

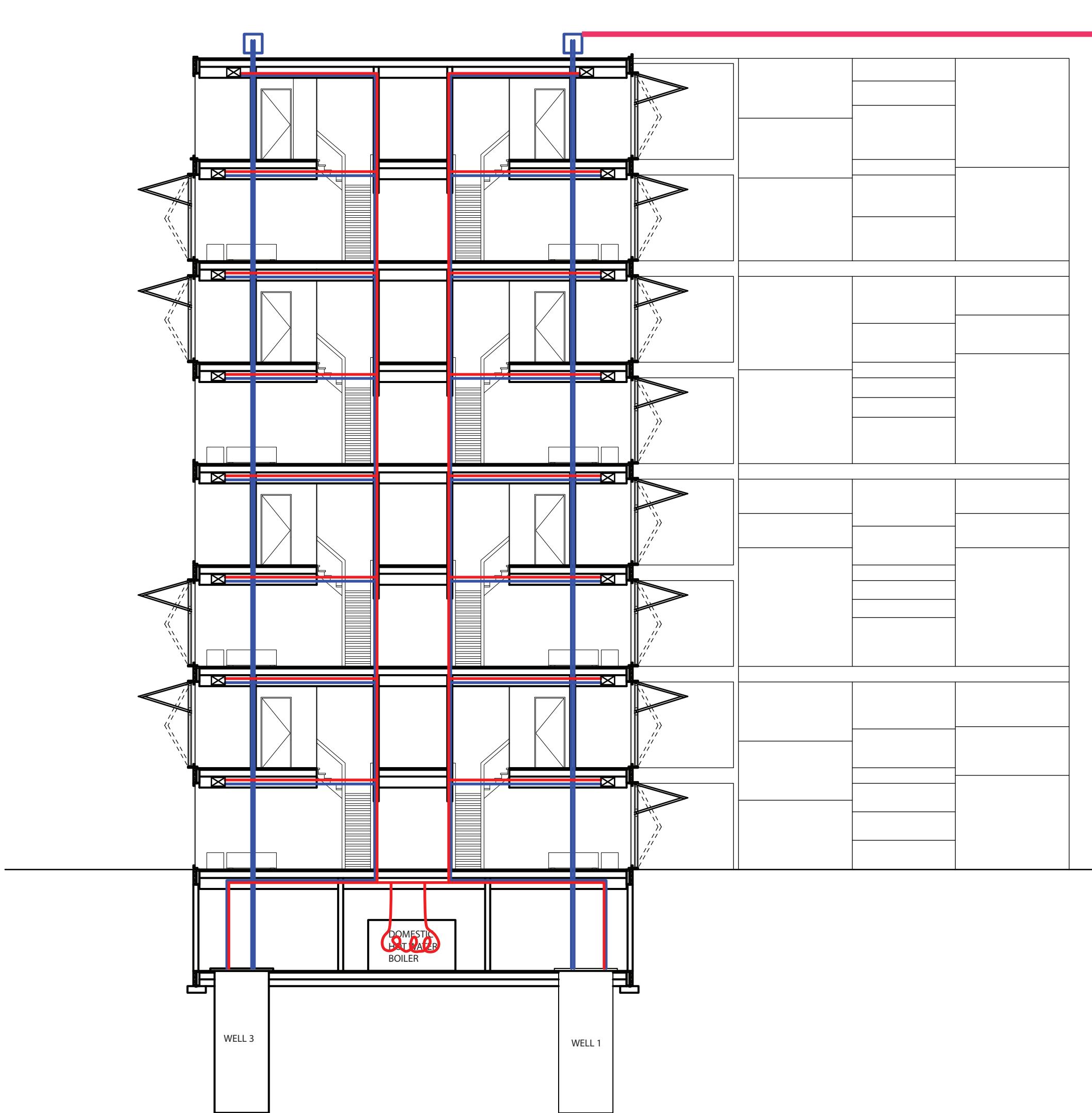
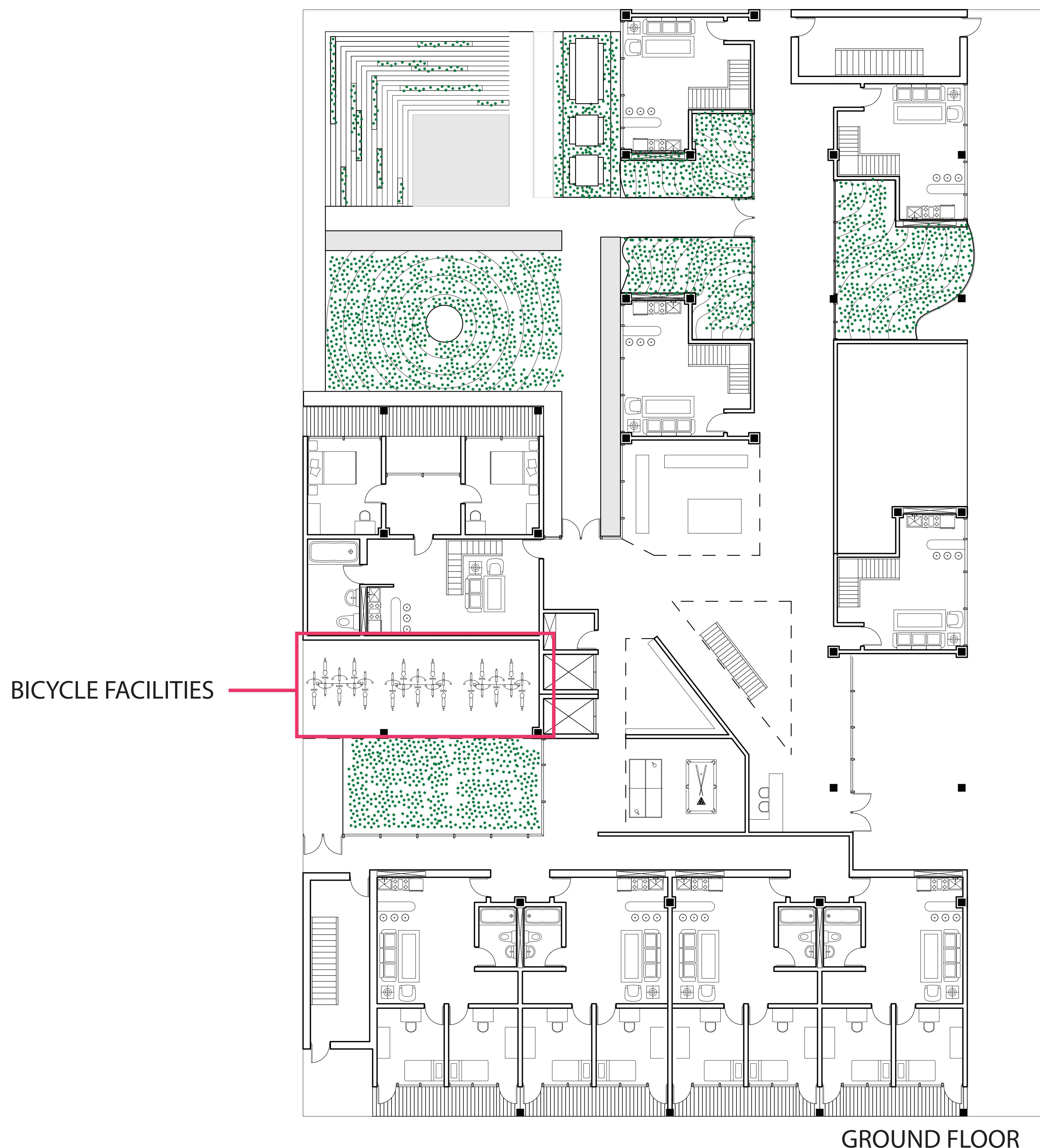
SUSTAINABLE SYSTEMS

Leed v4 for BD+C: New Construction and Major Renovation

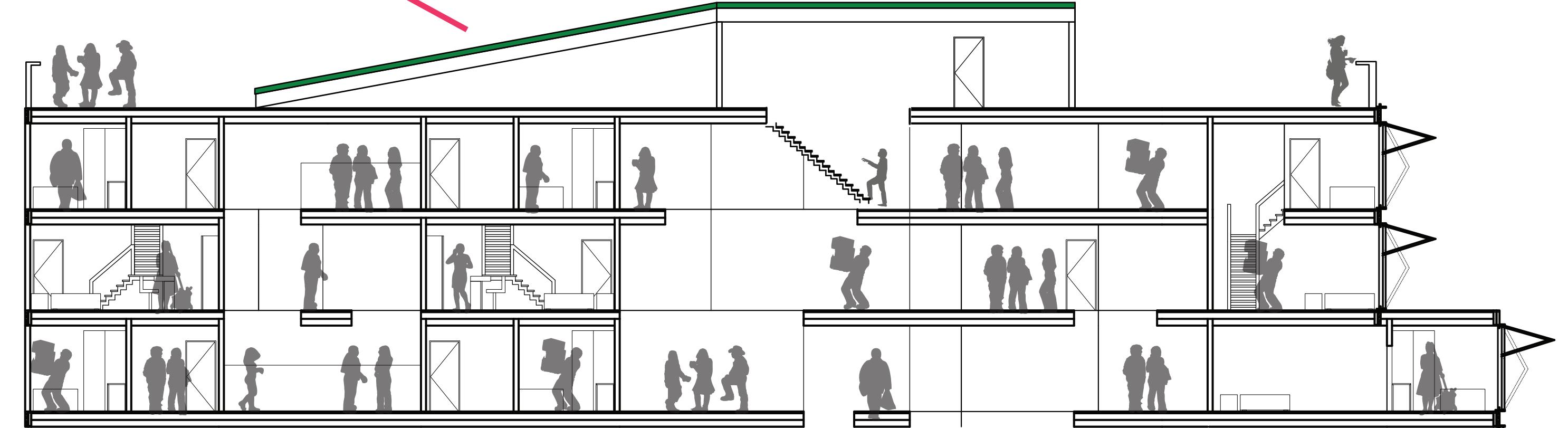
Project Checklist



TOTAL : 20



RECUPERATE HEAT



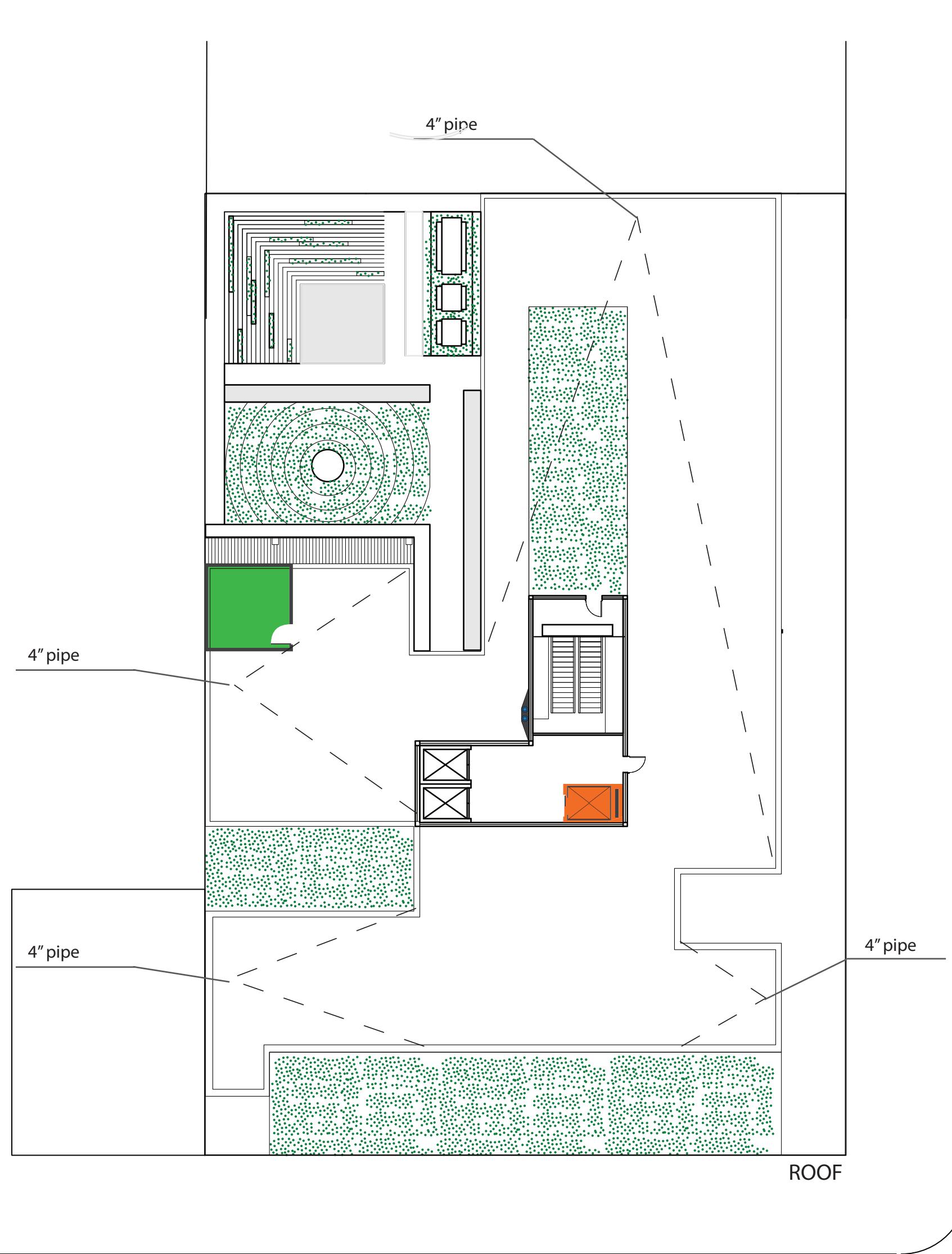
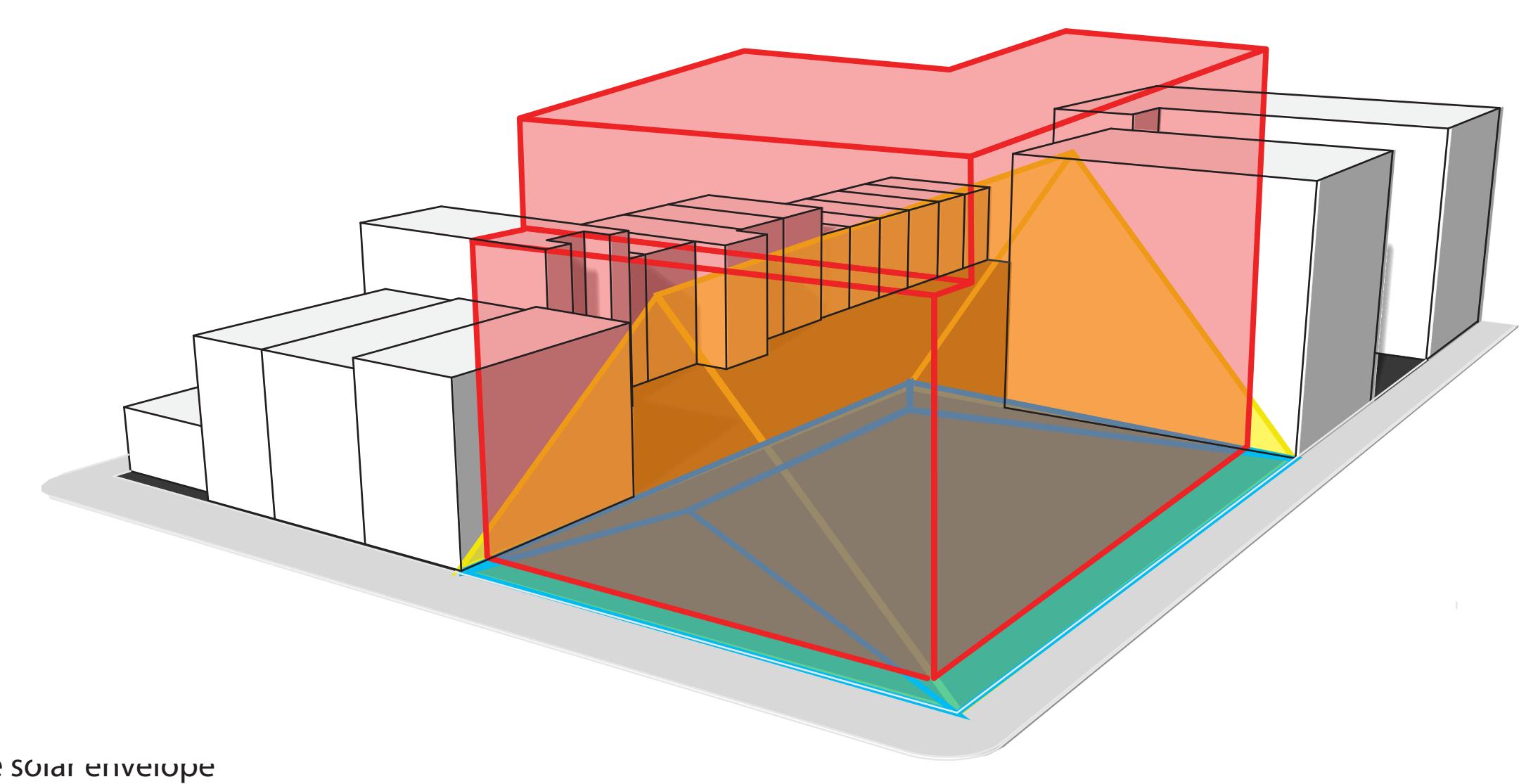
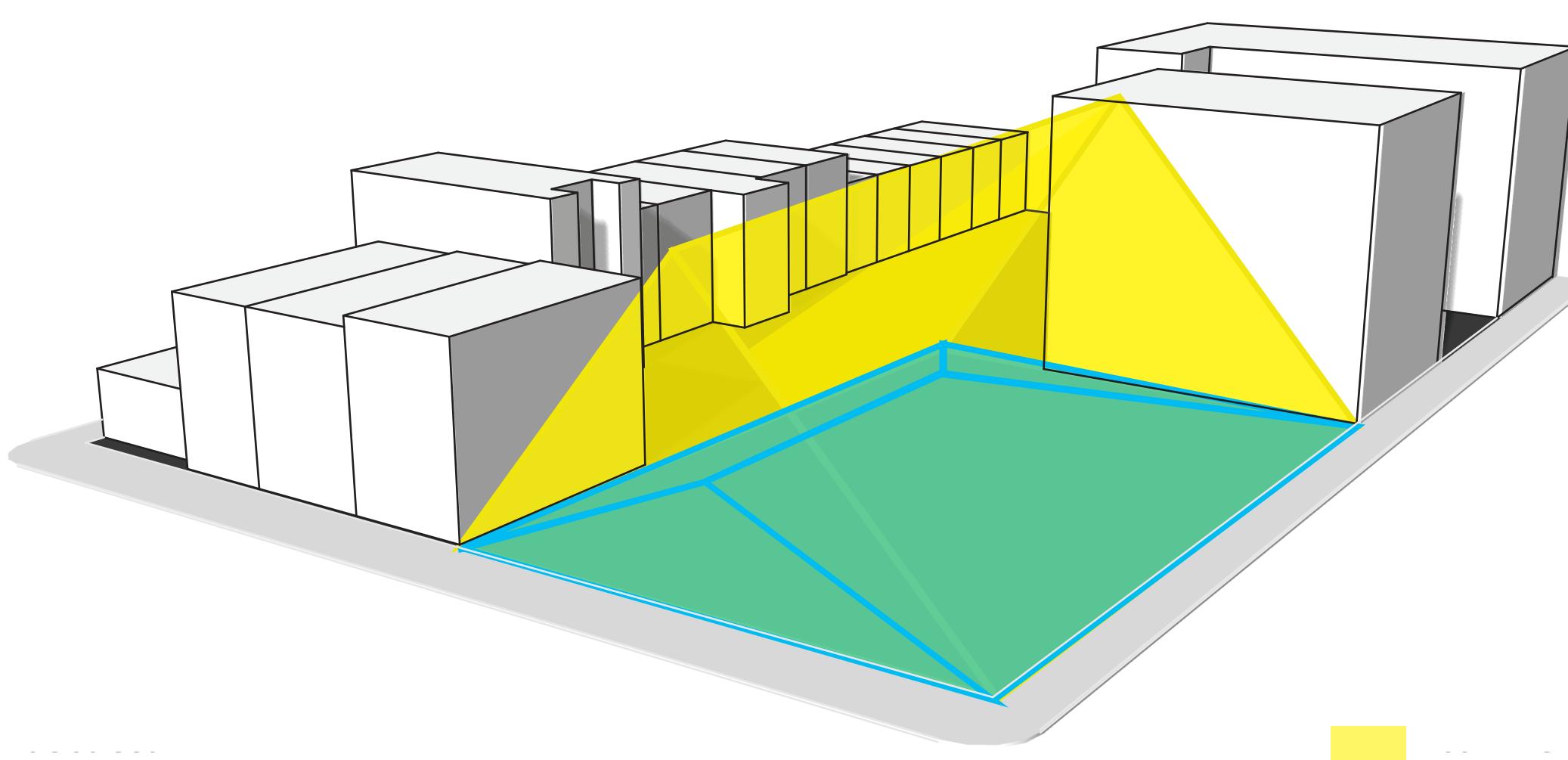
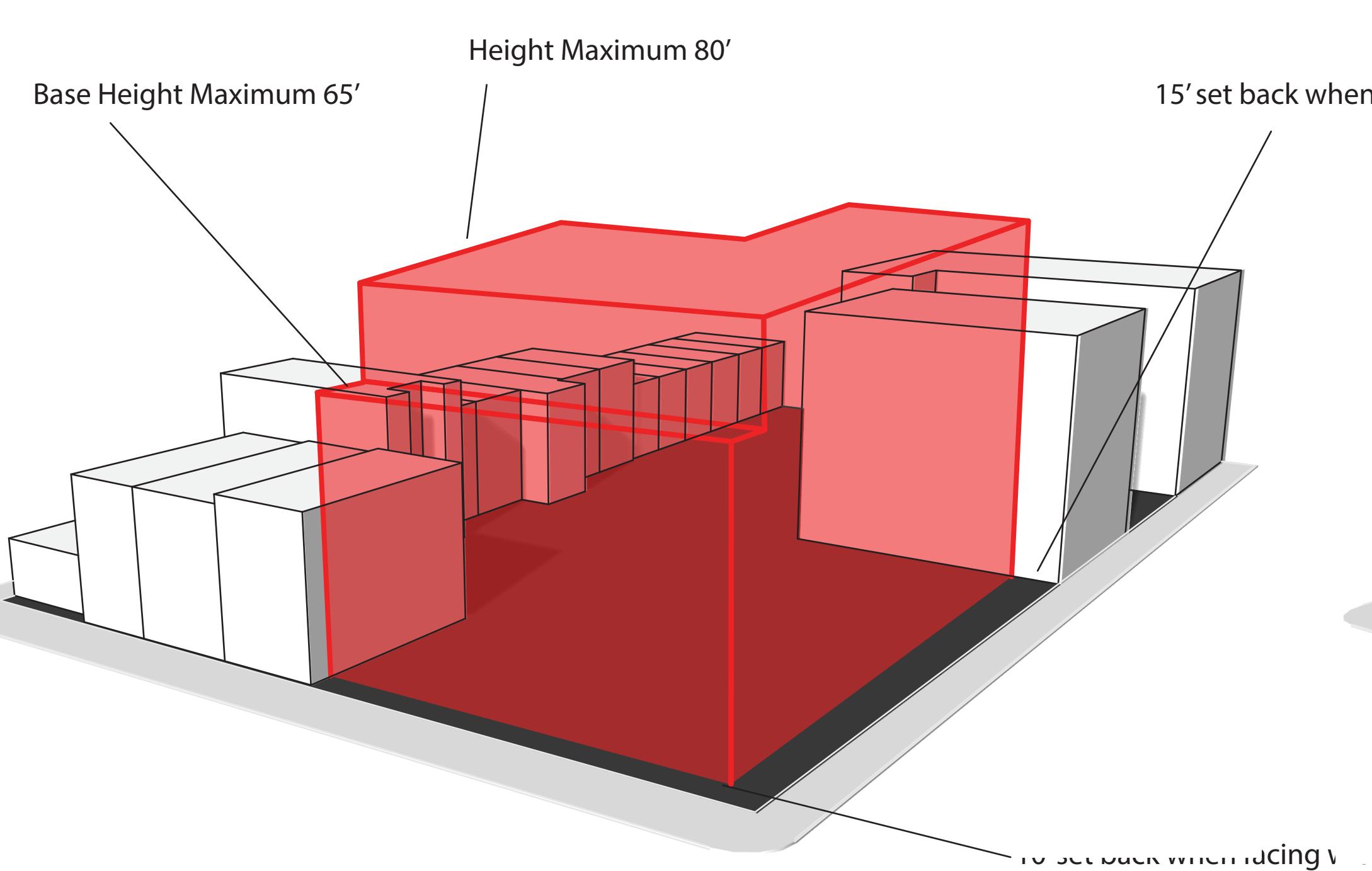
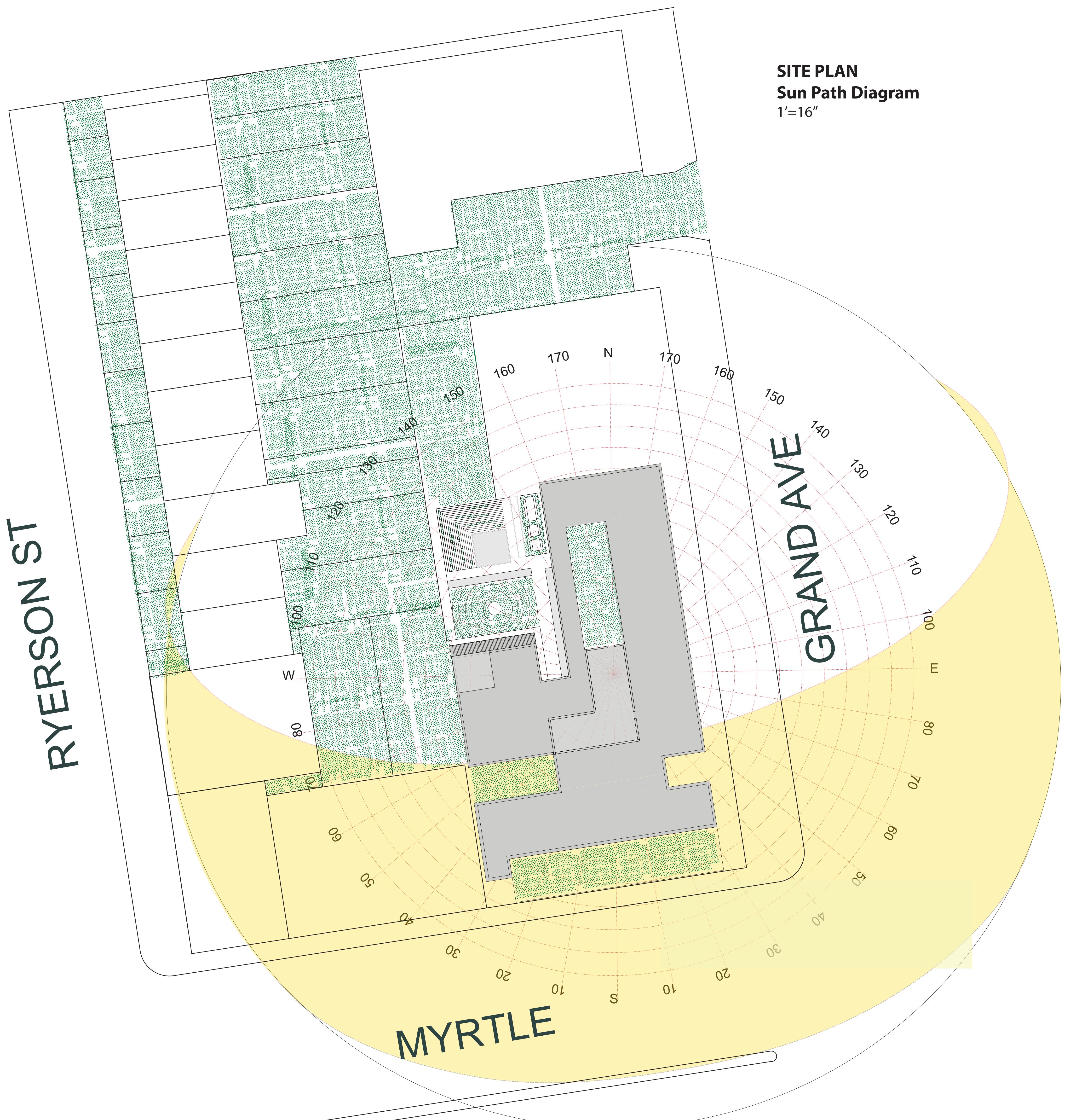
GREEN ROOF

FOR OUR PROJECT, WE USED SEVERAL SUSTAINABLE SYSTEMS TO REDUCE THE FOOTPRINT OF THE BUILDING, INCLUDING SOME ITEMS FROM THE LEED CHECKLIST FOR ACCREDITATION LIKE BICYCLE FACILITIES AND STORAGE AND COLLECTIBLE OF RECYCLABLES, BUT WE ALSO USED OTHER METHODS.

INSTEAD OF HAVING A CONVENTIONAL MEP SYSTEM, WE USED GEOEXCHANGE SYSTEM, GIVING EACH ZONE OF THE BUILDING A CONTROL OF THE ENVIRONMENT, BESIDES THE PASSIVE ENVIRONMENT CONTROL OF THE SKIN FACADE, AND WE PRODUCE HEAT COLLECTED FROM THE EXHAUST VENTS ON THE ROOF.

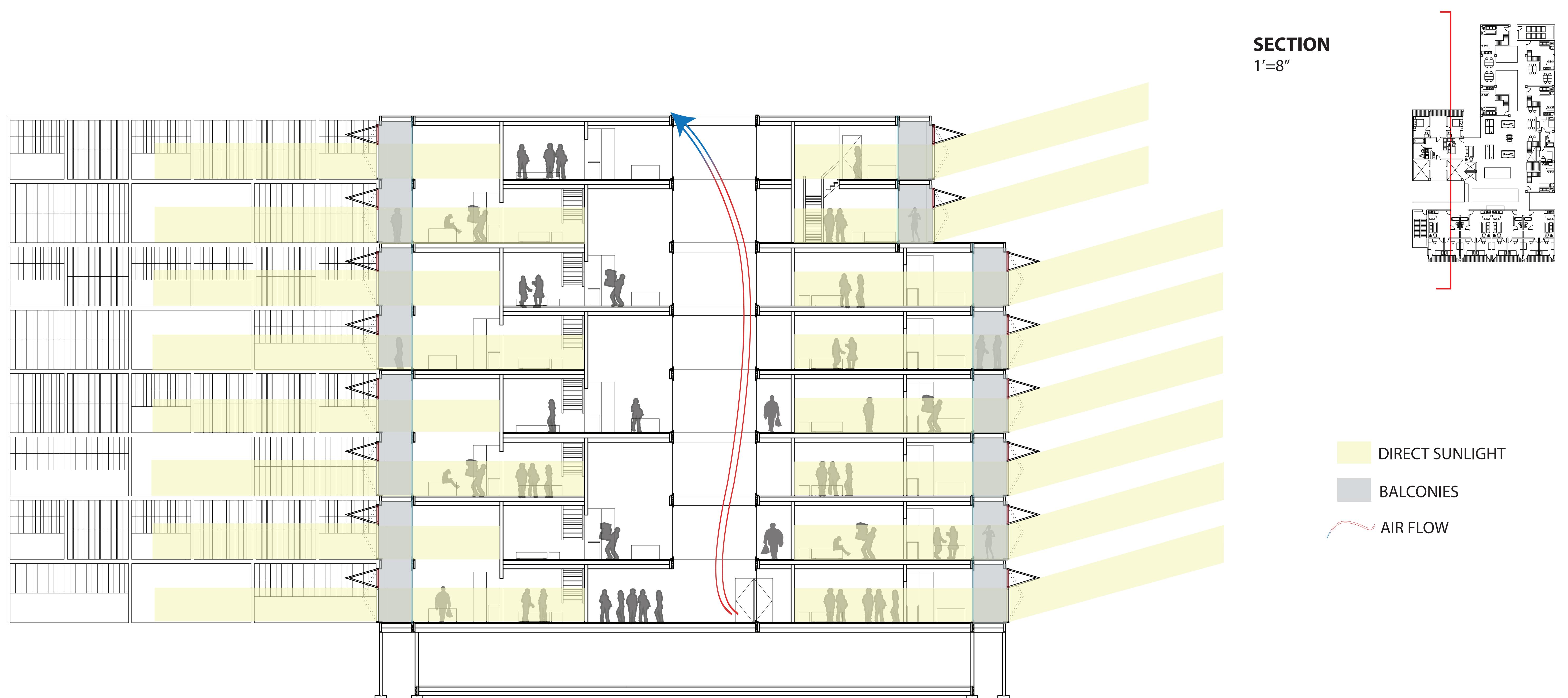
MOREOVER, WE HAVE A GREEN ROOF WHICH NOT ONLY REDUCES THE HEAT ISLAND EFFECT, BUT ALSO BECOMES A HABITABLE SPACE FOR RECREATION OF THE INHABITANTS OF THE BUILDING. THE WATER COLLECTED FROM THE RAIN IS USED TO IRRIGATE THE GREEN ROOF AS WELL AS THE INSIDE GARDENS AND THE BACKYARD.

SOLAR ENVELOPE

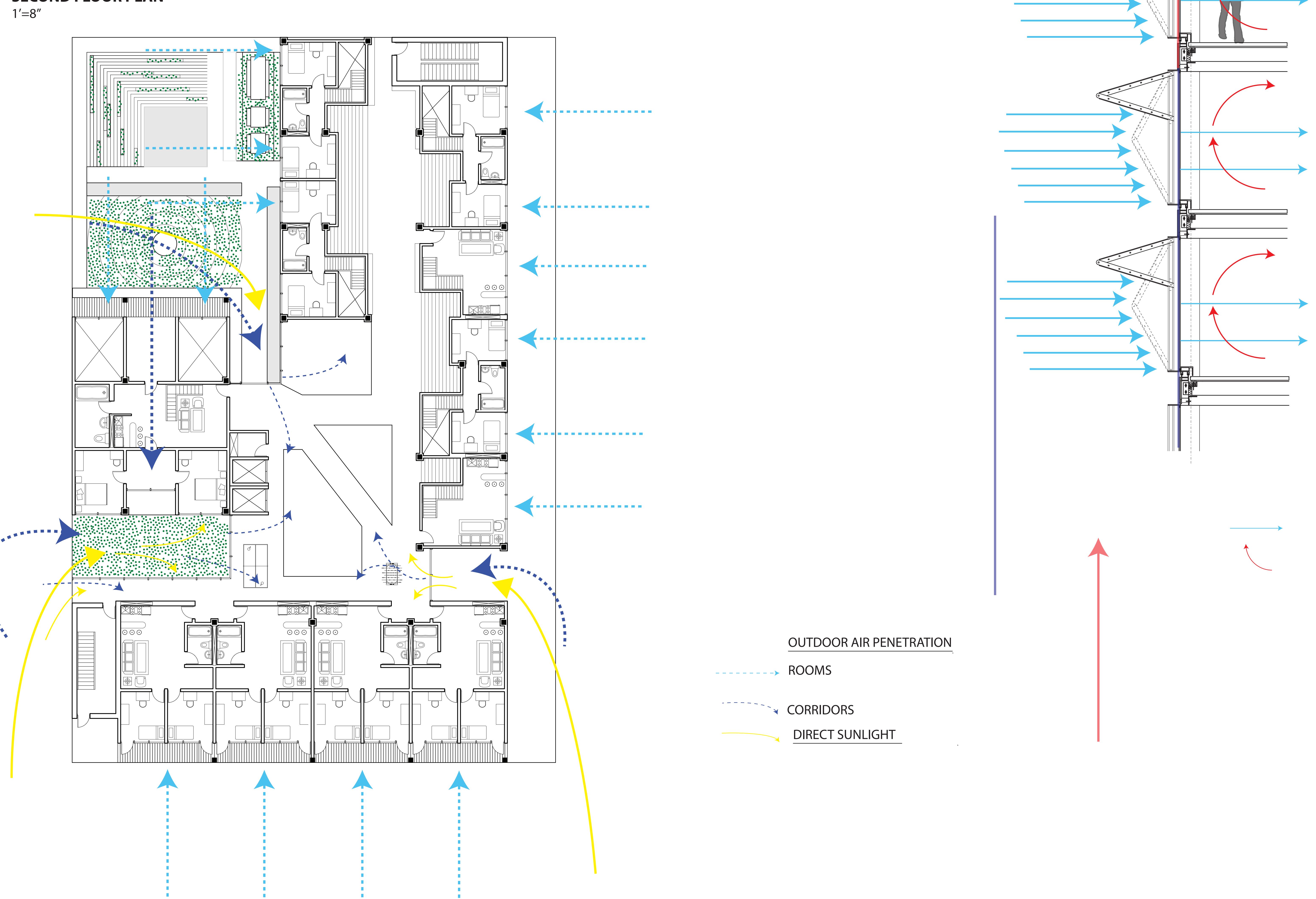


- HVAC Vertical Ventilation
- Chiller for Geothermal Energy
- Machine Room

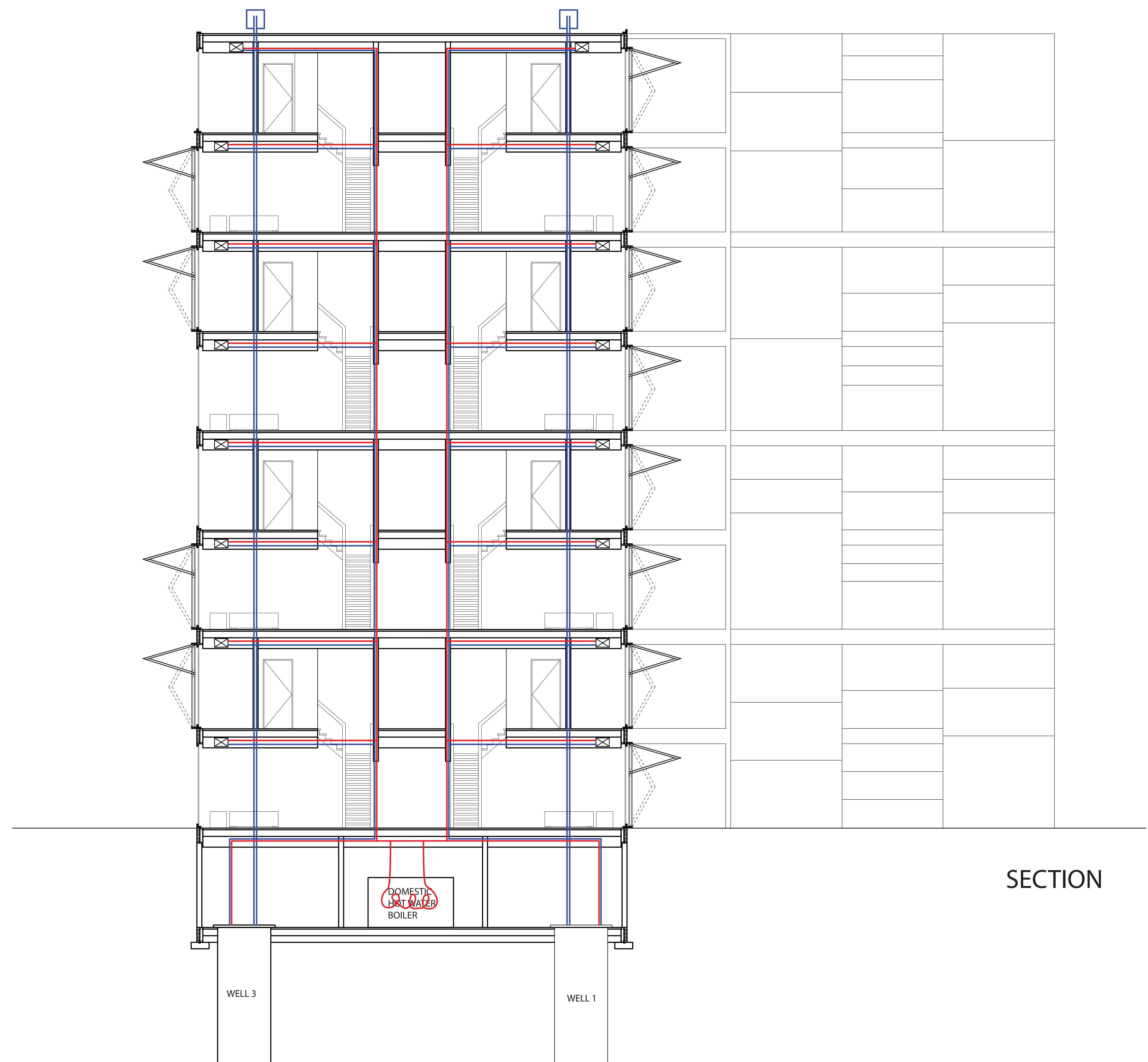
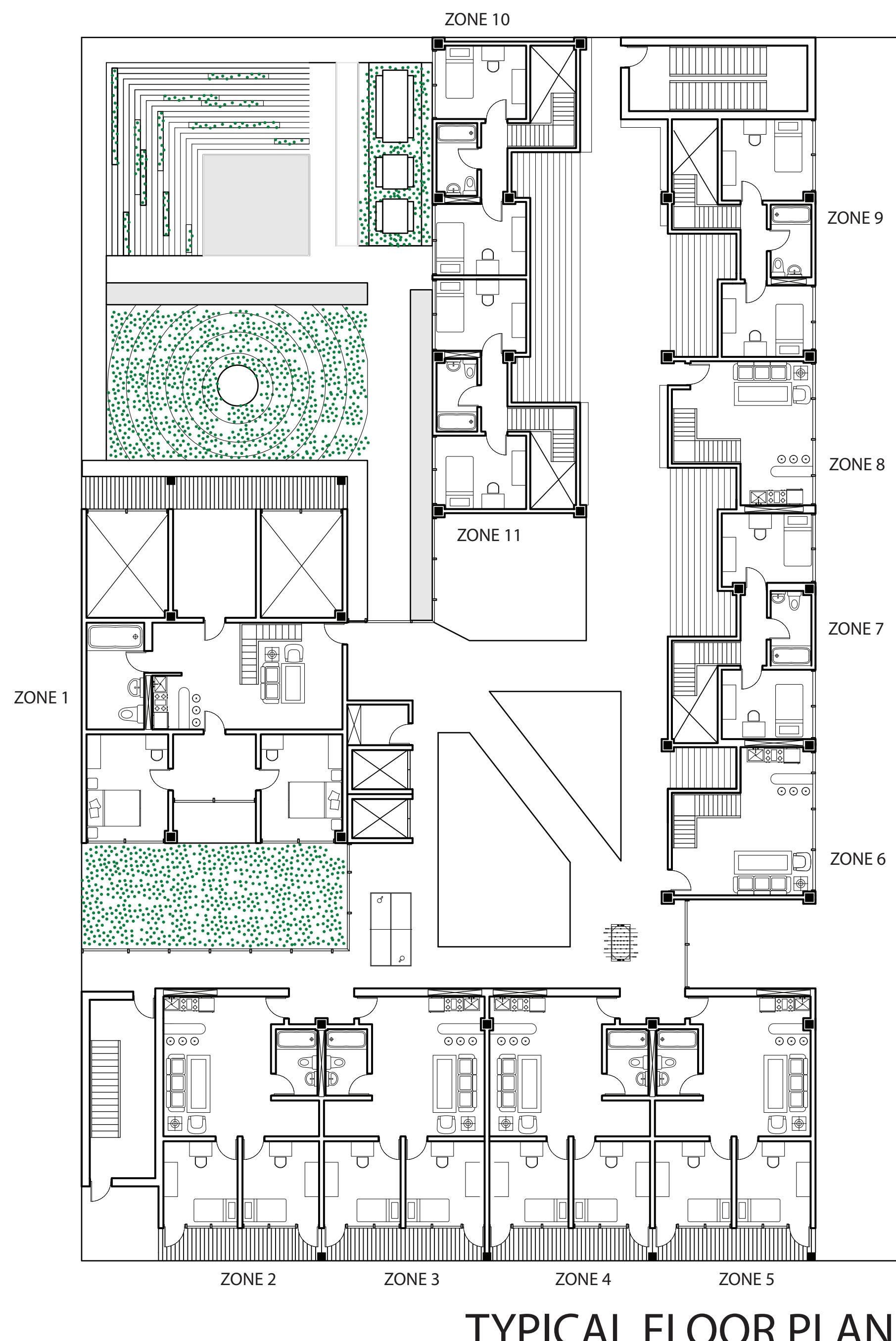
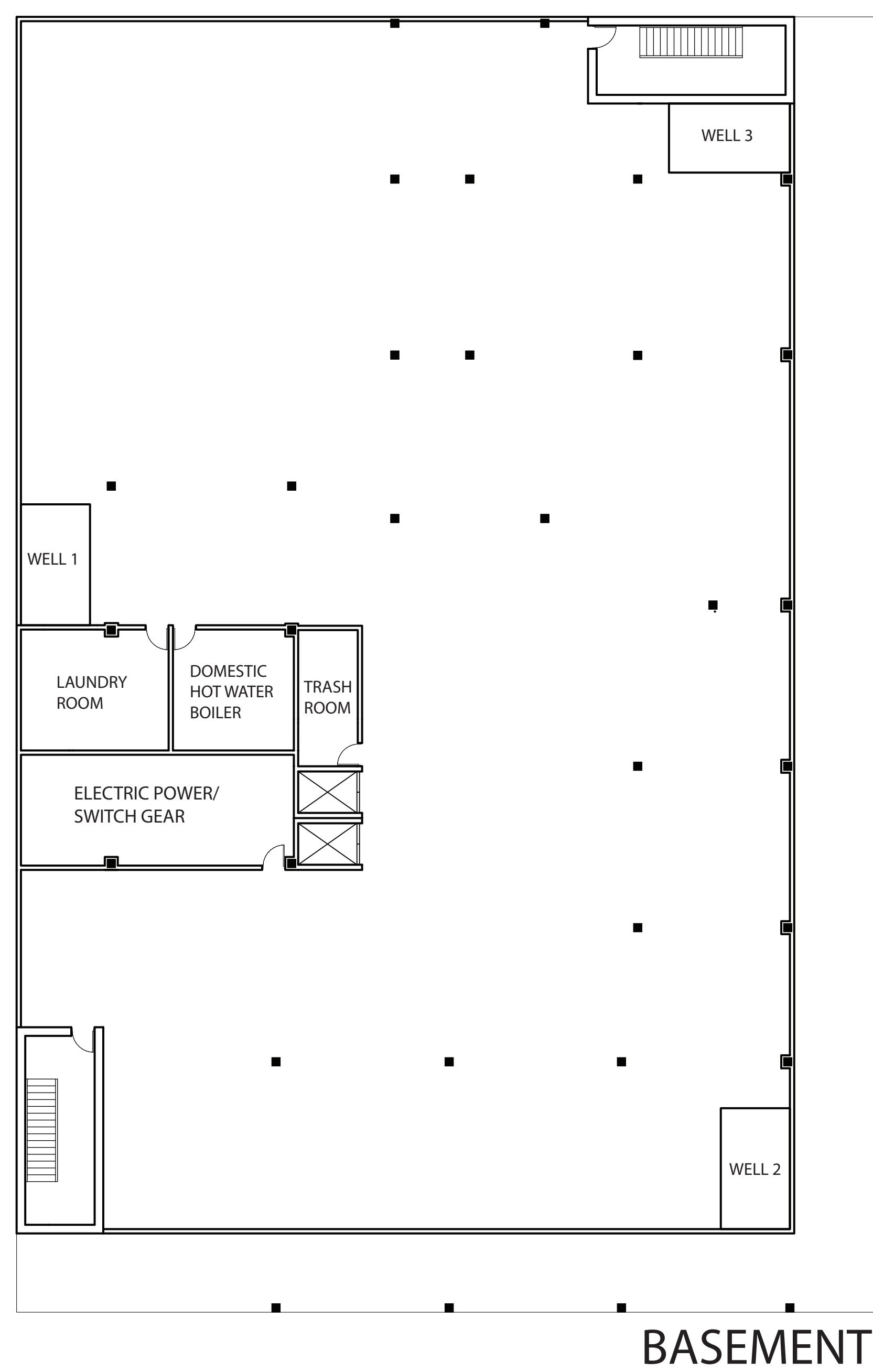
DAYLIGHTING / PASSIVE HEATING / VENTILATION



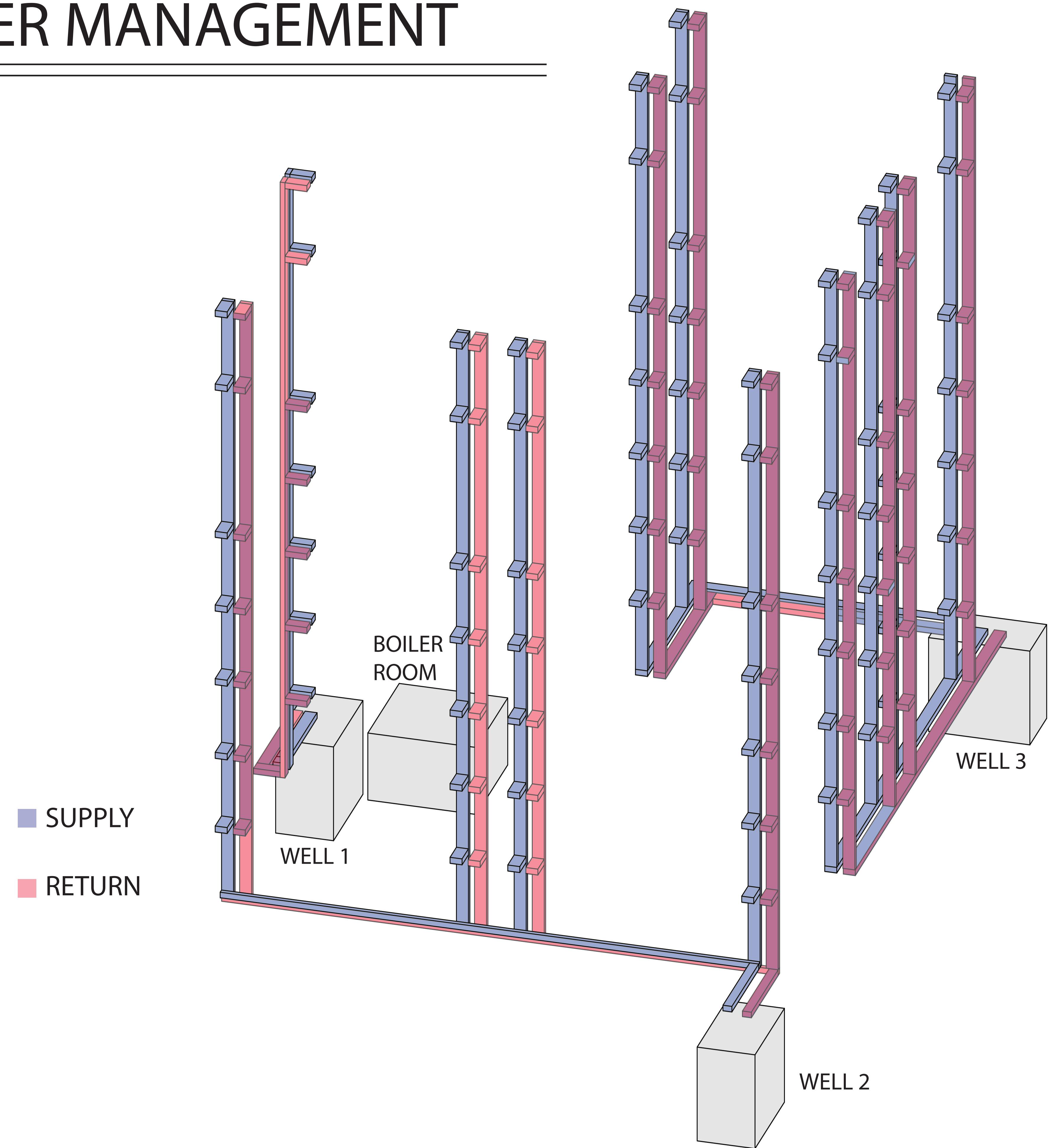
SECOND FLOOR PLAN



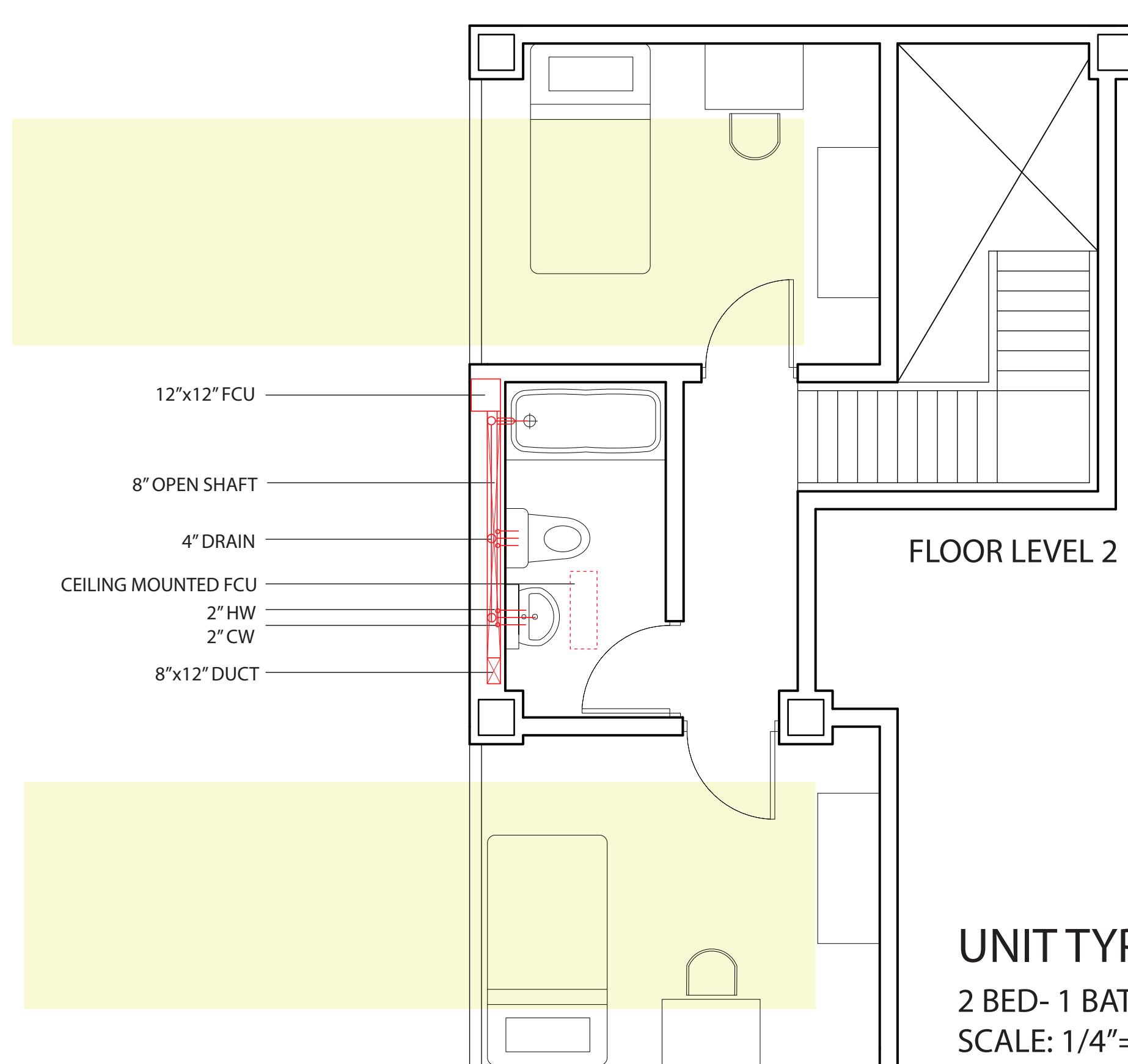
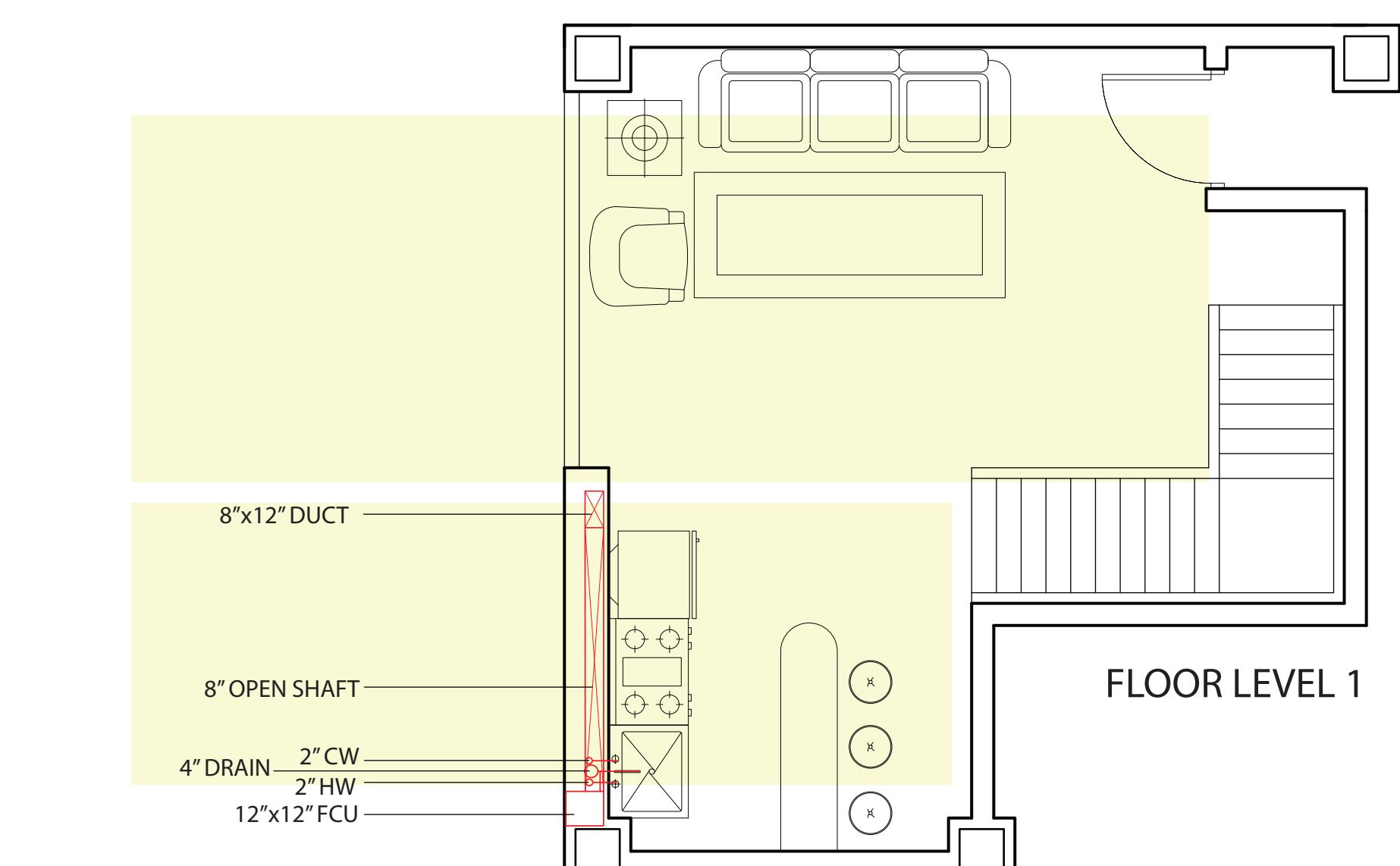
GEOEXCHANGE SYSTEM



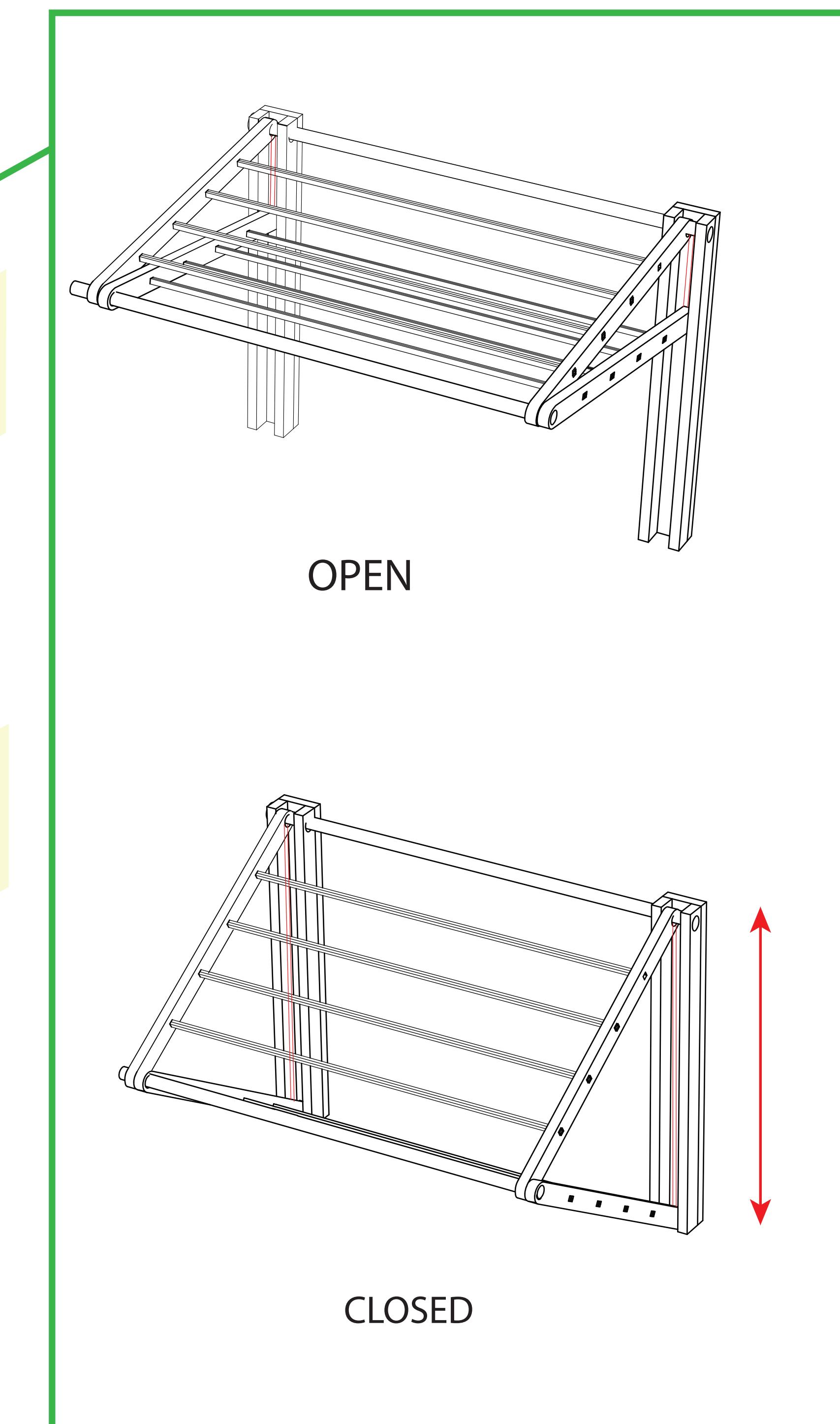
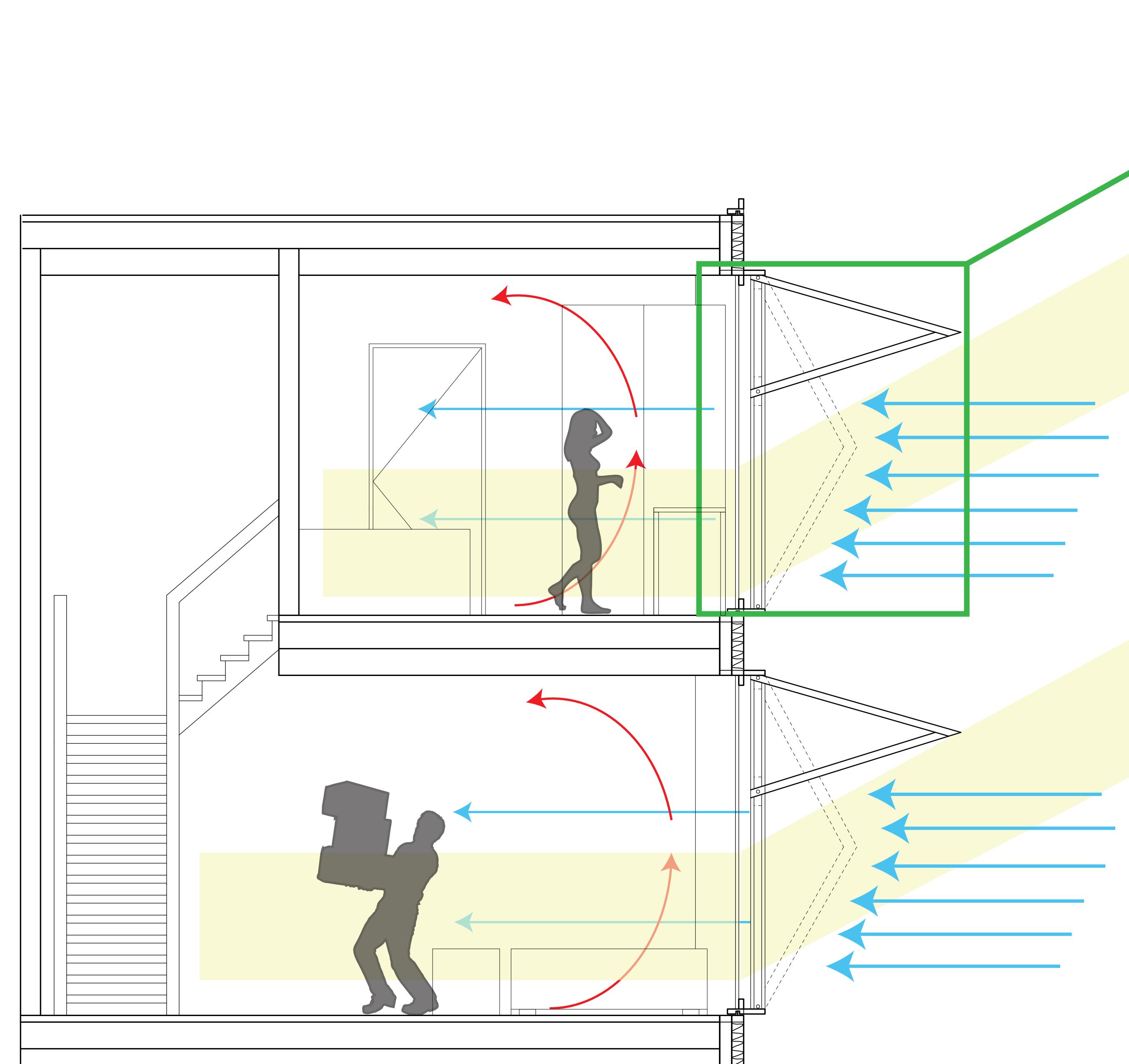
WATER MANAGEMENT



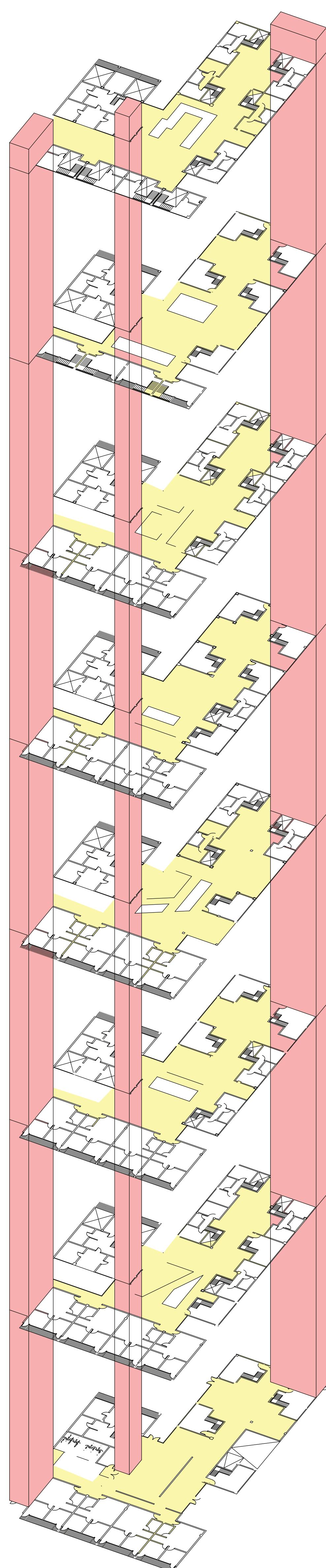
UNIT CLUSTER



UNIT TYPE 1
2 BED-1 BATH
SCALE: 1/4"=1'



MEANS OF EGRESS



Number of occupants per room (1) and total occupants for the floor (28).

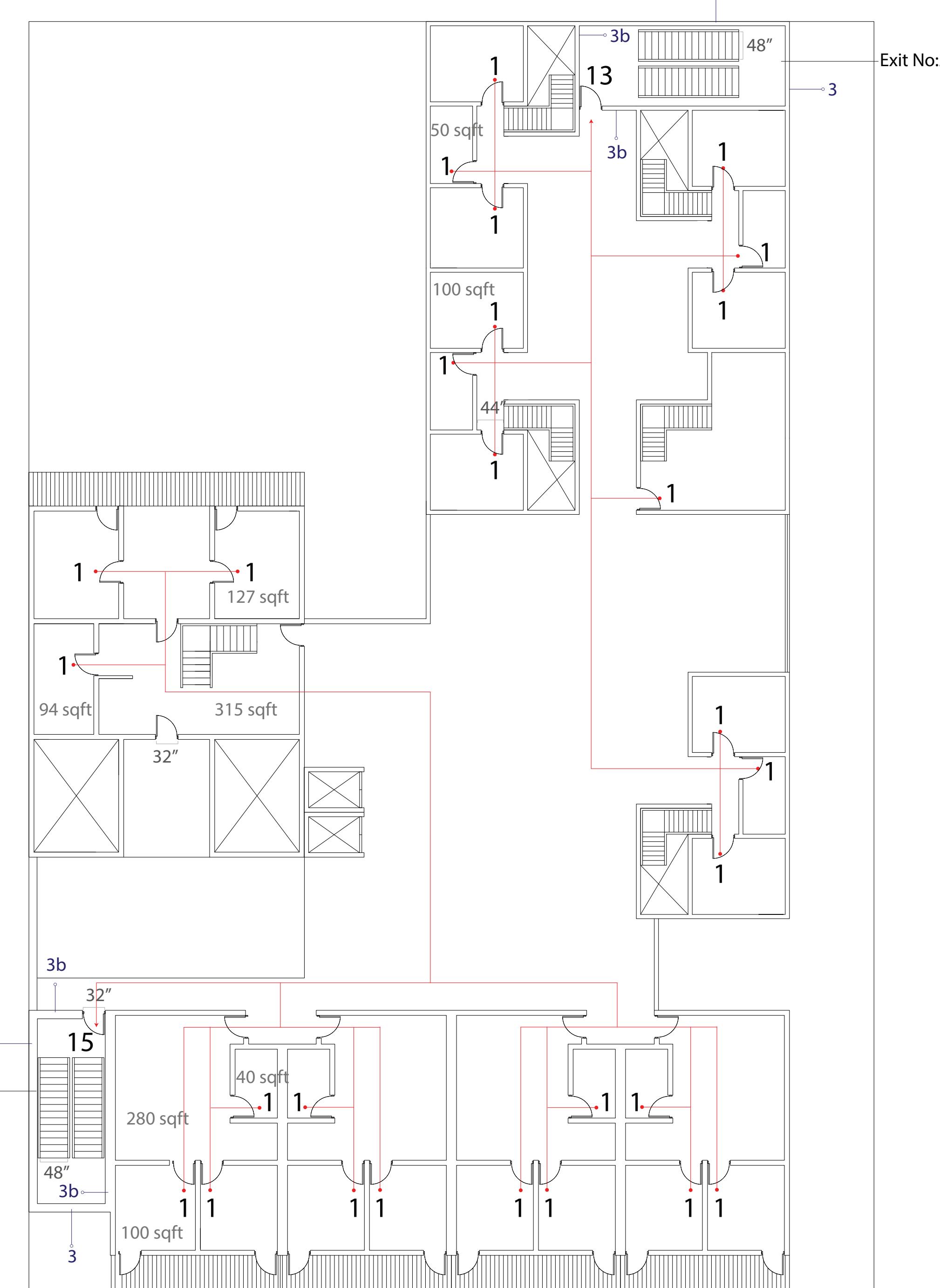
Minimum corridor width should be no less than 44".

Minimum stairway width should be no less than 48".

Minimum corridor doors width should be no less than 32".

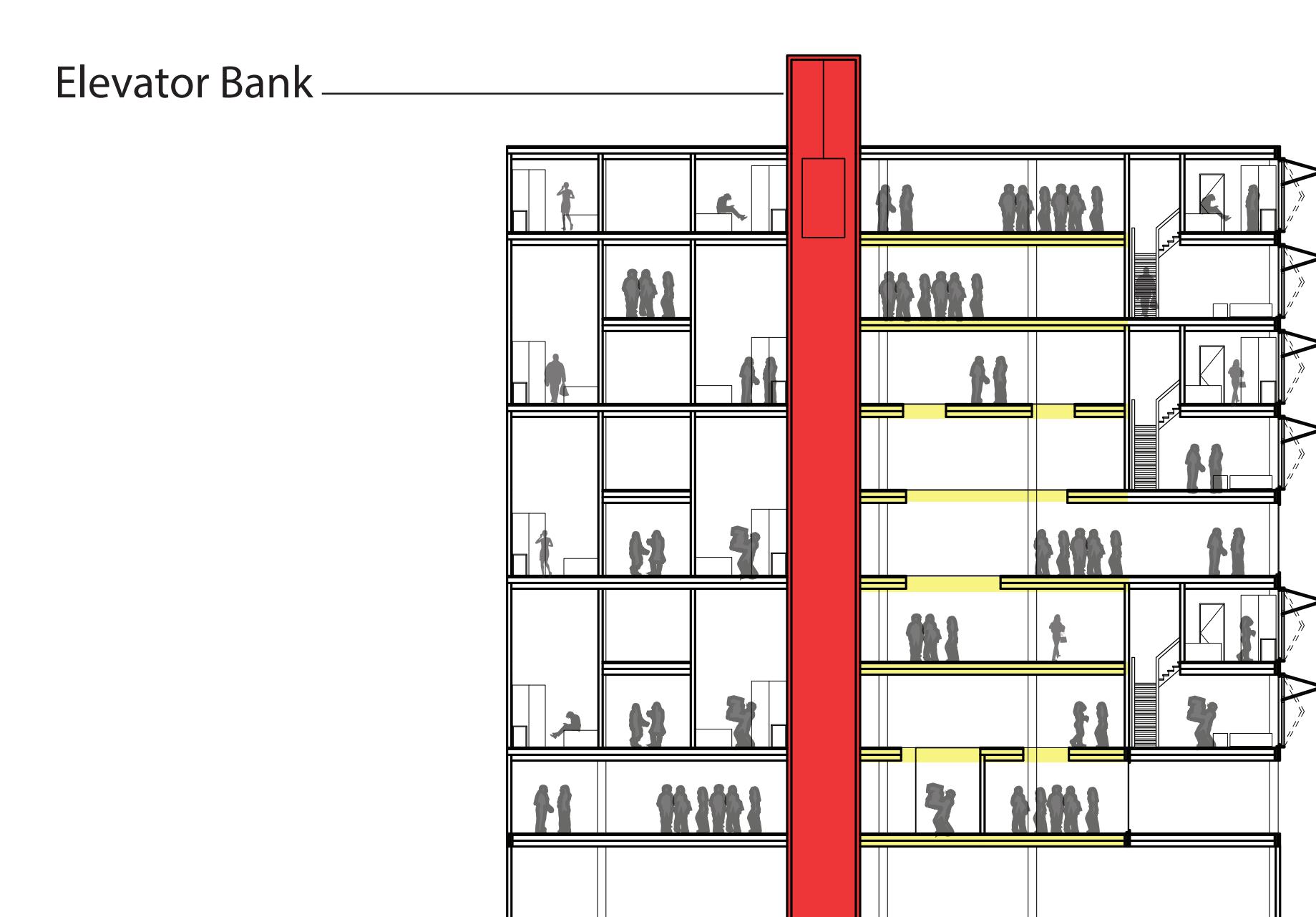
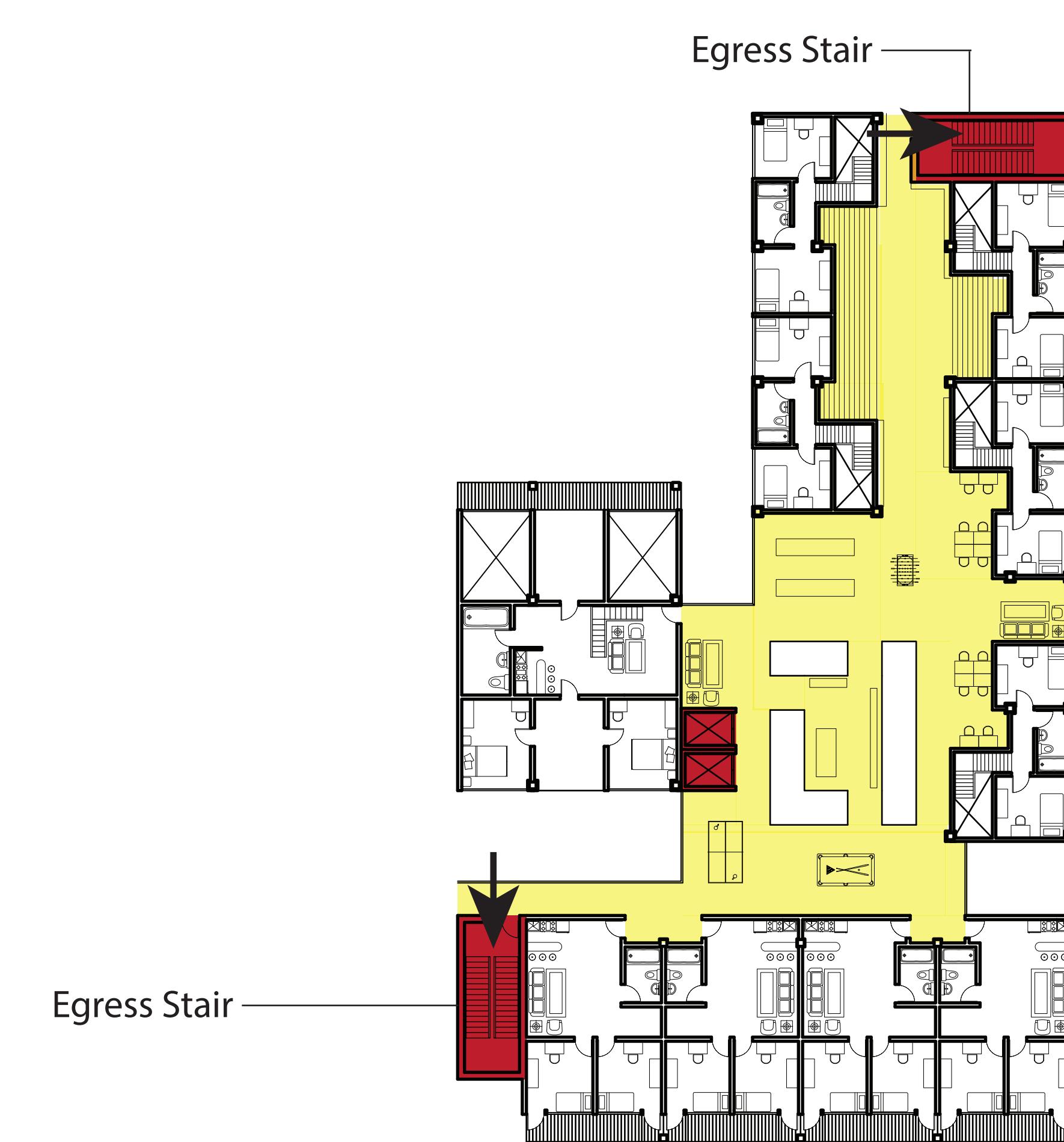
The exit access travel distance with sprinkler system is 200'.

For an occupant number of 1-500, the minimum number of exits is 2.



Number of occupant in room

Fire Rating



■ VERTICAL CIRCULATION

■ EXIT ACCESS CORRIDORS

→ EXIT DISCHARGE