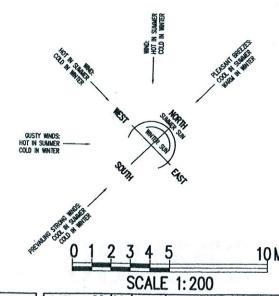


The plans are NOT for construction.



PROPOSED ADDITIONS

At: 45 Eurobin Ave, Manly N.S.W. 2095

Prepared By:

NORTHERN BEACHES
Consulting Engineers P/L.

A.C.N. 076 121 616 A.B.N. 24 076 121 616 Suite 207, 30 FISHER ROAD DEE WHY N.S.W. 2099

Ph: (02) 9984 7000 Fax: (02) 9984 7444 e-mail: nb@nbconsulting.com.au web page: www.nbconsulting.com.au

DRAWING SCHEDULE:

S01 - GENERAL NOTES

S02 - FOOTING & POOL PLAN

S03 - GROUND FLOOR FRAMING PLAN

S04 - FIRST FLOOR & ROOF FRAMING PLAN

S05 - SECTIONS

S06 - SLAB SECTIONS

S07 - POOL SECTIONS SHEET 1

S08 - POOL SECTIONS SHEET 2

S09 - POOL TYPICAL DETAILS

S10 - TYPICAL SLAB DETAILS

I certify that work completed in accordance with these plans and specifications will comply with the regulations referred to in Section 81A(5) of the Environment Planning and Assessment Act 1979

This is the plan/spec, referred to in Form Building Certifier's Certificate

Certificate No. 2.009
Plan Nos. SO. — S.10

Craig Formosa

BPB0124

080552

11.08.2009

REV A

GENERAL NOTES:

GENERAL

- GI. The drawings are to be read together with all Architects drawings and specifications.
- G2. Dimensions shall not be obtained by scaling from the drawings. All setting out dimensions shall be verified and discrepancies shall be referred to the Engineer prior to commencement of work.
- G3. Core is required during construction so that structural elements are not over stressed and that the works and excavations required therefore are kept stable at all times.
- G4. Design, materials and workmanship are to be in accordance with current S.A.A standards and statutory authority regulations except where varied by these documents.
- G5. Design live loads are in accordance with AS 1170.1
- G6. Builder to ensure stability of existing structures in the vicinity of excavation works

FOOTINGS

- FI. FOUNDATION STRATA IS ASSUMED FOR DESIGN PURPOSES IN ACCORDANCE WITH AS 2870-1996 "RESIDENTIAL SLAB AND FOOTINGS-CONSTRUCTION", SEE FOOTNOTE, CLASSIFICATION TO BE VERIFIED BY A GEOTECHNICAL ENGINEER COMMISSIONED BY THE CLIENT FOR CERTIFICATION OF FOUNDATIONS.
- F2. Footings to be constructed and back filled as soon as possible following excavation to avoid softening by rain or drying out by exposure.
- F3. Footings must bear into undisturbed natural ground clear of organic material. Refer to details.
- F4. If rock or variable bearing strata is encountered during excavation of the footings all footings/piers are to be excavated to similar material of greater bearing capacity.
 - The Engineer is to be contacted at that time for approval or review.
- F5. Footings to be cast in approved material having an allowable capacity as follows:

- SAI. Required bearing capacity 100 kPa.
- SA2. Trenches must be cleaned of all debris and hand compacted prior to placement of reinforcement.

Clay Foundations:

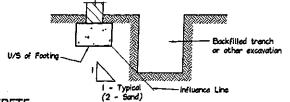
- CLI. Required bearing capacity 150 kPa.
- CL2. Trenches must be cleaned of all debris. Soft spots must be cut out and filled as per compacted fill notes, prior to placement of reinforcement.

Shale Foundations:

- SHI, Required bearing capacity 400 kPa.
- SH2. Excavation for footings into shale must be cast or copped with plain concrete on the same day as excavation.

Sandstane Foundations:

- SSI. Required bearing capacity 600 kPa.
- \$52. Scrape weathered surface to remove cleaved sandstone under footings. Refer adjacent for assumed Design bearing strata.
- F6. Future development of neighboring properties may affect ground water conditions on this site. Consequently, reactivity in subgrade beneath footings may be locally altered therefore putting footing at risk of differential settlement. We recommend that, particularly in clay subgrades, agricultural drainage is installed to the upstream perimeter of the building at a distance from the building which is outside the zone of influence of the footings The agricultural drain must be installed below the fluctuating seasonal zone which should be identified by geotechnical investigation.
- F7. UNLESS OTHER WISE APPROVED. Excavations near new or existing factings shall not be within the footing influence line.



CONCRETE

Date:

- Cl. All workmanship and materials shall be in accordance with AS 3600.
- C2. Concrete quality shall be as follows and shall be verified by tests.
- C3. All concrete unless otherwise noted shall have a slump of 80mm at point of placement, a max. aggregate size of 20 mm. No water shall be added to the mix prior to or
- during placement of concrete. Strength as specified on plans. C4. Clear concrete cover to reinforcement shall be as follows unless. otherwise shown-

ELEMENT	INTERIOR	EXTERIOR	EXTERIOR CAST AGAINST GROUND		
FOOTINGS	-	-	50		
COLUMNS/PEDESTALS	30 UNO	REFER TO PLAN	-		
SLAB5/WALLS	25	REFER TO PLAN	40 ON MEMBRANE		
BEAMS	25 UNO	REFER TO PLAN	50		
BLOCKWORK	55 FROM APPROPRIATE FACE				

- C5. Sizes of concrete elements do not include thickness of applied finishes.
- C6. All Construction Joints locations shall be approved by the Structural Engineer.
- C7. Beam depths are written first and include slab thickness, if any.
- C8. No holes or chases other than those shown on the structural drawings shall be made in concrete elements without the prior approval of the engineer.
- C9. Shrinkage reducing admixtures such as 'Eclipse' or approved equivalent, if specified, must be added to mix prior to pour.
- CIO. Water reducing agents, if specified, must be added to mix prior to pour. No extra water is to be added to increase slump. CII. Where vertical slab/beam surfaces are formed against a masonry
- (or other) wall, provide 10 mm styrene separation material.
- C12. Water must not be added to concrete mix prior to placement of concrete. C13. Above covers may have to be adjusted if fire rating is a requirement.

REINFORCEMENT

- RI. All reinforcement specified is Grade D500 unless noted otherwise.
- R2. Reinforcement is represented diagrammatically it is not necessarily shown in true projection.
- R3. Top reinforcement is to be continuous over supports. Bottom reinforcement to be lapped at supports.
- R4. Welding of reinforcement shall not be permitted unless shown on the
- R5. Pipes or conduits shall not be placed within the zone of concrete cover to the reinforcement without the approval of the engineer.
- R6. All reinforcing bars and fabric shall comply with A5 4671-2001.
- R7. Reinforcement, symbols:
 - N Grade 500N deformed bar (D500) Normal Ductility
 - R Grade 250N plain round bar (R250) Normal Ductility. SL - Grade 500L welded deformed ribbed mesh (D500)
 - Square Low Ductility.
 - RL Grade 500L welded deformed ribbed mesh (D500) Rectangular Low Ductility.
 - The number immediately following these symbols is the number of millimeters in the bar diameter.

Example : 8 N12-250

- Denotes 8, Grade 500N deformed bars, 12 mm diameter at 250 cts.
- R8. Fabric reinforcement to be lapped 1 complete square + 25 mm unless noted otherwise.
- R9 All reinforcement shall be firmly supported on bor chairs spaced at a maximum of 750 centres both ways under rod and fabric reinforcement. Reinforcement shall be tied at alternate intersections.

FORMWORK

- FWI. Formwork must be cleaned of all debris prior to casting of concrete. FW2. Minimum stripping times for form work shall be as recommended in AS 3610 - 1990 or as directed by the engineer.
- FW3. The finished concrete shall be a dense homogeneous mass, completely filling the form work, thoroughly embedding the reinforcement and free of stone pockets. All concrete elements including slabs on ground and footings shall be compacted with mechanical vibrators.
- FW4. Curing of all concrete is to be achieved by keeping surfaces continuously wet for a period of 3 days, followed by prevention of loss of moisture for seven days followed by a gradual drying out . Approved sprayed an curing compounds may be used where no floor finishes are proposed. Polythene sheeting or wet hession may be used if protected from wind and traffic.

BRICKWORK

- BRI. Brickwork is to be constructed to AS 3700.
- BR2. Two layers of approved greased metal based slip material shall be used over all load bearing walls that support concrete slabs and placed on smooth brickwork or trawelled mortar finish. Non load-bearing walls shall have 10 mm compressible material and ties to the slab soffit.
- ASSUMED FOUNDATION CLASSIFICATION FOR DESIGN PURPOSES 'A ASSUMED BEARING STRATA FOR DESIGN PURPOSES - SAND - 100 KPA CONTRACTOR TO ENGAGE GEOTECHNICAL CONSULTANT TO VERIFY FOUNDATION CLASSIFICATION
- EXTERNAL ELEMENTS, & ELEMENTS WITHIN EITHER SKIN OF EXTERNAL CAVITY WALLS GREATER THAN 2 km FROM SEA WATER: b. Preparation Blast clean to a minimum standard Class 2.5 is accordance with AS 1627 Part 4.

to achieve a total dry film thickness of 70 microns.

Primer 2-pack epoxy phosphate at dft 75 microns (Dulux Durepon PI4). Barrier Coat 2-pack epoxy micaeous iron oxide, dft 100 microns Finish Coat 2-pack epoxy high gloss acrylic to dft 75 microns. (e.a. Dulux Acrathane | F)

BR3. No brickwork shall be constructed on suspended slabs until

BR4. Control joints to be placed at a maximum of 8m centres

BR5. Exposure grade bricks to be used below damp proof course.

and brick walls shall be: 10 mm Spandex External UNO.

BR7. Provide stainless steel wall ties below DPC to AS 3700. Provide

BR8. Dry Pressed Bricks should always be use for brick retaining walls.

excessive brick arouth leads to cracking in walls and render.

concrete with 10 mm aggregate and 230 mm slump shall be

used. Clean out openings must be utilized for all cores.

BL4. Control joints to be placed at a maximum of 8 m centres

BL7. No blackwork shall be constructed on suspended slabs until

BR6. Vertical control joint material where specified on plan between slabs

galyanized wall ties above DPC to AS 3700 \$ Local Council Specifications.

In addition we recommend that dry pressed bricks be used for all types

of construction where possible. Dry pressed bricks grow only half as

much as extruded bricks. Extruded bricks are difficult to fix to and

BLI. Concrete blocks shall have a minimum compressive strength of 15 MPa

and conform to AS 1500. Mosonry to be constructed to AS 3700.

BL3. Location of actual starters is critical to suit block cores, allow 55 mm

BL5. Vertical control joint material where specified on plan between slabs

BL6. Retaining walls or any reinforced and concrete core filled block walls

Design, fabrication and erection to be in accordance with AS 4100.

Structures Code and the specification for Structural Steel.

8.85 - High Strength structural bolts Grade 8.8, snug tightened.

58. Load indicating washers shall be used in all fully tensioned joints.

59. All welding shall be carried out in accordance with AS 1554 SAA

57. Unless shown otherwise, minimum connection shall be 2MI6 bolts, 10 thick

510. Unless noted otherwise all welds shall be category SP using E41xx Electrodes.

511. Grouting of anchor bott sleeves and base plates shall be completed by the

All butt welds shall be complete penetration butt welds category SP.

512. Fabrication and erection tolerances for Structural Steelwork shall be in

a. Thoroughly cleaned wire brushing, followed by two coats of zinc phosphate

primer equivalent to Dulux Luxaprime applied by hand using brushes

52. Materials and workmanship shall comply with AS 1250 - 1981, SAA Steel

53. Rolled steel sections including steel plates shall comply with AS 3678-1990.

all propping has been removed from the underside of the slab and the

concrete has the specified 28 day cylinder strength verified by tests.

and brick walls shall be: 10 mm Spandex External UNO.

cover from the outside face of blockwork. All reinforcement lap lengths

Bitumastic fibreboard internal UNO

BL2. Where cores of hollow blocks are to be filled, properly compacted 20MPa

Bitumastic fibreboard internal UNO.

or in occordance with AS 3700.

BLOCKWORK

STEEL

S6. Bolt Designation:

and acting as a Bearing Joint.

and acting as a Bearing Joint.

Structural Steel Welding Code.

(8.8TF \$ 8.8TB).

accordance with AS 4100

INTERNAL

to conform to AS 3600.

or in accordance with AS 3700.

to be of Double 'U' Block Construction.

unless approved by the Structural Engineer.

BL8. Max. pour height for unrestrained blockwork is 2000.

SI. All Structural steelwork to be Grade 300 or greater.

4.65 - Commercial bolts Grade 4.6, snug tightened.

Unless noted otherwise, all bolts will be 8.85.

contractor using High Strength, Non-Shrink arout.

SI3. Purlin bolts shall be MI2 - 4.65 galvanised.

gusset plates, 6mm continuous fillet welds.

- c. Hot dipped galvanized to AS 4680. Where the galvanic (Hot Dip Galvanized) coating is compromised by welding, all propping has been removed from the underside of the slab and the bolting or damage, two pack zinc rick epoxy primer (Dulux Zincanade 202) concrete has the specified 28 day cylinder strength verified by tests. is to be be applied after wire brushing affected area (use 3 coats minimum)
 - or Hot Metal Spray in accordance with AS 4680. PAINTING OVER HOT DIP GALVANISED STEEL:
 - Degrease and preparation whip blast. Application of a general purpose epoxy (Dulux Durernax GPE) thickness 125 microns. Application of a high build polyurethane (Dulux Weathermax HBR) thickness 100 microns

EXTERNAL ELEMENTS. & ELEMENTS WITHIN EITHER SKIN OF EXTERNAL CAVITY WALLS LESS THAN 2 km FROM SEA WATER:

- d Preparation blost clean to minimum Class 2.5. Application of a two pack zinc rich epoxy primer (Dulux Zincanode 402) thickness 75 microns. Application of a general purpose epoxy (Dulux Duremax GPE) thickness 125 microns. Application of a high build polyurethane (Dulux Weathermax HBR) thickness 100 microns
- SIS. Workshop drawings shall be prepared and two copies submitted to the engineer for review prior to fabrication commencement.

TIMBER

- TI. All workmanship and materials to be in accordance with AS 1684, AS 1720 and as 3959. All soft wood to be Grade F7 unless noted otherwise. All hardwood to be minimum Grade FI4 unless otherwise noted. Exposed timber to be CCA treated (to AS 1604) redried after full impregnation, or durability class 1, 2 or 3. ALL SOFTWOOD TIMBER FRAMING TO HAVE A MINIMUM TREATMENT PROTECTION OF H2 or T2 TREATED FOR TERMITE PROTECTION UNLESS NOTED OTHERWISE.
- T2. All joists deeper than 150 to have blocking over support bearers and at a maximum 3000 centres
- T3. Roof trusses to be designed by the manufacturer to the relevant standards. Pre camber to be an amount equal to dead load deflection unless otherwise noted..
- T4. All holes for boilts to be exact size. Washers to be used under all heads and nuts and to be at least 2.5 times the bolt diameter. Bolts to be MI6 grade 4.6 unless noted otherwise
- T5. Treat all exposed cut ends with Reseal by Protim to manufacturers specification to achieve required Hazard Level Exposure Classification.
- T6. Battens for T & G to be Kiln Dried to 12 %, 38mm minimum, deep treated pine or as recommended by supplier. Flooring to be installed no sooner than 28 days after slab pour.
- T7. Hot dip galvanized nails/clouts/screws to be used with all timber connections.
- 54. Cold formed steel sections shall be Grade 450 Zinc coated in accordance with AS 1538-1988. T8, Continuous nailing must not be used for any timber connections. T9. All exposed CCA treated pine to have an application of
- 55. Welded and seamless steel hollow sections shall comply with AS 1163 Grade 350. penetrating sealer to reduce warping and twist of the timber due to varying moisture content in service. TIO. All Stud walls to be 90x45 F7 Kiln Dried
- 8.8TB High Strength structural bolts Grade 8.8, fully tightened to AS 1511 T2 Treated at 450 Cts and noggings to AS 1684. 8.8TF - High Strength structural bolts Grade 8.8, fully tensioned to AS 1511

COMPACTED FILL

- CFI. Only to be used with approval by Engineer \$ to be certified by a geotechnical Engineer.
- CF2. Clear organic material, topsoil and any uncontrolled existing fill under proposed slabs/footings.
- CF3. Filling shall be granular material compacted in not more than 200 mm layers to a minimum dry density ratio (AS 1289/E4.2 1982) of 98 percent standard maximum dry density
- CF4. During clearing and excavation for slabs and footings cut out soft spots and fill as above.

INSPECTIONS BY ENGINEER

- 48 HOURS NOTICE IS REQUIRED BEFORE ANY SITE INSPECTION
- i. Bearing strata of all footings prior to concrete pour Si4. Steel work shall have one of the following grades of corrosion protection:by Geotechnical Engineer.
 - Any reinforcement prior to concrete pour.
 - Timber and Steel framing prior to cladding or lining.
 - 4. Steel lintels after installation.
 - 5. CONTACT YOUR PCA (Principal Certifying Authority) AS TO REQUIREMENTS FOR MANDATORY CRITICAL STAGE inspections IN ACCORDANCE WITH REVISED EP\$A ACT REGULATIONS EFFECTIVE JULY 1, 2004.
 - Inspection by Geotechnical Engineer over 1.5m of vertical out through Sandstone bed rock to permit identification of defects and remedial measures initiated.



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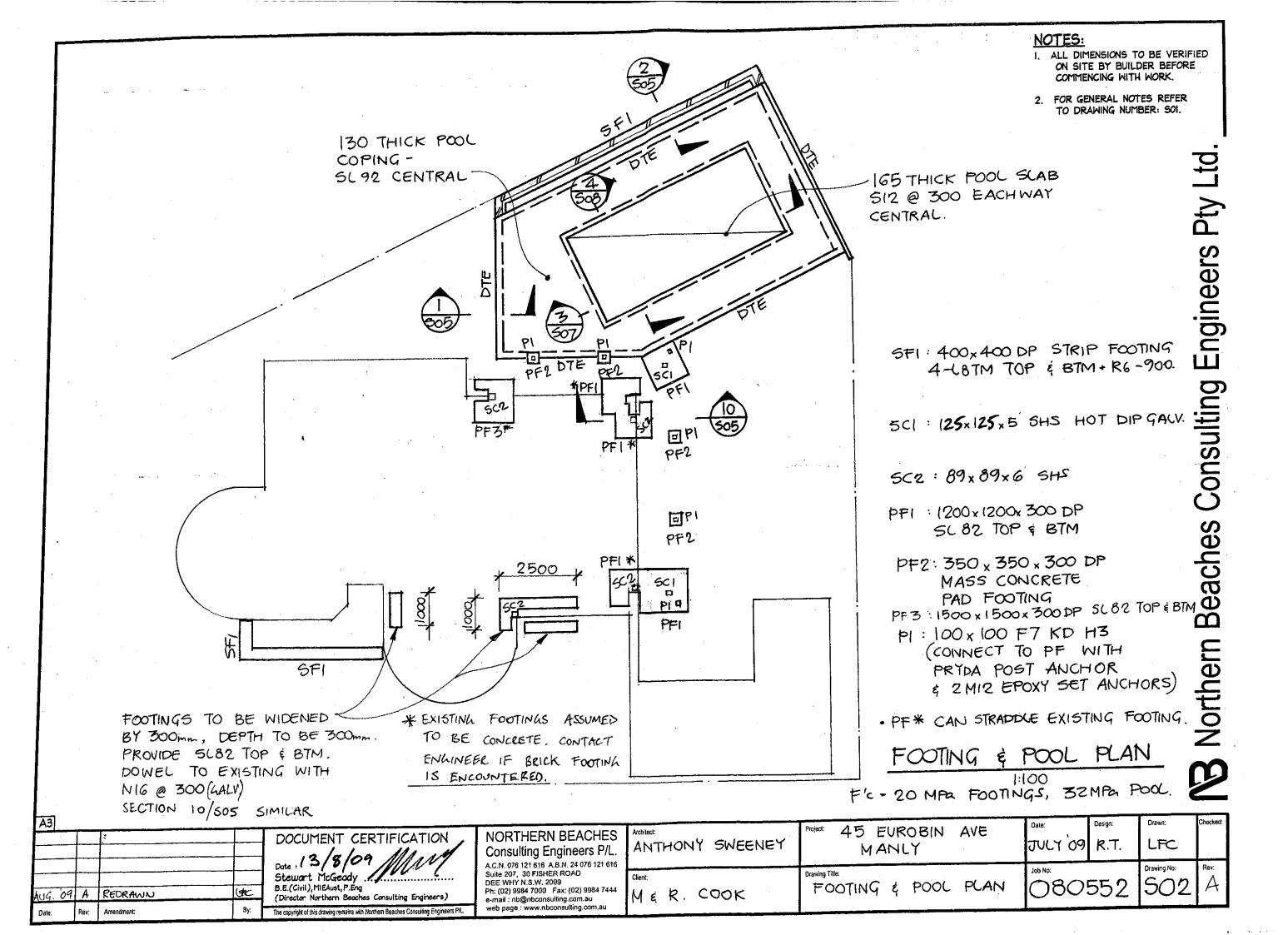
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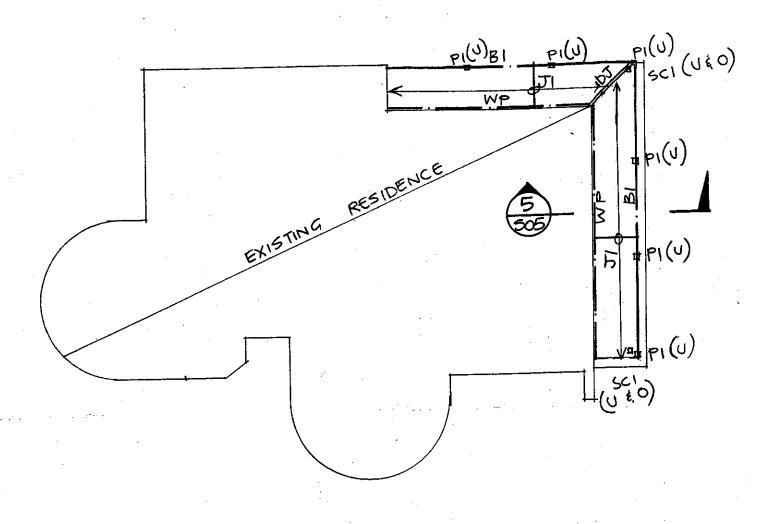
АЗ Checked Drawn: DOCUMENT CERTIFICATION 45 EUROBIN AVE NORTHERN BEACHES ANTHONY SWEENEY AUG 09 Consulting Engineers P/L. R.T. LFC Date: 11/8/09 MANLY ACN 076 121 616 ABN 24 076 121 616 Stewart McGeady Suite 207, 30 FISHER ROAD Grawing No: Drawing Title: B.E.(Civil), MIEAust, P.Eng Ph: (02) 9984 7000 Fax: (02) 9984 7444 D&O552 GENERAL NOTES (Director Northern Beaches Consulting Engineers) MER COOK e-mail: nb@nbconsultino.com.au Rev: Amendment: The copyright of this drawing remains with Northern Beaches Consulting Engineers PA web page : www.nbconsulting.com.au



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- 2. FOR GENERAL NOTES REFER TO DRAWING NUMBER: SOI.



GROUND FLOOR FRAMING PLAN

1:100

J1: 90 x 45 F7 KD H3 JOISTS @ 450cts

BI : 2/140 x 45 F7 KD H3

WP: 90x 45 F7 KD H3 WALL PLATE

WITH M12's @ 900 cts EPOXY SET ANCHORS.

P1:100x100 F7 KD H3

SCI: 100 x 100 x 5 SHS HOT DPGALV.

NORTHERN BEACHES Consulting Engineers P/L

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	Architect: ANTHONY	SWEENEY		
6	Client:			

(U) = UNDER

(0) = OVER

MANLY GROUND FLOOR FRAMING PLAN

45 EUROBIN AVE

JULY 09 R.T. LFC 080552

Orawing No: 503

AUG. OP A REPRAWN

DOCUMENT CERTIFICATION Date: 13/8/09 Stewart McGeody B.E.(Civil), MIEAust, P.Eng (Director Northern Beaches Consulting Engineers)

A.C.N. 076 121 616 A.B.N. 24 076 121 616

M&R. COOK

NOTES:

R1: 90x45 F7 KD RAFTERS @ 450cts

RBI: 90x45 F7 KD

KB2:140x45 F7 KD

RB8: 140x35 F7 KD

1B1 : 200 UC 46 182:150 UC 23

184: 250 UC 72

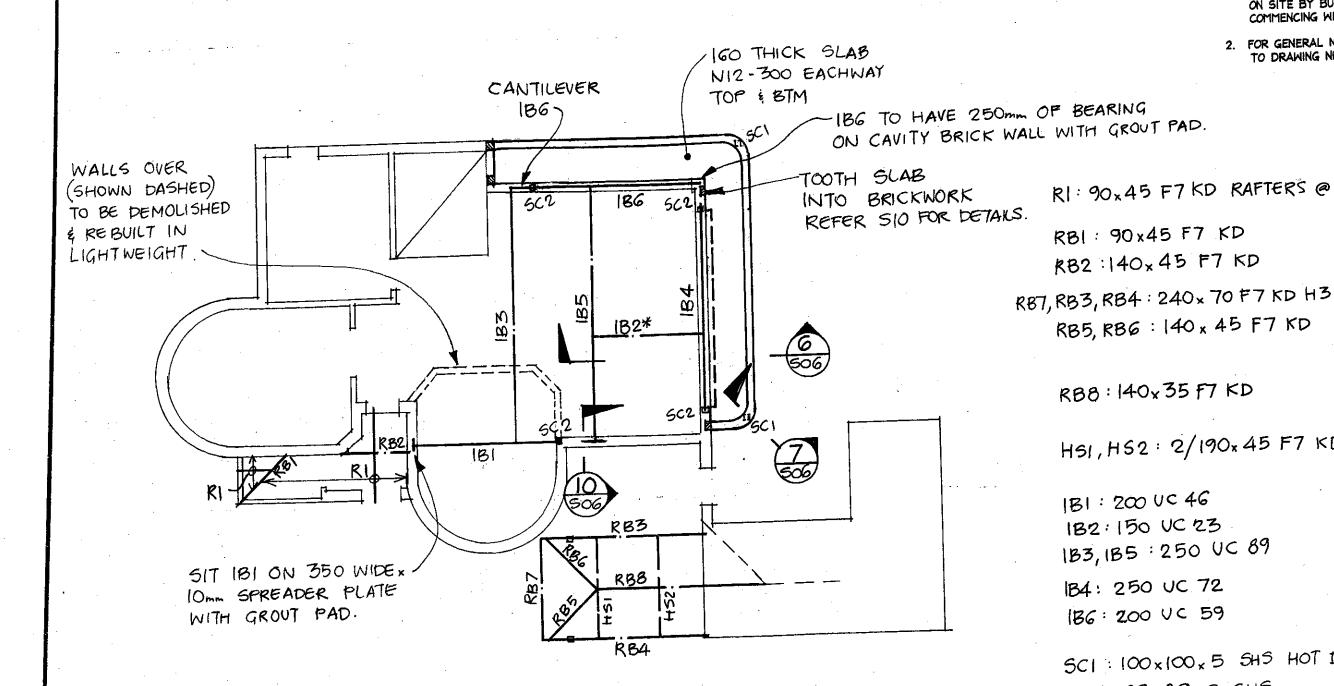
186: 200 UC 59

183,185 : 250 UC 89

RB5, RB6 : 140 x 45 F7 KD

HS1, HS2: 2/190x45 F7 KD

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FIRST FLOOR & ROOF FRAMING PLAN

1:100

F'c = 40 MPa, COVER = 45mm COVER

* 182 MAY BE OMITTED. ENGINEER TO ASSESS SLAB

DURING DEMOLITION OF STAIR VOID. DOCUMENT CERTIFICATION

Date: 13/8/09

B.E. (Civil), MIEAust, P.Eng

(Director Northern Beaches Consulting Engineers)

A3

REDEAWN

NORTHERN BEACHES
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ANTHONY SWEENEY MER. COOK

MANLY Drawing Title: FIRST FLOOR 4 ROOF FRAMING PLAN JULY 09 R.T. LFC 504 080552

183, 184, 185: 20mm

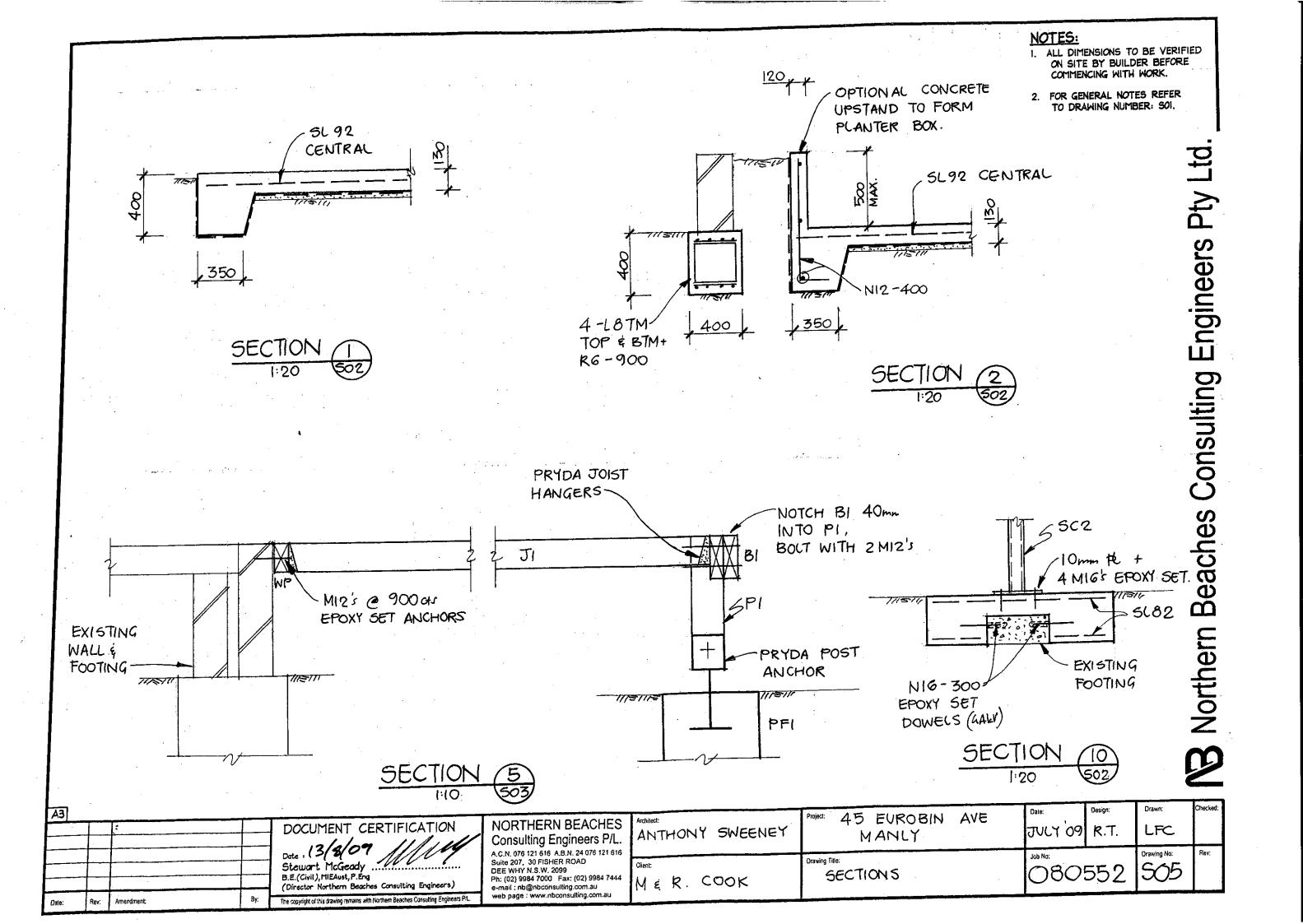
502:89x89x6 5H5

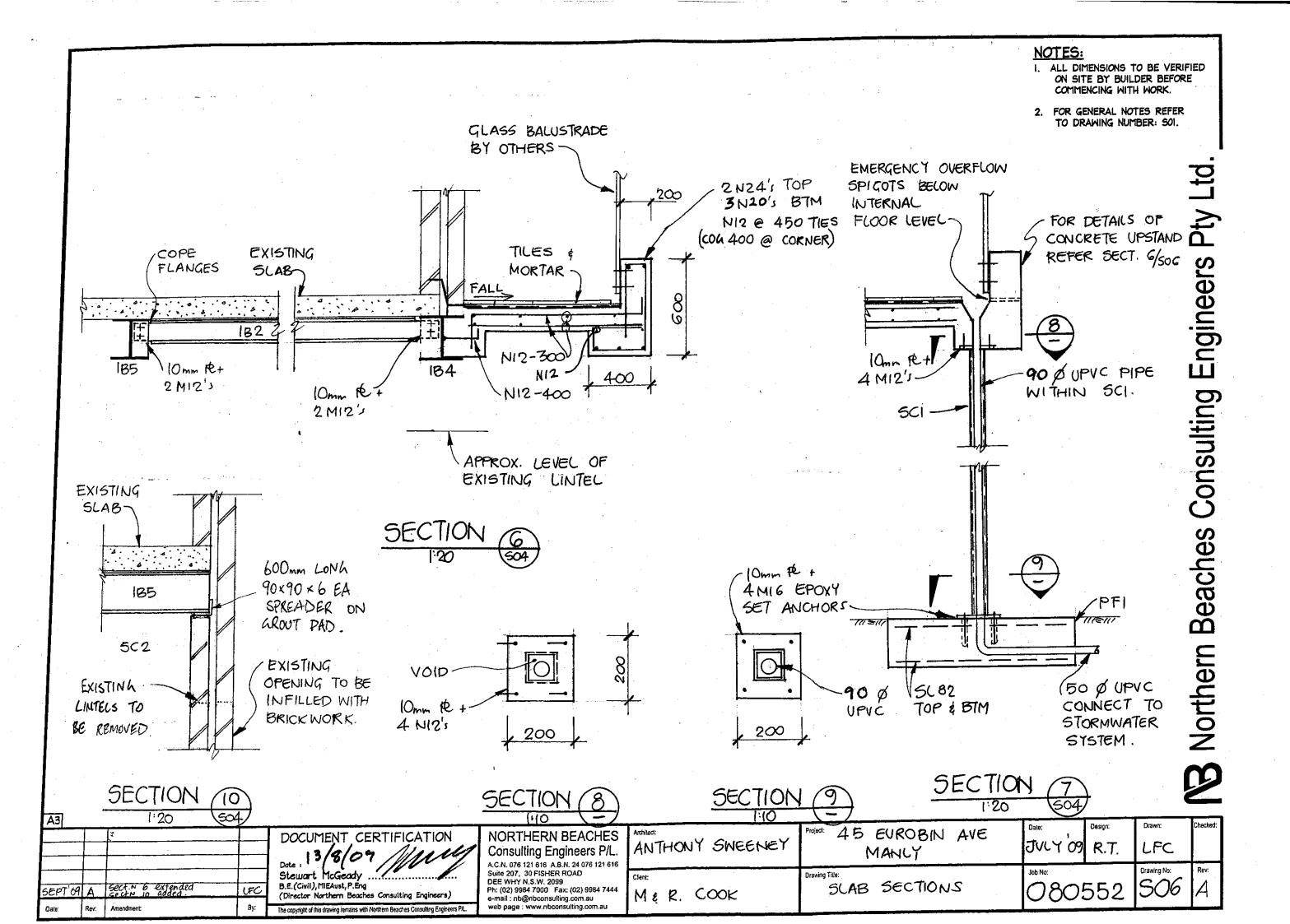
1B6: 10mm

BEAM PRELOADING DEFLECTION REQ'D (B1, 182:10mm

187: 150 UC 39

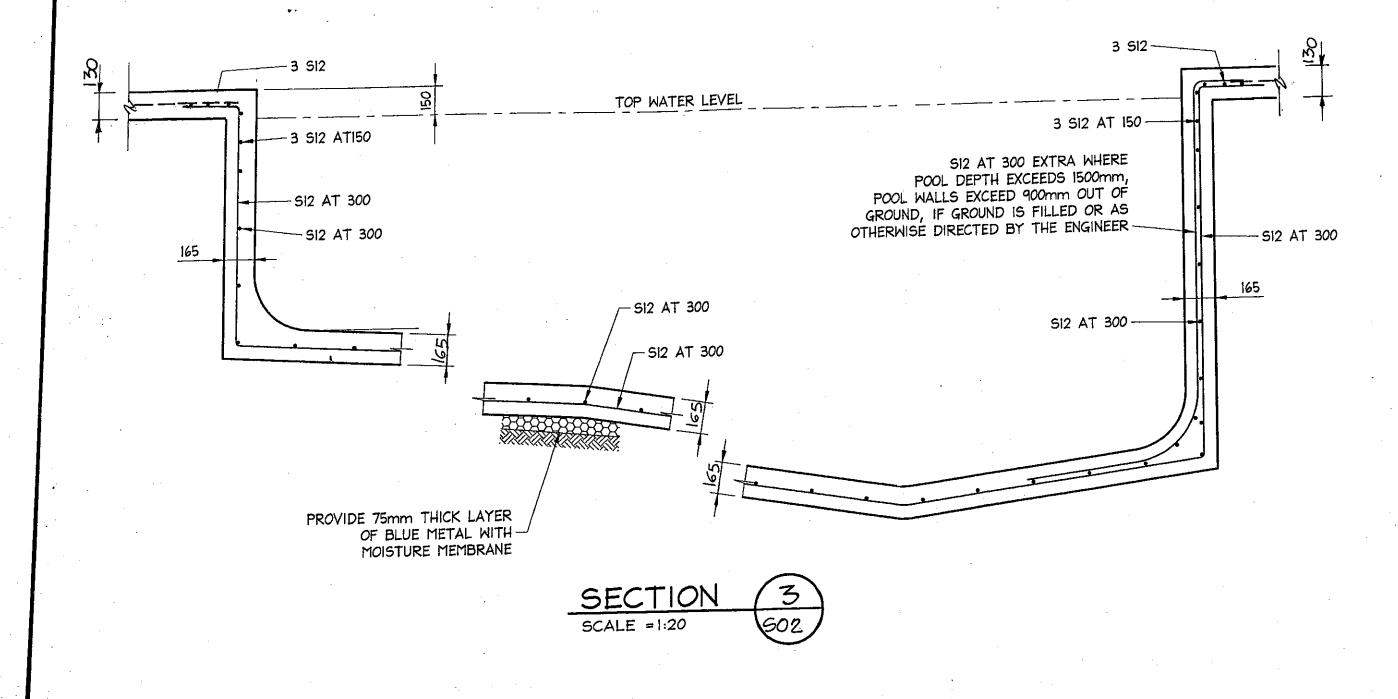
45 EUROBIN AVE





NOTES:

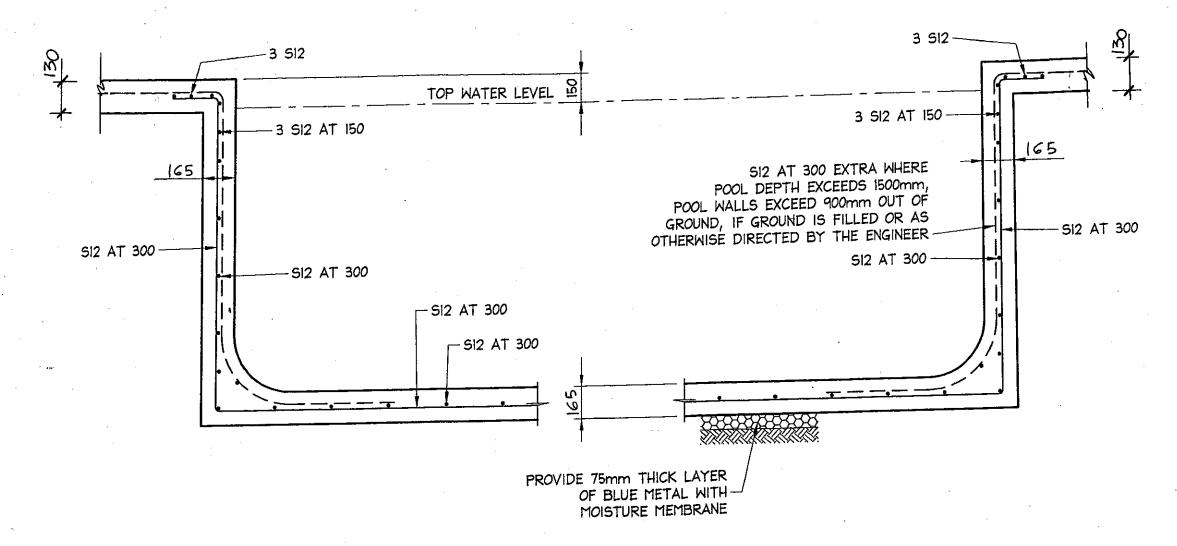
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A3	*		NORTHERN BEACHES	ANTHONY SWEENEY	Project: 45 EUROBIN AV		אינין '09		LFC	
		Stewart McGeady	A.C.N. 076 121 616 A.B.N. 24 076 121 616 Suite 207, 30 FISHER ROAD DEE WHY N.S.W. 2099 Ph: (02) 9984 7000 Fax: (02) 9984 7444 e-mail: nb@nbconsulting.com.au	Client:	Orawing Title: POOL SECTIONS S	SHEET	Job No:	552	A. m. 111 (A. 1 m.	Rev:
200	are department By:	The convicts of this desire remains with Northern Reaches Consulting Engineers P.L.	web page : www.nbconsulting.com.au							

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SECTION 4 502 Northern Beaches Consulting Engineers Pty Ltd

A3 DOCUMENT CERTIFICATION	NORTHERN REACHES T	Architect:	Project: 45 EUROBIN AVE	Date: Design:	Drawn:	Checked;
13/8/09 11/11/11	Consulting Engineers P/L. A.C. N. 076 121 616 A.B. N. 24 076 121 616	ANTHONY SWEENEY	(4) 711 (C)	JULY 09 R.T.	Drawing No:	Rev:
B.E. (Civil), MIEAust, P.Erq	Suite 207, 30 FISHER ROAD DEE WHY N.S.W. 2099 Ph: (02) 9984 7000 Fax: (02) 9984 7444	Client:	POOL SECTIONS SHEET		508	
By: The control of this drawing remains with Northern Beaches Consulting Engineers PA.	web page : www.nbconsulting.com.au					

CONCRETE POOL NOTES:

REINFORCEMENT:

All welded fabric shall be lapped as follows:

- 300mm minimum lap.
- 50mm minimum concrete cover. Mild steel rods denoted S12 are 12mm diameter 2505 Grade deformed bars.
 - 450mm minimum lap.
- 65mm minimum concrete cover Reinforcement to be held in its correct position at 800mm centres.

CONCRETE:

All workmanship and materials shall be carried out in accordance with AS 3600 Concrete design strength (Fic) at 28 days to be : 32 MPa. FOUNDATION:

Piers to be provided as directed by the Engineer if rock or filled ground is encounted when the pool is excavated. CONCRETE COVER:

Concrete placed in contact with the (excavation) ground to have 65mm minimum cover to reinforcement. 65mm minimum cover to pool face. DESIGN:

Pool design and construction to be in accordance with AS 2783 (1992) and all other relevant Australian Standards. PIER NOTES:

If pool floor is partially founded on solid rock provide 400mm & concrete piers at 1800mm maximum centres to remainder of pool floor.

All piers to be founded on rock. Piers up to 1.0m deep to be mass concrete

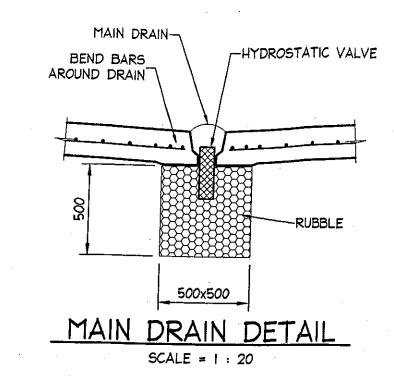
Piers between 1.0m and 2.0m deep provide 4 SI2 bars with R6 Ties at 300mm centres.

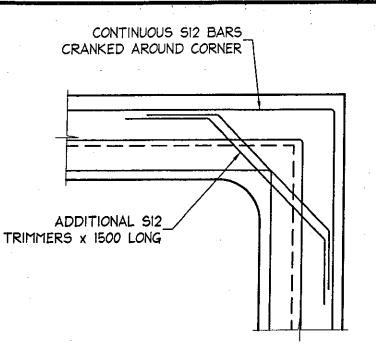
Any piers over 2.0m deep to Engineers detail.

For any internal piers under pool floor provide 3 S12 bars (1500mm long) at 300mm centres each way directly over piers to pool floor.

WASTE WATER:

Waste water from pool will be discharged into Sydney Water's Sewerage System.





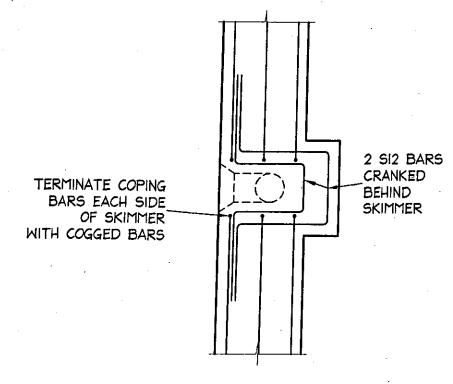
CORNER DETAIL

NOTES:

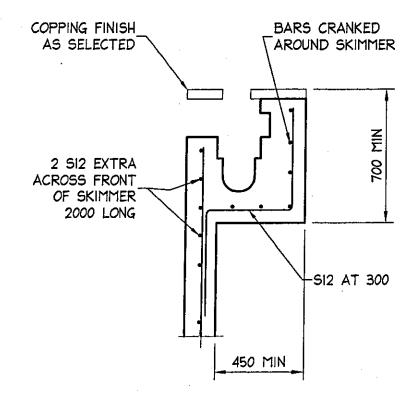
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Engineers Consulting Northern Beaches

SCALE = 1 : 20



PLAN ON SKIMMER



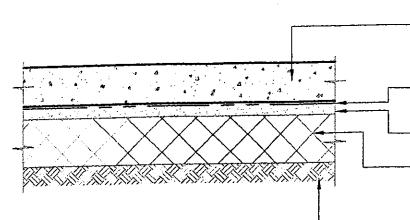
SECTION AT SKIMMER

SCALE = 1 : 20

DOCUMENT CERTIFICATION Stewart McGeady B.E. (Civil), MIEAust, P.Eng (Director Northern Beaches Consulting Engineers)

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NORTHERN BEACHES 45 EUROBIN AVE JULY 09 R.T. Consulting Engineers P/L. ANTHONY SWEENEY LFC MANLY A.C.N. 076 121 616 A.B.N. 24 076 121 616 Suite 207, 30 FISHER ROAD Drawing Title: Drawing No: DEE WHY N.S.W. 2099 Ph: (02) 9984 7000 Fax: (02) 9984 7444 1509 080552 M&R COOK POOL TYPICAL DETAILS e-mail: nb@nbconsulting.com.au



NOTE :

SAND BLINDING, SUB-BASE, FILLING AND SUB GRADE TO BE MECHANICALLY COMPACTED TO A DRY DENSITY RATIO OF NOT LESS THAN 98% MAXIMUM DRY DENSITY TO A.S. 1289/E4.2 1982. ALL AREAS TO BE TESTED BY GEOTECHNICAL ENGINEER AND RESULTS FORWARDED TO STRUCTURAL ENGINEER PRIOR TO POURING CONCRETE.

PLAN

REINFORCED CONCRETE SLAB REFER DETAILS.

0.2mm IMPERVIOUS MEMBRANE

30mm COMPACTED SAND BLINDING LAYER.

FILLING IF REQUIRED SHALL BE GRANULAR MATERIAL COMPACTED IN NOT MORE THAN 150mm LAYERS TO A MINIMUM DRY DENSITY RATIO OF 98% TO AS 1289/E4.2 1982.

SUBGRADE SHALL BE STRIPPED OF ALL TOPSOIL AND DELETERIOUS MATTER. APPROVAL SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO PLACING FILL.

TYPICAL SLAB PREPARATION TYPE A SLAB ON GRADE N.T.S.

PROVIDE 10mm STYRENE TO ALL VERTICAL FACES BETWEEN SLIPJOINT BY VESPOL CONCRETE AND BRICK/BLOCKWORK OR APPROVED EQUIVALENT SLAB REINFORCEMENT REFER DETAILS NI6 U-BAR TOP AND BOTTOM - NI6 U-BAR REFER SLAB DETAILS - NI6 U-BAR SLIPJOINT BY VESPOL OR APPROVED EQUIVALENT SLAB REINFORCEMENT REFER DETAILS

SECTION

TOOTHING TO BE PROVIDE AT 1500mm MAXIMUM CENTRES UNO.

PICAL TOOTHING DETAIL

SCALE = N.T.S.



NOTES:

- I. ALL DIMENSIONS TO BE VERIFIED ON SITE BY BUILDER BEFORE COMMENCING WITH WORK.
- 2. FOR GENERAL NOTES REFER TO DRAWING NUMBER: SOI.

