21 206

HOB.
TE
COL

TRAVERSE 2

83/19

83/10

83/17

83/16

83/20

83/9

83/11

83/18

TRAVERSE 1

TRAVERSE 3

N°30

N°32

BATHURST ST

BRICK BUILDING

ARGYLE ST
× 26M R.

SYNAGOGUE

HOBART CLUB.

N

Scale 1:200

POLICE H

30-32 BATHU

HOBART

SITE PLA

scale 1:2

FIG

M 1386

M 1386

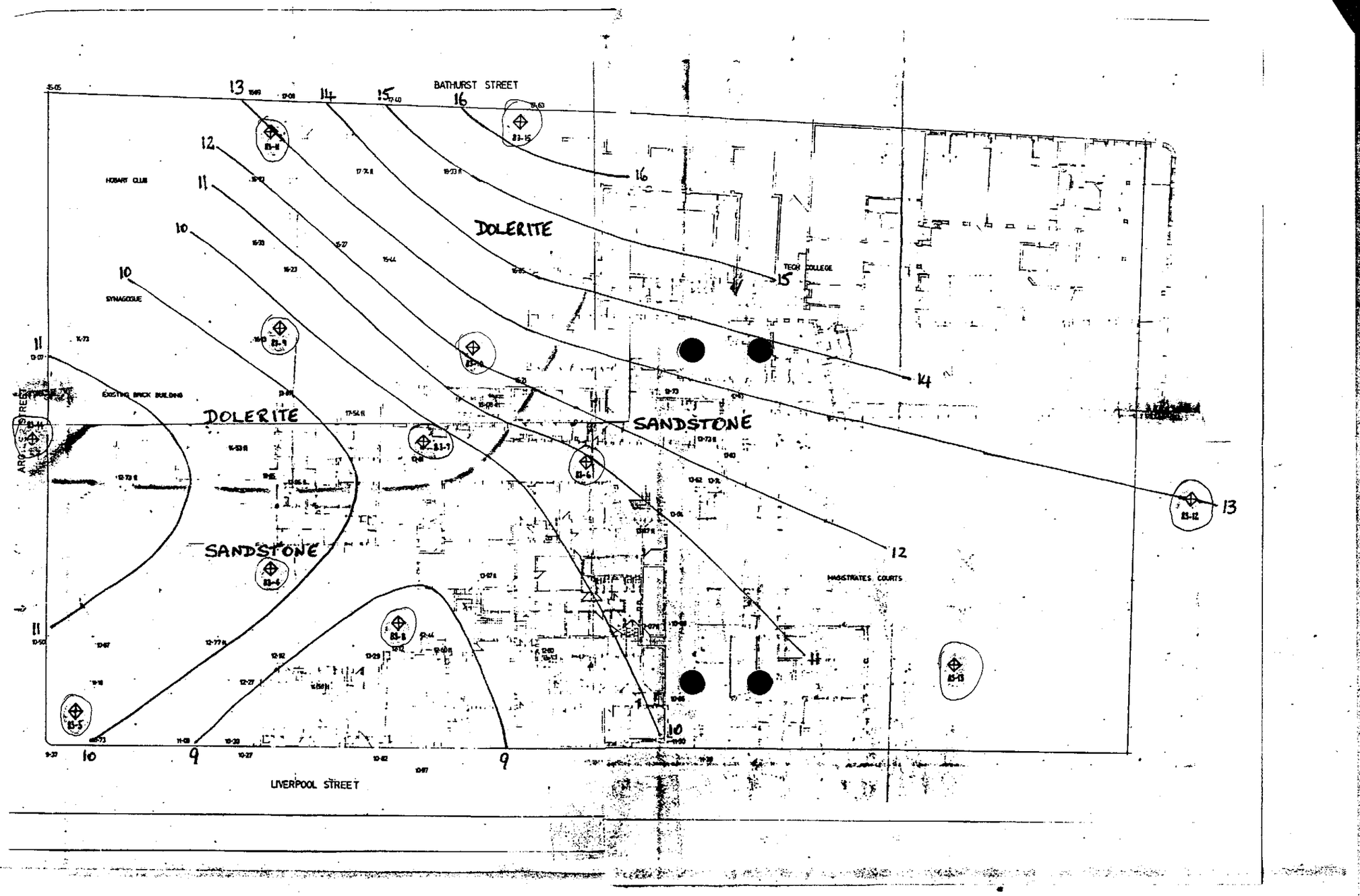

FIG 1: Location of boreholes New Police Headquarters, HOBART ⊕B3-4
Possible structural contours for top of in situ rock materials shown ——13
along with possible position of boundary between dolerite and sandstone — — —

method
AS auger screwing*
AD auger drilling*
R roller/tricone
W washbore
CT cable tool
* bit shown by suffix:
C casing
M mud

penetration
1 2 3 no resistance ranging to refusal

U50 – undisturbed sample 50 mm diameter
D – disturbed sample
N – standard penetration test:figure = result
N* – SPT + sample

based on unified classification system

moisture
D – dry
M – moist
W – wet

S – soft
F – firm
St – stiff
VSt – very stiff
H – hard
Fb – friable
VL – very loose
L – loose
MD – moderately dense

(Tas)
Division

REF NO 18298
QUAD 82
MAP SHEET 83122

ACC /
PUR O
E = 526705
N = 5252320
file:

borehole no: 83-9
sheet 1 of 2

engineering log – borehole

project: NEW POLICE HEADQUARTERS
borehole location: HOBART AS PER PLAN

hole commenced: 7-6-83
hole completed: 7-6-83
supervised by: T. SWANTON / C. DAVIES
log checked by: B. WELDON

drill model and mounting: GEMCO (trailer)
hole diameter: 110 mm
slope: Vert deg.
bearing: — deg.
R.L. surface: 16.2 m
datum:
operator: G. BAKER

method	penetration 1 2 3	support	water	notes samples, tests, etc.	R.L. depth metres	graphic log	classification symbol	material: soil type: plasticity or particle characteristics, colour, secondary and minor components.	moisture condition	consistency, rel. density	hand penetrometer kPa 100 200 300 400	structure and additional observations
AS					0			PRIME + SEAL RUBBLE, FILL, SANDY CLAY				Water levels date depth 9-6 0.00m 14-6 1.45 15-6 1.60 17-6 1.70
				N* = 10 (2,4,6)	1.50 1.95		SC-CL	SANDY CLAY: grey brown; medium plasticity; MC > P.L.; pockets of silt	M	VSt		
AS		C		N* = 21 (6,9,12)	3.00 3.45		SC-CL	SANDY CLAY: as above	M	VSt-H		pocket of silty clay
				N* > 50 (7,12,20/75)	4.50 4.875		GC	CLAYEY GRAVEL: medium to fine grained subrounded stl dolerite and MW-HW sandstone gravel; sandy clay matrix	M	MD-D		N.B. SPT lost 20 blows for only 75mm of penetration
			7/6									
				N* = 42 (18,17,25)	6.00 6.50			DOLERITE: green-grey; extremely weathered with veins of whitish clay.	M	Fb		
				N > 50	7.01			DOLERITE				SPT attempted at 7.01m depth, minimal penetration after 9 blows, hammer rebounding strongly
								continued on engineering log-cored borehole sheet				

key

method
AS auger screwing*
AD auger drilling*
R roller/tricone
W washbore
CT cable tool
* bit shown by suffix:
B – blank bit
V – "V" bit
T – TC bit
e.g. ADT

support
C casing
M mud

penetration
1 2 3 no resistance ranging to refusal

water
10 Oct, 73 water level on date shown
water inflow
water outflow

notes – samples and tests
U50 – undisturbed sample 50 mm diameter
D – disturbed sample
N – standard penetration test:figure = result
N* – SPT + sample
Nc – cone penetrometer

classification symbols and soil description
based on unified classification system

moisture
D – dry
M – moist
W – wet

consistency/relative density
VS – very soft
S – soft
F – firm
St – stiff
VSt – very stiff
H – hard
Fb – friable
VL – very loose
L – loose
MD – moderately dense
D – dense
VD – very dense

21 218

M 1500

ROADS (TAS.)
RESEARCH DIVISION

M & R F8

borehole no: 83-9
sheet 2 of 2

engineering log — cored borehole

File No.

project: NEW POLICE HEADQUARTERS
borehole location: HOBART AS PER PLAN

hole commenced: 7-6-83
hole completed: 7-6-83
supervised by: T. SWANTON / C. DAVIES
log checked by: B. WELDON

drill model and mounting: GEMCO (trailer) slope: Vert deg.
barrel type and length: NQTT 1.5m fluid H_2O bearing: — deg.

R. L. surface: ~16.2 m
datum:
Driller G. BAKER

drilling information				rock substance					rock mass defects	
method	case-lift	water	R.L. / depth metres	graphic log / core loss	substance description (rock type: grain characteristics, colour, structure, minor components.)	weathering	strength Is(50) EL VL L M H VH EH	defect spacing mm 30 100 300 1000 3000 A	defect description (thickness, type, inclination, planarity, roughness, coating.) particular	general
					continued from engineering log - borehole sheet					
			7.06		CORE LOSS					
			7.19		DOLERITE + blue-grey, fine; veins	MW			veins	
					CORE LOSS					
			7.65		DOLERITE: blue-grey, fine	MW			highly broken	
			8		CORE LOSS					
			8.53							
			8.65							
			8.75		DOLERITE: blue-grey, fine grained	MW			subvertical joints	
			8.90						vein 15mm wide	
			9						white, clay	
			9.30							
					CORE LOSS					
			10.01		DOLERITE: brown, clayey gravel	MW			clay matrix	
					END OF BOREHOLE 83-9 at 10.01m depth.					

Rock mass is highly broken by 4 veins of clay like material. Rock of M-H strength but matrix low strength

21 219

key

method
- AS auger screwing
- AD auger drilling
- R roller/tricone
- W washbore
- NMLC NMLC core drilling

case-lift
- casing used
- barrel withdrawn

water
- 10 Oct, 73 water level date shown
- water inflow
- partial drilling water loss
- complete drilling water loss

graphic log/core loss
- core recovered (hatching indicates material)
- no core recovered

weathering
- Fr — fresh
- SW — slightly weathered
- MW — moderately weathered
- HW — highly weathered
- EW — extremely weathered

strength (Is(50) indirect tensile strength)
- EL — extremely low
- VL — very low
- L — low
- M — medium
- H — high
- VH — very high
- EH — extremely high

M 1386