CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES

2024 MEETING 7 MINUTES

Venue: Teams

Date and Time: 29th August 2024 at 11:00 am

| Item | Item | | | | | | |
|------|---|--|--------------------------------|--|--|--|--|
| 1 | Welcome | | | | | | |
| | Attendance: | (2-2) | | | | | |
| | Brendan Fulle | | 5) | | | | |
| | Nathan Garve Allen Chen (L | | 1 | | | | |
| | Grant Vaugha | |) | | | | |
| | | (************************************** | | | | | |
| 2 | Apologies: Sarah Banda | | | | | | |
| | | | | | | | |
| | Gary Carlyle Scott MacDor | | | | | | |
| 3 | | | | | | | |
| | True and correct record of minutes from previous meeting Refer Attachment A | | | | | | |
| | M2024.07 Re | | | | | | |
| | ally adopted. | | | | | | |
| | any adopted. | | | | | | |
| 4 | Terms of refe | erence and Budget | | | | | |
| | Drandan ragi | acted that I CAs sound through the amount I CAS website hasti | | | | | |
| | | ested that LGAs send through the annual LGAQ website hosti uested by GRC via email. GRC to resend email to LGAs that tl | | | | | |
| | orders as req | desica by Orto via cinali. Orto to reseria cinali to 20/13 that ti | ney are waiting for. | | | | |
| | | d the ending date of the 3yr contract for the coordinator role. J | amie McCaul (RRC) is | | | | |
| | arranging a meeting with the committee to discuss deliverables etc. | | | | | | |
| 5 | | items from the previous meeting s items which were not fully resolved at the previous meeting of | or items not considered due to | | | | |
| | time constra | | n items not considered due to | | | | |
| | Item | | | | | | |
| | number | Item | Proponent | | | | |
| | M22.04.01 | Review of Reference documents in all Specifications | BSC | | | | |
| | M24.05.01 | Whitsunday Regional Council Membership | MCE | | | | |
| | M24.03.01 | Roofwater Pipes Under Footpaths | RRC | | | | |
| | M24.06.01 | D15 review comments | All | | | | |
| | M24.06.02 | Draft floodway and bed level crossing major changes | MCE | | | | |
| | M24.06.03 | Erosion and Sediment Control Documents | RRC | | | | |
| | | | | | | | |
| 6 | New Agenda Items | | | | | | |
| | Item | Maria. | Brananant | | | | |
| | number | Item | Proponent | | | | |
| | M24.07.01 | D14 Floodways | LSC | | | | |
| | M24.07.02 | D1 – Wildlife Corridors | LSC | | | | |
| | | | | | | | |
| | | | | | | | |
| 7 | General Bus | iness | | | | | |
| | | | | | | | |
| 8 | Next Meeting | | | | | | |
| | Next meeting | | | | | | |
| | NI. IV. C | Associated Constitutional | | | | | |
| | No objections | to going to 6 week interval. | | | | | |

| Item | Item | | |
|------|--|--|--|
| | | | |
| 9 | CMDG Action Register | | |
| | The latest register is Attachment B | | |
| | CMDG Trial Register | | |
| | The latest register is Attachment C | | |
| | Schedule 1 | | |
| | The latest schedule is Attachment D | | |
| 10 | Meeting closed at | | |

Agenda Items Detail

| Agenda Items | | | | | |
|--------------|---|--------------------|---|--|--|
| Item No. | Item Details | | | | |
| M22.04.01 | Review of Reference documents in all Specifications | | | | |
| | | Γ | 12 | | |
| | Specification | Action by | Current Status / comments | | |
| | D2 Pavement | RRC (Grant) | In progress. | | |
| | Design | | Refer agenda item M24.06.04 | | |
| | D7 Erosion | RRC | Documents provided for review. | | |
| | Control & | (Jamie/Tilak) | Potentially a new training course for WSUD delivered by | | |
| | Stormwater | | Water By Design scheduled for October, an email will be | | |
| | Management | | sent with details. | | |
| | | | Refer agenda item M24.06.03 | | |
| | D10 Landscaping | RRC (Grant/ | FN to provide comments at draft stage on drought | | |
| | DRAFT) | Michael Ramsay) | tolerant species. | | |
| | | | FN to provide species list to RRC/MCE. | | |
| | | | Refer agenda item M24.06.05 | | |
| | D11 Water Design | All | Changes made and document uploaded to website. | | |
| | D12 Sewerage Design | All | Changes made and document uploaded to website. | | |
| | D14 Floodways (DRAFT) | MCE | Refer agenda item M24.07.01 | | |
| | D15 Driveways | All | Comments received from final review by committee. Refer agenda item M24.06.01 | | |
| | M2024.07 Update Discussed removing Agreed by all parties. | _ | for clarity/ease of reading in lieu of individual agenda items. | | |
| M24.05.01 | Whitsunday Region | | G Membership | | |
| | M2024.07 Update | | | | |
| | | ICE to a high-lev | el comparison of CMDG vs WRC documentation. This is in | | |
| | progress. | | | | |
| | M2024.07 Discussion | <u>1</u> | | | |
| | | level comparisor | n between existing and CMDG documentation provided to provided by WRC yet. | | |
| | M2024.07 Resolution Richard (MCE) to rev | | pment manual for relevant ESCP info. | | |

M24.03.01

Roofwater Pipes Under Footpaths

M2024.03 Discussion

Discussion on how to document a suitable solution in CMDG.

Various suggestions including:

- Lifting footpath slightly to achieve some concrete over the pipe. This would require greater than 2.5% grade from back of kerb to footpath.
- Allow reduced thickness over pipe e.g. 50mm
- Use a RHS instead of 100mm uPVC
- Add sawn joint over the path to ensure neat crack at weak point.
- Roofwater drain to extend from kerb adaptor under the footpath to a minimum of 300mm past the edge of the path.

M2024.03 Resolution

MCE to review other standards including IPWEAQ (e.g. drawing RSD 201). MCE to make changes to drawing R-061 based on research and points above. Drawing to be sent to committee for review. Scott to check with his team for current approach taken in GRC region.

M2024.06 Update

Draft drawing is **attachment E** for discussion. Note that barrier kerb situation is potentially acceptable, however mountable kerb is problematic still. Suggest outcome is to locally raise path to improve cover.

M2024.06 Discussion

Show adapters on the plans (RHS to round to back of kerb adapter). Jamie advised that internally they have been raising the footpath locally. Grant noted that charged line have also been used at RRC by civil operations.

Significant discussion on potential options and disadvantages of each:

- Increase verge gradient
 - Cheap and simple solution that allows roofwater drain to be installed and operate normally
 - May result in driveway issues and footpath grade noncompliance when lifting locally over roofwater lines.
 - May not be very aesthetic
 - Conflicts with D1 verge grades
- Charged line
 - o Easy and cheap solution that has is being used currently.
 - Does not require any additional LGA infrastructure or adjustment to the footpath level
 - May have maintenance issues due to water and debris sitting in lower section of pipe. Note that roofwater pipes are not LGA infrastructure.
- 'inter-allotment' style pipes
 - Neat solution without having potential maintenance issues.
 - Increased cost over other options
 - Additional infrastructure for LGAs to maintain
 - Additional service line in verge (reduced space)

Agreed to introduce a table of difference. LGA's to determine their individual preferences and advise.

M2024.06 Resolution

LGA's to discuss internally and determine their individual preferences and advise.

M2024.07 Update

No additional information or updates have been received by MCE.

LGAs to determine requirements to allow update of drawing CMDG-R-061.

M2024.07 Discussion

- No further internal discussions have been had generally for all LGA's.
- MRC likely to suggest a few options to be made available (case by case).
- Jamie McCaul (RRC) raised what the standard of 'outer'-allotment drainage would be.
 - MCE to review options and advise proposed concept.
- MCE to review dimensions on kerb adapters and update to match commercially available units.
- Consider both RHS and pipe depending on option.

M2024.07 Resolution

- MCE to put together options list for Council's to provide an order of preference
 - D5 table required for options.
 - o Drawings also required.
- MCE to update R-061 to clarify the hatch pattern for cutouts.
- MCE to review options for 'outer'-allotment drainage and advise proposed concept.
- MCE to review dimensions on kerb adapters and update to match commercially available units.

Action By

MCE

M24.06.02 | Floodway and Bed Level Crossing Major Changes

MCE has completed a thorough draft review of the floodway and bed level crossing standard drawings, refer **attachments H1-4**.

Key changes include:

- Redrafting of standard drawings,
- Indicative pavement design for applications <500 VPD,
- Pavement panel spacing, jointing etc made compliant with Austroads Guide to Pavement Technology Part 2: Rigid Pavement Design.

For discussion.

M2024.06 Discussion

- The amendments to the floodways were discussed. RRC confirmed they were happy with the application of an approximate 'deemed to comply' for low order roads approach.
- Scott McDonald (GRC) raised that the extents of design event (floodway to extend 3m beyond design ARI extents) should be added back onto the drawings.

M2024.06 Resolution

Changed drawings to be updated as requested and re-circulated for approval.

M2024.07 Update

Comments reviewed from RRC and minor updates to floodways drawings in progress

Action By

MCE

M2024.07 Discussion

- Comments received from RRC.
- MRC intends to provide comments.

M2024.07 Resolution

• MCE to provide for final review on receipt of remaining comments.

M24.06.03

Erosion and Sediment Control Documents

RRC have produced an updated document that combines D7 and C211, refer attachment J1-3.

I suggest calling the document D7 as per other document that have had the construction specification combined e.g. D11 and D12.)

Key points:

- There are a number of sections that have taken from IECA and also from other RRC's
 policies, but RRC have tried to keep the important bits in the document and not refer off to
 other legislation too much without making the document huge.
- This is quite a change from the previous document so worth everyone having a good look through it. Jamie is happy to take any questions or make changes required.
- The document requires some formatting which MCE is working on.
- There is a WbD checklist for inspection and design that should also be included which is also attached.

M2024.06 Discussion

- Jamie advised that the State is returning for further audits in October. As part of the audit, the design guidelines must comply with RRC's Action Plan.
- Water by Design has provided a model planning scheme policy for use.
- The requirements for qualifications were discussed, specifically that there are not many CPESC's locally. It was discussed that RRC had agreed to accept a suitably qualified RPEQ (including requiring that the RPEQ had attended advanced training in erosion and sediment control).
- The difficulty of policing compliance was discussed. Staffing was identified as the limiting factor
- Allen (LSC) advised that Water by Design are preparing an Action Plan for LSC.

M2024.06 Resolution

- MCE and LGAs to review RRC's guide ESCP plan and D7.
- Confirmation of requirements at each stage is needed (MCU/ROL vs OPW vs prior to prestart).

M2024.07 Update

Comments only received from GRC:

- Reading the Natspec specification 0022 it has well defined certification requirements depending on the separate contexts.
- "Design certification" only has to be a "suitably qualified professional" then "additional certification" has three types of professional engineers depending on what is to be undertaken.
- CMDG D5 simply states "RPEQ or CPESC" which may be interpreted as a CPESC would be able to certify items that Natspec classes as "additional certification" as they are not excluded.
- May be worth reviewing the wording/ requirements.
- The proposed D7 changes thing again by not even mentioning the three types of professional engineers depending on what is to be undertaken.

D05.22. STORMWATER QUALITY D05 22 01 The developer shall submit MUSIC model and output from MUSIC model as a part of Site Based Stormwater Management Plan demonstrating stormwater quality objective is achieved in accordance with State Planning Policy 2017. D05.22.02. A development is required to comply with the State Planning Policy 2017 in relation to Water Quality Objectives. D05.22.03. The developer shall submit Erosion and Sediment Control (ESC) plan as ESC Plan required by the Local Government Authority at the operational works stage. Plans are to be certified by an appropriate RPEQ experienced in this field or Certified Professional in Erosion and Sediment Control (CPESC). ESC plans are to be updated, certified and submitted to the Local Government Authority as construction works proceed. CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES D5-19 ISSUE: NO:10 - Mar 2024 www.cmdg.com.au 0022 Control of erosion and sedimentation (Design).docx - Compatibility Mode • Saved to O: Drive Brendan Fuller ß Lavout References Mailings Review View Help Acrobat □ Comments 1 = - = - = - = = 0 ■ = = | 1= -Editing Create PDF Create PDF and Request and Share link Share via Outlook Signatures Files Տtyles հա Adobe Acrobat Voice Sensitivity Editor Reuse Files 1 · 3 · 1 · 4 · 1 · 5 · 1 · 6 · 1 · 7 · 1 · 8 - Inspection and test plans, and procedures for review and/or amendment to the ESCP. 17 Identification of site responsibilities. 128 Construction program and installation sequence for ESC measures. - Other relevant information Council may require to properly assess the ESCP: [complete/delete] 13 Design certification Certificate: Provide a signed and dated design certificate as evidence that a suitably qualified professional has reviewed all the design documents, including erosion and sediment program and 20 plans for the development, and can verify that the designed measures will effectively mitigate sediment migration from the development site. 21 Additional certification Sites with a soil disturbance greater than 2500 m2: Provide certification by a professional engineer that ality 22 the ESCP conforms to the following: Satisfies the intent and design/performance standards established by all relevant local state and ality federal policies relating to erosion and sediment control. 23 - Has been reviewed and approved for construction, soil science, hydrology/hydraulics and site 54 Certification by a hydrology and hydraulics professional engineer: Required for sites greater than 1 ha or where the ESCP incorporates a sediment basin. 52 Certification by a geotechnical specialist: Required if ESCP incorporates a sediment basin with a constructed earth embankment with a height greater than 1 m. 92 © AUS-SPEC (Oct 21) "[Insert date]" D07.01.04·A suitably qualified and experienced professional must have completed an advanced Qualifications¶ ¤ <u>specialised-training</u>-course-in-erosion-and-sediment-control-provided-by-a-reputablebody and be able to provide documentary evidence of such training upon request. Qualifications accepted as meeting this requirement include IECA's Registered Soil Practitioner Erosion and Sediment Control (RSP-ESC) or Certified Professional in-Erosion and Sediment Control (CPESC) D07.01.05 The Design Certificate Erosion and Sediment Control Form is to be completed and Design: submitted to Council with the Operational Works application. The form can be obtained Certificates from Council's website. Action By ΑII M2024.07 Discussion

- Jamie McCaul (RRC) advised that the extent of what has been put forward is as per direction from Water By Design and Topo.
 - Discussed limit of certification governed by the Professional Engineers Act i.e. an RPEQ not competent should not be certifying ESCP designs.
- Alan Chen (LSC) advised LSC likely to provide advice by mid-September.

- Jamie McCaul (RRC) advised this is critical to get sorted sooner rather than later.
 Discussed if there's any intent to provide the draft to industry for review. Responses from LGA's on internal reviews to be provided prior to going to industry. MCE to put together some sample standard drawings.
- Brendan Fuller (GRC) queried what is the need to produce this document separately from IECA guidelines. Jamie McCaul (RRC) advised the intent is to simplify the large amount of info in IECA for ease of implementation.
- Jamie McCaul (RRC) advised the example ESCP plan is available and will be circulated.

Post meeting note

Scott, Jamie and Richard have discussed the changes to the previous D7 document. Jamie to provide breakdown of previous content that has been removed or modified. Further consideration to be given to the document format/ content and ensuring consistency between CMDG specifications. Content from NATSPEC and other LGAs such as FNQROC development manual to be reviewed and considered.

M2024.07 Resolution

MCE to put together some sample ESCP standard drawings.

M24.06.04

D2 Pavement Design – No resolution at meeting M2024.07 D2 is undergoing review by RRC.

M2024.06 Discussion

- Allen raised Table D2.13.1 25mm vs TMR MRTS30 min 35mm, noting that the asphalt contractor working on a local subdivision had identified that they would not warrant the work if it was not in accordance with TMR specification.
- A brief review of Austroads AGTPT Part 2 identified that 25mm DG10 should be considered appropriate.
- It was noted that table C245.22.2 of C245 conflicts with CMDG D2.

M2024.06 Resolution

- Grant was asked to review construction specifications as part of the ongoing review of CMDG D2.
- MCE to provide input on asphalt mix designs

M2024.07 Update

Rich to provide update on asphalt mix designs.

Action By

RRC

M24.06.05

D10 Landscaping Design

D10 (draft) is being prepared by RRC.

M2024.06 Discussion

- Grant presented the draft D10 document to the committee.
- The origin of the original draft D10 was discussed, noting it was never circulated for use. It was expected that Greg Abbotts (LSC) created the draft in 2010 or there-abouts. This document has formed the base of the revised draft, as amended by Michael Ramsay (RRC's landscaping consultant). The revised document has amendments made in yellow.
- It was decided that C273 would not be combined with D10.
- The issue of circulating IPWEA drawings was raised, noting they operate on a subscription model. Scott McDonald (GRC) advised that other Councils have shared IPWEA drawings on their websites in the past, however would like to confirm this proposal with IPWEAQNT first before including on the CMDG website.
- It was agreed that two planting tables would be used, one for RRC and GRC each. Other LGA's were to provide their preferred default or provide a bespoke table if required.
- The impact of planting requirements on sight distance (refer to G16) was raised. Cross checking was required to ensure intersection sight distance was maintained. Post meeting commentary from GRC and MCE:
 - Scott McDonald Should it be SISD or SSD? SSD is a lower value allowing for stopping, concern that SISD requirements may be significant larger than 15-20m. Some intersections may be 60m apart meaning no trees allowed.
 - Rich Bywater Will need to be considered on a case-by-case basis as trunk of a tree might not be considered to obstruct sight distance. Also position of tree relative to kerb and traffic lane will have an impact. However, default should be to achieve SISD where possible. Further discussion required.
- RRC advised that the BCC Specification S190 is the best source of information for best practice landscaping/planting. Scott raised that review of specifics based on different climate vs Brisbane may be necessary.
- Bollard standard drawing steel for urban, timber/plastic for parks etc. Changes to drawing required.
- Scott raised intent of future movement of design vs construction sets. Rich confirmed approach is to generally combine on an ad-hoc basis. Agreed to make D11, D12 and D7 Design and Construction. Jarvis raised that website changes may be required. Rich suggested changing the website reference to 'Specifications' and localising all D and C suite. A prompt for what is superseded is to be included on the drawings. Suggested Design and Construction, D7 for example.

M2024.06 Resolution

- MCE/RRC to determine if the 'approved planting list' refers to the construction docs or the appendix.
- RRC to review C273 and if updates are required to align with D10.
- LGA's to advise their preference of planting table default.
- MCE to cross-check D10 with G16 to ensure correct sight distance is maintained.
- LGA's to advise if their requirements to BCC S190 vary.

M2024.07 Update

At the time of writing comments have only been received from GRC:

GRC have reviewed the BCC content and noted that it generally aligns with AUS-SPEC with some of differences where BCC wanted to change to suit their needs.

There are a few items that could be consider for inclusion if we are talking landscaping as a whole.

- Do we need to tie into Retaining Walls, potential need for open spaces or landscape area.
 Reference to other CMDG specification doc to guide requirements.
- Temporary Landscape fencing
- Temporary grassing do we provide coverage rates and requirements.

- It has watering requirements, do we need to consider Irrigation requirements drip irrigation systems / micro-irrigation system / subsurface drip irrigation systems
- Do we need to articulate the handling of seed mixture
- Fertiliser, do we have content like bags to be un-open when brought on-site and have labelling etc.
- Topsoil nutrient level tabled information

In referencing a third party document (BCC) will mean we never really have full control of the content.

GRC preference would be to take the content out that meets CMDG's needs. If we reference BCC specification the ongoing review of the BCC documents would be required to ensure that content is still suitable.

In referencing others does it start to take us away from a one stop shop model we keep trying to achieve for our customers, on the other hand if the information is out there why reinvent the wheel.

FNQROC may have some content in their development manuals that can add value to the development of content for CMDG.

Is the referencing of a 24 pages specification within our own 14 page specification over complicating things?

Marked up version by Scott is included as Attachment K.

Additional comments/ feedback from GRC:

- The objectives in D10 come from the Pine Rivers Plan 2006 (Attachment K1) and PSP30 for landscaping (Attachment K2) and have no context with anything in the document.
- The FNQROC 2005 D9 (Attachment K3) document was the starting point for D10 landscaping design and the current 2019 D9 (Attachment K4) is where it is now.
- Sections within D10 have been modified from original which makes it difficult to compare.
- S190 specification began as a reference specification for Brisbane City Council in 2000 (refer attached part D - Attachment K5) and was not based on Natspec (refer to images below). In 2001 there was a landscaping design guideline for tree planting (Part B07 Attachment K6)
- Mackay landscaping documentation appears to be based on the FNQROC development
 manual
- Recommendation is to start the specification again with the FNQROC D9 document as a basis/ guide, then incorporate the S190 information (Attachment K7 & K8) from Brisbane City Council. Note that some content from BCC S190 relates the CMDG construction spec C273.

For discussion and consideration.

Response from IPWEAQ re sharing of drawings

IPWEA are aware that a number of LGAs refer to IPWEA drawings and some also upload them to their own websites. IPWEA don't really support this but are understanding of the issues with access due to the paywall.

IPWEA support the idea of a free access model and are exploring various contribution models with a focus on providing free access to end users. However, they see some potential difficulties with implementation given the input and investment from number of LGAs and organisations. They note that the introduction of the 3 tiered subscription model, with Bronze providing access to the technical documents only, may help to make the content more accessible.

Until a free access model (or otherwise) is implemented IPWEA's position is for drawings to be referenced to their website rather than be uploaded elsewhere. However, they have no plans to police the upload of sharing for the drawings as they don't believe this would be helpful to industry.

M2024.07 Discussion

Grant Vaughan (RRC) advised that the draft documentation had been circulated internally.

- Will propose further changes i.e. irrigation etc.
- Nathan Garvey (BSC) advised similarly had been circulated internally and will provide comments.
- Jarvis Black (MRC) advised similarly.
- Discussion on GRC comments and creating a coherent document that contains all the content relevant to CMDG. General agreement that this should be the approach.
- Richard raised that C273 may have some overlaps with S190 and all documents need to be considered together. Jarvis noted that content and planting in C273 is limited for to verge and medians environments.

M2024.07 Resolution

- LGA's to provide feedback to MCE.
- FNQROC and NATSPEC to be reviewed and considered. Key content to be extracted from S190 and included in D10.

Action By All

M24.07.01

D14 Floodways

Comments have been received from IRC, RRC, GRC and LSC.

IRC and RRC comments have been actioned.

GRC comment in relation to rock sizing for bed level crossing has been reviewed and a revised formula in accordance with QUDM will be included as the exact reference/ justification for the current formula proposed in unknown.

Comments received from Allen at LSC:

- 1. I have some comments over the "Development Approval" parts. A floodway should be defined as an Operational Works under Planning Act 2016. If a floodway needs to be constructed by a developer, it is very likely that it is triggered because of a subdivision. In our planning scheme, any Operational Works associated with a subdivision (ROL application) is code assessable, i.e. Operational Works permit is required. Even it is not associated with ROL, as a floodway is very likely to be handed over to Council as Council's asset, I expect Operational Works Permit is a must as this will allow Council officers to inspect, review and record the as-constructed data, having defects period and etc.
- 2. I understand that D14.01.05 has mentioned MUTCD. But I thought maybe better to have a bit more specified clauses related to the traffic signs related to a floodway? Such as "road subject to flooding" and the scale showing the flood depth.

MCE comments:

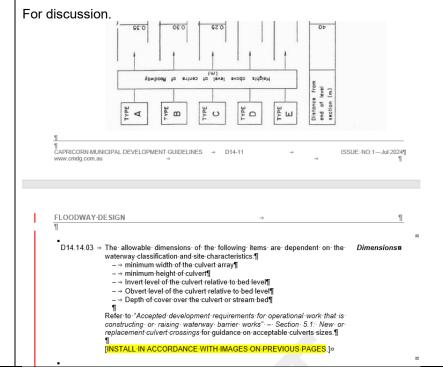
I don't think that there will be any scenario that does not require either operational works approval or a works in road permit so Council should have opportunity for review and comment. Floodway signage has varying requirements depending on road environment. Section D14.10 includes some signage requirements at the floodway.

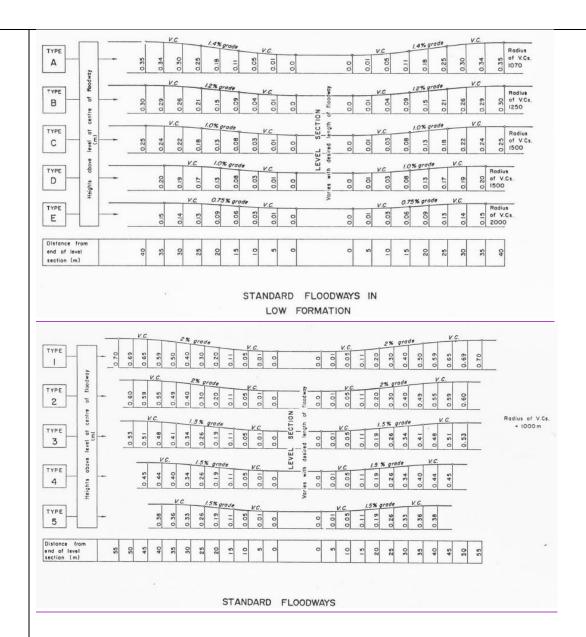
For discussion.

Inclusion of Design Charts for floodway grading

Brendan has suggested the inclusion of the design charts from Calliope, which provide vertical grading information for difference scenarios.

While they are helpful for basic floodways where there is no design provided, the majority of cases, and everything related to new development, would have a bespoke design and drawings.





M2024.07 Discussion

- Allen Chen (LSC) raised that the draft D14 document identified that the works do not need to be approved.
 - o D14.22.01 change reference from SPA to the Act.
 - Agreed signage on standard drawings is OK.
 - Agreed to add a clause noting that for specific approval requirements to contact the LGA.
- Brendan Fuller (GRC) raised the need to include set longitudinal sections as part of the doc. Grant Vaughan (RRC) suggested that this info might not be useful in modern practice.
 Jarvis Black (MRC) requested a copy of the long sections for review to determine if useful for MRC's rural roads. Richard Bywater (MCE) to provide.
- Brendan Fuller (GRC) queried the rock sizing formula. Richard (MCE) advised that it is still
 in progress to ensure there's a basis for the proposed equation/chart. Brendan
 recommended using the information from Austroads.

M2024.07 Resolution

 MCE to provide the longitudinal sections to MRC for reference and make the changes noted above.

M24.07.02

D1 - Wildlife Corridors - No resolution at meeting M2024.07

Livingstone Shire Council proposes to update the *CMDG Design Guidelines D1 – Geometric Road Design*, to enhance the requirement of wildlife corridors over road design. We have drafted the following updating:

- 1. Under Clause D01.04 of CMDG Geometric Road Design, Fauna Sensitive Road Design by Department of Transport and Main Road and Queensland Urban Drainage Manual shall be included as reference and source document.
- 2. Under Annexure D01E Livingstone Shire Council D1 Road Design Hierarchy Tables (note: this table is specifically for LSC, no need to be agreed by other Councils):
 - (1) Wildlife Corridors for Major Urban Collector shall be "Yes".
 - (2) A note shall be added to the item of "Wildlife Corridors" on the table of "*Urban Areas*" as below:

For a road with hierarchy of Major Urban Collector or higher, if it runs through the area under biodiversity overlay, or area with biodiversity concerns by local authority, wildlife corridors for terrestrial animals shall be provided. The detail of the wildlife corridor, including the size, location, frequency, shall be assessed and determined by suitably qualified person.

For a road with hierarchy of Major Urban Collector or higher, if it runs through a waterway under biodiversity overlay, or a waterway with biodiversity concerns by local authority, wildlife corridor shall be design in associated with the culvert crossing design. The detail of the wildlife corridor, including the size, location, frequency, shall be assessed and determined by suitably qualified person.

- (3) A note shall be added under the table of "Rural Areas" as below:
 Wildlife Corridors for terrestrial animals and/or associated with drainage facilities shall
 be designed by a suitably qualified person, for rural roads passing through areas with
 critical biodiversity concerns, as per the determination by local authority.
- 3. Under Standard Drawing No. CMDG-R-013 and CMDG-R-014, similar note as the above could be added. (Note: the standard drawings are applicable to all Councils. Putting these provisions in might need to be discussed in CMDG committee. But we could make an applicable table to define which Council applies.)
- 4. Add the following provisions under "Urban Design Criteria" (note: the provisions are applicable to all Council, which shall be discussed in CMDG committees. But we could make an applicable table to define which Council applies):

D01.26 Wildlife Corridors

D01.26.01 Wildlife Corridors for terrestrial animals shall be designed in accordance with *Fauna Sensitive Road Design by Department of Transport and Main Road*, or any other relevant standards, by a suitably qualified person, for roads of a certain hierarchy, as per the determination by local authority,.

D01.26.02 Wildlife Corridors at culverts or any drainage facilities associated with the road shall be designed in accordance with *Queensland Urban Drainage Manual* and *Austroad Guideline, Guide to Road Design Part 5: Drainage – General and Hydrology Considerations*, or any other relevant standards, by a suitably qualified person, for roads of a certain hierarchy, as per the determination by local authority.

5. Add the following provisions under "Rural Design Criteria" (note: the provisions are applicable to all Council, which shall be discussed in CMDG committees. But we could make an applicable table to define which Council applies):

D01.32 Wildlife Corridors

D01.32.01 Wildlife Corridors for terrestrial animals and/or associated with drainage facilities shall be designed in accordance with Fauna Sensitive Road Design by Department of Transport and Main Road, Queensland Urban Drainage Manual and Austroad Guideline, Guide to Road Design Part 5: Drainage — General and Hydrology Considerations, or any other relevant standards, by a suitably qualified person, for rural roads passing through areas with critical biodiversity concerns, as per the determination by local authority,.

| The above proposals are very general provisions, only to enhance the requirement of wildlife corridor. No detail specifications were added. Details should still be considered by the engineer conducting the design. |
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| Related references are Attachments L1-3 |

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For discussion.