# Domino Park, New York City

**Type**

— **On-site composting of food and horticultural waste**

**Best Practice Strategies**

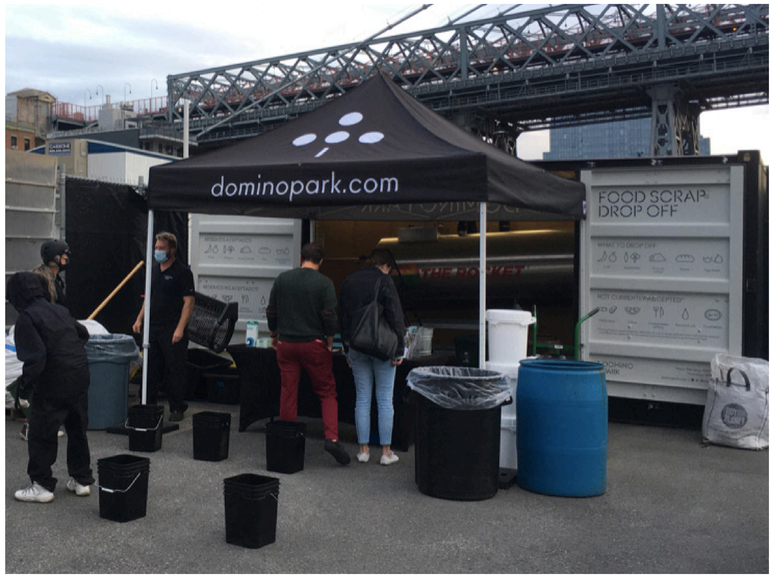
— **3.07 Staffed organics drop-off and processing on-site**

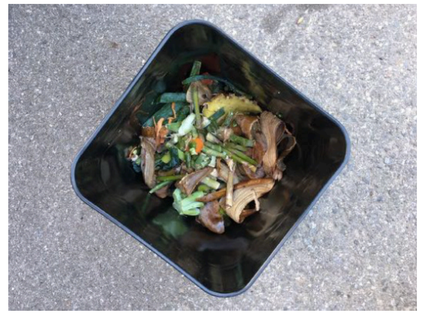
— **3.09 Incorporate community into collection operations**

**Summary**

Domino Park is a 5-acre park along the Brooklyn waterfront, designed by James Corner Field Operations in collaboration with Two Trees Management Company. The Williamsburg neighborhood of Brooklyn historically offered very little public access to the waterfront and is comparatively underserved by park space. Two Trees prioritized public access and enjoyment of the waterfront, and offer volunteer programs, workshops and tours to engage the community. The compost program gives the community access to food scrap drop-off and provides surplus compost for local community gardens and residents. They aim to be a leader in composting, showcasing a closed-loop organic waste system on the site.

Two Trees started collecting food scraps in 2018 from local restaurants and coffee shops as part of a sustainable initiative to divert organic waste from the landfill and to convert it into a soil-enhancing compost for use in the park. Horticultural waste from the park - trimmings from trees and shrubs and fall leaves - are combined with food waste, which



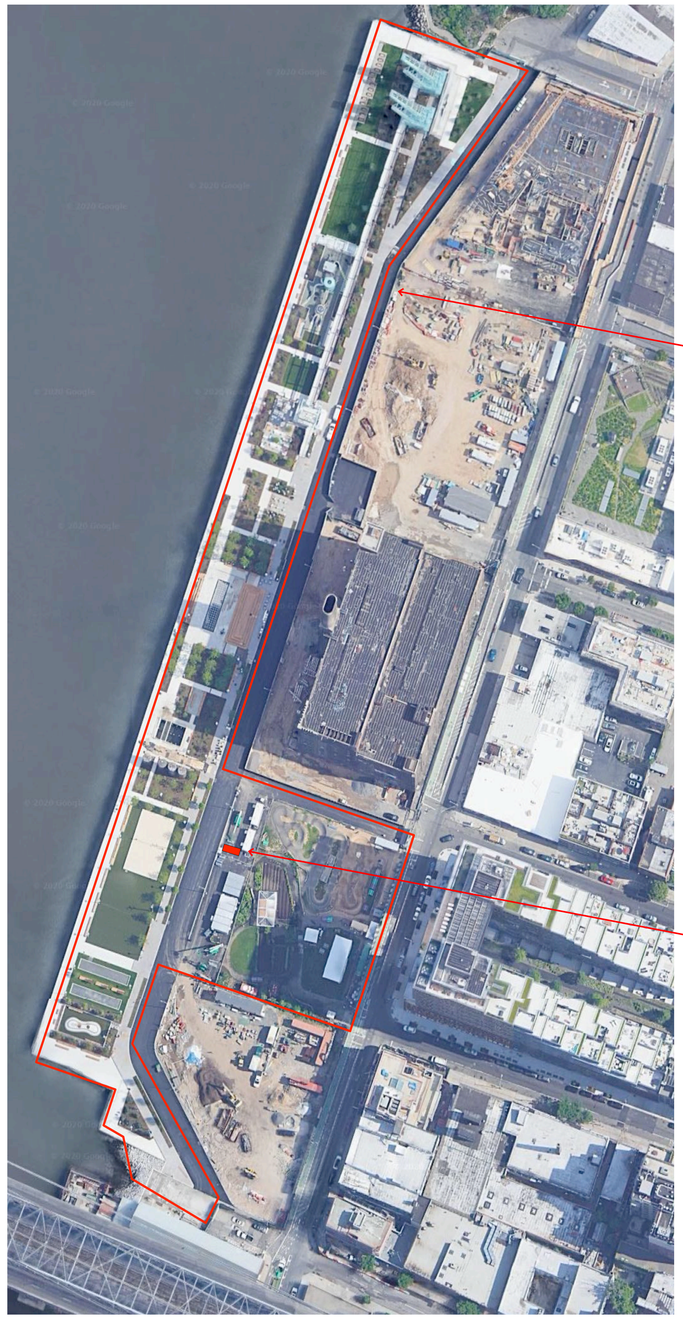



Top: Domino Park (Photo by Barrett Doherty)
Left: Compost drop-off in front of in-vessel composter
Right: Food waste and compost

produces high quality compost faster than using horticultural waste alone. There are 3.5 acres of planting beds, native plants and trees. Domino Park staff called “park ambassadors” manage the park and the composting system.

After COVID caused local restaurants to close and NYC’s curbside organics collection to be put on hold, Domino Park started accepting residential food scraps from across the neighborhood, with two 2-hour staffed drop off windows per week. An average of 80-120 participants come and drop-off around 5-10 lbs of waste each. The initiative is run by the horticultural director, who along with an assistant, each spend an average of 2 hours a day on the operation. Tasks include manning the drop-off, adding the food waste and wood chips, using the pulper, washing the buckets, weighing the waste, monitoring the equipment, and sifting the compost for use on site. They also make compost tea from soaking the compost and straining it, for use on the planting beds. They normally have sufficient landscape waste within the park, but occasionally need to source additional wood chips, which they get locally for free from Greenwood Cemetery.

Domino chose the Rocket in-vessel composter because it allows continuous feed, produces finished compost, is known to be robust, and has a local distributer. They set it up within an 8’ x 20’ reused shipping container, so it can be relocated as needed during the ongoing development of the site. They insulated the container and added wood panels, lighting, a utility sink and plumbing hookups which also allows them to dispose of greywater from the pulper.



Food waste is added to the Rocket up to 5 times a day, along with wood chips or other horticultural waste in a 2:1 ratio by volume of food waste: wood chips. This mixture is then processed in the Rocket for 2 weeks with close monitoring of the temperature through the readout. Ideally the output is cured for around 30 days before sifting for use on site. They have a waste pulper which they use when they have a lot of waste, as it increases the capacity of the Rocket threefold. They also made a 4 bin compost system with an air blower, which works like an aerated static pile, that they can use when they have additional material.

Contamination with non-compostable materials is minimal as Domino staff supervise drop-off and answer any questions people have. They monitor output and have adjusted which waste they accept to reduce problems. Currently they don't accept meat, dairy, fish, compostable products or citrus as they were taking too long to break down. They also don't accept sauces which were causing excess moisture and often contain oils which inhibit microbes. They are now experimenting with accepting some compostable products.

## Metrics

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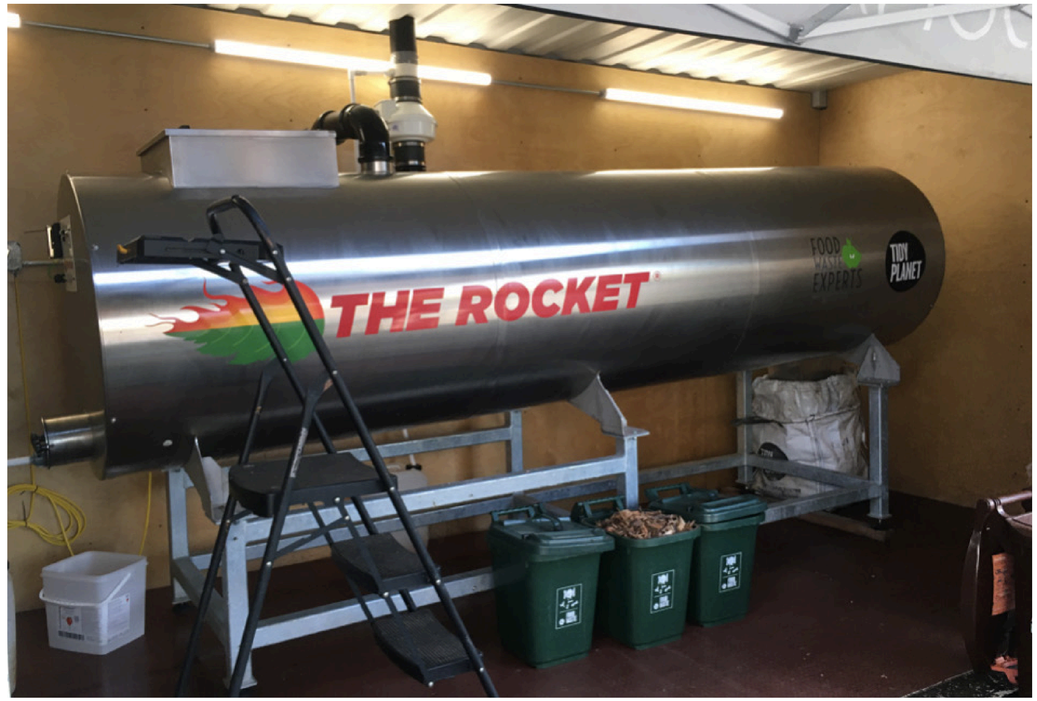
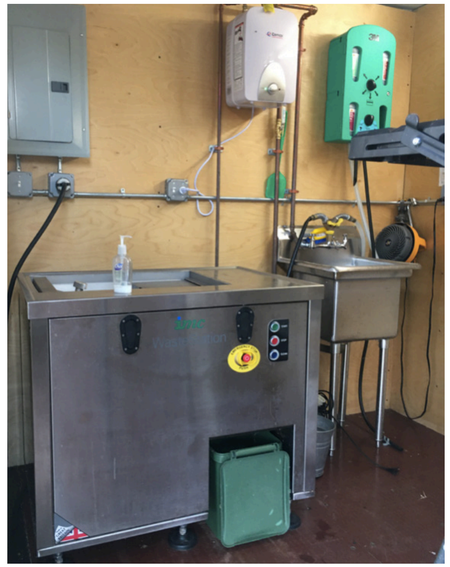
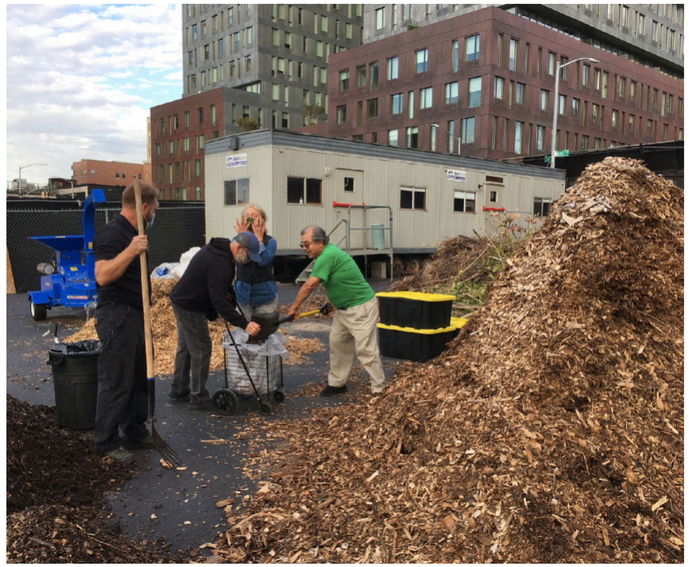
|---|---|---|
| Area of garden beds in park | 3.5 | acres |
| Food scraps collected | 0.6 | tons / week (31.2 tons/ year) |
| Landscape waste put into composter | 0.5 | tons / week (26 tons / year) |
| Compost created per year (50% reduction) | 28.6 | tons per year |
| Volume of compost (assume 900 lbs / CY density) | 63.6 | CY per year |
| Compost available per acre of beds | 18.2 | CY per acre |
| Resident waste supported | 343 | residents (assuming 3.5lbs/ resident/ week) |
| Area of compost operation (including 160 SF shipping container and areas for 4 bins system, storage of wood chips, compost tea, curing etc.) | ±1,000 | SF |
| Percentage of total park used for composting | 0.7% | of park area |




In-vessel composter



Pulper, utility sink, and hot water heater.



Wood chip area, and members of local community garden picking up finished compost