



GREEN LUNGS

International Garden Festival
Ponte de Lima | Plot 7

Design Aspects in Construction Details

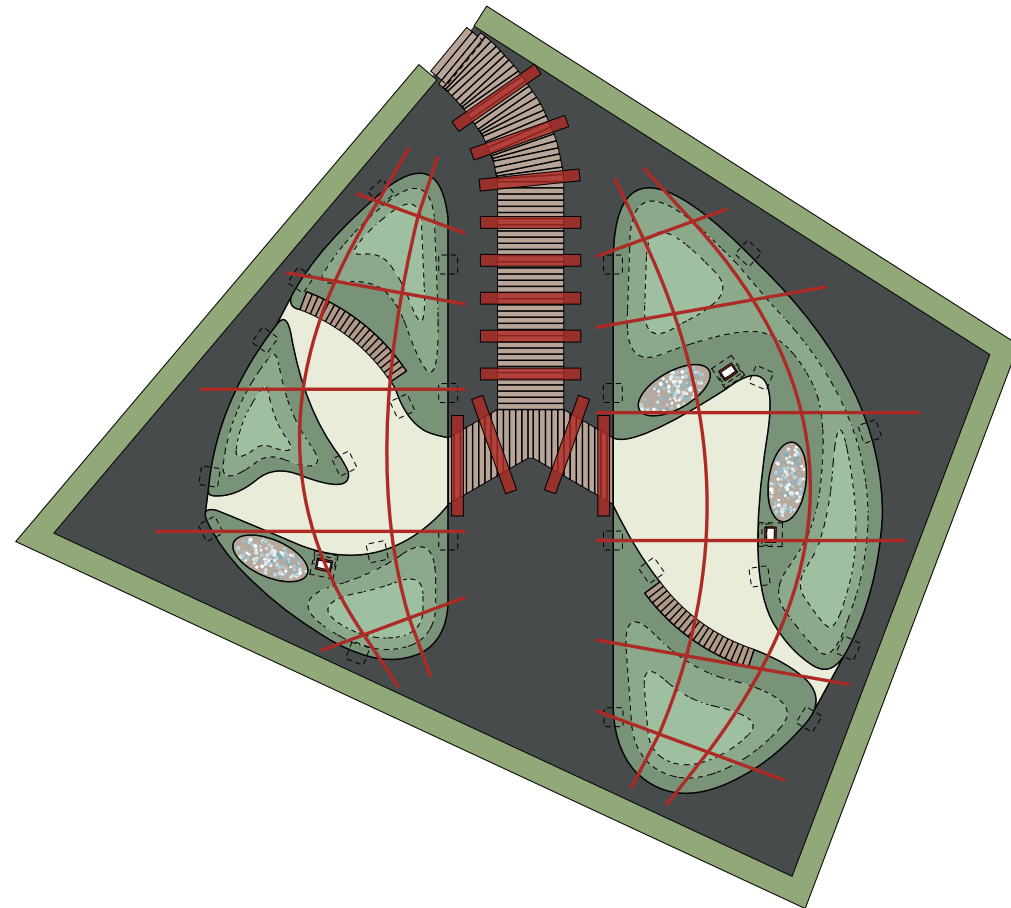
University of Natural Resources and Life
Sciences Vienna (BOKU)

WS 22/23

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GREEN LUNGS

PONTE DE LIMA, JARDIM 7

01_01 IDEA | CONCEPT | SKETCHES

Idea + Description

BREATHING_

_the act or process of taking air into your lungs and releasing it (Cambridge Dictionary)

_a soft movement, especially of air; a rest or pause (Collins Dictionary)

EVERYTHING ALIVE IS BREATHING_

_We need places of calm and relaxation instead of overwhelming news and stressful everyday lives for our physical and mental health.

Air pollution and the Covid pandemic have shown us again the relevance of taking in air through our lungs. Disfunctional breathing can lead to headaches, high blood pressure, concentration problems, fatigue and emotional upset. The flow of oxygen, the holding in and letting go are part of our existence. During stressful, sorrowful and challenging times we get tense and our breath becomes short and shallow. On the other side, conscious breathing invigorates creativity, regenerates productivity, calms and gives life a boost.

Therefore it is of great importance to highlight the value of our lungs and why not emphasize them in a garden for experience and recovery?

Spatial Concept



THE LUNGS

air-filled organ
respiration + filter
function



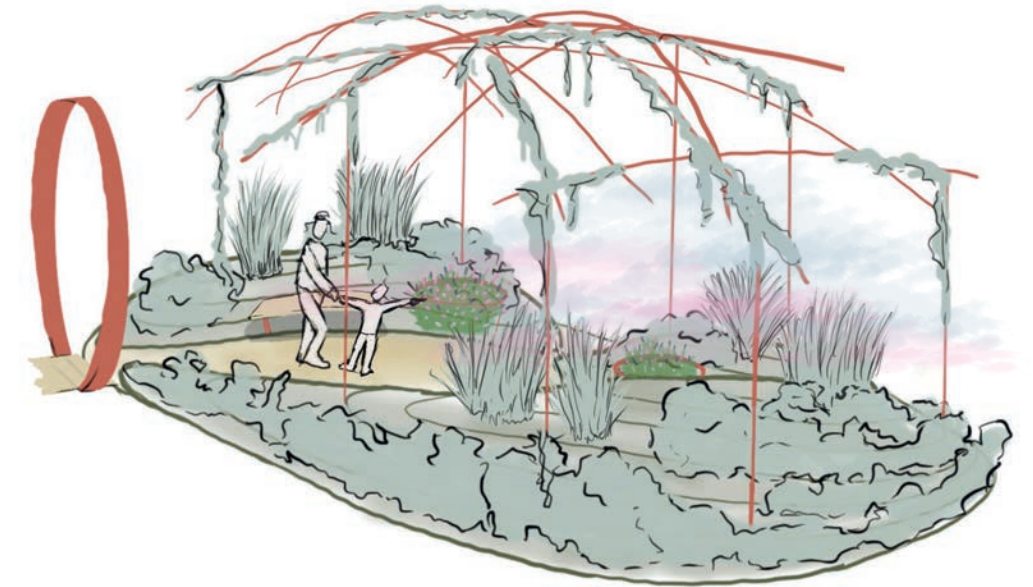
THE GARDEN

raised planting areas
+ places of rest
movement + recovery



THE EXPERIENCE

the windpipe as a path +
sensory/ filtering/ healing
plants



Perspective: The third dimension of the lungs is highlighted by overgrown arches (climbing plants)

Planting Concept



HEALING

plants with healing effects
for respiratory diseases
e.g. Echinacea + Mentha



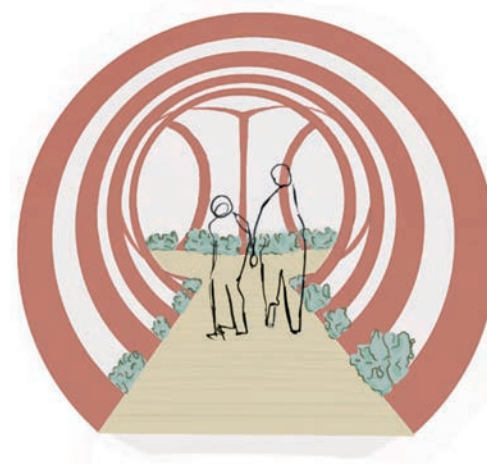
FILTERING

plants with filtering + cleaning
function for the lungs
e.g. Verbascum + Chrysanthemum



SENSORY

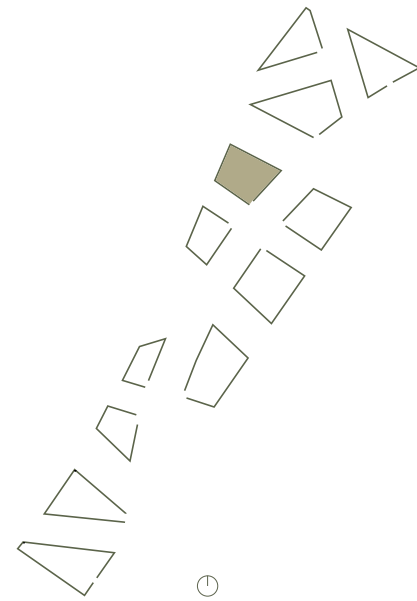
plants for conscious perception +
delightful scent
e.g. Lavandula + Thymus



Detail: Entrance through the
windpipe



Detail: 'Alveolus' with healing/ filtering/ sensory plants



DESIGN OF THE LUNGS_

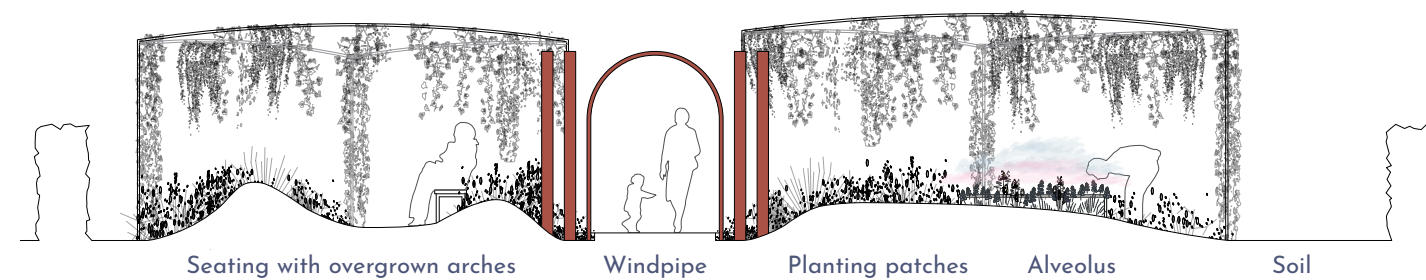
_At first sight you can't see what's in the garden, because you have to enter the curved windpipe. The garden reveals itself in organic forms:

The lungs consist of different planting patches which vary in shape, size and height. Healing, filtering and sensory plants strengthen the idea of green lungs as a healthy garden because plants deliver us oxygen. Flowers and herbs which are connected to the lungs can be perceived and/ or picked in designated areas, the so-called 'alveoli'. Little panels provide information about the plants and just like our respiratory organ needs care, the visitors can decide whether they pick or leave the flowers and herbs on their own.

It is up to us to enter the space through the windpipe, to consciously perceive, to dive into the three-dimensional body of the green lungs and to restore the flow of breathing.



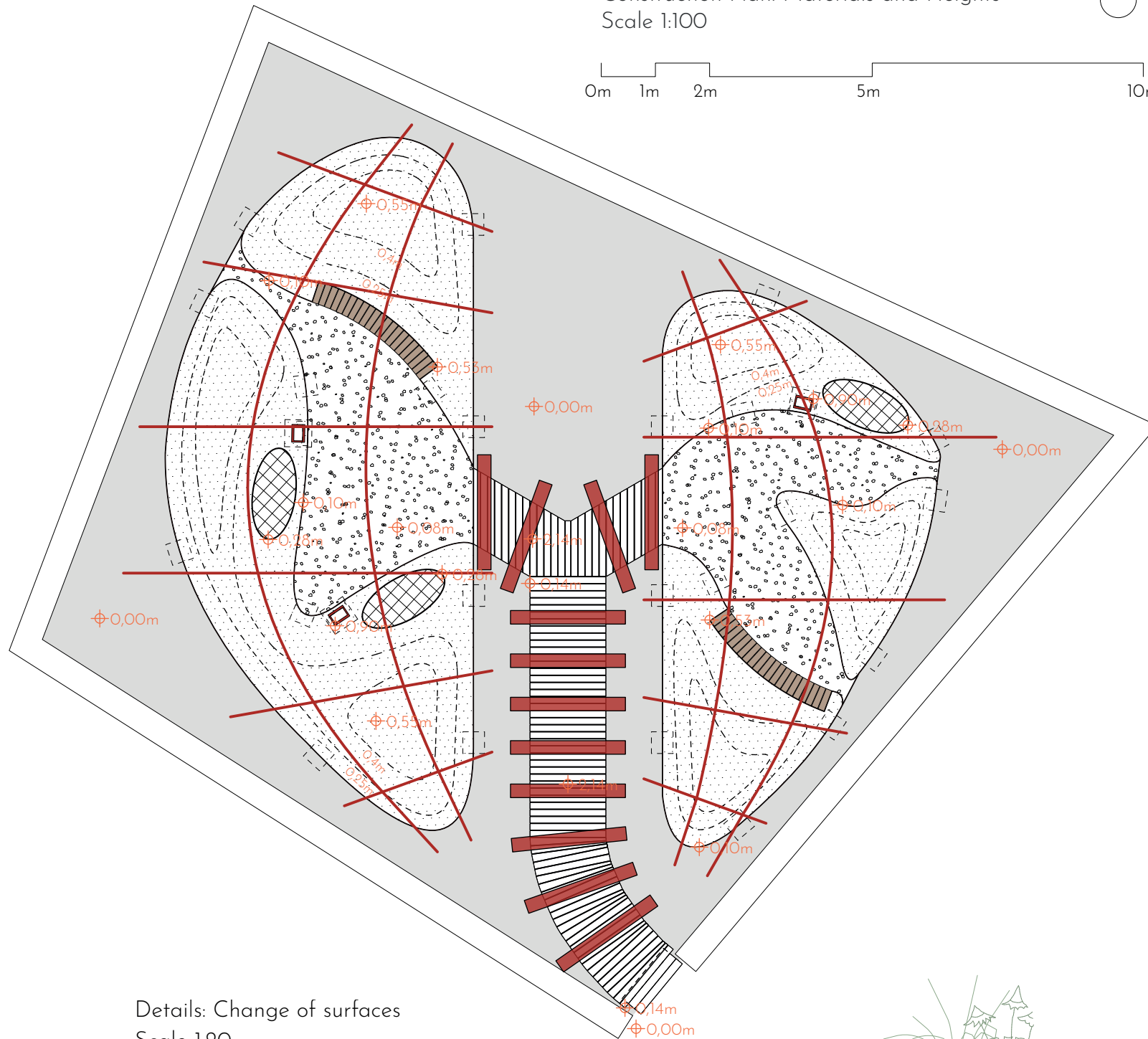
Ground Plan + Section
Scale 1:100



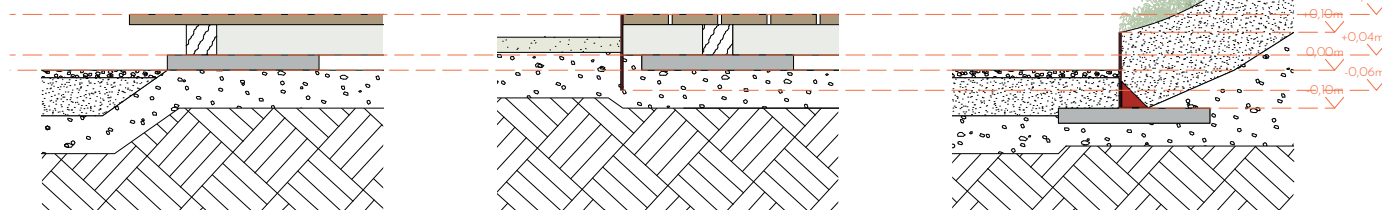
02_01 CONSTRUCTION PLAN | MATERIALS

Construction Plan: Materials and Heights
Scale 1:100

0m 1m 2m 5m 10m



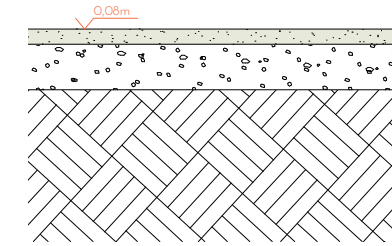
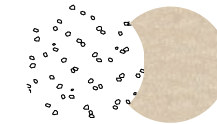
Details: Change of surfaces
Scale 1:20



Chippings/Soil -
Wooden Deck

Waterbound Cover -
Wooden Deck

Chippings/Soil -
Raised Planting Beds



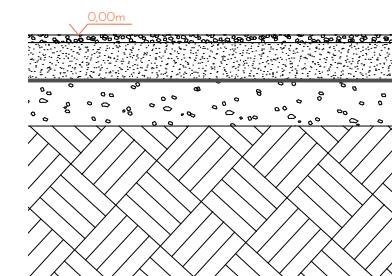
Detail Waterbound Cover
Scale 1:20

4cm Covering, colour: gold-ochre
Sand, gravel, chippings 0/5
12cm Gravel 0/32

Existing ground



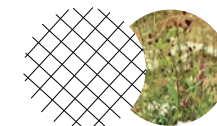
Detail Wooden Deck
See 03_01



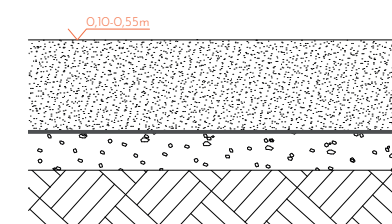
Detail Chippings/Soil
Scale 1:20

2cm Lava chippings 8/16, colour: reddish black
10cm Planting soil
0,1cm Garden fleece
10cm Gravel 0/32

Existing ground



Detail Alveolus
See 03_04

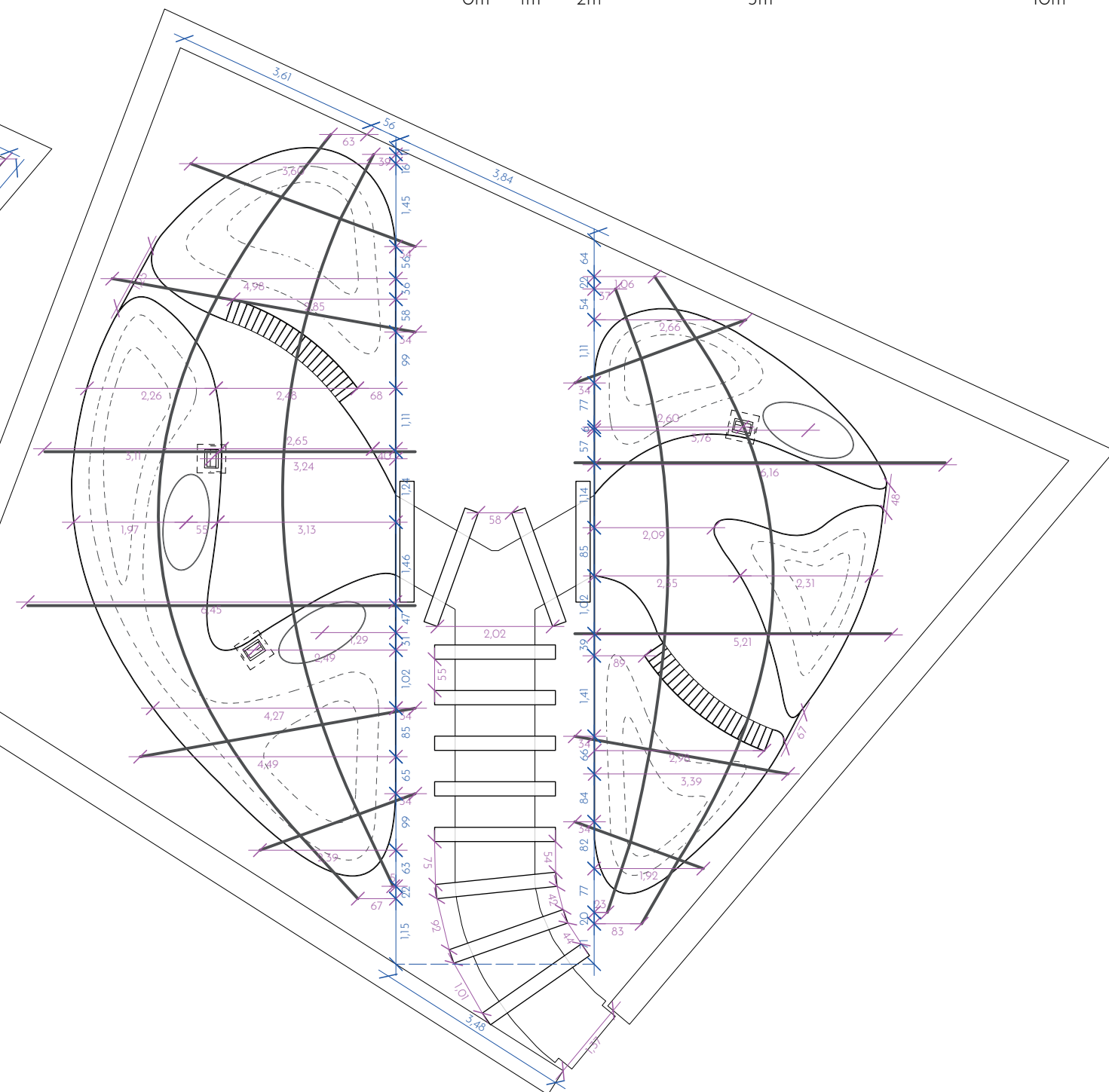
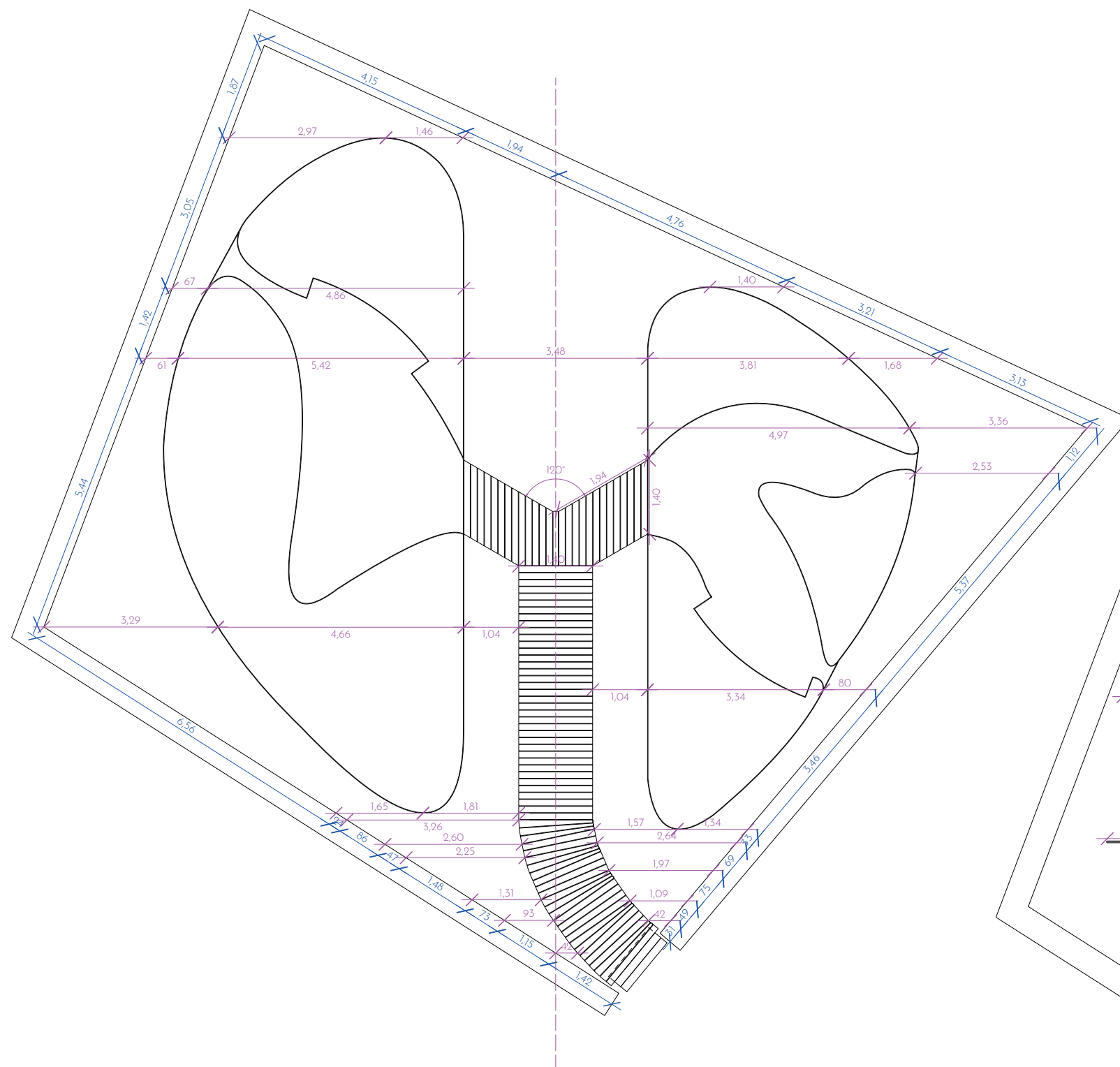
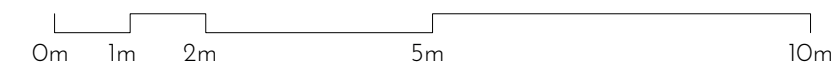


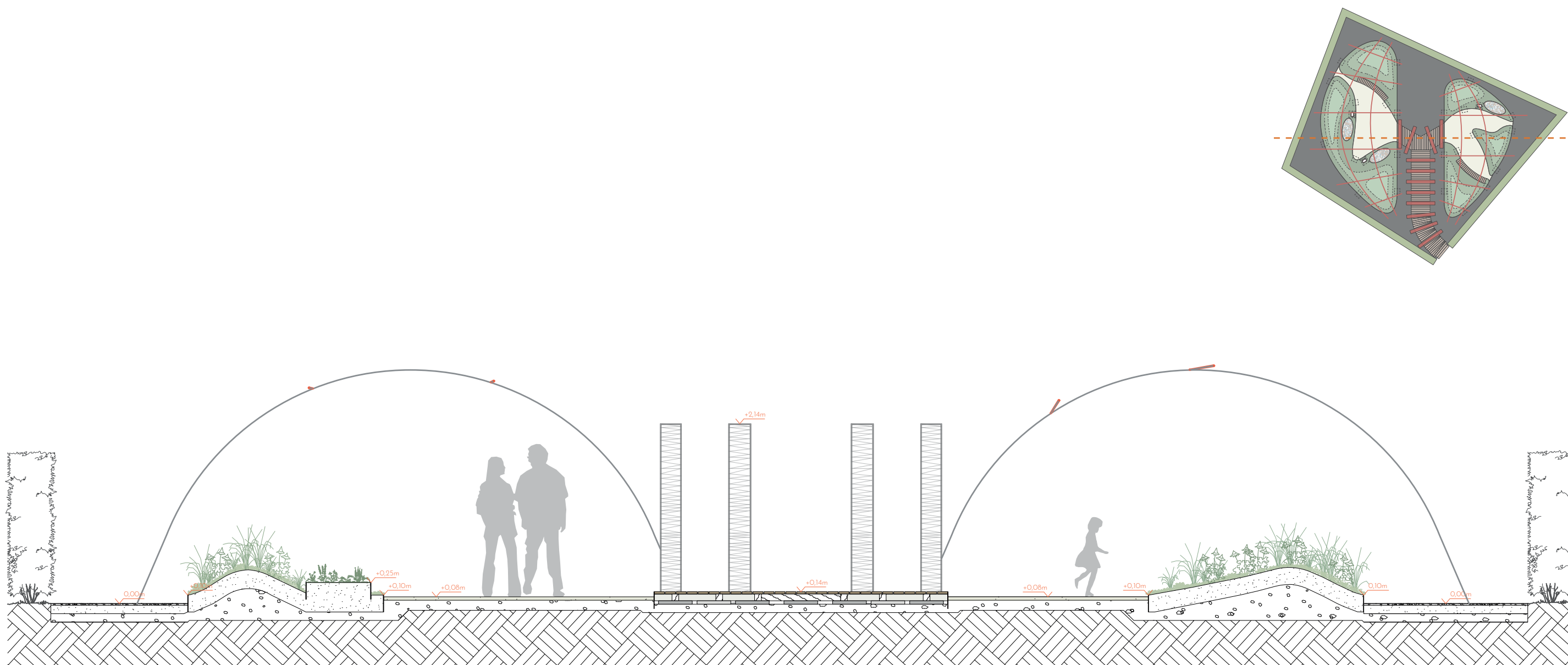
Detail Raised Planting Beds
Scale 1:20

20cm Planting soil
0,1cm Garden fleece
1-50cm Gravel 0/32
(filling for different heights)
Existing ground

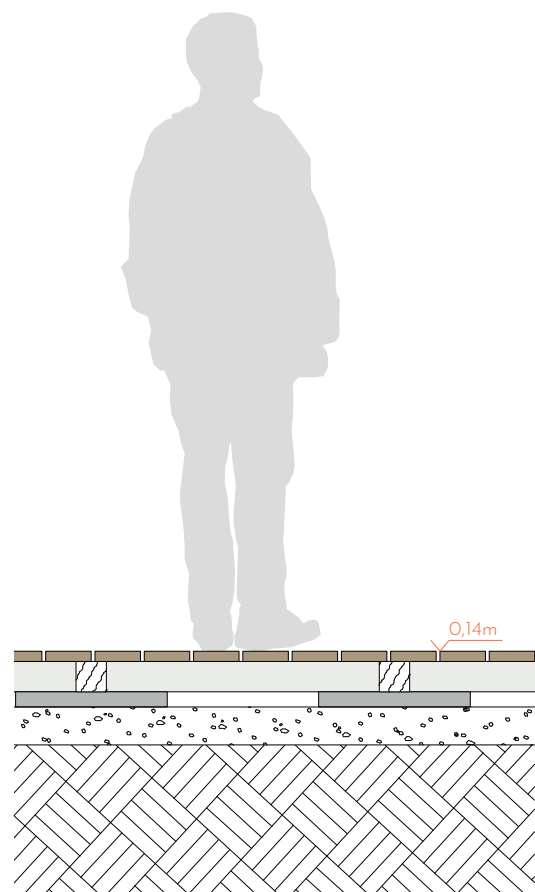
02_02 CONSTRUCTION PLAN | DIMENSIONS

Construction Plan: Dimensions outer/inner elements
Scale 1:100





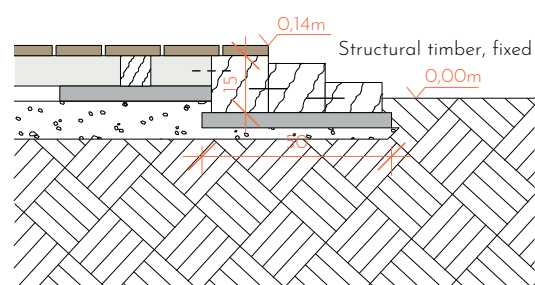
Scale 1:50



Detail: Section Wooden Deck
Scale 1:20

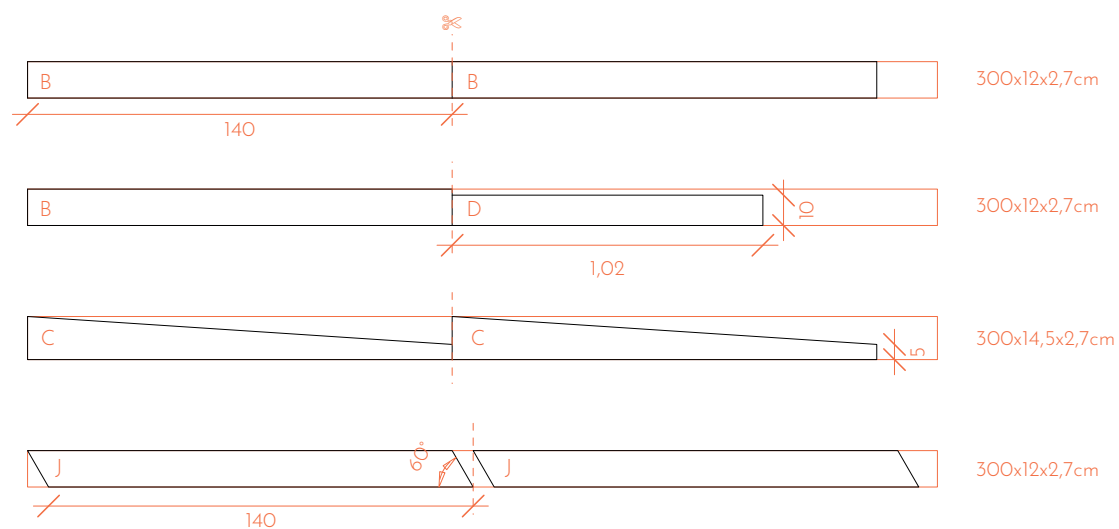
2,7cm Wooden board 12/140
8cm Structural timber 8/140
4cm Garden plate 40/40
10cm Gravel 0/32

Existing ground

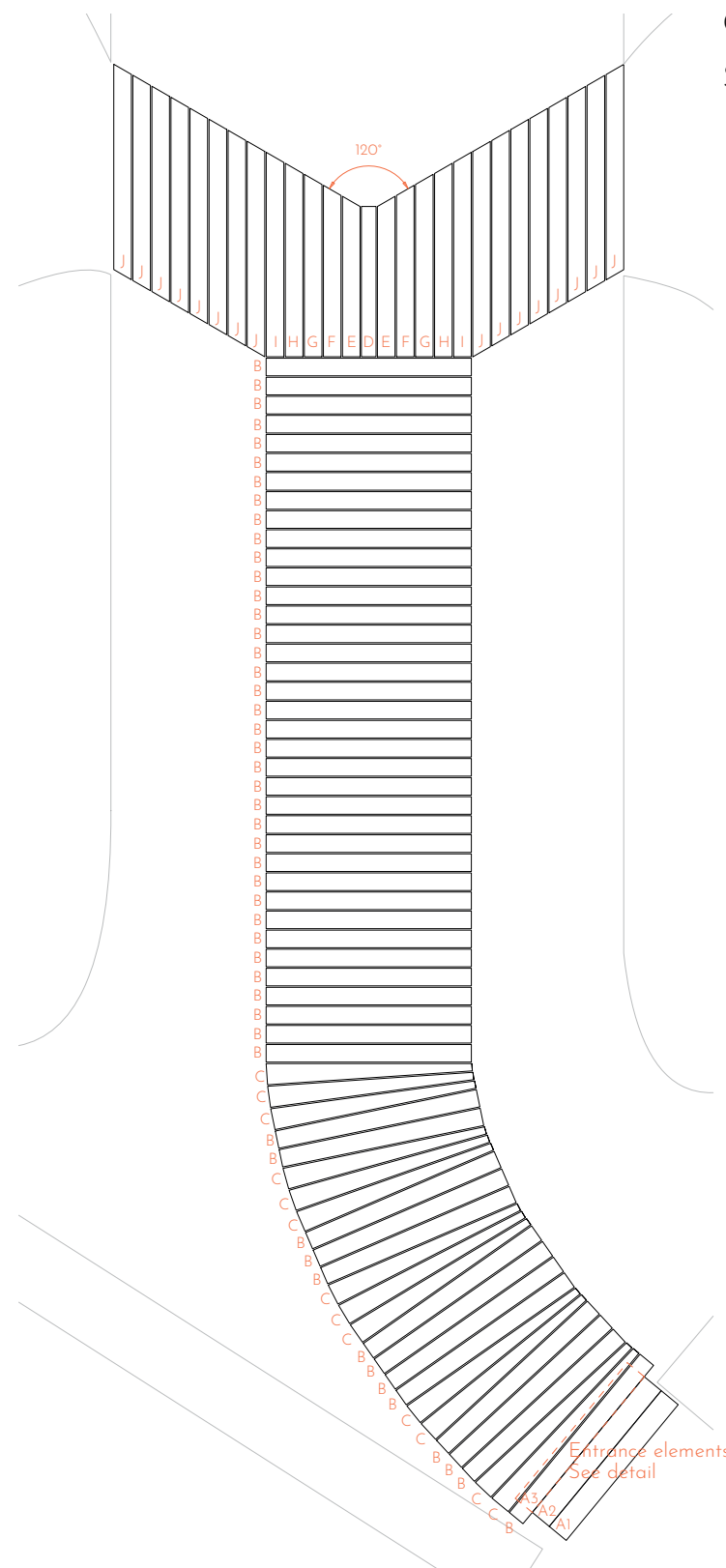


Detail Entrance: Elements A1-A3
Scale 1:20

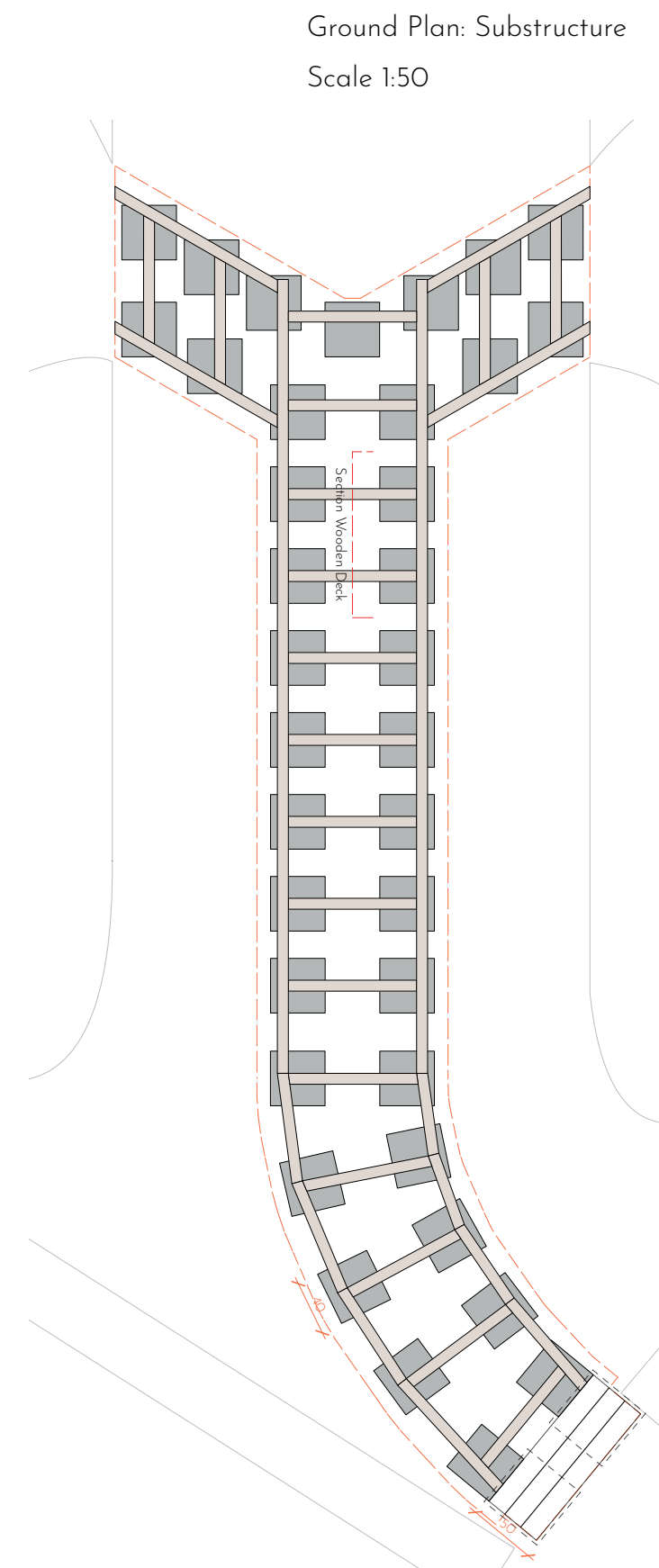
Proposal for cutting wooden boards A-J
Scale 1:25



Principle: Cut other elements (E-I) at same angle (60°)



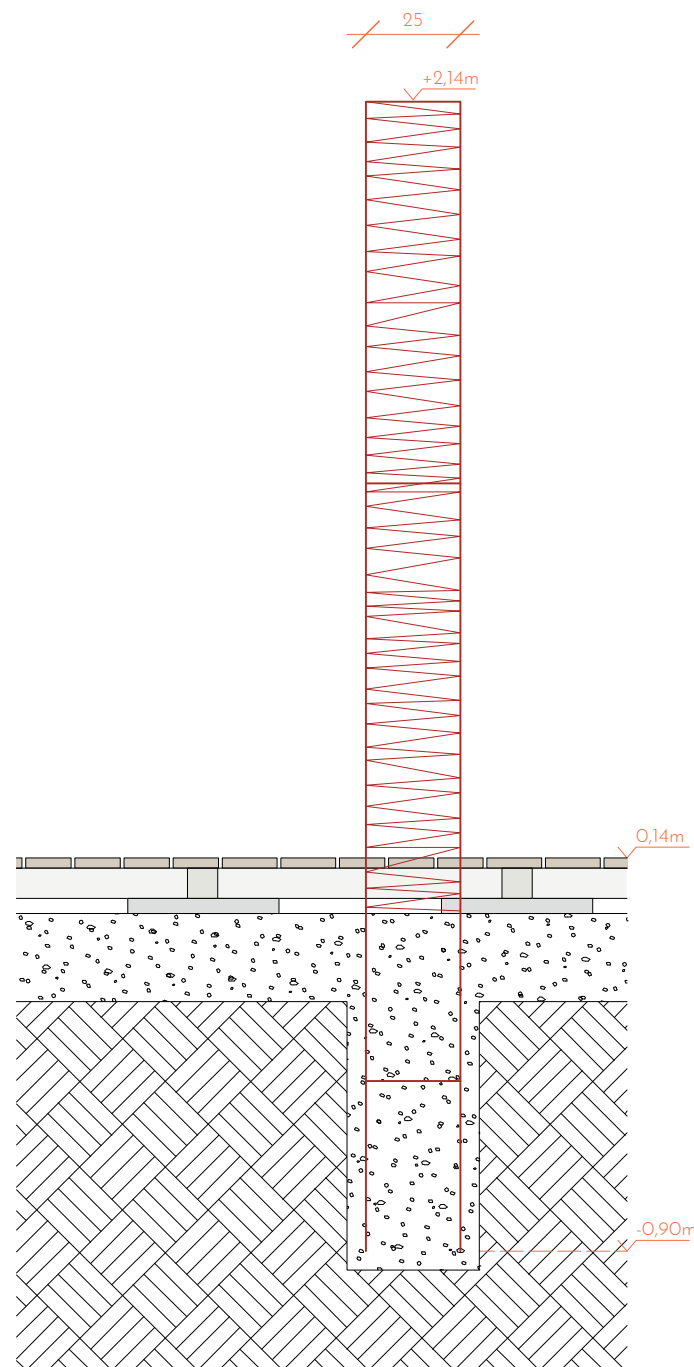
Ground Plan: Elements A-J
Scale 1:50



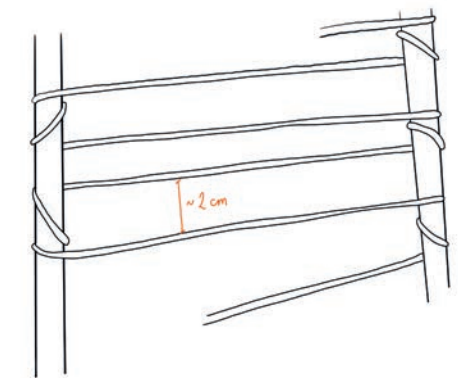
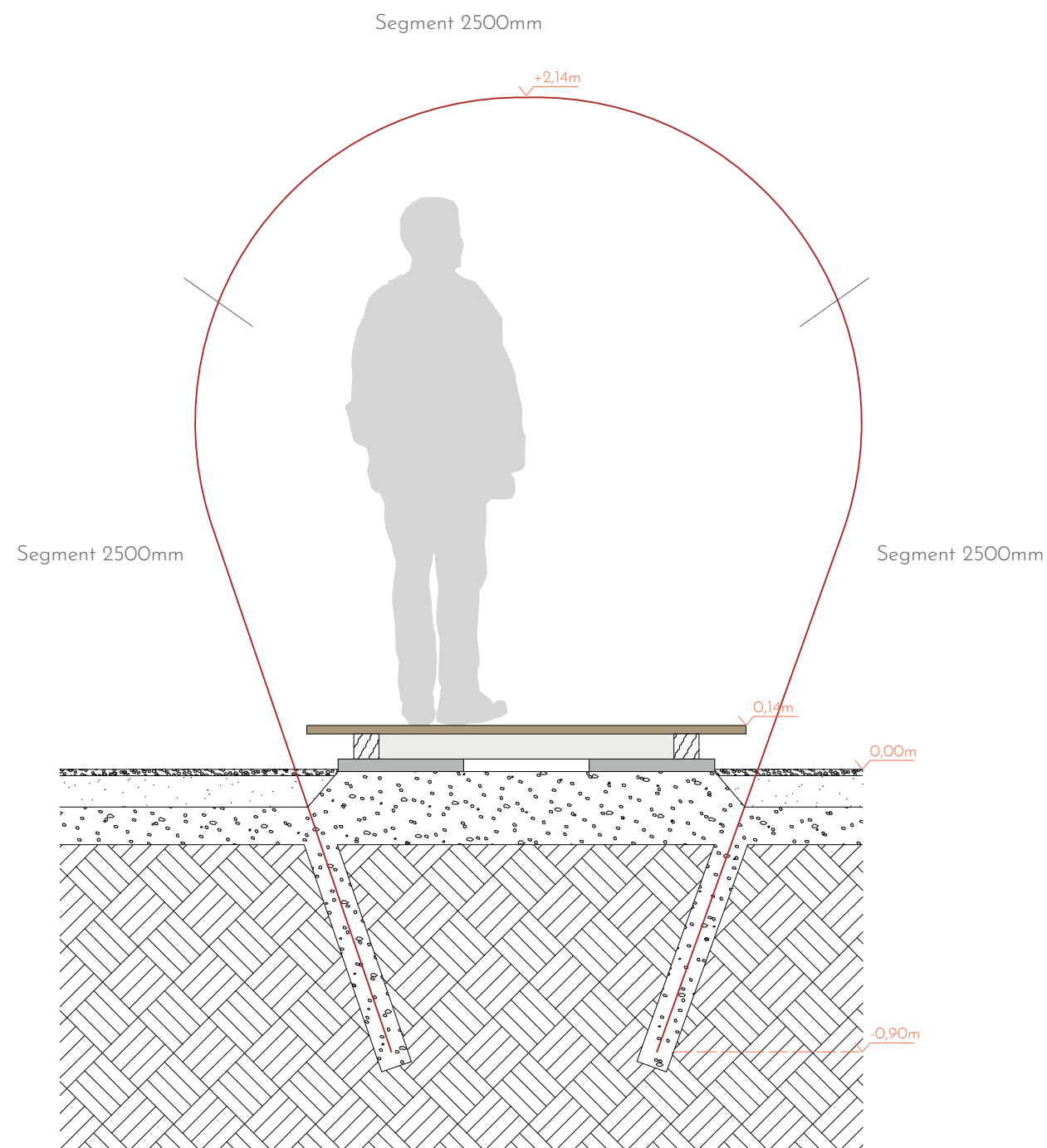
Ground Plan: Substructure
Scale 1:50

03_02 SCAFFOLD ('WINDPIPE')

Detail Windpipe, Scale 1:20
Material: rebar 10mm thickness



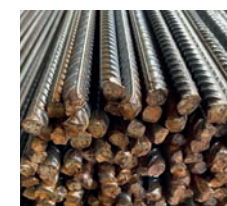
Section Windpipe, Scale 1:20
Total length 7,5m, radius 1m
Material: rebar 10mm thickness



Detail: Proposal for knotting



Polypropylen string, 3mm
Colour: 'Light Brown'

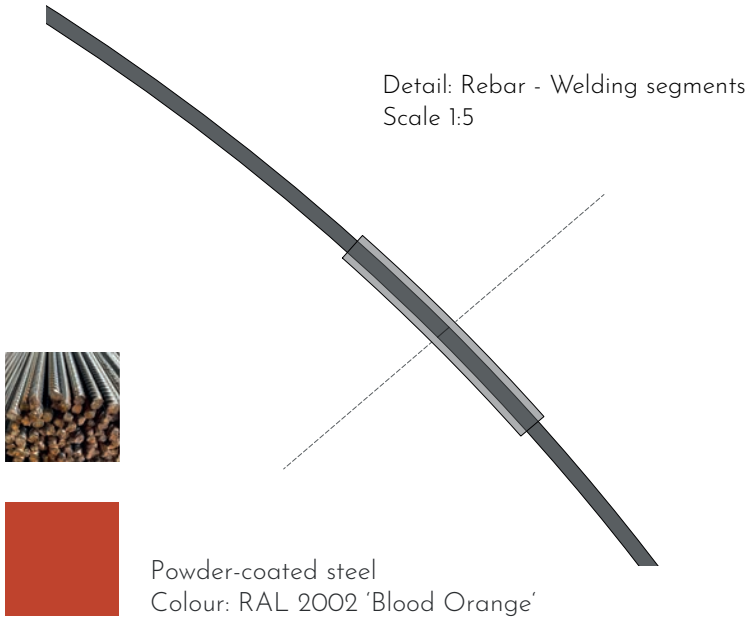
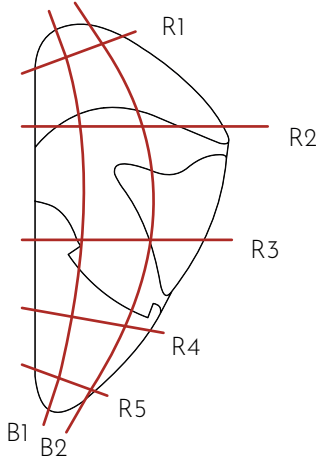


Rebar, 10mm

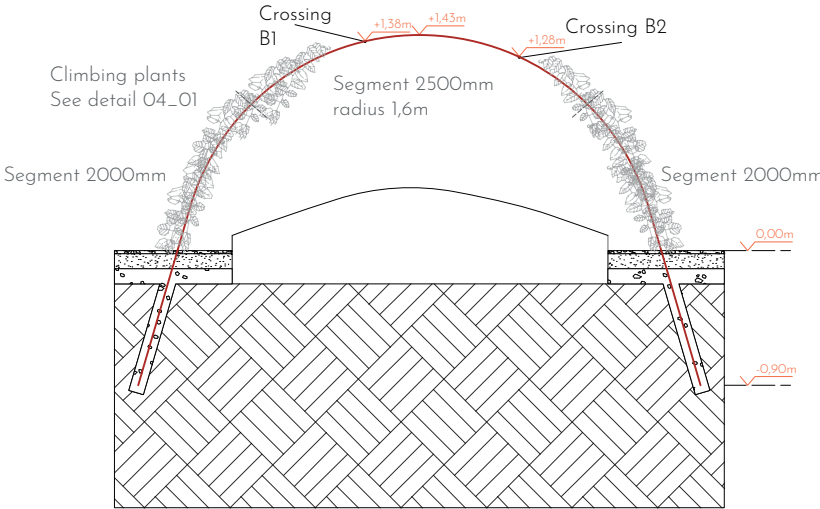


Powder-coated steel
Colour: RAL 2002 'Blood Orange'

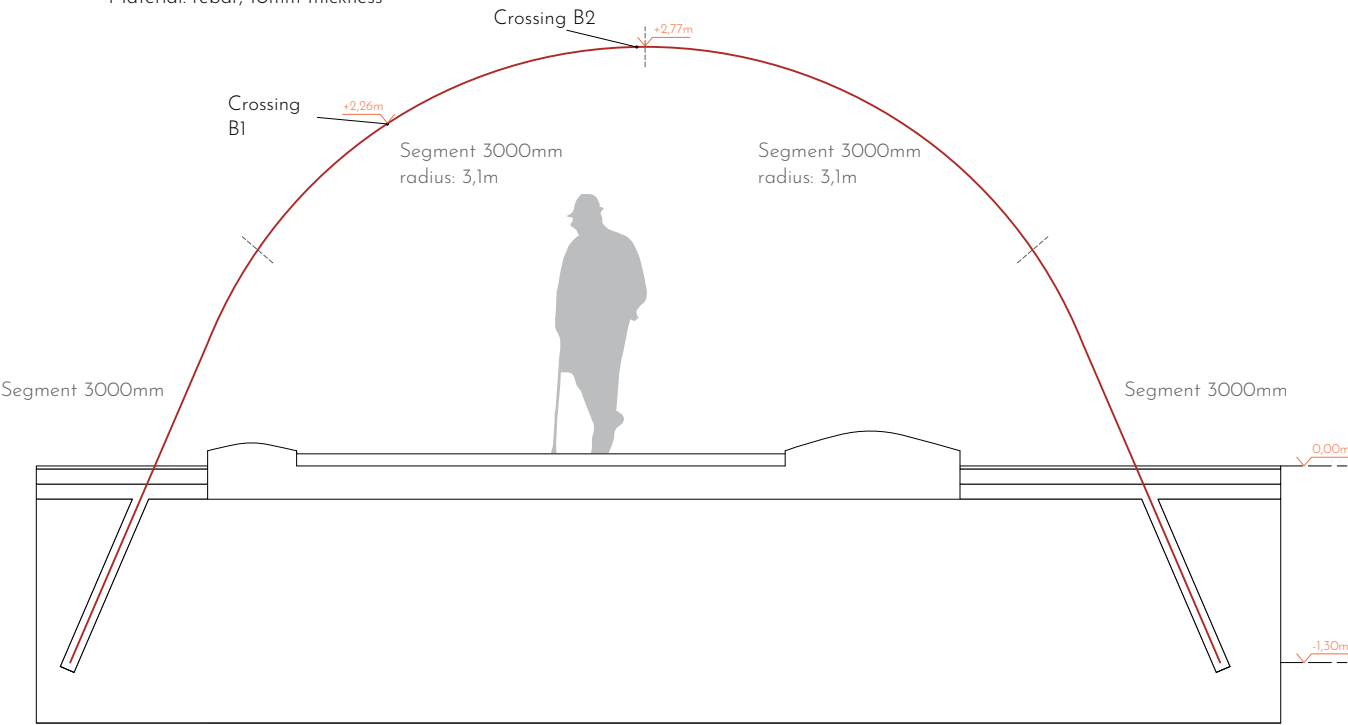
[All arches are overgrown with climbing plants]



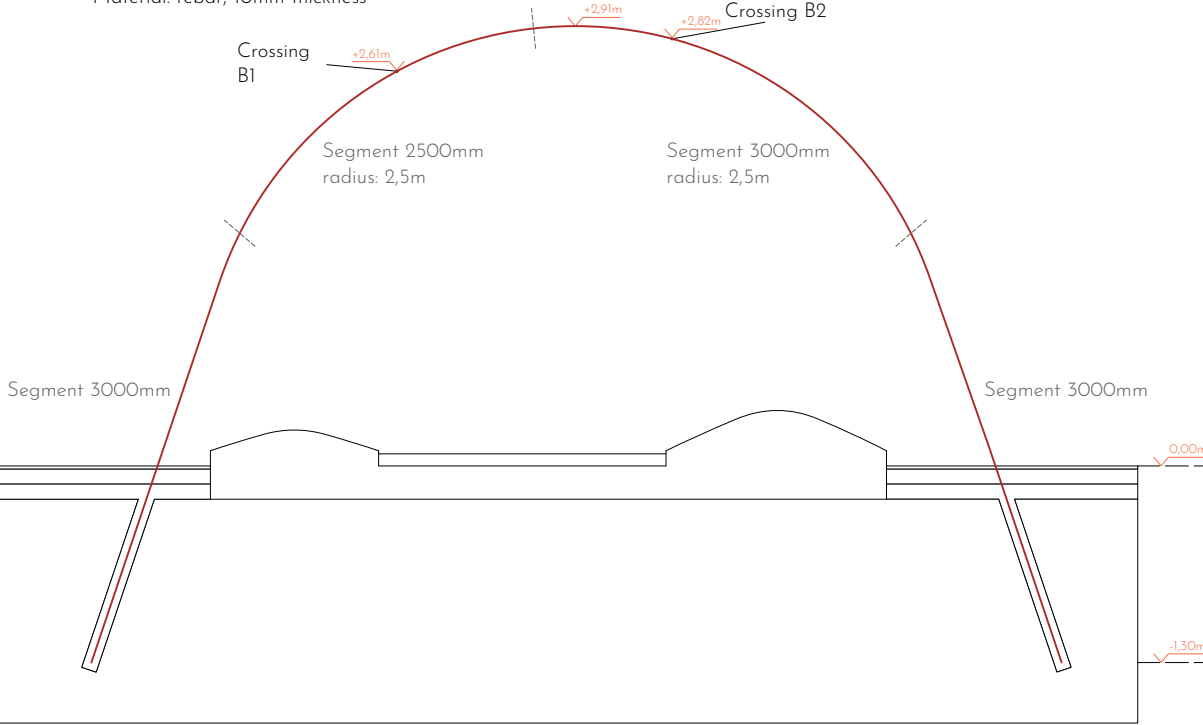
Detail R1 - Rebar Arc, Scale 1:50
Total length of arc 6,5m
Material: rebar, 10mm thickness



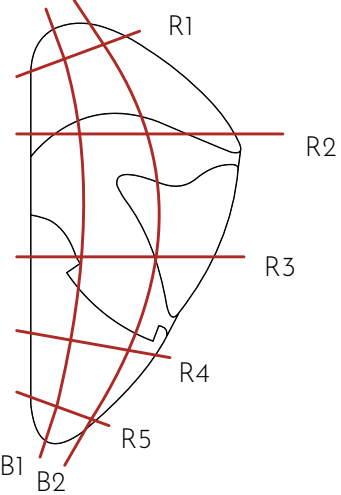
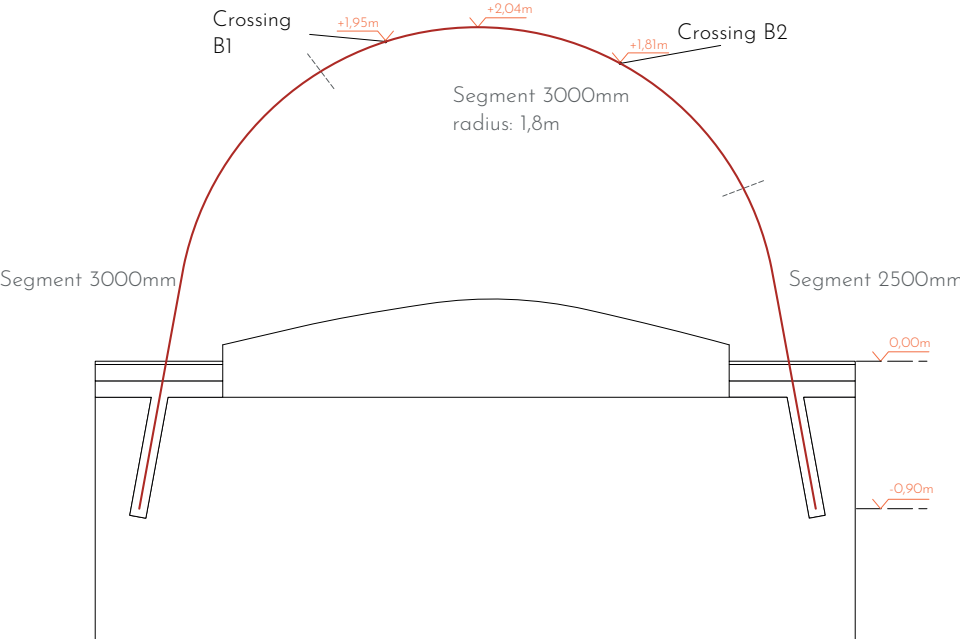
Detail R2 - Rebar Arc, Scale 1:50
Total length of arc 12m
Material: rebar, 10mm thickness



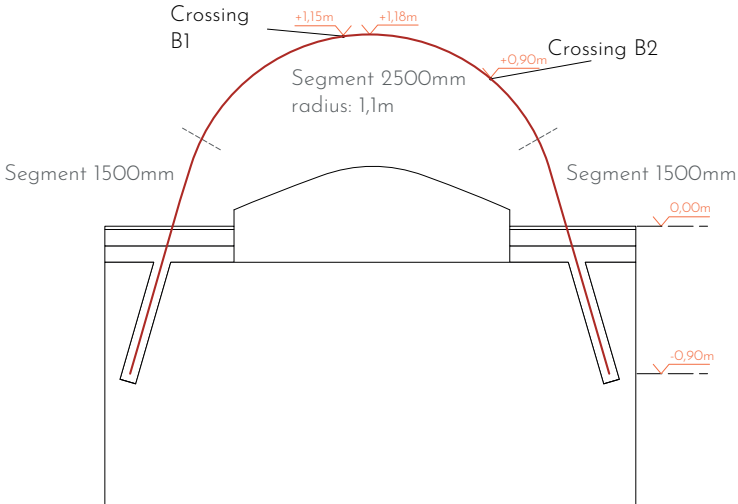
Detail R3 - Rebar Arc, Scale 1:50
Total length of arc 11,5m
Material: rebar, 10mm thickness



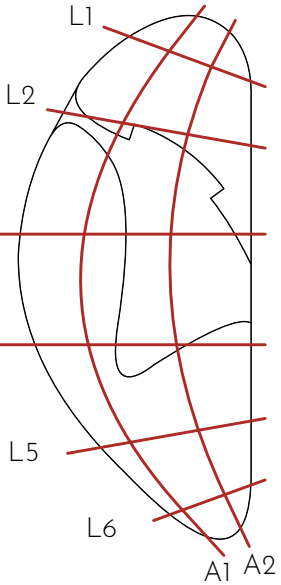
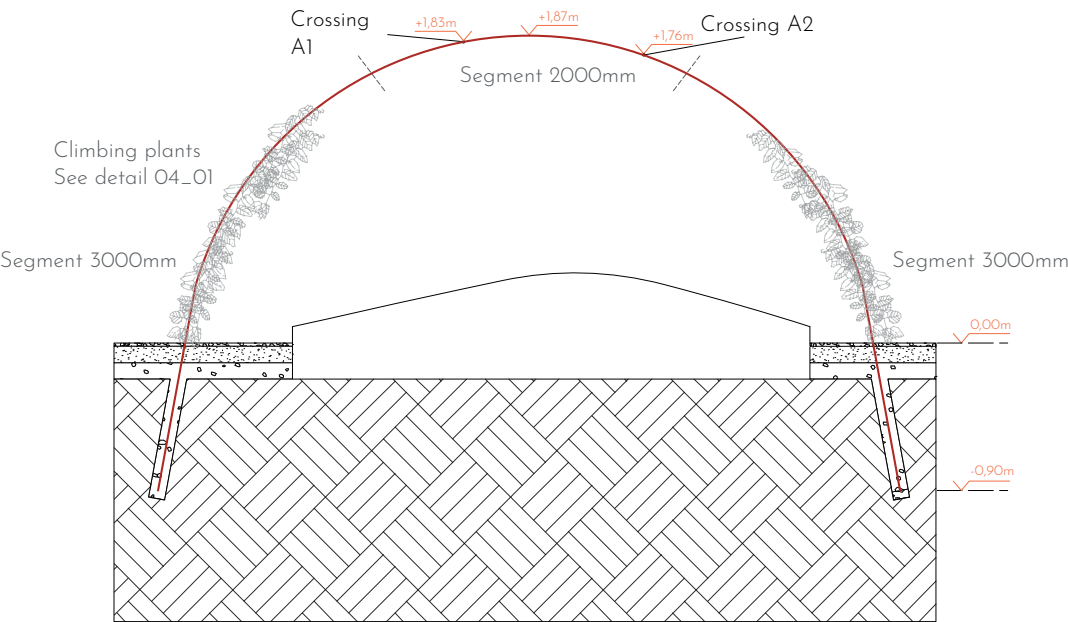
Detail R4 - Rebar Arc, Scale 1:50
Total length of arc 8m
Material: rebar, 10mm thickness



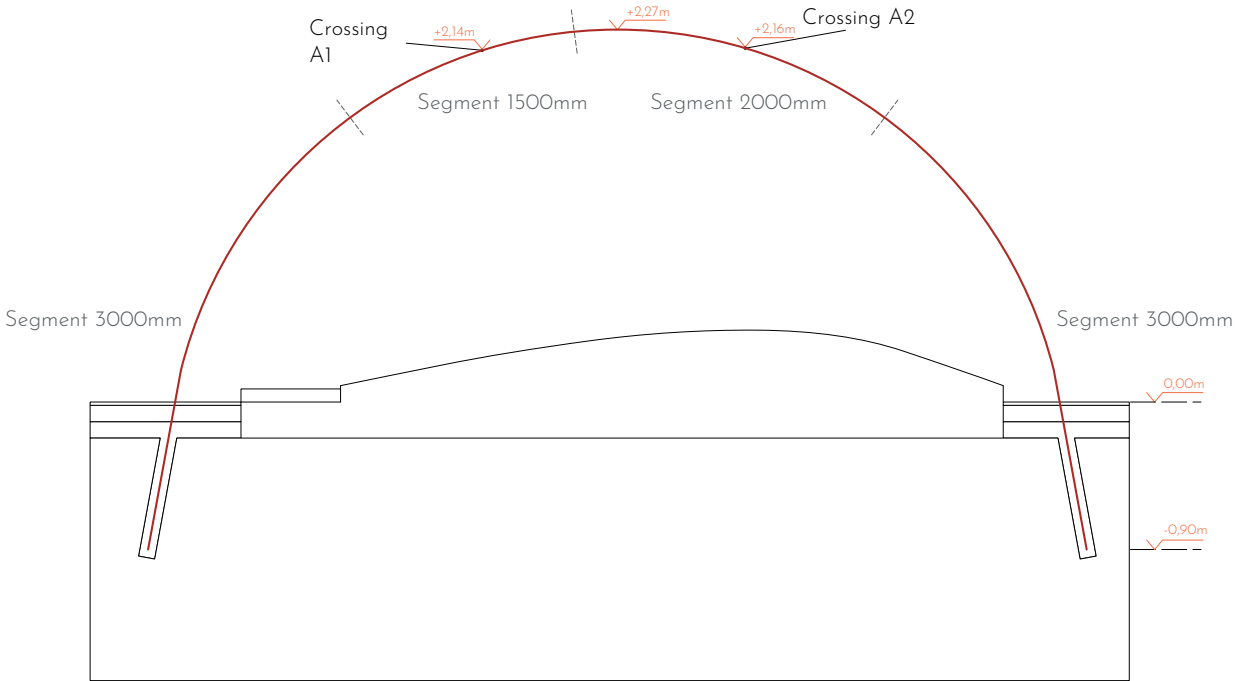
Detail R5 - Rebar Arc, Scale 1:50
Total length of arc 5,5m
Material: rebar, 10mm thickness



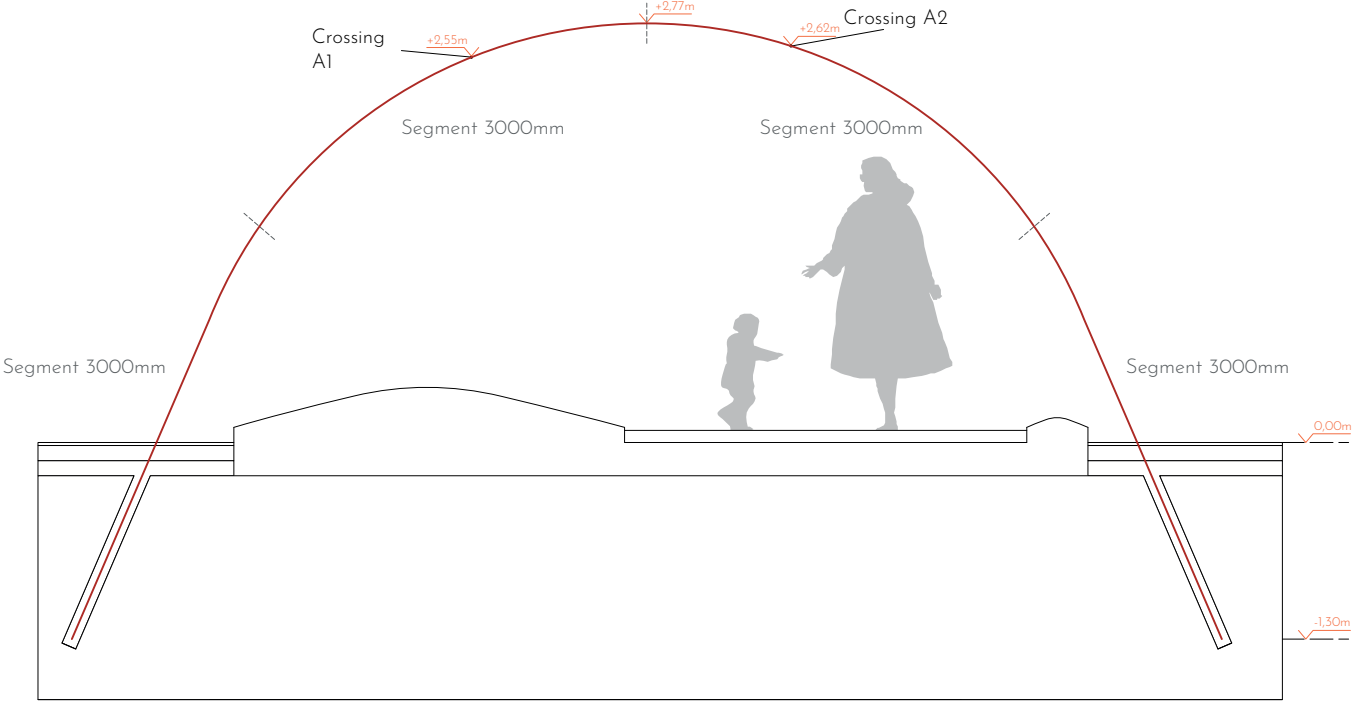
Detail L1 - Rebar Arc, Scale 1:50
Total length of arc 8m, radius 2,1m
Material: rebar, 10mm thickness



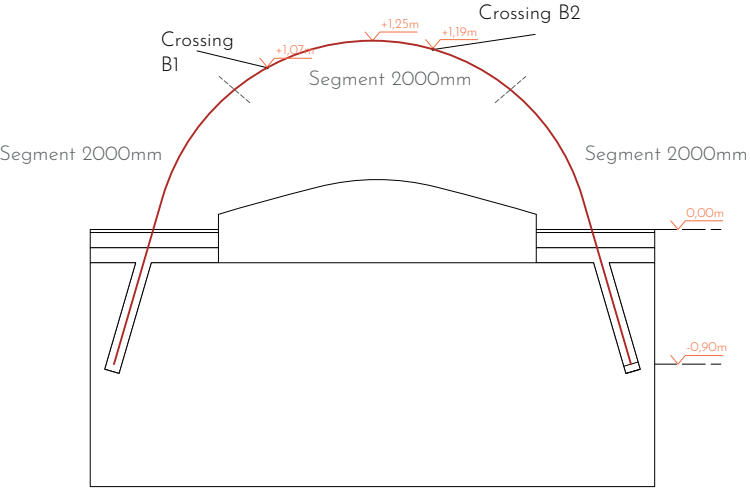
Detail L2 - Rebar Arc, Scale 1:50
Total length of arc 9,5m, radius 2,7m
Material: rebar, 10mm thickness



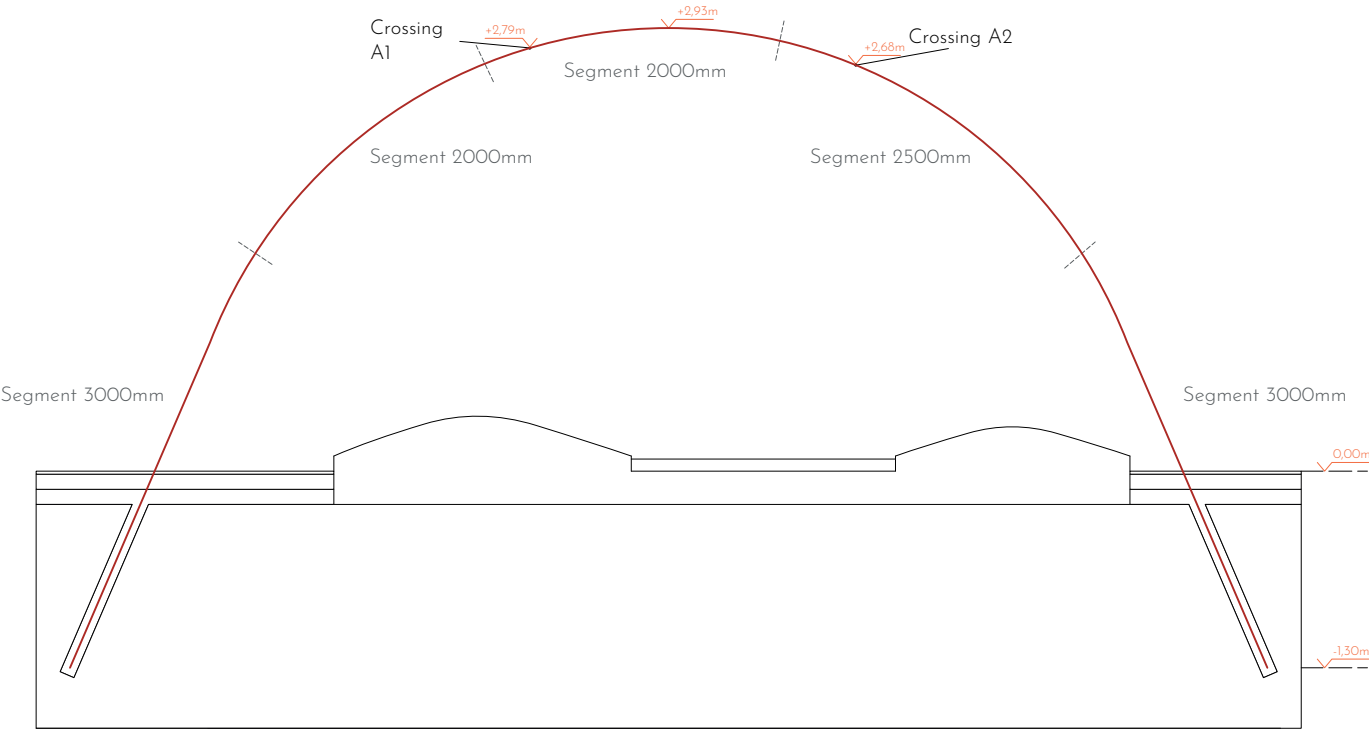
Detail L3 - Rebar Arc, Scale 1:50
Total length of arc 12m, radius 3,1m
Material: rebar, 10mm thickness



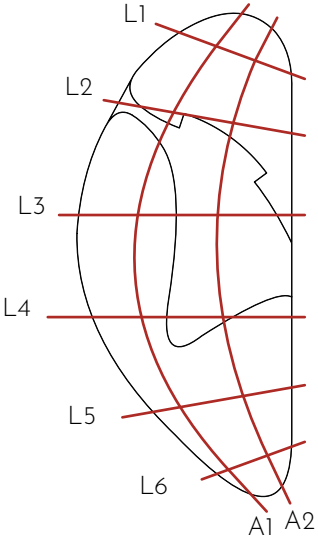
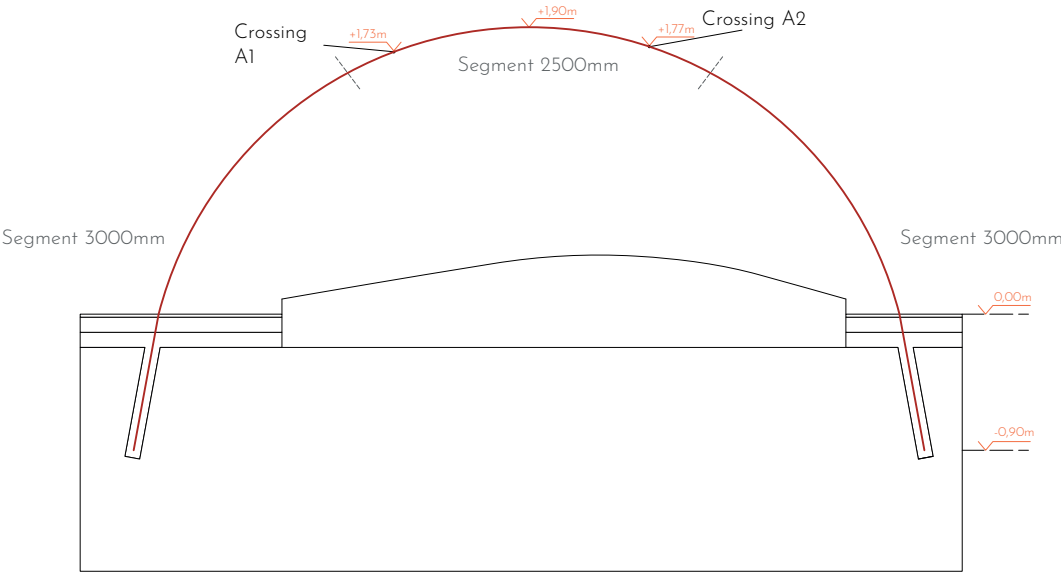
Detail L6 - Rebar Arc, Scale 1:50
Total length of arc 6m, radius 1,45m
Material: rebar, 10mm thickness

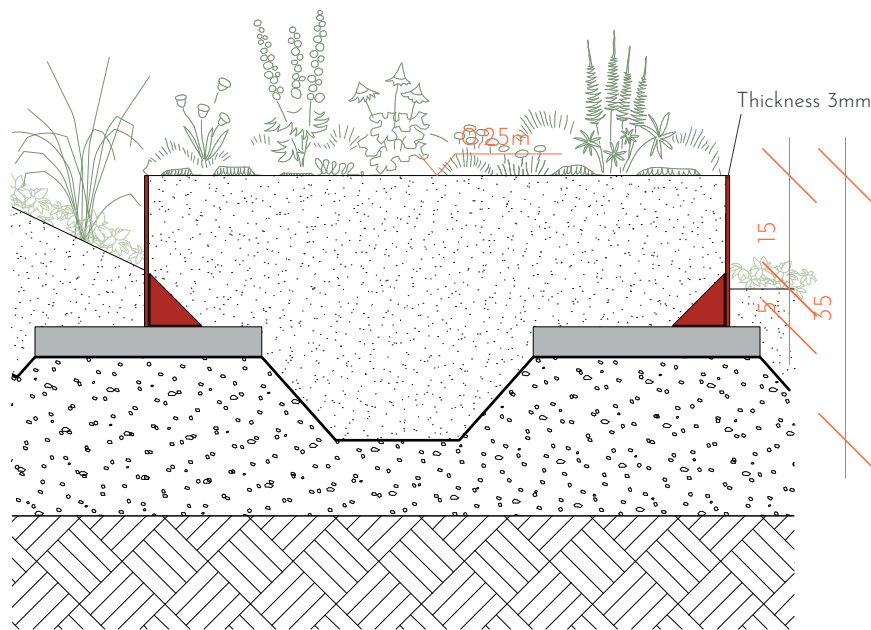


Detail L4 - Rebar Arc, Scale 1:50
Total length of arc 12,5m, radius 3,25m
Material: rebar, 10mm thickness



Detail L5 - Rebar Arc, Scale 1:50
Total length of arc 8,5m, radius 2,5m
Material: rebar, 10mm thickness





Detail: Alveolus
Scale 1:20

20cm Steel edge, powder-coated with RAL 2002
on a garden plate 30x30x4cm

35cm Planting soil

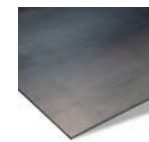
0,1cm Garden fleece

10cm Gravel 0/32

Existing ground



Garden plate made
of concrete

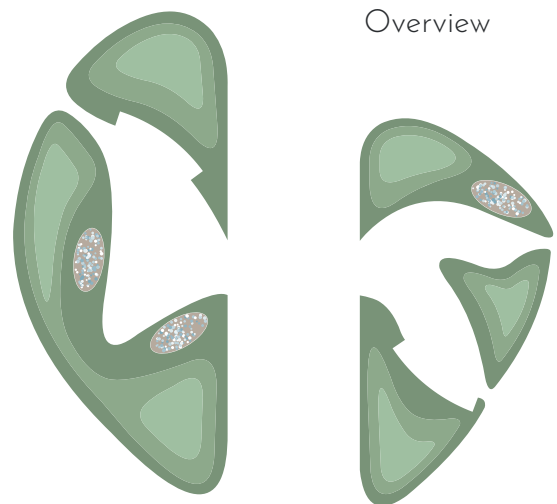


Steel edge made of plates
(3mm), fixed with steel angles

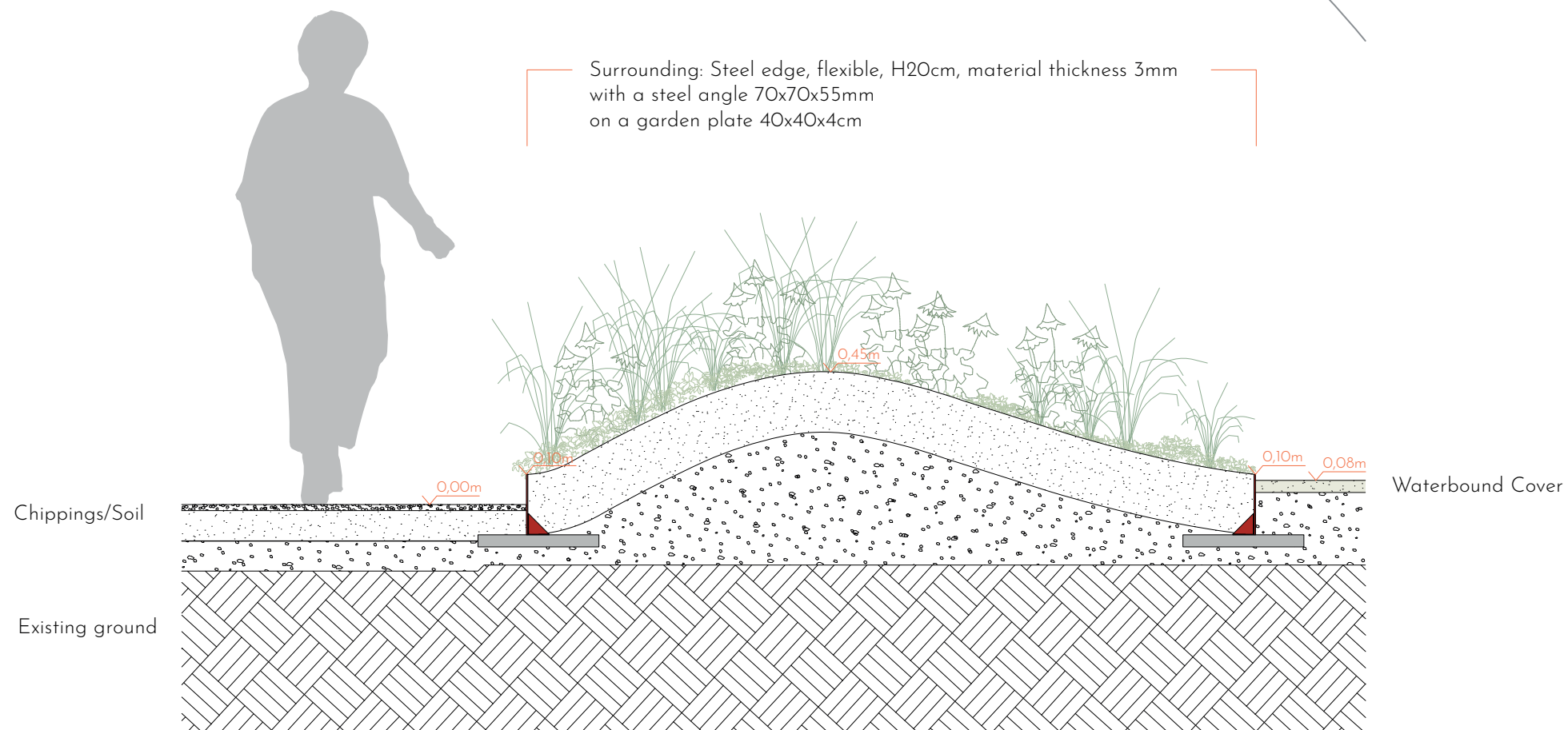


Detail: Raised planting bed
Scale 1:20

Surrounding: Steel edge, flexible, H20cm, material thickness 3mm
with a steel angle 70x70x55mm
on a garden plate 40x40x4cm



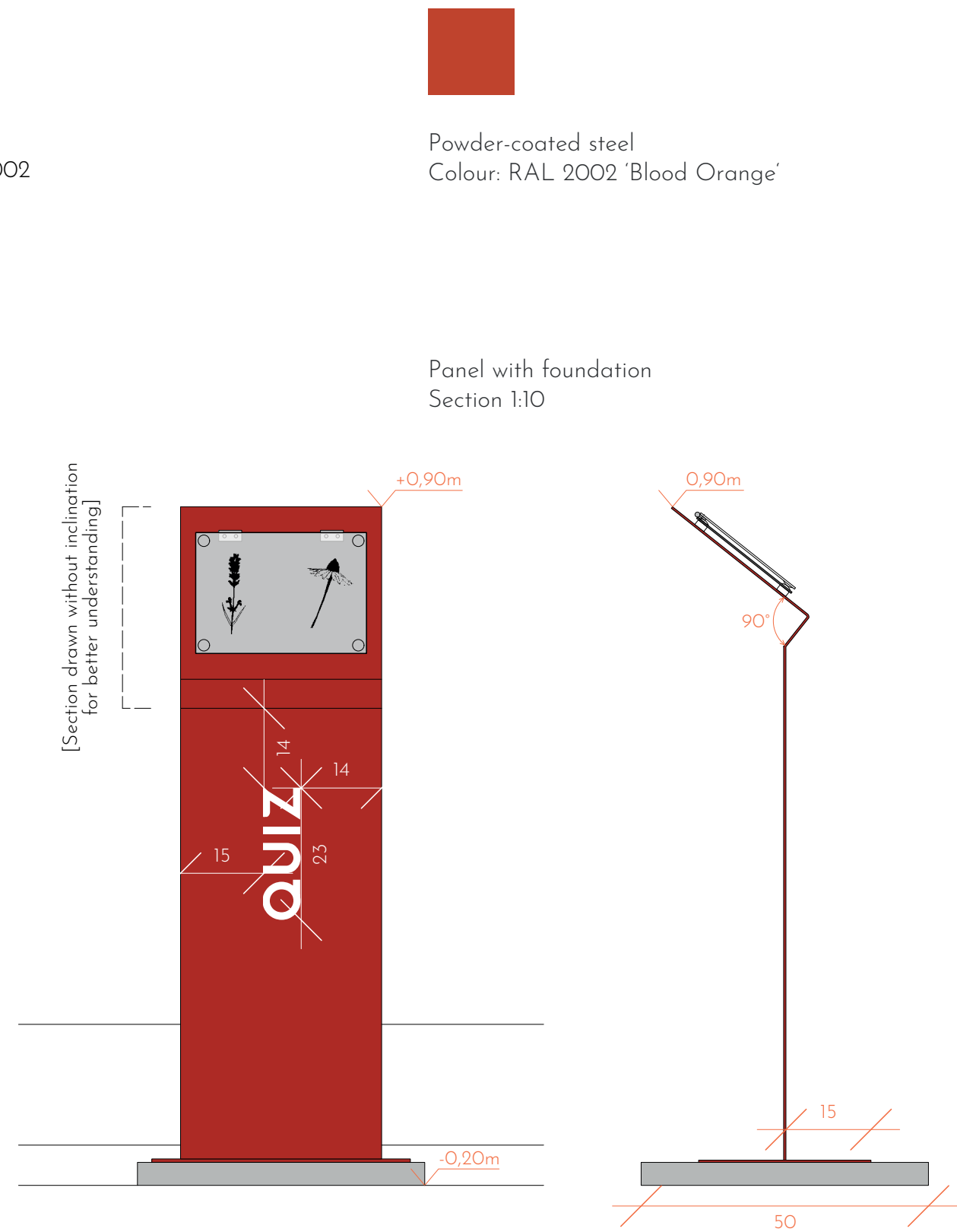
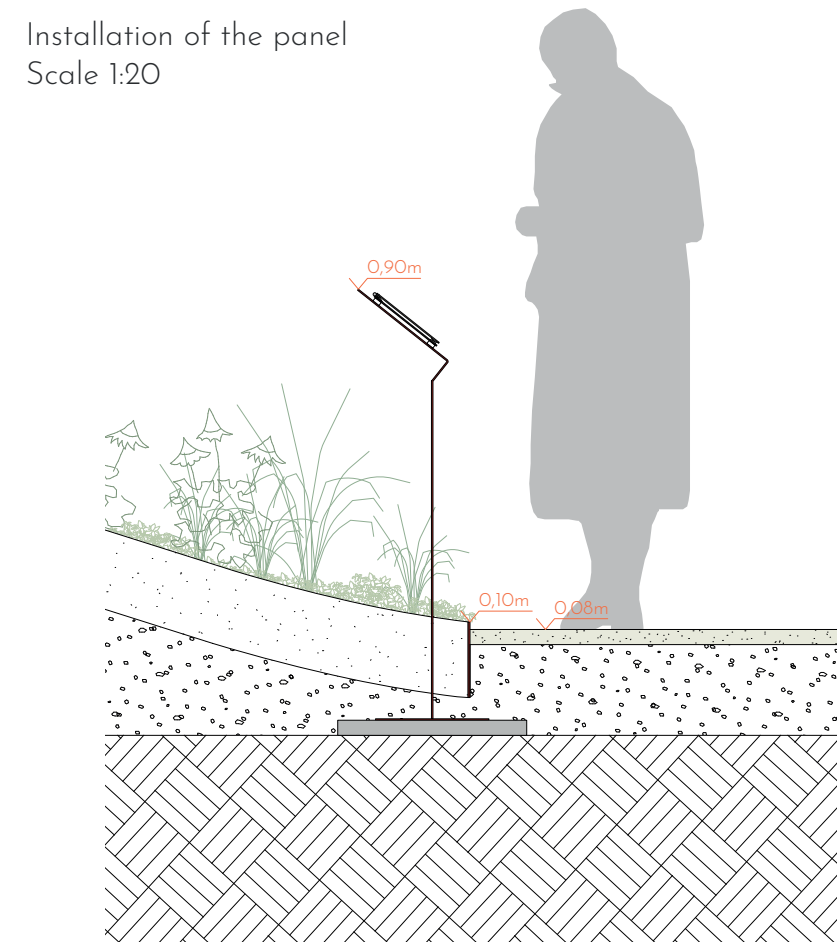
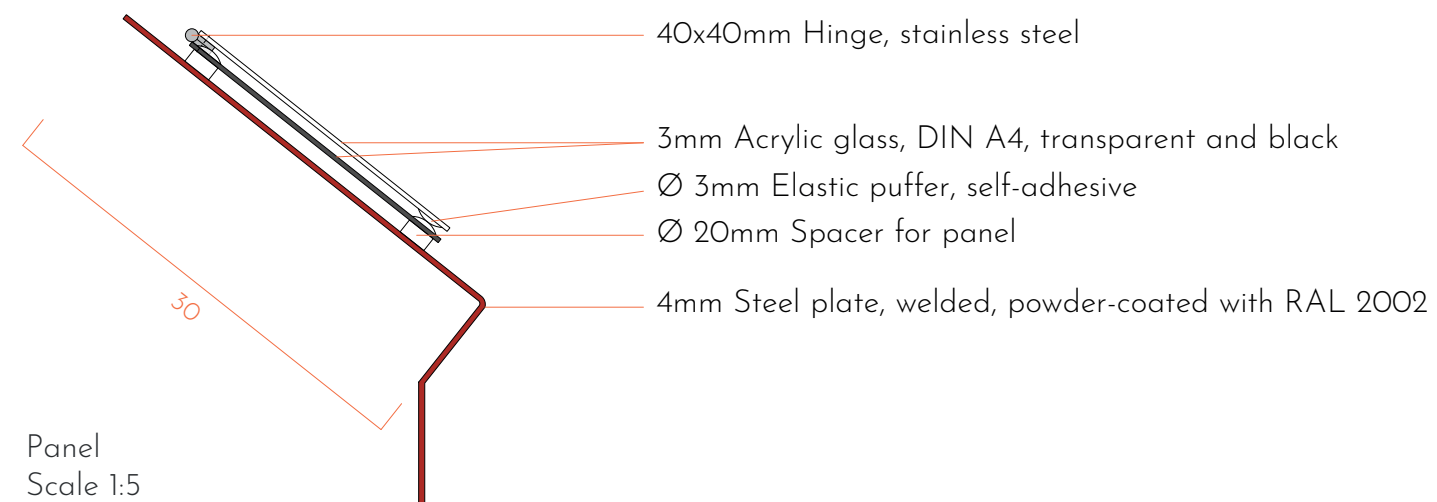
Overview



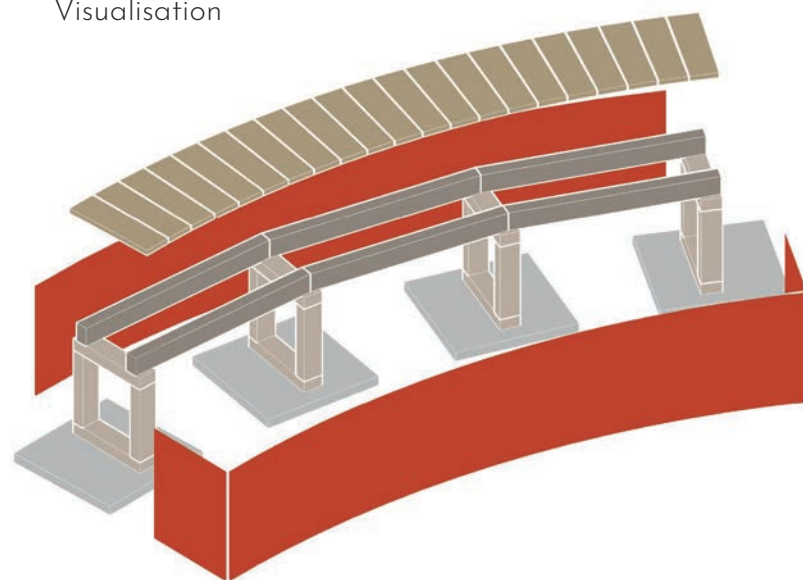
Chippings/Soil

Existing ground

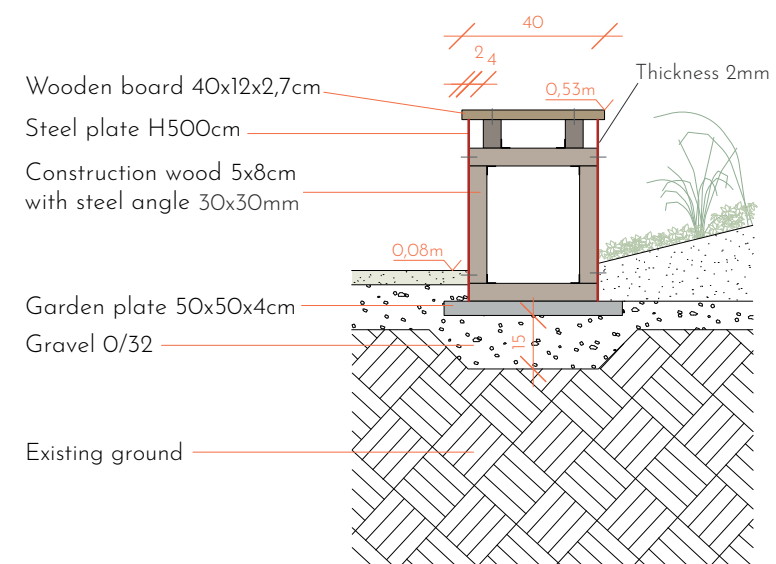
Waterbound Cover



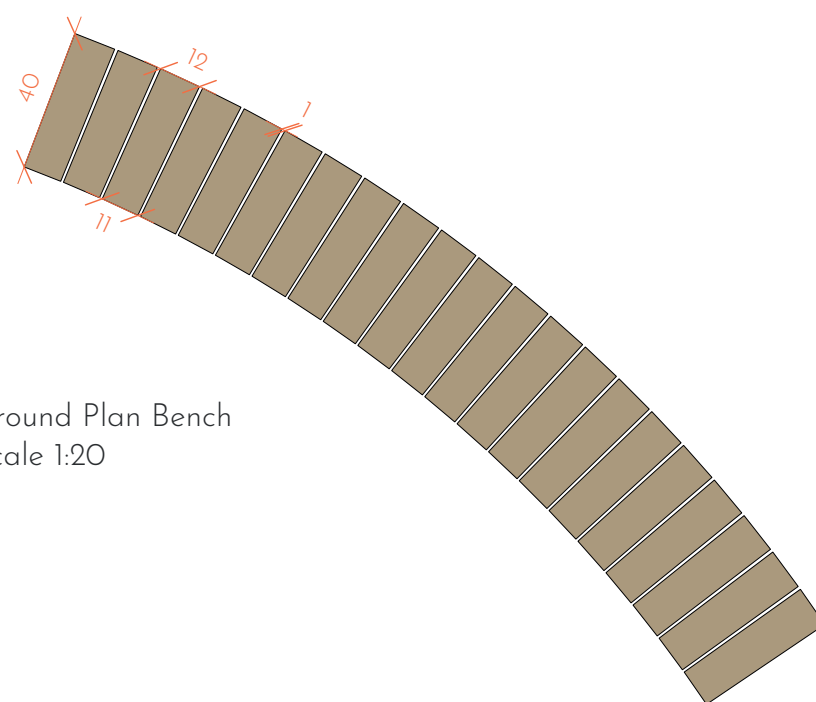
Visualisation



Detail: Section Bench
Scale 1:20

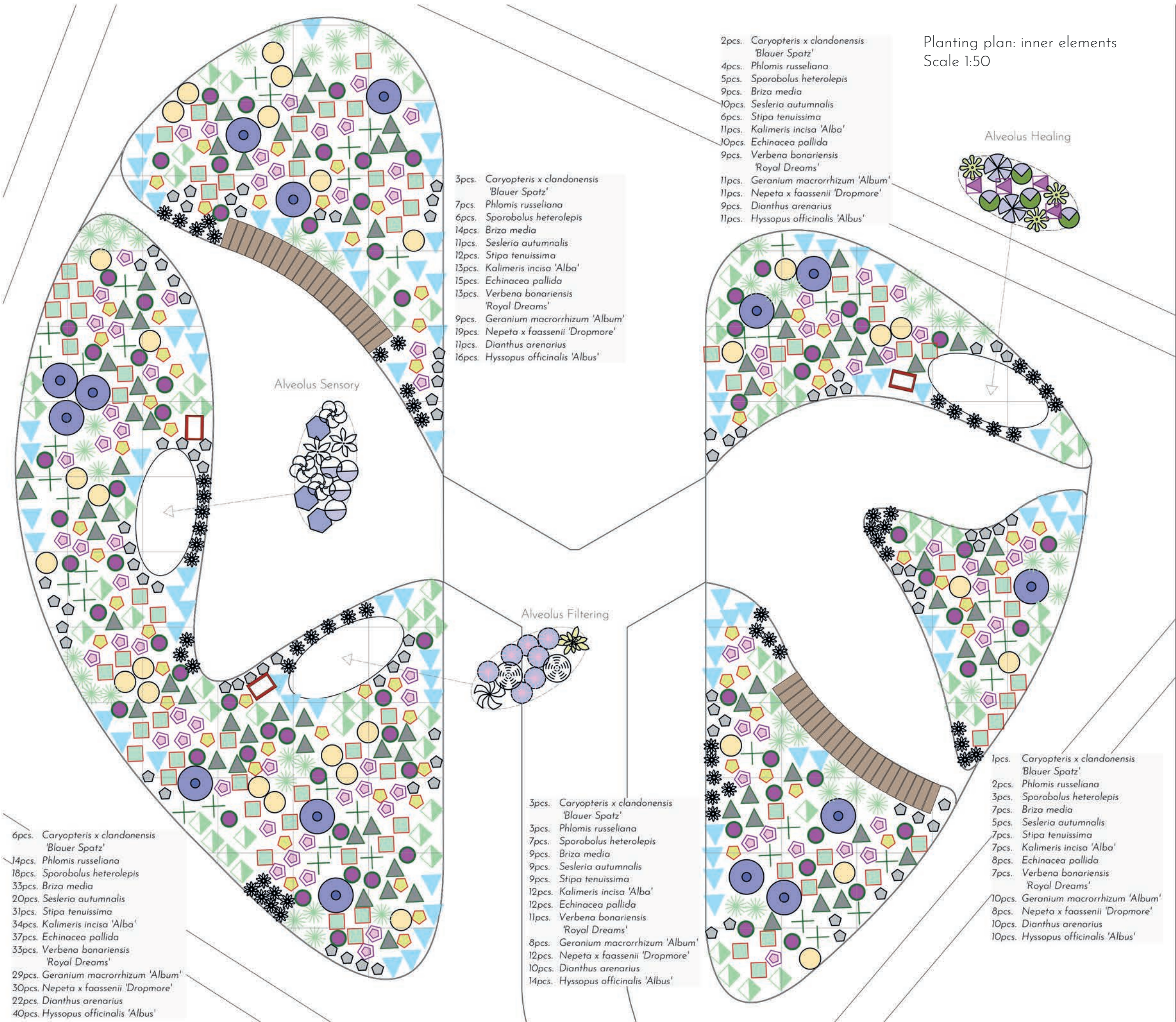


Ground Plan Bench
Scale 1:20



Powder-coated steel
Colour: RAL 2002 'Blood Orange'

Planting plan: inner elements
Scale 1:50



- Caryopteris x clandonensis* 'Blauer Spatz'
- Phlomis russeliana*
- Sporobolus heterolepis*
- Briza media*
- Sesleria autumnalis*
- Stipa tenuissima*
- Kalimeris incisa* 'Alba'
- Echinacea pallida*
- Verbena bonariensis* 'Royal Dreams'
- Geranium macrorrhizum* 'Album'
- Nepeta x faassenii* 'Dropmore'
- Dianthus arenarius*
- Hyssopus officinalis* 'Albus'

Alveolus Healing

- Salvia officinalis*
- Echinacea purpurea*
- Alchemilla epipsila*
- Mentha x piperita*

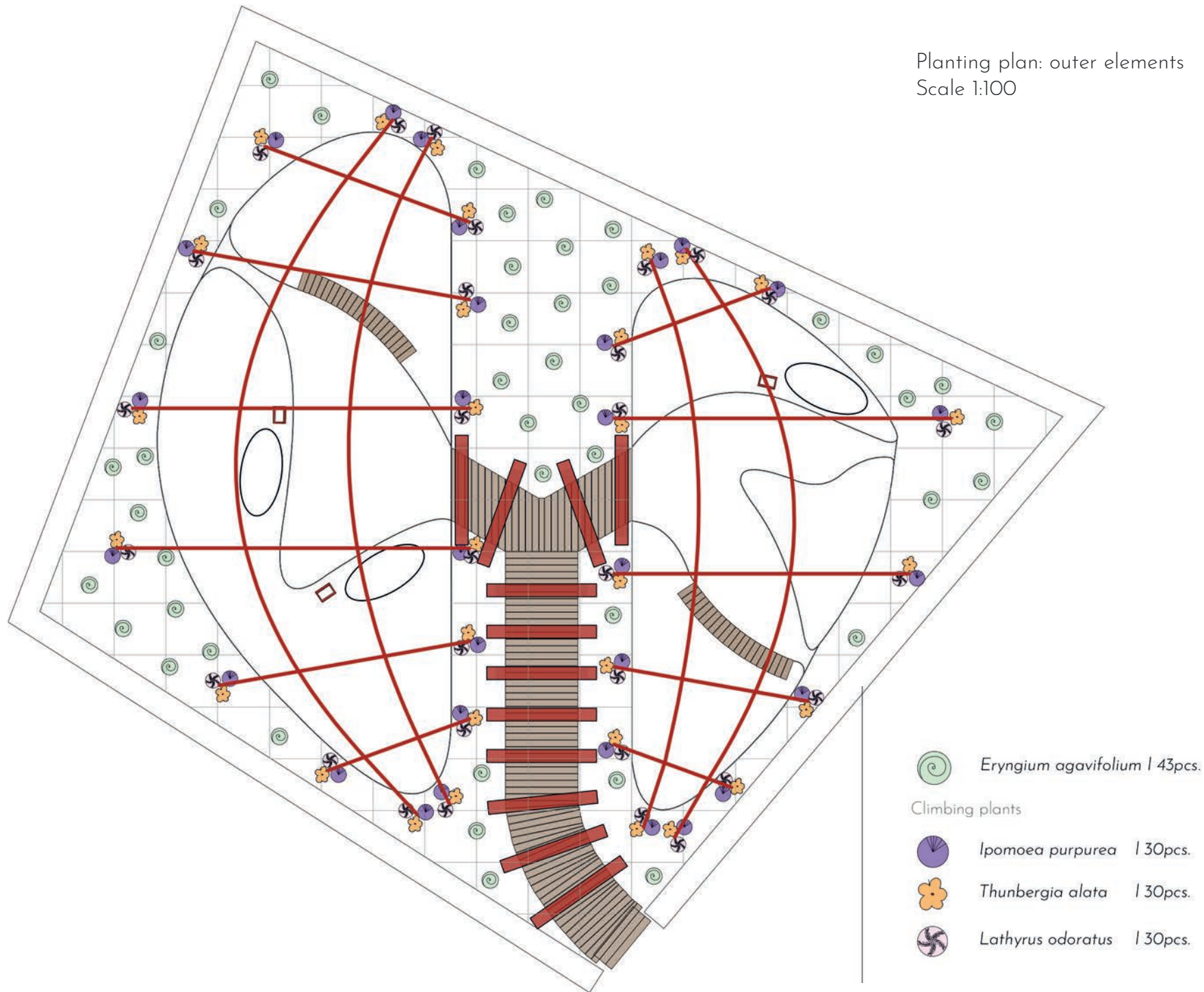
Alveolus Filtering

- Verbascum densiflorum*
- Malva sylvestris*
- Pulmonaria officinalis*
- Inula helenium*

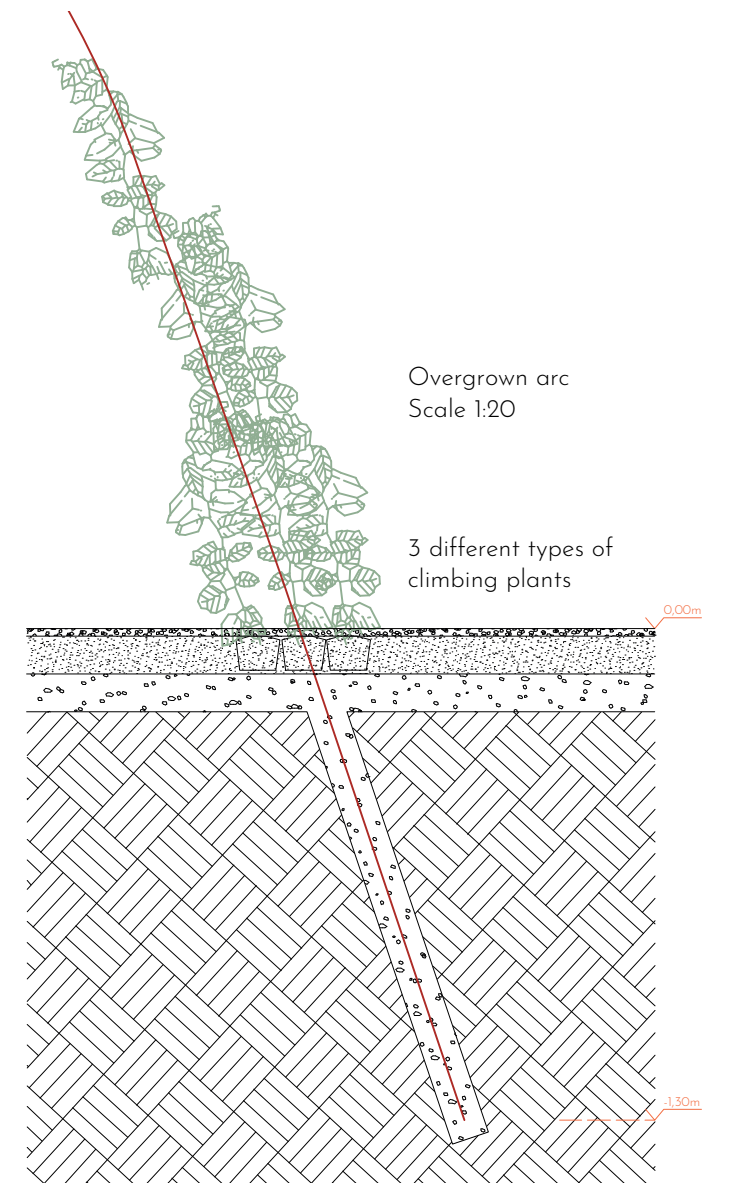
Alveolus Sensory

- Lavandula angustifolia*
- Thymus vulgaris*
- Calamintha nepeta*
- Origanum vulgare*

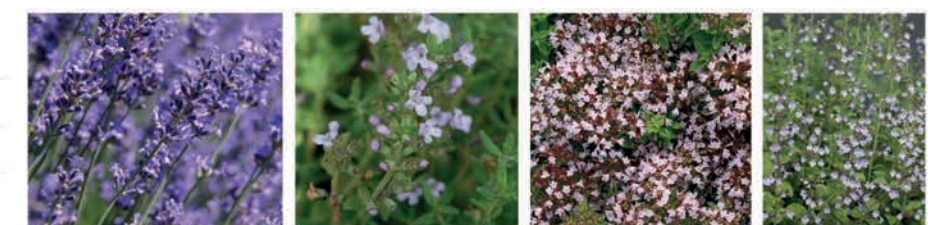
Planting plan: outer elements
Scale 1:100



Detail: Climbing plants
Scale 1:20



Total Amount	Name [bot.]	Height	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dez
15	<i>Caryopteris x clandonensis</i> 'Blauer Spatz'	80cm												
30	<i>Phlomis russeliana</i>	100cm												
39	<i>Sporobolus heterolepis</i>	70cm												
72	<i>Briza media</i>	40-50cm												
55	<i>Sesleria autumnalis</i>	50cm												
65	<i>Stipa tenuissima</i>	40-50cm												
77	<i>Kalimeris incisa</i> 'Alba'	60cm												
82	<i>Echinacea pallida</i>	80cm												
73	<i>Verbena bonariensis</i> 'Royal Dreams'	60cm												
67	<i>Geranium macrorrhizum</i> 'Album'	25cm												
80	<i>Nepeta x faassenii</i> 'Dropmore'	35cm												
62	<i>Dianthus arenarius</i>	15-20cm												
91	<i>Hyssopus officinalis</i> 'Albus'	20-40cm												
Alveolus Healing														
4	<i>Echinacea purpurea</i>	100cm												
4	<i>Mentha x piperita</i>	20-40cm												
3	<i>Alchemilla epipsila</i>	30cm												
2	<i>Salvia officinalis</i>	30-60cm												
Alveolus Filtering														
1	<i>Verbascum densiflorum</i>	120cm												
1	<i>Inula helenium</i>	150cm												
2	<i>Malva sylvestris</i>	50-100cm												
7	<i>Pulmonaria officinalis</i>	25-30cm												
Alveolus Sensory														
3	<i>Lavandula angustifolia</i>	60-70cm												
4	<i>Thymus vulgaris</i>	20cm												
2	<i>Origanum vulgare</i>	30-50cm												
3	<i>Calamintha nepeta</i>	40cm												
Climbing plants														
30	<i>Ipomoea purpurea</i>	300cm												
30	<i>Thunbergia alata</i>	300cm												
30	<i>Lathyrus odoratus</i>	80-200cm												
Outer plants														
43	<i>Eryngium agavifolium</i>	60-120cm												



Detail	Material	Source	Product Measurements	Prices per Unit	Remarks	Amount needed	Price
LUNGS							
02_01 Waterbound Cover	O/5 Sand, gravel, chippings; gold-ochre	https://www.hornbach.at/shop/Wassergebundene-Wegedecke-Deckschicht-Gold-Ocker-0-5mm-1000-kg-Big-Bag/4688468/artikel.html	1 to/BigBag	123,99 €/BigBag	28 m² x 0,4 cm = 1,12 m³ = 1,68 to	2 BigBags	247,98 €
03_03 Overgrown Arches	Rebar	https://www.bauwolf.at/betonstahl_7_meter-1558.html	Length: 7000mm, thickness: 10mm	8,39 €/Pc	160 m rebar for construction of arches	25 pieces	209,75 €
03_04 Raised Planting Beds + Alveoli	Steel plate	https://www.feld-eitorf.de/blech-stahl-staerke-3-0-mm	2500x200x3 mm (LxWxH)	41,11 €/Pc	103 m steel edge for raised planting beds + alveoli	42 pieces	1.726,40 €
03_04 Raised Planting Beds	Garden plate	https://www.hornbach.de/shop/Beton-Terrassenplatte-grau-40-x-40-x-4-cm/8356935/artikel.html	40x40x4 cm	2,25 €/Pc	Garden plates for steel edge	23 pieces	51,75 €
03_04 Alveoli	Garden plate	https://www.hornbach.de/shop/Beton-Terrassenplatte-grau-30-x-30-x-4-cm/8346811/artikel.html	30x30x4 cm	1,25 €/Pc	Garden plates for alveoli	6 pieces	7,50 €
03_05 Panels	Steel plate	https://www.feld-eitorf.de/blech-stahl-staerke-4-0-mm	1000x350x4 mm	52,11 €/Pc	Steel plates for panels	3 pieces	156,33 €
	Steel plate (ground plate)	https://www.feld-eitorf.de/blech-stahl-staerke-4-0-mm	450x300x4 mm	24,74 €/Pc	Gound plates for construction	3 pieces	74,22 €
	Garden plate	https://www.obi.at/terrassenplatten-gehwegplatten/gartenplatte-grau-50-cm-x-50-cm-x-4-cm	50x50x4 cm	3,19 €/Pc	Garden plates as foundation	3 pieces	9,57 €
	Acrylic plate	https://www.winklerschulbedarf.com/de/i/acrylglas-plexiglas-din-a4-per-stk-101104	DIN A4 (29,7x21cm), thickness 0,3cm	3,67 €/Pc	Acrylic plates with printed text	6 pieces	22,02 €
	Screw	https://www.obi.at/schlossschrauben/lux-schlossschraube-m5-x-40-mm-edelstahl-teilgewinde-4-stueck/p/7618283	M5x40 mm	4,29 €/4 Pcs	The connecting elements to attach the acrylic plates	3 packs	12,87 €
	Nut	https://www.obi.at/sicherungsmuttern/lux-sicherungsmutter-m5-verzinkt-8-stueck/p/7619844	M5	2,79 €/8 Pcs		2 packs	5,58 €
	Hinge	https://www.obi.at/scharniere/scharnier-kaentig-gelb-verzinkt-40-mm-x-40-mm/p/4887717	40x40mm	1,99 €/Pc	For folding mechanism	6 pieces	11,94 €
	Screw for hinge	https://www.obi.at/spanplattenschrauben-universalschrauben/lux-tools-linsenkopf-universalschraube-ph-antrieb-2-9-mm-x-6-5-mm-12-stueck/p/8483604	2,9x6,5 mm	1,89 €/12 Pcs	Connecting elements for hinges	2 packs	3,78 €
	Spacer for panel	https://www.kydexpress.de/BEFESTIGUNGEN/EPDM-4-5-Gummi-Spacer-Abstandhalter-fuer-Holster-und-Messerscheiden-10er-Pack.html	Height 4,5 mm, inside diameter 5mm, outside diameter 12 mm	4,95 €/10 Pcs	Placeholder between steel construction and acrylic plate	2 packs	9,90 €
	Elastic puffer	https://www.technirub.de/schwingungsdampfer/anschlagpuffer-typ-d/anschlagpuffer-20x10-mm-typ-d-m6x18.html	20x10 mm, M6x18mm	0,71 €/Pc	Bump stop between acrylic plates	6 pieces	4,26 €
Subtotal price Lungs							2.553,85 €

03_06 Benches	Garden plate	https://www.obi.at/terrassenplatten-gehwegplatten/gartenplatte-grau-50-cm-x-50-cm-x-4-cm	50x50x4 cm	3,19 €/Pc	Garden plates as foundation	8 pieces	25,52 €
	Wooden board	http://gartenholz.at/media/pdf/fd/75/20/Katalog2022_Kuebler-Holz.pdf	300x12x2,7 cm	17,70 €/Pc	16,8 m wooden planks seating surface	6 pieces	106,20 €
	Structural timber	https://www.holzpur.at/de/pages/holzterrasse-terrassen-unterbau-staffelholz-laerche-3m-5x8cm-20-1-0.aspx	300x5x8 cm	8,90 €/Pc	Wood for substructure	6 pieces	53,40 €
	Steel plate	https://www.feld-eitorf.de/blech-stahl-staerke-1-0-mm	2000x500x2 mm	91,39 €/Pc	Steel cover for substructure	3 pieces	214,27 €
	Steel angle for subconstruction	https://www.hornbach.at/shop/Breitwinkel-30-x-30-x-30-mm-sendzimirverzinkt-1-Stueck/770161/artikel.html	30x30x2 mm	0,85 €/Pc	Connecting elements for substructure	48 pieces	40,80 €
	Screw for steel plate	https://www.obi.at/holzschrauben/lux-tools-sechskantkopf-holzschraube-aussensechskant-antrieb-5-mm-x-30-mm/p/9249129	5x30 mm	0,35 €/Pc	Steel cover for subconstruction	24 pieces	8,40 €
	Screw for wooden board	https://www.obi.at/spanplattenschrauben-universalschrauben/spax-senkkopf-universalschraube-t-star-plus-antrieb-5-mm-x-60-mm-50-stueck/p/7598808	5x60 mm	7,99 €/50 Pcs	Wooden board on subconstruction	1 pack	7,99 €
	Screw for subconstruction	https://www.obi.at/spanplattenschrauben-universalschrauben/spax-t-star-plus-rostoffrei-4-mm-x-30-mm-250-stueck/p/7714363	4x40 mm	20,99 €/250 Pcs		1 pack	20,99 €
Subtotal price Lungs							477,57 €
Total price Lungs							3.031,42 €

Detail	Material	Source	Product Measurements	Prices per Unit	Remarks	Amount needed	Price
SURROUNDING							
Paint	Paint for all metal components; RAL 2002 blood orange	https://hamburgerlackprofi.de/products/kopie-von-hamburger-lack-profi-metallschutzlack-rotorange-ral-2001-abriebbestaendig-schlagfest	10 - 12 m²/l	22,89 €/l	38 m² painted surfaces	5 litres	114,45 €
Chippings/Soil	Soil for topography, Alveoli and surrounding area	https://www.lengel.at/	1 m³/BigBag	35 €/BigBag	21,45 m³	22 BigBags	770,00 €
	Garden Fleece	https://www.hornbach.at/shop/Unterbodengewebe-FloraSelf-25-x-2-m-100-g-m-schwarz/5617815/artikel.html	25x2 m, 100g/m²	50,49 €/Pc	190 m²	4 pieces	201,96 €
	Lava chippings 8/16; redish black	https://www.gabinova.at/lavasplit-8-16mm	8 - 16 mm	229,90 €/1,2 to (BigBag)	80 m² x 0,2 m = 1,6 m³ = 2,08 to	2 BigBags	459,80 €
Gravel	Gravel base layer	ROHRDORFER - Preislisten für Kies, Sand und Splitt	0 - 32 mm	16,07 €/to	25,61 m³ = 38,93 to	39 to	626,73 €
Total Price Surrounding							2.172,94 €

Detail	Material	Source	Product Measurements	Prices per Unit	Remarks	Amount needed	Price
WINDPIPE							
03_01 Wooden Deck	Garden plate	https://www.hornbach.de/shop/Beton-Terrassenplatte-grau-40-x-40-x-4-cm/8356935/artikel.html	40x40x4 cm	2,25 €/Pc	Garden plates for substructure	37 pieces	83,25 €
	Structural timber (entrance elements)	http://gartenholz.at/media/pdf/fd/75/20/Katalog2022_Kuebler-Holz.pdf	200x15x15 cm	20,70 €/Pc	Elements A1-A3	3 pieces	124,20 €
	Wooden board	http://gartenholz.at/media/pdf/fd/75/20/Katalog2022_Kuebler-Holz.pdf	300x12x2,7 cm	17,70 €/Pc	Elements B, E, F, G, H, I, J	38 pieces	672,60 €
	Wooden board	http://gartenholz.at/media/pdf/fd/75/20/Katalog2022_Kuebler-Holz.pdf	300x14,2x2,7 cm	28,50 €/Pc	Elements C, D	7 pieces	199,50 €
	Structural timber	https://odessa-handel.de/holzhandel/bauholz/leimholzbalken-kanteIn-kvh-bsh/leimholz-pfosten-80x80-mm-https://www.obi.at/spanplattenschrauben-universalschrauben/lux-tools-senkkopf-universalschraube-tx-antrieb-6-mm-x-200-mm-1-stueck/p/9248386	500x8x8 cm	10,95 €/Rm	Substructure	41 running meters	448,95 €
	Screw for entrance	https://www.obi.at/spanplattenschrauben-universalschrauben/lux-tools-senkkopf-universalschraube-tx-antrieb-6-mm-x-200-mm-1-stueck/p/9248386	6x200 mm	0,69 €/Pc	Entrance: bolt wooden elements together	15 pieces	10,35 €
	Longitudinal connector	https://www.obi.at/winkel-holzverbinder/flachverbinder-verzinkt-200-mm-x-60-mm-10-stueck/p/1988419	200x60 mm	19,49 €/10 Pcs	Connection parts for structural timber	4 packs	77,96 €
	Screw for subconstruction	https://www.obi.at/spanplattenschrauben-universalschrauben/lux-tools-senkkopf-universalschraube-tx-antrieb-6-mm-x-150-mm-50-stueck/p/9248212	6x150 mm	15,99 €/50 Pcs	Attaching subconstruction	4 packs	63,96 €
	Screw for wooden board	https://www.obi.at/spanplattenschrauben-universalschrauben/lux-tools-senkkopf-universalschraube-tx-antrieb-5-mm-x-60-mm/p/7621444	5x60 mm	19,49 €/400 Pcs	Bolt wooden boards on substructure	2 packs	38,98 €
03_02 Scaffold	Rebar	https://www.bauwolf.at/shopcart	Length: 7000mm, thickness: 10 mm	8,39 €/Pc	204 m for construction of arches	30 pieces	175,80 €
	Polypropylen string; light brown	https://www.schnurhaus-online.de/epages/15508078.sf/de_AT/?ObjectPath=/Shops/15508078/Products/03-39437419/SubProducts/03-39437419-100	Thickness: 3mm, material: PP 150daN, length: 100m, colour: light brown	22 €/Pc	For knotting string between arches	2 packs	44,00 €
Total price Windpipe							1.939,55 €

Plant species (bot.)	Source	Product Measurements	Prices per Unit	Amount needed	Price
PLANTS					
Caryopteris x clandonensis 'Blauer Spatz'	Stauden stade	80cm	8,05 €	15	120,75 €
Hyssopus officinalis 'Albus'	Stauden stade	20-40cm	2,05 €	92	188,60 €
Echinacea pallida	Stauden stade	80cm	3,75 €	82	307,50 €
Phlomis russeliana	Stauden stade	100cm	3,25 €	30	97,50 €
Verbena bonariensis 'Royal Dreams'	Stauden stade	60cm	3,75 €	73	273,75 €
Kalimeris incisa 'Alba'	Stauden stade	60cm	2,85 €	77	219,45 €
Nepeta x faassenii 'Dropmore'	Stauden stade	35cm	2,05 €	81	166,05 €
Dianthus arenarius	Stauden stade	15-20cm	2,55 €	62	158,10 €
Geranium macrorrhizum 'Album'	Stauden stade	25cm	2,85 €	68	193,80 €
Stipa tenuissima	Stauden stade	40-50cm	3,10 €	65	201,50 €
Briza media	Stauden stade	40-50cm	2,05 €	72	147,60 €
Sesleria autumnalis	Stauden stade	50cm	2,85 €	55	156,75 €
Sporobolus heterolepis	Stauden stade	70cm	3,50 €	39	136,50 €
Healing					
Echinacea purpurea	Garten schlüter	100cm	3,99 €	4	15,96 €
Mentha x piperita	Stauden stade	20-40cm	2,75 €	4	11,00 €
Alchemilla epipsila	Stauden stade	30cm	3,80 €	3	11,40 €
Salvia officinalis	Stauden stade	30-60cm	2,95 €	2	5,90 €
Filtering					
Verbascum densiflorum	Stauden stade	120cm	3,45 €	1	3,45 €
Inula helenium	Stauden stade	150cm	4,15 €	1	4,15 €
Malva sylvestris	Gaißmayer	50-100cm	3,80 €	2	7,60 €
Pulmonaria officinalis	Stauden stade	25-30cm	3,90 €	7	27,30 €
Sensory					
Lavandula angustifolia	Gaißmayer	60-70cm	4,20 €	3	12,60 €
Thymus vulgaris	Stauden stade	20cm	2,75 €	4	11,00 €
Origanum vulgare	Stauden stade	30-50cm	2,75 €	2	5,50 €
Calamintha nepeta	Stauden stade	40cm	2,95 €	3	8,85 €
Surrounding Plants					
Eryngium agavifolium		130cm	4,20 €	43	180,60 €
Climbing Plants					
Ipomoea purpurea		2,29/20 seeds	30 (5 seeds per planting)		18,32 €
Thunbergia alata		3,99/10 seeds	30 (5 seeds per planting)		59,58 €
Lathyrus odoratus		3,29/15 seeds	30 (5 seeds per planting)		32,90 €
Total Price Surrounding					2.783,96 €

TOTAL PRICE	9.927,87 €
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