Module 4-10

Shoulder Rehabilitation Considerations

Objectives

List common shoulder distresses
- **HMA shoulders**
- **PCC shoulders**

Discuss procedures for shoulder rehabilitation

Describe the benefits of using a tied PCC shoulder

Introduction

Purpose
- **Safety zone for errant vehicles**
- **Auxiliary area for emergency stops**
- **Provide lateral structural support**
- **Drain water away from mainline**

Generally designed to a lower structural capacity

Only paved shoulders are considered

Critical Distresses on HMA Shoulders

Pumping

Fatigue cracking

Lane-shoulder drop off

Block cracking

Shoving

Differential support

Weathering and raveling

Critical Distresses on PCC Shoulders

Cracking

Pumping

Faulting

Spalling

Benefits of Tied PCC Shoulders

Reduced edge / corner stresses

Improve lateral support

Reduce lane-shoulder drop off

Reduce lane-shoulder separation

Limit infiltration of moisture

Considerations

- Design
- Cost
- Construction

Construction

Construction

Summary

Evaluate shoulder condition along with mainline

Rehabilitation of shoulder should consider condition of mainline

Techniques are similar to those used on the mainline