

25 August 2011

General Manager
Pittwater Council
PO Box 882
MONA VALE NSW 1660

Dear Sir,

**Determination of Complying Development Certificate Application
48 Irrubel Road, Newport**

For Council's information, please find enclosed Complying Development Certificate No. 2011/154CDC issued for construction of a swimming pool, pool terrace & associated retaining wall at the above address, accompanied by:

- Copy of Complying Development Certificate application form
- Notice of Commencement of Work and Appointment of Principal Certifying Authority
- Builder's Home Warranty Insurance
- Cheque for \$36.00 being the prescribed fee to receive the above certificate.

NB: Please forward receipt for the above fee to **Insight Building Certifiers Pty Ltd, PO Box 326, Mona Vale 1660.**

Yours faithfully

Tom Bowden
Insight Building Certifiers Pty Ltd

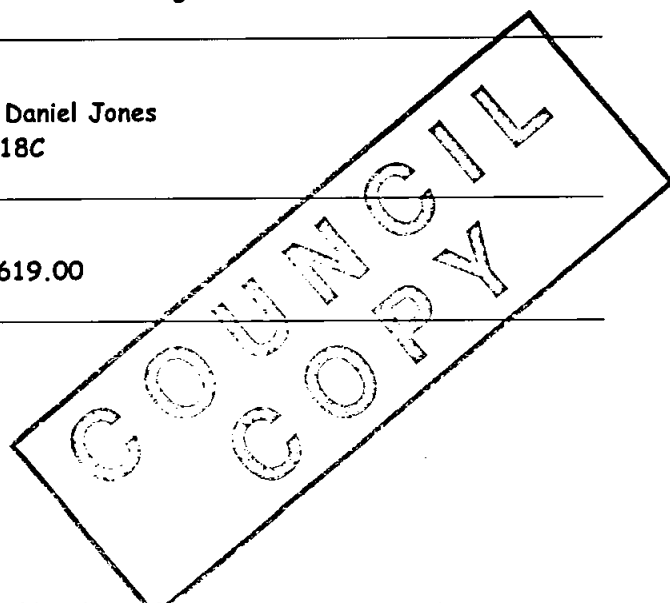
\$36 REC: 307283 26/8/11

Determination of a Complying Development Certificate Application

made under the Environmental
Planning and Assessment Act 1979
Section 85 and 85A

Certificate No. 2011/154CDC

Council	Pittwater
Determination Date of issue	Approved 25 August 2011
Subject land Address Lot No, DP No. Land Use Zone	48 Irrubel Road, Newport Lot A DP 408151 R2-2(a) (Residential "A")
Applicant Name Address Contact No.	Mrs Kate Long 48 Irrubel Road, Newport NSW 2106 0413 747 109
Owner Name Address Contact No.	Mrs Kate Long 48 Irrubel Road, Newport NSW 2106 0413 747 109
Description of Development Type of Work	Construction of a Swimming Pool, Pool Terrace & Associated Retaining Wall
Builder or Owner/Builder Name Contractor Licence No/Permit	Beau Daniel Jones 177518C
Value of Work Building	\$69,619.00



The development is to be carried out in compliance with the following plans and documentation listed below and endorsed with *Insight Building Certifiers* stamp:

1. Site Plan, Pool Plan & Pool Sections reference No DA01, (Issue C), DA02 (Issue C), & DA03 (Issue C) prepared by Weir Phillips Architects dated 19 August 2011
2. Structural Engineers reference no. 091202 Drawing nos S1.0, S2.0, S3.00, S4.00, S5.00, S6.00 & S7.00 prepared and endorsed Barrenjoey Consulting Engineers Pty Ltd dated August 2011
3. Long Service Levy Corporation receipt no. 623810081 dated 5 August 2011
4. BASIX Certificate no. A115220 dated 6 July 2011
5. Sydney Water approval dated 5 August 2011

and any other supporting documentation submitted as part of the application.

Certificate

I certify that the proposed development is complying development and that if carried out in accordance with the plans, specifications and attached schedule of conditions will comply with the requirements of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, Part 3, including the relevant conditions under Division 3, all requirements of the Environmental Planning and Assessment Regulations 2000 concerning the issue of the Certificate and the relevant provisions of the Building Code of Australia.

Signed



25 AUG 2011

Certificate No.

2011/154CDC

Date on which this Certificate will lapse:

25 AUG 2016

Certifying Authority

Name of Accredited Certifier
Accreditation No.
Accreditation Authority
Contact No.
Address

Tom Bowden
BPB0042
Building Professionals Board
(02) 9999 0003
13/90 Mona Vale Road, Mona Vale NSW 2103

BCA Classification

10b

Schedule of Conditions for Complying Development Certificate No. 2011/154CDC

Conditions applying before works commence

Protection of adjoining areas

1. A temporary hoarding or temporary construction site fence must be erected between the work site and adjoining lands before the works begin and must be kept in place until after the completion of works if the works:
 - could cause a danger, obstruction or inconvenience to pedestrian or vehicular traffic, or
 - could cause damage to adjoining lands by falling objects, or
 - involve the enclosure of a public place or part of a public place.

Toilet facilities

1. Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site.
2. Each toilet must:
 - be a standard flushing toilet connected to a public sewer, or
 - have an on-site effluent disposal system approved under the Local Government Act 1993, or
 - be a temporary chemical closet approved under the Local Government Act 1993.

Garbage receptacle

1. A garbage receptacle must be provided at the work site before works begin and must be maintained until the works are completed.
2. The garbage receptacle must have a tight fitting lid and be suitable for the reception of food scraps and papers.

Notification to neighbours

1. The person having the benefit of the complying development certificate must give at least 2 days' notice in writing of the intention to commence the works to the owner or occupier of each dwelling that is situated within 20m of the lot on which the works will be carried out.

Adjoining wall dilapidation report

1. If a wall on a lot is to be built to a boundary and there is a wall (the ***adjoining wall***) on the lot adjoining that boundary that is less than 0.9m from that boundary, the person having the benefit of the complying development certificate must obtain a dilapidation report on the adjoining wall.
2. If the person preparing the report is denied access to the adjoining lot for the purpose of inspecting the adjoining wall, the report may be prepared from an external inspection of the adjoining wall.
3. (3) In this clause:

dilapidation report means a report, prepared by a professional engineer, confirming the structural condition of the adjoining wall before the development commences.

Conditions applying during the works

Note. The Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (Noise Control) Regulation 2008 contain provisions relating to noise.

Hours of construction

1. Construction may only be carried out between 7.00 am and 5.00 pm on Monday to Saturday and no construction is to be carried out at any time on a Sunday or a public holiday.

Compliance with plans

1. Works must be carried out in accordance with the plans and specifications to which the complying development certificate relates.

Sedimentation and erosion controls

1. Run-off and erosion controls must be effectively maintained until the site has been stabilised and landscaped.

Maintenance of site

1. Building materials and equipment must be stored wholly within the work site unless an approval to store them elsewhere is held.
2. Demolition materials and waste materials must be disposed of at a waste management facility.
3. The work site must be left clear of waste and debris at the completion of the works.

Construction requirements

Staging construction

1. If the complying development is the erection of, or alterations or additions to, a dwelling house, the roof stormwater drainage system must be installed and connected to the drainage system before the roof covering is installed.
2. Any approval that is required for connection to the drainage system under the Local Government Act 1993 must be held before the connection is carried out.
3. If the complying development involves the construction of a vehicular access point, the access point must be completed before the occupation certificate for the complying development on the site is obtained.

Utility services

1. If the complying development requires alteration to, or the relocation of, utility services on the lot on which the complying development is carried out, the complying development is not complete until all such works are carried out.

Further requirements

Compliance with Building Code of Australia and insurance requirements under the Home Building Act 1989

1. A complying development certificate for development that involves any building work must be issued subject to the following conditions:
 - (a) that the work must be carried out in accordance with the requirements of the Building Code of Australia,
 - (b) in the case of residential building work for which the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of that Act, that such a contract of insurance must be entered into and be in force before any building work authorised to be carried out by the certificate commences.
2. A complying development certificate for a temporary structure that is used as an entertainment venue must be issued subject to the condition that the temporary structure must comply with Part B1 and NSW Part H102 of Volume One of the Building Code of Australia (as in force on the date the application for the relevant complying development certificate is made).
3. This clause does not limit any other conditions to which a complying development certificate may be subject, as referred to in section 85A (6) (a) of the Act.
4. This clause does not apply:
 - (a) to the extent to which an exemption is in force under clause 187 or 188, subject to the terms of any condition or requirement referred to in clause 187 (6) or 188 (4), or
 - (b) to the erection of a temporary building, other than a temporary structure that is used as an entertainment venue.
5. In this clause, a reference to the Building Code of Australia is a reference to that Code as in force on the date the application for the relevant complying development certificate is made.
Note. There are no relevant provisions in the Building Code of Australia in respect of temporary structures that are not entertainment venues.

Erection of signs

1. A complying development certificate for development that involves any building work, subdivision work or demolition work must be issued subject to a condition that the requirements of subclauses (2) and (3) are complied with.
2. A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:
 - (a) showing the name, address and telephone number of the principal certifying authority for the work, and
 - (b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
 - (c) stating that unauthorised entry to the site is prohibited.
3. Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

4. This clause does not apply in relation to building work, subdivision work or demolition work that is carried out inside an existing building, that does not affect the external walls of the building.
5. This clause does not apply in relation to Crown building work that is certified, in accordance with section 109R of the Act, to comply with the technical provisions of the State's building laws.
6. This clause applies to a complying development certificate issued before 1 July 2004 only if the building work, subdivision work or demolition work involved had not been commenced by that date.

Note. Principal certifying authorities and principal contractors must also ensure that signs required by this clause are erected and maintained (see clause 227A which currently imposes a maximum penalty of \$1,100).

Notification of Home Building Act 1989 requirements

1. A complying development certificate for development that involves any residential building work within the meaning of the Home Building Act 1989 must be issued subject to a condition that the work is carried out in accordance with the requirements of this clause.
2. Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the following information:
 - (a) in the case of work for which a principal contractor is required to be appointed:
 - (i) the name and licence number of the principal contractor, and
 - (ii) the name of the insurer by which the work is insured under Part 6 of that Act,
 - (b) in the case of work to be done by an owner-builder:
 - (i) the name of the owner-builder, and
 - (ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.
3. If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under subclause (2) becomes out of date, further work must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the updated information.
4. This clause does not apply in relation to Crown building work that is certified, in accordance with section 109R of the Act, to comply with the technical provisions of the State's building laws.

Fulfilment of BASIX commitments

1. This clause applies to the following development:
 - (a) BASIX affected development,
 - (b) any BASIX optional development in relation to which a person has made an application for a complying development certificate that has been accompanied by a BASIX certificate or BASIX certificates (despite there being no obligation under clause 4A of Schedule 1 for it to be so accompanied).

2. A complying development certificate for development to which this clause applies must be issued subject to a condition that the commitments listed in each relevant BASIX certificate for the development must be fulfilled.

Development involving bonded asbestos material and friable asbestos material

1. A complying development certificate for development that involves building work or demolition work must be issued subject to the following conditions:
 - (a) work involving bonded asbestos removal work (of an area of more than 10 square metres) or friable asbestos removal work must be undertaken by a person who carries on a business of such removal work in accordance with a licence under clause 318 of the Occupational Health and Safety Regulation 2001,
 - (b) the person having the benefit of the complying development certificate must provide the principal certifying authority with a copy of a signed contract with such a person before any development pursuant to the complying development certificate commences,
 - (c) any such contract must indicate whether any bonded asbestos material or friable asbestos material will be removed, and if so, must specify the landfill site (that may lawfully receive asbestos) to which the bonded asbestos material or friable asbestos material is to be delivered.
2. This clause applies only to a complying development certificate issued after the commencement of this clause.
3. In this clause, bonded asbestos material, bonded asbestos removal work, friable asbestos material and friable asbestos removal work have the same meanings as in clause 317 of the Occupational Health and Safety Regulation 2001.

Note 1. Under clause 317 removal work refers to work in which the bonded asbestos material or friable asbestos material is removed, repaired or disturbed.

Note 2. The effect of subclause (1) (a) is that the development will be a workplace to which the Occupational Health and Safety Regulation 2001 applies while removal work involving bonded asbestos material or friable asbestos material is being undertaken.

Note 3. Information on the removal and disposal of asbestos to landfill sites licensed to accept this waste is available from the Department of Environment, Climate Change and Water.

Note 4. Demolition undertaken in relation to complying development under the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 must be carried out in accordance with Australian Standard AS 2601—2001, Demolition of structures.

Condition relating to shoring and adequacy of adjoining property

1. A complying development certificate for development must be issued subject to a condition that if the development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the certificate must at the person's own expense:
 - (a) protect and support the adjoining premises from possible damage from the excavation, and
 - (b) where necessary, underpin the adjoining premises to prevent any such damage.
2. The condition referred to in subclause (1) does not apply if the person having the benefit of the complying development certificate owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

RECEIVED
08 AUG 2011

INSight building certifiers pty ltd

BY
**COMPLYING DEVELOPMENT CERTIFICATE
APPLICATION AND CHECKLIST**
(made under the Environmental Planning and Assessment Act 1979 Section 85 and 85A)

It is important that we are able to contact you if we need more information. Please give us as much details as possible

Mr. ☐ Mrs. ☒ Ms. ☐ Dr. ☐ Other ☐

Given Names (or ACN)

Family Name (or Company)

~~KATE~~ KATE ELIZABETH

~~KATE~~ LONG

Postal Address (we will post all mail to this address)

48 IRRUBEL RD NEWPORT NSW

Post Code 2106

Daytime telephone

Alternate no.

Mobile no.

02 99401555

02 93023999

0413747109 - best number

I request this application to be assessed under the following environmental planning instrument

? ☒ State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
OR

☐ The Council's Local Environmental Plan or Development Control Plan for Exempt and Complying Development

Every owner of the land must sign this form. If the owner is a company the form must be signed by an authorized director and the common seal must be stamped on this form. If the property is a unit under the strata title or a lot in a community title, then in addition to the owner's signature, the common seal of the body corporate must be stamped on this form over the signature of the owner and signed by the Chairman or Secretary of the Owners Corporation or the appointed Managing Agent.

Owner(s)

KATE ELIZABETH LONG

Address

48 IRRUBEL RD NEWPORT NSW 2106

As the owner(s) of the land to which this application relates, I/We consent to this application. I/We also consent for the Principal Certifying Authority and/or Accredited Certifier to enter the land to carry out inspections relating to this application.

As the owner(s) I/We also confirm the legal requirements of any covenants (if any) applying to the land are complied with.

Signature(s)

Kate Long

Without the owner's consent we will not accept the application. This is a very strict requirement for all applications. If you are signing on the owner's behalf as the owner's legal representative, you must state the nature of your legal authority and attach documentary evidence (e.g., power of attorney, executor, trustee, company director, etc).

Unit/Street no.

48

Street name

IRRUBEL RD

Suburb

NEWPORT

Post code

2106

Legal Property Description (these details are shown on your rate notices, property deeds, etc)

Lot no.

A

DP no.

408151

What type of work do you propose to carry out?

Please describe briefly everything that you want approved.

ADDITION OF POOL

The estimated cost of the development or contract price may be subject to review

Estimated cost of work

\$ 69,619

If known, to be completed in the case of residential building work

Name

PENINSULA PROJECTS / BEAU JONES

Licence no.

177518C

ph:

0410 694793

Owner/builder permit no.

I apply for a Complying Development to carry out building works as described in this application. To the best of knowledge, all the information in this application and checklist is true and correct.

Signature

Date

Kate Long

5/8/11

(Please Note: If the Applicant is not the owner of the land, a statement signed by the owner of the land to the effect that the owner consents to the making of this application)

Levy Online Payment Receipt

LONG SERVICE

Thank you for using our Levy Online payment system. Your payment for this building application has been processed.

Applicant Name:	KATE LONG
Levy Application Reference:	5017646
Application Type:	CDC
Application No.:	2011/154CDC
Local Government Area/Government Authority:	PITTWATER COUNCIL
Site Address:	48 IRRUBEL RD
	NEWPORT
	NSW
	2106
Value Of Work:	\$69,619
Levy Due:	\$243
Levy Payment:	\$243
Online Payment Ref.:	623810081
Payment Date:	5/08/2011 2:07:06 PM

BASIX Certificate

Building Sustainability Index www.basix.nsw.gov.au

Alterations and Additions

Certificate number: A115220

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Alterations and Additions Definitions" dated 29/9/2006 published by Department of Planning. This document is available at www.basix.nsw.gov.au

Director-General
Date of issue: Wednesday, 06, July 2011



Description of project

Project address	
Project name	Swimming Pool
Street address	48 Irrubel Road Newport 2106
Local Government Area	Pittwater Council
Plan type and number	Deposited Plan 408151
Lot number	A
Section number	0
Project type	
Dwelling type	Separate dwelling house
Type of alteration and addition	My renovation work is less than \$50,000, but includes a pool (and/or spa) with a combined capacity of 40,000 litres or more.

Certificate Prepared by (please complete before submitting to Council or PCA)	
Name / Company Name:	WEIR PHILLIPS ARCHITECTS
ABN (if applicable):	

	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Pool and Spa			
Rainwater tank			
The applicant must install a rainwater tank of at least 1750 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rainwater runoff from at least 412 square metres of roof area.		✓	✓
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool.		✓	✓
Outdoor swimming pool			
The swimming pool must be outdoors.	✓	✓	✓
The swimming pool must not have a capacity greater than 52.5 kilolitres.	✓	✓	✓
The applicant must install a pool pump timer for the swimming pool.		✓	✓
The applicant must install the following heating system for the swimming pool that is part of this development: solar only.		✓	✓

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a "✓" in the "Show on CC/CDC plans & specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate for the development may be issued.

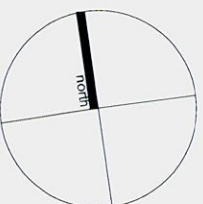
Long Residence

48 Irubel Road, Newport 2106

Lot A DP 408151



NOTE: SWIMMING POOL TO BE SURROUNDED BY A CHILD-RESISTANT BARRIER DESIGNED & INSTALLED TO COMPLY WITH THE REQUIREMENTS OF THE SWIMMING POOLS ACT AND REGULATIONS & IF A BOUNDARY FENCE IS TO ACT AS A POOL SAFETY BARRIER THEN IT MUST BE A MINIMUM 1800MM HIGH, MEASURED WITHIN THE POOL ENCLOSURE AND NO CLIMBABLE ELEMENTS WITHIN 900MM, MEASURED FROM THE TOP OF THE BOUNDARY FENCE IN ACCORDANCE WITH SWIMMING POOL ACT & REGULATIONS



source: www.whereis.com
Scale: 1:200

Drawing No.	Description	Scale
Drawing No.	Cover Page	N/A
DA01	Pool Plan	1:100
DA02	Elevations	1:100
DA03		

Total Site Area	1442 m ²
Exitg Building Footprint	250 m ²
Exitg Paved & Deck area	305 m ²
Exitg Total Site Coverage	555 m ²

Proposed Pool & Terrace area	107 m2
Proposed Total Site Coverage	662 m2

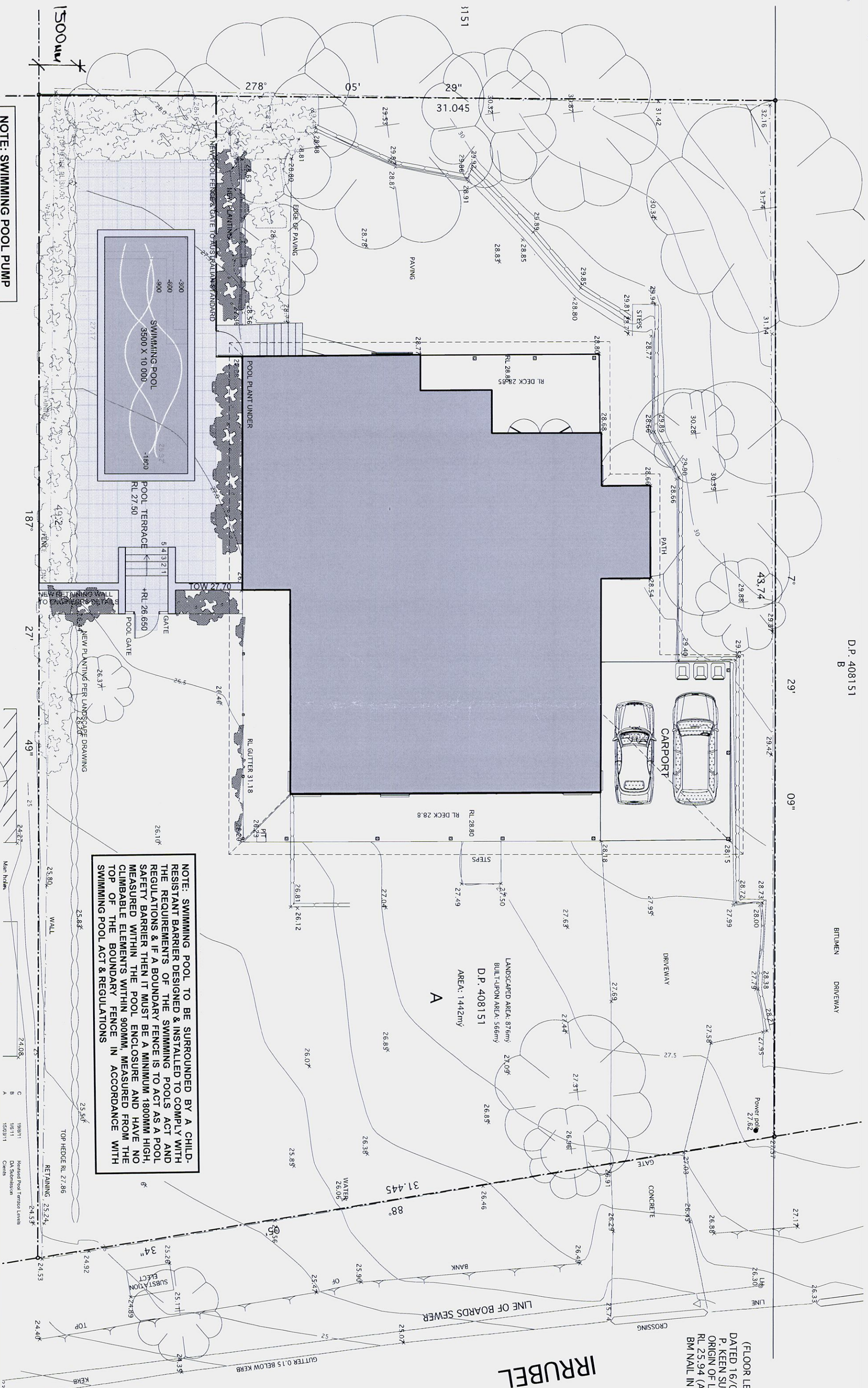
Weir Phillips Architects		PROJECT #	
ISSUE	DATE	REVISION	
PROJECT Long Residence, 48 Inrubei Road, Newport		LRN	
CLIENT Kate Long	DATE # 15/03/2011	DWG # 1100	DA01
DWG Cover Page	DRAWN JHO	CHECKED RW	REVISION C

Level 5 67-69 Strand Street, Chippendale NSW 2008
T 615 9210 1088 F 615 9210 1088 W www.weirphillips.com.au E info@weirphillips.com.au
NSW Registration Number 5385 Robert Weir

BITUMEN

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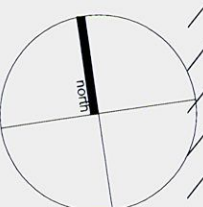
**NOTE: SWIMMING POOL PUMP
TO BE HOUSED WITHIN A
SOUND-PROOF ENCLOSURE.**

NOTE: SWIMMING POOL TO BE SURROUNDED BY A CHILD-RESISTANT BARRIER DESIGNED & INSTALLED TO COMPLY WITH THE REQUIREMENTS OF THE SWIMMING POOLS ACT AND REGULATIONS & IF A BOUNDARY FENCE IS TO ACT AS A POOL SAFETY BARRIER THEN IT MUST BE A MINIMUM 1800MM HIGH, MEASURED WITHIN THE POOL ENCLOSURE AND HAVE NO CLIMBABLE ELEMENTS WITHIN 900MM, MEASURED FROM THE TOP OF THE BOUNDARY FENCE IN ACCORDANCE WITH SWIMMING POOL ACT & REGULATIONS

LEGEND:

EXISTING
DEMOLISH

DEMOLISH



Weir Phillips Architects

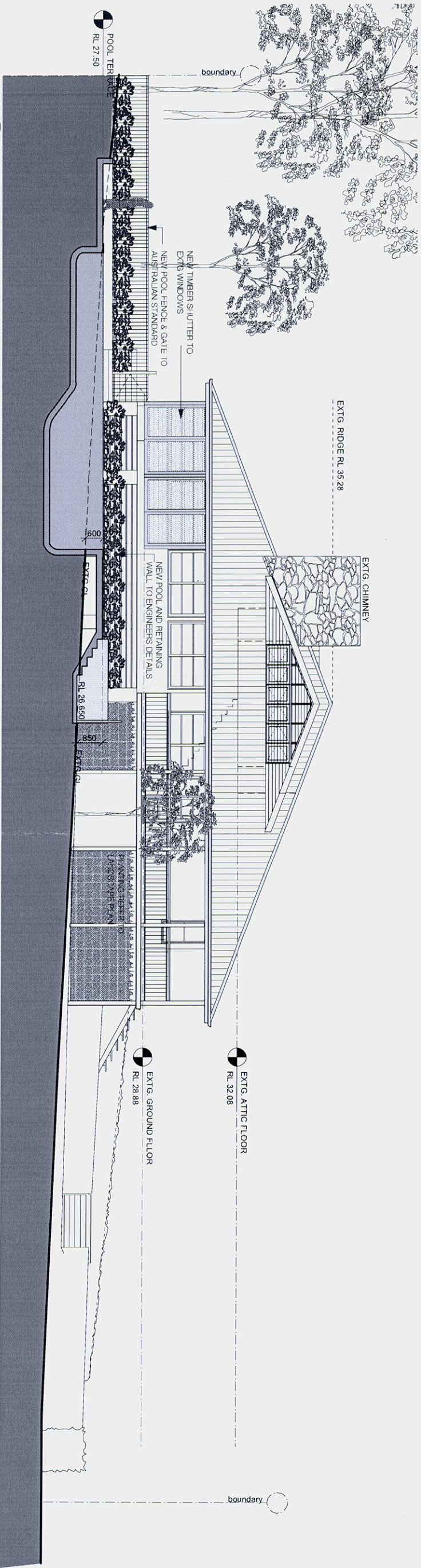
NSW Registration Number 6385 Robert Weir

NSW Registration Number 6385 Robert Weir

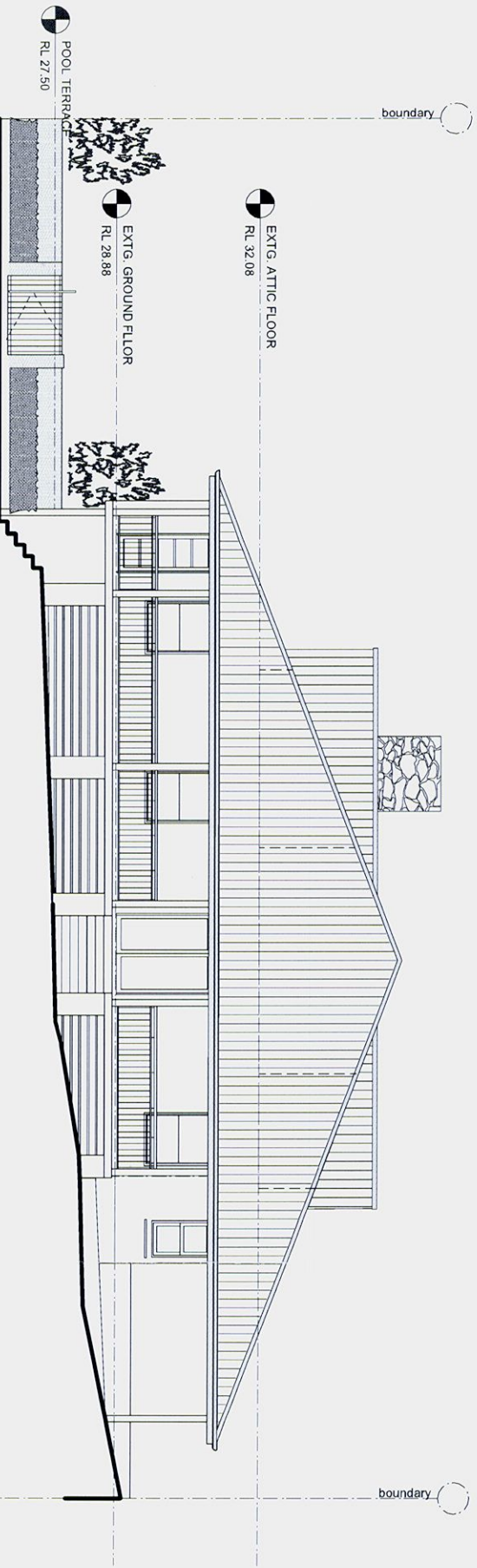
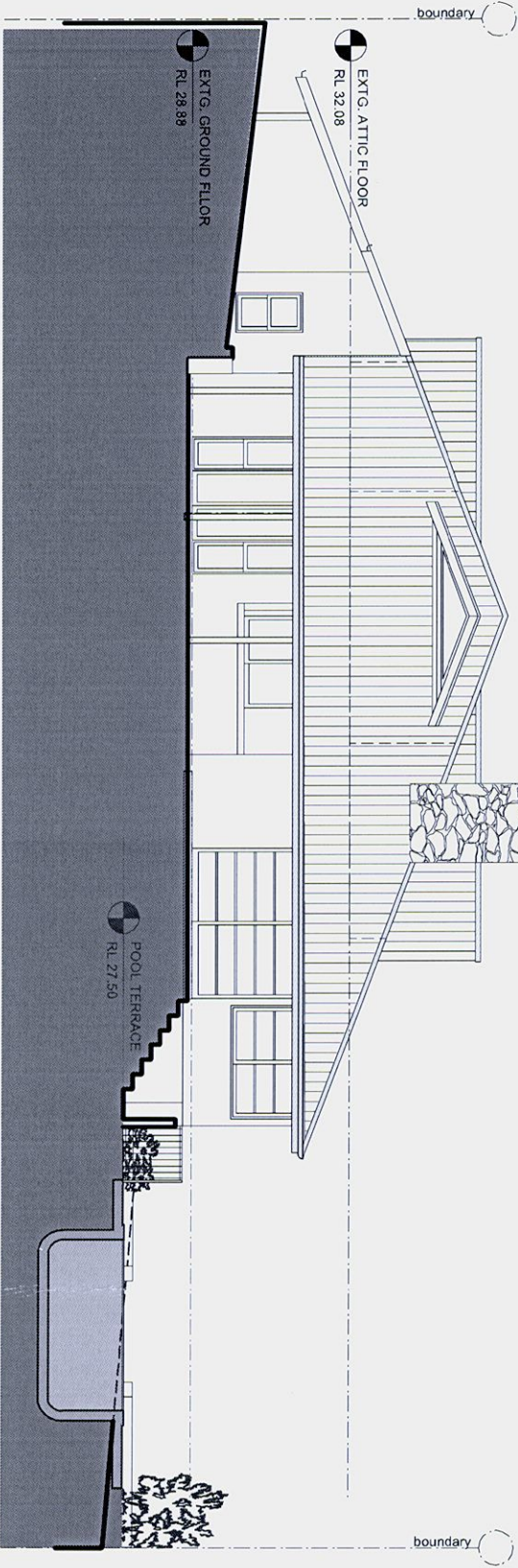
ISSUED	DATE	PERMISSION	PROJECT #
Long Residence, 48 Irrubel Road, Newport			LRN
CLIENT	NAME #		DWG #
Kate Long	SCALE @ A3	1:100	DA02
DWGS	DRAWN	3RD	
Swimming Pool Plan	CHECK	REV	REVISION
			C

Level 5 67-69 Regent Street, Chippendale NSW 2008
T: 612 9310 1010 F: 612 9310 1088
W: www.weirphillips.com.au
E: info@weirphillips.com.au

Level 3 6/-03 Regatta Street, Clippenside NSW 2008
T: 612 9310 1010 F: 612 9310 1088 W: www.weirphilips.com.au E: info@weirphilips.com.au



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Weir Phillips Architects
NSW Registration Number 6385 Robert Weir

ISSUE	DATE	REVISION	PROJECT #
C	19/8/11	Revised Pool Terrace Levels	LRN
B	1/6/11	DA Submission	
A	15/3/11	Comments	
CLIENT	Long Residence, 48 Irrubel Road, Newport		
DWG	Kate Long		
DATE #	15/03/2011	DWG #	DA03
SCALE & AN	1:100	DRAWN	BY
CHECKED	RW	REVISION	C
Level 5 67-69 Regent Street, Chippendale NSW 2008			
T: 612 9310 1010 F: 612 9310 1088 W: www.weirphillips.com.au E: info@weirphillips.com.au			

GENERAL NOTES

GENERAL

- G1 - These drawings are to be read in conjunction with all architectural and other consultants drawings and specifications. Any discrepancies are to be referred to all parties and rectified before proceeding with the works.
- G2 - Dimensions shall not be obtained by scaling from these drawings.
- G3 - During construction the structure shall be kept in a stable condition and no part shall be over stressed.
- G4 - All materials and workmanship are to be in accordance with the current Australian Standards, OHS requirements, and the by-laws and ordinances of any relevant statutory authority.

FOUNDATIONS

- F1 - The foundation material is to be WEATHERED ROCK of min 750 kPa bearing capacity.
- F2 -The foundation material is to be inspected, verified and approved by a Geotechnical Consultant as being in accordance with the above assumption and that it is sound and consistent with minimal possibility of differential settlement across the development.
- F3 - Should variable foundation material be encountered the engineer is to be contacted and it is likely all foundations are to be piers to similar material of the greatest bearing capacity and that additional detailing of the foundation reinforcement will be required.
- F4 - Any excavation works are to include measures to ensure the temporary and long term stability of any existing structure within its vicinity.
- F5 - All foundations shall be a minimum 300mm into the approved material unless otherwise noted.
- F6 - Foundation depth dimensions are a minimum only and final depth will be dependent on the adequacy of the bearing material.
- F7 - All organic matter and top soil shall be removed from the underside of all slabs and foundations.
- F8 - Any soft or questionable excavated areas are to be brought to the attention of the Geotechnical Consultant and may require controlled filling.
- F9 - Any filling shall be to the approval of the Geotechnical Consultant and will generally be granular material compacted in not more than 150mm layers to a minimum dry density ratio of 98%.

CONCRETE

- C1 - All workmanship and materials shall be in accordance with AS3600.
- C2 - Concrete quality shall be verified by tests.
- C3 - All concrete shall have a slump of 80mm and maximum aggregate size of 20mm.
- C4 - Concrete strength and cover shall be as detailed on the plans.
- C5 - Size of concrete members do not include thickness of applied finishes.
- C6 - Beam depths are written first and include slab thickness if any.
- C7 - No penetrations are to be made to the concrete members without the written approval of the engineer.
- C8 - No water is to be added to the concrete prior to placement.
- C9 - All construction joints shall be located to the approval of the engineer.
- C10 - Fire rating requirements and adequacy is to be reviewed and specified by others.
- C11 - All concrete members are to be cured by keeping the surfaces continuously wet for a period of 3 days followed by the prevention of loss of moisture for a further 7 days.

- C12 - All concrete elements shall be compacted to form a dense homogenous mass using mechanical vibrators.
- C13 - All formwork shall be installed and stripped in accordance with AS3610.
- C14 - All formwork is to be free of debris prior to pouring of concrete.

REINFORCEMENT

- R1 - All reinforcement shall be Grade D500.
- R2 - Top reinforcement is to be continuous over supporting elements and lapped between supporting elements only.
- R3 - Bottom reinforcement is to be continuous between supporting elements and lapped at supporting elements only.
- R4 - Reinforcement is represented diagrammatically only and is not necessarily shown in its true projection.
- R5 - Welding of reinforcement is not permitted.
- R6 - All reinforcement shall be supported on bar chairs at max 750mm spacing.
- R7 - Reinforcement shall be tied at alternate intersections.
- R8 - Reinforcement bars are to lap a minimum length equal to 40 times the bar diameter (e min 480mm for N12 bars, 640mm for N16 bars).
- R9 - Reinforcement fabric is to lap 1 complete square plus 25mm.

MASONRY

- M1 - All workmanship and materials shall be in accordance with AS3700.
- M2 - An approved slip joint material is to be placed over all load bearing masonry supporting a concrete slab and laid on smooth brick work or a trowed mortar finish, this material may constitute two layers of greased metal.
- M3 - Masonry shall be constructed on suspended concrete structures only after all propping has been removed and the concrete has achieved its specified strength.
- M4 - Control joints are to be placed in all walls at a maximum of 8m centres or closer as deemed necessary by the engineer. The joints are to be 10mm wide and sealed with an approved flexible sealant, with ties at 600mm centres vertical.
- M5 - Concrete blocks shall have a minimum compressive strength of 15 MPa.
- M6 - Core filling shall be 20 MPa concrete with 10mm aggregate, 230mm slump and compacted adequately.
- M7 - Concrete blocks used in retaining wall construction are to be Double Web H blocks.
- M8 - Maximum pour height for unrestrained blockwork is 1.8m.
- M9 - All masonry components are to be tied at not more than 600mm centres to adjacent steel or concrete columns.

STEEL

- S1 - All workmanship and materials shall be in accordance with AS4100.
- S2 - Hot rolled plates shall comply with AS 3678.
- S3 - Hot rolled sections shall comply with AS3679.
- S4 - Cold formed sections shall comply with AS4600.
- S5 - Welded and seamless hollow sections shall comply with AS1163.
- S6 - Unless noted otherwise all welds shall be 6mm continuous fillet from E4xx electrodes, unless noted otherwise.
- S7 - Unless noted otherwise all bolts shall be M16 high strength structural bolts grade 8.8, snug tightened, uno.
- S8 - Unless noted otherwise all connections shall be 3M16 bolts, 10mm plate and 6mm continuous weld.
- S9 - All structural steel work shall have the following level of corrosion protection (coatings listed below by ORICA Australia p/ maybe substituted with a certified equivalent) All coatings/finishes shall be applied in accordance with the manufacturers specifications and recommendations including surface preparation.

Internal elements

- not visible - a single coat (75 microns) of Zincanode 402.
- visible - a first coat (75 microns) of Zincanode 402 and a second coat (100 microns) of Weathermax HBR.
- External elements: (including members with an external cavity or within 1m of a significant opening)
- not visible - a first coat (75 microns) of Zincanode 402 and a second coat (200 microns) of Duremax GPE MIO
- or Hot Dipped Galvanised to AS 4680.
- visible - a first coat (75 microns) of Zincanode 402 and a second coat (200 microns) of Duremax GPE MIO and a third coat (100 microns) of Weathermax HBR
- or Hot Dipped Galvanised to AS 4680 and a decorative coating.
- S10 - All work shop drawings are to be reviewed and approved by the Engineer.

TIMBER

- T1 - All workmanship and materials shall be in accordance with AS1720 and AS1684.
- T2 - All exposed timber shall be H3 treated or of durability class 1.
- T3 - All timber in contact with the ground shall be H4 treated or of durability class 1.
- T4 - All exposed cuts shall be treated to achieve H3 or H4 requirements.
- T5 - All softwood shall be minimum F7.
- T6 - All hardwood shall be a minimum F14.
- T7 - All bolt hole s shall be exact size and washers shall be 2.5 x the bolt diameter.

INSPECTIONS

- I1 - Barrenjoey Consulting Engineers shall only inspect works within its capacity as an Engineering Consultancy and will not carry out Mandatory Critical Stage inspections.
- I2 - Barrenjoey Consulting Engineers will not inspect or certify foundation material adequacy, see F2.
- I2 - All inspections are to be carried out at the request of the projects Principal Certifying Authority, or should independent certification be required at the request of the client or builder.
- I3 - Typical inspections include -
 - Foundation reinforcement
 - Slab on ground reinforcement
 - Suspended concrete reinforcement
 - Steel structures
 - Timber structures
- I4 - The client shall be responsible for any fees for inspections regardless of whom requested them.
- I5 - All re inspection required due to no compliance with issued drawings or that deemed necessary by Barrenjoey Consulting Engineers shall be charged to the client.
- I6 - No certification will be given for works not inspected by Barrenjoey Consulting Engineers.
- I7-48 Hrs notice is required for any inspection within the Sydney region and 72 Hrs notice is required for any inspection outside of this region.

DESIGN LIFE OF THE STRUCTURE

- D1 - The design life of all elements as specified within these documents correspond to that required by the Building Code of Australia and the relevant Australian Standard.
- D2 - The Design Life of elements relevant to slope stability maybe extended to that required by Pittwater Councils Interim Risk Management Policy by the implementation of a rigorous maintenance and inspection schedule.
- D3 - To meet the requirements of Pittwater Councils Interim Risk Management Policy (if required) the works are to be regularly maintained by the occupant/home owner, inspected by an Engineer 12months after completion, by a licensed builder every 10 years and by a qualified Engineer every 25 yrs.

DRAWING SCHEDULE

- S1.0 - GENERAL NOTES
- S2.0 - POOL PLAN
- S3.0 - POOL SECTION A
- S4.0 - POOL SECTION B
- S5.0 - POOL SECTION C
- S6.0 - POOL SECTION D
- + DETAILING
- POOL DETAILING
- S7.0

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Structural Civil

PROJECT:

PROPOSED
SWIMMING POOL
48 IRRUBEL ROAD
NEWPORT
for ~ K. LONG

DRAWING :

GENERAL NOTES

Job No :

091202

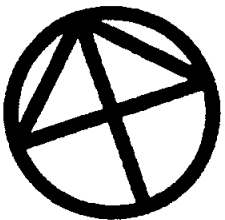
Drawing No :

S1.0

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per
Lucas Molloy MIEA CPENG NPER Director

Lucas Molloy



300x300 corbel for
coping widths > 750mm

New retaining wall to u/s existing residence

C
S5.0

D
S6.0

A
S3.0

Finished
RL
27.50

+1.1m Depth

+1.8m Depth

RL
27.50

B
S4.0

~ Boundary

NOTE - Existing ground levels between
Pool and boundary to be maintained

POOL SLAB PLAN

1:50

170mm Slab, Fc - 32 MPa, 65mm min cover

2S12 @ 200 central each way (western half), 1S12 @ 200 central each way (eastern half)

450mm dia piers @ 2m MAX cts to weathered rock (as required tbc upon mass excavation)

SF1 - 350x600 Strip footing 4-12TM top and bottom + R10 ties @ 600cts

(+ 450 dia piers @ 3m MAX cts)

SET OUT, STEP LOCATIONS, DEPTHS, SKIMMER BOX LOCATION, DIMENSIONS

DETAILS BY OTHERS

450 dia piers @ 2m MAX cts
to below adjacent excavation / retaining
line of influence

Extend foundation under
pool extents to support
block wall over

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PROJECT:

DRAWING:

POOL PLAN

Job No:

091202

Drawing No:

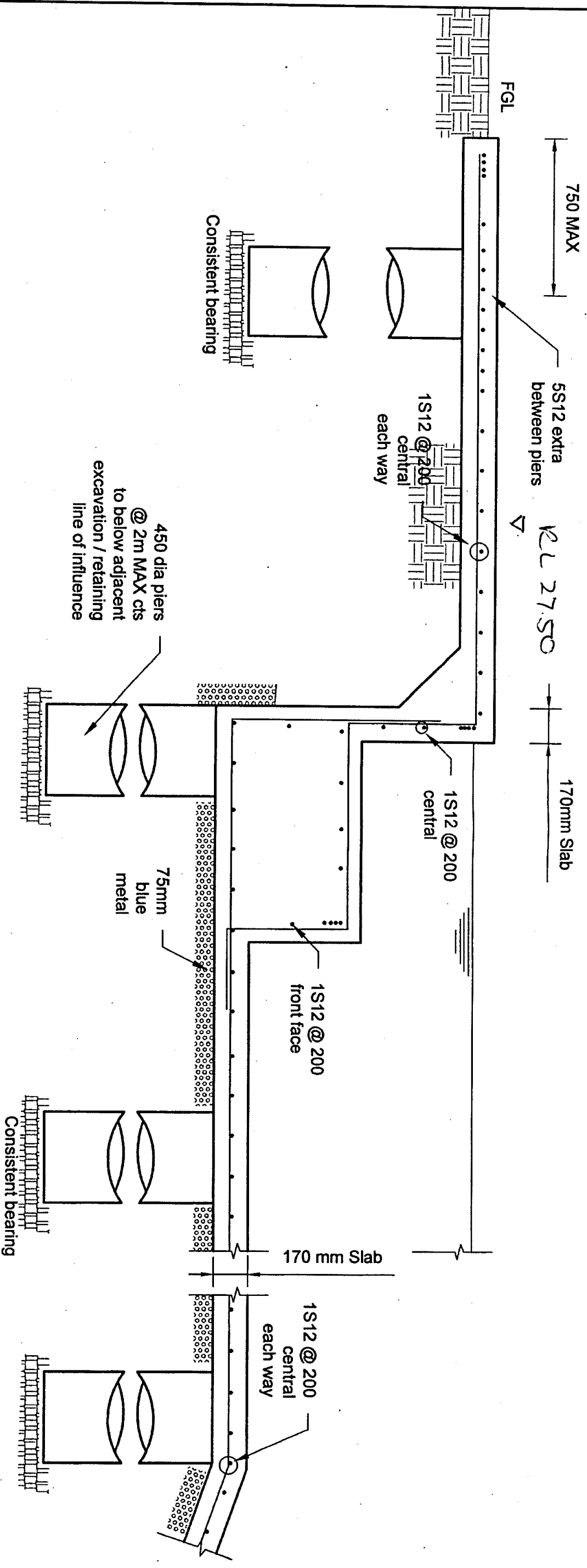
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POOL CROSS SECTION A

1:20

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PROJECT:

**PROPOSED
SWIMMING POOL
48 IRRUBEL ROAD
NEWPORT
for ~ K. LONG**

DRAWING :

POOL SECTION A

Job No :

091202

Drawing No :

S3.00

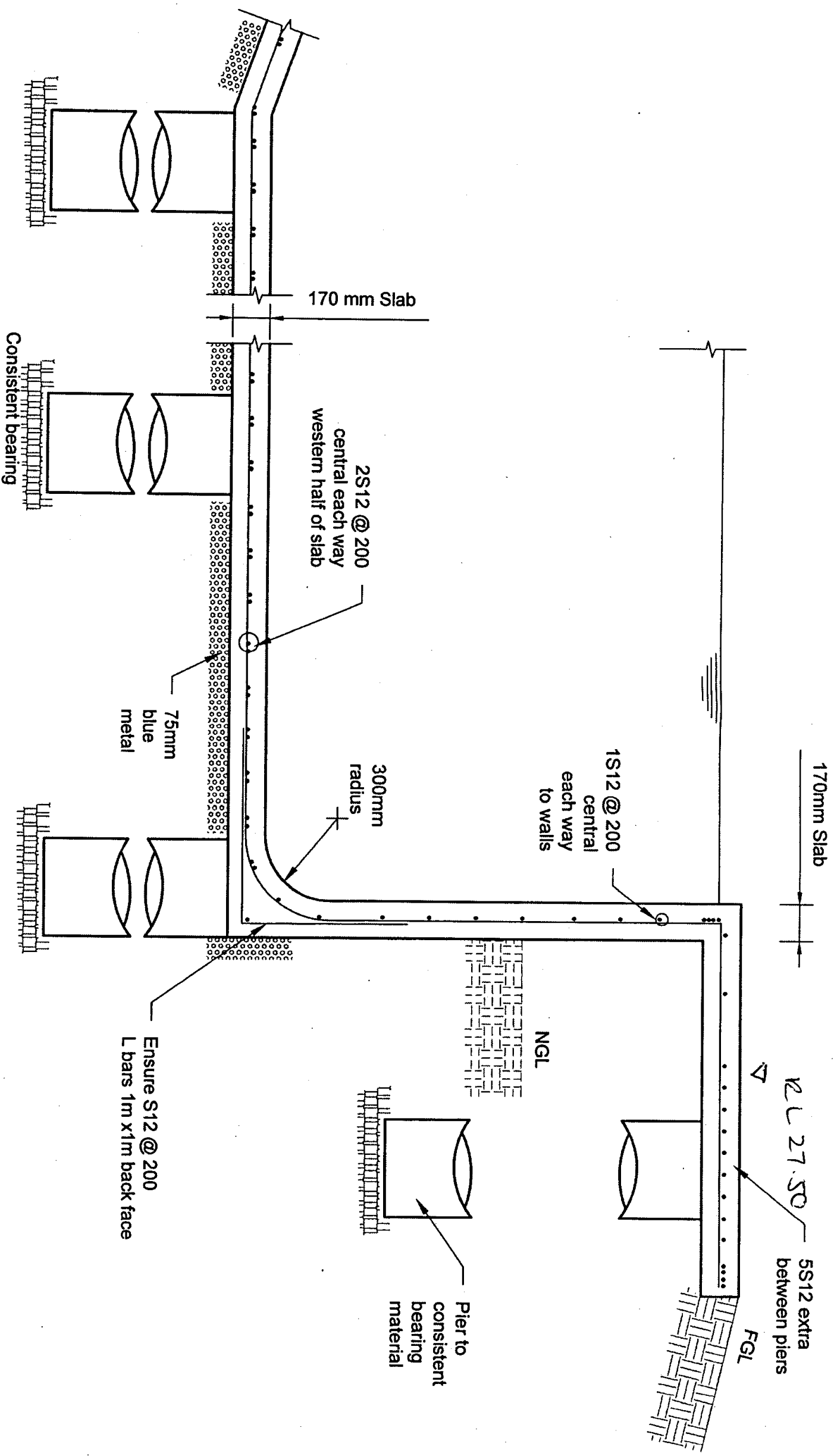
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Lucas Molloy



POOL CROSS SECTION B

1:20

PROJECT:

DRAWING :

Job No :

Drawing No :

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Structural

Civil

PROPOSED

SWIMMING POOL

48 IRRUBEL ROAD

NEWPORT

for ~ K. LONG

POOL SECTION B

091202

S4.00

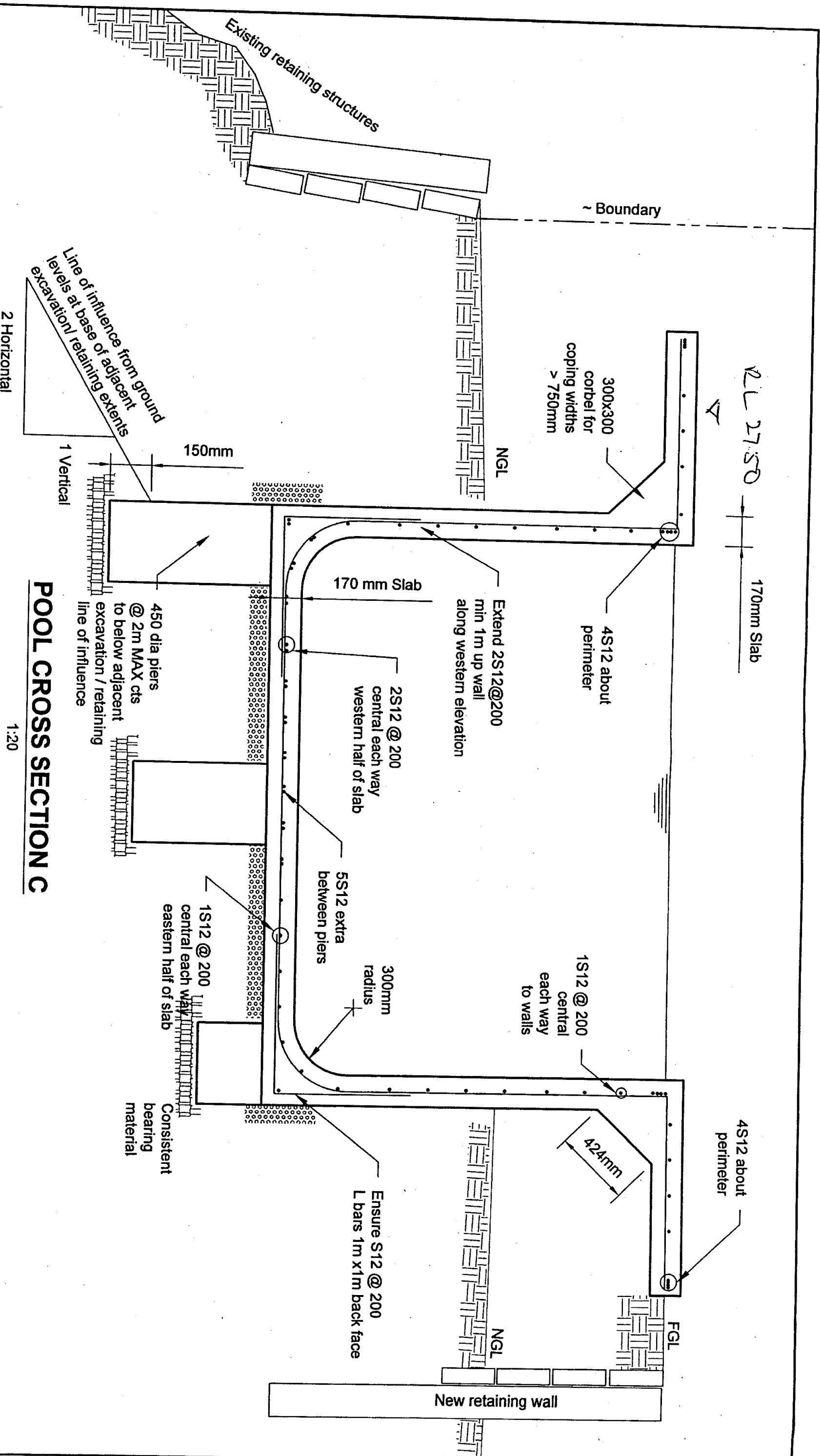
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Stormwater Structural Civil

PROJECT:

DRAWING :

Job No :

Drawing No :

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PROPOSED
SWIMMING POOL
48 IRRUBEL ROAD
NEWPORT
for ~ K. LONG

POOL SECTION C

091202

S5.00

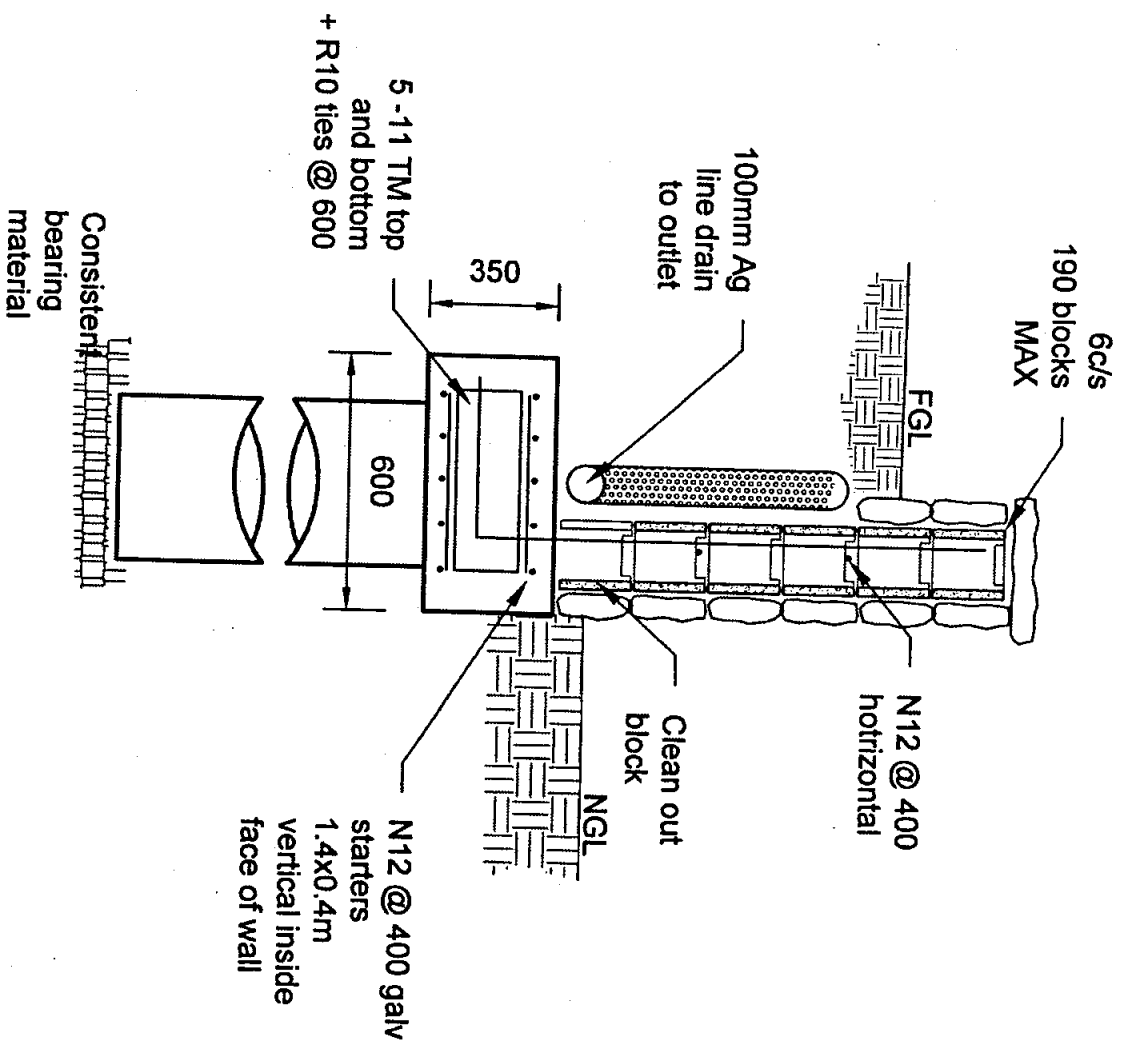
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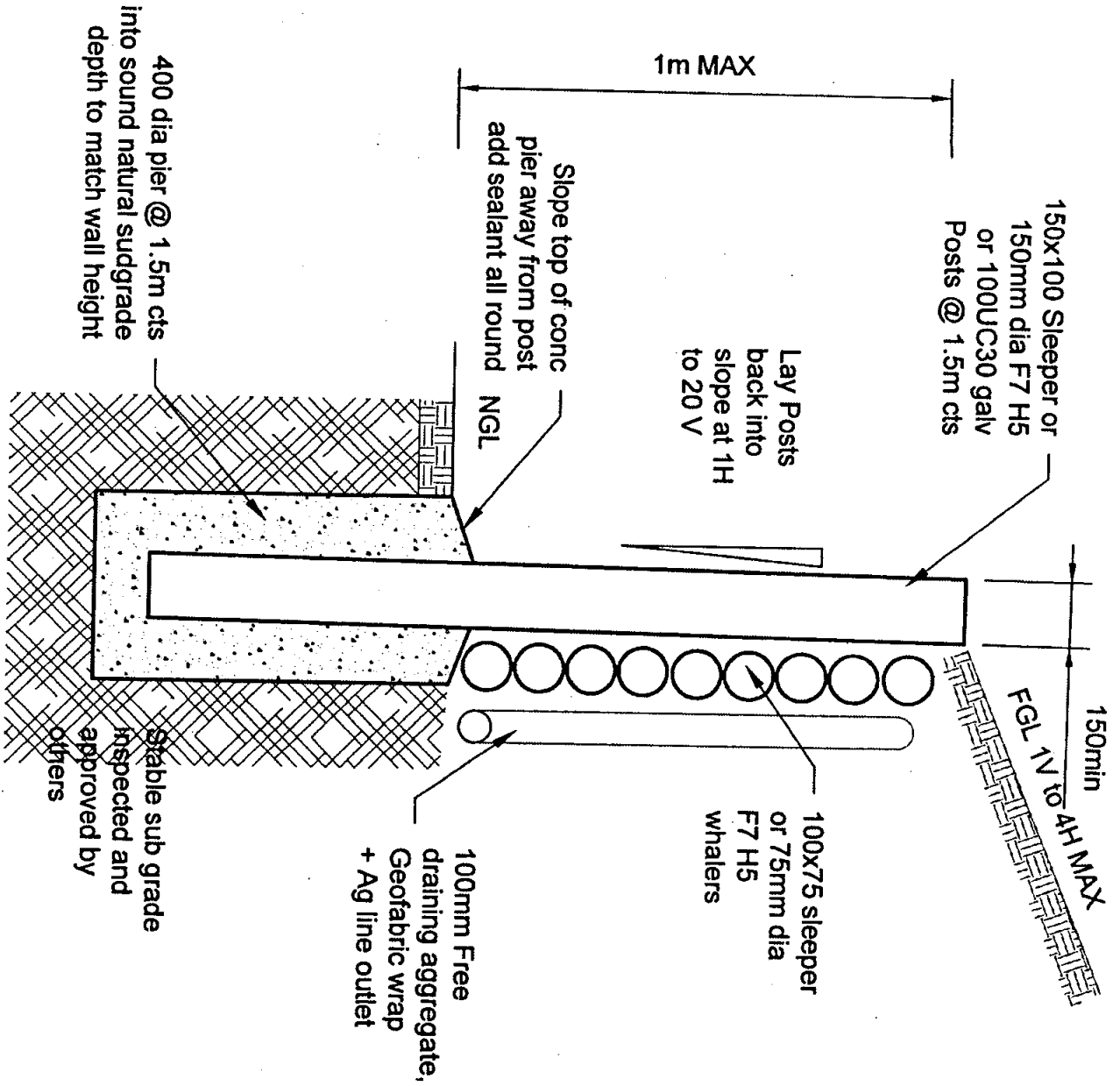
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[Signature]



POOL CROSS SECTION D

1:20



LOG RETAINING WALL DETAIL

1:20

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PROJECT:

PROPOSED SWIMMING POOL
48 IRRUBEL ROAD
NEWPORT
 for ~ K. LONG

DRAWING:

POOL SECTION D
 +
DETAILING

Job No:

091202

Drawing No:

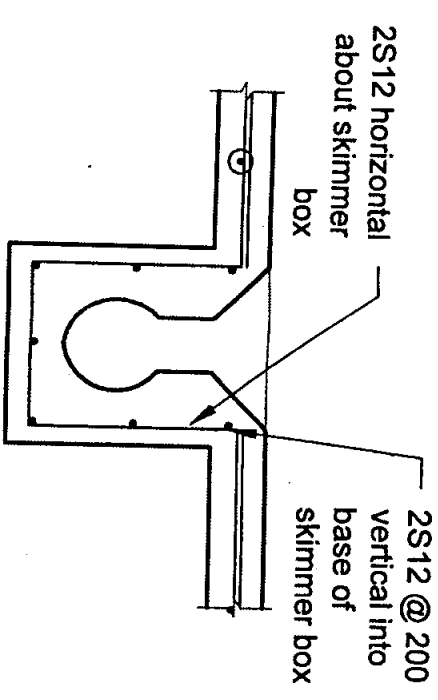
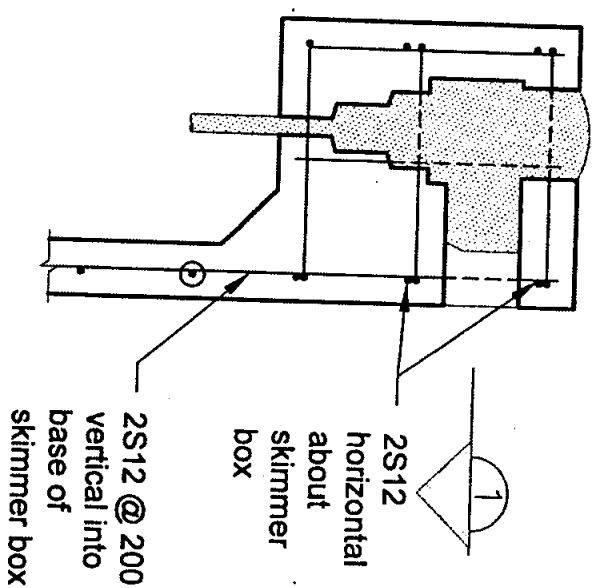
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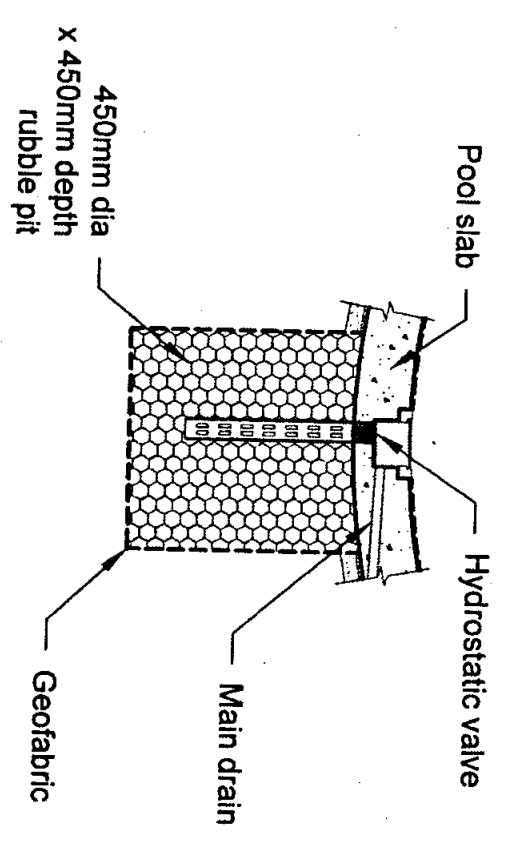
Lucas Molloy



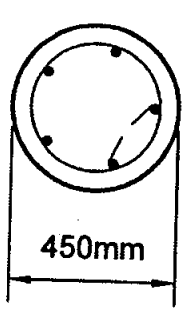
SKIMMER BOX DETAIL

LOCATION TO BE CONFIRMED BY ARCHITECT AND POOL MANUFACTURER.

SECTION 1

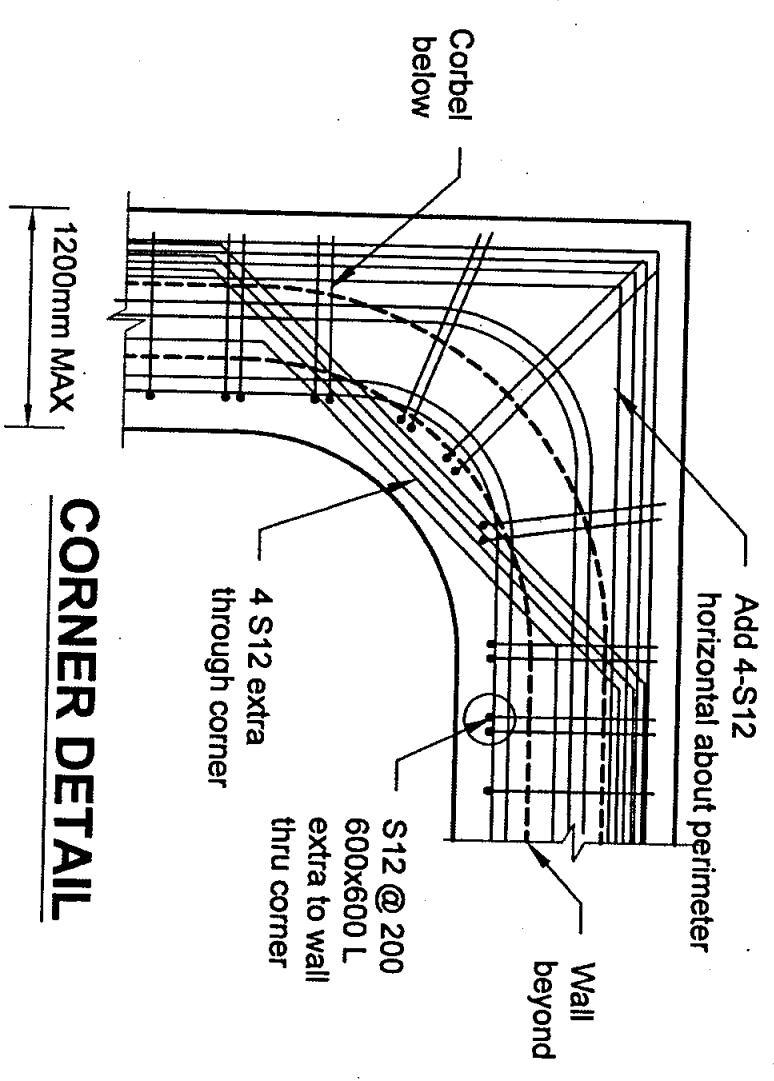


MAIN DRAIN DETAIL



5-N16 VERT BARS, R10-300 TIES
IF PIER > 1.2m IN DEPTH
2-N12 U BARS IF PIER 1.2m IN DEPTH

TYPICAL PIER DETAIL



CORNER DETAIL

Barrenjoey Consulting Engineers Pty Ltd Stormwater Structural Civil PO Box 672 Avalon NSW 2107 P: 9918 6264 F: 9918 5841 M: 0418 620 330 E: lucasbee@bigpond.com ABN: 13124694917 ACN: 124694917	PROJECT: PROPOSED SWIMMING POOL 48 IRRUBEL ROAD NEWPORT for ~ K. LONG	DRAWING : POOL DETAILING	Job No : 091202 Drawing No : S7.00 Document Certification Barrenjoey Consulting Engineers Pty Ltd per Lucas Molloy MICA OPENING NPFR Director
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Lucas Molloy