

3512

Project Layouts

# Index

- Software's
- Devices
- How to start
- Image Placement

# Software's

## Layouts

- Illustrator CS5
- In-design CS5

## Images

- Photoshop CS5



# Devices

- Camera
- Scanner
- Computers



# How to start

Think of a theme for layout

- It could be something that has to do with your drawing.

a section, a object or theme of project

Approach images

- Create images according to your theme for your layout



**1 COLUMN WIDE**



**2 COLUMN, LEFT**



**2 COLUMN, RIGHT**



**3 COLUMN, LEFT**



**3 COLUMN, RIGHT**

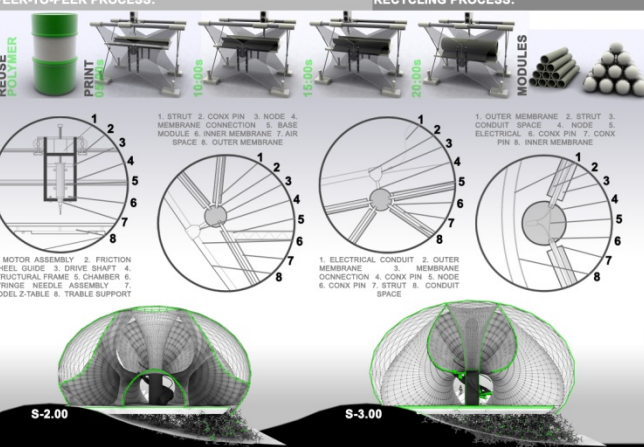
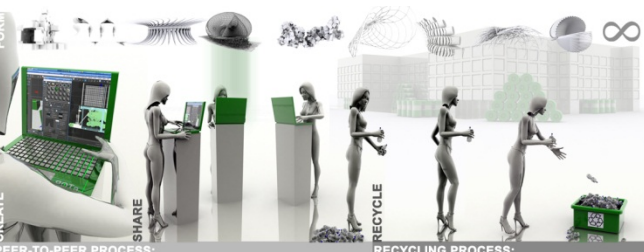


**3 COLUMN, CENTER**



OPEN is a project based off the idea that solving problems of the many, by the many, through an open source, peer-to-peer cooperation will solve problems. Sustainable housing solutions will come from the help and cooperation of the many. In the Information Age, where not only mass production is important, but coupled together with customization. Where economy once defined the modular, now data and information in the context and user's can directly become architecture via new digital manufacturing technologies. The OPEN project uses 3D-printing 3d printers to machine modular parts from a liquid polymer. The materials come from recycled plastics, and the input comes from an online peer-to-peer networking system aimed at the open source sharing of data.

# OPEN



**PROJECT INFORMATION:**

Single Family Dwelling

Three Bedrooms

Square Feet: 1800 SF

Longitude: 38 29 13 N

Latitude: 89 08 11 W

Form: Study of Minimal Surface

3408 Sq. Ft. of Eneper Surface

2324 Sq. Ft. of Membrane Surface

14,525 Linear Feet of Structural Tubing

522,900 Cu. Ft. of Material

**MATERIALS PRINTED FROM RECYCLED PLASTICS:**

1. Structural Tubing
2. Structural Node
3. Privacy Panel
4. Structural Flooring System
5. Packed Footing System
6. Polymer Membrane

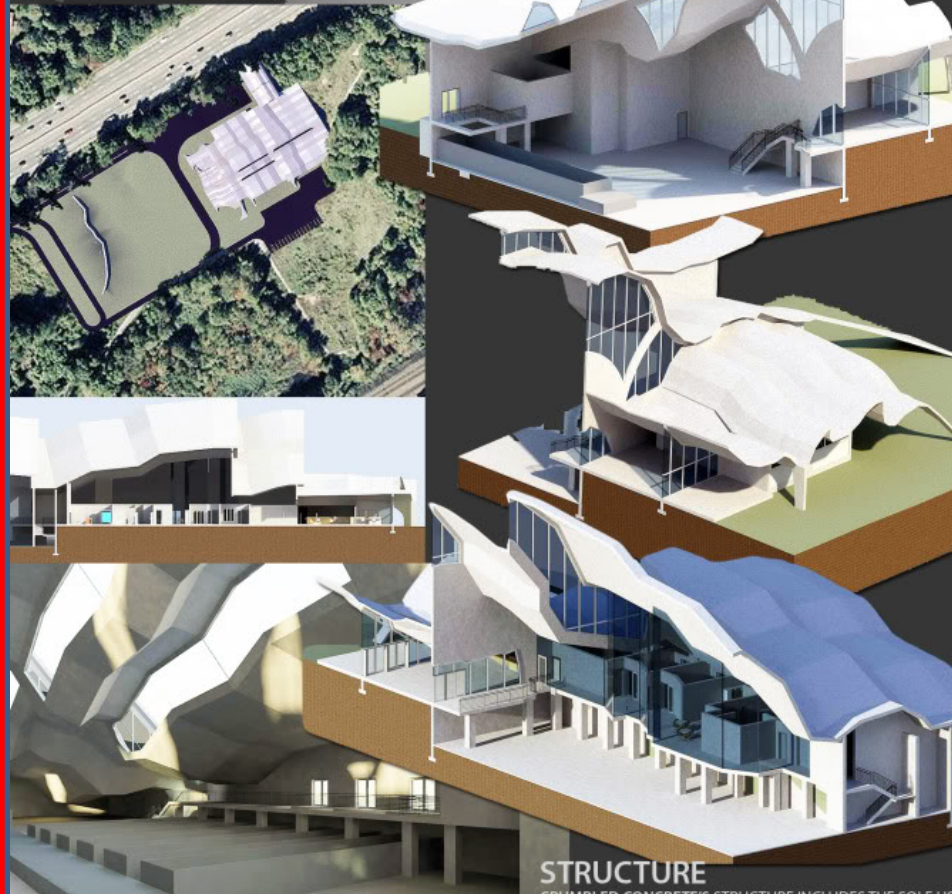


## CONCEPT

CRUMPLED UP PIECE OF PAPER PROVIDED THE BASIS OF THE BUILDING'S CONCEPT. THE SHARP EDGES, JAGGED SPINES, AND THE DRAPING ANOPY ROOF ARE INSPIRED BY A SINGLE PEICE OF CRUMPLED UP PAPER.

## SITE

RUMBLER CONCRETE IS LOCATED BETWEEN AND PARALLEL TO INTERSTATE-95 AND METRO-NORTH RAILROAD. THE TWO TRANSPORTATION ROUTES PROVIDE A BARRIER BETWEEN RUMBLER CONCRETE AND THE SURROUNDING RESIDENCES HILE STILL ALLOWING MAXIMUM SOUTHERN SUN EXPOSURE. EARLY ALL OF THE EXISTING FOLIAGE WILL REMAIN ON THE SITE.

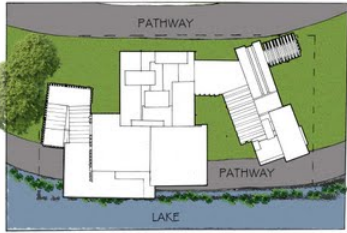


## STRUCTURE

CRUMBLER CONCRETE'S STRUCTURE INCLUDES THE SOLE USE OF CAST-IN-PLACE CONCRETE TO CREATE A SUSTAINABLE STRUCTURE. THE USE OF CAST-IN-PLACE CONCRETE ALLOW

# TURN

REST:STOP  
PRIMER TWO



## LOCATION PLAN



**LOCATION:**  
Botanic Garden - Symphony Lake

**CLIMATE:**  
Morning (7am) - 25 degree celcius  
Afternoon (1pm) - 29 degree  
Evening (7pm) - 26.5 degree

## NATURAL PHYSICAL FEATURE:

- Pathway: People Walk pass or through the pavilion
- Lake: Scenic Environment
- Trees
- Gradient: Steep Gradient (North East Direction)
- Pathway at the top of the slope
- Steep slope of plan grass

## CIRCULATION :

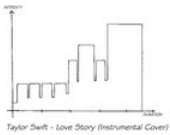
- 2 Pathway - Along lake & Above slope
- Human & Cultural :
  - Feeding of fishes/birds/turtles
  - Admiring the nature scenery
  - Picnic
  - Jogging
  - Performance at the Symphony stage
  - Taking pets out for a walk
  - Photography



SITE ANALYSIS  
1:1250

## SITE PLAN DESIGN STRATEGIES

Using a instrumental music as a design generator, and picking out a part out of the music converting it into a music bar.

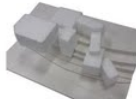


Taylor Swift - Love Story (Instrumental Cover)

## PROCESS MODEL



1ST MASSING MODEL



2ND MASSING MODEL

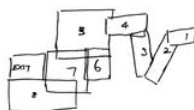
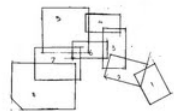


2ND PROCESS MODEL



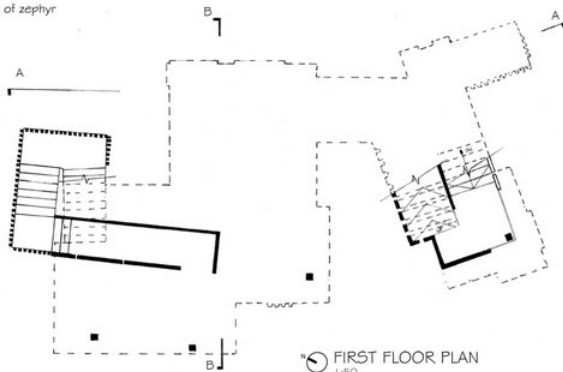
FINAL MODEL

## PROCESS SKETCHES

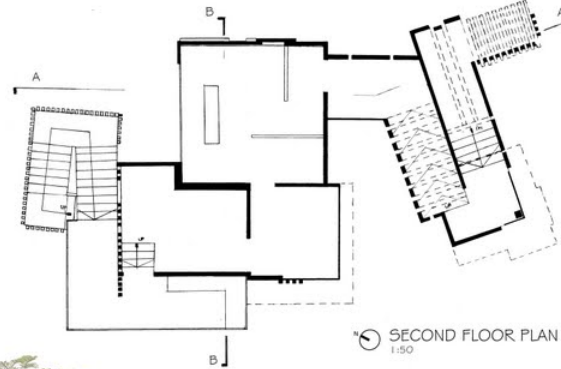


## HAIKU:

Garden with fresh air  
Stroll pass a pond with nature  
a breeze of zephyr



FIRST FLOOR PLAN  
1:150



SECOND FLOOR PLAN  
1:150



## DESIGN CONCEPT

Based on the fast music, TURN is design in a rhythmic and awaiting journey that somethings coming their way. It is designed in a rhythmic way for the first 4 spaces and volumetric intersection for the last 4 spaces. And a higher ground level of the climax viewing the lake and nature across the lake.



NORTH-EAST ELEVATION  
1:150

SECTION B-B  
1:150

SECTION A-A  
1:150

#### Shear Wall Structure

The System is cross-braced through large concrete and steel shear walls uninterrupted from the beginning of the foundation to the roof.



#### Public Swimming Pool

The System's swimming pool is designed to run across the entire building. Access to the other side is provided by bridges.



#### Solar Blinds

This semi-automated solar blinds system prevents excessive heat gain in summer while doing the opposite in winter.



#### Lobbies

The multiple lobbies are a possibility offered by the omnipresent elevator system. They provide an increased flow capacity for both cars and persons.

#### Circulation - Elevators

The twin movement elevator system is adapted from high density car parking to provide a private elevator ride to all tenants and guests.

#### Circulation - Escape Stairs

The streamlined corridor-less System requires an extensive array of emergency stairs, accessible only in extreme situations.



**ETC HOUSING SYSTEM**



administration



administration

The use of the white color palette is to highlight the building's form and structure, and to create a sense of openness and transparency. The white color palette is used throughout the building, from the exterior to the interior, to create a sense of continuity and unity. The white color palette is also used to highlight the building's structural elements, such as the white columns and the white railings, to create a sense of rhythm and order. The white color palette is also used to create a sense of light and airiness, to create a sense of openness and transparency. The white color palette is also used to create a sense of modernity and sophistication, to create a sense of a high-quality building. The white color palette is also used to create a sense of a clean and minimalist aesthetic, to create a sense of a modern and sophisticated building. The white color palette is also used to create a sense of a bright and airy atmosphere, to create a sense of a high-quality building. The white color palette is also used to create a sense of a sense of a clean and minimalist aesthetic, to create a sense of a modern and sophisticated building. The white color palette is also used to create a sense of a bright and airy atmosphere, to create a sense of a high-quality building.

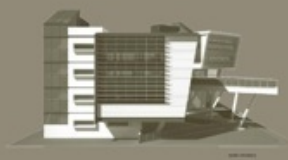
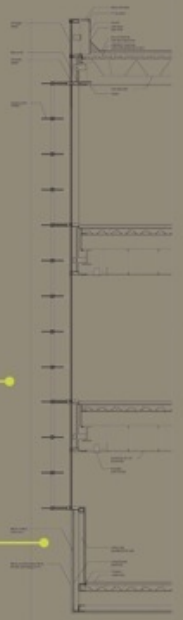
Project: 10000

section 3  
scale 1:100



Physical therapy is a health profession that focuses on the prevention, diagnosis, and treatment of movement-related issues. Physical therapists work with patients to improve their mobility, reduce pain, and prevent injury. They use a variety of techniques, including exercise, manual therapy, and education, to help their patients achieve their goals. Physical therapists work in a variety of settings, including hospitals, clinics, and private practices. They work with patients of all ages and abilities, and they play a vital role in helping people live healthier, more active lives. Physical therapists are highly trained professionals who are dedicated to helping their patients achieve their best possible health. They work closely with other healthcare providers, such as doctors and nurses, to provide comprehensive care to their patients. Physical therapists are also involved in research and education, and they play a key role in advancing the field of physical therapy. Physical therapists are an essential part of the healthcare system, and they are committed to providing the highest quality of care to their patients. Physical therapists are also involved in community outreach and public health initiatives, and they play a key role in promoting a healthy and active lifestyle for all people. Physical therapists are highly skilled professionals who are dedicated to helping their patients achieve their best possible health. They work closely with other healthcare providers, such as doctors and nurses, to provide comprehensive care to their patients. Physical therapists are also involved in research and education, and they play a key role in advancing the field of physical therapy. Physical therapists are an essential part of the healthcare system, and they are committed to providing the highest quality of care to their patients.

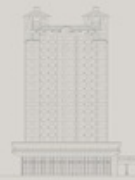
physical therapy



physical



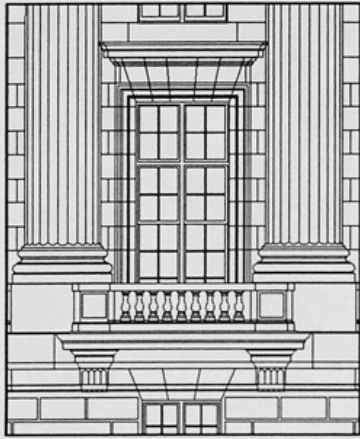
section 2  
scale 1:100



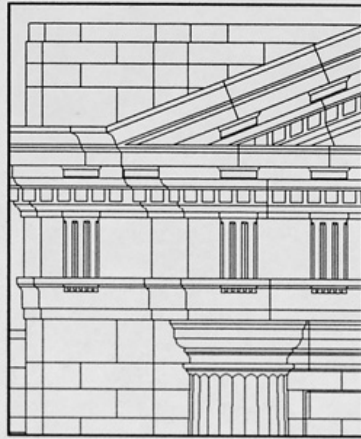
south elevation  
scale 1:100

# Image Placement

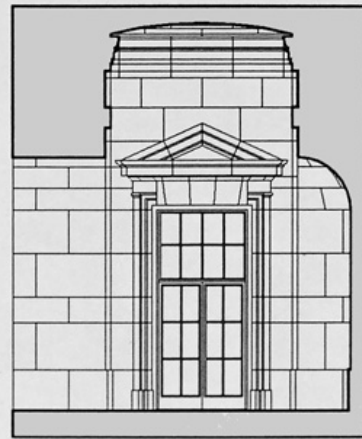
- Create hierarchy with images
- Create contrast with images



3. DETAIL



4. DETAIL



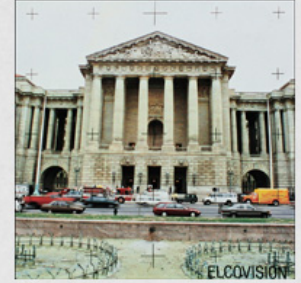
5. DETAIL



CONSTITUTION AVENUE

6. KEY PLAN

0 500'

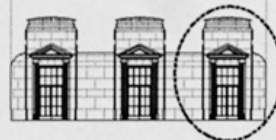


ELCOVISION



1. CONSTITUTION AVENUE ELEVATION (PARTIAL) ↑

2. ENTRY BENEATH PORTICO →



5

## DEFORMABLE SKIN

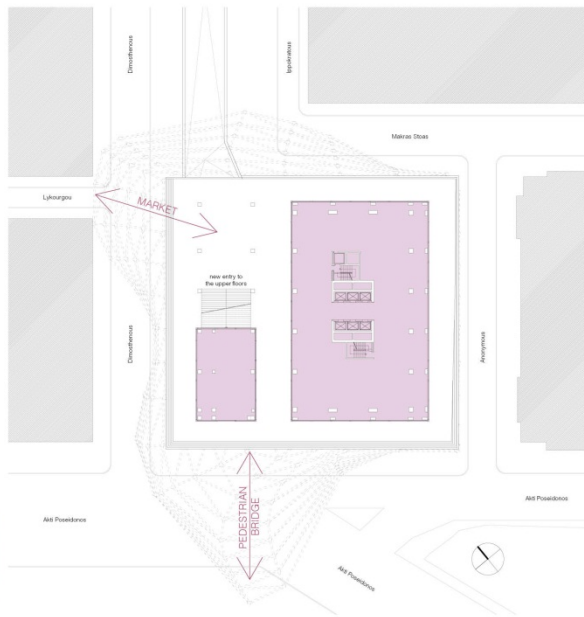
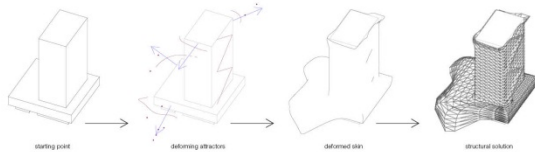
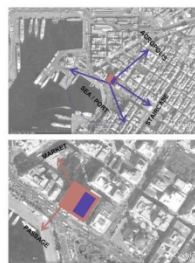
At the port of Piraeus this tower rises on a very prominent site with a vital surrounding. To resolve the problem of the sleeping giant, this project proposal suggests a deformable skin which creates interactions on different levels between the Piraeus Tower and its context. Taking the current structure as starting point, surrounding urban hotspots attract parts of the facade to reconfigure. These occurring deformations provide synergies with the surrounding which allow new happenings and reevaluate the whole area.

At Dimorphoussou and Lykourgou Street the skin stretches to provide a roof for the market and its lively atmosphere penetrates the ground floor of the new Piraeus Tower. On the other side at Ath Psephidou Street the skin allows building a pedestrian bridge across the busy road and creates a stronger relation to the waterfront and the port.

Above the plinth the skin grows upward approximately following the existing structure. Only where the new stairway climbs up, the skin deforms itself to enclose and hold it. At the top the deformation detaches again from the existing structure, pointing on one side towards the Acropolis to focus a dramatic view, while on the other side it provides a panorama across the port. These two deformations can be seen from outside as pointing towards the Acropolis and on the other as a welcoming gesture towards the sea. These deformations at the top interact on a bigger and more visual scale than the lower ones and enhance the tower's status in a larger city context.

The quality of interior and exterior value underlines the fact, that the building is alive with and without occupied indoor space and interacts on several levels with its context.

The overall project is designed and drawn in a parametric way to allow changes very easily. Attractions can be changed or even added and the written design engine updates the project dynamically.



## STRUCTURE AND MATERIALITY

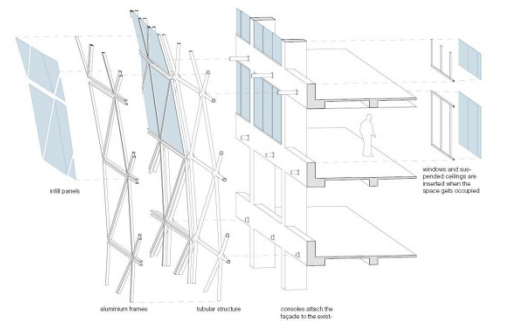
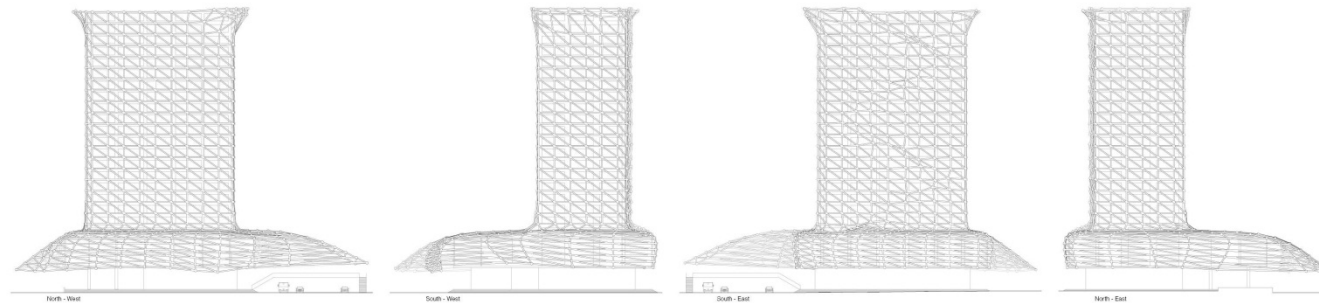
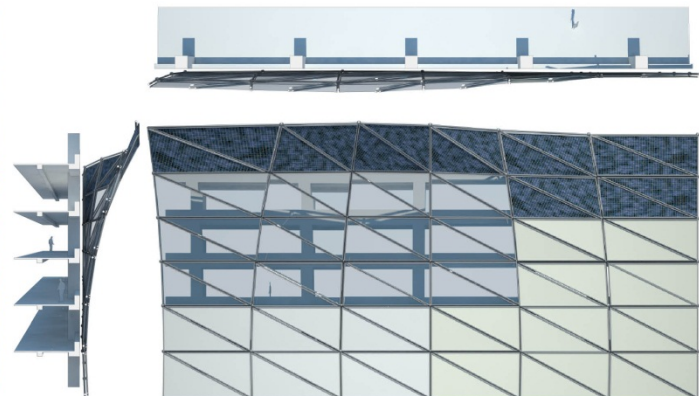
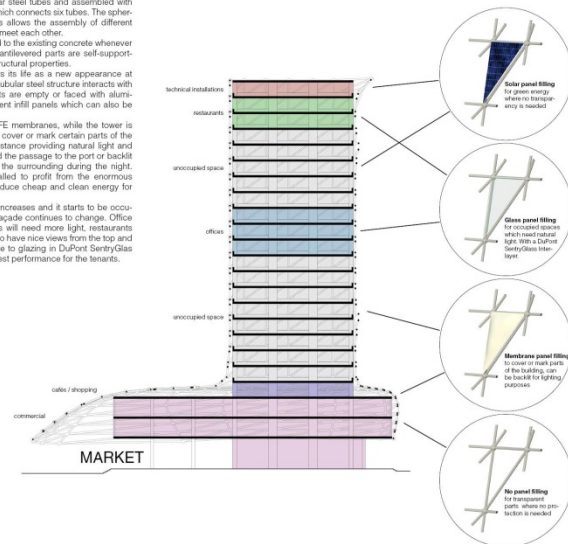
The skeletal structure consists of a triangulation of the skin which is realized in circular steel tubes and assembled with spherical joints, each of which connects six tubes. The spherical geometry of the joints allows the assembly of different angles in which the tubes meet each other.

The structure is connected to the existing concrete whenever no deformation occurs. Cantilevered parts are self-supporting and limited by their structural properties.

The deformable skin starts its life as a new appearance at the port of Piraeus whose tubular steel structure interacts with its surrounding. The facets are empty or faced with aluminum frames holding different infill panels which can also be changed over time.

Starting with DuPont's ETFE membranes, while the tower is still unoccupied, they can cover or mark certain parts of the tower. This includes for instance providing natural light and protection to the stairs and the passage to the port or backlit elements which can light the surrounding during the night. Solar panels will be installed to profit from the enormous available surface and produce cheap and clean energy for a green future.

As Piraeus Tower's value increases and it starts to be occupied more and more the facade continues to change. Office and administrative spaces will need more light, restaurants and lookout points desire to have nice views from the top and the infill panels will change to glazing in DuPont SentryGlas Interlayer to provide the best performance for the tenants.



## DEFORMABLE SKIN