POST AMALGAMATION MEETING 7 MINUTES

Venue:	Rockhampton Regional Council, Dooley Street Office, Rockhampton
Date and Time:	Thursday 27 November 2014 2:00pm – 5:00pm (tea and coffee provided)
Attendees: At meeting -	Chris Hegarty (Cardno), Abby Carolan (Cardno), , Michael Prior (Livingstone SC), Jonathon Herron (Rockhampton RC), Grant Vaughan (Rockhampton RC), Gail Roylance (Banana SC), Leesa Miller (Banana (SC)
Teleconference -	Ashleigh Tomkins, Emma Hamilton, Ian Munro, Don Dixon (GRC), Steven Ripper (CHRC), Ritesh Shrestha (CHRC), Nick Gansel, Scott ?(MRC)
Apologies:	Phil McKone (Livingstone SC), Kym Downey (MRC)

No	Item	Person Responsible
1	**New Councils Participating in CMDG** **a) Isaac Regional Council, Longreach Regional Council & Barcaldine Regional Council are still potential participants in CMDG.** No action – Chris H to keep everyone updated.	-
2	**SEQ Code & CTM Code** **a) South East Queensland (SEQ) Code & Cairns, Townsville & Mackay (CTM) Code for Water and Sewer Design and Construction.** **b) Chris H to provide background and update on development of water and sewer standards in QLD and what this might mean for CMDG.** SEQ Code is currently used by the SEQ Councils up to Moreton Bay (6 Councils). SEQ Code provides amendments to WSAA code. CTM Code provides amendments to SEQ code. All Councils previously supported a nationalised set of standard drawings as long as they were freely available to public. No action at this stage – Chris H to keep group updated on progress / changes in region.	-
3	**GRC Incorporation into CMDG**	
	a) GRC Amendments Water and Sewer Spec **i. Tables of Difference: Discuss increase in number of Tables of Difference and need to reduce these where possible.** Addressed as part of below items.	-

Sewer Easement Width

Table D12.07.2 to be amended as per the following: — Cardno

BSC	Minimum 4.0m, with the formula being twice the depth of the sewer line with the sewer line located centrally in the easement
CHRC	4.0m
GRC	4.0m with the sewer main to be located within a central zone in the easement which is at least 1m from the edge of the easement.
LSC	4.0m **TBC**
MRC	Minimum 4.0m, with the formula being depth of the sewer line minus 1.0m plus the offset from the property boundary
RRC	Minimum 3.0m, with the formula being twice the depth of the sewer line with the sewer line located centrally in the easement

Mike (LSC)

Ashleigh and Jonathon to provide wording on combined service (Roofwater and & Sewer) easement width. — Ashleigh (GRC) / Jonathon (RRC)

Trunk Infrastructure (Water and Sewer)

All Councils agreed to remove Tables 11.01.1 and 12.01.1 and address this issue at a later date – CMDG will continue to not cover trunk infrastructure at this stage. Ashleigh to look into how we can address trunk infrastructure in the new document. — Ashleigh (GRC)

Head Loss

Table D11.06.3 to remain as shown in Draft Water Design and Construction Specification (Rev C, Nov 14) – applicable to GRC only. — -

Calcareous Cement – Sewer Access Chambers

Table D12.03.2 to be amended to reflect the following: — Cardno

Council	Cement lining type
BSC	Calcareous
CHRC	Normal
GRC	Calcareous
LSC	Normal
MRC	**TBC** – Normal for now
RRC	Normal

MRC to confirm. — MRC

Water / Sewer Software

All Councils to confirm requirements / preferences for water and sewer network modelling software. — All

Sewer Maintenance Shafts

Change RRC requirements for Maintenance Shafts to ‘Not Approved’ within Table D12.08.3. — Cardno

	<u>Deflection of > 90° through access chambers</u> Remove Table D12.08.4 and provide clause stating – "*change of flow direction greater than 90° is not approved unless approved by the relevant service provider*". <u>Access Chamber Cover Seating</u> Remove reference to 'Compriband' within Clause D12.08.20 and replace with generic terminology. Mike to email Abby suggestion for this. <u>Discharge Chambers</u> All Councils, except GRC, have advised that both Fabricated Polyethylene and Concrete epoxy coated access chambers are approved for sewer discharge chambers. If all Councils agree and appropriate clause will be added and Table D12.09.4 removed – otherwise Table D12.09.4 will be updated to reflect each Councils preference. GRC to confirm their stance on this matter. <u>Sewer Inspection Requirements</u> RRC and LSC requirements within Table D12.17.1 to be changed to Visual inspection / CCTV (if required by Council). <u>Access Chamber Testing</u> Jonathon to provide wording regarding ingress testing where access chambers are installed below the water table. <u>Sewer Main Pressure Testing – Nata Accreditation</u> Leave table D12.21.01 as per draft specification (Rev C, Nov 2014) – Nata Accreditation required by GRC only.	Cardno Mike (LSC) GRC Cardno Jonathon (RRC) -
	ii. Water - **Order of Priority of documents: GRC's Order of Priority of documents is different to what is currently listed in the CMDG. We believe this is not an item that can / should be put into a Table of Difference – all Councils are encouraged to agree on this matter.** All Councils agreed to keep Order of Priority of Documents as currently shown in draft Water and Sewer documents (Rev C, November 2014).	-
	- **Bedding Sand: CMDG documents currently specify the following.** *"Pipe bedding material shall be clean, uniform, granular, non-cohesive, typically 6mm washed coarse bedding sand. Material shall be 90% passing AS1152 Sieve size 6.7mm, and less than 10% passing 0.150mm sieve."* It is recommended that we replace this section with the following extracts from WSAA.	

350.2 REQUIREMENTS

Compaction sand shall:

(a) Consist of hard durable inert grains of washed river, marine or dune sand or hard rock sand or a blend of these naturally occurring sand types.
(b) Compaction sand grading shall comply with Table 350.1
(c) The resistivity shall be greater than 1500 Ohm.cm^2 when tested in accordance with AS 1289.4.4.1.
(d) The pH shall be in the range 5 - 9 when determined in accordance with AS 1289.4.3.1.
(e) The sand shall be free from noxious weeds as proclaimed by the relevant regulators.
(f) The sand shall be free from dangerous chemicals as proclaimed by the relevant regulators.

TABLE 350.1
COMPACTION SAND GRADING

Sieve Size mm	Mass of sample passing, percent	
	Grade A	Grade B*
6.7	100	
4.75	95-100	100
2.36	85-95	100-90
1.18	65-80	85-100
0.6	50-70	70-100
0.3	30-50	50-100
0.15	5-12	0-40
0.075	3-8	0-5

* Table taken from Table G3 of AS/NZS 2566.2:2002.

TABLE 19.1
MINIMUM COMPACTION OF EMBEDMENT, TRENCH FILL AND EMBANKMENTS

Material type	Test method	Minimum value (%)			
		Trafficable areas		Non-trafficable areas	
		Embedment	Trench/ embankment fill	Embedment	Trench/ embankment fill
Cohesionless	Density index (Note)	70	70	60	60
Cohesive	Dry density ratio or Hilf density ratio	95	95	90	90

NOTE: *Graded gravels and sands having fines (silts and clays) greater than 5% shall have their compaction determined by the dry density ratio test method.*

Test methods for determining the degree of compaction shall comply with the appropriate part of AS 1289.

All Councils agreed to incorporate these tables into specification.

Cardno

- **Fire fighting minimum pressure: 12m at hydrant being assessed and 6m at any other location. GRC to provide further clarification and discuss with all councils to determine an agreed approach.**

The above is in accordance with Section 6.6.3 of the Department of Energy and Water Supply, Planning Guidelines for Water Supply and Sewerage. All Councils agreed to keep this requirements in the specification

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- **Hyrdrants at tees: GRC require hydrants to be located at all tees for the purpose of bleeding air off, flushing and swabbing. Table of difference will be required unless agreement is reached (preferable). Other Council's to confirm requirements on this matter.**

Agreement could not be reached – table of difference (D11.09.01) to be maintained as per current draft (Rev C Nov 2014) and below.

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BSC	No (maintenance / cost issue)
RRC	No (maintenance / cost issue)
LSC	No (maintenance / cost issue)
MRC	No (investigating but generally no)
CHRC	No (as above)
GRC	Yes

- **Bacteriological Testing: GRC require bacteriological testing to be carried out on all water mains in accordance with WSAA. These requirements have been included in the Final Draft of the Water Design and Construction specification. A table of difference has been provided to outline if bacteriological testing is mandatory for each of the Councils.**

GRC noted that they currently do the bacteriological testing with approximately 20% failure rate.

Other Councils who do not currently do testing may look at doing a risk assessment regarding this matter in the future but not at this stage.

	Table of difference (D11.20.01) to be updated to include the following Council preferences. BSC: Yes RRC: No LSC: No MRC: No CHRC: No GRC: Yes	Cardno
	- **Tapping band material: Currently, CMDG allows the use of plastic and gunmetal tapping bands for all Councils. As GRC do not allow plastic tapping bands, a table of difference has been introduced. Preferably, all Councils can agree on a requirement for tapping band materials to remove this table of difference.** Agreement could not be reached – table of difference (D11.03.02) to be maintained as per current draft (Rev C Nov 2014) and below. BSC: Both RRC: Both LSC: Both MRC: Both CHRC: Both GRC: Gun metal only	
	iii. Sewer - **Order of Priority of documents: GRC's Order of Priority of documents is different to what is currently listed in the CMDG. We believe this is not an item that can / should be put into a Table of Difference – all Councils are encouraged to agree on this matter** All Councils agreed to keep Order of Priority of Documents as currently shown in draft Water and Sewer documents (Rev C, November 2014).	-
	- **Emergency Storage at SPS: GRC currently does not allow storage in the upstream network to be included in the required emergency storage for a sewer pump station. A Table of Difference currently exists in the specification as all other CMDG Councils all network storage to be included as emergency storage.** All Councils agreed to leave Table of difference (D12.28.01) shown in current draft of Sewer Design / Construction Specification (Rev C, Nov 2014). MRC to look into the issue and confirm stance.	MRC / GRC
	<u>Revised Draft</u> Cardno to prepare a revised draft water and sewer specification with above changes. All councils will have 2 weeks (with consideration of the Christmas / New Year shutdown periods) to review and provide feedback. After this time the documents will be finalised and uploaded onto the website.	Cardno

b) GRC Incorporation into Road Design Spec

i. **Definitions – add to start of CMDG**

ii. **Policy Statement – incorporate into CMDG 'Aims' section**

iii. **Road Hierarchy – merge terminology together. CMDG / GRC terminology line up generally but would need to be merged / have multiple names for the same road type. Refer Attachment 8.**

iv. **Performance criteria tables – these will take a little bit of work to merge into CMDG tables. It is likely that we will need to recreate the CMDG tables to incorporate all of the additional information. Much of the information will be missing for the other Councils – to be left blank and then sent around to all Councils to fill in / reference other standards / leave blank where appropriate. Refer Attachment 8.**

v. **Cross Sections – GRC sections show slightly more detail than CMDG (ie bicycle / parking lanes). Recommend we update the CMDG sections to include this level of detail. Refer Attachment 9.**

Refer to GRC Road Hierarchy policy document in D1 Road Design Specification and upload policy to "Council Specific Info" page. All Councils to review possibility of merging policy with CMDG at next meeting. — Cardno

c) Engineering Certification Report – GRC have a very comprehensive Certification Report for the submission of development applications (refer Attachment 10). Recommend we review, check that it aligns with CMDG Approval Procedures and then replace current Statement of Compliance Engineering Design (refer Attachment 10). If other Councils don't want to incorporate we can add to Specific Council Info page.

Provide Table of Difference within CP1 (GRC Engineering Certification Report applicable to GRC only) and upload both documents to website. — Cardno

a) Construction Procedures – requirement for CCTV at on and off Defects Liability with Table of Difference added.

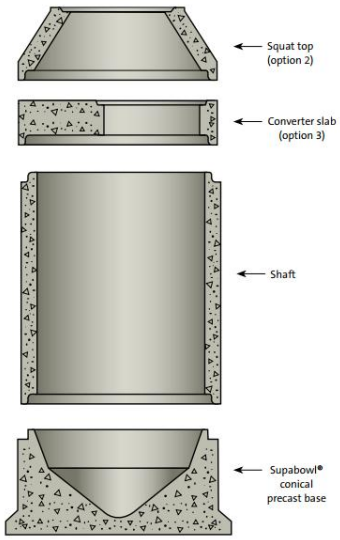
Table CP1.26.1 CCTV Inspection On and Off Defects Liability

Council	CCTV Inspection require prior to Council Acceptance	
	On Defects Liability	Off Defects Liability
Banana Shire	Yes	No
Central Highlands Regional Council	Yes	No
Gladstone Regional Council	Yes	Yes
Livingstone Shire Council	TBC	TBC
Maranoa Regional Council	TBC	TBC
Rockhampton Regional Council	No	No

Table CP1.26.1 to be updated as per the above. LSC and MRC to confirm requirements. — LSC / MSC

4 **Livingstone Shire Council Changes**

a) Conical Pre-cast Sewer Access Chamber Base



Provide Table of difference in Sewer Design and Construction Specification for approved use of Conical Chamber bases as per below.

Council	Conical Chamber Base
BSC	Not Approved
CHRC	Approved
GRC	Not Approved
LSC	Approved
MRC	TBC
RRC	Approved

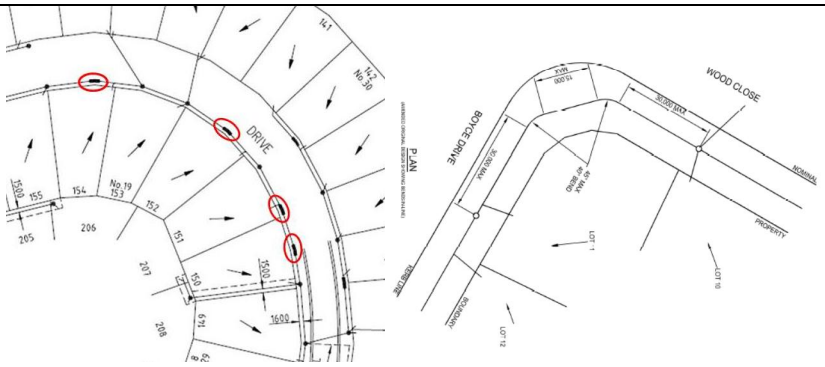
MRC to confirm requirements.

MRC

a) Sewer Bends

Examples of how to represent on drawings.

Cardno



Provide Table of difference in Sewer Design and Construction Specification for approved use of horizontal bends in sewers as per below.

Council	Use of Horizontal Bends in Sewers
BSC	Not Approved
CHRC	Not Approved
GRC	Approved
LSC	Approved
MRC	Not Approved
RRC	Not Approved

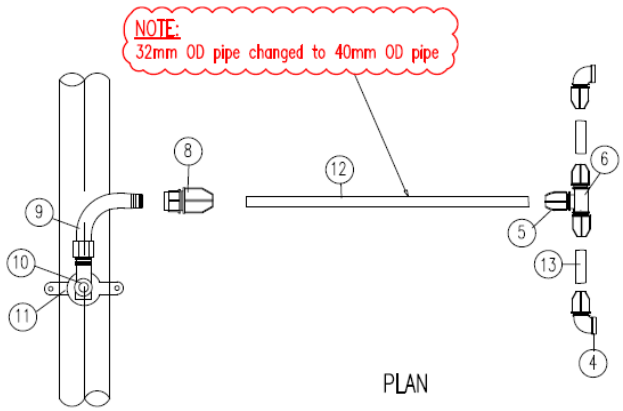
Mike to provide wording for inclusion in the specification regarding the use of bends. Wording to include:

- Bends to be 'long radius' type'
- Max 2 bends per run
- 80m between manholes still required.
- Vertical bends not approved.

Mike to also provide feedback on how these products go in ground.

Mike (LSC)

a) 32mm OD service connections (double) now 40mm to allow greater capacity for the construction of multi-unit dwellings.



WATER MAIN CONNECTION
DETAIL: B

MARK NO	DESCRIPTION
1	Approved 20mm Water Meter
2	20mm Ball Cock
4	20mm F.I. x 25 OD Poly Connector Elbow
5	40mm OD x 90 Poly Bend
6	25P x 25P x 40P Nominal OD Poly Tee (or equivalent)
8	32mm F.I. x 40 mm Poly Connector
9	M.I Ferrule Bend

WATER SERVICE CONNECTION
DETAIL: A

MARK NO	DESCRIPTION
10	25mm Ferrule Cock with Bonnet
11	Approved Tapping Band – Tapped 32mm DIA..
12	40mm OD Nominal
13	25mm Nominal OD Poly
14	20mm x 150 threaded Poly
15	100mm o UPVC Sewer Class SEH Riser
16	30 x 75 x 350 HWD Support
17	3 Brick Support
18	50mm MIN Sand Bedding

NOTES :
1. Short single connections (main in adjacent footpath) to be 25mm FI x 25mm OD Poly.
2. No galvanized fittings to be used.

Update Table of difference in Water Design and Construction Specification to include each Councils preferences for moving to 40mm OD double service connections as per above.

Council	Change to 40mm
BSC	TBC
CHRC	No
GRC	Yes
LSC	Yes
MRC	TBC
RRC	Yes

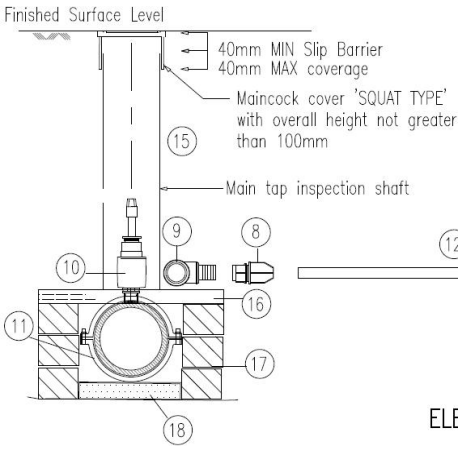
BSC and MRC to confirm requirements.

Table of difference D11.11.03 and Standard drawings to be updated appropriately.

BSC & MRC

Cardno

a) Ferrule Cock Box – cast iron



Update drawing to show Cast Iron Squat type Ferrule Cock Box for all Councils.

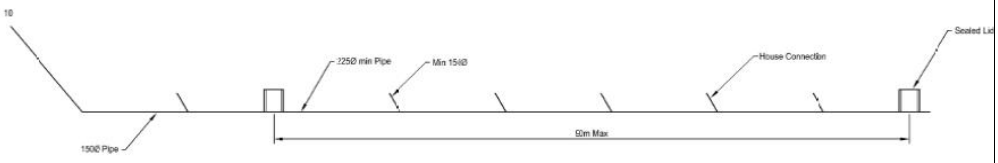
Clause D11.09.14 to be amended to exclude main taps.

Cardno

b) Interallotment / Roofwater Drainage – capture of roof runoff only (no requirements to capture overland runoff). Pits are not required in every allotment. Use of connection to interallotment main (similar to sewer) in place of pit.

Notes:

- **If depth of pipe is less than 2m, 45 degree & 60 degree bends are to be used – similar to sewer house connections.**
- **If depth of pipe is greater than 2m, 5 degree bends are to be used similar to sewer sugdon joint.**
- **All roof water house connection end caps to be marked 'Roof Water Only'.**
- **All sewer house connections and caps to be marked 'Sewer Only'.**



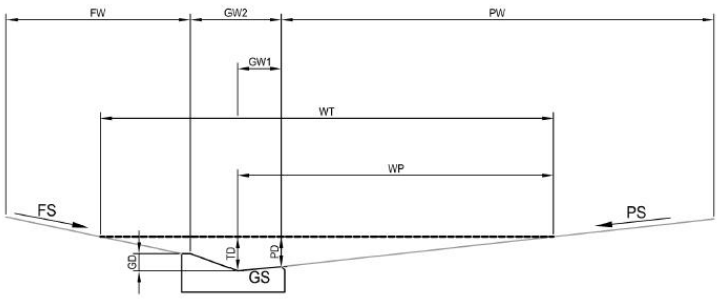
Provide Table of Difference in Drainage Design specification for required level of Inter-allotment Drainage as per below. — Cardno

Council	Required level of service (as per QUDM)
BSC	Level 2 – connection to main okay, no grated inlets
CHRC	
GRC	Level 3 (unless otherwise approved) – connection to pits
LSC	Level 2 – connection to main okay, no grated inlets
MRC	
RRC	

Create standard drawing for connection to main. Leesa (BSC) to provide example drawing). — Leesa (BSC)

Mike to provide section regarding surcharge from BCA / Plumbing and Drainage Code for Drainage design spec. — Mike (LSC)

a) Stormwater – Q100 flow analysis. Discuss requirements for representation of results ie levels at key locations, RPEQ signoff or Q100 inundation mapping.



Mike to send example of preferred output for Q100 inundation to enable easier assessment. — Mike (LSC)

5 **General CMDG Items**

a) Cover page and index pages updated.

b) Cattle Grid Drawing

- **RRC has questioned the Standard Council Grid Std Dwg. It appears to be based on the Main Roads drawing but with less detail. Should we provide more detail as per the Main Roads drawing?**
- **GRC Gates and Grids Policy P-2014/6**
- **There is potential to adopt Mobbs & Co, lower cost, engineering certified design.**
  - **Grid skew –** helps with vertical movement / stops tyres being damaged
  - **Crossfall (grid and base slab)** – to suit road
  - **Fixing details (grid bearer to abutment);**
  - **Bed rail (rail cast into abutment); and**
  - **Side rails.**

Refer Attachment 1 for all relevant information.

Standard drawing to include signage for grids.

GRC currently have their own drawings. GRC to send to Chris H and Gail for consideration and to recommend a way forward.

GRC, Chris H & Gail (MRC)

c) CP1 – Uncompleted works Bond Multiplier. GRC have requested a different multiplier to what is currently in the construction specifications. All other Councils to review and confirm required multiplier.

Incomplete works bond multiplier table of difference to be updated in CP1 as per the following.

Cardno

Council	Incomplete Works Bond Multiplier
Banana Shire	1.5
Central Highlands Regional	1.5
Gladstone Regional	1.5
Livingstone Shire	2.0
Maranoa Regional	1.5
Rockhampton Regional	2.0

d) As Constructed Submissions – RRC moving to ADAC requirements.

Cardno to check that CP1 refers to website and amend if necessary. RRC to make change to ADAC in 2015 – website to be updated then.

Cardno

6	**Sewer – General**	
	a) The current Sewer Pump Station drawings do not provide reinforcement details for the wet well. Reinforcement details for the lid are provided. Refer Attachment 2 for example SEQ drawings. All Councils agreed to leave as is.	-
	b) Split Ring Collar for Sewer manholes – suggested by Maranoa for incorporation into CMDG. Refer Attachment 3 for the BCC drawing for example. Benefits noted by Maranoa include: **i. Manhole cover can be raised when future resealing works on roadway are required;** **ii. Extra depth in the collar is attained by adding suitable rings to the collar; and** **iii. Pavements do not have to be disturbed around manholes when extra depth of surfacing is added.** Jonathon to research and provide recommendation as to how to proceed (ie new drawing or include reference in spec).	Jonathon (RRC)
7	**Stormwater - General**	
	a) Adoption and referencing of new QUDM – refer attached email (Attachment 4) from Abby Carolan outlining the potential impact of changes to QUDM on the CMDG. No changes until QUDM 2013 adopted.	-
	b) Banana Shire Council wish to amend their road elements table to bring hierarchy in line with funding bodies' information (refer Attachment 5). Discuss with GRC Road Hierarchy Policy incorporation. BSC's revised table to be included in specification. No other Councils could provide comment at this stage.	Cardno
	c) Floodway drawings - Floodways were discussed at the Longreach meeting, but due to resourcing the drawings have not been developed any further. RRC have adopted two Floodway Standard Drawings (refer Attachment 6) that could form the bones of CMDG Std Dwgs. Drawings to include signage and more joint details (GRC to provide drawings for joint examples). Grant to refine drawing content and Cardno to put on CMDG title block. All Councils to review – applicable to all Councils.	Grant (RRC) Cardno
	d) Power pole / gas alignment dwg no CMDG R-031 – preferred gas alignment of 3.4m conflicts with current power pole alignment of 3.3m off the property boundary. Only really an issue in brownfield sites as new developments have underground power as shown on dwg R-031. Alternative gas alignment closer to property boundary provided. Discuss if this is acceptable to all Councils. Current drawing on website shows an alternative gas alignment. No change required.	-

	e) Primer seals under Asphalt – a local contractor has raised the issue of cutter based binders in primer seals under asphalt causing softening of asphalt. Grant to investigate and determine if any action is required.	Grant (RRC)
9	**<u>Landscaping – General</u>**	
	a) Discuss current progress of document and way forward to complete and upload onto website. Greg Abbotts (LSC) to finalise draft for review.	Greg (LSC)
	b) GRC would like to incorporate plants lists into Construction Specification C273 Landscaping as per Attachment 7. Discuss if other Councils would like to include a list and whether we can make this list consistent. All Councils to provide plant species lists to include into C273. All Councils to review each other's lists to determine if we can move towards a common plant species list.	All
10	**General Business and Next Meeting** <u>CMDG Governance document</u> Document to outline processes / delegation / dispute resolution. Ian to send draft for Jonathon to progress.	Ian (GRC) Jonathon (RRC)