

## **MnDOT Road Foundations, Reclamation and Stabilization Reports**

### **Base Stabilization Guidance and Additive Selection for Pavement Design and Rehabilitation**

Report: <http://www.dot.state.mn.us/research/reports/2017/2017RIC02.pdf>

### **Geogrid Reinforced Aggregate Base Stiffness for Mechanistic Pavement Design**

Summary: <http://www.dot.state.mn.us/research/TS/2016/201624TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2016/201624.pdf>

### **Investigation of Performance Requirements of Full Depth Reclamation Stabilization**

Summary: <http://www.dot.state.mn.us/research/TS/2016/201609TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2016/201609.pdf>

### **Strengthening Road Foundations with Cement Stabilization**

Summary: [http://www.dot.state.mn.us/research/TS/2015/2015-TPF-5\(215\)TS.pdf](http://www.dot.state.mn.us/research/TS/2015/2015-TPF-5(215)TS.pdf)

### **Cost-Effective Base Type and Thickness for Long-Life Concrete Pavements**

Summary: <http://www.dot.state.mn.us/research/TS/2015/201542TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2015/201542.pdf>

### **Quantifying Moisture Effects in DCP and LWD Tests Using Unsaturated Mechanics**

Summary: <http://www.dot.state.mn.us/research/TS/2014/201413TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2014/201413.pdf>

### **Performance-Based Measurement of Optimum Moisture for Soil Compaction**

Summary: <http://www.dot.state.mn.us/research/TS/2013/201328TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2013/201328.pdf>

### **Investigation of Performance Requirements of Full Depth Reclamation Stabilization**

Report: <http://www.dot.state.mn.us/research/TRS/2013/TRS1310.pdf>

### **Structural Evaluation of Asphalt Pavements with Full-Depth Reclaimed Base**

Summary: <http://www.dot.state.mn.us/research/TS/2012/201236TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2012/2012-36.pdf>

### **Recycled Unbound Materials**

Summary: <http://www.dot.state.mn.us/research/TS/2012/201235TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2012/2012-35.pdf>

### **Subgrade Stabilization ME Properties Evaluation and Implementation**

Summary: <http://www.dot.state.mn.us/research/TS/2012/201218TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2012/2012-18.pdf>

### **Best Value Granular Material for Road Foundations**

Summary: <http://www.dot.state.mn.us/research/TS/2012/201201TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2012/2012-01.pdf>

### **Fly Ash: Stabilizing the Base**

Summary: [http://www.dot.state.mn.us/research/TS/2011/flyash-innovation%20update\\_July2010.pdf](http://www.dot.state.mn.us/research/TS/2011/flyash-innovation%20update_July2010.pdf)

### **Using Geosynthetics to Improve Road Performance**

Summary: <http://www.dot.state.mn.us/research/TS/2011/201120TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2011/2011-20.pdf>

### **New Test Roller Equipment and Construction Specifications Subgrade for Compaction Acceptance**

Summary: <http://www.dot.state.mn.us/research/TS/2011/201115TS.pdf>

Report: <http://www.dot.state.mn.us/research/TS/2011/2011-15.pdf>

### **2008 MnROAD Unbound Quality Control Construction Report**

Report: <http://www.lrrb.org/pdf/201032.pdf>

### **Dynamic Cone Penetrometer and Light Weight Deflectometer for Construction Quality Assurance**

Summary: <http://www.lrrb.org/pdf/200912TS.pdf>

Report: <http://www.lrrb.org/pdf/200912.pdf>

### **Hydraulic, Mechanical and Leaching Characteristics of Recycled Materials**

Summary: <http://www.lrrb.org/pdf/200932TS.pdf>

Report: <http://www.lrrb.org/pdf/200932.pdf>

### **Procedures to Use and Manage Intelligent Compaction Data in Real Time**

Summary: <http://www.lrrb.org/pdf/200935TS.pdf>

Report: <http://www.lrrb.org/pdf/200935.pdf>

### **Use of Fly Ash for Reconstruction of Bituminous Roads**

Summary: <http://www.lrrb.org/pdf/200927TS.pdf>

Report: <http://www.lrrb.org/pdf/200927.pdf>

### **Appendices to Use of Fly Ash for Reconstruction of Bituminous Roads**

Report: <http://www.lrrb.org/pdf/200927A.pdf>

### **Mechanistic Modeling of Tests of Unbound Granular Materials**

Summary: <https://www.lrrb.org/media/reports/200921TS.pdf>

Report: <https://www.lrrb.org/pdf/200921.pdf>

### **Implementation of Intelligent Compaction Performance Based Specifications in Minnesota**

Summary: <http://www.lrrb.org/pdf/200914TS.pdf>

Report: <http://www.lrrb.org/pdf/200914.pdf>

### **Investigation of Stripping in Minnesota Class 7 (RAP) and Full-Depth Reclamation Base Materials**

Summary: <http://www.lrrb.org/media/reports/200905TS.pdf>

Report: <http://www.lrrb.org/pdf/200905.pdf>

### **Decision Tree for Choosing the Optimal Asphalt Pavement Rehabilitation Method**

Summary: <http://www.lrrb.org/media/reports/200806TS.pdf>

Report: <http://www.lrrb.org/media/reports/200806.pdf>

### **Resilient Modulus Development of Aggregate Base and Subbase Containing Recycled Bituminous and Concrete for MnPAVE Pavement Design**

Summary: <http://www.lrrb.org/media/reports/200725TS.pdf>

Report: <http://www.lrrb.org/media/reports/200725.pdf>

**Demonstration of Ash Utilization in Low Volume Roads**

Summary: <http://www.lrrb.org/media/reports/200712TS.pdf>

Report: <http://www.lrrb.org/pdf/200712.pdf>

**Pavement Design Using Unsaturated Soil Technology**

Summary: <http://www.lrrb.org/pdf/200711TS.pdf>

Report: <http://www.lrrb.org/pdf/200711.pdf>

**Resilient Modulus and Strength of Base Course with Recycled Bituminous Material**

Report: <http://www.lrrb.org/pdf/200705.pdf>

**Field Validation of Intelligent Compaction Monitoring Technology for Unbound Materials**

Summary: <http://www.lrrb.org/pdf/200710TS.pdf>

Report: <http://www.lrrb.org/pdf/200710.pdf>

**Chemical Inventory and Database Development for Recycled Material Substitutes**

Report: <http://www.dot.state.mn.us/research/TS/2006/200628.pdf>

**Moisture Effects on PVD and DCP Measurements**

Report: <http://www.lrrb.org/pdf/200626.pdf>

**Intelligent Compaction and In-Situ Testing at MnDOT TH53**

Report: <http://www.lrrb.org/pdf/200613.pdf>

**Validation of DCP and LWD Moisture Specifications for Granular Materials**

Report: <http://www.lrrb.org/pdf/200620.pdf>

**Continuous Compaction Control Demonstration**

Report: <http://www.lrrb.org/pdf/200507.pdf>

**Moisture Retention Characteristics of Base and Sub-base Materials**

Report: <http://www.lrrb.org/pdf/200506.pdf>

**Screening Tool for Using Waste Materials in Paving Projects**

Report: <http://www.lrrb.org/pdf/200503.pdf>

**Special Practices for Design and Construction of Subgrades in Poor, Wet or Saturated Soil**

Report: <http://www.lrrb.org/media/reports/200336.pdf>

**Best Practices for the Design and Construction of Low Volume Roads (Revised)**

Report: <http://www.lrrb.org/media/reports/200217REV.pdf>

**Use of Geosynthetics to Reinforce Low Volume Roads**

Report: <http://www.lrrb.org/media/reports/200115.pdf>