Pierrefitte-sur-Seine

A new building for National Archives of France

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Helsinki May 9th

ARCHIVES NATIONALES

LIBER LAG 2014

Site location, north of Paris, 30 mn with métro very close of Paris 8 University

Project schedule

- ➔March 9th, 2004 : decision of President J.Chirac to build a new building for national archives
- ➔May 10th, 2005 : Architect M. Fuksas winner of the competition
- ➔June 18th, 2009 : beginning of the works
- ➔December 2010 : end of concrete works for main building
- ➔September 2011 : first shelving system in place
- ➔May 22nd, 2012 : first day of 200 Km records transfer (16 months)
- ➔June 15th, 2012 : building delivery
- ➔July 2012 : staff arrival into the building
- ➔January 21st, 2013 : public opening
- ➔February 11th, 2013 : inaugural ceremony by President F. Hollande

Programme

The main targets

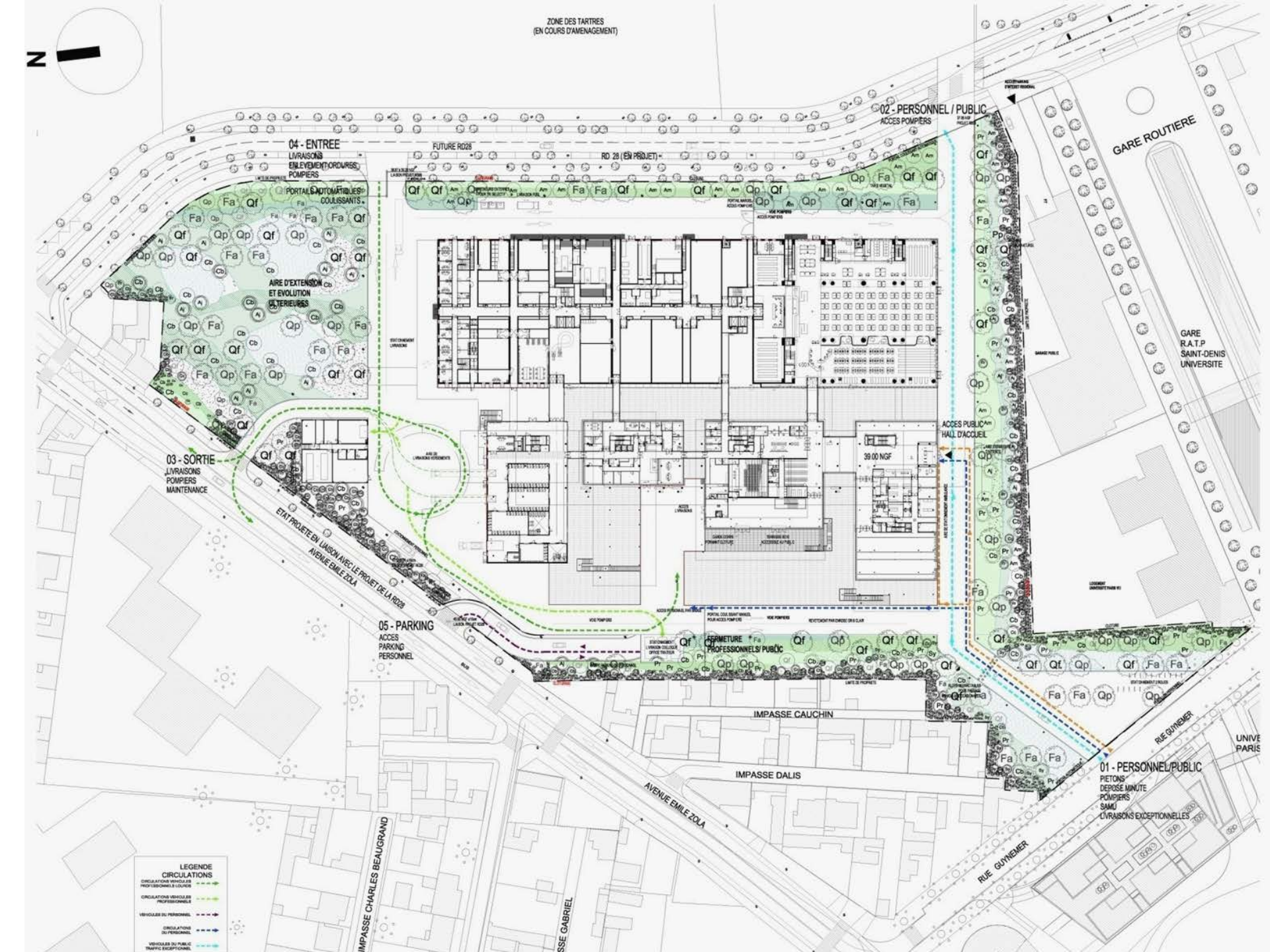
- ➔ Preservation : **320 km** of records shelves on which **120 km** of increasing for the next **30** years and about **120 km** more after **30** years (building extension possibility).
- ➔ Public consultation : **320** seats in the reading rooms
- ➔ Other public areas : **300** seats conference hall, **400 sqm** exhibition room, teaching service with **6** pédagogical rooms and workshop for **140** students
- ➔ Staff in the building : about **320** persons

The site

- ➔ Building site of **4,7 Ha**, easily accessible with metro resort and with capacity for a building extension

The building – 85 000 sqm

- ➔ Preservation : **220** repositories of **200 sqm** (regular and special)
- ➔ Specialized staff workshops : **1400 sqm** for restoration studio, digital recording studio and 10 archive processing rooms
- ➔ Consultation and public development spaces : about **5000 sqm**


ZONE DES TARTRES
(EN COURS D'AMENAGEMENT)
N
02 - PERSONNEL / PUBLIC
ACCES POMPIERS
GARE ROUTIERE
04 - ENTREE
LIVRAISONS
ENLEVEMENT ORDURES
POMPIERS
PORTAIL AUTOMATIQUES COULISSANTS
FUTURE RD28
RD 28 (EN PROJET)
AIRE D'EXTENSION ET EVOLUTION ULTERIEURES
GARE R.A.T.P SAINT-DENIS UNIVERSITE
ACCES PUBLIC HALL D'ACCUEIL
39.00 NGF
03 - SORTIE
LIVRAISONS
POMPIERS
MAINTENANCE
ETAT PROJETE EN LIAISON AVEC LE PROJET DE LA RD28
AVENUE EMILE ZOLA
05 - PARKING
ACCES
PARKING
PERSONNEL
FERMETURE PROFESSIONNELS/ PUBLIC
IMPASSE CAUCHIN
IMPASSE DALIS
AVENUE EMILE ZOLA
RUE GUYNEMER
01 - PERSONNEL/PUBLIC
PIETONS
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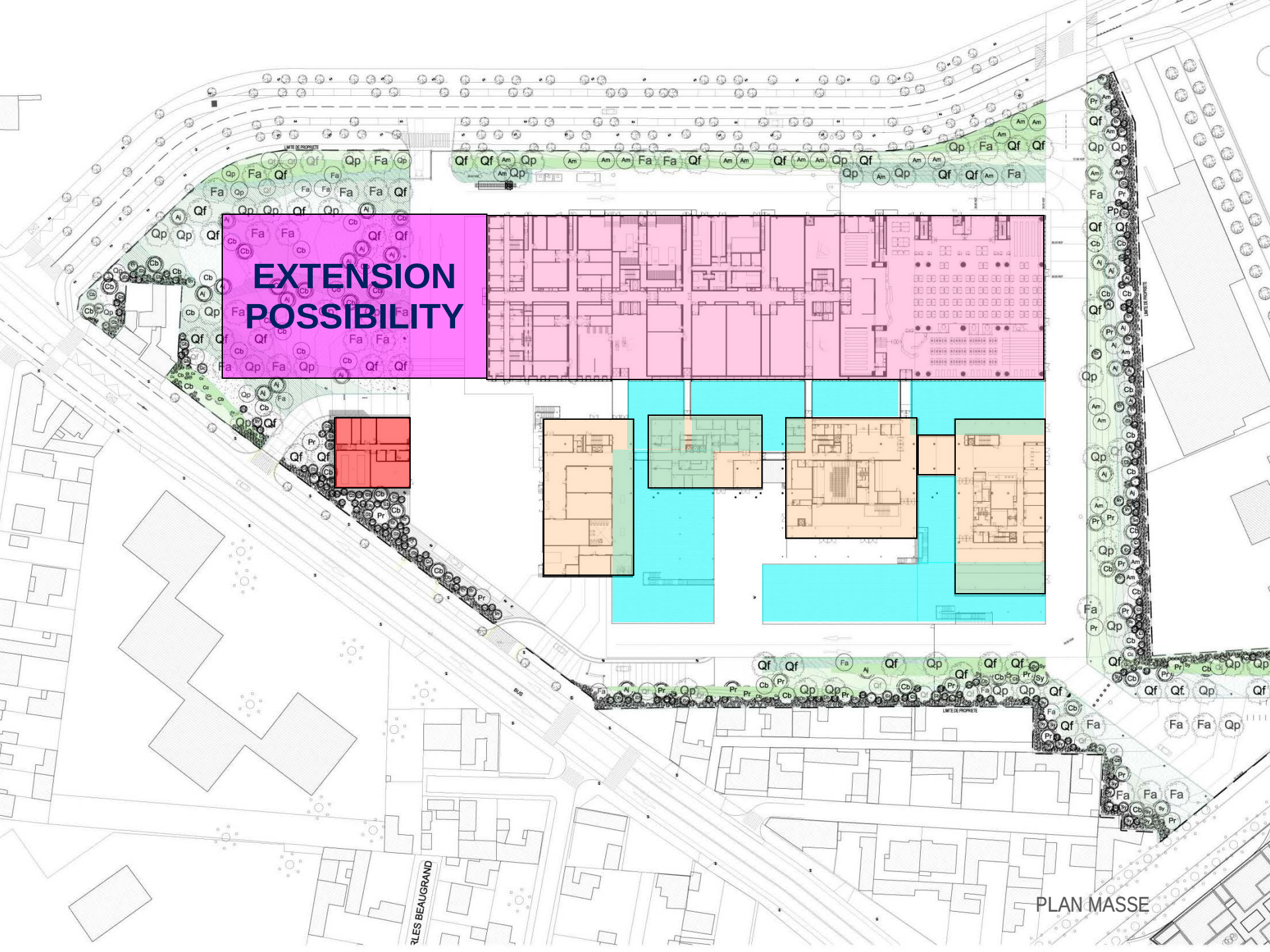

EXTENSION
POSSIBILITY
PLAN MASSE

A building of huge capacity

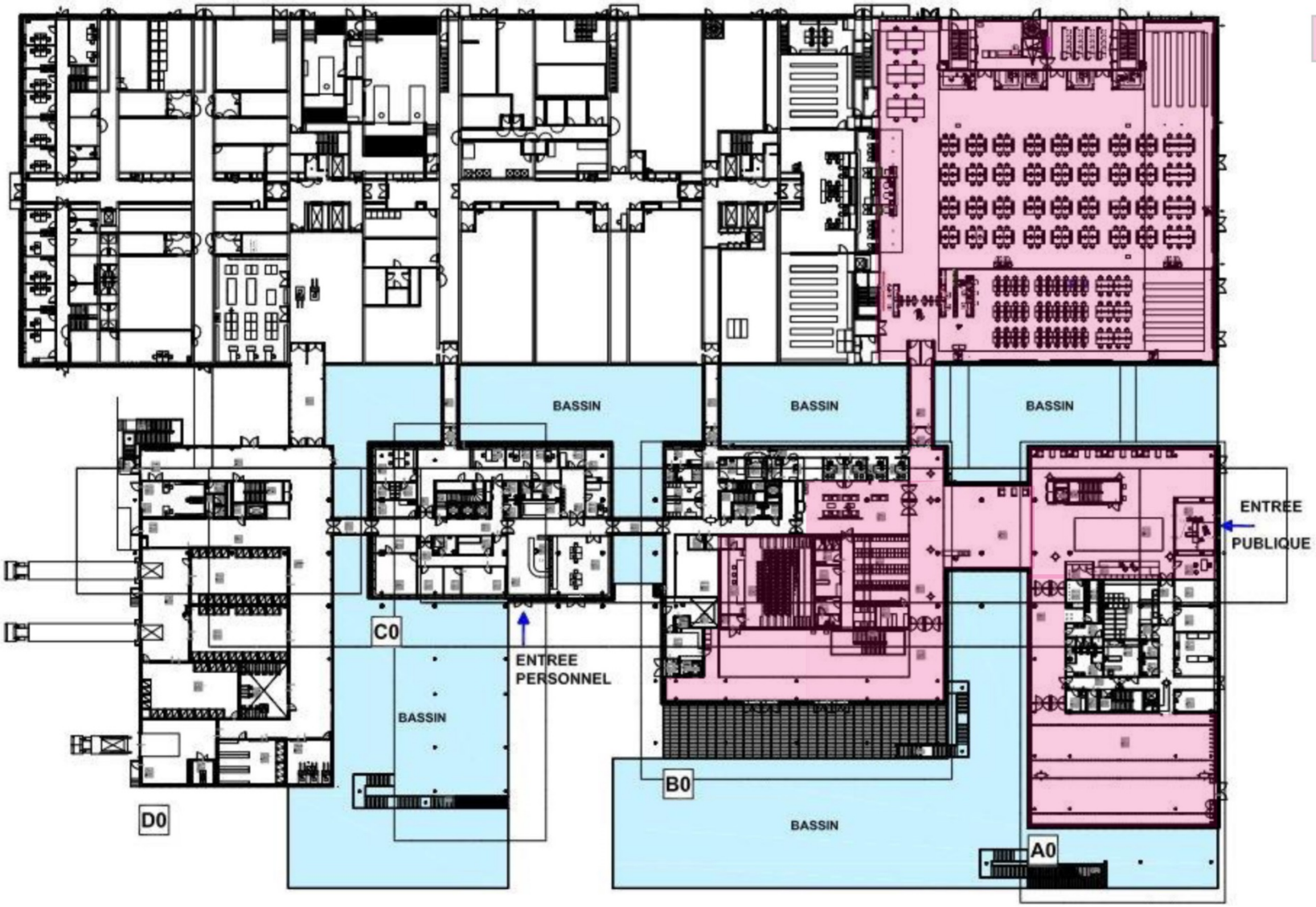
Main features of the building

A two part building

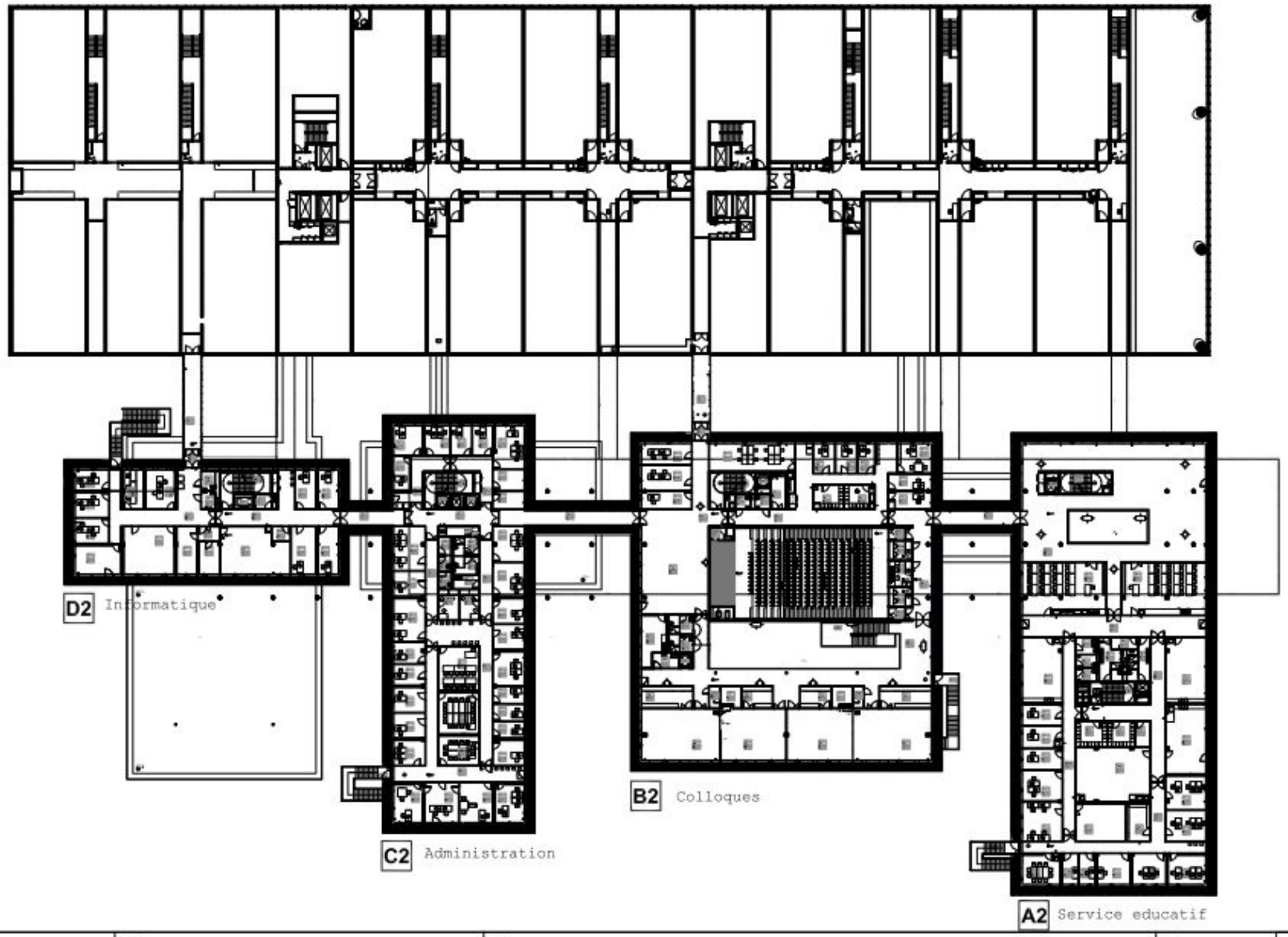
- ➔ Main building IGH : preservation/consultation
- ➔ Satellite building : all services located in 10 boxes (functional units) connected to each other by 6 footbridges and 11 footbridges with the main building
- ➔ All public areas on ground floor

Fonctionnal features of the main building

- ➔ Huge capacity for heritage documents 160 m x 48 m with 11 levels of compact repository design
- ➔ Central and main corridors provide easy access to all repositories located on each side
- ➔ Very rational organization with separated circuits (input circuit with specialized lifts and communication circuit for records with private lifts)
- ➔ Easy staff moving with archive trolleys by automatic doors with access control or personal detection



Archives Nationales	PROJET Centre des Archives Nationales de Pierrefitte-Sur-Seine	TITRE - RDC - 1/500ème	DATE / /2011	Version	PAGE



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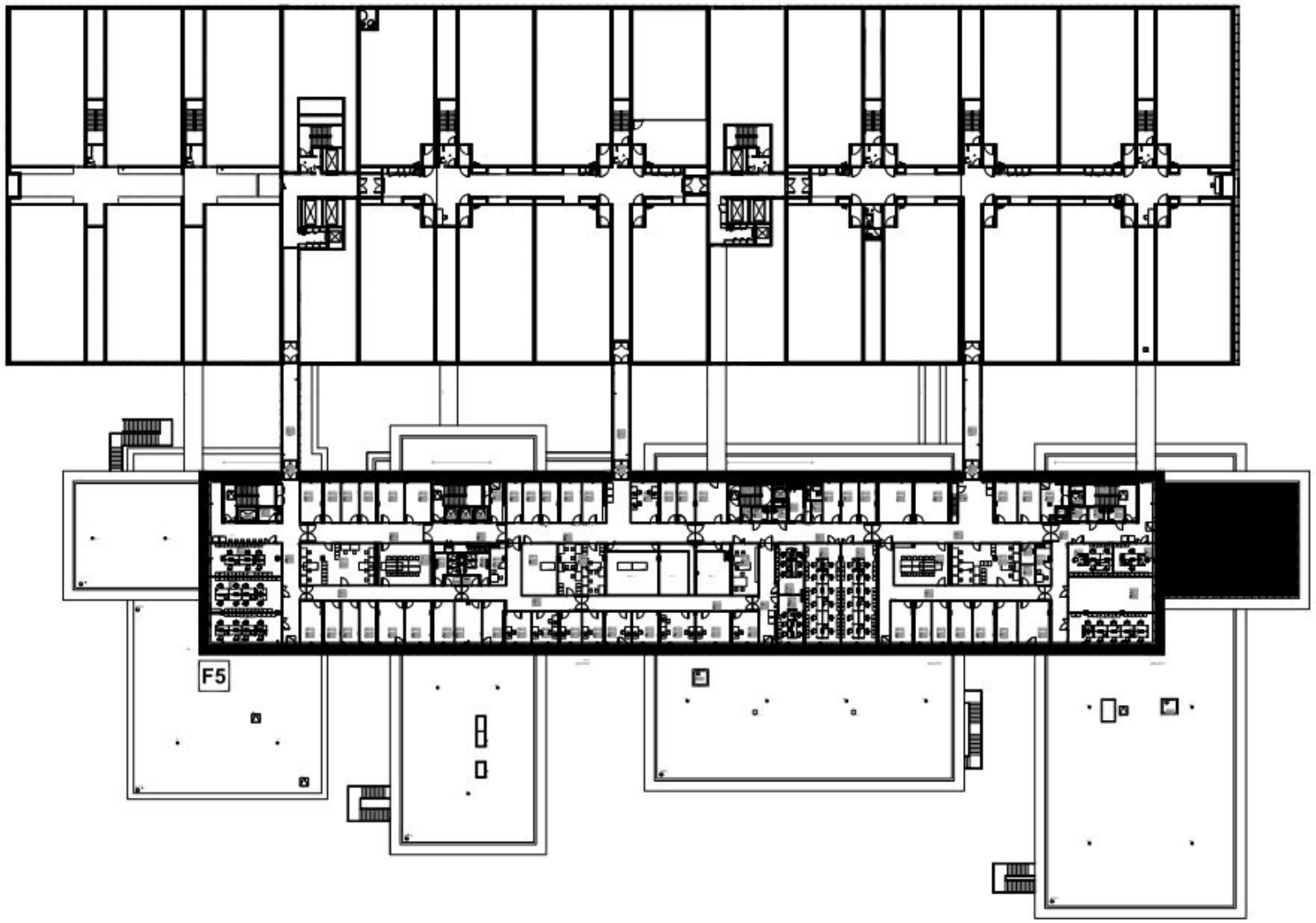

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Optimal conditions for preservation

Climatic conditions given by the own building

➔Strong thermal inertia : compact organisation with 220 repositories and outside thermal insulation

➔Strong thermal inertia by thick concrete walls (30 cm)

➔Variable temperature and relative humidity (RH) according to the seasons to save energy (16 to 24° and RH 57% max)

➔Target to reduce rate of fresh air and optimized mixing air

➔High efficiency and advanced equipments

➔All these measures associated to the air conditioning system enable to save 70 % of the energy usually necessary for the conservation buildings built in the 90’s.

Optimal fire security

Technical measures against fire

➔Fire compartment : 200 sqm repositories

➔Firewalls : 4 hours fire walls (rules for a very high building)

➔Fire detection : general optical smoke fire detectors

➔Automatic fire suppression system : high pressure water mist system (10 time less water than regular sprinkler system

➔Monitoring staff : fire brigade with 5 fire men 24/7

➔External fire rescue center in proximity

Optimal safety disposals

Many safety levels

➔Perimetrical fence around the site with video camera recording system

➔Access control : access control badges for staff and readers

➔Repositories for confidential records : double access control with badges and connected video cameras controlled by safety agent

➔Research reading room : pre recording access reader badges for readers and video camera recording system

➔Monitoring staff : security guards 24/7 in central PC room

Provisory constructiv disposals for preservation

To reach the perfect RH climate for repositories

less water quantity for pouring concrete

➔Concrete processing with less water (saving between 16 to 18 liter per each cubic meter of concrete)

➔Provisory waterproofing system on the slabs

➔Provisory openings in outside concrete wall (3 x 2 sqm for each repository)

➔Ventilation fans operating 3 month before building delivery

➔Decreasing control of residual humidity by monthly measurements of the concrete walls. In case of excess of residual water, the building contractor have to install mobile absorber machines to reach the target of 3% of residual humidity.


MONTAGRUES

Physico-chemical dispositions

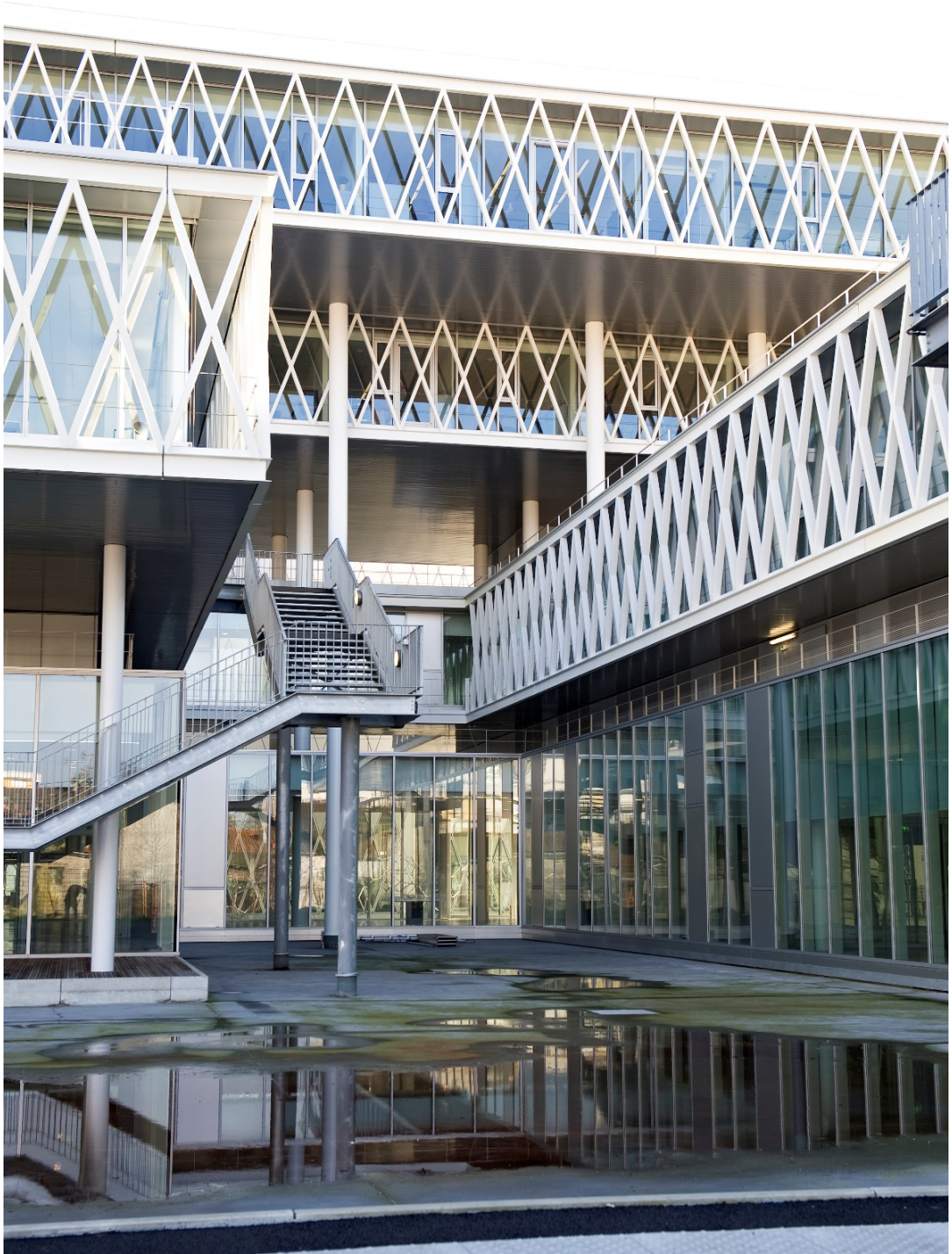
Chemical control of constructing products and equipments used in the repositories

➔No VOC (Volatil Organic Compound) in the repositories and preservation spaces

➔Wall coatings without VOC

➔Permeable water based wall painting (optimization of RH stability)

➔Technical equipment choice for preservation spaces with chemical control for a best preservation

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