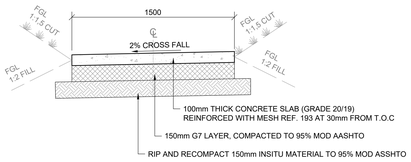
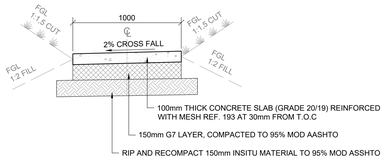


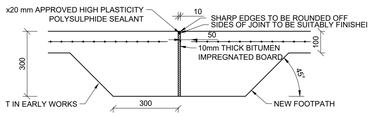
TYPICAL 1500mm WIDE FOOTPATH CROSS SECTION TYPE A

SCALE 1 : 20



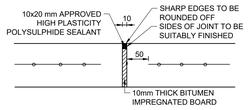
TYPICAL 1000mm WIDE FOOTPATH CROSS SECTION TYPE B
(ONLY WHERE SPACE IS CONSTRAINED)

SCALE 1 : 20



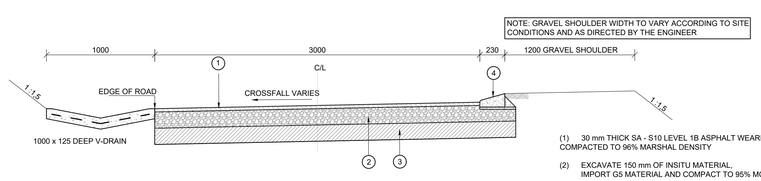
BUTT JOINT DETAIL TO INTEGRATE NEW FOOTPATH WITH OLD FOOTPATH

SCALE 1 : 10



EXPANSION JOINT DETAILS FOR SURFACE BED

SCALE 1:5



(1) 30 mm THICK SA - S10 LEVEL 1B ASPHALT WEARING COURSE COMPACTED TO 96% MARSHAL DENSITY

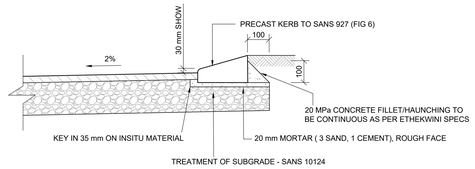
(2) EXCAVATE 150 mm OF INSITU MATERIAL, IMPORT G5 MATERIAL AND COMPACT TO 95% MOD AASHTO

(3) RIP AND RECOMPACT 150 mm LAYER TO DN NO. 3.74 - 5.7 DENSITY, TRH 14 CLASSIFICATION FOR G5

(4) PRECAST KERB TO SANS 927 (FIG 6)

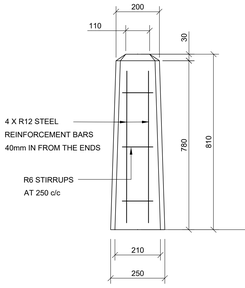
TYPICAL ROAD CROSS SECTION

SCALE 1 : 20

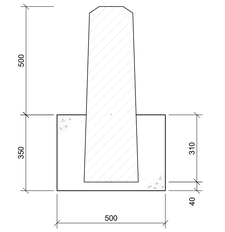


KERB ONLY DETAIL (MOUNTABLE KERB)

SCALE 1 : 10



BOTTOM FACE



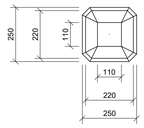
SECTION THROUGH BOLLARD

Scale 1:10

STANDARD BOLLARD (TYPE A)

Scale 1:10

NOTE :
1. CONCRETE GRADE 30/13
2. FINISH - SMOOTH WITH BOTTOM FACE BRUSHED.
3. FOUNDATION CONCRETE IS TO BE GRADE 20/13 AND IS TO HAVE A STEEL TROWEL FINISH.
4. TOLERANCE TO ALL DIMENSIONS + 3mm.



END ELEVATION

Scale 1:10

GENERAL NOTES:

GENERAL:

1. THESE NOTES MUST BE READ IN CONJUNCTION WITH THE SPECIFICATIONS IN THE BILLS OF QUANTITIES. WHERE DISCREPANCIES ARISE THE NOTES MUST TAKE PREFERENCE AND SUCH DISCREPANCIES BE DRAWN TO THE ATTENTION OF THE ENGINEER, IN WRITING, IMMEDIATELY.
2. DRAWINGS MUST BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES IN DIMENSIONS MUST BE REPORTED, IN WRITING, TO THE ENGINEER BEFORE WORK IS COMMENCED.
3. ALL WORK TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS.
4. CONTRACTOR TO INVESTIGATE SITE PRIOR TO SUBMISSION OF A QUOTATION.

CONCRETE WORK

1. EXCEPT WHERE MENTIONED OTHERWISE ON DRAWING NOTES THE CONCRETE WORK MUST CONFORM WITH THE CONDITIONS SET OUT IN SABS 0100 PART 2 AND SABS 1200 SECTION G.
2. A SET OF THREE TEST CUBES MUST BE MADE OF EVERY 50 CUBIC METER (OR PORTION THEREOF) OF EVERY GRADE OF CONCRETE POURED ON ANY SPECIFIC DAY CURED IN ACCORDANCE EITH THE METHODS SET OUT IN TH NBR AND TESTED BY LABORATORIES APPROVED BY THE ENGINEER.
3. NO CONCRETE IS TO BE POURED BEFORE THE ENGINEER HAS INSPECTED AND APPROVED THE FIXING OF THE REINFORCEMENT AND SHUTTERING.
4. BREAKS IN CONCRETE AND CONSTRUCTION JOINTS ARE TO BE MADE ONLY WITH THE APPROVAL OF THE ENGINEER.
5. SHOULD THERE BE A BREAK OF MORE THAN 45 MINUTES AT ANY TIME IN THE POURING OF CONCRETE, THIS FACT MUST BE DRAWN TO THE ATTENTION OF THE ENGINEER.

CONCRETE STRENGTHS:

1. CONCRETE WORKS CUBE STRENGTH AT 28 DAYS TO BE AS FOLLOWS:

	MPa
BLINDING	15
FOUNDATION WALLS	20
FOOTPATHS	20
CONCRETE INFILLS	15
MASS CONCRETE	15
FOR HANDRAILS	15

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL REINFORCEMENT IS CORRECTLY AND SECURELY FIXED IN POSITION.

NOTES

GENERAL :

1. PROVE ALL SERVICES PRIOR TO CONSTRUCTION.
2. ALL LEVELS AND DIMENSIONS TO BE VERIFIED ON SITE.
3. ALL SETTING OUT TO BE UNDERTAKEN BY A REGISTERED PROFESSIONAL LAND SURVEYOR.
4. ALL SURVEY AND SETTING OUT DATA PROVIDED IS BASED ON (WGS 84).
5. ALL WORK AREAS TO BE REINSTATED (PREMIX, CONCRETE, ETC.)
6. MUNICIPALITY TO EXECUTE ALL CONNECTIONS INTO MUNICIPAL LINES.
7. UNLESS OTHERWISE AGREED WITH ENGINEER, CONTRACTOR TO SUPPLY ENGINEER WITH RESULTS OF COMPACTION TESTS, AND WHEN APPLICABLE, PERCENTAGE STABILIZATION TESTS ON BACKFILL.
8. ALL WORKS IN ACCORDANCE WITH CITY OF DURBAN SPECIFICATIONS AND SANS 1200
9. THE ENGINEER REQUIRES 24 HOURS NOTICE FOR ALL INSPECTIONS.

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 LAYER WORKS ARE IMPORTED TO THE SITE AND PLACED.

FREQUENCY OF TESTS :

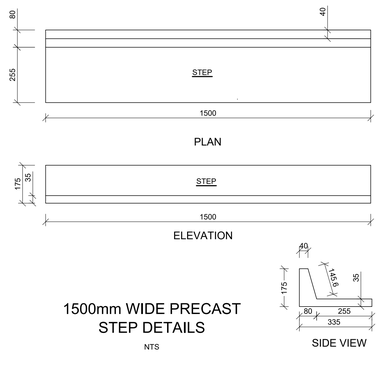
1. CBR TESTS 1 PER 300m².
2. COMPACTION TESTS 1 PER 200m² NOTE : COMPACTION TESTS WILL BE REQUIRED FOR EACH OF THE VARYING LAYER THAT IS IMPORTED AND COMPACTED IN PLACE.

ROADS AND FOOTPATHS :

1. ALL LEVELS, DIMENSIONS AND SETTING OUT DETAILS TO BE VERIFIED BY CONSULTANT AND CONTRACTORS ON SITE PRIOR TO CONSTRUCTION.
2. THE POSITIONS OF ACCESSES ARE TO BE DETERMINED IN CONSULTATION WITH THE LOCAL COMMUNITY. DAYLIGHT REQUIREMENTS ARE TO BE DECIDED BY THE ENGINEER ON SITE. CONCRETE WEDGES ACCORDING TO CIVIL ENGINEERS DETAILS AND SPECIFICATIONS MAY BE USED IN PLACE OF SURFACED BELL-MOUTHS FOR ACCESSES SERVING SINGLE RESIDENTIAL PROPERTIES.
7. EXISTING ROAD SIGNS, SERVICES AND FENCING AFFECTED BY CONSTRUCTION ARE TO BE REMOVED/RELOCATED ON INSTRUCTION BY THE CIVIL ENGINEER.
8. UNDERGROUND SERVICE CROSSINGS AND MARKERS ARE TO BE ACCORDING TO CIVIL ENGINEERS DETAILS AND SPECIFICATIONS.
9. ALL NEW ROAD SIGNS AND ROAD MARKING REQUIREMENTS ARE TO CONFORM TO THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL (SADC - RTSM).
10. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH "COLTO SPECIFICATIONS FOR ROAD AND BRIDGE WORKS FOR STATE ROAD AUTHORITIES".
11. NEW FILLS AND EXPOSED CUTS ARE TO BE TOP-SOILED AND VEGETATED IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.

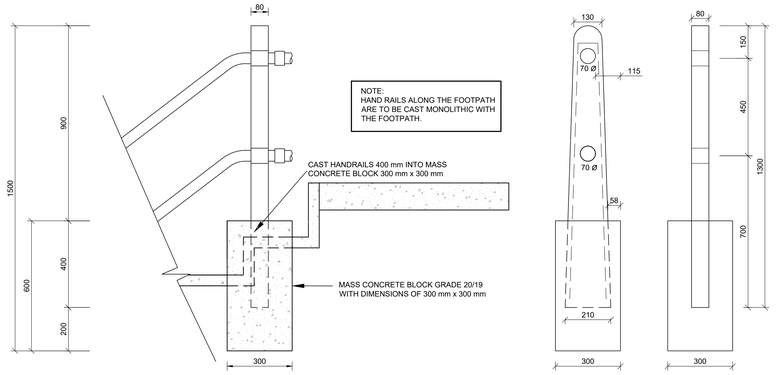
STORMWATER :

1. ALL STORMWATER PIPES ARE CLASS 100D CONCRETE AND HD CL 34 uPVC PIPES.
2. ALL STORMWATER CONCRETE PIPES TO COMPLY WITH SANS 677 STANDARDS.
3. ALL uPVC PIPES TO COMPLY WITH SANS 966 STANDARDS.
4. ALL JOINTS TO BE 'SPIGOT AND SOCKET' TYPE.
5. ALL STORMWATER PIPES TO BE LAID ON CLASS B BEDDING.
6. ALL EXISTING DRAINAGE CULVERTS ARE TO BE INSPECTED, AND ANY FOUND IN UNSERVICEABLE CONDITION ARE TO BE REPLACED ON INSTRUCTION BY THE CIVIL ENGINEER.
7. CULVERT INVERTS ARE TO BE DECIDED BY CIVIL ENGINEER ON SITE UNLESS SHOWN OTHERWISE. MIN. COVER = 600mm, MIN. SLOPE = 2%.



1500mm WIDE PRECAST STEP DETAILS

NTS

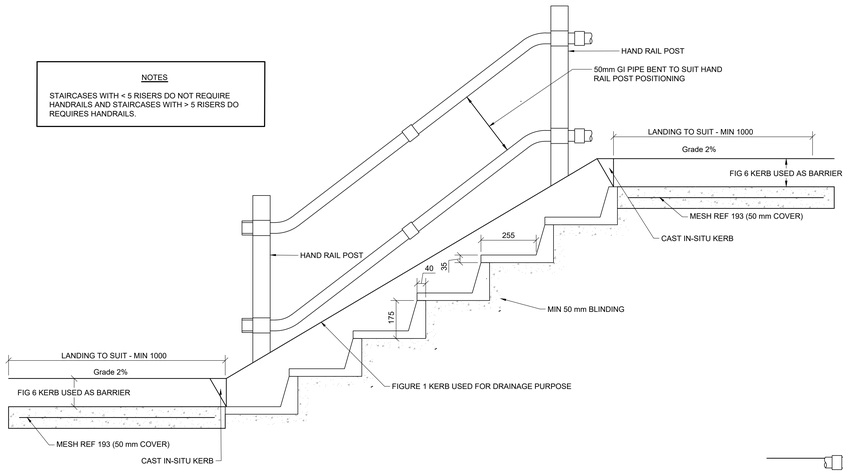


HAND RAIL CONNECTION DETAIL AT STAIRCASE

SCALE 1:10

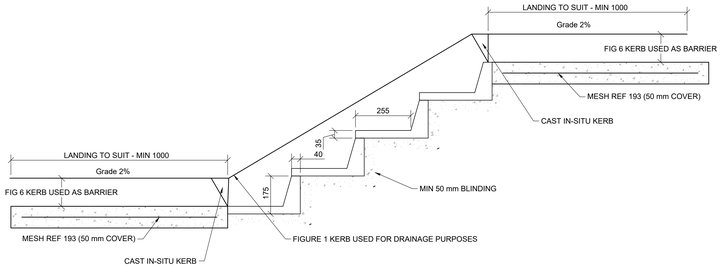
NOTES

STAIRCASES WITH < 5 RISERS DO NOT REQUIRE HANDRAILS AND STAIRCASES WITH > 5 RISERS DO REQUIRES HANDRAILS.



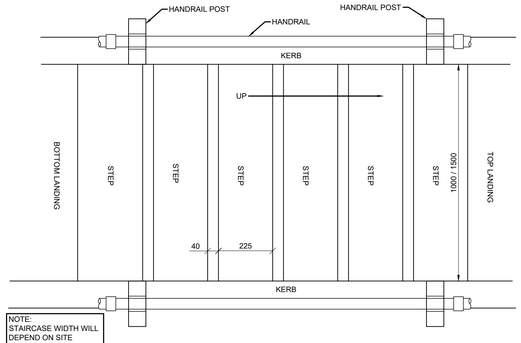
LONGITUDINAL SECTION FOR PRE-CAST STAIRCASE WITH > 5 RISERS

SCALE 1 : 10



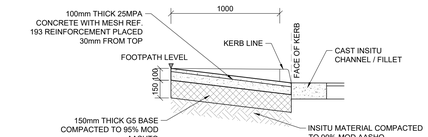
LONGITUDINAL SECTION FOR PRE-CAST STAIRCASE WITH < 5 RISERS

SCALE 1:10



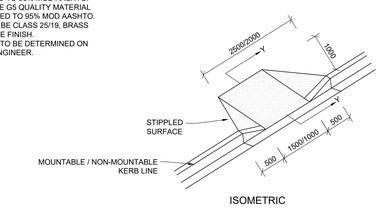
PLAN OF PRECAST STEPS AND STAIRCASE

NTS



SECTION Y-Y

NOTES :
1. IN-SITU MATERIAL BENEATH SUBBASE TO BE COMPACTED TO 90% MOD AASHTO.
2. SUBBASE TO BE G5 QUALITY MATERIAL AND COMPACTED TO 95% MOD AASHTO.
3. CONCRETE TO BE CLASS 25/19, BRASS BROOM STIPPLE FINISH.
4. SCOOP WIDTH TO BE DETERMINED ON SITE BY THE ENGINEER.



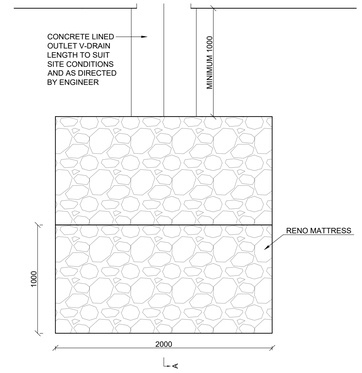
ISOMETRIC

PEDESTRIAN SCOOP DETAILS

N.T.S

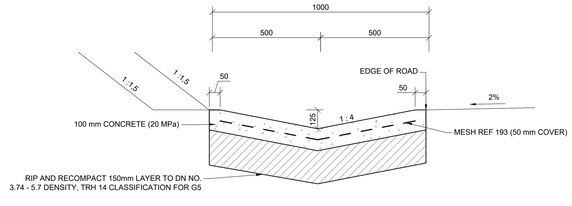
NOTE: RENO MATTRESSES

1. RENO MATTRESSES ARE TO BE USED FOR STORMWATER MANAGEMENT IN POSITIONS SHOWN ON LAYOUT DRAWINGS AS WELL AS DISCHARGE POINTS.
2. MATTRESSES ARE TO BE 2 m x 1 m x 0.3 m TO PREVENT SCOURING.
3. MATTRESSES ARE TO BE INSTALLED AS PER TYPICAL DETAIL DRAWING.
4. OPENING IN KERBS TO BE MAXIMUM 0.5 m.
5. THE MATERIAL TO BE USED FOR FILLING THE MATTRESSES MUST BE APPROVED BY THE ENGINEER, ARE TO BE OBTAINED FROM SOURCES ON OR NEAR THE SITE AND SHOULD BE DURABLE AND OF SOUND QUALITY RANGING IN SIZE BETWEEN 75 mm AND 150 mm FOR MATTRESSES.



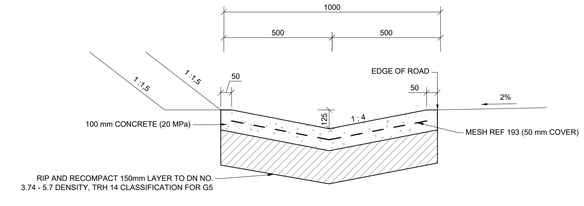
TYPICAL DRAINAGE DETAIL FOR FOOTPATHS TYPE 1

N.T.S



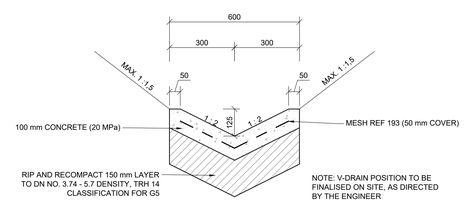
TYPE 'A' - CONCRETE LINED V-DRAIN (DRAIN NEXT TO ROAD)

SCALE 1 : 10



TYPE 'A' - CONCRETE LINED V-DRAIN (DRAIN NEXT TO ROAD)

SCALE 1 : 10



CONCRETE LINED OUTLET V-DRAIN

SCALE 1 : 10

FOR TENDER

SCALE (mm)

No.	REFERENCE DRAWINGS

REV	DESCRIPTION	BY	DATE
P1	ISSUED FOR TENDER	Z.M	2023.05.30

Professional person S.SIRPUTH PrTechEng Registration 20147/2135

CLIENT

ETHEKWINI MUNICIPALITY

PROJECT

eTHEKWINI INCREMENTAL SERVICES GUMTREE ROAD, KENVILLE, WARD 34

DETAILS

TYPICAL DETAILS LAYOUT

MAP AFRICA CONSULTING

SUITE ESS106 STRATHMORE PARK, 305 MUSGRAVE ROAD, MUSGRAVE, DURBAN
e-mail : admin@mapafrica.co.za
website : www.mapafrica.co.za
FAX (031) 3092929 TEL. (031) 3095831

DESIGNED	Z.M	COPYRIGHT RESERVED	SCALES
DRAWN	Z.M		AS SHOWN
APPROVED	S.S	PL	DATE 2023.02.24

DRAWING No. 557/GUMT-PH2/903 REV P1