SCHOOL BUILDING DRAWING
LOAD BEARING WALL-CGI ROOFING
1 STOREY-3 ROOM-HILL REGION

WORKING DRAWINGS

SUBMITTED BY:
ROOM TO READ, NEPAL
SAMEPA ROAD, JALITPUR, Nepal, P.O Box 21103
Tel: 01-5553416, Fax: 01-5547520
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TOTAL NUMBERS OF DRAWINGS : 15

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<td>4.</td>
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<td>F-1</td>
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</table>
## Building Type: 1 Storey CGI Roof with Brick Masonry

### FINISHING SCHEDULE

<table>
<thead>
<tr>
<th>S.No</th>
<th>Area</th>
<th>FLOOR</th>
<th>WALL</th>
<th>DOOR</th>
<th>WINDOW</th>
<th>Door &amp; Window</th>
<th>Roof</th>
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<td>FINISH</td>
<td>BEANAL</td>
<td>Sections</td>
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1. **Ground Floor**

1.1 **Class room**

<table>
<thead>
<tr>
<th></th>
<th>IPS</th>
<th>FB+TR</th>
<th>CP+WP</th>
<th>CP+WP1</th>
<th>D1=2</th>
<th>D2=2</th>
<th>MS</th>
<th>WPP</th>
<th>Al/150-300mm</th>
<th>SB-100</th>
<th>Al</th>
<th>W=12</th>
<th>MS</th>
<th>WPP</th>
<th>Al(75mm)</th>
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1.4 **Verandah**

### LEGENDS:

<table>
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<tr>
<th>Symbol</th>
<th>Description of symbol</th>
<th>Symbol</th>
<th>Description of symbol</th>
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<tbody>
<tr>
<td>CP</td>
<td>Cement Plaster</td>
<td>Al</td>
<td>Aluminium</td>
<td>WP1</td>
<td>Water Proof Cement Paint/White</td>
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<tr>
<td>IPS</td>
<td>Cement Screed floor</td>
<td>SB-125</td>
<td>Steel Butt Hinge 125mm</td>
<td>WP2</td>
<td>Water Proof Cement Paint;</td>
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<tr>
<td>FB</td>
<td>Fair face Brick</td>
<td>SB-100</td>
<td>Steel Butt Hinge 100mm</td>
<td>WP3</td>
<td>WEPP</td>
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<tr>
<td>BS</td>
<td>Brick on edge soling</td>
<td>SB-75</td>
<td>Steel Butt Hinge 75mm</td>
<td>EP1</td>
<td>Enamel paint</td>
</tr>
<tr>
<td>CPP</td>
<td>Cement Plaster with Punning</td>
<td>EP2</td>
<td>TR</td>
<td>Red Terracota paint</td>
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</tbody>
</table>

**Paint**

- **CP**: Cement Plaster
- **IPS**: IPS Screed floor
- **FB**: Fair face Brick
- **BS**: Brick on edge soling
- **CPP**: Cement Plaster with Punning
- **TR**: Red Terracota paint
1. Only written dimensions to be followed. Drawings not to be measured as per given scale
2. Any discrepancy or omission in this drawing if found shall be reported immediately to site engineer

Title: Trench Plan

Structure Design By: B. L. Shrestha
NEC No:1186-Civil

Approved By:

Date: 2015-Nov
Revised Date: 2016-Jan

Room to Read Nepal
1. Only written dimensions to be followed. Drawings not to be measured as per given scale.
2. Any discrepancy or omission in this drawing if found shall be reported immediately to site engineer.

Sheet Title: Floor Plan for 3 Rooms

Structure Design By: B.L. Shrestha
NEC No: 1186-Civil

Designed By: Govinda Devkota
NEC No: 1191-Civil

Checked By:  

Approved By:  

Project: 1 Storey/3Rm/ Frm- Brick-CGI Roof - Hill Region

Date: 2015–Nov

Room to Read Nepal
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**Room to Read Nepal**

**Project:** 1 Storey/2Rm/ Frm- Brick- CGI Roof

**Title:** Wall Section & Foundation Detail

**Structure Design By:** B. L. Shrestha

**NEC No:** 1186-Civil

**Checked By:**

**Approved By:**

---

1. Only written dimensions to be followed. Drawings not to be measured as per given scale
2. Any discrepancy or omission in this drawing if found shall be reported immediately to site engineer

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**Detail 1. Section at P-P**

Detail of steps & Verandah

- IPS floor finish
- 40mm thick screeding (1:6)
- 3" Thick PCC (1:3:6)
- 6" Stone or Hard Core filling
- Compacted Earth

**Detail 2. Wall Section at K-K**

- IPS floor finish
- 40mm thick screeding (1:6)
- 3" Thick PCC (1:3:6)
- 6" Stone or Hard Core filling
- Compacted Earth

**Foundation Detail for Safe Bearing Capacity = 100 KN/Sq.m**

**Footings Schedule for Weak Soil (Safe Bearing Capacity = 50 KN/Sq.m)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Depth of Foundation</th>
<th>Size of RCC at Footing</th>
<th>Steel Both Way</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>F1 (With Buttress)</td>
<td>3'-6&quot;</td>
<td>10 Ø(Fe500)@6&quot;C/C</td>
<td>B=2'-0&quot;; H=6&quot;; L=Throughout main building wall length</td>
<td></td>
</tr>
<tr>
<td>F2 (Verandah)</td>
<td>3'-6&quot;</td>
<td>10 Ø(Fe500)@6&quot;C/C</td>
<td>B=1'-6&quot;; H=6&quot;; L=Throughout the Verandah length</td>
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**Footings Schedule for Soft Soil (Safe Bearing Capacity = 100 KN/Sq.m)**

<table>
<thead>
<tr>
<th>Type</th>
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<th>Size of RCC at Footing</th>
<th>Steel Both Way</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>F1 (With Buttress)</td>
<td>3'-6&quot;</td>
<td>10 Ø(Fe500)@6&quot;C/C</td>
<td>B=2'-0&quot;; H=4&quot;; L=Throughout main building wall length</td>
<td></td>
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<tr>
<td>F2 (Verandah)</td>
<td>3'-6&quot;</td>
<td>10 Ø(Fe500)@6&quot;C/C</td>
<td>B=1'-6&quot;; H=4&quot;; L=Throughout the Verandah length</td>
<td></td>
</tr>
</tbody>
</table>
Only written dimensions to be followed. Drawings not to be measured as per given scale.

Any discrepancy or omission in this drawing if found shall be reported immediately to site engineer.

1. **Lintle Band**
2. 3" thick Jamb Concrete
3. Reinforcement for Vertical tie
4. Window
5. Brick wall
6. Tooothing in Brick
7. Sill Band
8. Door
9. RCC Plinth Band

**Legend**
- Lintel Band
- 2.3" thick Jamb Concrete
- 3. Reinforcement for Vertical tie
- 4. Window
- 5. Brick wall
- 6. Tooothing in Brick
- 7. Sill Band
- 8. Door
- 9. RCC Plinth Band

**NOTE:**
1. **CONCRETE** : M15(1:2:4)
2. PROVIDE OVERLAP FOR SPLICING STEEL @ 60x6
3. MINIMUM CLEAR COVER -
   - a. All Bands : 25 mm
4. VERTICAL REINFORCEMENT (AT BUTTRESS, WINDOW & DOOR OPENINGS) STARTS FROM FOUNDATION.

---

**Structural Design**
- Designed By: Govinda Devkota
- NEC No: 1191-Civil

**Checked By:**
- NEC No: 1186-Civil

**Approved By:**
- site engineer
## Opening Schedule for 3 ROOM CGI model

<table>
<thead>
<tr>
<th>SN</th>
<th>Particular</th>
<th>Symbol</th>
<th>Length</th>
<th>Height</th>
<th>Number</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>1</td>
<td>Door with Double Shutter</td>
<td>D1</td>
<td>3'-6&quot;</td>
<td>8'-0&quot;</td>
<td>0</td>
<td>Door with Ventilation</td>
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<tr>
<td>2</td>
<td>Single shutter Door</td>
<td>D2</td>
<td>3'-0&quot;</td>
<td>8'-0&quot;</td>
<td>3</td>
<td>Door with Ventilation</td>
</tr>
<tr>
<td>3</td>
<td>Window with Ventilation</td>
<td>W</td>
<td>3'-0&quot;</td>
<td>5'-6&quot;</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5</td>
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</table>

**Total**: 16

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1. Only written dimensions to be followed. Drawings not to be measured as per given scale.
2. Any discrepancy or omission in this drawing if found shall be reported immediately to site engineer.
1. Only written dimensions to be followed. Drawings not to be measured as per given scale.

2. Any discrepancy or omission in this drawing if found shall be reported immediately to site engineer.

Title: MS DOOR/WINDOW - DETAILING

Project: School Building Construction

Date: 2015-Oct

Designed By: Govinda Devkota
NEC No.1191-Civil

Prepared By: Keshab Paudel

Checked By:

Approved By:

100 LONG 25x25x3 mm MS ANGLE

MS VENTILATION FRAME

Note: 5 mm gap between ms plate and wooden frame for easy fit considered in design.
Note: 5 mm gap between ms plate and wooden frame for easy fit considered in design
Title: TYPICAL DWG-MS DOOR FRAME WITH WP PLYWOOD SHUTTER

Note: 5 mm gap between ms plate and wooden frame for easy fit considered in design.

1. Only written dimensions to be followed. Drawings not to be measured as per given scale.
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### Opening Schedule for 3 Room Building

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<th>Height</th>
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<tr>
<td>1</td>
<td>Door</td>
<td>D2</td>
<td>3'-0&quot;</td>
<td>8'-0&quot;</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Window</td>
<td>W</td>
<td>3'-0&quot;</td>
<td>9'-0&quot;</td>
<td>13</td>
<td></td>
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<td>3</td>
<td>Ventilation</td>
<td>V</td>
<td>3'-0&quot;</td>
<td>1'-0&quot;</td>
<td>2</td>
<td></td>
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<td>Total</td>
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1. Only written dimensions to be followed. Drawings not to be measured as per given scale.
2. Any discrepancy or omission in this drawing if found shall be reported immediately to site engineer.

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Additional details:
- **Title:** Alternate 2: Wooden Door (D2) & Window W1 and Ventilation (V) detail
- **Prepared By:** Keshab Paudel
- **Checked By:** Govinda Devkota
- **Approved By:**

---

**NEC No:** 1191-Civil

**Project:** School Building Construction/Hill type

**Date:** 2015-Oct

**Room to Read School Room Program**

**W-WINDOW-Alt 2J**
FULL TRUSS SCHEDULE REQUIRED SET NO: 5

<table>
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<th>SN</th>
<th>DESCRIPTION</th>
<th>NOTATION</th>
<th>SIZE</th>
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<th>REQD</th>
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<tr>
<td>1</td>
<td>ROOM TRUSS RAPTOR</td>
<td>RTR</td>
<td>50NB(M)</td>
<td>14'-10&quot;</td>
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<td>L&amp;R</td>
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<td>2</td>
<td>ROOM TRUSS TIE</td>
<td>RTT</td>
<td>50NB(M)</td>
<td>11'-2&quot;</td>
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<td>3</td>
<td>VERTICAL STRUT V1</td>
<td>V1</td>
<td>32NB(M)</td>
<td>0'-9&quot;</td>
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<td>4</td>
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<td>32NB(M)</td>
<td>2'-0&quot;</td>
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<td>INCLINED STRUT S1</td>
<td>S1</td>
<td>32NB(M)</td>
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<td>7</td>
<td>INCLINED STRUT S2</td>
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<td>32NB(M)</td>
<td>3'-7&quot;</td>
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<td>8</td>
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<td>32NB(M)</td>
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<td>L&amp;R</td>
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<td>32NB(M)</td>
<td>4'-6&quot;</td>
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<td>L&amp;R</td>
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<td>10</td>
<td>PURLIN 1</td>
<td>P1</td>
<td>50 NB(L)</td>
<td>14'-10&quot;</td>
<td>5x2X2</td>
<td>L&amp;R</td>
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<td>11</td>
<td>PURLIN 2</td>
<td>P2</td>
<td>50 NB(L)</td>
<td>12'-5&quot;</td>
<td>5x2X2</td>
<td>L&amp;R</td>
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Steel Pipe for Verandah Post

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<th>Description</th>
<th>SIZE(NB)</th>
<th>Length,Ft</th>
<th>Required nos</th>
<th>Region</th>
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<tbody>
<tr>
<td>Steel Post at Verandah</td>
<td>65NB(M)</td>
<td>9'-9&quot;</td>
<td>5</td>
<td>HI</td>
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</table>

Note:
1. All the MS structures should be factory made.
2. The final MS product will be coated with primer + minimum 2 coat of enamel paint.
3. Manufacturer will prepare sub drawings of steel roof truss, if required.
ANCHORING BOLT
8 mm SHOE PLATE WELDED ON BASE PLATE VERTICALLY ON BOTH SIDE OF TRUSS HORIZONTAL MEMBER

8.5"x8.5" PLATE (8mm TH.)
50NB (M) RAFTER

DETAIL AT 5

50NB Pipe (M) Rafter (Horizontal Member)
TOTAL 2 NOS. BASE PLATE FOR EACH TRUSS (REFER DETAIL E-E)

50NB (L) Purlin Pipe-1st from end
225mm long 25NB(M) eaves support pipe
lower clamp welded with eaves support pipe

Eaves board fixing detail: To be placed in between 2 Rafters lengthwise @ 6 ft c/c

NOTE: ALL DIMENSIONS ARE GIVEN IN MM; UNLESS OTHERWISE MENTIONED
Stationery/Instruction material Storage Rack (5'x4') for Teacher & Student

Iso 9001/NS standard 6mm thick plywood at back side
19mm Blockboard (ISO 9001/NS standard) with wooden bead
Drawer for Teacher Uses

LOW DESK (2 SIDE SITTING) FOR 3X2 CHILDREN (GRADE 3)

19mm thk. BLOCKBOARD moulded with 12mm thk. sal wooden bead
3x62 mm Pan Head Screw 2"x1.5" wooden section

LOW DESK (2 SIDE SITTING) FOR 3X2 CHILDREN (GRADE 1 & 2)

19mm thk. BLOCKBOARD moulded with 12mm thk. sal wooden bead
3x62 mm Pan Head Screw 2"x1.5" wooden section

Note:
1. Each & Every edges o the furniture should be rounded.
2. Painting finishing should be as per below :-
   2.1. Wood primer
   2.2. 2 coat Enamel paint-NS Standard

ROOM TO READ NEPAL

Prepared By:- Keshab Paudel
Checked By:-
Classroom Furniture Grade 1,2,3

DATE: 2015-Nov
Designed By:- Govinda Devkota
Approved By:-

Approved By:-

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Designed By:- Govinda Devkota
Approved By:-

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