



Appendix G

Geotechnical Assessment

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The Project Director
Sydney Opera House Venue Improvement Programme
Savills Project Management
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Attention: Mr Malcolm Patterson

Dear Sir,

**ENVIRONMENTAL ASSESSMENT: BENNELONG STORMWATER DRAIN
ASSESSMENT**

1. INTRODUCTION

This report presents information required under Item 5 (Geotechnical) and a portion of Item 6 (Demolition and Excavation) of the Director General's Requirements for the Environmental Assessment of the Bennelong Drain diversion proposal.

Sydney Opera House Trust proposes to divert the Bennelong Drain to a new route under the Sydney Opera House forecourt. At its current location, the drain discharges to Sydney Harbour. The proposed new discharge point would be to Farm Cove. The principal drivers for the project are discussed below and relate to future strategic building plan directions and operational flexibility.

This report has been prepared by Dr Philip Pells who has had extensive experience in geotechnical works in the vicinity of the Bennelong Drain having been responsible for the design of the cavern for the Opera House Carpark and also being responsible for the geotechnical investigations for the Sydney Harbour Tunnel that passes immediately to the west of the Opera House Carpark. For construction of the Opera House Carpark a length of the Bennelong Drain had to be diverted and specific investigations were undertaken for this diversion project (see Figures 13 and 18). A copy of Dr Pells' CV is attached.

This report is based on the investigations undertaken since 1970 for various investigations for parking facilities for the Opera House and for investigations for the Sydney Harbour Tunnel.