Our Ref: C-05-088-1

R: 180193.

7 November 2005

9/11/05
SMB.

Pittwater Council
PO Box 882
MONA VALE NSW 1660

Dear Sir or Madam,

Re: Construction Certificate
1186 Barrenjoey Road, Palm Beach
Development Consent No. N0332/05

I refer to our engagement in respect of the above and enclose the Construction Certificate for such in accordance with the provisions of clause 142(2) of the Environmental Planning and Assessment Regulation 2000.

Please find enclosed a cheque for $30.00 being the regulated registration fee for the above as detailed in Clause 263 of the Environmental Planning and Assessment Further Amendment (Quality of Construction) Regulation 2004. It would be appreciated if a receipt in this regard could be forwarded to our firm as soon as possible.

Should you require any further information please do not hesitate to contact me.

Yours faithfully,

Tom Miskovich & Associates Pty Ltd

Encl.

tom miskovich & associates pty ltd

acn 094 366 873
abn 93 094 366 873

office

8 albion street
pennant hills
nsw 2120

ph 02 9484 6999
fax 02 9484 3400

correspondence

po box 189
pennant hills
nsw 1715

email

tma@tm-a.com.au

services

accredited certifiers

building regulations consultants

fire safety specialists

authority liaison

Mr Tom Rutherford

Alterations and additions to an existing restaurant

1186 Barrenjoey Road,
Palm Beach

construction certificate

tm-a

Reference No: C-05-088-1
Dated: 7 November 2005

tom miskovich & associates pty ltd

acn 094 366 873
abn 93 094 366 873

office

8 albion street
pennant hills
nsw 2120

ph 02 9484 6999
fax 02 9484 3400

correspondence

po box 189
pennant hills
nsw 1715

email

tma@tm-a.com.au

services

accredited certifiers

building regulations consultants

fire safety specialists

authority liaison

construction certificate

This certificate is issued by a certifying authority (a council or a private certifier) and verifies that, if the applicant carries out the proposed work in accordance with the plans and specifications that are approved, the work will comply with the Environmental Planning and Assessment Regulation 2000 as referred to in section 81A(5) of the Environmental Planning and Assessment Act 1979

1. Details of the applicant

Mr ☒ Ms ☐ Mrs ☐ Dr ☐ Other

First name	Family name	Company/Organisation
Tom	Rutherford	

Flat/street no.	Street name
1	Beach Road

Suburb or town	State	Postcode
Palm Beach	NSW	2018

Daytime telephone	Fax	Mobile
9974 1159	9918 0806	

2. Details of the development consent

Development Consent Number:	Date Consent Determined:	Consent Authority (Local Government):
N0332/05	14 September 2005	Pittwater Council

3. Decision of the certifying authority

This certificate is issued:

☒ without any conditions

☐ subject to conditions of the kind referred to in clauses 187 or 188 of the Environmental Planning and Assessment Regulation 2000

Conditions have been placed on the certificate for the following reasons:

N/A

Date of this decision

7 November 2005

4. Certification

Tom Donohoe certifies that

if the work is completed following the plans and specifications which have been approved, it will comply with the Environmental Planning and Assessment Regulation 2000 as referred to in section 81A(5) of the Environmental Planning and Assessment Act 1979.

Construction certificate no.	Date of this certificate
C-05-088-1	7 November 2005

tom miskovich & associates pty ltd

acn 094 366 873
abn 93 094 366 873

office

8 albion street
pennant hills
nsw 2120

ph 02 9484 6999
fax 02 9484 3400

correspondence

po box 189
pennant hills
nsw 1715

email

tma@tm-a.com.au

services

accredited certifiers

building regulations consultants

fire safety specialists

authority liaison

construction certificate

5. Identify the land

Flat/street no.: 1186

Street name: Barrenjoey Road

Suburb or town: Palm Beach

Postcode: 2018

Lot no& DP/MPS no.: Lot 1, DP 1050253

Section:

Volume/folio:

6. Description of works

Building classification & BCA amendment: 6

Building works considered under the deemed to satisfy provisions of the BCA:

Type of Construction (BCA): N/A

Description of the building or part of the building: Alterations and additions to an existing restaurant

7. Signature

Donohoe

Name of certifier: Tom Donohoe

For enquiries please contact the project building surveyor: Tom Donohoe

Accreditation body of the certifier: DIPNR

Accreditation no. of the certifier: P0064

8. Attachments

certificate application details	annexure 1
documents that form part of this certificate	annexure 2
other supporting documentation	annexure 3
BCA – summary	annexure 4
fire safety schedule (existing and proposed)	annexure 5

tm-a

annexure 1

certificate application details

tm-a

certificate application form

tom miskovich & associates pty ltd

acn 094 366 873
abn 53 094 366 873

1. Service Requested

I/We the undersigned hereby make application to tom miskovich & associates pty ltd to undertake the following service:

(Place a cross in the box next to the service sought)

- ☒ The issue of a Construction Certificate.
- ☒ The modification (under clause 148 of the EP & A Regulations 2000) of previously issued Construction Certificate
- ☐ The issue of a Complying Development Certificate.
- ☒ The issue of an Occupation Certificate for ☒ interim, ☒ final, ☐ change of use, ☐ occupation/use of a new building.
- ☒ To appoint Tom Miskovich, DIPNR Accreditation No. 2024/Tom Donohoe, DIPNR Accreditation No. P0064 as our "Principal Certifying Authority".
- ☒ To have staff of tom miskovich & associates pty ltd to undertake critical stage inspections of the proposed building works as nominated by them during the certification process.

2. Details of the applicant (note: the applicant must be the person who has the benefit of the development consent (as required by section 109E of the EP & A Act 1979))

Mr ☑ Ms ☐ Mrs ☐ Dr ☐ Other [ ]

First name: Tom
Family name: [illegible]
Company/Organisation: [illegible]
Flat/street no.: 1
Street name: [illegible] Road
Suburb or town: [illegible]
State: NSW
Postcode: 2018
Daytime telephone: 99 741159
Fax: 9918 0806
Mobile: 0412642734
Email: tom@[illegible].com.au

office

8 albion street
pennant hills
nsw 2120

ph 02 9484 8999
fax 02 9484 3400

correspondence

p.o. box 189
pennant hills
nsw 1715

email

tma@tm-a.com.au

3. Identify the land

Flat/street no.: 1
Street name: [illegible] Road
Suburb or town: [illegible]
Postcode: NSW
Lot no.:
Section:
DP/MPS no.:
Volume/folio:

4. Estimated cost of the development

$ 80,000 including GST

services

accredited certifiers

building regulations consultant

fire safety specialists

authority liaison

certificate application form

5. Describe the development

What type of work do you propose to carry out?

Building work ☒

Subdivision work ☐

Describe the work

EXTENSION TO EXISTING BUILDING

For building work, what is the class of the building under the Building Code of Australia?

10

This can be found on the development consent

6. For purposes of an Occupation Certificate

Development Consent Number: N0332/05	Date Consent Determined 14-9-05	Consent Authority (Local Government) PITTWATER COUNCIL
Construction Certificate Number:	Date Construction Certificate issued	Accredited Certifier / Consent Authority
Complying Development Certificate Number: -	Date Complying Development Certificate issued -	Accredited Certifier / Consent Authority -

7. Signatures

The owner(s) of the land must sign this application.

As the owner(s) of the above property, I/we consent to this application:

Signature

Name MALCOLM DAVID

Date 11-10-05

Signature

Name JENNIFER DAVID

Date 11-10-05

The applicant, or the applicant's agent, must sign the application.

Signature

Name, if you are not the applicant

In what capacity are you signing if you are not the applicant

Date 11-10-05

tm a

certificate application form

Schedule to application for a construction certificate

Please complete this schedule. The information will be sent to the Australian Bureau of Statistics.

All new buildings

Please complete the following:

- Number of storeys (including underground floors): 1
- Gross floor area of new building (m^2): 87 m^2
- Gross site area (m^2): 948 m^2

Residential buildings only

Please complete the following details on residential structures:

- Number of dwellings to be constructed: NONE
- Number of pre-existing dwellings on site: NONE
- Number of dwellings to be demolished: NONE
- Will the new building(s) be attached to other new buildings? Yes ☐ No ☑
- Will the new building(s) be attached to existing buildings? Yes ☑ No ☐
- Does the site contain a dual occupancy? (NB dual occupancy = two dwellings on the same site) Yes ☐ No ☑

Materials – residential buildings

Please indicate the materials to be used in the construction of the new building(s).

Walls		Code	Roof		Code	Floor		Code	Frame		Code
Brick (double)	☐	11	Tiles	☑	10	Concrete or slab	☐	20	Timber	☑	40
Brick (veneer)	☐	12	Concrete or slate	☐	20	Timber	☑	40	Steel	☐	60
Concrete or slabs	☐	20	Fibre cement	☐	30	Other	☐	80	Aluminium	☐	70
Fibre cement	☐	30	Steel	☑	50	Not specified	☐	90	Other	☐	80
Timber	☑	40	Aluminium	☐	70				Not specified	☐	90
Curtain glass	☐	50	Other	☐	80						
Steel	☐	60	Not specified	☐	90						
Aluminium	☐	70									
Other	☑	80									
Not specified	☐	90									

tm-a

annexure 2

documents that form part of this certificate

documents that form part of this certificate

Architectural documentation & specification prepared by **Oceania Clarke**.

Drawing No.	Revision	Title	Date
A01	B	Plan, Elevations, Section	10-9-05
A03	B	Kitchen Layout & Specification	9-9-05

Structural documentation & specification prepared by **Meinhardt**.

Drawing No.	Revision	Title	Date
SK2	A	Part Roof Plan	30-9-05
SK1	A	Footing Plan	30-9-05

Hydraulic documentation & specification prepared by **Thomson Kane**.

Drawing No.	Revision	Title	Date
DAH-00	CC	Cover sheet, Legend, and Drawing Schedule	1-11-05
DAH-01	CC	Floor Plan, Hydraulic Services	1-11-05

Specifications

- Building Specification prepared by Oceania Clarke Pty Ltd;
- Kitchen Performance Specification, prepared by Oceania Clarke Pty Ltd;
- Extract from James Hardie catalogue for external fire rated wall system JH-214 (pgs 22 & 24)

Design statements and certificates as provided in annexure three (3) of this document

Discipline	Certificate/statement reference	Prepared by	Dated
Structure	-	Meinhardt (NSW) Pty Ltd	31-10-05
Hydraulic Design	-	Thomsonkane Pty Ltd	7-11-05

annexure 3

other supporting documentation

Level 2, 400 Kent Street
Sydney NSW 2000
Australia
http://www.meinhardt.com.au

Phone: (612) 9699 3088
Fax: (612) 9319 7508

Meinhardt (NSW) Pty Ltd A.C.N. 051 627 591
Consulting Engineers
Planners Managers

H:\PROJECTS\S\9000s\9594\9594-0510-003-Crt1-Tom Miskovich.doc
31 October 2005

Tom Miskovich & Associates Pty Ltd
PO Box 189
PENNANT HILLS NSW 1715

ATTENTION: TOM DONAHOE

Dear Sir

RE: BEACH ROAD RESTAURANT, PALM BEACH
1186 BARRENJOEY ROAD, PALM BEACH
STRUCTURAL DESIGN CERTIFICATE

Meinhardt NSW has been engaged as the Structural Engineers for the above project.

We certify that this design as shown in our sketches 9594 – SK1 and SK2 is in accordance with normal engineering practice and principles and the relevant clauses of the BCA and the relevant codes of the Australian Standards.

This certificate shall not be construed as relieving any other party of their responsibility.

Yours faithfully
MEINHARDT (NSW) PTY LIMITED

Denis Young
Managing Director

HYDRAULIC SERVICES

thomsonkane Pty Ltd
ABN 97 109 803 849
281 Pacific Highway
North Sydney NSW 2060
Ph. 02 9955 0788
Fax. 02 9954 5532
Email: tk@thomsonkane.com.au

thomsonkane

CERTIFICATION OF DESIGN

SUBJECT PREMISES: **1186 BARRENJOEY ROAD, PALM BEACH**
Lot 1 DP 1050253
DA N0332/05

Date: 7 November 2005

Pursuant to the provisions of Section 92 of the Environmental Planning and Assessment Act 1979, I hereby certify that the design of the Hydraulic Services nominated in this Certification meet the current requirements of the Building Code of Australia and in particular is designed in accordance with the following:

Element	BCA Requirement	Code designed to
Stormwater Drainage System	-	AS 3500, Pittwater Council DA Conditions B1
Rainwater Tank	-	AS 3500, Pittwater Council DA Conditions B2

I am an appropriately qualified and competent person in the area of Stormwater Drainage and hydraulic & fire services and as such can certify that the designs nominated in this Certificate comply with the Building Code of Australia, relevant Codes and Council DA Conditions.

The Company possesses Indemnity Insurance to the satisfaction of the building owner.

Full Name of Certifier: Allan Thomson
Qualifications and Experience: AHSCA, MIPA
Address of Certifier: 281 Pacific Highway, North Sydney NSW 2060
Telephone Numbers: Bus: (02) 9955 0788 **Mob:** 0412 216 281 **Fax:**(02) 9954 5532

Signed: _____ Date: 07/11/05

Allan Thomson AHSCA, MIPA
Director

RECEIVED
- 7 NOV 2005
BY:.....

Ridgway Council

OFFICIAL RECEIPT

3. External Walls

3.1 Overview

Where the *BCA* requires an external wall to be fire rated, an appropriate external wall can be created using James Hardie external cladding products.

To maintain the superior level of sound isolation achieved by using the James Hardie Preferred System described in Section 2, and to minimise the effects of externally generated noise, acoustic insulation between the studs should be considered. This insulation will generally also offer thermal benefits.

Timber framed walls may be used to meet this requirement and are appropriate where it is advantageous for the wall to be lightweight or where other walls of the building are of framed construction.

3.2 Fire Separation

The *BCA* Part 3.7.1 Fire requires that the external walls of Class 1 Buildings that are within 900mm of an allotment boundary (other than the boundary adjoining a public road or other public space) or external walls that are within 1.8m of another building on the same allotment (other than an appurtenant Class 10 Building or a detached part of the same Class 1 Building), shall have a FRL of 60/60/60.

Where Class 2 and 3 Buildings are of Type C construction within 1.5m from any fire source feature to which they are exposed, the external walls are required to have a FRL of 90/90/90. Refer to the *BCA* Specification C1.1 Clause 5 for further details.

The above information may be used as a guide to, but not as a substitute for, the *BCA*.

The *BCA* is subject to regular amendments and individual design may result in variation to the *BCA* requirements.

3.3 Design Requirements

3.3.1 Vapour Permeable Sarking

Vapour permeable sarking must be installed in the outside linings, between the Villaboard™ Lining and the Water and Fire Resistant plasterboard. The vapour permeable sarking must be a breather type sarking eg ACI Sisalation 499 or Tyvek Radiant Barrier™.

3.3.2 External Layer

The external layer may be any of the range of James Hardie fibre cement external sheet products which are 6mm or more in thickness, or plank products which are 7.5mm or more in thickness, ie HardiTex™ Base Sheet, Hardiflex™ Sheets, PanelClad™ Sheets, HardiPlank™ Cladding or PrimeLine™ Weatherboards.

3.3.3 Load Bearing Capacities

The load bearing capacities of the walls described in this manual are:

- Single stud walls - 15 kN per lin. m.
- Staggered and double stud walls - 20 kN per lin. m.

All tests were conducted using F5 grade timber.

3.4 Construction Details

3.4.1 General

Fire rated walls must not be supported on a non-fire rated structure. The wall can be supported on a concrete floor or masonry.

The linings must cover the entire wall on both sides, except in Class 1 Buildings, where the external fire protection need only extend to the eaves lining provided the eaves lining is non-combustible. For FRL 60/60/60 see Figure 33 and for FRL 90/90/90 see Figure 34.

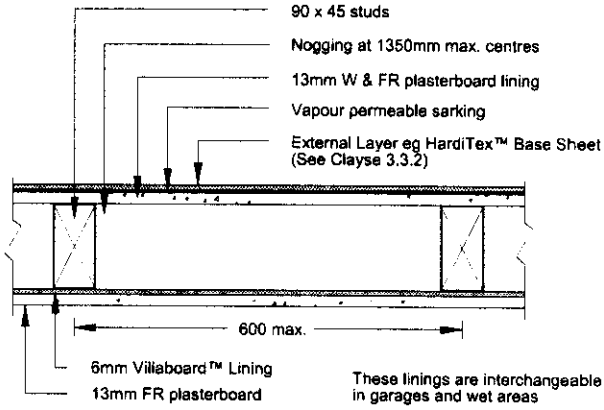


Fig. 33 External Wall FRL 60/60/60

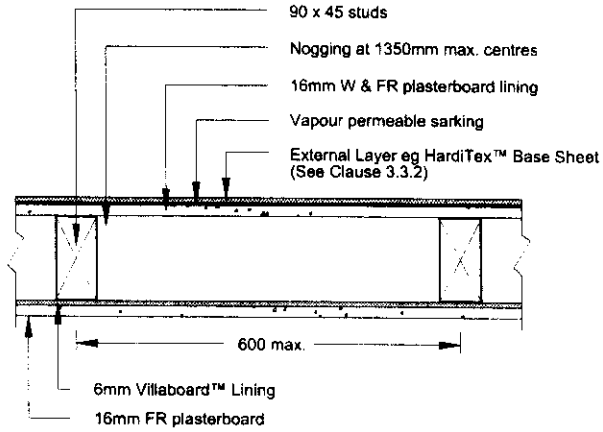


Fig. 34 External Wall FRL 90/90/90

3.6 External Wall Systems Summary

3.6.1 General

The charts below set out the materials required to achieve a range of James Hardie external wall systems with Fire Resistance Levels (FRLs) of 60/60/60 and 90/90/90. Acoustic performance data is also provided for each system. A guide to the elements contained in these charts is shown in Clause 1.6.

JH - 214

FRL
60/60/60

STC
48 - 51

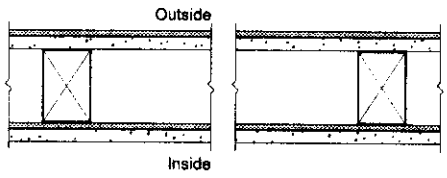
Rw
49.1 - 51.7

Load Bearing

Inside:
- 6mm Villaboard™ Lining underlay
- 13mm Fire Resistant plasterboard face layer

Outside:
- 13mm Water and Fire Resistant plasterboard underlay
- Sarking (see Clause 3.3.1)
- HardiTex™ Base Sheet as the external layer or see Clause 3.3.2
- Timber studs - single

Note: The order of the internal linings can be interchanged



	Stud Depth mm	
	90	
Cavity Infill	**STC**	**Rw**
1. Nil	48†	49.1
2. Fibreglass	51°	51.7
3. Polyester	50°	50.8
Wall Width mm	128	
Wall Mass kg/m²	47	

facsimile

	Company	Attention	Fax Number:
To:	Pittwater Council		9970 7150
CC:	Beach Road Restaurant	Tom Rutherford	9918 0806
CC:	Oceania Clarke	Stuart Clarke	9555 6611
Our ref:	C-05-088-1	Date:	7 November 2005
From:	Tom Donohoe	Pages:	7
		(incl cover sheet)	

FAXED
7 NOV 2005
BY:

Re: PCA Notification

1186 Barrenjoey Road Palm Beach

This facsimile is confidential and intended for the named addressee(s). It may contain legally privileged information. If you receive this facsimile in error please advise us immediately.

Message:

To whom it may concern,

Please find attached the following documents associated with section 81A of the Environmental Planning and Assessment Act 1979:

- Notice to commence works form, and
- Copy of application confirming nomination of PCA by person having benefit of development consent.

Should you need to discuss anything in this regard please do not hesitate to contact me.

Regards,

Tom Donohoe

ORIGINAL IN POST: ~~YES~~ NO

tom miskovich & associates pty ltd

acn 094 366 873
abn 93 094 366 873

office

8 albion street
pennant hills
nsw 2120

ph 02 9484 6999
fax 02 9484 3400

correspondence

p.o. box 189
pennant hills
nsw 1715

email

tma@tm-a.com.au

services

accredited certifiers

building regulations consultant

fire safety specialists

authority liaison

annexure 4

building code of australia summary

Building Code of Australia – Compliance Details

(Building Code of Australia 2005)

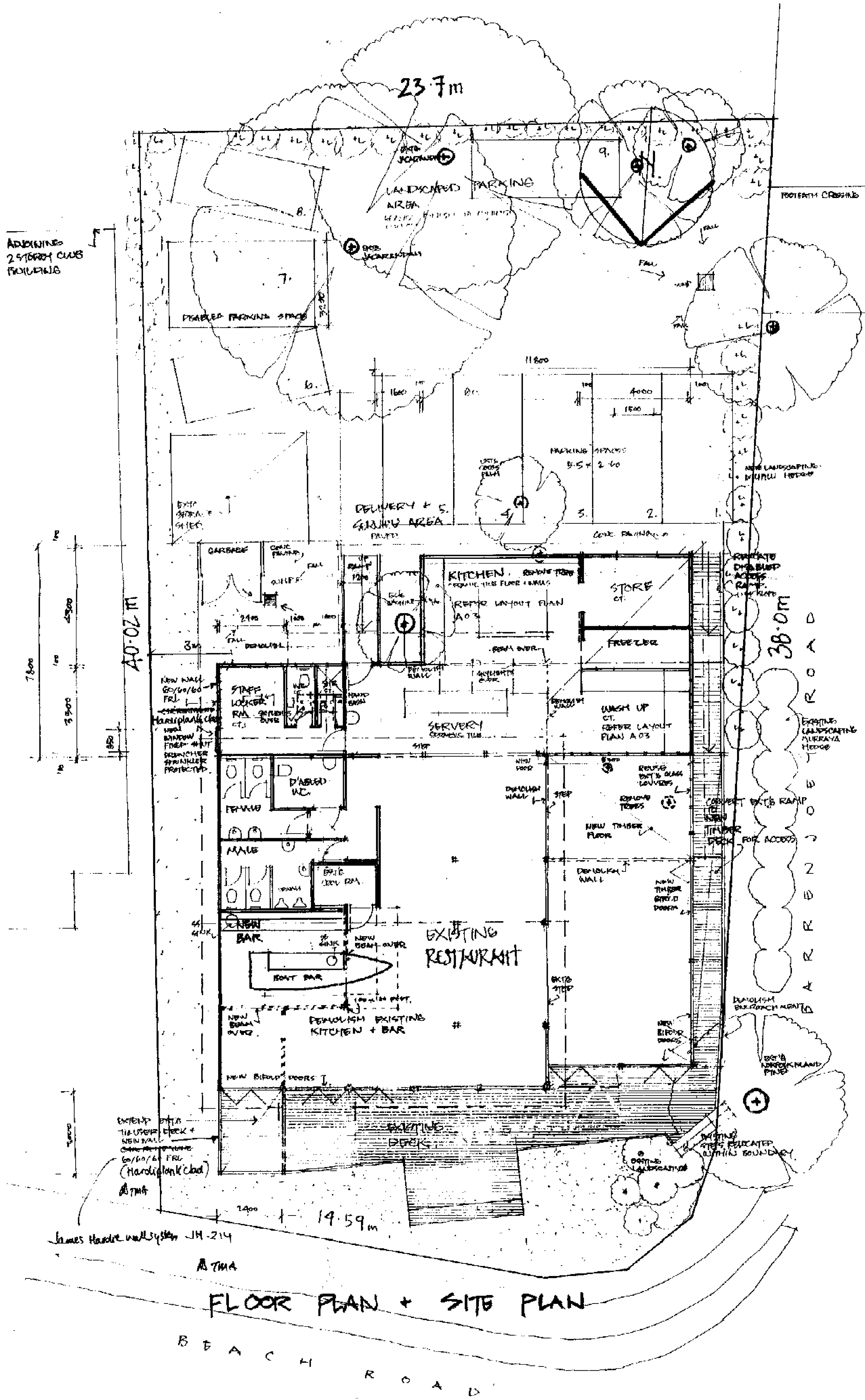
Classification	6
Rise in Storeys	1
Floor Area (approx)	320m^2
Volume (approx)	864m^3
Type of Construction	C
Building Design Basis	Deemed-to-satisfy
Effective Height	Less than 1m
Section C 'Fire Resistance'	Compliance achieved – plans confirm new walls and windows located within 3m of east boundary will be protected against spread of fire in accordance with Specification C1.1 & C3.2/3.4.
Section D 'Access and Egress'	Compliance achieved – detailed in plans & specifications
Section E 'Services and Equipment'	Compliance achieved – detailed in specifications
Section F 'Health and Amenity'	Compliance achieved – detailed in specifications

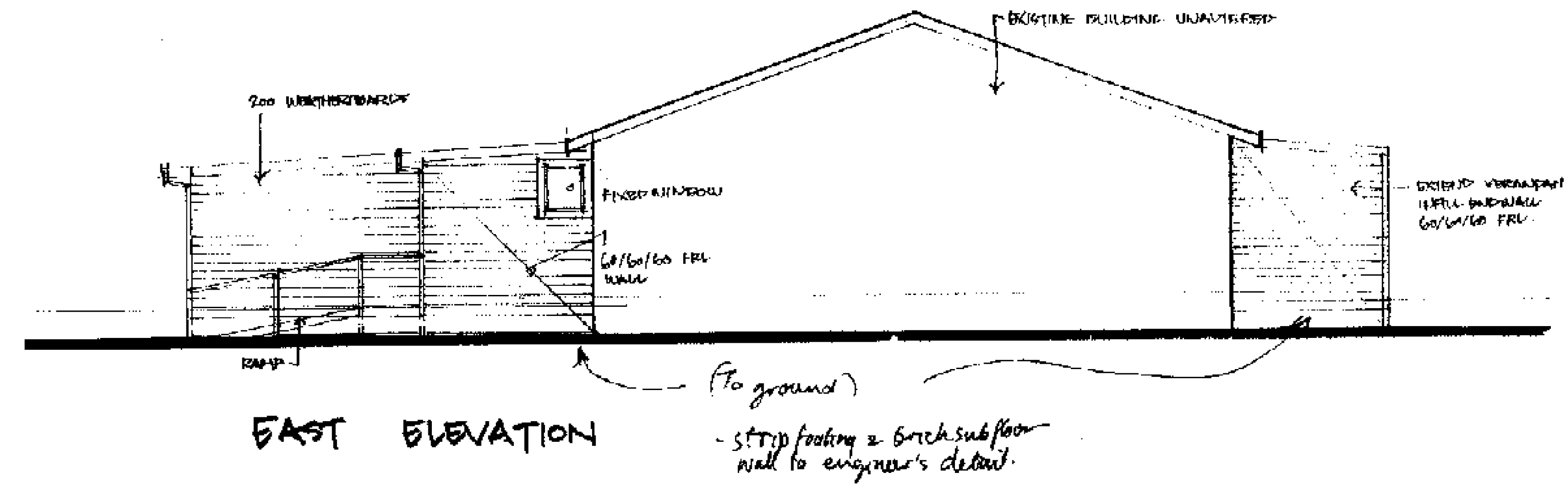
annexure 5

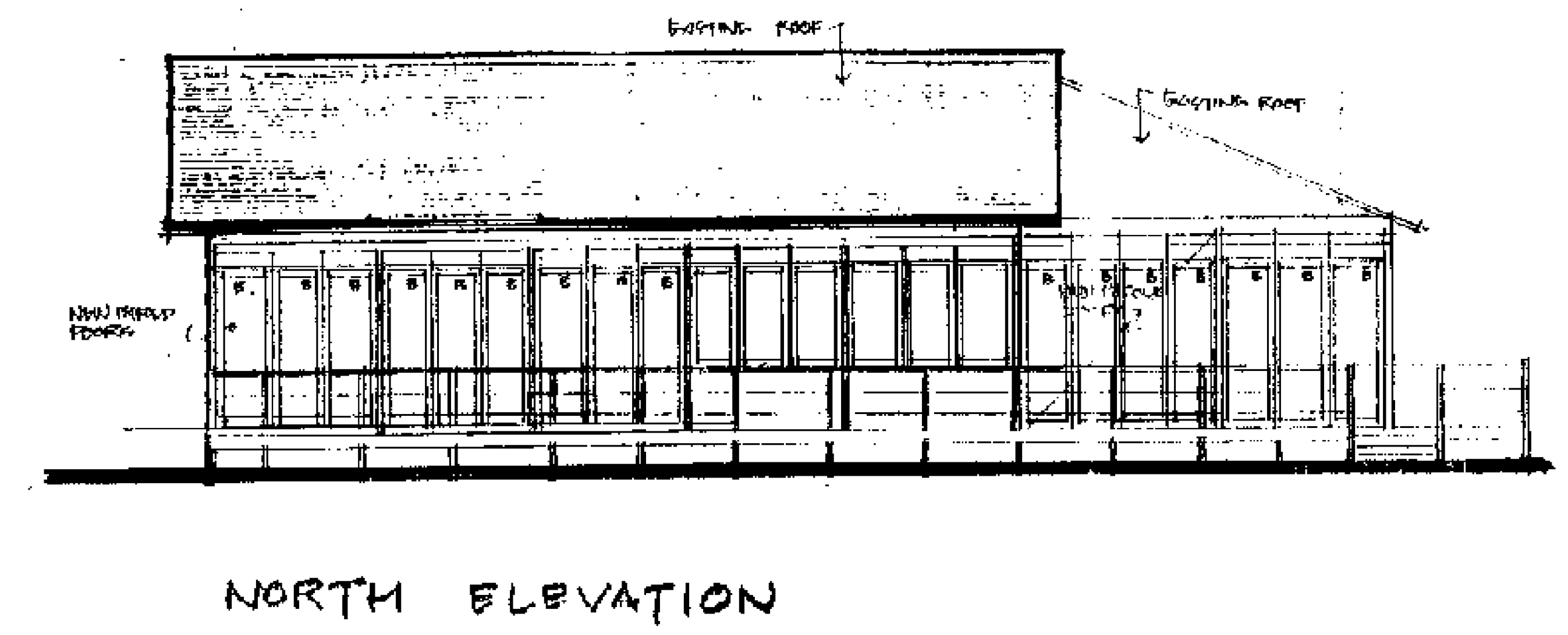
fire safety schedule (proposed & existing)

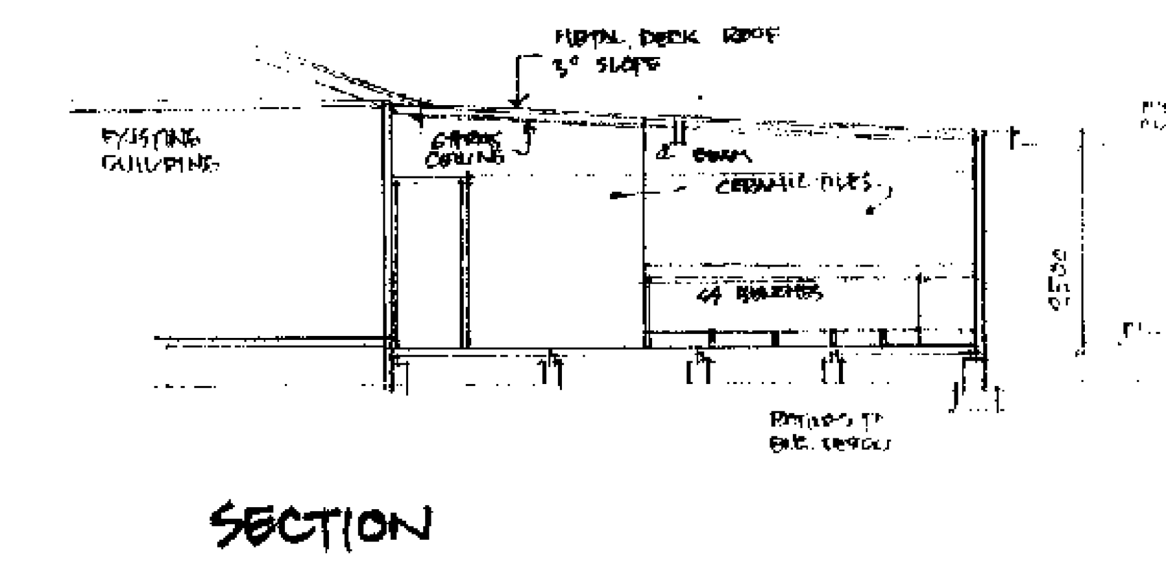
fire safety schedule (proposed & existing)

Fire Safety Measure	Standard of Design and/or Installation	Proposed	Existing
Emergency lighting	E4.4, E4.2, AS/NZS 2293.1, BCA 2005	√	-
Exit signs	E4.5, E4.8, AS/NZS 2293.1, BCA 2005	√	-
Lightweight construction within following locations: • FRL 60/60/60 wall to side/rear wall of staff room and enclosing side wall of front deck, where located within 3m of east boundary.	Spec. C1.1, BCA 2005	√	-
Portable fire extinguishers	E1.6, AS2444, BCA Amend	√	√
Wall wetting sprinkler and drencher system (new east window to staff room)	AS2118, C3.2, C3.4, BCA 2005	√	-

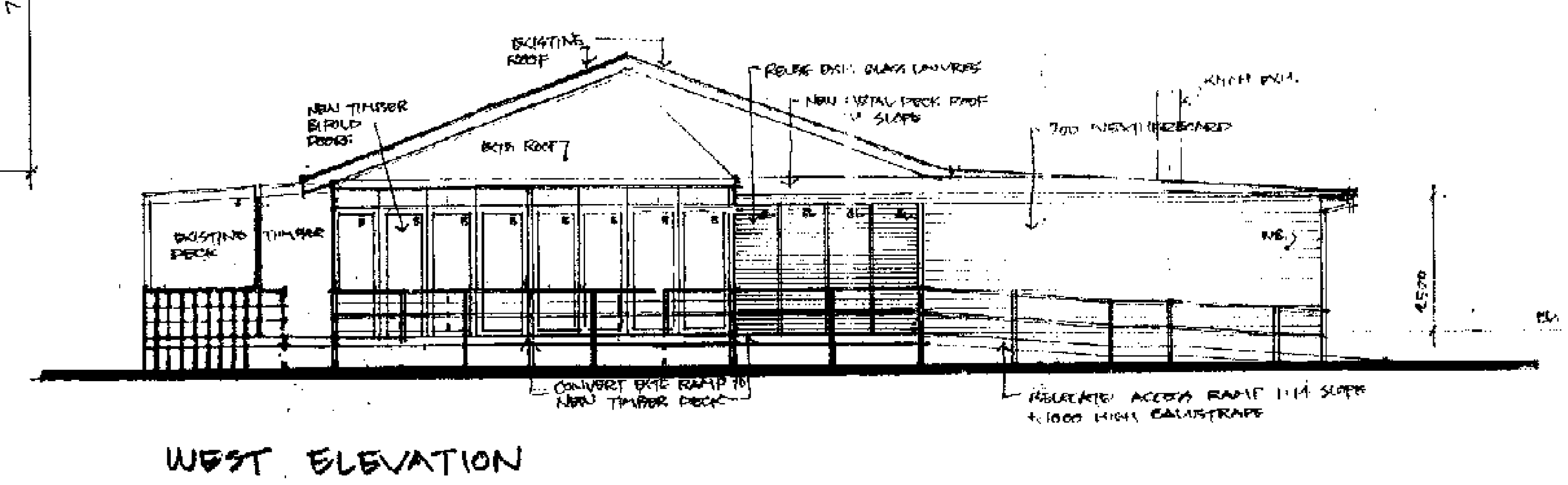


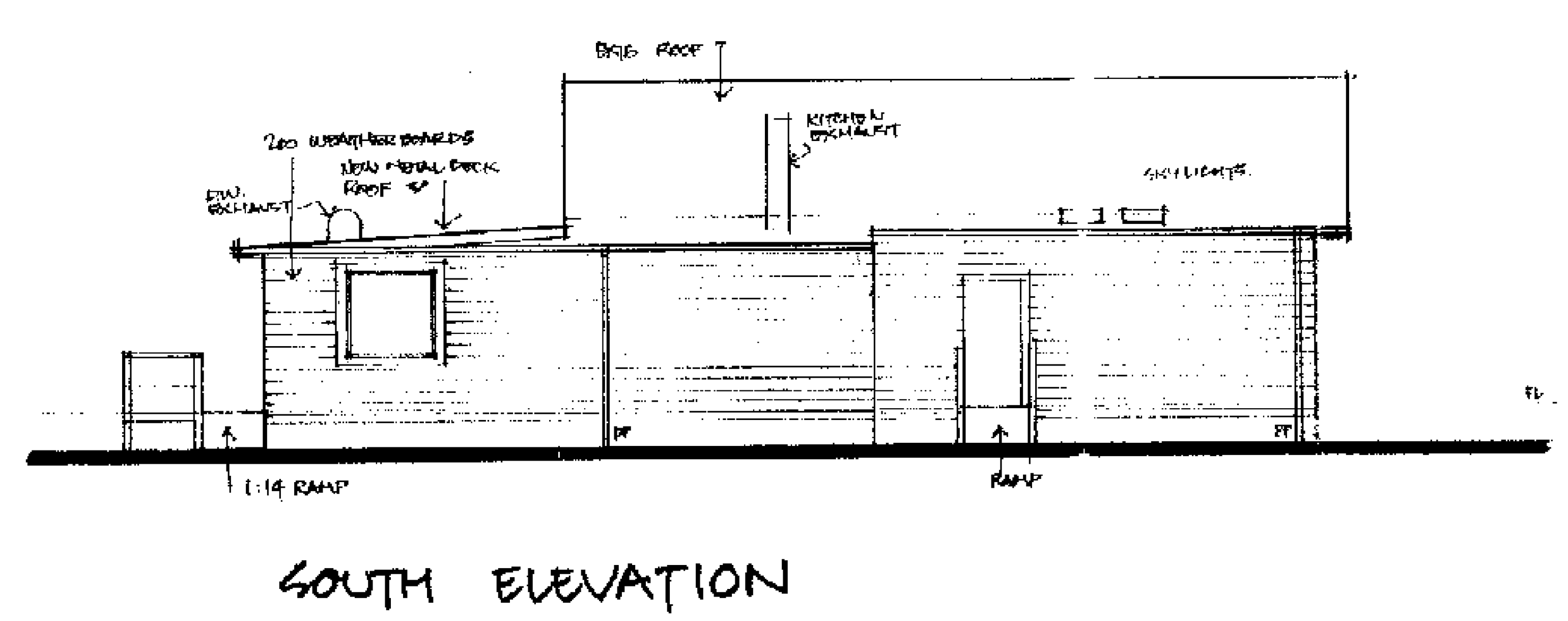






LANDSCAPING SCHEDULE





This is the document referred to in certificate:
No: C-05-0887
Dated: 2-11-05
tom miskovich & associates pty ltd

OCEANIA CLARKE
PTY LIMITED
Architecture and Interiors

Unit 4A, 5–13 Parsons St
Rozelle NSW 2039, Australia
Tel 9555 6800 Fax 9555 6811
ACN 077 876 129
ABN 13 077 876 129

PROPOSED ALTERATIONS & ADDITIONS
At Beach Road Restaurant
No 1186 Barrenjoey Road
Palm Beach
NSW 2108

For Tom Rutherford

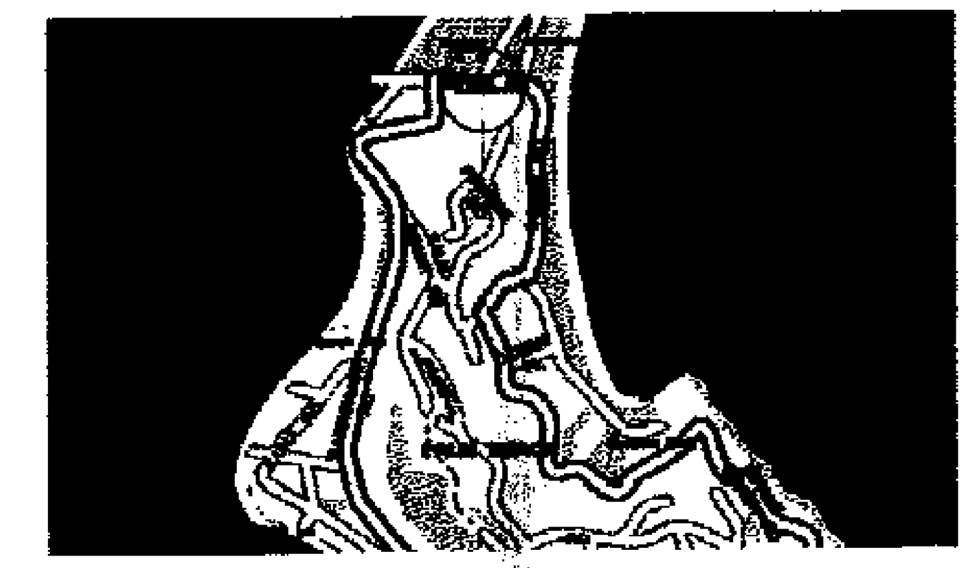
Plan, elevations, section

SCALE 1:100
DATE 24/05/05
PROJECT
DRAWING NO
A 01 B

ISSUE	AMENDMENT	DATE
A	Development application	24/05/05
B	Adjust boundaries, tree positions, parking layout, reduce kitchen to retain Washingtonia	10/09/05

HYDRAULIC SERVICES

No. 1 BEACH ROAD, PALM BEACH NSW



LOCATION PLAN

thomson

REFERENCES

ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D).

DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.

GENERAL - SITEWORKS

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORKS.

ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS AND SPECIFICATION.

THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATION.

WHERE NEW WORK ABUTS EXISTING, THE CONTACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES, IS OBTAINED.

DESIGN LEVELS GIVEN ARE TO FINISHED SURFACE LEVEL AND INCLUSIVE OF TOPSOIL. (TOPSOIL DEPTH VARIES)

CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER TELECOM OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS

EXISTING SERVICES

UTILITY INFORMATION SHOWN ON THE PLANS IS NOT INTENDED TO DEPICT MORE THAN THE PRESENCE OF ANY SERVICES. ACTUAL LOCATIONS SHOULD BE VERIFIED BY EXCAVATION PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF ALL EXISTING SERVICES IN AREAS AFFECTED BY THE WORKS.

THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES, SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING WHERE REQUIRED. ONCE THE WORKS ARE COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD ALL DISTURBED AREAS.

DRAINAGE PIPES

EXISTING PIPES WHICH FORM NO PART OF THE DRAINAGE SYSTEM SHALL BE REMOVED OR SEALED AS INDICATED ON THE PLANS.

PIPE LENGTHS MEASURED ARE BETWEEN PIT CENTRES

PIPES LARGER THAN 300 DIAMETER TO BE REINFORCED CONCRETE RUBBER RING JOINTED TYPE (CLASS AS SHOWN ON DRAWINGS) MANUFACTURED TO AS 4058 (1992) U.N.O.

PIPE INSTALLATION IS DESIGNED IN ACCORDANCE WITH CONCRETE PIPE ASSOCIATION OF AUSTRALIA PUBLICATION " CONCRETE PIPE SELECTION & INSTALLATION " TYPE HS3 SUPPORT.

EQUIVALENT STRENGTH FRC PIPES MAY BE USED.

MINIMUM GRADE TO DRAINAGE PIPES TO BE 1% U.N.O.

CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILIAR PIPEWORK.

DRAINAGE PITS

PITS DEEPER THAN 1200mm TO BE FITTED WITH STEP IRONS AT 300 CENTRES.

ALL EXPOSED EDGES TO BE ROUNDED WITH 20mm RADIUS, OR CHAMFERED 20mm X 20mm.

PIT REINFORCEMENT - RF 81, LAP TO BE 400mm MIN, CLEAR COVER 40 MIN, CAST AGAINST BLINDING OR FORMWORK. CORNER RETURNS MAY BE FABRIC OR EQUIVALENT BARS.

BENCHING TO BE HALF OUTGOING PIPE DEPTH. CONCRETE FOR BENCHING TO BE 20MPa MASS CONCRETE.

APPROVED PRECAST PITS MAY BE USED.

DIAMETER 100 HOLE FOR SUBSOIL DRAIN OUTLET TO BE LOCATED 100mm ABOVE INVERT OUTLET OF ALL INLET PIPES. DIAMETER 100 SUBSOIL DRAIN TO EXTEND FOR A DISTANCE OF 3m UPSTREAM OF PIT (AT EACH INLET TRENCH) WITH THE UPSTREM END SEALED.

ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.

STRUCTURAL NOTES

CARRY OUT ALL CONCRETE WORK IN ACCORDANCE WITH AS 3600-1988.

PLACE ALL CONCRETE OF THE FOLLOWING CHARACTERISTIC COMPRESSIVE STRENGTH AS DEFINED IN AS 3600-1988.

IN SITU CONCRETE FOR DRAINAGE PITS: f'c 25 MPa

BLINDING CONCRETE
F'/32a 15 Mpa, SLUMP 80mm, NOMINAL SIZE AGGREGATE 20mm

THE CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE ON THE DRAWINGS

CAST IN SITU CONCRETE AGAINST FORMWORK OR CONCRETE BLINDING: 40mm

CAST IN SITU CONCRETE AGAINST GROUND: 75mm

LAP LENGTHS FOR REINFORCEMENT:
LAPS AND OTHER SPLICES IN REINFORCEMENT SHALL ONLY BE MADE AT THE POSITIONS SHOWN ON THE DRAWINGS, UNLESS ALTERNATIVES AT OTHER LOCATIONS ARE APPROVED IN WRITING

LAP LENGTHS SHALL BE AS TABULATED BELOW, UNLESS NOTED OTHERWISE ON THE DRAWINGS

EROSION & SEDIMENT CONTROL

THE CONTRACTOR SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED ON THIS DRAWING.

ALL SUB-CONTRACTORS SHALL BE MADE AWARE OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWN-SLOPE LANDS AND WATER WAYS.

WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE SHALL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
A) INSTALL ANY NECESSARY SECURITY/BOUNDARY FENCES FOR THE SITE
B) CONSTRUCT "SILT" FENCING AS DETAILED ALONG BOTH DOWNSLOPE BOUNDARIES.

DURING WINDY WEATHER, LARGE UNPROTECTED AREAS SHALL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.

FINAL SITE LANDSCAPING SHALL BE UNDERTAKEN AS SOON AS POSSIBLE, AND WITHIN TWENTY WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) SHALL BE REMOVED AS SOON AS POSSIBLE, AND WITHIN TEN WORKING DAYS FROM PLACEMENT.

WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM, UNLESS IT IS RELATIVELY SEDIMENT-FREE: ie. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.

TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

THE CONTRACTOR SHALL PROVIDE ACCEPTABLE RECEPTORS FOR CONCRETE & MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.

AT LEAST WEEKLY, THE CONTRACTOR SHALL INSPECT THE SITE, PROVIDING PARTICULAR ATTENTION TO THE FOLLOWING MATTERS:
A) ENSURE DRAINS OPERATE EFFECTIVELY, AND INITIATE REPAIR OR MAINTENANCE AS REQUIRED
B) REMOVE SPILLED SAND (OR OTHER MATERIALS) FROM HAZARD, AREAS INCLUDING LANDS CLOSER THAN 2 METRES FROM LIKELY AREAS OF CONCENTRATED OR HIGH-VELOCITY FLOWS SUCH AS WATERWAYS, GUTTERS, PAVED AREAS AND DRIVEWAYS.
C) CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS, ie. MAKE ONGOING CHANGES TO THE PLAN
D) MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN A FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE REHABILITATED

WATER CYCLE

THE SCOPE OF WORK COMPRISES A VALVES AND CONTROLS NECESSARY FOR THE COMPETE SYSTEM. INSTALLATION SHALL BE CARRIED OUT BY SPECIALIST APPROVED WATER CYCLE CONTRACTION.

THE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF SYDNEY WATER URBAN WATER CYCLE REQUIREMENTS TO THE HIGHEST CURRENT LANDSCAPE WATER CYCLE STANDARDS

THE SOURCE OF WATER FOR THE WATER CYCLE SYSTEM SHALL BE FROM ALL ROOF AREAS / DOMESTIC COLD WATER SYSTEM / RAINWATER WATERCYCLE COLLECTION TANKS. THE WATER CYCLE MAIN SHALL BE COMPLETE WITH BACKFLOW PREVENTER VALVES AND CONTROLLERS WITH BRANCH ISOLATION VALVES, DISTRIBUTION PIPING AND SPRAY SPRINKLERS OPERATING AT A MINIMUM PRESSURE OF 300kPa AT THE MOST DISADVANTAGED SPRINKLER.

ALL PIPE WORK SHALL BE CLASS 12 UPVC AND SHALL BE EITHER COPPER OR UPVC INSTALLED IN CONDUITS WHEN PASSING UNDER ROADWAYS AND/OR PAVEMENTS.

ALL UPVC PIPEWORK SHALL HAVE A MINIMUM COVER OF 300MM FROM FINISHED GROUND LEVEL IN LAWN AND GARDEN AREAS. 600MM UNDER TRAFFICABLE AREAS.

ALL FITTINGS SHALL BE LEAST EQUAL SIZE TO THE LARGEST PIPE (INTERNAL DIAMETER) FEEDING THEM.

ALL CONNECTIONS BETWEEN PLASTIC PIPE AND METAL VALVES SHALL BE MADE USING PLASTIC MALE ADAPTERS. ALL THREADS SHALL BE SEALED WITH TEFLON THREAD SEALING TAPE.

LEGEND

Symbol	Description
—NPCW—	NON-POTABLE WATER
—CW—	COLD WATER
—STW—	STORMWATER DRAINAGE
—/—	100Ø SUBSOIL DRAINAGE
	DIRECTION OF FLOW
—E—E—E—	ELECTRICAL CONDUIT
	SEWER EXISTING
	WATER EXISTING
	STORMWATER EXISTING
	BOUNDARY
	STOP / ISOLATION VALVE
	RAINBANK
	SOLENOID VALVE
	DROP TO OR RISE FROM
	RISE TO OR DROP FROM
	UNDERGROUND RAINWATER TANK
	FALL
	PUMP
	JUNCTION PIT
	GRATED INLET PIT 600SQ
	OVERLAND FLOW PATH
	CAP OFF END OF DRAINAGE LINE
	PIT NUMBER
O DP	DOWNPIPE 90mm
Ø CO	CLEAR OUTLET
RWO	RAINWATER OUTLET Ø150mm
SRWO	SYPHONIC OUTLET Ø100mm
100 @ 1%	IL UPSTREAM, PIPE SIZE, LENGTH, GRADE, IL DOWNSTREAM
• 101.44	PROPOSED FINISHED SURFACE LEVEL

SCHEDULE OF DRAWINGS

DRG No.	SCALE	TITLE
DAH-00	NTS	COVER SHEET, LEGEND AND DRAWING SCHEDULE
DAH-01	1:100	FLOOR PLAN

SCHEDULE OF REFERENCE FILES		
DISCIPLINE	DRG NO.	REV
ARCHITECTURAL		
STRUCTURAL		
MECHANICAL		
ELECTRICAL		
OTHERS		

TK QA SYSTEM
REASON FOR ISSUE
CONSTRUCTION CERTIFICATE
AUTHORISATION
BY:
VERIFICATION OF LATEST AMENDMENT
BY:

REV	ISSUE	BY	CKD	DATE
CC	CONSTRUCTION CERTIFICATE ISSUE	PL	AT	01.11.05
P1	PRELIMINARY ISSUE	PL	AT	15.06.05

thomsonkane
Consulting Hydraulic and Fire Engineers
281 Pacific Highway, North Sydney NSW 2060
Phone: (02) 9955 0788 Fax: (02) 9954 5532
Email: tk@thomsonkane.com.au
ACN 083 079 609

CLIENT: TOM RUTHERFORD

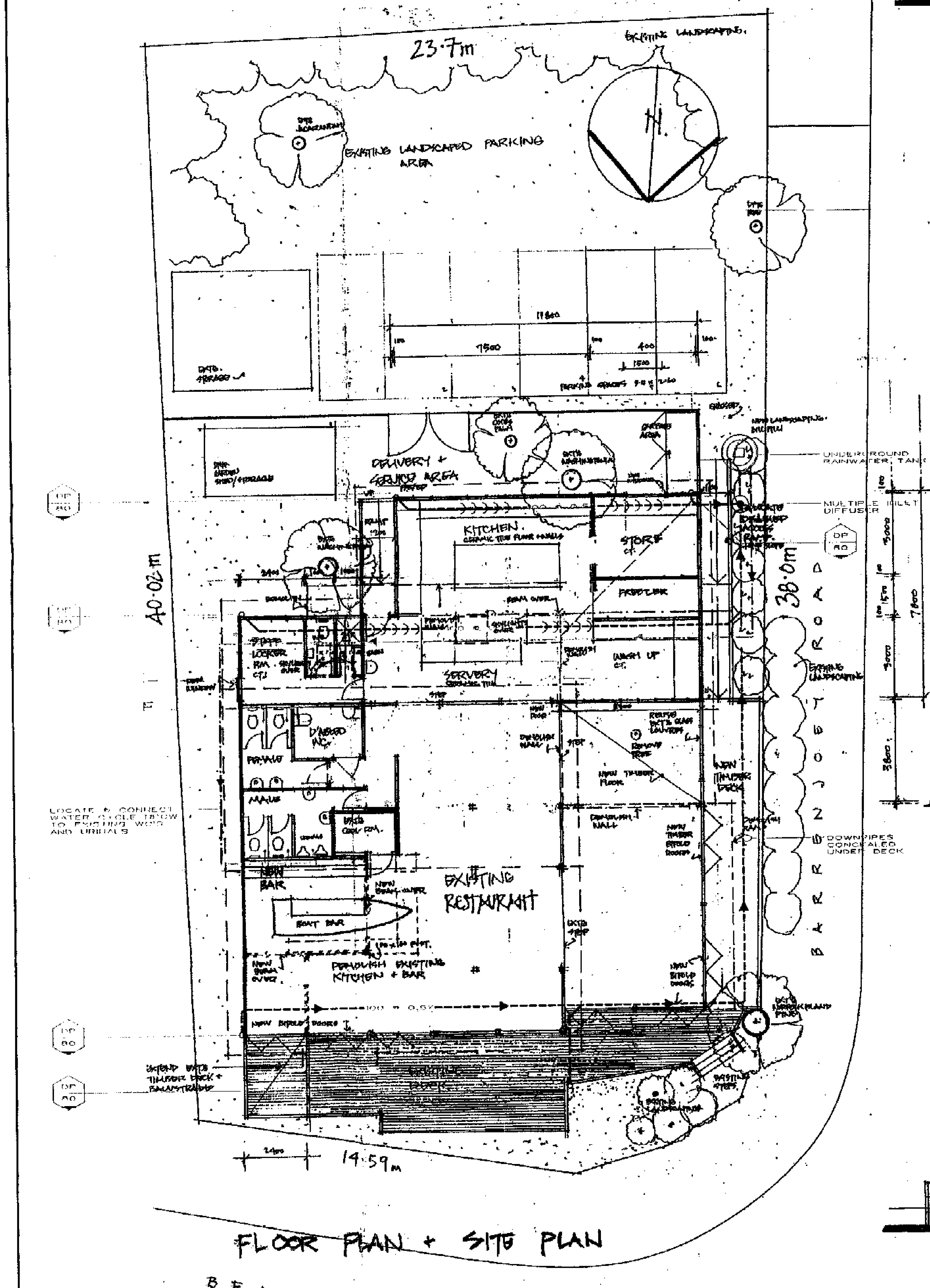
ARCHITECT: OCEANIA CLARKE PTY LTD
Unit 4A, 5-13 Parsons Street
Rozelle NSW 2039
Tel: (02) 9555 6800 Fax: (02) 9555 0011
Email: oceaniaclarke@bigpond.com

PROJECT: BEACH ROAD RESTAURANT
NO. 1 BEACH ROAD
PALM BEACH NSW 2108

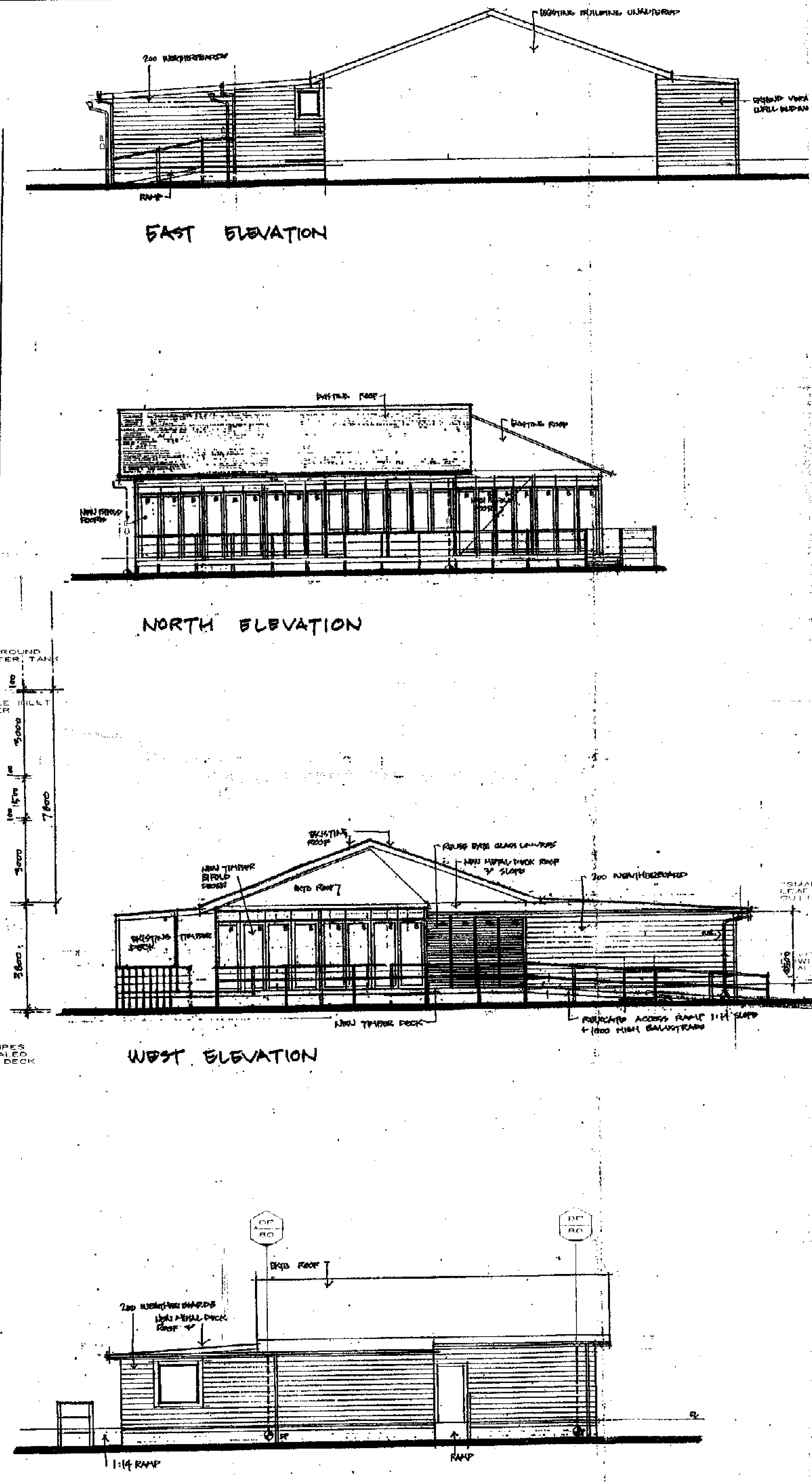
TITLE: HYDRAULIC SERVICES
COVER SHEET, LEGEND AND DRAWING SCHEDULE

SCALE: 1:100	PROJECT No: 4923-1H	CAD REF: T:\TKNEW\
DATE: JUNE '05	DRAWING NUMBER: DAH – 00	REVISION: CC
DRAWN BY: AT/PL		
CKD BY: AT		

This is the document referred to in certificate:
No.: C-05-088-1
Dated: 7-11-05
tom miskovich & associates pty ltd



FLOOR PLAN + SITE PLAN

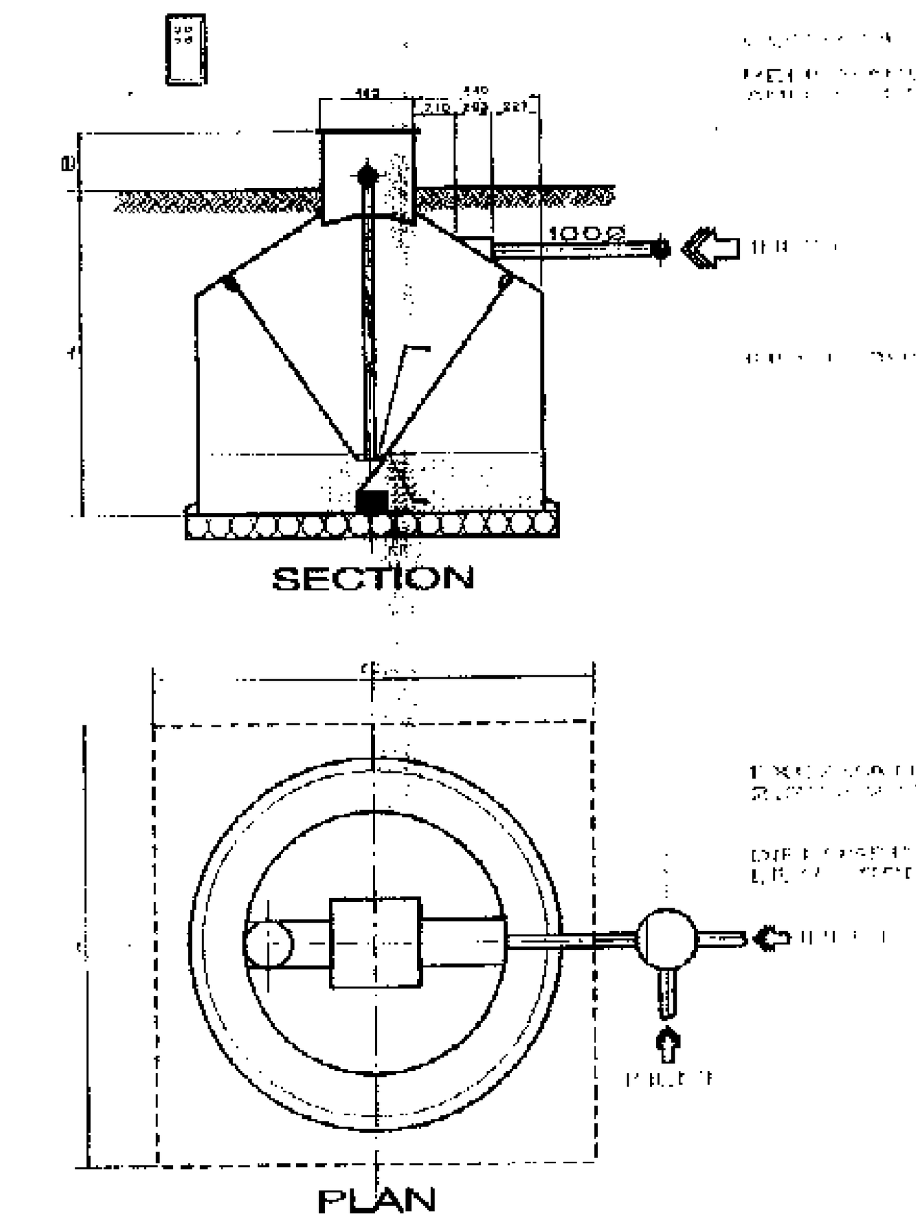


EAST ELEVATION

NORTH ELEVATION

WEST ELEVATION

SOUTH ELEVATION



CAPACITY	A	B	C	D

UNDERGROUND RAINWATER TANK
ACTION TANK
N.T.S.

SMART GUTTER DETAIL
N.T.S.

SCHEDULE OF REFERENCE FILES		
DISCIPLINE	DRG NO.	REV
ARCHITECTURAL		
STRUCTURAL		
MECHANICAL		
ELECTRICAL		
OTHERS		

TK QA SYSTEM
REASON FOR ISSUE
CONSTRUCTION CERTIFICATE
AUTHORISATION
BY:
VERIFICATION OF LATEST AMENDMENT
BY:

REV	ISSUE	BY	CKD	DATE
CC	CONSTRUCTION CERTIFICATE ISSUE	PL	AT	01.11.05
P2	FINAL REVIEW ISSUE	PL	AT	17.06.05
P1	PRELIMINARY ISSUE	PL	AT	15.06.05

thomsonkane
Consulting Hydraulic and Fire Engineers
281 Pacific Highway, North Sydney NSW 2060
Phone: (02) 9955 0788 Fax: (02) 9954 5632
Email: tk@thomsonkane.com.au
ACN 093 073 509

CLIENT: TOM RUTHERFORD

ARCHITECTS: OCEANIA CLARKE PTY LTD
Unit 4A, 8-13 Parsons Street
Rozelle NSW 2039
Tel: (02) 9555 8800 Fax: (02) 9555 6611
Email: oceaniaclarke@bigpond.com

PROJECT: BEACH ROAD RESTAURANT
NO. 1 BEACH ROAD
PALM BEACH NSW 2108

TITLE: HYDRAULIC SERVICES
FLOOR PLAN
HYDRAULIC SERVICES

This is the document referred to in certificate
No. C-05-0881
Dated: 7-11-05

SCALE: 1:100	PROJECT No: 4923-1H	CAD REF: T:TKNEW/
DATE: JUNE '05	DRAWING NUMBER:	REVISION
DRAWN BY: AT/PL	DAH – 01	CC
CKD BY: AT		

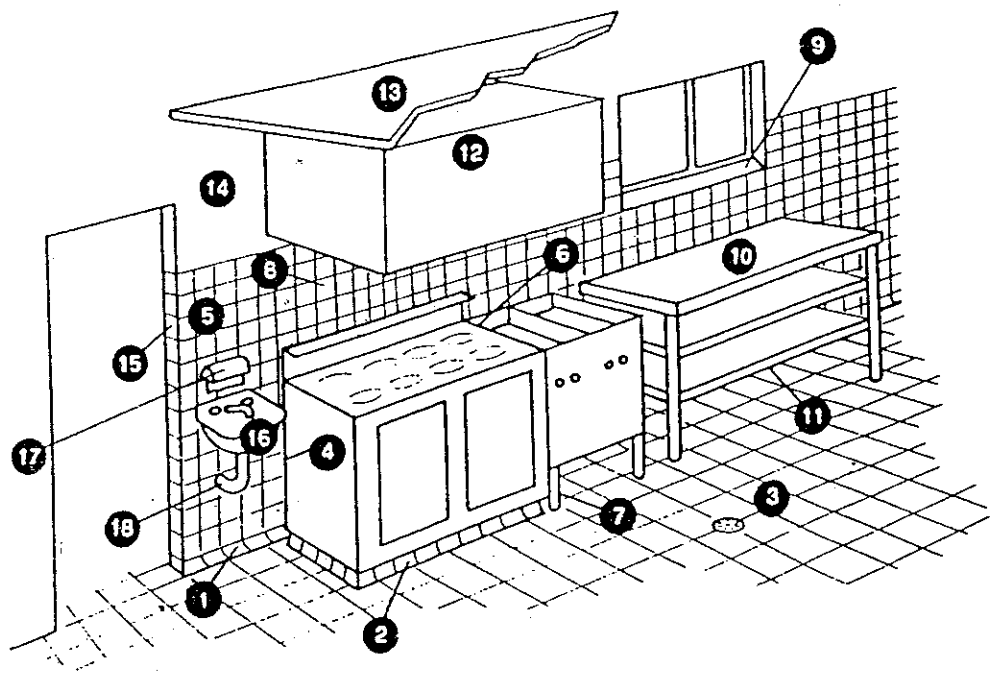


FIG. 1. Requirements — Typical Food Preparation Area

1. Floor/wall coving
2. Plinth not less than 75 mm high
3. Impervious floor graded & drained.
4. Fittings sealed to wall or 200 mm clear
5. Walls tiled to 2000 mm.
6. Sealing between fittings
7. Legs 150 mm min.
8. No Storage shelves below canopy
9. Splayed windowsill 300 mm above prep. bench
10. Preparation bench - steel framed
11. Bottom shelf min. 150 mm. above floor
12. Mechanical exhaust ventilation canopy
13. Rigid smooth faced ceiling
14. Smooth cement rendering
15. No timber door frames
16. Hand basin, hot & cold water mixing set
17. Soap & towel dispenser
18. Water & drainage pipes concealed in wall

This is the document referred to in certificate:
No.: C-05-0884
Dated: 7-11-01
tom miskovich & associates pty ltd

1. Floor/wall coving
2. Castors to underbench storage
3. Impervious floor graded & drained
4. Hot water heater sealed to wall
5. Walls tiled to 2000 mm
6. Shelving 25 mm clear of wall
7. Sink unit on metal frame
8. Thermometer
9. Garbage recepticle
10. Dishwasher with temperature indicating device
11. Legs 150 mm. min.
12. Bottom shelf min. 150 mm. above floor
13. Rigid smooth faced ceiling
14. Smooth cement rendering
15. Water & drainage pipes concealed into walls
16. Hand basin, hot & cold water mixing set
17. Soap & towel dispenser

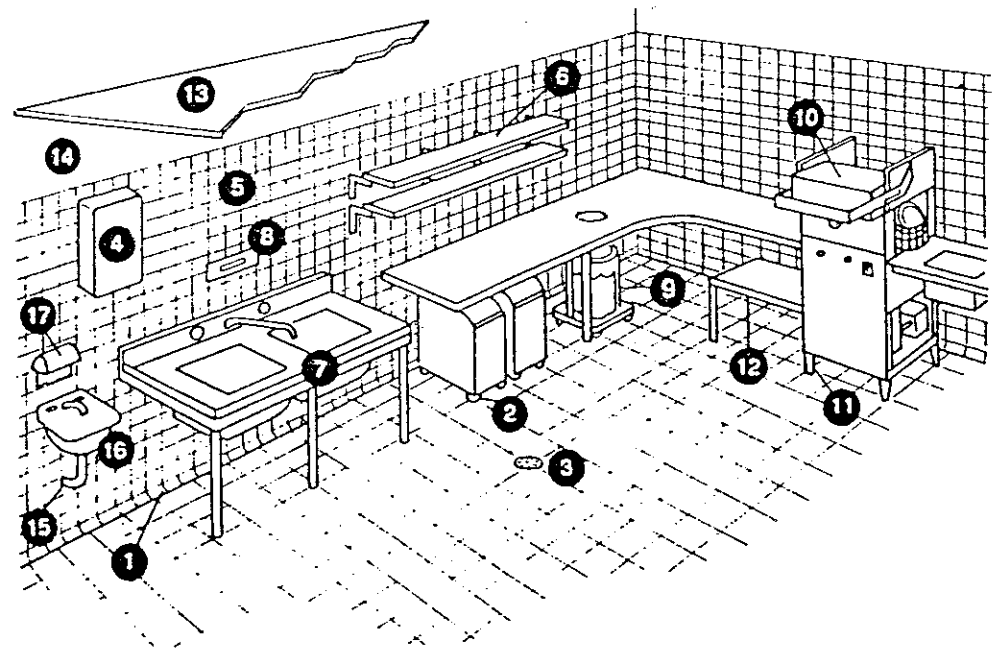
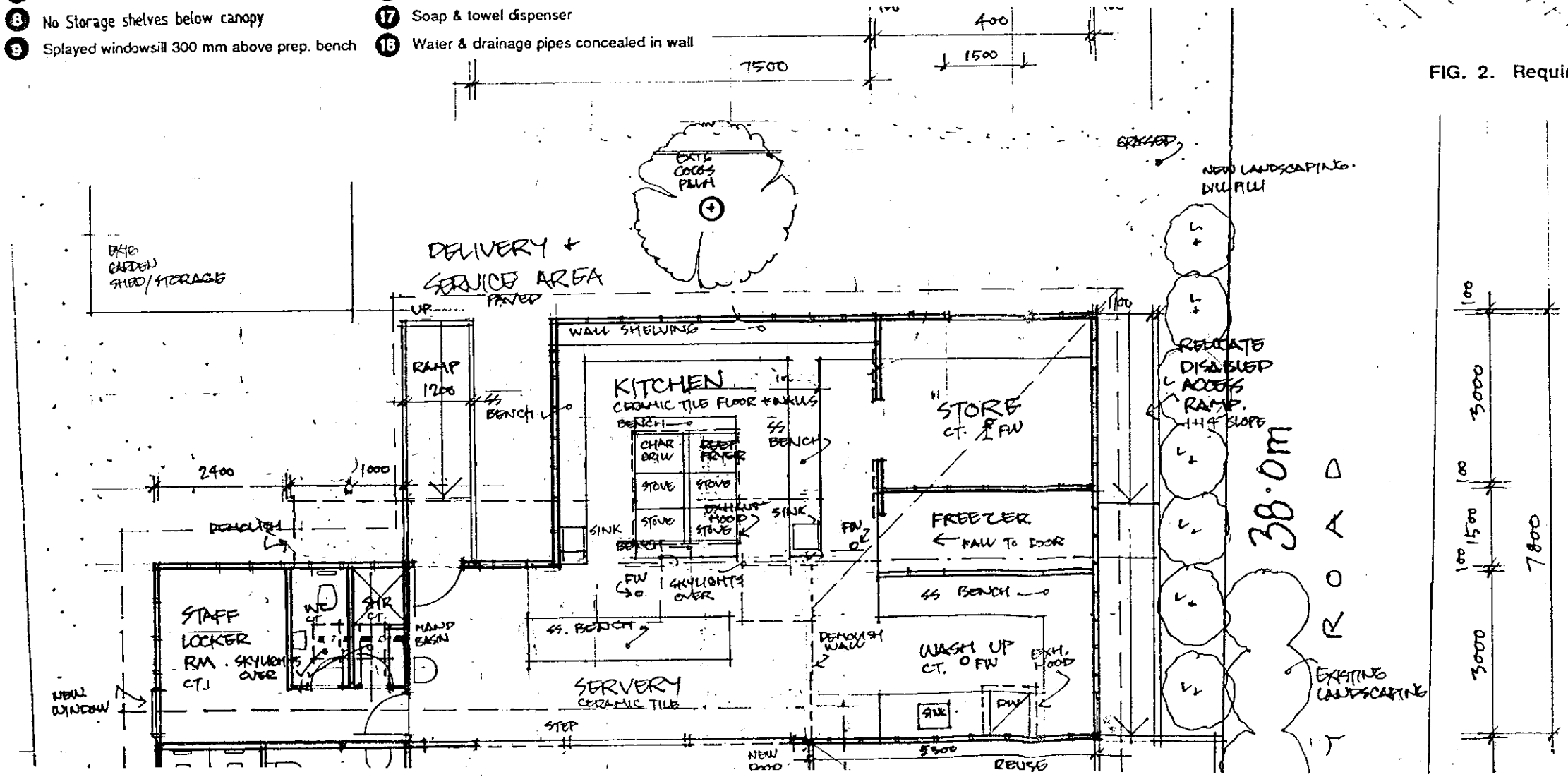


FIG. 2. Requirements — Typical Wash-up Area



OCEANIA CLARKE
PTY LIMITED
Architecture and Interiors

Unit 4A, 5 -13 Parsons St
Rozelle NSW 2039, Australia
Tel 9555 6600 Fax 9555 6611
oceaniaclarke@bigpond.com
ACN 077 876 129
ABN 13 077 876 129

PROPOSED ALTERATIONS & ADDITIONS
At Beach Road Restaurant
No 1 Beach Road
Palm Beach
NSW 2108

For Tom Rutherford

KITCHEN LAYOUT + SPECIFICATION

SCALE 1:100	PROJECT
DATE 24/05/05	DRAWING NO A 03 B

ISSUE	AMENDMENT	DATE
A	Development application	24/05/05
B	D.A. AMENDMENT	09/09/05

9918 0806

FACSIMILE TRANSMISSION

RECEIVED
- 1 NOV 2005
BY:----------

Attention	**Stuart Clarke**	Date	30 September 2005
Company	Oceania Clarke	**Page 1 of**	3
Fax No.	**02 9555 6611**	Project No.	9594
From	Denis Young	**Project Name**	**Beach Road Restaurant, Palm Beach**

MEINHARDT
CONSULTING ENGINEERS
PLANNERS, MANAGERS

Level 2
400 Kent Street
Sydney NSW
Australia 2000

www.meinhardtgroup.com

Tel: 61 (02) 9699 3088
Fax: 61 (02) 9318 7508

Alterations & Additions to Existing Restaurant

Dear Stuart,

Please find attached our sketches no. SK1 and SK2 relating to the abovementioned project.

Yours faithfully,
MEINHARDT (NSW) PTY LTD

Denis Young
Managing Director

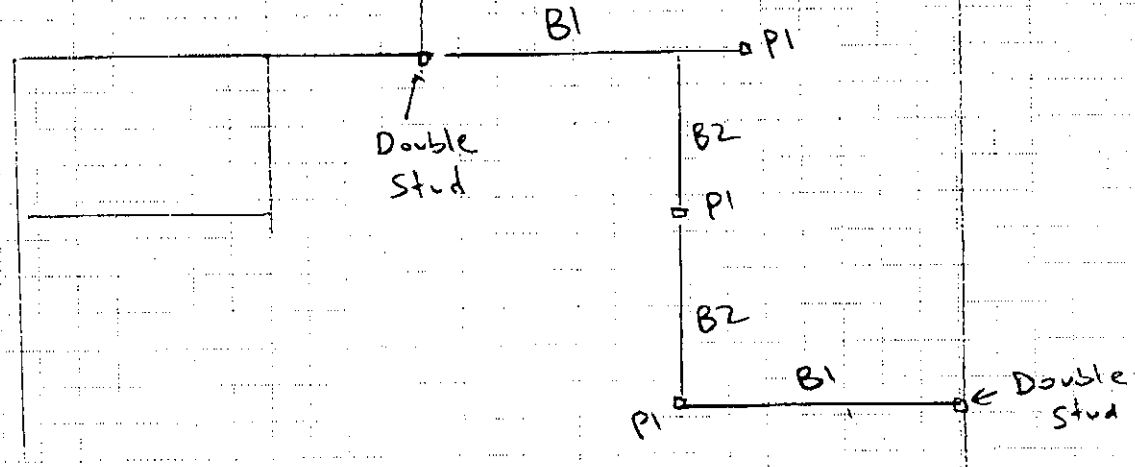
Enc.

COMPUTATIONS

MEINHARDT

Project: Beach Rd Restaurant Project No: 9597 Sheet No: SK2

Design: DY Date: 30-9-05



PART ROOF PLAN

B1 - 250 x 100 F7 Beam

B2 200 x 75 F7

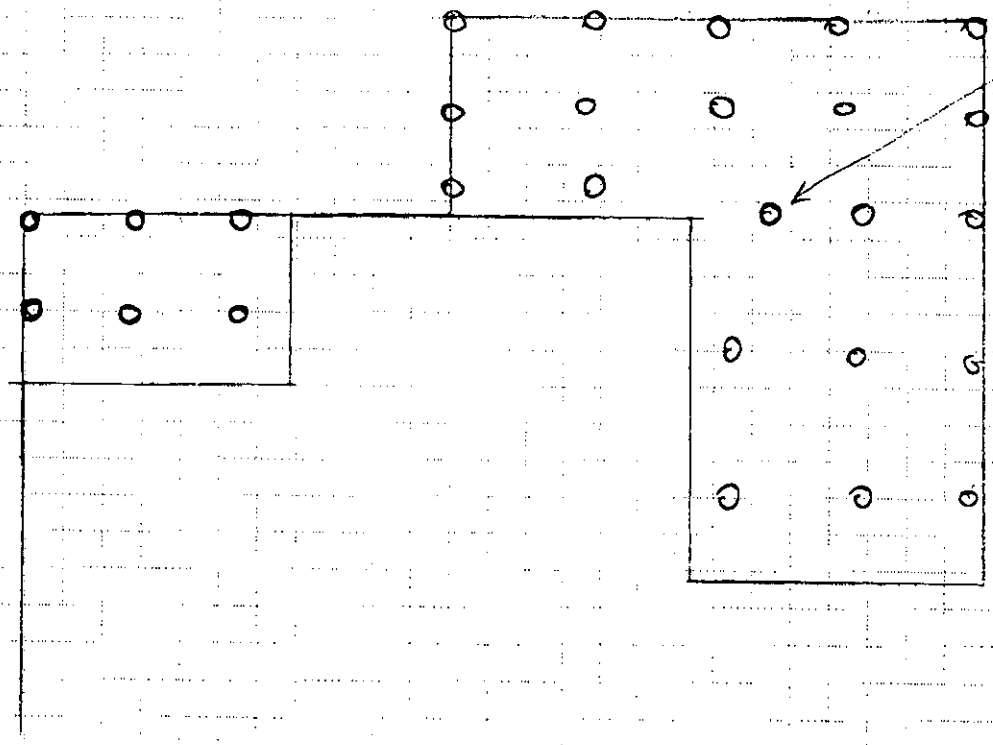
P1 - 100 x 100 F7 Timber Post

BE MIE Aust

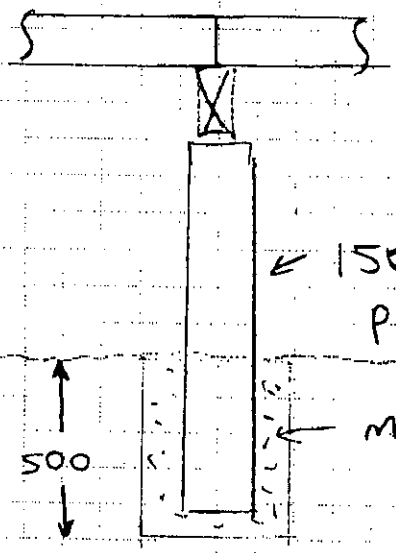
COMPUTATIONS

MEINHARDT

Project: Beach Rd Restaurant | Project No: 9594 | Design: DY | Sheet No: SK1 | Date: 30-9-05



FOOTING PLAN



O - indicates timber piers at 1800 maximum centres

← 150 ϕ tracked pine post - in 400 ϕ pier hole

← Mass concrete

Section through pier

BE MIEAust

This is the document referred to in certificate:

No.: C-05-088-1

Dated: 7-11-05

tom miskovich & associates pty ltd

SPECIFICATION

Development Application and Construction Certificate

For

Proposed Internal Fitout Alterations and Additions to existing restaurant at 1186 Barrenjoey Rd, Palm Beach

Prepared by
Oceania Clarke Pty Ltd
Architecture & Interiors

tel 9555 6600
fax 9556 6611

October 2005

Additional Specification notes

1. All external glazing to have a max. reflectivity index of 25%.

2. Roof sheeting to be zincalume, colorbond in dark grey, brown, or green tones as selected.

BCA compliance specification

B1.3 – Materials and Forms of Construction	All materials utilised in the construction of the building shall be in accordance with the relevant standards as detailed in clause B1.3 of the Building Code of Australia, ie. • The building or structure must resist loads determined in accordance with the following: (a) Dead and live loads and load combinations: AS 1170.1. (b) Wind loads: AS 1170.2. (c) Snow loads: AS 1170.3. (d) Earthquake loads: AS 1170.4. • Masonry to AS 3700 • Concrete construction (including reinforced and prestressed concrete) to AS 3600. • Steel construction- (a) Steel structures: AS 4100. (b) Cold-formed steel structures: AS/NZS 4600. (c) Composite steel and concrete: AS 2327.1. (d) Aluminium construction: AS/NZS 1664.1 or AS/NZS 1664.2. • Timber construction: (a) Design of timber structures: AS 1720.1. (b) Timber structures: AS 1684 Part 2, Part 3 or Part 4. • Glazed assemblies: in an external wall must comply with AS 2047: All other glazed assemblies to must comply with AS 1288: • Termite Risk Management: Where a primary building element is subject to attack by subterranean termites, to comply with AS 3660.1, and a durable notice must be permanently fixed to the building in a prominent location. • Roof construction: Roofing tiles: AS 2049, AS 2050; Metal roofing to AS 1562.1. • Particleboard structural flooring: AS1860

C1.10 – Fire Hazard Properties	All materials utilised will comply with the provisions of Specification C1.10. This refers to the fire hazard properties of finishes, ie. carpet.
C3.4 Protection of openings	All openings that are located within 3 metres of the fire source feature (side boundaries) will be protected with drencher sprinklers. Note the following: • Staff locker room – side window • Wall adjoining bifold doors at front of boat bar, where located within 3m of boundary
Specification C1.1 – Fire resisting construction	All new external walls within 3 m of the East boundary will comply with specification C1.1 for Type C construction.
D1.10 – Access to exits	The grade of the ramp outside the servery will not exceed 1 in 8
D2.7 – Installation in exits and paths of travel	All distribution boards or switchboards located within a path of travel are to be enclosed within non combustible construction or a fire protective covering and the access door suitably sealed against smoke spreading from the enclosure.
D2.10 – Pedestrian ramps	The grade of the ramp outside the servery will not exceed 1 in 8
D2.16 – Balustrades	balustrading/barriers tol be provided along stairways, balconies, and the like in accordance with clause D2.16, ie. 865mm above nosing of stairs, and 1000mm above the floor of balcony landing or the like. ▪ For balustrades along balconies openings must be limited to 125mm and in areas where the floor surface beneath is more than 4 m, there must not be any horizontal element between 150mm and 760 mm above the floor which could facilitate climbing. ▪ For wire balustrades confirmation that horizontal or vertical wire systems will comply with the relevant tension values or deflections details in D2.16;
D2.17 – Handrails	Ambulant handrails will be provided along both side of the disabled access ramp as required by AS1428.1
D2.20 – Swing of exit doors	Exit door near Servery to swing in outwards direction First fold of bi-fold doors will swing in outward direction.
D2.21 – Operation of latches	The required exit door and doors in the path of travel will have hardware that complies with clause D2.21, ie. single handed downward action device.

D3.2 & D3.3 – General access for disabled persons	Disabled access in accordance with the provisions of AS1428.1 will be provided to the following: From the disabled persons car park to the main entry of the building, Into the main entry of the restaurant. The external disabled access ramp being provided with handrails complying with AS1428.1 , i.e. both sides of stairs, turn downwards at 180^0 at end of stairs and extend not less than 300mm beyond the last tread as detailed in the figure
D3.5 – Disabled persons car parking space	Construction certificate plans to provide for at least one (1) disabled persons car parking space comply with AS1428.1.
D3.6 – Identification signage for disabled persons facilities	Confirmation that clear and legible Braille and tactile signs complying with Specification D3.6 and incorporating the international symbol for access in accordance with AS1428.1 will be provided to sanitary facilities and lift facilities.
D3.8 – Tactile indicators	Confirmation that the external ramps will be provided with Type B tactile indicators in accordance with AS1428.4 in order to warn persons with vision impairment that they are approaching the stairs.

E1.6 – Portable fire extinguishers	Portable fire extinguishers will be provided in accordance with AS2444.
E1.9 Fire precaution during construction	one fire extinguisher to suit class A, B and C fire and electrical fires to be provided during construction on each storey.
E4.2 – Emergency lighting requirements	Emergency lighting will be provided in accordance with clause E4.2, E4.4 and ASNZS 2293.1
E4.5 – Exit signs	All exit signs are to be provided in accordance with AS/NZS2293.1 and clause E4.5 and E4.8
F1.1 – Stormwater drainage	All stormwater drainage will comply with AS/NZS3500.3.
F1.5 – Roof coverings	Confirmation that sheet metal roofing will comply with AS/NZS 1562.1 1992 and fixed in accordance with SAA HB 39 1997.
F1.7 – Water proofing of wet areas in buildings	All water proofing will be undertaken in accordance with clause F1.7 and AS 3740.
F1.13 – Glazed assemblies	All windows, sliding doors, adjustable louvres, etc installed in an external wall, will comply with AS2047 for resistance to water penetration.
F4.5 – Ventilation of rooms	All internal non-naturally ventilated habitable rooms, i.e. internal laundries, bathrooms, WC's will be provided with mechanical ventilation or air conditioning system complying with AS1668.2 and AS/NZS3666.1.
F4.12 – Kitchen exhaust ventilation.	The exhaust system will comply with AS1668.1 and 1668.2 where required by the following criteria *- applies where max. power output more than 8kW or gas out put of more than 29MJ/h.*

KITCHEN PERFORMANCE SPECIFICATION

Development Application and Construction Certificate

For

Proposed Internal Fitout Alterations and Additions to existing restaurant at 1186 Barrenjoey Rd, Palm Beach

Prepared by
Oceania Clarke Pty Ltd
Architecture & Interiors

tel 9555 6600
fax 9556 6611

October 2005

Table of Contents

Part A - Construction, Materials and Finish

Section 1 - Walls

1.1 Construction
Walls of food premises including food preparation areas, kitchens, sculleries, food serveries, food display and food storage areas shall be of solid construction. (See definition.)

1.2 Finish
In all food preparation areas, kitchens, sculleries and the like such walls shall be finished to a height of at least 2m above floor level with:

(i) Glazed tiles fixed in accordance with the requirements of Australian Standard AS3958.1
(ii) Stainless steel, laminated plastics (formica, laminex, panelyte) or similar approved impervious material adhered directly to the wall.

1.3 Where not tiled
Walls where not tiled are to be cement rendered, set with plaster and steel trowelled to a smooth even surface, painted with a washable gloss paint of a light colour or sealed with other approved materials.

1.4 Surface material fixing
The finishing materials outlined 1.2(ii) are to be fixed so as to provide a smooth even surface to ensure ease of cleaning; be free of buckles, fixing screws, open joint spaces, cracks or crevices which may permit the access of vermin or the collection of liquids, food particles, grease or other refuse.

1.5 Intersections
The intersection of walls with floors and exposed plinths is to be coved.

1.6 Tiles to 450mm
In approved positions where the business operation does not require tiling the walls to a height of 2m above floor level, the accepted alternative is tiles or similar approved materials carried to a height of 450mm above the bench tops, wash hand basins and similar fittings.

1.7 Tiles to 300mm
In special circumstances, dependant on the operation, this height may be reduced to 300mm provided the bench top and turn-up are made of stainless steel all in one piece (ie. no joint at the wall and bench section).

1.8 Top edge of wall tiles
The wall finish between the top edge of the wall tiling and the ceiling is to be finished flush to the tiling or other approved surface or splayed with an impervious material so as not to form a ledge upon which dust or grease can accumulate. (See Figure 7)

Architraves etc.
Architraves, skirting boards, picture rails and the like are not permitted.

1.10 Vertical corners, corridor walls and the like
Vertical corners, corridor walls and the like, which are likely to be damaged by trolleys, kegs or similar traffic are to be protected by stainless steel angles, rubbing strips or other approved material (applies to door openings, columns and the like).

Section 2 - Floors

2.1 Construction
In food preparation areas and the like floors are to be constructed of materials which are impervious, non-slip, non-abrasive, resistant to chemicals, capable of withstanding heavy duty operation, scouring with steam, hot water, soap and detergent; and include ceramic tiles of an approved size and type properly fixed, impermeable cement render or similar topping over concrete, quarry tiles, magnesite or other approved material laid to the manufacturer's specifications.

2.2 Vinyl and similar preformed materials
In food display, food storage and other selected positions in food preparation areas commercial grade vinyl sheeting with welded joints or similar preformed material laid over a solid impervious base or an approved underlay is acceptable providing they are laid strictly in accordance with the manufacturer's specifications.

Section 8 - Garbage Rooms, Grease Arrestors

8.1 **Garbage storage**
A room separate from the kitchen or an appropriately constructed area outside the building is to be provided for the storage of garbage.

8.2 **Refrigerated garbage rooms**
Refrigerated garbage rooms must comply with the requirements of Section 9.

8.3 Construction - Rooms used for the storage of garbage and rooms used for the washing and storage of garbage receptacles are to be constructed of solid material and cement rendered and steel trowelled to a smooth even surface and made vermin proof.

8.4 Floor - The floor shall be of impervious material coved at the intersection with the walls, graded and drained to an approved floor waste within the room.

8.5 Storage racks - Racks shall be provided for the storage and drainage where domestic type garbage bins are used and may be fixed or freestanding, with the lowest shelf 300mm above floor level.

8.6 Rack construction - Racks to be constructed of galvanised piping, "T" iron, angle iron or solid flat steel or other approved material and preferably designed to be demountable for ease of cleaning.

8.7 Separate room - Garbage receptacle washing machines and heavy duty commercial garbage disposal units should be housed in a room separate from the garbage store and kept 300mm clear of all walls.

8.8 Ventilation - Garbage rooms shall be vented to the external air by natural or artificial means.

8.9 Hot and Cold Water - Hot and cold water hose cocks shall be located within a garbage room or in close proximity.

8.10 Grease arrestors - The installation of grease arrestors within kitchens and food preparation areas is not permitted.

8.11 Internal grease arrestor room - Where there is no alternative but to install the grease arrestor within the building, it shall be subject to the following conditions:

(i) Prior approval shall be obtained in each case.

(ii) The arrestor shall be installed in a special room.

(iii) The floor, walls and ceiling of the room shall be constructed of solid material sealed to prevent the escape of odours; the walls are to be cement rendered, set with plaster and steel trowelled to a smooth even surface and finished with a washable gloss paint or sealed with an approved material; all angles are to be coved.

(iv) The door shall be self closing and fitted with a rubber or other approved gaskets to provide a seal when closed; independent access to the arrestor for cleaning purposes shall be provided where practicable from outside the building.

(v) Proposals to mechanically ventilate grease arrestor are to be submitted for approval.

(vi) For information on grease arrestors generally, advice should be sought as to the requirements of the respective drainage authority prior to installation.

Section 9 - Low Temperature Rooms, Including Cool Rooms and Freezer Rooms

9.1 (i) All-purpose rooms - Are low temperature rooms which may be used for the storage of "wet" goods such as would be stored in a restaurant, butcher's shop, fish shop, smallgoods shop, food factory and similar premises.

(ii) Dry-goods storage rooms - Are low temperature rooms used for the storage of prepackaged goods, cartoned goods, canned goods and food sealed in containers.

9.2 **Solid construction**
All purpose rooms may be of solid construction which includes such materials as bricks, concrete or similar approved material, cement rendered to a smooth even finish and coved to a minimum radius of 25mm at all angles.

9.3 **Prefabricated construction**
All purpose rooms may also be constructed of prefabricated wall and ceiling sections with internal and external finishes of the following material; non-corrosive aluminium, stainless steel, polyester faced or other approved materials.

4.7 Corner protection - Where door openings are likely to be damaged by trolleys or similar traffic, the vertical corners are to be protected in an approved manner. (See section 1.10).

4.8 Flyscreen doors - Fly proofing to external door openings shall be provided as directed by Council's Environmental Health Officer.

Section 5 - Service Pipes, Vermin-Proofing

5.1 **Concealment of pipes** - Where possible all service pipes are to be located on the exterior of the premises or concealed in floors, plinths, walls or ceilings.

5.2 **Pipe supports on brackets** - Where it is not possible to conceal pipes or where it is contrary to the regulations of other authorities, such pipes are to be fixed on brackets so as to provide at least 25mm clearance between the pipe and the adjacent vertical surface and 100mm between the pipe and adjacent horizontal surfaces.

5.3 **Vermin-proofing of openings** - All openings in walls, floors and ceilings through which service pipes and the like, pass, shall be made proof against access of vermin.

5.4 **Cavities and voids** - Cavities, false bottoms and similar hollow spaces capable of providing access and harbourage for vermin are not permitted to be formed in the construction of premises, nor in the installation of fittings and equipment, unless approved means of access are provided to such spaces or such spaces are completely sealed in an approved manner.

5.5 **Sewerage pipes** - the location of sewerage pipes in food preparation, storage or serving areas is not desirable; however where circumstances will not permit an alternative position, cleaning eyes and access openings will not be permitted unless special precautions are taken to prevent likely contamination of the food in that area should any defect or chokage occur in the line.

5.6 **Roller shutters**
Roller shutters and roller grilles located on external openings are to be of vermin proof design.

Section 6 - Servery Bar Construction

6.1 **In situ construction**
Where counters or bars are constructed in situ the supporting wall shall be of solid construction finished with an approved impervious material commensurate with the use.

6.2 **Timber framing**
Framing of in situ bars and counters in timber is not permitted.

6.3 **Counter and bar tops**
Counter and bar tops may be constructed in solid core timber or similar timber sheeting glued and jointed in an approved manner. (See Figure 5)

Exposed surfaces
All exposed surfaces of the bar top or counter top are to be finished with a smooth impervious material.

6.5 **Exposed walls**
On the preparation and/or serving side exposed wall surfaces are to be smooth, free of ledges and the surface is to be cement rendered, set with plaster, and steel trowelled to a smooth even surface and finished with a washable gloss paint, tiled or sealed with an approved material commensurate with the use of the counter or bar. (See Figure 5)

Section 7 - Storerooms

7.1 **Wall construction**
Walls of rooms used for the storage of food enclosed in hermetically sealed containers, dry packaged goods, vegetables, cleaning materials and equipment, shall be of solid construction finished with an approved impervious material commensurate with use.

7.2 **Floor**
The floors of such rooms shall be impervious and coved at the intersection with walls and plinths.

7.3 **Cleaning material storage**
Materials and equipment for cleaning are to be stored in a place physically separated from any food storage, display or preparation area.

2.3 Finish
The floor finish is to be smooth and even, free of cracks, crevices or surface protrusions that will prevent easy cleaning, graded and drained where necessary.

2.4 Tile Joints
Floor tiles are to be butt jointed or alternatively the open joints are to be epoxy grouted, and finished flush with the floor surface material.

2.5 Floor wastes
Floor wastes shall be provided in food preparation areas and wet areas in locations where directed.

2.6 Coving
The intersections of floors with walls and exposed plinths are to be coved. Vinyl and similar preformed material is to be continued at least 75mm up the wall or other vertical surfaces.

2.7 Backing piece
Where vinyl sheeting and other similar preformed material is turned up to form a cove, a fillet or backing piece is to be fitted to provide support.

2.8 Carpet
Carpet may be used as a floor finish only in areas where customers stand or sit to receive food or service.

Section 3 - Ceilings

3.1 Provision
Ceilings shall be provided over food preparation, display or storage areas;

3.2 Construction
Ceilings are to be constructed of a rigid smooth faced, non-absorbent material and could include fibrous plaster, plasterboard, fibrous cement, cement render or other approved material painted with a washable gloss paint of a light colour.

3.3 Drop-in panels
Drop-in removable panel ceilings are not permitted over food preparation, display and servery areas.

3.4 Finish
The surface finish shall be free of open joints, cracks, crevices or openings in which grease, vapours or vermin may collect.

3.5 Intersections
The intersection of the walls and ceiling are to be tight jointed, sealed and dustproof.

3.6 Ceiling light fittings
Ceiling light fittings are to be installed flush with the ceiling surface, or alternatively, provided with an approved diffuser cover to prevent the accumulation of dust or harbourage of vermin.

Section 4 - Window Openings, Door Openings, and Serving Hatches

4.1 Windows
Window openings in kitchens and food preparation areas are to be designed and constructed with the window-sills at not less than 300mm above the top of any bench, table or equipment where splashing is likely to occur.

4.2 Alternatively
In approved positions where benches, tables, equipment, etc. are at least 100mm clear of the wall surface and window-sills are exposed the provisions of 4.1 may be varied.

4.3 Splayed sills - All window-sills are to be splayed inwards at an angle of 45° and finished with material matching the wall finish, with all vertical and horizontal edges rounded or bullnosed to a smooth even finish.

4.4 Architraves - Window and door architraves are not permitted.

4.5 Fly proofing - Removable fly proofing shall be provided as directed by Council's Environmental Health Officer.

4.6 Finish - Door openings, serving hatches and the like are to be finished in the same material as the wall, returned to meet the door jamb with the vertical and horizontal edges rounded or bullnosed to a smooth even surface.

9.4 **Embossed surfaces**
Embossed finish is not permitted as internal lining material or panels of prefabricated low temperature rooms.

9.5 **Panel construction**
The internal and external panels are to be adhered directly to the insulating material (core) to form an integral wall section.

9.6 **Coving of joints**
Joints at the floor to wall intersections are to be coved and the vertical wall to wall intersections are to be finished with a cove and the edges of all joining moulds are to be tight fitting and water repellant.

9.7 **Panel finish**
All panels are to be neatly cut and finished smooth to eliminate any cracks, crevices or imperfections which may provide access for vermin or be difficult to clean.

9.8 **Dry goods storage rooms**
Approved wall and ceiling lining materials for dry goods storage rooms includes stainless steel, aluminium, polyester faced finish, hot bonded sheets, alumply, laminated plastics or other approved materials and all lining material joints are to be tight fitting and water repellant.

9.9 **Concrete floor**
A concrete floor at least 75mm thick is to be provided in all low temperature rooms, graded to the doorway, coved at the intersections with the walls and finished so as to be impervious to liquids.

9.10 **Concrete floor finishes**
Unless constructed of impermeable type concrete, all low temperature room floors shall be coated, topped, or otherwise finished with an impervious material.

9.11 Plinths
Where a plinth is used its dimensions shall be identical with the external face of the low temperature room so as not to protrude beyond or recede under the vertical face.

9.12 **Internal floor wastes**
Floor drains connected directly to the sewerage service are not permitted within a low temperature room.

9.13 **Special approval**
Floor wastes may be permitted within a low temperature room where the room is used as a work or preparation room and shall be subject to special approval in each case.

9.14 **External floor wastes**
Where circumstances require drainage, a floor waste is to be located outside the low temperature room as near as practicable to the door opening.

9.15 **Painting of walls and ceilings**
Internal walls and ceiling surfaces are not to be painted unless the paint is of a special type prepared for use on low temperature room walls and ceilings, and applied in accordance with the paint manufacturer's specification.

9.16 **Sealing of joints**
The joint between the external walls of the low temperature room and the floor surface is to be sealed and finished in an approved manner.

9.17 **External wall finish**
Where the external walls of a low temperature room such as "coolroom sandwich panelling" are in the kitchen, cooking or food preparation area or any other place where splashing of walls is likely to occur; the walls are to be finished with tiles or in an approved manner commensurate with the use.

9.18 **Rat-proofing**
All exterior surfaces including the roof of the low temperature room are to be faced with an approved rat-proof material.

9.19 **Inaccessible spaces**
Where the room is built in such a position that an inaccessible cavity is formed between the top of the low temperature room and the ceiling above or between the low temperature room and any other wall or fixture, such cavities are to be made proof against the access of rats or other vermin.

9.20 **Storage rack construction**
Hanging bars and storage racks shall be constructed of galvanised pipe, angle iron, "T" iron, channel iron, flat metal or other approved materials, all of which should be treated to prevent corrosion.

9.21 **Rack clearance**
Racks may be fixed or freestanding; the underside of the lowest shelf or rack to be at least 150mm clear of the floor.

9.22 **Refrigeration machinery**
Where possible, all machinery and equipment is to be located outside the food premises. Where located inside it shall be installed in an approved manner with sufficient space for cleaning being provided both within and around:

(i) Equipment (eg. compressor, motor condenser, evaporator).

(ii) Fittings (eg. refrigeration pipes, condensate pipes).

(iii) The floor, walls and ceilings.

9.23 **Concealment of pipes**
Where possible, all service pipes and conduits are to be concealed in floors, walls or ceilings.

9.24 Fixing of pipes on brackets - Where concealment is not possible, pipes are to be fixed on brackets so as to provide at least 25mm clearance between the wall and pipe and 100mm between the floor and pipe. All such runs shall be kept to an absolute minimum.

9.25 Clearance from fittings - Pipes so installed are not to run underneath fittings.

9.26 Temperature gauge - A temperature gauge is to be provided externally to each low temperature room (including coolrooms, chillers, freezer rooms).

9.27 Noise and vibration - The refrigeration equipment and all associated fittings are to be installed in such a manner that the refrigeration system is capable of operating without causing noise or vibration nuisance.

9.28 Condensate disposal - Adequate provision for the disposal of condensate shall be provided.

9.29 Condensate discharge - Where condensate waste discharges to the sewer adequate disconnection or air gap shall be provided in accordance with the requirements of the local drainage authority.

9.30 Building Regulations - All low temperature rooms are to comply with the building regulation requirements regarding sizes of door openings, alarm devices and capability of being opened from within.

Part B - Installation of Fixtures, Fittings, Equipment

Section 10 - Refrigerators and Frozen Food Cabinets

10.1 Supports - Cabinets, upright or horizontal models are to be supported on wheels, plinths, legs or brackets or framework.

10.2 Metal bases - In areas where food is not prepared such as supermarket retail displays, cabinets with an approved metal base may be fitted directly to an impervious floor provided a complete seal is made between the floor and the metal base of the cabinet.

10.3 Seating of metal bases - When fitting a metal base as referred to in Section 10.2:

(i) The seal between the floor and the metal base of a cabinet is to be of an approved silicone sealant laid on the floor in a continuous seam.

(ii) Where the floor finish is of vinyl sheeting or similar preformed material the floor covering outside the cabinet is to be sealed to the floor; turned up and sealed to the base of the cabinet with a cove.

(iii) Where vinyl sheeting or similar preformed material is turned up to form a cove, a fillet or backing piece is to be fitted to provide support.

(iv) Where the floor finish is of terrazzo or concrete material a vinyl skirting strip is to be sealed to the floor; and to the base of the cabinet so as to provide a cove.

10.4 Cabinets located abutting walls
Refrigerator and frozen food cabinets may be fitted against the wall provided all joints formed between the back of the cabinet and the wall are suitably sealed to prevent the access of vermin.

10.5 Cabinets located away from walls
Where cabinets are kept clear of walls and other fixtures they shall comply with the following requirements:

(i) Cabinets up to 6m in length are to be kept a minimum of 200mm clear of the wall.

(ii) Where the cabinet exceeds 6m in length or cabinets are installed as a continuous run of more than 6m, a minimum space of 400mm is to be provided between the rear of the cabinet and the wall.

(iii) Where cabinets are kept clear of wall as specified in (i) and (ii) above, adequate access is to be provided between the cabinets or between the cabinets and any side wall to permit easy cleaning.

(iv) Where cabinets are kept clear of walls a suitable upstand or other approved means is to be provided to prevent the dislodgement of stock over the back of the cabinet or miscellaneous refuse accumulating between the wall and the cabinets.

10.6 Refrigerated milk bar counters etc.
Milk bars and similar refrigerated bar counters where consisting of a number of refrigerated cabinets or a continuous frame in one piece, are to be designed:

(i) With a continuous top stainless steel or other approved material either cast or welded in one piece, and are to be free of open joints, cracks, crevices, etc. which may allow liquids or food particles to collect therein.

(ii) So that any space formed between the face of the counter and the cabinet is to be made proof against the access of vermin, or alternatively, provided with access for easy cleaning.

(iii) So that a raised edge or lip is to be formed around each opening in the bar top to prevent foreign material falling into the food wells.

(iv) So that hinged lids are to be so constructed that when they are opened any liquid that may be on top of the lid will flow off into a channel formed along the hinged portion.

(v) So that the channel is to extend the full length of the lid so that the liquid will not gain access into the food well.

(vi) So that all angles, internal and external, of the cabinet are to be coved or rounded, with all joints smooth finished to allow easy cleaning.

10.7 Refrigeration machinery
Where possible, all machinery and equipment is to be located outside the food premises.

10.8 Refrigeration motor units
Whether located within the cabinet, adjacent to the cabinet or remote from the cabinet, motor units are to be supported on an open metal frame at least 150mm clear of the floor or 50mm above a plinth, and the unit is to be kept clear of adjacent walls.

10.9 Motor unit frame design
The frame is to be designed so as to permit dust, miscellaneous refuse, and the like to fall through to the floor for easy removal. (See Section 10.14).

10.10 Cabinet motors
Motor units located within cabinets supported on wheels may be mounted on an open metal frame closer than 150mm to the floor.

10.11 Top mounted cabinet motors
Condensing (motor) units may be located directly on top of the cabinets, providing all likely harbourage places for vermin beneath the unit are eliminated and adequate access for cleaning is provided at the front, rear and sides of the unit.

10.12 Noise
Condensing (motor) units are to be installed so as to operate without causing offensive noise within the meaning of respective noise control legislation.

10.13 Temperatures
The refrigeration system is to be capable of:

(i) Maintaining at all times the designed temperature within the cabinet commensurate with its proposed use.

(ii) Maintaining the temperature of displayed, prepared food capable of supporting the growth of microorganisms at temperatures prescribed by food hygiene regulation.

10.14 Ventilation openings
Ventilation openings in cabinets are to be fitted with frames that are easily detachable.

10.15 Framework design
When designing and fabricating angle, "T" or channel iron or flat steel for framework care is required to ensure there are no ledges or cavities formed which will permit the lodgement of dust and grease in areas accessible for cleaning.

10.16 Concealment of pipes
Where possible, all refrigeration pipes, condensate pipes and electrical conduit are to be concealed within cabinets, or within floors, plinths or walls.

10.17 Fixing of pipes on brackets
Where concealment is impossible such pipes are to be fixed on brackets so as to provide at least 25mm clearance between the pipes and adjacent vertical surfaces and at least 100mm clearance from any horizontal surface.

10.18 Sealing of openings
All openings around pipework and other similar spaces are to be sealed and made proof against access of vermin.

10.19 Restraining devices
A suitable restraining device is to be provided to upright cabinets where stability problems exist or are likely to occur.

Section 11 - Wheels, Plinths, Legs, Brackets and Framework Design

11.1 Use of wheels or castors
Wheels or castors capable of adequately supporting and easily moving a fully loaded fitting may be fixed to fittings provided that:

(i) Sufficient space is available to move such fittings so as to provide access to the floor beneath and the walls adjacent to the fittings for cleaning purposes.

(ii) Suitable restraining devices are incorporated on the wheels or castors.

11.2 Plinth construction and design
Plinths are to be an integral part of the floor, constructed of solid material similar to the flooring material and are to be:

(i) At least 75mm high.

(ii) Finished level to a smooth even surface.

(iii) Recessed under fittings to provided a toe space of not more than 50mm.

(iv) Rounded at exposed edges.

(v) Coved at the intersection with the floor and exposed walls. (See Figure 7)

11.3 Concealment of the pipes - Service pipes may be concealed in plinths provided that the surface finish of the plinth is restored; service pipes are not permitted underneath fittings in the recessed toe space.

11.4 Legs - are to be of non-corrosive solid or tubular metal or moulded plastic.

11.5 Tubular steel legs - If pipes are used, open ends are to be capped or sealed to prevent the access of vermin.

11.6 Clearances - Legs are to be designed and securely fixed so that:

(i) There is a clear space between the floor and the underside of the fitting of not less than 150mm.

(ii) Where the fitting is located in island formation with access from two sides, the minimum space between the floor and the underside of the fitting is 150mm.

(iii) Service pipes are not permitted in the space beneath fittings unless they run vertically.

(iv) A clear space of not less than 25mm is provided between the finished wall surfaces and the legs supporting fittings.

(v) Alternatively, the rear legs may be omitted and the fitting supported on brackets securely fixed onto the wall.

11.7 Brackets - Brackets are to be non-corrosive, tubular metal, solid metal or flat steel, and where tubular steel is used the open ends are to be capped or sealed to prevent the access of vermin.

11.8 Hollow brackets - Pressed metal brackets having hollow backs are not permitted even when filled in solid at the back.

11.9 Fixing - Supporting brackets are to be securely fixed so that:

(i) Cracks and crevices are not formed.

(ii) A clear space between the floor and the underside of the fitting of not less than 150mm is provided for all fittings up to 750mm in width.

(iii) This height shall be increased by 25mm for every additional 100mm or part thereof, in width.

(iv) Service pipes are not permitted in the space beneath fittings unless they run vertically.

11.10 Framework
Framework supports are to be of non corrosive tubular metal, solid metal or flat steel.

11.11 Tubular steel framework
If pipes are used, the open ends are to be capped or sealed to prevent the access of vermin.

11.12 Framework design
Framework is to be designed and fixed in such a manner that easy access is available for cleaning the framework and adjacent surfaces and designed to prevent access or harbourage of vermin.

11.13 Hygienic construction
Legs, brackets and framework are to be:

(i) Finished smooth.

(ii) Free of angles, cavities, crevices, ledges, recesses etc. which will permit the lodgement of dust and grease or provide areas inaccessible for cleaning.

11.14 Flanges
Flanges fitted to the base of legs or framework, are to be concealed in the floor or plinth and shall not be fixed onto the surface of floors or plinths.

Section 12 - Supporting of Appliances, Equipment, Fittings, and Fixtures

12.1 Appliance supports

Stoves, refrigerators, bain maries, stock pots, washing machines, hot water heaters, large scales, food mixers, food warmers, cupboards, counters, bars etc. are to be supported on wheels, plinths, legs, brackets or framework as outlined in Section 11.

12.2 Sealing equipment to plinths

Where appliances, equipment fittings or fixtures are placed on plinths they are to be effectively sealed to the plinths, so as to prevent any floor washings, food spillage, liquids, vermin or miscellaneous refuse from gaining access to the surface of the plinths.

12.3 Fixture supports

Wash hand basins, sinks, draining boards, tubs, urns, boiling water units, benches, shelving are to be supported on legs, brackets, or framework as outlined in Section 11.

12.4 Bench or counter top equipment

Where appliances, equipment, fittings or fixtures which are not easily moved by one person when fully loaded, are placed on benches or counters they are to be:

(i) Kept at least 75mm above the bench or counter top and 75mm clear of walls or other vertical surfaces; or

(ii) Sealed to the bench or counter top in such a manner as to eliminate any open joint, space crevice or cavity which will allow liquids, food particles, grease or other refuse to collect; or

(iii) Fitted with approved wheels or castors providing sufficient space is available to move the fittings so as to provide access to the bench or counter top beneath and the walls or other vertical surfaces adjacent to the fitting for cleaning purposes.

Section 13 - Clearances (Other than Cooking and Heating Equipment)

13.1 Butting of fittings

Inaccessible crevices formed by the butting together of fittings or appliances are not permitted.

13.2 Flashing and sealing

Where fittings abutt each other or walls any crevice formed is to be provided with a cover flashing or sealed in such a manner as to eliminate any open joint, space, crevice or cavity which will allow liquids, food particles, grease or other refuse to collect therein.

13.3 Space between fittings

Where a space is provided between fittings such clear space is to be:

(i) For fittings up to 750mm in width - at least 75mm

(ii) For fittings over 750mm in width - at least 150mm

13.4 Refrigerators and frozen food cabinets

Where abutting walls shall comply with Section 10.4 and where kept clear of the walls shall comply with Section 10.5.

13.5 Hot water heaters

Floor mounted hot water heaters shall be supported above the floor and kept clear of the wall in accordance with Sections 11 and 12.

Section 14 - Clearances (Cooking and Heating Appliances)

14.1 Installation

Stoves, ranges, boiling tables, ovens, deep fryers, broilers, griddles, barbecues and similar heating appliances are to be installed as follows:

(i) Supported on approved wheels, plinths, legs, brackets or framework as outlined in Section 11.

(ii) Located at least 200mm clear of walls where such appliances do not exceed 3 metres in a continuous run and where adequate access to such space is provided from at least one end.

(iii) Located at least 400mm clear of walls where such appliances exceed 3 metres in a continuous run, and access to such space, of not less than 300mm, is to be provided from both ends.

(iv) Alternatively cooking appliances may be butted against walls, or other equipment (eg. other cooking appliances) provided all joints between the appliances and walls are suitably flashed or sealed in such a manner as to eliminate any open joint, space or crevice or cavity which will allow liquids, food particles, grease or other refuse to collect.

14.2 Provision of space
Where a space is provided between cooking appliances or between them and other fittings, such space is to be at least 75mm for cooking appliances up to 750mm in width.

14.3 Cover flashing
A cover flashing of approved material and easily removable by hand may be provided to such a space (Section 14.2).

14.4 Greater width
For widths over 750mm at least 300mm clear space is required.

14.5 Abutting other fittings
Where cooking appliances are butt fitted to each other or to other fittings they are to be suitably flashed or sealed in such a manner as to eliminate any open joint, space, crevice or cavity which will allow liquids, food particles, grease or other refuse to collect therein or vermin to harbour (ie. a complete seal).

14.6 Wheels or castors
Where cooking appliances are fitted with wheels or castors and provided with a flexible connection, such appliances may abutt the walls and each other providing sufficient space is available to adequately move the appliance for cleaning purposes.

14.7 Obstruction of ventilation
Salamanders and similar equipment shall not be located directly above other cooking appliances where the efficiency of mechanical exhaust ventilation will be impaired.

Section 15 - Counter and Bar Fittings

15.1 Construction - Counters and bars by be constructed in situ of solid impervious construction (see Section 6) or as a freestanding fixture.

15.2 Finish - Freestanding counters and bars shall be finished with glass, metal, plastic, timber sheeting or other approved material.

15.3 Timber sheeting - Timber sheeting is to be of solid core or similar timber sheeting, glued and jointed in an approved manner and be free of cracks, crevices or cavities.

15.4 Metal framework - Metal framework (if required) is to be as outlined in Section 11.

15.5 Decorative cladding - Decorative cladding to counters or bars and any space, crevice or cavity formed between the facade, fittings, equipment, walls etc. is to be made proof against the access of vermin.

15.6 Counters and bar tops:

(i) Are to be free of cracks, crevices or cavities.

(ii) The finished surface of the top and edges are to be smooth, durable and impervious.

(iii) Are to be finished on the underside with a smooth, durable impervious finish which may include glass, paint, clear laquer or welded sheet vinyl.

15.7 Protection of food - All food displayed on bars, counters, self service cafeterias, smorgasbords and similar positions, is to be adequately protected from contamination from customers' breath, handling, smoking or from flies, dust and other contamination. (See Figures 8, 9, 10 and 11).

15.8 Self Service display designs - Glass cabinets, louvered display counters and smorgasbord protection designs shall comply with design criteria as in the appended diagrams. (See Figures 8,9,10 & 11).

15.9 Supports
Freestanding counters and bars may be supported on approved wheels, plinths, legs, castors, brackets or framework, as outlined in Section 11.

15.10 Refrigerated milk bar counters
Refrigerated milk bar counters and similar refrigerated bar counters are to be designed as outlined in Section 10.

15.11 Drink dispensing equipment
All drink dispensing equipment is to be installed in an approved manner. Motor units are to be supported as outlined in Section 11.

15.12 Post-mix service
All post mix units are to be installed as outlined in Section 11.

15.13 Safety glass
All glass used in the construction of equipment in which food is displayed is to be safety glass.

15.14 Exposed edges
Glass shelving, sneeze guards and the like are to have exposed edges bevelled and where necessary protected to prevent chipping.

Section 16 - Cupboards and Cabinets

16.1 Construction
Cupboards and cabinets shall be constructed of glass, metal, plastic, timber sheeting or other approved material.

16.2 Timber sheeting
Timber sheeting is to be of solid core or similar timber sheeting, glued and jointed in an approved manner; free of cracks crevices or cavities.

16.3 Framework
Metal framework (if required) is to be as outlined in Section 11.

16.4 Backing materials
Plywood, hardboard and similar materials used for "backing" to cupboards and cabinets is not permitted unless the rear of the backing material is in an accessible position and coated with a smooth durable finish.

16.5 Cupboard and cabinet doors
Sliding doors are to be hung from the top of the door and the bottom guides or runners are to be open so as to permit food spillage to fall through to the floor or, alternatively, the bottom guides or runners may be terminated at least 25mm from each end of the door openings so as to permit easy cleaning.

16.6 Finish
The surface finish, both internally and externally, including doors and shelving, is to be to an approved standard commensurate with the use of the fitting.

Section 17 - Shelving

17.1 Shelving types
Shelving shall be freestanding or fixed.

17.2 Materials
Shelving shall be constructed of glass, metal, plastic, solid core timber or other approved material.

17.3 Absorbent materials
The use of particle board or similar absorbent material is not permitted unless the shelving is laminated on all surfaces with an approved impervious material. (See also Section 15.14) (See Fig. 6)

17.4 Timber framing
Timber framing of shelving shall not be permitted; metal or similar approved material shall be used.

17.5 Backing
Plywood, hardboard and similar materials used for "backing" to shelving are not permitted unless the rear face of the backing material is in an accessible position and coated with a smooth durable finish.

17.6 Freestanding shelving
Freestanding shelving shall be supported on wheels, legs, castors or framework as outlined in Section 11.

17.7 Shelf clearances
All shelving is to be kept at least 25mm clear of walls and vertical surfaces unless the joint between the shelf and the wall or other vertical surface is sealed in such a manner as to eliminate any open joint, space, crevice or cavity which will allow liquids, food particles, grease or other refuse to collect.

17.8 **Surface finish**
The surface of shelving, including edges, is to be smooth, durable, non-absorbent and free of cracks, crevices or cavities.

17.9 **Stainless steel shelving**
In kitchens, food preparation areas and similar wet areas, where direct contact with food may occur shelving and supports shall be constructed only of stainless steel. (See Figure 6)

Section 18 - Benches, Draining Boards and Tables

18.1 **Materials**
Benches, draining boards, table tops, etc. are to be of rigid smooth faced non-absorbent, durable material, free of cracks, crevices or cavities, such as stainless steel or other approved material.

18.2 **Surface finish**
The surface finish is to be of an approved type, commensurate with the use.

18.3 **Stainless steel surfaces**
In kitchens, food preparation areas and similar wet areas, where direct contact with food may occur, bench and table tops shall be constructed of stainless steel.

Part C - Washing Facilities, Other Facilities and Special Requirements

Section 19 - Washing Facilities

19.1 Eating and drinking utensils washing facilities

The following washing facilities are to be provided for the cleaning of eating and drinking utensils:

(i) A sufficient number of efficient dish-washing and/or glass washing machines; and/or

(ii) A double bowl sink and/or two compartment tubs.

19.2 Temperature indicator

Each dish-washing and glass washing machine shall be fitted with a thermometer which is visible to the operator and show operating temperatures as required by respective State legislation.

19.3 Rinsing cycle

The rinsing cycles shall be operated at a temperature of not less than 75°C or at any higher temperature required by respective State Legislation.

19.4 Water temperature

One bowl of each double sink or one compartment of each two compartment tub shall be supplied with hot water at a temperature of not less than 45°C, together with sufficient soap or detergent for effectively washing the eating and drinking utensils and the other shall be supplied with hot water at a temperature of not less than 75°C, for the final rinsing of the eating and drinking utensils or at any higher temperature required by respective State Legislation.

.9.5 Thermometers

In all cases in which the cleansing of eating and drinking utensils is carried out in double bowl sinks or two compartment tubs, thermometers accurate to plus or minus 1°C, shall be provided convenient to the sinks or tubs to permit frequent checks of the water temperatures.

19.6 Rinsing basket

The bowl or tub used for rinsing shall be provided with approved facilities (eg. wire basket with high handles) so that all surfaces of every utensil immersed in rinse water are exposed to such water for 30 seconds.

19.7 Equipment washing facilities

For tools of trade, benches, fittings, machinery and utensils and implements (other than those in Section 19.1) a pot sink or single bowl tub shall be provided.

19.8 Hot and cold water

Such equipment washing facility (Section 19.7) is to be provided with an adequate supply of hot and cold water under pressure; the hot water temperature shall be not less than 45°C.

19.9 Hand washing facilities

Hand washing basins shall be provided in sufficient number in close proximity to where food is prepared; with hot and cold water provided to each, together with a sufficient supply of soap and hand drying facilities. Hot water shall be at a temperature of 40°C or any higher temperature required by respective State legislation.

19.10 Mixing device

Hot and cold water shall be supplied to the hand wash basin through an approved mixing device which can be adjusted to enable hands to be washed under hot running water.

19.11 Hand drying facilities

Hand drying facilities include single use towels, air dryers or other approved hand drying facilities.

19.12 Location of hand basins

The positioning of hand wash basins is determined by the operations of each area and is subject to approval in each individual case.

19.13 Accessible locations

Hand wash basins should be of the freestanding type and are not to be installed under benches or similar fittings and are to be readily accessible during hours of operation.

19.14 Preparation sink

A separate sink shall be required when foodstuffs need to be prepared by immersion in water.

19.15 Hot and cold water

Such a sink is to be provided with an adequate supply of hot and cold water under pressure, the hot water temperature shall be not less than 45°C.

19.16 **Capacity of hot water systems**
Hot water systems must be capable of supplying adequate hot water at minimum temperatures as outlined above at all times, especially at peak washing up periods.

19.17 **Washing facilities for floors**
A cleaner's sink may be required for the cleaning of floors and such a sink is to be provided with an adequate supply of hot and cold water under pressure, and is to be located in a room or space away from any food preparation area.

19.18 **Hose connections**
Where the floor is drained to an approved sanitary fitting, hot and cold water taps, fitted with hose connections, may be required to be installed in an approved position at least 600mm above the floor.

Section 20 - Food Conveyors (Dumb Waiters)

20.1 **Vertical lift conveyors**
Dumb waiters are to be constructed with an approved metal compartment with rounded internal angles and free from any cracks, open joints and crevices capable of holding food refuse and vermin.

20.2 **Cleaning access**
Any "well" formed at the bottom of a conveyor shaft capable of holding refuse, is to be constructed as to provide access for easy cleaning.

20.3 **Safety Regulations**
Such access shall be provided in accordance with any installation and safety regulations of the relevant authorities.

20.4 **Shaft construction**
Where the walls are constructed in solid materials such as bricks, concrete, etc. these walls shall be cement rendered internally to a smooth even finish and coved at all angles.

20.5 **Horizontal food conveyors**
Horizontal food conveyors are to be constructed of angle iron, channel iron, "T" iron, tubular framing or other approved material, with access panels to give reasonable access for maintenance and easy cleaning.

Section 21 - Oyster Opening Bays or Areas

21.1 **Separate area**
A separate room or area is to be provided for the hosing down and opening of oysters.

21.2 **Construction**
The floor and walls of any room or place used for the hosing down and the opening of oysters, shall be constructed of solid material and finished in an approved manner.

21.3 **Drainage**
Adequate drainage shall be provided to such room or area; grit arrestors may be required.

21.4 **Running water**
All sinks used in conjunction with the opening of oysters are to be provided with running potable water.

21.5 **Storage racks**
Bagged oysters are to be stacked at least 300mm above the floor on approved racks or stands.

Section 22 - Window Displays

22.1 **The display shelf**
The window display shelf shall be of rigid smooth faced non-absorbent material, free of cracks or crevices - such as stainless steel or other approved material.

22.2 **Coved intersections**
Where wet foods such as meat, fish and the like are displayed, the display shelf is to be coved at all intersections and graded and drained in an approved manner.

22.3 **Waste discharge**
An air gap is to be provided between the discharge wastepipe and the connection to the sewerage service.

22.4 Supports
Display shelving shall be supported on approved wheels, legs, brackets, castors or framework or on solid construction. (See Section 11).

Section 23 - Butcher's Shops

23.1 Special requirements
These additional requirements shall apply to butcher's shops, including any room or place used for boning, curing, mincing, salting, storage, fat rendering, sausage filling, pre-packing or similar process of preparation of meat.

23.2 Brine and pickling vats
Brine and pickling vats are to be constructed of stainless steel, or other approved material having a smooth, non-absorbent, non-toxic finish, free of cracks, crevices or cavities and coved at all intersections.

23.3 Vat design
Where such vats are designed or fitted as an integral part of the walls they shall be constructed and fitted in such a manner as to prevent any wall washings of contaminants from gaining access to the interior of the vat when cleaning down the surrounding walls.

23.4 Aerial disconnection
An air gap is to be provided between the discharge wastepipe from the vat and the connection to the sewerage service.

23.5 Waste products
Bones and waste matter are to be stored in approved metal containers provided with close fitting lids.

Section 24 - Staff Dressing Room Accommodation

24.1 Dressing room or changing area
Adequate dressing room accommodation shall be provided for male and female staff, and sufficient lockers shall be provided for all clothing and personal effects.

24.2 Cleaning materials and equipment
Adequate facilities such as a cleaners room, locker or suitable cupboard shall be provided for the storage of cleaning equipment and material. (See Section 7.1)

Section 25 - Toilet Accommodation

25.1 Staff toilet facilities
Adequate toilet accommodation and handwash facilities with hot and cold water together with an adequate supply of soap and hand drying facilities shall be provided for male and female staff during hours of operation.

25.2 Air locks
Internal water-closet compartments are to be entered through an air lock.

25.3 Customer toilet accommodation
Adequate customer toilet facilities shall be provided in accordance with the requirements of the Building Code of Australia.

Section 26 - Ventilation

26.1 Comfort ventilation
Ventilation is to be provided either by natural means or by an approved mechanical ventilating system.

26.2 Kitchen exhaust ventilation
Where cooking or extensive heating processed or such other processes as may be specified are carried out in the kitchen or in food preparation areas, an approved mechanical ventilating exhaust system shall be installed and operated in accordance with Australian Standard AS 1668 Part 1 & 2.

26.3 Special areas
Toilets, garbage rooms, grease arrestor rooms shall be either adequately ventilated or shall be ventilated by an approved mechanical exhaust ventilating system.

1. Floor/wall coving
2. Plinth not less than 75 mm high
3. Impervious floor graded & drained.
4. Fittings sealed to wall or 200 mm clear
5. Walls tiled to 2000 mm.
6. Sealing between fittings
7. Legs 150 mm min.
8. No Storage shelves below canopy
9. Splayed windowsill 300 mm above prep. bench
10. Preparation bench - steel framed
11. Bottom shelf min. 150 mm. above floor
12. Mechanical exhaust ventilation canopy
13. Rigid smooth faced ceiling
14. Smooth cement rendering
15. No timber door frames
16. Hand basin, hot & cold water mixing set
17. Soap & towel dispenser
18. Water & drainage pipes concealed in wall

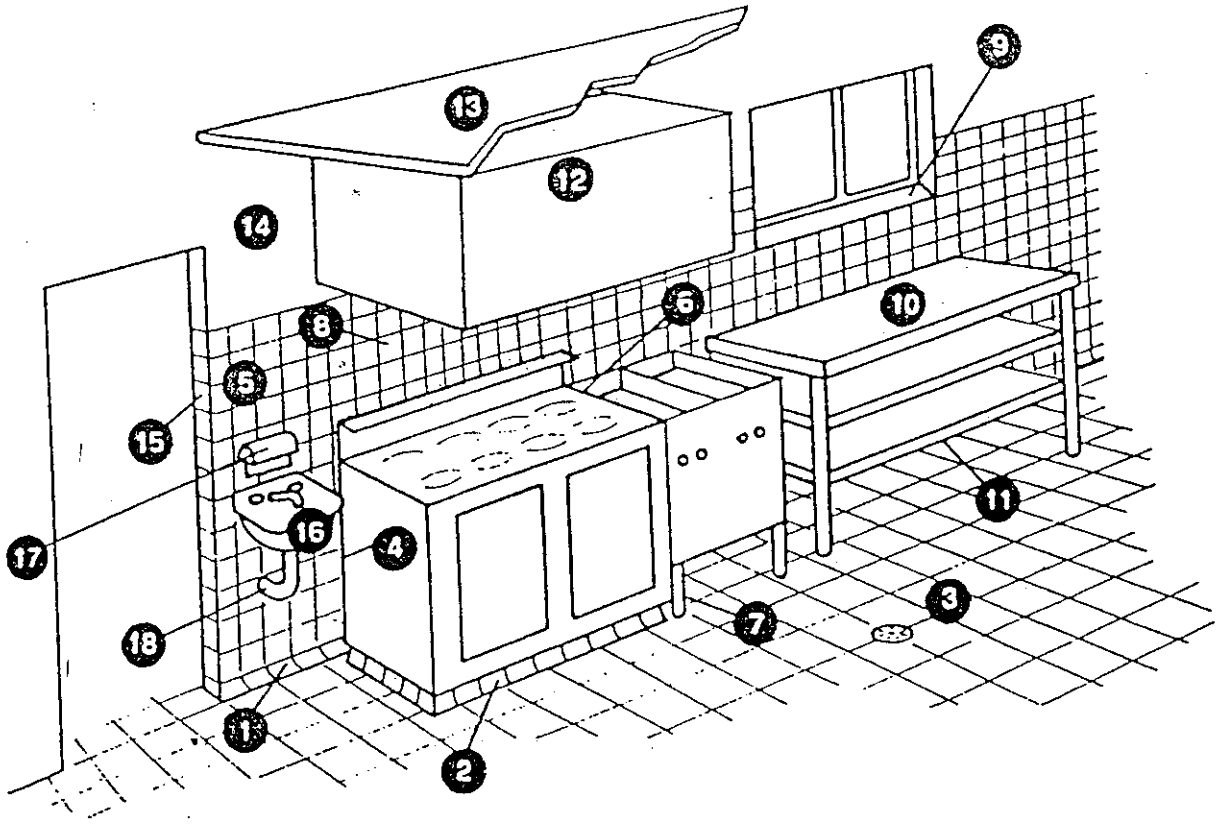


FIG. 1. Requirements — Typical Food Preparation Area

1. Floor/wall coving
2. Castors to underbench storage
3. Impervious floor graded & drained
4. Hot water heater sealed to wall
5. Walls tiled to 2000 mm
6. Shelving 25 mm clear of wall
7. Sink unit on metal frame
8. Thermometer
9. Garbage recepticle
10. Dishwasher with temperature indicating device
11. Legs 150 mm. min.
12. Bottom shelf min. 150 mm. above floor
13. Rigid smooth faced ceiling
14. Smooth cement rendering
15. Water & drainage pipes concealed into walls
16. Hand basin, hot & cold water mixing set
17. Soap & towel dispenser

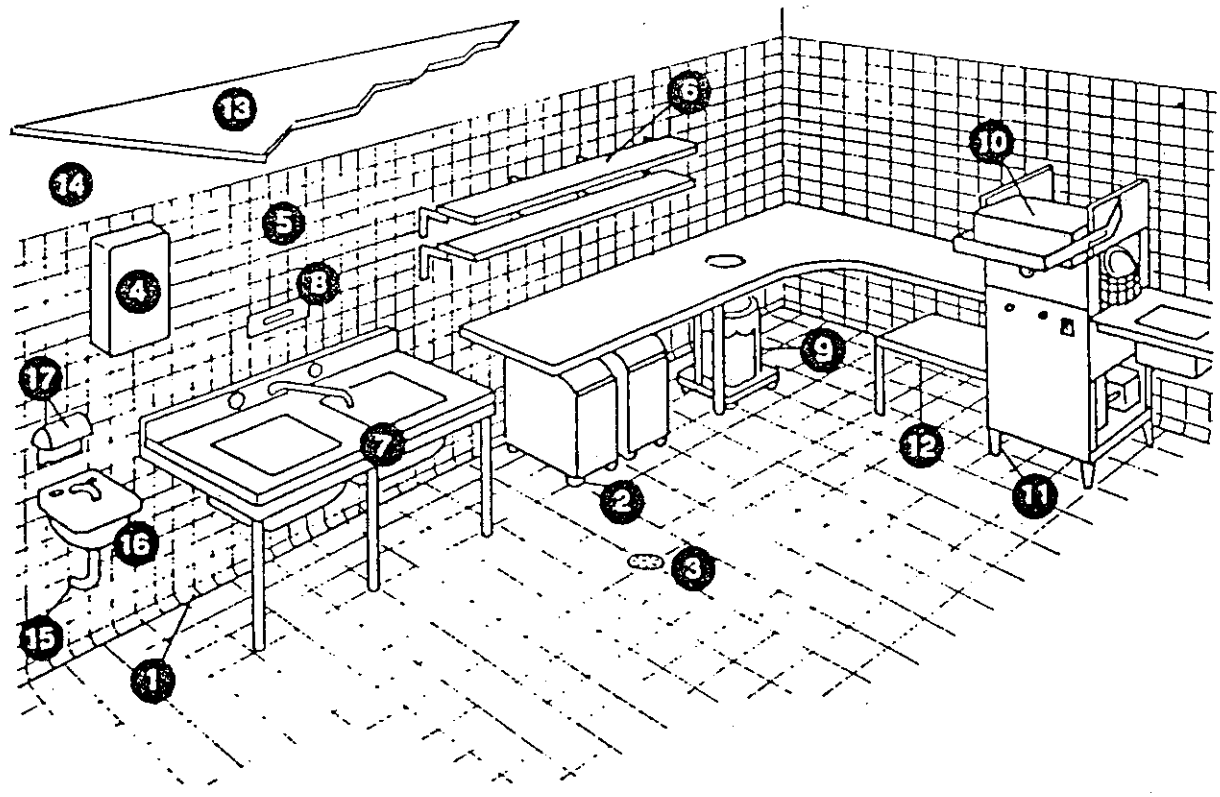


FIG. 2. Requirements — Typical Wash-up Area

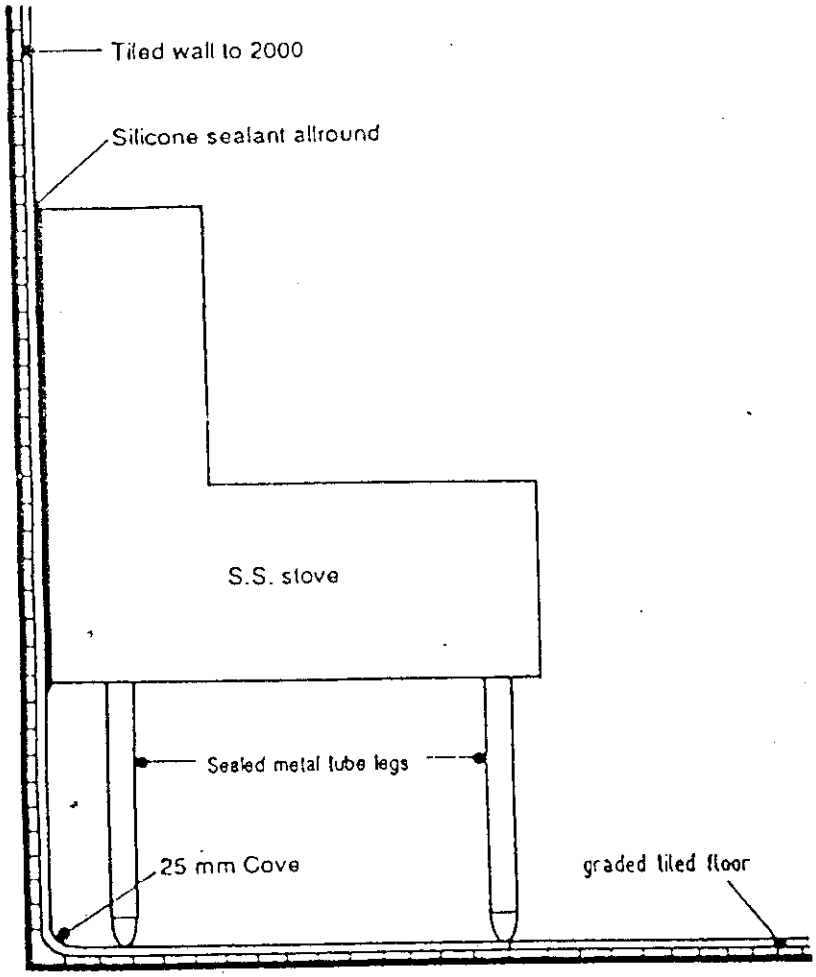


FIG. 3. Typical Arrangement - Stove to Wall

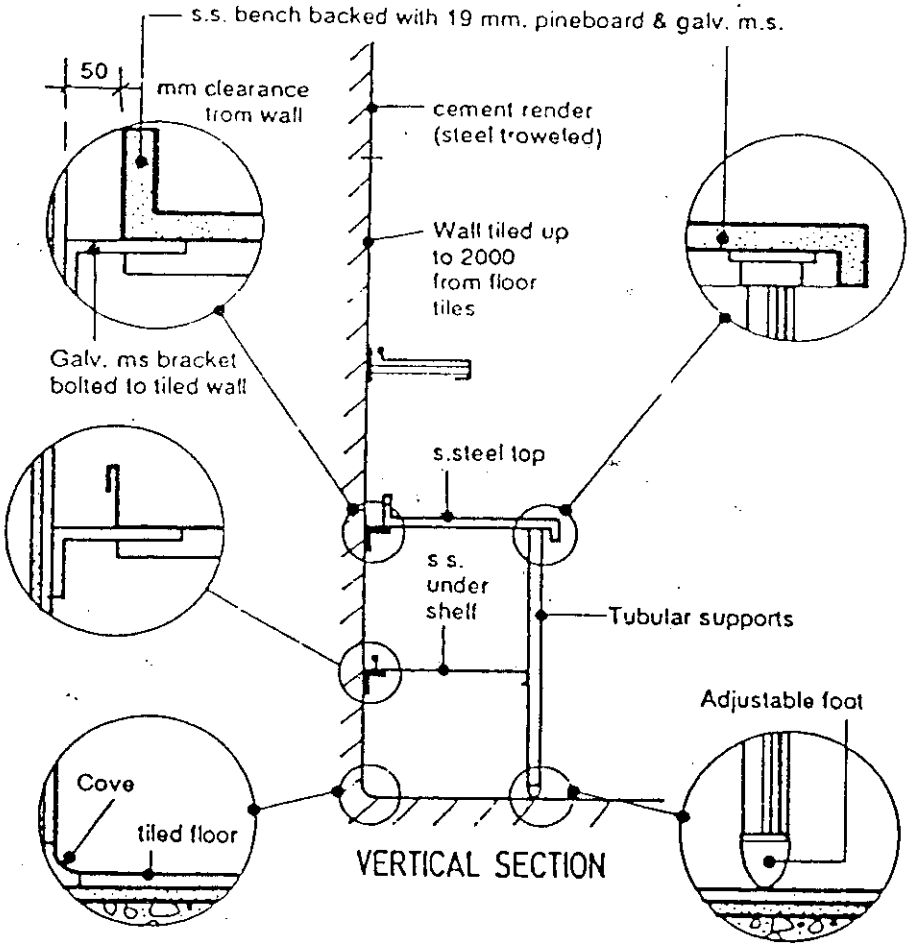


FIG. 4. Typical Arrangement - Wall Bench

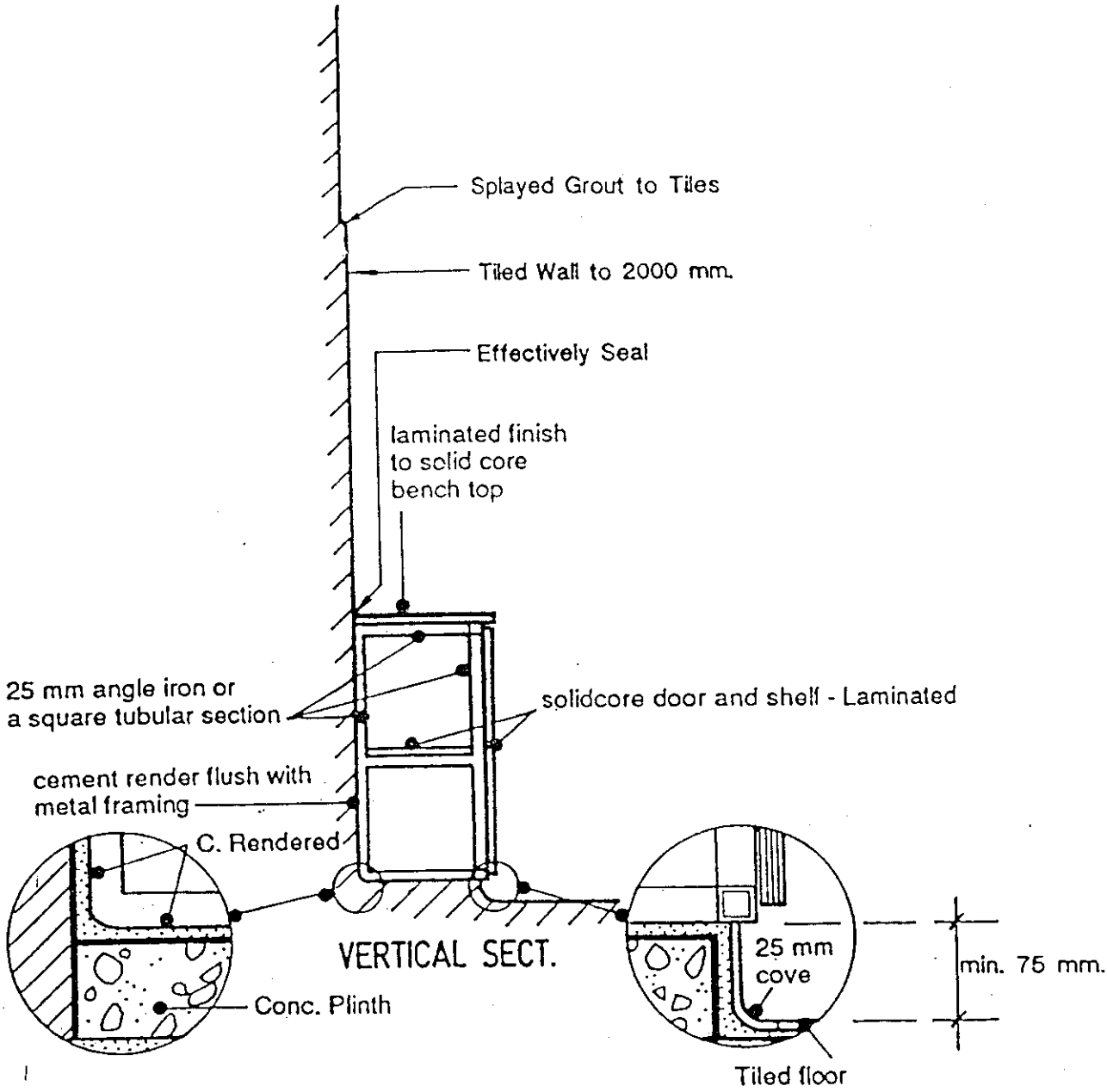


FIG 7. Typical Arrangement - Wall Cupboard (On Plinth)

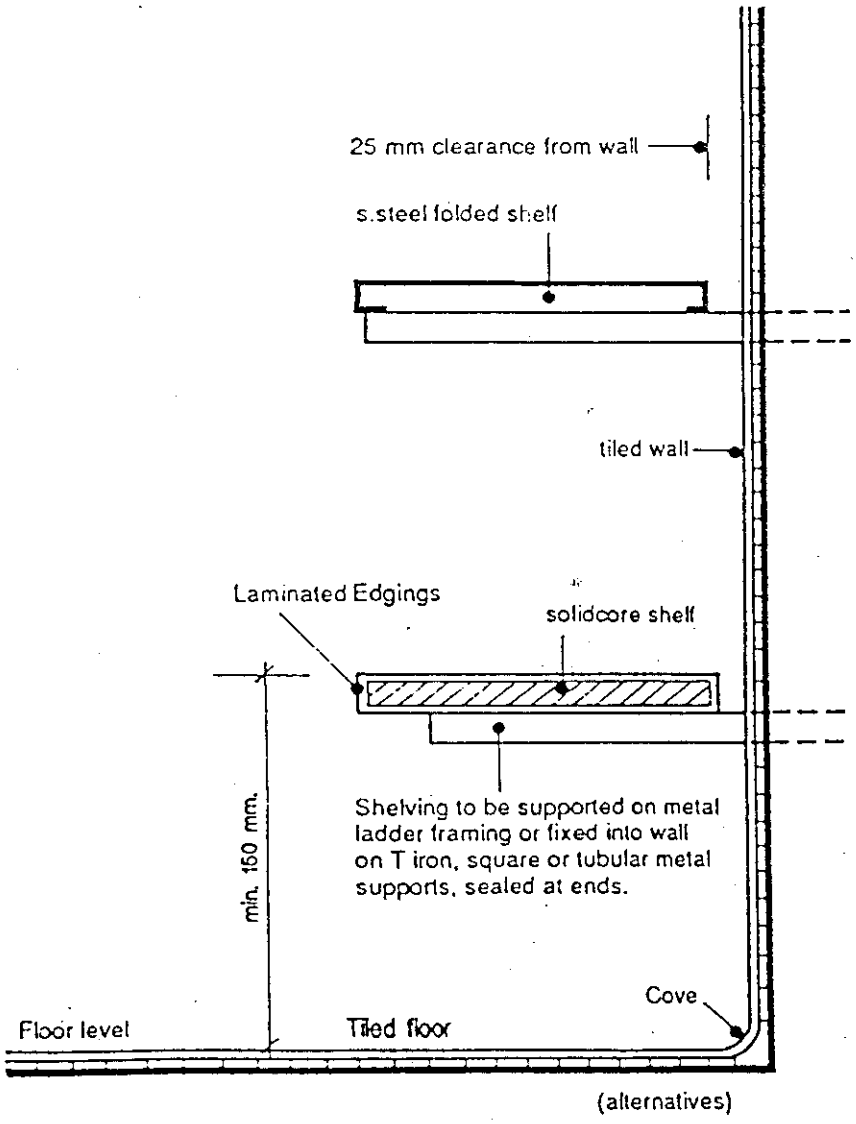


FIG 6. Typical Arrangement - Shelving

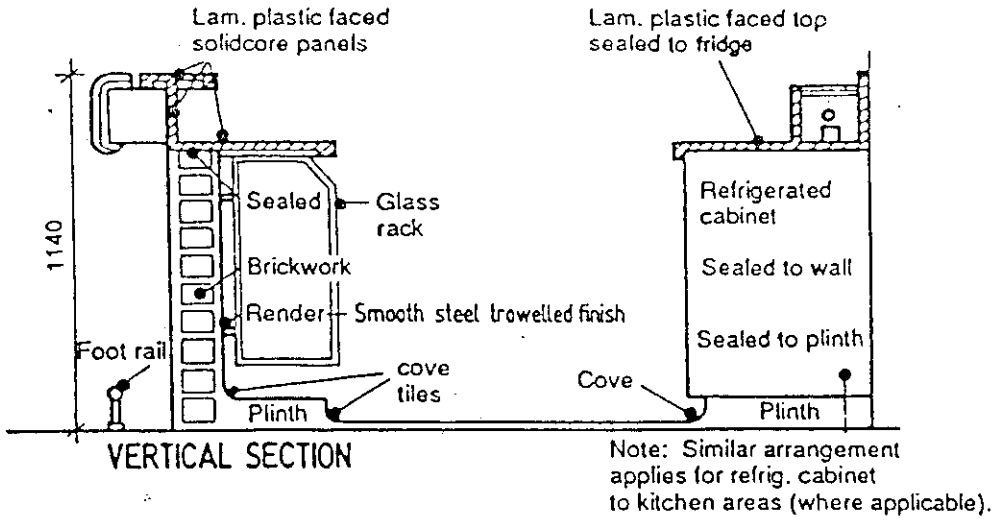


FIG 5. Typical Bar and Plinth Arrangement