## CONTAINER CITY-Sustainable Living<sup>1</sup>

Can you create a truly Great Living Space and Not Create such a Large Footprint on the Earth?



# REMEMBER YOU HAVE THE CHOICE OF THIS ASSIGNMENT **OR** THE CONDO ASSIGNMENT!

1. Watch the following video

https://www.youtube.com/watch?v=Fa2p\_ux8ER0

You are required to **design and build a model** of a container city. The model can be digital or practical model. If you are building a digital model use a program like Google Sketchup or any other free apps. If you would like to use another program please talk to your teacher it see if the program choice is appropriate.

#### The standard dimensions of a container is 8 feet by 8 feet by 64 feet.

These are the conditions you must adhere to

- 1) Your container city must have 13 containers
- 2) Your container city cannot be more than 5 containers high
- 3) Your container city is being built on a concrete pad 70 feet by 40 feet
- 4) Your design must be practical and liveable
- 5) YOUR CONTAINER CITY MUST BE ABLE TO STAND ON ITS OWN

#### Other helpful notes

- a) You can cut sections of containers out for walls.
- b) This project purpose is to focus on design concepts and calculation of area and surface area. There is no expectation that you know where to put support beams to keep ceilings from collapsing.
- c) Do not worry about furnishing the condo in your model. (But keep it in mind when designing)

What are you expected to submit to your teacher.

- 1. A model of your Container City
- 2. A write up about the layout of your City, and it should address the following.
  - a. What kind of units are you producing? (Single, Single Family, Double Occupancy)
    - i. What is the square footage of each of your units
    - ii. Why did you decide to create these kinds of units
  - b. What is the total surface area of your model in imperial measurements? (Not including the floor)
  - c. What is the value of the surface area, if your contain city was built? (Not including the floor)

<sup>1 &</sup>lt; <a href="http://housingprototypes.org/images/trinity%20buoy%20wharf">http://housingprototypes.org/images/trinity%20buoy%20wharf</a> 11.jpg>

### You will be assessed using the following criteria...

#### PART ONE: MODEL/ DRAWING (each out of 3)

1-did not complete criteria 2-effort shown to complete criteria 3-criteria was completed carefully

- /3 Your container city has at least 13 containers
- /3 Your container city cannot be more than 5 containers high
- /3 Your container city is being built on a concrete pad 70 feet by 40 feet
- /3 Your design must be practical and liveable
- /3 Your Container City is well constructed and stable

#### PART TWO: Written Explanation/Mathematical Calculations (each out of 3)

1-did not complete criteria 2-effort shown to complete criteria 3-criteria was completed carefully

- /3 You have explained your choice of layout and why it is suited to who would live there (Single, Single Family, Double Occupancy)
- /3 Determined the square footage of each of your units
- /3 What is the total surface area of your model in imperial measurements? (Not including the floor)
- /3 What is the value of building your container city (use \$120/square foot)?

**TOTAL=** /27