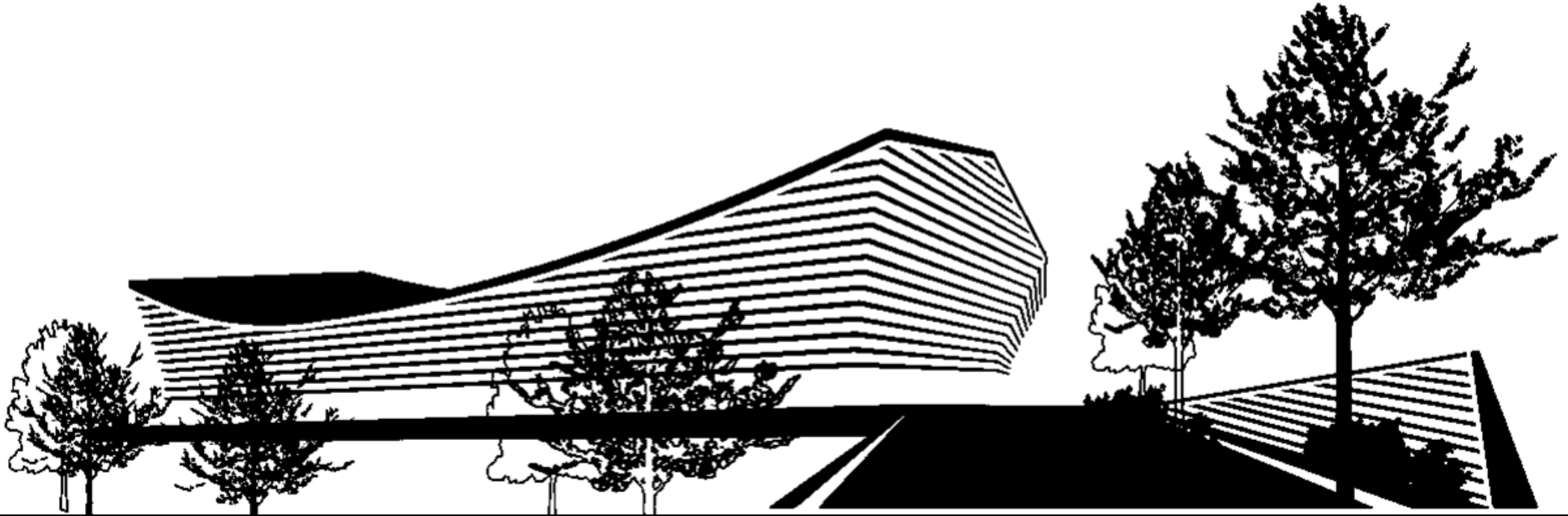


Centre Aquatique Olympique et son franchissement / Saint-Denis



VenhoevenCS
architecture+urbanism

Cécilia Gross

&

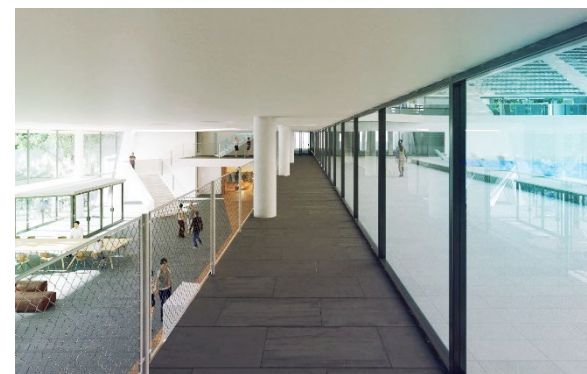
2/3/4
ARCHITECTURE
URBANISME
PAYSAGE

Laure Mériaud

concevoir pour l'héritage



complexe sportif pour tous









PARIS 2024
Olympic rings logo

PARIS 20

PARIS 2024

PARIS 2024



PARIS 2024

IS 2024



PARIS 2024



PARIS 2024



PARIS 2024



rayonner pendant les jeux

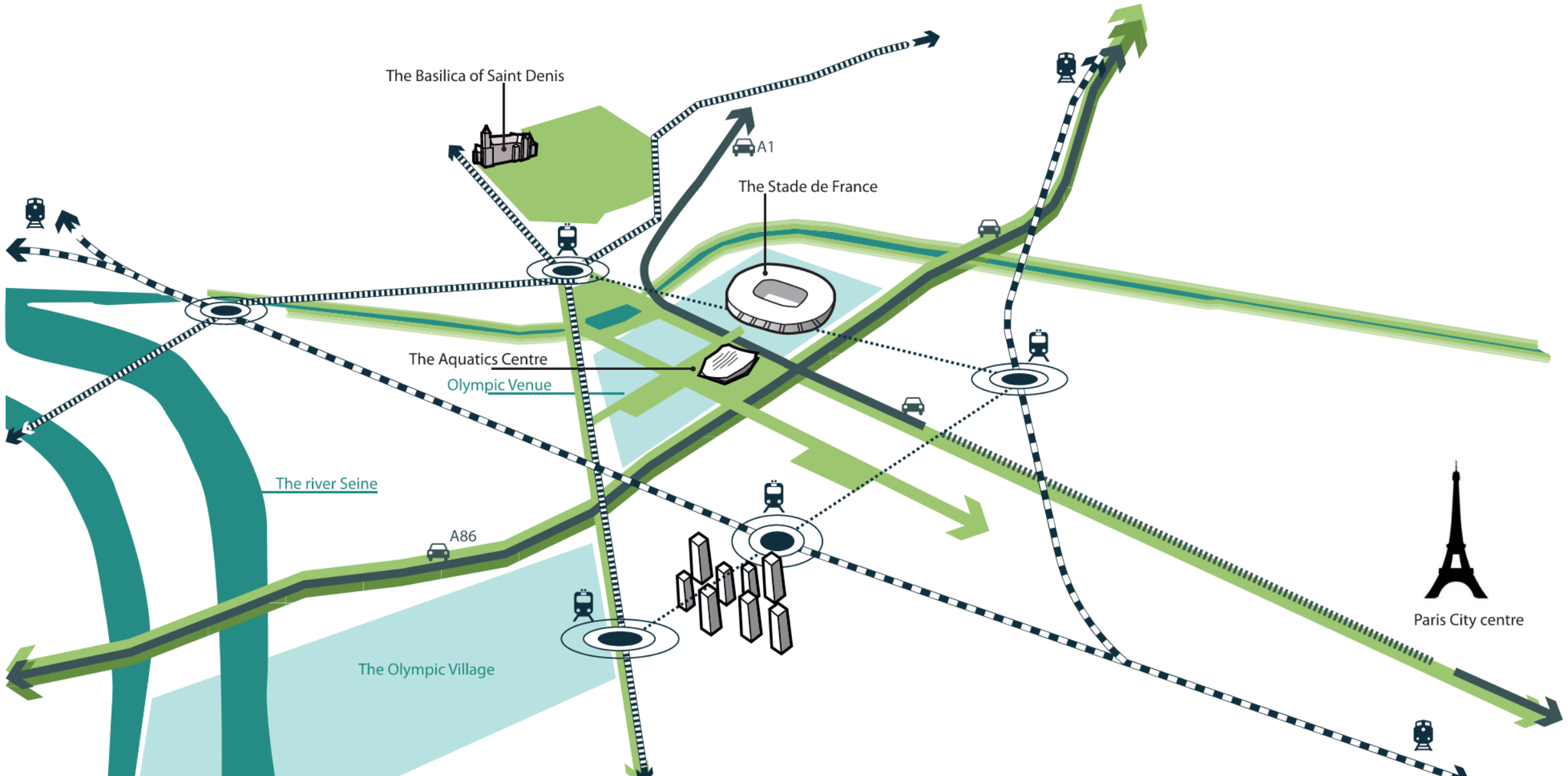


PARIS 2024

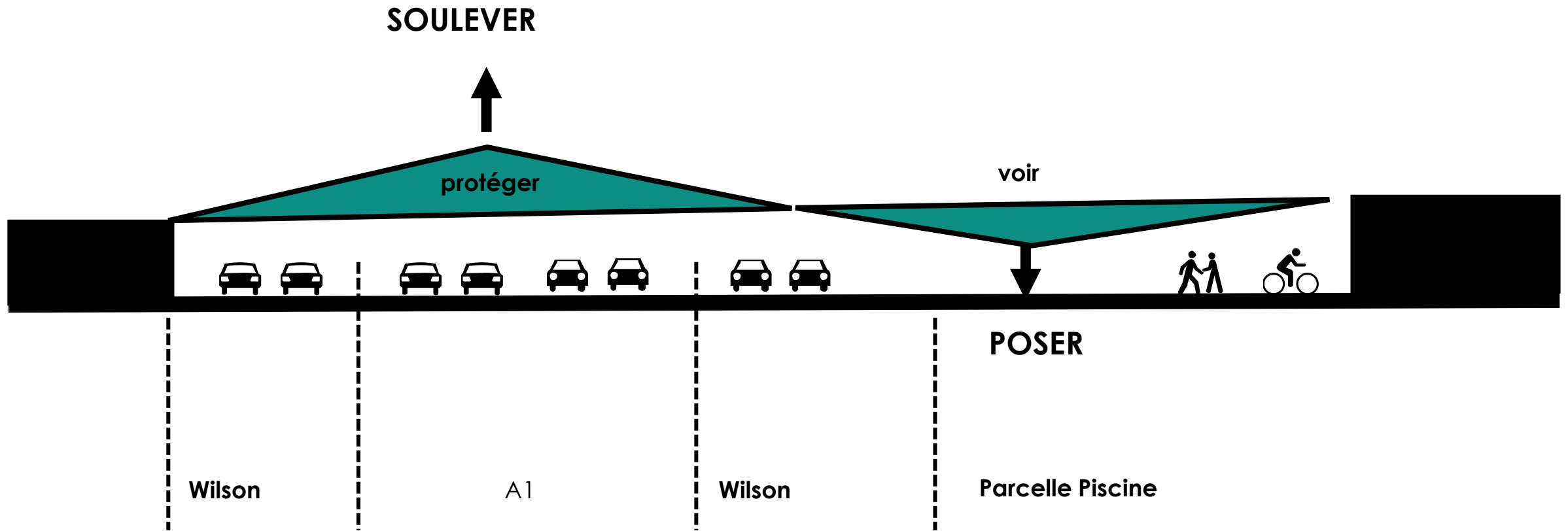




connecté



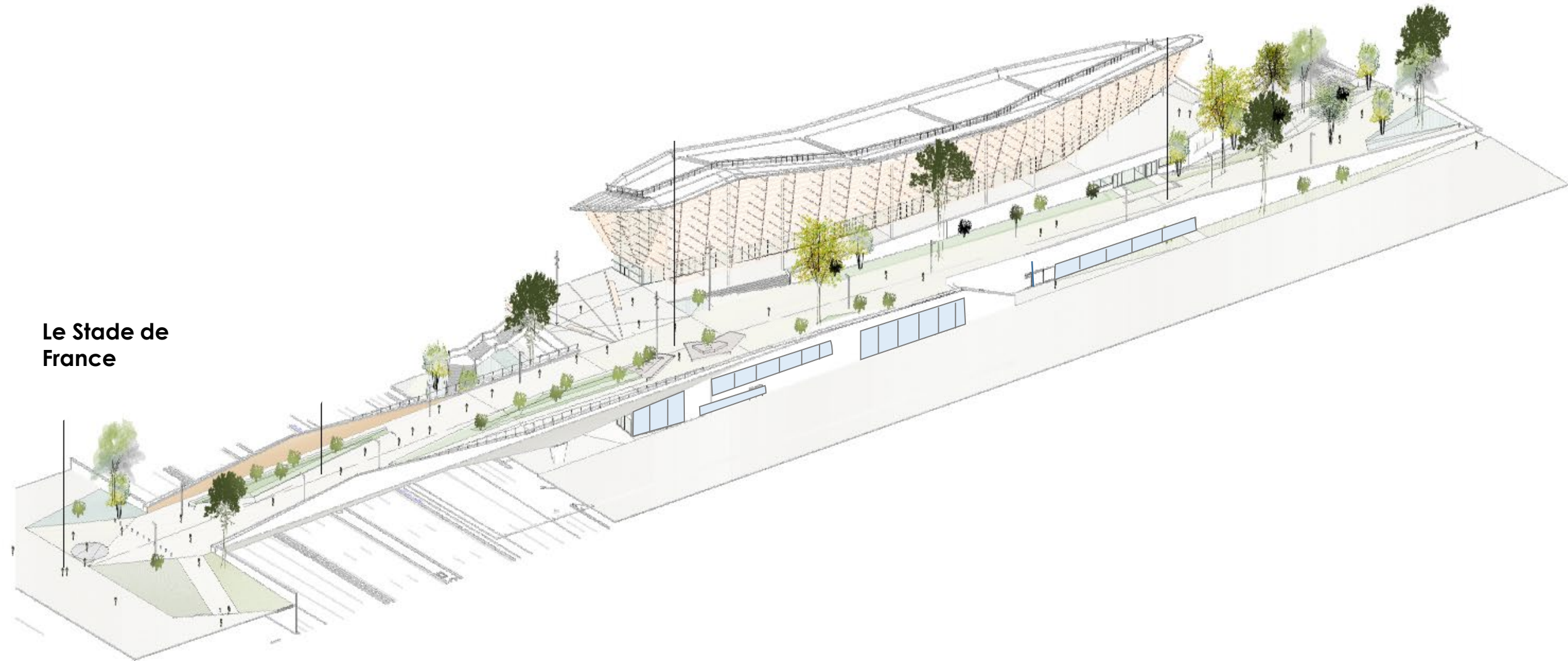
franchir



lieu habité

La ZAC Plaine
Saulnier

Le Stade de
France



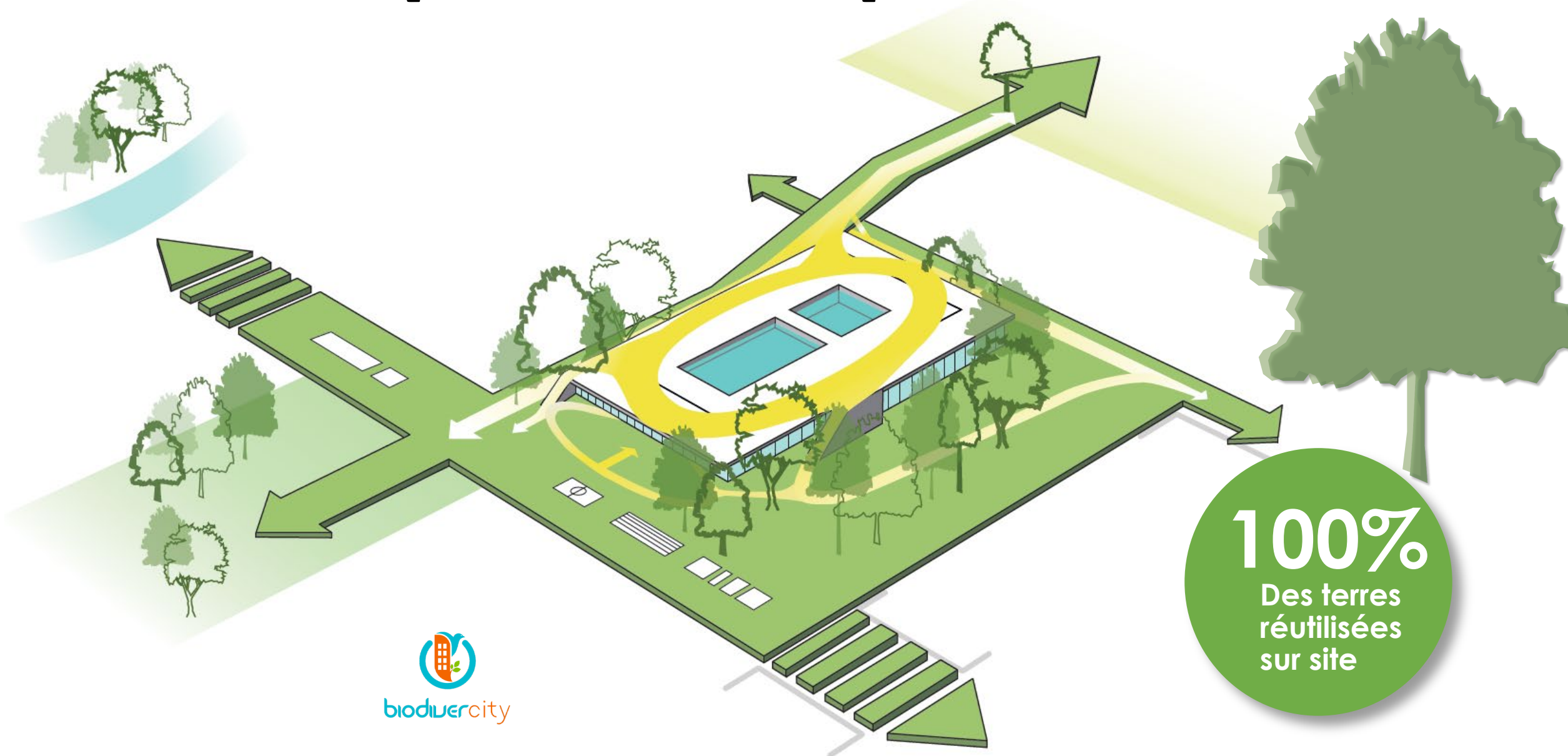
un parvis haut pour l'événementiel





nature

Etre compact – laisser place à la nature



100%

Des terres réutilisées sur site



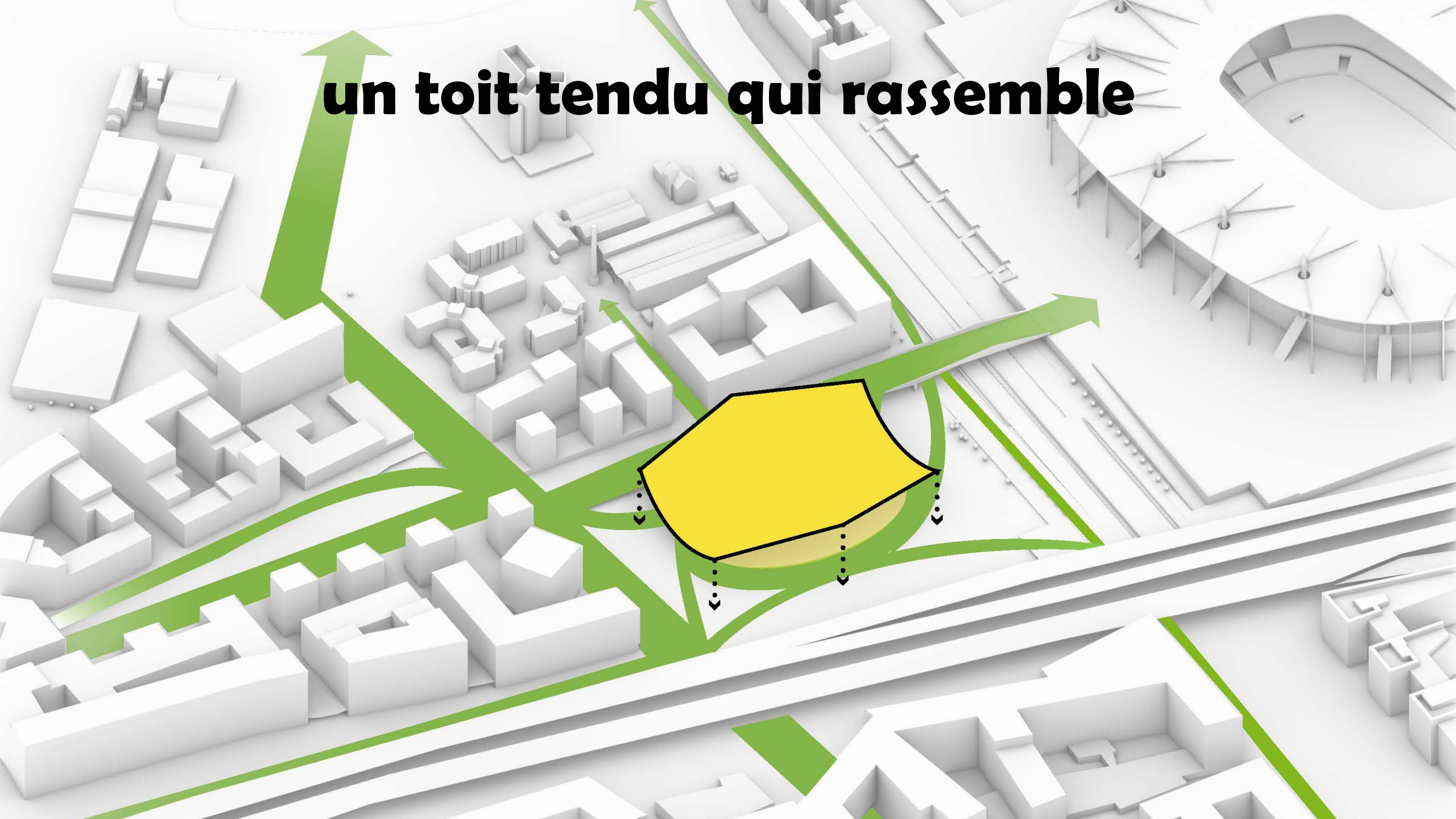




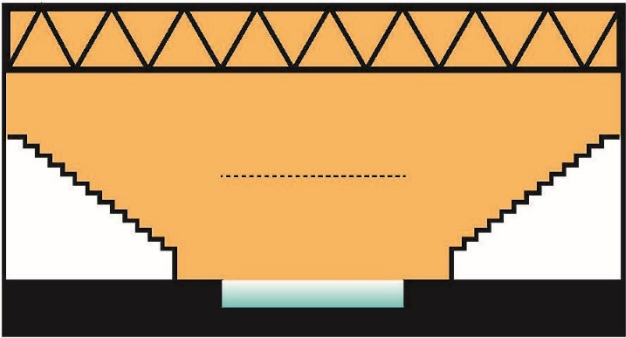
économie des ressources



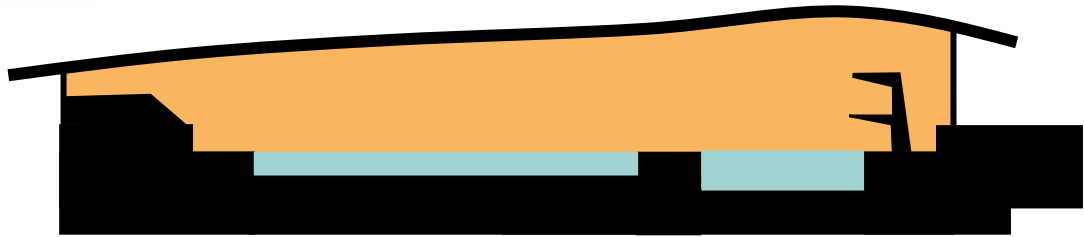
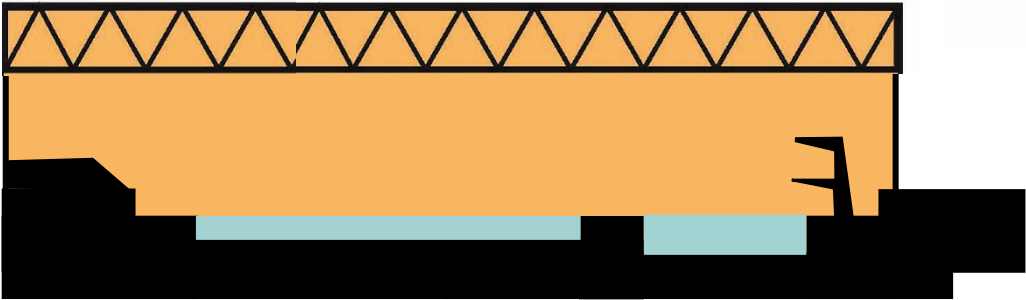
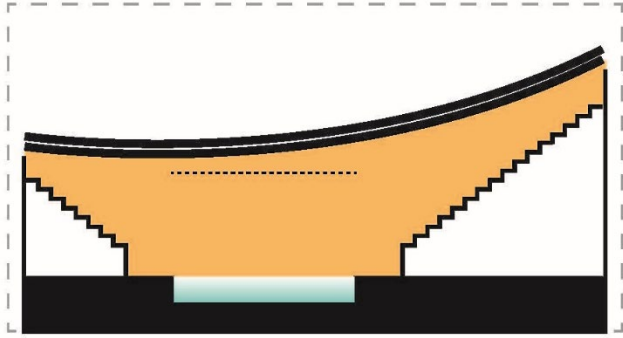
un toit tendu qui rassemble



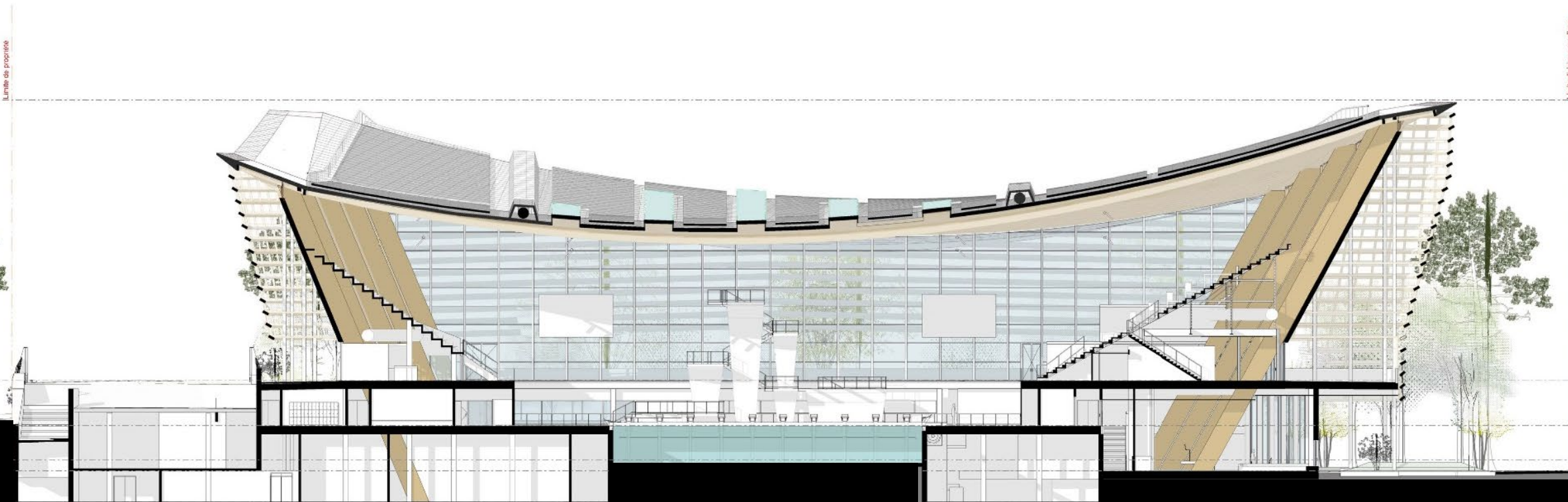
Réduire le volume à chauffer



-50%



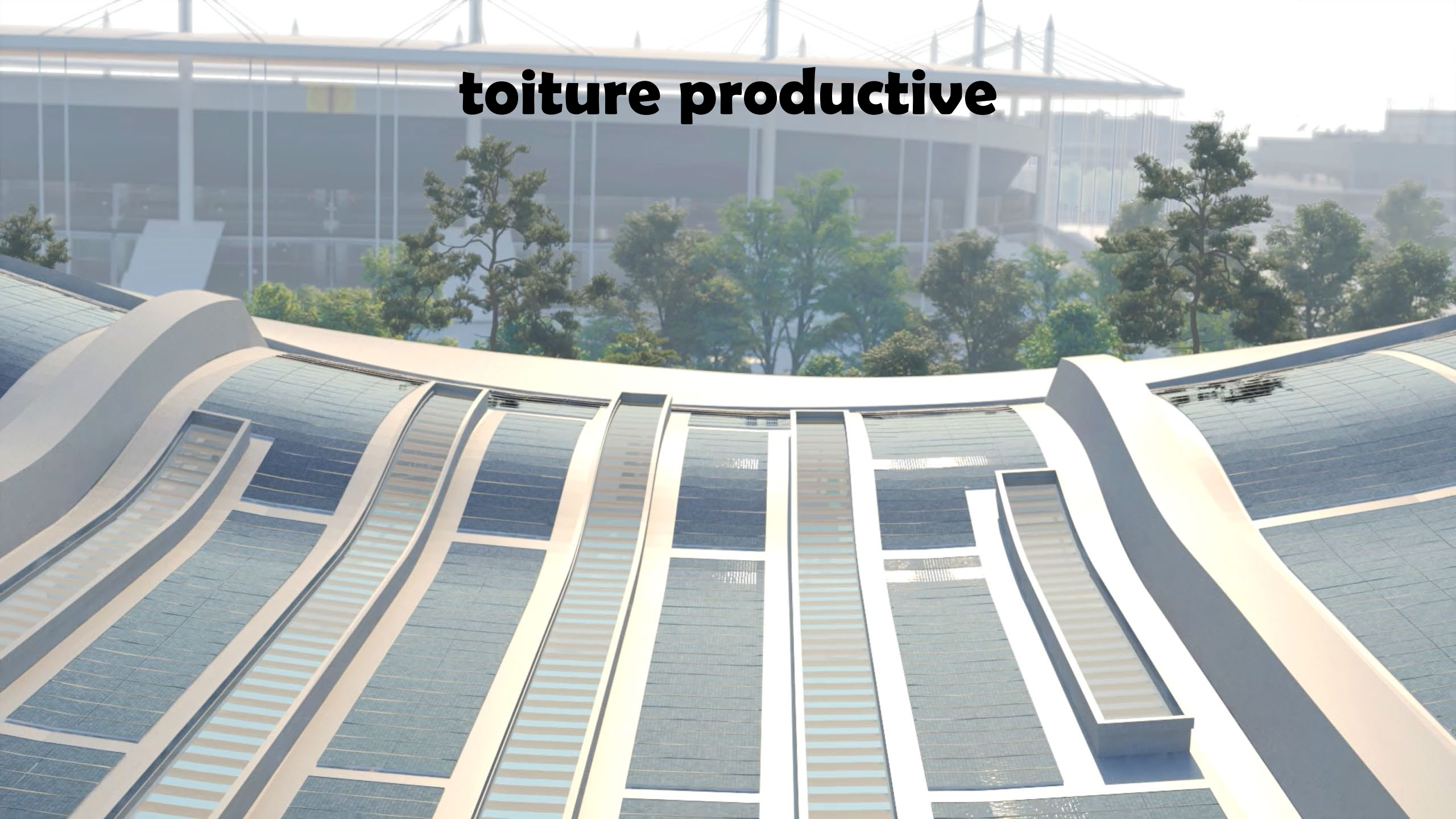
toiture légère et ultra mince



90cm
épaisseur

80m
portée

toiture productive



A close-up, low-angle shot of a wooden ceiling. The ceiling is composed of numerous parallel wooden slats that create a strong sense of depth and perspective. The wood has a warm, natural tone. Several recessed rectangular light fixtures are integrated into the ceiling structure, providing soft illumination. A thin metal rod is visible on the left side, possibly part of a lighting fixture or a support structure.

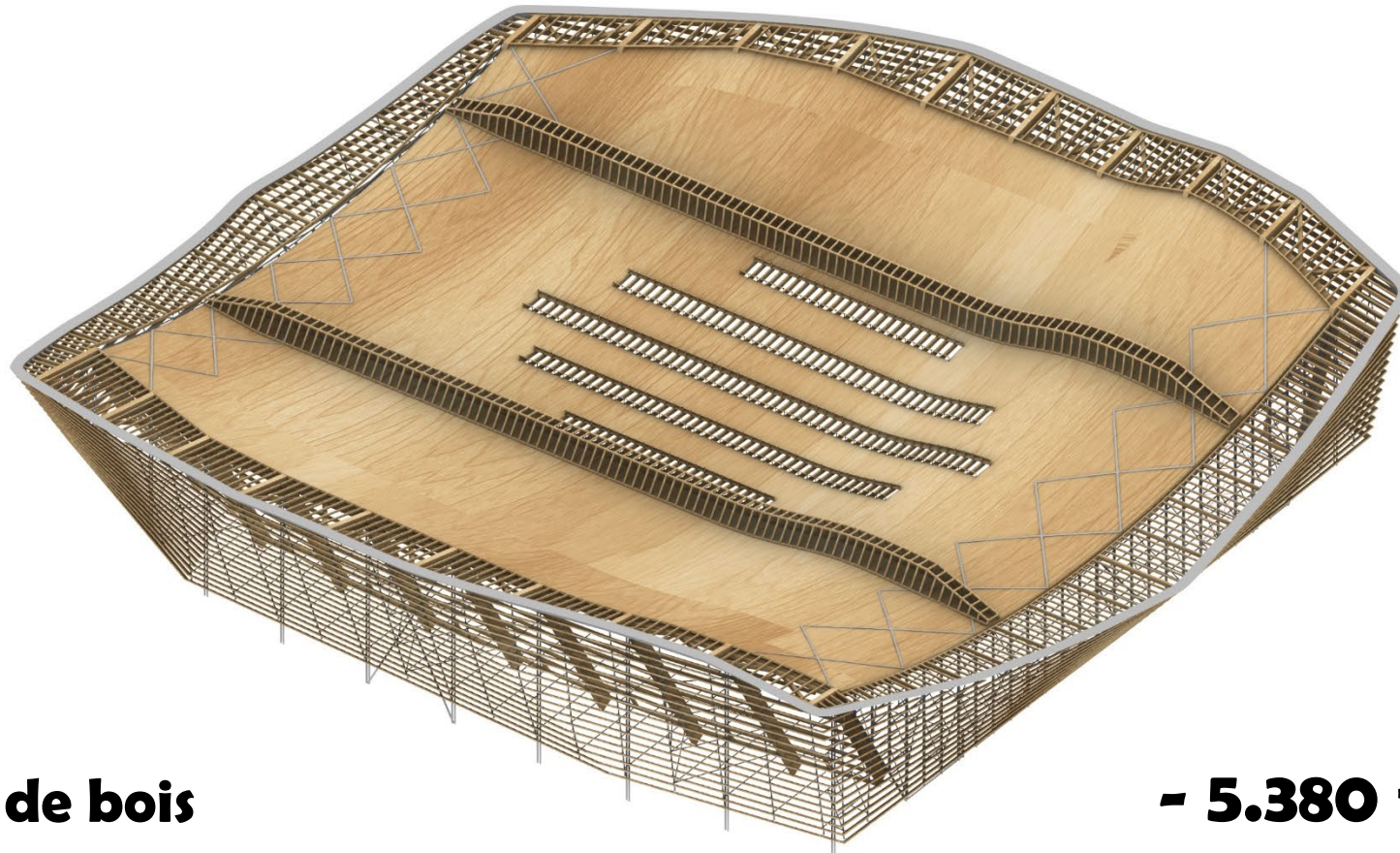
le bois

structure innovante

+
de 1200
tonnes
de matière
bio-sourcée

GRAND PRIX NATIONAL
DE L'INGÉNIERIE 2021

GPNI

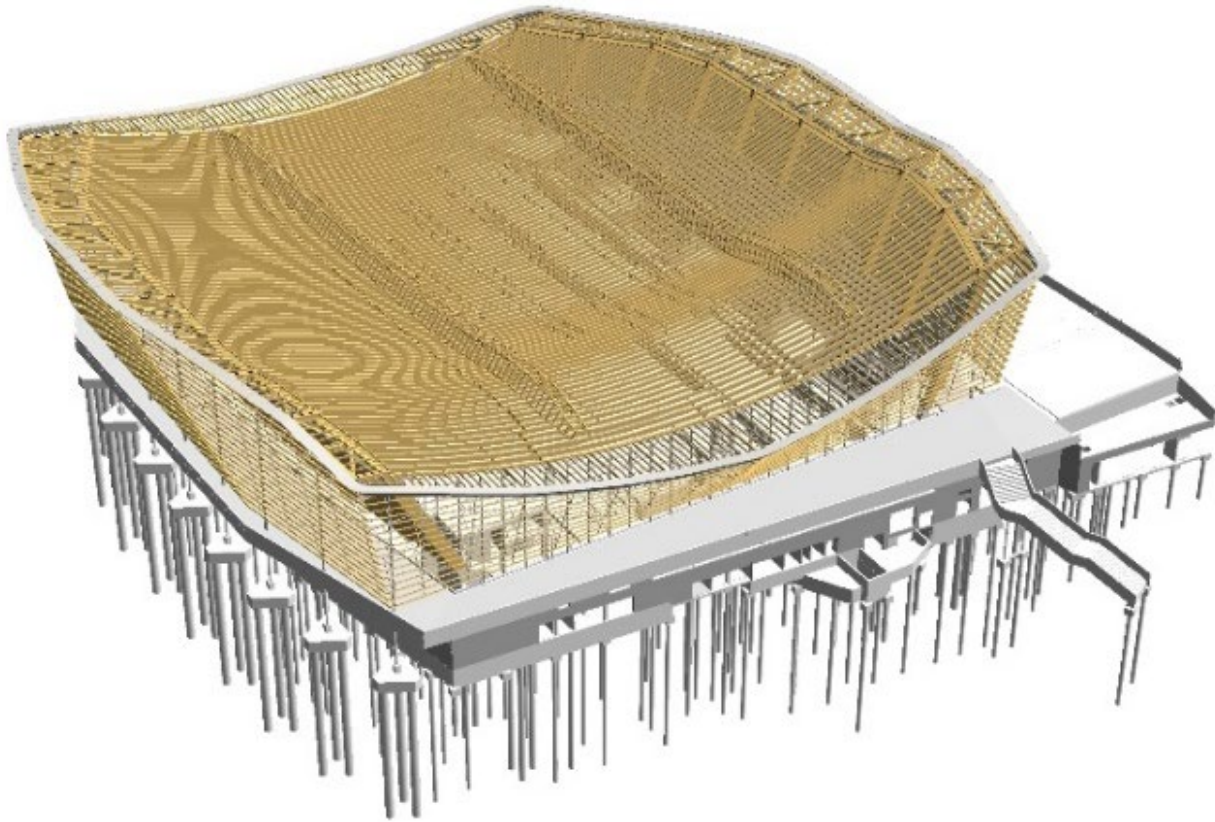


Total 2.690 m3 de bois

1m3 de bois utilisé = moins 2 tonnes de CO2

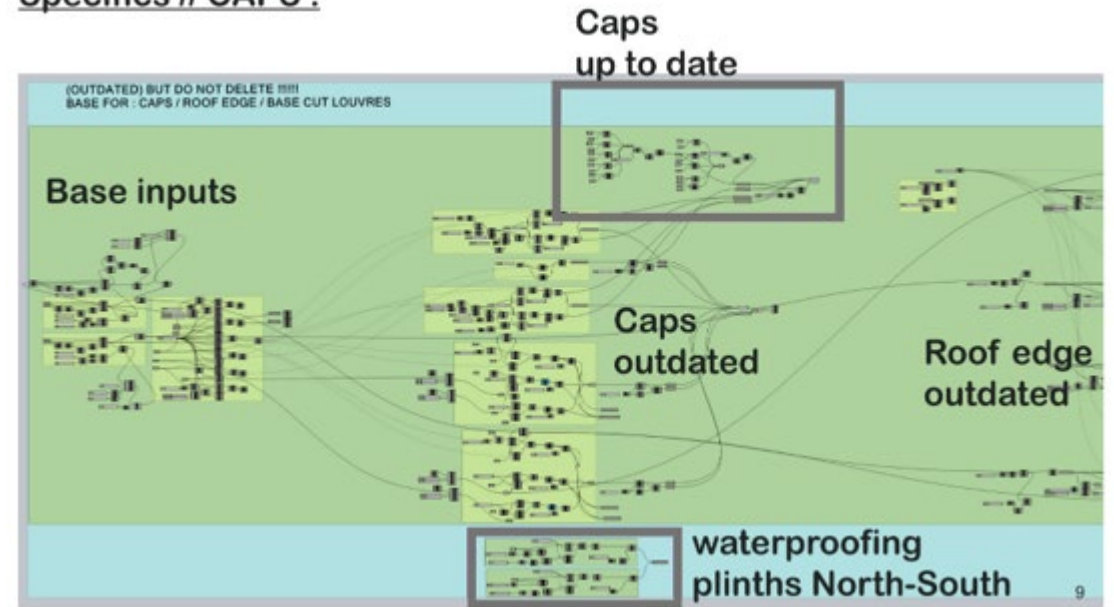
- 5.380 tonnes de CO2

Conception paramétrique



Rhino

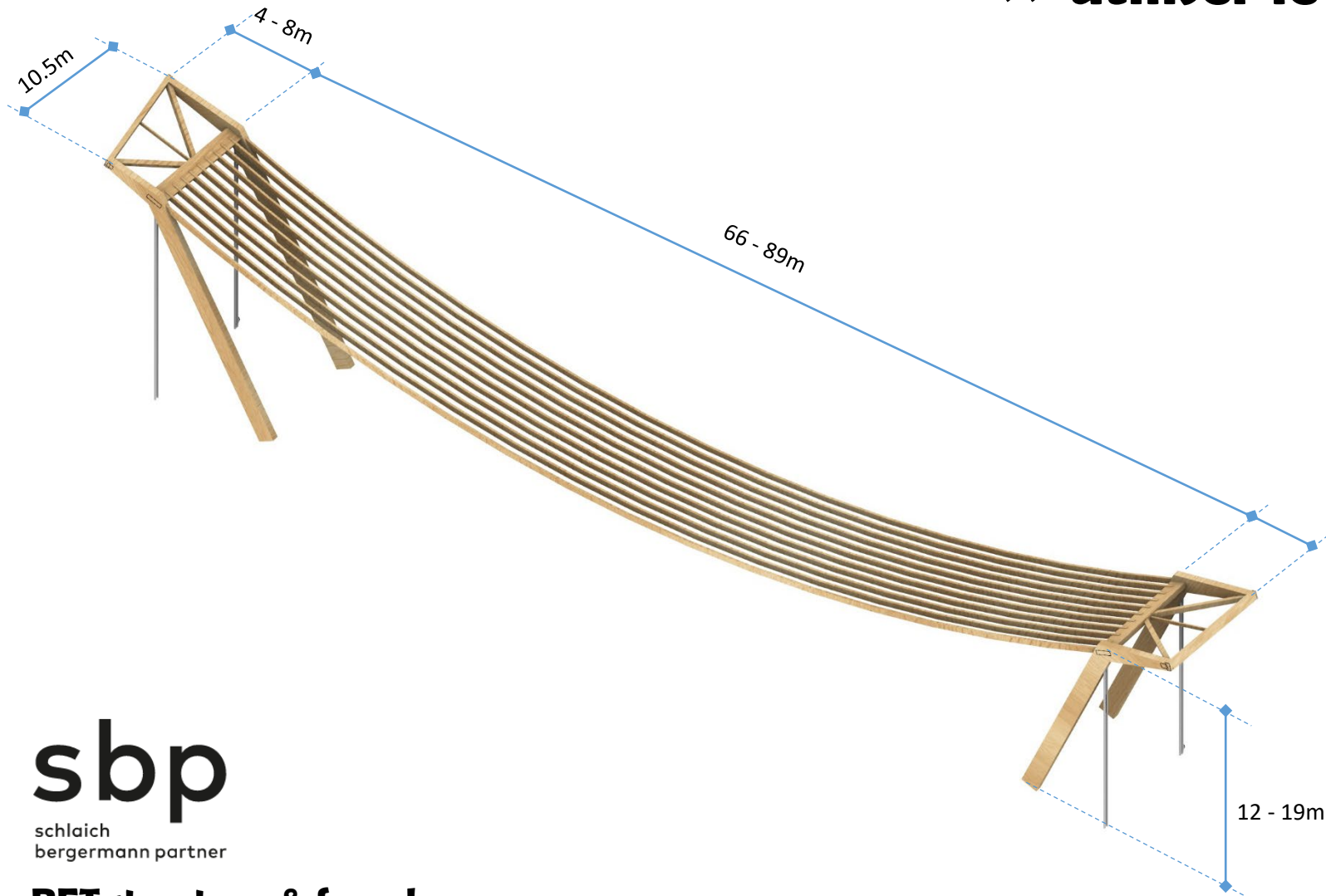
Specifics // CAPS :



Grasshopper

structure innovante

>> utiliser le bois en traction

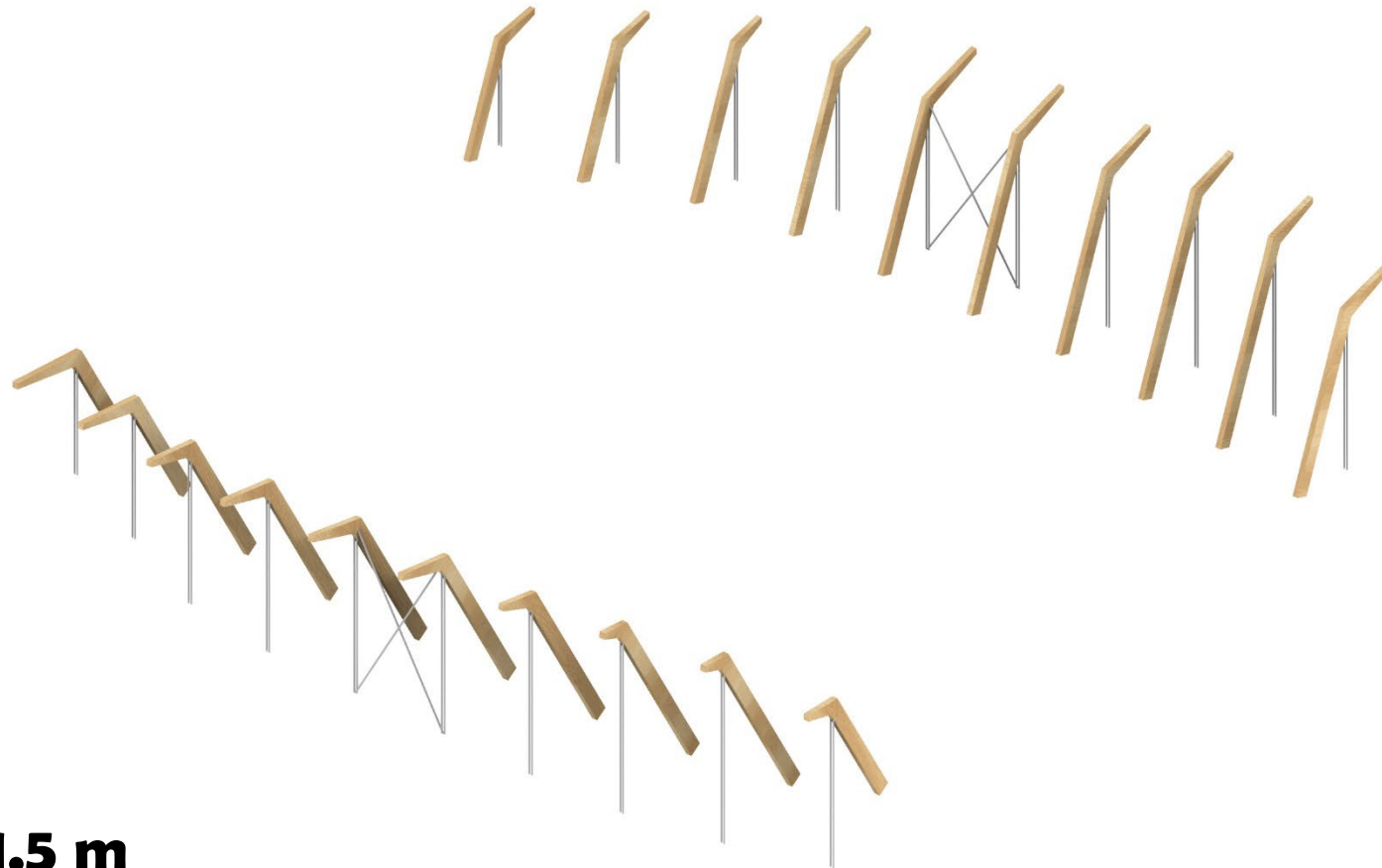


sbp
schlaich
bergemann partner

BET structure & façade

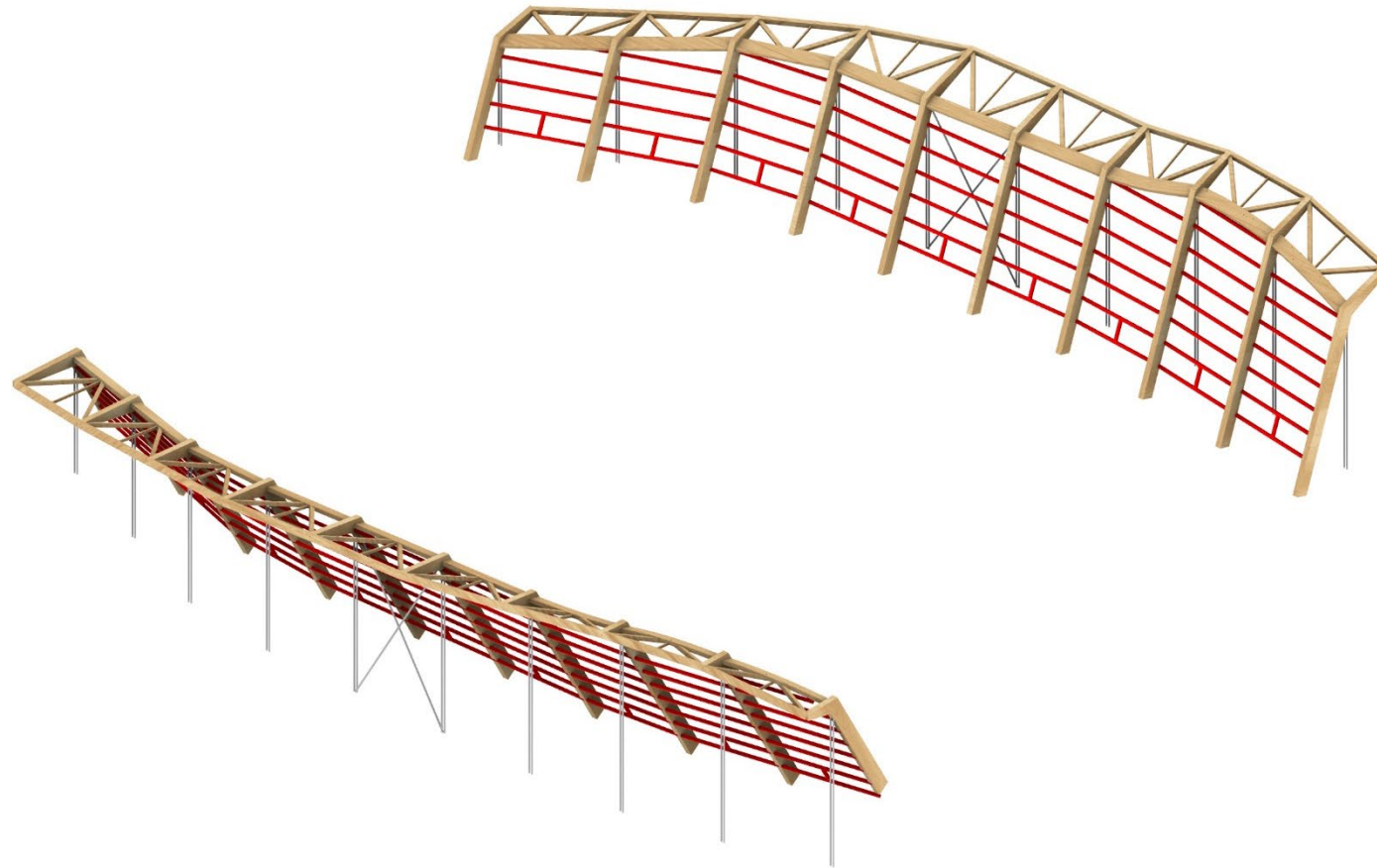


les poteaux inclinés et leurs tirants

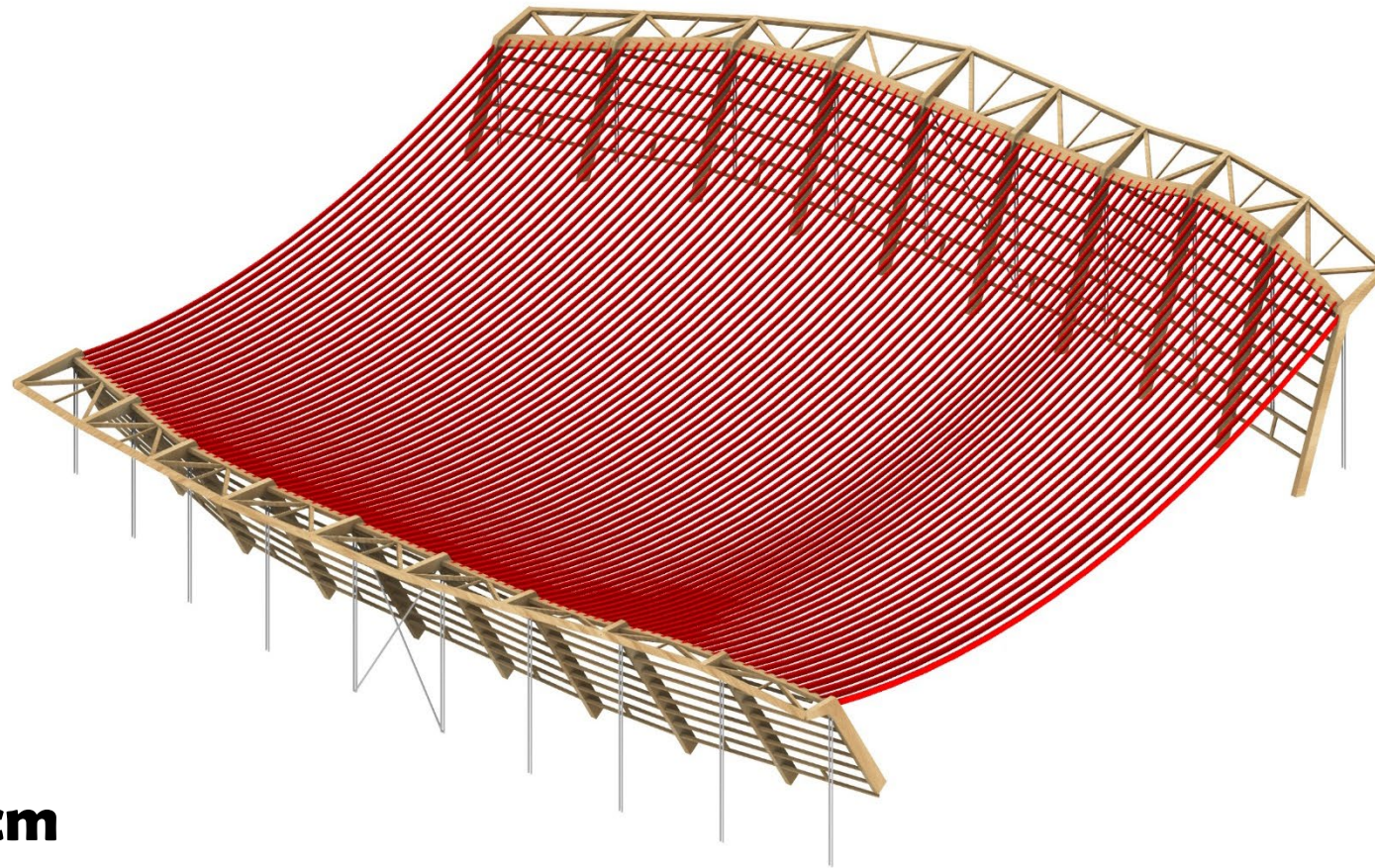


Epicea
Section 50 cm x 1.5 m
Trame : 10 m

les poutres de rive et les façades

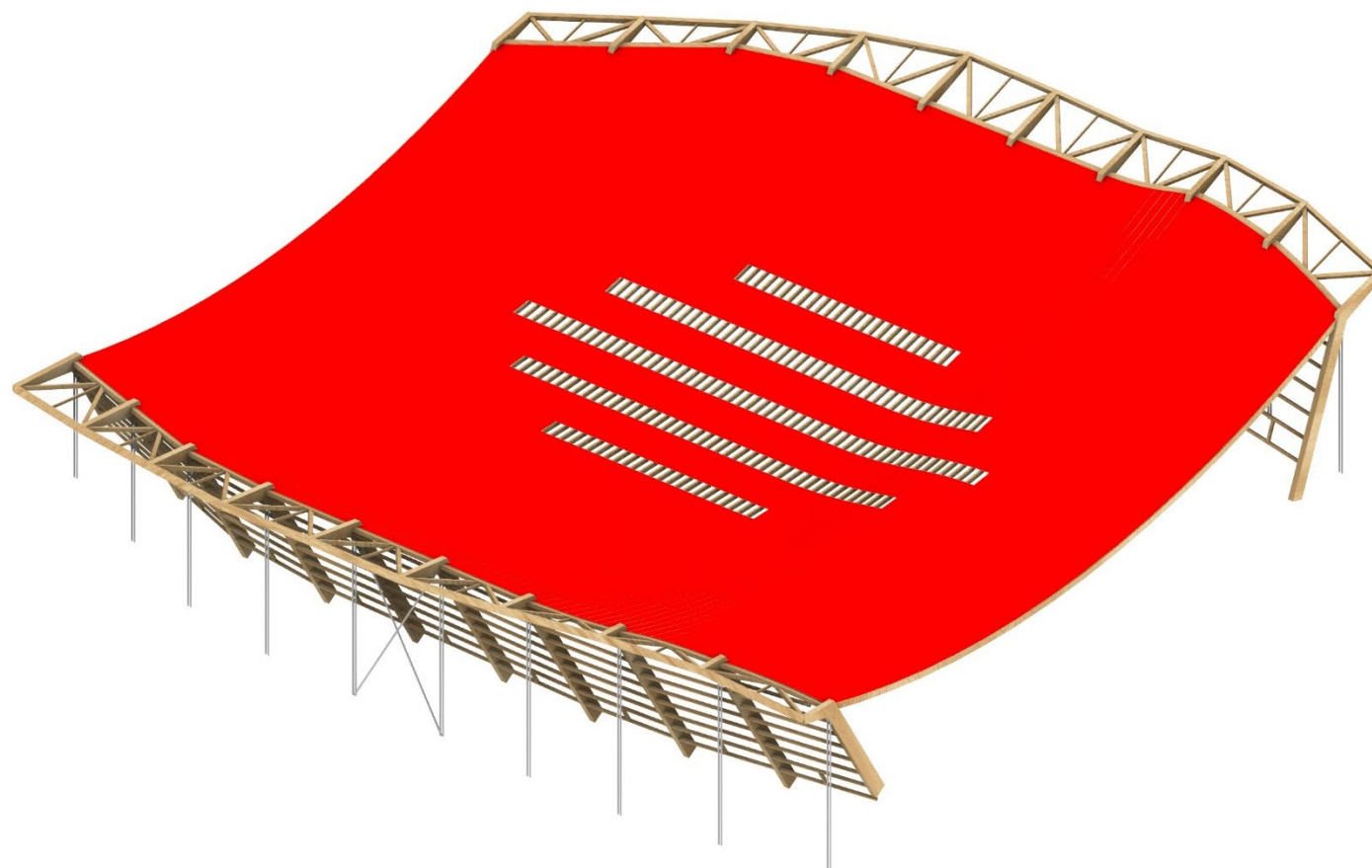


les catènes

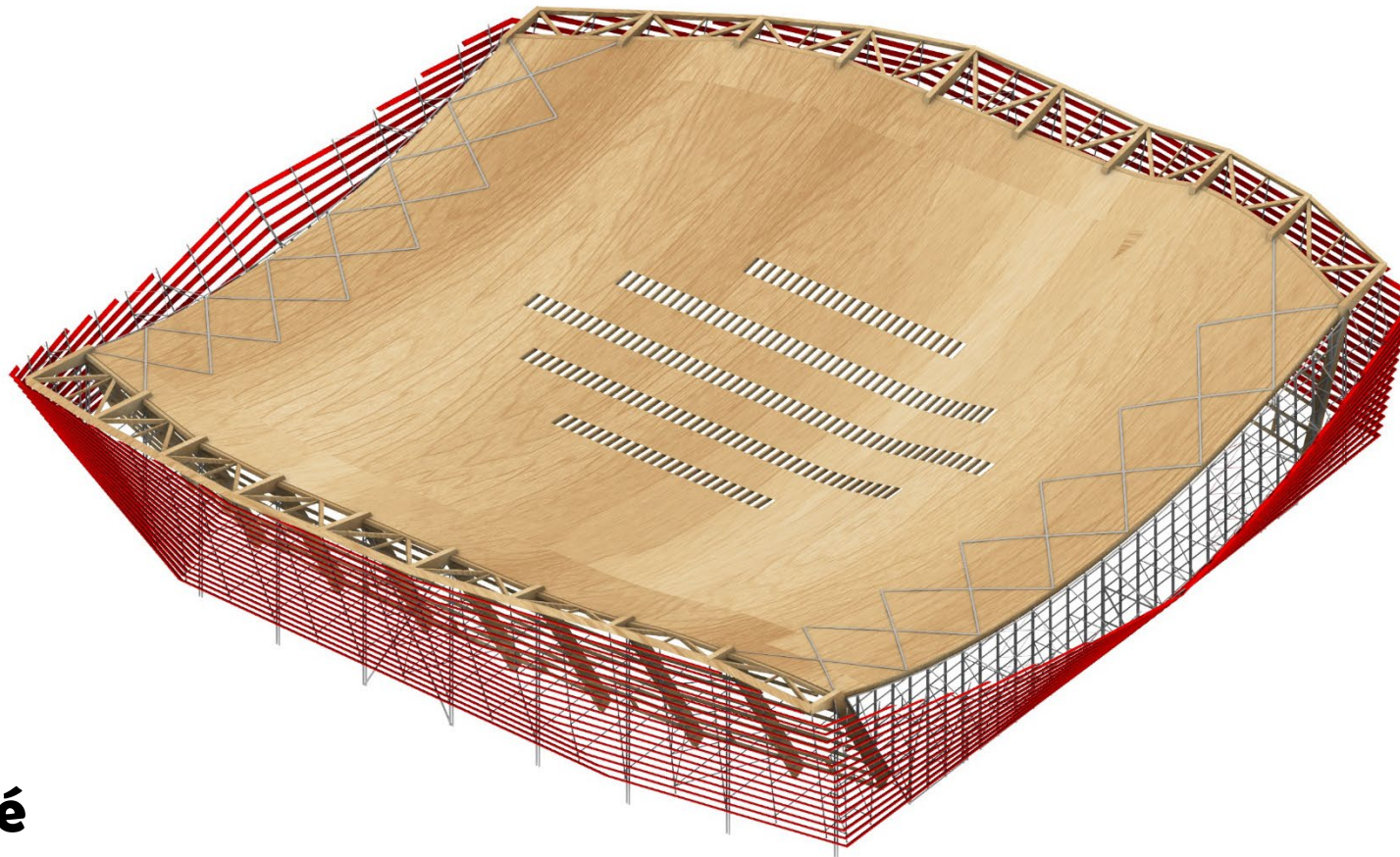


Section 20 x 50 cm
Trame : 1 m

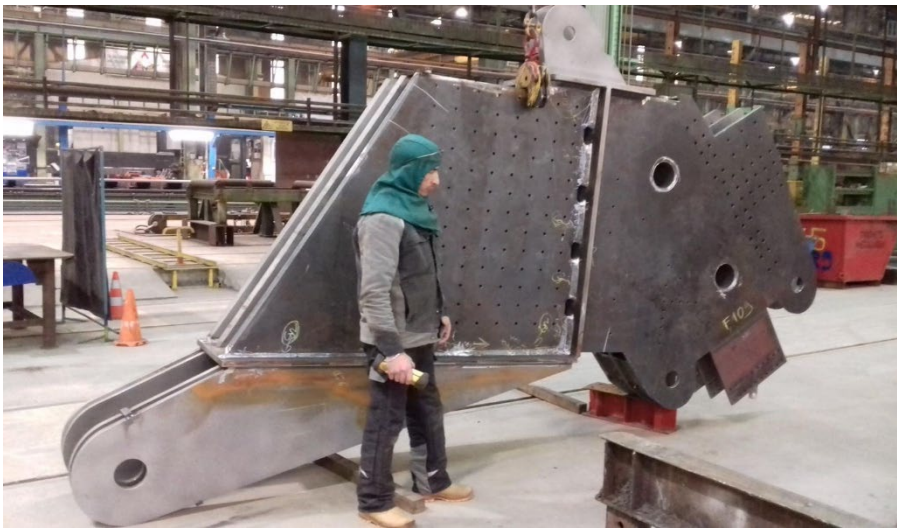
le voligeage



les casquettes et les brises-soleil



Douglas prégrisé
Section 14 x 48 cm



mathis

Construction Bois









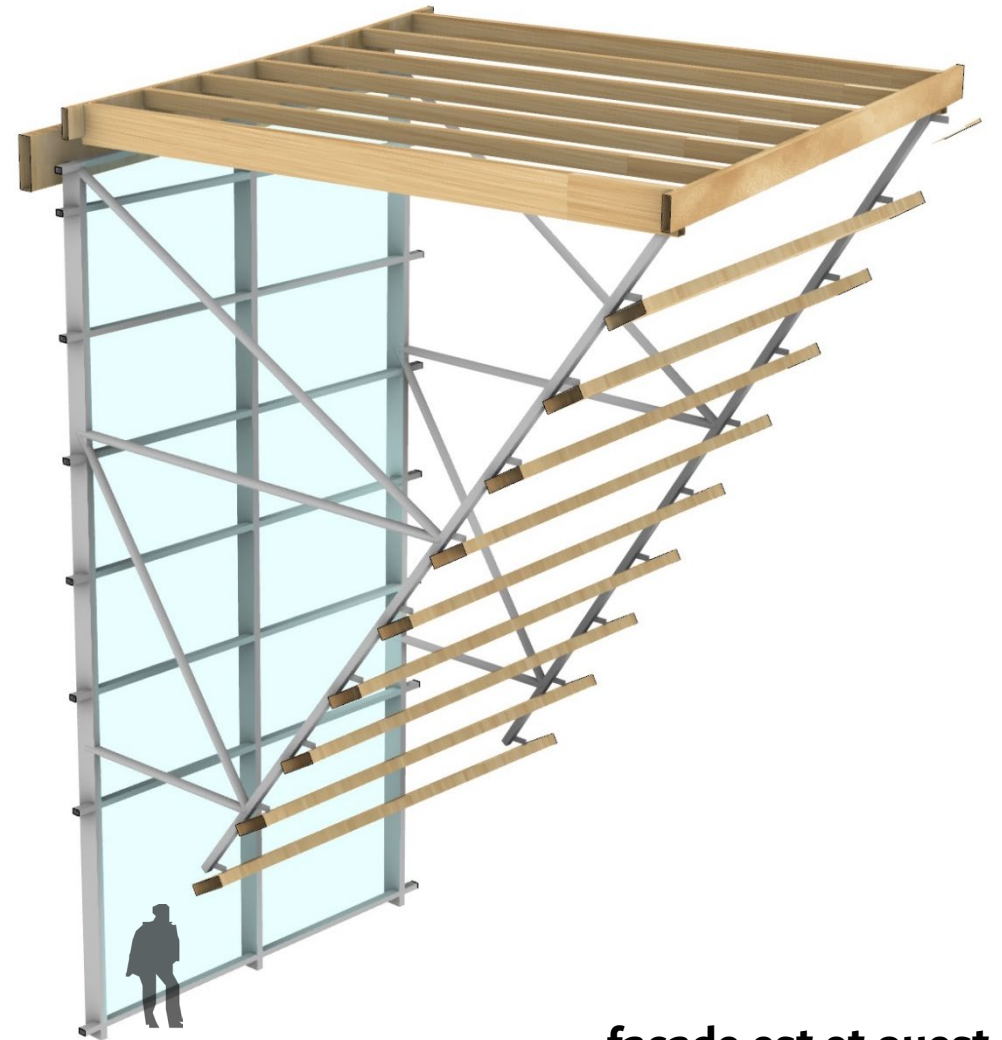




entre deux



façade sud et nord



façade est et ouest











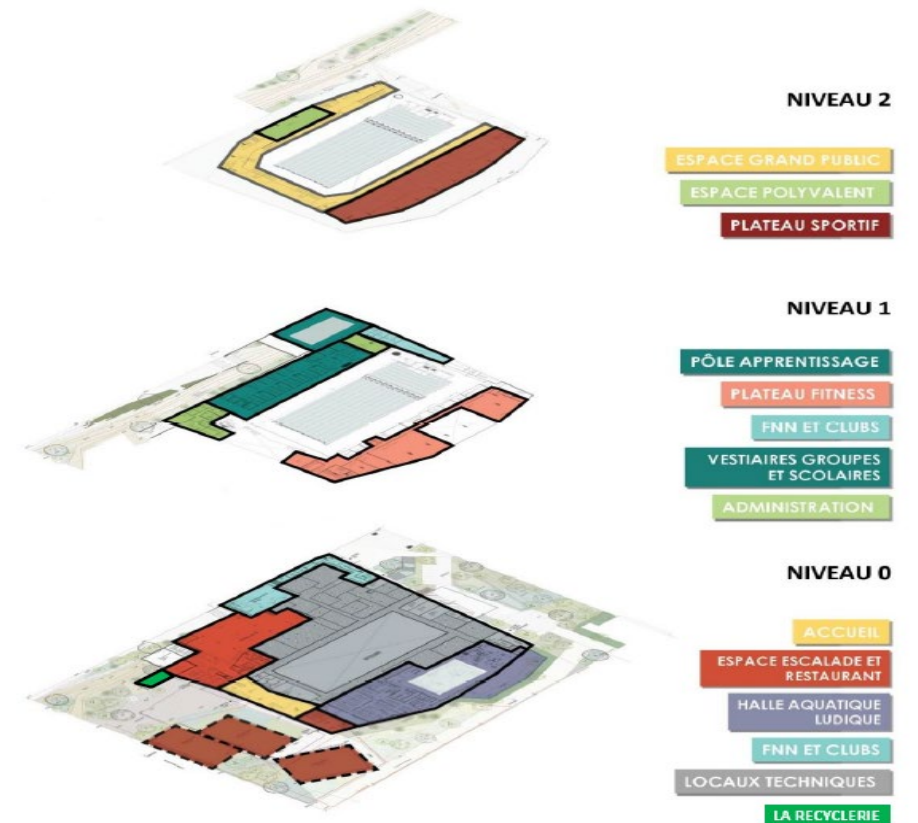
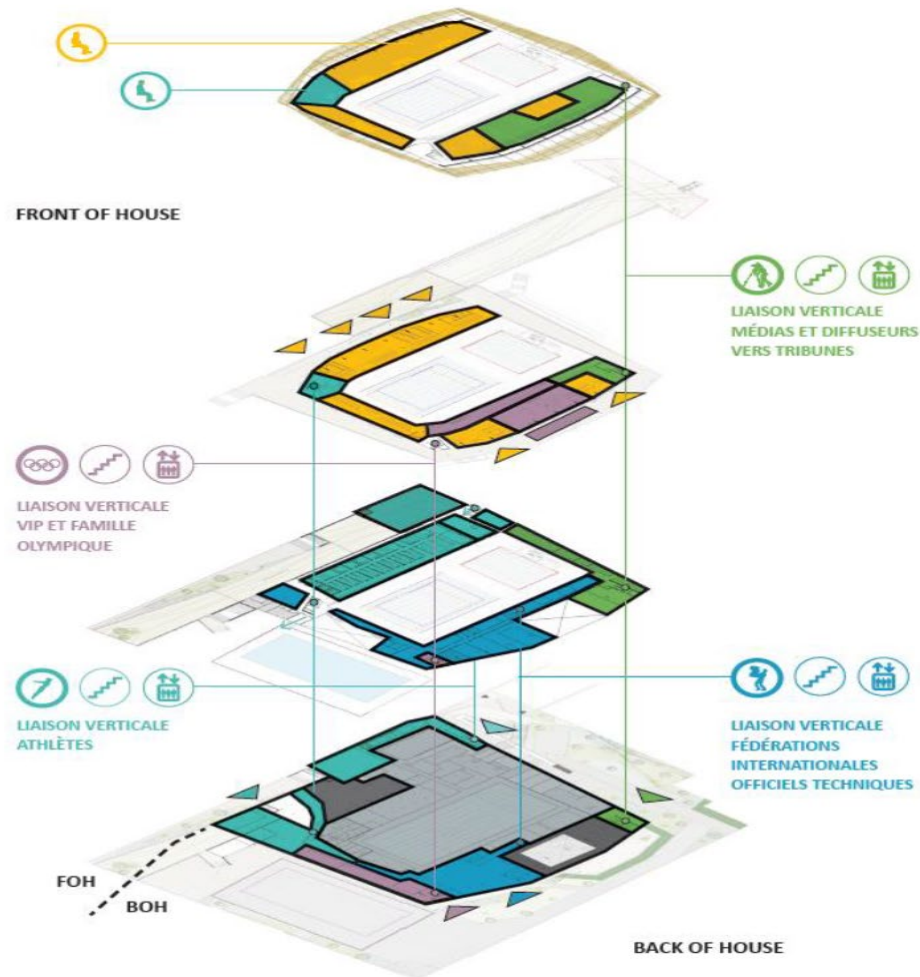
***réversibilité et
flexibilité***

réversibilité: 2 usages dans 1 meme batiment

Jeux Olympiques et Paralympiques



héritage



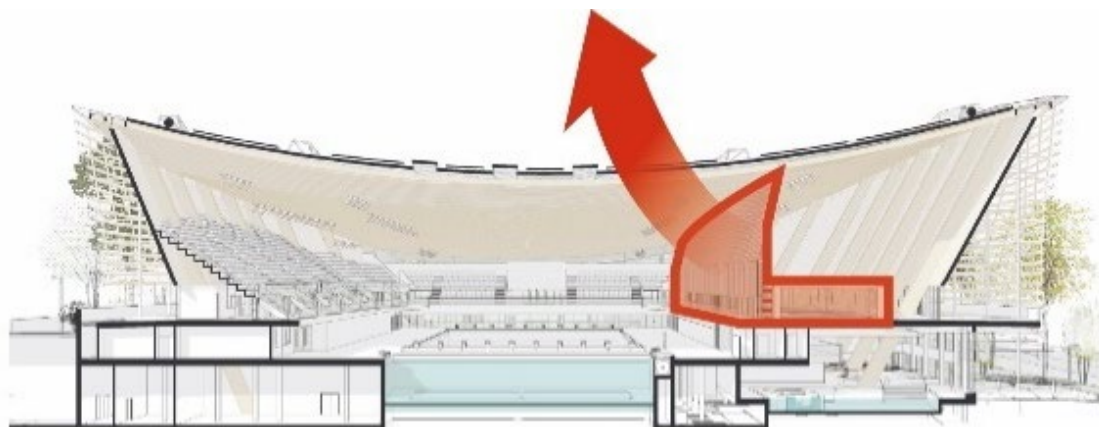
réversibilité

héritage



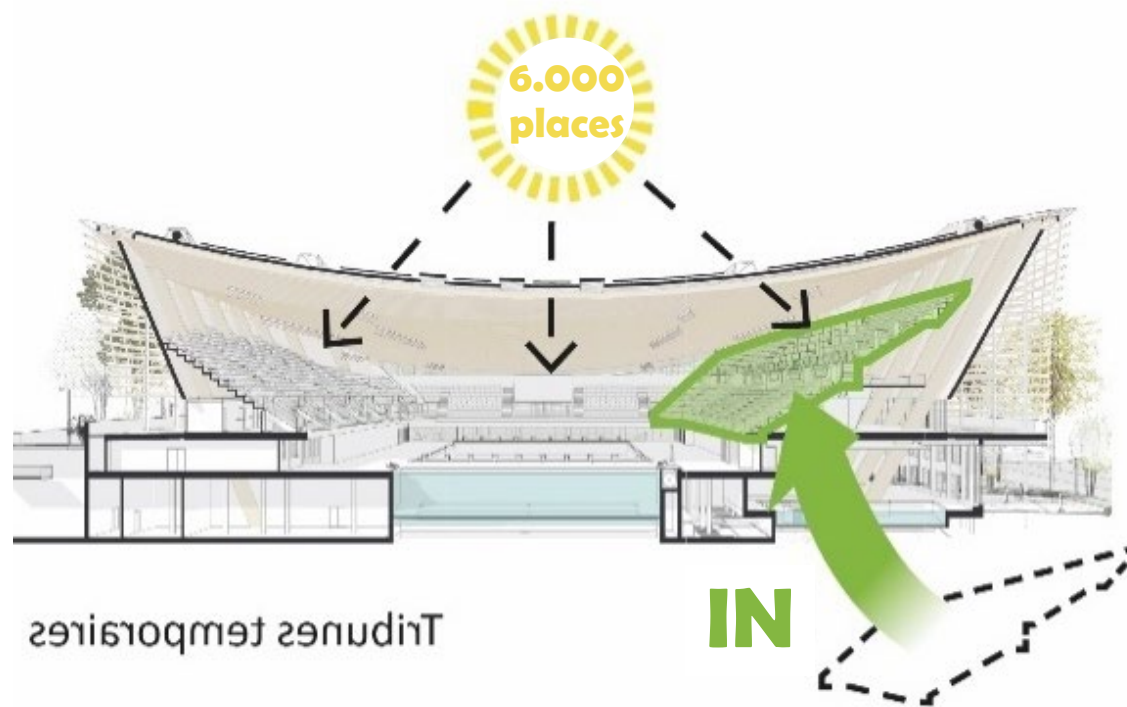
Compétition type 4

OUT



plateau sportif : padel-tennis

6.000 places

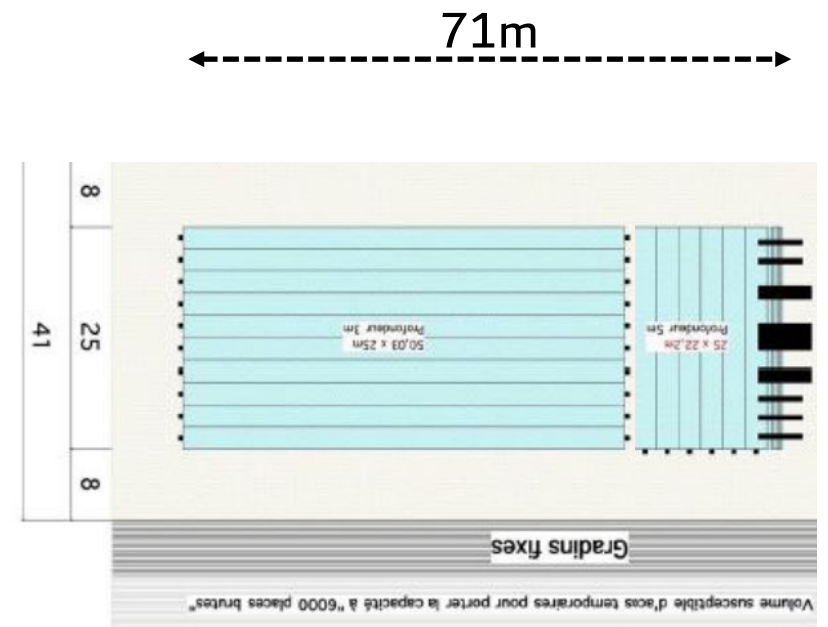
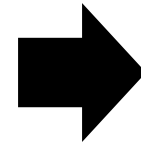
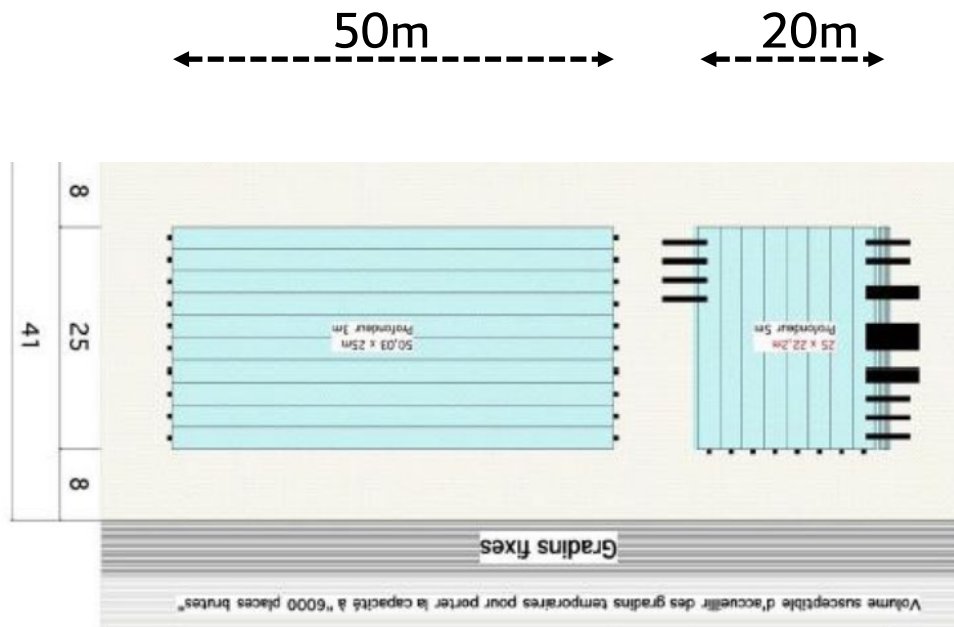


Tribunes temporaires

IN

tribunes temporaires (+2.500)

2 bassins > 2 multi-bassins



Simultanéité des épreuves

Water-polo
Natation artistique + **Plongeon**

OU

Natation courses

Simultanéité des épreuves

Water-polo
Natation artistique

33m

+

Plongeon

20m

OU

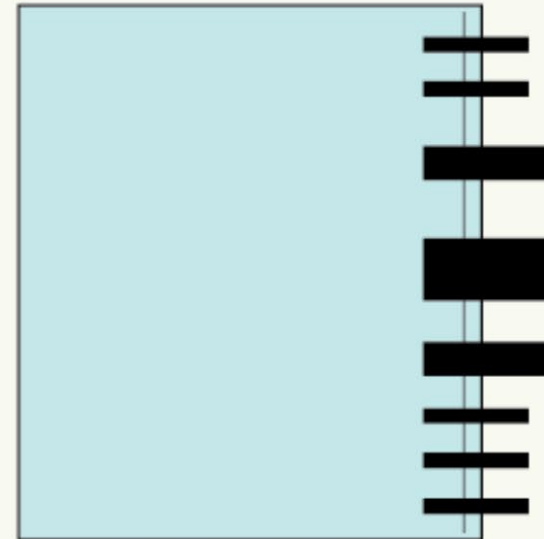
Natation courses

50m

2 bassins



33m

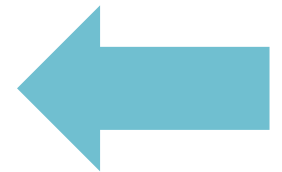
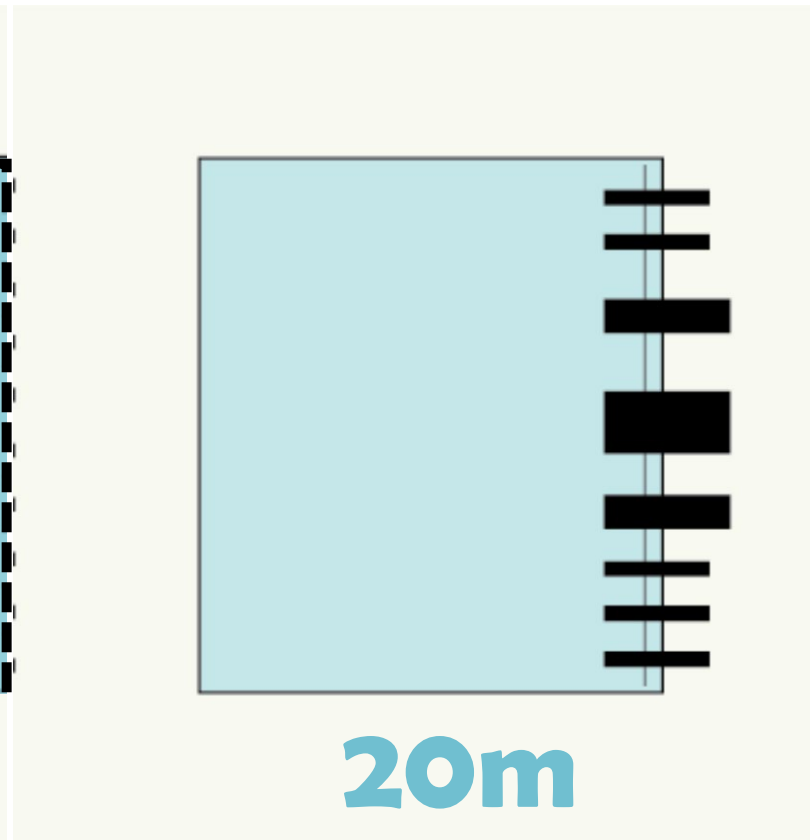
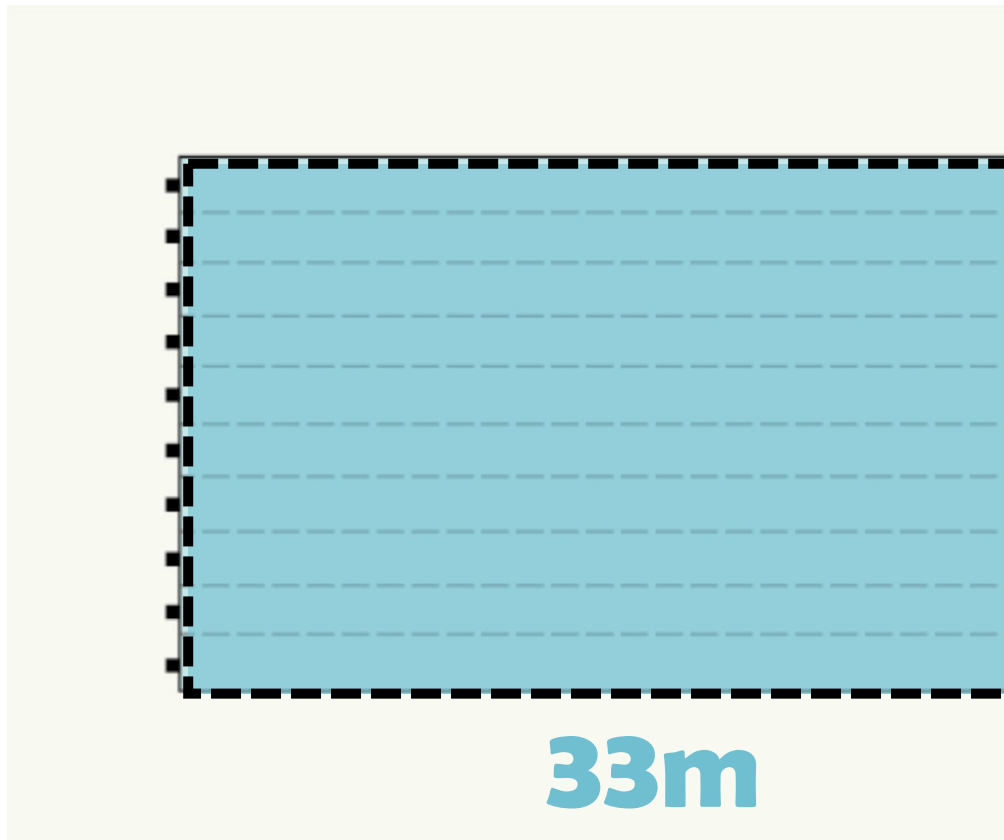


20m

2 bassins

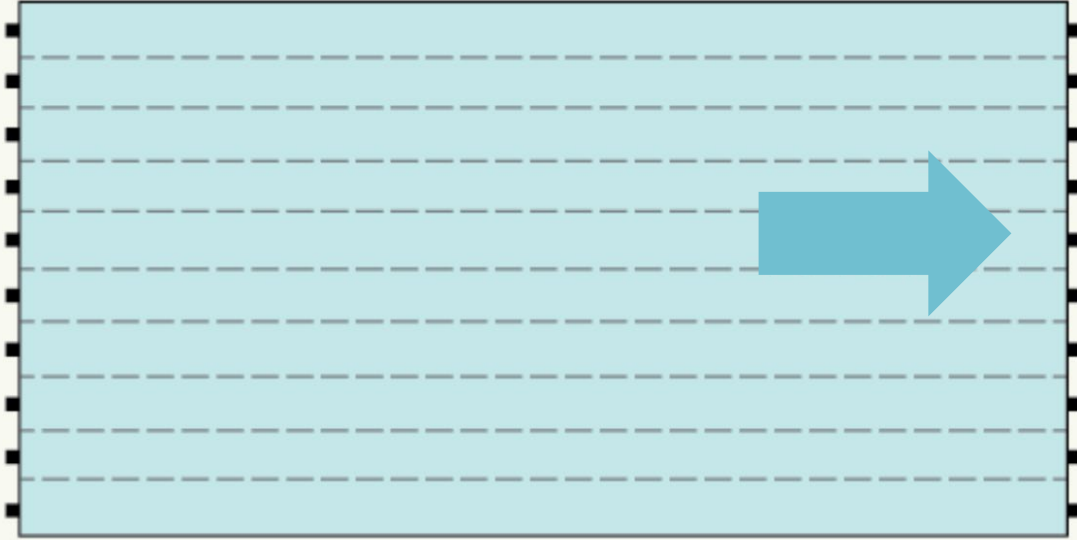
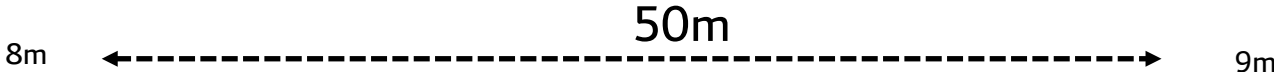
Configuration Water Polo / Natation synchronisée > Plongeon

8m ← 33m → 9m ← 20m → 8m

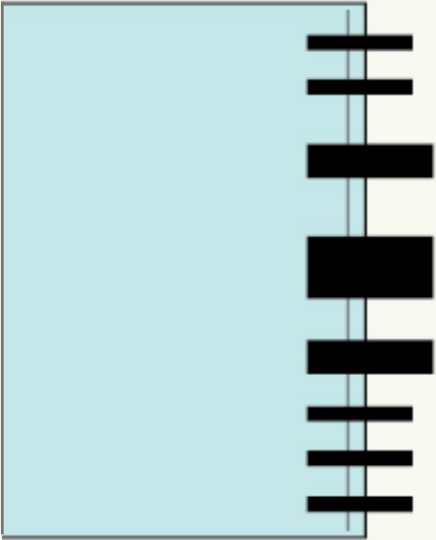


2 bassins

Configuration Natation courses

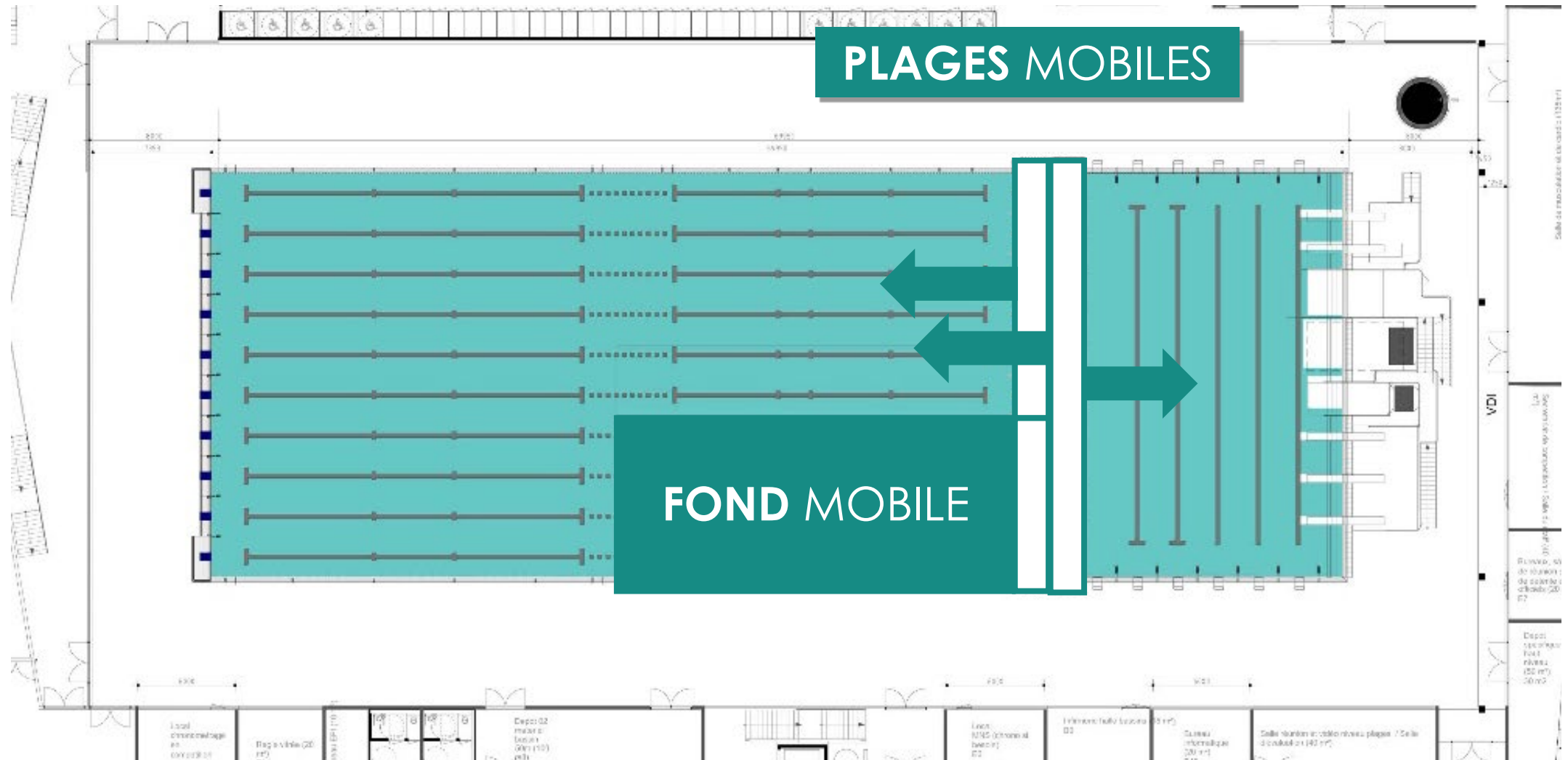


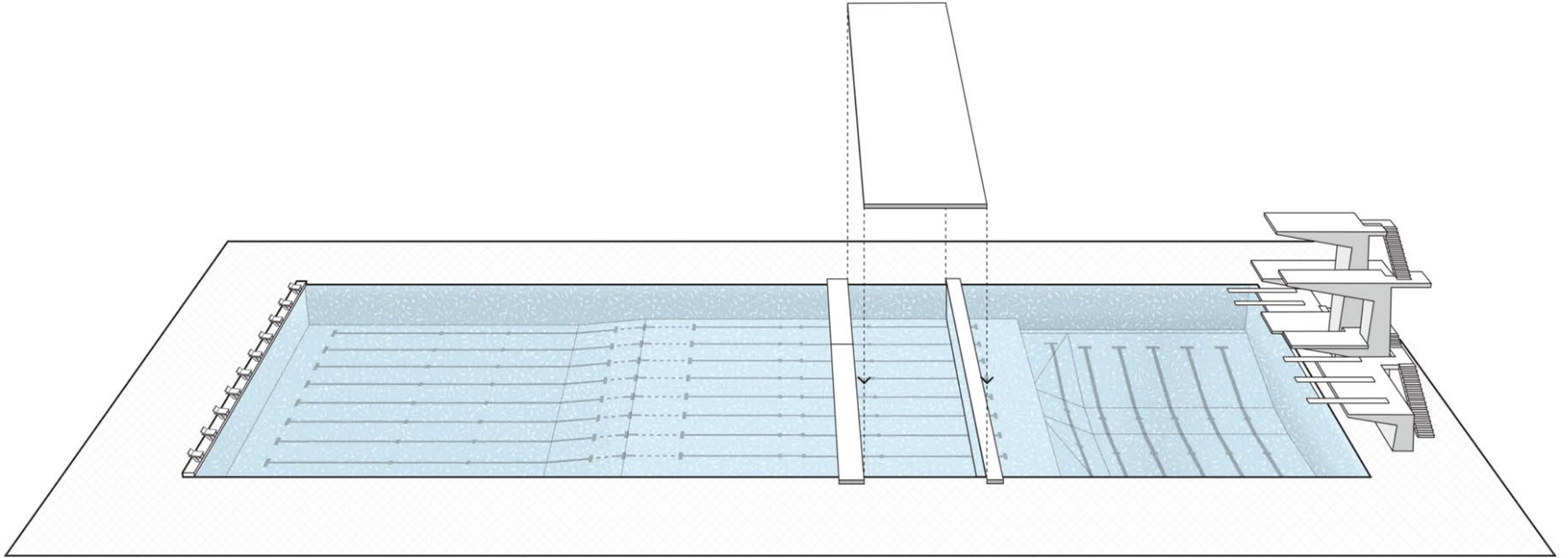
50m



17m

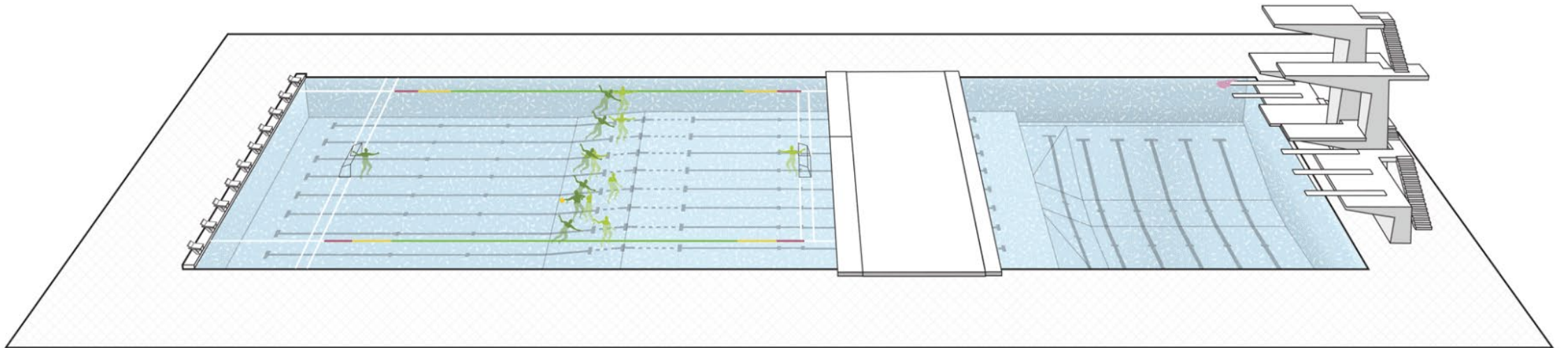
polyvalence des bassins





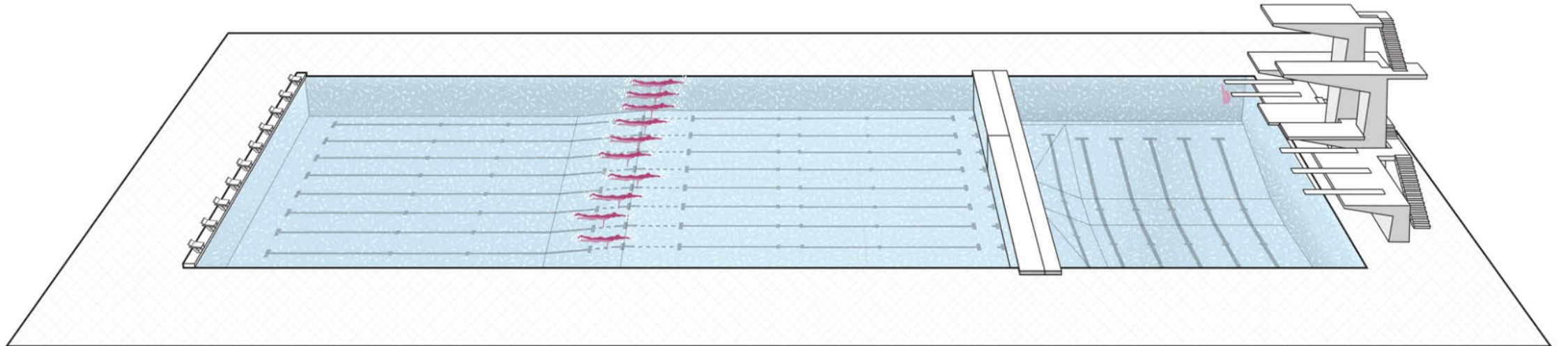
3

Olympic Games : waterpolo / artistic swimming + diving



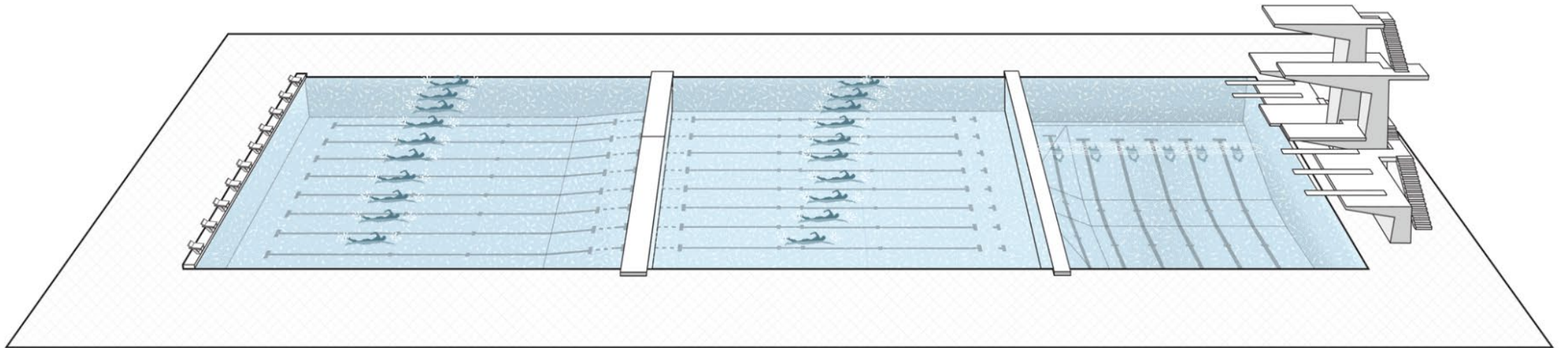
1

training day : swimming 50m + diving



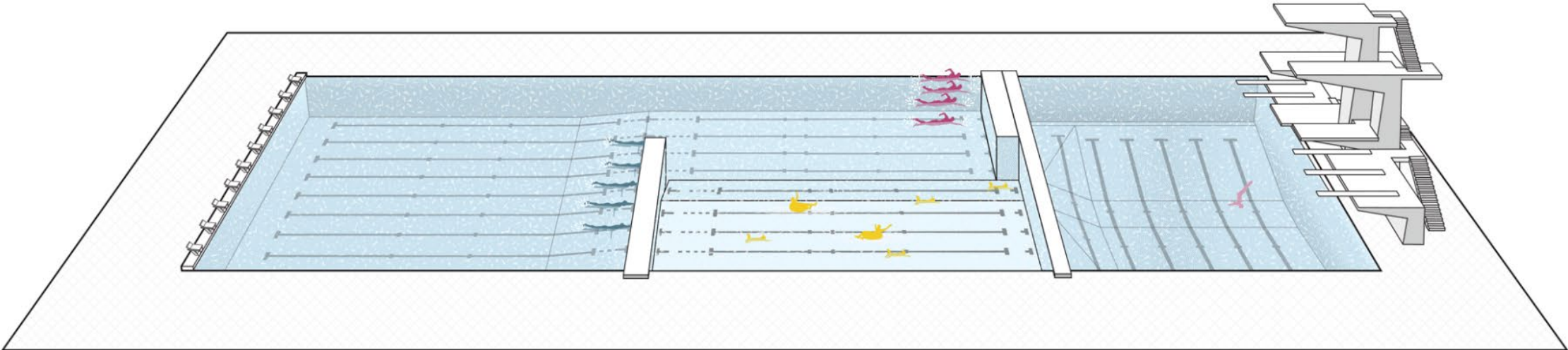
2

training day : 26 swimming lanes of 25m

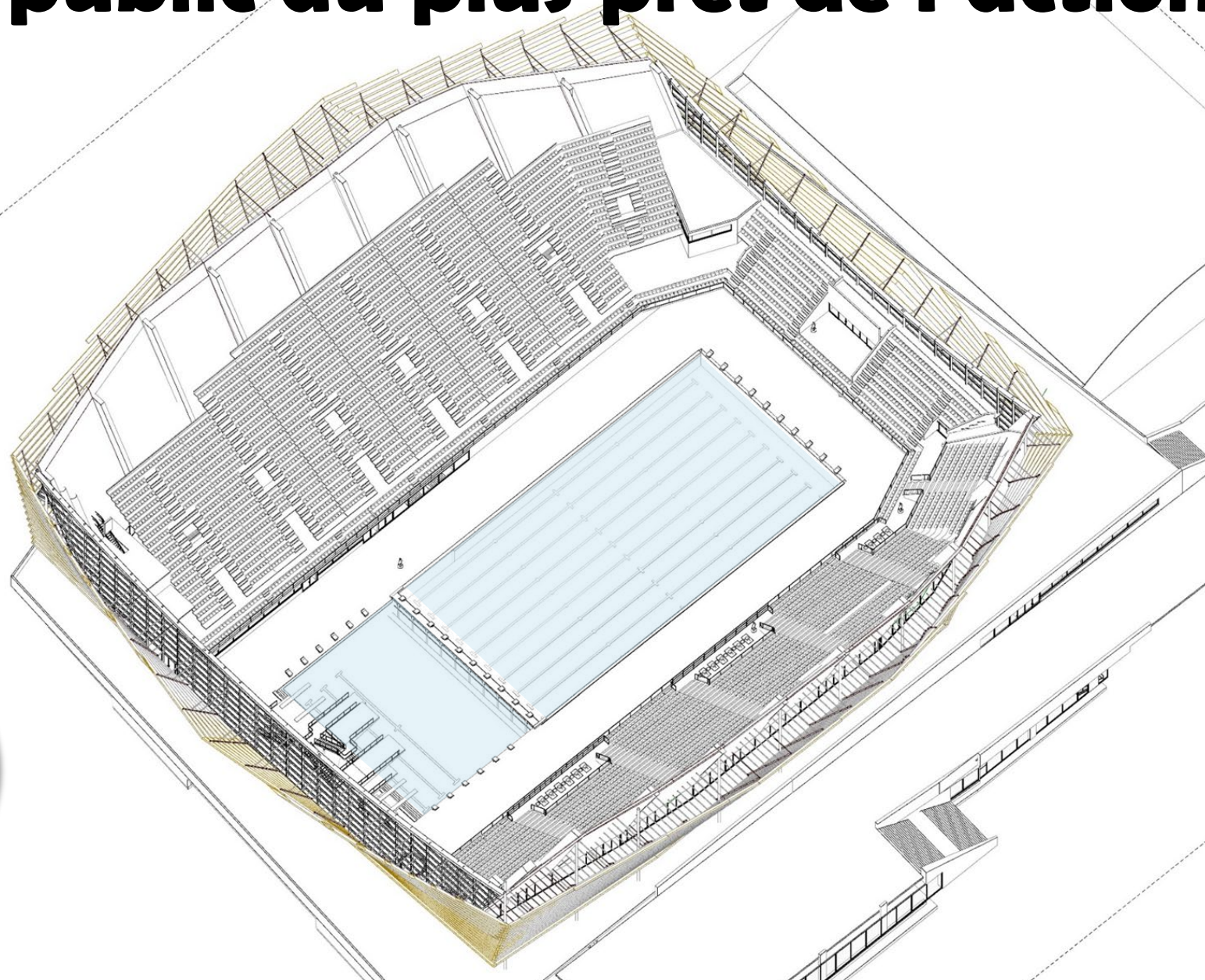


4

everyday's life : swimming 50m + swimming 25m + diving + learning swimming



le public au plus pret de l'action



-20%
volume

-10%
eau









économie circulaire

transmettre

aux jeunes générations





1
siège = 10kg
déchets

**100% plastique recyclé
collecté localement**





- 14 000 m³ de béton soit 14 millions de packs de 
- 17 500 m² de surface totale soit 350 salles de 
- 1 700 T d'acier soit 450 
- 2 800 m³ de bois soit 650 000 boites de 200 
- 350 Compagnons au pic d'activité soit 15 équipes de 
- 906 000 heures de main d'œuvre soit assez pour faire l'aller-retour jusqu'au  en 