

ARCHITECTURAL SUMMARY

1.1 Existing Conditions

15,560 square meters (3.8 acres) of agricultural land have been purchased in Kompong Chhnang, approximately 75 kilometers (45 miles) northeast of the capital of Cambodia, Phnom Penh. The site was previously three separate farming plots and contains one house built in typical Cambodian fashion of grass construction on woodpiles. There is one well on the site that is in need of pump repair to function.

The directors for CCAM thought extensively about space and functional needs, culminating in preparation of a master plan that documents special needs and relationships. This plan, along with further discussion and site visit, formed the basis for the Program Requirements and Design Intent.

1.2 General Concerns

* Security requirements dictate the site be enclosed by a perimeter wall. This construction will be the first to take place at the site and consist of brick construction. Outbuildings, possibly integrated into perimeter wall, will be for bulk storage, tools and equipment for agriculture, and restrooms.

* Separation of girl functions from boy functions.

* Exterior spaces to play, perform, and grow food. Site amenities include

1. Courtyard with central fountain
2. Playground
3. Existing site trees to remain
4. Orchard and gardens
5. Playing Fields

1.3 Site Development:

1. Classrooms

A. 24 individual classrooms

1. (16) Large Classrooms = $5.65 \text{ m} \times 6.9125 \text{ m} = 39 \text{ m}^2$ each
(Approximately 25 person classroom)

Note: (2) Large Classrooms are separated by accordion wall and can be open to form one large classroom =

$$11.5 \text{ m} \times 6.9125 \text{ m} = 79.5 \text{ m}^2$$

(Approximately 50-person classroom)

2. (8) Small Classrooms = $4.3125 \text{ m} \times 4.875 \text{ m} = 21 \text{ m}^2$ each
(Approximately 15-person classroom)

B. (8) Restrooms

C. Two story buildings located on east and west side of lot

2. Clinic

A. (2) Offices = $3.75 \text{ m} \times 3.4 \text{ m} = 12.75 \text{ m}^2$ each

B. (2) Inspection Rooms = $3.75 \text{ m} \times 5.3125 \text{ m} = 19.925 \text{ m}^2$ each 1 patient per room

C. (6) Patient Rooms = $3.75 \text{ m} \times 5.3125 \text{ m} = 19.925 \text{ m}^2$ each 2 patients per room

3. Kitchen

A. Kitchen = $7.625 \text{ m} \times 7.625 \text{ m} = 58.15 \text{ m}^2$

B. Storage Room = $3.85 \text{ m} \times 6.9125 \text{ m} = 26.6125 \text{ m}^2$

C. Clean and Prep Room = $3.85 \text{ m} \times 6.9125 \text{ m} = 26.6125 \text{ m}^2$

4. Dining Facility/Recreation Center
 - A. Boys Dining Room = $6.9125 \text{ m} \times 7.7 \text{ m} = 53.25 \text{ m}^2$
 - B. Girl's Dining Room = $6.9125 \text{ m} \times 7.7 \text{ m} = 53.25 \text{ m}^2$
 - C. Adult Dining/Meeting Room = $3.85 \text{ m} \times 6.9125 \text{ m} = 26.6125 \text{ m}^2$
 - D. Furniture Storage = $3.85 \text{ m} \times 6.9125 \text{ m} = 26.6125 \text{ m}^2$
 - E. Two Playrooms that overlook Dining Area = $7.625 \text{ m} \times 7.625 \text{ m} = 58.15 \text{ m}^2$
5. Guest Accommodations
 - A. (2) Apartments = $6.9125 \text{ m} \times 7.7 \text{ m} = 53.25 \text{ m}^2$ each
 - B. (8) Guest rooms = $3.85 \text{ m} \times 6.9125 \text{ m} = 26.6125 \text{ m}^2$ each
6. Theater/Dormitory
 - A. Ground Floor
 1. Office = $6.875 \text{ m} \times 6.6 \text{ m} = 45.375 \text{ m}^2$
 2. Conference Room = $6.875 \text{ m} \times 6.6 \text{ m} = 45.375 \text{ m}^2$
 3. Men's Restroom (4 fixtures, 3 sinks)
 4. Women's Restroom (4 fixtures, 3 sinks)
 5. Sound Booth = $6.55 \text{ m} \times 2.385 \text{ m} = 15.625 \text{ m}^2$
 6. 300 person theater = $12.25 \text{ m} \times 21 \text{ m} = 257.25 \text{ m}^2$
 7. Raised Stage = $12 \text{ m} \times 7.45 \text{ m} = 89.5 \text{ m}^2$
 8. Boy's Dressing Room = $3.125 \text{ m} \times 5 \text{ m} = 15.625 \text{ m}^2$
 9. Girl's Dressing Room = $3.125 \text{ m} \times 5 \text{ m} = 15.625 \text{ m}^2$
 10. Scenery = $9.65 \text{ m} \times 3.775 \text{ m} = 36.425 \text{ m}^2$
 11. Props/Costume = $6.5 \text{ m} \times 3.775 \text{ m} = 24.5375 \text{ m}^2$
 12. Janitor = $1.5 \text{ m} \times 2.385 \text{ m} = 3.45 \text{ m}^2$
 13. (2) Theater Gallery = $11.4 \text{ m} \times 4.175 \text{ m} = 47.595 \text{ m}^2$ each
 14. Theater Lobby (including reception) = $7.4 \text{ m} \times 8.15 \text{ m} = 60.31 \text{ m}^2$
 15. (2) Backstage Restroom = $2.575 \text{ m} \times 3.85 \text{ m} = 9.91375 \text{ m}^2$
 - B. First Floor/Second Floor similar
 1. Gallery = $30.375 \text{ m} \times 4.175 \text{ m} = 126.815 \text{ m}^2$
 2. (2) One-Bedroom Apartments = $6.85 \text{ m} \times 6.925 \text{ m} = 47.43625 \text{ m}^2$ each
 3. (2) Staff Rooms = $6.85 \text{ m} \times 3.85 \text{ m} = 26.3725 \text{ m}^2$ each
 4. (1) Children's Room for 12 children = $11.475 \text{ m} \times 6.85 \text{ m} = 78.60375 \text{ m}^2$
 5. (9) Double Rooms = $6.85 \text{ m} \times 3.85 \text{ m} = 26.3725 \text{ m}^2$ each
 6. Library = $3.225 \text{ m} \times 4.6 \text{ m} = 14.835 \text{ m}^2$
 7. Laundry = $3.225 \text{ m} \times 4.6 \text{ m} = 14.835 \text{ m}^2$
 8. Storage = $3.1 \text{ m} \times 2.55 \text{ m} = 7.905 \text{ m}^2$
 - C. Rooftop Performing Area
 1. Audience = $21.55 \text{ m} \times 11.325 \text{ m} = 244.05375 \text{ m}^2$
 2. Stage Area = $11.6 \text{ m} \times 5.75 \text{ m} = 66.7 \text{ m}^2$
 3. Boy's Dressing = $6.475 \text{ m} \times 10.3 \text{ m} = 66.6925 \text{ m}^2$
 4. Girl's Dressing = $6.475 \text{ m} \times 10.3 \text{ m} = 66.6925 \text{ m}^2$
 5. Storage = $13.05 \text{ m} \times 5.05 \text{ m} = 65.9025 \text{ m}^2$
 6. Men's Restroom = $4.2 \text{ m} \times 4.3 \text{ m} = 18.06 \text{ m}^2$, (3) fixtures, 3 sinks
 7. Women's Restroom = $4.2 \text{ m} \times 4.3 \text{ m} = 18.06 \text{ m}^2$, (3) fixtures, 3 sinks
 8. Exterior Storage = $21.5 \text{ m} \times 3.825 \text{ m} = 82.2375 \text{ m}^2$

1.4 DESIGN INTENT

The master plan is laid out to reflect the ministry of CCAM. Since the ministry of CCAM is centered on the children learning about Christ through the study of the arts, the theater and dorm rooms make up the main building on the site. This building is flanked to the east and west by the classroom buildings and dining/recreation center. The clinic, kitchen, and guest quarters enclose the courtyard on the north. The courtyard buildings are connected to each other by a covered walkway to allow access to all of the facilities with protection from the sun and rain.

To the south of the courtyard buildings, is the main entry drive, playing fields, leeching fields, power house, and parking spaces for people coming to performances. To the north of the courtyard buildings are the gardens, orchard, and service drive that help sustain the operations of the CCAM.

The buildings are designed to provide the most efficient and sustainable facility possible. All of the main living spaces are oriented to the exterior of buildings to ensure that all spaces have access to natural light, breezes, and views to exterior. Operable windows and louvered doors on the dorm floors catch breezes and warm air is released through the roof through airshafts. The powerhouse is designed to provide solar power or electricity to the facility. Downspouts from the buildings collect rainwater in cisterns to provide water for irrigation of crops.

In plan, the theater/dorm building is designed in a cross form with the head of the cross facing south. The arms of the cross form the stair towers and sitting areas. The body of the cross forms the theater on the first floor and the dorm rooms on the upper floors.

In section, the theater/dorm building is designed so that the base is the public floor while the upper two floors are the more private zones of the building. The open-air roof provides a space that can be used either for public or private functions.

The structure of the building will be fabricated steel columns and beams. The building will be enclosed with typical Cambodian masonry construction covered with plaster and painted. Floors will be concrete slab. Windows will be casement. Exterior doors will be wood or hollow metal frame. Interior doors on the 2nd and 3rd floor will be wood louvered doors. The roof will be fabricated steel trusses covered with clay tiles. Railings will be steel custom designed to match style of building.

Drawings were produced on site consisting of the Site Plan, Ground Floor Plan, First/Second Floor Plan, Roof Terrace Plan, Roof Plan, Elevations, and Building Sections.