

Proprietary Design Index for Bridges and Other Structures

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Feedback

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1 Introduction

Proprietary Design Index for Bridges and Other Structures (Design Index) is a document produced to list product designs that have been evaluated as compliant in accordance with the relevant design criteria.

This document is published on the departmental website at <http://www.tmr.qld.gov.au/business-industry/Business-with-us/Approved-products-and-suppliers/Bridges-and-other-structures-approved-products-and-suppliers.aspx>.

This document is maintained by Engineering and Technology Branch, Structures Division.

Enquiries should be directed to:

Director (Structures Design, Review and Standards)
Structures Section
Department of Transport and Main Roads
GPO Box 1412
Brisbane QLD 4001
Email: tmr.techdocs@tmr.qld.gov.au

2 Use of this index

This *Design Index* identifies product designs that are compliant with the relevant design criteria provided in reference Transport and Main Roads technical documents. Suitability for the individual project application will need to be considered.

Designs included in the reference must be manufactured by a registered supplier, and only by agreement with the design owner.

3 Scope

This index is applicable only to the product categories that have been referenced in relevant departmental technical documents. The following structural elements are excluded from this index, and managed separately:

- a) Noise barrier systems and panels
- b) Retaining wall systems, and
- c) Traffic barrier systems, including guardrail.

4 Process for evaluation

4.1 Submissions

Suppliers with designs that wish to be considered for inclusion in this *Design Index* should forward an application (Form STR-F-011) including:

- company and contact details
- RPEQ-certified drawings, and
- reference design category in this *Design Index* and reference Transport and Main Roads Technical Specifications.

Further detail of submission requirements can be found in the relevant departmental technical documents. Transport and Main Roads may request additional details and clarifications during product evaluation.

Product designs that are identified as an innovation shall follow the *Transport and Main Roads Engineering Innovation Guidelines* for evaluation.

4.2 Evaluation

Designs shall be evaluated against the relevant departmental technical documents.

4.3 Design removal

Designs may be removed from the *Design Index* for the following reasons:

- discontinuation of supply or availability
- poor performance
- non-compliance to reference technical documents, and/or
- due to the revision to referenced technical documents.

Suppliers will be notified of removal in writing.

5 Design index management

To maintain the accuracy of this index, suppliers shall notify Engineering and Technology of any changes to contact or design details.

6 Bridge deck systems

Reference: Design Criteria for Bridges and Other Structures

Supplier	Product name/Size	Drawing Ref
Quickcell Technology Product Pty Ltd	Quickcell Wide Flange Super I-Girders up to 46.0 m length	Quickcell technical manual and Project Specific Drawings

7 Precast concrete products

7.1 Culvert headwalls

Reference: Technical Note 27

Supplier	Product name/Size	Drawing Ref
Civilmart	Q-Seal Headwalls	Civilmart standard drawings for Q-SEAL headwalls for pipe culverts dated 03/12/2019-5 sheets Sizes 375, 450, 525, 600, 675, 750, 825, 900, 1050 and 1250 mm.
Humes, Holcim (Australia) Pty. Ltd	Precast double ear walls and headwall for small culverts	BC-CU-120450-DEW-TWN-B2-P/Rev B BC-CU-120450-DEW-TWN-B2-PR/Rev A BC-CU-120600-DEW-TWN-B2-P/Rev B BC-CU-120600-DEW-TWN-B2-PR/Rev A

Supplier	Product name/Size	Drawing Ref
Humes, Holcim (Australia) Pty. Ltd	Precast ear walls and headwall for small culverts	BC-CU-120450-EW-TWN-B2-P/Rev 1 BC-CU-120450-EW-TWN-B2-PR/Rev 1 BC-CU-120450-HW-TWN-B2-P/Rev 1 BC-CU-120450-HW-TWN-B2-PR/Rev 1 BC-CU-120600-EW-TWN-B2-P/Rev 1 BC-CU-120600-EW-TWN-B2-PR/Rev 1 BC-CU-120600-HW-TWN-B2-P/Rev 1 BC-CU-120600-HW-TWN-B2-PR/rev 1
Humes, Holcim (Australia) Pty. Ltd	Precast Headwall of Pipe Culverts [Designed to TMR TN27 (07/19), SD1243 (7/19)]	HW-CONNECTION-RKH-B2-P/Rev D HW-PP-0600MLD-1-RKH-B2-P/Rev C HW-PP-1200MLD-1-RKH-B2-P/Rev D HW-PP-600375-1-RKH-B2-R/Rev C HW-PP-600450-1-RKH-B2-R/Rev C HW-PP-600525-1-RKH-B2-R/Rev C HW-PP-1200600-1-RKH-B2-R/Rev C HW-PP-1200675-1-RKH-B2-R/Rev C HW-PP-1200750-1-RKH-B2-R/Rev C HW-PP-1200825-1-RKH-B2-R/Rev C HW-PP-1200900-1-RKH-B2-R/Rev B HW-PP-12001050-1-RKH-B2-R/Rev B HW-PP-12001200-1-RKH-B2-R/Rev B HW-0600CW-1-RKH-B2-P/Rev B HW-0600CW-1-RKH-B2-R/Rev B

7.2 Drainage pits

Reference: Technical Note 23

Supplier	Product name/Size	Drawing Ref
Humes, Holcim (Australia) Pty. Ltd	Precast concrete pits (900x900 mm)	16570-0A-01/R1 and 16570A-02/R2 (10/08/2012)
Aus Pits	Unhaunched Pit Haunched Pit Manhole Pit	AP-SD-SW-003 Rev 01 AP-SD-SW-004 Rev 01 and AP-SD-SW-009 Rev 01 Dated 10.01.2017

7.3 Motor grids (includes steelwork)

Reference: Technical Note 18 and Standard Drawings 1561 to 1564

Supplier	Drawings
Aprilla Grids	Type 10 QMR 2.7, Dwg. No. S01-M (9/8/17) Type 10/8 QMR 2.7, Dwg. No. S02-M (9/8/17) Type 8 QMR 2.7, Dwg. No. S03-N (9/8/17) Type 8 QMR 2.7, Dwg. No. S04-M (9/8/17)
Gridrite Pty Ltd	TN18-E000 to TN18-E003 Revision 3 dated 19/05/15
	GR-MRG18-E SHT 1 to 4/Rev 4 dated 25/06/2018

7.4 Road side gully Inlets

Reference: Standard Drawings 1443, 1444, 1459

Supplier	Product name	Drawing Ref
Civilmart	Precast Roadway Inlet Units (2400 mm long units)	Drawing No K2402 (08/12/2014)
Rocla	Precast Roadway Inlet Units (2400 mm long units)	Drawing Nos. D201327/F, D201328/G, D201329/G, D201330/C D201331/F, D201332/F D201333/F, D201685/C
Humes, Holcim (Australia) Pty. Ltd	Precast Roadway Inlet Units 2400 road gully units	PP-GN-2400RGU-CSWN-P/Rev 5 PP-GN-2400RGU-CSWN-R/Rev3 PP-GN-2400RGU-LSWN-P/Rev7 PP-GN-2400RGU-LSWN-R/Rev5 PP-GN-2400RGU-RSWN-P/Rev7 PP-GN-2400RGU-RSWN-R/Rev5 PP-GN-2400RGU-SSWN-D/Rev3

8 Referenced technical documents

The referenced Transport and Main Roads technical documents can be found via the below URLs:

Specifications:

<https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Specifications/2-Bridges-Marine-and-Structures>

Standard Drawings:

<https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Standard-drawings-roads/Standard-drawings-index>

Technical Notes:

<https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Technical-Notes/Bridges-other-structures>

Manuals:

<https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Bridge-design-and-assessment-criteria.aspx>

9 Supplier contact details

Approved supplier details can be found via the following Transport and Main Roads URL:

<https://www.tmr.qld.gov.au/business-industry/Business-with-us/Approved-products-and-suppliers/Bridges-and-other-structures-approved-products-and-suppliers>

