



FRANCE

Paris (75)

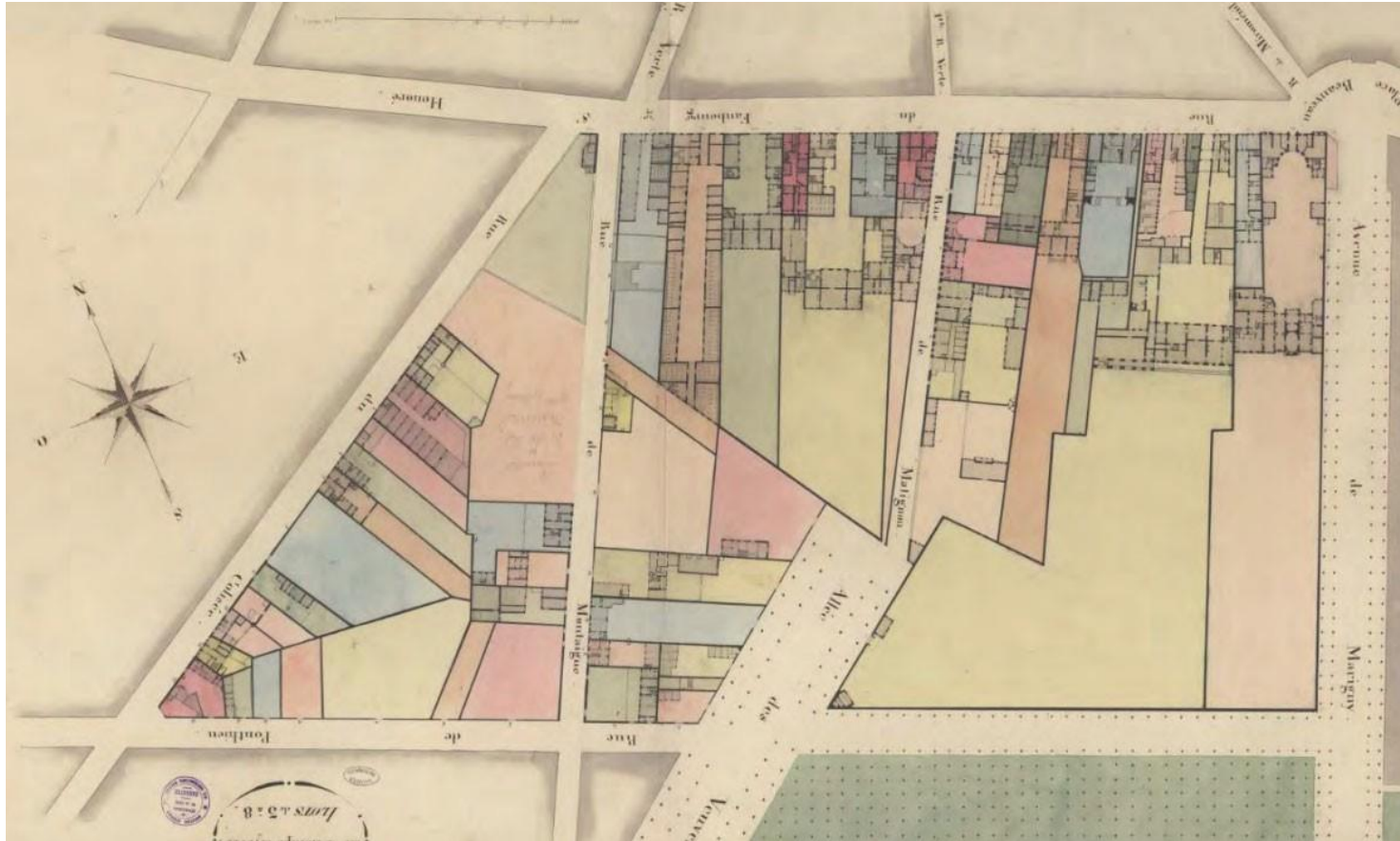
Elevation of an Exceptional Building



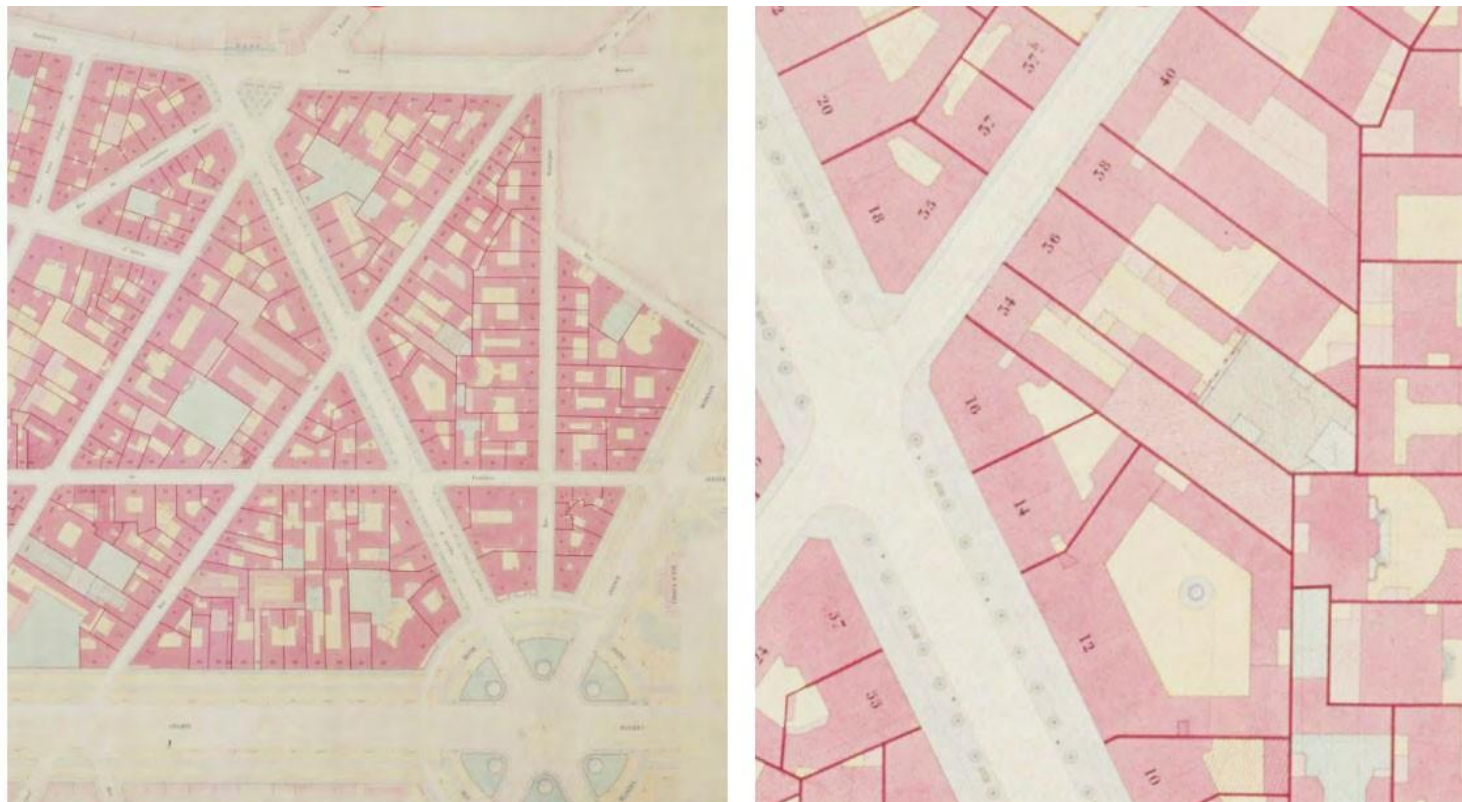
Etude de faisabilité

REHABILITATION
CREATION

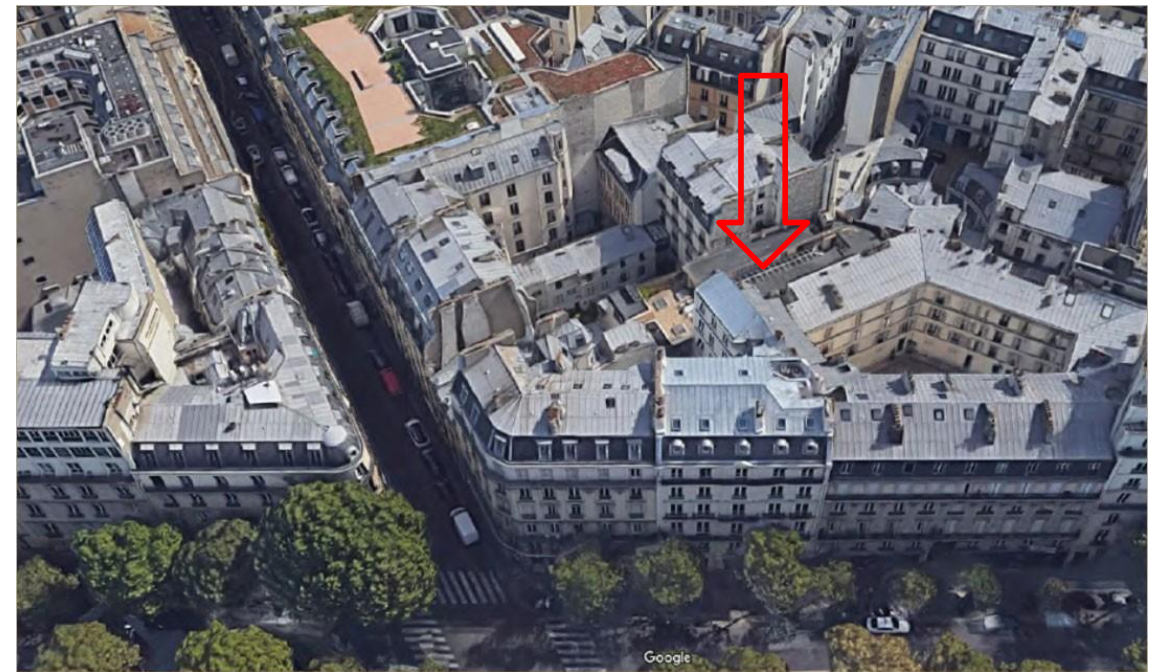
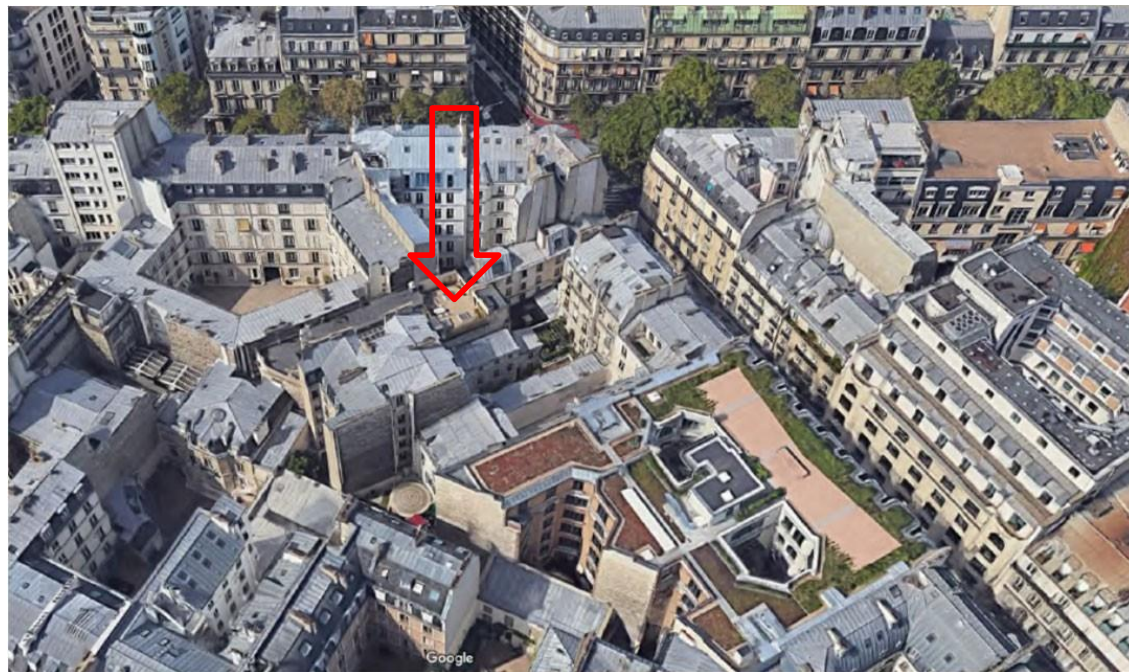
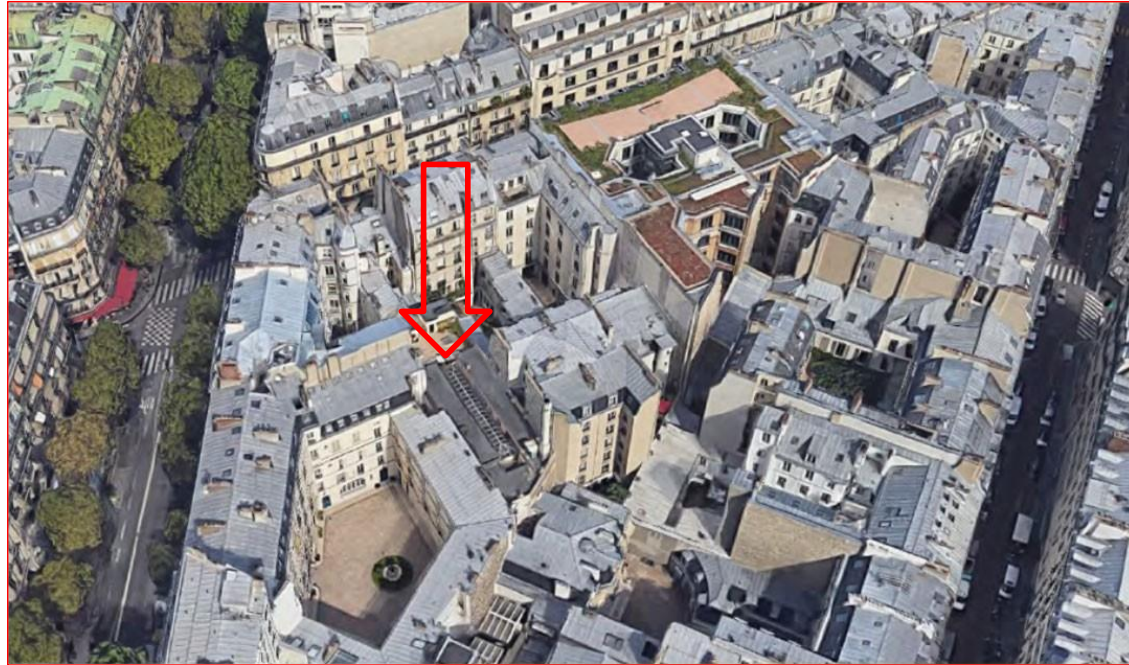
Un site remarquable



Vasserot and Bélanger Plan – 1830-1850 (source: Paris Archives – 2nd district – Champs-Élysées – Block 3 to 8 – 1/714 – F/31/74/03) – Orange plot



Municipal parcel plan of Paris – late 19th century (source: Paris Archives – 30th district – Fbrg du Roule – 30th sheet – 1/500 – PP/11902/C)

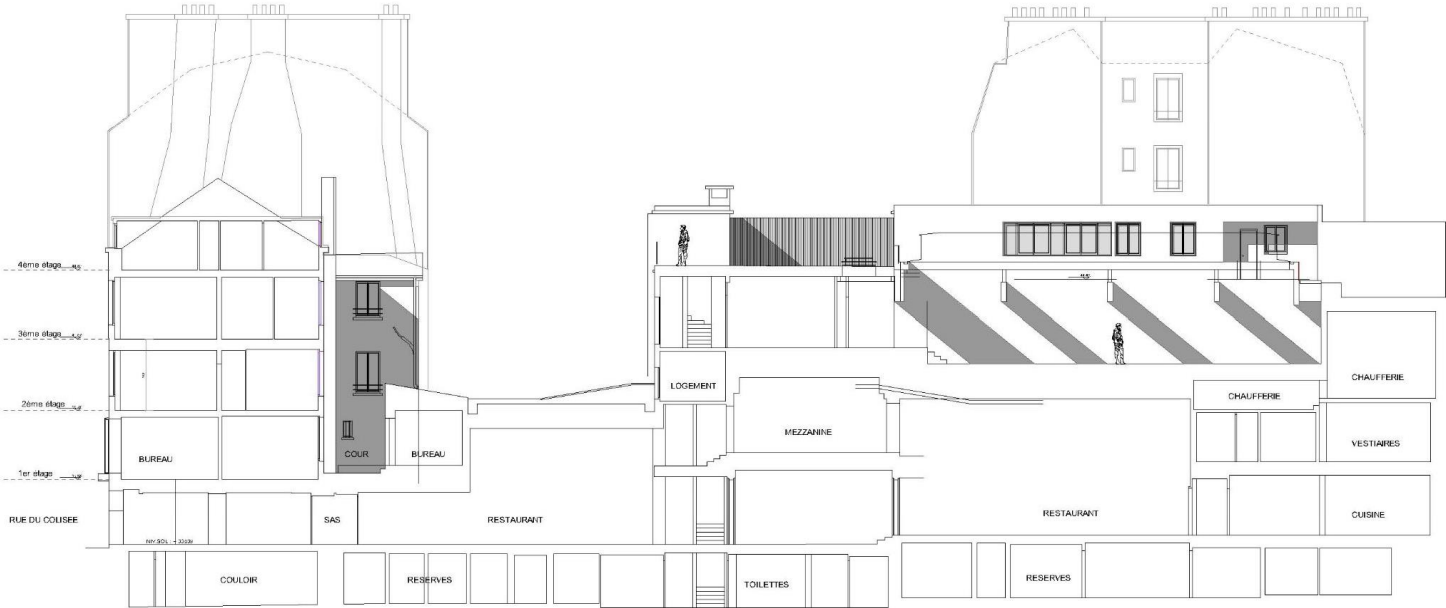
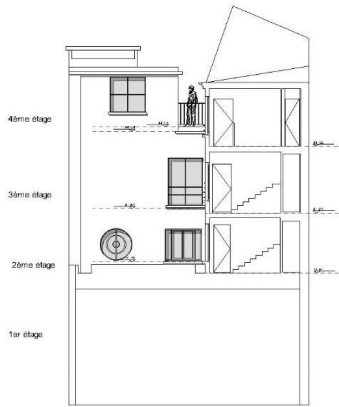
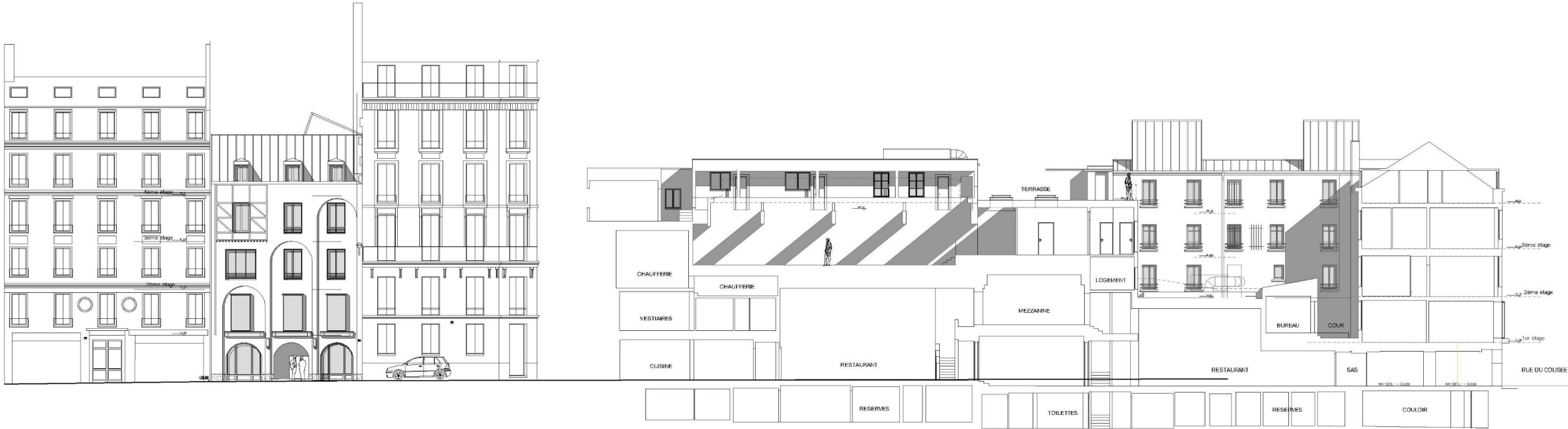


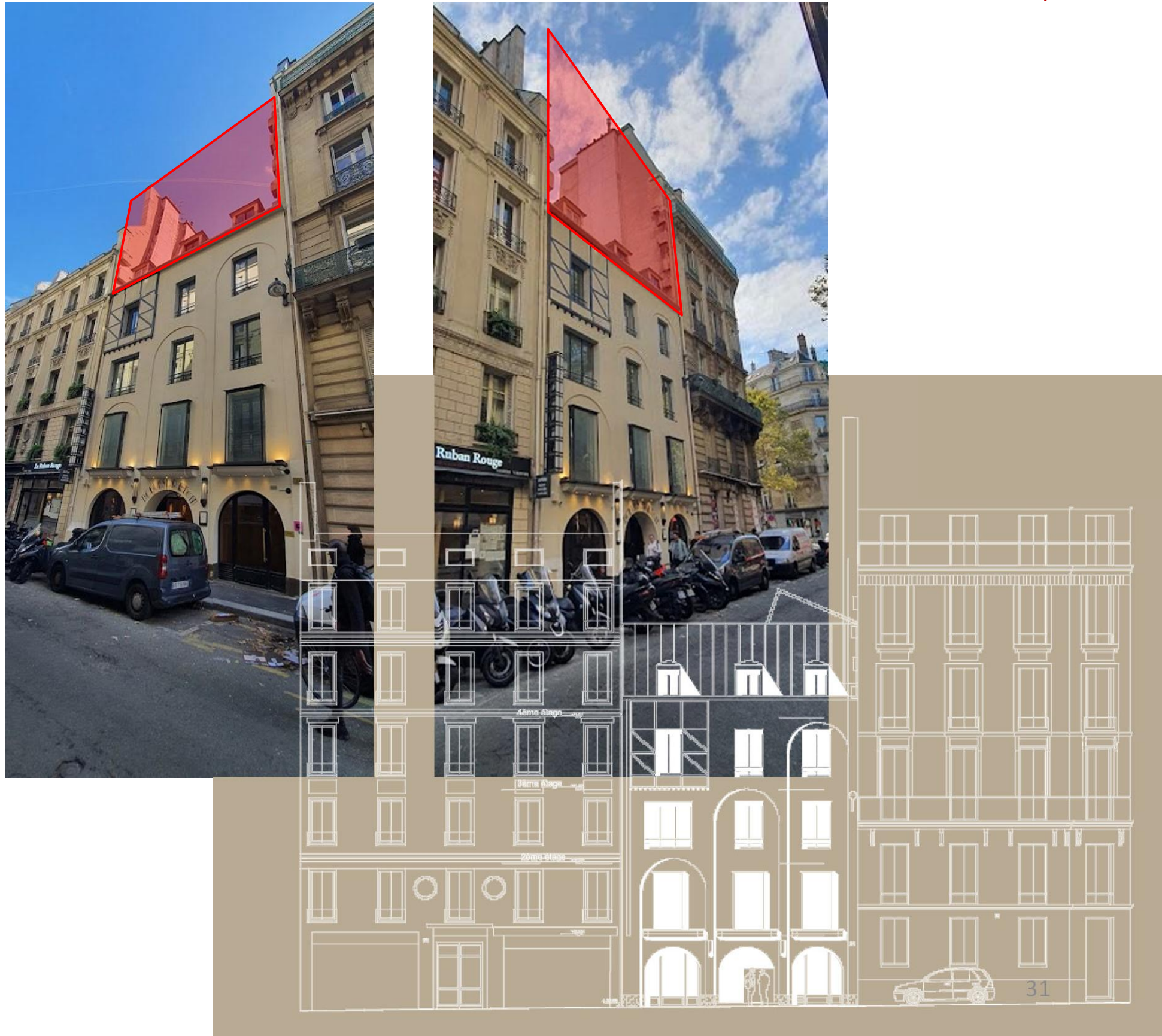


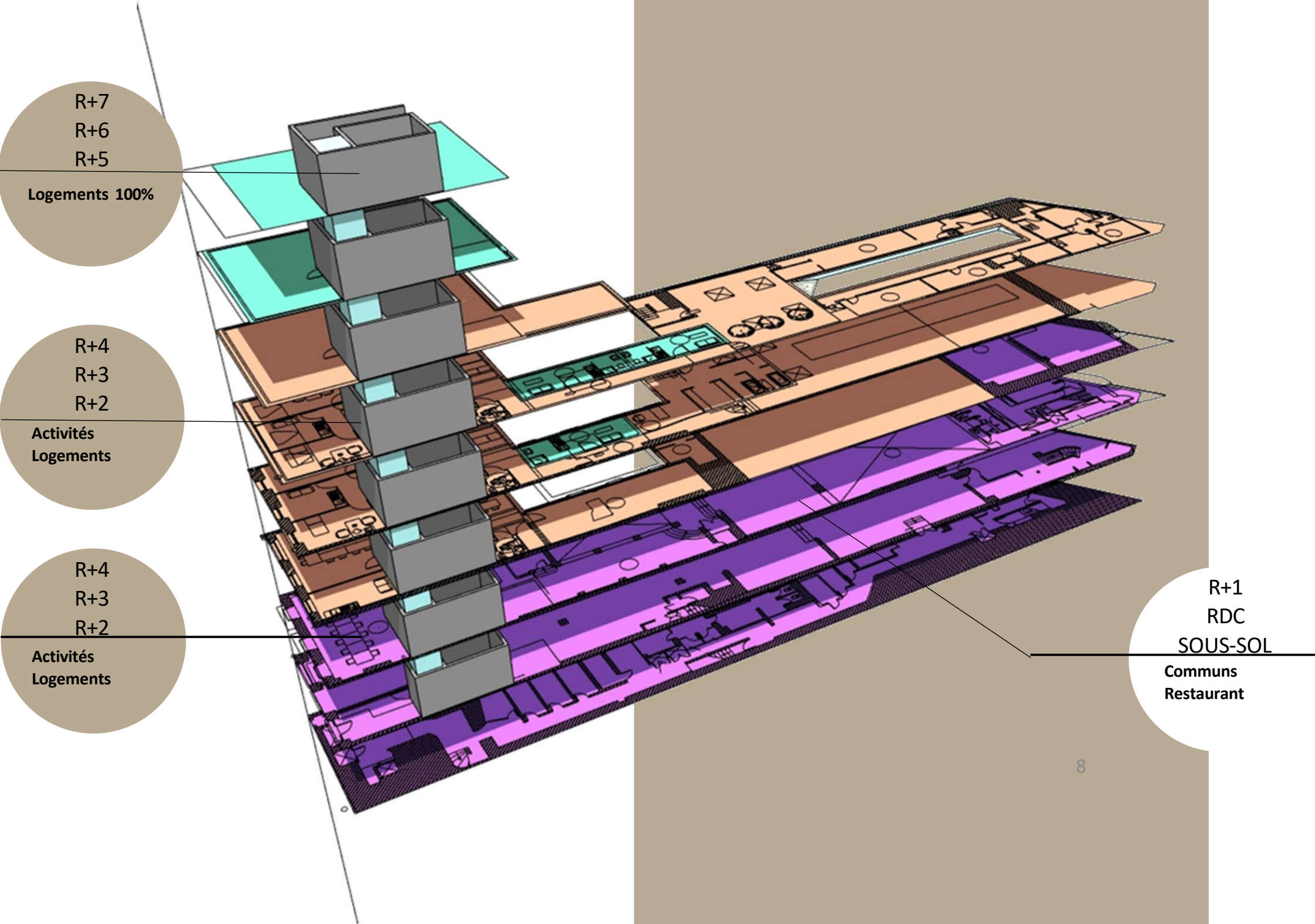
Vue 1

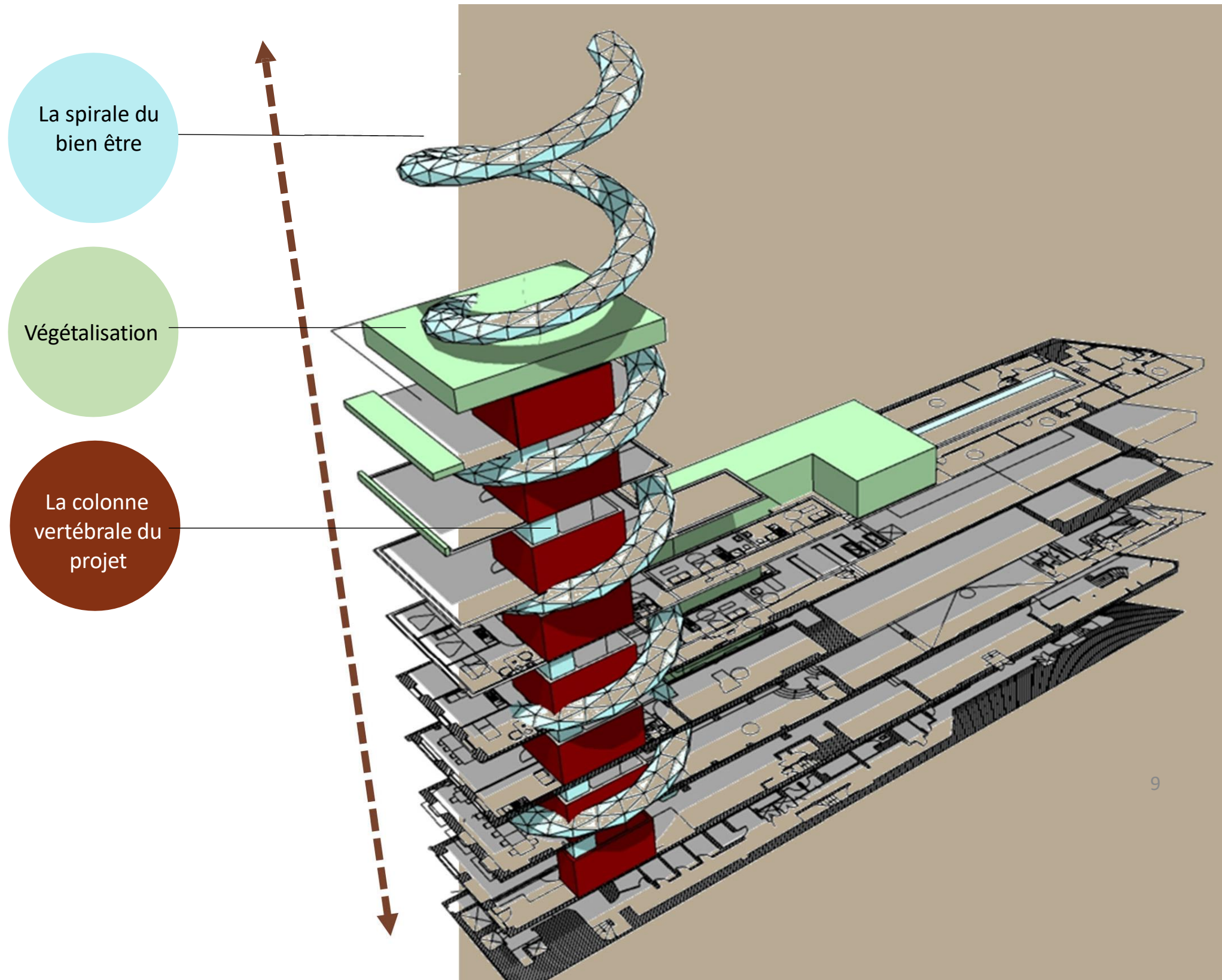


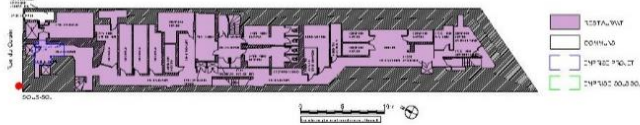
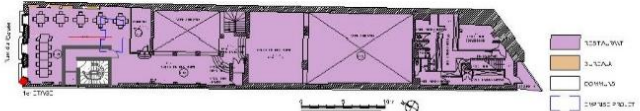
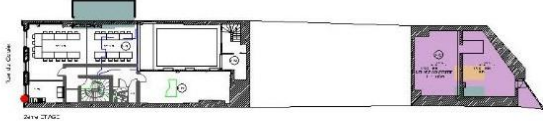
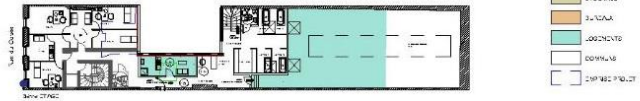
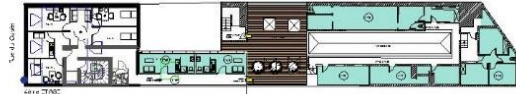
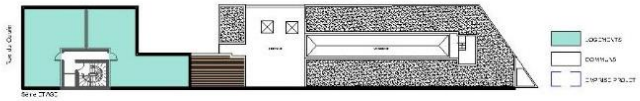
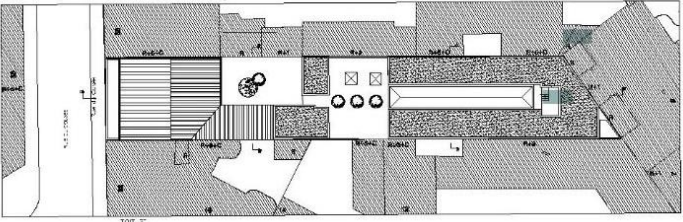
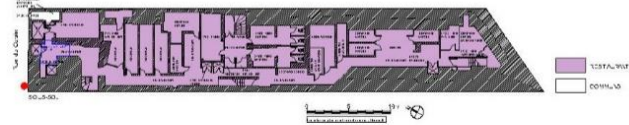
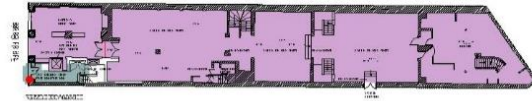
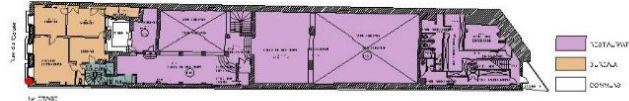
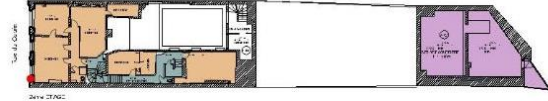
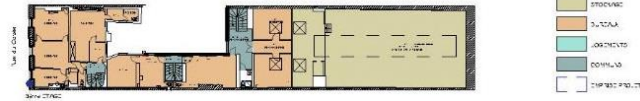
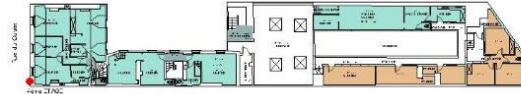
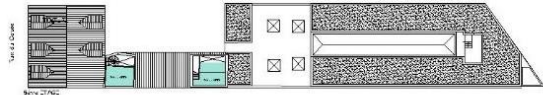
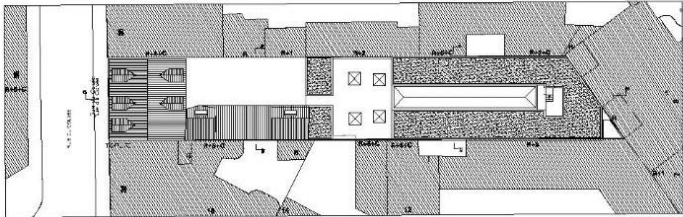
Vue 2

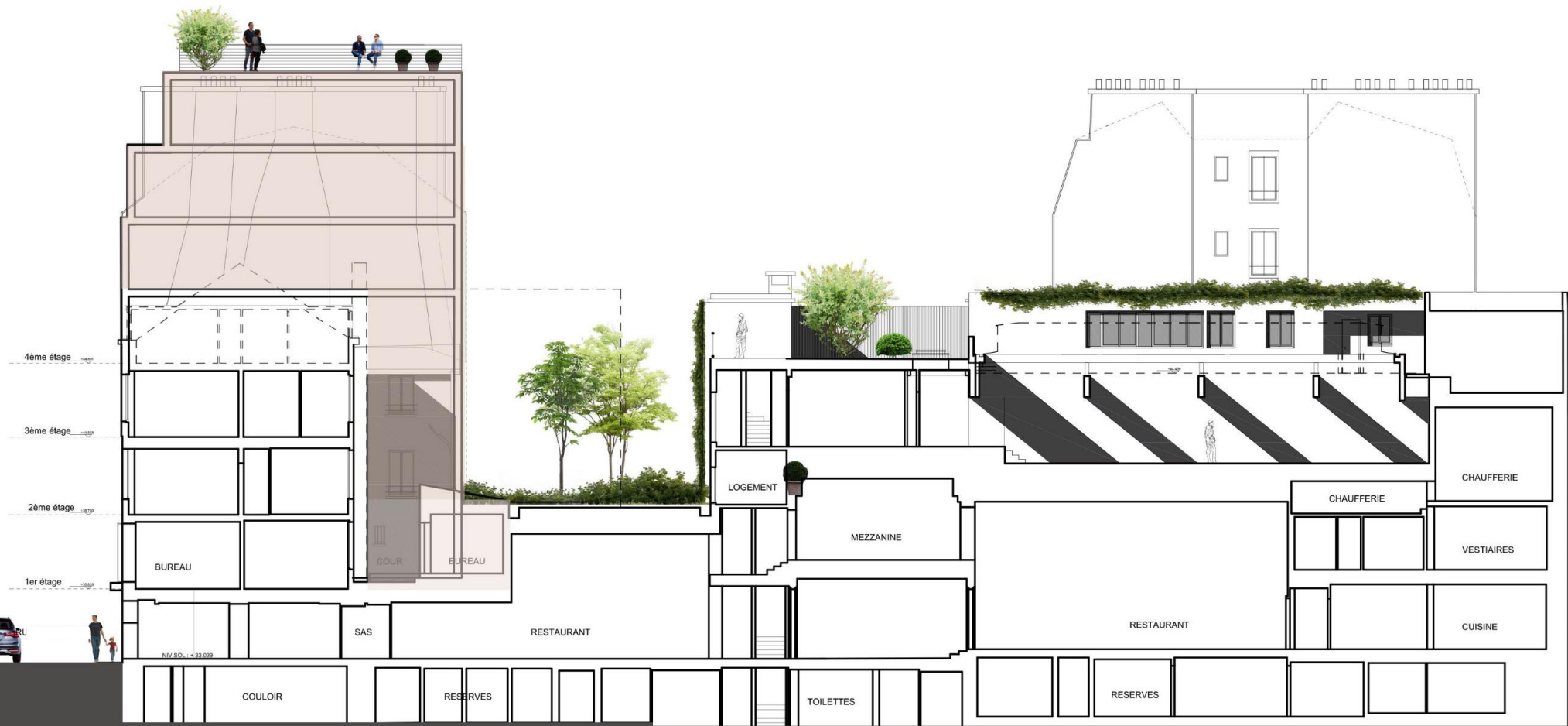


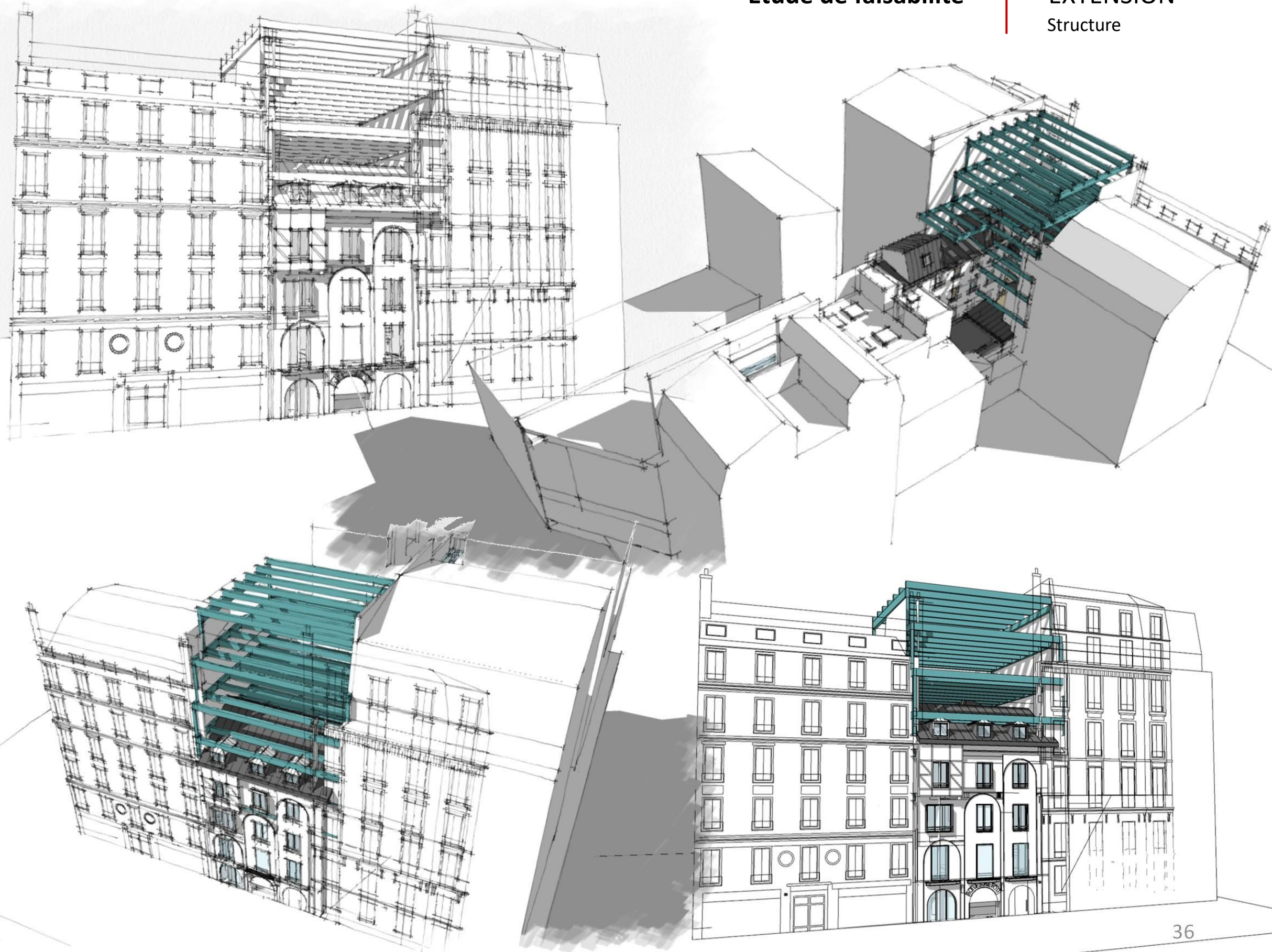












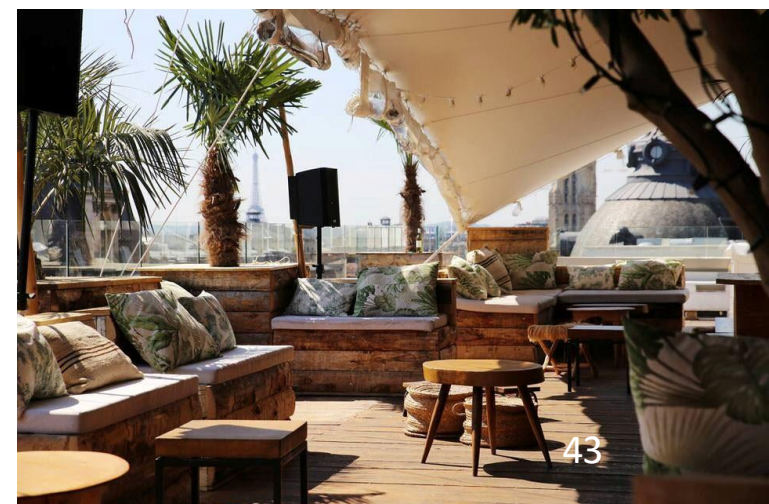




In Paris, as in all major cities, the presence of vegetation is a key ecological challenge in the fight against climate change. The Paris biodiversity plan emphasizes this objective by recommending the preservation and enhancement of nature in the city.

Vegetation on building roofs contributes to:

1. Rainwater retention (4 to 38 mm depending on substrate thickness), reducing the saturation of drainage systems and lowering flood risks.
2. Improvement of the urban environment: increased presence of vegetation in the city.
3. Biodiversity development: vegetated areas provide refuge, resting, feeding, and breeding spaces for wildlife.
4. Improvement of insulation and thermal inertia on the top floors of buildings in the case of green roofs.
5. Sound insulation: reduction of airborne noise for semi-intensive to intensive green roofs and vegetated walls.
6. Ambient temperature regulation: air is cooled and humidified through evapotranspiration, helping to mitigate urban heat island effects.
7. Air quality improvement: absorption of suspended particles such as dust and pollutants (NOx, SO₂...), and protection of roof waterproofing.





Mousse d'Islande



Mousse Boule

Mousse de
Provence

Mousse forestière



Mur Jungle



Mur de plantes

A vertical garden

1. Air purification for healthier interiors:

Some plants improve air quality by absorbing chemical pollutants like formaldehydes or benzenes found indoors. Plants in a green wall filter fine airborne particles and convert CO₂ into oxygen through photosynthesis.

2. Reduction of ambient temperature:

The exterior green wall naturally insulates through its layered composition (structure, substrate, and plants) and the air gap between the green wall and the support wall, which acts as insulation. Green walls act as a second skin, protecting the building from sunlight in summer and retaining heat in winter. Plants absorb sunlight, creating a cooler and more pleasant climate. They also help mitigate urban heat islands, creating a microclimate.

3. Regulation of ambient humidity:

During photosynthesis, the natural plants in the green wall regulate the humidity of their environment.

4. Reduction of indoor and outdoor noise:

Through multiple layers (plants, substrate, and modules), green walls partially absorb sound vibrations and reduce noise, functioning as natural acoustic insulation.

5. Enhanced well-being:

Living and working in a green environment positively affects human well-being. A green setting relaxes and reduces stress.

6. Eco-friendly natural decoration:

A green wall is made of living plants. Due to its CO₂ absorption capacity and health benefits, it aligns perfectly with the growing ecological trend.





Process steps

1. Analysis of urban planning regulations, feasibility study for a timber rooftop extension.
2. Project presentation to the City of Paris, building permit submission.
3. Technical study, plan design, tendering, execution dossier.
4. Removal of the existing roof.
5. Fabrication of the floor, assembly of walls, and construction of the timber frame in the workshop.
6. Creation of vertical circulation, stairs, and elevators.
7. Raising walls and frame on site using a crane.
8. Construction of roof and zinc walls, installation of joinery.
9. Insulation and airtightness.
10. Utilities installation (electricity, water), interior finishes, partitioning.
11. Finishes and floor coverings (parquet, tiles).
12. Project handover.