

TOWARDS GREATER HEALTH THROUGH GOOD HYGIENE

The intent of the design is to inculcate into young girls the practice of good hygiene. Towards this end a set of singular but modular in form toilets are proposed that are both gender specific and age specific.

Towards this end the design uses either recyclable waste or locally grown / produced sustainable products in its construction. While the elements of the design are common their manifestation would be specific to their geographic region and their craft and construction traditions.

Specifically, the design divides school children into three categories on the basis of age.



3D VIEW

4. MODULARITY

would be recommended. Each individual module can be expanded in two directions. On account of the skewed plinth of each individual unit, when placed collectively it would form a recognizable pattern that would give the toilets their own unique identity. On combining multiple units infrastructural elements such water tanks would potentially be common.

5. GENDER SPECIFICITY

The toilets fall into three typologies. Each typology reflects not only the gender specificity of the toilet but also the differences that occur on account of age. Towards this end the toilets have been placed into three categories – early primary school girls, middle and later primary school girls and later primary and secondary school girls.

6. HYGIENE

Each toilet has a raised platform and a sloped floor to ensure that its dry and clothing does not get unnecessarily wet. A drain has been provided for this water. Space for educational material has been identified as well as facilities for menstrual hygiene.

Early Primary School Girls: 4 to 7 years old.

The use of light colours, natural light and ventilation, hygiene promotion material to establish the link between education and practice, space for a teacher or an assistant to teach the girl proper toilet use and hand washing.

Middle and Later Primary School Girls: 8 to 11 years old.

Natural light and ventilation, the use of light colours, promotion materials to educate on the importance and practice of hygiene, integrated drinking water, hand washing and cleansing facility, privacy for individual users.

Later primary and secondary school Girls: 12 to 18 years old.

In addition to the above privacy for individual users, provisions for menstrual hygienic.

1. SPATIAL ORGANIZATION

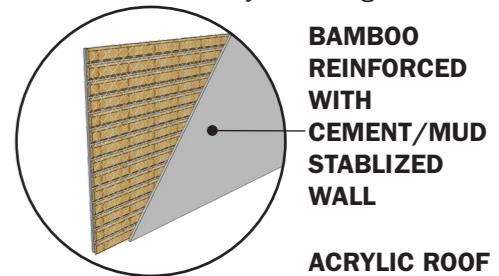
Each module is 4'-0"x4'-0" and is set on a raised plinth. The plinth is skewed to a 45 degree angle. The module consists of programmatic elements for ablution, defecation, waste management, cleansing and promotional educational material. The roof is inclined towards the rear to allow for rain water drainage and for light and ventilation to enter from the raised sides. Provisions for an overhead water tank can be made on the roof.

2. MATERIALITY & CONSTRUCTABILITY

Through the use of recyclable waste (Discarded PET bottles (aerated drinks)) and bamboo clad or re-inforced walls, the single storey toilets blocks would have a minimum carbon footprint. The materials are chosen so that they can be incrementally added to. For example the bamboo in a bamboo screen wall can serve as reinforcing with mesh for a lightweight concrete wall on which other finishing material can be subsequently applied. Through this as rural India gets urbanized these toilets can without being demolished and rebuilt be modified.

3. SUSTAINABILITY

Through both recyclable and sustainable materials the toilet block has a minimum carbon footprint. While the bamboo is fast growing and biodegradable, the PET bottles can be recycled. Natural lit and oriented to capture prevailing wind directions the toilets would require minimum electricity. LED light fixtures



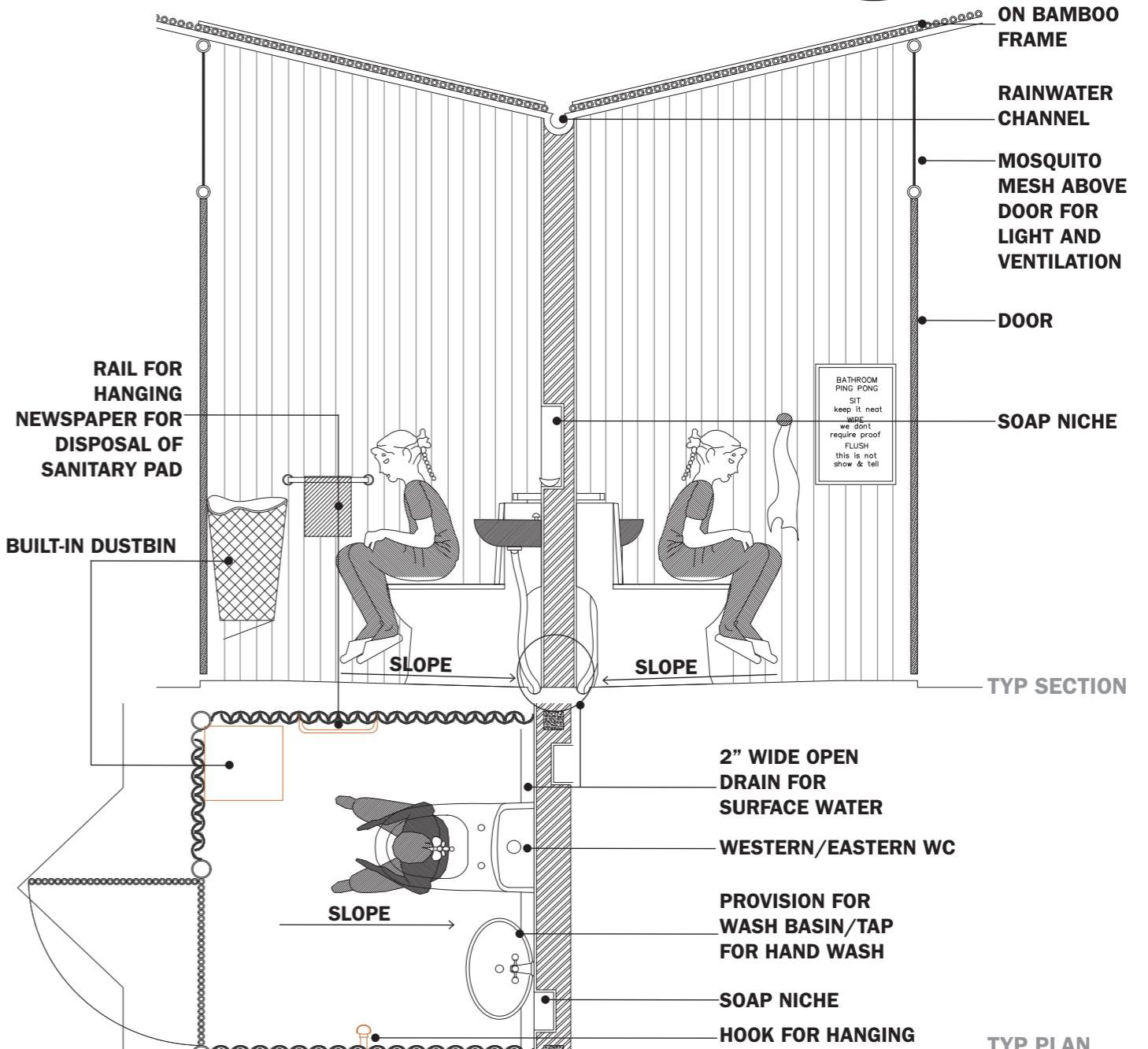
ACRYLIC ROOF ON BAMBOO FRAME

RAINFALL CHANNEL

MOSQUITO MESH ABOVE DOOR FOR LIGHT AND VENTILATION

DOOR

SOAP NICHE



TYP SECTION

2" WIDE OPEN DRAIN FOR SURFACE WATER

WESTERN/EASTERN WC

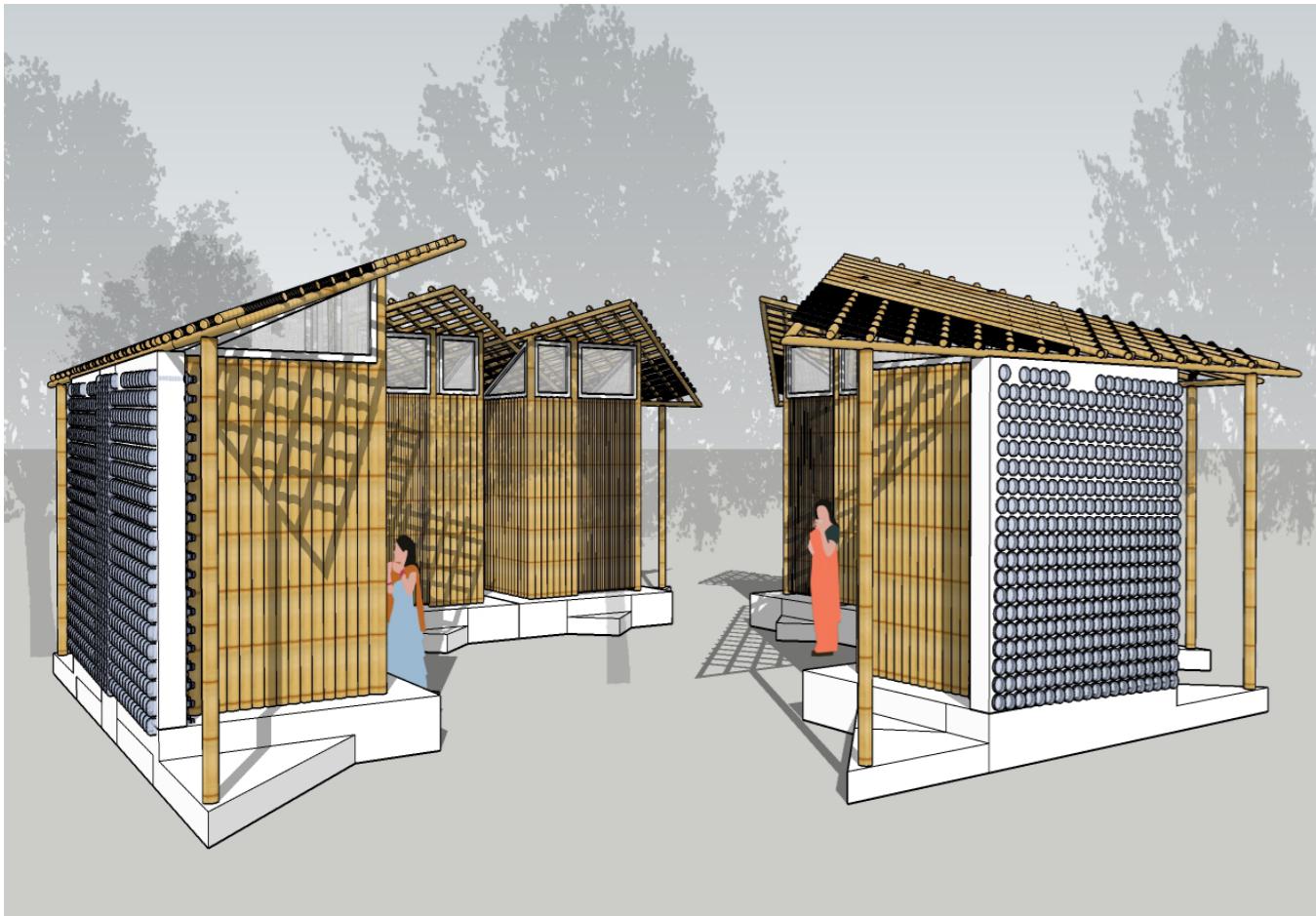
PROVISION FOR WASH BASIN/TAP FOR HAND WASH

SOAP NICHE

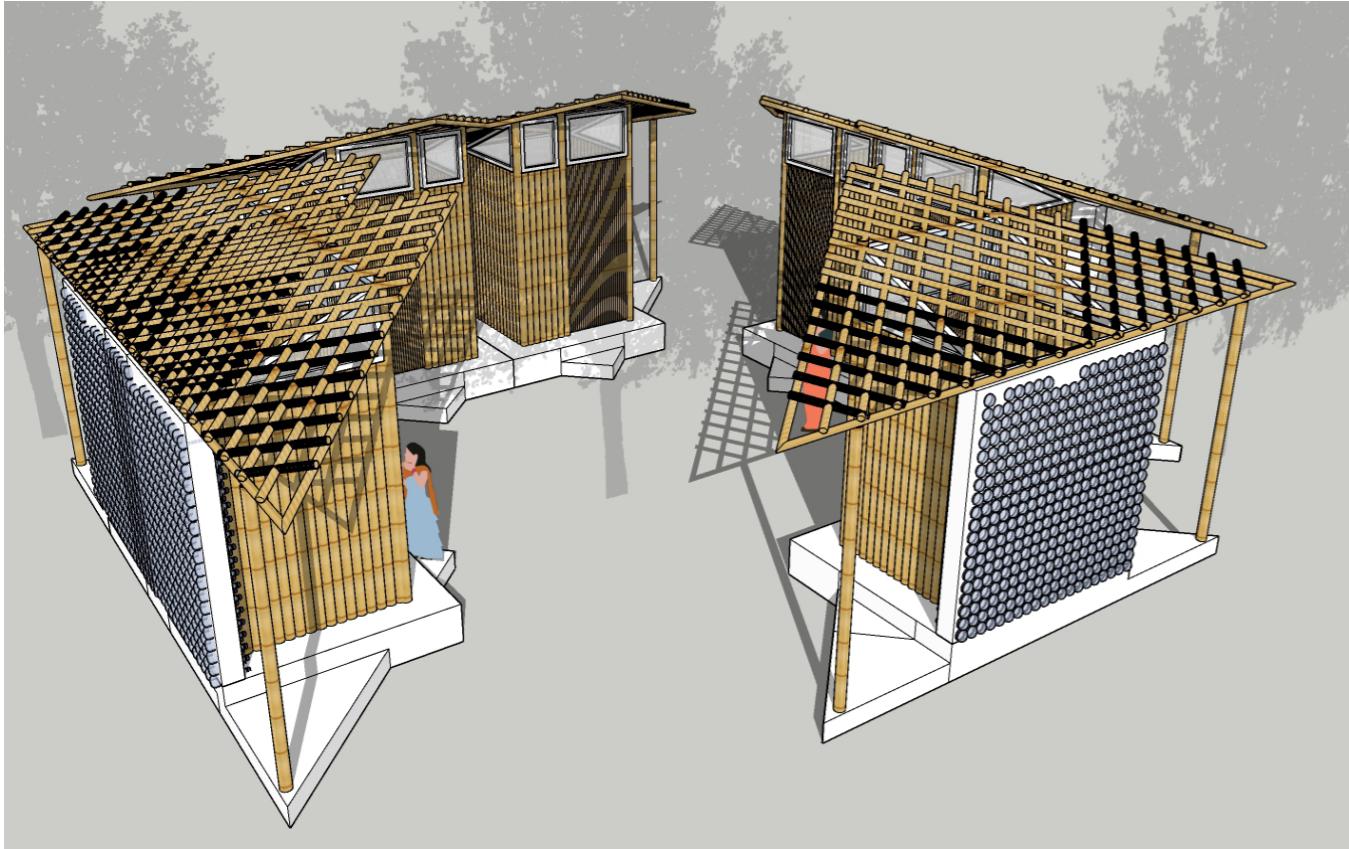
HOOK FOR HANGING

TYP PLAN

TOWARDS GREATER HEALTH THROUGH GOOD HYGIENE



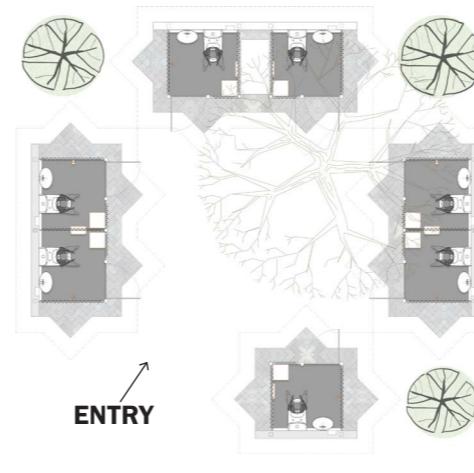
CLUSTER VIEW 1



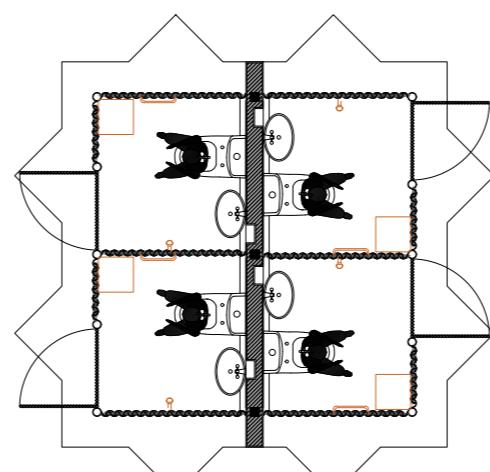
CLUSTER VIEW 2

7. IDENTITY AND COMMUNITY

The toilets collectively form a distinct and identifiable image. An extended plinth and overhang provide protection from the weather but also serve as the infrastructure for other possibilities. These are enabled through the manner in which individual modules are arranged.



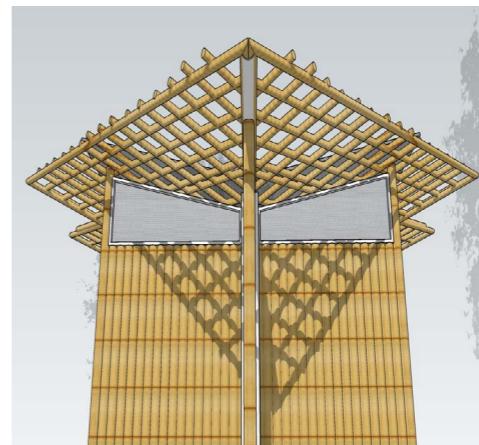
CLUSTER PLAN



CLUSTER MODULE 1
- INTER LOCKING SPLIT
BAMBOO WALL SYSTEM

8. GEOGRAPHY SPECIFICITY

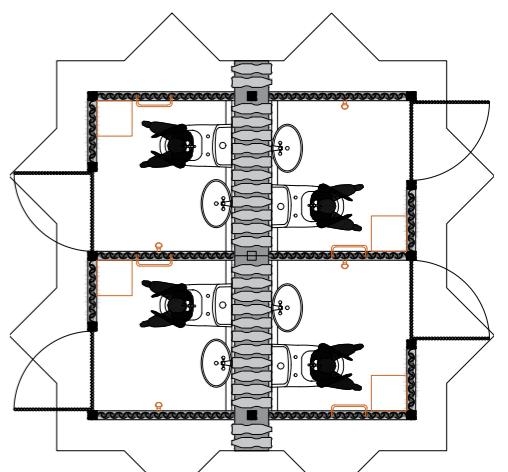
The designs of the toilets can be modified and manifested based on the availability of local craft skills. This would help create a greater sense of community, ownership and identity with the constructs. The toilets would thus be an agent for the strengthening of local community and traditional building skills.



ROOF AND RAIN WATER CHANNEL
VIEW

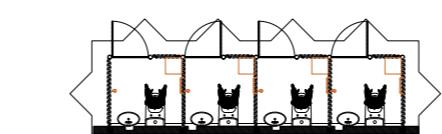


PET BOTTLE REINFORCED IN CEMENT/
MUD WALL VIEW

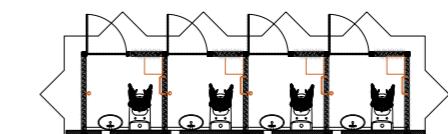


CLUSTER MODULE 2
- BAMBOO REINFORCED WITH
CEMENT/MUD STABILIZED WALL

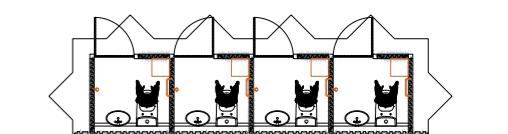
CLUSTER MODULE 3
- BAMBOO REINFORCED WITH
CEMENT/MUD STABILIZED WALL WITH
PEPT BOTTLE SERVICE WALL SYSTEM



LINEAR MODULE 1
- INTER LOCKING SPLIT
BAMBOO WALL SYSTEM



LINEAR MODULE 2
- BAMBOO REINFORCED WITH
CEMENT/MUD STABILIZED WALL



LINEAR MODULE 2
- BAMBOO REINFORCED WITH
CEMENT/MUD STABILIZED WALL WITH
PEPT BOTTLE SERVICE WALL SYSTEM

9. MANTAINABILITY

Through the use of local materials and local building techniques "the expertise" to build and take care of the toilets exist within the community. Easy to obtain and maintain materials are to be used.