

Item No. 40 - Use of Reclaimed Concrete Aggregate in Road Design

Mr. Chair, members of the IRPW committee, and civic administration.....

Thank you for the opportunity of appearing before you today to speak to item #40 - a proposed motion directing development of a public policy associated with the use of recycled concrete aggregate (RCA) in road base design.

There is a myriad of technical and engineering matters that need attention and understanding, enough to make one's head spin.

But.... that is NOT what is before you today, nor what it is I am here to speak to.

The issue of using RCA in road base design is, as is evident in cross-jurisdictional review, first and foremost a matter of public policy. And I do not believe there is anyone who would disagree with that statement.

Your Public Works department, like industry, has struggled to find a resolution in part, because of the absence of a public policy that directs or commits the city one way or another to the use of RCA.

The development and adoption of such a policy will ultimately help shape the final design decisions. That, for example, is the history in the City of Edmonton.

Let me try to point out the scope of the issues.

Hundreds of thousands of tonnes of demolished concrete are taken out from roads in the city's annual streets renewal program; related removals from work tendered by water and waste; work undertaken by utilities - e.g. Hydro, Bell/MTS, Shaw, Rogers - and private sector residential or commercial work.

Contractors take some of that material to processing yards, where recyclable concrete aggregate is extracted and sieved for reuse as road base and sub-base structure materials. More is recovered for use in surrounding municipalities, and by the private sector, such as parking lots.

Our industry for more than two decades has diverted hundreds of thousands of tonnes of waste concrete every year from the landfill, where it otherwise would have been dumped.

Recycling in road construction has spawned a sub-industry, creating new businesses and jobs.

Numerous jurisdictions in Canada, the United States and globally recover and write into the road construction specifications how recycled concrete aggregate can be used.

Edmonton, for example, has reused crushed concrete since 1978, having developed an aggressive policy for recycling waste construction materials. The city actively encourages households to bring concrete removed during construction or renovations. Now, according to its website, 99% of all aggregate rubble in Edmonton is recycled and up to 200,000 tonnes of recycled aggregate materials are produced annually.

The progress in Edmonton came about by necessity. While Winnipeg is blessed with access to high-quality aggregate deposits in the Capital Region, Edmonton is not and was running out of supply. Gravel is expensive.

But the imperative for recycling reflects the need to minimize environmental impact wherever possible, and responsible resource management demands reusing materials. Recycling concrete minimizes the carbon footprint at all stages — at the pits and quarries and on our roads, avoiding the greenhouse gas emissions that accompany the extraction, milling and transportation of sand, gravel and rock.

Other municipalities in Canada are working to increase the tonnage of recoverable concrete used on infrastructure projects. Higher levels of government are encouraging sub-levels to adopt policies and instruments such as higher landfill tipping fees that promote the practice.

The City of Winnipeg this year introduced new road-building specifications. The new specs are intended to lengthen the life of roads, with more durable structures.

We agree with the objectives, but the new specs are making it difficult to incorporate recycled concrete in roads.

Through the construction season - regarded as a test year to work with local recycling aggregate operators to refine and adjust their processes to meet the updated standards - not one supplier to city roads was able to consistently meet the new specs. The city and the suppliers have worked together, through the adjustment period to refine the material to meet spec, at significant cost to the companies.

But, as of mid-August, some halted deliveries of waste concrete to their yards, which means they are potentially destined for the landfill. It also means that those businesses – around for 20 years – may soon be out of business with consequential lost investment and jobs.

This is an untenable situation.

If we collectively cannot find a way to reuse recycled concrete in a competitive environment, the only option is to take more from limestone pits and quarries in the Capital Region, every year. Add to that impact the carbon cost of crushing, processing and transporting the material - including the wear on our roads - from pit to customer. Other municipalities and the private sector copy Winnipeg's specs, meaning they too will likely follow suit on effectively eliminating recycled concrete.

The heavy construction industry does not want that, nor do Winnipeggers, we think.

We all want roads that last, and we can achieve that and use recycled concrete in street renewal projects. The solution is a political one, backed by public policy that recognizes a broader, realistic cost-benefit analysis representing the public's best interest.

Our industry looks for innovation. We support environmental best practices, environmental initiatives and work to improve road building. I draw your attention to the attached 'Heavy Construction Sustainable Practices' summary which highlights some of our engagement in this area.

We ask you to develop a formal public policy which leads the development of construction designs, allowing for the re-use of recycled concrete aggregates in roads -- meeting equivalent objectives required from virgin aggregate. The development review should quantify the cost, and economic, environmental and resource-management benefits of using recycled concrete aggregates along with policy instruments and measures related to the collection and disposal of construction debris (including demolished street surface concrete).

The MHCA therefore urges this committee to support the resolution before you.

Lastly, I would remind that Winnipeg has used recycled concrete aggregates for its streets for decades. The product made today is greatly improved from that made 20 years ago – reflecting the evolution of recycled products, generally.

We are not experimenting here – RCA is used around the world. Indeed, governments across Canada and globally promote recycled concrete for road building because it is a good product and it MAKES GOOD SENSE.

What we are living through are growing pains. But the goal is to grow. Don't turn a recyclable product into an environmental liability.

We need a workable solution in the public's best interest. As always, that rests with political leadership.

Now....the resolution effectively means that consideration of policy recommendations and their adoption won't begin until sometime in January 2021 at the earliest.

So what might you ask happens in construction season 2021 as it relates to the use of RCA.

The MHCA has submitted suggestions to Public Works for construction season 2021. We continue to enjoy a good relationship with the public service and remain optimistic that we will find a solution for use until the policy is adopted and fully implemented.

The heavy construction industry is trying to be greener. We need the city's support to succeed.

I close by urging your leadership with unanimous adoption of the motion.

Thank you.

Chris Lorenc, B.A., LL.B., President MHCA

September 16, 2020

Winnipeg Spec Review 2020/RCA Public Policy Presentation to IRPW CWL Sept 16, 2020