Chapter 1120  

Basic Design Level

1120.01  General

Basic design level (B) preserves pavement structures, extends pavement service life, and restores the roadway for reasonably safe operations.

1120.02  Basic Design Level

Basic design level includes the following items of work:

- Adjust existing features (such as monuments, catch basins, and access covers) that are affected by resurfacing.
- Address ADA requirements according to WSDOT policy (see Chapter 1510).
- When recommended by the region Traffic Engineer, follow the criteria in Chapter 1110 for channelizing intersections. Justify any resulting changes in the Design Documentation Package.

1120.02(1)  Cross Slope Lane

- Rebuild the cross slope to 1.5% when the existing cross slope is flatter than 1.5% and the steeper slope is needed to provide adequate highway runoff in areas of intense rainfall (see Chapter 1230).

1120.02(2)  Cross Slope Shoulder

- When rebuilding the lane cross slope, evaluate shoulder cross slope in accordance with Chapter 1130, Modified Design Level.

1120.02(3)  Delineation, Signing, Illumination & ITS

- Install and replace delineation in accordance with Chapter 1030 (this includes only pavement markings, guideposts, and barrier delineation).
- Replace rumble strips when recommended by the Materials Engineer (see Chapter 1600).
- Note that Signing, Illumination, and ITS are not addressed under basic design level.

1120.02(4)  Basic Safety

- Evaluate drainage grates and replace as needed to address bicycle safety (see Drainage Grates and Manhole Covers in Chapter 1520).
1120.02(5) **Standard Run and Terminals**

- Evaluate guardrail height during the preliminary engineering phase on HMA Overlay projects. When the height will be reduced to less than 26 inches from the ground to the top of the rail element, adjust the height to a minimum of 26 inches and a maximum of 28 inches in accordance with 1610.04(1) and 1610.04(2)(a). This guardrail work may be programmed under a separate project.

- Evaluate the guardrail length of need for runs that need to be raised as a result of an HMA overlay in accordance with Chapter 1610. Up to 250 feet of additional run length within each run is provided for in preservation projects.

- Note that removal is an option if guardrail is no longer needed based on validation of the original guardrail purpose from past project documentation and after consulting Chapters 1600 and 1610.

- When the height of an existing terminal will be reduced to less than 26 inches from the ground to the top of the rail element, adjust the height to a minimum of 26 inches and a maximum of 28 inches. A rail height of 28 inches is desirable to accommodate future overlays. When adjusting terminals that are equipped with CRT posts, the top-drilled holes in the posts need to remain at the surface of the ground.

- When the height of an existing transition section will be reduced to less than 26 inches from the ground to the top of the rail element, adjust the height to a minimum of 26 inches and a maximum of 28 inches. A rail height of 28 inches is desirable to accommodate future overlays.

- Evaluate Upgrade (see Chapter 300) for Fill and Ditch in-slopes steeper than 4H:1V on Interstate HMA Overlays (Matrix row 1-5) and PCCP Single Lane Rehab (Matrix row 1-6) projects.

1120.03 **Documentation**

Refer to Chapter 300 for design documentation requirements.