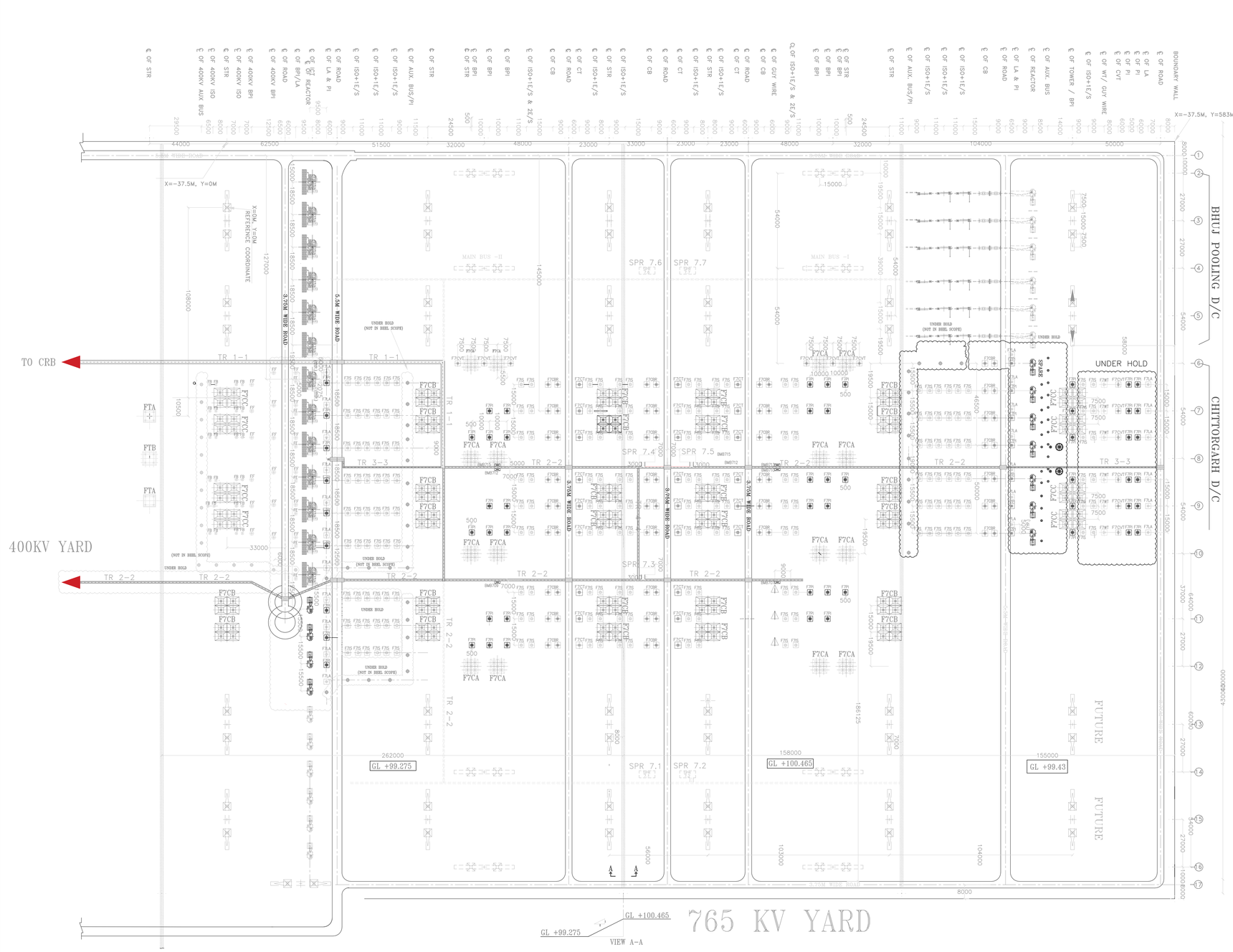
DRAWING No. TB-384-607-601

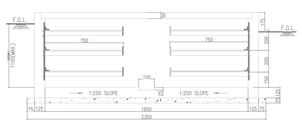


NOTES :-

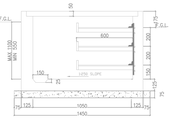
1. ALL DIMENSIONS ARE IN mm.
2. THE LOCATION OF CABLE TRENCHES MARKED IN THIS DWG MAY BE SLIGHTLY MODIFIED TO SUIT SITE CONDITIONS.
3. OPENINGS FOR TAKING OUT PVC PIPES TO EQUIPMENTS SHALL BE PROVIDED IN CABLE TRENCHES. OPENING OF SIZE SUITABLE TO DIA. 50/110 PIPE SHALL BE PROVIDED BELOW TOP CABLE SUPPORT.
4. BMB = INDICATES BAY MARSHALLING BOX.
5. BMBs SHALL BE PLACED IN THE LOCATION SHOWN. EXACT COORDINATES TO BE SUITABLY DECIDED AT SITE.
6. CABLES SHALL BE LAID IN MULTILAYER ON CABLE SUPPORT (ANGLES)
7. CABLE SUPPORT SHALL BE PROVIDED AT EVERY 0.75m INTERVAL.
8. INSERTS MUST BE EMBEDDED AT EVERY 0.75m INTERVAL FOR FIXING CABLE SUPPORT.
9. AUXILIARY POWER CABLES SHALL BE LAID IN TOP TIERS AND CONTROL CABLES IN BOTTOM TIERS, AS PER TECHNICAL SPECIFICATION.
10. BURIED CABLING SHALL BE DONE AS PER SPECIFICATION (INSTALLATION OF CABLES).
11. BURIED CABLES FOR LIGHTING PURPOSE SHALL BE AS PER LIGHTING LAYOUT.
12. LOCATION OF CABLE TRENCHES INSIDE CONTROL ROOM SHALL BE SHOWN SEPARATELY.
13. EARTH CONDUCTOR 50x6 MS FLAT TO BE WELDED ON THE CABLE SUPPORT BEFORE INSTALLATION OF CABLES.
14. CABLES CROSSING ROAD/RAIL TRACK SHALL BE LAID IN BOX CULVERT
15. FOR POWER & CONTROL SEPARATE PIPES SHALL BE USED CONSIDERING 60% VOID FOR EACH PIPE i.E., 40% FILLING CRITERIA.
16. PLACEMENT OF AC MK KIOSK AND ITS CABLE TRENCH IS TENTATIVE. EXACT COORDINATES TO BE SUITABLY DECIDED AT SITE.
17. ——— INDICATES CABLES LAID IN PVC PIPES OF 50/110mm OUTER DIA AT DEPTH OF 300mm (MAX.) CABLE FROM EQUIPMENT TO CABLE TRENCH SHALL RUN IN PVC PIPES.
18. MARKED THUS ◄ INDICATES CABLE ENTRY/EXIT FROM EQUIPMENT.
19. ALL OTHER DETAILS PERTAINING TO CIVIL WORKS SHALL BE REFLECTED IN THE RESPECTIVE CIVIL DRAWINGS.
20. PVC PIPES SHALL BE SECURELY FIXED AT BOTH ENDS, EITHER EMBEDDED IN CONCRETE OR PROPERLY CLAMPED.
21. AFTER LAYING THE CABLES THE ENDS OF PIPES SHALL BE FULLY SEALED TO PREVENT INGRESS OF WATER INSIDE THE PIPE.
22. CONTROL CABLES & POWER CABLES MUST BE LAID IN SEPARATE PVC PIPES.
23. CABLE TRENCH SHALL BE PROVIDED ON MARSHALLING BOX SIDE OF EQUIPMENT.
24. THE PURPOSE OF TRENCH LAYOUT DRAWING IS FOR USE AS FOLLOWS:
    - TO BE USED AS CIVIL INPUT FOR CABLE TRENCHES.
    - FOR ERECTION OF CABLE RACKS AT SITE.
    - FOR CABLE LAYING AND ROUTING AT SITE.
25. CABLE RACK AND SUPPORTS SHALL BE PAINTED AFTER INSTALLATION WITH 2 COATS OF METEL PRIMER (COMPRISING OF RED OXIDE & ZINC CHROMATE IN A SYNTHETIC MEDIUM) FOLLOWED BY TWO FINISHING COAT OF ALUMINIUM PAINT.
26. ▩ INDICATES BRICK WALL SHALL BE PROVIDED IN TRENCH WHERE FUTURE TRENCH/EQUIPMENT PIPE TERMINATED IN PRESENT SCOPE OF TRENCH.
27. SUITABLE PULL OUT BOX SHALL BE PROVIDED IF REQUIRED WHERE CABLE SHALL BE LAID IN PVC PIPE.
28. LONGITUDINAL SLOPE IN CABLE TRENCH SHALL BE TYPICALLY 1:500.
29. ▭ INDICATE PIPE CULVERT.
30. RACK ASSEMBIES FOR CABLE TRENCHES SHALL BE PROVIDED ON THE FACE OF TRENCH WALL MARKED ◄ THUS.
31. FOR ALL CIVIL WORKS EXECUTION POWER GRID APPROVED/RELEASED DRGS SHALL BE FOLLOWED.
32. UNDERGROUND LAYING OF FIBER OPTIC CABLE SHALL BE DONE IN GI PIPE.

REFERENCE DWG :-

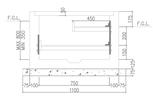
DWG. NO.	TITLE
TB-3-384-510-001B R01	SINGLE LINE DIAGRAM 765/400kV BANASKANTHA S/S
TB-384-510-002	ELECTRICAL LAYOUT PLAN FOR 765/400kV BANASKANTHA S/S
TB-384-607-601	765KV FOUNDATION LAYOUT FOR BANASKANTHA



TR 1-1

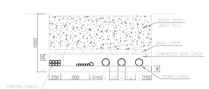


TR 2-2



TR 3-3

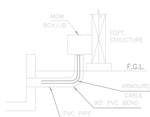
TR 4-4



TYPICAL BURIED CABLE TRENCH

* WIDTH OF BURIED CABLE TRENCH WILL DEPEND ON THE NO. OF CABLES FINALISED AS PER CABLE SCHEDULE.

TYPICAL CABLE SUPPORT



DETAIL SHOWING ROUTING OF CABLE INSIDE PVC PIPE CABLE TRENCH TO EQUIPMENT

PVC PIPES : CLASS IV (AS PER IS:4985)

			FOR 765kV AND 400kV EQUIPMENTS		
R.NO.	FROM	TO		FOR POWER CABLE (50MM OD)	FOR CONTROL CABLE (50MM OD)
1.	BUSBAR	JB (SP/CT)		–	1
2.	JB (SP/CT)	EACH POLE OF CVT / CT		–	1
3.	TRENCH	LCC OF CB		1	–
4.	TRENCH	765kV ISO/ES MOM 'Y'		1	–
5.	TRENCH	400kV ISO/ES MOM 'Y'		1	–
6.	765kV ISO/ES MOM 'Y'	765kV ISO/ES MOM 'B'		1	–
7.	765kV ISO/ES MOM 'Y'	765kV ISO/ES MOM 'R'		1	–
8.	765kV ISO/ES MOM 'Y'	765kV ISO/ES MOM 'N'		1	1
9.	400kV ISO/ES MOM 'Y'	400kV ISO/ES MOM 'Y'		1	–
10.	400kV ISO/ES MOM 'Y'	400kV ISO/ES MOM 'Y'		–	1
11.	400kV ISO/ES MOM 'Y'	400kV ISO/ES MOM 'Y'		–	1
12.	TRENCH	400kV REACTOR		–	1
13.	TRENCH	315MVA TRANS.		1	2

TABLE-1

QUANTITY OF NP3 RCC PIPE FOR ROAD CROSSING		
R.NO.	450MM OD	300MM OD
TR-2-2	02 NO.	01 NO.
TR-3-3	01 NO.	01 NO.

PVC PIPES : CLASS IV (AS PER IS:4985)

			FOR 66/33kV EQUIPMENTS	
R.NO.	FROM	TO	FOR POWER CABLE (50MM OD)	FOR CONTROL CABLE (50MM OD)
1.	TRENCH	JB (SP/CT)	–	1
2.	JB (SP/CT)	EACH POLE OF PT / CT	–	1
3.	TRENCH	LCC OF CB	1	–
4.	TRENCH	GO NOMR	1	–

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED
ZONE			ZONE			ZONE			ZONE			ZONE		

ADDITIONAL INFORMATION
W.O.No.AA 11035 , PROJECT CODE – 384

STATUS OF DRAWING

DISTRIBUTION OF PRINTS

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NAME OF PROJECT:
SS02 for Construction of 765/400/220kV Banaskantha S/S and Extension of 400kV Sankhari (GETCO) S/S with Green Energy Corridors : Inter-State Transmission Scheme (ISTS) – Part B
NOA NO.– CC-CS/483-WR2/SS-2803/11/G8/NOA-II/5507 & 5508 Dtd 01 Sep2015

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
ट्रांसमिशन परियोजना विभाग
BHARAT HEAVY ELECTRICALS LTD.
TRANSMISSION PROJECTS DIVISION

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स्वीकृत APPROVED	AS		03.03.16

विभाग DEPT. | कोड CODE | अनुपात / SCALE | कार्ड कोड CARD CODE

शीर्षक/TITLE
CABLE TRENCH LAYOUT FOR 765KV YARD
765/400/220 KV SS BANASKANTHA

ड्राईंग.क./DRAWING NO. TB-384-510-007

पुन:/REV. 0

पृष्ठ क./SHEET No. 01 अगला पृष्ठ /NEXT SHEET –

PRINT SIZE A0

COMPUTER DISC PATH NAME :
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