PETERSBURG GROCERY FACILITIES

CRAIG WEFLEN

CONCEPT:

First, the highway site provides the best access for trucks, and as this will serve as a micro-distribution center, access is key. The main goal of this project, however, is to create a partially self-sustaining grocery store. To do this, the large diagonal tract of land to the east of the highway site is repurposed to house greenhouses that are owned and operated by the store owner. The remainder of the land is city owned, and becomes a public park, complete with a bandshell, pond, and bicycle paths.

FUNCTIONAL GOALS:

-The twelve different greenhouses each have their own controlled climate. As such, the different foods are grouped according to similar growth temperatures, humidities, and sizes. The greenhouses are further brokendown based on overall sizes of plants to be grown within. For instance, the greenhouse that grows berries is much smaller than the greenhouse that grows fruits from citrus trees.

-The paths that are created on this diagonal tract of land actually link the new grocery store to the downtown. The store is one endpoint for the path, while the downtown is the other, and as such are the inevitable destinations for people in the park. Further, out of town visitors to the store are subliminally encouraged to explore the town as the are exiting on a path that leads the directly into this unique park space, and eventually to the downtown area.

PROGRAMATIC FEATURES:

-The greenhouses are partially submerged to provide additional insulation. Temperature is controlled primarily through opening vents in the greenhouse, although there are backup heating/cooling systems under the floor, just in case. These would only need to be used in the case of sustained extreme weather.

-The greenhouse that grows Apples is unique in that it is publically accessable at all times. Thus, in the winter, it becomes a sort of miniature vacation spot within the town, as you can go there to feel as though it is summer time.

-The store facility itself houses the corn growing facility, as it is a virtual extention of the farmland to the south.

-Produce within the store is subdivided to seperate the locally grown produce from the imported produce. This encourages people to buy locally grown goods, which keeps the money in the local economy.

-The distribution center has designated "in" and "out" truck lanes, and are on opposite sides of the warehouse. This provides easy off, easy on loading practices.

1. - BLACKBERRIES, BLUEBERRIES, BOYSENBERRIES, CRANBERRIES, MULBERRIES, RASPEBERRIES, MULBERRIES, RASPBERRIES, STRAWBERRIES, OLIVES, GRAPES, KIWI: *55-80 F, 70 IDEAL*
2. - BROCOLLI, RADISHES, PARSNIPS, TURNIPS, BRUSSELS SPROUTS, ONIONS, SPINACH: *35-75 F, 65 IDEAL*
3. - BANANAS, AVACADOS, GUAVA, MANGOS, PINEAPPLE: *70-110 F, 80 IDEAL*
4. - CARROTS, CELERY, ARTICHOKE, PEAS, ASPARAGUS: *30-77 F, 75 IDEAL*
5. - APRICOTS, CHERRIES, PEARS, PEACHES, PLUMS: *65-85 F, 75 IDEAL*
6. - EGGPLANT, PEPPERS, MELON, CUCUMBER: *70-95 F, 85 IDEAL*
7. - GRAPEFRUITS, LEMONS, LIMES, ORANGES: *55-100 F, 75 IDEAL*
8. - LETTUCE, CAULIFLOWER, CABBAGE: *45-85 F, 70 IDEAL*
9. - PUMPKINS, SQUASH *60-105 F, 95 IDEAL*
10. - TOMATOES *50-95 F, 75 IDEAL*
11. - POTATOES *60-70 F, 65 IDEAL*
12. - APPLES *65-100 F, 70 IDEAL*

STORE ROOF : CORN, *65 - 85 F*

1. - CAFE SEATING AREA
2. - CONVENIENCE STORE
3. - KITCHEN
4. - IMPORTED PRODUCE SECTION
5. - DELI
6. - CHECKOUT AND MAIN ENTRY
7. - DISTRIBUTION CENTER
8. - FREEZERS
9. - LOCALLY GROWN PRODUCE
10. - OFFICE AND BREAK ROOM
11. - RENTABLE SPACE
12. - RENTABLE SPACE