RevNo	Revision note	Date	Signature	Checked

PERIMETER OF 8.700M COUNTOUR = 256 M
PERIMETER OF 8.400M CONTOUR = 230 M
AVERAGE PERIMETER BETWEEN CONTOURS = 256 + 230 / 2 = 245 M
VOLUME OF SILT EXCAVATION = 245 X 0.75 X 0.30 = 55 CU.M

AREA BOUND BY 8.700M COUNTOUR = 1720 SQ.M
AREA BOUND BY 8.400M CONTOUR = 1429 SQ.M
AVERAGE AREA BETWEEN CONTOURS = 1720 + 1429 / 2 = 1575 SQ.M
VOLUME OF SILT EXCAVATION = 1575 X 0.3 = 472 CU.M

AREA BOUND BY 8.400M COUNTOUR = 1429 SQ.M
AREA BOUND BY 8.000M CONTOUR = 897 SQ.M
AVERAGE AREA BETWEEN CONTOURS = 1429 + 897 / 2 = 1163 SQ.M
VOLUME OF SILT EXCAVATION = 1163 X 0.4 = 497 CU.M

AREA OF TOPSOIL STRIP = 7066 SQ.M
VOLUME OF TOPSOIL STRIP = 7066 X 0.3 = 2120 CU.M

▽ GROUND LEVEL = 9.000
▽ LEVEL = 8.700
▽ GROUND WATER LEVEL = 8.250
▽ LEVEL = 8.000
▽ LEVEL = 7.000
▽ LEVEL = 6.000

TOPSOIL
SILT
SILT
CLAY

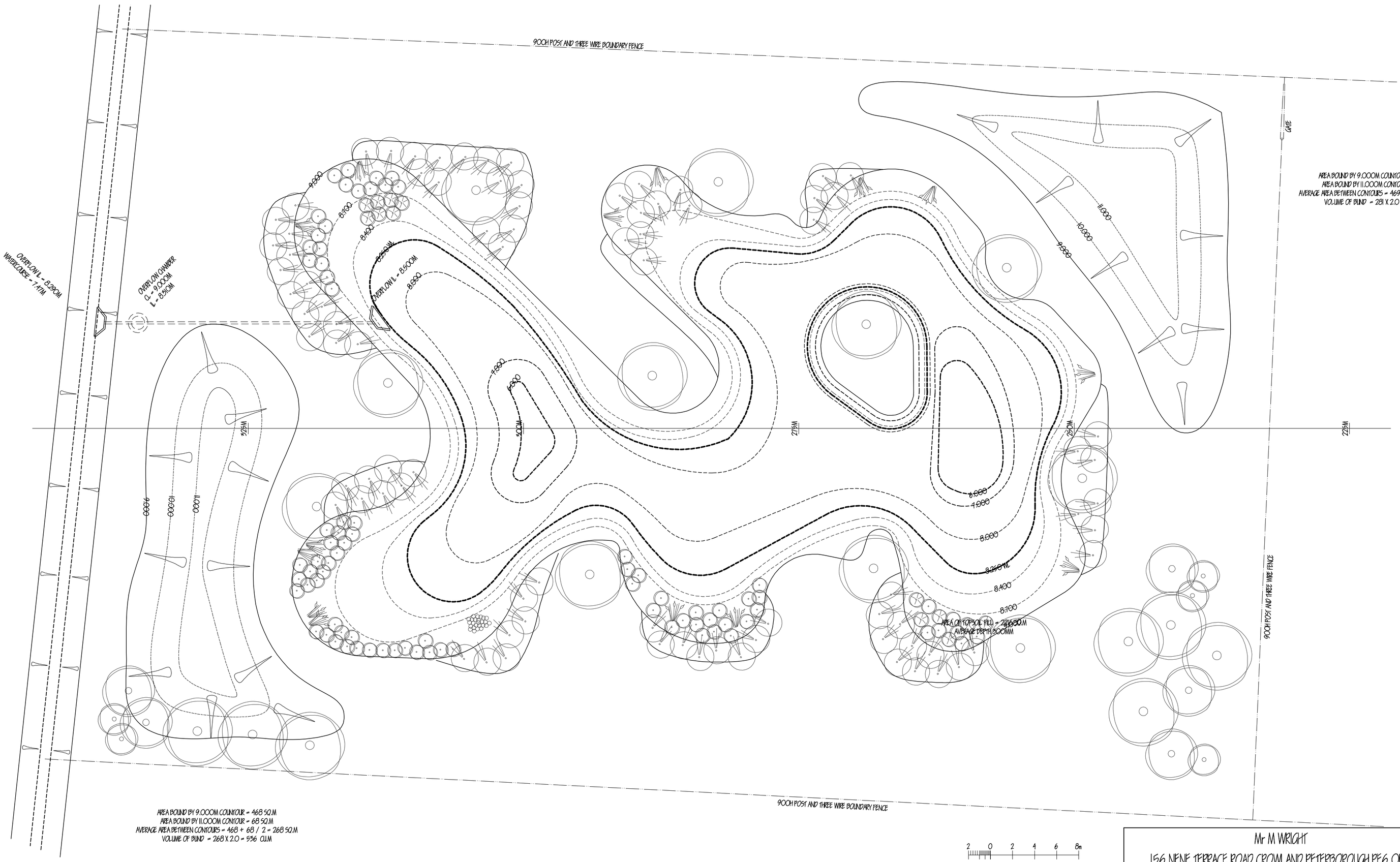
PERIMETER OF 8.400M COUNTOUR = 230 M
PERIMETER OF 8.000M CONTOUR = 192 M
AVERAGE PERIMETER BETWEEN CONTOURS = 230 + 192 / 2 = 211 M
VOLUME OF SILT EXCAVATION = 211 X 0.75 X 0.40 = 65 CU.M

AREA BOUND BY 8.000M COUNTOUR = 897 SQ.M
AREA BOUND BY 7.000M CONTOUR = 554 SQ.M
AVERAGE AREA BETWEEN CONTOURS = 897 + 554 / 2 = 596 SQ.M
VOLUME OF CLAY EXCAVATION = 596 X 1.0 = 596 CU.M

AREA BOUND BY 7.000M COUNTOUR = 554 SQ.M
AREA BOUND BY 6.000M CONTOUR = 76 SQ.M
AVERAGE AREA BETWEEN CONTOURS = 554 + 76 / 2 = 205 SQ.M
VOLUME OF CLAY EXCAVATION = 205 X 1.0 = 205 CU.M

TOTAL VOLUME OF TOPSOIL EXCAVATION = 2120 CU.M
TOTAL VOLUME OF SILT EXCAVATION = 472 + 497 + 55 + 65 = 1047 CU.M
TOTAL VOLUME OF CLAY EXCAVATION = 596 + 205 = 801 CU.M
TOTAL VOLUME OF CLAY FILL = 55 + 65 = 113 CU.M
TOTAL VOLUME OF CLAY EXCAVATION REMAINING = 801 - 113 = 685 CU.M
TOTAL VOLUME OF SILT AND CLAY TO FILL = 1047 + 685 = 1750 CU.M
TOTAL VOLUME OF BUNDS = 1098 CU.M
VOLUME DIFFERENCE (SILT) = 1750 - 1098 = 652 CU.M
FIELD AREA = 7066 SQ.M
LAKE AREA = 2217 SQ.M
FIELD AREA - LAKE AREA = 4849 SQ.M
DEPTH OF SILT FILL AROUND LAKE = 652 / 4849 = 0.13CM
VOLUME OF TOPSOIL AROUND LAKE = 4849 X 0.300 = 1455M3
VOLUME OF TOPSOIL IN ADJACENT PADDOCK = 2120 - 1455 = 665M3
AREA OF TOPSOIL IN ADJACENT PADDOCK (AVERAGE DEPTH 0.300M) = 665 / 0.300 = 2216M2

SECTION THROUGH LAKE AT CHAINAGE 300 M
SCALE 1:50



AREA BOUND BY 9.000M COUNTOUR = 468 SQ.M
AREA BOUND BY 11.000M CONTOUR = 68 SQ.M
AVERAGE AREA BETWEEN CONTOURS = 468 + 68 / 2 = 268 SQ.M
VOLUME OF BUND = 268 X 2.0 = 536 CU.M

WATER HYACINTH
DUTCH RUSH
GIANT REED
SPARTER DOCK
SHRUBS
LARGE TREE

LAKE PLAN
SCALE 1:200

2 0 2 4 6 8m
Scale 1:200

500 0 1000 2000MM
SCALE 1:50

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PROPOSED LAKE, ASSOCIATED EARTHWORKS & PLANTING.
LAKE & EARTH BUND PLANS, CROSS SECTIONS & PLANTING.

Designed	Checked	Approved	File name	Date	Scale	Drawing No
IB				APR 2018	AS SHOWN	IB/6426/005/005