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See **Distribution**

Dear Sir/Madam

USE OF CRUSHED ROCK SAND AS SUBSTITUTE FOR NATURAL SAND IN CONCRETE

Recent surveys show that crushed rock sand, in the form of granite dust, is often used as fine aggregate to replace natural sand in various proportions. Singapore Standard SS 31: Specification for Aggregates from Natural Sources for Concrete permits the use of crushed rock sand to totally replace natural sand for concrete. Studies and trial tests conducted in Singapore have demonstrated the suitability of crushed rock sand for use in concrete as total replacement of natural sand. In fact, there are already a couple of ongoing projects that are using 100% crushed rock sand as fine aggregate in concrete. However it must be noted that the quality and grading requirements of the crushed rock sand shall be in accordance with SS 31. With some adjustment to the concrete mix, together with the appropriate use of admixtures, it has been shown to be feasible to produce concrete that meets the required strength and workability requirements.

2 BCA encourages the use of crushed rock sand as replacement of natural sand since this is a viable alternative to natural sand and will help ease our reliance on natural sand for concrete.

3 If you require further clarification, please contact me or Mr Lung Hian Hao (Tel 6325 2090, email: lung_hian_hao@bca.gov.sg). Thank you.

Yours faithfully



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