Emergency School Reconstruction Project

TYPE DESIGN:
2 Storey laboratory, Library, ECD, music
& drawing room and computer room
2-LaLiEMC
# 2 Storey Laboratory, Library, ECD, Music & Drawing Room and Computer Room

## 2-LaLIMC

### Table of Content:

#### 1. Architectural Drawings

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Contents</th>
<th>Sheet No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ground Floor Plan</td>
<td>A-01</td>
</tr>
<tr>
<td>2</td>
<td>First Floor Plan</td>
<td>A-02</td>
</tr>
<tr>
<td>3</td>
<td>Roof Plan</td>
<td>A-03</td>
</tr>
<tr>
<td>4</td>
<td>P. E. Elevations</td>
<td>A-04</td>
</tr>
<tr>
<td>5</td>
<td>Elevation &amp; Section</td>
<td>A-05</td>
</tr>
<tr>
<td>6</td>
<td>Wall Section</td>
<td>A-06</td>
</tr>
<tr>
<td>7</td>
<td>Staircase Plan</td>
<td>A-07</td>
</tr>
<tr>
<td>8</td>
<td>Staircase Details</td>
<td>A-08</td>
</tr>
<tr>
<td>9</td>
<td>Door &amp; Window Details</td>
<td>A-09</td>
</tr>
<tr>
<td>10</td>
<td>Built-in Furniture Detail</td>
<td>A-10</td>
</tr>
<tr>
<td>11</td>
<td>Built-in Furniture Detail</td>
<td>A-11</td>
</tr>
<tr>
<td>12</td>
<td>False Ceiling Layout Plan</td>
<td>A-12</td>
</tr>
</tbody>
</table>

#### 2. Structural Drawings

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Contents</th>
<th>Sheet No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>General Notes &amp; Typical Details</td>
<td>S-00</td>
</tr>
<tr>
<td>14</td>
<td>Trench Plan &amp; Tie Beam Details</td>
<td>S-01</td>
</tr>
<tr>
<td>15</td>
<td>Footing Plan &amp; Section</td>
<td>S-02</td>
</tr>
<tr>
<td>16</td>
<td>Footing Plan &amp; Section &amp; Wall Foundation Details</td>
<td>S-03</td>
</tr>
<tr>
<td>17</td>
<td>Footing Plan &amp; Section</td>
<td>S-04</td>
</tr>
<tr>
<td>18</td>
<td>Column Layout Plan &amp; Details</td>
<td>S-05</td>
</tr>
<tr>
<td>19</td>
<td>Column Details, Sill &amp; Lintel Details</td>
<td>S-06</td>
</tr>
<tr>
<td>20</td>
<td>Plinth Beamatic Plan &amp; Details</td>
<td>S-07</td>
</tr>
<tr>
<td>21</td>
<td>Plinth Beam TIE Details</td>
<td>S-08</td>
</tr>
<tr>
<td>22</td>
<td>Beam Plan (First Floor &amp; Truss Level)</td>
<td>S-09</td>
</tr>
<tr>
<td>23</td>
<td>Beam Details</td>
<td>S-10</td>
</tr>
<tr>
<td>24</td>
<td>Beam Details</td>
<td>S-11</td>
</tr>
<tr>
<td>25</td>
<td>Beam Details</td>
<td>S-12</td>
</tr>
<tr>
<td>26</td>
<td>Secondary Beam Details</td>
<td>S-13</td>
</tr>
<tr>
<td>27</td>
<td>Slab Plan &amp; Section (First Floor Level)</td>
<td>S-14</td>
</tr>
<tr>
<td>28</td>
<td>Staircase Plan &amp; Section</td>
<td>S-15</td>
</tr>
<tr>
<td>29</td>
<td>Truss Plan &amp; Section</td>
<td>S-16</td>
</tr>
<tr>
<td>30</td>
<td>Truss Details</td>
<td>S-17</td>
</tr>
<tr>
<td>31</td>
<td>Truss Details</td>
<td>S-18</td>
</tr>
</tbody>
</table>

#### 3. Electrical Drawings

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Contents</th>
<th>Sheet No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Light, Power and Dis Layout Plan (Ground Floor)</td>
<td>E-01</td>
</tr>
<tr>
<td>33</td>
<td>Light, Power and Dis Layout Plan (First Floor)</td>
<td>E-02</td>
</tr>
</tbody>
</table>

#### 4. Sanitary Drawings

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Contents</th>
<th>Sheet No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Waste Water Pipeline Layout (Ground Floor)</td>
<td>P-01</td>
</tr>
<tr>
<td>35</td>
<td>Water Supply Pipeline Layout (First Floor)</td>
<td>P-02</td>
</tr>
</tbody>
</table>
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

NOTES:

1. Read this drawing along with other related drawings and other services drawings.
2. Drawing are not to be directly measured.
3. Provide threshold at all exterior doors as per details, unless otherwise indicated.
4. The location of ramps to be adjusted as per site condition.

Government Of Nepal
Department Of Education
Sanathini, Bhaktapur, Nepal

Donor:
Japan International Cooperation Agency

Project Title:
Emergency School Reconstruction Project

Joint Venture with

Oriental Consultants Global

Global Consulting for sustainable Development

Type Design:
2 STOREY LABORATORY, LIBRARY, ECD, MUSIC, DRAWING & COMPUTER ROOM

Sheet Title:
GROUND FLOOR PLAN

Sheet No.:
2-LaLi EMC

Date:
September, 2016

Print Sheet:
A’3’ Size
NOTES:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedules for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.
1. Read this drawing along with other related drawings and other services drawings.
2. Drawing are not to be directly measured.
3. All dimensions are in millimeters. Convert to meters if necessary.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

NOTES:
Government Of Nepal
Department Of Education
Central Region, Kathmandu, Nepal

Donor:
Japan International Cooperation Agency

Project Title:
Emergency School Reconstruction Project

Sub-Consultant:
Joint Venture with

Type Design:
2 Storey Laboratory, Library, ECD, Music, Drawing & Computer Room

Sheet Title:
2-LaLi EMC

Sheet No.
A-04

Notes:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are to be directly referred drawings and coordinate with structural, electrical, plumbing and other services drawings.
3. Refer doors & windows schedule/elevations for size of doors & windows.
4. Provide threshold at all exterior doors as per details, unless otherwise indicated.
5. The location of ramps to be adjusted as per site conditions.

Drawings are to be accompanied by other related drawings and other services drawings unless otherwise indicated.

Dorcas: September, 2016

Mr. H.B. Gurung
Mr. A.S. Tamang
Ms. M. Rana

Mr. Tomoki Miyano
Mr. Hisafumi Michikawa
Mr. Wong Kuok Hung

Donor:
Oriental Consultants Global

Global Consulting for Sustainable Development

Print Sheet: A’3’ Size

Front Elevation
(Scale: 1:100)

Back Elevation
(Scale: 1:100)
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read the drawing along with other related drawings and coordinates with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/sections for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site conditions.

NOTES:

1. Footings:
   - The footings to be designed for the following loads:
     - Vertical loads:
       - P1: 3 kN/m
       - P2: 2 kN/m
     - Moments:
       - M1: 0.5 kNm
       - M2: 0.3 kNm

2. Walls:
   - The walls to be constructed of solid brick masonry with a minimum thickness of 240 mm.

3. Windows:
   - The windows to be designed for a wind load of 150 kN/m².

4. Roofs:
   - The roofs to be designed for a snow load of 50 kN/m².

5. Services:
   - The services to be designed in accordance with the specifications provided by the relevant authorities.
1. Any discrepancy in the drawing is to be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Read the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

NOTES:

- 0.5M 1M 1.5M 2M 2.5M
- WALL SECTION AT Y-Y
- (Scale=1:50)
- WALL SECTION
- Sheet Title: 2-LaLi EMC
- Sheet No: A-06
- Date: September, 2016
- Print Sheet: A3' Size
NOTES:
1. Any discrepancy in the drawing is to be immediately reported to the consultant or concerned engineer.
2. Drawing are not be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

STAIRCASE PLAN
(Scale 1:40)
NOTES:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

Government Of Nepal
Department Of Education
Sanathimi, Bhaktapur, Nepal

Donor:
Japan International Cooperation Agency

Project Title:
Emergency School Reconstruction Project

Oriental Consultants Global
Global Consulting for Sustainable Development

MHNL & Associates, Inc.

Sheet Title:
STAIRCASE DETAILS

Type Design:
2 STOREY LABORATORY, LIBRARY, ETC.
MUSIC, DRAWING & COMPUTER ROOM

Print Sheet: A'3' Size

Date: September, 2016
Sheet No: 2-LaLi EMC
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide thresholds at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

NOTES:

WINDOW-W1 (28 Nos.)

DOORS & WINDOWS SCHEDULE:

<table>
<thead>
<tr>
<th>S.N.</th>
<th>SYMBOL</th>
<th>SIZE</th>
<th>G.F.</th>
<th>F.P.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>W1</td>
<td>1100 x 1450</td>
<td>14</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>W2</td>
<td>1100 x 1000</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>W3</td>
<td>100 x 370</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>D1</td>
<td>1100 x 2200</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>D2</td>
<td>100 x 2200</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>D3</td>
<td>1000 x 1650</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td>22</td>
<td>20</td>
<td>42</td>
</tr>
</tbody>
</table>

MUSIC, DRAWING & COMPUTER ROOM

5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

6. The location of ramps to be adjusted as per site condition.
1. Any discrepancy in the drawing is to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide thresholds at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

NOTES:

LABORATORY IN-BUILT FURNITURE (STUDENTS DESK)
(Scale= 1:25)

LABORATORY IN-BUILT FURNITURE (TEACHERS DESK)
(Scale= 1:25)

LABORATORY SECTION AT A-A
(Scale= 1:25)

LABORATORY SECTION AT B-B
(Scale= 1:25)

LABORATORY SECTION AT C-C
(Scale= 1:25)

LABORATORY SECTION AT D-D
(Scale= 1:25)
NOTES:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

1. Read this drawing along with other related drawings.
2. Drawing are not to be directly measured.
3. Refer doors & windows schedule/elevations for size of doors & windows.

Type Design : MUSIC, DRAWING & COMPUTER ROOM
Sheet Title : BUILT-IN FURNITURE DETAIL
Sheet No. : 2-LaLi
Print Sheet : A’3’ Size

Date : September, 2016

Government Of Nepal
Department Of Education
Sanothimi, Bhaktapur, Nepal

Joint Venture with
Project Title:
Emergency School Reconstruction Project

Japan International Cooperation Agency

RIOENTAL
CONSULTANTS GLOBAL
Global Consulting for Sustainable Development
1. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
2. Drawing are not to be directly measured.
3. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
4. Roller doors & windows schedule/locations for size of doors & windows.
5. Provide threshold at all exterior doors as per details unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

NOTES:

1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Roller doors & windows schedule/locations for size of doors & windows.
5. Provide threshold at all exterior doors as per details unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.
1. Use NG (1:1:1.5) grade concrete for slab, beam, column, foundation, sill & lintel bands (all RC details).
2. Use 6x60 grade steel (fy=410N/mm²) for slippage part of beams.
3. Cover to slabs.
   a. For concrete members in contact with soil = Min 50mm
   b. For longitudinal (vertical) bars in column = 45mm
   c. For main bars in beams = 25mm
   d. For outer bars in slab = 25mm
4. Bars in columns shall be spliced only at mid height of column as per detail shown in elevations 1906-2014.
5. Bars splicing in beam shall be avoided in the span where intermediate beam is connected and shall be only as shown in DWG.

Development / Lap length (Ld) for bars:

<table>
<thead>
<tr>
<th>Bar Size (mm)</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR WD Ld</td>
<td>600</td>
<td>650</td>
<td>700</td>
<td>750</td>
<td>800</td>
<td>900</td>
<td>1000</td>
</tr>
</tbody>
</table>

7. Temperature distribution reinforcement for slabs - Table 15 @ 100°C.
8. Clear vertical distance between two rows (layers) of bars = 25mm.
9. Provide shear reinforcement at 100°C at lap locations.
11. H = 0.85 or 400mm or larger lateral dimension of the member whichever is greater.
12. Z = Depth of beam.
13. Structural steel shall have strength fy = 410MPa
14. Foundation type should be decided by site condition after excavation of foundation.
15. If bearing capacity is less than 50KN/m², foundation should be redesigned.
16. Provide 2 nos. torsion bars in 53mm step beam.

Typical Lap location for beam bars.

Typical bent-up detail for slab bars.

Connection detail between main & secondary beam (Plan).

Connection detail between main & secondary beam (Elevations).

Typical column shear reinforcement detail.

Notes:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Read the drawings along with relevant details and coordinate with Structural, Electrical, Plumbing, and Heating and Air Conditioning drawings.
4. Rollout doors & windows schedule/eleavations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
3. Read this drawing along with other related drawings and other services drawings unless otherwise indicated.

2. Drawings are not to be directly measured.

1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.

5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

NOTES:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
3. Read this drawing along with other related drawings unless otherwise indicated.

2. Drawings are not to be directly measured.

1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.

4. Refer doors & windows schedule/elevations for size of doors & windows.

5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

NOTES:

S-02

Date: September, 2016

Mr. H.B. Gurung

Mr. A.S. Tamang

Mr. S. Malla

Sub-Consultant: Joint Venture with

Project Title: Emergency School Reconstruction Project

Oriental Consultants Global

Donor: Government of Nepal

Project Title: Emergency School Reconstruction Project

Sheet Title: FOOTING PLAN & SECTION

Print Sheet: A’3’ Size
3. Read this drawing along with other related drawings
   unless otherwise indicated.
2. Drawings are not to be directly measured.
   Reported to the consultant or concerned engineer.
1. Any discrepancy in the drawing to be immediately
   coordinated with Structural, Electrical, Plumbing,
   and other services drawings.
4. Refer doors & windows schedule/elevations for size
   of doors & windows.
5. Provide threshold at all exterior doors as per details,
   unless otherwise indicated.

NOTES:

---

Government Of Nepal
Department Of Education
Sanishree, Bhaktapur, Nepal

Japan International Cooperation Agency

Emergency School Reconstruction Project

Oriental Consultants Global

Department Title:

Project Title:

Type Design:

Sheet Title:

Sheet No:

Print Sheet: A'3' Size

Date: September, 2016

---

Mr. H.B. Gurung
Mr. A.S. Tamang
Mr. S. Malla

Sub-Consultant: Joint Venture with

Donor: Oriental Consultants Global

Global Consulting for Sustainable Development

Printed EMC 2-LaLi

Sheet: S-03
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

NOTES:

COLUMN FOOTING PLAN - F4
(Scale = 1:25)

COLUMN FOOTING PLAN - F5
(Scale = 1:25)

COLUMN FOOTING SECTION - F4
(Scale = 1:25)

COLUMN FOOTING SECTION - F5
(Scale = 1:25)
### COLUMN REINFORCEMENT DETAILS AT GRID -1

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>GRID</th>
<th>COLUMN SIZE</th>
<th>COLUMN SIZE</th>
<th>COLUMN SIZE</th>
<th>COLUMN SIZE</th>
<th>STARRUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FIRST FLOOR</td>
<td>(450 x 450)</td>
<td>(450 x 450)</td>
<td>(450 x 450)</td>
<td>(450 x 450)</td>
<td>80@100mm &amp; 150mm</td>
</tr>
<tr>
<td></td>
<td>12 NOS. -16mmØ</td>
<td>12 NOS. -16mmØ</td>
<td>8 NOS. -30mmØ</td>
<td>4 NOS. -15mmØ</td>
<td>12 NOS. -16mmØ</td>
<td>80@100mm &amp; 150mm</td>
</tr>
<tr>
<td>2</td>
<td>GROUND FLOOR</td>
<td>(450 x 450)</td>
<td>(450 x 450)</td>
<td>(450 x 450)</td>
<td>(450 x 450)</td>
<td>80@100mm &amp; 150mm</td>
</tr>
<tr>
<td></td>
<td>12 NOS. -16mmØ</td>
<td>12 NOS. -16mmØ</td>
<td>12 NOS. -20mmØ</td>
<td>12 NOS. -20mmØ</td>
<td>12 NOS. -16mmØ</td>
<td>80@100mm &amp; 150mm</td>
</tr>
</tbody>
</table>
### COLUMN REINFORCEMENT DETAILS AT GRID - 2

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>GRID</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>STIRRUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FIRST FLOOR</td>
<td>4 NO. 20mm x 8 NO. 16mm</td>
<td>4 NO. 22mm x 8 NO. 16mm</td>
<td>4 NO. 22mm x 8 NO. 16mm</td>
<td>4 NO. 22mm x 8 NO. 16mm</td>
<td>4 NO. 22mm x 8 NO. 16mm</td>
<td>80@100mmoc &amp; 150mmoc</td>
</tr>
<tr>
<td>2</td>
<td>GROUND FLOOR</td>
<td>4 NO. 20mm x 8 NO. 16mm</td>
<td>4 NO. 22mm x 8 NO. 16mm</td>
<td>4 NO. 22mm x 8 NO. 16mm</td>
<td>4 NO. 22mm x 8 NO. 16mm</td>
<td>4 NO. 22mm x 8 NO. 16mm</td>
<td>80@100mmoc &amp; 150mmoc</td>
</tr>
</tbody>
</table>

### COLUMN REINFORCEMENT DETAILS AT GRID - 3

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>GRID</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>COLUMN SIZE (450 x 450)</th>
<th>STIRRUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FIRST FLOOR</td>
<td>12 NO. 18mmØ</td>
<td>12 NO. 18mmØ</td>
<td>12 NO. 18mmØ</td>
<td>12 NO. 16mmØ</td>
<td>12 NO. 16mmØ</td>
<td>80@100mmoc &amp; 150mmoc</td>
</tr>
<tr>
<td>2</td>
<td>GROUND FLOOR</td>
<td>12 NO. 18mmØ</td>
<td>12 NO. 18mmØ</td>
<td>12 NO. 18mmØ</td>
<td>12 NO. 16mmØ</td>
<td>12 NO. 16mmØ</td>
<td>80@100mmoc &amp; 150mmoc</td>
</tr>
</tbody>
</table>

**NOTES:**
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Refer this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

NOTES:

PLINTH BEAM TIE PLAN AT PLINTH LEVEL
(Scale: 1:100)

PLINTH BEAM TIE DETAIL ALONG GRID - A, B, C, D & E
(Scale = 1:50)

SECTION 4-4
(Scale = 1:25)

SECTION 5-5
(Scale = 1:25)
1. Any discrepancy in the drawing is to be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

PLINTH BEAM TIE DETAIL ALONG GRID AT -1
(Scale = 1:50)

SECTION -1-1
(Scale = 1:25)

PLINTH BEAM TIE DETAIL ALONG GRID AT -2 & 3
(Scale = 1:50)

SECTION -3-3
(Scale = 1:25)
NOTES:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Rollers & windows schedule/locations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

S-09
Date: September, 2016

Mr. H.B. Gurung
Mr. A.S. Tamang
Mr. S. Malla

Sub-Consultant: Joint Venture with

Project Title: Emergency School Reconstruction Project

Donor: Japan International Cooperation Agency

Government Of Nepal
Department Of Education
Sanothimi, Bhaktapur, Nepal


Print Sheet: A’3’ Size

Type Design : 2 STOREY LABORATORY, LIBRARY, ECD, MUSIC & DRAWING AND COMPUTER ROOM

Sheet Title: BEAM PLANS (FIRST FLOOR & TRUSS LEVEL)

Print Sheet: A’3’ Size
1. Any discrepancy in the drawings should be immediately reported to the consultant or concerned engineering.
2. Drawings are not to be directly measured.
3. Read the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors, as per details unless otherwise indicated.

NOTES:
1. Beam detail along grid at -1 (Scale = 1:50)
2. Beam detail along grid at -1 (Scale = 1:25)
3. Beam detail along grid at -1 (Scale = 1:25)
4. Beam detail along grid at -1 (Scale = 1:25)
5. Beam detail along grid at -1 (Scale = 1:25)

Sheet Title: BEAM DETAILS
Sheet No.: 2-EMC

Date: September, 2016
Print Sheet: A3' Size

Government Of Nepal
Department Of Education
Sanathani, Bhaktapur, Nepal

Japan International Cooperation Agency

Project Title: Emergency School Reconstruction Project

Donor: ORIENTAL CONSULTANTS GLOBAL
Global Consulting for sustainable Development

Orient Consultants Global

MOH&RI ARCHITECTS & ASSOCIATES, INC.

Type Design: 2 STOREY LABORATORY, LIBRARY, ICD, MUSIC & DRIVING AND COMPUTER ROOM

Print Sheet: A3' Size

S-10
1. Any discrepancy in the drawing shall be immediately reported to the consultant or concerned engineer.

2. Drawings are not to be directly measured.

3. Refer doors & windows schedule/elevations for size of doors & windows.

4. Thicken/threshold at all exterior doors as per details, unless otherwise indicated.

5. Provide finish threshold at all exterior doors as per details, unless otherwise indicated.

NOTES:

1. Any discrepancy in the drawing shall be immediately reported to the consultant or concerned engineer.

2. Drawings are not to be directly measured.

3. Refer doors & windows schedule/elevations for size of doors & windows.

4. Thicken/threshold at all exterior doors as per details, unless otherwise indicated.

5. Provide finish threshold at all exterior doors as per details, unless otherwise indicated.
3. Read this drawing along with other related drawings and other services drawings unless otherwise indicated.

2. Drawing are not to be directly measured.

1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.

5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

4. Refer doors & windows schedule/elevations for size of doors & windows.
3. Read this drawing along with other related drawings and other services drawings unless otherwise indicated.

2. Drawings are not to be directly measured.

1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.

5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

4. Refer doors & windows schedule/elevations for size of doors & windows.

NOTES:

- 1:50
- 1:25
SLAB REINFORCEMENT PLAN

(Scale: 1:100)

SLAB THICKNESS
MAIN BAR (SHORT SPAN)
MAIN BAR (LONG SPAN)
NEGATIVE BAR (TOP BAR)
DISTRIBUTION BAR

15mm
6mm@150mm c/c
6mm@150mm c/c
6mm@150mm c/c
6mm@150mm c/c

NOTES:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedules/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

3. Read this drawing along with other related drawings
and other services drawings.

SLAB THICKNESS
MAIN BAR (SHORT SPAN)
MAIN BAR (LONG SPAN)
NEGATIVE BAR (TOP BAR)
DISTRIBUTION BAR

15mm
6mm@150mm c/c
6mm@150mm c/c
6mm@150mm c/c
6mm@150mm c/c

NOTES:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedules/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
1. Any discrepancy in the drawing shall be immediately reported to the consultant or concerned engineer.

2. Drawings are not to be directly measured.

3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.

4. Roller doors & windows schedules/ elevations for size of doors & windows

5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

NOTES:

SECONDS FLIGHT STAIRCASE SECTION AT - Q-Q

FIRST FLIGHT STAIRCASE SECTION AT - P-P
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

NOTES:

<table>
<thead>
<tr>
<th>Sheet Title: TRUSS PLAN &amp; SECTION</th>
<th>Sheet No. 2-LaLi EMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: September, 2016</td>
<td>Print Sheet: A’3’ Size</td>
</tr>
</tbody>
</table>

DONOR:

Japan International Cooperation Agency

PROJECT TITLE:

Emergency School Reconstruction Project

Government of Nepal

Department Of Education

Sanathimi, Bhaktapur, Nepal

Government Of Nepal

Department Of Education

Sanathimi, Bhaktapur, Nepal

OCCASIONAL CONSULTANTS GLOBAL

Joint Venture with

MOHRI ARCHITECTS & ASSOCIATES, INC.

East West Engineering Service Pvt. Ltd.

Mr. H.B. Gurung

Mr. S. Malla

Mr. A.S. Tamang

Mr. Wong Kuok Hung

Mr. Tomoki Miyano

Mr. Hisafumi Michikawa

Mr. Wong Kuok Hung

Mr. S. Malla

Type Design:

2-STOREY LABORATORY, LIBRARY, RCC, MUSIC & DRAWING AND COMPUTER ROOM

Print Sheet: A’3’ Size

S-16
NOTES:
1. Any discrepancy in the drawing shall be immediately reported to the consultant or concerned engineer.
2. Drawings are not to be directly measured.
3. Review the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

Government Of Nepal
Department Of Education
Sanothimi, Bhaktapur, Nepal

Mr. H.B. Gurung
Mr. A.S. Tamang
Mr. S. Malla

Sub-Consultant: Joint Venture with

Project Title: Emergency School Reconstruction Project

Government Of Nepal

Japan International Cooperation Agency

Donor:

Oriental Consultants Global Consulting for sustainable Development

Type Design: Sheet Title: Sheet No.

Print Sheet: A3 Size

Date: September, 2016

Print Sheet: A3 Size

Sheet No.

S-17
1. Any discrepancy in the drawing shall be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with the related drawings and coordinates with structural, electrical, plumbing, and other services drawings.
4. Refer doors & windows schedule/elevenments for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.

NOTES:

S-18
Date: September, 2016

Mr. H.B. Gurung
Mr. A.S. Tamang
Mr. S. Malla

Sub-Consultant: Joint Venture with

Project Title: Emergency School Reconstruction Project

Donor: Orientsal Consultants Global Consultants for Sustainable Development

Government Of Nepal
Department Of Education
Sanothimi, Bhaktapur, Nepal

Japan International Cooperation Agency

Mr. Tomoki Miyano
Mr. Hisafumi Michikawa
Mr. Wong Kuok Hung

Type Design: TRUSS DETAILS

Sheet No: 2-LaLi EMC
Print Sheet: A3 Size
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/elevations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.
7. The location of ramps to be adjusted as per site condition.

NOTES:

GND FLOOR UP DISTRIBUTION SYSTEM (DB-1)
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing, and other services drawings.
4. Refer doors & windows schedule/indications for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

NOTES:

LEGEND

SN | SYMBOL | INDICATES | MOUNTING HEIGHT | REMARKS
---|--------|-----------|-----------------|--------
1  | D-     | EA Power Socket | Above Ceiling | -
2  | I      | Two way Switch | 2.5 m above Floor Level | -
3  | S      | One way Switch | 2.5 m above Floor Level | -
4  | C      | 2m Electrical Floor Cover | 2 m above Ground Level | -
5  | H      | Single Pole MCB | - | -
6  | L      | Double Pole MCB | - | -
7  | S      | Three Pole MCB | - | -
8  | C      | NEMA Meter | 2.5 m above Ground Level | -
9  | K      | Distribution Board | 2.5 m above Ground Level | -
10 | M      | Mini Power Board | 2.5 m above Ground Level | -

FIRST FLOOR LP DISTRIBUTION SYSTEM (DB-2)

SOLAR DB

EMC
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read the drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedule/related drawings for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

NOTES:
6. The location of ramps to be adjusted as per site condition.

LEGEND FOR SANITARY DRAWINGS

Government Of Nepal
Department Of Education
Santrinire, Bhaktapur, Nepal

Donor:
Japan International Cooperation Agency

Emergency School Reconstruction Project

Oriental Consultants Global

Global Consulting for Sustainable Development

Type Design:

Print Sheet: A'3' Size

Sheet Title: WASTE WATER PIPELINE LAYOUT PLAN

Sheet No: 2-LaLi

WASTE WATER PIPELINE LAYOUT (GROUND FLOOR PLAN)

(Scale: 1:50)

Date: September, 2016

Print Sheet: A'3' Size

P-01
NOTES:
1. Any discrepancy in the drawing to be immediately reported to the consultant or concerned engineer.
2. Drawing are not to be directly measured.
3. Read this drawing along with other related drawings and coordinate with Structural, Electrical, Plumbing and other services drawings.
4. Refer doors & windows schedules/locations for size of doors & windows.
5. Provide threshold at all exterior doors as per details, unless otherwise indicated.
6. The location of ramps to be adjusted as per site condition.

LEGEND FOR SANITARY DRAWINGS

DATE: September, 2016
Print Sheet: A'3' Size

WATER SUPPLY PIPELINE LAYOUT
(GROUND FLOOR PLAN)
(Scale 1:50)