



B.1

COMMUNITY PLUMBING CHALLENGE



Nashik, India
2–5 November, 2015

BRIEF #1

September 2015



INTRODUCTION

Your Challenge – an overview:

- Enable a class of 60 school students (between the ages of 5–15 years old) to wash their hands after toilet use and before meals (one meal on site, per day).
- Supply water to the handwash facility and dispose of wastewater safely.
- Engage and inspire students via lessons and activities relating to the health aspects of plumbing and sanitation.

This Brief (B.1) has **four** parts:

- 1 – Full design solution for a new Handwashing facility at School 125, Mukti Dham, Nashik.
- 2 – Presentation of design solution to a Community representative group.
- 3 – Design and delivery of a class lesson.
- 4 – Design and delivery of skills training.

Please refer to the following Supporting Documents (separate files):

- Full school site plan and individual workspace plans (filename: CPC2015_Plans.pdf)
- Works schedule (filename: CPC2015_Schedule.pdf)
- Materials and Tools/equipment order forms (filename: CPC2015_Materials.pdf)
- Lesson and/or training plan template (filename: CPC2015_Lesson.pdf)

A supporting photoset with images of host School and existing facilities is also available at the following link:
<https://www.dropbox.com/sh/irrtwvgmuzg5gsm/AABWJginZPWtVkfDcaeYD2Oja?dl=0>

General tips:

Teams must consider that access to power onsite at the school is limited and unreliable, and plan accordingly.

All presentations and activities prepared should attempt creative means of interaction with the students, in order to overcome language and literacy barriers.

Flip charts will be available, if required. All other printed material should be prepared in advance.

All times specified in this document are IST (Indian Standard Time), i.e. UTC +05:30.



PART 1

FULL DESIGN SOLUTION FOR HANDWASHING FACILITY

Timeframe:

This must be completed during the period **4 Sept to 23 Oct, 2015** (pre-arrival to Nashik).

All work must be submitted to the CPC Organizing Team by 17:00 IST on Fri 23 Oct, 2015.

Your Challenge:

Provide a proposal to improve the health of students through a Handwash facility in the room provided (see site plan). This solution must include:

- New handwash facility to fit within the existing handwash room.
- New drinking water facility also to fit within the existing handwash room.
- Improve usability of space and access to handwash room.
- Provide metering to enable data of usage to be taken.

The Indian Plumbing Association has pledged INR 10,000 per month as an ongoing funding for maintenance and upkeep of the new facilities. You must include a management plan for this fund as part of the maintenance guide.

You must deliver:

- Site plans/drawings of the new facilities.
- Rationale document (how it works).
- Installation and maintenance guide for the solution, including required toolkit.
- Full material costing/budget in order to implement the solution.

Note:

Your solution should be realistic: achievable to build within three days intensive work onsite at the school during the CPC. This process must be clearly explained in your Rationale.



PART 2

SCHOOL COMMUNITY GROUP PRESENTATION

Timeframe:

This must be prepared during the period **4 Sept to 31 Oct, 2015**.

A one-page outline must be submitted to the CPC Organizing Team by 17:00 IST on Sun 1 Nov 2015.

The presentation will be delivered to the School Community Group on the first day of the CPC: Mon 2 Nov, 2015.

Your Challenge:

Your Team must present your design solution/proposal to the School Community Group consisting of the School 125 Principals, local Community Co-operators, and CPC Judges.

Each Team will be given 10 minutes to present, followed by 10 minutes for questions, answers and feedback on their proposal. All Teams will be present throughout this process.

You must deliver:

- A one-page outline for Judges, explaining your Team presentation plan and structure.
- A Team presentation to the School Community Group, explaining your design solution for the new handwashing facility.

Note:

The School Community Group will decide on the best proposal received from all participating Teams. Teams will collaborate to build and install the chosen solution at the School.



PART 3

CLASS LESSON

Timeframe:

This must be prepared during the period **4 Sept to 2 Nov 2015**.

A Lesson Plan must be submitted to the CPC Organizing Team by 17:00 IST on Mon 2 Nov 2015.

The lesson will be delivered on the second day of the CPC, Tues 3 Nov, 2015.

Your Challenge

Your Team must deliver a 60-minute lesson to a group of students between the ages 7–10 years old. There will be up to sixty students in the group.

The lesson theme is the importance of water, sanitation, and their relationship to health.

You are asked to create a game or activity that engages the group for one 60-minute lesson period; this should be fun, engaging, and deliver at least one key learning outcome for the children based on the CPC project and your previously design and research into new handwash and drinking water facilities (B1.1).

Teams are invited to select the most appropriate place in the school grounds to deliver their lesson. Possible examples include:

- Playground
- Verandas
- Toilets
- Stage area
- Classroom

You must deliver:

- A lesson plan for Judges, explaining your objectives, planned outcomes, and ways to assess the result of the lesson once complete.
- A 60-minute lesson to the student group, on day two.
- Provide details of learning aids used in delivery of the lesson.



PART 4

SKILLS TRAINING

Timeframe:

This must be prepared during the period **4 Sept to 2 Nov 2015**.

A Training Plan must be submitted to the CPC Organizing Team by 17:00 IST on Mon 2 Nov 2015.

Teams will collaborate to deliver these activities during the construction period.

Your Challenge

Your Team must provide a training plan for a small group of students between the ages 13–15 years old. There will be between five and ten students in the group. The purpose of this activity is to engage the group in the technical processes involved in the construction of the proposed solutions.

The number of activities and duration of exercises are at the discretion of your Team. They should map closely to the works being completed onsite at the school.

You are encouraged to consider knowledge exchange and skills transfer imparted to these students, in terms of promoting potential career choices in Plumbing, Engineering and Design.

You must deliver:

- A training plan for Judges, explaining your objectives, planned outcomes, and ways to assess the result of the training exercises once complete.
- Deliver the training exercises as specified.
- Provide details of supporting resources used in delivery of the training.