circumstances it is difficult to determine how improvement of hydraulic performance on the selected section will affect on hydraulic performance of the whole tunnel.

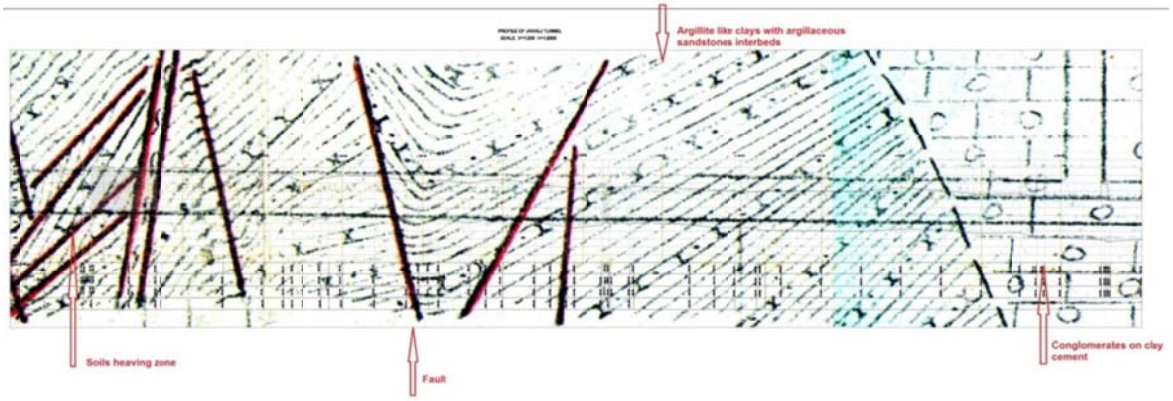


Figure 3-2: Geological profile of design section

4 SITE INSPECTION 2014

4.1 General

The assessment of general condition of the tailwater tunnel was made based on the tunnel inspection carried out in March 2014 and the information and documents provided by the Client during and after site visit. Inspection was held on 5th and 12th of March. On 5th of March only short part of the design section of the tunnel was inspected, because passing of the ponding area of the tunnel was impossible. Further inspection took place only on 12th of March, because of limitation by the GSE outage of the powerhouse.

The following staff attended the tunnel inspection:

- Mr. Nodar Jojua – Hydraulic Engineer
- Mr. Irakli Abramishvili – Civil Engineer
- Mr. Temur Pitava – Geotechnical Engineer.

Access into the tunnel is possible from the power house at ch.00+00, and from the lower portal or the vertical shaft at ch.34+50.

On first day, the inspection team entered the tunnel at ch.00+00. Nearly 2 hours were spent to reach section to be rehabilitated at ch.21+70. Inspection of the tunnel was done only till ch.23+50, due to the depth of the ponding water (approximately 1.7m).

Further inspection of the remaining part of the section was held on 12th of March. Tunnel was entered from the 80m deep shaft at ch34+50, situated in vilage Bichnigauri. Inspection took about 4 hours. About 50% of distance invert was pounded with water with approximate depth of 0.7m.

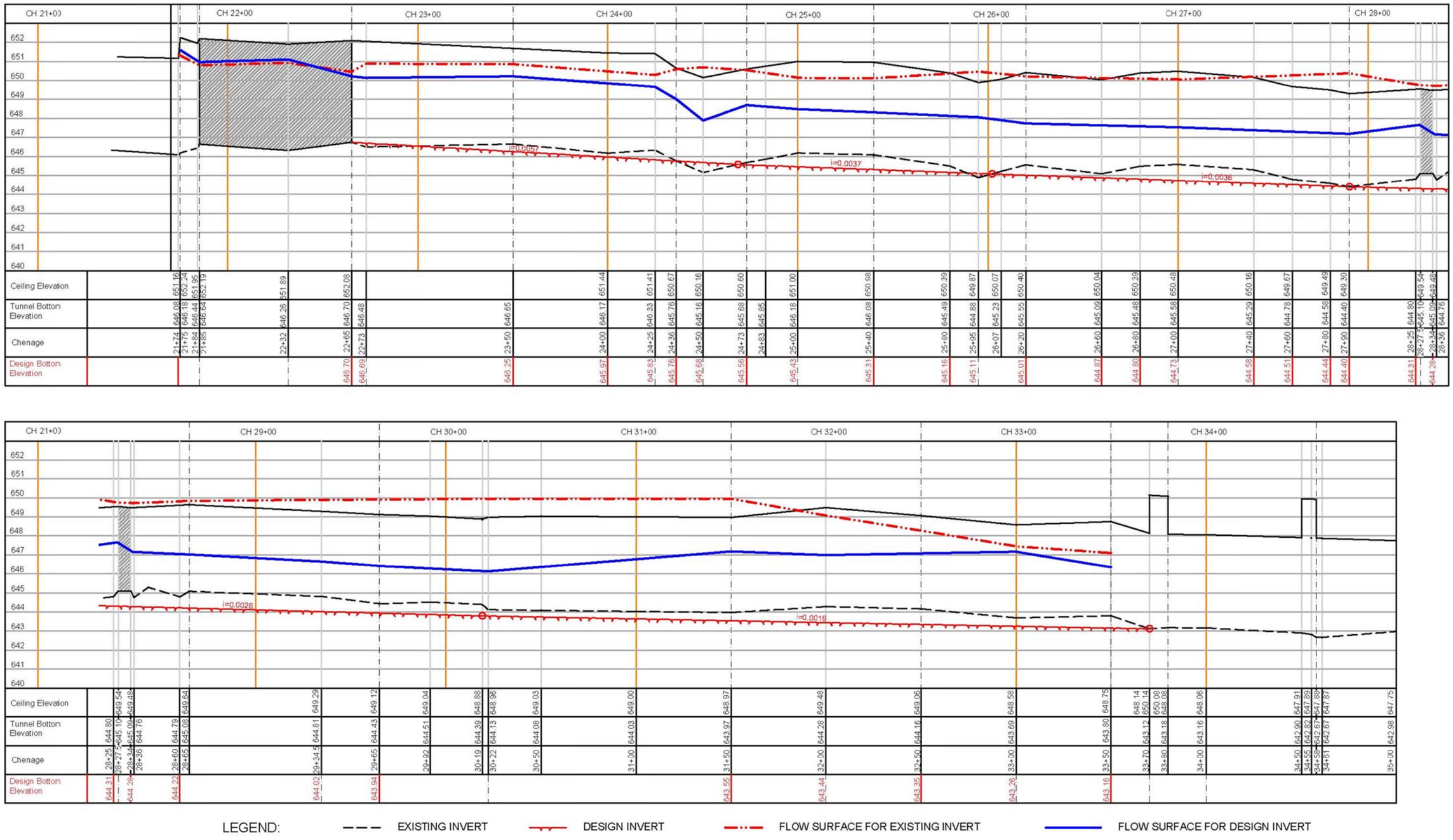
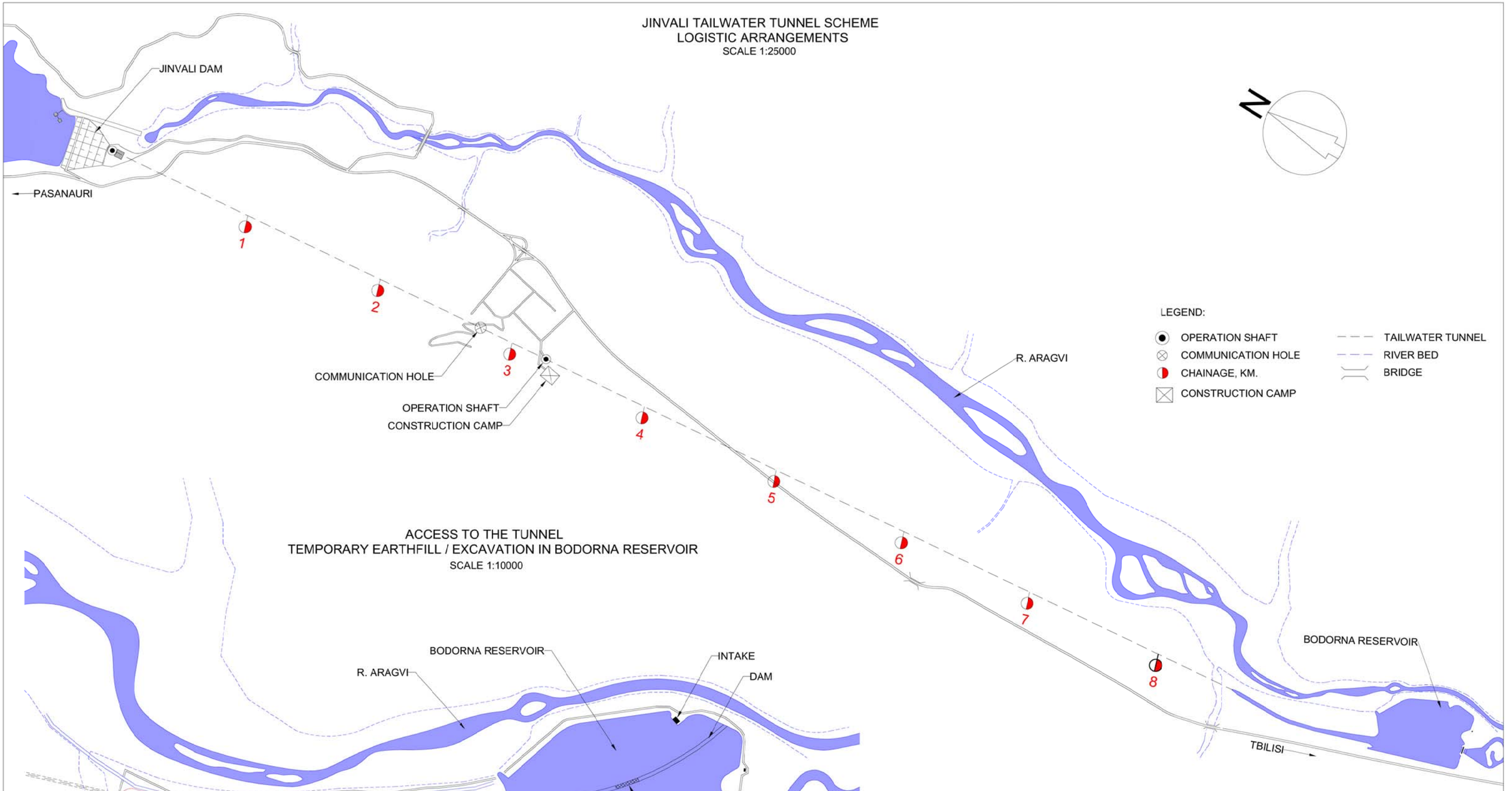
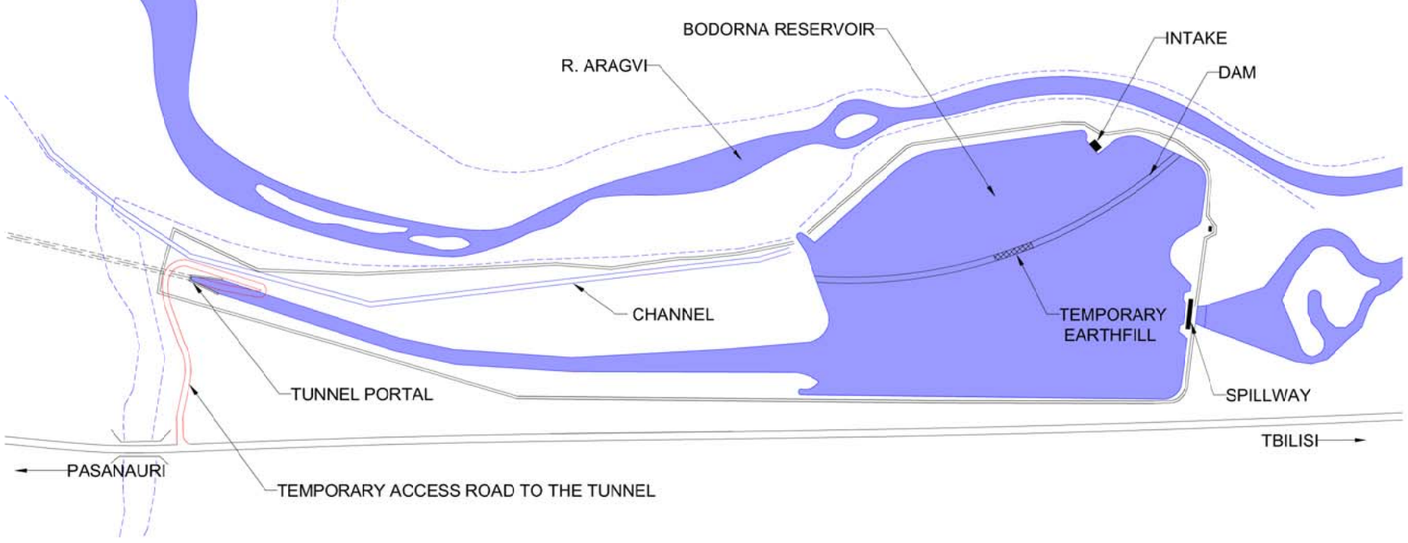


Figure 5-2: Flow surface in the tunnel at design discharge 70m³/s

JINVALI TAILWATER TUNNEL SCHEME
LOGISTIC ARRANGEMENTS
SCALE 1:25000



ACCESS TO THE TUNNEL
TEMPORARY EARTHFILL / EXCAVATION IN BODORNA RESERVOIR
SCALE 1:10000



NOTE:
1. MOBILIZATION WORKS ARE DESCRIBED IN PART. 2 CW TECHNICAL SPECIFICATION. CLAUSE 1
2. TEMPORARY STRUCTURES ARE LISTED IN PART 3. WORKS IMPLEMENTATION PLAN. CHAPTER 4,6

PHASE
- ☐ PROJECT DEFINITION
- ☐ FEASIBILITY STUDY
- ☐ INCEPT. & BASIC DESIGN
- ■ TENDER DESIGN
- ☐ CONSTRUCTION DESIGN
- ☐ AS-BUILT DRAWINGS

REV. No.	REVISION DESCRIPTION	DRWN	CHK'D	APP'D	DATE

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JINVALI TAILWATER TUNNEL REHABILITATION

JINVALI TAILWATER TUNNEL SCHEME
ACCESS ROADS, COMMUNICATION
SHAFTS, CONSTRUCTION CAMP

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DRAWN: GS	1:10000		
CHECKED: GM	DRAWING No.	REV. No.	
APPROVED: NG	5292.TT.001	0	
DATE: 14.04.14			