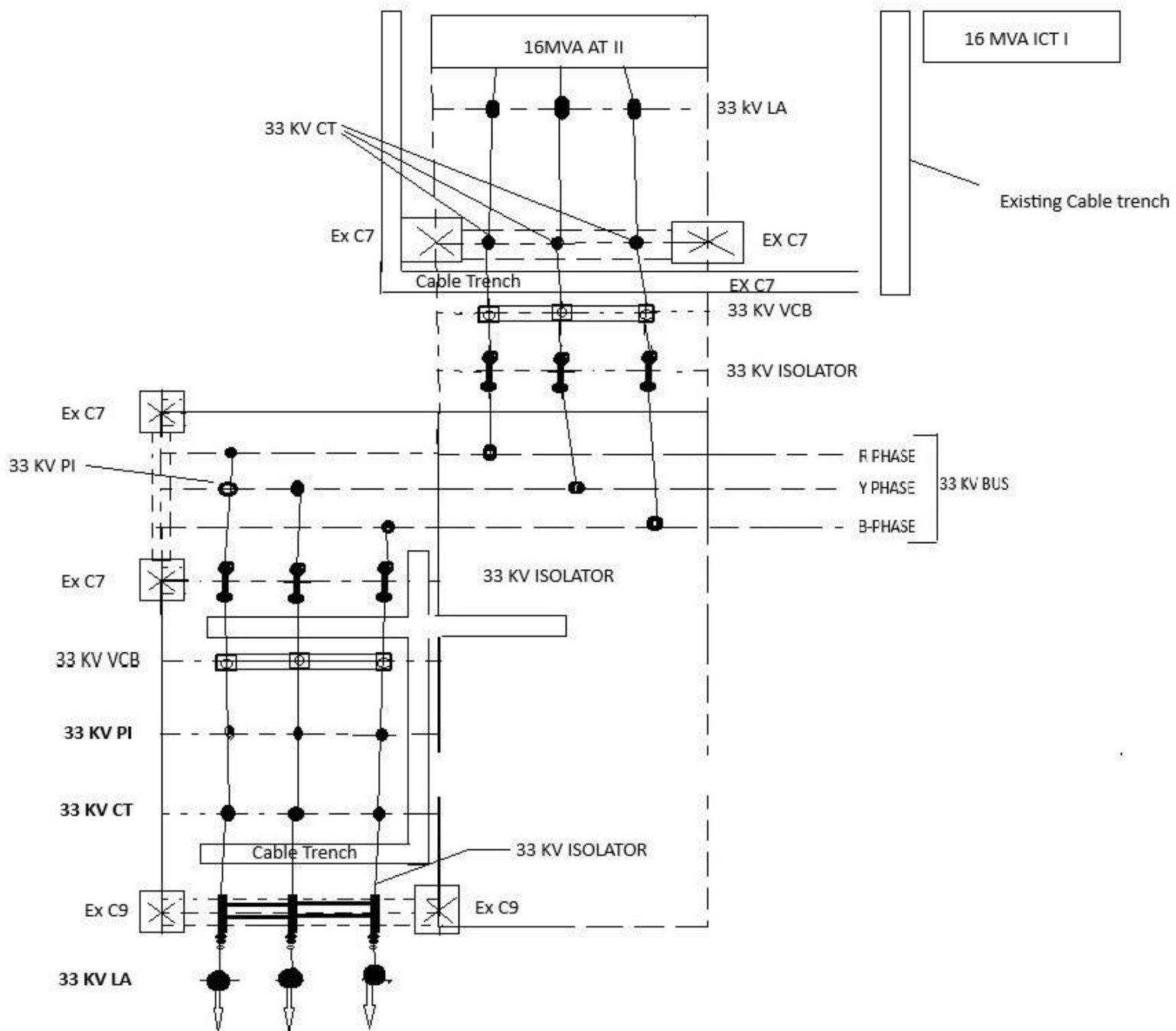
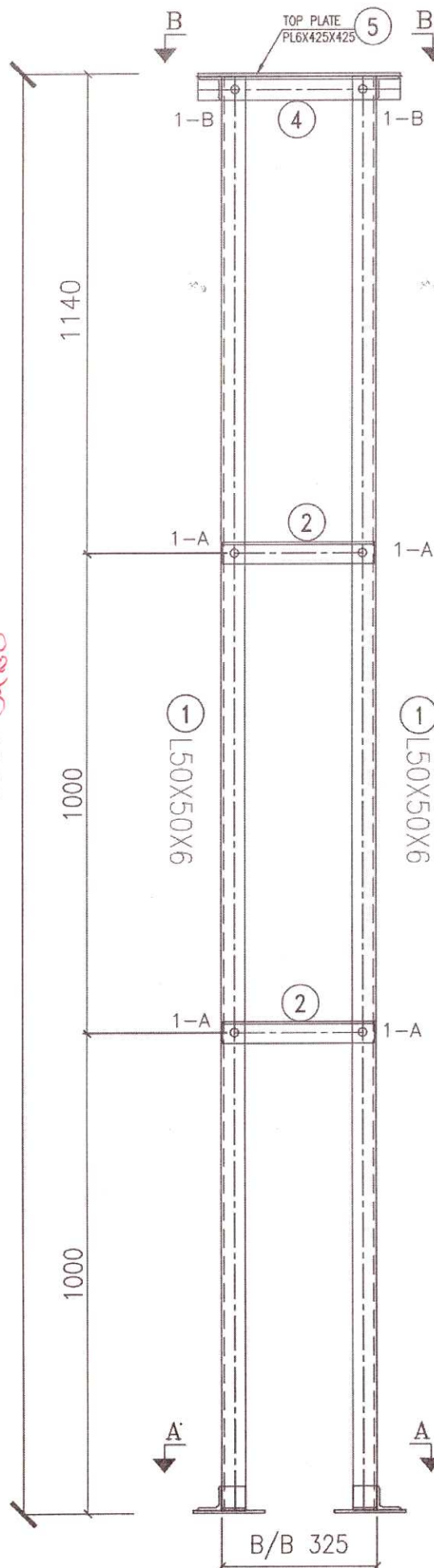


For tender
reference purpose only



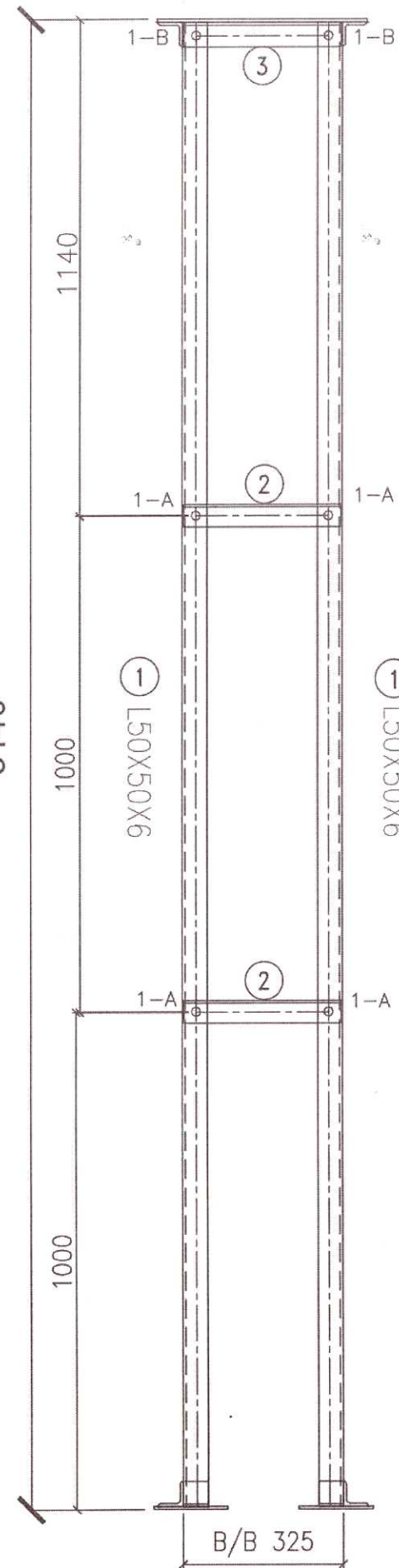
Layout Diagram for 33 KV HPCL feeder and 16 MVA AT-II LV Side

3140 3x60

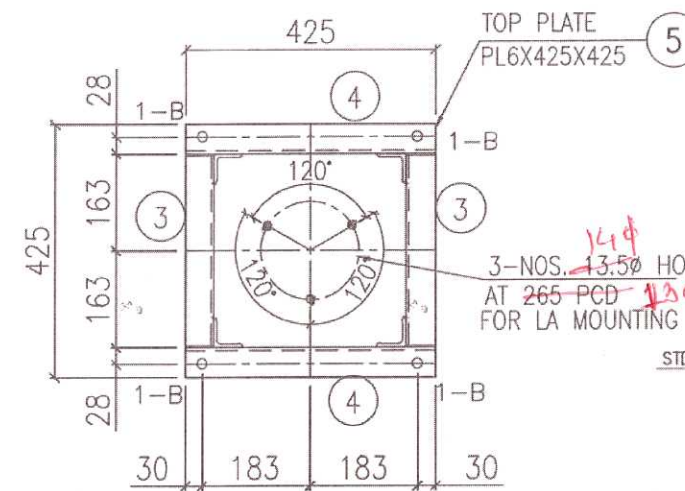


ELEVATION

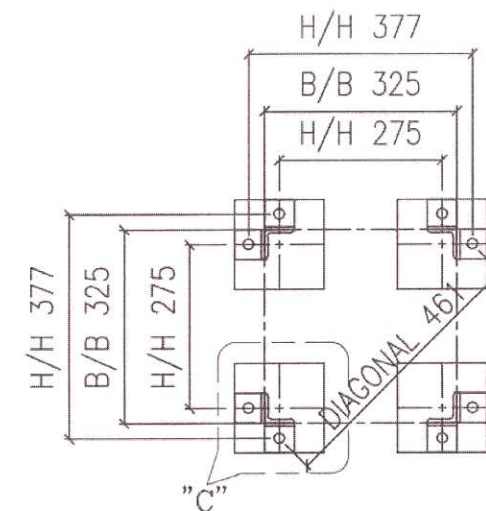
3140



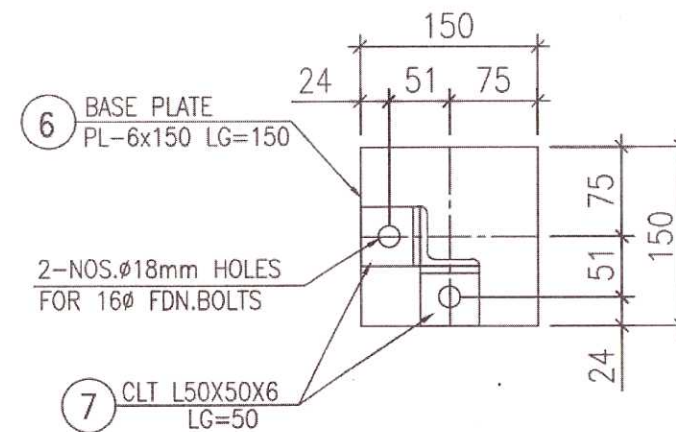
SIDE VIEW



VIEW 'B-B'

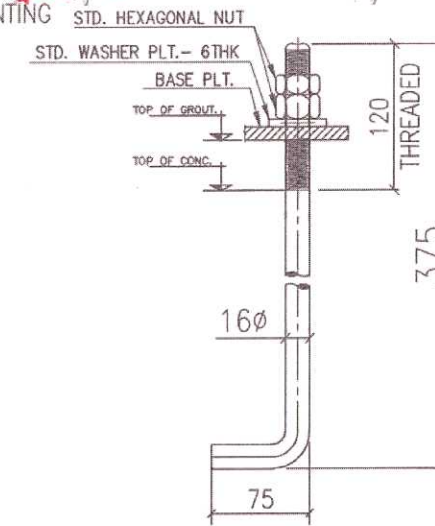


SECTION A-A



DETAIL-"C"

FOR TENDER REFERENCE
PURPOSE ONLY



M16x450
FOUNDATION BOLT

BOLTS AND NUTS STATEMENT		
TYPE	SIZE	QTY.
A	16 X 35 mm	16
B	16 X 40 mm	12
C	16 X 45 mm	-
D	16 X 50 mm	-
E	16 X 55 mm	-
F	16 X 60 mm	-
G	16 X 65 mm	-
H	16 X 70 mm	-
J	16 X 75 mm	-
K	16 X 85 mm	-
SPRING WASHER 3.5 Thk.-M16		28
6mm THICK PLAIN WASHER		-
8mm THICK PLAIN WASHER		-
10mm THICK PLAIN WASHER		-
12mm THICK PLAIN WASHER		-
STEP BOLTS M16 X175 LG		-

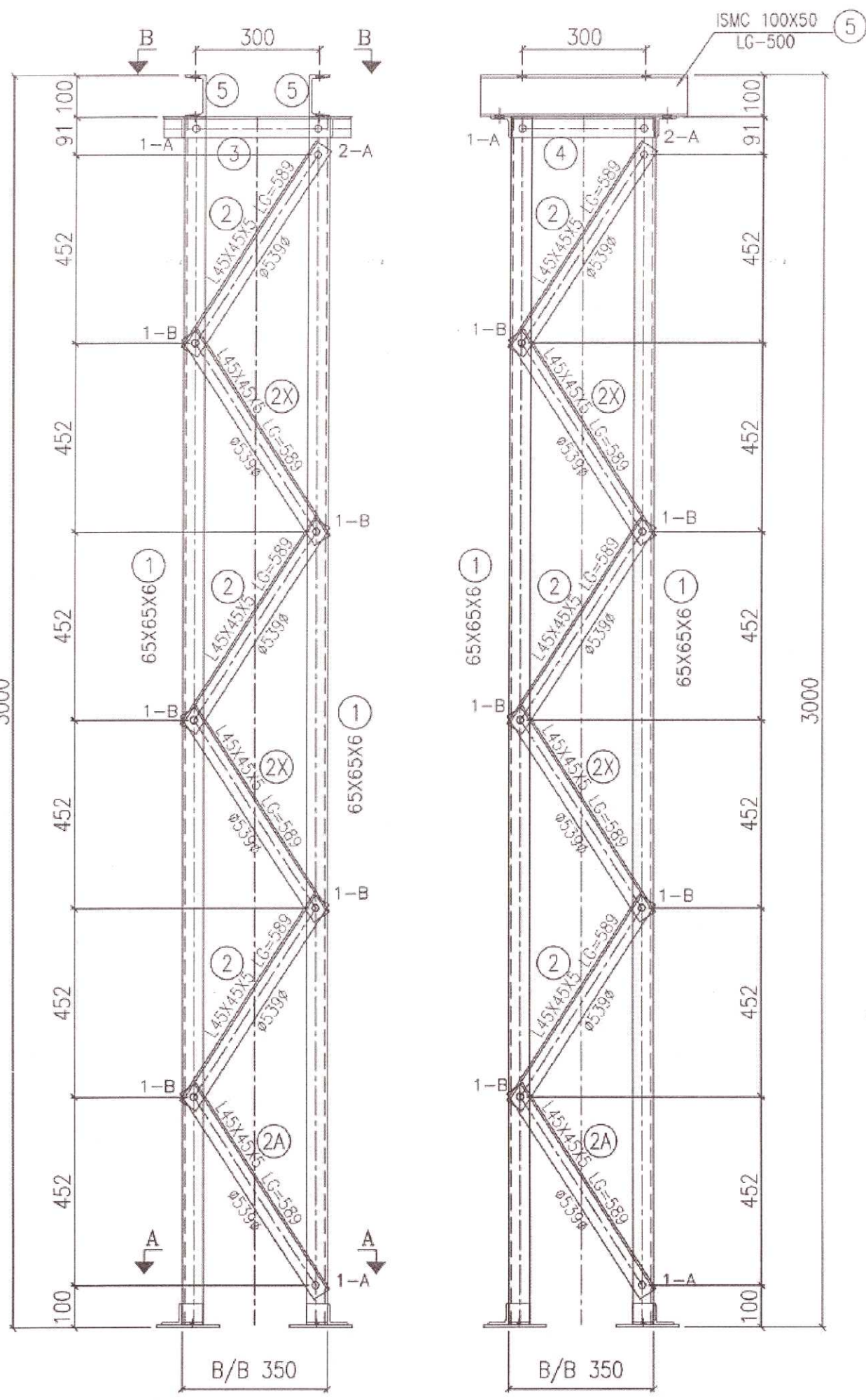
NOTES:

- ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
- BOLT SYMBOLS 12 $\bullet$ = 13.5 HOLES
16 $\circ$ = 17.5 HOLES
16 STEP BOLT $\circ$ = 17.5 HOLES DIAGONALLY OPPOSITE LEGS
22 $\otimes$ = 20 HOLES
- ALL ERECTION MARKS ARE TO BE PREFIXED WITH "3LA-"
- STRUCTURAL STEEL SHALL BE AS FOLLOWS
(i) MILD STEEL - IS:2062 WITH YEILD STRESS $F_y=2550\text{KG/SQ.CM}$
(ii) HIGH TENSILE STEEL-IS:8500 Fe 490B
- BOLTS & NUTS AS PER IS:12427-1988, CONFIRMING TO GRADE-5.6.
- GALVANISING SHALL CONFORM TO IS:2629-1985 & IS:4759-1996
- SPRING WASHER SHALL BE CONFIRM TO IS 3063-1994

FOR TENDER REFERENCE
PURPOSE ONLY

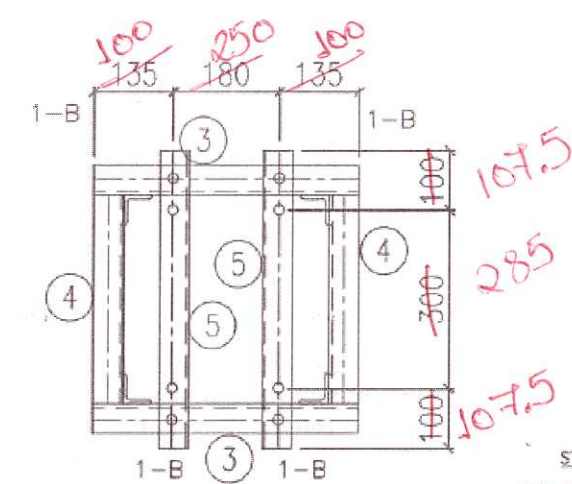
LA Structure Drawing

Sub Station:	220/132/33KV Salakathi GSS
Drig Tale :	33KV LA STR DRG

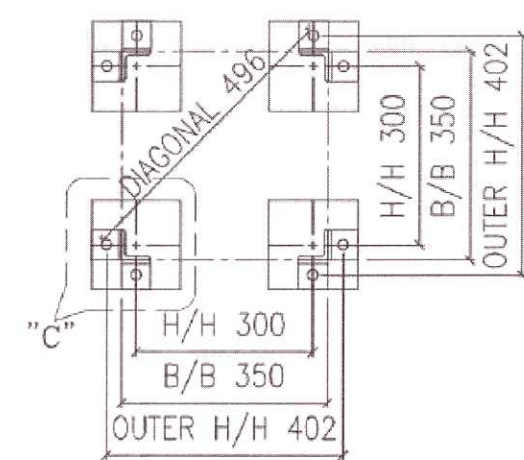


ELEVATION

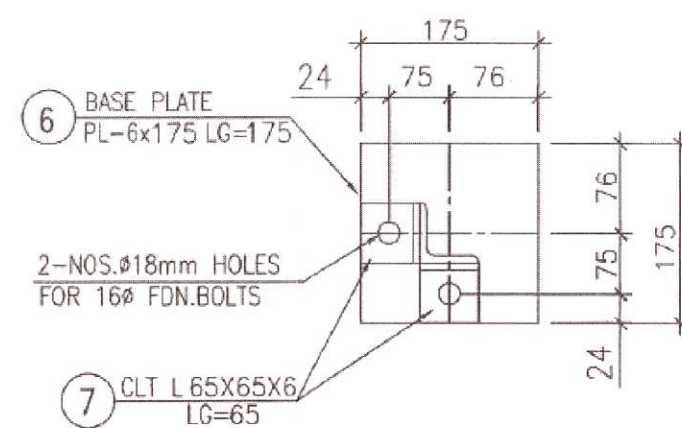
SIDE VIEW



VIEW 'B-B'

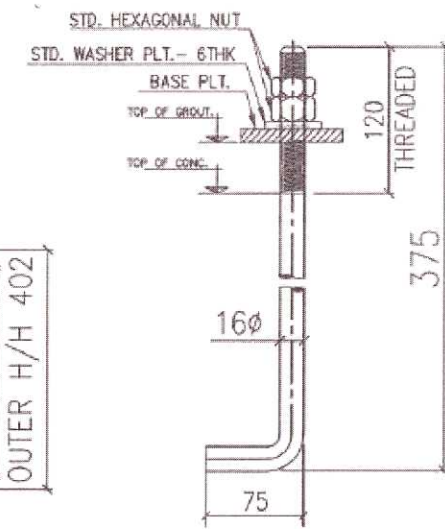


SECTION A-A



DETAIL-"C"

FOR TENDER REFERENCE
PURPOSE ONLY



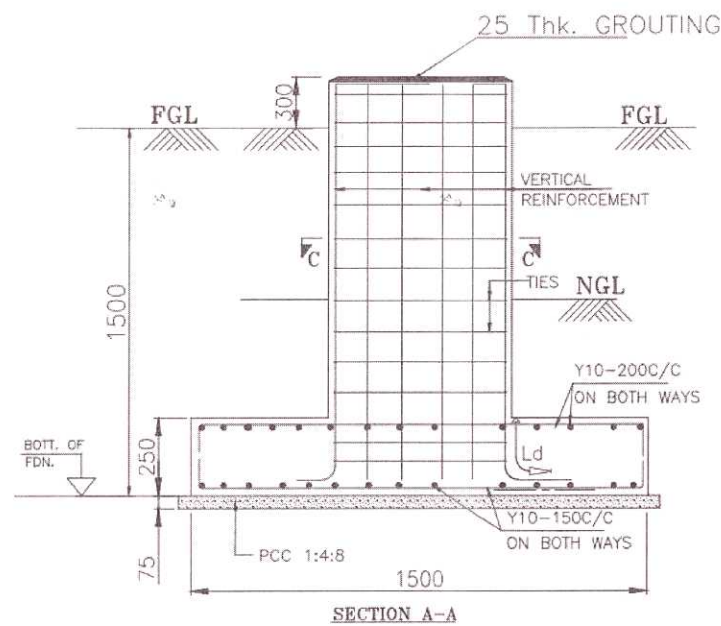
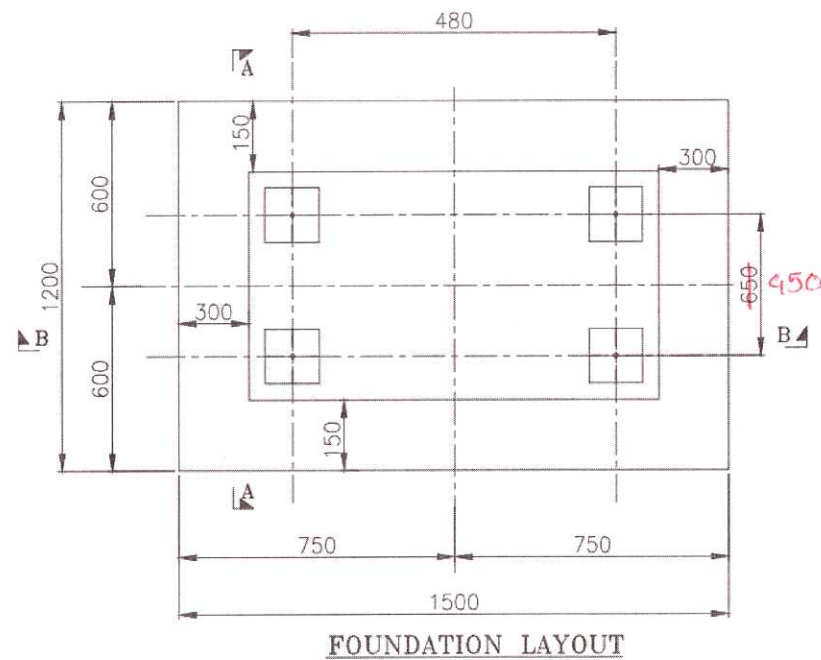
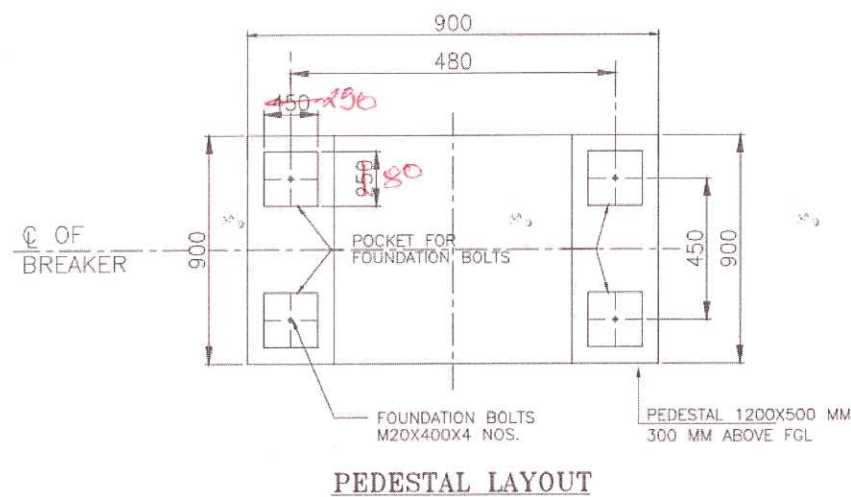
M16x450
FOUNDATION BOLT

BOLTS AND NUTS STATEMENT		
TYPE	SIZE	QTY.
A	ø 16 X 35 mm	16
B	ø 16 X 40 mm	24
C	ø 16 X 45 mm	-
D	ø 16 X 50 mm	-
E	ø 16 X 55 mm	-
F	ø 16 X 60 mm	-
G	ø 16 X 65 mm	-
H	ø 16 X 70 mm	-
J	ø 16 X 75 mm	-
K	ø 16 X 85 mm	-
SPRING WASHER 3.5 Thk.-M16ø		40
8mm THICK PLAIN WASHER		-
10mm THICK PLAIN WASHER		-
12mm THICK PLAIN WASHER		-
STEP BOLTS M16 X175 LG		-

- NOTES:
- ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
 - BOLT SYMBOLS 12ø = 13.5ø HOLES
16ø = 17.5ø HOLES
16ø STEP BOLT = 17.5ø HOLES DIAGONALLY OPPOSITE LEGS
22ø = 20ø HOLES
 - ALL ERECTION MARKS ARE TO BE PREFIXED WITH "33CT-"
 - STRUCTURAL STEEL SHALL BE AS FOLLOWS
(i) MILD STEEL - IS:2062 WITH YIELD STRESS $F_y=2550\text{KG/SQ.CM}$
(ii) HIGH TENSILE STEEL-IS:8500 Fe 490B
 - BOLTS & NUTS AS PER IS:12427-1988, CONFIRMING TO GRADE-5.6.
 - GALVANISING SHALL CONFORM TO IS:2629-1985 & IS:4759-1996
 - SPRING WASHER SHALL BE CONFIRM TO IS 3063-1994

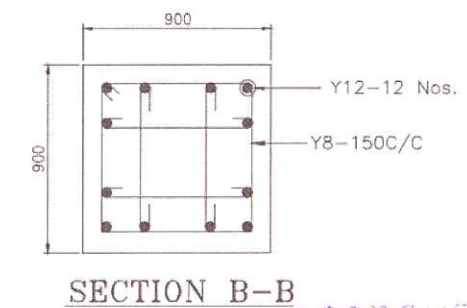
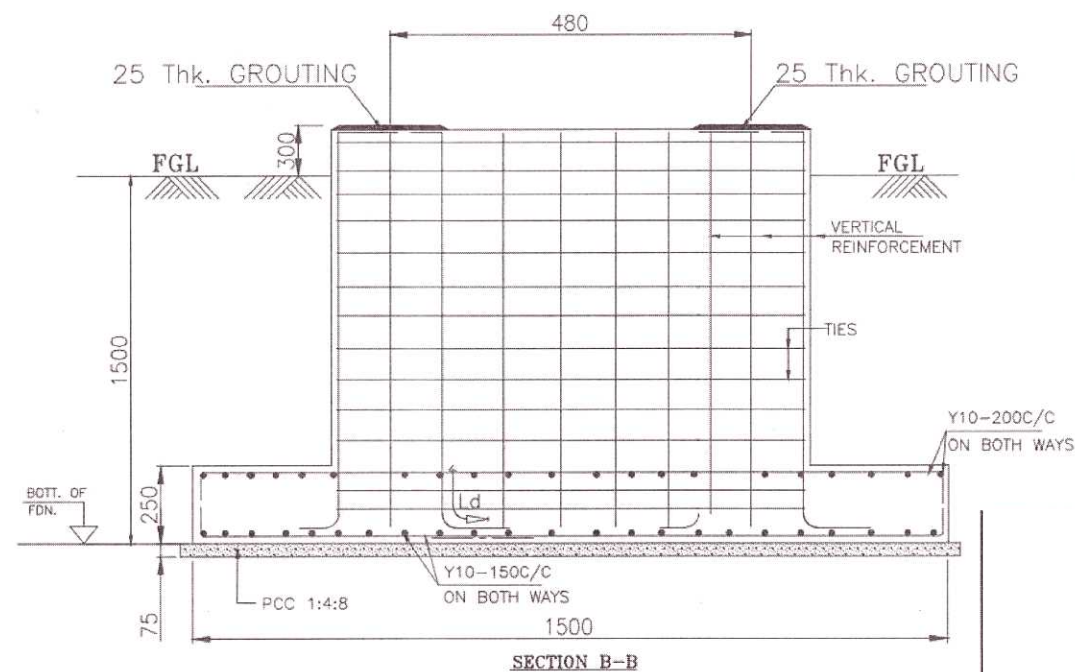
CT structure drawing

Sub Station:	220/132/33KV SALAKATHI GSS		
Dwg Title:	33KV CT STR DRG		
Dwg No:			
Revision:	RO	Sheet:	1 OF 1

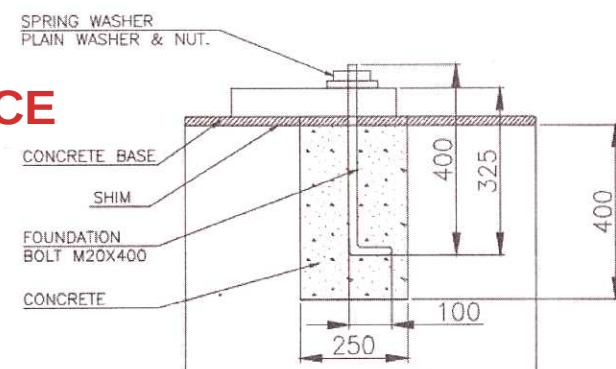


NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. FGL CORRESPONDS TO SWITCHYARD FORMATION LEVEL.
3. ALL STRUCTURAL CONCRETE SHALL BE GRADE M20 CONFORM TO IS:456.
4. ALL REINFORCEMENT STEEL SHALL BE HIGH YIELD STRENGTH DEFORMED BARS OF GRADE Fe 500 CONFORM TO IS:1786.
5. AGGREGATES SHALL CONFIRM TO IS:383.
6. THE CLEAR COVER FOR REINFORCEMENT SHALL BE 50mm FOR FOOTINGS AND 40mm FOR PEDESTALS.
7. IF FOUNDATION BOLTS FOUL WITH STIRRUPS, STIRRUPS SHALL BE ADJUSTED AT SITE.
8. FOUNDATION BOLTS SHALL BE PLACED IN POSITION BEFORE CONCRETE IS CAST.
9. NET BEARING CAPACITY IS CONSIDERED AS 10 T/Sq.m. @ 1.5m DEPTH FROM NGL.
10. NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT ONE SECTION.
11. ALL HOOKS, BENDS AND SPLICES SHALL BE AS PER IS:456 AND IS:2502.
12. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED TOWER AND FOUNDATION LAYOUT DRAWINGS.
13. THE FOUNDATION SHALL REST ON VIRGIN SOIL AT A DEPTH OF MINIMUM 1000mm.

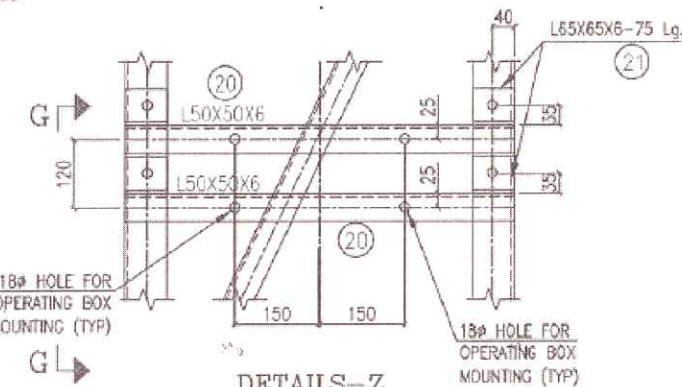


**FOR TENDER REFERENCE
PURPOSE ONLY**

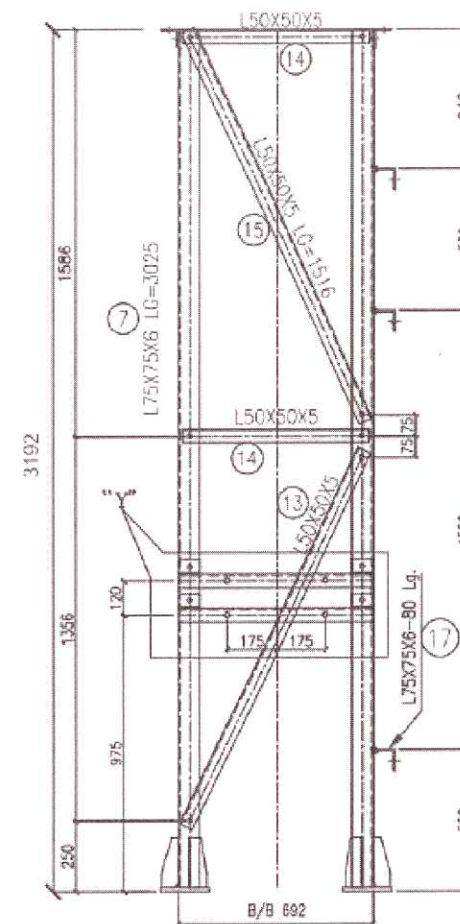


**VCB Structure
drawing**

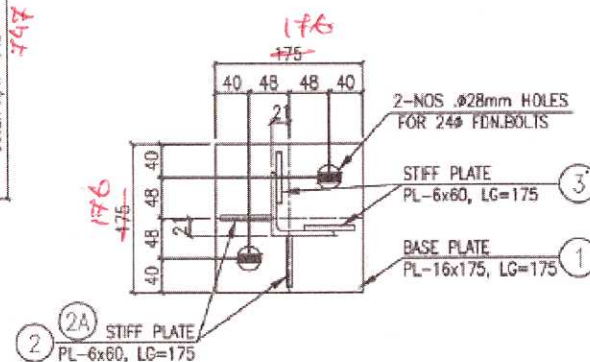
NOA No.	
TITLE:	VCB SALAKATHI GSS



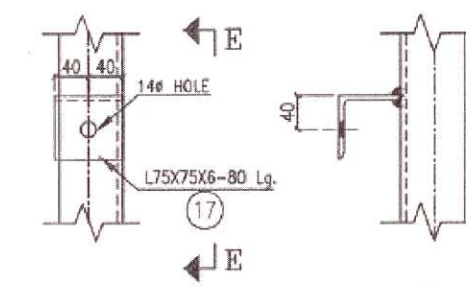
DETAILS—Z



VIEW C-C



DETAILS OF BASE PLATE



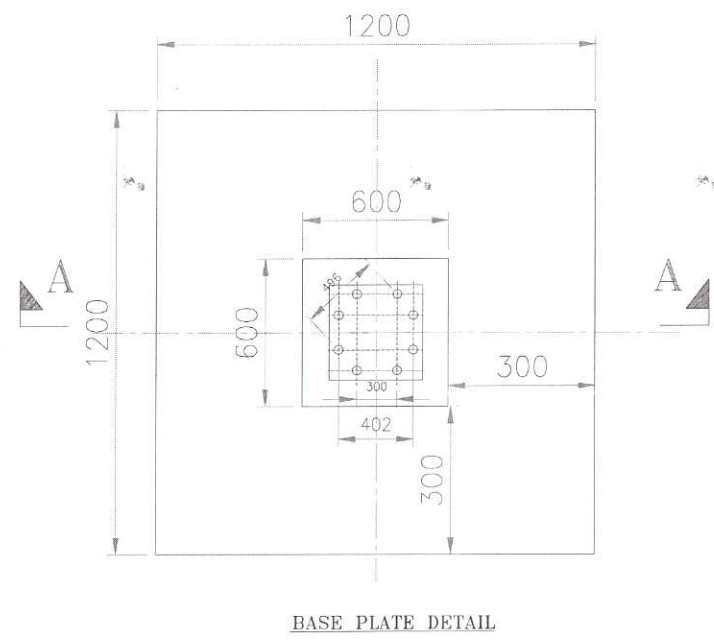
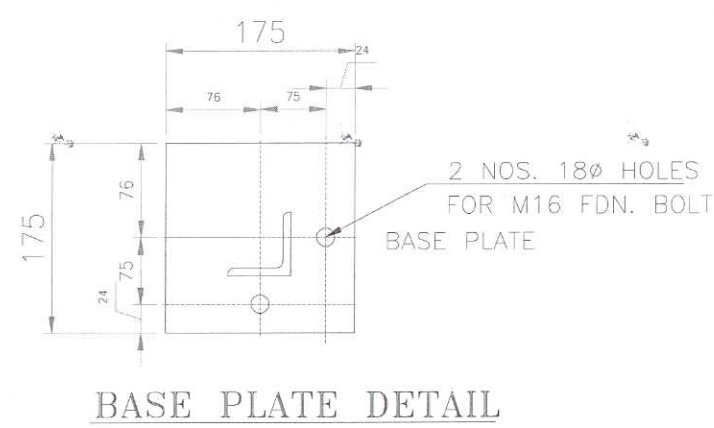
VIEW E-E

NOTES:

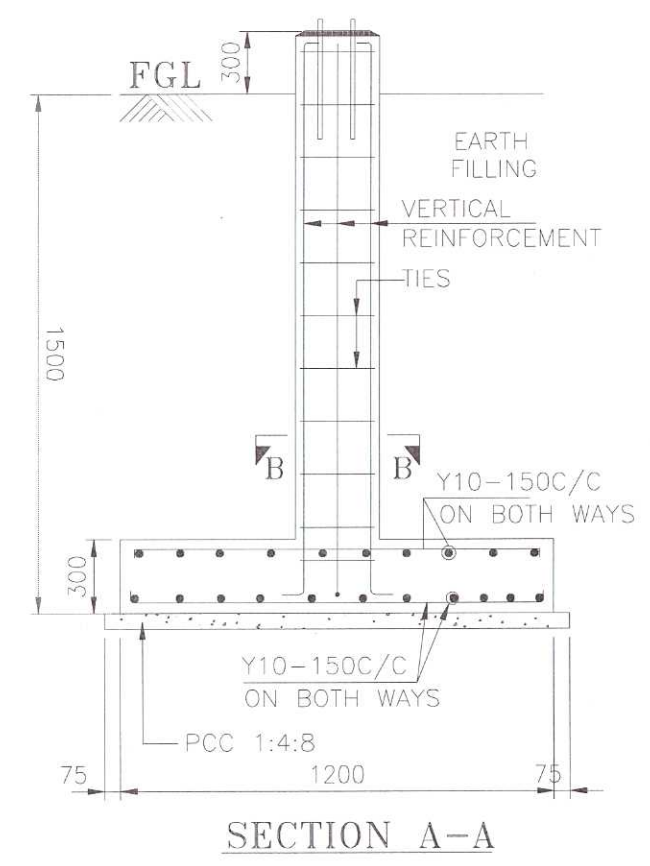
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
2. BOLT SYMBOLS 12 ϕ $\odot$ = 13.5 ϕ HOLES
16 ϕ $\odot$ = 17.5 ϕ HOLES
16 ϕ STEP BOLT $\odot$ = 17.5 ϕ HOLES DIAGONALLY OPPOSITE LEGS
22 ϕ $\odot$ = 20 ϕ HOLES
3. ALL ERECTION MARKS ARE TO BE PREFIXED WITH "JISO="
4. STRUCTURAL STEEL SHALL BE AS FOLLOWS
(i) MILD STEEL - IS:2062 WITH YIELD STRESS $F_y=2550\text{KG/SQ.CM}$
(ii) HIGH TENSILE STEEL-IS:8500 Fe 490B
5. BOLTS & NUTS AS PER IS:12427-1988, CONFIRMING TO GRADE-5.6.
6. GALVANISING SHALL CONFORM TO IS:2629-1985 & IS:4759-1996
7. SPRING WASHER SHALL BE CONFORM TO IS 3083-1994

BOLTS AND NUTS STATEMENT		
TYPE	SIZE	QTY.
A	Ø 12 X 40 mm	6
B	Ø 16 X 40 mm	66
C	Ø 16 X 45 mm	12
SPRING WASHER 3.5 Thk.-M16Ø		78
6mm THICK PLAIN WASHER		4

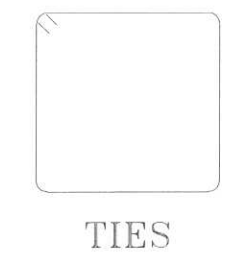
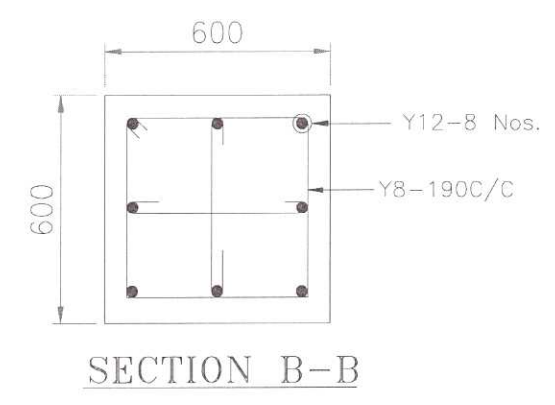
isolator structure drawing



- NOTES:-**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 2. FGL CORRESPONDS TO SWITCHYARD FORMATION LEVEL.
 3. ALL STRUCTURAL CONCRETE SHALL BE GRADE M20(1:1.5:3) CONFIRM TO IS:456.
 4. ALL REINFORCEMENT STEEL SHALL BE HIGH YIELD STRENGTH DEFORMED BARS OF GRADE Fe 500 CONFIRM TO IS:1786.
 5. AGGREGATES SHALL CONFIRM TO IS:383.
 6. THE CLEAR COVER FOR REINFORCEMENT SHALL BE 50mm FOR FOOTINGS AND 40mm FOR PEDESTALS.
 7. IF FOUNDATION BOLTS FOUL WITH STIRRUPS, STIRRUPS SHALL BE ADJUSTED AT SITE.
 8. FOUNDATION BOLTS SHALL BE PLACED IN POSITION BEFORE CONCRETE IS CAST.
 9. NET BEARING CAPACITY IS CONSIDERED AS 9.1 T/Sq.m. @ 1.0m DEPTH FROM NGL.
 10. NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT ONE SECTION.
 11. ALL HOOKS, BENDS AND SPLICES SHALL BE AS PER IS:456 AND IS:2502.
 12. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED TOWER AND FOUNDATION LAYOUT DRAWINGS.



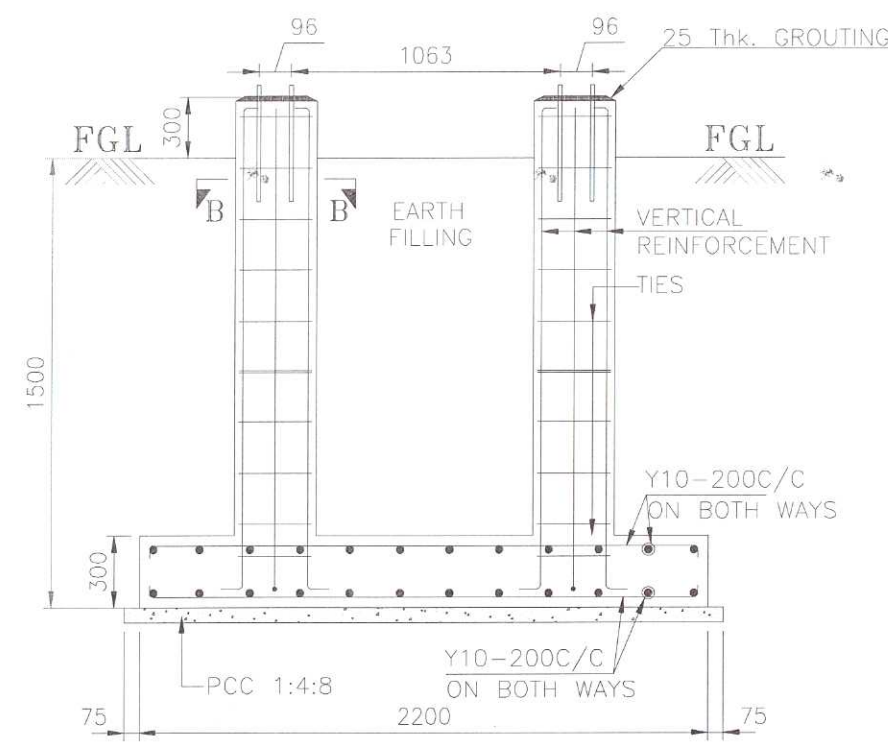
FOR TENDER REFERENCE PURPOSE ONLY



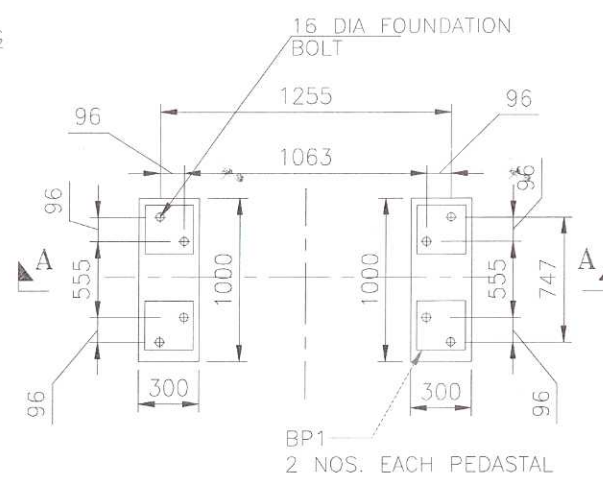
- FOUNDATION BOLTS DETAILS**
- | | |
|-----------------|------------------|
| 1. SIZE | - 16x450 |
| 3. TOTAL LENGTH | - 375mm |
| 4. NO. OF BOLTS | - 8Nos./PEDESTAL |

Foundation for CT

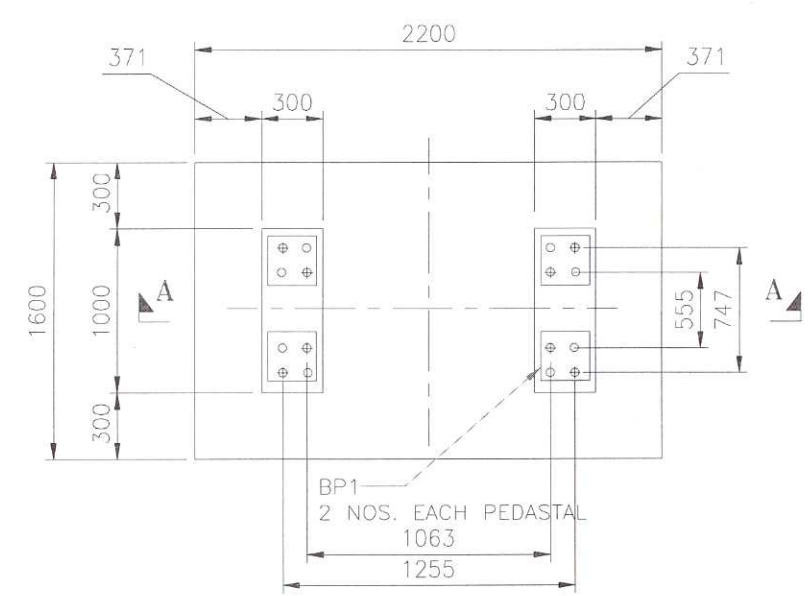
TITLE:	Details of Foundation For 33kV CT 200/132/33 kv (SALAKATI) Grid Sub Station



SECTION A-A



PEDESTAL LAYOUT



FOUNDATION LAYOUT

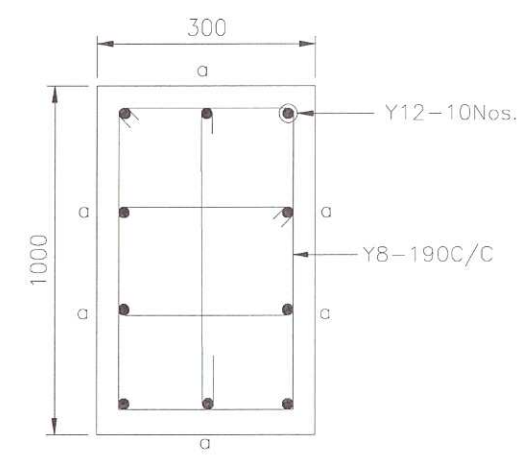
FOUNDATION BOLTS DETAILS

- | | |
|-----------------|------------------|
| 1. SIZE | - 16mm DIA |
| 3. TOTAL LENGTH | - 375mm |
| 4. NO. OF BOLTS | - 4Nos./PEDESTAL |

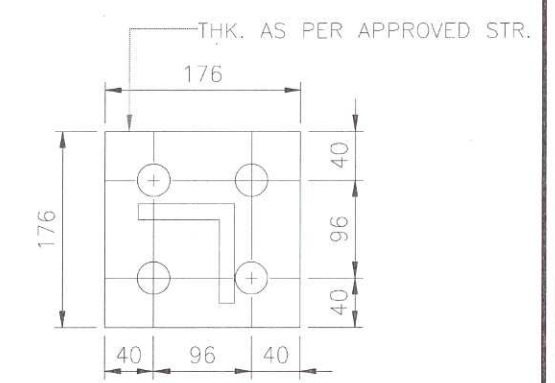
**FOR TENDER REFERENCE
PURPOSE ONLY**

NOTES:-

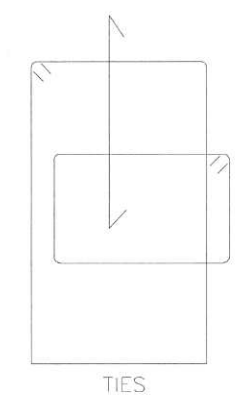
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. FGL CORRESPONDS TO SWITCHYARD FORMATION LEVEL.
3. ALL STRUCTURAL CONCRETE SHALL BE GRADE M20(1:1.5:3) CONFIRM TO IS:456.
4. ALL REINFORCEMENT STEEL SHALL BE HIGH YIELD STRENGTH DEFORMED BARS OF GRADE Fe₅₀₀ CONFIRM TO IS:1786.
5. AGGREGATES SHALL CONFIRM TO IS:383.
6. THE CLEAR COVER FOR REINFORCEMENT SHALL BE 50mm FOR FOOTINGS AND 40mm FOR PEDESTALS.
7. IF FOUNDATION BOLTS FOUL WITH STIRRUPS, STIRRUPS SHALL BE ADJUSTED AT SITE.
8. FOUNDATION BOLTS SHALL BE PLACED IN POSITION BEFORE CONCRETE IS CAST.
10. NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT ONE SECTION.
11. ALL HOOKS, BENDS AND SPLICES SHALL BE AS PER IS:456 AND IS:2502.
12. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED TOWER AND FOUNDATION LAYOUT DRAWINGS.



SECTION B-B



BASE PLATE
BP1

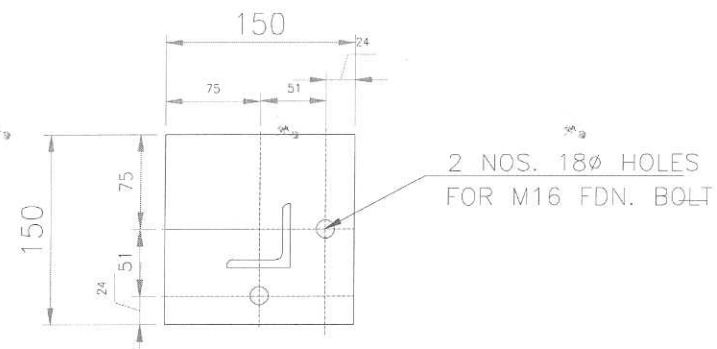


TIES

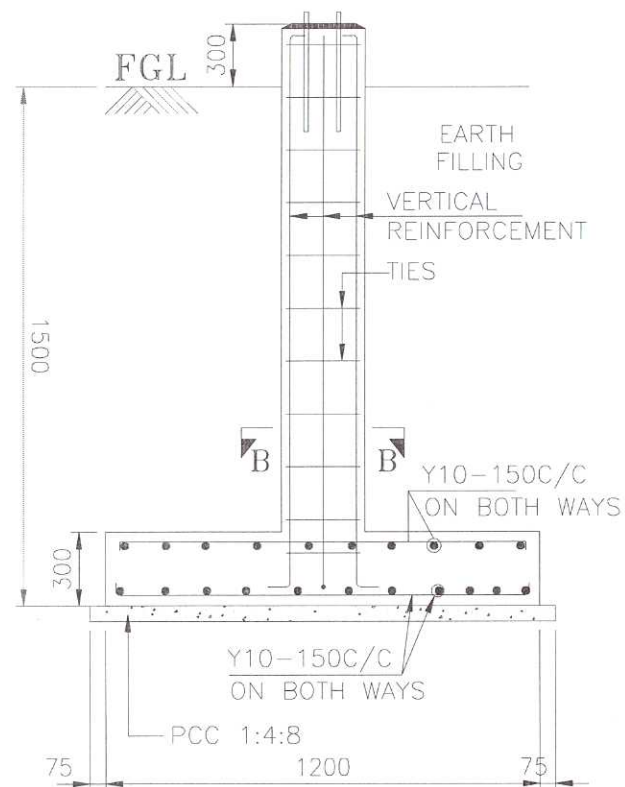
**Foundation
drawing for isolator**

TITLE:

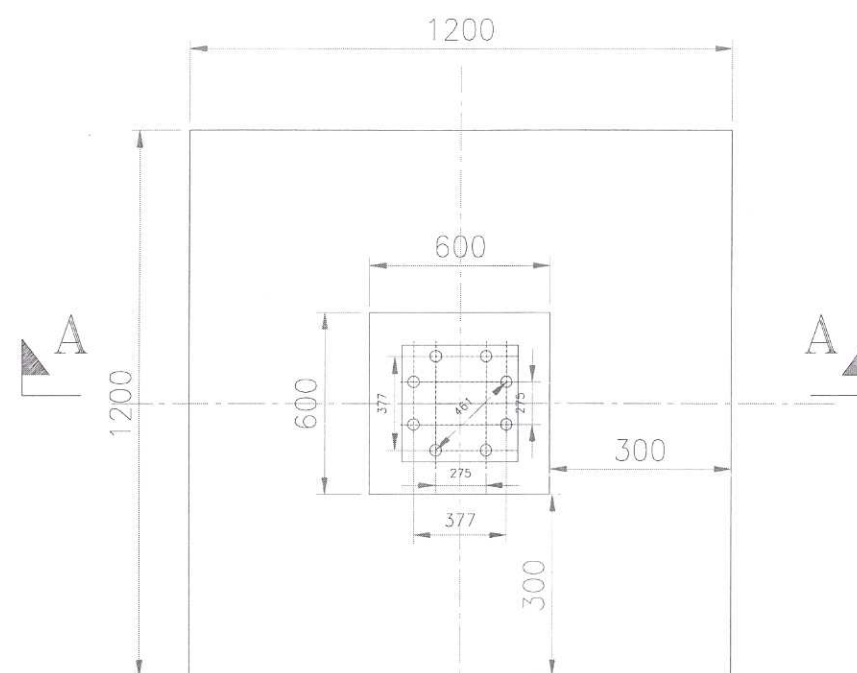
Details of Foundation For 33kV ISO W/ES & ES
220/132/33 KV (SALAKATI) Grid Sub Station



BASE PLATE DETAIL



SECTION A-A



FOUNDATION DETAIL

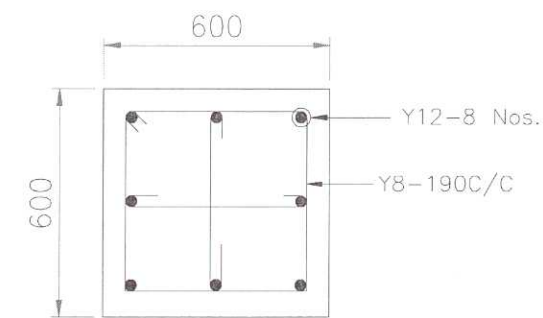
FOUNDATION BOLTS DETAILS

- | | |
|-----------------|------------------|
| 1. SIZE | - 16x450 |
| 3. TOTAL LENGTH | - 375mm |
| 4. NO. OF BOLTS | - 8Nos./PEDESTAL |

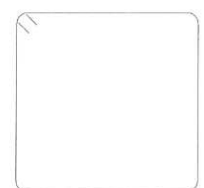
**FOR TENDER REFERENCE
PURPOSE ONLY**

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. FGL CORRESPONDS TO SWITCHYARD FORMATION LEVEL.
3. ALL STRUCTURAL CONCRETE SHALL BE GRADE M20(1:1.5:3) CONFIRM TO IS:456.
4. ALL REINFORCEMENT STEEL SHALL BE HIGH YIELD STRENGTH DEFORMED BARS OF GRADE Fe 500 CONFIRM TO IS:1786.
5. AGGREGATES SHALL CONFIRM TO IS:383.
6. THE CLEAR COVER FOR REINFORCEMENT SHALL BE 50mm FOR FOOTINGS AND 40mm FOR PEDESTALS.
7. IF FOUNDATION BOLTS FOUL WITH STIRRUPS, STIRRUPS SHALL BE ADJUSTED AT SITE.
8. FOUNDATION BOLTS SHALL BE PLACED IN POSITION BEFORE CONCRETE IS CAST.
10. NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT ONE SECTION.
11. ALL HOOKS, BENDS AND SPLICES SHALL BE AS PER IS:456 AND IS:2502.



SECTION B-B



TIES

**Foundation drawing
for LA**

TITLE:	Details of Foundation For 33kV LA & PI 200/132/33 kv (SALAKATI) Grid Sub Station
DRG. NO:	UK/AEGCL/AIIB/33KV LA & PI/SALAKATI/FDN/01