ROADWAY SURFACING OPTIONS PHOTO ALBUM

Companion Document to Context Sensitive Roadway Surfacing Selection Guide

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U.S. Department of Transportation
Federal Highway Administration

CTIP

Federal Lands Highway
Commitment to Excellence

Central Federal Lands Highway Division
12300 West Dakota Avenue
Lakewood, CO 80228

FHWA
FLH

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INTRODUCTION

To address context sensitive concerns, the Federal Lands Highway (FLH) Division of the Federal Highway Administration (FHWA) has developed a selection process that includes consideration of environmental impacts, cultural sensitivity, and aesthetics in the selection of roadway surfacing while also facilitating the public consultation process. As a result, the selection process permits a balanced consideration of engineering and environmental factors and better ensures that the completed roadway enhances, or is, at least, compatible with, the surrounding landscape.

The FLH has developed a “Roadway Surfacing Options Photo Album” as a supplement to the “Context Sensitive Roadway Surfacing Selection Guide” (Guide). This album contains product descriptions, photographs, and presents some advantages and limitations for different roadway surfacing types. Additional information for each surfacing type can be found in the Guide. The Guide includes technical and design information for over 50 roadway surfacing options and a detailed description of the context sensitive surfacing selection process.

INTRODUCTION (cont.)

Several assumptions were made in the summaries presented for each surfacing type. It is assumed that best design practices will be used and that certain common design elements will be part of the design. These design elements include: adequate surface and subsurface drainage provisions, structurally stable slopes and embankments, erosion control and shoulder treatments, provisions for cross-drainage and wildlife/fish passage structures, etc.

An estimate of how long the roadway will last under normal conditions has been provided. The life expectancy will vary depending on traffic volumes, in particular the percentage of heavy vehicles, climatic conditions, subgrade types, and level of preventative maintenance that is used. If the traffic volume exceeds the range provided for a particular surfacing type, the life expectancy may be significantly decreased, the road serviceability level may be reduced, or maintenance costs may be unacceptably high.

A unit price estimate has been provided for each roadway surfacing type. This price range is a “ballpark” number provided for preliminary cost comparisons between different surfacings. Prices can vary significantly with location, product availability, and project size. Local unit price estimates should be obtained during roadway planning and design. Prices included are based on Year 2004 estimates.

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ACRONYMS

AADT	Average Annual Daily Traffic
CFLHD	Central Federal Lands Highway Division
CIR	Cold In-Place Recycling
CMAC	Cold Mix Asphalt Concrete
EFLHD	Eastern Federal Lands Highway Division
FDR	Full Depth Reclamation
FHWA	Federal Highway Administration
FLH	Federal Lands Highway
HACP	Hot Asphalt Concrete Pavement
HIR	Hot In-Place Recycling
OGFC	Open Graded Friction Course
PCC	Portland Cement Concrete
PCCP	Portland Cement Concrete Pavement
RAP	Reclaimed Asphalt Product
RCA	Reclaimed Concrete Aggregate
RCC	Roller Compacted Concrete
RMP	Resin Modified Pavement
WFLHD	Western Federal Lands Highway Division