



Phase 1 Tree Survey & Preliminary Tree Constraints/Impact Assessment Plan

Land adjacent to Rhosduu Industrial Estate, off Main Road, Rhosrobin, Wrexham

Prepared for:

DS HOLMES BUILDERS LTD

Our Ref: 14/AIA/WXM/142 (Rev B)

20 March 2015

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TREE SURVEY SCHEDULE (BS5837: 2012)

TREE SOLUTIONS LTD

SITE:	LAND ADJ TO RHOSDUU INDUSTRIAL ESTATE, MAIN ROAD, RHOSROBIN
CLIENT:	DS HOLMES BUILDERS LTD
BRIEF:	ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A. HENDERSON
ASSESSMENT DATE:	04/06/14 & 23/01/15
VIEWING CONDITIONS:	GOOD
JOB REFERENCE:	14/AIA/WXM/142

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TREE NO. T - Tree G - Group H - Hedge	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m)				STEM/ MULTI-STEM* DIA.(mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m) RPA (m²)
				N	S	E	W						
T1	Hawthorn	M	6 0	1.5	1.5	2	2	160	G	- Individual tree from past boundary hedgerow - E.R.C. 10	N/A	C2	1.9 12m²
T2	Oak	FM	16 0.5N	6.5	7.5	5	5	930	M	- Widespread decay in main stem to north extending to 4m - (stem hollow to north with brown cubical rot within) - Tree appear in good health and vigour - E.R.C. 20+	Crown reduce by 4m to alleviate loading on stem and retain tree at reduced volume in future	B2	11.2 391m²
T3	Oak	FM	18 1N	8	6	7	7	950	G	- Good quality tree with no defects - E.R.C. 40+	N/A	A2	11.4 408m²
T4	Oak	M	15 0.5S	5	5.5	5	5	420	G	- As T3 but not visually prominent - E.R.C. 20+	N/A	B2	5 80m²

HEADINGS & ABBREVIATIONS

TREE NO.	REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE)
SPECIES:	COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)
AGE RANGE/LIFE STAGE:	Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE
HEIGHT:	ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES
CROWN SPREAD:	MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)
CROWN CLEARANCE & DIRECTION OF GROWTH:	HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)
STEM DIA/MULTI-STEM DIA:	STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES
VITALITY:	A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD
E.R.C. = ESTIMATED REMAINING CONTRIBUTION:	RELATIVE USEFUL LIFE EXPECTANCY (YEARS)
BS 5837CATEGORY & SUB-CATEGORY GRADING:	A = HIGH QUALITY AND VALUE, B = MODERATE QUALITY AND VALUE, C = LOW QUALITY AND VALUE, U = UNSUITABLE FOR RETENTION (SUB-CATEGORY REFERS TO ARBORICULTURAL, LANDSCAPE AND CULTURAL/CONSERVATION VALUES)
BS 5837 RADIUS & BS 5837 RPA:	PROTECTIVE DISTANCE - RADIUS FROM THE CENTRE OF THE STEM TO THE LINE OF TREE PROTECTION (CONSTRUCTION EXCLUSION ZONE - CEZ) AND PROTECTIVE BARRIER ROOT PROTECTION AREA - BS 5837 (2012) ANNEX D (THE RECOMMENDATIONS STATE THAT THE RPA SHOULD BE CAPPED AT 707 M ²) NOTE – ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL

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				N	S	E	W						
T5	Field Maple	M	13 1.5N	4.5	3	3	2	300	G	- Individual tree within boundary hedgerow - provides good screening to commercial unit to south - E.R.C. 10+	• N/A	C2	3.6 41m²
T6	Cherry	M	12 1N	4.5	2.5	3	3	370	G	- As T5 - E.R.C. 10+	• N/A	C2	4.4 62m²
T7	Field Maple	M	14 1N	4	2.5	3	3	280	G	- As T5 - E.R.C. 10+	• N/A	C2	3.4 35m²
T8	Oak	FM	17 0.5N	6	6	6	10	1000	G	- Historic and landscape value - Small cavity at base of stem to south - E.R.C. 40+	• N/A	A2	12 452m²
T9	Oak	M	17 1E	8	8	8	8	950	G	- Good quality tree with no defects - E.R.C. 40+	• N/A	A2	11.4 408m²
T10	Oak	M	15 1S	6	6.5	6	6	970	G	- Large cavity at base of stem to east and large tear out wound from failed scaffold limb above to east - Tree appears in good health and vigour - E.R.C. 20+	• Will require remedial work if retained within close proximity to any high target area	B2	11.6 426m²

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				N	S	E	W						
G1	Holly Hawthorn Elder	M	10 0	2	1	2	2	≤200	M/P	- Unmanaged boundary hedgerow offer good screening to commercial units to south but requires additional planting - E.R.C. 20+	• N/A	C2	2.4 18m²
G2	Hawthorn Cherry Oak Hazel	M	16 0.5S	4.5	4	4	4	≤350	G	- Good quality well established linear wooded copse offering excellent screening to commercial units to south - E.R.C. 20+	• N/A	B2	4.2 55m²
G3	Birch Sycamore Oak	EM	16 0.5S	3	3	3	3	≤400	G	- Group of trees located on top of railway disused embankment - all well established but unmanaged - E.R.C. 20+	• N/A	B2	4.8 72m²
G4	Oak Hawthorn Ash	EM	≤5					≤240	G	- Small, young trees on disused railway embankment - E.R.C. 20+	• N/A	C2	2.9 26m²
G5	Willow	EM	≤3					≤150	M	- Mass of small diameter & multi-stemmed scrub located outside southern boundary on upward sloping embankment - E.R.C. 10+	• 3rd party trees	C2	1.8 10m²
G6	Willow Hawthorn	EM /M	≤6					≤180	G	- As G5 - Provides biodiversity value to locale - E.R.C. 20+	• 3rd party trees	C2	2.2 15m²

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				N	S	E	W						
G7	Willow (S. Cap) Hawthorn	M	≤13	4	4	4	4	300x 3 (520)	M	- Multi-stemmed self set willow on railway siding - small Hawthorn adjacent - E.R.C. 10+	3rd party trees	C2	6.2 122m²
G8	Oak x 3 Sycamore x 1	M	≤15	5	5	5	5	≤400	M	- Trees located outside western boundary on railway siding - Not particularly good specimens - E.R.C. 10+	3rd party trees	C2	4.8 72m²
G9	Hawthorn	M	≤4.5					≤120	G	- Mass of Hawthorn scrub on downward sloping former railway embankment - Forms dense screen and habitat - E.R.C. 20+	3rd party trees	C2	1.4 7m²
H1	Hawthorn	M	7 0	1	1	1.5	2	≤120	G	- Unmanaged and overgrown boundary hedgerow - easily replaced by new planting of trees and hedge to enhance site frontage - E.R.C. 20	Remove and replace with new specimen tree planting to enhance landscape/ streetscape of locale	B2	1.4 7m²
H2	Hawthorn	M	2					≤60	M	- Unmanaged hedgerow - easily replaced if required - E.R.C. 10	N/A	C1	0.7 2m²

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2



Legend

Root Protection Area Modified to Account for Site Features

Category A (High Quality) Category B (Moderate Quality) Category C (Low Quality) Category U (Dead/Dying/In Decline)

Tree Position Approximate (not shown on original survey)

Root Number

Crown Spread

Tree Position

Client: D.S. HOLMES BUILDERS LTD

Project: Land Adjacent to Rhosddu Industrial Estate, Wrexham, LL13 4YU.

Title: Preliminary Tree Constraints Plan

Scale: 1:500 @ A3 Date: January 2015

Drawn By: LJ & AM Revision: A

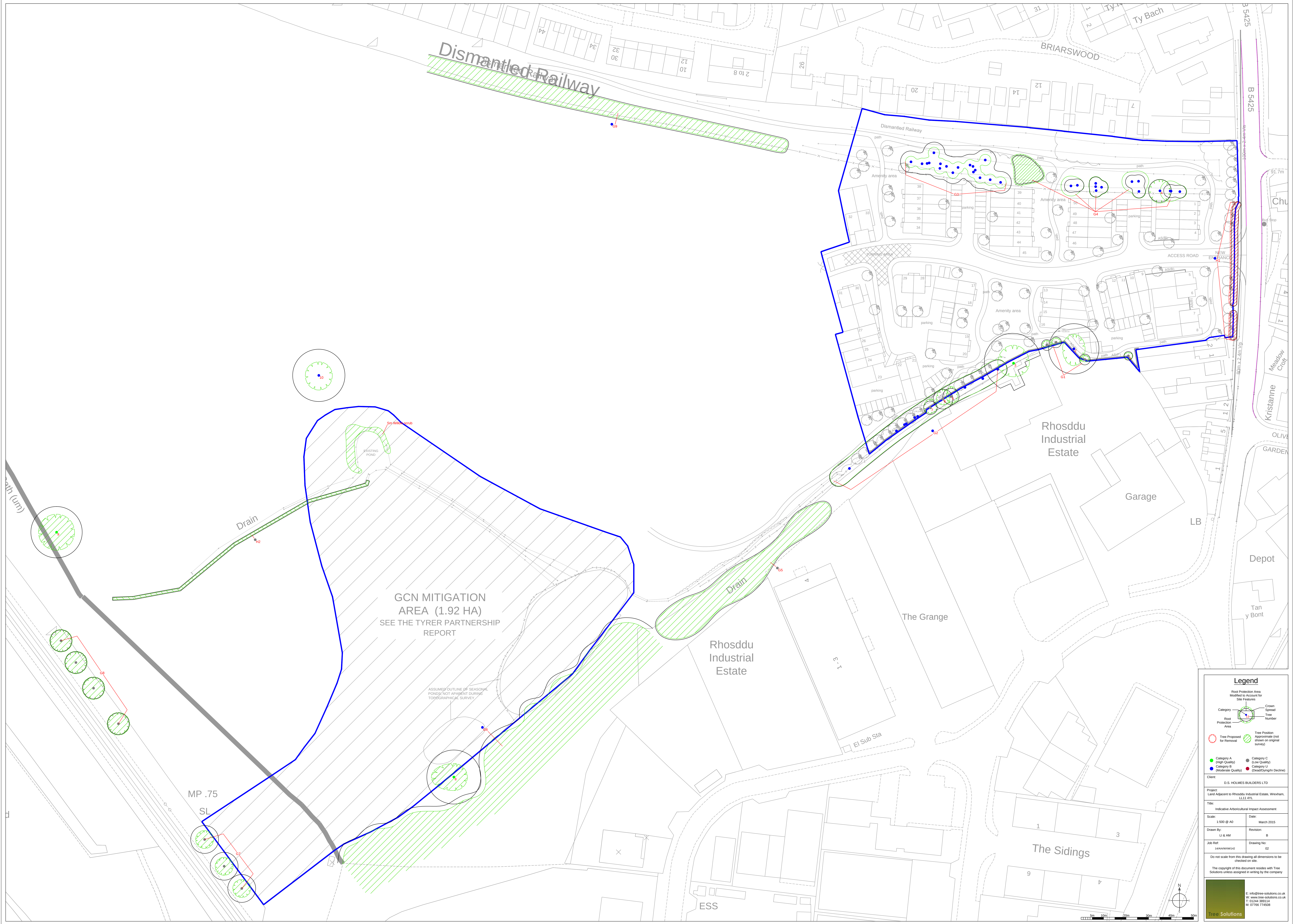
Job Ref: L4946/WM1542 Drawing No: 01

Do not scale from this drawing all dimensions to be checked on site.

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Legend

- Root Protection Area Modified to Account for Site Features
- Category A (High Quality)
- Category B (Moderate Quality)
- Category C (Low Quality)
- Category U (Dead/Dying/Decline)
- Tree Position Approximate (not shown on original survey)
- Tree Proposed for Removal
- Tree Protection Area
- Tree Number
- Tree Spread

Client: D.S. HOLMES BUILDERS LTD

Project: Land Adjacent to Rhosddu Industrial Estate, Wrexham, LL13 4YX.

Title: Indicative Arboricultural Impact Assessment

Scale: 1:500 @ A3 Date: March 2015

Drawn By: LJ & AM Revision: B

Job Ref: L406/0000142 Drawing No: 02

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Figure 2 Default specification for protective barrier

Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps

- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps

