



REPORT FOR:

PHARMABEES AND CREATIVE CARDIFF

# GREENING CATHAYS NATURE WAITING ROOM DESIGN

MARCH 2025

by SITUATED STUDIO AND ANALOG ARCHITECTURE





INTRODUCTION



## INTRODUCTION

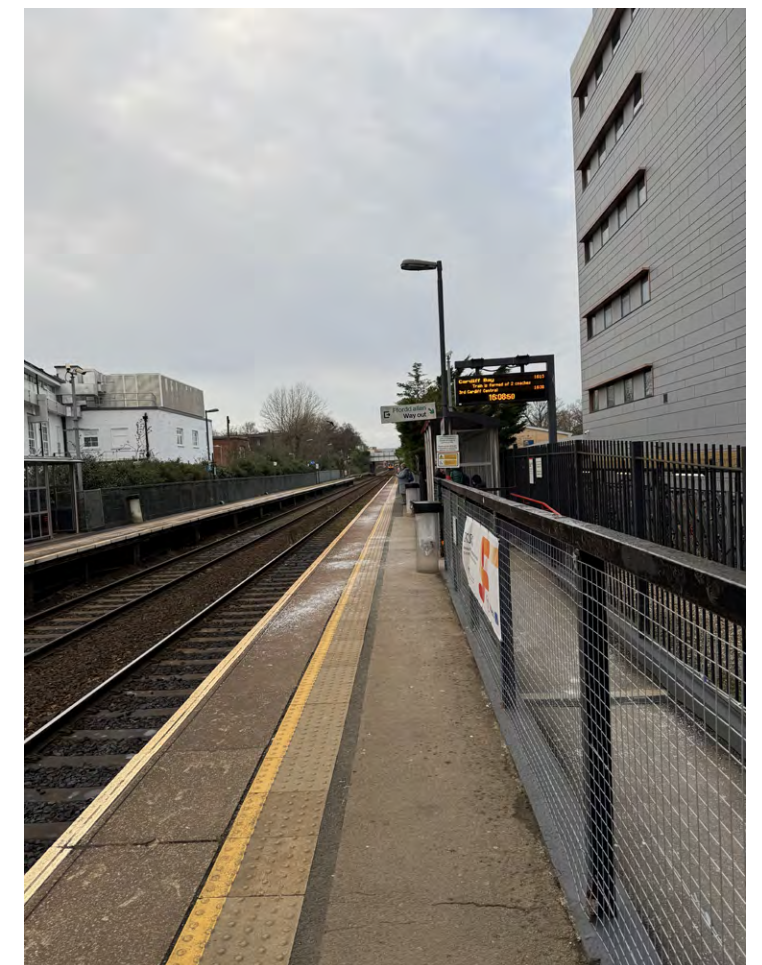
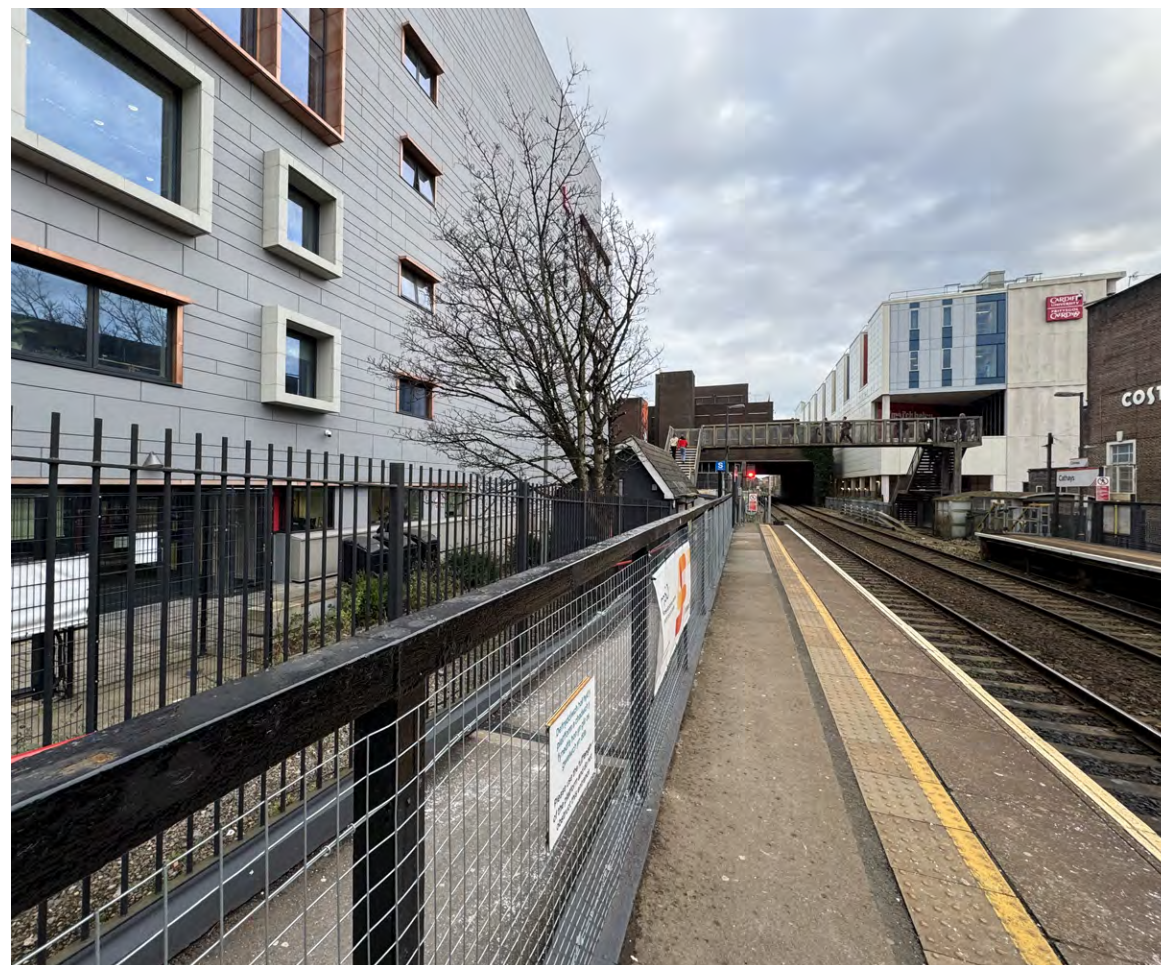
Greening Cathays is an initiative by Creative Cardiff working in partnership with Cardiff University's School of Pharmacy's Pharmabees project, as is funded with support from Cardiff City Council through the Shared Prosperity Fund.

The initiative aims to bring together communities by creating nature-rich urban environments which will support biodiversity, re-energise public spaces through creativity and allow diverse residents to connect with the natural world, and with each other.

Local artists and creative practitioners have been commissioned to undertake seven projects as part of Greening Cathays.

Analog Architecture and Situated Studio have been appointed for Commission 1 - Placemaking project on university-owned land at Cathays Train Station.

This report sets out the brief, site analysis, design process and proposal for the installation, including and estimate of the budget to deliver it.



*Right:  
Cathays Train Station lacks greenery,  
nature and a pleasant waiting area.*







## BRIEF

Cathays Train Station sits at the heart of the Cathays Ward, next to Cardiff University Students' Union and across the road from many Cardiff University building, as well as a short walk from the Welsh Government and other civic buildings in Cathays. As a key site for local travel – with connection to both the Rhondda Valleys and Merthyr Tydfil train lines, it is Wales's seventh most-used train station. The footpath over the railway bridge is also widely used as a shortcut between Park Place and Senghenydd Road. This makes it a key site within the ward, connecting residents, workers and students.

Cathays station itself is comprised of two narrow platforms, each with a small shelter and information screen displaying train arrivals times. However, surrounded by high-rise civic and university buildings, flanked by alleyways and with tall security fencing on either side, the site is aesthetically unappealing with limited greenery or public realm enhancements. The station also has limited 'waiting room' space.

This commission seeks to create an alternative 'open air' green waiting room next to the northern side of the station (platform 1, trains towards Cardiff Central Station).

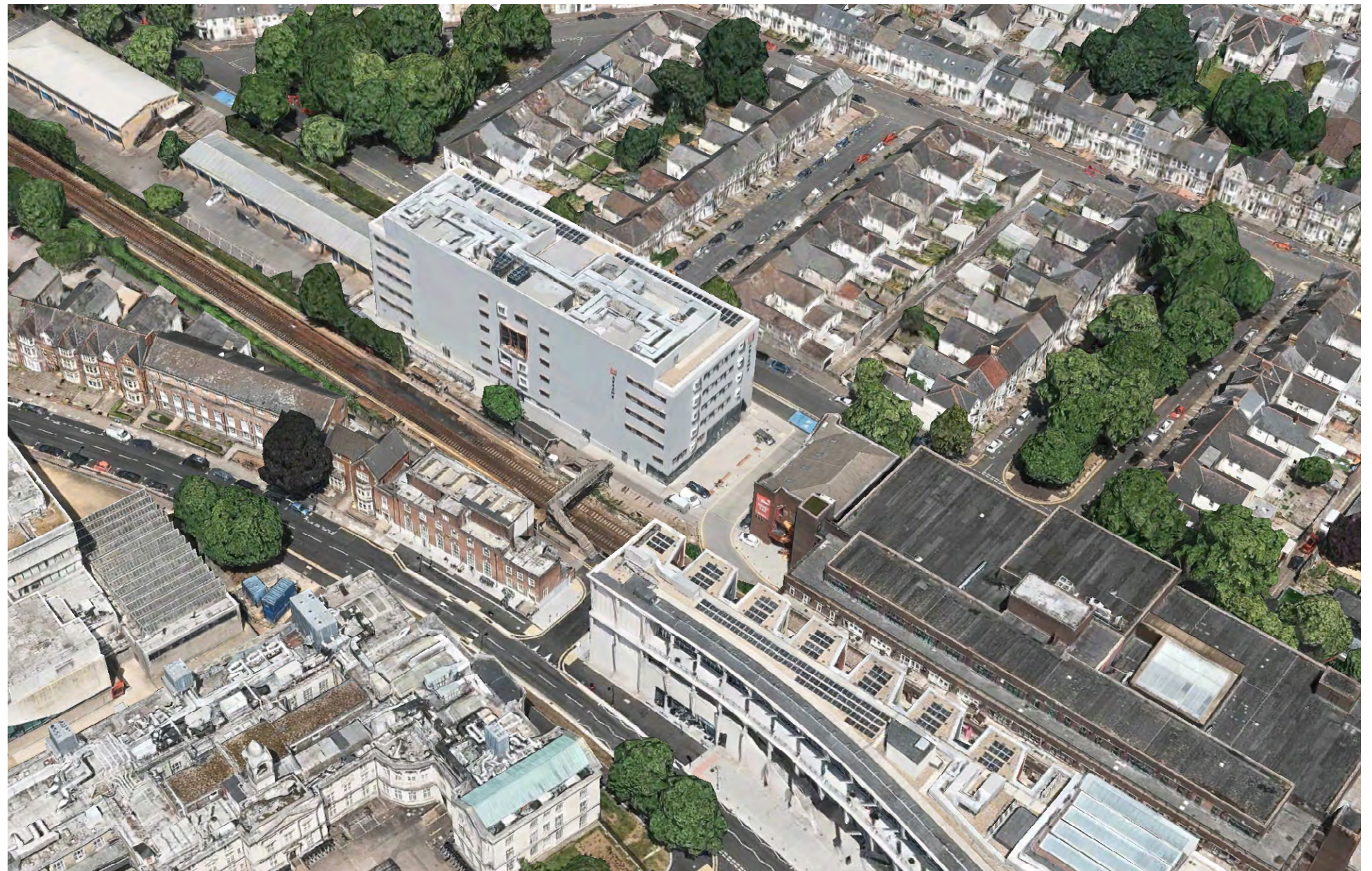
Focussed on university-owned land to the immediate north of the ticket office, adjacent to the university's ABACWS building, this commission will:

- Engage with the local community and Cardiff University (especially teams based in ABACWS) to feed into design.
- Develop and plan a creative concept for an 'open air' green waiting room with a nature theme – this could be e.g. a mural, an installation, or a digital / projection concept etc.
- Positively enhance the public realm of the station.
- Incorporate existing university-installed planters, supporting increased biodiversity and well-being.

*Note: The location of the site was changed after it was found that Transport for Wales plans to replace the footbridge over the railway would occupy part of the site.*

**This commission seeks to create an alternative 'open air' green waiting room.**

*Below:  
3D aerial view of the site, Cathays Train Station and Abacws Building*







**SITE ANALYSIS**



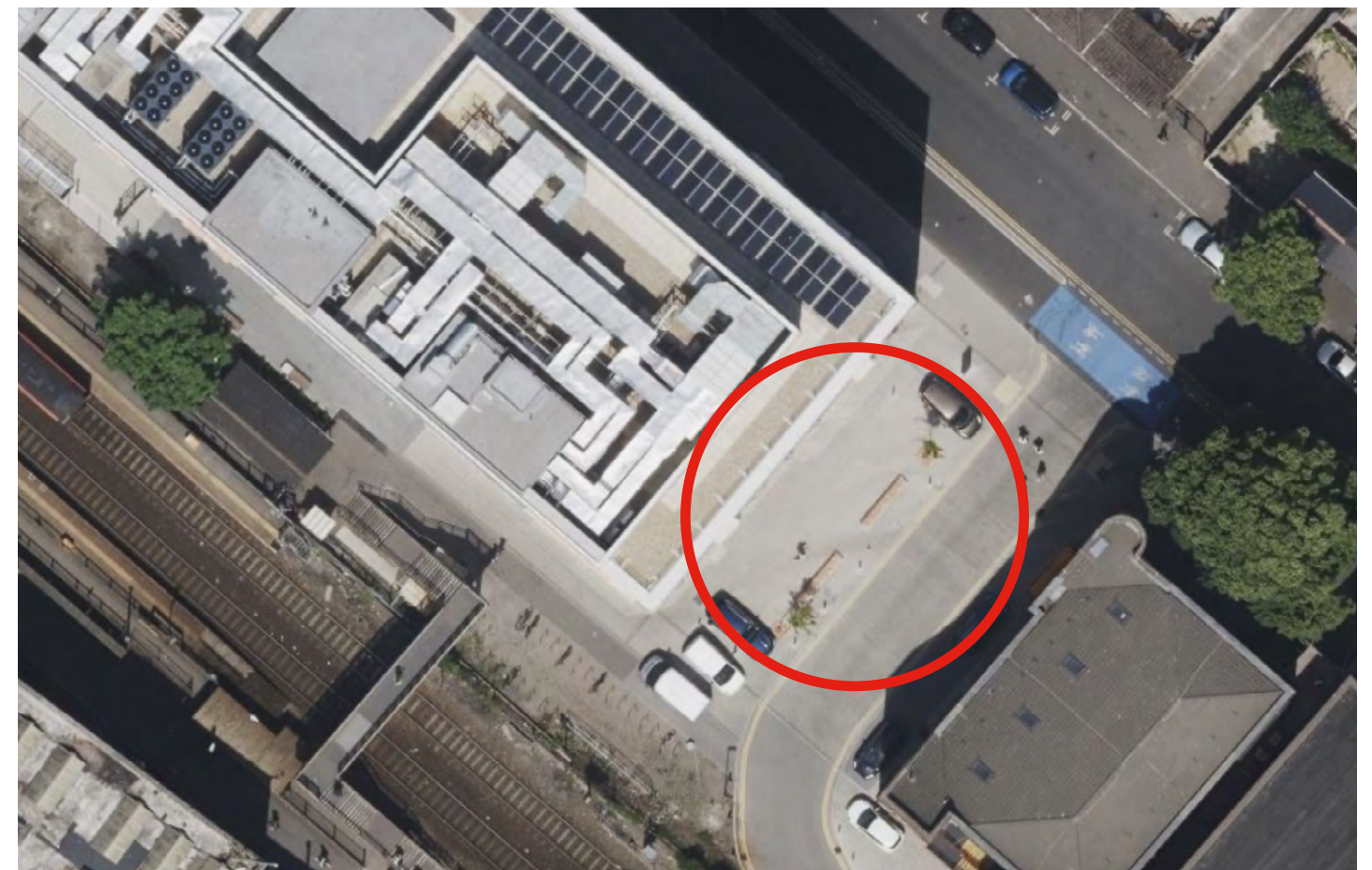
## SITE ANALYSIS

The newly identified site is located along the south east side of the south Abacws Building on university-owned land.

The paved area is approximately 8m wide from the building facade to the access road which runs between the Abacws Building and the Student Union. It provides a pedestrian route linking Cathays to the train station and the footbridge over the railway. Additionally, many cyclists move through the area to access cycle parking at the train station and university buildings, or to cross to the other side of the railway.

The site is currently occupied by two trees (which we intend to retain), two metal benches, a large signboard and bank of recycling bins. Bollards run along the edge adjacent to the road, while removable bollards can be out in place either end of the site to prevent parking on the paved area.

An informal study area within the ground floor of Abacws has full-height glazing providing views onto the site. This creates an opportunity to make a pleasant space for Abacws building users to enjoy, as well as those waiting to catch a train.



Right:  
OS map and aerial view of the site.



## SITE ANALYSIS

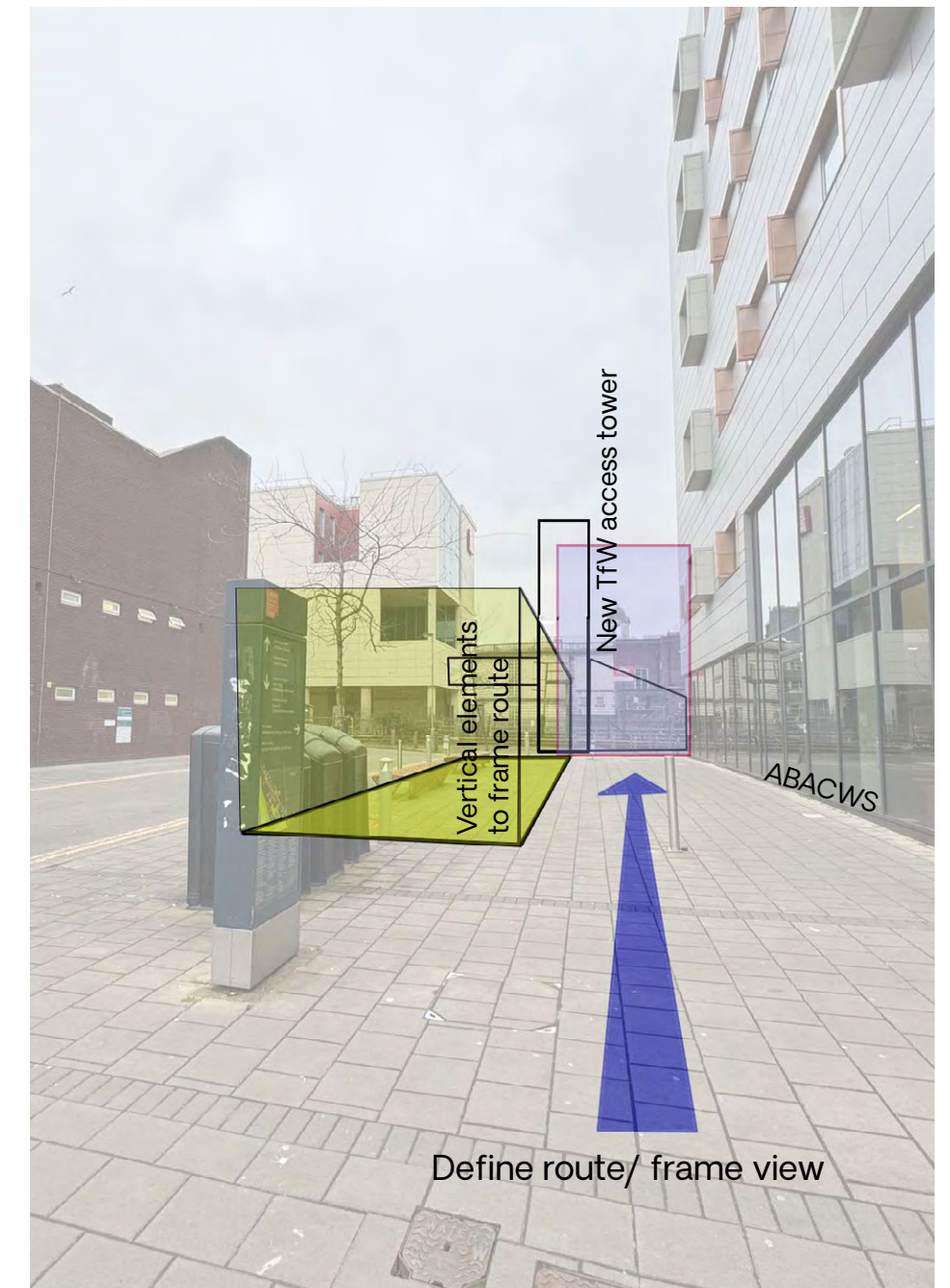
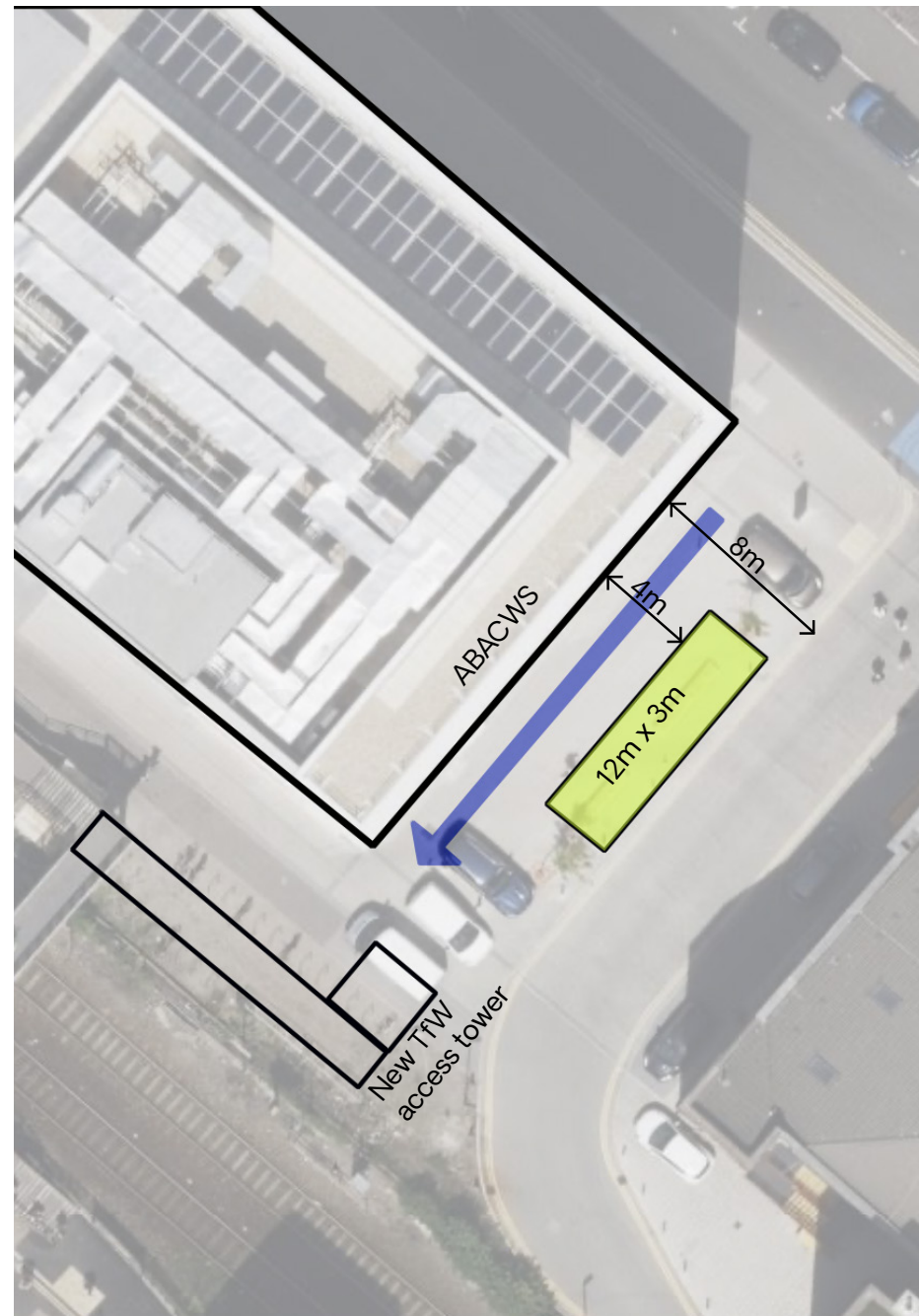
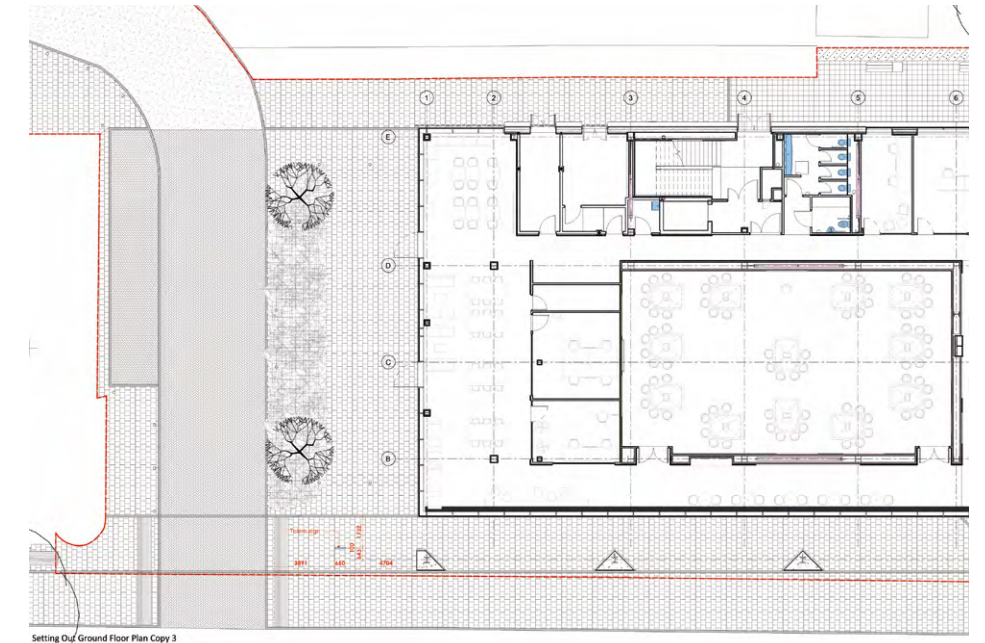
This new site is more exposed than the original site identified in the brief. This brings the benefit of being of greater value to more people in the community. However, it also means the installation needs to be more robust and present an attractive appearance on all sides. There are also no existing planters, seating or fences to incorporate in the design in this location.

## SITE CONSTRAINTS

It has been agreed with Estates and Abacws facilities management that the installation can occupy the space between the two existing trees. It will be set back 4m from the building edge to allow for access maintenance. The installation will require relocation of the existing benches; and repositioning of the bins will improve access and visibility.

Right: Abacws ground floor plan.

Below:  
OS map and aerial view of the site.







ENGAGEMENT



## ENGAGEMENT

On Tuesday 11th March 2025 we held an engagement workshop at the Abacws Building to give staff and student an opportunity to hear about and contribute to our proposal.

This was also an opportunity to discuss the practicalities of the site with facilities management staff.

We used a collage image as a way to share our concept ideas and vision for the installation. It is not intended as a literal representation of a design proposal, but it captures our ideas about creating a sensory outdoor waiting room where you feel immersed in nature - triangular planters forming a zig-zag edge along the route with seating along the inside edges so you can sit surrounded by plants; vertical elements to provide a framework for plants to climb up and to frame the route to the station footbridge; painted pavement to define the space and extend the impact outside the zone where it is possible to build in; a speaker playing sounds of nature (bird song, bees buzzing, wind in trees...); projection onto the floor surface with images of a flower meadow etc. to enliven the space on dark evenings.

Feedback was generally very positive. There were some comments/concerns about maintenance which, although important, are outside of the scope of our piece of work.

*Right: Images from the engagement workshop at Abacws Building on 11th March 2025*

*Below: The concept image used to convey the idea of an outdoor waiting room where you feel immersed in nature.*







**CONCEPT DESIGNS**



## CONCEPT IDEA - IMMERSED IN NATURE

Our creative vision for the Cathays Train Station Placemaking commission is to transform this unattractive, grey, urban site, into a sanctuary space, where people can have the experience of being immersed in nature.

The station is the daily arrival point in the city for hundreds of commuters and students, with the footbridge providing a connection to the city centre for hundreds more pedestrians; yet the site currently provides a particularly unwelcoming experience for train users and people passing through on foot.

This project offers an opportunity to reactivate this dull public space to allow the diverse range of people who pass through every day, as well as users of the adjacent Abacws Building, to experience a connection with nature.

Our plan is to create a mini-urban oasis to re-energise the space. The 'waiting room' will offer a moment to immerse yourself in nature and benefit from that experience, as well as positively enhancing the public realm in this well-used part of the city.

- We propose a series of triangular planters creating a zig-zag edge along the pedestrian route. These can be planted with pollinator-friendly plants.
- The inside edges of the zig-zag will have seating so you can sit surrounded by plants.
- A vertical framework will make the installation more visible, provide support for climbing plants and frame the route to the station and proposed new Transport for Wales footbridge.
- A pattern painted on the pavement will help define the waiting room space, whilst extending the footprint and impact of the installation without encroaching on access and maintenance space.
- A speaker playing the sounds of nature (bird song, bees buzzing, wind in trees...) will create an immersive, relaxing experience.
- A projection onto the floor surface with images of a flower meadow etc. will enliven the space on dark evenings.

The image opposite aims to capture the feel of the place we propose to create, without being a literal representation of the design.

*Below: Concept collage - A space to feel immersed in nature.*





## CONCEPT IDEA - PRECEDENT

We seek to be inspired by and to learn from the work of others.

This page shows examples of projects which have informed our ideas and design, including a painted floor surface to increase impact, benches combined with planters, a vertical structure to enclose space and for plants to climb up, and projection of images onto the floor.

*Below and right: Precedent images for outdoor waiting room*







**DESIGN PROPOSAL**



# DESIGN PROPOSAL

This section of the report illustrates our proposed design for the outdoor waiting room. Scale drawings show the location of the installation on the site plan, as well as larger scale plans, elevations and annotated 3D views.

## PLANTERS AND BENCHES

Two versions of the triangular planters and benches are shown:

- Option 1. Metal planters with timber bench
- Option 2. Timber planters with metal bench

This allows for comparison of costs in the following section of the report.

## VERTICAL FRAMEWORK

The vertical framework is formed from bespoke scaffolding, powder-coated in our chosen colour palette.

## FLOOR PAINT

Colourful graphics painted on the pavement extend the impact of the installation.

## AUDIO AND PROJECTION

Outdoor speakers will play 'sounds of nature' such as bird song, or bees buzzing. When it gets dark an image of a flower meadow will be projected onto the pavement in front of the seating.

Specialist advice and a cost estimate has been sought for the audio-visual element of the proposal. For the audio, it is recommended to have the following set up:

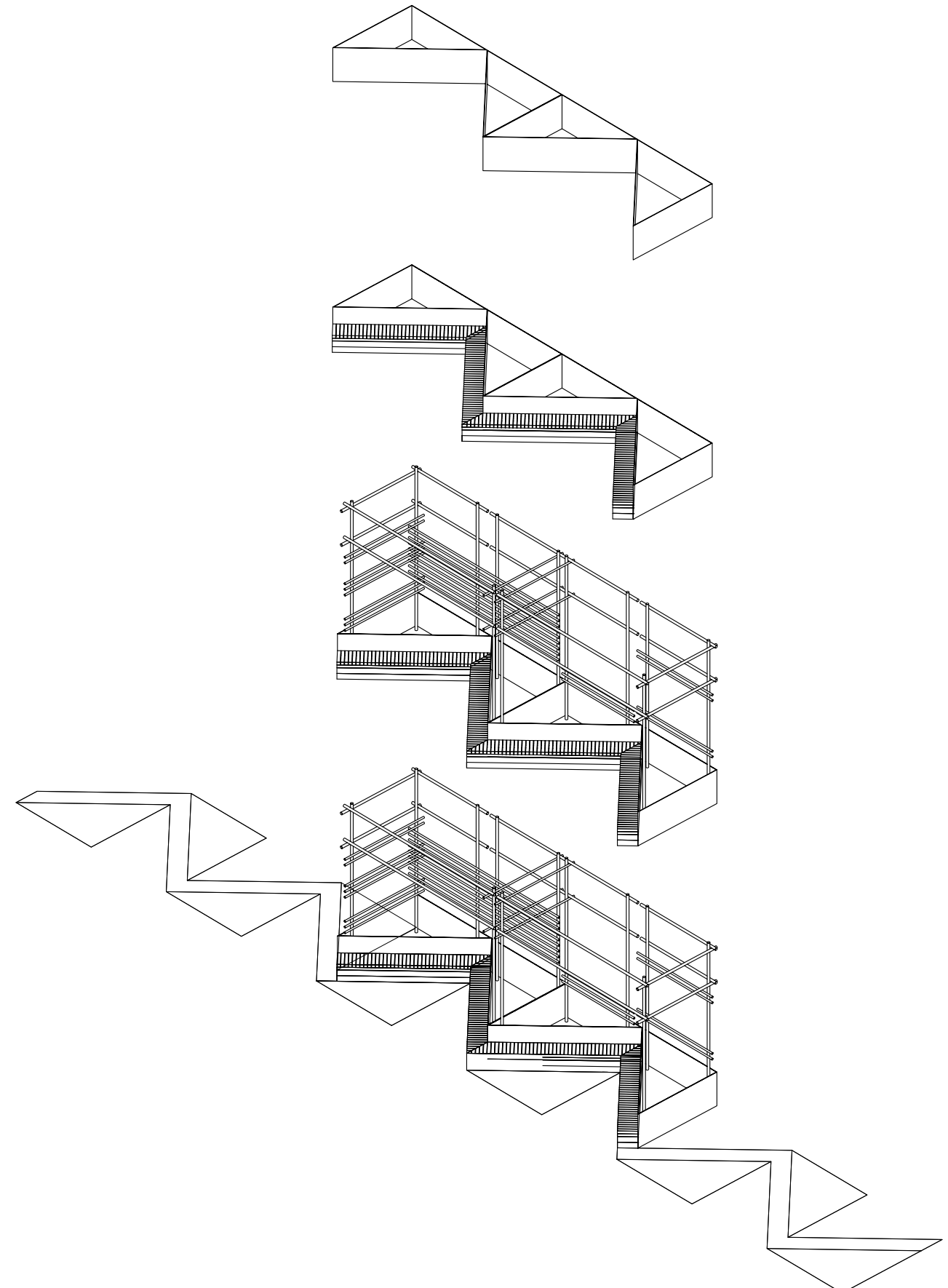
- Amplifier and source (USB or Bluetooth) housed inside connected to power supply.
- Speaker cable connecting amp to external speakers.
- 2 no. outdoor speakers mounted externally.

Allowing a cost of £1000 – £1500 is recommended.

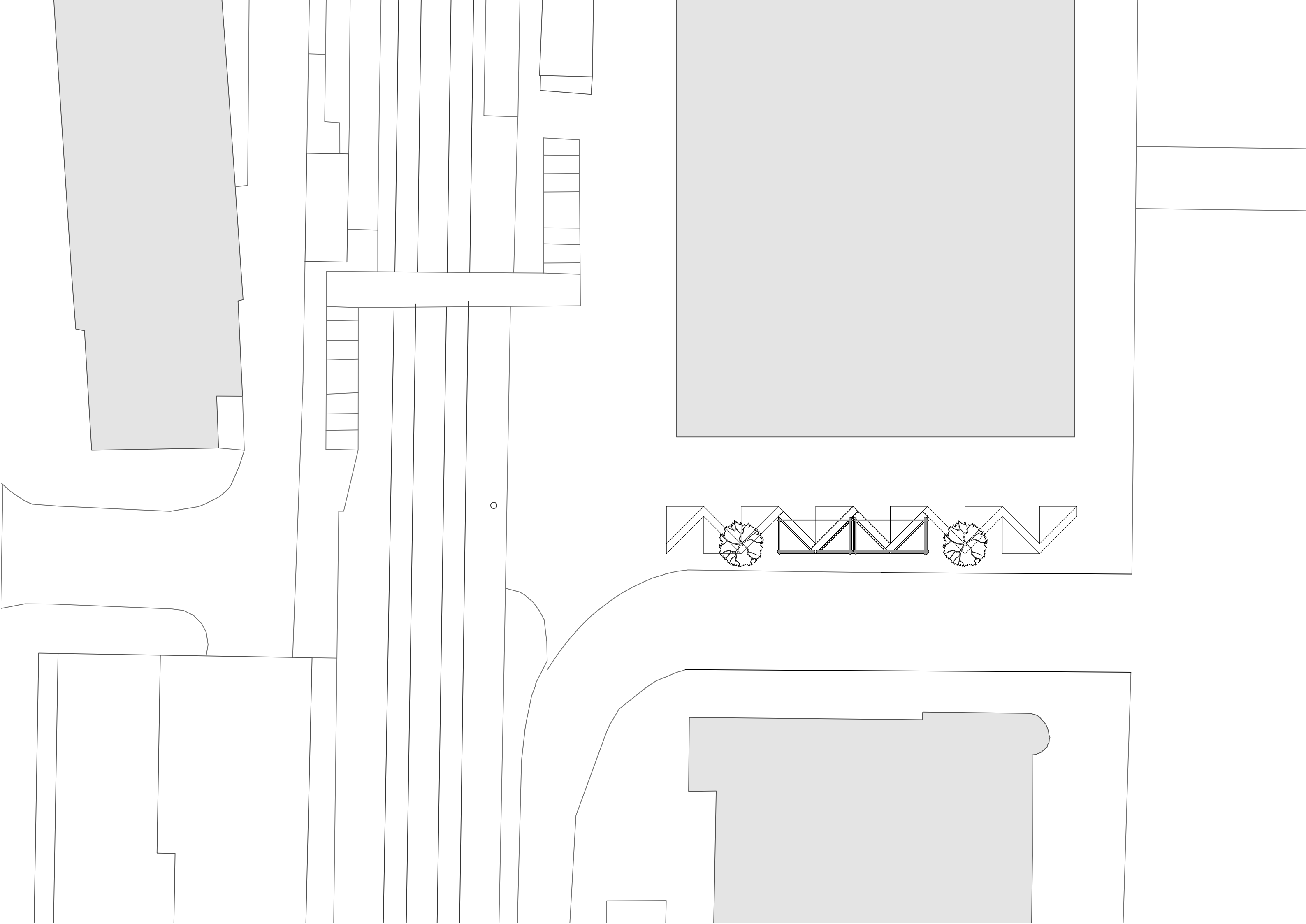
Further advice is required to the projection specification, but an outdoor projector will need to be connected to an internal source, such as a laptop, tablet or Blu-ray player, and power supply. Allowing a cost of £1500 – £2000 is recommended.

## PLANTING

It is suggested that planting consists of drought-tolerant perennial varieties, which flower in a range of purples, violets and blues. This will complement the colour scheme chosen for the planters and vertical structure, which is inspired by the colour spectrum visible to bees.









#### ELEMENT 4 - FLOOR PAINT

Colour and pattern added to floorscape to create a longer, linear intervention. This delineates the route to the station.

#### ELEMENT 2 - TIMBER BENCH

Timber 'zig zag' bench to provide a place to rest whilst immersed in nature. The timber bench would be painted yellow and the planters would provide a back rest.

#### ELEMENT 5 - PROJECTION AND AUDIO

The sound of birdsong and bees, in addition to a projection of a wildflower meadow with bees will illuminate and activate the floorscape at night and provide an immersive experience.

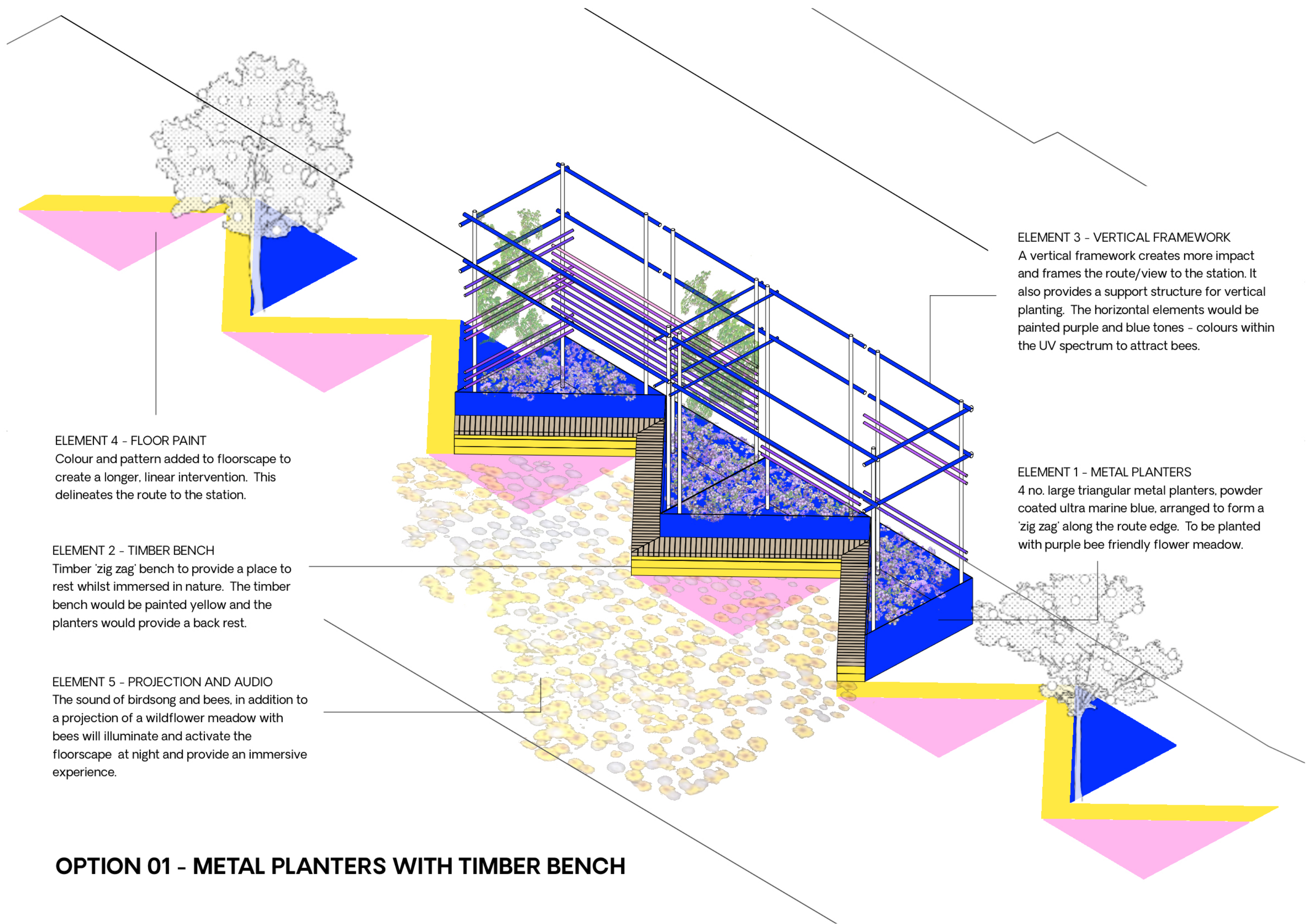
#### ELEMENT 3 - VERTICAL FRAMEWORK

A vertical framework creates more impact and frames the route/view to the station. It also provides a support structure for vertical planting. The horizontal elements would be painted purple and blue tones - colours within the UV spectrum to attract bees.

#### ELEMENT 1 - METAL PLANTERS

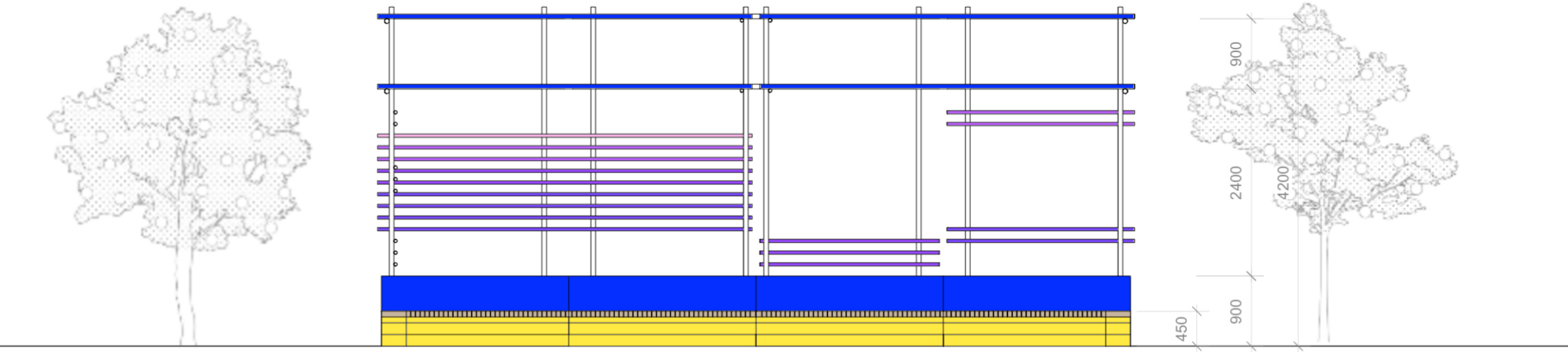
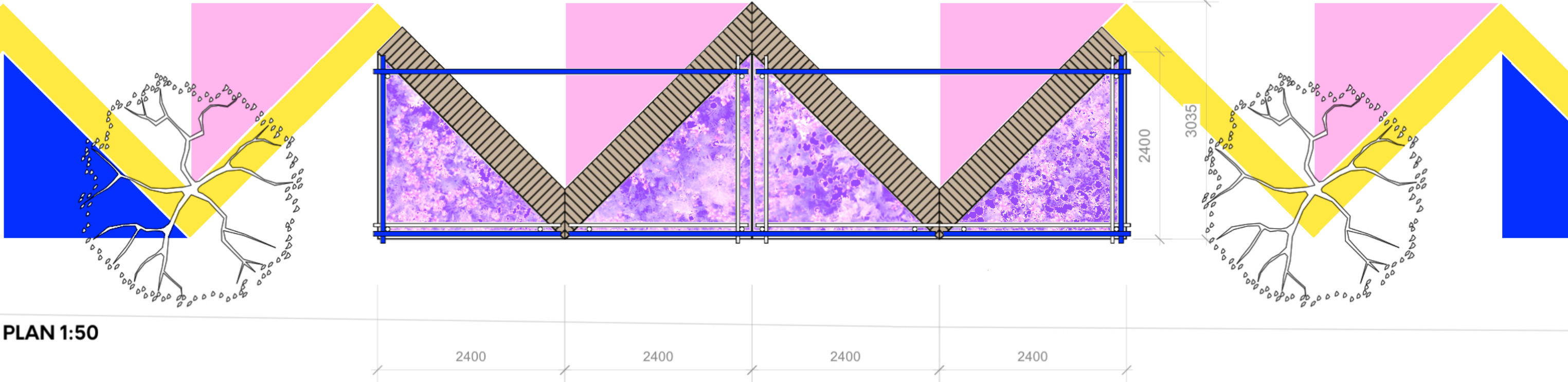
4 no. large triangular metal planters, powder coated ultra marine blue, arranged to form a 'zig zag' along the route edge. To be planted with purple bee friendly flower meadow.

## OPTION 01 - METAL PLANTERS WITH TIMBER BENCH





OPTION 01 - METAL PLANTERS WITH TIMBER BENCH





#### ELEMENT 4 - FLOOR PAINT

Colour and pattern added to floorscape to create a longer, linear intervention. This delineates the route to the station.

#### ELEMENT 2 - METAL BENCHES

Metal benches arranged to form a 'zig zag' to provide a place to rest whilst immersed in nature. The metal benches would be powdercoated yellow and the planters would provide a back rest.

#### ELEMENT 5 - PROJECTION AND AUDIO

The sound of birdsong and bees, in addition to a projection of a wildflower meadow with bees will illuminate and activate the floorscape at night and provide an immersive experience.

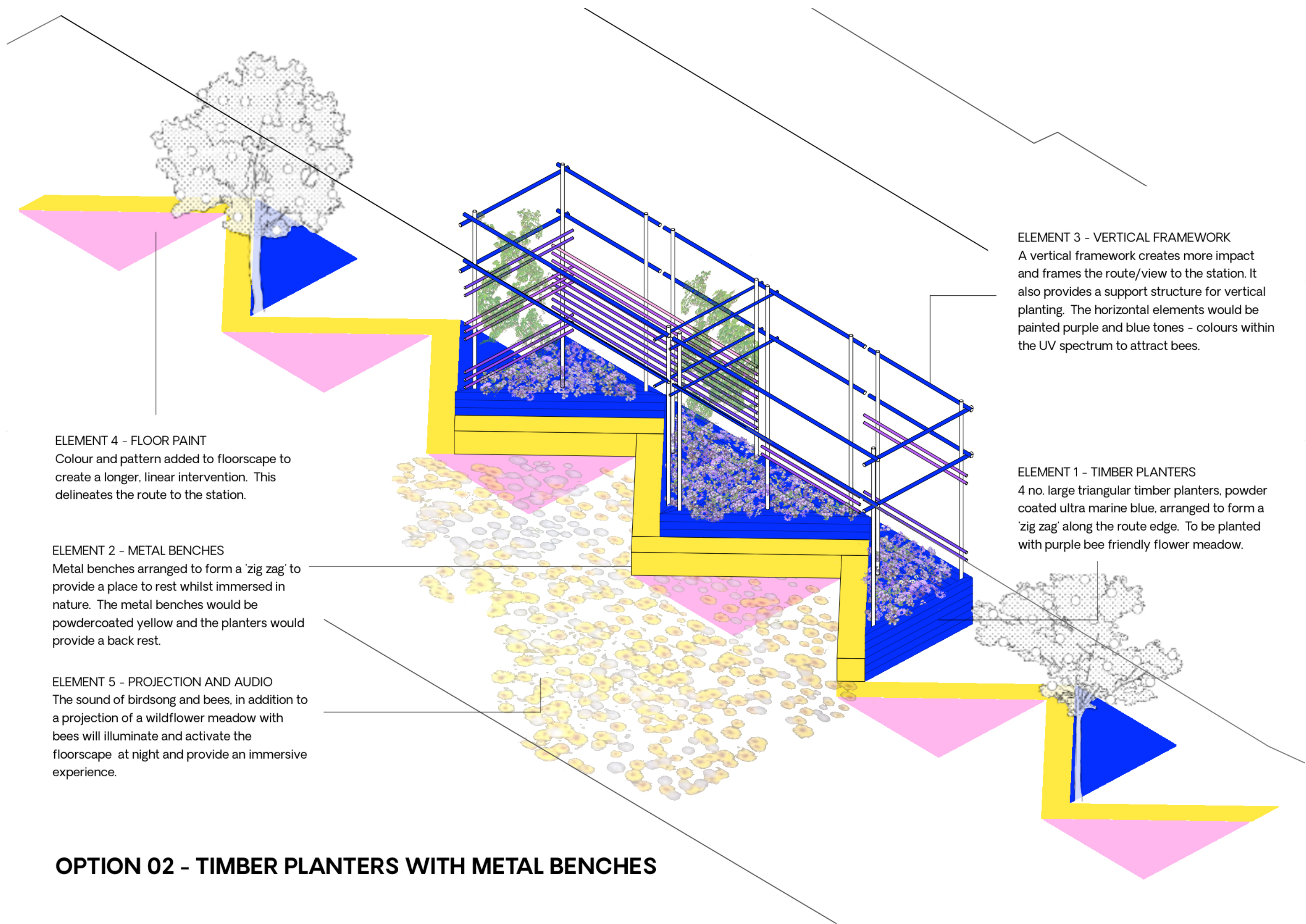
#### ELEMENT 3 - VERTICAL FRAMEWORK

A vertical framework creates more impact and frames the route/view to the station. It also provides a support structure for vertical planting. The horizontal elements would be painted purple and blue tones - colours within the UV spectrum to attract bees.

#### ELEMENT 1 - TIMBER PLANTERS

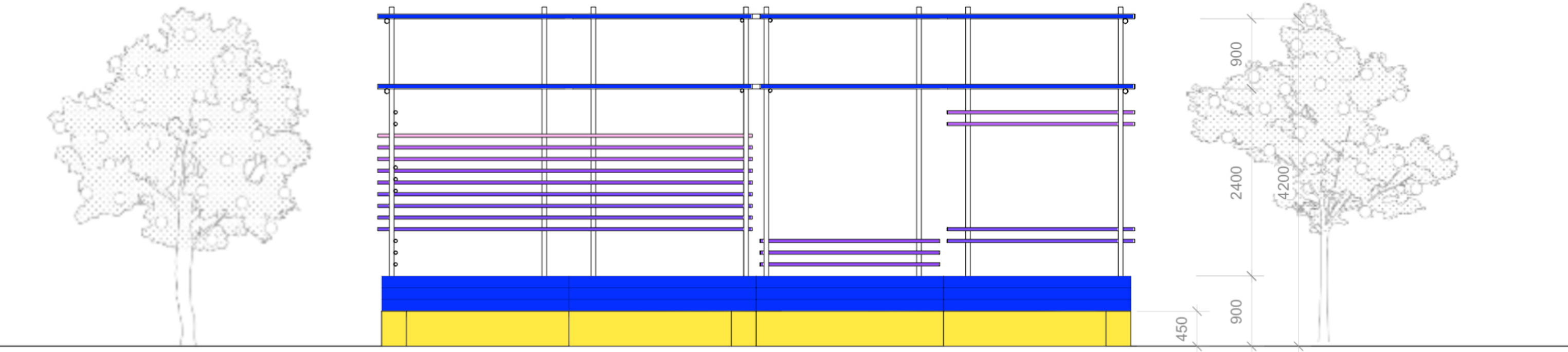
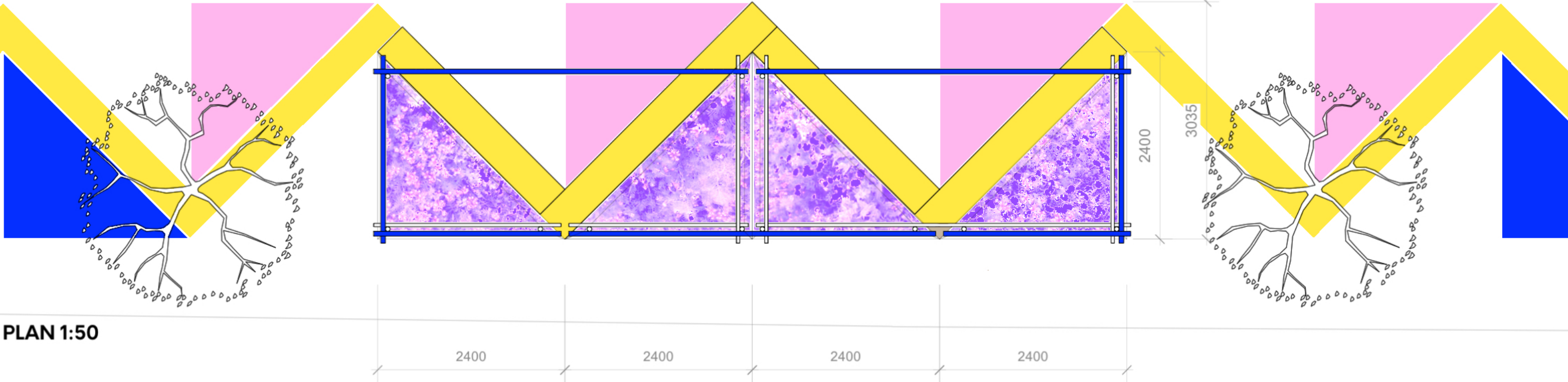
4 no. large triangular timber planters, powder coated ultra marine blue, arranged to form a 'zig zag' along the route edge. To be planted with purple bee friendly flower meadow.

## OPTION 02 - TIMBER PLANTERS WITH METAL BENCHES





OPTION 02 - TIMBER PLANTERS WITH METAL BENCH







**COSTS**



COSTS

Our design idea can be broken down into 5 distinct elements: the planters, the bench, the vertical framework, the floor paint and the audio and projection.

We have sought quotes for each element, and these are illustrated and costed on the following pages. Some of the figures are the average of two or three quotations for the same element. The drawings sent to fabricators for quoting can be found in the appendices.

Our preferred option would be to have metal planters and a timber bench, however on the next page, we have also shown costs for timber planters and metal benches, assuming that timber planters would be cheaper. To reduce costs further, a third option for consideration would be to make timber planters and benches.

INSTALLATION

In addition to the cost of manufacture and delivery to site of the elements illustrated, a cost for the installation and erection of the different elements should be accounted for. A provisional sum of £3000 should be set aside for this.

HEALTH AND SAFETY

To provide barriers and signage, including fencing around the working area during installation allow £300 + VAT.

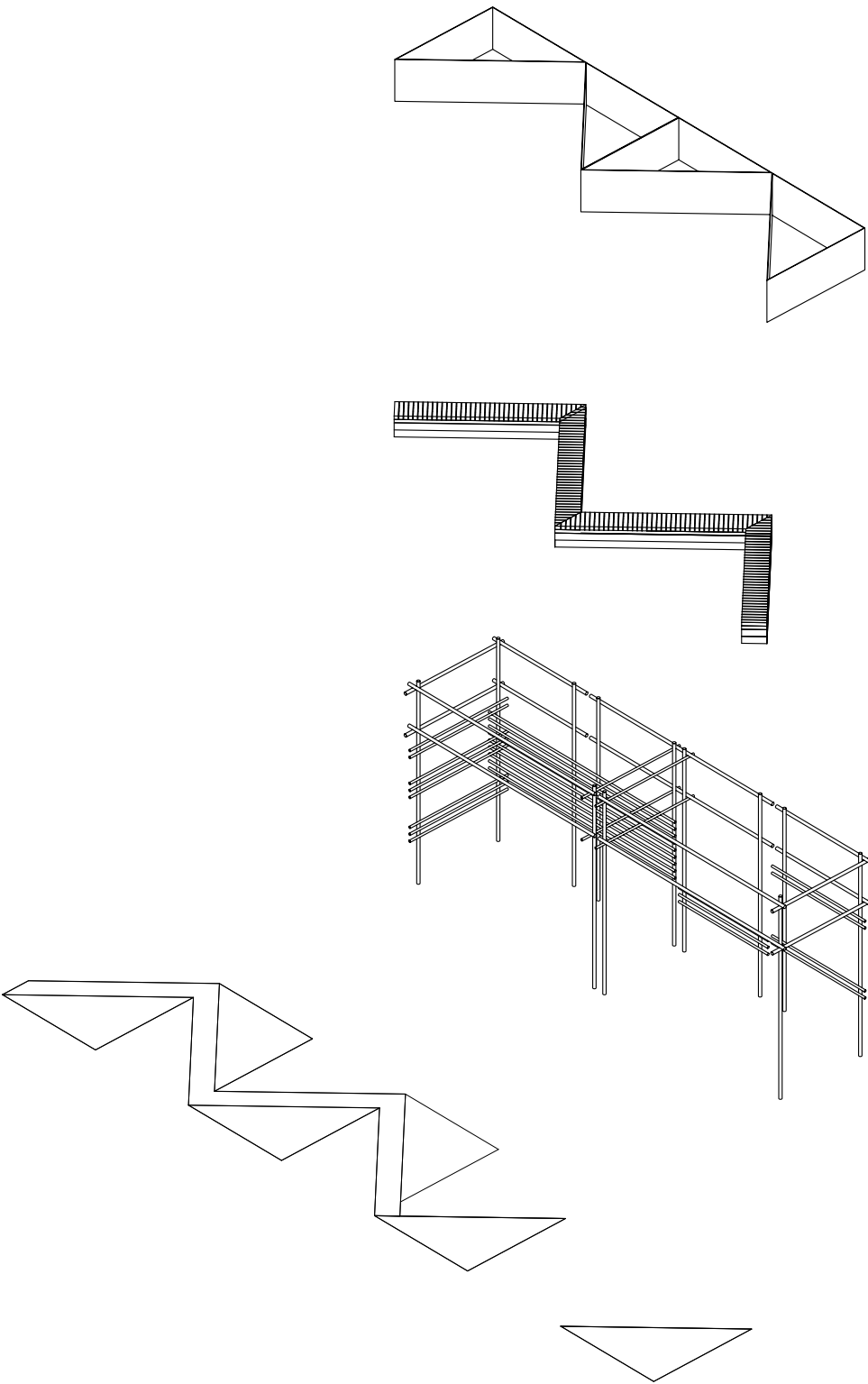
SOIL

To supply and fill planters with soil allow £800 +VAT.

PLANTING

We have not included a cost for planting as this needs to be agreed with the client in line with maintenance arrangements.

OPTION 01 - METAL PLANTERS



ELEMENT 1 - METAL PLANTERS

£9987 + VAT

ELEMENT 2 - TIMBER BENCH

£2950 + VAT

ELEMENT 3 - VERTICAL FRAMEWORK

£3500 + VAT

ELEMENT 4 - FLOOR PAINT

£240 + VAT

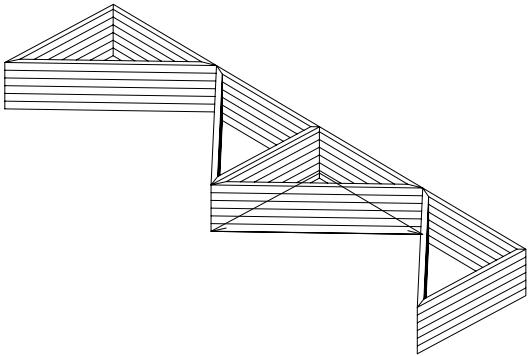
ELEMENT 5 - PROJECTION AND AUDIO

£3000 + VAT

**TOTAL    £19,677 + VAT**  
(materials and delivery only -not including installation cost)

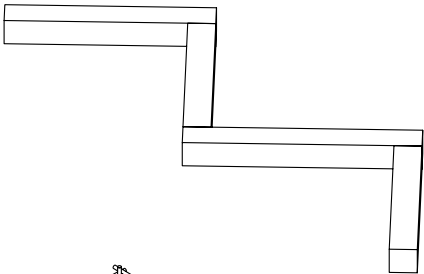


**OPTION 02 - TIMBER PLANTERS**



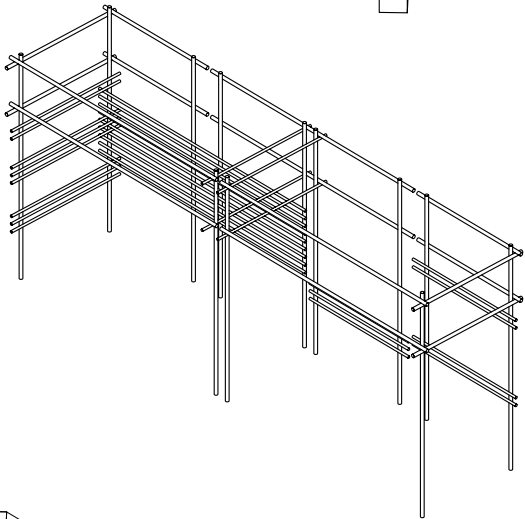
**ELEMENT 1 - TIMBER PLANTERS**

£5600 + VAT



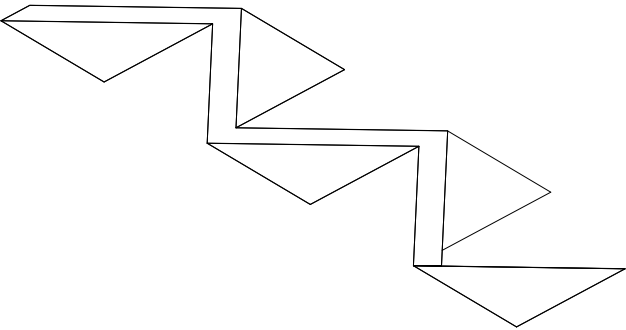
**ELEMENT 2 - METAL BENCHES**

£6874 + VAT



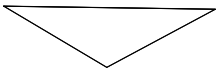
**ELEMENT 3 - VERTICAL FRAMEWORK**

£3500 + VAT



**ELEMENT 4 - FLOOR PAINT**

£240 + VAT



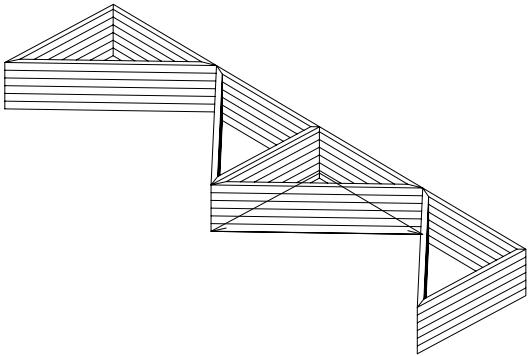
**ELEMENT 5 - PROJECTION AND AUDIO**

£3000 + VAT

**TOTAL    £19,214 + VAT**  
(materials and delivery only -not including installation cost)

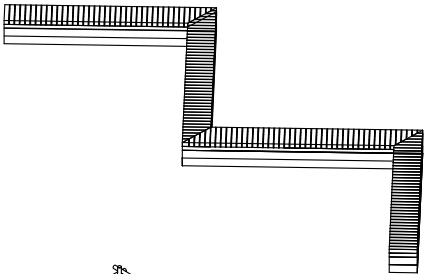


**OPTION 03 - ALL TIMBER PLANTERS + BENCHES**



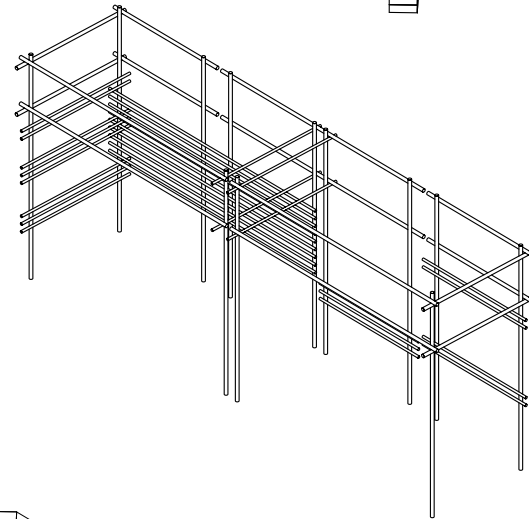
**ELEMENT 1 - TIMBER PLANTERS**

£5600 + VAT



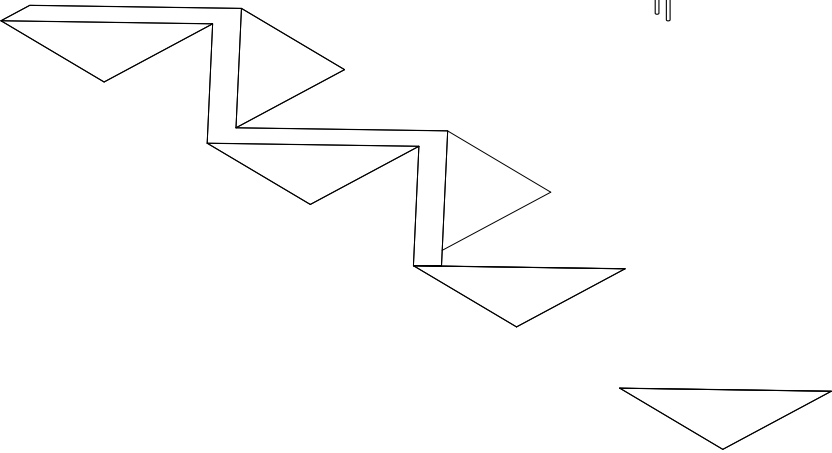
**ELEMENT 2 - TIMBER BENCHES**

£2950 + VAT



**ELEMENT 3 - VERTICAL FRAMEWORK**

£3500 + VAT



**ELEMENT 4 - FLOOR PAINT**

£240 + VAT

**ELEMENT 5 - PROJECTION AND AUDIO**

£3000 + VAT

**TOTAL** £15,290 + VAT  
(materials and delivery only -not including installation cost)





**NEXT STEPS**

## NEXT STEPS

### PLANNING REQUIREMENTS

Before any work takes place to refine the design, fabricate and install the waiting room, it should be established whether planning permission is required. Submitting a pre-application enquiry will determine the planning requirements. However, if there is already a relationship with the relevant Planning Officer, a less formal approach may be possible.

### BUDGET AND FUNDING

This design report provides a number of options and combinations for fabrication of the waiting room, covering a range of costs. Establishing a target budget will allow for funding for delivery to be sought, and for refinement of the design.

### DETAIL AND TECHNICAL DESIGN

Once the budget has been agreed, the design can be refined and worked up in more detail. This stage will include liaising with the relevant fabricators, suppliers and installers to agree dimensions and specifications. Coordination of the various elements will be necessary.

### MAINTENANCE REQUIREMENTS AND RESPONSIBILITIES

A level of maintenance will be required to keep the waiting room at its best.

Some 'gardening' will be necessary on a regular basis to ensure the pollinator-friendly plants grow well, and weeds do not take over. Mulching and feeding should be carried out as required.

We suggest the planters are stocked with drought-tolerant plants to minimise watering requirements. However, some watering may be required during longer dry spells.

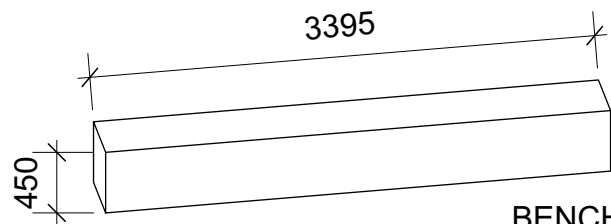
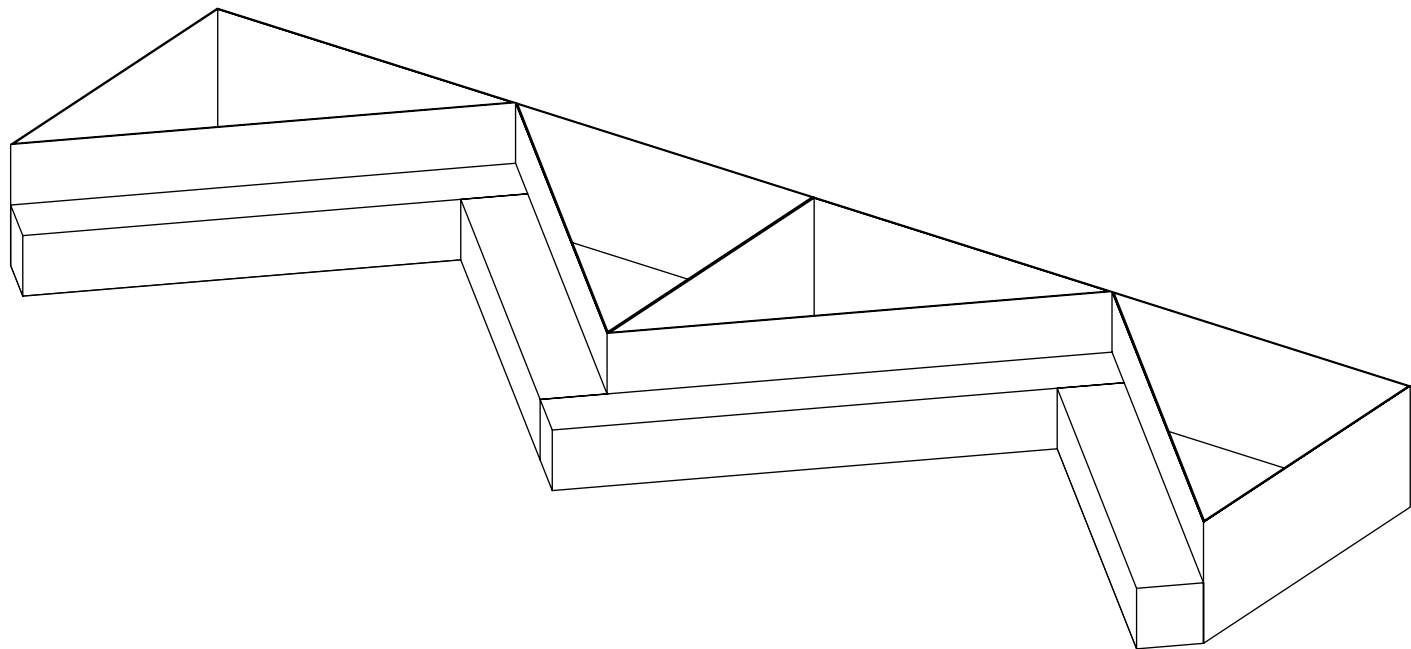
In the longer term, the planters, vertical structure and floor paint will need cleaning and may require re-painting or treating

The Pharmabees team and wider university stakeholders should agree who is responsible for each maintenance task.

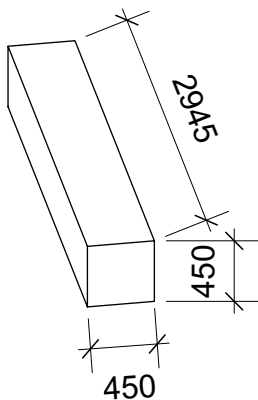




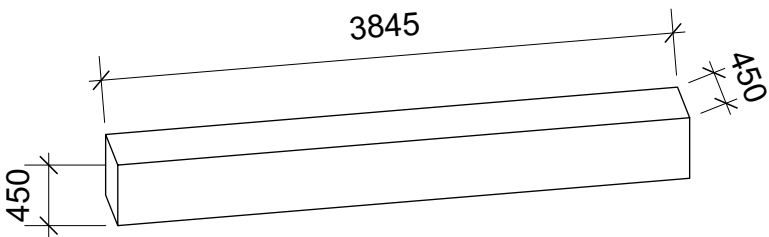
# METAL BENCHES



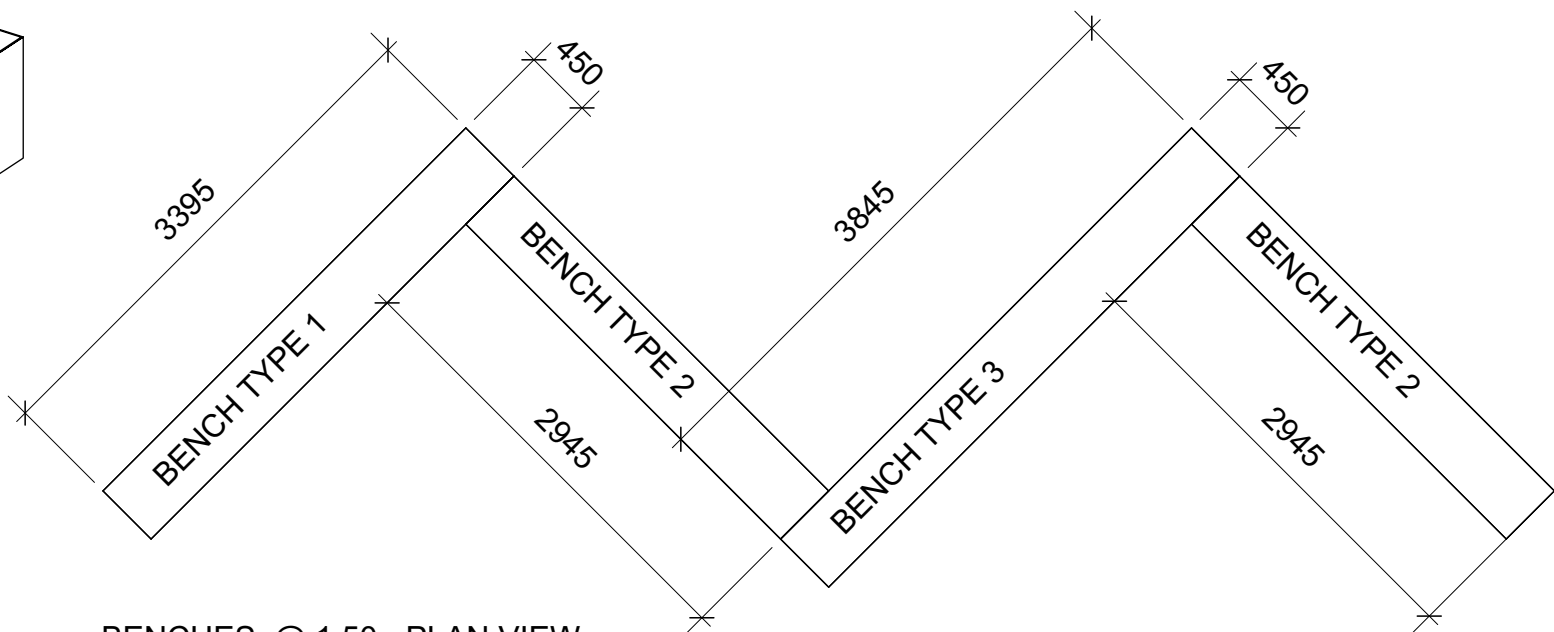
**BENCH TYPE 1**  
3395mm long, x 450mm high, 450mm wide  
1 no. required



**BENCH TYPE 2**  
2945mm long, x 450mm high, 450mm wide  
2 no. required



**BENCH TYPE 3**  
3845mm long, x 450mm high, 450mm wide  
1 no. required



**BENCHES @ 1:50- PLAN VIEW**

## NOTES:

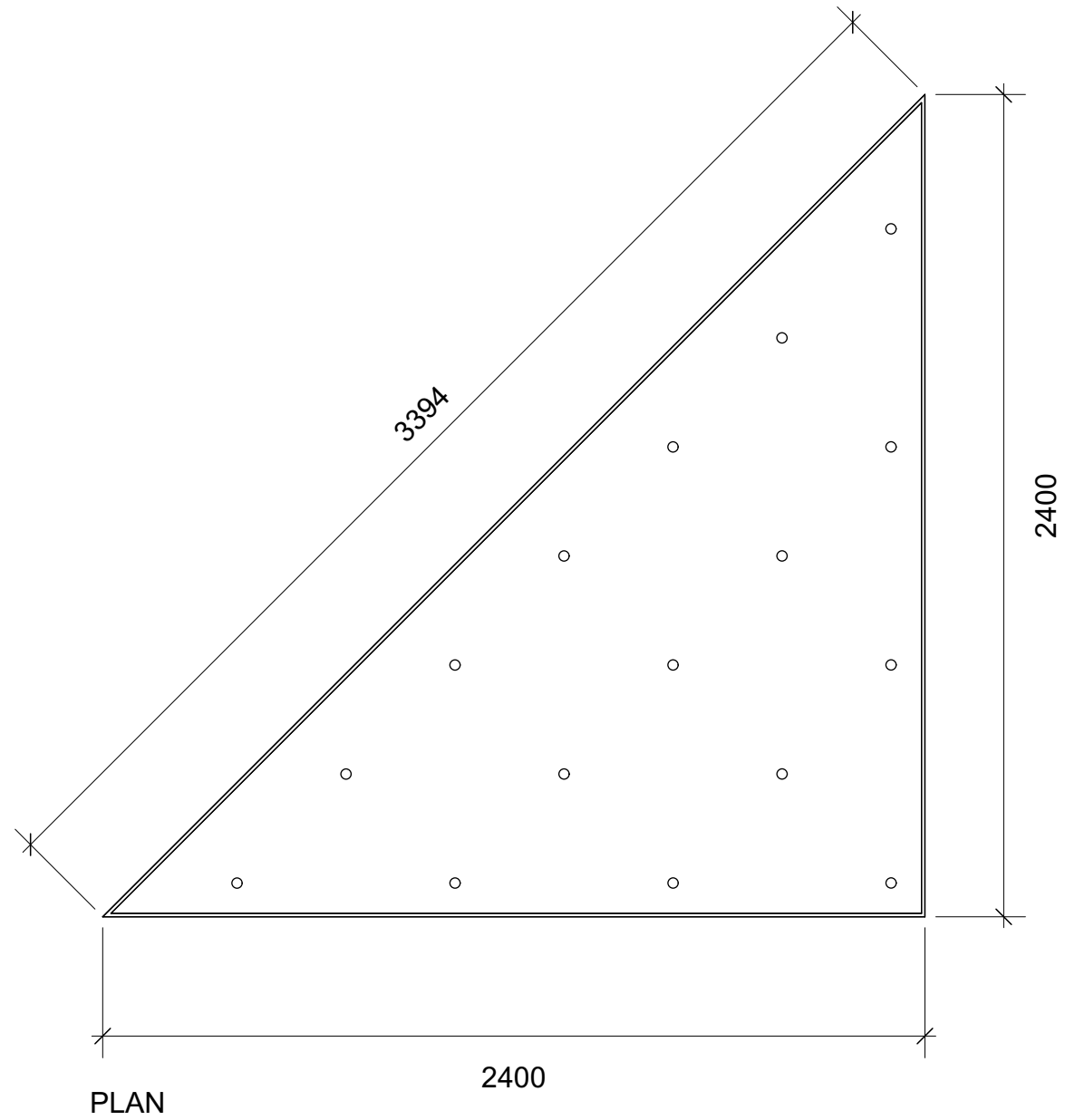
4 no. metal benches required, sized as illustrated.

Drawn as 5 mm sheet - although happy to take advice on metal thickness. Include for all bracing as neccessary.

All planters to be powdercoated (colour TBC but either blue or yellow)

Include for manufacture, powdercoating and delivery of planters to site.





## METAL PLANTERS @ 1:50

### NOTES:

4 no. metal planters required, all sized to match as illustrated.

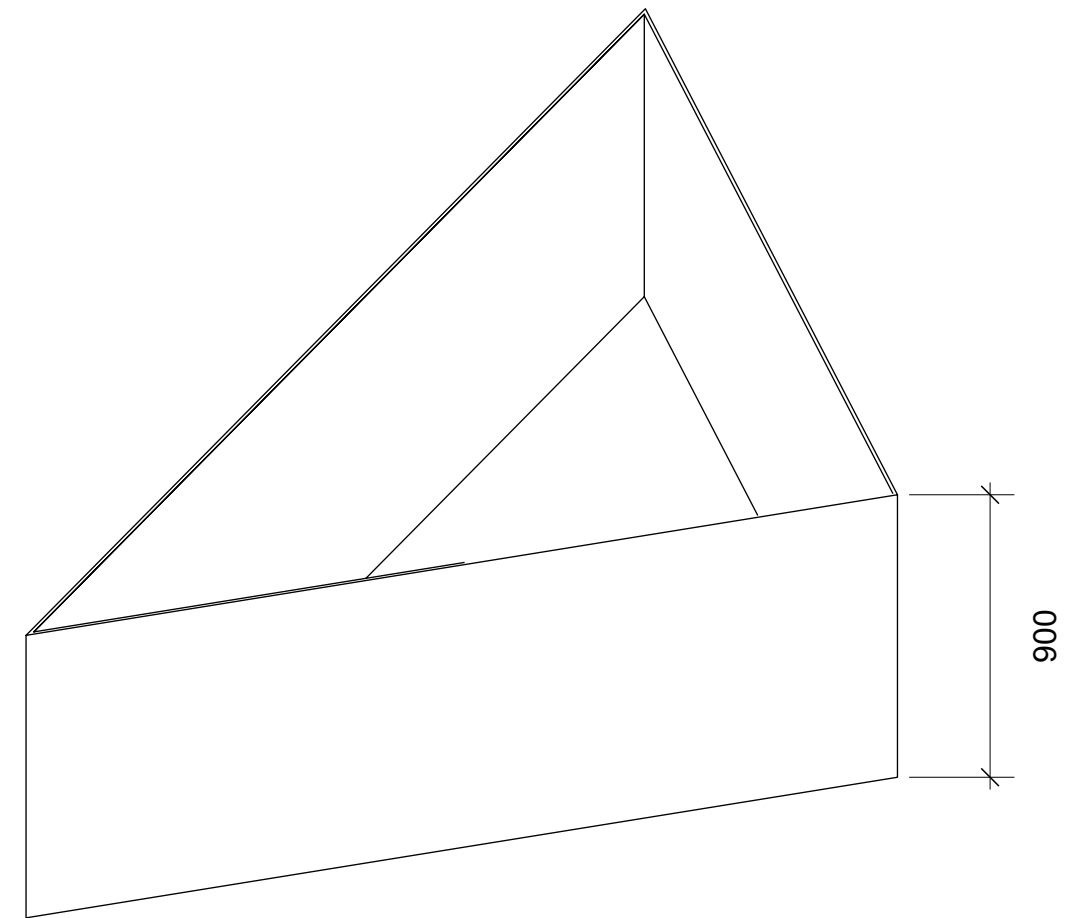
Drawn as 5 mm sheet - although happy to take advice on metal thickness.

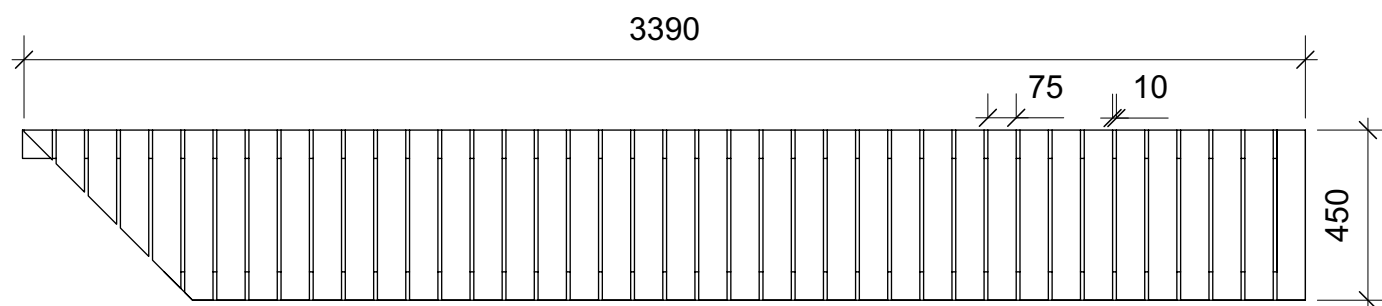
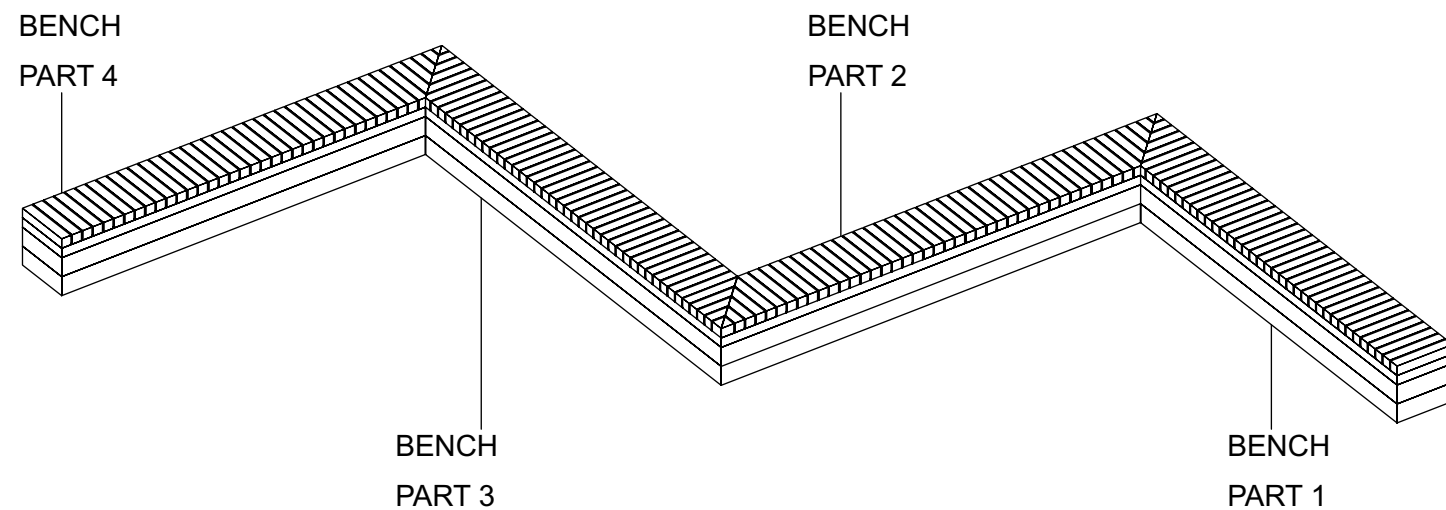
Include for all bracing as neccessary.

Include for min 12 no. drainage holes 30mm thick, evenly spaced.

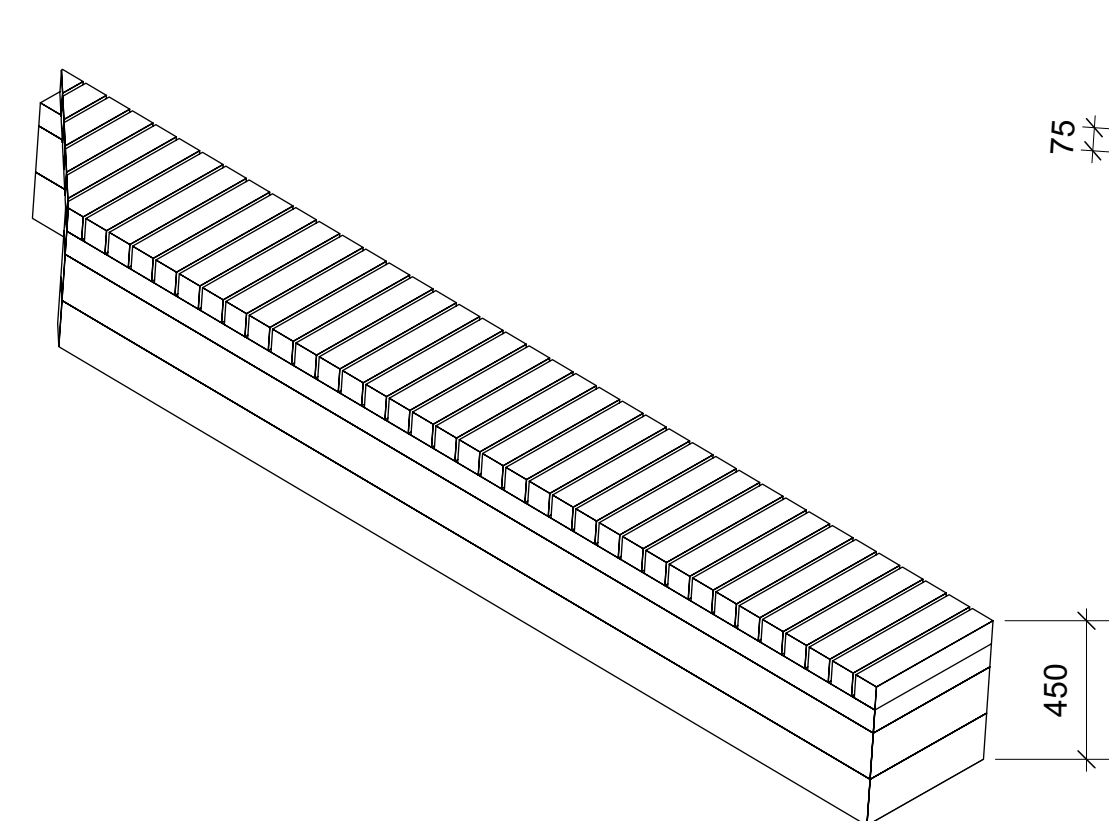
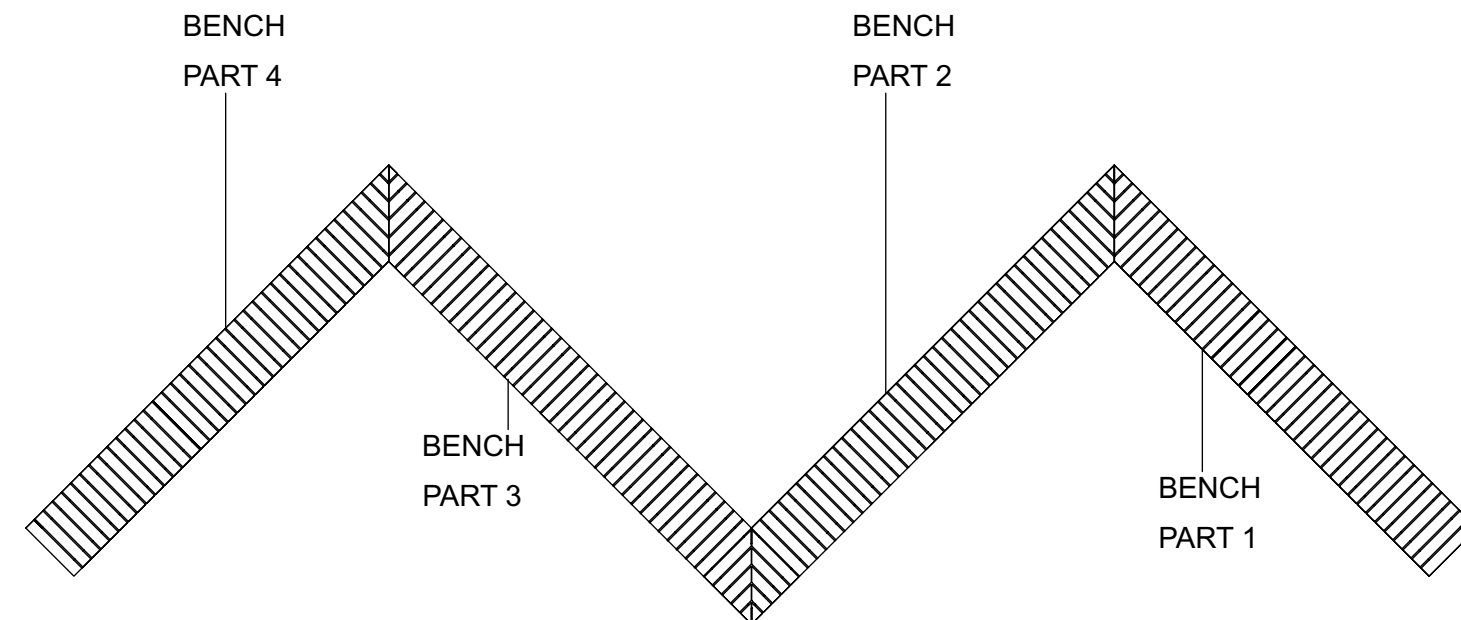
All planters to be powdercoated (colour TBC but either blue or yellow)

Include for manufacture, powdercoating and delivery of planters to site.

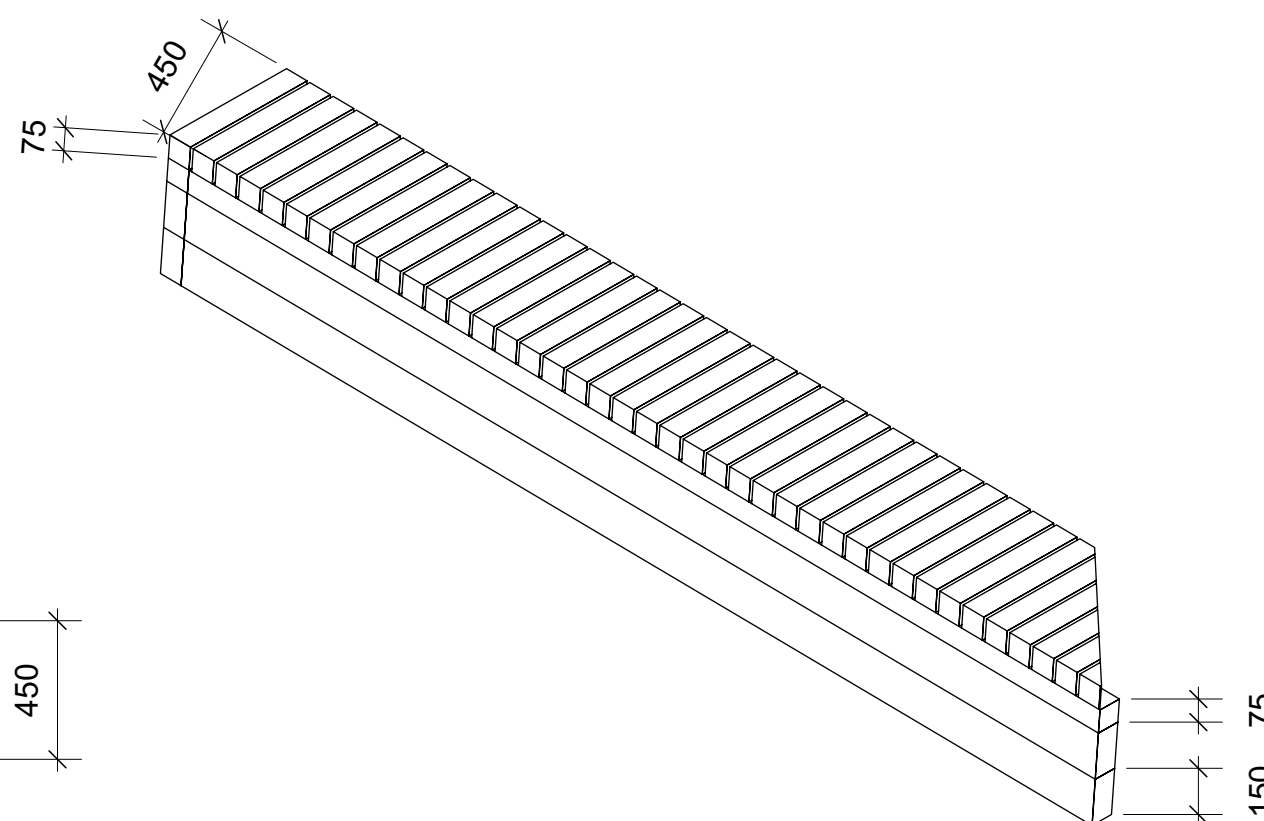




BENCH 1 @ 1:20- PLAN VIEW



BENCH 1 @ 1:20- 3D VIEW FRONT



BENCH 1 @ 1:20- 3D VIEW REAR

## TIMBER BENCH PART 1

### NOTES:

Zig Zag timber bench made in 4 parts.  
Include for materials, labour and construction of all parts

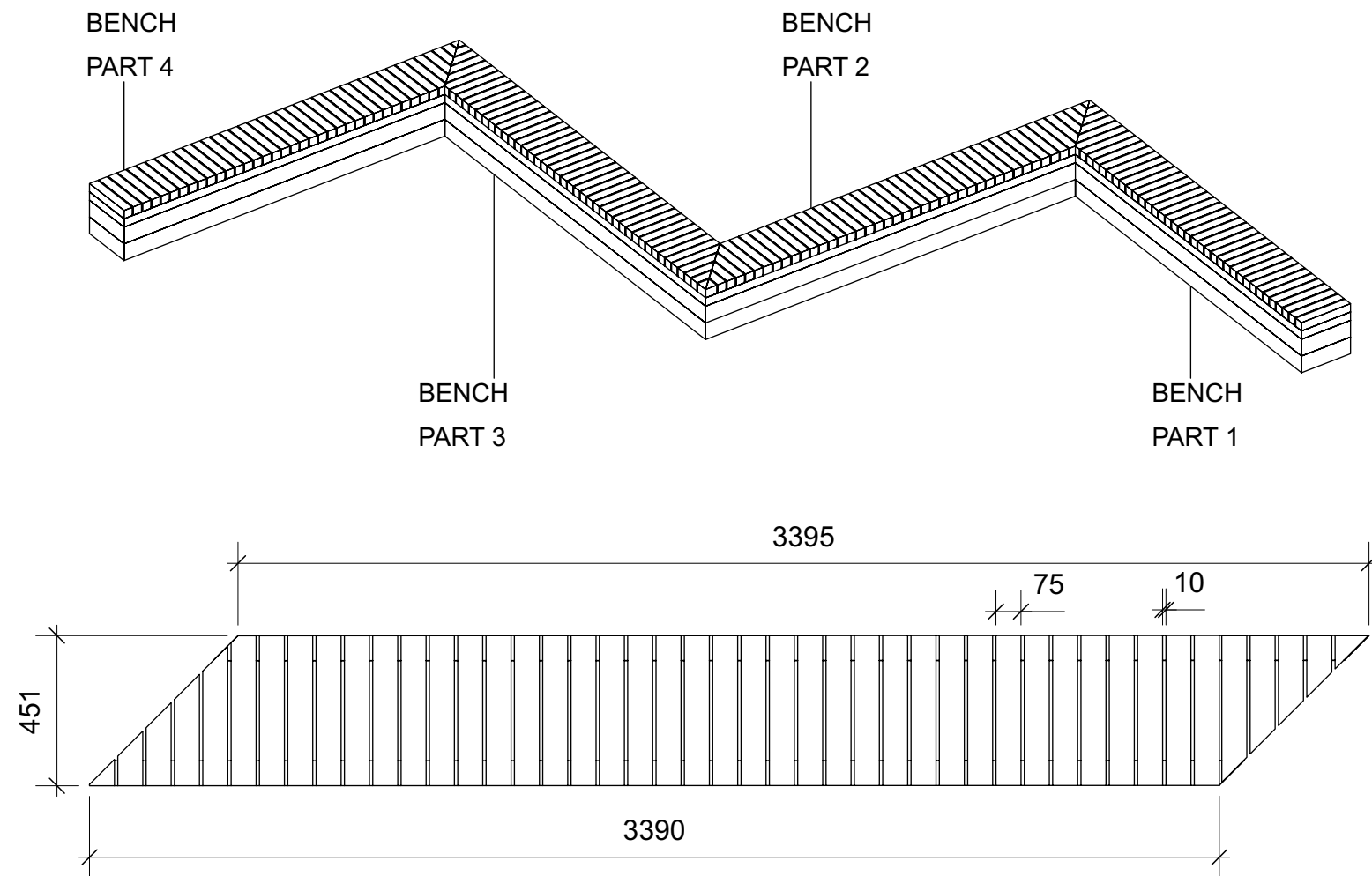
Base made from 150 x 75mm and 75mm x 75mm 'sleeper' type chunky timber sections - although happy to take advice on timber sizes.

All timber to be robust and suitable for outdoor use. Include for all fixings and jointing.

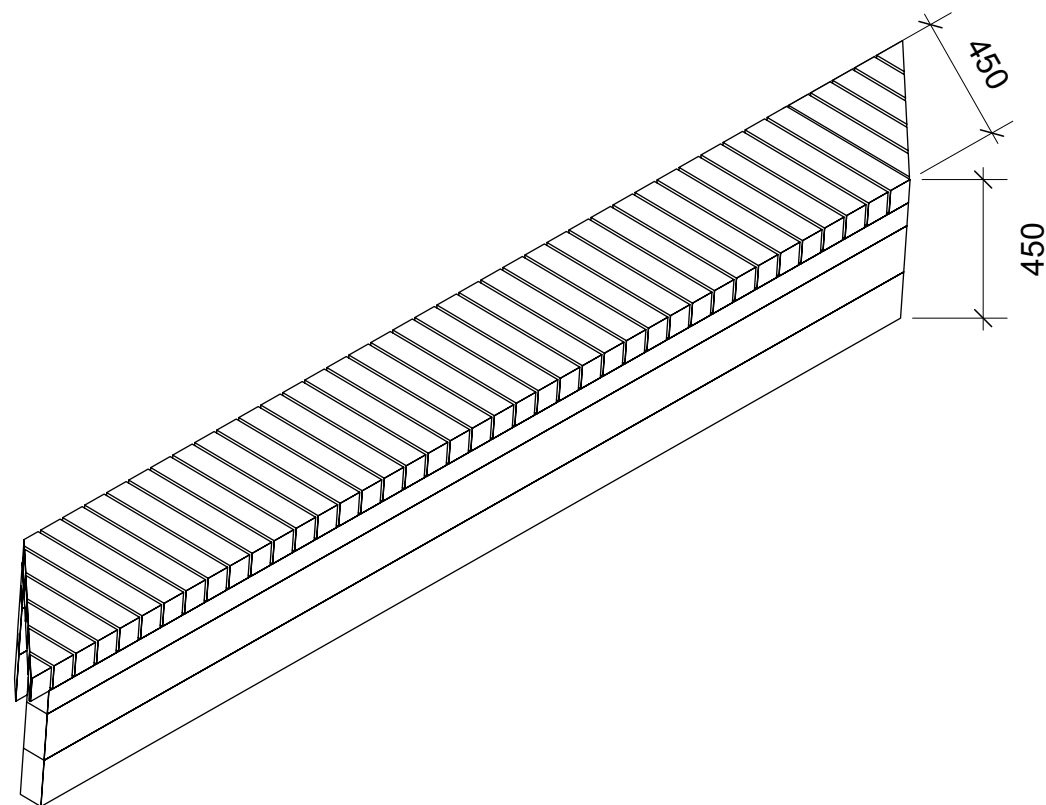
Top/seat made from smooth planed and oiled 75mm 75mm timber sections with 10mm gap.

Include for all labour and assembly of planters on site.

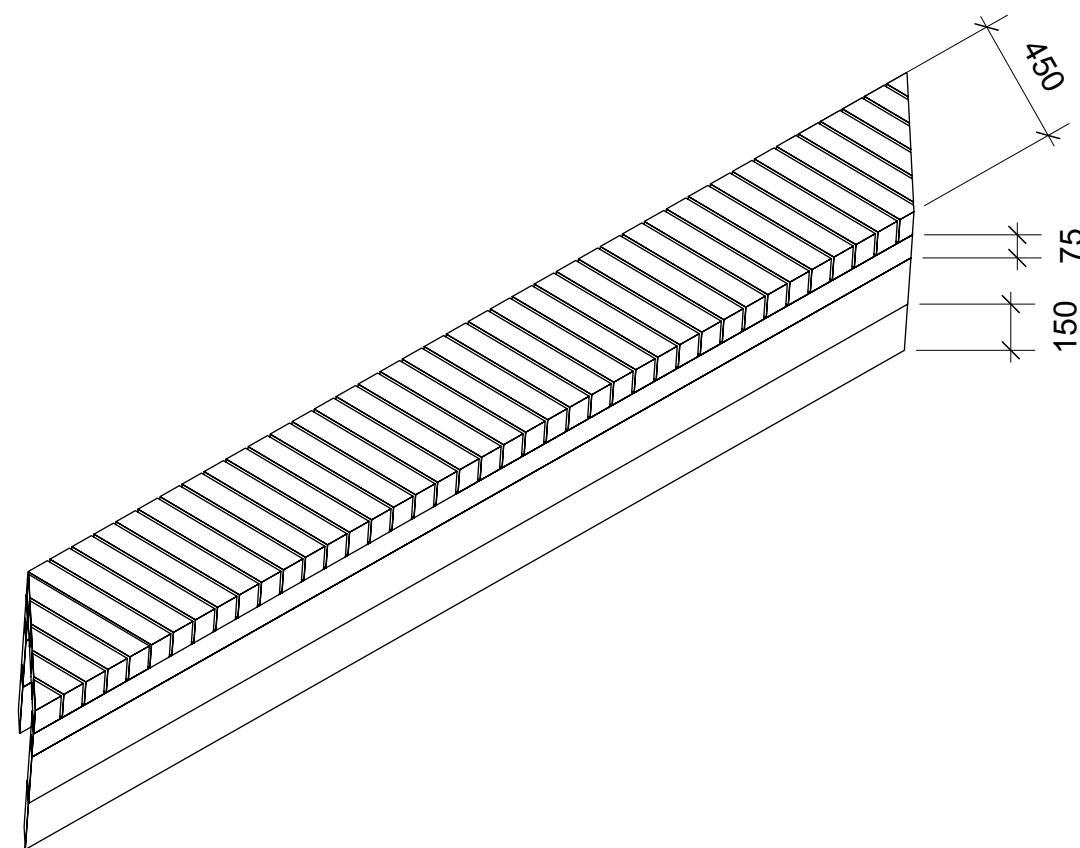




BENCH 2 @ 1:20- PLAN VIEW

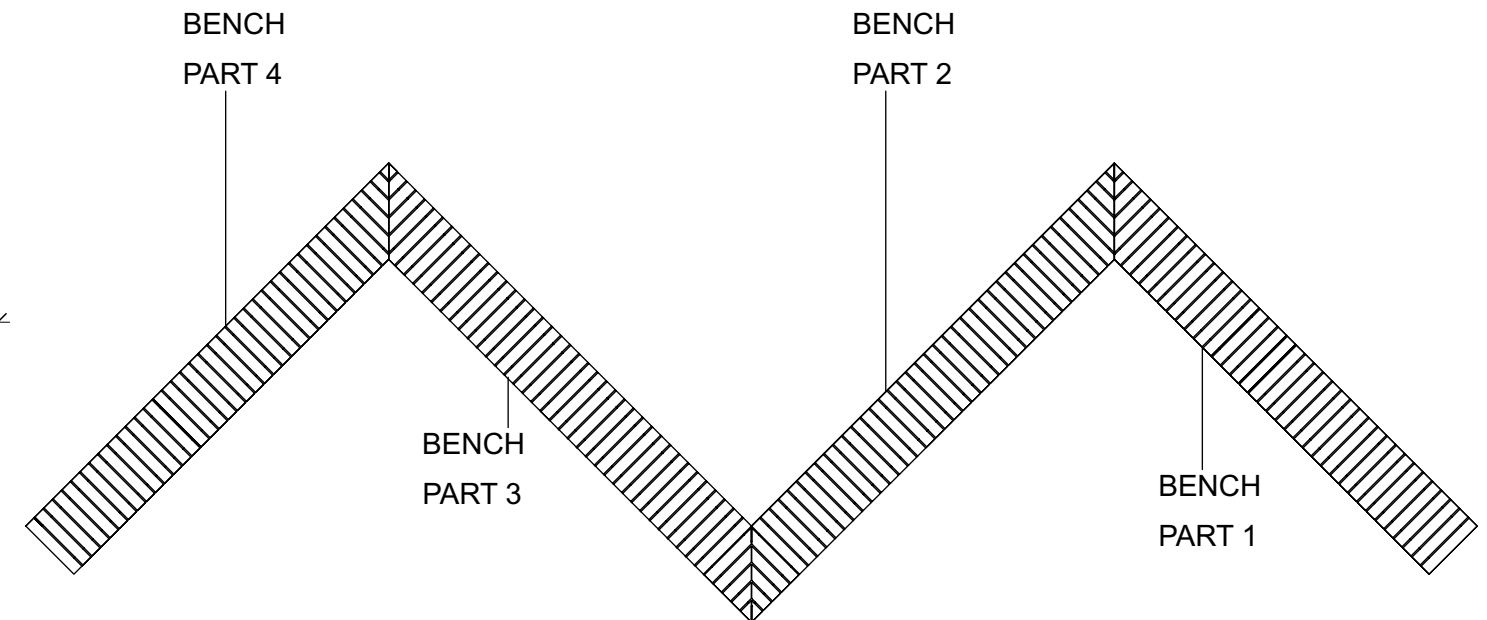


BENCH 2 @ 1:20- 3D VIEW FRONT



BENCH 2 @ 1:20- 3D VIEW REAR

## TIMBER BENCH PART 2



### NOTES:

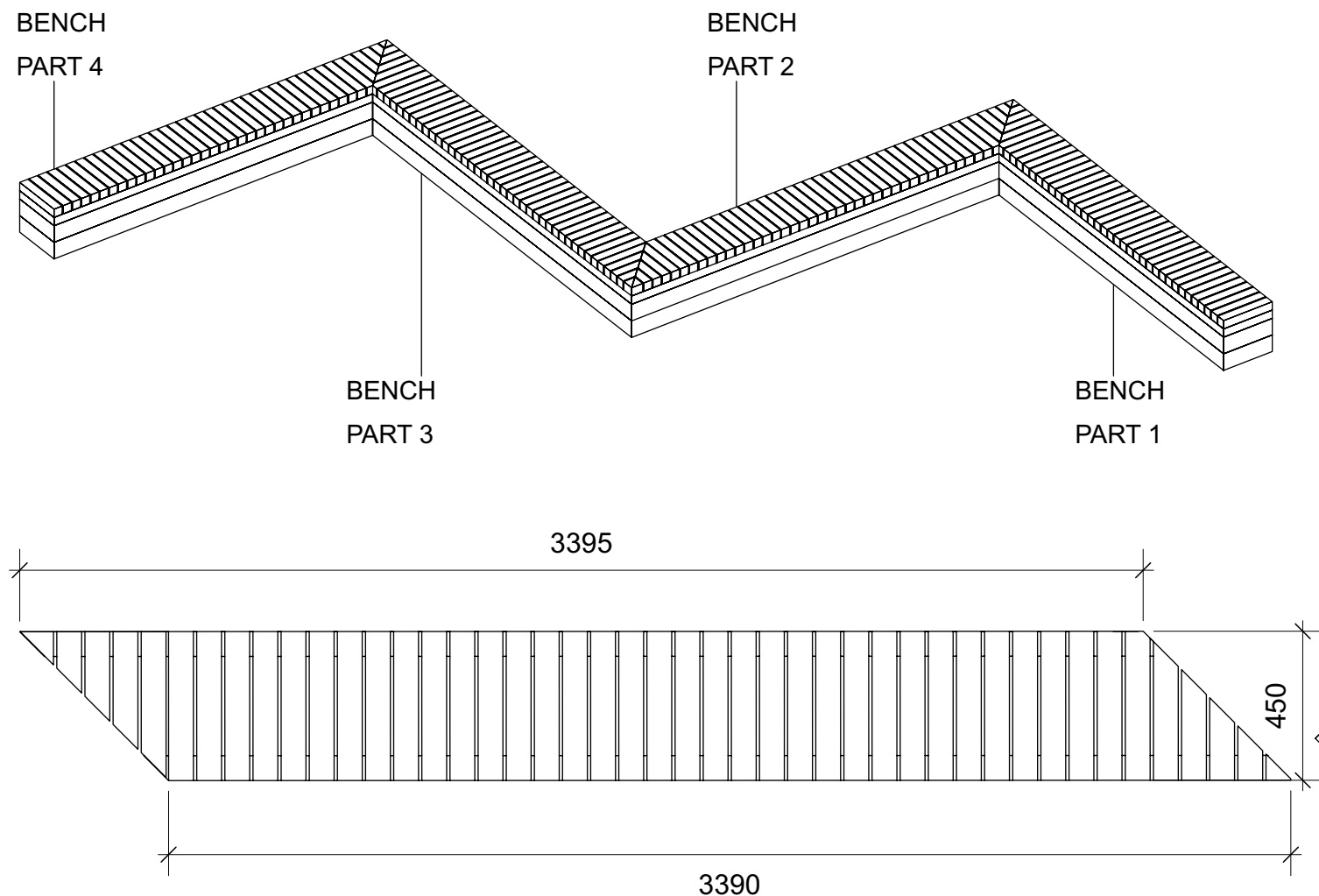
Zig Zag timber bench made in 4 parts.  
Include for materials, labour and construction of all parts

Base made from 150 x 75mm and 75mm x 75mm 'sleeper' type chunky timber sections - although happy to take advice on timber sizes.

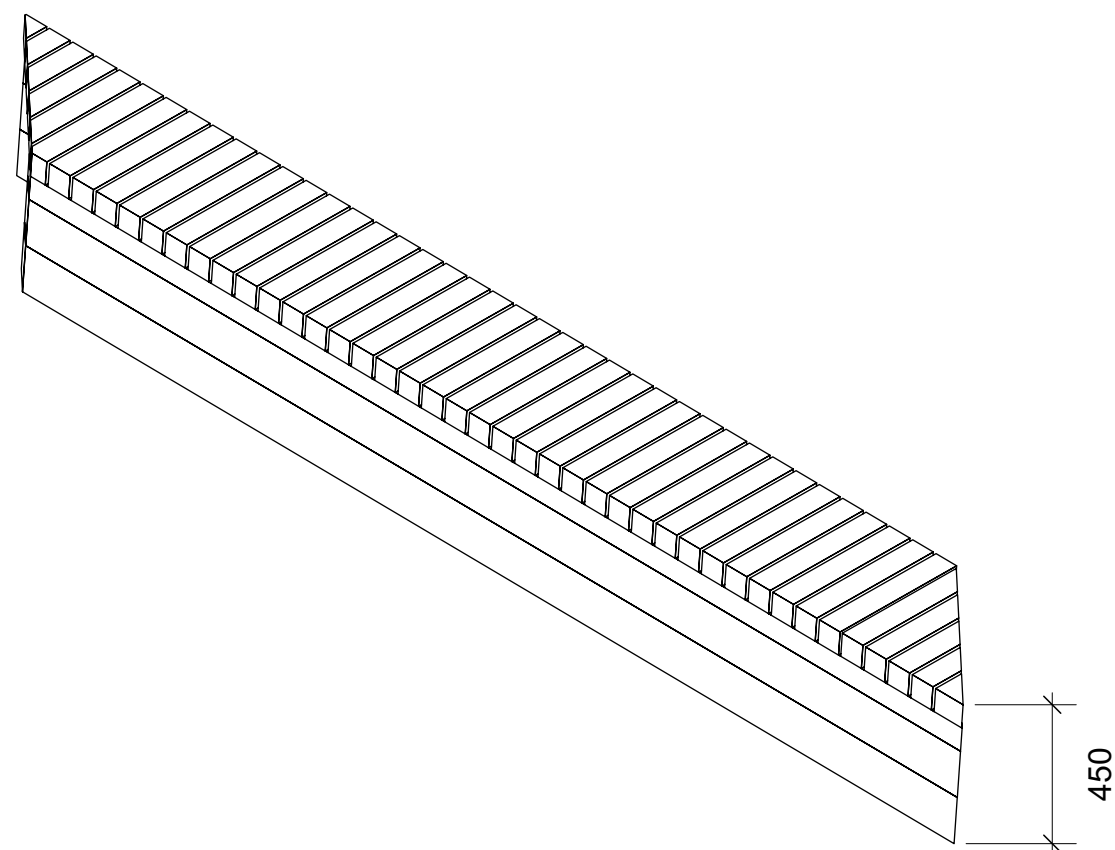
All timber to be robust and suitable for outdoor use. Include for all fixings and jointing.

Top/seat made from smooth planed and oiled 75mm 75mm timber sections with 10mm gap.

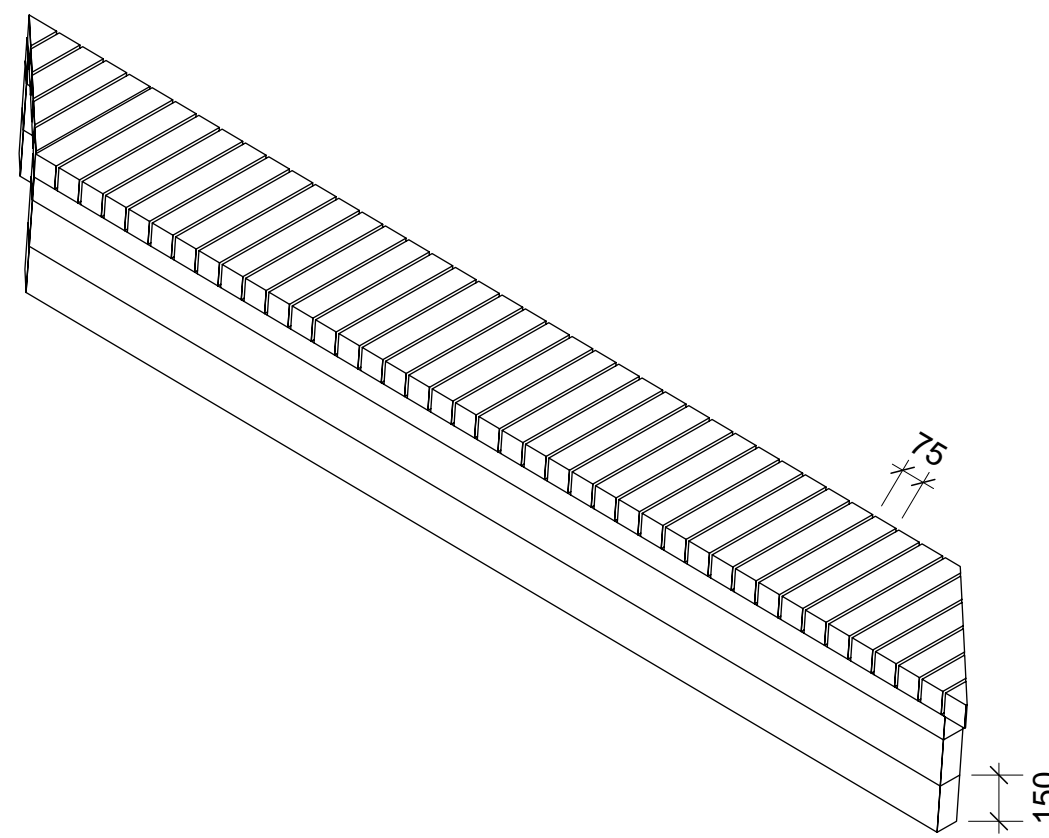
Include for all labour and assembly of planters on site.



BENCH 3 @ 1:20- PLAN VIEW

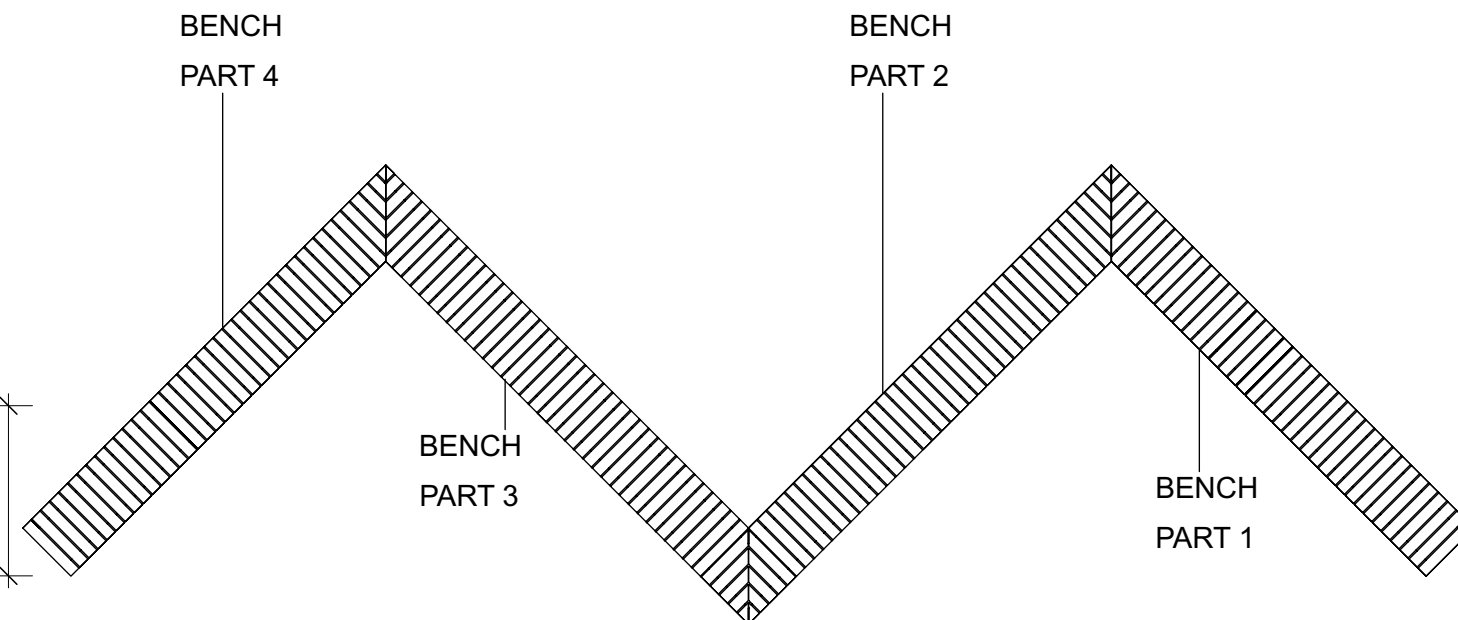


BENCH 3 @ 1:20- 3D VIEW FRONT



BENCH 3 @ 1:20- 3D VIEW REAR

## TIMBER BENCH PART 3



### NOTES:

Zig Zag timber bench made in 4 parts.  
Include for materials, labour and construction of all parts

Base made from 150 x 75mm and 75mm x 75mm 'sleeper' type chunky timber sections - although happy to take advice on timber sizes.

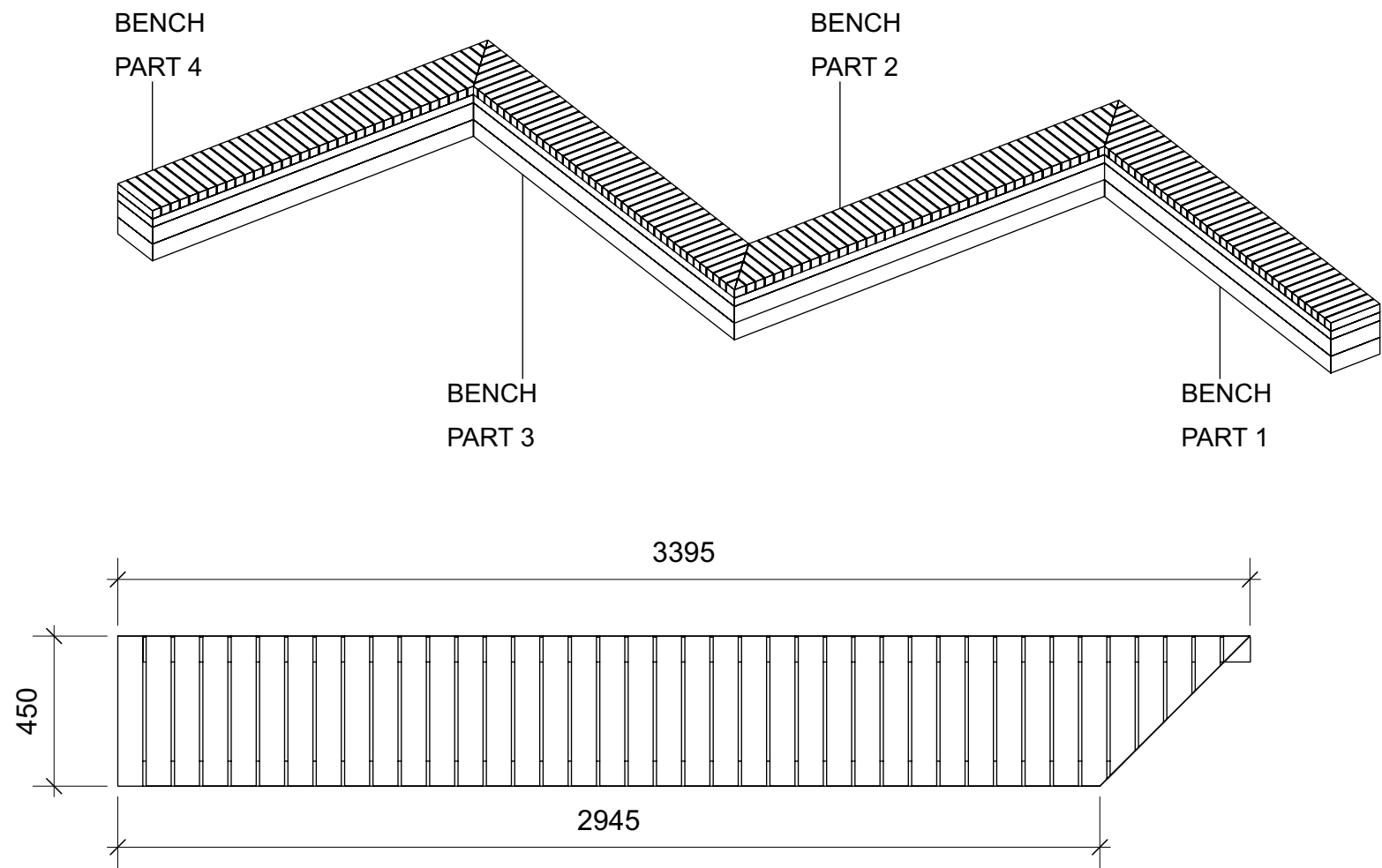
All timber to be robust and suitable for outdoor use. Include for all fixings and jointing.

Top/seat made from smooth planed and oiled 75mm 75mm timber sections with 10mm gap.

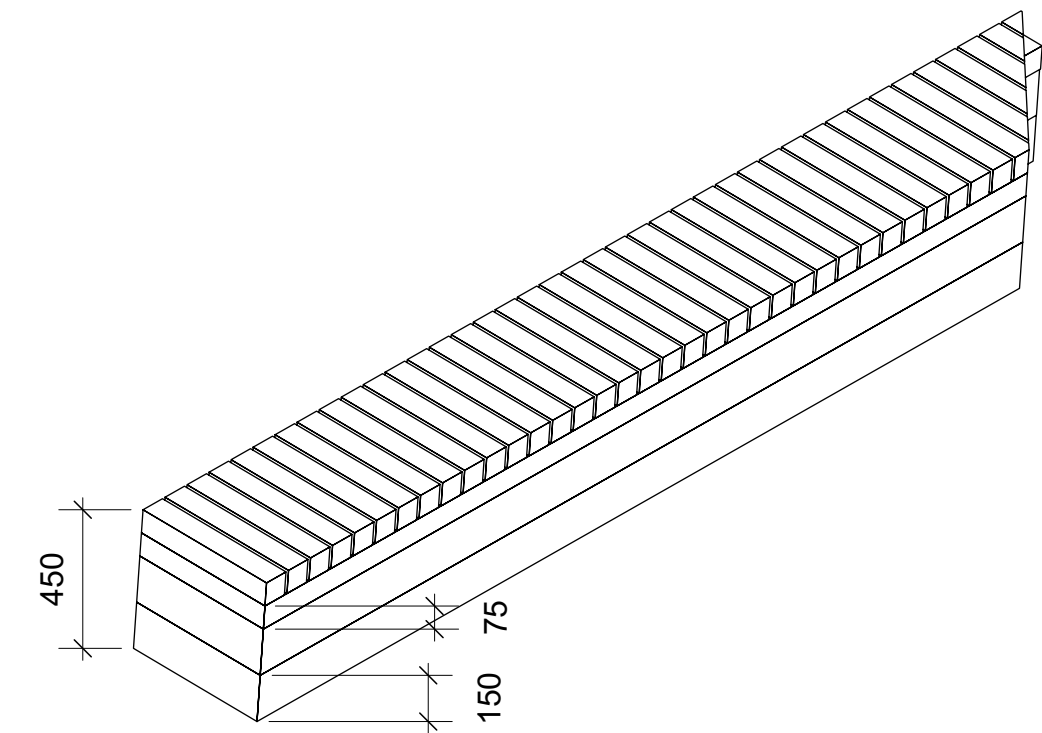
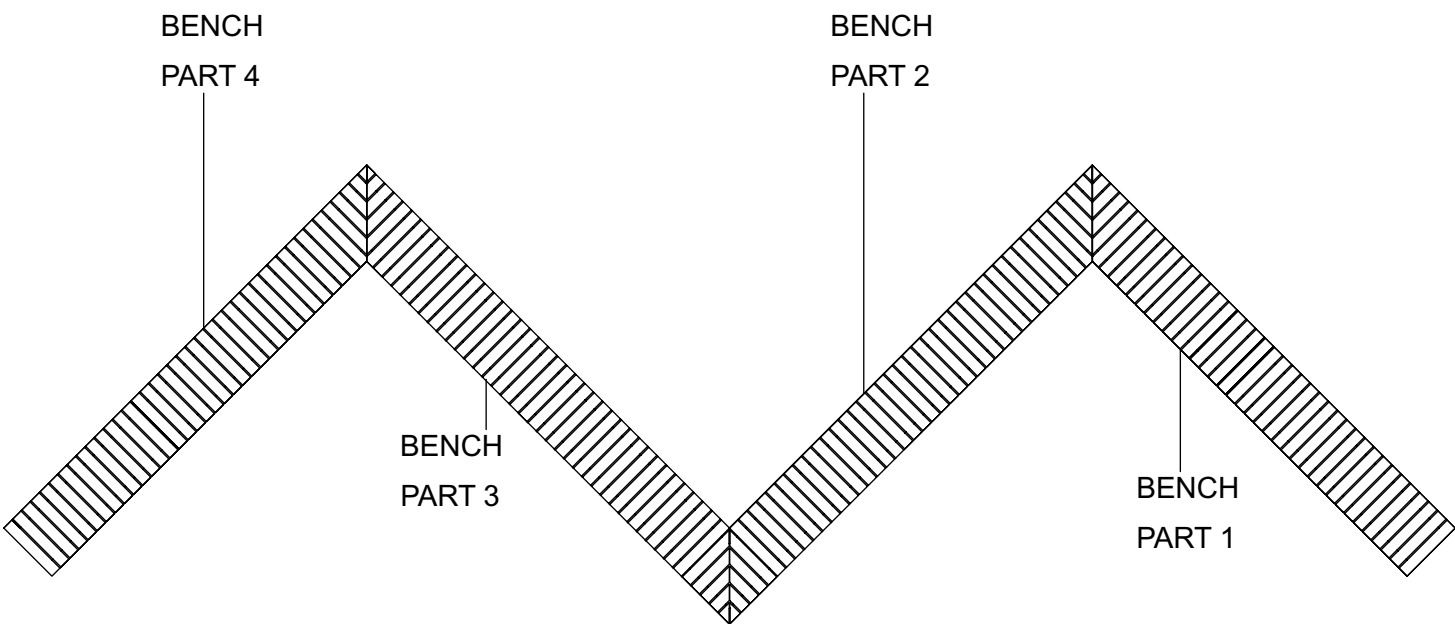
Include for all labour and assembly of planters on site.



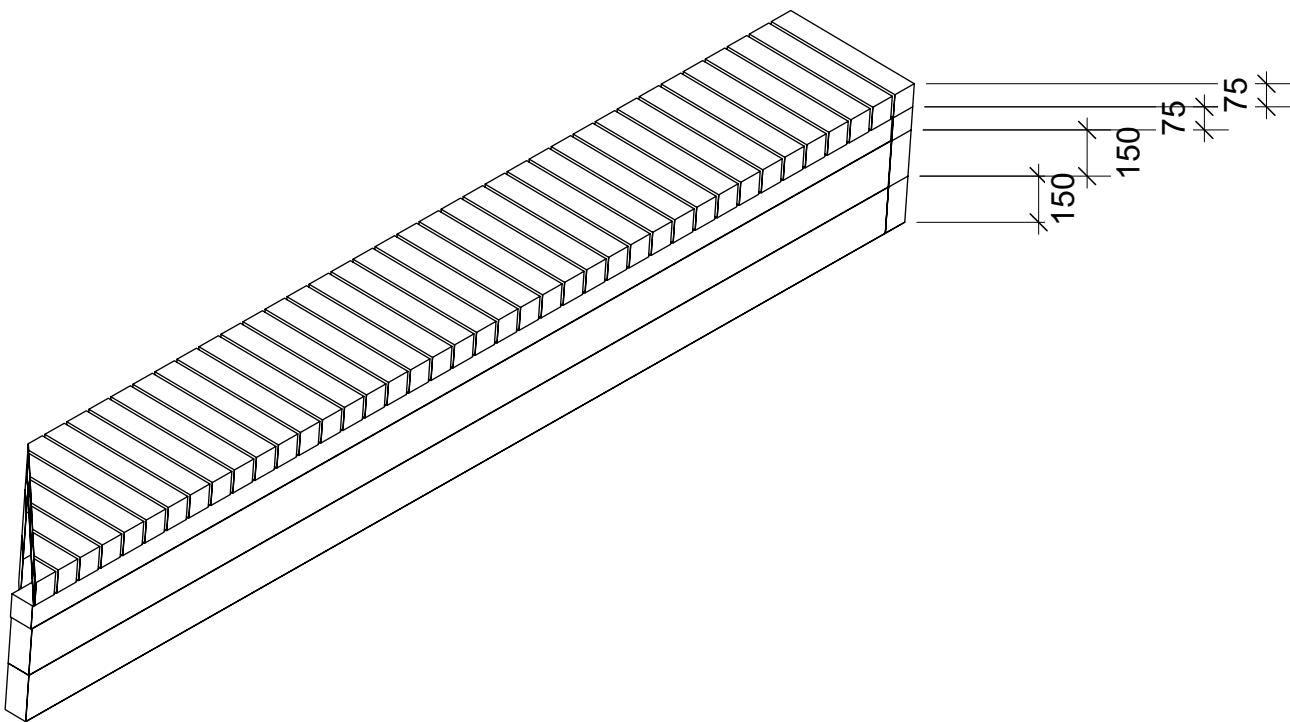
# TIMBER BENCH PART 4



BENCH 4 @ 1:20- PLAN VIEW



BENCH 4 @ 1:20- 3D VIEW FRONT



BENCH 4 @ 1:20- 3D VIEW REAR

NOTES:  
Zig Zag timber bench made in 4 parts.  
Include for materials, labour and construction of all parts

Base made from 150 x 75mm and 75mm x 75mm 'sleeper' type chunky timber sections - although happy to take advice on timber sizes.  
All timber to be robust and suitable for outdoor use. Include for all fixings and jointing.

Top/seat made from smooth planed and oiled 75mm 75mm timber sections with 10mm gap.

Include for all labour and assembly of planters on site.

TIMBER PLANTERS @ 1:50

NOTES:

4 no. timber planters required, all sized to match as illustrated.

Drawn as 150 x 100mm 'sleeper' type chunky timber sections - although happy to take advice on timber sizes.

All timber to be robust and suitable for outdoor use.

Include for all fixings and jointing.

Include for all labour and assembly of planters on site.

