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Issue Number 72, June 2015

State Aid E-Scene

Local Agency Pavement Preservation Chip Seal Study

By: Joel Ullring, Pavement Engineer

State Aid has initiated a long-term study to better understand and answer the question, "Should I be chip sealing my bituminous roads?" There are many opinions about chip sealing bituminous pavements. The study is being supported by the MnDOT Office of Materials and Road Research who will be performing the field data collection and lab testing of collected pavement core samples.



Three local agencies have volunteered to participate in the study, the City of St. Cloud and Cass and Crow Wing Counties. The study consists of establishing three road test segments. Two segments are rural CSAHs with the third segment being a city street. The road segments are divided into six test sections. One section will be set aside as a control section which will not be chip sealed and the remaining five sections will be chip sealed one section per year over a five year period. For the next ten years, periodic pavement cores will be removed from the pavements for testing and the pavement surface will be monitored for ride, surface condition, and any maintenance performed by the local agency. The intent of the study is to see how effective a chip seal is at preventing aging of a bituminous pavement and when

is the best time to apply it.

A similar chip seal pavement preservation study was performed by MnDOT Research Services on TH 56 located near Austin. MnDOT Research Report, [2008-16 Determination of Optimal Time for the Application of Surface Treatments to Asphalt Concrete Pavements Phase II](#) (PDF) was issued in 2008 and [2014-45 Optimal Timing of Preventive Maintenance for Addressing Environmental Aging in Hot-Mix Asphalt Pavements](#) (PDF) was issued in November 2014. The 2014 report concluded that pavement binder aging was reduced and life expectancy was increased by earlier application of a surface treatment.

Look for periodic updates to this study as it progresses.

Buy America

By: Mitch Bartelt, Construction Engineer

The use of domestic steel and iron on transportation projects has recently been a newsworthy topic. This issue has gained even more prominence politically, given recent layoffs by mining companies in Minnesota and nationwide.

The Buy America Act was a provision of the Surface Transportation Act of 1982 that set content requirements for domestic steel and iron on public transportation projects receiving federal funding. It has undergone some changes over the years, and the current regulations can be found in [U.S. 23 CFR 635.410](#) (PDF). Similar requirements requiring the use of domestic steel and iron were included in the 2014 Minnesota State Transportation [Bond](#) (PDF) and [Cash Funds](#) (PDF) bills.

There recently was a notable change to the MnDOT Special Provisions regarding the Buy America Act. As of March 16, 2015, the [Boiler Plate Special Provision language for Spec 1601](#) (PDF) corresponding to the 2014 MnDOT Spec Book states as follows: *“Prior to performing work the Contractor shall submit to the Engineer a certification stating that all iron and steel items supplied are of domestic origin, except for non-domestic iron and steel specifically stipulated and permitted in accordance with the paragraph above.”* Previous language stated that the Contractor merely needed to supply such documentation prior to completing the work.

(Note: Though the [2016 Edition of the MnDOT Standard Specifications for Construction](#) (PDF) has been released, the corresponding

Boiler Plate Special Provisions for that version have not. Until these are released, if you’re putting together a proposal that is governed by the 2016 Spec Book, it is suggested simply to add the language from the 2014 MnDOT Boiler Plate Special Provisions to supplement the 2016 Spec Book Specification for 1601.)

Buy America requirements apply to all transportation jobs receiving federal funding, as well as projects receiving state funding from 2014 bonding (LRIP/LBRP) and/or the

2014 General Fund Appropriation. The [State Aid Electronic Proposal Document Table](#) has been updated for Sequences 20, 20B, and 20GFA, as well as 1601, 1601B, and 1601GFA, to reflect the change in specification language regarding Buy America. Please include this updated language in your contract documents as you put together your projects.

For jobs that have been advertised but have yet to be bid upon, it is strongly recommended that an Addendum be issued superseding previous 1601 specification language with the updated provisions.

For jobs that have already been awarded to a successful bidder, it is strongly advised to monitor steel and iron quantities and obtain Certificates of Compliance (and if necessary, stipulations for use of non-domestic steel and iron) as the project progresses. Regular weekly or bi-weekly construction meetings would be a great way to keep track of this. Please bring this up at your preconstruction meeting if that has not yet already

occurred.

As per the Special Provisions for 1601, a modest amount of non-domestic steel or iron is allowed to be used on each project. For federal projects, this amount is the greater of either one-tenth of one percent of the total Contract cost or \$2,500. For applicable state-funded jobs, the requirement is, “To the extent practicable, a public entity receiving an appropriation of public money for a project in this act must ensure those facilities are built with American-made steel.” However, if the Contractor elects to use any non-domestic iron or steel, it must submit the information on the [Stipulation for Foreign Iron or Steel Materials form](#) (PDF). This form must be submitted by prospective bidders with their bid.

Please contact your area State Aid Construction Engineer and/or Specialist with any questions regarding the Buy America requirements.

Districts 1 – 4, Ron Bumann at ronald.bumann@state.mn.us or 218-725-2811

Districts 6-8, Mitch Bartelt at mitch.bartelt@state.mn.us or 651-366-3832

Metro, Elisa Bottos at 651-234-7766 or elisa.bottos@state.mn.us or Jim Deeny at 651-234-7762 or james.deeny@state.mn.us.

Northern Long-eared Bat Update

By: Merry Daher, State Aid Project Delivery Engineer

On April 2, the U.S. Fish & Wildlife Service published a public notice that does two things:

1. Promulgates a final rule listing the Northern Long-eared Bat as a threatened species under the Endangered Species Act; and
2. Promulgates an interim rule under Section 4(d) of the ESA that establishes measures necessary to conserve this bat. The rule became effective May 4, though the USFWS is accepting comments on the rule until July 1, 2015.

How might this rule impact county public works department projects?

Exempt projects

No permit is required for projects that:

- Consist of maintenance or expansion of existing right of way and transmission corridors where work occurs no further than 100' on either or both sides of existing ROW, and/or
- Qualify as "minimal tree removal" which is defined as removal of trees on a cumulative area of one acre or less, and/or
- Qualify as forest management, native prairie management or hazardous tree removal

AND

The project is not within 0.25 mile of a known, occupied Northern Long-eared Bat hibernacula or roost tree. Projects within 0.25 mile of a known, occupied roost

tree can still be exempted from permitting if certain steps are taken, mainly pertaining to the timing of clearing. In particular, you must not cut known, occupied roost trees from June 1 to July 31.

How do you know where the known hibernacula and roost trees are in your county? You may request this information by contacting Andrew Horton at andrew.horton@fws.gov.

Non-exempt projects

Construction of bypass roads, new roads or new trails outside of existing ROW+100' that require cutting one or more acres in total of trees large enough for use as a roosting tree (3" or larger is the rule of thumb per our verbal communications with USFWS) may require obtaining a permit from the USFWS. The permit process typically takes several

months such that, according to USFWS staff, for many projects they may opt instead to delay construction until after the applicable tree removal restriction time period. That permit is likely to limit the time of year when trees may be removed, potentially leading to the need to conduct tree removal well in advance of construction.

The [USFWS Interim 4\(d\) Rule webpage](#) walks through a series of questions that help a project proposer determine applicable requirements.

Federal project guidance can be found in the USFWS's [User's Guide for the Range-wide Programmatic Informal Consultation for Indiana Bat and Northern Long-eared Bat \(Version 1.1, June 4, 2015\)](#) document (PDF).

State Aid Rules Revision Process

By: Paul Stine, Operations Engineer

In March, State Aid solicited suggestions for potential rules revision from all city and county engineers and MnDOT staff. Thank you for your responses, we received about 80 suggestions.

We are currently sorting through the suggestions for technical issues and soon the DSAE's will review them for practical and administrative feasibility. In July and August the MCEA Standards Committee will work on draft language, and shortly

thereafter a CEAM committee will review the draft language.

And after several legal and administrative reviews, the State Aid Rules Advisory Committee will meet in October to review proposed rules language and by November approve the final language. After final legal and administrative approvals, the rules should be adopted in February.



Recent Additions to the DCP Forms

By: Merry Daher, State Aid Project Delivery Engineer

Request for Contracting Authority (DCP 01)

A line has been added for the LPA to sign.

Post-Award Documentation – DSAE (DCP 05)

Justification Letter (If bid varies ± 10 percent greater than the Engineer's Estimate) –

previously this was only needed when bids were more than 10 percent over the Engineers Estimate, now a justification is required for bids more than 10 percent below the Engineers Estimate.

Post-Award Documentation – SALT (DCP 08)

This has been revised into two forms; one for greater Minnesota LPA's and one for metro LPA's to insure the post award documents are submitted to the correct processors for timely action.

Three new items have been added to the submittal package, as a result of recent federal program reviews conducted by the FHWA.

1. Copy of the Justification Letter (If bid varies ± 10 percent greater than the Engineer's Estimate) –

previously this was only needed when bids were more than 10 percent over the Engineers Estimate, now a justification is required for bids more than 10 percent below the Engineers Estimate.

2. **Written verification that the apparent low bid was formally reviewed and compared to the Engineer's Estimate and found it to be responsive and not materially unbalanced.** Bid procedures are outlined in the electronic State Aid Manual Chapter 6.C.

3. Written verification that the federal online SAM list has been checked for debarred contractors.

How to Check for Federally Debarred Contractors

Use the following steps to see if an entity is subject to any active exclusions (e.g., suspensions, debarments) imposed by a federal agency:

1. Go to <http://sam.gov>
2. On the homepage or the Search Records tab, type the Entity's name and or DUNS number in the search bar and click on the Search icon. (IMPORTANT NOTE: Individuals are not assigned DUNS numbers. If you are checking for an exclusion for an individual, search by typing in the name.)
3. If "no record is found", the entity does not have an active exclusion submitted in SAM by a federal agency and therefore is not barred from bidding your federal project.

4. If the contractor's name comes up and the statement, "Has Active Exclusion?" is answered with "No", the contractor is not barred from bidding federal projects.

5. If an exclusion record is found, and the box says "Exclusion" but the Termination date has passed, they are not barred from bidding federal projects.

6. If the box in the records says "Exclusion" and there is an activation date, but no termination date, the contractor **is barred** from bidding federal projects indefinitely.

7. If the box in the record says "Exclusion" and there is an activation date and future termination date, the contractor **is barred** from bidding federal projects until that termination date has passed.

8. If the box in the records says "Entity" and the statement, "Has Active Exclusion?" is answered with "Yes", and the expiration date has not passed, the contractor is barred from bidding federal projects.

Admittedly, the federal SAM website is not intuitive, but it must be checked for federally debarred contractors whenever federal funds are used on a project.

If you need assistance with this, contact Merry Daher at 651-366-3821 or merry.daher@state.mn.us.



Plan Requirements for projects on MnDOT Right of Way

By: Merry Daher, State Aid Project Delivery Engineer

When a local agency or their consultant prepares a plan for project that will require MnDOT approval, the following comments often result from the MnDOT Pre-letting Services Section. This information is being presented in an effort to provide consistency and streamline processing of locally administered projects on MnDOT right of way that require MnDOT approval.

[MnDOT's Metro Sample Plans](#) (these can be used as statewide guidance).

The [Design Scene and Guidance webpage](#) contains useful information for designers. It contains clarification on things that have been found confusing in the past as well as information that the designers should be aware of.

- The news section is important information for designers that has not yet been incorporated in the design scene. This information will eventually be added to the design scene when time allows.
- The related resources section has some useful information for designers as well.
- The technical memos section is important information to know as well.

We encourage you to give all of these sections a look, especially the metro sample plan as it talks about what the plans should contain (at least from a metro perspective).

The remain content are some persistent comments and resources that may be helpful in plan preparation.

Comment: Remove zeros on the Statement of Estimated Quantities & Tabs – if there is no quantity, do not list the item in the SEQ

Resource: Estimated Quantities. The quantities put on the estimate sheet should normally be rounded to the nearest whole number. We should avoid using decimals, if possible. Only in cases of extremely small quantities should decimals be used and then only to the tenth place.

Commas should not be used either. For large numbers either leave a space where the comma would typically go or just continue the number (i.e. 12 345 or 12345 instead of 12,345).

When using small numbers as in the case of prorated items, a zero should be placed before the decimal number (i.e. 0.5 instead of .5).

Do NOT use zeros or dashes in the estimated quantities table or any tabs. These locations should be left blank.

See [Design Scene, Chapter 2 – Quantities and Tabulations](#) (PDF) for further details.

Comment: Remove “.XXX” from Item 2575.XXX on Notes.

Resource: The full spec numbers (2104.501) should be shown on the statement of estimated quantities only, elsewhere in the plan only the first four digits should be shown (2104).

See [Estimated Quantities sample plan](#) (PDF) for further details.

Comment: Delete the web address for approved products list .

(Sheet 2). This note is provided for the convenience of the Contractor.

Resource: There is no specific rule about the use of websites but as a department we leave off the sites because of the frequency of them changing. From the plan there is enough information in the sentence that a web site is not necessary.

Comment: Add “incidental” to the end of Note 4. This is note is only a general note not specific to any item.

Resource: How is the contractor going to get paid? There are no specific items to take care of the work cited. So you need to add pay items or place (incidental) at the end of the paragraph. From the spec. book: INCIDENTAL. Whenever the word “incidental” is used in the Contract it shall mean no direct compensation will be made.

Comment: Remove letters from the end of Standard Plate Numbers

Resource: Use current standard plates. See [Standard Plate sample plan](#) (PDF) for further details.

Include the standard note on top of the Standard Plates Tabulation: The following standard plates, approved by the FHWA, shall apply on this project.

On the tabulation, use the most recent letter designation. On all other plan sheets, eliminate the letter reference.

New Intelligent Transportation Systems Engineering Requirement

By: Merry Daher, State Aid Project Delivery Engineer

Intelligent Transportation Systems means electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

Any ITS project or projects with an ITS component authorized after June 30, 2016, shall fully comply with 23 CFR 940 and be properly documented.

The FHWA Division Office has been working with the MnDOT Office of Traffic, Safety and Technology to improve the implementation of 23 CFR 940 in Minnesota. The Transportation Equity Act for the 21st Century includes this requirement for a 2005 implementation.

Where applicable, **Rule 940** requires that all ITS systems or components be developed based on a Systems Engineering process and that the scale of the SE process be on a scale commensurate with the project.

When Rule 940 Applies

Rule 940 is required for the following:

- All ITS projects funded (in whole or in part) with the highway trust fund; (Includes National Highway System and non-NHS facilities)
- All state funded ITS projects in which ITS component(s) will be connected/integrated to another ITS component, project or system. This applies to all ITS Class B-1, B-2 and C projects

Minnesota ITS Projects are divided into four classes:

- Class A: Standard ITS Applications (90 percent of the projects)
- Classes B-1, B-2 and C: ex. Lane Control Signals, Gates, Automated Vehicle Location Internal Conflict Warning systems.

If your project is Class A, complete and sign the appropriate a programmatic SE process was done for all Class A projects so a Systems Engineering process is not required. You will need to submit a Class A checklist from the following to your DSAE along with supporting documentation. It will be submitted along with the federal authorization for approval by the FHWA.

- [Traffic Signal Checklist](#) (Word)
- [Road Weather Information System Checklist](#) (Word)
- [Railroad-Highway Grade Crossing Checklist](#) (Word)
- [Weigh in Motion System Checklist](#) (Word)

If your project is Class B-1, B-2 or C, complete the System Engineering Process, then complete and sign the checklist for the Class of your project.

- [Class B-1 Checklist \(Freeway Traffic Management\)](#) (Word)
- [Class B-2 Checklist \(Arterial Traffic Management\)](#) (Word)
- [Class C Checklist \(General Systems\)](#) (Word)

The basic (minimum) steps required for a full SE process are as follows:

1. Coordination with regional ITS architecture
 - a. From the [Minnesota Statewide Regional ITS Architecture](#) identify the portions of the regional ITS architecture being implemented, and:
 - ⇒ Ensure that the final design accommodates the interface requirements and information exchanges specified in the [regional ITS architecture](#) (PDF).
 - ⇒ The regional ITS architecture can be updated as so that the project and the regional architecture have accommodating interface requirements and information exchanges.
 2. If the Minnesota Statewide Regional ITS Architecture does NOT contain the ITS project:
 - ⇒ Create a project-level architecture that coordinates with the development of the regional ITS architecture. Please refer to MnDOT Office of Traffic, Safety and Technology contact for guidance.
 - ⇒ Ensure that the final project-level ITS architecture coordinates with the development of the regional ITS architecture so that the project will accommodate the interface requirements and information exchanges in the completed regional ITS architecture.

continued....New Intelligent Transportation Systems Engineering

3. Identify the roles and responsibilities of participating agencies;
4. Define requirements;
4. Analyze alternative system configurations and technology options and determine what best meets requirements;
5. Identify procurement options;
6. Identify applicable ITS standards and testing procedures;
7. Identify procedures and resources necessary to operate and manage the system.

Revised Responsible Contractor Specifications and Verification/Certification

By: Ron Dahlquist, Federal Plans Specialist

What's new?

Even though the Responsible Contractor specification is relatively new, there has already been a revision to it, due to an amendment to the underlying statute. Among other things, the amendment to the statute does not allow for local agencies to establish additional responsibility criteria. In addition, the Verification/Certification form (Attachment A) does not be notarized; while notarization is not required, it is recommended for local agency projects.

There has also been a minor revision to language in the accompanying 1801 Subletting of Contract spec.

The Verification/Certification form (Attachment A) for local agency use has also been revised, removing a MnDOT reference.

These two specs and the Attachment A still apply to projects estimated at more than \$50,000.

When does it go into effect?

Local agencies should begin using these revised specs with any upcoming projects. Local agencies are also encouraged to include the revisions in any addenda they may issue for currently advertised projects.

Why are there revisions already?

There was some confusion as to what constituted a Responsible Contractor. Certain motor carriers and aggregate suppliers are now more clearly defined as needing Responsible Contractor verification. However, Responsible Contractor verification does not apply to some other material suppliers and licensed design professionals.

The revised specification also more clearly defines who may be considered a subcontractor. Please see the new spec for details.

Where does this spec fit into my proposal?

For most proposals, the Responsible Contractor specification and the accompanying 1801 Subletting of Contract spec should be placed

at the beginning of the Division S of the proposal. The certification form (Attachment A) should be placed near the very end of the proposal with other forms requiring signatures.

How do I find the new spec?

Please do not use the MnDOT boilerplate spec. The revised MnDOT spec includes information on how to submit Responsible Contractor verification for MnDOT projects only and is not compatible for local agencies.

Please use the revised version of the Responsible Contractor specification, the accompanying 1801 Subletting of Contract spec, and the Attachment A found on the State Aid Electronic Proposal Document Table.

What if I still have questions?

Contact Ron Dahlquist at ron.dahlquist@state.mn.us or 651-366-3823.



Safe Routes to School Update

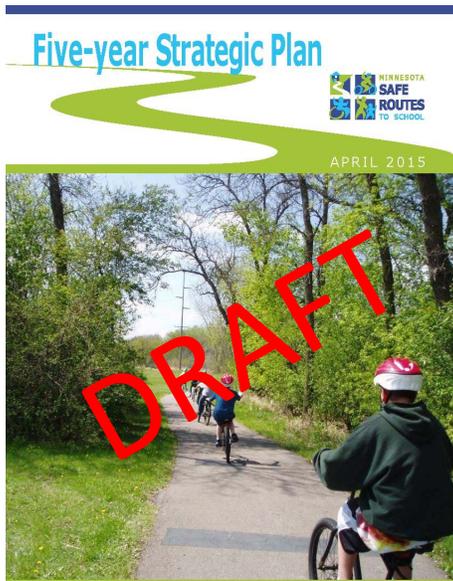
By: Mao Yang, Assistant Project Development Engineer

DRAFT SRTS Strategic Plan **Now Available**

Beginning in the fall of 2014, MnDOT convened a diverse group of stakeholders from agencies and organizations around the state to develop a Minnesota SRTS Strategic Plan. Participants worked through four interactive workshops and a series of online surveys between November 2014 and February 2015, to develop a vision and value statements for the state SRTS program, 5-year goals, strategies, and action steps.

The plan includes approaches to public outreach, marketing, and education for SRTS initiatives throughout the state of Minnesota, as well as strategies for developing and implementing SRTS plans and programs.

Check out the draft strategic plan and fill out this survey to provide comments and weigh in on SRTS program priorities: <https://www.surveymonkey.com/r/8DZHVGF>.



Upcoming Funding Opportunities

Schools and communities will have an opportunity to apply for non-infrastructure and infrastructure grants this fall. State funds appropriated to the Minnesota SRTS program from the state legislature will fund planning grants and federal funds designated for SRTS by MnDOT will help fund infrastructure projects in 2017. The federal funds for SRTS infrastructure will be in addition to the federal funds available through the Transportation Alternatives Program in which SRTS projects are also eligible. Details on the grants and the solicitations will be shared on the [MnDOT SRTS website](#).

SRTS Planning Assistance (\$350,000) – Funding to schools and communities to develop SRTS plans.

SRTS Infrastructure (\$1.7 million) – Funding to construct or improve infrastructure around schools and along student travel routes that will improve access and safety.

Minnesota SRTS Resource Center

An online resource center is coming soon! Beginning July, visit www.mnsaferoutestoschool.org to find resources to start a SRTS program, find additional funding sources, share success stories, access a toolkit of SRTS materials to use at the school, and more.

MnDOT 2015 Noise Policy for Type I Federal Aid Projects

By: Lynnette Roshell, Federal Aid Agreements & Special Programs Engineer

The new 2015 Noise Policy's effective date is June 15, 2015. Revisions to the policy were developed by MnDOT in cooperation with a Technical Advisory Committee and a Policy Advisory Committee, composed of various stakeholders including Minnesota legislators, representatives from local agencies, citizens, Minnesota Pollution Control Agency, FHWA, and MnDOT.

The 2015 MnDOT Noise Policy applies uniformly and consistently to all Type I federal highway projects in the Minnesota; that is, any project that receives federal aid funds or are otherwise subject to federal approval. Local agencies

are exempt from the Minnesota State Noise Standards under [Minnesota Statute 116.07](#) unless full control of access has been acquired. A Type I project is a federal aid highway project that constructs a highway on a new location, has a substantial horizontal and/or vertical alteration, adds a through lane (including HOV, contraflow, HOT, bus lane, truck climbing lane, and auxiliary lane) or restripes to add lanes. The Type I definition also includes the alteration of interchanges, weigh stations, rest stops, ride-share lots or toll plazas. If a portion of the project is Type I then the entire project area is considered a Type I project.

If you are constructing a federally roadway project even partially on a new alignment please contact State Aid to discuss the need for a noise study and subsequent analysis of the effectiveness of noise barriers being incorporated into your project.

Copies of the 2015 MnDOT Noise Policy and implementation schedule will be available on the [Noise Analysis webpage](#).

For more information, contact Marilyn Jordahl-Larson at marilyn.jordahl@state.mn.us or 651-366-4666.



State Aid for Local Transportation

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