Date: February 26, 2025

BULLETIN #1 (2025-01)

Replacing Marshall Mix "C" with 12.5mm Superpave Mix

Background

The City of Calgary has identified segregation and durability issues with the current Marshall Mix "C," which has exhibited early cracking and significant performance concerns during the Construction Completion Certificate (CCC) and Final Acceptance Certificate (FAC) phases. Additionally, extensive field observations and industry feedback indicate that the Marshall Mix “C” is not meeting expected End-of-Useful-Life (EUL) performance standards.

Objective

This bulletin informs developers, consultants, and contractors about the removal of Marshall Mix "C" from approved asphalt Mixes and its replacement with 12.5mm Superpave asphalt Mix to improve pavement durability and long-term performance.

Issue Identification

- Segregation Problems: Marshall Mix "C" is coarser than 12.5mm Superpave Mix, leading to significant segregation on many roads.
- Durability Concerns: Raveling and multiple issues during the CCC/FAC phase.

Specification Update

Effective immediately, the City of Calgary is removing all Marshall Mix "C" from its specifications and replacing it with 12.5mm Superpave asphalt Mix.

- **Updated Specification Section**: 307.00.00.
- **Change**: Substitute Marshall Mix "C" with 12.5mm Superpave Mix.

Consultation and Decision Process

The City of Calgary engaged in discussions with the Building Industry and Land Development Association –(BILDCR) regarding the performance issues of Marshall Mix "C". Based on feedback and technical evaluations, the decision to transition to 12.5mm Superpave Mix was made in collaboration with industry stakeholders to ensure long-term pavement durability and sustainability.

Implementation and Compliance

- Contractors must transition to 12.5mm Superpave Mix for all new paving projects.
- Any existing projects utilizing Marshall Mix "C" must be reviewed and, where feasible, adjusted to incorporate 12.5mm Superpave Mix.
- Non-compliance with this update will be addressed through specification enforcement measures.

Contact Information

Any questions regarding this bulletin may be directed to Pavement and Materials Engineering Section, Construction and Materials, Mobility, The City of Calgary. (Taher Baghaee Moghaddam at Taher.Baghaeemoghaddam@calgary.ca)

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