



Queensland

IPWEA

INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA

IPWEAQ ANNUAL CONFERENCE 2019 HANDBOOK

IN PARTNERSHIP WITH BRISBANE CITY COUNCIL

**Royal International Convention Centre,
22 – 24 October 2019**





Contents

| | |
|--------------------------------|----|
| Welcome from the Mayor | 3 |
| Welcome from the President | 4 |
| Charity Auction | 5 |
| General Information | 6 |
| Technical Tours | 9 |
| Program Features | 10 |
| Conference program | 12 |
| Social program | 16 |
| Geoff Wilmoth Best Paper Award | 17 |
| Sponsors | 18 |
| Exhibitors | 19 |
| Outdoor Trade Displays | 20 |
| Councils & Organisations | 21 |
| Excellence wards | 23 |
| Project nominations | 24 |
| About IPWEAQ | 28 |
| Partners | 29 |
| Subscribers | 30 |



Welcome

Message from the Mayor of Brisbane

The city of Brisbane is thrilled to host the 2019 Institute of Public Works Engineering Australasia Conference. Over the past 14 years, I have seen Brisbane truly transform into a New World City and have overseen major projects, including Legacy Way and New Farm Riverwalk, that have changed the landscape of Brisbane for the better. Brisbane is a city with boundless opportunity and, as Lord Mayor, I remain focussed on building the critical infrastructure our city needs, while protecting our unique lifestyle and expanding Brisbane's green space.

Brisbane is the best city in the world so it's not surprising that we are experiencing unparalleled growth. Our \$171 billion economy is on track to grow to more than \$217 billion by 2031. That same year, our population is expected to have grown by 23% to nearly three million people. Infrastructure development is part of our vision to grow the Brisbane lifestyle and we are investing record amounts into new infrastructure while maintaining the high quality of our existing assets to ensure Brisbane remains a great place to live, work and relax.

We have a plan aimed at tackling traffic congestion, improving public and active transport as well as creating a healthier, more active city. Brisbane Metro is shovel ready and will halve travel times to ensure residents get home quicker and safer. We are investigating a much-needed travel action plan for residents in Brisbane's north west and continue to operate Australia's biggest bus fleet. We are also enhancing cross-river connectivity with our plan for five new green bridges and are close to introducing Brisbane's first double-decker City Cat.

Brisbane's fantastic lifestyle means more time spent relaxing, dining and being outdoors in our beautiful climate. We've recently finished redeveloping the heritage-listed Howard Smith Wharves and it has become a world-class waterfront destination. We're also spearheading the Victoria Park Vision to transform the existing golf course into the biggest new park Brisbane has seen in 50 years.

Exciting developments such as Cross River Rail, Queen's Wharf and a second airport runway are also bolstering Brisbane's reputation as a world-class destination while ensuring the Brisbane of tomorrow is even better than the Brisbane of today.

I look forward to seeing what inspiring and illuminating ideas come from the 2019 IPWEAQ Conference and wish you a fantastic time in Brisbane.



Adrian Schrinner
Mayor
Brisbane City



Welcome from the President



We are delighted to welcome you to #IPWEAQ19 at the Royal International Convention Centre (RICC), Brisbane, 22-24 October 2019.

Our program this year kicks off Tuesday 22 October with the launch of our Design Thinking session offering delegates under age 35 a new way of viewing and solving problems. This will be a highly beneficial program to advance the capabilities of our future leaders.

The Design Thinking session is followed by a special welcome lunch for our under 35s where they will meet their Conference Buddy. The Buddy Program connects a senior, experienced engineer (Guide) with a student, graduate or emerging professional. Guides offer assistance with the selection of streams and introductions to colleagues and peers enhancing early career networking opportunities. The networks that we build at IPWEAQ conferences make our community of public works professionals stronger than other professional communities.

We have four Technical Tours this year. All buses depart from RICC at 1.30pm Tuesday 22 October:

- Brisbane Airport Corporation
- Kingsford Smith Drive
- Komatsu Wacol Facility Tour
- Luggage Point Innovation

The Welcome Function, sponsored by A2K Technologies, will be held in the main plenary space at the RICC. This offers another excellent opportunity for you to network with fellow delegates and exhibitors.

We are delighted to welcome David Bartlett as our conference MC. David was Premier of Tasmania from 2008-2011. His time as Premier was characterised by bold reforms designed to improve Tasmania's educational outcomes and capitalise on Tasmania's natural advantages in water, food, high speed telecommunications and renewable energy. David will also deliver a keynote presentation on The Death of the Job, the Future of Work.

Our keynote speaker in the opening session on day two is Marita Cheng. Marita was the 2012 Young Australian of the Year and is a technology entrepreneur and women in technology advocate.

We are delighted to have the Minister for the Department State Development, Infrastructure, Manufacturing & Planning, the Hon Dick Cameron MP, launch the much-anticipated Street Planning & Design Manual. Please arrive early for this session.

On day three, the morning after the gala excellence awards ceremony and dinner, Mick Colliss will share his desire to

represent Australia. After trying numerous different sports from rugby to lawn bowls, he finally achieved his dream, just not in the way you might think!

Our final keynote speaker, Mr Hengky Tay has travelled from Singapore to present at this year's Annual Conference. Mr Tay, the Director Physical Planning Infrastructure for the Urban Redevelopment Authority of Singapore, will deliver a presentation on Planning for a Sustainable Singapore.

69 nominees will compete for the 2019 IPWEAQ Excellence Awards to be announced at the award ceremony dinner, Wednesday night. This is a wonderful night of celebration for our sector so be sure to join us!

The charity for my term as President is MS Queensland and I am pleased to confirm another charity auction will be held at the excellence awards dinner courtesy of Pickles Auctions with prizes provided by Pickles, with thanks.

The 2019 Futures Challenge will include these presentations from students from JCU, USQ, UQ and CQU. The winner this year will be announced at the excellence awards gala ceremony and dinner (Wednesday 23 October). Delegates will be asked to vote for the best presentation using the conference app.

On day three, we will host the inaugural Women in Public Works Engineering Master Class facilitated by Dr Jillian Kenny. This interactive session, 'diversity as a superpower' will offer delegates tangible takeaways including relevant and authentic development strategies.

The penultimate session on day three sees the launch of IPWEAQ's new Learning Hub, an online platform offering a range of professional development modules including soft skills which can be accessed remotely.

The topic for the Great Debate this year is, 'rural/regional (public works) engineers are more adaptable than their city counterparts' which is sure to generate a robust discussion. On the affirmative team: Glenda Kirk (Mareeba Shire Council), Andrew Johnson (Somerset Regional Council) and Ben Ash (George Bourne & Associates and IPWEAQ Ambassador). On the negative team, arguing city engineers are more adaptable, is Joe Bannan (Brisbane City Council), Paul Wilson (Logan City Council), Jessica Kahl (Aurecon and IPWEAQ Ambassador).

On behalf of the Board and staff at IPWEAQ, we look forward to welcoming you to Brisbane for what will be yet another memorable IPWEAQ event.

Seren McKenzie
IPWEAQ President

Charity Auction

Each year, IPWEAQ's President chooses a charity to support during their term. Seren McKenzie has chosen MS Queensland and we are delighted to offer you this opportunity to purchase an all-inclusive holiday to Melbourne at our charity auction!

Sponsored by Pickles, this Charity Auction is sure to be a highly contested prize. This magnificent Melbourne experience for two includes accommodation at the 5 Star InterContinental Melbourne The Rialto. Jaw-dropping luxury awaits you, during your two-night stay in a King Club InterContinental Suite, with full Club InterContinental access (including Breakfast, Canapes, Cocktails and Drinks daily).

On one night of your stay, you will enjoy a two-course dinner (including matching wine), served in renowned Restaurant 'Alluvial', with the Chef personally introducing the Main Course, at your table! In addition you will have a private, VIP Mixologist session in 'Market Lane Bar' (2019 Winner: TAA Vic Best Hotel Bar). Creating your own Cocktails, designed specifically for your personality and preferences, before the Bar opens to the public. You will receive a unique, hard-covered Monacle Travel Guide to Melbourne! To top it all off, Pickles are also contributing \$500 towards your flights to Melbourne to make this a truly memorable holiday!

During the IPWEAQ Excellence Awards gala dinner, Pickles have arranged an incredible lucky door prize for one lucky delegate – be prepared for someone to be surprised on the night.

Please bid generously for this incredible holiday, in support of MS Queensland and for the President's Charity.



General Information

We have pleasure in welcoming you to the 2019 IPWEAQ Annual Conference.

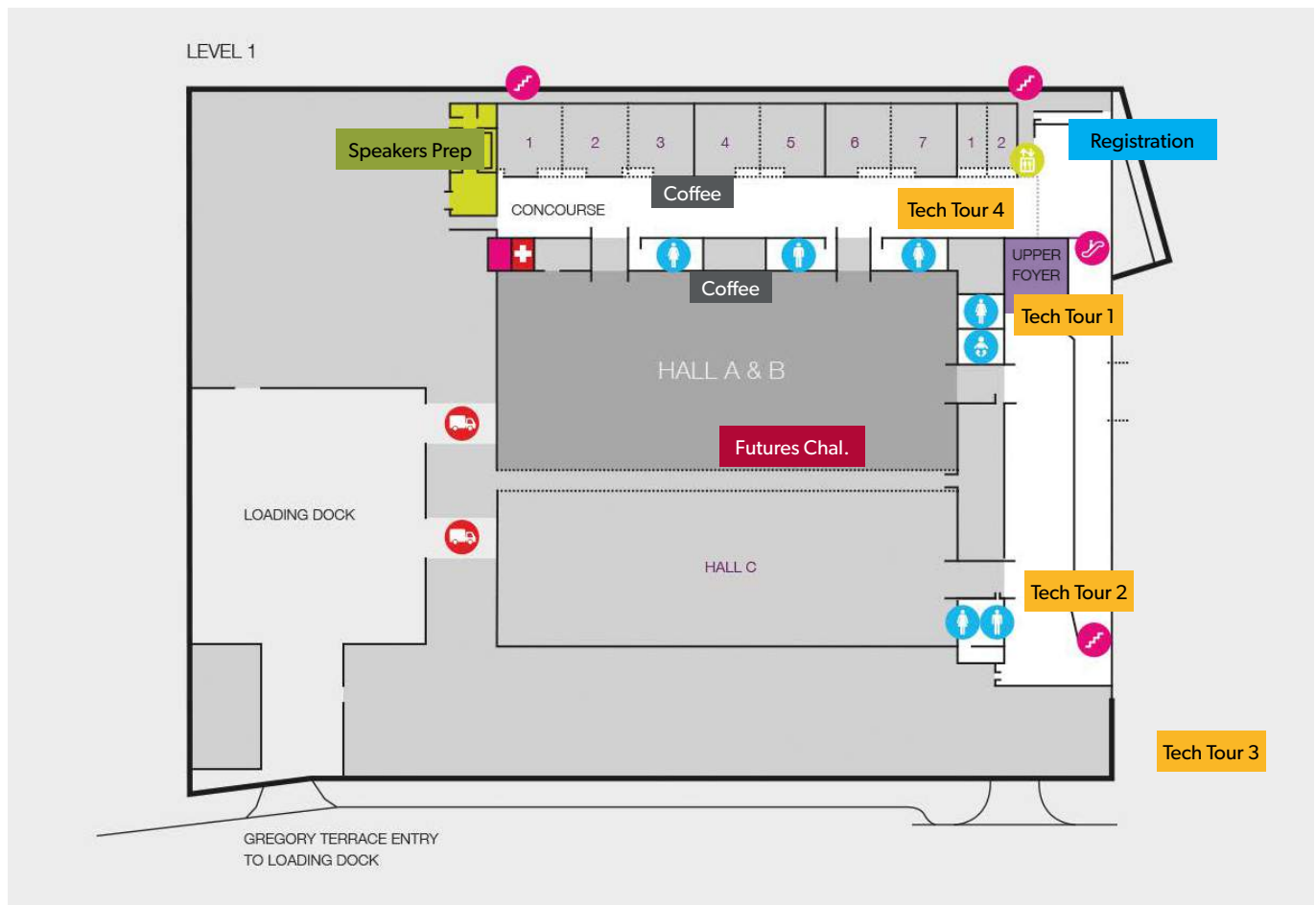
Conference Venue

Royal International Convention Centre
600 Gregory Terrace, Bowen Hills 4006
<https://www.brisbaneshowgrounds.com.au/>

The Brisbane Showgrounds is a world-class events and lifestyle precinct located just 1.5km from the city's CBD and 15 minutes from Brisbane Airport. It's home to the state-of-the-art Royal International Convention Centre (Royal ICC), a four and a half star Rydges Hotel and vibrant King Street dining hub.

Please see the venue site plan below and note room allocations:

- Tech Tours (please follow signs for your tour)
 - Tech Tour 1: Upper Foyer (Hall A end)
 - Tech Tour 2: Upper Foyer (Hall C end)
 - Tech Tour 3: Outside on plaza at Komatsu Display
 - Tech Tour 4: Concourse
- Speakers prep room: Green room (green)
- All Plenary sessions: Hall A & B
- Day Two & Three Breakout Rooms: Rooms 1&2, Rooms 3&4, Rooms 6&7
- Excellence Awards Gala Ceremony/Dinner: Hall C
- AGM Thursday 24 October (IPWEAQ members only): Rooms 1&2
- Registration desk (blue)
- Futures Challenge (red)
- Lounge areas for delegates (purple)
- Exhibitors (Hall A&B)
- Catering (Hall A&B)
- Coffee cart (grey)





IPWEAQ ANNUAL CONFERENCE 2019

Getting there from Brisbane Airport

From Brisbane Airport, take the airport link (M7) towards the city, exit at Fortitude Valley, turn right onto Hamilton Place and the turn right onto Gregory Terrace.

For public transport, take the Airtrain from the Brisbane Airport to Fortitude Valley station, exit onto Alfred Street, turn left onto Constance St and turn right onto Gregory Terrace.

Registration

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

Registration desk opening times are:

| | |
|----------------------|--|
| Tuesday 22 October | 10.30 – 11.00 for U35 Design Thinking Session 12:30 – 13:30 |
| Wednesday 23 October | 07:30 – 08:30 |
| Thursday 24 October | 07:30 – 08:30 |

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.

The Amazing Race

We are delighted to launch **The Amazing Race** for this year's Annual Conference!

The Race is on for all three days of the conference, offering incentives to visit exhibition booths and partake in challenges. You can trade in your accumulated points at any time at the redemption station with a range of prizes available.

Top performers will be announced at the Conference Close.

Watch [this quick video](#) to see how it works!

APPs

Conference App:



1. Download the app: [The Event App by EventsAIR](#)
2. Enter event code **19BNE**
3. Log in using your email address and pin provided by email (and on your Lanyard)

Within the App you will be able to review your agenda; select your table at the Excellence Awards Gala dinner, social function attendance, search for and contact exhibitors, delegates and speakers; receive conference alerts; and access the conference handbook.

The Amazing Race (Be Challenged) App:



1. Download the app: Go Team
2. Open the app & enable all the features to ensure access to all the content on the day.

On the day a QR code will be displayed on the screen, delegates will be able to scan it from within the Go Team app to download all the appropriate content.

Within the App you will be able to participate in The Amazing Race by completing challenges and view prizes.

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 Hall C on Wednesday 23 October with pre-drinks from 6pm in Halls A&B.

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 (Komatsu, A2K Technologies 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 #IPWEAQ19 trade exhibition is within the main plenary space and concourse.

All catering breaks will be served within the trade display area as well as the Welcome Function, and pre-drinks for the Excellence Awards Gala.

AGM

Members are invited to attend the AGM with special resolution, Thursday 24 October, 12:45pm in Meeting Rooms 1 & 2.

Please note that this is a MEMBERS ONLY event and you must be a financial member to attend.



IPWEAQ ANNUAL CONFERENCE 2019

President's Charity

We are delighted to have Pickles Auctions conducting a charity auction at this year's excellence awards with a range of prizes on offer.

When you register on Day One, please purchase an MSQ lapel pin for \$5 to wear during the conference. Our mobile EFTPOS machine will be available for your convenience.

Please see page 23 for this year's fines including late arrival at sessions with double demerit points the morning after the excellence awards gala dinner/ceremony.

WiFi

Royal ICC GUEST is a free low speed connection for web-based email and web browsing only.

1. Ensure your wireless enabled mobile device is turned on and has its wireless signal/switch activated.
2. Go to the Available Wireless Network Connection List as displayed on your mobile device.
3. Navigate to Royal ICC GUEST from the list and then select Connect.
4. Once it is connected, your internet browser will open at the Brisbane Showgrounds Wifi login page, and you will be directed to the select the I accept the terms of use button, followed by clicking on CONNECT Button, then follow the prompts to complete your connection.

Dietary Requirements

If you have informed us of any special dietary requirements (vegetarian, vegan, coeliac etc), this information has been provided to the RICC's 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 may 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.

Conference Contacts

| | |
|------------------|--------------|
| Monica Robertson | 0481 266 355 |
| Johanna Vanling | 0400 622 118 |
| Leigh Cunningham | 0449 987 238 |
| Craig Moss | 0431 745 277 |

We look forward to welcoming you to the 2019 IPWEAQ Annual Conference!

Social Media Handles

We encourage exhibitors and delegates to use our handles when posting to social media:

| | |
|----------|-------------------|
| LinkedIn | @IPWEA Queensland |
| Facebook | @IPWEAQ |
| Twitter | @IPWEAQ |

Parking

Parking is available at RICC. An Early Bird special of \$15 is available if you enter prior to 9am and depart after 2pm. There is also limited street parking available.

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 booth on the concourse.

Business Card Draws

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

Street Planning & Design Manual Consultation Workshop

IPWEAQ in partnership with the Department of State Development, Manufacturing, Infrastructure and Planning will launch the highly anticipated Street Planning & Design Manual (SPDM) Thursday 24 October at 8:30am. A consultative workshop will be held Friday 25 October, 8:30am - 1:00pm offering you an opportunity to contribute to the Manual.

If you are yet to register or require more information, please visit the IPWEAQ booth on the concourse.

| | |
|-------|---|
| Date | Friday 25 October |
| Time | 8.30am arrival for 9am start 1.00pm conclusion |
| Where | Rydges Fortitude Valley (across from the conference venue) |



Technical Tours

Tech Tour One: Brisbane Airport Corporation

Brisbane Airport is Queensland's major aviation and business hub, with over 23 million passengers a year. With 2,700ha of land, 425+ businesses employing 24,000 people, Brisbane Airport is a diverse and exciting place to visit. As Queensland's primary gateway, Brisbane Airport plays a vital role in connecting Queensland businesses with markets across the country and around the globe. This tour will provide delegates with an appreciation to the strategic planning for the sustainability of this precinct. They will also learn about the construction of the new runway including the challenges presented by low lying site with very poor strength soils likened to the consistency of toothpaste.

Delegates will need to wear flat shoes.

Tour highlights include:

- Overview of the Airport Master Plan
- Presentation on Brisbane's new runway (construction overview, airspace design, communications)
- Bus tour to Brisbane's new runway VIP viewing platform & Dryandra Road underpass

Tech Tour Two: Kingsford Smith Drive

The Kingsford Smith Drive upgrade will improve the capacity of the road to meet the future needs of the traffic network on one of Brisbane's busiest roads. Once completed, this project will create an entry statement to Brisbane, transforming one of the city's most significant routes into a vibrant urban corridor with the Brisbane River as the centrepiece. The upgrade involves widening the road from four to six lanes between Theodore Street at Eagle Farm and Cooksley Street at Hamilton. It also includes improvement works between Cooksley Street and Breakfast Creek Road at Albion.

This tour will provide delegates with an understanding of the completed works and also remaining works required for project completion. This will include an overview of the unique set of civil and structural construction challenges faced throughout the project.

Attendees must attend a visitor briefing and register onsite. All attendees must wear long pants, long sleeves and steel capped boots. Hard hats, vests, gloves and safety glasses can be supplied if required.

Tour highlights include:

- Learn about the project benefits and design highlights
- Hear about the geotechnical challenges
- Discover the strategies to manage construction impacts
- Bus tour of the project

| | |
|-------------------------|--------------------|
| Date: | Tuesday 22 October |
| Registration: | 12.30pm – 1.30pm |
| Depart: | 1.30pm |
| Return to Venue: | 4.45pm |

Tech Tour Three: Komatsu Wacol Facility Tour

The Komatsu Wacol facility is a one-stop shop for local customers, with the sale, service, assembly and remanufacturing of mining and construction equipment taking place on site. The site has six main buildings across 61,000 square metres of land. Three large central buildings house office, mining and construction machine assembly, service workshop and remanufacturing functions, with a fully enclosed wash bay building, boiler-maker and track press shop, and an extensive paint-shop building. Rainwater harvesting, energy efficient lighting, temperature controlling insulation and a bio-retention basin are all featured on site.

The site also features Komatsu's Condition Monitoring Services' oil-testing laboratories.

Tour highlights include:

- Tour of the Wacol Facility including the oil analysis laboratory
- Observe the assembly of mining and construction equipment taking place on-site

Tech Tour Four: Luggage Point Innovation

A sewage treatment plant isn't usually a 'must-see' for visitors, but Queensland Urban Utilities' Innovation Centre is putting Luggage Point on the world map. The centre is an old heritage-listed building at Luggage Point Sewage Treatment Plant, which has been transformed into a thriving hub of world-leading research. Delegates will be able to experience a research facility that is at the forefront of the advancement of water management systems, designing and testing ideas that benefit the environment and our communities. As Luggage Point is Queensland's largest treatment plant, it is one of the few places in the world where scientists can work side by side with operators, allowing them to turn research into reality right in the facility. Featuring the world's largest replica water main (1.2km long!) scientists are able to accomplish truly ground breaking work that transforms water networks both across Australia and overseas.

Tour highlights include:

- Learn about a diverse range of research and development initiatives
- Visit the largest QUU sewerage pump station (SP10) at Eagle Farm

Program Features



Marita Cheng

Marita Cheng was the 2012 Young Australian of the Year and is a technology entrepreneur and women in technology advocate. Marita Cheng is the founder and CEO of 2Mar Robotics, which makes a telepresence robot, Teleport, for kids with cancer in hospital to attend school, people with a disability to attend work and to monitor and socialise with elderly people. As well as telepresence robots, 2Mar does research and development in robotic arms, virtual reality and autonomous mapping and navigation.



David Bartlett

David was the 43rd Premier of the Australian State of Tasmania from 2008 until 2011. During his parliamentary career he also held the positions of Minister for Innovation, Science & Technology and Minister for Education & Skills. His time as Premier was characterised by bold reforms designed to lift Tasmania educational outcomes and capitalise on Tasmania's natural advantages in water, food, high speed telecommunications and renewable energy. For his work in promoting innovation and broadband infrastructure David was named by The Australian as one of Australia's Top 50 most influential people in technology.



Mr Tengky Tay

Hengky is currently the Director for Physical Planning, Infrastructure at the Urban Redevelopment Authority of Singapore (URA). He leads a team of planners and engineers, working closely with various government agencies in Singapore to formulate appropriate planning and policy responses and reviewing them regularly in a bid to tackle the increasing complexity and challenges of planning and implementing developments and supporting infrastructures in a built-up environment.



Mick Colliss

This is the story of Mick Colliss, a man who desperately wanted to wear the green and gold and represent Australia. After trying numerous different sports, from rugby to lawn bowls, he finally achieved his dream, just not in the way you might think. Mick's is a laugh out loud true story about mateship, having a go and never giving up.



Program Features

Wednesday 23 October IPWEAQ Futures Challenge

Four students from JCU, USQ, UQ and CQU will prepare poster boards for display in the trade exhibition and plenary 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 the gala awards ceremony/dinner that night.

Participating projects:



Lucy Bombardieri

JCU, Bachelor of Engineering (Honours)(Civil)
Mix Design of Paste Backfill for Underground Mining



Mark Tomarchio

USQ, Bachelor of Engineering (Honours)(Civil)
Industry considerations for truck stability at roundabouts



Brooke Young

UQ, Bachelor of Engineering (Honours)(Civil) / Bachelor of Business Management (Sustainability)
Design Proposal for Sustainable Futures Building at The University of Queensland



Benjamin Chappell

CQU, Bachelor of Engineering (Honours)(Civil)
recently graduated
Quantitative Analysis of Coal Fouling in the Stanwell Power Station Balloon Loop

Thursday 24 October

The Great Debate - 'rural/regional (public works) engineers are more adaptable than their city counterparts'

Moderator: David Bartlett

Team for the Affirmative:

- Glenda Kirk, *Director Infrastructure Services, Mareeba Shire Council*
- Andrew Johnson, *Director Operations, Somerset Regional Council*
- Ben Ash, *Civil Engineer, George Bourne & Associates and IPWEAQ Ambassador*

Team for the Negative

(city engineers are more adaptable):

- Joe Bannan, *Manager Asset Management, Brisbane City Council*
- Paul Wilson, *Principal Engineer Project Development, Logan City Council*
- Jessica Kahl, *Civil Engineer, Aurecon*

Affirmative Team



Glenda Kirk

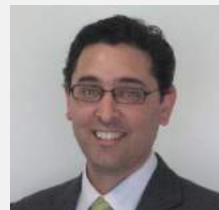


Andrew Johnson



Ben Ash

Negative Team



Joe Bannan



Paul Wilson



Jessica Kahl

Conference Program

Day One | Tuesday, October 22, 2019

| | | | | |
|---------------------|--|---|---|---|
| 10:30 AM - 11:00 PM | U35 Registration Opens | | | |
| 11:00 AM - 12:30 PM | Design Thinking Session (CASE Workshop for U35 delegates) Sponsored by Aurecon | | | |
| 12:30 PM - 1:30 PM | Under 35 Lunch Sponsored by Aurecon | Registration Opens and Lunch | | |
| 1:30 PM - 4:45 PM | Tech Tour 1: Brisbane Airport Corporation | Tech Tour 2: Kingsford Smith Drive | Tech Tour 3: Komatsu Wacol Facility Tour | Tech Tour 4: Luggage Point Innovation Centre (Water and Waste) |
| 5:00 PM - 7:00 PM | Welcome Function Royal International Convention Centre, Sponsored by A2K Technologies | | | |

Day Two | Wednesday, October 23, 2019

| | | | | |
|---|--|---|---|---|
| 7:30 AM - 8:30 AM | Registration desk open (day two) | | | |
| 8:30 AM - 8:40 AM | Introduction and Acknowledgement of Traditional Owners | | | |
| 8:40 AM - 9:00 AM | Official Conference Opening Lord Mayor Adrian Schrinner, Brisbane City Council | | | |
| 9:00 AM - 10:00 AM | Keynote Presentation - Marita Cheng, 2012 Young Australian of the Year Robotics in the Future of Work | | | |
| 10:00 AM - 10:30 AM | Morning Tea in Exhibition Area (day two) <i>Sponsored by SurePact</i> | | | |
| 10:30 AM - 11:10 AM | Keynote Presentation - Planning for a Sustainable & Resilient City Mr Hengky Tay, Singapore Urban Redevelopment Authority | | | |
| 11:10 AM - 11:50 AM | Keynote Presentation - David Bartlett, Former Premier of Tasmania The Death of the Job, the Future of Work | | | |
| 11:50 AM - 12:30 PM | Panel Discussion: Future Australia - planning for our communities in 2050 | | | |
| 12:30 PM - 1:30 PM | Lunch in Exhibiton Area (day two) <i>Sponsored by LGIAsuper</i> | | | |
| 1:25 PM - 3:00 PM | Stream 1: A Strategic Approach to Safer Roads <i>Sponsored by Point8</i> | Stream 2: Delivering Surface water Solutions | Stream 3: Planning for our community | Stream 4: Water Utilities <i>Sponsored by Interflow</i> |
| Stream group 1: Wednesday 23 October 2019 | | | | |


IPWEAQ ANNUAL CONFERENCE 2019

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| 1:30 PM - 2:00 PM | <p>Using AusRAP and ANRAM data and assessments to reduce casualty crashes on Queensland roads</p> <p>Michael Gillies Department of Transport & Main Roads</p> | <p>Thabeban master drainage strategy – a wholistic approach to reducing flooding and increasing development yield in flat terrain</p> <p>Nicole Bichel SLR Consulting</p> | <p>How should I decide? Development assessment and conditions</p> <p>Sarah Hausler McCullough Robertson</p> | <p>Queensland Urban Water Industry Strategy</p> <p>Trevor Dean Fraser Coast Regional Council</p> |
| 2:00 PM - 2:30 PM | <p>Safe System Assessments</p> <p>Kenn Beer Safe System Solutions Pty Ltd</p> | <p>Evolution in flood modelling based on the example of the Eudlo Creek crossing over the Bruce Highway</p> <p>Anne Kolega BMT Global</p> | <p>Delivering Place-based Infrastructure and Land Use Planning using Digital Twins</p> <p>Jason Natoli Integran</p> | <p>Understanding and optimising disinfection performance in a water supply network</p> <p>Neels Kloppers, Gladstone Regional Council</p> <p>Roger Crozier Stantec</p> |
| 2:30 PM - 3:00 PM | <p>Applying Safe Systems principles to raised priority crossings for pedestrian and cyclist paths</p> <p>Prue Oswin Sidelines Traffic</p> | <p>Waterways as social assets: filling the gap in waterway design guidelines</p> <p>Katie Fletcher ARUP</p> | <p>Assessment of pavement impacts of development: lessons from the Department of Transport and Main Roads</p> <p>Bradley Jones Premise</p> | <p>Townsville's water supply and sewerage demand by land use</p> <p>Darron Irwin City of Townsville</p> |
| 3:00 PM - 3:30 PM | Afternoon Tea in Exhibition Area (day two) | | | |
| 3:30 PM - 4:00 PM | Future innovations for road networks' Michael Caltabiano, ARRB | | | |
| 4:00 PM - 4:30 PM | Traffic Management Harmonisation Dr. Dan Sullivan, Austroads | | | |
| 4:30 PM - 5:15 PM | IPWEAQ Futures Challenge Sponsored by Premise | | | |
| 6:00 PM - 7:00 PM | Pre-Dinner Networking Royal International Convention Centre Sponsored by Leading Roles | | | |
| 7:00 PM - 11:00 PM | Excellence Awards Gala Dinner 2019 Royal International Convention Centre Sponsored by Leading Roles | | | |

Day 3 | Thursday, October 24, 2019

| | | | | |
|---------------------|--|--|--|---|
| 7:30 AM - 8:30 AM | Registration desk open (day three) | | | |
| 8:30 AM - 8:45 AM | Street Planning & Design Manual The Honourable Cameron Dick MP, Department of State Development, Manufacturing, Infrastructure and Planning | | | |
| 8:45 AM - 9:25 AM | Keynote Presentation - Mick Colliss, Author, Poet and Sports commentator The man who found a unique way to represent his country, Sponsored by Shepherd | | | |
| 9:25 AM - 10:05 AM | A resilient Queensland Brendan Moon, Queensland Reconstruction Authority | | | |
| 10:05 AM - 10:30 AM | Pretengineers Jack Aubort Ryan Loomans | | | |
| 10:30 AM - 11:00 AM | Morning Tea in Exhibition Area (day three) | | | |
| 10:55 AM - 12:30 PM | Stream 5: Sustainable Flexible Pavements | Stream 6: Innovation in Structures | Stream 7: Optimising Asset Data | Stream 8: Professional Practice |
| | Stream group 2: Thursday 24 October 2019 | | | |
| 11:00 AM - 11:30 AM | Getting better performance from bituminous materials - from waste to sustainability Rob Vos AAPA | Enabling better bridge management by understanding risk Dr Tim Heldt ARRB | A Council's transformational journey to allow improved asset management Anna Scott Gladstone Regional Council | The importance of dotting your "i's" and crossing your "t's" - a snapshot of key considerations for delivering your project Matt Bradbury McCullough Robertson |
| 11:30 AM - 12:00 PM | Optimising the use of construction and demolition waste in granular and stabilised pavement materials Lincoln Latter ARRB Stephen Hulme Department of Transport & Main Roads | Scenic Rim Council and InQuik flood resilience project for Brookland Bridge replacement Logan Mullaney InQuik | PANIC STATIONS! When State Government funding rules our asset condition assessment schedule Shelley Burchett Proterra Group Phil Herron South Burnett Regional Council | Intuition, infrastructure and overcoming bias James Thorne WSP Opus, Christchurch |
| 12:00 PM - 12:30 PM | Comparison of deep lift asphalt and foamed bitumen treatment options for heavily trafficked pavements Scott Young Stabilised Pavements of Australia | Toowoomba Second Range Crossing – constructing the viaduct Isaac Kirsch Department of Transport & Main Roads | Stormwater pipe condition assessment – if only animals could talk Clarissa Campbell Moreton Bay Regional Council | Board of Professional Engineers update Dawson Wilkie, Board of Professional Engineers |
| 12:30 PM - 1:30 PM | Lunch in Exhibition area (day three) - (12:45 – 1:15, AGM with special resolutions) | | | |

IPWEAQ ANNUAL CONFERENCE 2019

| | | | | |
|-------------------|--|---|---|---|
| 1:25 PM - 3:00 PM | Stream 9: Effective Project Delivery | Stream 10: Sustainable Asset Management | Stream 11: Community Projects | Stream 12: Women in Public Works Engineering Master Class <i>Sponsored by GHD</i> |
| 1:30 PM - 2:00 PM | Logan Enhancement Project – delivering innovative solutions to overcome the challenges of upgrading an existing motorway Andrew Richardson <i>Transurban Queensland</i> | Managing the cost of local government services Rachel Vagg <i>Queensland Audit Office</i> | Resurrecting an Australian icon: rebuilding the Waltzing Matilda Centre in outback Queensland Brian Jackson <i>Peak Services</i> | Masterclass – Diversity as a superpower. Part one Facilitator: Dr Jillian Kenny |
| 2:00 PM - 2:30 PM | North Burnett Regional Council takes a new approach to road service delivery Darren Shepherd <i>Shepherd Services</i> Justin Kronk <i>North Burnett Regional Council</i> | Adaptive asset management: a pathway to the evidence-based and sustainable management of complex infrastructure assets Ben Penhallurick, <i>Renew Solutions</i> James Coathup, <i>Renew Solutions</i> | Brisbane Valley Rail Trail – Australia’s longest trail Andrew Johnson <i>Somerset Regional Council</i> | Masterclass – Diversity as a superpower. Part two Facilitator: Dr Jillian Kenny |
| 2:30 PM - 3:00 PM | Scenic Highway, Statue Bay – Cyclone Marcia Reconstruction Project Dan Toon <i>Livingstone Shire Council</i>  2019 CQ Best Paper Winner | Transitioning to an asset management ecosystem Kieran Shirey <i>LOGiT Australia</i> | Construction of Hughenden Recreational Lake Hari Boppudi <i>Flinders Shire Council</i> | Masterclass – Post Master Class Cheese & Champagne |
| 3:00 PM - 3:30 PM | Afternoon Tea in Exhibition Area (day three) | | | |
| 3:30 PM - 3:45 PM | IPWEAQ Learning Hub Nadia Marks, IPWEAQ | | | |
| 3:45 PM - 4:30 PM | The Great Debate: Rural and regional engineers are more adaptable than their city counterparts | | | |
| 4:30 PM - 4:45 PM | IPWEAQ President’s Address | | | |
| 5:30 PM - 8:30 PM | Closing Ceremony <i>Sponsored by PelicanCorp</i> Welcome to Bowen Hills | | | |

Social Program

Design Thinking Session (CASE Workshop for U35 delegates) & Lunch

Venue
Royal International Convention Centre

Design Thinking Session:
Meeting Rooms 6&7

Lunch: Concourse

Date
Tuesday 22 October

Time
11am – 1.30pm

Dress
Casual

Sponsor
Aurecon



WELCOME FUNCTION

Venue
Royal International Convention Centre, Hall A&B

Date
Tuesday 22 October

Time
5pm – 7pm
Canapes and Drinks

Dress
Smart Casual

Sponsor
A2K Technologies



GALA CEREMONY AND DINNER

Venue
Royal International Convention Centre, Hall C

Date
Wednesday 23 October

Time
6pm – 7pm
Pre-Dinner Drinks

7pm – 11pm
Dinner and Awards Ceremony

3 course meal and drinks

Dress
Business / Cocktail attire

Sponsor
Leading Roles



CLOSING FUNCTION

Venue
Venue Welcome to Bowen Hills (631 Gregory Terrace, Bowen Hills), Swill Bar

Date
Thursday 24 October

Time
530pm – 830pm
Canapes and drinks

Dress
Smart 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

Matthew Tilly

City of Gold Coast

More than a sporting event: the transport legacy of GC2018

2019 winner

Delegates are invited to vote for the best paper of the conference during the conference. The winner of the Geoff Wilmoth 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 2021. The winner will also have an opportunity to deliver their presentation at that event.

Our Sponsors

PLATINUM



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WELCOME FUNCTION



GALA DINNER



CLOSING FUNCTION



SILVER

COFFEE CART



CHARITY AUCTION



BRONZE

U35 DESIGN
THINKING SESSION



LANYARDS



SATCHELS



KEYNOTE MICK COLLISS



FUTURES CHALLENGE



Premise

WOMEN IN PUBLIC WORKS
ENGINEERING MASTER
CLASS



STREAM 1: A STRATEGIC
APPROACH TO SAFER
ROADS



STREAM 4: WATER UTILITIES



LUNCH



MORNING TEA



EXCELLENCE AWARDS

PEOPLE'S AWARDS

ENGINEER OF THE YEAR



WOMAN IN ENGINEERING



YOUNG ENGINEER
OF THE YEAR



TEAM MEMBER
OF THE YEAR



PROJECT AWARDS

INNOVATION



ROAD SAFETY



ASSET MANAGEMENT



ENVIRONMENT AND
SUSTAINABILITY



INNOVATION &
SUSTAINABILITY
IN WATER



\$5MIL - \$10MIL



PROJECTS OVER \$10MIL



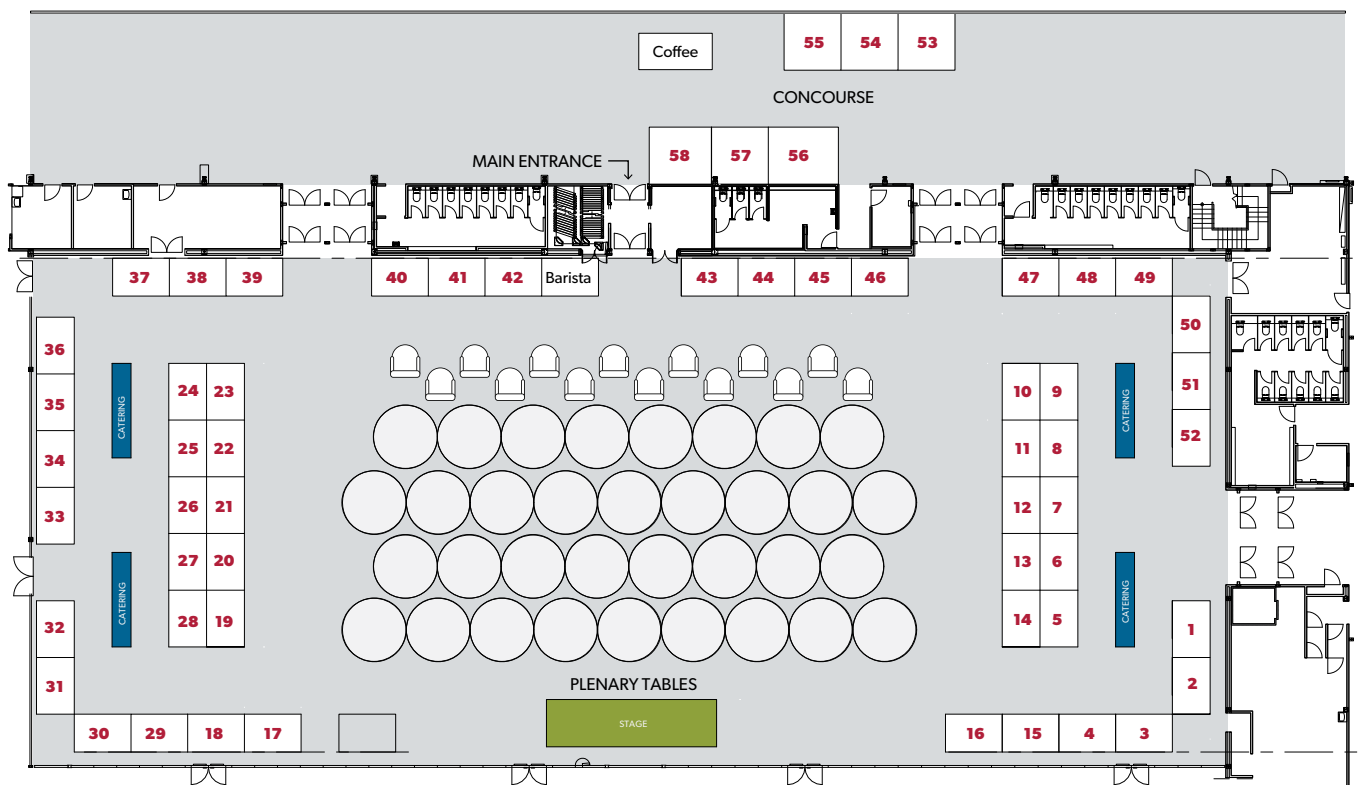


Our Exhibitors

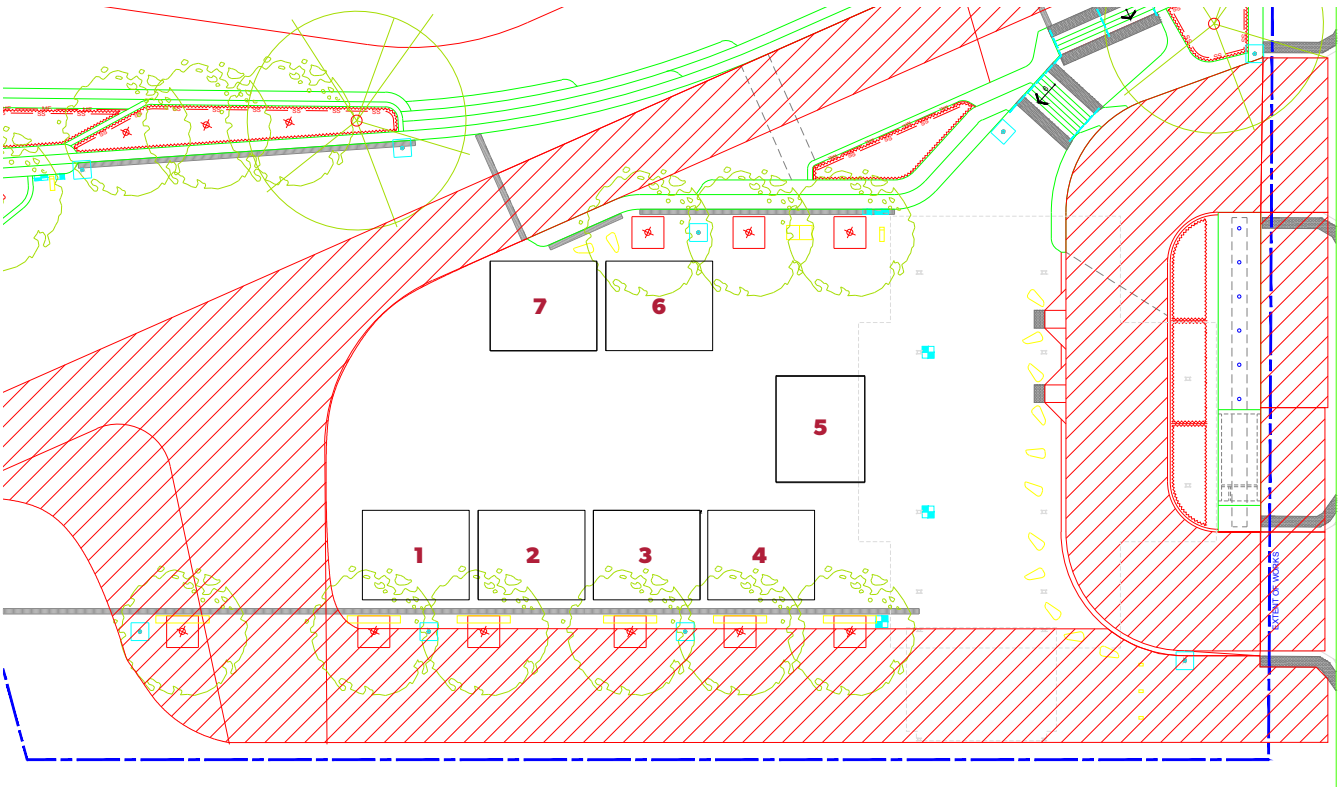
| | |
|-------|------------------------------|
| 1 - 2 | Colas |
| 3 | Hastings Deering |
| 4 | C.R. Kennedy |
| 5 | Seals Brisbane |
| 6 | Joe Wagner Group |
| 7 | Pavement Management Services |
| 8 | Inquik |
| 9 | Dial Before You Dig |
| 10 | Local Buy |
| 11 | Supersealing |
| 12 | Rocla |
| 13 | Orion Solar |
| 14 | Boral |
| 15 | 12D Solutions |
| 16 | Proterra |
| 17 | Holcim/Humes |
| 18 | JWA |
| 19 | Komatsu |
| 20 | Wagners |

| | |
|---------|-------------------------------|
| 21 - 23 | Downer |
| 24 | Cardno |
| 25 | Global Synthetics |
| 26 | Assetic |
| 27 - 28 | Delnorth |
| 29 | LGIA Super |
| 30 | LSM Technologies |
| 31 | Pelican Corp |
| 32 | Star8 |
| 33 | Harrison Infrastructure Group |
| 34 | Roadline Removal |
| 35 | LO-GO Appointments |
| 36 | Stabilised Pavements of Aust. |
| 37 | Earthlok |
| 38 | BPEQ |
| 39 | Interflow |
| 40 | Saferoads |
| 41 | Lion Systems |
| 42 | McArthur |

| | |
|----|--------------------------------|
| 43 | A2K |
| 44 | Fulton Hogan |
| 45 | McBerns |
| 46 | McCullough Robertson |
| 47 | Shepherd |
| 48 | ARRB |
| 49 | Rei-lux |
| 50 | Vacuworx |
| 51 | Seca |
| 52 | Instrada |
| 53 | Pragmatic Thinking |
| 54 | Concept Environmental Services |
| 55 | Danley |
| 56 | Treadwell Group |
| 57 | Allquip Water Trucks |
| 58 | IPWEAQ |



| | |
|---|----------------------|
| 1 | McCormack Industries |
| 2 | Seca |
| 3 | ARRB |
| 4 | JWA |
| 5 | Komatsu |
| 6 | VacuWorx |
| 7 | InQuik |



Councils and Organisations

We look forward to welcoming delegates from the following councils and organisations:

Organisations

- 12d Solutions
- A2K Technologies
- ACS Engineers (Aust) Pty Ltd
- Agraco Pty Ltd
- Aj & Co Lawyers / Pia President
- all.PM
- Allford Hall Monaghan Morris
- Allquip Water Trucks
- Allroads Pty Ltd
- ARRB Group
- Arup
- Assetic
- ATC Engineers & Project Managers
- Aubot
- Aurecon Australasia Pty Ltd
- Australian Asphalt Pavement Association
- BBD Water Engineering
- Bennett & Bennett
- BMD
- BMT WBM Pty Ltd
- Board of Professional Engineers of Queensland
- Boral
- Brandon & Associates Pty Ltd
- C.R Kennedy
- Calibre Professional Services Pty Ltd
- CARDNO Ltd
- Central Queensland University
- Colas
- COMPLETE Urban
- Concept Environmental Services
- Concept Tanks
- Construction Project Management Pty Ltd
- Consultant
- CPM Group
- CT Management Group
- Danley
- Delnorth Group Pty Ltd
- Department of Housing and Public Works, Queensland
- Department of State Development, Manufacturing, Infrastructure and Planning
- Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP)
- Department of Transport and Main Roads
- Design Solutions (Qld)
- Dial Before You Dig
- Dileigh Consulting Engineers
- DM Roads
- Downer Group
- DSDMIP
- Dulverton Waste Management
- Earthlok
- EDQ, Department of State Development, Manufacturing, Infrastructure & Planning
- EJ Tannock & Associates Pty Ltd
- Encompass Development Solutions (EDS)
- Engeny Water Management
- Engineers Australia
- Ethos Urban
- FNQROC
- GenEng Solutions Pty Ltd
- George Bourne & Associates
- GHD Pty Ltd
- Global Synthetics Pty Ltd
- Griffith University
- GWR Civil Engineering Management
- Haro Designs
- Harrison Infrastructure Group
- Hastings Deering (Australia) Ltd
- Holcim Australia Pty Ltd
- Innovyze
- InQuik Pty Ltd
- Instrada
- Integran
- Interflow
- James Cook University
- Joe Wagner Group
- John Gaskell Planning Consultants
- JWA Oilfield Supplies Pty Ltd
- Komatsu Australia Pty Ltd
- Leading Roles
- LGAQ
- LGIA Super
- Lion Systems
- Local Buy
- LOGiT
- LSM Technologies Pty Ltd
- McArthur
- McBarns Innovative Solutions
- McCormack Industries
- McCullough Robertson Lawyers
- Meridian Urban
- Orion Solar
- Pavement Management Services
- Peak Services
- PelicanCorp
- PolyCom Stabilising Aid
- Pragmatic Thinking
- Premise
- Professionals Australia
- Proterra Group Pty Ltd
- Queensland Audit Office
- Queensland Reconstruction Authority
- Queensland University of Technology
- Queensland Water Directorate
- Redfrost Pty Ltd
- Rei-lux
- Reinforced Concrete Pipes Australia (RCPA)
- Renew Solutions Pty Ltd
- Retired
- RMA Engineers
- Roadline Removal
- RobertsDay
- Rocla
- RPQ Group
- Safe System Solutions Pty Ltd
- Saferoads
- Saunders Havill Group
- Seals Group
- Seca
- Shepherd
- Sidelines Traffic
- Simmonds & Bristow Pty Ltd
- Singapore Urban Redevelopment Authority
- SLR Consulting
- Solutions in Transport
- Stabilised Pavements of Australia
- Stantec
- Star8
- SuperSealing



IPWEAQ ANNUAL CONFERENCE 2019

- SurePact
- Swart & Associates Quantity Surveyors
- Terradigm
- TOD Consulting Engineers
- Tonkin
- Transurban Queensland
- Treadwell Group
- Unitywater
- University of Queensland
- University of Southern Queensland
- Urban Development Institute of Australia Queensland
- Vacuworx Australia
- Wagners CFT Manufacturing Pty Ltd
- Ward Consulting Pty Ltd
- Water Technology
- Wave International Pty Ltd
- WR & CA Paulger
- WSP Opus

Councils

- Banana Shire Council
- Barcoo Shire Council
- Brisbane City Council
- Bundaberg Regional Council
- Burdekin Shire Council
- Cairns Regional Council
- Cassowary Coast Regional Council
- Central Highlands Regional Council
- City of Gold Coast
- City of Ipswich
- Cloncurry Shire Council
- Douglas Shire Council
- Flinders Shire Council
- Fraser Coast Regional Council
- Gladstone Regional Council
- Goondiwindi Regional Council
- Gympie Regional Council
- Hinchinbrook Shire Council
- Isaac Regional Council
- Livingstone Shire Council
- Lockyer Valley Regional Council
- Logan City Council
- Mackay Regional Council
- Mareeba Shire Council
- McKinlay Shire Council
- Moreton Bay Regional Council
- Noosa Council
- North Burnett Regional Council
- Quilpie Shire Council
- Redland City Council
- Rockhampton Regional Council
- Scenic Rim Regional Council
- Somerset Regional Council
- South Burnett Regional Council
- Southern Downs Regional Council
- Sunshine Coast Council
- Tablelands Regional Council
- Toowoomba Regional Council
- Townsville City Council
- Western Downs Regional Council
- Whitsunday Regional Council
- Winton Shire Council



Excellence Awards

People Categories

Join us at the 2019 Excellence Awards as we celebrate the people who deliver the projects that make Queensland great.

Wednesday 23 October 2019
Royal International
Convention Centre

Pre-dinner drinks **6pm**

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

Dress **business/cocktail 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)
- President's Award - chosen by the President for outstanding contributions to the Institute



2018 Engineer of the Year
Alton Twine
City of Gold Coast



2018 Woman in
Engineering
Natasha Murray
Cairns Regional Council



2018 Young Engineer
Haydn O'Leary
Toowoomba
Regional Council



2018 President's Award
John Derbyshire



2018 Team Member
of the Year
Neil Graham
City of Gold Coast

Project Nominations

Asset Management

| | |
|---|--|
| Pavement Advancement Program | Townsville City Council, Pavement Management Services, Yotta |
| Asset Management Improvement Project | Unitywater |
| Cassowary Coast Core Asset Management Plans | Cassowary Coast Regional Council |
| Mackay Regional Council - Civil Operations Unsealed Road Maintenance | Mackay Regional Council |
| The ultimate airtask: the Greenbank Reservoir Complex renewal | Logan City Council |
| Sewer Manhole Rehabilitation Program | Gladstone Regional Council |

Environment & Sustainability

| | |
|---|---|
| Park Upgrade - Graham Andrews Park, Charleville | Murweh Shire Council |
| Gap Graded Crumb Rubber Asphalt Demonstration Project | City of Gold Coast and Fulton Hogan |
| MBRC Standard Drawings Suite - Fauna Movement Infrastructure | Moreton Bay Regional Council |
| Pine Rivers Park - Riverbank Stabilisation | Moreton Bay Regional Council - Engineering Construction Maintenance |
| Arundel Wetlands Collaboration | City of Gold Coast |

Innovation

| | |
|--|--|
| Pavement Advancement Program | Townsville City Council, Pavement Management Services, Yotta |
| Successful development of high-performance asphalt mix design, specifications and field trials for Gold Coast 600 Race Track Street Circuit | City of Gold Coast |
| Cassowary Coast Unsealed Road Management System | Cassowary Coast Regional Council |
| Sunshine Coast Council Integrated Transport Strategy | Sunshine Coast Regional Council |
| Gold Coast City Transport Strategy 2031 Mid-Life Review | City of Gold Coast |
| Artificial Intelligence - Road Defects | Moreton Bay Regional Council |
| Portfolio & Program Management Transformation Project | Queensland Urban Utilities |
| Guardian IMS Emergency Management Software Implementation | Central Highlands Regional Council |
| Palm Beach Shoreline Project | City of Gold Coast Council |

Project Nominations

Innovation & Sustainability in Water

| | |
|--|--|
| Townsville CBD Utilities Upgrade | Townsville City Council |
| Palm Beach Shoreline Project | City of Gold Coast Council |
| Kenmore Jindalee Cross-River Water and Sewer Pipeline | Queensland Urban Utilities & Abergeldie Complex Infrastructure / Obayashi Corporation (AOJV) |

Road Safety

| | |
|--|----------------------------|
| Move Safe Brisbane Pedestrian Safety Review | Brisbane City Council |
| Works Hub | Sunshine Coast Council |
| Toowoomba Region Road Safety Strategy 2019-2023 | Toowoomba Regional Council |
| The Crash Investigation Alliance | City of Gold Coast |

Projects under \$1mil

| | |
|---|---|
| Cardwell Water Quality Improvement Project | Cassowary Coast Regional Council |
| The Esplanade Pavement Rehabilitation Project, Bulcock Beach | Sunshine Coast Council |
| Pine Rivers Park - Riverbank Stabilisation | Moreton Bay Regional Council - Engineering Construction Maintenance |
| Noosa Main Beach Boardwalk | Noosa Council |
| HorsePower Sculpture | Southern Downs Regional Council / John Simpson & Henry Osiecki |
| Stanthorpe Big Thermometer | Southern Downs Regional Council / Stanthorpe Chamber of Commerce |

Projects \$1mil - \$2mil

| | |
|--|---|
| Goondiwindi Levee Bank Restoration Project | Goondiwindi Regional Council and Proterra Group |
| Ipswich Street, Grandchester - gravel road sealing | Ipswich City Council |
| Kirkwood Road and Lavender Boulevard Intersection Upgrade | Gladstone Regional Council |

Project Nominations

Projects \$2mil - \$5mil

| | |
|---|---|
| Mooloolaba Walk & Ride Bridge | Tod Consulting; Sunshine Coast Council; Alder Constructions; Place Design Group |
| Tugun to Bilinga Oceanway | City of Gold Coast |
| Noosaville Library Refurbishment | Noosa Council |
| Bracken Ridge BMX facility | Brisbane City Council |
| Upgrade of Thermal Hydrolysis System - CAMBI MK II Upgrade Project | Queensland Urban Utilities |
| Peregian Beach Digital Hub | Noosa Council |
| Western Ipswich Bikeway | Ipswich City Council |
| Springfield Central Library | Ipswich City Council |
| Pierces Creek Road Upgrade Stage 2 | Toowoomba Regional Council |

Projects \$5mil - \$10mil

| | |
|---|--|
| Upgrade of Nyleta Creek Water Supply Scheme | Cassowary Coast Regional Council |
| Precast bridge building at Burketown: Beames Brook Bridge Project | Department of Transport and Main Roads |
| Noosa Park Road Boardwalk | Noosa Council |
| Pittsworth Industrial Precinct Enabling Project (PIPEP) - Gap Road | Toowoomba Regional Council |

Projects over \$10mil

| | |
|---|---|
| Townsville CBD Utilities Upgrade | Townsville City Council |
| Scenic Highway, Statue Bay - Cyclone Marcia Reconstruction Works | Livingstone Shire Council |
| Palm Beach Shoreline Project | City of Gold Coast Council |
| Telegraph Road Stage 2 | Brisbane City Council |
| Mareeba Airport Upgrade - Stage 1 | Mareeba Shire Council |
| Cairns Performing Arts Centre | Cairns Regional Council |
| Mort Street and Griffiths Street Upgrade Projects | Toowoomba Regional Council |
| Somerset Accelerated Bridge Replacement Program | Somerset Regional Council and GHD Pty Ltd |
| Resurrection of the Waltzing Matilda Centre, Winton, Queensland | Winton Shire Council and Peak Services |



Who doesn't like a bit of fun? Especially when it's for a good cause!

Referees will be on the lookout for violations of the Conference Codes.

Repeat offenders - you know who you are - may wish to simply pay in advance.



Conference Code 106 violation:

Use of a mobile phone during a session (Emergency cases and Tinder exempt)

Conference Code 403 violation:

Late arrival to session (particularly first session Thursday morning after the Gala Dinner – double demerit points apply)

Conference Code 663 violation:

Not having a ridiculously good time at the gala dinner (If you're not smiling look out)

Conference Code 746 violation:

Talking during the awards ceremony – please save the chatting for breaks in proceedings and after the awards conclude. Double demerit points apply.

Conference Code 867 violation:

Daggy dance moves including signature moves from YCMA, Time Warp and Gangnam Style.

If you are found to be in violation of any Conference Code, our diligent, tireless referees will issue you with a \$10 fine or \$20 for double demerit point offences. Delegates are invited to 'dob in a mate'; no questions asked. And all delegates are asked to report violations of Conference Code 867 while in progress. Video evidence otherwise required.

You may pay your fines in cash or we have a mobile credit card facility available.

All proceeds go to MS Queensland.

In addition to the above fundraising activity you are invited to:

- Purchase an MS lapel pin for \$5 when you register and wear it throughout the conference to show your support.

Thank you for your continued support raising funds for this worthy cause!

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



President
Seren McKenzie



Vice President
Craig Murrell



Board member
Gerard Read



Board member
Andrew Ryan



NQ Branch President
Bruce Gardiner



SWQ Branch President
Angela Fry



SEQ Branch President
Raad Jarjees



CQ Branch President
Celisa Faulkner

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 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. Seren McKenzie has chosen Multiple Sclerosis Queensland.

IPWEAQ Partners

PRINCIPAL PARTNERS



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.

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| C | u | l | t | u | r |
| T | i | t | l | e | |

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 |
| Access to iMPACT including ongoing capability training to meet your changing needs. | \$10,000 |

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



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

**NEW
PROGRAMS**

- Managing unsealed local roads
- Basic geometric road design
- Drainage for road design
- Managing the risk on lower order roads
- Demystifying EDD applications
- Road safety audit
- Treatment of crash locations
- Bridge inspection Levels 1 and 2
- Introduction to asset management
- Road pavement (visual assessment)
- Stormwater drainage condition assessment & asset performance
- Native title and cultural heritage compliance

- Leadership – difficult conversations
- Leadership – influencing others
- The emerging leader

And many more programs in development

Professional Development Packages available to deliver a single course or multiple courses over a set period of time. Packages of \$5,000 or \$10,000.

Our training may also qualify for a funding subsidy through your RRTG under the Roads & Transport Alliance SCDF Fund.

EOFY is approaching!

To attain or maintain RPEQ, you must complete 150 CPD hours every three years.

Earn up to 45 CPD hours for preparing and presenting at an IPWEAQ conference.

[See 10 benefits of presenting at an IPWEAQ Conference.](#)

Contact

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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

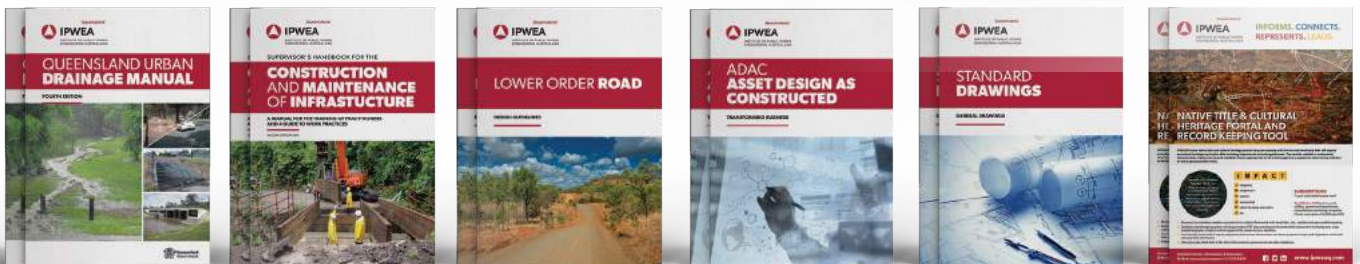
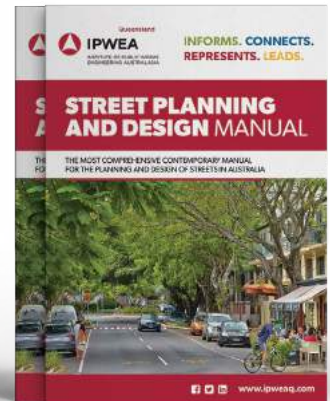
PUBLIC WORKS TECHNICAL SUBSCRIPTION



\$4,500 plus GST

- ✓ Full access to Standard Drawings which can be shared with constituents **(value \$800 per individual user)**
- ✓ Access to the multi-user version of the Queensland Urban Drainage Manual (QUDM) **(value \$700)**
- ✓ 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)**
- ✓ Discount on multi-user version of the new Street Planning & Design Manual (SPDM) when launched (October 2019)
- ✓ 10% discount on all Professional Development programs for all staff
- ✓ 10% discount on iIMPACT - our NEW online portal and record-keeping tool for native title and cultural heritage compliance
- ✓ One complimentary registration to the Annual Conference for an employee **(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

coming soon!



Contact Relationship Manager ☎ Johanna.Vanling@ipweaq.com ☎ 3632 6803



Cairns 2020



We invite you to join us for the 2020 IPWEAQ Annual Conference to be held at the Cairns Convention Centre, 10-12 November 2020.

The award winning Cairns Convention Centre provides highly flexible and adaptable facilities. Its state-of-the-art advanced audio visual and communications technology caters to the most demanding multimedia conference requirements.

The centre is staffed by a friendly professional team, world renowned for their tropical hospitality. Their menus feature contemporary five star cuisine with the freshest local seafood and tropical produce.

Conference Loyalty Program

Delegates who attended #IPWEAQ19 are entitled to a 10% discount on their 2020 conference registration.

Delegates who attended #IPWEAQ18 and #IPWEAQ19 are entitled to a 20% discount on their 2020 conference registration.

Register early with Johanna or Monica.

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 2020.
Submit your abstract online together
with your bio and photo.**

Conference papers may be selected for publication in the December 2020 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 2020 conference program.

Branch scholarships including a complimentary conference registration are available for disadvantaged members and for YIPWEAQ members.

Please contact Leigh Cunningham for more information.

**We look forward to welcoming you to
#IPWEAQ20 in Cairns!**



Queensland



IPWEA

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