

100 Trees Initiative

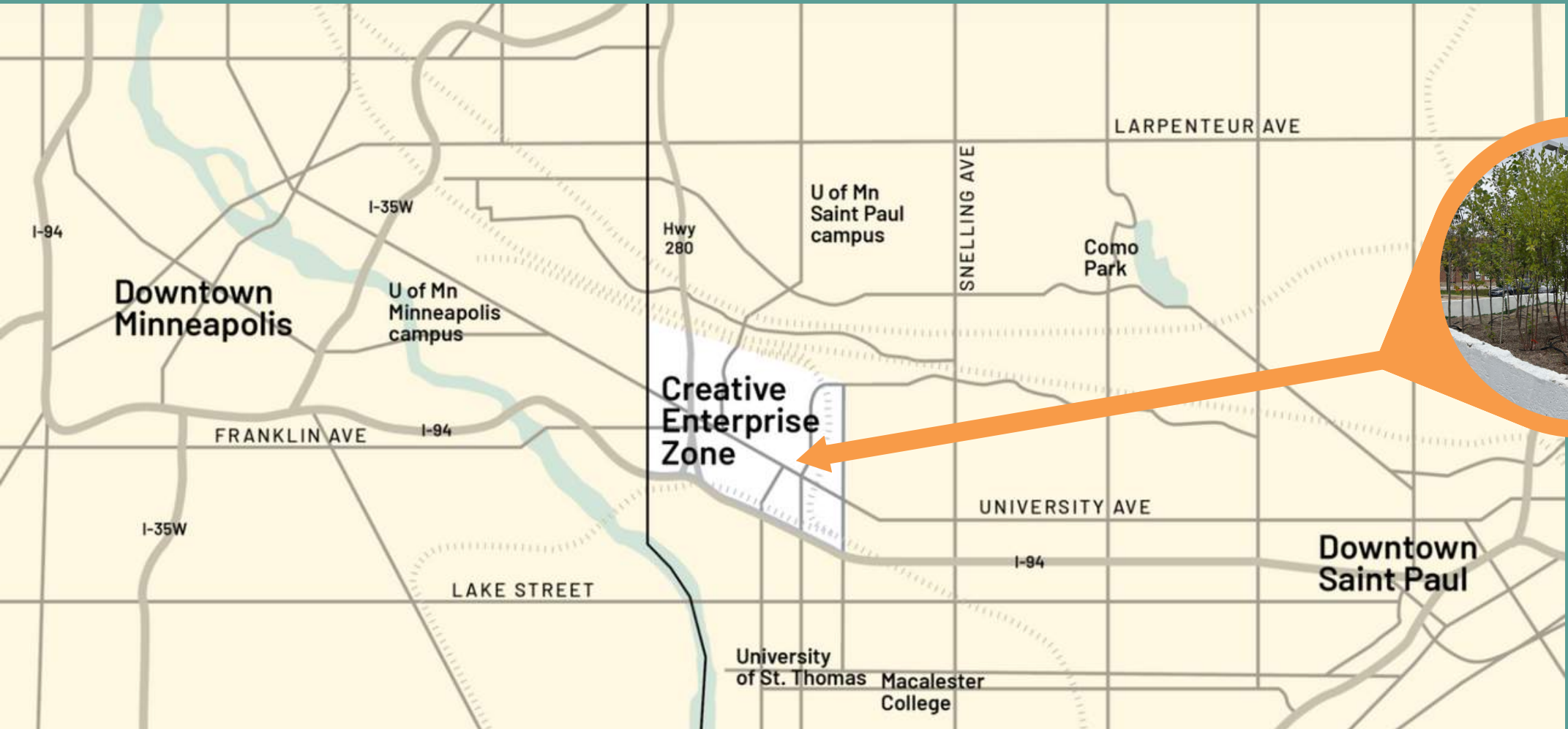
Report on Year 3



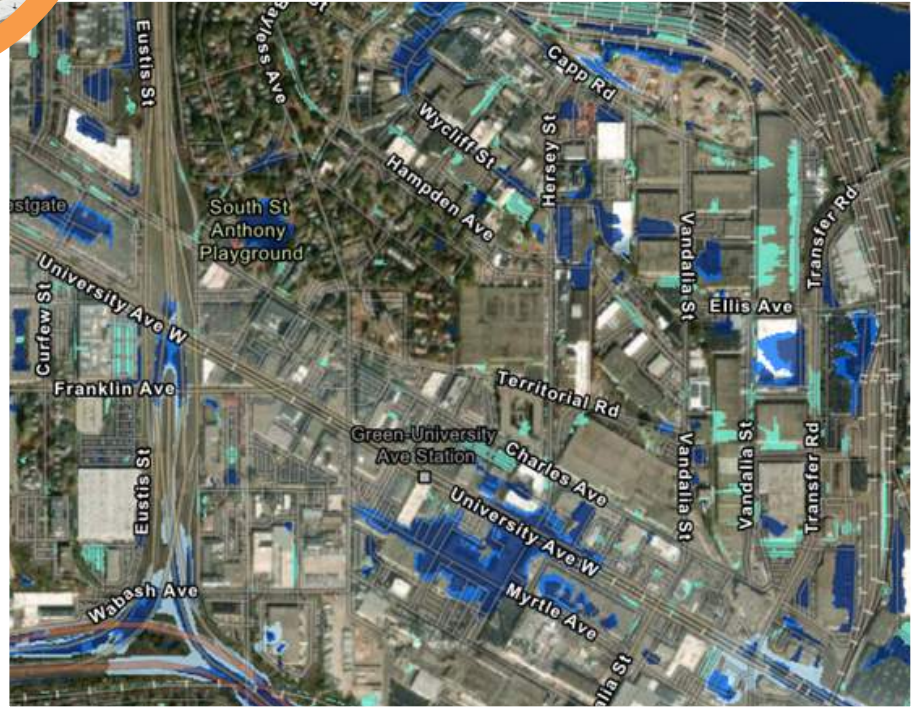
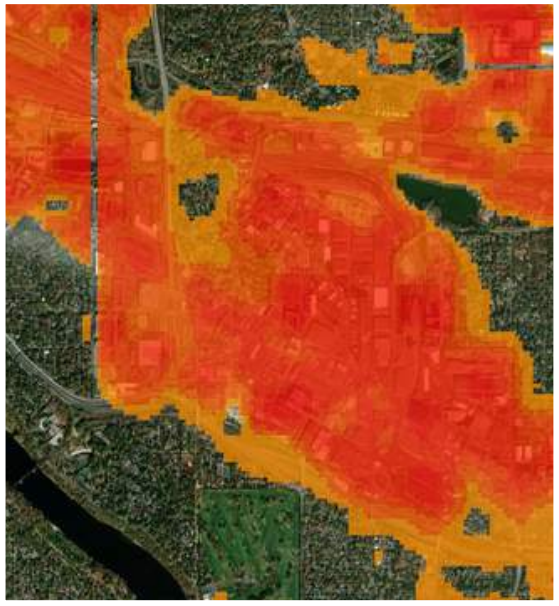
November 2023

Creative Enterprise Zone watering trailer parked beside the newly-installed and planted 2023 CEZ Gravel Bed (July 2023)

Location and Need



The CEZ shows elevated heat (right) and flood risks (bottom left) as compared with neighboring regions due to impervious ground cover and lack of tree canopy (bottom right)



Located between St. Paul and Minneapolis, the Creative Enterprise Zone (CEZ) is a recognized center of creativity and enterprise, a place where people make a living by their creative capacities.

Project Scope

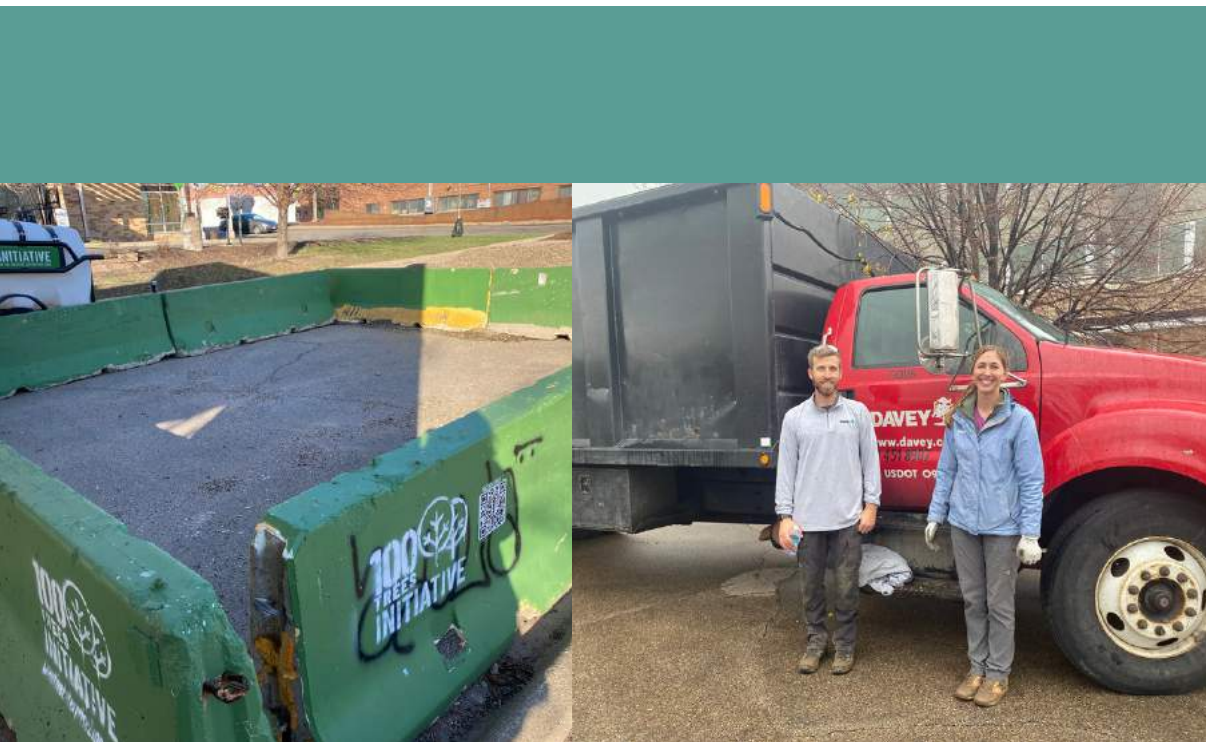
- **Expand** the Urban Tree Canopy by **planting 100 trees per year** in the Creative Enterprise Zone (CEZ), prioritizing public boulevard space
- **Install** a **Gravel Bed at the CEZ headquarters**
- **Grow 40 bareroot trees** to plant in Fall 2023
- **Maintain** a **summer watering program** to aid trees during their first 3 growing seasons
- **Host** a **100-Tree planting event** in Fall of 2023
- **Monitor** health and maintenance needs for all trees planted through the 100 Trees initiative, providing **supplemental care (pruning, staking and mulching) as necessary**



Volunteers attending gravel bed installation (right top) and tree planting events in 2021

Gravel Bed Installation & Planting

April 28, 2023



40 Trees Planted and Irrigation Installed

- 10 Quaking Aspen
- 10 Heritage River Birch
- 10 St. Croix Elm
- 10 Boulevard Linden

Volunteers pose after completing bareroot tree planting in the new bed at the CEZ headquarters (below)

Davey Tree employees (top right) volunteered their time and resources to help install the gravel beds



Summer Watering Program

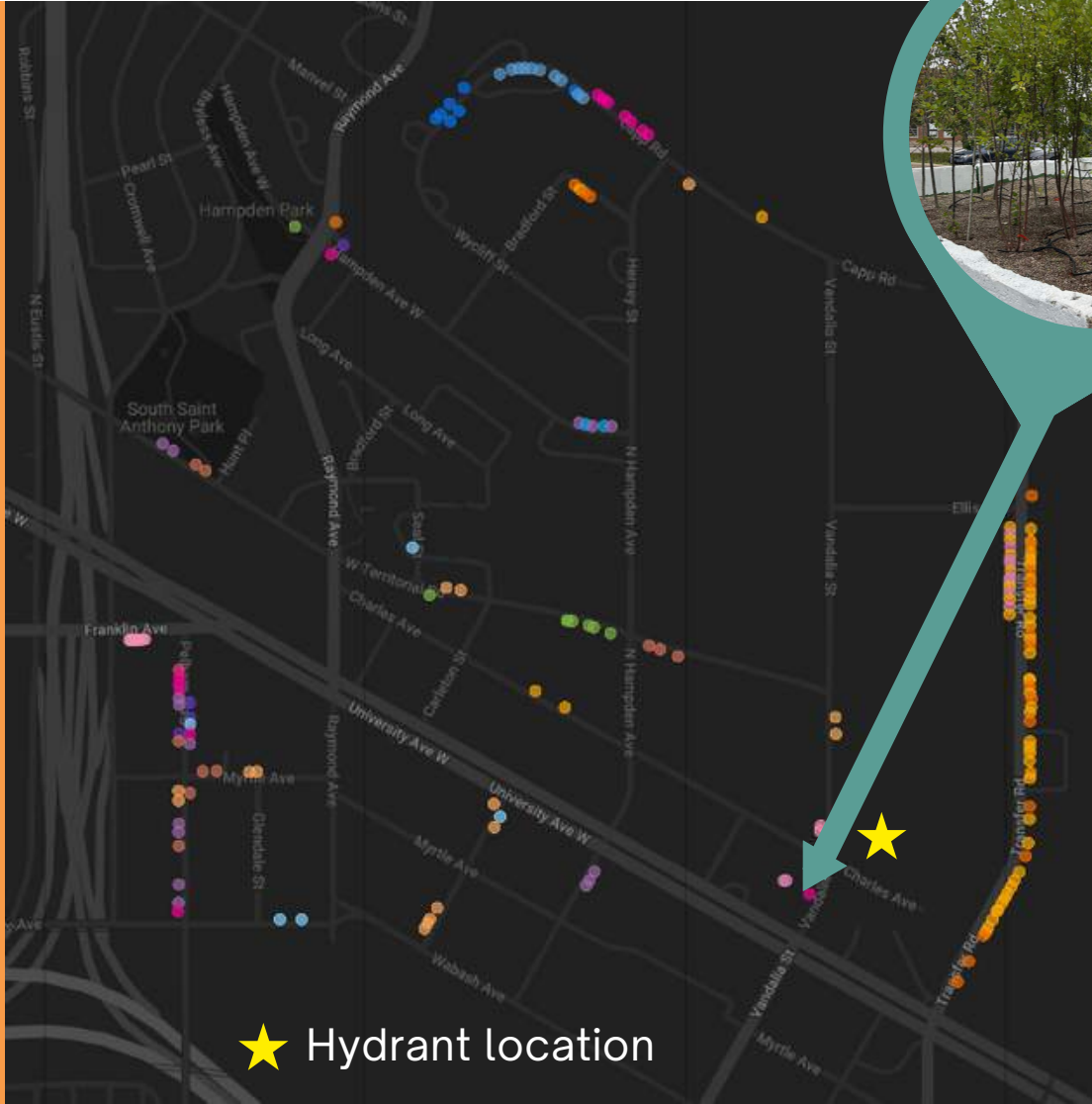


May - November

AmeriCorps Members Emily and Eli with the new CEZ watering trailer (left); Trees planted as of November 2023 and their proximity to the CEZ headquarters and hydrant for re-filling the watering trailer (right)



- 600-gallon watering trailer
- Weekly truck rental
- 15-gallon watering bags installed on all boulevard trees, filled weekly
- Partnership with Landbridge Ecological for water & hydrant access
- Two AmeriCorps Members managing routes and volunteers



Fall Planting

Pre-event



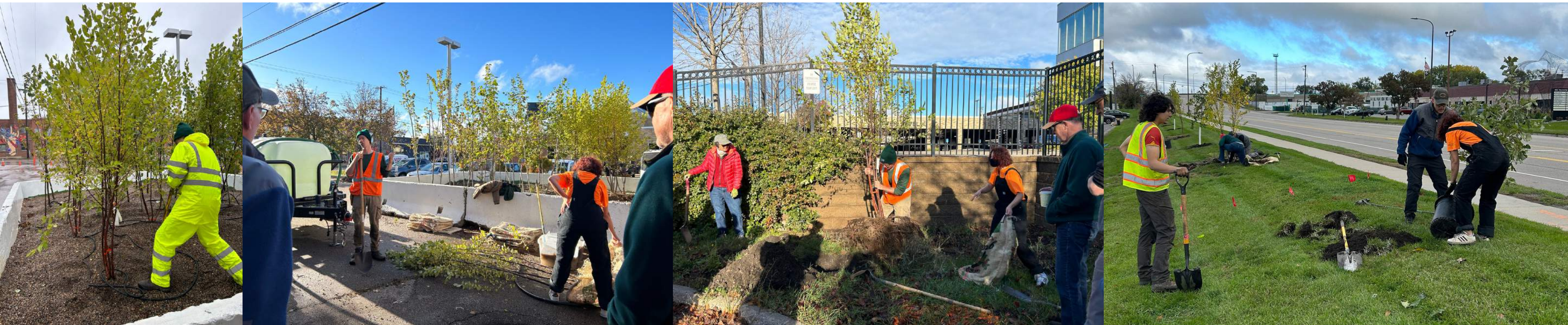
AmeriCorps Member Peter unloads container trees (Left) to be sorted by planting location in advance of the weekend's event

Container Trees

- 25 Bicolor Oak**
- 15 Prairifire Crabapple**
- 10 Starlite Crabapple**
- 5 Espresso Kentucky Coffeetree**
- 5 Boulevard Linden**

Fall Planting

October 14-18 2023



- 60 trees planted day-of
- 40 trees planted following week
- 25 Volunteers attended

A River Birch is harvested for the planting demo (Left)
Hydrogel is administered to protect tree roots during transport to planting location (Middle left)
AmeriCorps Member Peter leads a planting demo (Middle right)
A Davey Tree Certified Arborist volunteers his time to coach in proper planting technique (Right)

2023 Planting Locations

10 St. Croix Elm
(Bareroot)

10 Quaking
Aspen
(Bareroot)

10 Boulevard
Linden
(Bareroot)

10 River Birch
(Bareroot)



25 Bicolor Oak
(Container)

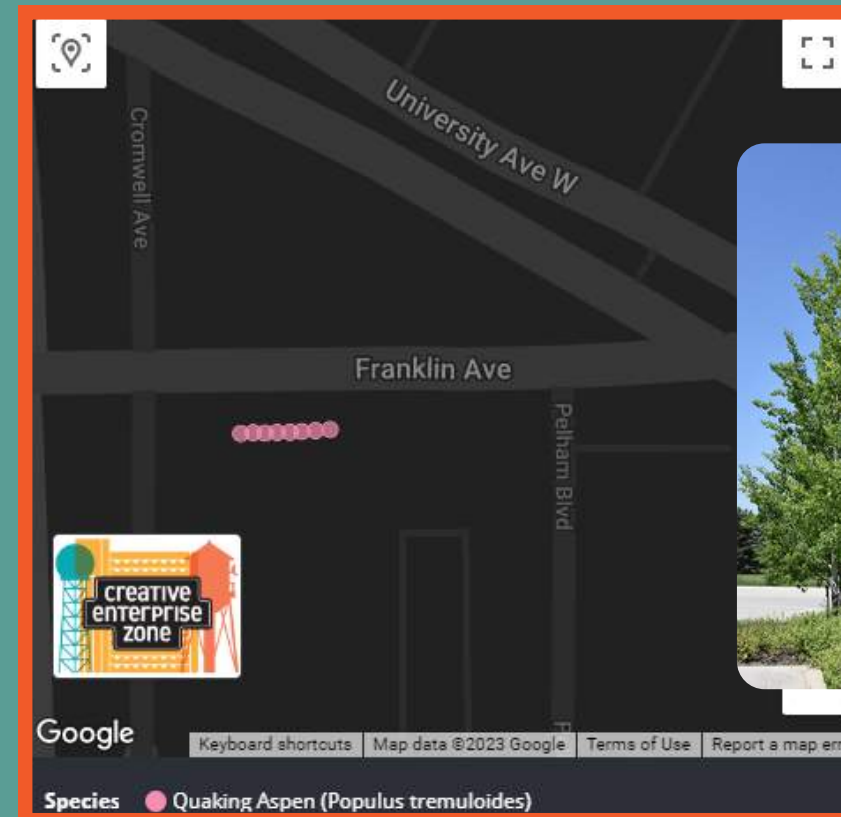
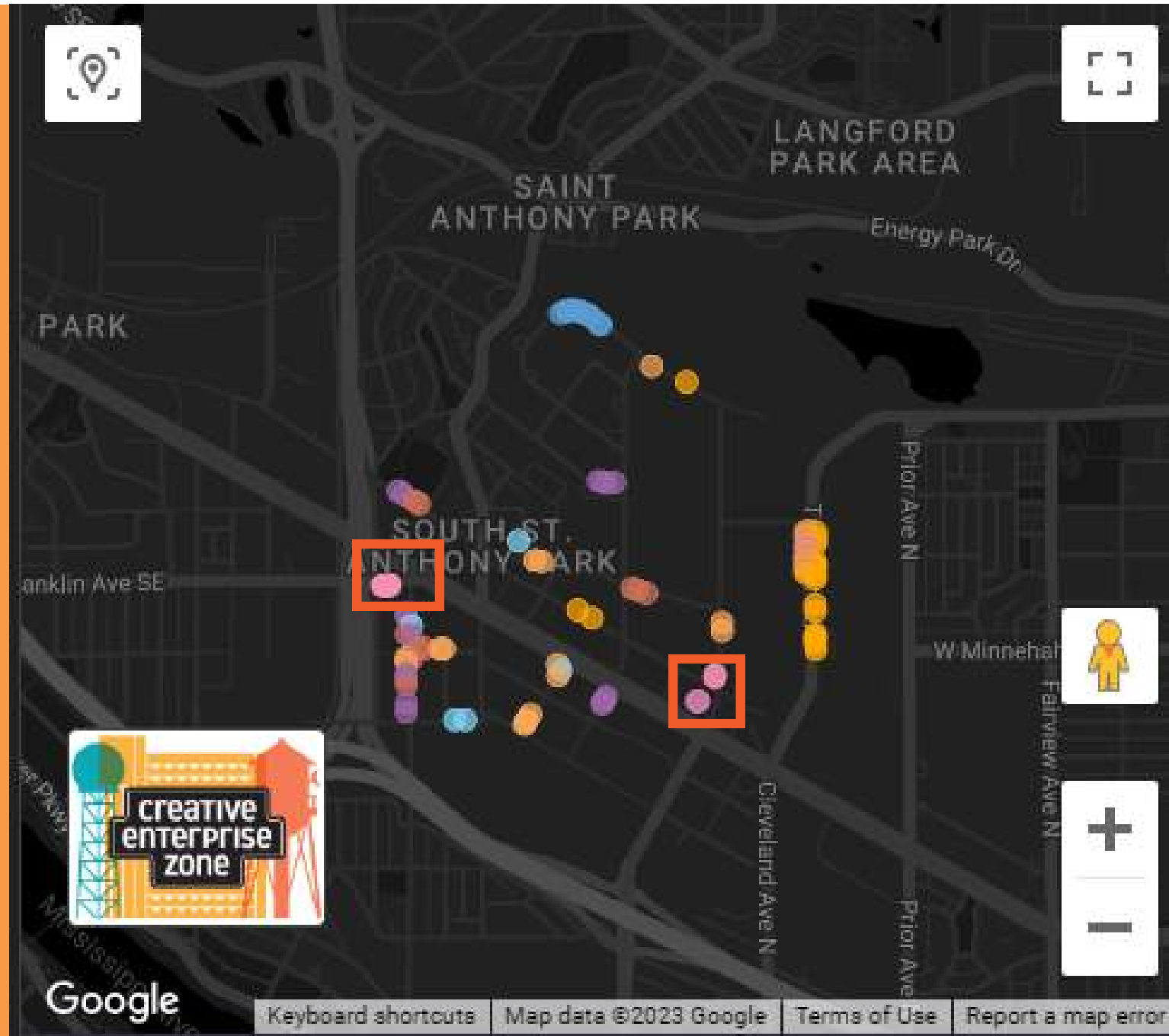
15 Prairifire
Crabapple
(Container)

10 Starlite
Crabapple
(Container)

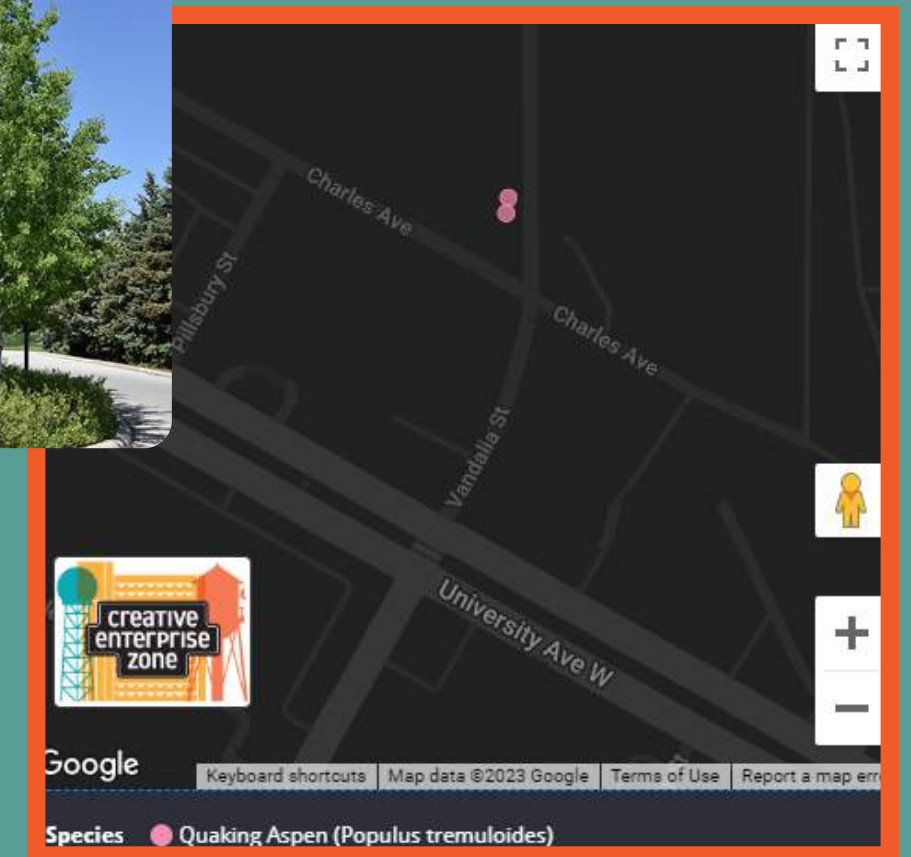
5 Espresso
Kentucky
Coffeetree
(Container)

5 Boulevard
Linden
(Container)

2023 Planting Locations

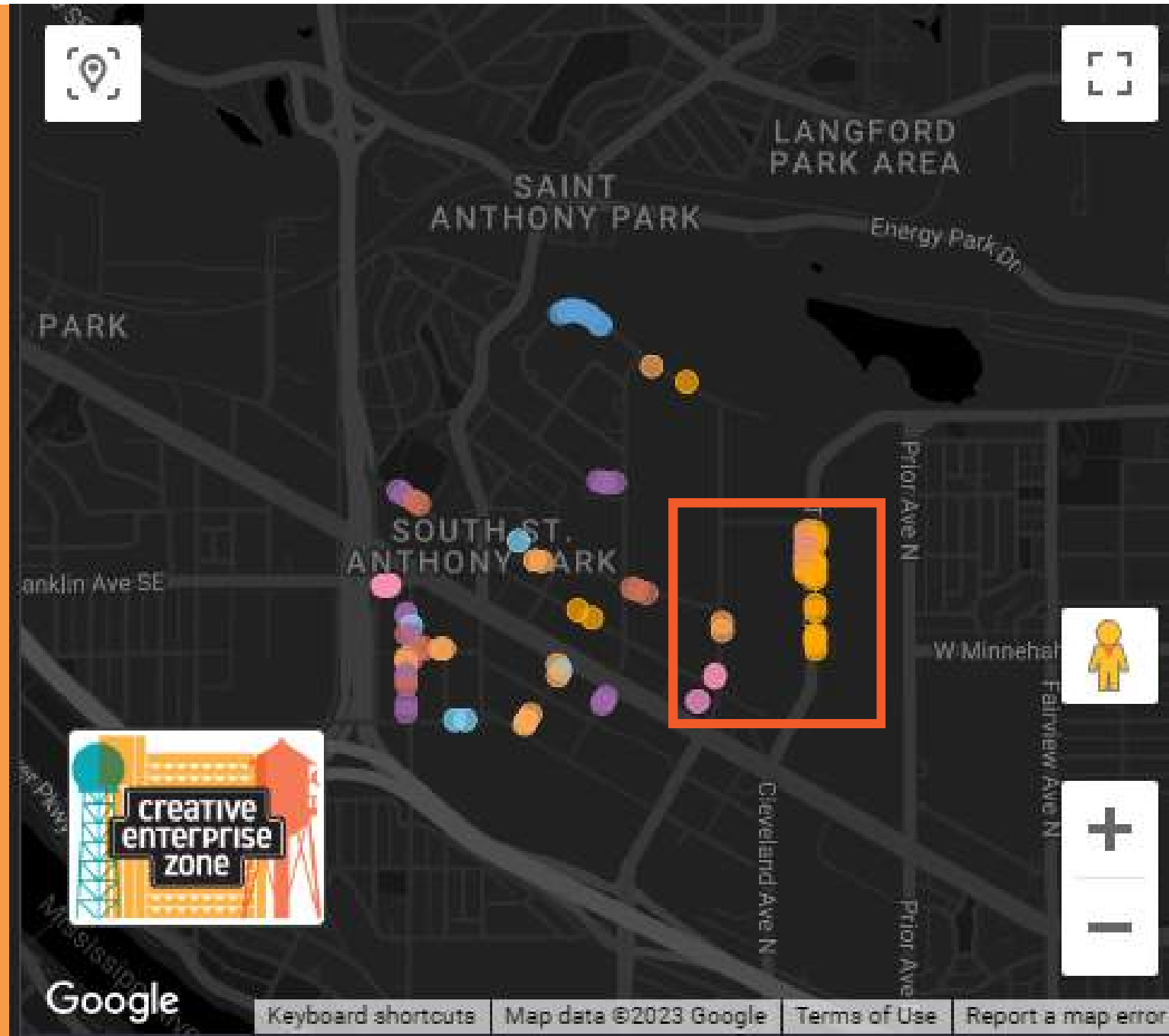


10 Quaking Aspen (Bareroot)



PC: NetPS Plant Finder

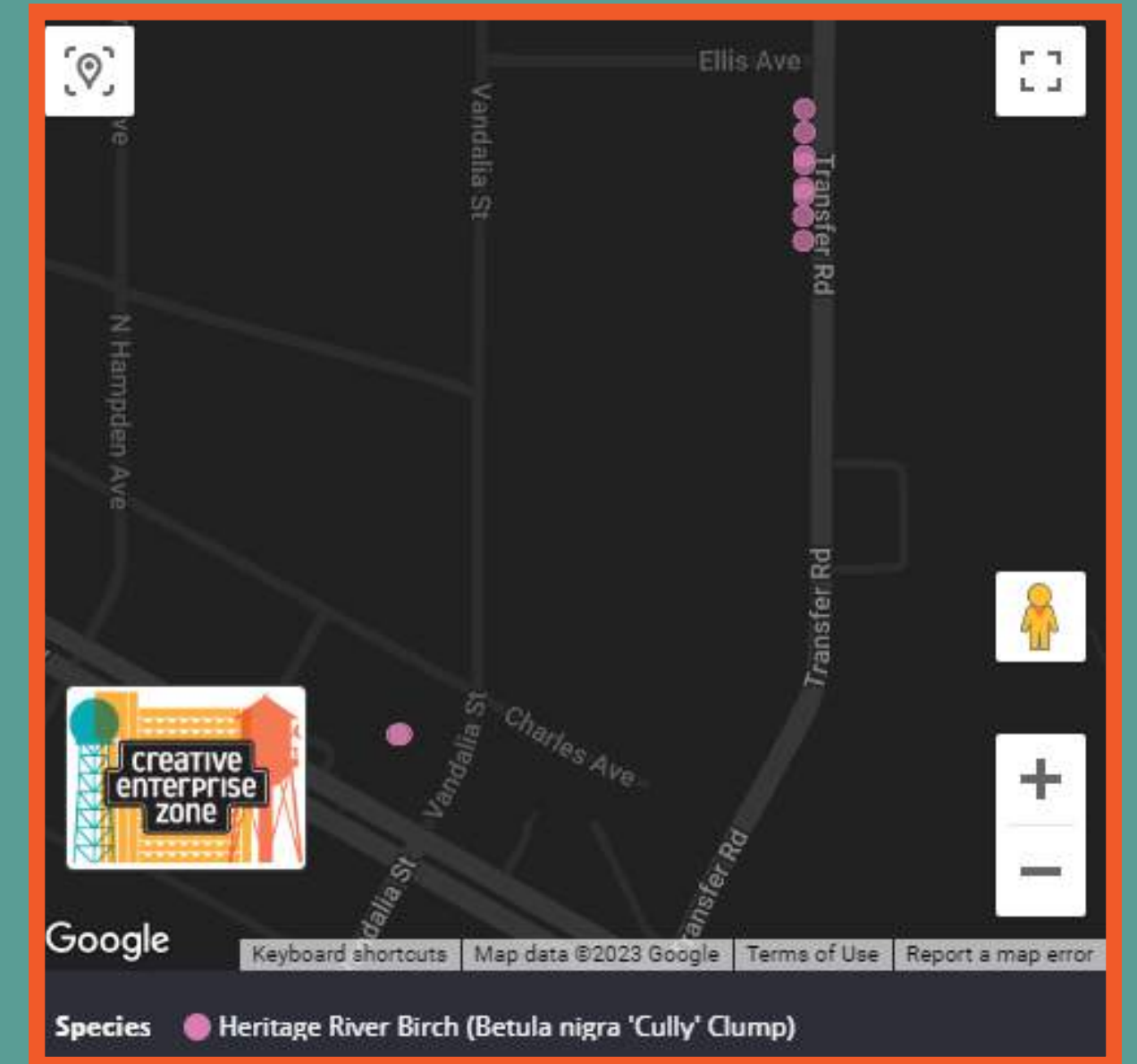
2023 Planting Locations



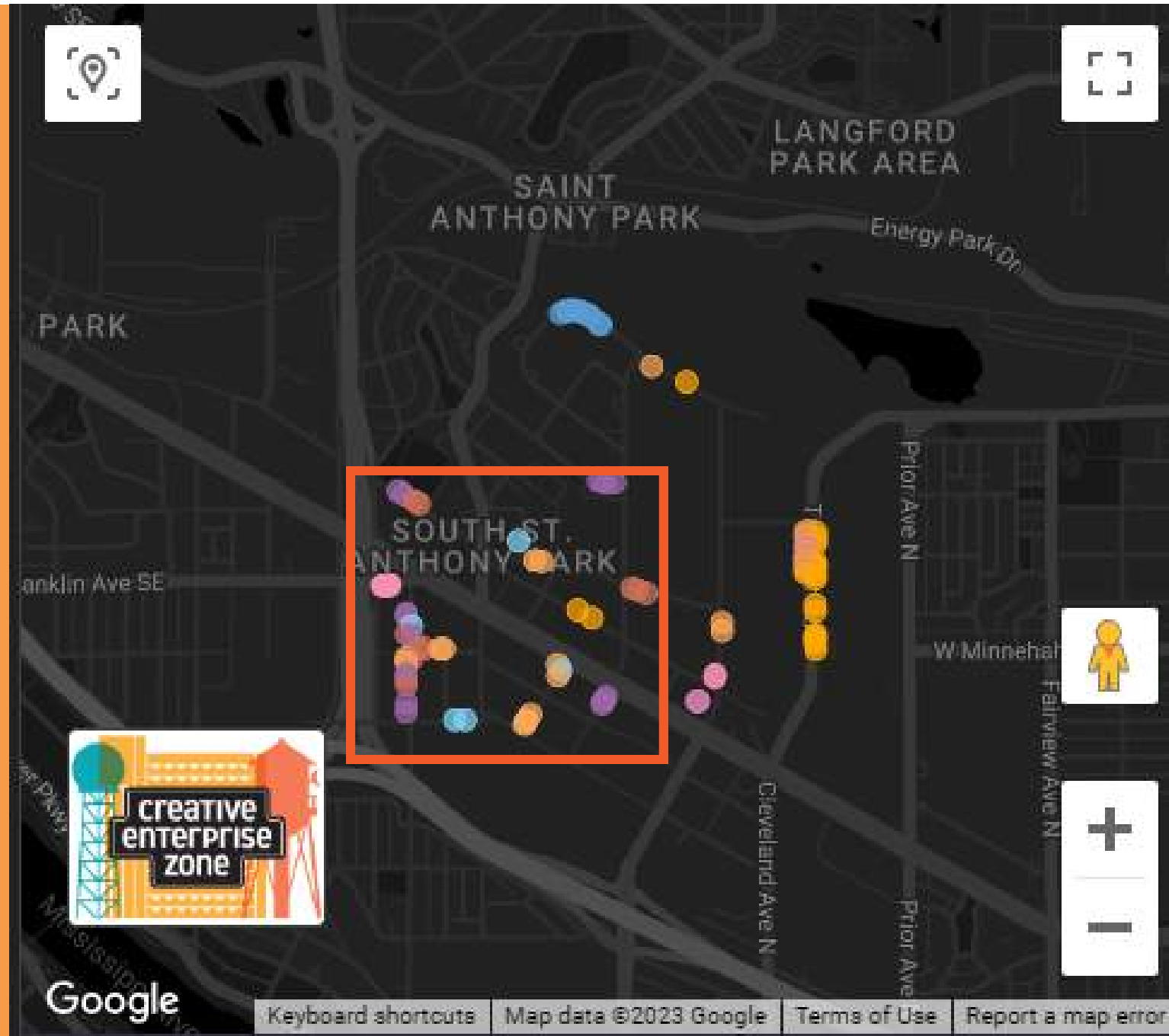
10 River Birch
(Bareroot)



PC: <https://www.starkbros.com/products/landscape-trees/shade-trees/heritage-birch>



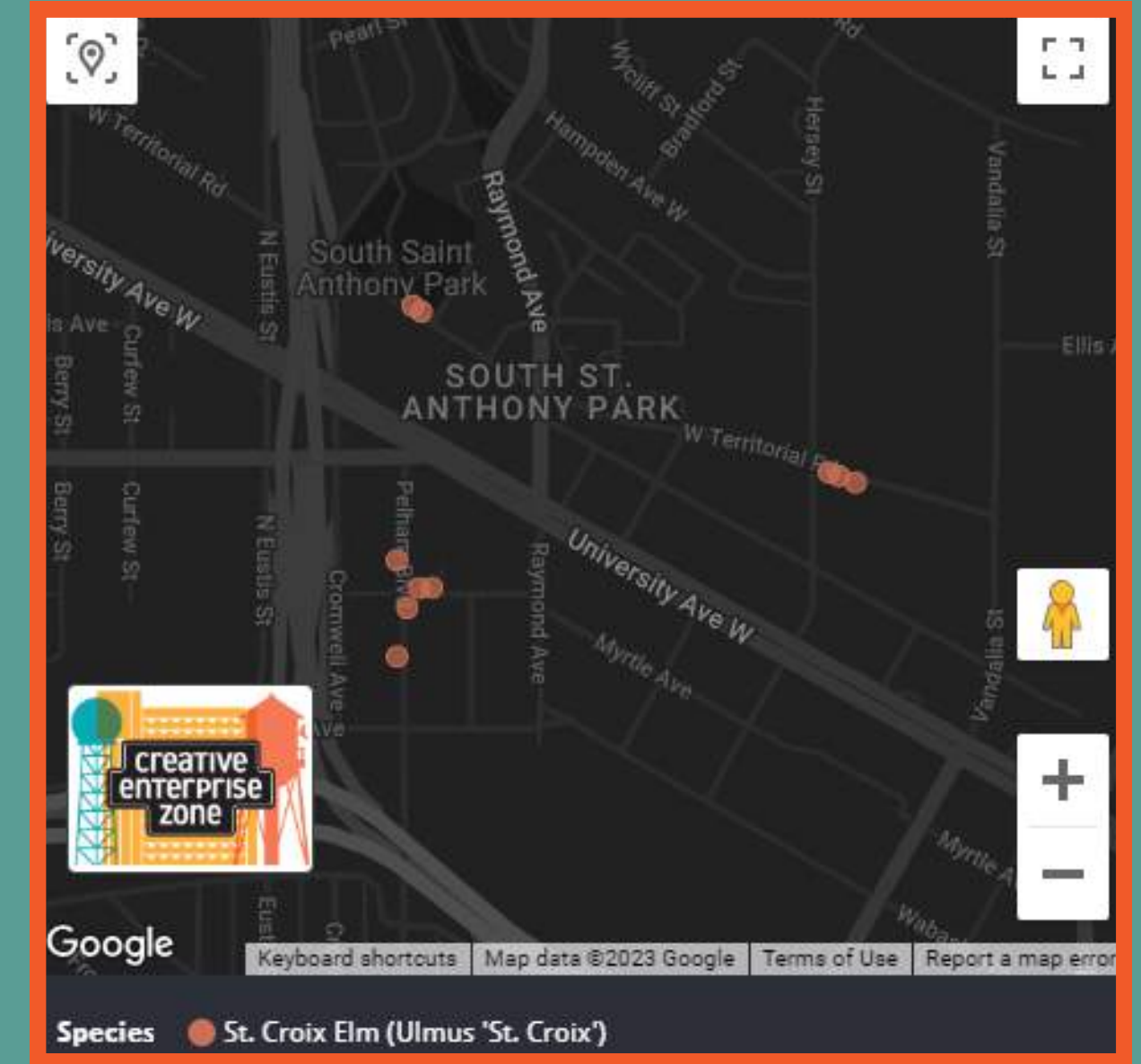
2023 Planting Locations



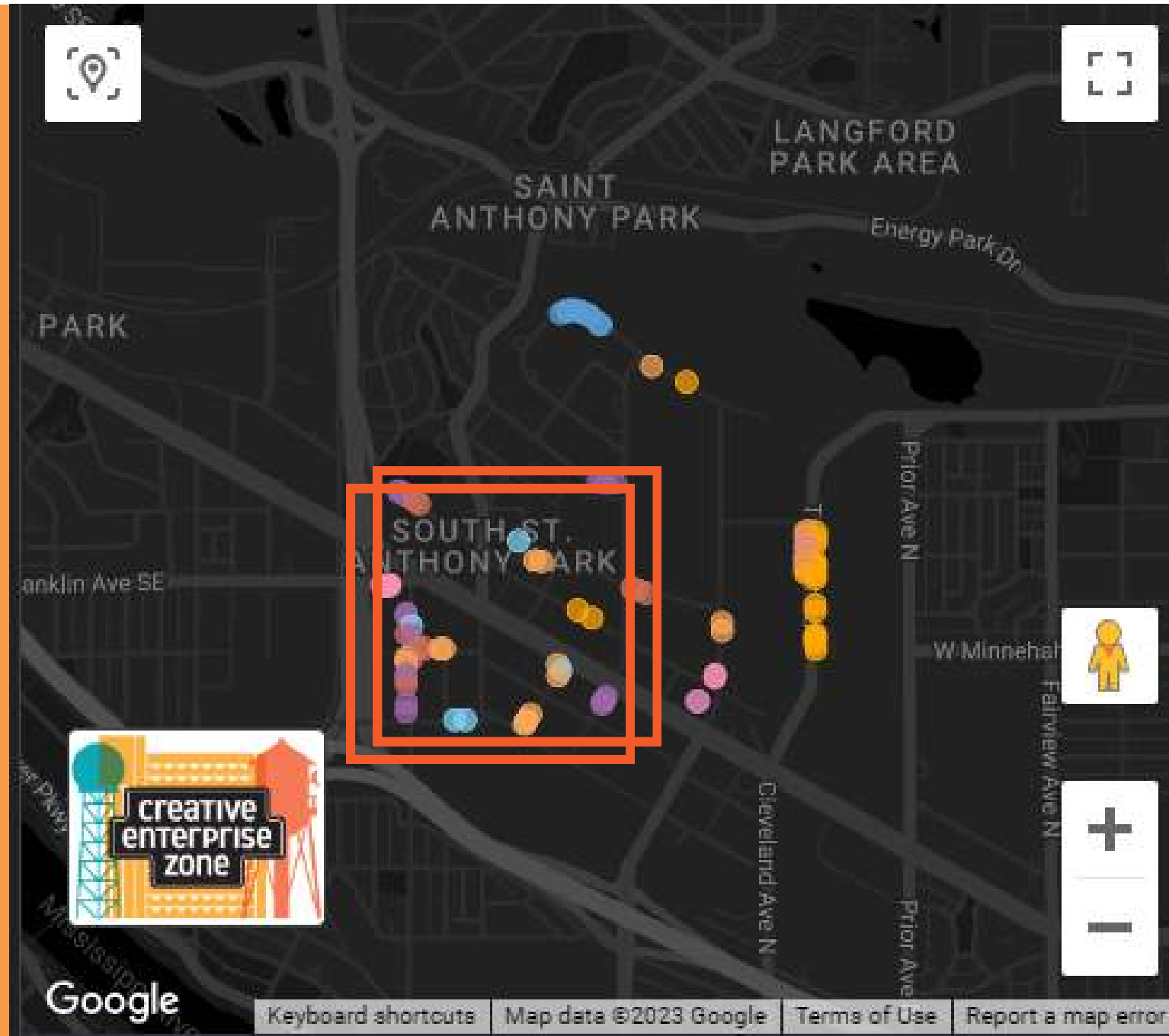
10 St. Croix Elm
(Bareroot)



PC: <https://firsteditionsplants.com/product/st-croix-american-elm/>



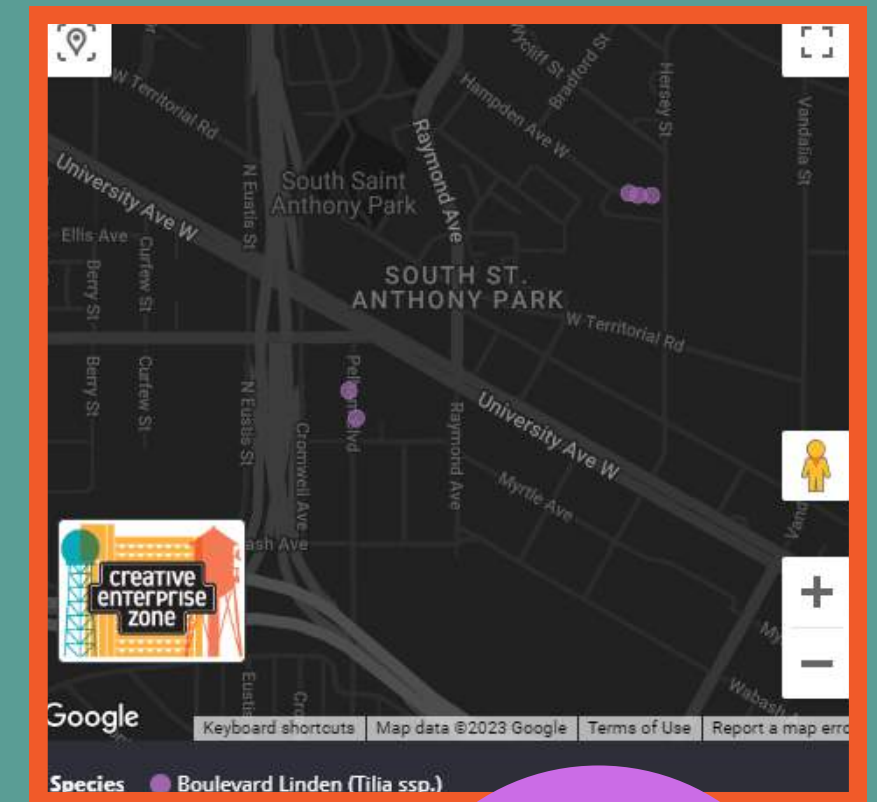
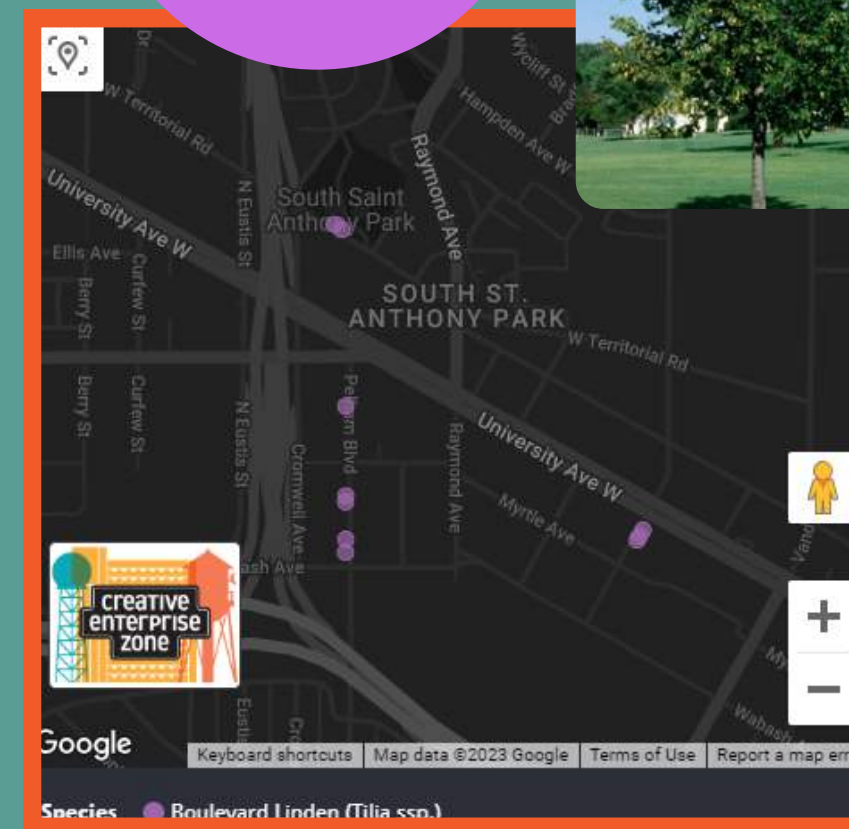
2023 Planting Locations



10 Boulevard Linden (Bareroot)

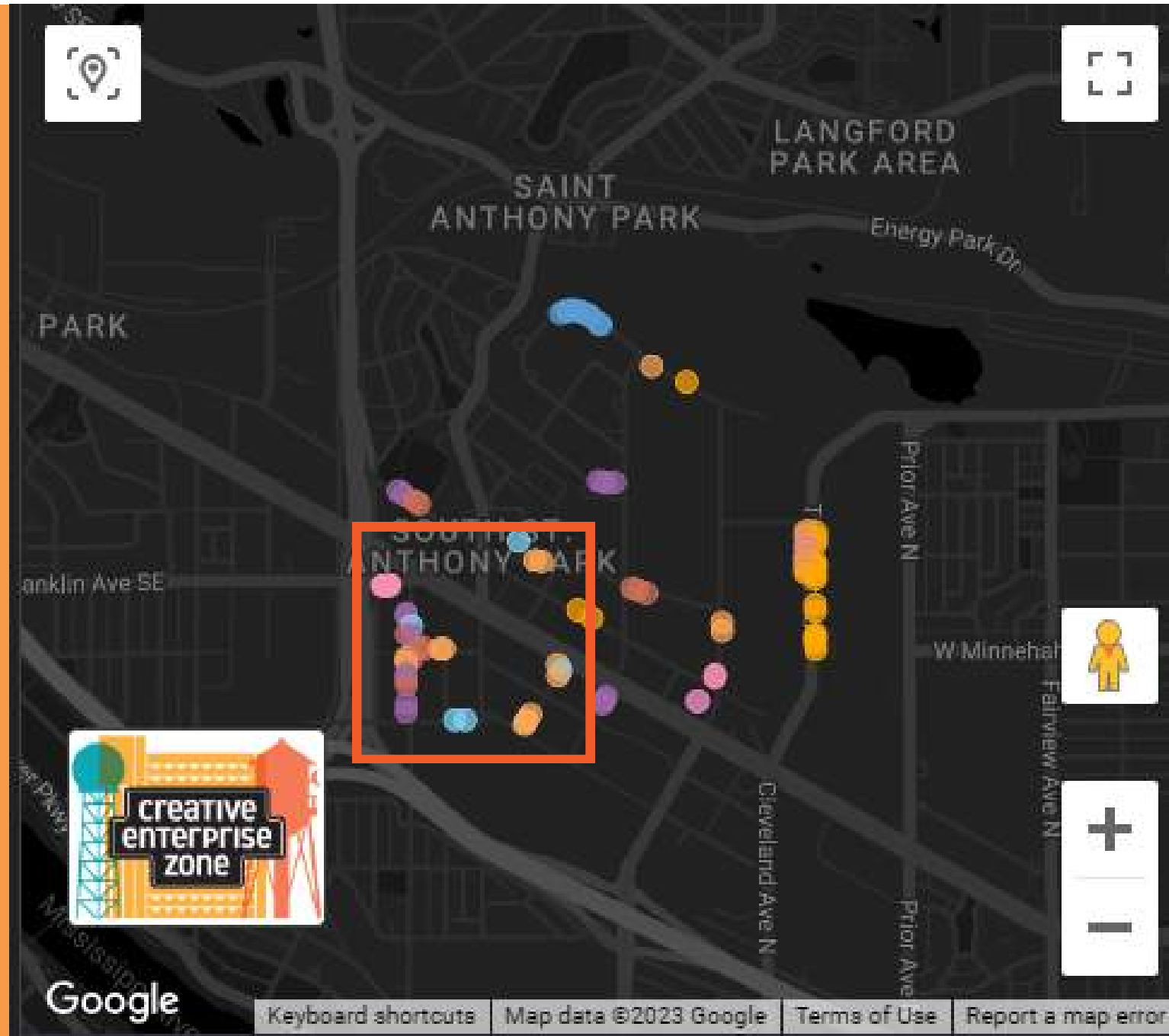


PC: <https://northernpinesgreenery.com/shop/boulevard-linden-tilia-americana-boulevard/>



5 Boulevard Linden (Container)

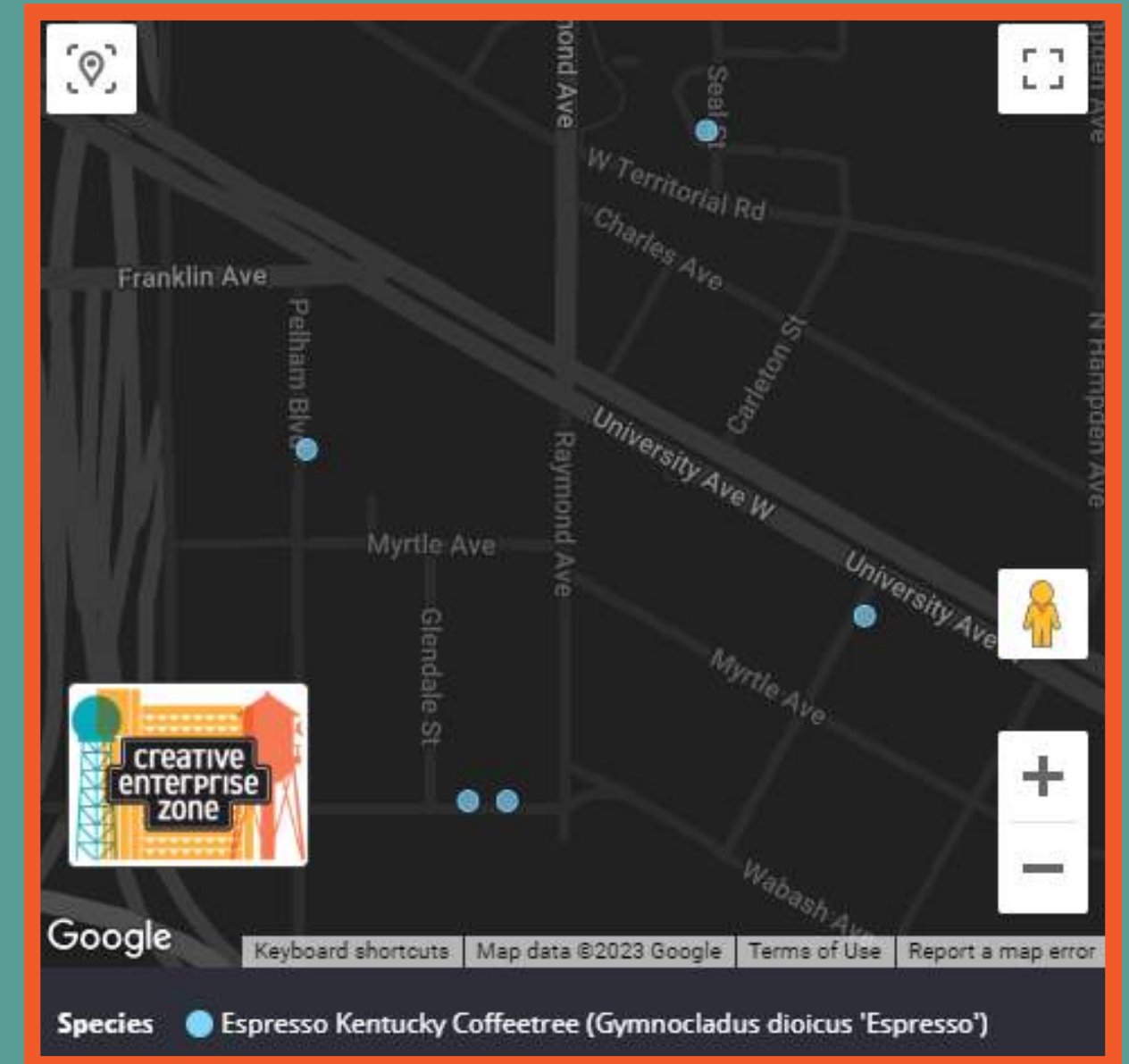
2023 Planting Locations



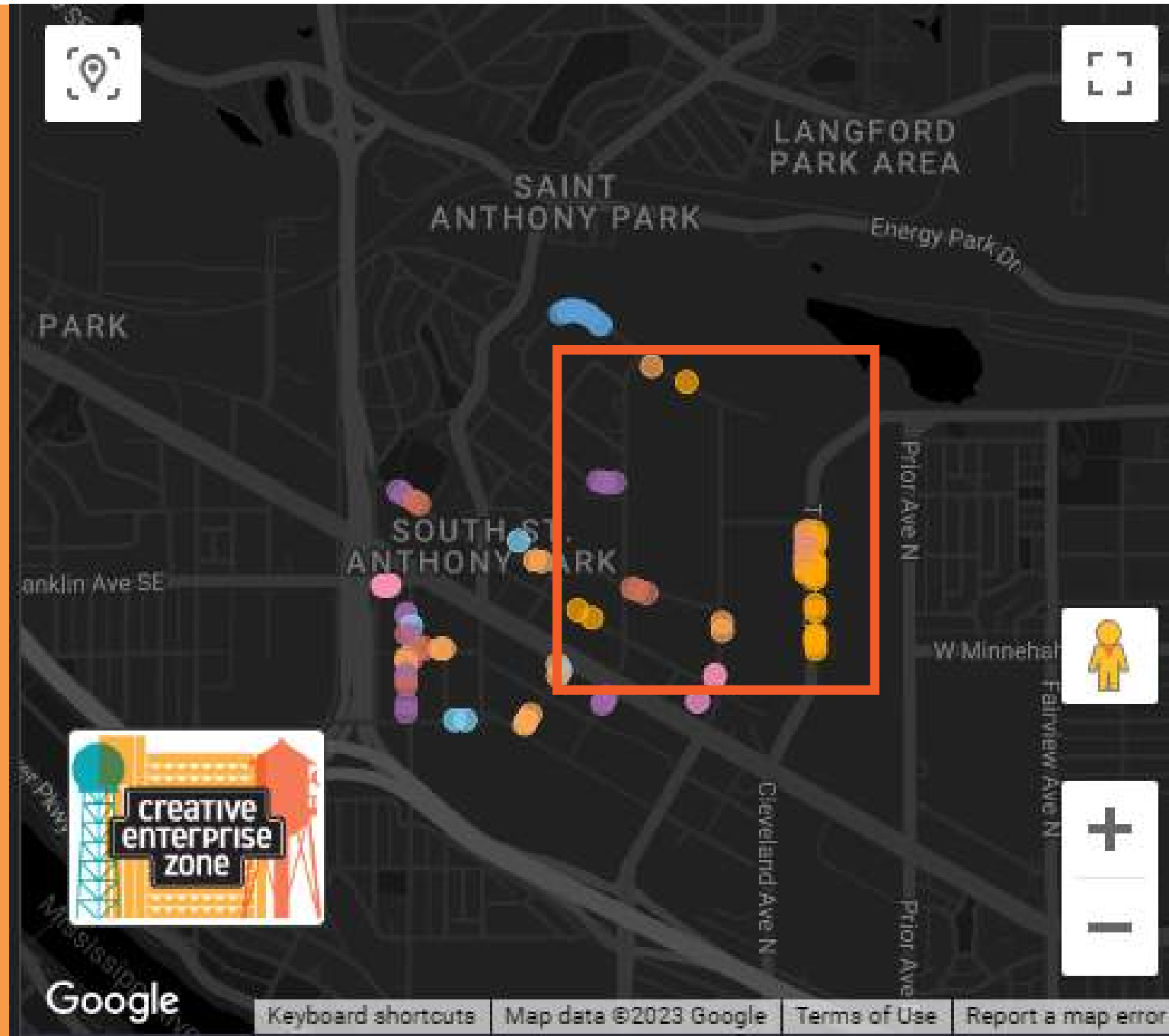
5 Espresso Kentucky Coffeetree (Container)



PC: <https://jfschmidt.com/all-trees/introductions/espresso-kentucky-coffee-tree/>



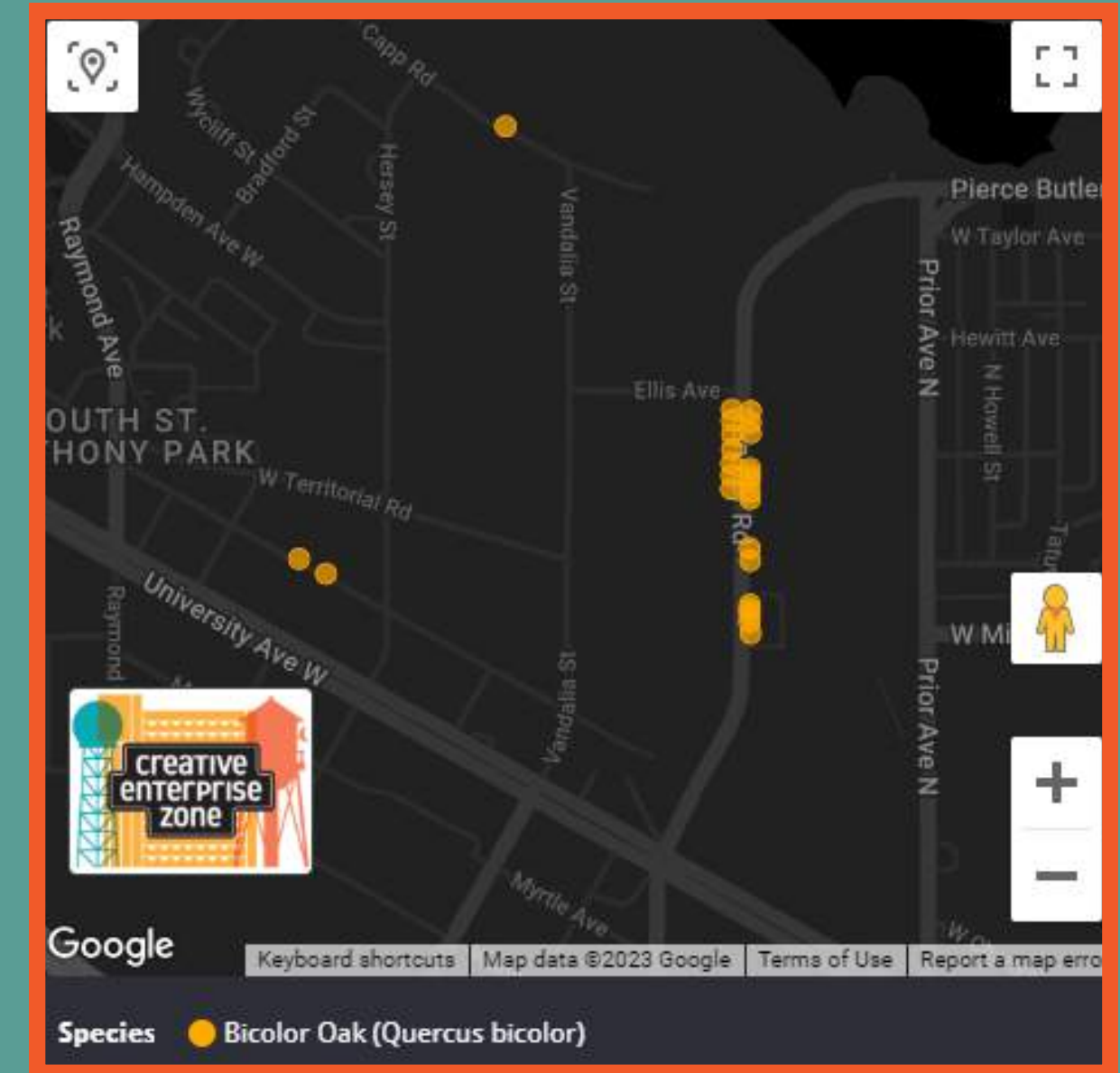
2023 Planting Locations



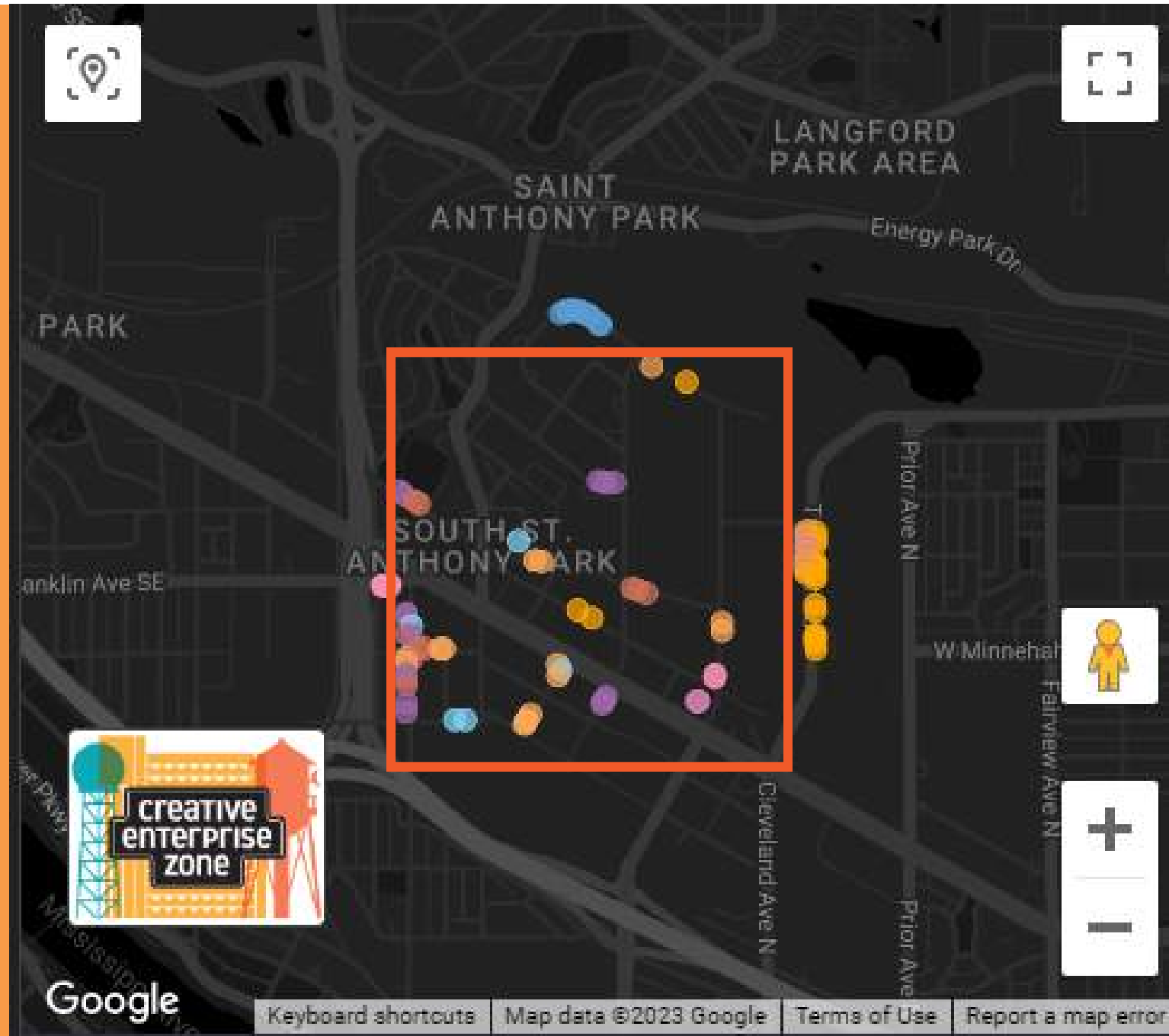
25 Bicolor Oak
(Container)



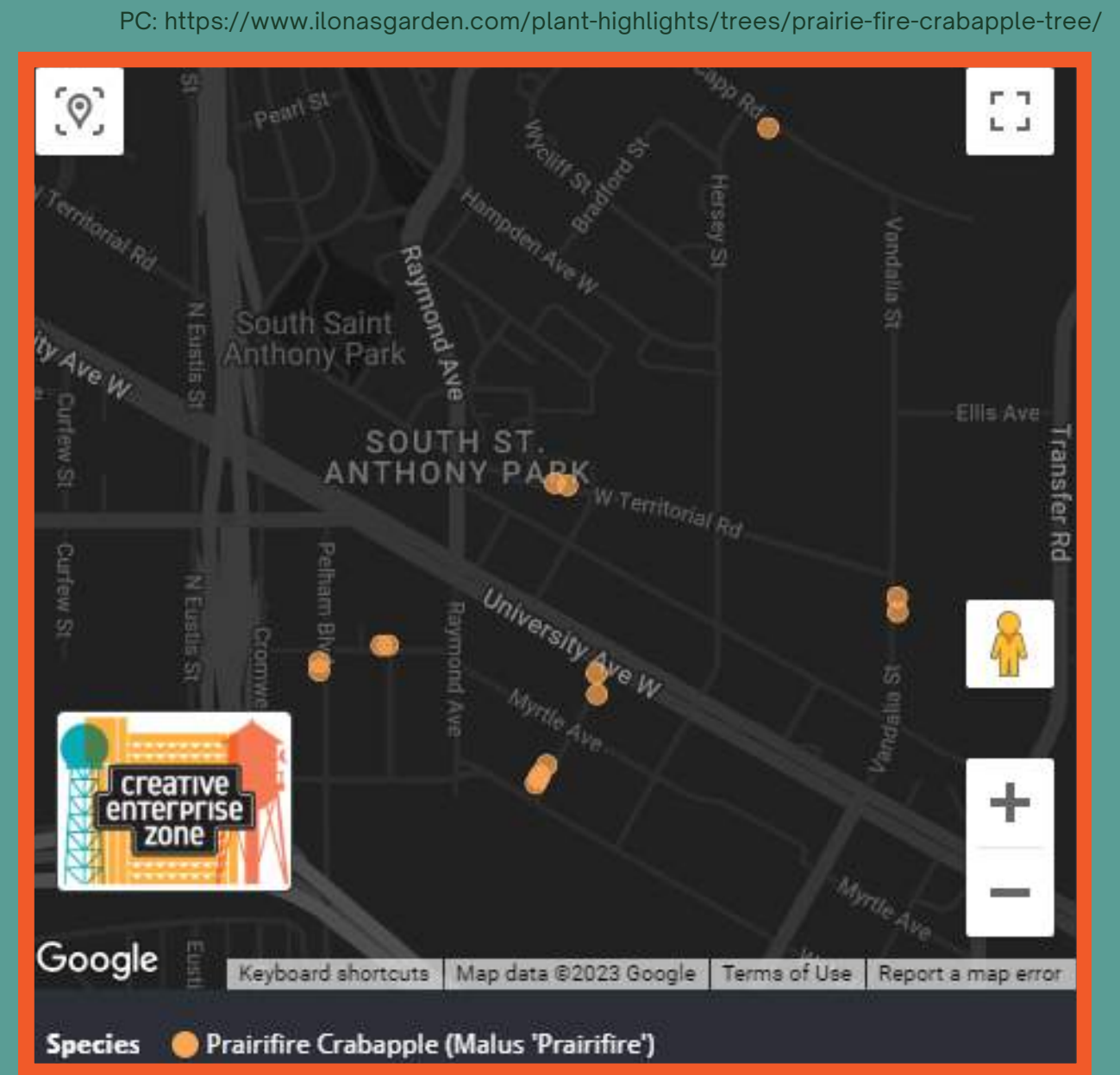
PC: <https://nfs.unl.edu/woody-plants/swamp-white-oak>



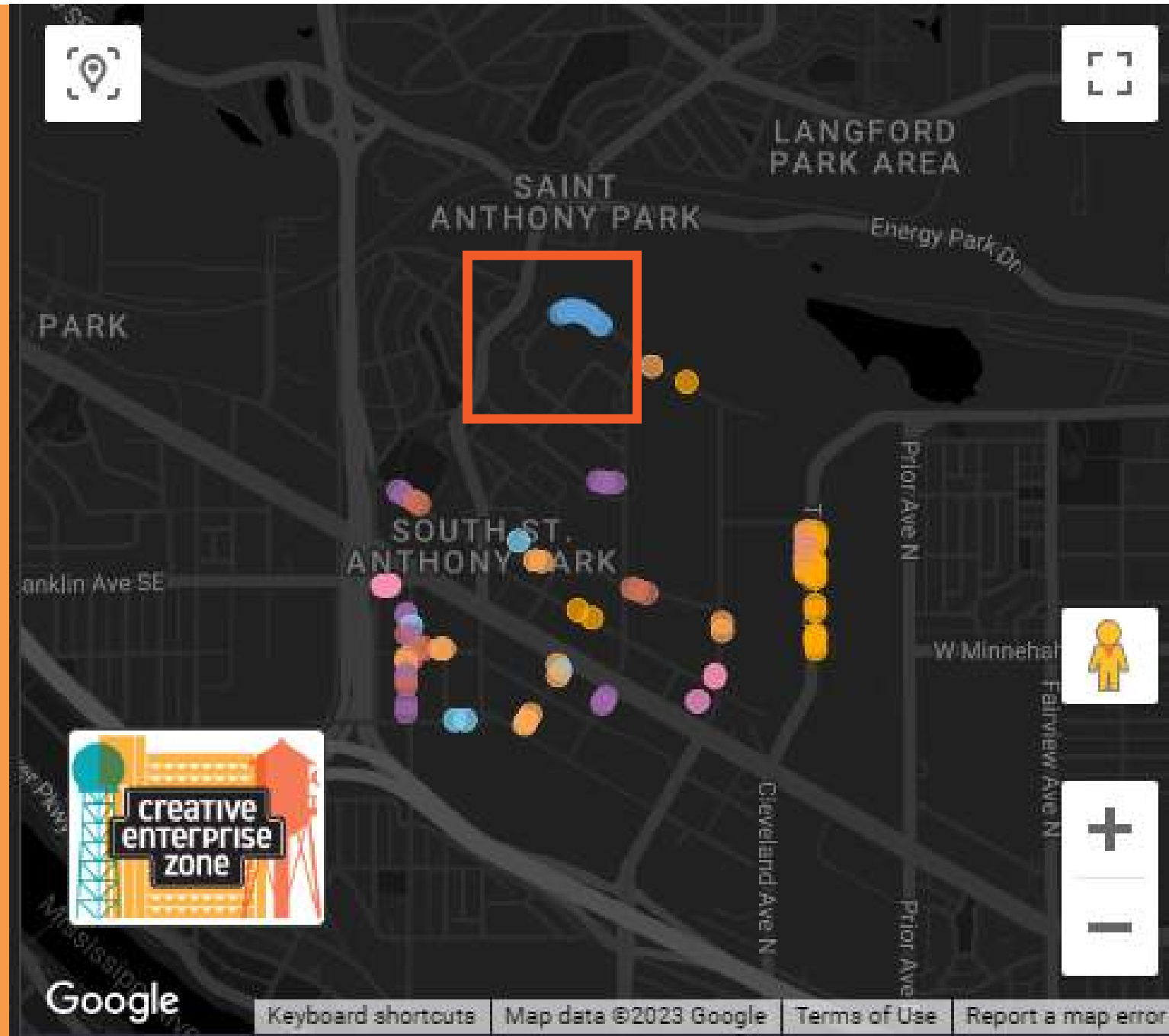
2023 Planting Locations



15 Prairifire Crabapple (Container)

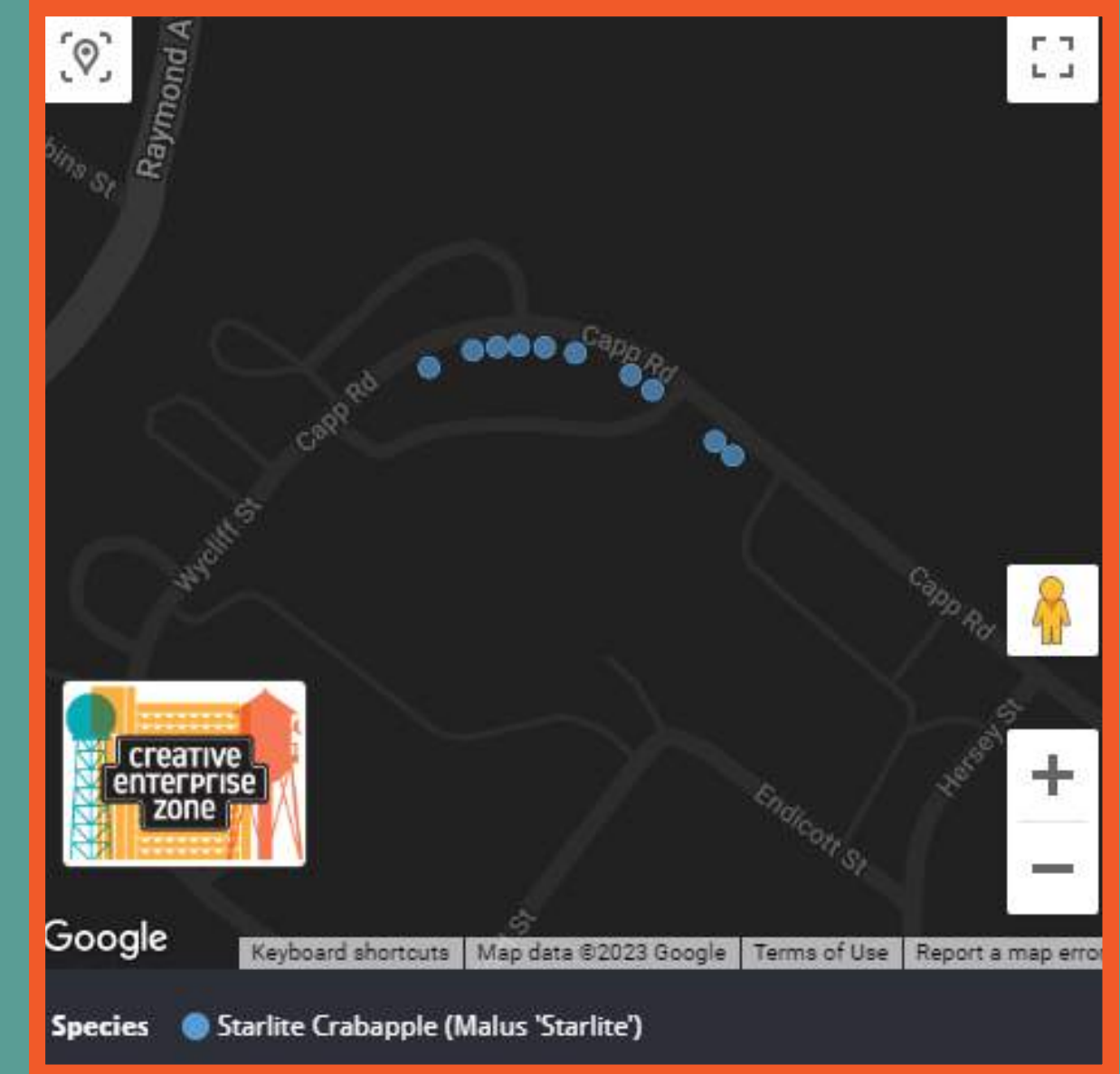


2023 Planting Locations

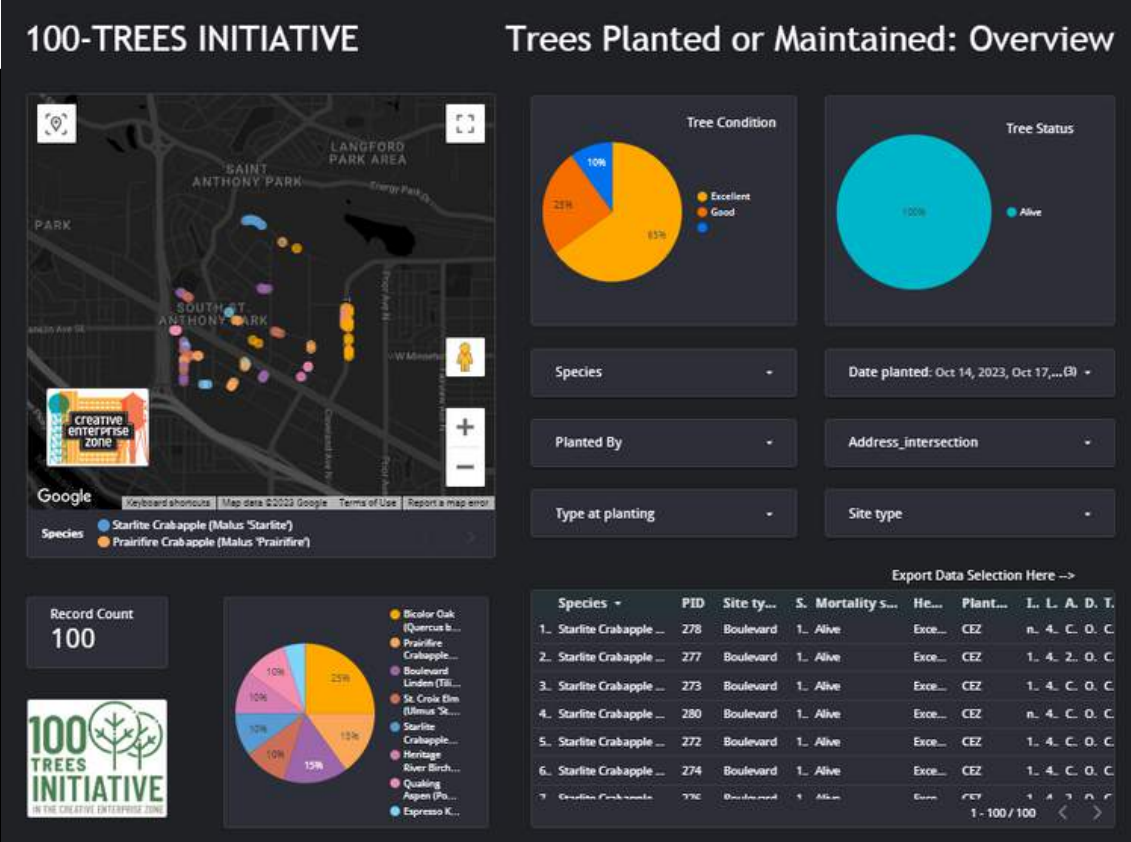
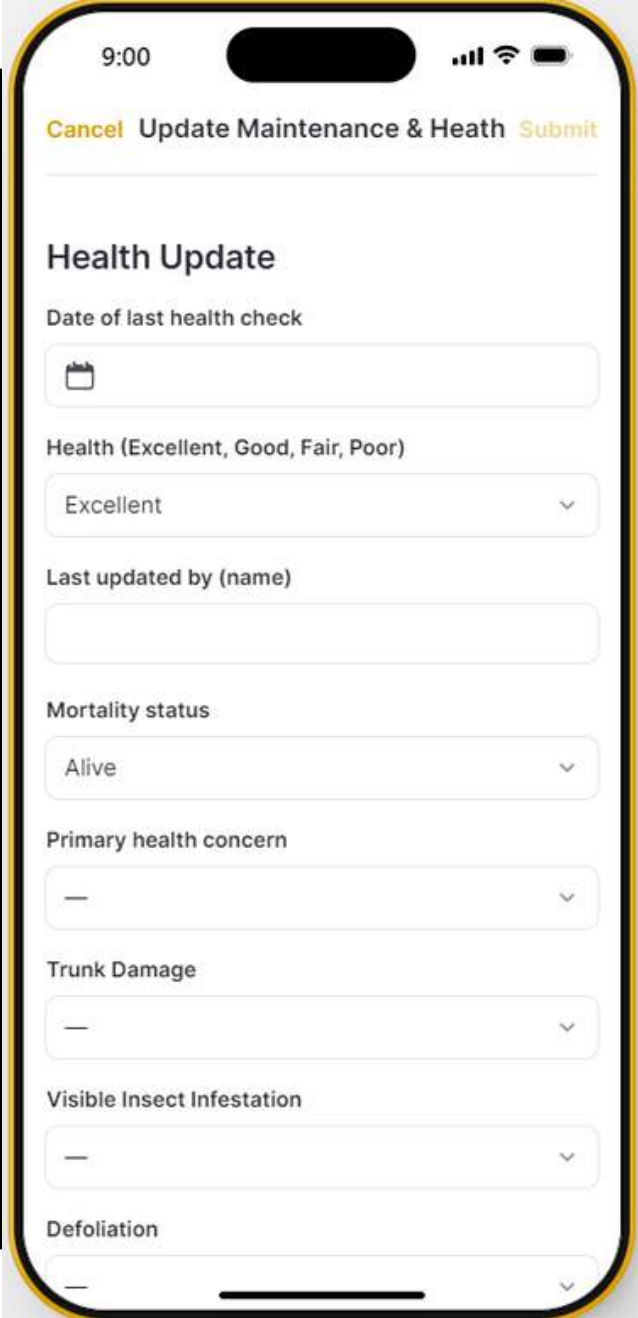
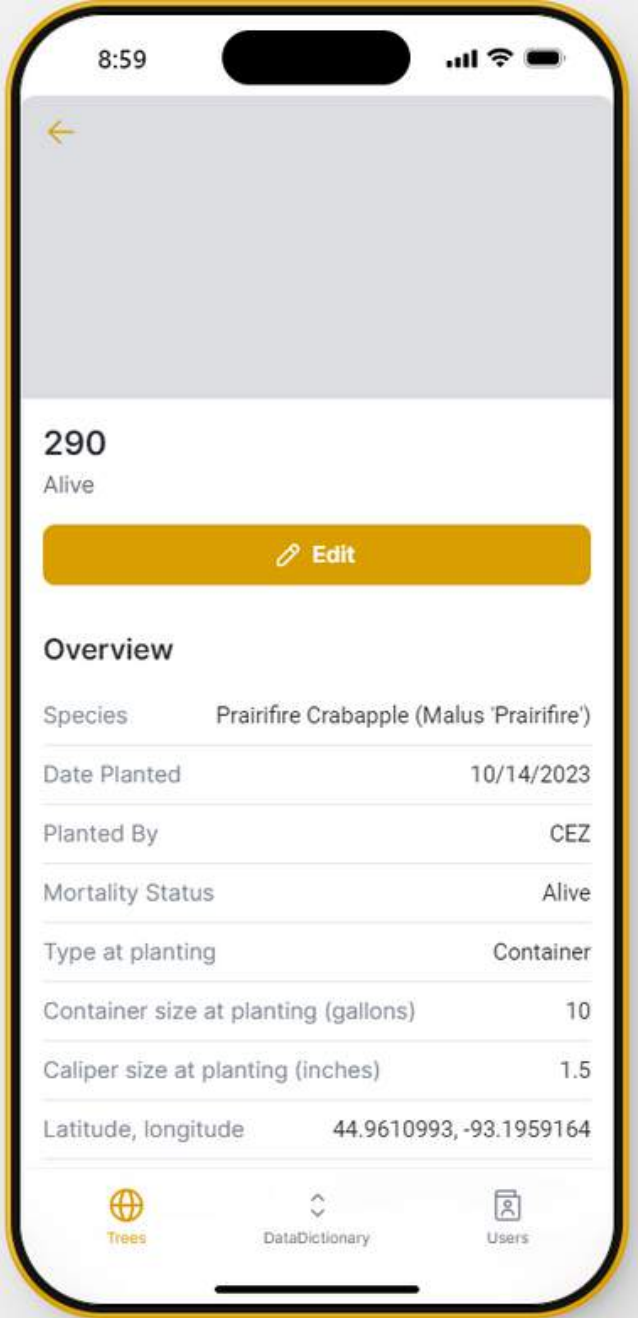
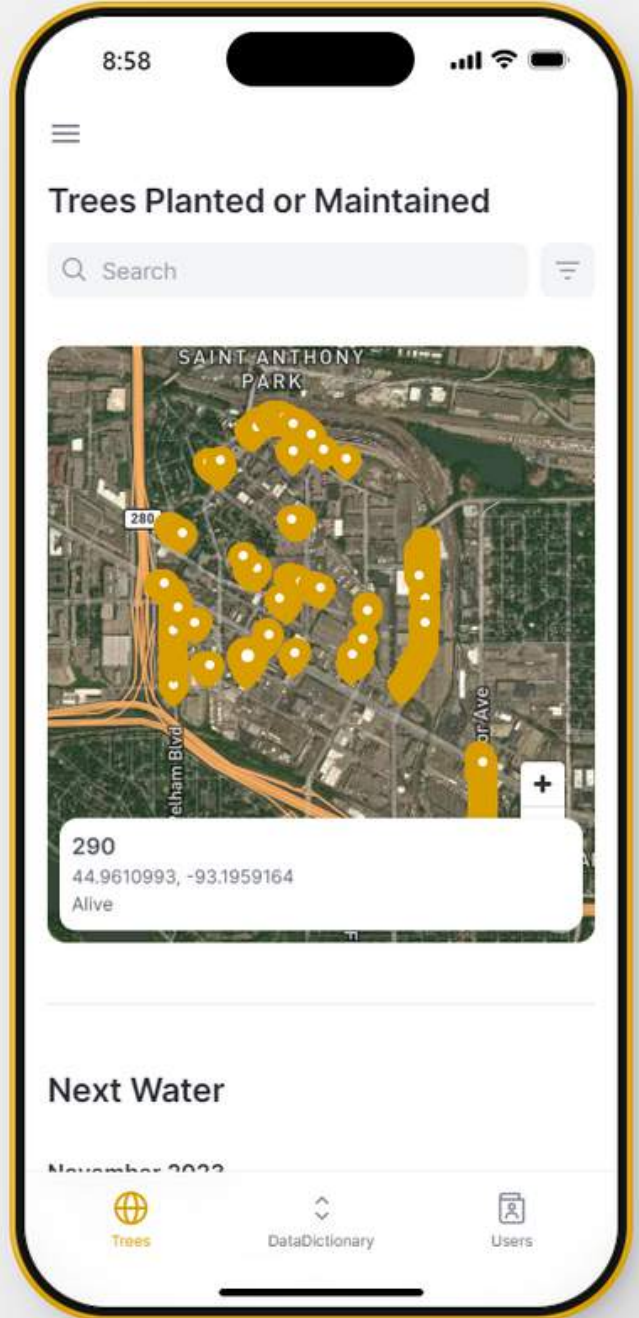


PC: https://www.broderickgardens.com/shop/c/p/Starlite-Flowering-Crabapple--7-7-x63212088.htm_

10 Starlite Crabapple (Container)



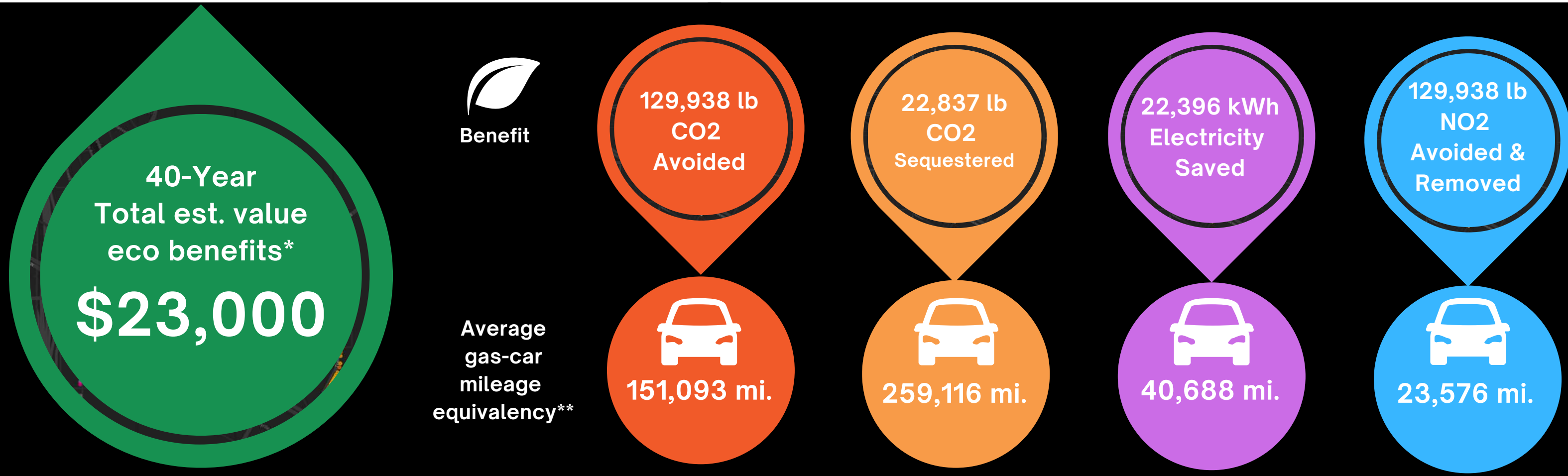
Monitoring Program



- Tree health and maintenance tracking through
 - Mobile Data Entry application (GlideApps)
 - Data summary dashboard (LookerStudio)
- Potential for “Citizen science” community involvement

Ecosystem Benefits

All Trees as of 2023



*Calculated using iTree Planting

40 year
70% mortality
Electricity emissions factor 633.59
Fuel emissions factor 87.3

**Calculated using EPA Greenhouse Gas Equivalencies Calculator

By the Numbers



87%

Survivorship since 2022



Trees Planted to date (2023)

300

40+

Community volunteers engaged (2022-2023)

25%

Largest percentage any one species (among all trees planted since 2021)



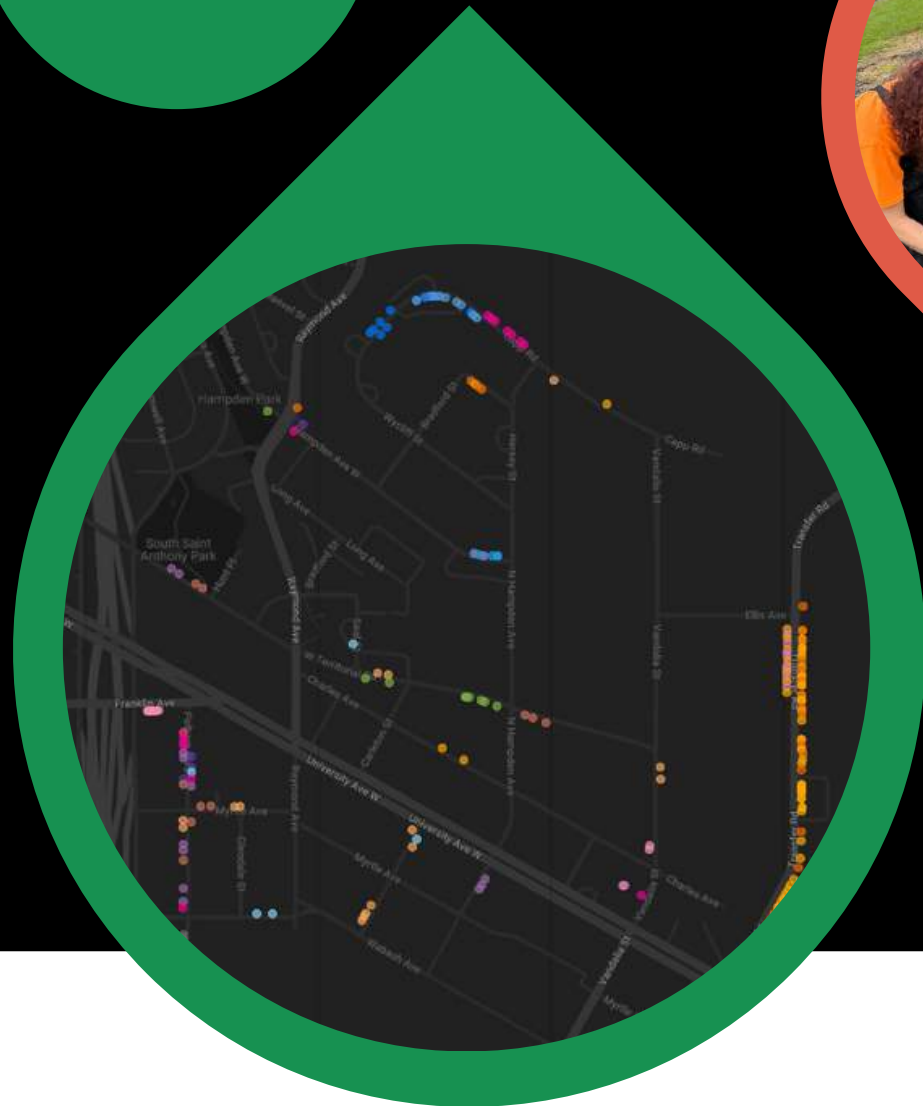
Gallons of water administered via trailer (2023)

12000+



Species planted since 2021

13



Engagement



AmeriCorps
Members

5

Certified
Arborists

8

Volunteers

40+

Volunteer & Service
Learning Hours

1200

Creative Enterprise Zone and Minneapolis Downtown Improvement District AmeriCorps Members paired up to manage tree watering and tree inventory projects.



Looking Forward



- **Continue** expanding the Urban Tree Canopy by **planting 100 trees per year**, prioritizing public boulevard space
- **Continue** the **summer watering program**
- **Prioritize trunk protection to reduce mortality** due to mower and varmint damage
- **Establish** a **volunteer-based maintenance and monitoring program**
- **Partner** with local environmental organizations to help **grow the urban understory** and **educate the community** about the importance of the urban forest and its care



2023 Sponsors & Partners



THANK YOU!



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