



IOM International Organization for Migration

سازمان بین المللی مهاجرت  
دمه‌اجرت نړیوال سازمان

# **Humanitarian Assistance Program**

## **Disaster Risk Mitigation Infrastructure**

### **Specification of Gravel**

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All gravel shall be furnished by the Contractor from any source approved by the Engineer. They shall be free from organic material, lumps of soft material, clay, chalk, lime, peat, loam, soft clayey shale or decomposed stone, vegetable and other impurities that may be harmful to concrete.

The gravel supplied shall not contain any materials that are deleteriously reactive with the alkalies in the cement in an amount sufficient to cause excessive expansion of mortar or concrete except that if such materials are present in injurious amounts, the coarse aggregate is not prohibited when used with a cement containing less than 0.60 % alkalies calculated as sodium oxide equivalent ( $\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$ ) or with the addition of a material that has been shown to prevent harmful expansion due to the alkali-aggregate reaction.

Gravel for concrete shall be uniformly graded and consist of hard and dense rock. The gravel shall be free of materials finer than 5 mm and the surface shall be clean. Gravel for use in reinforced concrete shall be crushed rock. Generally, natural gravel and/or crushed rock particles shall be spherical or cubical in shape. The maximum nominal size of the gravel shall be twenty (20) mm.

