I. TEAM CHARTER

1. TEAM INFORMATION
   a. See excel file

2. TEAM PURPOSE AND OBJECTIVES

   A. Team purpose:

   a. To develop and design a home and center of education for girls who have been previously trafficked.

   B. Objectives:

   a. Develop user and data based research plans to learn how Indians live and build structures.
   b. Collaborate material and human centered research towards the final project
   c. Test building methods at full scale
   d. Develop a full program for the girls based on collaborative research that can be presented to Kranti by the end of the semester.

3. BACKGROUND

   A. Customer/Sponsor : Kranti, a women's rights organization being established by an IIT PSYC Alumnus that is in the process of developing a home and school for sexually trafficked girls in Mumbai, India

   B. User: Previously Trafficked Girls
       User problems:

   a. Finding a safe place to live
   b. No family and support
   c. Schooling for a better future
   d. Language diversity – many girls only speak their local language
   e. Integration into society after rehabilitation
   f. Physical and emotional problems from being sexually trafficked

   C. Technology or science involved in addressing the problems:

   a. Cinva Orum 3000 Earth Press - Machined bought and shipped from Tehachapi, Ca used to make compressed earth bricks.
   b. Internet - communicating with client; costs: $85
   c.   International/Liaison researcher on the ground in Mumbai – trips to site; costs : $30
   d. Cement (mini) Mixer
   e. Materials – Cement, tarps, storage platform
   f. Machine Level Platform

D. Historical success or failure in addressing problem:

    a. Other models of homes that exist for trafficked girls have typically followed the pattern of repatriation, marrying the girls off, or teaching them a small trade. This approach isn't the most successful since after repatriation or being married many find themselves being trafficked again. Usually the trade that is learned isn't adequate for them to support themselves outside of the home.

    b. There is also a lack of support from family and home communities because of their previous life of being trafficked.

E. Ethical Issues in investigating the problems:

    a. The girls' privacy while conducting research

F. Business/Societal Cost of Trafficking:

    a. Trafficking is treated like an industry in the economy. Generally society doesn't want to address the problem because it generates money.

G. Proposed Implementation Outline:

    a. Refer to Research Plan

H. Similar Solution:

    a. Research done by Precedent studies group

I. Critical Supplementary Documents:

    a. Attach Articles read in class

4. TEAM VALUES STATEMENT

1. Showing up on time
2. Clear understanding of schedules and obligations including agreed upon times and tasks before meetings end.
3. Addressing conflicts and complaints protocol during class meetings for group conversation about problems and conflict resolution
4. Hierarchal conflict resolution: subgroup > class > instructor

5. PROJECT METHODOLOGY

1. Work Breakdown Structure
   a. Problem Solving
1. Work Breakdown Structure
   a. User based Research
2. The Process:
   a. User based Research
   b. Data documentation/Analysis/Presentation
   c. Testing full scale mock-ups
3. Major tasks:

    a. Understand Mumbai : The City
    b. Sustainable Systems – Methods and Materials provide examples for each system/method
    c. Programmatic needs (inside/outside, private/public activities, safety/security)
    d. Precedent studies (existing models and possible a-typical models)
4. Testing, Analysis and Documentation of potential solutions:
    a. Testing: Models, Charettes,
    b. Analysis: Group meeting, client/user feedback, presentations
    c. Documentation: Universally formatted pdf/binder
5. Completion of Tasks:
    a. On time provided that member contribute
6. TEAM STRUCTURE
    1. Team Leader : ??
    2. Subteams:
       o Mumbai: The City – Leader: ??
       o Programmatic Needs - Leader: ??
       o Sustainable Systems- Leader: ??
       o Precedent Study - Leader: ??
7. TEAM STRUCTURE

Gathering research   Design and analysis   Prototyping

General Tasks: Mumbai Sustainable Systems Programmatic Needs Precedent Studies	Project Plan	Project presentation	Presentation Skills Seminar **10.1**						Ethics Reflective Report **DUE 11.11**		Ipro Day Abstract Brochure, & Poster **DUE 11.30**	IPRO day final presentation **DUE 12.2** Final Project Report & Ipro Day **DUE 12.4**
	9.15	**9.22**	**9.29**	**10.06**	**10.13**	**10.20**	**10.27**	**11.3**	**11.10**	**11.17**	**11.24**	**12.01**
Developing & Researching-	■	■	▓	▓	▓	▓	▓	▓	▓	▓	▓	
Analyzing Data	■	■	▓	▓	▓	▓	▓	▓	▓	▓	▓	
Documenting the Data	■	■	■	■	■	■	■	■	■	■	■	
Development & Refinement	■	■	■	■	■	■	■	■	■	■	■	
Design & Analysis - Material Transformation			■									
Design & Analysis – Dirt & Compression				■	■							

Design & Analysis – Material Testing						■	■					
Review								■				
Full Scale Testing									■			
Full Scale Mockup										■	■	
Final Presentation												■

2. Expected Results:
   A. Provide details on expected activities involved in the project.
   - The class will be creating different activities to help understand how the girls live and what the girls want.
   - We will also be making trips to any related precedent studies to understand how they are built and how design is affected by need base.
   - As design and research of materials form, we will be trying out new materials to make Compressed Earth Block (CEB) structures with a Sinba Press Machine. We will test the structures by making full scale mock ups.
   B. Describe expected data from research and testing involved in the project.
   - We hope to receive an abundance of information about the girls in Kranti and about the environment they live in, as well as where they are coming from. This way we can understand their lives in order to design a home and school to better fit their needs.
   - From the testing of the prototypes, we can hopefully achieve a successful solution to a material and a sustainable design that can be easily built and maintained for the Kranti girls.
   - With the data about other organizations, we can create a program that will help the girls of Kranti have a better life and help them grow into successful women.
   C. Define potential products resulting from research and testing
   - From the research and testing, we hope to have at least 3 well refined products. These products will be potential materials and design concepts for the home and school. The full scale mock ups will represent a portion or detail of the building we have designed.
   - Learn in detail the material properties and push them to their limits.
   - Possibility to improve in some certain way the materials properties.
   D. Define potential outputs to be produced through each of the project tasks.
   - Understanding Mumbai: We will have a map of all the points of interest, a site, and an analysis of the city life in Mumbai
   - Sustainable Methods: We expect to have several different sustainable materials to test and also sustainable design strategies to incorporate in the building.
   - Programmatic Needs: We hope to have enough information about the girls to understand what they need and develop a program for the building. This will also lead to a program that Kranti will offer the girls to rebuild their life.
   - Precedent Studies: Visit and study other shelters and schools. Eventually we will design a home and school similar to the precedent studies but altered to fit the need of the Kranti girls.

E. Describe the expected results in terms of deliverables that will be produced by the team i.e. a working prototype, survey or focus group feedback, grant proposal, etc.

- Many prototypes of full scale mock ups
- Data and research compiled into presentation diagrams
- Analyzed data and documented into a final report

F. Summarize the challenges, risks and assumptions that you can anticipate affecting your results.

- CEB testing could go horribly wrong including factors regarding weather and environment conditions.
- Inappropriate chosen materials building materials.
- Bad execution of block connections.

G. Discuss how the expected results will be incorporated in a proposed solution or contribute to a solution process.

- The results will lead us to final decision of selecting the materials.
- By developing the final results, we are going to gain basic knowledge of the actual building how is going to be build and probably it will lead us to be awarewhat to avoid in the actual building process.
- If we find some faster process of developing of some of the materials, probably this method is going to be incorporated in the physical building of the home/ school.

3. Project Budget

4. Designation of Roles
A. Assigned roles:

- Speaker – controls the agenda during meeting, makes sure meetings go according to agenda
- Minute Taker – takes notes and distributes them to the group
- Agenda Maker – creates an official agenda for group meetings