12th Australian Small Bridges Conference

22-23 October 2024

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Accepted Abstracts

As of 22 April, 2024

(Note that some accepted abstracts are not listed below as are awaiting Asset Owner, or other, Approval)

60M SPAN SPLICED SUPER T BRIDGE DESIGN

Noritomo Maruo, SMEC

A CRITICAL REVIEW OF CRACK CONTROL PROVISIONS IN AS5100.5-2017 FOR PIER WALLS IN BRIDGES

Sleiman Mikhael, Arcadis Suthan Mohanakumar, Arcadis

A FIELD INVESTIGATION OF DETERIORATION OF REINFORCED CONCRETE USING A UAV-BASED SOUNDING METHOD – A CASE STUDY WITH FIELD VALIDATION

Ash Pender, Arcadis
Harsh Rathod, Niricson
Joshua Columbus, Niricson
Simon Borst, Niricson
Shannon Rosario, DTP Vic
Yanan Yang, DTP Vic

A MODERN CONUNDRUM – CAN WE DELIVER OUR PROJECTS – WITHOUT DRAWINGS?

John Legge-Wilkinson, Arup Oystein Ulvestad, Arup

A NON-CONSERVATIVE DESIGN APPROACH TO DESIGN BRIDGE AND ROAD BARRIERS

Basim Matar, SMEC Huy Binh Pham, SMEC

ASSESSMENT OF SLENDER STEEL FLEXURAL MEMBERS TO AS5100-2017 WITH USE OF BUCKLING ANALYSIS

David Huggett, SMEC

BLI BLI BRIDGE – GIRDER REHABILITATION AND STRENGTH RESTORATION

Ben Wiggins, Transport and Main Roads Queensland

BLUESCOPE COMPOSITE STEEL ROAD BRIDGES – UPDATING A DESIGN GUIDE

Raed El Sarraf, WSP Rob Danis, Bluescope Sabina Piras, WSP

BREAKFAST CREEK GREEN BRIDGE

Alistair Smith, SMEC Paul Bradbury, SMEC

BRIDGE ASSESSMENTS - PLAUSIBILITY GAPS AND PITFALLS

Adam O'Rourke, Ductile Consulting Engineers Edward Eskew, Ductile Consulting Engineers

BRIDGE ASSET MANAGEMENT: THE GOOD, THE BAD AND THE FUTURE

David Baby, CT Management Neal Lake, Osborn Consulting Engineers Tim Heldt, Osborn Consulting Engineers

BRIDGE BARRIER UPGRADES TO VARIOUS REGIONAL BRIDGES IN SOUTH AUSTRALIA

Howard Jiang, Jacobs Larry Yang, Jacobs

BRIDGE BARRIERS: WHAT CAN ASSET OWNERS DO TO IDENTIFY AND ADDRESS KEY RISKS ON THEIR NETWORK?

Joshua Hniat, pitt&sherry Richard Cassidy, pitt&sherry

CASE STUDY - DESIGN AND CONSTRUCTION OF THE INTEGRAL BRIDGES ON THE NEW BRIDGEWATER BRIDGE PROJECT

Darnell Santos, Jacobs

CHALLENGES IN THE DESIGN OF A 50M STEEL TRUSS BRIDGE OVER STEELS CREEK

Hassan Asif, Stantec Muhammad Abdullah, Stantec Yasir Ali, Stantec

COMPARISON OF TRAIN ROLLING STOCK LOADS TO 300LA CONFIGURATION OVER MULTIPLE SPAN LENGTHS

Stephen Hives, V/Line

CONCONGELLA CREEK BRIDGE CROSSHEAD STRENGTHENING – A CASE STUDY ABOUT FRP DESIGN OPTIMISATION

Aviral Choudhary, Mapei Australia Umberto Rico, Mapei S.p.A

COST EFFECTIVE STEEL CONCRETE COMPOSITE BRIDGE BEAMS

Wolfram Schwarz, WSP

CULVERT AND BRIDGE DESIGN INTERFACE WITH ENVIRONMENTAL, FAUNA MANAGEMENT AND CHALLENGING GROUND CONDITIONS

Vahid Gheshlaghiolfat, Aurecon Veeral Patel, Aurecon

DESIGN AND DELIVERY OF THE WOODS STREET RAIL BRIDGE SUPERSTRUCTURE RENEWAL PROJECT IN MELBOURNE

Ahmed Al-Aghbari, Hatch Tanmay Vegad, Hatch

DESIGN CONSIDERATIONS OF ACCESSIBLE STEEL BOX GIRDERS SUPPORTING OVERHEAD SIGNAGE

Hasret Aydin, SMEC Huy Binh Pham, SMEC

DESIGN OF CULVERTS WITH PRECAST SEGMENTAL BASE SLABS

Amir Holakoo, KBR Tony Phan, KBR

DESIGN OF THE NEW BEAUMONT BRIDGE – CROSSING NEW ZEALAND'S LARGEST RIVER

Jeremy Jennings, WSP

DIGITAL TWINS FOR ASSET MANAGEMENT OF BRIDGES

Maria Rashidi, Western Sydney University

DWAARLINDJIRRAAP PEDESTRIAN BRIDGE

Andrew Grime, Arup Antony Schofield, Arup Jose Garcia-Boente Fernandez, Arup Sarah Madrigal, Arup

EFFECTIVE THERMAL MANAGEMENT IN PRECAST CONCRETE ELEMENTS: A CASE STUDY ON VICTORIA PARK-CANNING LEVEL CROSSING REMOVAL (LXR) PROJECT

Frank Papworth, BCRC Herman Jong, BCRC Inam Khan, BCRC Stuart Young, APS

ELIZABETH AVENUE PEDESTRIAN OVERPASS - CLONTARF

Bj Byrnes, SMEC Loïc Fields, SMEC

GARIE ROAD FLOOD RECOVERY - ANCHORED BORED PILE WALL SLOPE STABILISATION

James Dickson, Aurecon Marcia Prelog, Aurecon Nazanin Salehi, Aurecon Tim Donovan, Aurecon

HERITAGE TIMBER RAIL BRIDGE PIER REPLACEMENTS IN THE TABLELANDS SYSTEM

Harrison Fugate, BG&E

HICKSON ROAD HERITAGE BRIDGES MAINTENANCE - A CASE STUDY

Joe Joyce, FSC Range Oliver Gasior, Marine & Civil Maintenance Troy Palmer, Marine & Civil Maintenance

IMPLEMENTATION OF RISK BASED CULVERT ASSESSMENTS AT PORT MACQUARIE HASTINGS COUNCIL

Edward Eskew, Ductile Consulting Engineers Adam O'Rourke, Ductile Consulting Engineers Stephen Wood, Port Macquarie Hastings Council

KEY CONSTRAINTS OF THE DESIGN AND CONSTRUCTION OF A SINGLE SPAN CYCLIST BRIDGE REPLACING A 3-SPAN ROAD BRIDGE OVER A RAIL CORRIDOR

Aimee Beheshti, Queensland Rail Michael Kozji, Queensland Rail

KOLOONA DRIVE BRIDGE REPLACEMENT

Mike Wright, InQuik Bridging Systems

LAHRS ROAD BRIDGE – REUSE OF A REUSED BRIDGE – WHOLISTIC MODIFICATION AND SUBSTRUCTURE STRENGTHENING WITH FRP

Aida Bartels, Arup Tracey Knight, Arup

MAINTENANCE PLAN FOR SUSTAINABLE DEVELOPMENT OF TIMBER VEHICLE BRIDGE IN NEW ZEALAND

Hanshen Wang, University of Auckland

MANAGEMENT OF BRIDGE ASSETS ON THE ARC INFRASTRUCTURE RAIL NETWORK

Verity Scott , Arc Infrastructure Zia Rice , Arc Infrastructure

O'KEEFE STREET VELOBRIDGE

Conor Doherty, AECOM
John Hart, AECOM
Patrick Arteaga, Dept of Transport & Main Roads

PRECAST PRESTRESSED CONCRETE BEAMS MADE CONTINUOUS OVER SUPPORTS – VARIABILITY OF LONG-TERM DESIGN ACTIONS

Konrad Slominski, Arcadis Sleiman Mikhael, Arcadis

PYRMONT BRIDGE – CHALLENGES ASSOCIATED WITH THE OVER-WATER STRUCTURAL REMEDIATION OF A HERITAGE-LISTED TIMBER BRIDGE

Daniel Lu, Marine & Civil Maintenance Maverick Penman, FSC Range Max Panafieu, Marine & Civil Maintenance

RENEWAL OF RAILWAY CORRIDOR TO DEVELOP TOURISM ACCESS IN REGIONAL VICTORIA

Eric Hooimeyer, Teleo Design

REPAIR OF BATTER SLOPE BENEATH ROAD BRIDGE

Jack Arnold, Mainmark James O'Grady, Mainmark

SAN REMO BRIDGE - LOAD ASSESSMENT FOR SCAFFOLD LOADING

Dr Stephen Salim, Hatch Timothy Lui, Hatch

STEEL HALF-THROUGH GIRDER RAIL BRIDGES: RECENT EXPERIENCE IN VICTORIA

John Cain, Arup Martin Holt, Mott MacDonald

STRENGTHENING OF BRIDGE STRUCTURES: A REVIEW OF EXISTING METHODS WITH RECOMMENDATIONS

Christophe Camille, Western Sydney University Fidelis Mashiri, Western Sydney University Olivia Mirza, Western Sydney University Saman Karimi, Western Sydney University

STRENGTHENING WORKS OF BARRY ROAD BRIDGE OVER RAIL

Amir Holakoo, KBR Kirush Kirushanthan, KBR

STRUCTURAL REHABILIATION TO INCREASE THE LOAD RATING OF AN EXISTING BRIDGE AND CONSTRUCTION CHALLENGES FACED

Shadia Capobianco, Stantec

SUGGESTED CHANGES TO AS 5100 BRIDGE DESIGN FOR FIRE DESIGN Ross Pritchard, SMEC

THE DESIGN OF FIRST HELICOIDAL RAMP IN MALAYSIA

Alvin Ang Cheng Hin, TYLin International Malaysia Cheng Fan Chuen, TYLin International Malaysia Mohd Faizal Atan, PROLINTAS Group of Companies

THE INSPECTION AND ASSESSMENT OF SMALL REINFORCED CONCRETE RAILWAY BRIDGES WITH UNKNOWN REINFORCEMENT IN REMOTE SCOTLAND, UK

Conor Flannery, FSC Range

THE INTEGRATION AND APPLICATION OF DATA, DIGITAL TOOLS, AND ALGORITHMS TO ASSIST WITH MANAGEMENT STRATEGIES IN SUSTAINING PUBLIC INFRASTRUCTURE ASSETS

Harshil Patel, Aurecon Kim Biau Chua, Aurecon

THE RE-EMERGENCE OF ELECTROCHEMICAL CHLORIDE EXTRACTION FOR BRIDGE REMEDIATION

Blane McGuiness, Marine & Civil Maintenance Troy Palmer, Marine & Civil Maintenance

UNION AND MONT ALBERT ROAD LEVEL CROSSING REMOVAL BRIDGES: CONSTRUCTION LED DESIGN

Darnell Santos, Jacobs Hamish Currie, Jacobs Lachie Gallop, Jacobs

UPDATING THE WEATHERING STEEL GUIDE FOR AUSTRALIAN BRIDGES

Michail Karpenko, HERA Raed El Sarraf, WSP Rob Danis, Bluescope

USING REAL TIME MONITORING TO DELAY REPAIRS ON A DETERIORATING CULVERT

Charl Pieterse, EngAnalysis Henry Griscti, EngAnalysis John Vasey, EngAnalysis William Macdonald, EngAnalysis