Request for Proposals – Construction of New Wing in Existing Eco-Friendly School in Nabha, Punjab

Introduction

The Nabha Foundation is a Punjab-based charitable trust with extensive experience with community-based approaches in sustainable agriculture, women’s empowerment youth employability, education, healthcare and clean drinking water and sanitation. The Foundation promotes innovative rural development models for the development and wellbeing of the people of Nabha and its surrounding areas in Punjab. The bedrock for the Foundation’s initiatives is a deep understanding of ground realities in the villages and town of Nabha. The Foundation believes that the programs and interventions in Nabha can serve as an excellent model of integrated and sustainable rural development, from which the rest of India can learn.

Nabha, Punjab

Nabha is located in the western part of the district of Patiala, in the fertile soils of the northern Indian state of Punjab. By way of administrative boundaries, Nabha is a sub-division or tehsil of Patiala district. The Nabha Tehsil is made up of a sub-teenthil (Bhadson), a total of 174 villages, and the town of Nabha, where the sub-divisional offices of the district are located. The people of Nabha are predominantly rural and agricultural in orientation – It has a population of over 270,000, of which 75% live in its 169 villages and the remaining 25% living in the town of Nabha (India Census 2011) The town is located approximately 25 kilometres west of the city of Patiala.

Project Description

The Nabha Foundation is committed to developing and maintaining an environment that enhances human health and fosters a transition toward sustainability. To that end, the Foundation has built in Nabha, Punjab an eco-friendly school to provide a space for children to grow in a natural environment, and also integrate the concept of sustainability in the lives of children. Maharani Gurcharan Kaur Euro Group Preparatory School (MGK) was established in 2017 at Nabha, spearheading the Foundation’s dual vision of providing world class progressive education to the girl children in Nabha and equipping them with a modern world view and an equally strong set of values rooted in Indian tradition. The mission of the school is to provide an inspiring, nurturing and safe environment with high quality education to international standards that is culture and value-based, diverse and rigorous.

The school through its architecture and curriculum also emphasizes on inculcating principles of eco-friendliness amongst its students. The uniquely designed school is an example of a green building and incorporates special features such as natural cooling through air circulation, abundance of natural light and so forth. The school initiated with primary grades will gradually evolve as a senior secondary girl’s school in the region, following the CBSE pattern.

To the MGK School’s existing building we are now inviting proposals from architects to build 4 additional class rooms and 1 laboratory.

The Foundation will select firms for design and related professional services on the basis of their knowledge and demonstrated experience in applying sustainability concepts and principles such as those listed above. Firms that have demonstrated success with green and environmental building and integrated design are especially encouraged to bid.

Objectives

Design- The existing design has the below elements and the new wing should be on similar lines:
The design must be adapted to the vernacular architecture of Nabha, Punjab with eco-friendly modern interior and infrastructure

Defining common elements, building guidelines, edges to bind the campus together with existing ambience

It should make use of local material, know-how, and skills to build an eco-friendly infrastructure. More specifically, the design must –
- Utilize green technologies and construction processes and materials that are eco friendly
- Promote a harmonious relation between natural system and developed spaces
- Work around existing trees / greens
- Make use of good sustainable architectural practises & solar passive architecture
- Increase energy efficiency, and reduce water consumption

It has to be sensitivity to site, user and community

The design must be handicap friendly

Innovation in application of sustainable design and architecture principles for development of building and site are encouraged

It needs to respond to specific function of building –
- A ‘Community Based School’ which will strengthen and enrich the learning practices and environment to motivate children
- Encourage collaboration and inter-relation between various departments, keeping in mind the inter departmental relationships & workflow
- Include informal spaces, playgrounds, shared common areas, and ensure floor plan flexibility that will allow the design to adapt to changing needs of the school

It should allow for a coherent movement system with well-defined pedestrian and vehicular traffic, thereby establishing good connectivity with minimum conflicts

Finally, it must be modular and low cost (to construct and maintain) and should be replicable across different cities

**Functional Requirements**

- The four additional class rooms should be approximately of size 23.9”x19.3” each. This is as per the size of our existing classrooms.
- Size of the Science laboratory should be approximately 31.6”x19.3”.

*For all other design specifications, please refer Annex A*

**Scope of Services**

The scope of services will be architectural design, supervision & construction of the new wing as per specifications and aligned to the existing structure.

**Proposal**

If you are interested in responding to this RFP, please provide a proposal indicating the following –

**Project Approach (2 pages)**

- Please provide an executive summary for the project articulating the projects needs and design components that will be adopted
- List consultant firms proposed for this project (if any), including previous projects in which you have collaborated
Related Project Experience (1 page)
• Provide information on project experience of your firm and your team members that demonstrates your qualifications and ability to provide the services requested.

Proposed Fees and Expenses (1 page)
• Include the estimated costs/budget for the project based on provided specifications.

Timeline and Submission
Proposal Submission and Evaluation

Deadline for Submission of Proposal – 12nd March 2020

Submission
Please submit your proposal via email to info@thenabhfoundation.org.
Annex A

About the Eco-friendly School site today

- Site location – Rohata Mehs village in Nabha
- Shape & Terrain – Site rectangular plot with flat terrain flat for all practical purposes
- Site Area – approximately 9000 square yards
- Weather – Dry even after heavy rain i.e. no flooding
- Locate – Site is away from villages and is surrounded by agricultural fields
- Water – water source available

(Above observations were made by the site selection committee)

Micro-climate

- Solar Radiation: Intense in summers and winters with low percentage of diffused radiation, but very low in monsoon with predominantly diffused radiation.
- Mean Temperature –
  - Summer Midday – 32 C – 43 C
  - Summer Night – 27 C – 32 C
  - Winter Midday – 10 C – 25 C
  - Winter Night – 4 C – 10 C
  - Diurnal Variation – 35 C – 22 C
- Relative Humidity –
  - Dry Periods – 20–55%
  - Wet Periods – 55–95%
- Winds –
  - Hot and dusty during summer.
  - Strong winds in monsoon from SE
  - Dry, cold winds in winter from NE