse walls: Locate noggings:

- at least 150 mm from the horizontal joint; or
- ensure that noggings do not protrude beyond the face of studs.

### ***Installation***

Plasterboard: To AS/NZS 2589.1.

Framed construction: Screw or nail or combine with adhesive.

### ***Joints***

Flush joints: Provide recessed edge sheets and finish flush using perforated paper reinforcing tape. Make joints over framing members or otherwise provide back blocking.

External corner joints: Make joints over zinc coated steel corner beads.

Control joints: Install purpose-made zinc coated control joint beads at not more than 12 m centres in walls and ceilings and to coincide with structural movement joints.

Wet areas: Install additional supports, flashings, trim and sealants as required.

## **21.6 Fibre Cement Lining**

### ***Supports***

Install timber battens or proprietary cold-formed galvanized steel furring channels:

- where framing member spacing exceeds the recommended spacing; and/or
- where direct fixing of the fibre cement is not possible due to the arrangement or alignment of the framing or substrate.

### ***Installation***

General: Run sheets across the framing members. In flush jointed applications, stagger end joints in a brick pattern and locate them on framing members, away from the corners of large openings. Provide supports at edges and joints.

Timber framed construction: Nail only or combined with adhesive.

Wall framing: Do not fix to top and bottom plates or noggings.

In tiled areas: Provide an extra row of noggings immediately above wall-to-floor flashings. Fix sheet at 150 mm centres to each stud and around the perimeter of the sheet.

Ceilings and soffits: Provide battens where fixing to underside of rafters, roof trusses and purlins.



Wet areas: To AS 3740.

### ***Joints***

Flush joints: Provide recessed edge sheets and finish flush using perforated paper reinforcing tape.

Movement joints in walls: Position a stud parallel to the joint on each side.

Movement joints in ceilings and soffits: Provide movement joints to divide ceilings into bays not larger than 10.8 x 7.2 m and soffit linings into bays not larger than 4.2 x 4.2 m or 5.4 x 3.6 m. Provide framing parallel to the joint on each side. Do not fix the lining to abutting building surfaces.

External corner joints: Make joints over zinc coated steel corner beads.

Butt joints: Butt sheets together over framing members or otherwise provide back blocking.

Control joints: Provide purpose-made zinc coated control joint beads at 7.2 m maximum centres in walls and ceilings and to coincide with structural movement joints.

Wet areas: Provide additional supports, flashings, trim and sealants as required.

Joints in tiled areas: Bed perforated paper tape in bedding compound. Do not apply a topping coat.

Movement joints: Space to suit joints required in tiling.

Internal corners: Reinforce with zinc-coated steel angles. In corners subject to continuous moisture, flash over the angle and under the sheeting with continuous bitumen coated aluminium flashing.



## 22. Insulation and Barriers

### 22.1 General

#### ***Cross References***

Refer to the *General Requirements* worksection.

#### ***Related Worksections***

Refer to the Schedule of Products.

### 22.2 Interpretation

#### ***Definitions***

Terminology: To AS 2352.

Sarking-type material: Flexible membrane material normally used for waterproofing, vapour proofing or thermal reflectance.

### 22.3 Quality

#### ***Witness Points***

Give sufficient notice so that the sarking, vapour barrier and insulation may be inspected before they are covered up or concealed.

### 22.4 Execution

#### ***Bulk Insulation***

Standard: To AS 3999 or AS 4075.

Batts and rigid sheets: Fit tightly between framing members. If support is not otherwise provided, staple nylon twine to the framing and stretch tight.

#### ***Sarking-Type Material***

Standard: To AS/NZS 4200.2.

Location: Walls in accordance with BCA use breathable moisture and mechanical barrier.

Roof: In accordance with BCA use reflective foil insulation and condensation barrier

#### ***Reflective Foil Laminate***

To timber: Clouts or staples at 300 mm maximum centres.



## 22.5 Wall Insulation

### *General*

Location: Use R2.0 rigid batts between studs to all external walls. **Line external face of all external walls with CSR Bradford THERMOTUFF LD breather fixed in accordance with manufacturer's recommendations** area (Refer Schedule of Products).

## 22.6 Roof Insulation

### *General*

Location: Install R2.0 blanket insulation on sarking to the whole of the roof area (Refer Schedule of Products) except the following:

- » Eaves, overhangs, rooflights, vents and openings.
- » Roofs to outbuildings, garages, and semi-enclosed spaces such as verandahs, porches and carports.

## 22.7 Underfloor Insulation

### *General*

Location: Install AirCell blanket insulation under the whole of the raised floor area, Tape laps and fix to underside of floor joists in accordance with the manufacturer's recommendations area (Refer Schedule of Products).

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## 23. Tiling

### 23.1 General

#### ***Cross References***

Refer to the *General Requirements* section.

#### ***Related Sections***

Refer to the Schedule of Products.

### 23.2 Materials and Components

#### ***Ceramic Tiles***

Standard: To BS 6431 for tolerance limits on dimensions, surface quality, physical and chemical properties relevant to the product type.

#### ***Exposed Edges***

In positions where the edge is exposed provide purpose-made border tiles with the exposed edge (whether round, square or cushion) glazed to match the tile face. If such tiles are not available, mitre tiles on external corners.

#### ***Accessories***

Provide tile accessories which match the composition, colour and finish of the surrounding tiles.

#### ***Coves, Nosings and Skirtings***

Provide matching stop ends and internal and external angle tiles moulded for that purpose.

### 23.3 Adhesives

#### ***General***

Standard: To AS 2358.

PVA (polyvinyl acetate) based adhesives: Do not provide in wet areas or externally.

### 23.4 Mortar

#### ***Materials***

Cement type to AS 3972: GP.

- » White cement: Iron salts content  $\leq 1\%$ .
- » Off-white cement: Iron salts content  $\leq 2.5\%$ .

Lime: To AS 1672.

Sand: Fine aggregate with a low clay content selected for grading.

Water: To AS 3958.1.



### ***Bedding Mortar***

Proportioning: Select proportions from the range 1:3 - 1:4 cement:sand to obtain satisfactory adhesion. Provide minimum water.

Mixing: To AS 3958.1.

## **23.5 Grout**

### ***Type***

Cement based proprietary grout: Mix with water. Fine sand may be added as a filler in wider joints.

Portland cement based grout: Mix with fine sand. Provide minimum water consistent with workability.

- » For joints < 3 mm: 1:2 cement:sand.
- » For joints  $\geq$  3 mm: 1:3 cement:sand.

## **23.6 Execution**

### ***Drying and Shrinkage***

Before tiling, allow at least the following times to elapse (for initial drying out and shrinkage) for these substrates:

- » Toppings on slabs or compressed cement sheet: 21 days.

### ***Preparation***

Suitably prepare substrates to receive the bedded finish, including the following:

- » Remove deleterious and loose material and leave the surface dust-free and clean.
- » For mortar bedding wet the substrate as necessary to achieve suitable suction. Alternatively apply a bonding agent to the substrate to improve adhesion.

## **23.7 Tiling Generally**

### ***Sequence***

Fix wall tiles before floor tiles.

### ***Cutting and Laying***

Cutting: Cut tiles neatly to fit around fixtures and fittings, and at margins where necessary. Drill holes without damaging tile faces. Cut recesses where necessary for fittings such as soapholders. Rub edges smooth without chipping.

Laying: Return tiles into sills, reveals and openings. Butt up to returns, frames, fittings, and other finishes. Strike and point up beds where exposed.

### ***Variations***

If necessary, distribute variations in hue, colour, or pattern uniformly, by mixing tiles or tile batches before laying.





### ***Protection***

Floor tiles: Keep traffic off floor tiles until the bedding has set and attained its working strength.

Cleaning: Keep the work clean as it proceeds and protect finished work from damage.

## **23.8 Setting Out**

### ***General***

Joint widths: Set out tiles to give uniform joint widths within the following limits:

- » Internal ceramic tiling: 1.5 - 3 mm.
- » External ceramic tiling: 4 - 9 mm.
- » Mosaic tiling: Nominal 2 mm or as dictated by pattern.
- » Quarry tiling: 6 - 12 mm.
- » Chemical resistant epoxy jointed floor tiling: 5 - 6 mm.
- » Vitrified floor tiling: 3 - 5 mm.

Joint alignment: Set out tiling with joints accurately aligned in both directions and wall tiling joints level and plumb, to a tolerance of  $\pm 4$  mm in 2 m from the design alignment.

Margins: Provide whole or purpose made tiles at margins where practicable, otherwise set out to give equal margins of cut tiles. If margins less than half tile width are unavoidable, locate the cut tiles where they are least conspicuous.

Fixtures: If possible position tiles so that holes for fixtures and other penetrations occur at the intersection of horizontal and vertical joints or on the centre lines of tiles. Continue tiling fully behind fixtures which are not built in to the tiling surface. Before tiling ensure that fixtures interrupting the tile surfaces are accurately positioned in their designed or optimum locations relative to the tile layout.

## **23.9 Falls and Levels**

### ***General – Disabled Bath Only***

General: Grade floor tiling to even and correct falls to floor wastes and elsewhere as required. Make level junctions with walls. Where falls are not required lay level.

Fall, general: 1:100 minimum.

Fall, in shower areas: 1:60 minimum. For PWD showers, refer Figure C9 in AS 3740.

Deviation: Maximum deviation of the finished floor level between points of contact under a 2 m straight edge laid in any direction on an area of uniform grade to be 1:300 or 3 mm, whichever is the lesser.

Change of finish: Maintain finished floor level across changes of floor finish including carpet.



## **23.10 Grouted and Caulked Joints**

### ***Grouted Joints***

General: Commence grouting as soon as practicable after bedding has set. Clean out joints as necessary before grouting.

Face grouting: Fill the joints solid and tool flush. Clean off surplus grout. Wash down when the grout has set. When grout is dry, polish the surface with a clean cloth.

Edges of tiles: Grout exposed edge joints.

Epoxy grouted joints: Ensure that tile edge surfaces are free of extraneous matter such as cement films or wax, before grouting.

Grouting mosaics: If paper faced mosaics are to be bedded in cement mortar, pre-grout the sheeted mosaics from the back before fixing. After fixing, rub grout into the surface of the joints to fill any voids left from pre-grouting. Clean off surplus grout. When grout has set, wash down. If necessary use a proprietary cement remover.

### ***Caulked Joints***

General: Provide caulked joints filled with sealant and finished flush with the tile surface as follows:

- » Where tiling is cut around sanitary fixtures.
- » Around fixtures interrupting the tile surface, for example pipes, brackets, bolts and nibs.
- » At junctions with elements such as window and door frames and built-in cupboards.
- » At internal corners.

Width: 5 mm.

Depth: Equal to the tile thickness.

## **23.11 Joint Accessories**

### ***Floor Finish Dividers***

General: Finish tiled floors at junctions with differing floor finishes with a non corrosion resistant metal dividing strip suitably fixed to the substrate, with top edge flush with the finished floor. Where changes of floor finish occur at doorways make the junction directly below the closed door.



## 24. Resilient Finishes

### 24.1 General

#### ***Cross References***

Refer to the *General Requirements* section.

#### ***Related Sections***

Refer to the Schedule of Products.

### 24.2 Standard

#### ***General***

Laying: To AS 1884.

### 24.3 Quality

#### ***Edges of Sheets***

Ensure edges are firm, unchipped, machine-cut accurately to size and square to the face, and that tile edges are square to each other.

### 24.4 Execution

#### ***Substrate***

General: Suitably prepare the substrate to receive the installation, including the following:

- » Repairs: Make good to the surface finish as necessary. Fill depressions with a suitable filler, and remove high spots and projections. Fixtures and fittings: Remove door stops and other fixtures, and refix in position undamaged on completion of the installation.

#### ***Cleaning and Protection***

General: Keep traffic off floors until bonding has set or for 24 hours after laying, whichever period is the longer. Do not allow water in contact with the finish for 7 days.

Reinstatement: Repair or replace faulty or damaged work. If the work cannot be repaired satisfactorily, replace the whole area affected.

#### ***Cleaning***

Keep the surface clean as the work proceeds.

### 24.5 Sheet Installation

#### ***Sheet Setout***

Set out sheets to give the minimum number of joints. Run sheet joints parallel with the long sides of floor areas, vertically on walls.



## **24.6 Vinyl Sheeting**

### ***Welded Joints***

Heat welding: After fixing, groove the seams using a grooving tool and weld the joints with matching filler rod and using a hot air welding gun. When the weld rod has cooled, trim off flush.

Epoxy jointing: Join seams with epoxy adhesive.

## **24.7 Joints and Accessories**

### ***Junctions***

Finish junctions flush with adjoining surfaces. Where changes of floor finish occur at doorways locate the junctions directly below the closed doors.

### ***Accessories***

General: Provide purpose-made accessories for edge cover strips and finishes at junctions, margins, and angles, if available. Otherwise form accessories from the sheet material.

### ***Cover Strips***

General: Provide edge cover strips at junctions with different floor finishes and as protection strips to exposed edges.

Metal cover strip: Extruded tapered strip 25 mm wide, of the same thickness as the sheet or tile. Fix with matching screws to timber bases or to masonry anchors in concrete bed bases, at 200 mm maximum centres.

## **24.8 Completion**

### ***Maintenance Manual***

Submit manufacturer's published use, care and maintenance requirements for each type of finish.

### ***Cleaning***

Clean the finished surface. Buff and polish. Before handover, mop and leave the finished surface clean and undamaged on completion.



## 25. Painting

### 25.1 General

#### ***Cross References***

Refer to the *General Requirements* section.

### 25.2 Standards

#### ***General***

Painting: Comply with the recommendations of those parts of AS/NZS 2311 and AS/NZS 2312 which are referenced in this section.

### 25.3 Quality

#### ***Coated Samples***

Submit, on representative substrates, 1 m<sup>2</sup> samples of each coating system showing surface preparation, colour, gloss level, texture, and physical properties.

### 25.4 Materials and Components

#### ***Paints***

GPC specifications: Provide paints and other materials which are scheduled in the Australian Paint Approvals Scheme "List of Approved Products" as complying with cited GPC specifications.

Quality: Provide premium quality lines.

#### ***Combinations***

General: Do not combine paints from different manufacturers in a paint system.

Clear timber finish systems: Use only the combinations of putty, stain and sealer recommended by the manufacturer of the top coats.

#### ***Delivery***

Deliver paints to the site in the manufacturer's labelled and unopened containers. Ensure containers of materials specified by a GPC specification code are labelled accordingly.

#### ***Tinting***

General: Provide only products which are colour tinted by the manufacturer or supplier.

Tinting by contractor: Add tinters or stainers only if this is without detriment to the durability or aesthetic performance of the product.

#### ***Putty***

General: Oil-based or polymeric based.



Putty for timber finishes: Lacquer or water based. Do not provide oil based or glazing putty.

#### ***Toxic Ingredients***

Comply with the requirements of Appendix P "Uniform Paint Standard" to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

## **25.5 Execution**

#### ***Painting***

General: To AS/NZS 2311 Sections 3, 6 and 7.

Protection of steelwork: To AS/NZS 2312 Sections 5, 8 and 10.

#### ***Order of Work***

Other trades: Before painting, complete the work of other trades as far as practicable within the area to be painted, except for installation of fittings, floor sanding and laying flooring materials.

Clear finishes: Complete clear timber finishes before commencing opaque paint finishes in the same area.

#### ***Protection***

Fixtures: Remove door furniture, switch plates, light fittings and other fixtures before starting to paint, and refix in position undamaged on completion of the installation.

Adjacent surfaces: Protect adjacent finished surfaces liable to damage from painting operations.

#### ***"Wet Paint Warning"***

Place notices conspicuously and do not remove them until paint is dry.

#### ***Restoration***

Clean off marks, paint spots and stains progressively and restore damaged surfaces to their original condition. Touch up damaged decorative paintwork or misses only with the paint batch used in the original application.

#### ***Substrate Preparation***

General: Prepare substrates to receive the painting systems.

Cleaning: Clean down the substrate surface. Do not cause undue damage to the substrate or damage to, or contamination of, the surroundings.

Filling: Fill cracks and holes with fillers, sealants, putties or grouting cements as appropriate for the finishing system and substrate, and sand smooth.

Clear finish: Provide filler tinted to match the substrate.

#### ***Paint Application***

Apply the first coat immediately after substrate preparation and before contamination of the substrate can occur. Ensure each coat of paint or clear finish is uniform in colour, gloss, thickness and texture, and free of runs, sags, blisters, or other discontinuities.



### ***Priming Before Fixing***

Apply one coat of wood primer (2 coats to end grain) to the back of the following before fixing in position:

- » External fascia boards.
- » Timber door and window frames.
- » Tops and Bottoms of external doors.
- » Associated trims and glazing beads.
- » Timber board cladding.

### ***Repair of Galvanising***

General: For galvanised surfaces which have been subsequently welded, prime the affected area.

Primer: To GPC-C-29/16, two pack.

## **25.6 Paint Systems**

### ***Paint System Description***

Final coat: If a paint or clear finish system is referred to only by its final coat (for example by the manufacturer's brand name, or the generic name) provide in addition to the final coat, the appropriate stains, primers, sealers and undercoats, suitable for the substrate and compatible with the finish coat and each other.

No system description given: If a surface is to be painted but no system is nominated select the system from AS/NZS 2311 clause 5.1, using System 1 where a choice is offered.

### ***Number of Coats***

Unless specified as one coat or two coat systems, each paint system consists of at least 3 coats. Provide additional coats if necessary to :

- » Prepare porous or reactive substrates with prime or seal coats consistent with the manufacturer's recommendations;
- » Achieve the total film thickness or texture; or
- » Achieve a satisfactory opacity.

### ***Tinting***

Tint each coat of an opaque coating system so that each has a noticeably different tint from the preceding coat, except for top coats in systems with more than one top coat.

Paint within wet areas to include mould/mildew retardant.

## **Interior Painting Schedule**

<b>Surface Identification</b>	<b>Substrate</b>	<b>Paint System</b>
-------------------------------	------------------	---------------------

3 New Houses at Tabulam



Surface Identification	Substrate	Paint System
All ceilings except bathroom and laundry	Plasterboard	Flat latex
Ceiling to bathroom and laundry	Fibrous Cement	Semi gloss latex
Walls	MDF	Semi gloss latex
Doors	Timber	Full gloss enamel
All trim (includes architraves, skirting, jambs, sills etc)	Timber	Full gloss enamel

#### Exterior Painting Schedule

Surface Identification	Substrate	Paint System
Soffits and raking ceilings	Fibrous cement	Semi gloss latex
Fascia, barges and rafters	Timber	Full gloss enamel
Gables, battens and beams	Timber	Full gloss enamel
Walls	Timber	Semi gloss enamel
Doors	Timber	Full gloss enamel
All Trim (jambs sills etc)	Timber	Full gloss enamel
Posts	Timber/steel	Semi gloss enamel
Handrails balustrade	Timber/steel	Full gloss enamel
Sunhoods	Metal	Full gloss enamel

#### Paint Systems Schedules

General: These schedules specify, for each of the paint systems listed in the **Painting schedules**, and for each substrate to which those systems are applied in the project:

- » The number and order of coats; and
- » The paint type for each coat.

Codes: Codes are GPC Specification codes.

#### Flat Latex : Interior

Substrate	1st Coat	2nd Coat	3rd Coat
Plasterboard	S-17/2	L-26/4	L-26/4

#### Low Gloss Latex: Interior

Substrate	1st Coat	2nd Coat	3rd Coat
Existing paintwork (solvent-borne)	L-26/5	L-26/5	
Existing paintwork (latex)	L-26/5	L-26/5	
Sprayed ceiling	S-17/2	L-26/5	L-26/5





Substrate	1st Coat	2nd Coat	3rd Coat
Fibre cement	S-17/2	L-26/5	L-26/5
Plasterboard (paper faced)	S-17/2	L-26/5	L-26/5
Iron & steel	P-32	L-26/5	L-26/5
Aluminium	P-35/4	L-26/5	L-26/5
Zinc-coated and zinc-alloy-coated steel	P-13/4	L-26/5	L-26/5
Oil-based air-drying primed metal	L-26/5	L-26/5	
Organic or inorganic zinc primed metal	S-17/1	L-26/5	L-26/5
Timber	P-18/3	L-26/5	L-26/5
Particleboard	P-18/3	L-26/5	L-26/5
Medium density fibreboard	S-17/2	L-26/5	L-26/5
Hardboard, unprimed	P-18/3	L-26/5	L-26/5
Pre-primed board	L-26/5	L-26/5	
uPVC	U-16/1	L-26/5	L-26/5

#### **Semi-Gloss Latex: Exterior**

Substrate	1st Coat	2nd Coat	3rd Coat
Existing paintwork (solvent-borne)	L-169	L-169	
Existing paintwork (latex)	L-169	L-169	
Concrete	L-169	L-169	
Fibre cement	L-169	L-169	
Compressed fibre cement	S-17/1	L-169	L-169
Iron & steel	P-32	L-169	L-169
Aluminium	P-35/4	L-169	L-169
Zinc-coated and zinc-alloy-coated steel	P-13/4	L-169	L-169
Oil-based air-drying primed metal	L-169	L-169	
Organic or inorganic zinc primed metal	L-169	L-169	
Cat. epoxy zinc phosphate primed metal	L-169	L-169	
Timber	P-18/3	L-169	L-169
UPVC	L-169	L-169	

#### **Full Gloss, Solvent-Borne: Interior**

Substrate	1st Coat	2nd Coat	3rd Coat
Oil-based air-drying primed metal	U-16/1	E-15/4	E-15/4
Organic or inorganic zinc primed metal	P-13/4	E-15/4	E-15/4
Timber	U-16/1	E-15/4	E-15/4
Particleboard	U-16/1	E-15/4	E-15/4
Medium density fibreboard	S-17/2	E-15/4	E-15/4



Hardboard, unprimed	U-16/1	E-15/4	E-15/4
Pre-primed board	U-16/1	E-15/4	E-15/4
UPVC	E-15/4	E-15/4	

#### **Full Gloss, Solvent-Borne: Exterior**

<b>Substrate</b>	<b>1st Coat</b>	<b>2nd Coat</b>	<b>3rd Coat</b>
Compressed fibre cement	S-17/1	E-15/3	E-15/3
Iron & steel	P-32	E-15/3	E-15/3
Aluminium	P-35/4	E-15/3	E-15/3
Zinc-coated and zinc-alloy-coated steel	P-13/4	E-15/3	E-15/3
Oil-based air-drying primed metal	U-16/1	E-15/3	E-15/3
Organic or inorganic zinc primed metal	P-13/4	E-15/3	E-15/3
Cat. epoxy zinc phosphate primed metal	E-15/3	E-15/3	
Timber	P-18/1	U-16/1	E-15/3
uPVC	E-15/3	E-15/3	

#### **Two Pack Epoxy, Water-Borne: Interior**

<b>Substrate</b>	<b>1st Coat</b>	<b>2nd Coat</b>	<b>3rd Coat</b>
Existing pipework	E-167	E-167	
Concrete	S-17/1	E-167	E-167
Fibre cement	S-17/1	E-167	E-167
Masonry	S-17/1	E-167	E-167
Iron & steel	P-32	E-167	E-167
Aluminium	P-35/4	E-167	E-167
Zinc-coated and zinc-alloy-coated steel	P-13/4	E-167	E-167
Oil-based air-drying primed metal	P-32	E-167	E-167
Cat. Epoxy zinc phosphate primed metal	E-167	E-167	
Timber	P-18/3	E-167	E-167

### **25.6.1 Completion**

#### ***Maintenance Manual***

Submit the paint manufacturer's published recommendations for maintenance.



## 26. Landscaping

### 26.1 General

The contractor is to provide a land scaping plan to allow for planting and site works to the value of the provisional sum noted in the contract documentation. Planting to include 4 fruit trees at the rear of each house.



## 27. Drawings

TABULAM ACDP PROGRAM		
Drawing Number	Revision Number	Description
LOT 101 Walker St		
41-12221 –A240	0	LOCALITY PLAN
41-12221 –A241	0	GENERAL NOTES
41-12221 –A242	0	SITE PLAN
41-12221 –A243	0	FLOOR PLAN
41-12221 –A244	0	ELEVATIONS
41-12221 –A245	0	SECTIONS
41-12221 –A246	0	ROOF PLAN
41-12221 –A247	0	KITCHEN ELEVATIONS
41-12221 –A248	0	WET AREAS
41-12221 –A249	0	JOINERY DETAILS
41-12221 –A250	0	SLAB AND FOOTING PLAN – SHEET 1 OF 2
41-12221 –A251	0	FOOTING DETAILS – SHEET 2 OF 2
41-12221 –A252	0	FLOOR FRAMING PLAN
41-12221 –A253	0	WALL BRACING PLAN
41-12221 –A254	0	HYDRAULIC PLAN
41-12221 –A255	0	ELECTRICAL PLAN
41-12221 –A256	0	CONSTRUCTION DETAILS
LOT 103 Walker St		
41-12221 –A260	0	LOCALITY PLAN
41-12221 –A261	0	GENERAL NOTES
41-12221 –A262	0	SITE PLAN
41-12221 –A263	0	FLOOR PLAN
41-12221 –A264	0	ELEVATIONS
41-12221 –A265	0	SECTIONS
41-12221 –A266	0	ROOF PLAN
41-12221 –A267	0	KITCHEN ELEVATIONS
41-12221 –A268	0	BATHROOM ELEVATIONS
41-12221 –A269	0	JOINERY DETAILS
41-12221 –A270	0	SLAB AND FOOTING PLAN – SHEET 1 OF 2
41-12221 –A271	0	FOOTING DETAILS – SHEET 2 OF 2
41-12221 –A272	0	FLOOR FRAMING
41-12221 –A273	0	WALL BRACING PLAN



41-12221 –A274	0	HYDRAULIC AND DRAINAGE PLAN
41-12221 –A275	0	ELECTRICAL PLAN
41-12221 –A276	0	CONSTRUCTION DETAILS

**Lot 40 Gundingbo St Tabulam**

41-12221 –A160	0	LOCALITY PLAN
41-12221 –A161	0	GENERAL NOTES
41-12221 –A162	0	SITE PLAN
41-12221 –A163	0	FLOOR PLAN
41-12221 –A164	0	ELEVATIONS
41-12221 –A165	0	SECTIONS
41-12221 –A166	0	ROOF PLAN
41-12221 –A167	0	KITCHEN ELEVATIONS
41-12221 –A168	0	PWD TOILET ELEVATIONS
41-12221 –A169	0	JOINERY DETAILS
41-12221 –A170	0	SLAB AND FOOTING PLAN
41-12221 –A171	0	FLOOR FRAMING
41-12221 –A172	0	WALL BRACING PLAN
41-12221 –A173	0	HYDRAULIC & DRAINAGE PLAN
41-12221 –A174	0	ELECTRICAL PLAN
41-12221 –A175	0	CONSTRUCTION DETAILS



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## Appendix A

# Sample Test Plans



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(Must be approved by Superintendent prior to work commencing on site)

**Project Quality Plan:**

**CONTRACT TESTING & INSPECTION STATUS RECORD**

**Cover Page**

**Location: TABULAM**

**Principal: NSW Department of Commerce**

**Contractor:**

**Contract No: 0901085**

	Inspection & Testing Schedules	Inspection/Test Completed by	Sign off by Contractor (Activity completed satisfactorily)	
			Signature	Date
No	Description			
1	Preliminary Site Inspection			
2	Documentation			
3	Inspection and Notice by authorities where applicable			
3a	Electrical - Installation			
	- Testing			
3b	Gas - Installation			
	- Testing			
3c	Water & Sewerage - Installation			
	- Testing			
3d	Drainage - Installation			
	- Testing			
	Contractor Inspection of Services			
3e	Water - Installation			
	- Testing			
3f	Sewerage - Installation			
	- Testing			
3g	Drainage - Installation			
	- Testing			
4	Variation			
5	Pre-Commencement			
6	Site Preparation			
7	Footings			
8	Concrete Slab Work			
9	Pier/Stump/Column			
10	Sub Floor Frame			
11	Wall Frame & Windows			
12	Ceiling Frame			
13	Roof Frame			
14	Roof Truss			
15	Metal Roof			
16	Tiled Roof			
17	External Wall Cladding			
18	Internal Wall Cladding			
19	Windows/Doors			



	Inspection & Testing Schedules	Inspection/Test Completed by	Sign off by Contractor (Activity completed satisfactorily)	
			Signature	Date
20	Flooring, Excluding Wet Areas			
21	Flooring, Wet Areas			
22	Waterproof Membranes, Wet Areas			
23	Lock-Up Inspection			
24	Pre-Paint Inspection			
25	Pre-Handover Inspection			
26	Water Penetration/Leaks Inspection			
27	Other Inspections Completed by Builder			
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## Appendix B

# Schedule of Products



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## APPENDIX B

### Schedule of Products

#### Cover Page

**Revision:  
June 2008**

#### Schedule of Products and Finishes

This schedule is to be read in conjunction with drawings and specification

Note Not all of the materials/items shown in this schedule will be required for the project it is a generic list which covers all possible situations. The contractor is to select as required to complete the works.

Note All fittings to conform to the Basix Certificate issued for each building.

Item	Description	Material	Colour/Finish	Product/Type (or similar)
<u>SITEWORKS</u>				
Driveway/Cartracks		Concrete	Square edges/Broom finished	-
Paths	Pedestrian access to house	Concrete	Square edges / Broom finished	-
Fences		Welded galvanised wire fence panels fixed to metal posts. (refer IMEAQ standard drawing G-0045. Extend footings to 1m deep)	Galvanised	Smorgon ARC - Weldmesh Acacia
Gates	Pedestrian and Vehicular	Welded wire fence panels fixed to metal posts. (refer IMEAQ standard drawing G-0045. Extend footings to 1 m deep)	Galvanised	Smorgon ARC - Weldmesh Acacia
Clothesline	One per house	Fixed hinged retractable clothes line - 2300 x 720	Precoated , rust resistant	Hills - Model No 45312
	One per house	Fixed rotary type with min 48 lm line/5m diameter	Galvanised	Hills – Original Supa Hoist 5
Letterbox		Alum.. Min. 150 mm wide x 160 mm high x 230 mm deep. Min. 25 mm high letterbox slot. Complete with stick-on house numbers	Refer Details	



Item	Description	Material	Colour/Finish	Product/Type (or similar)
Carparking	Slab on ground	Concrete	Natural - broom finish	Local
Garden taps	2 No per unit and house - refer plan for location	Standpipe, hose cock 900 mm above GL		Refer Drawing for detail
External sink	1 per house	single bowl stainless steel sink, 1200 nom. long, on galv. SHS frame complete with splashback	Sink - Natural, Frame - galvanised. Refer drawing for detail	Clarks - 1000 Series (1012S)
Footings (PO)	-	Reinforced concrete piers and strip footing as detailed	Natural	-
<u>EXTERNAL</u>				
Wall framing	Generally	Cyprus pine studs @ 400 crs Alternative – termite treated pine maybe used	Natural for cyprus ,If alternative is used -stamped for Termite treated timber	Local
	Wet Areas	Cyprus pine studs @ 400 crs Alternative – termite treated pine maybe used	Natural for cyprus ,If alternative is used -stamped for Termite treated timber	Local
Wall insulation	Behind all external wall cladding	Breathable foil barrier fixed to external face of studs with (R2.5) rigid polyester wool batts between studs	Foil laminate	CSR Bradford THERMOTUFF LD breather
Wall Sheeting		Nom 180 FC weatherboards – face fixed refer manufactures specification for fixings etc	Paint finish	James Hardie weatherboard (Profile to match existing) complete with extruded alum corners and trim
Block wall	Retaining wall	190 series face blockwork reinforced and conc. filled	Natural	Local



Item	Description	Material	Colour/Finish	Product/Type (or similar)
Stair Stringers	Stair stringer	100x50x3 Galv RHS	Natural	
Verandah railing (Deck below 1000 above ground level)	Bottom, mid and top rail	40 mm dia. Galv steel pipe Framing structure to AS 4100 Steel tube to AS 1163 Galvanised to AS 1650 Welding to AS 1554.1	Natural	
Verandah railing (Deck above 1000 above ground level)	Bottom and top rail	40 mm dia. Galv Steel Pipe	Natural	
Refer drawings for location	Balustrades at max 125 c/s	12 dia solid Galv steel rod welded to rails Framing structure to AS 4100 Steel tube to AS 1163 Galvanised to AS 1650 Welding to AS 1554.	Natural	
Verandah flooring (DE)	Verandah	Grooved Class 1 88 x 19 Kwila hardwood decking	Sikkens Cetol or Wattyl Oil based decking stain. Face grooves down	
Roof framing	-	Cypress pine roof trusses and rafters If cyprus not used - alternative certified LOSP treated pine		Trusses designed and fabricated by others
Roof sheeting (RSH)	-	Colorbond coated steel min. 0.48 mm BMT	Colorbond – Colour to be advised	Custom Orb
Roof flashing	Penetrations	Colorbond XRW - To AS 2179.1/80	To match roof sheeting	
Facias & barges	-	Colorbond 0.60 mm BMT	To match roof sheeting	
Roof insulation	Under roof sheeting	Reflective foil roof sarking bonded to 50 mm (R2.0) polyester wool blanket	Reflective	CSR Bradford THERMFOIL 730
Posts (PO)	Verandah	75 x 75 x 4 Galv SHS	Painted	Local
Roof vent (RV)	-	Colorbond 0.60 mm BMT	To match roof sheeting	Edmonds SupaVent



Item	Description	Material	Colour/Finish	Product/Type (or similar)
				ventilator
Roof Lights	-	400 diameter flexible shaft with opaque diffusers with ventilated rung	To match roof sheeting	Edmonds SolarBrite
Verandah ceilings		6 mm Fibre cement sheeting	Painted	James Hardie - Hardiflex II
Soffits (SO)		6 mm Fibre cement sheeting with ventilation slots or holes	Painted	James Hardie - Hardiflex II/Decorvent NSR or similar
Gutters (GU)		Colorbond 150 mm half round with external strap. Colorbond 0.60 mm BMT	To match roof sheeting	Stratco - Spanish style brackets
Downpipes (DP)		Colorbond XRW – rectangular with 25 mm wide Colorbond. Strap 100 dia PVC complete with first flush system to rainwater tank and leaf diverter on gutter	Colour to be advised Colour to match Colorbond downpipes	Local Rain Harvesting
Rainwater tank		Proprietary food grade polyethylene - approx 2400 L rainwater tank on galv metal stand and concrete footings	Beige	Proprietary system
Windows		Aluminium frame	Powdercoat - colour to be advised	G James Series or equiv.
Security screens		Alum. security screen to each window (both panes) and incorporating one fire escape mechanism to each bedroom	Powdercoat - colour to match window	Amplimesh or similar
Security doors		Alum. Security doors complete with triple locks and door closer	Powdercoat - colour to match window	G James Series or equiv.





Item	Description	Material	Colour/Finish	Product/Type (or similar)
Entry doors		Solid core waterproof ply, 3 Trio s/steel hinges, 40 mm thick. Provide weatherproof threshold seals	Painted – colour to be advised	Local, Raven RP3 seals
Door frames		Zincanneal metal frame Note Rising butt hinges required on all toilet doors	Prepainted finish – final paint onsite	Local
Doorstops		Lockwood 250 floor mounted door stop		Lockwood
Door locks & latches	Front & rear entry	Cylindrical latchset, key in knob		Lockwood 530 Series
	Front & rear entry [disabled only]	Cylindrical latchset, lever		Lockwood 930 Series
	Bedrooms	Cylindrical latchset		Lockwood 531 Series
	Bedrooms [disabled only]	Cylindrical latchset, lever		Lockwood 930 Series
	Bathroom/WC doors	Cylindrical latchset, key in knob, with privacy set		Lockwood 532 Series
	Bathroom/WC doors [disabled only]	Cylindrical latchset, lever		Lockwood 930 Series
Sliding doors		Aluminium frame	Powdercoat - colour to match window	G James Series or equiv.
Light fittings	Verandah	Wall mounted - IP55	Natural	Thorn - Kempthorn - Porto 1 IP55
	Entry	Wall mounted - IP55	Natural	Thorn - Kempthorn - Porto 1 IP55
	Floodlight to outside	Mounted to fascia	Natural	Thorn - Flexiflood [150 W] Par 38
Underfloor battens (UFB)	Perimeter of house/unit	100 x 50 x 2 galvanised channel notched around posts	Natural	Refer drawings for detail
<b>INTERNAL</b>				



Item	Description	Material	Colour/Finish	Product/Type (or similar)
Sub-floor system		Steel bearer/joists floor system bolted to concrete with 2 No 12 dia x 100 Ramset Hexhead Ankascrew anchors	Natural	BHP Quika-Floor system
Under floor Insulation	Fix to underside of joists	Air Cell Retroshield	Natural	Air Cell Insulation
Flooring	Excluding wet areas	15 mm Plywood	Natural – LOSP Treated	Local
	Wet areas	15 mm Compressed fibre cement	Natural (tiled finish on completion)	James Hardie
Wall lining (IWL)	Excluding wet areas	13 CSR Impactchek plasterboard wall sheeting	Painted	Local
	Wet areas	Fibre cement sheet wall lining – 9 mm thick	Painted/Tiled	James Hardie - Villaboard
Ceilings	Excluding wet areas	13 mm reinforced flush set plasterboard sheeting	Painted	Gyprock
	Wet areas	6 mm flush set fibre cement sheet	Painted	James Hardie - Villaboard
Doors		40 mm thick flush panel ply faced solid core door to AS 2688 externally & 35 mm hardboard faced honeycomb core doors internally	Painted	Local
Door frames		Prepainted Zincaneal metal frame - width to suit wall sheeting fixed behind	Painted	Local
Doorstops		Floor mount door stop	Chrome	Lockwood 250 door stop
Skirting (SKT)		42 mm x 12 mm square edge pine	Painted	Local
Architraves		42 mm x 12 mm pine	Painted	Local



Item	Description	Material	Colour/Finish	Product/Type (or similar)
Cornice (CO)		Plasterboard	Painted to match ceiling	Local
Corners	Vertical - Internal	Flush Set	Painted	Local
	Vertical - External	Flush Set	Painted	Local
	Vertical - Wet Areas	Flush Set	Painted	Local
Flooring finishes	Bedrooms	Vinyl sheeting of commercial grade, 2.5 mm thick.	To be advised	Tarkett
	Entry/passage	Vinyl sheeting of commercial grade, 2.5 mm thick	To be advised	Tarkett
	Living/dining	Vinyl sheeting of commercial grade, 2.5 mm thick.	To be advised	Tarkett
	Kitchen	Vinyl sheeting of commercial grade, 2.5 mm thick	To be advised	Tarkett
Tiles (CT)	Wet area walls	150 mm x 150 mm, 6 mm thick	White	Waringa
	Kitchen splashback	150 mm x 150 mm, 6 mm thick	White	Waringa
	Wet areas - floor	Vitrified ceramic, 150 mm x 150 mm, 8 mm thick	Non-slip - Colour to be advised	Granito Oasis
	Fireplace plinth	Vitrified ceramic, 150 mm x 150 mm, 8 mm thick	Non-slip - Colour to be advised	Granito Oasis
Wardrobes	Interior shelves and carcass	Melamine faced MDFB. 1 shelf at 1700 mm AFL, coat rail under and open fixed shelving adjacent	White	Local
Broom cupboard	Interior shelves and carcass	Melamine faced MDF. 1 shelf at 1700 mm AFL	White	Local
Linen cupboard	Interior shelves and carcass	Melamine faced MDFB. 4 shelves per cupboard	White	Local
Heater (HE)		Locate on tiled plinth with tiled lining behind where required	Metallic Black or Goldern Brown	Gradwell & Co Manhattan Savoy



Item	Description	Material	Colour/Finish	Product/Type (or similar)
Kitchen cupboards, benches and doors		Framed carcasses with 32 mm HMR plywood rolled edge bench tops	Colour to be advised	Refer drawings for details
Kitchen fittings	Sink (SK)	Stainless steel, one and a half bowl sink nom. 1200 mm long, with three tap holes	Flushline profile, natural	Clarks Series 2000, type 2003F
	Taps	Sink set [hob] Basix approved AAA Rating	Chrome	Caroma Trident Adjustable Hob Sink Set
Wet Area fittings	Taps	Basin set with Mark II handles Basix approved AA Rating	Chrome	Caroma Trident Series
	Taps - Disable bathroom	Basin Mixer with lever arm Basix approved AAA Rating	Chrome	Caroma Opus vanity basin mixer (87144C) with lever handle (90921C)
	WC pan and cistern	Vitreous china pan with heavy duty plastic seat and cistern. Dual Flush Basix approved AAAA Rating	White	Caroma Caravelle 2000 cistern and pan and Caravelle Vandal Resistant seat
	WC pan and cistern Disable bathroom	Vitreous china pan with heavy duty plastic seat and cistern. Dual Flush Basix approved AAAA Rating	White	Caroma Care 200 Toilet Suite
	Handbasins (VB)	Vitreous china vanity basin [size 500 mm x 425 mm] with three tap holes	White	Caroma Concorde 500
	Hand basin Disable bathroom	Vitreous china vanity basin with one tap hole	White	Caroma Caravelle 550
	Baths (BA)	Acrylic bath 1675 mm x 762 mm x 390 mm	White	Caroma Verona
	Shower tray (SHR)	Acrylic shower base 900 mm x 900 mm x 90 mm	White	Caroma Verona
	Shower screen (SSC)	1800 mm high	Clear safety glass	Stegbar or similar
	Ceiling mounted curtain track complete with	Anodised aluminium	Natural	Handrail Industries – Altrack Curtain



Item	Description	Material	Colour/Finish	Product/Type (or similar)
	shower curtain and hooks Disable bathroom			track
	Shower head	Universal – adjustable shower rose – Basix approved AAA Rating	Chrome	Caroma Trident Series
	Shower head Disable bathroom	Adjustable hand held shower Basix approved AAA Rating	Chrome	Caroma Mystic hand held
	Shower taps	Top assembly wall handles Basix approved AAA Rating	Chrome	Caroma Trident Series
	Shower taps Disable bathroom	Shower Mixer with disable lever Basix approved AAA Rating	Chrome	Caroma with G series lever
	Wall mounted Shower seat Disable bathroom	600 wide 12mm acrylic seat on SS frame		Handrail Industries - Model 503
	Grab rails for toilet Disable bathroom	32 dia stainless steel profiled to conform to AS1428	Chrome	Handrail Industries – Model No 102/103
	Grab rails for Shower Disable bathroom	stainless steel profiled to conform to AS1428 complete with adjustable shower bracket	Chrome	Handrail Industries - Model 258/259 and 390
	Bath Taps and Spout	Bath taps and spout Basix approved AA Rating	Chrome	Caroma Trident Series
	Laundry tubs (LT)	Stainless steel single bowl tub with min. 70 L capacity housed in rust resistant cabinet	White	Clarks Single Laundry Unit Mk II, type 9011
	Laundry taps	Pillar tap plus swivel aerated spout and Washing machine taps Basix approved AAA Rating	Chrome	Caroma Trident Series
	Toilet roll holder (TRH)	Screw fixed to stud or nogging	Chrome	Dorf Alliance
	Bath towel rail (TR)	Single towel rail [760 mm long]	Chrome	Dorf Alliance
	Robe hooks (CH)	Screw fixed to back of door	Chrome	Dorf Alliance
	Mirror (MI)	Integral part of vanity unit	Powdercoat (frame)	Local
	Exhaust (EX)	All bathrooms and WC's. Mechanically ventilated	White	Edmonds Bathroom Ventilation System



Item	Description	Material	Colour/Finish	Product/Type (or similar)
	Vanity Cabinet	Nom. 700 mm wide x 500 mm high with 2 shelves. Lockable mirrored sliding doors	White	Local
	Waterproofing	To AS 3740	Natural	Davco Dampflex
Electrical Appliances	Range hood (RH)	Exhaust type with ducting to roof. Nom. 600 mm wide	White	Robinhood
	Electric stove (ST)	Separate grill and oven, coil element. Fixed to floor with anti-tip plate.	White	Chef EUC5140W
	Smoke alarms	Location as per code requirements. Alarm pause (hush) button to silence alarm - hard wired	White	Clipsal Photoelectric
	GPOs	Plastic faced	White	Clipsal Standard range
	Television outlet	Living area - 1 x outlet	White	Clipsal Standard range
	Telephone outlet	Living area - 1 x outlet	White	Clipsal Standard range
	Hot water system	315 L Electric connected to off-peak supply.	Natural	Rheem - Optima
Light Fittings	Bedrooms	Surface mounted on ceiling, 350 dia metal shade fitting complete with batten fitting and 18W low energy bulb	White	Ideal Electrical Suppliers
	Bathrooms	Fluorescent - Impact [18W] Surface mounted on ceiling, opal diffuser	White	Thorn
	Kitchen	Fluorescent - Impact [36W] Surface mounted on ceiling, opal diffuser	White	Thorn
	Living/Dining	Surface mounted on ceiling, 350 dia metal shade fitting complete with batten fitting and 18W low energy bulb	White	Ideal Electrical Suppliers
	Deck/Entry	Fluorescent - Gladiator [1 x 36 W or 1x 18 W] Surface mounted on soffit,	White	Thorn
	External	Floodlight - Flexiflood [150W] Par 38	Black	Thorn



Item	Description	Material	Colour/Finish	Product/Type (or similar)
Fans	Where indicated on drawings	3 blade circulating wall mounted fan c/w wall controls	White	Clipsal or similar
Painting  <b>NOTE – Spray painting is not allowed for the application of paint.</b>  <b>NOTE – Spray painting is not allowed for the application of paint.</b>	Kitchen area – walls and ceilings	2 Coats of Anti-flame paint under finishing coat	Tint to suit finished colour	Luxury Paints, Dubbo NSW
	Internal	All paint types, oils and stains as specified	To be advised	To be selected from either Wattyl, Dulux or Taubman range
	External	All paint types, oils and stains as specified	To be advised	To be selected from either Wattyl, Dulux or Taubman range Note Add Tropical Mould Killer (UIM Chemicals Brisbane) to paint



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Appendix C

## Sample of Safe Working Method Statements



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(Must be approved by Superintendent prior to work commencing on site)

**Safety Management Plan:**

Indicate who is responsible for the following areas of safety:

<b>Safety Aspect</b>	<b>Name</b>	<b>Position</b>	<b>Qualification</b>
Keeping up to date with relevant OHS&R Regulations, Codes of Practice and the communicating of their relevance within to others the Contractors organisation.			
The identification and the evaluation of site-specific OHS&R hazards.			
Ensuring the continued safety of all equipment, plant and materials used on the site.			
Procuring, training, enforcement and the monitoring of the condition of all safety related equipment.			
The management of on-site safe work methods, the warning of hazards and the implementation of accident and emergency procedures.			
The protection of the public and private property on and near the site.			
The supervision of Sub-Contractors.			
The conducting of site inductions for visitors and new employees			
Training and instruction of employees including the distribution of safety information.			
Providing First Aid and the maintenance of First Aid stocks.			



## Appendix D

# Basix Certificates





## Appendix E

# Drawings





**GHD Pty Ltd** ABN 39 008 488 373

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#### **Document Status**

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	L. Clem	G. Paulsen				



# BASIX Certificate

Building Sustainability Index

www.basix.nsw.gov.au

Certificate number: 201290S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2006, published by the Department of Planning. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Note that this proposal has been the subject of an Alternative Assessment by the Department of Planning. The schedule below contains additional commitments resulting from this assessment, shown at the end of the Certificate.

Director-General

Date of issue: Friday, 26 September 2008



NSW GOVERNMENT  
Department of Planning

## Score

- ✓ Water: 40 (Target 40)
- ✓ Thermal comfort: pass (Target pass)
- ✓ Energy: CONCESSION (25) (Target 35)

## Description of project

Project address	
Project name	Lot 101 Walker St, Tabulam
Street address	101 Walker Street Tabulam 2469
Local Government Area	Tenterfield Shire Council
Plan type and plan number	Deposited Plan 752398
Lot no.	2
Section no.	0.0
Project type	
Project type	separate dwelling house
No. of bedrooms	3
Site details	
Site area (m <sup>2</sup> )	1220
Roof area (m <sup>2</sup> )	203
Conditioned floor area (m <sup>2</sup> )	119
Unconditioned floor area (m <sup>2</sup> )	15
Total area of garden and lawn (m <sup>2</sup> )	250
Assessor details and thermal loads	
Assessor number	n/a
Certificate number	n/a
Cooling load (MJ/m <sup>2</sup> .year)	n/a
Heating load (MJ/m <sup>2</sup> .year)	n/a
Other	
none	n/a

## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Landscape</b>			
The applicant must plant indigenous or low water use species of vegetation throughout 235 square metres of the site.	✓	✓	
<b>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 3 star in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 2400 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 76 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
<ul style="list-style-type: none"> <li>all indoor cold water taps (not including taps that supply clothes washers) in the development</li> </ul>		✓	✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Criteria			
The applicant must construct the dwelling in accordance with the following specifications:			
• the dwelling is a single storey dwelling;	✓	✓	✓
• the dwelling has a slab on ground floor or, if the floor is suspended, the floor has insulation with an R-value of at least R1.5;	✓	✓	✓
• walls are brick veneer, weatherboard or fibro;		✓	✓
• walls have insulation with i) an R-value of at least R1.5 or ii) an R-value of at least R1.0 + wall wrap;		✓	✓
• all windows and glazed doors have eaves that project at least 600 millimetres (including gutter width);	✓	✓	✓
• eaves are no more than 500 millimetres above window or glazed door heads;	✓	✓	✓
• the total window and glazed door area is no more than 29.5 square metres;	✓	✓	✓
• ceilings have insulation with an R-value of at least R3.0;		✓	✓
• the roof has sarking or two wind-driven ventilators with eave and/or roof vents.		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric storage.	✓	✓	✓
<b>Cooling system</b>			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans; Energy rating: n/a		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans; Energy rating: n/a		✓	✓
<b>Heating system</b>			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: wood heater; Energy rating: n/a		✓	✓
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✓	✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development: At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
<b>Artificial lighting</b>			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• at least 3 of the bedrooms / study;		✓	✓
• at least 2 of the living / dining rooms;		✓	✓
• the kitchen; dedicated		✓	✓
• all bathrooms/toilets; dedicated		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <li>the laundry; dedicated</li> </ul>		✓	✓
<ul style="list-style-type: none"> <li>all hallways;</li> </ul>		✓	✓
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
<b>Other</b>			
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	
The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.		✓	

Alternative Assessment

Water commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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Alternative Assessment

Thermal Comfort commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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Alternative Assessment

Energy commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
No additional commitments required Hot water concession	✓	✓	✓

## Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

# BASIX Certificate

Building Sustainability Index

www.basix.nsw.gov.au

Certificate number: 201292S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2006, published by the Department of Planning. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Note that this proposal has been the subject of an Alternative Assessment by the Department of Planning. The schedule below contains additional commitments resulting from this assessment, shown at the end of the Certificate.

Director-General

Date of issue: Friday, 26 September 2008



NSW GOVERNMENT  
Department of Planning

## Score

- ✓ Water: 41 (Target 40)
- ✓ Thermal comfort: pass (Target pass)
- ✓ Energy: CONCESSION (29) (Target 35)

## Description of project

Project address	
Project name	Lot 103 Walker St, Tabulam
Street address	103 Walker Street Tabulam 2469
Local Government Area	Tenterfield Shire Council
Plan type and plan number	Deposited Plan 752398
Lot no.	2
Section no.	0.0
Project type	
Project type	separate dwelling house
No. of bedrooms	4
Site details	
Site area (m <sup>2</sup> )	1185
Roof area (m <sup>2</sup> )	205
Conditioned floor area (m <sup>2</sup> )	116
Unconditioned floor area (m <sup>2</sup> )	24
Total area of garden and lawn (m <sup>2</sup> )	250
Assessor details and thermal loads	
Assessor number	n/a
Certificate number	n/a
Cooling load (MJ/m <sup>2</sup> .year)	n/a
Heating load (MJ/m <sup>2</sup> .year)	n/a
Other	
none	n/a



## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Landscape</b>			
The applicant must plant indigenous or low water use species of vegetation throughout 235 square metres of the site.	✓	✓	
<b>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 3 star in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 2400 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 80 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
<ul style="list-style-type: none"> <li>all indoor cold water taps (not including taps that supply clothes washers) in the development</li> </ul>		✓	✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Criteria			
The applicant must construct the dwelling in accordance with the following specifications:			
• the dwelling is a single storey dwelling;	✓	✓	✓
• the dwelling has a slab on ground floor or, if the floor is suspended, the floor has insulation with an R-value of at least R1.5;	✓	✓	✓
• walls are brick veneer, weatherboard or fibro;		✓	✓
• walls have insulation with i) an R-value of at least R1.5 or ii) an R-value of at least R1.0 + wall wrap;		✓	✓
• all windows and glazed doors have eaves that project at least 600 millimetres (including gutter width);	✓	✓	✓
• eaves are no more than 500 millimetres above window or glazed door heads;	✓	✓	✓
• the total window and glazed door area is no more than 30.8 square metres;	✓	✓	✓
• ceilings have insulation with an R-value of at least R3.0;		✓	✓
• the roof has sarking or two wind-driven ventilators with eave and/or roof vents.		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric storage.	✓	✓	✓
<b>Cooling system</b>			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans; Energy rating: n/a		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans; Energy rating: n/a		✓	✓
<b>Heating system</b>			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: wood heater; Energy rating: n/a		✓	✓
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✓	✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development: At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
<b>Artificial lighting</b>			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• at least 4 of the bedrooms / study;		✓	✓
• at least 2 of the living / dining rooms;		✓	✓
• the kitchen; dedicated		✓	✓
• all bathrooms/toilets; dedicated		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <li>the laundry; dedicated</li> </ul>		✓	✓
<ul style="list-style-type: none"> <li>all hallways;</li> </ul>		✓	✓
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓
The applicant must install a window and/or skylight in 4 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
<b>Other</b>			
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	
The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.		✓	

Alternative Assessment

Water commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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Alternative Assessment

Thermal Comfort commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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Alternative Assessment

Energy commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
No additional commitments required Hot water concession	✓	✓	✓

## Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

# BASIX Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Certificate number: 145605S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2006, published by the Department of Planning. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Note that this proposal has been the subject of an Alternative Assessment by the Department of Planning. The schedule below contains additional commitments resulting from this assessment, shown at the end of the Certificate.

Director-General  
Date of issue: Tuesday, 03 July 2007



NSW GOVERNMENT  
Department of Planning

## Score

- ✓ Water: 41 (Target 40)
- ✓ Thermal comfort: pass (Target pass)
- ✓ Energy: CONCESSION (28) (Target 35)

## Description of project

Project address	
Project name	Lot 40 Gundingbo St, Tabulam
Street address	Lot 40 Gundingbo Street Tabulam 2469
Local Government Area	Tenterfield Shire Council
Plan type and plan number	Deposited Plan 752398
Lot no.	224
Section no.	0.0
Project type	
Project type	separate dwelling house
No. of bedrooms	4
Site details	
Site area (m <sup>2</sup> )	1940
Roof area (m <sup>2</sup> )	277
Conditioned floor area (m <sup>2</sup> )	148
Unconditioned floor area (m <sup>2</sup> )	28
Total area of garden and lawn (m <sup>2</sup> )	100
Assessor details and thermal loads	
Assessor number	n/a
Certificate number	n/a
Cooling load (MJ/m <sup>2</sup> .year)	n/a
Heating load (MJ/m <sup>2</sup> .year)	n/a
Other	
none	n/a

## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments		Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Landscape</b>				
The applicant must plant indigenous or low water use species of vegetation throughout 70 square metres of the site.		✓	✓	
<b>Fixtures</b>				
The applicant must install showerheads with a minimum rating of 3 star in all showers in the development.			✓	✓
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.			✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.			✓	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.			✓	
<b>Alternative water</b>				
<b>Rainwater tank</b>				
The applicant must install a rainwater tank of at least 2400 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.		✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 80 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).			✓	✓
<ul style="list-style-type: none"> <li>all indoor cold water taps (not including taps that supply clothes washers) in the development</li> </ul>			✓	✓



Thermal Comfort Commitments			
Criteria	Show on DA plans	Show on CC/CDG plans & specs	Certifier check
<p>The applicant must construct the dwelling in accordance with the following specifications:</p> <ul style="list-style-type: none"> <li>the dwelling is a single storey dwelling;</li> <li>the dwelling has a slab on ground floor or, if the floor is suspended, the floor has insulation with an R-value of at least R1.5;</li> <li>walls are brick veneer, weatherboard or fibro;</li> <li>walls have insulation with i) an R-value of at least R1.5 or ii) an R-value of at least R1.0 + wall wrap;</li> <li>all windows and glazed doors have eaves that project at least 600 millimetres (including gutter width);</li> <li>eaves are no more than 500 millimetres above window or glazed door heads;</li> <li>the total window and glazed door area is no more than 38.7 square metres;</li> <li>ceilings have insulation with an R-value of at least R3.0;</li> <li>the roof has sarking or two wind-driven ventilators with eave and/or roof vents.</li> </ul>	✓	✓	✓
	✓	✓	✓
		✓	✓
		✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
		✓	✓
		✓	✓
		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric storage	✓	✓	✓
<b>Cooling system</b>			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: ceiling fans; Energy rating: n/a		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: ceiling fans; Energy rating: n/a		✓	✓
<b>Heating system</b>			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: wood heater; Energy rating: n/a		✓	✓
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✓	✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
<b>Artificial lighting</b>			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• at least 4 of the bedrooms / study;		✓	✓
• at least 2 of the living / dining rooms;		✓	✓
• the kitchen; dedicated		✓	✓
• all bathrooms/toilets; dedicated		✓	✓

Energy Commitments		Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> <li>the laundry; dedicated</li> <li>all hallways;</li> </ul>			✓	✓
			✓	✓
<b>Natural lighting</b>				
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.		✓	✓	✓
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.		✓	✓	✓
<b>Other</b>				
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.			✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.			✓	
The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.			✓	

**Alternative Assessment**

Water commitments		Show on DA plans	Show on CC/CDC plans & specs	Certifier check
-------------------	--	------------------	------------------------------	-----------------

**Alternative Assessment**

Thermal Comfort commitments		Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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**Alternative Assessment**

Energy commitments		Show on DA plans	Show on CC/CDC plans & specs	Certifier check
No additional commitment required.				

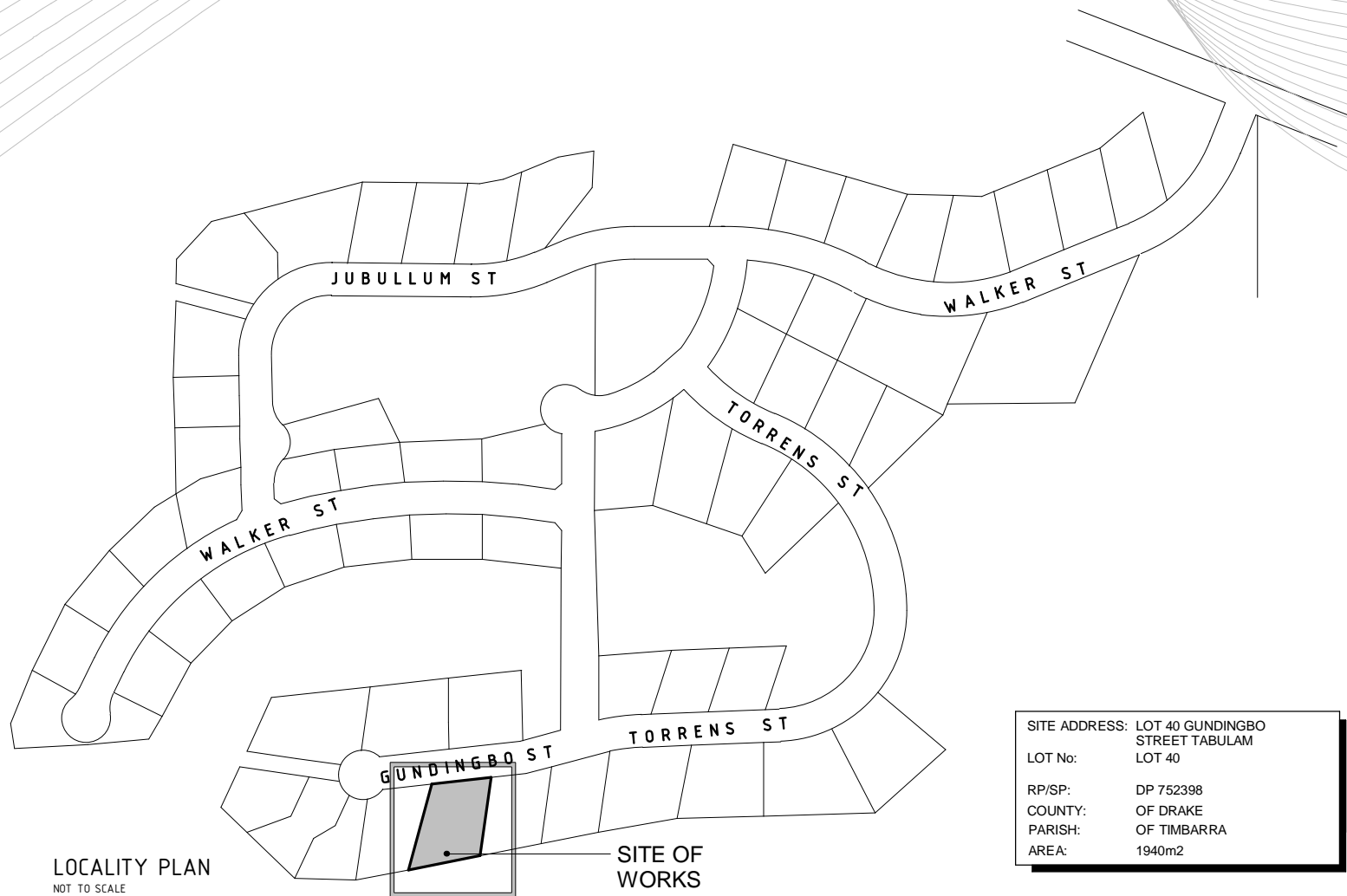
<b>Legend</b>	
In these commitments, "applicant" means the person carrying out the development.	
Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).	
Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.	
Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.	



# TABULAM ACDP PROGRAM

## LOT 40 GUNDINGBO ST TABULAM

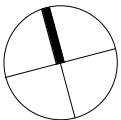
### CONTRACT No. 0080 1212



SITE ADDRESS: LOT 40 GUNDINGBO STREET TABULAM  
LOT No:  
RP/SP: DP 752398  
COUNTY: OF DRAKE  
PARISH: OF TIMBARRA  
AREA: 1940m2

DRAWING SCHEDULE	
41-12221-12- A160	LOCALITY PLAN
41-12221-12- A161	GENERAL NOTES
41-12221-12- A162	SITE PLAN
41-12221-12- A163	FLOOR PLAN
41-12221-12- A164	ELEVATIONS
41-12221-12- A165	SECTIONS
41-12221-12- A166	ROOF PLAN
41-12221-12- A167	KITCHEN ELEVATIONS
41-12221-12- A168	PWD TOILET ELEVATIONS
41-12221-12- A169	JOINERY DETAILS
41-12221-12- A170	SLAB AND FOOTING PLAN
41-12221-12- A171	FLOOR FRAMING
41-12221-12- A172	WALL BRACING PLAN
41-12221-12- A173	HYDRAULIC & DRAINAGE PLAN
41-12221-12- A174	ELECTRICAL PLAN
41-12221-12- A175	CONSTRUCTION DETAILS

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date
0	FOR CONSTRUCTION		JT	LJC*	KJH*	08.06.07



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Drawn	J.TSAKOS	Designed	L.CLEM
Drafting Check	L.CLEM*	Design Check	L.CLEM*
Approved	K.HOWE*		
Date	08.06.07		
Scale	AS INDICATED	This Drawing must not be used for Construction unless signed as Approved	

Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 40 GUNDINGBO ST TABULAM LOCALITY PLAN**

Original Size **A1** Drawing No: **41-12221-12- A160**

Rev: **0**



G1. READ THESE DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, OTHER ENGINEERING DRAWINGS, SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE USED. THE CONSTRUCTION NOTES SHALL APPLY UNLESS OTHERWISE VARIED BY THE DRAWINGS OR SPECIFICATIONS.

G2. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE BUT INDICATES THE REQUIRED PROPERTIES OF THE ITEM,

SIMILAR

ALTERNATIVES HAVING THE REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL.

G3. REFER ANY DISCREPANCY TO THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK.

G4. DO NOT OBTAIN DIMENSIONS BY SCALING FROM THE DRAWINGS. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS IN METRES.

G5. VERIFY SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED.

G6. MAINTAIN STRUCTURE IN STABLE CONDITION DURING CONSTRUCTION. NO PART SHALL BE OVERSTRESSED. PROVIDE TEMPORARY BRACING AS REQUIRED.

G7. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAA CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.

G8. THE STRUCTURAL WORK SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LOADS:

(A) WIND LOADS TO A.S. 4055 - 2006:

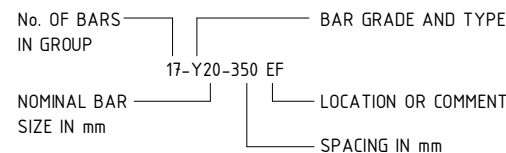
REGION	=A
TERRAIN CATEGORY	=2.5
TOPOGRAPHIC CLASS	=T2
WIND CLASSIFICATION	=N3

(B) LIVE LOADS: 15kPa

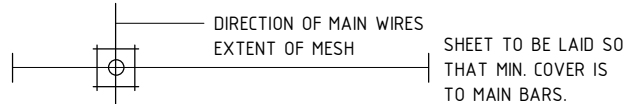
- T1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 1720- PART 1 AND AS 1684
- T2. ALL TIMBER SHALL BE PROTECTED FROM THE WEATHER BEFORE AND AFTER FABRICATION.
- T3. ALL TIMBER SHALL BE FREE FROM GUM VEINS, POCKETS, KNOTS, HOLES AND SPLITS WITHIN 150mm OF ANY BOLT OR CONNECTION
- T4. GALVANIZED BOLTS SHALL BE USED IN 2mm CLEARANCE HOLES. GREASE BOLTS BEFORE ASSEMBLY. WASHERS OF SPECIFIED SIZE ARE TO BE USED UNDER HEAD AND NUT OF BOLT. ALL BOLTS ARE TO BE LEFT ACCESSIBLE AND RETIGHTENED AT COMPLETION OF CONTRACT AND AT THE END OF MAINTENANCE PERIOD
- T5. APPROVED SPLIT RING AND SHEAR PLATE CONNECTORS ARE TO BE FITTED WITH GALVANISED BOLTS, NUTS AND WASHERS TO THE MANUFACTURERS RECOMMENDATIONS. SHEAR PLATES ARE TO BE PLACED AND SECURED WITH CLOUDS IMMEDIATELY AFTER GROOVING. COAT CONNECTOR AND GROOVE WITH APPROVED OIL OR PAINT AND GREASE BOLTS BEFORE ASSEMBLY.
- T6. THREE COPIES OF ALL CHECKED WORKSHOP DRAWINGS ARE TO BE SUBMITTED TO THE SUPERINTENDENT FOR REVIEW AND A REVIEWED COPY OBTAINED PRIOR TO THE COMMENCEMENT OF FABRICATION. REVIEW DOES NOT INCLUDE DIMENSIONS.
- T7. UNLESS APPROVED BY THE SUPERINTENDENT, ALL TRUSSES ARE TO BE SHOP FABRICATED.
- T8. DURING ERECTION, TRUSSES ARE TO BE SLUNG FROM THEIR PANEL POINTS ONLY.
- T9. APPROVED PATENT 12mm GALVANIZED METAL ANCHORS AND NAIL-ON PLATES ARE TO BE SECURELY FIXED WITH GALVANIZED NAILS TO MANUFACTURERS RECOMMENDATIONS. NAIL-ON PLATES ARE TO BE USED IN HIDDEN LOCATIONS ONLY
- T10. SURFACE PREPARATION AND PROTECTIVE TREATMENT OF TIMBER: LOSP (IF CYPRESS NOT USED). TREATMENT CERTIFICATE TO BE SUPPLIED.


R1. SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS:  
R - DENOTES STRUCTURAL GRADE 230 PLAIN ROUND BAR TO AS/NZS 4671  
Y - DENOTES HOT ROLLED GRADE 410 DEFORMED BAR TO AS/NZS 4671  
F - DENOTES HARD DRAWN WIRE REINFORCING FABRIC TO AS/NZS 4671  
N - DENOTES NORMAL DUCTILITY BAR TO AS/NZS 4671  
L - DENOTES LOW DUCTILITY BAR TO AS/NZS 4671

R2. DESIGNATION OF REINFORCEMENT BARS IS AS IN EXAMPLE:



- R3. THE FOLLOWING ABBREVIATIONS APPLY TO THE LOCATION OF REINFORCEMENT:
- |              |             |                               |
|--------------|-------------|-------------------------------|
| EW EACH WAY  | FF FAR FACE | CP CENTRALLY PLACED           |
| EF EACH FACE | B BOTTOM    | B/U BOTTOM UNDER (LAID FIRST) |
| NF NEAR FACE | T TOP       | T/O TOP OVER (LAID LAST)      |
- R4. COGS AND HOOKS TO BE STANDARD IN ACCORDANCE WITH AS 3600.
- R5. MAIN WIRES OF FABRIC AND WIDTH OF SHEETS SHOWN IN FLOOR PLAN OR WALL ELEVATIONS THUS:



- R6. EXTENT OF BARS SHOWN THUS:
- 
- R7. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND IS NOT NECESSARILY IN TRUE PROJECTION.
- R8. MAINTAIN NOMINAL CLEAR CONCRETE COVER TO REINFORCEMENT (INCLUDING FITMENTS) BY APPROVED CHAIRS, SPACERS, OR TIES AS REQUIRED TO PROVIDE ADEQUATE SUPPORTS SHALL BE SPACED AT 750 MAXIMUM CROSS CENTRES FOR FABRIC AND BARS UP TO AND INCLUDING 16 DIA. AND 1200 MAXIMUM CROSS CENTRES FOR BARS OVER 16 DIA.

- | BAR        | LAP  |
|------------|------|
| Y12 OR N12 | 375  |
| Y16 OR N16 | 500  |
| Y20 OR N20 | 750  |
| Y24 OR N24 | 1100 |
| Y28 OR N28 | 1376 |

BAR	LAP
Y12 OR N12	300
Y16 OR N16	400
Y20 OR N20	600
Y24 OR N24	850
Y28 OR N28	1100

- 
- MIN. LAP
- 25 MINIMUM

- 
- Diagram illustrating the fabric splice length. The splice length is defined as the distance between the centers of the rivets, marked by dimension lines and the label "SPLICE LENGTH". The fabric is shown as a horizontal line with rivets, and the splice length is indicated by a dimension line with arrows at both ends. The label "FABRIC" points to the material.

R11. WELDING OF REINFORCEMENT IS ONLY PERMITTED WHERE SHOWN ON THE DRAWINGS OR OTHERWISE APPROVED BY THE SUPERINTENDENT.

R12. DOWELS SHALL BE SAWN TO LENGTH. IN SKEWED JOINTS DOWELS SHALL BE ALIGNED WITH THE LONGITUDINAL JOINTS. DOWEL ALIGNMENT TO BE MAINTAINED BY USE OF A SUPPORT ASSEMBLY SUITABLE TO ENSURE A HORIZONTAL AND VERTICAL ALIGNMENT TOLERANCE OF 5 IN 400

C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 3600, CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS

- C2. QUALITY OF CONCRETE ELEMENTS SHALL BE AS FOLLOWS:

STRUCTURAL ELEMENTS	EXPOSURE CLASS	COVER TO REINF. (mm)	F <sub>c</sub> MPA	MAX. AGGR. SIZE (mm)	SLUMP (mm)
SLAB AND FOOTING	A1	25 TO EXPOSED SLAB SURFACE	20	20	80+ -10
		50 TO SURFACES IN CONTACT WITH GROUND			

- C3. ADDITIVES SHALL NOT BE USED WITHOUT THE SUPERINTENDENT'S PRIOR APPROVAL
- C4. CONCRETE IS TO BE COMPACTED USING VIBRATORS
- C5. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES
- C6. PROVIDE ALL EXPOSED EDGES AND CORNERS WITH 20 CHAMFERS OR FILLETS.
- C7. FORM ALL CONSTRUCTION JOINTS AND USE ONLY WHERE SHOWN OR APPROVED BY THE SUPERINTENDENT
- C8. NO HOLES, CHASES OR EMBEDMENT OF PIPES, OTHER THAN THOSE SHOWN ON THE STRUCTURAL ENGINEER'S DRAWINGS SHALL BE MADE WITHOUT THE APPROVAL OF THE SUPERINTENDENT.
- C9. CURING OF ALL CONCRETE SHALL BE COMMENCED AS SOON AS POSSIBLE AFTER PLACING OR STRIPPING. REFER 'CURING' IN A.S. 3600 AND THE SPECIFICATION. ACCEPTABLE CURING METHODS ARE AS FOLLOWS:-
  - WATER IMMERSION
  - WATER SPRAY BENEATH APPROVED PLASTIC SHEETING
- C9. FORMWORK AND ITS REMOVAL TO BE IN ACCORDANCE WITH A.S. 3610
- C10. ALL PROPS AND FORMWORK FOR BEAMS AND SLABS TO BE REMOVED BEFORE CONSTRUCTION OF ANY WALLS OR OTHER PERMANENT LOADING ON THE SLAB.
- C11. LAP AND SEAL 0.2mm WATERPROOF MEMBRANE TO ENSURE A COMPLETE VAPOUR BARRIER.
- C12. CONSTRUCTION TOLERANCES TO BE IN ACCORDANCE WITH AS 3610.
- C13. FORMED SURFACE FINISHES TO BE IN ACCORDANCE WITH AS 3610.
- C14. FINISHED FORMED SLAB SURFACES:
  - CLASS 1 TOLERANCE - TRUE PLANES WITHIN 3 IN 3000
  - SURFACE FINISH - POWER TROWEL AND STEEL FLOAT FINISH.

<b><u>ROOF FRAMING</u></b>	
<b>TRUSSES:</b>	PREFABRICATED ENGINEER DESIGNED ROOF TRUSSES @ 900 MAX. CTRS.
<b>VERANDAH RAFTERS:</b>	150 x 50 F17 @ 900 MAX. CTRS., MAX. SPAN = 3m, MAX. O/HANG = 900mm
<b>BATTENS:</b>	40 x 0.55 BMT G550, AZ150 @ 900 CTRS.
<b>VERANDAH BEAM:</b>	B1-B7 - 195 x 85 HYNBEAM 17 B8-B9 - 130 x 85 HYNBEAM 17
<b>VERANDAH PLATE:</b>	200 x 50 F17, MAX. SPAN = 3m, FOR VERANDAHS WITH O/HANGS UP TO 600mm. 2/200 x 38 F17, MAX. SPAN = UP TO 3.3m, FOR VERANDAH WITH O/HANG UP TO 900mm.
<b>NAILING PLATE:</b>	120 x 35 F17, BOLTED TO TRUSSES/WALL FRAMING WITH 1/M12 BOLT @ 1200 MAX. CTRS.
<b>VERANDAH/CARPORT POST:</b>	100 x 100 x 4 GALV. POST.

LOAD BEARING WALLS:	
STUDS:-	90 x 35 F8 @ 400 CTRS.
TOP PLATE:-	2/90 x 45 F8
BOTTOM PLATE:-	90 x 35 F5
NOGGING:-	90 x 35 F5 - MAX. 1350 CTRS.
INTERNAL NON LOAD BEARING WALLS:	
STUDS:-	90 x 35 F8 @ 400 CTRS.
TOP PLATE:-	90 x 35 F8
BOTTOM PLATE:-	90 x 35 F8
NOGGING:-	90 x 35 F5 - MAX. 1350 CTRS.
LINTELS:	
(UPPER STOREY)	
SPAN TO 0 - 1500mm	2/140 x 35 MGP10
SPAN TO 1500 - 1800mm	2/170 x 35 MGP10
SPAN TO 1800 - 2100mm	2/190 x 35 MGP10
STUDS BESIDE OPENINGS:	
SPAN TO 900mm	1
SPAN TO 1800mm	2
SPAN OVER 2400mm	3

- T1. TIE DOWN & BRACING HAS BEEN DESIGNED FOR A N3 WIND CLASSIFICATION WITH SHEET ROOF CONSTRUCTION.
- T2. ALL TIMBER FRAMING, BRACING & TIE DOWN DETAILS ARE TO BE IN ACCORDANCE WITH AS 1684 FOR NOMINAL WIND CLASSIFICATION. ALL NOMINAL FIXINGS REQUIRED BY AS 1684 ARE IN ADDITION TO THE TYPICAL FIXINGS DETAILED & DESCRIBED ON THESE DRAWINGS.
- T3. ALL TIE DOWN FIXINGS HAVE BEEN DESIGNED FOR TIMBER WITH A JOINT GROUP CLASSIFICATION OF JD4 OR BETTER.
- T4. BRACING WALL SYSTEM HAS BEEN DESIGNED ON THE ASSUMPTION THAT THE CEILING BATTENS ARE DIRECTLY FIXED TO THE ROOF FRAMING. IF OTHER CEILING SUPPORT SYSTEMS ARE USED. THE SUPERINTENDENT IS TO BE NOTIFIED TO CONFIRM THE DESIGN.

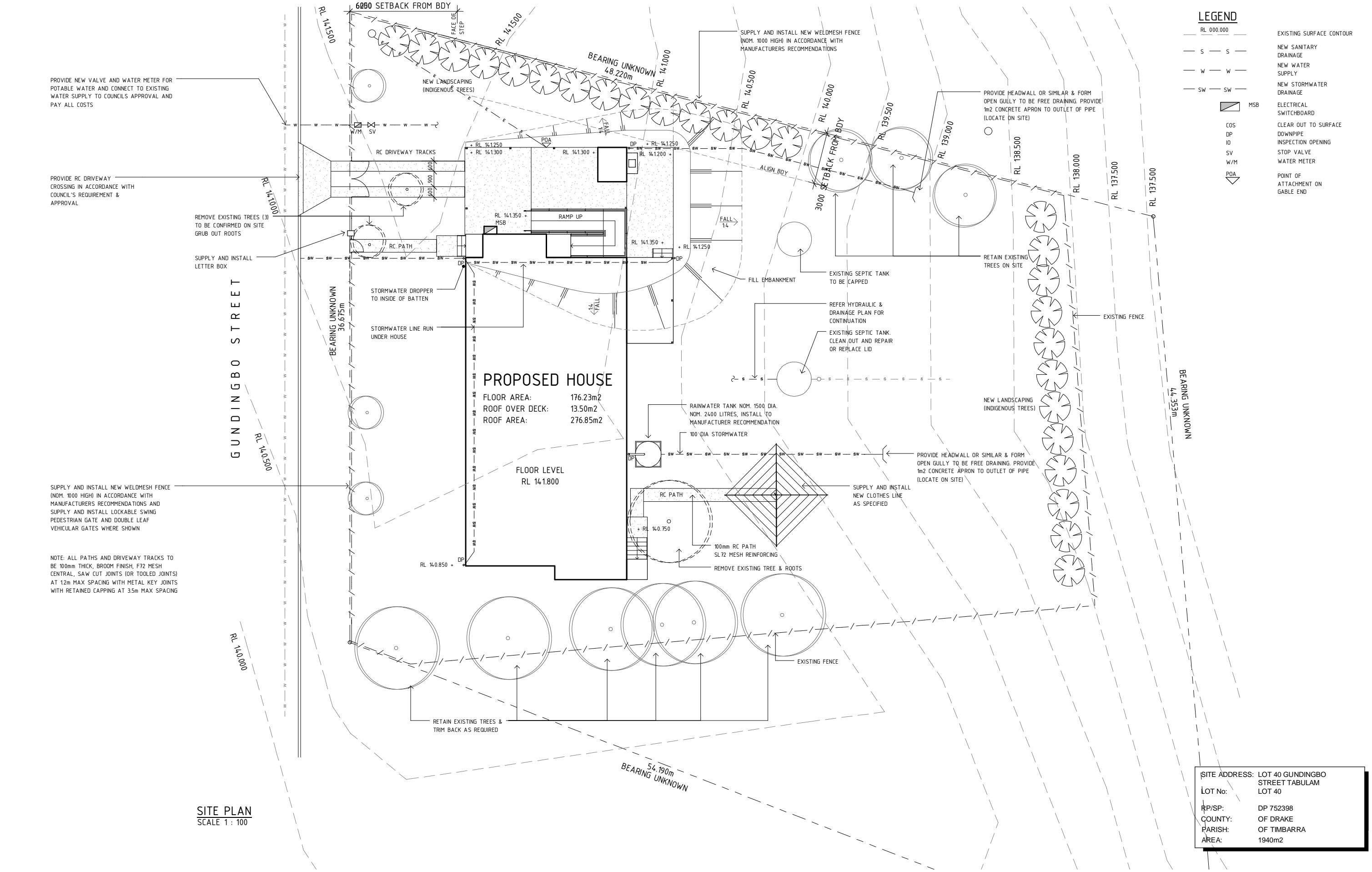
- F1. FOOTINGS HAVE BEEN DESIGNED FOR A SAFE WORKING PRESSURE OF 100kPa AND CLASS S (SLIGHTLY REACTIVE) SITE CLASSIFICATION ON THE BASIS OF A GEOTECHNICAL REPORT PREPARED BY COFFEY GEOSCIENCES PTY LTD DATED 9 DECEMBER 2003 REFERENCE No. NR1346/1-B.
- F2. FOUNDATION LEVELS SHOWN ARE CONTRACT LEVELS - THE FINAL LEVELS SHALL BE AS DIRECTED BY THE SUPERINTENDENT.
- F3. FOUNDATION MATERIAL BENEATH SLABS ON GROUND SHALL BE COMPACTED TO 95% STANDARD COMPACTION IN ACCORDANCE WITH AS1289
- F4. ALL FOOTINGS ARE TO BE FOUNDED 300mm MIN, INTO NATURAL GROUND.
- F5. FOUNDATION CONDITIONS AT THE SITE ARE TO BE MAINTAINED IN ACCORDANCE WITH CSIRO BROCHURE BTF 18 "FOOTING MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNER'S GUIDE," TO ENSURE 'NORMAL' SOIL MOISTURE CONDITIONS AS DEFINED BY AS 2870

M1. ALL CONCRETE BLOCKWORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF:

- AS3700 – SAA MASONRY CODE  
AS2733 – CONCRETE MASONRY UNITS  
AS3600 – CONCRETE STRUCTURES
- M2. BLOCKS SHALL BE GRADE 15 ( $f'_{uc} = 15 \text{ MPa}$ ).
- M3. CHASING OF HOLLOW BLOCKWORK NOT PERMITTED.
- M4. REINFORCED BLOCKWORK:
- MORTAR TO BE 1 CEMENT = 1/2 HYDRATED LIME: 4 1/2 SAND  
GROUT FOR FILLING CORES TO HAVE A MINIMUM  $f'_{c} = 12 \text{ MPa}$   
MAX. AGGREGATE SIZE OF 10 AND SLUMP =  $200 \pm 30$   
CONCRETE FOR BOND BEAMS TO HAVE  $f'_{c} 20 \text{ MPa}$  AND SLUMP =  $80 \pm 15$   
REINFORCEMENT TO HAVE 15 NOM. MINIMUM COVER FROM INSIDE FACE OF BLOCKS.  
REMOVE ALL MORTAR DROPPINGS FROM BOTTOM OF GROUTED CORES BEFORE  
CONCRETING BY USE OF CLEANOUT BLOCKS.  
BLOCKWORK CONSTRUCTION NOT TO PROCEED MORE THAN SIX COURSES AHEAD  
OF CORE GROUTING.

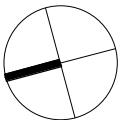
- E1. ALL SERVICES, BOTH ABOVE AND BELOW GROUND, SHALL BE LOCATED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK
- E2. ANY AVAILABLE TOPSOIL FROM UNDER THE PROPOSED FOOTPRINT OF THE HOUSE SHALL BE STRIPPED AND STOCKPILED FOR REUSE
- E3. ON COMPLETION OF WORKS, SUPPLY SPREAD AND LAY 50mm OF TOPSOIL AND TURF AROUND THE PERIMETER OF THE HOUSE FOR MIN. 6000mm OR TO THE FRONT AND SIDE BOUNDARIES

[illegible]



0	FOR CONSTRUCTION	JT	LJC*	KJH*	08.06.07	
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date

0 1000 2000 3000 4000 5000mm  
SCALE 1:100 AT ORIGINAL SIZE



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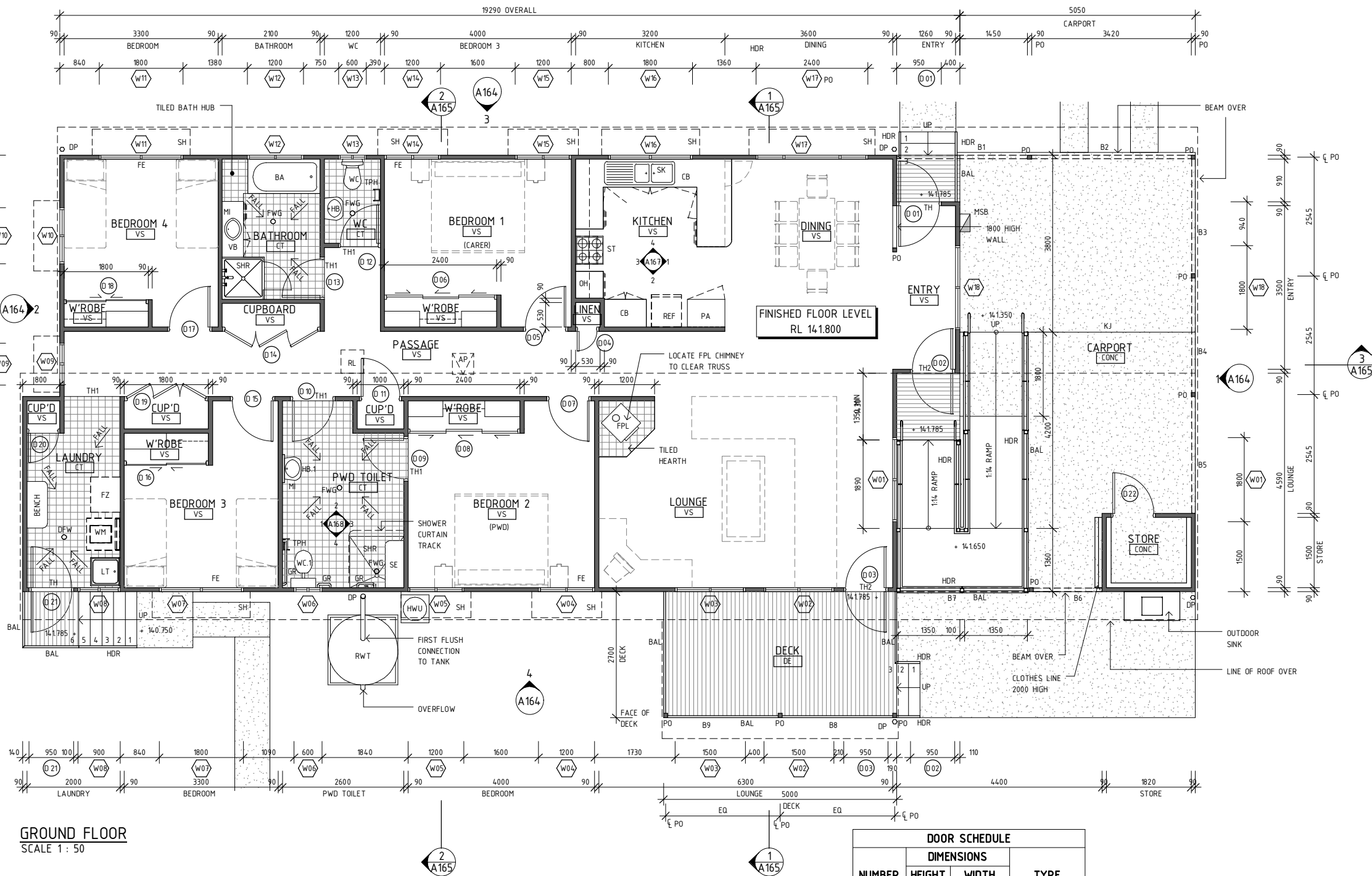
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Drawn	J.TSAKOS	Designed	L.CLEM
Drafting Check	L.CLEM*	Design Check	L.CLEM*
Approved	K.HOWE*		
Date	08.06.07		
Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved	

Client	TABULAM CWP		
Project	TABULAM ACDP PROGRAM		
Title	LOT 40 GUNDINGBO ST TABULAM SITE PLAN		
Original Size	A1	Drawing No:	41-12221-12- A162
Rev:	0		





GROUND FLOOR  
SCALE 1 : 50

LEGEND OF FLOOR FINISHES ABBREVIATIONS

CONC - CONCRETE FLOORING  
CT - CERAMIC TILE  
DE - 90 x 19 SHOTEDGE HWD TIMBER DECKING  
VS - SHEET VINYL

LEGEND OF DOOR SCHEDULE ABBREVIATIONS

D01 - SOLID CORE FLUSH PANEL WATERPROOF PLY FACED  
D02 - HOLLOW CORE FLUSH PANEL HARDBOARD FACED  
D03 - HOLLOW CORE FLUSH PANEL HARDBOARD FACED  
D04 - WITH LIFT OFF HINGES  
D05 - FLYSCREEN  
D06 - SECURITY SCREEN DOOR (TRIPLE HINGED)  
D07 - STEEL FRAMED  
D08 - SLIDING DOOR  
D09 - TIMBER FRAME  
D10 - WEATHERPROOF THRESHOLD  
D11 - NOTE: ALL LINEN AND CUPBOARD DOORS TO BE TYPE D01 SIZE TO SUIT OPENINGS. DOOR JAMBS TO BE TIMBER

ANNOTATION LEGEND

ABC ANNOTATION ABBREVIATION (REFER LEGEND)  
ROOM NAME ROOM NUMBER AND FLOOR FINISH  
D01 DOOR NUMBER  
W01 WINDOW NUMBER  
?° PITCH ROOF PITCH AND DIRECTION

DOOR SCHEDULE

NUMBER	DIMENSIONS		TYPE
	HEIGHT	WIDTH	
01	2040	870	SF/D0/FS/SD/TH
02	2040	870	SF/D0/FS/SD/TH
03	2040	870	SF/D0/FS/SD/TH
04	2040	420	TF/D01
05	2040	870	SF/D01
06	2040	2400	TF/D01/SLD
07	2040	870	SF/D01
08	2040	2400	TF/D01/SLD
09	2040	870	SF/D01
10	2040	870	SF/D01
11	2040	820	TF/D01
12	2040	820	SF/D02
13	2040	820	SF/D02
14	2040	3 X 670	TF/D01
15	2040	870	SF/D01
16	2040	1720	TF/D01/SLD
17	2040	870	SF/D01
18	2040	1720	TF/D01/SLD
19	2040	3 X 570	TF/D01
20	2040	620	TF/D01
21	2040	870	SF/D0/FS/SD/TH
22	2040	870	SF/D01

WINDOW SCHEDULE

NUMBER	WIDTH	HEIGHT	TYPES	OPENING	REMARKS
01	1800	600	AS/FS/SS	OX	
02	1500	1200	AS/FS/SS	OX	
03	1500	1200	AS/FS/SS	OX	
04	1200	1200	AS/FS/SS	OX	FE
05	1200	1200	AS/FS/SS	OX	
06	600	600	AS/FS/SS	OX	V
07	1800	1200	AS/FS/SS	OX	FE
08	900	1000	AS/FS/SS	OX	
09	900	600	AS/FS/SS	OX	
10	1200	600	AS/FS/SS	OX	
11	1800	1200	AS/FS/SS	OX	FE
12	1200	600	AS/FS/SS	OX	V
13	600	600	AS/FS/SS	OX	V
14	1200	1200	AS/FS/SS	OX	FE
15	1200	1200	AS/FS/SS	OX	
16	1800	1000	AS/FS/SS	OX	
17	2400	1200	AS/FS/SS	XOX	
18	1800	600	AS/FS/SS	OX	

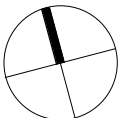
LEGEND OF WINDOW SCHEDULE ABBREVIATIONS

AS - ALUM. SLIDING COMPLETE WITH TIMBER REVEAL  
AO - ALUM. FIXED  
FE - FIRE ESCAPE PANEL IN SECURITY SCREEN  
FS - FLYSCREEN  
SS - SECURITY SCREEN (SCREW FIXED)  
O - FIXED PANE (AS VIEWED FROM OUTSIDE)  
X - SLIDING PANE (AS VIEWED FROM OUTSIDE)  
V - VENTILATION SCREEN TO FIXED WINDOW

NOTE:  
\* MOUNT SUNHOODS HIGH ENOUGH TO ALLOW FE TO SWING FULLY OPEN  
\* FS AND SS ARE COMBINED  
\* OPAQUE GLASS TO W06, W12 & W13

LEGEND

AP	ACCESS PANEL
BA	BATH
BAL	BALUSTRADE
BCP	COLORBOND BARGE CAPPING
BE	BEARER
BP	BOTTOM PLATE
CB	CUPBOARD BENCH
CL	CEILING LINING
CD	PLASTERBOARD CORNICE
DFW	DRY FLOOR WASTE
DO	CUPBOARD DOOR
DP	DOWNPIPE
DPS	DOWNPIPE STRAP
DR	DRAWER
EGL	EXISTING NATURAL GROUND
EX	EXHAUST FAN
FA	FASCIA
FE	FIRE ESCAPE
FL	FLOORING
FP	UNI-PIER SUPPORT POST
FPL	FIREPLACE
FWG	FLOOR WASTE
FZ	FREEZER SPACE
GR	GRABRAIL
GU	COLORBOND GUTTER
HB	HAND BASIN
HB.1	HANDRAIL
HDR	HIGH POINT
HP	HOT WATER UNIT
INS	INSULATION
IO	INSPECTION OPENING
JO	JOISTS
KJ	KEY JOINT
LB.1	LOADBEARING JOIST
LT	LAUNDRY TUB
MI	LOCKABLE MIRROR CABINET
MSB	NEW METER BOX
OH	OVERHEAD CUPBOARD
P1	450DIA x 1200 DEEP CONC FOOTING
P2	450DIA x 600 DEEP CONC FOOTING
PA	PANTRY
PBD	PLASTERBOARD LINING
PLY	WALL PLY LINING
PO	POST
POT	POT DRAWER
RCP	COLORBOND RIDGE CAPPING
REF	REFRIGERATOR SPACE
RH	RANGE HOOD
RL	ROOF LIGHT
RSH	COLORBOND ROOF SHEETING
RV	ROOF VENTILATOR
RWT	RAINWATER TANK
SE	SHOWER SEATING
SH	SUNHOOD
SHR	SHOWER
SK	SINK
SKT	SKIRTING
SO	SOFFIT LINING
SPL	TILE SPLASHBACK
ST	STOVE
TH	WEATHERPROOF THRESHOLD
TH1	VINYL TO TILE THRESHOLD
TH2	DISABLED THRESHOLD
TPH	TOILET PAPER HOLDER
UFB	UNDER FLOOR BATTEN
VB	VANITY BASIN
WC	TOILET
WC.1	
WM	WASHING MACHINE SPACE
WSH	WALL CLADDING



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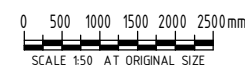
Drawn	J.TSAKOS	Designed	L.CLEM
Drafting Check	L.CLEM*	Design Check	L.CLEM*
Approved	K.HOWIE*		
Date	08.06.07		
Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved	

Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 40 GUNDINGBO ST TABULAM FLOOR PLAN**

Original Size **A1** Drawing No: **41-12221-12- A163**



0	FOR CONSTRUCTION	JT	LJC*	KJH*
No	Revision      Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved
				Date



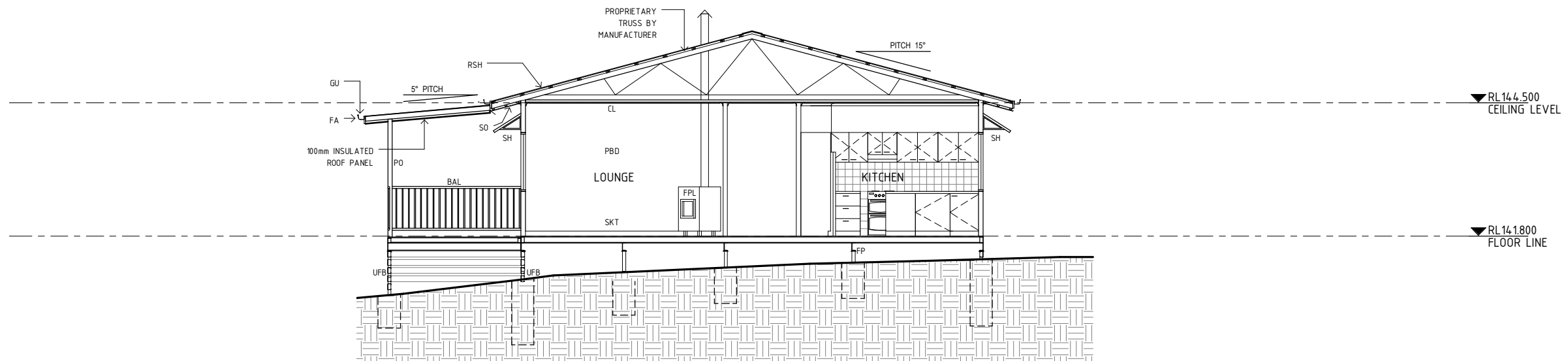
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Approved	K.HOWIE*		
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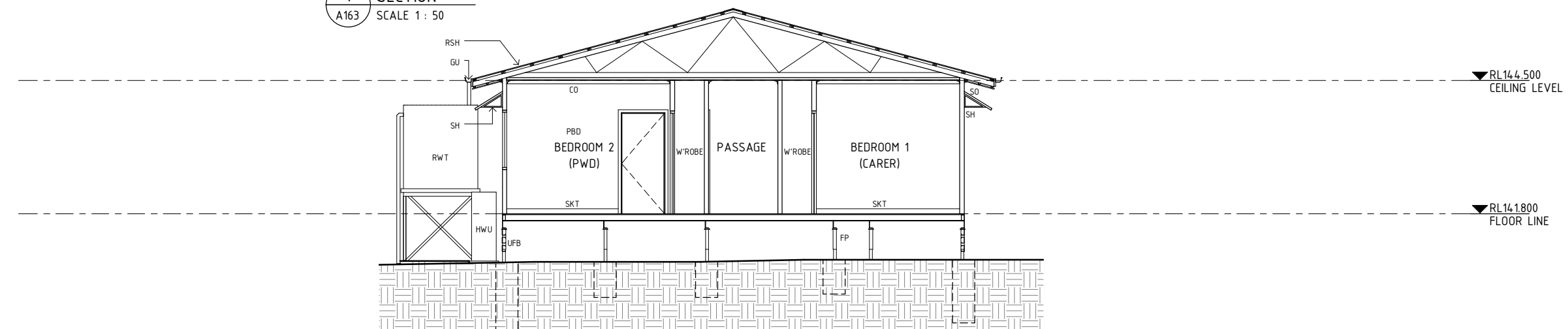
Client	<b>TABULAM CWP</b>
Project	<b>TABULAM ACDP PROGRAM</b>
Title	<b>LOT 40 GUNDINGBO ST TABULAM ELEVATIONS</b>

Original Size  
**A1** Drawing No: **41-12221-12- A164**

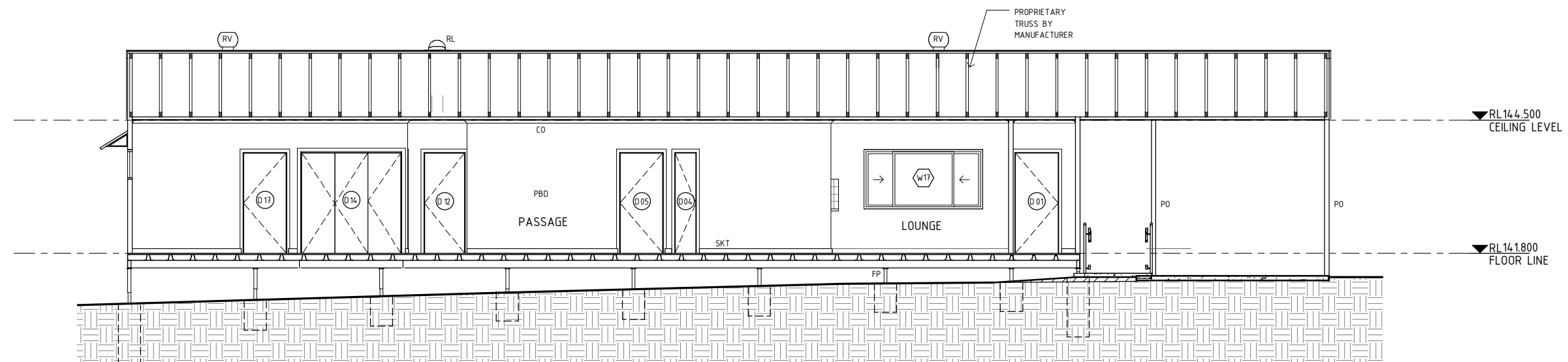
Rev: 0



1 SECTION  
A163 SCALE 1 : 50



2 SECTION  
A163 SCALE 1 : 50



3 SECTION  
A163 SCALE 1 : 50

0 500 1000 1500 2000 2500mm  
SCALE 1:50 AT ORIGINAL SIZE

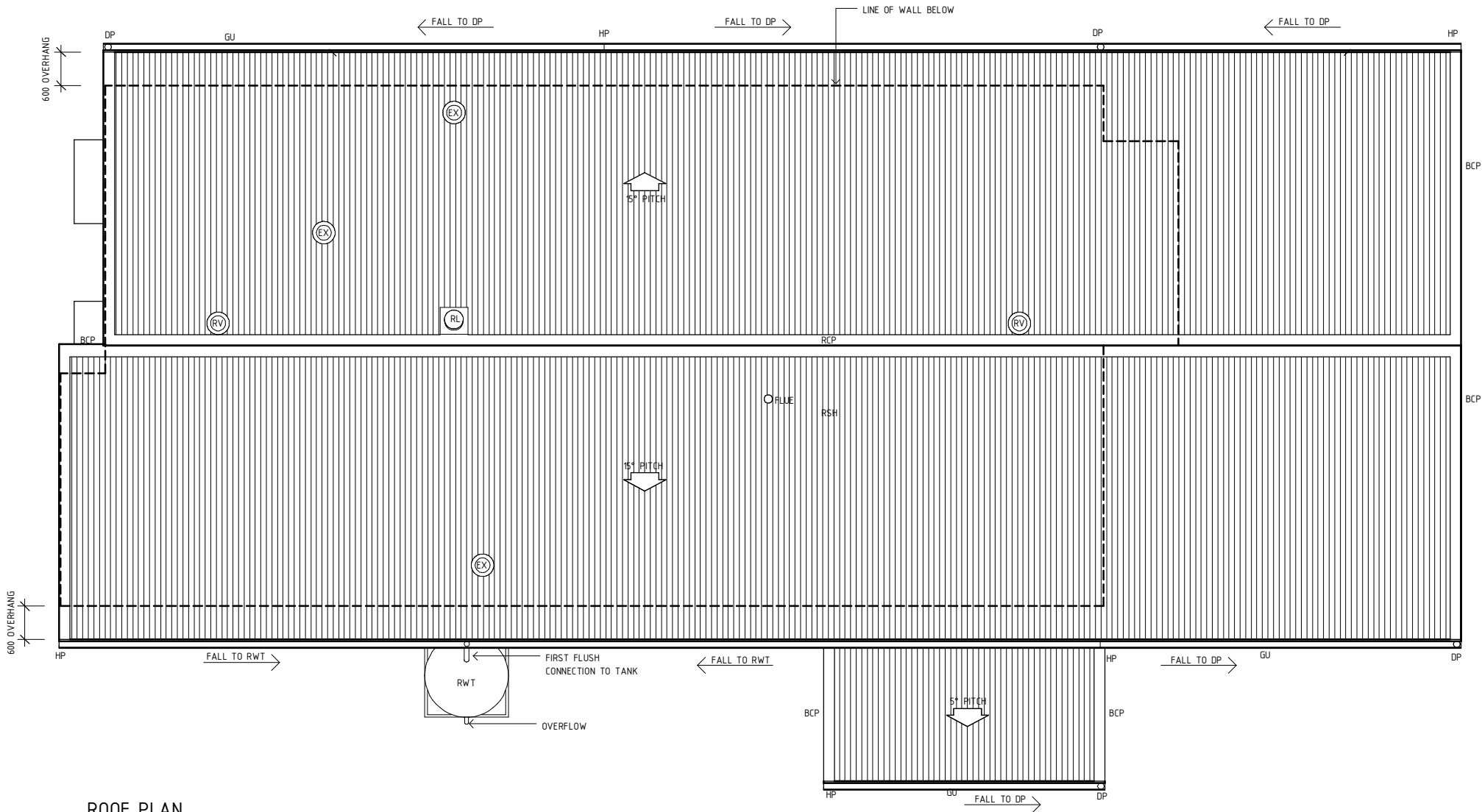
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Approved	K.HOWE*		
Date	08.06.07		
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Client	TABULAM CWP
Project	TABULAM ACDP PROGRAM
Title	LOT 40 GUNDINGBO ST TABULAM SECTIONS
Original Size	A1
Drawing No:	41-12221-12- A165

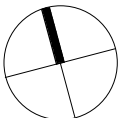
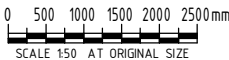
Rev: 0



ROOF PLAN  
SCALE 1 : 50

NOTE:  
PROVIDE LEAF GUARD TO ALL GUTTER

0	FOR CONSTRUCTION	JT	LJC*	KJH*	08.06.07		
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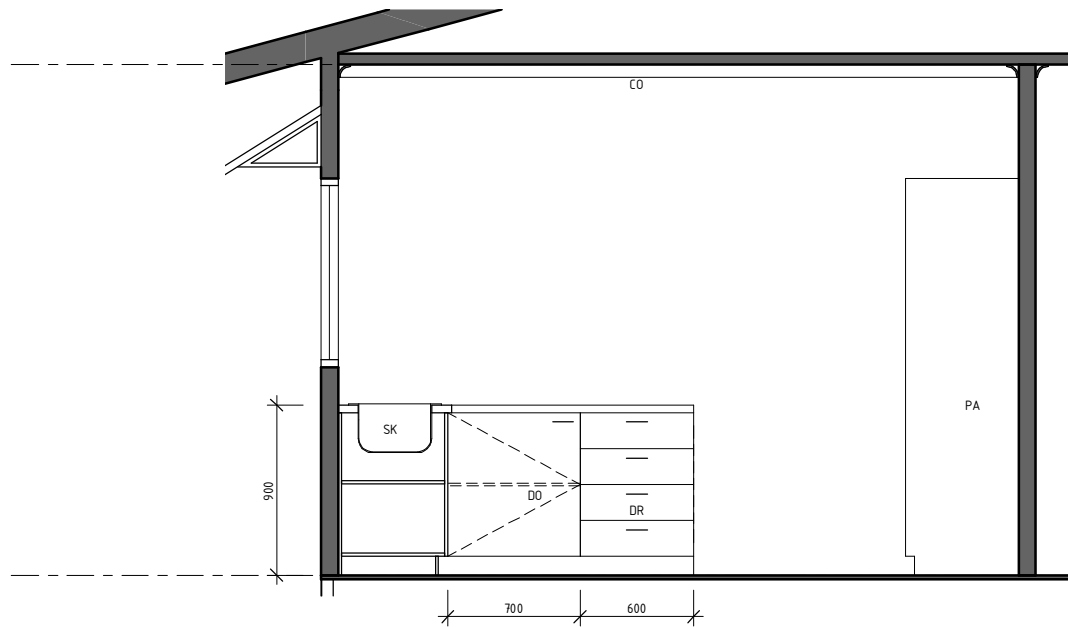
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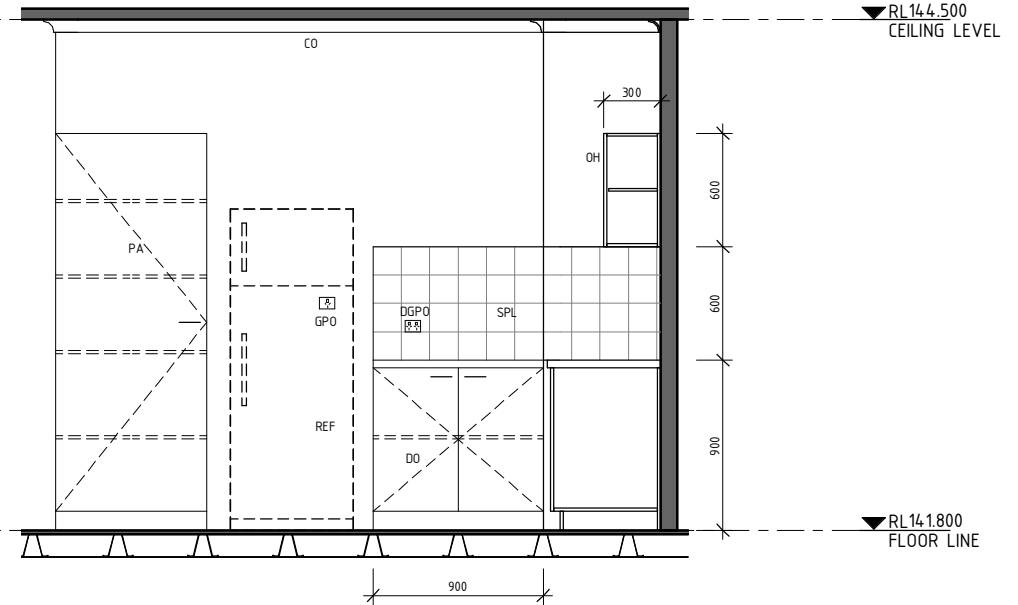
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Approved	K.HOWIE*		
Date	08.06.07		
Scale	1 : 50	This Drawing must not be used for Construction unless signed as Approved	

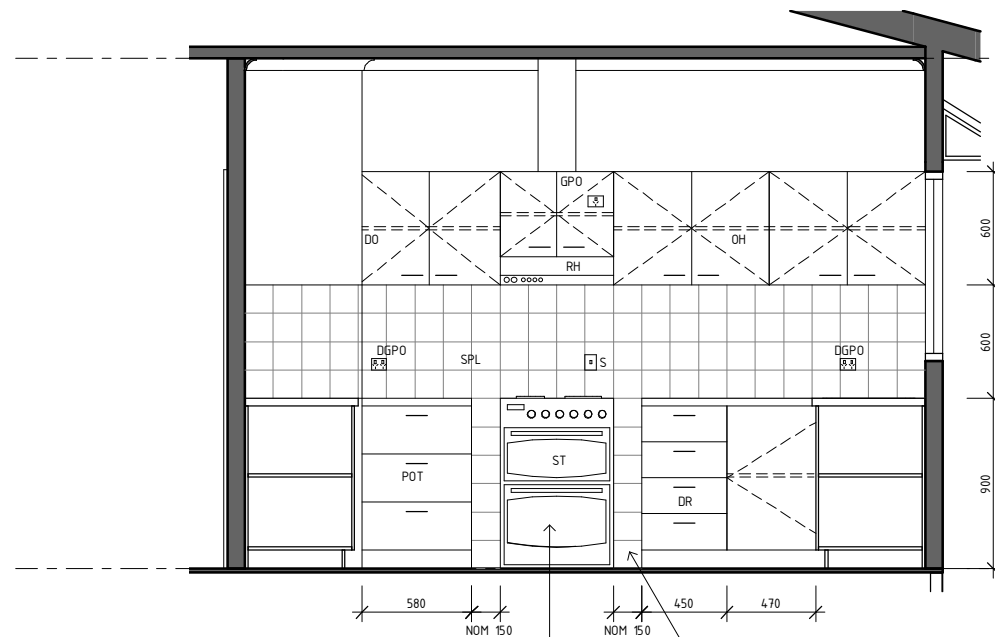
Client	TABULAM CWP
Project	TABULAM ACDP PROGRAM
Title	LOT 40 GUNDINGBO ST TABULAM ROOF PLAN
Original Size	A1
Drawing No:	41-12221-12- A166
Rev:	0



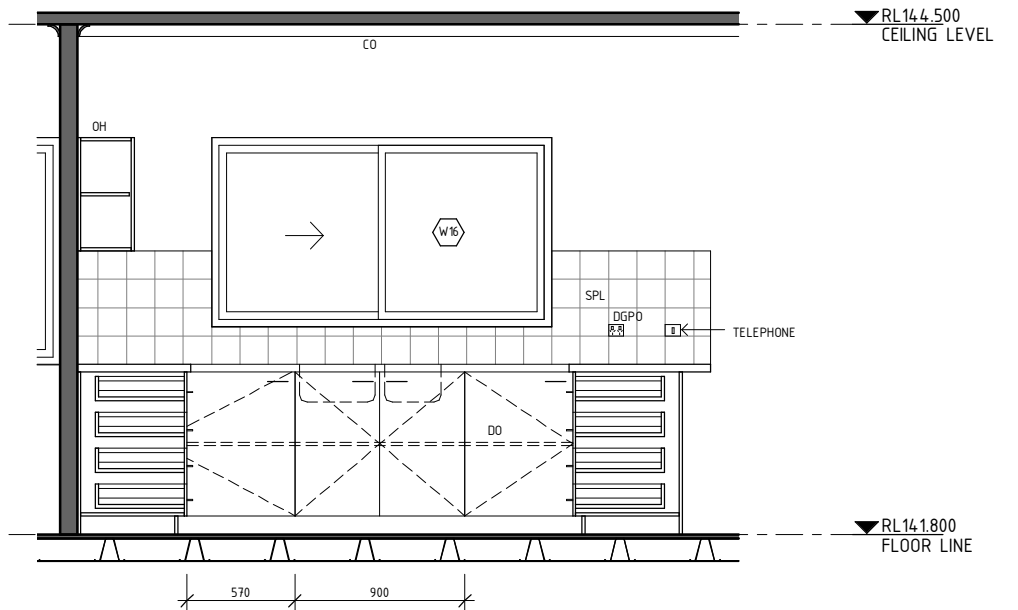
1 ELEVATION  
A163 SCALE 1 : 20



2 ELEVATION  
A163 SCALE 1 : 20



3 ELEVATION  
A163 SCALE 1 : 20



4 ELEVATION  
A163 SCALE 1 : 20

#### KITCHEN LEGEND

BE	BENCHTOP - 32mm THICK HMR PLY FINISHED ON ALL EDGES WITH LAMINATED PLASTIC. ALL LEADING EDGES TO BE BULL NOSED.	DGPO	REFER ELECT.
CA	CARCASS - 16mm MELAMINE FACED MEDIUM DENSITY FIBREBOARD FINISHED ON ALL EDGES WITH 2mm PVC EDGE STRIP.	GPO	REFER ELECT.
CO	PLASTERBOARD CORNICE	PA	PANTRY
DO	DOOR - 16mm MELAMINE FACED MEDIUM DENSITY FIBREBOARD FINISHED ON VERTICAL EDGES WITH 'L' SHAPED ROLLED EDGES AND 2mm PVC STRIP TO HORIZONTAL EDGES COMPLETE WITH SATIN CHROME 'D' SHAPED DOOR.	PO	POT DRAWERS SIMILAR TO 'DR'
DR	4 DRAWER CUPBOARD WITH CUTLERY UNIT. DRAWER FRONT AS FOR 'DO'. DRAWER UNITS TO BE METAL SHEETED SIDES AND FRAMED ON METAL SLIDES.	OH	OVERHEAD CUPBOARD - SIMILAR TO 'CA'
		REF	REFRIGERATOR
		SK	SINK
		SPL	TILE SPLASHBACK - NEW CERAMIC TILES (JOHNSON APPROVED EQUIVALENT), SILCONE SEAL ALL CORNERS, CONTINUE TO FLOOR BEHIND STOVE
		OR	SUPPLY AND INSTALL NEW RANGEHOOD COMPLETE WITH 125 DIA COLORBOND DUCT DISCHARGING ABOVE ROOF WITH A VENTILATED COWL. PROVIDE NEW SINGLE GPO, LOCATED TO SUIT RANGEHOOD.
		RH	

0 200 400 600 800 1000mm  
SCALE 1:20 AT ORIGINAL SIZE

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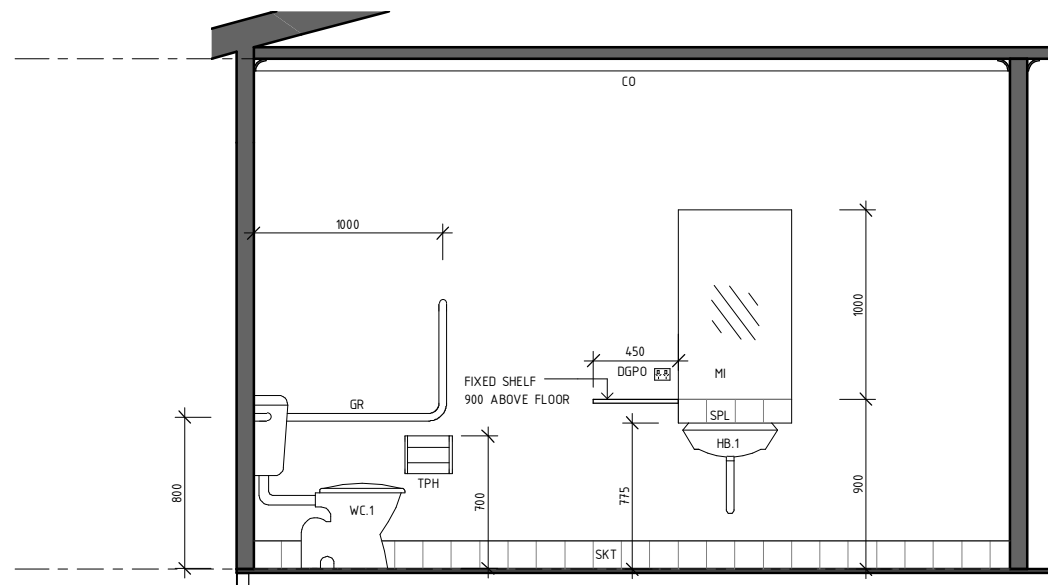
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Drafting Check	L.CLEM*	Design Check	L.CLEM*
Approved	K.HOWE*		
Date	08.06.07		
Scale	As indicated		

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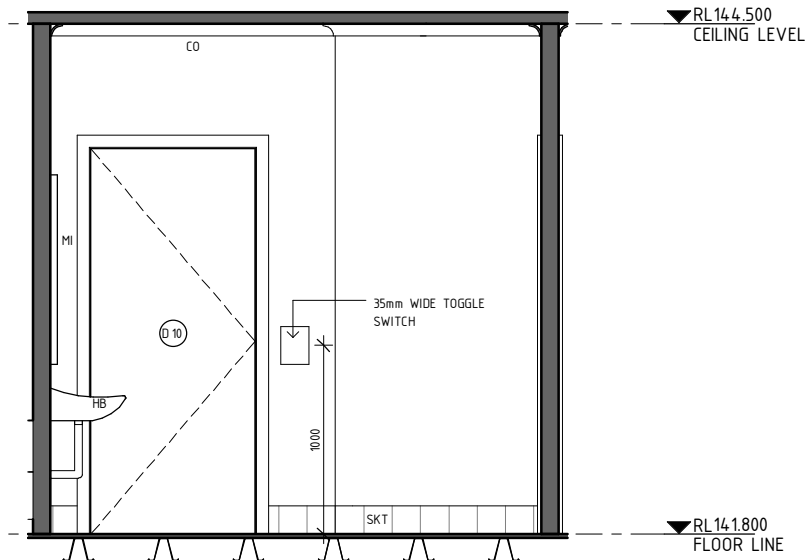
Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 40 GUNDINGBO ST TABULAM KITCHEN ELEVATIONS**

Original Size **A1** Drawing No: **41-12221-12- A167**

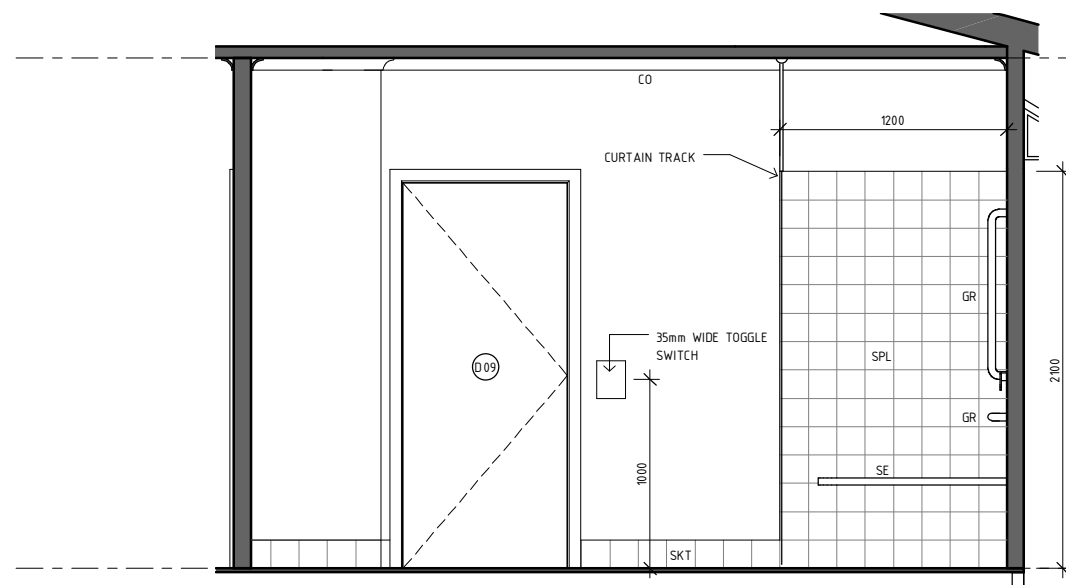
Rev: **0**



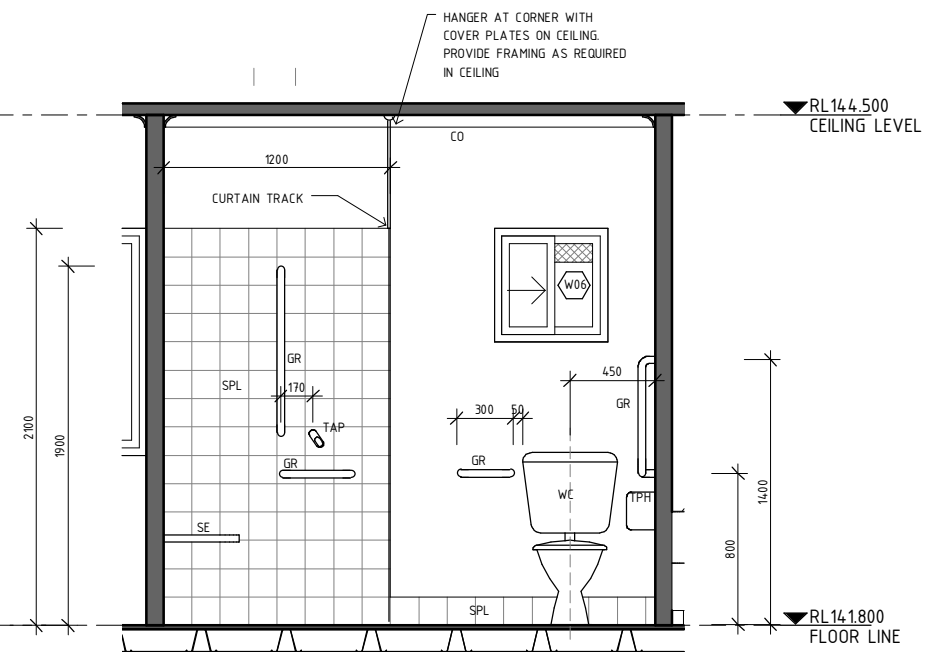
1 ELEVATION  
A163 SCALE 1 : 20



2 ELEVATION  
A163 SCALE 1 : 20



3 ELEVATION  
A163 SCALE 1 : 20



4 ELEVATION  
A163 SCALE 1 : 20

NOTE:  
LOCATIONS & FIXINGS OF FIXTURES  
& FITTINGS TO COMPLY WITH REQUIREMENTS OF AS1428

0	FOR CONSTRUCTION		JT	LJC*	KJH*	08.06.07
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date

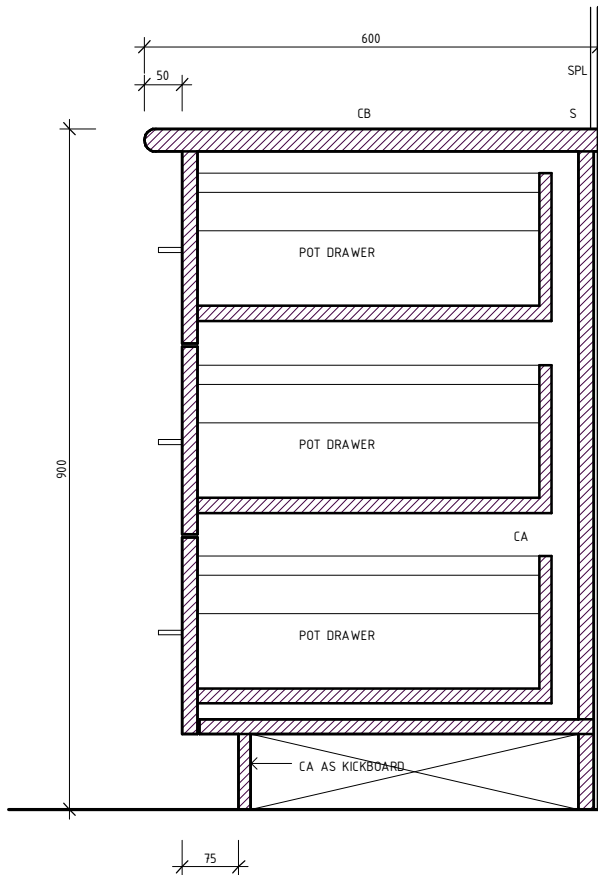
0 200 400 600 800 1000 mm  
SCALE 1:20 AT ORIGINAL SIZE

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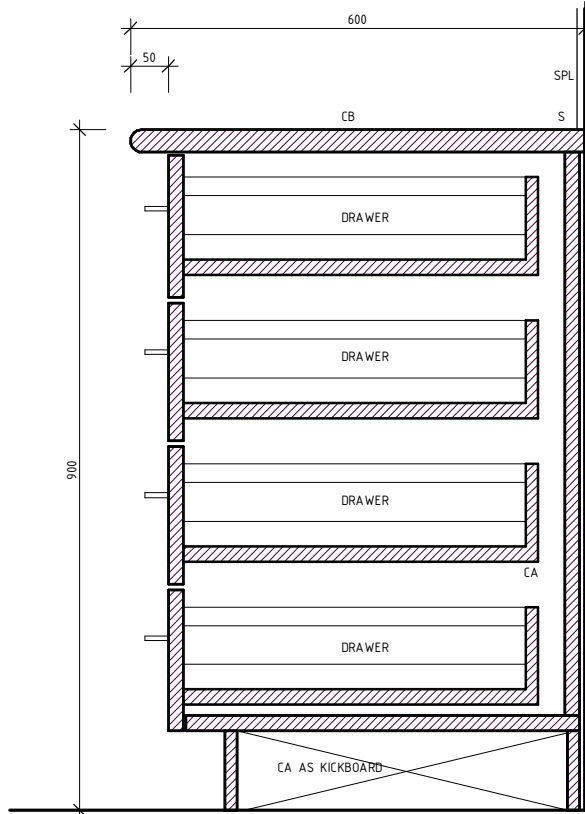
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Approved	K.HOWE*		
Date	08.06.07		
Scale	1 : 20		

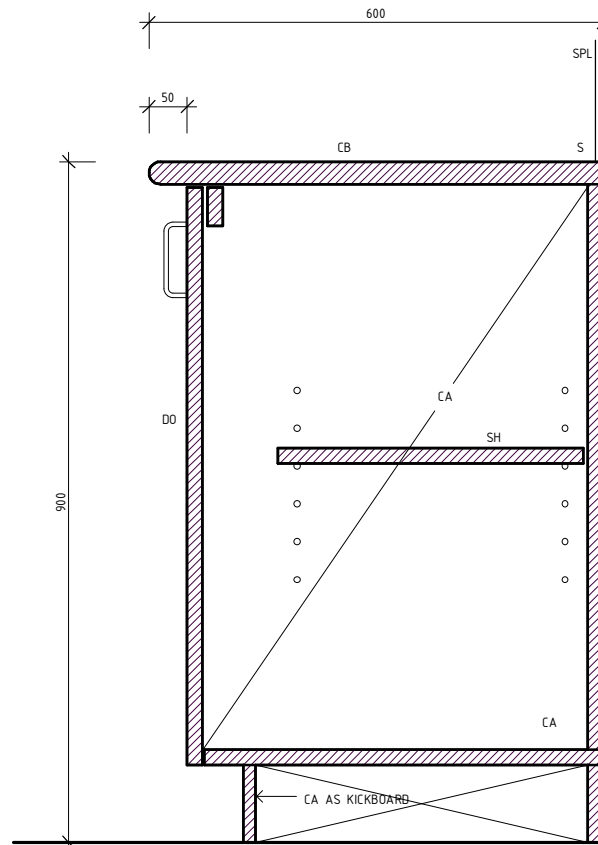
Client	<b>TABULAM CWP</b>
Project	<b>TABULAM ACDP PROGRAM</b>
Title	<b>LOT 40 GUNDINGBO ST TABULAM PWD TOILET ELEVATIONS</b>
Original Size	<b>A1</b>
Drawing No:	<b>41-12221-12- A168</b>
Rev:	<b>0</b>



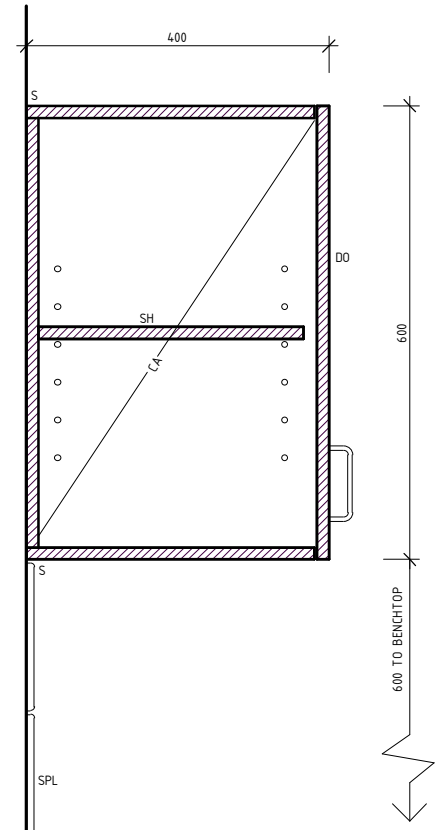
1 POT DRAWER DETAIL  
SCALE 1 : 5



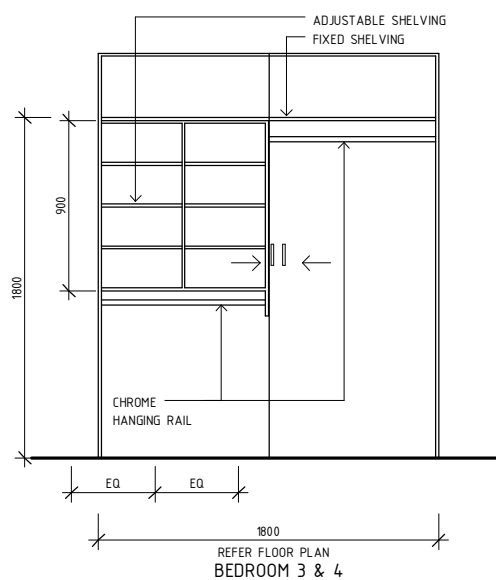
2 4 DRAWER UNIT DETAIL  
SCALE 1 : 5



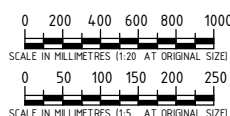
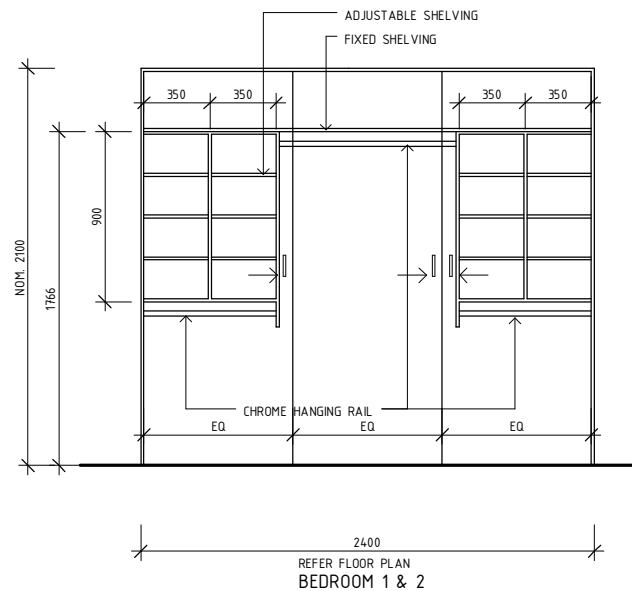
3 FLOOR CUPBOARD DETAIL  
SCALE 1 : 5



4 OVERHEAD CUPBOARD DETAIL  
SCALE 1 : 5



5 WARDROBE DETAILS  
SCALE 1 : 20



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Approved	K.HOWE*		
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Scale	As indicated		

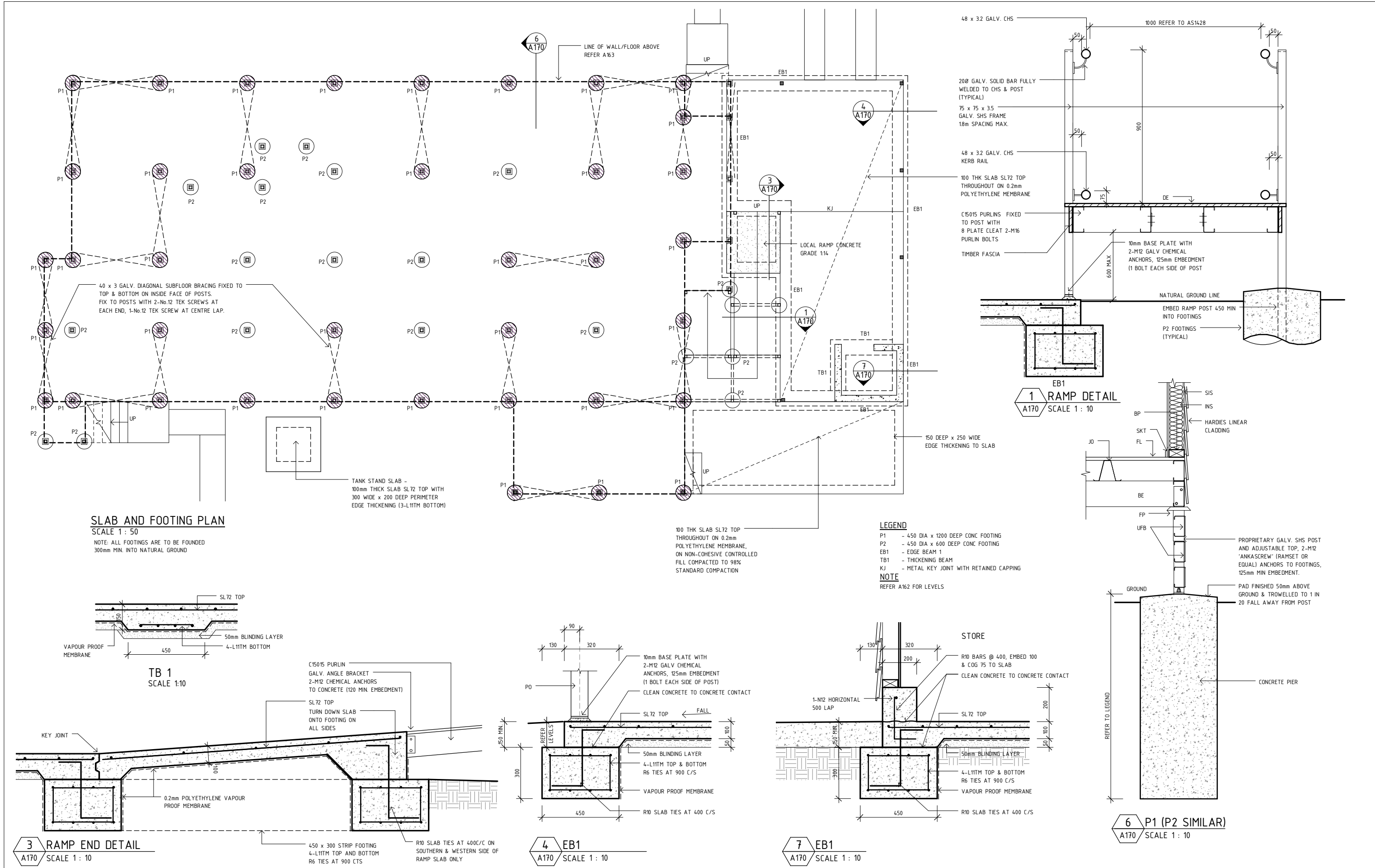
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Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 40 GUNDINGBO ST TABULAM JOINERY DETAILS**

Original Size  
**A1** Drawing No: **41-12221-12- A169**

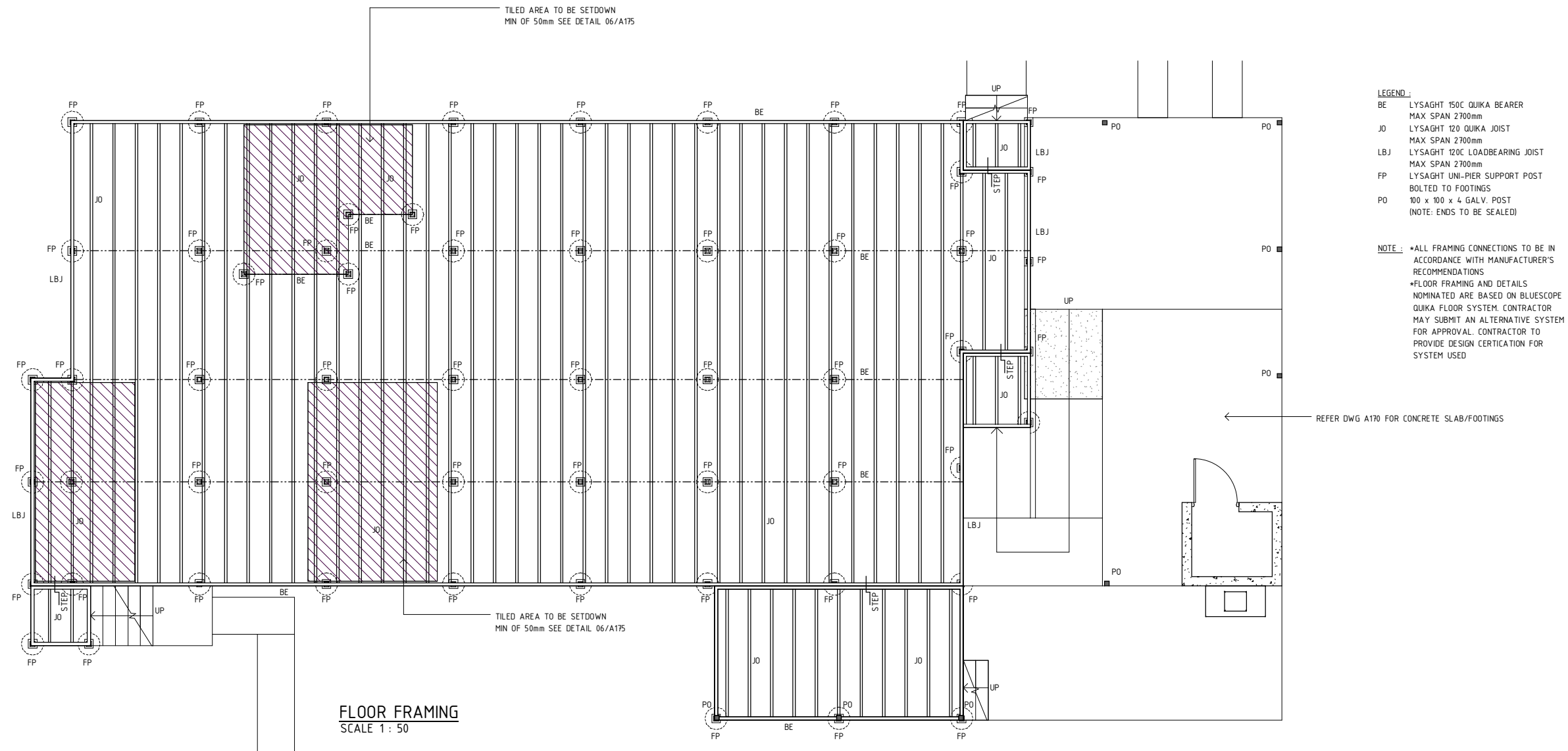
Rev: **0**





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										Approved <b>K.HOWE*</b>		Date <b>08.06.07</b>		Scale <b>As indicated</b>			
												This Drawing must not be used for Construction unless signed as Approved					
1	FOOTING ADDITION AND NOTES REVISED					JT											
0	FOR CONSTRUCTION					JT	LJC*	KJH*	08.06.07								
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing				Drawn	Checked	Approved	Date								

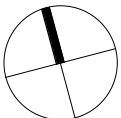




FLOOR FRAMING  
SCALE 1 : 50

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0 500 1000 1500 2000 2500mm  
SCALE 1:50 AT ORIGINAL SIZE



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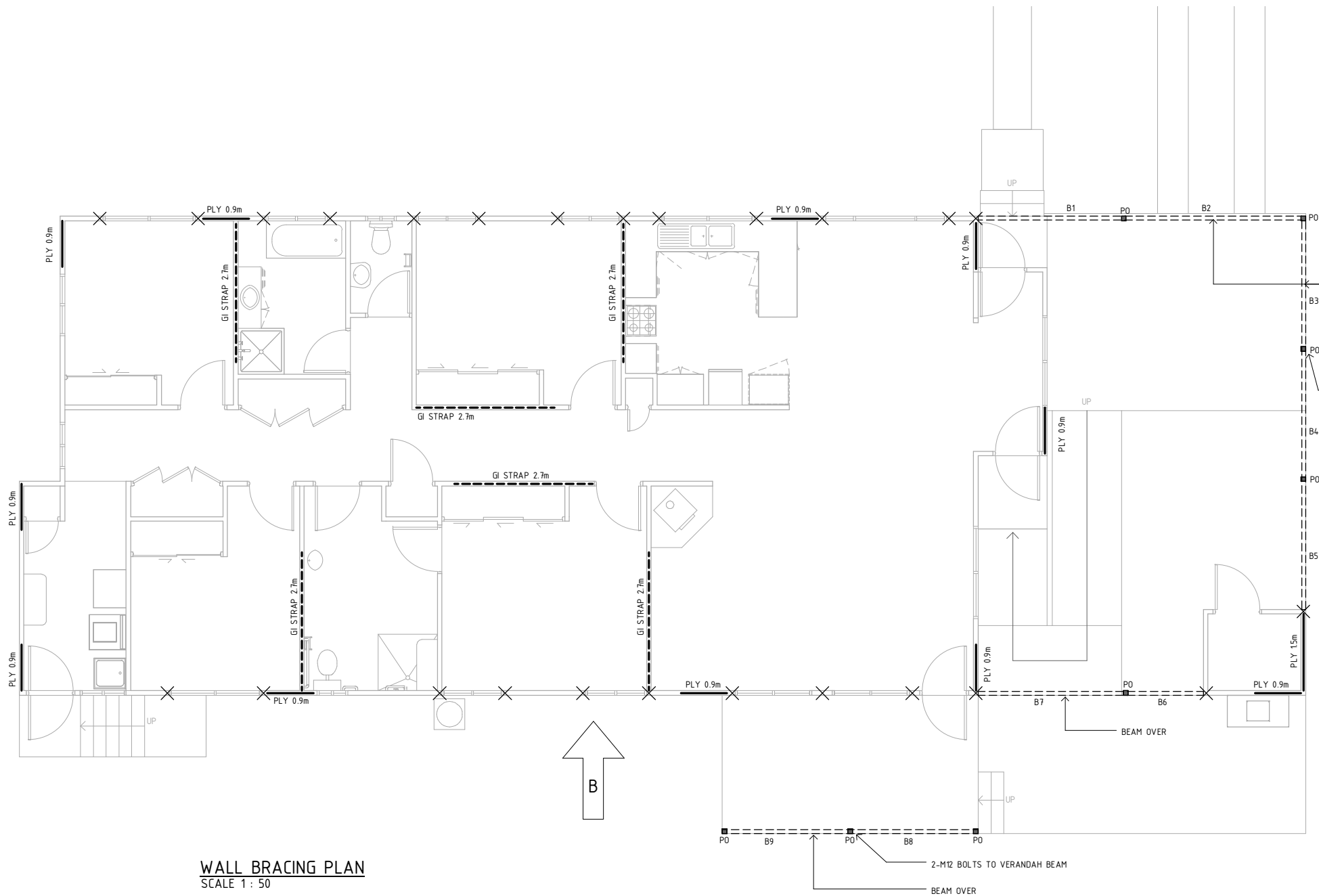
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Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 40 GUNDINGBO ST TABULAM FLOOR FRAMING**

Original Size  
**A1** Drawing No: **41-12221-12- A171**

Rev: **0**



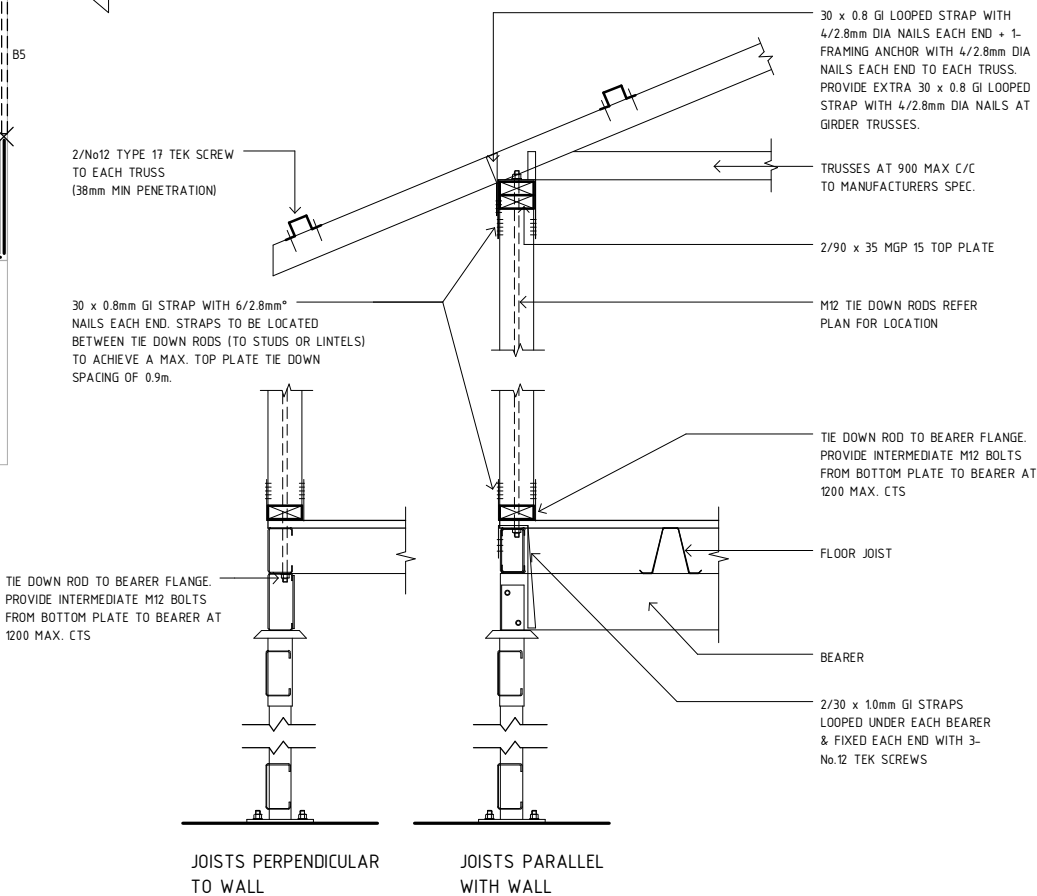
WALL BRACING PLAN  
SCALE 1 : 50

LEGEND

- INDICATES PLYWOOD BRACING PANEL RATED AT 6kN/m. REFER TO AS 1684.2 (2006) TABLE 8.18 (g) METHOD B. LENGTH 0.9m UNLESS NOTED OTHERWISE
- INDICATES DOUBLE DIAGONAL TENSION GALVANIZED STEEL STRAP RATED AT 3kN/m. REFER TO AS 1684.2 (2006) TABLE 8.18 (d) METHOD A. LENGTH 2.7m UNLESS NOTED OTHERWISE
- INDICATES M12 THREADED ROOF TIE DOWN ROD FROM TOP PLATE TO BEARER

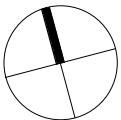
BRACING REQUIREMENTS

- DIRECTION A  
BRACING REQUIRED : 28.0kN  
BRACING PROVIDED : 43.0kN
- DIRECTION B  
BRACING REQUIRED : 53.0kN  
BRACING PROVIDED : 73.0kN



1	REVISED BRACING REQUIRED	JT			
0	FOR CONSTRUCTION	JT	LJC*	KJH*	08.06.07
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved

0 500 1000 1500 2000 2500mm  
SCALE 150 AT ORIGINAL SIZE



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Approved	K.HOWE*		
Date	08.06.07		
Scale	As indicated		

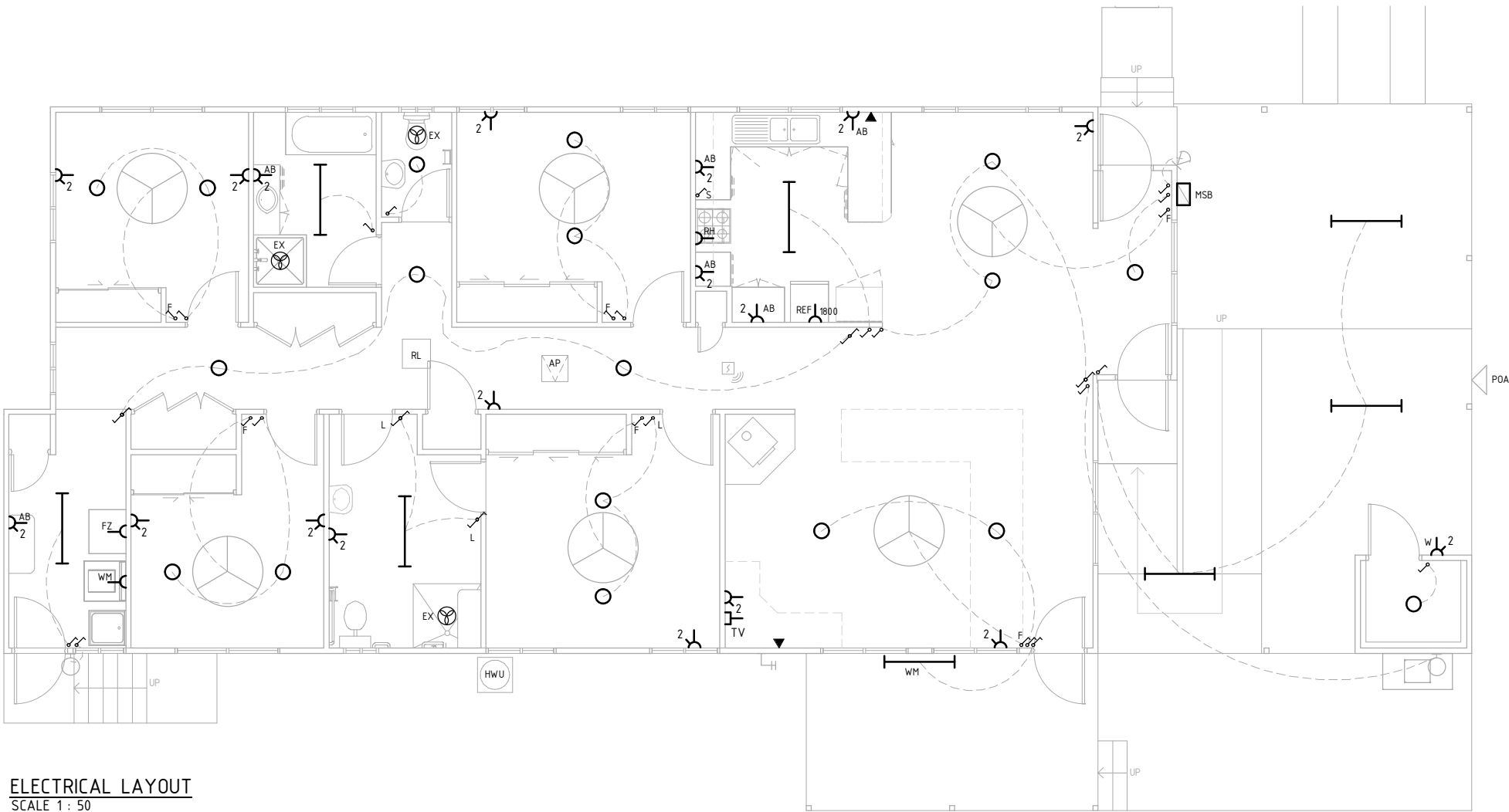
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Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 40 GUNDINGBO ST TABULAM WALL BRACING PLAN**

Original Size **A1** Drawing No: **41-12221-12- A172**

Rev: **0**





ELECTRICAL LAYOUT  
SCALE 1 : 50

## NOTES

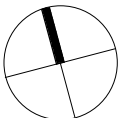
1. THE WORK INCLUDES BUT IS NOT RESTRICTED TO THE DESIGN, MANUFACTURE, SUPPLY, INSTALLATION, TESTING & MAINTENANCE OF THE ELECTRICAL & ASSOCIATED SERVICES SHOWN ON THE DRAWINGS & SPECIFICATION.
2. ALL WORK TO COMPLY WITH AS/NZS 3000, AS/NZS 3008, RELEVANT LOCAL SUPPLY AUTHORITY RULES & BUILDING CODE OF AUSTRALIA (BCA).
3. PROVIDE ALL MATERIALS & EQUIPMENT TO MAKE A SAFE & COMPLETE INSTALLATION WHICH CAN BE READILY OPERATED & MAINTAINED.
4. CARRY OUT ALL WORK IN A NEAT, TRADESMAN LIKE MANNER USING COMPETENT & EXPERIENCED PERSONNEL, PROPERLY SUPERVISED.
5. PRIOR TO PRACTICAL COMPLETION REMOVE ALL TOOLS, EQUIPMENT & DEBRIS ASSOCIATED WITH THE WORK. CLEAN ALL COMPONENTS OF THE INSTALLATION INCLUDING LUMINARIES, CABINETS, ETC.
6. TEST CERTIFICATES, DATED & SIGNED BY A RESPONSIBLE PERSON TO BE SUPPLIED TO THE SUPERINTENDENT.
7. LOCATIONS OF OUTLETS, SWITCHES, LUMINARIES, ETC. SHOWN ON THE ELECTRICAL DRAWINGS ARE INDICATIVE ONLY, ALLOW FOR MOVEMENT BY UP TO 2 M DISTANCE WITHOUT CONTRACT VARIATION. FINAL LOCATIONS TO BE CONFIRMED ON SITE. PROVIDE CIRCUIT IDENTIFICATION LABELS ON ALL ACCESSORIES.
8. LIASE WITH LOCAL SUPPLY AUTHORITY TO PROVIDE AERIAL SUPPLY TO POINT OF ATTACHMENT (POA) AND PAY ALL CHARGES.

## LEGEND

- DOUBLE SWITCH SOCKED OUTLET (SSO) WALL MOUNT 300 ABOVE FLOOR UNLESS NOTED OTHERWISE  
AB - DENOTES MOUNT 300 ABOVE BENCH  
W - DENOTES WEATHERPROOF
- SINGLE SSO MOUNT AS DOUBLE SSO ABOVE  
RH - DENOTES MOUNT TO SUIT RANGE HOOD  
FZ - DENOTES MOUNT TO SUIT FREEZER  
WM - DENOTES MOUNT TO SUIT WASHING MACHINE  
1800 - DENOTES MOUNT AT 1800 AFL
- LIGHT SWITCH MOUNT 1000 AFL  
L - DENOTE LARGE ROCKER
- 2 WAY LIGHT SWITCH MOUNT 1000 AFL  
L - DENOTES LARGE ROCKER
- STOVE SWITCH WITH NEON LIGHT
- TELEPHONE OUTLET MOUNT AS DOUBLE SSO ABOVE
- TELEVISION OUTLET MOUNT AS DOUBLE SSO ABOVE
- SMOKE ALARM, CEILING MOUNT, 240V WIRED WITH BATTERY TYPE
- FLOODLIGHT
- 1x36W SURFACE MOUNTED FLUORESCENT BATTEN
- 1 x 60W BATTEN FITTING
- WALL MOUNTED MOVEMENT SENSOR LIGHT
- MECHANICAL EXHAUST AS PER SCHEDULE OF PRODUCTS
- MAIN SWITCHBOARD/METER BOX.
- HOT WATER UNIT
- TV ANTENNA - SUITABLE FOR RECEPTION IN THE AREA LOCATION TO BE DETERMINED ON SITE
- ACCESS HATCH IN CEILING
- 1200 DIA CEILING FAN
- 3 SPEED CEILING FAN CONTROLLER, MOUNT 1100 AFL
- WALL MOUNTED FLUORESCENT
- POINT OF ATTACHMENT ON GABLE END

0	FOR CONSTRUCTION		JT	LJC*	KJH*	08.06.07
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date

0 500 1000 1500 2000 2500mm  
SCALE 1:50 AT ORIGINAL SIZE



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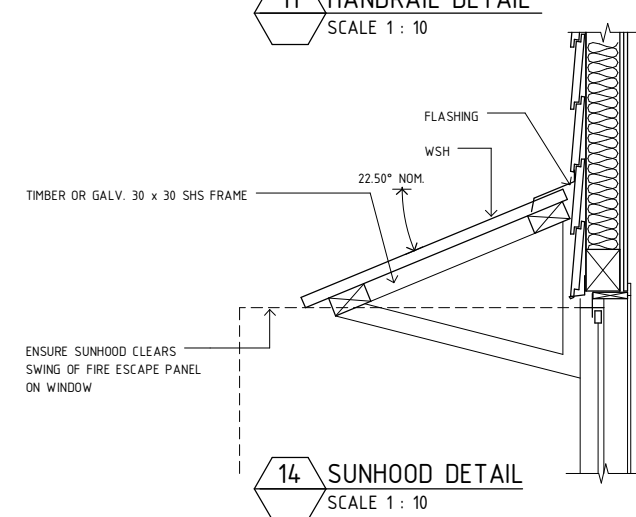
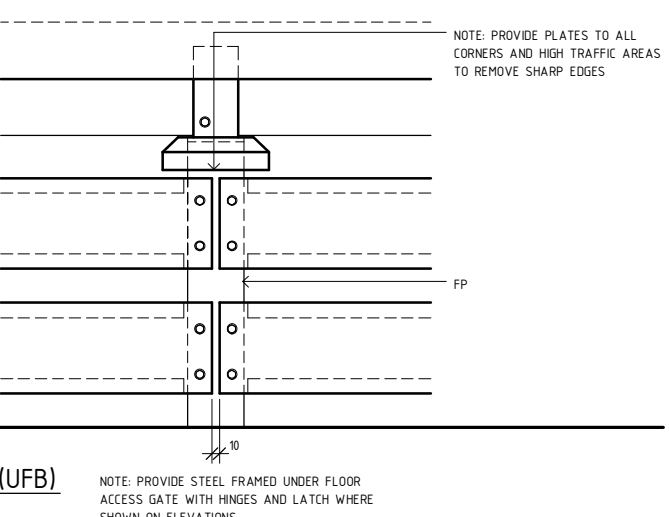
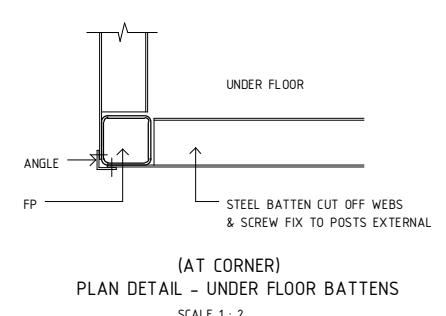
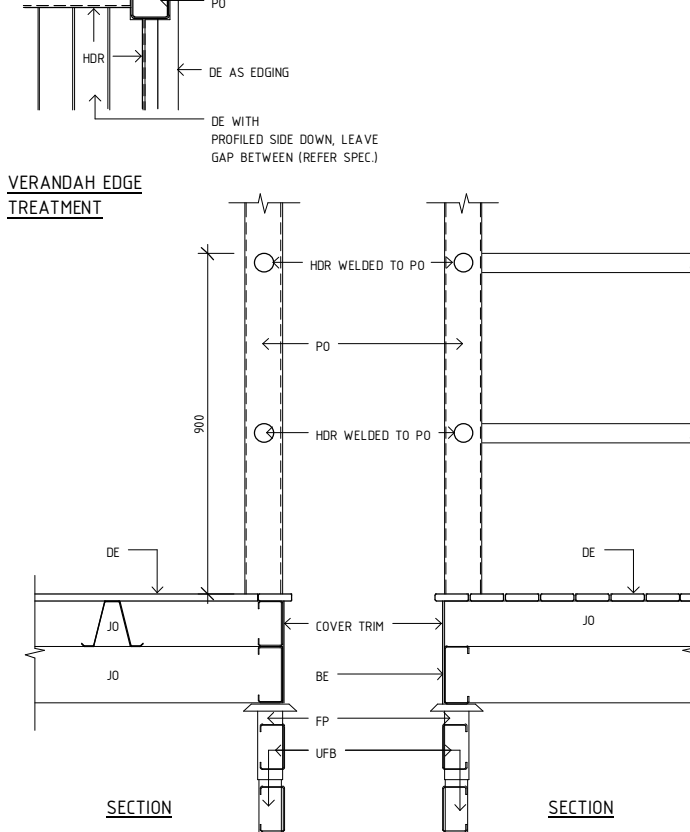
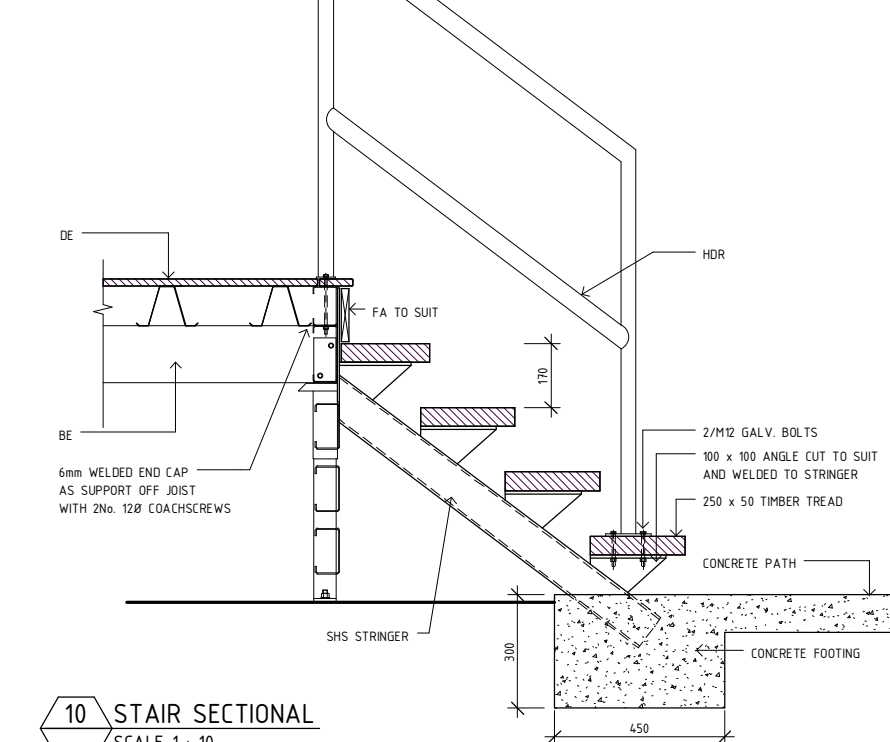
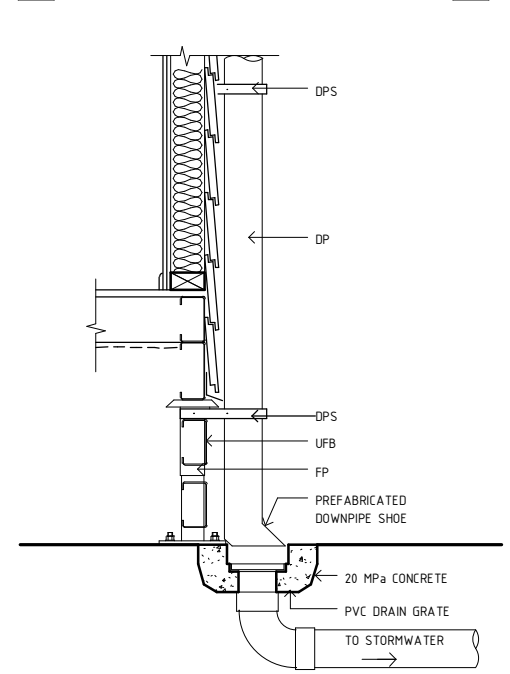
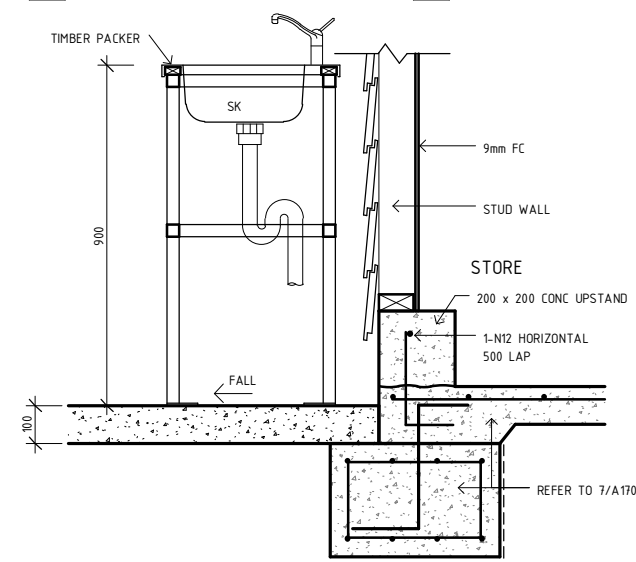
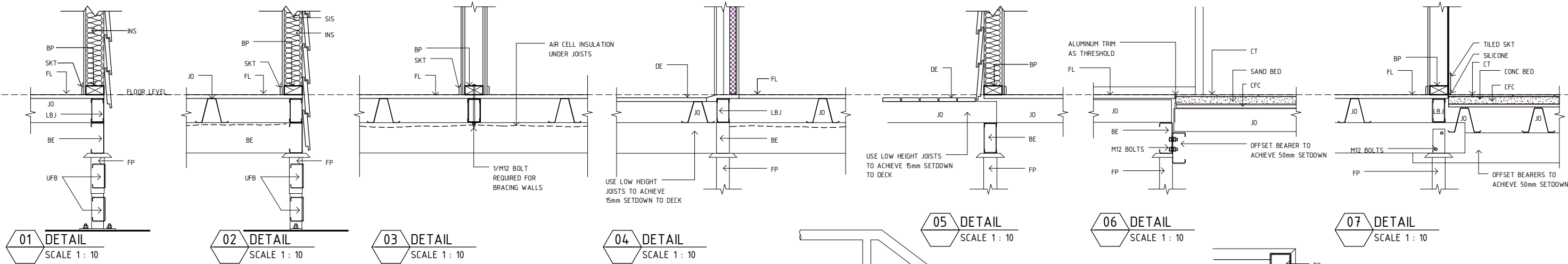
Drawn J.TSAKOS  
Designed L.CLEM  
Drafting Check L.CLEM\*  
Design Check L.CLEM\*  
Approved K.HOWIE\*  
Date 08.06.07  
Scale As indicated

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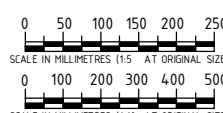
Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 40 GUNDINGBO ST TABULAM ELECTRICAL PLAN**

Original Size **A1** Drawing No: **41-12221-12- A174**

Rev: **0**



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	Approved <b>K.HOWE*</b>	
	Date <b>08.06.07</b>	
	Scale <b>As indicated</b>	This Drawing must not be used for Construction unless signed as Approved

Client <b>TABULAM CWP</b>	Project <b>TABULAM ACDP PROGRAM</b>	Original Size <b>A1</b>
Title <b>LOT 40 GUNDINGBO ST TABULAM CONSTRUCTION DETAILS</b>	Drawing No: <b>41-12221-12- A175</b>	Rev: <b>0</b>

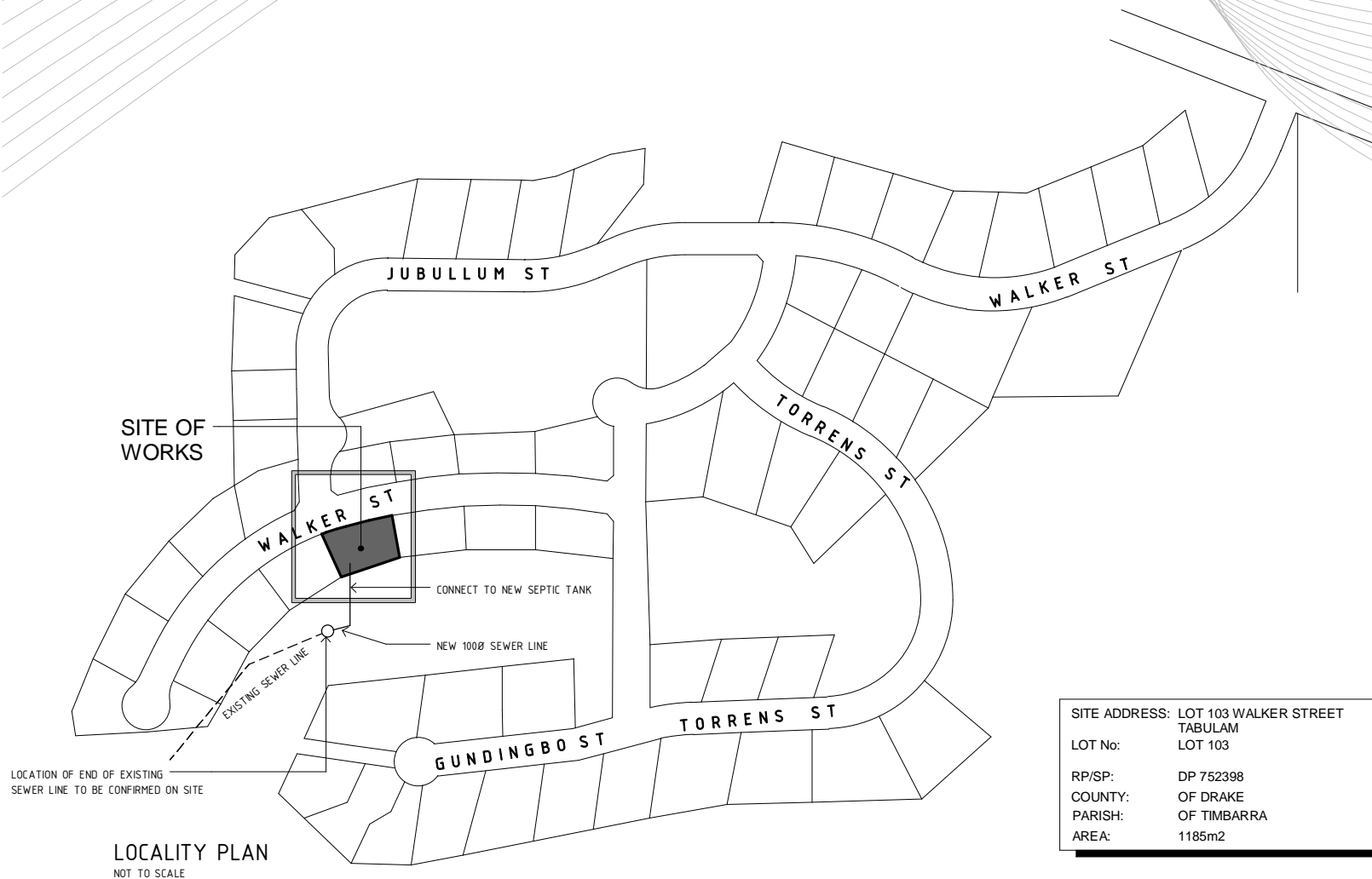




# TABULAM ACDP PROGRAM

## LOT 103 WALKER ST TABULAM

### CONTRACT No. 0080 1212

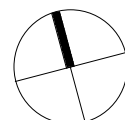


SITE ADDRESS: LOT 103 WALKER STREET  
TABULAM  
LOT No:  
RP/SP: DP 752398  
COUNTY: OF DRAKE  
PARISH: OF TIMBARRA  
AREA: 1185m2

#### DRAWING SCHEDULE

- 41-12221-19- A260 LOCALITY PLAN
- 41-12221-19- A261 GENERAL NOTES
- 41-12221-19- A262 SITE PLAN
- 41-12221-19- A263 FLOOR PLAN
- 41-12221-19- A264 ELEVATIONS
- 41-12221-19- A265 SECTIONS
- 41-12221-19- A266 ROOF PLAN
- 41-12221-19- A267 KITCHEN ELEVATIONS
- 41-12221-19- A268 BATHROOM ELEVATION
- 41-12221-19- A269 JOINERY
- 41-12221-19- A270 SLAB AND FOOTING DETAILS - SHEET 1 OF 2
- 41-12221-19- A271 FOOTING DETAILS - SHEET 2 OF 2
- 41-12221-19- A272 FLOOR FRAMING
- 41-12221-19- A273 WALL BRACING PLAN
- 41-12221-19- A274 HYDRAULIC AND DRAINAGE PLANS
- 41-12221-19- A275 ELECTRICAL PLAN
- 41-12221-19- A276 CONSTRUCTION DETAILS

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date
0	APPROVED ISSUE		JT	LJC*	KJH*	11.07.08



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	Approved	K.HOWE*				Title	LOT 103 WALKER ST TABULAM LOCALITY PLAN	
	Date	11.07.08				Original Size	A1	
	Scale	1 : 2	This Drawing must not be used for Construction unless signed as Approved			Drawing No:	41-12221-19- A260	Rev: 0

G1. READ THESE DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, OTHER ENGINEERING DRAWINGS, SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE USED. THE CONSTRUCTION NOTES SHALL APPLY UNLESS OTHERWISE VARIED BY THE DRAWINGS OR SPECIFICATIONS.

G2. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE BUT INDICATES THE REQUIRED PROPERTIES OF THE ITEM, SIMILAR ALTERNATIVES HAVING THE REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL.

G3. REFER ANY DISCREPANCY TO THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK.

G4. DO NOT OBTAIN DIMENSIONS BY SCALING FROM THE DRAWINGS. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS IN METRES.

G5. VERIFY SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED.

G6. MAINTAIN STRUCTURE IN STABLE CONDITION DURING CONSTRUCTION. NO PART SHALL BE OVERSTRESSED. PROVIDE TEMPORARY BRACING AS REQUIRED.

G7. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAA CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.

G8. THE STRUCTURAL WORK SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LOADS:

(A) WIND LOADS TO A.S. 4055 - 2006:

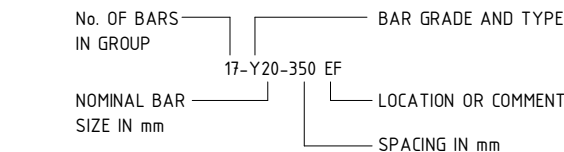
REGION	=A
TERRAIN CATEGORY	=2.5
TOPOGRAPHIC CLASS	=T2
WIND CLASSIFICATION	=N3

(B) LIVE LOADS: 1.5kPa

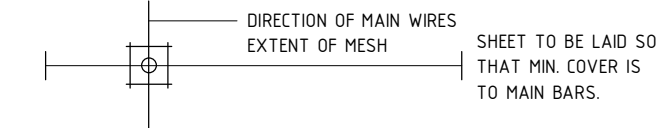
- T1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 1720- PART 1 AND AS 1684
- T2. ALL TIMBER SHALL BE PROTECTED FROM THE WEATHER BEFORE AND AFTER FABRICATION.
- T3. ALL TIMBER SHALL BE FREE FROM GUM VEINS, POCKETS, KNOTS, HOLES AND SPLITS WITHIN 150mm OF ANY BOLT OR CONNECTION
- T4. GALVANIZED BOLTS SHALL BE USED IN 2mm CLEARANCE HOLES. GREASE BOLTS BEFORE ASSEMBLY. WASHERS OF SPECIFIED SIZE ARE TO BE USED UNDER HEAD AND NUT OF BOLT. ALL BOLTS ARE TO BE LEFT ACCESSIBLE AND RETIGHTENED AT COMPLETION OF CONTRACT AND AT THE END OF MAINTENANCE PERIOD
- T5. APPROVED SPLIT RING AND SHEAR PLATE CONNECTORS ARE TO BE FITTED WITH GALVANISED BOLTS, NUTS AND WASHERS TO THE MANUFACTURERS RECOMMENDATIONS. SHEAR PLATES ARE TO BE PLACED AND SECURED WITH CLOUTS IMMEDIATELY AFTER GROOVING. COAT CONNECTOR AND GROOVE WITH APPROVED OIL OR PAINT AND GREASE BOLTS BEFORE ASSEMBLY.
- T6. THREE COPIES OF ALL CHECKED WORKSHOP DRAWINGS ARE TO BE SUBMITTED TO THE SUPERINTENDENT FOR REVIEW AND A REVIEWED COPY OBTAINED PRIOR TO THE COMMENCEMENT OF FABRICATION. REVIEW DOES NOT INCLUDE DIMENSIONS.
- T7. UNLESS APPROVED BY THE SUPERINTENDENT, ALL TRUSSES ARE TO BE SHOP FABRICATED.
- T8. DURING ERECTION, TRUSSES ARE TO BE SLUNG FROM THEIR PANEL POINTS ONLY.
- T9. APPROVED PATENT 12mm GALVANIZED METAL ANCHORS AND NAIL-ON PLATES ARE TO BE SECURELY FIXED WITH GALVANIZED NAILS TO MANUFACTURERS RECOMMENDATIONS. NAIL-ON PLATES ARE TO BE USED IN HIDDEN LOCATIONS ONLY
- T10. SURFACE PREPARATION AND PROTECTIVE TREATMENT OF TIMBER: LOSP (IF CYPRESS NOT USED). TREATMENT CERTIFICATE TO BE SUPPLIED.


R1. SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS:  
 R - DENOTES STRUCTURAL GRADE 230 PLAIN ROUND BAR TO AS/NZS 4671  
 Y - DENOTES HOT ROLLED GRADE 410 DEFORMED BAR TO AS/NZS 4671  
 F - DENOTES HARD DRAWN WIRE REINFORCING FABRIC TO AS/NZS 4671  
 N - DENOTES NORMAL DUCTILITY BAR TO AS/NZS 4671  
 L - DENOTES LOW DUCTILITY BAR TO AS/NZS 4671

R2. DESIGNATION OF REINFORCEMENT BARS IS AS IN EXAMPLE:



- R3. THE FOLLOWING ABBREVIATIONS APPLY TO THE LOCATION OF REINFORCEMENT
- |              |             |                               |
|--------------|-------------|-------------------------------|
| EW EACH WAY  | FF FAR FACE | CP CENTRALLY PLACED           |
| EF EACH FACE | B BOTTOM    | B/U BOTTOM UNDER (LAID FIRST) |
| NF NEAR FACE | T TOP       | T/O TOP OVER (LAID LAST)      |
- R4. COGS AND HOOKS TO BE STANDARD IN ACCORDANCE WITH AS 3600.
- R5. MAIN WIRES OF FABRIC AND WIDTH OF SHEETS SHOWN IN FLOOR PLAN OR WALL ELEVATIONS THUS:



- R6. EXTENT OF BARS SHOWN THUS:
- 
- R7. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND IS NOT NECESSARILY IN TRUE PROJECTION.
- R8. MAINTAIN NOMINAL CLEAR CONCRETE COVER TO REINFORCEMENT (INCLUDING FITMENTS) BY APPROVED CHAIRS, SPACERS, OR TIES AS REQUIRED TO PROVIDE ADEQUATE SUPPORTS SHALL BE SPACED AT 750 MAXIMUM CROSS CENTRES FOR FABRIC AND BARS UP TO AND INCLUDING 16 DIA. AND 1200 MAXIMUM CROSS CENTRES FOR BARS OVER 16 DIA.

- | BAR        | LAP  |
|------------|------|
| Y12 OR N12 | 375  |
| Y16 OR N16 | 500  |
| Y20 OR N20 | 750  |
| Y24 OR N24 | 1100 |
| Y28 OR N28 | 1376 |

BAR	LAP
Y12 OR N12	300
Y16 OR N16	400
Y20 OR N20	600
Y24 OR N24	850
Y28 OR N28	1100

- 

- 
- Diagram illustrating the splice length and fabric components. The splice length is divided into three equal segments, each marked with an equals sign (=). The fabric is shown as a continuous line with stitching points indicated by small circles.

R11. WELDING OF REINFORCEMENT IS ONLY PERMITTED WHERE SHOWN ON THE DRAWINGS OR OTHERWISE APPROVED BY THE SUPERINTENDENT.

R12. DOWELS SHALL BE SAWN TO LENGTH. IN SKEWED JOINTS DOWELS SHALL BE ALIGNED WITH THE LONGITUDINAL JOINTS. DOWEL ALIGNMENT TO BE MAINTAINED BY USE OF A SUPPORT ASSEMBLY SUITABLE TO ENSURE A HORIZONTAL AND VERTICAL ALIGNMENT TOLERANCE OF 5 IN 400

C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 3600, CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS

- C2. QUALITY OF CONCRETE ELEMENTS SHALL BE AS FOLLOWS:

STRUCTURAL ELEMENTS	EXPOSURE CLASS	COVER TO REINF. (mm)	F <sub>c</sub> MPA	MAX. AGGR. SIZE (mm)	SLUMP (mm)
SLAB AND FOOTING	A1	25 TO EXPOSED SLAB SURFACE	20	20	80+-10
		50 TO SURFACES IN CONTACT WITH GROUND			

- C3. ADDITIVES SHALL NOT BE USED WITHOUT THE SUPERINTENDENT'S PRIOR APPROVAL
- C4. CONCRETE IS TO BE COMPACTED USING VIBRATORS
- C5. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES
- C6. PROVIDE ALL EXPOSED EDGES AND CORNERS WITH 20 CHAMFERS OR FILLETS.
- C7. FORM ALL CONSTRUCTION JOINTS AND USE ONLY WHERE SHOWN OR APPROVED BY THE SUPERINTENDENT
- C8. NO HOLES, CHASES OR EMBEDMENT OF PIPES, OTHER THAN THOSE SHOWN ON THE STRUCTURAL ENGINEER'S DRAWINGS SHALL BE MADE WITHOUT THE APPROVAL OF THE SUPERINTENDENT.
- C9. CURING OF ALL CONCRETE SHALL BE COMMENCED AS SOON AS POSSIBLE AFTER PLACING OR STRIPPING. REFER 'CURING' IN A.S. 3600 AND THE SPECIFICATION.ACCEPTABLE CURING METHODS ARE AS FOLLOWS:-
  - WATER IMMERSION
  - WATER SPRAY BENEATH APPROVED PLASTIC SHEETING
- C9. FORMWORK AND ITS REMOVAL TO BE IN ACCORDANCE WITH A.S. 3610
- C10. ALL PROPS AND FORMWORK FOR BEAMS AND SLABS TO BE REMOVED BEFORE CONSTRUCTION OF ANY WALLS OR OTHER PERMANENT LOADING ON THE SLAB.
- C11. LAP AND SEAL 0.2mm WATERPROOF MEMBRANE TO ENSURE A COMPLETE VAPOUR BARRIER.
- C12. CONSTRUCTION TOLERANCES TO BE IN ACCORDANCE WITH AS 3610.
- C13. FORMED SURFACE FINISHES TO BE IN ACCORDANCE WITH AS 3610.
- C14. FINISHED FORMED SLAB SURFACES:
  - CLASS 1 TOLERANCE - TRUE PLANES WITHIN 3 IN 3000
  - SURFACE FINISH - POWER TROWEL AND STEEL FLOAT FINISH.

<b><u>ROOF FRAMING</u></b>	
<b>TRUSSES:</b>	PREFABRICATED ENGINEER DESIGNED ROOF TRUSSES @ 900 MAX. CTRS.
<b>VERANDAH RAFTERS:</b>	150 x 50 F17 @ 900 MAX. CTRS., MAX. SPAN =3m,MAX. O/HANG = 900mm
<b>BATTENS:</b>	40 x 0.55 BMT G550, AZ150 @ 900 CTRS.
<b>VERANDAH BEAM:</b>	B1-B7 - 195 x 85 HYNBEAM 17 B8-B9 - 130 x 85 HYNBEAM 17
<b>VERANDAH PLATE:</b>	200 x 50 F17, MAX. SPAN = 3m, FOR VERANDAHS WITH O/HANGS UP TO 600mm. 2/200 x 38 F17, MAX. SPAN = UP TO 3.3m, FOR VERANDAH WITH O/HANG UP TO 900mm.
<b>NAILING PLATE:</b>	120 x 35 F17, BOLTED TO TRUSSES/WALL FRAMING WITH 1/M12 BOLT @ 1200 MAX. CTRS.
<b>VERANDAH/CARPORT POST:</b>	100 x 100 x 4 GALV. POST.

<b>LOAD BEARING WALLS:</b>	
STUDS:-	90 x 35 F8 @ 400 CTRS.
TOP PLATE:-	2/90 x 45 F8
BOTTOM PLATE:-	90 x 35 F5
NOGGING:-	90 x 35 F5 - MAX. 1350 CTRS
<b>INTERNAL NON LOAD BEARING WALLS:</b>	
STUDS:-	90 x 35 F8 @ 400 CTRS.
TOP PLATE:-	90 x 35 F8
BOTTOM PLATE:-	90 x 35 F8
NOGGING:-	90 x 35 F5 - MAX. 1350 CTRS
<b>LINTELS:</b>	
<b>(UPPER STOREY)</b>	
SPAN TO 0 - 1500mm	2/140 x 35 MGP10
SPAN TO 1500 - 1800mm	2/170 x 35 MGP10
SPAN TO 1800 - 2100mm	2/190 x 35 MGP10
<b>STUDS BESIDE OPENINGS:</b>	
SPAN TO 900mm	1
SPAN TO 1800mm	2
SPAN OVER 2400mm	3

T1.	TIE DOWN & BRACING HAS BEEN DESIGNED FOR A N3 WIND CLASSIFICATION WITH SHEET ROOF CONSTRUCTION.
T2.	ALL TIMBER FRAMING, BRACING & TIE DOWN DETAILS ARE TO BE IN ACCORDANCE WITH AS 1684 FOR NOMINAL WIND CLASSIFICATION. ALL NOMINAL FIXINGS REQUIRED BY AS 1684 ARE IN ADDITION TO THE TYPICAL FIXINGS DETAILED & DESCRIBED ON THESE DRAWINGS.
T3.	ALL TIE DOWN FIXINGS HAVE BEEN DESIGNED FOR TIMBER WITH A JOINT GROUP CLASSIFICATION OF Jd4 OR BETTER.
T4.	BRACING WALL SYSTEM HAS BEEN DESIGNED ON THE ASSUMPTION THAT THE CEILING BATTENS ARE DIRECTLY FIXED TO THE ROOF FRAMING. IF OTHER CEILING SUPPORT SYSTEMS ARE USED. THE SUPERINTENDENT IS TO BE NOTIFIED TO CONFIRM THE DESIGN.

- F1. FOOTINGS HAVE BEEN DESIGNED FOR A SAFE WORKING PRESSURE OF 100kPa AND CLASS S (SLIGHTLY REACTIVE) SITE CLASSIFICATION ON THE BASIS OF A GEOTECHNICAL REPORT PREPARED BY COFFEY GEOSCIENCES PTY LTD DATED 9 DECEMBER 2003 REFERENCE No. NR1346/1-B.
- F2. FOUNDATION LEVELS SHOWN ARE CONTRACT LEVELS - THE FINAL LEVELS SHALL BE AS DIRECTED BY THE SUPERINTENDENT.
- F3. FOUNDATION MATERIAL BENEATH SLABS ON GROUND SHALL BE COMPACTED TO 95% STANDARD COMPACTION IN ACCORDANCE WITH AS1289
- F4. ALL FOOTINGS ARE TO BE FOUNDED 300mm MIN, INTO NATURAL GROUND.
- F5. FOUNDATION CONDITIONS AT THE SITE ARE TO BE MAINTAINED IN ACCORDANCE WITH CSIRO BROCHURE BTF 18 "FOOTING MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNER'S GUIDE," TO ENSURE 'NORMAL' SOIL MOISTURE CONDITIONS AS DEFINED BY AS 2870

M1. ALL CONCRETE BLOCKWORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF:  
AS3700 - SAA MASONRY CODE  
AS2733 - CONCRETE MASONRY UNITS  
AS3600 - CONCRETE STRUCTURES

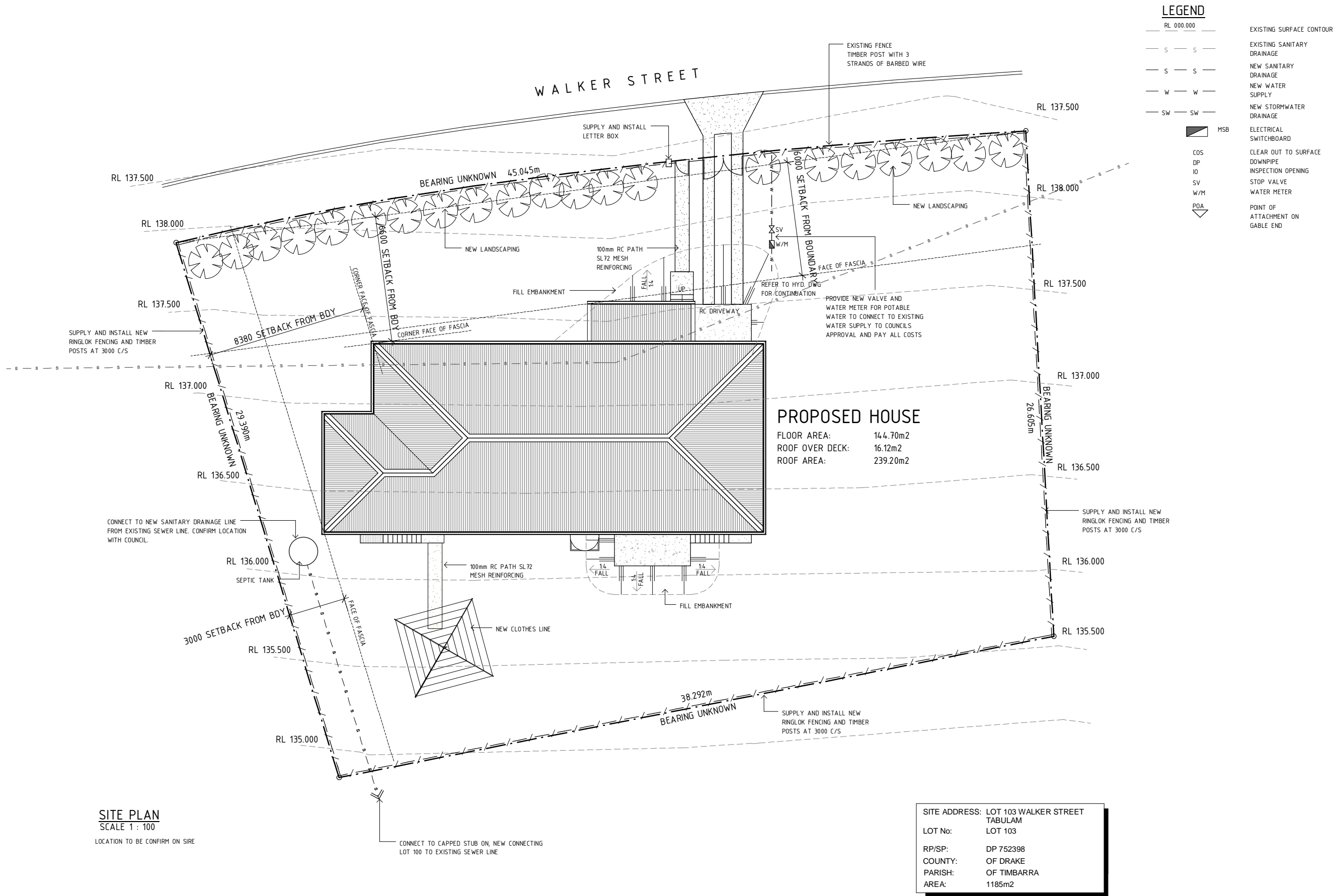
M2. BLOCKS SHALL BE GRADE 15 ( $f'_{uc} = 15 \text{ MPa}$ ).

M3. CHASING OF HOLLOW BLOCKWORK NOT PERMITTED.

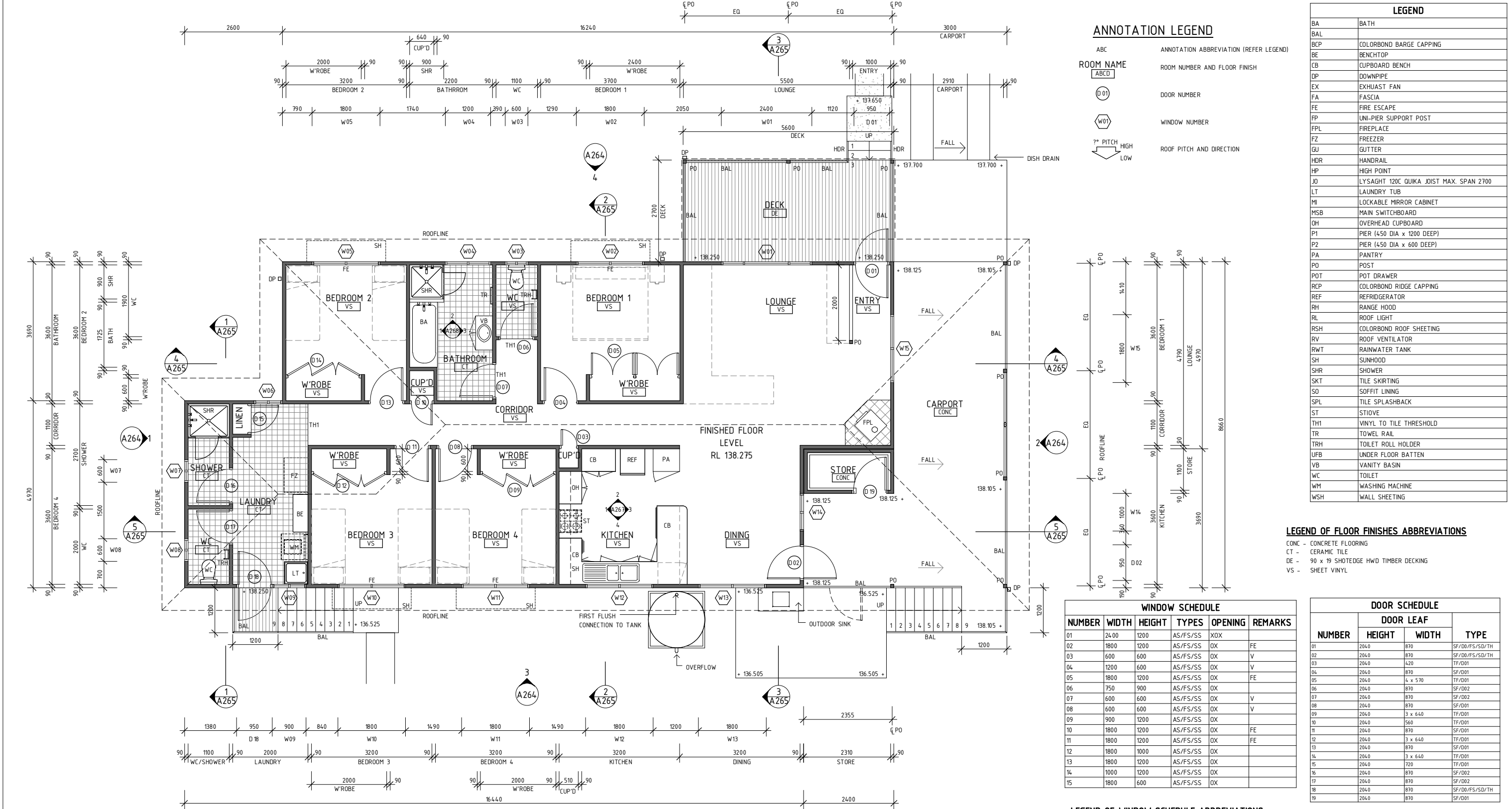
M4. REINFORCED BLOCKWORK:  
MORTAR TO BE 1 CEMENT = 1/2 HYDRATED LIME: 4 1/2 SAND  
GROUT FOR FILLING CORES TO HAVE A MINIMUM  $F'c = 12 \text{ MPa}$   
MAX. AGGREGATE SIZE OF 10 AND SLUMP =  $200 \pm 30$   
CONCRETE FOR BOND BEAMS TO HAVE  $F'c$  20MPa AND SLUMP =  $80 \pm 15$   
REINFORCEMENT TO HAVE 15 NOM. MINIMUM COVER FROM INSIDE FACE OF BLOCK  
REMOVE ALL MORTAR DROPPINGS FROM BOTTOM OF GROUTED CORES BEFORE  
CONCRETING BY USE OF CLEANOUT BLOCKS.  
BLOCKWORK CONSTRUCTION NOT TO PROCEED MORE THAN SIX COURSES AHEAD  
OF CORE GROUTING.

- E1. ALL SERVICES, BOTH ABOVE AND BELOW GROUND, SHALL BE LOCATED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK
- E2. ANY AVAILABLE TOPSOIL FROM UNDER THE PROPOSED FOOTPRINT OF THE HOUSE SHALL BE STRIPPED AND STOCKPILED FOR REUSE
- E3. ON COMPLETION OF WORKS, SUPPLY SPREAD AND LAY 50mm OF TOPSOIL AND TURF AROUND THE PERIMETER OF THE HOUSE FOR MIN. 6000mm OR TO THE FRONT AND SIDE BOUNDARIES

[illegible]

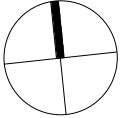
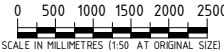






FLOOR LINE  
SCALE 1 : 50

0	APPROVED ISSUE		JT	LJC*	KJH*	11.07.08
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date





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Drawn J.TSAKOS

Drafting Check L.CLEM\*

Approved K.HOWE\*

Date 11.07.08

Scale As indicated

Designed L.CLEM

Design Check L.CLEM\*

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Client TABULAM CWP

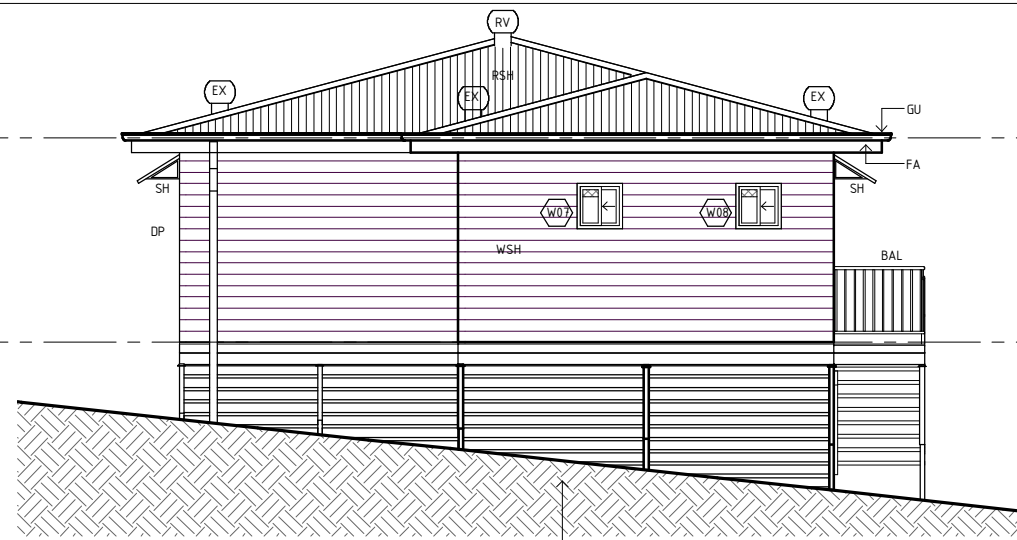
Project TABULAM ACDP PROGRAM

Title LOT 103 WALKER ST TABULAM FLOOR PLAN

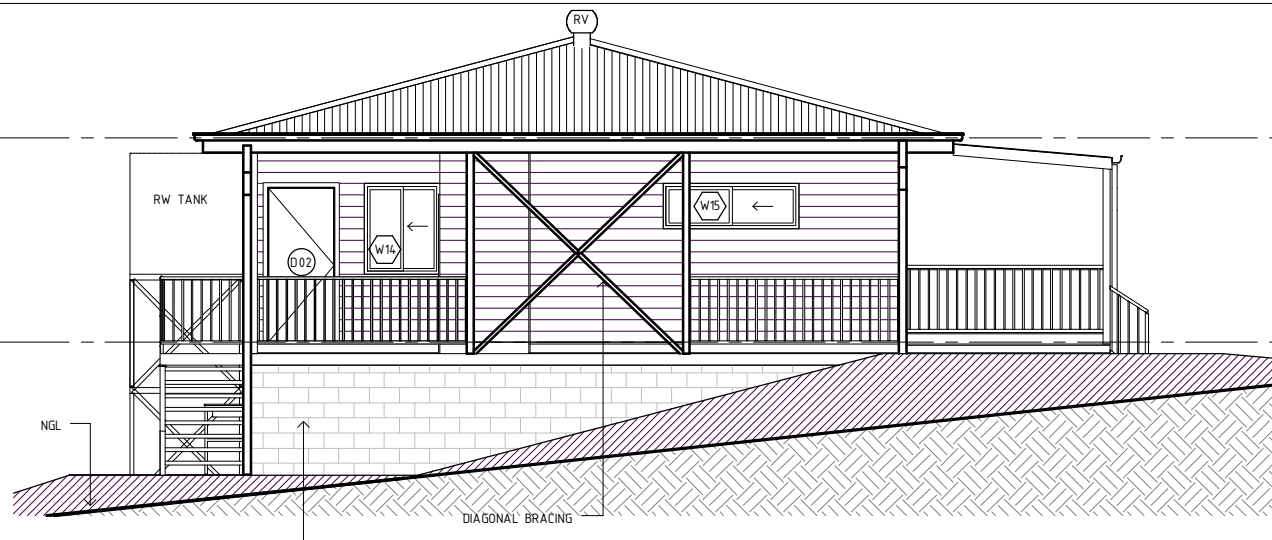
Original Size A1

Drawing No: 41-12221-19-A263

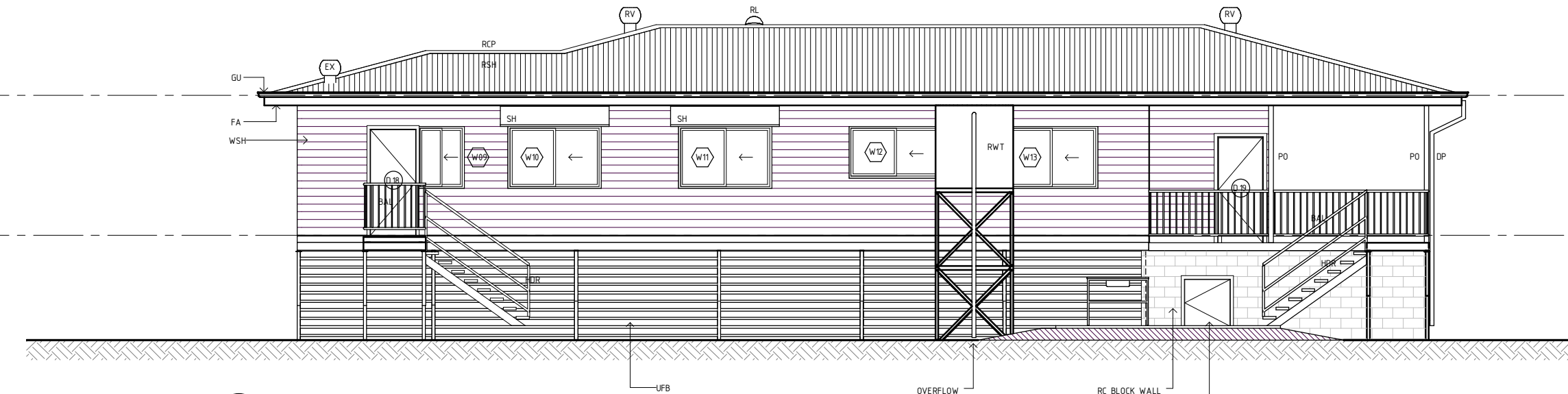
Rev: 0



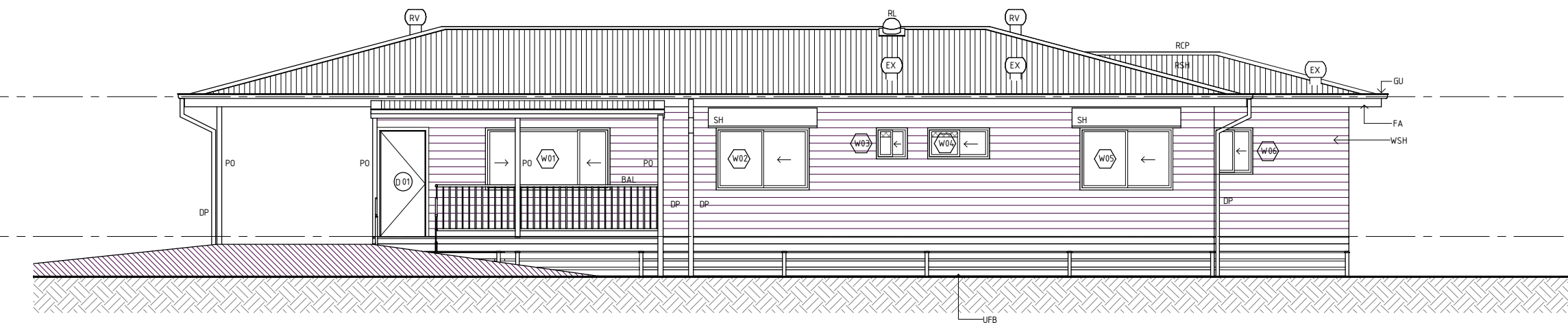
1 WEST ELEVATION  
A263 SCALE 1 : 50



2 EAST ELEVATION  
A263 SCALE 1 : 50

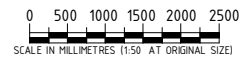


3 SOUTH ELEVATION  
A263 SCALE 1 : 50



4 NORTH ELEVATION  
A263 SCALE 1 : 50

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No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date

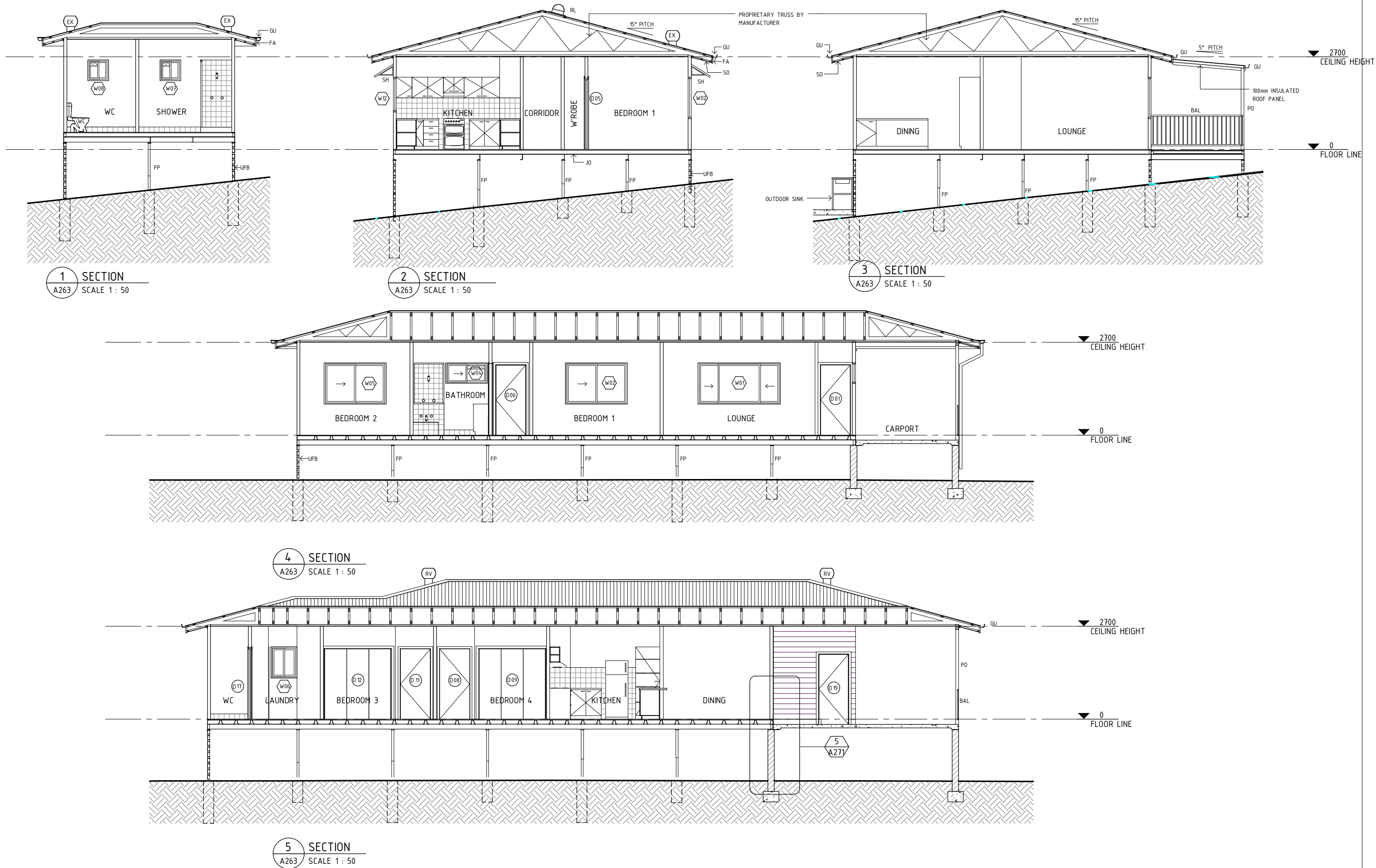


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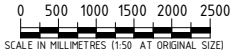
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	Approved K.HOWE*	
	Date 11.07.08	
	Scale 1 : 50	This Drawing must not be used for Construction unless signed as Approved

Client	<b>TABULAM CWP</b>
Project	<b>TABULAM ACDP PROGRAM</b>
Title	<b>LOT 103 WALKER ST TABULAM ELEVATIONS</b>
Original Size	<b>A1</b>
Drawing No:	<b>41-12221-19-A264</b>
Rev:	<b>0</b>



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					Date



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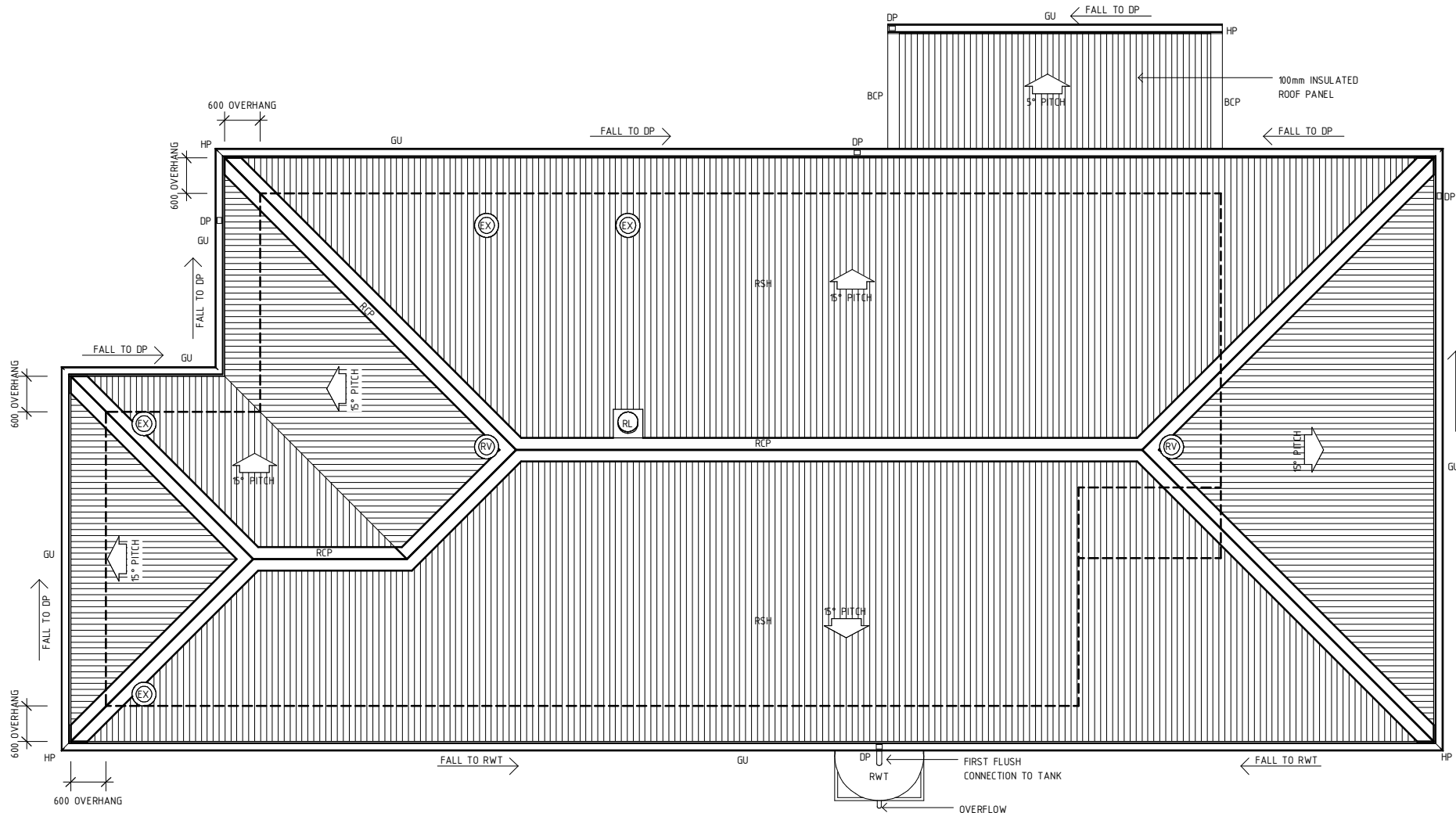
Designed L.CLEM  
Design Check L.CLEM\*

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Client TABULAM CWP  
Project TABULAM ACDP PROGRAM  
Title LOT 103 WALKER ST TABULAM  
SECTIONS

Original Size  
A1 Drawing No: 41-12221-19-A265

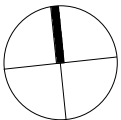
Rev: 0



ROOF PLAN  
SCALE 1 : 50

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0 500 1000 1500 2000 2500  
SCALE IN MILLIMETRES (1:50 AT ORIGINAL SIZE)



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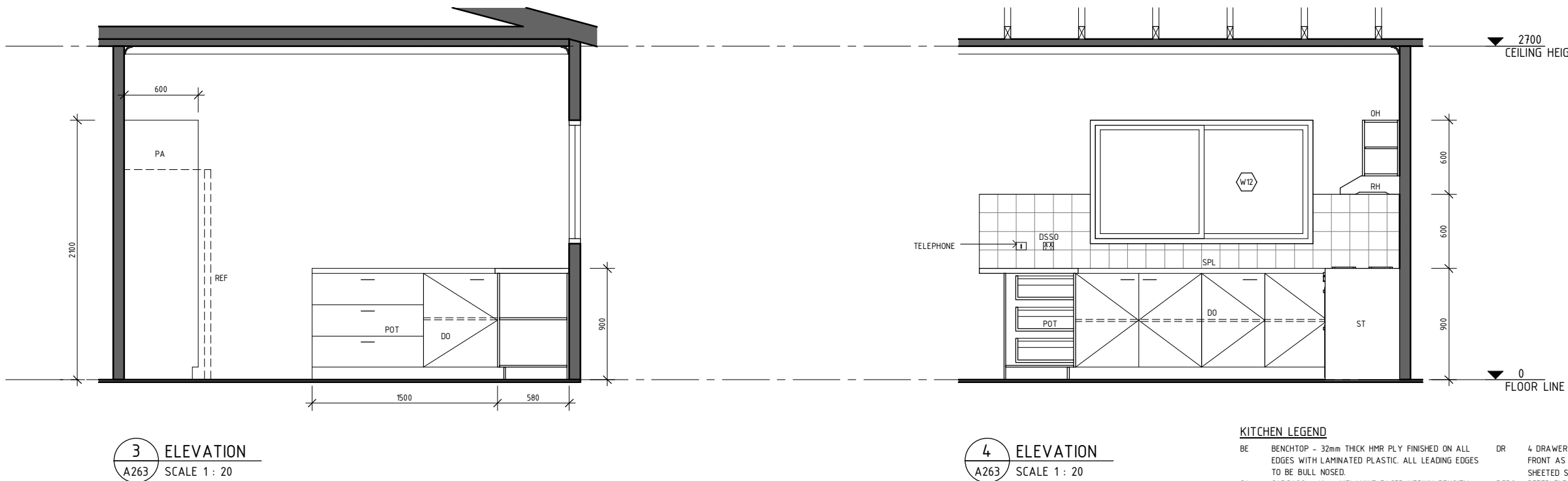
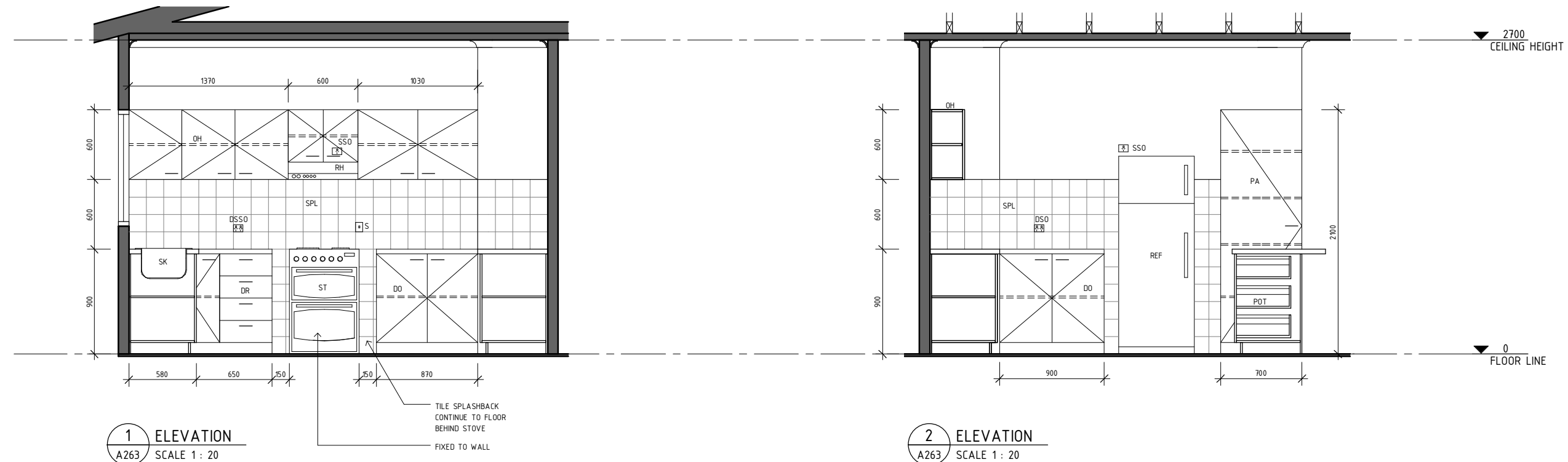
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Approved	K.HOWE*		
Date	11.07.08		
Scale	1 : 50		

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signed as Approved

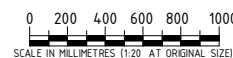
Client	TABULAM CWP
Project	TABULAM ACDP PROGRAM
Title	LOT 103 WALKER ST TABULAM ROOF PLAN
Original Size	A1
Drawing No:	41-12221-19-A266
Rev:	0



#### KITCHEN LEGEND

BE	BENCHTOP - 32mm THICK HMR PLY FINISHED ON ALL EDGES WITH LAMINATED PLASTIC. ALL LEADING EDGES TO BE BULL NOSED.	DR	4 DRAWER CUPBOARD WITH CUTLERY UNIT. DRAWER FRONT AS FOR 'DO'. DRAWER UNITS TO BE METAL SHEETED SIDES AND FRAMED ON METAL SLIDES.
CA	CARCASS - 16mm MELAMINE FACED MEDIUM DENSITY FIBREBOARD FINISHED ON ALL EDGES WITH 2mm PVC EDGE STRIP.	DGPO	REFER ELECT
CO	PLASTERBOARD CORNICE	GPO	REFER ELECT
DO	DOOR - 16mm MELAMINE FACED MEDIUM DENSITY FIBREBOARD FINISHED ON EDGES WITH 2mm PVC STRIP OF MATCHING COLOUR COMPLETE WITH SATIN CHROME 'D' SHAPED DOOR.	PA	PANTRY
		POT	POT DRAWERS SIMILAR TO 'DR'
		OH	OVERHEAD CUPBOARD - SIMILAR TO 'CA'
		REF	REFRIGERATOR
		SPL	TILE SPLASHBACK - NEW CERAMIC TILES (JOHNSON APPROVED EQUIVALENT), SILICONE SEAL ALL CORNERS. CONTINUE TO FLOOR BEHIND STOVE
		RH	SUPPLY AND INSTALL NEW RANGEHOOD COMPETE WITH 125 DIA COLORBOND DUCT DISCHARGING ABOVE ROOF WITH A VENTILATED COWL. PROVIDE NEW SINGLEPO, LOCATED TO SUIT RANGEHOOD.

0	APPROVED ISSUE		JT	LJC*	KJH*	11.07.08
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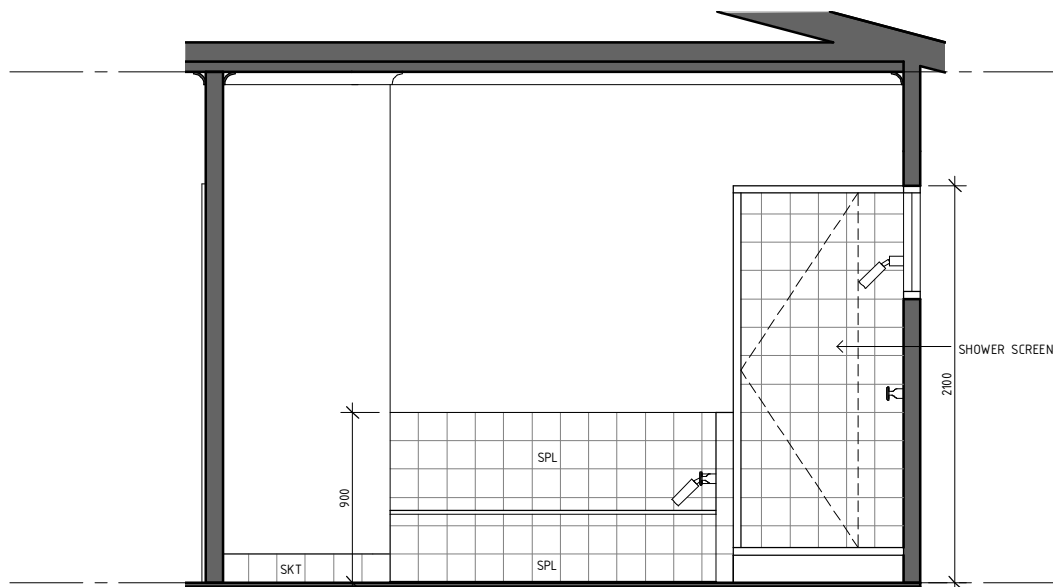


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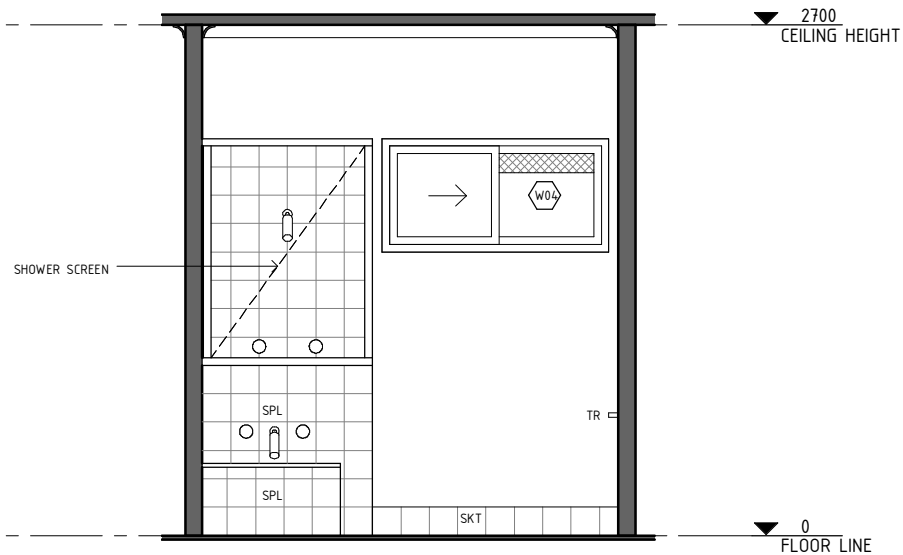
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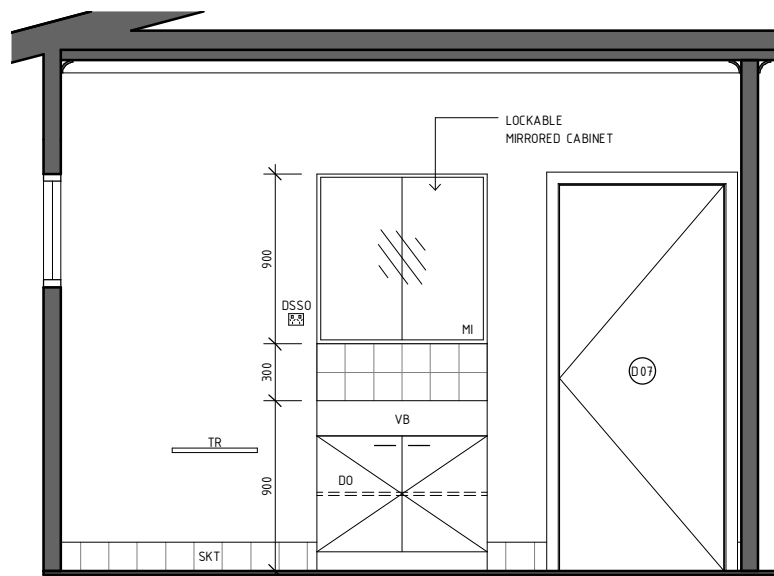
Client	<b>TABULAM CWP</b>
Project	<b>TABULAM ACDP PROGRAM</b>
Title	<b>LOT 103 WALKER ST TABULAM KITCHEN ELEVATIONS</b>
Original Size	<b>A1</b>
Drawing No:	<b>41-12221-19-A267</b>
Rev:	<b>0</b>



1 ELEVATION  
A263 SCALE 1 : 20



2 ELEVATION  
A263 SCALE 1 : 20



3 ELEVATION  
A263 SCALE 1 : 20



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Drafting Check L.CLEM\*

Approved K.HOWIE\*

Date 11.07.08

Scale 1 : 20

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Client

Project

Title

Original Size

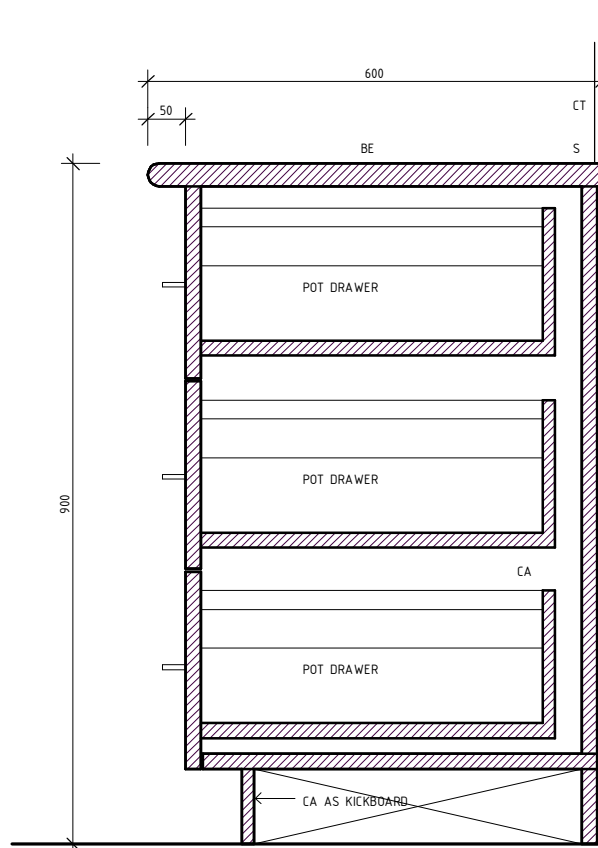
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**TABULAM ACDP PROGRAM**  
**LOT 103 WALKER ST TABULAM**  
**BATHROOM ELEVATION**

**A1**

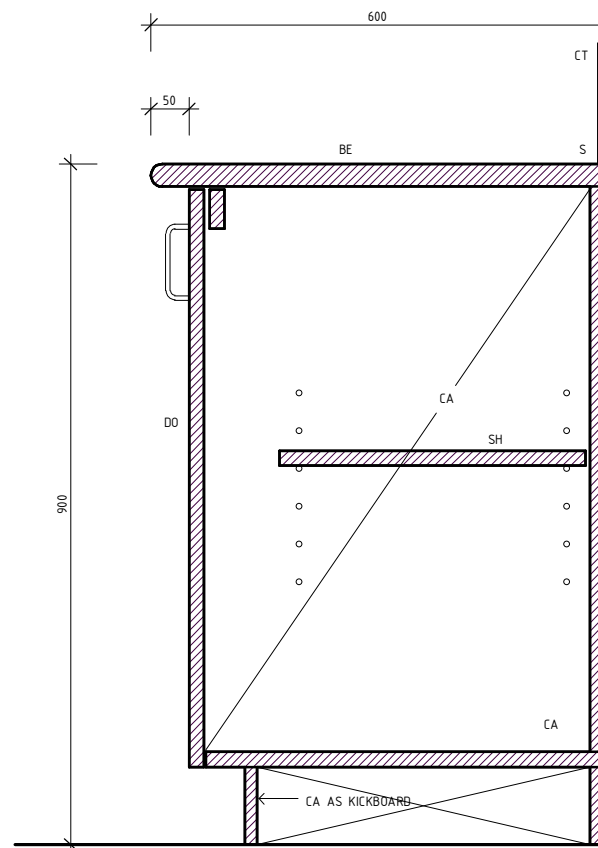
**Drawing No: 41-12221-19-A268**

**Rev: 0**

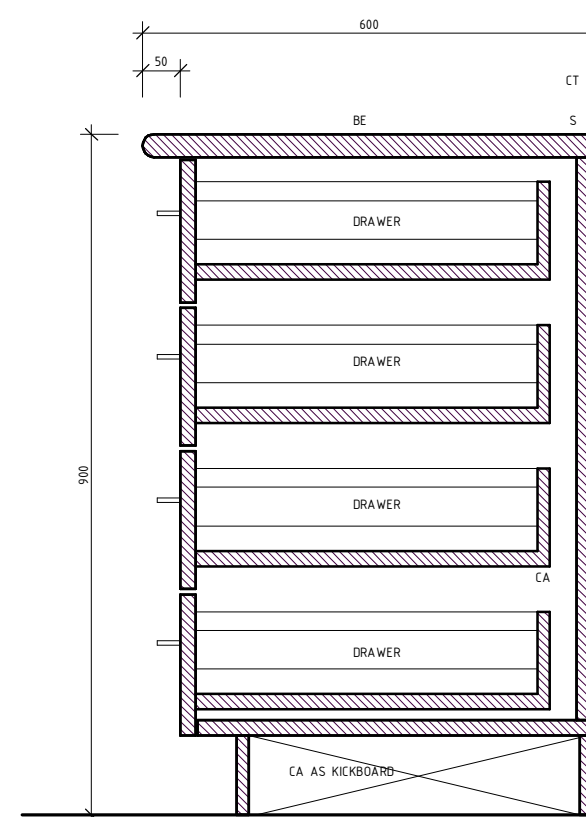




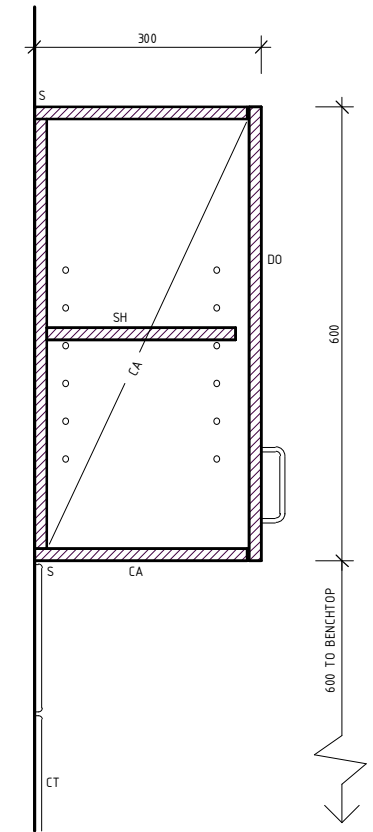
**5 POT DRAWER UNIT DETAIL**  
SCALE 1 : 5



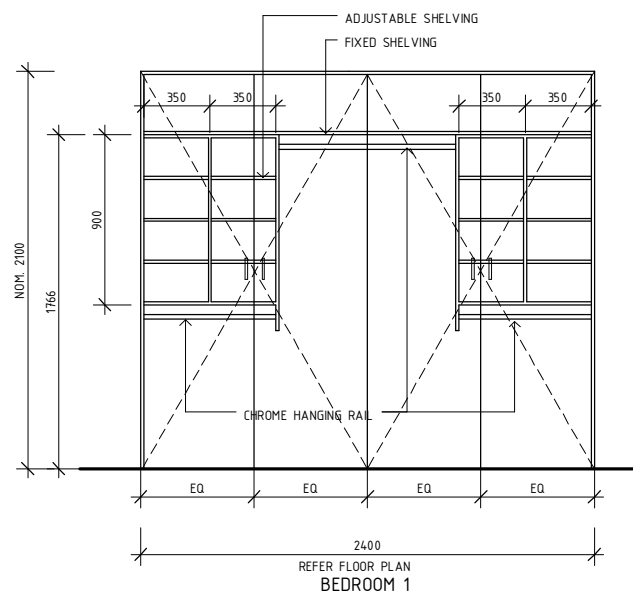
**6 FLOOR CUPBOARD DETAIL**  
SCALE 1 : 5



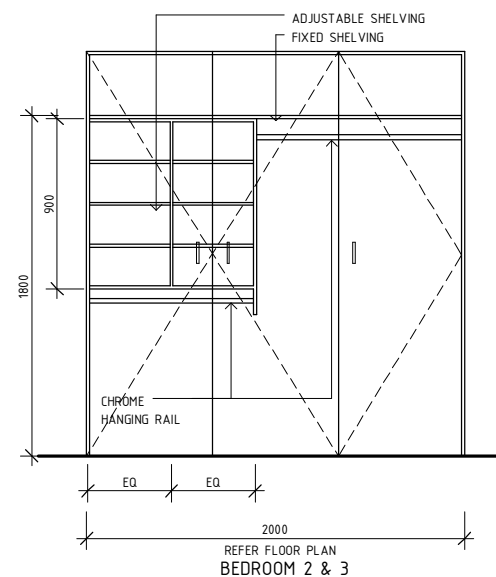
**7 4 DRAWER UNIT DETAIL**  
SCALE 1 : 5



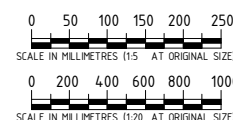
**8 OVERHEAD CUPBOARD DETAIL**  
SCALE 1 : 5



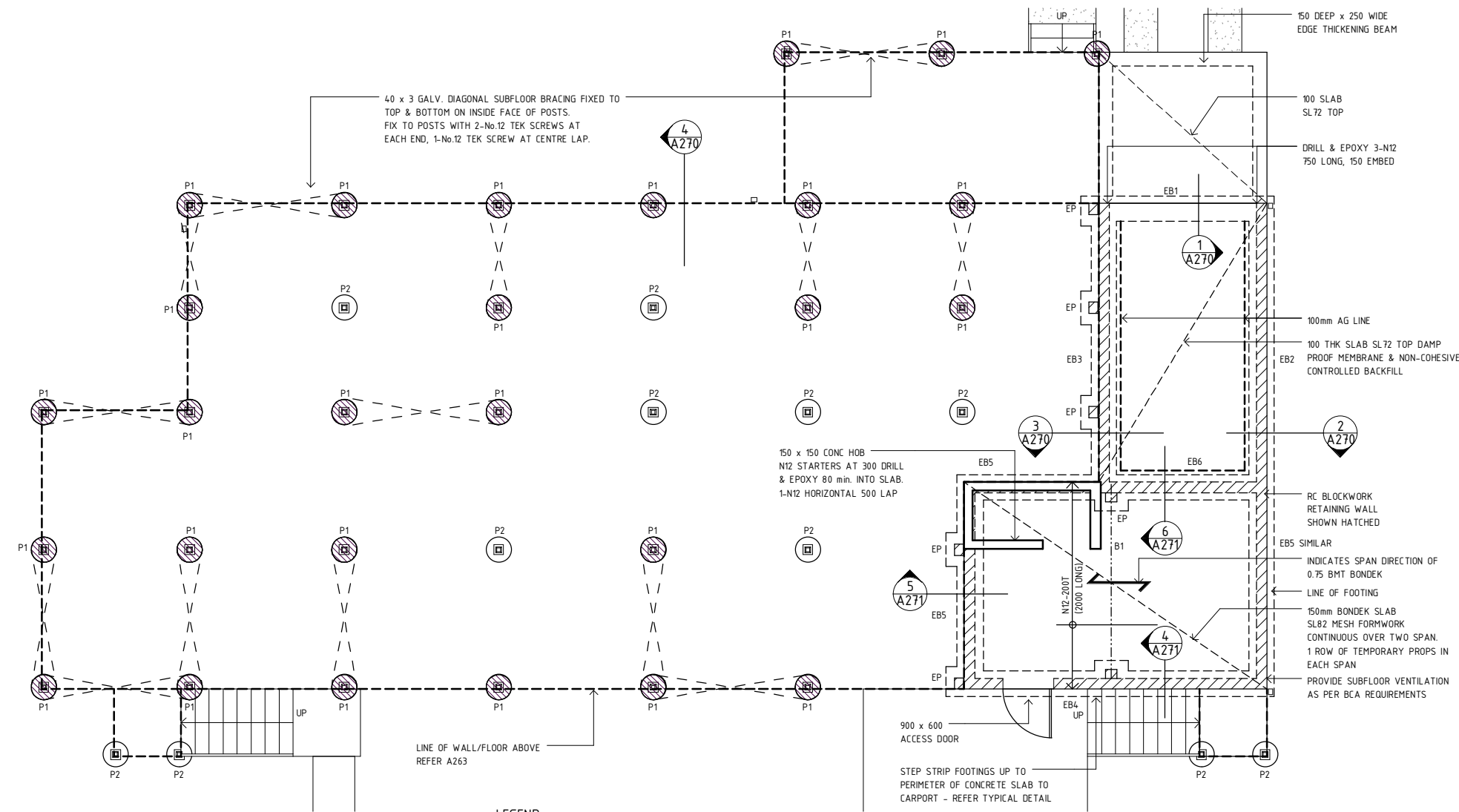
**1 WARDROBE DETAILS**  
SCALE 1 : 20



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No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date

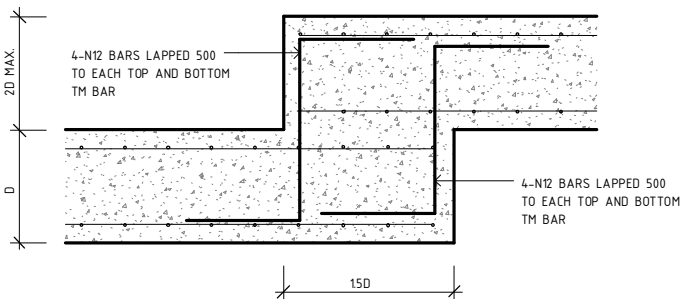


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	Approved <b>K.HOWIE*</b>		Title <b>LOT 103 WALKER ST TABULAM JOINERY</b>
	Date <b>11.07.08</b>		
	Scale <b>As indicated</b>	This Drawing must not be used for Construction unless signed as Approved	
			Original Size <b>A1</b> Drawing No: <b>41-12221-19-A269</b> Rev: <b>0</b>



**SLAB AND FOOTING PLAN**  
SCALE 1 : 50

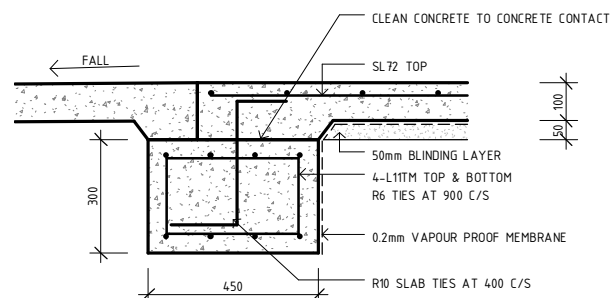
NOTE:  
FINISH TOP OF FOOTINGS P1 & P2 100mm ABOVE GROUND LINE



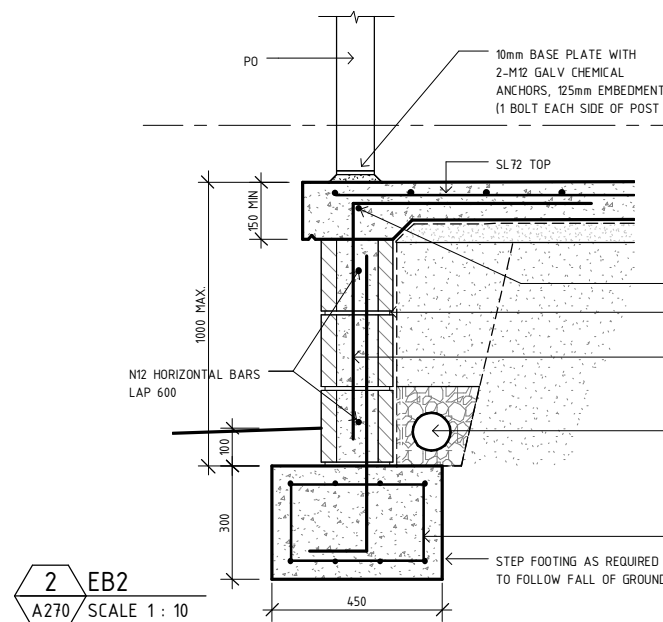
**5 TYPICAL FOOTING STEP DETAIL**  
SCALE 1 : 10

- LEGEND**
- P1 - 450Ø x 1200 DEEP CONC FOOTING
  - P2 - 450Ø x 600 DEEP CONC FOOTING
  - EB1 - EDGE BEAM 1
  - EB2 - EDGE BEAM 2
  - EB3 - EDGE BEAM 3
  - EB4 - EDGE BEAM 4
  - EB5 - EDGE BEAM 5
  - EB6 - EDGE BEAM 6
  - EP - ENGAGED 200 SQUARE BLOCK PIER
  - B1 - 200UB25 STEEL BEAM (HOT DIPPED GALVANISED)

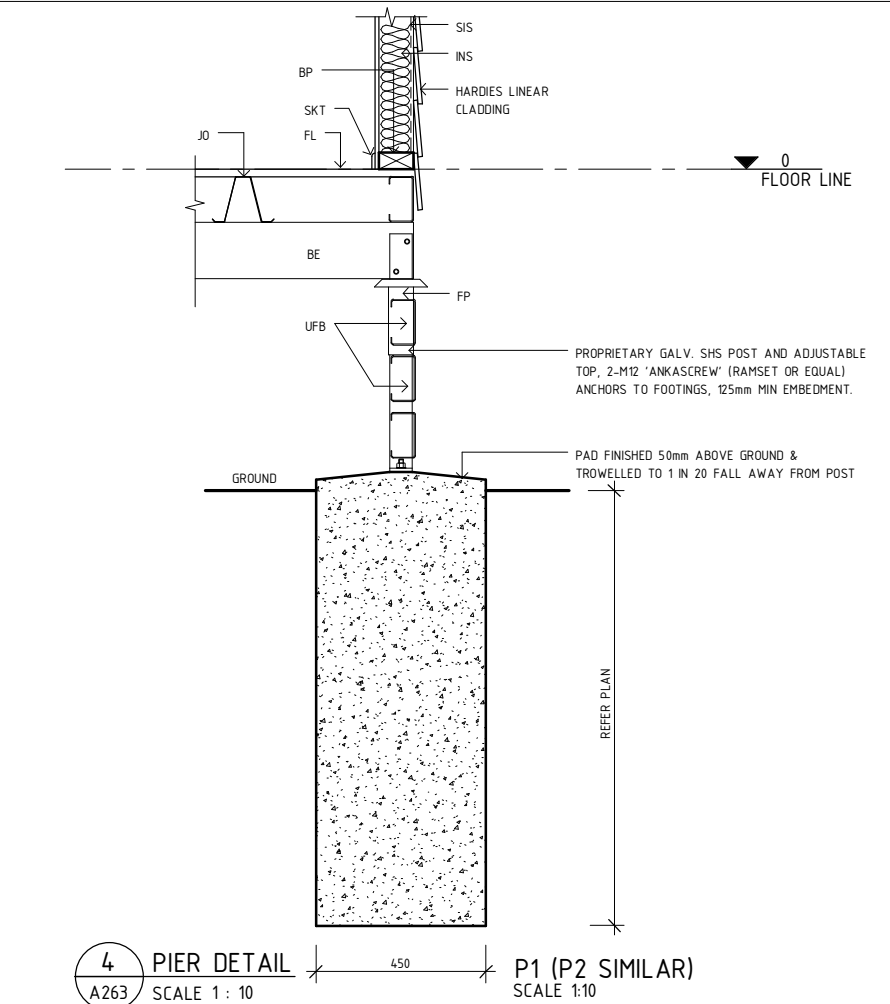
**NOTE**  
REFER A263 FOR LEVELS



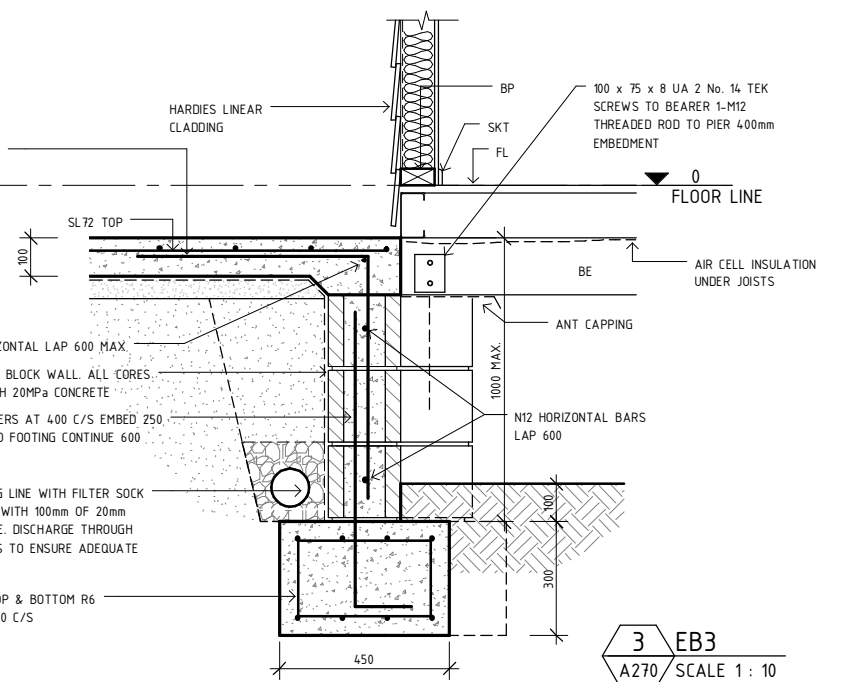
**1 EB1**  
A263 SCALE 1 : 10



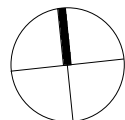
**2 EB2**  
A270 SCALE 1 : 10



**4 PIER DETAIL**  
A263 SCALE 1 : 10



**3 EB3**  
A270 SCALE 1 : 10



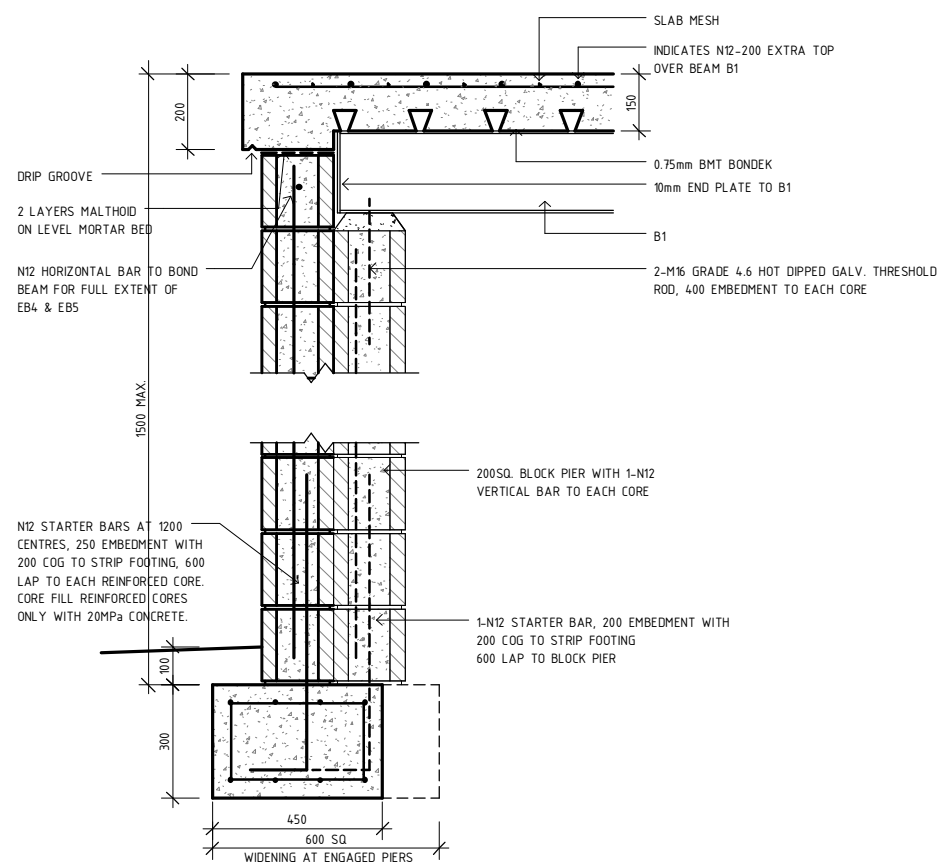
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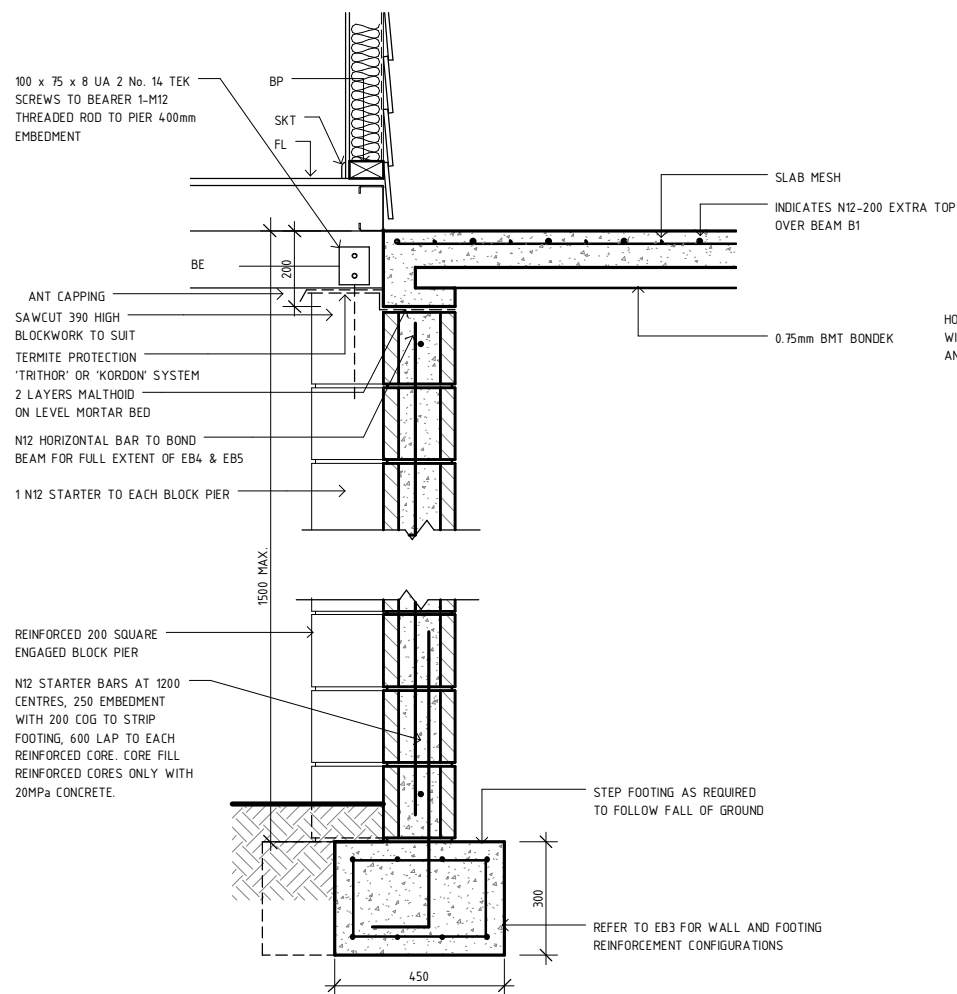
Drawn **J.TSAKOS** Designed **L.GELLATLY**  
Drafting Check **L.CLEM\*** Design Check **L.GELLATLY\***  
Approved **K.HOWE\***  
Date **11.07.08**  
Scale **As indicated**  
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Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 103 WALKER ST TABULAM SLAB AND FOOTING DETAILS - SHEET 1 OF 2**  
Original Size **A1** Drawing No: **41-12221-19-A270** Rev: **0**

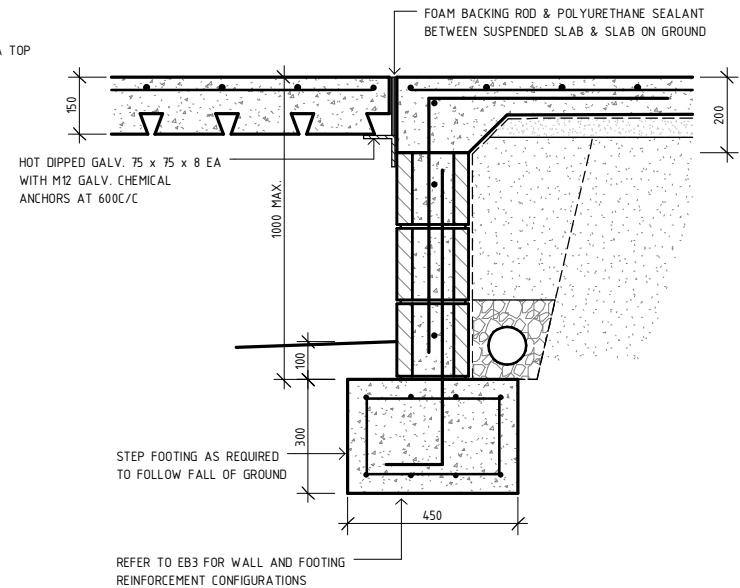




**4 EB4**  
A263 SCALE 1 : 10



**5 EB5**  
A265 SCALE 1 : 10



**6 EB6**  
A270 SCALE 1 : 10

0 100 200 300 400 500  
SCALE IN MILLIMETRES (10x ORIGINAL SIZE)

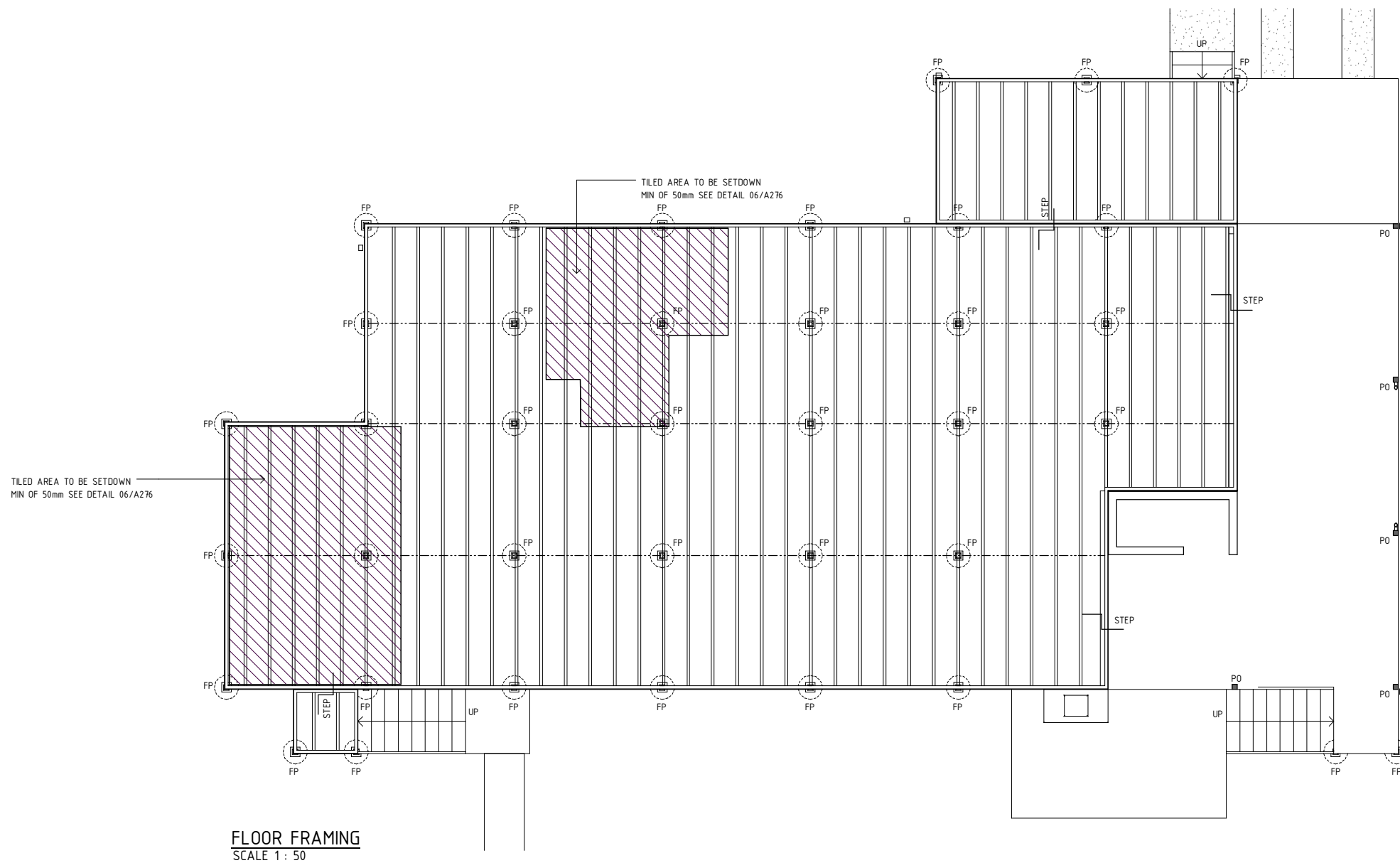
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Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 103 WALKER ST TABULAM FOOTING DETAILS - SHEET 2 OF 2**  
Original Size **A1**  
Drawing No: **41-12221-19-A271**

Rev: 0

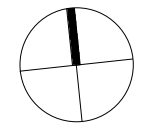
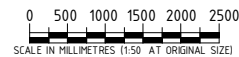


- BE LYSAGHT 150C QUIKA BEARER  
MAX SPAN 2700mm  
JO LYSAGHT 120 QUIKA JOIST  
MAX SPAN 2700mm  
LBJ LYSAGHT 120C LOADBEARING JOIST  
MAX SPAN 2700mm  
FP LYSAGHT UNI-PIER SUPPORT POST  
BOLTED TO PIERS  
EP ENGAGED PIER  
PO 100 x 100 x 4 GALV. POST  
(NOTE: ENDS TO BE SEALED)

NOTE : \*ALL FRAMING CONNECTIONS TO BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION  
\*FLOOR FRAMING AND DETAILS NOMINATED ARE BASED ON BLUESCOPE QUIKA FLOOR SYSTEM. CONTRACTOR MAY SUBMIT AN ALTERNATIVE SYSTEM FOR APPROVAL. CONTRACTOR TO PROVIDE DESIGN CERTIFICATION FOR SYSTEM USED

FLOOR FRAMING  
SCALE 1 : 50

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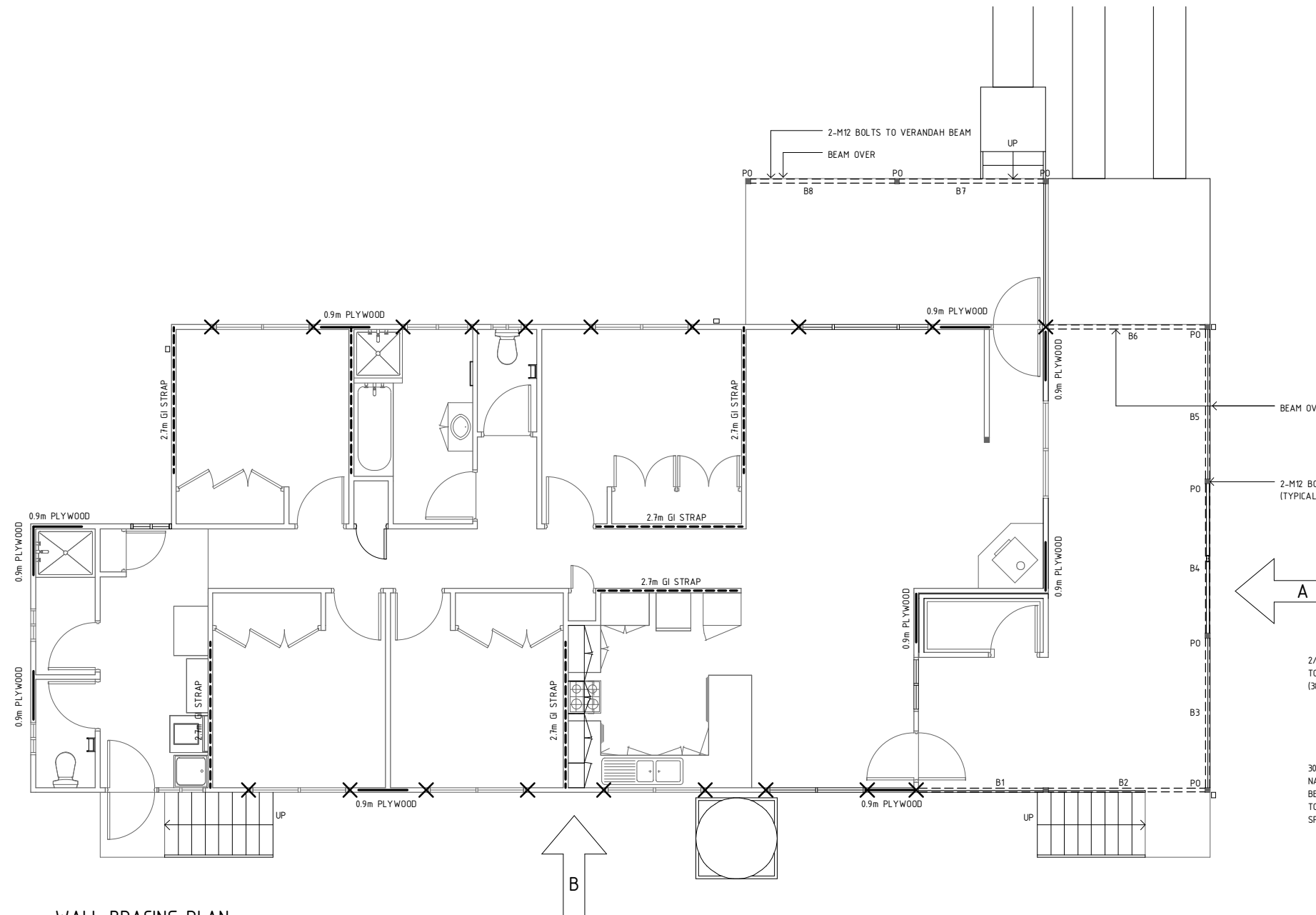


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	Approved K.HOWIE*		
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Client	TABULAM CWP		
Project	TABULAM ACDP PROGRAM		
Title	LOT 103 WALKER ST TABULAM FLOOR FRAMING		
Original Size	A1	Drawing No: 41-12221-19-A272	Rev: 0



WALL BRACING PLAN  
SCALE 1 : 50

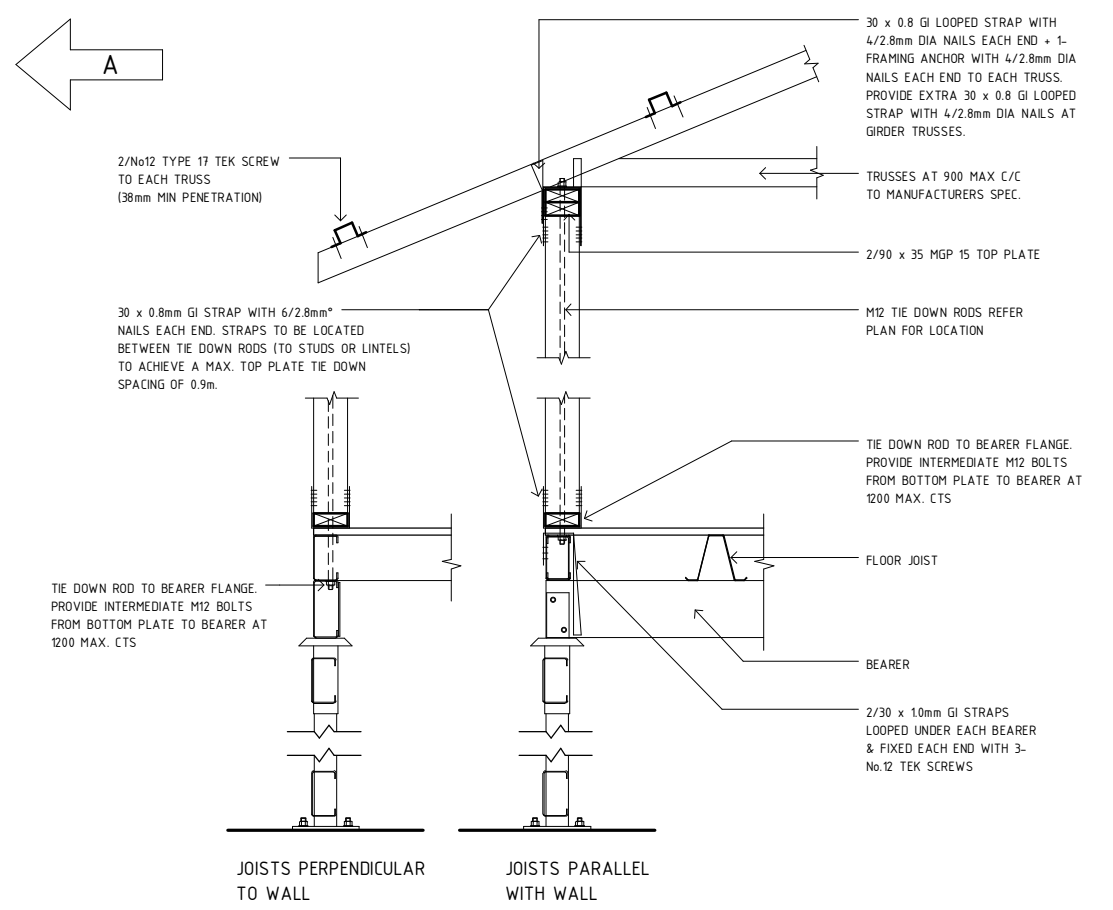
LEGEND

- INDICATES PLYWOOD BRACING PANEL RATED AT 6kN/m. REFER TO AS 1684.2 (2006) TABLE 8.18 (g) METHOD B. LENGTH 0.9m UNLESS NOTED OTHERWISE
- INDICATES DOUBLE DIAGONAL TENSION GALVANIZED STEEL STRAP RATED AT 3kN/m. REFER TO AS 1684.2 (2006) TABLE 8.18 (d) METHOD A. LENGTH 2.7m UNLESS NOTED OTHERWISE
- INDICATES M12 THREADED ROOF TIE DOWN ROD FROM TOP PLATE TO BEARER

BRACING REQUIREMENTS

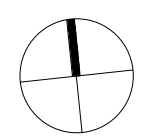
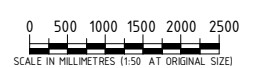
DIRECTION A  
BRACING REQUIRED : 26.7kN  
BRACING PROVIDED : 37.6kN

DIRECTION B  
BRACING REQUIRED : 4.18kN  
BRACING PROVIDED : 50.1kN



1 WALL SECTIONAL  
SCALE 1 : 10

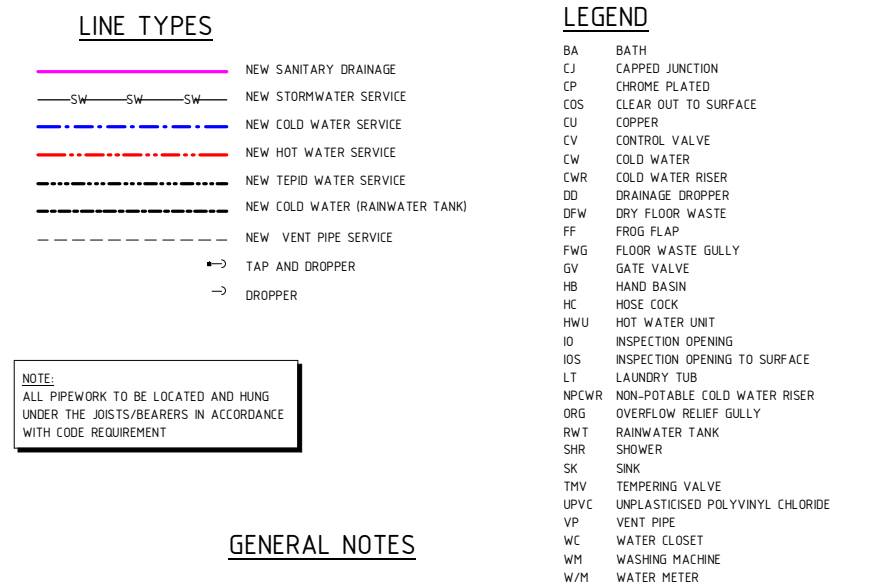
0	APPROVED ISSUE	JT	LJC*	KJH*	11.07.08	
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date



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DO NOT SCALE		Drawn J.TSAKOS	Designed L.GELLATLY	Client TABULAM CWP	
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		Approved K.HOWE*		Title LOT 103 WALKER ST TABULAM WALL BRACING PLAN	
		Date 11.07.08		Original Size	
		Scale As indicated	This Drawing must not be used for Construction unless signed as Approved		
				A1 Drawing No: 41-12221-19-A273	Rev: 0



DRAWINGS:

1. THE DRAWINGS ARE A DIAGRAMMATIC LAYOUT FOR THE SERVICE PIPES.
2. DO NOT SCALE FROM DRAWINGS.
3. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH THE ARCHITECT'S, AND ENGINEERS' DRAWINGS AND SPECIFICATIONS. REFER TO ARCHITECT'S DRAWINGS FOR FINAL POSITION OF FIXTURES AND FITTINGS.

LEVELS:

1. CONTRACTOR TO VERIFY ALL INVERT LEVELS, SURFACE LEVELS, CLEARANCES AND COVERS ARE CORRECT AND OBTAINABLE BEFORE COMMENCEMENT OF WORK.

REGULATIONS:

1. ALL WORK TO BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL AUTHORITIES REQUIREMENTS AND THE RELEVANT AUSTRALIAN STANDARDS.
2. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE BY-LAWS AND THE REQUIREMENTS OF THE LOCAL AUTHORITY.

EXISTING SERVICES:

1. ALL EXISTING SERVICES WHICH ARE NO LONGER REQUIRED SHALL BE REMOVED OR SEALED OFF TO THE SATISFACTION OF THE LOCAL AUTHORITY.
2. ORG TO BE 150mm BELOW LOWEST FIXTURE AND 75mm ABOVE SURROUND GROUND.  
ORG TO RECEIVE DISCHARGE FROM HWU

1. ALL HOUSE DRAINAGE SHALL BE 100mm DIAMETER AND SHALL BE LAID AT A GRADE OF 1:60 MINIMUM UNO.
2. ALL INSPECTION OPENINGS UNDER CONCRETE TO BE TAKEN TO SURFACE LEVEL UNO. WHERE SUBJECT TO VEHICULAR TRAFFIC ALL 10's SHALL BE FINISHED WITH A BRASS CLEAROUT COVER.
3. ALL FLOOR WASTE GULLIES SHALL HAVE CHROME PLATED SCREWED REMOVABLE GRATES. ALL FLOOR WASTE GULLIES AT GROUND LEVEL SHALL BE 100mm DIA. UNO.
4. MATERIALS:  
DRAINAGE: UPVC CLASS DWV TO AS/NZS 1260.  
SANITARY PLUMBING: UPVC CLASS DWV TO AS/NZS 1260  
SOLVENT WELDED JOINTS.
5. FIXTURE DISCHARGE PIPE SIZES UNO.  
B - 50 T&WP  
SK - 50 T&WP  
WC - 100 WP  
TD - 50 UNO.  
SHR - 50 WP (& TRAP WHERE CONNECTED DIRECT TO WASTE)

RETICULATION:

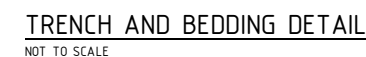
1. ALL HOT AND COLD WATER RETICULATION PIPEWORK SHALL BE 15mm DIA. SUPPLY TO A SINGLE FIXTURE AND 20mm TO TWO OR MORE FIXTURES U.N.O.
2. ALL HOT AND COLD WATER RETICULATION SHALL BE RUN IN THE CEILING SPACE. UNDER SUSPENDED FLOOR OR CAVITY WALLS. PIPES LOCATED IN MASONRY WALLS OR CONCRETE SLABS TO BE INSULATED KEMLAG TUBE OR SIMILAR APPROVED MATERIAL U.N.O.
3. THE LENGTH OF 15mm DIA. BRANCHES SHOULD NOT EXCEED 2 METRES U.N.O.

MATERIALS:

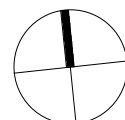
1. COLD WATER SERVICE EXTERNAL IN-GROUND TO BE PE, 80 B
2. COLD WATER SERVICE ABOVE GROUND TO BE COPPER TYPE 'B' WHERE EXPOSED. HOT WATER SERVICE TO BE COPPER TYPE 'B' - WHERE EXPOSED.
2. HOT WATER PIPES SHALL BE INSULATED WITH KEMLAG.

HOT WATER UNITS:

1. HOT WATER UNIT TO BE INSTALLED IN ACCORDANCE WITH AS/NZS 3500.4.2 AND LOCAL AUTHORITY REQUIREMENTS.
2. TEMPERING VALVE TO BE INSTALLED ON HOT WATER SUPPLY TO BA, HB & SHR HOT WATER TO SK, LT & WM ONLY.



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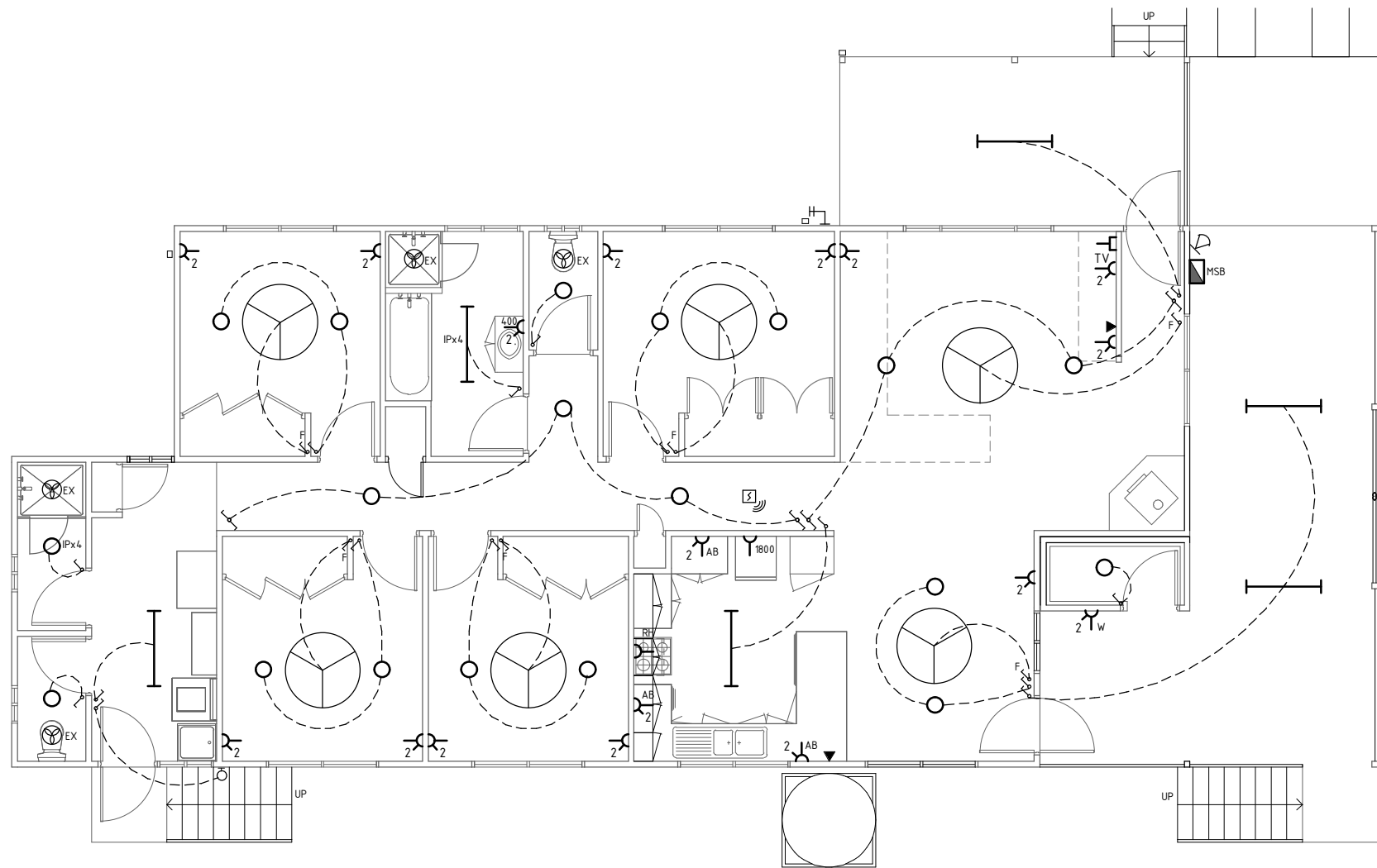
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Client	<b>TABULAM CWP</b>
Project	<b>TABULAM ACDP PROGRAM</b>
Title	<b>LOT 103 WALKER ST TABULAM HYDRAULIC AND DRAINAGE PLANS</b>

Original Size **A1** Drawing No: **41-12221-19-A274**

Rev: 0



ELECTRICAL PLAN  
SCALE 1 : 50

## NOTES

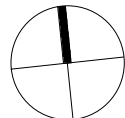
1. THE WORK INCLUDES BUT IS NOT RESTRICTED TO THE DESIGN, MANUFACTURE, SUPPLY, INSTALLATION, TESTING & MAINTENANCE OF THE ELECTRICAL & ASSOCIATED SERVICES SHOWN ON THE DRAWINGS & SPECIFICATION.
2. ALL WORK TO COMPLY WITH AS/NZS 3000, AS/NZS 3008, RELEVANT LOCAL SUPPLY AUTHORITY RULES & BUILDING CODE OF AUSTRALIA (BCA).
3. PROVIDE ALL MATERIALS & EQUIPMENT TO MAKE A SAFE & COMPLETE INSTALLATION WHICH CAN BE READILY OPERATED & MAINTAINED.
4. CARRY OUT ALL WORK IN A NEAT, TRADESMAN LIKE MANNER USING COMPETENT & EXPERIENCED PERSONNEL, PROPERLY SUPERVISED.
5. PRIOR TO PRACTICAL COMPLETION REMOVE ALL TOOLS, EQUIPMENT & DEBRIS ASSOCIATED WITH THE WORK. CLEAN ALL COMPONENTS OF THE INSTALLATION INCLUDING LUMINARIES, CABINETS, ETC.
6. TEST CERTIFICATES, DATED & SIGNED BY A RESPONSIBLE PERSON TO BE SUPPLIED TO THE SUPERINTENDENT.
7. LOCATIONS OF OUTLETS, SWITCHES, LUMINARIES, ETC. SHOWN ON THE ELECTRICAL DRAWINGS ARE INDICATIVE ONLY, ALLOW FOR MOVEMENT BY UP TO 2 M DISTANCE WITHOUT CONTRACT VARIATION. FINAL LOCATIONS TO BE CONFIRMED ON SITE. PROVIDE CIRCUIT IDENTIFICATION LABELS ON ALL ACCESSORIES.
8. LIAISE WITH LOCAL SUPPLY AUTHORITY TO PROVIDE AERIAL SUPPLY TO POINT OF ATTACHMENT (POA) AND PAY ALL CHARGES.

## LEGEND

- DOUBLE SWITCH SOCKED OUTLET (SSO) WALL MOUNT 300 ABOVE FLOOR UNLESS NOTED OTHERWISE  
AB - DENOTES MOUNT 300 ABOVE BENCH  
W - DENOTES WEATHERPROOF  
400 - DENOTES 400 ABOVE BENCH
- SINGLE SSO MOUNT AS DOUBLE SSO ABOVE  
RH - DENOTES MOUNT TO SUIT RANGE HOOD  
FZ - DENOTES MOUNT TO SUIT FREEZER  
WM - DENOTES MOUNT TO SUIT WASHING MACHINE  
1800 - DENOTES MOUNT AT 1800 AFL
- LIGHT SWITCH MOUNT 1000 AFL.  
L - DENOTE LARGE ROCKER
- 2 WAY LIGHT SWITCH MOUNT 1000 AFL  
L - DENOTES LARGE ROCKER
- STOVE SWITCH WITH NEON LIGHT
- TELEPHONE OUTLET MOUNT AS DOUBLE SSO ABOVE
- TELEVISION OUTLET MOUNT AS DOUBLE SSO ABOVE
- SMOKE ALARM, CEILING MOUNT, 240V WIRED WITH BATTERY TYPE
- FLOODLIGHT
- 1x36W SURFACE MOUNTED FLUORESCENT BATTEN  
IPx4 - DENOTE PROTECTION RATING
- 1 x 60W BATTEN FITTING  
IPx4 - DENOTE PROTECTION RATING
- WALL MOUNTED MOVEMENT SENSOR LIGHT
- MECHANICAL EXHAUST AS PER SCHEDULE OF PRODUCTS
- MAIN SWITCHBOARD/METER BOX.
- HOT WATER UNIT
- TV ANTENNA - SUITABLE FOR RECEPTION IN THE AREA LOCATION TO BE DETERMINED ON SITE
- ACCESS HATCH IN CEILING
- 1200 DIA CEILING FAN
- 3 SPEED CEILING FAN CONTROLLER, MOUNT 1100 AFL
- WALL MOUNTED FLUORESCENT
- POINT OF ATTACHMENT ON GABLE END

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0 500 1000 1500 2000 2500  
SCALE IN MILLIMETRES (1:50 AT ORIGINAL SIZE)



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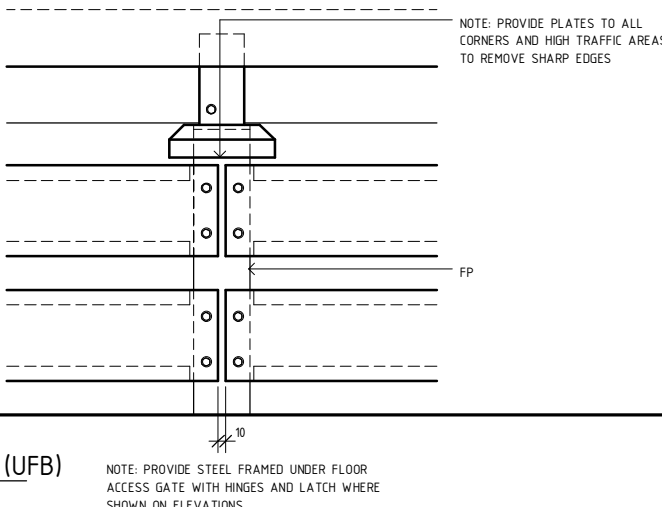
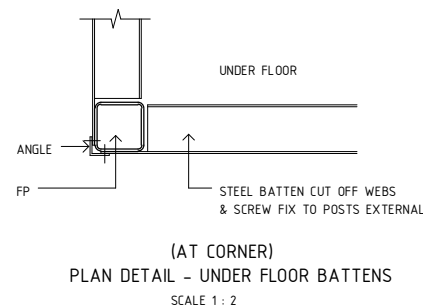
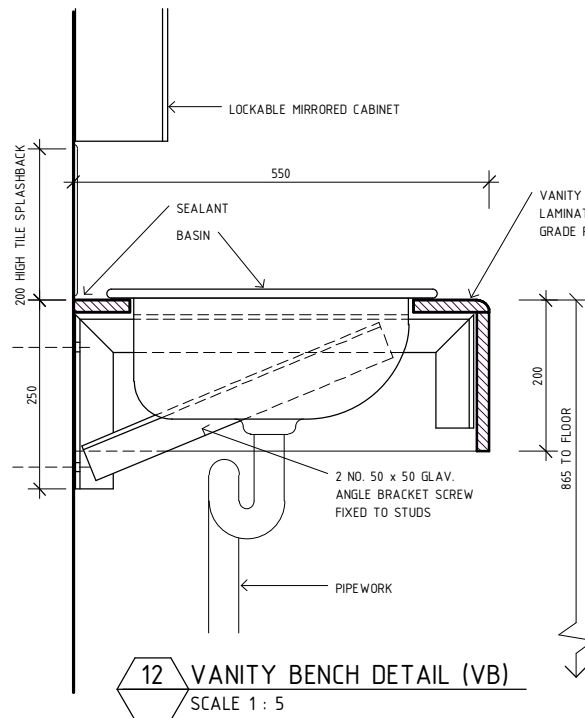
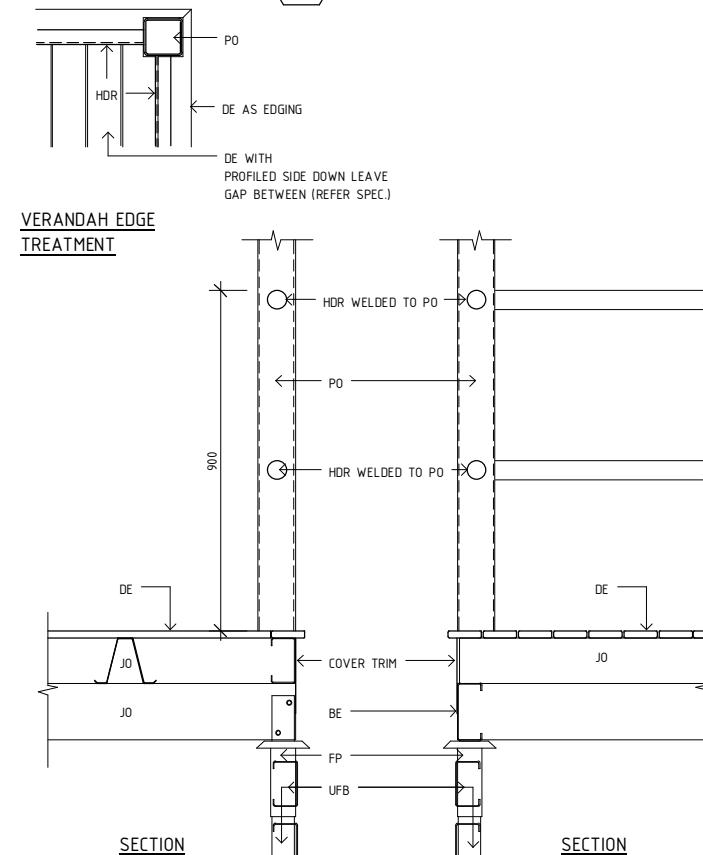
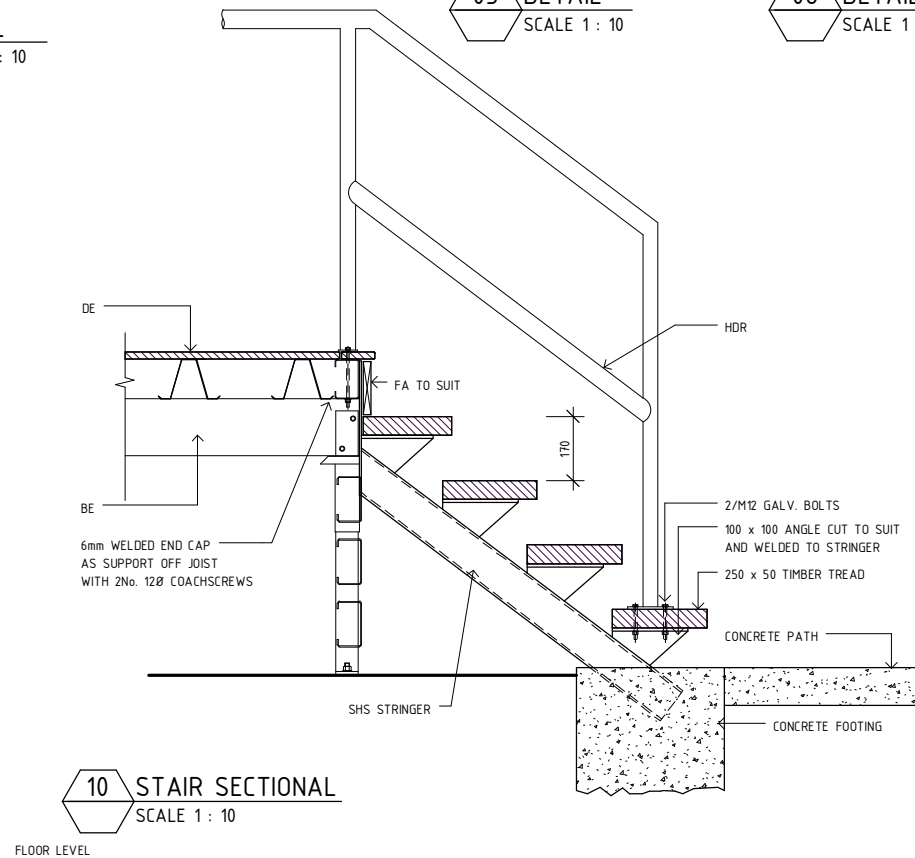
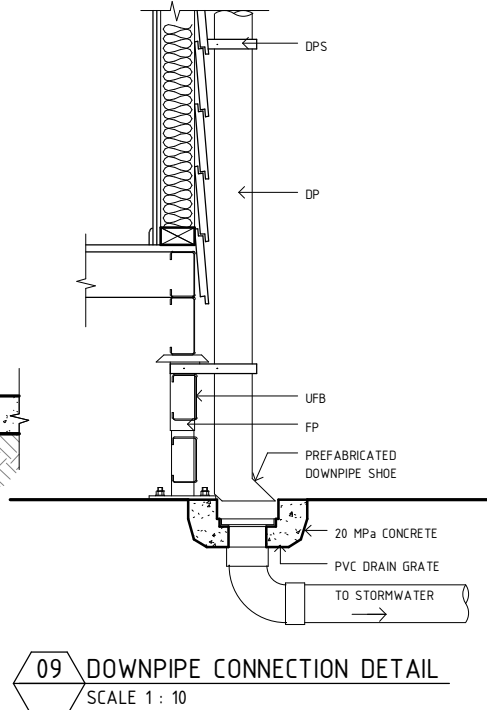
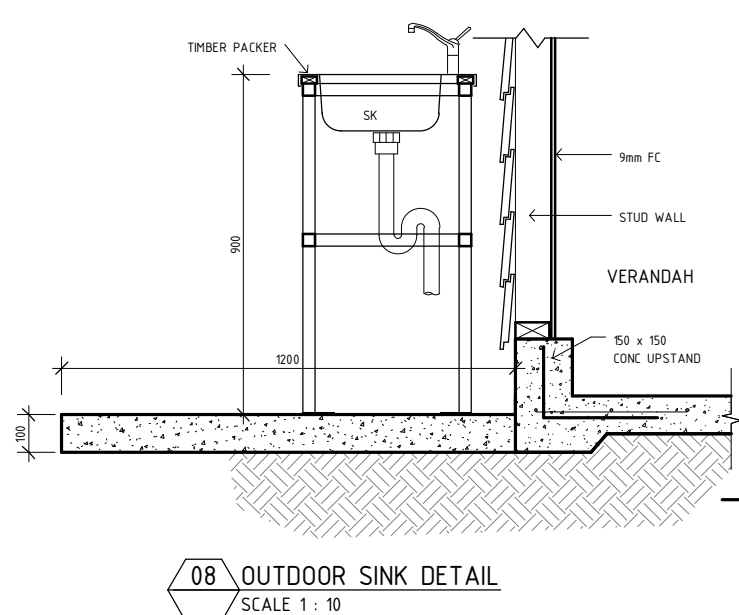
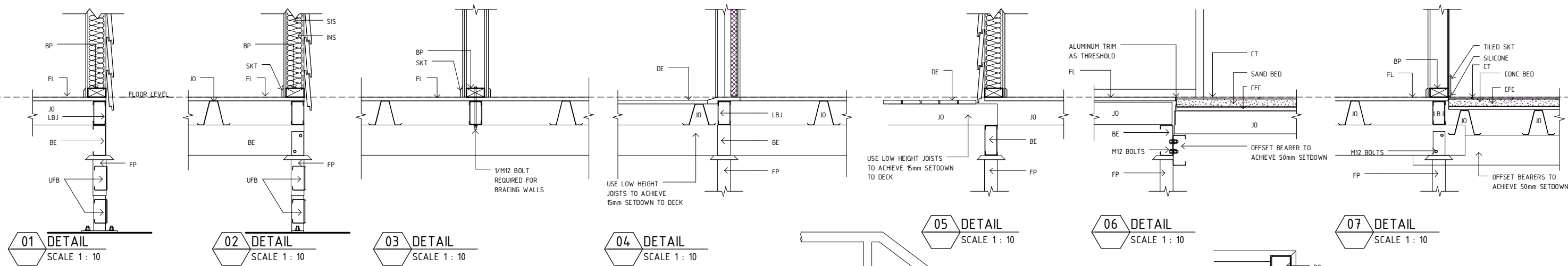
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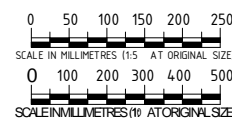
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Drafting Check	L.CLEM*	Design Check	L.CLEM*
Approved	K.HOWE*		
Date	11.07.08		
Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved	

Client	TABULAM CWP
Project	TABULAM ACDP PROGRAM
Title	LOT 103 WALKER ST TABULAM ELECTRICAL PLAN
Original Size	A1
Drawing No:	41-12221-19-A275
Rev:	0



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Approved	K.HOWE*		
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Client	<b>TABULAM CWP</b>
Project	<b>TABULAM ACDP PROGRAM</b>
Title	<b>LOT 103 WALKER ST TABULAM CONSTRUCTION DETAILS</b>
Original Size	<b>A1</b>
Drawing No:	<b>41-12221-19-A276</b>
Rev:	<b>0</b>

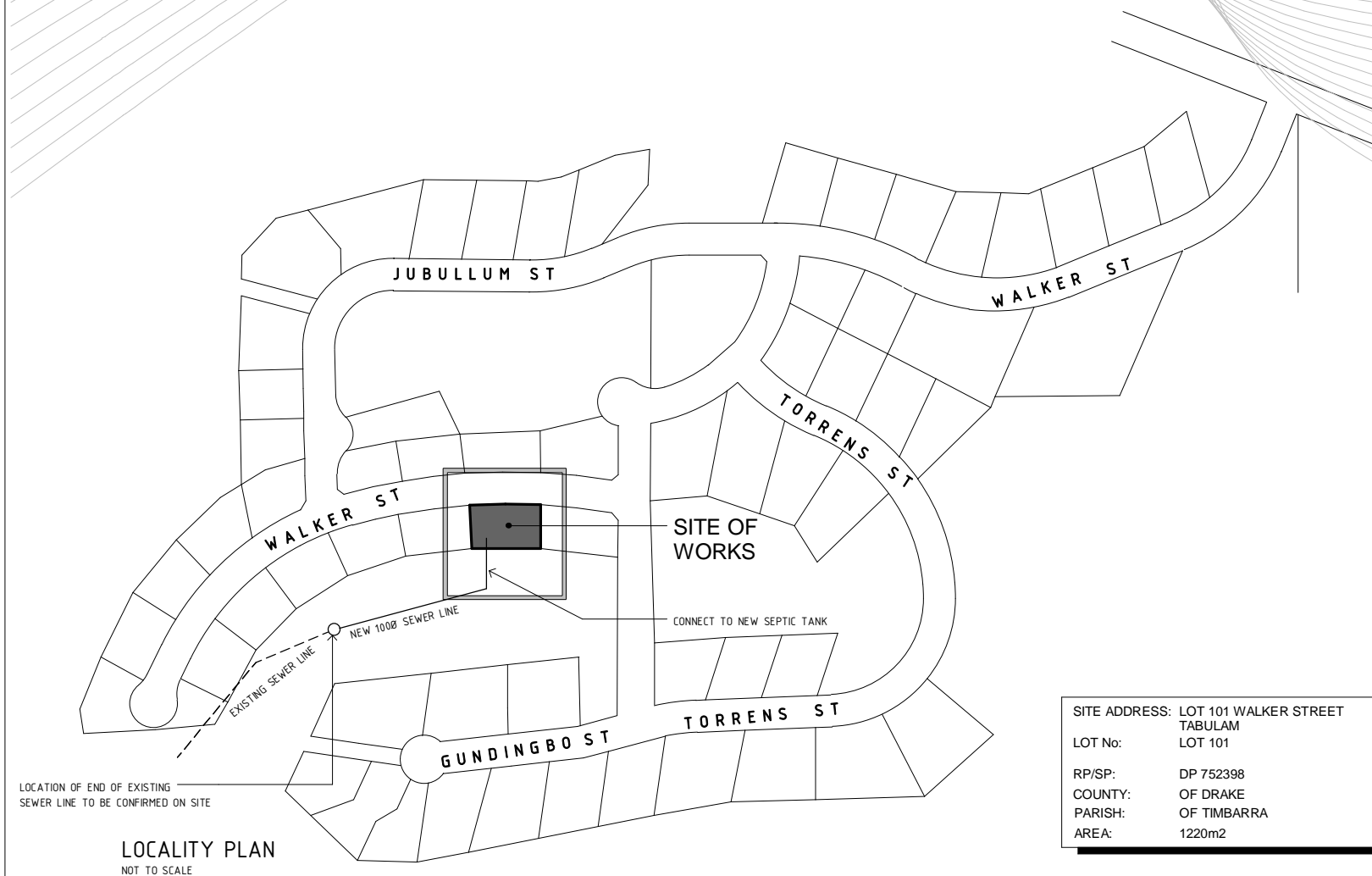




# TABULAM ACDP PROGRAM

## LOT 101 WALKER ST TABULAM

### CONTRACT No. 0080 1212

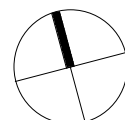


SITE ADDRESS: LOT 101 WALKER STREET  
TABULAM  
LOT No:  
RP/SP: DP 752398  
COUNTY: OF DRAKE  
PARISH: OF TIMBARRA  
AREA: 1220m2

#### DRAWING SCHEDULE

- 41-12221-18- A240 LOCALITY PLAN
- 41-12221-18- A241 GENERAL NOTES
- 41-12221-18- A242 SITE PLAN
- 41-12221-18- A243 FLOOR PLAN
- 41-12221-18- A244 ELEVATIONS
- 41-12221-18- A245 SECTIONS
- 41-12221-18- A246 ROOF PLAN
- 41-12221-18- A247 KITCHEN ELEVATIONS
- 41-12221-18- A248 WET AREAS
- 41-12221-18- A249 JOINERY
- 41-12221-18- A250 SLAB AND FOOTING DETAILS - SHEET 1 OF 2
- 41-12221-18- A251 FOOTING DETAILS - SHEET 2 OF 2
- 41-12221-18- A252 FLOOR FRAMING PLAN
- 41-12221-18- A253 WALL BRACING PLAN
- 41-12221-18- A254 HYDRAULIC PLAN
- 41-12221-18- A255 ELECTRICAL PLAN
- 41-12221-18- A256 CONSTRUCTION DETAILS

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Approved	K.HOWIE*		
Date	11.07.08		
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Client	TABULAM CWP
Project	TABULAM ACDP PROGRAM
Title	LOT 101 WALKER ST TABULAM LOCALITY PLAN
Original Size	A1
Drawing No:	41-12221-18-A240
Rev:	0

GENERAL NOTES

- G1.

READ THESE DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, OTHER ENGINEERING DRAWINGS, SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE USED. THE CONSTRUCTION NOTES SHALL APPLY UNLESS OTHER WISE VARIED BY THE DRAWINGS OR SPECIFICATIONS.
- G2.

NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE BUT INDICATES THE REQUIRED PROPERTIES OF THE ITEM, SIMILAR ALTERNATIVES HAVING THE REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL.
- G3.

REFER ANY DISCREPANCY TO THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK.
- G4.

DO NOT OBTAIN DIMENSIONS BY SCALING FROM THE DRAWINGS. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS IN METRES.
- G5.

VERIFY SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED.
- G6.

MAINTAIN STRUCTURE IN STABLE CONDITION DURING CONSTRUCTION. NO PART SHALL BE OVERSTRESSED. PROVIDE TEMPORARY BRACING AS REQUIRED.
- G7.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAA CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.
- G8.

THE STRUCTURAL WORK SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LOADS:

(A)

WIND LOADS TO A.S. 4055 – 2006:

REGION

=A

TERRAIN CATEGORY

=2.5

TOPOGRAPHIC CLASS

=T2

WIND CLASSIFICATION

=N3

(B)

LIVE LOADS:

1.5kPa
- FOUNDATIONS
- F1.

FOOTINGS HAVE BEEN DESIGNED FOR A SAFE WORKING PRESSURE OF 100kPa AND CLASS S (SLIGHTLY REACTIVE) SITE CLASSIFICATION ON THE BASIS OF A GEOTECHNICAL REPORT PREPARED BY COFFEY GEOSCIENCES PTY LTD DATED 9 DECEMBER 2003 REFERENCE No. NR1346/1-B.

F2.

FOUNDATION LEVELS SHOWN ARE CONTRACT LEVELS – THE FINAL LEVELS SHALL BE AS DIRECTED BY THE SUPERINTENDENT.

F3.

FOUNDATION MATERIAL BENEATH SLABS ON GROUND SHALL BE COMPACTED TO 95% STANDARD COMPACTION IN ACCORDANCE WITH AS1289

F4.

ALL FOOTINGS ARE TO BE FOUNDED 300mm MIN, INTO NATURAL GROUND.

F5.

FOUNDATION CONDITIONS AT THE SITE ARE TO BE MAINTAINED IN ACCORDANCE WITH CSIRO BROCHURE BTF 18 "FOOTING MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNER'S GUIDE," TO ENSURE 'NORMAL' SOIL MOISTURE CONDITIONS AS DEFINED BY AS 2870
- CONCRETE BLOCK MASONRY
- M1.

ALL CONCRETE BLOCKWORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF:

AS3700 – SAA MASONRY CODE

AS2733 – CONCRETE MASONRY UNITS

AS3600 – CONCRETE STRUCTURES

M2.

BLOCKS SHALL BE GRADE 15 (f<sub>uc</sub> = 15 MPa).

M3.

CHASING OF HOLLOW BLOCKWORK NOT PERMITTED.

M4.

REINFORCED BLOCKWORK:

MORTAR TO BE 1 CEMENT = 1/2 HYDRATED LIME: 4 1/2 SAND

GROUT FOR FILLING CORES TO HAVE A MINIMUM F<sub>c</sub> = 12MPa

MAX. AGGREGATE SIZE OF 10 AND SLUMP = 200 ± 30

CONCRETE FOR BOND BEAMS TO HAVE F<sub>c</sub> 20MPa AND SLUMP = 80 ± 15

REINFORCEMENT TO HAVE 15 NOM. MINIMUM COVER FROM INSIDE FACE OF BLOCKS.

REMOVE ALL MORTAR DROPPINGS FROM BOTTOM OF GROUTED CORES BEFORE CONCRETING BY USE OF CLEANOUT BLOCKS.

BLOCKWORK CONSTRUCTION NOT TO PROCEED MORE THAN SIX COURSES AHEAD OF CORE GROUTING.

SITE PREPARATION AND EARTHWORKS

E1.

ALL SERVICES, BOTH ABOVE AND BELOW GROUND, SHALL BE LOCATED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK

E2.

ANY AVAILABLE TOPSOIL FROM UNDER THE PROPOSED FOOTPRINT OF THE HOUSE SHALL BE STRIPPED AND STOCKPILED FOR REUSE

E3.

ON COMPLETION OF WORKS, SUPPLY SPREAD AND LAY 50mm OF TOPSOIL AND TURF AROUND THE PERIMETER OF THE HOUSE FOR MIN. 6000mm OR TO THE FRONT AND SIDE BOUNDARIES

STRUCTURAL TIMBER

T1.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 1720- PART 1 AND AS 1684

T2.

ALL TIMBER SHALL BE PROTECTED FROM THE WEATHER BEFORE AND AFTER FABRICATION.

T3.

ALL TIMBER SHALL BE FREE FROM GUM VEINS, POCKETS, KNOTS, HOLES AND SPLITS WITHIN 150mm OF ANY BOLT OR CONNECTION

T4.

GALVANIZED BOLTS SHALL BE USED IN 2mm CLEARANCE HOLES. GREASE BOLTS BEFORE ASSEMBLY. WASHERS OF SPECIFIED SIZE ARE TO BE USED UNDER HEAD AND NUT OF BOLT. ALL BOLTS ARE TO BE LEFT ACCESSIBLE AND RETIGHTENED AT COMPLETION OF CONTRACT AND AT THE END OF MAINTENANCE PERIOD

T5.

APPROVED SPLIT RING AND SHEAR PLATE CONNECTORS ARE TO BE FITTED WITH GALVANISED BOLTS, NUTS AND WASHERS TO THE MANUFACTURERS RECOMMENDATIONS. SHEAR PLATES ARE TO BE PLACED AND SECURED WITH CLOUTS IMMEDIATELY AFTER GROOVING. COAT CONNECTOR AND GROOVE WITH APPROVED OIL OR PAINT AND GREASE BOLTS BEFORE ASSEMBLY.

T6.

THREE COPIES OF ALL CHECKED WORKSHOP DRAWINGS ARE TO BE SUBMITTED TO THE SUPERINTENDENT FOR REVIEW AND A REVIEWED COPY OBTAINED PRIOR TO THE COMMENCEMENT OF FABRICATION. REVIEW DOES NOT INCLUDE DIMENSIONS.

T7.

UNLESS APPROVED BY THE SUPERINTENDENT, ALL TRUSSES ARE TO BE SHOP FABRICATED.

T8.

DURING ERECTION, TRUSSES ARE TO BE SLUNG FROM THEIR PANEL POINTS ONLY.

T9.

APPROVED PATENT 1.2mm GALVANIZED METAL ANCHORS AND NAIL-ON PLATES ARE TO BE SECURELY FIXED WITH GALVANIZED NAILS TO MANUFACTURERS RECOMMENDATIONS. NAIL-ON PLATES ARE TO BE USED IN HIDDEN LOCATIONS ONLY

T10.

SURFACE PREPARATION AND PROTECTIVE TREATMENT OF TIMBER: LOSP (IF CYPRESS NOT USED). TREATMENT CERTIFICATE TO BE SUPPLIED.

REINFORCEMENT

R1.

SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS:

R – DENOTES STRUCTURAL GRADE 230 PLAIN ROUND BAR TO AS/NZS 4671

Y – DENOTES HOT ROLLED GRADE 410 DEFORMED BAR TO AS/NZS 4671

F – DENOTES HARD DRAWN WIRE REINFORCING FABRIC TO AS/NZS 4671

N – DENOTES NORMAL DUCTILITY BAR TO AS/NZS 4671

L – DENOTES LOW DUCTILITY BAR TO AS/NZS 4671

R2.

DESIGNATION OF REINFORCEMENT BARS IS AS IN EXAMPLE:

No. OF BARS  
IN GROUP

17-Y20-350 EF

BAR GRADE AND TYPE

NOMINAL BAR  
SIZE IN mm

LOCATION OR COMMENT

SPACING IN mm

R3.

THE FOLLOWING ABBREVIATIONS APPLY TO THE LOCATION OF REINFORCEMENT:

EW EACH WAY

FF FAR FACE

CP CENTRALLY PLACED

EF EACH FACE

B BOTTOM

B/U BOTTOM UNDER (LAID FIRST)

NF NEAR FACE

T TOP

T/O TOP OVER (LAID LAST)

R4.

COGS AND HOOKS TO BE STANDARD IN ACCORDANCE WITH AS 3600.

R5.

MAIN WIRES OF FABRIC AND WIDTH OF SHEETS SHOWN IN FLOOR PLAN OR WALL ELEVATIONS THUS:

DIRECTION OF MAIN WIRES

EXTENT OF MESH

SHEET TO BE LAID SO  
THAT MIN. COVER IS  
TO MAIN BARS.

R6.

EXTENT OF BARS SHOWN THUS:

TYPICAL BAR

R7.

REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND IS NOT NECESSARILY IN TRUE PROJECTION.

R8.

MAINTAIN NOMINAL CLEAR CONCRETE COVER TO REINFORCEMENT (INCLUDING FITMENTS) BY APPROVED CHAIRS, SPACERS, OR TIES AS REQUIRED TO PROVIDE ADEQUATE SUPPORTS SHALL BE SPACED AT 750 MAXIMUM CROSS CENTRES FOR FABRIC AND BARS UP TO AND INCLUDING 16 DIA. AND 1200 MAXIMUM CROSS CENTRES FOR BARS OVER 16 DIA.

R9.

SPLICE REINFORCEMENT ONLY AT LOCATIONS SHOWN ON DRAWING, OR AS APPROVED BY SUPERINTENDENT. LAP LENGTH BARS SHALL BE AS BELOW:

(1) HORIZONTAL BARS WITH 300 OR MORE CONCRETE CAST BELOW.		(2) ALL OTHER BARS	
BAR	LAP	BAR	LAP
Y12 OR N12	375	Y12 OR N12	300
Y16 OR N16	500	Y16 OR N16	400
Y20 OR N20	750	Y20 OR N20	600
Y24 OR N24	1100	Y24 OR N24	850
Y28 OR N28	1376	Y28 OR N28	1100

R10.

FABRIC SPLICES SHALL BE MADE BY EITHER OF THE TWO FOLLOWING METHODS:

(1) LAPPING OF FABRIC

25 MINIMUM

MIN. LAP

(2) USE OF SPLICE BARS.

SPLICE LENGTH

=

=

FABRIC

SPLICE BAR LENGTH IS 1100 OR 1500 FOR HORIZONTAL BARS WHERE MORE THAN 300 CONCRETE CAST BELOW

R11.

WELDING OF REINFORCEMENT IS ONLY PERMITTED WHERE SHOWN ON THE DRAWINGS OR OTHERWISE APPROVED BY THE SUPERINTENDENT.

R12.

DOWELS SHALL BE SAWN TO LENGTH. IN SKEWED JOINTS DOWELS SHALL BE ALIGNED WITH THE LONGITUDINAL JOINTS. DOWEL ALIGNMENT TO BE MAINTAINED BY USE OF A SUPPORT ASSEMBLY SUITABLE TO ENSURE A HORIZONTAL AND VERTICAL ALIGNMENT TOLERANCE OF 5 IN 400

CONCRETE

C1.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS

C2. QUALITY OF CONCRETE ELEMENTS SHALL BE AS FOLLOWS:					
STRUCTURAL ELEMENTS	EXPOSURE CLASS	COVER TO REINF. (mm)	F <sub>c</sub> MPA	MAX. AGGR. SIZE (mm)	SLUMP (mm)
SLAB AND FOOTING	A1	25 TO EXPOSED SLAB SURFACE	20	20	80+/-10
		50 TO SURFACES IN CONTACT WITH GROUND			

C3.

ADDITIVES SHALL NOT BE USED WITHOUT THE SUPERINTENDENT'S PRIOR APPROVAL

C4.

CONCRETE IS TO BE COMPACTED USING VIBRATORS

C5.

SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES

C6.

PROVIDE ALL EXPOSED EDGES AND CORNERS WITH 20 CHAMFERS OR FILLETS.

C7.

FORM ALL CONSTRUCTION JOINTS AND USE ONLY WHERE SHOWN OR APPROVED BY THE SUPERINTENDENT

C8.

NO HOLES, CHASES OR EMBEDMENT OF PIPES, OTHER THAN THOSE SHOWN ON THE STRUCTURAL ENGINEER'S DRAWINGS SHALL BE MADE WITHOUT THE APPROVAL OF THE SUPERINTENDENT.

C9.

CURING OF ALL CONCRETE SHALL BE COMMENCED AS SOON AS POSSIBLE AFTER PLACING OR STRIPPING. REFER 'CURING' IN A.S. 3600 AND THE SPECIFICATION.ACCEPTABLE CURING METHODS ARE AS FOLLOWS:-

-WATER IMMERSION

-WATER SPRAY BENEATH APPROVED PLASTIC SHEETING

C9.

FORMWORK AND ITS REMOVAL TO BE IN ACCORDANCE WITH A.S. 3610

C10.

ALL PROPS AND FORMWORK FOR BEAMS AND SLABS TO BE REMOVED BEFORE CONSTRUCTION OF ANY WALLS OR OTHER PERMANENT LOADING ON THE SLAB.

C11.

LAP AND SEAL 0.2mm WATERPROOF MEMBRANE TO ENSURE A COMPLETE VAPOUR BARRIER.

C12.

CONSTRUCTION TOLERANCES TO BE IN ACCORDANCE WITH AS 3610.

C13.

FORMED SURFACE FINISHES TO BE IN ACCORDANCE WITH AS 3610.

C14.

FINISHED FORMED SLAB SURFACES:

CLASS 1 TOLERANCE – TRUE PLANES WITHIN 3 IN 3000

SURFACE FINISH – POWER TROWEL AND STEEL FLOAT FINISH.

FRAMING NOTES

ROOF FRAMING

TRUSSES:

PREFABRICATED ENGINEER DESIGNED ROOF TRUSSES @ 900 MAX. CTRS.

VERANDAH RAFTERS:

150 x 50 F17 @ 900 MAX. CTRS., MAX. SPAN =3m,MAX. O/HANG = 900mm

BATTENS:

40 x 0.55 BMT G550, AZ150 @ 900 CTRS.

VERANDAH BEAM:

B1-B7 – 195 x 85 HYNEBEAM 17  
B8-B9 – 130 x 85 HYNEBEAM 17

VERANDAH PLATE:

200 x 50 F17, MAX. SPAN = 3m, FOR VERANDAHS WITH O/HANGS UP TO 600mm.  
2/200 x 38 F17, MAX. SPAN = UP TO 3.3m, FOR VERANDAH WITH O/HANG UP TO 900mm.

NAILING PLATE:

120 x 35 F17, BOLTED TO TRUSSES/WALL FRAMING WITH 1/M12 BOLT @ 1200 MAX. CTRS.

VERANDAH/CARPORT POST:

100 x 100 x 4 GALV. POST.

WALL FRAMING

LOAD BEARING WALLS:

STUDS:- 90 x 35 F8 @ 400 CTRS.

TOP PLATE:- 2/90 x 45 F8

BOTTOM PLATE:- 90 x 35 F5

NOGGING:- 90 x 35 F5 – MAX. 1350 CTRS.

INTERNAL NON LOAD BEARING WALLS:

STUDS:- 90 x 35 F8 @ 400 CTRS.

TOP PLATE:- 90 x 35 F8

BOTTOM PLATE:- 90 x 35 F8

NOGGING:- 90 x 35 F5 – MAX. 1350 CTRS.

LINTELS:

(UPPER STOREY)

SPAN TO 0 – 1500mm

2/140 x 35 MGP10

SPAN TO 1500 – 1800mm

2/170 x 35 MGP10

SPAN TO 1800 – 2100mm

2/190 x 35 MGP10

STUDS BESIDE OPENINGS:

SPAN TO 900mm

1

SPAN TO 1800mm

2

SPAN OVER 2400mm

3

BRACING AND TIE DOWN DETAILS

T1.

TIE DOWN & BRACING HAS BEEN DESIGNED FOR A N3 WIND CLASSIFICATION WITH SHEET ROOF CONSTRUCTION.

T2.

ALL TIMBER FRAMING, BRACING & TIE DOWN DETAILS ARE TO BE IN ACCORDANCE WITH AS 1684 FOR NOMINAL WIND CLASSIFICATION. ALL NOMINAL FIXINGS REQUIRED BY AS 1684 ARE IN ADDITION TO THE TYPICAL FIXINGS DETAILED & DESCRIBED ON THESE DRAWINGS.

T3.

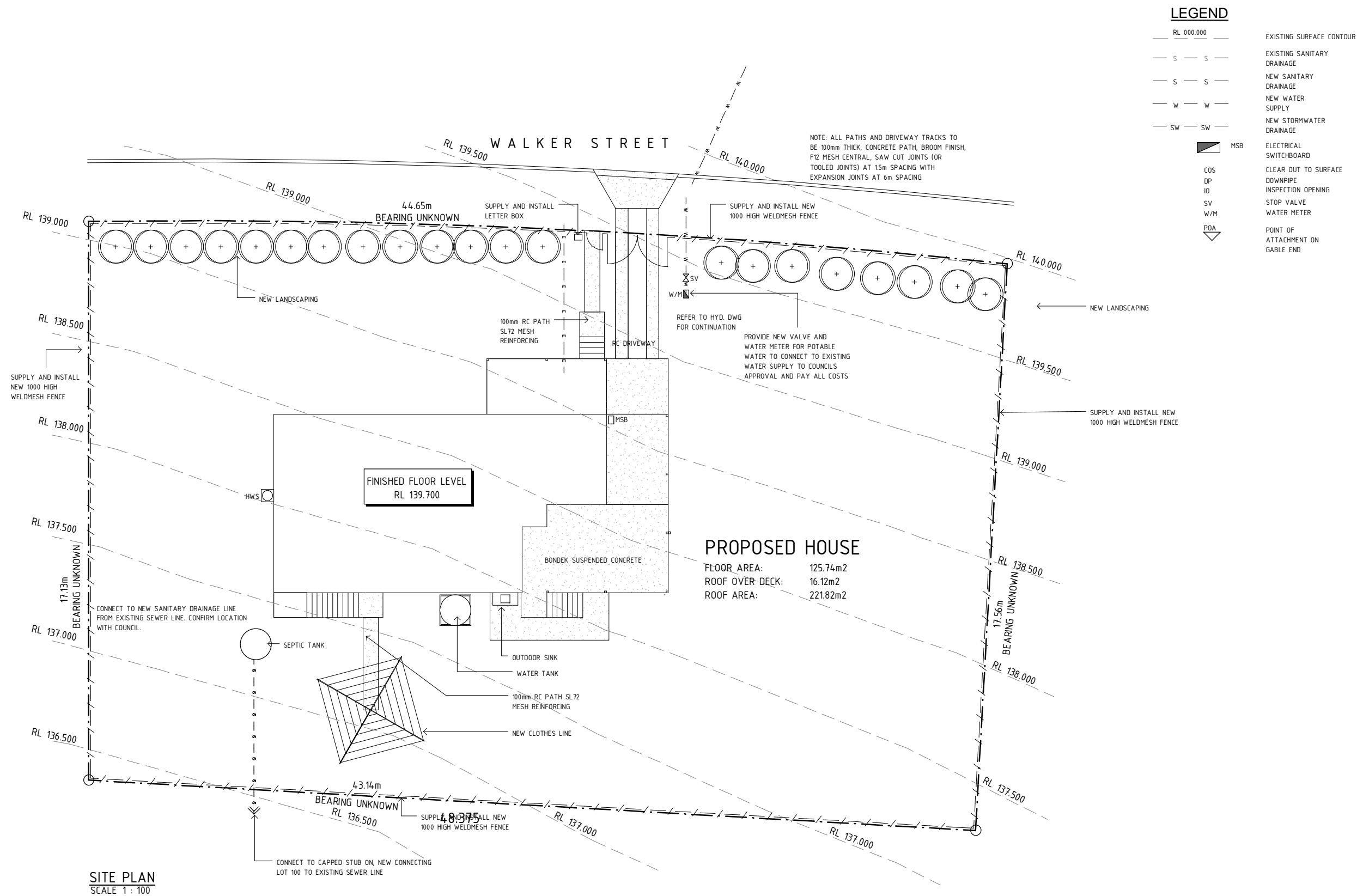
ALL TIE DOWN FIXINGS HAVE BEEN DESIGNED FOR TIMBER WITH A JOINT GROUP CLASSIFICATION OF J04 OR BETTER.

T4.

BRACING WALL SYSTEM HAS BEEN DESIGNED ON THE ASSUMPTION THAT THE CEILING BATTENS ARE DIRECTLY FIXED TO THE ROOF FRAMING. IF OTHER CEILING SUPPORT SYSTEMS ARE USED. THE SUPERINTENDENT IS TO BE NOTIFIED TO CONFIRM THE DESIGN.

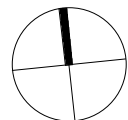
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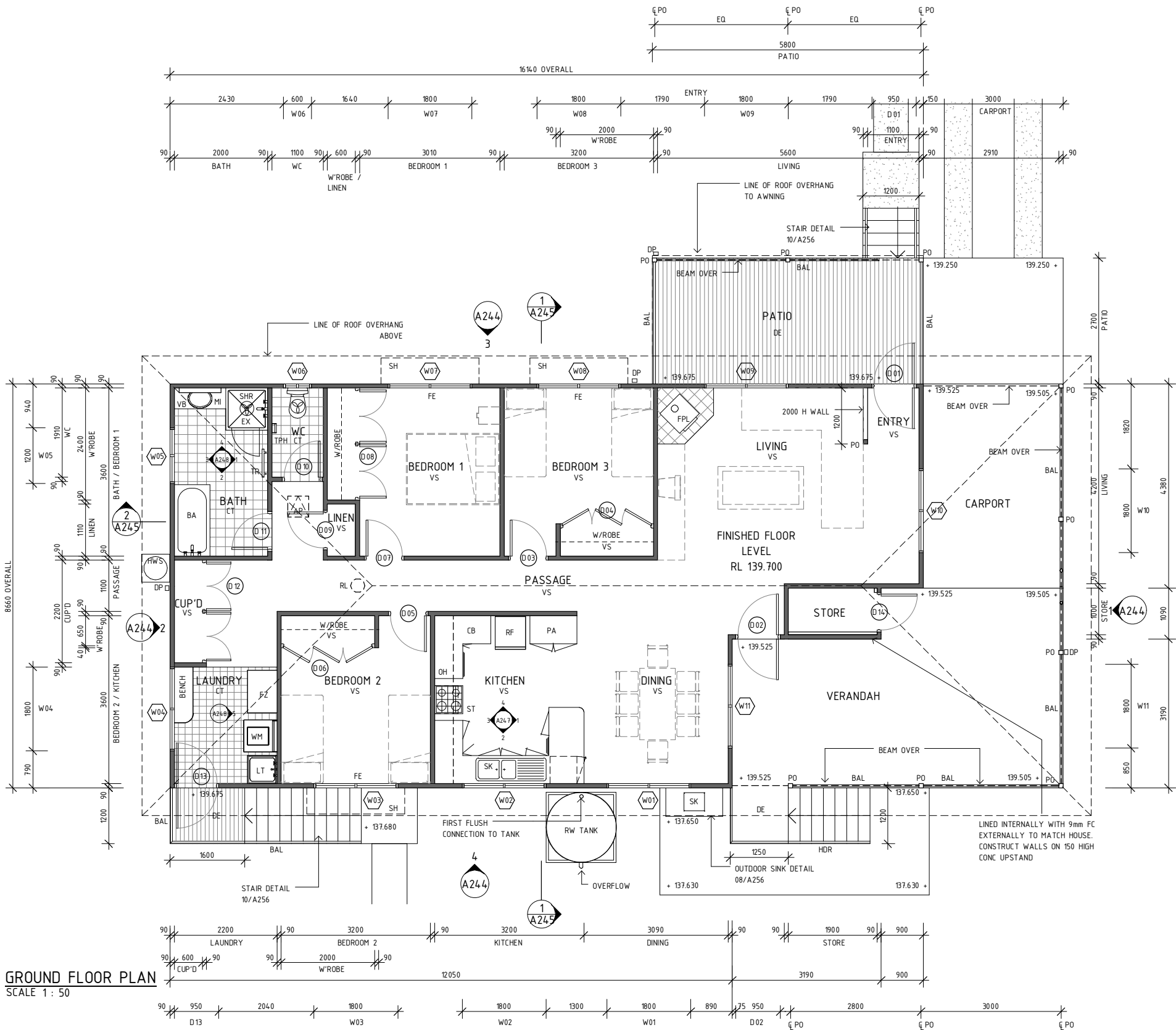
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Approved	K.HOWE*		
Date			
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Client	TABULAM CWP
Project	TABULAM ACDP PROGRAM
Title	LOT 101 WALKER ST TABULAM SITE PLAN
Original Size	A1
Drawing No:	41-12221-18-A242
Rev:	0



GROUND FLOOR PLAN  
SCALE 1 : 50

LEGEND	
AP	ACCESS PANEL
BA	BATH
BAL	BALUSTRADE
BE	LYSAGHT 150C QUIKA BEARER MAX. SPAN 2700mm
CB	KITCHEN CUPBOARD & BENCHTOP
CT	CERAMIC TILE
DE	90 x 19 SHOTEDGE HWD TIMBER DECKING
DP	DOWNPIPE
EX	EXHUAUST FAN
FA	FASCIA
FE	FIRE ESCAPE
FP	UNI-PIER SUPPORT POST
FPL	FIREPLACE
FWG	SHOWER
FZ	FREEZER
GU	COLORBOND GUTTER
HDR	HANDRAIL
HP	HIGH POINT
HWS	HOT WATER SYSTEM
JO	LYSAGHT 120C QUIKA JOIST MAX. SPAN 2700mm
LT	LAUNDRY TUB
MI	LOCKABLE MIRROR CABINET
MSB	NEW METER BOX
OH	OVERHEAD CUPBOARD
P1	PIERS (450DIA x 1200 DEEP)
P2	PIER (450DIA x 600 DEEP)
PA	PANTRY
PO	POST
RCP	FIRE ESCAPE
REF	FIRE ESCAPE
RF	REFRIGERATOR SPACE
RH	FIRE ESCAPE
RL	ROOFLIGHT
RSH	COLOROND ROOF SHEETING
RWT	RAIN WATER TANK
SH	FIRE ESCAPE
SHR	SHOWER
SK	SINK
SKT	SKIRTING
SPL	TILE SPLASHBACK
ST	STOVE
TAP	TAP
TPH	TOILET PAPER HOLDER
TR	TOWEL RAIL
UFB	UNDER FLOOR BATTEN
VB	VANITY BASIN
VS	SHEET VINYL
WC	TOILET SUITE
WM	WASHING MACHINE

WINDOW SCHEDULE					
NUMBER	DIMENSIONS		TYPE	OPENING	REMARKS
	WIDTH	HEIGHT			
01	1800	1200	AS/FS/SS	OX	
02	1800	1000	AS/FS/SS	OX	
03	1800	1200	AS/FS/SS	OX	FE
04	1800	1200	AS/FS/SS	OX	
05	1200	600	AS/FS/SS	OX	V
06	600	600	AS/FS/SS	OX	V
07	1800	1200	AS/FS/SS	OX	FE
08	1800	1200	AS/FS/SS	OX	FE
09	1800	1200	AS/FS/SS	OX	
10	1800	600	AS/FS/SS	OX	
11	1800	1200	AS/FS/SS	OX	

LEGEND OF WINDOW SCHEDULE ABBREVIATIONS

AS - ALUM. SLIDING COMPLETE WITH TIMBER REVEAL  
FE - FIRE ESCAPE PANEL IN SECURITY SCREEN  
FS - FLYSCREEN  
SS - SECURITY SCREEN (SCREW FIXED)  
O - FIXED PANEL (AS VIEWED FROM OUTSIDE)  
X - SLIDING PANEL (AS VIEWED FROM OUTSIDE)  
V - VENTILATION SCREEN TO FIXED WINDOW

NOTE:  
\* MOUNT SUNHOODS HIGH ENOUGH TO ALLOW  
FE TO SWING FULLY OPEN  
\* FS AND SS ARE COMBINED

DOOR SCHEDULE			
NUMBER	DIMENSIONS		TYPE
	HEIGHT	WIDTH	
01	2040	870	SF/D0/FS/SD/TH
02	2040	870	SF/D0/FS/SD/TH
03	2040	770	TF/D01
04	2040	640	206
05	2040	770	TF/D01
06	2040	640	206
07	2040	770	TF/D01
08	2040	570	TF3
09	2040	770	TF/D01
10	2040	770	TF/D01
11	2040	770	TF/D01
12	2040	520	TF/D03
13	2040	870	SF/D0/FS/SD/TH
14	2040	770	TF/D01
15	2040	570	TF3
16	2040	520	TF/D03
19	900	600	TF/D05

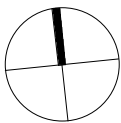
LEGEND OF DOOR SCHEDULE ABBREVIATIONS

D0 - SOLID CORE FLUSH PANEL WATERPROOF PLY FACED  
D01 - HOLLOW CORE FLUSH PANEL HARDBOARD FACED  
D02 - HOLLOW CORE FLUSH PANEL HARDBOARD FACED WITH  
LIFT OFF HINGES  
FS - FLYSCREEN  
SD - SECURITY SCREEN DOOR (TRIPLE HINGED)  
SF - STEEL FRAMED  
SG - SAFETY GLASS  
SLD - SLIDING DOOR  
TF - TIMBER FRAME  
TH - WEATHERPROOF THRESHOLD

NOTE: ALL LINEN AND CUPBOARD DOORS TO BE TYPE D01 SIZE TO SUIT  
OPENINGS. DOOR JAMBS TO BE TIMBER

0	APPROVED ISSUE	JT	LJC*	KJH*	11.07.08	
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0 500 1000 1500 2000 2500  
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Designed **L.CLEM**

Drafting Check **L.CLEM\***

Design Check **L.CLEM\***

Approved **K.HOWE\***

Date

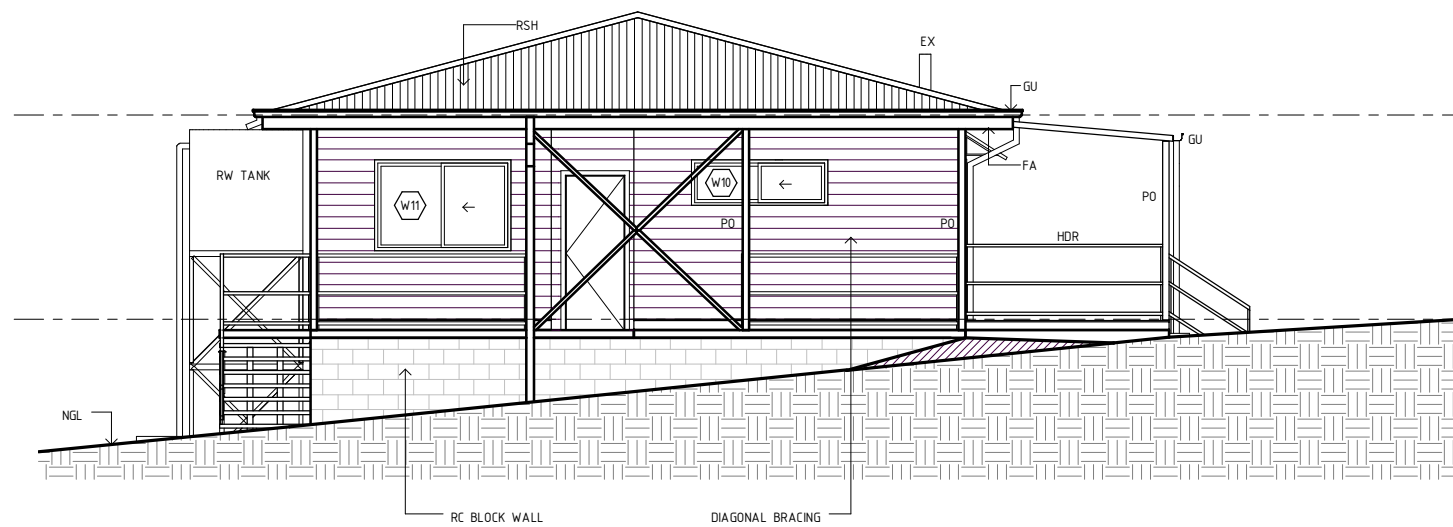
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Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 101 WALKER ST TABULAM  
FLOOR PLAN**

Original Size  
**A1** Drawing No: **41-12221-18-A243**

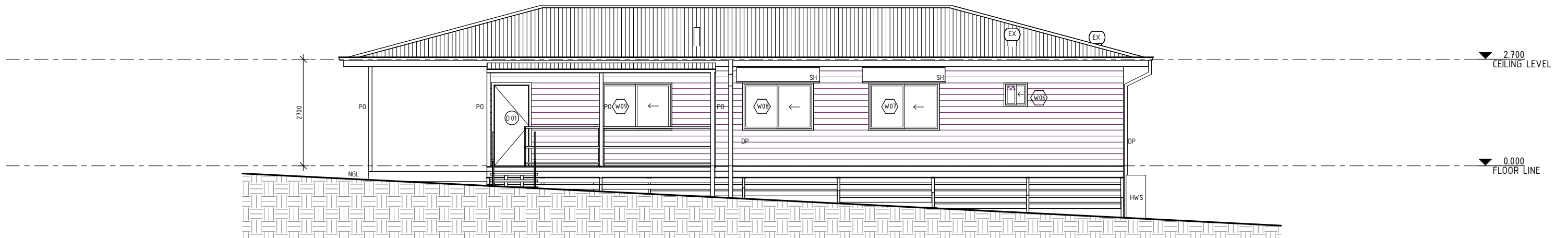
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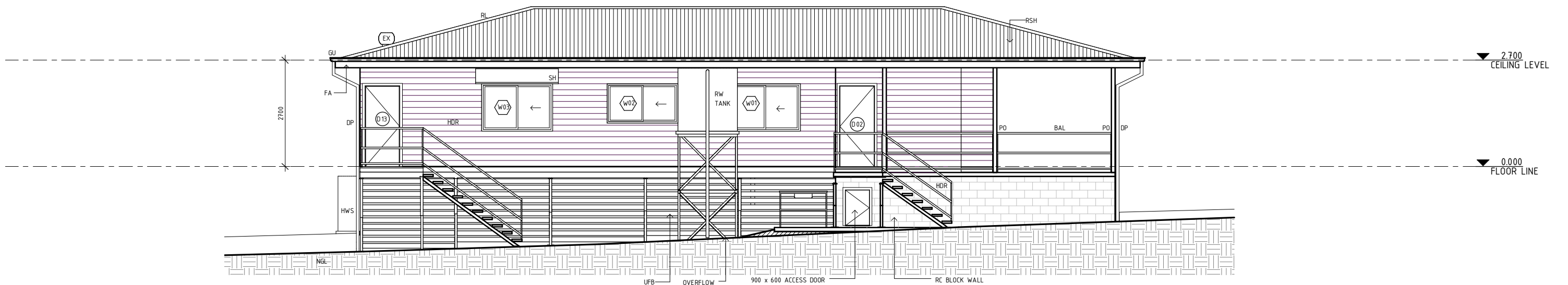
1 NORTH/EAST ELEVATION  
A243 SCALE 1 : 50



2 SOUTH/WEST ELEVATION  
A243 SCALE 1 : 50



3 NORTH/WEST ELEVATION  
A243 SCALE 1 : 50



4 SOUTH/EAST ELEVATION  
A243 SCALE 1 : 50

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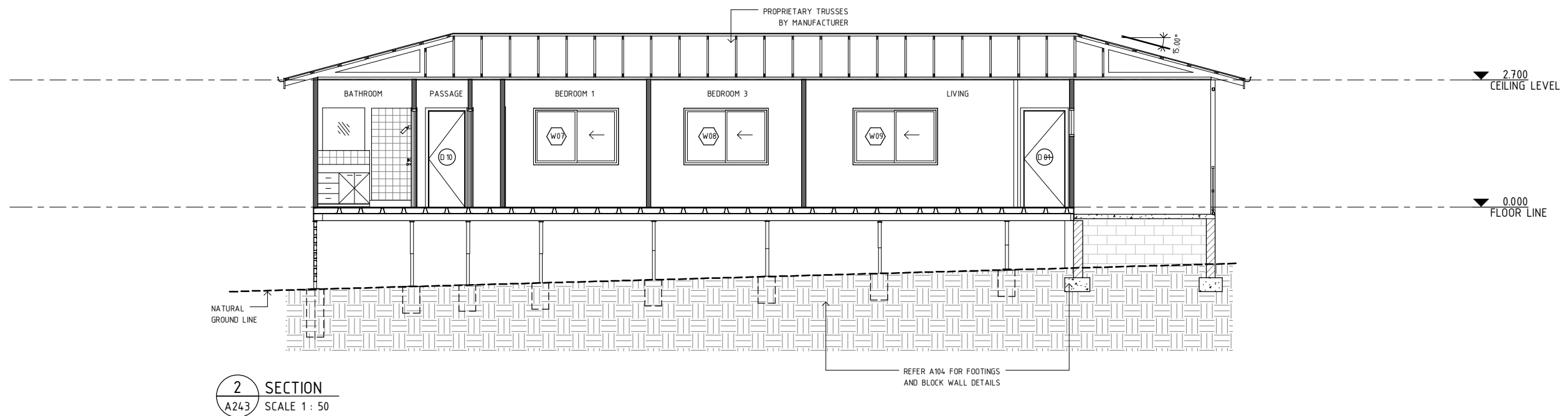
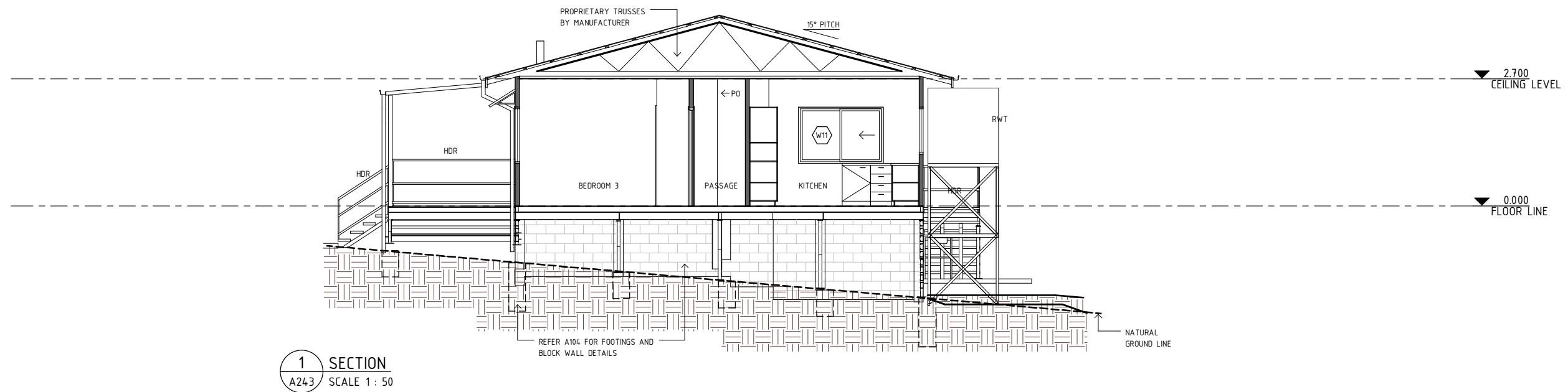
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Client	TABULAM CWP
Project	TABULAM ACDP PROGRAM
Title	LOT 101 WALKER ST TABULAM ELEVATIONS
Original Size	A1
Drawing No:	41-12221-18-A244
Rev:	0



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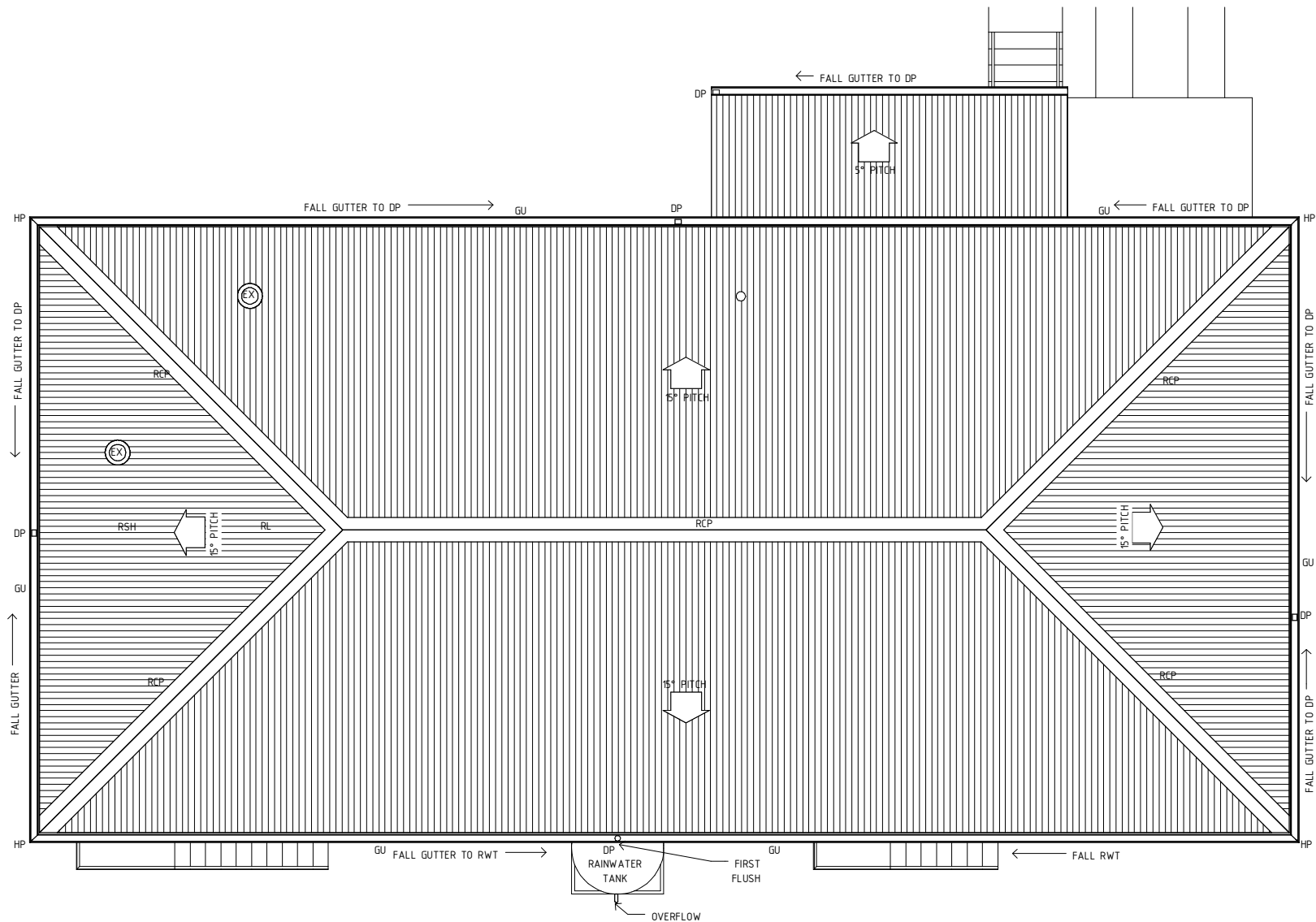
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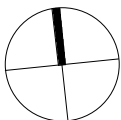
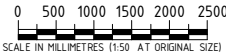
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Approved	K.HOWE*		
Date			
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Project	TABULAM ACDP PROGRAM		
Title	LOT 101 WALKER ST TABULAM SECTIONS		
Original Size	A1	Drawing No:	41-12221-18-A245
Rev:	0		



ROOF PLAN  
SCALE 1 : 50

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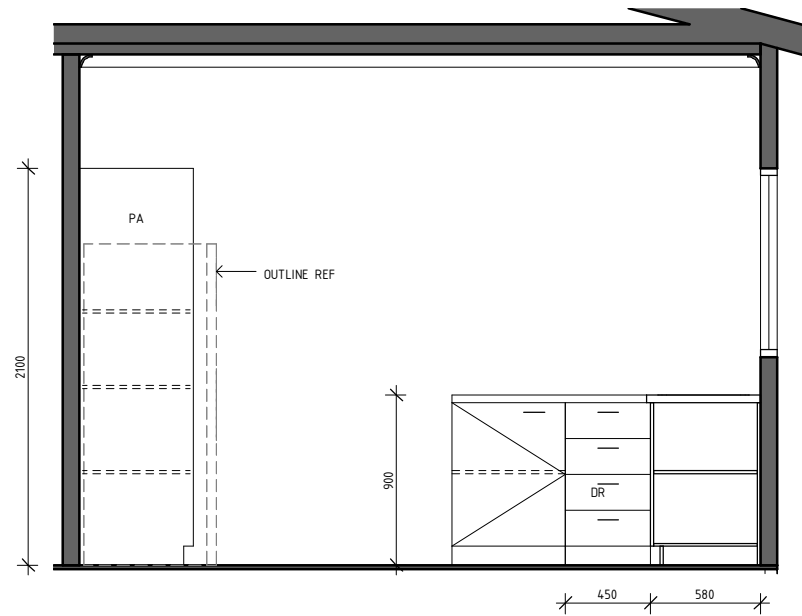
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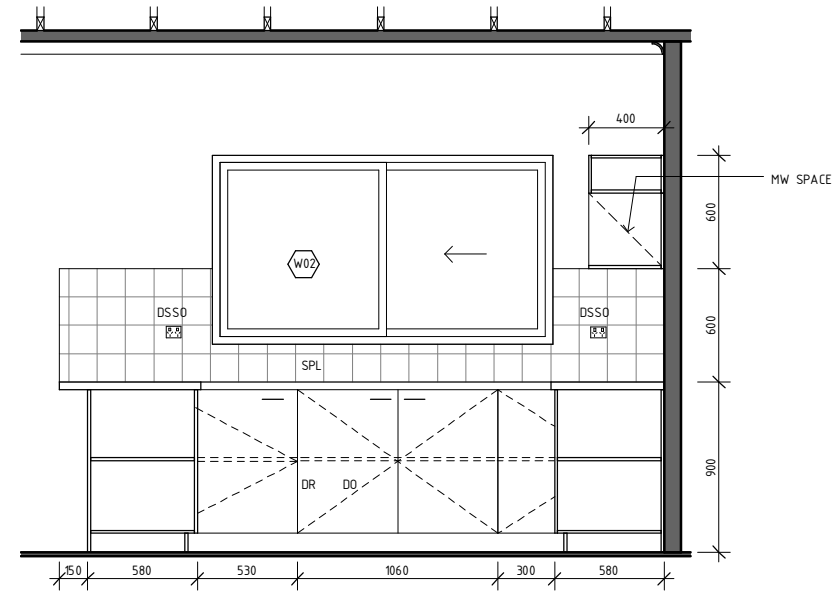
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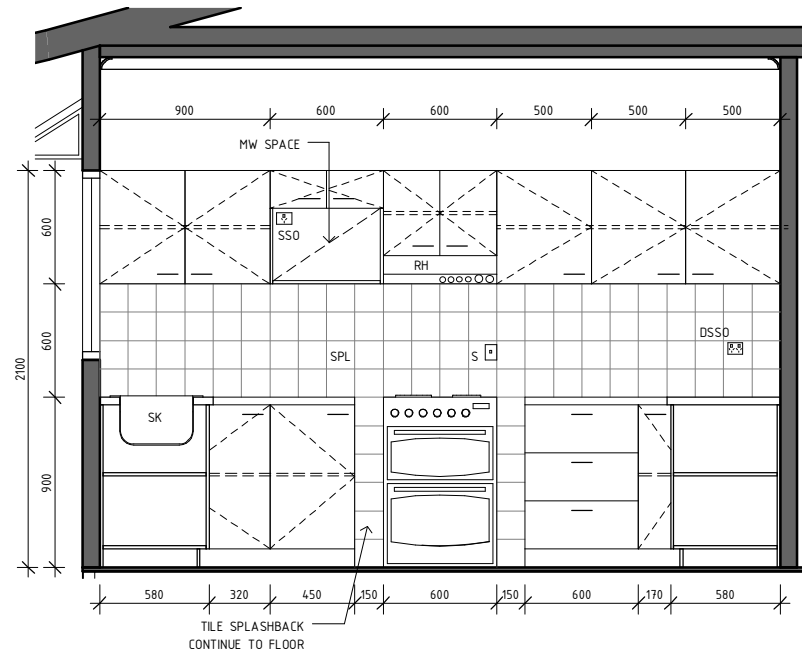
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Project	TABULAM ACDP PROGRAM		
Title	LOT 101 WALKER ST TABULAM ROOF PLAN		
Original Size	A1	Drawing No:	41-12221-18-A246
Rev:	0		



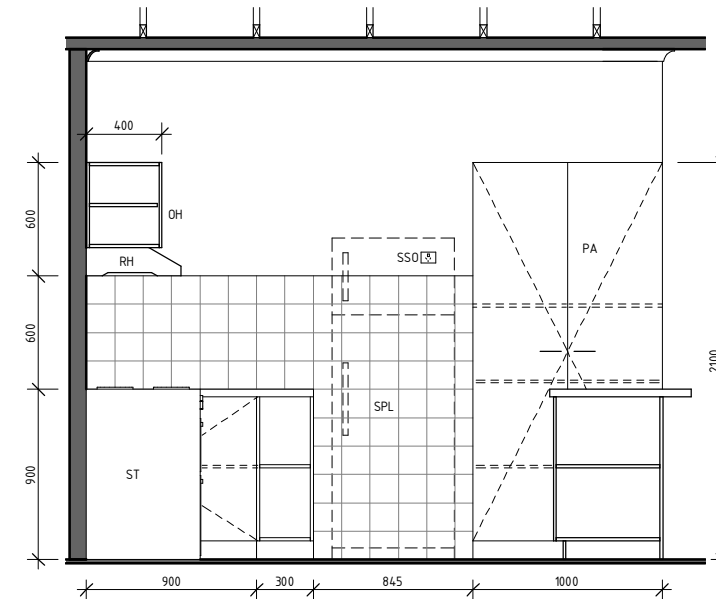
1 ELEVATION  
A24.3 SCALE 1 : 20



2 ELEVATION  
A24.3 SCALE 1 : 20



3 ELEVATION  
A24.3 SCALE 1 : 20



4 ELEVATION  
A24.3 SCALE 1 : 20

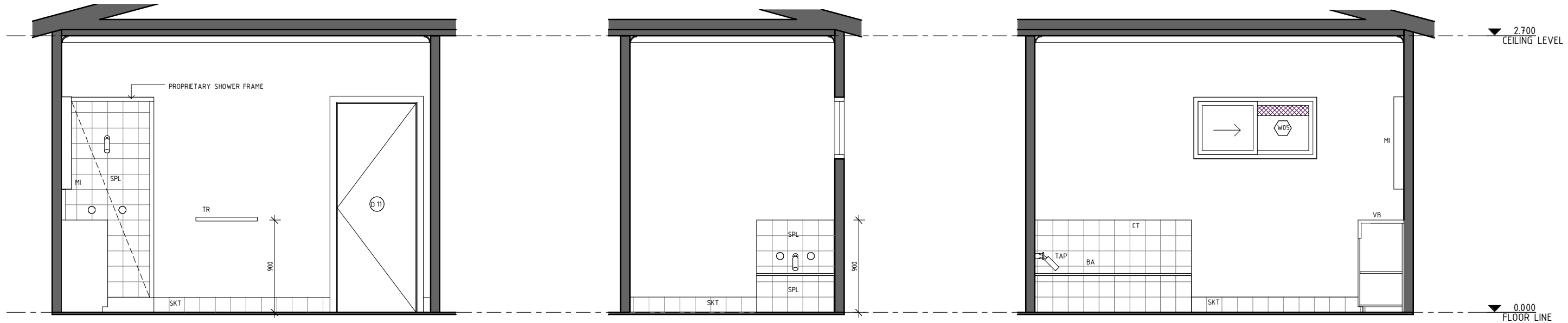
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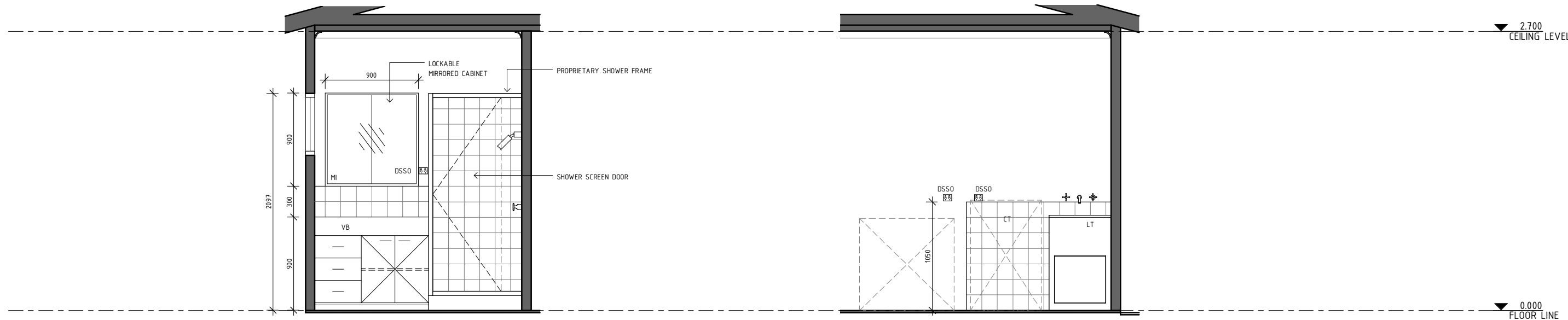
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Project	TABULAM ACDP PROGRAM	
Title	LOT 101 WALKER ST TABULAM KITCHEN ELEVATIONS	
Original Size	A1	Drawing No: 41-12221-18-A247
Rev:	0	



1 ELEVATION 05  
A243 SCALE 1 : 20

2 ELEVATION  
A243 SCALE 1 : 20

3 ELEVATION  
A243 SCALE 1 : 20



4 ELEVATION  
A243 SCALE 1 : 20

5 ELEVATION  
A243 SCALE 1 : 20

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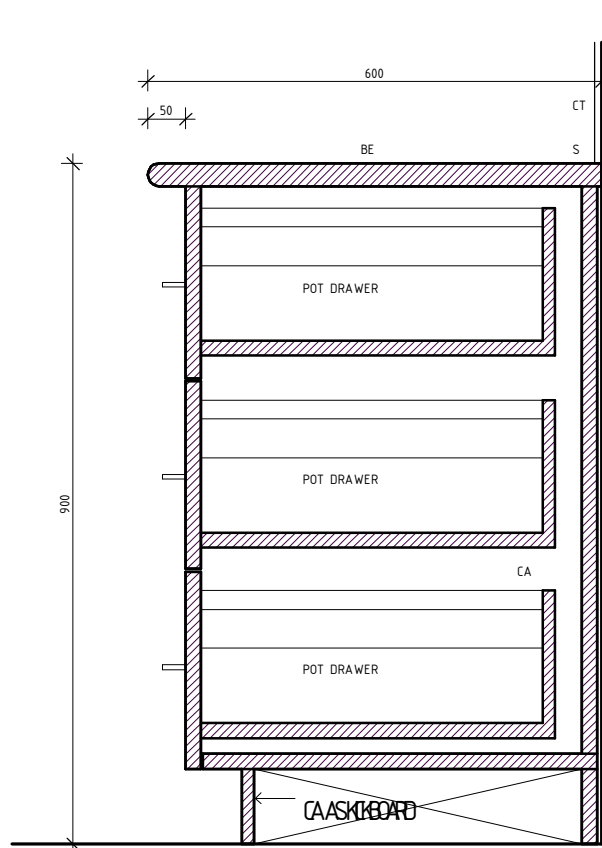
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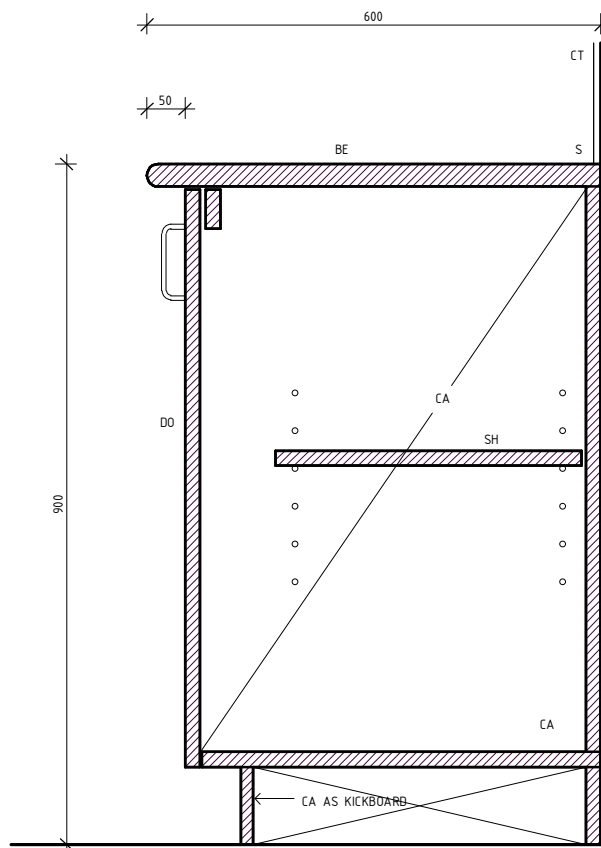
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	Date		
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Project	TABULAM ACDP PROGRAM		
Title	LOT 101 WALKER ST TABULAM WET AREAS		
Original Size	A1	Drawing No: 41-12221-18-A248	Rev: 0

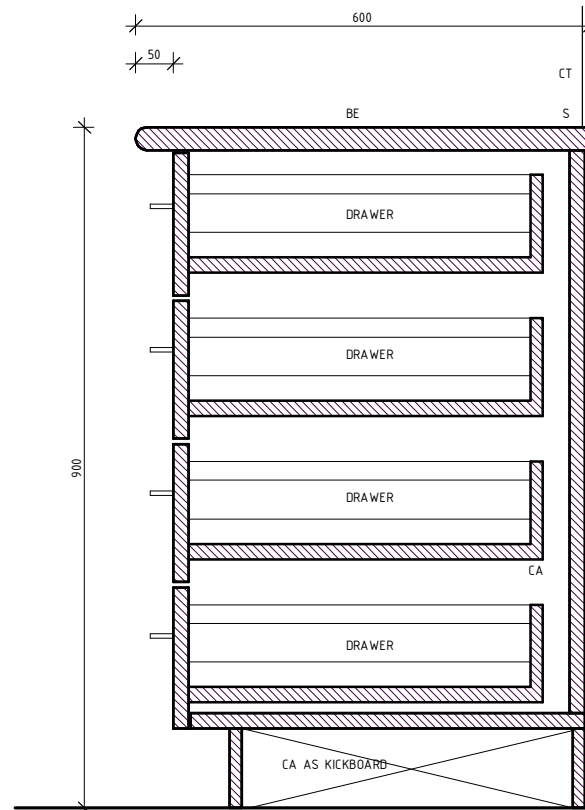




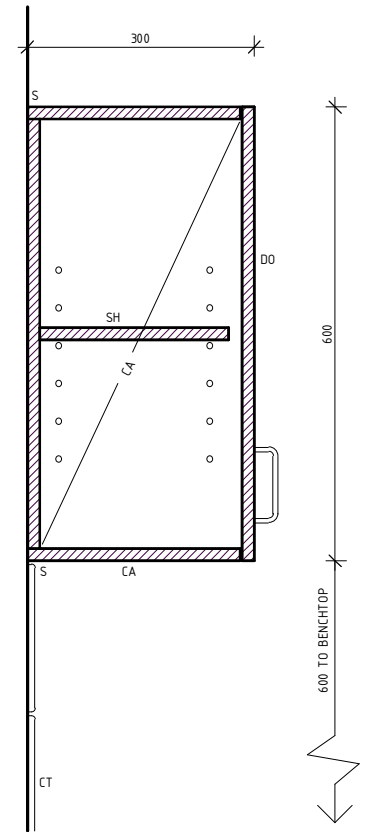
**5 POT DRAWER UNIT DETAIL**  
SCALE 1 : 5



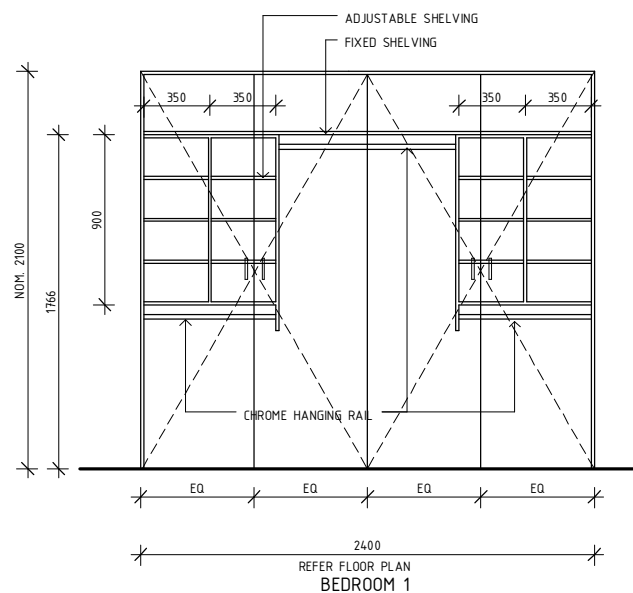
**6 FLOOR CUPBOARD DETAIL**  
SCALE 1 : 5



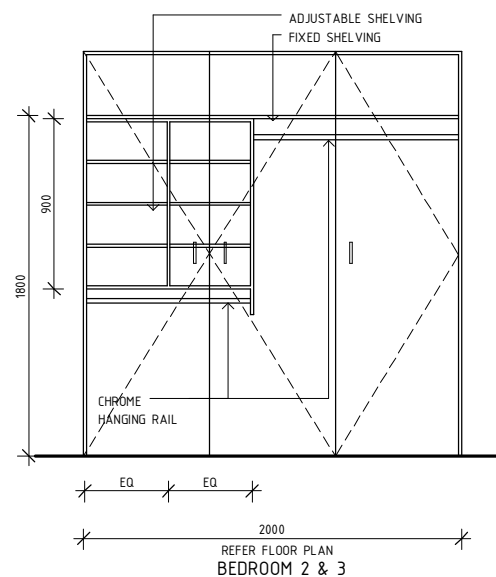
**7 4 DRAWER UNIT DETAIL**  
SCALE 1 : 5



**8 OVERHEAD CUPBOARD DETAIL**  
SCALE 1 : 5

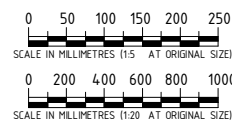


**1 WARDROBE DETAILS**  
SCALE 1 : 20



#### KITCHEN LEGEND

BE	BENCHTOP - 32mm THICK HMR PLY FINISHED ON ALL EDGES WITH LAMINATED PLASTIC. ALL LEADING EDGES TO BE BULL NOSED.	PA	PANTRY
CA	CARCASS - 16mm MELAMINE FACED MEDIUM DENSITY FIBREBOARD FINISHED ON ALL EDGES WITH 2mm PVC EDGE STRIP.	PO	POT DRAWERS SIMILAR TO 'DR'
DO	DOOR - 16mm MELAMINE FACED MEDIUM DENSITY FIBREBOARD FINISHED ON VERTICAL EDGES WITH 'L' SHAPED ROLLED EDGES AND 2mm PVC STRIP TO HORIZONTAL EDGES COMPLETE WITH SATIN CHROME 'D' SHAPED DOOR.	OH	OVERHEAD CUPBOARD - SIMILAR TO 'CA'
		REF	REFRIGERATOR
		SPL	TILE SPLASHBACK - NEW CERAMIC TILES (JOHNSON OR APPROVED EQUIVALENT), SILICONE SEAL ALL CORNERS CONTINUE TO FLOOR BEHIND STOVE
		RH	SUPPLY AND INSTALL NEW RANGEHOOD COMPLETE WITH 125 DIA COLORBOND DUCT DISCHARGING ABOVE ROOF WITH A VENTILATED COWL. PROVIDE NEW SINGLE GPO, LOCATED TO SUIT RANGEHOOD.



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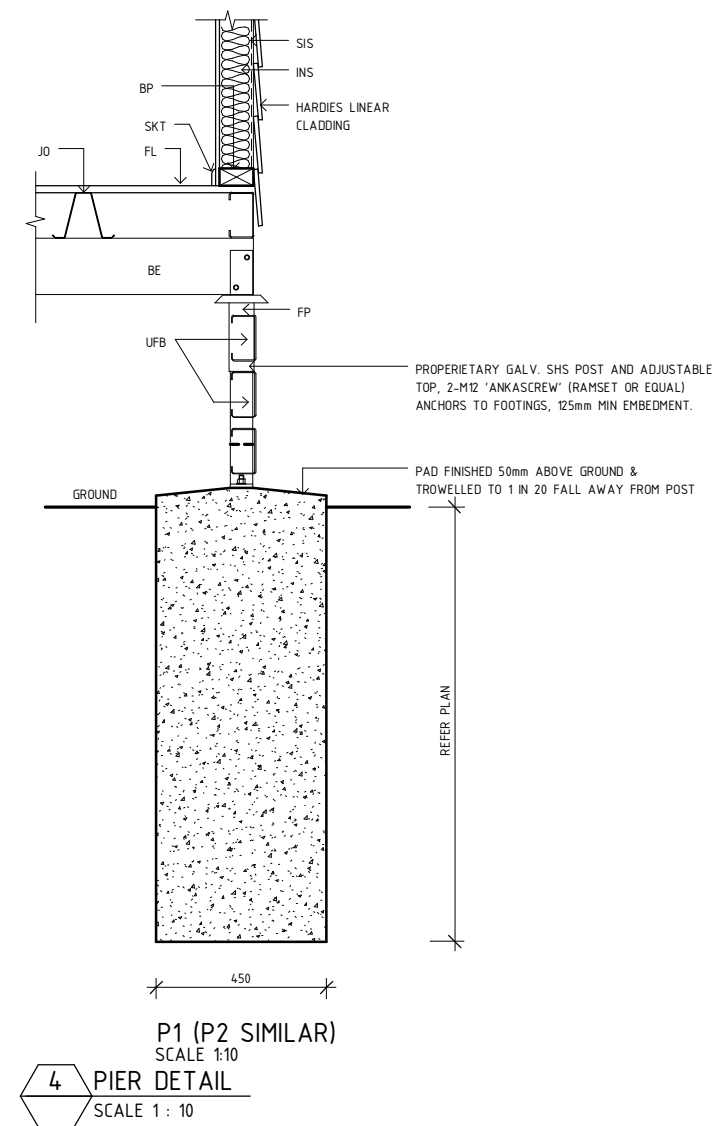
Drawn	J.TSAKOS	Designed	L.CLEM
Drafting Check	L.CLEM*	Design Check	L.CLEM*
Approved	K.HOWE*		
Date			
Scale	As indicated		This Drawing must not be used for Construction unless signed as Approved

Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 101 WALKER ST TABULAM JOINERY**

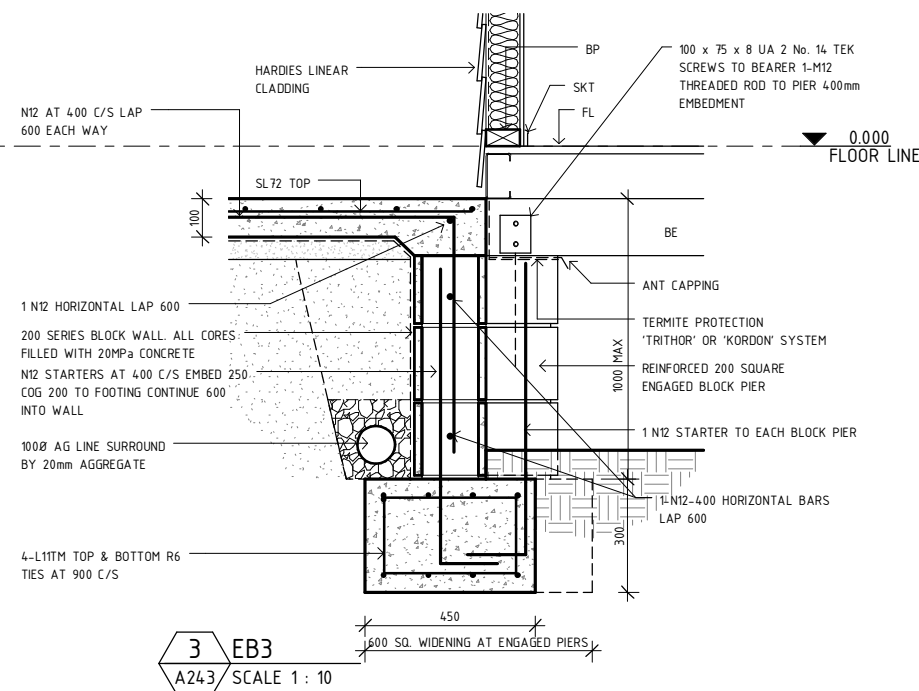
Original Size **A1** Drawing No: **41-12221-18-A249**

Rev: 0



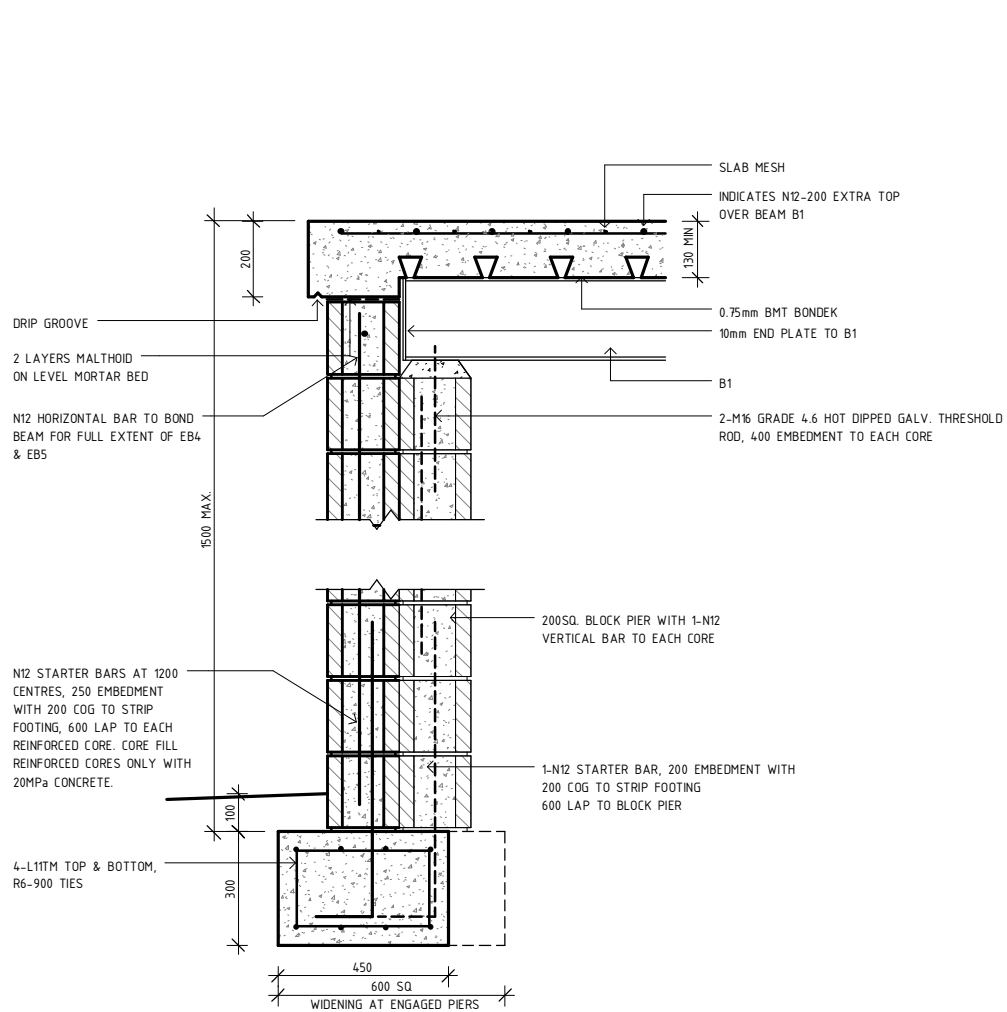


NOTE:  
FINISH TOP OF FOOTINGS P1 & P2 100mm ABOVE GROUND LINE

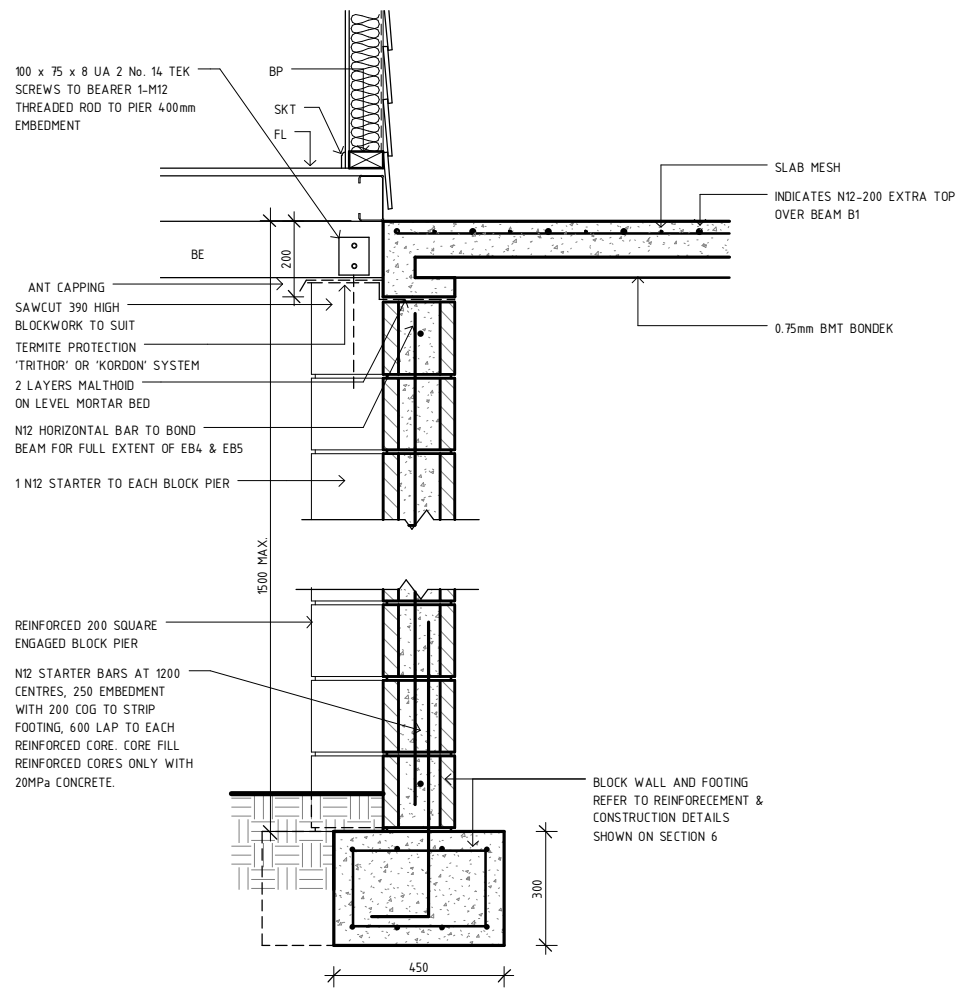


5 TYPICAL FOOTING STEP DETAIL  
SCALE 1 : 10

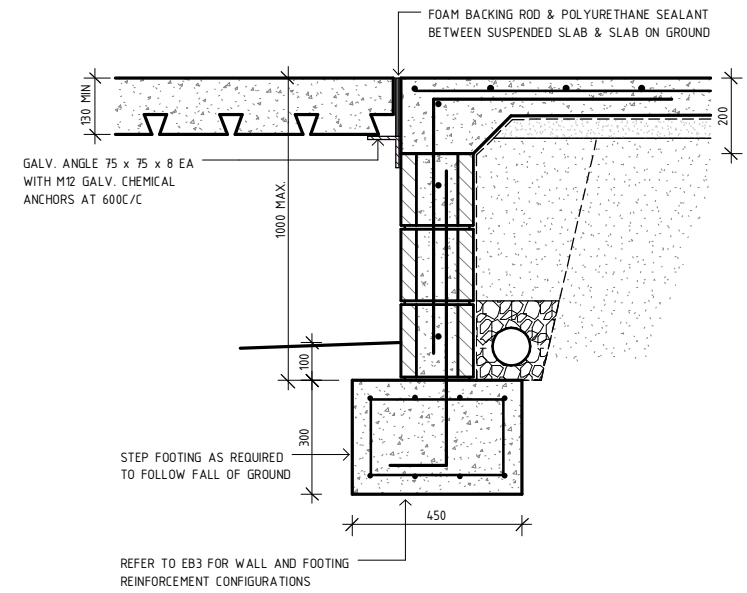
Client	<b>TABULAM CWP</b>		
Project	<b>TABULAM ACDP PROGRAM</b>		
Title	<b>LOT 101 WALKER ST TABULAM SLAB AND FOOTING DETAILS - SHEET 1 OF 2</b>		
Original Size	<b>A1 Drawing No: 41-12221-18-A250</b>		<b>Rev: 0</b>



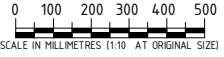
**6 EB4**  
A250 SCALE 1 : 10



**7 EB5**  
A243 SCALE 1 : 10



**8 EB6**  
A250 SCALE 1 : 10



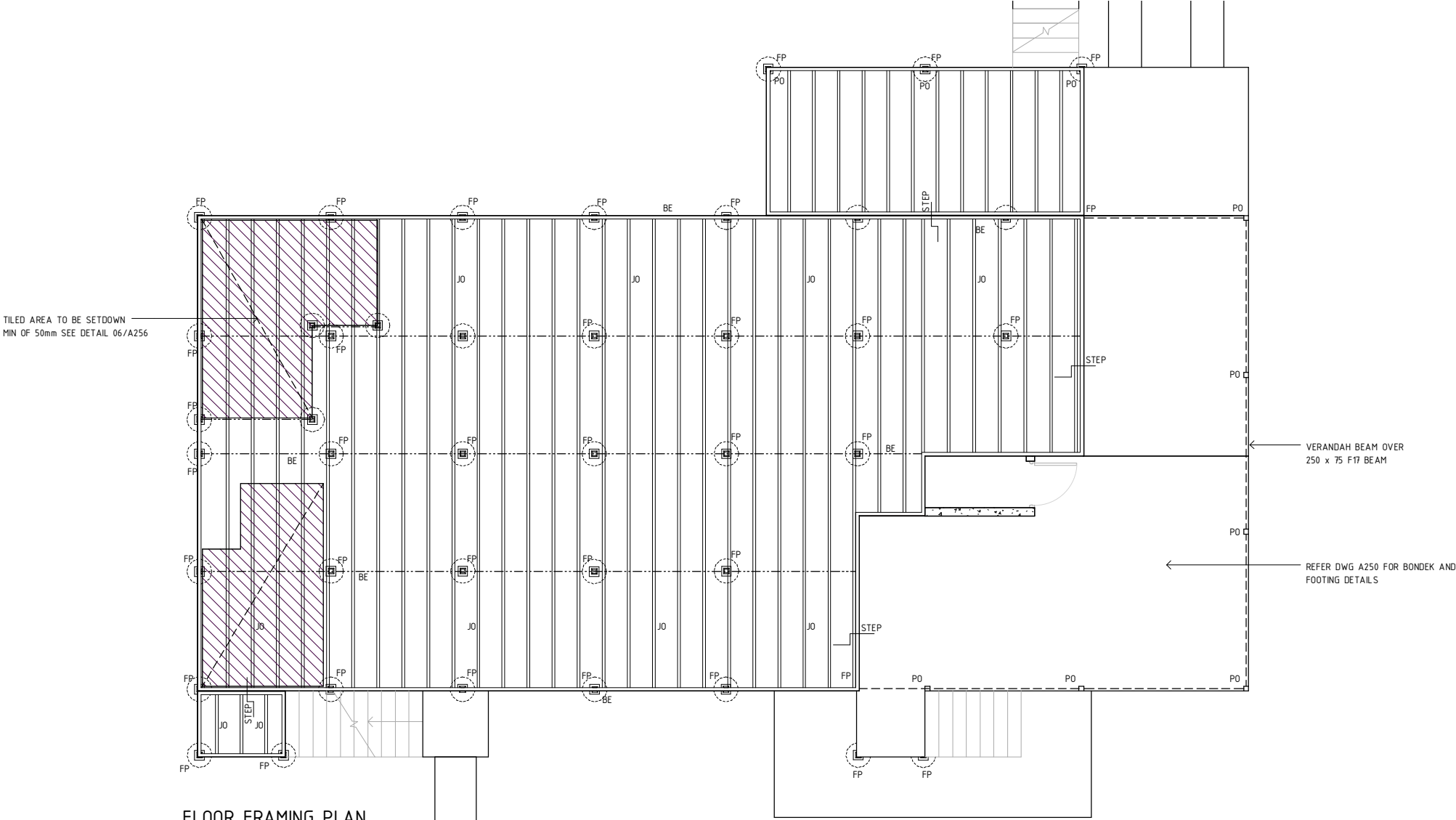
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Drafting Check **L.CLEM\*** Design Check **L.GELLATLY\***  
Approved **K.HOWE\***  
Date  
Scale **1 : 10**  
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Client **TABULAM CWP**  
Project **TABULAM ACDP PROGRAM**  
Title **LOT 101 WALKER ST TABULAM FOOTING DETAILS - SHEET 2 OF 2**  
Original Size  
**A1** Drawing No: **41-12221-18-A251**

Rev: **0**

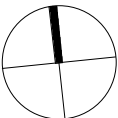
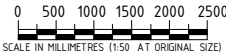


- BE LYSAGHT 150C QUIKA BEARER  
MAX SPAN 2700mm  
JO LYSAGHT 120 QUIKA JOIST  
MAX SPAN 2700mm  
LB.J LYSAGHT 120C LOADBEARING JOIST  
MAX SPAN 2700mm  
FP LYSAGHT UNI-PIER SUPPORT POST  
BOLTED TO PIERS  
EP ENGAGED PIER  
PO 100 x 100 x 4 GALV. POST  
(NOTE: ENDS TO BE SEALED)

NOTE : \*ALL FRAMING CONNECTIONS TO BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION  
\*FLOOR FRAMING AND DETAILS NOMINATED ARE BASED ON BLUESCOPE QUIKA FLOOR SYSTEM. CONTRACTOR MAY SUBMIT AN ALTERNATIVE SYSTEM FOR APPROVAL. CONTRACTOR TO PROVIDE DESIGN CERTIFICATION FOR SYSTEM USED

FLOOR FRAMING PLAN  
SCALE 1 : 50  
BRACING BETWEEN POSTS AS PER  
MANUFACTURERS DESIGN AND RECOMMENDATIONS

0	APPROVED ISSUE	JT	LJC*	KJH*	11.07.08	
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date

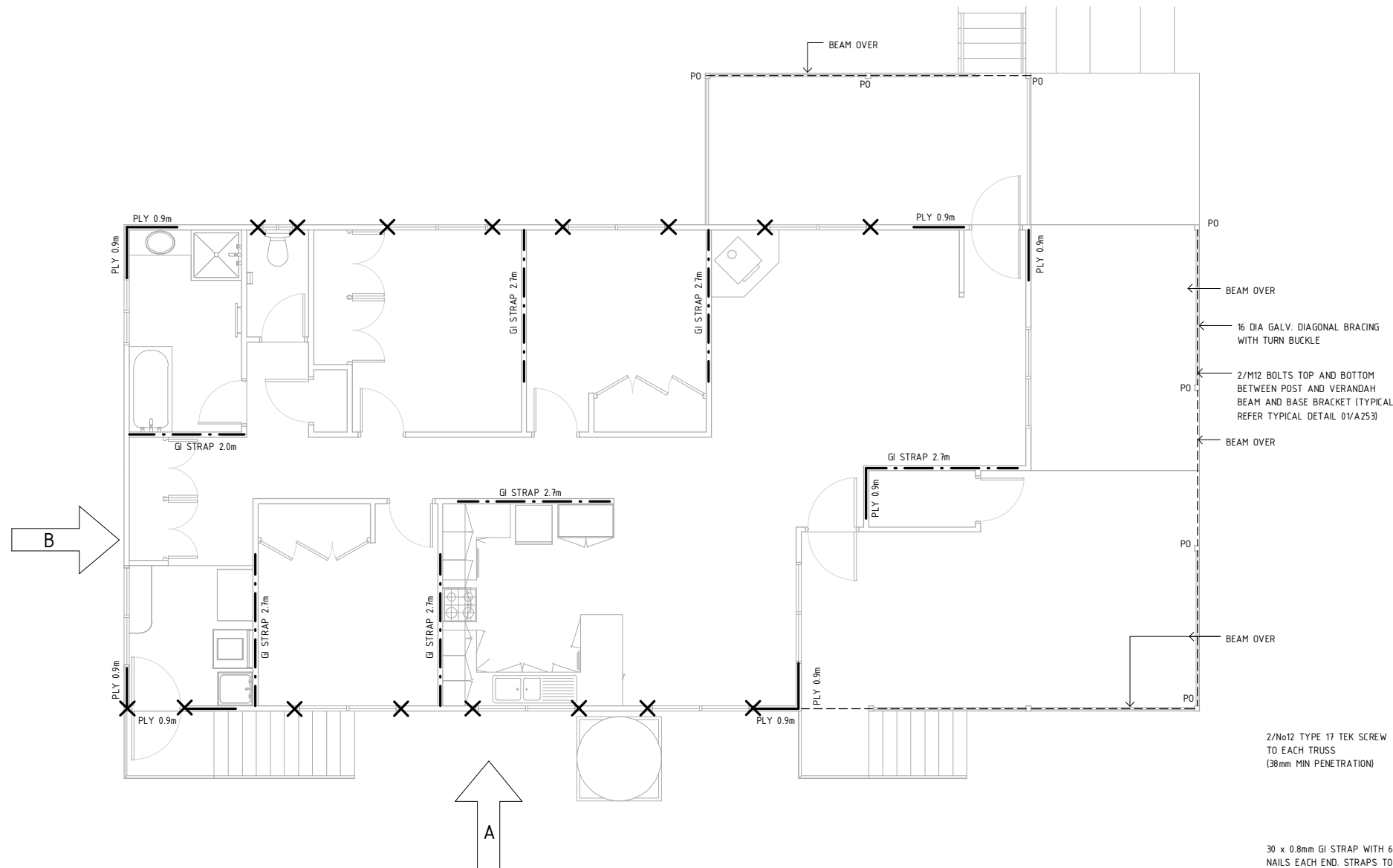


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		Approved K.HOWE*	
		Date	
		Scale 1 : 50	This Drawing must not be used for Construction unless signed as Approved

Client	TABULAM CWP		
Project	TABULAM ACDP PROGRAM		
Title	LOT 101 WALKER ST TABULAM FLOOR FRAMING PLAN		
Original Size	A1	Drawing No: 41-12221-18-A252	Rev: 0



BRACING & TIEDOWN LAYOUT  
SCALE 1 : 50

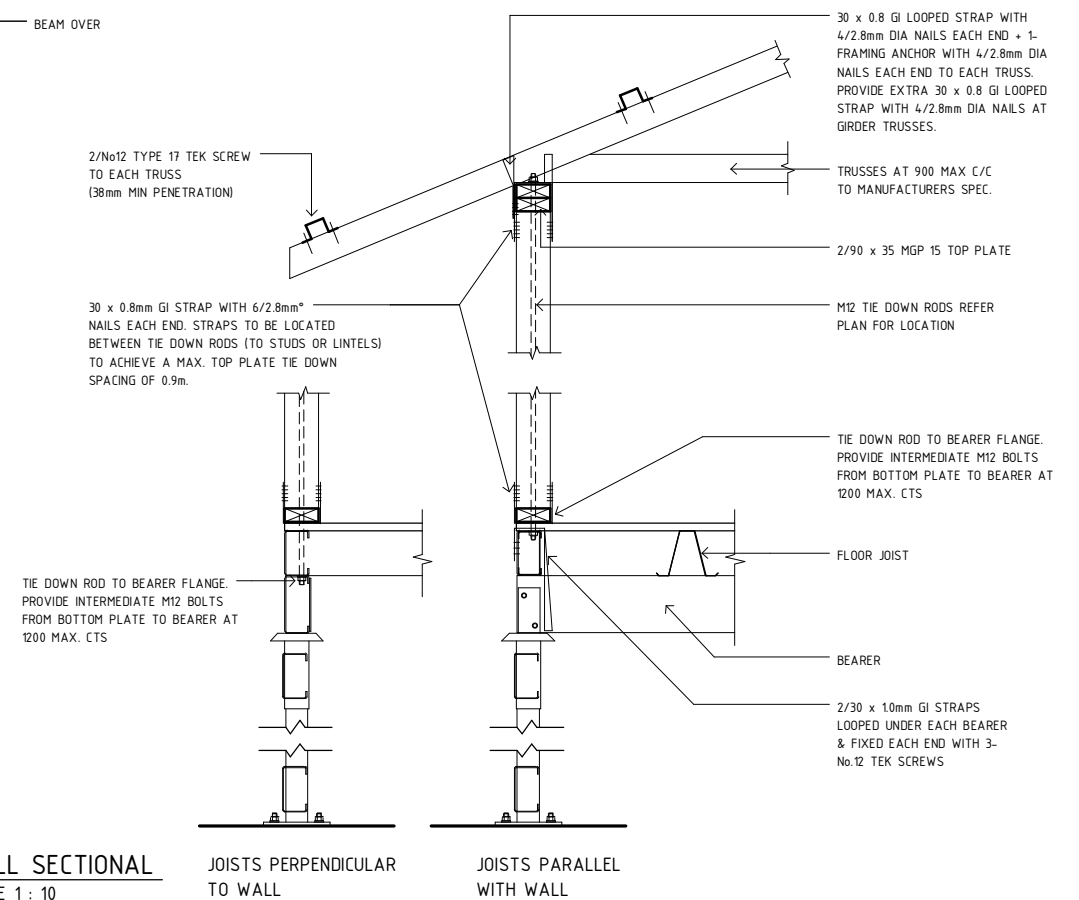
### LEGEND

- INDICATES PLYWOOD BRACING WALL  
RATED AT 6kN/m. REFER TO AS 1684.2  
(2006) TABLE 8.18 (h) METHOD B.  
LENGTH 0.9 UNLESS NOTED OTHERWISE
- INDICATES DOUBLE DIAGONAL TENSION  
GALVANIZED STEEL STRAP RATED AT  
3kN/m. REFER TO AS 1684.2 (2006)  
TABLE 8.18 (d) METHOD A.  
LENGTH 2.7m UNLESS NOTED OTHERWISE
- INDICATES M12 THREADED ROD TIEDOWN  
FROM TOP PLATE TO BEARER

### BRACING REQUIREMENTS

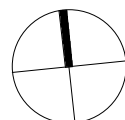
DIRECTION A  
BRACING REQUIRED : 48kN  
BRACING PROVIDED : 58kN

DIRECTION B  
BRACING REQUIRED : 20kN  
BRACING PROVIDED : 35kN



1 WALL SECTIONAL  
SCALE 1 : 10

0 500 1000 1500 2000 2500  
SCALE IN MILLIMETRES (1:50 AT ORIGINAL SIZE)



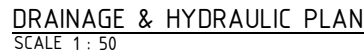
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Drafting Check	L.CLEM*	Design Check	L.GELLATLY*
Approved	K.HOWE*		
Date			
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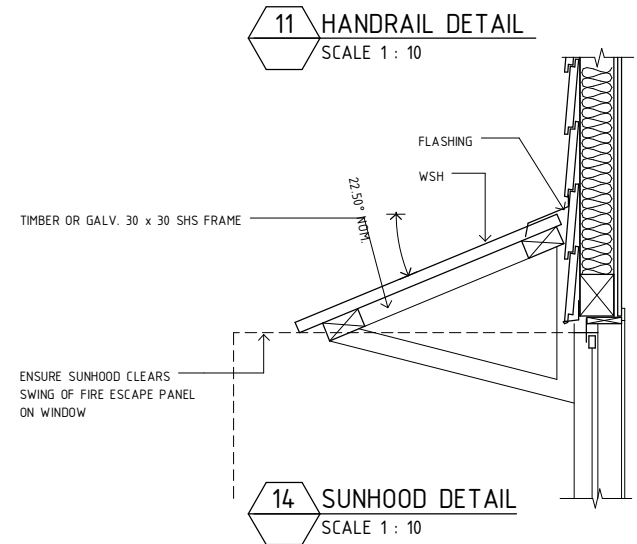
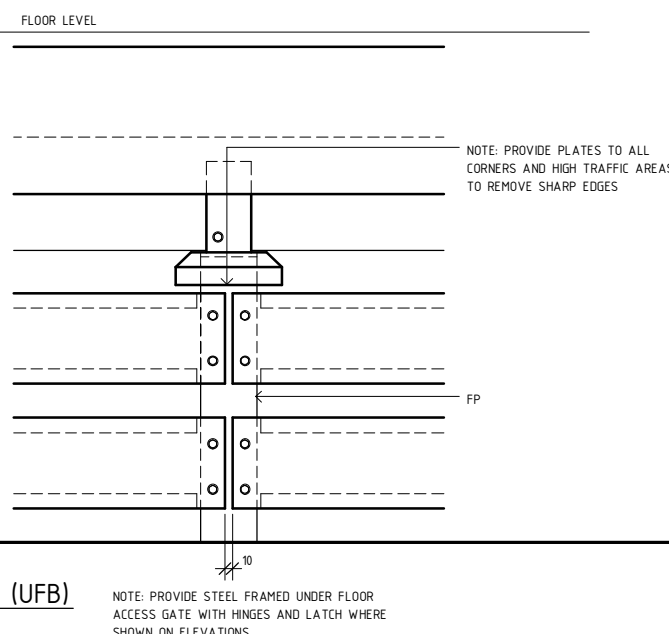
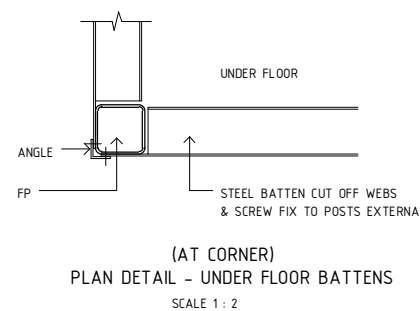
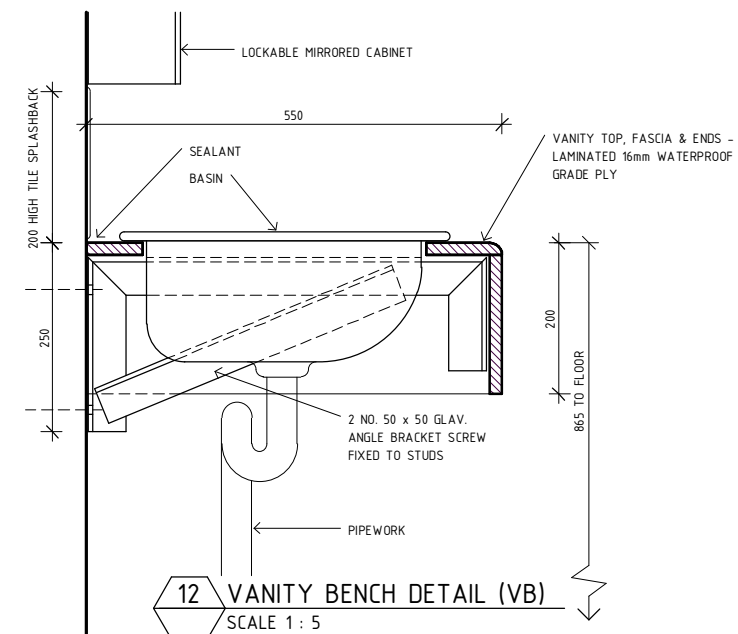
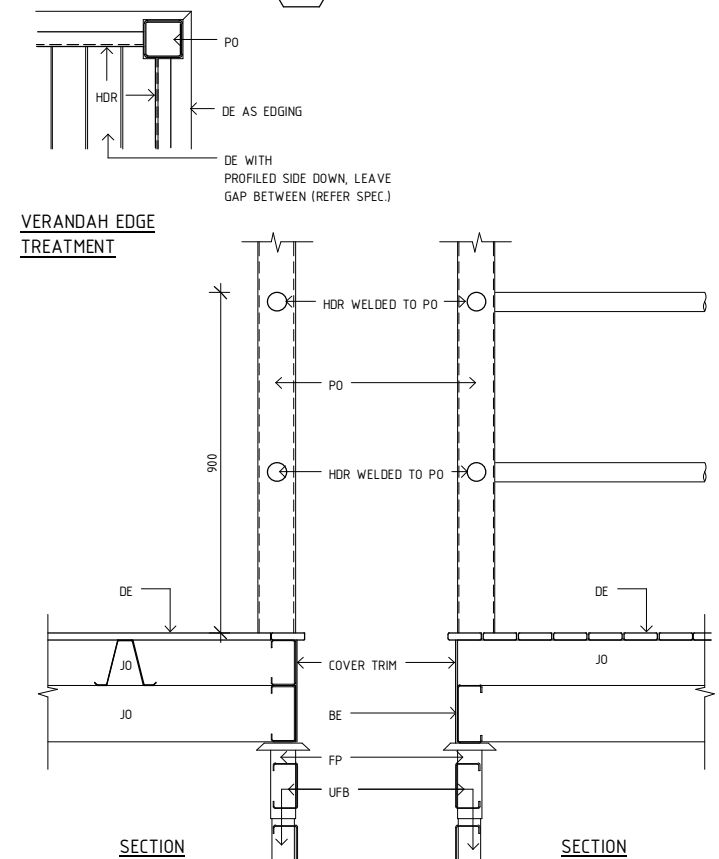
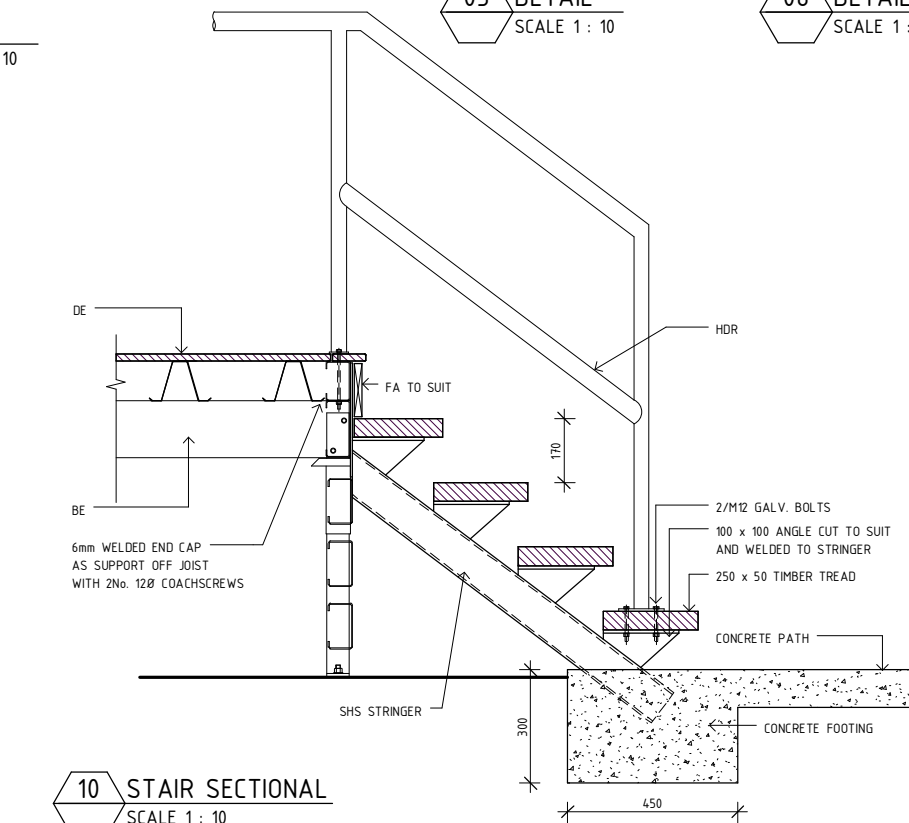
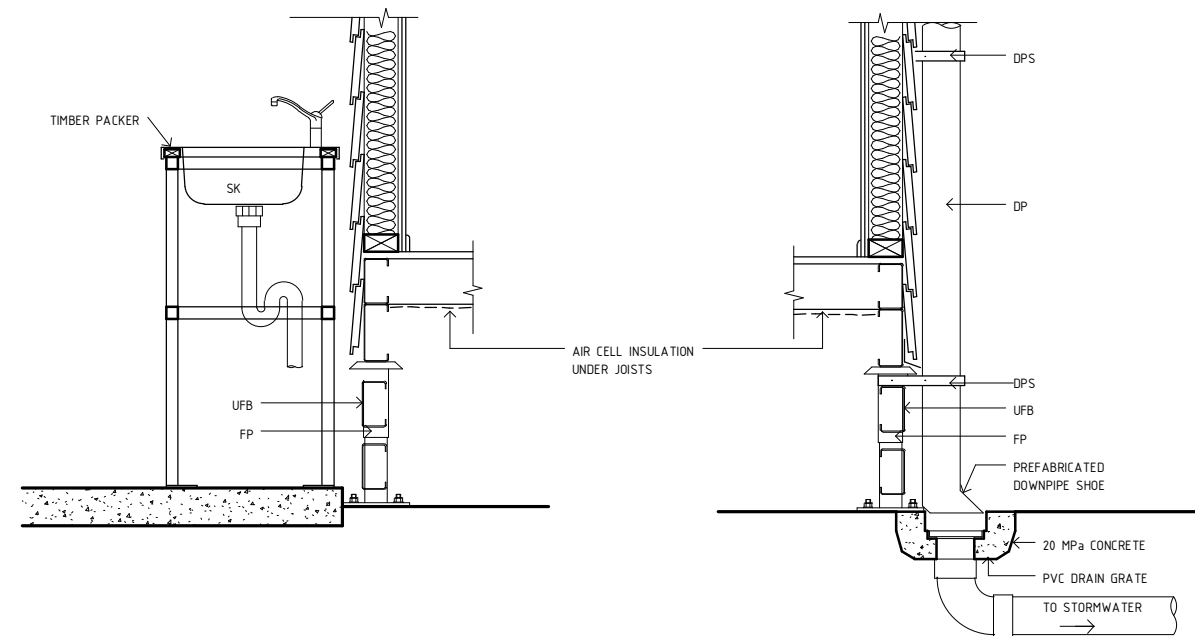
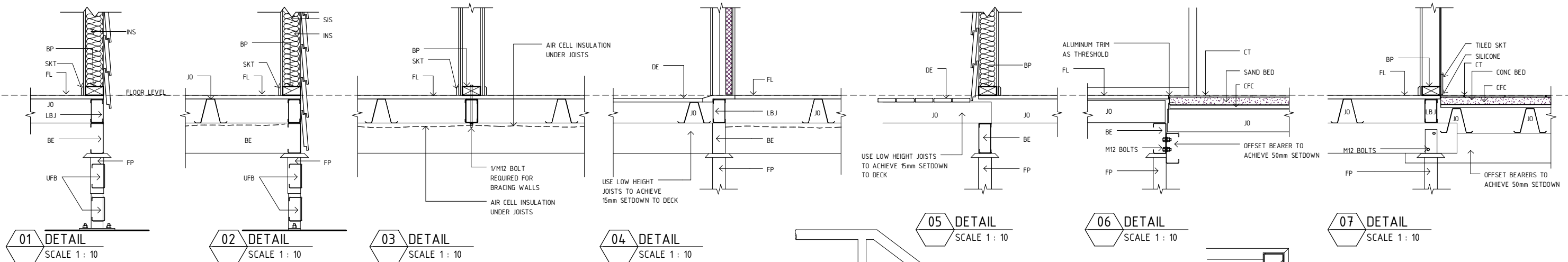
Client	TABULAM CWP
Project	TABULAM ACDP PROGRAM
Title	LOT 101 WALKER ST TABULAM WALL BRACING PLAN
Original Size	A1
Drawing No:	41-12221-18-A253

Rev: 0

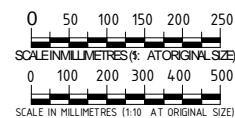








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No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date



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	Approved <b>K.HOWE*</b>	
	Date	
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Client <b>TABULAM CWP</b>	Project <b>TABULAM ACDP PROGRAM</b>	Original Size
Title <b>LOT 101 WALKER ST TABULAM CONSTRUCTION DETAILS</b>	Drawing No: <b>41-12221-18-A256</b>	Rev: <b>0</b>