

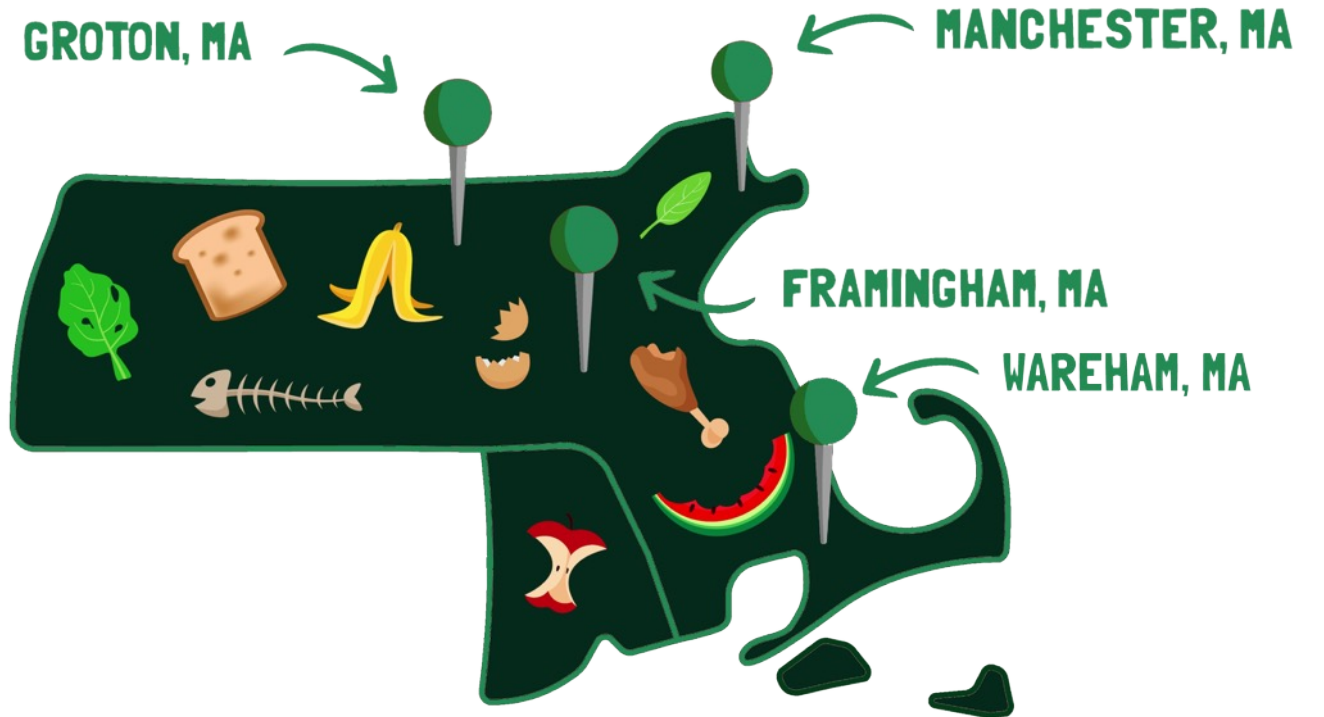
Full organics management

Pilot proposal for how to add on
food waste processing to an existing
leaf & yard debris compost site.



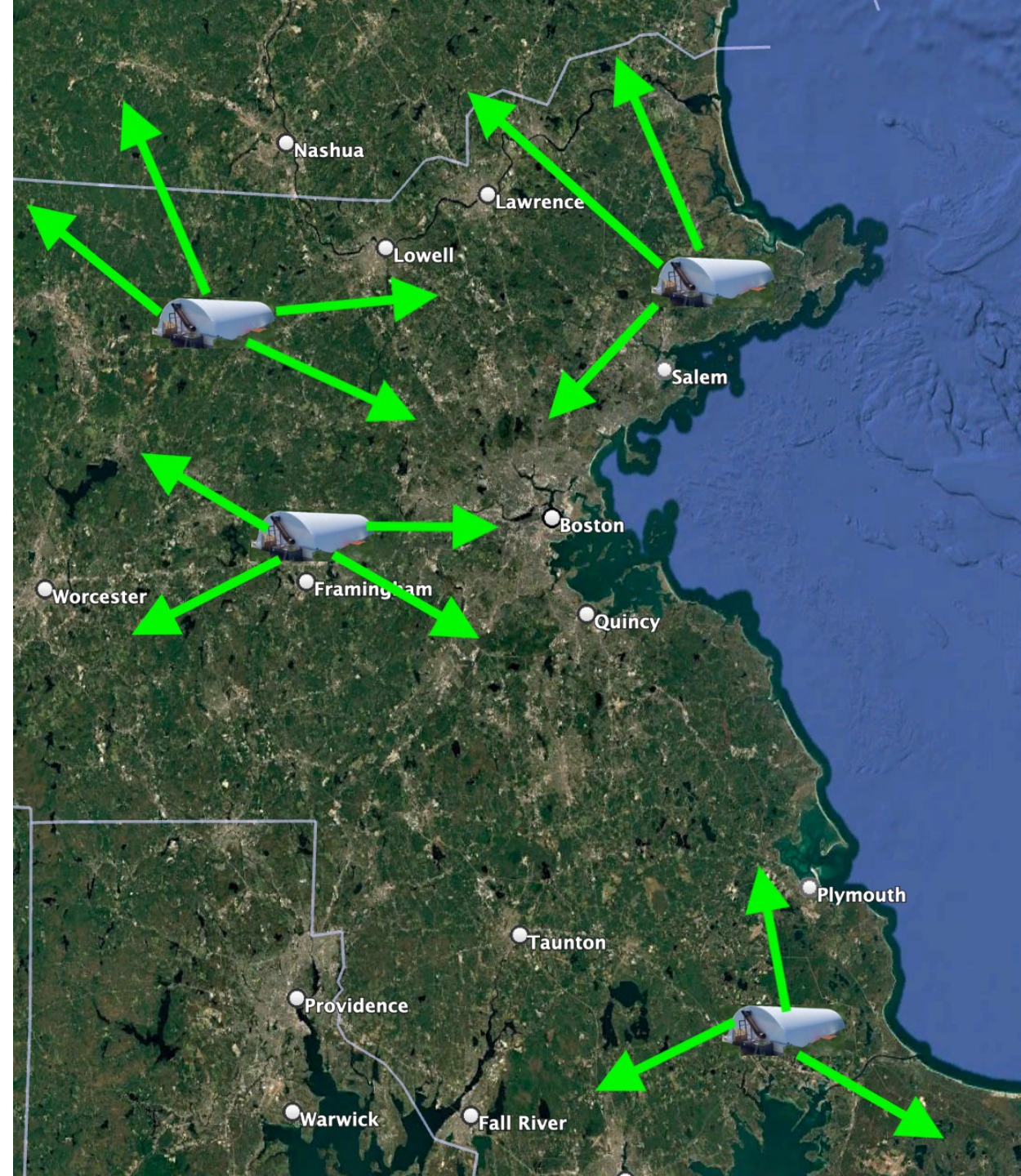
Black Earth Compost

Compost Collection
Compost Production



Why is this important

- Household food scraps is best suited for composting.
- Most diversion.
- 25 sites – most cost effective for MA
- Each site handles 5-10 neighboring towns.
- Decentralization Keeps trucking costs low and avoids traffic.
- Nutrient rich compost is a boon for the area's soils.



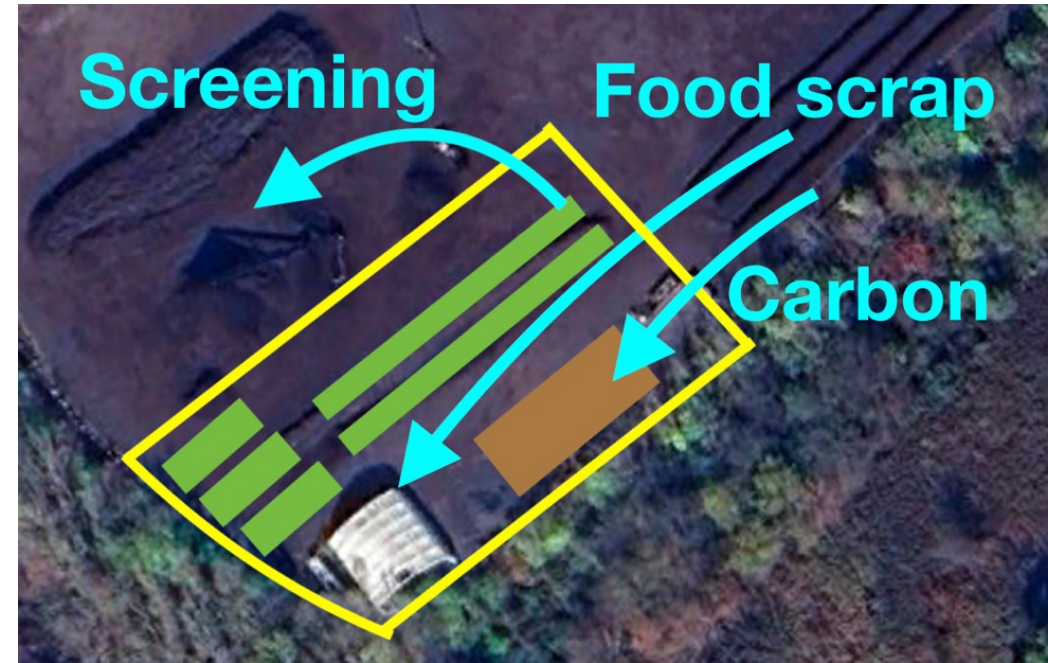
We propose a pilot project

Purpose: Test the controlled addition of food scraps into a side stream of Hartwell's existing management of leaf and yard debris.

Tests: Technical Viability, Financial Viability of composting food scraps at Hartwell.

- 3 year
- ~1 acre in back corner.
- Indoor Receiving of Food Scraps. Aerated Static Pile (ASP) composting method
- Black Earth staffs and has a wheel loader
- 3 Trucks stationed bringing food scraps from Lexington and region in (~1:2 ratio)
- 2020 McSweeney assessment
- Transparent Cost/Revenue books on operation
- 5% reduction in Town collection bill = \$20,000/year
- Revenue to Hartwell: \$7-15/cubic yard of food scrap compost that Black Earth sells. = \$20,000/year
- Creates synergies with Hartwell's staff.
- Leads to the big picture goal of **Owning the Infrastructure**

Questions?



Do Nothing Future

- Hartwell composts only **Leaf & Yard Debris**
- **\$\$\$\$ Cost** to collect food waste and drive **far away** for recycling
- **\$\$ Cost** to tip at 3rd party recycler
- 3-5 year contract
- Exposed to interstate markets and global markets

Own the compost facility

- Hartwell composts **Leaf & Yard Debris + Food Scraps**
- **\$\$ Cost** to collect food waste and recycle **in town**.
- **\$\$ Revenue from neighboring towns**.
- 20-30 year contract
- Resistant to global market strife

North Shore Regional Compost Facility – Manchester by the Sea, MA



Compost Facility – Groton, MA

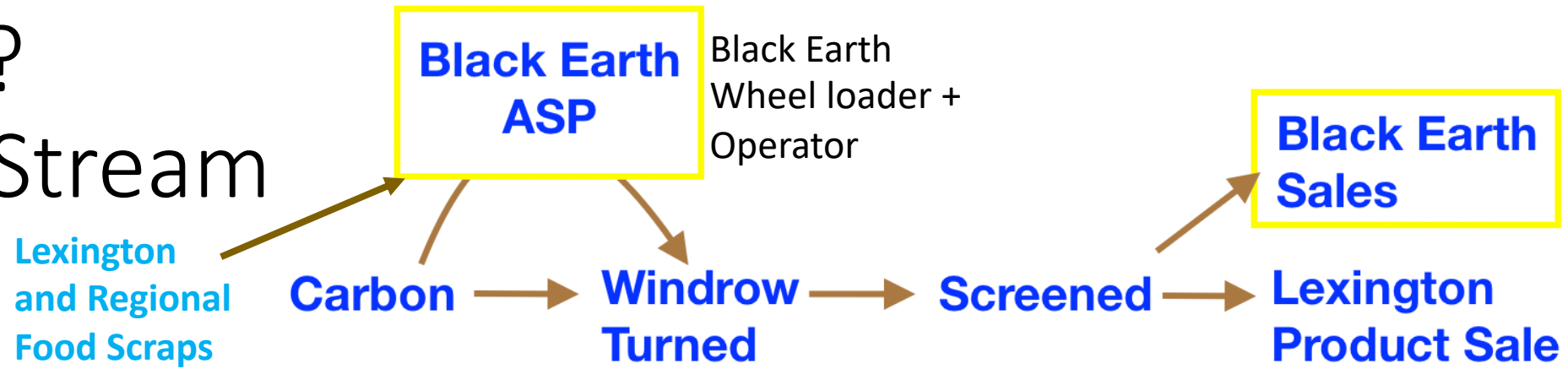


How?

Side Stream



How? Side Stream



How? Side Stream

Lexington
and Regional
Food Scraps

Carbon

Black Earth
ASP

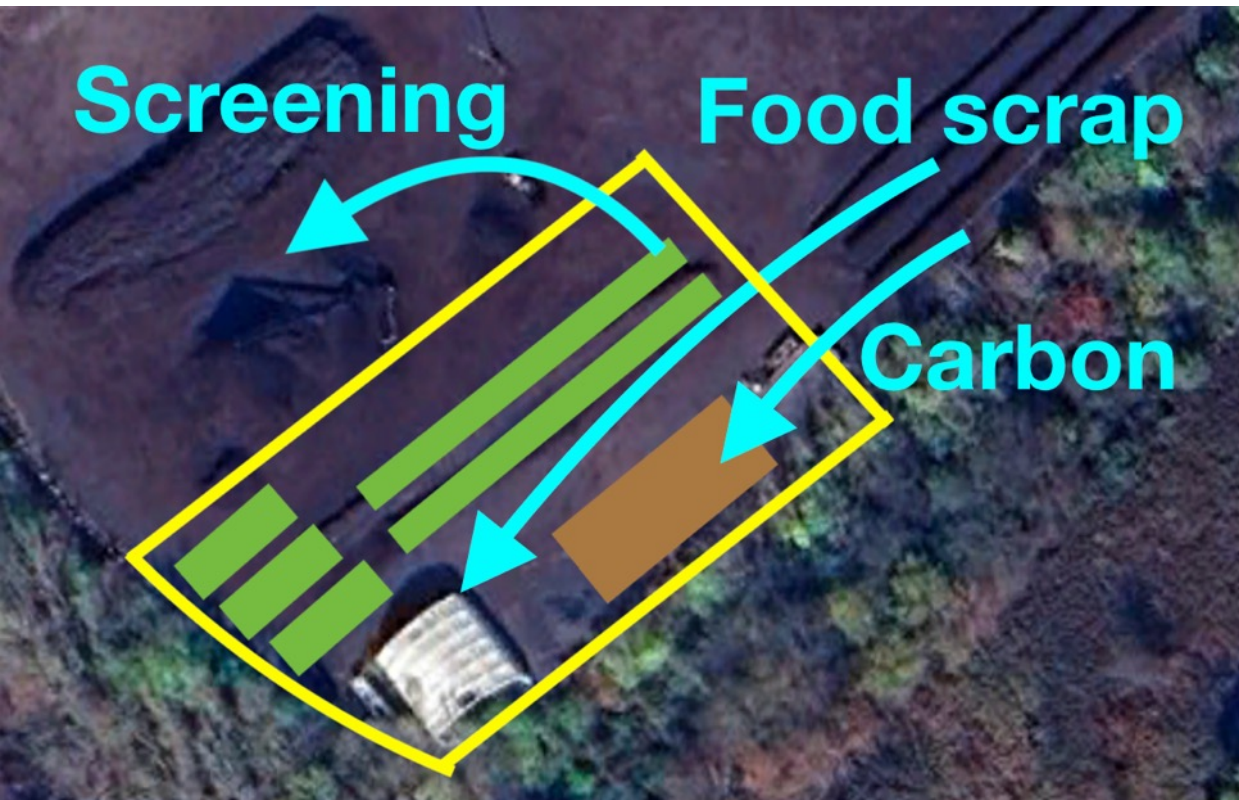
Windrow
Turned

Screened

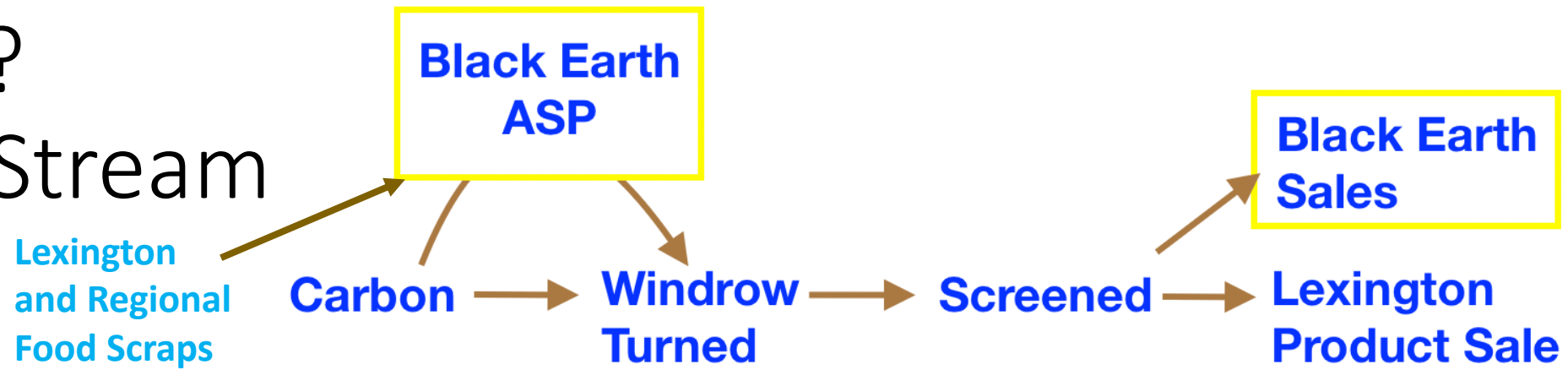
Black Earth
Sales

Lexington
Product Sale

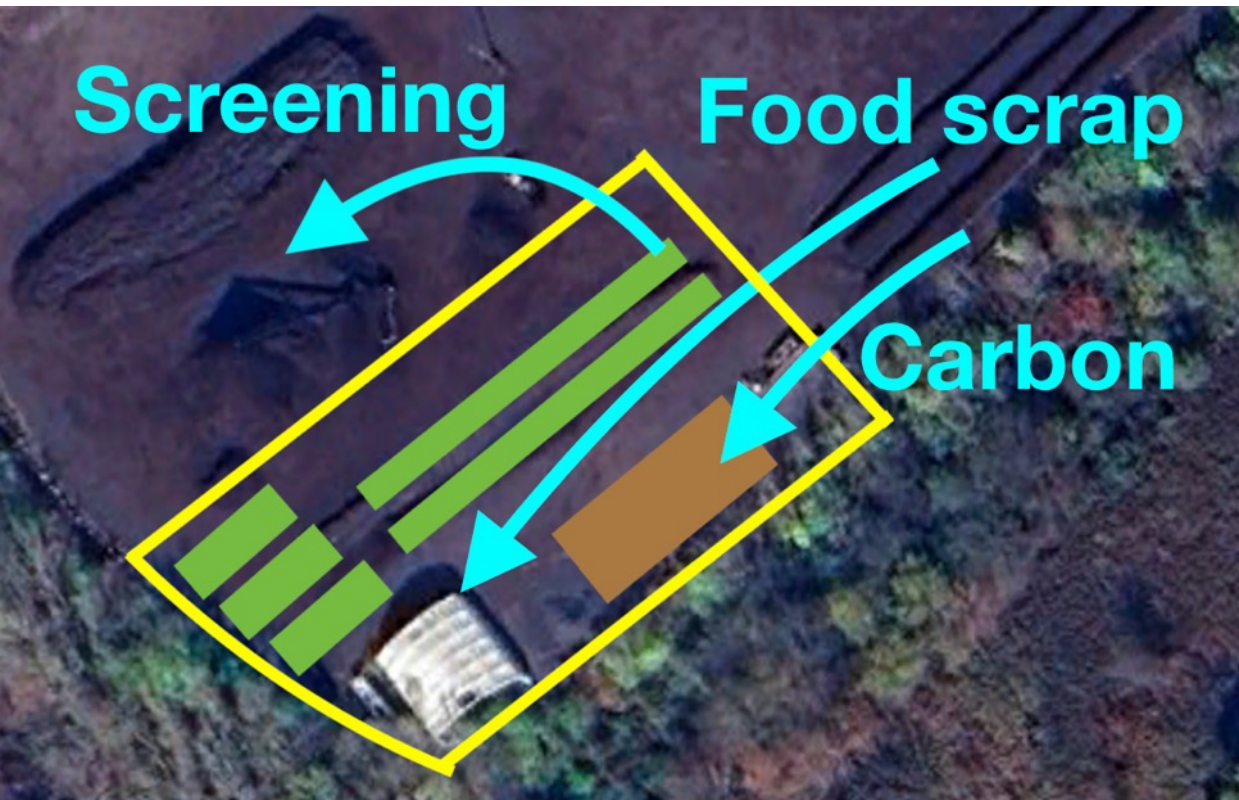
Pilot Phase



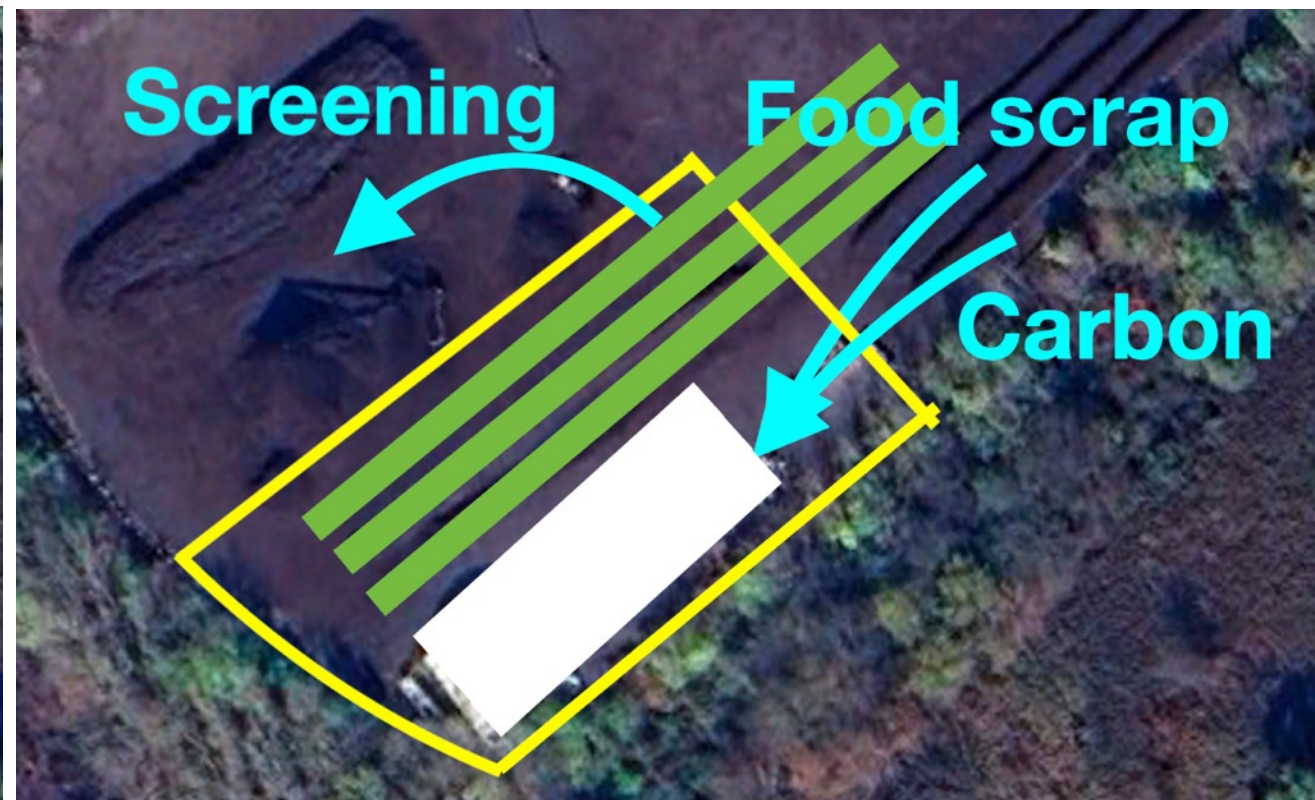
How? Side Stream



Pilot Phase



Future



Contracting/Procurement

- **DEP Permit:** uses existing town permit
- **Term:** 3 year pilot
- **Start:** Summer 2025
 - Site will have least material on it
 - Prep for Fall leaves coming in
- **Procurement:** Exempt from 30B
- **Transition:** into a long term contract after 3 years?
 - Year 2 consider contracting/permitting for permanent structure
 - Pilot phase baselines town benefits to then frame a long term contract
 - Additional Savings for Lexington