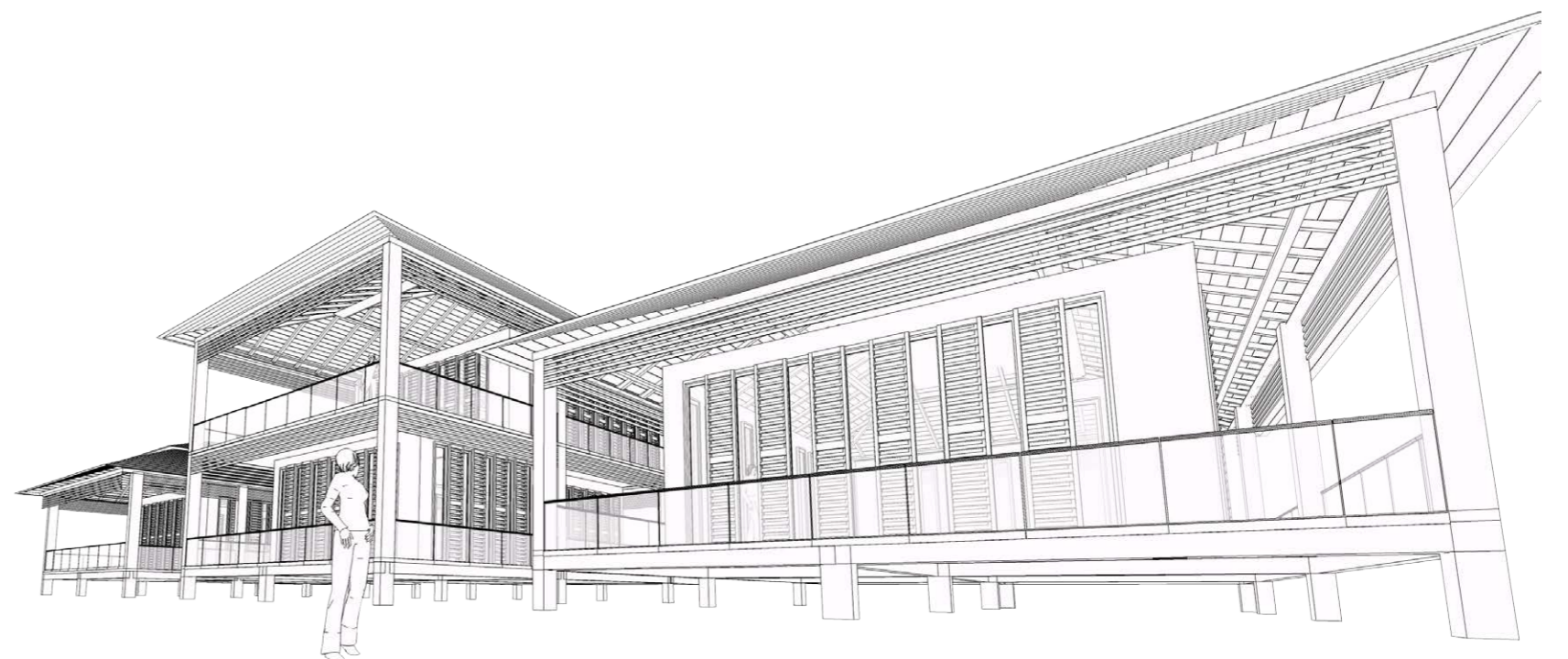


werkboek Mei '08

# Sint Maarten



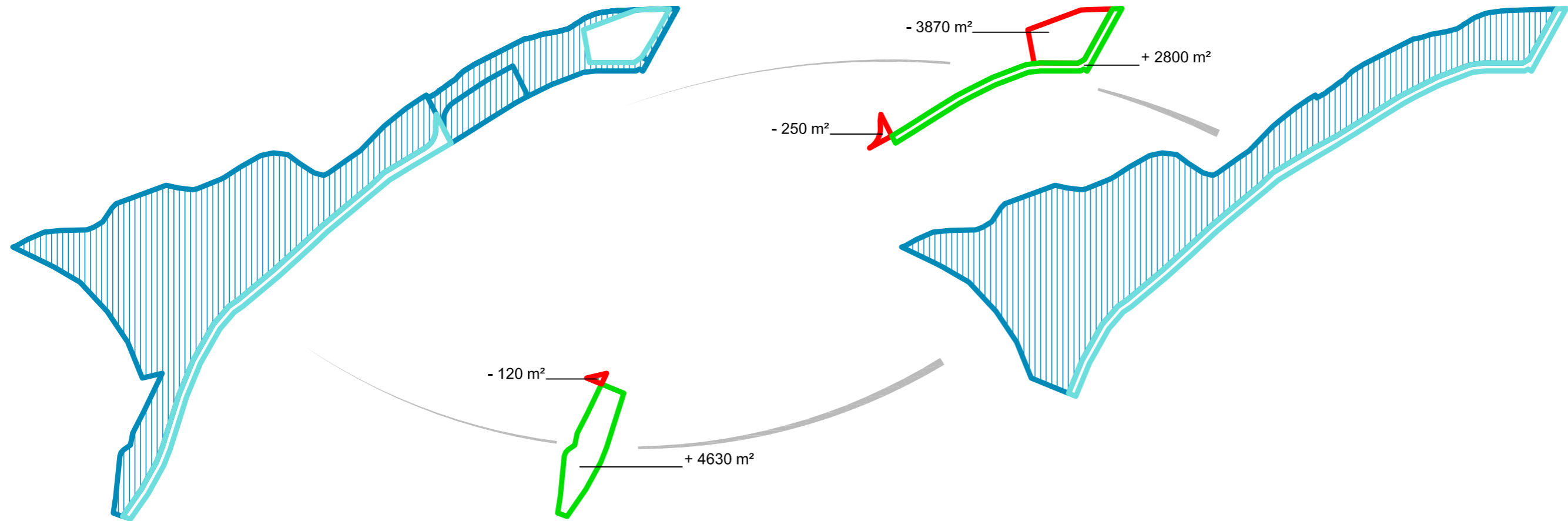
# Inhoudsopgave

1. Studie grondruil
2. Langsdoorsnede plangebied
3. Dwarsdoorsneden plangebied
4. Identiteit bebouwing
5. Natuurlijke ventilatie
6. Bebouwingstypen
7. Verdeling dichtheid / openbaar vs. prive
8. Berekening vloeroppervlak

# 1. Studie grondruil

Uitgangssituatie

Situatie na grondruil



Verkoop:

2800 m<sup>2</sup>  
4630 m<sup>2</sup>

Tot aal

7430 m<sup>2</sup>

Aankoop:

120 m<sup>2</sup>  
250 m<sup>2</sup>  
3870 m<sup>2</sup>

Tot aal

4240 m<sup>2</sup>

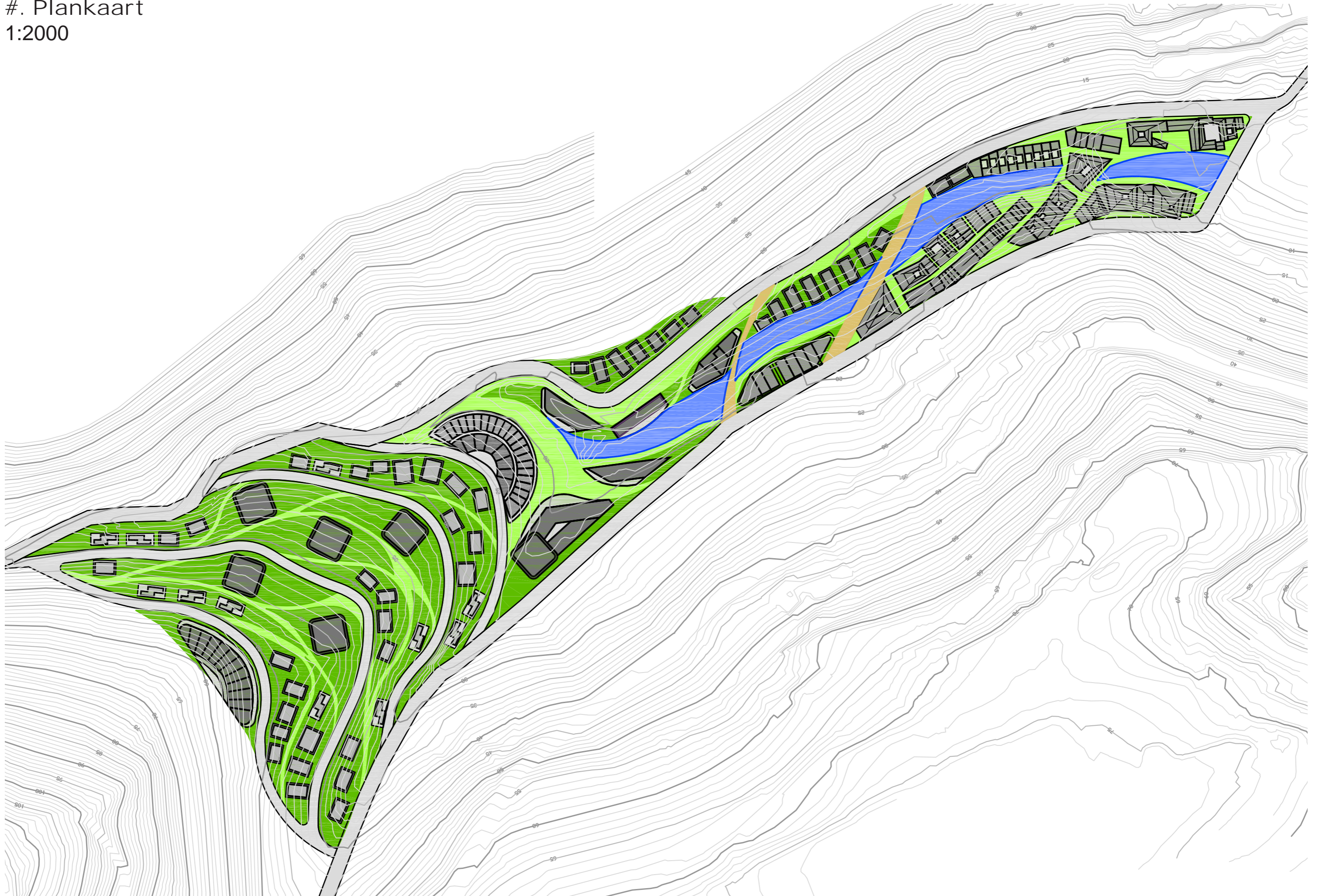
Resultaat:

7430 m<sup>2</sup>  
4240 m<sup>2</sup>

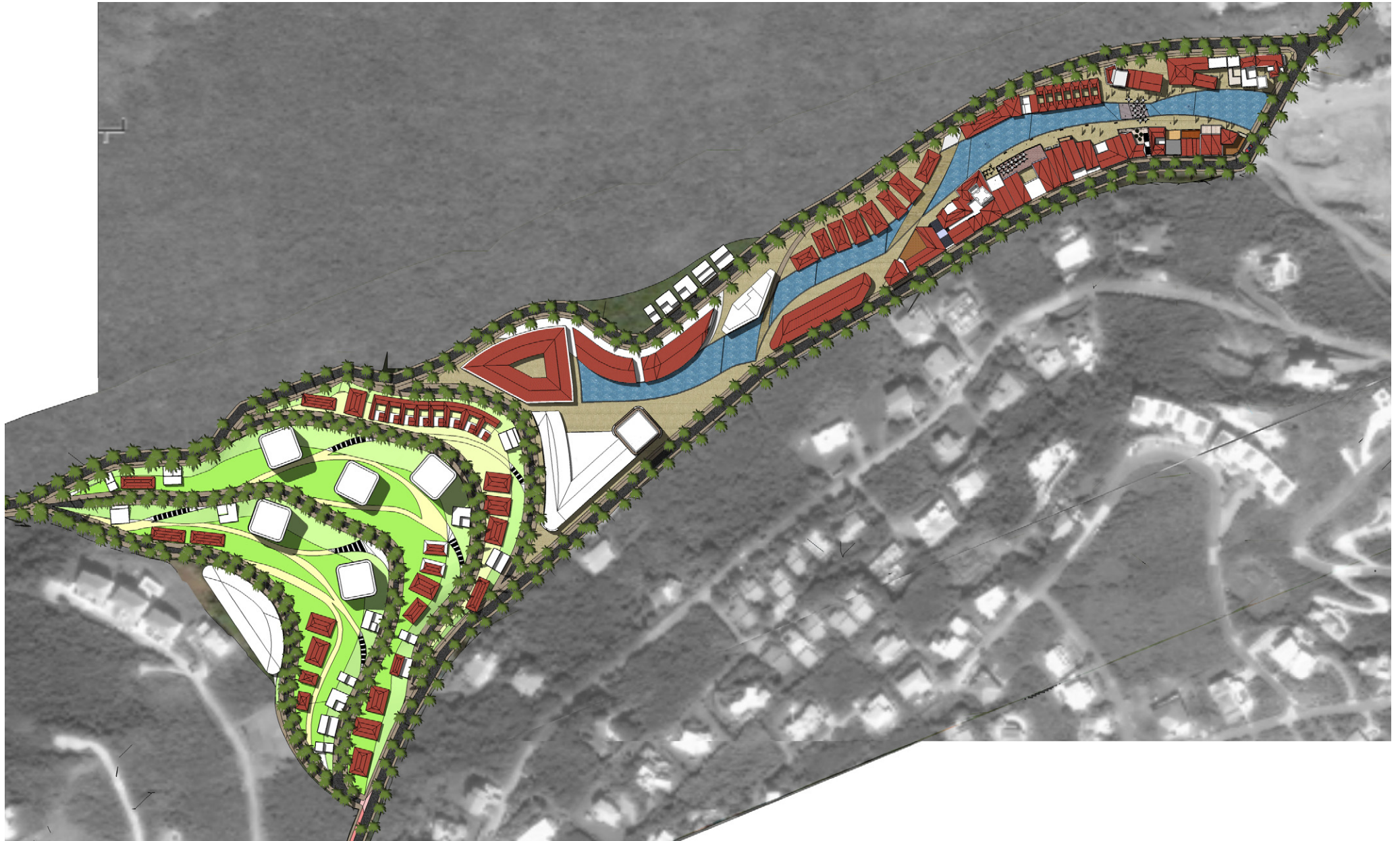
Tot aal

3190 m<sup>2</sup>

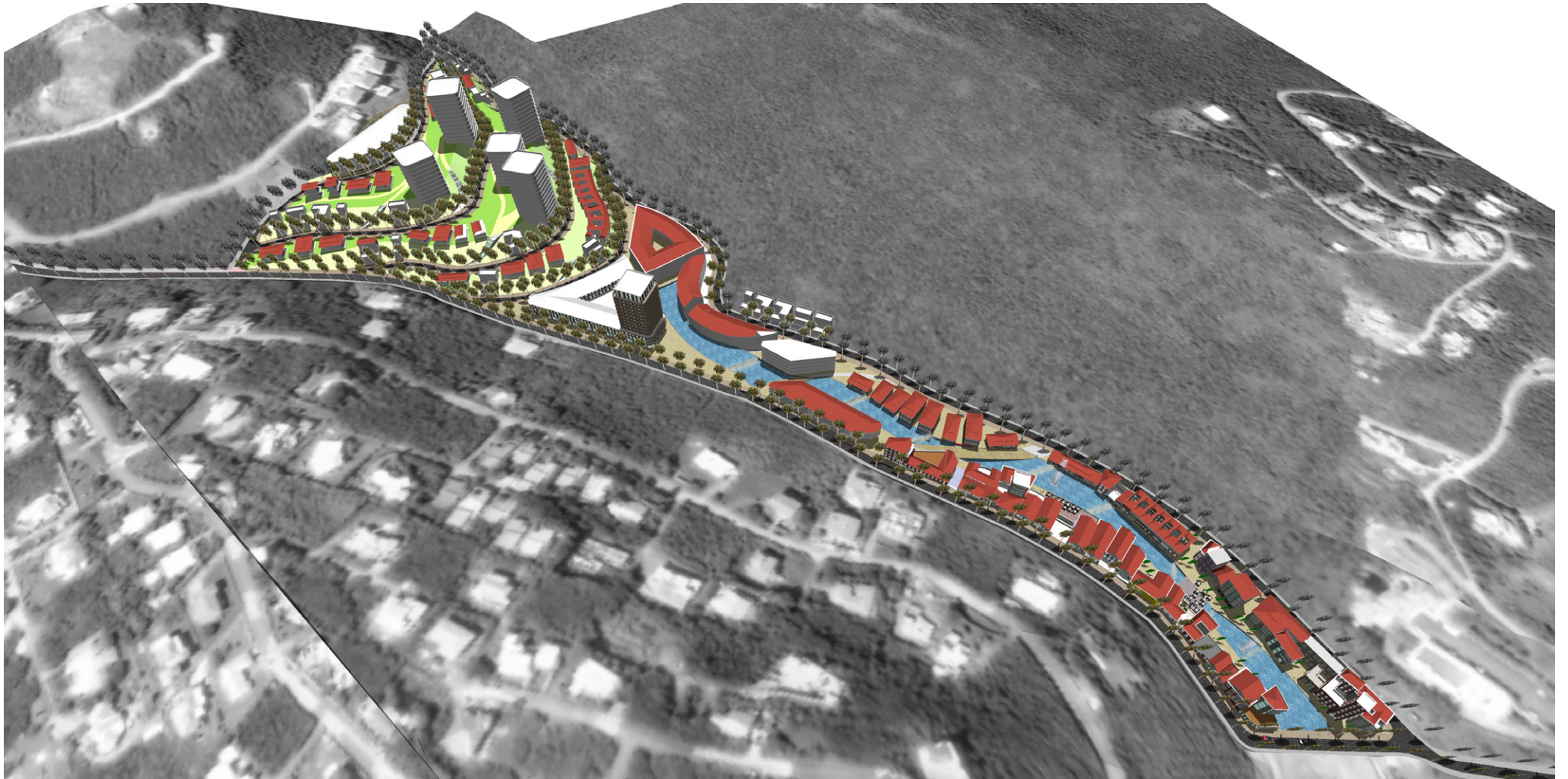
#. Plankaart  
1:2000



# 1. Plankaart

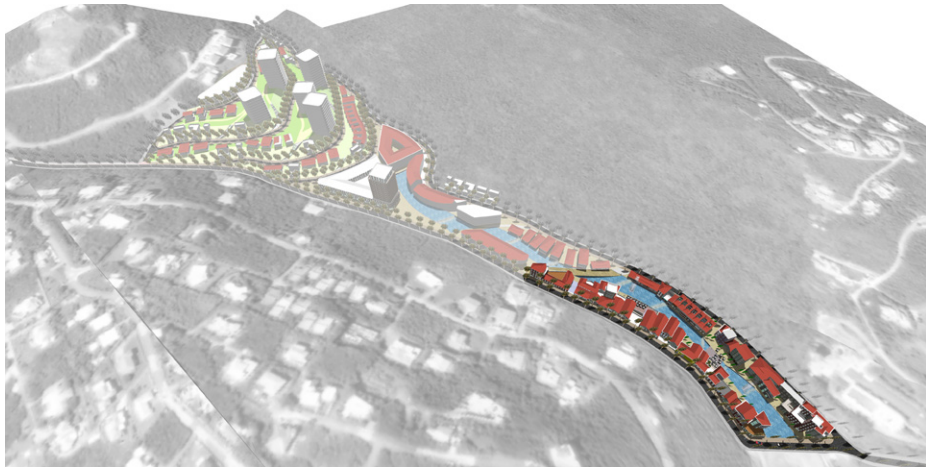


Bovenaanzicht

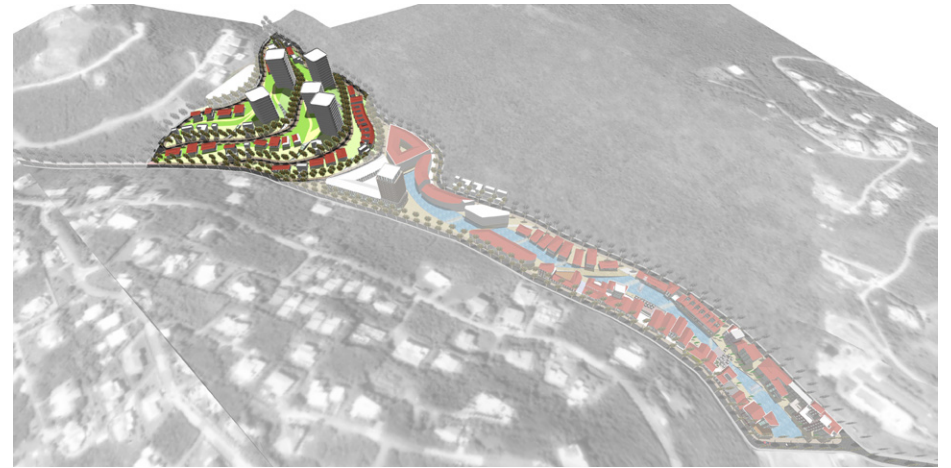


Isometrie

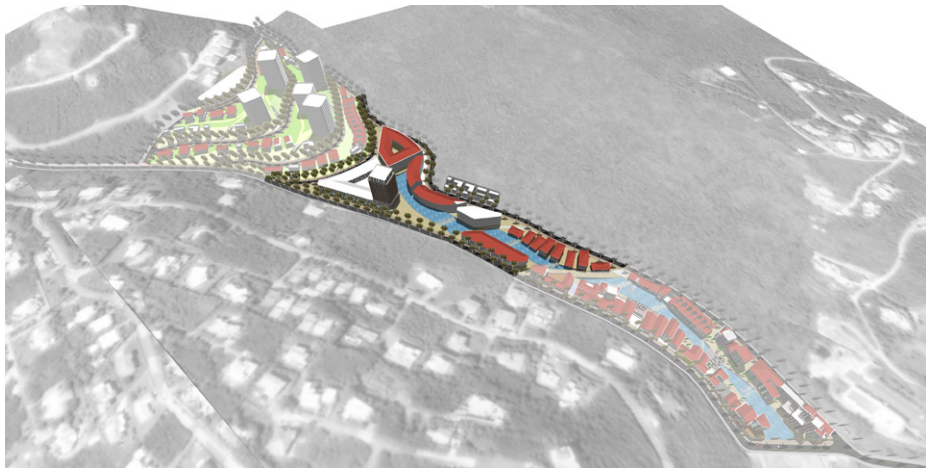
## 2. Fasering



Fase 1 - 'downtown'



Fase 3 - 'heuvel'

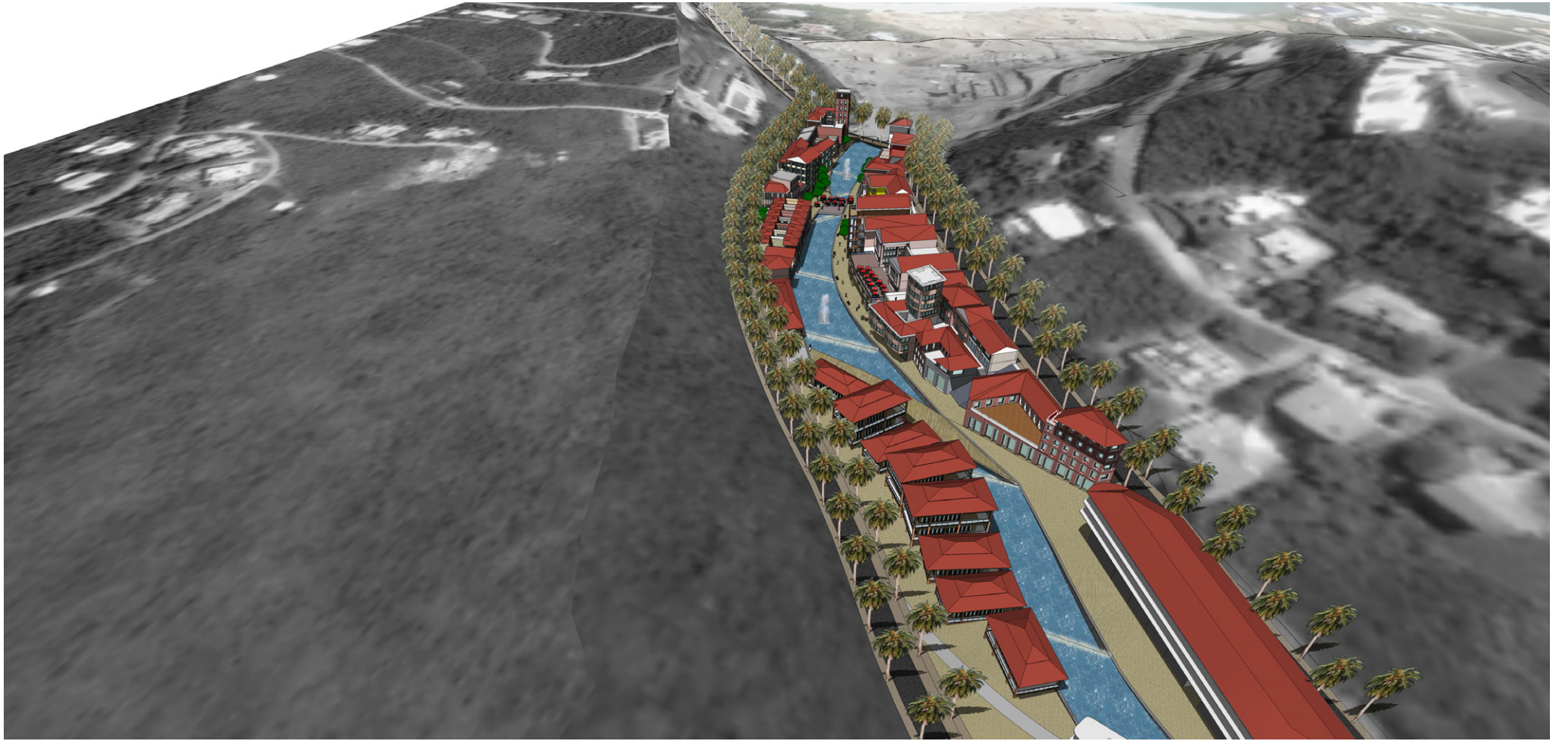


Fase 2 - 'midtown / centrum'

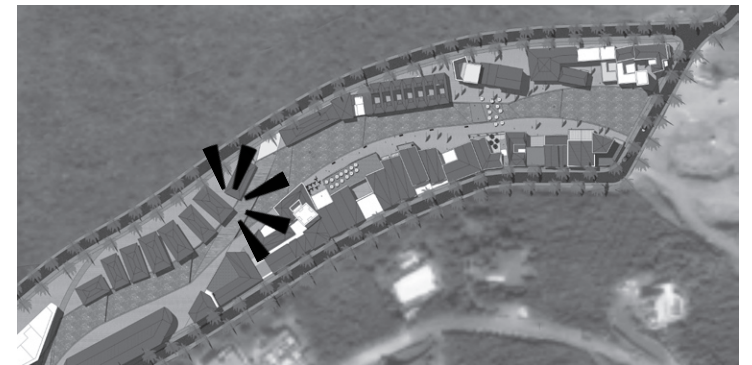
### 3. Vogelvlucht perspectief - fase 1

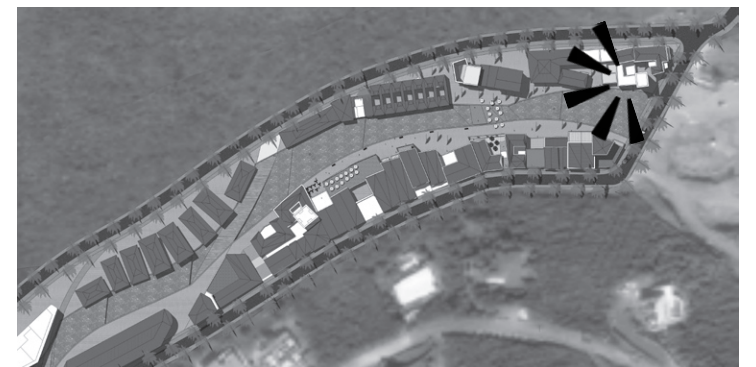


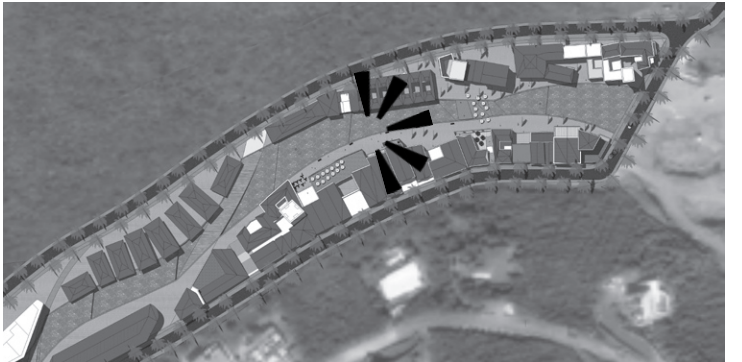


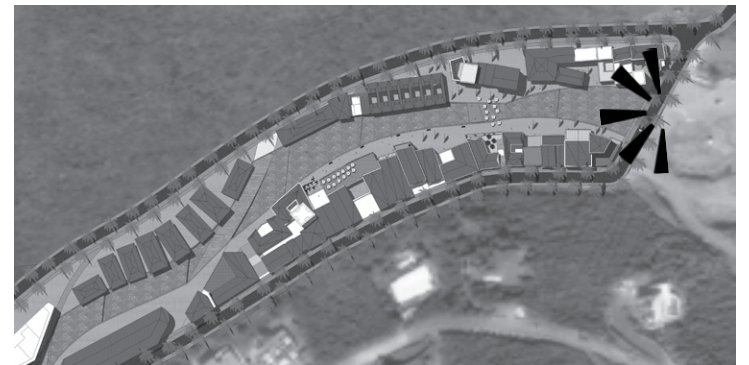


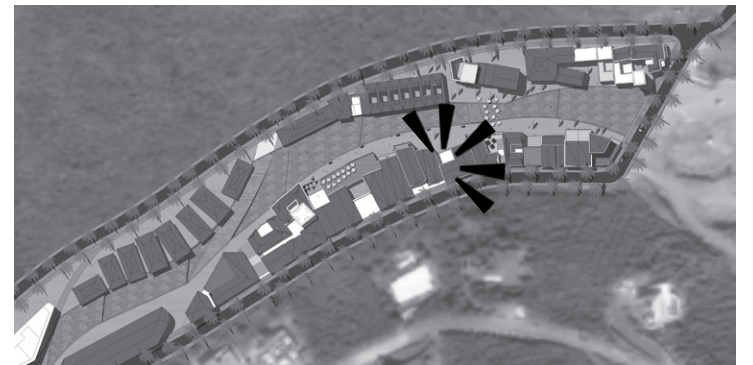
#### 4. Collages - fase 1

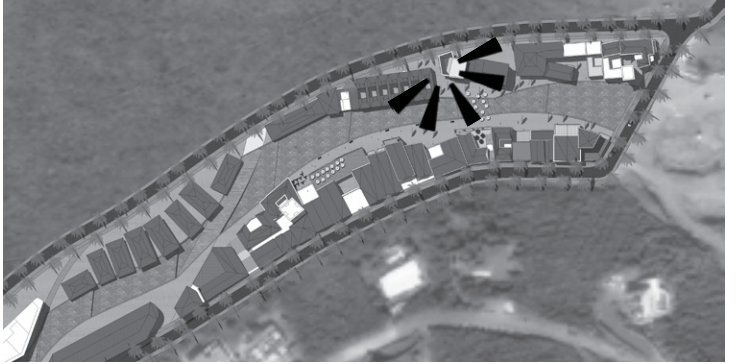




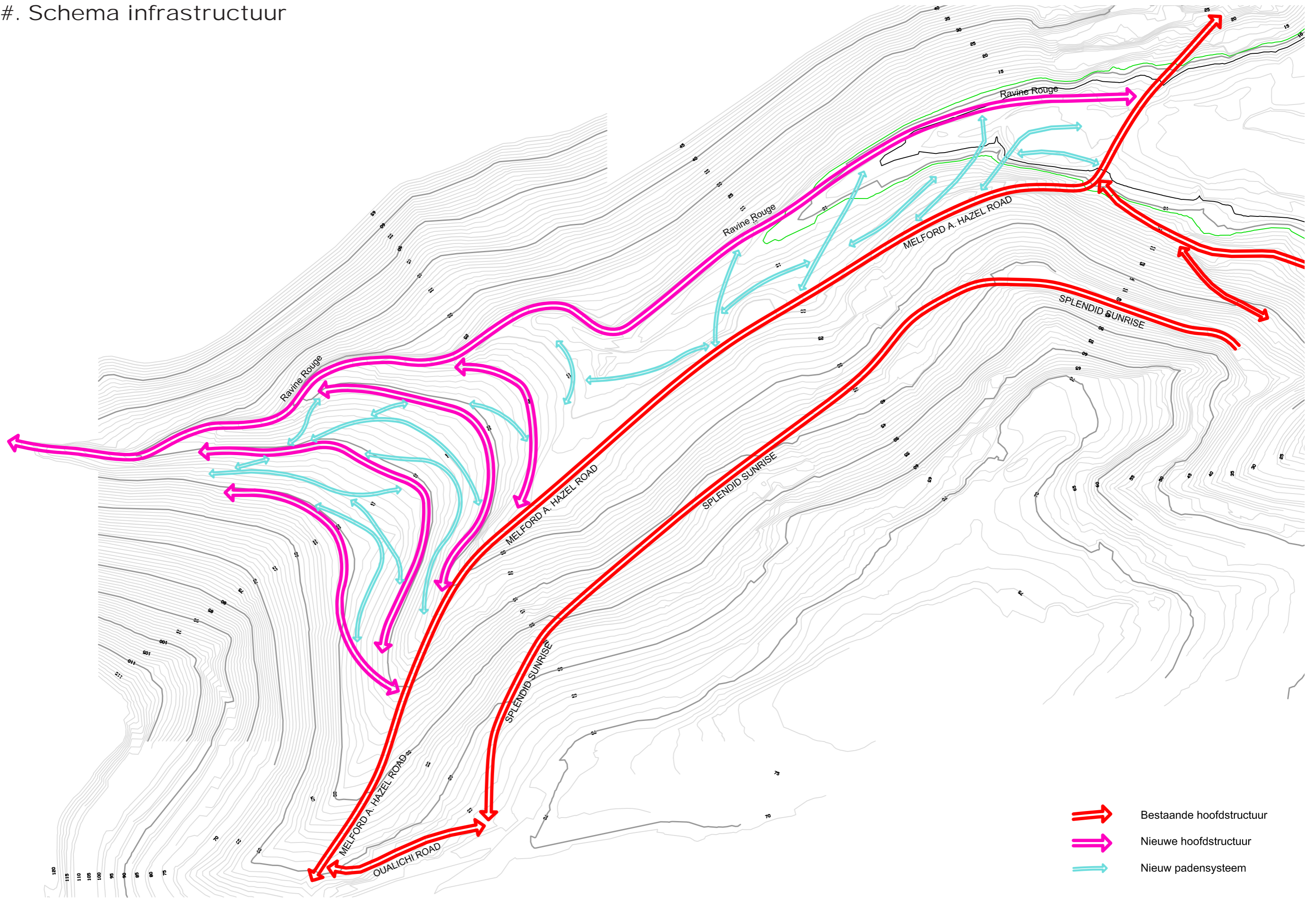






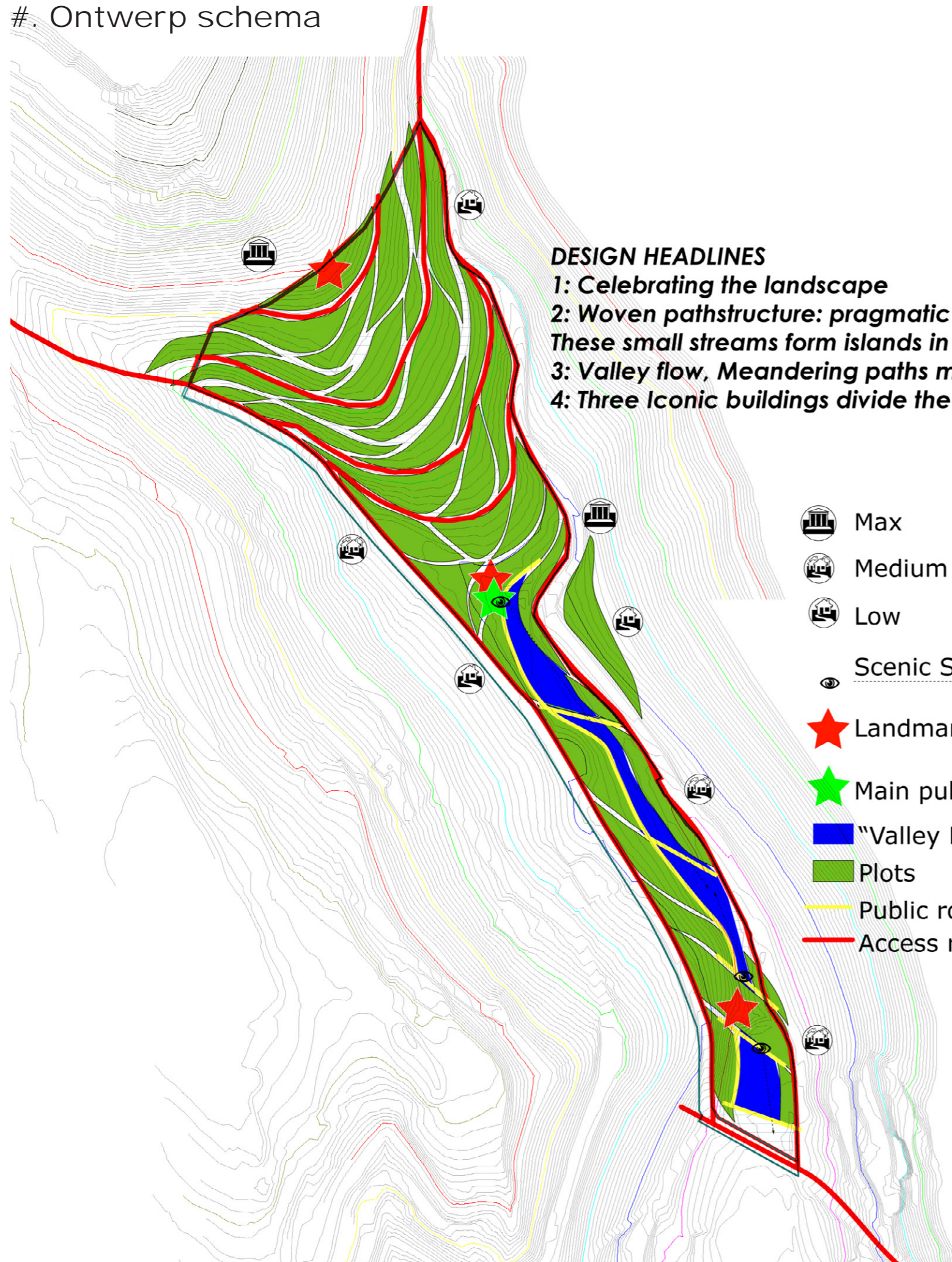


# #. Schema infrastructuur





#. Ontwerp schema

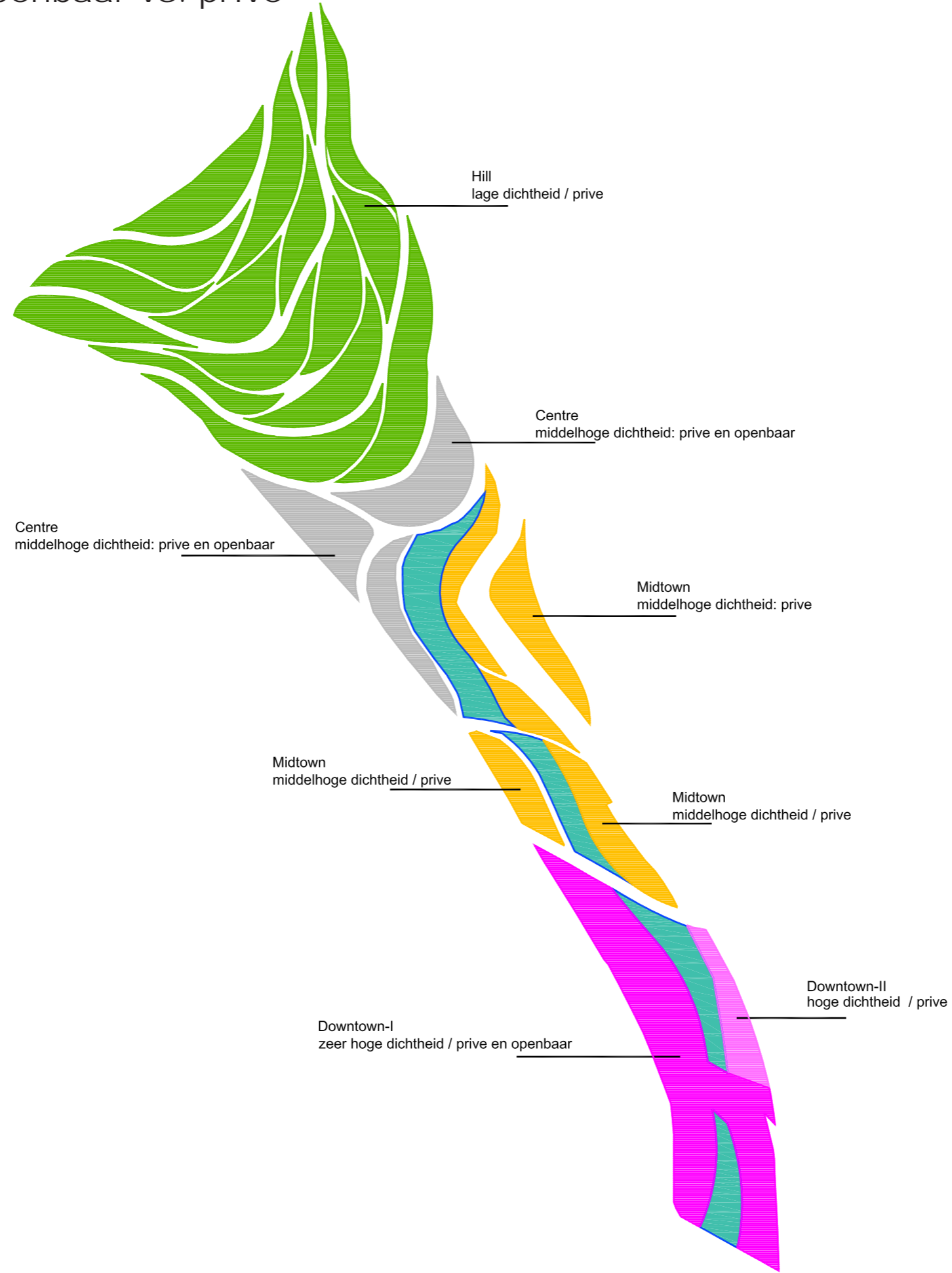


**DESIGN HEADLINES**

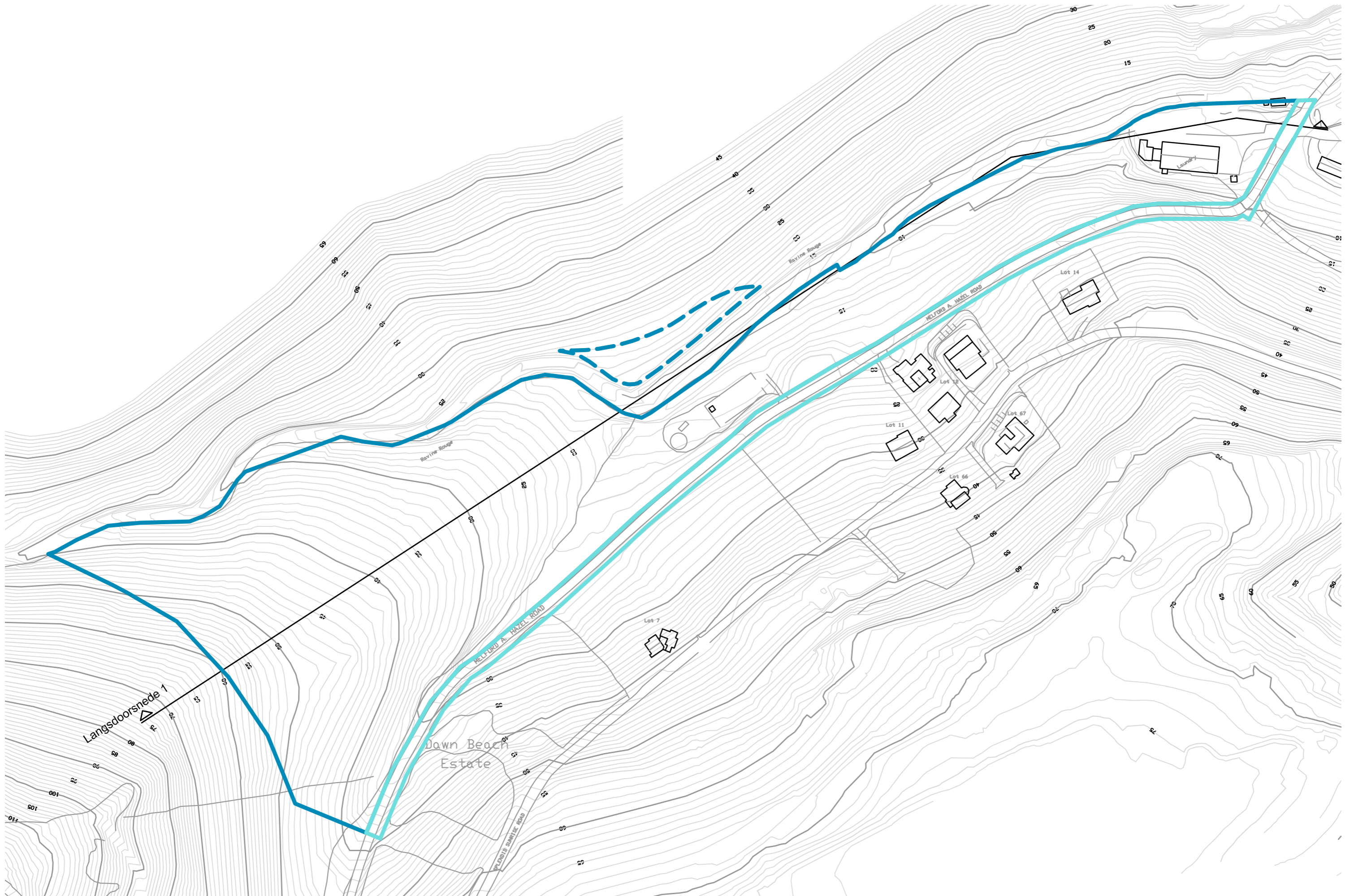
- 1: Celebrating the landscape
- 2: Woven pathstructure: pragmatic design, 4,5% accessibility creates a pathway structure of small river streams. These small streams form islands in the valley
- 3: Valley flow, Meandering paths merges into a "valley river" flowing towards sea
- 4: Three Iconic buildings divide the valley in three parts with different densities

- Max
- Medium
- Low
- Scenic Sight
- Landmark
- Main public space
- "Valley River"
- Plots
- Public route
- Access roads

#. Verdeling dichtheid / openbaar vs. prive

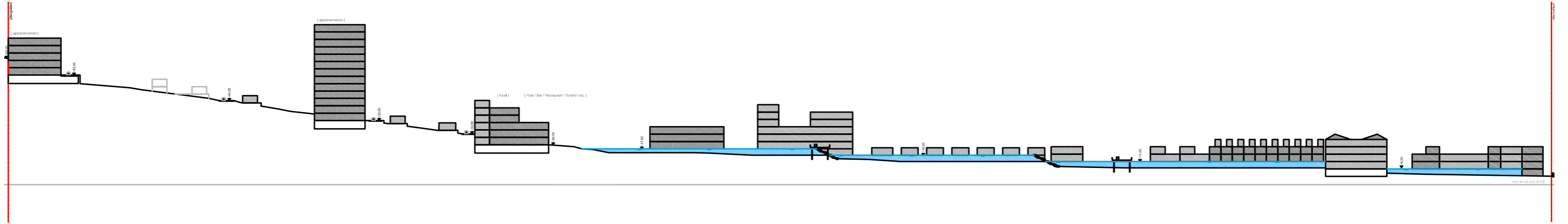


## 2. Langsdoorsnede plangebied



# Langsdoorsnede 1

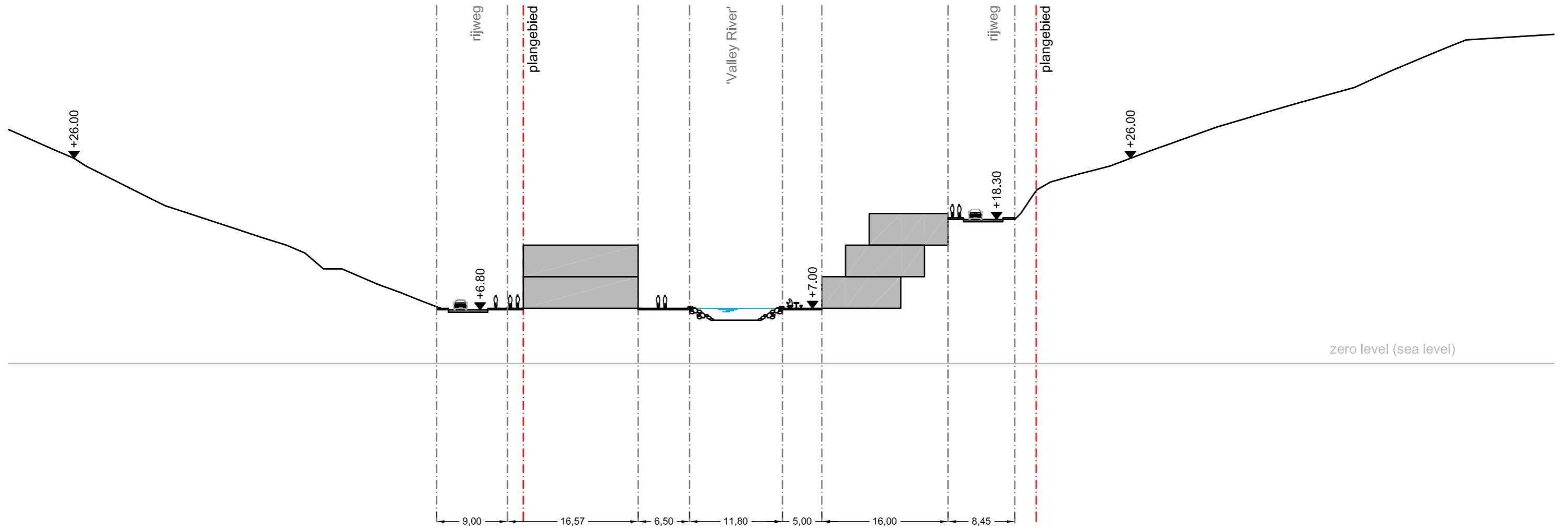
Scale-to-fit



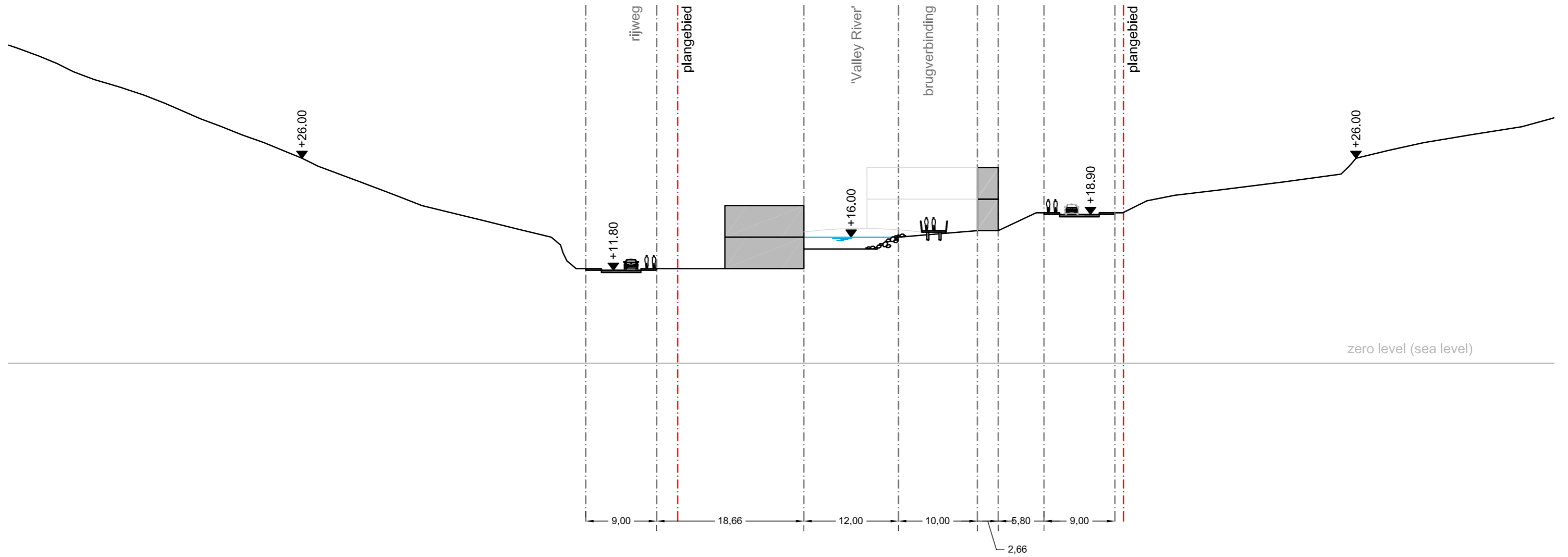
### 3. Dwarsdoorsneden plangebied



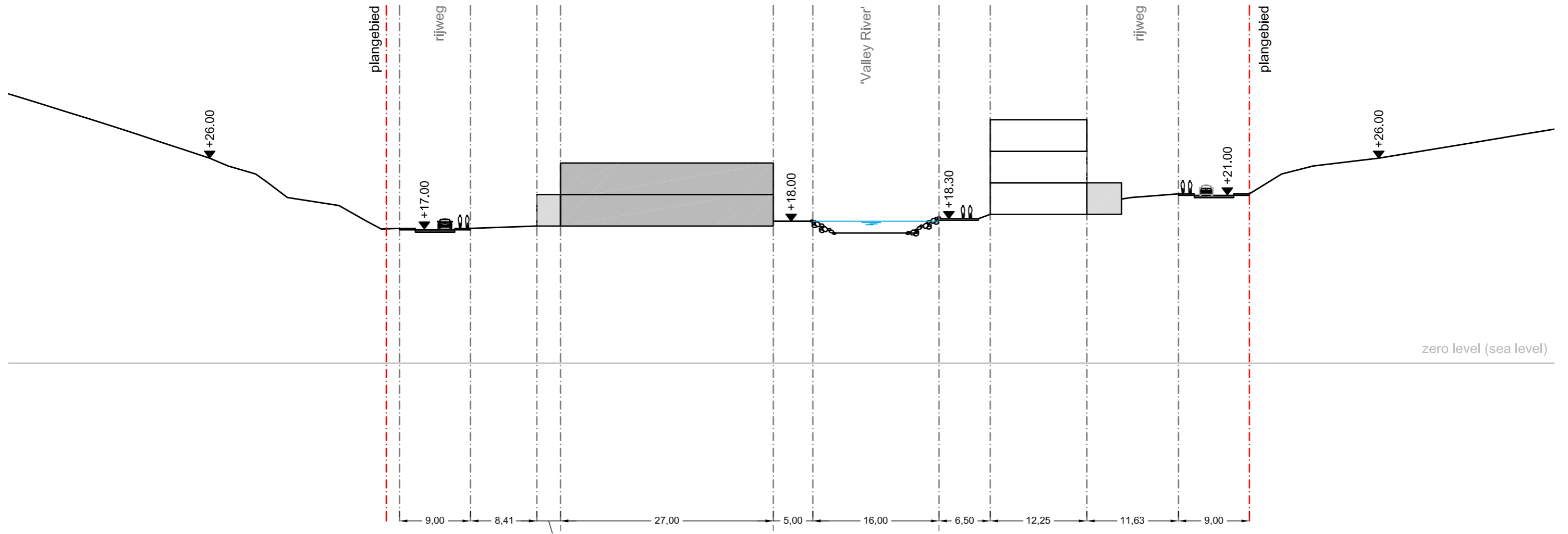
Dwarsdoorsnede 1  
1:500



Dwarsdoorsnede 2  
1:500

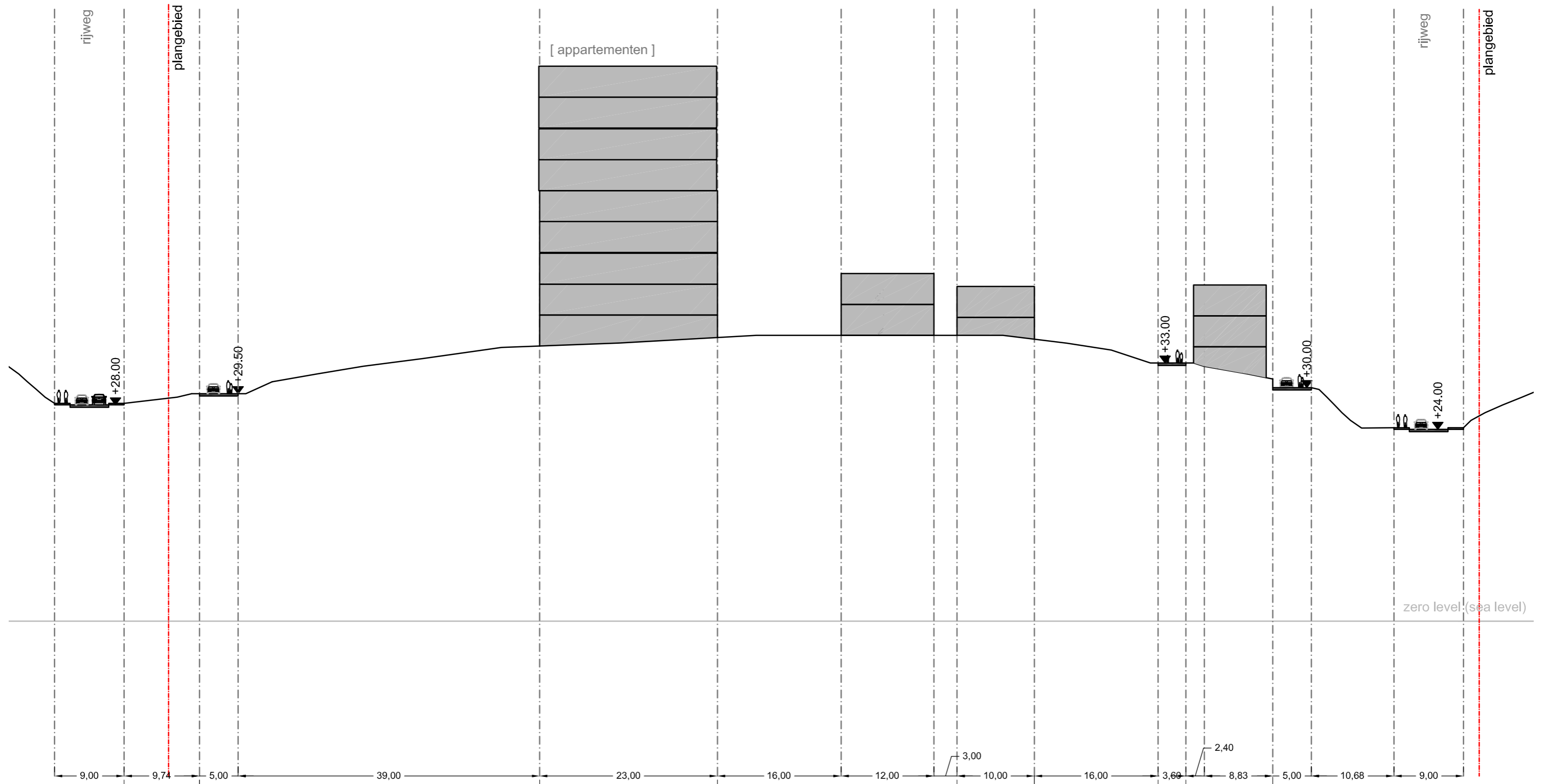


Dwarsdoorsnede 3  
1:500

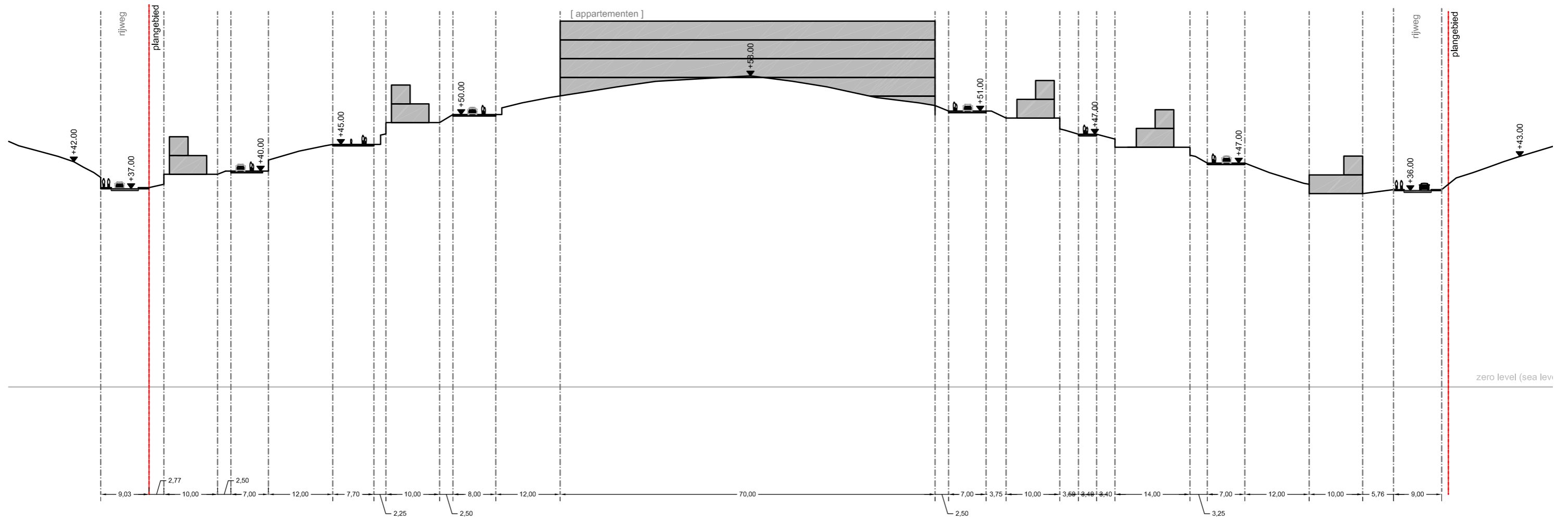




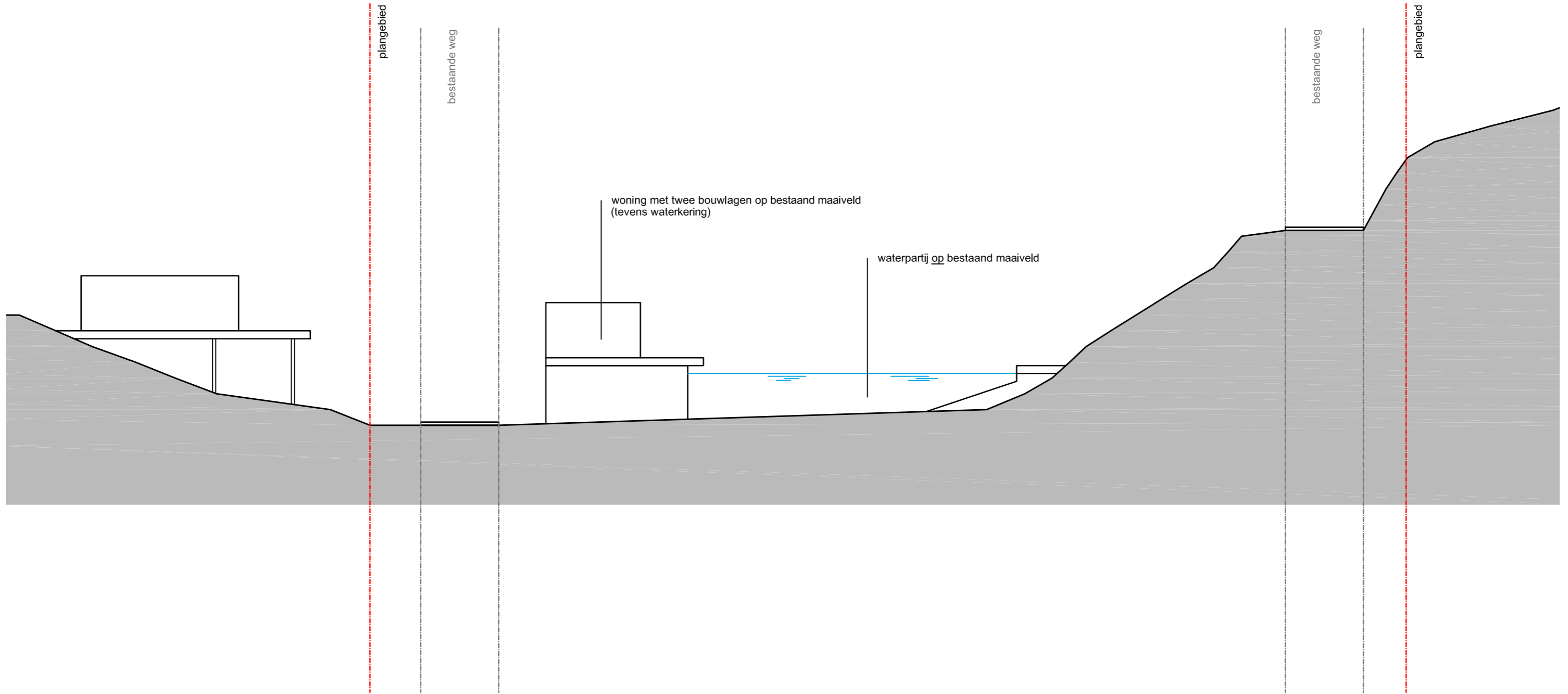
Dwarsdoorsnede 4  
1:500



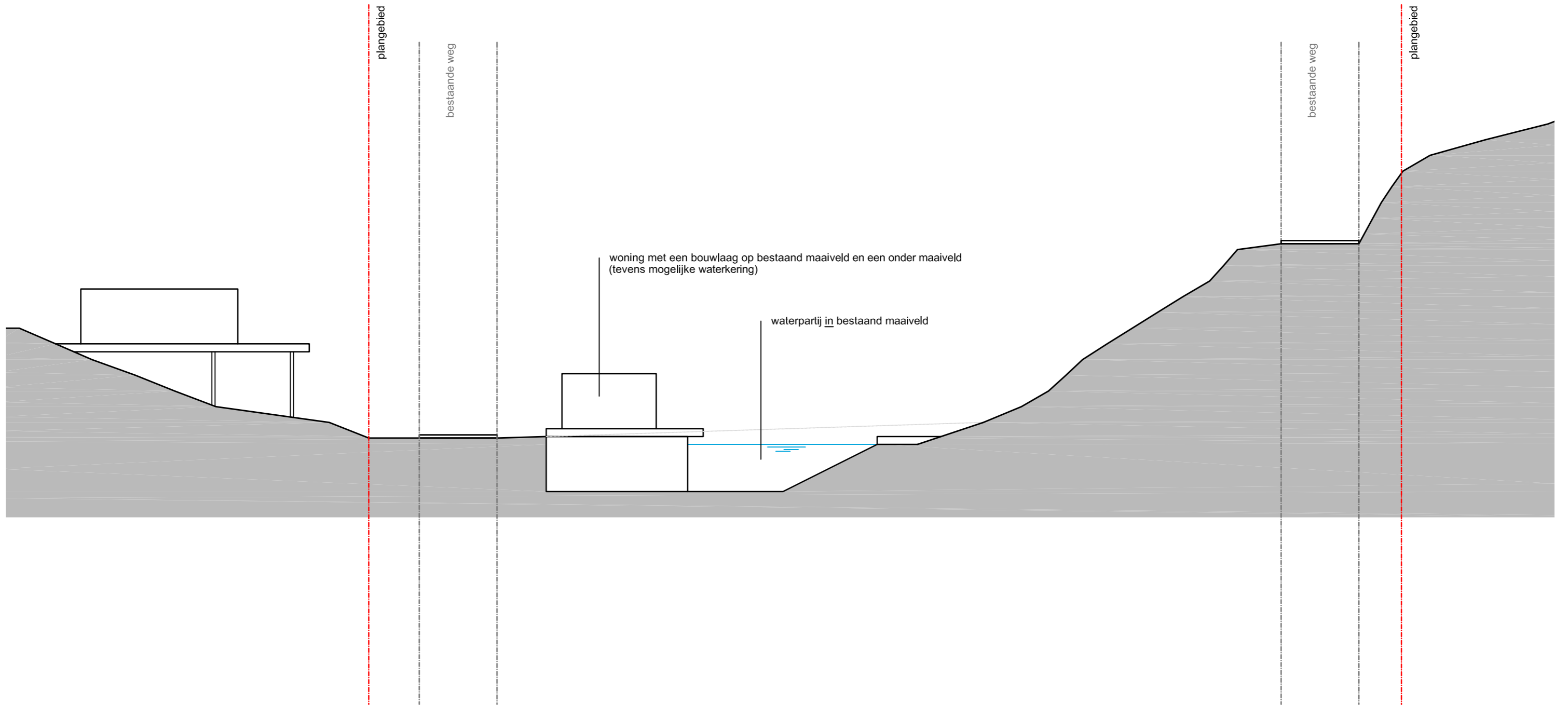
Dwarsdoorsnede 5  
ca. 1:500



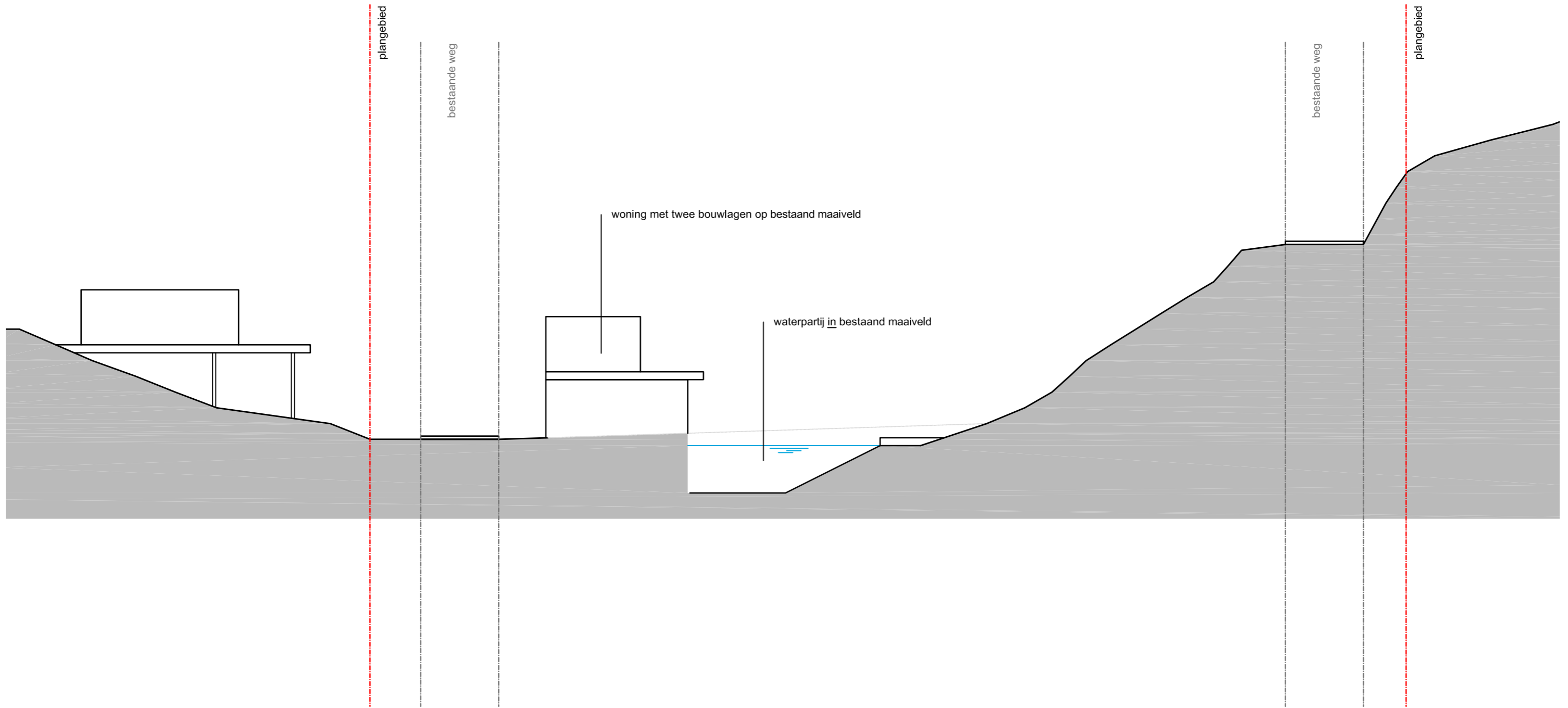
#### 4. Principedoorsnede waterpartij - doorsnede op het lage gedeelte



- doorsnede op het hoge gedeelte (1)



- doorsnede op het hoge gedeelte (2)

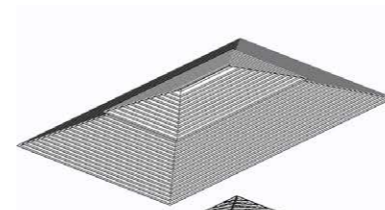


## 4 Identiteit bebouwing

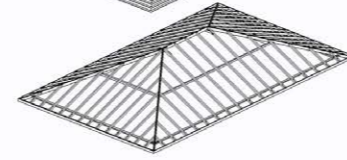
The strongest identity for the new development is by far the natural landscape of the site and its climate. By enhancing and strengthening this attractive valley landscape a perfect foundation is laid. The location and its changing views over the North Atlantic Ocean are one of the biggest attractions.

In order not to compete with or to dominate this landscape we propose for an architectural form that is dealing with the natural conditions and that is integrating with the surrounding, but above all breathes the identity of Sint Maarten. An architecture that derives from a long history of building for tropical climates and the different cultural influences Sint Maarten had.

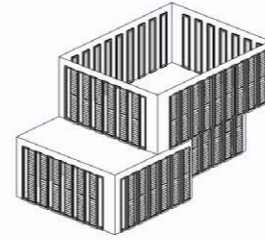
Making shadow, possibilities for natural ventilation and high ceilings are the basic, "historical" principles for building in tropical climates. By re using and interpreting "old techniques" the typical architectural form for is created. Making one strong coherent new development



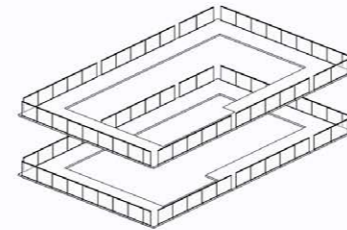
Extended roof



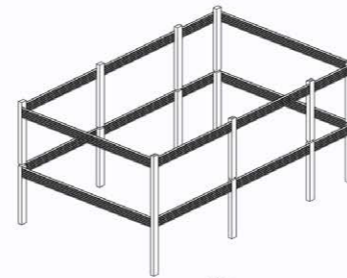
Natural ventilated floors



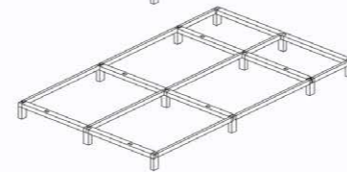
Terrace and gallerie offer outdoor space and cooling shadow



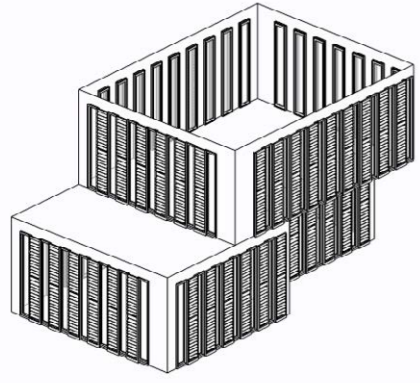
visible light construction



on pilotis, cooling the house using the airflow it creates under the house

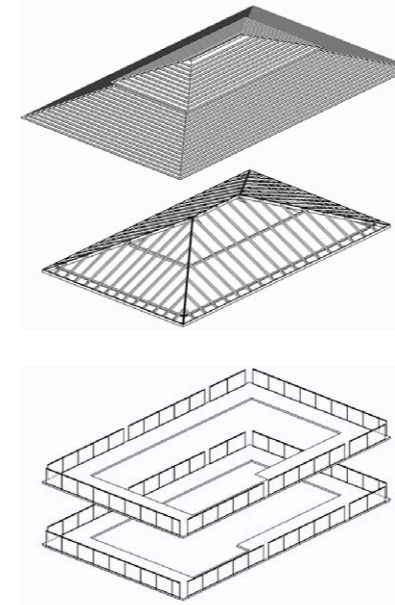


## Terrace

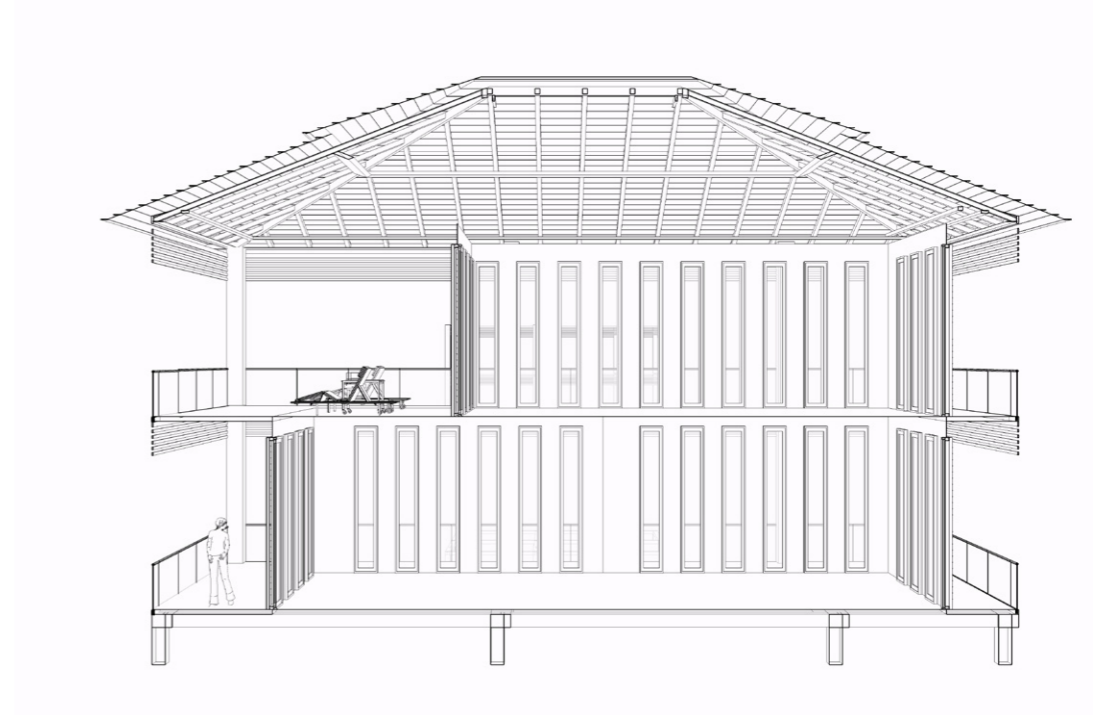


Each single floor house has a terrace.  
Two storey houses have a large balcony with the roof overhanging

## BIG ROOFS



Shadow is given to the facades using overhanging, light weight, roofs.  
The overhang, sloped or flat creates a recognisable image.  
The roof will be the main architectural theme.

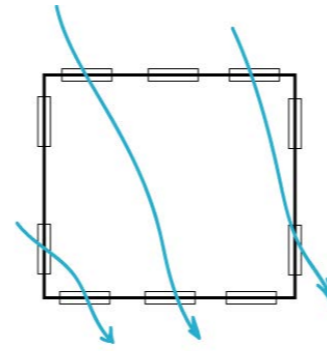


## 5 Natuurlijke ventilatie

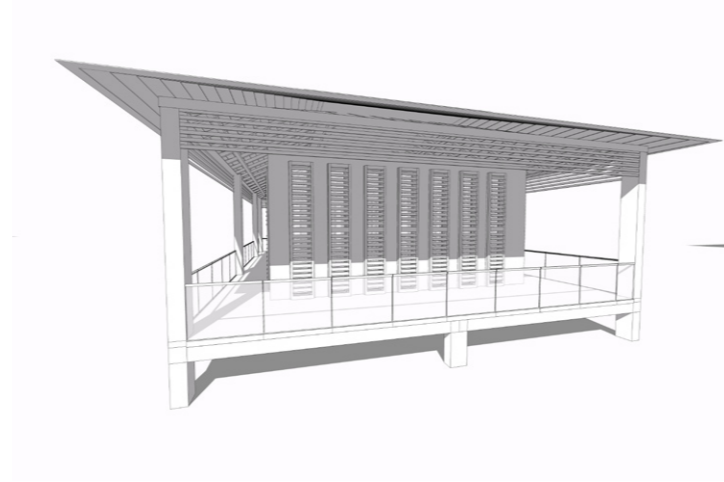
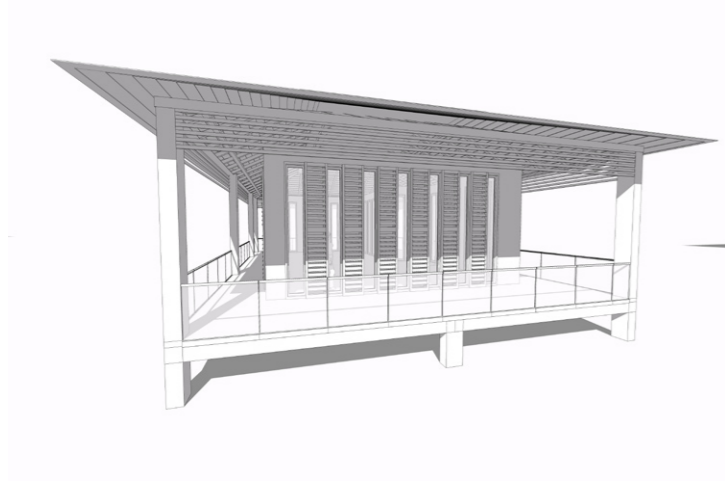
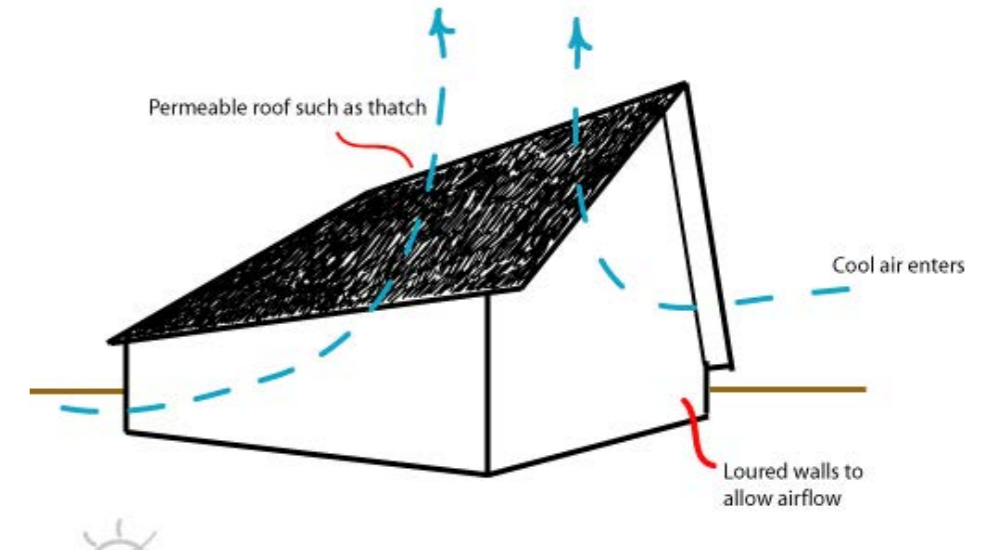
The North Atlantic ocean offers a cool sea breeze. To take full advantage of this breeze; maximum ventilation has to be made possible.

Allowing the breeze to take the warmed up air inside the house out.

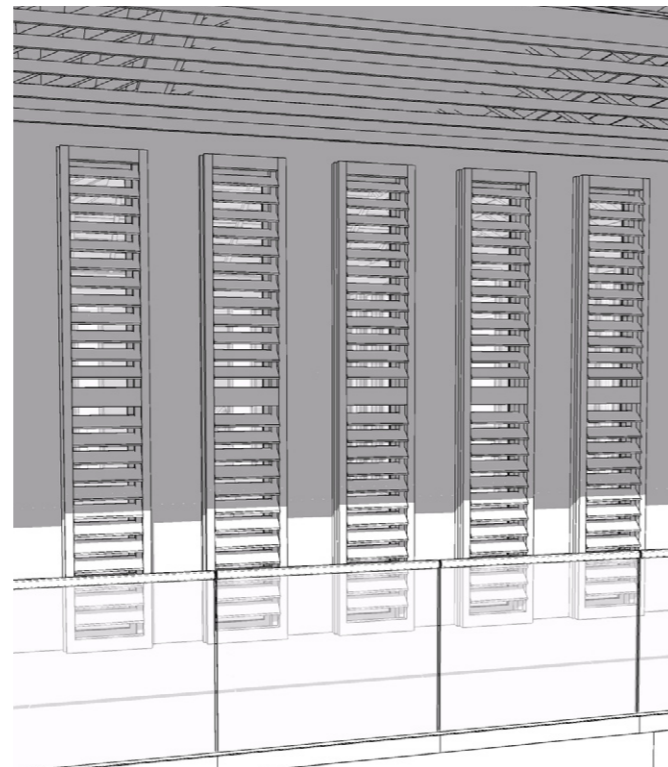
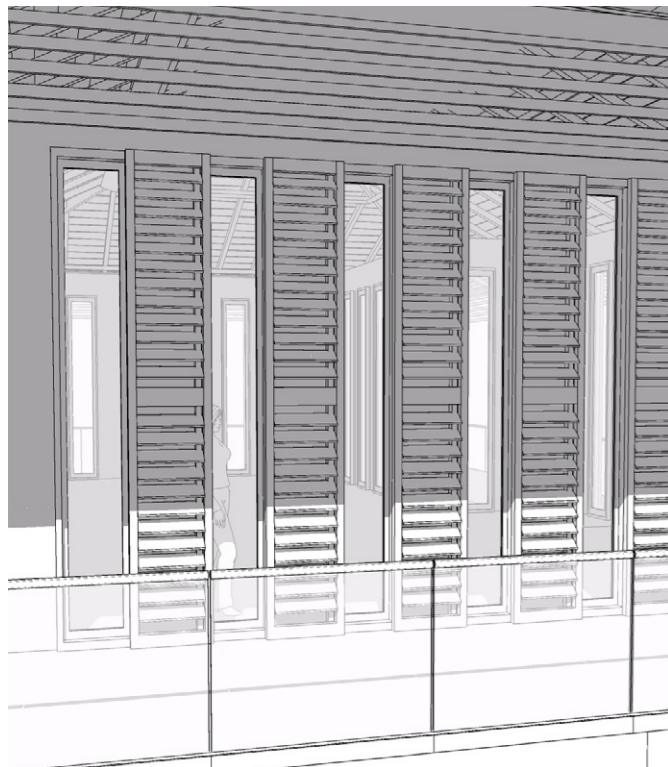
This means that closed indoor spaces have to be avoided and windows have to be placed across each other.



## Tropical House Design



Allowing ventilation and keeping the sun out.





Maximum ventilation and optimum shadow

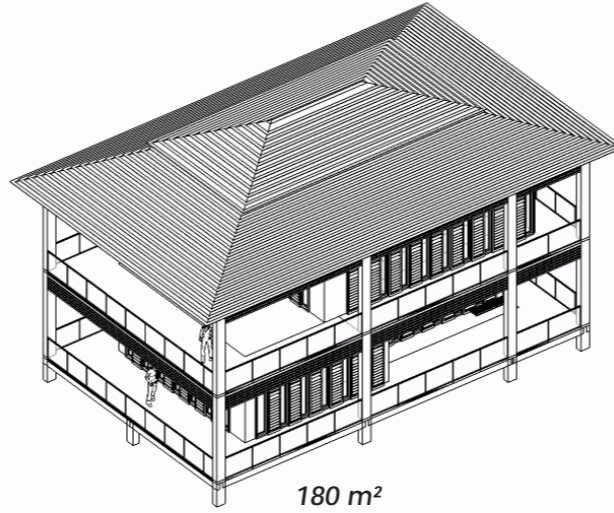
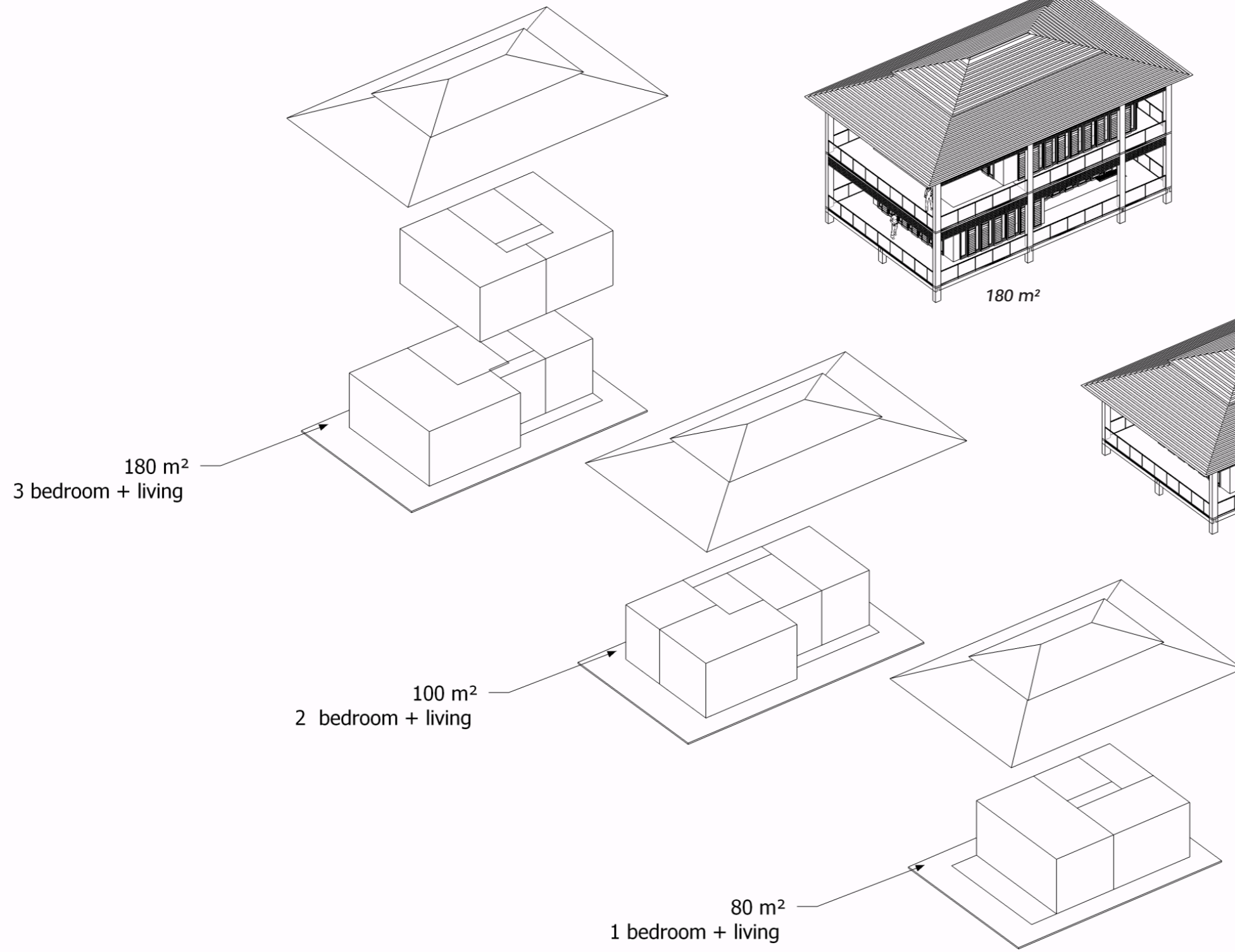


Allowing maximum ventilation through the house

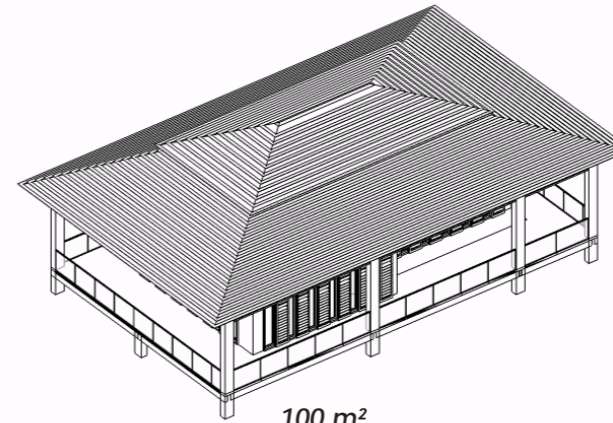


# 6. Bebouwingstypen

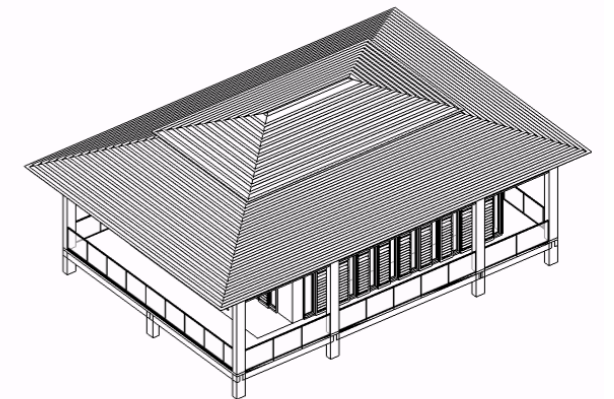
Example prototypes  
80 m<sup>2</sup> - 100 m<sup>2</sup> - 180 m<sup>2</sup>



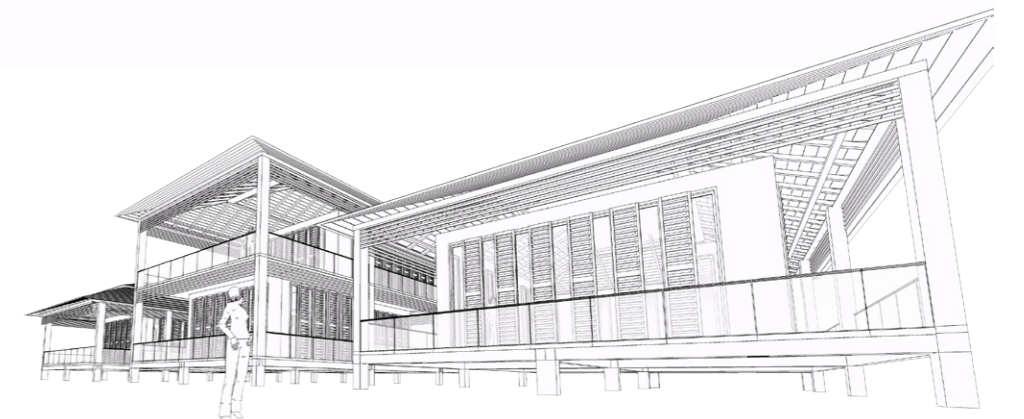
180 m<sup>2</sup>



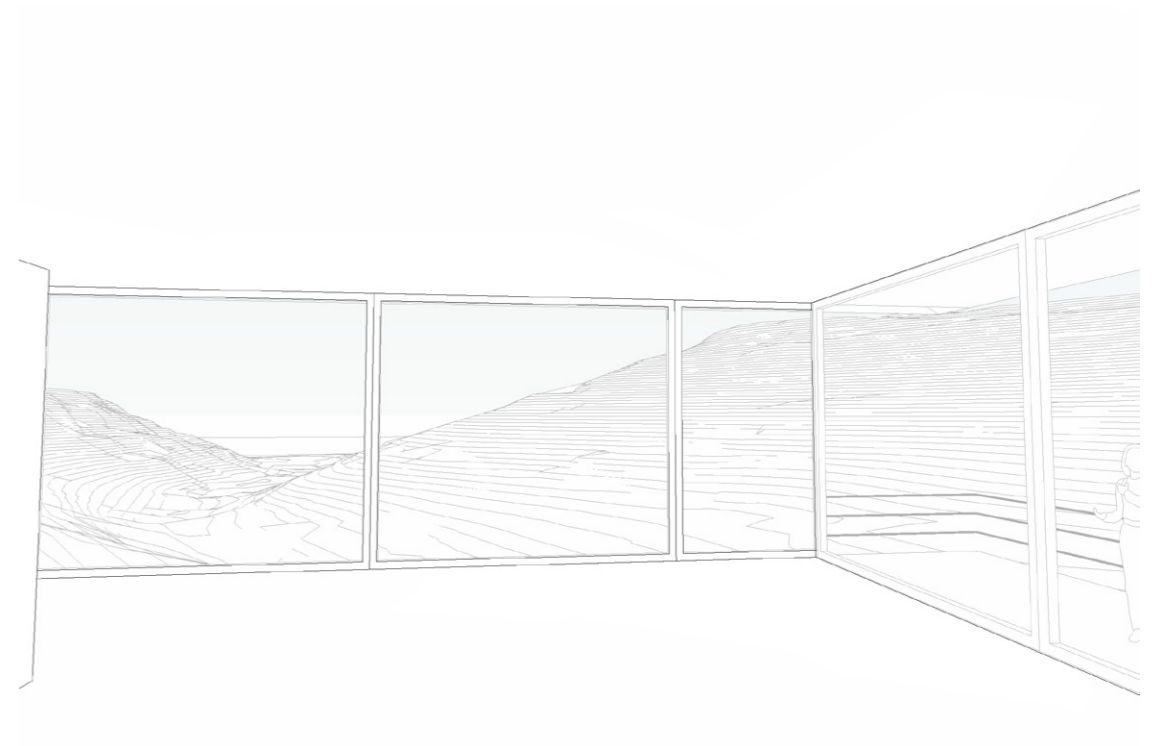
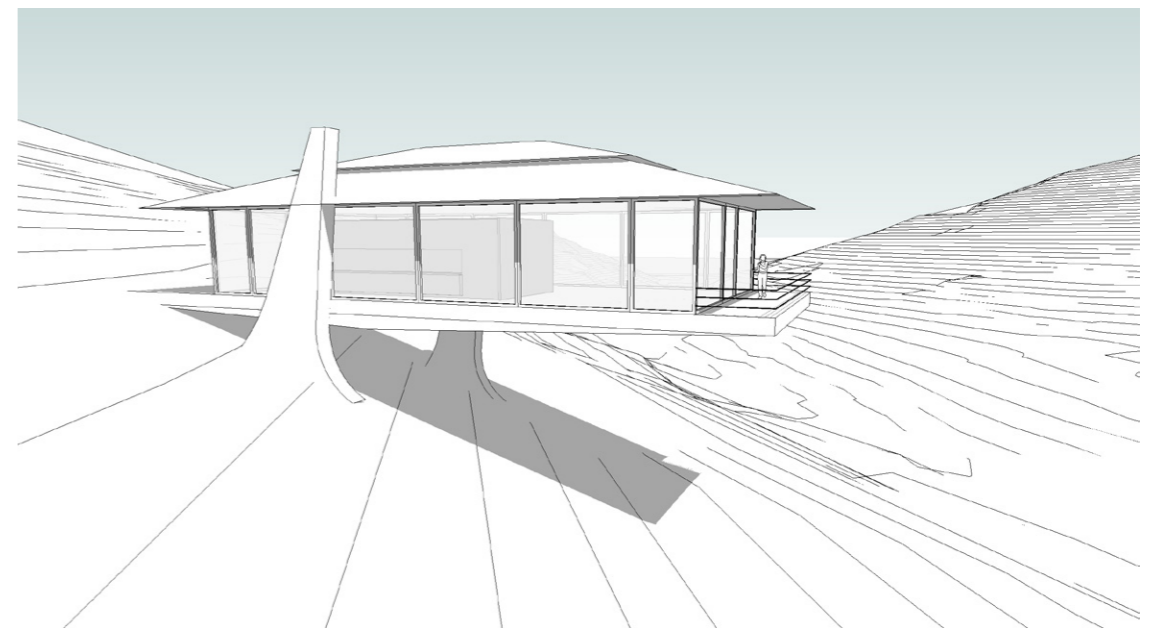
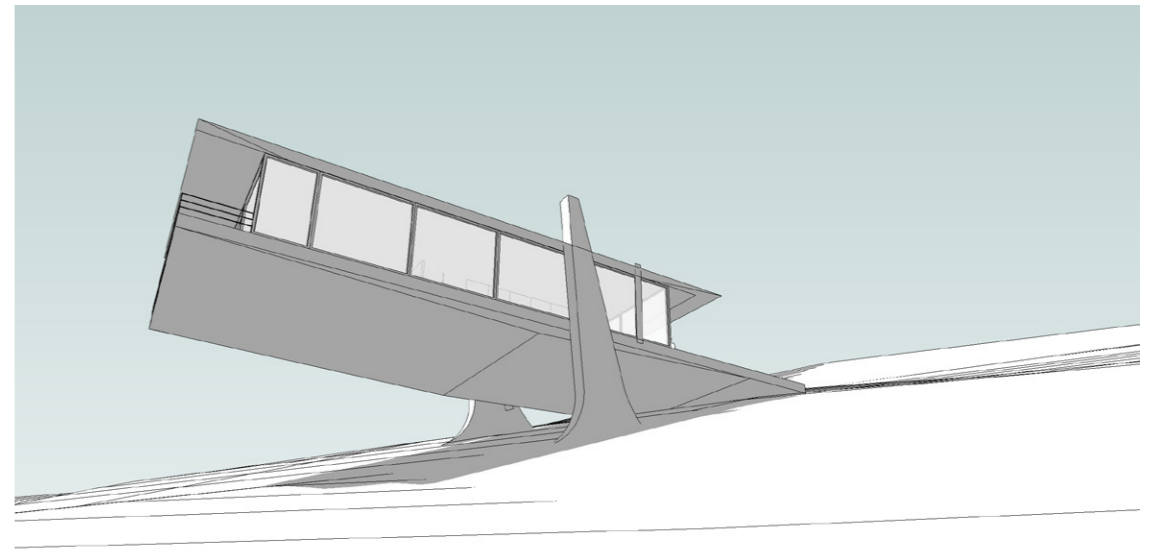
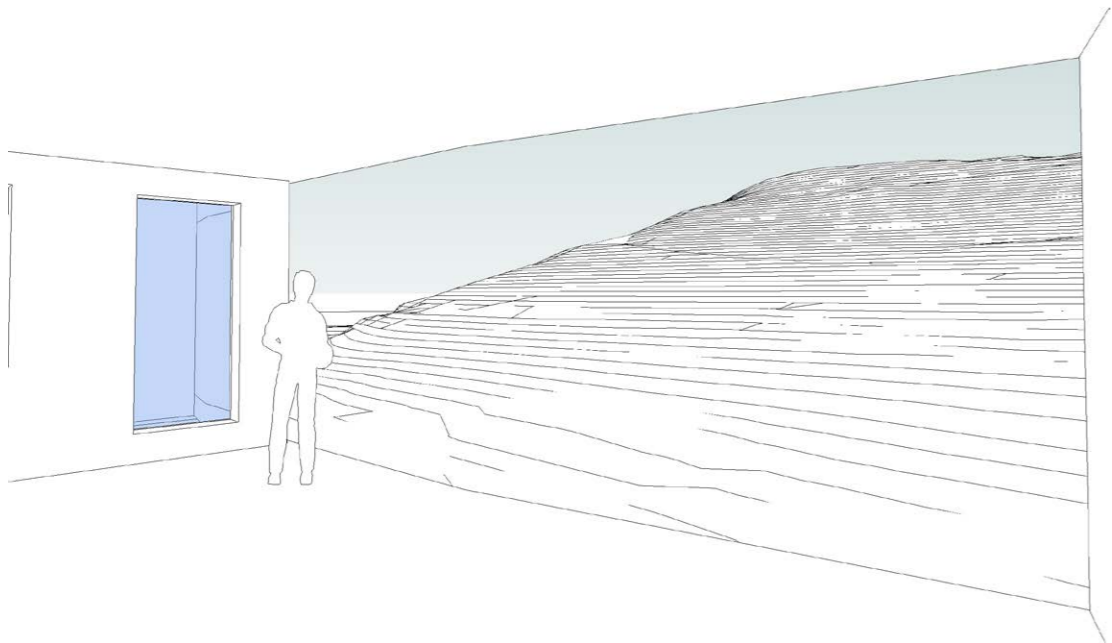
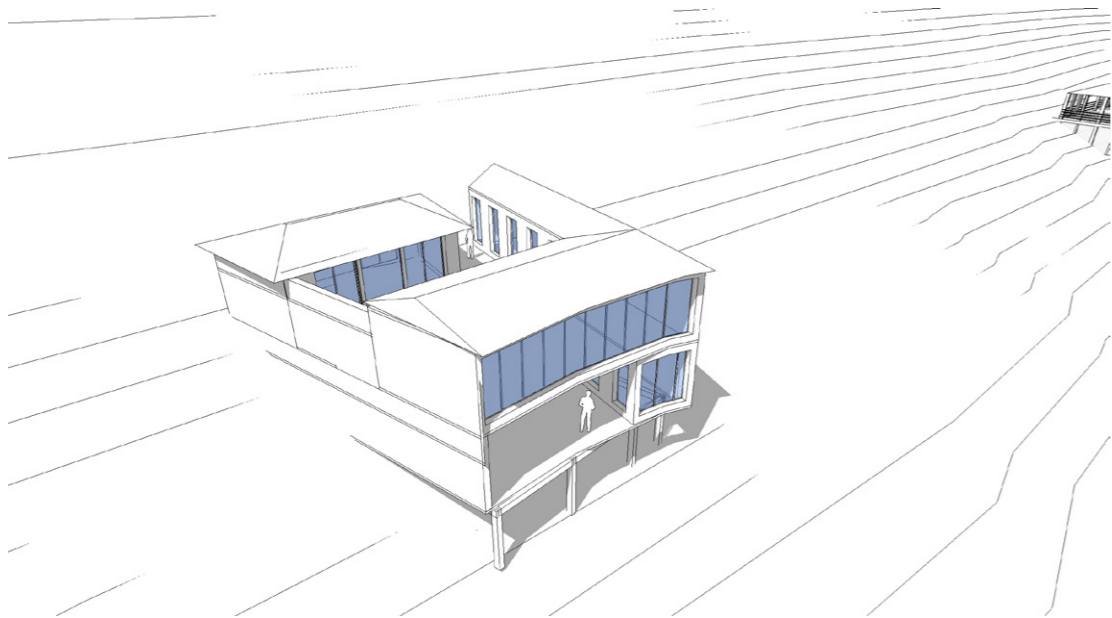
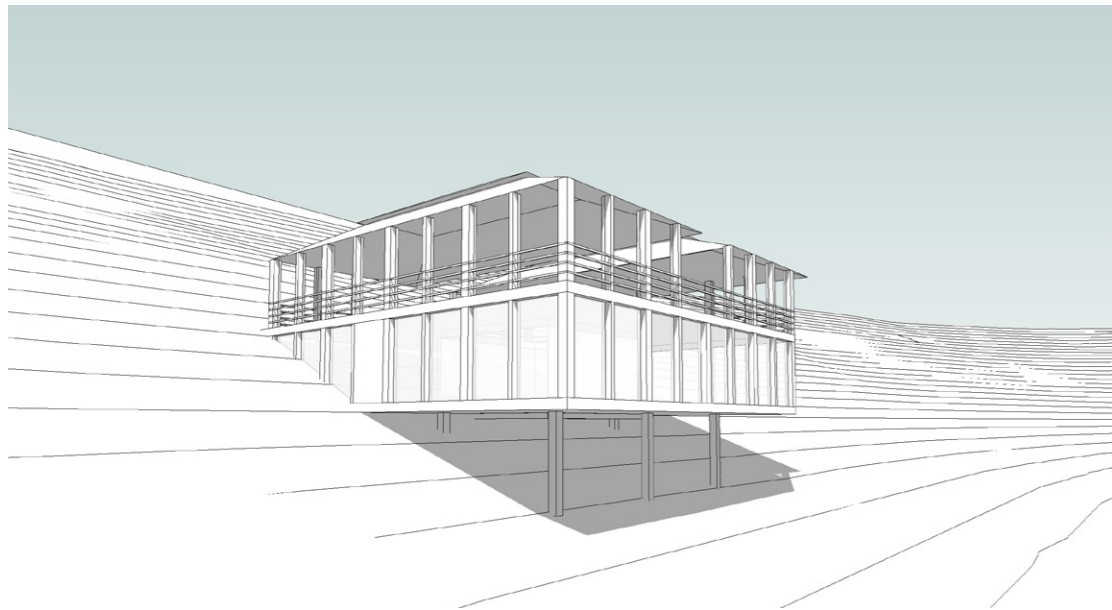
100 m<sup>2</sup>



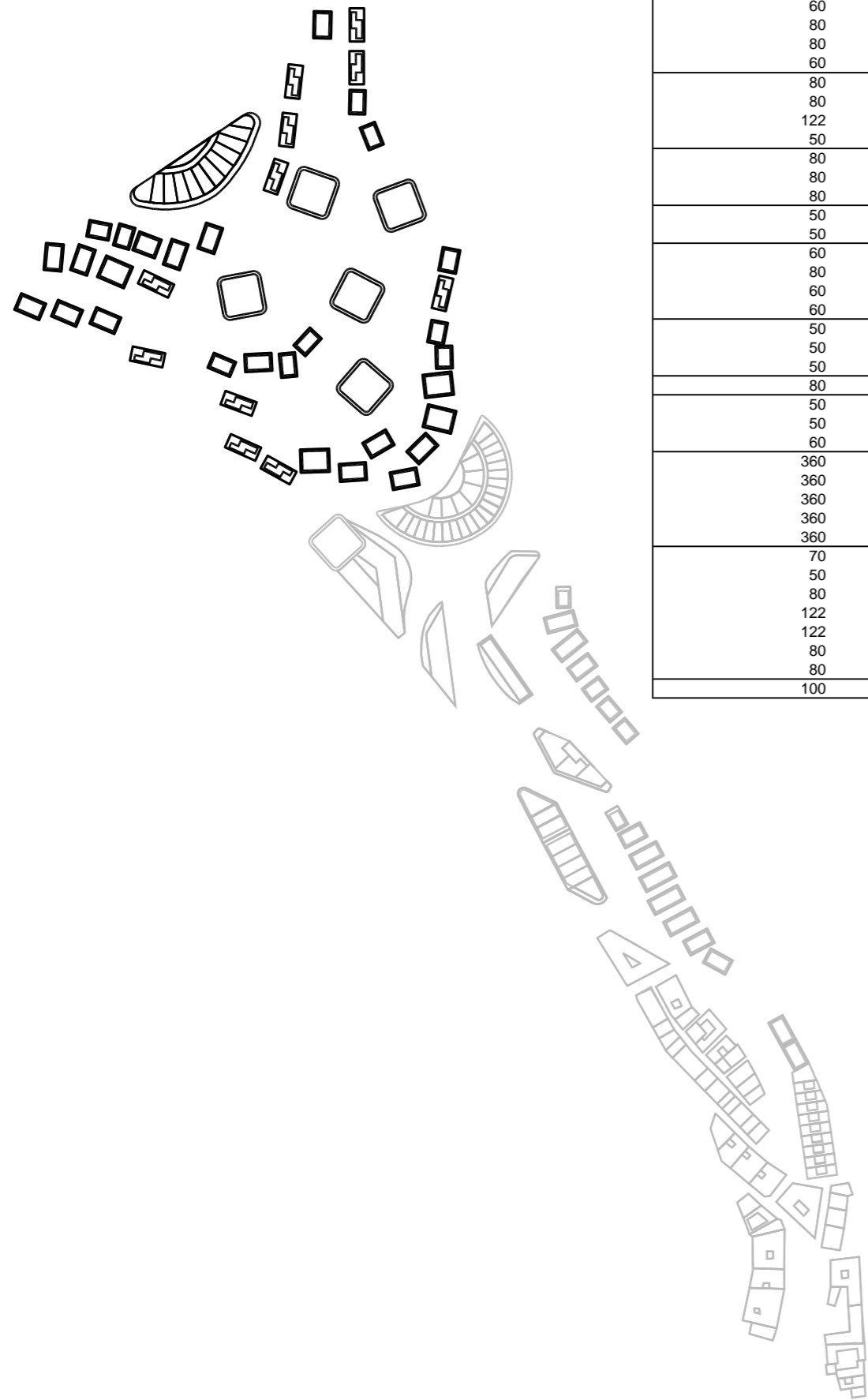
80 m<sup>2</sup>







## 8. Berekening BVO / FSI



### Hill

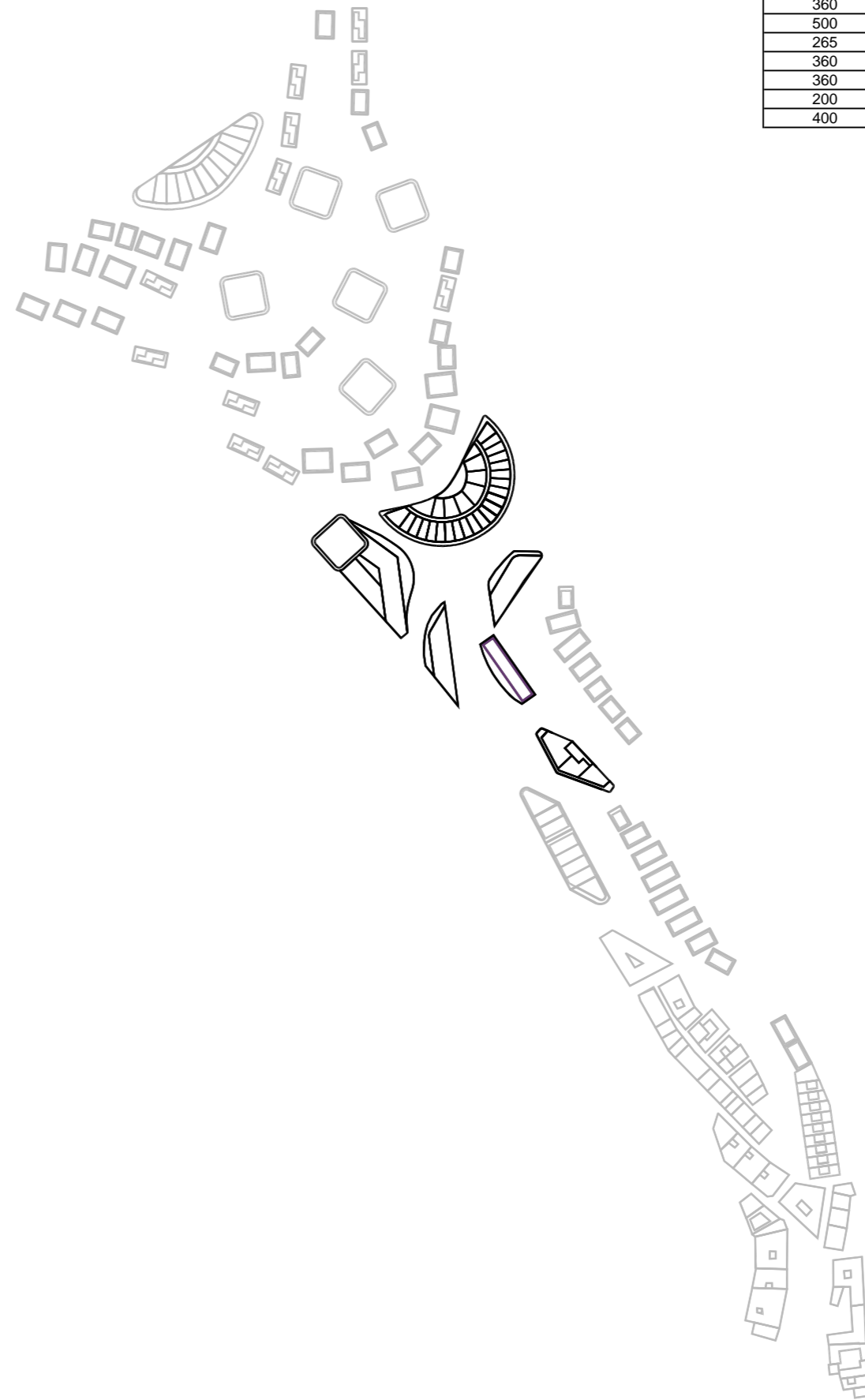
Floorplan (excl. terrace)	layers	total m <sup>2</sup> (bruto)
60	1,75	105
60	1,75	105
80	1,75	140
80	1,75	140
60	1,75	105
80	1,75	140
80	1,75	140
122	1,75	213,5
50	1,75	87,5
80	1,75	140
80	1,75	140
80	1,75	140
50	1,75	87,5
50	1,75	87,5
60	1,75	105
80	1,75	140
60	1,75	105
60	1,75	105
50	1,75	87,5
50	1,75	87,5
50	1,75	87,5
80	1,75	140
50	1,75	87,5
50	1,75	87,5
60	1,75	105
360	13	4680
360	13	4680
360	13	4680
360	13	4680
360	13	4680
70	1,75	122,5
50	1,75	87,5
80	1,75	140
122	1,75	213,5
122	1,75	213,5
80	1,75	140
80	1,75	140
100	5	500

27865,5 m<sup>2</sup>

### Centre

Floorplan ( layers	total m <sup>2</sup> (bruto)	
1630	5	8150
360	13	4680
500	4	2000
265	4	1060
360	3	1080
360	3	1080
200	3	600
400	6	2400

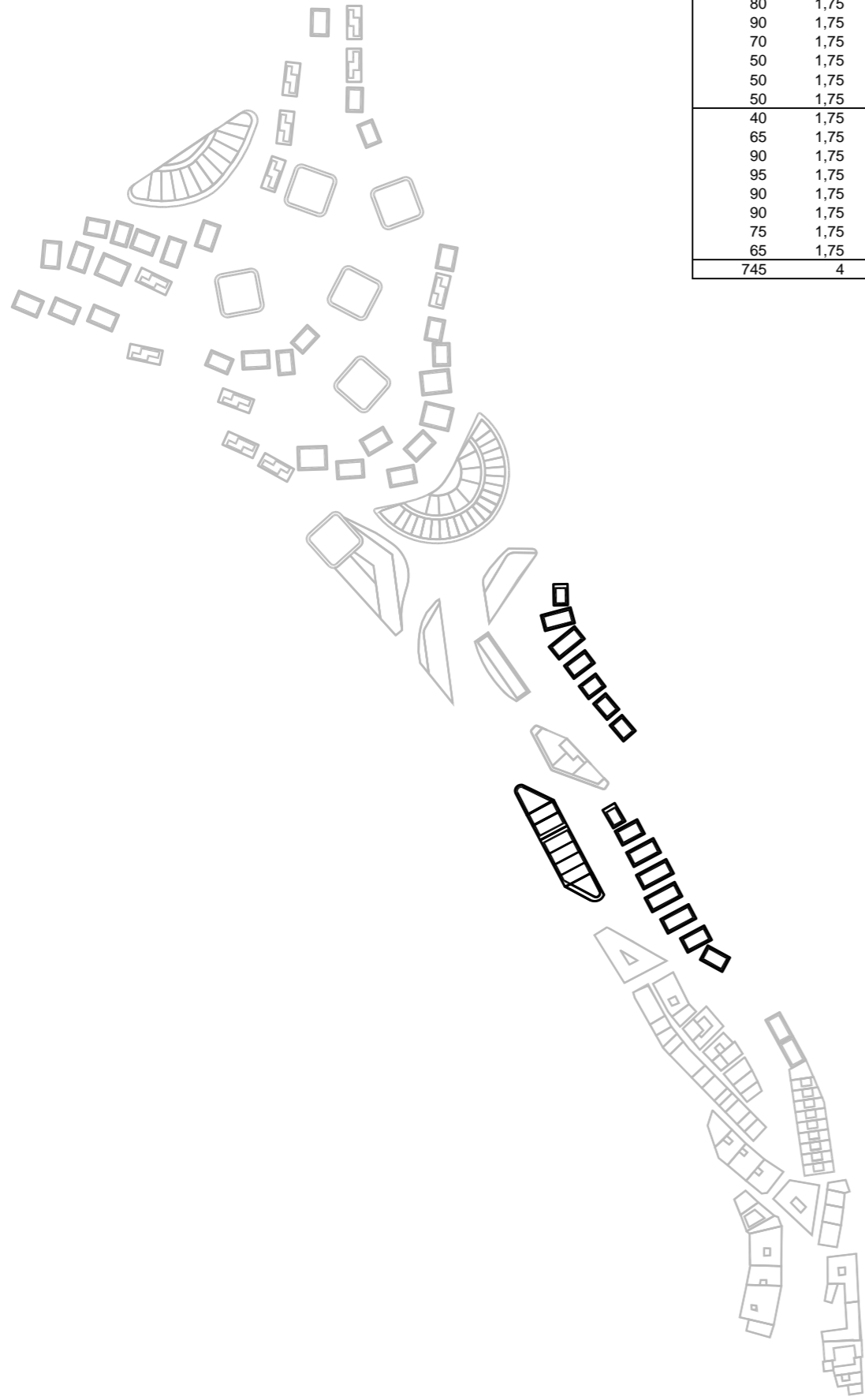
21050 m<sup>2</sup>



**Midtown**

Floorplan ( layers	total m <sup>2</sup> (bruto)	
40	1,75	70
80	1,75	140
90	1,75	157,5
70	1,75	122,5
50	1,75	87,5
50	1,75	87,5
50	1,75	87,5
40	1,75	70
65	1,75	113,75
90	1,75	157,5
95	1,75	166,25
90	1,75	157,5
90	1,75	157,5
75	1,75	131,25
65	1,75	113,75
745	4	2980

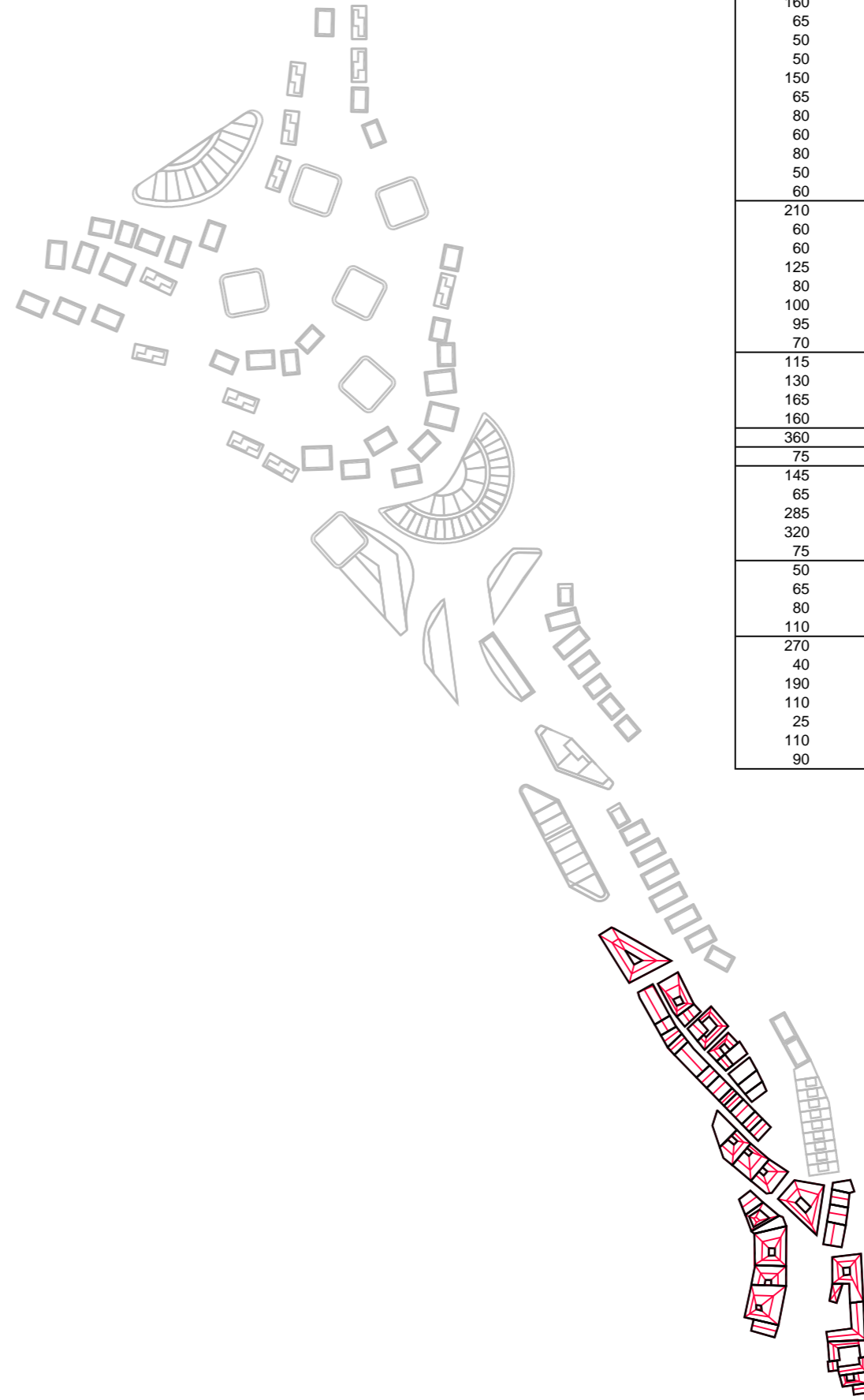
4800 m<sup>2</sup>



**Downtown-I**

Floorplan ( layers	total m <sup>2</sup> (bruto)	
450	4	1800
160	3	480
65	3	195
50	3	150
50	3	150
150	3	450
65	3	195
80	3	240
60	3	180
80	3	240
50	3	150
60	3	180
210	3	630
60	3	180
60	6	360
125	3	375
80	3	240
100	3	300
95	3	285
70	3	210
115	4	460
130	3	390
165	5	825
160	4	640
360	3	1080
75	3	225
145	3	435
65	2	130
285	3	855
320	3	960
75	3	225
50	3	150
65	3	195
80	3	240
110	3	330
270	3	810
40	3	120
190	3	570
110	3	330
25	8	200
110	3	330
90	4	360

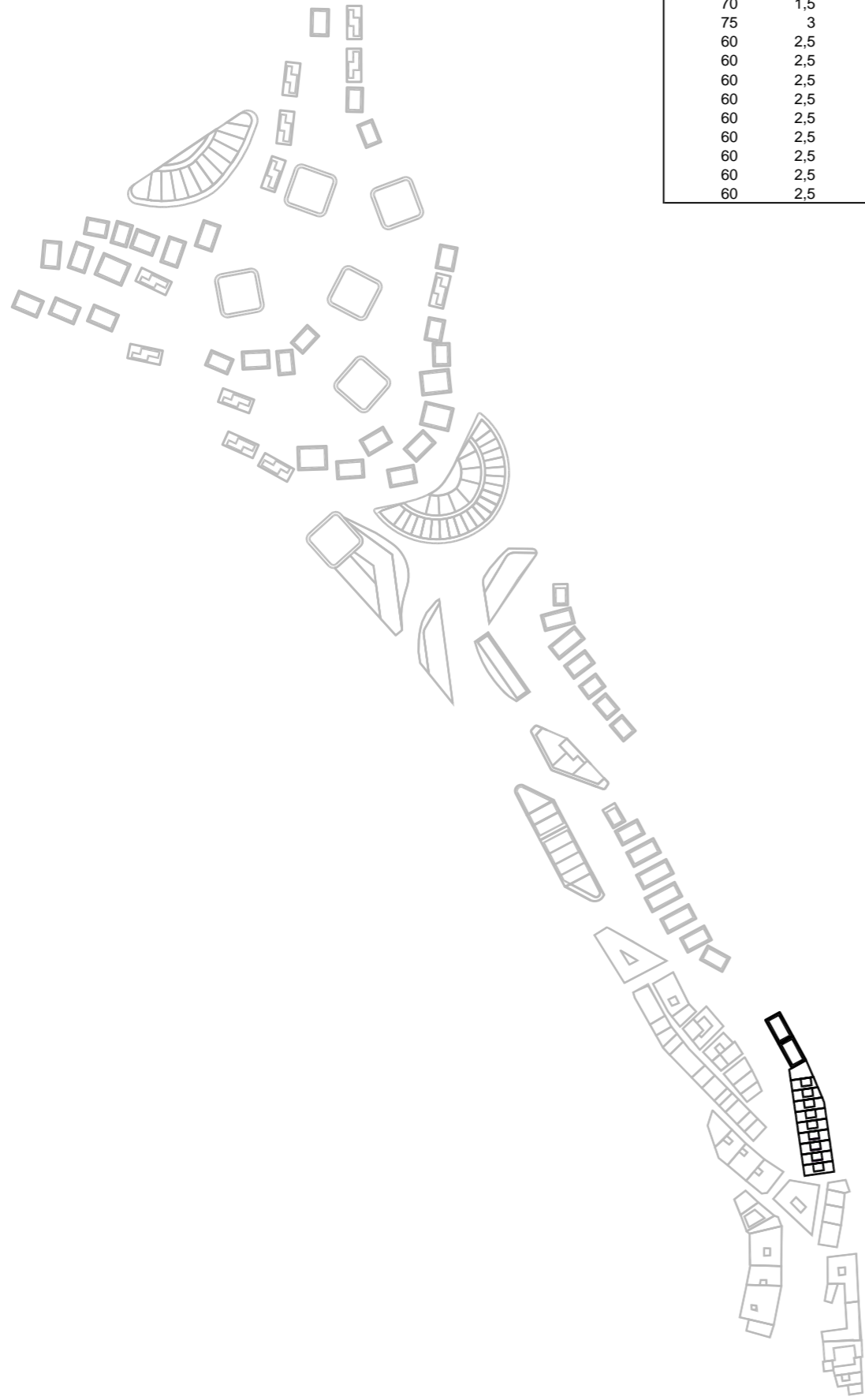
16850 m<sup>2</sup>



**Downtown-II**

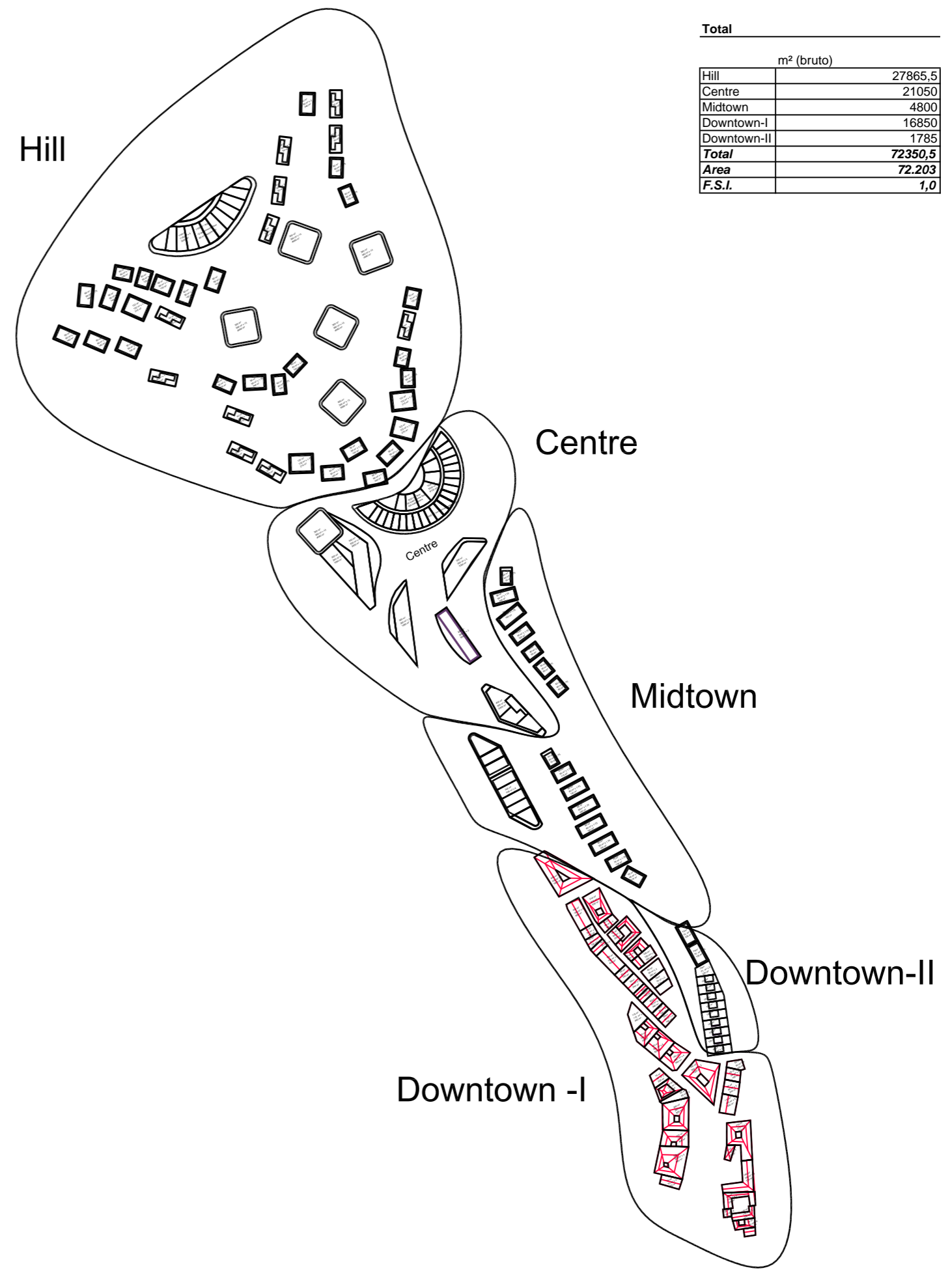
Floorplan ( layers	total m <sup>2</sup> (bruto)	
70	1,5	105
70	1,5	105
75	3	225
60	2,5	150
60	2,5	150
60	2,5	150
60	2,5	150
60	2,5	150
60	2,5	150
60	2,5	150
60	2,5	150
60	2,5	150
60	2,5	150
60	2,5	150

1785 m<sup>2</sup>



**Total**

	m <sup>2</sup> (bruto)	
Hill	27865,5	
Centre	21050	
Midtown	4800	
Downtown-I	16850	
Downtown-II	1785	
<b>Total</b>	<b>72350,5</b>	
<b>Area</b>	<b>72.203</b>	
<b>F.S.I.</b>	<b>1,0</b>	



#. Referenties







