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Technical Note

Project	Kilnwood Vale	Project No	11950
Subject	Topsoil and Subsoil Validation	Date	13 April 2026
File Ref	APP11950-2026-03-17-GARDENS_LANDSCAPING_SOIL 3DEFG-F3.docx	Pages	3

The works specified herein describe the validation records required for imported Topsoil and imported or site-won Subsoil for use in private gardens and landscaping across Phase 3DEFG, as indicated on the enclosed overall conveyance plan. It should be noted that this is an abridged version of a remediation specification, concerning the validation of soils in gardens and landscaping, on top of validated Engineered Fill and that there is no identified requirement for a "cover system". These records are required to provide supporting evidence that the site is suitable for residential end use, in accordance with relevant guidance[1].

The site has been subject to remedial earthworks, providing a development platform with Engineered Fill that was validated against limiting values for a residential end use with consumption of homegrown produce. The plot developments will build up from the earthworks finished bulk earthworks level, in soft landscaping and private gardens, with imported or site-won validated Subsoil and imported Topsoil.

A site-wide topographic survey was carried out across the top of the Engineered Fill at time of handover and the finish levels in gardens and landscaping should be compared against the top of the Engineering Fill layer.

GARDEN AND LANDSCAPING SOILS VALIDATION	
Testing prior to import & stockpiled on-site	Must be certified to show suitability for use and approved by the appointed environmental consultant prior to import: **greenfield source** three samples per source or 1 per 200m^3 whichever is greater; or **unknown / site-won source** six samples or 1 per 50m3, whichever is greater. Samples to be scheduled for testing in accordance with BS 3882 (Topsoil) or BS 8601 (Subsoil) (as appropriate) AND include chemical testing as per Table 1. A named competent person shall visually inspect all soils proposed for Topsoil and Subsoil in stockpile prior to any use and confirm in writing (and with supporting documentary evidence) that they have been visually inspected and confirmed free of anthropogenic inclusions, waste materials, or deleterious components prior to use. Prior to placement, Topsoil and Subsoil stockpiles are to be sampled (3 samples or 1 per 150m^3, whichever is greater) and include chemical testing as per Table 1. Any materials not approved in this way shall not be used.
Depth Validation in-situ	**private gardens** typically 250mm imported Topsoil and 250mm imported or site-won Subsoil (as specified by Landscape Architect) holes dug in 1 in 4 gardens to confirm depth - photos with measuring stick/tape required **soft landscaping** typically 150mm imported Topsoil and 250mm of imported or site-won Subsoil (as specified by Landscape Architect) 50-100m^2 coverage to check depth - photos with measuring stick/tape required

[1] *A Regulator's Guide to Cover Systems and their Verification* (NCLOG, 2024)

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A verification report comprising this information shall be prepared by a suitably qualified and competent person and appropriate written verification records presented as required to by the regulatory authorities.

Table 1: Soil Limiting Values for Subsoil or Topsoil

SUBSTANCE	MAX SOIL CONCENTRATION (mg/kg)
Metals and cyanide	
Arsenic	37[A]
Beryllium	1.7[A]
Cadmium	22[B]
Chromium (Total)	910[A]
Hexavalent Chromium	21[B]
Copper	200[D]
Inorganic Mercury (Total)	42[A]
Selenium	270[A]
Nickel	140[D]
Lead	200[B]
Zinc	300[D]
Cyanide (Total)	24[C]
Asbestos	
Asbestos	Not present and <0.001%
Polycyclic Aromatic Hydrocarbons	
Naphthalene	15[B]
Acenaphthylene	190[A]
Acenaphthene	230[A]
Fluorene	180[A]
Phenanthrene	100[A]
Anthracene	2,600[A]
Fluoranthene	310[A]
Pyrene	670[A]
Chrysene	16[A]
Benzo(a)anthracene	7.4[A]
Benzo(b)fluoranthene	2.6[A]
Benzo(k)fluoranthene	78[A]
Benzo(a)pyrene	5.0[A]
Indeno(123-cd)pyrene	28[A]

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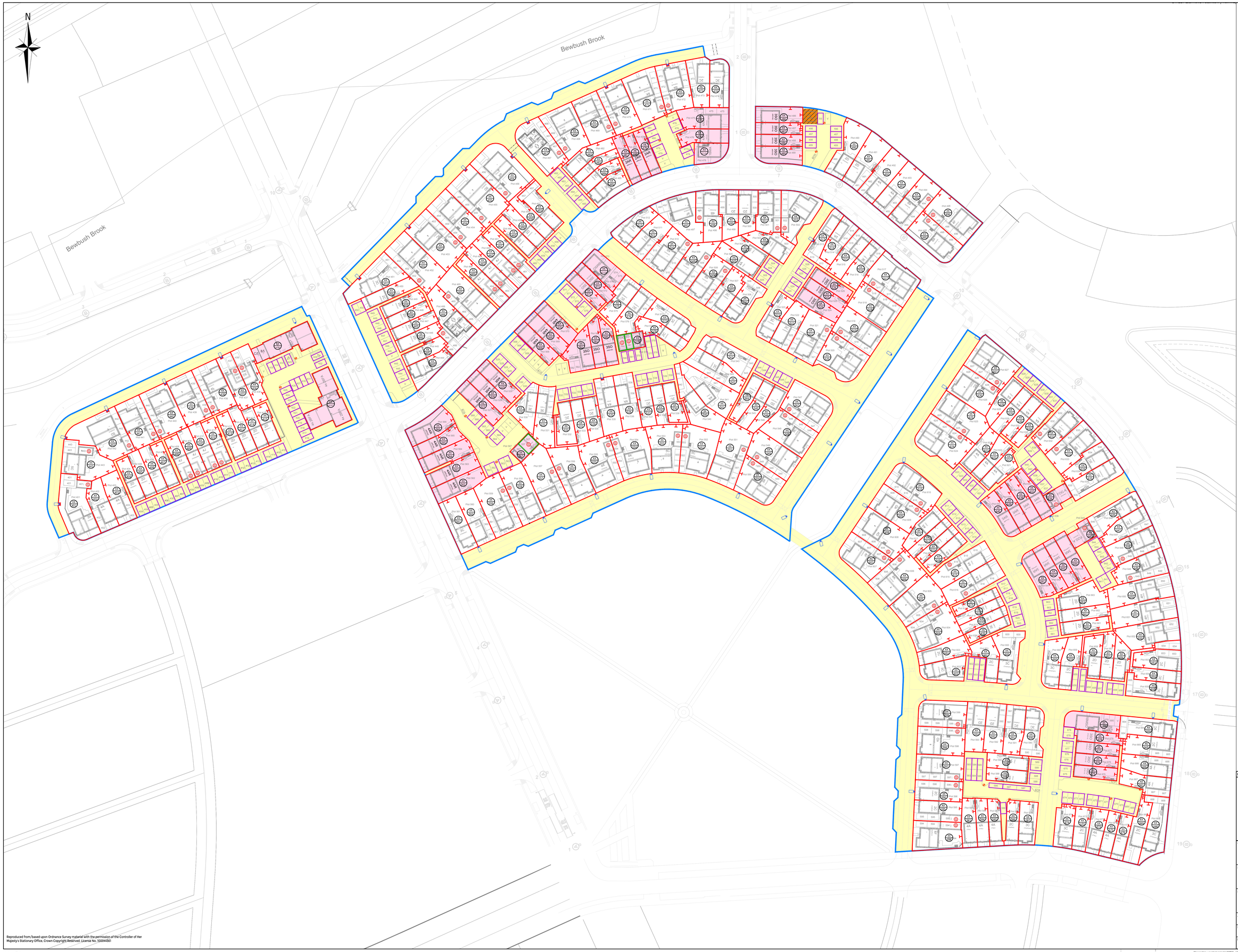
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Benzo(ghi)perylene		320[A]
Dibenzo(ah)anthracene		0.2[A]
Total Petroleum Hydrocarbons		
TPH	EC>5-10	27[E]
	EC>10-12	130[E]
	EC>12-16	1,100[E]
	EC>16-21	1,900[E]
	EC>21-40	1,900[E]
pH		As per BS3882 / BS 8601 required range and landscape architect's requirements
Soil Organic Matter		

Notes: All values above assume 1% Soil Organic Matter (SOM). [A]S4UL for Residential end use with consumption of homegrown produce. [B]C4SL for Residential end use with p/u. [C]SoBRA Acute Risk GAC. [D]BS3882:2015 Topsoil Requirements (assuming pH>7.0). [E] S4UL for Residential end use using lowest value for aliphatic/aromatic hydrocarbon fraction.

Other requirements: all soils must be free from metal, plastic, wood, glass, bitumen macadam, paper, odours and organic matter (except within topsoil) and shall be sorted into an appropriate size fraction and comply with the requirements of the landscaping specification. Maintain the following records: a description of the source, type and quantity of material, documentation to demonstrate legality and a non-waste status of materials, analytical testing records that show suitability of the material.

Sample storage and handling – All samples should be placed analysis specific sample jars/bottles as supplied by the laboratory suitable for the above testing requirements. Ensure that all samples are stored and transported in a suitable manner for sample preservation. The analysis laboratory shall have UKAS accreditation for each of the test types required. The test data sheets shall show Limits of Detection, Laboratory accreditation to BS EN ISO/IEC17025 and other supporting information if requested. Asbestos analysis must be to HSG 248.



NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
2. DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
3. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES UNLESS OTHERWISE STATED.
4. ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
5. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PRIOR PERMISSION FROM THE ENGINEER.
6. UNLESS STATED OTHERWISE, ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AT AN APPROVED TIP OFF-SITE.
7. THE PUBLIC HIGHWAY AND WORKS WILL BE KEPT CLEAN AND FREE OF DEBRIS BY USE OF WHEEL WASHING FACILITIES AND ROAD SWEEPERS TO THE COUNCIL'S SATISFACTION.
8. ALL SETTING OUT SHALL BE AGREED ON-SITE PRIOR TO THE COMMENCEMENT OF THE WORKS.
9. ALL SOFT SPOTS AND VOIDS SHALL BE REMOVED BEFORE CONSTRUCTION AND REPLACED WITH SUITABLE FILL MATERIAL.
10. ALL CONCRETE AND CEMENT MORTAR MUST BE SULPHATE RESISTING TO BS 4021.

CDM NOTES:

1. THE ATTENTION OF THE CLIENT AND THE PRINCIPAL CONTRACTOR IS DRAWN TO THE FOLLOWING POTENTIAL RISKS IN CONJUNCTION WITH THE PROPOSED ON-SITE AND OFF-SITE WORKS AS DESIGNED FOR THIS PROJECT:
2. WORKS IN THE VICINITY OF LIVE SERVICES WILL BE NECESSARY AND THE ADVICE OF ALL STATUTORY SERVICE COMPANIES MUST BE SOUGHT BEFORE ANY WORKS COMMENCE
3. WORKS WITHIN AND ABUTTING THE EXISTING HIGHWAY WILL ENTAIL TRAFFIC HAZARDS AND ALL APPROPRIATE SAFETY MEASURES INCLUDING BARRIERS, SIGNS AND LIGHTING MUST BE UNDERTAKEN TO THE APPROVAL OF THE LOCAL AUTHORITY, THE HIGHWAY AUTHORITY AND THE POLICE.
4. HAZARDOUS MATERIALS INCLUDING CEMENT AND BITUMINOUS MATERIALS ARE SPECIFIED AND THE MANUFACTURER'S ADVICE ON SAFE HANDLING PROCEDURES MUST BE OBTAINED AND MADE CLEAR TO ALL OPERATIVES.
5. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES WITHIN THE VICINITY OF THE WORKS AND ENSURE THESE ARE PROTECTED THROUGHOUT THE DURATION OF THE WORKS. ALL UTILITY PLANT SHOULD BE CLEARLY MARKED ON THE GROUND PRIOR TO COMMENCEMENT OF THE WORKS.
6. THE CONTRACTOR MUST ENSURE ALL WORKING AREAS ARE FULLY SECURE.

LEGEND:

- SITE BOUNDARY
- PLOT CONVEYANCE BOUNDARY
- RIGHT TO USE
- MANAGEMENT COMPANY
- HOUSING ASSOCIATION
- 3m SUBSTATION EASEMENT
- POSTAL NUMBER / PLOT NUMBER
- DENOTES FENCE OWNERSHIP
- PLOT GARAGES
- CS CYCLE STORE
- BS BIN STORE
- DENOTES GARAGES BEING CONVEYED TO ONE PLOT BUT LEASED TO ANOTHER PLOT (FOG UNITS)
- STREET LIGHTING POSITION (TO ADOPTABLE STANDARDS)
- STREET LIGHTING POSITION (PRIVATE)

0m 5m 25m

Scale: 1:500 @ A0

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Rev	Description	Drn	Chk	App	Date

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Client: CREST NICHOLSON

Project Title: KILNWOOD VALE, PHASE 3DEFG

Drawing Title: OVERALL CONVEYANCE PLAN

A0 Scale	Date	Designed by
1:500	15.03.24	IL
Drawn by	**Checked by**	**Approved by**
IL	MSL	JEC
Drawing Number		**Rev**
15004-4000		-