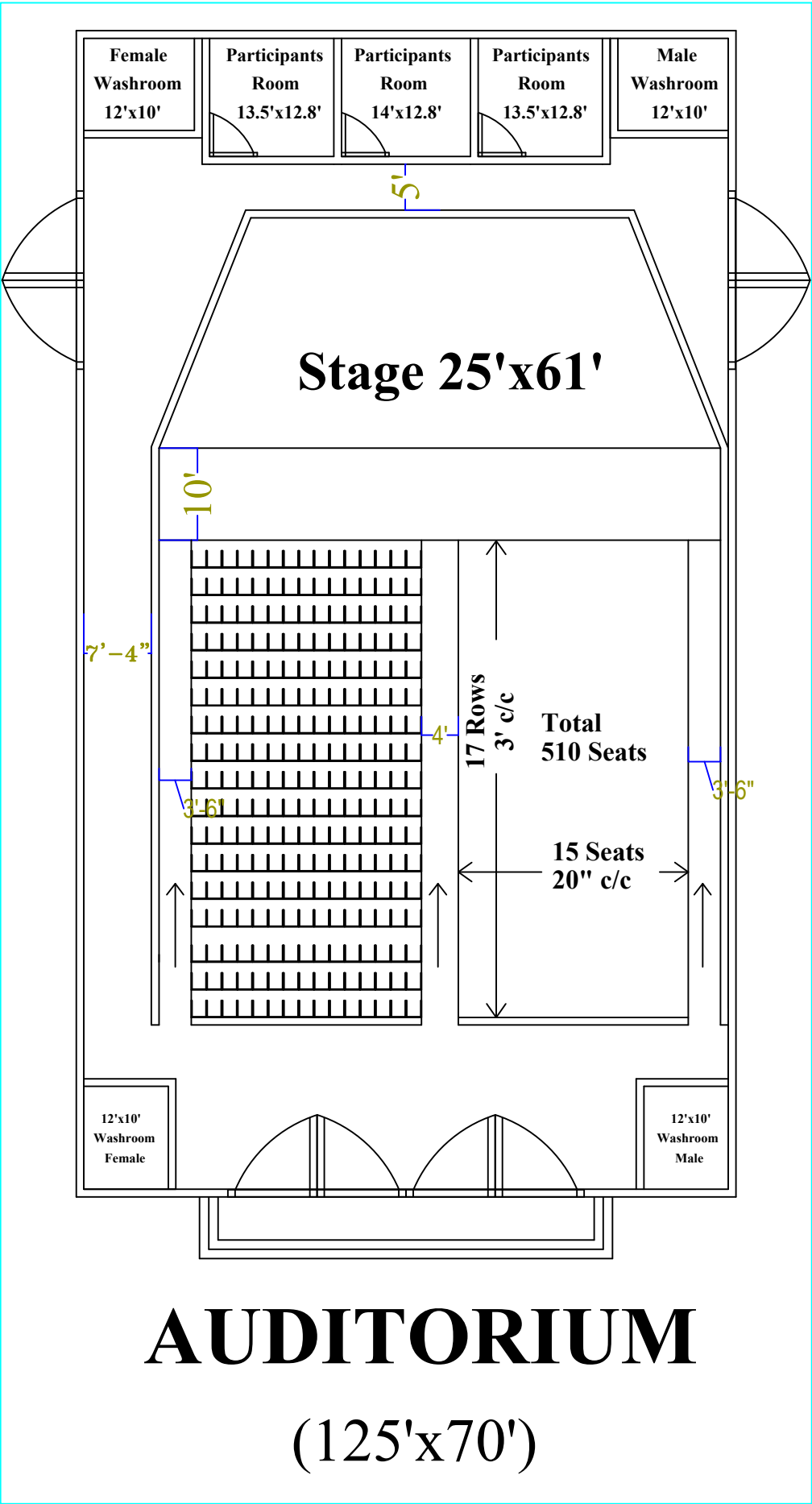


Mohammadpur Govt Boys High School Auditorium Building Structural Details



SUMMITTED BY:		
Capstone Group C2/3		
1804173 - SM Nahian Al Wasi (GL) 1804180 - Samiha Tasneem (DGL) 1804165 - Shoeb Ahmad Tanim 1804176 - Abu Naser Khan 1804177 - Muhammed Yeasin Arafat 1804179 - Shamim Azad Bakul		
PROJECT		
Proposed AUDITORIUM Building For MOHAMMADPUR GOVT. BOYS HIGH SCHOOL		
CLIENT		
PWD (PUBLIC WORKS DEPARTMENT)		
ENGINEER		
Capstone Group C2/3		
Undergraduate CIVIL ENGINEERING DEPARTMENT, BUET		
CHECKED BY		
1.		
2.		
3.		
4.		
DRAWING TITLE		
Auditorium Plan View		
DATE	JANUARY -2024	
SCALE	NOT TO SCALE	
SHEET NO.		
A-01		

SUMMITTED BY:		
Capstone Group C2/3		
1804173 - SM Nahian Al Wasi (GL) 1804180 - Samiha Tasneem (DGL) 1804165 - Shoeb Ahmad Tanim 1804176 - Abu Naser Khan 1804177 - Muhammed Yeasin Arafat 1804179 - Shamim Azad Bakul		
PROJECT		
Proposed AUDITORIUM Building For MOHAMMADPUR GOVT. BOYS HIGH SCHOOL		
CLIENT		
PWD (PUBLIC WORKS DEPARTMENT)		
ENGINEER		
Capstone Group C2/3		
Undergraduate CIVIL ENGINEERING DEPARTMENT, BUET		
CHECKED BY		
1.		
2.		
3.		
4.		
DRAWING TITLE		
Beam Layout		
DATE	JANUARY -2024	
SCALE	NOT TO SCALE	
SHEET NO.		
A-02		

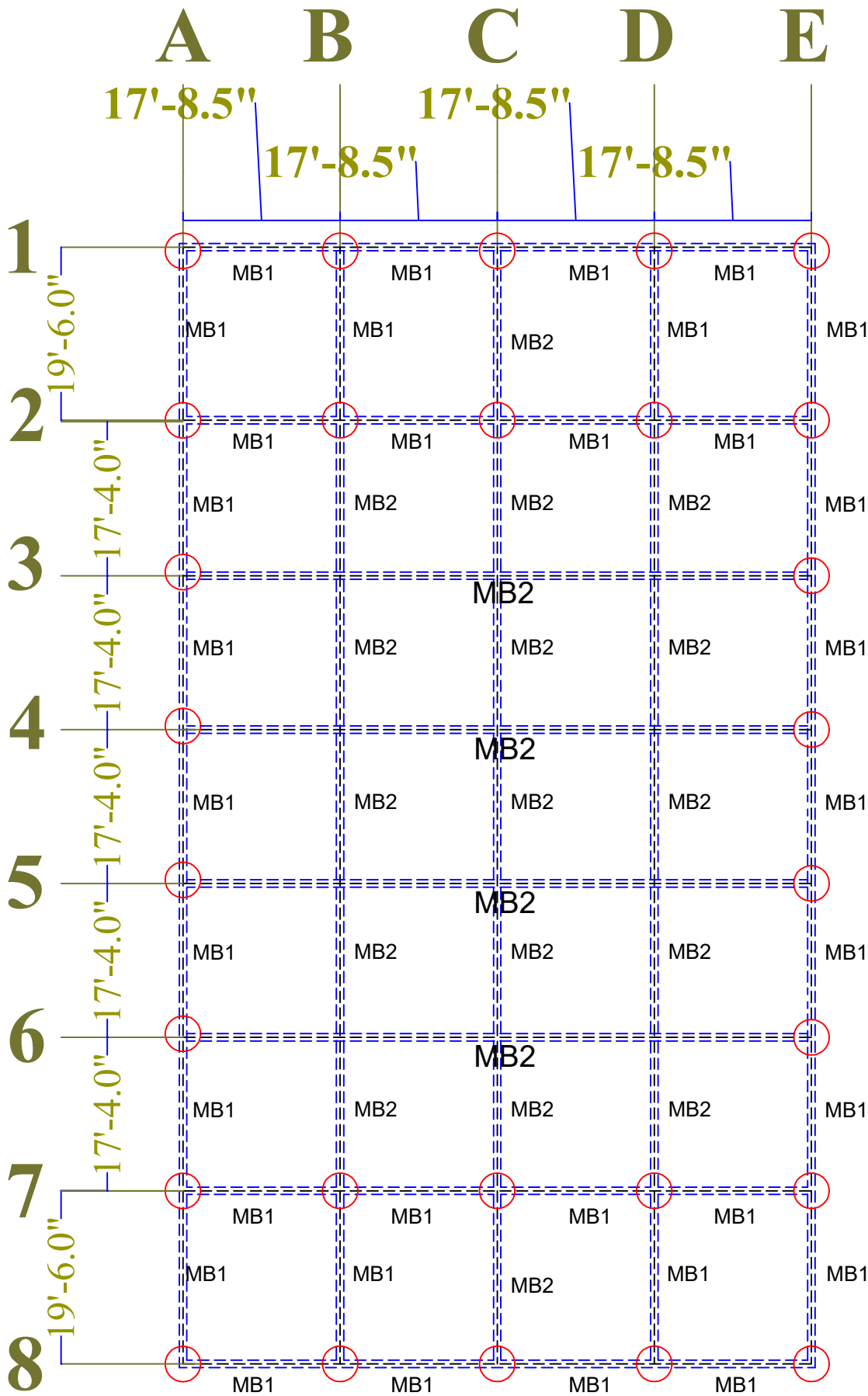
AUDITORIUM Beam Layout

MB1 18"x22"

MB2 24"x34"

Beam
Concrete Mix -1:2:4 (f'c=28 days
cylinder strength= 4000 psi)
(to be determined by trial mix design)
Slump= 1"-2"
Clear Cover=1.5"

Steel
fy= 60000 psi deormed bar. Lap length
as per BNBC code



Typical Floor Roof Beam Reinforcement Details

SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shoeb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed AUDITORIUM
Building For
MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

1.

2.

3.

4.

DRAWING TITLE

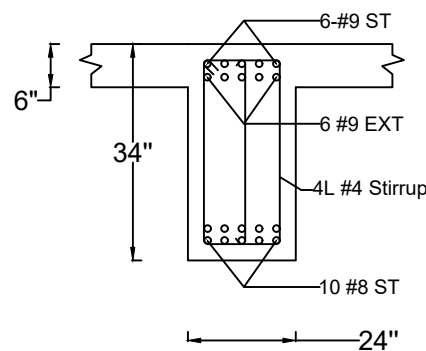
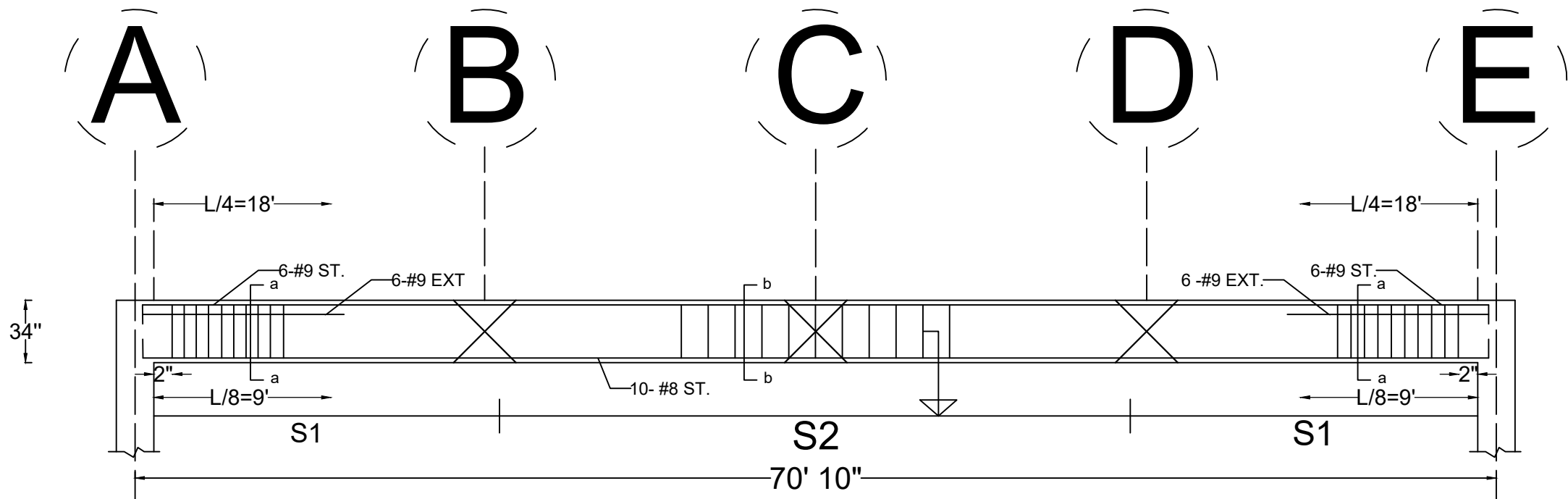
Beam Detailing

DATE JANUARY -2024

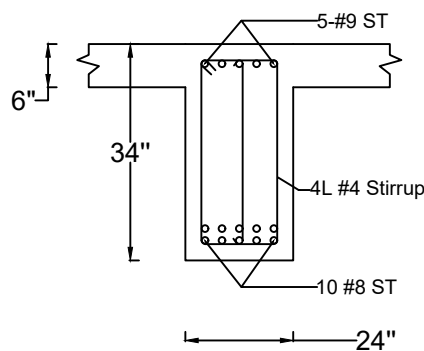
SCALE NOT TO SCALE

SHEET NO.

A-03



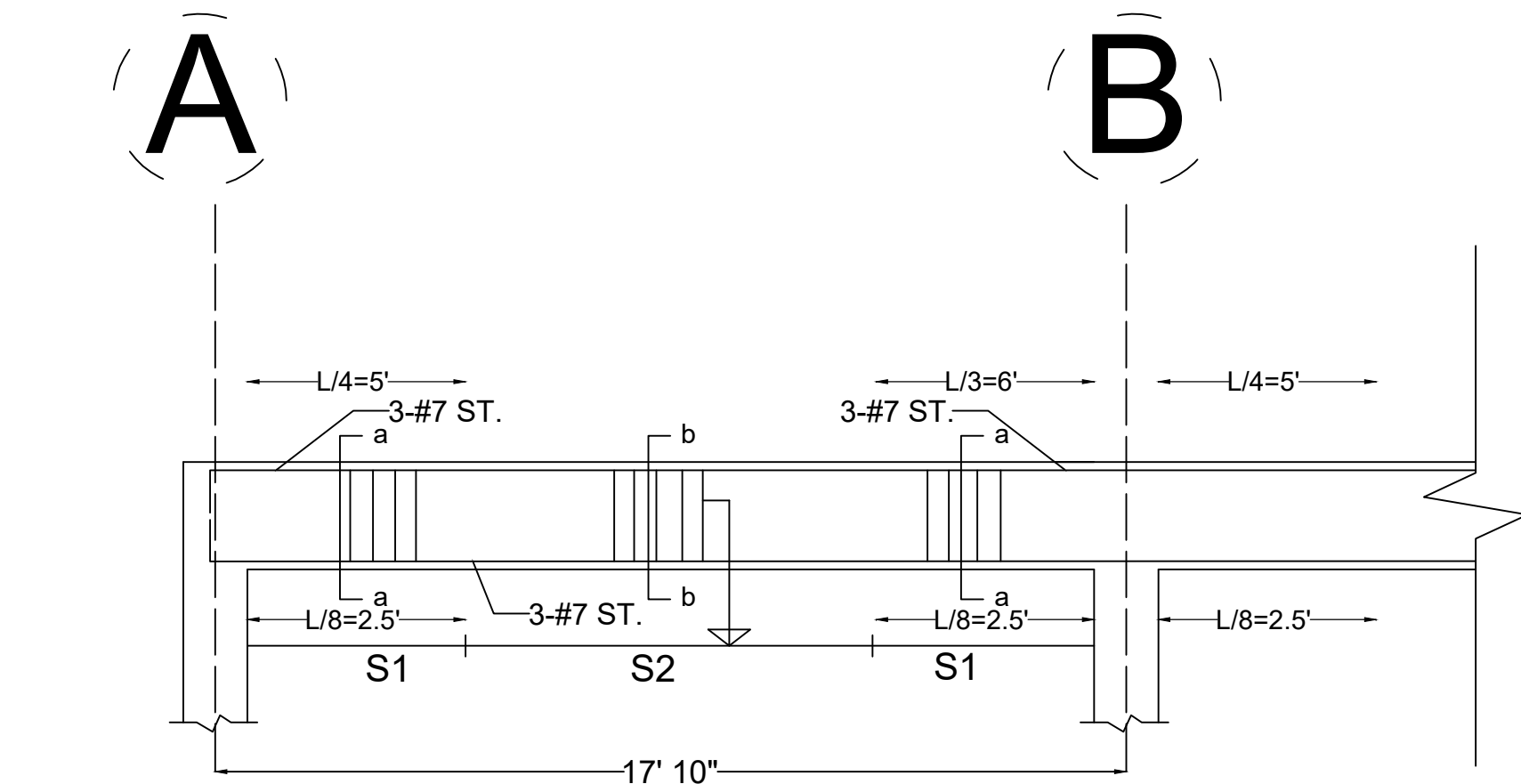
X Section a-a
MB2 24"x34"



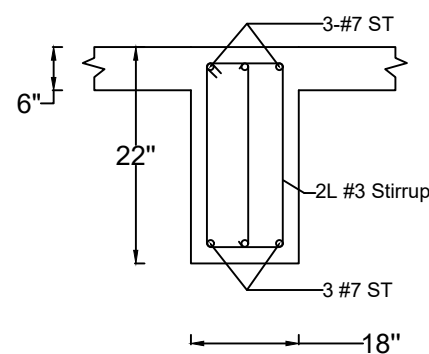
X Section b-b
MB2 24"x34"

S1 4 L #4 @6" c/c
S2 4 L #4 @8" c/c

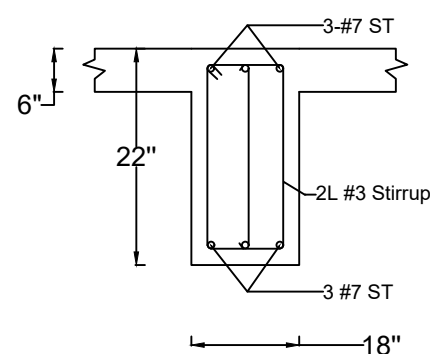
Typical Floor Roof Beam Reinforcement Details



LONG SECTION OF FLOOR BEAM- MB1 18"x22"



X Section a-a
MB2 18"x22"



X Section b-b
MB2 18"x22"

S1 2 L #3 @6" c/c
S2 2 L #3 @8" c/c

SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shoeb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed AUDITORIUM
Building For
MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

1.
2.
3.
4.

DRAWING TITLE

Beam Detailing

DATE JANUARY -2024

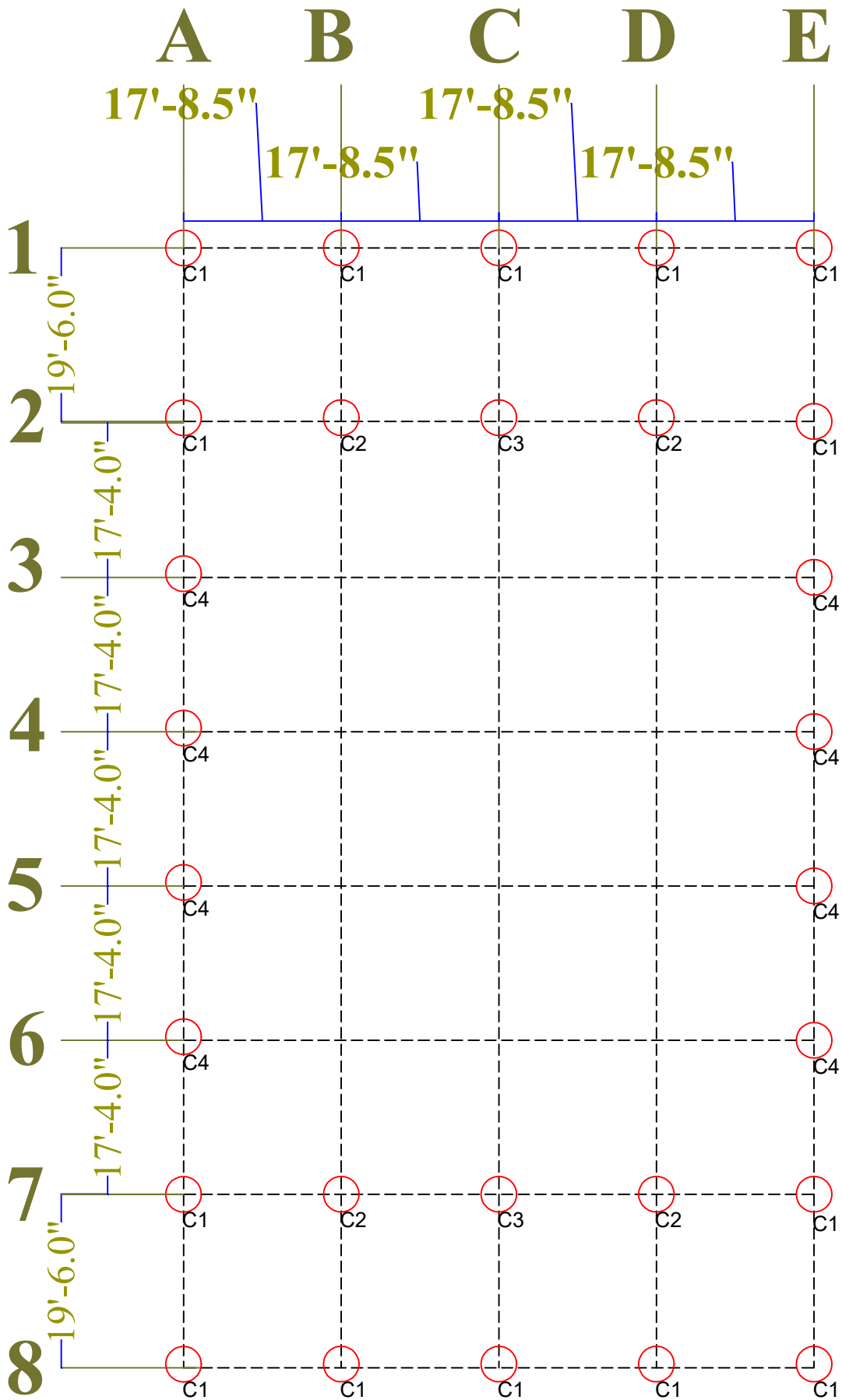
SCALE NOT TO SCALE

SHEET NO.

A-04

SUMMITTED BY:		
Capstone Group C2/3		
1804173 - SM Nahian Al Wasi (GL) 1804180 - Samiha Tasneem (DGL) 1804165 - Shoeb Ahmad Tanim 1804176 - Abu Naser Khan 1804177 - Muhammed Yeasin Arafat 1804179 - Shamim Azad Bakul		
PROJECT		
Proposed AUDITORIUM Building For MOHAMMADPUR GOVT. BOYS HIGH SCHOOL		
CLIENT		
PWD (PUBLIC WORKS DEPARTMENT)		
ENGINEER		
Capstone Group C2/3		
Undergraduate CIVIL ENGINEERING DEPARTMENT, BUET		
CHECKED BY		
1.		
2.		
3.		
4.		
DRAWING TITLE		
Column Layout		
DATE	JANUARY -2024	
SCALE	NOT TO SCALE	
SHEET NO.		
A-05		

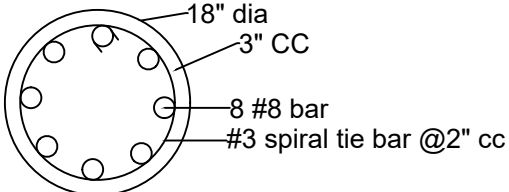
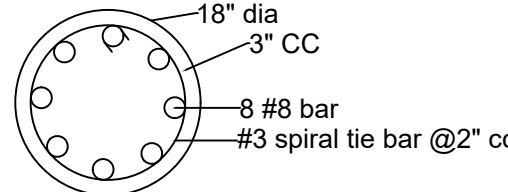
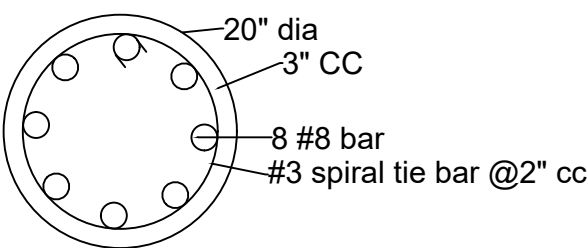
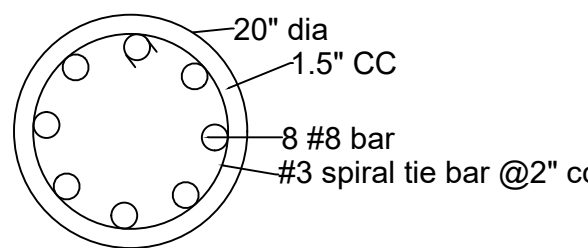
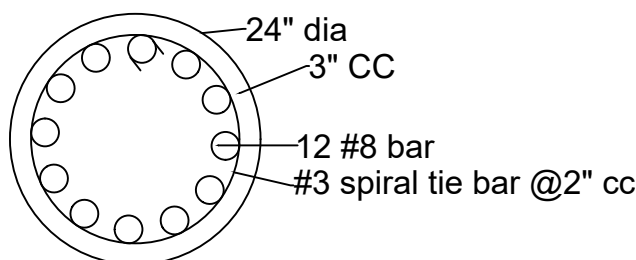
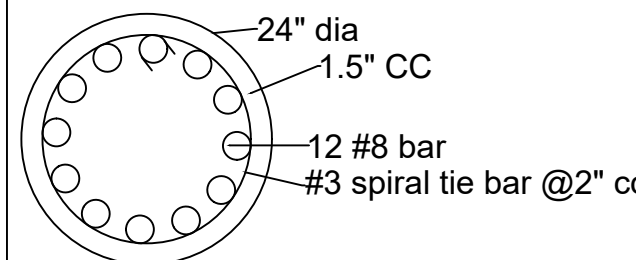
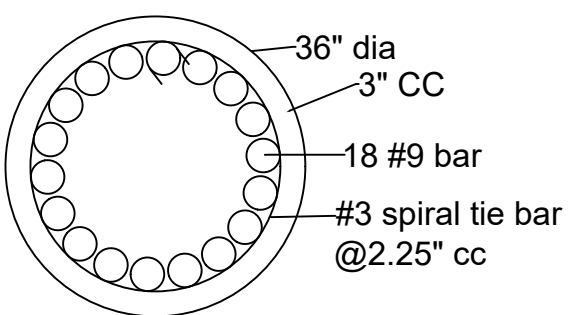
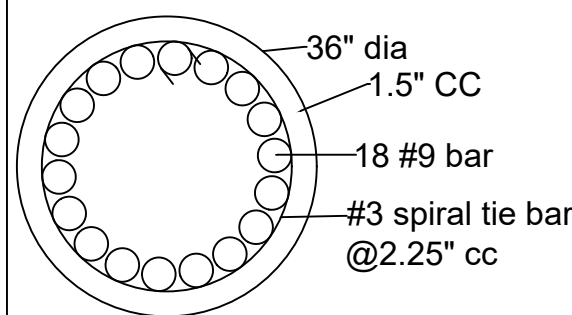
AUDITORIUM Column Layout



- C1 18" Circular
- C2 20" Circular
- C3 24" Circular
- C4 36" Circular



SCHEDULE OF COLUMN

COL.	Below Plinth.	Plinth To Rooftop
C1 circular column 18" dia		
C2 circular column 20" dia		
C3 circular column 24" dia		
C4 circular column 36" dia		

Column

Concrete Mix -1:2:4 (f'c=28 days cylinder strength= 4000 psi)
(to be determined by trial mix design)
Slump= 1"-2"
Clear Cover= 3" & 1.5"

Steel

fy= 60000 psi deormed bar. Lap length as per BNBC code

SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shoeb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed AUDITORIUM
Building For
MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

1.

2.

3.

4.

DRAWING TITLE

Column Detailing

DATE

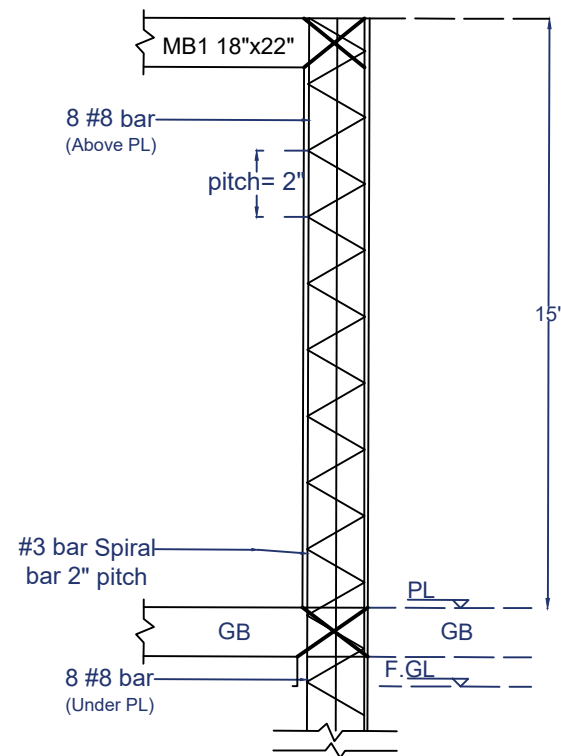
JANUARY -2024

SCALE

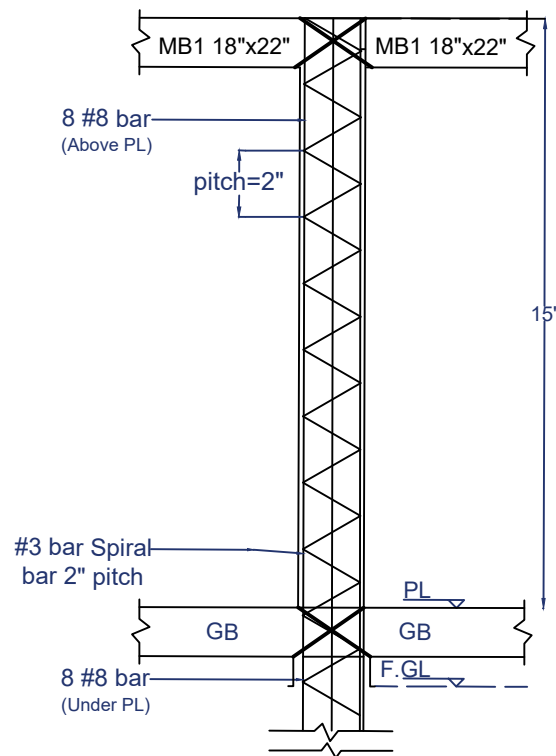
NOT TO SCALE

SHEET NO.

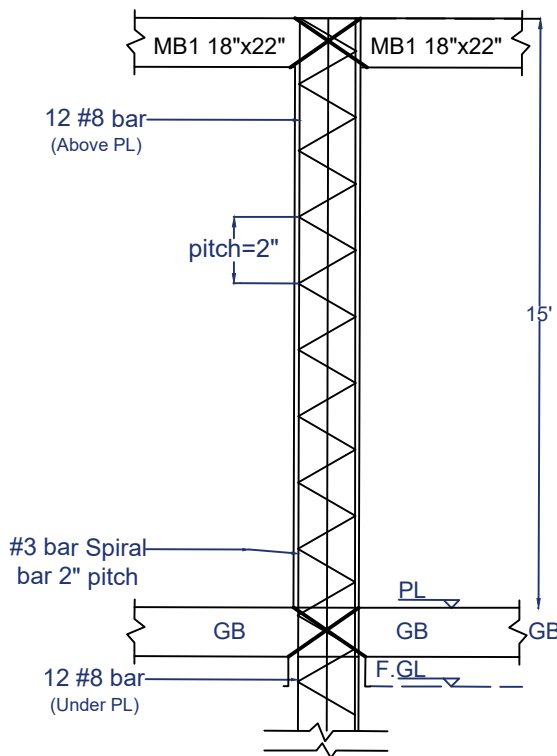
A-06



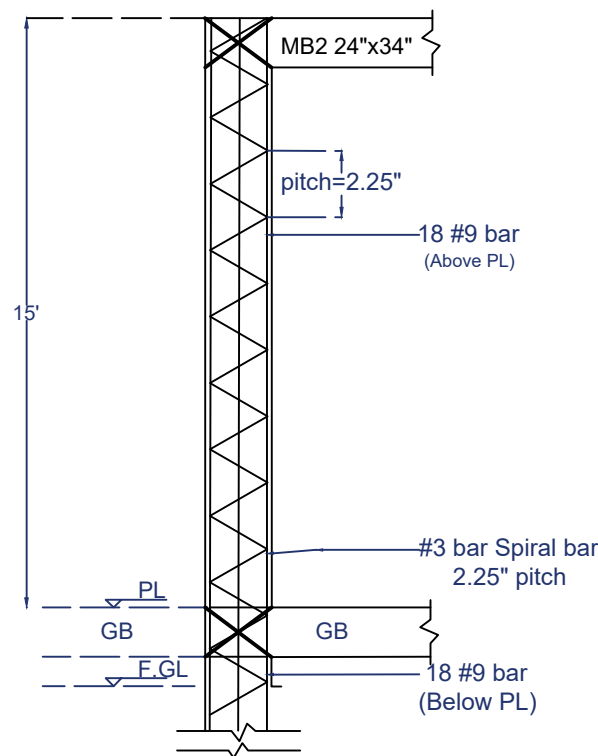
LONG SECTION OF COLUMN, C1



LONG SECTION OF COLUMN, C2



LONG SECTION OF COLUMN, C3



LONG SECTION OF COLUMN, C4

SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shoeb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed AUDITORIUM
Building For
MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

- 1.
- 2.
- 3.
- 4.

DRAWING TITLE

Column Detailing

DATE JANUARY -2024

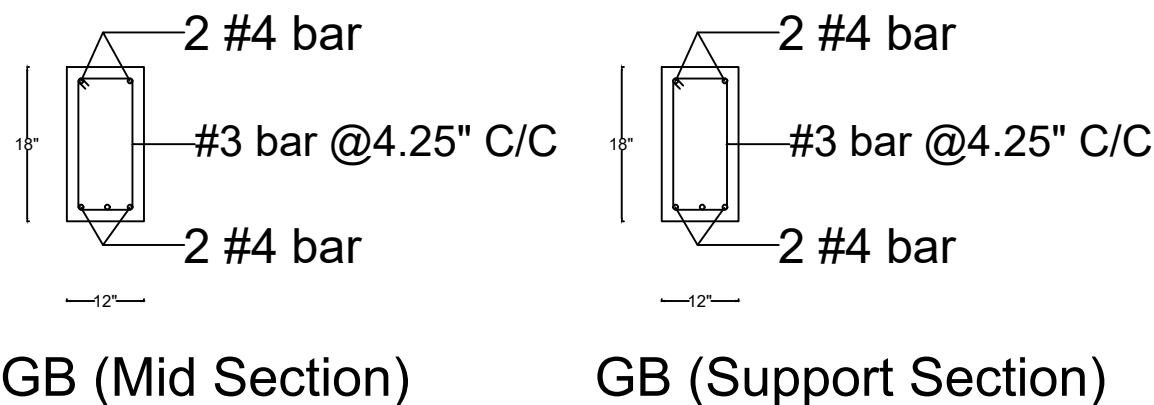
SCALE NOT TO SCALE

SHEET NO.

A-07

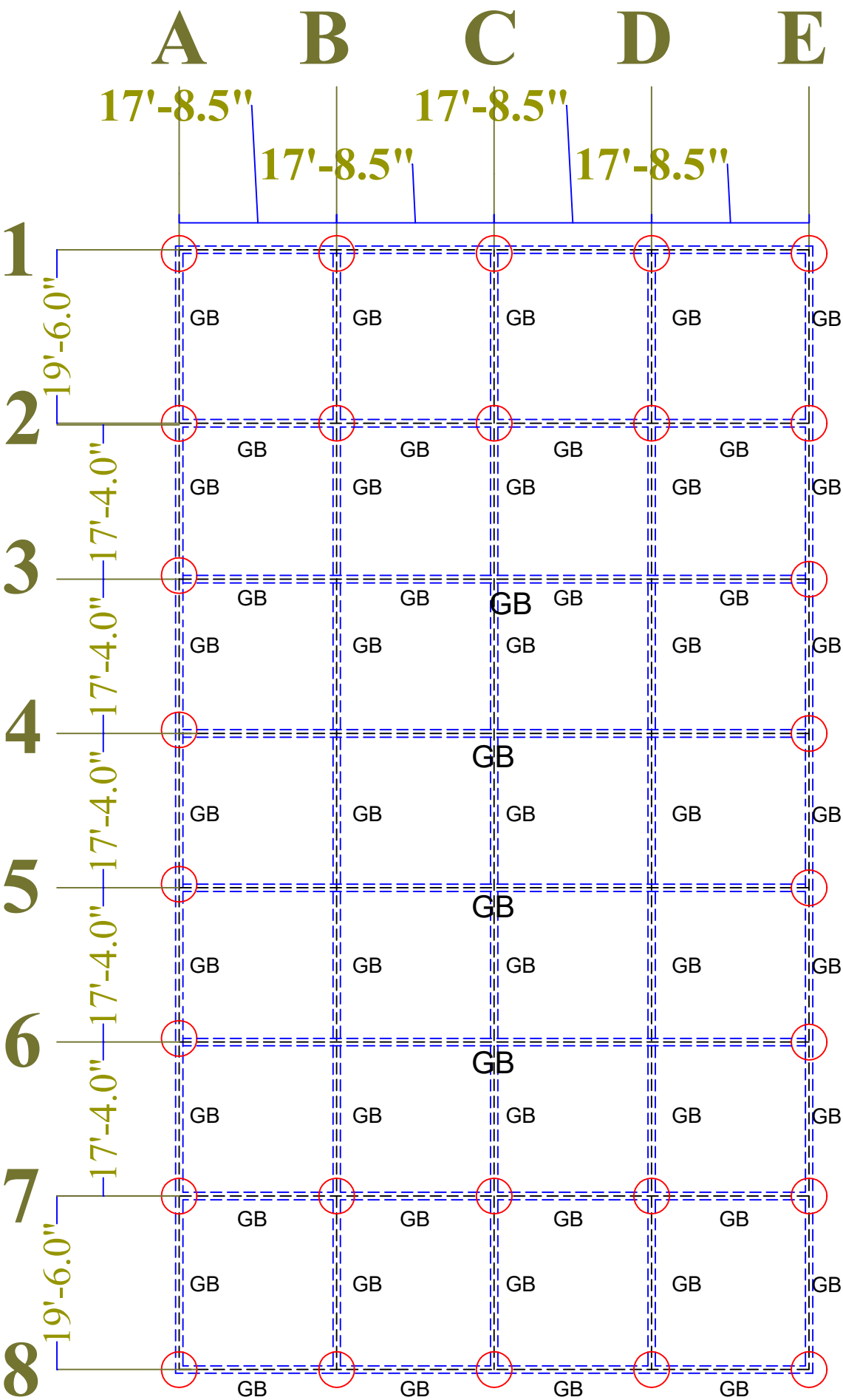
AUDITORIUM
Grade Beam Layout
and Detail

GB 12"x18"



Grade Beam
Concrete Mix -1:2:4 (f'_c =28 days
cylinder strength= 4000 psi)
(to be determined by trial mix design)
Slump= 1"-2"
Clear Cover=1.5"

Steel
 f_y = 60000 psi deormed bar. Lap length
as per BNBC code



SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shueb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed AUDITORIUM
Building For
MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

1.
2.
3.
4.

DRAWING TITLE

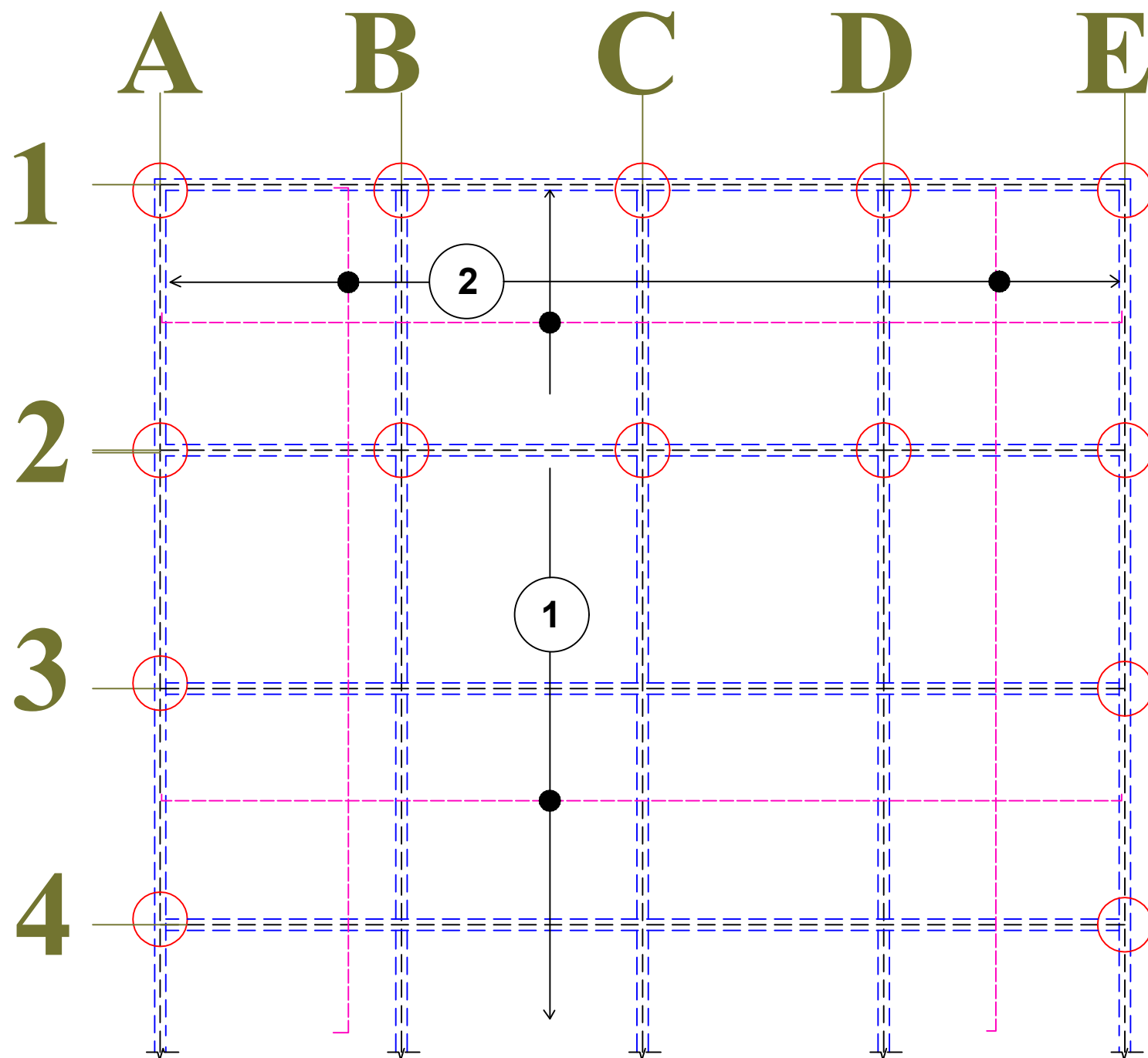
Grade Beam Layout
and Detail

DATE JANUARY -2024

SCALE NOT TO SCALE

SHEET NO.

A-08



Typical Floor Slab Top Reinforcement Details

Slab Thickness= 6"

1) #3 @10" c/c bottom y direction
2) #3 @10" c/c bottom x direction

Slab

Concrete Mix -1:2:4 (f'_c =28 days
cylinder strength= 4000 psi)
(to be determined by trial mix design)
Slump= 1"-2"
Clear Cover= 0.75"

Steel

f_y = 60000 psi deformed bar. Lap length
as per BNBC

SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shoeb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed AUDITORIUM
Building For
MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

1.	
2.	
3.	
4.	

DRAWING TITLE

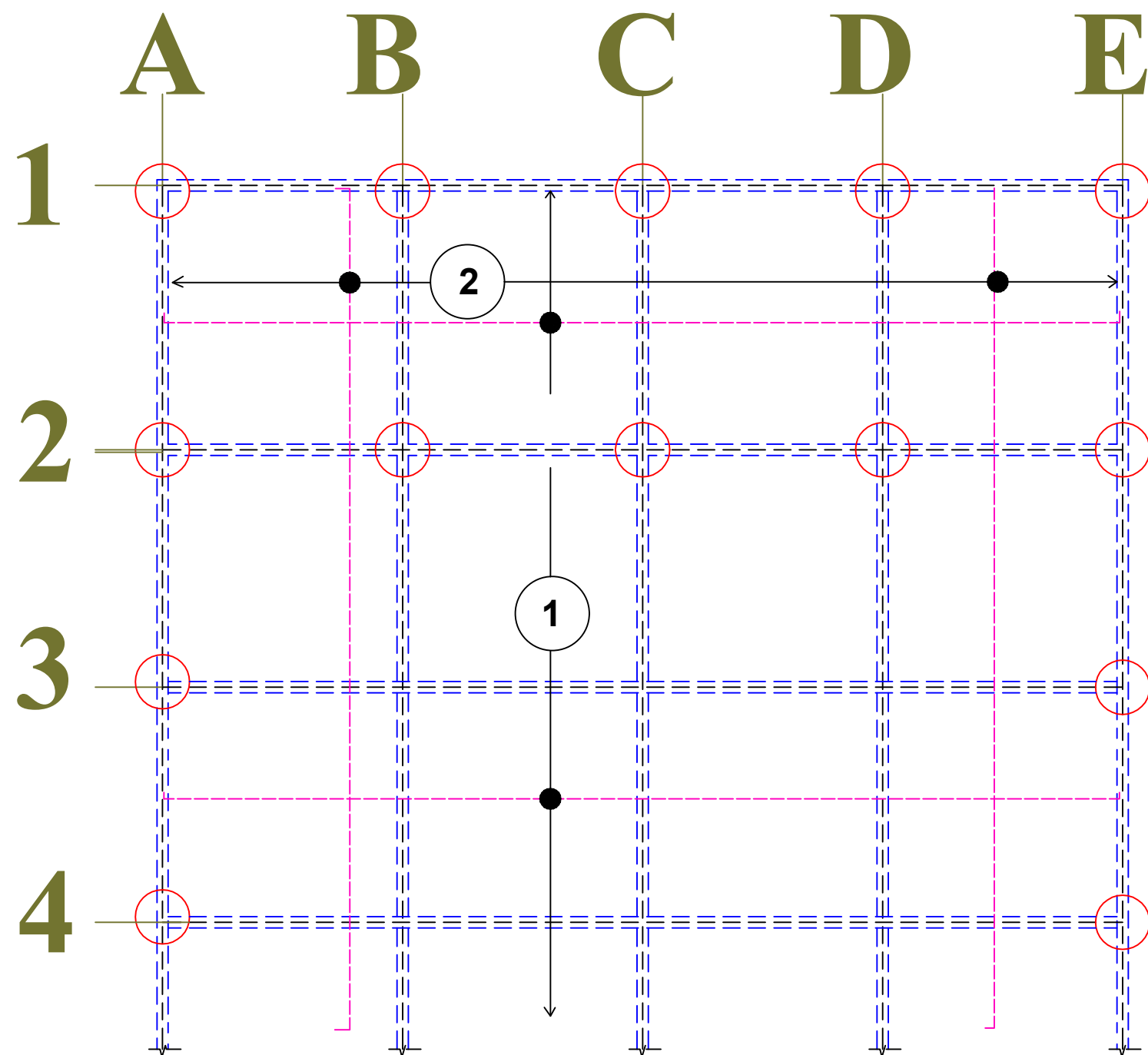
Slab Details

DATE	JANUARY -2024
-------------	---------------

SCALE	NOT TO SCALE
--------------	--------------

SHEET NO.	
------------------	--

A-09



Typical Floor Slab Bottom Reinforcement Details

Slab Thickness= 6"

- 1) #3 @10" c/c bottom y direction
- 2) #3 @10" c/c bottom x direction

Slab

Concrete Mix -1:2:4 (f'_c =28 days
cylinder strength= 4000 psi)
(to be determined by trial mix design)
Slump= 1"-2"
Clear Cover= 0.75"

Steel

f_y = 60000 psi deformed bar. Lap length
as per BNBC

SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shoeb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed AUDITORIUM
Building For
MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

1.

2.

3.

4.

DRAWING TITLE

Slab Details

DATE

JANUARY -2024

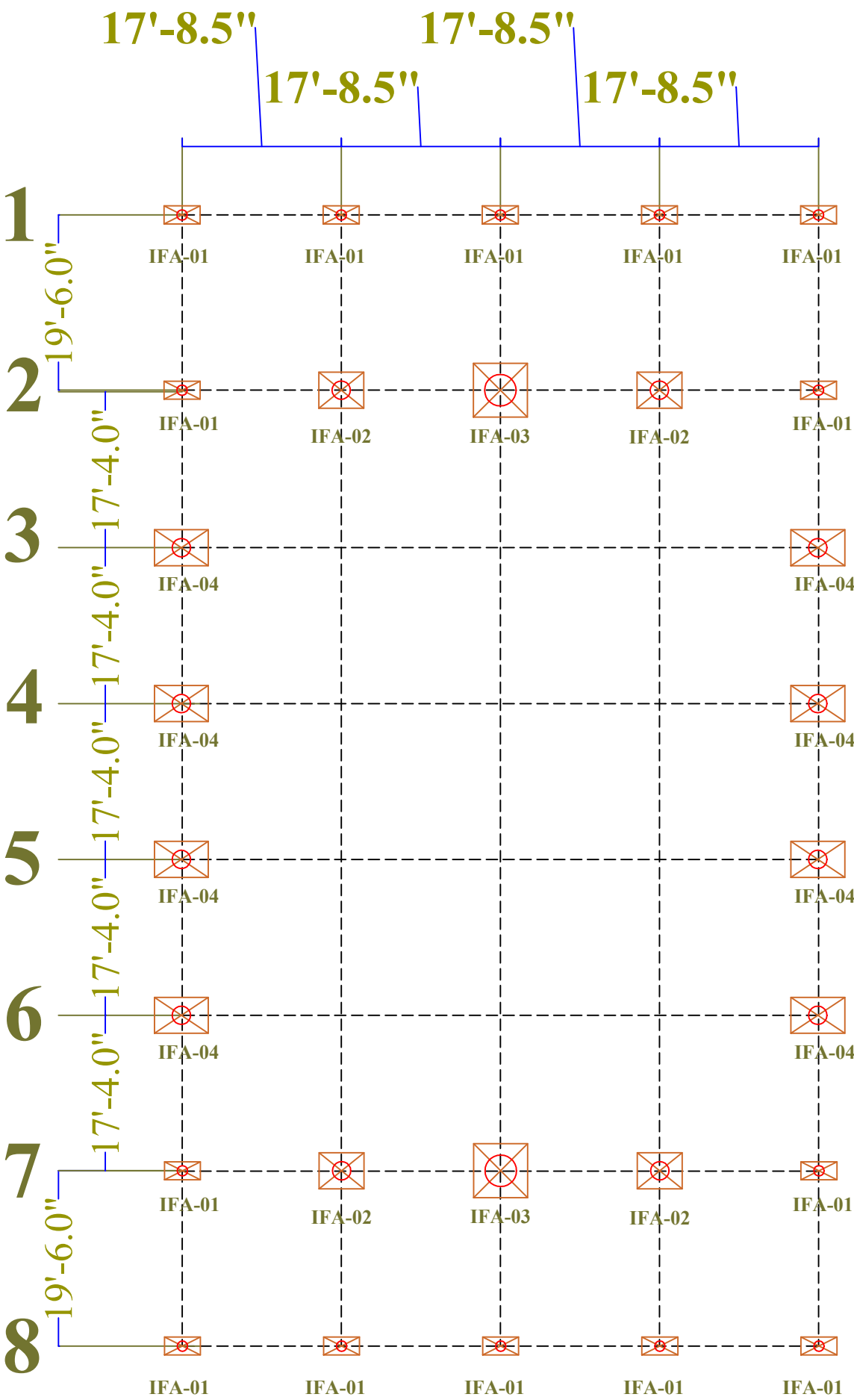
SCALE

NOT TO SCALE

SHEET NO.

A-10

AUDITORIUM Foundation Layout



IFA-01	2'x4'
IFA-02	4'x5'
IFA-03	6'x6'
IFA-04	4'x6'

Beam
Concrete Mix -1:2:4 (f'c=28 days
cylinder strength= 4000 psi)
(to be determined by trial mix design)
Slump= 1"-2"
Clear Cover=1.5"

Steel
fy= 60000 psi deormed bar. Lap length
as per BNBC code

SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shoeb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed AUDITORIUM
Building For
MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

1.	
2.	
3.	
4.	

DRAWING TITLE

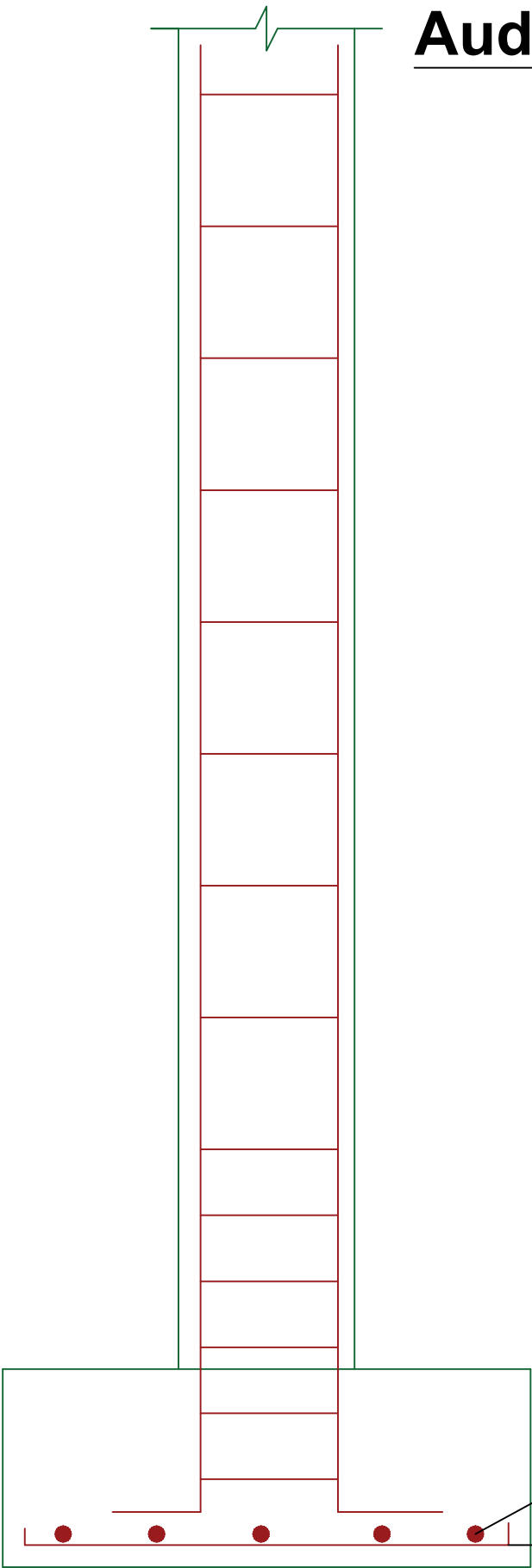
Footing Layout

DATE	JANUARY -2024
------	---------------

SCALE	NOT TO SCALE
-------	--------------

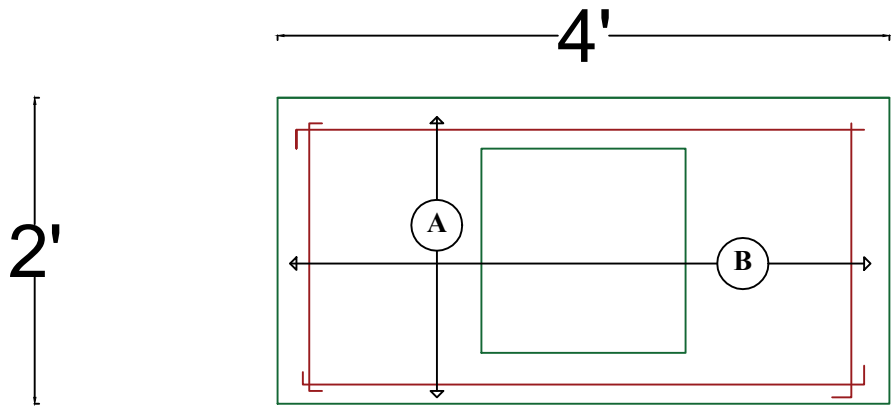
SHEET NO.	
-----------	--

A-11



Auditorium Foundation Detail

FOOTING TYPE:IFA-01



A 4#7 @14inch c/c

B 2#7 @48inch c/c

4#7 @14inch c/c
2#7 @48inch c/c

SUMMITTED BY:

Capstone Group C2/3

1804173 - SM Nahian Al Wasi (GL)
1804180 - Samiha Tasneem (DGL)
1804165 - Shoeb Ahmad Tanim
1804176 - Abu Naser Khan
1804177 - Muhammed Yeasin Arafat
1804179 - Shamim Azad Bakul

PROJECT

Proposed Academic Building
for MOHAMMADPUR GOVT.
BOYS HIGH SCHOOL

CLIENT

PWD (PUBLIC WORKS
DEPARTMENT)

ENGINEER

Capstone Group C2/3

Undergraduate CIVIL ENGINEERING
DEPARTMENT, BUET

CHECKED BY

1.	
2.	
3.	
4.	

DRAWING TITLE

Foundation Detail

DATE	JANUARY -2024
SCALE	NOT TO SCALE
SHEET NO.	A-12