

Sloane Weldon Pty. Ltd.

Engineering & Groundwater Geologists
ACN 066 626 195

'Westella'
181 Elizabeth Street Hobart
GPO Box 321 HOBART TAS 7001
Ausdoc: DX 77181 Hobart 'Westella'

Telephone: (03) 6234 3994
Facsimile: (03) 6234 3995
Mobile: 018 12 8151
015 87 3399

43 013

SW Report: 1996/73

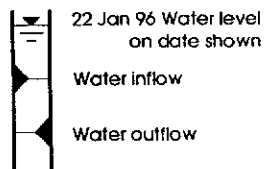
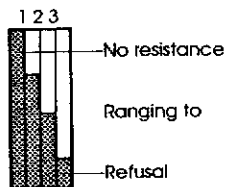
**FOUNDATION ASSESSMENT:
TATTERSALLS HOBART AQUATIC
AND LEISURE CENTRE**

REF Nos 18855
18856
18857

Client: Fletcher Construction Australia

Borehole and Excavation log

Penetration Water Notes - samples and tests Material classification



- UD50** Undisturbed sample
50mm diameter
- D** Disturbed sample
- N** Standard penetrometer
blow count for 300mm
- SV** Shear Vane test
- PP** Hand penetrometer (kPa)

Based on Unified Soil Classification System.
In Graphic Log materials are represented by clear contrasting symbols for each project.

Moisture content

- D** Dry, looks and feels dry.
- M** Moist, no free water on hand when remoulding.
- W** Wet, free water on hand when remoulding.
- LL** Liquid limit.
- PL** Plastic limit.
- PI** Plasticity index.

Consistency

- VS** Very soft. (kPa) < 25
- S** Soft. 25 - 50
- F** Firm. 50 - 100
- St** Stiff. 100 - 200
- VSt** Very stiff. 200 - 400
- H** Hard. > 400
- Fb** Friable.

Density index

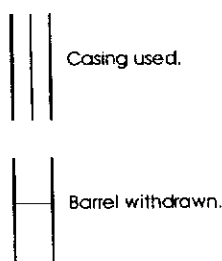
- VL** Very loose. % 0 - 15
- L** Loose. 15 - 35
- MD** Medium dense 35 - 65
- D** Dense. 65 - 85
- VD** Very dense. 85 - 100

eg:
M>PL Moist, moisture content greater than plastic limit.

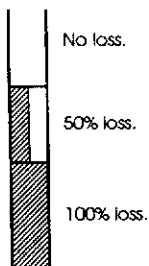
Notes: x on log is test result
■ is range of results.

Cored borehole log

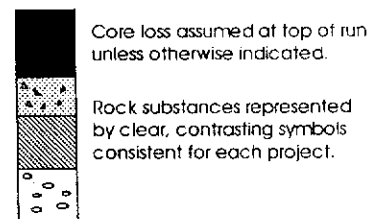
Case - lift



Fluid loss



Graphic log



Weathering

- Fr** Fresh.
- SW** Slightly weathered.
- HW** Highly weathered.
- EW** Extremely weathered.

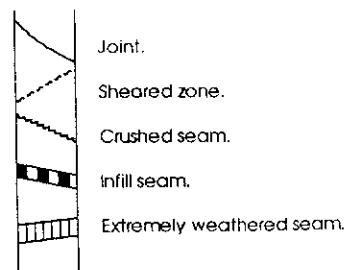
Strength

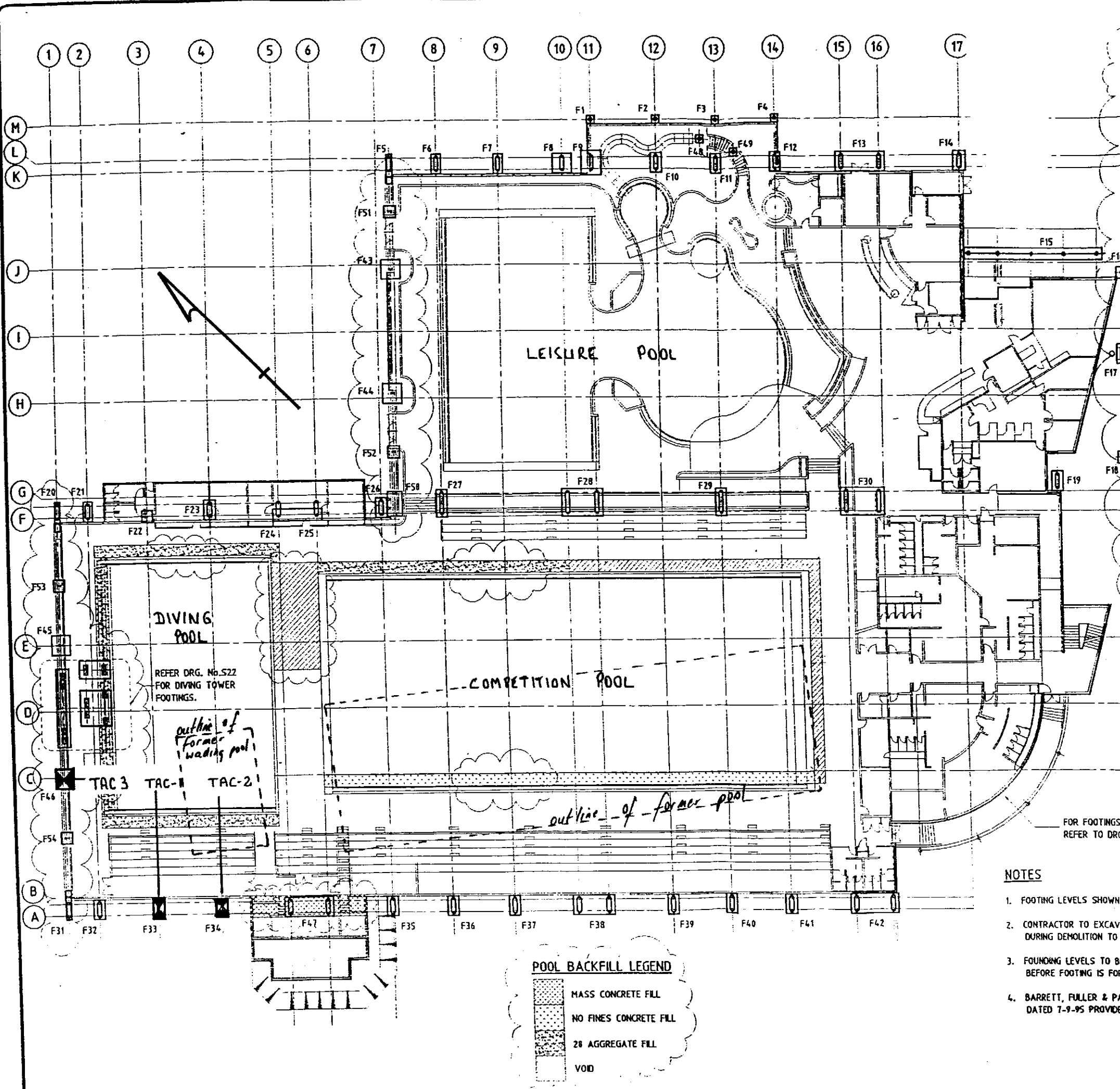
- EL** Extremely low. Point load strength index $I_{s(50)}$ (MPa) < 0.03
- VL** Very low. 0.03 - 0.1
- L** Low. 0.1 - 0.3
- M** Medium. 0.3 - 1.0
- H** High. 1.0 - 3.0
- VH** Very high. 3.0 - 10.0
- EH** Extremely high. > 10

Note: x on log is test result.

Significant defects

Significant defects shown graphically.





TYPE	FOOTING W x L x D'	PKR	APPROX. FOUNDING LEVEL	TOP OF FOOTING	TOP OF PIER
F1-F4	0.8 x 0.8 x 0.8	P7	R.L. 21.30	R.L. 22.10	R.L. 22.50
F5	0.6 x 3.0 x 1.2	P5	R.L. 18.90	R.L. 20.10	R.L. 20.70
F6, F7	1.0 x 2.0 x 1.2	P5	R.L. 18.90	R.L. 20.10	R.L. 20.70
F8	2.0 x 2.0 x 1.5	P5	R.L. 18.60	R.L. 20.10	R.L. 20.70
F9	2.0 x 2.5 x 1.5	P5	R.L. 17.70	R.L. 19.20	R.L. 20.70
F10-F12	1.0 x 2.0 x 1.2	P5	R.L. 18.00	R.L. 19.20	R.L. 20.70
F13	4.6 x 2.5 x 1.2	2 x P5	R.L. 18.50	R.L. 19.70	R.L. 20.70
F14	1.0 x 2.0 x 1.2	P5	R.L. 18.50	R.L. 19.70	R.L. 20.70
F15	0.6 x 14.5 x 0.6	5 x P7	R.L. 19.10	R.L. 19.70	R.L. 20.10
F16	0.8 x 0.8 x 0.8	P7	R.L. 18.80	R.L. 19.60	R.L. 20.10

Figure 1. SITE PLAN:
Borehole locations - Tattersalls Hobart Aquatic and Leisure Centre

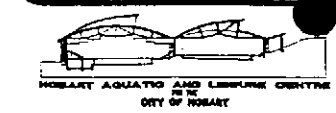
Scale: 1:400
Client: Fletcher Construction Australia
 Sloane Weldon Pty. Ltd. SW1996/73 Plan: 96077

F45	2.0 x 2.0 x 1.45	FLOOR SLAB	R.L. 17.00	R.L. 18.45	NIL
F46	2.0 x 2.0 x 1.45	FLOOR SLAB	R.L. 17.00	R.L. 18.45	NIL
F47	4.6 x 2.0 x 2.1	-	R.L. 14.60	R.L. 16.70	NIL
F48	0.8 x 0.8 x 0.6	-	R.L. 19.00	R.L. 19.60	NIL
F49	0.8 x 0.8 x 0.6	-	R.L. 18.00	R.L. 18.60	NIL
F50	1.5 x 2.0 x 1.2	FLOOR SLAB	R.L. 16.80	R.L. 18.00	NIL
F51	1.2 x 1.2 x 0.8	FLOOR SLAB	R.L. 18.30	R.L. 19.10	NIL
F52	1.2 x 1.2 x 0.8	FLOOR SLAB	R.L. 17.90	R.L. 18.70	NIL
F53, F54	1.2 x 1.2 x 0.8	FLOOR SLAB	R.L. 17.25	R.L. 18.05	NIL

CONCRETE STRENGTH FOR ABOVE FOOTINGS - F'c = 32MPa

APPROVED FOR CONSTRUCTION

CO-ORDINATION	CHECK



TASARC Wylie Young & Mendenhall and Peter Hunt ARCHITECTS IN ASSOCIATION

STEPHENSON **EMF** CONSULTANTS ENGINEERS and MANAGERS

STRUCTURAL

ROOF STRUCTURE COLUMN FOUNDATIONS PLAN

HOBART AQUATIC AND LEISURE CENTRE FOR THE CITY OF HOBART

12301/S2

- NOTES**
- FOOTING LEVELS SHOWN ARE APPROXIMATE ONLY
 - CONTRACTOR TO EXCAVATE TEST PITS AT FOOTING LOCATIONS DURING DEMOLITION TO CONFIRM ADEQUATE FOUNDING LEVELS
 - FOUNDING LEVELS TO BE APPROVED BY THE SUPERINTENDANT BEFORE FOOTING IS FORMED & POURED
 - BARRETT, FULLER & PARTNERS GEOTECHNICAL INVESTIGATION DATED 7-9-95 PROVIDED FOR INFORMATION ONLY

REF NO 18856

E 526970
N 5252700

ACC 2
QUAD 82
MAP 83122

43 017

Sloane Weldon Pty. Ltd.
Engineering & Groundwater Geologists.

Borehole Number.
TAC2
sheet 1 of 1

ENGINEERING LOG - CORED BOREHOLE

project	Tattersalls Aquatic Centre			location	Queens Domain - Hobart		
co-ordinates	Refer to site plan	drill type	Pioneer	hole commenced	19/3/96		
R.L.	Approx. 17.0m RL	drill method	HQ diamond drilling	hole completed	19/3/96		
inclination	Vertical	drill fluid	Polymer	logged by	BDW		
bearing		contractor	KMR Drilling	checked by			

Drilling information				Rock substance				Rock mass defects											
cases - lift	fluid losses	water	notes	depth metres	graphic log	substance description rock type: grain characteristics, colour, structure and minor components	weathering	strength				RQD %	defect spacing mm.				defect description		
								FL	VL	LM	HM		EH	80	100	300	1000	3000	significant
				1		CLAYEY GRAVEL: Fine to medium subangular to angular dolerite gravel; grey-blue; medium to high yellow-brown clay; approx. 20% fine to medium sand; some silt; some porcelain/ china & glass fragments.													
				2															
				3															
				4.10		? DOLERITE BEDROCK													
				4.20		DOLERITE: Fine grained; blue-grey.	SW-MW					0							
				4.40										0					
				4.94		CORE LOSS - ground away.													
				5.37															
				6															

Rough planar joints at about 30 & 60 to core axis, some with clay/ iron coating < 1mm.

