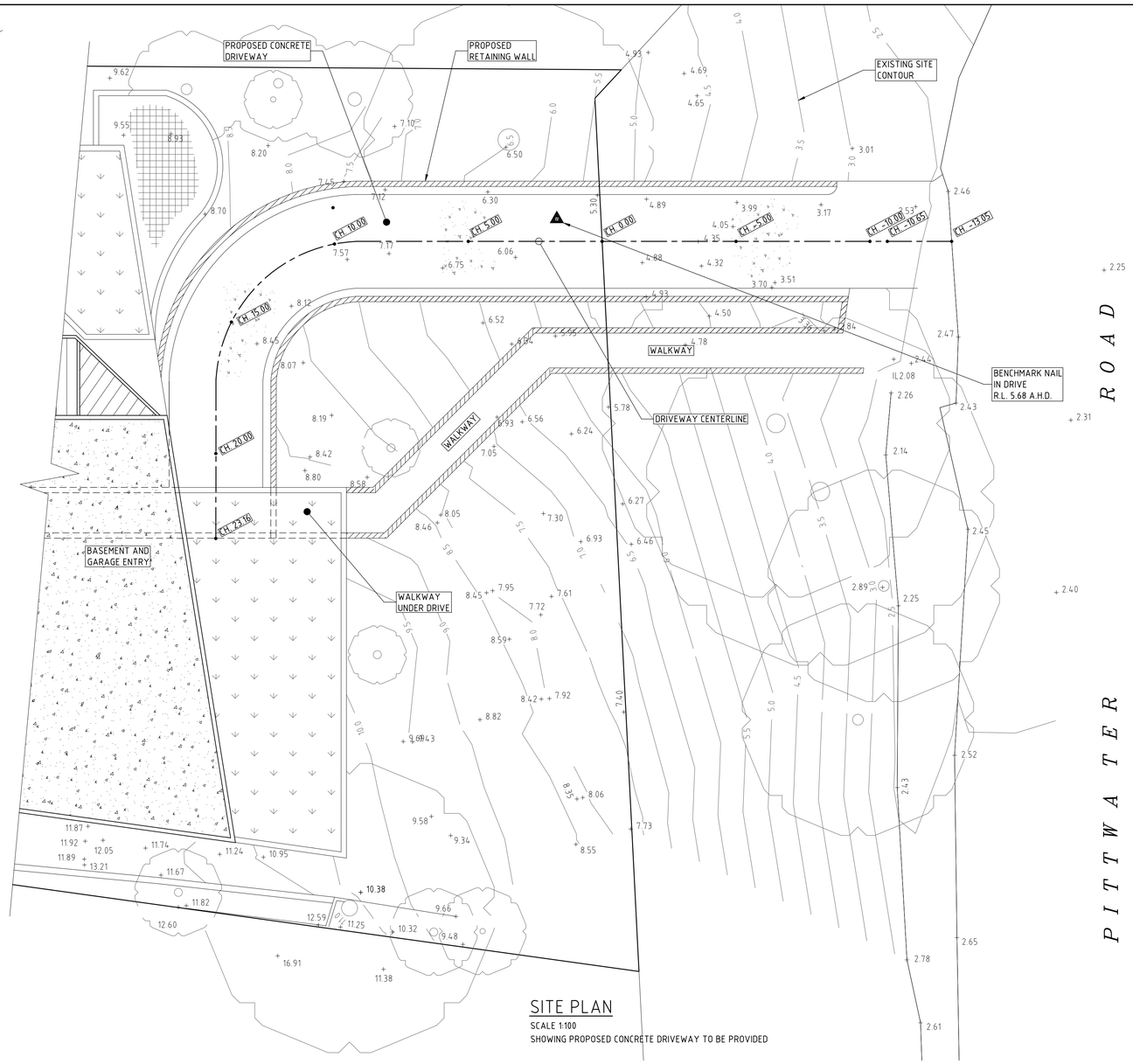
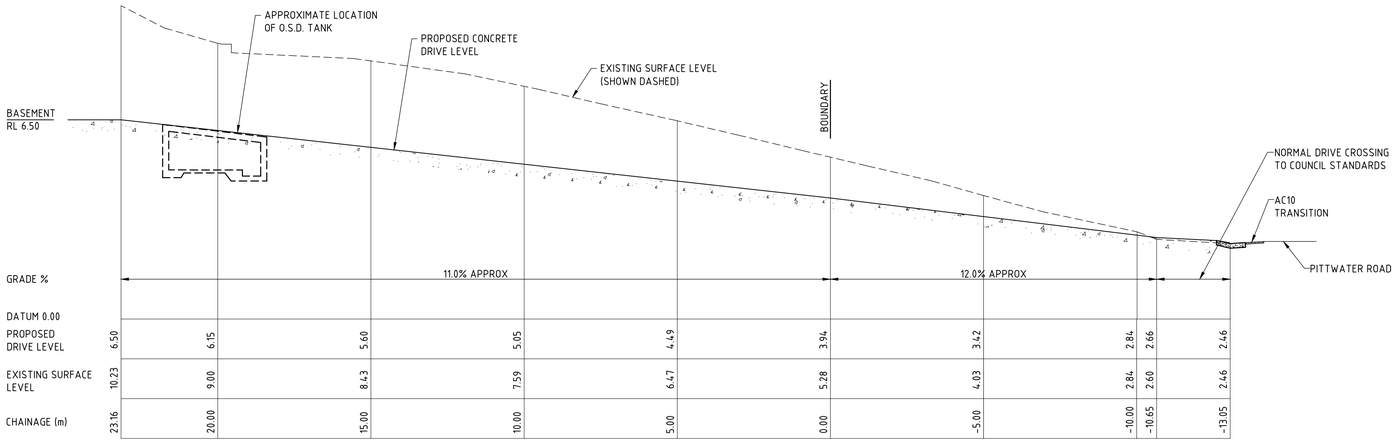


SITE PLAN

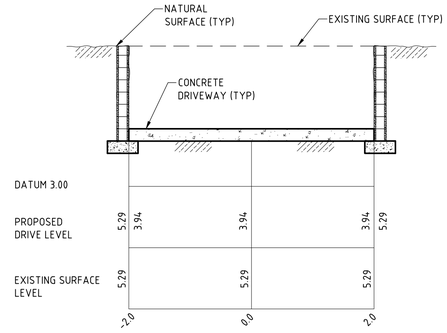
SCALE 1:100
SHOWING PROPOSED CONCRETE DRIVEWAY TO BE PROVIDED



GRADE %		11.0% APPROX					12.0% APPROX				
DATUM 0.00											
PROPOSED DRIVE LEVEL	6.50	6.15	5.60	5.05	4.49	3.94	3.42	2.84	2.66	2.46	
EXISTING SURFACE LEVEL	10.23	9.00	8.43	7.59	6.47	5.28	4.03	2.84	2.60	2.46	
CHAINAGE (m)	23.16	20.00	15.00	10.00	5.00	0.00	-5.00	-10.00	-10.65	-13.05	

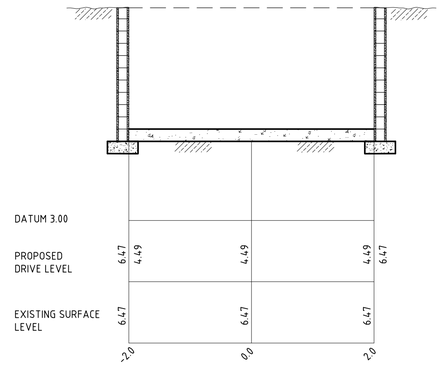
DRIVEWAY LONG-SECTION

SCALE 1:100 NATURAL



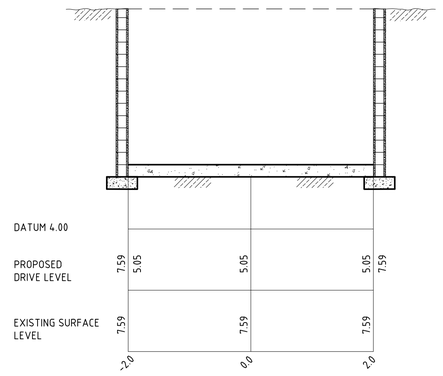
CHAINAGE 0.0

SCALE 1:50



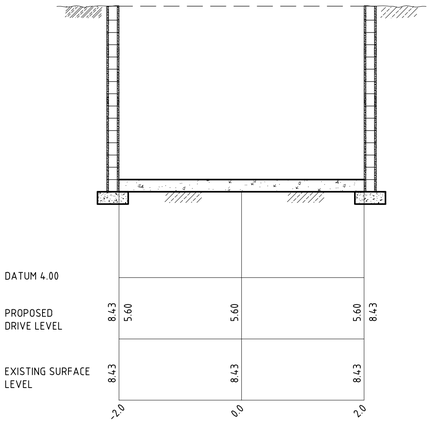
CHAINAGE 5.0

SCALE 1:50



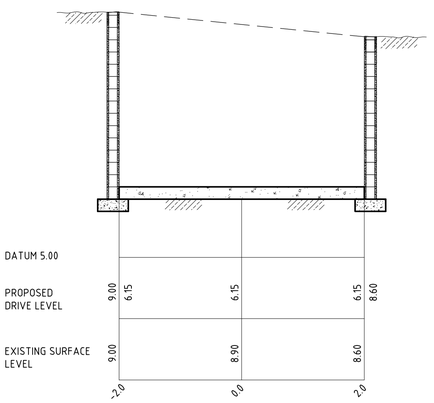
CHAINAGE 10.0

SCALE 1:50



CHAINAGE 15.0

SCALE 1:50



CHAINAGE 20.0

SCALE 1:50

ISSUE DATE	REVISION

TITLE
DRIVEWAY PLAN AND DETAILS
1955 PITTWATER ROAD, BAYVIEW

DRAWN	DATE	CHECKED	SCALE @ A1
AVW	30 JANUARY 2019	BE Civil (Hons) MIE Aust.	1:100 1:50

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PIT 2 450 SQ GRATE R.L. INVERT R.L.

PROVIDE ATLANTIS DRAINAGE CELL UNDERLAY (OR EQUIVALENT) TO DRAIN PLANTER BASE (TYP). PLANTER BASE DRAINAGE LAYOUT TO FUTURE SEPARATE DETAIL. C/3

PROVIDE 'SPS TRUFLO 100mm WITH ALL-PURPOSE PLANTER BOX ADAPTER' OR EQUIVALENT TO ALL PLANTER BOX (TYP) C/3

PROVIDE 'SPS PARAPET DRAINS WITH Φ100 OUTLET' OR EQUIVALENT TO BALCONY AREAS (TYP) C/3

PROVIDE 100 WIDE GAP IN BALUSTRADE AS OUTLET FOR EMERGENCY OVERFLOW FROM TERRACE (TYPICAL 3 LOCATIONS)

600 SQ ACCESS GRATE (TYP)

NOTE: CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS

EXISTING

EXISTING JUNCTION PIT GRATE R.L. 2.30 INVERT R.L. TO BE CONFIRMED PRIOR TO CONSTRUCTION

Φ225 P.V.C. AT 1.0% MIN

JUNCTION PIT 1 600 SQ GRATE R.L. 3.94 INVERT R.L. 3.34 D/3

200 WIDE GRATED DRAINS IN DRIVEWAY

BENCHMARK NAIL IN DRIVE R.L. 5.68 A.H.D.

100 WIDE GRATED DRAINS ACROSS PATH (TYP)

STORMWATER DETENTION TANK
STORAGE VOLUME = 12,000 LITRES
STORAGE LENGTH = 3000mm
STORAGE WIDTH = 4000mm
STORAGE DEPTH = 1000mm
TANK FLOOR = R.L. 4.80
PROVIDE Φ150 LOW LEVEL CONNECTION TO BOUNDARY PIT
A/3

SECURE DRAINAGE LINES TO UNDERSIDE OF FLOOR STRUCTURE AS NECESSARY FOR CONNECTION TO DETENTION STORAGE TANK (TYP)

450 SQ. INLET PIT DEPTH TO SUIT MINIMUM PIPE FALL AS NECESSARY **NOTE**: ALL PITS TO HAVE 2.0m LONG SUB-SOIL TAIL INLET F/3

200 SQ INLET TRAYS TO TERRACE AREAS AS SHOWN

EXISTING SITE CONTOURS (TYP)

450 WIDE BY 100 DEEP CONCRETE DISH DRAIN (OR EQUIVALENT) AT 1% MIN FALL TO PIT 2 E/3

PROVIDE 200 SQ RAINHEAD (WITH PROVISION FOR EMERGENCY OVERFLOW TO Φ100 P.V.C. DOWNPIPE) (TYP)

LINE OF BUILDING UNDER SHOWN DASHED (TYP)

NOTE: BASEMENT & SUB-SOIL DRAINAGE LAYOUTS TO FUTURE SEPARATE DETAIL

FALL (TYP)

ROAD

PITWATER

SITE DRAINAGE PLAN

SCALE 1:100

DRAINAGE NOTES

1. + DENOTES EXISTING GROUND LEVEL
2. FALL STORMWATER PIPES AT 1% MIN. UNLESS OTHERWISE NOTED.
3. SUB-SOIL DRAINAGE TO BE CONNECTED TO THE SITE DRAINAGE SYSTEM AS NECESSARY.
4. SURFACE GRATES 450 SQ. UNLESS OTHERWISE NOTED.
5. ALL STORMWATER PIPES TO HAVE SOLVENT CEMENT WATERTIGHT JOINTS.
6. CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS.
7. INSPECTIONS MUST BE UNDERTAKEN BY THIS OFFICE (BY PRIOR ARRANGEMENT WITH ENGINEER) DURING CONSTRUCTION TO ENABLE FULL CERTIFICATION UPON COMPLETION OF WORKS.
8. ALL CONSTRUCTION OF COUNCIL DRAINAGE WORKS TO COMPLY WITH COUNCIL STANDARD.
9. REMOVE REDUNDANT DRAINAGE PITS AND SEAL PIPES.
10. PIT BENCHING TO BE HALF THE OUTGOING PIPE DIAMETER. CONCRETE FOR BENCHING TO BE 20 MPa MASS CONCRETE.
11. APPROVED PRE-CAST PITS MAY BE USED.
12. ALL PIPES TO BE LAID ON COMPACTED FINE CRUSHED ROCK OR SAND BEDDING 75mm THICK & PIPES BACKFILLED WITH COMPACTED SAND TO 300mm ABOVE TOP OF PIPE, ELSE ATTACHED TO UNDERSIDE OF STRUCTURE AT 600mm c/c AS NECESSARY
13. PIPE ROUTES SHOWN ARE INDICATIVE ONLY AND SHOULD BE AS NECESSARY ACCORDING TO SITE CONDITIONS, TREE POSITIONS ETC. CONFIRM SIGNIFICANT CHANGES IN PIPES SYSTEM DETAILS WITH SUPERVISING ENGINEER PRIOR TO COMMENCEMENT OF DRAINAGE CONSTRUCTION WORKS.
14. CONTRACTOR SHALL ENSURE THAT SERVICES TO BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED. CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS WHERE REQUIRED. ONCE WORKS ARE COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL TEMPORARY SERVICES AND MAKE GOOD ALL DISTURBED AREAS.
15. STORMWATER SYSTEM REQUIRES SIGNIFICANT MAINTENANCE DUE TO POTENTIAL HIGH POLLUTANT LOAD. FILTERS AND POLLUTANT TRAPS SHOULD BE CHECKED AFTER LARGE STORM EVENTS AND CLEANED EVERY 6 MONTHS.
16. PLUMBING AND DRAINAGE WORKS TO COMPLY WITH AS-3500, THE NATIONAL DRAINAGE & PLUMBING CODE.
17. WHERE POSSIBLE DRAINAGE LINES SHALL BE LAID IN AREAS PREVIOUSLY DISTURBED BY OTHER SITE WORKS AND FOLLOW TOPOGRAPHICAL FEATURES TO REDUCE IMPACT AND AVOID TREE ROOTS.
18. THIS STORMWATER MANAGEMENT PLAN HAS BEEN PREPARED FOR D.A. SUBMISSION TO COUNCIL AND DOES NOT NECESSARILY CONTAIN ALL APPROPRIATE INFORMATION TO ENABLE FOR ISSUE TO PLUMBER/BUILDER FOR CONSTRUCTION. CONTACT TAYLOR CONSULTING FOR MORE INFORMATION.

OSD SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 1296.57 m²
DEVELOPED IMPERVIOUS AREA = 542.80 m² (41.86%)

PERMISSIBLE SITE DISCHAGES (STATE-OF-NATURE)

5 YR ARI = 36 l/s
100 YR ARI = 77 l/s

DEVELOPED SITE FLOWS

5 YR ARI = 29 l/s
100 YR ARI = 51 l/s

DETENTION SYSTEM DATA

AREA DRAINING TO THE DETENTION TANK = 748 m²
PROPOSED 100YR T.W.L. = R.L. 5.60
SSR = 12.0 m³
ORIFICE DIAM = 120 mm

STORMWATER SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 1296.57 m² (100%)
PROPOSED IMPERVIOUS AREA = 542.80 m² (41.86%)
PROPOSED LANDSCAPED AREA = 753.77 m² (58.14%)
EXISTING IMPERVIOUS AREA = 485.54 m² (37.45%)
EXISTING LANDSCAPED AREA = 811.03 m² (62.55%)

ISSUE	DATE	REVISION

TITLE
STORMWATER MANAGEMENT PLAN
1955 PITTWATER ROAD, BAYVIEW

DRAWN	DATE	CHECKED	SCALE @ A1
MDB	30 JANUARY 2019	BE Civil (Hons) MIE Aust.	1:100

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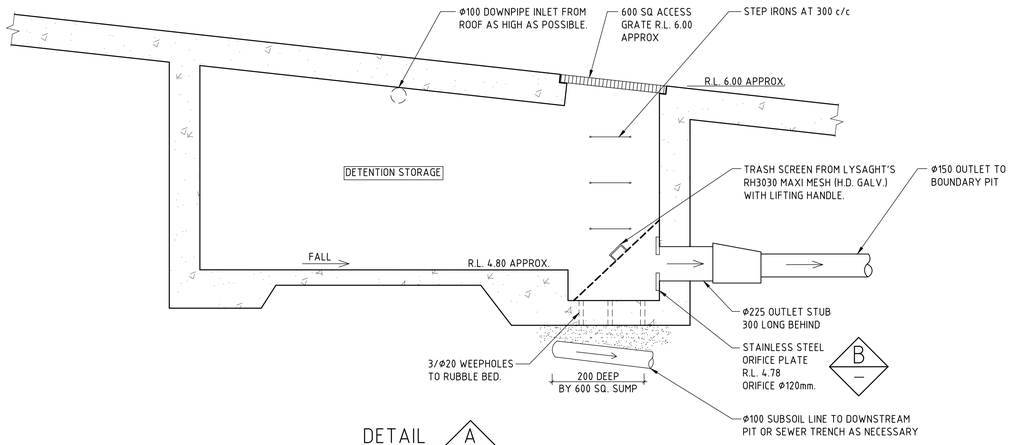
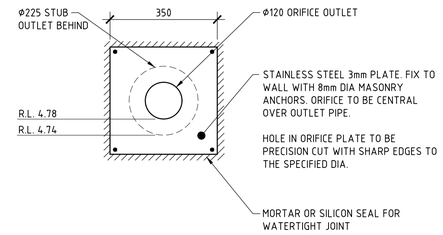


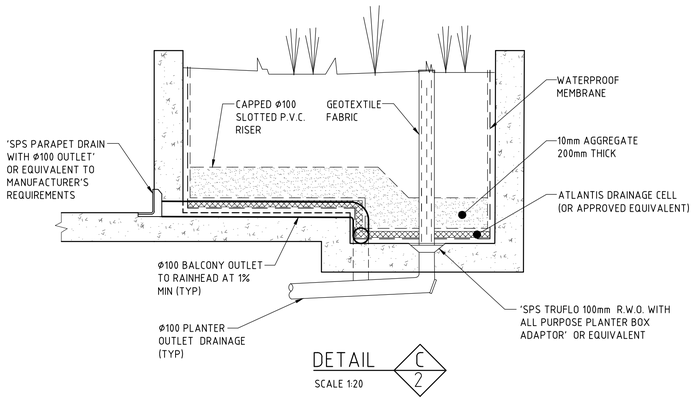
DETAIL A/2
SCALE 1:20

SHOWING SCHEMATIC LAYOUT DETENTION SYSTEM
NOTE: STRUCTURAL DESIGN OF TANK TO FUTURE SEPARATE DETAIL.



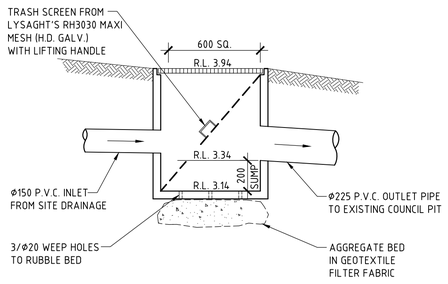
DETAIL B/–
SCALE 1:10

ORIFICE PLATE DETAIL



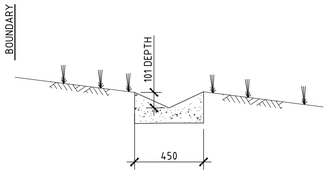
DETAIL C/2
SCALE 1:20

SHOWING TYPICAL PLANTER BOX DETAIL



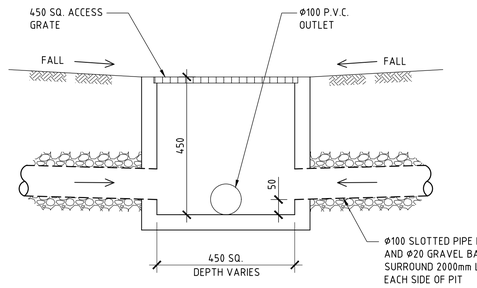
DETAIL D/2
SCALE 1:20

TYPICAL POLLUTION CONTROL PIT DETAIL



DETAIL E/2
SCALE 1:20

TYPICAL CONCRETE LINED DISH DRAIN DETAIL (OR EQUIVALENT) 2%1 MIN. FALL TO PIT 2



DETAIL F/2
SCALE 1:10

TYPICAL SURFACE INLET PIT DETAIL

ISSUE DATE	REVISION

TITLE
STORMWATER MANAGEMENT DETAILS
1955 PITTWATER ROAD, BAYVIEW

DRAWN	DATE	CHECKED	SCALE @ A1
MDB	30 JANUARY 2019	BE Civil (Hons) MIE Aust.	1:100 1:20 1:10

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