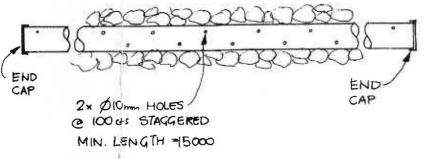


LEVEL SPREADER DETAIL





CALCULATION SUMMARY 702.9m2 SITE AREA 246.7m (35%) EXISTING IMPERVIOUS AREA 276. 2m2 (39%) PROPOSED IMPERVIOUS AREA IMPERVIOUS AREA 15 < 60% AND INCREASE IN IMPERVIOUS AREA 15 < 50m2 : NO OSD REQ'D 220 m2 AREA TO DISPERSION PIPE 220/15 = 15m LENGTH REQUIRED

- ALL PIPES TO BE ICOMM & UNLESS NOTED OTHERWISE.
- PES TO BE UPVC TO AS 1254-2002 UNLESS NOTED OTHERWISE.
- PES TO BE LAYED AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
- 4 ALL PIPES SHALL BE LAID ON A ICOMM SAND BED, COMPACTED TO 100% S.M.D.D. BELOW PAVEMENTS. (NO-COMPACTION REQUIRED BELOW LANDSCAPING) COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN, TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED
- 5 ALL DOWN PIPES TO BE 100mm & UNLESS NOTED OTHERWISE.
- 6 DOWN PIPE LOCATIONS ARE INDICATIVE ONLY, LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT WITH WORK
- 7 PRCVIDE CLEANING EYES AT ALL DOWNPIPES
- 8 ALL PITS TO BE CAST INSITU OR, IF PRECAST, APPROVED BY ENGINEER. CAST INSITU PITS TO HAVE ISOmm THICK CONCRETE WALLS AND BASE, WALLS TO BE REINFORCED WITH I NIZ TOP TIE UNLESS NOTED OTHERWISE. CAST INSITU PITS GREATER THAN 1000 DEEP TO BE MINIMUM 900x600 AND TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH NIZ AT 300 EACH WAY UNLESS NOTED OTHERWISE,
- 9 ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS FER COUNCIL STANDARDS.
- 10 ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
- II PRICE TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO APROVED SEDIMENT AND EROSION CONTROL PLAN, EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION.
- 12 ALL LEVELS SHOWN ARE TO AHD
- 13 ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- 4 ALL EXISTING EARTHENWARE PIRES TO BE LIPGRADED TO UPVC.
- 15 ALL WORKS TO BE
- TAIL OUT 90 ALL PITS, SUBSO UPSTREAM OF DETAILS



STORMWATER	MANAGEMENT	PLAN

BOWER

DRAINAGE

23.17

24.39

DECK

CHANNEL

LANDSCAPING/ VEGETATION

RWT

OVERFLOW

EXISTING

OVERFLOW TO

LEVEL SPREADER

RWT.

GARAGE

26.56

A2				:200
18/5/10	Ä	ISSUED FOR C.C.	J.E.	DOCUMENT CERTIFICATION Data : 18/5/10 Stewart McGeady B.E.(Civit), MIEAunt, P.Eng (Director Northern Boaches Consulting Engineers)
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END OF COUNCILS

LEVEL SPREADER

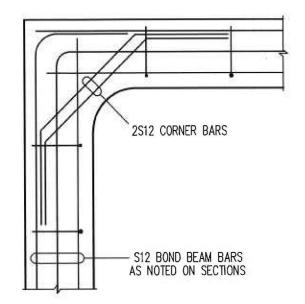
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DRAINAGE PIPE

NORTHERN BEACHES

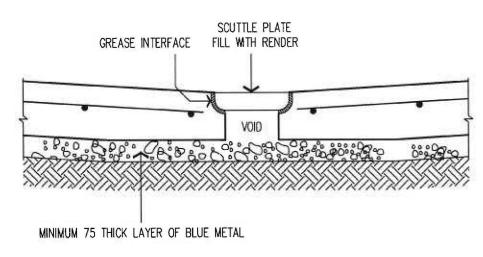
Consulting Engineers P/L. A.C.N 976 121 616 AB.N. 24 C76 121 616 Suite 207, 30 FISHER ROAD DEE WHY N.S IV. 2099 Ph: (02) 9984 7000 Far, (02) 9984 7444 e-mail: nb@nbcoxsulting.com.au web page: www.abconsulting.com.au

ALL WALLS	Project Nº 16 BOWER ST MANLY	MAY'IO P.M.	3-18 mm	PW Crester
MR & MRS BEACHLEY	MANAGEMENT PLAN	1005	DO I	A

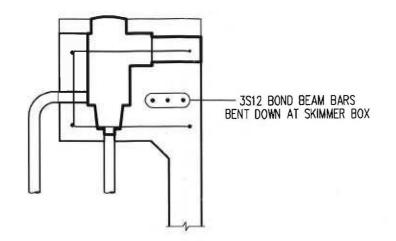


CORNER DETAIL - BOND BEAM

(IF APPLICABLE)



HYDROSTATIC RELIEF VALVE DETAIL (H.R.V.)



SKIMMER BOX DETAIL

(IF APPLICABLE) DISCHARGE SURFACE SKIMMER FILTER AND PUMP POOL RETURN HYDROSTATIC RELIEF VALVE

DIAGRAMMATIC PLUMBING LAYOUT

(IF APPLICABLE)

NOTES FOR SWIMMING POOL OWNERS

1. POOL SET OUT

Pool set-out size, location and height level is deemed to be acceptible to the owner unless the builder is advised otherwise. Such advice must be prior to placement of reinforcement.

After concreting, the pool shell is to be thoroughly wetted down twice daily for at least (7) days. (ten (10) days in summer.)

3. SAFETY FENCES

Safety fencing is to be Council approved prior to the pool being filled and comply with AS1926

4. FILLING POOL

Hose to be prevented from swishing around during filling. DO NOT use rubber hoses.

5. UNDERWATER LIGHTS

Lights must be fully submerged during use.

6. WALKWAYS AND COPINGS

Walkways and copings are designed for a 2 kPa live load and are not designed to support masonry walls unless noted otherwise.

- All workmanship and materials to be in accordance with Australian Standard AS 2783.
- Site Plan dimensions are to water face U.N.O.
- Dimensions shall not be obtained by scaling the details.
- All levels and dimensions are relative to concrete coping level. Fixed Datum represents the the fixed coping height/level.

Approximate coping levels are represented as follows:

- a) NGL +200 represents 200 mm above existing Ground Level.
- b) NGL -400 represents 400 mm below existing Ground Level.
- Provide filter with matched pump and plumbing to manufacturers recommendations.
- Supporting ROCK to be natural material with a minimum safe bearing capacity of 600kPa.
- Advise Engineer if excavation in fill or ground water is encountered. Provide temporary penetrations to floor slab if ground water level exceeds 500 mm above deep floor level.
- The excavation base is to be provided with an undershell drainage layer as follows:
- 75 min. blue metal drainage layer, or 50 min. thick layer with plastic over.
 - Corrugated iron sheeting & membrane if over rock.
 - c) Plastic layer only if base is entirely in sand.
- All reinforcement to be of Australian Manufacture in accordance with S.A.A. Standards.
 - S Grade 230 stuctural grade deformed. N - Grade 410 tempcore grade bars.
- R Grade 230 plain grade round. SL - Grade 450 hard drawn wire fabric.

DETAILS NOTED

- 10. Reinforcing bars, unless note otherwise, are to be lapped 40 bar diameters min., fabric to be lapped 400mm min. All laps should preferably be staggered.
- All reinforcing to be securely supported by bar chairs at 1000 max cs.
- 12. Minimum concrete cover to reinforcement from closest concrete surface to be as follows: Water face Salt Chlorination: 65mm

Water face standard chlorination: 50mm Coping/walkway surface: 50mm

Rear face, formed: 40mm

Rough ground: 65mm. Concrete to be pneumatically placed, have a min. design strength of F'c = 25 MPa at 28 days

a) Where structure located < 1km from large expanses of water

Where structure is located in tidal or splash zone of salt water, Where structure is located in tidal or splash zone of salt water then concrete design strength min. Fic = 40 MPa at 28 days.

14. Skimmer box to comply with AS1926.3-2003

PROPOSED SWIMMING POOL AT 16 BOWER STREET, MANLY FOR MR. S. PETRINI

DET	ΓΛΙ	10
UL.	M	LJ

JOB No. DATE SCALES 10122 N.A. C.W. 28.09.10

J.T.DAVIES & Co. Pty. Ltd.

CONSULTING CIVIL AND STRUCTURAL ENGINEERS ABN 54 001 220 186 TEL: (02) 9908 4968 MOBILE: 0411390744 FAX: (02) 9908 4961

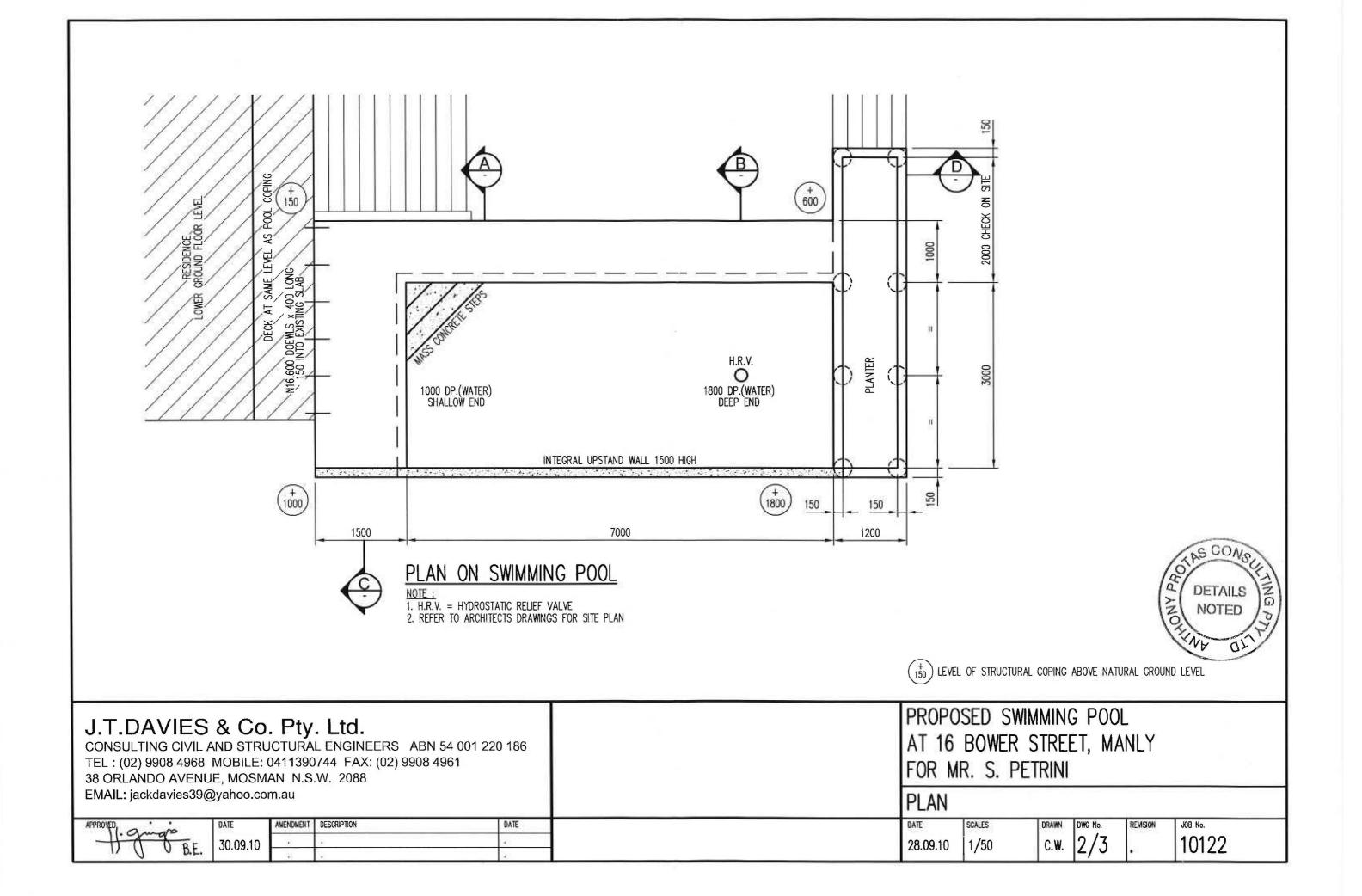
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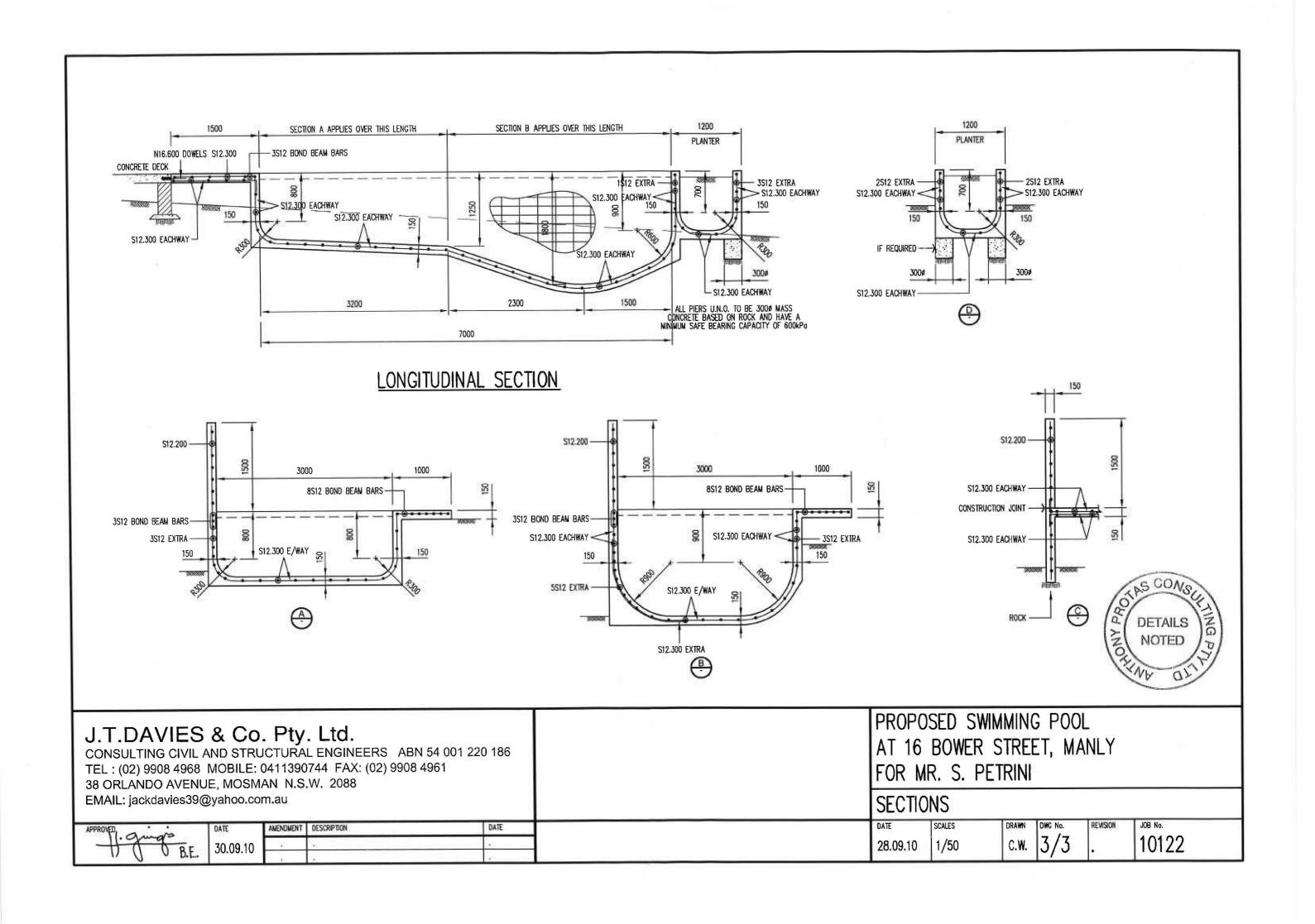
EMAIL: jackdavies39@yahoo.com.au

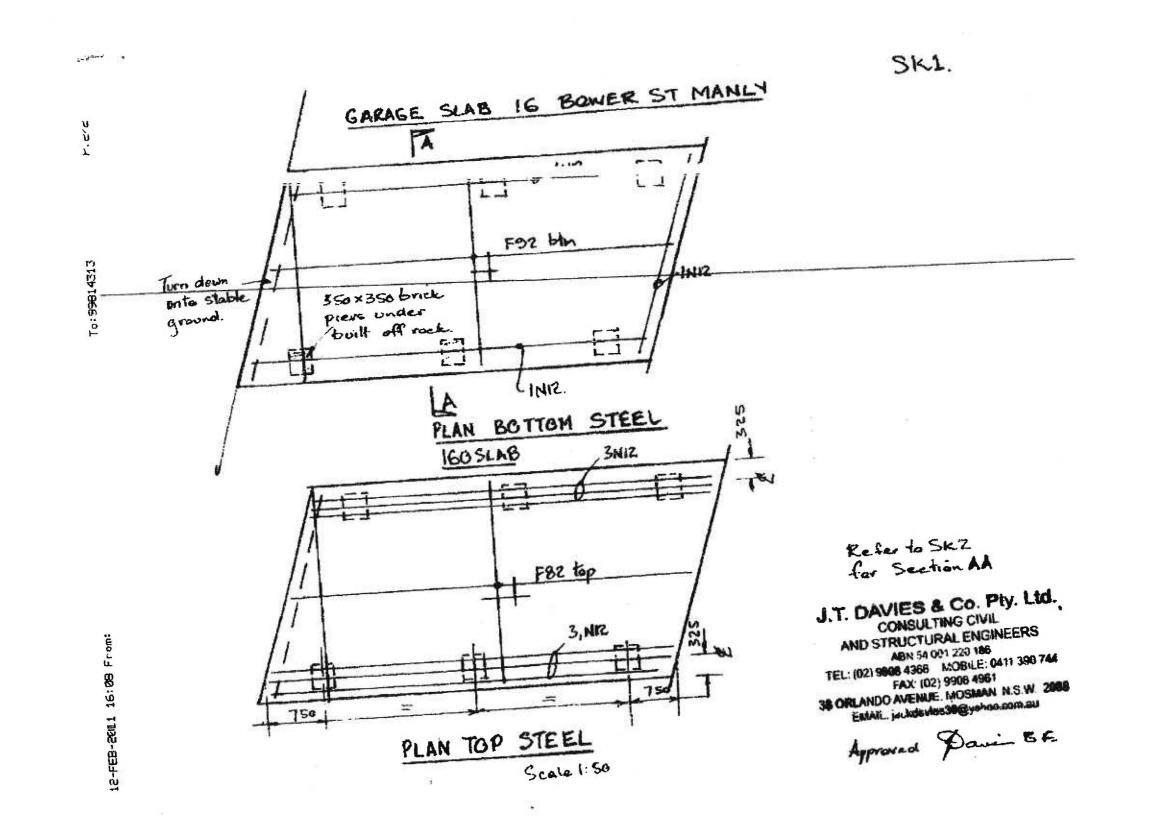
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30.09.10

AMENDMENT DESCRIPTION







Section 1

3H12 F82 3N12. -1415 F92 30 Cover. SECTION AA Scale 1:20

NOTE: Concrete FIL 40MPa.

J.T. DAVIES & Co. Pty. Ltd.

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Approved Dewi BE.

