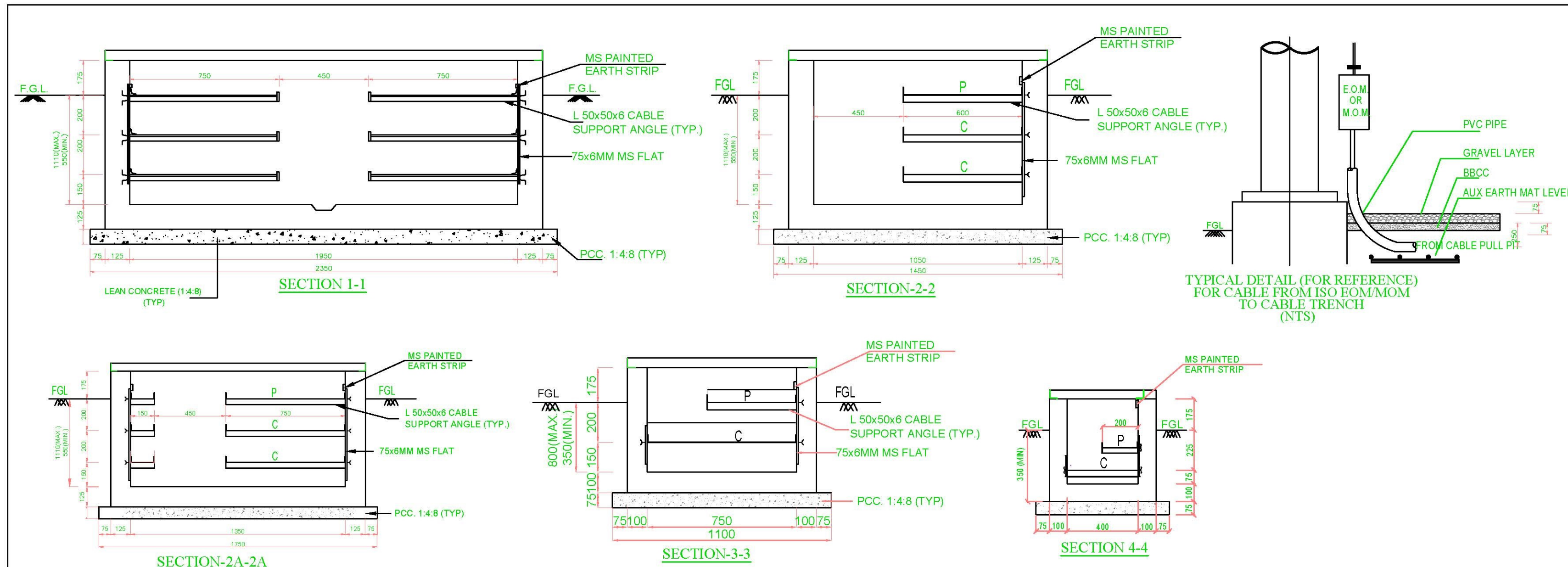
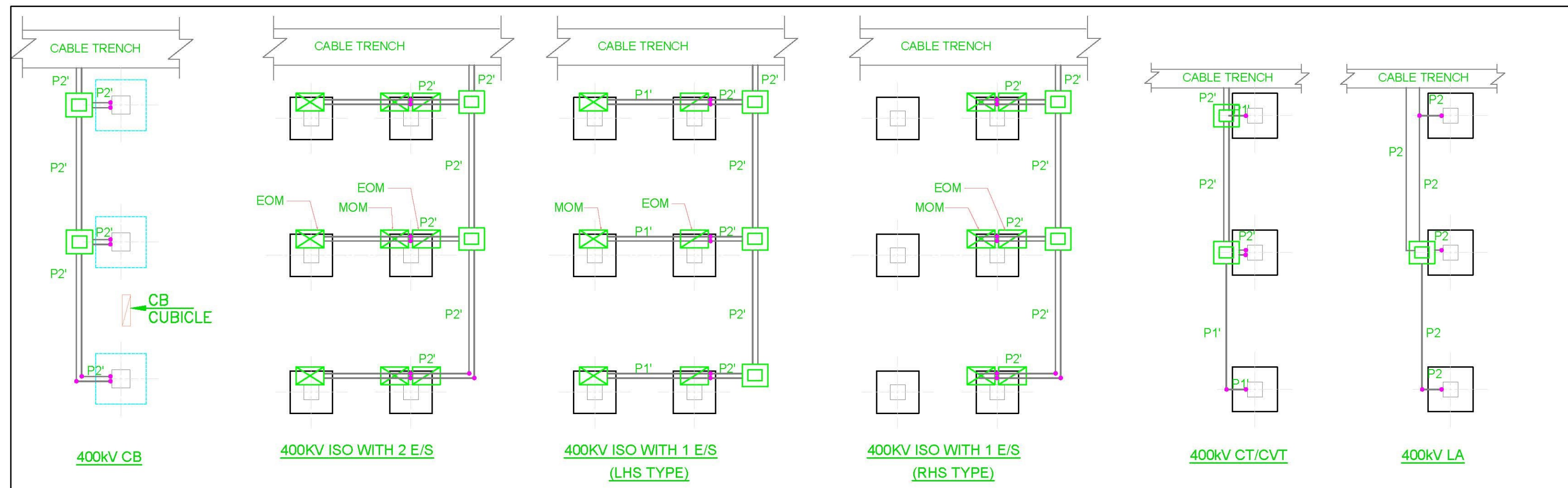


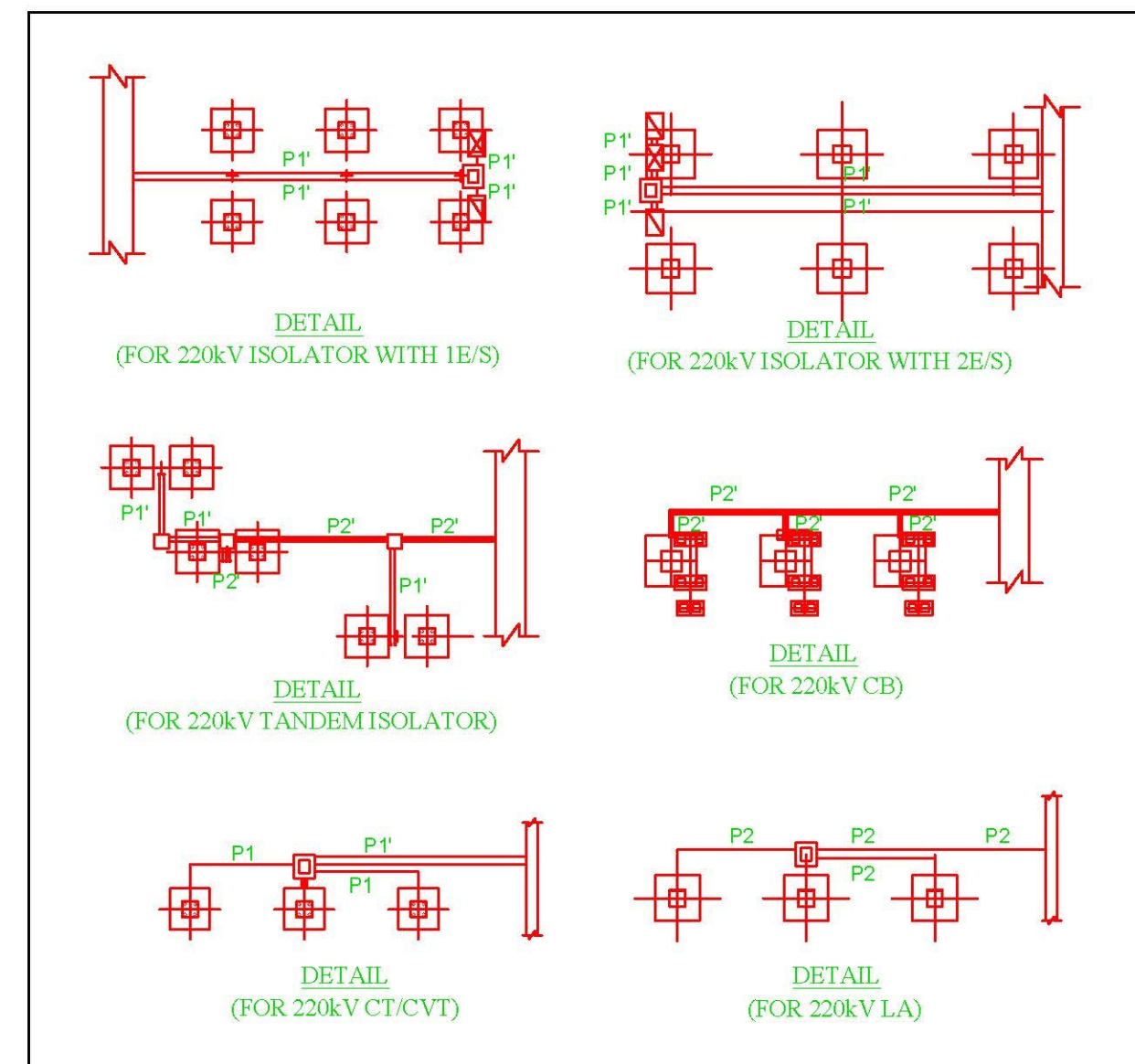
## TRENCH SECTIONS



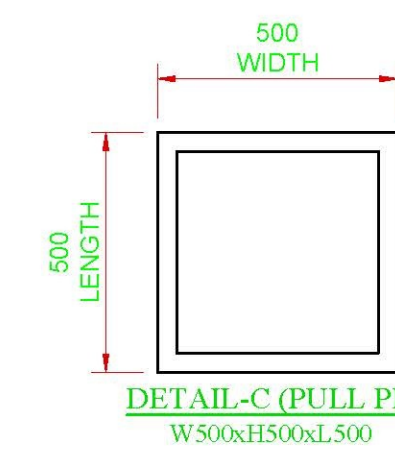
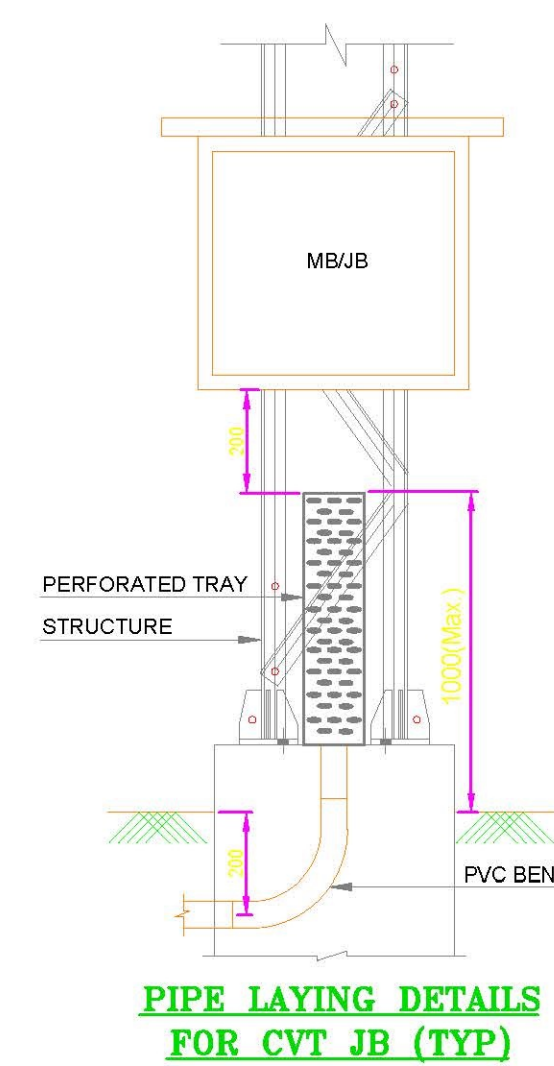
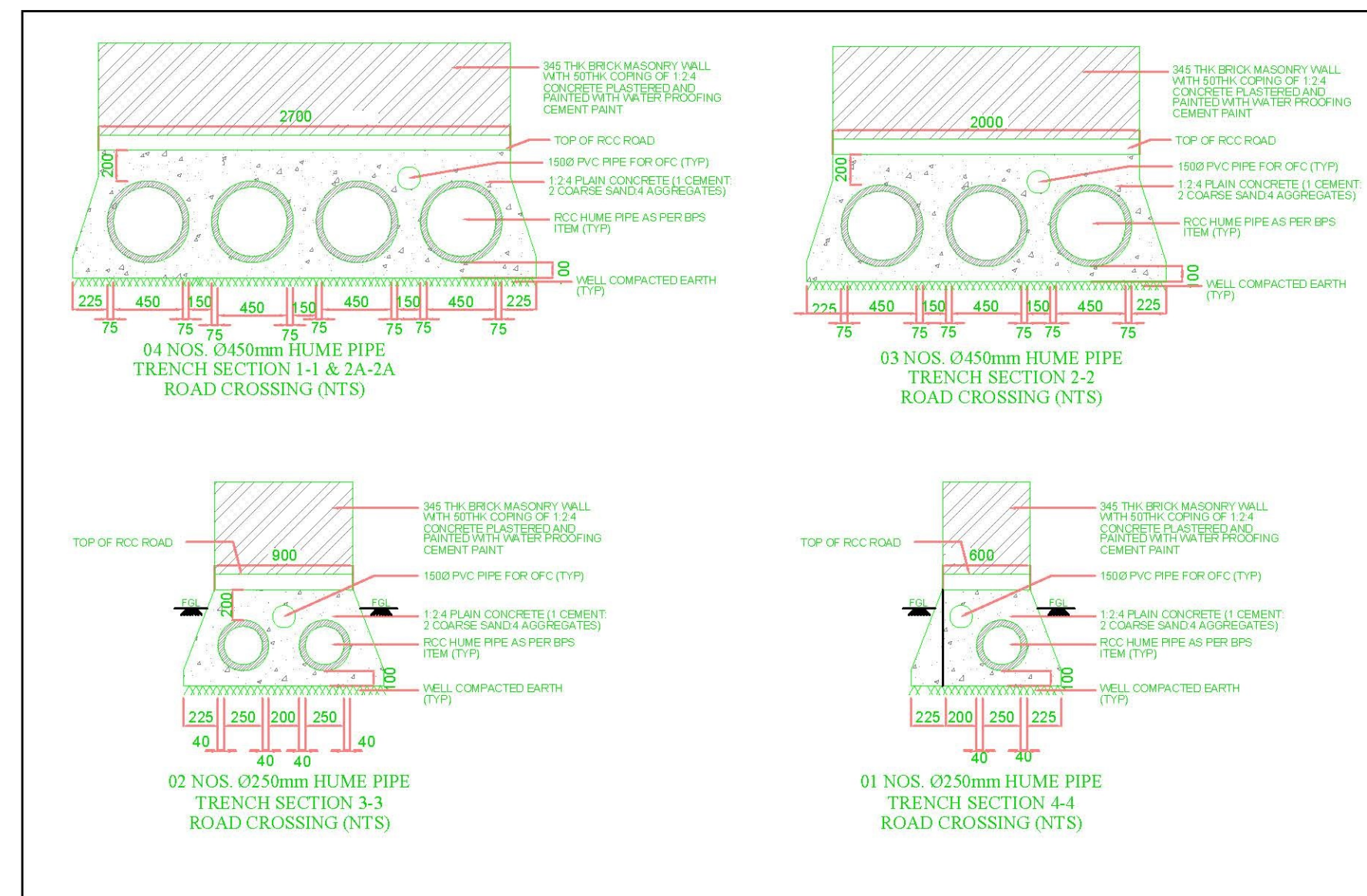
## OUTDOOR EQUIPMENT CONNECTION DETAILS (400kV)



## OUTDOOR EQUIPMENT CONNECTION DETAILS (220kV)



## ROAD CROSSING DETAILS (CULVERT)



## NOTES:-

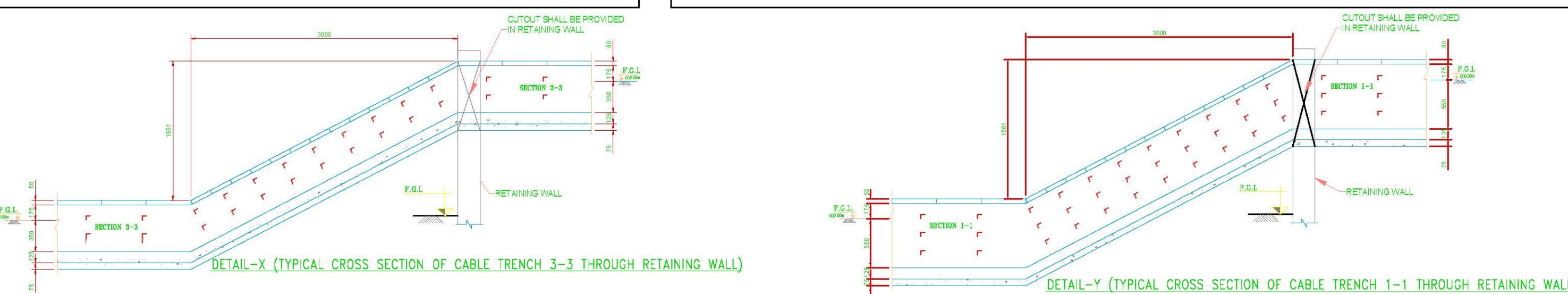
- ALL DIMENSIONS ARE IN MM & LEVELS IN METERS.
- 230MM THICK BRICK WALL IS PROVIDED WHEREVER MAIN TRENCH IS TO BE EXTENDED IN THE FUTURE.
- POWER & CONTROL CABLES SHALL BE LAID IN SEPARATE TIERS IN CABLE TRENCH. POWER CABLES SHALL BE LAID IN TOP TIERS. CONTROL CABLES SHALL BE LAID IN BOTTOM TIERS INSIDE THE CABLE TRENCH.
- LIGHTING & OTHER POWER CABLES SHALL BE DIRECTLY BURIED WHEREVER THERE IS NO AVAILABLE CABLE TRENCH.
- THIS DRAWING HAS TO BE REFERRED FOR CABLE TRENCH ROUTING LAYOUT ONLY AND FOR OTHER CONSTRUCTION DETAILS RELATED TO CIVIL WORK REFER RELEVANT CIVIL DRAWINGS ISSUED DRAWINGS.
- INDOOR CABLE TRENCH LAYOUT/DETAILS SUBMITTED SEPARATELY.
- KINDLY REFER THIS LAYOUT FOR CABLE TRENCH PURPOSE ONLY. FOR ANY FOUNDATION DETAILS, REFER CIVIL FOUNDATION LAYOUT.
- 2NOS. 100MMØ PVC PIPE - 1 NO. 100MMØ GI PIPE & 1NO. 100MMØ PVC PIPE - 1NO. 100MMØ GI PIPE SHALL BE USED FOR CABLE FROM TRENCH UPTO TRANSFORMER MB & REACTOR MB RESPECTIVELY.
- INSERT PLATE TO BE PROVIDED AT AN INTERVAL OF 750MM.
- ALL PVC PIPES SHALL BE PROVIDED WITH SLOPES TOWARDS THE CABLE TRENCHES FOR EASY DRAINAGE OF RAIN WATER.
- AFTER LAYING THE CABLES THE ENDS OF PIPES SHALL BE SUITABLY SEALED AT SITE TO PREVENT INGRESS OF WATER INSIDE THE PIPES.
- SEPARATE PIPES SHALL BE PROVIDED FOR POWER & CONTROL CABLES.
- LIFTING EYES ARE TO BE PROVIDED FOR TRENCH COVERS AT APPROPRIATE LOCATION.
- NECESSARY OPENINGS IN CABLE TRENCHES SHALL BE PROVIDED FOR PVC PIPES AT APPROPRIATE LOCATION.
- SIZE OF PIPES/CONDUITS SHALL BE SELECTED ON 40% FILL CRITERIA AND SHALL BE AS PER TYPICAL PIPE DETAILS.
- CONDUITS SHALL BE KEPT AT LEAST 300MM AWAY FROM HOT PIPES, HEAVY DEVICE ETC.,
- PVC/HDPE/GI PIPES SHALL BE BURIED IN THE GROUND AT A DEPTH AT 250MM BELOW FGL.
- PVC PIPES USED SHALL BE OF CLASS-4 AS PER IS 4985.
- THE ROUTE SHOWN FOR CABLE TRENCH & PIPES ARE TENTATIVE & MAY BE SHIFTED TO AVOID FOULING WITH THE FOUNDATIONS.
- INSERT PLATES WILL BE PROVIDED AT AN INTERVAL OF 750MM WHEREVER CABLES ARE TO BE SUPPORTED WITHOUT THE USE OF CABLE TRAYS, WHILE AT ALL OTHER PLACES THESE WILL BE AT AN INTERVAL OF 2000MM.
- A SLOPE OF 1:250 SHALL TO BE GIVEN IN THE DIRECTION PERPENDICULAR TO THE RUN OF THE TRENCH FOR ALL SECTIONS.
- INVERT LEVELS FOR MAIN TRENCHES WILL BE AS PER FOUNDATION LAYOUT, HOWEVER THE SAME MUST BE CHECKED AT SITE BEFORE CONSTRUCTION.
- EARTH FLAT IN CABLE TRENCH (50MM X 6MM M.S.) WILL RUN ALONG THE TOP TIER OF EACH CABLE TRENCH SECTION. IT WILL BE WELDED AT EVERY SUPPORT. PROVISION WILL BE KEPT TO CONNECT EXTERNAL EARTH GRID AT EVERY 30MTR. INTERVAL. THE M.S. FLAT SHALL BE PAINTED WITH TWO COATS OF RED OXIDE PRIMER AND TWO COATS OF POST OFFICE RED ENAMEL PAINT.
- ALL CABLE TRENCHES SHALL HAVE A SLOPE OF 1:1000 IN THE DIRECTION OF MAIN RUN AWAY FROM THE BUILDING.
- OUTDOOR CABLE TRENCH INTERCONNECTION BETWEEN SPR, FFPH, & CRB SUBMITTED IN INDOOR CABLE TRENCH LAYOUT.
- CABLE FROM TRENCH UPTO EQUIPMENT SHALL RUN IN PVC/HDPE/GI PIPE AS MARKED IN THE DRAWING, HOWEVER CABLES FROM FGL TO EQPT. MB SHALL BE TAKEN PERFORATED CABLE TRAY.
- JB/BM/CC/EOM/MOM LOCATION SHOWN IS TENTATIVE ONLY, PIPE ROUTING SHALL BE DONE AS PER LOCATION OF BOXES/JBS IN SUPERVISION OF SITE IN CHARGE.

INDICATIVE DRAWING FOR TENDER PURPOSE ONLY

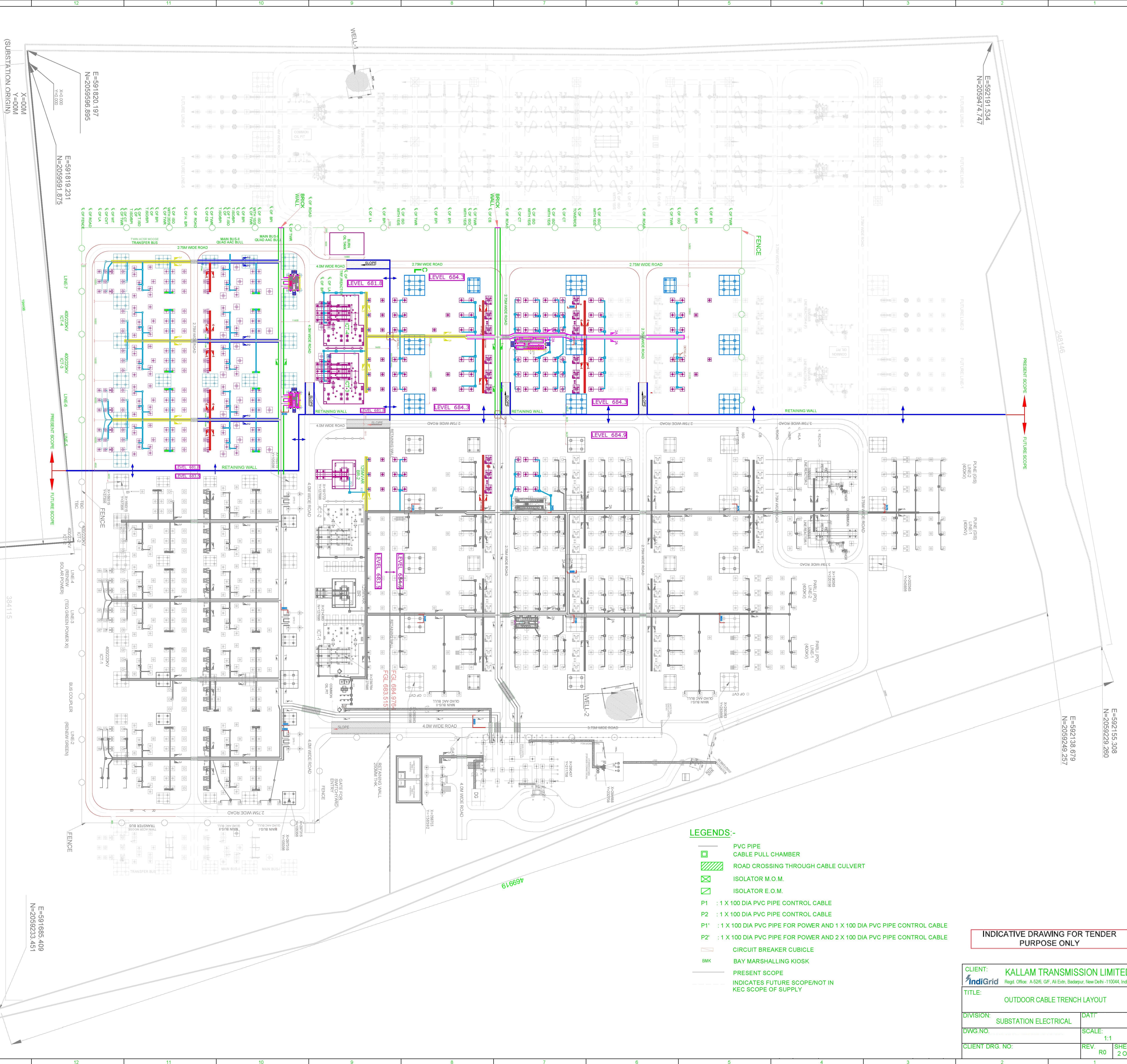
CLIENT: **KALLAM TRANSMISSION LIMITED**  
**IndiGrid** Regd. Office: A-52/6, G/F, Ali Extn, Badarpur, New Delhi -110044, India.

TITLE: **OUTDOOR CABLE TRENCH LAYOUT**

DIVISION: **SUBSTATION ELECTRICAL** DATE: **1**  
 DWG.NO. **SCALE: 1:1**  
 CLIENT DRG. NO. **REV. R0** SHEET: **1 OF 2**







- LEGENDS:-**
- PVC PIPE
  - CABLE PULL CHAMBER
  - ROAD CROSSING THROUGH CABLE CULVERT
  - ISOLATOR M.O.M.
  - ISOLATOR E.O.M.
  - P1 : 1 X 100 DIA PVC PIPE CONTROL CABLE
  - P2 : 1 X 100 DIA PVC PIPE CONTROL CABLE
  - P1' : 1 X 100 DIA PVC PIPE FOR POWER AND 1 X 100 DIA PVC PIPE CONTROL CABLE
  - P2' : 1 X 100 DIA PVC PIPE FOR POWER AND 2 X 100 DIA PVC PIPE CONTROL CABLE
  - CIRCUIT BREAKER CUBICLE
  - BAY MARSHALLING KIOSK
  - PRESENT SCOPE
  - INDICATES FUTURE SCOPE/NOT IN KEC SCOPE OF SUPPLY

INDICATIVE DRAWING FOR TENDER PURPOSE ONLY

CLIENT: KALLAM TRANSMISSION LIMITED	
Regd. Office: A-526, GF, All Extn, Badepur, New Delhi-110044, India	
TITLE: OUTDOOR CABLE TRENCH LAYOUT	
DIVISION: SUBSTATION ELECTRICAL	DATT
DWG NO.	SCALE: 1:1
CLIENT DRG. NO.	REV. RO
SHEET:- 2 OF 2	