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Shree Kshetrapaleshwori Secondary School

Bhotenamlang-9, Tipeni, Sindhupalchok

Ref. No.: 28

Date: 20 Nov 2016 (2073/08/05)

Let. No.:073/74

Shree Bishnu Kumar Shrestha

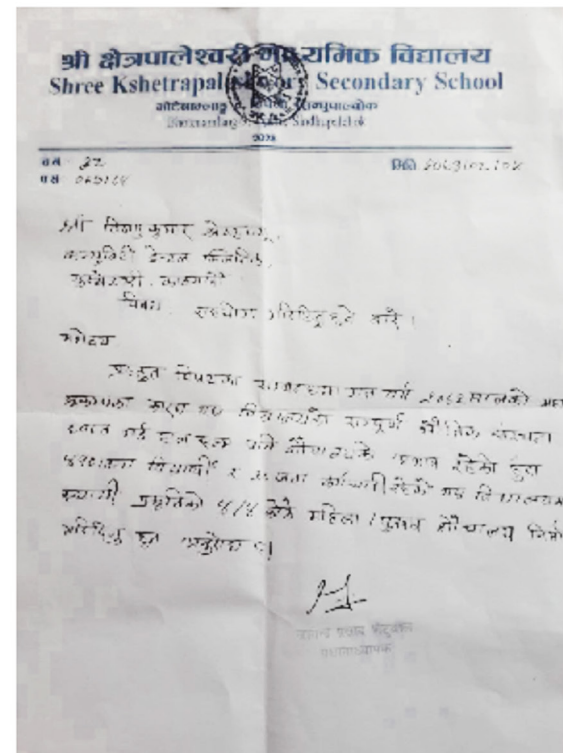
Subject: Request for help.

Dear Sir,

Regarding above mention subject, due to the 2015 devastating earthquake, all the physical structures of the school were completely damaged. The school has 410 students and 20 teacher's family and we are having very high scarcity of the toilet. We request to build permanent type of 4 male and 4 female toilets in to our school.

Jagendra Prasad Bhetuwal

Principle



Letter of request from the Shree Kshetrapaleshwori School

Consultation with the school



Healthhabitat & students receiving briefing from the school



Interview with girls from the school



Interview with boys from the school

REQUESTS, CONCERNS, AND FEEDBACK FROM USERS	
TEACHERS	<ul style="list-style-type: none"> ☐ MOST HOUSES IN VILLAGE DESTROYED; SO PEOPLE USE SCHOOL TOILETS – THE TEACHERS DO NOT LIKE THIS ☐ WOULD LIKE TO BE ABLE TO OBSERVE STUDENTS VISITING THE TOILET FACILITIES ☐ REASONS FOR SEPARATION FROM STUDENT TOILETS ARE: PRIVACY, QUICK ACCESS, AND SANITATION. ☐ SEPARATE MALE AND FEMALE TOILET WANTED ☐ OK WITH BEING ATTACHED WITH SEPARATE KEY ACCESS ☐ 400 CURRENT STUDENTS (60% FEMALE, 40% MALE) ☐ 11 MALE STAFF, 8 FEMALE STAFF ☐ SUBMITTED PROPOSAL TO ASIAN BANK FOR SCHOOL FENCE ☐ CURRENTLY 8 CLASSROOMS UNDER CONSTRUCTION ☐ POTENTIAL 8 CLASSROOMS ON TOP OF OTHERS ☐ TEMPORARY CLASSROOMS TO BE REMOVED LATER FOR MORE OVAL SPACE ☐ AIM IS FOR 20—36 CLASSROOMS ☐ PLAN TO USE RECONSTRUCTION OFFICE FOR A FUTURE HOSTEL <ul style="list-style-type: none"> - CURRENT APPROVAL FOR YEARS 9/10 – 46 STUDENTS - FUTURE PLANS FOR 11 AND 12 GRADE - AIM FOR 40 STUDENTS FROM EACH YEAR IN TECHNOLOGY PROGRAM - TOTAL 160 STUDENTS - WOULD LIKE HALF OF THE NEW TOILETS TO BE BUILT FOR FUTURE HOSTEL ☐ REQUESTED <ul style="list-style-type: none"> - 3 BOYS TOILETS - 3 GIRLS TOILETS - 2 STAFF TOILETS - IF POSSIBLE WOULD LIKE A TOTAL OF 10 TOILETS
FEMALE STUDENTS	<ul style="list-style-type: none"> ☐ TOILETS SHOULD BE NEAR THE CLASSROOMS ☐ MOST LEAVE SCHOOL AT LUNCHTIME TO EAT IN THE VILLAGE ☐ HANG OUT ON THE GRASS FIELD NEAR THE ROAD ☐ GIRLS GO WITH FRIENDS TO THE TOILET – SCARED OF BEING LOCKED IN ☐ WOULD LIKE PRIVACY BY DISTANCE/SEPARATING WALL ☐ WILL CHOOSE NOT TO USE A TOILET IF UNCLEAN OR SMELLING ☐ WOULD LIKE A BIN OR BUCKET FOR DISPOSAL OF DISPOSABLE SANITARY PADS ☐ REQUESTED 2 HOOKS IN EACH CUBICLE FOR HANGING CLOTHES ☐ THE CURRENT TOILET CUBICLES ARE TOO SMALL AND THERE IS NOT ENOUGH LIGHT ☐ THEY LIKE THE COLOUR A LOT (BLUE) ☐ BRUSH TEETH AT HOME ONCE A DAY BUT WOULD DO SO AT SCHOOL IF FACILITIES WERE PROVIDED ☐ WAITING QUEUE ON AVERAGE 4-5 PEOPLE LONG, MORE DURING EXAM PERIOD. ☐ TOILETS TO BE NOT NEXT TO THE ROAD SIDE PLAYING AREA ☐ STUDENTS RINSE HANDS FROM THE TAP BUT THERE IS NO SOAP. THEY ALSO DRINK FROM THE SAME SOURCE
MALE STUDENTS	<ul style="list-style-type: none"> ☐ PREFERRED SITE DOWN NEAR THE GATE (LEVEL 1) ☐ IF FLOORS WERE TILED BOYS WOULD BE MORE LIKELY TO KEEP THEM CLEAN ☐ STRONG WANT/NEED FOR MORE LIGHT INTO THE TOILETS ☐ NEED FOR A WATER TAP IN EACH TOILET ☐ ABSOLUTELY AGAINST BUILDING ON THE OVAL ☐ WORRIED THAT BALLS FROM PLAY MAY DAMAGE NEW BUILDING ☐ THEY WOULD LIKE THE SMELL NOT TO AFFECT THE CLASSROOMS ☐ SEPARATION BETWEEN BOYS AND GIRLS AND STUDENTS AND STAFF ☐ PREFERENCE FOR LARGER THAN CURRENT SIZED CUBICLES IF POSSIBLE ☐ EACH TOILET NEEDS A BUCKET ☐ LIKED THAT THE CURRENT DOORS ARE LOCKABLE FROM THE INSIDE ☐ PREFERENCE FOR URINALS FOR SPEED/REDUCED QUEUE IF POSSIBLE/BUDGET ALLOWS ☐ WANT FOR OPEN AREA NEAR NEW CLASSROOMS FOR VOLLEYBALL ☐ DO NOT LIKE VILLAGERS USING THE SCHOOL TOILETS ☐ CURRENTLY DON'T HAVE A CONSTANT WATER SUPPLY

Design development

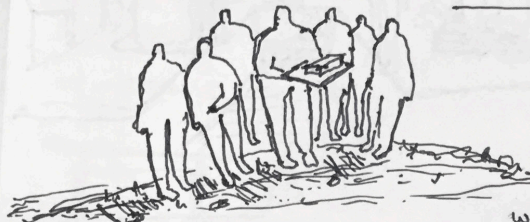


Students working on the project

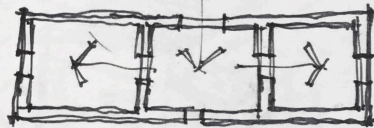
FAMILY PRESENTATION

- PLAN CHANGE: KITCHEN TO MIDDLE
- INTERNAL DOORS. NO WINDOWS ON WEST FRONT.
- NO SIDE WINDOWS • CIRCULAR IS PREMISE HOUSE TOO HIGH.

*ANIMATE CUT MOVED AROUND TO OTHER SITE.



MODEL DEMONSTRATION



TIPPECAN SCHOOL BRIEFING

*350 STUDENTS IN SCHOOL - 5-18 Y.O.

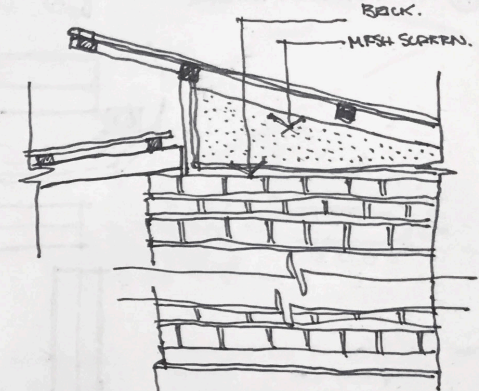
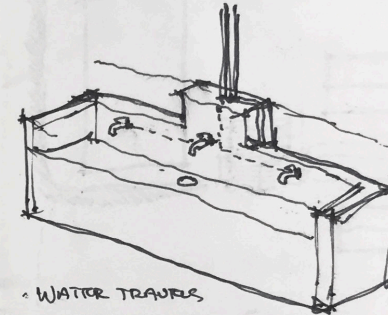
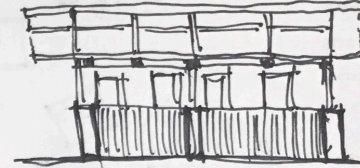
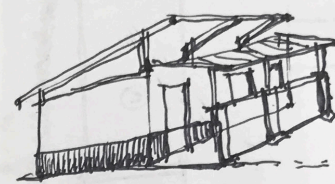
- COMMUNICATING WITH THE FAMILY THROUGH 'FRIM' THE AS A TRANSLATOR WAS MORE CHALLENGING THAN I THOUGHT IT WOULD BE. THE FAMILY SEEMED TO UNDERSTAND THE FRAME MODEL ALOT MORE THAN THE DRAWINGS.

WHEN WE PICKED OUT THE FOOT PRINT OF THE HOUSE ON SITE & TALKED THROUGH OUR DESIGN WITH THEM, THEY INDICATED THAT THEY WOULD LIKE TO MAKE A FEW CHANGES:

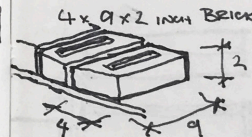


BIG SIDE TO TIPPECAN

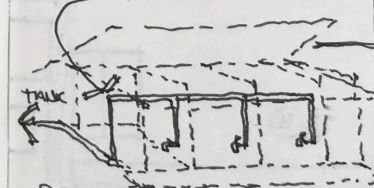
- WALK TO SCHOOL FOR FINISHED D.P.D
- TOILET BLOCKS INSPECTION/ANALYSIS : DHANU PALDAP.



• WATER TRAVELS FROM ROOFS TO 3000L TANK BEFORE GOING TO TOILET BLOCKS FOR HAND WASHING & FLUSHING



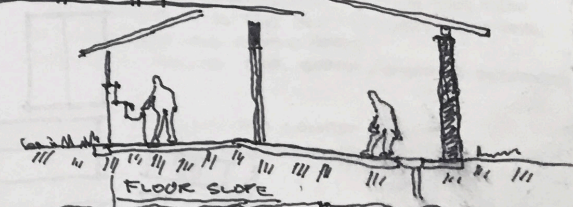
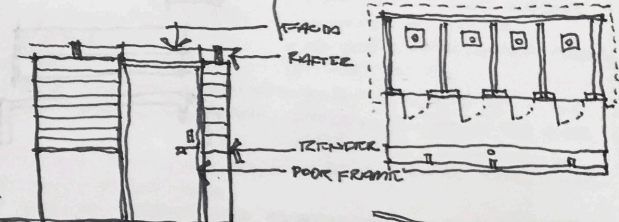
BRICK CUTS KNOWN OUT FOR PIPE



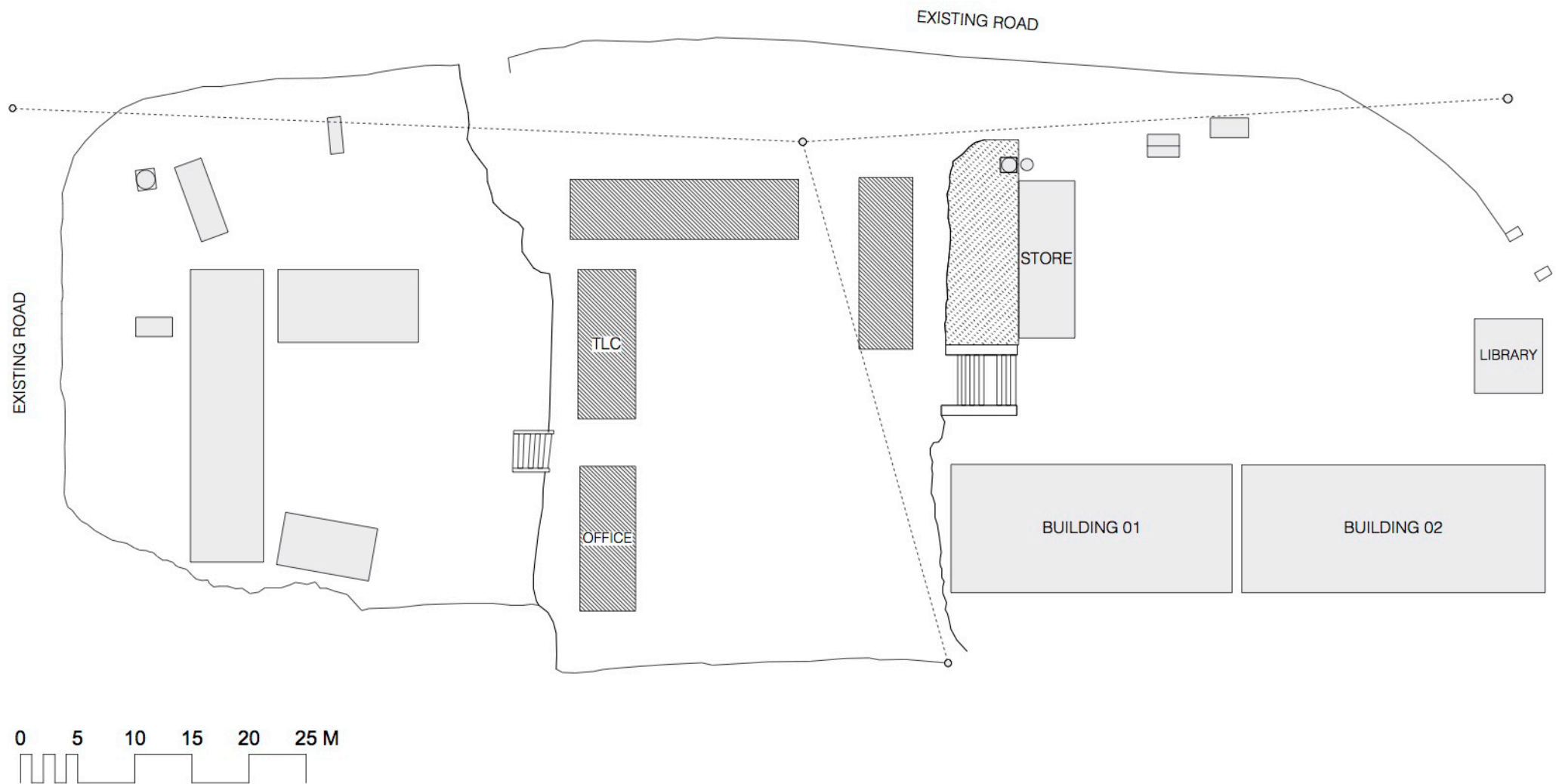
PIPE SYSTEM TO TOILETS FROM TANK

*NO. OF STUDENTS. AMOUNT OF WATER USED PER STUDENT.

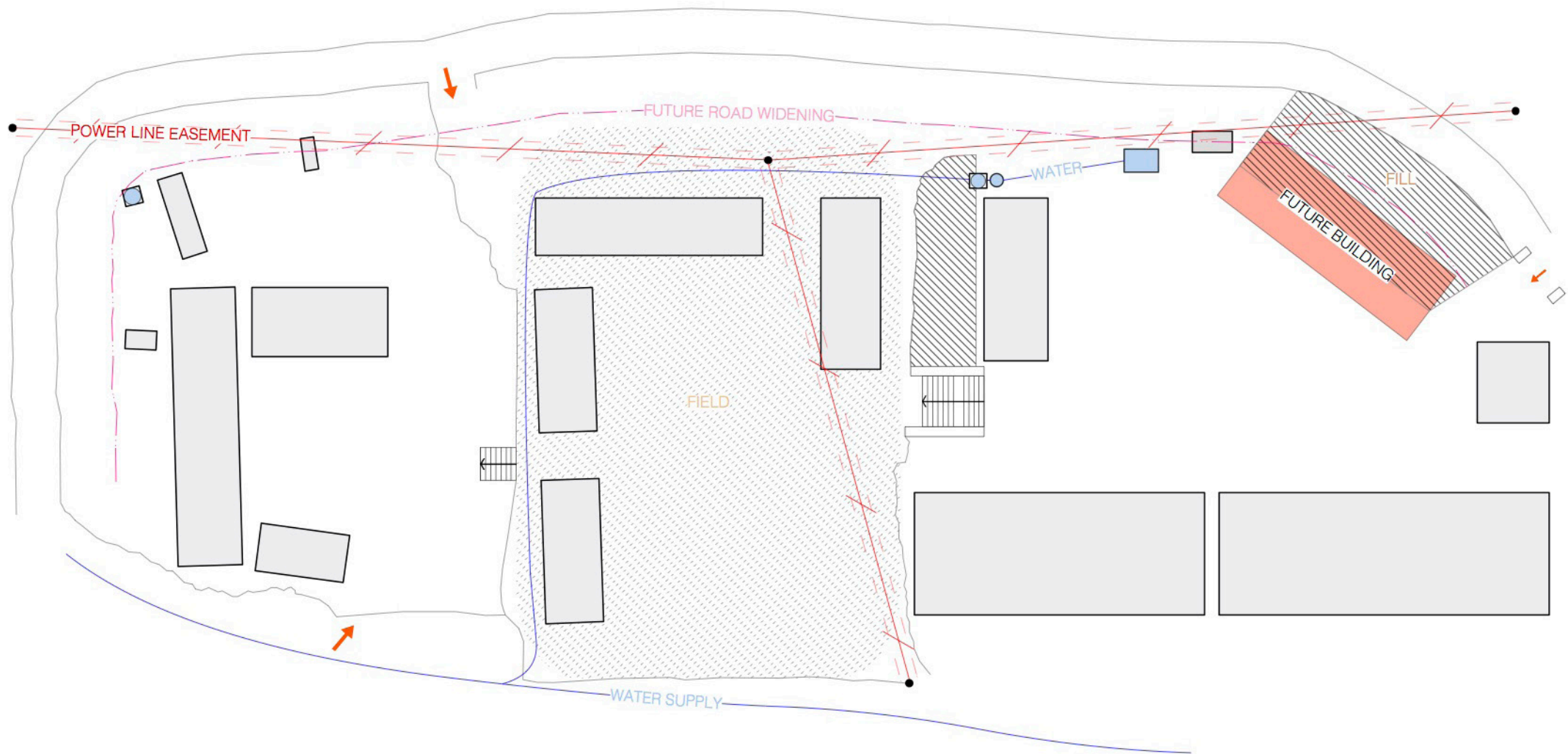
2ND CHAMBER REMAINS FLUID
1ST CHAMBER DEVELOPS A BACTERIAL CRUST.



09/02

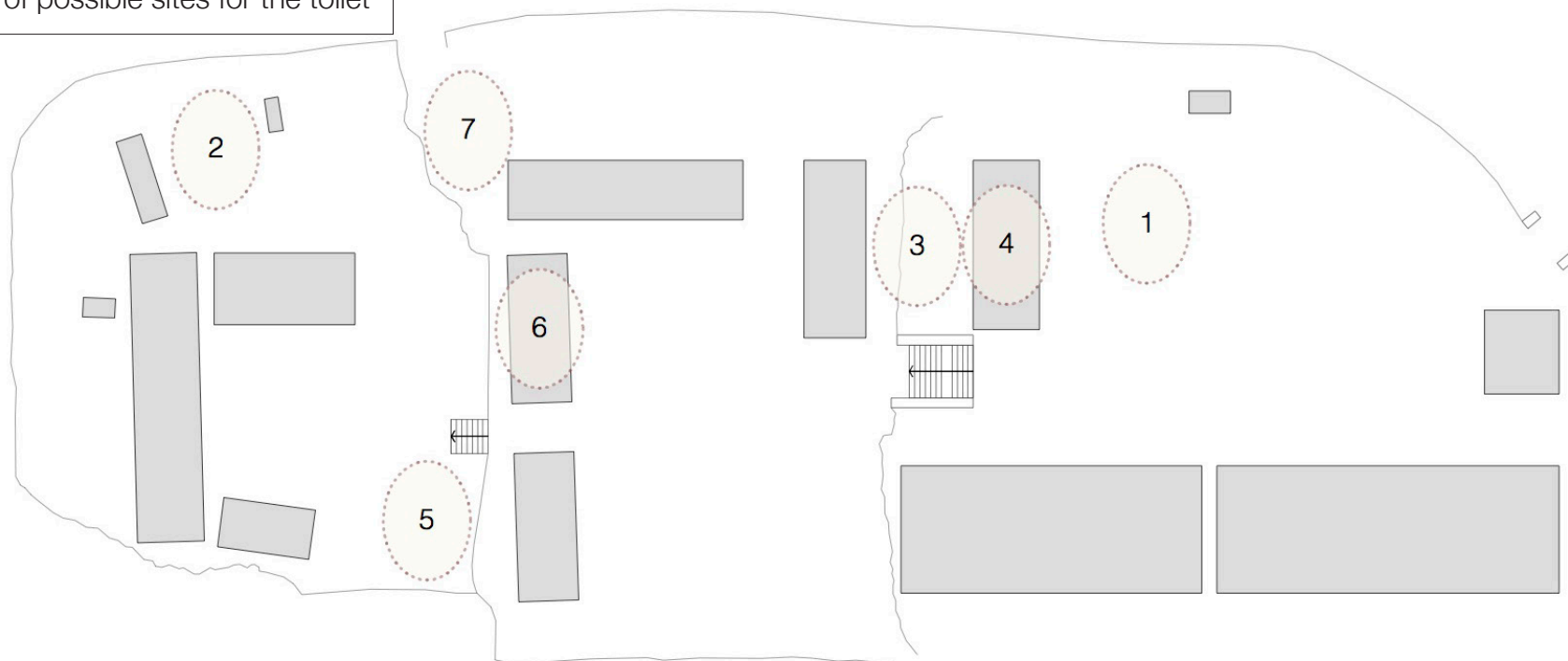


Site plan of the school



Key constraints of the site

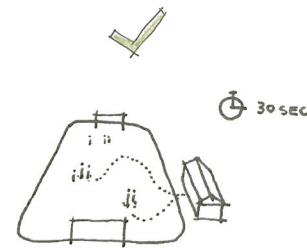
Consideration of possible sites for the toilet



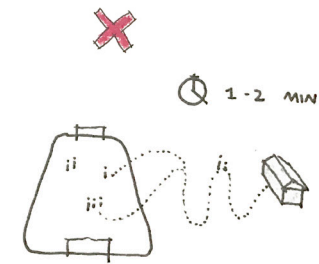
	PROS	CONS
1	<ul style="list-style-type: none"> <input type="checkbox"/> SURVEILLANCE FOR TEACHERS <input type="checkbox"/> POTENTIAL CLASSROOM AREA IN FUTURE <input type="checkbox"/> MOST POPULAR SITE BY TEACHERS AND STUDENTS 	<ul style="list-style-type: none"> <input type="checkbox"/> CLOSE TO ROAD <input type="checkbox"/> PUBLIC USE AND NO VISUAL PRIVACY <input type="checkbox"/> SEPARATED FROM MAIN PLAY AREA <input type="checkbox"/> ROUGH SITE <input type="checkbox"/> POSSIBLE BUS DROP OFF ZONE <input type="checkbox"/> SMALL SITE
2	<ul style="list-style-type: none"> <input type="checkbox"/> CLOSE TO UPPER CLASSROOMS <input type="checkbox"/> CLOSE TO EXISTING SERVICES <input type="checkbox"/> NO CURRENT PLANS FOR THE SITE 	<ul style="list-style-type: none"> <input type="checkbox"/> TOO FAR FROM NEW CLASSROOMS <input type="checkbox"/> FUTURE PLANS FOR SITE USE UNCERTAIN <input type="checkbox"/> NOT ABLE TO BE SEEN <input type="checkbox"/> POWER LINES <input type="checkbox"/> OLD SEPTICS AND DIFFICULT SITE WORKS
3	<ul style="list-style-type: none"> <input type="checkbox"/> GOOD CONNECTION TO OVAL <input type="checkbox"/> NO CURRENT PLANS FOR SITE <input type="checkbox"/> HALFWAY BETWEEN OVAL AND CLASSROOMS <input type="checkbox"/> MORE SEPARATED FROM THE VILLAGE 	<ul style="list-style-type: none"> <input type="checkbox"/> SITE IS ON FILL <input type="checkbox"/> SMALL SITE

	PROS	CONS
4	<ul style="list-style-type: none"> <input type="checkbox"/> CENTRAL LOCATION <input type="checkbox"/> SURVEILLANCE FOR TEACHERS <input type="checkbox"/> GOOD SURVEILLANCE AND ACCESS TO CLASSROOMS 	<ul style="list-style-type: none"> <input type="checkbox"/> UNKNOWN PLANS AND TIMING FOR THE FUTURE <input type="checkbox"/> STORAGE WOULD NEED TO BE RELOCATED
5	<ul style="list-style-type: none"> <input type="checkbox"/> CLOSE TO UPPER RECONSTRUCTION BUILDINGS <input type="checkbox"/> AWAY FROM VILLAGE USE 	<ul style="list-style-type: none"> <input type="checkbox"/> CAN'T SEE FROM THE CLASSROOMS <input type="checkbox"/> FAR FROM CLASSROOMS AND SCHOOL ENTRANCE <input type="checkbox"/> CLOSE TO NEIGHBOURING HOUSE
6	<ul style="list-style-type: none"> <input type="checkbox"/> LAND IS EASY TO BUILD ON <input type="checkbox"/> GOOD ACCESS TO CLASSROOMS AND UPPER RECONSTRUCTION BUILDINGS <input type="checkbox"/> GOOD PRIVACY FROM THE VILLAGE 	<ul style="list-style-type: none"> <input type="checkbox"/> ON THE OVAL <input type="checkbox"/> POTENTIAL SITE FOR A FUTURE BUILDING <input type="checkbox"/> MAY NOT BE AVAILABLE IN 2017 FOR BUILDING
7	<ul style="list-style-type: none"> <input type="checkbox"/> CLOSE TO UPPER CLASSROOMS <input type="checkbox"/> NOT ON THE OVAL BUT ON THE SAME LEVEL <input type="checkbox"/> NO OTHER FUTURE PLANS FOR THIS SITE 	<ul style="list-style-type: none"> <input type="checkbox"/> HARD SITE WORKS <input type="checkbox"/> NO PRIVACY FOR STUDENTS ACCESSING <input type="checkbox"/> WOULD REQUIRE TEMPORARY CLASSROOMS TO GO

1. Distance to field

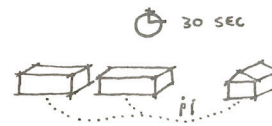


Sites: **3**,4,5,6,7

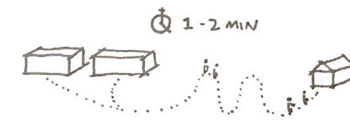


Sites: 1,2

2. Proximity to classrooms



Sites: 1,**3**,4

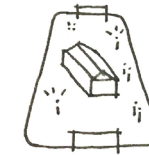


Sites: 2,5,6,7

3. Do not build on field

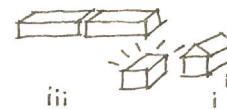


Sites: 1,2,**3**,4,5

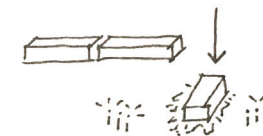


Sites: 6,7

4. Do not build toilets where other buildings may be built

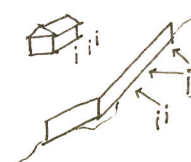


Sites: 2,**3**,5,6,7



Sites: 1,4

5. Prevent villagers from accessing toilets

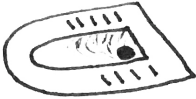

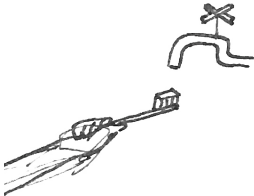
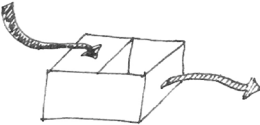



Sites: 2,**3**,4,5,6



Sites: 1,7

Design requirements

DEVELOPED DESIGN BRIEF	
NUMBER OF CUBICLES 	<ul style="list-style-type: none"> <input type="checkbox"/> PROJECTED STUDENT POPULATION IS 500 MINIMUM <input type="checkbox"/> 60% FEMALE AND 40% MALE <input type="checkbox"/> CONFIGURATION <ul style="list-style-type: none"> - 4-5 x FEMALE - 4 x MALE - 2 x TEACHERS (1 MALE, 1 FEMALE)
HAND WASHING 	<ul style="list-style-type: none"> <input type="checkbox"/> CONFIGURATION <ul style="list-style-type: none"> - 3 x FEMALE - 3 x MALE <input type="checkbox"/> COULD POSSIBLY SHARE HAND WASHING STATIONS BETWEEN MALES AND FEMALES AS LONG AS VISUAL PRIVACY FROM THE TOILETS IS MAINTAINED
TEETH CLEANING POINTS 	<ul style="list-style-type: none"> <input type="checkbox"/> CONFIGURATION <ul style="list-style-type: none"> - 3 x FEMALE - 3 x MALE <input type="checkbox"/> COULD POSSIBLY SHARE TOOTH BRUSHING STATIONS BETWEEN MALES AND FEMALES AS LONG AS VISUAL PRIVACY FROM THE TOILETS IS MAINTAINED <input type="checkbox"/> A TEACHER CONTROLLED ISOLATION VALVE WOULD BE GOOD TO STOP WATER WASTAGE AND PREVENT STUDENTS FROM RINSING AFTER BRUSHING TEETH
SEPTIC TANKS 	<ul style="list-style-type: none"> <input type="checkbox"/> CONFIGURATION <ul style="list-style-type: none"> - 2 x TANKS WITH A TOTAL CAPACITY OF 2300L - POSSIBLY WILL SHARE A DOUBLE BRICK WALL BETWEEN <input type="checkbox"/> SOAKAGE TRENCH LENGTH TO BE 11.5m PER TANK <ul style="list-style-type: none"> - TOTAL 23m
WATER STORAGE 	<ul style="list-style-type: none"> <input type="checkbox"/> 5000L (2 DAYS STORAGE CAPACITY)

Draft design



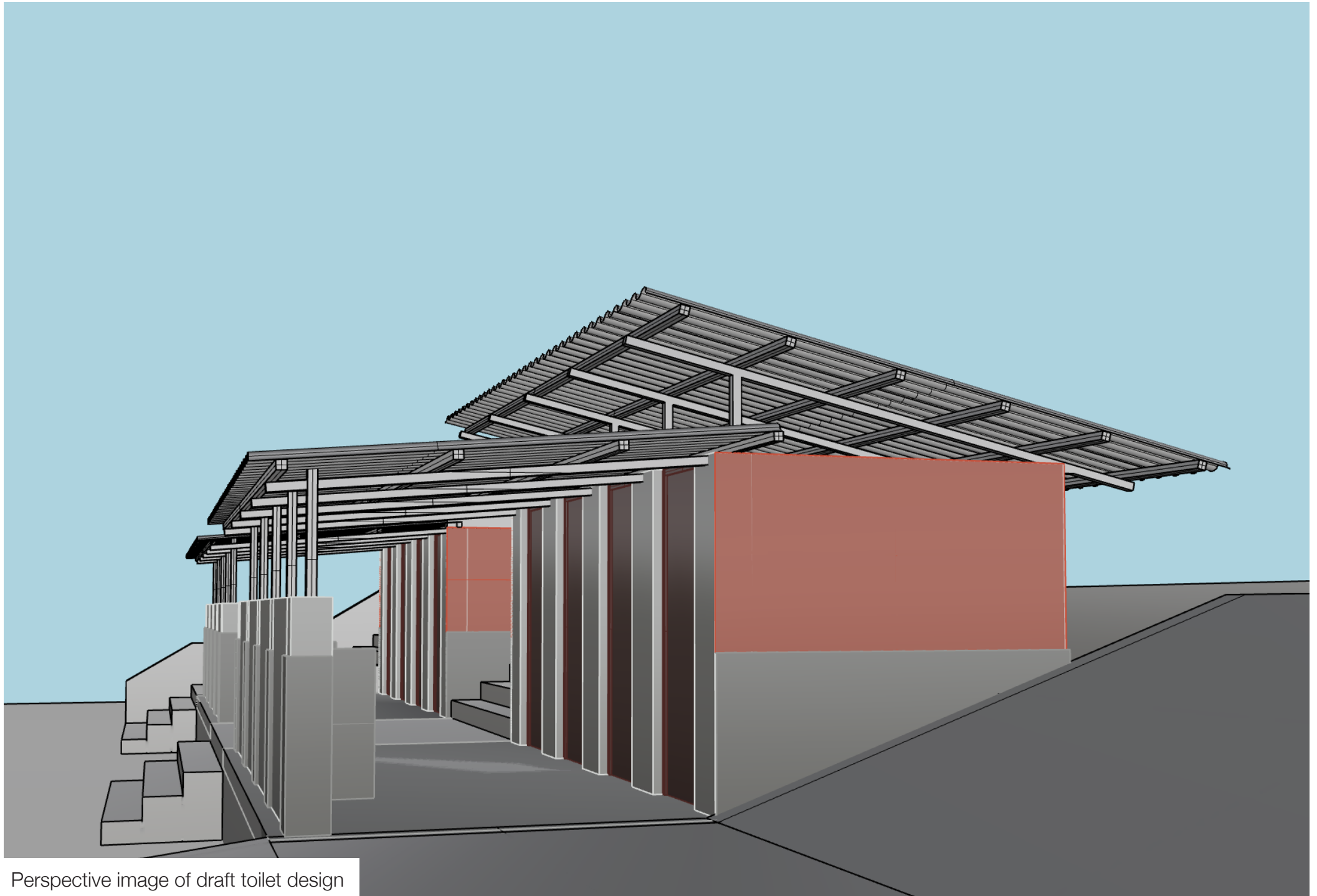
Healthabitat presenting a draft design to representatives of the school



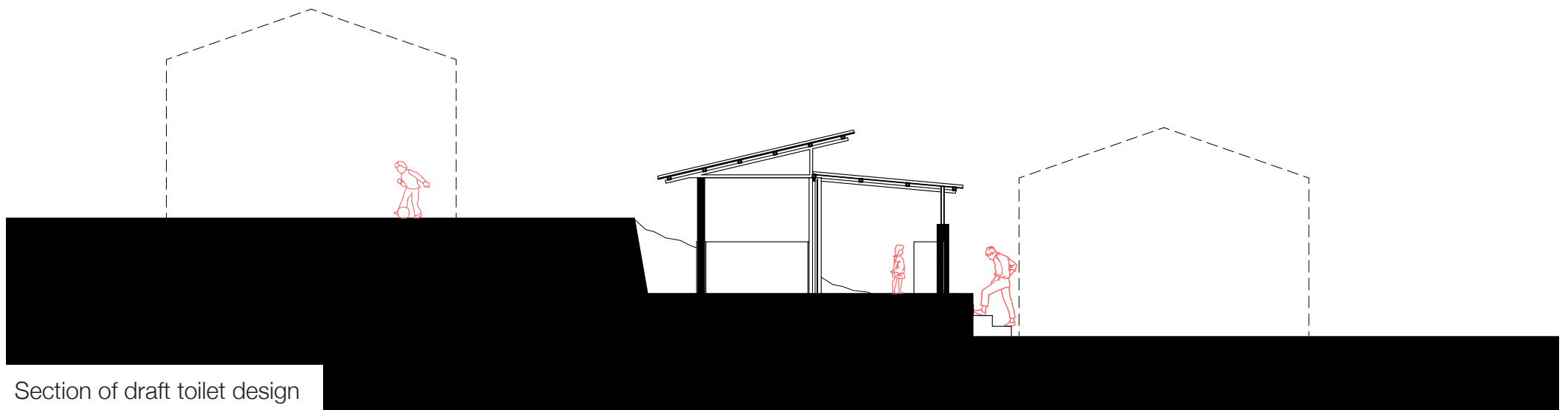
Agreed toilet location

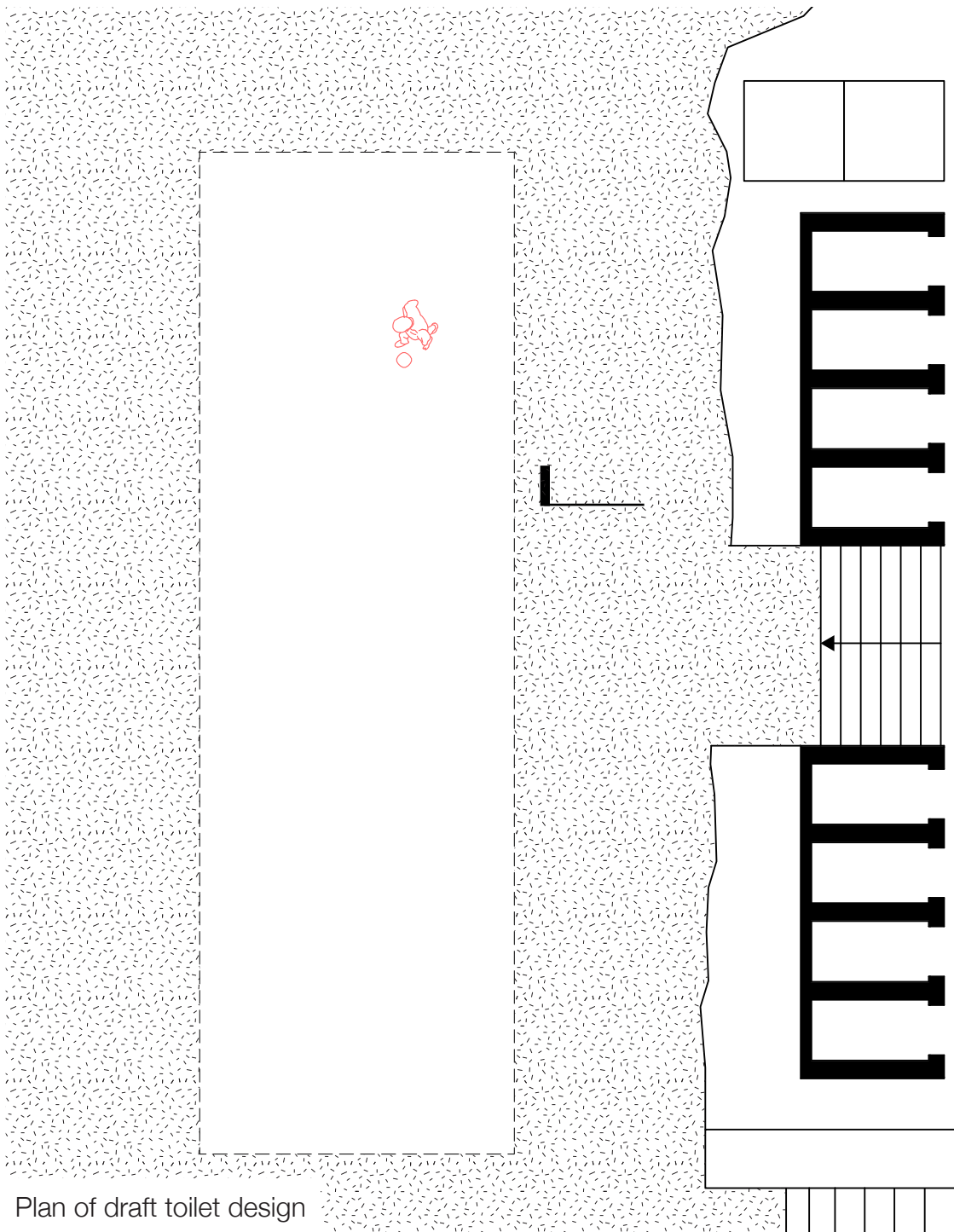


Perspective image of draft toilet design

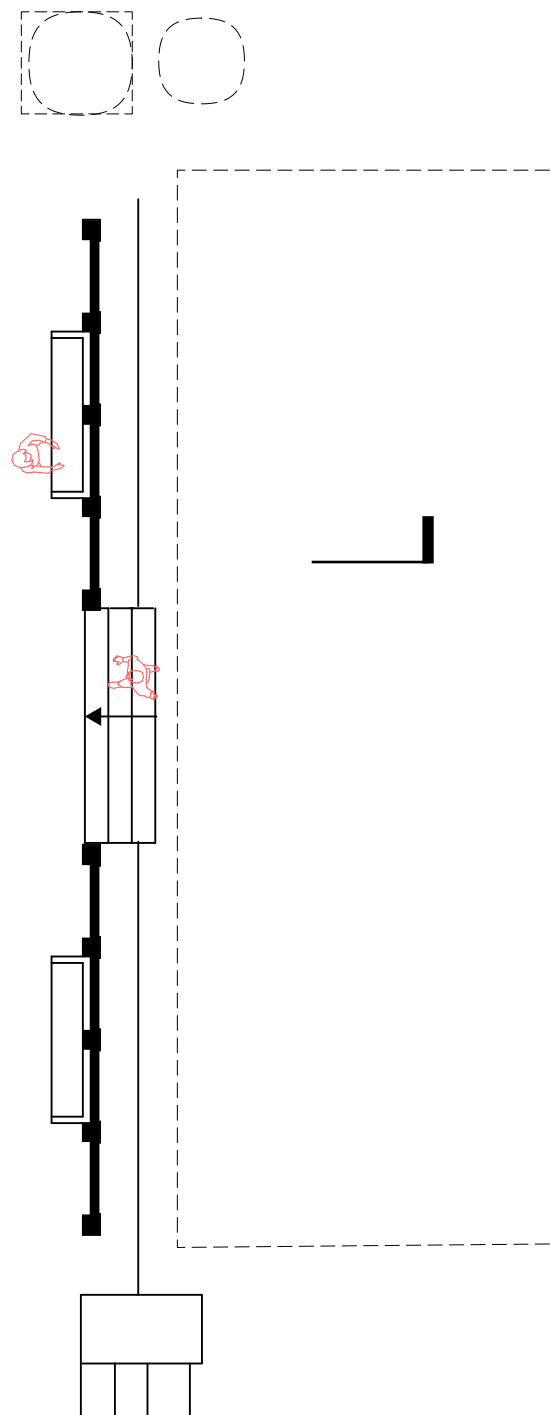


Perspective image of draft toilet design





Plan of draft toilet design



Dhanyavad!