

European green premises

Tools for integrating nature in developments

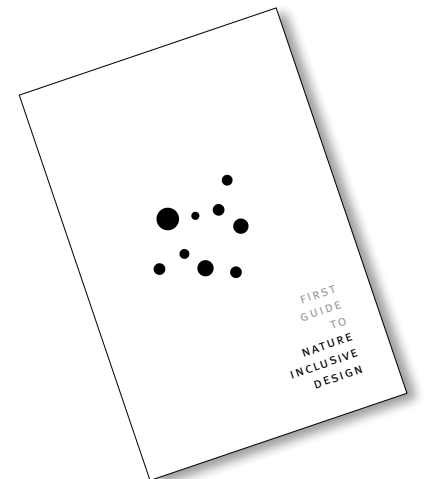
Maike van Stiphout - www.dsla.nl

2022.09.15 Wiesbaden

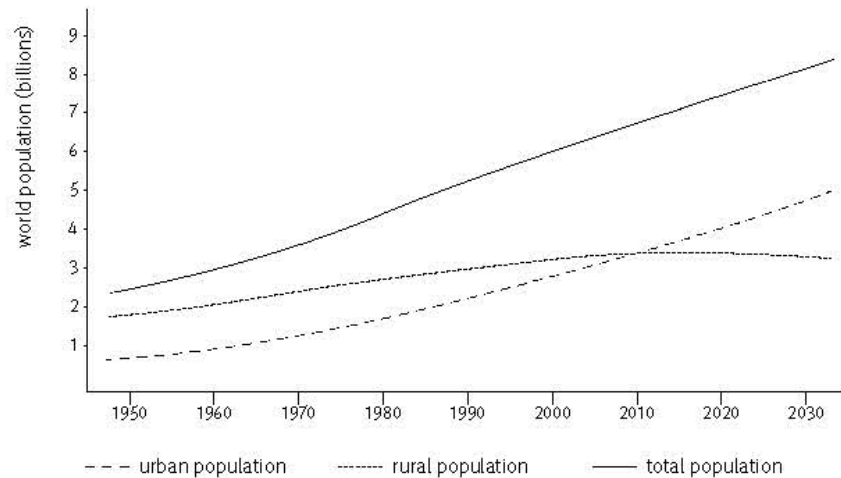
. quality of live+

**. tools for biodiversity
oriented developments**

. tools for nature inclusive design

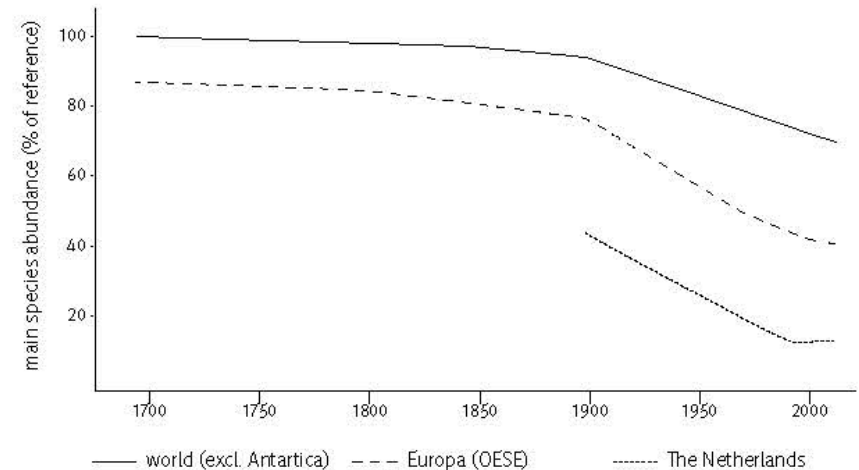


quality of live+



The growth of the world population only takes place in cities.

Herman Sittrop grafisch realisatiebureau, Biowetenschappen en Maatschappij

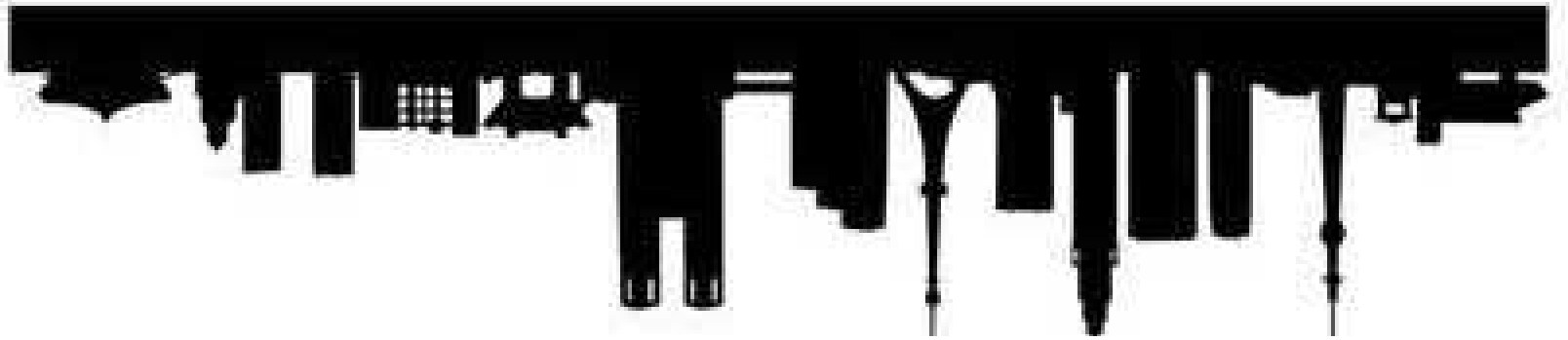


Main species abundance

PBL Netherlands Environmental Assessment Agency, 2013

the time is right

quality of live+



“If you took the city of Tokyo and turned it upside down and shook it you would be amazed at the animals that fall out: badgers, wolves, boa constrictors, crocodiles, ostriches, baboons, capybaras, wild boars, leopards, manatees, ruminants, in untold numbers.”

Yann Martel - Life of Pi

quality of live+

Bosco Verticale is improving the quality of life of the inhabitants and the neighbourhood

2 million litres of rainwater per year

catching **fine dust** particles

producing **O₂** and absorbing **CO₂**

4-6 degrees lower in temperature

making people **happy and healthy**

quality of live+

HOTEL/RÉSIDENTICE
DE SERVICES



ROOFTOP CAFÉ



FERME URBAINE



STUDIOS
D'ENREGISTREMENT



CENTRE SPORTIF



SALLE DE DANSE



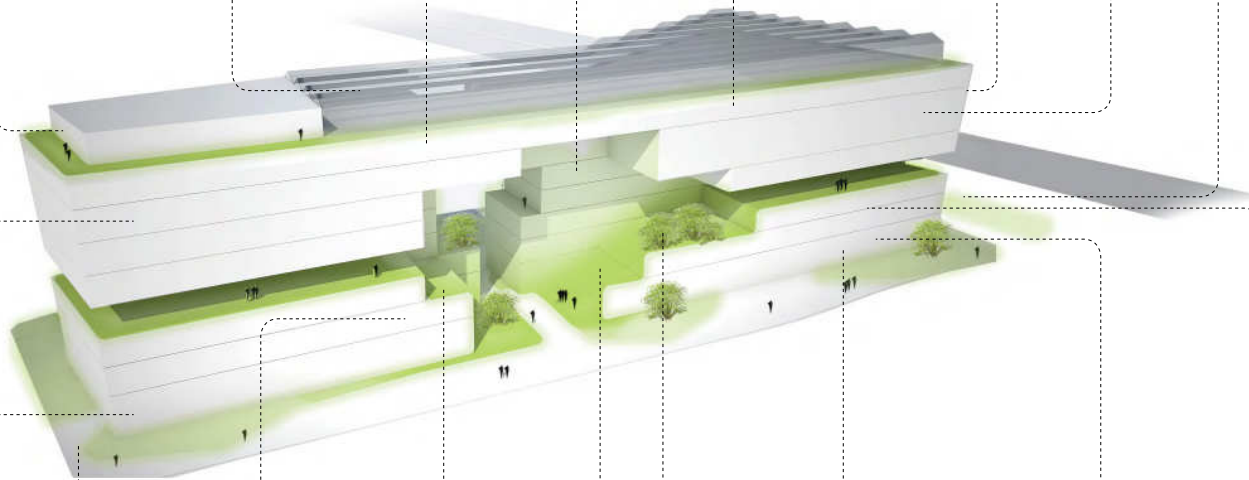
FAÇADE VÉGÉTALE



AUDITORIUM



HUB DE MOBILITE



COMMERCE



ESPACES COMMUNS



CRÈCHE



PLAY GROUND



AMÉNAGEMENT
RÉALISÉ EN
CONCERTATION



ESPACES COMMUNS
VEGETALISES



PLATEFORME
LOGISTIQUE



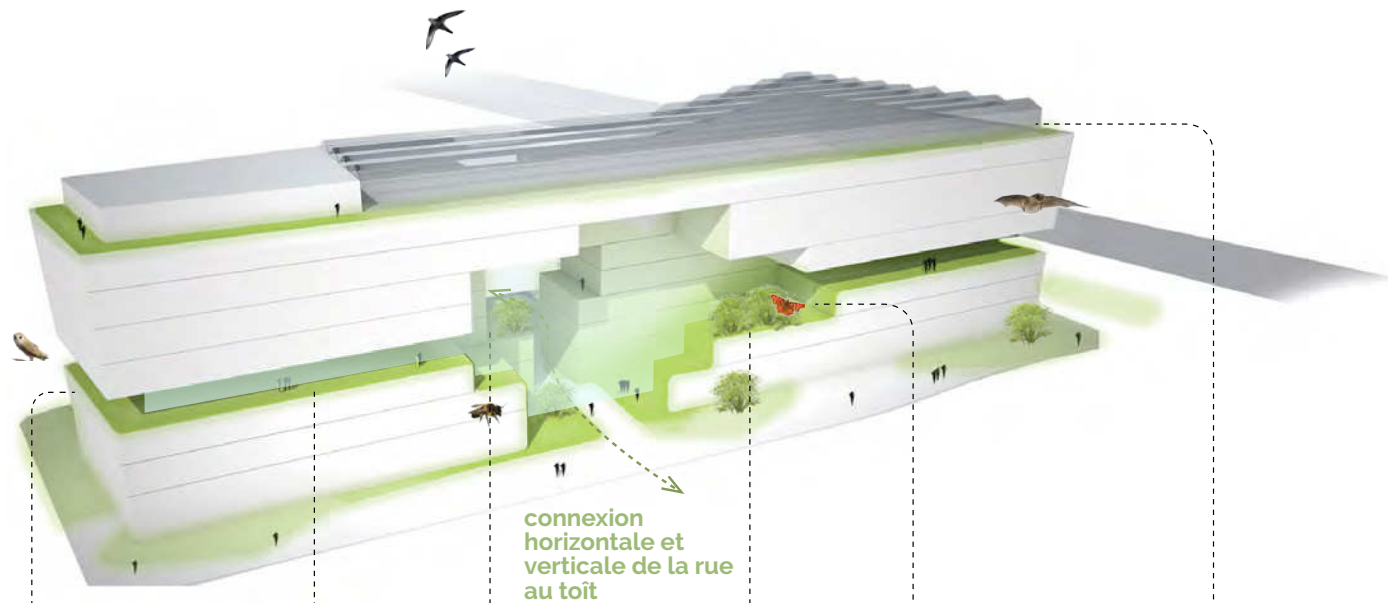
MARCHÉ
ALIMENTAIRE



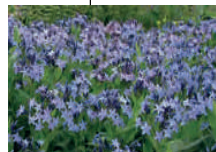
INCUBATEUR ET
COWORKING

the requirements for men

quality of live+



Façade vivante pour la faune et la flore



Fleurs et plantes aux différentes saisons



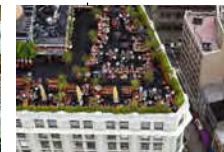
Façades végétalisées intérieure et extérieure



Plantes comestibles poussant sur le bâtiment



Des arbres dans les espaces communs régulent la qualité de l'air et l'humidité



Une toiture verte fonctionnelle, qui réduit la pollution et crée une atmosphère agréable

the requirements for plants and animals

quality of live+

	vliegopening nestkast			nestkastmaat			ophanghoogte	gevel richting
	breedte in mm	hoogte in mm	doorsnede in mm	breedte in mm	hoogte in mm	diepte in mm	boven maaiveld	
vogels								
huismus			35	120	260	120	1-10 meter	N-O
steenuil			65-70	300	200	800	2-10 meter	N-O, N-W, N
pimpelmees, matkop, glanskop, kuifmees			26-28	100	200	100	3-5 meter	Z, Z-O, O
koolmees, gekraagde roodstaart, bonte vliegenvanger			32-35	130	250	130	3-5 meter	Z, Z-O, O
spreeuw, kleine bonte specht			32-35	130	250	130	3-5 meter	Z, Z-O, O
middelste bonte specht, groene specht			60	130	500	150	3-5 meter	Z, Z-O, O
bosuil			150	400	600	400	3-5 meter	N-O, N-W, N
kerkuil	150	150		400	600	400	3-5 meter	N-O, N-W, N
torenvalk	400	150		400	300	400	3-5 meter	N-O, N-W, N
gierzwaluw	65	30		300	125	200	3-20 meter	N-O, N-W, N
huiszwaluw (kolonie)	155	75		155	155	170	6-10 meter	Z, Z-O, O
slechtvalk							20-60 meter	Z, Z-O, O, N-O
zoogdieren								
	breedte in mm	hoogte in mm		breedte in mm	hoogte in mm	diepte in mm	boven maaiveld	
meervleermuis	60	15		140	270	140	5-10 meter	Z, Z-W
baardvleermuis	60	15		140	270	140	3-15 meter	Z, Z-W, Z-O
gewone dwergvleermuis	60	15		140	270	140	4-10 meter	W, Z, O
Franjestaart	60	15		140	270	140	4-10 meter	W, Z, O
Laatvlieger	60	15		140	270	140	10-15 meter	Z, W
ruige dwergvleermuis	60	15		140	270	140	4-10 meter	W, Z, O
gewone grootoorvleermuis	60	15		140	270	140	4-10 meter	W, Z, O
grijze grootoorvleermuis	60	15		140	270	140	4-10 meter	W, Z, O
insecten								
	muurspleten en nestelgaten						ophanghoogte	gevel richting
	breedte in mm	hoogte in mm	doorsnede in mm	breedte in mm	hoogte in mm	diepte in mm	boven maaiveld	
hommels:	muurspleten							
Tuinhommel	5 – 7						1-10 meter	Z, Z-O
Steenhommel	5 – 7						1-10 meter	Z, Z-O
solitaire bijen en wespen:			nestelgaten Ø					
Behangersbijen			5 – 6				1-10 meter	Z, Z-O
Klokjesbijen			3 – 6				1-10 meter	Z, Z-O
Maskerbijen			2 – 4				1-10 meter	Z, Z-O
Metselbijen			5 – 7				1-10 meter	Z, Z-O
Tronkenbijen			2 – 5				1-10 meter	Z, Z-O
Wolbijen			12				1-10 meter	Z, Z-O
Muurwespen			3 – 6				1-10 meter	Z, Z-O
overwinterende vlinders:								
Citroenvlinder	8-12	60-100		300	120	280	2-4 meter	Z, Z-O, O
Dagpauwoog	8-12	60-100		300	120	280	2-4 meter	Z, Z-O, O
Gehakkelde Aurelia	8-12	60-100		300	120	280	2-4 meter	Z, Z-O, O

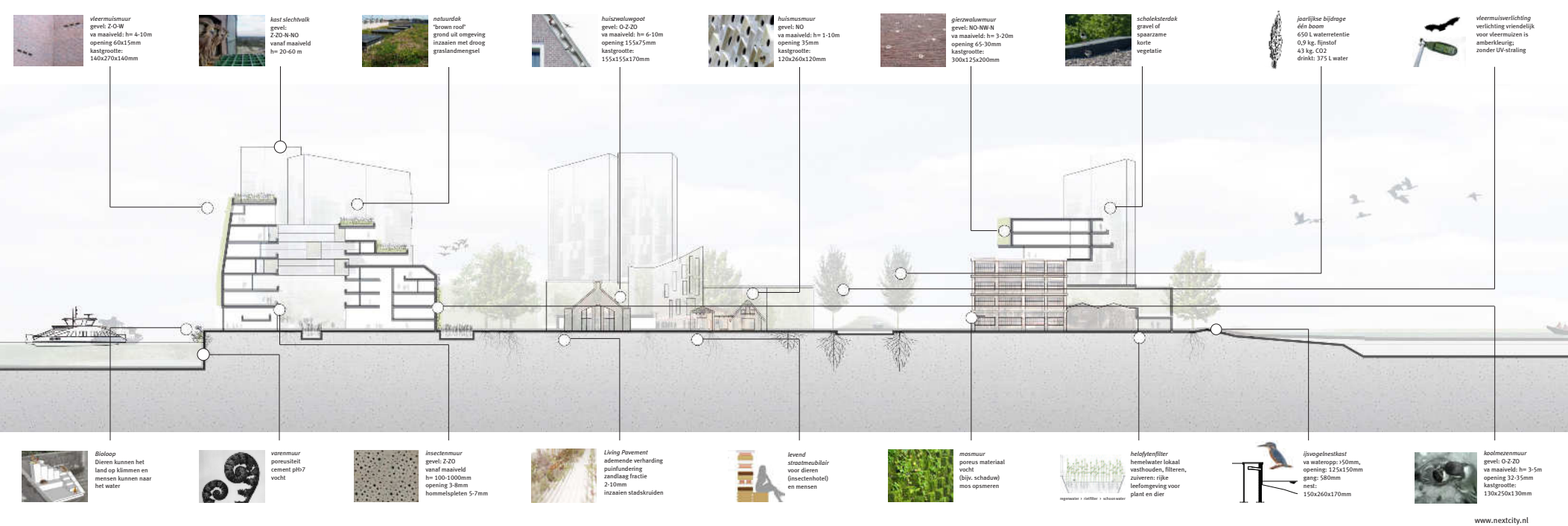
the requirements for plants and animals

quality of live+



the requirements for animals

quality of live+



www.nextcity.nl

the requirements for animals in planning phase



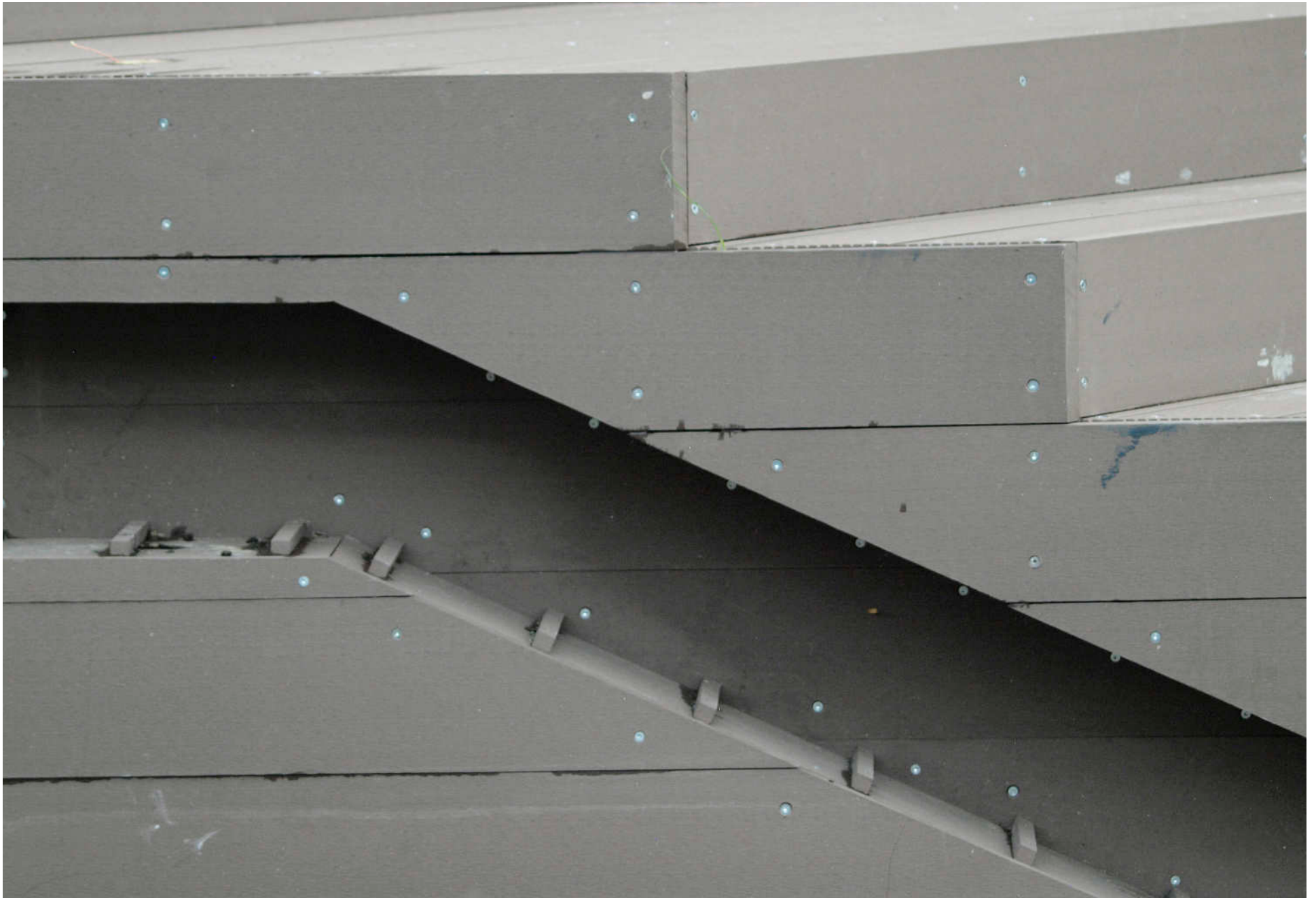
Ecole de biodiversite - Boulogne Billancourt - Parijs



Scratches for bads under the bridge deck, Kattenbrug, KorthTielens architecten, DS



Bioloop, for men and animals - nextcity.nl



Bioloop, for men and animals - nextcity.nl



Passage for mammals, next architects

biodiversity oriented development



- situation
- starting points
- property
- nature development
- maintenance
- costs and results
- communication and coordination

www.kanbouwen.nl

biodiversity oriented development

geografic spreading
over different land-
scape types and
soils



biodiversity oriented development

	   <i>huizenbroeders</i>	      <i>holenbroeders</i>	   <i>parkvogels</i>	  <i>boomvogels</i>	  <i>struikvogels</i>	  <i>vogels van jonge wijkaanplant</i>
<i>Egelshoek</i>	+	+	++	++	++	++
<i>Rieteland oost</i>	+	+	+	+	+	+
<i>De Kersentuin</i>	+	0	+	+	+	+
<i>Haverleij - Leliënhuyze</i>	+	0	+	+	0	0
<i>GWL-terrein</i>	0	0	+	+	+	+
<i>Zuiderburen</i>	-	-	0	0	0	+
<i>'t Zand</i>	-	-	0	0	0	0

in buildings

Stadsvogelindicator: Vogelbescherming NL

++	+	0	-	--
<i>far above national average</i>	<i>above national average</i>	<i>on national average (benchmark)</i>	<i>under national average</i>	<i>far under national average</i>

Birds are good indicators of the quality of nature

biodiversity oriented development

	verbinding natuur omgeving	behoud vegetatie	inheemse vegetatie	water retentie	zelfbeheer en gedeelde tuinen
EVA-Lanxmeer	+	++	++	++	++
De Kersentuin	-	-	++	++	++
Haverleij - Leliënhuyze	++	-	++	++	-
GWL-terrein	-	-	++	++	++
Egelshoek	++	+	++	++	++
Bosrijk	++	++	++	++	+
Achter 't Holthuis	++	++	++	++	-
Groot Holthuizen	++	+	++	++	+ -
Rieteland oost	++		+	++	-
Zuidhoek	++		+	++	-
't Zand	++	+	++	++	+ -
Zuiderburen	++	+ -	+	++	-

basics

nestplaatsen	nestkasten	weinig verharding	gemengde hagen	zachte oeveren	klimplanten	beplante daken
+ -	++	++	++	++	+ -	+ -
++	++	++	++		+	+
-	+	+	++	++	-	-
+	+	++	+ -	+	++	+
+ -	+	++	-	++	-	+ -
-	-	++	+	-	-	-
-	+	++	-	+	-	-
-	+	+ -	+	++	-	-
-	-	+	+	++	-	-
-	-	+ -	-	+ -	-	-
-	-	+ -	-		-	-
-	-	+ -	-	-	-	-

extras

++	+	+ -	-	
ruim aanwezig	aanwezig	nauwelijks	niet	n.v.t

Basic tools and extra measures

5 tools

for a biodiversity oriented development



connect it with
the nature around
the site



use indigenous
plants



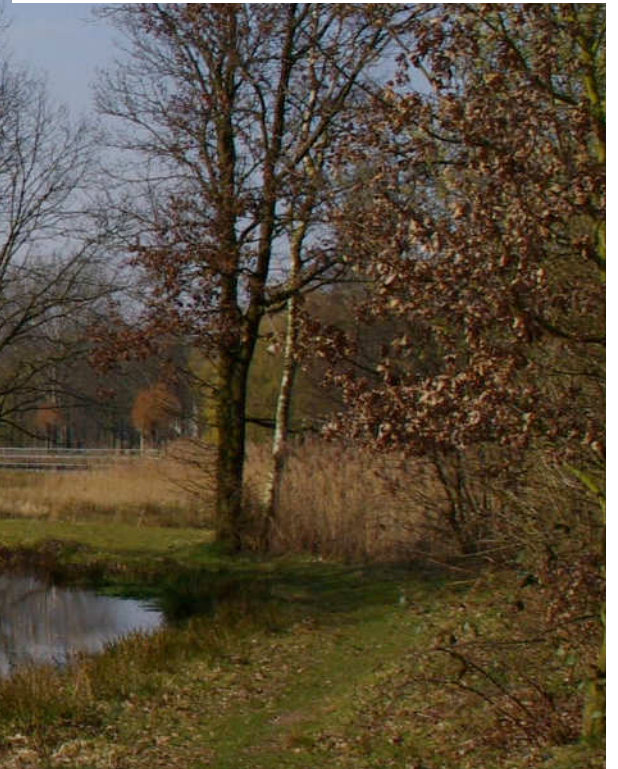
save existing
vegetation



keep the water
where it falls



share the maintenance
of the site



1. Connect it with the nature around the site



2. Use indigenous vegetation



3. Save existing vegetation on site



4. Keep the water where it falls



5. Share the maintenance of the site

Zoöp

A zoöp is an organisation whose board includes a representative for the voices and interests of non-human life.

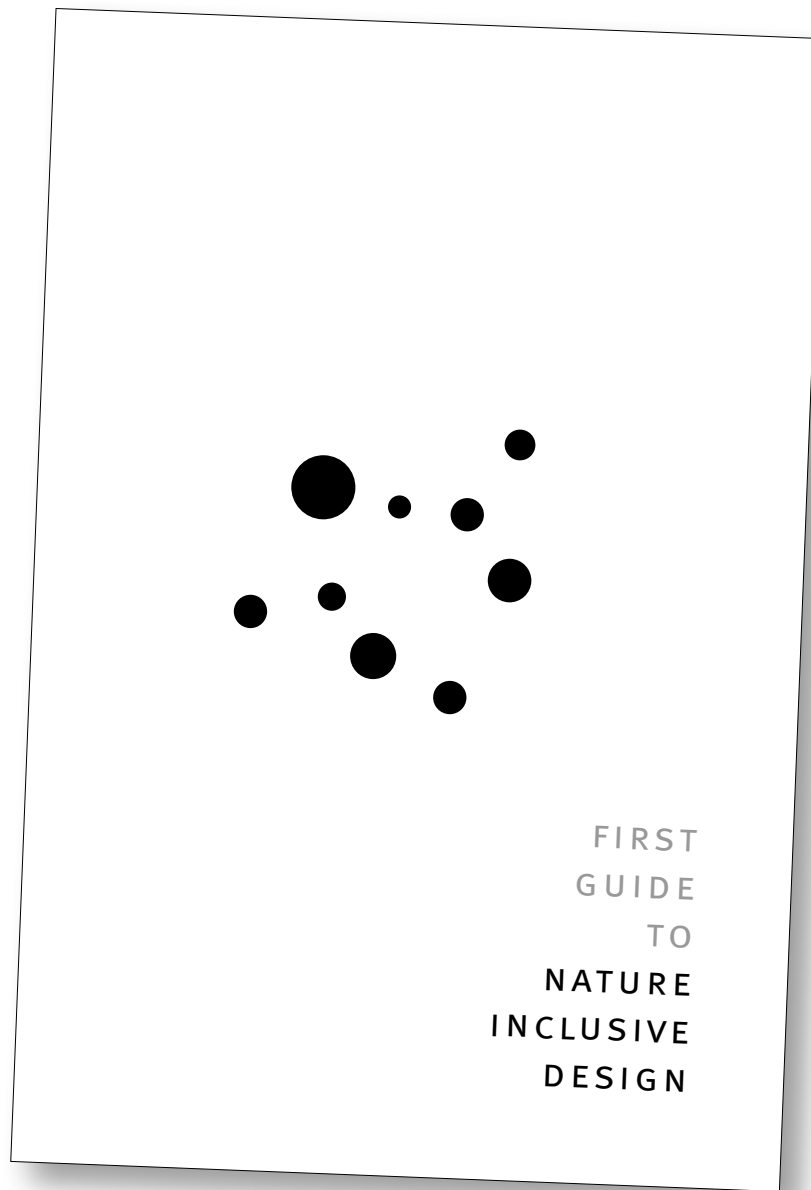
www.zoop.earth





World's first Zoöp “Het Nieuwe Instituut” Rotterdam

e-book via Amazon
€ 9,-



3 tools



1

look at the
landscape as a
mountain area

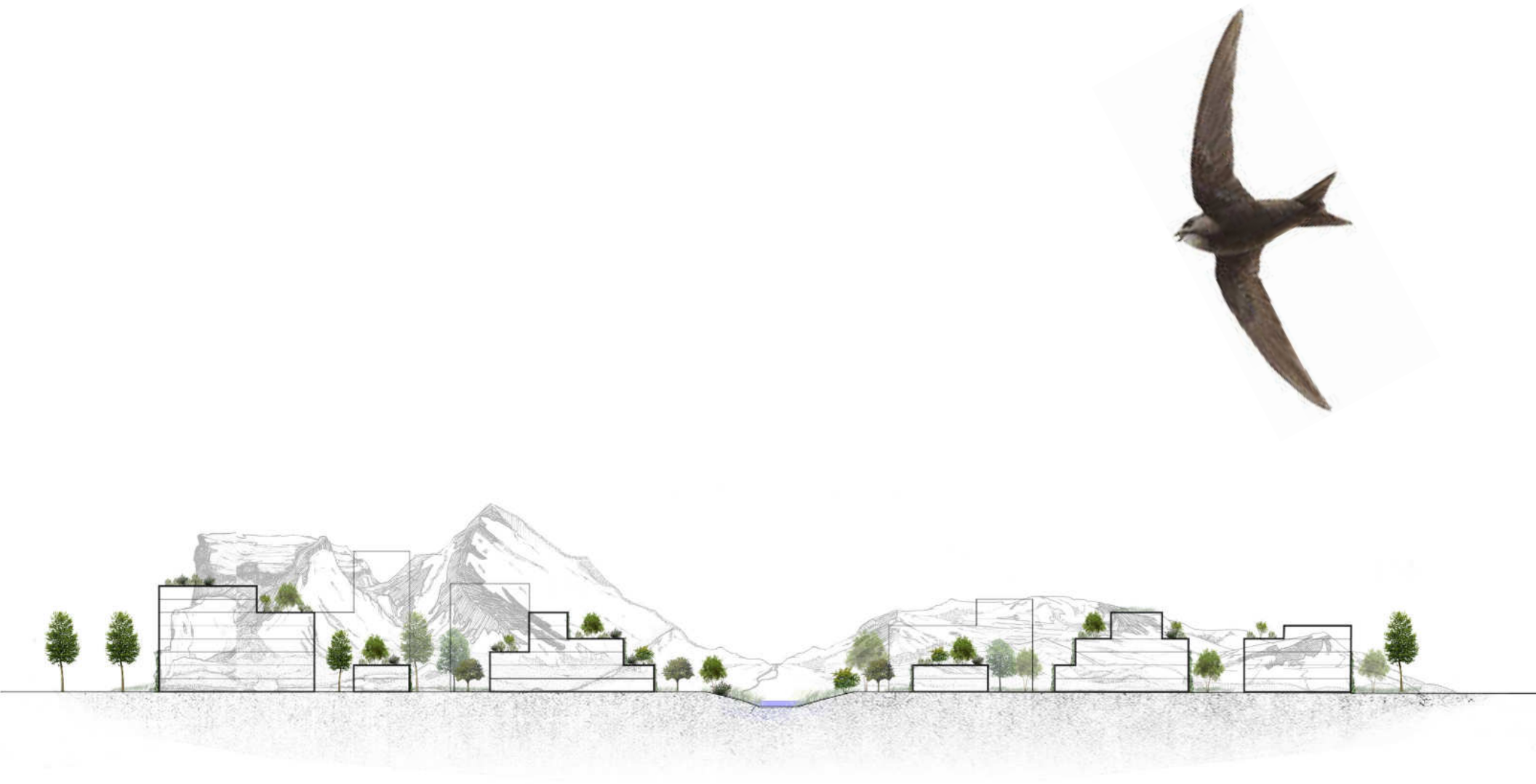


select your clients

2



use the 3 design
tools



1 • Look at the site as a mountain landscape



2. Select your clients



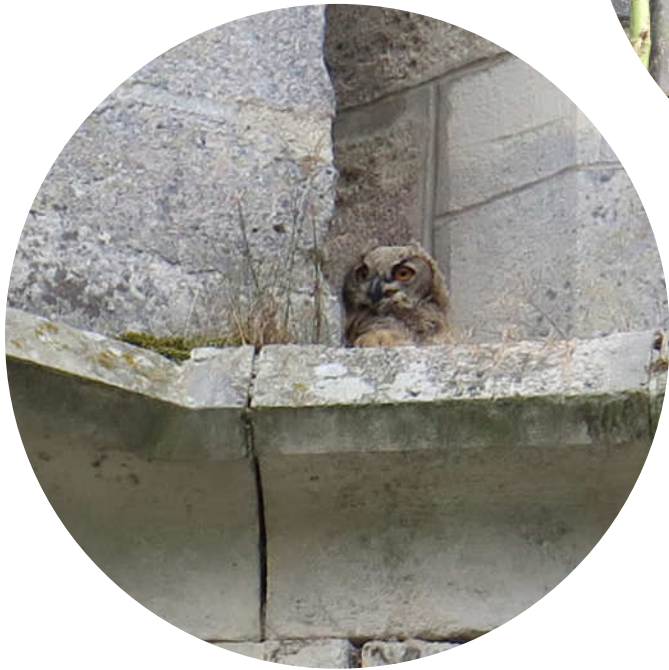
2. Select your clients



porosity



diversity in use
and maintenance



size and scale

3. Use the nature inclusive design tools



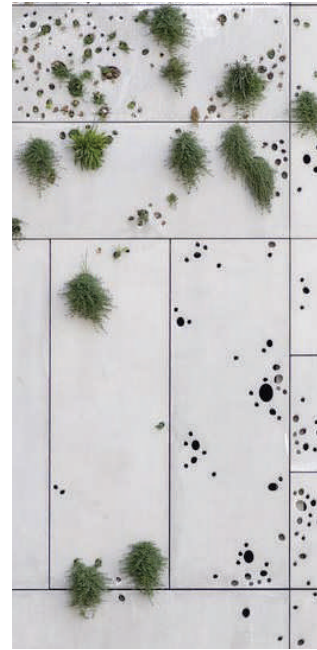
3a. Variation in size and scale in urban context



3a. Variation in size and scale in urban context



3a. Variation in size and scale in urban context



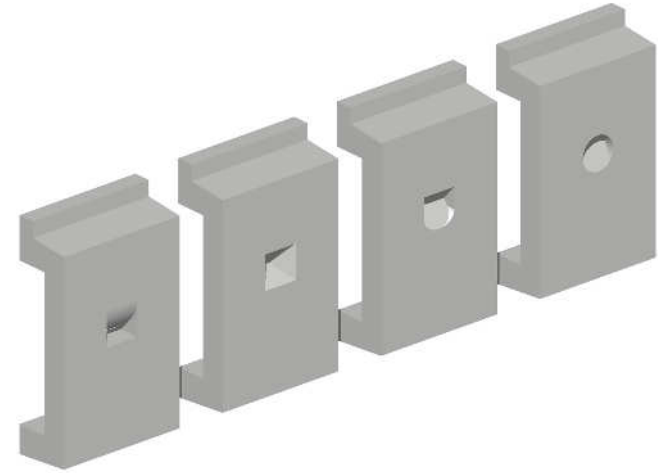
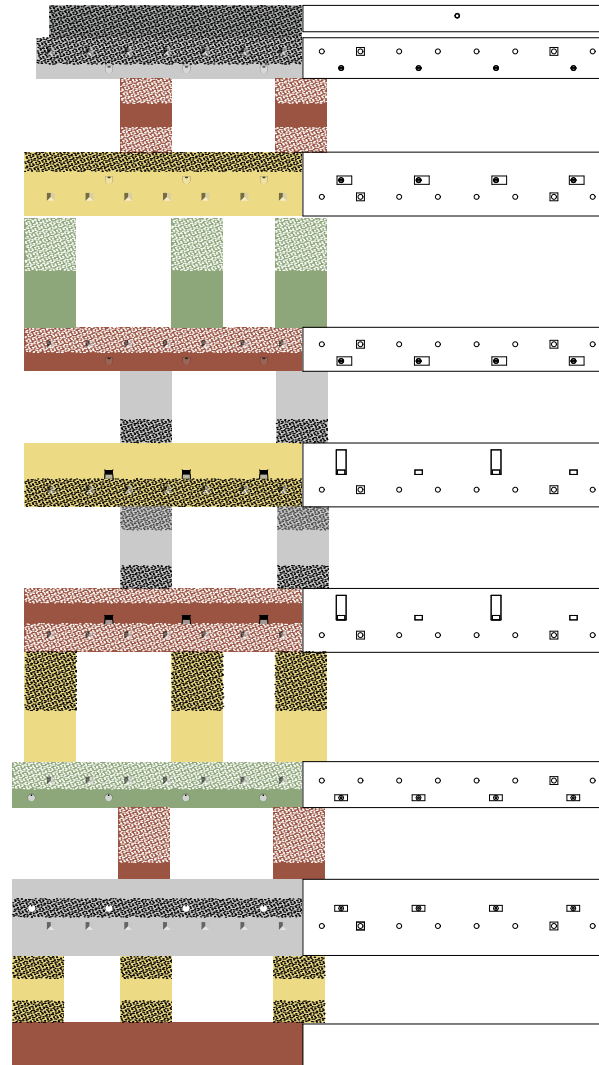
3b. Porosity in facades, roofs and pavings

**Studio
Donna van
Milligen
Bielke**

Sloterdijk Toren N1

**Studio
Donna van
Milligen
Bielke**

Sloterdijk Toren N1
nestkast sparingen veranderen mee met het licht



3b. Porosity



3b. Porosity



3c. Diversity in use and maintenance activities



3c. Diversity in use and maintenance activities



3c. Diversity in use and maintenance activities



3c. Diversity in use and maintenance activities



Thank you!