ATTACHMENT A

ROUTINE INSPECTION REPORT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Inspection Report for B-52-035

STH 56 over FANCY CREEK

Mar 08,2018

Type	Prior	Frequency (mos)	Performed
Routine	03-08-16	24	X
Interim	05-27-14	0	
SIA Review	03-08-16	48	

Start Coordinates		End Coordinates (optional)	
Latitude	43°26'40.23"N	Latitude	
Longitude	90°28'34.28"W	Longitude	

Owner	STATE HIGHWAY DEPT	Maintainer	STATE HIGHWAY DEPT

Time Log

Hours	Minutes
1	15

Team members

	Name	Number	Signature	Date
Inspector	Bohnsack, Dave	5015	Dave Bohnsack E-signed by David Bohnsack(ditd2b)	03-08-18

BRIDGE INSPECTION REPORT
Wisconsin Department of Transportation
DT2007 2003 s.84.17 Wis. Stats.

Identification & Location

Feature On: STH 56	Section Town Range: S10 T11N R01W	Structure Number: **B-52-035**
Feature Under: FANCY CREEK	County: RICHLAND	
Location 0.1M E JCT CTH H	Municipality: MARSHALL	Structure Name:

Geometry

measurements in feet, except where noted

Approach Roadway Width: 36	Bridge Roadway Width: 30.0	Total Length: 68.2
Approach Pavement Width: 22	Deck Width: 35.0	Deck Area (sq ft): 2387

Traffic

	Lanes	ADT	ADT year	Traffic Pattern
On	2	790	2015	TWO WAY TRAFFIC

Capacity / Load Rating

Inventory rating: HS14	Overburden depth (in): 2.0	Last rating date: 08-29-13	Controlling: INTERIOR DECK GIRDER Positive Moment
Operating rating: HS38	Deck surface material: LOW SLUMP CONCRETE	Re-rate for capacity (Y/N):	Control location: SPAN 1
Posting:	Re-rate notes:		

Hydraulic / Classification

Scour Critical Code(113): (8) STABLE-ABOVE TOP FOOTING	Q100 (ft3/sec): 0	
High water elevation (ft): 850.0	Velocity (ft/sec): 13.0	Sufficiency #: 76.2

Span(s)

Span #	Material	Configuration	Depth (in)	Length (ft)	Main
1	PREST CONCRETE	DECK GIRDER	36	66.0	Y

Expansion joint(s)

Temperature: File: | New:

Clearance

Item	File Measurement (ft)	File Date	New Measurement (ft)
Highway Min Vertical On Cardinal			
Horizontal On Cardinal			

Special Components

Component	Year	Work Performed	Note
DECK - IOWA MIX	1990	OVERLAY - CONCRETE - NEW RAIL & JOINTS	

Construction History

Year	Work Performed	FOS id
1990	OVERLAY - CONCRETE - NEW RAIL & JOINTS	1000-35-27
1963	NEW STRUCTURE	

Maintenance Items History

Item	Recommended by	Status	Status change	Year completed
Approach - Wedge Approach	Johnson, Allan N (5017)	COMPLETE	03/14/12	
Wedge Approaches - lots of cracking. See photo.				

Maintenance Items

Item	Priority	Recommended by	Status	Status change
Misc - Paint Spot / Complete	MEDIUM	Bohnsack, Dave (5015)	APPROVED	03/14/12
PAINT EXPOSED PILES.				
Substructure - Repair Abutment / Wings	MEDIUM	Bohnsack, Dave (5015)	APPROVED	03/14/12
SHORE UP ROTTED BACKWALL TIMBERS.				

Elements

Chk	Element	Defect	Description	UOM	Total	Quantity in Condition State 1	2	3	4
X	**12**		**Reinforced Concrete Deck**	SF	2,387	2,243	144	0	0
		1080	Delamination - Spall - Patched Area	SF		0	74	0	0
			2 areas of full depth deck patching near mid span - location of former deck drains (**20** SF). Area of full depth deck patch at SE corner (**34 SF). Areas of delamination near abutments (20 SF)**						
		1130	Cracking (RC)	SF		0	70	0	0
			Various random HL cracks on ends with lite staining. NAR width longitudinal crack **with efflorescence** at NW corner under PPT. **Areas of narrow width block cracking near abutments.**						
	8514		Concrete Overlay	SF	2,387	2,047	340	0	0
			Overlay is delaminating from original deck.						
		3210	Debonding/Spall/Patched Area/Pothole	SF		0	96	0	0
			[10] Chained - 15% delamination. **[14]** Chained - 14% delamination. **[18] Chained - ~4% delamination - mostly found in EB lane and shoulder, thin deck may account for difficulting determining if deck is delaminated.**						
		3220	Crack (Wearing Surface)	SF		0	244	0	0
			HL and NAR block cracking (transverse and longitudinal cracks that form block shapes) throughout.						
X	**109**		**Prestressed Concrete Open Girder**	LF	472	460	12	0	0
			7 girders.						
		1080	Delamination - Spall - Patched Area	LF		0	1	0	0
			Spall on bottom flange of G1 near EA.						
		1110	Cracking (PSC)	LF		0	11	0	0
			G7 @ WA: 1-NAR horizontal crack in web (2'2"). G7 @ EA: 1-NAR horizontal crack in web (**2'10**"). G6 @ EA: NAR dia crack (2'6" from backwall). G**3 @ WA: NAR dia crack (~1')** **G**2 @ WA: NAR dia crack in top flange (1 LF).						
X	**215**		**Reinforced Concrete Abutment**	LF	75	55	15	5	0
			Encased steel piles and covered timber backwall in 2013. Concrete abutment consists of concrete backwall above and below cap.						
		1080	Delamination - Spall - Patched Area	LF		0	6	1	0
			WA: F/T damage with NAR cracks and delamination at south end (3 LF) and north end (2 LF). EA: Spalling with exposed rebar at south end (1 LF in CS2 and CS3).						
		1130	Cracking (RC)	LF		0	9	4	0
			WA: F/T cracks with efflorescence on south corner, NAR width horizontal crack at top of abutment diaphragm between G1 & G2 (5 LF). **A few NAR vertical cracks in abutment.** EA: F/T cracks with efflorescence on north corner (4 LF). **1/16" wide vertical crack between G4 and G5.**						

X	**234**		**Reinforced Concrete Cap**	LF	75	67	7	1	0
			Abutment consists of a concrete cap with steel piling, timber backwall covered by concrete backwall.						
		1080	Delamination - Spall - Patched Area	LF		0	3	0	0
			WA: F/T damage with NAR cracks and delamination at south end (3 LF).						
		1130	Cracking (RC)	LF		0	4	1	0
			WA: F/T damage consisting of cracking with efflorescence at north end (4 LF). F/T damage at ends. **EA: 1/16" wide vertical crack between G4 & G5.**						
X	**330**		**Metal Bridge Rail**	LF	134	17	84	33	0
			Railing is a concrete parapet topped with aluminum rail and with W panel on wood blocks on front.						
		1000	Corrosion	LF		0	20	0	0
			Areas of scraped galvanizing is corroding**,** some areas of blush rusting.						
		1080	Delamination - Spall - Patched Area	LF		0	54	33	0
			Curb is delaminated and spalled with areas of exposed rebar (**CS=33** LF).						
		1130	Cracking (RC)	LF		0	0	0	0
			Cracking along curb face. Areas of HL cracks on concrete parapet.						
		1150	Checks-Shakes-Cracks-Splits-Delam	LF		0	10	0	0
			Some checks and splits in block outs.						
X	**8400**		**Integral Wingwall**	EA	4	0	4	0	0
			Timber backwall wings with steel H-pile. Wings are functioning properly with movement and rot evident in top timber planks and corrosion beginning on piles.						
		8903	Wall Deterioration	EA		0	4	0	0
			SW: Piles - blush rust occurring on piles, active corrosion at ground line, one pile damaged at top; timbers - top planks are cracked and rotting, bottom plank has area of rot at pile. NW: Piles - areas of active rust and some blush rust; Timbers - some splitting on ends. SE: Piles - areas of blush and active rust, end pile damaged at top; Timbers - movement of top planks and some rot. NE: Piles - areas of blush and active rust, end pile damaged at top; Timbers - movement of top planks, top plank and ends have cracks.						

Assessments

Chk	Element	Defect	Description	UOM	Total	Quantity in Condition State 1	2	3	4
	9001		**Drainage - Ends of Structure**	EA	4	3	1	0	0
			NE: Erosion of slope behind wing. **[18] Snow covered - could no inspect.**						
X	**9030**		**Signs - Object Markers**	EA	4	3	1	0	0
			NE: slight damage to sign from TI.						
X	**9045**		**Slope Protection- Riprap**	EA	2	2	0	0	0
X	**9168**		**Concrete Diaphragm**	EA	12	12	0	0	0
X	**9323**		**Approach Roadway - Asphalt**	EA	2	0	2	0	0
			Both **approaches are plagued by patched potholes,** crack**ing throughout, raveling asphalt, and** minor settl**ement.**						
X	**9335**		**Decorative Rail**	EA	2	0	2	0	0
			Scrapes on both sides. Some loose nuts.						

NBI Ratings

	File	New
Deck	5	5
Superstructure	7	7
Substructure	7	6
Culvert	N	N
Channel	8	8
Waterway	8	8

Structure Specific Notes

AM = 2026

Inspection Specific Notes

Inspector Site-Specific Safety Considerations

Structure Inspection Procedures

Special Requirements

Chk	Hours	Cost	Comments

Underwater Probe Form
B-52-035

General Site Conditions - Scour

General Site Conditions - Embankment Erosion/Conditions

Prior to 2013, channel migration and aggregation had occurred because of high water events. In 2013, maintenance crews re-established the channel to the location of original construction.

Substructure Notes

Chk	Unit	Max Water Depth(ft)	Mode	Notes
X	Cardinal		Dry	
X	Non Cardinal		Dry	

Routine

Document Comment/Description

West approach pavement

Routine

Document Comment/Description

Spalled curb along north parapet.

Routine

Document Comment/Description

Spalling curb along north parapet

Routine

Document Comment/Description

Corrosion on beam guard.

Routine

Document Comment/Description

East approach pavement

Routine

Document Comment/Description

Backside of parapet with bolts fastening steel beam guard to concrete parapet

Routine

Document Comment/Description

F/T damage in east abutment/concrete cap at south end.

Routine

Document Comment/Description

NAR crack in web of G7 at EA

Routine

Document Comment/Description

Patch in underside of deck

Routine

Document Comment/Description

1/16” wide vertical crack in east abutment/cap between G4 and G5

Routine

Document Comment/Description

F/T damage in east abutment/concrete cap at north end.

Routine

Document Comment/Description

Spall in bottom flange of G1 near EA.

Routine

Document Comment/Description

F/T damage in west abutment/concrete cap at north end.

Routine

Document Comment/Description

Cracking and efflorescence between deck and ppt at NW corner.

Routine

Document Comment/Description

Patched underside of deck at former deck drain.

Routine

Document Comment/Description

F/T damage in west abutment/concrete cap at south end.

Routine

Document Comment/Description

SW wing

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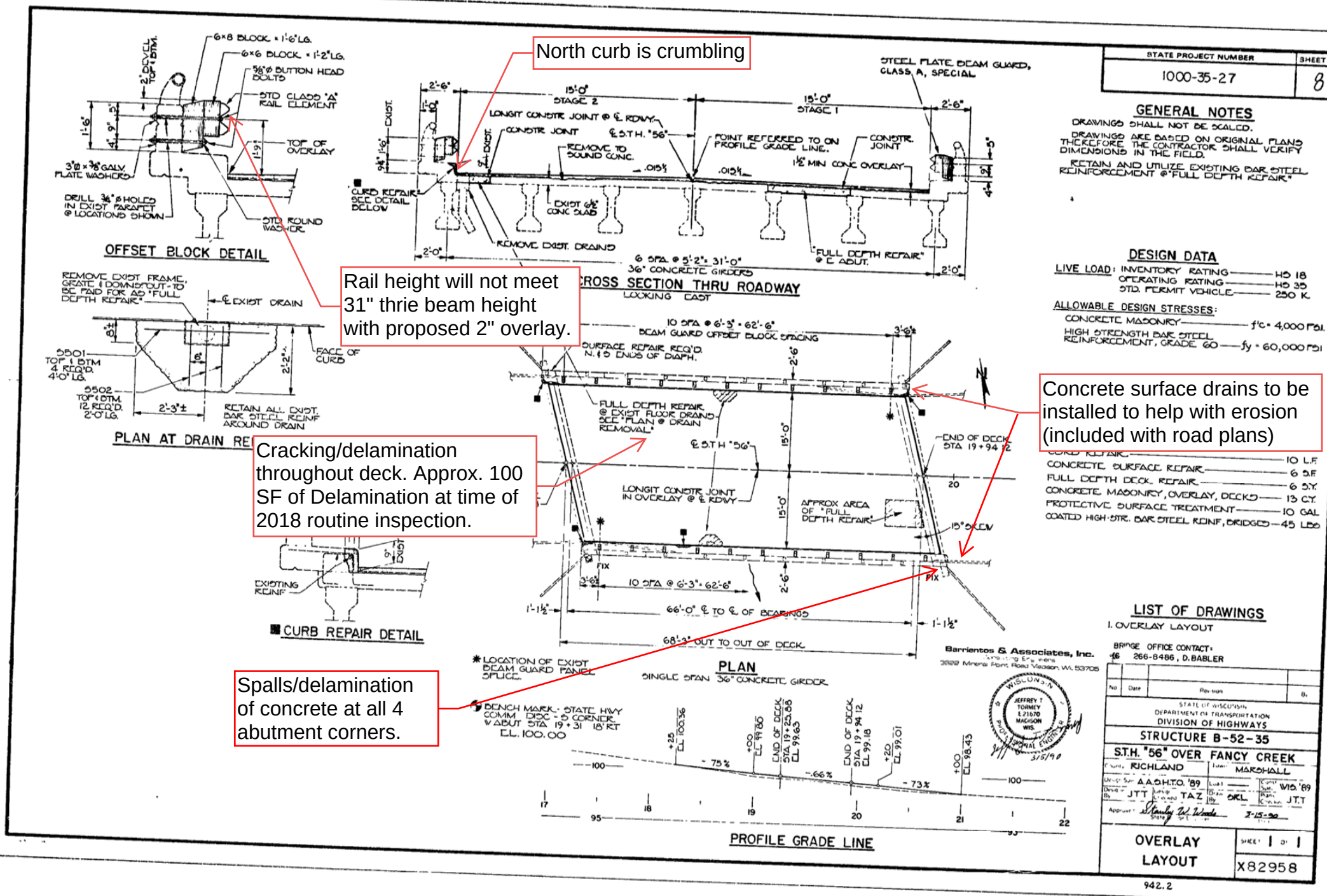
ATTACHMENT B

BRIDGE PLAN OF DEFICIENT AREAS


North curb is crumbling
Rail height will not meet 31" thrie beam height with proposed 2" overlay.
Cracking/delamination throughout deck. Approx. 100 SF of Delamination at time of 2018 routine inspection.
Spalls/delamination of concrete at all 4 abutment corners.
Concrete surface drains to be installed to help with erosion (included with road plans)
OFFSET BLOCK DETAIL
CROSS SECTION THRU ROADWAY
PLAN AT DRAIN
CURB REPAIR DETAIL
PLAN
PROFILE GRADE LINE
GENERAL NOTES
DESIGN DATA
LIST OF DRAWINGS
1. OVERLAY LAYOUT
STATE PROJECT NUMBER
1000-35-27
SHEET
8
STRUCTURE B-52-35
S.T.H. "56" OVER FANCY CREEK
RICHLAND
MARSHALL
OVERLAY LAYOUT
X82958
Barrientos & Associates, Inc.

942.2

ATTACHMENT D

CORRESPONDENCE WITH DOT FOR BRIDGE REPAIRS

Email from Region DOT specifying inflation percentage for deck repairs

Joshua Sweno

From: Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>
Sent: Wednesday, October 24, 2018 9:53 AM
To: Quirin Klink
Cc: Jolie Snyder; Bobbi Maxwell
Subject: RE: STH 56 - Richland Cty bridge work
Attachments: RE: STH 56 - Richland Cty bridge work

Follow Up Flag: Follow up
Flag Status: Flagged

Q,

Please see the attached from our bridge maintenance section. You can inflate the areas by 10-20% to estimate future deterioration prior to the let.

Thanks

Dan

From: Quirin Klink [mailto:qklink@msa-ps.com]
Sent: Tuesday, October 23, 2018 2:38 PM
To: Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>
Cc: Snyder, Jolie <jsnyder@msa-ps.com>; Maxwell, Bobbi <bmaxwell@msa-ps.com>
Subject: FW: STH 56 - Richland Cty bridge work

Dan, I left a voicemail just now as well. See below questions – could you get us answers to these in the next week or so? We need them to submit the prel plans/SSRs. Thanks, Q.

From: Jolie Snyder
Sent: Tuesday, October 23, 2018 2:29 PM
To: Quirin Klink <qklink@msa-ps.com>
Subject: STH 56 - Richland Cty bridge work

Questions for Dan regarding B-52-35 and B-52-84:

B-52-35:

- Do you want us to improve cross slope from 1.5% to 2%? This would affect cost mainly. The extra thickness would be at the C/L road. Should not have significant effect on the load rating.
- Type 1, Type 2, Full Depth Deck Repair Areas. We get these qtys from the DOT for these type of projects since we have no data to go from. We really only need the Type 1, since Type 2 can be estimated as 40% of this. Need from Bridge Maintenance Engineer.

B-52-84:

- Type 1, Type 2, Full Depth Deck Repair Areas. We get these qtys from the DOT for these type of projects since we have no data to go from. We really only need the Type 1, since Type 2 can be estimated as 40% of this. Need from Bridge Maintenance Engineer.

Box Culverts:

- We have asbestos reports for the two bridges, but we want to confirm that we do not need these for the box culverts, based on DOT policy. Is that correct?

Email from Region Maintenance providing deck repair estimates from previous inspections

Joshua Sweno

From: Olson, Michael A - DOT <MichaelA.Olson@dot.wi.gov>
Sent: Wednesday, October 24, 2018 8:42 AM
To: Kleinertz, Daniel - DOT; Bohnsack, David - DOT
Subject: RE: STH 56 - Richland Cty bridge work

Dan

I would also assume that we would like to correct the crown thickness as long as it wouldn't affect the load rating of the bridge to have that extra concrete. In looking at our last inspections on the bridges these are the follow quantities that I came up with.

B-52-0035: Chained in 2018 showing ~4% delam = ~ 100SF it shows that there is 74 SF of delam or patched areas under the deck with 54 of that being patched areas so I would think that 20SF of full depth would be sufficient. Type 1= 100 SF, Type 2= 40 SF (40%) and Full depth =20 SF.

B-52-0084: Chained in 2012 and 2016 showing 10 SF and 65 SF of delamination respectively. It doesn't look like there is much for delamination on the underside, and with it being a slab span I would anticipate much full depth but I suppose we should throw in a small quantity for just in case purposes. There is also a drip edge repair that the county did in 2015 that is starting to crumble along the north edge of the repair, that we should have the contractor fix while they are out there. I think that would probably fall under the type 1 repair since it is the top edge, but it could also fall under the surface repair item. Just want to make sure that it is addressed in the plan so it gets repaired. It is the entire length of that edge 44 ft. I would go with Type 1= 120 SF, Type 2= 50 SF, Full Depth 5 SF.

That being said as you know these are all just a best guess, if you want to bump them up so we don't have overages feel free. I am not sure if we do asbestos checks or not on boxes so I am no help there.

Let me know if you need anything else.

Mike.

From: Kleinertz, Daniel - DOT
Sent: Tuesday, October 23, 2018 2:44 PM
To: Bohnsack, David - DOT <David.Bohnsack@dot.wi.gov>; Olson, Michael A - DOT <MichaelA.Olson@dot.wi.gov>
Subject: FW: STH 56 - Richland Cty bridge work

Dave/ Mike,

MSA is looking for Type 1 / Type 2 and Full depth deck repair qty's on the two bridges listed below. My assumption is we would want to correct the crown and B-52-35 with the overlay. We also don't do asbestos checks on boxes.

MSA

From: Quirin Klink [mailto:qklink@msa-ps.com]
Sent: Tuesday, October 23, 2018 2:38 PM
To: Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>
Cc: Snyder, Jolie <jsnyder@msa-ps.com>; Maxwell, Bobbi <bmaxwell@msa-ps.com>
Subject: FW: STH 56 - Richland Cty bridge work

Dan, I left a voicemail just now as well. See below questions – could you get us answers to these in the next week or so? We need them to submit the prel plans/SSRs. Thanks, Q.

From: Jolie Snyder
Sent: Tuesday, October 23, 2018 2:29 PM
To: Quirin Klink <qklink@msa-ps.com>
Subject: STH 56 - Richland Cty bridge work

Questions for Dan regarding B-52-35 and B-52-84:

B-52-35:

- Do you want us to improve cross slope from 1.5% to 2%? This would affect cost mainly. The extra thickness would be at the C/L road. Should not have significant effect on the load rating.
- Type 1, Type 2, Full Depth Deck Repair Areas. We get these qtys from the DOT for these type of projects since we have no data to go from. We really only need the Type 1, since Type 2 can be estimated as 40% of this. Need from Bridge Maintenance Engineer.

B-52-84:

- Type 1, Type 2, Full Depth Deck Repair Areas. We get these qtys from the DOT for these type of projects since we have no data to go from. We really only need the Type 1, since Type 2 can be estimated as 40% of this. Need from Bridge Maintenance Engineer.

Box Culverts:

- We have asbestos reports for the two bridges, but we want to confirm that we do not need these for the box culverts, based on DOT policy. Is that correct?

Emails with Bureau of Structures when developing the railing replacement detail

Jolie Snyder

From: Landini, Anthony P - DOT <Anthony.Landini@dot.wi.gov>
Sent: Tuesday, November 13, 2018 2:50 PM
To: Quirin Klink; Kleinertz, Daniel - DOT
Cc: Nelson, David - DOT (Structures); Bobbi Maxwell; Jolie Snyder; Ksontini, Najoua - DOT
Subject: RE: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question
Attachments: 021001_cd-02 111218.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Quirin

I didn't like the offset in post attached to concrete and one attached to railing. Took a quick look at crash tests and didn't see any test configurations like that.

Attached is a suggestion for your consideration.

Tony

From: Quirin Klink [mailto:qklink@msa-ps.com]
Sent: Friday, November 02, 2018 9:37 AM
To: Landini, Anthony P - DOT <Anthony.Landini@dot.wi.gov>; Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>
Cc: Nelson, David - DOT (Structures) <David1.Nelson@dot.wi.gov>; Maxwell, Bobbi <bmaxwell@msa-ps.com>; Snyder, Jolie <jsnyder@msa-ps.com>
Subject: FW: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Tony and Dan, one of our construction guys thought of an alternate way of attaching the thrie beam on the bridge… see attached sketch. This would certainly be much more easy and cost effective to construct AND to maintain in the future if it is hit and needs repair. Let us know your thoughts. If this is preferred, we would change the plan detail to this layout.

From: Jolie Snyder
Sent: Friday, November 2, 2018 9:27 AM
To: Quirin Klink <qklink@msa-ps.com>
Subject: RE: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Can you take a look at the attached detail and send along to Dan and Tony? Or I can also.

From: Jolie Snyder
Sent: Thursday, November 1, 2018 1:13 PM
To: 'Landini, Anthony P - DOT' <Anthony.Landini@dot.wi.gov>
Cc: Nelson, David - DOT (Structures) <David1.Nelson@dot.wi.gov>; Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>; Quirin Klink <qklink@msa-ps.com>; Bobbi Maxwell <bmaxwell@msa-ps.com>
Subject: RE: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Hi Tony,

We have talked this over with our construction folks here. We anticipate the posts and thrie rail to be installed in the following sequence:

1. The two button head bolts would initially be approximately 6" longer than required, and the wood posts and blocks would be installed loosely on these bolts leaving space between the wood post and offset block to install the bolts through the rail to the offset block.
2. The thrie rail will then be attached and tightened to the offset block.
3. The button head bolts will then be tightened (at the back of the parapet) cinching the whole system together. The extra bolt length then cut off.

Using actual posts sizes (7.5" wide post, 5.5" wide block), the front of the thrie rail would be inset approximately 1.75" from the front of the curb. This is the same as the current configuration on the bridge. (It's hard to tell, but I think the attached photo helps to show the inset thrie rail). We understand this is not desirable under current guidelines, so we are proposing to go to using an 7.5" (8" nominal) wide offset block, so then the front of the thrie rail would be as close as possible to lining up with the curb (sticking out only approx. 0.25" from the front of the bottom of curb).

If this change is made, does BOS concur with this detail? I have attached the updated construction detail for your reference.

Thanks,

Jolie

From: Landini, Anthony P - DOT <Anthony.Landini@dot.wi.gov>
Sent: Tuesday, October 30, 2018 9:52 AM
To: Jolie Snyder <jsnyder@msa-ps.com>
Cc: Nelson, David - DOT (Structures) <David1.Nelson@dot.wi.gov>; Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>; Quirin Klink <qklink@msa-ps.com>; Bobbi Maxwell <bmaxwell@msa-ps.com>
Subject: RE: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Jolie

Actually, I was trying to get you to look at how the bolts look in plan view. I don't know how the Contractor will be able to assemble this detail. If you bolt both posts to concrete you can't get the thrie beam bolt in place. If you bolt the thrie beam to 6" post then you can't get a wrench on the upper long bolt under the thrie beam to tighten it to the concrete.

Recommend using standard size timber blocking so you are not cutting off outer layers of treated material taking into consideration nominal size versus actual size when dimensioning location of thrie beam in relation to curb.

tony

From: Jolie Snyder [mailto:jsnyder@msa-ps.com]
Sent: Tuesday, October 30, 2018 7:58 AM
To: Landini, Anthony P - DOT <Anthony.Landini@dot.wi.gov>
Cc: Nelson, David - DOT (Structures) <David1.Nelson@dot.wi.gov>; Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>; Quirin Klink <qklink@msa-ps.com>; Maxwell, Bobbi <bmaxwell@msa-ps.com>
Subject: RE: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Hi Tony,

I think the attached plan sheet shows the block layout you are looking for. If it's not, let me know and I can work on getting you what you need.

In response to David's comments on the offset block detail drawing (attached): We will fix the drafting/dimension errors on the detail. The front of the thrie beam will line up very close to the bottom of the curb. (2.5' overhang – 1' parapet footprint – 8" wide post – 6" wide block - 3.25" thrie rail = ¾" from bottom of curb to face of rail).

Let me know if you need any other information.

Thanks,

Jolie

From: Landini, Anthony P - DOT <Anthony.Landini@dot.wi.gov>
Sent: Monday, October 29, 2018 3:52 PM
To: Jolie Snyder <jsnyder@msa-ps.com>
Cc: Nelson, David - DOT (Structures) <David1.Nelson@dot.wi.gov>
Subject: RE: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Jolie

Could you also provide a little plan view sketch at the wood blocking

tony

From: Nelson, David - DOT (Structures)
Sent: Monday, October 29, 2018 10:23 AM
To: Snyder, Jolie <jsnyder@msa-ps.com>
Cc: Landini, Anthony P - DOT <Anthony.Landini@dot.wi.gov>
Subject: FW: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Jolie,

Just a few questions on the railing proposal for B-52-35:

- For Alternate #2 sketch
  - Notes say Thrie Beam is at 31" from pavement, but sketch shows 31" to top of wood block. This gives ≈ 30 1/8" from pavement to top of Thrie Beam. Was this the intent?
  - I assume the new wood blocks will go all the way down to the curb surface. Is this correct?
  - Does the front edge of the Thrie Beam line up with the bottom front edge of the curb or does it project beyond it?
- For structure in general
  - Is the concrete parapet in good condition and did someone visit the bridge to look it over?
  - Is the underside of curb below the parapet in good condition?
  - What is the speed limit at the bridge site?
  - Is the structure or bridge deck on a timeline for replacement? If so, when?
  - There is a lot of cracking and spalling at the curbs. What is being proposed for these regions?

Thanks in advance for your responses.

David Nelson

From: Kiekbusch, David - DOT
Sent: Friday, October 26, 2018 10:44 AM
To: Quirin Klink <qklink@msa-ps.com>; Snyder, Jolie <jsnyder@msa-ps.com>; Nelson, David - DOT (Structures) <David1.Nelson@dot.wi.gov>
Cc: Rhodes, Leah <lrhodes@msa-ps.com>; Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>; Maxwell, Bobbi <bmaxwell@msa-ps.com>
Subject: RE: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

David,
I would appreciate it if you could assist Jolie with the question below.

Dave

From: Quirin Klink [mailto:qklink@msa-ps.com]
Sent: Friday, October 26, 2018 10:22 AM
To: Snyder, Jolie <jsnyder@msa-ps.com>; Kiekbusch, David - DOT <david.kiekbusch@dot.wi.gov>
Cc: Rhodes, Leah <lrhodes@msa-ps.com>; Kleinertz, Daniel - DOT <Daniel.Kleinertz@dot.wi.gov>; Maxwell, Bobbi <bmaxwell@msa-ps.com>
Subject: RE: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Hi all,
I have cc'd Dan Kleinertz here, the Region project manager that we are working with, so he is in the loop on this discussion. Thanks!

From: Jolie Snyder
Sent: Friday, October 26, 2018 10:14 AM
To: Kiekbusch, David - DOT <david.kiekbusch@dot.wi.gov>
Cc: Quirin Klink <qklink@msa-ps.com>; Leah Rhodes <lrhodes@msa-ps.com>
Subject: 5730-00-60; STH 56 over Fancy Creek B-52-35 - Railing Question

Hi Dave,

We are putting together preliminary plans for the subject line bridge, and I wanted to get your thoughts on the modifications to the bridge rail we are proposing. The proposed detail is attached as "Alt #2" in the "021001_c-02" pdf.

The original bridge rail consisted of a concrete parapet with steel railing, but it was modified to include wood posts with Class A guardrail bolted through the concrete parapet when the bridge had a concrete overlay in 1990. I have attached some pictures of the current railing configuration.

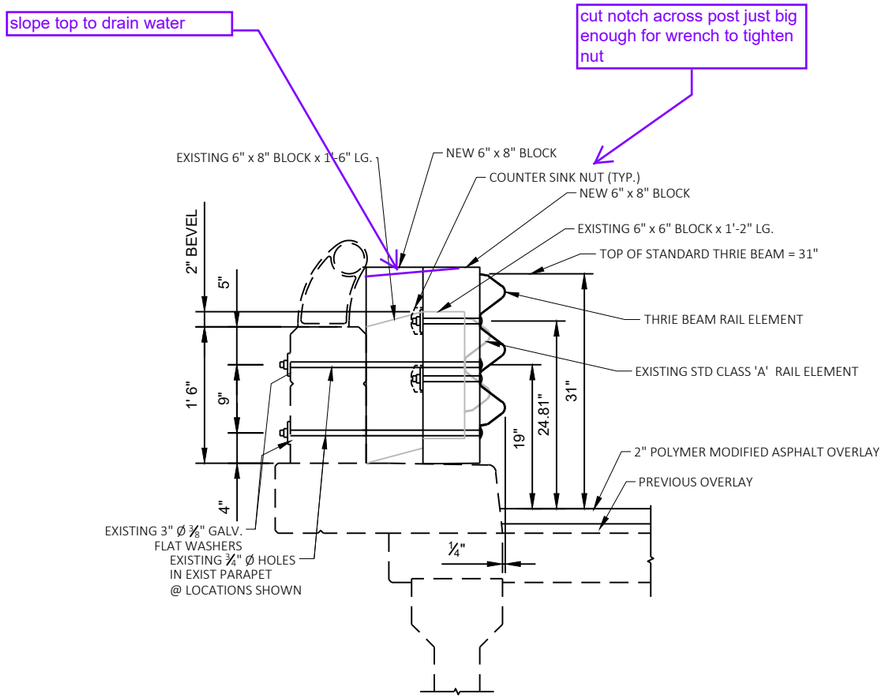
The rehabilitation proposed to this bridge is an HMA Polymer Modified Asphalt Overlay; it is part of a larger project consisting of a mill and overlay of a 7.6 mile stretch of STH 56 between STH 80 and Viola. The guardrail on the bridge approaches is being upgraded to the MGS system, and with the increased height of the MGS guardrail, the existing Class A steel rail and wood posts on the bridge will need to be replaced to match the MGS system. The existing holes through the concrete parapet are proposed to be reused, and the new wood blocks will be replaced at the same location as the old.

Is this an acceptable solution at this site?

Thanks,

Jolie

Jolie Snyder, PE | Project Engineer
Licensed in WI, GA
MSA Professional Services, Inc.
+1 (608) 355-8912



OFFSET BLOCK DETAIL

NOTES:
- THRIE BEAM IS AT 31" FROM PAVEMENT
- TOP & BOTTOM BOLT THROUGH THRIE BEAM WILL NOT BE DRILLED THROUGH PARAPET. EXTEND BOLT THROUGH FIRST BLOCK AND COUNTER SINK NUT.
-EXISTING TOP & BOTTOM HOLE IN PARAPET WILL HAVE A BOLT THROUGH THE BLOCKS BUT NOT THROUGH THE THRIE BEAM.

PROJECT NO: 5730-00-60	HWY: STH 56	COUNTY: RICHLAND	PLAN: CONSTRUCTION DETAILS	SHEET	E

ATTACHMENT E

ASBESTOS INSPECTION

708 Heartland Trail, Suite 3000
Madison, WI 53717

608.826.3600 PHONE
608.826.3941 FAX

www.TRCsolutions.com

Bridge Asbestos Inspection Report

WisDOT Project ID: 5661-00-60
Structure Number: B-52-0035 and B-52-0102
Structure Name: STH 56 over Fancy Creek and STH 80 over Melancthon Creek
City/County: Richland County
TRC Project Number: 200908.0000.0000
Date Inspected: February 14, 2013
Inspected By/License Number: John Roelke, AII-119523

Findings:

The inspection to identify and collect samples of potential asbestos-containing material (ACM) was completed following WisDOT standard sampling procedure for bridge inspections found in FDM 21-35-40.

On structure B-52-0035, the gaskets located under the railing attachment plates on the parapet and the caulk located around the bolts in the railing attachment plates tested positive for asbestos greater than 1% and is therefore regulated ACM. The repair of the bridge can proceed as planned. If the ACM will be disturbed, the ACM must be removed prior to any repairs. Standard Special Provision (STSP) 203-005 should be incorporated into the specifications. If the ACM will not be disturbed during the repairs, STSP 107-120 should be included in the specifications.

On structure B-52-0102, none of the materials that were identified as potentially asbestos-containing material (ACM) and sampled tested positive for asbestos. The repair of the bridge can proceed as planned. Standard Special Provision (STSP) 107-127 should be included in the specifications.

Sample Number	Sample Description	Sample Location	Analytical Results and Method	Friable/ Non-friable or No ACM	Approximate Quantity of ACM Material
B-52-0035					
1	Gasket	Under attachment plate	PLM, 3%	Non-friable	6 sq ft
2	Gasket	Under attachment plate	Not analyzed, positive stop	--	
3	Gasket	Under attachment plate	Not analyzed, positive stop	--	
4	Caulk	Parapet expansion joints	PLM, non-detect	No ACM	0
5	Caulk	Parapet expansion joints	PLM, non-detect	No ACM	
6	Caulk	Parapet expansion joints	PLM, non-detect	No ACM	
7	Caulk	Around bolts in railing attachment plates	PLM, 5%	Non-friable	0.5 sq ft
8	Caulk	Around bolts in railing attachment plates	Not analyzed, positive stop	--	
9	Caulk	Around bolts in railing attachment plates	Not analyzed, positive stop	--	
10	Paint	Wingwall support column	PLM, non-detect	No ACM	0
11	Paint	Wingwall support column	PLM, non-detect	No ACM	
12	Paint	Wingwall support column	PLM, non-detect	No ACM	

Sample Number	Sample Description	Sample Location	Analytical Results and Method	Friable/ Non-friable or No ACM	Approximate Quantity of ACM Material
B-52-0102					
1	Caulk	Wingwall and around railing attachment plates	PLM, non-detect	No ACM	0
2	Caulk	Wingwall and around railing attachment plates	PLM, non-detect	No ACM	
3	Caulk	Wingwall and around railing attachment plates	PLM, non-detect	No ACM	
4	Caulk	Around bolts in railing attachment plates	PLM, non-detect	No ACM	0
5	Caulk	Around bolts in railing attachment plates	PLM, non-detect	No ACM	
6	Caulk	Around bolts in railing attachment plates	PLM, non-detect	No ACM	

If you have any questions, please contact me, at (608) 826-3628.

TRC Environmental Corporation

Daniel Haak
Project Manager

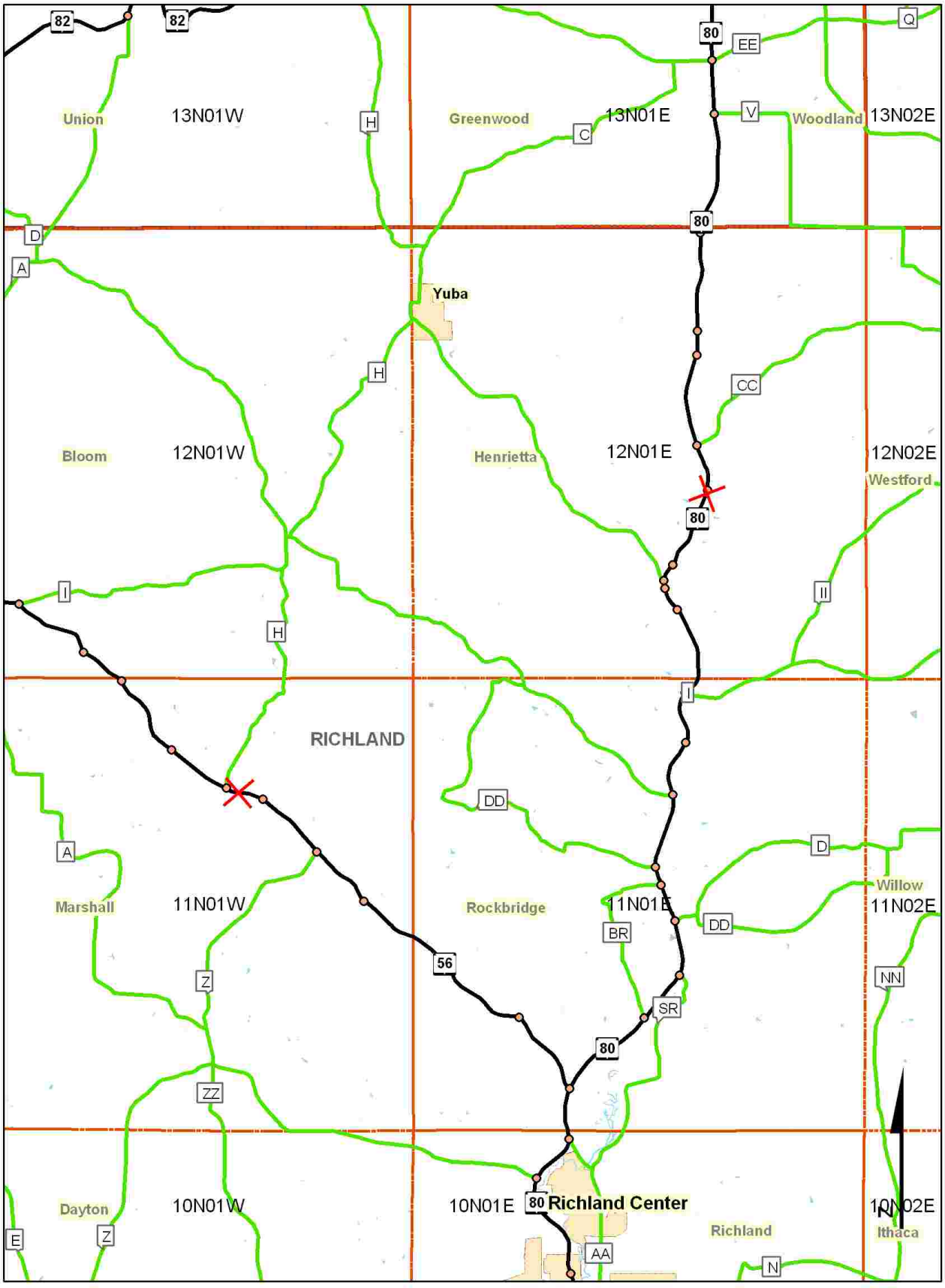
John Roelke
Asbestos Inspector

Attachments: Location Map, Photos, Laboratory Reports

Report Distribution:

Recipient	Electronic (PDF) Copy	Paper Copy
BTS-ESS sharlene.tebeest@dot.wi.gov	X (via email)	X
REC Jennifer.fredrickson@dot.wi.gov	X (via email)	
Project Manager joseph.langeberg@dot.wi.gov	X (via email)	
Other		

CDR Map


82
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13N01W
H
Greenwood
C
13N01E
V
Woodland
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A
80
Yuba
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CC
Bloom
12N01W
Henrietta
12N01E
12N02E
Westford
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RICHLAND
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Marshall
11N01W
Rockbridge
11N01E
Willow
11N02E
BR
DD
56
Z
NN
SR
80
ZZ
Dayton
10N01W
10N01E
80
Richland Center
10N02E
Richland
Ithaca
E
Z
AA
N
N

B-52-0035

Gasket under railing attachment

Caulk in parapet expansion joint

Caulk around bolts in attachment plate

Paint on wingwall supports

B-52-0102

Caulk in wingwall joint

Caulk around railing attachment plate and around bolts in plate

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: Wisconsin Department of Transportation

Site: DOT Bridge Inspection, B-52-35
Lab Log #: 41847
Project #: 200908.0000.0000
Date Received: 02/15/13
Date Analyzed: 02/15/13

RESULTS

Sample No.	Color	Homogeneous	Multi-Layered	Layer No.	Other Matrix Mat'ls	Asbestos %	Asbestos Type
B-52-35 (1)	Grey	Yes	No	--	--	3%	Chrysotile
B-52-35 (2)	--	--	--	--	--	NA/PS	--
B-52-35 (3)	--	--	--	--	--	NA/PS	--
B-52-35 (4)	Grey	Yes	No	--	--	ND<1%	None
B-52-35 (5)	Grey	Yes	No	--	--	ND<1%	None
B-52-35 (6)	Grey	Yes	No	--	--	ND<1%	None
B-52-35 (7)	Grey	Yes	No	--	--	5%	Chrysotile
B-52-35 (8)	--	--	--	--	--	NA/PS	--
B-52-35 (9)	--	--	--	--	--	NA/PS	--
B-52-35 (10)	Orange/Grey/Brown	Yes	No	--	--	ND<1%	None
B-52-35 (11)	Orange/Grey/Brown	Yes	No	--	--	ND<1%	None
B-52-35 (12)	Orange/Grey/Brown	Yes	No	--	--	ND<1%	None

NA/PS- Not Analyzed/Positive Stop

Reporting limit- asbestos present at 1%
ND<1% - asbestos was not detected
Trace- asbestos was observed at level of less than 1%

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, negative results must be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation (1982), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes

polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2013. TRC is an American Industrial Hygiene Association (AIHA) accredited lab for PLM effective through October 1, 2014. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and the QC data related to the samples is available upon written request from the client.

Analyzed by _____
Kathleen Williamson, Laboratory Manager

Reviewed by _____
Kathleen Williamson, Laboratory Manager
or other approved signatory

Date Issued: 2/18/13

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: WI Department of Transportation

Site: DOT Bridge Inspection, B-52-102
Lab Log #: 41843
Project #: 200908.0000.0000
Date Received: 02/15/13
Date Analyzed 02/15/13

RESULTS

Sample No.	Color	Homogeneous	Multi-Layered	Layer No.	Other Matrix Mat'ls	Asbestos %	Asbestos Type
B-52-102 (1)	Grey	Yes	No	--	--	ND<1%	None
B-52-102 (2)	Grey	Yes	No	--	--	ND<1%	None
B-52-102 (3)	Grey	Yes	No	--	--	ND<1%	None
B-52-102 (4)	Grey	Yes	No	--	--	ND<1%	None
B-52-102 (5)	Grey	Yes	No	--	--	ND<1%	None
B-52-102 (6)	Grey	Yes	No	--	--	ND<1%	None

Reporting limit- asbestos present at 1%
ND<1% - asbestos was not detected
Trace- asbestos was observed at level of less than 1%

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, negative results must be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation (1982), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2013. TRC is an American Industrial Hygiene Association (AIHA) accredited lab for PLM effective through October 1, 2014. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and the QC data related to the samples is available upon written request from the client.

Analyzed by _____
Kathleen Williamson, Laboratory Manager

Reviewed by _____
Kathleen Williamson, Laboratory Manager
or other approved signatory

Date Issued: 2/18/13

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0 **AIHA #100122** **CT #PH-0426** **ME LA-0075, LB-0071** **MA #AA000052** **NY #10980** **WV# LT000356**
RI #AAL-007C3 **TX #300354** **VT #AL014538** **VA #3333 000283** **AZ #A20944** **HI #L-09-004** **NJ #CT004** **CA #10275CA**

ATTACHMENT F

DNR INITIAL REVIEW

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

3-20-17

Nathan Schumaker
3550 Mormon Coulee Road
La Crosse WI 54601

Subject: DNR Initial Project Review
Project I.D. 5730-00-30
STH 56, Viola to Richland Center
Camp Creek Bridge to STH 80
Richland County
T-12-N/R-2-W

Dear Mr. Schumaker:

The Wisconsin Department of Natural Resources (DNR) has received the information you provided for the proposed above-referenced project on 2-14-17. According to your proposal, the purpose of this project is to rehabilitate STH 56 from the Camp Creek bridge to STH 80. Proposed improvements include mill and relay, bridge rehabilitation, beam guard, slope work, and culvert replacement/extension.

Preliminary information has been reviewed by DNR staff for the project under the DNR/DOT (Wisconsin Department of Transportation) Cooperative Agreement. Initial comments on the project as proposed are included below, and assume that additional information will be provided that addresses all resource concerns identified. In addition to the project specific resource concerns highlighted below, it is DNR's expectation that the full range of DOT roadway standards will be applied throughout the design process.

A. Project-Specific Resource Concerns

Section 4(f) Requirement:
Public lands are present in the vicinity of this project. If there is potential for impacts to these lands, please begin coordination with us as soon as possible. *First and foremost, every effort should be taken to avoid impacts to these lands*.

There is a U.S. Dept. of Transportation "Section 4(f)" process for federally funded transportation projects that impact various types of public parks, wildlife refuges, and recreation areas. This requirement is coordinated by state and federal transportation departments. Please ensure the 4f process as described in DOT FDM Chapter 21-25-1 is followed.

Pittman-Robertson/Dingell-Johnson Funded Lands:
Lands acquired with funding from the U.S. Fish and Wildlife Service (USFWS) Pittman-Robertson Wildlife Restoration or Dingell-Johnson Sport Fish Restoration (PR-DJ) program that are taken by a highway project must

be replaced or made whole, pending approval from appropriate agencies. This PR- DJ requirement would apply to Camp Creek Fishery Area.

The entire transaction must be evaluated for compliance with 43 CFR 12.71 and approved by USFWS through the DNR Federal Aid Coordinator. *Note that the Department of Interior (DOI) asserts PR-DJ funded lands are 4(f) due to main purpose for funding source.*

Wetlands:

There is potential for wetland impacts to occur as a result of this project. Wetland impacts must be avoided and/or minimized to the greatest extent practicable. Unavoidable wetland losses must be compensated for in accordance with the DNR/DOT Cooperative Agreement and the DOT Wetland Mitigation Banking Technical Guideline. Per the Cooperative Agreement, mitigation banking is the preferred compensation option, however DOT and DNR agree that other practicable and ecologically valuable project specific opportunities may be pursued on a case-by-case basis. DNR requests information regarding the amount and type of unavoidable wetland impacts.

Fisheries/Stream Work:

Camp Creek is a Class I trout water. In order to protect developing fish eggs and substrate for aquatic organisms, all instream work that could adversely impact water quality should be undertaken between May 15th and Sept 15th.

Creek 22-14 (Springdale Drive) is a Class II trout water. In order to protect developing fish eggs and substrate for aquatic organisms, all instream work that could adversely impact water quality should be undertaken between May 15th and Sept 15th.

Buffton Hollow Creek is a Class I trout water. In order to protect developing fish eggs and substrate for aquatic organisms, all instream work that could adversely impact water quality should be undertaken between May 15th and Sept 15th.

Fancy Creek is a Class I trout water. In order to protect developing fish eggs and substrate for aquatic organisms, all instream work that could adversely impact water quality should be undertaken between May 15th and Sept 15th.

Unnamed Trib to Fancy Creek (Gillingham Drive) is a Class II trout water. In order to protect developing fish eggs and substrate for aquatic organisms, all instream work that could adversely impact water quality should be undertaken between May 15th and Sept 15th.

Creek 24-3a T11N R1W (Bell Hollow Lane) is a Class II trout water. In order to protect developing fish eggs and substrate for aquatic organisms, all instream work that could adversely impact water quality should be undertaken between May 15th and Sept 15th.

Aquatic Connectivity and Culvert Work:

The culvert extension located at Springdale Drive on Creek 22-14 should be set and sized in such a manner to avoid or minimize impacts to stream morphology, aquatic organism passage, and water quality. This requires that water flow characteristics and streambed sediment in the culvert should closely match the characteristics of the streambed sediment in the natural channel. The invert elevations of the existing and proposed structure(s), the water surface elevations, and the natural streambed elevations upstream and downstream should be specified in

the plans. The natural streambed elevations should extend well beyond the zone of influence of the culvert. The invert elevation of the new culvert(s) should be set an adequate distance below the natural streambed elevation, to allow for a natural and continuous streambed condition to occur.

The scour hole and tail-water control downstream of the current culvert are indicators of an inadequately sized culvert with excessive velocities at certain times of the year. The Department feels this structure could be a candidate for full replacement and sizing as opposed to the culvert extension work currently planned.

Culvert Cleaning at CTH MM

The culverts to be cleaned just west of CTH MM directly outlet to Camp Creek, a Class I trout water. In order to protect developing fish eggs and substrate for aquatic organisms, all instream work that could adversely impact water quality should be undertaken between May 15th and Sept 15th. Additionally, measures should be taken to contain and control sediments during culvert cleaning operations.

Endangered Resources:

Based upon a review of the Natural Heritage Inventory (NHI) and other DNR records dated 3-13-17, the following Endangered Resources are known to occur in the project area or its vicinity and could be impacted by this project.

The Blanchard's cricket frog (*Acris blanchardi*), an endangered species in Wisconsin, prefers ponds, lakes, and a variety of habitats along and adjacent to streams and rivers including, marshes, fens, sedge meadows, low prairies, and exposed mud flats.

The following measures will be needed: Based on the plans provided, we do not anticipate impacts to the Blanchard's cricket frog. However, if any work is performed beyond the current toe of slope in the Camp Creek Fishery Area, further review will be necessary.

The DNR Transportation Liaison has initiated coordination with Stacy Rowe, of the Bureau of Natural Heritage Conservation (NHC).

Migratory Birds:
Based on the information provided and/or site review, there is no evidence of past migratory bird nesting on the existing box structures scheduled for replacement or extension work.

Invasive Species and Viral Hemorrhagic Septicemia (VHS):

Adequate precautions should be taken to prevent transporting or introducing invasive species via construction equipment, as provided under chapter NR 40 Wis. Adm. Code. Further information on species classified as Restricted or Prohibited under NR 40 can be found at: http://dnr.wi.gov/topic/Invasives/classification.html.

DNR will work with project managers to help identify specific problem areas across the project site and recommend preventive measures. The following Best Management Practices (BMPs) for rights-of-way provide a series of measures that will ensure reasonable precautions are taken throughout the stages of construction: http://www.wisconsinforestry.org/files/invasiveBMPs/TransportationRoW-BMPs.pdf .

Any equipment coming into contact with surface waters must be properly cleaned and disinfected to address the spread of invasive species and viruses. Special provisions must require contractors to implement the following

measures before and after mobilizing in-water equipment to prevent the spread of VHS, Zebra Mussel, and other invasive species. Contractors should follow ***STSP 107-055*** *Environmental Protection, Aquatic Exotic Species Control*, or protocol found here: http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection_protocols.pdf .

Additional information on invasive species and infested waters can be found at:
http://dnr.wi.gov/lakes/invasives/AISByWaterbody.aspx

Floodplains:
A determination must be made as to whether or not the project lies within a mapped/zoned floodplain. Floodplain impacts should be assessed and/or quantified and appropriate coordination must be carried out in accordance with the DOT/DNR Cooperative Agreement. Coordination must also occur with the Richland County Zoning Program.

Burning:
If burning of brush will occur as part of this project, the contractor should be informed that it is illegal to burn materials other than clean wood. It is also illegal to start or maintain fires using oily substances, or other materials prohibited under chapter NR 429, Wis. Adm. Code. All necessary burning permits must be obtained prior to construction, as required under local and state fire protection regulations, in order to comply with NR 429 (Malodorous Emissions & Open Burning) http://docs.legis.wisconsin.gov/code/admin_code/nr/400/429.pdf .

Burning permits are available through the local DNR ranger or fire warden, however other local burning permits maybe required.

B. Project Specific Construction Site Considerations

The following issues should be addressed in the Special Provisions, and the contractor will be required to outline their construction methods in the Erosion Control Implementation Plan (ECIP). An adequate ECIP for the project must be developed by the contractor and submitted to this office for review at least 14 days prior to the preconstruction conference. Erosion control and stormwater measures must adhere to the DNR/DOT Cooperative Agreement, Trans 401, and applicable federal laws.

Erosion Control and Storm Water Management:

- Erosion control devices should be specified on the construction plans. All disturbed bank areas should be adequately protected and restored as soon as feasible.

- If erosion mat is used along stream banks, DNR recommends that biodegradable non-netted mat be used (e.g. Class I Type A Urban, Class I Type B Urban, or Class II Type C). Long-term netted mats may cause animals to become entrapped while moving in and out of the stream. Avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings in the mesh are fixed in size.

- If dewatering is required for any reason, the water must be pumped into a properly selected and sized dewatering basin before the clean/filtered water is allowed to enter any waterway or wetland. The basin must remove suspended solids and contaminants to the maximum extent practicable. A properly designed and constructed dewatering basin must take into consideration maximum pumping volume (gpm or cfs) and the sedimentation rate for soils to be encountered. Do not house any dewatering technique in a wetland.

- The contractor should restrict the removal of vegetative cover and exposure of bare ground to the minimum amounts necessary to complete construction. Restoration of disturbed soils should take place as soon as conditions permit. If sufficient vegetative cover will not be achieved because of late season construction, the site must be properly winterized.

- All temporary stock piles must be in an upland location and protected with erosion control measures (e.g. silt fence, rock filter-bag berm, etc.). Do not stockpile materials in wetlands, waterways, or floodplains

Temporary Stream Channel or Culvert:

If a temporary channel is needed for any culvert construction or extension, the channel should be lined with plastic or other non-erodible material and weighted down with clean stone. A temporary channel or culvert must be capable of carrying all stream flows during the construction period and must maintain a suitable depth and velocity to allow the passage of migrating fish and aquatic species. Fish that become stranded in dewatered areas or temporary channels should be captured and returned to the active channel immediately.

These requirements should be addressed in the special provisions and require the contractor to outline these construction methods in the ECIP.

Asbestos:
A Notification of Demolition and/or Renovation and Application for Permit Exemption, DNR form 4500-113 (chapters NR 406, 410, and 447 Wis. Adm. Code) may be required. Please refer to DOT FDM 21-35-45 and the DNR's notification requirements web page: http://dnr.wi.gov/topic/Demo/Asbestos.html for further guidance on asbestos inspections and notifications. Contact Mark Davis, Air Management Specialist 608-266-3658, with questions on the form. The notification must be submitted 10 working days in advance of demolition projects.

Other Issues/Unique Features: The Cooperative Agreement allows our agencies to be flexible with our review process in order to ensure the DOT project remains on schedule. At times we will identify unique resources or project specific concerns that necessitate creative solutions to complex resource issues. We believe the requests below are necessary to adequately protect resources, are reasonable, are site specific, and will not set precedence or new policy for statewide policy or guidance. The request made below apply only to this project, and should be incorporated into the project Special Provisions.

- **Oak Wilt:** This project involves work that may involve cutting or wounding of oak trees. To prevent the spread of oak wilt disease, please avoid cutting or pruning of oaks from April through September. See the DNR webpage at: http://dnr.wi.gov/topic/foresthealth/oakwilt.html .

- **Emerald Ash Borer:** This project has the potential for spreading the Emerald Ash Borer (EAB) beetle. It is illegal to move or transport ash material, the emerald ash borer, and hardwood debris (i.e. firewood) from EAB quarantined areas to a non-quarantined area without a compliance agreement issued by WI Department of Agriculture, Trade and Consumer Protection. Regulated items include cut hardwood (non-coniferous) firewood, ash logs, ash mulch or bark fragments larger than on inch in diameter, or ash nursery stock (DATCP statute 21).
  - For more information regarding the EAB and quarantine areas please click on the following link: http://datcpservices.wisconsin.gov/eab/article.jsp?topicid=20
  - Recommendations to reduce the spread of EAB in potentially infested Ash wood: http://datcpservices.wisconsin.gov/eab/articleassets/Recommendations%20to%20reduce%20the%20spread%20of%20EAB.pdf

This project may require a permit from the U.S. Army Corps of Engineers (ACOE). For further details you will need to contact Kerrie Hauser of the ACOE located in the La Crescent office, at 651-290-5903. All local, state, and federal permits and/or approvals must be obtained prior to commencing construction activities.

The above comments represent the DNR's initial concerns for the proposed project and do not constitute final concurrence. Final concurrence will be granted after further review of refined project plans, and additional consultation if necessary. If any of the concerns or information provided in this letter requires further clarification, please contact this office at 608-275-3308, or email at andrew.barta@wisconsin.gov.

Sincerely,

Andy Barta

Andy Barta
Environmental Analysis & Review Specialist

cc: Steve Vetsch – WisDOT
Dan Kleinertz - WisDOT
Kerrie Hauser - ACOE