


## NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. CONCRETE COMPRESSIVE STRENGTH SHALL CONFORM WITH REQUIREMENTS OF T8-TMS-0-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 MIN. LEAN CONCRETE AS PER SEC STANDARD TCS-0-113.03 SEC.7.3.1.
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 ERECTED/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 (75 OR 77, 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 ARE PROVIDED WITH HIGHER REVEAL EXTENSIONS AS PER NG STANDARD AND REQUIREMENTS.
19. ALL WELDING WORKS AS PER TES-W-109.1.

 ساتيك Saudi Technologists Consulting Engineers	
LICENSE NO. 486- KHALED A. MUHAMMAD P.O. Box 31759, Al-Khobar 31952 - Saudi Arabia	Signature  Date / /
ISSUED FOR APPROVAL	

DRAWING COMPLETION CERTIFICATE (DCC):

DRAWN BY SATECH CHECKED BY MS SCALE: N.T.S.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED	CERTIFIED  BY _____ DATE _____
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FOUNDATION DETAILS FOR SUSPENSION TOWER TYPE "USA"

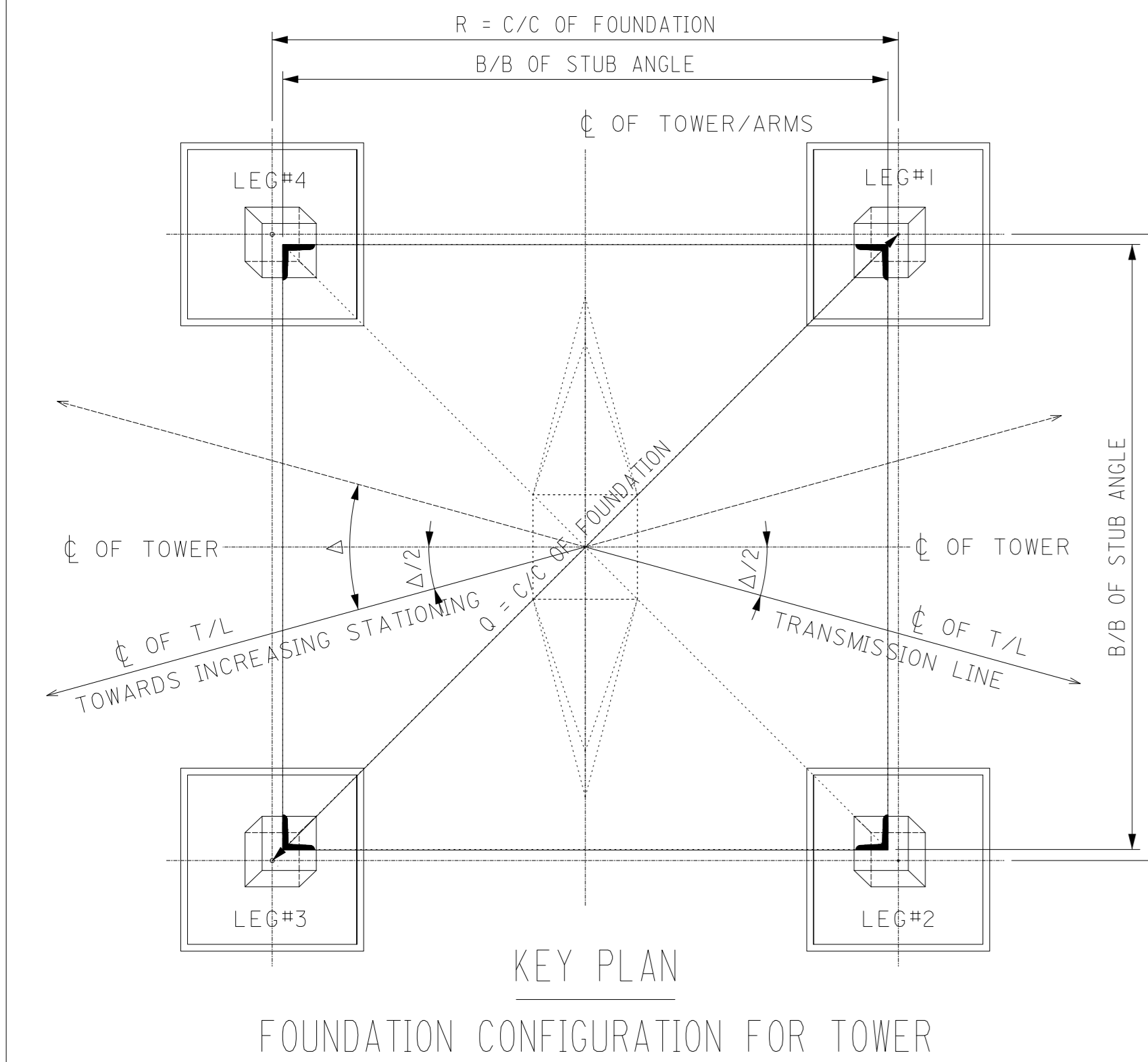
# CONSTRUCTION OF 132kV D/C OHL FOR MUHAYIL

CENTRAL 132/33/13.8KV SUBSTATION

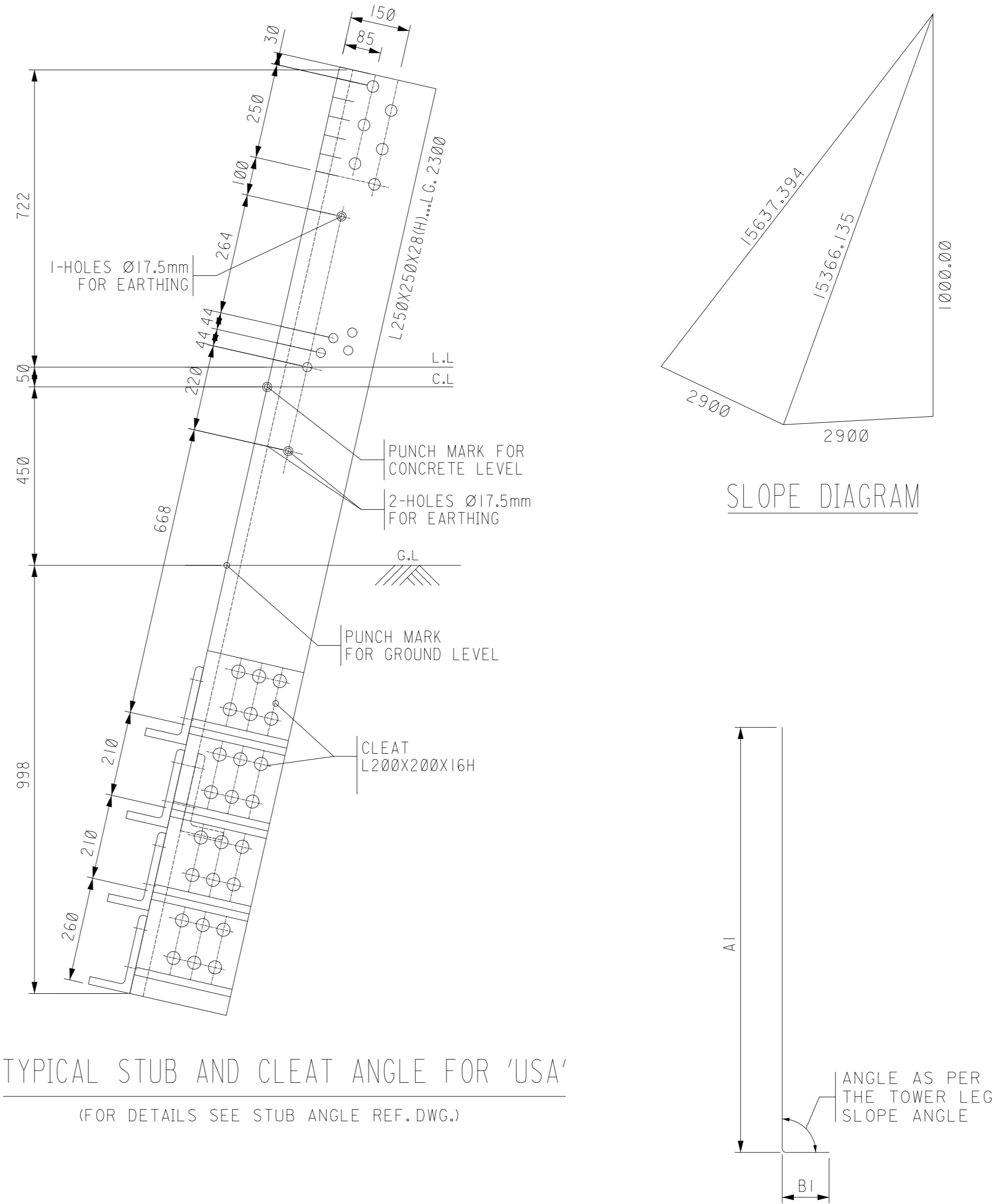
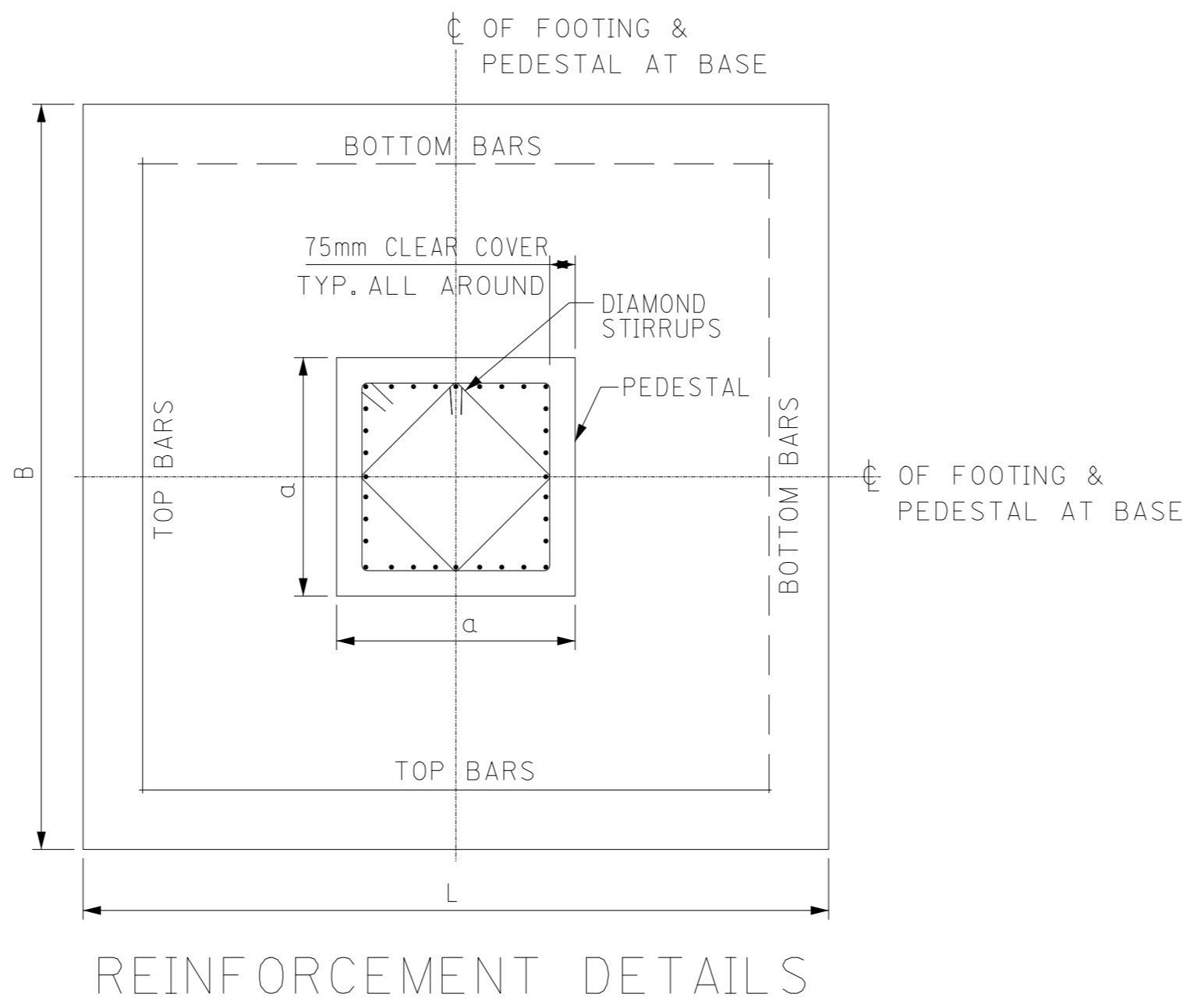
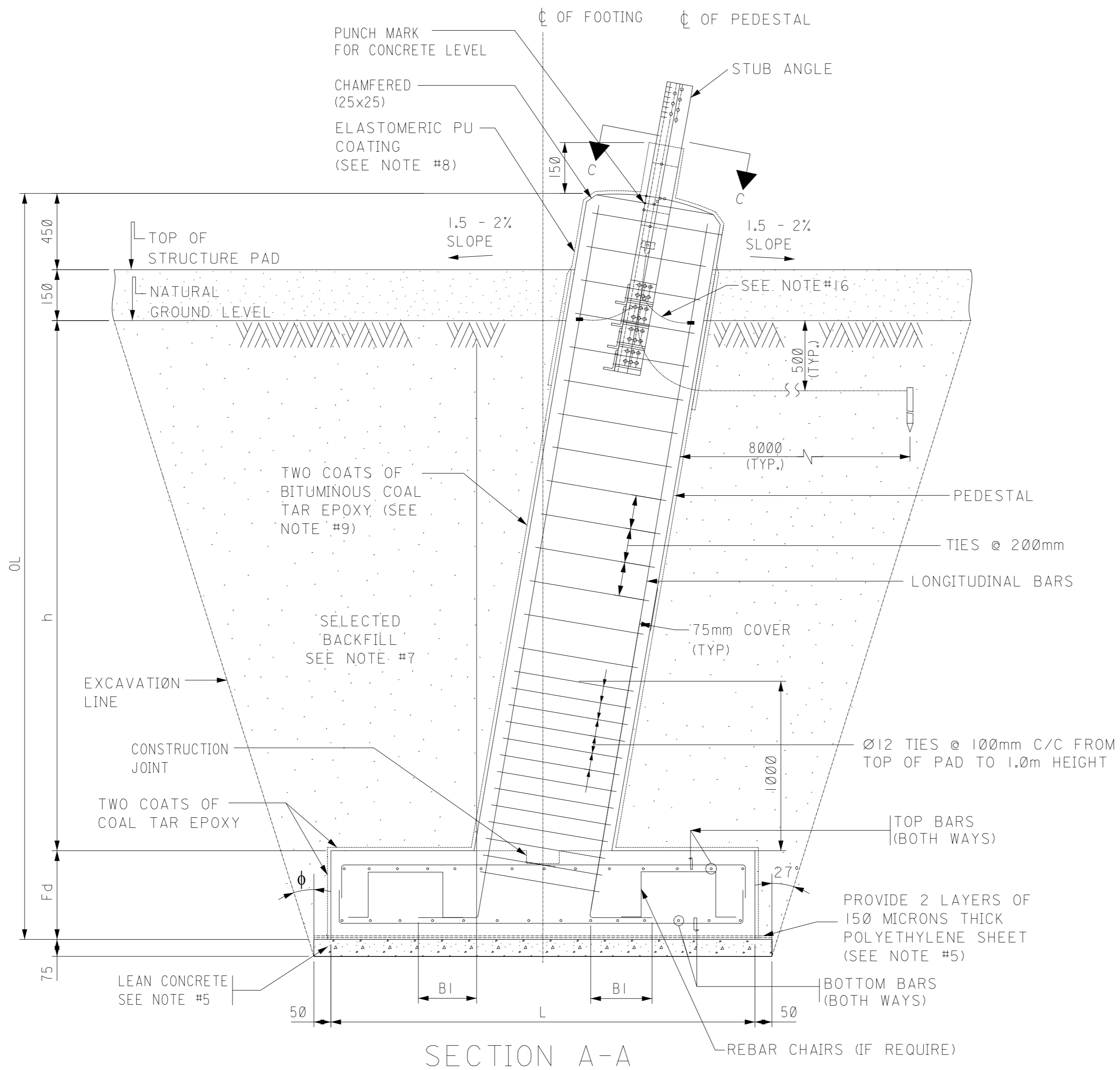
MUHAYIL	SAUDI ARABIA
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INDEX	TEAM NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
Q	TEAM 125	SA-125-101	01 of 01	00

DMS	VECTOR	NGA00
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NOTE: REFER STRUCTURE DATA LIST FOR TOWER  
DESCRIPTION (STRUCTURAL CONFIGURATION)  
AND COORDINATES



SIZE	φ 12
LENGTH	2140
NOS. REQ'D	29
A2	460

