

**MELBOURNE METRO RAIL PROJECT ENVIRONMENT EFFECTS STATEMENT**  
**INQUIRY AND ADVISORY COMMITTEE**

**MMRA TECHNICAL NOTE**

**TECHNICAL NOTE NUMBER:** 008

**DATE:** 26/07/2016

**PRECINCT:** CBD South

**EES/MAP BOOK REFERENCE:** Maps 8, 9, 10 (Vertical Alignment Plans)

**SUBJECT:** Soil and Rock Bore Logs

Response to item 8 of the IAC request dated  
13 July 2016

Potential Modification to vertical alignment at  
CBD South

**NOTE:**

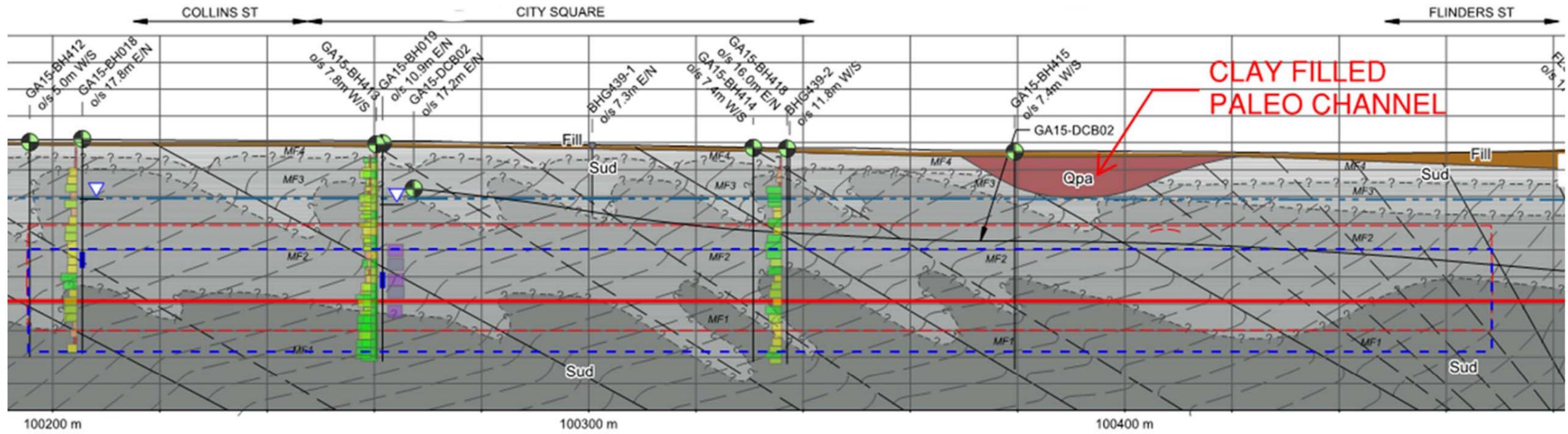
1. The full details of investigation soil and rock bore logs relevant to the Golder Associates Interpreted Geological Setting and Interpreted Hydrogeological Setting Summary Reports in Technical Appendices O and P are attached to this Technical Note.
2. In addition, since the exhibition of the EES, MMRA has been provided with information from 270 additional boreholes conducted by Golder Associates.
3. The interpretation of this additional information, along with further geological testing, is an ongoing process and will continue throughout detailed design and construction.
4. In general, the preliminary review of the updated geological information appears to confirm the approach taken to the Concept Design for much of the alignment.
5. An outcome of the preliminary review of the updated geological information is the identification of a clay-filled paleo channel above the cavern at CBD South between Flinders Lane and Flinders Street, and deeper weathered rock profiles in the CBD Area.

6. For the purposes of the IAC assessment of the Concept Design, this note proposes a potential variation to the vertical depth of the CBD South Station by up to 4 metres.

**Attachments:**

- A. 36 soil and rock bore logs (to be provided)
- B. Geological long sections based on 270 additional bores (to be provided)
- C. Potential variation of vertical alignment at CBD South.

ATTACHMENT C:



- EES CONCEPT DESIGN CAVERN PROFILE
- 4m LOWERED CAVERN PROFILE