## **Project Title - Community Garden**

School: Randolph Community Garden

Contact(s): Rachel Gunawardena, Carlos Ramirez (principal), Shannon Quinn (IB coordinator and Randolph PR Liaison), Marc Hoffman (Randolph parent and carpenter), Amy Creed (PTA President), Bethany Sutton (Food Pantry coordinator), Samantha Stevens (Hope Multiplied Program Director)

Brief summary of the project: Ongoing project to create a garden that services the needs of the school community

### **Getting Going**

How did the project start? The project began after a discussion with the principal and the PTA members after a food pantry event. The school runs a monthly food pantry for families in which they can get some produce, dry goods and other items for free at the school. Both the principal and the PTA members present brought up the fact that with rising inflation, as well as stagnating wages, the prices for fresh food in particular were rising. It would be difficult to raise sufficient funds to continue providing fresh produce, even monthly, to all of the families that use the pantry. The idea was floated that perhaps someone should explore local community garden connections. Later that week, I was speaking with a veteran teacher in the building who had been teaching there over a decade. They informed me that the school used to have a community garden in the back, but with the need for a fence, the area was no longer accessible to families and thus had not been used for many years. This led to exploring whether or not it was possible to create a garden at Randolph. Not many weeks later, the testing coordinator received an email from a contact who said that Amazon was looking for a place to partner with to possibly create a community garden, and he forwarded the information to me.

Who were important people to contact at the beginning? Samantha Stevens at Hope Multiplied explained the scope of the project to me, and contacting the PTA board to ask for a carpenter put me in touch with Mark, a local parent with a background in carpentry

What are the threshold resources that need to be identified at the beginning before proceeding further? (For example, robust parent volunteer network, elevated loading docks, nearby outdoor spigot.) When I spoke with the PTA board, the consensus was that while we could easily tap our volunteer network for ongoing support with maintaining the garden, the initial investment would be one requiring expertise and assistance with materials in order to get it off the ground. The location near the sidewalk was chosen because it was close enough to the sidewalk to make it easy for families to access independently, but also because it

was near a maintenance storage area, making it easier for custodians to bring out materials if needed.

What are the policies (if any) from APS or elsewhere that may affect the project and need to be considered? There may be additional protection from critters that we'll need to consider, and certainly safe storage of any gardening materials we allow others to use from the school.

What budget and/or funding sources were needed? In the attached sheet from the carpenter, you can see his estimates for materials. Given that the space we had was also on a hill, this figured into the estimate.

# **Implementation**

Did you pilot or test the project and then scale it up? If so, describe your process. We have not piloted the program yet simply because we are waiting on a decision from Hope Multiplied on the funding aspect.

Approximately how many students were actively involved, and how many were affected? If we were to roll out this project, more than 300 students would be affected, because their families access the food pantry and this could give them access to more fresh food.

What obstacles were overcome? Are there continuing obstacles? What lessons did you learn from doing this? So far, I am learning patience, and I think the community is learning to advocate a bit more for the changes it wants to see.

Will the project continue into future years? If so, how will you keep continuity? Do you plan modifications? We will continue to look for funding for this project in the next school year, if we have not gotten a final decision from Hope Multiplied by August.

Are there photos that could help others visualize how this worked for you? If so, please insert them here. Please see attached!

### Replication

Do you have resources you used that would be helpful for someone trying to replicate this project? Would you be willing to share them? I have attached the carpenter's proof of

concept to this document so that others can see what he did and possibly use it to start their own project to build raised beds for a garden.

What else should someone wanting to implement a similar project at their school know? Please tap into your PTA network! Someone almost always knows someone else who can be helpful to a project of this size.

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**PURPOSE**: This document provides a Rough Order of Magnitude (ROM) estimate for costs to build raised planter boxes on Randolph Elementary property for the purpose of supplementing the community food pantry with fresh produce.

**SUMMARY:** The project materials will cost between \$6,000 - \$9,100 depending on final design. There are opportunities to reduce cost through bulk purchasing, design refinement, and availability of no-cost organic fill material. There is risk for cost increase through fluctuating material costs & availability and material selections.

#### **ASSUMPTIONS**:

1. The planter boxes will be installed on the north side of the property between S Quincy, the north-most parking lot and the wooded area surrounding the foot path, per the figure below:

Each rectangle represents one 4'x8' Planter box



- · 3 rows of 4 Planter Boxes
- Each Planter Box is 4' Wide, 8' Long

#### Planter Boxes connect end-to-end



- 2. Boxes shall be ~waist high for an adult (30-36") for ease of use.
- 3. Box layout shall maximize growable surface area (function over form).
- 4. Box rows shall have roughly 3 feet of space between for access.
- 5. Construction may be done by non-professional volunteers.
- 6. Some local grading & leveling will be necessary.
- 7. Labor costs for construction and land preparation were not estimated.

For quick and scalable estimating purposes, costs are based on a modular design consisting of three (3x) rows of planter boxes, each row made up of four (4x) box units. Each box unit is 4 feet wide, 8 feet long, and roughly 30 inches high. Planter boxes in each row butt up against each on the short (4') side and can be installed at staggered heights as needed for grade changes. This design can be scaled up or down by adding or removing boxes or moving the arrangements within the space.

**DESIGN 1 – LUMBER BOXES:** This design uses Prime Ground Contact Pressure Treated two-inch dimensional lumber for the carcass of each box. A range of board widths between 6 and 12 inches can be used which will affect overall height and cost. Depending on lumber selected, costs per box range from \$342 – 470 with a total of \$4,107 – 5,644 for 12 boxes.

Initial research indicates pressure treated lumber is safe to use in planter beds growing food for human consumption. Treating the interior of the boxes with a plastic liner or food-safe sealer is recommended. Rot-resistant hardwoods were evaluated as an alternative but accurate pricing was difficult due to product scarcity and are expected to be significantly costlier than pressure treated, if even available in our area.



**DESIGN 2 – GALVANIZED STEEL BOXES:** This design uses Prime Ground Contact Pressure Treated 2x4 lumber as a frame around galvanized steel shed roof panels to contain the soil. Cost per box is \$213 with a total of \$2,558 for 12 boxes.

Initial research shows galvanized steel is safe to use in planter beds growing food for human consumption.

**FILL:** Using basic internet research, estimate \$3,000 to fill all twelve boxes. Each box requires about 3 cubic yards (CY) of soil. Depending on the source, soil can cost between \$120-400/box to fill, or a range of \$1,440 - \$4,724. It is possible to defray this cost using locally-sourced organics to fill some of the volume at the bottom of the boxes (i.e. rotting logs from the woods behind the school).

**IRRIGATION:** Implementing irrigation will cost roughly \$500. Drip or soaker irrigation kits including dripline, mainline tubing, fittings, stakes, a pressure regulator and timer will cost approximately \$300 to cover 12 Planter Boxes. Assume an additional \$200 for <sup>3</sup>/<sub>4</sub>" Schedule 40 PVC line & fittings to plumb from the nearest hose bib up to each planter box.

**SITE SURVEY:** The following pictures show the intended installation site.



Seen from Parking Lot, facing North-East.



Seen from near S Quincy St., facing West.

