



Queensland

IPWEA

INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA

IPWEAQ ANNUAL CONFERENCE 2021 HANDBOOK

IN PARTNERSHIP WITH CAIRNS REGIONAL COUNCIL

**Cairns Convention Centre,
12 – 14 October 2021**

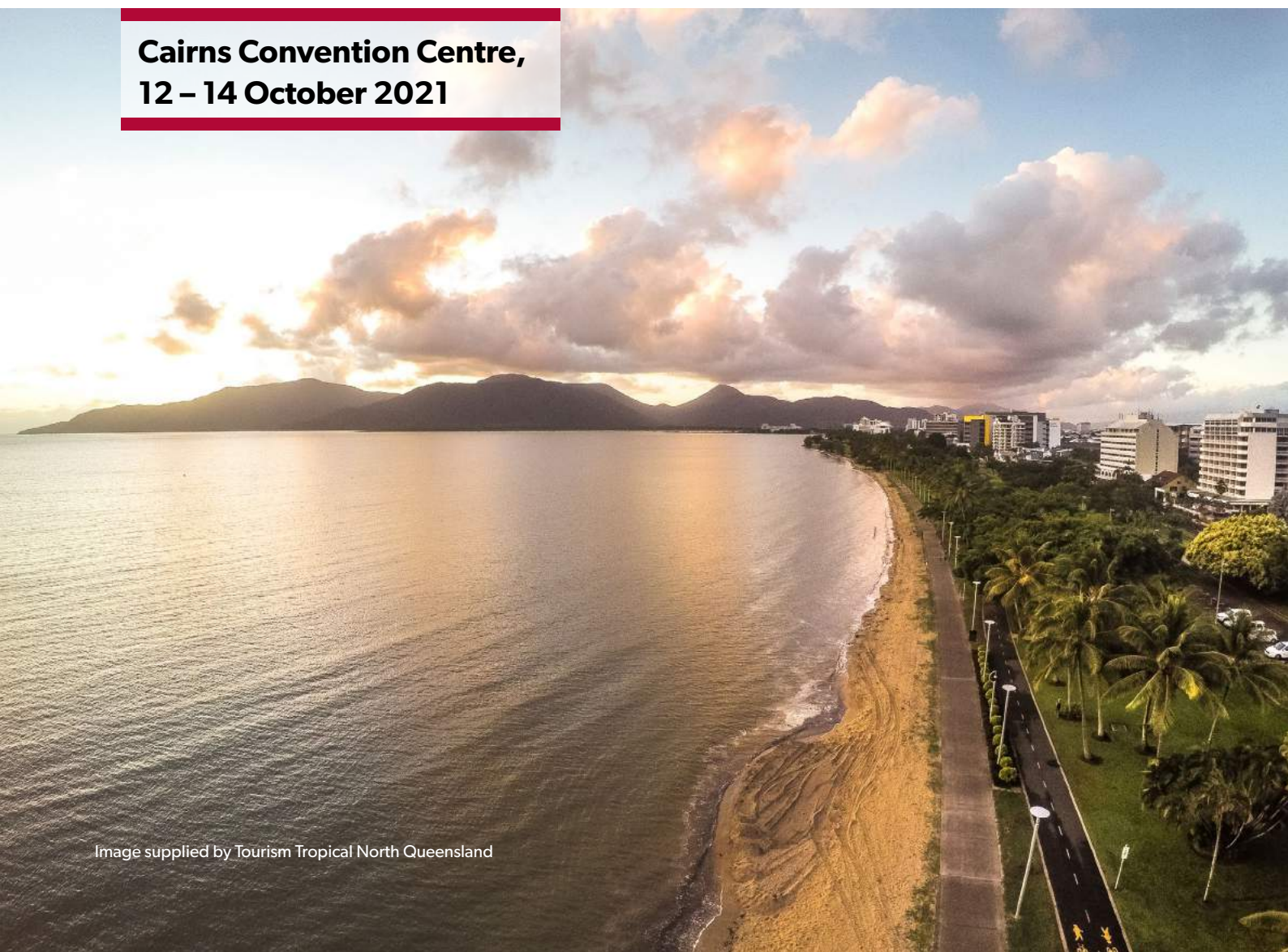
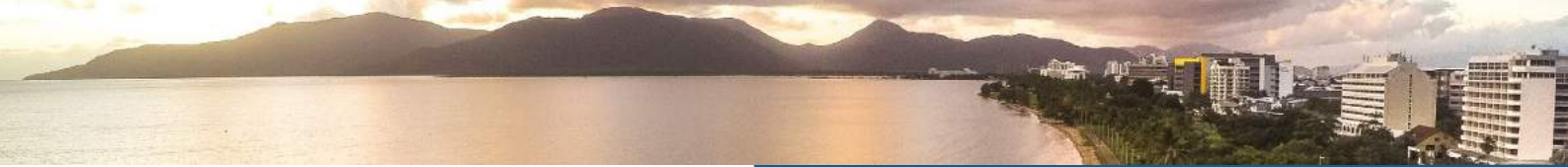
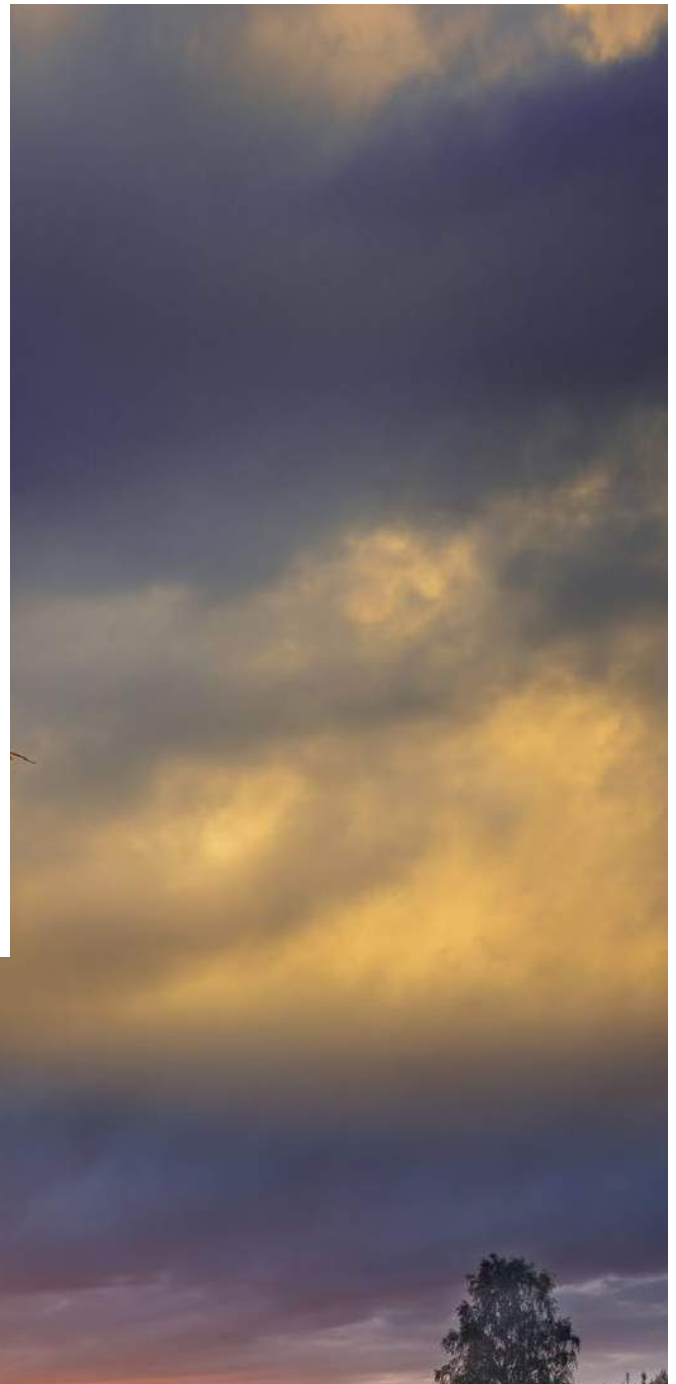


Image supplied by Tourism Tropical North Queensland



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Queensland

IPWEA

INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA



RURAL AID

PRESIDENT'S
CHARITY



RURAL
(aid)

Welcome

MESSAGE FROM CAIRNS CR BOB MANNING OAM

Welcome to Cairns and Tropical North for the annual Institute of Public Works Engineering Australasia Queensland Conference.

It's been a hard year for this region, particularly for our tourism industry as we struggle to cope with the uncertainty and disruption brought on by the COVID-19 pandemic.

Taking that on board, Council acted quickly to implement a number of initiatives to boost our local economy and to create jobs, and a big component of that was to accelerate \$30 million of public works, including the \$28 million redevelopment of our city's most popular area for both locals and tourists, the Esplanade Dining Precinct.

I am thrilled that despite the issues surrounding travel, Cairns has been able to host the IPWEAQ Annual Conference and I hope that those attendees from out of town will get some time to enjoy what our region has to offer while they are here for the conference.

These conferences are valuable to those in the public works sector because they provide a forum to discuss the sorts of challenges we face in delivering community infrastructure in an ever-changing world. And keeping up with those changes requires out-of-the-box thinking, the constant pursuit of knowledge, and the acceptance that we need to learn how to do things differently.

As Mayor of Cairns, I warmly welcome you to our special part of the world and I look forward to opening the conference on Wednesday 13 October.

Have a wonderful stay, enjoy the hospitality and take some time to experience the wonderful environment that we have on our doorstep.



Cr Bob Manning OAM
Cairns Mayor



Welcome from the President



We are delighted to welcome you to #IPWEAQ21 at the Cairns Convention Centre, Cairns, 12 – 14 October 2021

The program this year starts Tuesday 12 October with two workshops facilitated by Dale Carnegie. The first workshop 'Communicate with Influence' is for our Emerging Professionals (those under age 35) and the second workshop 'How to engage with millennials and Gen X (for those over 35). Both workshops will be followed by a Welcome lunch.

We have three Technical Tours this year:

- City Centre Master Plan
- Cairns Southern Access Corridor Stage 3: E2G Project
- Cairns City Waste Facilities Tour

Our IPWEAQ Excellence Awards gala dinner and ceremony, sponsored by Premise, will take place Tuesday evening, the first night of the conference. Please note the dress code for this event is gala or business/cocktail attire. A record 100 nominations were received this year, so please join us for a night celebrating the achievements of our sector.

We are delighted to welcome Stephen Yarwood as our MC for 2021. Stephen is one of Australia's best-known and respected contemporary urban planners who consults internationally on future city trends, urban innovation, leadership and creating positive change. Prior to being Adelaide's Lord Mayor, Stephen worked in the state and local government in South Australia as a planner, researcher, educator and speaker. His planning experience is exceptionally diverse; from strategy to implementation on many large projects dealing with most land use types and a diverse range of environment, economic, community, design and development issues.

All delegates have been invited to this year's Women in Public Works Engineering (WPWE) Masterclass breakfast facilitated by Patricia O'Neill – CEO, Cairns Chamber of Commerce. Our keynote speaker in the opening session on Day 2 is Richard "Harry" Harris, SC, OAM, an Australian anaesthetist and cave diver who played a crucial role in the Thai cave rescue. A thrilling and powerful keynote not to be missed.

The 2021 Futures Challenge, sponsored by Reece Civil will include presentations from four University of Southern Queensland students. The winner this year will be announced at the conference close (Thursday 14 October). Delegates will be asked to vote for the best presentation using the conference app.

On Wednesday evening, we are hosting a 'not to be missed' Tropical Night, sponsored by RCPA. This is your chance to be completely immersed in your tropical Cairns surroundings amidst the World Heritage listed, Kuranda Rainforest.

Thursday morning, we will hear from keynote speaker Anthony Laye, a mentalist who is set to inspire you to become a better leader, influencer and communicator in a world that is constantly distracting us.

To conclude our conference, we invite you to join us for our closing ceremony onsite at the Cairns Convention Centre, but not before we close the conference with a bang, with this year's Great Debate, 'technology will make engineering redundant'. On the affirmative team: Stephen Bolden, Coordinator Design & Survey Services, Capital Projects Delivery, Design & Survey Services Unit Infrastructure Services for Cairns Regional Council, Janice Wilson, Director of Double Black Diamond Solutions and Cameron Ives, Professional Engineer for GenEng Solutions Pty Ltd. On the negative team: Jordan Maultby, Water Resources Team Lead for AECOM, Jo O'Brien, Qld Program Manager for Tonkin Consulting Pty Ltd and Justin Fischer, Manager Asset Engineering for Cassowary Coast Regional Council. Watch on as these two teams go head-to-head in what is always a robust discussion!

On behalf of the Board and the team at IPWEAQ, we look forward to welcoming you to Cairns for what will be a unique and memorable IPWEAQ Annual Conference.

Craig Murrell
IPWEAQ President

General Information

It is our pleasure to welcome you to the 2021 IPWEAQ Annual Conference

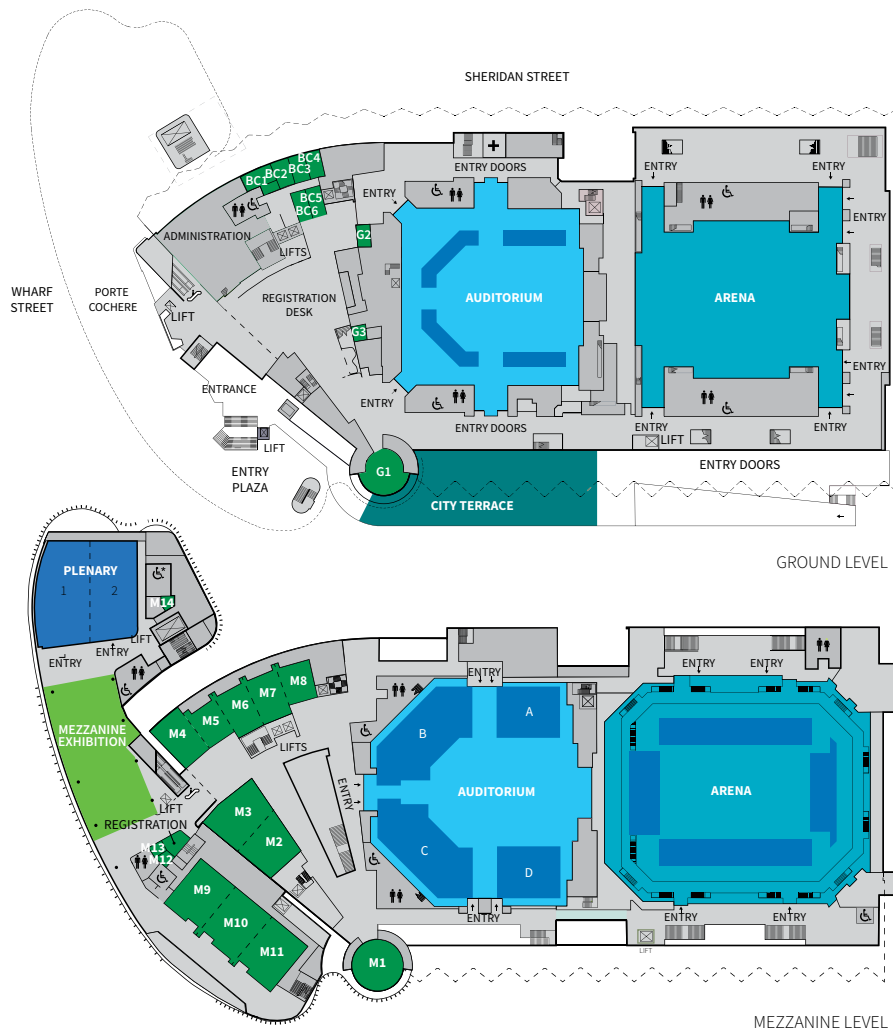
Conference Venue

Cairns Convention Centre
Sheridan St & Wharf St,
Cairns City 4870
www.cairnsconvention.com.au

The world class Cairns Convention Centre is everything you would expect from an international purpose-built venue located amidst nature's pristine playground. Please see the venue site plan below and note room allocations:

- Tech Tours: All to depart from the registration area
- Tuesday Workshops: M1 and M5-M8
- Wednesday & Thursday Workshops: Auditorium A&D

- Womens Masterclass: MR1
- Speakers prep room: G2
- All Plenary sessions: Auditorium B&C (Plenary)
- Breakout Rooms: Auditorium A&D, M1 and M5-M8
- Excellence Awards Gala Ceremony/Dinner: Auditorium
- AGM Wednesday 13 October (During lunch, IPWEAQ members only): MR1
- Registration desk
- Futures Challenge: Auditorium B&C (Plenary) (Challenge posters displayed in the registration area)
- Exhibitors: Main Exhibition (Arena)
- Catering: Main Exhibition (Arena)
- Coffee cart: Main Exhibition (Arena)



Registration

The registration desk is located in the Foyer. Please register early to collect your lanyard which must be worn at all times.

Registration desk opening times are:

Tuesday 12 October	10:30am - 11:00am for Workshops 12:30pm - 1:30pm for Tech Tours
Wednesday 13 October	6:30am - 8:30am
Thursday 14 October	7:30am - 8:30am

Dress Code

Conference program, welcome and closing functions: smart casual, no suits or ties.

Gala awards ceremony and dinner: gala or business/cocktail dress - up to you.

APP

Conference App:



1. Download the app: [The Event App by EventsAIR](#)
2. Enter event code **IPWEAQ21**
3. Log in using your email address and pin provided by email (and on your Lanyard)

In the app you will be able to review your agenda, search for and contact exhibitors, delegates and speakers, receive conference alerts, vote for the best paper and access the conference handbook.

Excellence Awards

Using the conference app, you will be able to select and reserve your place at a table. Invite colleagues and friends to join you for a memorable night. The Excellence Awards gala dinner will be held in the Auditorium Tuesday 12 October 2021.

Photography and Recording

A professional photographer will be present for the duration of the event. We will publish photos taken at the conference in our journal, *Engineering for Public Works*, on our website and in marketing materials that promote our members, IPWEAQ and our industry. If you do not wish to be photographed, please advise the photographer and move out of camera range. Otherwise, consent is presumed granted. Photographs will be taken of delegates, speakers and exhibitors during sessions, social functions and at the awards ceremony and dinner. If you would like to arrange a group photo of you and your colleagues, please be sure to arrange this directly with the photographer. JPL Media will be recording conference proceedings including all sessions, keynote presentations and plenary sessions. They will also conduct interviews with delegates, exhibitors and speakers. If you do not wish to be included in any videos, please advise the videographer and move out of camera range. Otherwise, consent is presumed granted.

Conference Sponsors

We wish to acknowledge our Principal Partners (Reece - Civil, Wagners, RCPA and Department of Transport and Main Roads), Enterprise Partners, exhibitors and sponsors for their ongoing support and contribution to our successes. Please see page 18 for a full list of our sponsors.

Exhibition

We are delighted to announce the #IPWEAQ21 trade exhibition is next door to the plenary space. All catering breaks will be served within the trade display area, as well as the pre-dinner drinks for the Excellence Awards gala.

AGM

Members are invited to attend the AGM, Wednesday 13 October 2021 12:30pm in MR1. Please note this is a MEMBERS ONLY event and you must be a financial member to attend.

President's Charity

You will have a chance to win from an array of different prizes including adventure tour and a choice of custom, first nations artworks and artifacts, painted locally. Raffle tickets will be on sale when you register and during the Tropical Night function. Tickets are \$5 each or five for \$20. Cash or EFTPOS.

WiFi

Network: CCC Convention
PW: Cairns2021

Dietary Requirements

If you have informed us of any special dietary requirements (vegetarian, vegan, coeliac etc), this information has been provided to the Cairns Convention Centre catering team and any external venues for social events you have registered to attend.

Please make yourself known to the catering staff during meal breaks and social functions. All efforts have been made to accommodate your requests.

Feedback

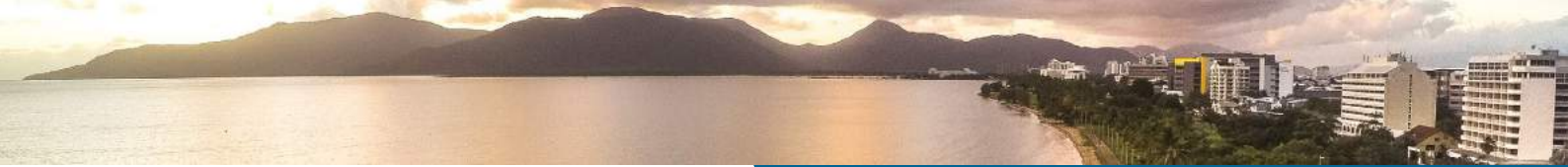
After the conference, we will email your certificate of attendance with CPD hours stated together with a conference survey form.

Your feedback is valued and will guide us for future events. Thanking you in anticipation.

Geoff Wilmoth Best Paper Award

Please vote after each presentation you attend so that we can collate results for a best paper award. The winner will be announced at the conference close during the President's Address.

Read more about the Best Paper award on page 17.



IPWEAQ ANNUAL CONFERENCE 2021

Conference Contacts

Monica Robertson	0481 266 355
Savannah Roberts	0413 438 846
Leigh Cunningham	0449 987 238
Craig Moss	0431 745 277

We look forward to welcoming you to the 2021 IPWEAQ Annual Conference!

Social Media

We encourage exhibitors and delegates to tag us when posting on social media:

LinkedIn	@IPWEA Queensland
Facebook	@IPWEAQ
Twitter	@IPWEAQ
Instagram	@ipweaq
Hashtag	#IPWEAQ21

Parking

The Cairns Convention Centre has 239 undercover parking spaces including 7 identified disabled car parking bays. Entrance to the car park is via Sheridan Street and the cost is \$7.00 per exit.

Bike Club

Join our Bike Club! #TeamIPWEAQ was formed in March 2019 with the inaugural bike ride/Technical Tour of the multi award-winning Brisbane Valley Rail Trail. We invite you, your colleagues, partners, family and friends to join TEAM IPWEAQ.

To learn more, or to join, please visit the IPWEAQ Team at registration.

Business Card Draws

Business Card prizes will be drawn Thursday afternoon. Be sure to enter at all participating exhibitor booths.



Technical Tours

Date:	Tuesday 12 October 2021
Registration:	12:30pm - 1pm
Depart:	1:30pm
Return to Venue:	4:30pm



Tech Tour 1: Cairns City Centre Master Plan

As a design and planning framework, the Master Plan reflects Council's Corporate Plan 2017-2022 and the community's values and aspirations for their city.

The Cairns City Master Plan tour includes a tour of the Courthouse building, streetscape treatments, Shields Street and Esplanade Dining Precinct, Esplanade Parklands and Florence Street enhancement.



Tech Tour 2: Cairns Southern Access Corridor Stage 3: E2G Project

The site tour provides attendees with the opportunity to see and understand the methodology and implementation of construction activities along with environmental controls, whilst seeing firsthand the challenges being addressed by the construction team within the local landscape.



Tech Tour 3: Cairns City Waste facilities tour

The tour includes a presentation at the rediscovery centre, walkway viewing, viewing of CRC Glass Processing Facility (from outside only), processing of glass for use in infrastructure applications, capped landfill viewing area and Landfill & Resource Recovery Precinct Viewing.

PPE requirements for the tour/viewing only require enclosed shoes. Due to the location of the facility (bordering mangrove wetlands) it is advisable to bring insect repellent.

Program Features



Dr Richard Harris

Dr Richard Harris SC OAM has become a frequent name in both national and international media after his heroic involvement in the Thai Cave rescue. His previous cave diving experience combined with his expert medical knowledge, saw him advise, overlook and navigate the treacherous and dangerous conditions to save the lives of twelve young soccer players and their coach.

In 2019, Richard 'Harry' Harris, alongside Dr Craig Challen SC OAM, was named as the first dual Australians of the Year, for their role in the rescue mission to save 12 boys from flooded Tham Luang cave in Thailand.

Having worked with AusAID in Vanuatu for two years, Dr Harris helped to provide much needed medical services in the developing nation's health system, including anaesthesia and intensive care. Dr Harris currently works at South Australia's emergency medical retrieval service, MedSTAR as an Adelaide anaesthetist.

Richard's diving career spans across thirty years and has seen him complete some record-breaking and daring expeditions. His passion for underwater exploration has seen him work on documentaries, feature films and with teams from across the globe in the roles of diver, underwater cameraman and medical support. He is a member of the Explorers Club of New York.

In 2011, his diving skills were called upon to rescue the body of his friend, after she became stuck underwater and ran out of oxygen. He was required to navigate eight kilometres of undesirable conditions filled with twisting underwater passageways to recover her body.

In both 2011 and 2012, Richard led a team of Australian divers to record depths of 194 and 221 metres in search of the source of the Pearse River. The mission's complexity and danger was all recorded for National Geographic.



Anthony Laye

In a world that is constantly distracting us and fighting for our attention, being a better leader, influencer and communicator requires a unique edge.

Anthony Laye's mission is to inspire that in you. And he does this by teaching you to live a more conscious life. Using his talent as a mentalist, Anthony shares his amazing business and mindset skills as he demonstrates the importance and power of being conscious. A dynamic, energetic and exciting speaker, Anthony engages, empowers and connects his audience, as he delivers the edge you need to help you develop a more cohesive team, build stronger business relationships, sharpen your sales speak or improve customer experience.

And when you start to live a conscious life, you'll find yourself being happier, more productive, and more business will be won and retained. Living consciously is your secret to standing out from the crowd, and being part of the top 1%.

Program Features



Stephen Yarwood – Conference MC

Passionate about cities and innovation, Stephen is one of Australia's best-known and respected contemporary Urban Planners who consults internationally on future city trends, urban innovation, leadership and creating positive change.

He is considered an international specialist on the future citizen and the relationships between people, technology, infrastructure, society, cities and quality urbanism. Stephen has worked, researched and attended events throughout Australia and in New Zealand, Taiwan, Europe, the Middle East, China, India and the USA. His LinkedIn profile has a detailed career summary and a list of endorsed skills and recommendations.

Stephen has a Bachelor of Arts in Planning, Graduate Diplomas in Regional & Urban Planning and Environmental Studies and an MBA from Adelaide University. He is an adjunct lecturer at the Adelaide University Business School and has worked for the University of South Australia, Canberra University and Flinders University. He has also lectured at universities in Japan, Singapore and Thailand and is an award winning member of the Planning Institute of Australia and a member of the exclusive Academy of Urbanism.

During his time as Lord Mayor (2010-2014), his emphasis on collaboration with the private sector and State Government delivered many outcomes and saw Adelaide recognised internationally as an innovative destination by Lonely Planet, National Geographic and The New York Times.

Prior to being Lord Mayor, Stephen worked in the South Australian Government and Parliament, in Local Government and internationally as a planner, researcher, educator and speaker. His planning experience is exceptionally diverse; from strategy to implementation on many large projects dealing with most land use types and a diverse range of environment, economic, community, design and development issues.



Program Features

Wednesday 13 October IPWEAQ Futures Challenge

Four students will prepare poster boards for display in the registration area. Delegates are asked to visit the displays and offer advice and feedback on the student's theses. Students will then deliver a 10-minute presentation in the main plenary, and delegates are asked to vote on the best presentation. The winner will be announced at conference close. Futures Challenge entrants:



Clare Ferguson, USQ

Clare is a fourth (but really seventh) year Bachelor of Engineering (Honours) Major Civil student, studying externally at the University of Southern Queensland. Her final research project investigates Queensland's Natural Disaster Recovery process and, in particular, how QLD councils can better utilise Queensland Reconstruction Authority (QRA) funding to build a more resilient road network. Current systems and processes result in repeat damage and repeated restoration to "pre-event condition". Clare works for Proterra Group as a technical officer and is heavily involved in the disaster recovery process with Goondiwindi Regional Council. Prior to this, Clare worked in Gladstone on a tailings dam where she lived and breathed her real passion – big yellow machines moving dirt.

Fun facts:

- Clare held the title of St Ursula's College Pi Reciting Champion for four years and can recite 180 decimals
- She is an avid CrossFitter and is a part-time CrossFit Coach
- She is passionate about travel and has visited 19 countries so far with an aim to reach 30 before she turns 30 – 5 years to go!



Ryan Ball, USQ

Ryan Ball is a final year Civil Engineering student from the University of Southern Queensland, presenting his undergraduate thesis on the shear strength properties of sand with fines for various moisture contents. Ryan recently accepted a graduate role at a Brisbane-based geotechnical engineering company. He previously assisted the engineering site team on the Fairbairn Dam Spillway Improvement Project near Emerald as an undergraduate site engineer and has a keen interest in delivering future infrastructure projects. This project provided a key role in his learning and development as an undergraduate engineer as it allowed the application of theoretical principles to assist in problem-solving.

Fun facts:

- I have a hobby-level interest in geology which was inspired by an enthusiastic lecturer at USQ. This includes reading before I travel anywhere and hiding heavy rocks in the backpacks of my hiking buddies
- I once announced my first-place victory in an Ikea furniture assembling race, only to realize with horror that the seat was installed back-to-front
- To fund my university studies, I worked nightshift as a manager at a popular McDonald's trapped between two nightclubs. This led to close relationships with the local police force and insights into team cohesion and safety in the workplace



Lucinda Sterling, USQ

Lucinda is in her fifth year of a Bachelor of Civil Engineering (Honours) and a Bachelor of Business & Commerce at the University of Southern Queensland. For the past three years, Lucinda has been working as an Intern at Toowoomba Regional Council, where she has discovered a passion for design. Lucinda is extremely motivated and eager to step into the industry as soon as she graduates and maximise every learning opportunity possible to kickstart a successful career.

Fun facts:

- I have a lovely little cat named Honey
- I would love to go to Dubai one day
- I cannot live without coffee

Program Features



Hadi Nourizadeh, USQ

Hadi Nourizadeh is a research student at the Centre for Future Materials (CFM), University of Southern Queensland. Hadi is working on a cutting-edge project entitled "improvement of ground control materials". This project aims to improve the capability of Australian manufactured rock bolts used for stabilising the surface and underground constructions such as slopes and tunnels. Hadi is a skilled geotechnical engineer in both experimental investigation and computer modelling of complex geotechnical conditions. Hadi's research interest has focused on the analysis and investigation of the underground opening's stability.

Thursday 14 October

**The Great Debate -
'technology will make engineering redundant'**

Team for the Affirmative:

- Stephen Bolden
*Coordinator Design & Survey Services
Capital Projects Delivery
Design & Survey Services Unit Infrastructure Services
Cairns Regional Council*
- Janice Wilson
Director, Double Black Diamond Solutions
- Cameron Ives
Professional Engineer, GenEng Solutions Pty Ltd

Team for the Negative:

- Jordan Maultby
Water Resources Team Lead, AECOM
- Jo O'Brien
Qld Program Manager, Tonkin Consulting Pty Ltd
- Justin Fischer
*Manager Asset Engineering,
Cassowary Coast Regional Council*



Image supplied by Tourism Tropical North Queensland

Conference Program

Day One | Tuesday, October 12, 2021

10:30 AM - 11:00 AM	Registration opens for workshops		
11:00 AM - 12:30 PM	Communicate with influence (Workshop for U35 delegates) Dale Carnegie (Meeting Room M1)	How to engage with millennials and Gen X (Workshop for over 35 delegates) Dale Carnegie (Meeting Room M5 - M8)	
12:30 PM - 1:30 PM	Lunch and registrations open for Tech Tours		
1:00 PM - 4:30 PM	Tech Tour One: Cairns City Centre Master Plan	Tech Tour Two: Cairns Southern Access Corridor Stage 3: E2G Project	Tech Tour Three: Cairns City Waste facilities tour
6:00 PM - 11:00 PM	Excellence Awards gala dinner and ceremony		

Day Two | Wednesday, October 13, 2021

6:30 AM - 8:30 AM	Registration opens (day two)		
7:00 AM - 8:15 AM	Women in Public Works Engineering Masterclass Breakfast Patricia O'Neill – CEO, Cairns Chamber of Commerce (Meeting Room M1)		
8:30 AM - 8:40 AM	Conference Introduction		
8:40 AM - 9:00 AM	Conference welcome Mayor: Cr Bob Manning OAM, Cairns Regional Council		
9:00 AM - 10:00 AM	Problem Solving in the Dark Dr Richard Harris SC OAM, 2019 Australian of the Year		
10:00 AM - 10:30 AM	Morning Tea in Exhibition Area (day two)		
10:30 AM - 11:10 AM	Queensland's path to disaster resilience Jimmy Scott, Queensland Reconstruction Authority		
11:10 AM - 11:50 AM	Next Generation infrastructure - but not as you know it. Building intelligence cities with smart citizens. Stephen Yarwood, Former Lord Mayor of Adelaide		
11:50 AM - 12:30 PM	Panel Discussion: How do we plan better for resilient and sustainable communities in vulnerable locations? Renata Berglas, ARRB Group Jimmy Scott, Queensland Reconstruction Authority Mayor Lyn McLaughlin, Burdekin Shire Council Glenda Kirk, Mareeba Shire Council		
12:30 PM - 1:30 PM	Lunch in Exhibition Area (day two)		
12:45 PM - 1:15 PM	AGM (during lunch) Meeting Room M1		

Day Two | Wednesday, October 13, 2021

1:25 PM - 3:00 PM	Stream 1: Asset Management Auditorium B&C	Stream 2: Road projects Meeting Room M5 - M8	Stream 3: Stormwater management Auditorium A&D	Stream 4: Water supply Meeting Room M1
	Stream group 1-4: Wednesday 13 October			
1:30 PM - 2:00 PM	Implementing & using an Asset Information Management System to better support Asset Management Processes and Decisions Gladstone Brohier <i>Technology One</i>	Tropical surprises and infrastructure success on the E2G project Tom Ryzak <i>E2G Joint Venture</i>	CFD for fish passage design – balancing weak-swimming fish needs and water rights Kyle Thomson <i>Water Modelling Solutions</i>	The Reinvention of the Ayr Drinking Water Supply to meet water quality and resiliency benchmarks Tayla Heuir and Coralie Mannea <i>Burdekin Shire Council</i>
2:00 PM - 2:30 PM	An Innovative Approach to Service Planning and its Impact on Asset Management Owen Harvey <i>CT Management Group</i>	Using Basegrade Stabilisation to Rehabilitate Thin Local Roads Scott Young <i>Stabilised Pavements of Australia</i>	Causeways - Risk Mitigation through Renewal Upgrade and Emergency Response Darren Carlson <i>Moreton Bay Regional Council</i>	Thargomindah Water Cooling Project Brian Jackson <i>Peak Services</i> Lew Rojhan <i>Bulloo Shire Council</i>
2:30 PM - 3:00 PM	Asset Damage Prevention: A Series of Client Case Studies John Lockton <i>PelicanCorp</i>	Broader Applications of Engineered Geosynthetic Systems for more cost-effective, time-efficient and sustainable construction in Roads and Airfields Zehra Kaya <i>Huesker Australia</i>	Bundaberg Regional Council Stormwater Management Strategy - A New Path for Council's Longstanding Challenges Jordan Maultby <i>AECOM</i> Dwayne Honor <i>Bundaberg Regional Council</i>	Contaminants of emerging concern for the urban water industry Dr Rob Fearon <i>qldwater</i>
3:00 PM - 3:30 PM	Afternoon Tea in Exhibition Area (day two)			
3:30 PM - 4:00 PM	Professional Practice Suzy Cairney, BPEQ			
4:00 PM - 5:00 PM	2021 Futures Challenge			
6:00 PM - 10:00 PM	Tropical Night Buses depart from Cairns Convention Centre at 5:30PM			

Day Three | Thursday, October 14, 2021

7:30 AM - 8:30 AM	Registrations open (day three)			
8:10 AM - 8:15 AM	Conference welcome (day two)			
8:15 AM - 9:15 AM	Effective listening, observing, communicating and building influence Anthony Laye			
9:15 AM - 9:45 AM	Is it a Waste Product or is it a Resource Material Renata Berglas, ARRB			
9:45 AM - 10:30 AM	The future of transport Kym Murhpy, Department of Transport and Main Roads			
10:30 AM - 11:00 AM	Morning Tea in Exhibition Area (day three) <i>Morning Tea sponsored by Peak Services & LocalBuy</i>			
10:55 AM - 12:30 PM	Stream 5: Project delivery Auditorium B&C	Stream 6: Road Surfacing Meeting Room M5 - M8	Stream 7: Network operations Auditorium A&D	Stream 8: Managing water and sewerage assets Meeting Room M1
	Stream group 5-8: Thursday 14 October 2021			
11:00 AM - 11:30 AM	Tully Grandstand Project - A different way of delivering Justin Fischer Cassowary Coast Regional Council	A resale contract like no other: How external factors united in unprecedented fashion Cameron Ives GenEng Solutions	Innovative community transport through collaborative partnership Nick Cooney, Don Pitt Sunshine Coast Council Kylie Grimley IIP Pty Ltd	Dynamic catchment risk assessment – innovative tools for water security decision-making Chris Shanks Tonkin and Taylor Ltd
11:30 AM - 12:00 PM	Adopting Innovative Engineering Approaches to Overcome Geotechnical Site Challenges: Castle Hill FRP Stairs Case Study Michael Kemp Wagners CFT	Presentation TBC Bernie-Anne Freeman Department of Transport and Main Roads	What can the transport sector learn from the water sector? Angela Fry GHD	How North East Water delivered Australia's first intelligent water network Paul Drummond North East Water Doug Van Gelder Esri Australia
12:00 PM - 12:30 PM	Beyond the Australian Standard – Is there a better contract for the delivery of public infrastructure? Michael Rochester McCullough Robertson Lawyers	Sustainable environmental and financial outcomes resulting from doubling the life expectancy of asphalt roads Kym Neaylon Centre for Pavement Engineering Education	Port to Project Logistics for Windfarms. Practical Assessment of impacts on transport infrastructure Nick Canto icubed Consulting	Technology advancements in the CCTV industry using AI and Automation Steve Latimer & John Phillips Interflow
12:30 PM - 1:30 PM	Lunch in Exhibition Area (day three) <i>Lunch sponsored by Department of Transport and Main Roads</i>			

Day Three | Thursday, October 14, 2021

1:25 PM - 3:00 PM	Stream 9: Road user safety Auditorium B&C	Stream 10: Planning and design Meeting Room M5 - M8	Stream 11: Asset data Auditorium A&D	Stream 12: Effective management of structures Meeting Room M1
	Stream 9-12: Thursday 14 October 2021			
1:30 PM - 2:00 PM	Improving pedestrian safety through Smart Crossings Janet Smith <i>Department of Transport and Main Roads</i> Kim Thomas <i>Integrate</i>	Enhancing project outcomes through the early consideration of constructability Adrian Vesnaver <i>Bellwether</i>	A Backbone of Well-Defined Asset Information Requirements (Including Classification and Assessment Guidelines) Enabling AI – Computer Vision and Digital Engineering Dallas Lee <i>Brisbane City Council</i>	Management of Structures with Concrete Halving Joint Carrie Lin and Dr Tim Heldt <i>Department of Transport and Main Roads</i>
2:00 PM - 2:30 PM	Cyclist Safety at Roundabouts – The Cairns Experience Stephen Bolden <i>Cairns Regional Council</i>	Trunk and non-trunk infrastructure: a rose by any other name Sarah Hausler <i>McCullough Robertson Lawyers</i>	Using AI for Sealed Road Maintenance Management – A Roads Alliance Initiative Stephen Hegedus <i>Shepherd</i> Aaron Meehan <i>South Burnett Regional Council</i>	Footpath and Cycleway – Best Practice Design and Construction Methods Kipp Richter <i>Danley</i>
2:30 PM - 3:00 PM	Lines save lives: Working towards a high performing line marking standard for Queensland roads Paul Gottke <i>Department of Transport and Main Roads</i>	Street Trees, Finding their place in the urban landscape Jason Reepsdorff <i>Bundaberg Regional Council</i>	Our Journey Towards Up-to-date, Accurate Data – Shared Across the Whole Business Sophie Geldenhuis and Dan Whitehouse <i>Proterra</i>	How to reduce the risk of Structural Steelwork failing in your projects John Gardner <i>Australian Steel Institute Structures</i>
3:00 PM - 3:45 PM	Closing Ceremony (during afternoon tea) City Terrace			
3:45 PM - 4:30 PM	The Great Debate: Technology will make engineering redundant			
4:30 PM - 4:45 PM	IPWEAQ President's Address and conference close			

Social Program

GALA CEREMONY AND DINNER

Venue
Cairns Convention Centre

Date
Tuesday 12 October

Time
6-7pm
Pre-dinner drinks
7-11pm
Dinner and Awards ceremony
3 course meal and drinks

Dress
Business/Cocktail

Sponsor
Premise



Premise

TROPICAL NIGHT

Venue
Rainforestation Nature Park

Date
Wednesday 13 October

Time
6-11pm
Dress
Casual - tropical shirts encouraged!

Sponsor
RCPA



CLOSING CEREMONY

Venue
Cairns Convention Centre

Date
Thursday 14 October

Time
3-3:45pm
Canapes and drinks

Dress
Conference casual



Geoff Wilmoth Best Paper Award



Who is Geoff Wilmoth?

Geoff Wilmoth was a founding member of IPWEAQ, chairing the inaugural meeting held in Rockhampton 7 October 1970 which proposed the formation of a Queensland local government engineer's association. He

was then elected onto the Institute's governing committee at the inaugural meeting on 2 October 1972.

Mr Wilmoth graduated from the University of Melbourne in 1934 with the degree of Bachelor of Civil Engineering. He was first employed as a temporary Assistant Draftsman by the Queensland Main Roads Commission in 1934 but resigned a year later to work as the assistant to CR Tranberg, Shire Engineer of Johnstone Shire Council. After experience in road and bridge survey, design and construction, he obtained the position of Engineer in Charge of loan subsidy and Main Roads works in the Town of Roma in 1936. He resigned after a year to work as Assistant Engineer to HE MacDonnell, consulting engineer of Gayndah, whose practice provided full engineering services for nine rural shires in the Burnett area.

Wilmoth served in the Australian Army. Upon demobilisation in 1945 he was appointed City Engineer of Bundaberg and in 1948 he was appointed City Engineer in Mackay.

Wilmoth joined the Toowoomba City Council in March 1953, the organisation with which he spent the remainder of his working life until his death in 1973. Shortly after joining the council, he was appointed City Engineer and Town Planner. He continued research into potential sites for Toowoomba's second water supply storage area. The results of stream flows and other surveys indicated Perseverance Creek was the most suitable site. Council officers proceeded with detailed surveys and design of the dam, pump tower and rising main to the Mt Kynoch reservoir. The construction of a water treatment plant at Mt Kynoch progressed after completion of the Perseverance Dam system in 1962.

The main water distribution system was augmented with steel mains and a new service reservoir at Mt Lofty, and a new mushroom shaped elevated reservoir at Picnic Point. These projects combined to form a very efficient water supply system and were constructed over many years, by which time preliminary investigations had begun into the Cressbrook Dam system, Toowoomba's third water supply storage area.

Wilmoth encouraged major sewerage works to ensure all of Toowoomba was sewered in as short a period as finances permitted. He formulated a 10 year program of accelerated sewerage reticulation. After the 10 year program was completed, further surveying, particularly for the expansion of sewerage reticulation, was carried out using aerial photography. The sewerage reticulation program also

required augmentation of existing sewers while the extended catchment areas necessitated major expansion of the Wetalla Sewage Treatment Plant.

Wilmoth also oversaw the elimination of the remaining red gravel roads and the kerbing and channelling of all new and existing bitumen roads in Toowoomba. Under his leadership stormwater and the city's creeks also received more consideration, including the undergrounding of five year storm flows in East Creek, Lake Annand and a retention lake.

Wilmoth's philosophy was simple: first things first. Water and sewerage was the number one priority, roads number two, stormwater and creeks number three and beautification projects as funds permitted. He devised programs for construction in sequence of needs. His well-conceived and well-presented reports resulted in Council approving most of his preferred programs. He was appointed to the National Capital Planning Committee in the late 1960s.

Mr Wilmoth passed away on 8 April 1973. He was acknowledged for his service at the first Annual General Meeting of the Institute held 1 October 1973 and it is recorded that, 'Geoff will be long remembered and revered by all of his engineering colleagues and it would be fitting if some tangible form of recognition of his service to the community could be instigated by this Association.'

The Geoff Wilmoth award for the best paper delivered at our state conference continues 43 years later in his honour.

Last year's winner

John Tannock

EJ Tannock and Associates

Installation of Oivi/Gorari Battle Monument (PNG)

2021 Winner

The winner of the Geoff Wilmoth Best Paper award will be announced during the President's Address at the conference close on Day 3. The winner will receive a complimentary registration plus travel and accommodation to attend the IPWEA NZ conference in 2022. The winner will also have an opportunity to deliver their presentation at that event.

Our Sponsors

PLATINUM



GOLD



SILVER



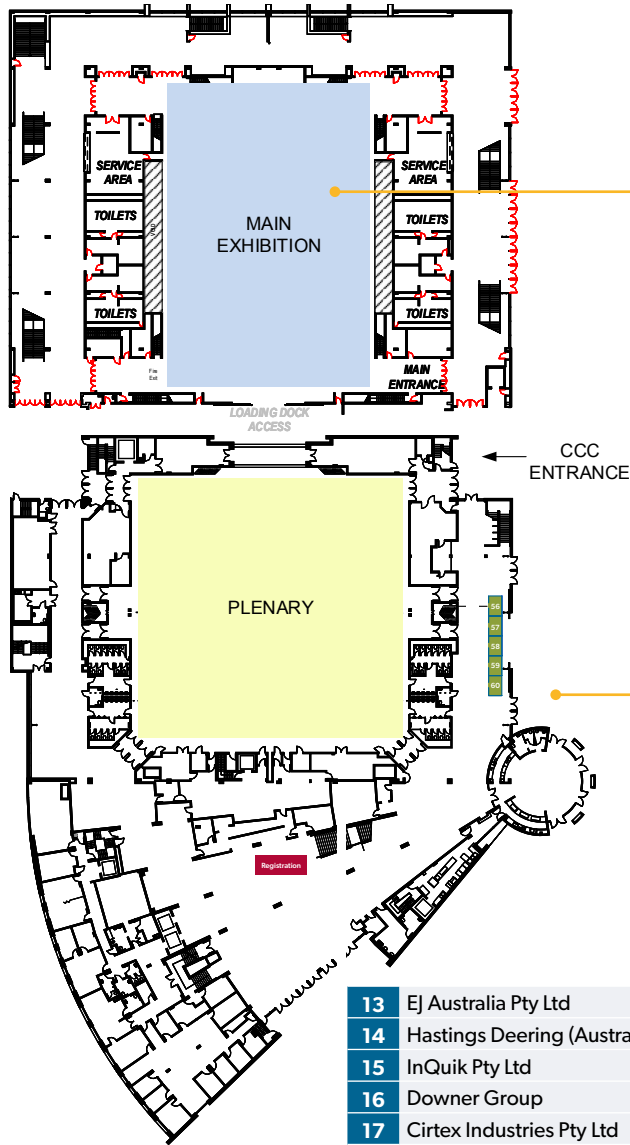
BRONZE



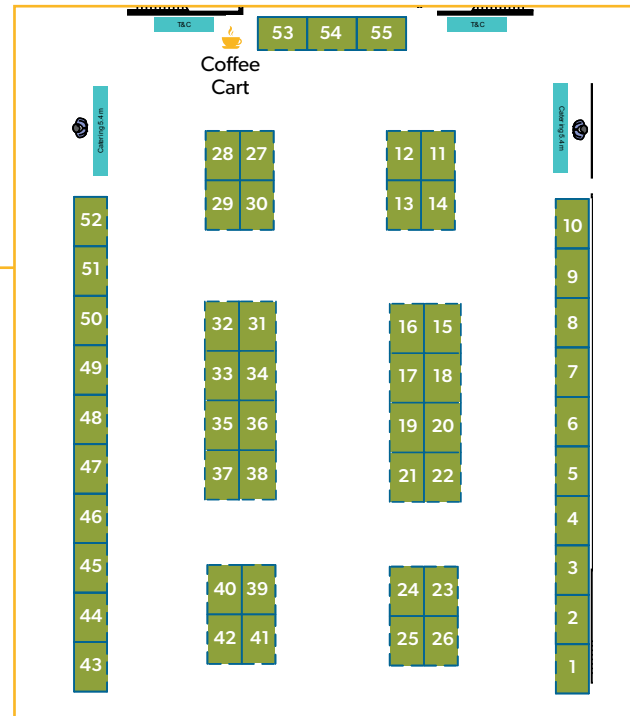
EXCELLENCE AWARDS



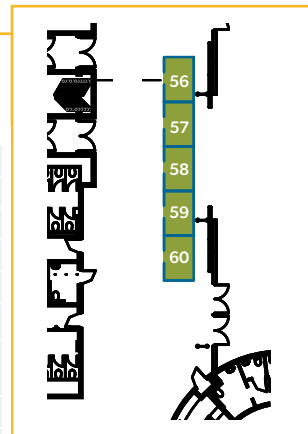
Our Exhibitors



1	Leading Roles
2	Boral
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7	Holcim/Humes Australia
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25	Interflow
26	Danley
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46	Stabilised Pavements of Australia
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53	McArthur
54	Proterra Group Pty Ltd
55	Pavement Management Services
56	Innovzyze
57	Townsville City Council
58	ETS Geotechnical
59	Netstar
60	SMEC Australia

Councils and Organisations

We are pleased to welcome delegates from the following council's and organisations to #IPWEAQ21:

Councils:

- Aurukun Shire Council
- Banana Shire Council
- Barcaldine Regional Council
- Brisbane City Council
- Bundaberg Regional Council
- Burdekin Shire Council
- Burke Shire Council
- Bulloo Shire Council
- Cairns Regional Council
- Carpentaria Shire Council
- Cassowary Coast Regional Council
- Central Highlands Regional Council
- Charters Towers Regional Council
- City of Gold Coast
- City of Ipswich
- Cook Shire Council
- Croydon Shire Council
- Douglas Shire Council
- Fraser Coast Regional Council
- Flinders Shire Council
- Gladstone Regional Council
- Goondiwindi Regional Council
- Isaac Regional Council
- Kowanyama Aboriginal Shire Council
- Livingstone Shire Council
- Lockyer Valley Regional Council
- Logan City Council
- Mareeba Shire Council
- Moreton Bay Regional Council
- Mount Isa City Council
- Murweh Shire Council
- Noosa Shire Council
- Redland City Council
- Rockhampton Regional Council
- Scenic Rim Regional Council
- Shoalhaven City Council
- Somerset Regional Council
- South Burnett Regional Council

- Sunshine Coast Council
- Tablelands Regional Council
- Toowoomba Regional Council
- Torres Shire Council
- Torres Strait Island Regional Council
- Townsville City Council
- Western Downs Regional Council
- Winton Shire Council
- Whitsunday Regional Council

Organisations:

- AECOM Australia Pty Ltd
- Aileron Edge Pty Ltd
- Allroads Pty Ltd
- ARRB Group
- ARO Industries
- Assetic Australia Pty Ltd
- Aurald Australia Pty Ltd
- Australian Concrete Mats
- Australian Flexible Pavement Association
- Bellwether
- Board of Professional Engineers of Queensland
- Boral
- Brad Finegan and Associates Pty Ltd
- C.R.Kennedy
- CARDNO Ltd
- Centre For Pavement Engineering Education
- Cirtex
- Civil Contractors Federation Queensland
- CT Management Group
- Dale Carnegie Australia
- Danley
- Department of Transport & Main Roads
- Desiderata Advisory
- Delnorth Group Pty Ltd
- Dileigh Consulting Engineers
- Diona
- Downer Group
- EA
- EJ Australia Pty Ltd
- ERSCON Consulting Engineers
- Esri Australia
- ETS Geotechnical
- ESP Australia Pty Ltd
- Everhard
- Far North Queensland Regional Organisation of Councils
- Fulton Hogan Industries Pty Ltd
- GBA Consulting Engineers
- GenEng Solutions Pty Ltd
- George Bourne & Associates
- GHD Pty Ltd
- Graf Australia
- Grenof
- GWR Civil Engineering Management
- HARO Civil Engineering
- Hasting Deering
- Holcim (Australia) Pty Ltd
- Huesker Australia Pty Ltd
- Humes
- IIP Pty Ltd
- In4 Advisory Ltd
- Ingal Civil Products
- Innovzye
- Instrada
- Interflow
- Integrate
- InQuik Pty Ltd
- Lackon
- Leading Roles
- LGIASuper
- Local Buy
- LO-GO Appointments
- McArthur Management Services
- McBerns
- McCullough Robertson Lawyers
- National Heavy Vehicle Regulator
- Nepean/Weldlock
- Netstar Australia
- Newlands Group
- Norton Rose Fulbright Australia
- Objective Leader
- Odour Technologies
- On Country Roads Civil & Mining (ALLROADS)
- Orion Project Consulting
- Orion Solar

- Pavement Management Services
- Peak Services
- PelicanCorp
- Project Delivery Managers
- Project Services NQ Pty Ltd
- Projex Partners Pty Ltd
- Proterra Group Pty Ltd
- Queensland Reconstruction Authority
- QLD Water
- RCPA
- Redfrost Pty Ltd
- Reece Civil
- Regional Development Australia Tropical North
- Rehau Australia
- Retex Pavement Services
- RPQ Group
- Saferoads
- SGQ
- Shepherd Services Pty Ltd
- Shoalhaven City Council
- Signfix Australia Pty Ltd
- Smarttech Australia
- Solutions in Transport
- SpelStormwater
- Spencer Civil Pty Ltd
- St George Project Services Pty Ltd
- Stabilised Pavements of Australia
- SuperSealing
- TechnologyOne
- The Bridgeman Group
- Thompson Consulting Engineers
- Tonkin Consulting Pty Ltd
- TRC
- Trimble
- University of Southern Queensland
- Viadux
- Vinidex Pty Ltd
- Wagners CFT Manufacturing Pty Ltd
- Water Modelling Solutions
- Wave International Pty Ltd
- WR & CA Paulger

Excellence Awards

People Categories

Join us at the 2021 Excellence Awards as we celebrate the people who deliver the projects that make Queensland great.

Tuesday 12 October 2021
Cairns Convention Centre

Pre-dinner drinks **6pm**

Dinner and awards ceremony **7pm to 11pm**

Dress **gala or business/cocktail style dress**

- Engineer of the Year
- Woman in Engineering
- Young Engineer of the Year
- Team Member of the Year
(non-engineers and includes Supervisors, Works Officers and other support staff)



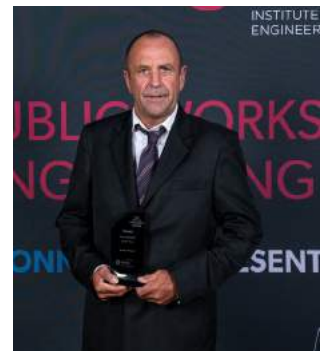
2020 Engineer of the Year
Ged Brennans
Managing Director,
GenEng Solutions



2020 Woman in Engineering
Tiffany Parker
Senior Structural Engineer,
City of Gold Coast



2020 Young Engineer
Brianna Barnett
Senior Works Manager,
Western Downs
Regional Council



**2020 Team Member
of the Year**
Lenny Wright
Program Coordinator
Construction,
Western Downs Regional Council

Project Nominations

Asset Management

Asset Rationalisation	Cassowary Coast Regional Council
MBRC Green Infrastructure Portfolio - Asset Management Plan	Moreton Bay Regional Council
Total Asset Management Strategy Project (TAMS)	South Burnett Regional Council, GenEng Solutions, ATC Consulting
Asset Physical Condition Inspections	Central Highlands Regional Council
Sustainable Road Pavement Management Plan	City of Gold Coast Council
The Strategic Local Government Asset Assessment Project	National Heavy Vehicle Regulator
Bundaberg Regional Council Stormwater Management Strategy	Bundaberg Regional Council AECOM

Coastal Engineering

Holloways Beach Stabilisation	Cairns Regional Council / BMT / GHD
Redcliffe, Scarborough Cliffs Stabilisation Project	Moreton Bay Regional Council
Maroochy Groyne Project	Sunshine Coast Council
Surfers Paradise Sand Backpass Pipeline Project	City of Gold Coast

Environment & Sustainability

Sunshine Coast Council - Road Reseal & Rehabilitation Program FY 20/21	Sunshine Coast Council
Wildlife Awareness Monitors	Brisbane City Council
Carbonmastic SMA 7 Asphalt trial	City of Gold Coast and Austek Asphalt
Southern Suburbs Rising Main	Townsville City Council, BMD
Kleinton Waste Management facility	Toowoomba Regional Council

Innovation

Palm Beach Foamed Asphalt Trial - QLD First	City of Gold Coast and Stabilised Pavements Australia
Freight Priority System	City of Gold Coast
Bundaberg Regional Council Stormwater Management Strategy	Bundaberg Regional Council AECOM
The AI enabled Stormwater Inspection System	Moreton Bay Regional Council
The Strategic Local Government Asset Assessment Project	National Heavy Vehicle Regulator
Maroochy Groyne Project	Sunshine Coast Council

Project Nominations

Thargomindah Water Cooling Project	Bulloo Shire Council, Peak Services, NRG Services
Kingsford Smith Drive upgrade	Brisbane City Council

Innovation & Sustainability in Water

Bundaberg Regional Council Stormwater Management Strategy	Bundaberg Regional Council AECOM
Total Asset Management Strategy Project (TAMS) (copy)	South Burnett Regional Council, GenEng Solutions, ATC Consulting
Thargomindah Water Cooling Project	Bulloo Shire Council, Peak Services, NRG Services
Urraween Reservoir - Floating Roof and Liner Replacement	Fraser Coast Regional Council

Projects Under 1 million

Welsh Street Footpath	Gladstone Regional Council
Sandgate Foreshore Traffic Management Enhancements	Brisbane City Council
Cassy Lives Skate Park Upgrade	Gladstone Regional Council
Bundaberg Regional Council Stormwater Management Strategy	Bundaberg Regional Council AECOM
Renewal of the Amarina Culvert, Mooloolaba	Sunshine Coast Council/Interflow Pty Ltd

Projects 1 million to 2 million

Flinders River Crossing/Glentor Road	Flinders Shire Council
Labona Airstrip – Extension, widening and sealing of the Labona Airstrip	Wagners (Principal Contractor for Bravus)
Lake Moondara Stage 4 Pipeline Replacement	Newlands Group Mount Isa Water Board
Kowanyama Airport	Kowanyama Aboriginal Shire Council
2.Tobruk Memorial Drive Toowoomba Escarpment Lookout	Toowoomba Regional Council
Maroochy Groyne Project	Sunshine Coast Council

Projects 2 million to 5 million

Proserpine Main Street streetscape upgrade	Whitsunday Regional Council
Tennis Centre Roof	Cairns Regional Council - CAIRNS, QLD
Boyne Island Wastewater Treatment Plant Pond Relining and Pump Station	Gladstone Regional Council
Caboolture to Wamuran Rail Trail	Moreton Bay Regional Council

Project Nominations

Western Shires TMR Rest Area Upgrade Program	Proterra Group
Tummalville Road Bridge Replacement	Toowoomba Regional Council
Hughenden 4.3ML Tank construction	Flinders Shire Council
Gold Coast Oceanway - Palm Beach North	City of Gold Coast
Paroo Shire Council DRFA Project	Paroo Shire Council / Proterra Group
Murgon CBD Footpath Reconstruction	South Burnett Regional Council
CityLink Cycleway Trial	Brisbane City Council
Brisbane CBD Burst Mains Replacement	Urban Utilities
Orealla Crescent Bridge Replacement	Noosa Council
Thargomindah Water Cooling Project	Bulloo Shire Council, Peak Services, NRG Services
Atherton Water Quality Improvement Plan	Tablelands Regional Council

Projects 5 million to 10 million

Flinders River Alderley Crossing Bridge	Flinders Shire Council
Supply and Construction of Recycled Water Reuse Main and Southern Suburbs Rising Main – Cleveland Bay Purification Plant to Murray Sporting Complex Plus Branch to South Townsville	Newlands Group Townsville City Council
Cairns Court House Refurbishment	Cairns Regional Council
The Strategic Local Government Asset Assessment Project	National Heavy Vehicle Regulator
Tully Grandstand	Cassowary Coast Regional Council
Surfers Paradise Sand Backpass Pipeline Project	City of Gold Coast
The Mill at Moreton Bay water park and place space	Moreton Bay Regional Council

Projects 10 million to 20 million

East and West Creek Projects Toowoomba	Department Transport and Main Roads and Toowoomba Regional Council
Indoor Sports Centre - South Pine Sports Complex	Moreton Bay Regional Council
Hughenden Recreational Lake	Flinders Shire Council
Southern Suburbs Rising Main	Townsville City Council, BMD
Coondoo Creek Bridge Replacement Project	RoadTek
Kleinton Waste Management Facility	Toowoomba Regional Council

Projects Over 20 million

Indooroopilly Riverwalk	Brisbane City Council
Cairns Esplanade Dining Precinct	Cairns Regional Council
Quilpie Shire Council 2020 DRFA Project	Quilpie Shire Council / Proterra group
Exit 57 Intersection Upgrade	RoadTek
Toowoomba Regional Council Principal Depot	Toowoomba Regional Council

Road Safety Infrastructure

New 'No U-turn' signage	Brisbane City Council
SAMs for School	Brisbane City Council

Community Road Safety

School Traffic Management Plans and Improvements	Brisbane City Council
Broadbeach 30 km/h Area Speed Zone	City of Gold Coast
Pedestrian and Cycle Network Improvement Plan - Bli Bli State School Precinct	Sunshine Coast Council
Local Government Temporary Traffic Management Harmonisation Initiative Project	Toowoomba Regional Council

Employer of the Year (Private Sector)

GHD - Toowoomba office	GHD
Proterra Group	Proterra Group
St George Project Services Pty Ltd	St George Project Services Pty Ltd
Tonkin	Tonkin

Employer of the Year (Public Sector)

Department of Transport and Main Roads	Department of Transport and Main Roads
Moreton Bay Regional Council - Culture Change Program	Moreton Bay Regional Council
Somerset Regional Council	Somerset Regional Council
Tonkin	Tonkin



See all our nominees in the
2021 Excellence Awards
Commemorative Book!

About IPWEAQ

IPWEAQ is the peak body representing those actively involved in the delivery of public works and services in Queensland.

Our purpose is to enhance the quality of life for all Queensland communities by advancing the skills, knowledge and resources available to those involved in the planning and provision of public works and services.

Our History

A meeting, chaired by Geoff Wilmoth was held in Rockhampton 7 October 1970 proposing the formation of a Queensland local government engineer's association. The inaugural meeting of the Local Government Engineers' Association of Queensland (LGEAQ) was held at Southport, on 2 October 1972, attended by approximately 50 engineers from various local authorities. TJ (Jim) Abbiss was elected as our founding President.

The name of the association was changed in 1999 to the Institute of Public Works Engineering Australia, Queensland then again in 2015 to the Institute of Public Works Engineering Australasia, Queensland.

Our Board



Craig Murrell
President



Angela Fry
Vice President



Sarah Hausler
Board Member



Trevor Dean
Board Member



Celisa Faulkner
CQ Branch President



Glenda Kirk
NQ Branch President



Raad Jarjees
SEQ Branch President



Andrew Johnson
SWQ Branch President

Our Chief Executive Officer



Leigh Cunningham
07-3632 6810
Leigh.Cunningham @ipweaq.com

Queensland Water Directorate (*qldwater*)

In 2003, the Institute established the Queensland Water Directorate to provide services to the urban water and sewerage industry. **qldwater** is a registered business of IPWEAQ.

Registered Charity

IPWEAQ is a registered charity with the Australian Charities and Not-for-profits Commission (ACNC)



President's Charity

IPWEAQ presidents nominate a charity for members to support during their term. Craig Murrell has chosen Rural Aid Australia



IPWEAQ Partners

PRINCIPAL PARTNERS



Queensland
Government



civil



ENTERPRISE PARTNERS



Subscribers



iMPACT

NATIVE TITLE & CULTURAL HERITAGE PORTAL AND RECORD KEEPING TOOL

IPWEAQ's new native title and cultural heritage portals help you comply with the law and avoid acts that will impact on cultural heritage and native title including impairment and extinguishment. The portals establish a methodical, documented, robust process and establish that an appropriate level of thoroughness was applied in determining whether or not to proceed with works.

Section 51(1) Native Title Act 1993 - an entitlement on just terms to compensate native title holders for any loss, diminution, impairment or other effect of the act on their native title rights and interests.

i M P A C T

i ntegrated
M anagement
P ortal for
A ssessment of
C ultural heritage and native
T itle

SUBSCRIPTIONS

Subscriptions now open for the first year of iMPACT!

Annual Subscription	Plus GST
One-off Project Assessment	\$1,000
Councils with less than 25,000 constituents	\$3,000
All other councils, utilities, consultancies and other industry entities eg mining, pastoral.	\$5,000

Public Works Technical Subscription Apply a 10% discount if your council is a PTWS subscriber.

1. Resource to undertake complex assessments in a logical framework with templates, lists, registers and geo-spatial mapping.
2. Detailed record keeping system which generates a PDF documenting all elements of the assessment including text, maps and photographic evidence which supports the reason for your decision.
3. User friendly portal with a step by step process to ensure infrastructure and other projects comply with legislation which will save you time and money.
4. Interactive site which links to the latest information in government and other databases.

Professional Development

Native Title and Cultural Heritage

Urban Planning

Construction Law

Construction Practices

Asset Management

Stormwater Drainage

Design Practices

Professional Practice

Traffic Engineering

Contract Management

Leadership

Finance for Technical Professionals

In-House Courses

PD packages

Continuing your professional development

All programs can be customised to meet your specific needs and delivered at your preferred location.

Contact Manager, Professional Development 📧 Tammi.Petre@ipweaq.com ☎️ 07 3632 6807

ADAC 5.0



New - XML validation tool available

Web based XML validation tool – XML data from 'as constructed' or design data can be validated to ensure the required works have been completed and captured correctly for each council.

ADAC is the Civil BIM (Building Information Modelling) for public works infrastructure. It is open source and adopted widely by councils and utilities across Australia.

ADAC (Asset Design as Constructed) is an open source data specification and transport format (XML) for the description and transmission of asset design and as constructed data.

Why adopt ADAC?

ADAC enables the easy, reliable and consistent exchange of asset design and as constructed data between asset constructors and asset managers.

ADAC provides for the automation of data entry from any source (once validated via the XML validation tool). This automated process is not a function of asset management software – ADAC is required to achieve this outcome.

ADAC data can be checked for errors, transformed and loaded into asset management systems in an automated and reliable manner and then used to populate asset component registers and Geographical Information Systems (GIS).

The ADAC framework offers consistent and accurate results saving time and costs.

Why is ADAC better than alternatives?

- ✓ It has a broader scope ie more asset classes.
- ✓ It contains more detail ie more attributes defined at a greater level.

- ✓ It is open source and independent of other platforms so you are not locked into a particular software solution.
- ✓ It is a language for describing assets rather than representing them.
- ✓ It represents the collective wisdom of our community of public works professionals expert in the management of assets.

What are the benefits of ADAC?

- ✓ Significant time and resource savings in the electronic processing of as constructed data.
- ✓ Improved consistency and accuracy of detailed asset data.
- ✓ Quality control checks on asset data for completeness and integrity.
- ✓ Beneficial for automated uploading of asset data to GIS, asset management databases and other registers.
- ✓ Transparent asset registration and valuation processes that deliver improved corporate governance.
- ✓ Capacity to reconcile donated assets with planning scheme requirements and infrastructure agreements.
- ✓ Potential to 'round-trip' asset data and related information to external customers in a consistent format.
- ✓ Property developers and consulting engineers experience consistent requirements from councils.

Benefits of Consortium Membership

- ✓ XML data from 'as constructed' or design data can be quickly validated to ensure the required works have been completed and captured correctly.
- ✓ Technical support from our ADAC forums and resource centre.
- ✓ Access to the Technical Reference Group. Contribute to the expansion of ADAC.
- ✓ Network of other ADAC users and forums which offer support and value-add to asset data processes.
- ✓ National recognition as an ADAC member.

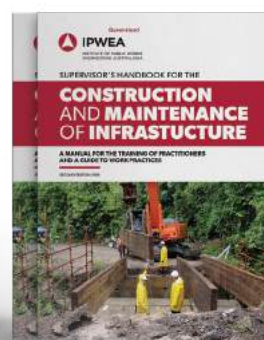
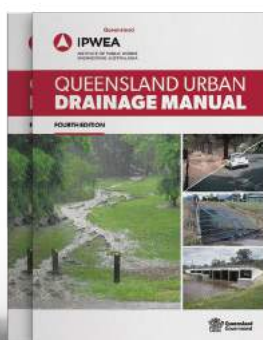
Size per constituency	Cost*
Councils with < 25,000	\$2,000
Councils with 25,000 to 100,000	\$4,000
Councils with > 100,000	\$7,000
Utility Providers	\$7,000
Other Entities	Contact IPWEAQ

* plus GST

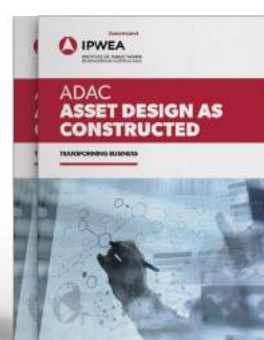
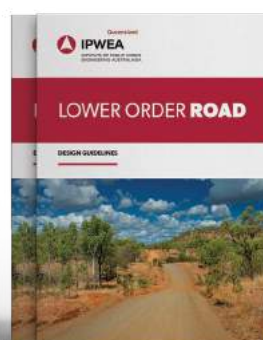
PUBLIC WORKS TECHNICAL SUBSCRIPTION



- ✓ Full access to Standard Drawings which can be shared with constituents **(value \$800 per individual user)**
- ✓ Discount for the multi-user version of the Queensland Urban Drainage Manual (QUDM) **(value \$140)**
- ✓ 10% discount on annual ADAC subscription **(value up to \$700)**
- ✓ Copy of Lower Order Road Design Guidelines, PDF **(value \$400)**
- ✓ Copy of the Supervisor's Handbook PDF **(value \$600)**
- ✓ 10% discount on all Professional Development programs for all staff
- ✓ One complimentary registration to the to the Annual Conference **(value up to \$2,000)**
- ✓ Your mayor, CEO and councillors receive a complimentary registration to the Annual Conference **(value \$2,000 per person)**
- ✓ Opportunity to include announcements and notices including job vacancies in 'Connect' our regular e-news service



**\$4,500
plus GST**



Contact Relationship Manager 📧 melissa.bradley@ipweaq.com ☎️ 3632 6803

Brisbane 2022



We invite you to join us for the 2022 IPWEAQ Annual Conference to be held at the Brisbane Convention and Exhibition Centre, 11 - 13 October 2022.

Brisbane Convention & Exhibition
Centre International Convention Centre
Glenelg Street, South Brisbane 4101
<https://www.bcec.com.au/>

The Brisbane Convention & Exhibition Centre sits at the heart of Brisbane's bustling cultural and entertainment precinct – South Bank. The Brisbane Convention & Exhibition Centre sits at the heart of Brisbane's bustling cultural and entertainment precinct – South Bank.

This iconic area is home to art galleries, museums and the city's popular performing arts centre.

Conference Loyalty Program

Delegates who attended #IPWEAQ21 are entitled to a 10% discount on their 2022 conference registration.

Delegates who attended #IPWEAQ20 and #IPWEAQ21 are entitled to a 20% discount on their 2022 conference registration.

Register early with Savannah.

No cancellation fees apply up to one month prior to the event and registrations are transferable to a colleague up to one week prior to the event.

Call for papers

**Call for Papers opens Early 2022.
Submit your abstract online
together with your bio and photo.**

Conference papers may be selected for publication in the issue of our quarterly e-Journal, *Engineering for Public Works*.

All conference papers will be uploaded to the IPWEAQ Knowledge Centre.

Contact Craig Moss and Monica Robertson for more information on the 2022 conference program.

We look forward to welcoming you to #IPWEAQ22 in Brisbane!



Queensland



IPWEA

INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA

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