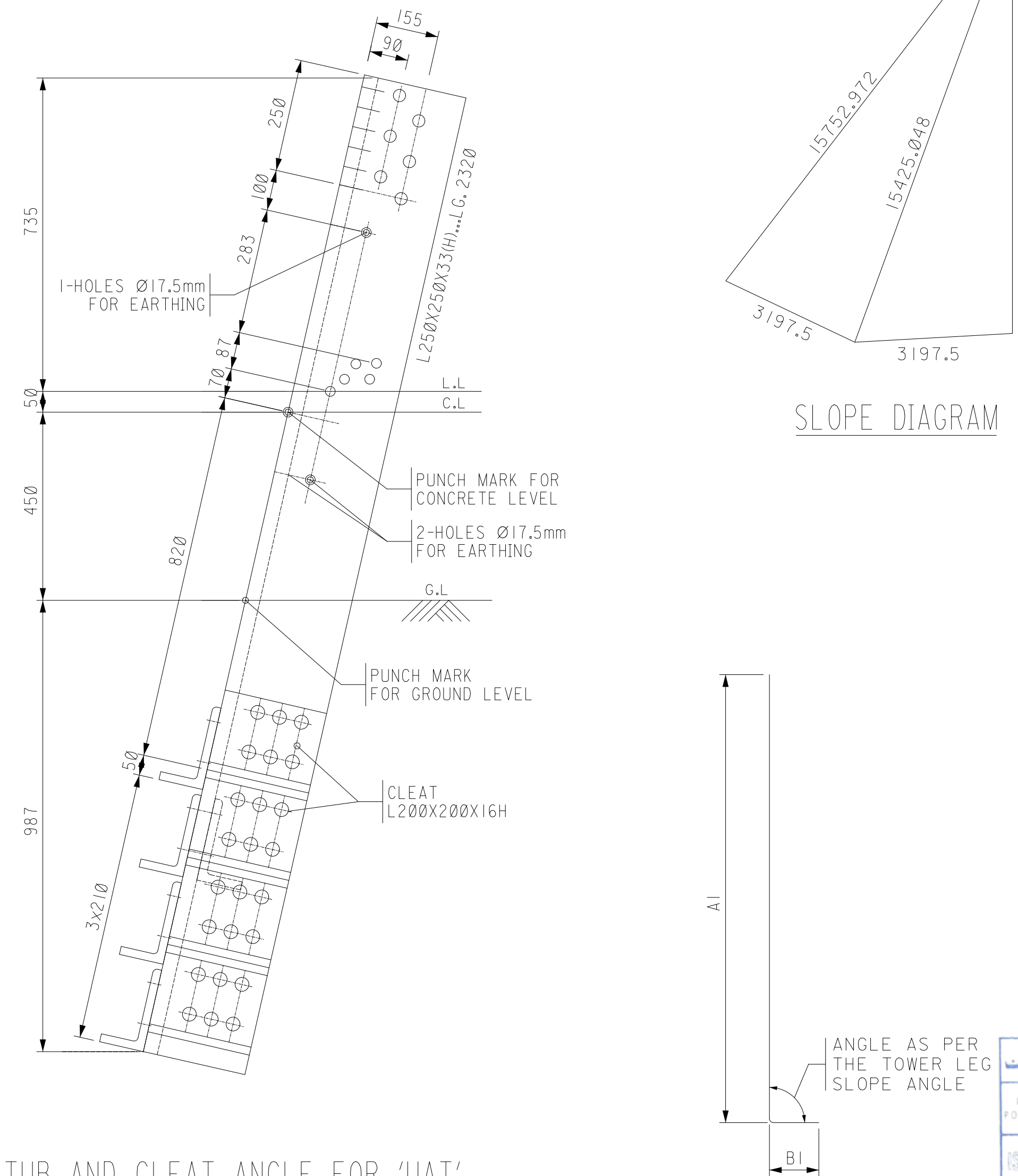
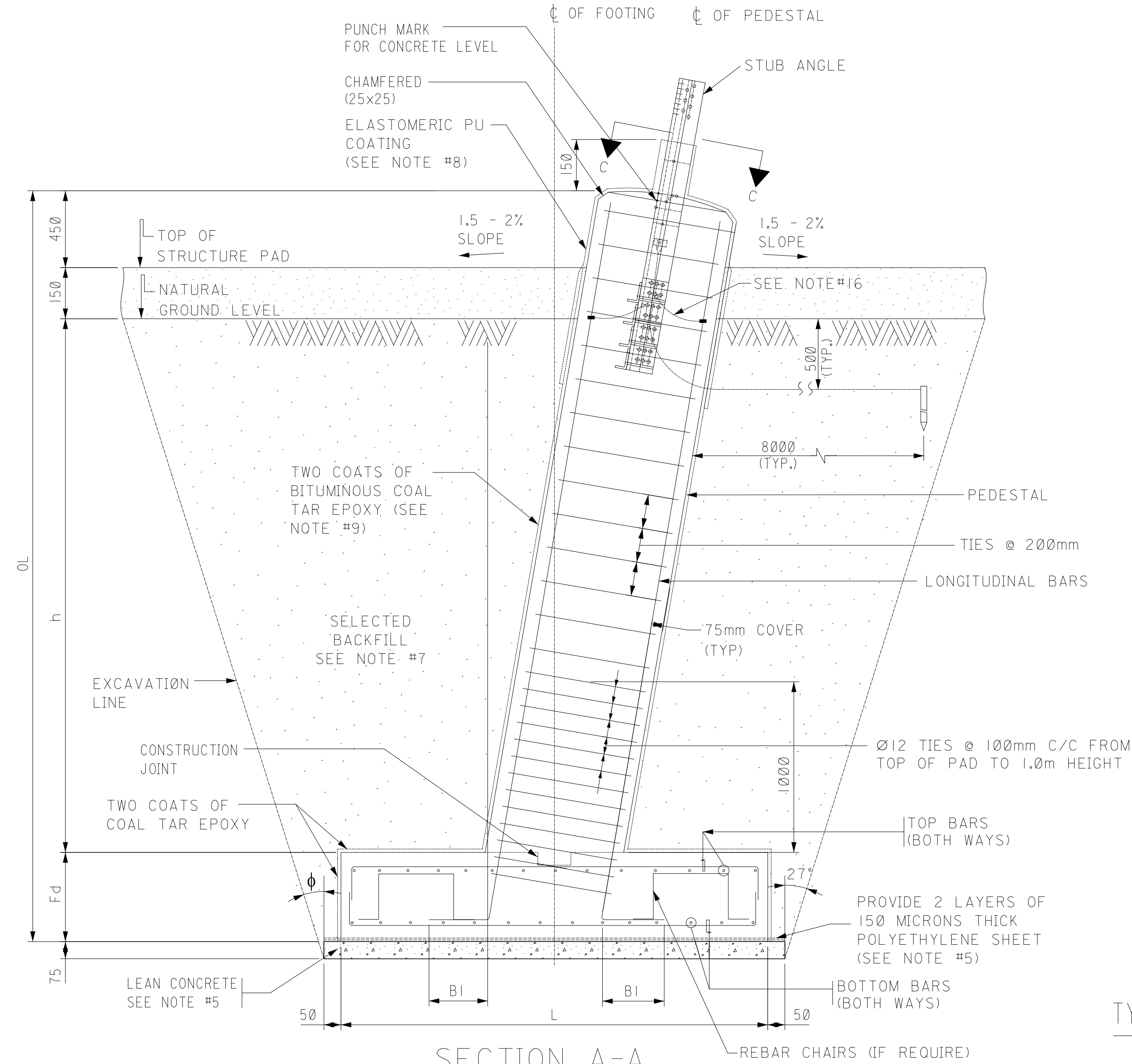


PAD & CHIMNEY FOUNDATION SCHEDULE FOR TOWER TYPE "UAT"

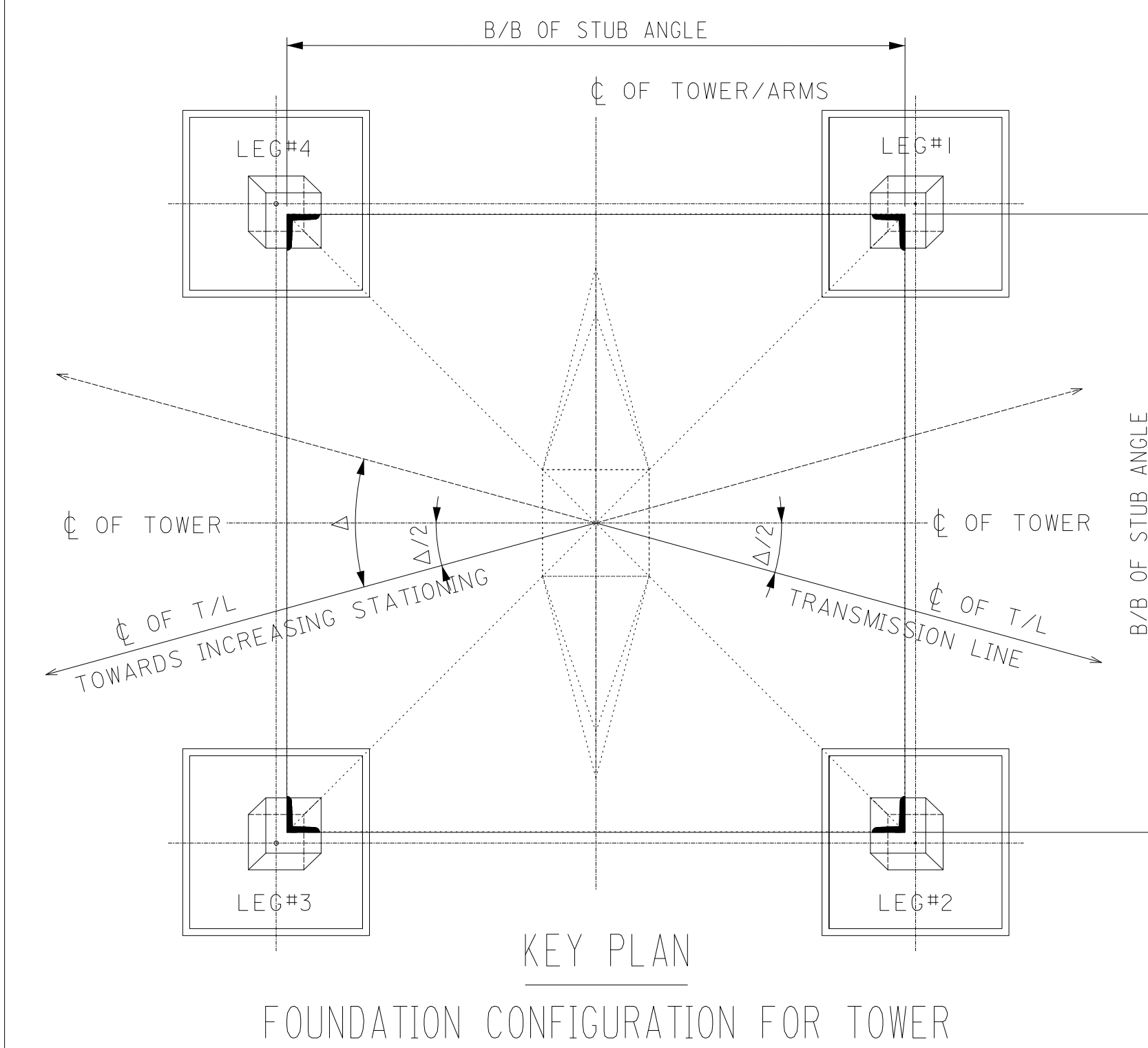
## NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. CONCRETE COMPRESSIVE STRENGTH SHALL CONFORM WITH REQUIREMENTS OF 70-TMS-03 REV.2 AND SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 38mpa FOR SEVERE EXPOSURE SOIL AND 28mpa FOR MODERATE EXPOSURE SOIL CONDITION.
3. YIELD STRENGTH OF DEFORMED STEEL REINFORCEMENT,  $f_y = 420$  MPa.
4. THE MINIMUM CONCRETE COVER TO REINFORCEMENT STEEL SHALL BE 75mm.
5. PROVIDE (2) TWO LAYERS OF 150mm THICK POLYETHYLENE SHEET UNDER 75mm THICK LEAN CONCRETE AS PER SEC STANDARD TCS-0-113.03 SEC:7.3.7.
6. TOP SURFACE OF CONCRETE SHALL BE CROWNED AND GIVEN A SMOOTH STEEL TROWEL FINISH.
7. BACKFILLING SHALL BE DONE WITH APPROVED BACKFILLING MATERIALS AND COMPACTION SHALL BE CARRIED OUT TO ACHIEVE A MIN.95% OF STANDARD PROCTOR DENSITY IN LAYERS NOT MORE THAN 200mm THICK.
8. ALL EXPOSED CONCRETE SURFACES SHALL BE DRY & CLEANED AT THE TIME OF APPLICATION AND IT SHALL BE COATED WITH POLYURETHANE WATER PROOFING MEMBRANE.
9. ALL CONCRETE SURFACES BELOW GRADE LEVEL HAVE COATED WITH A MINIMUM OF (2) COATS OF COAL TAR EPOXY.
10. REFER TO THE REFERENCE DRAWINGS FOR STUB & STUB SETTING DETAILS AND TOWER GROUNDING DETAILS.
11. EXCAVATION MUST BE CLOSELY MONITORED TO MAKE SURE THE SOIL/ROCK PARAMETERS USED IN THIS DESIGN ARE IN AGREEMENT WITH THE ACTUAL SITE CONDITION. IF THERE ARE ANY DIFFERENCES, DESIGN OFFICE SHALL BE INFORMED FOR RECTIFICATION AND REDESIGN IF NEEDED.
12. TOWER NOT ERRECTED/INSTALLED UNTIL AT LEAST 10 DAYS AFTER POURING THE CONCRETE FOUNDATIONS AS PER CLAUSE 4.3 OF TCS-P-122.06, REV.01.
13. NO LOADS ARE APPLIED TO THE TOWER UNTIL THE CONCRETE HAS REACHED 28 DAYS STRENGTH AS PER CLAUSE 4.3 OF TCS-P-122.06, REV.01.
14. CONSTRUCTION JOINT SHALL BE PROVIDED AT 300mm BELOW THE STUB ANGLE. BEFORE APPLICATION OF NEXT CONCRETE POURING APPROVED BONDING AGENT ARE USE AS PER 11.3.1 OF TCS-P-122.05, REV.1.
15. EXPOSED FOUNDATIONS ARE CURED IN MOIST CONDITION FOR 21 DAYS FOLLOWING CLAUSE 8.3.5 OF TCS-0-133.03, REV.0.
16. STUB ANGLES SHALL BE CONNECTED BY (#5 OR #7, AS APPLICABLE) COPPER CLAD GROUNDING CONDUCTOR THROUGH COMPRESSION CONNECTOR AND REBARS EXOTHERMALLY WELDED AT LEAST TWO (2) LOCATIONS ON EACH TOWER LEG AS PER CLAUSE 6.3 OF TCS-0-122.10, REV.0.
17. DE-SHUTTERING AND REMOVAL OF TEMPLATES SHALL BE CARRIED OUT AFTER (72 HOURS) 3 DAYS OF CONCRETE CURING FOLLOWING CLAUSE 10.3 OF TCS-P-122.03, REV.0.
18. IN CASES WHERE THE TOWER CROSSED OR IS LOCATED IN WADI AREA, SPECIAL TOWER FOUNDATIONS WERE PROVIDED WITH HIGHER REVEAL EXTENSIONS AS PER NG STANDARD AND REQUIREMENTS.
19. ALL WELDING WORKS AS PER TES-W-109.1.

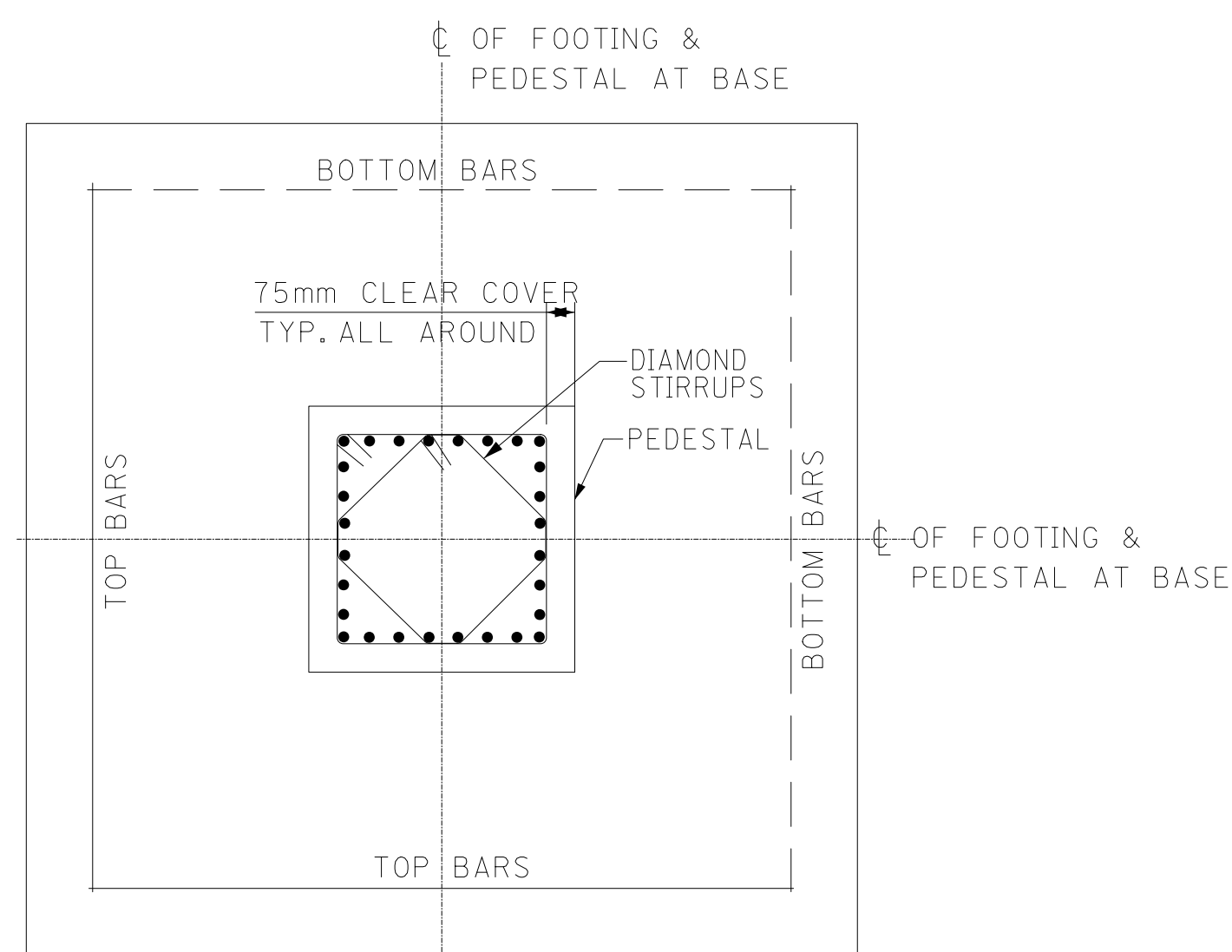


TYPICAL STUB AND CLEAT ANGLE FOR 'UAT'

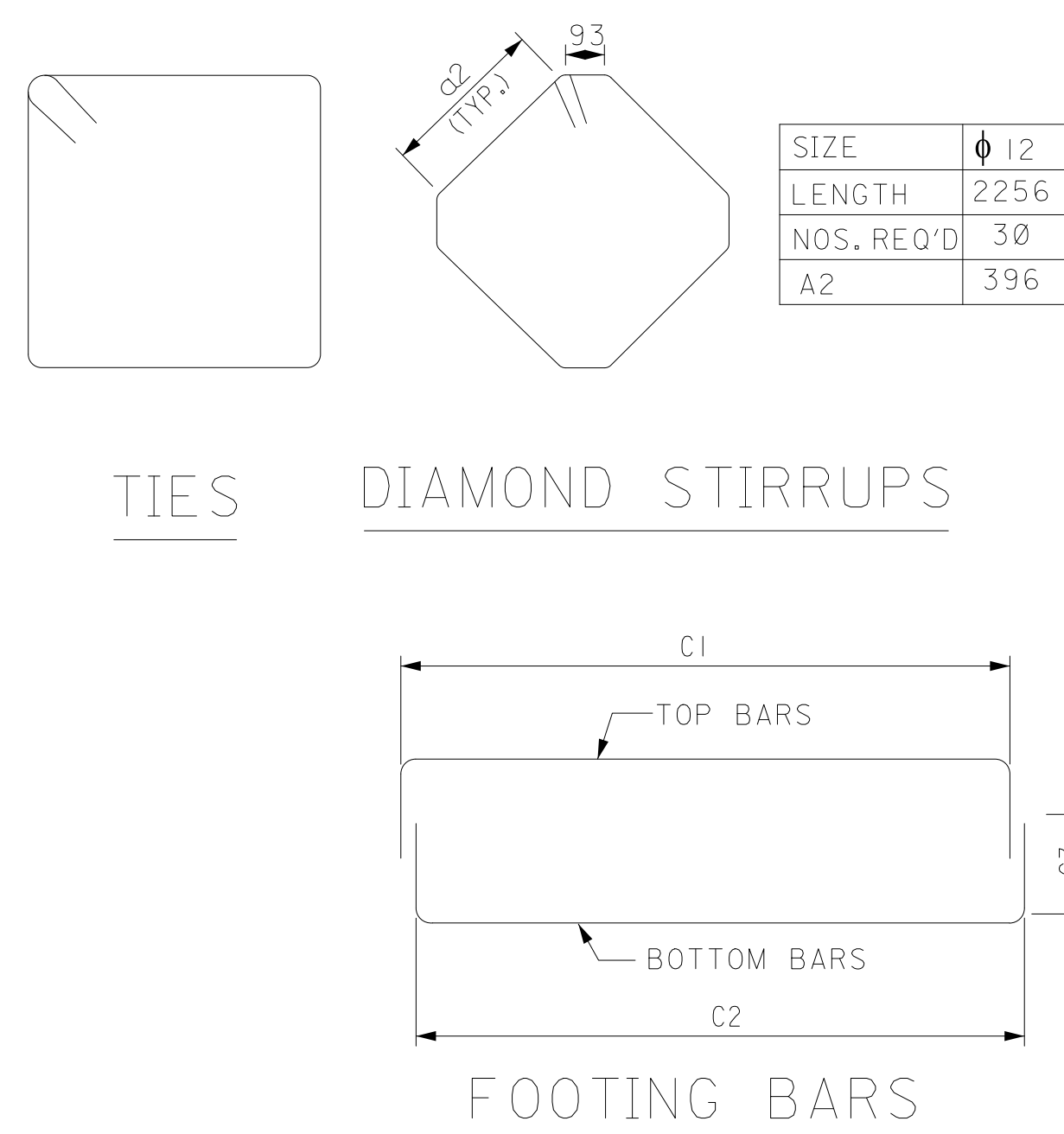
(FOR DETAILS SEE STUB ANGLE REF.DWG.)



NOTE: REFER STRUCTURE DATA LIST FOR TOWER  
DESCRIPTION (STRUCTURAL CONFIGURATION)  
AND COORDINATES



## REINFORCEMENT DETAILS



AS-BUILT		BY	DATE			
00	20-11-23	SATECH	ISSUED FOR CONSTRUCTION	MUO	MS	FNK
03	13-11-23	SATECH	ISSUED FOR APPROVAL	MUO	MS	FNK
02	05-10-23	SATECH	ISSUED FOR APPROVAL	MUO	MS	FNK
01	20-09-23	SATECH	ISSUED FOR APPROVAL	MUO	MS	FNK
REV. NO.	DATE	BY	DESCRIPTION	CHKD.	CERT.	APPD.

DRAWING COMPLETION CERTIFICATE (DCC):

**Redacted Signature**  
National Grid SA

[illegible]

DRAWN BY \_\_\_\_\_ CHECKED BY \_\_\_\_\_ MS SCALE: \_\_\_\_\_ N.T.S.

DATE STARTED 13-11-23 DATE COMPLETED \_\_\_\_\_

OPR'G. DEPT. \_\_\_\_\_ ENG. DEPT. \_\_\_\_\_


THIS DRAWING IS NOT TO BE USED FOR  
CONSTRUCTION OR FOR ORDERING

MATERIAL UNTIL CERTIFIED AND DATED BY \_\_\_\_\_ DATE \_\_\_\_\_

## FOUNDATION DETAILS FOR SUSPENSION TOWER TYPE "UAT"

CONSTRUCTION OF 132kV D/C OHL FOR MUHAYIL

CENTRAL 132/33/13.8KV SUBSTATIONSAUDI ARABIA

INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
-------	-----------	----------------	-----------	----------

Page 01 of 01

Q	THIRTY-ONE	51	51	51	00
					0312/201

	DMS	VECTOR	NGA00
1	0.00	0.00	0.00
2	0.00	0.00	0.00
3	0.00	0.00	0.00
4	0.00	0.00	0.00
5	0.00	0.00	0.00
6	0.00	0.00	0.00
7	0.00	0.00	0.00
8	0.00	0.00	0.00
9	0.00	0.00	0.00
10	0.00	0.00	0.00
11	0.00	0.00	0.00
12	0.00	0.00	0.00
13	0.00	0.00	0.00
14	0.00	0.00	0.00
15	0.00	0.00	0.00
16	0.00	0.00	0.00
17	0.00	0.00	0.00
18	0.00	0.00	0.00
19	0.00	0.00	0.00
20	0.00	0.00	0.00
21	0.00	0.00	0.00
22	0.00	0.00	0.00
23	0.00	0.00	0.00
24	0.00	0.00	0.00
25	0.00	0.00	0.00
26	0.00	0.00	0.00
27	0.00	0.00	0.00
28	0.00	0.00	0.00
29	0.00	0.00	0.00
30	0.00	0.00	0.00
31	0.00	0.00	0.00
32	0.00	0.00	0.00
33	0.00	0.00	0.00
34	0.00	0.00	0.00
35	0.00	0.00	0.00
36	0.00	0.00	0.00
37	0.00	0.00	0.00
38	0.00	0.00	0.00
39	0.00	0.00	0.00
40	0.00	0.00	0.00
41	0.00	0.00	0.00
42	0.00	0.00	0.00
43	0.00	0.00	0.00
44	0.00	0.00	0.00
45	0.00	0.00	0.00
46	0.00	0.00	0.00
47	0.00	0.00	0.00
48	0.00	0.00	0.00
49	0.00	0.00	0.00
50	0.00	0.00	0.00
51	0.00	0.00	0.00
52	0.00	0.00	0.00
53	0.00	0.00	0.00
54	0.00	0.00	0.00
55	0.00	0.00	0.00
56	0.00	0.00	0.00
57	0.00	0.00	0.00
58	0.00	0.00	0.00
59	0.00	0.00	0.00
60	0.00	0.00	0.00
61	0.00	0.00	0.00
62	0.00	0.00	0.00
63	0.00	0.00	0.00
64	0.00	0.00	0.00
65	0.00	0.00	0.00
66	0.00	0.00	0.00
67	0.00	0.00	0.00
68	0.00	0.00	0.00
69	0.00	0.00	0.00
70	0.00	0.00	0.00
71	0.00	0.00	0.00
72	0.00	0.00	0.00
73	0.00	0.00	0.00
74	0.00	0.00	0.00
75	0.00	0.00	0.00
76	0.00	0.00	0.00
77	0.00	0.00	0.00
78	0.00	0.00	0.00
79	0.00	0.00	0.00
80	0.00	0.00	0.00
81	0.00	0.00	0.00
82	0.00	0.00	0.00
83	0.00	0.00	0.00
84	0.00	0.00	0.00
85	0.00	0.00	0.00
86	0.00	0.00	0.00
87	0.00	0.00	0.00
88	0.00	0.00	0.00
89	0.00	0.00	0.00
90	0.00	0.00	0.00