



#### GEOTECHNICAL NOTES

1. ALL DIMENSIONS ARE IN mm, UNLESS SHOWN OTHERWISE.
2. THE FOUNDATIONS SHALL BE PLACED ON PROPER GROUND.
3. THE EXPECTED SUBSURFACE MATERIAL OVER WHICH FOUNDATIONS ARE LAID CONSISTS OF HIGHLY FRACTURED ROCK.
4. THE NET ALLOWABLE BEARING CAPACITY IS 200 kPa.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE ASSUMED 200 kPa BEARING CAPACITY IS ACTUALLY ACHIEVED ON SITE PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHOULD CHECK THE SOIL/ROCK CONDITIONS PRIOR TO CONSTRUCTION.
7. PROPER PREPARATION AND COMPACTION OF THE AREAS TO RECEIVE FOUNDATION SHALL BE DONE PRIOR TO FOUNDATION CONSTRUCTION. THE PROPOSED FOUNDATION LEVEL SHOULD BE THOROUGHLY INSPECTED BY GEOTECHNICAL ENGINEER TO ENSURE THAT NO CLAY MATERIALS, FILL LAYERS, DEBRIS MATERIALS OR ANY OTHER PROBLEMATIC MATERIALS ARE ENCOUNTERED AT THIS LEVEL. ALL MANMADE FILL LAYERS SHALL BE REMOVED AND REPLACED BY CYCLOPEAN.
8. SOIL DENSITY = 20 KN/m<sup>3</sup>, BACKFILL ANGLE OF FRICTION = 35°, BACKFILL SLOPE = ZERO.
9. SURCHARGE LOAD = 20 KN/m<sup>2</sup>.
10. THE CONTRACTOR SHOULD CHECK IF UTILITIES DO EXIST AT THE RETAINING WALL LOCATION.
11. ROCKS USED IN THE CYCLOPEAN CONCRETE WALL SHALL CONSIST OF SOUND BROKEN STONE OR BOULDERS RANGING IN SIZE FROM 200MM TO 300MM. THEY SHALL BE FREE FROM SHARP OR ANGULAR EDGES AND SHALL NOT FORM MORE THAN 40% OF THE TOTAL VOLUME OF CONCRETE. THEY SHALL BE EVENLY GRADED AND SHALL BE SOAKED IN WATER PRIOR TO INCORPORATION IN THE MIX.
12. THE CEMENT USED IN THE CYCLOPEAN CONCRETE WALL SHALL BE OPC TYPE I CEMENT TO ASTM C150. CYLINDRICAL COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 25 MPa.

A.A.ALAL	NOVEMBER 25	FINAL DESIGN	K&A	-
REV.	DD/MM/YY	DESCRIPTION	ISSUED BY	REQUESTED BY



DRAWN BY:	A.A.ALAL	DATE: 11/11/25	CLIENT NAME:	MINISTRY OF PUBLIC WORKS AND TRANSPORT	DRAWING TITLE:
DESIGNED BY:	I.FAWAZ	DATE: 11/11/25	PROJECT NAME:	طريق بطرماز بيت حاويك	طريق بطرماز بيت حاويك CYCLOPEAN WALL DETAIL
CHECKED BY:	D.ZAKHEM	DATE: 11/11/25			
APPROVED BY:	D.ZAKHEM	DATE: 11/11/25			
SIZE:	A1	SCALE:	PROJECT NO:	DRAWING NUMBER	DATE ISSUED:
		AS SHOWN	----	BY - - - GE 001 00	NOVEMBER 25