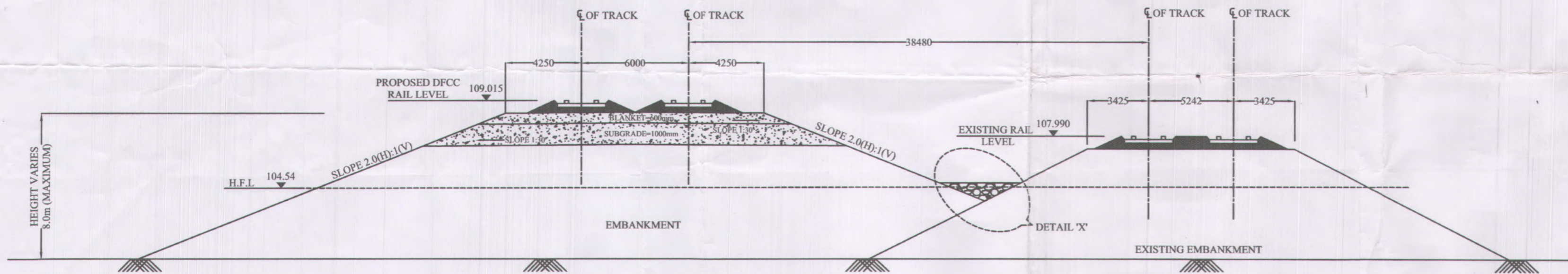
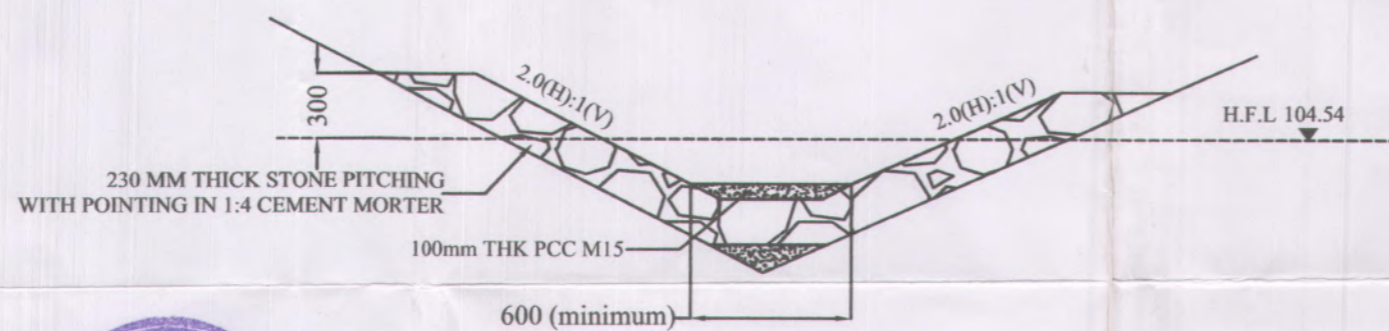


DESIGN SECTION FOR EMBANKMENT OF HEIGHT 8.0m (A1 i.e., MUMBAI SIDE)



DESIGN SECTION FOR EMBANKMENT OF HEIGHT 8.0m (A2 i.e., SURAT SIDE)



DETAIL 'X'

- Notes
1. ALL DIMENSIONS ARE IN mm & LEVELS IN METER UNLESS OTHERWISE INDICATED.
 2. ALL DIMENSIONS ARE TO BE READ AND NOT TO MEASURED.
 3. ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF APPROVING AUTHORITY BEFORE EXECUTION OF WORK AT SITE.
 4. THE DRAWING IS PREPARED BY M/S SOMA ENTERPRISE.
 5. THE DRAWING IS BASED ON DETAIL SUCH AS GEOTECHNICAL INVESTIGATION, FILL MATERIAL TESTING CARRIED OUT BY M/S SOMA ENTERPRISE.
 6. EARTH WORK, SUBGRADE AND BLANKET FOR APPROACHES OF THE BRIDGE SHALL BE AS PER DFCC'S SPECIFICATIONS.
 7. EROSION PROTECTION MEASURES ON THE SLOPE OF BANK ON APPROACH OF BRIDGE SHALL BE PROVIDED UPON 300mm ABOVE HFL.
 8. EROSION CONTROL ON SLOPE OF EMBANKMENTS SHALL BE DONE BY BIO-ENGINEERING TECHNIQUES SUCH AS SOWING SEEDS OR PLANTING ROOT STRIPS OF LOCALLY AVAILABLE GRASS AS PER CLA. 2.16 OF DFCC CONTRACT AGREEMENT, SPECIFICATION VOLUME III SECTION IX PART I.
 9. SCOUR PROTECTION SHALL BE DONE BY RIVETING/ PITCHING HAND PACKED BOULDERS UPTO 1M BEYOND WING WALL/RETURNS AS PER CL NO 22 OF DFCC CONTRACT AGREEMENT EMPLOYER'S REQUIREMENT VOLUME I SECTION V AND APPROVED DRAWING NO. SURAT/DFC/D/WC-ST/MB-188/2011.
 10. FOR BORE HOLE DETAILS REFER DOCUMENT NO: SOMA/DFCC/545 (R1).
 11. THE FILL MATERIAL USED FOR EMBANKMENT SHALL ALSO HAVE FOLLOWING PROPERTIES.
 BULK DENSITY (γ) : 18 TO 21 kN/m³
 SHEAR STRENGTH PARAMETERS:
 UNDRAINED CONDITION:
 ANGLE OF INTERNAL FRICTION(ϕ_u): $\geq 28^\circ$
 COHESION (cu) : ≥ 10 kpa
 DRAINED CONDITION:
 ANGLE OF INTERNAL FRICTION(ϕ'): $\geq 30^\circ$
 COHESION (c') : ≥ 5 kpa
 12. ANY SOFT OR LOOSE FORMATION AT FOUNDATION LEVEL WITHIN BASE WIDTH OF EMBANKMENT SHALL BE EXCAVATED & REPLACED WITH EMBANKMENT FILL MATERIAL SATISFYING CHARACTERISTICS MENTIONED IN POINT NO: 11.
 13. TRIAL PITS SHALL BE TAKEN IN THE APPROACH PORTION AT 50m INTERVAL EXTENDING UPTO WEATHERED ROCK FORMATION OR 3m DEPTH WHICHEVER IS SHALLOWER TO VERIFY THE SUB-SURFACE PROFILE AS PER BORE HOLE A1 (MUMBAI SIDE) & A2 (SURAT SIDE).

01	29.01.13	SECOND SUBMISSION			
Rev	Date	Description			
J.G.M (DESIGN)	J.G.M (DESIGN)	QMAX-GCPI (REVIEW)	P.M.C	S.E.L	
PROOF CONSULTANT :-					
STUP CONSULTANTS PVT.LTD					
CLIENT:-					
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD					
CONTRACTOR :-					
SOMA ENTERPRISE LTD.					
CONSULTANT :-					
QMAX - GENSTRU J V					
PROJECT :-					
WESTERN FREIGHT CORRIDOR: MAJOR BRIDGES BETWEEN VAITARNA AND UTRAN ON VASAI-BHARUCH SECTION					
TITLE :-					
EMBANKMENT SECTION FOR BRIDGE NO 400					
DESIGNED BY.	DRAWN BY.	CHECKED BY.	APPROVED BY.		
IT	DB	IT	PN		
DRAWING NO SOMA-DFCC-400-E-01		DATE 29.01.13	REV 01	SCALE NTS	

400/589/05
CONTROLLED COPY

Signature
Date
CRE B.H. Gansolhi
20/11/13

25.11.13
CPM



29.01.13
Jy. cpm/DFCC/st