Washington State Department of Transportation

HMA Mineral Aggregates

Contract Number	Mix Class	Sample Number	Date Sampled	Sampled By
Date Tested	Tested By	Aggregate Source	HMA Test Number	JMF Number
Sample Weight (lbs.)	Testing Site			

Sand Equivalent Test (WSDOT FOP for AASHTO T 176)

$$SE\ Value = \frac{Sand\ Reading\ (100)}{Clay\ Reading}$$

Clay Reading	Sand Reading	SE Value

Specification	

Average	

Percentage of Fracture in Coarse Aggregate (WSDOT FOP for AASHTO T 335)

P = Percent Fracture
F = Mass of Fractured Particles
Q = Mass of Questionable Particles or borderline Particles
N = Mass of Nonfractured Particles

$$P = \left[\frac{[F + (Q / 2)]}{F + Q + N} \right] (100)$$

F	Q	N	P

Fracture Specification Single Face = Double Face =

Uncompacted Void Content of Fine Aggregate (WSDOT FOP for AASHTO T 304)

$$U = \left[\frac{V - (F / G)}{V} \right] (100)$$

V = Volume of Cylindrical Measure, ml
F = Net Mass, g, of fine aggregate in measure
G = Bulk Dry Specific Gravity Fine Aggregate (G_{sb})
U = Uncompacted Voids, percent, in the material

Preparation of Test Sample	
Sieve Size	**Mass**
# 8 - # 16	44 grams
# 16 - # 30	57 grams
# 30 - # 50	72 grams
# 50 - # 100	17 grams

Tare

V	F	G	U

Specification	

Average	

Contractor's Signature	Date
Inspector's Signature	Date