Toronto and Region
Conservation
for The Living City®

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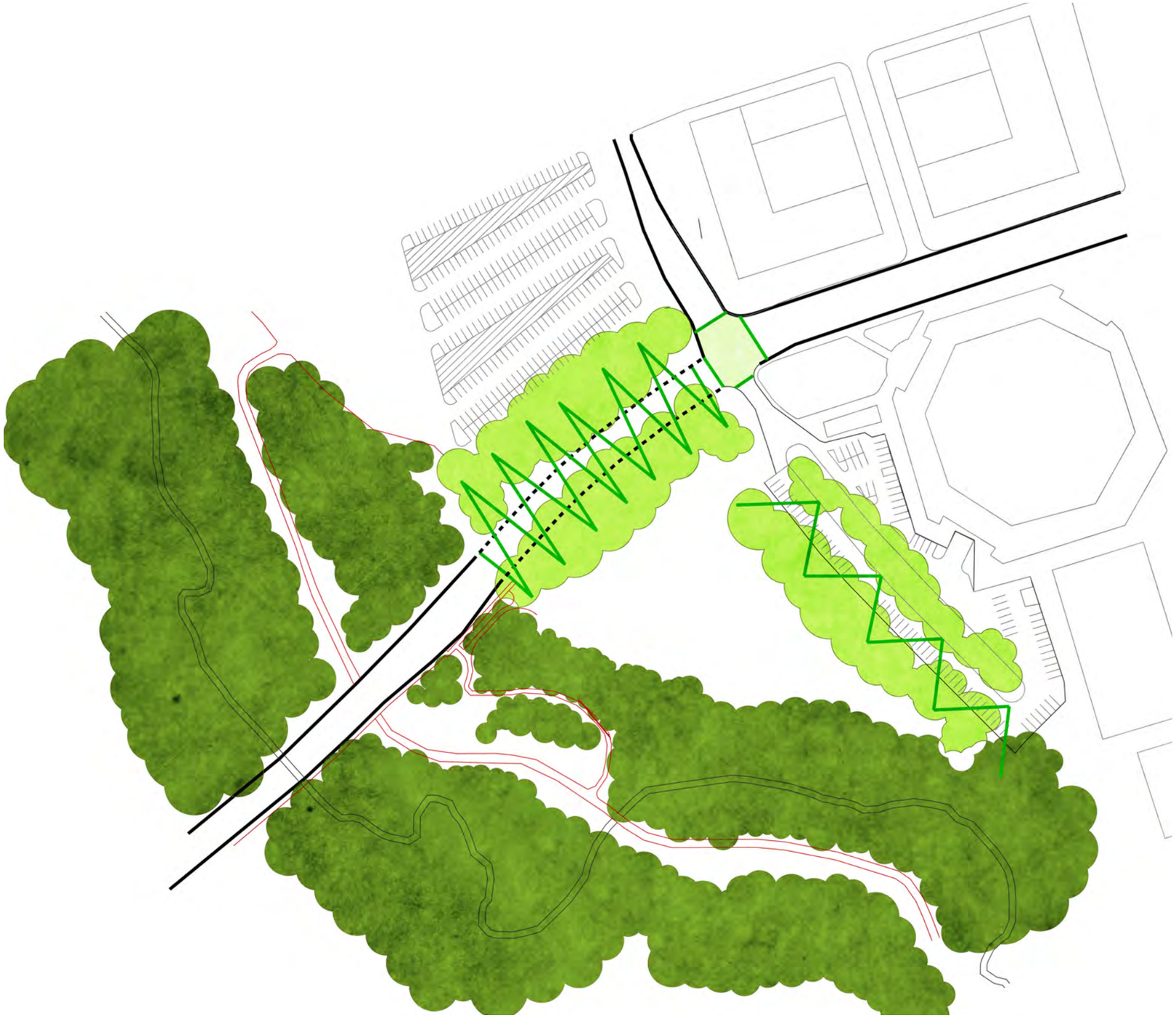
ZAS
ARCHITECTS + INTERIORS

bucholzmcevoyARCHITECTS

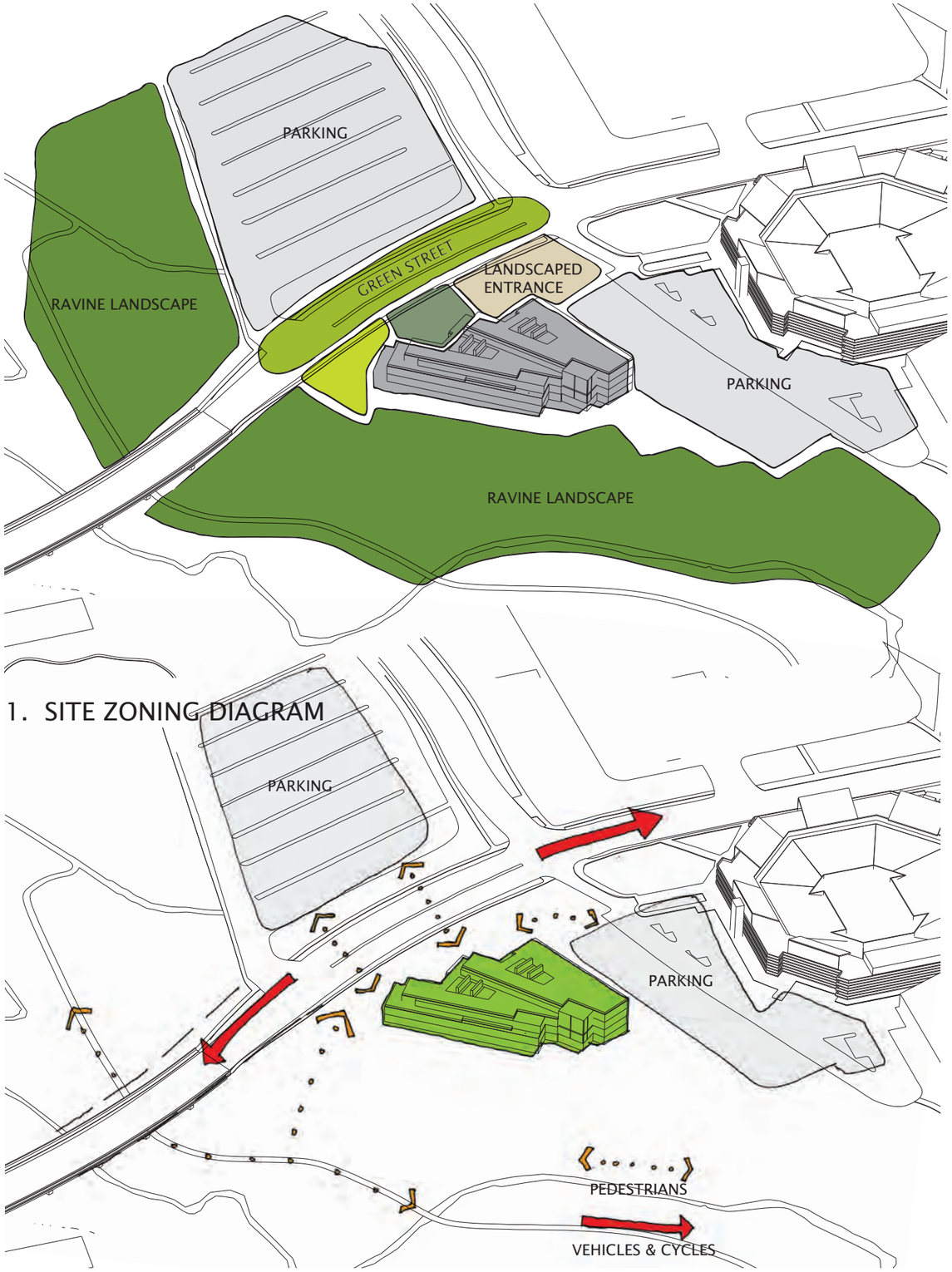
IN JOINT VENTURE

CONTEXT PLAN

REINFORCING GREEN BELT



SITE STRATEGY & OVERVIEW



1. SITE ZONING DIAGRAM

1. SITE MOVEMENT DIAGRAM

2. SITE PLANTING ZONES

2. SITE WATER MANAGEMNT & STATEGY

LANDSCAPE PLAN

01 PLAN + SITE PLAN

01 PLAN + SITE PLAN

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SITE SECTION

DROP - OFF

BICYCLE PARKING

ENTRANCE

RECEPTION

PLANNING COUNTER

COMMUNITY MEETING ROOM

BOARD ROOM

CAFETERIA

FIELD STORE

VEGETABLE GARDEN

C

B


BICYCLE PARKING
DROP - OFF


BICYCLE PARKIN
ENTRANCE
RECEPTION
PLANNING COUNTER
COMMUNITY MEETING ROOM
BOARD ROOM


ENTRANCE
RECEPTION
PLANNING COUNTER
BOARD ROOM
CAFETERIA
FIELD STORE
C
B
VEGETABLE GARDEN

DROP - OFF

BICYCLE PARKING

ENTRANCE

RECEPTION

PLANNING COUNTER

BOARD ROOM

CAFETERIA

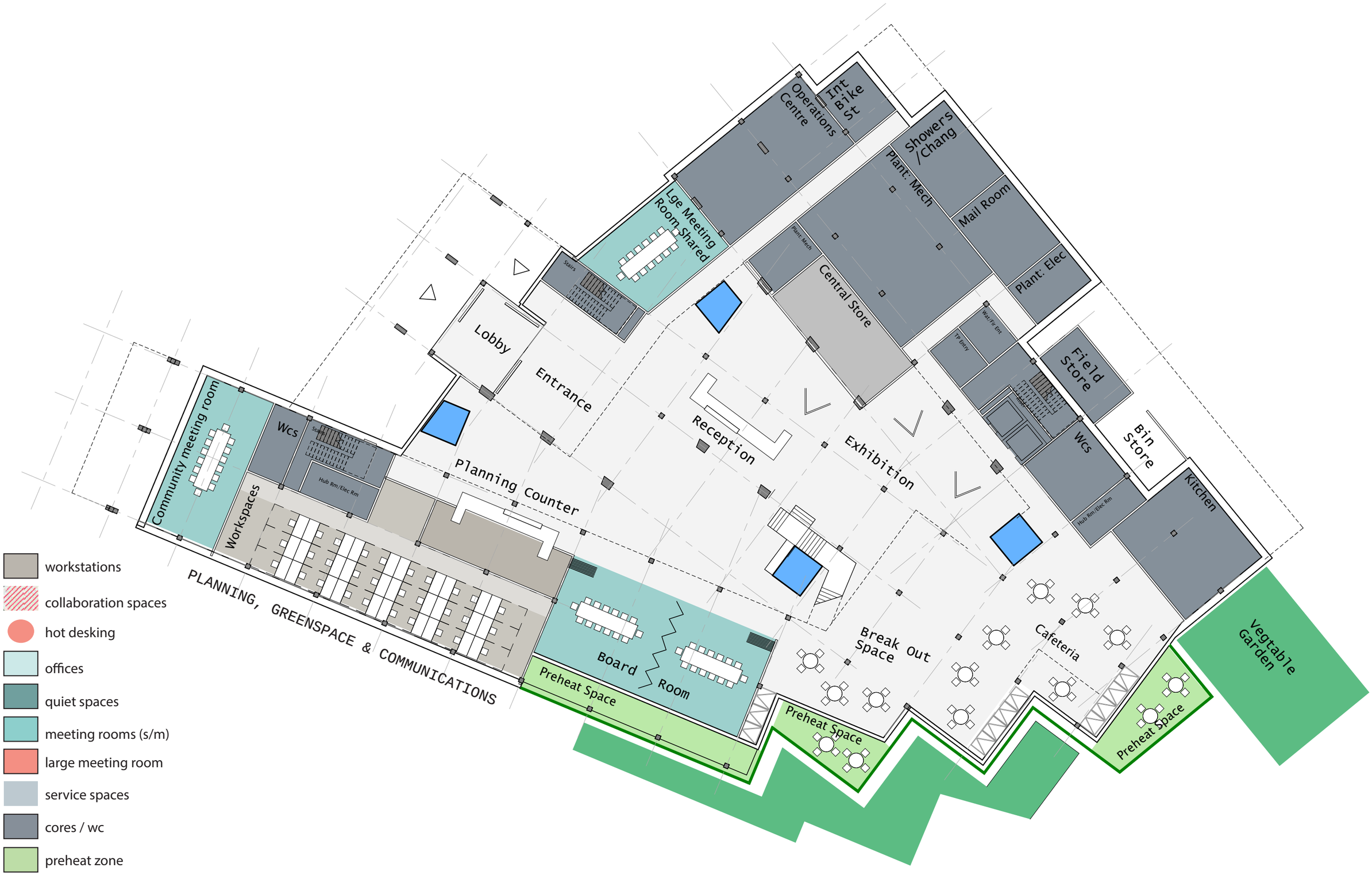
FIELD STORE

C

B

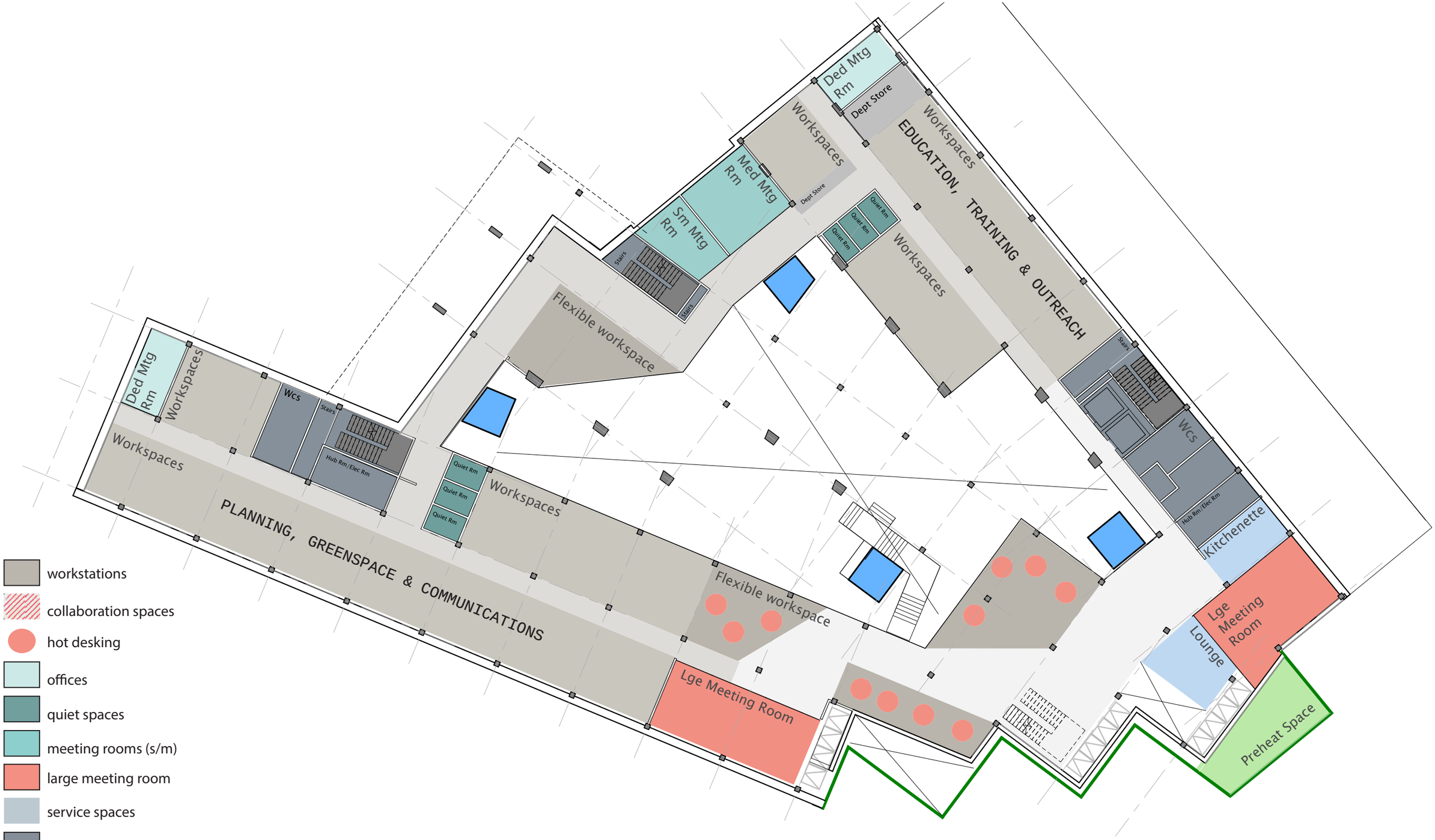
VEGETABLE GARDEN

LEVEL 01



- workstations
- collaboration spaces
- hot desking
- offices
- quiet spaces
- meeting rooms (s/m)
- large meeting room
- service spaces
- cores / wc
- preheat zone
- external terrace garden

LEVEL 02



- workstations
- collaboration spaces
- hot desking
- offices
- quiet spaces
- meeting rooms (s/m)
- large meeting room
- service spaces
- cores / wc
- preheat zone
- external terrace garden

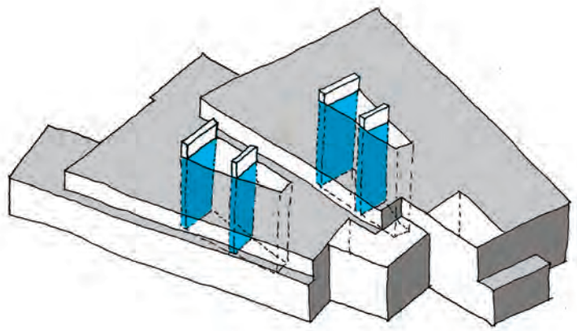
LEVEL 03

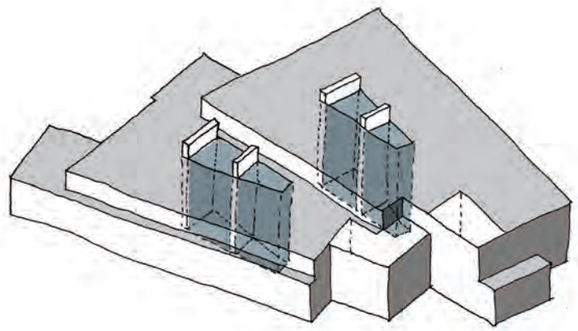
- workstations
- collaboration spaces
- hot desking
- offices
- quiet spaces
- meeting rooms (s/m)
- large meeting room
- service spaces
- cores / wc
- preheat zone
- external terrace garden

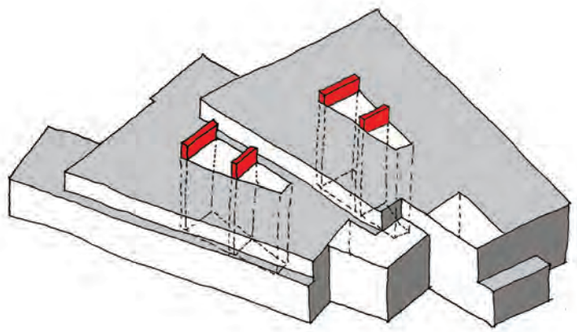
LEVEL 04

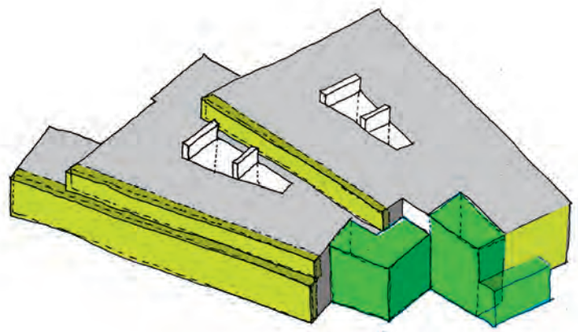
- workstations
- collaboration spaces
- hot desking
- offices
- quiet spaces
- meeting rooms (s/m)
- large meeting room
- service spaces
- cores / wc
- preheat zone
- external terrace garden

ENVIRONMENTAL STRATEGY









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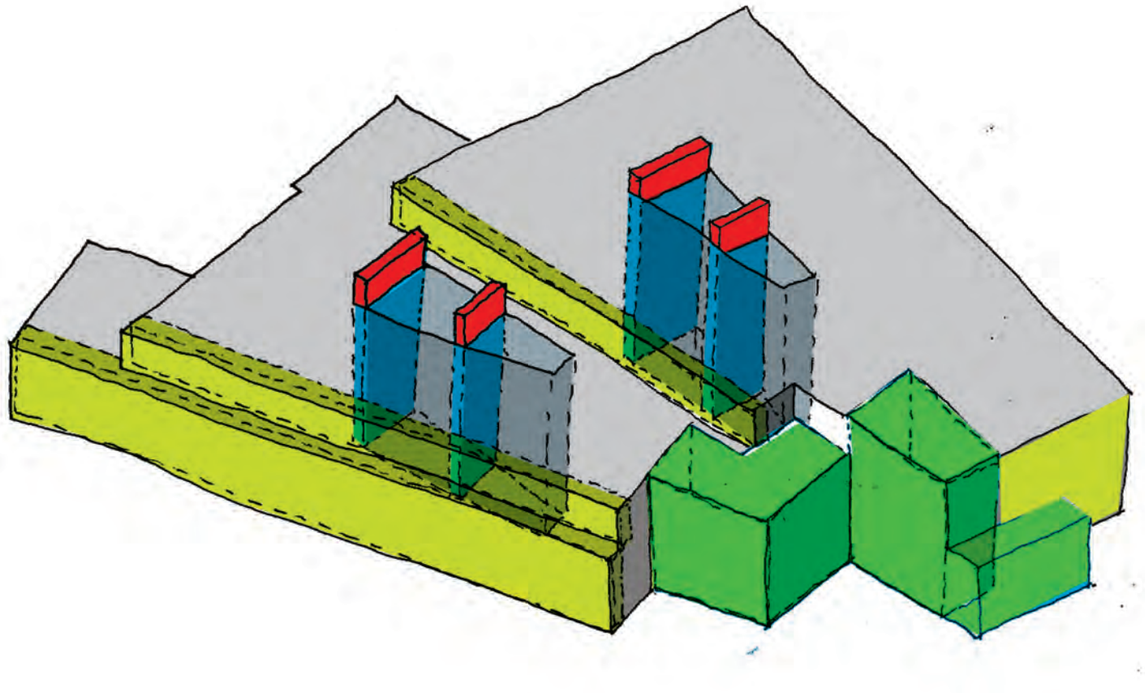


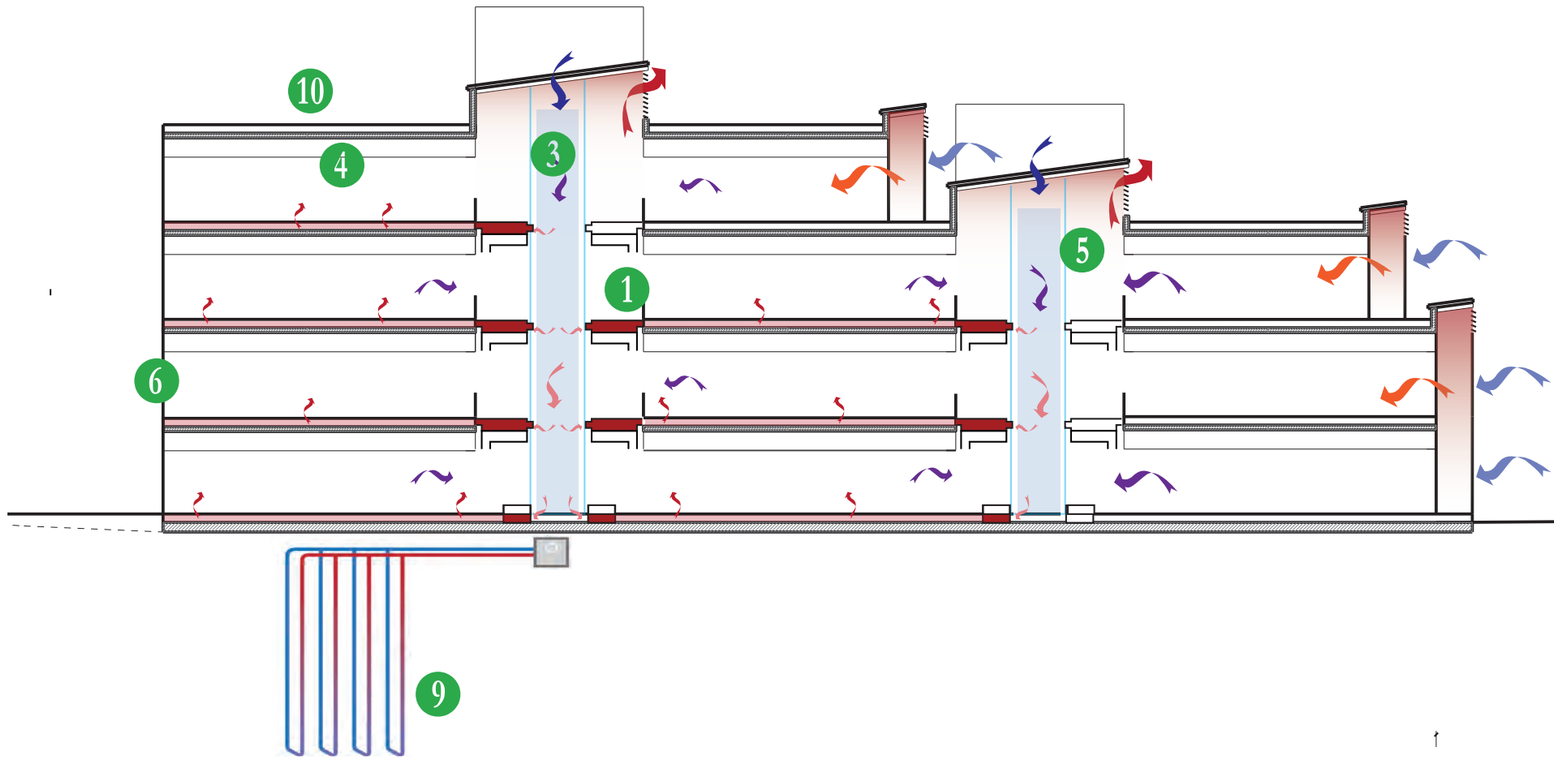
INTEGRATED DESIGN - SYSTEMS

B. Overview

3. Climate Concept - Building Level

The building level strategies.

1. **Decentralized Ventilation Units & DOAS**
   Ducted ventilation is provided through decentralized ventilation units and supplies only the quantity of outside air required to maintain good indoor air quality for occupant health. Heating/cooling is provided separately via radiant systems.
2. **Underfloor Plenum & Displacement Ventilation**
   Air is distributed via the underfloor plenum and delivered by displacement ventilation. Displacement ventilation supplies air at floor level, which tends to concentrate fresh air in the breathing zone and older air near the ceiling.
3. **Water Wall Supply Air Conditioning**
   The purpose the water-wall is to precondition air that enters the decentralized ventilation units. The water in the water-wall is directly coupled to geothermal wells so that the temperature of the water matches the ground temperature. The water temperature is not adjusted by a heat-pump, therefore the energy consumed is in water circulation.
4. **Thermally Activated Radiant Ceiling Panels**
   For enhanced comfort, high-energy efficiency, and reduced maintenance, heating and cooling is provided by activated thermal mass (radiant tubing embedded in concrete) in prefabricated ceiling panels.
5. **Atrium Ventilation Return**
   Ventilation air is transfered from the regularly occupied space to the atrium. There it is pulled back into the decentralized ventilation units for energy recover before being exhausted out of the building.
6. **High-performance envelope**
   Facade thermal performance is optimized to control solar heat gain, and heating and cooling loss through the facade. Facade recommendations based on simulation can be found in Appendix 1.
7. **Daylight & Electric Lighting**
   The high floor-to-ceiling high and optimized window locations allow for most of the building to be day lit during the day, with lighting off. Daylight harvesting controls with high-efficiency LED lighting reduces electricity consumption and cooling load.
8. **Exterior or Interstitial Shading**
   Exterior or interstitial shading is required to control the heat gain on south, east and west facing facades.
9. **Geothermal System**
   The geothermal system provides hot and chilled water to the decentralized ventilation units, thermally activated radiant ceiling panels and to the water wall.
10. **Photovoltaic Panels**
    PV panels on the roof of the building will provide at a minimum, 5% of the building's energy use.
11. **Information Dashboard**
    Information about the building's operation as well as energy consumption and renewable energy production will be available here.



Overall building climate and sustainability concept

RENDERED VIEW - BUILDING APPROACH FROM SHOREHAM BRIDGE

RENDERED VIEW - BUILDING APPROACH FROM SHOREHAM DRIVE

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INTERNAL CONCEPT VIEWS

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