

_____ PRODUCTION OF SAND AND COARSE AGGREGATE

NOTE TO SPECIFIERS: This paragraph is to be included whenever it is likely that aggregate will be obtained from Governmentcontrolled land. In general, it need not be used for small contracts (5,000 cubic yards or less) when acceptable ready-mix concrete is readily available.

a. General. - Sand and coarse aggregate for concrete, and sand for mortar and grout, may be obtained by the Contractor from any source approved by the Government.

The approval of deposits by the Contracting Officer shall not be construed as constituting the approval of all or any specific materials taken from the deposits, and the Contractor will be held responsible for the specified quality of all such materials used in the work.

¹[(Bureau of Reclamation tests performed on samples of sand and coarse aggregate obtained from sources in the following locations indicate that these sources contained, when sampled, materials meeting the quality requirements of these specifications for sand and/or coarse aggregate:

- (1) _____.
- (2) _____.
- (3) _____.
- (4) _____.

All locations are listed relative to the _____ Meridian. Aggregate from sources ²(_____) above will not require the use of low-alkali ³(cement) (or pozzolan meeting the alkali requirements) in accordance with paragraph _____ (Cement) or (Cementitious Materials). ⁴(Test data representing material from acceptable aggregate sources are found in _____.)]

If sand and coarse aggregate are to be obtained from a deposit not previously tested and approved by the Government, the Contractor shall assist the Government in collecting representative samples for preconstruction testing and approval. The samples shall consist of approximately 200 pounds each of sand and 3/16- to 3/4-inch coarse aggregate, ⁵(and 100 pounds of the 3/4- to 1-1/2-inch coarse aggregate) and shall be submitted to the Bureau of Reclamation, Attn D-1511, Building 56, Entrance S-6, Denver Federal Center, Denver CO 80225, not less than 60 days before the sand and coarse aggregate are required for use.

In addition to preconstruction testing and approval of the deposit, the Government may test the sand and coarse aggregate during the aggregate processing, but final acceptance of aggregates will be based on samples taken at the batch plant. The Contractor shall provide

such facilities as may be necessary for procuring representative samples at the aggregate processing plant and at the batch plant.

If the deposit used by the Contractor is located within an approved area owned by the Government and controlled by the Bureau of Reclamation, no charge will be made to the Contractor for materials taken from such deposit and used in the work covered by these specifications, but use and development of any such deposit shall be subject to the approval of the Contracting Officer. Any royalties or other charges required to be paid for materials taken from deposits not owned by the Government and controlled by the Bureau of Reclamation shall be paid by the Contractor.

⁶[Source(s) _____ ³(and _____) ³(are) (is) located on land controlled by the Bureau of Land Management. ³(A) Free-use permit(s) ³(has) (have) been granted to the Bureau of Reclamation. The free-use permit(s) contain(s) requirements regarding mode of operations and environmental considerations for the aggregate source(s) and ³(are) (is) available for inspection at the Office of the ³(Project) Construction Engineer,

b. Developing aggregate deposit. - If the deposit is owned by the Government and controlled by the Bureau of Reclamation, the portion of the deposit used shall be located and operated so as not to detract from the usefulness of the deposit or of any other property of the Government and so as to preserve, insofar as practicable, the future usefulness or value of the deposit. The Contractor shall carefully clear the area, from which aggregates are to be produced, of trees, roots, brush, sod, soil, unsuitable sand and gravel, and other objectionable matter. Materials, including stripping, removed from deposits owned by the Government and controlled by the Bureau of Reclamation and not used in the work covered by these specifications shall be disposed of in accordance with paragraph _____ (Cleanup and Disposal of Waste Materials).

c. Processing raw materials. - Processing of the raw materials shall include screening, and washing as necessary, to produce sand and coarse aggregate conforming to the requirements of paragraphs _____ (Sand) and _____ (Coarse Aggregate). Processing of aggregates produced from any source owned by the Government and controlled by the Bureau of Reclamation shall be done at an approved site. Water used for washing aggregates shall be free from objectionable quantities of silt, organic matter, salts, and other impurities. Oversize material may be crushed to concrete aggregate particle size, and excess materials in individual coarse aggregate size fractions may be crushed to give the largest practical yield of useable concrete aggregate.

Jaw crushers shall not be used except as the primary crusher. Crusher fines produced in manufacturing coarse aggregate may be used in sand. Crushed sand and crusher fines, if used, shall be predominantly cubical in shape and shall be blended uniformly with natural sand by routing them together through the sand classifier. Crushed coarse aggregate shall be blended uniformly with natural coarse aggregate by routing both together through the classifying screens.

In the process of developing and producing aggregates from approved sources for work under these specifications, the provisions of section _____ (Environmental Quality Protection) shall apply.

d. Cost. - The cost of producing aggregates required for work under these specifications and the cost of aggregates not obtained from a source owned by the Government and controlled by the Bureau of Reclamation shall be included in the applicable prices bid in the schedule for concrete in which the aggregates are used, which prices shall include the cost of stripping, processing, transporting, and storing materials. The Contractor shall be entitled to no additional compensation for materials wasted from a deposit, including crusher fines, excess material of any of the sizes into which the aggregates are required to be separated by the Contractor, and materials which have been discarded by reason of being above the maximum sizes specified for use.

¹Delete when tested and approved sources are not to be listed. A listing will be prepared, on request, by D-1511, Concrete Section.

²Indicate source numbers. (If all sources require the use of low-alkali cement, state so.)

³Revise or delete as required.

⁴If applicable, include reference to the associated Construction (and Foundation) Materials Test Data. If no such data is to be included in the specifications, delete sentence.

⁵When the maximum-size coarse aggregate is to be larger than 1-1/2 inches, change this portion of the sentence to read "and 100 pounds of each of the other sizes of coarse aggregate".

⁶Include as required. Indicate sources.

3-15-85 Revisions: Minor revisions throughout.