

NOTES AND SPECIFICATIONS

1 GENERAL

- 1.1 ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS REQUIREMENTS.
- 1.2 ALL DIMENSIONS ARE IN MILLIMETERS. (UNLESS OTHERWISE SPECIFIED).
- 1.3 DO NOT SCALE FROM THESE DRAWINGS.
- 1.4 ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- 1.5 THE FOUNDATION DETAILS TO BE SITE SPECIFIC AND DESIGNED BY THE ENGINEER.

2. REINFORCED CONCRETE

- 2.1 REINFORCED CONCRETE WORK SHALL BE IN STRICT ACCORDANCE WITH SECTIONS 702, 703 AND 704 OF THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, 3rd EDITION, 2005.
- 2.2 CONCRETE COVER SHALL BE AS INDICATED ON THE DRAWINGS OR SPECIFICATIONS.

3. STRUCTURAL STEELWORK

- 3.1 STRUCTURAL STEELWORK SHALL BE IN STRICT ACCORDANCE WITH SECTION 809 OF THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, 3rd EDITION, 2005.
- 3.2 STRUCTURAL STEEL SHALL BE GRADE 300W UNLESS OTHERWISE INDICATED OR SPECIFIED.
- 3.3 COLD FORMED SECTIONS SHALL BE MADE FROM COMMERCIAL QUALITY STEEL UNLESS OTHERWISE SPECIFIED.
- 3.4 HOLDING DOWN BOLTS SHALL BE OF THE GRADE SPECIFIED ON THE DRAWINGS.
- 3.5 PAINTING OF STRUCTURAL STEELWORK SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF SECTION 806 OF THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, 3rd EDITION, 2005.
- 3.6 ALL STRUCTURAL STEEL, INCLUDING TUBES, SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF SABS 763 FOR TYPE A1 OR B1 ARTICLES AS APPLICABLE (OR LATEST).

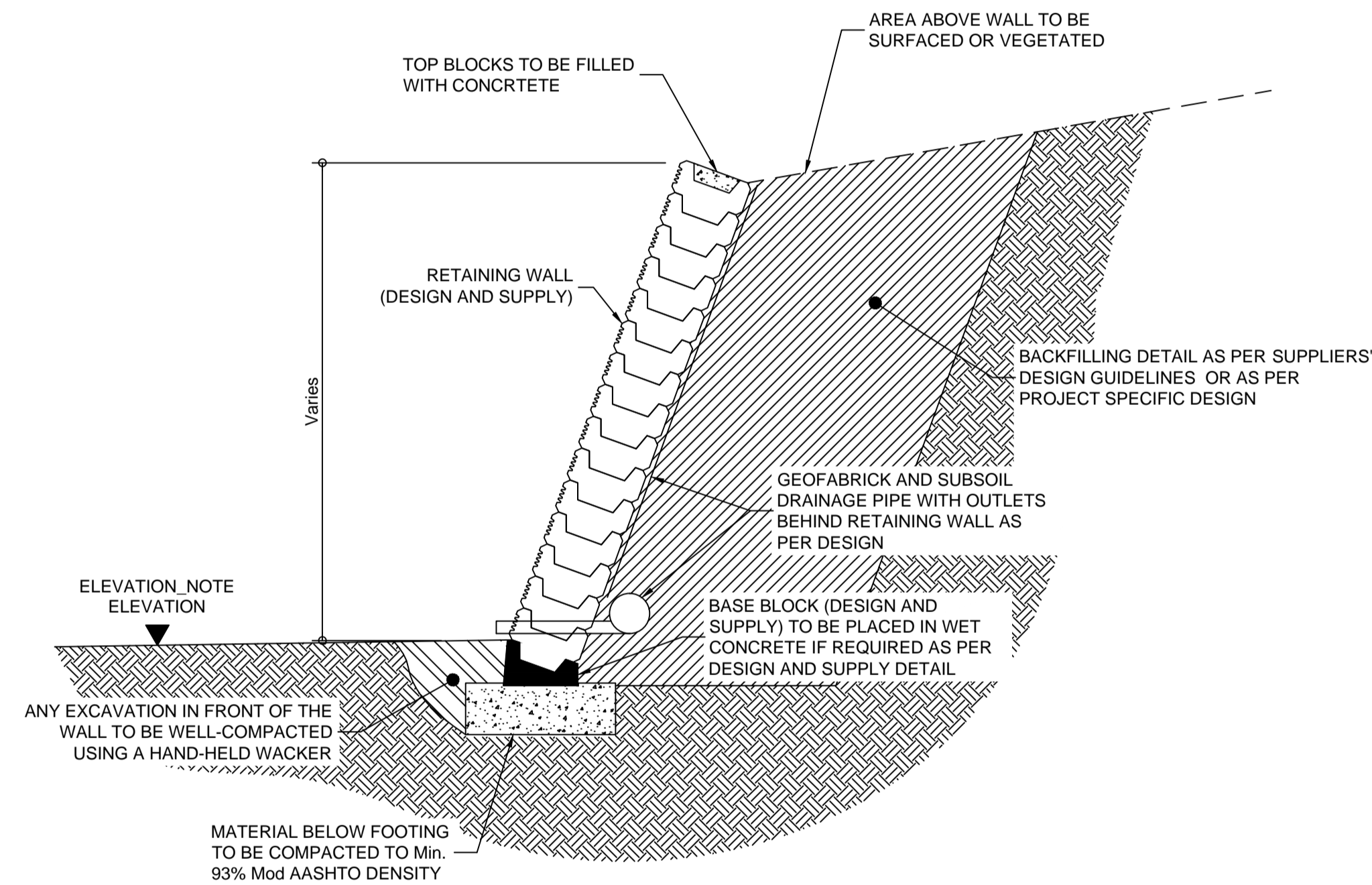
4. CONCRETE BOLLARDS

- 4.1 CONCRETE TYPE CLASS 30/19.
- 4.2 CONCRETE FINISH AS SPECIFIED ON DRAWINGS. MUST BE FIXED IN THE RECESS TO ENHANCE VISIBILITY.
- 4.3. STEEL REINFORCEMENT TO BE MIN. 3Y10 BARS FOR 150mm AND 4Y10 BARS FOR 250mm WITH R10 LINKS AT 150mm PITCH.
- 4.4. 30mm CONCRETE COVER TO REINFORCEMENT.
- 4.5. UNLESS OTHERWISE SPECIFIED, REFLECTIVE TAPE
- 4.6. CONCRETE BACKFILL AROUND BOLLARD SPACE TO BE DETERMINED BY PAVING PROFILE MIN. 400mm X 400mm FOR 250mm Ø BOLLARDS.
- 4.7. ALL BACKFILLED CONCRETE FINISHES MUST BE WORK OFF TO CLASS U2 SURFACE FINISH. ALL CONCRETE EDGES TO BE WORK OFF WITH A NOSING TOOL.

DESIGN AND SUPPLY CONCRETE BLOCK RETAINING WALLS

NOTES AND SPECIFICATIONS:

- 1. ALLOWED CONCRETE BLOCKS AND BASE BLOCKS :
 - MVA BRICKS: Lok Block
 - TECHNICRETE: Enviro-Wall
 - INFRASET: RidgeBlok
- 2. DIFFERENT ANGLES FOR BASE BLOCKS RANGING FROM 60° - 80° CAN BE USED. TO BE CONFIRMED WITH DESIGN.
- 3. RETAINING WALL TO BE CONSTRUCTED AS PER SUPPLIERS' DESIGN GUIDELINES OR AS PER PROJECT SPECIFIC DESIGN IF REQUIRED.
- 4. ADEQUATE DRAINAGE MUST BE PROVIDED AS PER PROJECT SPECIFIC DESIGN.
- 5. GEOFABRICK TO BE INSTALLED AS PER PROJECT SPECIFIC DESIGN.



TYPICAL DETAIL FOR CONCRETE BLOCK RETAINING WALL

SCALE 1: 20

| AMENDMENTS | | | | |
|------------|------|----------|-------------|------|
| NR. | DATE | APPROVED | DESCRIPTION | PAR. |
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| DESIGNED J. CRONJE Pr Tech Eng. | DRAWN S. AUDIE |
| DESIGNED BY S. NAIDOO Pr Tech Eng. | INFRASTRUCTURE TECHNICAL INFORMATION MANAGEMENT D.J. CHALMERS |

CITY OF TSHWANE
ROADS AND TRANSPORT DEPARTMENT

| | | |
|--|--|---|
| GROUP HEAD Mr Letloankane P. (Pheko) P.O. BOX 1409 PRETORIA 0001 | | DIVISIONAL HEAD Mr Marven K Thagale P.O. BOX 1409 PRETORIA 0001 |
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| TRANSPORT INFRASTRUCTURE DESIGN AND CONSTRUCTION DIVISIONAL HEAD Mr K Thagale (Marven) | TRANSPORTATION PLANNING DIVISIONAL HEAD Mr Swanepoel (Marven) |
| SIGNATURE: _____ | SIGNATURE: _____ |
| DATE: _____ | DATE: _____ |
| DRAWING APPROVED BY GROUP HEAD Mr Letloankane P. (Pheko) | |
| SIGNATURE: _____ | DATE: _____ |

TYPICAL STANDARD DETAILS

HANDRAILS/BALUSTRADE, AND BOLLARDS
TYPICAL DETAIL FOR CONCRETE BLOCK RETAINING WALL

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|------------------------------|------------------------|----------------------------|
| CONTRACT No.: | PROJECT No.: | |
| DATE: 14 MARCH 2021 | SCALE: NOT TO SCALE | ORIGINAL PAPER SIZE: A1 |
| DRAWING NO. STD011 | SHEET NO. 3 OF 3 | REVISION |