

# APPLICATION FOR A CONSTRUCTION CERTIFICATE

Construction Certificate

Modified Construction Certificate

1. Applicant's details 001 725 248 9555 1177 ALEK NOVAKOVIC 0402 276963 2. Owner's consent BAYVIEW INVESTMENT GROUP P/C 8/401 NEW SOUTH HEAP ROAD DOUBLE BAY NSW ZO28 . Location of property 1925 PITTUATER BAYVIEW 301 113 9238

4. Description of work What stype of work do you propose to carry out?	
Please describe briefly everything that you want approved  BASEMENT CONSTRUCTION AND AND AND AND AND AND AND AND AND AN	ANCILLARY WORKS: - footings and pasement only,
5. Estimated cost of work  The estimated cost of the development on contract sprace may be subject to nevice technological cost of awar to severe the subject to severe the subj	W
6. Development Consent  Gourgi Consent no. 616/2004  Deterorepeter  7. Building Code of Australia classification  This can be round on the development consent.  Builder's details	
If knowns to be completed in the case of residential building work  Name: INFINITY CONSTRUCTION GROW PL  Owner / builden permit to  9. Applicant's declaration	icerceino 173639 C
Edipply for mean struction descriptions to carry out building works as described be expected by the control of	diwith this application have commenced. To the

#### SUBMISSION REQUIREMENTS

#### A GENERAL Are the plans submitted with the Construction Certificate Application in accordance with the Development Consent? yes 🛂 Have all the conditions of Development Consent relating to the issue of the Construction Certificate been fully complied with? Yes 🔽 No 🗌 If you have answered NO to either of the above questions, then you will need to speak with the Accredited Certifler BEFORE LODGING YOUR APPLICATION. ALL PROPOSALS (has the following required information been submitted?) Not In the case of an application for a Construction Certificate for Applicable Yes No building work Three (3) copies of detailed architectural plans and specifications The plan for the building must consist of a general plan drawn to a scale not less than 1 100 and a site plan drawn to a scale not less than 1 200 The general plan of the building show a plan of each floor section show a plan of each elevation of the building show the levels of the lowest floor and of any yard or unbuilt on area belonging to that c) floor and the levels of the adjacent ground indicate the height, design and full construction details indicate the provision for fire safety and fire resistance (if any) Where the proposed building work involves any alteration or addition to or rebuilding of an W existing building all copies of the general plan are to be coloured or otherwise marked to the satisfaction of the Council to adequately distinguish the proposed alteration addition or rebuilding with a separate letter listing the proposed changes being submitted П to describe the construction and materials of which the building is to be built and the method of drainage sewerage and water supply state whether the materials proposed to be used are new or second hand and give particular Where the proposed building work involves a modification to previously approved plans and W П specifications the general plans must be coloured or otherwise marked to the satisfaction of the Accredited Certifier to adequately distinguish the modification If the proposed building work involves a modification to previously approved plans and specification which were subject of a Development Consent has the original Development Consent been modified by Council? Except in the case of an application for or in respect of domestic building work a) a list of any fire safety measures that are proposed to be implemented in the building J or on the land on which the building is situated and if the application relates to a proposal to carry out any alteration or rebuilding of or addition to an existing building a separate list of such of those measures as are currently implemented in the building or on the land on which the building is situated. This list must specify the standard of design of each of those fire safety measures to which they were originally installed. This list must describe the extent capability and basis of design of each of the Copy of BASIX Certificate & Schedule of BASIX Commitments

#### HOME BUILDING ACT 1989 (as amended) OWNER/BUILDER REQUIREMENTS

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Applicants for work at a residential property with a value of work over \$12 000 require insurance as specified in the Home Building Act

Copy of signed BASIX Compliance Statement

All other documentation to satisfy conditions of Development Consent

Owner Builders require Property Owner Builder's Permit issued by the Department of Fair Trading for all projects over \$5 000 In addition to this permit all projects valued in excess of \$12 000 may also require a contract of insurance under the provisions of the Home Building At 1989 as amended This requirement will take effect should the property owner offer the property for sale in the ensuing period of 7

Enquiries on any matters relevant to this section should be taken up with the Department of Fair Trading at Level 21 Astra House 227 Elizabeth Street Sydney (ph 133220)

#### LONG SERVICE LEVY (applies to all classes of buildings)

PARTICULARS OF THE PROPOSAL

A Long Service Levy at 0 35% of the cost of works is payable on projects valued \$25 000 or more. This sum can be paid directly to the Long Service Payments Corporation or to Council acting as an agent to the Corporation. Partial exemption from the levy may be granted to non profit organizations churches and to owner/builders. The levy may also be paid in instalments. Application forms for these exemptions are available from Council but all enquines in this regard should be address to the Long Service Payments Corporation.

THE CONSTRUCTION CERTIFICATION CANNOT BE ISSUED UNLESS THE LONG SERVBICE LEVY AND HOME BUILDING ACT 1989 INSURANCE (APPLICABLE TO RESIDENTIAL PROPERTIES) HAVE BEEN PAID OR EVIDENCE OF THE EXEMPTION PROVIDED TO COUNCIL

What is the area of t	he land (n	1°)?	i	Gross floor area of building (m²) as proposed							
80	195				6400						
What are the curre building(s)/land?	ent uses	of all or part	s of the	Location							
VA	CANI	r		Use	MA						
Does the site contain	a dual occ	cupancy?		What is the gross		the proposed (	addition or ne				
	No			building (sq metres)?  SEE Above							
What are the propose	ed uses of	all parts of the	building(s	Number of pre-exis							
land?	N	•				NIL					
Number of dwellings	to be dem	olished		How many dwellings	proposed?	<u></u>					
	N	14				40					
How many storeys wil	i the build	ling consist of?		Will the new building	g be attached to	the existing b	uilding? No				
	Th	19		Will the new buildin	g be attached to	any new build	rg' KE				
MATERIALS TO BE US	ED										
The following informat	ion must	be supplied for	the Australia	n Bureau of Statistics							
Place a tick ( $\checkmark$ ) in the $t$	oox which	best describes	the material	s the new work will be	constructed of						
WALLS Brick veneer		FLOOR Concrete		ROOF Aluminium		FRAME Timber					
Full brick		Timber		Concrete	<b>✓</b>	Steel					
Single brick		Other		Concrete tile		Other					
Concrete block		Unknown		Fibrous cement		Unknown					
Concrete/masonry				Fibreglass							
Concrete				Masonry/terracotta st	ningle						
Steel				Tiles							
Fibrous cement				Slate							
Hardıplank				Steel							
Timber/weatherboard				Terracotta tile							
Cladding aluminium				Other							
Curtain glass				Unknown							
Other											
Unknown											

# PRINCIPAL CERTIFYING AUTHORITY (PCA) SERVICE AGREEMENT

Environmental Planning and Assessment Act 1979 (the Act') Environmental Planning and Assessment Regulation 2000 ('the Regulation)

This document is a Service Agreement between Insight Building Certifiers Pty Ltd and the undermentioned owner of the subject property

# **TERMS AND CONDITIONS**

This document is a Service Agreement between Insight Building Certifiers Pty Ltd and the client' For the purposes of this Service Agreement, 'the client is the person who appointed the PCA

#### OBLIGATIONS OF THE ACCREDITED CERTIFIER (AC) / PCA

- Critical Stage Inspections
  - The AC/PCA (or another AC agreed to by the PCA) shall carry out the critical stage inspections as are prescribed in the Regulations and other required inspections contained in the Notice to the client issued by the PCA under S 81A of the Act and CI 103A of the Regulations
  - 12 The PCA shall issue an Inspection Result Sheet for each inspection undertaken
- Issuing of Occupation Certificate 2
  - The PCA shall issue an Occupation Certificate for the building works when satisfied that
    - 211 All conditions of the development consent required to be satisfied prior to the issue of the Occupation Certificate have been complied with
    - 212 The building works are in conformity with the issued Development Consent
    - and Construction Certificate and the Act and Regulations
      The building works are suitable for occupation in accordance with their classification under the BCA 213
    - All commitments listed within the BASIX Certificate (if applicable) have been 214
    - A fire safety certificate has been issued (unless a Class 1 or 10 building)
    - An application for the issue of an Occupation Certificate has been received and the fee specified in the issued Fee Proposal for the issue of such 216
    - certificate has been paid to the PCA
      The building does not pose any threat to the health or safety of the 217 occupants in the case of an Interim Occupation Certificate and
    - In the case of a Final Occupation Certificate all outstanding payments have 218 been received (as per this Agreement)

#### **OBLIGATIONS OF THE CLIENT**

- The client 3
  - Shall ensure that the site/works are available for the PCA to carry out its contractual 31 and statutory obligations,
  - Shall ensure that competent people are used/engaged for all aspects of the building 32 works.
  - 33 Agrees to attend any meetings if required by the PCA
  - Agrees to comply with any Notices or Orders that the PCA issues
  - Shall arrange for provision of additional professional reports/certificates as requested by the AC/PCA NB Insight Building Certiflers may rely upon various certification(s) from appropriately qualified persons to verify components of the project to demonstrate compliance with conditions of Development Consent. This may also include Survey Reports
  - Shall provide all information that can be reasonably obtained to enable the AC/PCA to 36 fulfil its obligations
  - 37 Agrees to act in good faith, in accordance with the Act and Regulations and in a cooperative fashion,
  - Shall comply with all terms and conditions of the issued Development Consent and 38 statutory requirements
  - Shall ensure no nuisance and/or damage is caused to any adjoining properties and/or 39 adjacent public place and that no work (including excavation drainage and/or footings) is carried out on any adjoining property
  - Shall ensure that the PCA receives the required notification of inspections in the 3 10 manner and timeframe detailed in the PCAs notice to the client issued under S 81A(2)(b1)(ii) of the Act and Cl 103A of the Regulations
  - Shall ensure that there is no occupation and/or use of the building until it is authorised 3 11 by the issue of an Occupation Certificate under the relevant Development Consent and Construction Certificate, and

- 3 12 Shall not carry out permit and/or allow any development or work in breach of the Act Regulations or the Building Code of Australia (BCA) or that encroaches upon an adjoining property
- Acknowledges that any application for the issue of an Interim Certificate or Modified Construction Certificate, is subject to a separate Fee Proposal" (and payment of such fees) prior to the issuing of the subject certificate(s)

#### COMMENCEMENT OF BUILDING WORK / PCA APPOINTMENT

- 4 The client shall
  - 4.1 Ensure no building work is commenced unless the required Construction Certificate has been issued
  - Ensure no building work is commenced until the client has received the PCA's notice under \$ 81A(2)(b1)(ii) of the Act and Cl 103A of the Regulations, and
  - Ensure no building work is commenced until the client has complied with the requirements of S 81A(2)(b2) of the Act,
  - 4.4 Ensure the Principal Certifying Authority (PCA) signage as provided is displayed in public view on the property and maintained for the duration of building works
  - The client acknowledges that.
  - 4.5 The statutory PCA appointment role under this Service Agreement is not accepted by the AC until the client has satisfied the requirements of 4.1 and 4.4 above, and the PCA has confirmed such appointment in writing to the client in the notice issued under S.81A(2)(b1)(ii) of the Act and CI 103A of the Regulations

#### **GENERAL MATTERS**

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- Any part of the building works are redesigned and/or constructed contrary to the issued Construction Certificate plans and/or this Agreement
- An amendment to the Act the BCA or any other law requires any aspect of the building works or the AC s/PCAs work to be varied
- The PČA is required to undertake more inspections than those paid for under the issued Fee Proposal
- The builder owner and/or client does anything that causes a delay to the building works or does anything that delays the ability of the AC/PCA to carry out its obligations under this Agreement,
- Written correspondence is received by the AC/PCA from the Council and/or an adjoining owner/occupant and/or other person/authority in regard to the development works and/or the subject property and such correspondence necessitates additional works and/or the subject property and such correspondence necessitates additional
- work by the AC/PCA (and/or others on behalf of the AC/PCA),

  Preparation is needed of additional reports letters photocopying etc, at the request of the client owner or builder
- 5 7 Unauthorised building work is carried out on the property and/or any adjoining land,
- If any Notice or Order is issued by the PCA or Council or other authority or Court then the AC/PCA may charge additional fees at the rate of \$200 (plus GST) per additional hour of work incurred. Notice of such additional fees is to be made by way of notice to the client in writing stating the reason/s for the additional fees the amount of the additional fees and the required payment time.
- 6 Duration of Works
  - If the building work does not commence within 12 months of the date of issue of the Construction Certificate or if the building work is not completed (and a Final Occupation Certificate not issued) within 18 months of the date of issue of the Construction Certificate, then the AC/PCA may charge an additional fee of 10% of the total amount of the original Fee proposal"
- 7 Termination
  - 7 1 The AC/PCA may terminate this Agreement at any time by issuing a Notice of Termination in circumstances involving any breach of clauses 4 and/or 5 of this Agreement, and/or failure to pay any money owed to the AC/PCA or in circumstances where upon the AC/PCA's obligations are restrained by an Order of a court of law
  - 7 2 The client must pay all termination money to the AC/PCA within 14 days of receiving a Notice of Termination
  - 7.3 If the PCA or client terminates the Agreement the PCA is entitled to carry out a further inspection at the client's expense (such inspection being necessary to audit and document the works as at that time)
  - 7.4 This Agreement and PCA appointment automatically exhausts upon the issue of the Final Occupation Certificate
- 8 Effect of Contract
  - This contract represents the entire contractual agreement between the parties and overrides any other documents or oral representations upon which the parties mages to rely to generate any legal effect or to imply any contractual obligation

THIS DOCUMENT IS NOT AN AUTHORITY TO COMMENCE ANY BUILDING WORKS - NO BUILDING WORK MAY TAKE PLACE UNLESS A CONSTRUCTION CERTIFICATE AND REQUIRED PCA STATUTORY NOTICES HAVE BEEN ISSUED AND RECEIVED

OWNER'S ACCEPTANCE OF SERVICE AGREEMENT / APPOINTMENT OF PCA

**Proposed Building Works** 

BASEMENT CONSTRUCTION AND ANCILLARY WORKS BEING
PART OF 40 APPARTMENTS, PARKING + LANDSCAPING
834/05

**Property Address** 

1825 PITTLATER ED BAYVIEW

In accordance with the *Terms and Conditions* contained herein and the issued Fee Proposal document, I hereby agree to this Service Agreement with **Insight Building Certifiers Pty Ltd** including the associated payment of fees. In accordance with the Act and Regulations. I hereby make application to appoint as the Principal Certifying Authority (the PCA) for the proposed building works under the subject development consent concluding upon the issuing of the Final Occupation Certificate or upon termination of this agreement. I acknowledge that **Insight Building Certifiers Pty Ltd** is not the PCA until it has accepted and confirmed its appointment to me in writing

Owner's Name

BAYNEW INVESTMENT GROUP P/C

Owner's Address

8/401 NEW SOUTH HEAD RIP DOUBLE BAY NEW

ZO28

Owner's Signature

DIRECTOR

### ACCREDITED CERTIFIER'S ACCEPTANCE OF SERVICE AGREEMENT

I hereby agree to provide the nominated services detailed in this Service Agreement and the issued Fee Proposal, subject to the terms and conditions attached

Insight Building Certifiers Pty Ltd
Accredited Certifier No (Building Pro

(Building Professionals Board)

Date



Mr A Novakovic C/-Bayview Investment Group Pty Ltd 8/401 New South Head Rd Double Bay NSW 2028

# **Construction Certificate**

#### Certificate

I certify that if the work is completed in accordance with the attached plans and specifications which have been approved it will comply with the requirements of the Environmental Planning and Assessment Regulation 2000 as referred to in Section 81A (5) of the Environmental Planning and Assessment Act 1979 This certificate is issued without any conditions for the following premises

Address of Property 1825 Pittwater Rd, Bayview

Plan Numbers Approved Drawings No A1 04 rev J prepared by Antoniades Architects & dated Feb 10

NOTE REFER TO THE ATTACHED 'SCHEDULE A' LIST OF DETAILS TO BE READ IN CONJUNCTION WITH THIS CONSTRUCTION CERTIFICATE

Information attached to this decision

A Fire Safety Schedule

The Conditions of the Certificate

**Construction Certificate No** 

**Date of this Decision** 

and Certificate

1408CC3

26<sup>th</sup> October 2010

**Certifying Authority** 

Insight Building Certifiers Pty Ltd

Signature

Name of accredited Certifier

John Briggs

**Building Professionals Board** 

Accreditation No

**BPB 0049** 

**Proposal** 

Basement slab, walls, pool piers & stormwater

management

**Development Consent No** 

834/05

Date of Determination

15 3 07

Council Area

**Pittwater** 

**Applicant's right of appeal** – If the certifying authority is a council, a Minister or a public authority and the certifying authority has issued a construction certificate subject to conditions, you can appeal against these conditions to the Land and Environment Court within 12 months from the date of the decision

Construction Certificate No 1408CC3

Address 1825 Pittwater Rd, Bayview

Applicant Mr A Novakovic

# SCHEDULE A

The following is a list of details/plan references that should be read in conjunction with Construction Certificate No 1408CC3

Structural Engineers drawings no 89022874 sheets 100-107, 110 & 115 all rev A & dated 28 9 10, Sheets 112 Rev B dated 6 10 10 & sheet 203 RevA dated 23 9 10 all prepared by Cardno (NSW/ACT) Pty Ltd

COURSE OF THE CONTRACT. G2 THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR STRUCTURAL ENGINEERING PURPOSES ONLY. IN ALL OTHER MATTERS, THE APPROVED ARCHITECTS' DRAWINGS SHALL TAKE PRECEDENCE. ALL DISCREPANCIES THAT COULD RESULT IN CHANGES TO THE STRUCTURAL DETAILS SHALL BE REFERRED TO THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION. IF IN DOUBT - ASK.

G3 CONSTRUCTION FROM THESE DRAWINGS AND ASSOCIATED CONSULTANTS' DRAWINGS SHALL NOT COMMENCE UNTIL APPROVED BY THE LOCAL

G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES

EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION. G5 ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE. ENGINEERS' DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.

G6 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.

G7 THE BUILDER SHALL GIVE 48 HOURS NOTICE FOR ALL ENGINEERING

G8 UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.

G9 THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND STATUARY REGULATIONS FOR THE FOLLOWING LOADINGS: FOR IMPORTANCE LEVEL: 2 (AS/NZS 1170.0/BCA)

FLOOR USAGE	LIVE LOAD kPa	SUPERIMPOSED DEADLOADS (kPa)
STEEL ROOFS	0 . 25	-
ROOF SLAB	1 . 5	1.2
RES. UNITS	1.5	0.5
RES. BALCONIES	2.0	1.0
PODIUM AREAS	4 , 0	6.8
BMENT CARPARK	2.5	H

WIND	L	AO.	DS	A	RE	IN	A	CC	0	RD	A	NC	Ε	W	IT	H	A	S	1	IZ	S	11	7(	).2	AS	FOLLOWS:
BAS	1	C	W	1	N	D	٧	E	L	0	c	1	Т	Υ	86	(	٧	5	0	0	)					45m/s
REG	1	01	٧													į.		¥	v.		*		10			A 2
TER	R	A	١N		C	ΑТ	E	G	0	R	Y				*			*	v		+					T C 3

THE RELEVANT PROVISIONS OF AS 1170.4 HAVE BEEN APPLIED FOR A HAZARD FACTOR (Z) OF 0.08 AND FOR A PROBABILITY FACTOR (kp) OF 1.0 AND A SUBSOIL CLASS Ce

FOUNDATIONS

F1 FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING INTENSITY OF 250kPa ON V. STIFF CLAY. THIS FOUNDATION MATERIAL SHALL BE UNIFORM AND BE APPROVED BY THE ENGINEER FOR THIS PRESSURE BEFORE PLACING MEMBRANE, REINFORCEMENT OR CONCRETE. F2 FOOTINGS SHALL BE CONCRETED ON THE DAY OF APPROVAL UNLESS

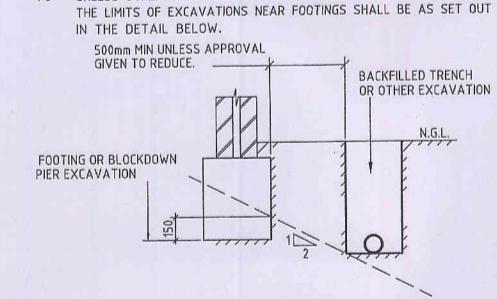
PERMISSION IS GIVEN OTHERWISE. F3 FOOTINGS SHALL BE LOCATED CENTRALLY UNDER WALLS AND COLUMNS

UNLESS NOTED OTHERWISE. F4 DO NOT EXCEED A RISE OF 1 IN A RUN OF 2 FOR THE LINE

OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS. F5 REFER TO GEOTECHNICAL INVESTIGATION REPORT No.43451 PREPARED BY DOUGLAS PARNERS AND DATED NOVEMBER 2005

F6 DO NOT BACKFILL RETAINING WALLS (OTHER THAN CANTILEVER WALLS) UNTIL FLOOR CONSTRUCTION AT TOP AND BOTTOM IS COMPLETED. BACKFILL SHALL BE COMPACTED TO 96% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2%. U.N.O. (ENSURE FREE DRAINING BACKFILL AND DRAINAGE IS IN PLACE).

F7 FOOTING LEVELS, WHERE SHOWN ARE ESTIMATES ONLY AND WILL BE ESTABLISHED DURING SITE INSPECTION OF WORK IN PROGRESS. F8 UNLESS OTHERWISE APPROVED BY THE ENGINEER / SUPERINTENDENT,



PRIOR TO ANY EXCAVATION NEAR EXISTING FOOTINGS, THE BUILDER SHALL DETERMINE THE DEPTH OF FOUNDING OF EXISTING FOOTINGS BY LOCAL INVESTIGATORY EXCAVATION.

GENERAL EXCAVATION SHALL NOT PROCEED BELOW A LEVEL 150mm ABOVE THE UNDERSIDE OF EXISTING FOOTINGS UNTIL INSTRUCTION IS OBTAINED FROM THE ENGINEER ON PROCEDURES & PRECAUTIONS TO

F9 SUBGRADE: UNLESS OTHERWISE SPECIFIED THE SUBGRADE BELOW BASECOURSES FOR SLABS SHALL BE APPROVED MATERIAL COMPACTED TO 98 % STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE

CONTENT ± 2 %. F10 BASE COURSE: BASE COURSE SHALL BE FINE CRUSHED ROCK (DGB20) OR OTHER MATERIAL APPROVED BY THE ENGINEER SPREAD IN LAYERS NOT EXCEEDING 200mm DEPTH AND COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2%.

REINFORCEMENT

R1 REINFORCEMENT SYMBOLS: N DENOTES GRADE 500 N BARS TO AS 4671 R DENOTES GRADE 250 R HOT ROLLED PLAIN BARS TO AS 4671 L DENOTES GRADE 500 L HARD-DRAWN WIRE REINFORCING FABRIC

W DENOTES GRADE 450 W HARD-DRAWN PLAIN WIRE TO AS 4671

NUMBER OF BARS IN GROUP BAR GRADE AND TYPE 

NOMINAL BAR SIZE IN mm

THE FIGURES FOLLOWING THE FABRIC SYMBOLS RL, SL, L .. TM IS THE REFERENCE NUMBER TO AS 4671. R2 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT

NECESSARILY IN TRUE PROJECTION. R3 SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR, AS PER THE TABLE BELOW:

BAR SIZE	MINIMUM LAP
N 1 0	450
N 1 2	5-0 0
N 1 6	650
N 2 0	1000
N 2 4	1350
N 2 8	1600
N 3 2	1800
N 3 6	2 1 0 0

BOTTOM BAR LAPPED @ SUPPORTS AND TOP BAR LAPPED AT MID SPAN.

R4 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE

R5 FABRIC SHALL BE LAPPED 2 TRANSVERSE WIRES PLUS 25 mm. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER

CENTRES WITH 3 WRAPS OF THE WIRE. R6 WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400 mm

R7 JOGGLES TO BARS SHALL COMPRISE A LENGTH OF 12 BAR DIAMETERS BETWEEN BEGINNING AND END OF AN OFFSET OF 1 BAR DIAMETER. R8 ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS, AND 800 EACH WAY FOR FABRIC. WHEN POURED ON GROUND AS FORMWORK PROVIDE PLATES UNDER ALL BAR CHAIRS. PLASTIC TIPPED STEEL CHAIRS SHALL NOT BE USED ON EXPOSED

FACES IN EXPOSURE CLASSIFICATION B1, B2 AND C ONLY PLASTIC OR PLASTIC OR CONCRETE CHAIRS. R9 AT A SIMPLE OR END SUPPORT OF A SLAB ON A MASONRY WALL, ALL BOTTOM SLAB REINFORCEMENT SHALL EXTEND OVER THE MASONRY WALL BY A LENGTH 75mm FOR N12 BARS & 95mm FOR N16 BARS. IF THIS CANNOT BE ACHIEVED DUE TO COVER REQUIREMENTS THEN THE BARS SHALL BE COGGED.

FOR FABRIC THE LAST WELDED CROSS ROD SHALL BE LOCATED OVER THE WALL AND 50mm MINIMUM BEYOND THE FACE OF THE WALL. R10 SITE BENDING OF REINFORCEMENT SHALL BE AVOIDED IF POSSIBLE. WHERE SITE BENDING IS UNAVOIDABLE IT SHALL BE CARRIED OUT COLD, WITHOUT THE APPLICATION OF HEAT, AND IN ACCORDANCE WITH THE PRACTICE NOTE RPN1 OF THE STEEL REINFORCEMENT INSTITUTE

OF AUSTRALIA. R11 THE STRUCTURAL ENGINEER SHALL BE GIVEN 24 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE DELIVERED UNTIL FINAL APPROVAL HAS BEEN OBTAINED FROM THE STRUCTURAL ENGINEER.

FORMWORK

UNLESS NOTED.

CF1 THE DESIGN, CONSTRUCTION AND PERFORMANCE OF THE FORMWORK AND

FALSEWORK IS THE RESPONSIBILITY OF THE BUILDER. CF2 DESIGN AND CONSTRUCTION AND STRIPPING TIMES SHALL COMPLY WITH AS 3610 AND AS 3600 UNLESS OTHERWISE APPROVED BY THE

CF3 DURING CONSTRUCTION, SUPPORT PROPPING SHALL BE PROVIDED WHERE LOADS FROM STACKED MATERIALS, FORMWORK AND OTHER SUPPORTED SLABS INDUCE LOADS IN A SLAB OR BEAM WHICH EXCEED THE DESIGN LOAD FOR STRENGTH OR SERVICEABILITY AT THAT AGE ONCE THE NOMINATED 28 DAY STRENGTH HAS BEEN ATTAINED, THESE LOADS SHALL NOT EXCEED THE DESIGN SUPERIMPOSED LOADS SET OUT IN THE GENERAL NOTES.

CF4 IN MULTI-STOREY CONSTRUCTION PROPPING SHALL BE PROVIDED AT LEAST 3 LEVELS BELOW THE FLOOR BEING CAST. PROP REMOVAL IS TO BE PROGRAMMED TO AVOID DISTRESS TO PREVIOUSLY CAST FLOORS. RE-SHORING OR BACK-PROPPING IS SUBJECT TO THE APPROVAL OF

THE PROJECT DESIGN ENGINEER. CF5 THE FORMWORK SHALL BE DESIGNED TO RELY ON NO RESTRAINT OR SUPPORT FROM THE PERMANENT STRUCTURE WITHOUT PRIOR APPROVAL FROM THE PROJECT DESIGN ENGINEER.

CF6 FORMWORK SHALL BE DESIGNED TO ACCOMMODATE MOVEMENTS AND LOAD RE DISTRIBUTION DUE TO POST-TENSIONING. CF7 WHERE NECESSARY SPECIAL REQUIREMENTS FOR SEQUENCE OF CONCRETE

PLACEMENT AND STRIPPING ARE SET OUT ON DRAWINGS. CF8 DESIGN INFORMATION CONCERNING THE FOUNDATION FORMWORK SHALL BE DETERMINED FROM THE CONDITIONS EXISTING ON SITE AT THE TIME OF CONSTRUCTION. REFER ALSO TO THE GEOTECHNICAL REPORT WHERE

AVAILABLE. CF9 UNLESS NOTED OTHERWISE PROVIDE UPWARD CAMBER TO FORMWORK OF CANTILEVERS OF L/120, WHERE L IS THE SHORTEST PROJECTION BEYOND COLUMN OR WALL FACE, AND TO FORMWORK OF SLABS WHERE NOTED ON PLAN. MAINTAIN THE SLAB AND BEAM DEPTHS SHOWN. CONCRETE

C1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600, AS 1379 & AS 3610 CURRENT EDITIONS WITH AMENDMENTS. EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

C2 CONCRETE QUALITY ALL CEMENT TO BE TYPE SL, SHRINKAGE LIMITED CEMENT IN ACCORD-ANCE WITH AS3972, EXCEPT THAT THE MAXIMUM SHRINKAGE OF THE CEMENT IN THE MORTAR TEST SAMPLE IN ACCORDANCE WITH AS2350 SHALL BE LESS THAN 600 MICROSTRAIN.

ELEMENT	STRENGTH GRADE	SLUMP (mm)	MAXIMUM AGGREG. SIZE (mm)	MINIMUM CEMENT CONTENT (kg/cu.m)
COLUMNS	4 0	8 0	2 0	400
GROUND F. SLAB	4 0	8 0	2 0	400
ROOF SLAB	3 2	8 0	2 0	3 2 0
FIRST F. SLAB	3 2	8 0	2 0	3 2 0
FOOTINGS	2 5	8 0	2 0	250
B'MENT SLAB	2 5	8 0	2 0	250

PROJECT ASSESSMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379 CLAUSE B7.

C3 (i) ALL CONCRETE IN SLABS AND BEAMS TO BE PROPORTIONED TO LIMIT DRYING SHRINKAGE TO 650 MICROSTRAIN AT 56 DAYS. (ii) DETAILS OF THE PROPOSED MIX TO BE SUBMITTED & APPROVAL

OBTAINED PRIOR TO POURING ANY CONCRETE. (iii) SHRINKAGE TESTS SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY IN ACCORDANCE WITH AS 1012 PART 13. TESTS SHALL BE CONDUCTED ON THE FIRST BATCH OF CONCRETE USED IN SUSPENDED SLABS AND SUBSEQUENTLY AT THE RATE OF ONE TEST EVERY ADDITIONAL 100 CUBIC METRES OF CONCRETE SUPPLIED. THREE SPECIMENS SHALL BE TAKEN FOR EACH TEST AND THE SHRINKAGE SHALL BE THE AVERAGE OF THE THREE RESULTS.

THE COST OF TESTING SHALL BE BIORNE BY THE CONTRACTOR AS SHALL ANY ADDITIONAL TESTS REQUIRED IF THE CONCRETE FAILS TO MEET THE SPECIFIED SHRINKAGE LIMITES.

C4 NO ADMIXTURES OTHER THAN LOW RANGE WRA SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.

C5 CLEAR CONCRETE COVER TO ALL REINFORCEMENT SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE. COVER MAY NEED TO BE INCREASED FOR FIRE RATING.

EXPOSURE CLASS TO AS 3600	COL	N I M N C R E R A D	TE	CAST AGAINST GROUND	CAST IN FORMS AND EXPOSED	CAST IN FORMS AND NOT EXPOSED
A1 (INTERN	IAL)	25	E)	4 0 m m	-	2 0 m m
B2 (EXTERN	IAL)	40		65 m m	4 5 m m	-
FOOTINGS		25	1	5 0 m m	-	

NOTE: WHERE CONCRETE IS POUMED ON A VAPOURPROOF MEMBRAN 0.2 mm MINIMUM THICKNESS, THE COVER TO CONCRETE CAST AGAINST GROUND MAY BE REDUCED BY 10 mm.

C6 CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES. NO FINISH WHICH DECREASES COVER IS ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. C7 DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.

C8 FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC. REFER TO ARCHITECT'S DETAILS, MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS. C9 NO HOLES, CHASES, BLOCKOUTS, DUCTS OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL

C10 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.

C11 ALL CONCRETE COLUMNS GREATER THAN 1.2 METRES IN HEIGHT SHALL BE POURED A MINIMUM OF 4 HOURS PRIOR TO SLAB OR BEAM OVER. C12 THE FINISHED CONCRETE SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOWS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDIDING THE REINFORCEMENT AND FREE

OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED) WITH MECHANICAL VIBRATORS. C13 CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF THREE DAYS, AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED ON CURING COMPOUNDS THAT COMPLY WITH AS 3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED (REFER MANUFACTURERS

SPECIFICATION). POLYTHENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC. C14 CONSTRUCTION SUPPORT PROPPIING IS TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING. NO BRICKWORK OR PARTIITION WALLS ARE TO BE CONSTRUCTED ON SUSPENDED LEVELS UNTIL SEWEN DAYS AFTER PROPPING HAS BEEN REMOVED AND THE SLAB PRE-LIOADED WITH THE BRICKS OR UNITS

TO BE USED IN THE WALL. C15 REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE

PERMISSION OF THE ENGINEER. C16 CAST-IN FIXINGS, BOLTS ETC. SHALL NOT BE ALTERED WITHOUT THE PERMISSION OF THE ENGINEER.

C17 CONDUITS, PIPES ETC. SHALL ONLY BE LOCATED IN THE MIDDLE THIRD OF THE SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS. CONDUITS AND PIPES SHALL NOT BE PLACED WITHIN THE COVER TO REINFORCEMENT.

C18 SLABS AND BEAMS SHALL BE CONSTRUCTED TO BEAR ONLY ON THE BEAMS, WALLS, COLUMNS ETC. SHOWN ON THE DRAWINGS. ALL OTHER BUILDING ELEMENTS SHALL BE KEPT 12mm CLEAR OF SOFFITS OF STRUCTURE..

STRUCTURAL STEEL

S1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100 AND AS 1554 EXCEPT WHERE VARIED BY THE CONTRACT

S2 UNLESS NOTED OTHERWISE ALL MATERIAL SHALL BE:

- GRADE 250 HOT-ROLLED PLATES COMPLYING WITH AS 3678; - GRADE 250 HOT-ROLLED FLATS,.

- GRADE 300PLUS UB, UC, PFC, ANGLES, AND TFB, - GRADE 300 WB, WC COMPLYING WITH AS 3679.2; - GRADE C350 RHS, CHS COMPLYING WITH AS 1163;

S3 THREE(3) COPIES OF WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AT LEAST 7 DAYS PRIOR TO COMMENCEMENT OF FABRICATION AND PERMISSION TO USE OBTAINED PRIOR TO FABRICATION. PERMISSION TO USE DOES NOT RELIEVE THE BUILDER OF THE FULL RESPONSIBILITY FOR DIMENSIONS, FIT AND COMPLIANCE WITH ARCHITECTURAL AND ENGINEERING DRAWINGS. S4 BOLTS:-

4.6/S . . . COMMERCIAL BOLTS OF GRADE 4.6 TO AS 1111, SNUG

8.8/S . . . HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252, SNUG TIGHTENED.

ALL BOLTS SHALL BE M20 GRADE 8.8/S UNLESS NOTED. NO CONNECTION SHALL HAVE LESS THAN 2 BOLTS. ALL BOLTS, NUTS & WASHERS TO BE GALVANISED.

S5 WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1554.1. WELDING CONSUMABLES SHALL BE E48XX OR W50X U.N.O. ALL WELD SHALL BE 6 mm CFW SP CATEGORY U.N.O. CPBW SHALL BE SP CATEGORY U.N.O. INSPECTION SHALL BE CARRIED OUT TO AS 1554.1. ALL GP/SP WELDS SHALL BE 100% VISUALLY SCANNED. SP WELDS ALLOW FOR 25% VISUAL EXAMINATION U.N.O.

BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS TO AS 1554. S6 ALL DETAILS, GAUGE LINES ETC. WHERE NOT SPECIFICALLY SHOWN ARE TO BE IN ACCORDANCE WITH AISC DESIGN CAPACITY TABLES FOR STRUCTURAL STEEL AND AISC STANDARDIZED STRUCTURAL CONNECTIONS.

PLATES TO BE 10mm THICK, EX-STANDARD SQUARE EDGE FLATS U.N.O. S7 STEELWORK TO BE CONCRETE ENCASED SHALL BE WRAPPED WITH F41 STEELWIRE FABRIC AND SHALL HAVE 50 mm MINIMUM CONCRETE COVER TO THE STRUCTURAL STEEL.

S8 PROVIDE SEAL PLATES TO ALL HOLLOW SECTIONS. PROVIDE VENT HOLES TO HOLLOW MEMBERS & DRAIN HOLES TO ALL MEMBERS TO BE HOT DIP GALVANISED.

59 IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT STEELWORK IS SECURELY TEMPORARILY BRACED AS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

S10 STRUCTURAL STEELWORK SHALL HAVE THE FOLLOWING SURFACE TREATMENT IN ACCORDANCE WITH AS/NZS 2312.2002.

ELEMENT		RFAC		PROTECTIVE COATING
INTERNAL	CLASS	St	12	INORGANIC ZINC SILICATE 7,5um
BUILT INTO MASONRY	CLASS	St	12	HOT DIP GALVANISED
EXTERNAL	CLASS	St	B	+ 2 COATS EPOXY PAIN (FINISH TO ARCH SPEC

S11 THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL TO STEEL AND TIMBER TO STEEL WHETHER OR NOT DETAILED ON THE DRAWINGS.

S12 THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK SHALL BE UNDERTAKEN BY A QUALIFIED PERSON EXPERIENCED IN SUCH SUPERVISION, IN ORDER TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGN ARE MET. ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP.

PREPARATION UNDER SLABS ON GRADE

PG1 THE SLAB DESIGN AS DETAILED ON THIS DRAWING ASSUMES A PROPERLY PREPARED UNIFORM AND STABLE SUBGRADE.

PG2 STRIP OFF ALL VEGETATION, RUBBISH & TOPSOIL CONTAINING ORGANIC OR ROOT MATTER FROM THE AREA OF THE WORKS AND REMOVE FROM SITE. PG3 PRIOR TO ANY FILLING. THE EXPOSED SUBGRADE TO A DISTANCE OF 1.5

METRES BEYOND THE BUILDING WORKS SHALL BE PROOF ROLLED WITH A MINIMUM OF 10 PASSES OF A 5 TONNE (MIN) DEAD WEIGHT VIBRATING ROLLER, ANY SOFT OR YIELDING MATERIAL SHALL BE REMOVED AND REPLACED WITH . APPROVED FILLING COMPACTED AS HEREAFTER SPECIFIED. PG4 FILL SHALL BE SOUND WELL GRADED MATERIAL WITH A HIGH GRANULAR CONTENT.

USING SUITABLE MECHANICAL EQUIPMENT AT OPTIMUM MOISTURE CONTENT ± 2 % TO NOT LESS THAN 98 % MAXIMUM STANDARD DRY DENSITY IN ACCORDANCE WITH AS 1289 - E1.1 UNLESS OTHERWISE NOTED. \* WHERE NOTED ON DRAWINGS AS "FILL AS FORMWORK", FILLING SHALL

BE COMPACTED SUFFICIENTLY TO PROVIDE A STABLE PLATFORM DURING

CONCRETING. THIS WOULD NORMALLY BE PROVIDED BY COMPACTION

PG5 FILL SHALL BE SPREAD IN LAYERS NOT EXCEEDING 200mm AND COMPACTED

TO AT LEAST 98% MAXIMUM STANDARD DRY DENSITY. PG6 BLIND WITH SAND SUFFICIENT ONLY TO ENSURE NO DAMAGE TO MEMBRANE

(0 TO 10mm MAX.) AND LAY POLYTHENE VAPOURPROOF MEMBRANE. PG7 VAPOURPROOF MEMBRANE SHALL BE POLYTHENE SHEETING OF 0.2mm THICKNESS LAPPED 200mm AT JOINTS AND TURNED UP AND TAPED AT PIPE PENETRATIONS ETC.

PG8 DENSITY TESTING OF FILLING (AND BASE COURSE WHERE APPLICABLE) SHALL BE CARRIED OUT AT THE RATE OF 1 TEST PER 200 SQ METRES EACH LAYER (MINIMUM 2 TESTS). TESTING SHALL BE BY A N.A.T.A REGISTERED LABORATORY AND SHALL BE ALLOWED FOR BY THE BUILDER

BRICKWORK AND BLOCKWORK

B1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH

B2 STRENGTHS OF MASONRY UNITS AND TYPE OF MORTAR SHALL BE AS

ELEMENT MA	TERIAL	UNCON COMPR STRE	TERIST NFINED ESSIVE ENGTH 'c)	(CEMENT
BRICKS	CLAY	2 0	MPa	1:1:6
BLOCKS				
CORE FILLED	CONC	15	MPa	1:0.25:
BLOCKS				
SOLID	CONC	12	MPa	1:0.25:3

MORTAR ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF THE SUPERINTENDENT.

B3 THE LONG TERM UNRESTRAINTED MOISTURE INDUCED EXPANSION OF CLAY BRICKS UTILISED IN THE WORKS SHALL BE LESS THEN 1mm/metre

B4 ONLY LOAD BEARING MASONRY WALLS ARE SHOWN UNDER CONCRETE B5 OTHER THAN REINFORCED CONCRETE BLOCKWORK, MASONRY SUPPORTING

SLABS AND BEAMS SHALL BE TROWELLED SMOOTH WITH MORTAR FILLING ALL VOIDS. TWO LAYERS OF MALTHOID SHALL BE PLACED FULL WIDTH ACROSS SUCH LOAD BEARING SURFACES EXCEPT WHERE PROPRIETARY BEARING STRIP IS NOTED OR ALTERNATIVE DETAIL IS DOCUMENTED. THE HEADS OF LOAD BEARING WALLS SHALL NOT EXTEND ABOVE THE SOFFIT OF THE CONCRETE SLAB ABOVE.

B6 ALL DOUBLE SKIN SOLID WALLS SUCH AS 230mm THICK BRICKWORK SHALL BE BONDED BY A HEADER COURSE EVERY 4th COURSE. B7 ALL MASONRY SUPPORTING OR SUPPORTED BY CONCRETE FLOORS

SHALL BE PROVIDED WITH VERTICAL JOINTS TO MATCH ANY CONTROL JOINTS IN THE CONCRETE.

B8 NON LOAD BEARING WALLS BUILT PRIOR TO POURING CONCRETE SHALL BE SEPARATED FROM CONCRETE ABOVE BY 16 mm THICK CLOSED CELL POLYSTYRENE STRIP. WHERE BUILT AFTER CONCRETE IS POURED LEAVE 12 mm CLEAR OF CONCRETE SOFFIT.

B9 NO CHASES OR RECESSES ARE PERMITTED IN LOAD BEARING MASONRY WITHOUT THE APPROVAL OF THE ENGINEER.

B10 PROVIDE VERTICAL CONTROL JOINTS AT 8 m MAX. CENTRES GENERALLY, AND 4 m MAX. FROM CORNERS FOR BRICKWORK AND UNREINFORCED BLOCKWORK, FOR BOTH INTERNAL AND EXTERNAL WALLS.

LOCATION OF JOINTS TO BE APPROVED BY THE ARCHITECT. B11 REFER TO CONCRETE NOTES FOR DE-PROPPING PRIOR TO CONSTRUCTION OF MASONRY WALLS ON SUSPENDED SLABS.

B12 ALL CAVITY CONSTRUCTION SHALL INCLUDE STAINLESS STEEL TIES INSTALLED IN ACCORDANCE WITH CLAUSE 7.8 AS 3700. B13 REINFORCED CONCRETE BLOCKWORK SHALL COMPLY WITH THE

FOLLOWING, UNLESS NOTED \* BLOCKS SHALL BE STRENGTH GRADE 15 CONFORMING TO AS 2733. \* MORTAR SHALL COMPRISE 1 CEMENT:0.25 LIME:3 SAND. \* PROVIDE CLEANOUT HOLES 100 mm SQUARE MINIMUM AT BASE OF ALL WALLS AND ROD CORE HOLES TO REMOVE PROTRUDING MORTAR

\* CORE FILLING GROUT SHALL BE :- F'c = 20 MPa MINIMUM CEMENT CONTENT = 300 kg/m, SLUMP =  $230 \pm 30$  mm.

FINS PRIOR TO GROUTING.

\* REINFORCEMENT PROJECTING FROM FOUNDATION OR SLABS INTO CORES. SHALL BE SET ACCURATELY IN PLACE USING TEMPLATES TO ALIGN WITH THE CENTRE OF THE LENGTH OF CORES AND WITH COVER AS NOTED. WHERE HORIZONTAL BARS ARE INDICATED, THE WEBS OF THE BLOCKS BELOW THE BARS SHALL BE CUT DOWN TO ACCOMMODATE THE BARS.

\* GROUT ALL CORES IN REINFORCED BLOCKWORK UNLESS OTHERWISE NOTED. HEIGHT OF BLOCKWORK TO BE GROUTED ON ONE DAY SHALL BE 2400mm. GROUT SHALL BE PLACED IN LIFTS OF 1200mm MAXIMUM AND COMPACTED BY POKER VIBRATOR. A SHORT TIME SHOULD ELAPSE BETWEEN SUCCESSIVE LIFTS TO ALLOW PLASTIC SETTLEMENT TO OCCUR.

\* PROVIDE 50 mm COVER FROM THE OUTSIDE OF THE BLOCKWORK UNLESS NOTED

B14 BACKFILL TO RETAINING WALLS SHALL BE FREE DRAINING GRANULAR MATERIAL, PROVIDE SUBSOIL DRAIN AT BASE OF WALL. DO NOT BACKFILL UNTIL 14 DAYS AFTER GROUTING, OR IF APPLICABLE. AFTER RESTRAINING SLAB OVER HAS BEEN POURED AND CURED FOR 7 DAYS. BACKFILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2 %.

NOTE:

PLASTIC FORMWORK SPACERS AND BAR CHAIRS TO BE USED IN ALL EXPOSED CONCRETE WORK

> TERMITE PROTECTION: THE BUILDER IS TO PROVIDE TERMITE PROTECTION IN ACCORDANCE WITH A.S. 3660.1

building certifiers pty ltd CONSTRUCTION CERT. NO. 1408cc 3 CONSTRUCTION CERTIFICATE ted to accordance I certify that the war with those

Accreditation No. BPB0049

his Plan / Detail to be read in conjuction with FOILCTION OFFICE January 401 1979

Email: cco@centralcoast.cardno.com.au Web: www.cardno.com.au For: BAYVIEW INVESTMENT GROUP PTY LTD

THE MASTERS DARLEY ST WEST BAYVIEW NSW

STRUCTURAL NOTES

DRAWING NUMBER:

CONSTRUCTION

30 40 50 60 70 80 90 100 110 120 130 140 150mm A1 ON ORIGINAL

A 28/9/10 ISSUED FOR CONSTRUCTION REVISIONS REV DATE

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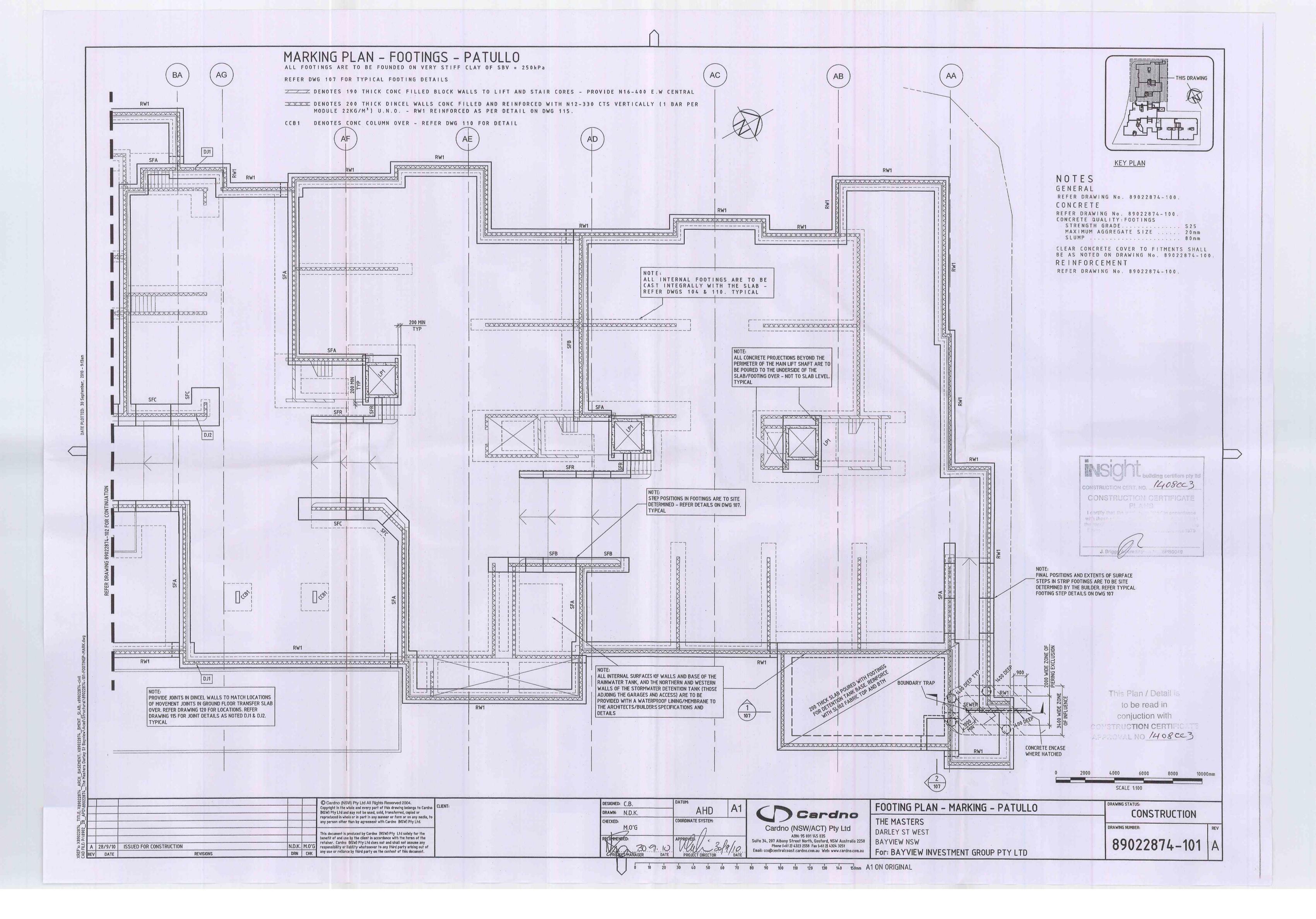
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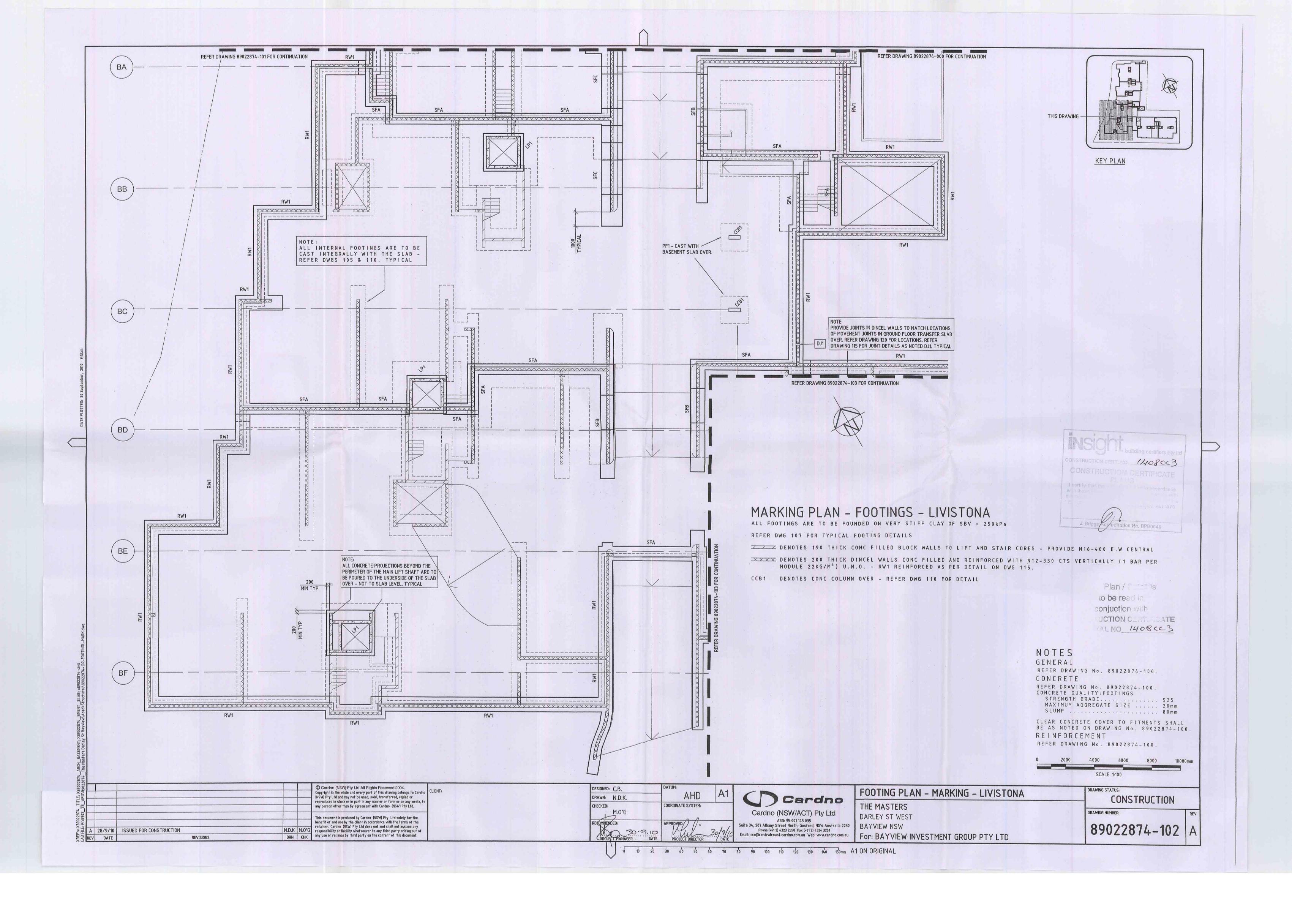
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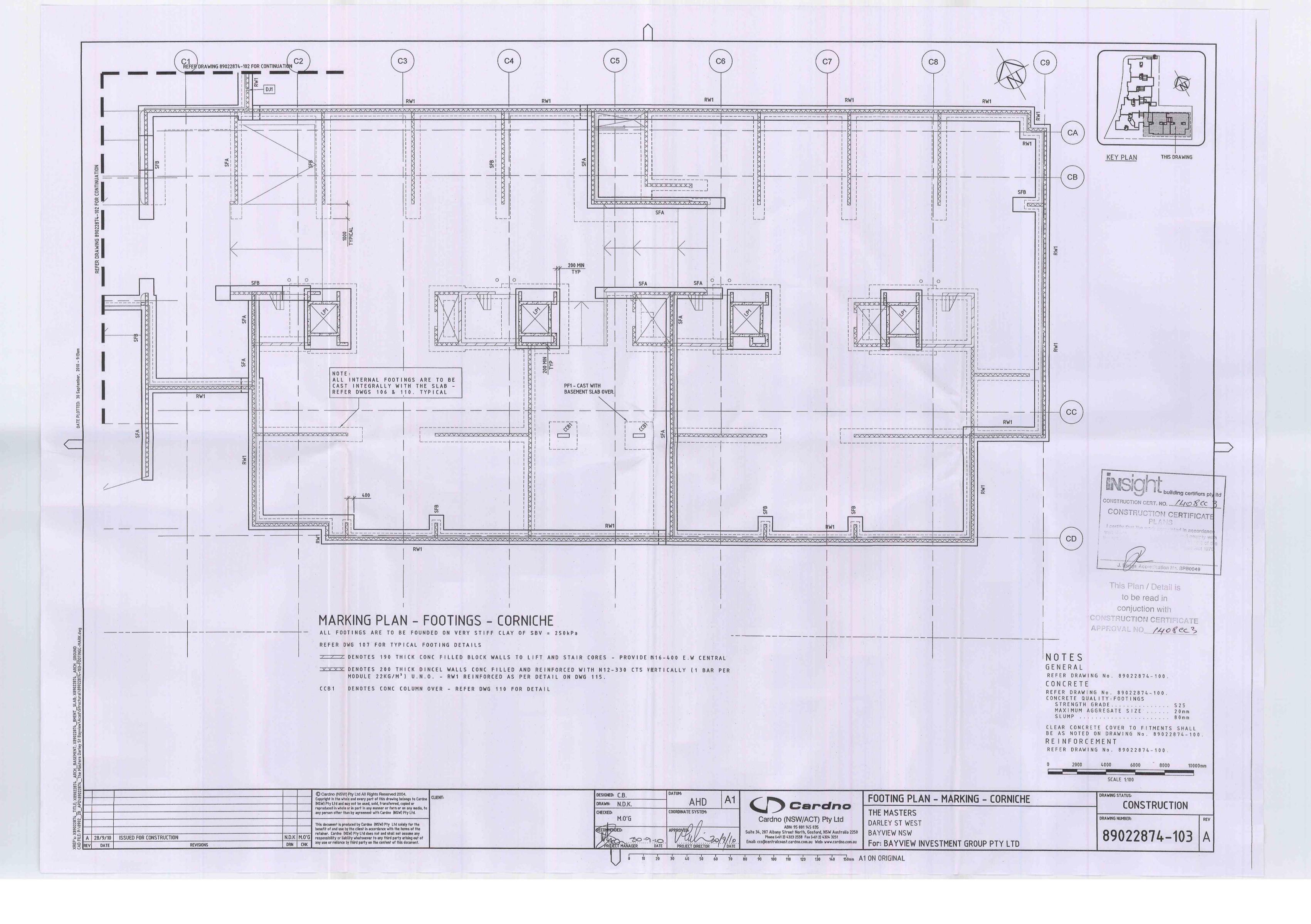
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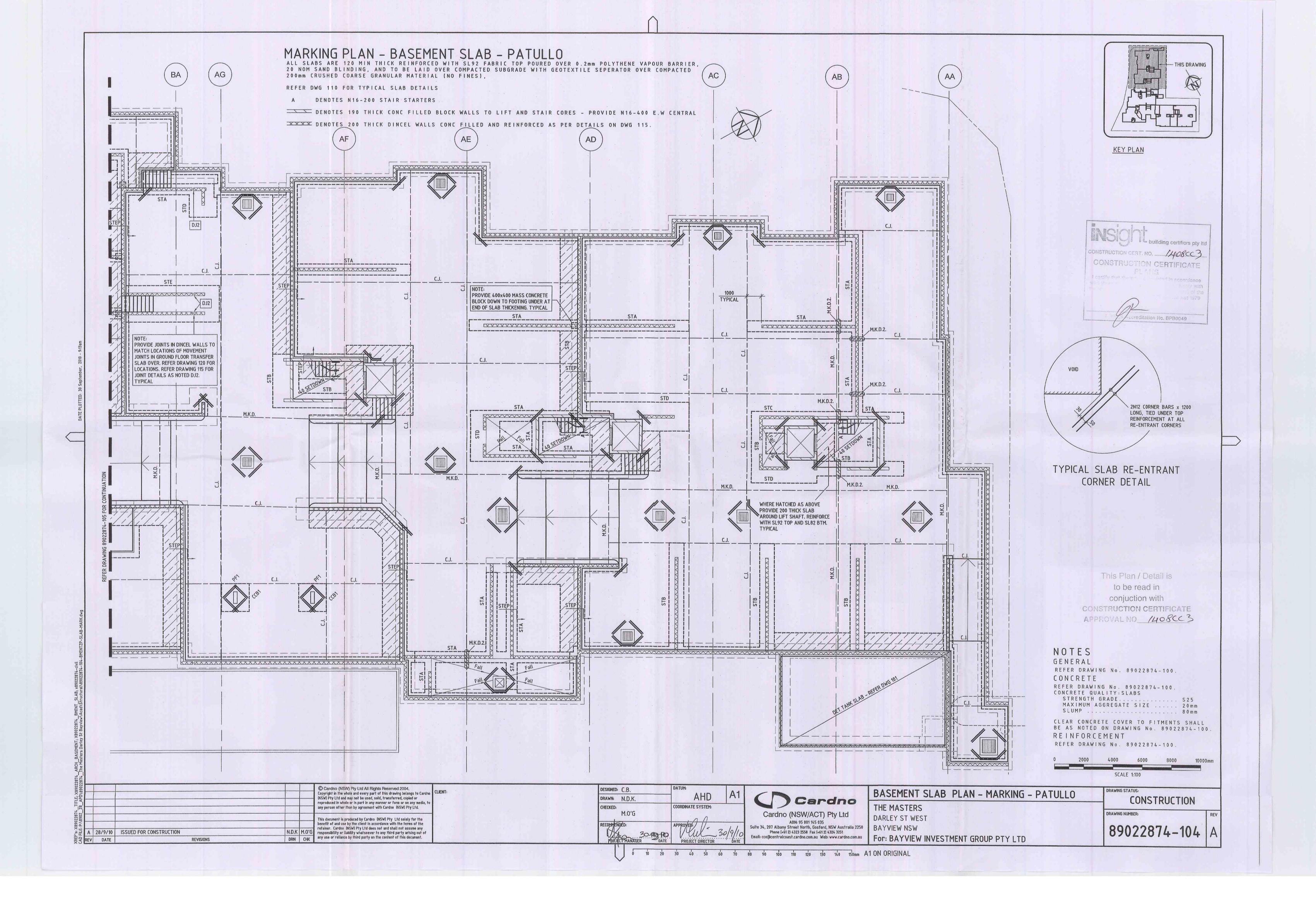
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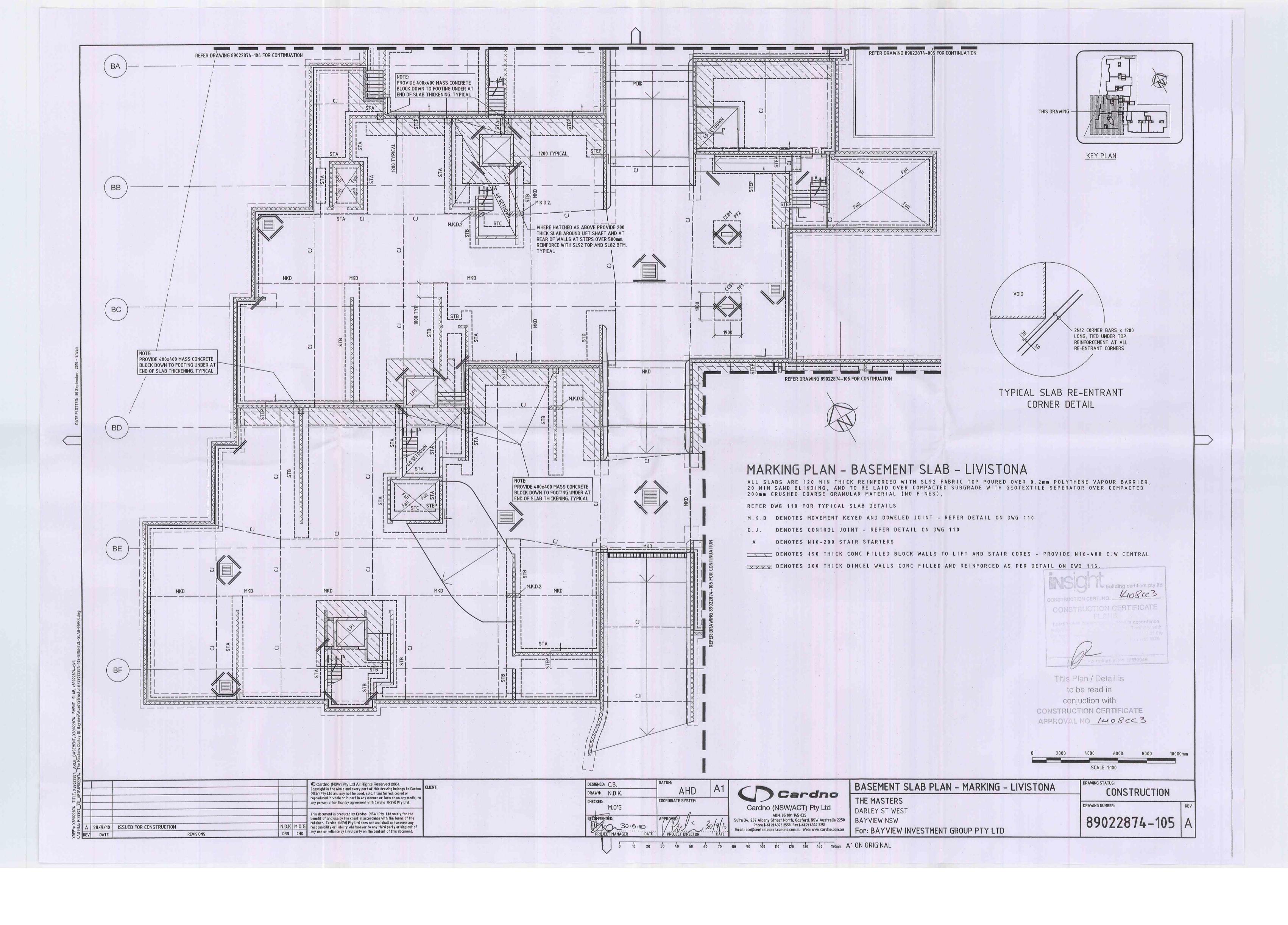
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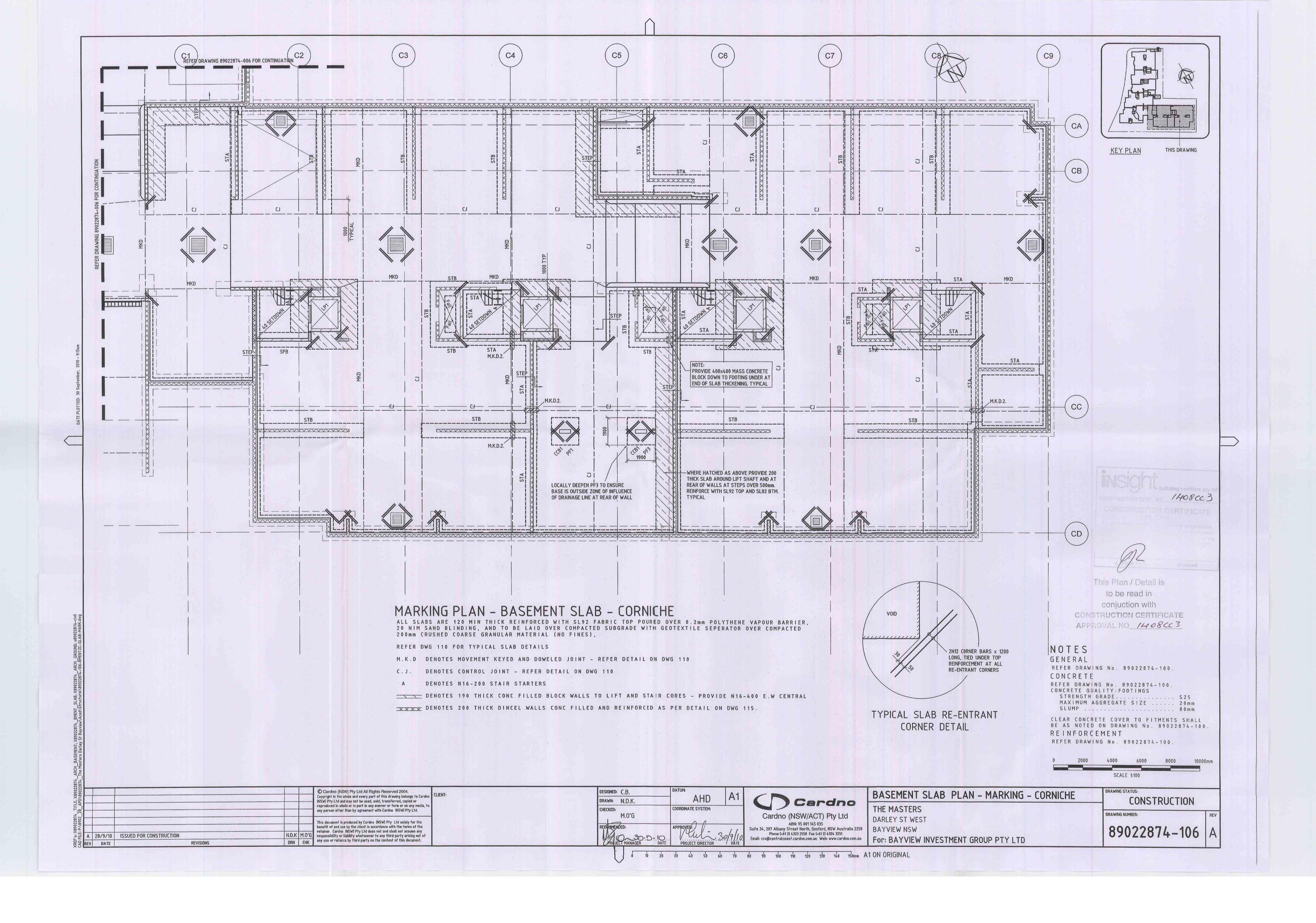


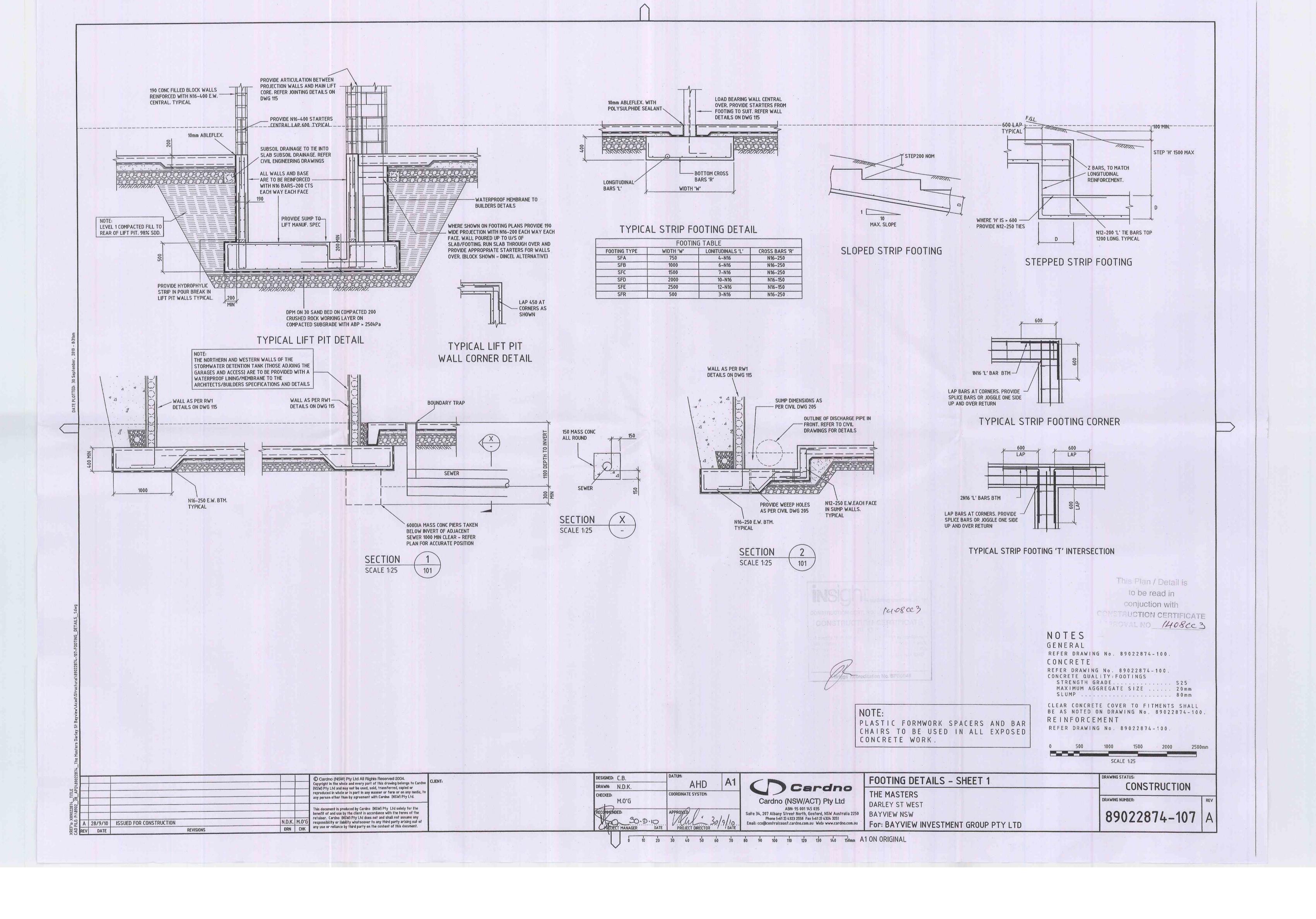


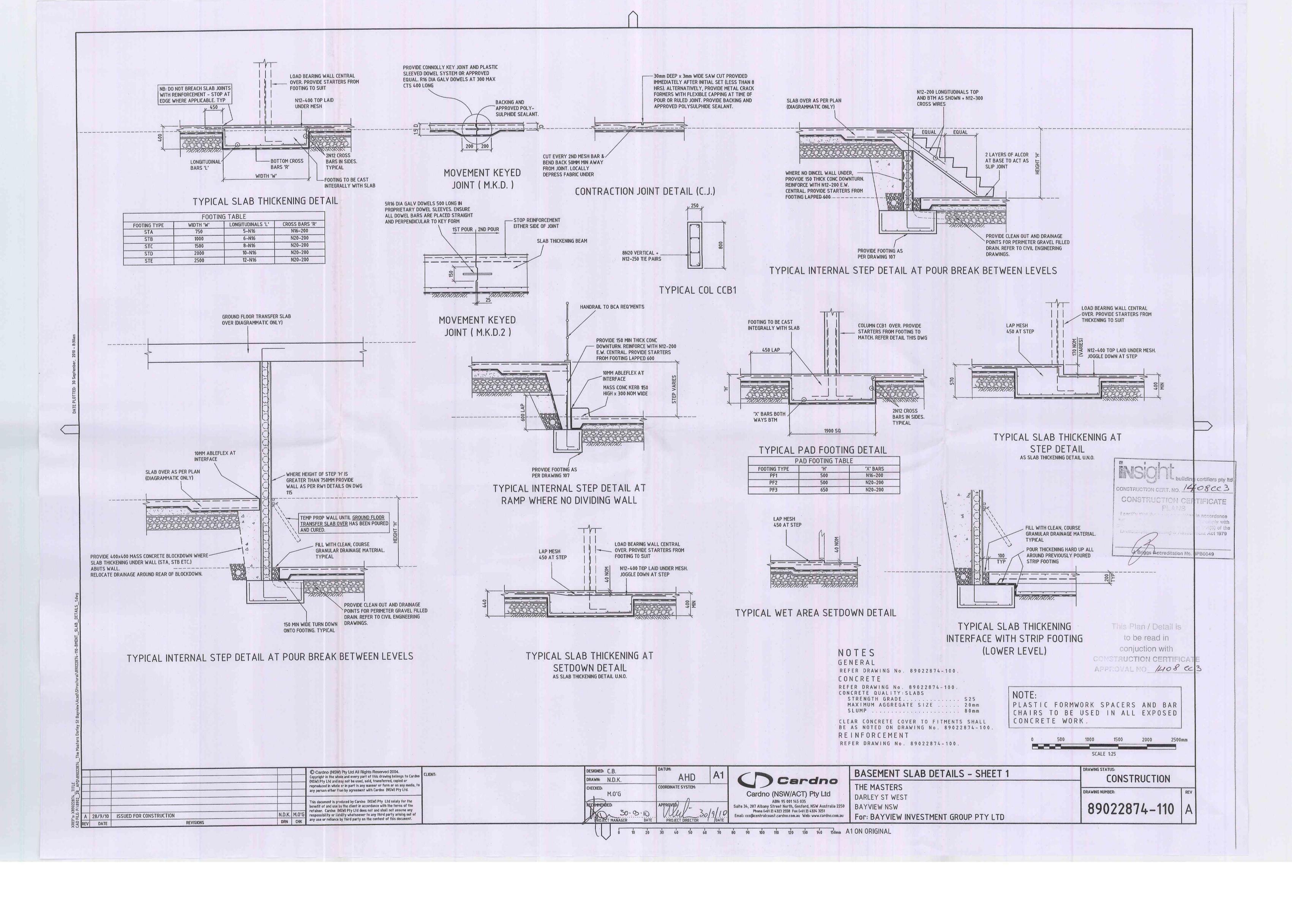


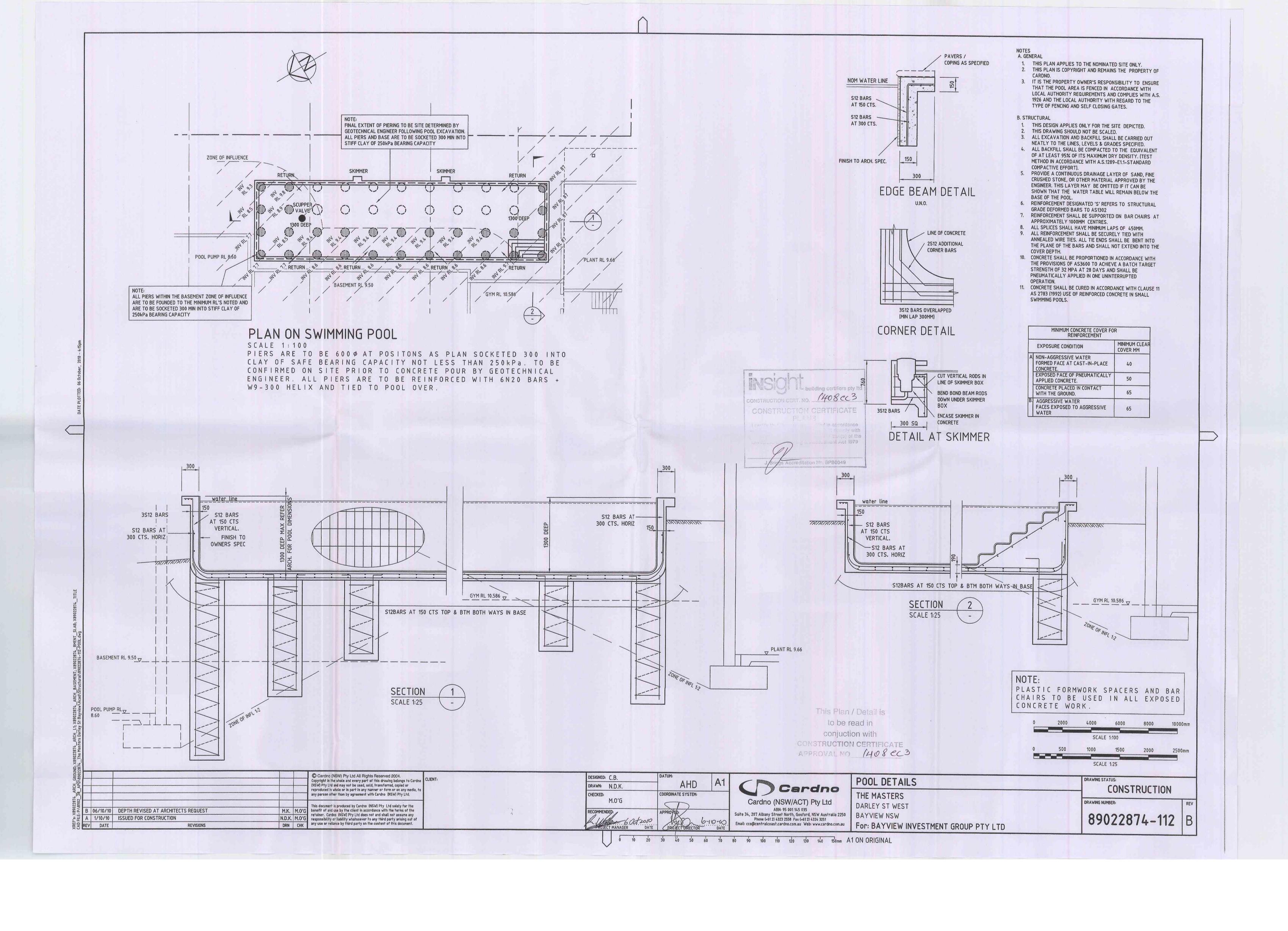


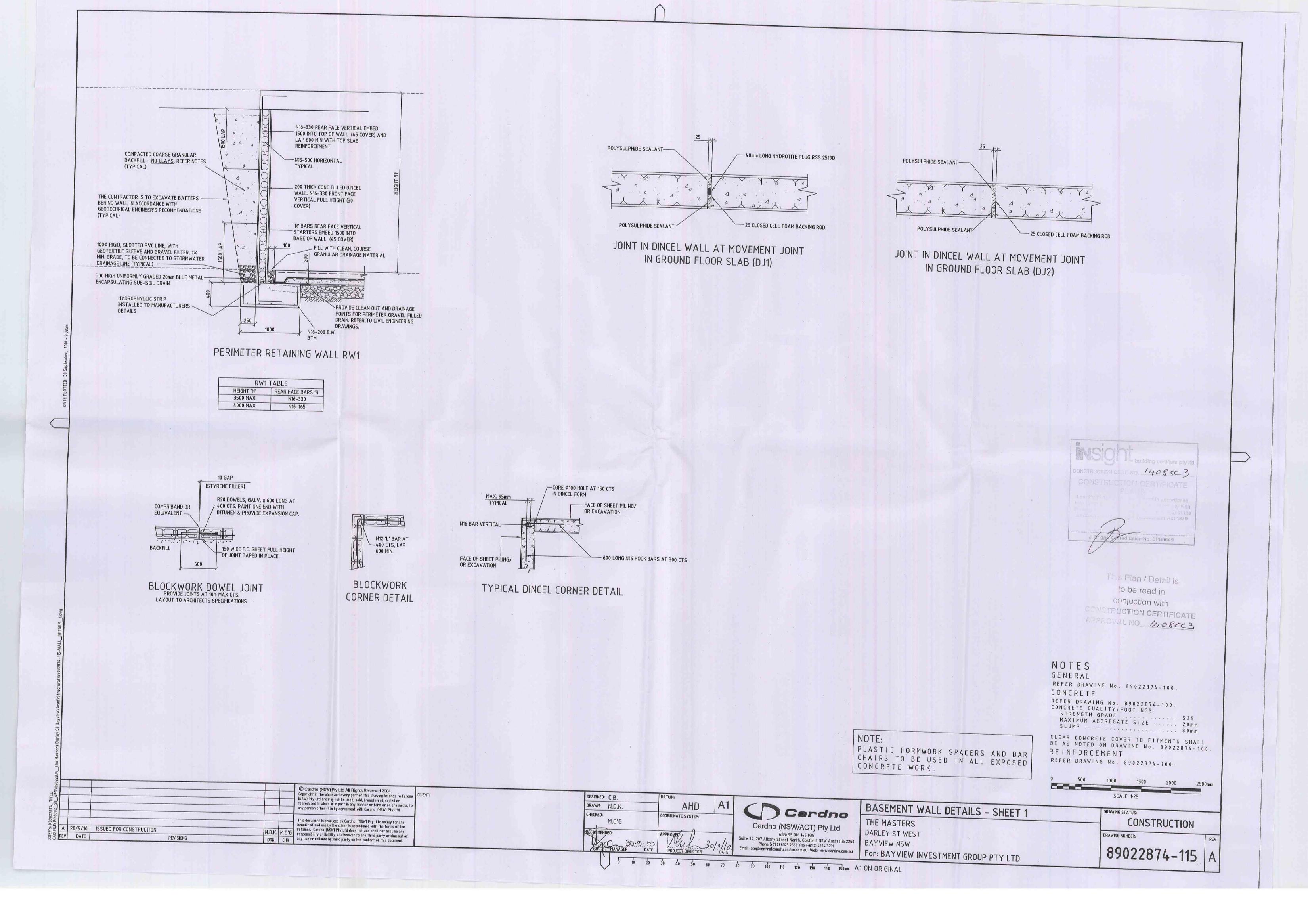


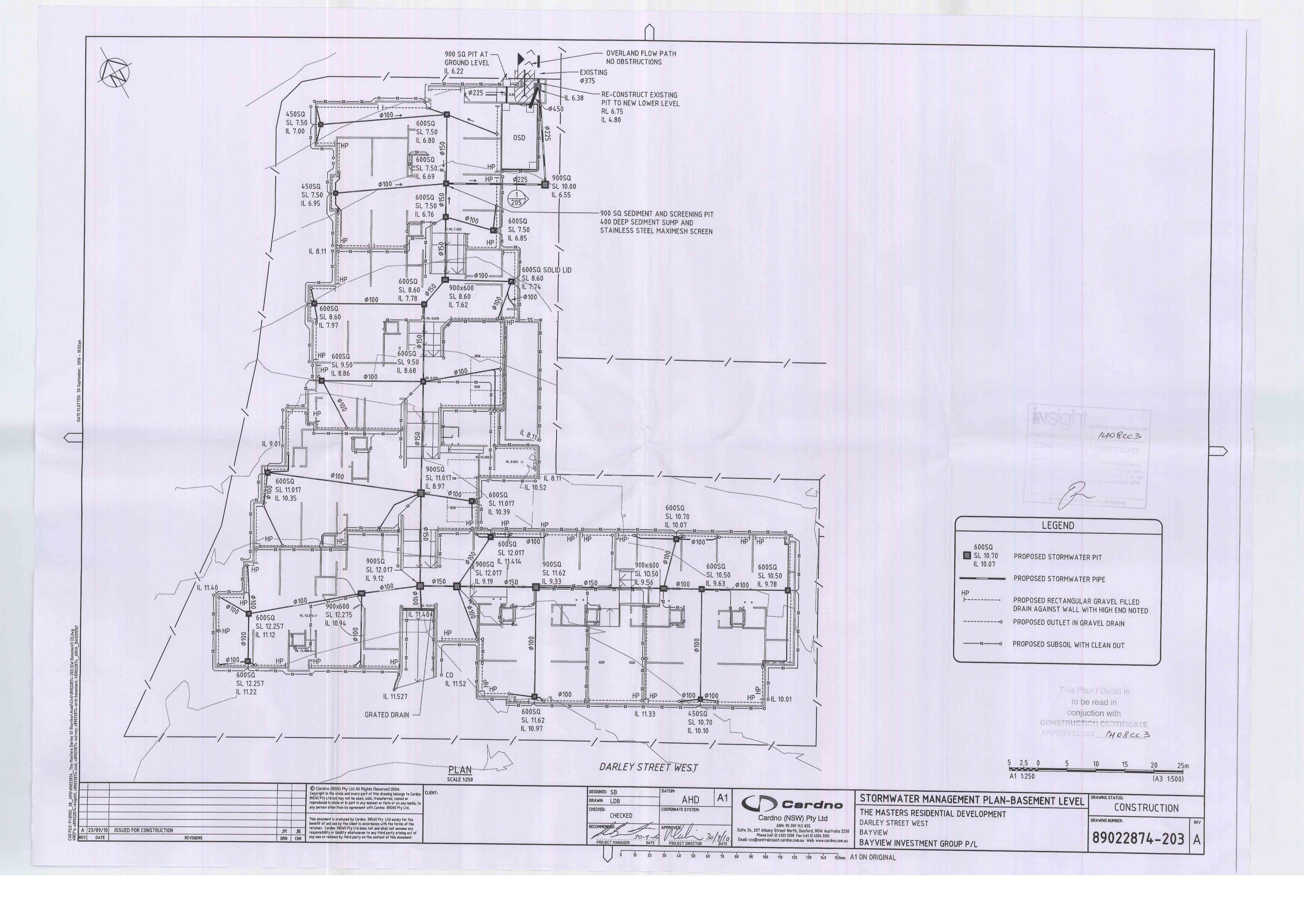












		WALL SCHEDULE - BASEMENT	
		60/60/60 DENOTES - 1 hr Structural Adequacy / Integrity / Insulation	
TYPE	FIRE RATING	DESCRIPTION	REMARKS
1	120 / 120 / 120	200 Dincel Retaining wall - Painted internally except for plant room or store room	1.5
2	120 / 120 / 120	200 Dincel Retaining wall with 28mm furring channel and PB one side	
3	120 / 120 / 120	200 Dincel Retaining wall with PB or WPB one side (WPB in wet areas)	22
4	120/-/-	200 Internal Dincel Wall Painted except for plant room or store room	**
5	120/-/-	200 Internal Dincel Wall Painted with PB or WPB one side (WPB in wet areas)	800
6	120 / 90 / 90	200 Internal Dincel Wall	*#:
7	-1-1-	150 Shortcrete wall to pool consultant's specifications	
11	120 / 120 / 120	CB wall - Painted except for plant room/ store room/ shaft	
12	120 / 120 / 120	CB wall finished on one side with PB or Render (PB to lobby and render to carpark)	
13	120 / 120 / 120	CB wall - R / CB / 28 furring channel / PB (PB to lobby and render to carpark)	99
14	120 / 120 / 120	CB wall finished on one side with 28 furring channel and PB	0.0
15	120 / - / -	CB wall - Painted	**
16	90 / 60 / 30	GB wall - PB / CB / render external	**
17	120 / 90 / 90	CB wall	
17	-1-1-	140 CB wall rendered externally	**
89	-1-1-	TS wall with PB or WPB both sides	441

WALL N	UMBERING
1-10	Basement Dincel walls
11-20	Basement CB walls
21-30	Ground and First level CB walls
31-40	RC Walls
41-60	Cavity or double brick wall
61-80	Single brick
81- 100	Brick veneer and stud wall

WALL LEGEND RC Reinforced Concrete (wall or column dimensions as per structural engineer's specifications) CB Concrete Blockwork (190 mm U.N.O) Brickwork (110 mm U.N.O) MS Metal Stud (64 mm U.N.O) Timber Stud (90 mm U.N.O) PB Plasterboard (13 mm U.N.O) WPB Waterproof Plasterboard (13 mm U.N.O)
FC Fibre Cement sheets

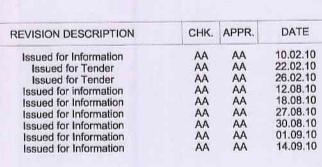
			DC	OR LE	AF		FRAMI	E		
MARK	LOCATION	WIDTH	HEIGHT	THK	TYPE	SWING	TYPE	MOUNT	FIRE RATING	REMARKS
D1	Entrance	5500	2300	50	TG1	NA	Sectional door		-1-1-	Aluminium louvre
D2	Plant	820	2040	35	T1	Left	FR204	В	-/60/30	Self-closing/ Solid Core
D3	Bins	920	2040	35	T1	Right	N204	В	+1+1+	Solid Core
D4	Bins	920	2040	35	T1	Right	N204	В	+1-1-	Solid Core
D5	Bins	920	2040	35	T1	Right	N204	В	-1-1-	Solid Core
D6	Bins	920	2040	35	T1	Right	N204	В	-1-1-	Solid Core
D7	Cart entrance	4000	2400	35	TG1	NA	Sectional door		-1-1-	Perforated steel
D8	Pump	1120	2040	35	T1	Left	N204	В	-1-1-	Solid Core
D9	Pump	820	2040	35	T1	Left	N204	В	-1-1-	Solid Core
D10	Carpark	6500	2400	35	TG2	Sliding	Sliding		60/60/60	Solid steel
D11	Gym	820	2040	35	T1	Left	N104	В	-1-1-	Hollow Core Waterprod
D12	Gym	820	2040	35	T1	Left	N104	В	-1-1-	Hollow Core Waterprod
D13	Store	820	2040	35	T1	Right	N204	В	-1-1-	Hollow Core Waterprod
D14	Plant	B20	2040	35	T1	Right	FR204	В	-/60/30	Self-closing/ Solid Cor
D15	Bins	920	2040	35	T1	Left	N204	В	-/-/-	Solid Core
D16	Bins	920	2040	35	T1	Left	N204	В	-1-1-	Solid Core
D17	Bins	920	2040	35	T1	Left	N204	В	-1-1-	Solid Core
D18	Toilet	820	2040	35	T1	Right	N204	В	-1-1-	Hollow Core Waterprod
D19	Carpark	6000	2400	35	TG2	Sliding	Sliding		60/60/60	Solid steel
D20	Electrical	820	2040	35	T1	Right	FR204	В	-/60/30	Self-closing/ Solid Cor
D21-59 exc. D45	Garage	5955	2200	35	TG1	NA.	Panel tilt		-1-1-	Steel Mesh
D45, D60	Garage	5605	2200	35	TG1	NA	Panel tilt		-1-1-	Steel Mesh
D61	Hot water plan		2040	35	T1	Left	FR204	В	-/60/30	Self-closing/ Solid Co.
D62	Electrical	820	2040	35	T1	Right	FR204	В	-/60/30	Self-closing/ Solid Cor



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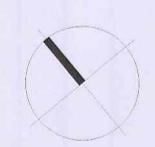


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DRAWING TITLE BASEMENT PLAN



SCALE 1:250@A1 0 2.5 5 FEBRUARY 2010 DRAWN KM, EC DATE CHECKED PROJECT NO. AA.RES.0801 APPROVED AA DRAWING NO. REVISION A1.04

