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GEOLOGICAL SOCIETY OF AUSTRALIA'S SUBMISSION ON THE DESIGN AND BUILDING PRACTITIONERS REGULATION 2020

Introduction

The Geological Society of Australia (GSA) welcomes the opportunity to provide this submission on the Draft Design and Building Practitioner Regulation 2020. Our contribution is designed to assist the New South Wales Government, in finalising this important piece of regulation.

The GSA agrees with the overall intention of the reform and believes that it will make an important contribution to enhancing public safety and consumer protection.

In this submission we propose that the provisions of the draft Regulation be amended to recognize the important contribution of our members who are professional Engineering Geologists. Engineering Geologists play an important role in applying geological knowledge and understanding to the planning, design and construction of our civil and building infrastructure. This is different from the geotechnical engineer's role, which is as a Civil Engineer specialising in the determination of the mechanical characteristics of earth materials. This briefing document explains why the Geological Society of Australia believes that professional Engineering Geologists as well as Geotechnical Engineers must be included on the proposed register to ensure that they can continue to make their important contribution to NSW society.

Amendment of the regulation is required to ensure that these Engineering Geologists can continue to make their important contribution to NSW society.

About the Geological Society of Australia

The GSA was established as a non-profit organisation in 1952 as a national organisation to promote, advance and support earth sciences in Australia. Part of our mission is to influence decision-making processes to support geoscience employment across a variety of industries around Australia.

With over 1,700 members around the country and 350+ members here in New South Wales we are one of the leading professional bodies representing the geoscience community.

The GSA manages a professional accreditation scheme, **The Accredited Geoscientist** program. The purpose of this program is to provide an additional level of recognition for

members who can demonstrate the requisite level of knowledge and expertise in specific fields. Accreditation is intended to assure competence within a specified field of expertise.

GSA's proposed amendment

In its current form, GSA is of the view that the regulation will unnecessarily restrict the work that some professional engineering geologists currently carry out in the building industry. The kinds of design work, which currently may be performed by engineering geologists are covered by the role defined as Design practitioner – Geotechnical engineering in Schedule 1.

However, Schedule 2 Part 3 requires that Design practitioner – Geotechnical engineering must be qualified as a registered professional engineer in the class of geotechnical engineering. This class of registration is currently closed to most engineering geologists who do not have either an undergraduate or postgraduate engineering degree, recognition or registration as a professional engineer by a professional body of engineers.

To avoid this unnecessary restriction on some of our members, GSA would like to suggest two alternative amendments.

Option 1

Amend Design practitioner – geotechnical engineering to include a pathway for professionally accredited engineering geologists.

Option 2

Add a new class of design practitioner covering professionally accredited engineering geologists.

GSA's preference would be for option 1.

Precedents for the proposed amendment

The important role played by professional engineering geologists is already recognized by the NSW Department of Infrastructure, Planning and Natural Resources in their Geotechnical Policy Kosciuszko Alpine Resorts. This policy is applicable for building work covered by State Environmental Planning Policy No. 73 Kosciuszko National Park - Alpine Resorts) 2007.

Ground engineering in the NSW building industry

All types of building work cause a change of stress on the ground, either by applying a load for example from a new building, or by removing soil and rock for a building basement. The understanding of the nature, behavior and performance of soil and rock under changes in stress, and the prediction of potential failure mechanisms that must be taken into account in engineering analysis and design, require skills and experience in geology and engineering. The more complex the geology of the project site, the higher the level of geological skills required to design a successful outcome.

This specialist area of the building construction industry is serviced by both geotechnical engineers and engineering geologists.

The role of engineering geologists

In NSW, engineering geologists currently carry out a broad range of building-related work spanning the design and implementation of geotechnical investigations, the design of

excavation support measures, the supervision and approval of construction of foundations to site classification for building developments. These engineering geologists may work independently or as part of multi-disciplinary teams at large companies where they work closely with geotechnical engineers and other engineering professionals.

Engineering geologists are the only professionals in the building industry with the in-depth education and training in geology that is required to fully understand the ground and its implications. Whilst some undergraduate degrees in civil engineering and most post-graduate geotechnical degrees include some classes in geology, these are generally insufficient to provide adequate geological understanding for sound geotechnical design.

Professional accreditation as an engineering geologist typically requires an undergraduate degree in geology with either a post-graduate degree in engineering geology or significant practical engineering experience working in the geotechnical industry.

GSA professional accreditation program

The GSA provides professional accreditation through our Accredited Geoscientist Program (Ac.Geo.). Our geotechnical and engineering geology field of expertise is for geoscientists concerned with geological materials and their geo-mechanical, geotechnical and engineering properties, applications to mine excavations, construction of buildings, roads, railways, dams and other civil engineering projects, mine stability, erosion studies pertaining to civil engineering, urban development, earthquake studies and seismic research.

Maintaining accreditation is dependent on strict adherence to the Society's Code of Ethics and Continuing Professional Development. The Society audits members to determine they have maintained the level of Professional Development required to ensure they retain their status. It is a requirement of our accreditation scheme that members only practice within their areas of experience and expertise. Failure to comply with this important element of the code of ethics risks the withdrawal of accreditation.

Closing

In closing, the GSA believe that professional engineering geologists should be recognized by the proposed reforms in order that they may continue to provide their important contribution to the building industry in New South Wales. GSA would welcome the opportunity of assisting the New South Wales Government in refining the regulation.

Contact details

Yours sincerely,

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