



**UNIVERSITI PUTRA MALAYSIA**

**DETERMINATION OF VOIDS IN STONE MASTIC ASPHALT MIXTURES  
USING IMAGE- BASED TECHNIQUE**

**SITI ZUBAIDAH MOHAMAD**

**FK 2016 152**



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UNIVERSITI PUTRA MALAYSIA  
BERILMU BERBAKTI

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MIXTURES USING IMAGE- BASED TECHNIQUE**

**UPM**

By

**SITI ZUBAIDAH MOHAMAD**

**Thesis Submitted to the School of Graduate Studies, University Putra  
Malaysia, in Fulfillment of the Requirements for the Degree of Master of  
Science**

**September 2016**

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