



# 425 BLOOR ST W

WORKING GROUP 2

PROJECT NO: 138025

2023-06-27



# AGENDA

1. Introductions
2. What We Learned
3. Sustainability
4. Uses
5. Community Benefits
6. Timing
7. Discussion
8. Next steps





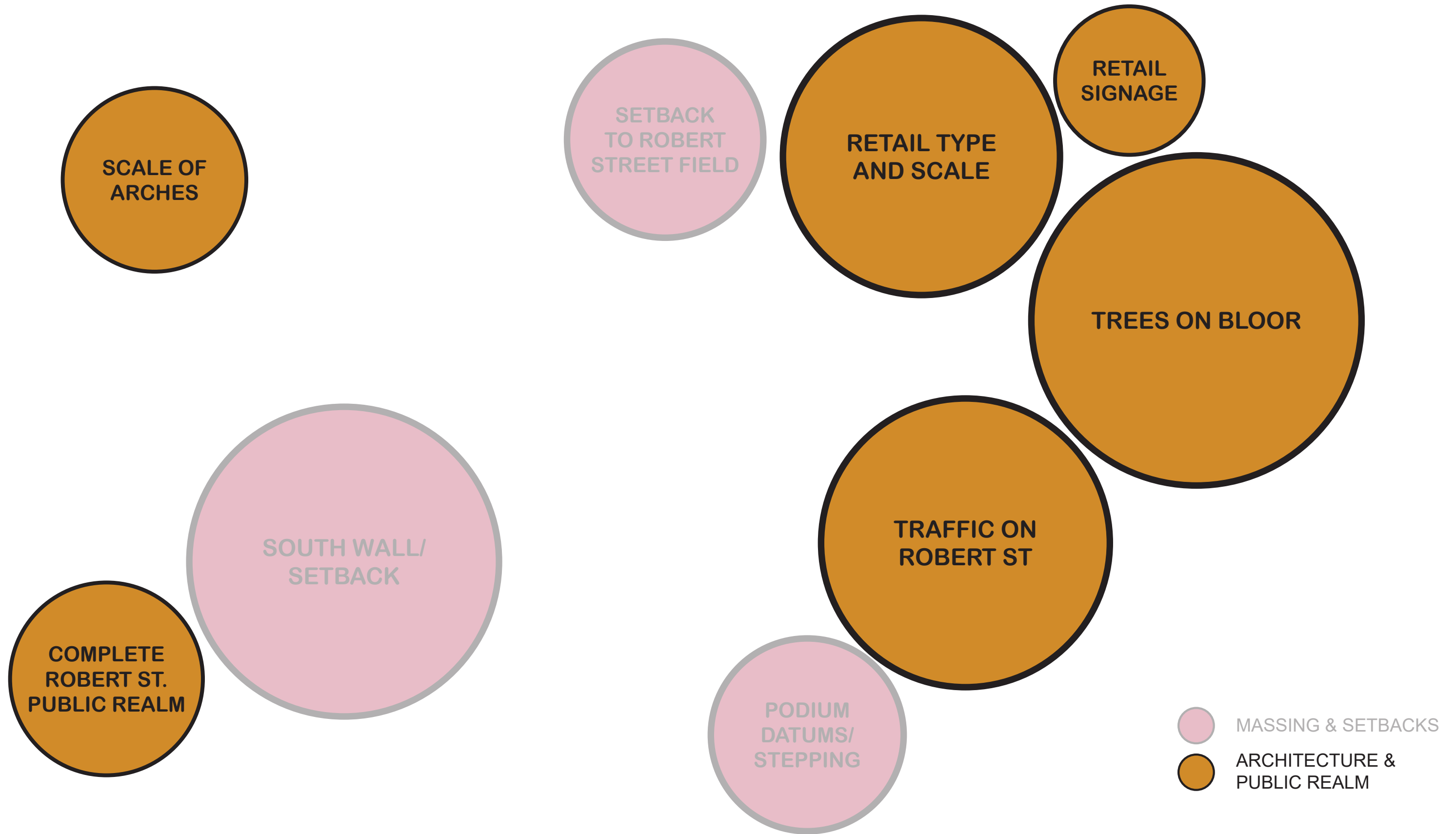


## WHAT WE LEARNED

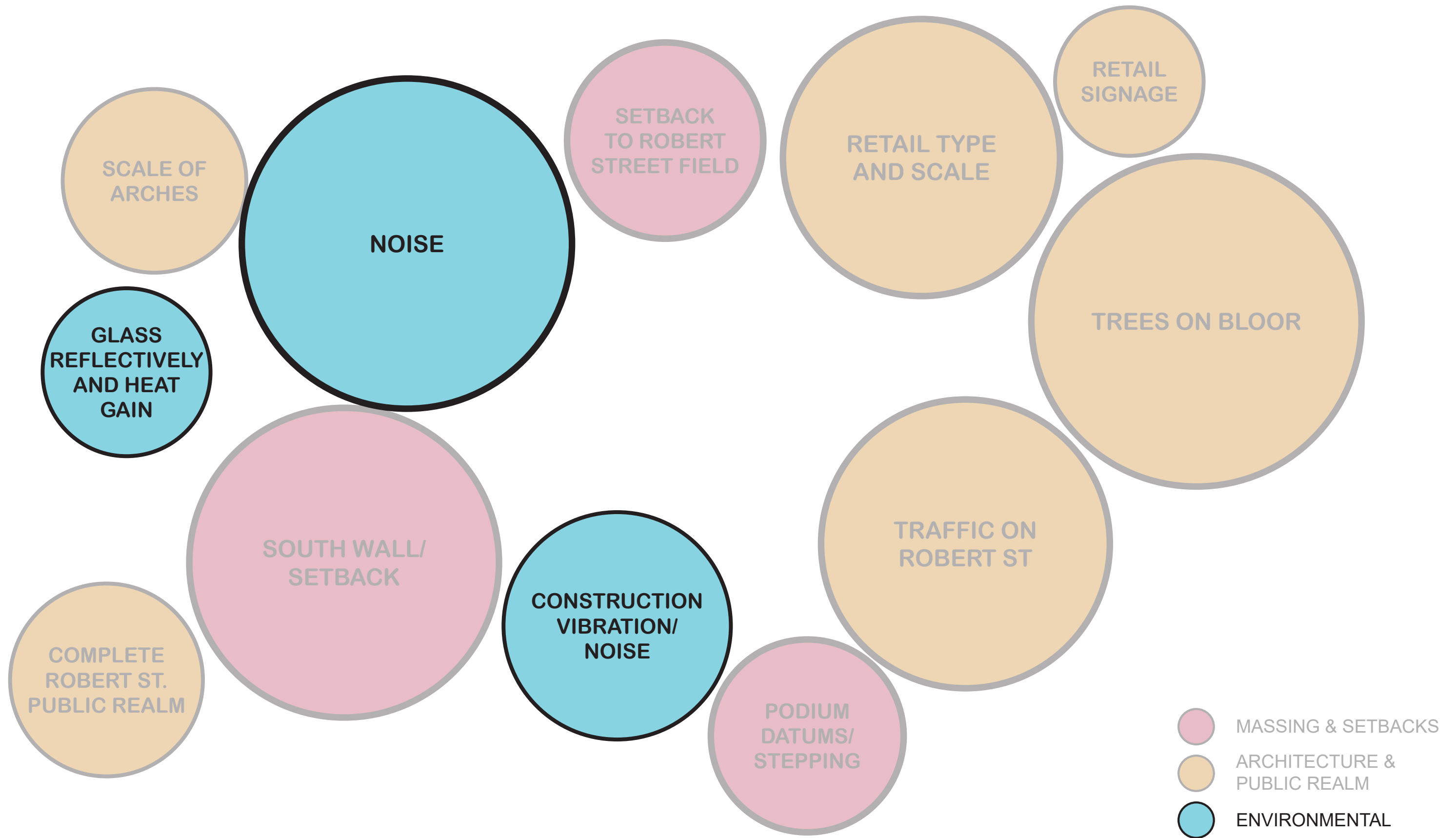


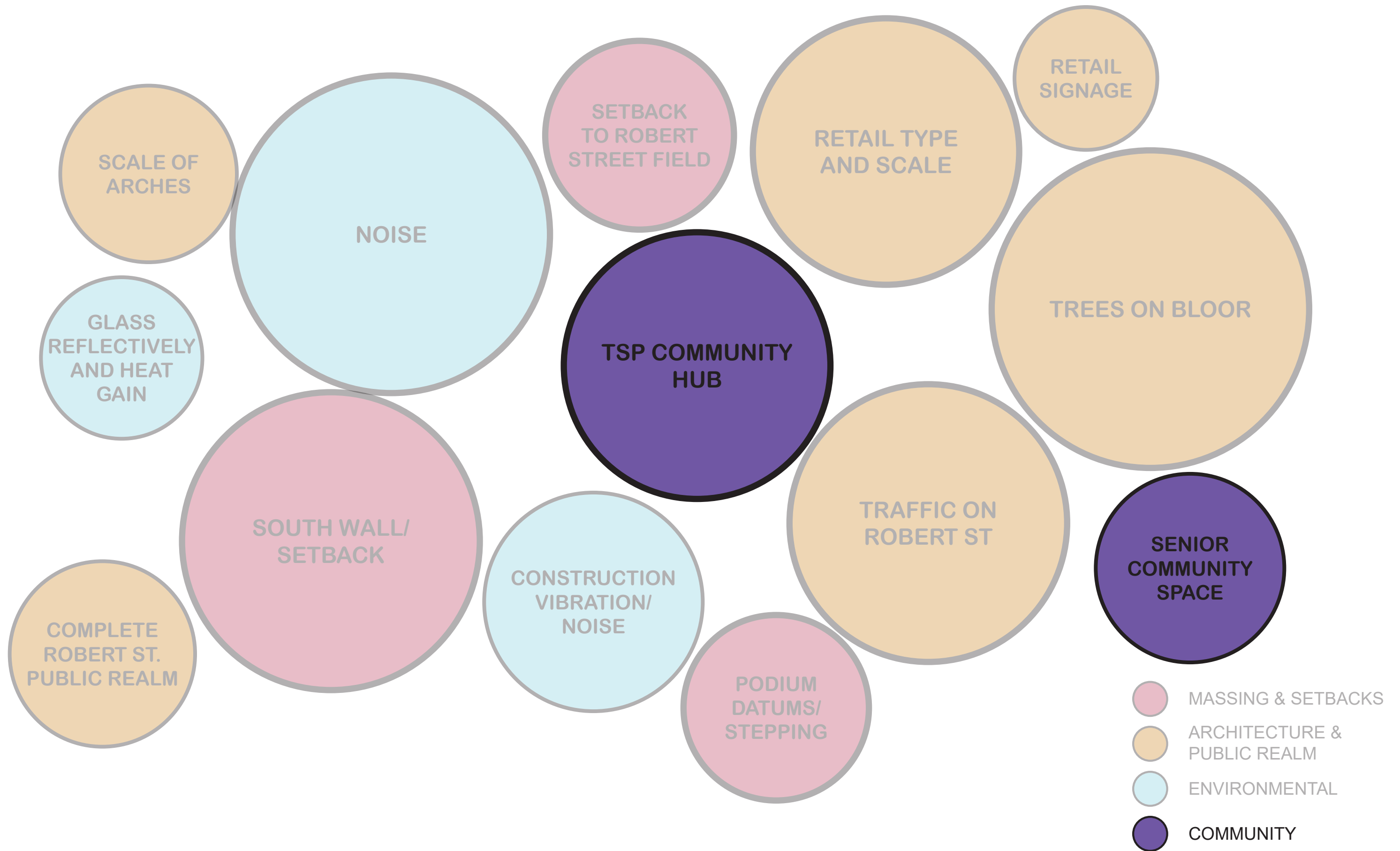


 MASSING & SETBACKS

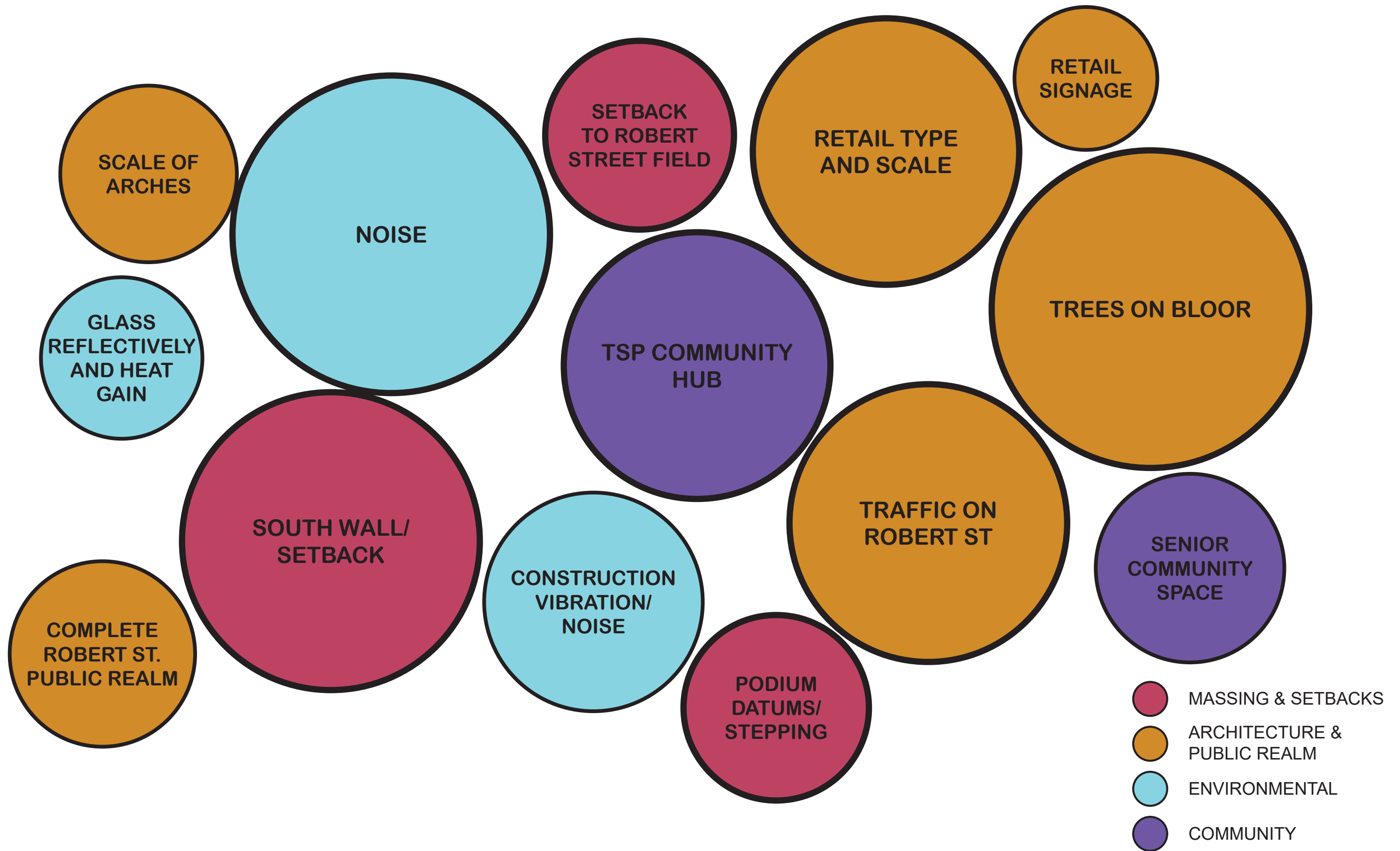














# SUSTAINABILITY

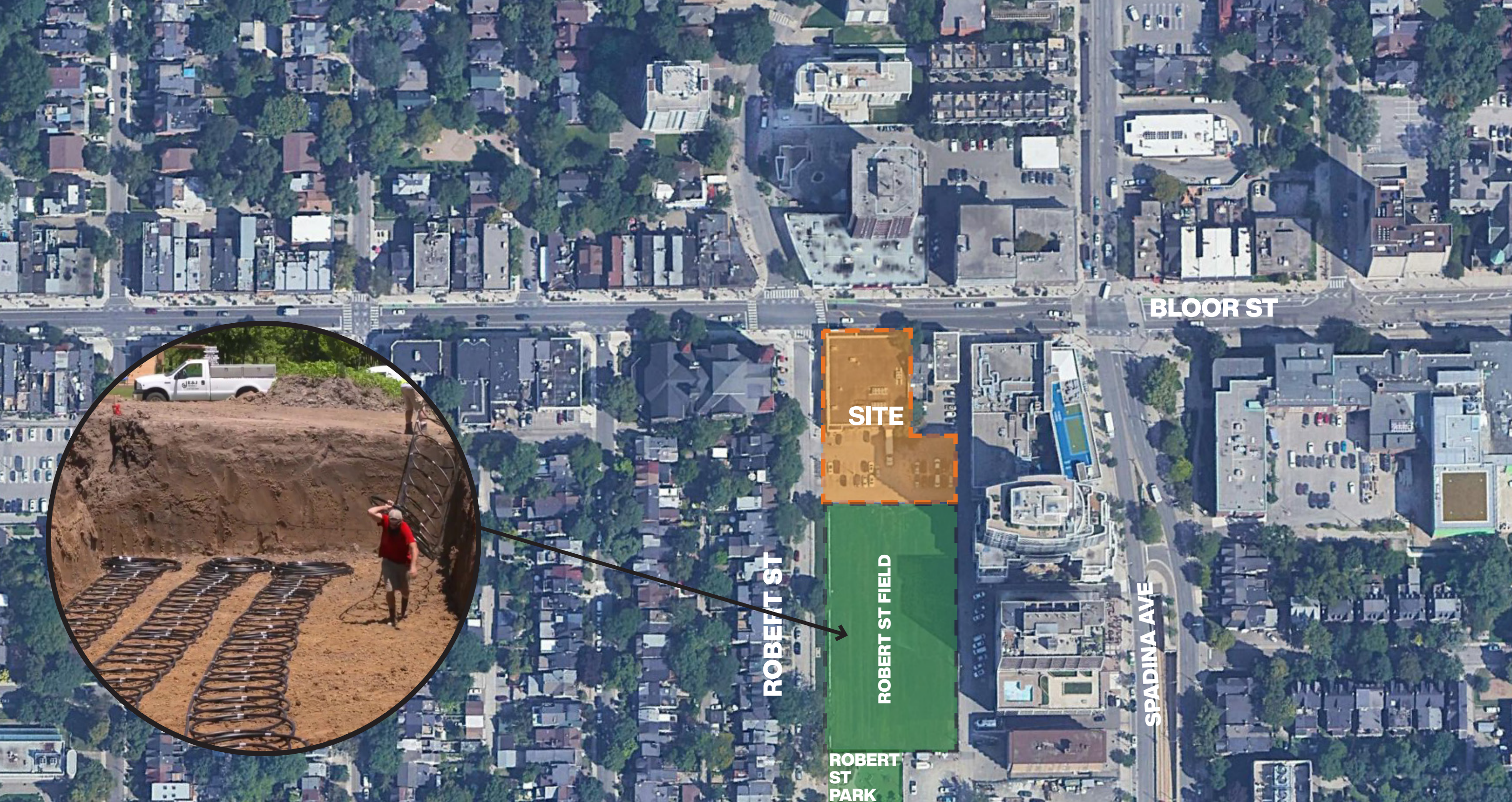




BIKE PARKING / E-BIKE CHARGING / GREEN ROOF / SUSTAINABLE PLANTING / ENERGY EFFICIENCY / BIRD FRIENDLY GLAZING  
NO GAS APPLIANCES / WATER (DRINKING) FOUNTAIN ON-SITE

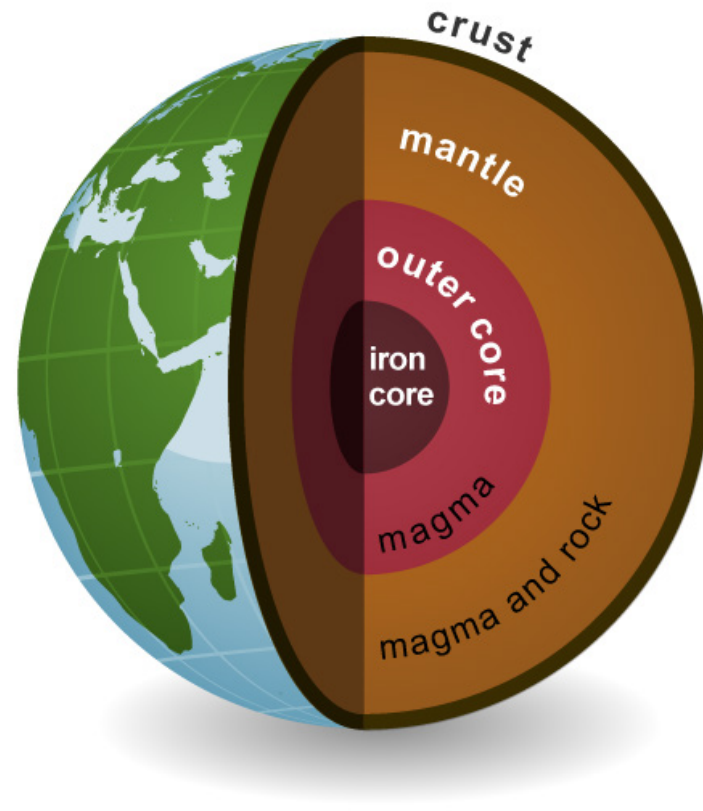






POTENTIAL FOR GEOTHERMAL ON NEIGHBOURING LANDS





- Geothermal energy is heat within the earth.
- Is a renewable energy source because heat is continuously produced inside the earth.
- People use geothermal heat for bathing, for heating buildings, and for generating electricity.

## BENEFITS OF GEOTHERMAL ENERGY

- Geothermal energy is currently believed to be one of the most advantageous sources of energy. Not only is it a renewable type of energy but is also present in most areas, outperforming even some conventional sources in many aspects.
- Geothermal energy sourcing is good for the environment.
- Geothermal energy is extracted from earth without burning fossil fuels, and geothermal fields produce practically no emissions.
- We can archive savings of up to 80% over conventional energy usage
- Reliable source of renewable energy, unlike solar, wind or biomass, it does not depend on neither wind or sun, available all year long.



# WHAT IS IN A GEOTHERMAL HEAT PUMP SYSTEM?

A geothermal heat pump system includes:

## 1. An underground heat collector:

A geothermal heat pump uses the earth as a heat source and sink (thermal storage), using a series of connected pipes buried in the ground near a building. The loop can be buried either vertically or horizontally. It circulates a fluid that absorbs or deposits heat to the surrounding soil, depending on whether the ambient (outside) air is colder or warmer than the soil.

## 2. A heat pump:

When ambient temperatures are colder than the ground, a geothermal heat pump removes heat from the collector's fluids, concentrates it, and transfers it to the building. When ambient temperatures are warmer than the ground, the heat pump removes heat from the building and deposits it underground.

## 3. A heat distribution subsystem:

Conventional ductwork is generally used to distribute heated or cooled air from the geothermal heat pump throughout the building.



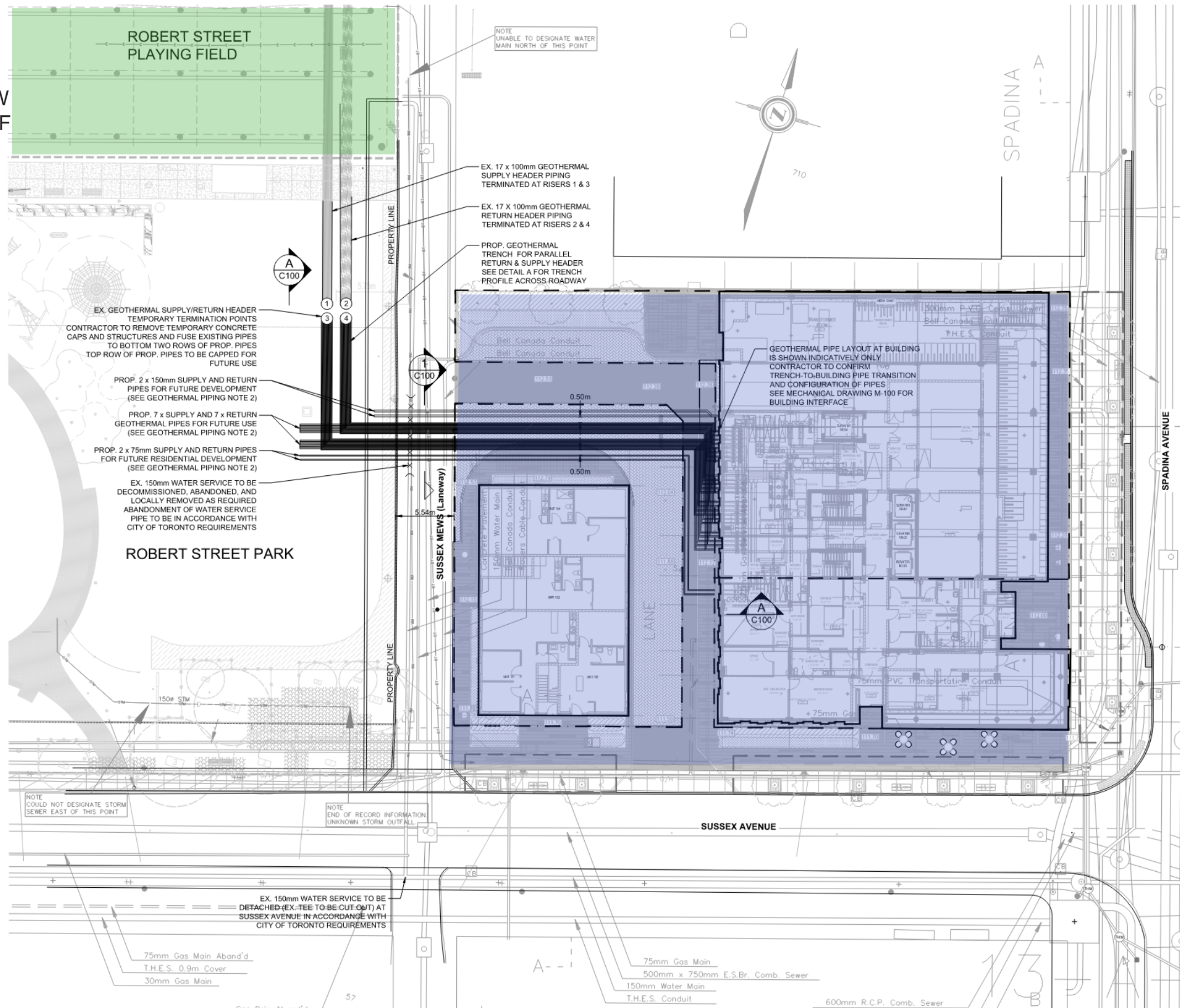
# ROBERT ST. GEO-EXCHANGE FIELD

- 152 boreholes – 850ft (260m deep). Installation of the borefield and geo-exchange piping completed in Spring/ Summer of 2021.
- Primary host is Spadina Sussex Student Residence (SSSR). (Utilizes over 50% of the borefield for heating and cooling the building year round)
- Remainder of the field can be used for future project allocations:
  - \* Future residential development on Sussex Mews land
  - \* Future Robert St. Field Facility building (club house)
  - \* Possible development on the north end of the field.





425 BLOOR ST W  
NORTH EDGE OF  
FIELD









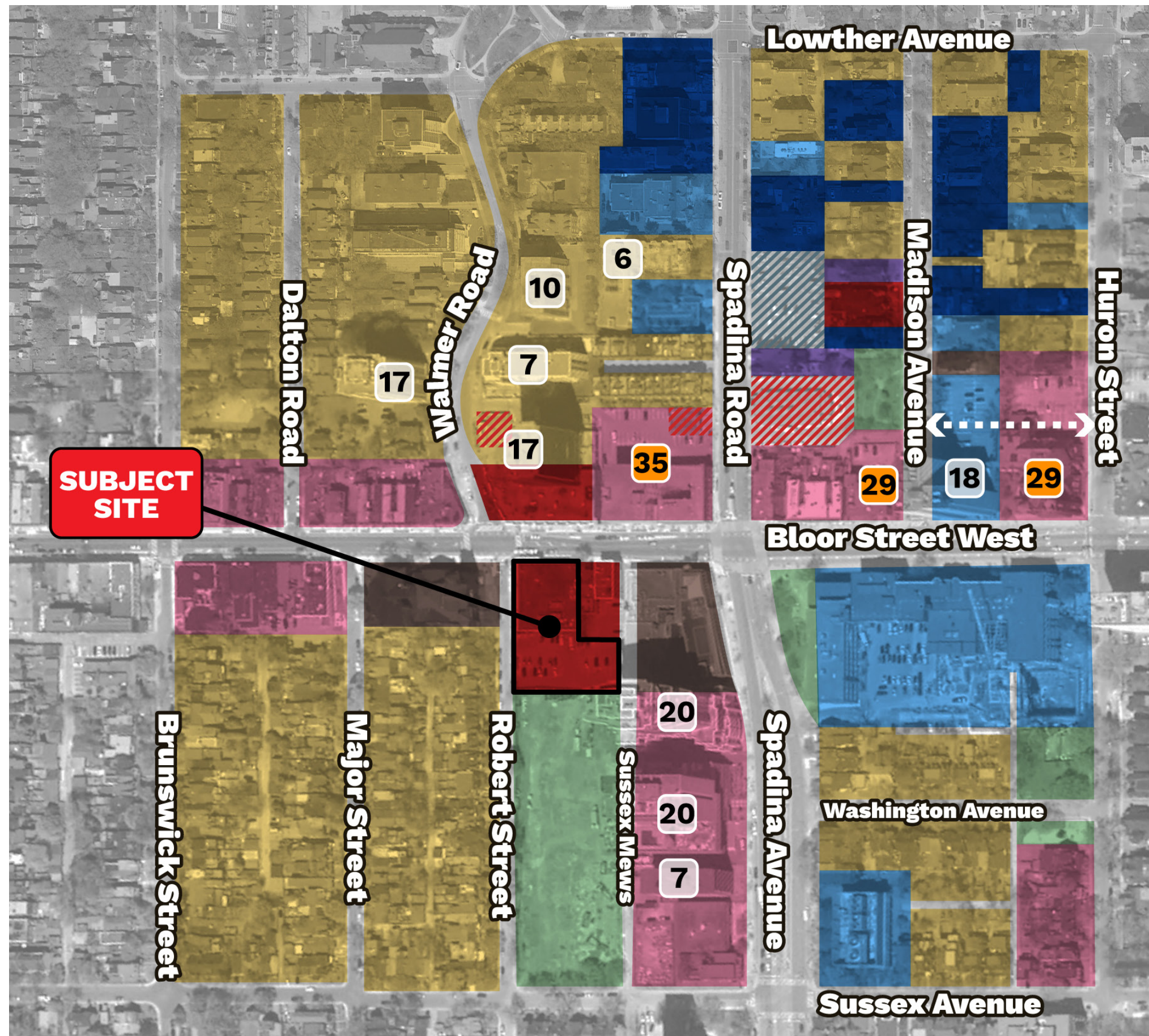


# USES









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**ARCADIS**

**USES** | BLOCK PLAN





# COMMUNITY BENEFITS

# TRADITIONAL SECTION 37 VS. CBCS

- Historically, Section 37 of the Planning Act provided a flexible framework for community benefits
  - \* Contribution amount negotiated, with reference to magnitude of increase in height/density
  - \* Cash contributions typically directed to local projects
  - \* In-kind contributions of facilities could take many forms

# TRADITIONAL SECTION 37 VS. CBCS

The Community Benefits Charge (CBC) regime that has replaced the traditional section 37 is more rigid

- Contribution amount fixed at 4% of land value
- Default form of contribution is cash; in-kind contribution of facilities voluntary and subject to Council approval
- Less flexibility to direct cash contributions to local projects
- Facilities, services and matters eligible for in-kind contributions limited to the following categories:

- \* Parks and recreation

- \* Community facilities

- \* Affordable housing

- \* Public realm

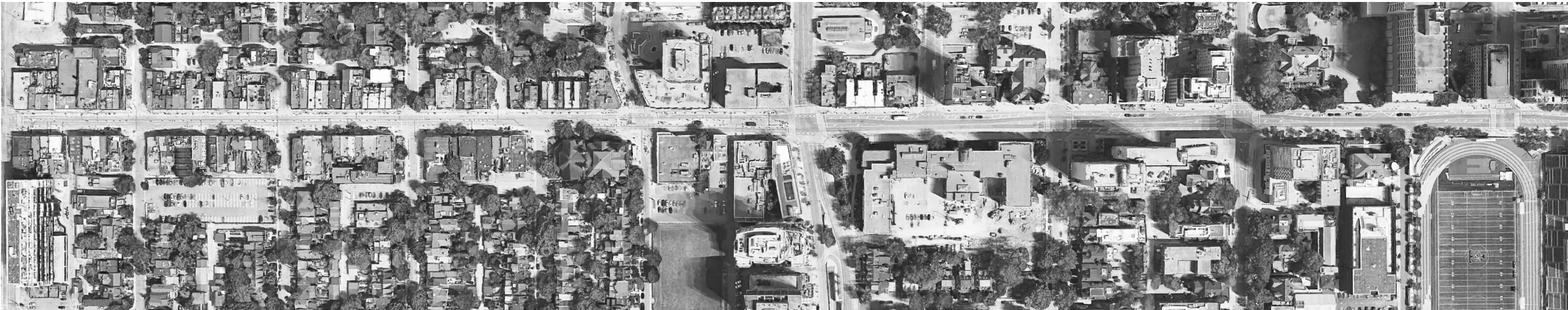
- \* Active and sustainable transportation

- \* Protective services (e.g. ambulance services)

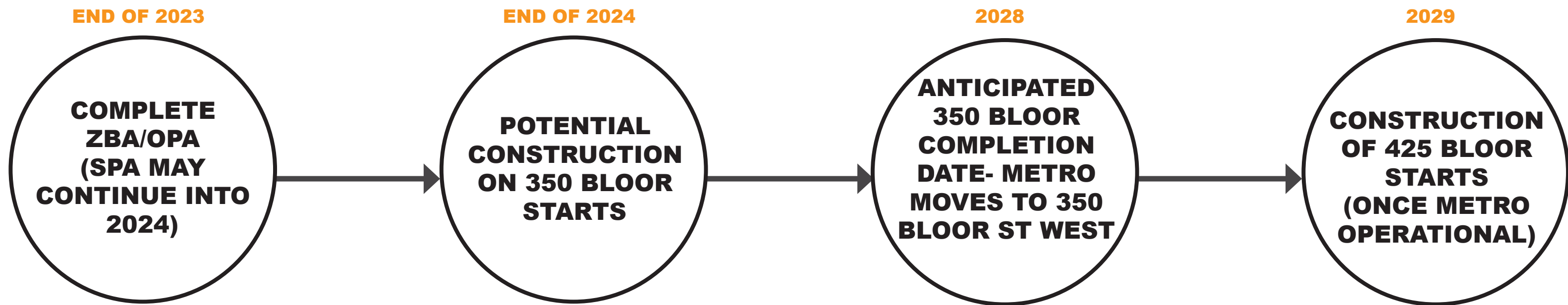
- \* Waste management

- \* Civic administration





# **TIMING**







**THANK YOU!**

**ENGAGE WITH US AT:**

**<https://www.425bloorstreetwest.com>**