
Procedure to Conduct Road Surface Evaluation

Date Approved: **DRAFT**

Section: Capital Asset Management

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Lead: Director, Operations

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Supports: **Policy CAM-002 – City of Selkirk Asset Evaluation Policy**

OBJECTIVES

Procedure to follow when evaluating the condition of and asphalt road service asset from the City of Selkirk Asset Registry.

SUPPORTING POLICY, PROCEDURES AND TOOLS

Policy

CAM-002 Capital Asset Evaluation Policy

Procedures

CAM-001-006 Procedure to Update the Condition of an Asset in the Registry

Tools

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5	UPDATE THE ASSET REGISTER TABLE	Error! Bookmark not defined.

1 DETERMINE PAVEMENT CONDITION INDEX (PCI)

Who:

- 1.1 Launch the TotalPave PCI application on a City of Selkirk smart phone.
- 1.2 In the TotalPave PCI application, select the road segment that you are going to conduct a visual assessment on.
 - 1.2.1 Press the "+" button from the main screen.
 - 1.2.2 Drag the crosshair to the section of road segment that will be inspected.
 - 1.2.3 Click on "Select Location" to select the road once the cross hair is located on top of it.
 - 1.2.4 Ensure you have selected the correct section and click on "Confirm".
 - 1.2.5 Enter the surface type (ACC – Asphalt or PCC – Pavement").
 - 1.2.6 Enter the Width in metres.
 - 1.2.7 Based on the length of the length and width of each segment, the TotalPave PCI app will tell you the minimum number of length of samples you must take to correctly assess the condition of the road surface.
- 1.3 Conduct a visual assessment of each road segment and record every distress. Refer to the Total Pave PCI Distress Manual.
 - 1.3.1 Distresses to be recorded are:
 - Alligator Cracking
 - Block Cracking
 - Bumps & Sags
 - Corrugation
 - Depression
 - Edge Cracking
 - Joint Reflection Cracking
 - Lane/Shoulder Drop off
 - Long/Trans Cracking
 - Patch/Utility Cuts
 - Potholes
 - Rutting
 - Slippage Cracking
 - Shoving
 - Bleeding
 - Polished Aggregate
 - Railroad Crossing
 - Swelling
 - Weathering
 - Raveling
 - 1.3.2 PCI distress shall be recorded in the TotalPave PCI application on a City of Selkirk mobile device.

1.4 Reiterate this visual inspection for each road segment

2 DETERMINE INTERNATIONAL ROUGHNESS RATIO (IRI)

Who: Surveyor or Trained Staff Member

The winter survey shall occur in the first week of February annually, and the summer survey to occur in the first week of July.

2.1 Launch the TotalPave IRI collector app.

2.2 Mount on the windshield of one of the City of Selkirk survey vehicle as outlined in the TotalPave User Guide.

2.3 Perform the IRI Survey, as outlined in the TotalPave User Guide.

2.3.1 Press the "Start Data Collection" button and get up to speed (30 kms/hr) before reaching the start point of the section.

2.3.2 Try to maintain a uniform speed throughout entire survey to ensure accurate data collection

2.3.3 Do not interact with the phone in any way while data is being recorded

2.3.4 When you have driven the desired road segments, click "Stop Data Collection"

2.3.5 Do not stop in the middle of a section while recording, or it will result in inaccurate IRI measurements.

2.4 Upload the IRI Survey Data

2.4.1 Go to the "Log Page" in the Total Pave IRI app and click the grey arrow adjacent to the record.

3 DETERMINE OVERALL CONDITION SCORE

3.1 Use the following table to determine the Asset Condition score.

Road Network - Surface (Asphalt)		
Rating	Condition	Description
1	Very Good	Surface appears to be very smooth and is generally free of any distress. No potholes. No crack sealing required. Complies with engineering standards.
2	Good	Some surface deterioration is evident. Minimal crack sealing required. Minimal pothole patching required. Complies with engineering standards.
3	Fair	Surface deterioration is much more advanced. Minor rutting may be noticeable in the outer wheel paths. Numerous pothole patching required. Regular crack sealing required. Minimal joint heaving.
4	Poor	Pavement deteriorating. Extensive potholes and cracks. Rutting is becoming more pronounced. Needs resurfacing or overlay. Joint heaving pronounced.
5	Very Poor	Traffic ride ability is severely affected. Surface is severely cracked and disintegrated.

4 UPDATE ASSET REGISTRY

See Section 1 of the *Procedure to Update the Condition of an Asset in the Registry*.