



**Uganda Humanist Schools Trust**

**Multimedia Block and Large-group Teaching Project**

**Isaac Newton High School, Kateera, Masaka**

**December 2016**



Senior one students at Isaac Newton High School in lesson without pictures

## **Building work**

The project involves the construction of a large building comprising:

3 classrooms – each furnished to seat 55 students

1 science lab – fully equipped and furnished, with adjoining prep room.

1 teachers' preparation and development room, with adjoining store room

The building will have an insulated ceiling to prevent lessons being disrupted by the frequent heavy rain storms.

All rooms will be glazed to keep out rain and driving winds from Lake Victoria. The building will be secured to prevent theft by having bars on windows and metal security doors.

The rooms will be well lit and cabled to provide power sockets in each room.

Each room will be equipped with ceiling mounted data projector, HDMI cables, microphones and speakers. Laptop computers will be bought for each department to enable teachers to prepare materials for class. The teachers' room will have internet access to allow teachers to conduct research for lessons and to download pictures, videos and other lesson materials.

## **Professional Development**

UHST will use expertise among our trustees to organise a training programme to enable teachers to make effective use of multimedia and internet-sourced resources in their teaching with large groups of students (50+). Among UHST Trustees we have a technical IT specialist, a science curriculum developer, a teacher education specialist and former Director of the ELATE Africa (E-Learning and Teacher Education) Programme (based at Makerere University School of Education and funded by the British Council, a professor emeritus in Biological sciences who is experienced in developing sophisticated PowerPoint animations and a Mathematics teacher and teacher trainer. Three of these trustees have already run courses in the school for teachers and students.

We will also draw in expertise from within the school and from other schools and colleges in Uganda, including the NGO Uganda Connect (U-Connect). Teachers have already been trained in the use of the ICT resources of the ELATE Project, on the use of the RACHEL repository and Khan Academy Science and Mathematics Videos and the use of e-books from the Gutenberg collection. In addition they will learn to make effective use of the Office Suite and, in particular, Powerpoint and how to integrate web-based resources, such as YouTube videos and images found on Google, into their lessons.

The training programme will be extended to teachers from other member schools of Uganda Humanist Schools Association – in collaboration with the Brighter Brains Institute of California. This will happen through an extended second national conference for teachers in Humanist Schools in January 2018, and such other workshops as are necessary.

## Construction Costs

Bills of Quantities: MULTIMEDIA BLOCK  
ISAAC NEWTON HIGH SCHOOL

| DESCRIPTION                             |                    |                |
|---|--------------------|----------------|
| SUMMARY OF BILL                         | Ug Sh              | £              |
| ELEMENT NO.1: SUBSTRUCTURE              | 17,056,900         | £3,790         |
| ELEMENT NO.2: BUILDING FRAME            | 6,326,320.00       | £1,406         |
| ELEMENT NO.3 WALLS                      | 9,059,960.00       | £2,013         |
| ELEMENT NO.4: ROOF STRUCTURE            | 4,499,040.00       | £1,000         |
| ELEMENT NO.5: WINDOWS                   | 11,928,800         | £2,651         |
| ELEMENT NO.6: DOORS                     | 14,841,200         | £3,298         |
| ELEMENT NO.7: MECHANICAL INSTALLATIONS  | 25,004,400.00      | £5,557         |
| ELEMENT NO.8: FLOOR FINISHES            | 2,089,360.00       | £464           |
| ELEMENT NO.9: WALL FINISHES             | 6,773,900.00       | £1,505         |
| ELEMENT NO.10: ROOF FINISHES            | 17,645,600.00      | £3,921         |
| ELEMENT NO.11: LIGHTNING PROTECTION     | 6,968,000          | £1,548         |
| ELEMENT NO.12: FIXTURES                 | 18,959,200         | £4,213         |
| ELEMENT No.13: ELECTRICAL INSTALLATIONS | 10,462,500         | £2,325         |
| ELEMENT NO.14: FLOWER GARDENS AND TREES | 3,752,000          | £834           |
| ELEMENT NO.15: WATER HARVESTING         | 7,840,000          | £1,742         |
| <b>TOTAL BILL</b>                       | <b>163,207,180</b> | <b>£36,268</b> |

## **Multimedia Equipment**

Microphones, speakers, data projectors, laptops

Initial budget (based on used of reconditioned laptops from U-Connect)

The system will be extended later **£ 3,000**

## **Professional Development Programme**

Training will be provided by Trustees from UHST who will meet their own travel and subsistence expenses for visits to and stays in Uganda. (Approx. trustees contribution £3,000)

Subsistence and facilitation expenses for teachers undergoing training from Isaac Newton High School **£1,000**

Costs for participants from other UHSA schools (after contribution from the Brighter Brains Institute) **£2,000**

**TOTAL PROJECT COSTS £42,268**

## **Schedule of payments (Funds will be sent by UHST in 5 staged payments)**

Site preparation, foundations and lower walls **£12,268**

Upper walls and roof **£12,000**

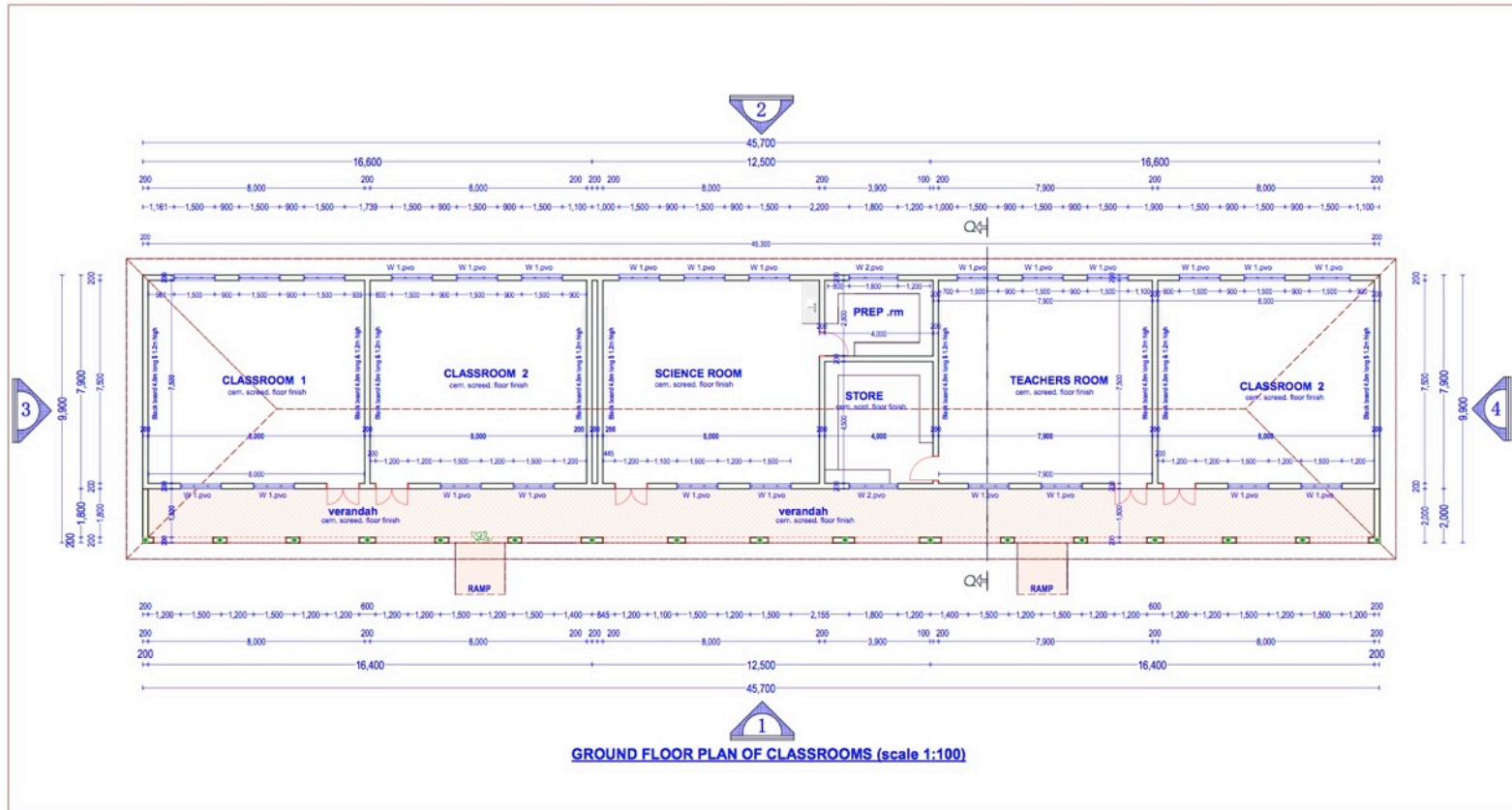
Windows, doors, electrics and inside & exterior finishing **£12,000**

Multimedia equipment **£3,000**

Professional Development Programme **£3,000**

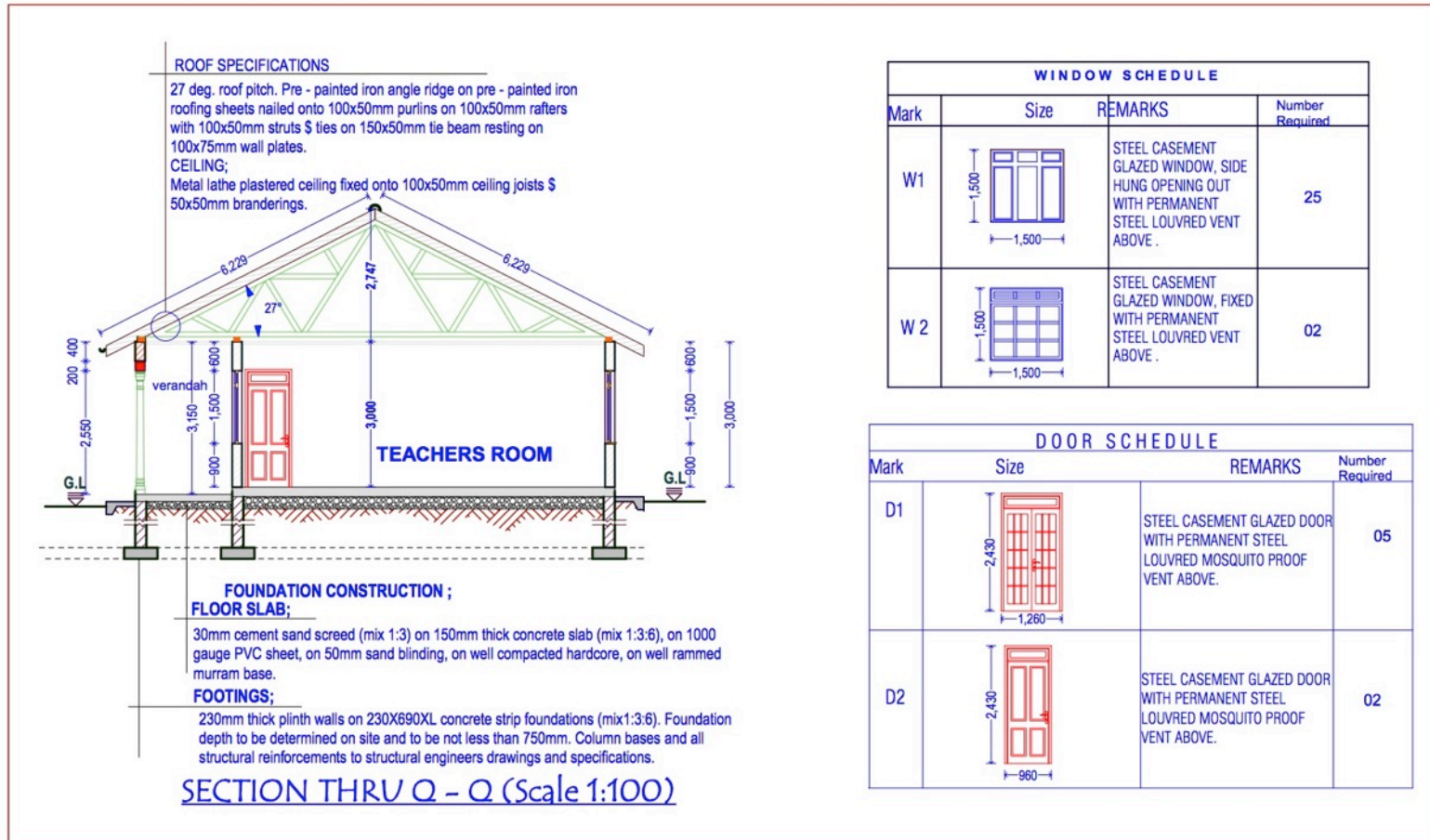


**Isaac Newton High School: Drawing of Multimedia Block**



Isaac Newton High School: Plan of Multimedia Block





Isaac Newton High School: Specifications for Multimedia Block