



TEAM

# SUSTAIN

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# Agenda / Order of content v2

1. Context (Alie)
2. Sabatier overview (Alie)
3. Structural system (Jamie)
  - a. Steel grid
    - i. Greenhouse, walkways
  - b. Wood prefab
    - i. Living unit arrangement: bedroom/bathroom unit as berths, changing the way of living
4. Electrical system - PV and sabatier (Jamie)
  - a. Attached to roof structure + shingled
  - b. Above units
  - c. East/west orientation
  - d. Basement storage + powers the sabatier
5. HVAC system - air systems, sabatier heat, utilising the greenhouse (Ophelie)
  - a. Summer vs winter
  - b. Greenhouse versus living units
6. Water system (Ophelie)
  - a. Gutters/rainwater collection
  - b. Aquaponics loop
    - i. Community kitchen program
    - ii. Cafe
  - c. Vertical farming
    - i. Integration into living unit kitchen
    - ii. Explain facades
  - d. Living machine system
    - i. Leads into the building, ties the greenhouse to front public spaces (mention makerspace/lobby)

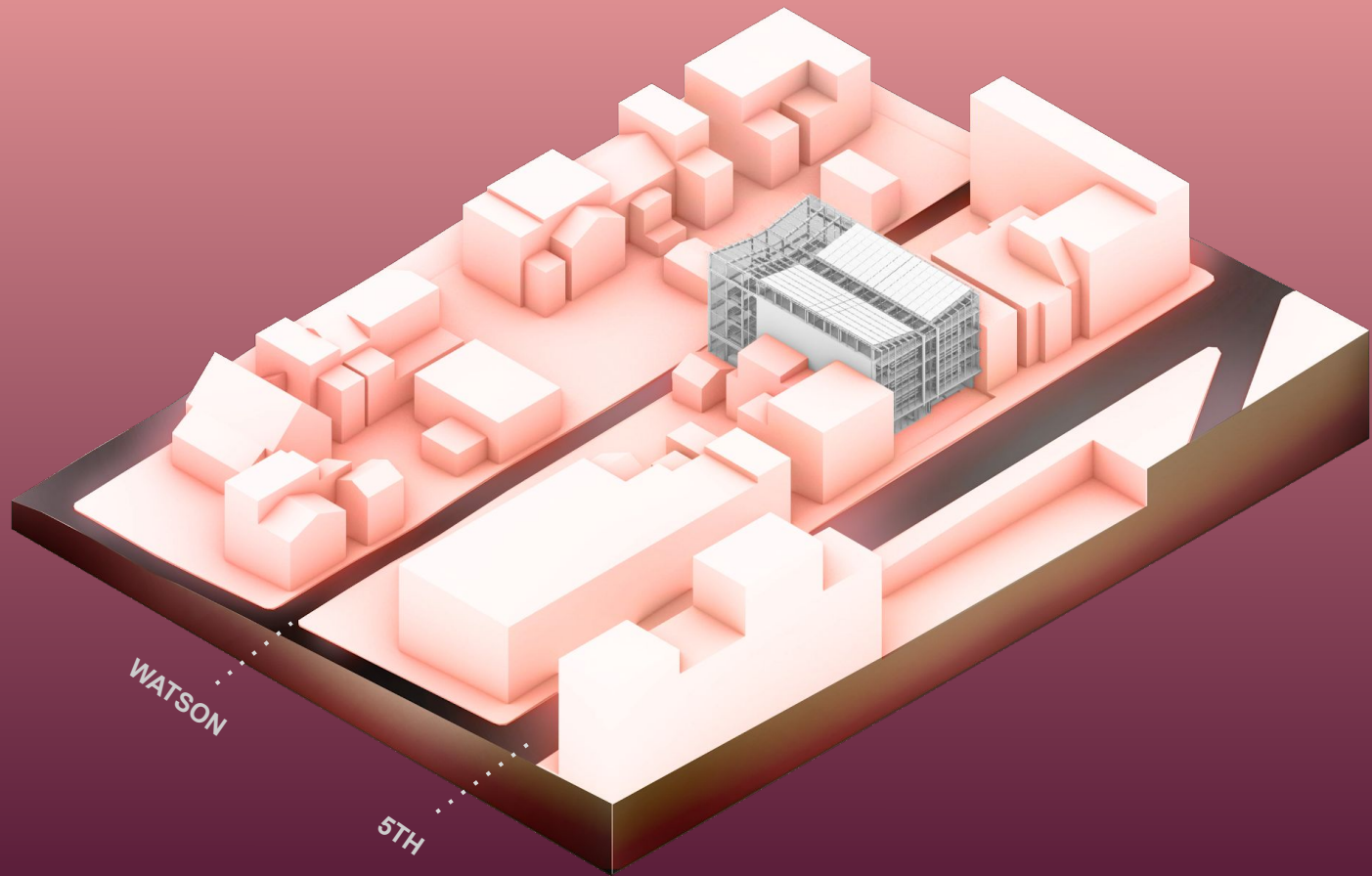


**OUR VISION :**

**HOW CAN WE**

**SUSTAIN**

**A VIABLE LIVING AND DWELLING SYSTEM WITH LOW ENERGY?**



WATSON

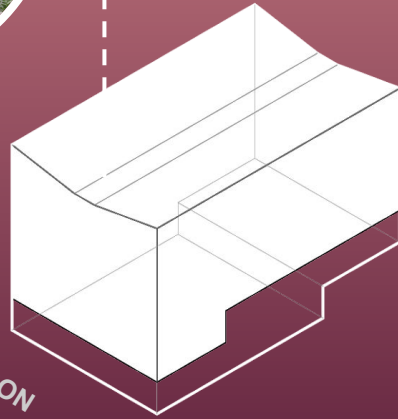
5TH

[01]

# overview

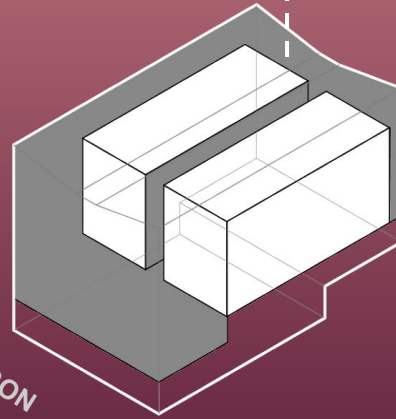


# DESIGN OVERVIEW



WATSON

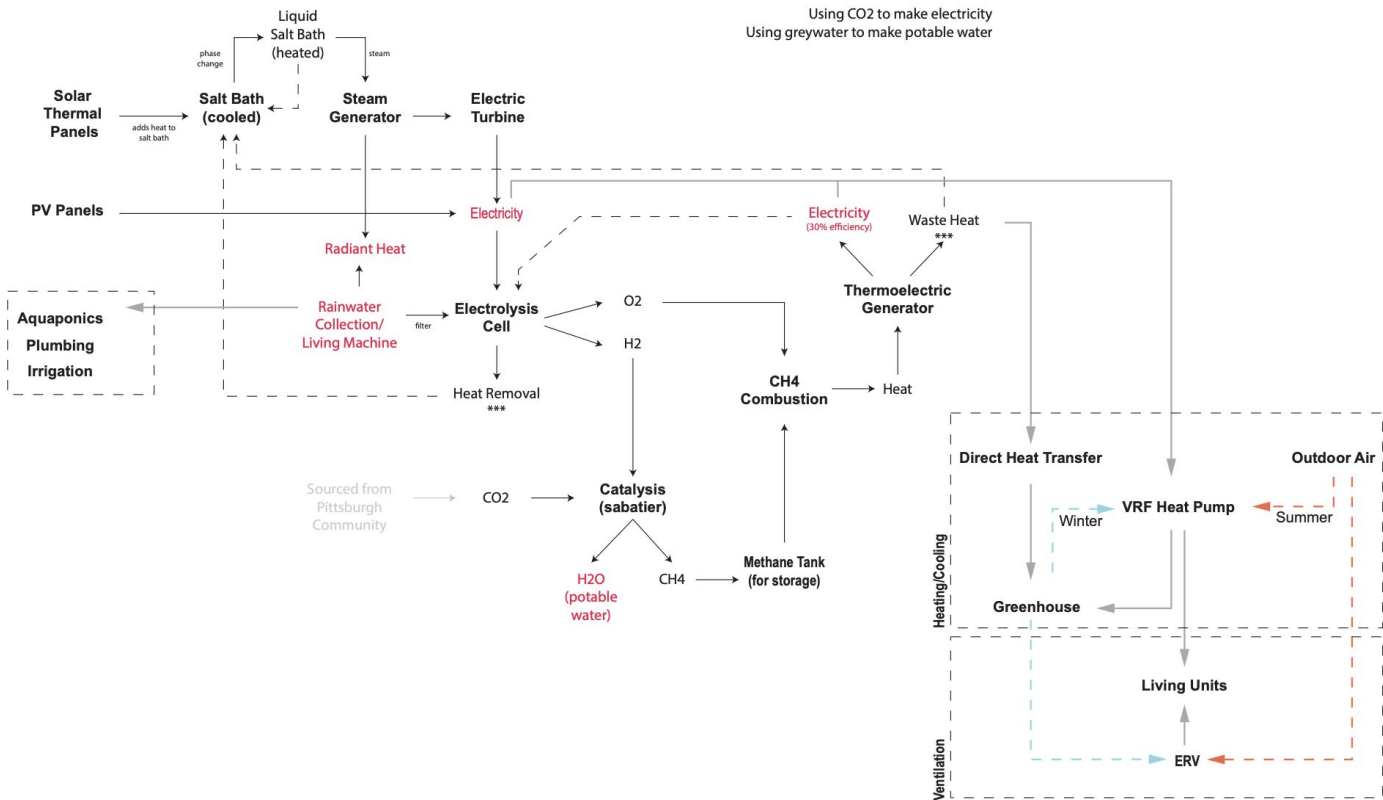
Greenhouse



WATSON

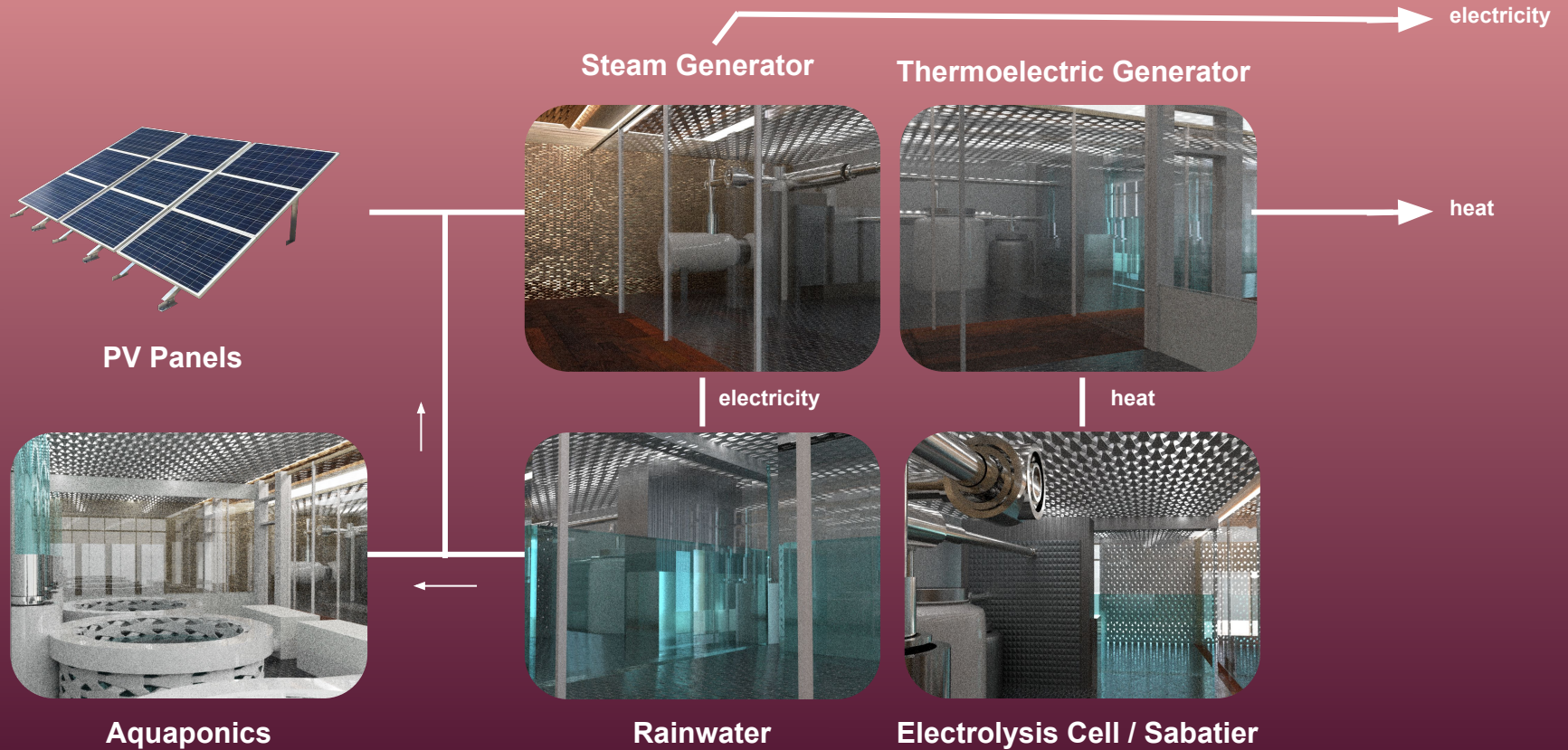
Residential in Greenhouse

# SABATIER SYSTEM

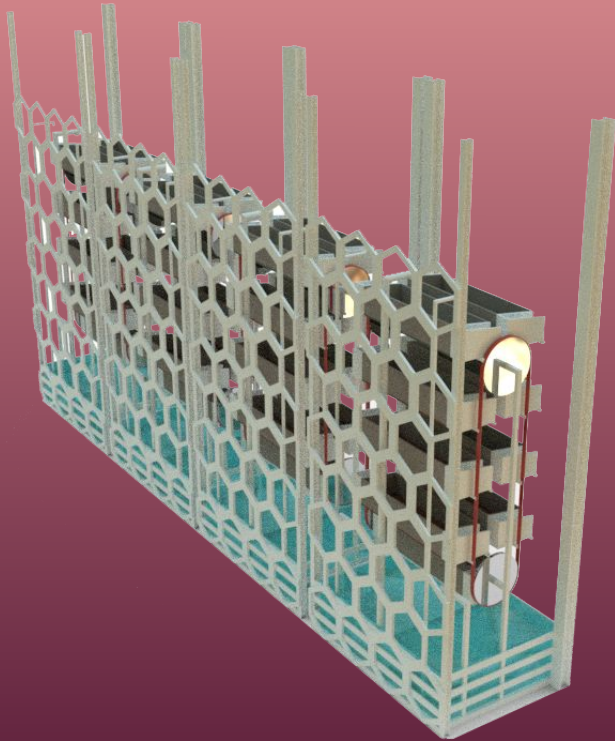




# SABATIER SYSTEM



# GARDEN CIRCULATION



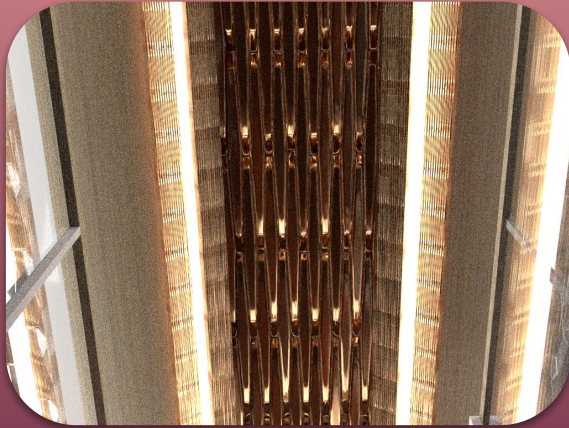
Vertical Garden



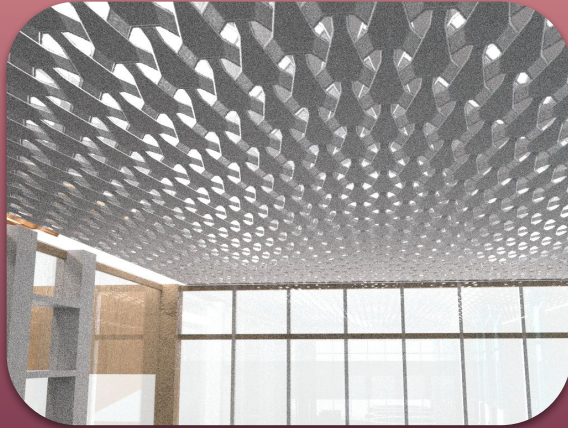
Aquaponics

# MATERIAL PALETTE

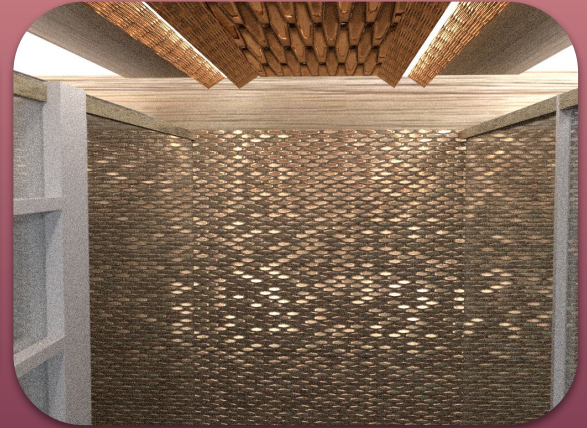
Bronze Ceramic



Aluminum Mesh



Gold Ceramic



Light Oak



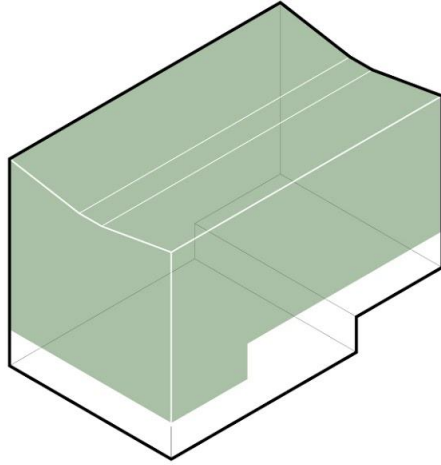
Painted  
Steel



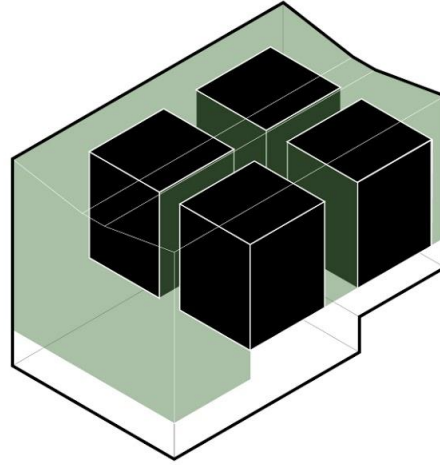
Cherry  
Oak

[02]

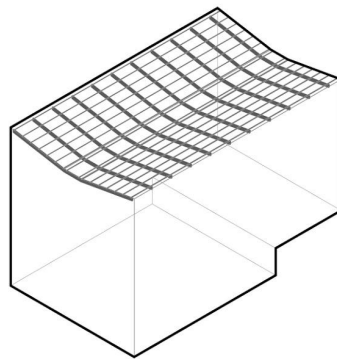
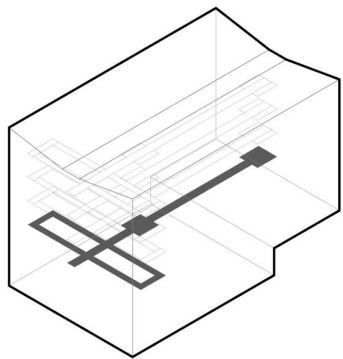
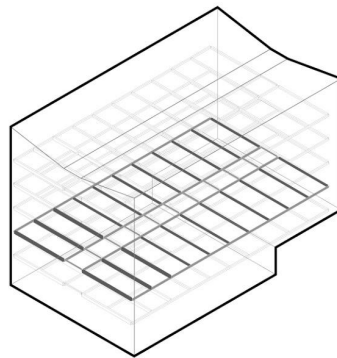
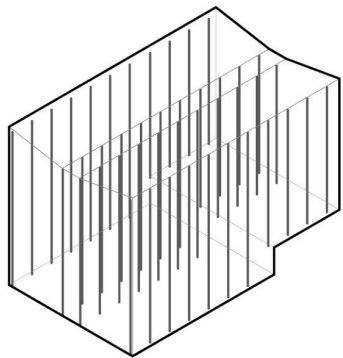
**structural**

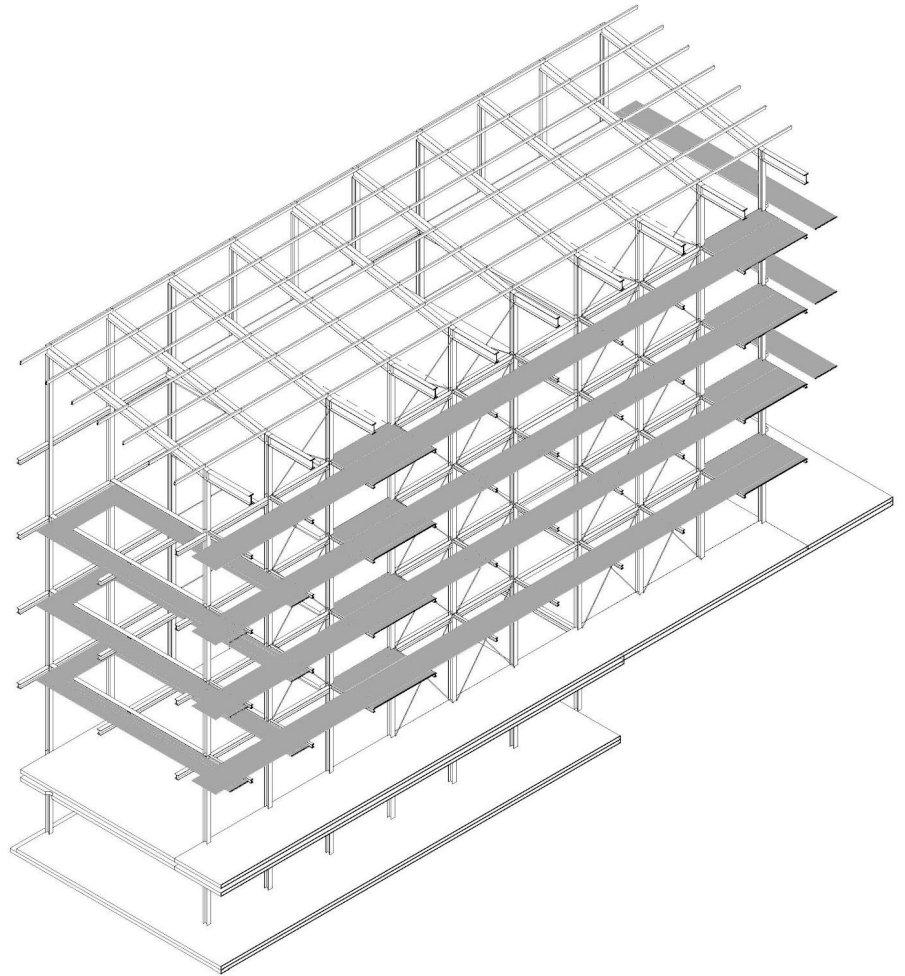
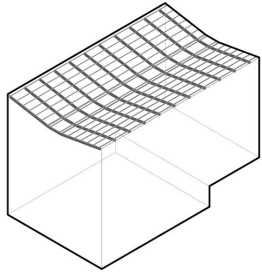
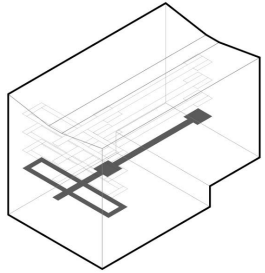
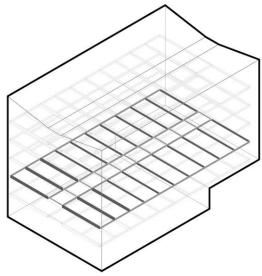
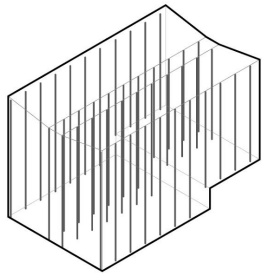


Greenhouse



Residential in Greenhouse

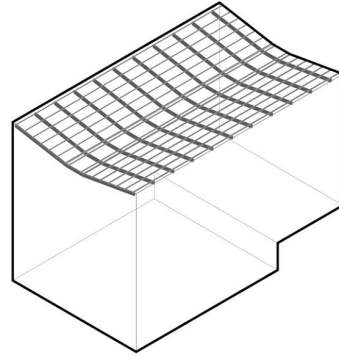
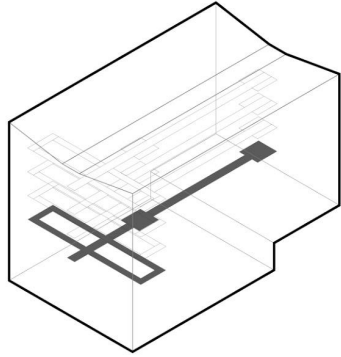
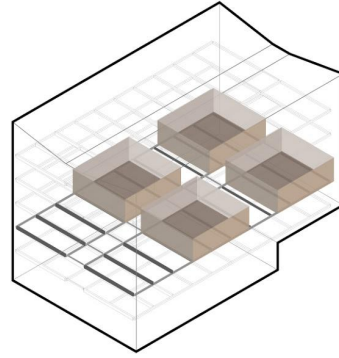
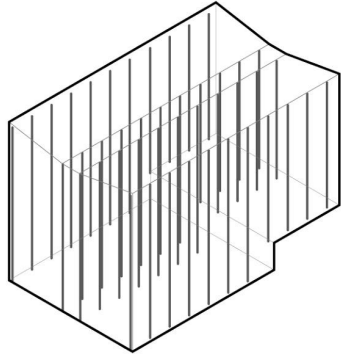


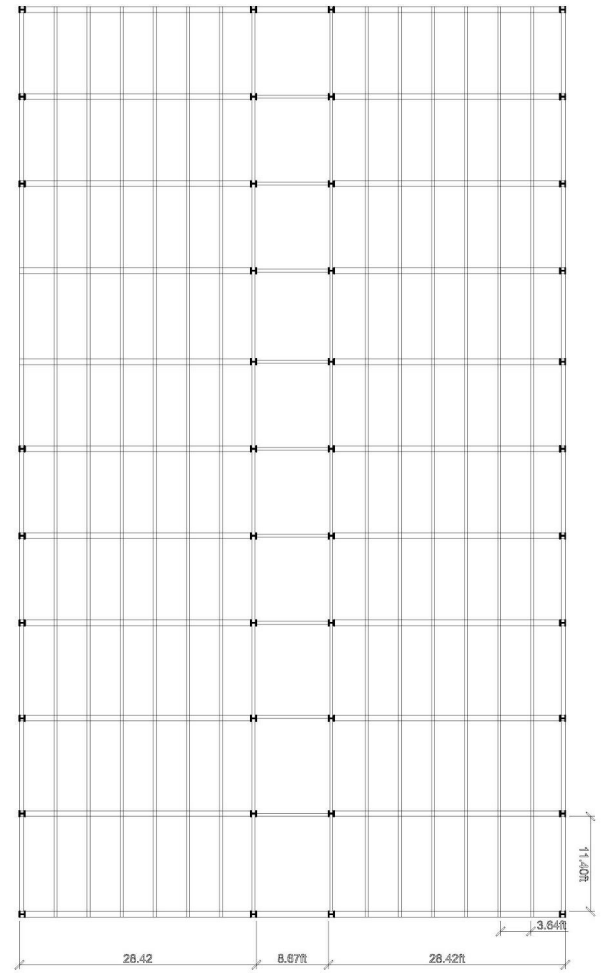
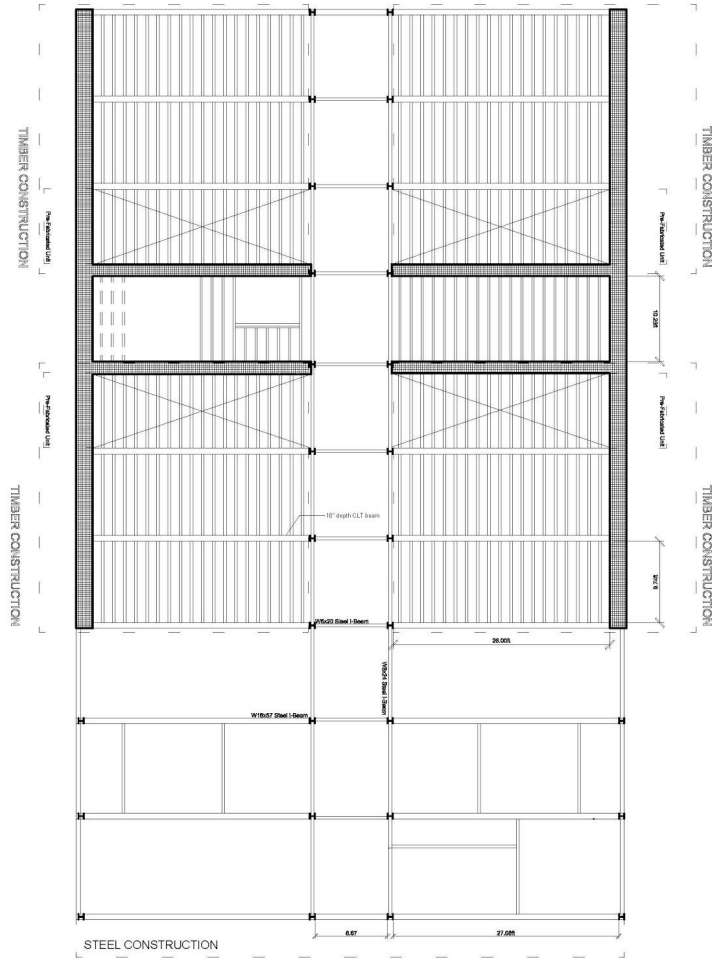








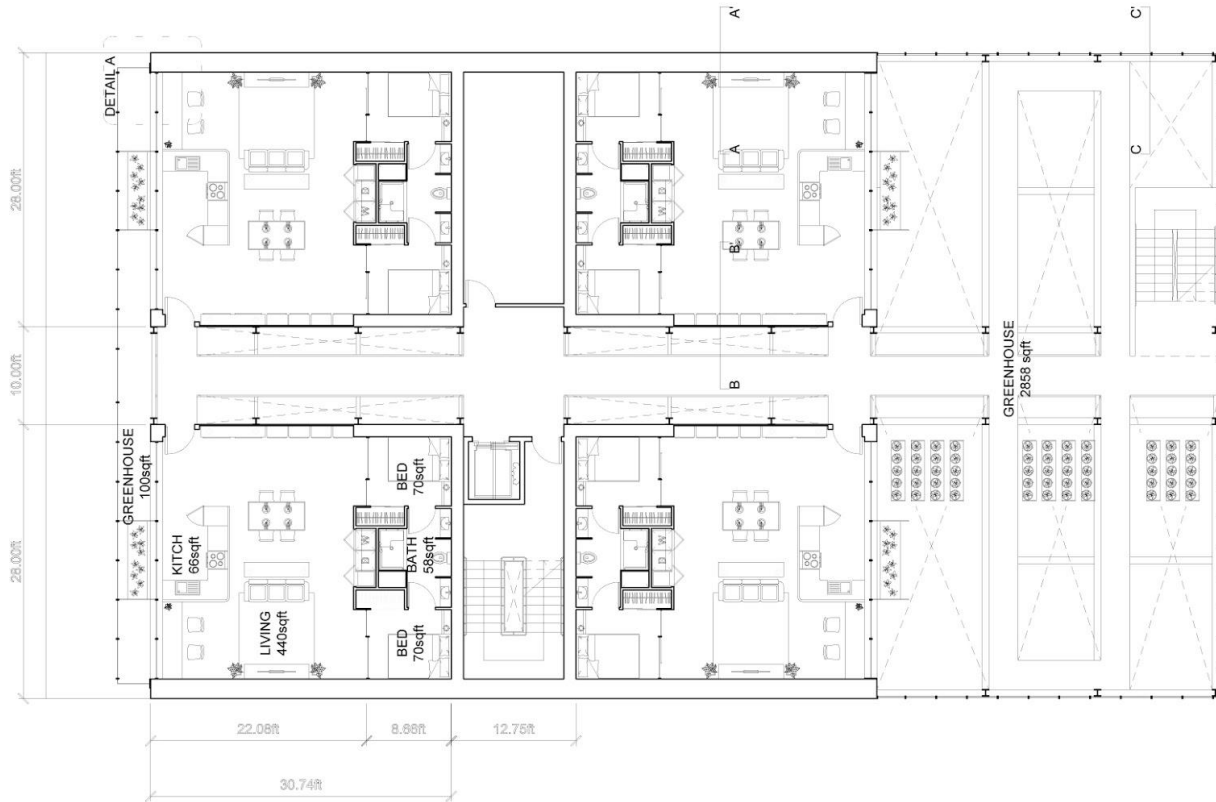


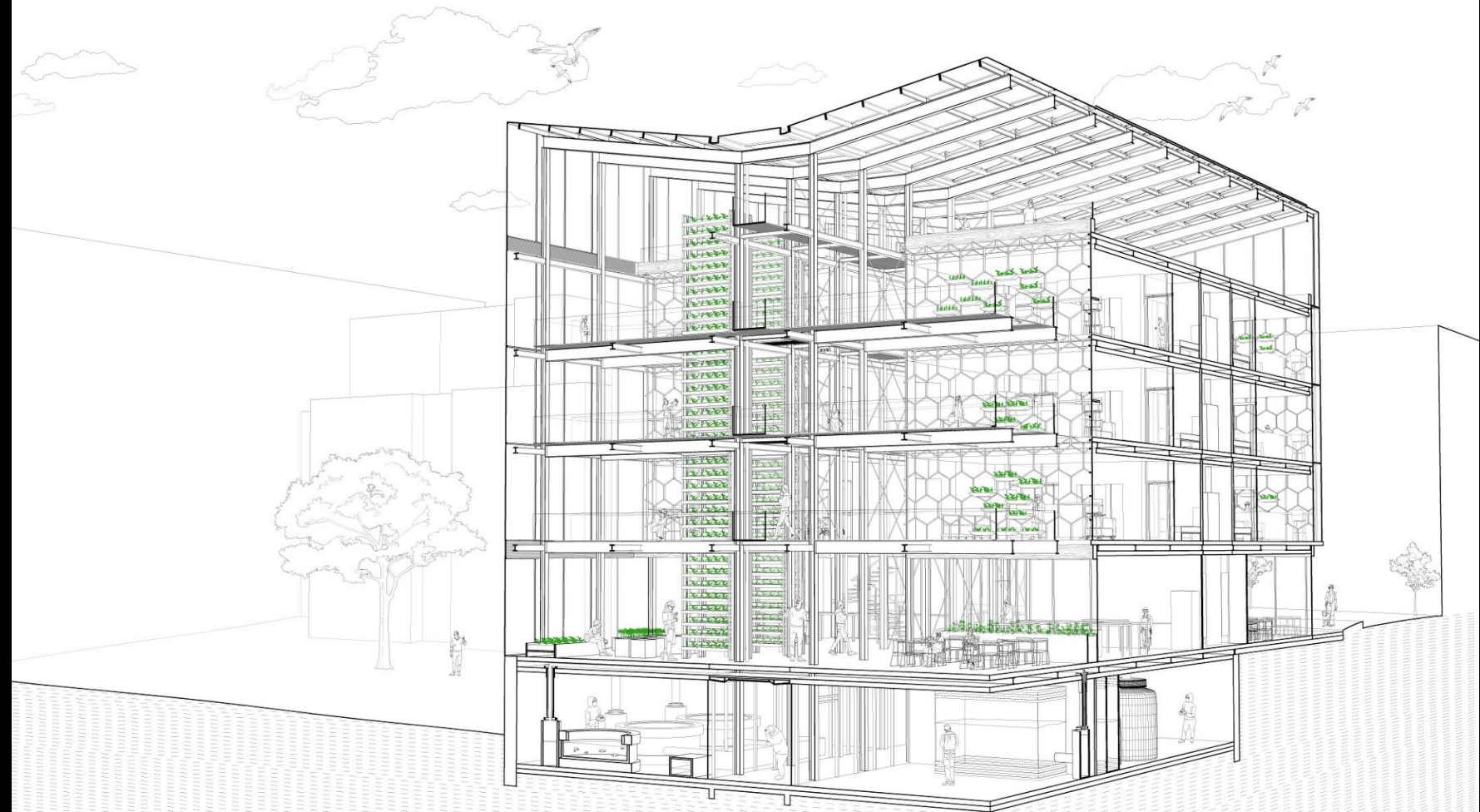






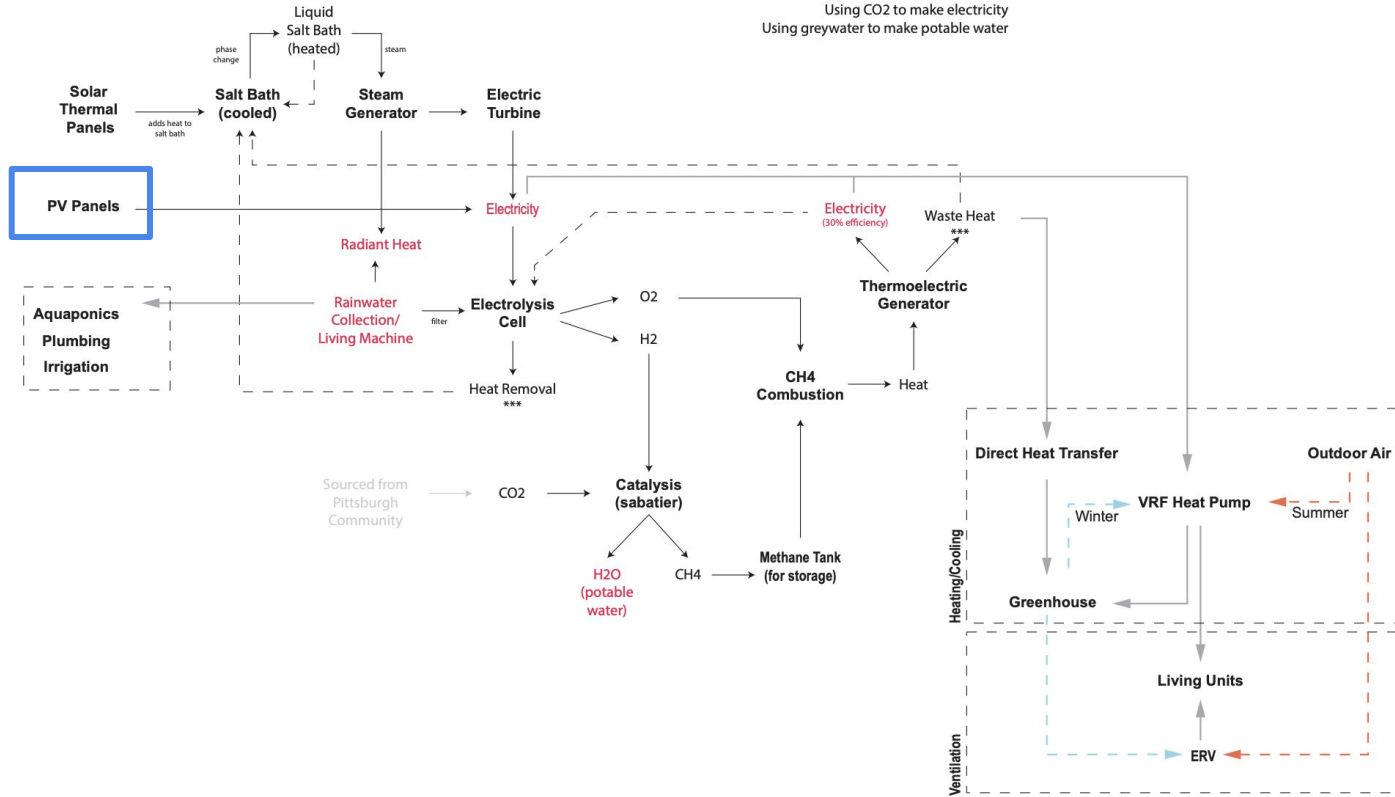
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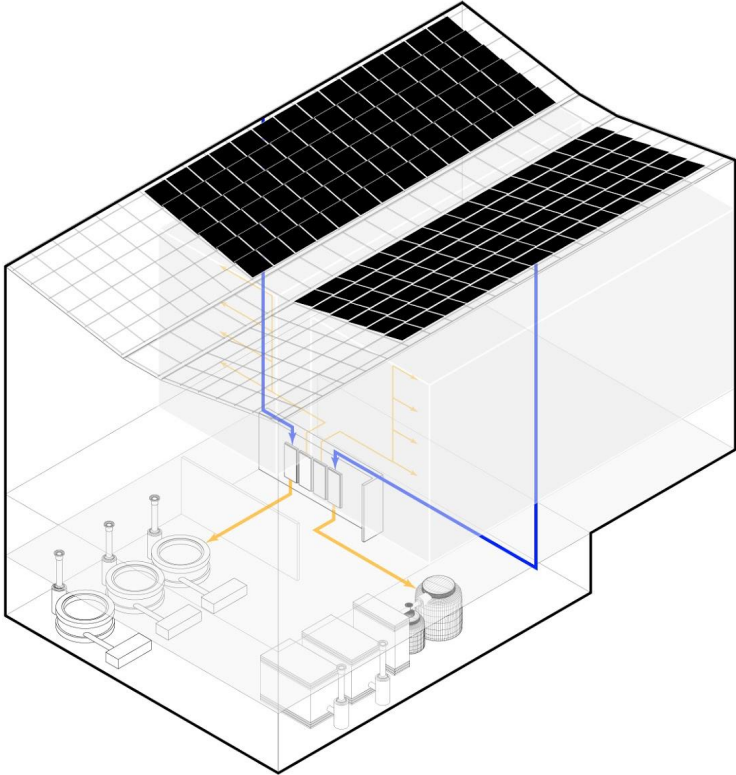


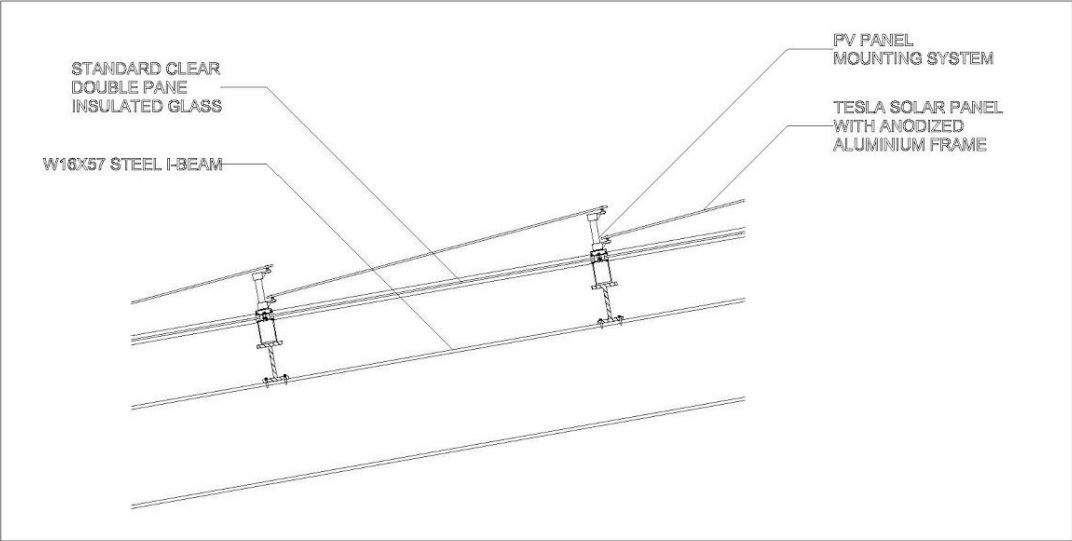
[03]

**electrical**

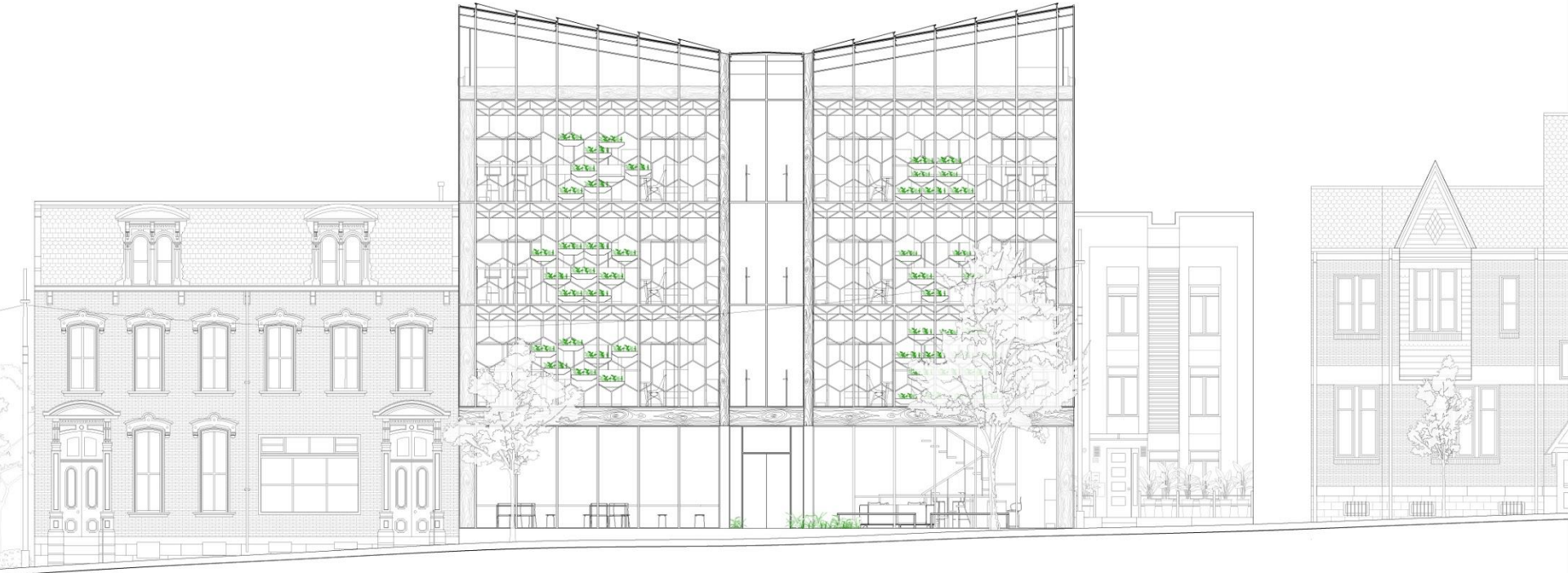


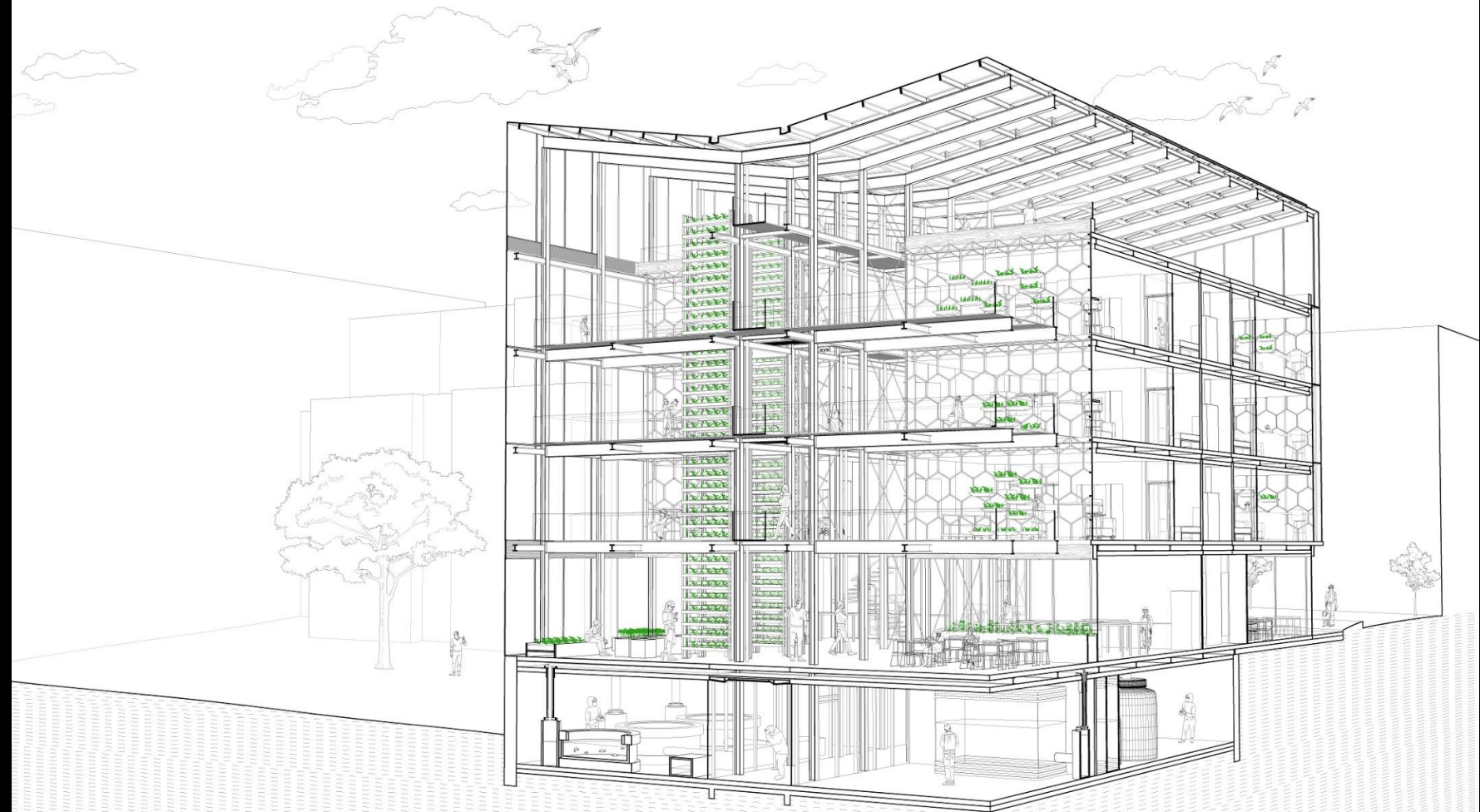


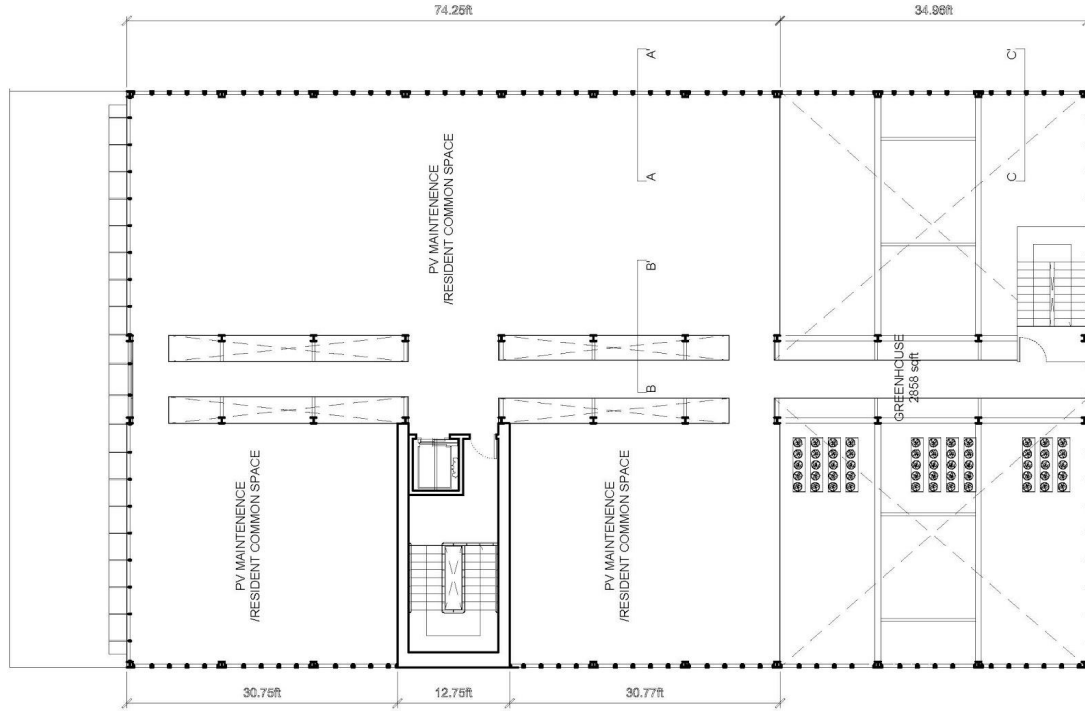




detail E





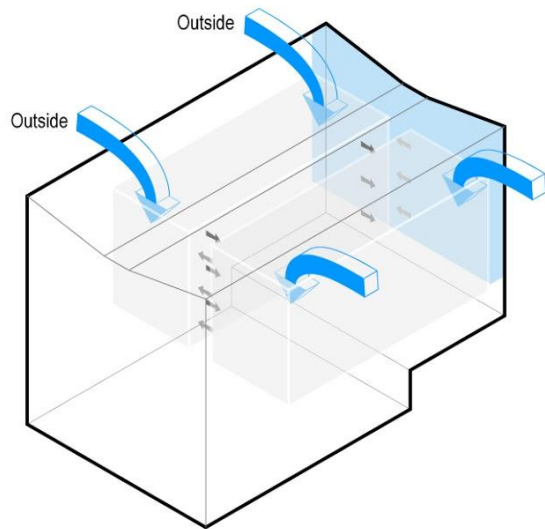


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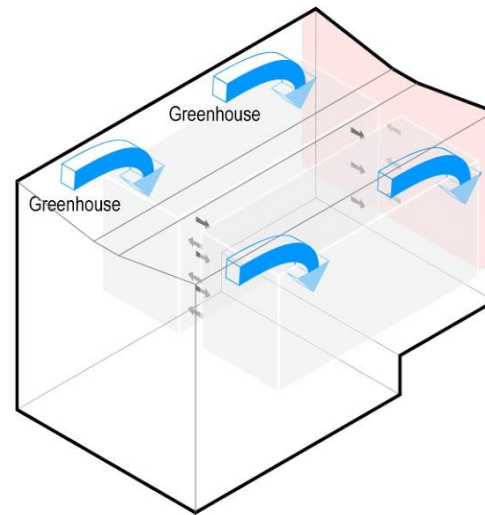
[04]

**hvac**



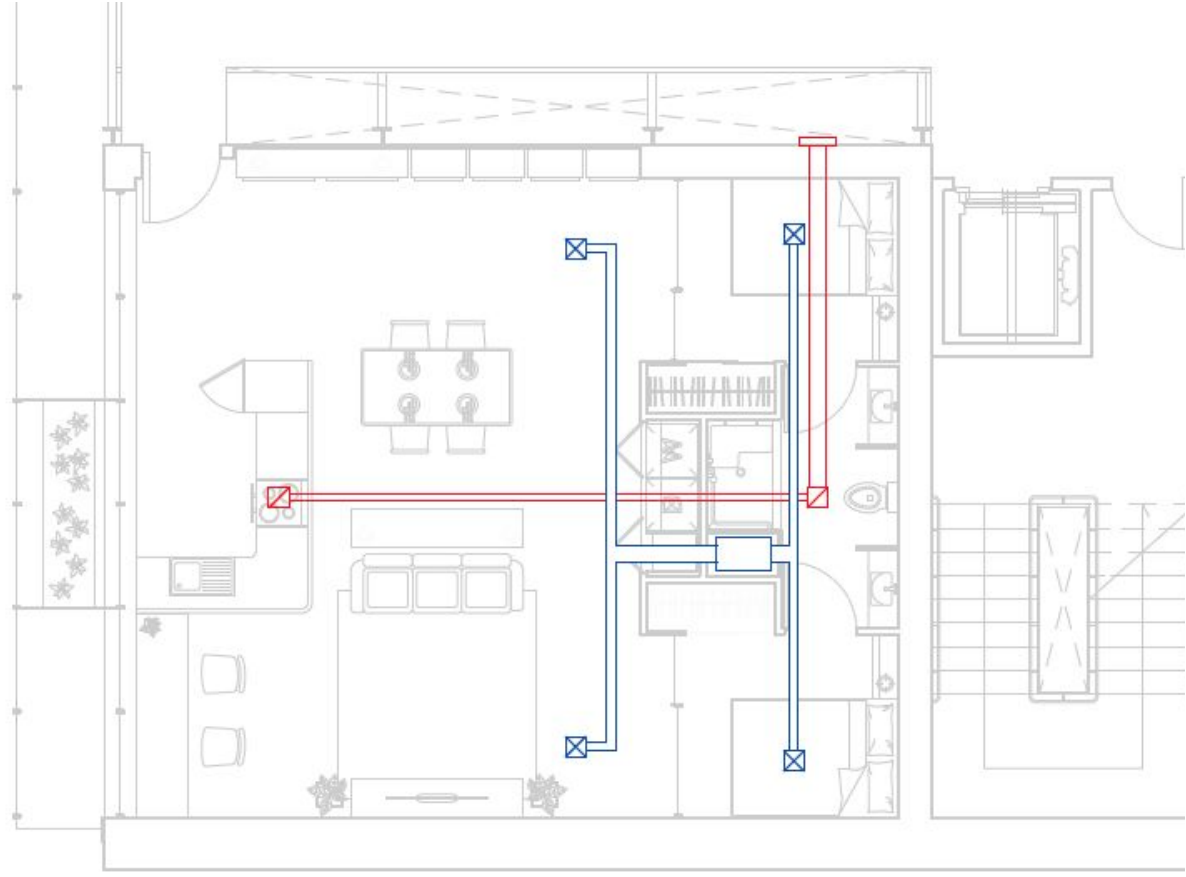


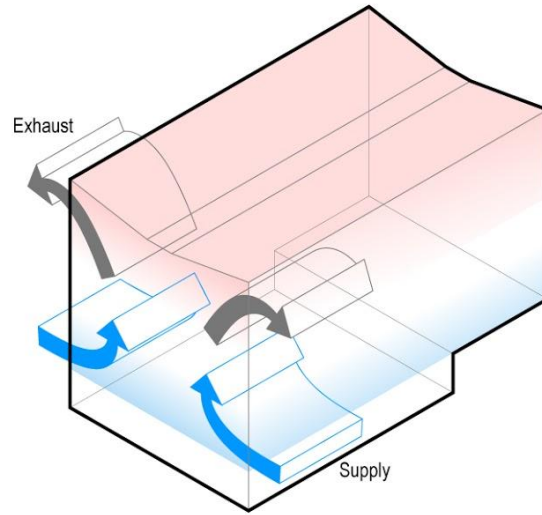
Living Units  
Summer



Living Units  
Winter



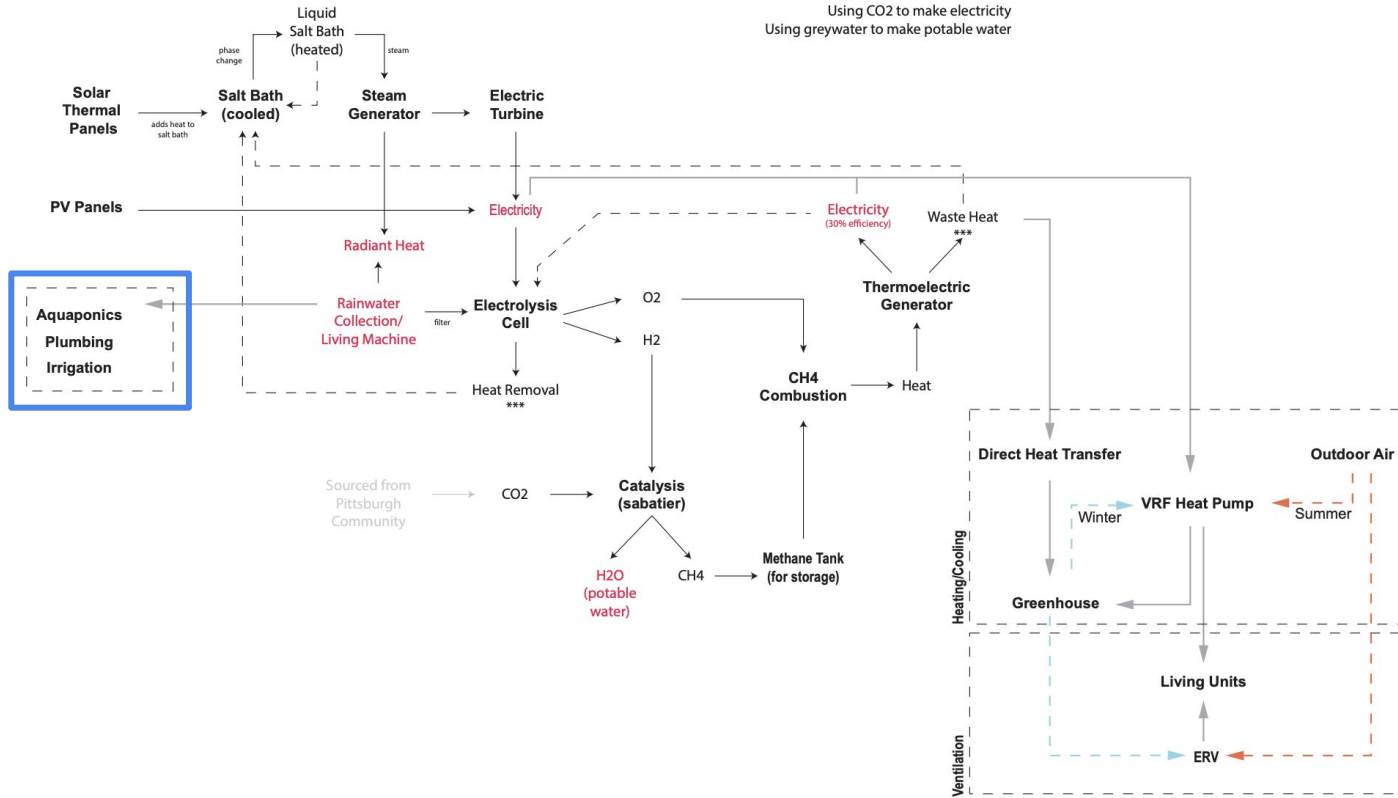


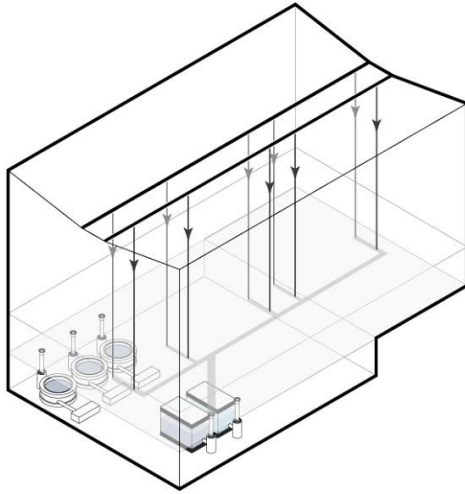


Greenhouse

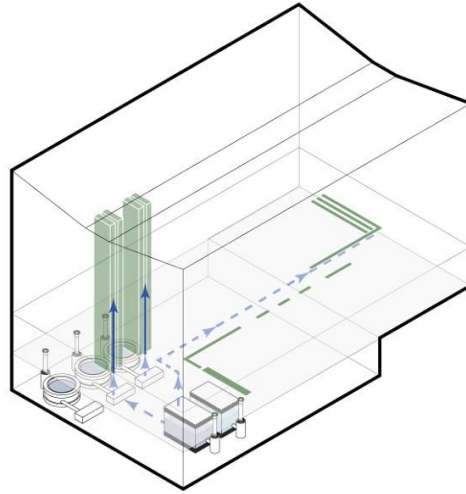
[05]

**water**

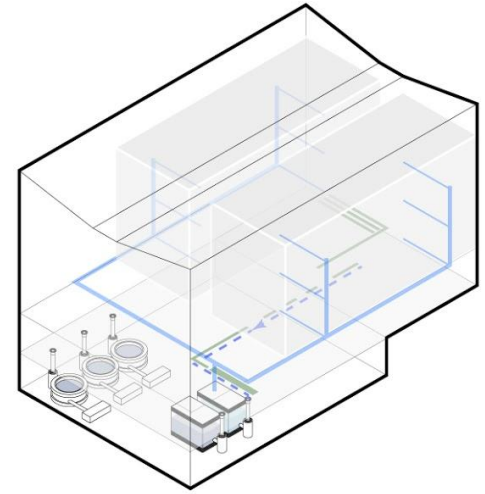




Water Collection



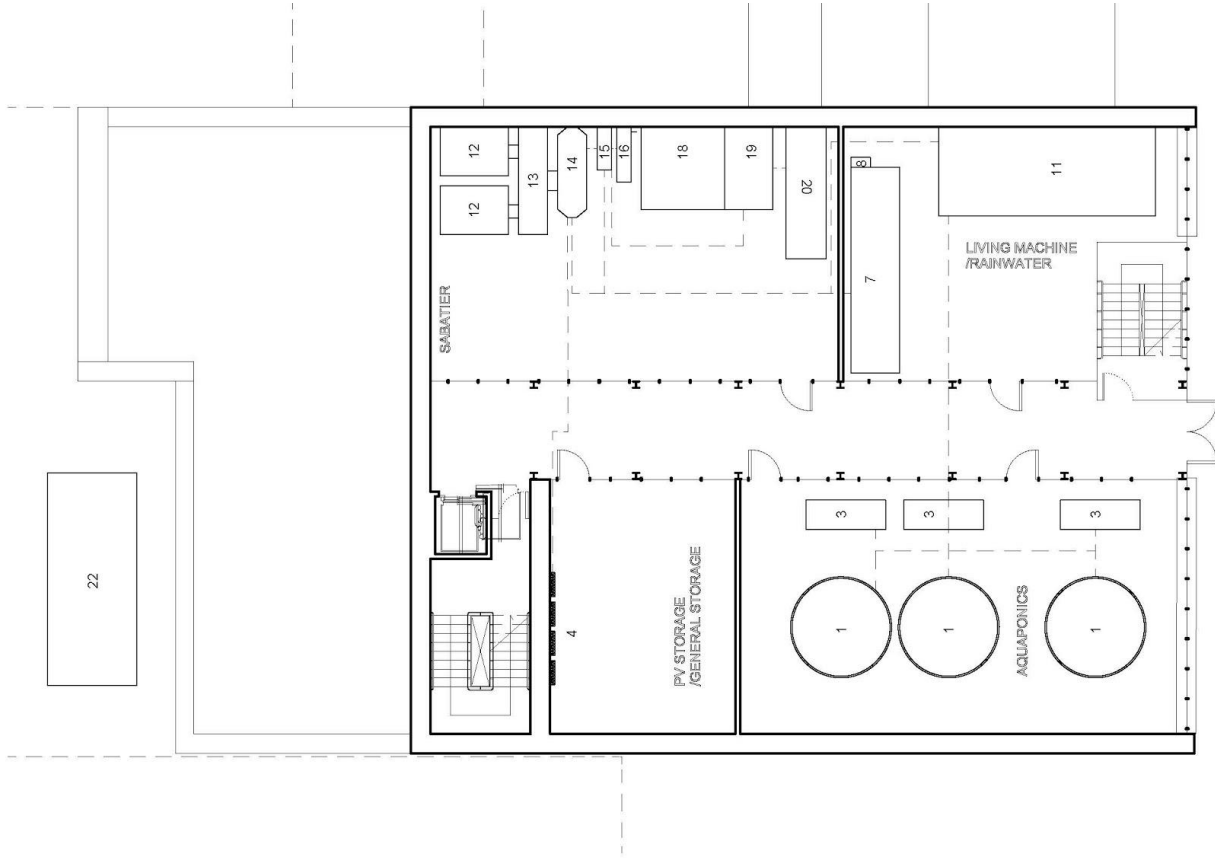
Grey Water Usage

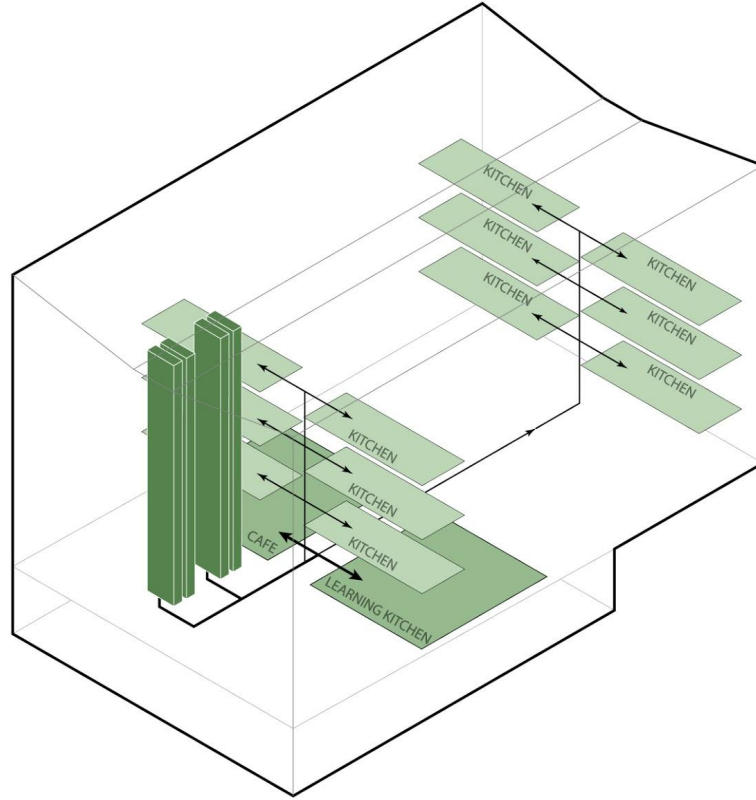


Potable Water Usage



SCALE: 1'-0" = 3/16"





Double Skin Facade

Bedrooms/Bathroom

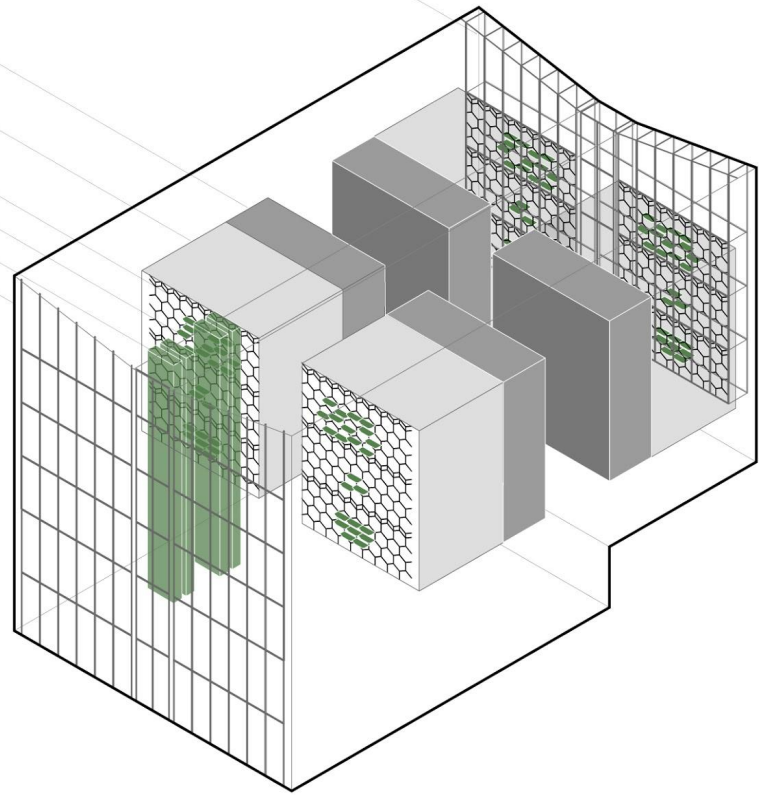
Kitchen/Living Room

Hexagonal Glazing

Planters

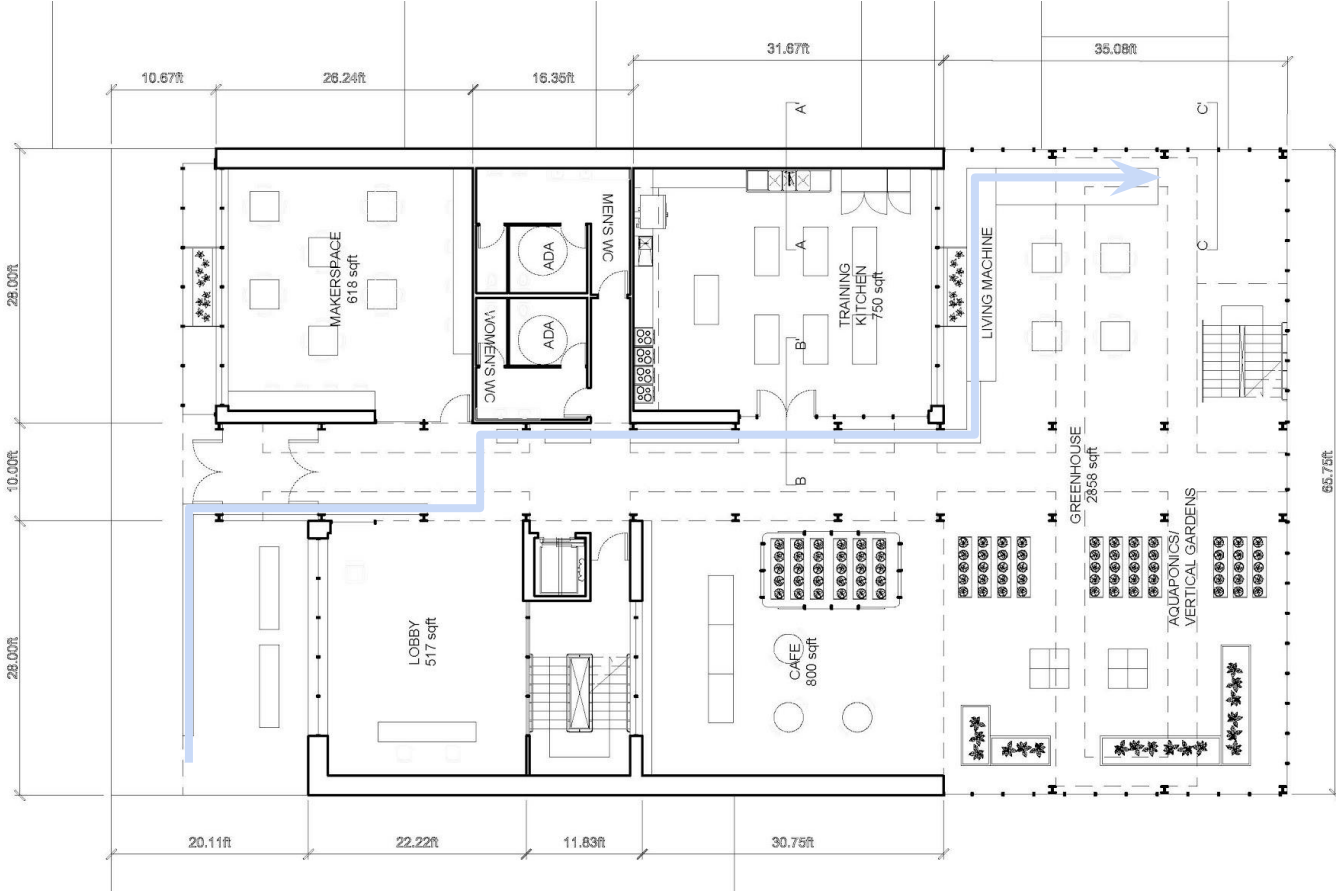
Vertical Garden

Curtain Wall













**QUESTIONS?**



**THANK YOU!**

