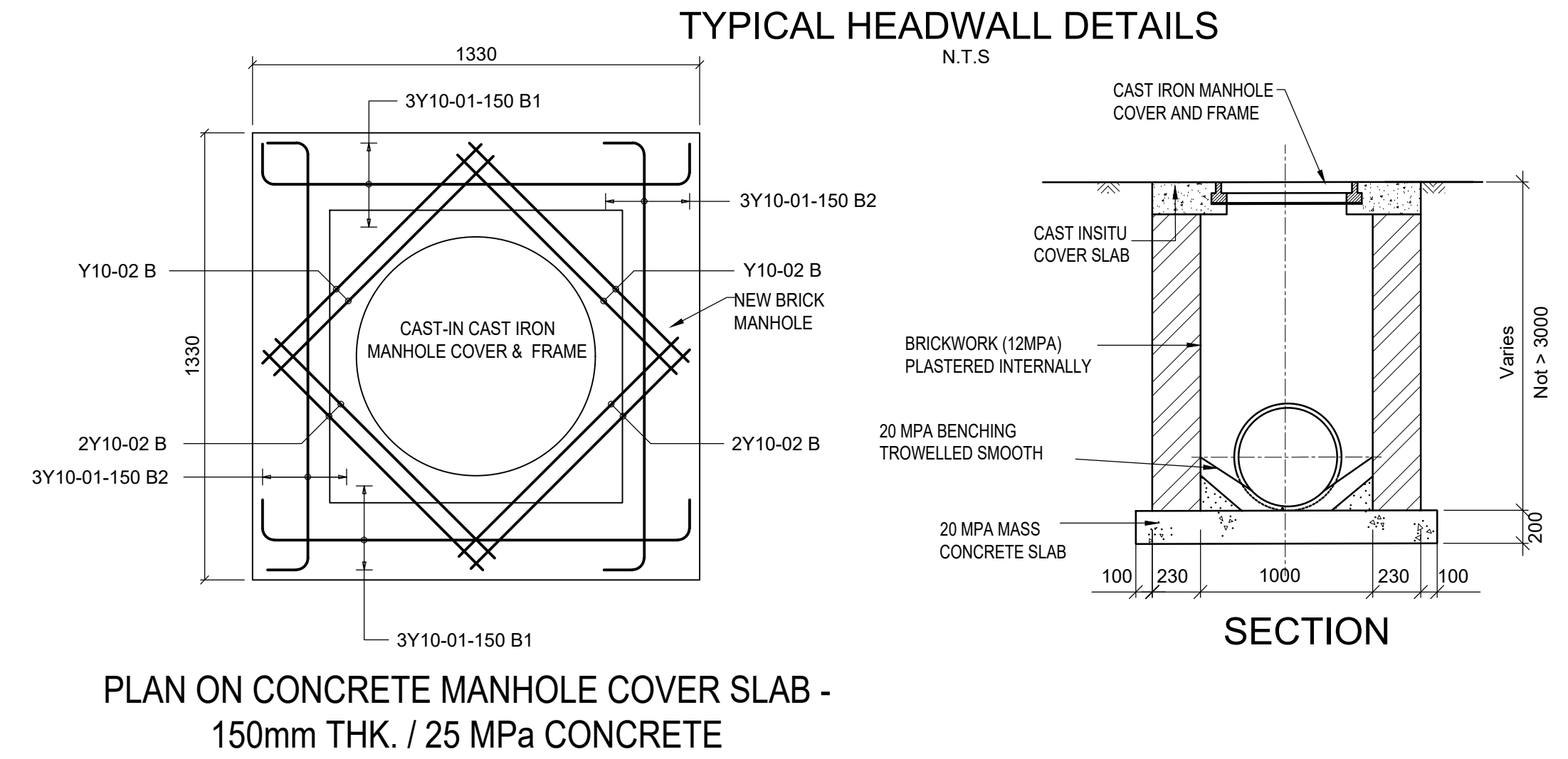
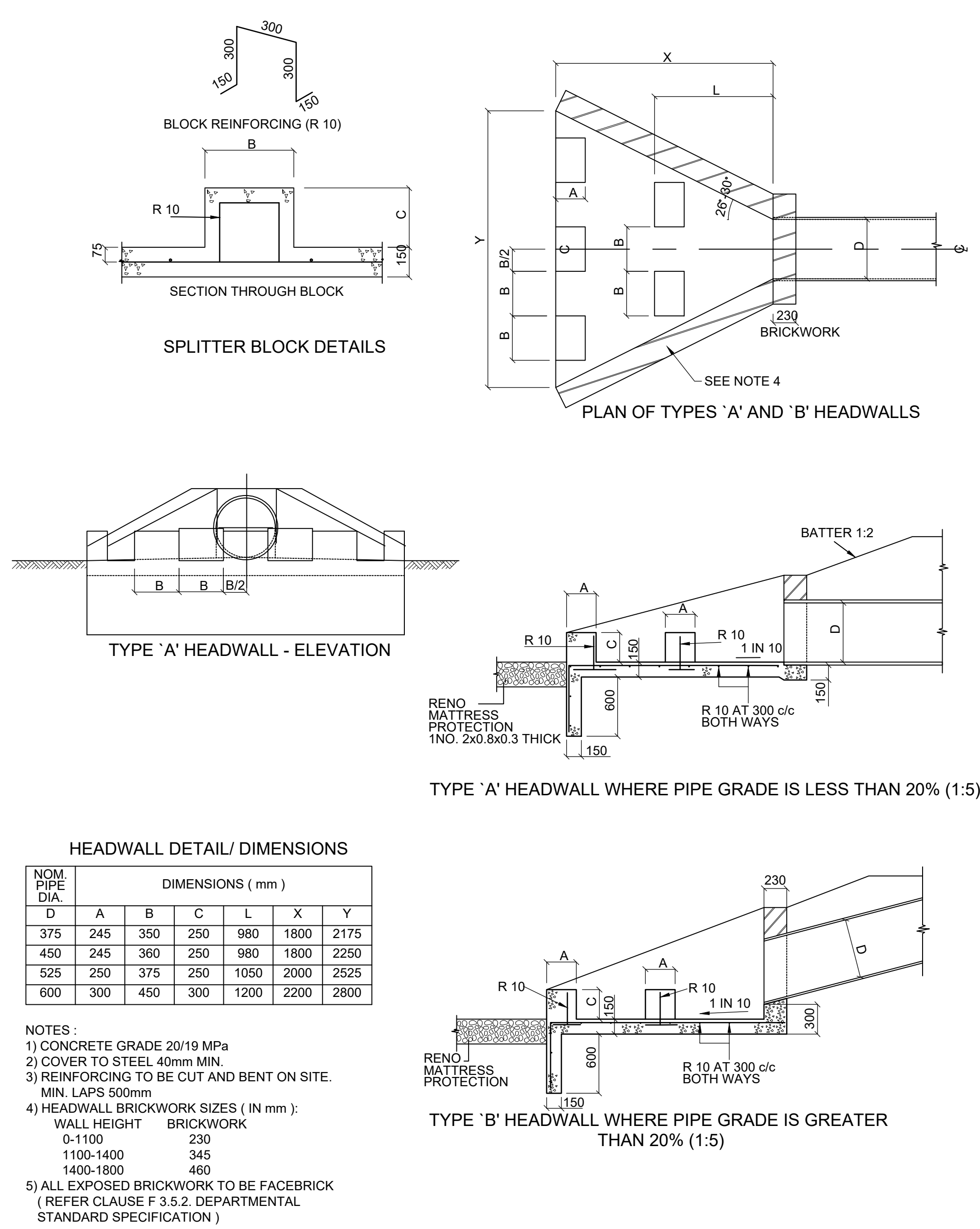
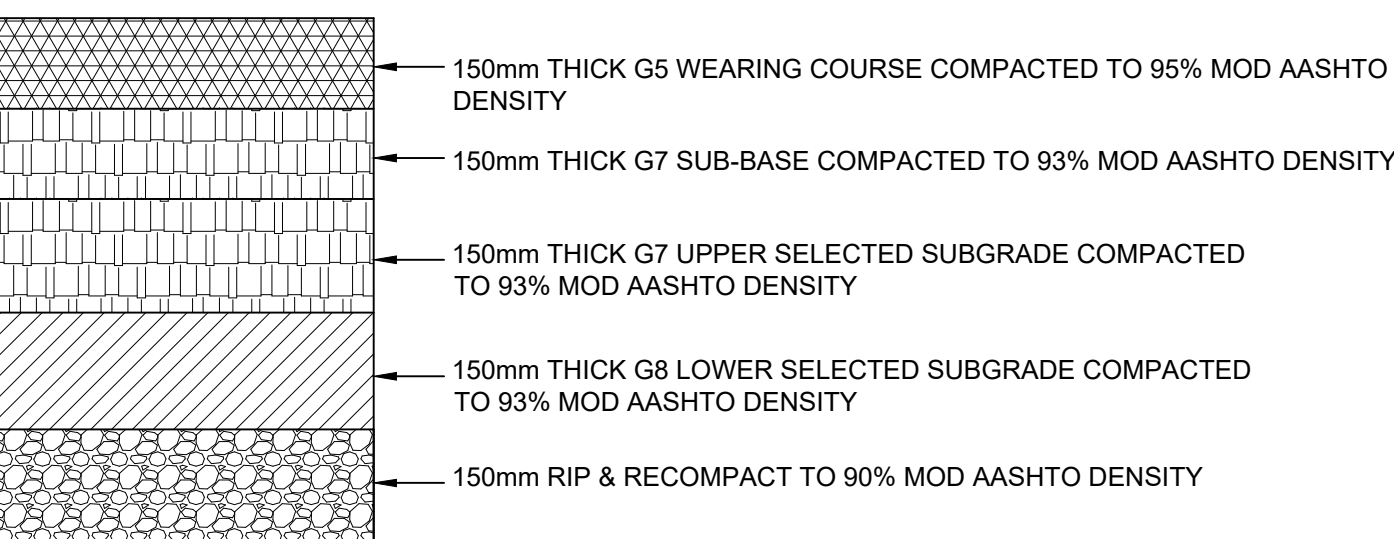
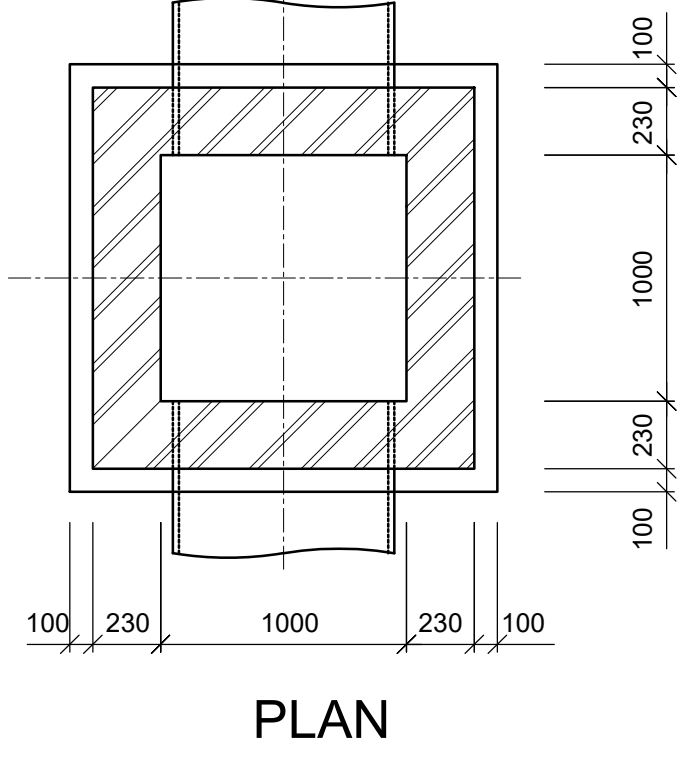


| ROADWAYS - SETTING OUT DATA | | | |
|-----------------------------|----------|---------|---------|
| POINT | Y-COORD | X-COORD | LVL |
| P1 | -68920.9 | 3136739 | 1129.98 |
| P2 | -68926.0 | 3136738 | 1129.95 |
| P3 | -68929.8 | 3136735 | 1129.60 |
| P4 | -68935.8 | 3136724 | 1129.01 |
| P5 | -68945.3 | 3136706 | 1128.59 |
| P6 | -68948.0 | 3136701 | 1128.50 |
| P7 | -68948.4 | 3136697 | 1128.30 |
| P8 | -68946.0 | 3136694 | 1128.40 |
| P9 | -68941.6 | 3136692 | 1128.53 |
| P10 | -68948.0 | 3136680 | 1128.53 |
| P11 | -68959.7 | 3136687 | 1128.19 |
| P12 | -68958.0 | 3136690 | 1128.21 |
| P13 | -68948.4 | 3136708 | 1128.50 |
| P14 | -68938.8 | 3136725 | 1128.92 |
| P15 | -68932.1 | 3136738 | 1129.60 |
| P16 | -68933.1 | 3136741 | 1129.95 |
| P17 | -68936.7 | 3136740 | 1129.45 |
| P18 | -68942.3 | 3136743 | 1129.40 |
| P19 | -68946.3 | 3136750 | 1129.75 |
| P20 | -68930.6 | 3136744 | 1129.98 |

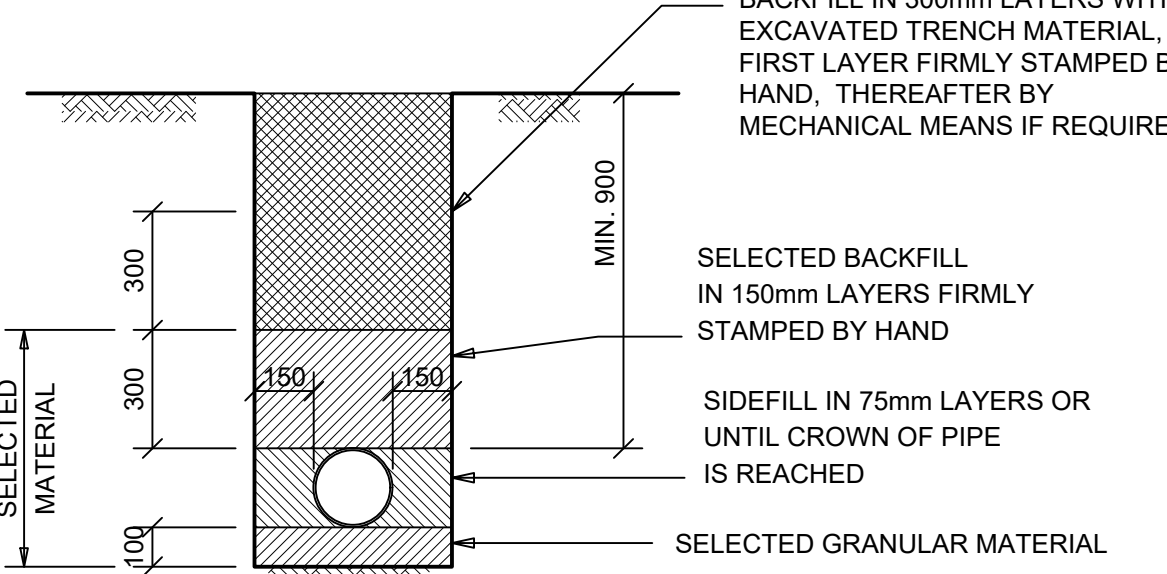


| MEMBER | No OF | BARS PER MEMB | DIA. | LENGTH | TOTAL NUM-BER | MARK | S.C. | BENDING |
|--------|-------|---------------|------|--------|---------------|------|------|---------|
| | 1 | 12 | Y10 | 1500 | 60 | 01 | 35 | 1270 |
| | 6 | Y10 | 900 | 40 | 02 | 35 | 20 | |

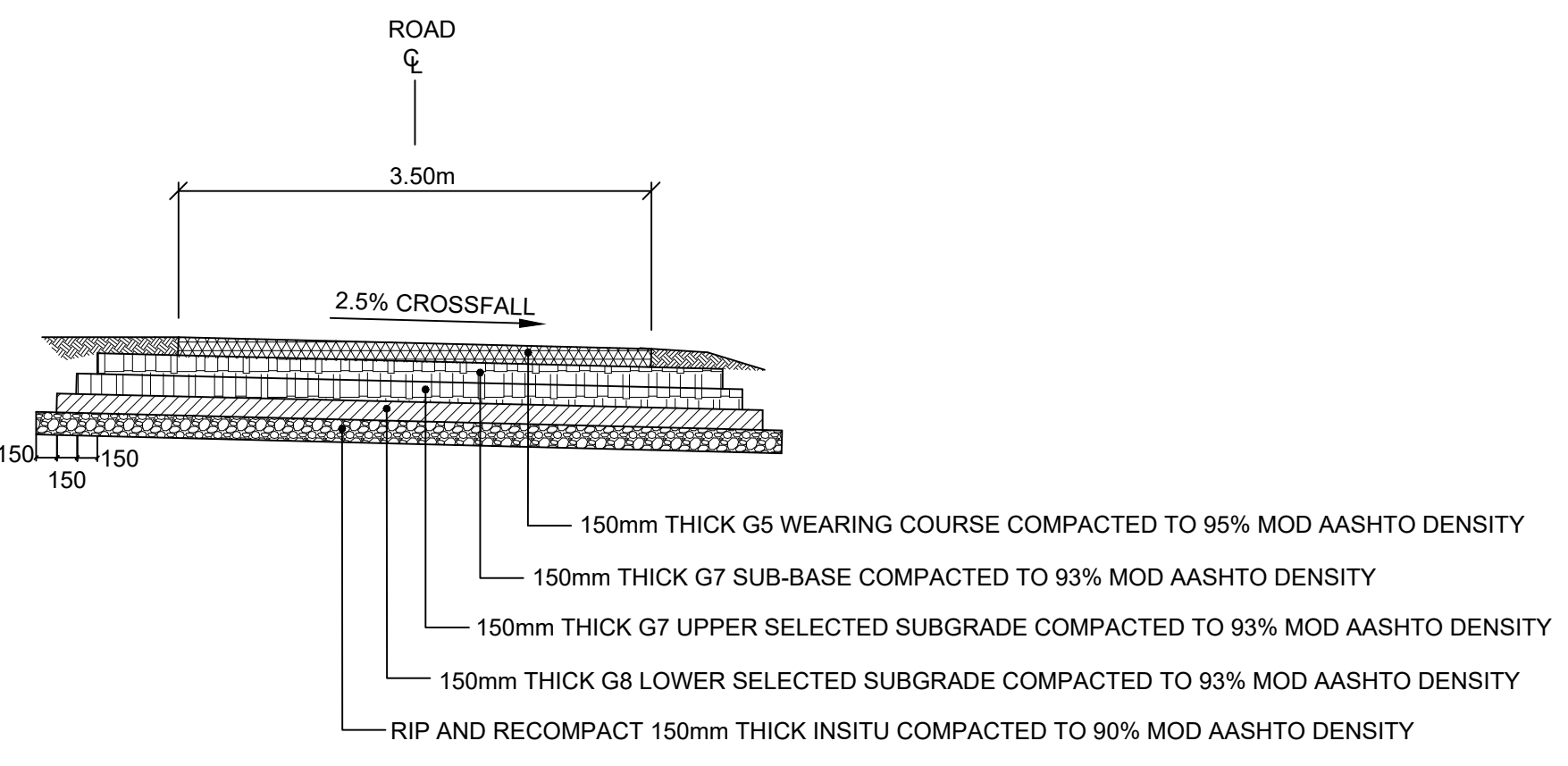
STORMWATER MANHOLE TYPE C (1000 X 1000) (>1800mm ; <2500mm IN DEPTH) N.T.S.



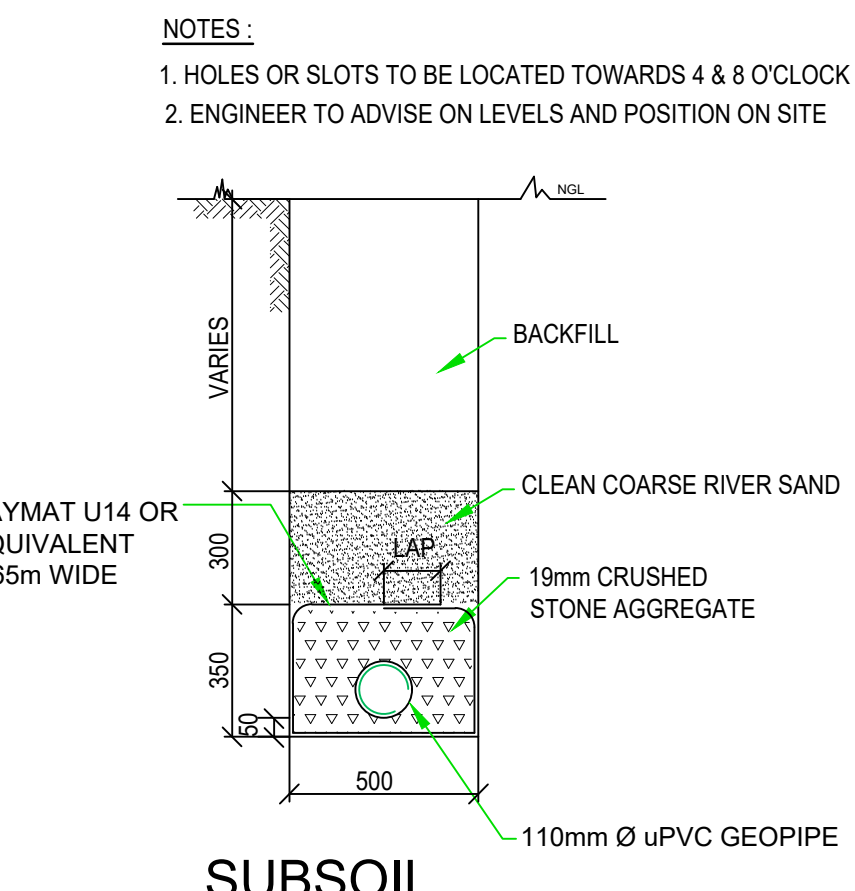
TYPICAL ACCESS ROADWAY LAYERWORK DETAILS N.T.S.



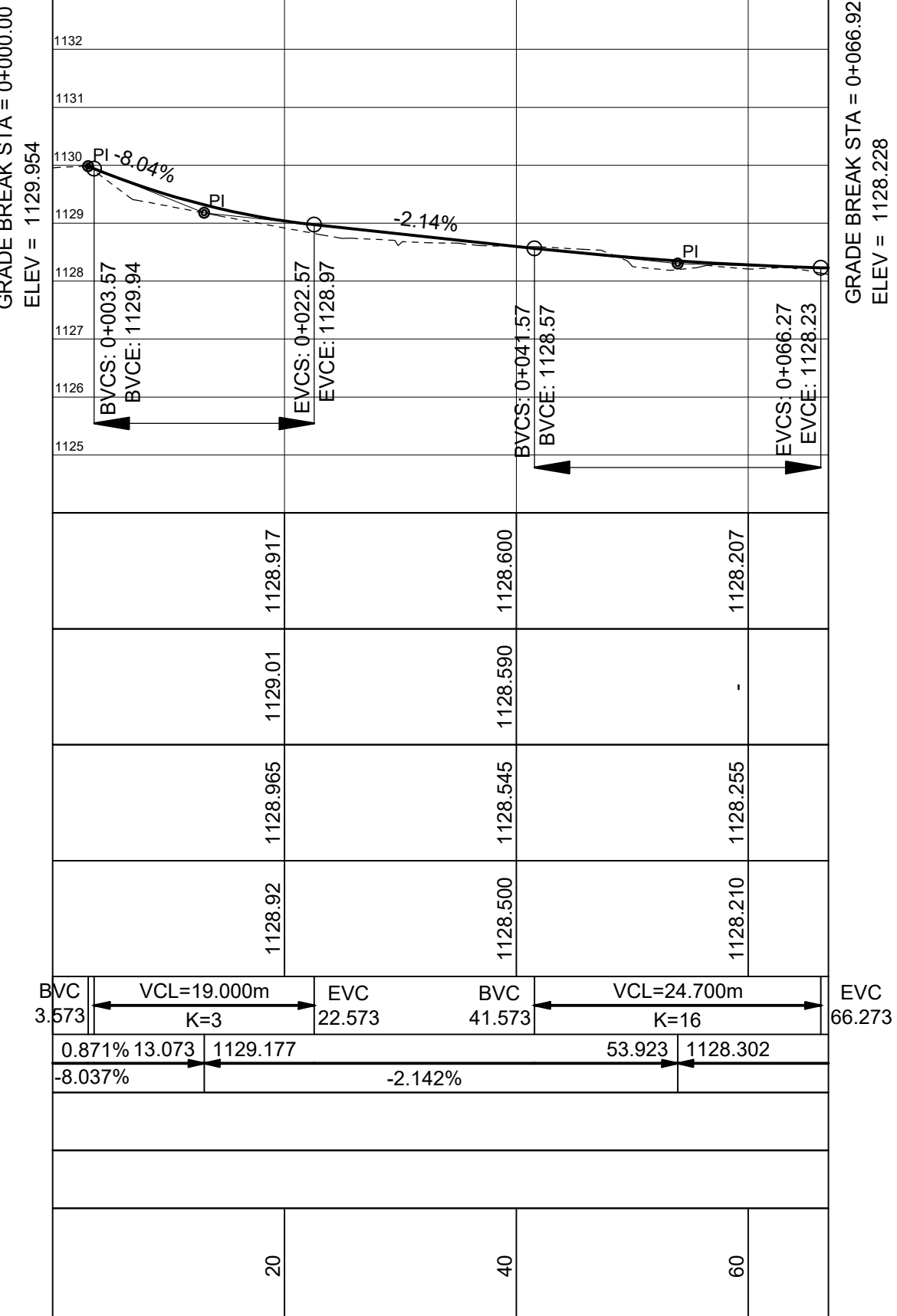
TYPICAL PIPE BEDDING DETAIL N.T.S.



TYPICAL ROAD CROSS SECTION SCALE 1:50



SUBSOIL AGGREGATE DRAIN SCALE 1:20



LONGSECTION ROAD 1 FROM 0.000 TO 66.923

| SCALES: | |
|--------------------------|------------------|
| Horizontal | 1:500 |
| Vertical | 1:100 |
| DATUM 1124.000 | |
| GROUND LEVELS ON CL | |
| FINAL DESIGN ROAD LEVELS | LEFT EDGE (HL) |
| | CENTRE LINE (CL) |
| | RIGHT EDGE (HR) |
| VERTICAL PROFILE GRADES | |
| HORIZONTAL ALIGNMENT | |
| DISTANCE (m) | |

- NOTES**
- GENERAL
1. ALL SETTING OUT TO BE UNDERTAKEN BY A REGISTERED PROFESSIONAL LAND SURVEYOR.
 2. PROVE ALL SERVICES PRIOR TO CONSTRUCTION.
 3. ALL WORK AREAS TO BE REINSTATED (PREMIX, CONCRETE, ETC.).
 4. MUNICIPALITY TO EXECUTE ALL CONNECTIONS INTO MUNICIPAL LINES.
 5. SUPPLY AND INSTALLATION TO COMPLY WITH SANS 1200.
 6. ALL LEVELS AND DIMENSIONS TO BE VERIFIED ON SITE.
 7. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, FIRE ENGINEERING, MECHANICAL ENGINEERING, ELECTRICAL ENGINEERING AND STRUCTURAL ENGINEERING DRAWINGS.
 8. ALL WORK IS TO BE EXECUTED IN ACCORDANCE WITH SANS 1200.
 9. OTHER THAN PDF COPIES, NO CONSTRUCTION DRAWINGS WILL BE ISSUED IN A DIGITAL FORMAT TO THE CONTRACTOR.
 10. CONTRACTOR TO PROVIDE AN AS-BUILT SURVEY OF ALL WORKS CONSTRUCTED UPON COMPLETION OF THE PROJECT.

MATERIAL COMPLIANCE TESTING

1. RESULTS OF COMPACTION AND CBR TESTS ON INSITU SUB-BASE MATERIAL AND FILLED SUB-BASE MATERIAL MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE THE UPPER LAYERWORKS ARE IMPORTED TO THE SITE AND PLACED.

FREQUENCY OF TESTS

1. CBR TESTS 1 PER 500m²

2. COMPACTION TESTS - MIN. 2 PER SITE / LOT

NOTE: COMPACTION TESTS WILL BE REQUIRED FOR EACH OF THE VARYING LAYERWORKS THAT IS IMPORTED AND COMPACTIONED IN PLACE.

| REVISION SCHEDULE | | | |
|-------------------|------------|---|---------|
| NO. | DATE | DESCRIPTION | REV. BY |
| P1 | 2021.12.10 | PRELIMINARY | AB |
| P2 | 2021.12.13 | REVISED IN ACCORDANCE WITH DOH COMMENTS | GT |
| P3 | 2023.09.04 | CHANGES TO LAYOUT | AD |
| P1 | 2023.10.07 | FOR TENDER | KG |

| DEPARTMENT OF HEALTH | |
|--|------|
| INFRASTRUCTURE DEVELOPMENT | |
| CHIEF ENGINEER: MR E. CHIRO - CIVIL / STRUCTURAL | |
| SIGNATURE | DATE |
| PROJECT MANAGER: MR T. DLAMINI | |
| SIGNATURE | DATE |
| CLIENT DEPARTMENT SIGNATURES: | |
| FACILITY STAMP: | |

| | |
|--|------|
| FACILITY MANAGER: | |
| INFRASTRUCTURE MANAGER: | |
| GENERAL MANAGER: | |
| CHECKED BY CONSULTANT: | |
| NAME: | |
| SIGNATURE | DATE |
| CONSULTANT: | |
| SUITE 601A GROUND FLOOR BUSINESS PARTNERS CENTRE 23 AN HORNBEY ROAD WESTVILLE 2003 | |
| TEL: +27 31 309 5831 FAX: +27 31 309 2829 email: admin@mapafrica.co.za www.mapafrica.co.za | |



| MIDLANDS REGION | |
|---|--|
| PROJECT: | |
| WIMS 066058: DRIEFONTEIN CLINIC - UPGRADE SEWER TREATMENT PLANT | |

| DRAWING DESCRIPTION: | |
|----------------------------|--|
| ROADWAY LAYOUT AND DETAILS | |

| | | | |
|------------------------------------|------------------|--------------|----------------|
| SCALE: 1:200 | DATE: 07-10-2024 | DRAWN BY: KG | CHECKED BY: PN |
| CONSULTANT DRAWING NUMBER: 484/905 | | REVISION: T1 | |

| | |
|------------------------|--|
| DCPW DRAWING NUMBER: | |
| WIMS NO/066058/CIV/905 | |

STAMPED BY PLANS APPROVAL COMMITTEE:

FOR TENDER