



Tree Climate Resilience Analysis

Table indicates an assessment of each tree proposed, identifying characteristics and aspects of climate resilience.

Trees have been selected to provide a highly resilient scheme, whilst maintaining native and native cultivars wherever possible. A wide variety of species is proposed for biosecurity purposes.

Mature sizes taken from Barchams tree nursery data.

Drought, flood, wind and salt tolerance from 'The Tree Selection Guide' by H. Sjoman & A Anderson (in association with Royal Botanic Gardens, Kew).

Tree	Characteristics	Mature Size	Shade Provider	Drought Tolerance	Flood Tolerance	Wind Tolerance	Salt Tolerance	Native Cultivar
Acer campestre	- Pioneer species - Seasonal interest (autumn foliage)	H: 7-12m D: 4-8m	Medium	High	Low	High	Medium	Y
Acer campestre 'Elsrijk'	- Suitable for urban environments - Pollution tolerant (air) - Seasonal interest (autumn foliage)	H: 7-12m D: 4-6m	Medium	High	Low	High	Medium	Y
Acer campestre: 'Lienco'	- Compaction tolerant - Seasonal interest (autumn foliage)	H: 7-12m D: 3-5m	Medium	High	Low	High	Medium	Y
Acer platanoides 'Crimson Sentry'	- Compaction tolerant - Drought tolerant - Seasonal interest (autumn foliage)	H: 12-17m D: 5-8m	High	Medium	Low	Medium	Medium	N
Acer x freemanii 'Autumn Blaze'	- Large feature tree - Seasonal interest (autumn foliage)	H: 12-17m D: 9-14m	Medium	Medium	High	Medium	Medium	N
Amelanchier lamarckii	- Year round seasonal interest (blossom, berries, autumnal foliage) - Multi-stem - provides low level/understorey greening	H: 3-5m D: 3-4m	Medium	Medium	Low	High	Medium	N
Amelanchier arborea 'robin hill'	- Year round seasonal interest (blossom, berries, autumnal foliage) - Multi-stem - provides low level/understorey greening	H: 3-5m D: 3-4m	Medium	Medium	Low	High	Medium	N
Betula pendula	- Pioneer species - Winter interest (bark) - Multi-stem	H: 7-12m D: 7-9m	Medium	Low	Medium	High	Medium	Y
Celtis occidentalis	- Compaction tolerant - Pollution tolerant (air)	H: 7-12m D: 6-9m	Medium	High	Low	Medium	High	N
Cercis canadensis 'Forest Pansy'	- Spring/Autumn interest (blossom, foliage) - Pollution tolerant (air)	H: 3-7m D: 4-5m	Low	Medium	Low	Low	Medium	N
Gleditsia triacanthos 'Skyline'	- Suitable for urban environments - Pollution tolerant (air) - Salt tolerant	H: 12-17m D: 7-11m	Low	High	Medium	High	High	N
Prunus 'Accolade'	- Semi-double flowers - Tolerant of most soils	H: 7-12m D: 4-8m	Low	High	Low	High	Medium	N
Pyrus calleryana 'Chanticleer'	- Suitable for urban environments - Pollution tolerant (air) - Year round seasonal interest (blossom, fruits, autumnal foliage)	H: 7-12m D: 4-7m	Medium	High	Medium	High	High	N

Tree Planting Schedule

TREES				
Number	Plant Name	Height	Girth	Specification
3 -	Acer campestre	500-550cm	20-25cm	Semi-Mature: 3x: RB: Clear Stem min. 200cm
2 -	Acer campestre 'Elsrijk'	500-550cm	20-25cm	Semi-Mature: C: Clear Stem min. 200cm
13 -	Acer campestre 'Lienco'	400-450cm	18-20cm	Extra Heavy Standard: C: Clear Stem min. 200cm
2 -	Acer platanoides 'Crimson Sentry'	min. 450cm	20-25cm	Semi-Mature: 3x: RB: Clear Stem min. 200cm
3 -	Acer x freemanii 'Autumn Blaze'	500-550cm	20-25cm	3x: Semi-mature: clear stem minimum 200cm: RB
4 -	Amelanchier lamarckii	425-600cm	18-20cm	Extra Heavy Standard: 3x: RB: Clear Stem 175-200cm
2 -	Amelanchier x grandiflora 'Robin Hill'	450-650cm	18-20cm	3x: Extra Heavy Standard: clear stem minimum 200cm: RB
3 -	Betula pendula	500-550cm	20-25cm	Large Feathered: 3x: RB
1 -	Celtis occidentalis	500-550cm	20-25cm	Semi-mature: 5 brks: 3x: RB: Clear Stem min. 200cm
5 -	Cercis canadensis 'Forest Pansy'	450-500cm	18-20cm	Extra Heavy Standard: 3x: RB: Clear Stem min. 200cm
5 -	Gleditsia triacanthos 'Skyline'	min. 450cm	20-25cm	Semi-Mature: 3x: RB: Clear Stem min. 200cm
7 -	Prunus 'Accolade'	min. 450cm	20-25cm	3x: Semi-mature: clear stem minimum 200cm: RB
2 -	Pyrus calleryana 'Chanticleer'	500-550cm	20-25cm	Semi-Mature: 3x: RB: Clear Stem min. 200cm

Total :52 -

LEGEND

- Site application boundary
- Existing tree; refer to arboricultural report for details
- Root protection area of existing tree; refer to arboricultural report for details
- Proposed clear stem tree
- Proposed multi stem tree
- Proposed hedgerow
- Proposed planting
- Proposed amenity grass to play area and woodland margin
- Proposed EW1F Wild Flowers for Woodland by Emorsgate; or similar approved
- Proposed ArborSystem by GreenBlue Urban; structural loading bearing tree cells; or similar approved
- Proposed root barrier
- Proposed mounding; no steeper than 1:3; refer to Detailed Hard Landscape proposals for details

All dimensions in millimetres

This drawing is to be used for planting information only
Any species substitution must be verified with the project Landscape Architect

This layout must be checked in accordance with NHBC Standards 2023 (Chapter 4.2 - Building Near Trees, and Chapter 10.2 - Drives, Paths and Landscaping) by the project engineer prior to implementation

Excavations: Contractors must ensure they have full information relating to service and drainage positions before undertaking any excavations

Root barriers to be used in association with tree planting adjacent to kerbs, services, highways etc.

All irrigation by specialists
For CDM information refer to Designers Risk Assessment

FOR OTHER LANDSCAPE DRAWINGS REFER TO THE FOLLOWING:

Detailed Hard Landscape Proposals:
-SFM-LLA-ZZ-GF-DR-LS-0101 to 0105

Boundary Treatment Proposals:
-SFM-LLA-ZZ-GF-DR-LS-0106

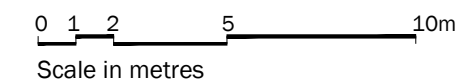
Street Furniture & Play Proposals:
-SFM-LLA-ZZ-GF-DR-LS-0107

Detailed Planting Proposals:
-SFM-LLA-ZZ-GF-DR-LS-0201 to 0205

Landscape Specification & Details:
-SFM-LLA-ZZ-XX-DR-LS-0300 series

Living Roof Proposals:
-SFM-LLA-ZZ-RF-DR-LS-0401

Landscape Planting Schedule:
-SFM-LLA-ZZ-XX-DR-LS-0201



P06	26.02.20	Update tree position to coordinate with drainage strategy	RF	AF
P05	26.01.25	Update to planting & tree position	BW	AF
P04	23.01.26	Update to townhouse frontage	BW	AF
P03	18.12.25	Update to revised layout	BW	AF
P02	07.11.25	Update to comments	BW	AF
P01	31.10.25	First issue	BW	AF
Rev	Date	Description	Dm	Chk

Title: Tree Planting Proposals
Project: Sir Frederick Messer Estate, Seven Sisters
Client: Formation Design & Build Limited
Date: October 2025
Scale: 1:200 @ A1
Drawing No: SFM-LLA-ZZ-GF-DR-LS-0206
Revision: P06
Suitability: S2
Project No: 12948

T: +44 (0)1279 647044 E: office@lizlake.com www.lizlake.com

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LIZ LAKE ASSOCIATES
LANDSCAPE ARCHITECTS



Ratmat MedO S1 Wildflower Seed Mix:

- Agrimony; 6%
- Birdsfoot Trefoil; 6%
- Bladder Campion; 5%
- Bulbous Buttercup; 5%
- Common Knapweed; 4%
- Common Toadflax; 1%
- Cowslip; 6%
- Field Scabious; 6%
- Hoary Plantain; 3%
- Kidney Vetch; 6%
- Lady's Bedstraw; 6%
- Meadow Buttercup; 5%
- Musk Mallow; 4%
- Oxeye Daisy; 4%
- Perforate St Johns Wart; 2%
- Rough Hawkbit; 5%
- Salad Burnet; 5%
- Selfheal; 6%
- Vipers bugloss; 3%
- Wild Basil; 3%
- Wild Marjoram; 4%
- Wild Migniette; 4%

Maintenance to Radmat Recommendations for MedO planted Green Roof Maintenance
(Radmat GM30 Substrate and Radmat MedO S1 Wildflower Seed mix.)

General
A Seeded Green or 'brown' roof will take at least 2 to 3 growing seasons to establish, therefore any requirements for specific species mix or diversity of flora will need to be managed. Non-management will result in a finish completely driven by the local environment, which may be the driver for the specification.

Irrigation
During the first four to six weeks after installation irrigation is advised, typically once every two to three days via hose or sprinkler system until the green roof is at full saturation.

Weather
Regular checks should be undertaken to ensure that high winds or heavy rainfall has not moved or dislodged any of the materials. The movement of products is unlikely but possible in extremes of weather.

Drainage checks
Open drains should be checked for build-up of dead vegetative material, and cleaned as appropriate at each 6 month/12 month inspection. This also applies to covered drainage outlets.

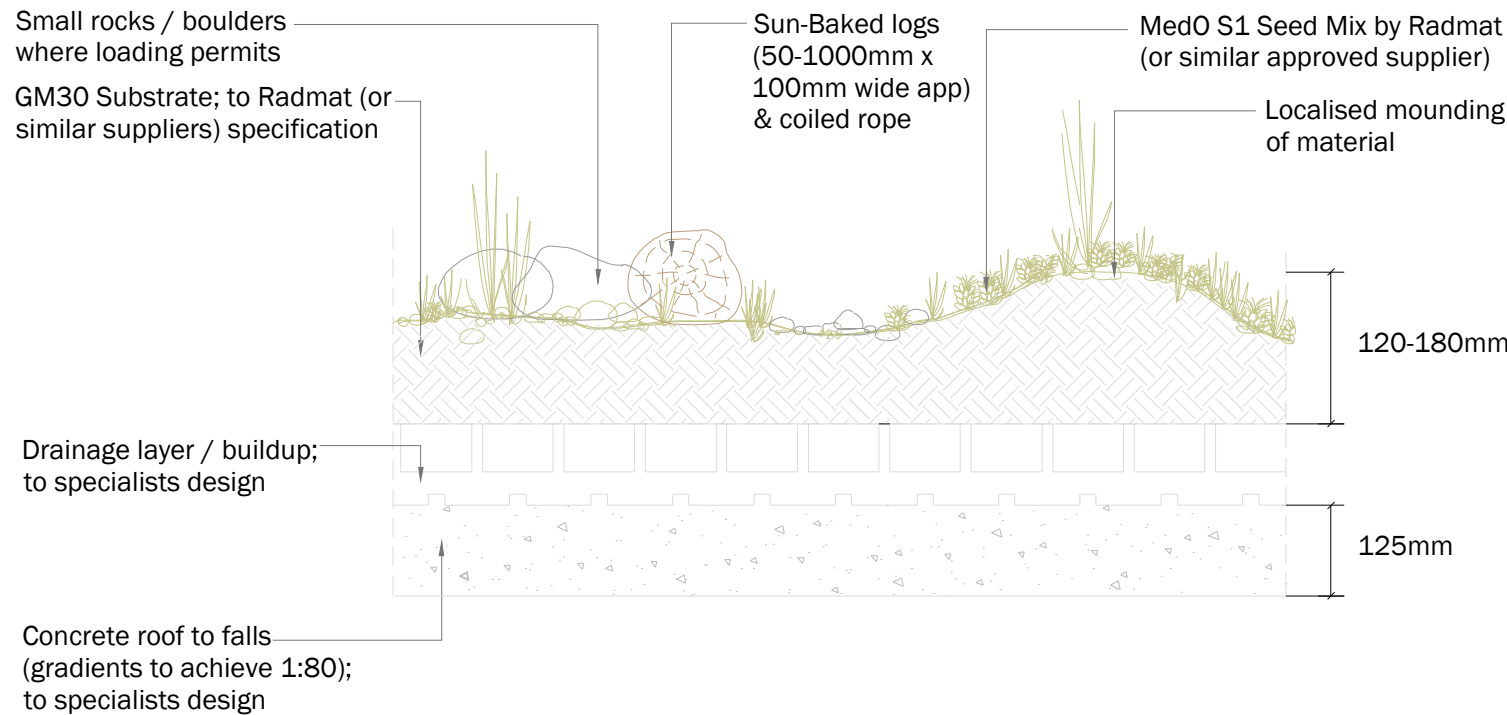
Inspections
Annual inspections of the biodiverse roof should be made to check continual growth and coverage.

Customer maintenance
Maintenance should be carried out to keep the system healthy and working properly. The system should be inspected and maintained biannually:
- One visit in the Spring to inspect drains, fertilise and spot remove any species not required.
- One visit in the Autumn to inspect and spot remove any species not required.

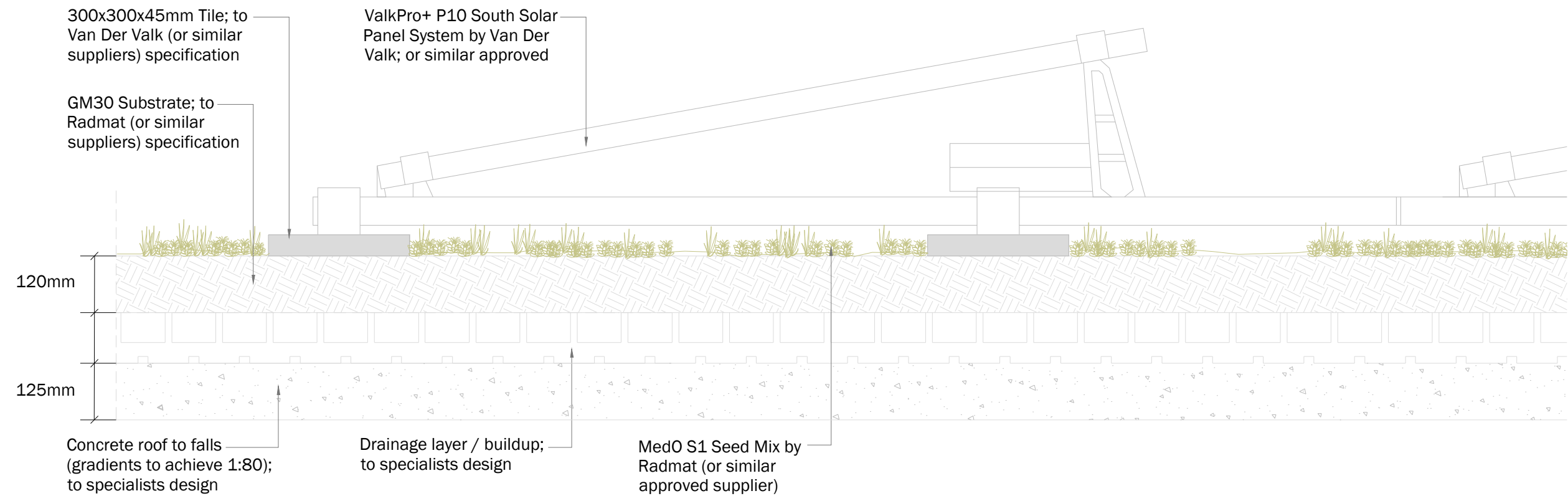
Ensure safe access can be gained to the roof and that relevant Health and Safety procedures are followed when working at roof level.
Safety harness attachment points or man safe systems should always be used where provided.

Contact:
Radmat Building Products Ltd, Holland House, Valley Way, Rockingham Road, Market Harborough, LE16 7PS
Tel 01858 410372, Fax: 01858 410572, e-mail: technquiries@radmat.com.

Living Roof Illustrative Section; all ecological areas to ecologists specification; not to scale



Solar Panel System Illustrative Section; solar panel to specialist design; not to scale



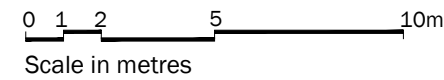
LEGEND

- Site application boundary
- Proposed gravel ballast; 95mm depth; to roof borders and structures/hatches
- Proposed GM30 Substrate and S1 Wildflower seed mix by Radmat; or similar approved by different supplier
- Proposed aggregate & 'flat' stones to areas for potential habitat creation; coarse aggregate <70mm with larger 'flat' stones mixed through <200mm; refer to ecological consultant requirements for further information; or similar approved
- Proposed sandy pile; to ecologists recommendations; or similar approved
- Proposed log pile; to ecologists recommendations; 3-7 log piles grouped as one unit; to be securely fixed to the roof; or similar approved
- Proposed rope coil; to be securely fixed to the roof; to ecologists recommendations; or similar approved
- Proposed drainage fall to roof; gradients to achieve 1:80; to specialists design

ALL LIVING ROOF FEATURE POSITIONS INDICATED ILLUSTRATIVELY; LOCATION TO BE CONFIRMED BY PROJECT ECOLOGIST AND ADJUST TO SUIT
ALL LARGER ITEMS TO BE SUITABLY FIXED/LOADED TO PREVENT MOVEMENT; TO SPECIALIST RECOMMENDATIONS

ALL DIMENSIONS IN MILLIMETRES
ALL DRAINAGE (INCLUDING LEVELS) TO ENGINEERS DETAILS
ALL LIGHTING TO BE DESIGNED BY SPECIALIST
ALL BUILDUPS AND RETAINING STRUCTURES TO ENGINEERS DETAILS
ALL IRRIGATION BY SPECIALISTS
FOR CDM INFORMATION REFER TO DESIGNERS RISK ASSESSMENT

FOR OTHER LANDSCAPE DRAWINGS REFER TO THE FOLLOWING:
Detailed Hard Landscape Proposals:
- SFM-LLA-ZZ-GF-DR-LS-0100 series
Detailed Planting Proposals:
- SFM-LLA-ZZ-GF-DR-LS-0200 series
Landscape Specification & Details:
- SFM-LLA-ZZ-XX-DR-LS-0300 series



P06	23.01.25	Update to B01 PV Layout	BW	AF
P05	06.01.25	Update to revised site layout	BW	AF
P04	04.12.25	Update to revised roof layout	BW	AF
P03	21.11.25	Update to comments	BW	AF
P02	07.11.25	Update to comments	BW	AF
P01	31.10.25	First issue	BW	AF
Rev	Date	Description	Dwn	Chk

Title: Living Roof Proposals
Biodiverse Green Roof
Project: Sir Frederick Messer Estate, Seven Sisters
Client: Formation Design & Build Limited
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T: +44 (0)1279 647044 E: office@lizeke.com www.lizeke.com
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