# Course Title: AutoCAD Advanced (Project Development)

# Covered Course: Civil Engineering Drawing-II Sessional

**COURSE CODE: CE 0731-2100** **CREDIT: 01**

**CIE MARKS: 30**

**SEE MARKS: 20**

**CLO 01 Create** floor plan and septic tank plan.

**CLO 02 Create** layout and schedule of footing and column.

**CLO 03 Develop** grade beam details, floor beam details and section.

**CLO 04 Develop** slab reinforcement and stair section.

**Prepared By- Md. Rejoan Chowdhury, Lecturer, CE, UGV**

| Sl. | Course Contents | Teaching Learning Strategy | Hours | CLOs |
|---|---|---|---|---|
| 1 | Ground Floor Plan | Lecture, Discussion | 5 | CLO 1 |
| 2 | First Floor Plan | Lecture, Discussion | 5 | CLO 1 |
| 3 | Footing Layout | Lecture, Discussion | 5 | CLO 2 |
| 4 | Footing Schedule | Lecture, Discussion | 5 | CLO 2 |
| 5 | Column Layout | Lecture, Discussion | 5 | CLO 2 |
| 6 | Column Schedule | Lecture, Discussion | 5 | CLO 2 |
| 7 | Grade Beam Details | Lecture, Discussion | 5 | CLO 3 |
| 8 | Floor Beam Details | Lecture, Discussion | 5 | CLO 3 |
| 9 | Floor Beam Section | Lecture, Discussion | 5 | CLO 3 |
| 10 | Slab Reinforcement | Lecture, Discussion | 5 | CLO 4 |
| 11 | Stair Section | Lecture, Discussion | 5 | CLO 4 |
| 12-13 | Septic Tank Plan | Lecture, Discussion | 10 | CLO 1 |

**Reference Book-** How to Build a Nice Home- Md. Ibrahim

| Week | Topic | Teaching Learning Strategy | Assessment Strategy | CLOs | Page |
|---|---|---|---|---|---|
| 1 | Ground Floor Plan | Lecture, Discussion | Lab report, Quiz | CLO 1 | 5-6 |
| 2 | First Floor Plan | Lecture, Discussion | Lab report, Quiz | CLO 1 | 7-8 |
| 3 | Footing Layout | Lecture, Discussion | Lab report, Quiz | CLO 2 | 9-10 |
| 4 | Footing Schedule | Lecture, Discussion | Lab report, Quiz | CLO 2 | 11-12 |
| 5 | Column Layout | Lecture, Discussion | Lab report, Quiz | CLO 2 | 13-14 |
| 6 | Column Schedule | Lecture, Discussion | Lab report, Quiz | CLO 2 | 15-16 |
| 7 | Grade Beam Details | Lecture, Discussion | Lab report, Quiz | CLO 3 | 17-18 |
| 8 | Floor Beam Details | Lecture, Discussion | Lab report, Quiz | CLO 3 | 19-20 |
| 9 | Floor Beam Section | Lecture, Discussion | Lab report, Quiz | CLO 3 | 21-22 |
| 10 | Slab Reinforcement | Lecture, Discussion | Lab report, Quiz | CLO 4 | 23-24 |
| 11 | Stair Section | Lecture, Discussion | Lab report, Quiz | CLO 4 | 25-26 |
| 12-13 | Septic Tank Plan | Lecture, Discussion | Lab report, Quiz | CLO 1 | 27-28 |
| 14 | Lab Assessment | Demonstration | Lab report, Quiz, Viva | CLO 1-4 | N/A |

# Assessment Strategy

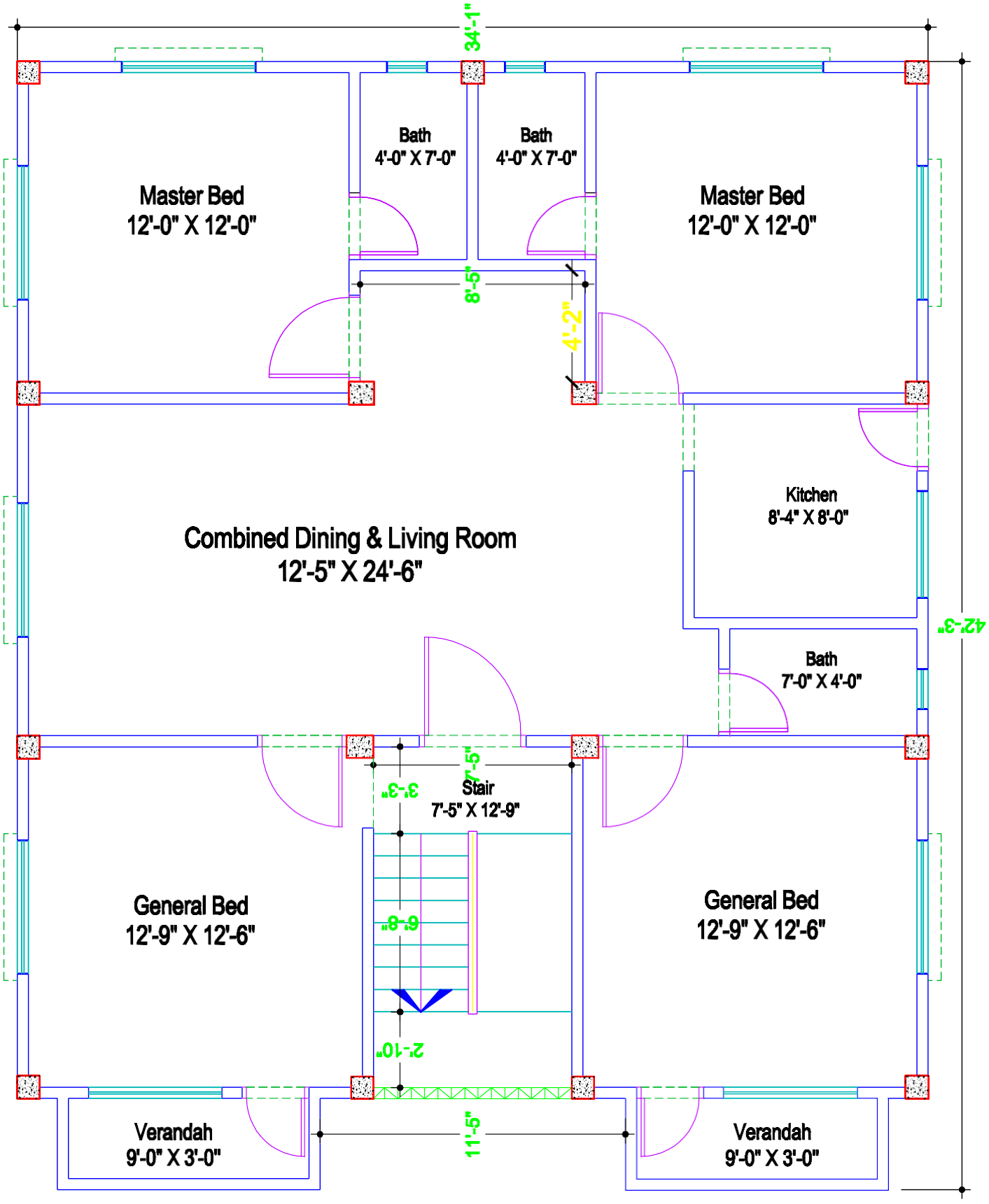
## CIE- Continuous Internal Evaluation (60 Marks) (Should be converted in 30 marks)

| Bloom's Category Marks (out of 60) | Lab Final (30) | Lab Report (10) | Continuous lab performance (10) | Presentation & Viva (10) | External Participation in Curricular/Co-Curricular Activities (10) |
|---|---|---|---|---|---|
| Remember | 05 | | | 02 | Attendance 10 |
| Understand | 05 | 05 | 02 | 03 | |
| Apply | 05 | | 02 | | |
| Analyze | 05 | | 02 | | |
| Evaluate | 05 | 05 | 02 | | |
| Create | 05 | | 02 | 05 | |

## SEE- Semester End Examination (40 Marks) (Should be converted in 20 marks)

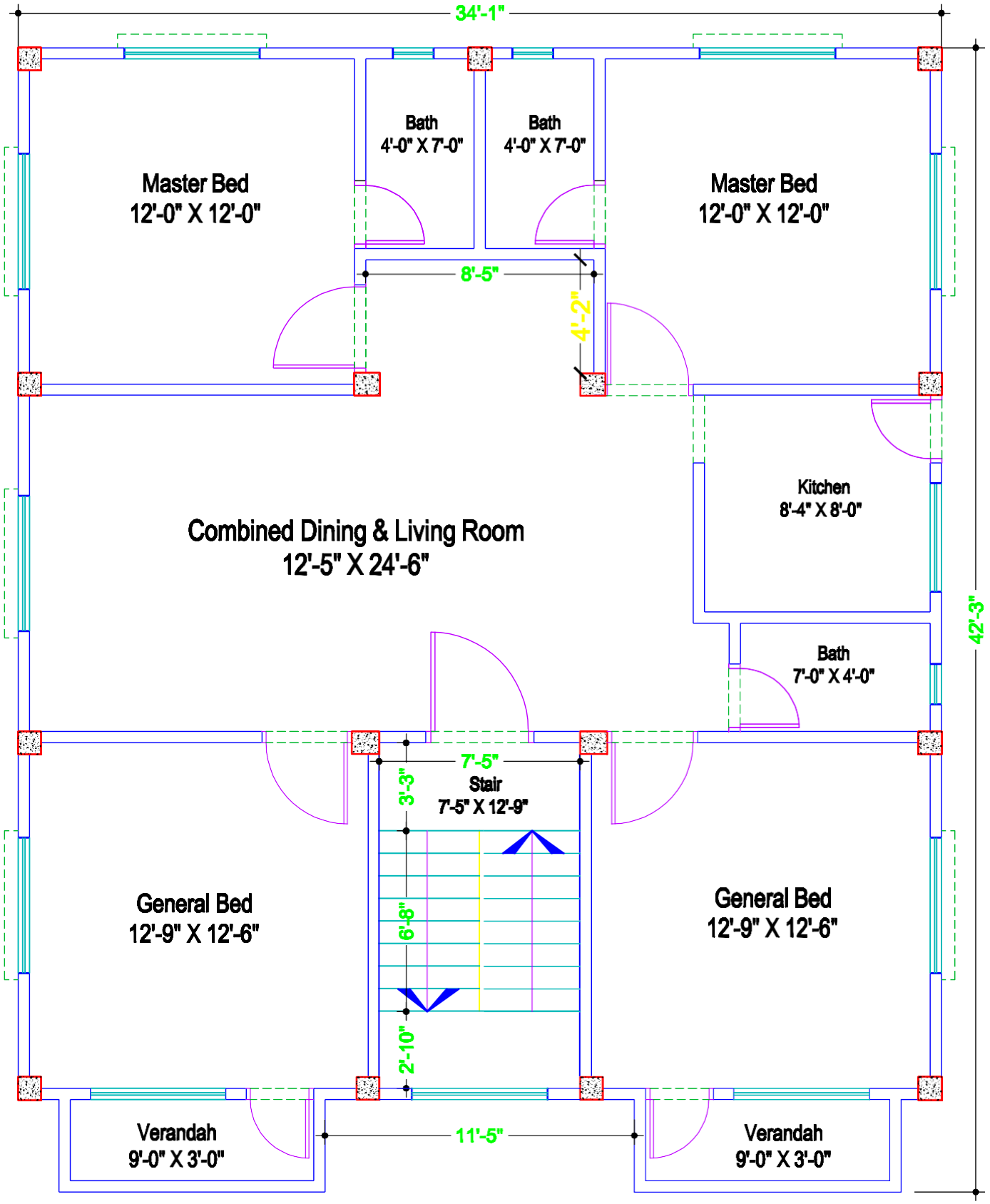
| Bloom's Category | Tests |
|---|---|
| Remember | 05 |
| Understand | 05 |
| Apply | 10 |
| Analyze | 05 |
| Evaluate | 05 |
| Create | 10 |

# Ground Floor Plan (Week 1)



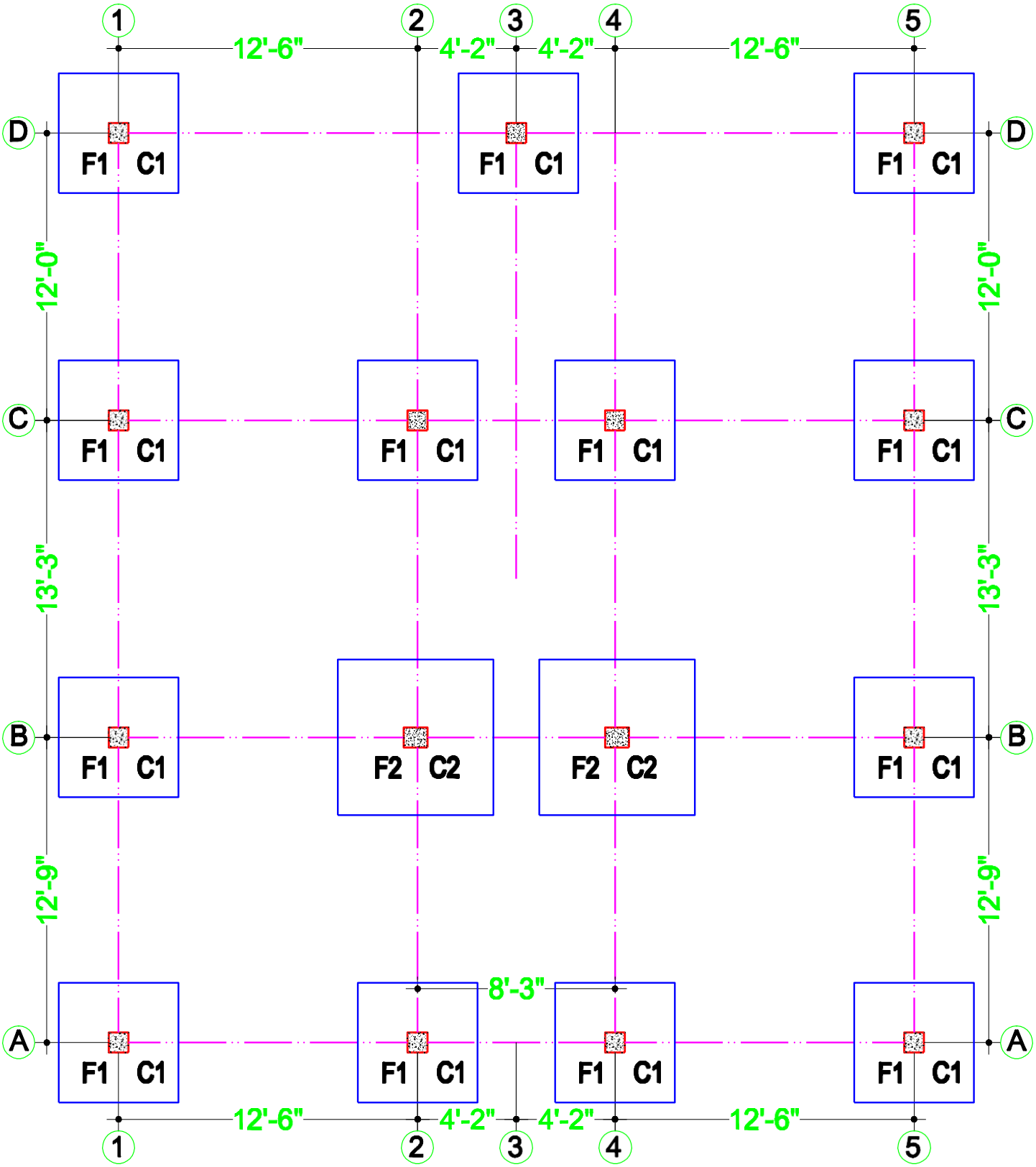

GROUND FLOOR PLAN

# First Floor Plan
# (Week 2)




FIRST FLOOR PLAN

# Footing Layout
# (Week 3)

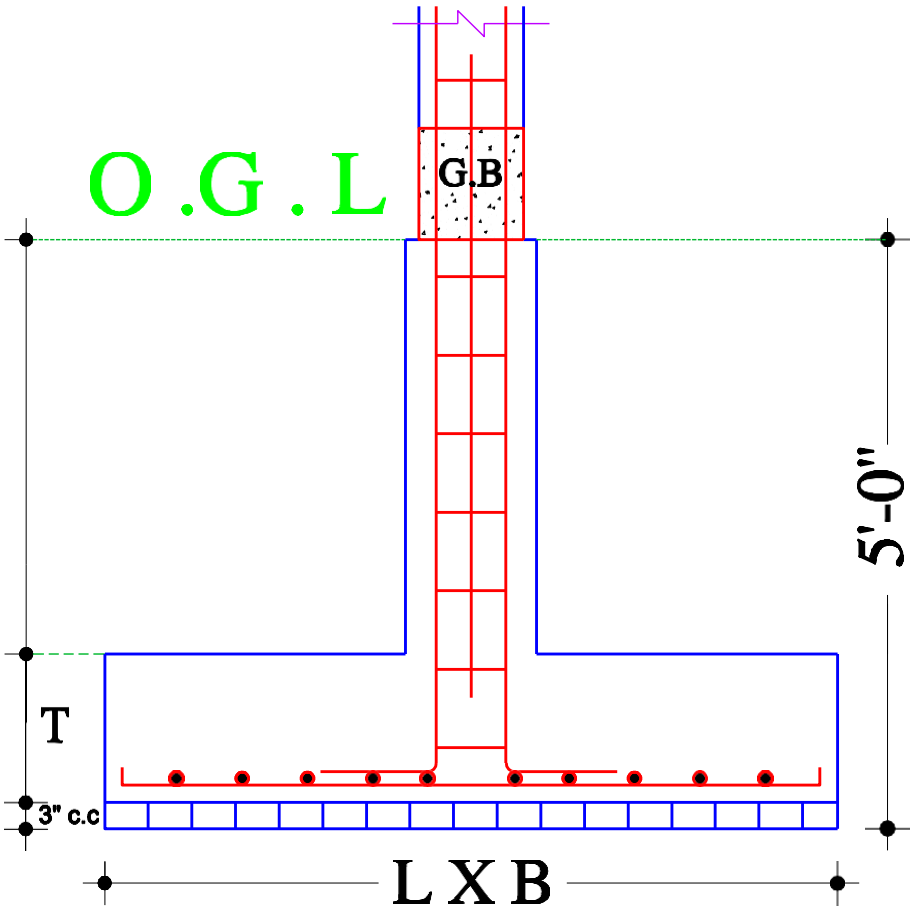



FOOTING LAYOUT

# Footing Schedule
# (Week 4)

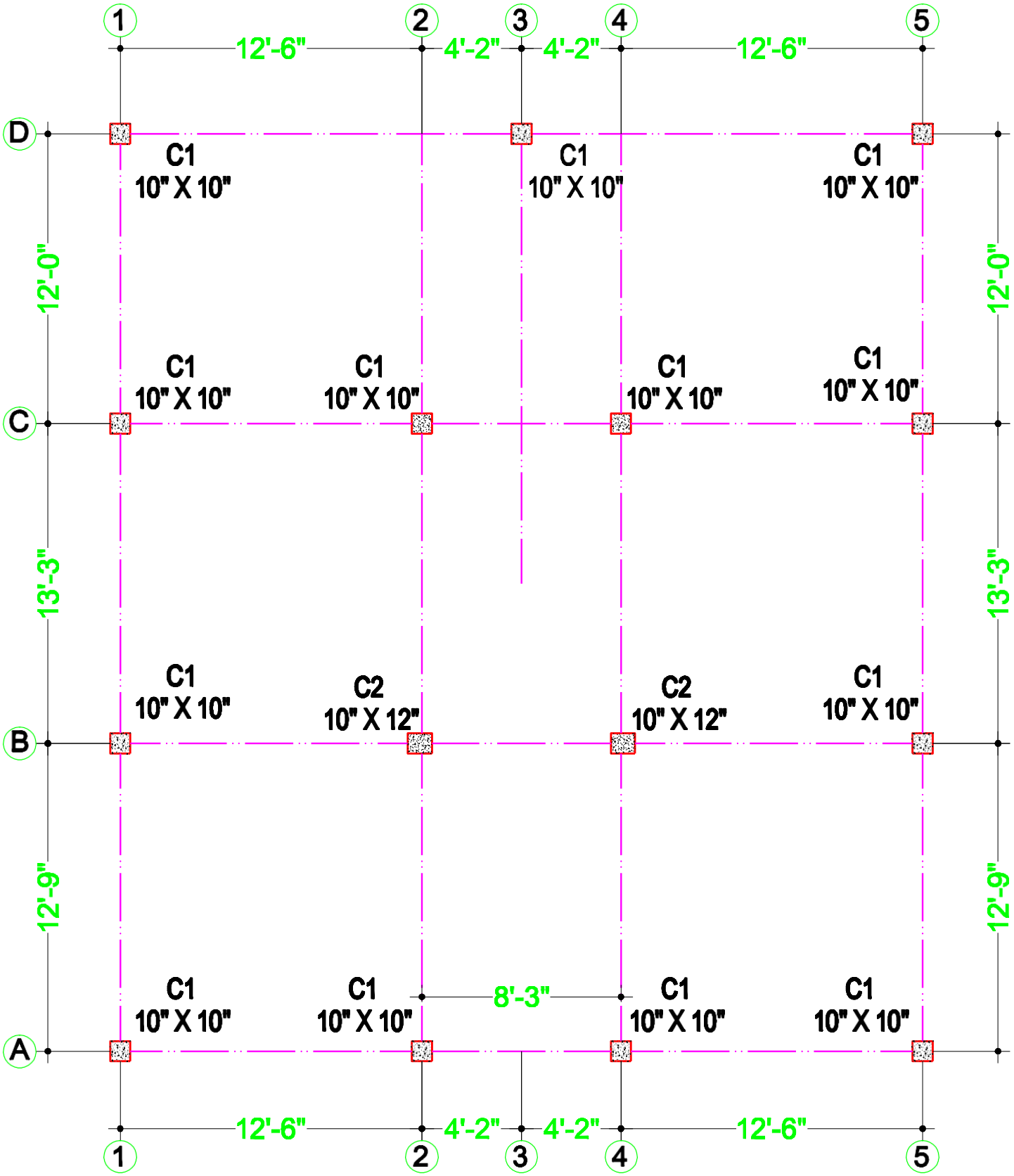
## Footing Schedule:

| Type of Footing | Size of Base | Main Bar | T |
|---|---|---|---|
| F1 | 5'- 0" X 5'- 0" | 12 mm @ 4" c/c Both Way | 12" |
| F2 | 6'- 6" X 6'- 6" | 12 mm @ 4" c/c Both Way | 14" |




X - Section of F1, F2.

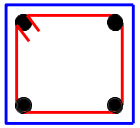
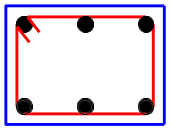
# Column Layout (Week 5)

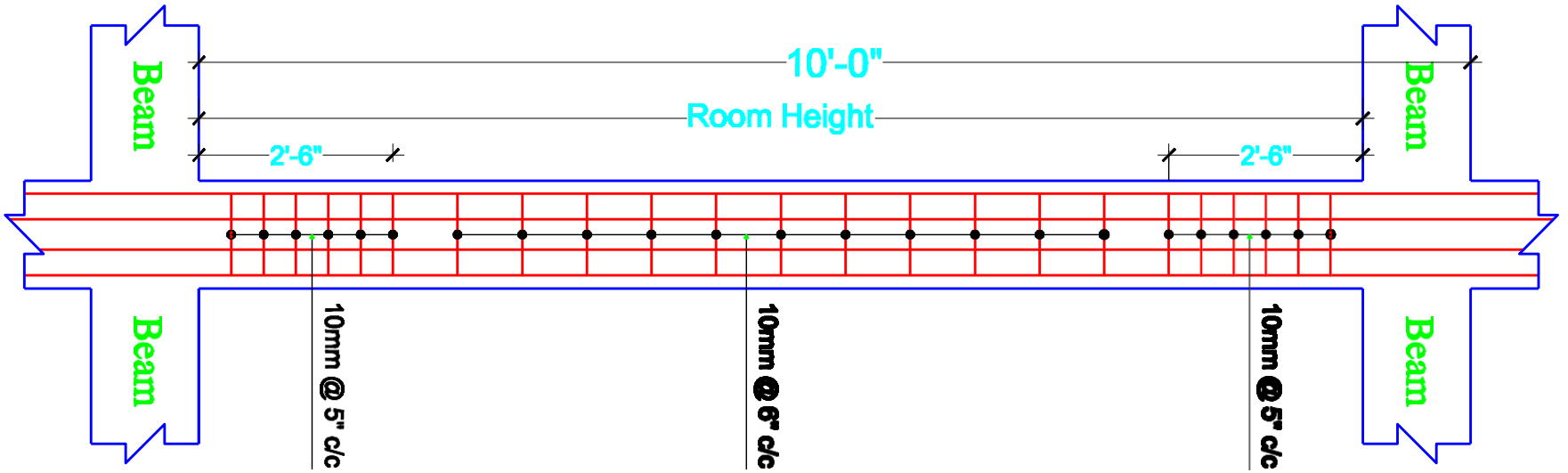



COLUMN LAYOUT

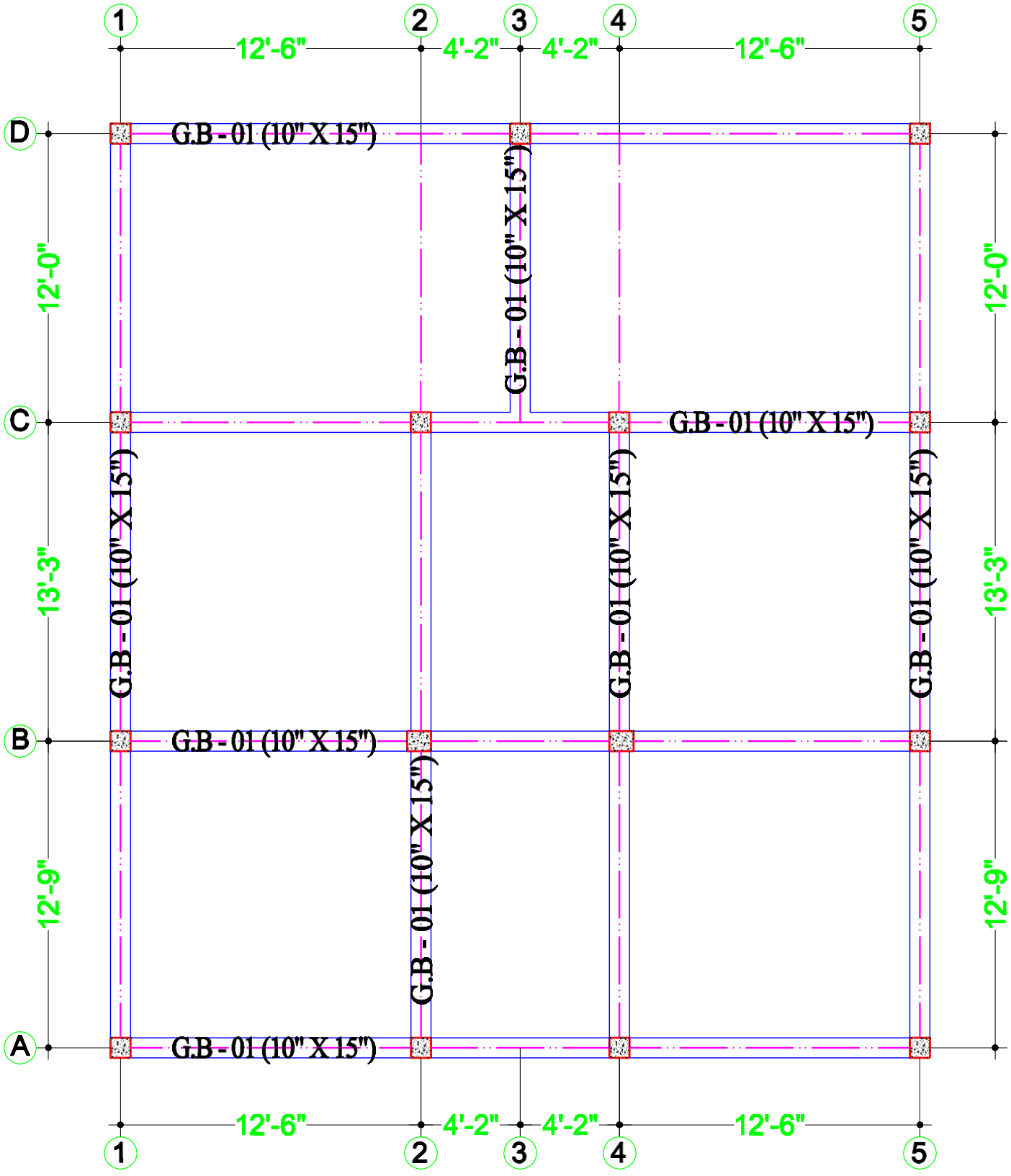
# Column Schedule
# (Week 6)

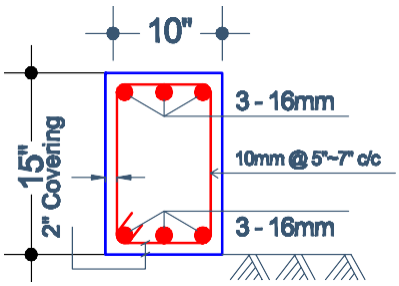
## Column Schedule:

| TYPE OF COLUMN | SIZE OF COLUMN | | Gr. to 1st. Floor | Ring |
|---|---|---|---|---|
| | BELOW G.L | ABOVE G.L | | |
| C1 | 13" X 13" | 10" X 10" | 4 - 16mm |  |
| C2 | 13" X 15" | 10" X 12" | 6 - 16mm |  |
| | | | | |



# Grade Beam Details (Week 7)

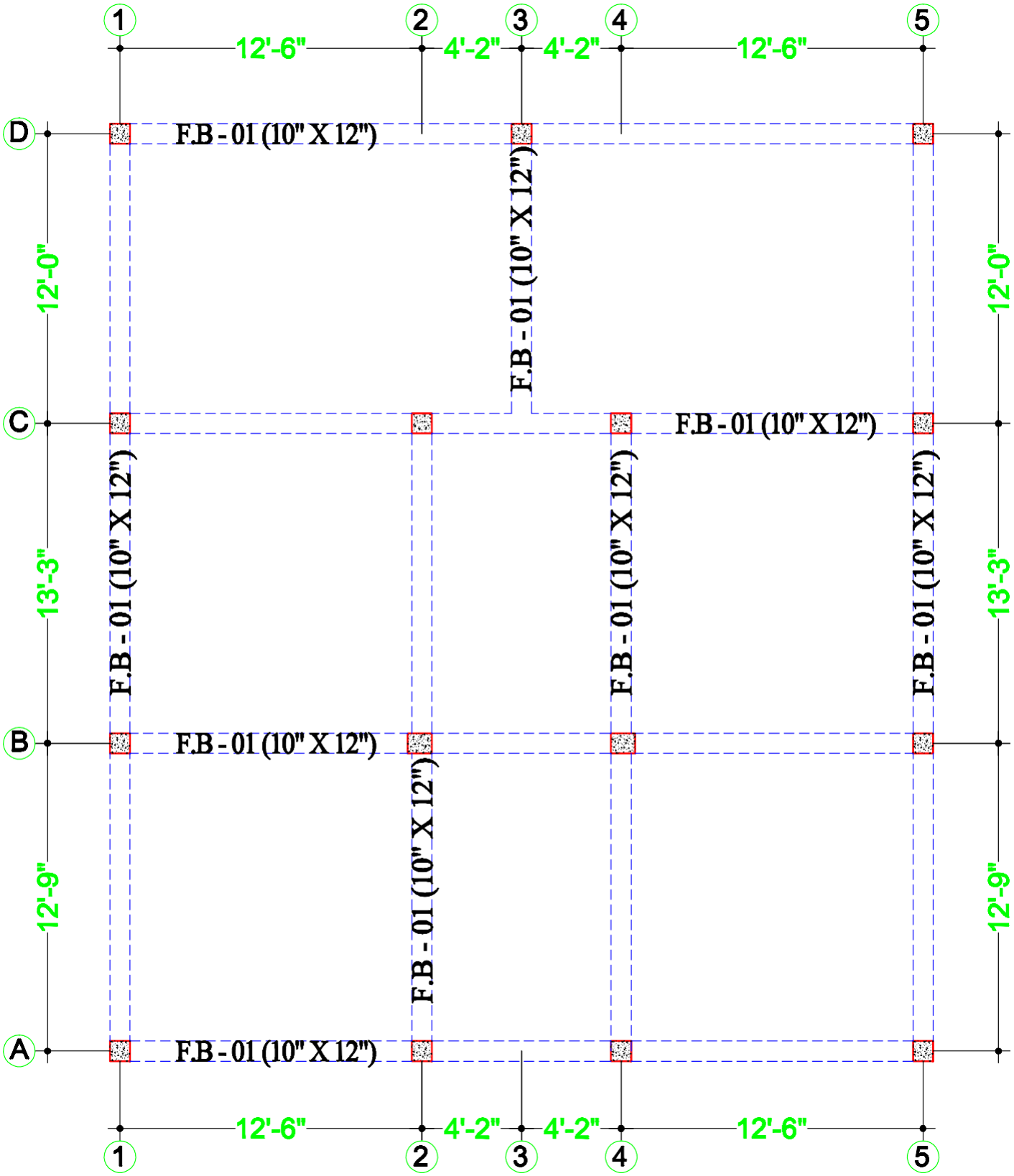



X Sec. of G .B - 01

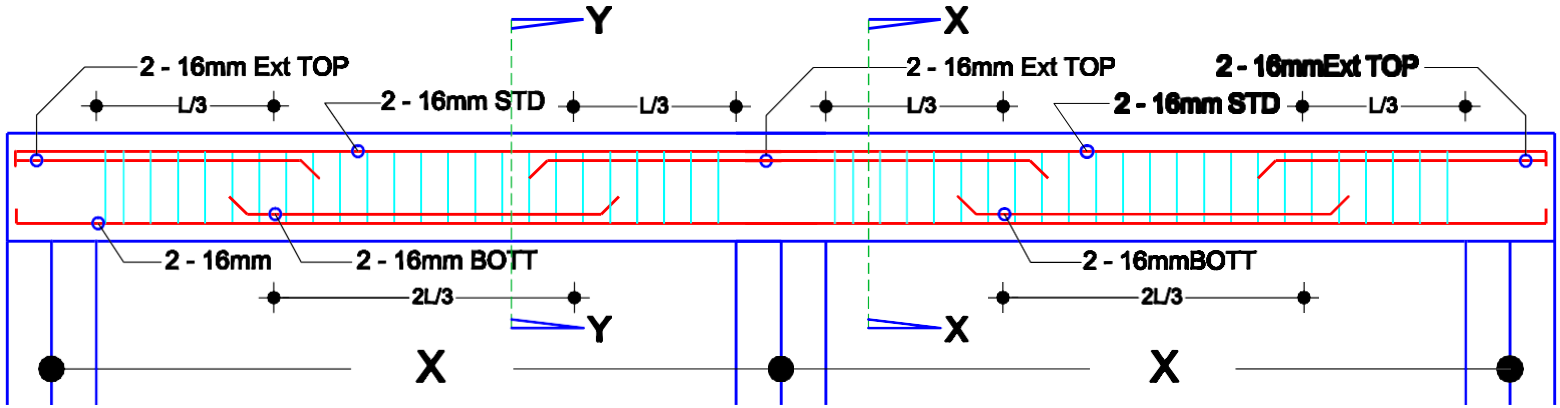
GRADE BEAM DETAILS

# Floor Beam Details (Week 8)

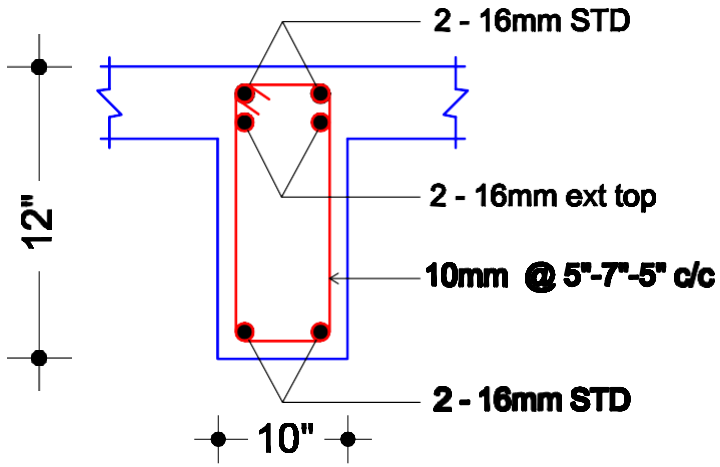



FLOOR BEAM DETAILS

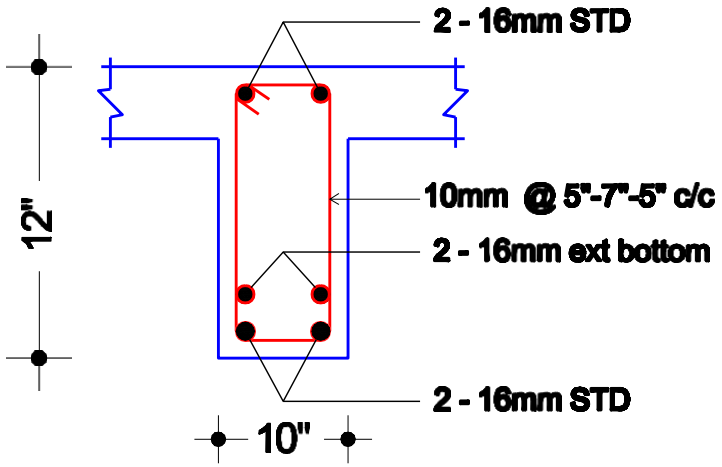
# Floor Beam Section (Week 9)




Long Sec. of F.B - 01 ( 10" X 12" )



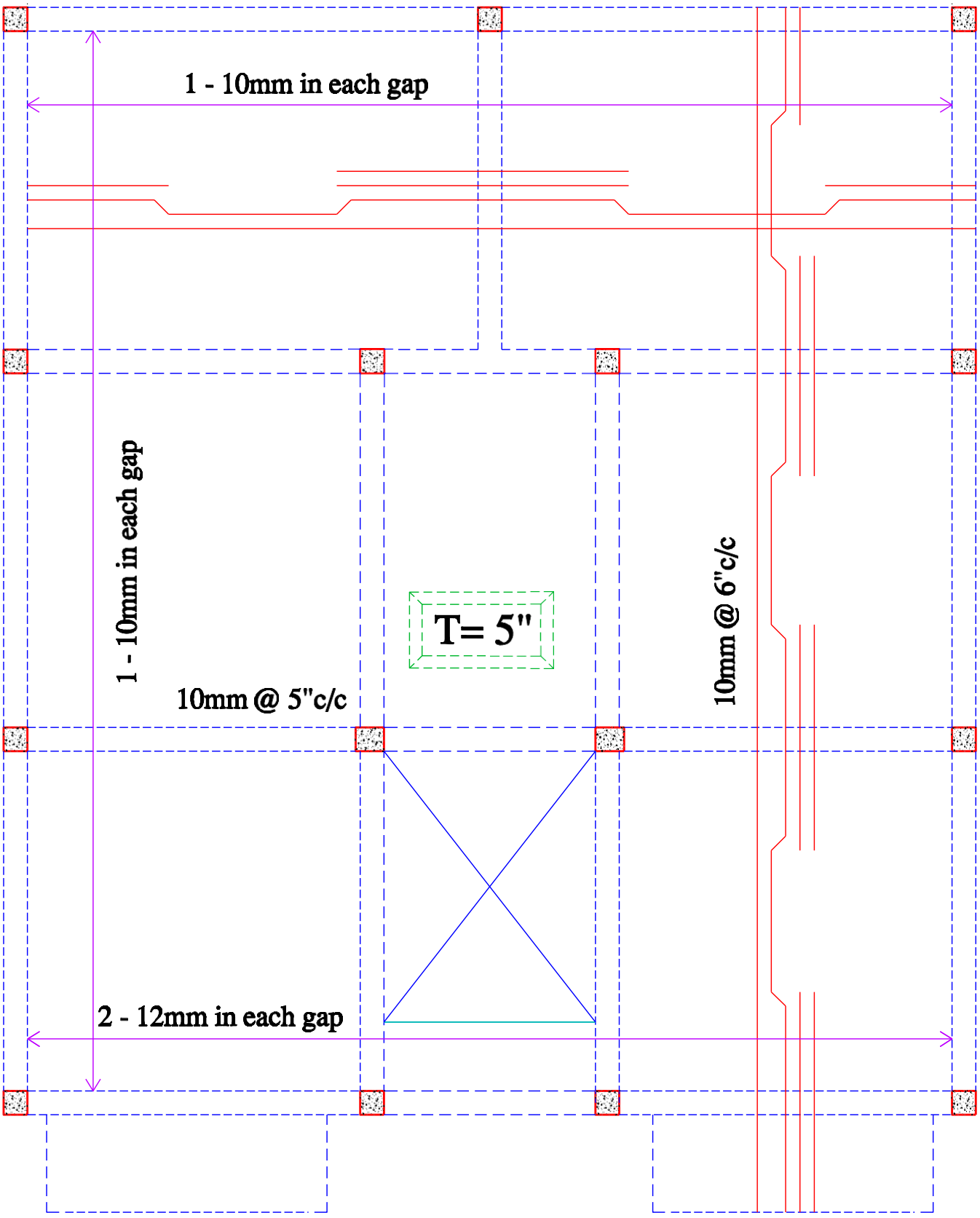

X - X Section F.B - 01.




Y - Y Section F.B - 01.

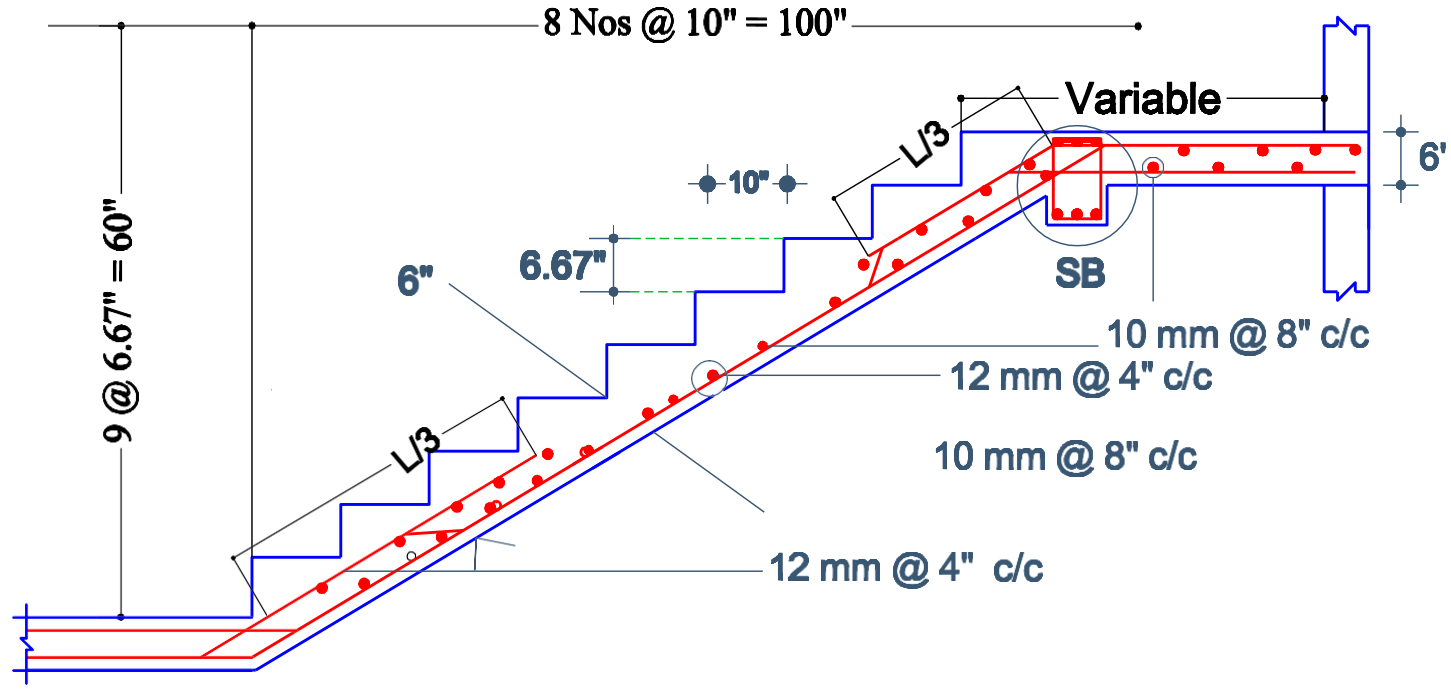
# FLOOR BEAM SECTION DETAILS

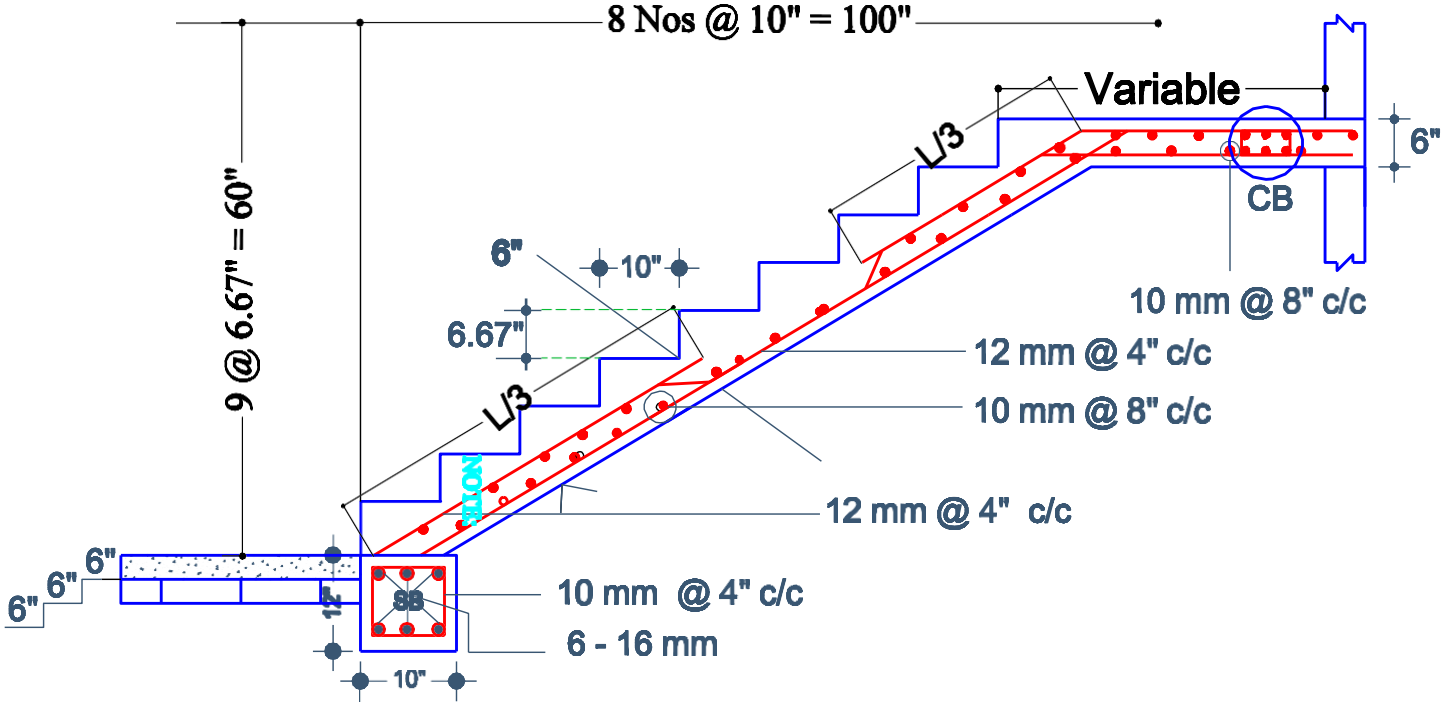
# Slab Reinforcement (Week 10)




SLAB REINFORCEMENT

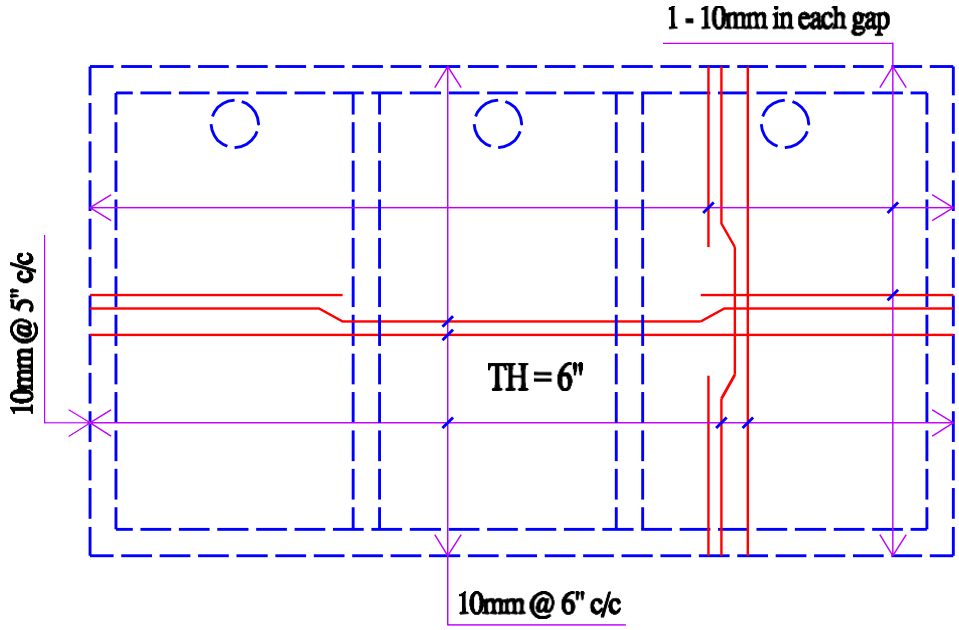
# Stair Section
# (Week 11)

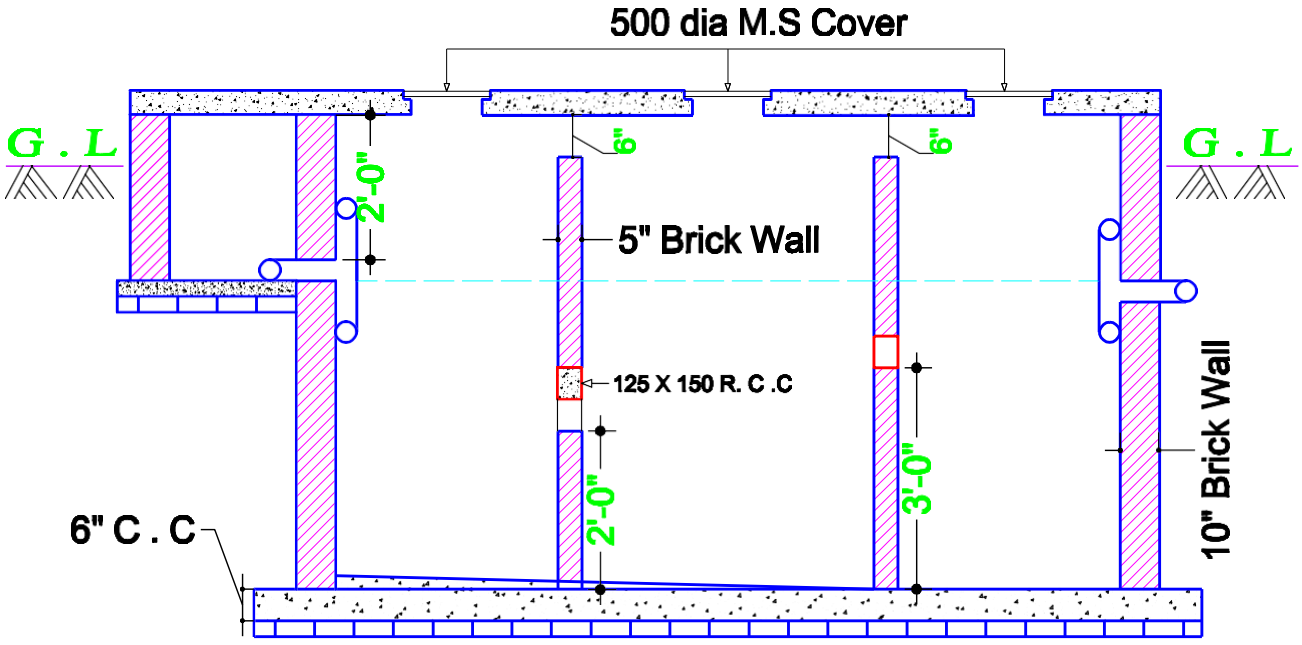


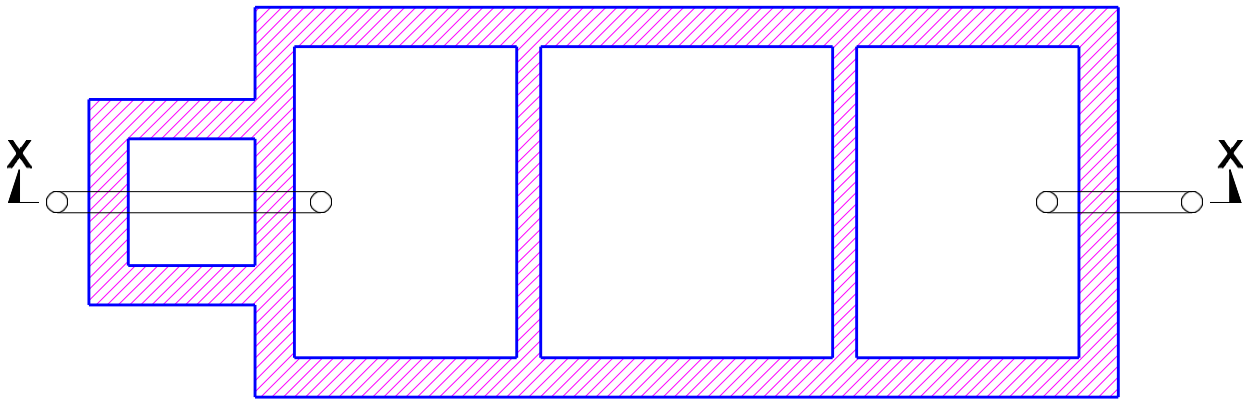

STAIR SECTION DETAILS

# Septic Tank Plan
# (Week 12)




*Section on x - x*




*Plan of Septic Tank*