
Urban Elements

D

D1 Landscape

Introduction

Rotterdam Central Station

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Just as the quality of the architectural elements is essential for designing the passenger environment, green qualities play an important role in a station's overall environment. The railway external public area has an important part of the city's interaction with a station and a place for both passengers and residents to live a public space. Today's passengers, however, have very different demands for station environments and the design of green areas needs to be integrated with passenger flow and shared space. The quality of the park should be updated not only for the passenger experience, but also as part of sustainable urban planning.

By working with consciously designed green spaces, it is possible to create environments with better air quality, less noise and strong identity, where it is easy to find your way around. The modern railway park does not need to be a traditional park, but is a means of using vegetation as a cornerstone for designing and structuring passenger functions including arrival, parking, stops and the 'gap' with screening elements and side slopes. It is an important part of a station's profile, and requires close collaboration between the Transport Administration and the municipality or other landowners.

Station urban planning

In most cases, a station is centrally located in the urban area, but it may also be outside the urban area in a central location in relation to travel patterns and networks of different transport modes.

Offices, schools or housing near a station generate various types and amounts of travel. Offices near a station have the greatest effect on the selection of mode of transport. Distance and services have a bearing on selection of different modes of transport to the train:

- Walking and cycling have great relevance up to 0.5–3 km, as does access to bicycle parking
- Buses have relevance for connecting journeys over 2km
- For car journeys, available parking and fees are important, especially in smaller towns

Railway yards and connecting areas can be developed to fulfill other functions. This provides opportunities for a more efficient use of land located in the vicinity of a station. A station is more integrated with its surroundings if a new building is added, for example, a new facility, or any enterprise that facilitates travel and which allows a station to be perceived as closer and safer.



Landscape

D1

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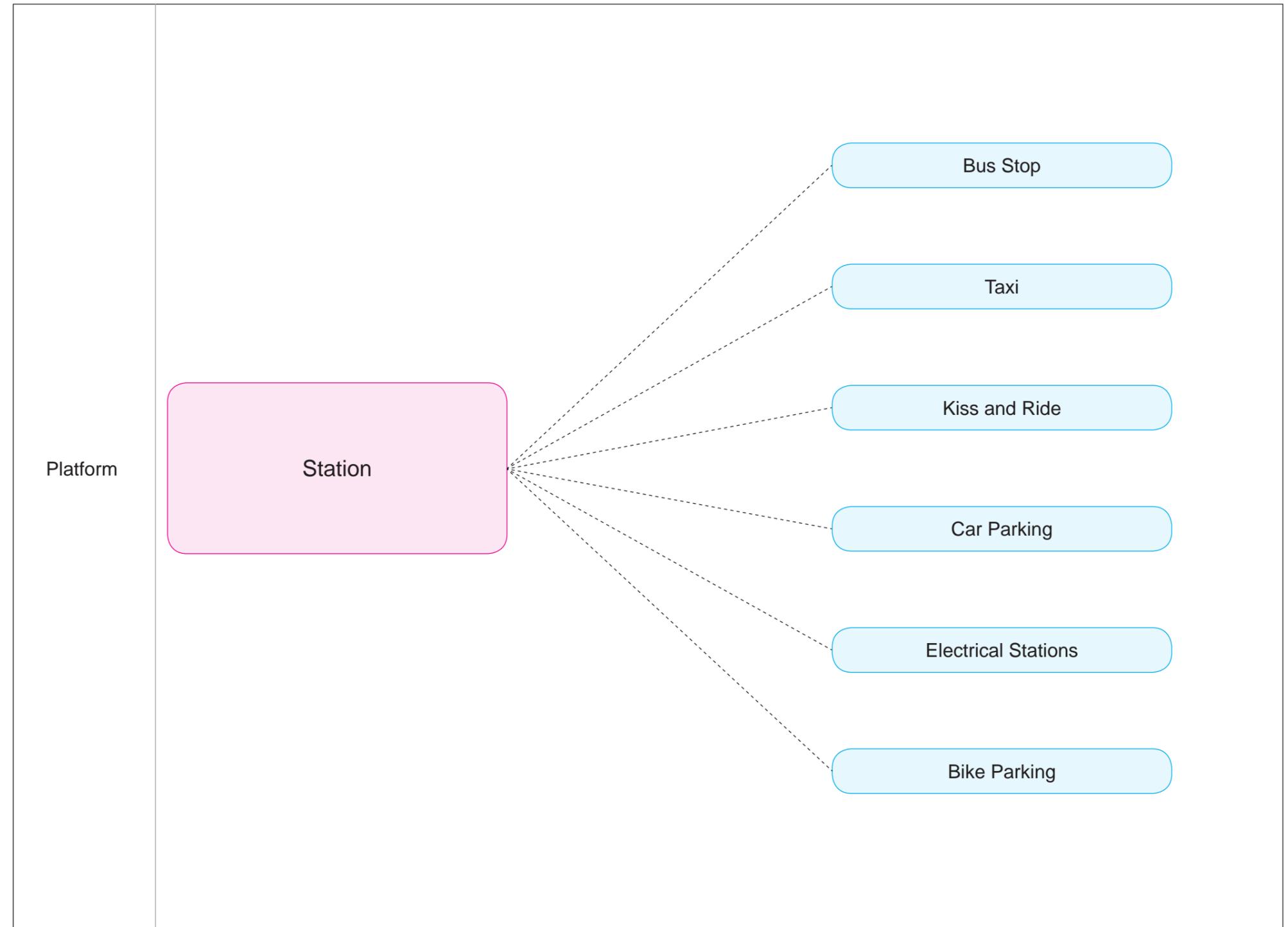


Requirements



Train, car and bus movements present constraining geometrical prerequisites, but it is how the movement pattern provides view ability, accessibility and ease for the passenger that is crucial to the final perceived value of a station environment which, in turn, affects the willingness to travel from a station. Minimizing walking time within a station is important for the passenger's vision of a simple journey. Complexity differs markedly between central station and a regional station. External area of the station must to be functional and easy to use by all users. The following requirements must be provided in each station type.

- 1) Car Parking
- 2) Bus stop
- 3) Taxi drop-off
- 4) Pedestrian Area
- 5) Bike Parking
- 6) Kiss and Ride
- 7) Electrical Station





Station classification

A well-functioning station environment means the provision of functions, fixtures and comfort tailored to the type of station and passenger and to the number of passengers.

There are three factors that are deemed important when classifying stations:

- 1) Number of Passengers;
- 2) Level of Interchange;
- 3) Symbolic Value.

	Type	Station Type	Volume of Travelers (According to RB Operational Plan)
RAIL BALTICA STATIONS	TYPE 1 - International	Main Station	International Station
	TYPE 2 - Landmark	Medium Station	< 600 PMD
	TYPE 3 - Basic	Small Station	< 300 PMD
	TYPE 4 - Platform	Essential Station	< 150 PMD



Station classification

Minimum requirements

According to the volume of travelers for each regional station, future designers must define the correct number and dimensions for each function.

The following table shows the minimum requirements of each function for each station type.

Function	TYPE 2 - LANDMARK		TYPE 3 - BASIC		TYPE 4 - PLATFORM	
	•		•		•	
Car parking	•	30 cars	•	20 cars	•	12 cars
Kiss and go	•	-	•	-	•	-
Taxi area	•	6 cars	•	4 cars	•	2 cars
Bus stop	•	-	•	-	•	-
Bike parking	•	-	•	-	•	-
Electrical station	•	6 stations	•	4 stations	•	2 stations

Note
Parkings must have the proper number of cars as per local legislations.

Zoning Strategy

Zoning

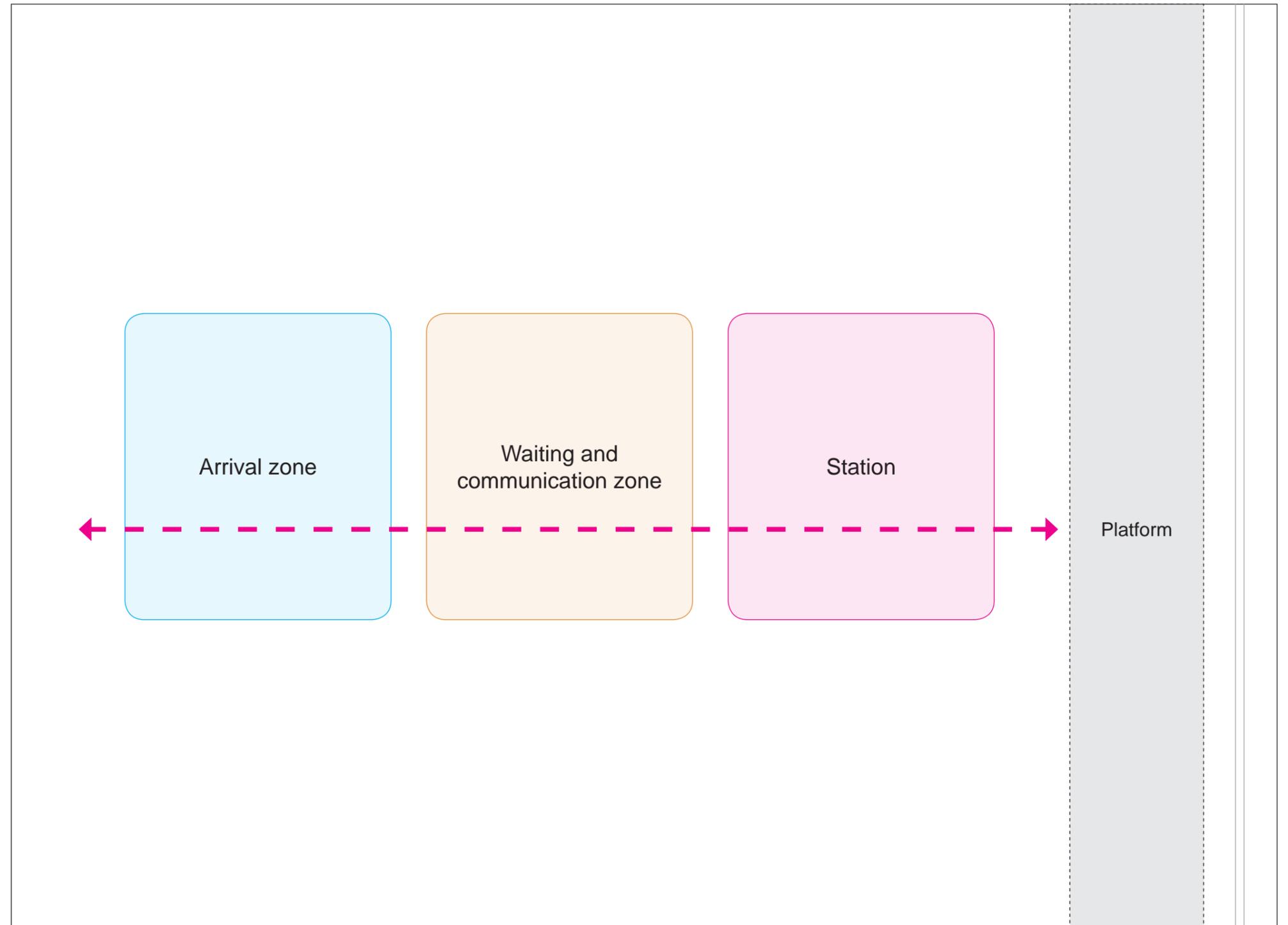
In the construction of a station, it is important to consider the logic of movement of different types of passenger.

A simple station, where the proximity between transport modes provides a view and understanding of how a station must be used, is very important.

By describing a station in zones, which are almost always found, regardless of the station's size and type, one can understand the form and context. The transition between the parts should be perceived as natural.

These zones are:

- 1) Arrival zone
- 2) Waiting and Communication zone
- 3) Station
- 4) Platform



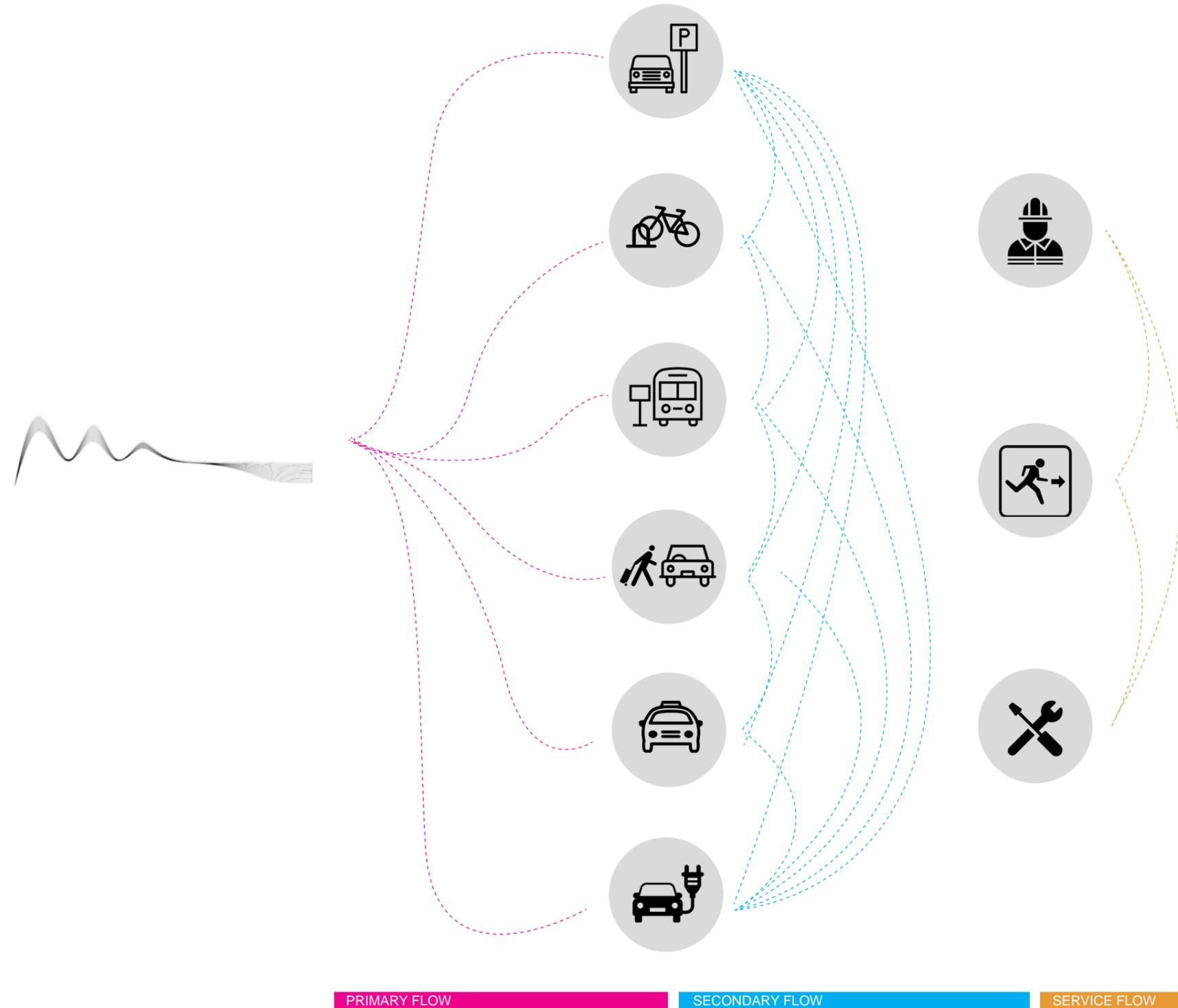


Zoning Strategy

Flow analysis

A fundamental prerequisite for a station's construction is that it can handle the flows: primarily of passengers, but also the flows arising from other functions within the station area.

-  Pedestrian flow
-  Private driveway flow
-  Public driveway flow
-  Cycle flow



Zoning Strategy

Zoning of the station area is employed to ensure efficient circulation.

First step of the strategy is to define the functions, define the boundaries of the site area and analyze the urban context. The main zones that structure the external area of the rail station are:

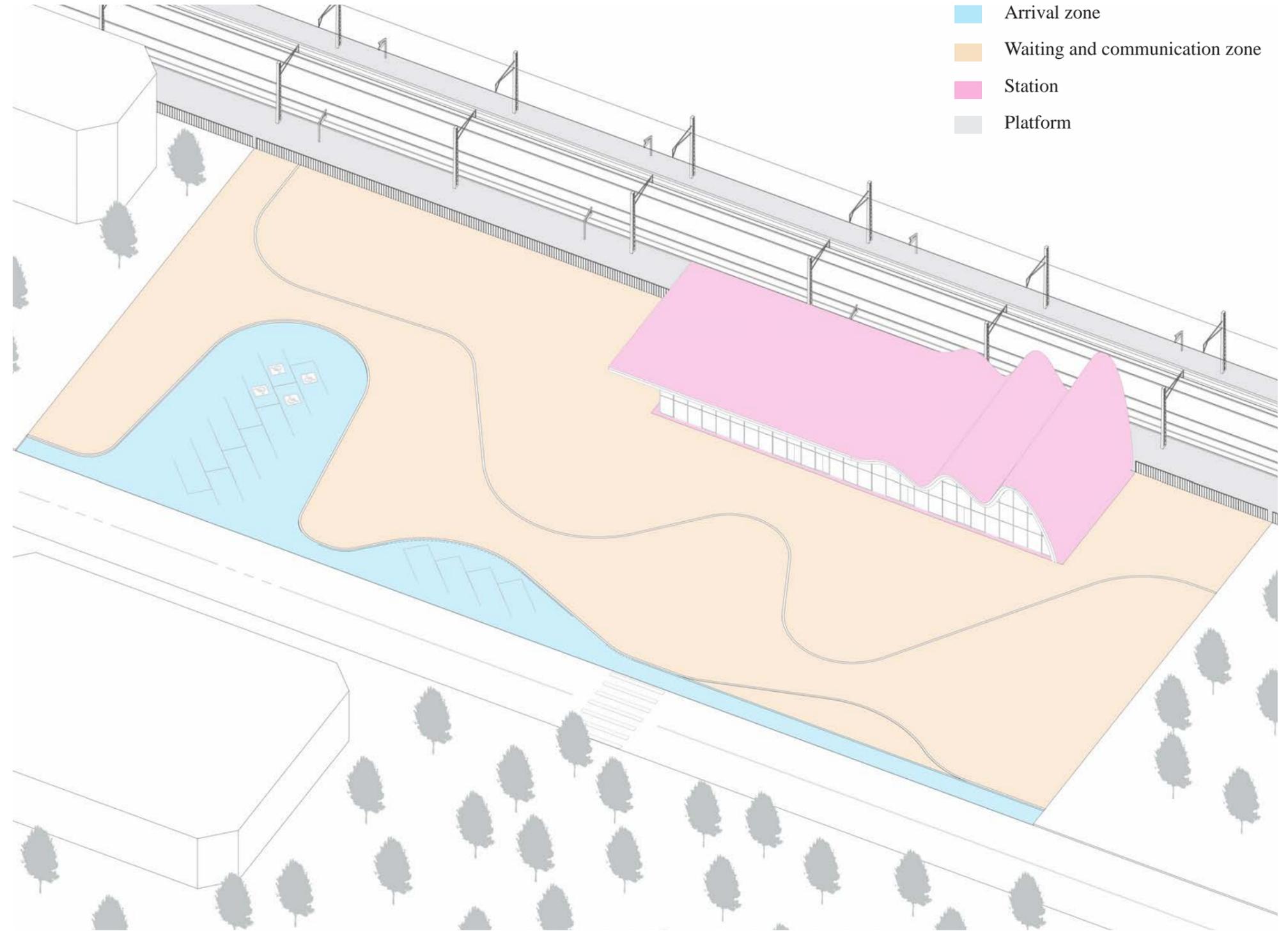
- 1) Arrival zone
- 2) Waiting and communication zone
- 3) Station
- 4) Platform

The arrival zone is the outer area where a station and its surroundings connect: a station's set-down/pick-up zone. The area includes a bus stop, a taxi rank, a set down and pick-up point for private cars and parking, and footpaths from these functions toward the trains. In some cases, the area also includes a road for service traffic to the platforms and trains. This subdivision facilitates the district's traffic and movement patterns around the station, but is also important for the individual passenger's own, rapid selection of route to the train.

Waiting and communication zone is the area between the platform and the arrival zone. This area should give to passengers the information to use correctly the area and each function inside and also provide comfortable place to rest and wait the train.

The station is the *house* of the passengers that contains the main public functions as rest point, information desk, retails and so on.

The platform is the nearest area to the train where people wait to catch the train or get out from the train. This area must be safety and comfortable.





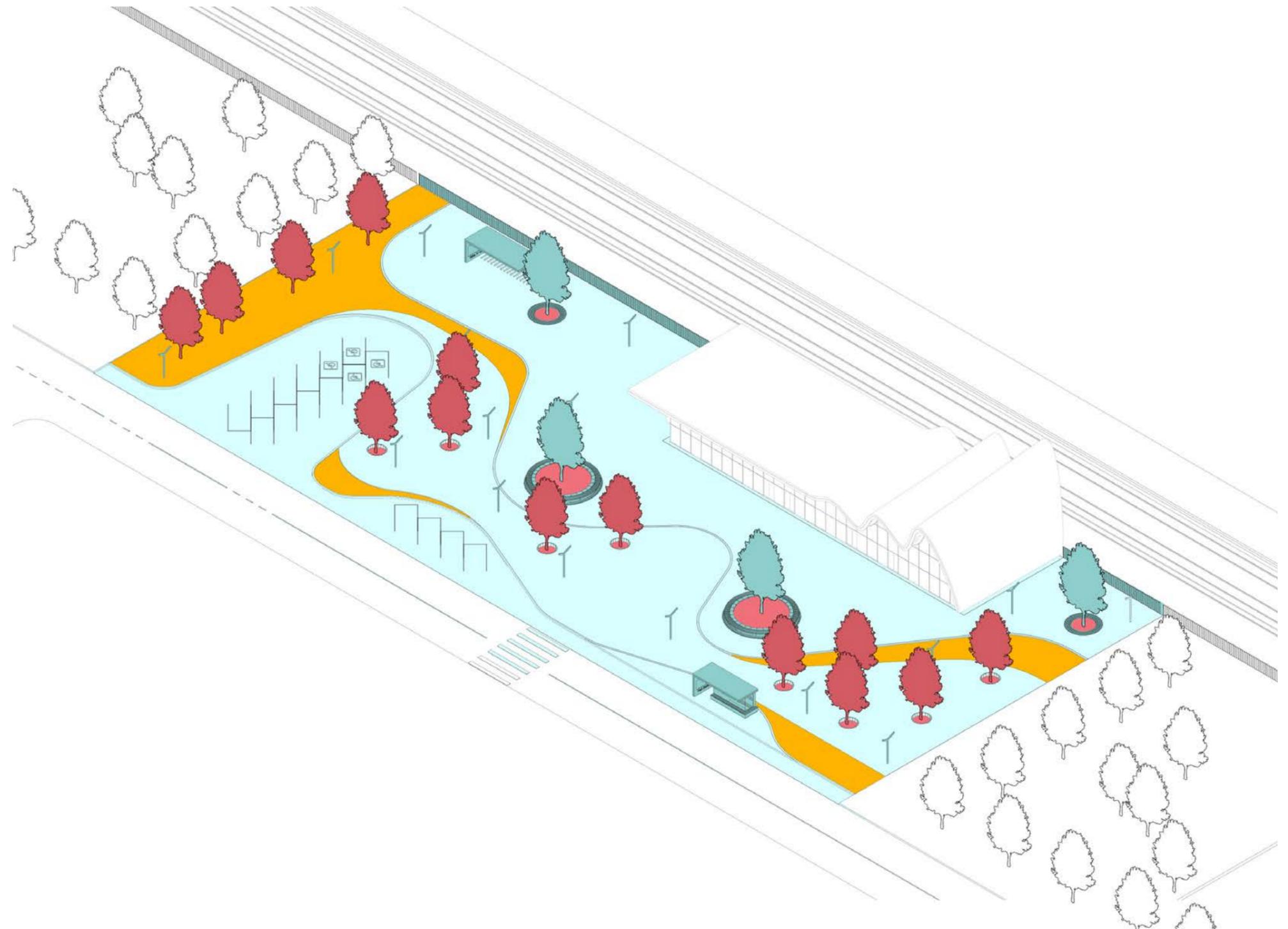
Identity

Network Identity: The Rail Baltica Touch
 One of the focal points of the design is that this infrastructure shall be recognizable in its entirety. The “Rail Baltica touch” shall be visible in all the elements of the track, both from the passenger’s point of view and from the external point of view. The design of the elements shall be standardized on the network and applied to the different elements.

Country Identity: The National Traditions
 The cultures and identities of the three Baltic countries have points in common: they share the same history, face the same sea and are located in similar natural environments. Despite this, the Baltic cultures also have many peculiarities that need to be taken into account by differentiating and enhancing them in each country. The same elements that characterize the identity of the network will have to have specific variations according to the country such as materials or colours.

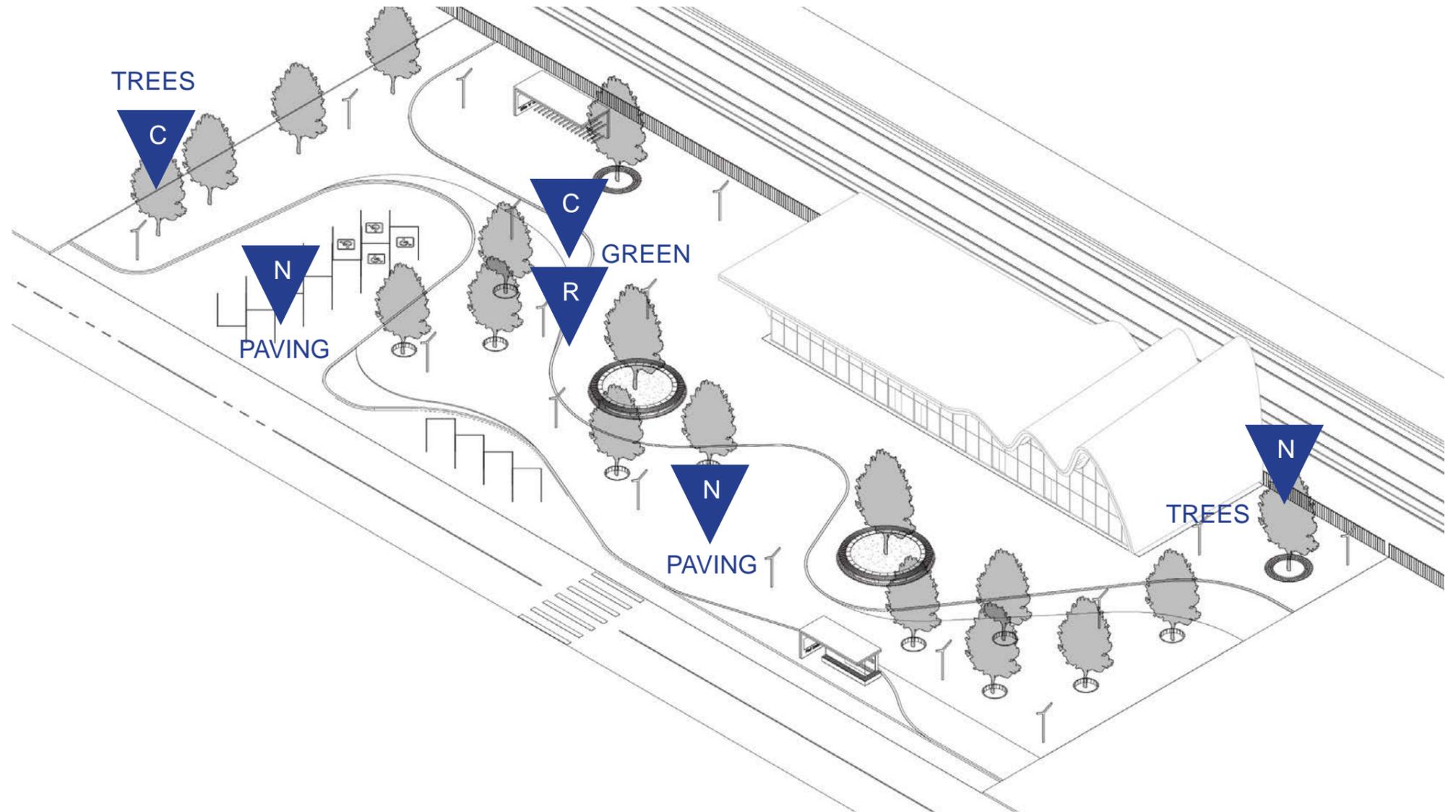
Regional Identity: The Local Belonging
 Culture and traditions of each of the three Baltic countries vary widely between their regions. Valuing local identities is therefore of fundamental importance, both for the concerned communities and for their integration. Especially in regional stations, spaces or elements shall be designed to show the local culture of a particular region, enhancing and increasing its awareness first on a national and then on an international level.

- Network Identity
- Country Identity
- Regional Identity



Identity

Identity Matrix



-  Material
-  Geometry
-  Modularity
-  Color
-  Vegetation

	N	C	R
Landscape	 	 	 



Design Strategy

Position Strategy - Car & Bike Parking, Kiss & Ride and Bus Stop

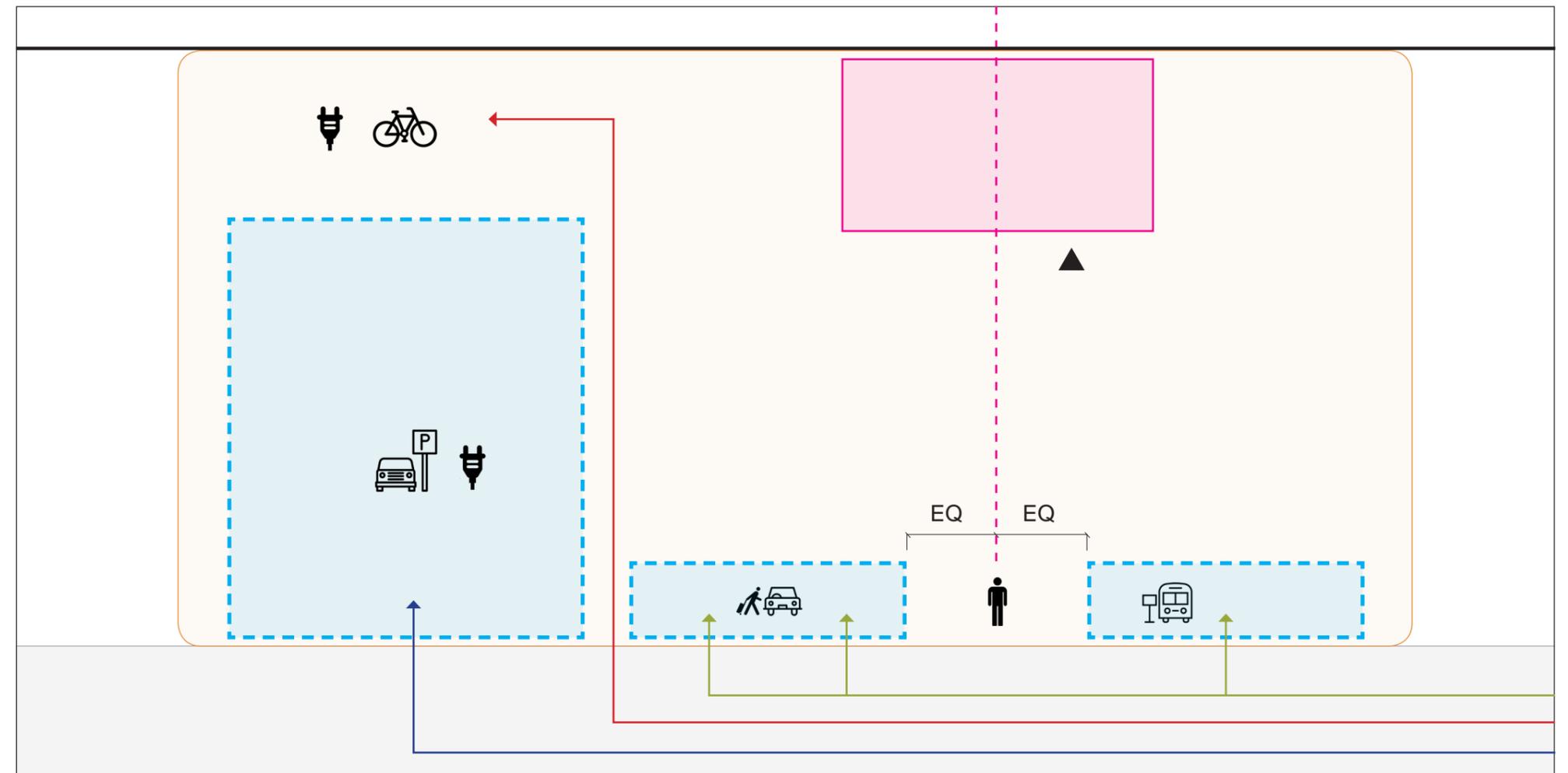
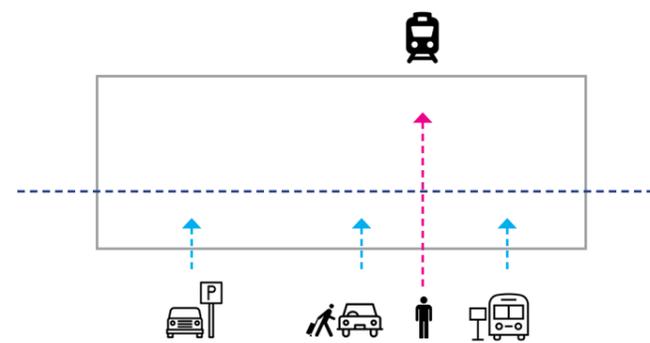
Pedestrian flow

Positioning the arrival zone in the bottom area of the public area, people will be able to easily identify the area where they need to go and reach it when they leave the station without obstacles.

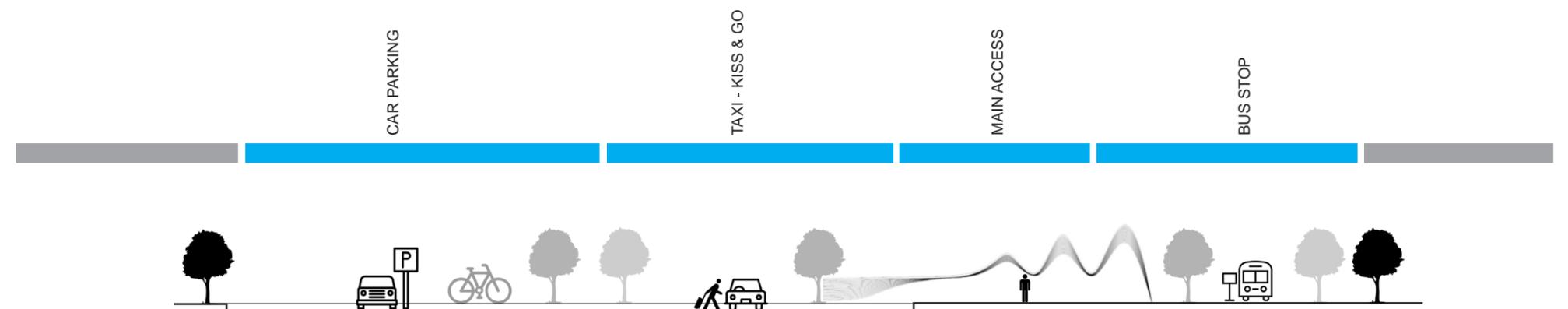
This approach for placing the functions, also allow PRM to use easily each part of the external area of the station without any help.

Car flows

Public and private car flows will be sorted before to enter in the station area. This approach will leave the pedestrian area safe and easy to use.



- Arrival zone
- Waiting and communication zone
- Station



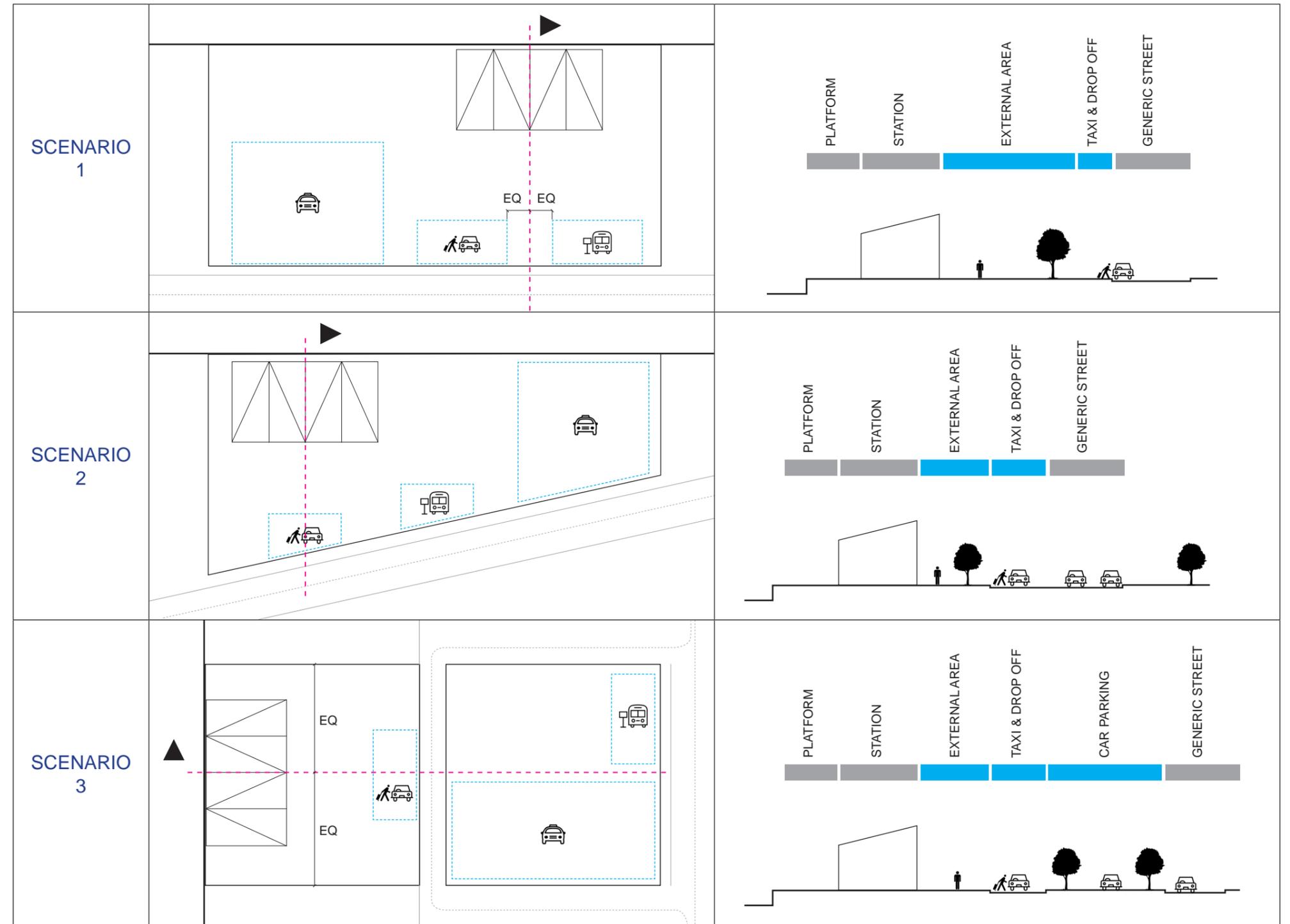


Design Strategy

Position Strategy - Station

Along the line several stations will be placed each one with its own surrounding. Site areas differ in terms of the urban context, dimension, and geometry.

Architectural, Landscaping and Visual Identity Design Guidelines instructs the designers to place station building and the functions within the external area of the station.



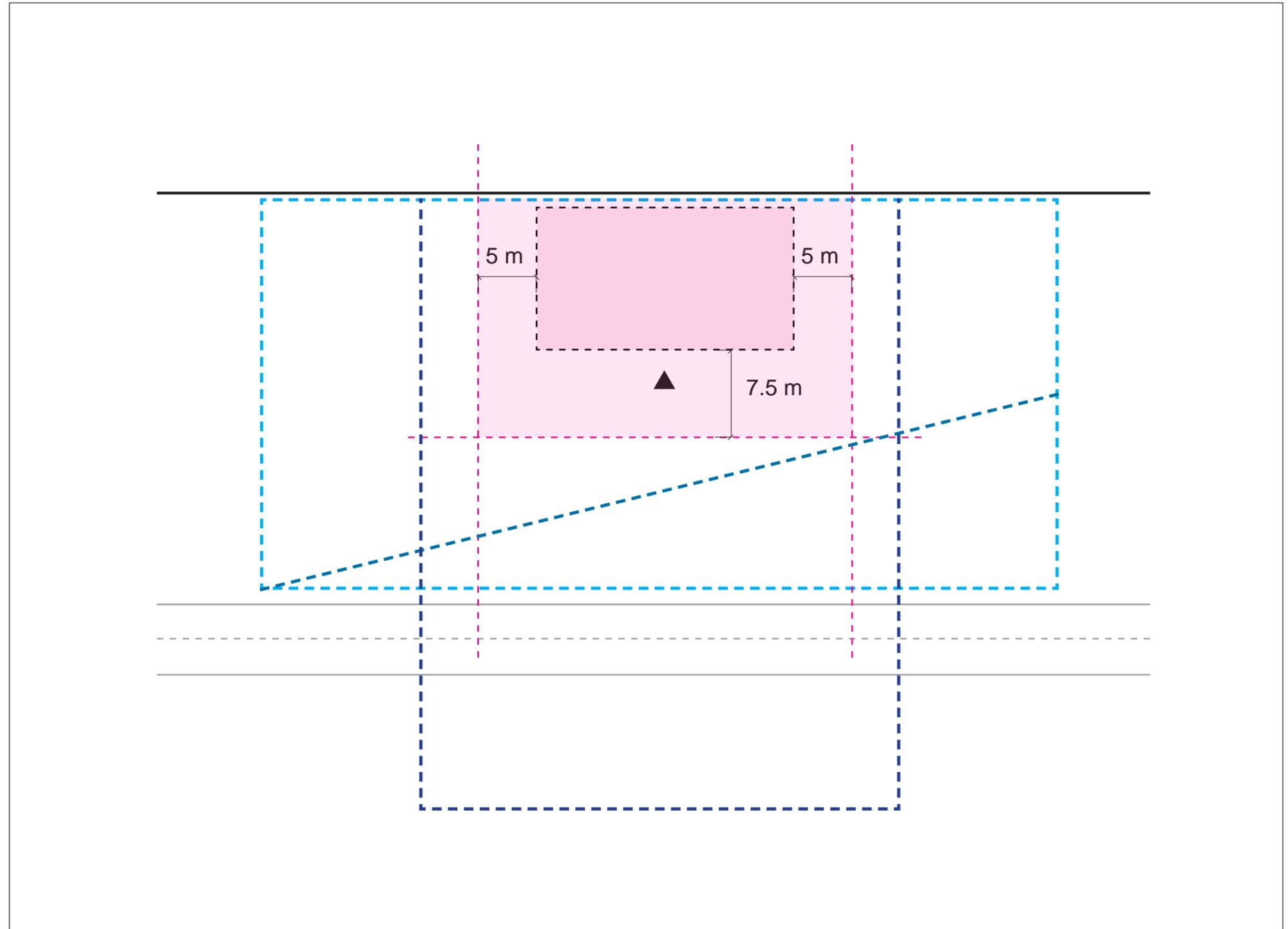
Design Strategy

Position Strategy - Station

Designers should consider the minimum area of intervention around the building of the station. This includes the required free area surrounding the station that's required to maintain network identity.

Building

A 5 metres zone is required around the station building and a 7,5 metres zone is required in front of the building where the main entrance will be placed.





Design Strategy

Types of Station

Dimensions and minimum requirements of the station change based on the number of passengers per day. The design of the external area is also based on this “modular approach”.

As often happens, the construction of infrastructure is the opportunity for the development of municipalities. Based on this opportunity, the design shall take into account the possibility to expand the station and the public area in the next years.

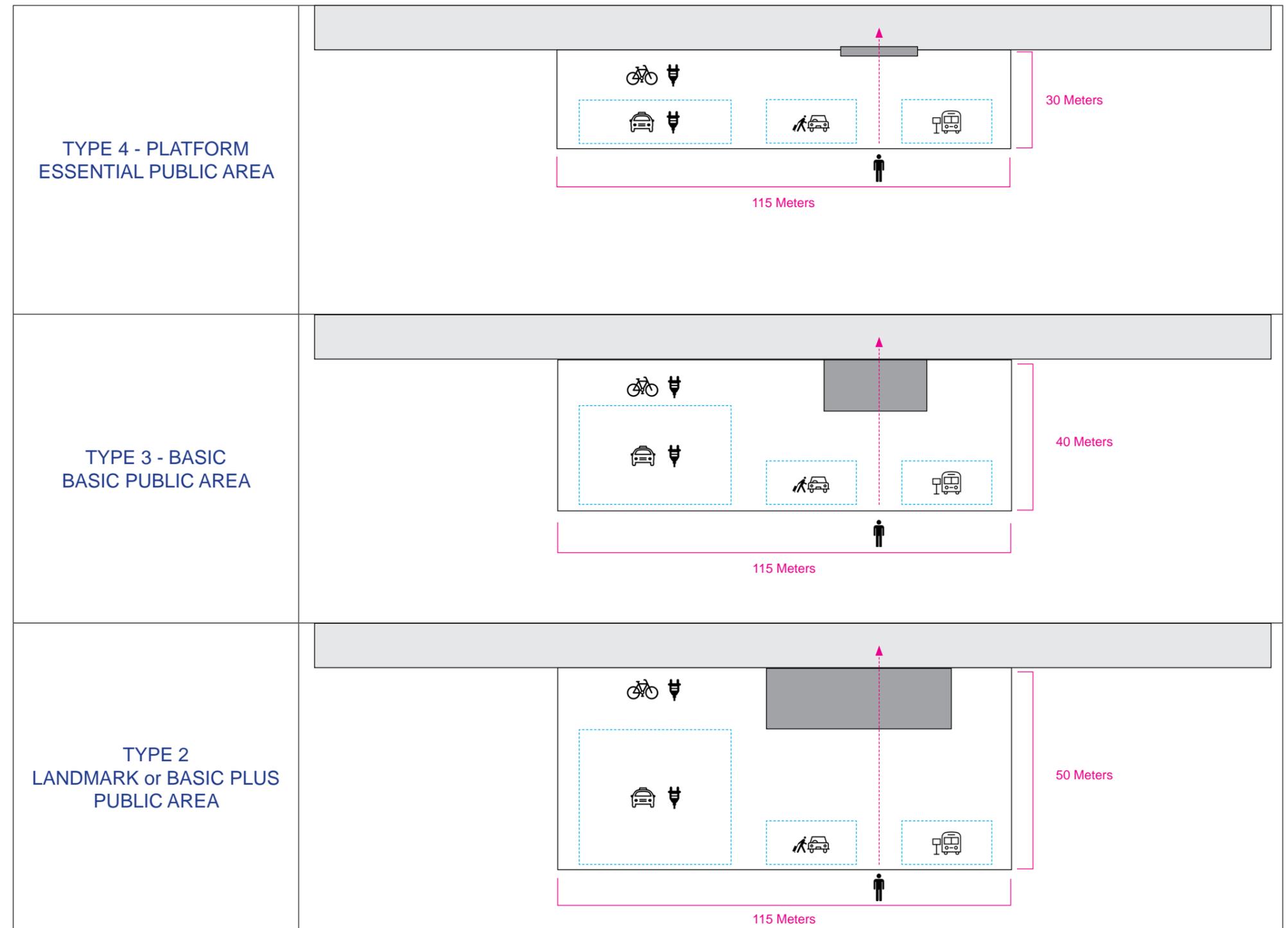
Designers shall consider the minimum area of intervention around the building of the station in order to allow easily the expansion.

Based on the types defined for the stations, the design of the public area provides three types of public space:

Type 4 - Platform station
Essential public area (115m x 30m)

Type 3 - Basic station
Basic public area (115m x 40m)

Type 2 - Landmark Station/Basic Plus
Landmark/ Basic plus public area (115m x 50m)



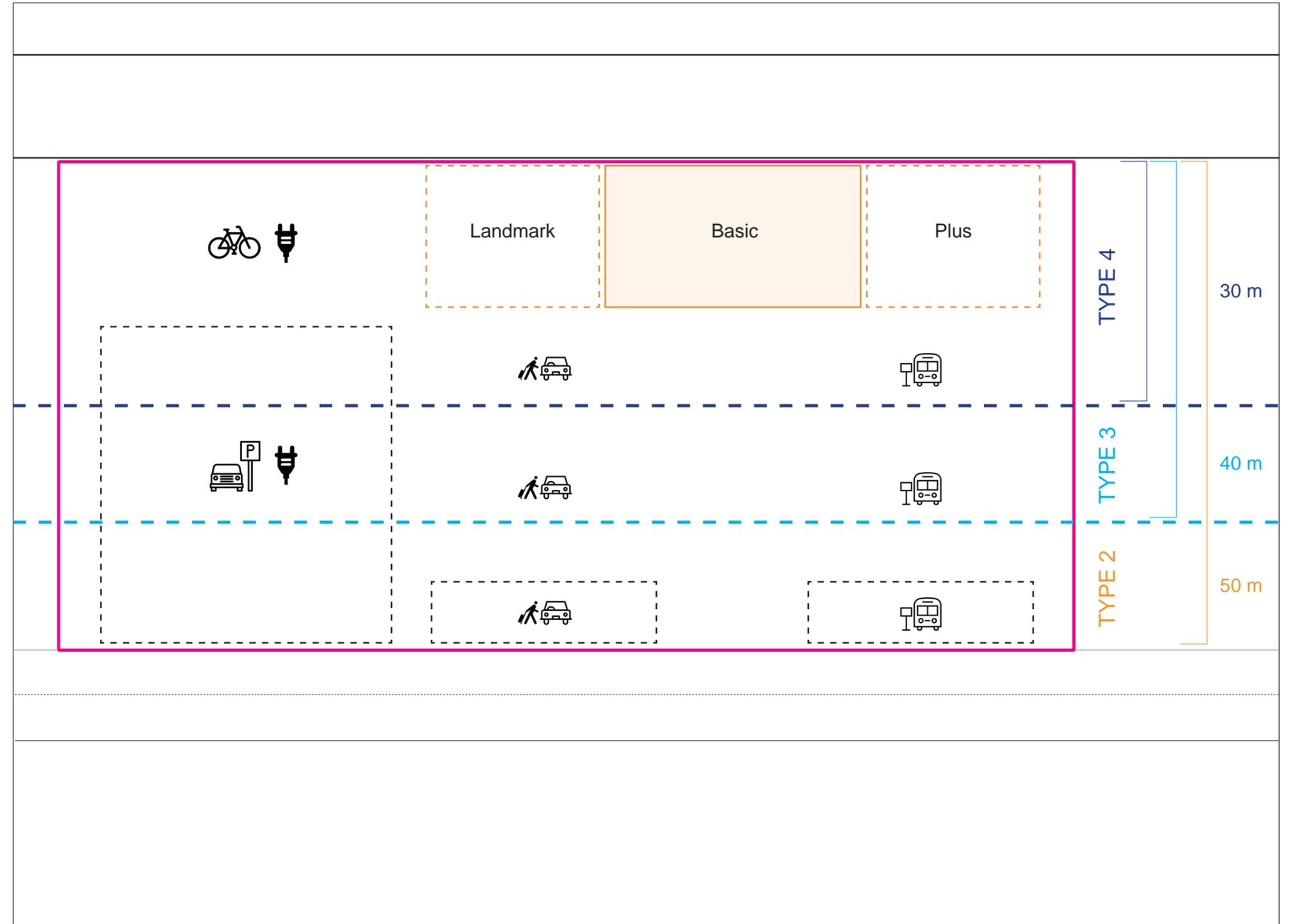


Design Strategy

D1.5

Grow Strategy

The scheme illustrates grow strategy for public space outside the stations.



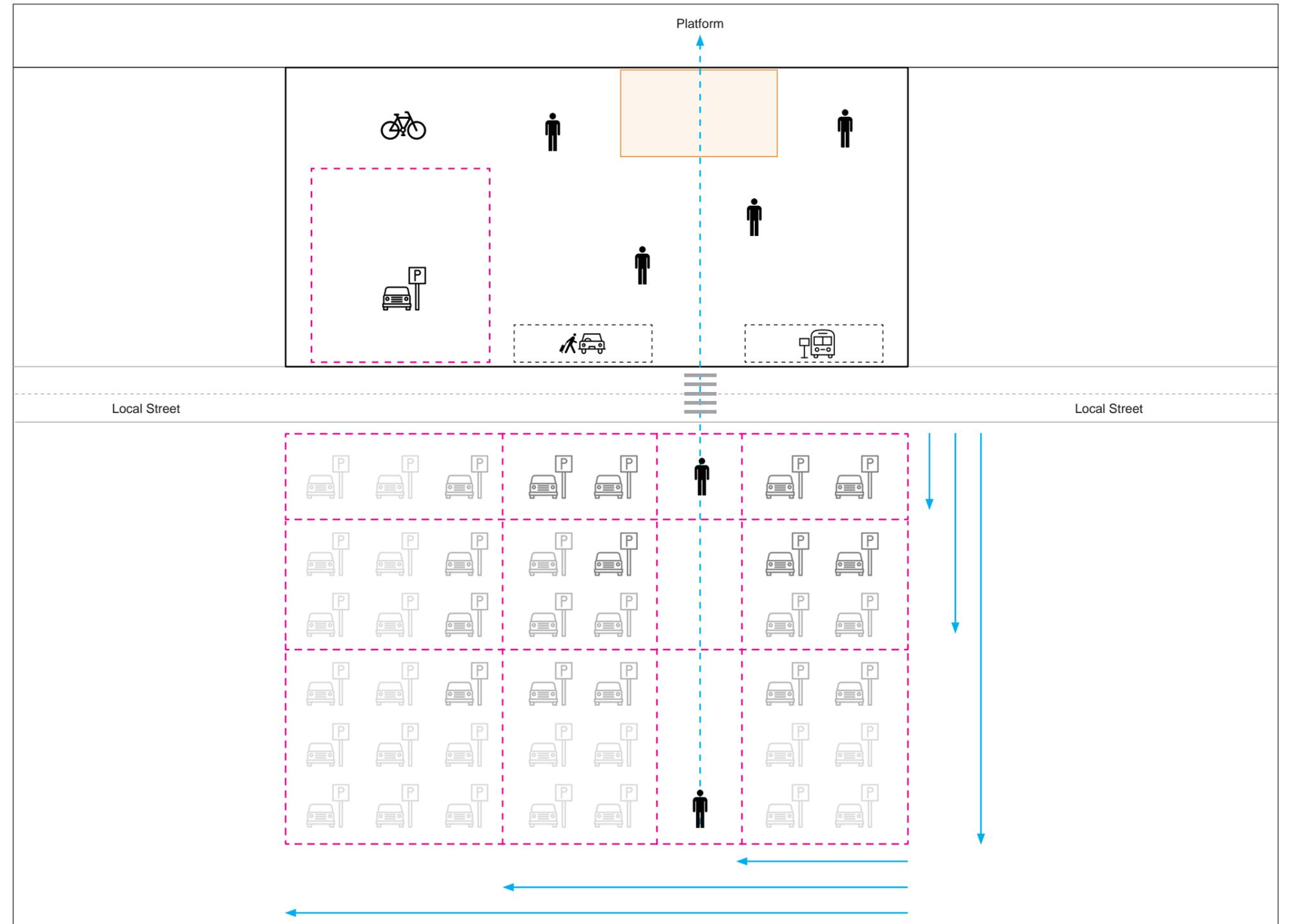


Design Strategy

Grow Strategy - Parking

The development of the site area with the surrounding can increase the need for parking.

If the viability allows the pedestrian to cross easily the street, parking can expand on the other side of the street.





Adaptability

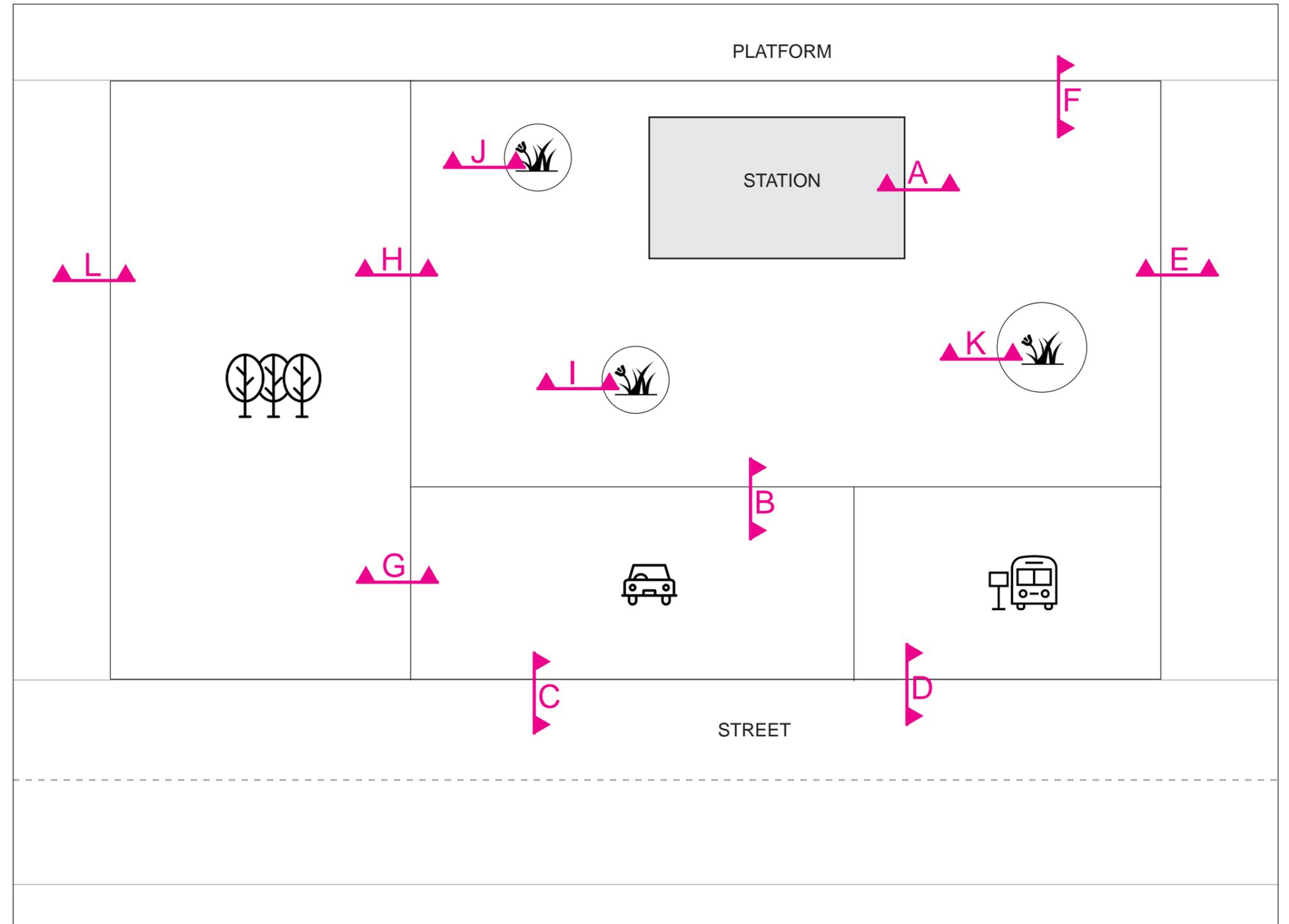
Each country has its own environment and cultural traditions. Moreover, each regional station will be placed in site areas that differ in terms of the urban context, dimension, and geometry.

Based on these considerations, it's very difficult to define a design and ensure a common identity in all the site areas.

Architectural, Landscaping and Visual Identity Design Guidelines instructs the designers to use specific furniture, signage, materials, and vegetation in order to ensure a Network identity to each regional station.

Using these standardize elements in each public area, the design become adaptable to any context but recognizable.

The scheme illustrates how designers must use hardscape and softscape during the design phase for public areas.



Legend

- A - Station building / Pedestrian paving
- B - Pedestrian paving / Vehicle paving
- C - Vehicle paving / Road
- D - Pedestrian paving / Road
- E - Pedestrian paving / Site boundary
- F - Pedestrian paving / Platform area
- G - Green area / Vehicle paving
- H - Green area / Pedestrian paving
- I - Flowerpot Type 1
- J - Flowerpot Type 2
- K - Bench
- L - Green area / Site boundary



Hardscape

Materials Overview

Several materials are selected along with the Architectural, Landscaping and Visual Identity Design Guidelines Elements to represent the Network Identity of the Rail Baltica Line.

Network materials palette ensure a common identity to each public area near the Rail Baltica station, giving the possibility to future designers to propose a design suitable for each site.

Please notice that in order to ensure to everyone an easy usage of the public area, paving must be as smooth as possible.

PAVING AND FURNITURE



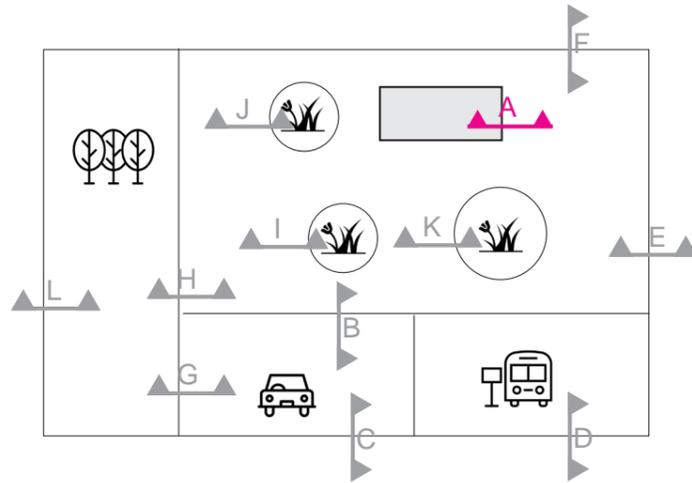
Materials specifications:

- 1 - Brick tiles: 7 cm x 20 cm
- 2 - Limestone: 20 cm x 50 cm
- 3 - Stone tiles: 10 cm x 10cm
- 4 - White stone or white concrete
- 5 - Wooden slat
- 6 - Weathering steel plate
- 7 - Gray Stone
- 8 - Metal grid
- 9 - Dark grey metal

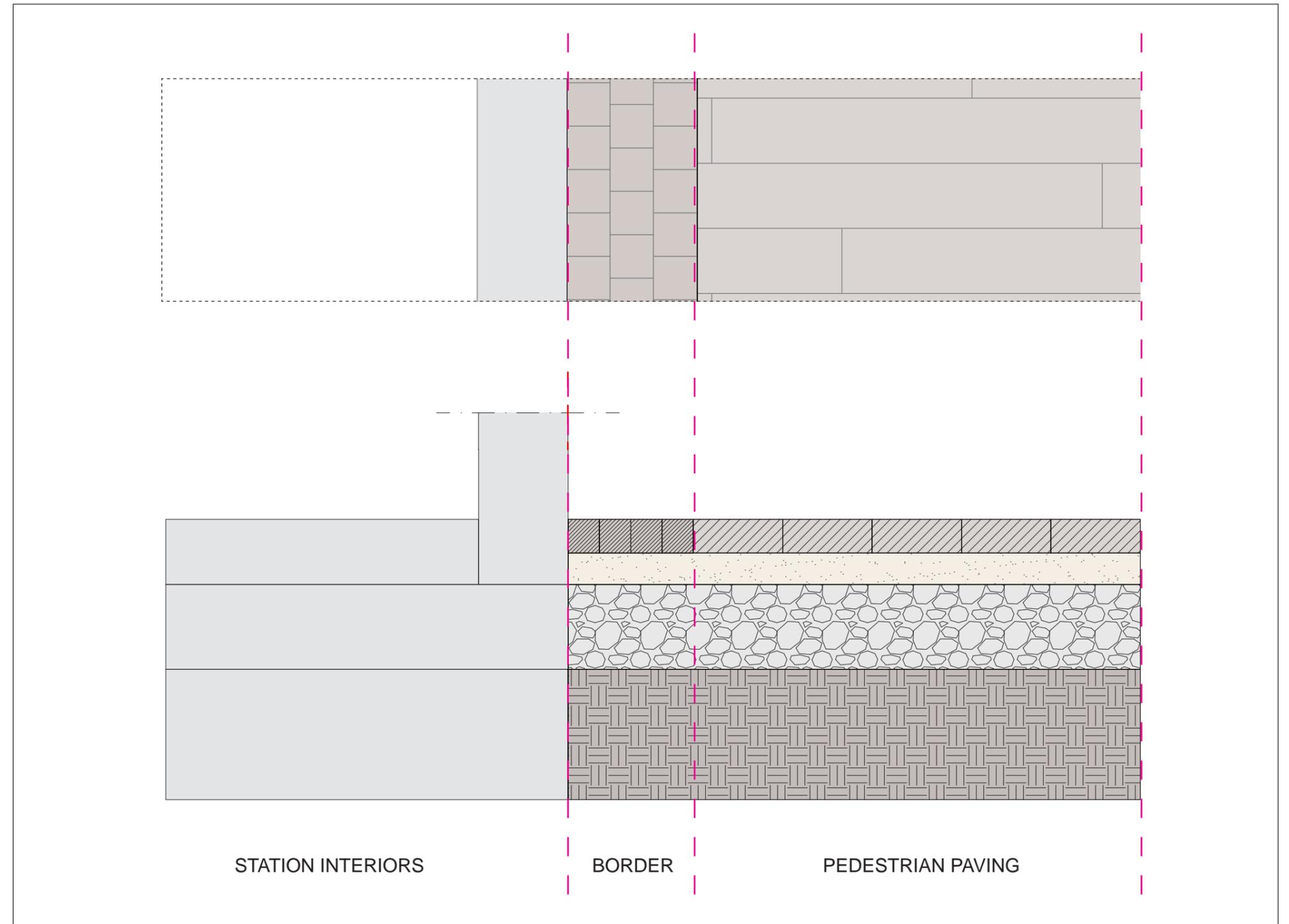


Hardscape

Detail A - Station building / Pedestrian paving



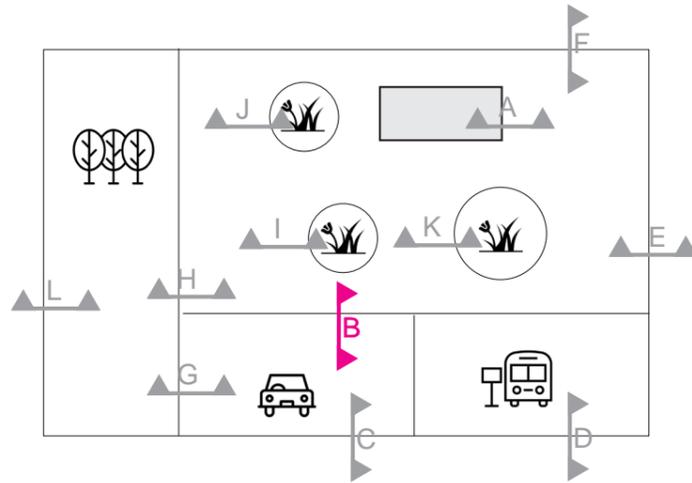
Note
 Around the station building shall be provided a border of at least 60 cm with the same paving of the pedestrian area but installed with a different orientation.
 For border and pedestrian paving can be chosen material 1 and material 2.



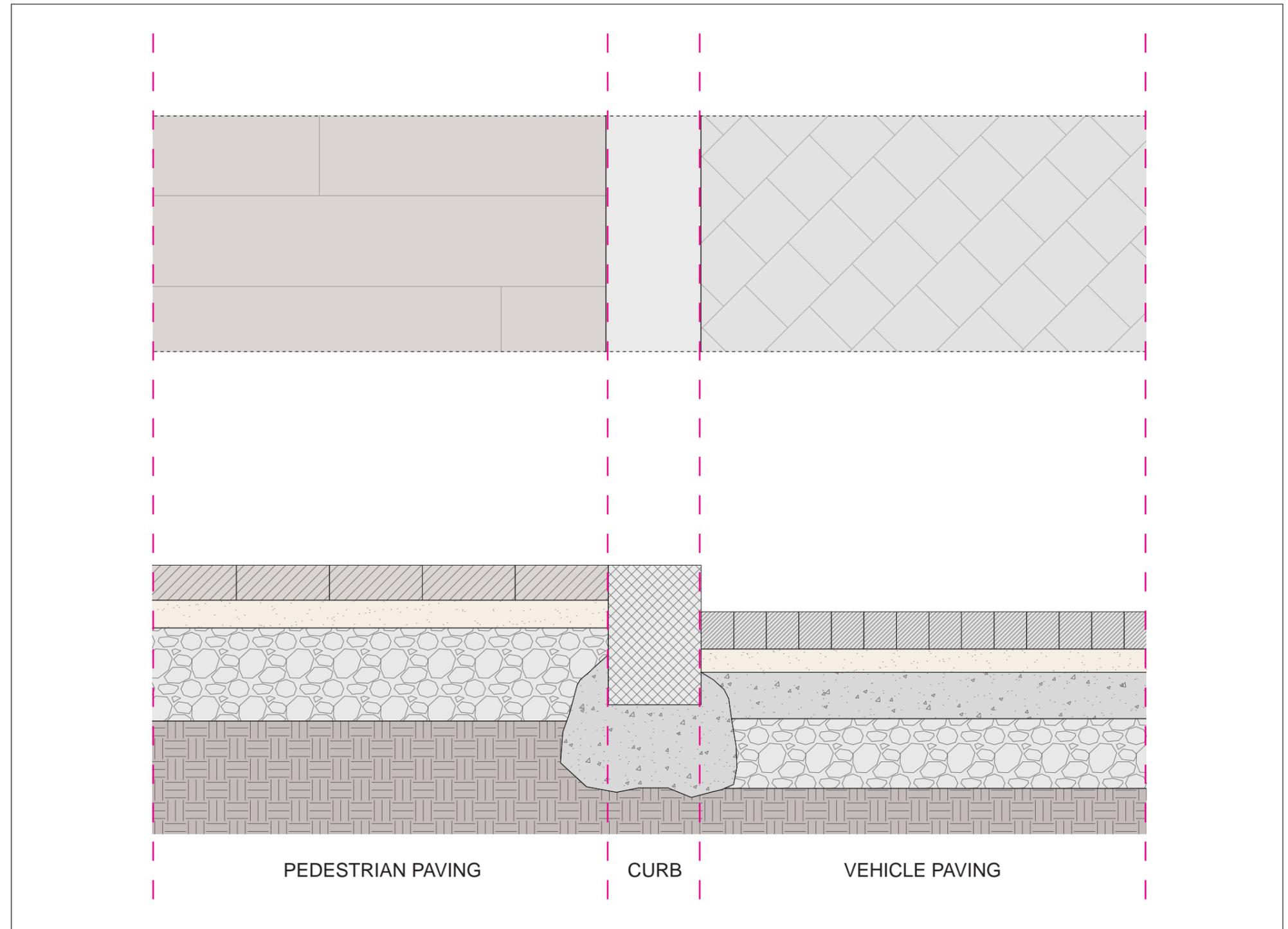


Hardscape

Detail B - Pedestrian Paving / Vehicle Paving



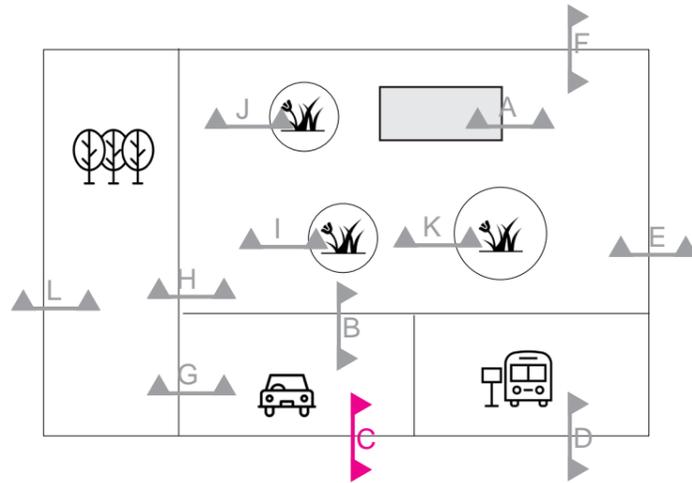
Note
 Pedestrian paving, curb and vehicle paving shall be designed using three different materials.
 For pedestrian paving can be chosen material 1 and material 2. For curb shall be used material 4 and shall be at least 20 cm. For vehicle paving shall be used material 3.



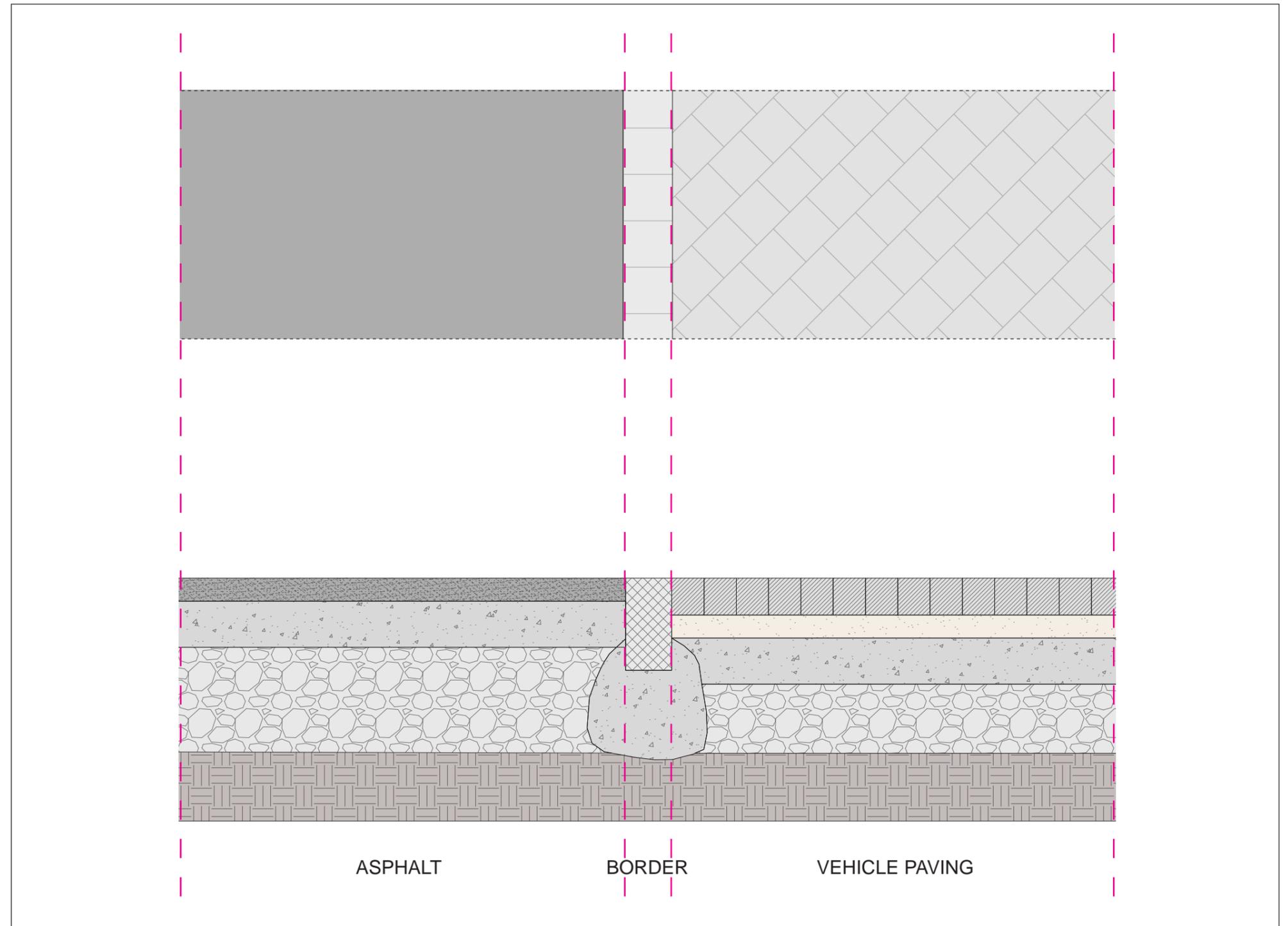


Hardscape

Detail C - Vehicle Paving / Road



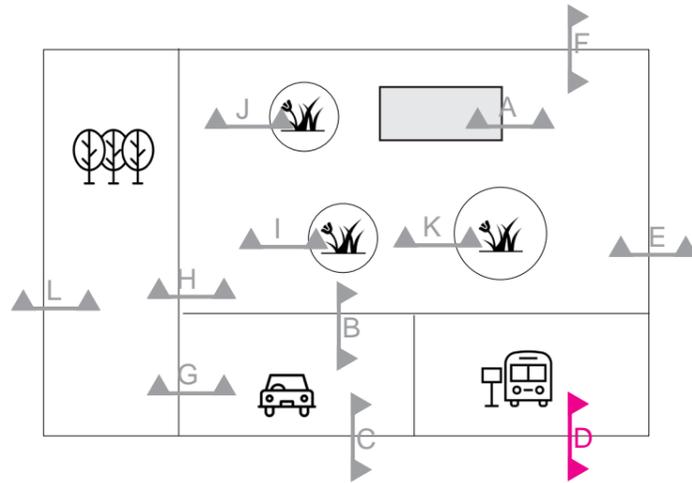
Note
For vehicle paving shall be used material 3. Whatever will be the installation direction, a border of the same material shall be provided when the paving adjoin the asphalt. The border shall be parallel to the road.



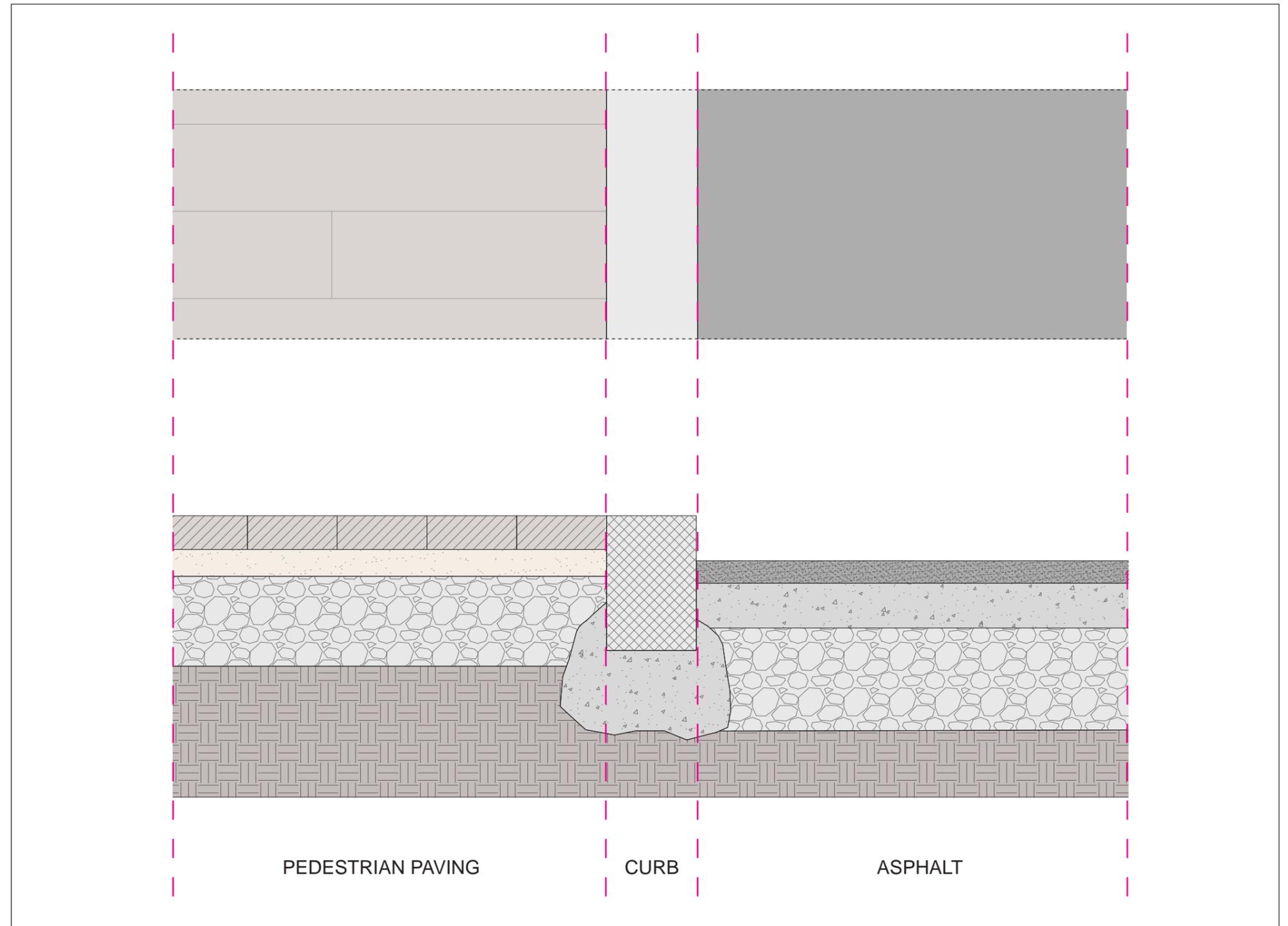


Hardscape

Detail D - Pedestrian Paving / Road



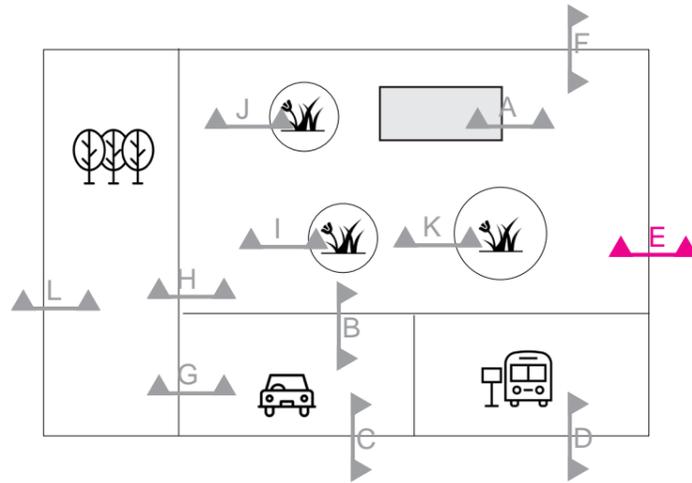
Note
 Where a pedestrian paving adjoin a road shall be provided a curb of at least 20 cm.
 For pedestrian paving can be chosen material 1 or material 2. For curb shall be used material 4.



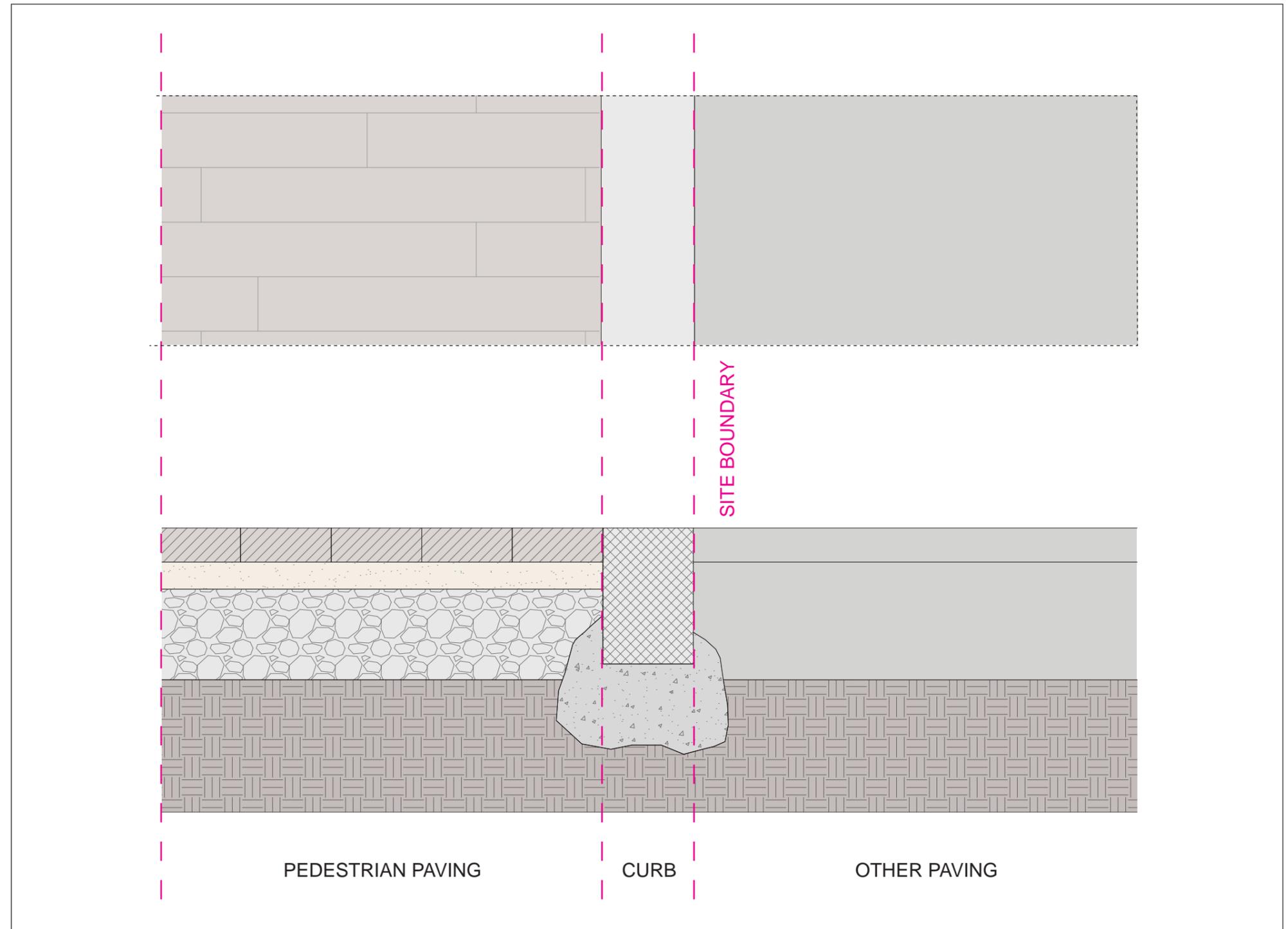


Hardscape

Detail E - Pedestrian Paving / Site Boundary



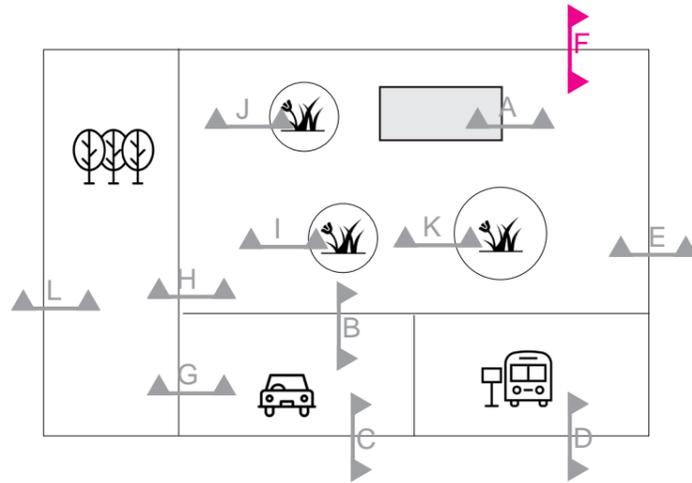
Note
 Where a pedestrian paving adjoin the site boundaries shall be provided a curb of at least 20 cm.
 For pedestrian paving can be chosen material 1 or material 2. For curb shall be used material 4.





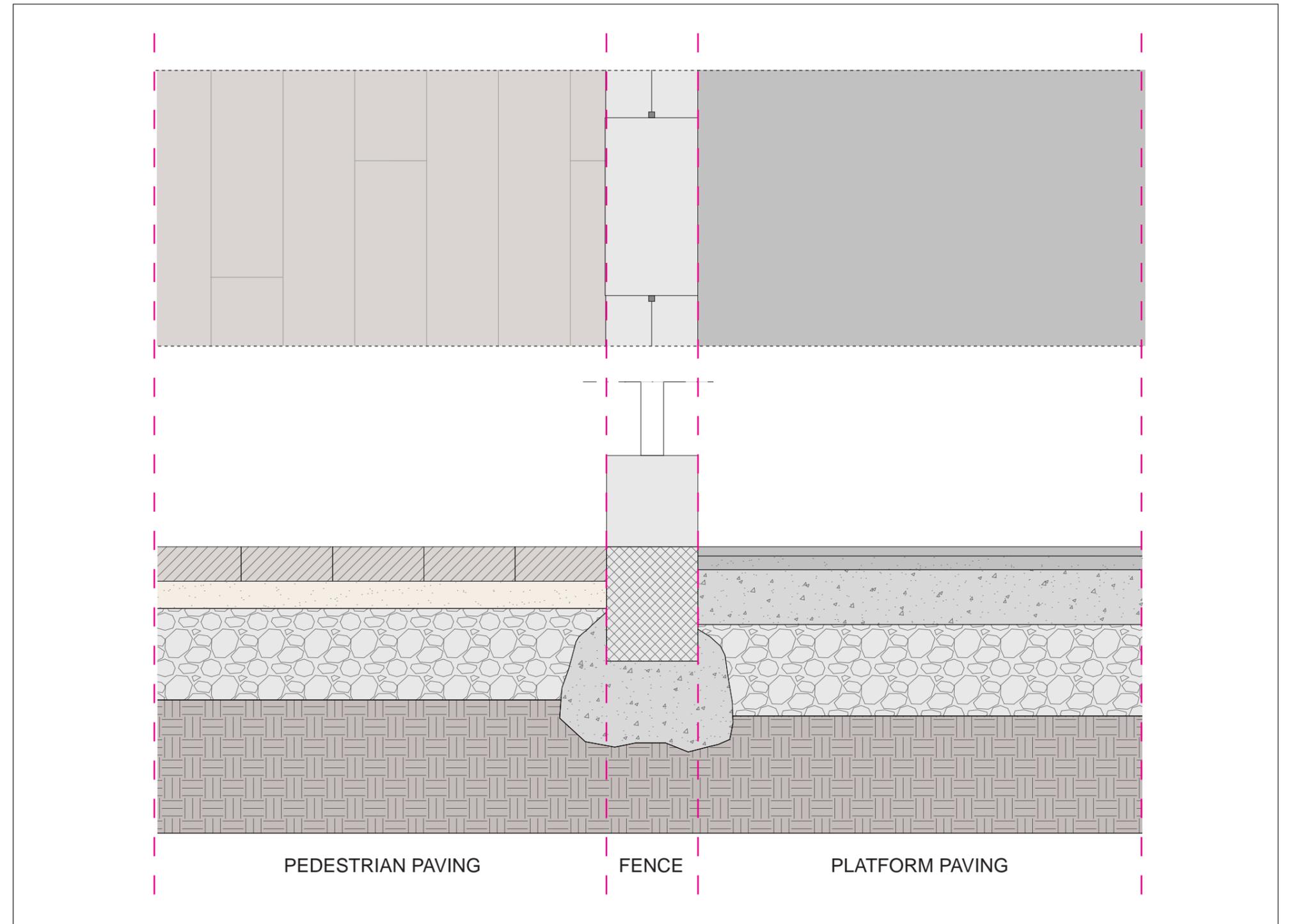
Hardscape

Detail F - Pedestrian paving / Platform area



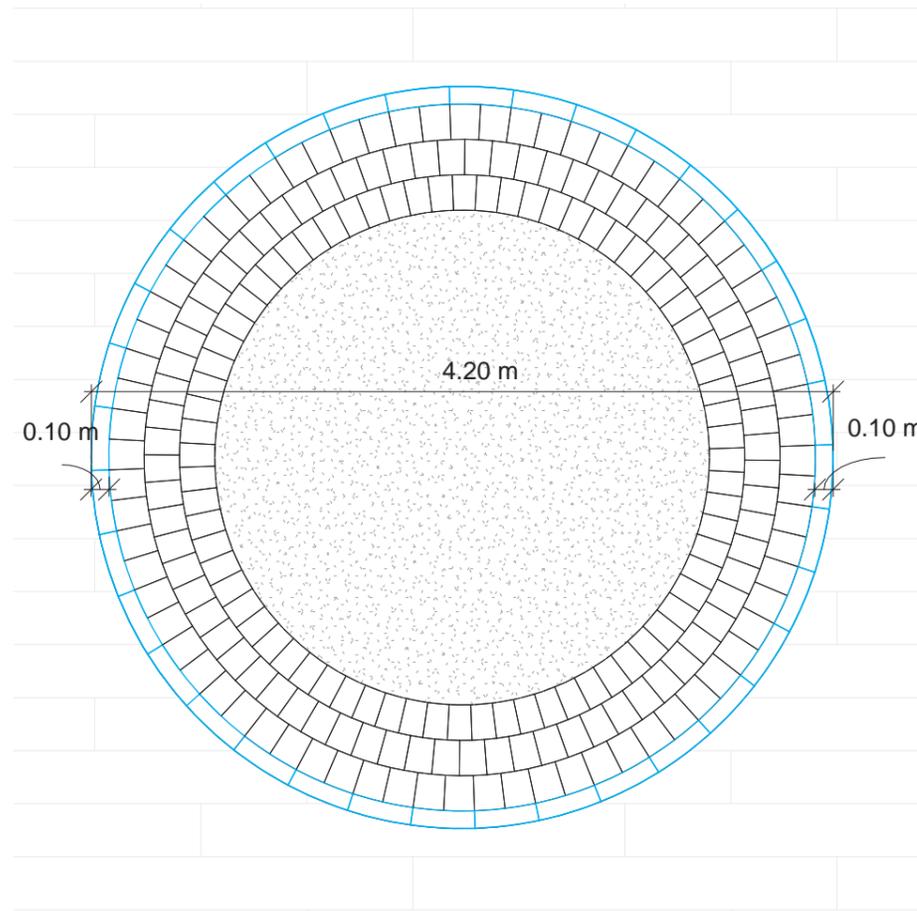
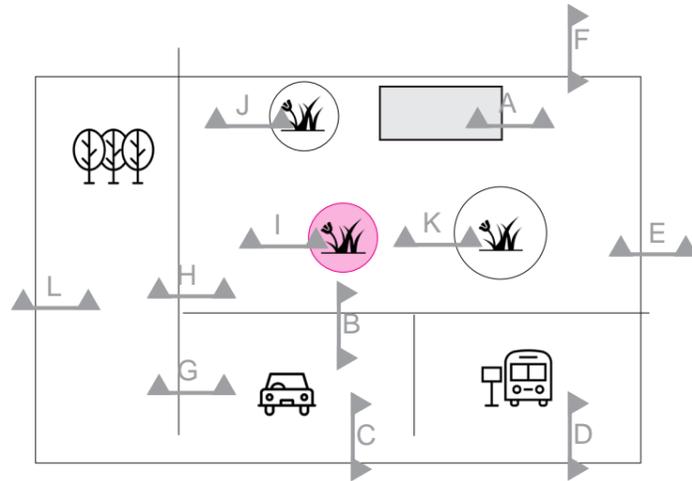
Note

Between the pedestrian area and the platform area shall be placed a fence. For the fence design please refer to the chapter D1.11.

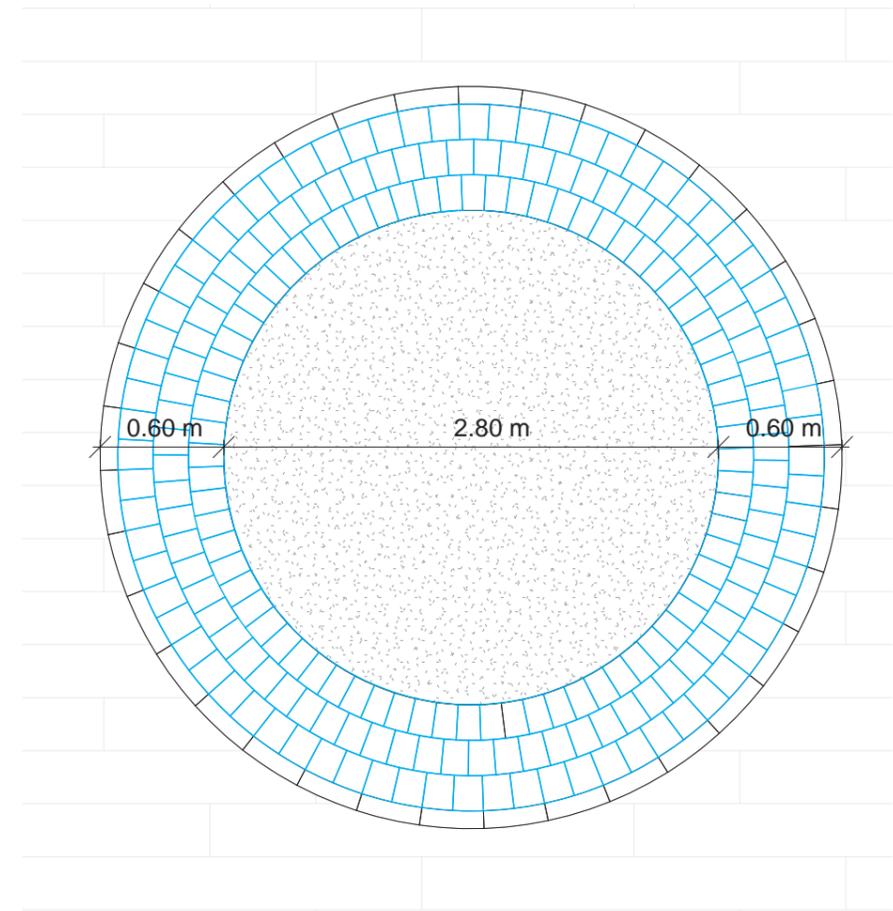


Hardscape

Flowerpot - Type 1



BORDER

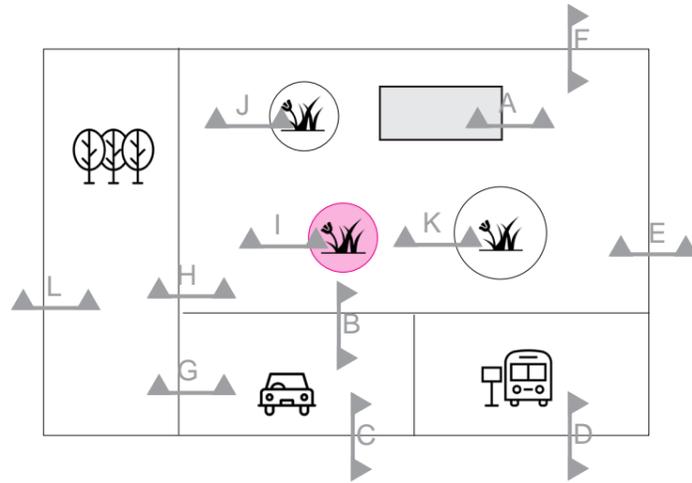


INTERNAL ROWS

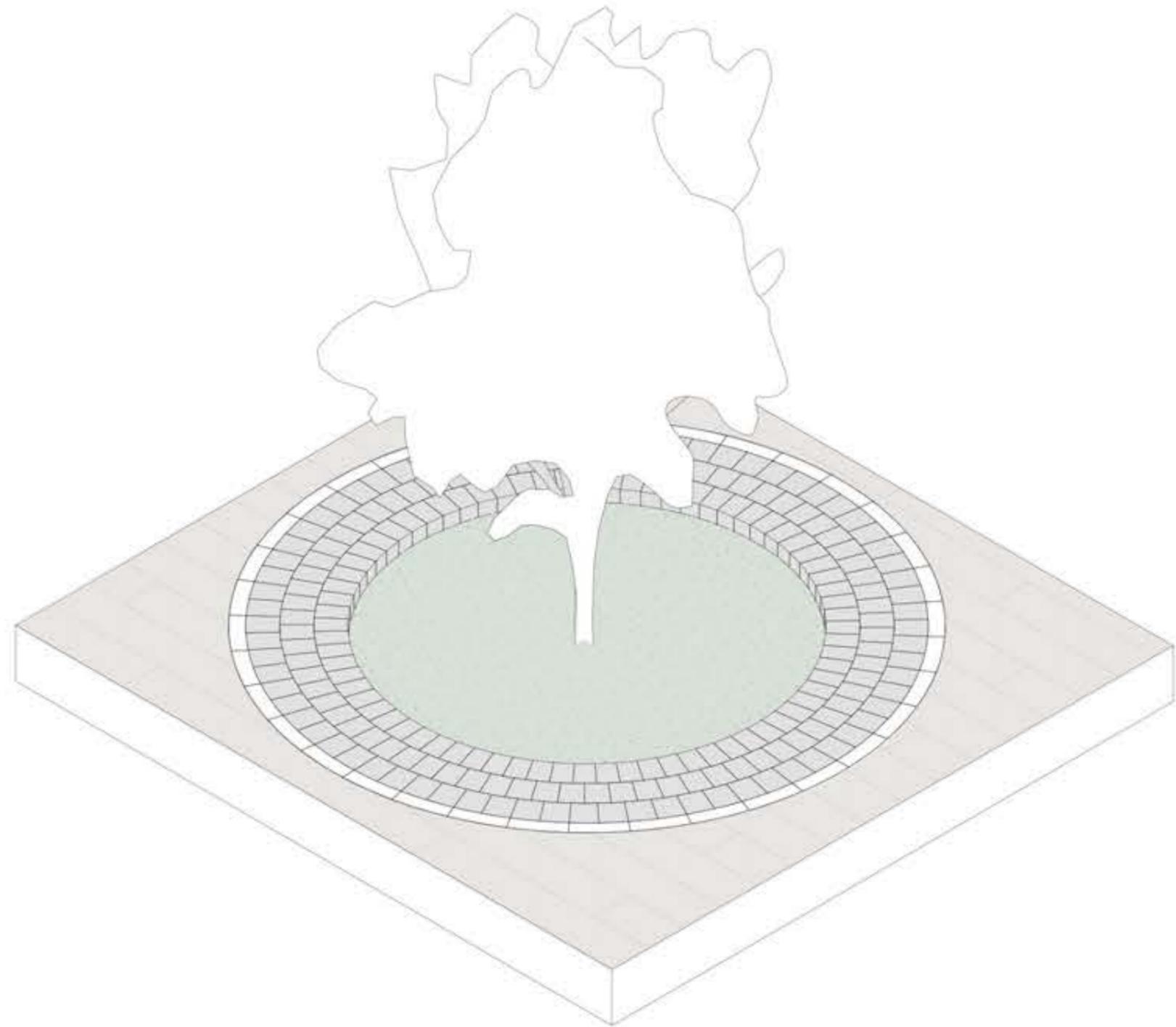
Note
Placing flowerbed type 1 shall be provided a border of 10 cm with material 4 and, internally, 60 cm of material 3.

Hardscape

Flowerpot - Type 1

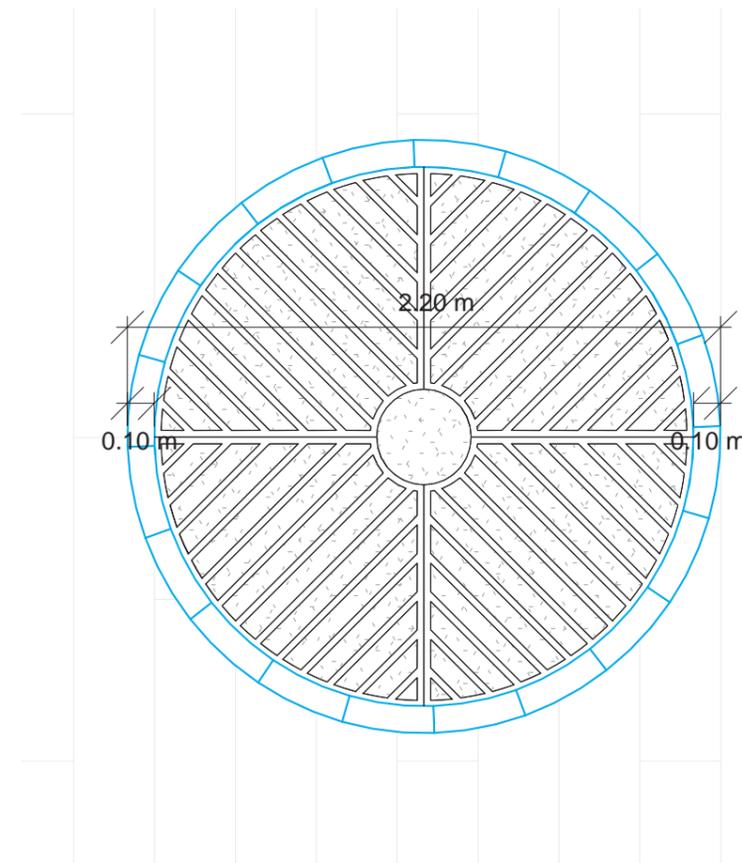
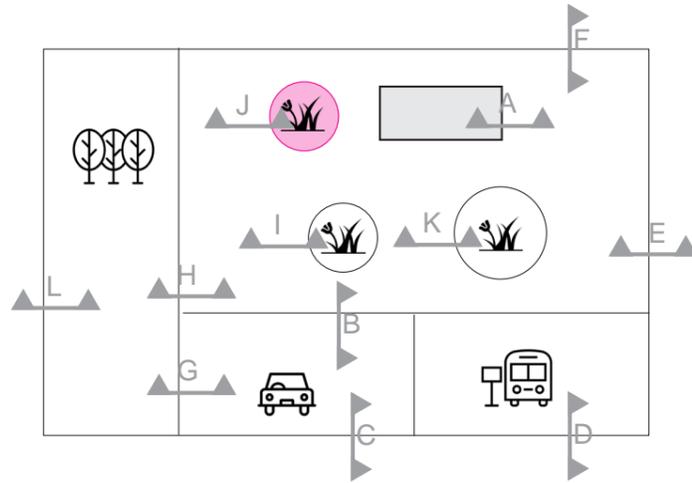


Note
Placing flowerbed type 1 shall be provided a border of 10 cm with material 4 and, internally, 60 cm of material 3.

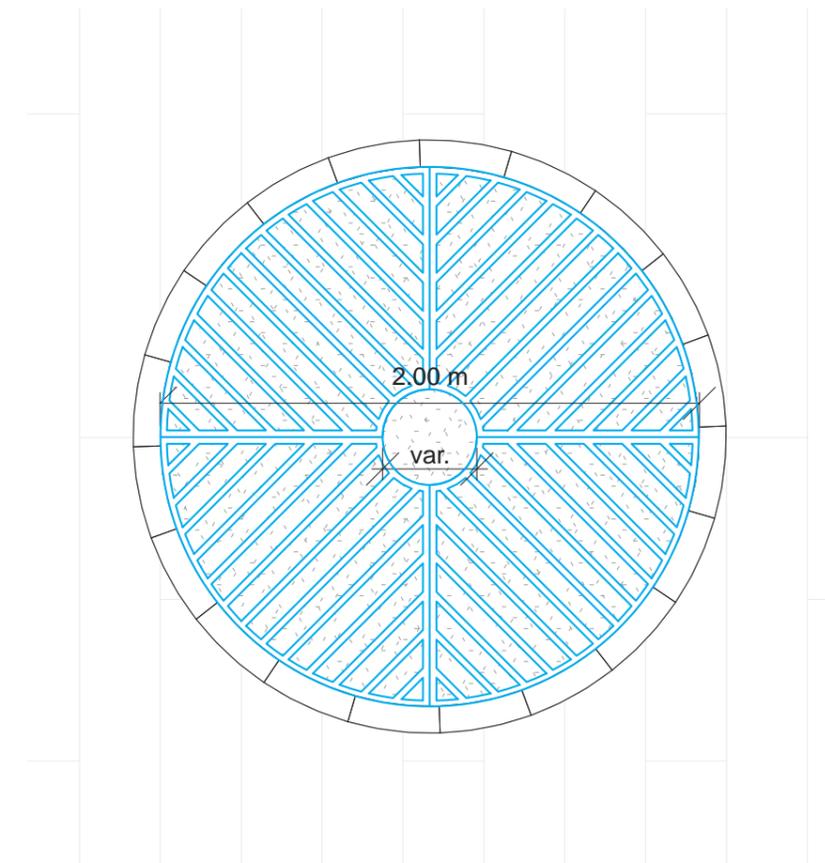


Hardscape

Flowerpot - Type 2



BORDER

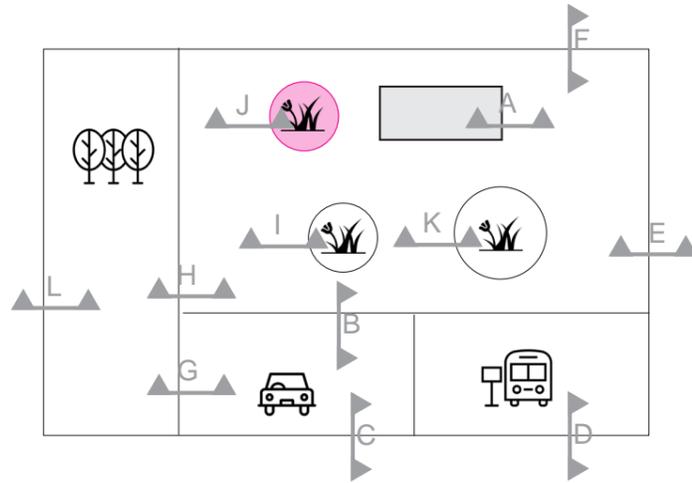


INTERNAL GRID

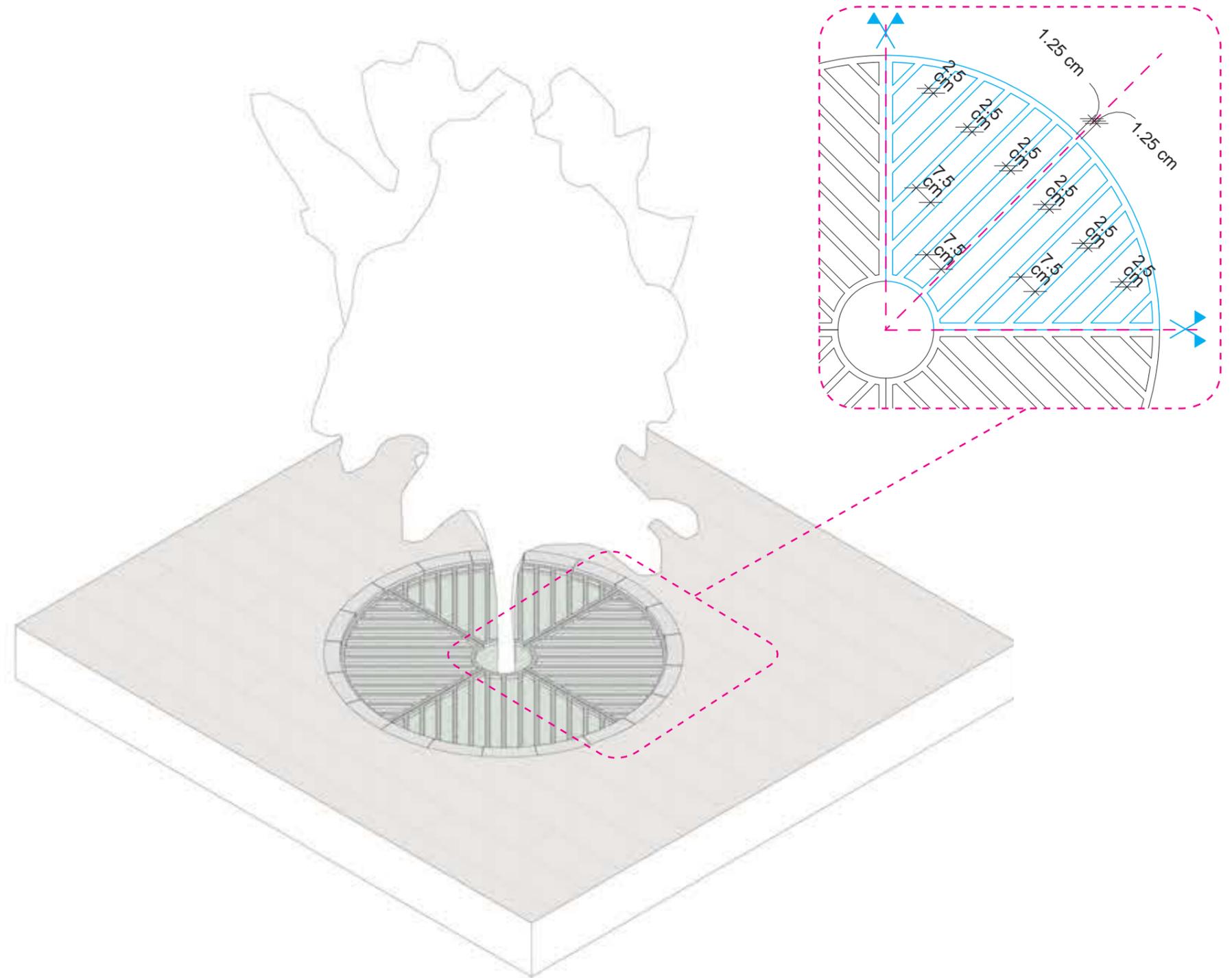
Note
 Placing flowerbed type 2 shall be provided a border of 10 cm with same materials of the pedestrian area (material 1 and material 2).
 Internally, a grid of materials 8 shall be placed.

Hardscape

Flowerpot - Type 2



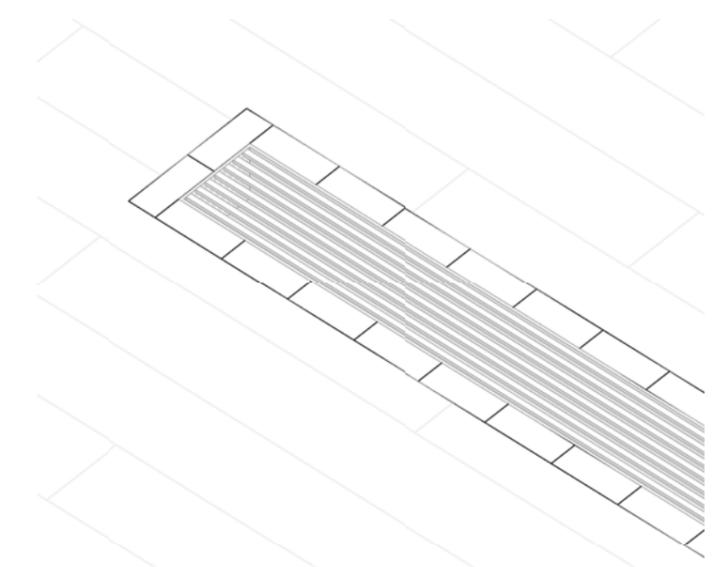
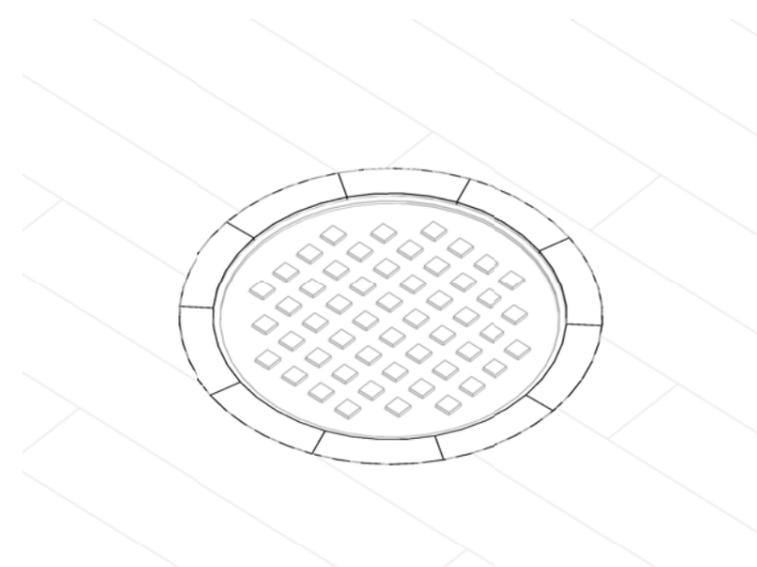
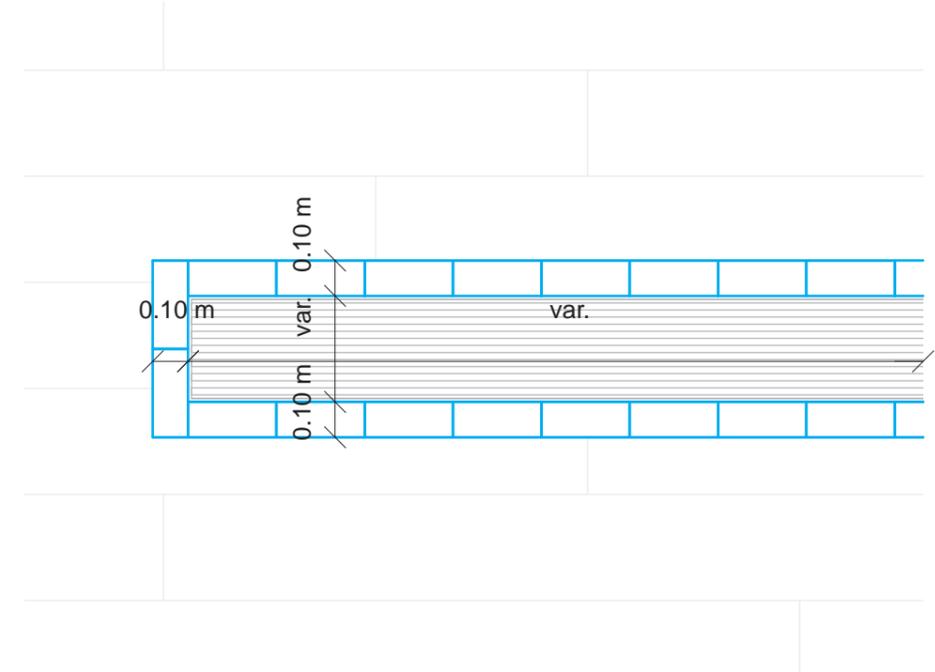
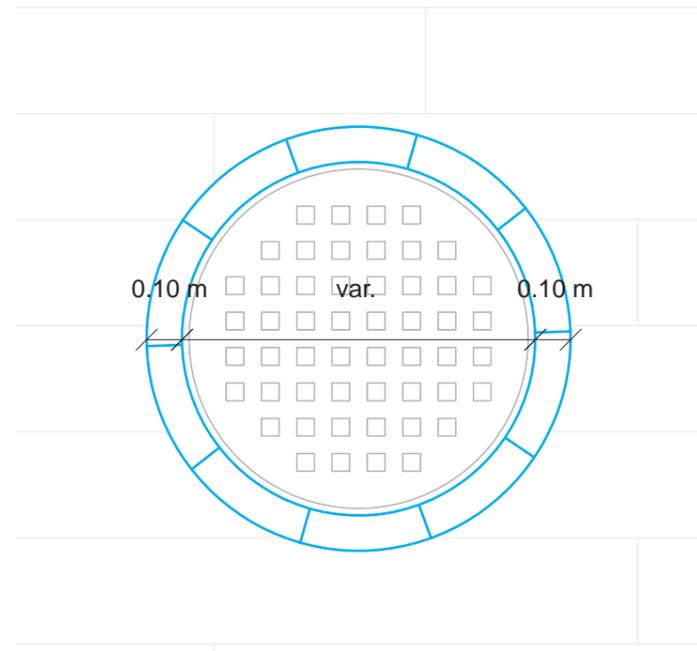
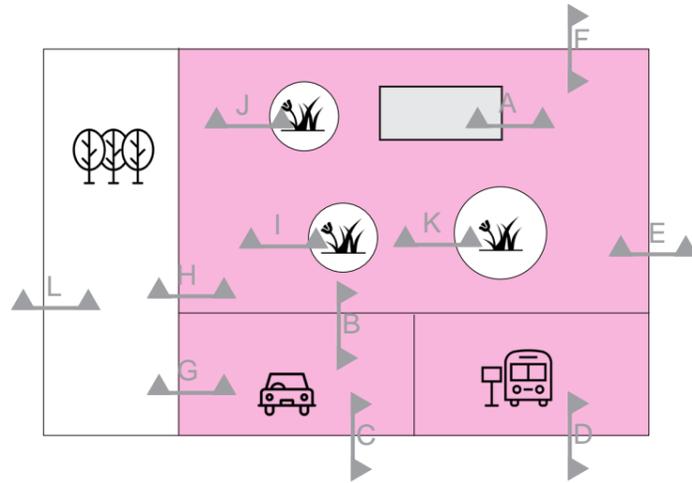
Note
 Placing flowerbed type 2 shall be provided a border of 10 cm with same materials of the pedestrian area (material 1 and material 2).
 Internally, a grid of materials 8 shall be placed.





Hardscape

Manholes and grids



Note
Placing a manhole or a grid, shall be provided a border of at least 10 cm around it with the same material of the paving where it is placed.



Softscape

Vegetation Overview

The Rail Baltica line across three different countries. Each as a primary colour assigned for identification.

- Estonia
- Latvia
- Lithuania

Designers can define and choose from native species of trees and flowers in order to apply the identity to the green areas.

	COUNTRY & REGIONAL IDENTITY			INSPIRATION
ESTONIA				
LATVIA				
LITHUANIA				



Softscape

Design Strategy

Designers shall provide in the proposed design a minimum area intended for green area.

Type 4 - Essential public area

Designers shall provide in the proposed design at least 20% of green areas compared to the total surface of the site area.



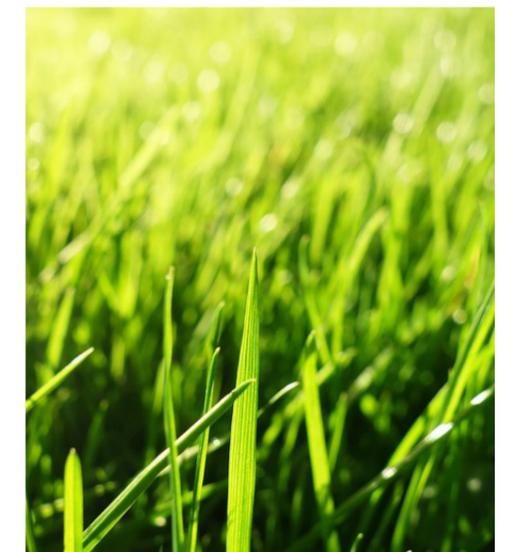
Type 3 - Basic public area

Designers shall provide in the proposed design at least 20% of green areas compared to the total surface of the site area.



Type 2 - Icon / Basic Plus public area

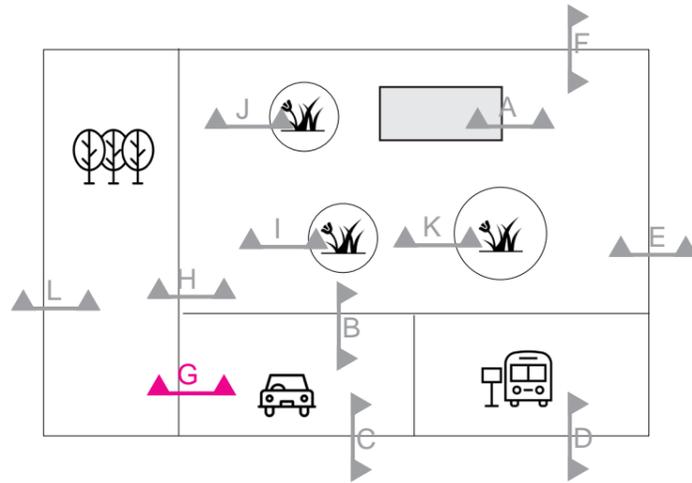
Designers shall provide in the proposed design at least 20% of green areas compared to the total surface of the site area.



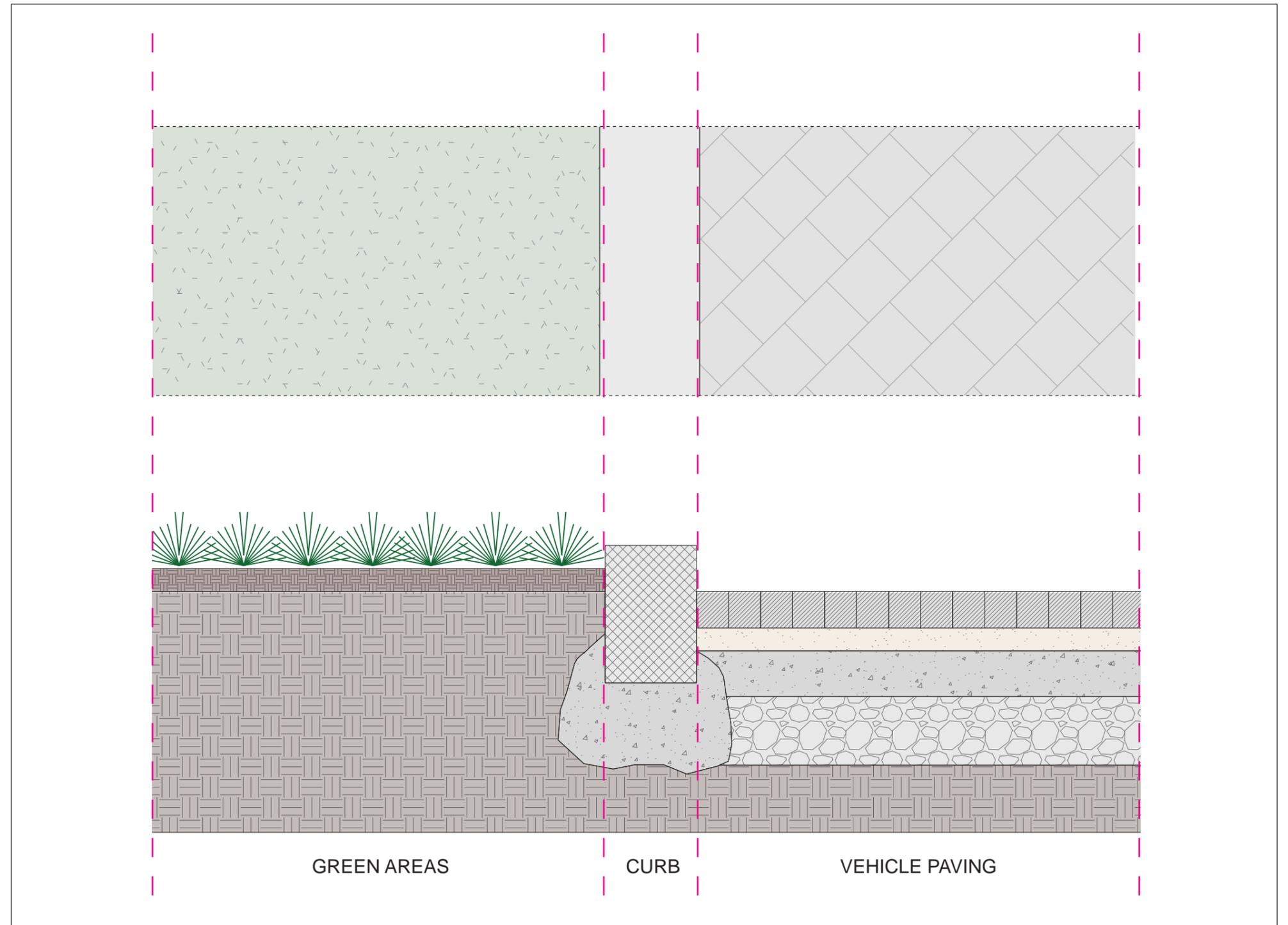


Softscape

Detail G - Green Area / Vehicle Paving



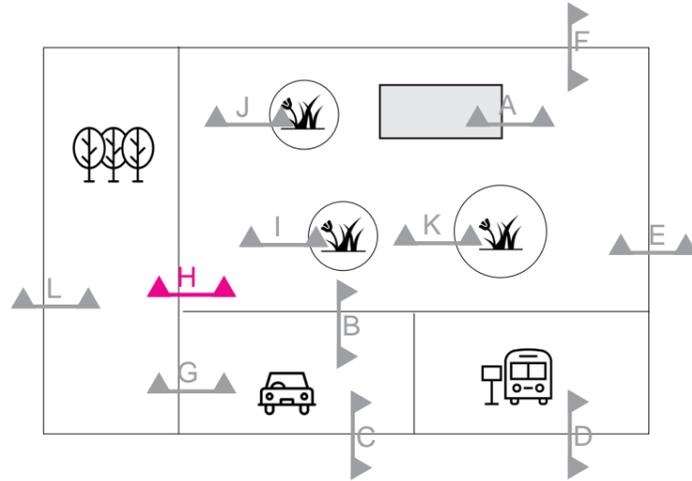
Note
 Where a green area adjoin a vehicle paving shall be provided a curb of at least 20 cm.
 For vehicle paving shall be used material 3. For curb shall be used material 4.



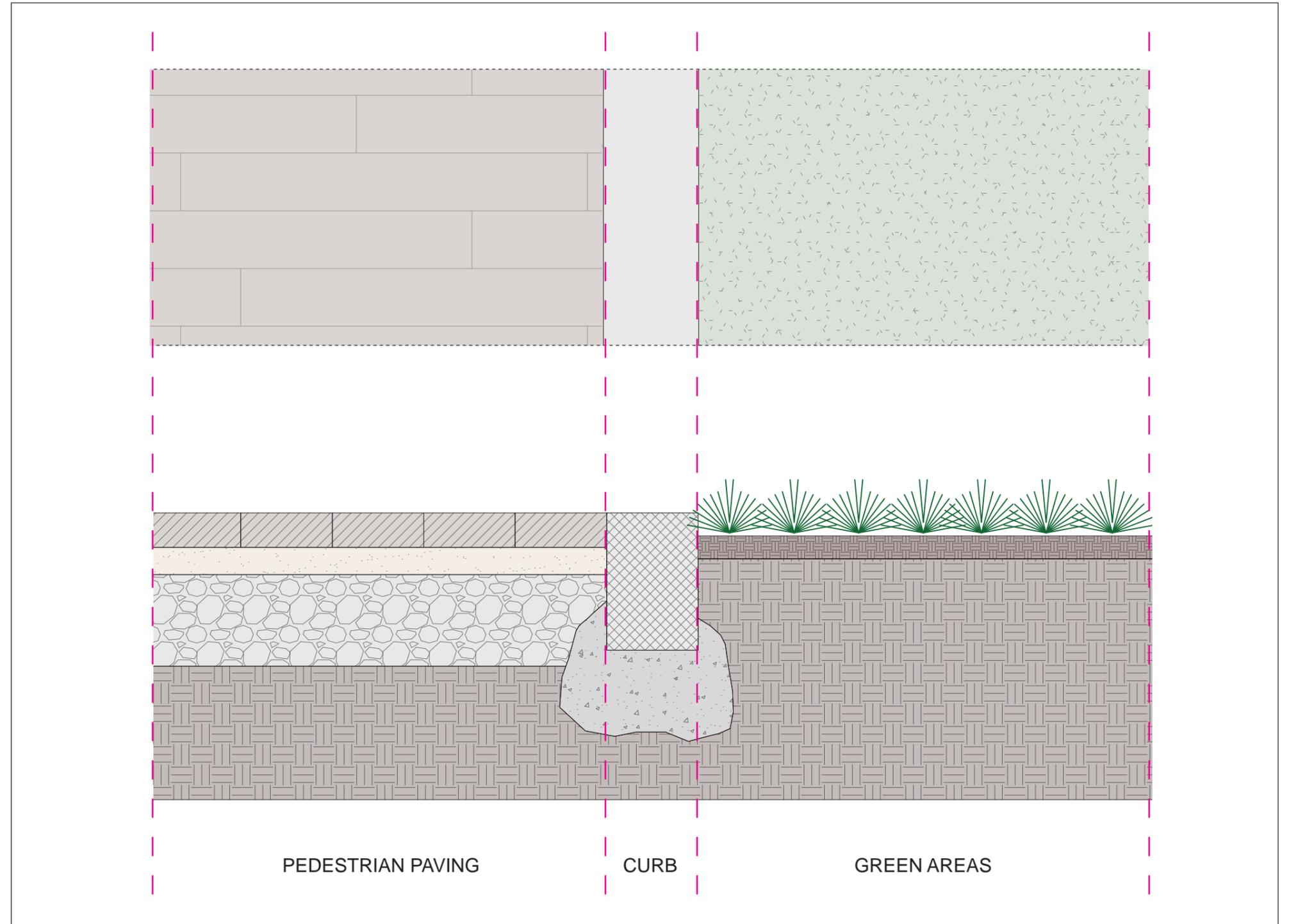


Softscape

Detail H - Green Area / Pedestrian Paving



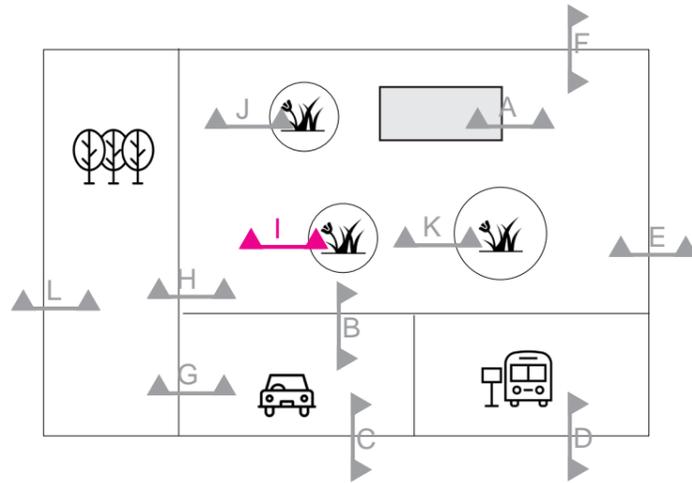
Note
 Where a green area adjoin a pedestrian area shall be provided a curb of at least 20 cm.
 For pedestrian paving can be chosen material 1 and material 2. For curb shall be used material 4.



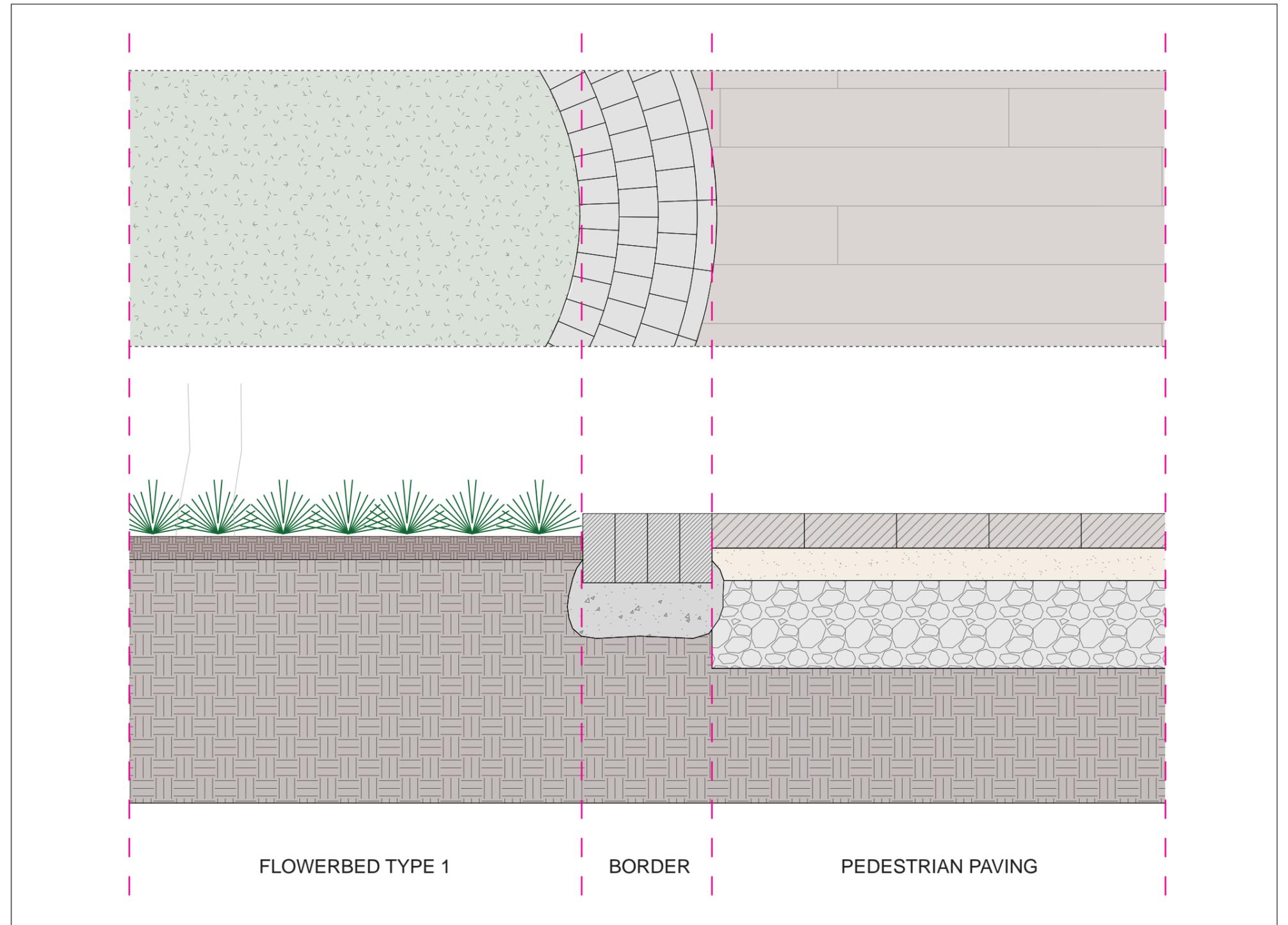


Softscape

Detail I - Flowerpot Type 1

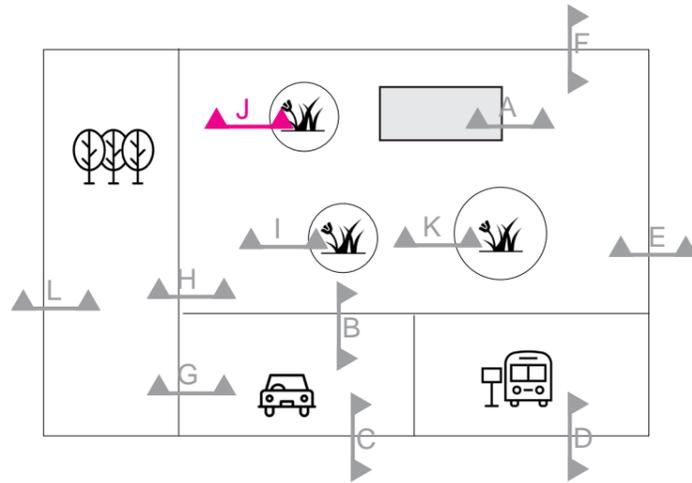


Note
Where a green area is inside a flowerbed type 1 shall be provided a border of at least 70 cm.
For hardscape indications please refer to page 26.

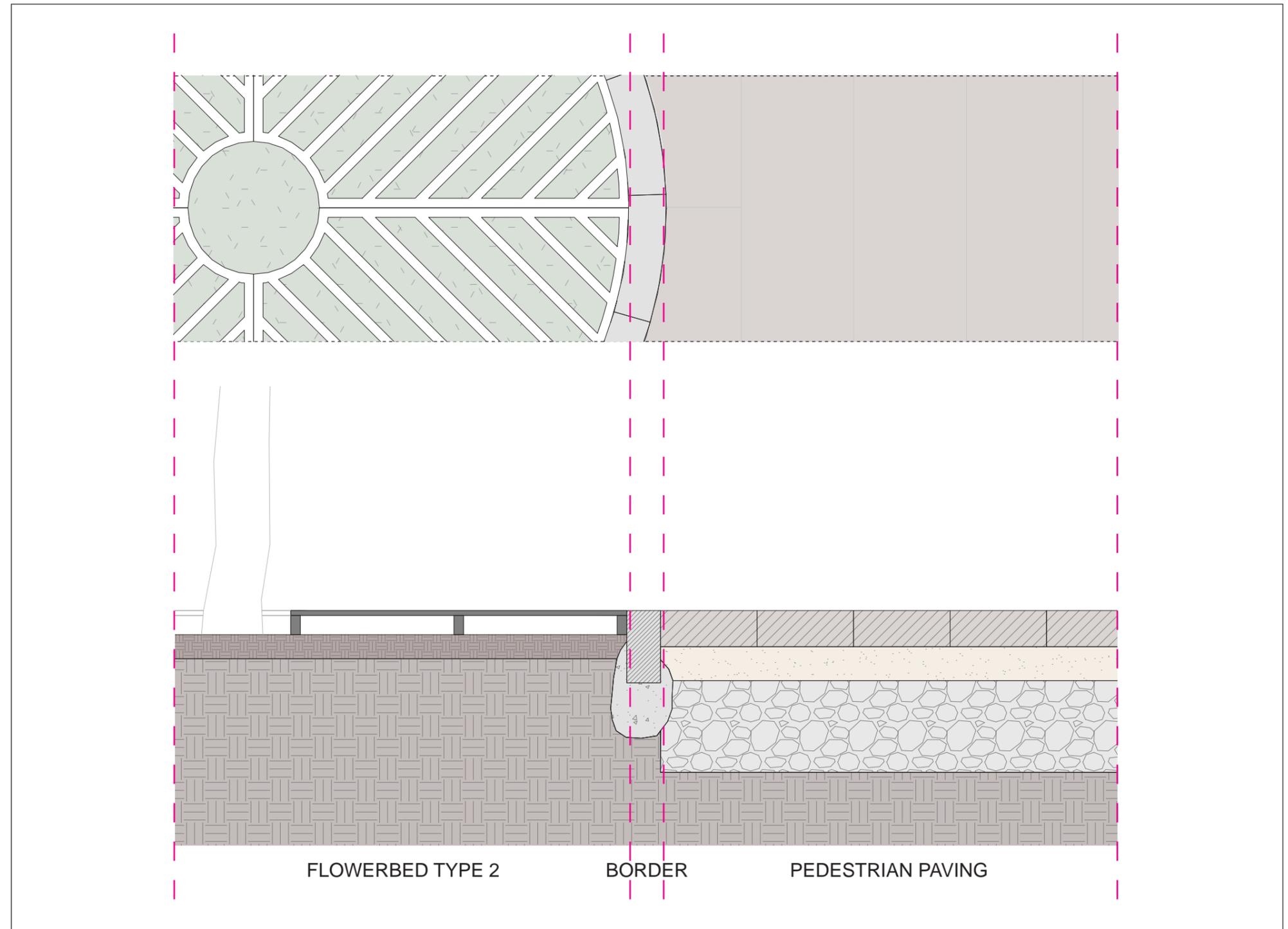


Softscape

Detail J - Flowerpot Type 2

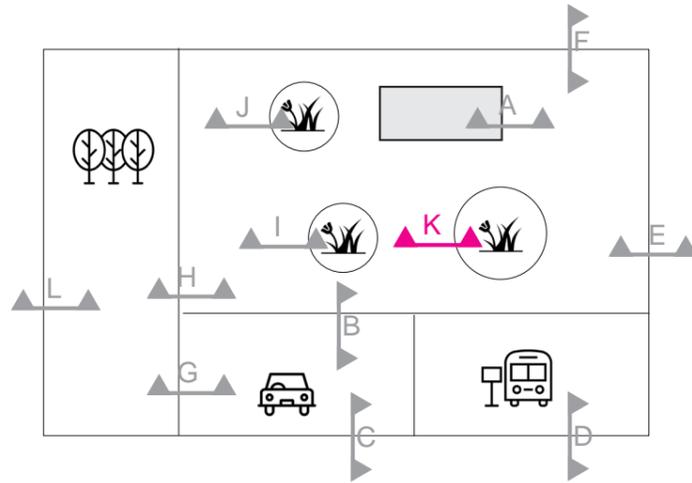


Note
 Where a green area is inside a flowerbed type 2 shall be provided a border of at least 10 cm and a grid inside the border.
 For hardscape indications please refer to page 28.

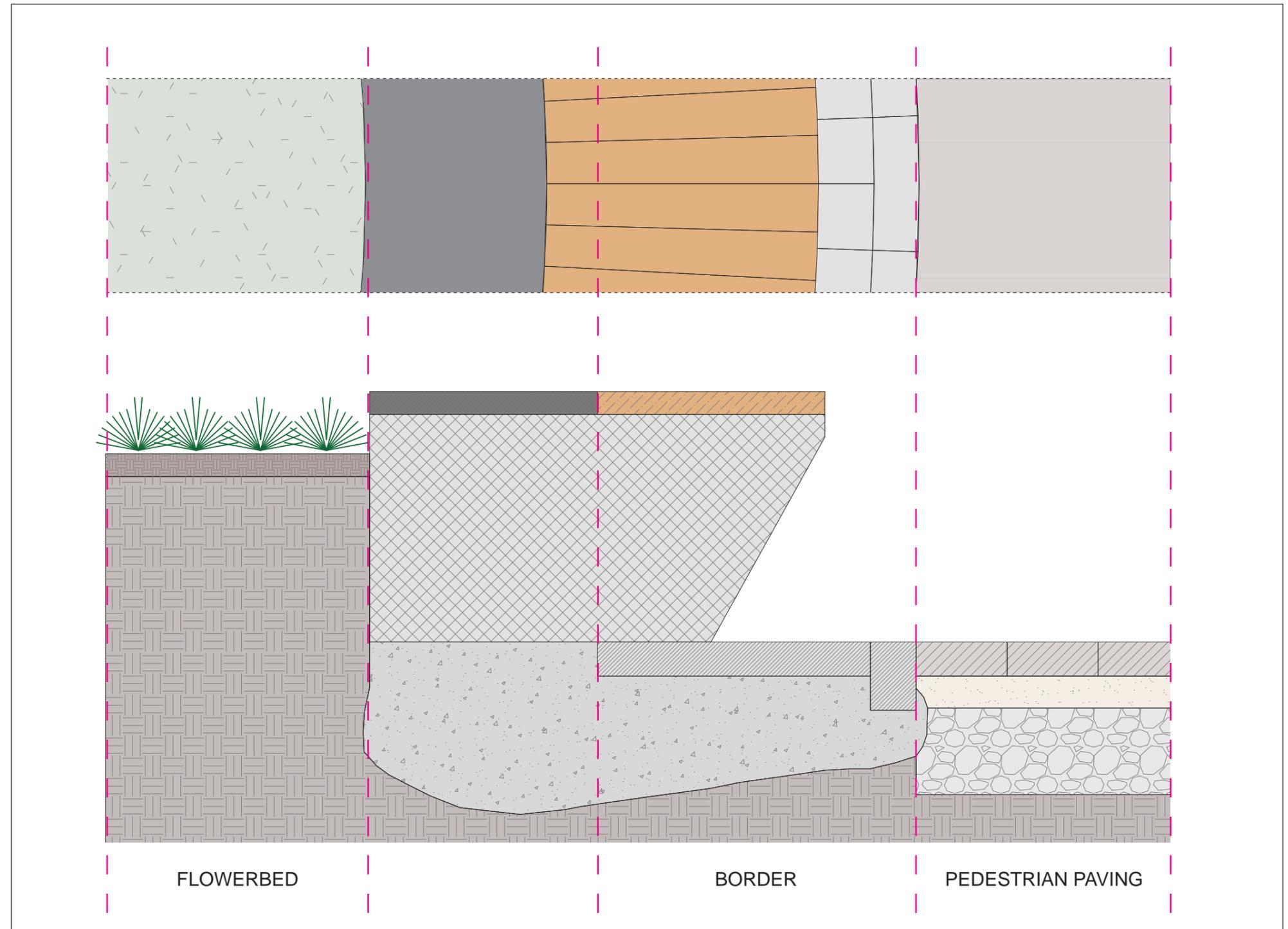


Softscape

Detail K - Bench



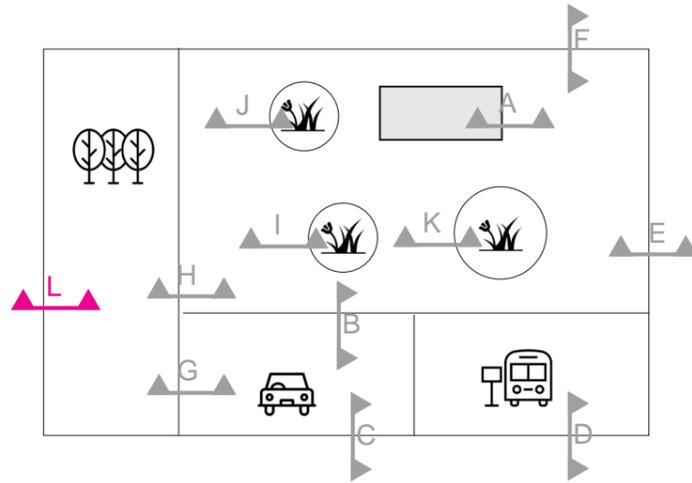
Note
A green area can be placed enclosing it inside benches. Benches will be realized in concrete with wood and stone finishes.



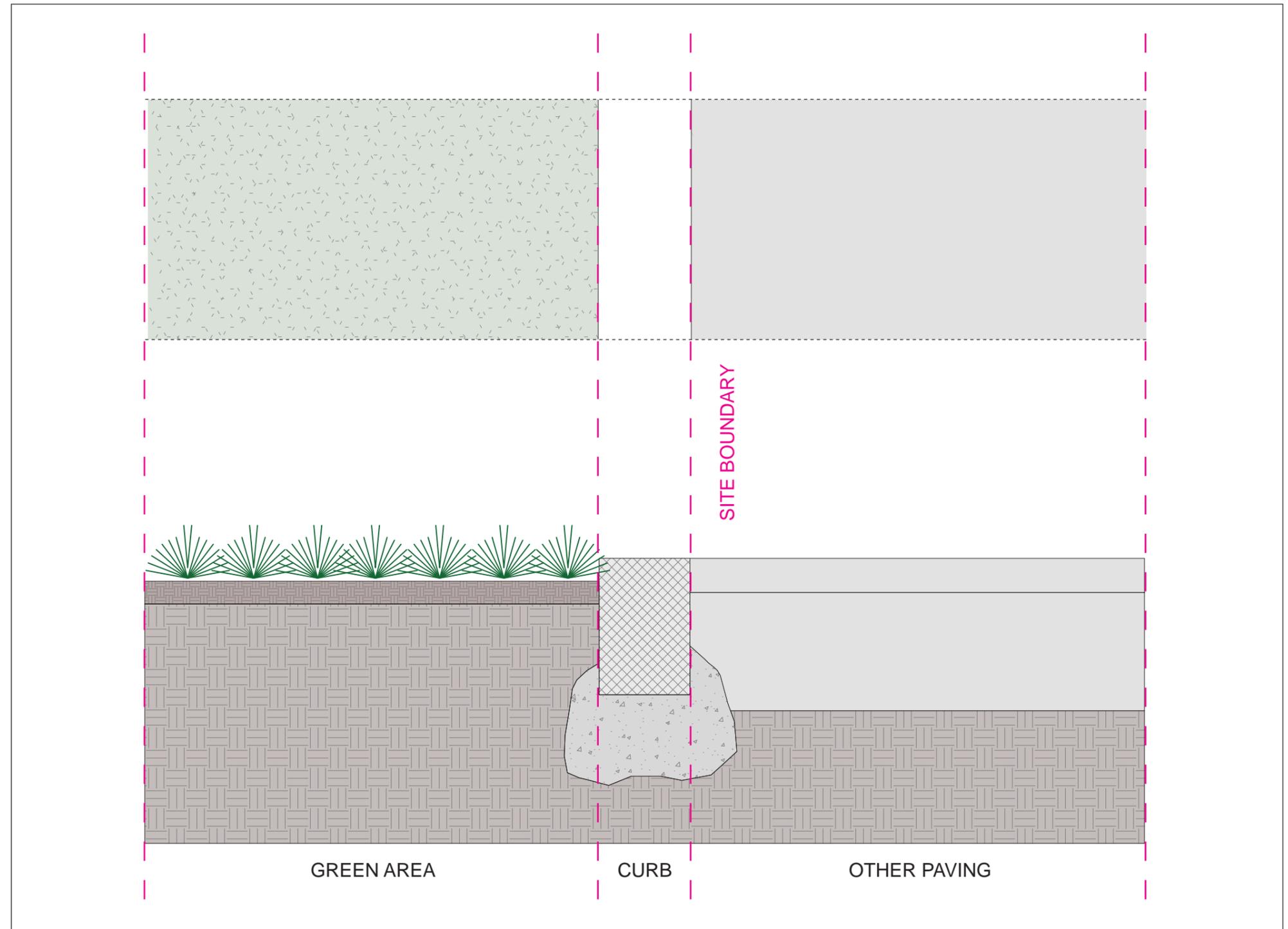


Softscape

Detail L - Green Area / Site Boundary

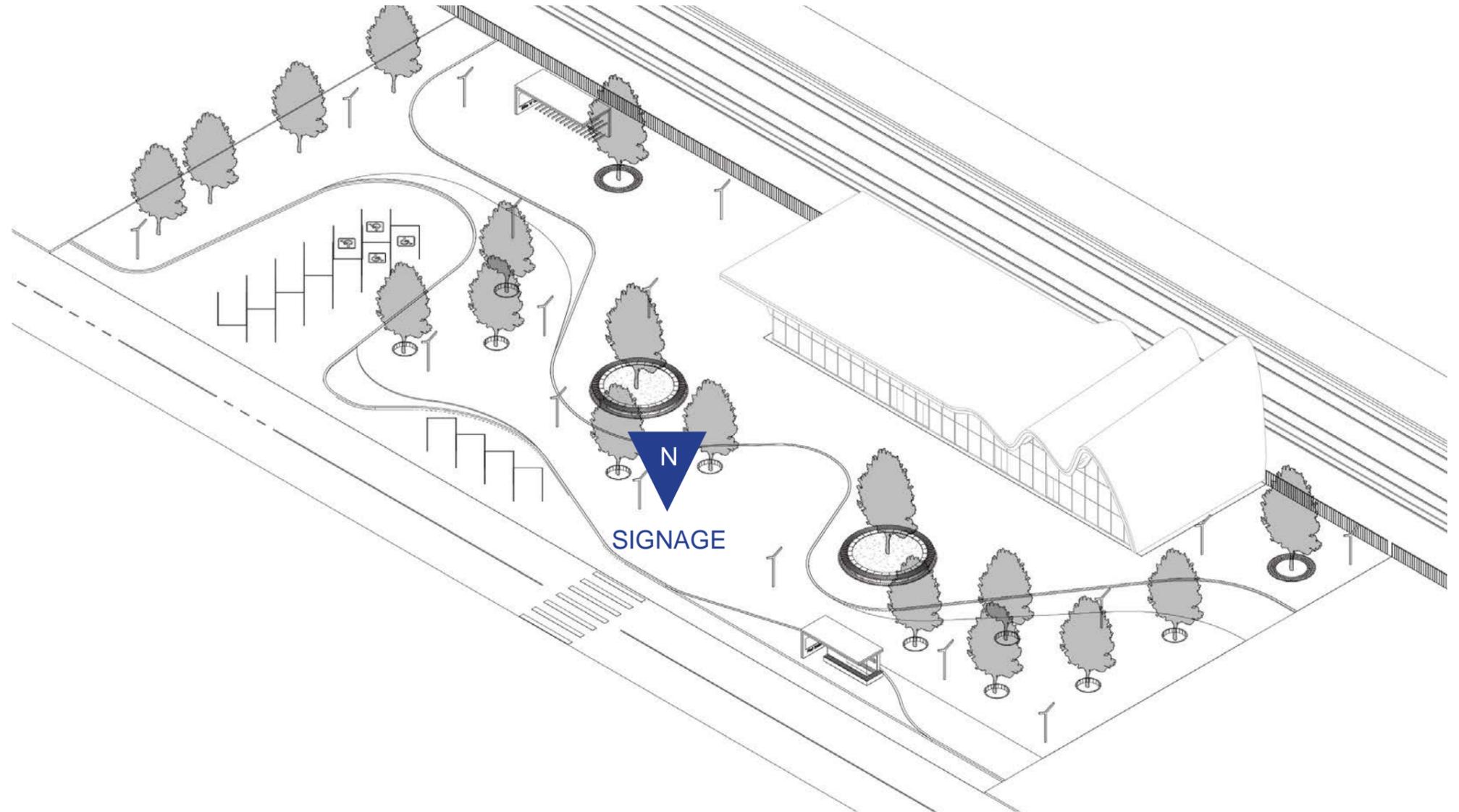


Note
Where a green area adjoin the site boundaries shall be provided a curb of at least 20 cm.
For curb shall be used material 4.



Signage and Wayfinding

Identity Matrix



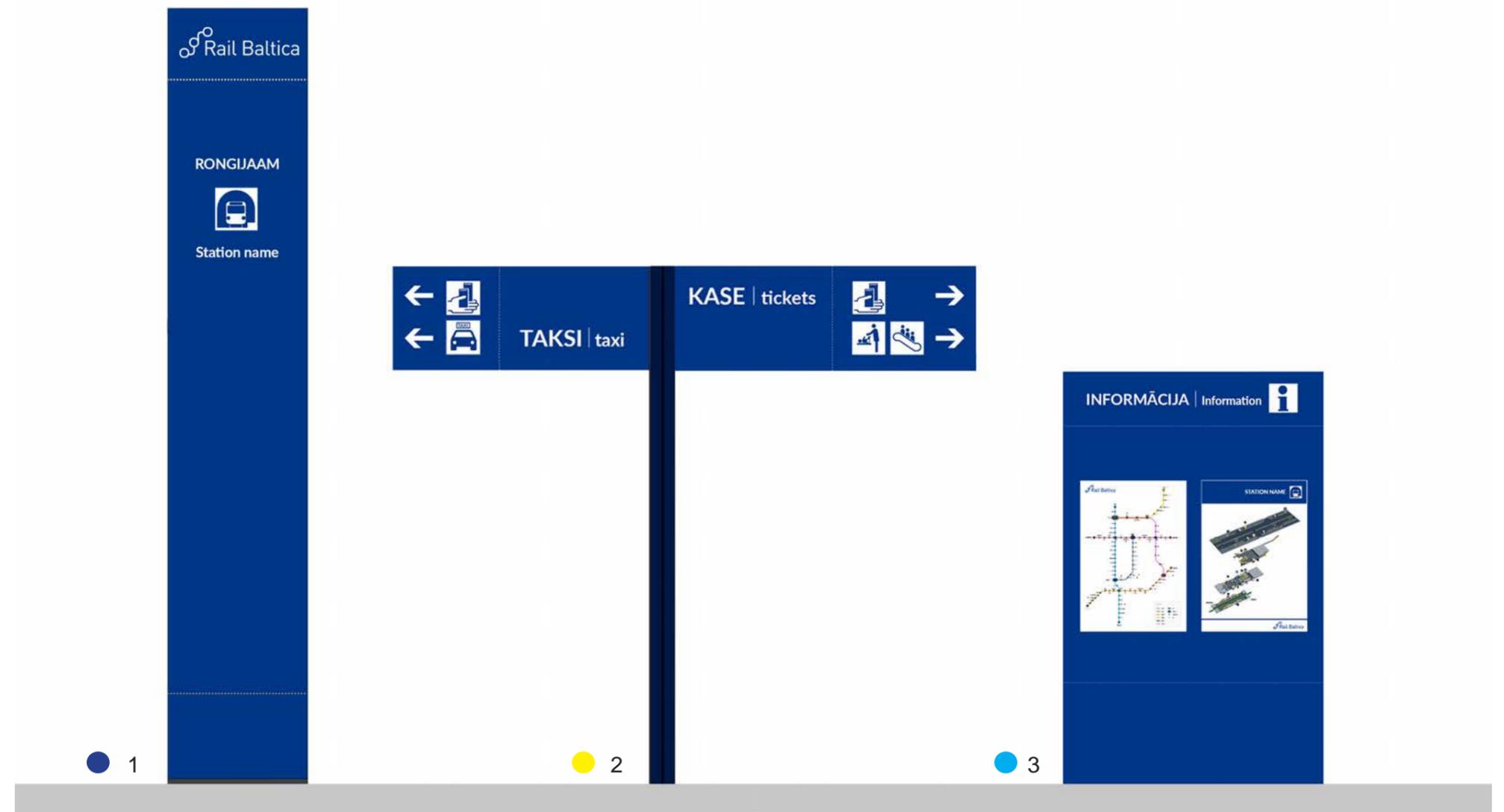
-  Material
-  Geometry
-  Modularity
-  Color
-  Vegetation

	N	C	R
Signage	  		

Signage and Wayfinding

Urban Signs Overview

External signs include: totem signs which identifies the station as well as fingerpoints signs which provide directions for passengers.



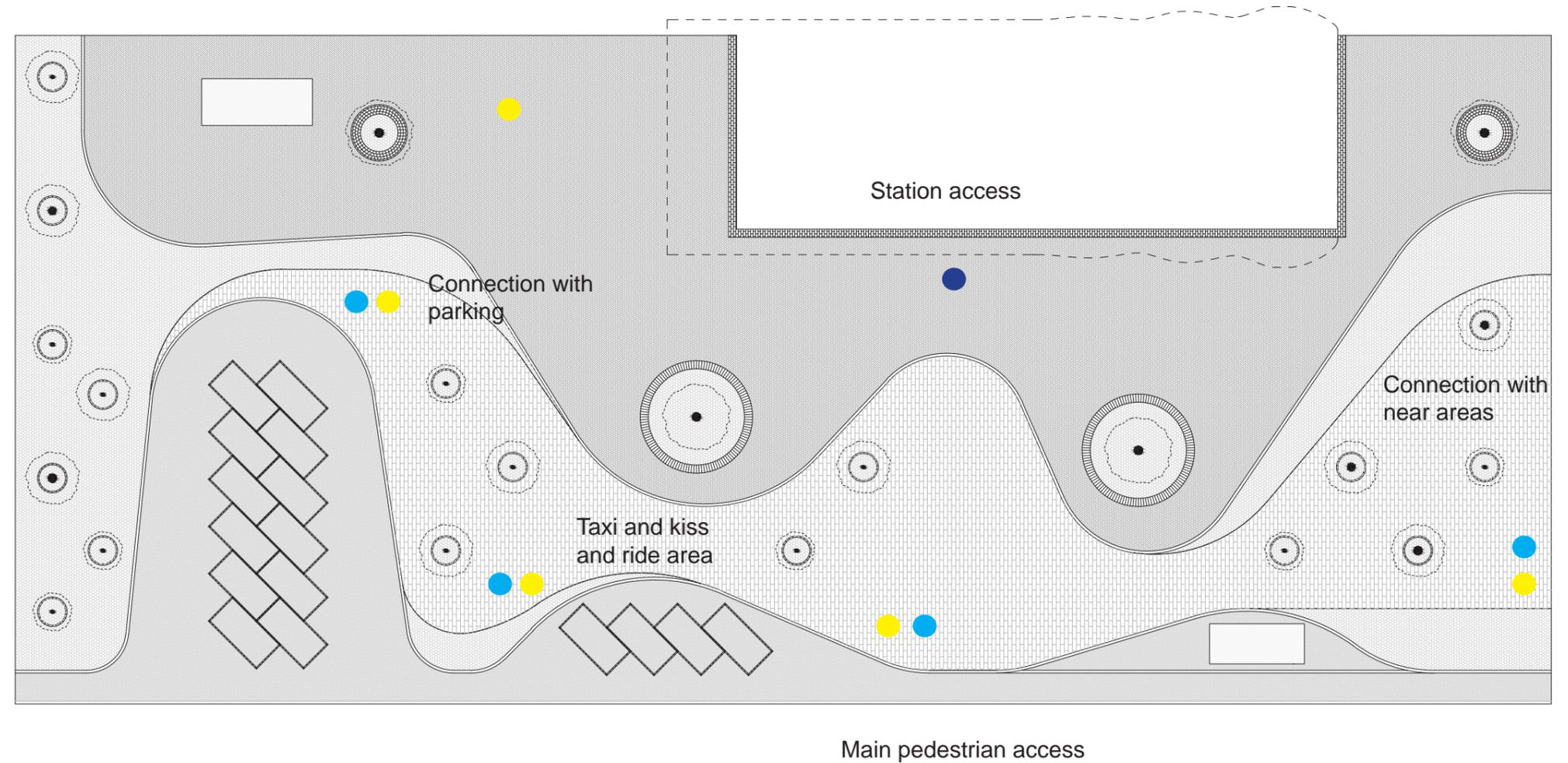
Legend

- 1. Urban Totem sign
- 2. Urban Fingerpointer sign
- 3. Urban Stand sign

Signage and Wayfinding

Position Strategy

It is important for the signs to be allocated in the best possible way to ensure accessibility and safe route to the station. Urban signs should help directing passengers to the points of interest within the station external area.

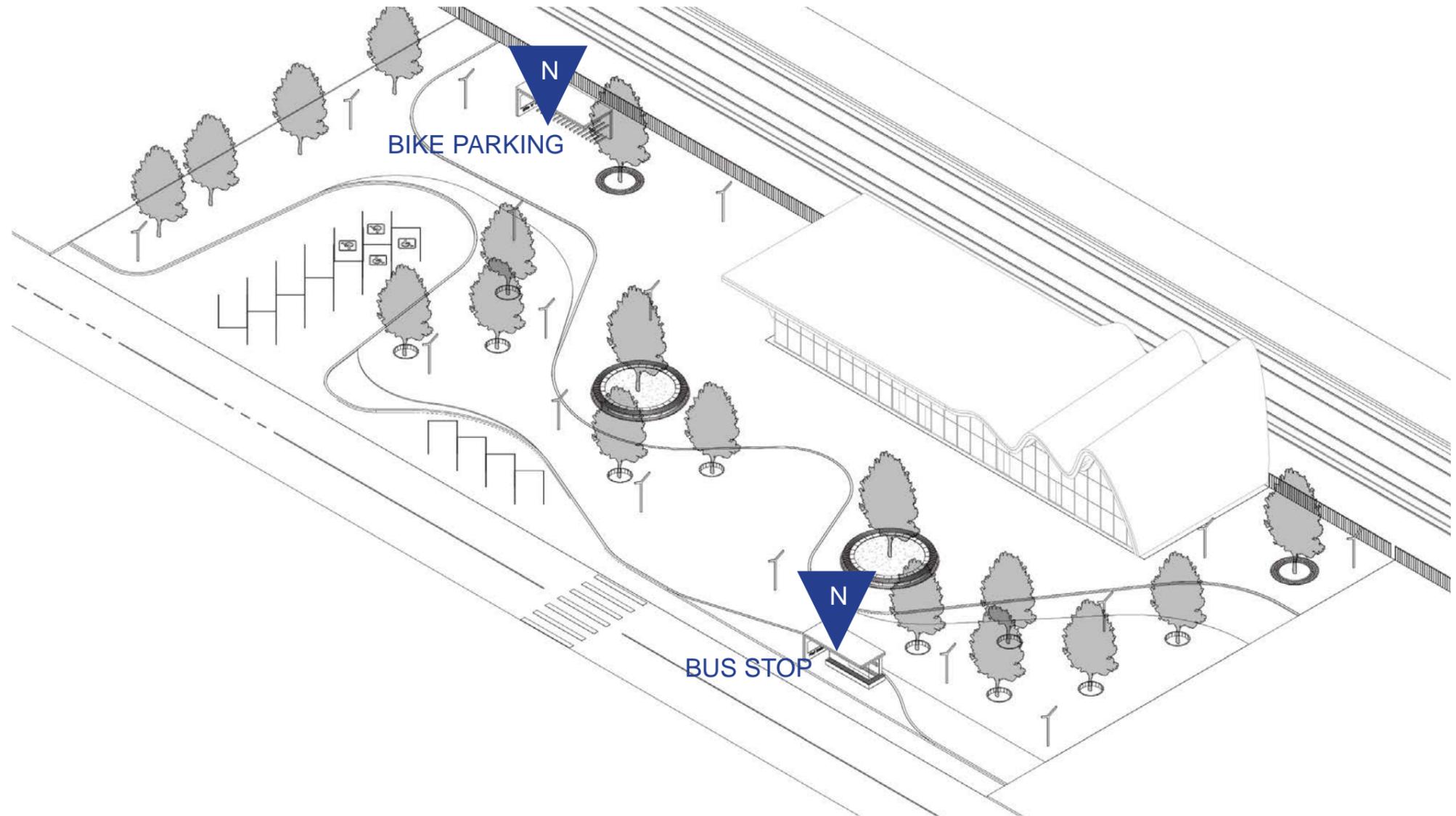


Legend

- 1. Urban Totem sign
- 2. Urban Fingerpointer sign
- 3. Urban Stand sign

Shelter

Identity Matrix



-  Material
-  Geometry
-  Modularity
-  Color
-  Vegetation

	N	C	R
Shelter	  		



Shelter

D1.10

Bus Stop

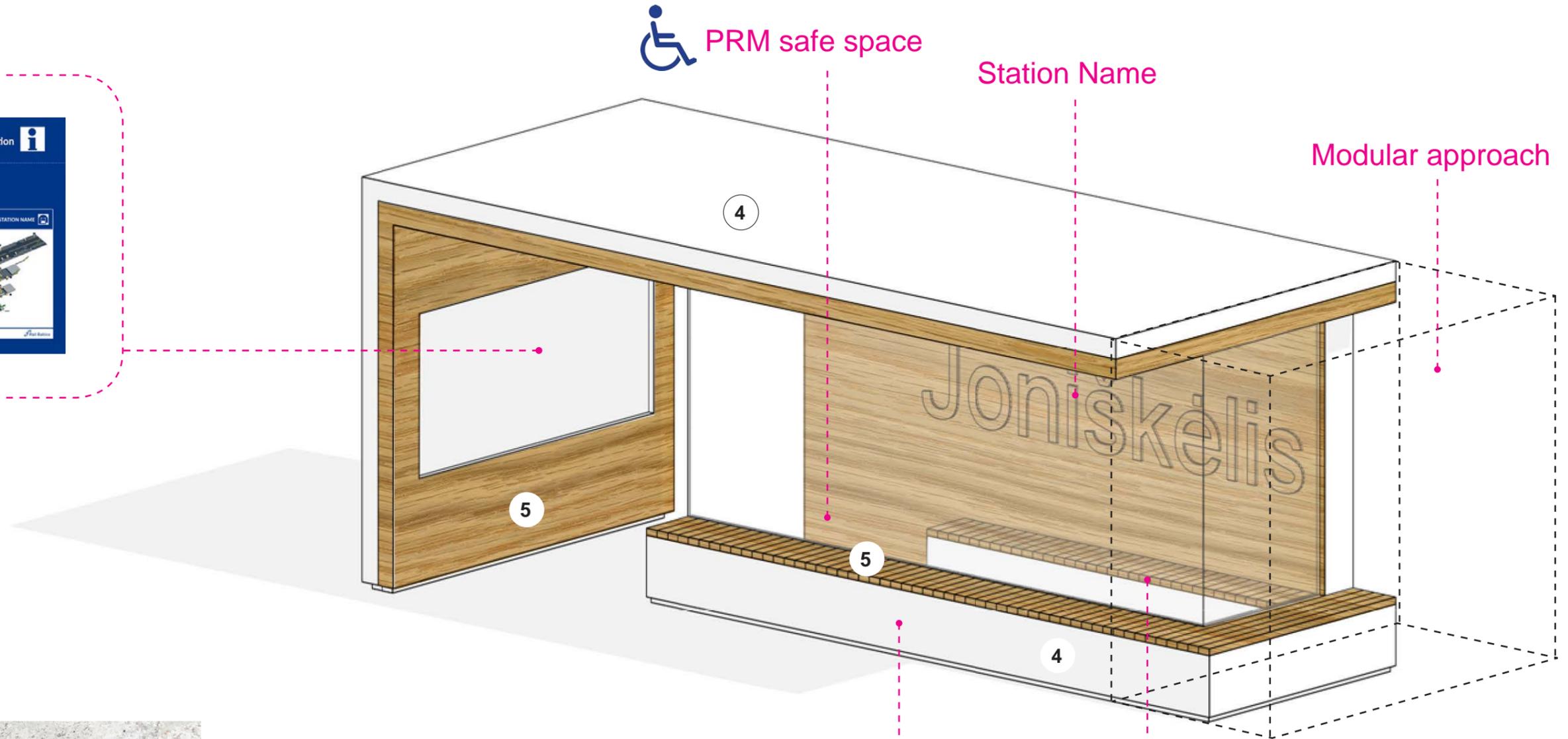
Map



PRM safe space

Station Name

Modular approach



Seating area

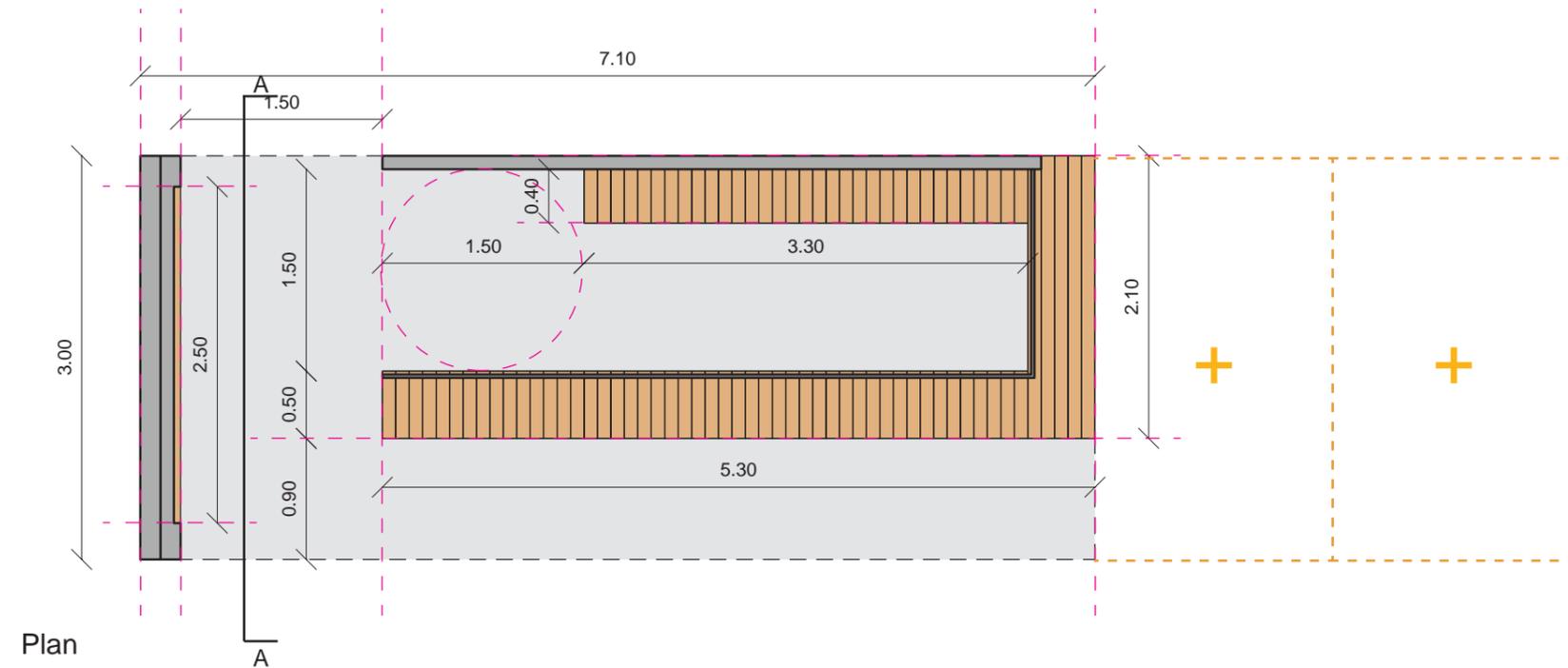
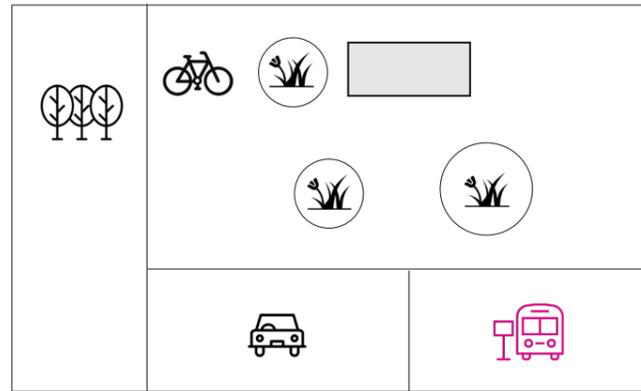
Indoor space



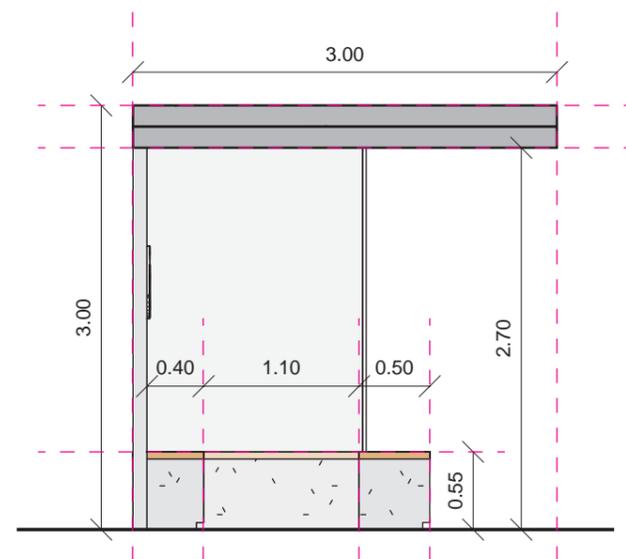
Shelter

D1.10

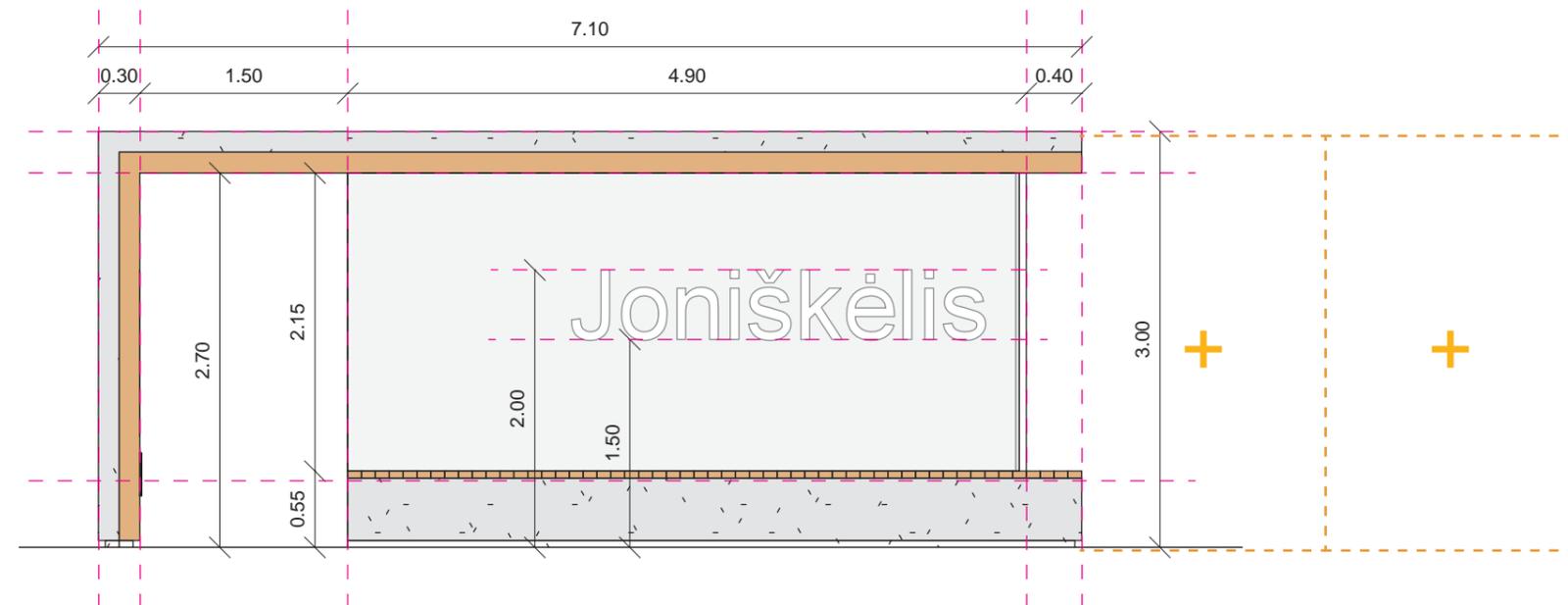
Bus Stop



Plan



Section A

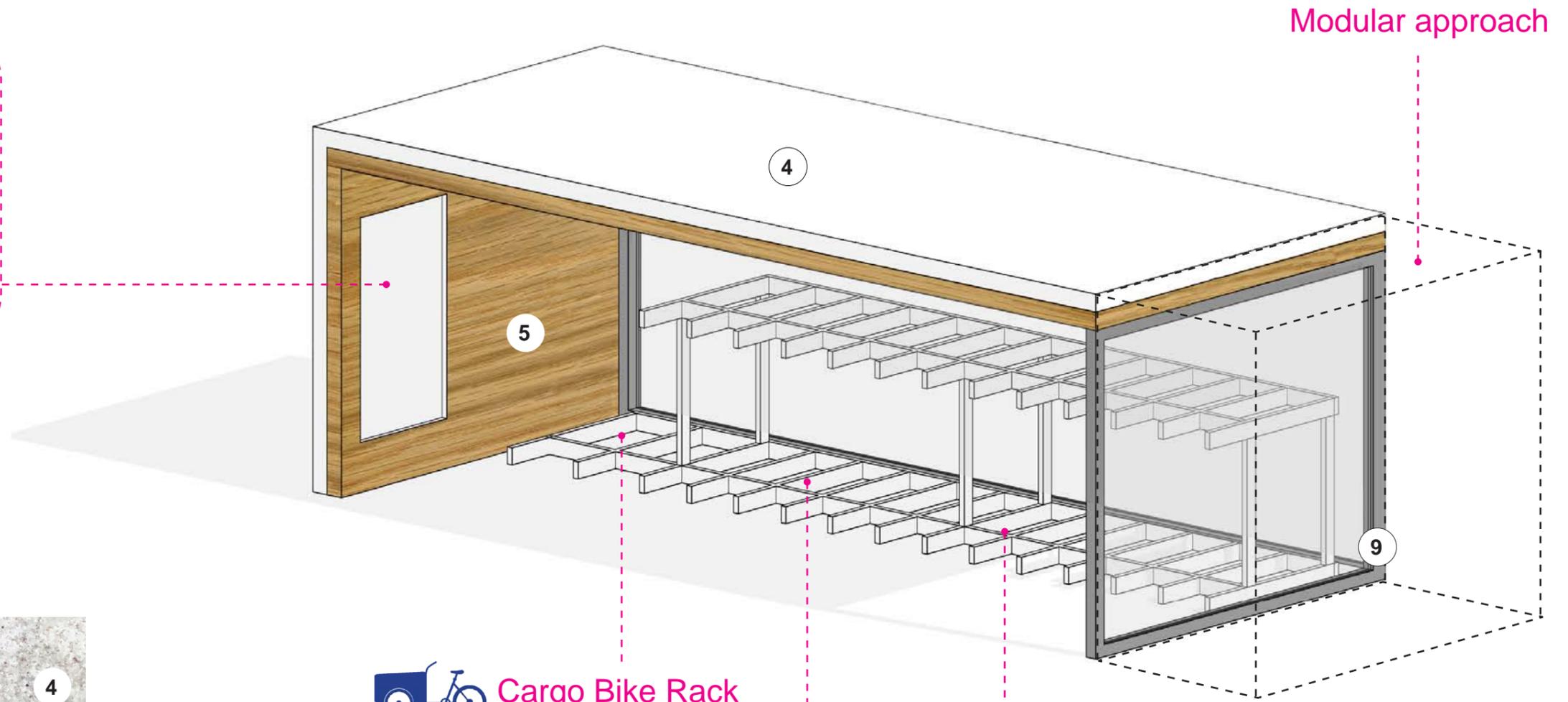


Elevation

Shelter

Bike Parking

Map

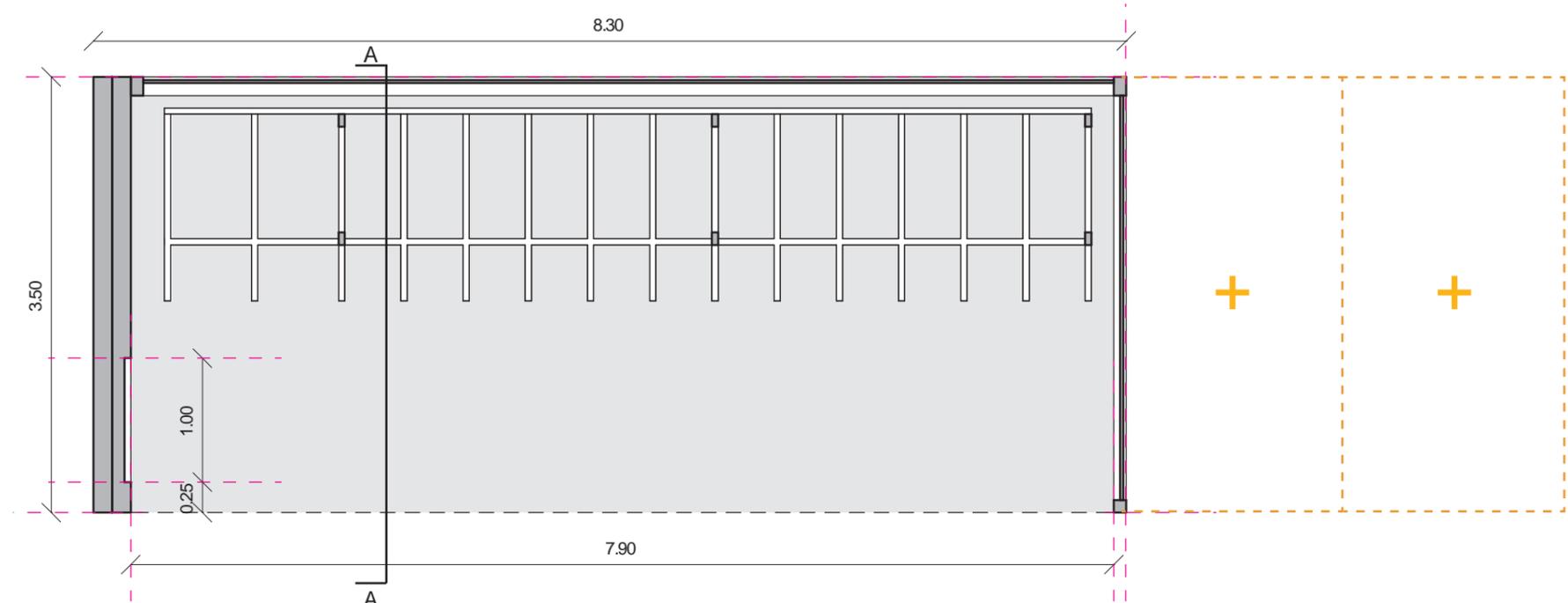
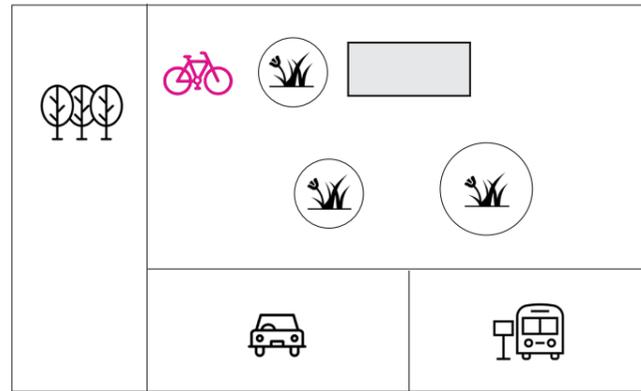




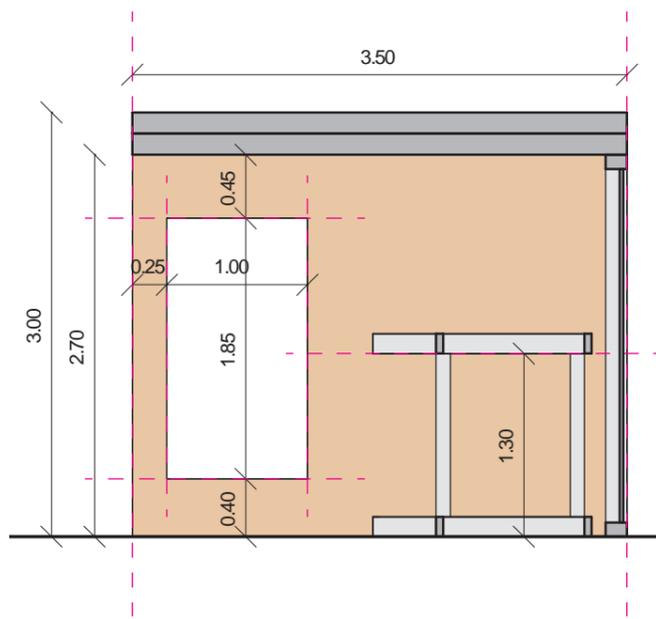
Shelter



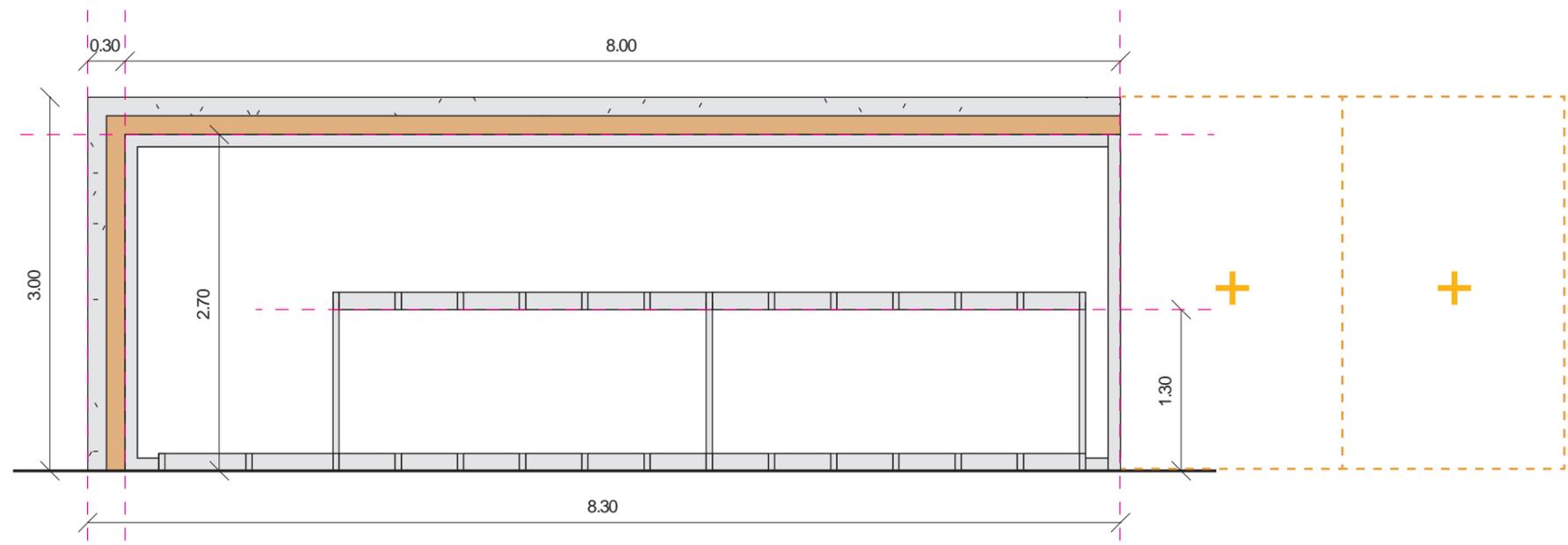
Bike Parking



Plan



Section A

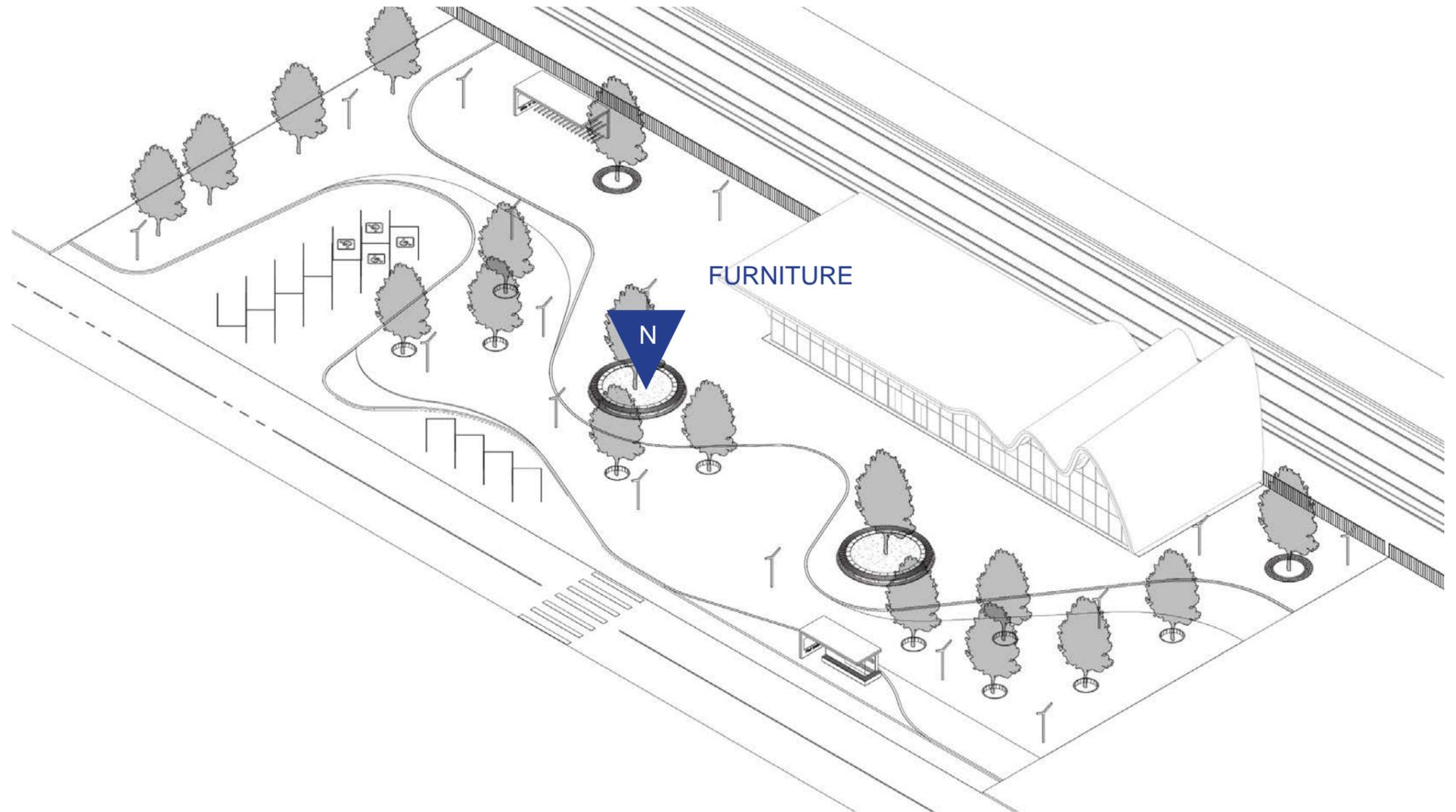


Elevation



Furniture

Identity Matrix

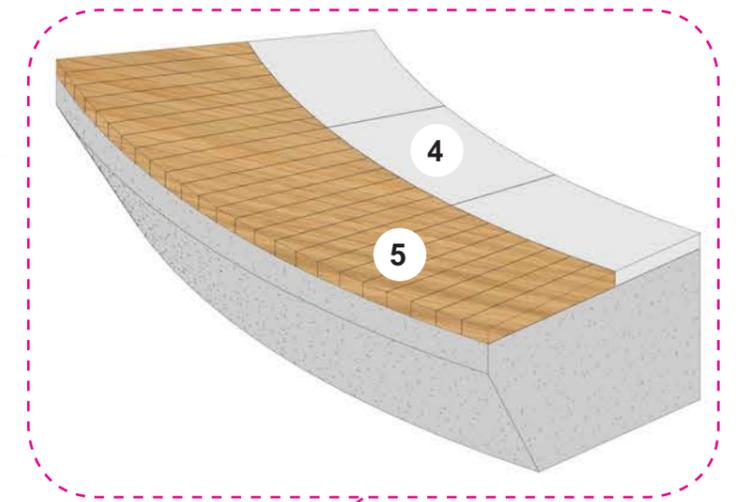
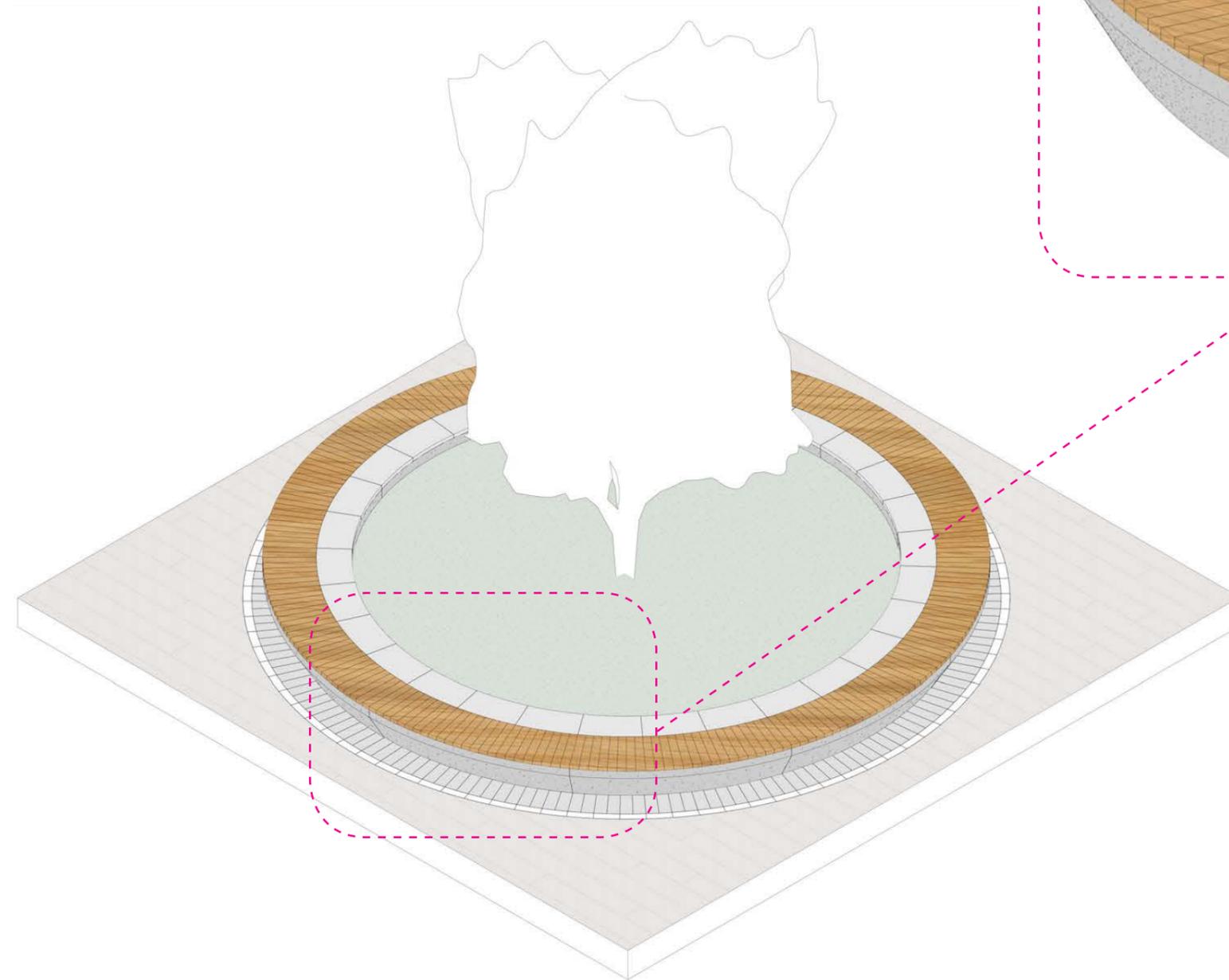
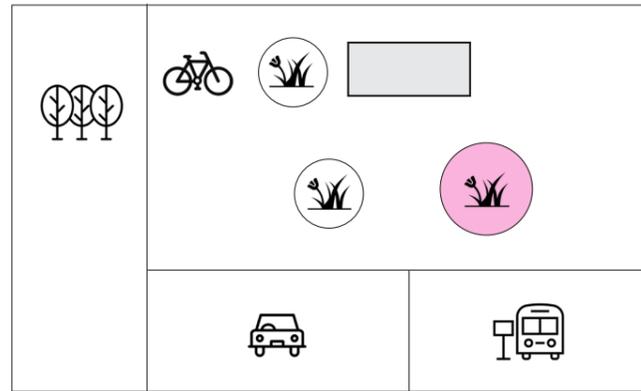


-  Material
-  Geometry
-  Modularity
-  Color
-  Vegetation

	N	C	R
Furniture	 		

Furniture

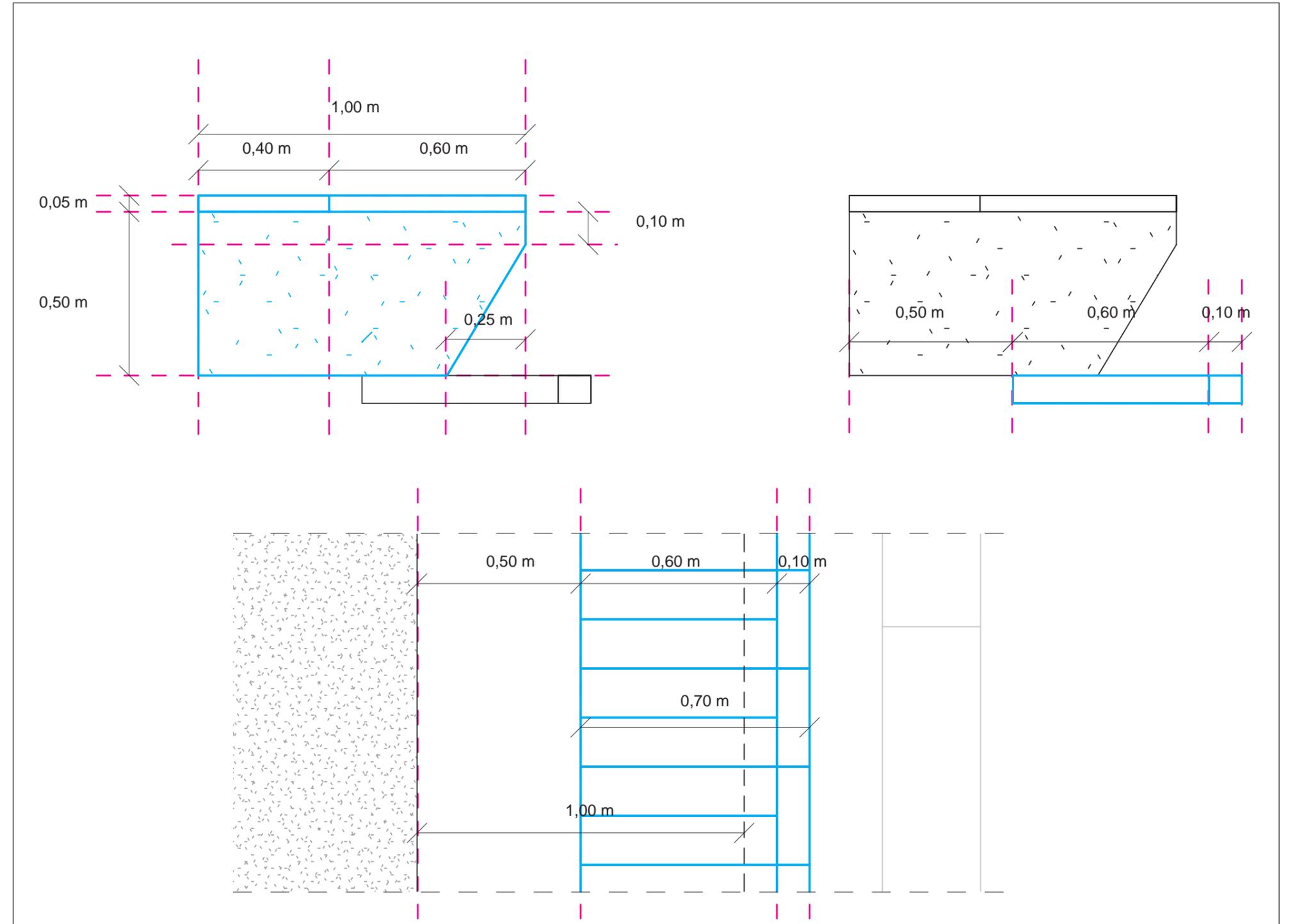
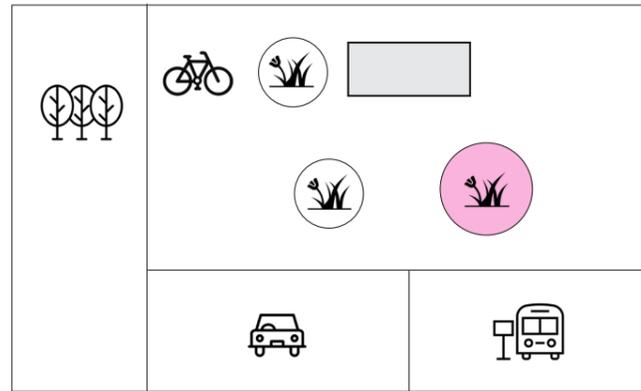
Bench





Furniture

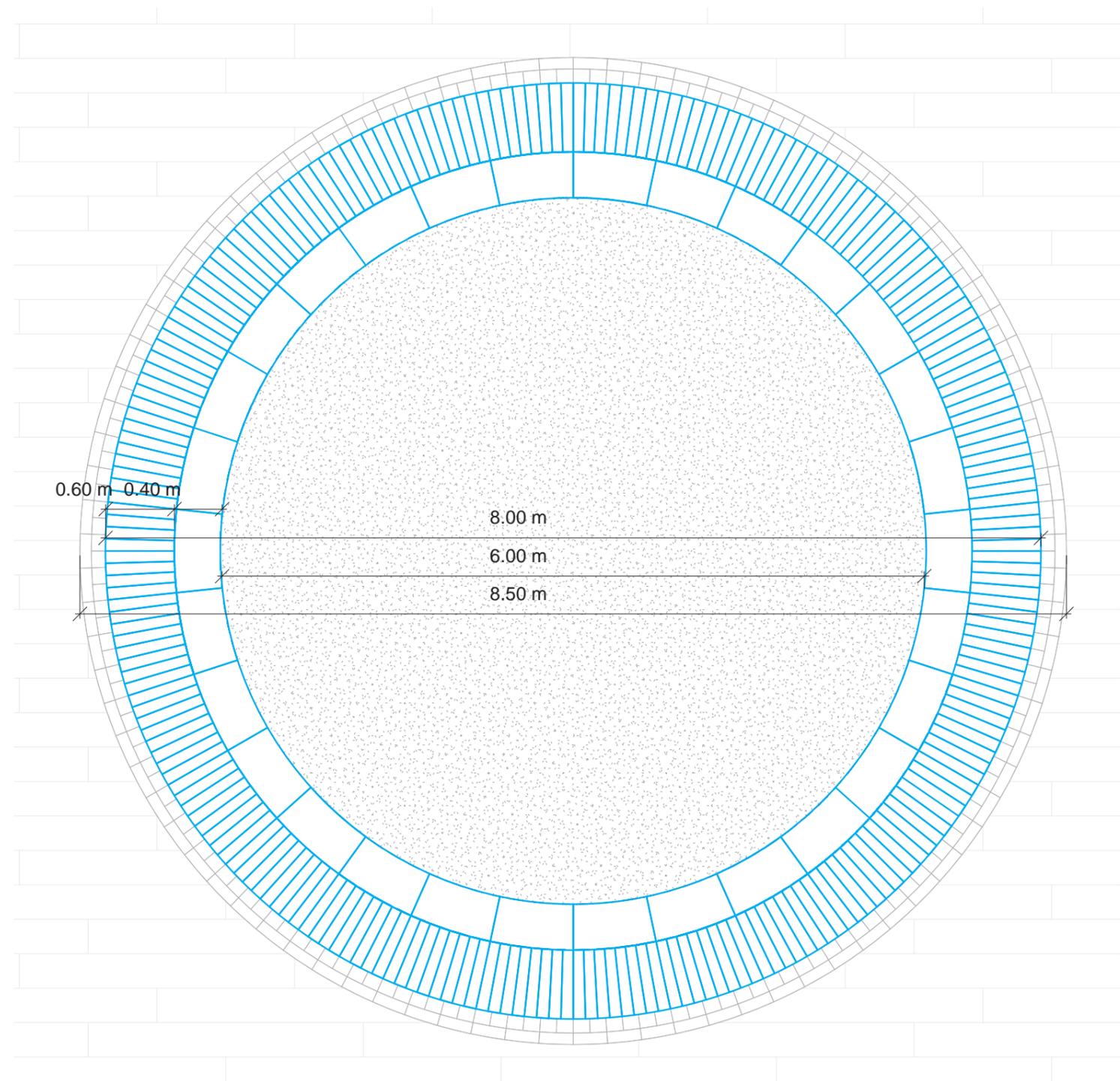
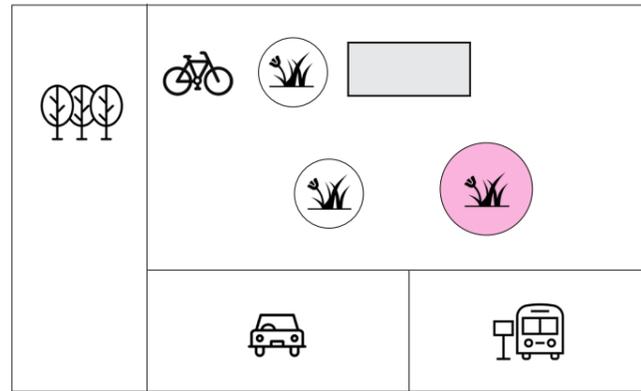
Bench



Note
 Benches will be realized in concrete with wood and stone finishes. The dimensions provided for the section shall be respected but the extrusion can be done as per future design.
 Under the bench shall be provided a border with the same paving of the pedestrian area (material 1 and material 2) of at least 70 cm.

Furniture

Bench



Note

The seating area must be of 60 cm and must be realized with material 5. The back part must be 40 cm and must be realized with material 4.

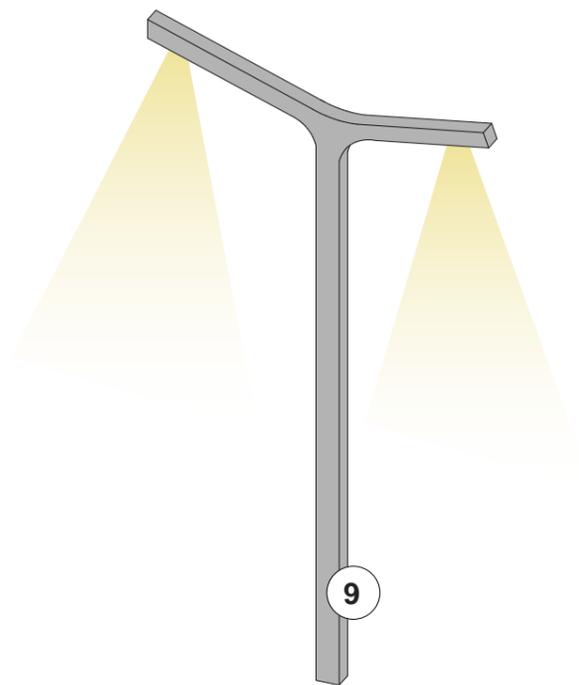
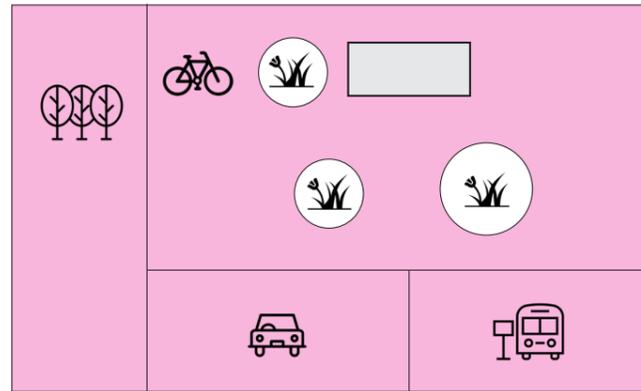
If the bench will be extruded in a circle the interior diameter must be of 6 meters.



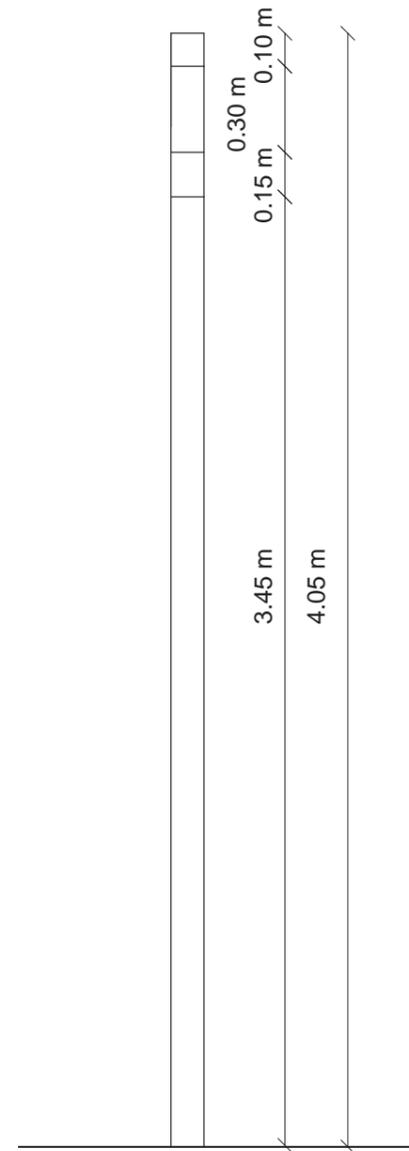
Furniture



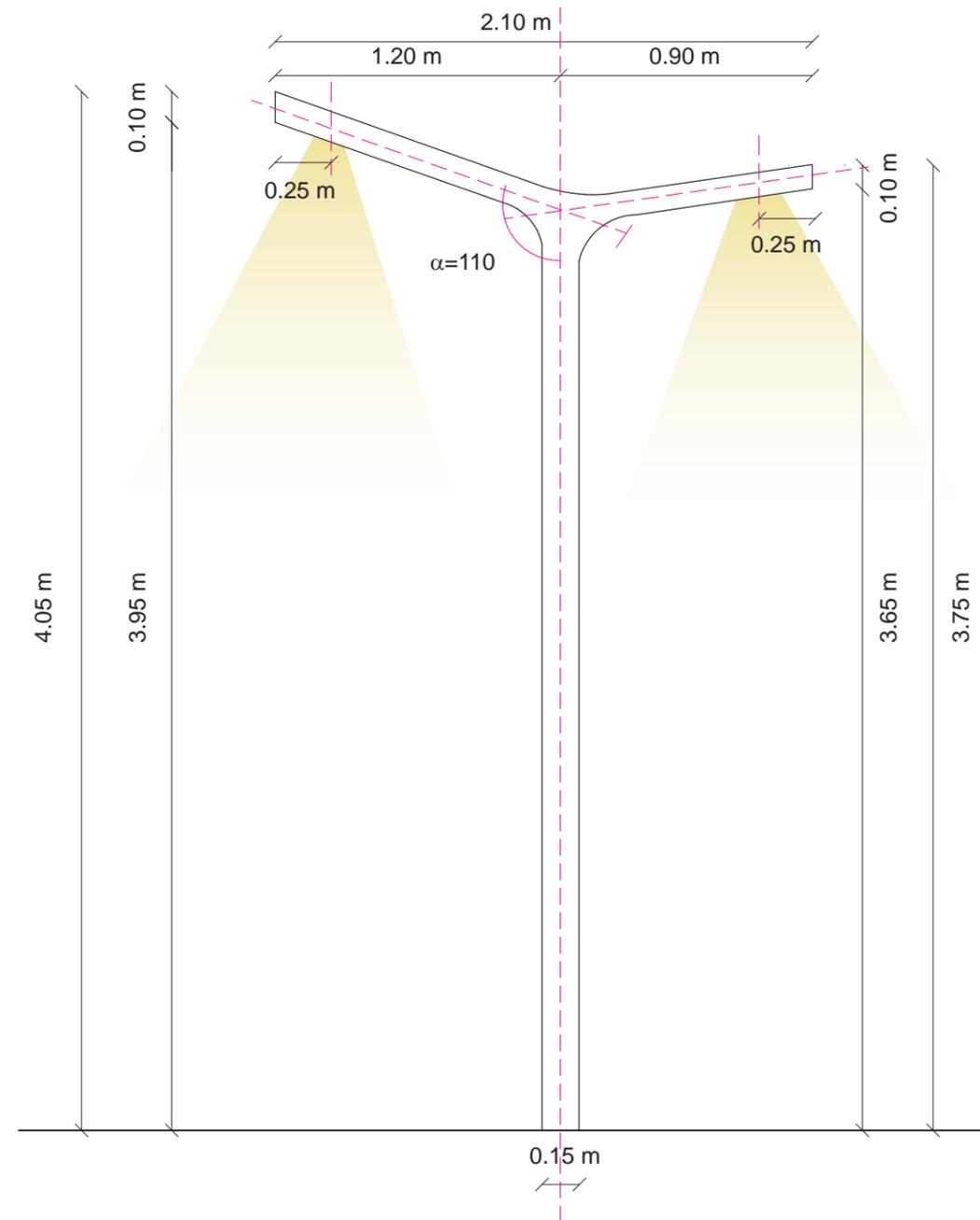
Light Pole



Isometric View



Side View



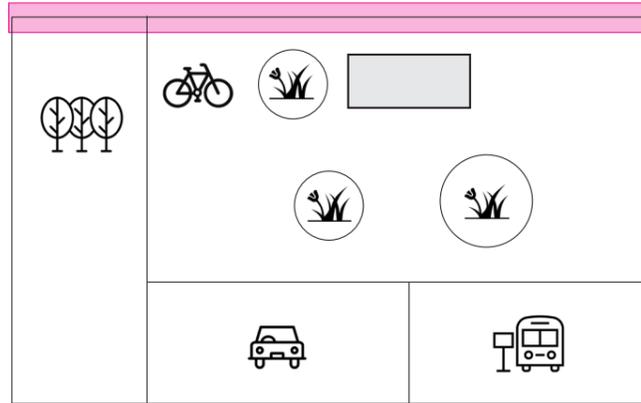
Front View





Furniture

Transparent Fence

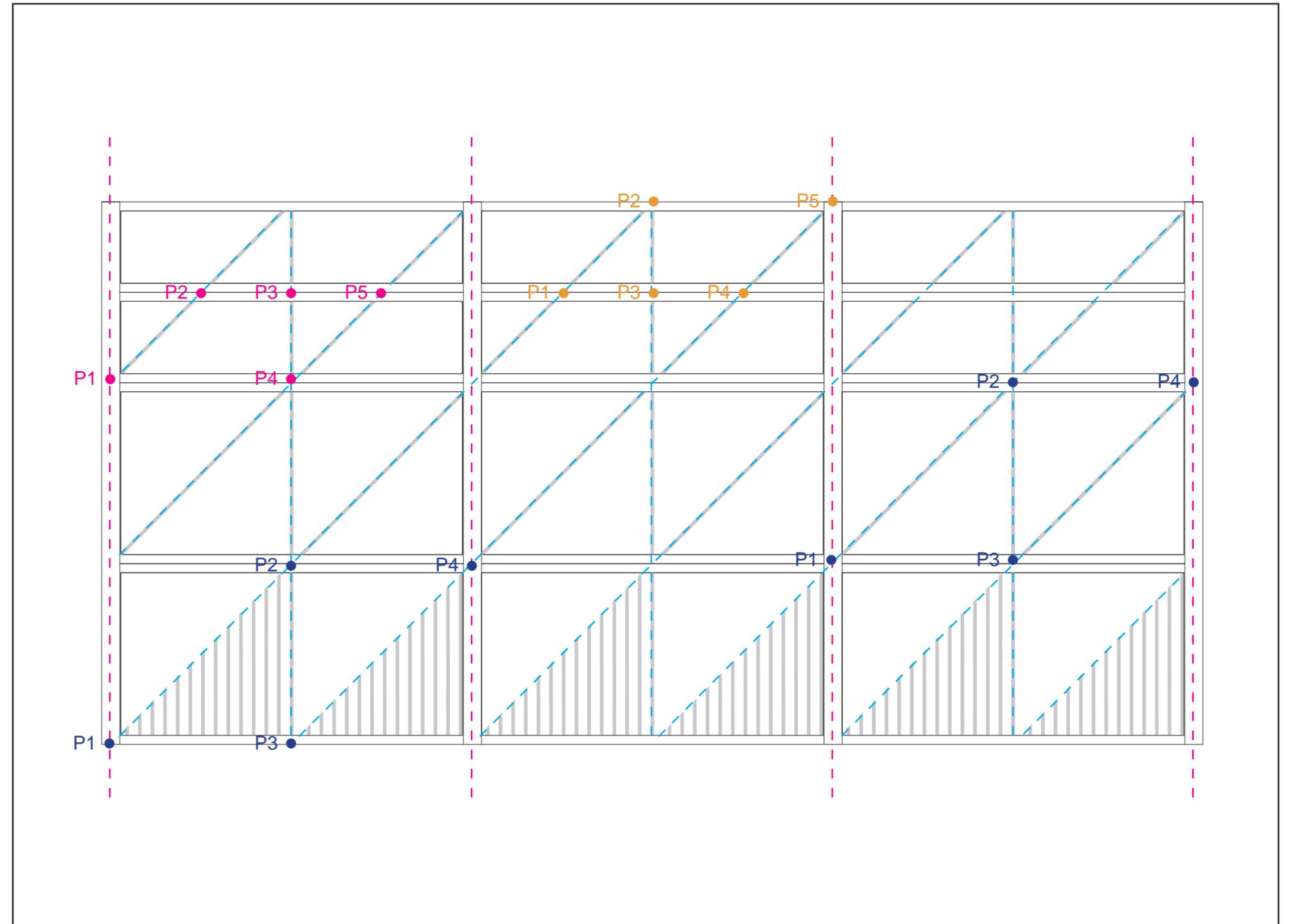


The pattern used to assign identity to the transparent fences are lines that define Right Triangles.

For the fence the pattern starts with a 1.00 meters height right triangle that covers first row panel of 1.00 meter height.

On all the diagonal and vertical lines between two control points (blue, magenta or orange) must be placed a line.

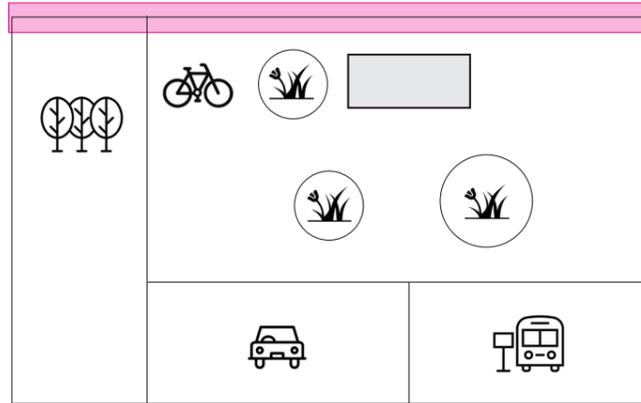
For the 0,50 meters height modules the same rules must be followed referring to the magenta and orange control points.





Furniture

Wooden / Metallic Fence



The pattern used to assign identity to the wooden/metallic fences are lines that define Right Triangles.

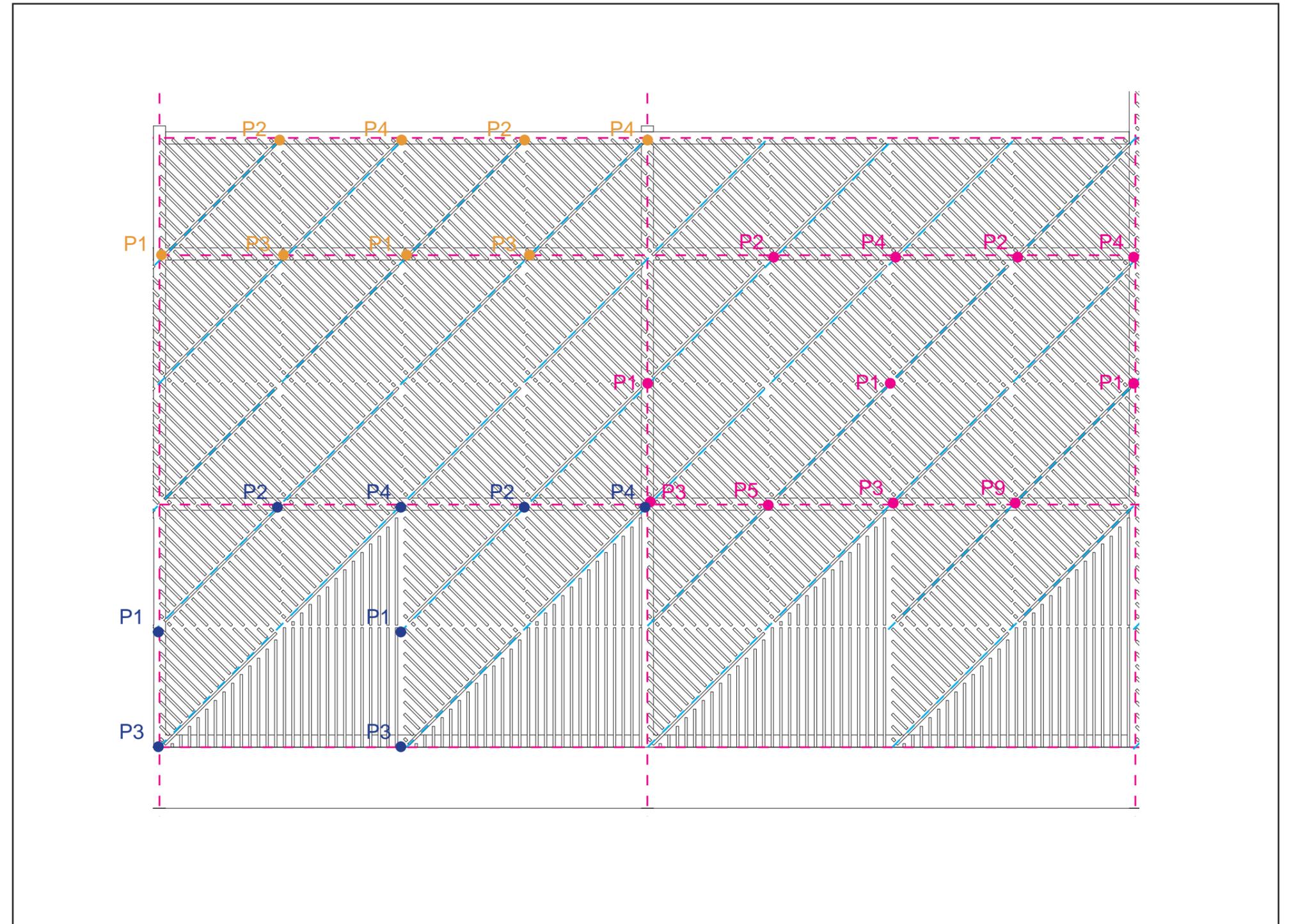
For the fence the pattern starts with a 1.00 meters height right triangle that covers first row panel of 1.00 meter height.

On all the diagonal lines between two control points (blue, magenta or orange) must be placed a plate. On all the vertical lines between control points the plates must be interrupted.

Other plates must be placed perpendicular to the plates placed on the diagonal lines between control points.

The plates under the line between the blue control point P1 and the magenta control point P4 must be vertical oriented.

For the 0,50 meters height modules the same rules must be followed referring to the orange control points.

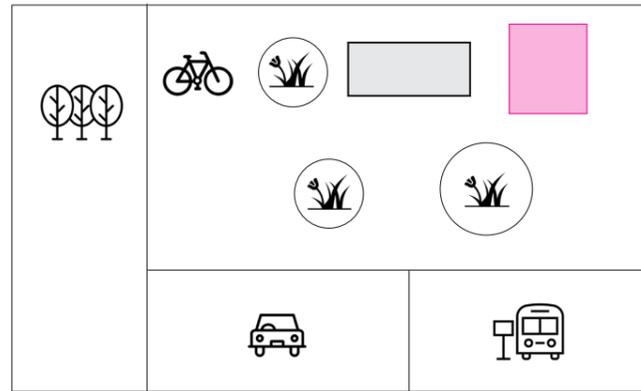




Furniture

D1.11

Bike Rack



Bike racks can be placed next to the station in order to ease the access of the cyclists to the station. The design of the bike rack will be on the future designers choosing between the two solutions proposed in the side images.



Pictures

- From above:
- Image 1 - Credits: *weburbanist.com*
- Image 2 - Credits: *weburbanist.com*
- Image 3 - Credits: *forms-surfaces.com*
- Image 4 - Credits: *forms-surfaces.com*



Accessibility



Tactile

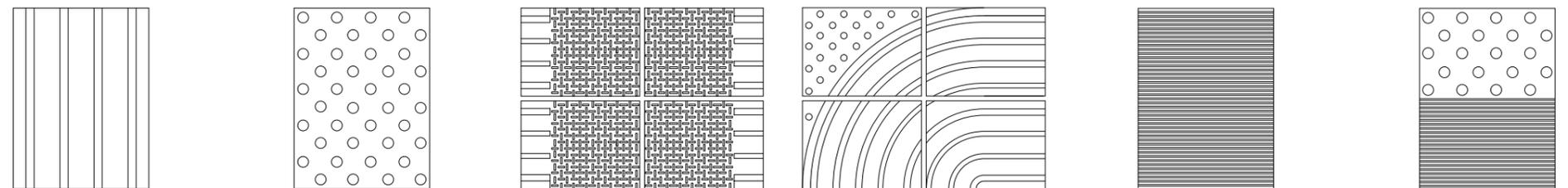
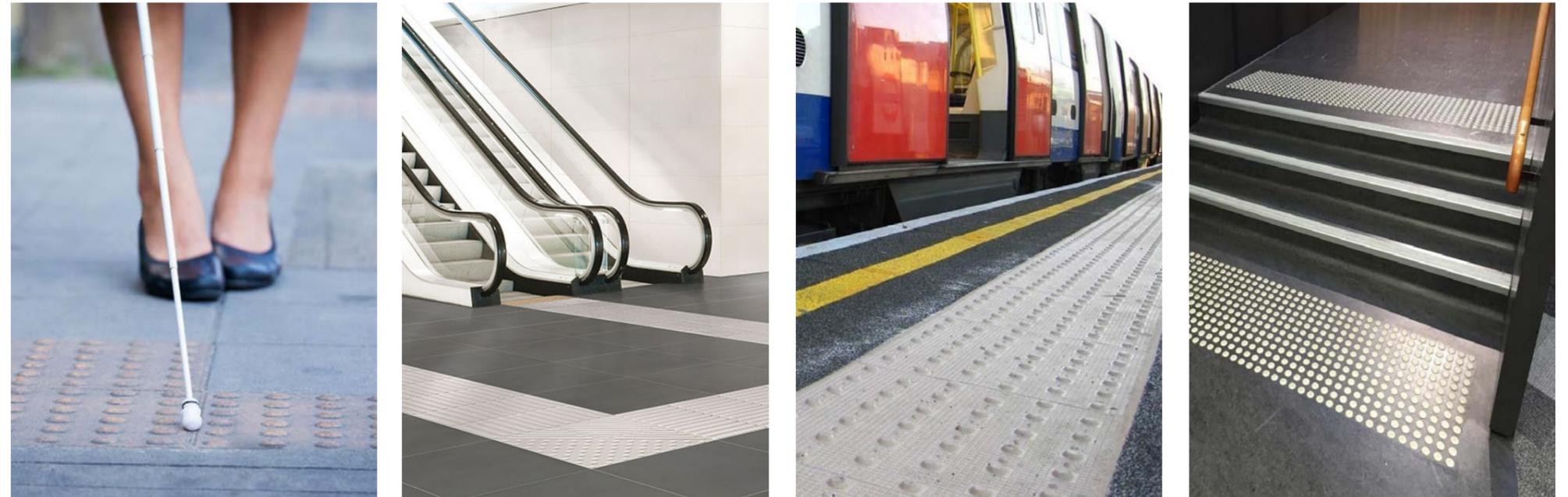
In order to make it accessible and reachable in a broad sense, a station should be designed so that it is usable for all. Regulations and guidelines are found in both national and EU directives.

For people with disabilities, a well thought-out, integrated environment with few obstacles to ease and independence of movement in the environment is crucial. In addition to creating an integrated environment, stations and transfer points in their basic functions, construction and design should comply with the requirements and regulations regarding disabilities that society imposes on a station's function and physical design.

Tactile paths are one of the main important elements to ensure to all passengers an easy use of the station areas.

Six are the main codes that should be used:

1. Straight
2. Stop / Danger
3. Crossroads between 3 or 4 roads
4. Turn 90°
5. Attention important service
6. Feasible danger



Straight direction

Uncrossable Potential danger

Crossroad

Turn

Service

Feasible danger

Pictures

From left:

Image 1 - Credits: Shutterstock

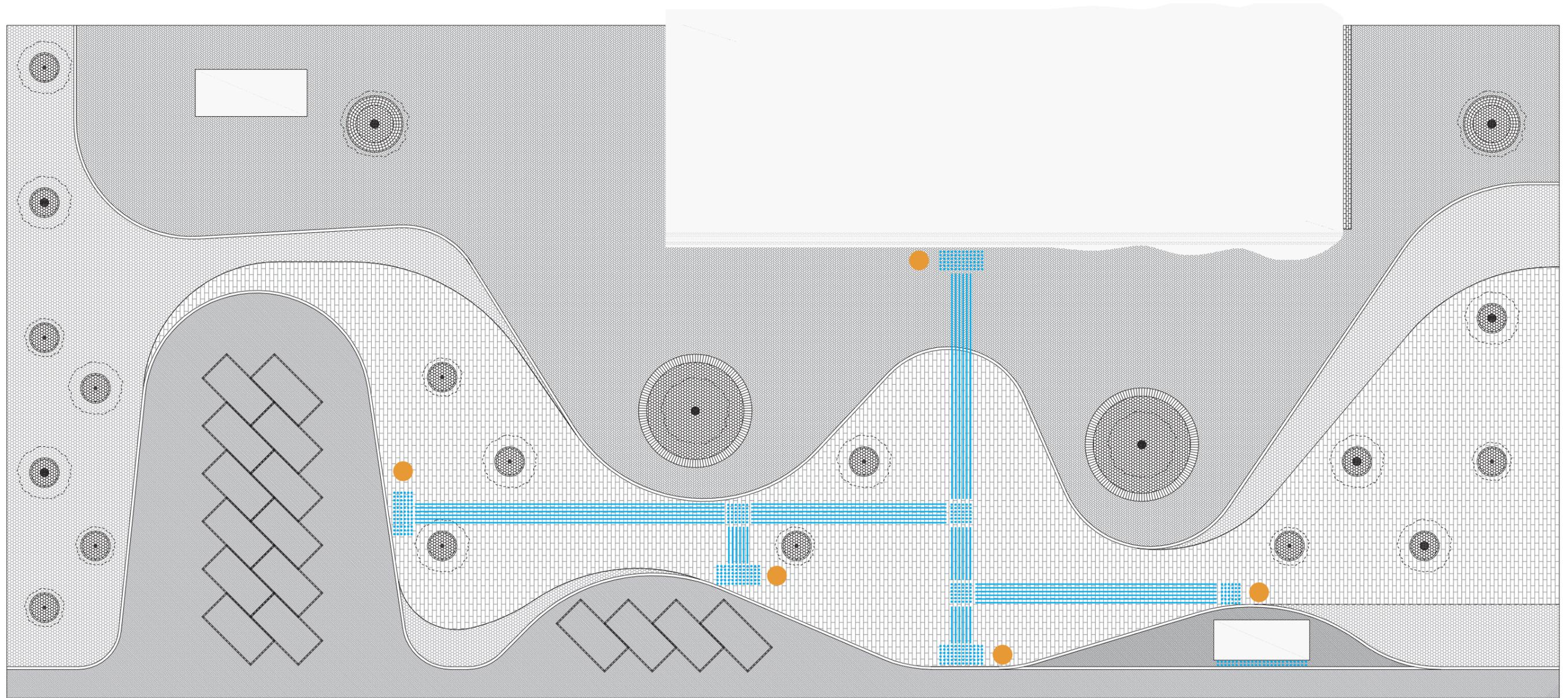
Image 2 - Credits: caesar.it

Image 3 - Credits: visulsystems.com

Image 4 - Credits: tacpro.com.au

Accessibility

Tactile and Braille Map Position Strategy



Note
Braille map should be placed in strategic point of the public areas, where blind people can stop to analyze the map and understand how to move in the surrounding easily and safety.

-  Braille map
-  Tactile path

Accessibility

New Technologies

Each LVE tactile path, in order to work in the best way as a multisensational guide for blind people, should be mapped.

The mapping consists in assigning to each TAG RFG, placed under the pavement, several useful information for the user as the signaling of a danger, a service and any other specific information to every design requirement.

The mapping can also be done later than the installation of the tactile path.

LVE technology provides rapid vocal information on the surrounding environment. In this way, the user, through the connection system with the smartphone / tablet and the bluetooth earphone, is correctly and analytically informed of the entire environmental context.

It is also possible to transmit voice messages that provide simple information, such as:

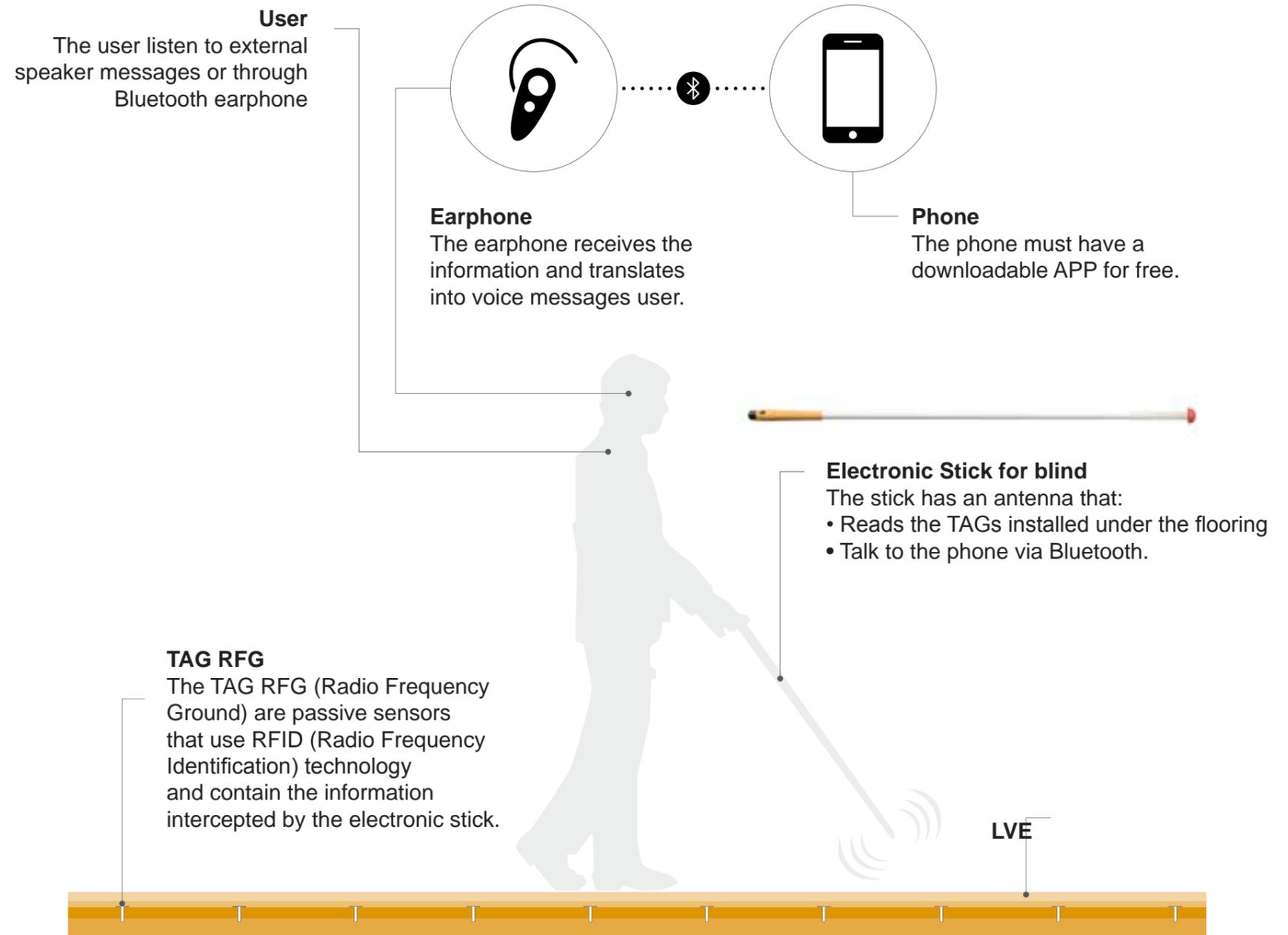
- presence of crossings;
- pedestrian crossings;
- travel guidelines;
- any points of interest.

Furthermore, the voice messages, allow the transmission of even more elaborate information, such as:

- news on means of transport;
- presence and information on museums, archaeological excavations, historic centers etc;
- information on public facilities (universities, schools, hospitals, etc.).

Note

Source: *dascenzi.it*



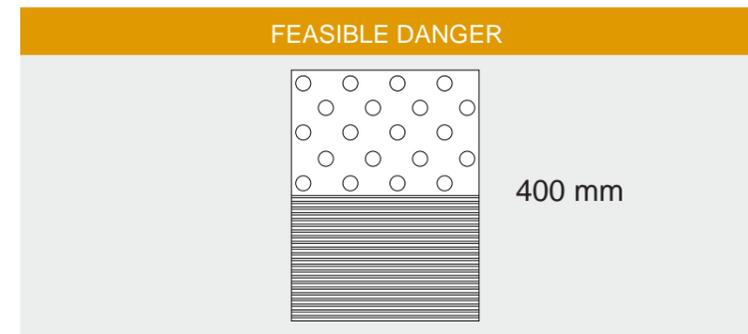
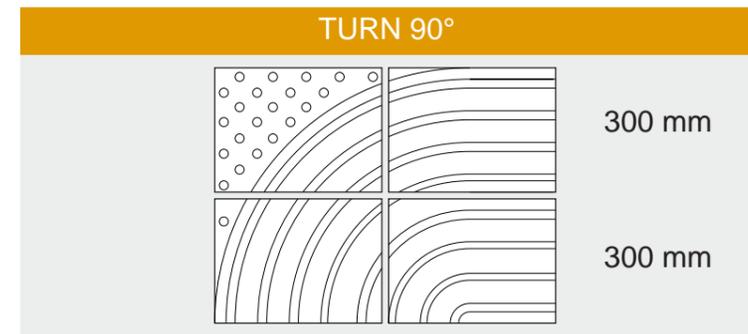
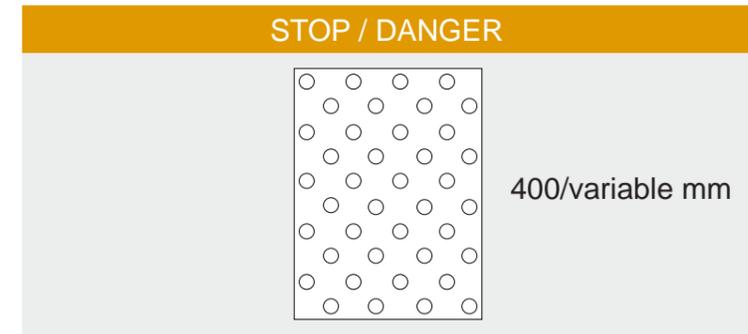
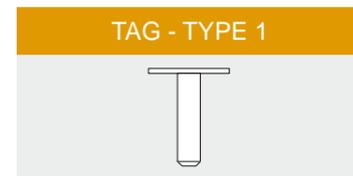
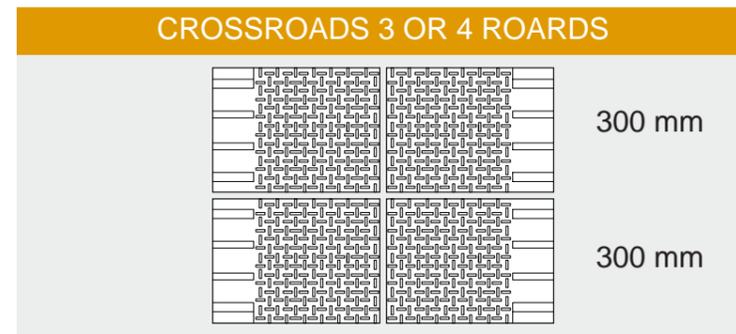
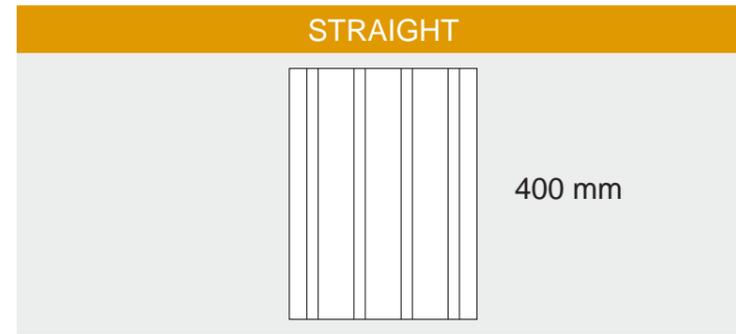


Accessibility

Tactile tiles

Drawings illustrate the general dimensions for the tactile tiles.

Based on the information that must be communicate to blind people, a specific tactile tile must be used.



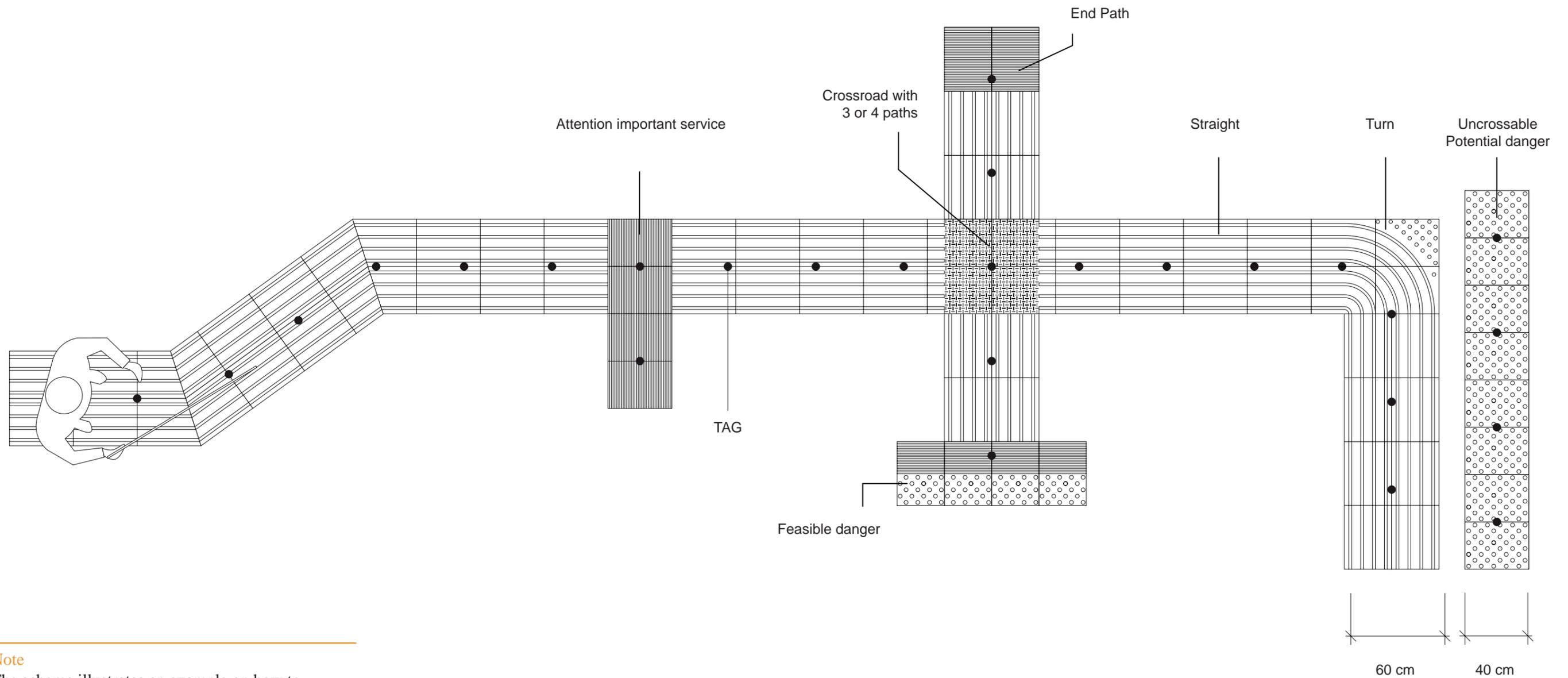
Note
Source: dascenzi.it



Accessibility



Typical Tactile Path



Note
 The scheme illustrates an example on how to combine the different tactile tiles.
 Source: *dascenzi.it*

Design Proposal

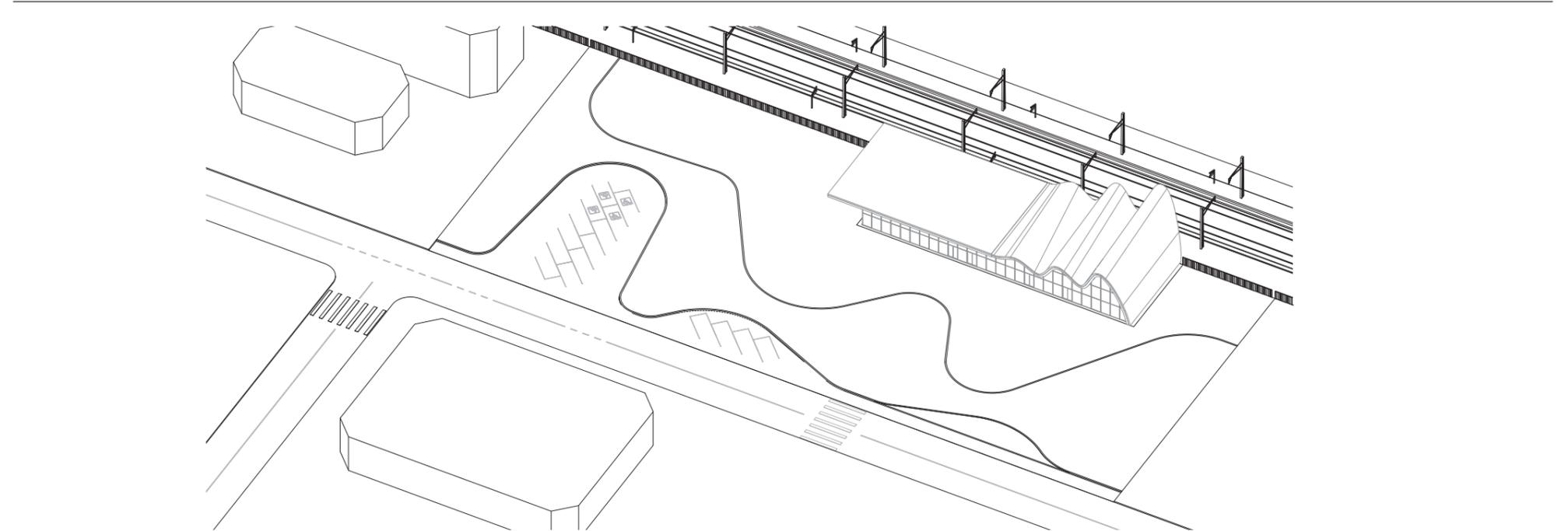
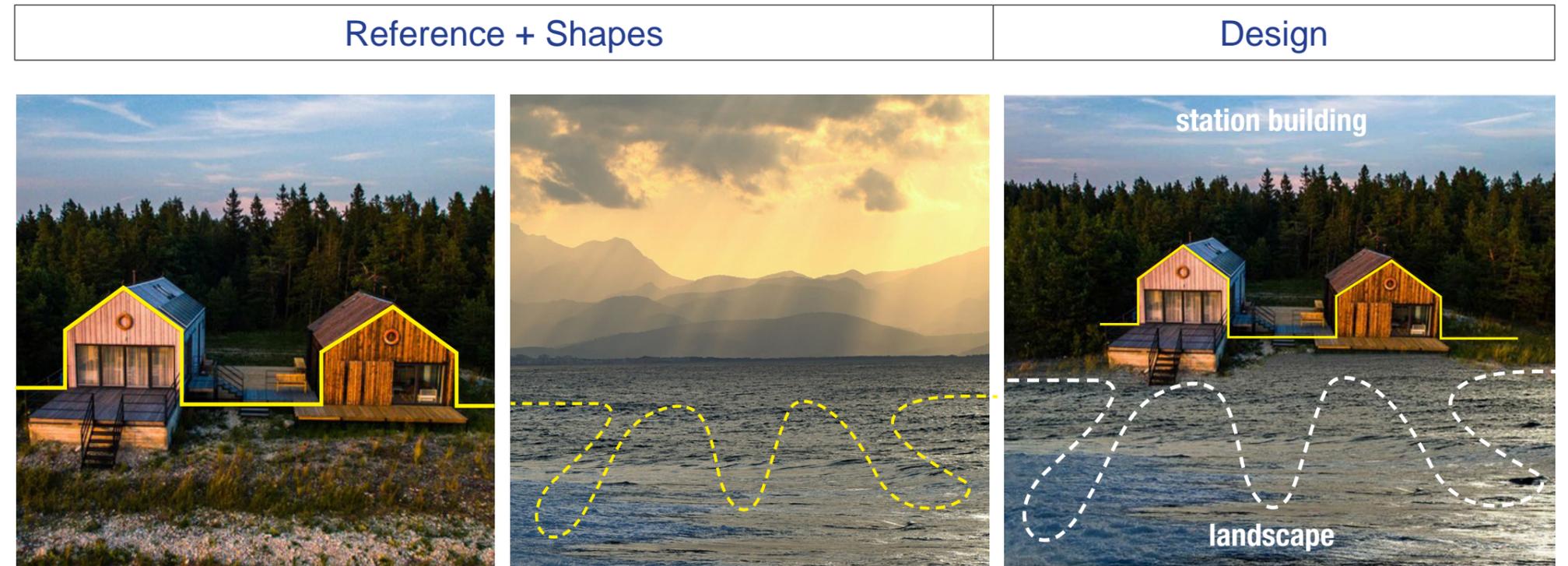
Concept

The concept illustrates a proposal for the design of the public area.

Future designers and municipalities can use this approach for the design or only take inspiration from this proposal to elaborate a new one more suitable for a specific site.

Since Regional station will be located in several different site, proposed concept takes inspiration from a more big surrounding: the entire countries, their tradition and culture.

During the interviews with the Stakeholders, one of the most poetic answer we have received when we have asked: "What you have in common with the other countries?" they have answered "the sea".



Pictures

From left:
 Image 1 - Credits: vaatetorni.ee
 Image 2 - Credits: pixabay.com

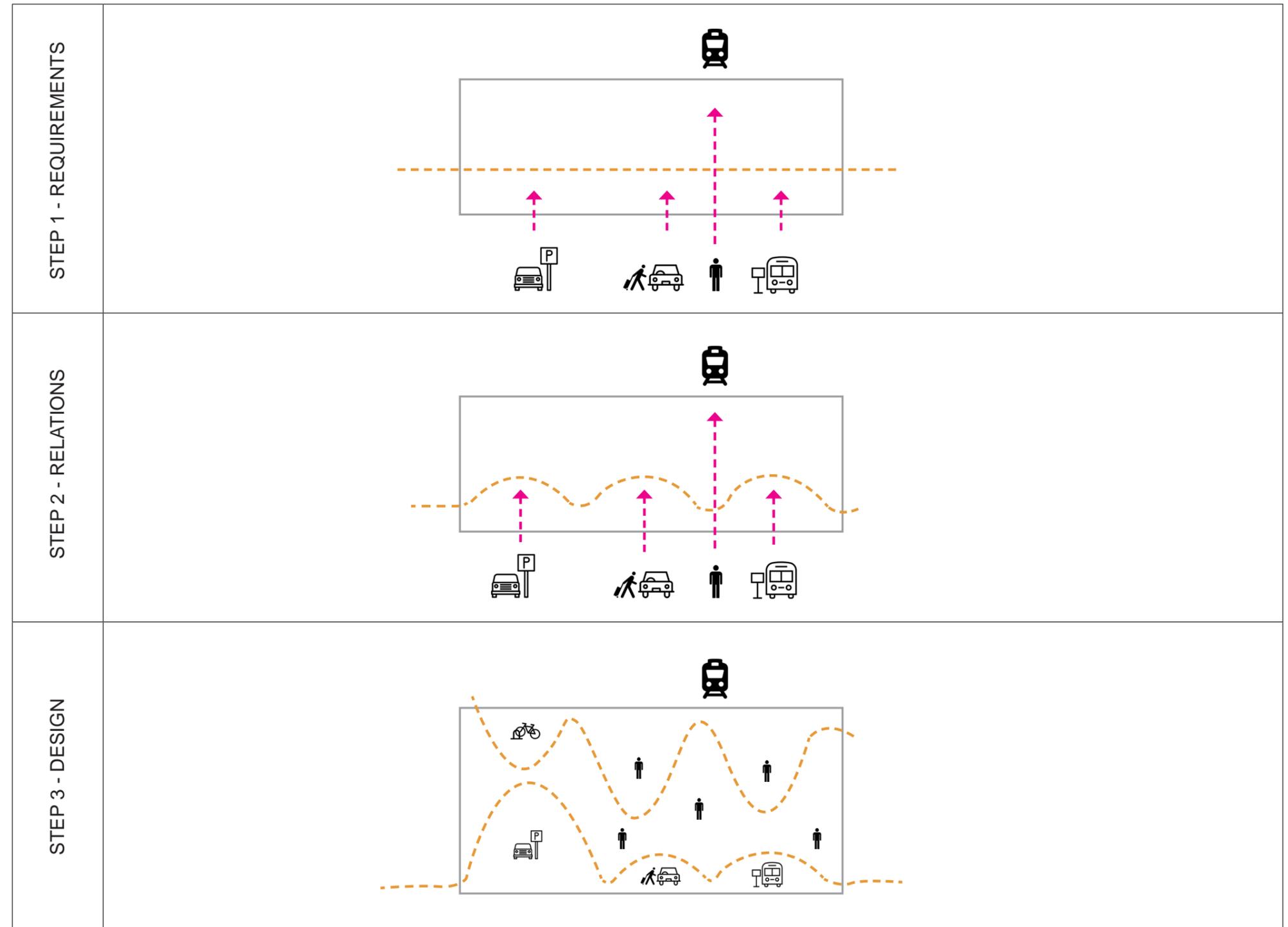


Design Proposal



Design Strategy

Once minimum requirements have been defined, each function has been placed in the site area taking into consideration functionality, accessibility, recognizability and ensure and easy use for everyone.





Design Proposal

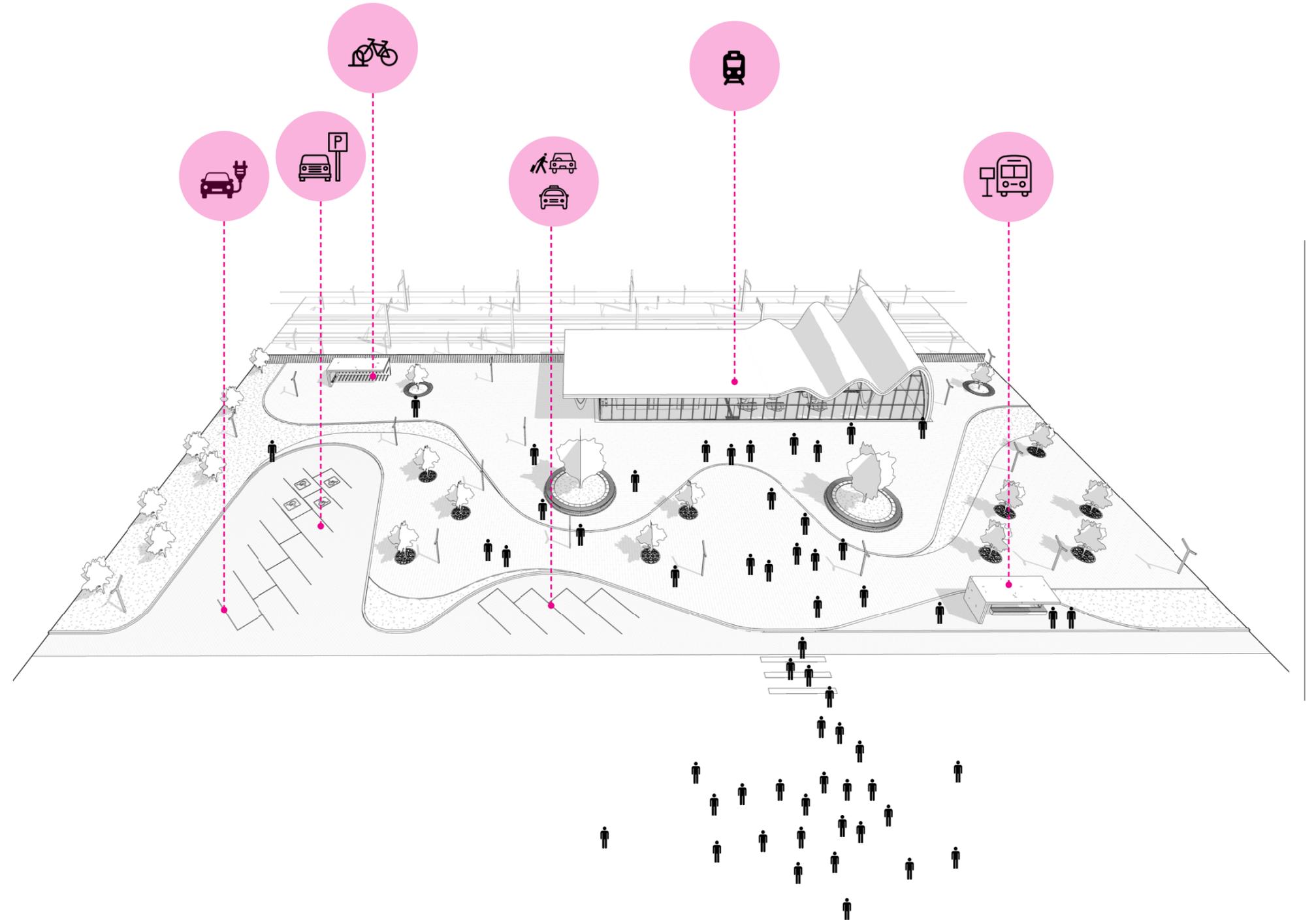


Design Strategy

Car Parking, Taxi, Kiss & Ride and Bus Stop are functions that required a driveway paving.

It is recommendable to place these functions near the street preserving the pedestrian area and allowing users to use the plaza in a more safe way.

Station building should be visible and easy to reach also for PRM, for this reason it is recommendable to don't insert obstacles along the main flow and provide tactile and Braille map in strategic points.

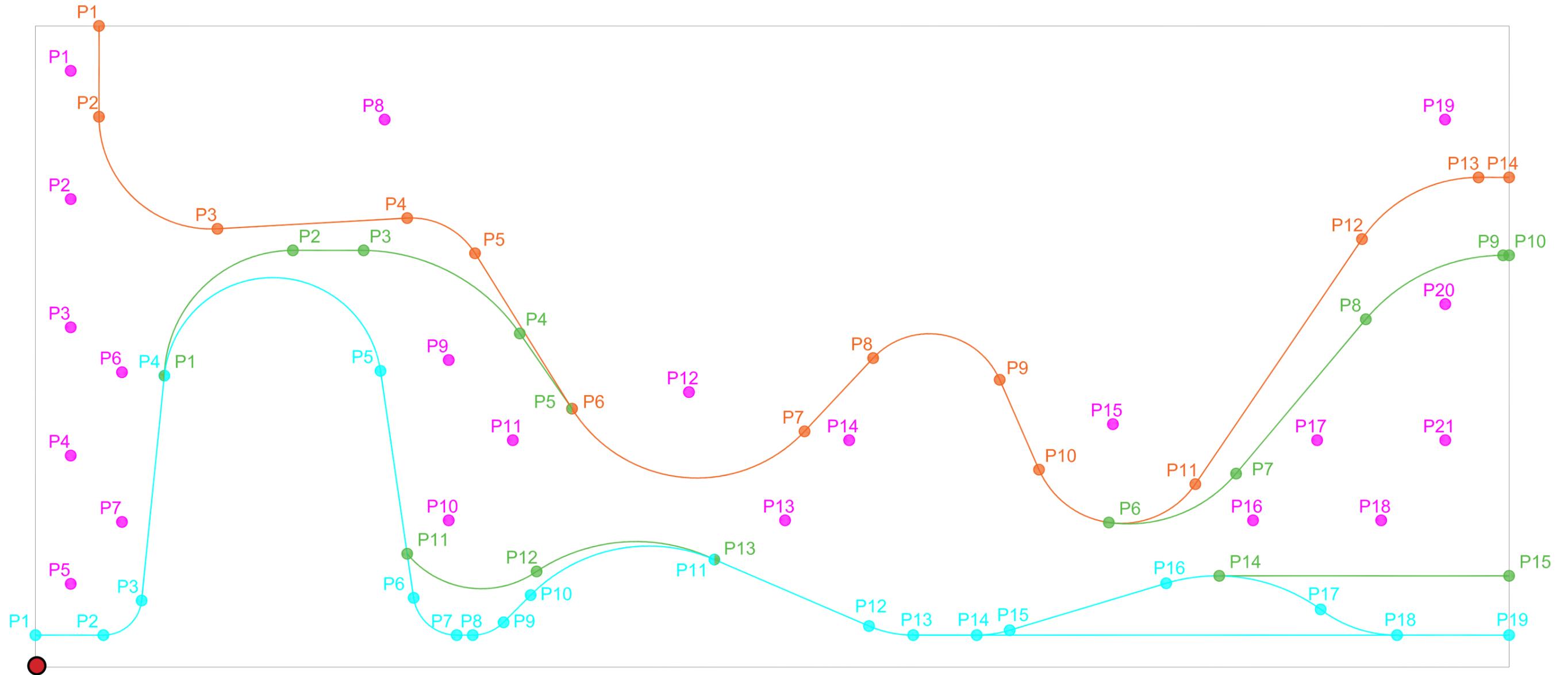




Design Proposal



Geometry





Design Proposal



Geometry

SPOT COORDINATES

RADIUS OF THE ARCHES

Cyan		
Spot	X	Y
P1	0,00	2,50
P2	5,30	2,50
P3	8,30	5,20
P4	10,00	22,75
P5	27,00	23,10
P6	29,50	5,40
P7	32,90	2,50
P8	34,15	2,50
P9	36,50	3,50
P10	38,65	5,60
P11	53,00	8,40
P12	65,00	3,20
P13	68,50	2,50
P14	73,50	2,50
P15	76,00	2,90
P16	88,25	6,55
P17	100,30	4,50
P18	106,25	2,50
P19	115,00	2,50

Green		
Spot	X	Y
P1	10,00	22,75
P2	20,00	32,50
P3	25,60	32,50
P4	37,80	26,00
P5	41,90	20,15
P6	83,75	11,30
P7	93,70	15,10
P8	103,80	27,15
P9	114,50	32,10
P10	115,00	32,10
P11	29,00	8,85
P12	39,10	7,50
P13	53,00	8,40
P14	92,40	7,15
P15	115,00	7,15

Orange		
Spot	X	Y
P1	5,00	50,00
P2	5,00	43,00
P3	14,20	34,20
P4	29,00	35,00
P5	34,30	32,30
P6	41,90	20,15
P7	60,00	18,40
P8	65,35	24,10
P9	75,25	22,40
P10	78,30	15,40
P11	90,50	14,30
P12	103,50	33,40
P13	112,50	38,20
P14	115,00	38,20

Magenta		
Spot	X	Y
P1	2,75	46,50
P2	2,75	36,50
P3	2,75	26,50
P4	2,75	16,50
P5	2,75	6,50
P6	6,75	23,00
P7	6,75	13,00
P8	27,25	43,00
P9	32,25	24,00
P10	32,25	12,00
P11	37,25	17,50
P12	51,00	21,50
P13	58,50	11,50
P14	63,50	17,50
P15	84,00	19,00
P16	95,00	11,50
P17	100,00	17,50
P18	105,00	11,50
P19	110,00	42,50
P20	110,00	27,00
P21	110,00	17,50

Cyan	
Arc	Radius
P2-P3	3,00
P4-P5	8,50
P6-P7	3,40
P8-P9	3,40
P10-P11	13,00
P12-P13	8,75
P14-P15	8,95
P16-P17	13,80
P17-P18	9,80

Green	
Arc	Radius
P1-P2	15,00
P3-P4	15,00
P6-P7	6,50
P8-P9	4,50
P11-P12	9,00
P12-P13	9,00

Orange	
Arc	Radius
P2-P3	8,75
P4-P5	5,85
P6-P7	11,50
P8-P9	6,00
P10-P11	7,00
P12-P13	11,00



Design Proposal

D1.13

Typical Landscape Scenario



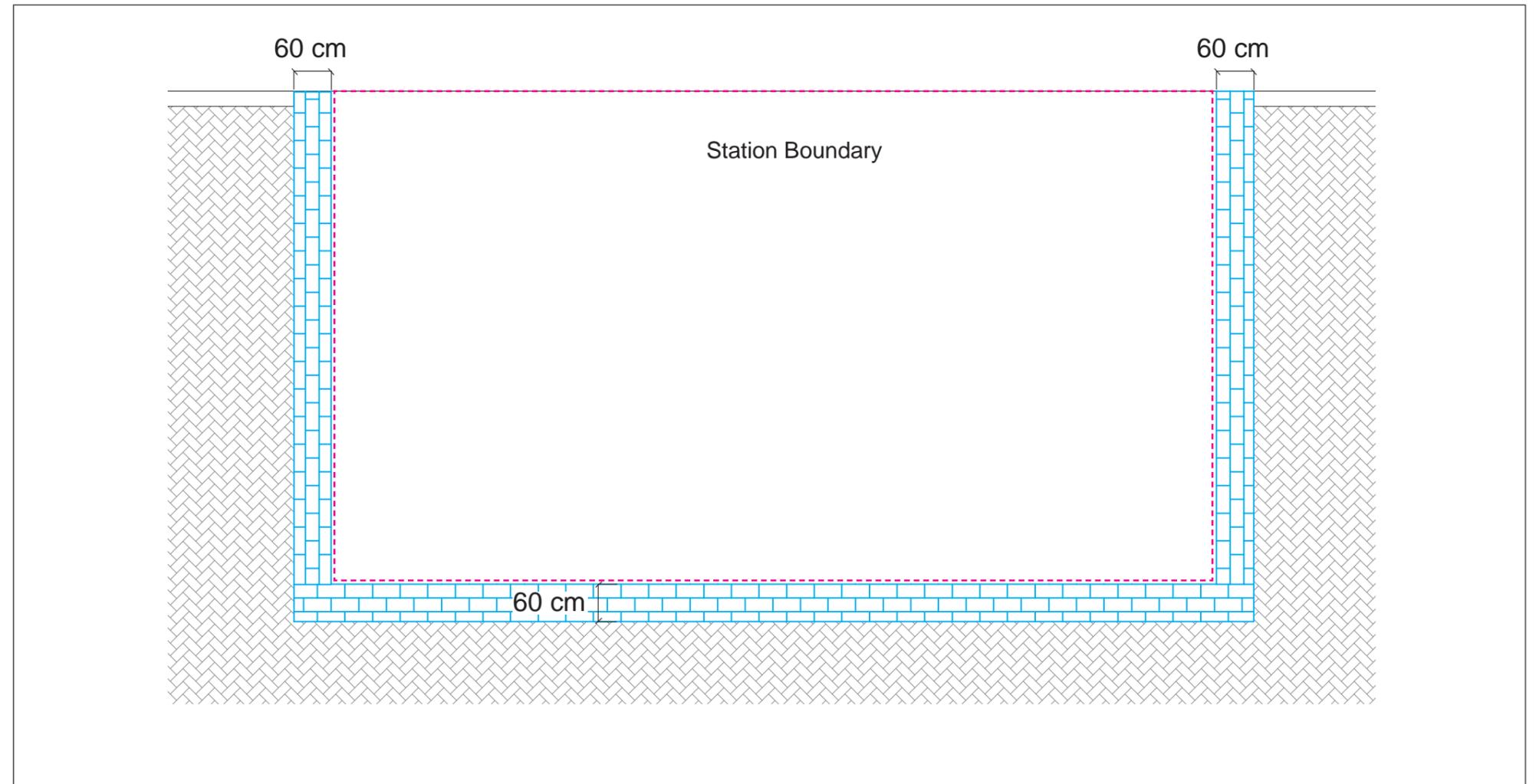
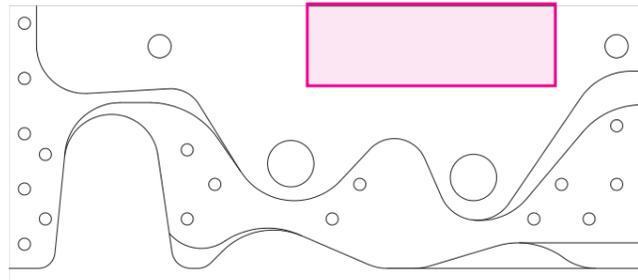
Note
Images must be considered are only for reference



Design Proposal



Materials Strategy

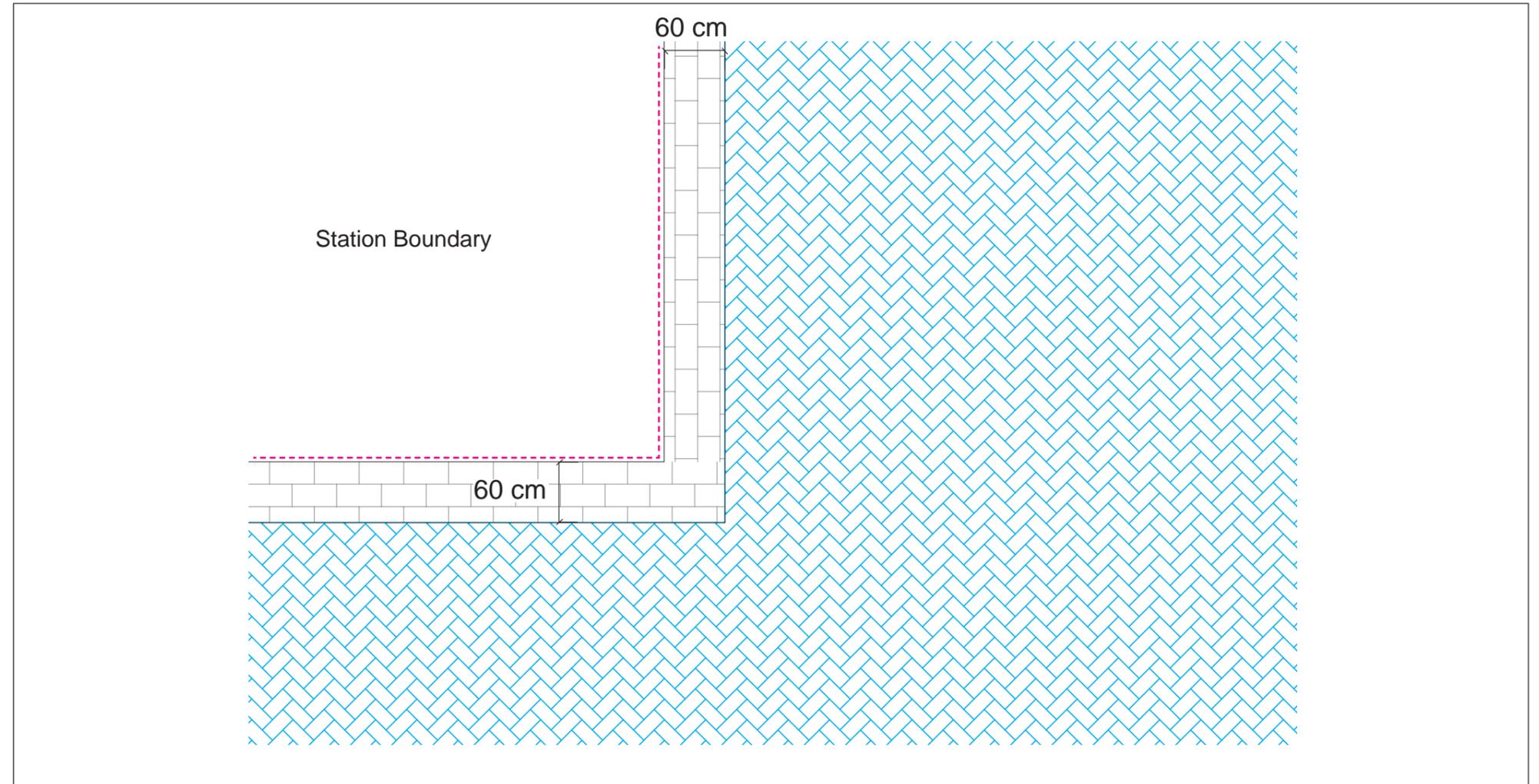
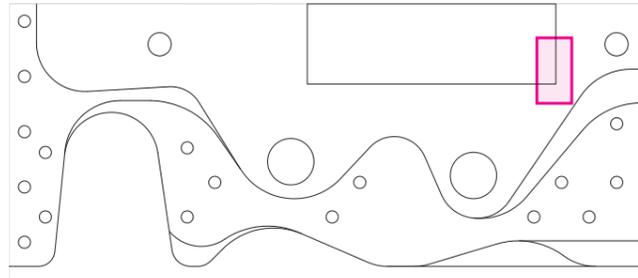




Design Proposal



Materials Strategy

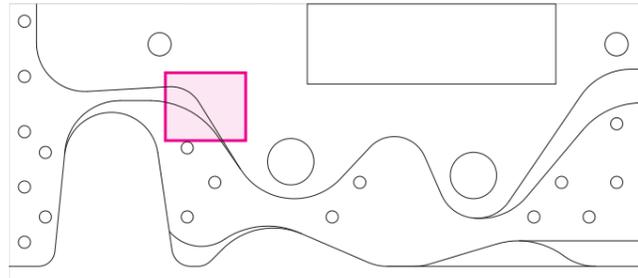




Design Proposal



Materials Strategy

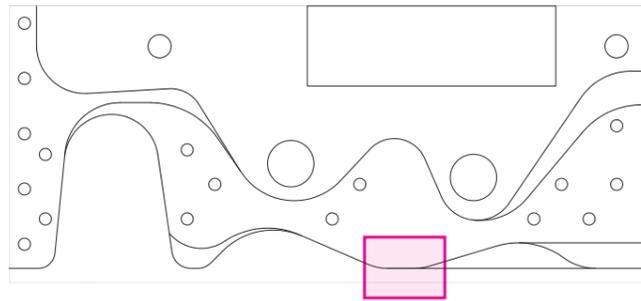




Design Proposal



Materials Strategy



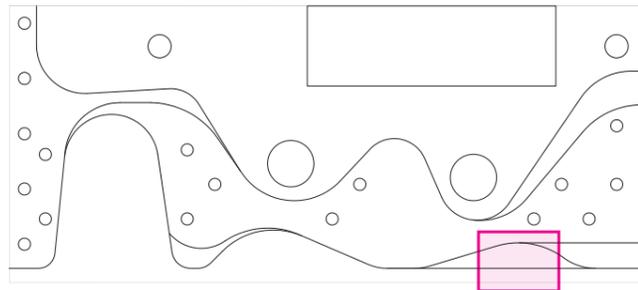
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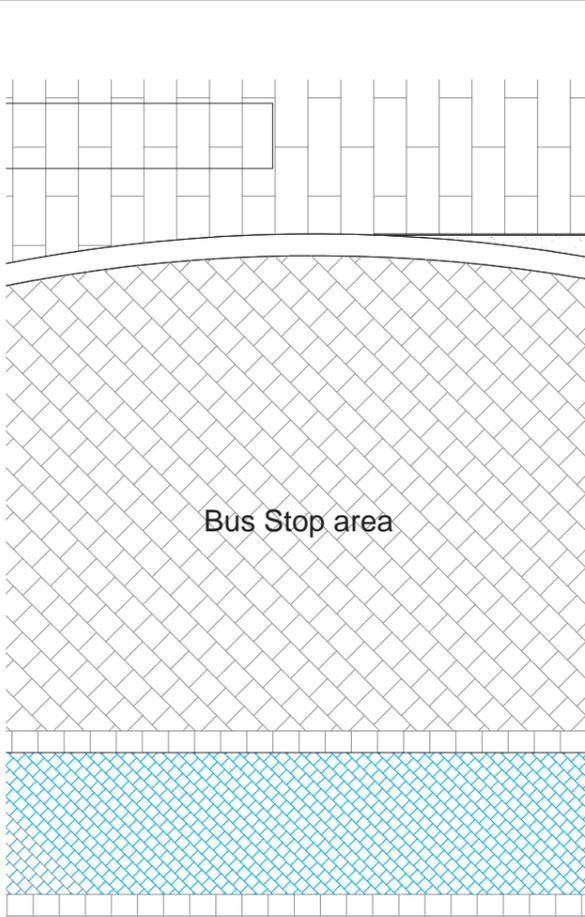
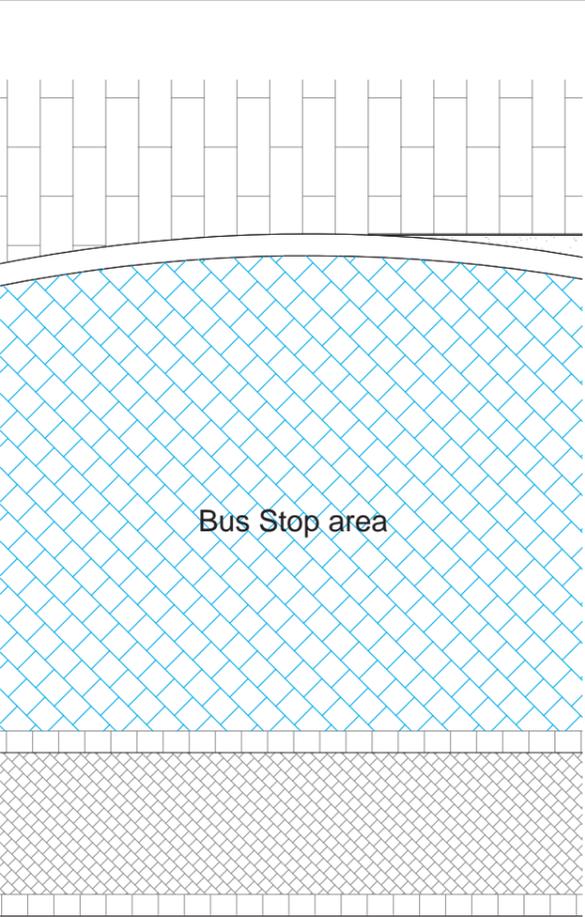
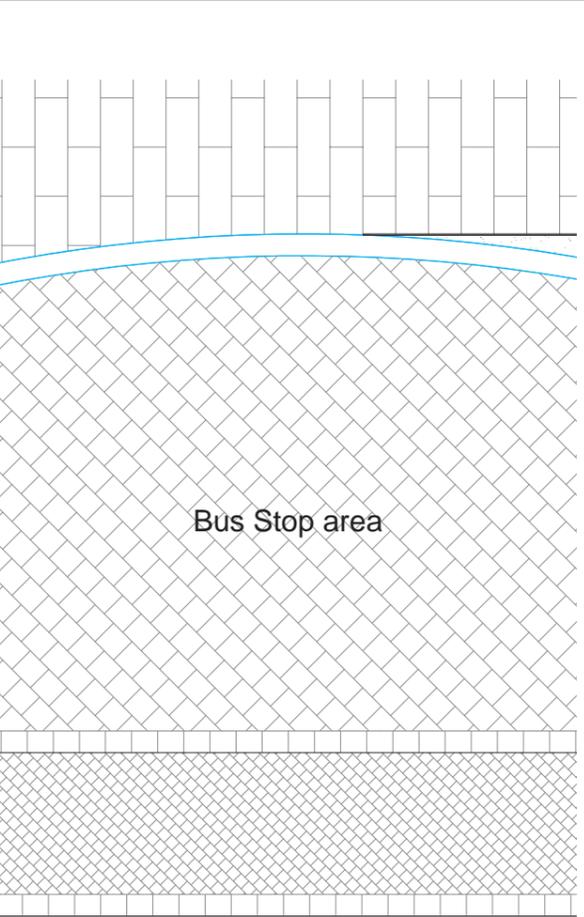


Design Proposal



Materials Strategy



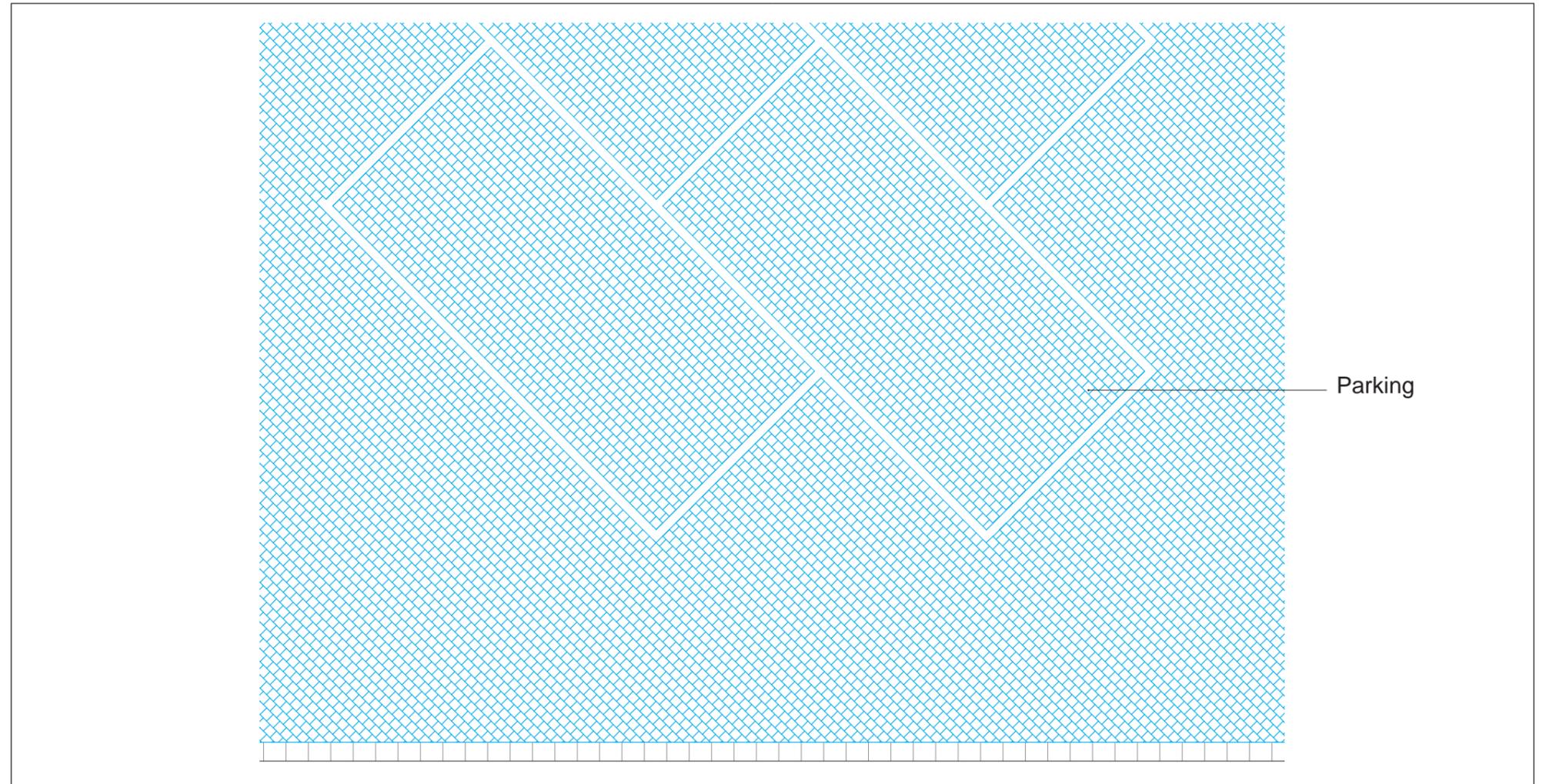
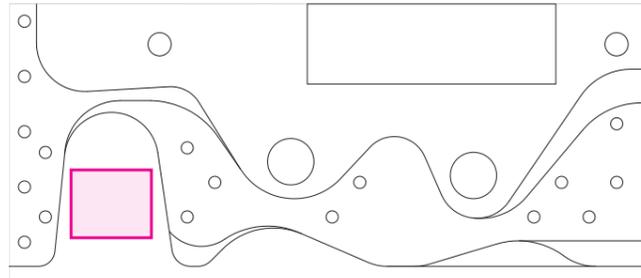
 <p>Bus Stop area</p> <p>Local Street</p>	 <p>Bus Stop area</p> <p>Local Street</p>	 <p>Bus Stop area</p> <p>Local Street</p>
 <p>3</p>	 <p>1</p>	 <p>4</p>



Design Proposal



Materials Strategy



D

Rail Baltica Urban Elements

ARCHITECTURAL, LANDSCAPING AND
VISUAL IDENTITY DESIGN GUIDELINES FOR
RAIL BALTICA

RB Rail AS



SBS ENGINEERING GROUP