

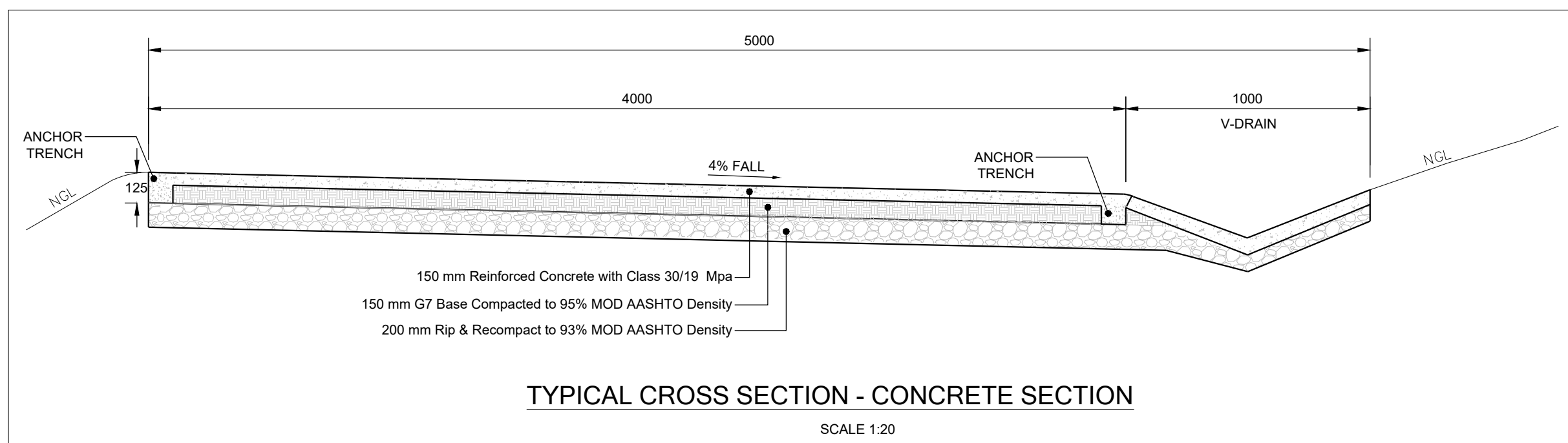
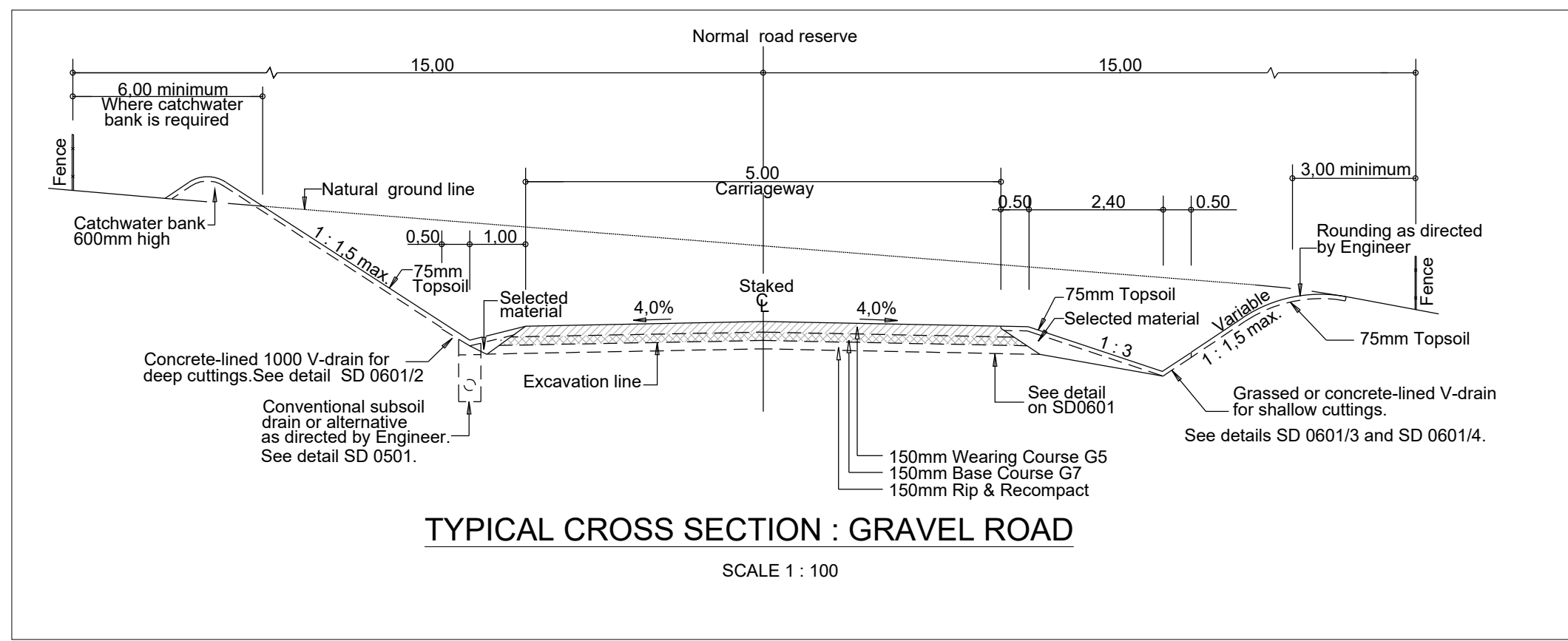


DESIGN SPEED - 40km/hr

#### GENERAL NOTES

1. ALL LEVELS, DIMENSIONS AND SETTING OUT DETAILS TO BE VERIFIED BY CONTRACTORS ON SITE PRIOR TO CONSTRUCTION.
2. ALL EXISTING DRAINAGE CULVERTS ARE TO BE INSPECTED, AND ANY FOUND IN UNSERVICEABLE CONDITION ARE TO BE REPORTED TO THE ENGINEER REPLACED UNLESS SHOWN OTHERWISE.
3. CULVERT INVERTS ARE TO BE DECIDED BY ENGINEER ON SITE UNLESS SHOWN MIN. COVER = 600mm, MIN SLOPE = 2%.
4. PIPE CULVERTS ARE TO BE LAID IN ACCORDANCE WITH SD 0401 WITH HEADWALLS AS ACCESS BELL-MOUTHS, AND MIN DIA = 600mm FOR MAJOR ROAD CROSS DRAINAGE AS PER SD 0401, SD 0403, SD 0406. MIN DIA = 450mm FOR MINOR ACCESS ROADS.
5. BOX CULVERTS < 1.5m HIGH ARE TO BE CONSTRUCTED IN ACCORDANCE WITH SD 0404 OR SD 0407. BOX CULVERTS > 1.5m HIGH ARE TO BE CONSTRUCTED AS PER THE STRUCTURAL ENGINEER'S DESIGN IN ACCORDANCE WITH KZN DOT STANDARDS.
6. FOR EROSION CONTROL, GABION MATTRESSES ARE RECOMMENDED AT CULVERT INLETS AND OUTLETS.
7. EARTH BERMES ARE TO BE CONSTRUCTED AT CULVERT INLETS TO DIRECT STORM-WATER INTO CULVERTS WHERE NECESSARY.
8. ROCK BOLSTERS ARE TO BE PLACED ACROSS THE INVERT OF DRAINS SUSCEPTIBLE TO EROSION FOR EVERY 2m VERTICAL DROP.
9. GRASSED/CONCRETE LINED V-DRAINS AS PER SD 0601/3 & 4 ARE RECOMMENDED FOR SHALLOW CUTTINGS OF DEPTH LESS THAN 5m MEASURED AT A POINT 6m FROM EDGE OF CARRIAGEWAY. CONCRETE LINED 1500 V-DRAINS AS PER SD 0601/2 ARE RECOMMENDED FOR DEEP CUTTINGS OF DEPTH GREATER THAN 5m MEASURED AT A POINT 6m FROM EDGE OF CARRIAGEWAY.
10. SUBSOIL DRAINS AS PER SD 0501 ARE TO BE INSTALLED WITH 1500 V-DRAINS OR WHERE HIGH WATER TABLES ARE ENCOUNTERED.
11. KERB AND CHANNEL DRAINS AS PER 0701 ARE TO BE PROVIDED WHERE FILL EMBANKMENTS EXCEED 3m IN HEIGHT.
12. WHERE SURFACE RUNOFF IS TOWARD THE ROAD, CATCH-WATER BANKS ARE TO BE PROVIDED TO DIVERT STORM-WATER TO MAJOR CROSS DRAINAGE STRUCTURES.
13. THE POSITIONS OF ACCESSSES ARE TO BE DETERMINED IN CONSULTATION WITH THE LOCAL COMMUNITY. DAYLIGHTING REQUIREMENTS ARE TO BE DECIDED BY THE ENGINEER ON SITE. CONCRETE WEDGES AS PER SD 0303 MAY BE USED IN PLACE OF SURFACE BELL-MOUTHS FOR ACCESSSES SERVING SINGLE RESIDENTIAL PROPERTIES.
14. GUARDRAILS ARE TO BE INSTALLED IN ACCORDANCE WITH SD 1101 AND SD 1102 WHERE FILL EMBANKMENTS EXCEED 3m IN HEIGHT OR WHERE HAZARDOUS OBSTRUCTION CANNOT BE REMOVED.
15. EXISTING ROAD SIGNS, SERVICES AND FENCING AFFECTED BY CONSTRUCTION ARE TO BE REMOVED/RELOCATED WHERE NECESSARY.
16. UNDERGROUND SERVICE CROSSINGS AND MARKERS ARE TO BE IN ACCORDANCE WITH SD 1001 - 3.
17. ALL NEW ROAD SIGNS AND ROAD MARKING REQUIREMENTS ARE TO CONFORM TO THE SOUTHERN AFRICAN ROAD TRAFFIC SIGNS MANUAL (SARTSM).
18. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH COLTO SPECIFICATIONS FOR ROAD AND BRIDGE WORKS FOR STATE ROAD AUTHORITIES.
19. ALL SURVEY AND SETTING OUT DATA PROVIDED ON (WGS 84).
20. NEW FILLS AND EXPOSED CUTTINGS ARE TO BE TOP-SOILED AND VEGETATED IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.

LEGEND	DESCRIPTION
	CONCRETE ROAD
	GRAVEL ROAD



REV	DESCRIPTION	DATE	REV BY	CHKD
T	ISSUED FOR TENDER	SEP' 23	TG	

DESIGNED	MMANOKO
DRAWN	BNSHABALALA
CHECKED	T.GIGABA

APPROVED	
PROJ. PRINCIPAL: T. GIGABA	
SIGNATURE:	DATE: SEP. 2023



PROJECT/DRAWING TITLE
UPGRADE OF BOMVINI GRAVEL ROAD PART A UPGRADE OF LOCAL ROAD
LAYOUT PLAN CH1000 - CH2000

SCALE: 1:2500	SHEET 1 OF 1
CONTRACT No.	PROJECT No.
DRAWING No. RAY-MAB-002	REV 1

ISSUED FOR TENDER