

ENTRADA

13 NOVEMBER 2018

*LESSONS LEARNED
FIRST STEP TO DEVELOPMENT PRINCIPLES*



STEDENBOUW
& STRATEGIE

CONCEPT

CONTENT

1. SPATIAL CONDITIONS

2. PHASING

3. PROGRAM

4. COLLABORATION

SPATIAL CONDITIONS

1. Plot boundaries

2. Sound

3. Accessibility & Parking

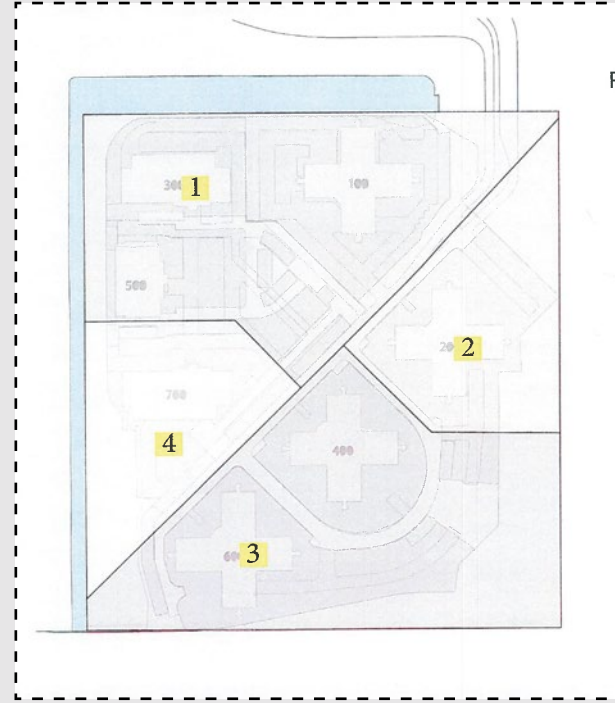
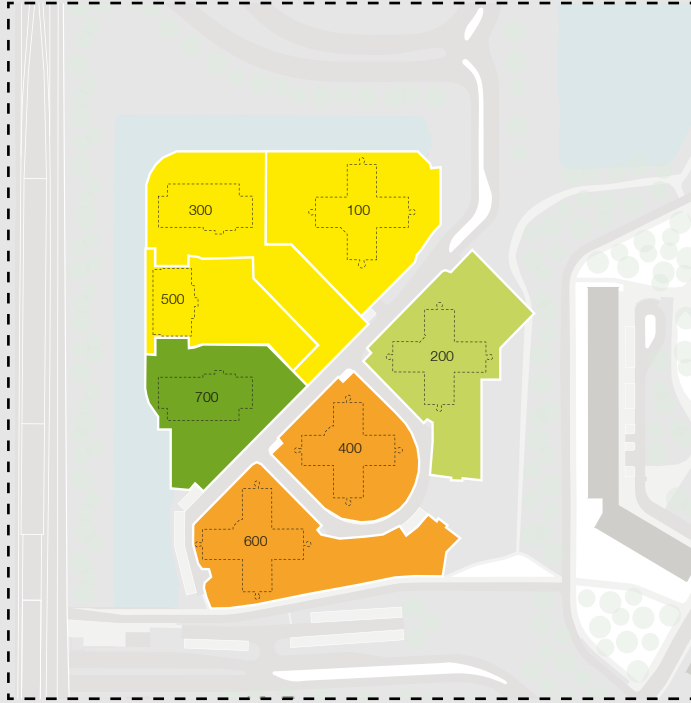
4. Connection to the context

5. Surface level

6. Building heights

7. Urban Quality: Public space

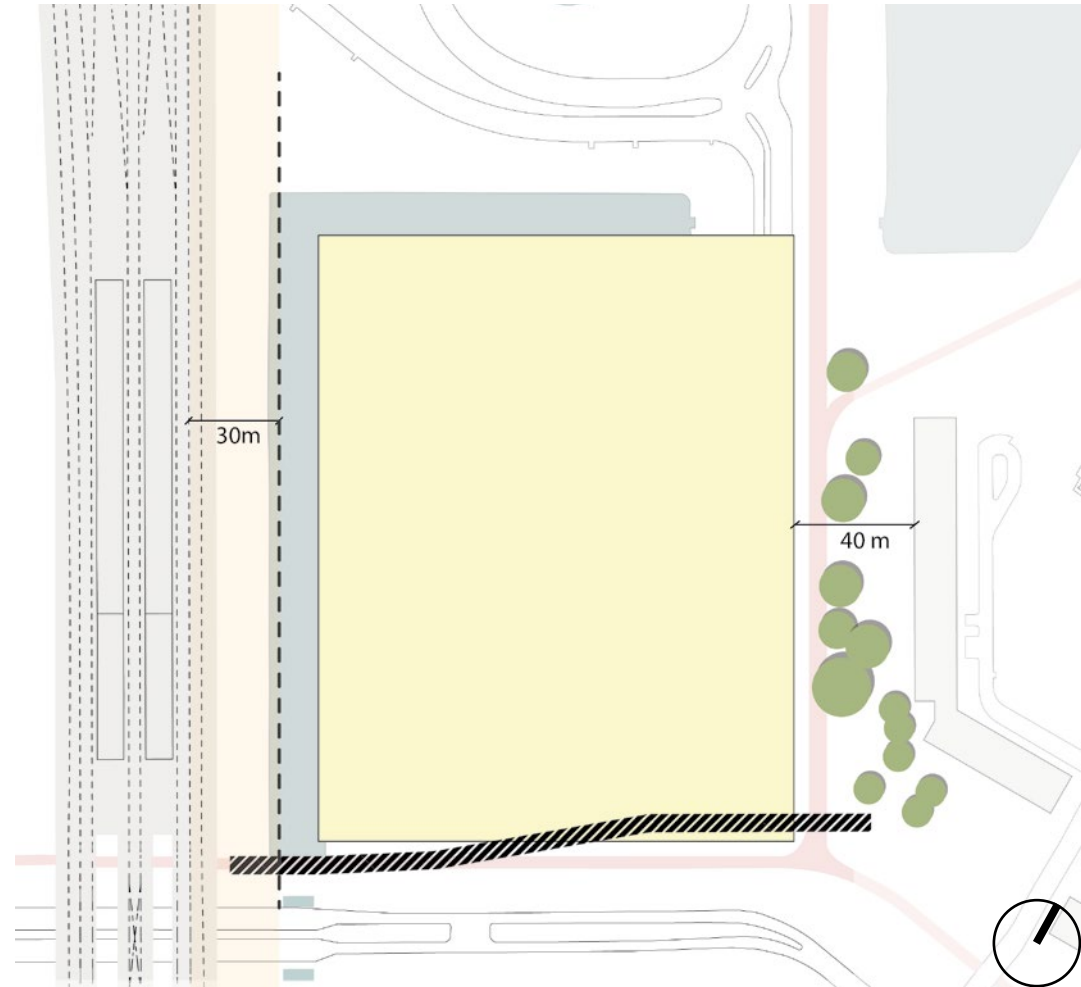
SPATIAL CONDITIONS | PLOT BOUNDARIES



Which boundaries do we need to take into account?

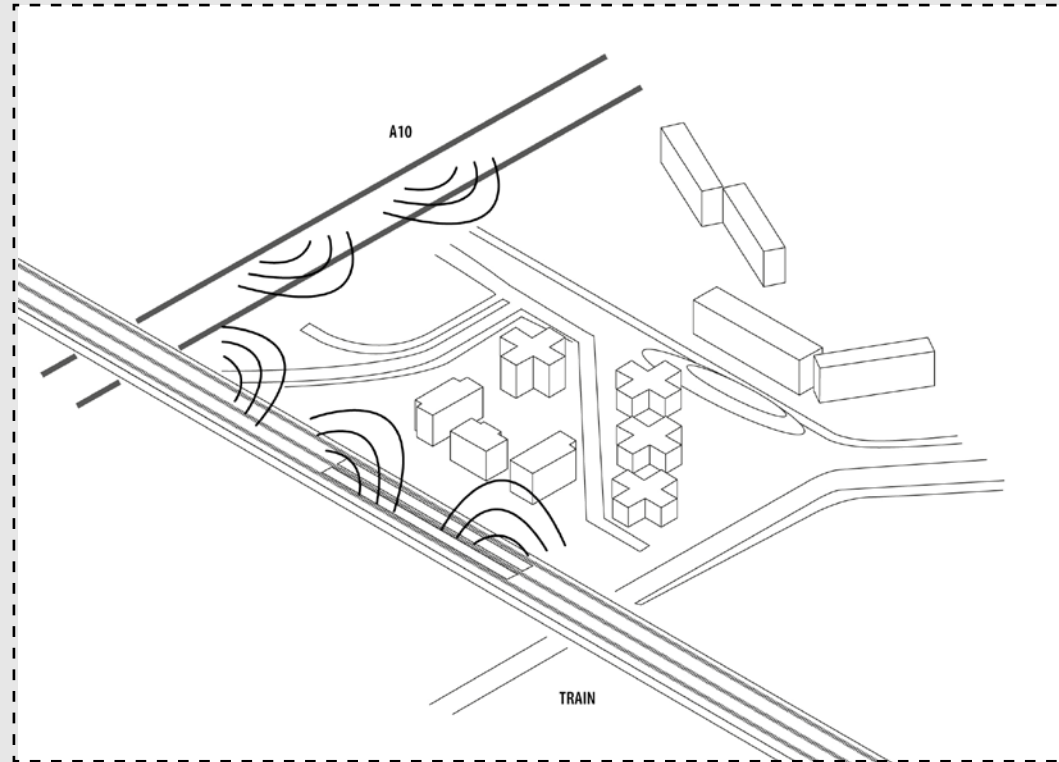
SPATIAL CONDITIONS | PLOT BOUNDARIES

- Safety limit: 30 m from railroad
- Levels of noise pollution: Train - extreme limit value < 68 dB; Road - extreme limit value < 63 dB)
- The current amount of water should be maintained; the water edge forms the building boundary along the A10 & the railway.
- At the Van der Madeweg there are cables and pipes that should be taken into consideration (costs to move them)
- Minimal distance of new buildings to Neptunus building.



SCHEME MAXIMUM BUILDABLE AREA

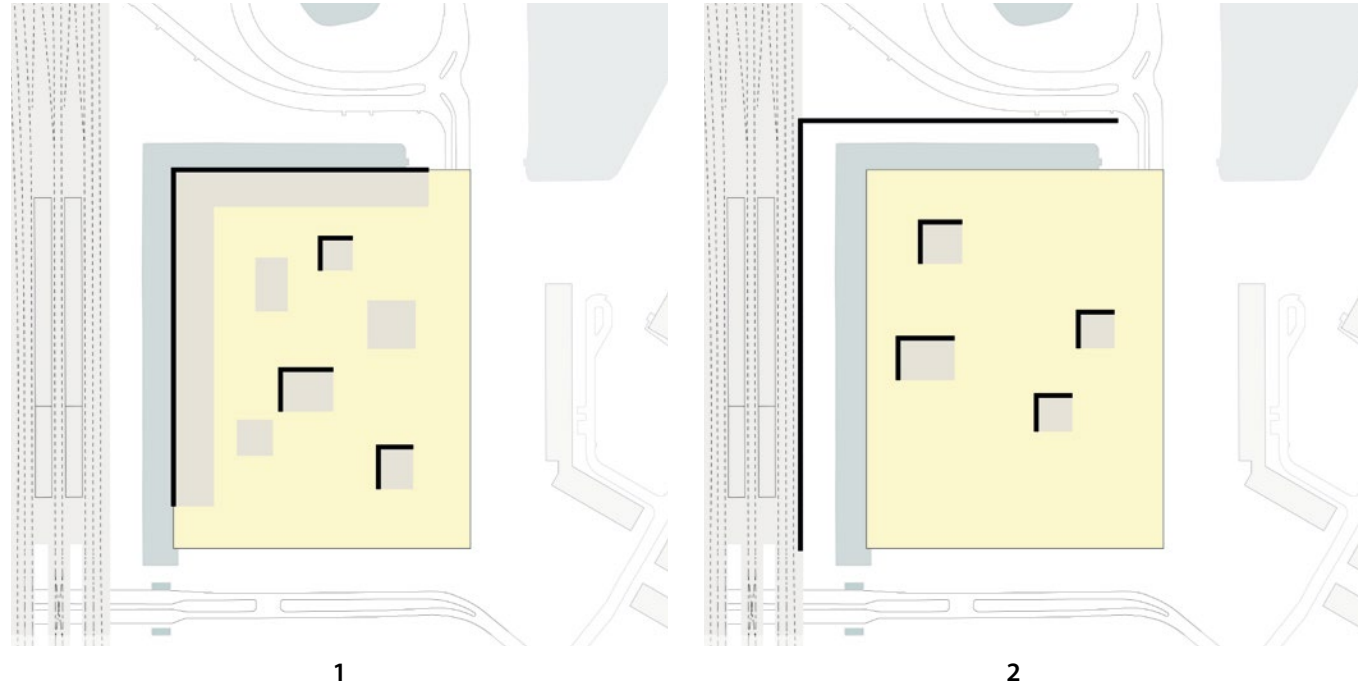
SPATIAL CONDITIONS | SOUND



Which sound measures are needed to make Entrada suitable as residential area?

SPATIAL CONDITIONS | SOUND

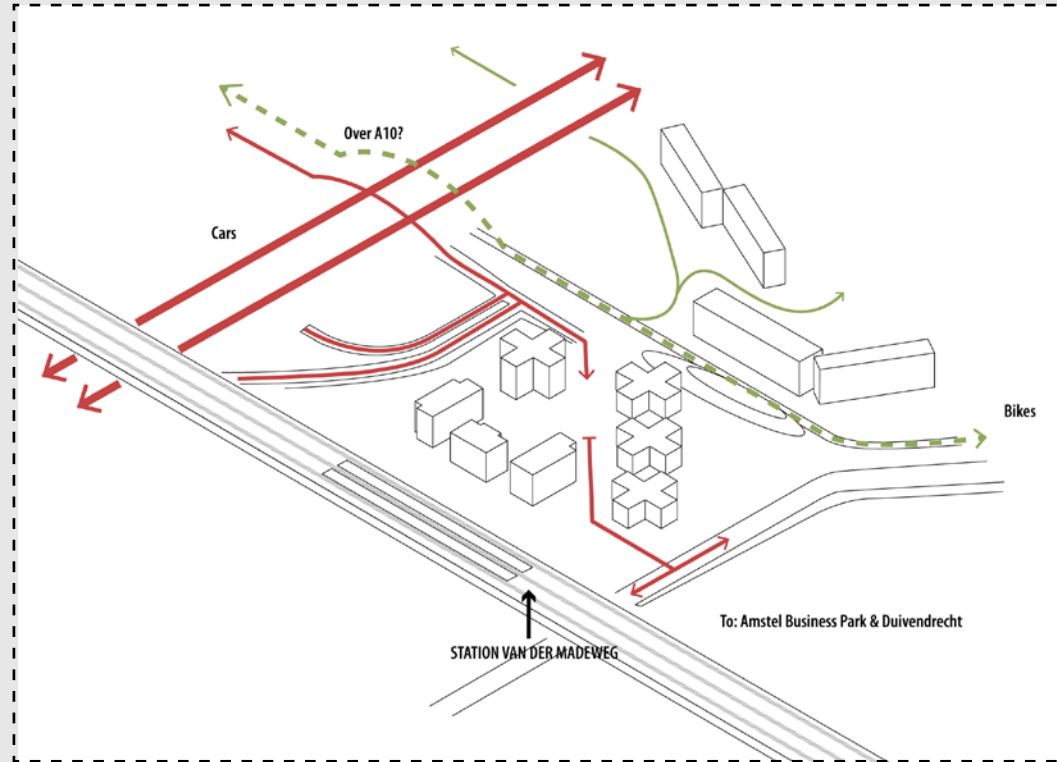
- Option 1: buildings as sound barrier (deaf facade) towers with deaf facade
- Option 2: sound screen + towers with deaf facade



GENERAL REMARKS:

- A sound study is necessary for the development of the urban plan
- The solution for sound barrier is an important factor in phasing possibilities.

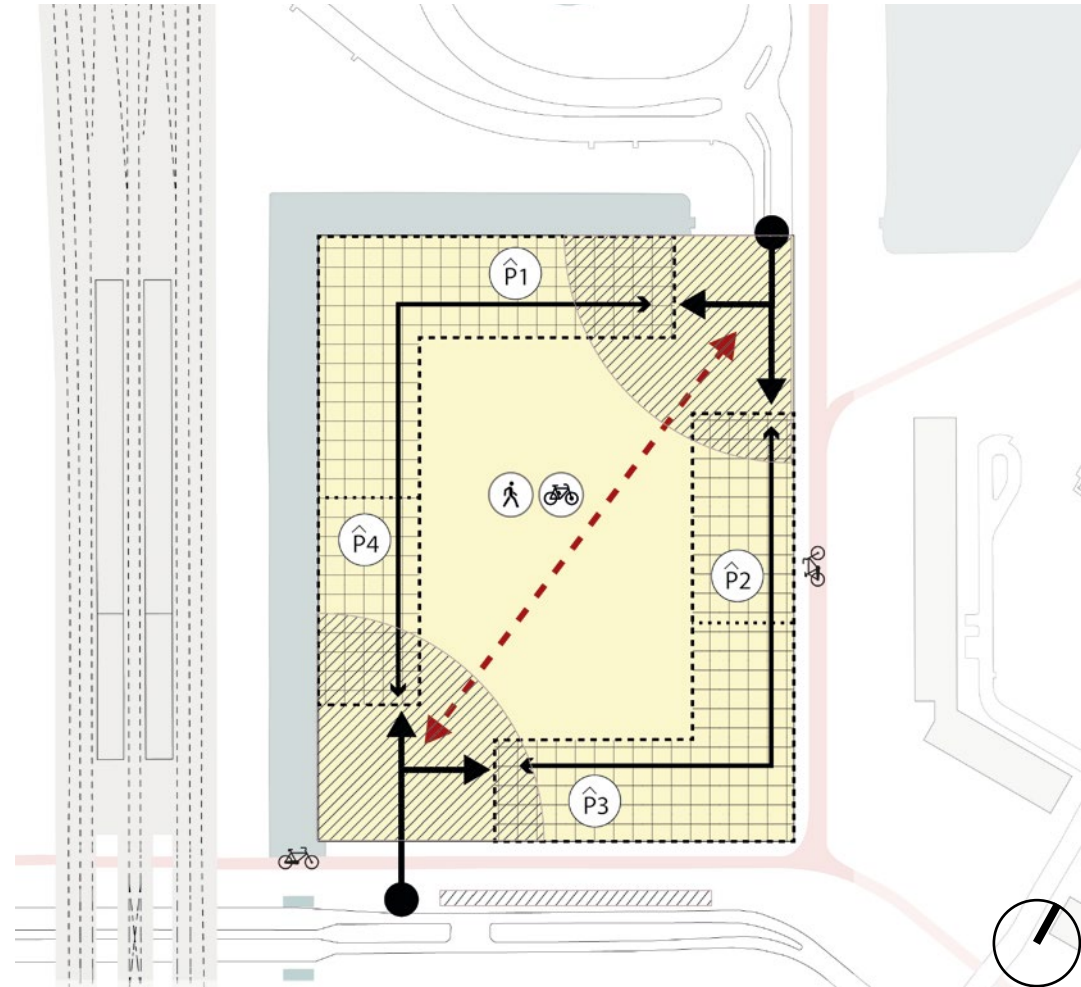
SPATIAL CONDITIONS | ACCESSIBILITY & PARKING



How can we offer residents of Entrada direct access to the A10 and Van der Madeweg, whilst simultenaously blocking other traffic? Can we create sufficient car parking spaces, without parking underneath the public space?

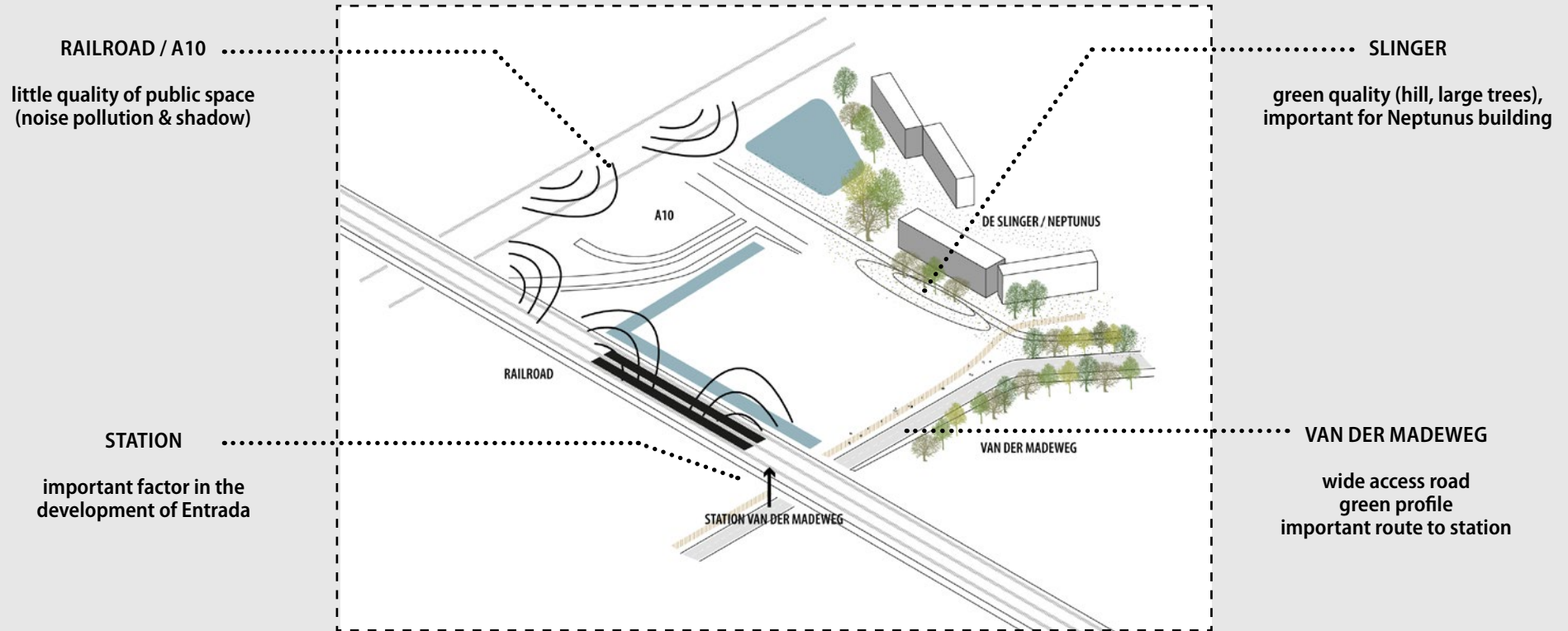
SPATIAL CONDITIONS | ACCESSIBILITY & PARKING

- Two accesses: A10 & Van der Madeweg
- Connection to both access points through parking garage.
- Area is accessible for emergency services (diagonal).
- Location access point at the Van der Madeweg is to be investigated in relation to traffic (safety)
- Parking garages connect two by two to facilitate access to A10 & Van der Madeweg; and to facilitated double use (residents & visitors)
- Parking is positioned under buildings and not under public space: maximize green quality & climate adaptation possibilities.
- Bicycle pads along the plan area; and route through the area.



SCHEME ACCESSIBILITY & PARKING

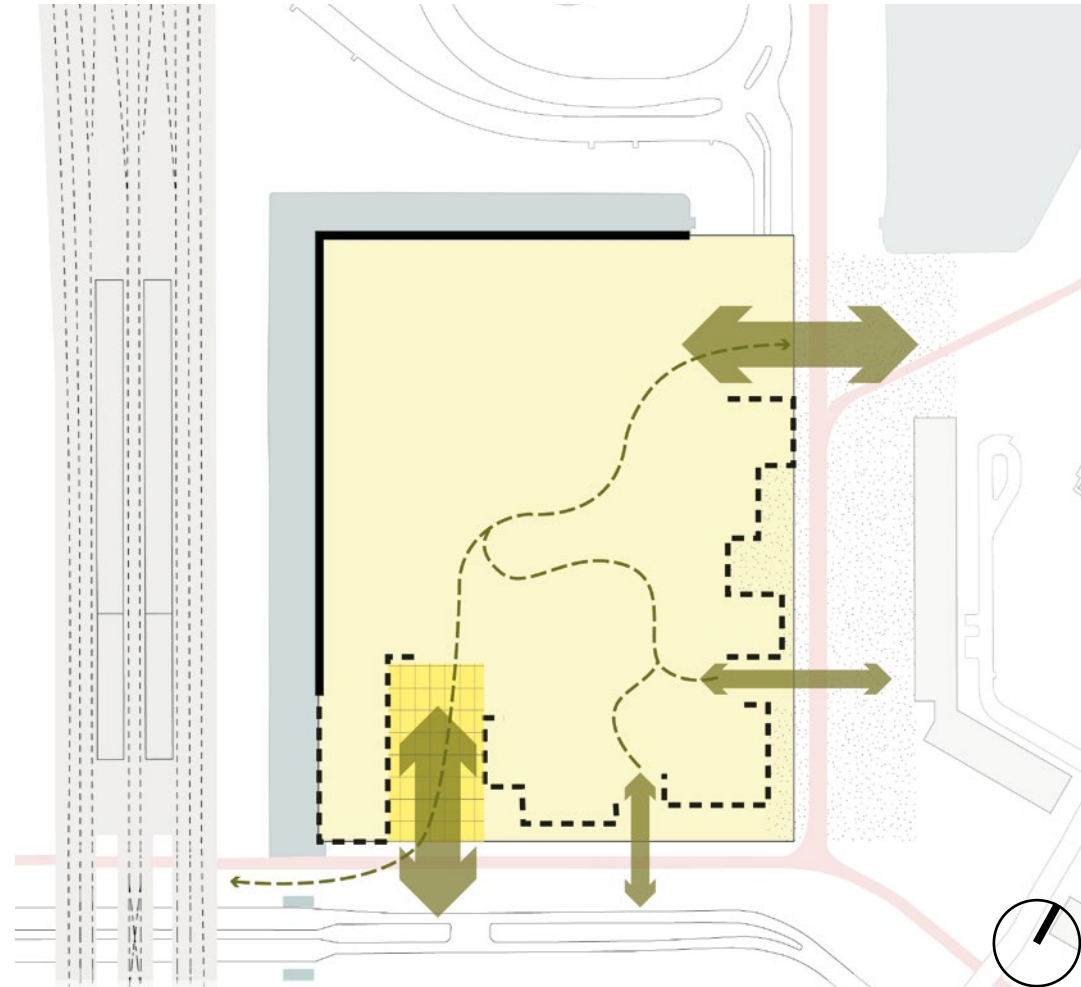
SPATIAL CONDITIONS | CONNECTION TO CONTEXT



How to connect Entrada to its surroundings?

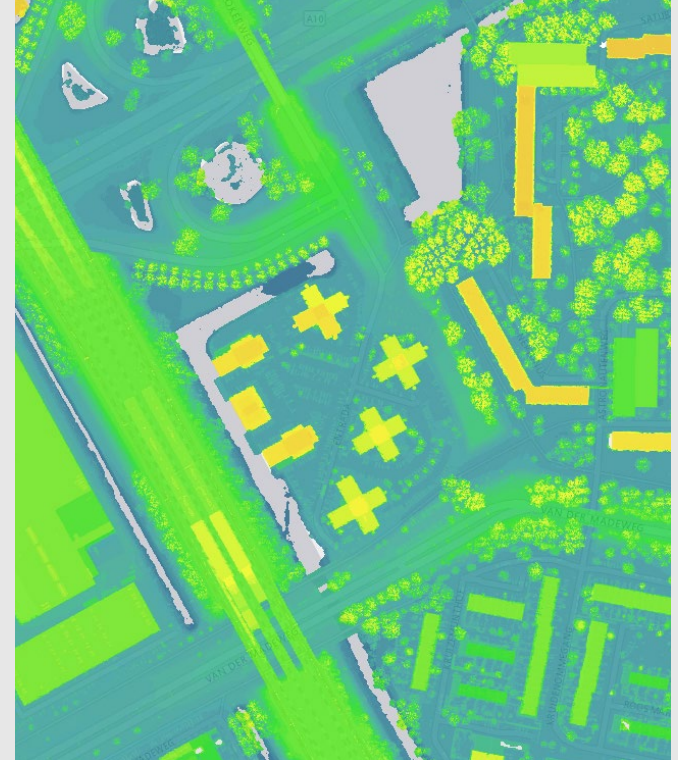
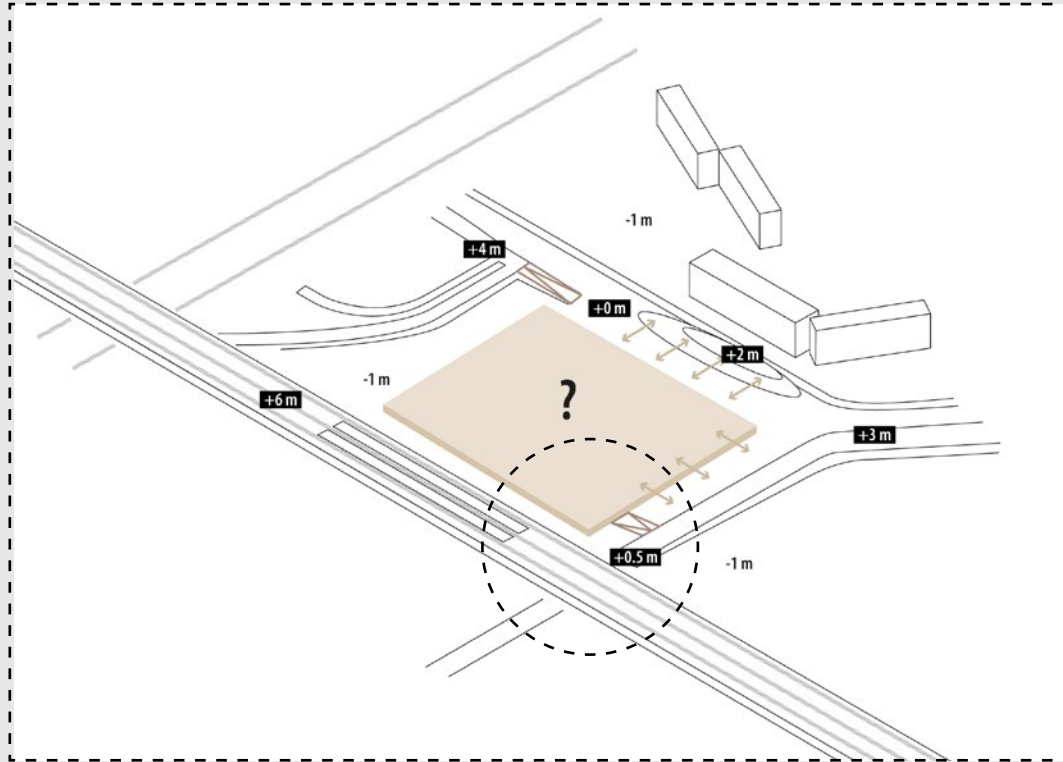
SPATIAL CONDITIONS | CONNECTION TO CONTEXT

- VAN DER MADEWEG: create a street facade with a lively plinth (commercial facilities and entrances) for safe passage to the station.
- SLINGER: embrace the green quality > keep the trees in the green hill.
- RAILROAD / A10: build at the water edge.
- STATION: create a lively station square, with commercial facilities (lively plinth) and entrances.



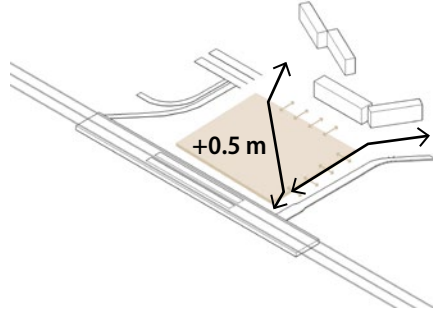
SCHEME CONNECTION TO CONTEXT

SPATIAL CONDITIONS | SURFACE LEVEL



Which surface level would be best to connect Entrada to its surroundings?

SPATIAL CONDITIONS | SURFACE LEVEL: OPTION 1.



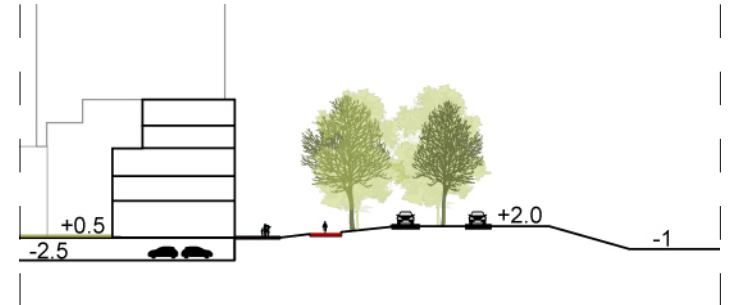
DE SLINGER

addresses and lively plinth at groundlevel (+0.5 NAP)



VAN DER MADEWEG

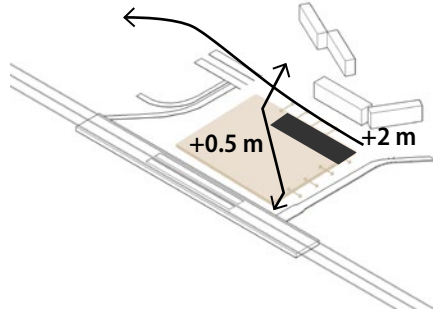
> easy access to Van der Madeweg



GENERAL REMARKS:

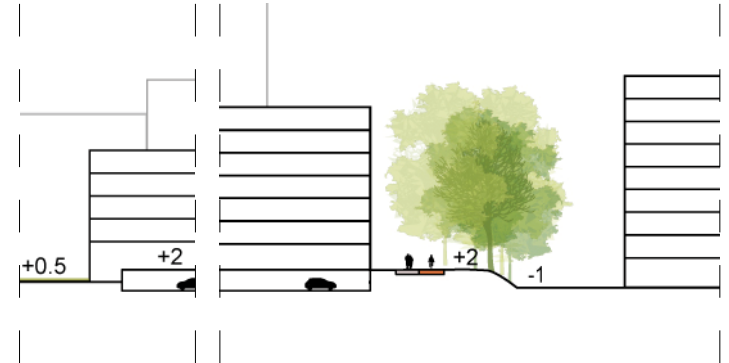
- Raising the entire surface level to +0.5 m creates easier access to the A10 and Van der Madeweg
- The parking garage can be used to raise the entire level from -1 to +0.5 NAP

SPATIAL CONDITIONS | SURFACE LEVEL: OPTION 2.



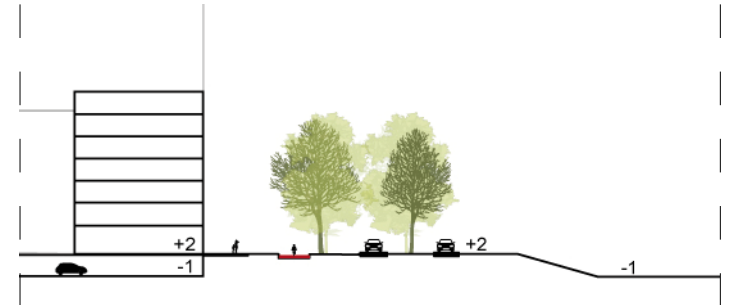
DE SLINGER

*> bike path on the hill,
addresses and lively plinth at groundlevel*



VAN DER MADEWEG

> easy access to Van der Madeweg at high point

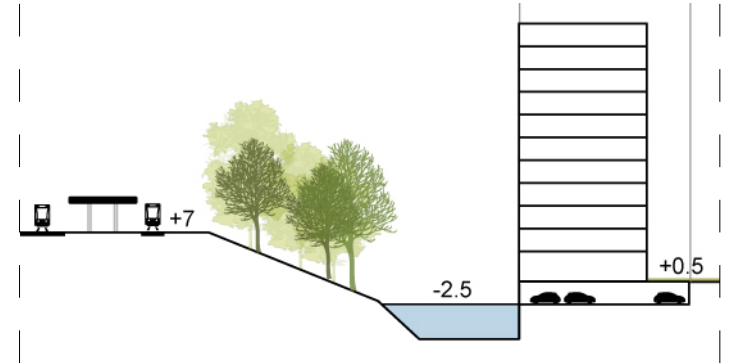


GENERAL REMARKS:

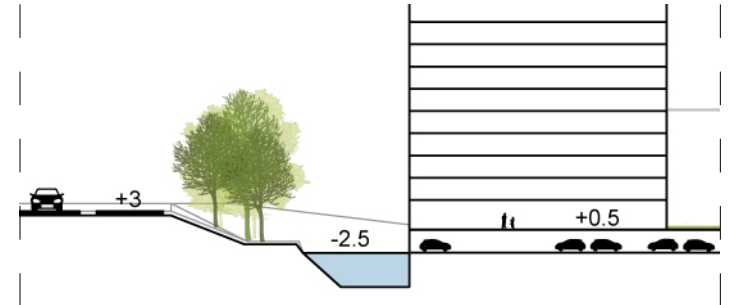
- Interesting height differences within the plan can help distinguish between public and collective spaces

SPATIAL CONDITIONS | SURFACE LEVEL

RAILROAD



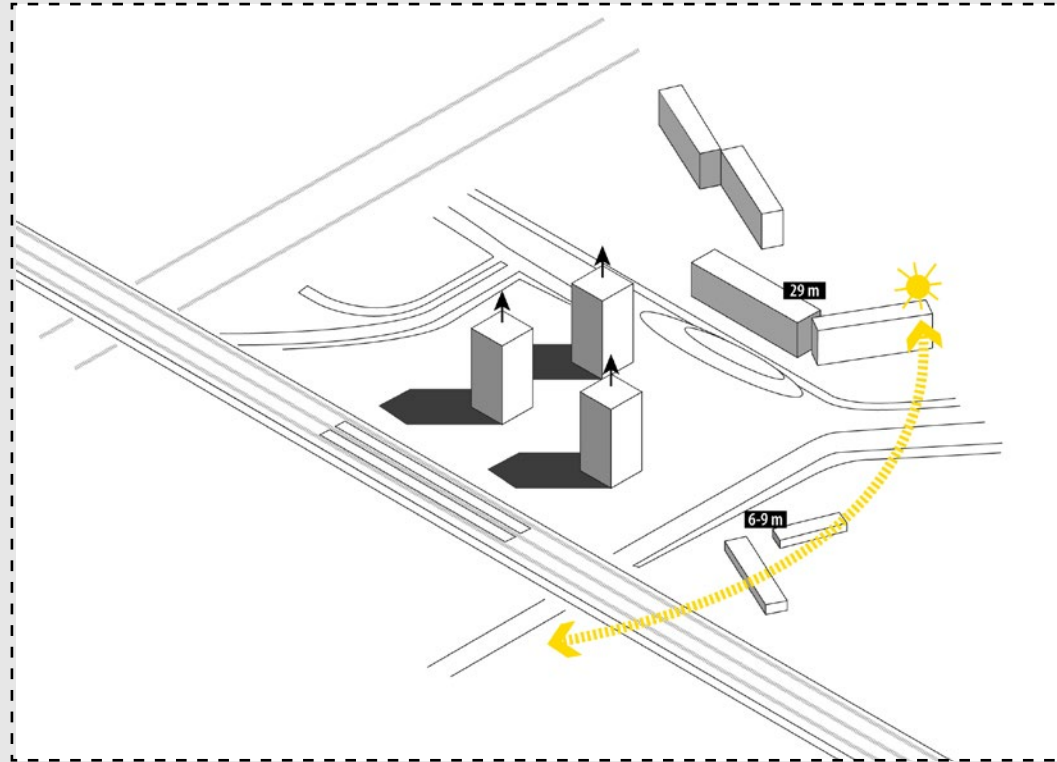
EXIT A10



GENERAL REMARKS:

- Difference between ground level and water level must be taken into account

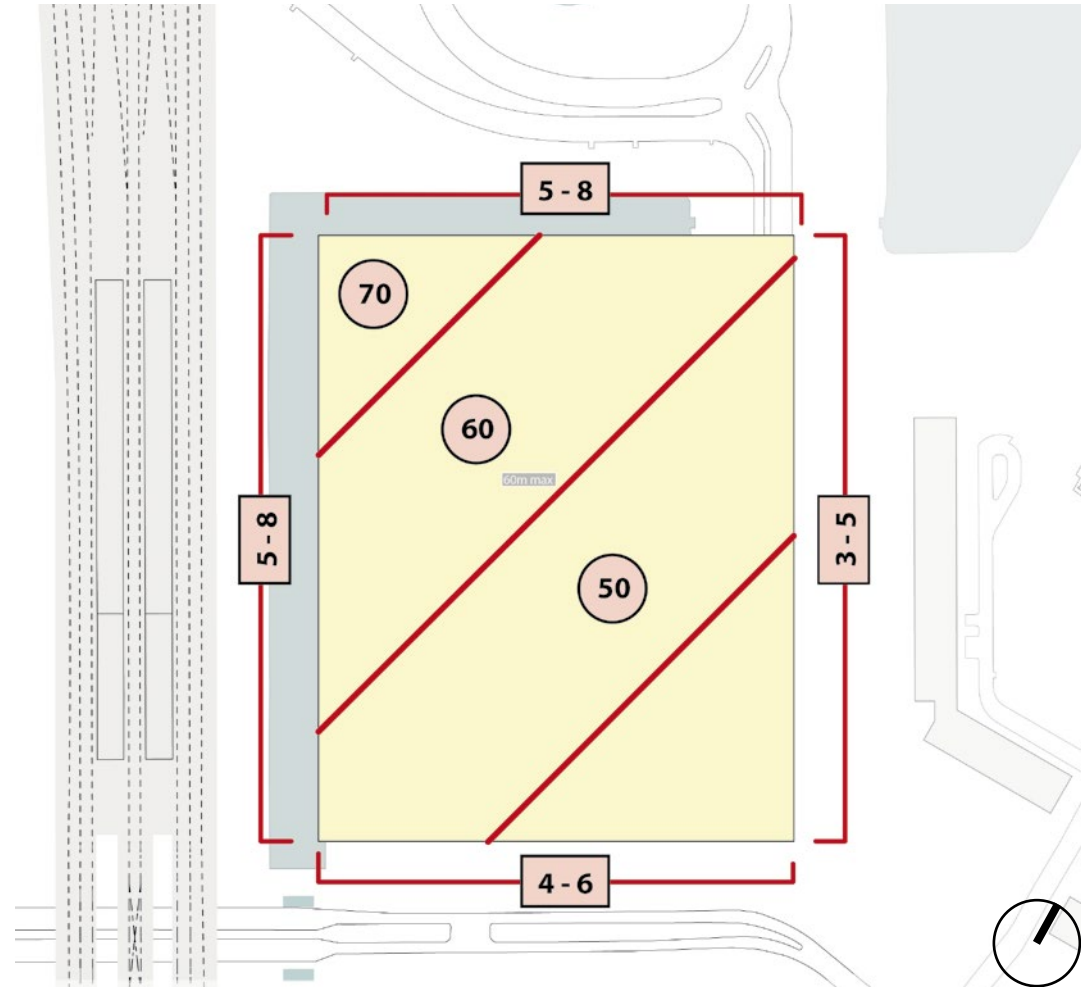
SPATIAL CONDITIONS | BUILDING HEIGHTS



*What should be the maximum building height for Entrada,
taking into consideration the surroundings of Duivendrecht and the living quality in Entrada?*

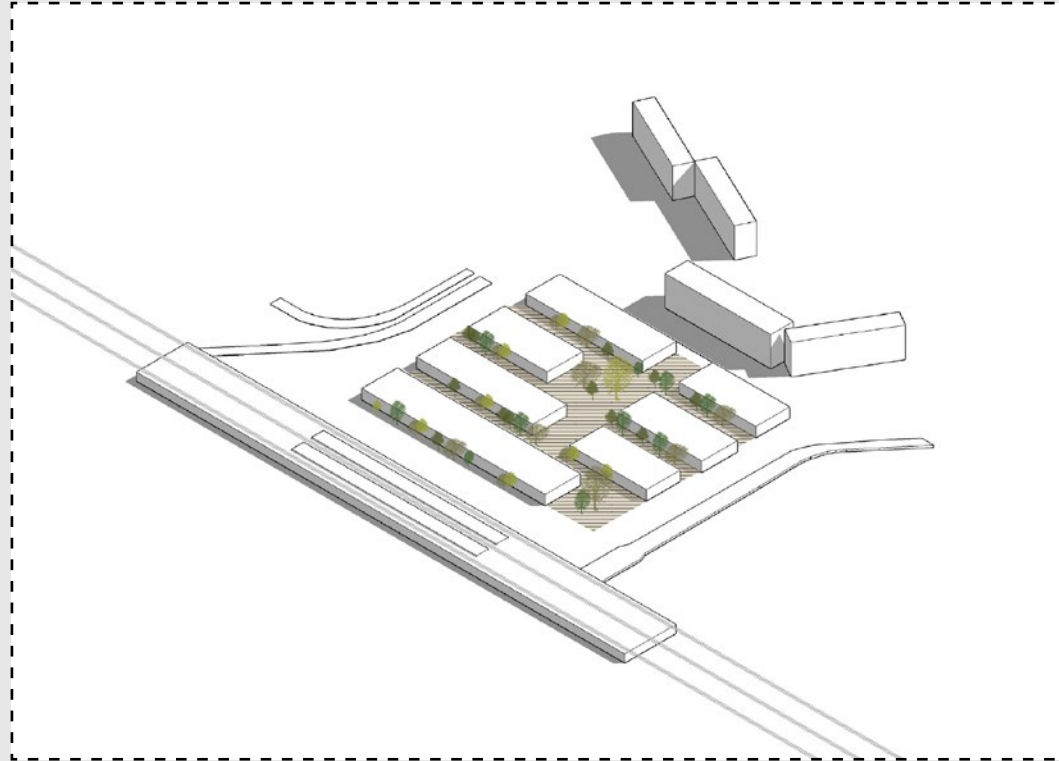
SPATIAL CONDITIONS | BUILDING HEIGHTS

- Differentiation between high-rise (accents) and base (low-rise)
- base height at the Duivendrecht-side must be lower than Neptunus-building > 3-5 layers
- base height at A10 / train can be higher to make a sound barrier > 5-8 layers
- maximum of 5 height accents
- introduce human scale: towers with setbacks, accentuated plinth, ...



SCHEME BUILDING HEIGHTS

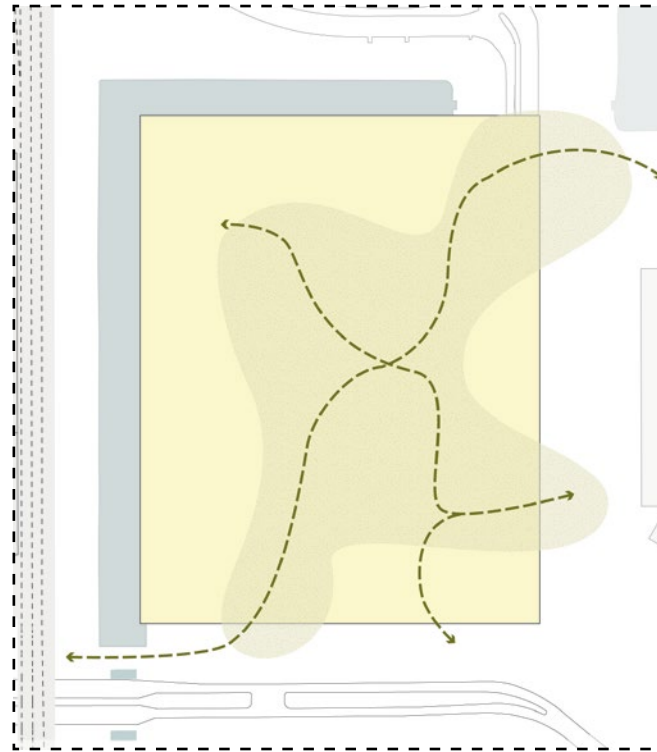
SPATIAL CONDITIONS | PUBLIC SPACE



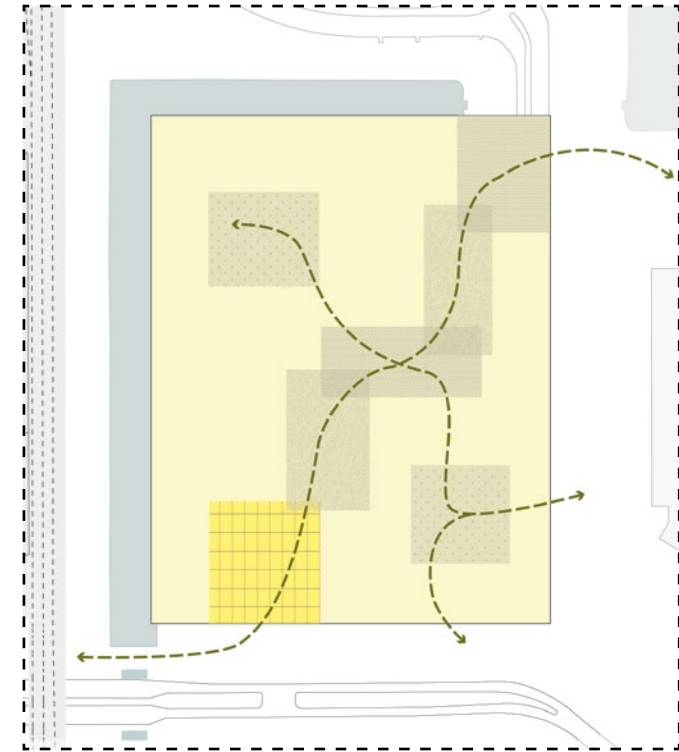
What kind of ground conditions and public space do we want for Entrada?

SPATIAL CONDITIONS | PUBLIC SPACE

- max. 40% built space
- public space must be surrounded by entrances and lively plinths
- noise, shadow and wind must be studied for the design of public space
- make sure the public spaces have a clear use
- Typology of public space suitable: park like space or sequence of public and collective spaces.



LARGE PARK



SEQUENCE OF PUBLIC AND COLLECTIVE SPACES

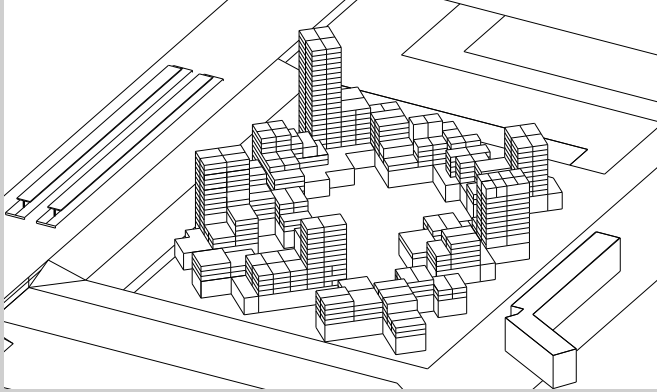
PHASING

Is it possible to develop the location step by step? And what if in the end only parts of the plan are executed?

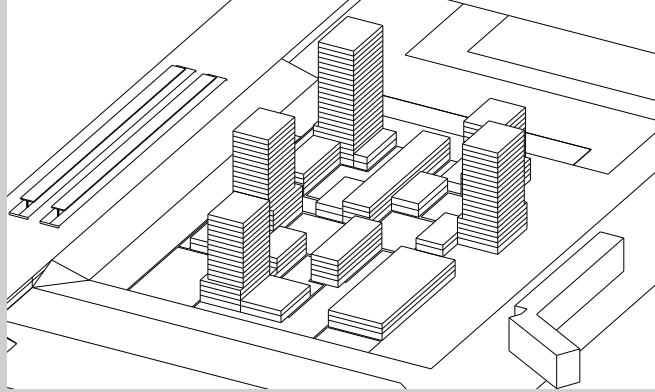
All models are based on current ownership lines to enable separate development, however:

- the sound barrier must be created (first)
- the connected parking garages work best if developed two by two
- (every phase of) Entrada needs a critical mass to offer an interesting living environment
- the best way to put Entrada on the map is to market and develop it as a whole

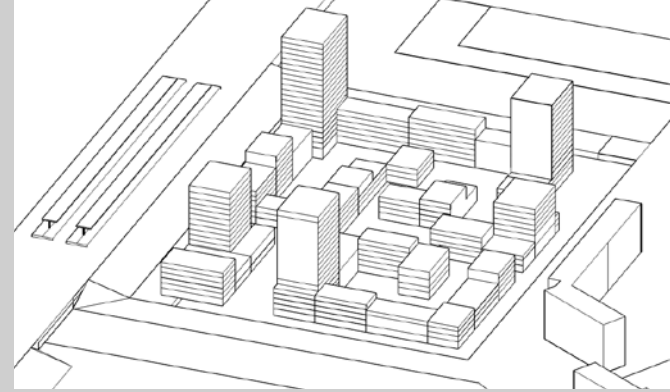
PROGRAM



105.000 m² GFA



90.000 m² GFA



100.000 m² GFA

Is the program of 100.000 m² GFA on this location feasible?

PROGRAM | MODEL 1 (A)

TOTAL GFA **105.000 m²**

SUITABLE FOR HOUSING **74.000 m²**

layer 1 to 3 **9.000 m²**

other layers **65.000 m²**

SUITABLE FOR STORAGE, BIKE PARKING **4.500 m²**

SUITABLE FOR FACILITIES* **25.500 m²**

*** only 15.000 m2 facilities needed**

REALISTIC GFA **95.500 m²**



Plinth: 3 layers

- Dark spaces on plinth: ~ 4.500 m² (suitable for storage)

- Dark spaces on level 1 and 2: ~ 9.000 m²

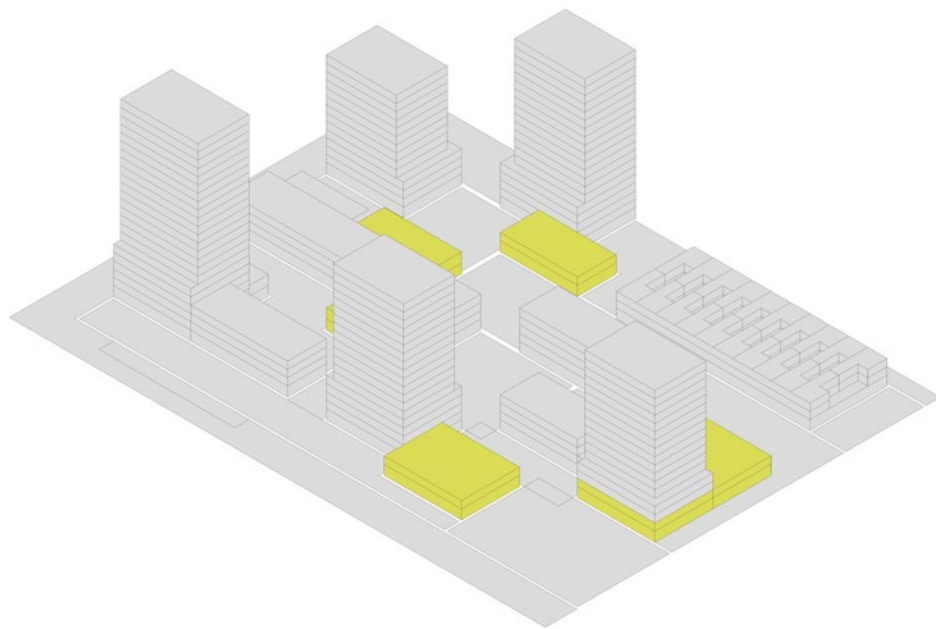
PROGRAM | MODEL 2

TOTAL GFA **90.000 m²**

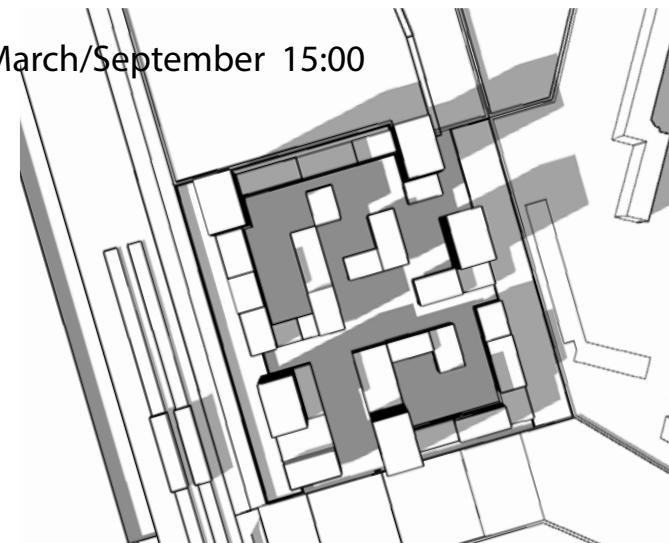
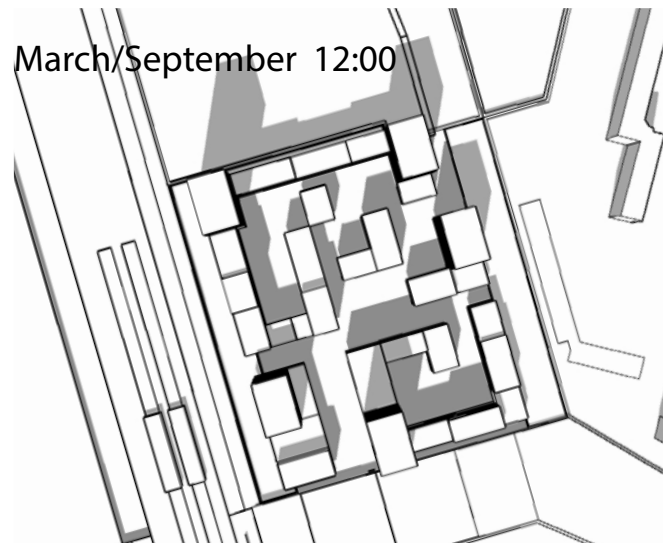
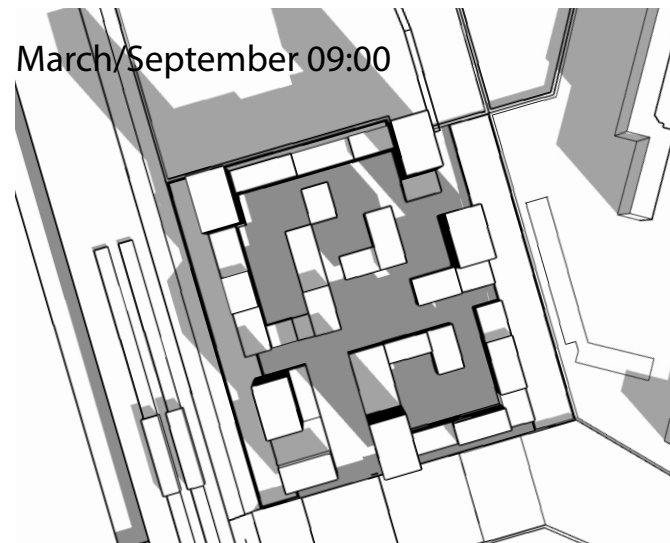
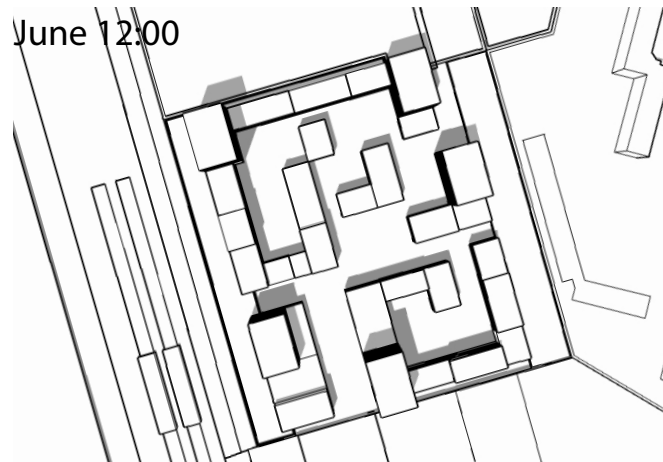
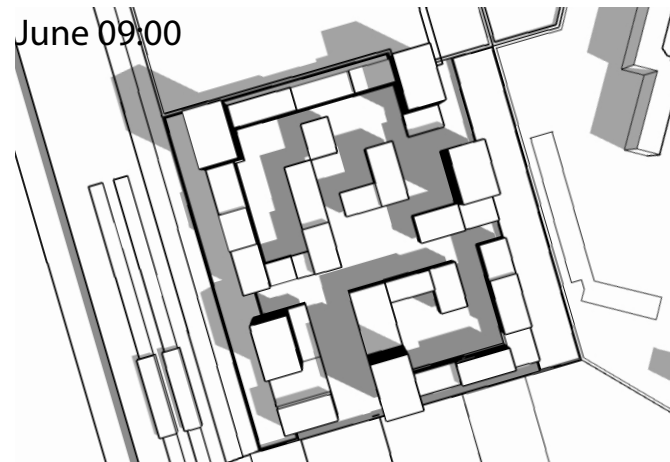
SUITABLE FOR HOUSING **80.160 m²**

SUITABLE FOR OTHER FUNCTIONS* **9.840 m²**

* suitable for public or commercial facilities,
storage and bike parking



PROGRAM | MODEL 3 (B) - 130.000 m²

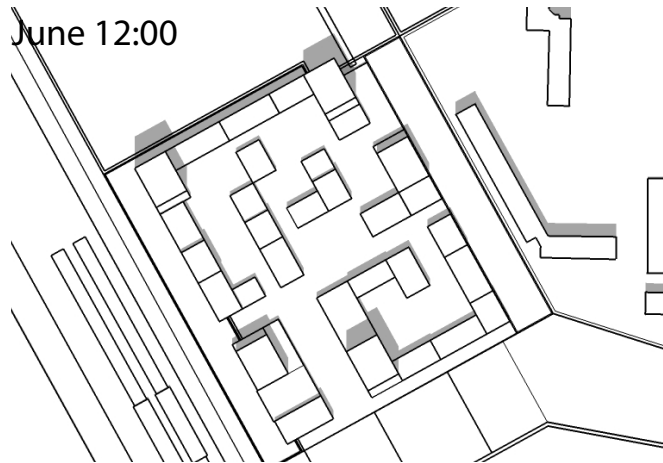


MODEL B | MODEL 3 (B) - 100.000 m²

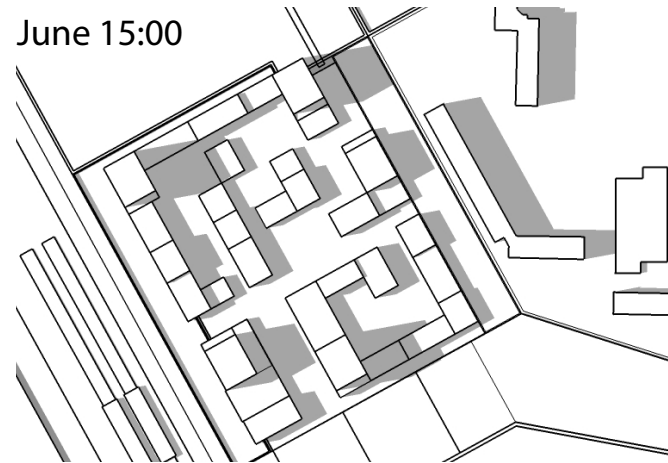
June 09:00



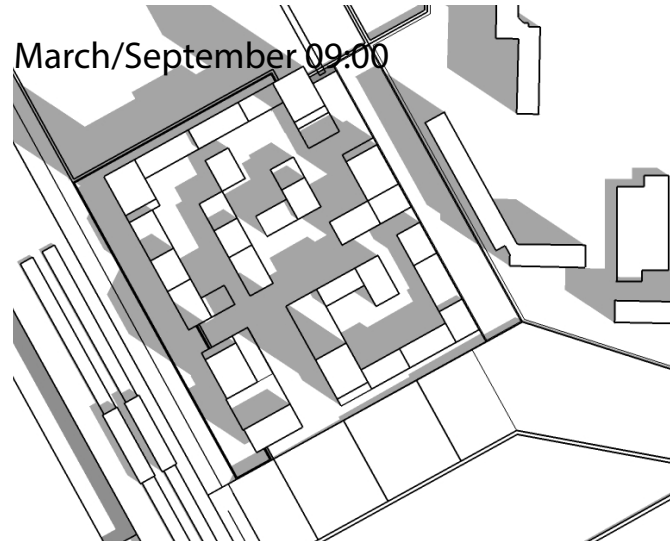
June 12:00



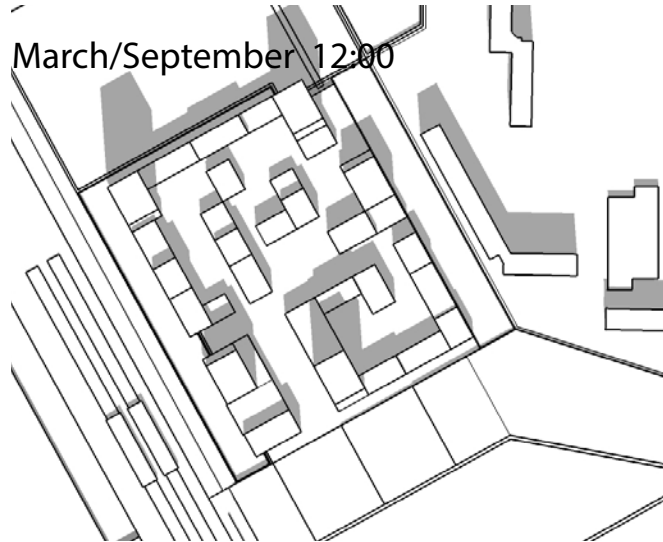
June 15:00



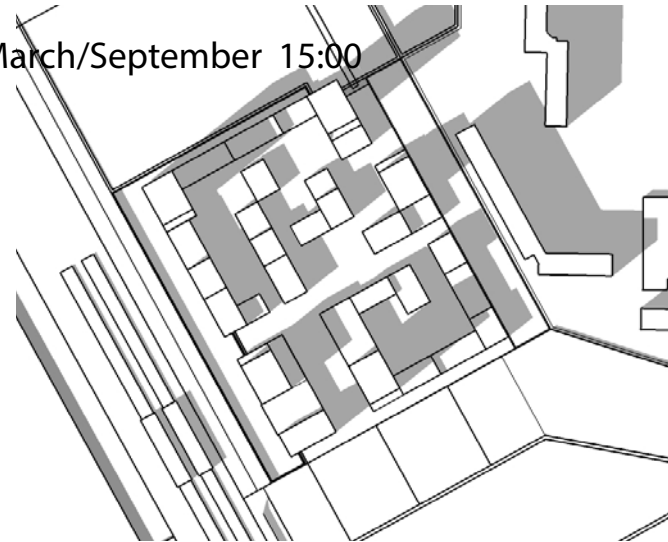
March/September 09:00



March/September 12:00



March/September 15:00



PROGRAM | DIVISION

TOTAL	100.000 GFA
FACILITIES	15.000 GFA
COMMERCIAL FACILITIES	7.500 GFA
PUBLIC FUNCTIONS (7%)	7.500 GFA
RESIDENTIAL	85.000 GFA
30% SOCIAL*	
70% MID & EXPENSIVE RENT, OWNERSHIP	

* Preferably build by corporations

PROGRAM | RESIDENTIAL

SOCIAL HOUSES

≥ 50 m² UFA*

MID & EXPENSIVE RENT / OWNERSHIP

max. 30% SMALL

height from floor to ceiling ≥ 3,5 m

max. 45% MID

≥ 50 m² UFA*

min. 25% LARGE

≥ 70 m² UFA*

* UFA = Usable Floor Area (gebruiksoppervlakte)

COLLABORATION

Can the current ownership division serve as a good base for the development of Entrada?

YES

- all the models take the current ownership into account
- the plot division creates an interesting pattern for public space

HOWEVER

- collaboration is necessary for accessibility
- collaboration makes parking solutions easier and more efficient
- the sound conditions make phasing complex

COLLABORATION

Entrada needs a strong identity, as the site offers little quality by itself

ENTRADA NEEDS COHERENCY

The site is too small and the division too complex to establish coherency through a grid of streets and blocks

ENTRADA NEEDS AN URBAN PLAN