Capricorn Municipal Development Manual Technical Reference Group MEETING MINUTES POST AMALGAMATION MEETING 4

Venue: Council Chambers Duaringa
Date and Time: Wednesday 13 July 2011

11:00 am to 4:00 pm

Invitees: Chris Hegarty (Cardno) Kevin Quinn (RRC)
Abby Smith (Cardno) Phil McKone (FRW)

Roger Naidoo (CHRC)
Grant Vaughan (RRC)
Gail Roylance (BSC)
Sunny S (BSC)

Jonathan Herron (RRC) Savannah Sang (Cardno)

Apologies: Kym Downey (MRC)

Mike Prior (RRC)

Andrew Bullock (CHRC)

No	Item	Action By	
	Meeting Open – 11:00am		
1	Meeting Opening Session / Introduction		
	a) Inclusion of Maranoa Regional Council (MRC)		
	- It was noted that a representative from MRC was unable to attend.		
	 Cardno to upload revised map showing all four (4) Councils onto website. 	Cardno	
	b) Relocation of CMDG Formal Meeting		
	 It may be possible to have timing of CMDG meeting to coincide with next IPWEAQ meeting (9 September 2011 in Emerald). 		
	 Next meeting may take place in Biloela to provide more central location with inclusion of Maranoa or meeting location could move around to share travel times. 		
	 Next formal meeting date, time and location to be confirmed through consultation with each of the involved Councils. 	Chris	
	c) Correspondence		
	 Correspondence to be sent to the following Council contact persons who will distribute to all relevant parties; 	Chris	
	RRC - Phil (Water & Sewer) and Grant (Roads & Drainage)		
	BSC – Gail (All)		
	CHRC – Roger (All)		
	MRC – Kym (All)		
	d) Reference to CMDG in Council Planning Schemes		
	 Planning Schemes are to refer directly CMDG for technical matters to provide legal weighting to CMDG 		
	- This will also allow technical standards to change without amendment to Planning Schemes		
	 BSC, CHRC have confirmed that their respective Planning Schemes have been amended to show the above 		

	- MRC is in process of updating	
	- RRC has acknowledged that there are some conflicts between the two sets of documents and will provide reference to CMDG in revised Planning Scheme (currently being updated)	
	e) BSC Water and Sewer Input	
	- Gail to arrange for Water and Sewer Engineer (George Kaitthakotin) to call Phil directly to discuss water and sewer technical standards rather than wait for next meeting.	Gail
	 Aim is to familiarise George with CMDG and allow him provide comments. 	
	 Gail noted that currently in Biloela a 700 Lot development is under design/ construction forming 90% of Banana's future residential development planned for in the PIP. The ten (10) stages of this development will provide enough capacity for the growth of Biloela for the next 20 years. Banana would like to see these standards implemented to ensure consistency between all stages of the development. 	
	f) D11 Water Design Guideline (DRAFT)	
	- The draft document was presented for discussion.	
	It was noted that Cardno has now received Maranoa's proposed changes to be included in the design and construction specifications.	Cardno
	g) Other issues	
	 Chris acknowledged that a separate fee agreement has been provided to cover Maranoa's changes to documents and drawings. 	
	- All Councils have accepted 2.5m water main offset.	
2	Previous meeting minutes and business arising	
	No business was raised from previous meeting minutes.	
3	CMDG Website	
	a) Current status / inclusion of Maranoa	
	 Updated of Roads/Drainage drawings have been uploaded to website. This will be further amended to include Maranoa RC and will be uploaded. 	Cardno
	 All specifications will be distributed for approval prior to uploading website. 	Cardno
	It was noted that all involved Council's are happy with Maranoa's inclusion. Cardno is currently waiting on okay from Kym to upload Maranoa's dedicated page onto website (Chris to follow up).	Cardno
	- All attending parties acknowledged that use of website is effective.	
	Ownership of CMDG	
	a) Grant brought forward the question as to who has ownership of CMDG. For example, who grants permission for the use of the specifications and drawings in other publications (ie Statewide Standards)?	
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Grant noted that there may be a push for Statewide standards in the future. It was suggested that the guidelines have been funded by the public (rate payers), therefore they should be freely available and without cost (not sold). It was also suggested (Gail) that if the State wanted to purchase the documents then they may need to reimburse Council and subsequently the public for time and resources It was agreed that the guidelines are cost saving for Council and no different to other freely available Policies on Council websites. - It was recommended (Chris) that in the future, if there was a possibility for State funding, RRC control this funding and delegate to different resources / consultants. May be referring to 'default standards' for Roads and Drainage (Phil) - Chris to investigate intentions for State standards in future. Chris 4 Cardno Current and projected costs a) The expected costs (Cardno Fees) for completion and maintenance were discussed. - An invoice has been recently sent out. - The next invoice will include all four (4) Councils as well a separate invoice for Maranoa (to include in already updated drawings). Cardno estimates approximately \$25,000 per year (total fee) for the revision of the specifications and drawings. - It is expected that maintenance cost will be less (ie for small changes, enquiries and meetings). 5 **Safety Plans** a) The issue of Council inspector safety on work sites was brought forward (Phil). - Currently there is a focus on safety of contractors, however Council staff and inspectors also need to be considered. Does CMDG contain reference to an appropriate safety plan which covers Council staff? Council vehicles (RRC) now being fitted with flashing lights and UHF in order to comply with site safety standards It was recommended that at the Pre-Start Meeting a copy of work plan should be produced and reviewed to ensure Council inspectors are identified. It was identified that some water/sewer inspections are prearranged and therefore the inspectors may not be escorted into the site – may create safety concerns. Currently BSC requires a WH&S officer to attend all pre-start meetings for both private and Council construction to ensure the WH&S Plans are adequate. It was recommended that the Work Safe Plans be included in pre-start Chris list and are to be provided to Council 7 days the pre-start meeting to be reviewed by appropriately qualified WH&S personnel. Chris to consult with Tony Haunschild (WH&S Officer) at RRC regarding this approach.

Standard Drawings a) New proposed applicability box to reduce the space taken up on the standard drawings (thanks to Jason Gustafson RRC). DRAWING REGISTER Council BSC CHRC MRC RRC Applicable Applicable DWG - All attending Councils are happy to use applicability box. Box to be renamed "Applicability Table". Cardno The "Applicable DWG" row is to be removed from drawings if not Cardno applicable. Where drawing is not applicable a reference to the relevant Council Cardno specific drawing is to be added. Tick / Cross to be changed to Yes / No. Cardno Applicability box to have a standard location on all drawings (bottom Cardno right corner) b) It is proposed to standardise font on all standard drawings It was agreed that this is not a high priority and at this stage will only be Cardno changed if already amending the drawings (any changes from now on are also to be made consistent by Cardno) Jason Gustafson (RRC) will make these changes on water and sewer Chris drawings and will be circulated once complete. Chris to discuss drafting check sheet with Jason (including font styles, Chris applicability box) to ensure consistency. c) As Constructed Drawings / Data It was recommended that all of the Councils work towards consistent requirements for the submission of as constructed data. - Does Council want to move towards ADAC (SEQ standard for as constructed information)? BSC and CHRC to look at current RRC 'As Constructed' Information Gail/Roger Manual and Tables online to determine if this would suit their Council specific requirements. d) Roads, Drainage and General These drawings have been updated to include all amendments (previous to this meeting) and have been loaded onto the website. - Cardno are currently amending drawings to include Maranoa. Cardno e) Floodway Drawing The use and details of a standard Floodway Drawing were discussed as per the following; - Grant has begun producing standard Floodway drawings. Gail to send current BSC Floodway drawings to Grant. Gail

- It was noted that currently BSC requires permits for 'road trains' to use Council owned roads. - It was agreed that each floodway requires site specific engineering design. Grant recommended that the standard drawing include the following three floodway types; Type 1 – temporary repair that allows road to continue to be used in rain event. Type 2 – raised with batter protection Type 3 –includes low flow pipes - Floodways need to ensure that natural scouring occurs (min scour velocity) to prevent a build up of sediment upstream of the floodway. Each case needs to consider natural and environmental impact to Grant determine the type of floodway and if a floodway is most appropriate solution. It was recommended that 'Factors for Consideration' for the selection and design of floodways be included in the specification. Standard drawing to include reference to required 'flood immunity Grant height' - to be confirmed. Grant to develop standard floodway drawings/guidelines as per the Grant above and distribute for review. f) Batter Slope The issue of maintenance of steep batter slopes was raised (Kevin). Chris to check if guidelines currently specify the following (or similar) -Chris "Where max batter slope of 1 in 4 is not achievable – batter treatment is required". It was noted that the guidelines needs to be more flexible with respect to batter slopes or specify in what situations the batter slope can be varied (eg shallower than 1 on 4 for sand). Chris to consult with Kevin to ensure the above points are reflected in Chris the guidelines. a) Water and Sewerage: Draft drawings to be circulated separately. An error in the CDMG drawing SD-S-070 for the suitable epoxy coating material and thickness. Chrisproposed the following wording to replace Note 10 on SD-S-061 (Sewer PS wet well) and Note 10 on Drawing SD-S-070 (Discharge MH details): 10. Corrosion Protection of discharge chamber or pump well alternatives: a) All internal surfaces shall be smooth and free of holes and lightly sandblasted or acid-etched before painting with Peerless Epigen 1311 or Parchem Nitocote EP410 in two coats with a total dry film thickness of 600 microns. The concrete surface shall have cured for at least 28 days; or b) A fabricated chamber liner of polyethylene shall be placed before the wall and
 - c) An alternative method of corrosion protection approved by the Service Authority.

Iplex EZI pit or Wavin Tegra; or

Phil noted that the water and sewer drawings are out of date and are in the process of being updated and amended to reflect current processes

top slab is poured or use a complete polyethylene manhole system such as

I	and to be simpler and less prescriptive (where required).	
	 All Councils to send comments through to Cardno regarding current water and sewer drawings. 	All Council Reps
	 b) Parks – draft drawings presented for preliminary discussion only (Kevin) - Michael Buckley has been appointed the new Parks and Gardens Manager at BSC. 	
	 Kevin to arrange meeting between Michael and the CHRC and MRC Parks Representatives to discuss and develop Council specific 'Excluded Plant Species' lists. 	Kevin
	 RRC has just completed a Street Tree Master Plan (DRAFT). Kevin to send to Chris who will to circulate to all. 	Kevin/Chris
	 Chris to amend Landscaping Specification to remove Plant Inclusion and Exclusion lists and replace with a note to approach individual Councils for advice. 	Chris
	A short break for lunch was held.	
7	Water design and Construction specifications	
	a) Purchase specifications	
	Phil McKone has prepared draft documents for review. It is proposed that where a purchase specification does not exist for an item that the standard WSAA Purchase specification will apply (note these specs often refer to the Water Authority for advice on specific matters)	
	 Flanges: Cardno to amend purchase specification to refer to AS4087 rather than AS2129 for flanges. 	Cardno
	 Sewer uPVC: Phil to review WSAA standard for Sewer class (ie SN8 or SN10 > 3.0m up to 5.7m) and confirm preference 	Phil
	 Trenches: Details to be amended to ensure appropriate bedding / compaction for SN8 > 3m deep 	Cardno
	 DI Fittings: Purchase specification to specify elongated gibaults in accordance with Australian Standard. 	Cardno
	 Adoption of Purchase Specifications: All Councils to review purchase specs and indicate if happy to adopt / provide comments and amendments if required. 	All Council Reps
	 b) Plan for documents to distinguish between Water Service Providers (eg RRC) and Water Service Operators (eg FRW) - Gail indicated that she believes that Provider and Operator would be same entity with BSC. 	
	 Note there will be no change / addition to the specification however each Council needs to be aware who Provider and Operator is within Council (ie different departments). 	
	c) Hierarchy of Documents	
	It was confirmed the following hierarchy of documents will apply. i) CMDG Design Spec D11 ii) CMDG Construction Specification D11	

	iii) CMDG Standard drawingsiv) Manufacturers Instructionsv) Purchase Specificationsvi) WSAA Water Services Code of Australia	
	d) Status of Specifications	
	It was noted that water and sewerage design and construction specs are currently being amended and will be distributed when complete.	Cardno
8	Roadworks and Drainage design specifications and issues which have	
	<u>arisen</u>	
	e) Pathway and driveway access	
	In response to a request from the Rockhampton Community Access and Equity Reference Group to investigate whether there is capacity for all pathways and driveway access to be flush (no lip) the following was noted.	
	- It was agreed to remove lip – relevant drawings to be amended.	Cardno
	 It is preferable for slope from invert of kerb up driveway to be changed to 1 in 8 (or 150mm over 1.2m) which corresponds with maximum pedestrian walkway slope – relevant drawings to be amended. CMDG- R-100 and 101 to be reviewed to determine impact on other services. 	Cardno
	f) SD-R-100	
	Currently standard drawings require water main road crossings to run perpendicular to road centreline. As a result the Inspection Openings (maincocks) are being located under driveways.	
	 Drawings to be amended to show water crossings acceptable on angles (up to 22.5 degrees), preferably from property boundary to property boundary. 	Cardno
	 Jon noted that where practical it should avoid placing services under pathways. 	
	g) Rural Road Causeways	
	- Grant to confirm ARI's for cross drainage design and Check ARI's (ie major flow checks for trafficability) and circulate.	Grant
	h) Use of FRC stormwater pipes - CHRC and BSC are happy to accept FRC.	
	- RRC to confirm acceptance of these pipes.	Grant
	- Guidelines to be amended to make reference to acceptance/rejection of use of FRC pipes.	Cardno
	i) Pavement Design Calculation Method	
	It was noted that currently the method for calculating the Design Traffic Volume (refer page D2-4) is carried out in accordance with the ARRB, Sealed Local Roads Manual (latest version - 2005). However, determination of pavement thickness is required to be carried out in accordance with and using the more conservative design charts in the APRG Report 21 (1998).	
	- Jonathan to discuss with Abby and determine Council's preferred	Jon/Abby

direction j) Spray Bitumen Seals - The following is to be removed from Design Specification and amended Cardno to refer to Austroads and Construction Specification. (b) Rural & Rural Residential - Primer seal, plus 2 coat sprayed bitumen seal 1st coat 14mm aggregate & 2nd coat 10mm aggregate k) Asphalt Compaction The current minimum compaction requirement for asphalt is between 95 and 96% depending on layer thickness. These values are thought to be high in comparison to the DTMR standard compaction requirements (generally 90-92%, see below) and advice from Boral Asphalt (they advise that 95-96% is not obtainable unless mix has high bitumen content). Table 12.3.1.2-A - Compaction Standard Surfacing, Binder and Corrector Joints Base Layers Layers Asphalt Mix Average Average Value (%) Characteristic Value (%) Nominal Value (%) Size (mm) Minimum Maximum Minimum Minimum DG7 90.0 97.0 DG10 90.0 97.0 90.0 88.0 92.0 DG14 97.0 92.0 (91.0†) 90.0 (91.0†)DG20 93.0 98.0 93.0 90.0 DG28 90.0 93.0 98.0 For target compacted layer thickness < 50 mm Grant/Jon (RRC) to check with Russel Collins on Council stance and will Grant/Jon report back. CHRC and BSC are happy to adopt DTMR Asphalt compaction standards. It was discussed that there have also been some problems with Grant/Jon minimum constructed asphalt thicknesses. Grant/Jon to investigate and inform Cardno of any amendments required to specifications. 9 Requests for use of new products a) Fibreglass Sewer PS wells (Mulally) - Phil noted that RRC will allow for temporary construction only BSC and CHRC to consult Water and Sewer engineers and advise of Gail / result. Roger b) Use of Pressure Sewers (Mono, ITT) Phil note that RRC does not allow for use generally, life cost is higher than gravity systems. Use permitted, only as approved where gravity systems are not practical. BSC and CHRC are to consult Water and Sewer engineers and advise Gail / of result. Roger

	c) Ezi Pit Maintenance shaft (Iplex)		
	The CMDG already permits use of PooPits/maintenance shafts as follows but requirements apply to RRC only.		
	Except for the Rockhampton City Council area , Maintenance shafts or small inspection chambers (eg. Wormall 'Poo-pit' or equivalent) may be used for 150mm diameter sewers in the head of cul de sacs to minimise the number of access chambers required for change of direction subject to the following requirements:		
	 (a) maintenance shafts are not to replace access chambers required at sewer junctions or access chambers required for maximum spacing (refer Table D12-1); and (b) provision of a heavy duty concrete surround at surface in accordance with the lamphole detail; and (c) product compliance with WSAA purchasing standards. 		
	- Phil noted that RRC is happy to continue with above.		
	 BSC and CHRC are to consult Water and Sewer engineers and advise of result. 	Gail / Roger	
	a) Use of Black Max stormwater pipe (Iplex)		
	- All attending Councils okay with use for inter-allotment drainage within private lots or open space but not in road reserve - Guidelines to be amended to suit ("BlackMax to be installed to AS2566")	Cardno	
11	Water Sensitive Urban Design (WSUD)		
	With regard to adoption of SEQ guidelines (available at www.waterbydesign.com.au);		
	 RRC believes these guidelines should be adopted if the new development has proposed to incorporate WSUD. 		
	 BSC and CHRC needs to confirm their Council's stance due to maintenance implications. 	Gail/Roger	
Meeting Close - 4:00pm			