

ARKANSAS STATE HIGHWAY & TRANSPORTATION DEPARTMENT  
EQUIPMENT AND PROCUREMENT OFFICE  
LITTLE ROCK, ARKANSAS

January 29, 2016

NOTICE TO BIDDERS  
ADDENDUM

Bid No. H-16-261J

Asphalt Concrete Cold Plant and Hot Mix Materials

OPENING DATE: February 2, 2016

**Please replace the Special Provision for Recycled Asphalt Shingles with the attached copy.**

A handwritten signature in cursive script that reads "Danny Keene".

Division Head  
Equipment and Procurement

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT**

**SPECIAL PROVISION**

**JOB NO. XXXXXX**

**RECYCLED ASPHALT SHINGLES**

**DESCRIPTION:** This specification covers the use of Recycled Asphalt Shingles (RAS) in Asphalt Concrete Hot Mix (ACHM).

**MATERIALS:** ACHM utilizing RAS shall meet all of the requirements of Sections 404, 409, 410, and 416, and the requirements of Section 405, 406, or 407 for the mixture type specified on the plans. The mix design will follow AASHTO MP 23-14 and AASHTO PP 78-14 except as follows:

- (1) A maximum of three (3) percent RAS by total mix weight will be allowed in any mix design. The amount of RAS will be included in the total Recycled Asphalt Pavement (RAP) percentage if RAP is used.
- (2) Shingle material shall be processed so that 100 percent passes the 3/8" (9.5 mm) sieve and ninety-five (95) percent passes the No. 4 (4.75 mm) sieve.
- (3) Pre-consumer, or manufacturer waste, shingles may be used in mix designs requiring PG 64-22 binder only.
- (4) Post-consumer, or tear-off, shingles may be used in mix designs requiring PG 64-22 binder only.
- (5) Pre- and post-consumer shingles may not be combined in mix designs.
- (6) Tear-off shingles shall be acquired from residential sources only, and shall have been produced after 1980. In no case shall a roofing material containing rubber or rubber-like polymer components be used as RAS in asphalt mixes.
- (7) When using tear-off shingles, one stockpile test per lot of mix shall be conducted to confirm the binder content and gradation of the RAS product, and the sample shall be representative of the RAS material entering the production process for the lot tested. Binder content and gradation shall be determined using AHTD 450 or AASHTO T 308. If AASHTO T 308 is used, the sample size shall be 400 grams, and the sample shall be oven dried to a constant mass (at a temperature not exceeding 140°F) prior to testing. Shingle fibers shall be removed from the extracted sample prior to gradation testing.