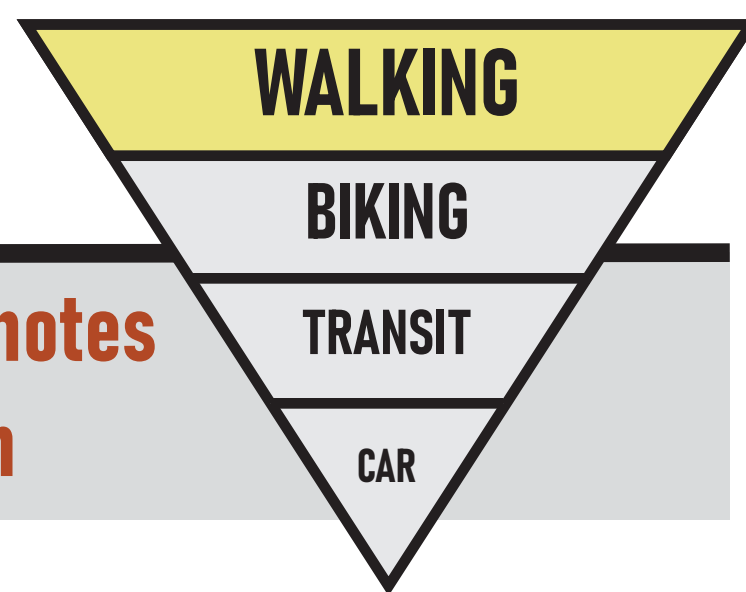


# MANCHESTER RAIL DISTRICT



a convenient system that promotes active modes of transportation



## LRT TOD COMMUNITIES

- **15 minute neighbourhood** with high-density, mixed-use communities within a 450m radius of LRT stations
- **50th Avenue SE Station** integrated along the existing LRT line to widen the catchment area (NOTE LENGTH BTW THE TWO CURRENT STATIONS)
- **Multi-Transportation Junction** located at each LRT station that includes bike-share services, community streetcar, and bus



Brentwood Town Centre, Burnaby

## PEDESTRIAN STREET TYPOLOGIES

- **Pedestrian focus** for street and sidewalk typologies that are structured for the comfort and safety of pedestrian movement
- **Create a pedestrian street on 58th Avenue SE** to reduce the 39,000 vehicles per day that utilize the street
- **Kinetic energy harvesting from footsteps** by integrating Pavegen tiles on the pedestrian street, as well as other areas with high pedestrian traffic volumes
- **Envac Automated Waste Collection System** performs all garbage collection and removal below ground to reduce vehicular traffic on residential streets



Pavegen Tiles on Oxford Street, London



Envac Automated Waste Removal



Strøget, Copenhagen

## COMMUNAL PARKING GARAGES

- **Strategic arterial locations** to reduce vehicular entry into the community and residential roadways
- **Multi-modal transportation options** conveniently located at the garages for user connectivity
- **Electric vehicle charging stations** located at most stalls
- **Solar roof-panels** to generate energy to charge electric vehicles within the garage
- **Roof rain gardens** located on some of the garages to help with stormwater retention



Freiburg, Germany



"OsterGro" in Osterbro, Denmark

## UTILITY ROAD GREEN GATEWAY

- **Community food garden** located on the western edge of the LRT utility road
- **Rain water** captivation for garden production
- **District compost** used for garden production
- **Adjacent walking and biking path** that runs along the LRT line to create a multi-dimensional community interface



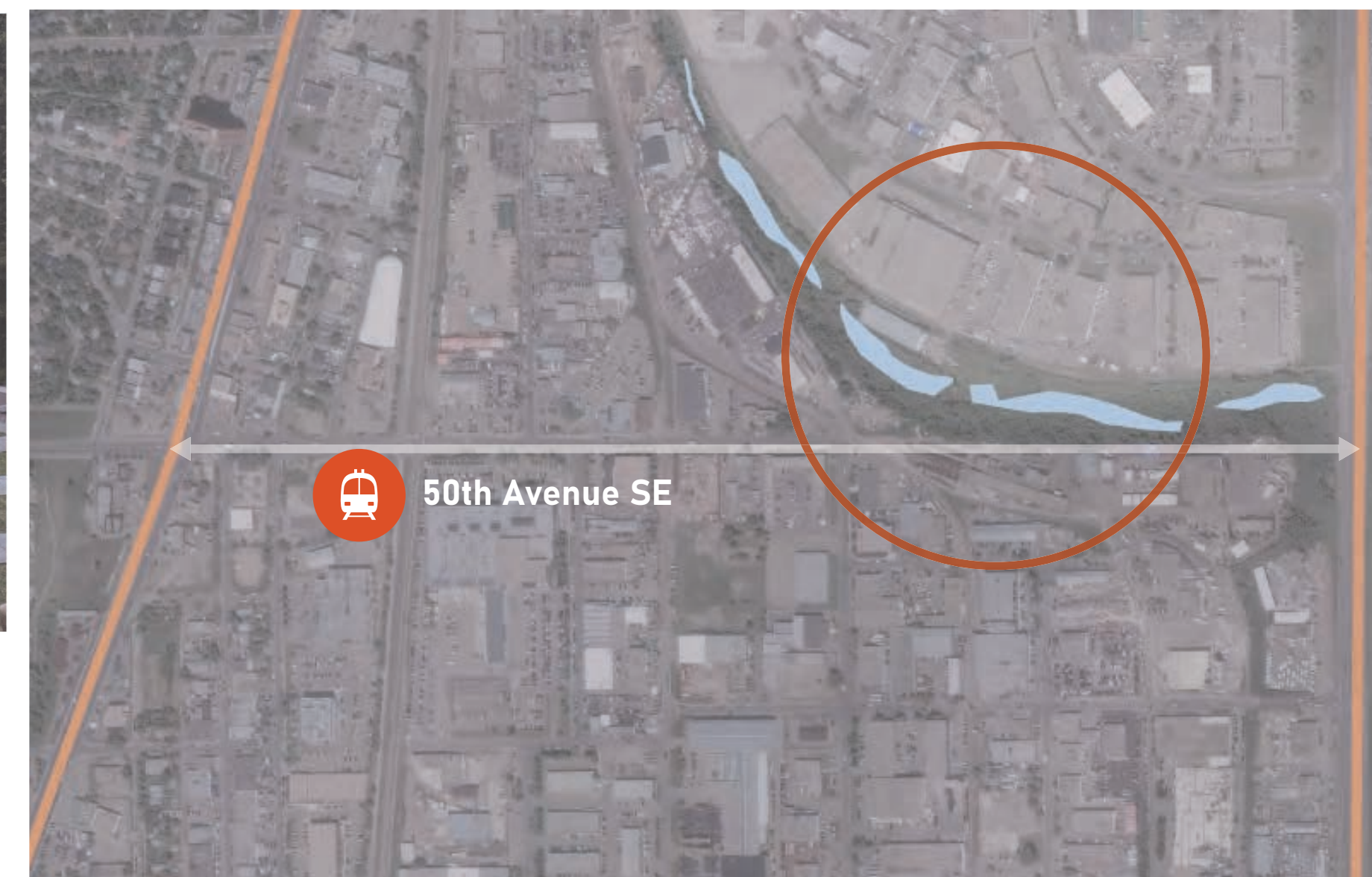
Proposed Utility Road Green Gateway, Manchester

## RECREATIONAL STORMWATER POND

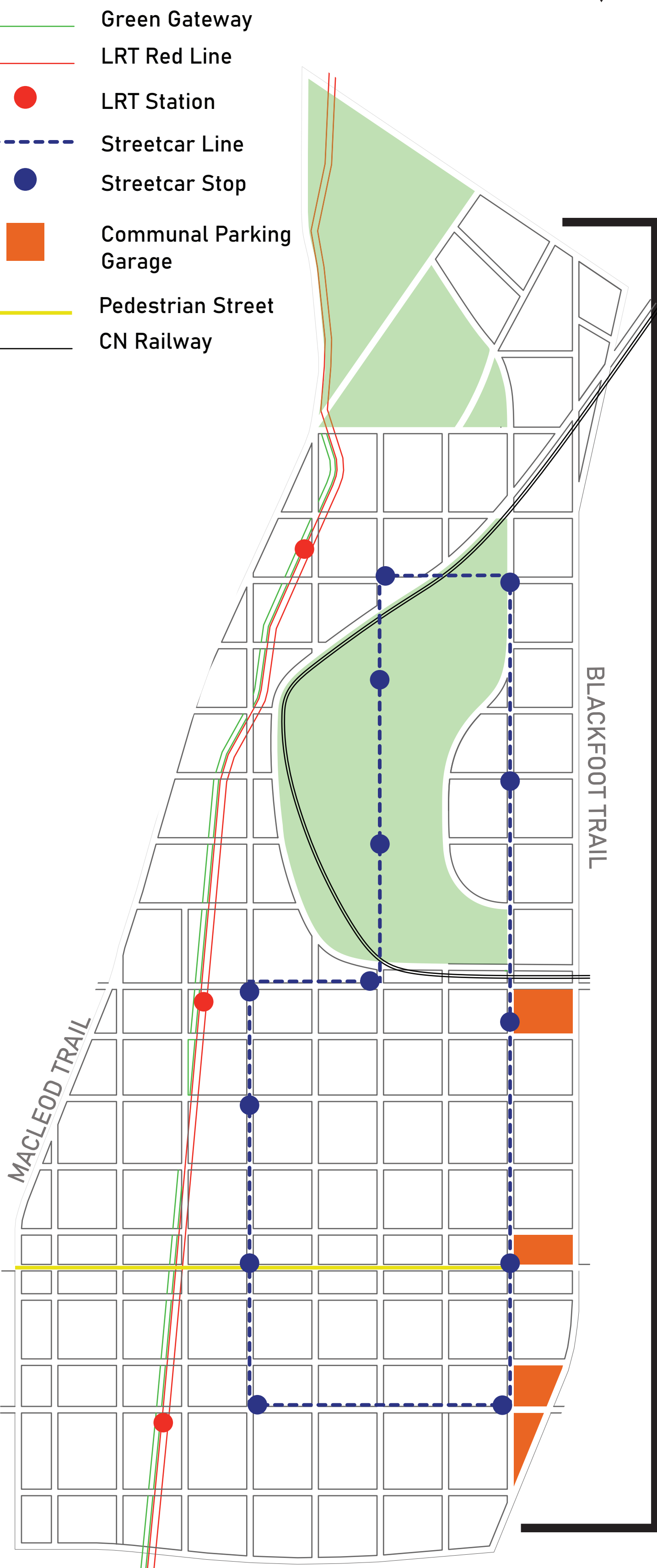
- **Social outdoor hub** that uses the stormwater pond as the centerpiece
- **Recreational walking paths** surrounding the pond
- **Focus on taking the invisible to visible** by immersing people within infrastructure that is often concealed



Historic Fourth Ward Park, Atlanta



Proposed Recreational Stormwater Pond Locations, Manchester

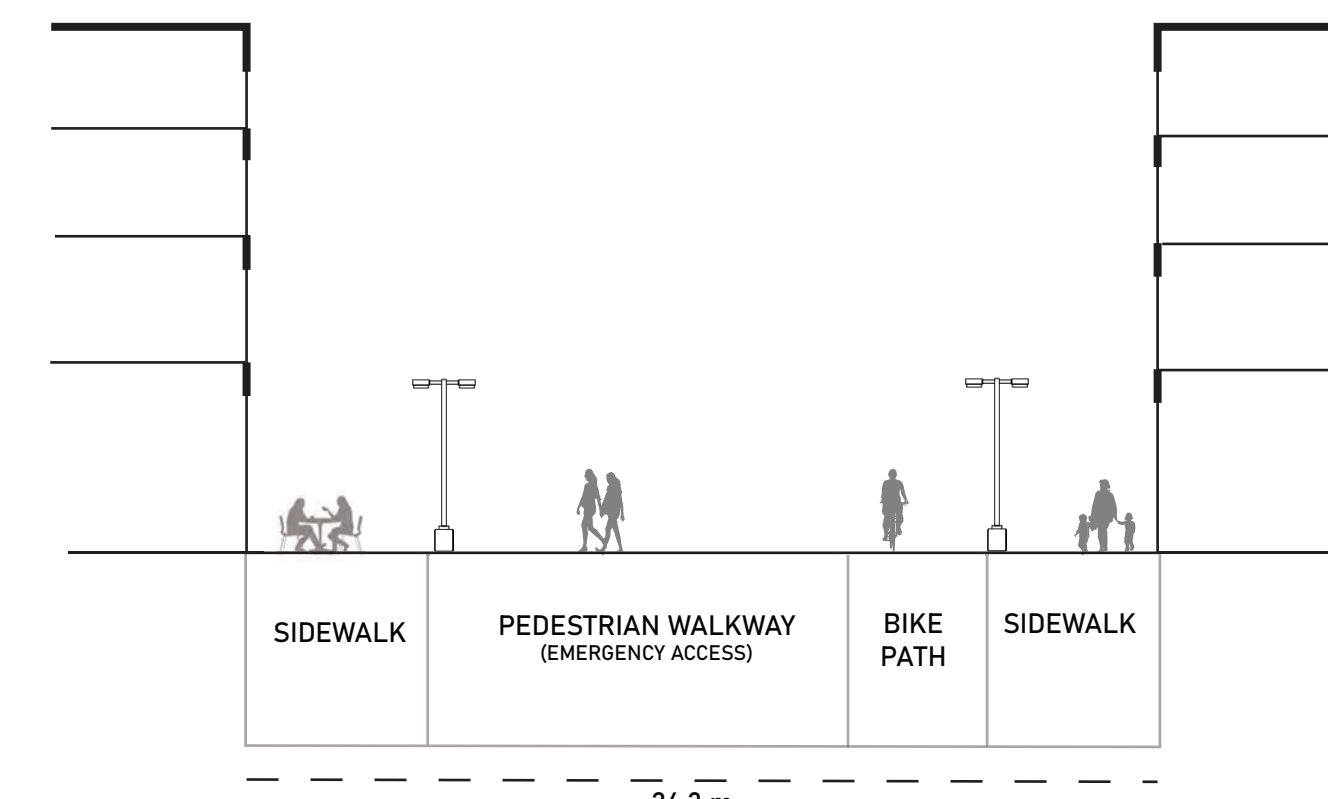


124,000 vehicles p/day on internal roads with 39,000 on 58th Avenue SE

(2017, City of Calgary)



Proposed Pedestrian Street on 58th Avenue SE, Manchester



Pedestrian Street Cross-Section