

Geophysical Test Site Description, Test Site 2, Southmeads Road

Description:

Technical Description of Target Objects

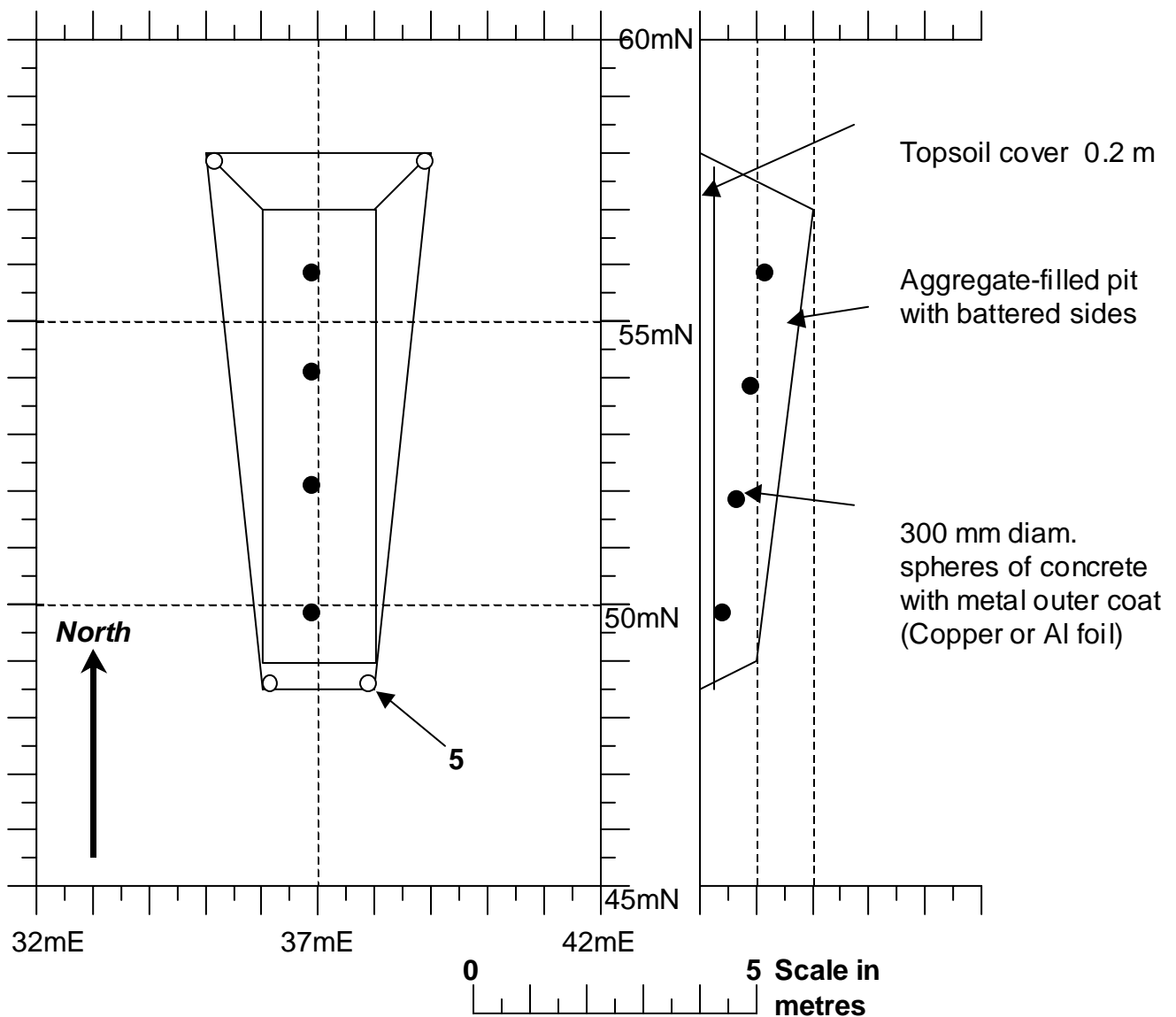
Participants in the development of the test site.

Photographs of Sub-area 2



Photographs of Sub-area 3

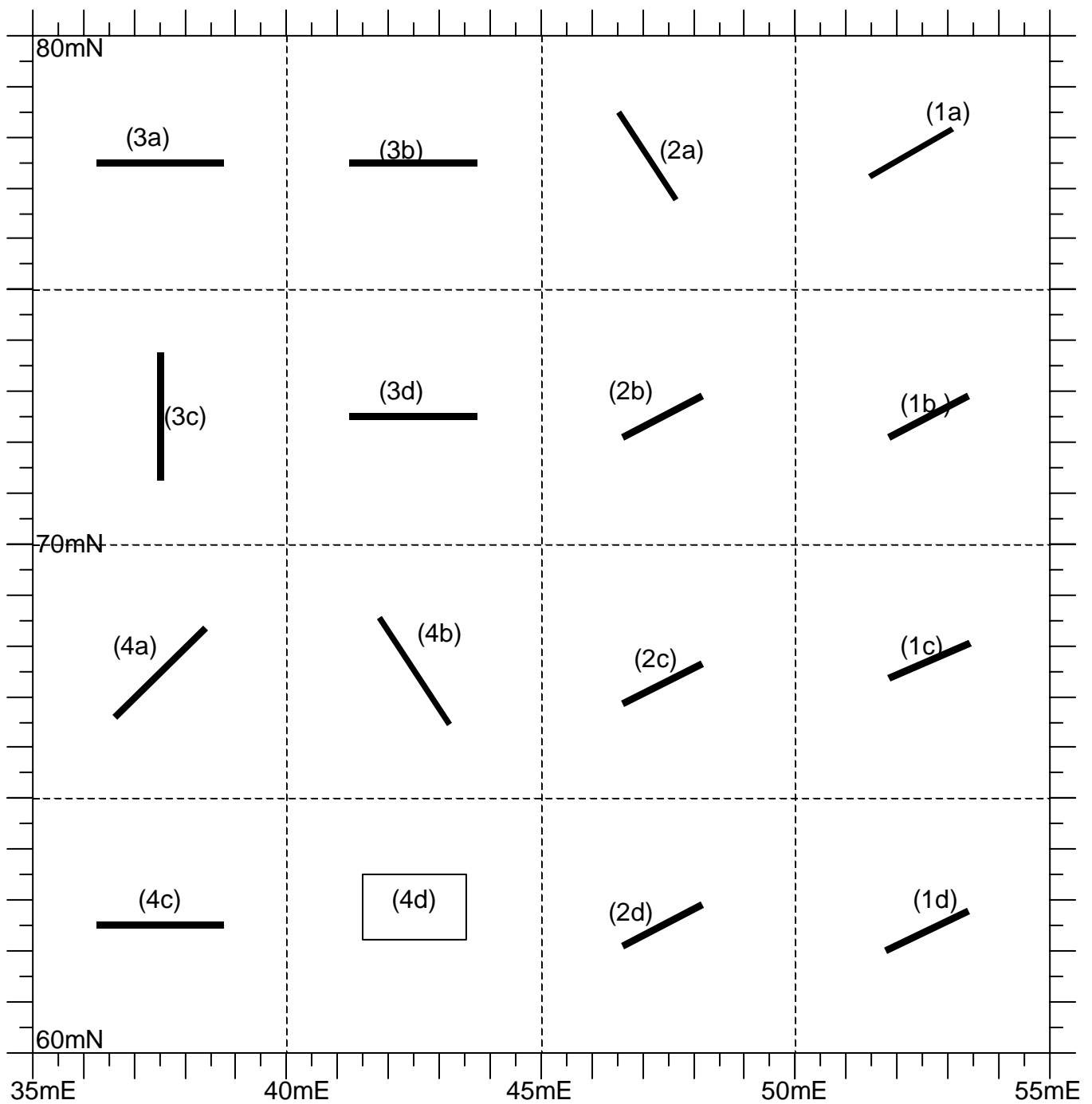




Sub Area 1 – Radar Target Pit (spheres)

A large pit excavated with sloping base and battered sides, backfilled with aggregate containing spherical conducting objects to act as ground radar calibration targets

	Description	Depth to top (m)	
1	300 mm diameter concrete filled copper ball.	0.25	
2	As (1)	0.50	
3	As (1)	0.75	
4	As (1)	1.00	
5	Slotted plastic casing, removable cap at top to measure water level, one at each corner of pit.	0.1	Laid down battered slope of pit wall.



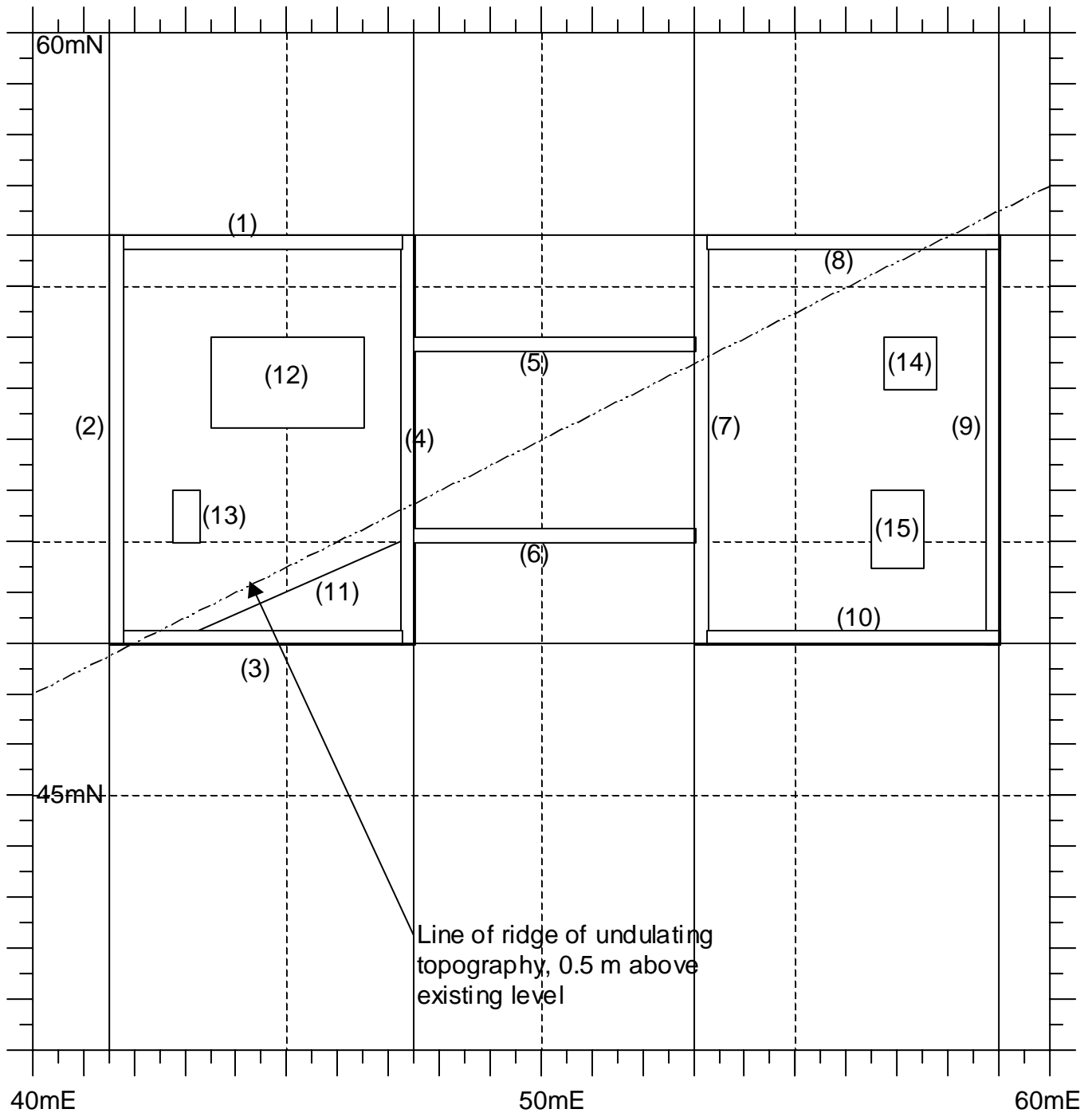
Sub Area 2 – Conductive Sheet Targets

An area of conducting sheet materials that may be detected by magnetic, electromagnetic, or Ground penetrating radar methods. Generally slit trenches will be dug and backfilled with the excavated material. Where dipping sheets are required, a trench with a battered wall will be dug, then the objects laid on that battered wall before backfilling. Such objects could be similar to buried metal tanks, vehicles or aircraft.

Sub-Area 2 - Details of individual Conductive Sheet Targets as numbered on plan:

Each trench is backfilled with excavated material, carefully compacted, with the addition of conducting metallic material as specified below

No	Description	Depth to top(m)	Depth to Base(m)
1	Trenches 0.3 m wide. Steel plates 2m x 1m x 1.2 mm with bitumen protective coating: (a) vertical (b) Dip 60°N (c) Dip 30 °S	0.4	1.4 or less for dipping plates
2	Trench 0.3 m wide (a) Steel plate 2m x 1m x 1.2 mm no bitumen protective coating (vertical) (b) Wire Mesh plastic-coated, Dip 60 °N (c) Wire Mesh plastic-coated Dip 30 °N (d) Wire Mesh plastic coated	0.4	1.4 or less for dipping plates
3	Trench 0.3 m wide Aluminium plates 2.4 m x 1.4 m x 1.2 mm (a) Vertical (b) Dip 60 °N (c) Dip 30 °N (d) Dip 30 °S	0.4	1.4 or less for dipping plates
4	Trench 0.3 m wide plastic-coated steel wire netting (a) Vertical (b) Vertical (c) Dip 45 °N (d) Horizontal at 0.4 m	0.4	1.4 or less for dipping plates



Sub Area 3 – Buried trenches

An area of a network of buried trenches with various infilling, simulating buried foundations and footings. All trenches a maximum of 1 m deep, all trenches 0.2 to 0.5 m wide. The area is topped by additional subsoil to make an undulating top surface simulating ridge and furrow cultivation, amplitude 0.5 m wavelength 6m, ridges running true east-west, oblique to the buried trenches.

Details of the individual trench construction are given overleaf.

Sub-Area 3 - Details of individual trenches and objects as numbered on plan:

No	Description	Depth to top(m)	Depth to Base(m)
1	Trench 0.3 m wide infill with excavated soil with 20%peat mix	0.2	1.0
2	Trench 0.3 m wide infill with excavated soil with 20%peat mix	0.2	0.8
3	Trench 0.3 m wide infill with stacked bricks	0.4	0.8
4	Trench 0.3 m wide infill with stacked bricks	0.5	0.9
5	Trench 0.3 m wide infill with concrete	0.4	0.8
6	Trench 0.3 m wide infill with concrete with reinforcing bars, 5m long by 12 mm diameter.	0.4	0.8
7	Trench 0.3 m wide infill with stacked bricks	0.4	0.8
8	Trench 0.3 m wide infill with loose brick rubble	0.4	0.8
9	Trench 0.3 m wide infill with assorted builders rubble. Three re-bars, 6m by 12 mm diameter laid on top of trench fill.	0.2	0.8
10	Trench 0.3 m wide infill with assorted builders rubble	0.2	0.8
11	Brick and stone rubble simulating collapsed wall material	0.4	0.8
12	Paving slabs laid to form flat buried surface (1.8 by 3.0 m). No aggregate or sand	0.45	0.5
13	Concrete block 1.3 m by 0.5 m cast in situ	0.5	1.5
14	Concrete block 1 m x 1m by 0.5 m thick, cast in situ	0.5	1.0
15	Paving slabs laid to form flat buried surface (1.2 by 1.8 m) Slabs laid in a bed of aggregate.	0.15	0.2

All depths are given from mean original ground surface. As the undulating topography is formed over this area, the actual depth from surface will vary by up to an additional 0.5 m. The position of the major ridge is marked by a dashed line. The ends of the ridge are faired smoothly into the existing surface over a distance of 3 to 5 m.