



General Practitioners June 2023 Newsletter

Welcome to the second newsletter for 2023.

In this quarter's newsletter we have a few great articles and helpful links that might interest our readers. We have two good lessons learned with some amazing photos of both with one showing what happens when you specify the incorrect paint spec and the other demonstrating what can happen when members are under-designed.

The EGP group have organised events around the country to get local engineers meeting each other and to be able to discuss ideas, ask questions or just find out what others are doing in your area. Have a look to see the event in your area and please come along and join in.

Don't forget to share your photos of any interesting jobs you have done for others to view on Slack, or submissions can be emailed to general.practitioners@engineeringnz.org. Also, **I would like to encourage you all to submit your lessons learned for inclusion in our upcoming newsletters.** This is anonymous and a great tool to help other engineers to not repeat the same mistakes. We are also asking for you to submit photos that you think best describe Engineering General Practice, so that we can showcase exactly what we as EGPs do.

Tamlyn Adams, Editor

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Message from the Chair

Kia ora members.

This year has been racing by.

We now have over 340 members and are still growing. I believe that it is vital to grow the group and use the power of the voice it gives us to advocate for engineering general practice.

The committee is starting a project on 28 June, and you can read more about that elsewhere in this newsletter. Beginning on this day we have group meetings in various centres – an opportunity for engineers to meet colleagues in their local communities and begin to form relationships which they can rely on. If you have been working on your own or with just a couple of people to talk to I urge you to go along to have a drink with some fellow engineers – you never know when an understanding listener could be useful. And the eats this time are free.

We will work at putting on more of these events around the country – our goal is to have all engineers connected. And if this means that you and your engineering colleagues see the value in belonging to the EGP SIG we will continue to grow. SESOC has about 2500 members and is the largest technical group in the country. If we can get to 1000 members and maybe more, think of the power that voice will have.

What do we hope to achieve with all this power?

- A seat at the table as the new regulations governing our profession are formed.
- Recognition of General Practice Engineering as the fundamental discipline from which all the specialties spring - having a General Practice Field will give the engineers who do a bit of everything, and do it well, the recognition they deserve.
- Look at new standards and see how they can be improved for use by those of us who can't afford the fancy computer programs (most of which are irrelevant for the small projects we work on)
- Provide guidance documents on all the nuances that are emerging as engineering pushes the envelope of what can be done. Finding ways to show that we apply these things without having to produce 45 pages of calculations and commentary on a few beams in a house.
- Advocate for EGPs with the technical groups.
- Help to improve the standard of engineering outcomes.

There's many more. But the point is we must make sure our voice is not lost in the headlong rush to push the limits and to define how engineers work and stay professional. To do that we need to connect engineers who talk the same language and who understand the difficulties we face.

I believe that the key to wielding that power is growing this group. Please head along to a meet in your town and if there isn't one think of setting one up yourself. It is just a matter of picking a day and a time and a place and letting as many engineers in your area know that it is happening – we can help so get in touch.

Kia kaha,

Pete van Grinsven
Chair EGP SIG

Upcoming Engineering Gathering – Come Meet Engineers in Your Area

A small group of engineers in the Rodney area in Auckland started getting together once a month to have a coffee with each other at the Kings Plant Barn café over 10 years ago and it has been going strong ever since, it is a great way to discuss issues you may have, look at different ways to tackle projects, find out how others are working and in general just catch up with some great engineers. The EGP has made a conscious effort to start these groups throughout the country and there is a good gathering in Hamilton and elsewhere, but we would like to encourage this further.

The events listed below are organised in the hopes that these gatherings can start happening all over the country so Engineers can discuss engineering especially when they do not work in a large firm where they have people to ask questions. We had an event in Invercargill on the 24 of March that was a great success.

There will be some nibbles provided and everyone is welcome. If you can please contact the event coordinator below so we can determine numbers for catering. The catering will only be provided on this occasion, but we hope that the invigorating conversations will be incentive enough for the gatherings to continue.

Area	Location	Date	Time
Auckland - Albany	Bar Africa-1B William Pickering Drive, Rosedale	28/06/2023	17:30-19:00
Christchurch	No 4 Bar and Restaurant – 4 Mansfield Avenue St Albans	28/06/2023	17:00-18:30
Hamilton	The Helm Bar and Kitchen – 22 Ulster Street, Whitiara	28/06/2023	17:00-18:30
Kerikeri	Rocksalt Restaurant & Bar – 73 Kerikeri Road	28/06/2023	18:00-19:30
Whangarei	Dickens Inn – 71 Cameron Street	28/06/2023	17:30-19:00

If you have any questions, please feel free to reach out to us on tech.groups@engineeringnz.org

EGP Presenting at SESOC Conference 2023

The SESOC Conference is underway this month from the 21-23 of June in Christchurch. The EGP and Martin Pratchett from Engineering New Zealand will be presenting in one of the sessions on the Friday (23) from 13:00-15:00, if you are heading to the conference come and join our session and provide your input. Our run sheet for the session is as follows:

No.	Presenter	Topic
1	Pete Van Grinsven	Presidents Welcome and Challenge
2	Martin Pratchett	P21 Bracing for Residential Buildings
3	Gordon Hughes	The Flying Engineer, Service to the Profession and a life of Inspiration
4	Ian Watson	Sheds and Shed Houses – Some Design Questions Introduced
5	Tamlyn Adams	Regulation and Proposal for Registration Levels

6	Pete Van Grinsven	Do No Harm
7	Nick Calvert & Matt Stewart	EGP Forum

The EGP One Question Survey

This issue, we are asking Engineering General Practitioners:

How is it that in a world where the internet is a thing that exists, Standards New Zealand can't provide a current version of all Codes without resorting to issuing separate documents that say "Delete Clause X.XX and replace with the following..."

- I know, right? It just makes my job so much harder to stay on top of amendments.
- You can take my well-annotated paper copies of the Standards from my cold dead hand.

CLICK TO TAKE THE SURVEY

In the last issue we asked:

Should it be a requirement that all geotechnical jobs have an allowance for entering the data into the New Zealand Geotechnical Database (NZGD)?

ANSWER CHOICES	RESPONSES
Yes this will be helpful to everyone in the end and it is not that much extra work	52.4%
Yes only to all jobs where a full geotechnical report is provided and it can be allowed for in the quote	42.9%
No it is not beneficial to the client currently so why should they pay for it, only enter it when specifically requested by the client	4.7%

Seems we (the EGP) may need to take this to the New Zealand Geotechnical Society (NZGS) as a suggestion and might be worth raising with your individual companies if you have geotechnical engineers/geologists working with you.

Learning Opportunities

The biggest opportunities to learn from are not when things go right, but when they go wrong. The best way to learn from your mistakes is to recognise what went wrong and how you (and others) can avoid making the same mistake again.

Click on the links below to read some anonymous Learning Opportunities submitted by two different contributors:

1. [What happens when you specify internal coating system for steel not fully enclosed or protected](#)
2. [EngNZ Learning form Disciplinary Decisions – Collapse of the Southland Stadium Roof](#)

Do you have a learning opportunity that would be of interest to your fellow EGP members, please submit your examples for others to learn from? Download the Learning Opportunities form here and send it to egp.sig.anonymous@gmail.com

EGP Slack Channel Update

Nick Calvert

The EGPSIG Slack channel provides a useful forum for technical discussion. The committee recommends that all our members are active on the slack channel. Follow this link to sign up and install the EGP Slack Channel: <https://egp-sig-nz.slack.com/?redir=%2Farchives%2FCUHB068FJ> If you have any issues or questions regarding the Slack channel, feel free to email your questions to tech.groups@engineeringnz.org.

Since the last update we have grown our slack channel membership further and also have an increase in the number of people regularly posting. Recent content includes the following:

- Lots of discussion on the new AS/NZS1720.1
- Crack control in residential floor slabs that are polished with hydronic heating pipes
- How to deal with pile holes that are going to be left open for an extended period
- Welding of pile reinforcing in relation to the MBIE practice advisory 11
- The design approach for foundations on expansive soil specifically relating to return periods and the need for a design guide
- A question raised regarding the use of open stirrups when assessing historical buildings
- Discussion over the use of mortice and tenon timber connections
- One of our members talking about an interesting project they designed involving horizontal jacking of a foundation supporting concrete shear walls
- Discussions on various foundation systems such as driven timber piles with waffle slabs, surefoot etc
- Various updates from the Engineering NZ Practice manager
- Discussion on timber and fixing durability
- A question regarding the useful software that engineers use to do business (technical and non-technical)
- Design approach for freestanding spiral staircases
- Live loads for car dealerships

Missed any topics of interest to you, have a look back on the Slack Channel to see what was discussed.

Do you have any interesting photos from your EGP jobs, share them on the EGP-Photos Channel on Slack. Great to see what we are working on out there.

We ask all members to continue to be active on the Slack channel because the more activity, the more beneficial the content is for everyone. If you missed out on any of these, go have a look at the discussions and feel free to add your input.

The Online Producer Statement System

Bruce Tricker

Our company has been using the Engineering New Zealand / ACE New Zealand online system for about two years. It is a great time saver for generating the various forms for a building consent application. It doesn't just do producer statements though. With automated form fields it will generate any of the following documents:

- Certificate of Design Works
- Construction Monitoring Schedule
- Design Features Report
- Structural Maintenance Schedule
- B2 Letter in Lieu – Design

You can also go back into the job and generate a Producer Statement PS4 – Construction Review, and there is a separate page for the 'A' series producer statements (PS1A, PS21, PS4A) for projects where there is no building consent.

Probably the most valuable feature is the Design Features Report (DFR). On smaller projects it can be difficult to justify a full tailored report on your project but the online system makes it easy. You can select which parts you want to include (e.g. loadings, concrete cover, soil properties etc) and the report will only include these sections.

As a member of the Engineering New Zealand triage panel, I assess structural CPEng candidates when they come up for renewal. I see a large range of work samples submitted and as a rule applicants tend to submit their best work, rather than one of their less than perfect projects. Despite this I occasionally see candidates submitting pages of calculations and printouts with no explanation of what they are doing or why they are doing it.

So why should you provide a Design Features Report (and the forms above) along with your PS1 Producer Statement, even for smaller projects?

1. It provides a clear summary for someone unfamiliar with your project
2. A common complaint from the Council checkers is that they can't find the basic information about the design in the calculations (such as soil bearing capacity or the chosen structural ductility).
3. The DFR provides a useful self-check of your design before it goes out the door.
4. Engineering New Zealand recommends it.
5. SESOC recommends it.

Give the online system a try. I found that it took three or four projects to get familiar with the inputs and outputs, but after that it started to pay off.

[READ MORE](#)

Why Engineering New Zealand recommend \$200,000 PI Insurance

Martin Pratchett

We're frequently asked about the PI statement. Learn more about the background and how you can work with requests to raise the amount. The article is on the Producer Statement page.

[READ MORE](#)

Are you specifying the correct version of Codes and Standards – not necessarily the latest

Tamlyn Adams

This article falls on the release from Masterspec where Building Consent Authorities (BCAs) are requesting the revision of documentation to the latest Revisions. This however is not always correct.

When engineers undertake designs, they will follow a verification method, acceptable solution or an alternative solution. For a verification method to be compliant it is required to be cited in the New Zealand Building Code (NZBC). Until the NZBC is updated to reflect the specific updated code you are referencing, the new code would be considered an Alternative Solution.

Masterspec cites the version of the Standard as it is in the building code, so if you are requested to adjust your specifications by a BCA, refer them to this article first:

[READ MORE](#)

Are Small Consulting Firms Adequately Represented?

Bruce Tricker

Small businesses are defined by StatsNZ and others as having less than 20 employees. In 2021, 64% of professional, scientific and technical services employees or self-employed people worked in organisations with 19 people or less (Source: StatsNZ). It would be reasonable to suspect a similar percentage in consulting engineering. But this might not be apparent to Engineering New Zealand.

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Tips and Tricks for Structural Engineers

Martin Pratchett

Sometimes we don't hand knowledge down from generation to generation. We've accumulated some tips, tricks and rules of thumb from engineers. This will be updated as we receive more information. Now looking for tips and tricks from and for geotechnical engineers!

[READ MORE](#)

Upcoming EGP Webinars

The EGP has recently been rolling out a few great webinars for our members with a few other exciting ones lined up. Below are some webinars that may be of interest to our members coming up soon, otherwise please refer to the Engineering New Zealand link below for a full list of upcoming webinars:

Date	Webinar/Event
08/06/2023	Structural Engineering Across the Pacific Ocean - Webinar
14/06/2023	EGP- TBC
15/06/2023	Timber Design Society 2023 Series 5 - Webinar
16/06/2023	NZIGE Technical Webinar – Emissions Reporting

22/06/2023	SESOC Conference – Event Christchurch
27/06/2023	Geotechnical Engineering Practise Modules
12/07/2023	EGP- TBC
02/08/2023	Maintaining your Chartership: Reassessments

As a voluntary committee, we want to bring you quality content to support your work as a General Practitioner and we hope you'll join us for our next webinar. If you have ideas for future webinar topics, please get in touch, we would love to hear from you.

If you missed any of the previous EGP webinars, you can watch it through the link below:

[**READ MORE**](#)