



# ABC Waters Professionals and Practitioners Annual Webinar 2021

An annual webinar where Engineers, Architects, Technical Specialists and Practitioners of PUB Singapore's National Water Agency - ABC Waters Programme come together to share best practices on Certified Projects and updates on ongoing ABC Waters Projects.

For Whom: ABC Waters Professionals, QECPs, Architects, Engineers, Landscape Architects and Academics.

Date: 17 December, 2021, Friday

Time: 5pm to 7pm

CPD Program: 2 ABC-WPs / 2 SILA-ABC (Approved and Confirmed)
PDUs for PEs and CEngs / QECP / BOA-SIA / (All To Be Confirmed)

Fees:

IES/ ACES /SIA /SILA /SCAL Members, PUB/ HDB / LTA/ NParks

Officers: \$20.00

Non Members: \$40.00 (Fees exclude 7% GST)



Please scan the QR Code or click <u>HERE</u> to register





Er Tan Seng Chuan & Mr Tan Nguan Sen

Chairman & Co-Chairman

ABC Waters Professional Monitoring Committee



Mr Jelle Hendrik Therry, Master of Landscape Architecture Ramboll Studio Dreiseitl



Mr Xu Haohui Design Director Ramboll Studio Dreiseitl



Ms Goh Jia Li Senior Planner JTC Corporation



Ms Sarah Bennett Senior Design Engineer Ramboll Studio Dreiseitl

## **ABOUT PROGRAM**

Time	Programme
5:00-5:10pm	Opening Address by Er Tan Seng Chuan & Mr Tan Nguan Sen
	By: Chairman & Co-Chairman, ABC Waters Professional Monitoring Committee
5:10-5:35pm	ABC Waters at Jurong Lake - Floating Wetlands and Boardwalk: Concept, Design, Floating
	Mats, Construction Challenges and Learning Points
	By Mr Jelle Hendrik Therry, Master of Landscape Architecture,
	Mr Xu Haohui, Design Director
	Ramboll Studio Dreiseitl (RSD)
5:35-6:00pm	Towards Green and Sustainable Industrial Estates
	By Ms Goh Jia Li, Senior Planner
	JTC Corporation
6:00-6:25pm	Singapore Institute of Technology – ABC Waters in the campus
	Concept, design, construction challenges and learning points*
	By Ms Sarah Bennett
	Ramboll Studio Dreiseitl (RSD)
6:25-6:50pm	Panel Discussion
	Moderator: Liu Huei Lyn
6:50-7:00pm	Closing Remarks

# ABOUT SYNOPSIS AND SPEAKERS

#### ABC WATERS AT JURONG LAKE: FLOATING WETLANDS AND BOARDWALK

The 3,850m2 floating wetland is the largest man-made floating wetland in Singapore and is located within Jurong Lake Garden. It has been enhanced under PUB's ABC Waters programme to create a spacious viewing promenade and boardwalks for visitors to observe the scenery and wildlife in the wetlands.

The new floating wetland is extended from the existing floating element that allows a unique sustainable feature in Singapore at Jurong Lake Garden. Visitors can experience water fluctuation of the lake before and after stormwater events while exploring a variety of biodiversity visually and aurally. The greenery landscape complements the design of the boardwalk, where visitors can take a walk to enjoy the scenic views of the lake and admire the flora and fauna thriving on the floating wetlands. The floating wetland create a natural habitat for birds, butterflies, dragonflies, amphibians and even otter families

Mr Xu Haohui has a strong interest in water sensitive urban design and ecological development in both urban and nature context.

Working as landscape Architect in Singapore, he is keen to take sustainable strategy into landscape design process to create a liveable environment.

Since joining Ramboll Studio Dreiseitl in 2016, he has been involved in different types and scales of the projects with variety of professionals and specialists, which broadens his horizons in various aspects. By managing the project from concept stage to construction phase, he has a deep love for broad ideas and also been fascinated by design details. The past professional career also taught him to stay close to the reality, learn from the nature, and be aware of urban ecosystem process with social and humanistic responsibility in design.

Mr Jelle Therry is a multidisciplinary landscape architecture practice seeking to raise awareness of the social and ecological value of water in urban design, specializing in the integration of art, urban hydrology, environmental engineering and landscape architecture within an urban context. We create sustainable societies where people and nature flourish.

He is drawn to projects that responds to the interface between architecture and landscape, respecting the power of each entity to complement and reinforce one another. He has an affinity and deep love for the details of design and believe that careful attention to the details and manipulation of a space's natural characteristic have the power to transform our everyday lives; grounding us in the restorative powers of place, and affect our motivations and ambitions for a better world.

Prior in joining Ramboll Studio Dreiseitl, Jelle Therry has over eighteen years of professional experience designing and managing both large and small scale landscape projects around the globe. He has developed and delivered high profile projects significantly contributing to the public realm from procurement through to implementation.

## ABOUT SYNOPSIS AND SPEAKERS

#### **TOWARDS GREEN AND SUSTAINABLE INDUSTRIAL ESTATES**

Amidst everchanging economic structures, industry demand as well as physical and environmental challenges that Singapore has faced, the focus of JTC's planning strategies has evolved over the years to encompass integrated and sustainable planning solutions, so as to achieve better outcomes in creating conducive and good quality work environments for investment and talent attraction.

From the early development of Jurong Lake as part of Jurong Industrial Town in the 60's, to the development of International Business Park (IBP), Changi Business Park (CBP) and one-north in the early 2000s, JTC industrial estates were developed opportunistically to deal with site challenges and functionally address the needs of the industrialists and its workforce, while aligning with the national agenda to create Singapore as a Garden City.

Since then, the JTC journey has transitioned towards a more sustainable planning paradigm and development approach. This began with Cleantech Park (Singapore's first Eco Business Park) and Jurong Eco-Garden within as a testbed for the demonstration of integrated planning with nature, as many of the new industrial estates are located adjacent to natural assets. This approach has been subsequently implemented and continuously improved in JTC's new estates such as Seletar Aerospace Park (SAP), Jurong Innovation District (JID), Punggol Digital District (PDD), Woodlands North Coast (WNC), etc.

Moving forward, incorporating a multi-layered and integrated Green and Blue Infrastructure (GBI) has become JTC DNA as an integral part of the City in Nature agenda and to contribute to the Singapore Green Plan. To achieve this, JTC has been working with other relevant Agencies to develop new planning frameworks and policies to support the implementation of the integrated GBI. Coming full circle, we hope to implement these integrated planning approaches at a larger scale, in our upcoming rejuvenation plans for our brownfield estates, beginning with the Sungei Kadut Eco-District (SKED). SKED's key value proposition includes the preservation and restoration of natural assets and biodiversity and the application of integrated GBI and nature based solutions to achieve a climate-resilient and environmentally responsive estate and developments.

Ms Goh Jia Li is a Senior Planner in the Urban Planning & Design Department of JTC Corporation, the lead agency responsible for the development of industrial infrastructure to support and catalyse the growth of new industries and transform existing enterprises in Singapore.

She graduated from the National University of Singapore with a M.Arch (UD Specialization) and is a Full Member at the Singapore Institute of Planners (SIP). Passionate about creating attractive and conducive working environments for the future of industry, Jia Li is currently involved in a variety of large-scale planning projects in Singapore's Western Region, encompassing both JTC's new and existing estates. These include one-north – an exciting place of vision and inspiration; Jurong Innovation District (JID) – a carlite, green and sustainable Advanced Manufacturing Hub; and International Business Park (IBP) within the upcoming Jurong Lake District (JLD). As part of JTC's sustainability efforts, Jia Li is also involved in planning and developing Green and Blue Strategies for industrial estates.

## SINGAPORE INSTITUTE OF TECHNOLOGY – ABC WATERS IN THE CAMPUS: CONCEPT, DESIGN, CONSTRUCTION CHALLENGES AND LEARNING POINTS

SIT's Punggol Campus is all set to transform the future of how students learn and play.

Seamlessly intertwined with smart automated systems and a multi-energy microgrid is its blue-green infrastructure backbone. Lush green landscape and water features are integrated into the urban campus environment and provide outlets of respite for the students' wellbeing.

Furthermore, many of these landscape features are designed to detain and cleanse stormwater before it is harvested and reused through smart water-saving dripline irrigation systems. More than 40% of the total catchment area is treated through ABC Waters features on site, allowing SIT Punggol campus to be awarded ABC Waters Certification (Gold).

In this session, you will learn more about the ABC Waters Concept applied in the project and see how these features have been integrated into the urban campus fabric to create a more sustainable and liveable environment for all.

Ms Sarah Bennett is a Senior Design Engineer at Ramboll Studio Dreiseitl. Her background is in Environmental Engineering and she has worked on a variety of stormwater management projects at different scales within the Asian region in the last four years.

Her professional work experience includes hydraulic modelling, stormwater management strategy with a focus on nature-based solutions, flood risk management and detailed engineering design of such interventions. She has worked on multiple ABC Waters Projects in Singapore from their design stage to construction and maintenance stages, and is part of the team that is working on the SIT project.