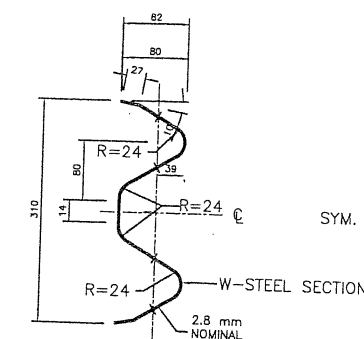
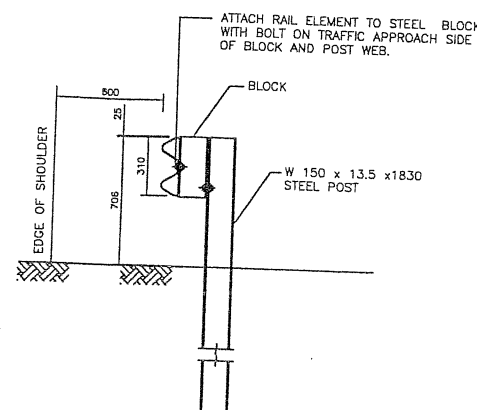
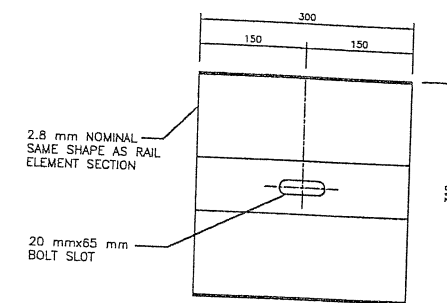


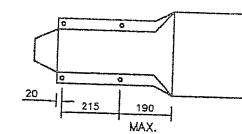
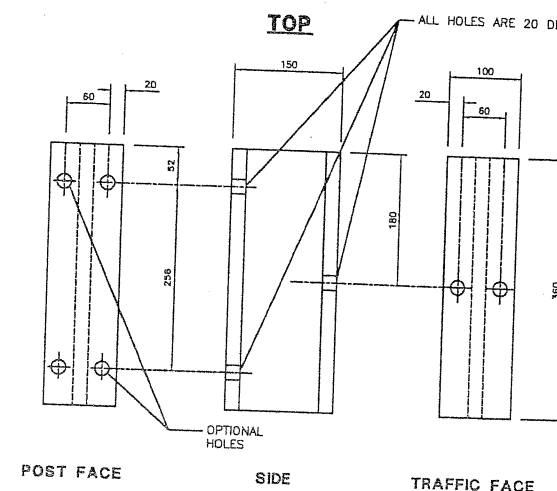
METAL W-BEAM GUARD RAILING WITH W150x13.5 STEEL POSTS AND BLOCKS



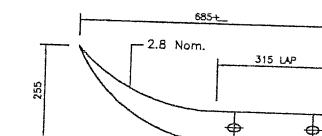
SECTION THROUGH W-BEAM RAIL ELEMENT



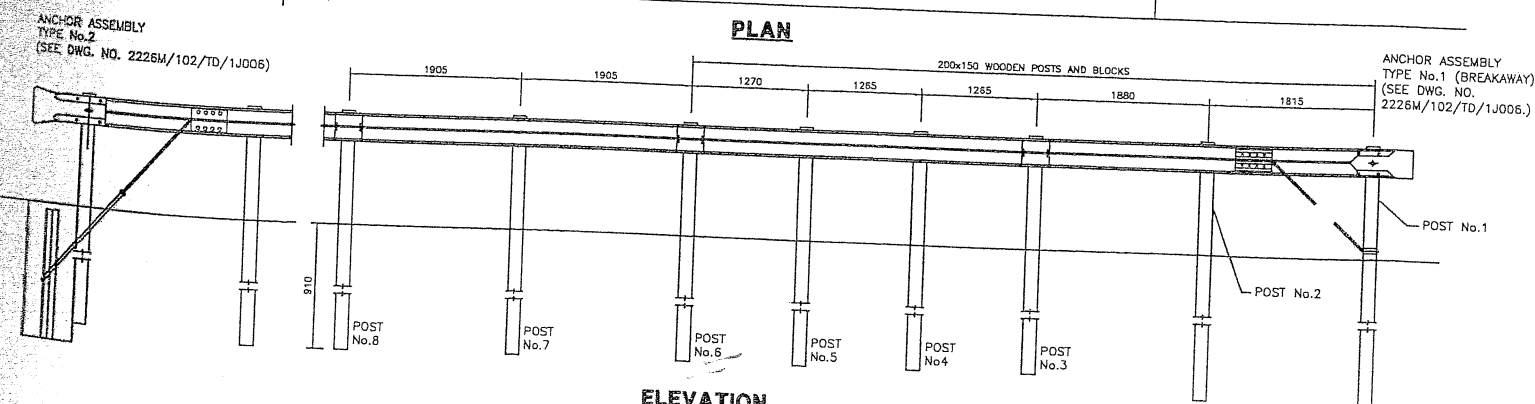
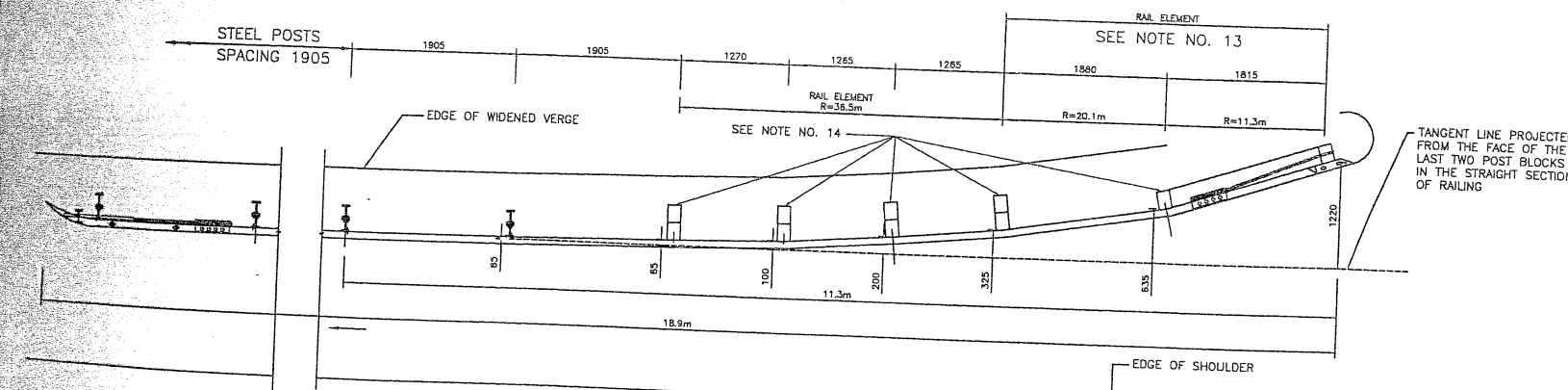
W-BEAM BACK-UP PLATE



ELEVATION
TERMINAL SECTION TYPE No. 1
W-BEAM



ELEVATION
TERMINAL SECTION TYPE No. 2
W-BEAM



NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE.
- ALL LAPS SHALL BE IN THE DIRECTION OF TRAFFIC.
- W-BEAM TERMINAL SECTIONS SHALL BE USED IN PLACE OF END ANCHORAGE RAIL AT THE DEPARTURE END ONLY OR AT OTHER RESTRICTED LOCATIONS AS APPROVED BY THE ENGINEER.
- W-BEAM RAIL SECTION SHALL CONFORM TO AASHTO M-180 AND SHALL BE TYPE-II, CLASS 'B'.
- WHERE THE GUARD RAIL HAS TO FOLLOW A CURVE OF LESS THAN 45m RADIUS, THE BEAM SHALL BE CURVED TO SUIT, BY THE BEAM MANUFACTURER.
- THE HOLES FOR ANCHORAGE POSTS SHALL BE BACKFILLED WITH WELL COMPACTED GRANULAR MATERIAL. THE SPACE INSIDE THE TERMINAL NOSE SHALL BE FILLED WITH CONCRETE.
- THE CONTRACTOR SHALL PREPARE DRAWINGS SHOWING LOCATIONS, ELEVATIONS AND SPACING OF POSTS AT EACH CULVERT/HIGH FILL LOCATION AND SHALL OBTAIN APPROVAL OF THE ENGINEER.
- BACKFILLING OF THE POST HOLES SHALL BE CARRIED OUT AS FOLLOWS:
 - IN CASE OF ROCK, CORED HOLES-250 DIA (AS MADE) WILL BE BACKFILLED WITH LEAN CONCRETE.
 - IN CASE OF STRATA OTHER THAN ROCK, HOLES-300 DIA (AS MADE) WILL BE BACKFILLED WITH LEAN CONCRETE OR THE POSTS MAY BE HAMMERED IN PLACE AS APPROVED BY THE ENGINEER.
- NO EXTRA PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR CORING AND OR CONCRETING FOR POST FIXATION.
- EXISTING EMBANKMENT MAY BE WIDENED, WHERE NECESSARY, TO ACCOMMODATE GUARD RAIL FLARE AT APPROACH END.
- BACK-UP PLATE TO BE USED BETWEEN GUARD RAIL ELEMENT AND STEEL BLOCK ON STEEL POST WHERE THERE IS NO RAIL ELEMENT SPLICE.
- DIRECTION OF TRAFFIC INDICATED BY ARROW (—>).
- POST SPACING AND HEIGHT IS, AS PER TYPE OF RAIL, SPECIFIED IN HIGHWAY DESIGN STANDARDS SECTION 16.
- THE RAIL ELEMENT CONNECTING POST NOS. 1, 2, AND 3 HAS A COMPOUND BEND WITH A RADIUS OF 11.3m BETWEEN POST NOS. 1 AND 2, AND A RADIUS OF 20.1m BETWEEN POST NOS. 2 AND 3. THE RADIUS CHANGES AT POST NO. 2.
- SHELF ANGLES TO SUPPORT THE RAIL ELEMENT SHALL BE INSTALLED ON POST NOS. 2, 3, 4, 5 AND 6 OF THE FLARE. SEE DWG. NO. 2226M/102/TD/1J006A.
- FOR GUARD RAIL EXTENDED INTO CUT BANK, THE POSTS INSTALLED ON SLOPES GREATER THAN 10:1, SHOULD BE 2400 LONG.
- THE FLARE RATE FOR THE GUARD RAIL EXTENDED INTO CUT BANKS MAY BE INCREASED AFTER CROSSING THE DITCH BOTTOM (AT THE ANGLE POINT), TO SHORTEN THE LENGTH OF TERMINAL (UP TO 8:1).
- TYPE NO. 2 WOULD BE USED ON THE TRAIL END OF A 1WAY SINGLE CARRIAGEWAY. AND ON THE TRAIL END FOR A DUAL CARRIAGEWAY.
- MINOR ADJUSTMENTS TO POST SPACING AND OFFSETS MAY BE REQUIRED TO FIT SITE CONDITIONS.