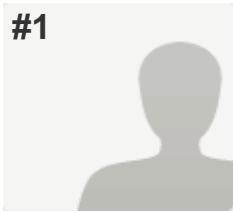


#1



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Wednesday, July 29, 2015 6:47:13 AM
Last Modified: Wednesday, July 29, 2015 8:02:22 AM
Time Spent: 01:15:09
IP Address: 63.66.64.245

PAGE 1

Q1: State Representative

Name	Neal Fannin
Agency	PennDOT
State / Province	PA
Email	nfannin@pa.gov

Q2: Do you require joint sealing? Yes

Q3: Do you require Quality Control plans for the following?

Sawing	Yes
Sealing	Yes

If yes, please include your requirements.

1. QC Plan. Prepare a QC Plan as specified in Section 106.03 and submit it for review before the start of the project and at least annually thereafter. Include in the QC Plan testing frequencies and action points to initiate corrective measures. Do not start work until the Department has reviewed the QC Plan. Furnish a copy of the QC Plan to be maintained in the Department's project field office. 1.a Field Operation QC Plan. Prepare a field operation QC Plan for the Representative's review, as outlined on Form CS-704, to evaluate concrete field operation. Submit the field operation QC Plan at the Preconstruction conference or at least 2 weeks before the first concrete pour. Describe the construction equipment, personnel, and methods necessary to construct and test concrete courses for all structural elements. Include testing frequencies and action points to initiate corrective measures. Do not establish action points at either the upper or lower specification limits.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? *Respondent skipped this question*

Q5: If Yes to #4, answer the following:

Which one?	No
Other comments?	No

Q6: What is the minimum saw cut depth requirement?	
T/3	On grade
Q7: Do you routinely check sawcut depths?	<i>Respondent skipped this question</i>
Q8: If Yes to #7, answer the following:	
If yes, how often?	when saw cutting begins and randomly after that
Check with what?	Steel ruller
Agency or Contractor performs checks	agency
Q9: Do you allow early entry sawing?	Other (please specify) We do allow early entry sawing but do not have a specification to cover it. The District inspection staffs work out details.
Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?	Additional Comments See above,
Q11: Do you require anything to continue curing the sawcut after sawing?	<i>Respondent skipped this question</i>
Q12: What is the sequence between initial joint sawing and final sawing?	<i>Respondent skipped this question</i>
Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?	Yes
Q14: What do you require for cleaning the joint prior to sealing?	
Waterblasting	Yes
Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?	
No method specified	
Q16: Do you seal the following longitudinal joints?	
Between asphalt shoulder and concrete pavement	Yes
Between asphalt pavement and concrete curb and gutter	Yes
Between concrete pavement and concrete curb and gutter	Yes
Q17: What type of joint sealants/sealers do you allow/specify?	
Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Allow
Silicone	Allow
Topical Sealer	Do not use
Q18: Do you have a warranty for joint sealant performance?	<i>Respondent skipped this question</i>

Q19: What is the typical performance life of a sealed joint?

Varies, some have come out within the first year, some have stayed in and functioned very well for 10 years or more. Most have gone to the hot poured. It seems to be highly related to installation practices.

Q20: Do you have a joint resealing program?

Respondent skipped this question

Q21: Please attach a link to approved products list and approval process for joint sealants.

<https://www.ecamms.pa.gov/Public/Pages/Bulletins/BulletinSearch.aspx?BulletinTypeKey=2>

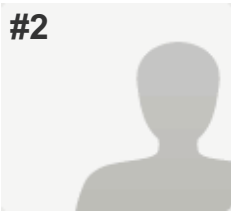
Q22: Please attach a link to your current standard joint details.

<ftp://ftp.dot.state.pa.us/public/Bureaus/design/PUB72M/RC-20M.pdf>

Q23: Any additional comments?

Interested in recommendations.

#2

**COMPLETE**

Collector: Web Link 1 (Web Link)

Started: Tuesday, August 11, 2015 12:49:29 PM

Last Modified: Tuesday, August 11, 2015 1:00:34 PM

Time Spent: 00:11:04

IP Address: 156.75.252.71

PAGE 1

Q1: State Representative

Name	Michael Bergin
Agency	FDOT
State / Province	Florida
Email	michael.bergin@dot.state.fl.us

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	Yes
Sealing	Yes

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
-----	----------

Q7: Do you routinely check sawcut depths? No**Q8: If Yes to #7, answer the following:** *Respondent skipped this question***Q9: Do you allow early entry sawing?** Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** Yes**Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing?

Initial is performed after the concrete has achieved final set. The final sawing is performed after the grooving and grinding.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Waterblasting Yes

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

He has to blow out the joints, but the bond strength is confirmed to ensure a good bond.

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement Yes

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Preformed Elastomeric Compression (Neoprene) Allow

Silicone Allow

Q18: Do you have a warranty for joint sealant performance?

If Yes, what is it?
based on the manufacturer's (joint sealant) warrantee.

Q19: What is the typical performance life of a sealed joint?

Not sure but I would say 8 to 12 years

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?
Not that I am aware of. But a contract could be let to do this work.

Q21: Please attach a link to approved products list and approval process for joint sealants.

<https://fdotwp1.dot.state.fl.us/ApprovedProductList/Specifications?specificationRange=900>
then look at article 20.

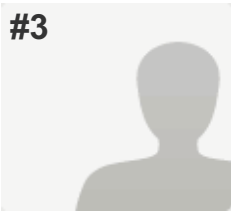
Q22: Please attach a link to your current standard joint details.

If I do that I'll lose the information that I've inputted.

Q23: Any additional comments?

Respondent skipped this question

#3

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Tuesday, August 11, 2015 1:00:18 PM**Last Modified:** Tuesday, August 11, 2015 1:25:58 PM**Time Spent:** 00:25:39**IP Address:** 165.206.209.230

PAGE 1

Q1: State Representative

Name	Kevin Merryman
Agency	Iowa DOT
State / Province	Iowa
Email	kevin.merryman@dot.iowa.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
Other	On grade
Other (please specify)	We require T/3 saw cuts for all longitudinal contraction joints. For transverse contraction joints, a minimum saw cut depth of 1" is required when a early entry saw is used. Early entry saws are used most of the time for transverse contraction joints.

Q7: Do you routinely check sawcut depths? Yes**Q8: If Yes to #7, answer the following:**

If yes, how often?	Inspectors are to randomly check a few locations daily.
Check with what?	Typically a ruler.
Agency or Contractor performs checks	Agency

Q9: Do you allow early entry sawing? Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth? No

Q11: Do you require anything to continue curing the sawcut after sawing?

No.

Q12: What is the sequence between initial joint sawing and final sawing?

N/A

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Additional Comments

Additional cleaning is only required if a joint is to be sealed. An air blast is required if the joint was dry sawed. Water blasting, followed by an air blast is required when wet sawed.

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting No

Waterblasting Yes

Heat No

Manufacturer's recommendation No

Other Yes

Please explain: See response to question 13.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement No

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter It depends

Additional comments We only seal sawed joints. We do not seal construction joints.

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Specify

Preformed Elastomeric Compression (Neoprene) Do not use

Silicone Do not use

Topical Sealer Do not use

Membrane Curing Compound Do not use

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

Variable. We have many transverse contraction joints that were cut with early entry saws and filled without backer rod that are performing fine after 20 years.

Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://www.iowadot.gov/erl/current/GS/content/4136.htm>
<https://maple.iowadot.gov/Search.aspx>

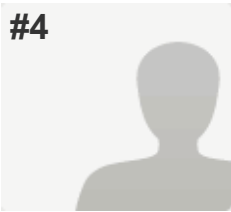
Q22: Please attach a link to your current standard joint details.

http://www.iowadot.gov/erl/current/RS/content_eng/pv101.pdf

Q23: Any additional comments?

Respondent skipped this question

#4

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Tuesday, August 11, 2015 1:14:27 PM**Last Modified:** Tuesday, August 11, 2015 2:39:27 PM**Time Spent:** 01:25:00**IP Address:** 204.64.21.50

PAGE 1

Q1: State Representative

Name	HUA CHEN
Agency	TXDOT
State / Province	TEXAS
Email	HUA.CHEN@TXDOT.GOV

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing No

Sealing No

If yes, please include your requirements.

It depends on projects. We require - Submit a paving and quality control plan for approval before beginning pavement construction operations. Include details of all operations in the concrete paving process, including methods to construct transverse joints, methods to consolidate concrete at joints, longitudinal construction joint layout, sequencing, curing, lighting, early opening, leave-outs, sawing, inspection, testing, construction methods, other details and description of all equipment.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:***Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3 On grade

Q7: Do you routinely check sawcut depths? It depends**Q8: If Yes to #7, answer the following:***Respondent skipped this question***Q9: Do you allow early entry sawing?** Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth? Yes

Q11: Do you require anything to continue curing the sawcut after sawing?

Yes, promptly restore membrane cure damaged within the first 72 hr. of curing.

Q12: What is the sequence between initial joint sawing and final sawing?

Typically, 1/16" to 1/4" initial saw cut to T/3, then saw cut to the size of sealant reservoir.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Manufacturer's recommendation Yes

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No.
require - Apply the sealant to dry joint surface unless otherwise recommended by the sealant manufacturer.

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement No

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Preformed Elastomeric Compression (Neoprene) Allow

Silicone Allow

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

about 10 yrs

Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://ftp.dot.state.tx.us/pub/txdot-info/cmd/mpl/jtsealrs.pdf>

http://ftp.dot.state.tx.us/pub/txdot-info/cst/DMS/6000_series/pdfs/6310.pdf

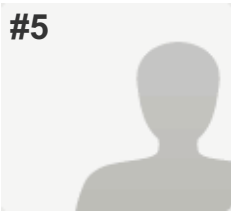
Q22: Please attach a link to your current standard joint details.

<ftp://ftp.dot.state.tx.us/pub/txdot-info/cmd/cserve/standard/roadway/js14.pdf>

Q23: Any additional comments?

Respondent skipped this question

#5

**COMPLETE**

Collector: Web Link 1 (Web Link)

Started: Wednesday, August 12, 2015 9:52:41 AM

Last Modified: Wednesday, August 12, 2015 10:51:40 AM

Time Spent: 00:58:59

IP Address: 63.225.17.34

PAGE 1

Q1: State Representative

Name	Eric Prieve
Agency	Colorado DOT
State / Province	Colorado
Email	eric.prieve@state.co.us

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:***Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
Other	Concrete overlays
Other (please specify)	T/3 for concrete placed on grade and concrete overlays greater than 6 inches thick Thin white topping T/4

Q7: Do you routinely check sawcut depths? Yes**Q8: If Yes to #7, answer the following:**

If yes, how often?	1 per 528 linear feet
Check with what?	Tape
Agency or Contractor performs checks	Agency

Q9: Do you allow early entry sawing? Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** Yes

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing? *Respondent skipped this question*

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting Yes

Waterblasting Yes

Heat No

Manufacturer's recommendation No

Other No

Please explain: Sand or water blasting is required to clean the joints prior to sealing joints

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

no

Q16: Do you seal the following longitudinal joints?

Between asphalt pavement and concrete curb and gutter Yes

Between concrete pavement and concrete curb and gutter Yes

Additional comments We don't use asphalt shoulders for PCCP.

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Allow

Preformed Elastomeric Compression (Neoprene) Allow

Silicone Allow

Topical Sealer Do not use

Membrane Curing Compound Specify

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

5-10 years

Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants.

<https://www.codot.gov/business/apl>

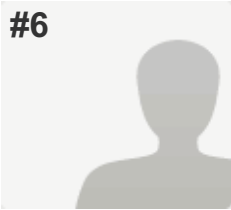
Q22: Please attach a link to your current standard joint details.

<https://www.codot.gov/business/designsupport/standard-plans/2012-m-standards-plans/2012-m-standards-pdfs/13-concrete-pavement-joints/m-412-1-concrete-pavement-joints>

Q23: Any additional comments?

Respondent skipped this question

#6

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Tuesday, August 11, 2015 12:23:15 PM**Last Modified:** Wednesday, August 12, 2015 2:41:21 PM**Time Spent:** Over a day**IP Address:** 164.165.237.19

PAGE 1

Q1: State Representative

Name	Clint Hoops
Agency	Transportation Dept
State / Province	Idaho
Email	Clint.Hoops@itd.idaho.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
T/4	On grade

Q7: Do you routinely check sawcut depths? It depends**Q8: If Yes to #7, answer the following:** *Respondent skipped this question***Q9: Do you allow early entry sawing?** Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** Yes**Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing? *Respondent skipped this question*

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Waterblasting Yes

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

Compressed air

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement Yes

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Specify

Preformed Elastomeric Compression (Neoprene) Allow

Silicone Allow

Topical Sealer Do not use

Membrane Curing Compound Do not use

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

Varies by type. Silicone 10 +/-, Compression 15+/-, Hot pour 15+/-, Single sawcut hot pour unknown. Note: these are estimates based on project knowledge and not based on tracking data

Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants.

ASTM D6690 type II for Concrete to Asphalt
ASTM D6690 Type III for concrete to concrete

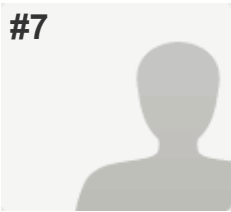
Q22: Please attach a link to your current standard joint details.

http://www.itd.idaho.gov/design/StandardDrawings/English/c1b_0613.pdf

Q23: Any additional comments?

Respondent skipped this question

#7

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Thursday, August 13, 2015 6:36:16 AM**Last Modified:** Thursday, August 13, 2015 6:38:30 AM**Time Spent:** 00:02:14**IP Address:** 158.123.8.61

PAGE 1

Q1: State Representative

Name	Mark Felag
Agency	RI DOT
State / Province	RI
Email	mark.felag@dot.ri.gov

Q2: Do you require joint sealing?

Additional Comments
We build mostly asphalt pavements.

Q3: Do you require Quality Control plans for the following?

Respondent skipped this question

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

Respondent skipped this question

Q5: If Yes to #4, answer the following:

Respondent skipped this question

Q6: What is the minimum saw cut depth requirement?

Respondent skipped this question

Q7: Do you routinely check sawcut depths?

Respondent skipped this question

Q8: If Yes to #7, answer the following:

Respondent skipped this question

Q9: Do you allow early entry sawing?

Respondent skipped this question

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

Respondent skipped this question

Q11: Do you require anything to continue curing the sawcut after sawing?

Respondent skipped this question

Q12: What is the sequence between initial joint sawing and final sawing?

Respondent skipped this question

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

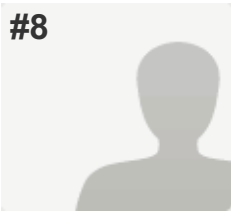
Respondent skipped this question

Q14: What do you require for cleaning the joint prior to sealing?

Respondent skipped this question

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?	<i>Respondent skipped this question</i>
Q16: Do you seal the following longitudinal joints?	<i>Respondent skipped this question</i>
Q17: What type of joint sealants/sealers do you allow/specify?	<i>Respondent skipped this question</i>
Q18: Do you have a warranty for joint sealant performance?	<i>Respondent skipped this question</i>
Q19: What is the typical performance life of a sealed joint?	<i>Respondent skipped this question</i>
Q20: Do you have a joint resealing program?	<i>Respondent skipped this question</i>
Q21: Please attach a link to approved products list and approval process for joint sealants.	<i>Respondent skipped this question</i>
Q22: Please attach a link to your current standard joint details.	<i>Respondent skipped this question</i>
Q23: Any additional comments?	<i>Respondent skipped this question</i>

#8

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Thursday, August 13, 2015 9:59:58 AM**Last Modified:** Thursday, August 13, 2015 10:44:37 AM**Time Spent:** 00:44:39**IP Address:** 50.171.237.172

PAGE 1

Q1: State Representative

Name	Maria Masten
Agency	Minnesota DOT
State / Province	Minnesota
Email	maria.masten@state.mn.us

Q2: Do you require joint sealing?

Additional Comments

MnDOT requires sealing concrete on non-drainable type bases (MnDOT Class 5), whitetopping, milled and new HMA interlayers, and where the speed limit is 45 mph or less. We seal all transverse joints and sawed longitudinal joints in this cases. We do not ever require sealing the butted (tied/un-tied) longitudinal joint. We do not seal unbonded overlays with geotextile fabric interlayer, drainable bituminous interlayers, or drainable bases on grade.

Q3: Do you require Quality Control plans for the following?

Sawing	Yes
Sealing	No

If yes, please include your requirements.

Yes for early-entry sawing only. Provide wet-cut saws for joint establishment in the all concrete. If the Contractor would like to use lighter weight dry-cut saws, commonly referred to as "early entry", submit a Quality Control Plan to the Engineer defining the intended use for the early-entry saws. The Engineer, in conjunction with the Concrete Engineer, will evaluate the QC plan to determine if their use is acceptable. When using early-entry saws, use saw blades and skid plates for the coarse aggregate type used in the concrete in accordance with the saw manufacturer's recommendation.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

No

Q5: If Yes to #4, answer the following:*Respondent skipped this question*

Q6: What is the minimum saw cut depth requirement?

T/3	Concrete overlays
T/4	On grade

Q7: Do you routinely check sawcut depths? It depends

Q8: If Yes to #7, answer the following:

If yes, how often?	At the Engineer's discretion
Check with what?	Steel Ruler
Agency or Contractor performs checks	Agency checks - Contractor may do their own QC checks but not required

Q9: Do you allow early entry sawing? Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth? Yes

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing?

H.2.b Joint Establishment
 Provide initial joint sawing as shown on the plans. Perform the initial sawing as soon as the concrete will support the joint sawing operation without raveling and before random cracking occurs. If raveling of joints occurs due to the sawing operations, review the sawing operation and make immediate correction to the sawing operations. The Engineer, in conjunction with the Concrete Engineer, will evaluate the raveled joints in accordance with 2301.3.M.1, "Defective Pavement" and 2301.3.M.2, "Random and Uncontrolled Cracking."
 During sawing of joints, provide one or more backup saws and an adequate supply of blades. Immediately after completing the joint sawing, use water under nozzle pressure to remove the sawing residue from each joint and the pavement surface.
 If widening is necessary, do not widen the joints to full width until the concrete is at least 24 h old, or longer if the sawing causes raveling of the concrete.
 Stake preformed joint filler material for expansion joints in place to maintain the position shown on the plans during concrete placement.
 Extend transverse joints constructed in the pavement through the integrant curb.
 When placing concrete adjacent to the in-place concrete pavement joints, protect all ends of transverse joints to the satisfaction of the Engineer to prevent concrete mortar from infiltrating into the existing joints and causing compression spalls.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Additional Comments
 Immediately after completing the joint sawing, use water under nozzle pressure to remove the sawing residue from each joint and the pavement surface.

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	Yes
Waterblasting	Yes
Heat	No
Manufacturer's recommendation	Yes

Other

Yes

Please explain:

N.3 Joint Sealing When joint sealing is required by the Contract, provide a joint sealant in accordance with 3725, —Hot-Poured, Extra-Low Modulus, Elastic-Type Joint and Crack Sealer, unless the type of sealant for contraction joints is otherwise specified in the contract. If the concrete mixture contains Class B coarse aggregate as defined in 3137, —Coarse Aggregate for Portland Cement Concrete, do not seal joints with silicone. Perform joint sealing as shown on the plans and in accordance with the following: (1) Seal joints after the Engineer inspects and approves the joints; (2) Perform joint sealing on surface dry concrete after cleaning the joints of debris, dirt, dust, and other foreign matter, including accumulations of concrete; (3) Lightly sandblast the joint walls before final compressed air cleaning; (4) Immediately before sealing the joints, clean the joints with a jet of compressed air under pressure of at least 85 psi [580 kPa]; (5) Seal transverse integrant curb joints with the same joint sealer used to seal the pavement joints; (6) Seal joints in accordance with the tolerances shown on the plans; (7) Provide backer rod material compatible with the sealer as shown on the plans; and (8) Remove and replace sealer at joints filled above the permissible level shown on the plans at no additional cost to the Department. Handle and place joint sealer material as recommended by the manufacturer and in accordance with the following requirements: N.3.a Hot-Poured Sealers Heat hot-poured sealers in a double-boiler type kettle or melter. Fill the space between inner and outer shells with oil or other material as allowed by the manufacturer. Provide heating equipment with automatic temperature control, mechanical agitation, and recirculating pump. Use heating equipment as recommended by the manufacturer of the sealer material. Do not melt quantities of sealer material greater than the quantity used within the same day. After heating the sealer material to the application temperature, maintain the material temperature until placement. Place the sealer material within 4 h after the initial heating to the application temperature. Apply sealant to the pavement at ambient pavement temperatures greater than 39 °F [4 °C]. N.3.b Silicone Sealers Install silicone sealers as recommended by the manufacturer. N.3.c Preformed Sealers Provide preformed seals in one continuous length for each joint, except the Contractor may use butt splices in transverse joints at longitudinal joints. Do not stretch the preformed sealer material in the installation process by greater than 5 percent of the joint length.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	It depends
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	No
Additional comments	Some Districts come back and seal the asphalt shoulder/concrete pavement joint 2-3 years after pavement construction. Sometimes with maintenance staff and sometimes by contract.

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Specify
Preformed Elastomeric Compression (Neoprene)	Specify
Silicone	Do not use
Topical Sealer	Do not use
Membrane Curing Compound	Do not use
Other	Do not use
Additional Comments?	MnDOT Standard Joint Sealant is Hot Pour. We do not use silicone anymore due to poor performance typically from poor installation practices. It also does not stick to concrete with 100% carbonate aggregate (even just 1 fraction). In the Metro area, neoprene is typically the specified standard for transverse joints.

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

Hot Pour - 1 year maybe
 Silicone - 1 - 5 years maybe
 Neoprene - 20+ years

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?
 Not anymore. MnDOT did it over 20 years ago as a standard since money was typically set aside for that purpose. Pavement Management Data indicates better pavement performance in joint resealing sections. This was only good until the joints got wider than 1/2" then it seems the sealant was less effective.

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://www.dot.state.mn.us/products/concrete/concretehotpouredcertifiedsources.html>

<http://www.dot.state.mn.us/products/crackandjointmaterials/pdf/jfqualificationprocedure.pdf>

<http://www.dot.state.mn.us/products/crackandjointmaterials/moisturecuredpolymericjointsealers.html>

<http://www.dot.state.mn.us/products/crackandjointmaterials/pdf/jsqualificationprocedure.pdf>

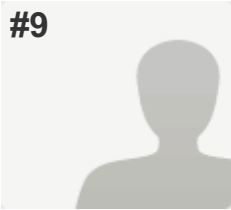
Q22: Please attach a link to your current standard joint details.

<http://dotapp7.dot.state.mn.us/edms/download?docId=1482899>

Q23: Any additional comments?

How do states deal with raveled joints?

#9

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Thursday, August 13, 2015 10:26:49 AM**Last Modified:** Thursday, August 13, 2015 10:54:07 AM**Time Spent:** 00:27:17**IP Address:** 161.7.59.17

PAGE 1

Q1: State Representative

Name	Paul Bushnell
Agency	Montana Department of Transportation
State / Province	Montana
Email	pbushnell@mt.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
-----	----------

Q7: Do you routinely check sawcut depths? It depends**Q8: If Yes to #7, answer the following:** *Respondent skipped this question***Q9: Do you allow early entry sawing?** Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** It depends**Q11: Do you require anything to continue curing the sawcut after sawing?**

Yes, Protect saw cuts in concrete 60 hours old or less from rapid drying using twisted paper, fiber or rope cords, waterproof covering, or other approved methods.

Q12: What is the sequence between initial joint sawing and final sawing?

Saw initial contraction joints as soon as possible after the concrete is placed. Do not permit the saw to tear or ravel the adjacent concrete. Saw the remaining contraction joints typically within 4 to 48 hours after concrete is placed.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Other Yes

Please explain:

Immediately after the joints are sawed, flush the groove with pressurized water and blow the groove out with compressed air to remove all dust, water, and slurry. Clean the groove using compressed air just before filling with joint filler.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

Clean the groove using compressed air just before filling with joint filler.

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	No
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	It depends

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Specify
Preformed Elastomeric Compression (Neoprene)	Do not use
Silicone	Allow
Topical Sealer	Do not use
Membrane Curing Compound	Do not use

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

NA

Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants.

http://www3.mdt.mt.gov:7782/mttplc/MTSTM.STMK0009.EXT_QPL_LIST?CNAME=&CMTRL=707.01.01.02

Q22: Please attach a link to your current standard joint details.

http://www.mdt.mt.gov/other/const/external/detailed_drawings/2014/501_PCCP.PDF

Q23: Any additional comments?

Respondent skipped this question

#10

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Friday, August 14, 2015 12:12:28 PM**Last Modified:** Friday, August 14, 2015 1:05:59 PM**Time Spent:** 00:53:30**IP Address:** 163.191.13.70

PAGE 1

Q1: State Representative

Name	James Krstulovich
Agency	Illinois DOT
State / Province	Illinois
Email	James.Krstulovich@illinois.gov

Q2: Do you require joint sealing?

Additional Comments
Only the longitudinal joint must be sealed.

Q3: Do you require Quality Control plans for the following?

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

No

Q5: If Yes to #4, answer the following:

Respondent skipped this question

Q6: What is the minimum saw cut depth requirement?

T/3	On grade
T/4	Concrete overlays

Q7: Do you routinely check sawcut depths?

No

Q8: If Yes to #7, answer the following:

Respondent skipped this question

Q9: Do you allow early entry sawing?

Other (please specify)
Yes, on PCC overlays, and though it is not documented in our manuals or specifications, it may be allowed when working in urban areas.

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

No

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing?

n/a

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? No

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting No

Waterblasting No

Heat No

Manufacturer's recommendation Yes

Please explain: We only specify that the joint must be clean, not how to clean it.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement No

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Specify

Preformed Elastomeric Compression (Neoprene) Specify

Silicone Do not use

Topical Sealer Do not use

Membrane Curing Compound Do not use

Other Specify

Additional Comments? Regarding "Other," we specify polysulfide or polyurethane sealants for curb and gutter work.

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

n/a

Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants.

No approved lists for such sealants.

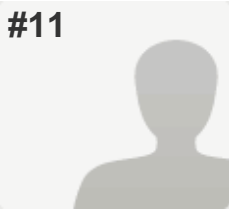
Q22: Please attach a link to your current standard joint details.

http://www.idot.illinois.gov/Assets/uploads/files/Doing-Business/Standards/Highway-Standards/PDF/216-420001-08_pavementjoints.pdf

Q23: Any additional comments?

Respondent skipped this question

#11

**COMPLETE**

Collector: Web Link 1 (Web Link)

Started: Tuesday, August 18, 2015 7:16:27 AM

Last Modified: Tuesday, August 18, 2015 7:21:01 AM

Time Spent: 00:04:33

IP Address: 130.39.255.10

PAGE 1

Q1: State Representative

Name	Tyson Rupnow
Agency	LADOTD
State / Province	LA
Email	Tyson.Rupnow@la.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
-----	----------

Q7: Do you routinely check sawcut depths? No**Q8: If Yes to #7, answer the following:** *Respondent skipped this question***Q9: Do you allow early entry sawing?** Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** Yes**Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing?

Deepen the sawcut to T/3, Clean and then install backer rod and then seal with single or two part silicone.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	Yes
Waterblasting	No
Heat	No
Manufacturer's recommendation	Yes

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	Yes
Between asphalt pavement and concrete curb and gutter	Yes
Between concrete pavement and concrete curb and gutter	Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Allow
Silicone	Specify
Topical Sealer	Do not use
Membrane Curing Compound	Specify

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

Depends

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?
 According to our policies and procedures, we generally do a joint sealing rehabilitation at 15-20 years.
 According to others in the Department, we don't do joint maintenance.

Q21: Please attach a link to approved products list and approval process for joint sealants.

Respondent skipped this question

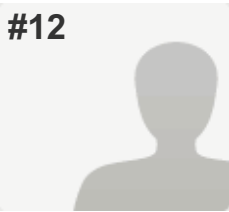
Q22: Please attach a link to your current standard joint details.

Respondent skipped this question

Q23: Any additional comments?

Respondent skipped this question

#12



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, August 18, 2015 12:52:52 PM
Last Modified: Tuesday, August 18, 2015 12:56:38 PM
Time Spent: 00:03:46
IP Address: 164.119.51.238

PAGE 1

Q1: State Representative

Name	Lieska Halsey
Agency	Nebraska Department of Roads
State / Province	Nebraska
Email	lieska.halsey@nebraska.gov

Q2: Do you require joint sealing? Yes

Q3: Do you require Quality Control plans for the following?

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No

Q5: If Yes to #4, answer the following: *Respondent skipped this question*

Q6: What is the minimum saw cut depth requirement?

T/3	On grade
Other (please specify)	We use T/3 for both full depth pavement and concrete overlays.

Q7: Do you routinely check sawcut depths? No

Q8: If Yes to #7, answer the following: *Respondent skipped this question*

Q9: Do you allow early entry sawing? Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth? No

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing?

NA

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	Yes
Waterblasting	No
Heat	No
Manufacturer's recommendation	No
Other	No

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	Yes
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Do not use
Silicone	Do not use
Topical Sealer	Do not use
Membrane Curing Compound	Do not use

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

8 years

Q20: Do you have a joint resealing program? Yes

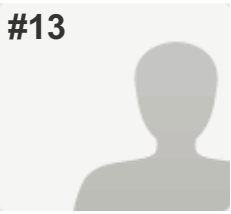
Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://www.transportation.nebraska.gov/mat-n-tests/hotpoursealers.htm>

Q22: Please attach a link to your current standard joint details. *Respondent skipped this question*

Q23: Any additional comments? *Respondent skipped this question*

#13



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, August 20, 2015 10:22:44 AM
Last Modified: Thursday, August 20, 2015 11:12:00 AM
Time Spent: 00:49:16
IP Address: 164.154.156.59

PAGE 1

Q1: State Representative

Name	Darin Hodges
Agency	SDDOT
State / Province	SD
Email	darin.hodges@state.sd.us

Q2: Do you require joint sealing? Yes

Q3: Do you require Quality Control plans for the following?

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No

Q5: If Yes to #4, answer the following: *Respondent skipped this question*

Q6: What is the minimum saw cut depth requirement?

T/4	On grade
-----	----------

Q7: Do you routinely check sawcut depths? No

Q8: If Yes to #7, answer the following: *Respondent skipped this question*

Q9: Do you allow early entry sawing? Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

Additional Comments

this is the language we use for Softcut sawing on Transverse joints: If an early entry saw is used, the cut may remain approximately 1 inch from the edges of the concrete slab to control spalling at the edge. Unless specified otherwise, the early entry saw cut shall be to a minimum depth of 1.0 inch. If an early entry saw is used, the Contractor shall complete the initial saw cut on all joints where a crack has not developed for the entire width and to the required depth before the end of the 72 hour curing period. The Engineer will not require the Contractor to complete the saw cut to the final required depth at joint locations where the early entry saw cut resulted in the concrete pavement cracking, as determined by the Engineer. The early entry saw shall not induce micro cracking along the saw cut. The Contractor shall repair damaged areas resulting from incorrect early entry sawing practices.

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing?

Typically an 1/8" sawcut t/4 initially then at 72 hours or after they do a "widening" cut to size and clean the joint for sealant.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Additional Comments

Vast majority of PCCP gets sealant so yes it is cleaned, but on the one no sealant project the joint didn't have to be cleaned.

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	Yes
Waterblasting	No
Heat	No
Manufacturer's recommendation	No

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

no

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	Yes
Between asphalt pavement and concrete curb and gutter	Yes
Between concrete pavement and concrete curb and gutter	Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Specify
Preformed Elastomeric Compression (Neoprene)	Do not use
Silicone	Specify
Topical Sealer	Do not use
Membrane Curing Compound	Do not use

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

It varies from a good project being 15 to 20 years, and a poor silicone project may only be 10 years.

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?

We usually only do re-sealing at 15 - 20 years old with a joint and spall repair project.

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://www.sddot.com/business/certification/products/Default.aspx>

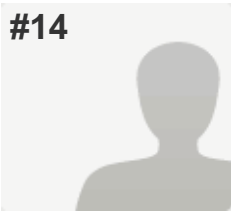
Q22: Please attach a link to your current standard joint details.

<http://www.sddot.com/business/design/plates/index/Default.aspx>
Look for section 380 plates.

Q23: Any additional comments?

Respondent skipped this question

#14

**COMPLETE**

Collector: Web Link 1 (Web Link)

Started: Friday, August 21, 2015 3:15:21 PM

Last Modified: Friday, August 21, 2015 3:34:15 PM

Time Spent: 00:18:53

IP Address: 168.177.119.184

PAGE 1

Q1: State Representative

Name	Scott Nussbaum
Agency	Utah Department of Transportation
State / Province	UT
Email	snussbaum@utah.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
-----	----------

Q7: Do you routinely check sawcut depths? Yes**Q8: If Yes to #7, answer the following:**

If yes, how often?	Usually each operation / production day.
Check with what?	Piece of a tape measure
Agency or Contractor performs checks	Both

Q9: Do you allow early entry sawing? Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** It depends**Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing?

Usually the same operation.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Other Yes

Please explain: For new concrete, cleaning with air is usually deemed sufficient.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement Yes

Between asphalt pavement and concrete curb and gutter It depends

Between concrete pavement and concrete curb and gutter Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Specify

Additional Comments? We will specify different products under specific conditions, but we use a hot pour sealant for the vast majority of our PCCP.

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

10+ years.

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?
Generally, we evaluate and reseal joints as necessary in conjunction with any other pavement preservation or rehabilitation work on PCCP. We don't generally have joint resealing as a driver of those projects.

Q21: Please attach a link to approved products list and approval process for joint sealants.

Specification for Joint Control: <http://www.udot.utah.gov/main/uconowner.gf?n=7597502676881542>

Specification for PCCP:

<http://www.udot.utah.gov/main/uconowner.gf?n=7592304342352170>

New APL: <https://app.udot.utah.gov/prod/mat/f?p=244:1>

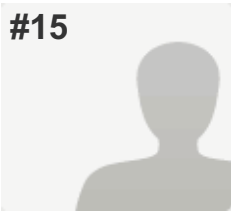
Q22: Please attach a link to your current standard joint details.

<http://www.udot.utah.gov/main/uconowner.gf?n=8235032170188725>

Q23: Any additional comments?

Respondent skipped this question

#15

**COMPLETE**

Collector: Web Link 1 (Web Link)

Started: Monday, August 24, 2015 10:53:49 AM

Last Modified: Monday, August 24, 2015 11:30:50 AM

Time Spent: 00:37:00

IP Address: 204.24.68.74

PAGE 1

Q1: State Representative

Name	John Staton
Agency	Michigan DOT
State / Province	Michigan
Email	statonj@michigan.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
T/4	Concrete overlays

Q7: Do you routinely check sawcut depths? Yes**Q8: If Yes to #7, answer the following:**

If yes, how often?	Random
Check with what?	Something that will fit into 1/8 inch sawcut
Agency or Contractor performs checks	Both
Any other comments?	Will check more often if early entry saw is used

Q9: Do you allow early entry sawing? Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** No**Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing?

Depends on the contractor and construction staging requirements. It could be as early as a few days or as late as a month after concrete placement.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Additional Comments

Immediate cleaning is required if the sealant reservoir is also cut during initial sawing operation.

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	No
Waterblasting	Yes
Heat	No
Manufacturer's recommendation	No

Please explain:

Sandblasting is preferred. However, water blasting is most common. Artificial heat used to dry the joint prior to sealing is prohibited.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

Oil free compressed air. Artificial heat is prohibited.

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	No
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Specify
Preformed Elastomeric Compression (Neoprene)	Do not use
Silicone	Do not use
Topical Sealer	Do not use
Membrane Curing Compound	Specify

Q18: Do you have a warranty for joint sealant performance?

If Yes, what is it?

Yes. 5-year Materials and Workmanship Warranty

Q19: What is the typical performance life of a sealed joint?

For LCCA, the current network service life for PCC pavements (20-year design life) is 34 years. Included in this LCCA are average preventive maintenance cycles at 12, 16, and 21 years. For most PCC pavements, it is anticipated that joint resealing will be a part of each of the above preventive maintenance cycles.

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?

Resealing joints in PCC pavements is part of the Capital Preventive Maintenance (CPM) Program. Each roadway is scoped and then programmed for CPM, as needed. Joint reservoir is resawed to establish new vertical surfaces, cleaned and then resealed using hot poured rubber sealant.

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://mdotcf.state.mi.us/public/specbook/2012/>
Search section 9.14

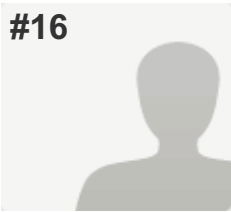
Q22: Please attach a link to your current standard joint details.

<http://mdotcf.state.mi.us/public/design/englishstandardplans/>
Select Joint, then Standard Plan Series R-39

Q23: Any additional comments?

Respondent skipped this question

#16

**COMPLETE**

Collector: Web Link 1 (Web Link)

Started: Monday, August 24, 2015 2:33:15 PM

Last Modified: Monday, August 24, 2015 2:47:44 PM

Time Spent: 00:14:28

IP Address: 204.62.25.101

PAGE 1

Q1: State Representative

Name	Kenny R. Seward
Agency	OK DOT
State / Province	Oklahoma
Email	kseward@odot.org

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
-----	----------

Q7: Do you routinely check sawcut depths? No**Q8: If Yes to #7, answer the following:** *Respondent skipped this question***Q9: Do you allow early entry sawing?** Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** Yes**Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing?

Nothing in the specification in regards to timing

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Additional Comments They have to clean for sealing.

Q14: What do you require for cleaning the joint prior to sealing?

Other	Yes
Please explain:	Contractor's choice

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No, Usually just compressed air

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	No
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	No

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Do not use
Silicone	Specify
Topical Sealer	Do not use
Membrane Curing Compound	Do not use
Additional Comments?	Hot pour not allowed on new pavement.

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

We do track the life.

Q20: Do you have a joint resealing program?

No

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://www.odot.org/materials/htm-smap/11062p-JFS.html>

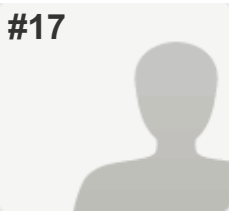
Q22: Please attach a link to your current standard joint details.

<http://www.odot.org/roadway/roadway2009/R-14.pdf>

Q23: Any additional comments?

Respondent skipped this question

#17



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, August 24, 2015 2:20:53 PM
Last Modified: Monday, August 24, 2015 4:10:51 PM
Time Spent: 01:49:58
IP Address: 168.166.124.100

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Q1: State Representative

Name	Brett Trautman
Agency	MoDOT
State / Province	Missouri
Email	Brett.Trautman@modot.mo.gov

Q2: Do you require joint sealing?

Additional Comments
 For new pavement, Missouri does not require the joints to be sealed unless it opens up by more than a 1/4 inch. Our maintenance forces will seal working cracks in older concrete pavement which utilized joint spacing greater than 30 ft. Several of are older pavements utilized 40 and 61.5 ft. joint spacing. Require all expansion joints to be sealed.

Q3: Do you require Quality Control plans for the following?

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

No

Q5: If Yes to #4, answer the following:

Which one?	n/a
If yes, when does Contractor submit?	n/a
How often is it verified?	n/a
Who checks the information?	n/a
Other comments?	N/A

Q6: What is the minimum saw cut depth requirement?

T/3	On grade
Other (please specify)	Bonded Concrete Overlay of Asphalt Pavement - D/3 Unbonded Concrete Overlay of Concrete or Asphalt Pavement - D/3 Joint width in all cases - 1/8"

Q7: Do you routinely check sawcut depths?

Yes

Q8: If Yes to #7, answer the following:

If yes, how often?	Check several joints the first couple of days. If no issues reduce frequency to a couple of joints once every 2 to 3 days.
Check with what?	Tape measure along pavement edge; sometimes thin ruler used away from pavement edge.
Agency or Contractor performs checks	Check both agency & contractor

Q9: Do you allow early entry sawing? Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth? No

Q11: Do you require anything to continue curing the sawcut after sawing?
No

Q12: What is the sequence between initial joint sawing and final sawing?
Joints sawed in one operation

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? No

Q14: What do you require for cleaning the joint prior to sealing?
Please explain: When required (Joint open >1/4 inch) specifications only state the joint needs to be thoroughly cleaned and dried. No methods or procedures are specified.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?
No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	No
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	No

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Do not use
Silicone	Do not use
Topical Sealer	Do not use
Membrane Curing Compound	Do not use

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

Estimate approximately 15 to 20 years before resealing required when we use to seal joints.

Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants.

n/a

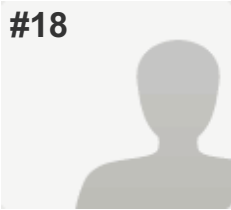
Q22: Please attach a link to your current standard joint details.

http://www.modot.org/business/standards_and_specs/Online%20Standard%20Plans/50205.pdf

Q23: Any additional comments?

Respondent skipped this question

#18

**COMPLETE**

Collector: Web Link 1 (Web Link)

Started: Tuesday, August 25, 2015 11:35:47 AM

Last Modified: Tuesday, August 25, 2015 11:41:14 AM

Time Spent: 00:05:27

IP Address: 167.154.58.44

PAGE 1

Q1: State Representative

Name	Darin Tedford
Agency	Nevada DOT
State / Province	NV
Email	dtedford@dot.state.nv.us

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/4	On grade
Other	Concrete overlays
Other (please specify)	No overlays placed to date.

Q7: Do you routinely check sawcut depths? Yes**Q8: If Yes to #7, answer the following:**

If yes, how often?	Per inspector's frequency.
Check with what?	ruler
Agency or Contractor performs checks	Agency

Q9: Do you allow early entry sawing? Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** No**Q11: Do you require anything to continue curing the sawcut after sawing?**

reapplication of curing compound if disturbed

Q12: What is the sequence between initial joint sawing and final sawing?

24 hour minimum wait

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes**Q14: What do you require for cleaning the joint prior to sealing?**

Sandblasting Yes

Waterblasting Yes

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

air blasting

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement No

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter No

Q17: What type of joint sealants/sealers do you allow/specify?

Silicone Specify

Q18: Do you have a warranty for joint sealant performance? No**Q19: What is the typical performance life of a sealed joint?**

10 years

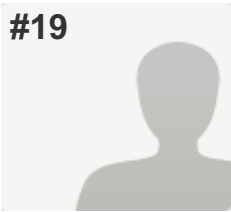
Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?
 saw and reseal when rehabilitation is done, at approximately 10 to 15 years.

Q21: Please attach a link to approved products list and approval process for joint sealants.
www.nevadadot.com, search QPL
Q22: Please attach a link to your current standard joint details.
www.nevadadot.com, search Standard Plans
Q23: Any additional comments?

Respondent skipped this question

#19

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Tuesday, August 25, 2015 4:42:45 PM**Last Modified:** Tuesday, August 25, 2015 4:49:25 PM**Time Spent:** 00:06:40**IP Address:** 165.234.252.170

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Q1: State Representative

Name	Clayton Schumaker
Agency	North Dakota DOT
State / Province	North Dakota
Email	cschumaker@nd.gov

Q2: Do you require joint sealing?	It depends
--	------------

Q3: Do you require Quality Control plans for the following?

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?	No
---	----

Q5: If Yes to #4, answer the following:	<i>Respondent skipped this question</i>
--	---

Q6: What is the minimum saw cut depth requirement?

T/3	On grade
-----	----------

Q7: Do you routinely check sawcut depths?	Yes
--	-----

Q8: If Yes to #7, answer the following:

If yes, how often?	Varies
Agency or Contractor performs checks	Agency

Q9: Do you allow early entry sawing?	Yes
---	-----

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?	No
---	----

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing?

Single saw cut.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Other Yes

Please explain: Air

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement Yes

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter No

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Allow

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

N/A

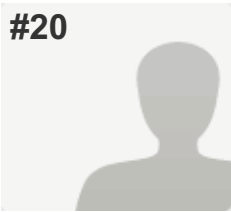
Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants. *Respondent skipped this question*

Q22: Please attach a link to your current standard joint details. *Respondent skipped this question*

Q23: Any additional comments? *Respondent skipped this question*

#20

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Thursday, August 27, 2015 2:38:39 PM**Last Modified:** Thursday, August 27, 2015 5:18:56 PM**Time Spent:** 02:40:16**IP Address:** 70.196.16.42

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Q1: State Representative

Name	Drew Waldrop
Agency	Alabama Department of Transportation
State / Province	Alabama
Email	waldropa@dot.state.al.us

Q2: Do you require joint sealing?

Yes

Q3: Do you require Quality Control plans for the following?

Sawing Yes

Sealing Yes

If yes, please include your requirements.

The paving contractor is required to submit an overall QC plan to Materials and Tests for acceptance for completeness. These two items should be addressed in that plan.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

No

Q5: If Yes to #4, answer the following:

Which one? N/A

If yes, when does Contractor submit? N/A

How often is it verified? N/A

Who checks the information? N/A

Q6: What is the minimum saw cut depth requirement?

T/3 On grade

Other Concrete overlays

Other (please specify) T/3 for overlays as well.

Q7: Do you routinely check sawcut depths?

Yes

Q8: If Yes to #7, answer the following:

If yes, how often? Spot-check; no pre-determined frequency

Check with what? Flat metal ruler, other appropriate means

Agency or Contractor performs checks Agency

Q9: Do you allow early entry sawing?

Other (please specify)
 Yes, if the contractor requests in writing with acceptable justification. It has been allowed in the past however not full cut. This practice may not be allowed in the future for night work due to past experiences.

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

Additional Comments
 Yes, the contractor must come back to cut the full depth. We do not allow full depth cuts on early entry sawing.

Q11: Do you require anything to continue curing the sawcut after sawing?

Not necessarily, however we require a minimum curing time of 72 hours.

Q12: What is the sequence between initial joint sawing and final sawing?

As per means and methods as determined by the contractor.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

- Sandblasting No
- Waterblasting No
- Heat No
- Manufacturer's recommendation No
- Other Yes

Please explain:

We don't specify the means of cleaning. Subarticle 450.03(n) states the following: (n) SEALING JOINTS. Before the pavement is opened to traffic, and as early as is feasible, all joints, both longitudinal and transverse, shall be filled with joint sealing material of a type specified by the plans. The joint faces shall be clean and surface dry when the seal is applied. Suitable tools for installing the seal to the proper depth and dimensions shall be used. The joints to be sealed with Hot Poured Sealants or Cold Poured Sealants shall be sealed as outlined in Section 454. Preformed Elastomeric Joint Seals shall be installed in accordance with the manufactured recommendations and the details shown on the plans.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No.

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	No
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	Yes
Additional comments	410.03(h)1 says, in part, "The contact surface of concrete structures shall be treated with a thin coat of liquid asphalt binder material, tack material, or the liquid asphalt binder material used in the mix, prior to construction of the joint."

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Allow
Silicone	Do not use
Topical Sealer	Do not use
Membrane Curing Compound	Do not use
Other	Do not use

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

Alabama has not tracked the performance life of concrete pavement joints. We have noted that well-constructed joints last much longer regardless of joint sealant type but our best performer have been the preformed elastomeric joint seals.

Q20: Do you have a joint resealing program?

No

Q21: Please attach a link to approved products list and approval process for joint sealants.

Approval process: <http://www.dot.state.al.us/mtweb/Testing/MSDSAR/doc/pro/Piii04.pdf>
 QPL: <http://www.dot.state.al.us/mtweb/Testing/MSDSAR/doc/QMSD/Liii04.pdf>

Q22: Please attach a link to your current standard joint details.

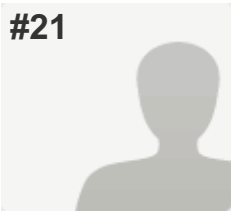
http://alletting.dot.state.al.us/Docs/Standard_Drawings/2015%20English/STDUS15_0100.pdf

Index no. 110 & 110a

Q23: Any additional comments?

None

#21

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Thursday, August 27, 2015 10:25:10 PM**Last Modified:** Thursday, August 27, 2015 10:56:57 PM**Time Spent:** 00:31:47**IP Address:** 170.141.177.15

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Q1: State Representative

Agency	Tennessee DOT
State / Province	Tennessee

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing No

Sealing No

If yes, please include your requirements.

Although there is not really a Quality Control Plan, the contract plans and standard drawings must be followed.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:***Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3 On grade

Q7: Do you routinely check sawcut depths? It depends**Q8: If Yes to #7, answer the following:***Respondent skipped this question***Q9: Do you allow early entry sawing?**Other (please specify)
Begin sawing the joint as soon as the concrete has hardened sufficiently to allow sawing with out excessive raveling. Once started – continue with the sawing operation until all transverse contraction joints are sawed. Saw in sequence.**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** No**Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing?

N/A

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Additional Comments

Immediately after sawing, thoroughly clean all longitudinal contraction and construction joints of all residue by flushing with water under pressure.

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting Yes

Waterblasting Yes

Heat No

Manufacturer's recommendation Yes

Please explain:

Immediately before sealing, thoroughly clean each joint of all foreign material, including the membrane curing compound, by sandblasting. Subject all joints to high pressure air blowing prior to sealing. Ensure that all joint faces are clean and dry when applying the sealant. Apply sealant to the joint immediately after the cleaning.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

Yes, must air dry by pressure.

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement It depends

Between asphalt pavement and concrete curb and gutter It depends

Between concrete pavement and concrete curb and gutter It depends

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Allow

Preformed Elastomeric Compression (Neoprene) Allow

Silicone Allow

Topical Sealer Specify

Membrane Curing Compound Specify

Additional Comments? These are listed in our Qualified Products List Report.

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

Not known.

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?
Preventive Maintenance Program which addresses all types of joints and sealants. If sealant does not bond to concrete, remove, clean, and reseal.

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://www.tn.gov/tdot/topic/qualified-products>

Select Qualified Products List Report (Section 05)

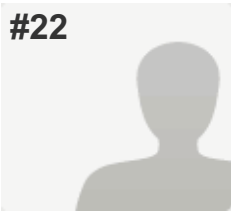
Q22: Please attach a link to your current standard joint details.

<http://www.tn.gov/tdot/article/transportation-chief-engineer-engineer-library-design-roadway-and-pavement>

Q23: Any additional comments?

Respondent skipped this question

#22

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Friday, August 28, 2015 11:27:06 PM**Last Modified:** Friday, August 28, 2015 11:59:48 PM**Time Spent:** 00:32:41**IP Address:** 73.8.95.71

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Q1: State Representative

Name	Steve Gillen
Agency	Illinois Tollway
State / Province	Illinois
Email	sgillen@getipass.com

Q2: Do you require joint sealing?

Additional Comments only longitudinal joints

Q3: Do you require Quality Control plans for the following?

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

No

Q5: If Yes to #4, answer the following:*Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
Other	Concrete overlays
Other (please specify)	We have not done any concrete overlays

Q7: Do you routinely check sawcut depths?

No

Q8: If Yes to #7, answer the following:*Respondent skipped this question***Q9: Do you allow early entry sawing?**

Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

No

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing?

N/A

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? No

Q14: What do you require for cleaning the joint prior to sealing?

Other Yes

Please explain:

Specific cleaning methods are not detailed. "Just prior to sealing, each joint shall be thoroughly cleaned of all foreign material, including membrane curing compound, and the joint faces shall be clean and surface dry when the seal is applied."

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement No

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Specify

Preformed Elastomeric Compression (Neoprene) Specify

Silicone Do not use

Topical Sealer Do not use

Membrane Curing Compound Do not use

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint? *Respondent skipped this question*

Q20: Do you have a joint resealing program? No

Q21: Please attach a link to approved products list and approval process for joint sealants.

ASTM D 6690, Type II

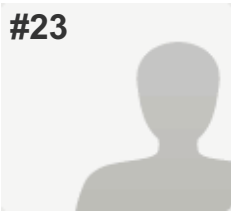
Q22: Please attach a link to your current standard joint details.

http://idot.illinois.gov/Assets/uploads/files/Doing-Business/Standards/Highway-Standards/PDF/216-420001-08_pavementjoints.pdf

Q23: Any additional comments?

The Illinois Tollway follows IDOT specifications for sawing and sealing joints

#23

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Monday, August 31, 2015 5:19:50 AM**Last Modified:** Monday, August 31, 2015 5:47:42 AM**Time Spent:** 00:27:52**IP Address:** 199.90.35.12

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Q1: State Representative

Name	Richard Burley
Agency	NCDOT Construction Unit
State / Province	North Carolina
Email	rburley@ncdot.gov

Q2: Do you require joint sealing?

Yes

Q3: Do you require Quality Control plans for the following?

Sawing Yes

Sealing Yes

If yes, please include your requirements.

SECTION 700 GENERAL REQUIREMENTS FOR PORTLAND CEMENT CONCRETE PAVEMENT 700-1 DESCRIPTION Before placing concrete pavement, submit for approval a Process Control Plan addressing all operations necessary in the production and placement of concrete pavement.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

Yes

Q5: If Yes to #4, answer the following:

Which one?	Maturity Method, & suggest HiperPav
If yes, when does Contractor submit?	Process Control Plan
How often is it verified?	At random intervals during construction
Who checks the information?	Resident Engineer or His appointee.

Q6: What is the minimum saw cut depth requirement?

T/3	Concrete overlays
Other (please specify)	Minimum depth of 4" or T/3 depending on slab thickness.

Q7: Do you routinely check sawcut depths?

Yes

Q8: If Yes to #7, answer the following:

If yes, how often?

Each day joints are cut at a minimum of 20% Daily.

Check with what?

Checked with small ruler

Agency or Contractor performs checks

Agency checks depths.

Q9: Do you allow early entry sawing?

Other (please specify)

700-11 JOINT CONSTRUCTION (A) General Construct all joints in accordance with these Standard Specifications and the details shown on the plans. Saw all transverse joints and seal them with joint sealer in accordance with the dimensions and details shown in the contract. Seal joints in accordance with Article 700-12. Use an early entry dry-cutting sawing system. Ensure an adequate amount of sawing equipment is available to match the production and concrete paving operations. At least one standby sawing unit is recommended. Construct the joint groove using a 1/8" saw blade to a minimum depth of 4" or the design thickness divided by 3 whichever is less. Perform sawing as soon as the concrete has hardened sufficiently without undercutting, spalling and raveling to control random cracking. Complete all saw cutting before 7 hours has elapsed from the time of concrete placement.

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

Additional Comments

Should be sawed the correct depth but do allow additional sawing not to exceed the specified time limit or as allow by the Engineer.

Q11: Do you require anything to continue curing the sawcut after sawing?

After sawing the area should be sprayed with Curing Compound.

Q12: What is the sequence between initial joint sawing and final sawing?

Age of the pavement should be at least 14 Calendar days old.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Additional Comments

Section 700.12 (D) Immediately after sawing the joint to the dimensions as shown on the plans, completely remove the resulting slurry from the joint by flushing with a jet of water under pressure. Use sand blasting to clean joint faces before applying sealant. Make as many passes with a sand blaster as are necessary to provide a clean joint wall. Blow all joints clear of deleterious materials with air using a nozzle pressure of at least 90 psi before installing the backer rod. Use rotary screw compressors for this purpose that are equipped with traps capable of removing water and oil from the air. Maintain the traps in accordance with manufacturer's instructions. Apply sealer only on thoroughly clean and dry joints. Place the sealer to closely conform to dimensions shown on the plans. Any unreasonable deviation will be cause for rejection.

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	Yes
Waterblasting	Yes
Manufacturer's recommendation	Yes
Please explain:	700-12 SEALING JOINTS (D) Sealing the Joint Immediately after sawing the joint to the dimensions as shown on the plans, completely remove the resulting slurry from the joint by flushing with a jet of water under pressure. Use sand blasting to clean joint faces before applying sealant. Make as many passes with a sand blaster as are necessary to provide a clean joint wall. Blow all joints clear of deleterious materials with air using a nozzle pressure of at least 90 psi before installing the backer rod. Use rotary screw compressors for this purpose that are equipped with traps capable of removing water and oil from the air. Maintain the traps in accordance with manufacturer's instructions. Apply sealer only on thoroughly clean and dry joints. Place the sealer to closely conform to dimensions shown on the plans. Any unreasonable deviation will be cause for rejection.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

A rotary screw compressor is required not a lawn type blower. Use a compressor with air using a nozzle pressure of at least 90 psi

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	Yes
Between asphalt pavement and concrete curb and gutter	Yes
Between concrete pavement and concrete curb and gutter	Yes
Additional comments	Types of silicone sealant required are the following: Silicone sealant for Concrete to Concrete sealing. Or Silicone sealant for Concrete to asphalt sealing.

Q17: What type of joint sealants/sealers do you allow/specify?

Silicone	Allow
Membrane Curing Compound	Allow
Additional Comments?	Types of silicone sealant required are the following: Silicone sealant for Concrete to Concrete sealing. Or Silicone sealant for Concrete to asphalt sealing.

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

If placed correctly it can be as much as 25 years in lifespan.
Should be checked at approx. 5 year intervals to assure joints are in good condition.

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?

Per recent state legislation joints have become a pavement preservation tool, before that time our maintenance forces handled joint sealing, if needed.

Q21: Please attach a link to approved products list and approval process for joint sealants.

<https://apps.ncdot.gov/vendor/approvedproducts/>

Q22: Please attach a link to your current standard joint details.

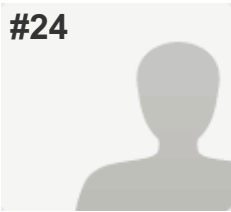
<https://connect.ncdot.gov/resources/Specifications/Specification%20Resources/2012%20Standard%20Specifications.pdf>

<https://connect.ncdot.gov/resources/Specifications/pages/2012-roadway-drawings.aspx>

Q23: Any additional comments?

Respondent skipped this question

#24

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Thursday, August 27, 2015 1:44:38 PM**Last Modified:** Monday, August 31, 2015 8:56:11 AM**Time Spent:** Over a day**IP Address:** 108.59.48.4

PAGE 1

Q1: State Representative

Name	Anthony Zander
Agency	INDOT
State / Province	IN
Email	azander@indot.in.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing Yes

Sealing Yes

If yes, please include your requirements.

INDOT has a specification for QC/QA PCCP and construction of such pavement requires a QCP in accordance with ITM 803. Section 6.14 of that ITM deals with joints.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:***Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3 On grade

Other Concrete overlays

Other (please specify) It depends. For thin concrete overlay the saw cut depth would be T/4, but as thickness increases the depth would increase to T/3.

Q7: Do you routinely check sawcut depths? No**Q8: If Yes to #7, answer the following:***Respondent skipped this question***Q9: Do you allow early entry sawing?** No**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?***Respondent skipped this question*

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing?

The second saw cut shall be made after the concrete has sufficiently cured, but before opening to non-construction traffic.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Waterblasting Yes

Manufacturer's recommendation No

Please explain:

Slurry or saw residue remaining in the joint after the second saw cut shall be immediately flushed with water. Construction traffic shall not be allowed on the PCCP after the second saw cut until the joint is sealed. The sawed slot shall be cleaned to remove all foreign matter from the entire depth of cut in accordance with the sealant manufacturer's recommendations. Water blasting shall not be applied under pressure, which may damage concrete. All joints shall be sealed prior to discontinuing for the winter.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement No

Between asphalt pavement and concrete curb and gutter No

Between concrete pavement and concrete curb and gutter No

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Allow

Preformed Elastomeric Compression (Neoprene) Allow

Silicone Allow

Topical Sealer Do not use

Membrane Curing Compound Do not use

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

It would depend on the type of sealant. It appears that INDOT is experiencing a loss in expected life for silicone sealants.

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?

From the INDOT Road Design Manual: Contraction and longitudinal joints should be inspected periodically and cleaned and resealed as required. For preventative maintenance, timely sealing of the joints minimize dirt and moisture from entering the joints. Rigid pavement, 8-10 years old should be inspected. If on inspection, 10% of the joints have loose, missing or depressed sealant, sawing and sealing of the joints should be considered. The joints should be sawed to remove old sealant and to reshape the joint-seal reservoir.

Q21: Please attach a link to approved products list and approval process for joint sealants.

Hot pour sealant is to be per ASTM D 6690 Type II. Batches of material are pretested prior to use.

Silicone joint sealant is per 906.02(a)1. and approved material list.

<http://www.in.gov/indot/div/mt/appmat/pubs/apl18.pdf>

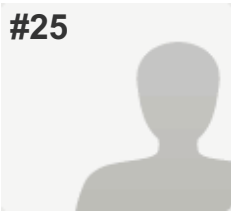
Q22: Please attach a link to your current standard joint details.

<http://www.in.gov/dot/div/contracts/standards/drawings/sep15/e/500e/e500%20combined%20pdfs/E503-CCPJ.pdf>

Q23: Any additional comments?

INDOT is not really happy with our current sealing specification and we are currently in the process of reviewing it and revising it.

#25

**COMPLETE**

Collector: Web Link 1 (Web Link)

Started: Monday, August 31, 2015 9:21:49 AM

Last Modified: Monday, August 31, 2015 9:31:17 AM

Time Spent: 00:09:28

IP Address: 164.110.221.225

PAGE 1

Q1: State Representative

Name	Mark Russell
Agency	WSDOT
State / Province	Washington
Email	russelm@wsdot.wa.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:***Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
T/4	On grade
Other (please specify)	T/3 for longitudinal contraction joints T/4 for transverse contraction joints

Q7: Do you routinely check sawcut depths? No**Q8: If Yes to #7, answer the following:***Respondent skipped this question***Q9: Do you allow early entry sawing?**

Other (please specify)
 WSDOT specifications do not preclude early entry sawing. The final depth of the cut would need to meet the same depth requirement as conventional saw cutting.

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

Additional Comments See above.

Q11: Do you require anything to continue curing the sawcut after sawing?

No

Q12: What is the sequence between initial joint sawing and final sawing?

Joints are only sawed once.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Additional Comments

The joints must be clean at the time of sealing.

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	No
Waterblasting	No
Heat	No
Manufacturer's recommendation	No
Other	No

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

No

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	Yes
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	No

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Do not use
Silicone	Do not use
Topical Sealer	Do not use
Membrane Curing Compound	Do not use
Other	Allow
Additional Comments?	WSDOT also allows poured rubber sealant.

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

About 30 years

Q20: Do you have a joint resealing program?

No

Q21: Please attach a link to approved products list and approval process for joint sealants.

WSDOT Qualified Products List is at:
http://www.wsdot.wa.gov/biz/mats/QPL/QPL_Search.cfm. Joint Sealants are listed under
Standard Specification 9-04.2(1) and 9-04.2(2).

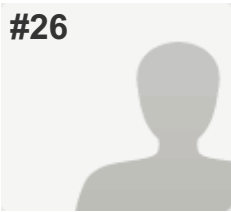
Q22: Please attach a link to your current standard joint details.

WSDOT Standard Plan for Cement Concrete
Pavement Joints is located at:
http://www.wsdot.wa.gov/publications/fulltext/Standards/english/PDF/a40.10-03_e.pdf

Q23: Any additional comments?

Respondent skipped this question

#26

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Monday, August 31, 2015 9:22:06 AM**Last Modified:** Monday, August 31, 2015 10:14:51 AM**Time Spent:** 00:52:44**IP Address:** 156.63.133.8

PAGE 1

Q1: State Representative

Name	Dan Miller
Agency	Ohio Department of Transportation
State / Province	Ohio
Email	daniel.miller@dot.ohio.gov

Q2: Do you require joint sealing? No**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? Yes**Q5: If Yes to #4, answer the following:**

Which one?	HiperPav
If yes, when does Contractor submit?	prior to placement
How often is it verified?	daily
Who checks the information?	Project Engineer

Q6: What is the minimum saw cut depth requirement?

Other	On grade
Other (please specify)	=> 10" it is T/4 <10" it is T/3 depth is the same for both on grade and overlays.

Q7: Do you routinely check sawcut depths? It depends**Q8: If Yes to #7, answer the following:**

Any other comments?	Depends on situation and the Engineer on the project.
---------------------	---

Q9: Do you allow early entry sawing? Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** No

Q11: Do you require anything to continue curing the sawcut after sawing?

Yes, require them to respray the affected area with curing compound.

Q12: What is the sequence between initial joint sawing and final sawing?

No sequence, sawing is completed in one pass.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

No

Q14: What do you require for cleaning the joint prior to sealing?

Other No

Please explain: Sealing joints is not required.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

N/A

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement No

Between asphalt pavement and concrete curb and gutter Yes

Between concrete pavement and concrete curb and gutter No

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Specify

Preformed Elastomeric Compression (Neoprene) Do not use

Silicone Do not use

Topical Sealer Do not use

Membrane Curing Compound Do not use

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

Respondent skipped this question

Q20: Do you have a joint resealing program?

No

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://www.dot.state.oh.us/Divisions/ConstructionMgt/Materials/Pages/QPL.aspx>

<http://www.dot.state.oh.us/Divisions/ConstructionMgt/Materials/Approved-List/Pages/default.aspx>

Q22: Please attach a link to your current standard joint details.

Transvers-

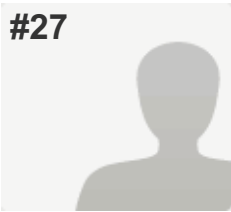
http://www.dot.state.oh.us/Divisions/Engineering/Pavement/Standard%20Drawings%20%20PDF/bp22_jul08.pdf

Longitudinal- http://www.dot.state.oh.us/Divisions/Engineering/Pavement/Standard%20Drawings%20%20PDF/BP-2.1_7-1-2015.pdf

Q23: Any additional comments?

Respondent skipped this question

#27

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Monday, August 31, 2015 11:06:16 AM**Last Modified:** Monday, August 31, 2015 11:48:57 AM**Time Spent:** 00:42:40**IP Address:** 143.100.53.13

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Q1: State Representative

Name	James Page
Agency	Ga. Department of Transportation
State / Province	Georgia
Email	jpage@dot.ga.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:** *Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	Concrete overlays
T/4	On grade
Other (please specify)	T/4 + 1/4 " = total depth required

Q7: Do you routinely check sawcut depths? Yes**Q8: If Yes to #7, answer the following:**

If yes, how often?	At random
Check with what?	Narrow steel ruler
Agency or Contractor performs checks	Both

Q9: Do you allow early entry sawing? Yes**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** Yes**Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing?

Respondent skipped this question

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Yes

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting

Yes

Waterblasting

Yes

Other

Yes

Please explain:

Immediately after sawing the joint do the following: a. Completely remove the resulting slurry from the joint and clean the immediate area by flushing it with a jet of water under pressure. Use other tools as necessary. b. When the surfaces are thoroughly clean and dry and immediately before placing the joint sealer, use compressed air with a pressure of at least 90 psi (620 kPa) to blow out the joint and remove dust traces. c. If freshly cut sawed joints are contaminated before they are sealed, clean them according to Section 461. d. Ensure that cleaning methods do not alter the joint profile, the rounding of the top corners, or the concrete riding surface texture. Do not clean the joint with chemical agents.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

None

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement

Yes

Between asphalt pavement and concrete curb and gutter

No

Between concrete pavement and concrete curb and gutter

Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour

Allow

Silicone

Allow

Additional Comments?

Neoprene has been used on bridge deck joints. These have not proven to have a long lifespan. Silicone is all allowed on Concrete Pavements and Bridge Deck Joints. Hot Pour is used when specified on longitudinal joints between Concrete Mainline Pavements and Asphalt Shoulders

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

If installed correctly GDOT has pavements where sealant was installed 25+ years and still in good condition

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?

Resealing Existing Joints

1. Remove Existing Sealant Completely remove the existing sealant in the joints. Take care during removal and cleaning to prevent damaging or enlarging the existing width of the joint. Repair any damaged areas at no cost to the Department.
2. Depth of Existing Joint Determine if the joint depth will accommodate the required sealant thickness and bond breaker and provide the required recess below the riding surface. Consider that the backer rod is thicker after it is squeezed into the joint. If necessary, saw the existing joint deeper and wider to provide the joint depth and width specified on the Plans.
3. Clean the Joint Thoroughly clean the joint of all foreign material including oil, asphalt, curing compound, sealant adhesive, paint, rust, and existing sealant, if still present. Demonstrate to the Engineer that the proposed method of cleaning old sealant or foreign material from joints will not widen the joints by more than 0.040 in (1 mm). The method shall not alter the joint profile (including rounding of the top corner) or alter the texture of the concrete riding surface. Do not use chemical agents to clean the joint. Ensure that the cleaning process produces a new, clean concrete face on the vertical faces of the joint.

B. Sealing New Joints

1. Sawing Saw the transverse and longitudinal joints according to the Specifications and Plan details.
 - a. Make the initial cut and wait for the concrete to harden enough to prevent spalling or raveling:
 - b. Make the second cut to the width and depth shown on the Plans. NOTE: Do not use a gang saw to make a completed cut in a single operation.
 - c. If spalling of the sawed edge harms the joint seal, patch the spall with an approved epoxy patching compound and allow it to fully cure before installing the joint sealant.
 - d. Make each patch to the intended neat lines of the finished cut joint.
2. Cleaning Freshly Cut Sawed Joints Immediately after sawing the joint do the following:
 - a. Completely remove the resulting slurry from the joint and clean the immediate area by flushing it with a jet of water under pressure. Use other tools as necessary.
 - b. When the surfaces are thoroughly clean and dry and immediately before placing the joint sealer, use compressed air with a pressure of at least 90 psi (620 kPa) to blow out the joint and remove dust traces.
 - c. If freshly cut sawed joints are contaminated before they are sealed, clean them according to Section 461.
 - d. Ensure that cleaning methods do not alter the joint profile, the rounding of the top corners, or the concrete riding surface texture. Do not clean the joint with chemical agents.

C. Sealing Joints

1. Install Bond Breakers Select and use bond breakers [backer rod (if required) or tape] according to Section 833.2.06.A.2.
 - a. Before installing a bond breaker, clean and dry the joint or crack. Before placing the bond breaker and sealant, complete the cleaning, air blasting, or air drying.
 - b. Ensure that the backer rod diameter is at least 25 percent larger than the joint width.
 - c. Install the backer rod in the joint at the depth specified on the joint detail in the Plans, as directed by

the Engineer, and according to Subsection 461.3.05.B. NOTE: The width of some bridge joints may require back-up material other than the typically shaped round backer rod. d. Use material available in square or rectangular shapes, or cut the strips from sheet stock to fit properly into the joint. Use approved bond breaking tapes in place of backer rod in some applications. See Plan details for various joint types. 2. Install Silicone Sealant Install the silicone sealant immediately after cleaning the joint or crack and installing the bond breaker. Keep the joint or crack clean and dry. Section 461—Sealing Roadway and Bridge Joints and Cracks If the joint or crack becomes contaminated, damp, or wet, remove the bond breaker if it has been installed. Clean and dry the joint or crack and install a new bond breaker before placing the sealant. Follow these guidelines when placing the sealant: a. Ensure that the air temperature during placement is at least 40 °F (4 °C). b. Use a pump to apply the silicone sealant. The pump must be able to completely fill the joint to the specified width and height of sealant in one pass. Use a nozzle with the proper size and shape to closely fit inside the joint. The sealant must be introduced inside the joint with enough pressure to prevent voids in the sealant and to force the sealant into contact with the joint faces. c. Use a caulking gun with cartridge for touch-up work, small applications (such as vertical runs with Type A silicone in a bridge deck joint when Type B, C, or D silicone is used), and to seal voids and cracks with Type A silicone where Type B, C, or D silicone might leak through. You may also use a caulking gun to seal small cracks in the concrete. d. After placing Type A silicone sealant, tool it to provide the specified recess, thickness, and shape as shown on the Plans. Apply sufficient force to the sealant in this tooling operation to force the sealant against the joint faces and to ensure proper wetting and bonding of the sealant to the joint faces. Type B, C, and D silicones are self-leveling and do not normally require tooling. e. Because of the consistency of Type B, C, and D silicones, ensure that the bond breaker completely closes off gaps and voids where the silicone might leak through. To ensure that the gaps are closed use any of the following methods: Stuff small pieces of backer-rod into the gaps and voids Place a piece of bond breaking tape over the void Use Type A silicone to seal the void. If using Type B, C, or D silicone and a backer-rod, ensure the backer rod is Type M. Do not use Type L backer-rod with Type B, C, and D silicone. f. Place the sealant to conform to the specified recess and thickness shown in the Plans.

Q21: Please attach a link to approved products list and approval process for joint sealants.

<http://www.dot.ga.gov/PartnerSmart/Materials/Documents/qpl66.pdf>

<http://www.dot.ga.gov/PartnerSmart/Business/Source/specs/ss461>

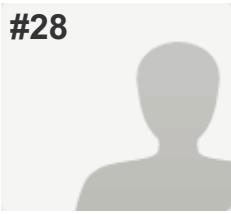
Q22: Please attach a link to your current standard joint details.

Respondent skipped this question

Q23: Any additional comments?

Respondent skipped this question

#28

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Monday, August 31, 2015 12:04:36 PM**Last Modified:** Monday, August 31, 2015 12:48:23 PM**Time Spent:** 00:43:46**IP Address:** 165.201.162.178

PAGE 1

Q1: State Representative

Name	Will
Agency	Kansas DOT
State / Province	Kansas
Email	wlindquist@ksdot.org

Q2: Do you require joint sealing?

Additional Comments
All joints are sealed with the exception of those joints in pavement constructed over CTB or ATB.

Q3: Do you require Quality Control plans for the following?

Sawing	Yes
Sealing	No

If yes, please include your requirements.

Sawing requirements are required as part of the overall QC plan for the project. The specific requirements are fairly basic.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

No

Q5: If Yes to #4, answer the following:*Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
-----	----------

Q7: Do you routinely check sawcut depths?

No

Q8: If Yes to #7, answer the following:*Respondent skipped this question***Q9: Do you allow early entry sawing?**

Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

Yes

Q11: Do you require anything to continue curing the sawcut after sawing?

"Repair curing membrane damaged during sawing as directed by the Engineer."

Q12: What is the sequence between initial joint sawing and final sawing?

"The sequence of the relief sawing is at the Contractor's option, provided all relief sawing is completed before random cracking develops."

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Additional Comments

"Immediately clean freshly cut sawed joints by flushing with a jet of water under pressure and other necessary tools to remove the resulting slurry from the joint and immediate area."

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	Yes
Waterblasting	Yes
Heat	No
Manufacturer's recommendation	No
Other	No

Please explain:

Sandblasting or waterblasting followed by compressed air.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

compressed air

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	It depends
Between asphalt pavement and concrete curb and gutter	It depends
Between concrete pavement and concrete curb and gutter	It depends

Additional comments

Depends on the base. For granular bases, the joints are sealed, and for CTB or ATB, the joints are open.

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Allow
Silicone	Allow
Topical Sealer	Do not use
Membrane Curing Compound	Do not use

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

KDOT has moved to no sealants if possible.

Q20: Do you have a joint resealing program?

No

Q21: Please attach a link to approved products list and approval process for joint sealants.

Section 15 at the following link:

<http://www.ksdot.org/bureaus/burMatrRes/PQL/default.asp>

Q22: Please attach a link to your current standard joint details.

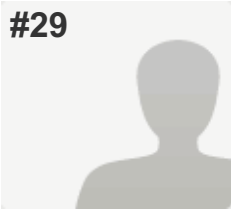
Page 5 at the following link:

<http://ksdot1.ksdot.org/burconsmain/contracts/Proposals/Plans/515036101p.pdf>

Q23: Any additional comments?

Respondent skipped this question

#29

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Tuesday, September 01, 2015 10:39:48 AM**Last Modified:** Tuesday, September 01, 2015 1:06:54 PM**Time Spent:** 02:27:06**IP Address:** 149.136.17.252

PAGE 1

Q1: State Representative

Name	Mehdi Parvini
Agency	Caltrans
State / Province	CA
Email	mehdi_parvini@dot.ca.gov

Q2: Do you require joint sealing?

Additional Comments
For new construction, widening, or reconstruction, joints are not sealed, except for isolation joints, expansion joints, and joints in desert or mountain climate regions.

Q3: Do you require Quality Control plans for the following?

Sawing	No
Sealing	Yes
If yes, please include your requirements.	Before sealing joints, arrange for a representative from the manufacturer to provide training on cleaning and preparing the joint and installing the liquid joint sealant or preformed compression joint seal. Do not seal joints until your personnel and the Department's personnel have been trained.

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

No

Q5: If Yes to #4, answer the following:*Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

Other	On grade
Other (please specify)	Not defined.

Q7: Do you routinely check sawcut depths?

No

Q8: If Yes to #7, answer the following:*Respondent skipped this question***Q9: Do you allow early entry sawing?**

Yes

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth? No

Q11: Do you require anything to continue curing the sawcut after sawing?

Reapply curing compound to saw cuts and disturbed areas.

Q12: What is the sequence between initial joint sawing and final sawing?

N/A.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)? Yes

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting Yes

Waterblasting Yes

Please explain: 1. Removing debris 2. Drying 3. Sandblasting 4. Air blasting 5. Vacuuming

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

After removing debris, allow the reservoir surfaces to dry or remove moisture and dampness at the joint with compressed air that may be moderately hot.

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement No

Between asphalt pavement and concrete curb and gutter It depends

Between concrete pavement and concrete curb and gutter Yes

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour Allow

Preformed Elastomeric Compression (Neoprene) Allow

Silicone Allow

Additional Comments? Silicone joint sealant must be on the Authorized Material List. Asphalt rubber joint sealant must: 1.Be paving asphalt mixed with not less than 10 percent ground rubber by weight. Ground rubber must be vulcanized or a combination of vulcanized and devulcanized materials that pass a no. 8 sieve. 2.Comply with ASTM D6690 for Type II. 3.Be capable of melting at a temperature below 400 degrees F and applied to cracks and joints. Preformed Compression Joint Seals Preformed compression joint seals must: 1.Comply with ASTM D2628 2.Have 5 or 6 cells, except seals 1/2 inch wide or less may have 4 cells Lubricant adhesive used to install seals must comply with ASTM D2835.

Q18: Do you have a warranty for joint sealant performance? No

Q19: What is the typical performance life of a sealed joint?

Around 10 years.

Q20: Do you have a joint resealing program? Yes

Q21: Please attach a link to approved products list and approval process for joint sealants.

http://www.dot.ca.gov/hq/esc/approved_products_list/pdf/silicone_joint_sealant.pdf

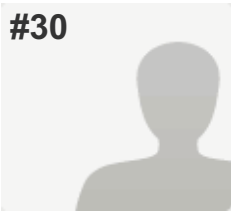
Q22: Please attach a link to your current standard joint details.

http://www.dot.ca.gov/hq/esc/oe/project_plans/highway_plans/stdplans_US-customary-units_10/viewable_pdf/rspp20.pdf

Q23: Any additional comments?

Respondent skipped this question

#30

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Wednesday, September 02, 2015 2:11:03 PM**Last Modified:** Wednesday, September 02, 2015 3:51:58 PM**Time Spent:** 01:40:54**IP Address:** 170.3.8.253

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Q1: State Representative

Name	Bill Cuerdon
Agency	NYS DOT
State / Province	New York
Email	william.cuerdon@dot.ny.gov

Q2: Do you require joint sealing? Yes**Q3: Do you require Quality Control plans for the following?**

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? No**Q5: If Yes to #4, answer the following:***Respondent skipped this question***Q6: What is the minimum saw cut depth requirement?**

T/3	On grade
T/4	On grade
Other (please specify)	T/3 for transverse, T/4 for longitudinal.

Q7: Do you routinely check sawcut depths? Yes**Q8: If Yes to #7, answer the following:**

If yes, how often?	Couple of times a day. At the start, then randomly.
Check with what?	Any sort of feeler.
Agency or Contractor performs checks	Inspector

Q9: Do you allow early entry sawing? It depends**Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?** No

Q11: Do you require anything to continue curing the sawcut after sawing?

No. We recoat damaged curing compound, but nothing in the joint.

Q12: What is the sequence between initial joint sawing and final sawing?

Initial cut when scratch test indicates it is time. Typically, we put a widening cut on 3 days later.

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Additional Comments
Yes, and wash debris from the pavement.

Q14: What do you require for cleaning the joint prior to sealing?

Sandblasting	Yes
Waterblasting	No
Heat	No
Manufacturer's recommendation	Yes
Please explain:	We like abrasive blast.

Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

Time and above the dew point.

Q16: Do you seal the following longitudinal joints?

Between asphalt shoulder and concrete pavement	No
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	No
Additional comments	No is for new construction. We have sealed the above after some time.

Q17: What type of joint sealants/sealers do you allow/specify?

Hot Pour	Allow
Preformed Elastomeric Compression (Neoprene)	Allow
Silicone	Do not use
Topical Sealer	Do not use
Membrane Curing Compound	Specify

Q18: Do you have a warranty for joint sealant performance?

No

Q19: What is the typical performance life of a sealed joint?

Since 2001, we have been doing T/3 transverse cuts 0.125 inch wide. Then, after 3 days, we widen it to 0.25 inch for a 1" depth. We fill the whole thing up with ASTM D6690 Type IV. We try to leave it a touch low so it doesn't smush up too badly. The 0.25 inch widening is so the stuff goes in the joint. It won't go in at 0.125 inch. I'd like to see some improvement in the nozzle technology.

Q20: Do you have a joint resealing program?

If Yes, what is it? What is your process for resealing?

I wouldn't call it a program. I go look, if it's open, I suggest that a region spend some of it's maintenance dollars on a re-seal. We're getting really good life on the ASTM D6690 Type IV. We haven't resealed one yet, but the first ones are in need. I would say that we get 10 good years with the Type IV. Our last neoprene contract was 1994. Joint seals are in very-good to excellent condition today.

Q21: Please attach a link to approved products list and approval process for joint sealants.

Respondent skipped this question

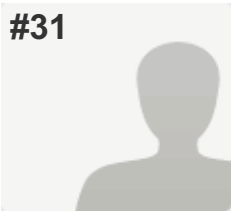
Q22: Please attach a link to your current standard joint details.

Respondent skipped this question

Q23: Any additional comments?

Respondent skipped this question

#31

**COMPLETE****Collector:** Web Link 1 (Web Link)**Started:** Tuesday, September 01, 2015 5:16:17 PM**Last Modified:** Thursday, September 03, 2015 3:14:18 PM**Time Spent:** Over a day**IP Address:** 130.47.34.2

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Q1: State Representative

Name	chad hayes
Agency	wis.dot
State / Province	wi
Email	chad.hayes@dot.wi.gov

Q2: Do you require joint sealing?

No

Q3: Do you require Quality Control plans for the following?

Sawing	No
Sealing	No

Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing?

It depends

Q5: If Yes to #4, answer the following:

Which one?	HiperPav
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Q6: What is the minimum saw cut depth requirement?

T/3	On grade
-----	----------

Q7: Do you routinely check sawcut depths?

Yes

Q8: If Yes to #7, answer the following:

Check with what?	Ruler
Agency or Contractor performs checks	Agency

Q9: Do you allow early entry sawing?

No

Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?*Respondent skipped this question***Q11: Do you require anything to continue curing the sawcut after sawing?**

No

Q12: What is the sequence between initial joint sawing and final sawing?

Single sawcut

Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?	No
Q14: What do you require for cleaning the joint prior to sealing?	<i>Respondent skipped this question</i>
Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?	<i>Respondent skipped this question</i>
Q16: Do you seal the following longitudinal joints?	
Between asphalt shoulder and concrete pavement	It depends
Between asphalt pavement and concrete curb and gutter	No
Between concrete pavement and concrete curb and gutter	No
Q17: What type of joint sealants/sealers do you allow/specify?	
Hot Pour	Allow
Q18: Do you have a warranty for joint sealant performance?	<i>Respondent skipped this question</i>
Q19: What is the typical performance life of a sealed joint?	<i>Respondent skipped this question</i>
Q20: Do you have a joint resealing program?	<i>Respondent skipped this question</i>
Q21: Please attach a link to approved products list and approval process for joint sealants.	<i>Respondent skipped this question</i>
Q22: Please attach a link to your current standard joint details.	<i>Respondent skipped this question</i>
Q23: Any additional comments?	<i>Respondent skipped this question</i>