Asphalt Pavement Basics

East-West Center, Jefferson Hall, Asia Room
1777 East West Road
Honolulu, Hawaii 96848

Tuesday April 17 2012

8:30 a.m.—4:00 p.m.

Registration begins at 8:00 a.m.

Registration Procedure
1. Please contact HAPI via Phone at 847-4274 or email at jon@hawaiiasphalt.org by Thursday, April 12, 2012.
2. Seating is limited
3. There is no cost for registration

Parking
East West Center parking passes are available at $6/day for Passenger Cars Only. If you would like a parking pass please ask for one when registering. All vehicles (including government vehicles) are required to have an EWC parking pass in order to park in the EWC specified areas. Payment at the door by cash or check payable to the Research Corporation of the University of Hawaii (RCUH).

Alternate parking for all vehicles is available at the University of Hawaii Lower Campus parking and is $5/day upon entry.

More information will be issued after confirmation of attendance.

Cancellations
Please contact HAPI if you are unable to attend or if someone will be substituting for you.
Course Description:
An introduction to the basics of asphalt paving for the non-expert. Introduces basic materials, design methods, terms, construction practices, and specifications. Coverage remains general and is suitable for a general audience. Upon completion of this course the attendee will have an understanding of the asphalt pavement industry; its key materials, processes and products; and the ability to better understand pavement issues.

Learning Objectives:
Upon completion of this seminar participants will be able to:

- Describe the differences between flexible and rigid pavements
- Describe the types of flexible pavements and their uses to include dense-graded, stone matrix asphalt, open-graded, bituminous surface treatment
- Describe the use of aggregate and asphalt in HMA
- Describe the type of asphalt and types of HMA mixes typically used in Hawaii
- Describe the sequence of events involved in HMA pavement construction
- Determine basic pavement condition levels

Topics:
- Pavement facts and figures
- Pavement types
  ◦ Flexible vs. rigid pavement
  ◦ Types of flexible pavement and mixes
- Materials
  ◦ Aggregate
  ◦ Asphalt
- Mix design
  ◦ Mix design fundamentals
  ◦ Methods (Marshall, Hveem, Superpave)
  ◦ Typical mix design
- Construction
  ◦ Plant operations
  ◦ Transport
  ◦ Laydown
  ◦ Compaction
- Pavement distress
  ◦ Types and causes
  ◦ Identification
- Maintenance and Rehabilitation
  ◦ Pavement management
  ◦ Maintenance methods
  ◦ Rehabilitation methods
- Panel discussion

Instructor:

Steve Muench
An Associate Professor in the University of Washington’s Department of Civil and Environmental Engineering. His Interests include pavement design, construction and maintenance; construction materials; quality control and quality assurance; sustainability and education/teaching. Steve is the developer of the original HAPI Asphalt Pavement Guide in 2003 and will be updating it this year. He is a licensed professional engineer in Washington State and received degrees from the University of Washington in 1990, 1998 and 2004. Steve is a graduate of Kailua Elementary, Kailua Intermediate and Kalaheo High School (class of 1986). His parents still live in Kailua and he still calls Hawai‘i “home”.

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