

Reclaimed Materials Committee (RecMat): Introduction and update



RPF November 2016



TCT
TRANSPORT
FOR CAPE TOWN

Background

- Kirsten Barnes presented on secondary materials at last RPF
- Following that, RMC decided in August to put together new TRH for the use of crushed recycled building materials in roads
- Ian Bowker was asked to champion this
- Kirsten Barnes of Green Cape called for a “Way Forward” meeting on 28 Sept’16 with various industry role players in Cape Town

Background

- Discussions included proposed new TRH document and possible trial section in Cape Town
- Resolved at the meeting that:
 - TRH documents take too long, something faster required
 - Steering committee be established to produce Best Practice Guideline for use of reclaimed materials which will form the basis of the new TRH manual
 - As no funding available yet, members initially to be based in CT, with corresponding members from elsewhere in SA (avoid travel costs)
 - Trial section be carried out in Cape Town – Strandfontein Road identified

Background

- Many names for construction demolition waste:
 - Secondary materials
 - CDW
 - Recycled materials etc
- “Waste” is considered a bad word
- Propose to standardise and call it Reclaimed Materials
- The committee is called therefore the RecMat Committee.

Committee

- Current committee members:

Ian Bowker (Chair, CoCT, RMC member)

Gerhard Fourie (VC (tbc),SANRAL,)

Kirsten Barnes (Green Cape, Admin & coms)

Bryan Perrie (Concrete Institute)

Chantal Rudman (Stellenbosch University)

Azni November (WCG)

Llewellyn Truter (Alt VC, WCG, RMC member)

Tim Beardmore (Martin & East)

Gert van den Heever (ASPASA)

Proposed Corresponding members have not been contacted yet
but any volunteers welcome

Results of first meeting

- Committee met on 30 October 2016 and resolved:
 - Scope of document: Guideline for the use of reclaimed materials as an alternative to natural gravels (G materials) as a road construction material and as aggregate for concrete only.
 - No RA included (already covered in TRH 21 for asphalt and being included in revised TG2 for BSM)
 - No other recycled products still under investigation

Results of first meeting

- Proposed Framework for document :
 - Ch1 Introduction
 - Ch2 Applicable legislation and legislative requirements
 - Ch3 Best practice sourcing and separation at source/prior to crushing of materials
 - Ch4 Best practice crushing and screening
 - Ch5 Best practice stockpiling/ blending of crushed materials
 - Ch6 Material specifications for use in roads
 - Ch7 Material specifications for use as concrete aggregate
 - Ch8 Best practice construction and quality control

Proposed Framework details

- **Ch1 - Introduction** (Ian Bowker)
- **Ch2 - Applicable legislation and legislative requirements** (Kirsten Barnes) – classification of waste, storage of “waste” materials, permit requirements etc
- **Ch3 - Best practice sourcing and separation at source/ prior to crushing of materials** (KB to co-ordinate, Tim Beardmore, Ian Bowker Other?)
 - NB deconstruction/separation at source
- **Ch4 - Best practice crushing and screening** (KB to co-ordinate, Tim Beardmore, ASPASA guidelines for virgin material crushers?)

Proposed Framework details

- **Ch5 - Best practice stockpiling/ blending of crushed materials** (Kirsten Barnes to co-ordinate, Tim Beardmore and Chantal Rudman, Afrimat - Hylton Hale?)
 - Suggest stockpile for specific project - tested and ceded to client.
 - If run out, start again with testing and checking of a new stockpile.
 - Need to notify when change of material or source

Proposed Framework details

- **Ch6 - Material specs for use in roads** (Chantal Rudman)
 - Identify specs for materials based of the existing G and C classifications (G4 to G9/C3 –C4)
 - Use R-G and R-C instead of just G and C to differentiate between reclaimed and natural materials. Include additional testing requirements, e.g. durability, any other(?) to meet R-G Specs.
 - Perhaps include base quality material e.g. R-G3 by including performance testing – shear parameters and Resilient modulus?

Proposed Framework details

- **Ch7 - Material specs for use as concrete aggregate** (Bryan Perrie)
 - specs for aggregate use in concrete – to conform to SANS aggregate specification
- **Ch8 - Best practice design, construction and quality control** (Chantal (design), Tim (design and construction), Azni, Llewellyn - combined)
 - Questioned need for chapter, committee decided to leave it in. More to allay concerns and address poor perceptions of secondary materials. To reference SAPEM for best practice construction techniques
 - Chapter will not be prescriptive

Way Forward

- Chapter champions to outline content of each chapter and committee to meet again in Jan/Feb 2017 to discuss content – input welcome
- Funding? No funding currently
 - Committee is currently volunteering
 - Volunteer work = stop gap work = long time
 - Need for one driver to liaise with chapter experts, gather info and compile document?
 - Funding required – Road authorities to enquire?
 - Professional Services Tender? – open tender vs. single source? Most likely open tender. One authority will need to compile, advert, evaluate and manage tender

Questions?

Comments?

Suggestions?

Volunteers? Members,
corresponding members,
writers?

Sponsors?



Thank You



TCT
TRANSPORT
FOR CAPE TOWN