

EVOLUTION OF MANHATTAN

MANNAHATTA

"THE MANNAHATTA PROJECT ILLUSTRATES THE ORIGINAL ECOLOGY OF MANHATTAN PRIOR TO ITS METAMORPHOSIS BY EUROPEAN SETTLERS. THE PROJECT WAS NAMED AFTER WHAT THE LENAPE INDIANS USED TO CALL MANHATTAN OF 400 YEARS AGO... IN 1609, ONLY 300 PEOPLE INHABITED THE ISLAND. TODAY THERE ARE 1.5 MILLION PEOPLE."

-ERIC SANDERSON

MANNAHATTA DATA:
ECOLOGICAL COMMUNITIES:
APPALACHIAN OAK - PINE FOREST (COASTAL)

WILDLIFE:
MAMMALS - MEADOW VOLE/
WHITE-FOOTED MOUSE/ BEAVER/
EASTERN GREY SQUIRREL
BIRDS - BLUE JAY/ SHARP-SHINNED
HAWK/ WOOD DUCK/ AMERICAN
BLACK DUCK

FISH - BROWN BULLHEAD/
AMERICAN EEL/ CREVALLE JACK/
WHITE SUCKER

PLANTS - VIRGINIA THREESEED/
RED MAPLE/ AMERICAN
HORNBEECH/ STARVED PANICGRASS

TOPOGRAPHY
HYDROGRAPHY

PUBLIC PARKS/
LANDFILL

1811 GRID /
INDUSTRIALIZATION

FLOOD ZONE

GARBAGE
PRODUCTION
2013

[CONTAINED]
PHASE 1 : 2017

[CONTAINED]
PHASE 2 : 2022

[CONTAINED]
PHASE 3 : 2024

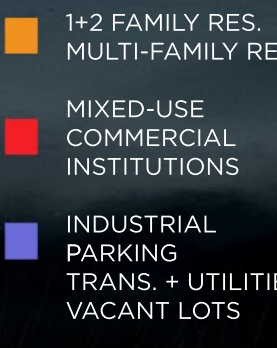
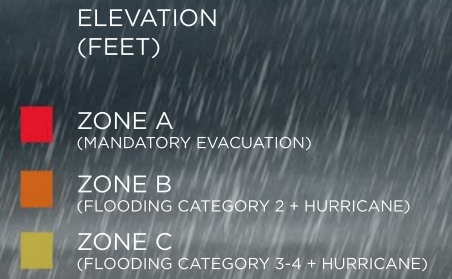
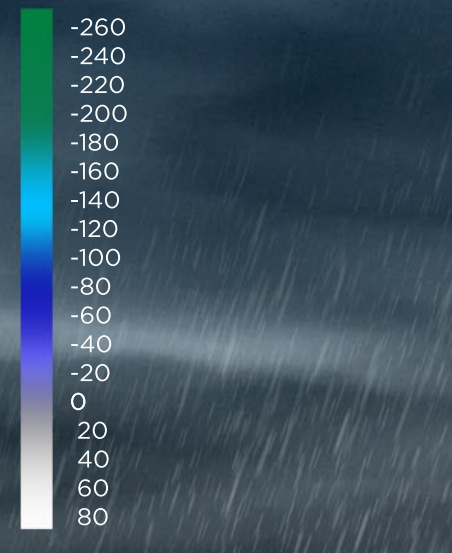
LAND USE



[CONTAINED] NYC

DISASTERS ARE BOTH ENVIRONMENTAL AND SOCIAL EVENTS. THE RISK OF A NATURAL DISASTER DOES NOT DEPEND UPON THE PHENOMENON ITSELF, BUT IS A RESULT OF THE VULNERABILITY OF THE POPULATION. IN THE 1950S THE MOVEMENT TOWARDS CONTAINERIZATION PUSHED INDUSTRIES OVERSEAS AND SUBSEQUENTLY KICK STARTED A RAPID DECLINE IN NEW YORK CITY'S INDUSTRIAL MARKETABILITY. AS A RESULT, WATERFRONT PROPERTIES HAVE BEEN REPROGRAMED TO ACCOMMODATE THIS PROCESS. IN THE LAST DECADE, ONE THIRD OF NYC HAS BEEN REZONED PROVIDING OUR EXPANDING POPULATION WITH HIGH END LUXURY CONDOS PRONE TO THE REPERCUSSIONS OF RISING SEA LEVELS. COUPLED WITH POPULATION INCREASE IS THE INEVITABLE PRODUCTION OF WASTE. CURRENTLY TAXPAYERS SPEND AN ESTIMATED \$980 MILLION TO EXPORT THEIR TRASH ALONE. AN APPROACH SOLELY RELYING ON SOFT INFRASTRUCTURE WILL ONLY MITIGATE RISING SEA LEVELS, IT IS NOT A SOLUTION. [CONTAINED] REPURPOSES GARBAGE AS AN ABUNDANT RENEWABLE RESOURCE TO STORMPROOF OUR CITY. USING AN ELEMENTARY INFRASTRUCTURE [CONTAINED] ENCAPSULATES THE ENTIRE REFUSE PRODUCTION FOR THE GENERAL POPULATION. IN ADDITION, [CONTAINED] ESTABLISHES THE RE-INDUSTRIALIZATION OF NYC WHILE SUPPLYING CITIZENS WITH PREVENTATIVE RESIDENTIAL TYPOLOGIES. CLIMATE CHANGE IS EVIDENT; AND IT IS OUR RESPONSIBILITY TO UNDERSTAND THE IMPLICATIONS HURRICANE SANDY SET FORTH. SERVING AS AN ANTICIPATORY INFRASTRUCTURE FOR OUR CITY, [CONTAINED] WILL DEFEND.

BECAUSE SEA LEVEL COULD RISE 1 M OR MORE DURING THE NEXT CENTURY, IT IS IMPORTANT TO UNDERSTAND THE DIRECT RELATIONSHIPS BETWEEN BOTH TOPOGRAPHY AND HYDROGRAPHICAL ELEVATIONS OF THE ISLAND.



MASTERPLAN
DOWNTOWN MANHATTAN



"SINCE THE DAYS OF DUTCH NEW YORK, MANHATTAN ISLAND HAS UNDERGONE MASSIVE TRANSFORMATION TO ITS COASTLINE. THE FIRST LAND RECLAMATION WAS UNDERTAKEN BY PETER STUYVESANT UPON TAKING OVER AS THE COLONY'S GOVERNOR IN 1646. HOPING TO FACILITATE WASTE DISPOSAL AND TRANSPORTATION, HE ORGANIZED THE EXCAVATION OF THE CANAL ALONG WHAT IS NOW BROAD ST."

DATA
REGENERATION

1 PERSON:
PRODUCES .4 TONS
OF GARBAGE ANUALLY



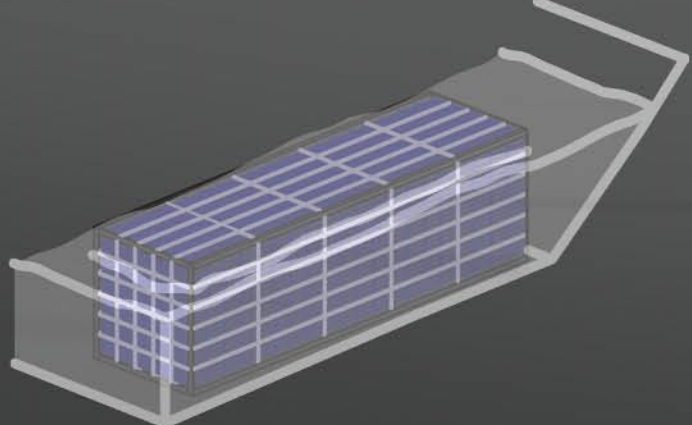
NYC POPULATION (8.2 MILLION) :
PRODUCES 40,000 TONS DAILY



TYPICAL SHIPPING CONTAINER:
30 TON CAPACITY/ 1,300
CONTAINERS TO ACCOMMODATE
1 DAY OF NYC OUTPUT



TYPICAL CITY BLOCK:
200' X 800'
500 CONTAINERS TO FILL 100%



TYPICAL CELL BLOCK:
200' X 800' X 200'
1,200 CONTAINERS TO FILL 100%

SECTION

NEW JERSEY

HUDSON RIVER

[CONTAINED] WEST

WEST CANAL

MANHATTAN

EAST CANAL

[CONTAINED] EAST

EAST RIVER

QUEENS/ BROOKLYN