High Binder Replacement

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Current Practice

- For mix designs with High RAP/Any RAS
  - Test the RAP and RAS during stockpile construction
    - RAP Every 1000 tons
    - RAS Every 100 tons
  - Report the test data to the Contracting Agency on WSDOT Form 350-042 as part of the mix design submittal for approval on the QPL
  - Do not add to these stockpiles after starting the mix design process.
Maximum Amount of RAP and/or RAS in HMA Mixture

Binder Replacement

- RAP – 40% minus contribution of binder from RAS
- RAS – 20% Maximum

- Calculated as the weight of asphalt binder contributed as a percentage of the total weight of the asphalt binder in the mixture
Perform Extraction and Recovery of recycled materials

Test recovered asphalt Residue per AASHTO R29 to determine asphalt binder grade

Determine the % of recycling agent and/or grade of new asphalt binder in accordance with ASTM D4887

Test final blend of recovered binder from RAP/RAS, new asphalt binder and recycling agent in accordance with AASHTO R29
Final Blend
Contactor Data

- Shall meet but not exceed the performance grade required by the Contract

- Comply with the requirements of Standard specification 9-02.1(4)

- Submit data to WSDOT Materials Lab for verification (including all test data from stockpiles, HMA and binder)

- Representative samples of Aggregate, RAP, RAS and 150 grams of recovered asphalt residue from associated stockpiles
High Temperature PG Grade

conractor Supplied Data

RAP PG Grade

Eastern WA

Western WA