



SCDOT Critical Findings

Emily Bickley, P.E.

Asst Director of Bridge Management – NBIS Compliance

Overview

- Definition
- Previous Process
- Configuration
- Automated Reporting
- Follow Up Actions
- Data Overview Pages
- SCDOT Process



Definition

- Defined in NBIS
- Immediate Safety Concern
- Report to FHWA within 24 hours on NHS
- Provide Monthly Updates to FHWA

Critical finding. A structural or safety related deficiency that requires immediate action to ensure public safety.



Example Bridge

- Asset ID 5793
- S-12 over Bear Creek
- Precast Panels/Caps
- Timber Piles
- ADT: 8,000 with 2% Trucks
- Built 1970
- Previous Condition: Fair (5)



Previous Process

Standard PDF Form



Critical Findings Form

BIGD Attachment 5.5
NOV2025, V1
Page 1 of 2

Part I – Bridge Data *Complete at all times with bridge data.*

Asset ID (NBI 08):	05793	Facility Carried (NBI 07):	S-29-12	Inspection or Site Assessment Date:	07/07/2026
District # (NBI 02):	District 4	Feature Intersected (NBI 06):	BEAR CREEK		
County (NBI 03):	Lancaster	Bridge Owner (NBI 22):	01 - SCDOT	C.F. Reporting Date:	07/07/2026

Part II – Immediate Actions Performed

☐ Bridge Collapse

☐ Approach Failure

☐ Bridge Closed

☐ Damage, Failure or Bridge Hit

☐ Delam. Conc. over Traffic

☐ Lane(s) on Bridge Closed

☐ Issue w/ Posting Sign

☐ Flooding/Scour

☐ Other Immediate Action Taken:

☒ Phone Call Made to DME, RME and/or BMO (indicate below)

☒ Load Rating Requested

Complete for Oral Report (if an oral report (i.e. phone call) performed)

Date/Time of Oral Report of Critical Finding: 07/07/2026 / 3:18PM

Name(s) and position(s) that Critical Findings have been reported to: Cody McAbee

Immediate Actions Taken

/Other Comments: Contacted Cody McAbee to be made aware of defective pile. Further action to follow from preliminary results.

SECTION REQUIRED

Part III – Describe how the Critical Finding was discovered, if not during a planned inspection.

☒ Critical Finding was discovered during a planned inspection (routine, underwater, non-redundant tension member, special, etc.)

Discovered during July 2026 Routine Inspection

Part IV – Note Critical Findings Category, Priority, Initial Action Taken, Description, and Photo Number (using photo form on Page 2)

Category	Priority	Initial Action Taken	Critical Finding Description	Photo # (See Pg. 2)
Timber Piles	Structural De	Other Act Discuss	Pile 2-5 has severe decay on. Resistance drill was used and measured at 41% remaining area. Coupled with three spliced piles with CS2 underminina (scour).	1-2

Email Generation

Report Critical Findings:

Submit Critical Finding

Transmittal Critical Findings
Update on Action Plan:

Transmit

Duplicate Photo Upload

Critical Findings Form Photographs



Photo #: 1 Date: 07/07/2026 ☒ Original Inspection ☐ Maintenance Inspection
Caption: Pile 2-5 - Drill Location, 41% Pile Remaining

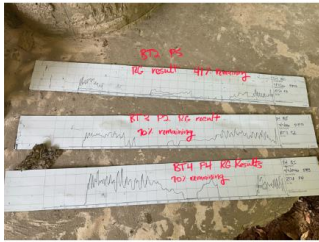


Photo #: 2 Date: 07/07/2026 ☒ Original Inspection ☐ Maintenance Inspection
Caption: Drill Logs (Note Pile 2-5 41% Pile Remaining)

AASHTOWare Bridge Management User Group Meeting 2026

Previous Process

- Limited Follow Up Options
- Manual Statewide Tracking



Photo #: 3 Date: 07/16/2026 ☐ Original Inspection
☒ Maintenance Inspection
 Caption: Piles repaired, Pile 2-5, Pile 3-3 and Pile 4-4

Part VII - Periodic Update of Action Plan Describe each type of repair / actions taken, include reference to Part V. Include dates, res parties, company/orgs, etc. Indicate if any Critical Findings are Open, Addressed or	
Critical Finding Description	Status (Open, Addressed or
Pile 2-5 has severe decay on. Resistance drill was used and measured at 41% remaining area. Coupled with three spliced piles with CS2 undermining (scour).	Resolved
	-
	-
	-
Discussed at posting review meeting with load rating consultant. Decision was made to repair the piles.	
Part VIII – Post Repair/Action Update (Resolved Critical Findings) Certify work has been performed (either repair or action), bridge has been re-inspected (if needed), restriction lifted.	
☒ Maintenance Inspection Performed by BITL, include date below ☐ Load Rating Request Form (Attachment 3.1) Completed ☐ Attachment 5.24 MUST BE Completed, if bridge was closed ☐ Lane/Shoulder Restriction Removed	
Critical Finding Pile 2-5 Repaired along with two additional piles, Pile 3-3 and Pile 4-4.	

Configuration

- Event Type – By Date
- Link to Inspection Events
- Page Access by Role
- Editable Parameters
- Level 1 and 2 Review
- Level 2 Optional



Automated Reporting - Creation

Critical Finding Status

Status

Resolved

Current Priority Level

Structural in Load Rating (Non-Closure)

Sent to FHWA

False

 Reopen

Per your agency's policy, you must notify the FHWA within 1 days of recording a critical finding

Critical Finding Data

Reporter

Jordan, Ryan

Reporter Phone

(803) 697-0687

Reporter Email

JordanRT@scdot.gov

Date/Time of Finding

7/7/2026

Discovered During Inspection

07/07/2026 (ESYF) - Routine

Category

Timber Piles

Initial Priority

Structural in Load Rating (Non-Closure)

Initial Action Taken

Other Action

Bridge Owner Contacted Date/Time

07/07/2026 03:18 PM

Contacted Name

Cody McAbee

Contacted Phone

803-209-3393

Description

During the routine inspection we found one pile with severe decay on P2-5. Resistance drill was used and measured at 41% remaining area. Coupled with three spliced piles with CS2 undermining (scour) we decided to report this critical finding for a structural review. Contacted Cody McAbee to be made aware of defective pile. Further action to follow from preliminary results.

Automated Reporting – Level 1 or 2 Review

Critical Findings Pending Level 1 Review

P

production@promiles.com

☺

↩ Reply

↩

Reply all

➡

Forward

📎

🗺

⋮

To: McAbee, Cody; Alewine, Joe, W.; Barnes, Ted; Jordan, Ryan, T.; Scott, Kenneth, B.; Makuchan, Brandon; Quillin, Philip; Vinayagam, Thulasi; Butler, Petrina; +5 others

Cc: Scott, Kenneth, B.; Daniel.Murdzia@hdrinc.com; AlewineJA@scdot.gov

Tues 07/07/2026 3:31 PM

*** This is an EXTERNAL email. Please do not click on a link or open any attachments unless you are confident it is from a trusted source. ***

The following Critical Findings are pending level 1 review:

Created Date	Priority	Critical Finding ID	Agency Bridge ID	Location (B.L.11)	County Code (B.L.02)	Highway Agency District (B.L.04)	Category	Description	Initial Action Taken
7/7/2026	Structural in Load Rating	0573-07072026-1531	05793	Piedmont	(29) Lancaster	District 4	Timber piles	During the routine inspection we found one pile...	Other Action

Click here to review in BrM

✉

Send to FHWA

⊘

Not a Critical Finding

AASHTOWare Bridge Management User Group Meeting 2026

Automated Reporting - FHWA

Newly Created Critical Finding for Bridge 05793



production@promiles.com



Reply



Reply all



Forward



To: Tucker, Rodrick, J.; Smith, Emily, D.; Gerken, Blake - FHWA; Woods, Emily, K.; Futch, Sean, A.; Tues 7/7/2026 at 4:30 PM

Cc: Scott, Kenneth, B.; Daniel.Murdzia@hdrinc.com; AlewineJA@scdot.gov



CriticalFindingReport-05793... ▾

84 KB

Please see the attached report for the newly created critical finding

Automated Reporting - FHWA



Critical Finding Report

Status: Resolved

Asset ID (SC.ID.01): 05793 District: District 4
Structure Number (SC.ID.03): 2970001200200 County: (29) Lancaster
Structure Name (B.ID.02): Facility Carried: S-29-12
Bridge Nickname: S-29-12 OVER BEAR CREEK Feature Intersected: BEAR CREEK
Owner (B.CL.01): S01 SCDOT

Critical Finding

Comment to FHWA

Comment: Critical finding under structural view. Sending CF to FHWA.

Status and Priority

Status: Resolved

Current Priority: Structural in Load Rating (Non-Closure)

Critical Finding Data

Reporter: Jordan, Ryan Reporter Phone: (803) 697-0687 Reporter Email: JordanRT@scdot.gov

Date of Finding: 07/07/2026 Time of Finding: 05:30 PM Discovered During 07/07/2026 (ESYF)
Inspection Date:

Category: Timber Piles Initial Priority: Structural in Load Rating Initial Action Other Action
Taken:

Bridge Owner Contact

Date/Time: 7/7/26 7:18 pm Contacted Name: Cody McAbee Contacted Phone: 803-209-3393

Critical Finding Description

During the routine inspection we found one pile with severe decay on P2-5. Resistance drill was used and measured at 41% remaining area. Coupled with three spliced piles with CS2 undermining (scour) we decided to report this critical finding for a structural review. Contacted Cody McAbee to be made aware of defective pile. Further action to follow from preliminary results.



Photo 28 (7/15/2026 8:31:12PM):
BT2P5 Critical Finding pile.

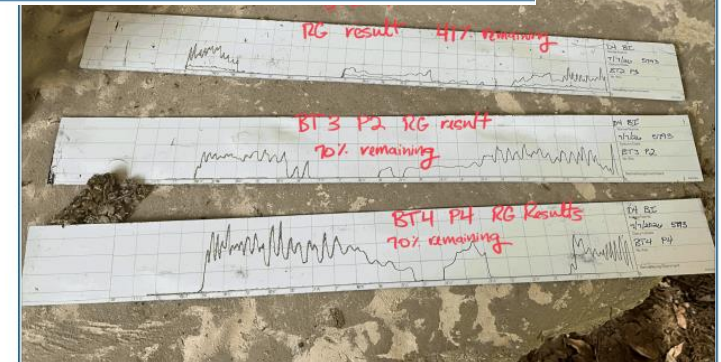


Photo 18 (7/15/2026 8:31:11PM):
RESISTOGRAPH READINGS FOR DECAYED PILES

Follow Up Actions - Log

Critical Finding Log

Q Search

Action Date/Time ↑	User	Action	Due Date	Comment	
07/07/2026 03:46 PM	Jordan, Ryan	Saved New Critical Finding			
07/08/2026 02:59 PM	Jordan, Ryan	Completed Level 1 Review		Critical finding under structural view. Sending CF to FHWA.	
07/08/2026 02:59 PM	Jordan, Ryan	Sent to FHWA		BrM sent auto-generated email to the following FHWA contacts: SmithE1@scdot.gov, Blake.Gerken@dot.go ...	
07/08/2026 02:59 PM	Jordan, Ryan	Added Comment		Critical finding under structural view. Sending CF to FHWA.	
07/20/2026 07:47 AM	Jordan, Ryan	Linked Event		Linked to Bridge Inspection '07/07/2026 ESYF'	🔗
07/20/2026 07:47 AM	Jordan, Ryan	Added Comment		Linking event critical finding was documented.	
07/20/2026 07:47 AM	Jordan, Ryan	Linked Event		Linked to Bridge Inspection '07/16/2026 WZAU'	🔗
07/20/2026 07:47 AM	Jordan, Ryan	Added Comment		Linking event where critical finding piles were repaired.	
07/20/2026 07:48 AM	Jordan, Ryan	Marked Critical Finding as Resolved		All critical finding piles have been repaired, critical finding resolved.	

<< < 1 > >> 1 - 9 of 9 15 ▾

Follow Up Actions – Other Features

Committee Review Data & Intermediate Actions

Critical Finding Committee Review Data

Review Required *

Committee Review Date

Estimated Repair Date

mm/dd/yyyy

mm/dd/yyyy

Comment

User

Date 1%

No records to display.

<< < > >> 0 - 0 of 0 15 ▾

Intermediate Actions

Filter

Source

Open ▾

All ▾

Q Search

Name 1% Action 1% Date Recommended 1% Target Year 1% Estimated Cost 1% Status 1% Work Assignment 1% Priority 1% Structure Unit 1% Date Completed 1% Source 1% Description 1%

No records to display.

<< < > >> 0 - 0 of 0 15 ▾

Outstanding Tasks & Associated Projects

Critical Finding Outstanding Tasks

Event Type 1%

Assignee 1%

Due Date 1%

Days Remaining

Comment

No records to display.

Critical Finding Associated Projects

Project

Actions

Projected End Date 1%

Days Remaining

No records to display.

Follow Up Actions – Status Updates

Mark as Addressed or Resolved

Critical Finding Status

Status	Current Priority Level	Sent to FHWA	Mark as Addressed Mark as Resolved
In Progress	Non-Structural/Safety (Non-Closure)	True	

Per your agency's policy, you must notify the FHWA within 1 days of recording a critical finding

Reopen Critical Finding

Critical Finding Status

Status	Current Priority Level	Sent to FHWA	Reopen
Resolved	Bridge Closure	True	

Per your agency's policy, you must notify the FHWA within 1 days of recording a critical finding

Follow Up Actions – FHWA Reporting

Resolved Email

Newly Resolved Critical Finding for Bridge 05793



production@promiles.com

😊 ↩ Reply ↩️ Reply all ➡ Forward | 📎 🗑️ | ...

To: Tucker, Rodrick, J.; Smith, Emily, D.; Gerken, Blake - FHWA; Woods, Emily, Futch, Sean, A.; +2 others

Mon 7/20/2026 7:48 AM

Cc: Scott, Kenneth, B.; Daniel.Murdzia@hdrinc.com; AlewineJA@scdot.gov

*** This is an EXTERNAL email. Please do not click on a link or open any attachments unless you are confident it is from a trusted source. ***

Please see the attached report for the newly resolved critical finding

The generated report is too large to attach and is available in BrM.

Follow Up Actions – FHWA Reporting

Critical Finding Log (Actions Taken)				
Action Date/Time	User	Action	Due Date	Comments
7/7/26 7:46 pm	Jordan, Ryan	Saved New Critical Finding		
7/8/26 6:59 pm	Jordan, Ryan	Completed Level 1 Review		Critical finding under structural view. Sending CF to FHWA.
7/8/26 6:59 pm	Jordan, Ryan	Sent to FHWA		BrM sent auto-generated email to the following FHWA contacts: SmithE1@scdot.gov, Blake.Gerken@dot.gov, Daniel.Murdzia@hdrinc.com, TuckerRJ@scdot.gov, BickleyEJ@scdot.gov, LacyCR@scdot.gov, WoodsEK@scdot.gov, FutchSA@scdot.gov
7/8/26 6:59 pm	Jordan, Ryan	Added Comment		Critical finding under structural view. Sending CF to FHWA.
7/20/26 11:47 am	Jordan, Ryan	Linked Event		Linked to Bridge Inspection '07/07/2026 ESYF'
7/20/26 11:47 am	Jordan, Ryan	Added Comment		Linking event critical finding was documented.
7/20/26 11:47 am	Jordan, Ryan	Linked Event		Linked to Bridge Inspection '07/16/2026 WZAU'
7/20/26 11:47 am	Jordan, Ryan	Added Comment		Linking event where critical finding piles were repaired.
7/20/26 11:48 am	Jordan, Ryan	Marked Critical Finding as Resolved		All critical finding piles have been repaired, critical finding resolved.



Data Overview - Bridge

- Search
- Export to Excel
- Sort Columns
- Add New, Edit, Delete

Critical Finding Page

Bridge

05793



Search

Export

Date of Finding ↑↓

ID ↑↓

Category ↑↓

Description ↑↓

3/5/2024

05793-03052024

Timber Piles

Came to check on raft re

7/9/2025

05793-07092025

Timber Piles

During routine inspectio

7/7/2026

05793-07072026-1546

Timber Piles

During the routine inspe

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1 - 3 of 3

15



Data Overview - Statewide

- Filter Dropdown
- Search
- Export to Excel
- Sort Columns
- View Critical Finding
- Control Bridge List

Critical Findings Dashboard

Filter

Unresolved ▾



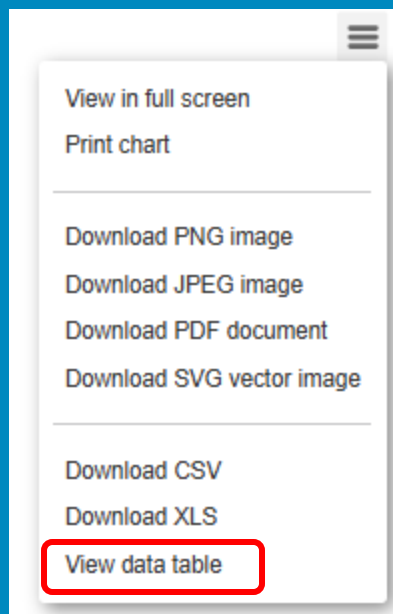
Search

Export

Days Until Next Action Due ↑↓	Priority ↑↓	Status ↑↓	Bridge ID ↑↓	County ↑↓	District ↑↓	Route ↑↓
	Bridge Closure	In Progress	06719	(29) Lancaster	District 4	S-29-34
	Non-Structural/Safety (Non-Closure)	In Progress	00632	(29) Lancaster	District 4	S-29-94
	Bridge Closure	Addressed	04808	(25) Hampton	District 7	S-25-380
	Shoulder Closure	Addressed	05754	(25) Hampton	District 7	S-25-13
	Shoulder Closure	In Progress	04759	(17) Dillon	District 5	S-17-423
	Shoulder Closure	In Progress	06084	(17) Dillon	District 5	S-17-41
	Shoulder Closure	In Progress	04675	(45) Williamsburg	District 5	S-45-315

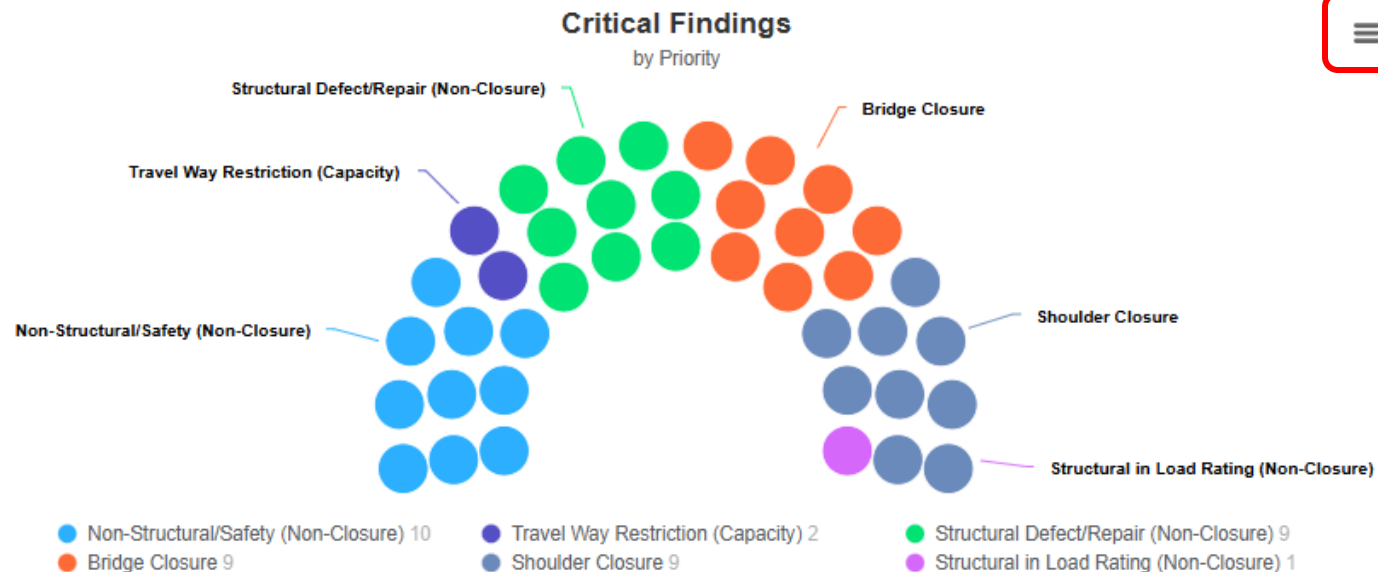
Data Overview - Statewide

- Show By Dropdown
- Additional Options



Show by

Priority ▼



Category	Critical Findings		
	name	y	label
Non-Structural/Safety (Non-Closure)	Non-Structural/Safety (Non-Closure)	10	Non-Structural/Safety (Non-Closure)
Travel Way Restriction (Capacity)	Travel Way Restriction (Capacity)	2	Travel Way Restriction (Capacity)
Structural Defect/Repair (Non-Closure)	Structural Defect/Repair (Non-Closure)	9	Structural Defect/Repair (Non-Closure)
Bridge Closure	Bridge Closure	9	Bridge Closure
Shoulder Closure	Shoulder Closure	9	Shoulder Closure
Structural in Load Rating (Non-Closure)	Structural in Load Rating (Non-Closure)	1	Structural in Load Rating (Non-Closure)

SCDOT Process - Dashboard

- Statewide Table
- District Table

Statewide (Addressed and In Progress)		
Summary Table		
Total Critical Findings	40	
Addressed	27	
In-Progress	13	
Pending Review (Review within 1 Day)	0	
Critical Findings by Priority		
Bridge Closure	9	
Structural Defect/Repair (Non-Closure)	9	
Structural in Load Rating (Non-Closure)	1	
Non-Structural/Safety (Non-Closure)	10	
Shoulder Closure	9	
Travel Way Restriction (Capacity)	2	
Travel Way Restriction (Not Structural Capacity)	0	
Critical Findings by Category		
Missing/Defect with a Posting Sign	7	
Missing/Defect with a Low Vertical Clearance Sign	0	
Timber Piles	16	
Flood/Storm/Earthquake	0	
Scour/Erosion	5	
Collision (Bridge Hit/Impact)	2	
Hole in Deck/Overhead Hazard	1	
Fire	0	
NSTM/FPD Deterioration	0	
Other Deterioration	8	
Bridge Rail	1	
Results from Load Rating (by LR Only)	0	
Unknown/Other	0	

SCDOT Process - Dashboard

- Export
- Filter/Sort
- Map

Critical Finding List

[Export to XLS](#)[Export to KML](#)[Map](#)

☐	ASSET ID ↑↓	STRUCTURE NUMBER ↑↓	DISTRICT ↑↓	COUNTY ↑↓	OWNER ↑↓	FACILITY CARRIED ↑↓
☐	04281	1170032000100	District 4	(11) Cherokee	S01 SCDOT	S-11-320
☐	03519	4290034600100	District 3	(42) Spartanburg	L01 COUNTY	C-42-346
☐	06706	2670093500200	District 5	(26) Horry	S01 SCDOT	S-26-935
☐	04920	0270113900100	District 7	(02) Aiken	S01 SCDOT	S-2-1139
☐	04808	2570038000100	District 7	(25) Hampton	S01 SCDOT	S-25-380
☐	06528	2970037600100	District 4	(29) Lancaster	S01 SCDOT	S-29-376
☐	06719	2970003400100	District 4	(29) Lancaster	S01 SCDOT	S-29-34
☐	03603	0870036100100	District 6	(08) Berkeley	S01 SCDOT	S-8-361
☐	01998	0570007500100	District 7	(05) Bamberg	S01 SCDOT	S-5-75

SCDOT Process - FHWA Monthly Reports

- Scheduled Task – 1st of the month

Monthly CF Report for FHWA-In Progress-Addressed Report on 8/1/2026 6:22:44 AM UTC



production@promiles.com

To: Bickley, Emily, J.



Reply



Reply all



Forward



Sat 8/1/2026 2:22 AM



Report-20260801062010368....
61 KB



*** This is an EXTERNAL email. Please do not click on a link or open any attachments unless you are confident it is from a trusted source. ***

The Monthly CF Report for FHWA-In Progress-Addressed report has been generated and is attached.

SCDOT Process - FHWA Monthly Reports

- Used for Data Entry into FHWA Database

STATE CODE	ASSET ID	NBI STRUCTURE #	DISTRICT	COUNTY	OWNER	FACILITY CARRIED	FEATURE INTERSECTED	SCDOT CRITICAL FINDING NUMBER	FINDING DATE	ADDRESSED DUE DATE	FHWA NOTIFICATION TYPE
45 South Carolir	00521	000000000000521	District 5	(16) Darlington	S01 SCDOT	US 15	BIG SEED TICK CREEK	00521-04102024-1221	4/22/2024	5/22/2024	E - Other [CF Not in Last Mont
45 South Carolir	05779	0000000000005779	District 1	(28) Kershaw	S01 SCDOT	I-20 EB	WATEREE RIVER	05779-07262024-1727	7/26/2024	8/25/2024	E - Other [CF Not in Last Mont
45 South Carolir	00388	0000000000000388	District 7	(09) Calhoun	S01 SCDOT	S-9-24	BATES MILL CREEK	00388-02252025-1118	2/25/2025	3/27/2025	E - Other [CF Not in Last Mont
45 South Carolir	06212	0000000000006212	District 7	(02) Aiken	S01 SCDOT	S-2-151	GULLY CREEK	06212-04022025-325	4/3/2025	5/3/2025	E - Other [CF Not in Last Mont
45 South Carolir	03080	0000000000003080	District 1	(40) Richland	S01 SCDOT	I-126 WB	RR CSXT & RR NS	03080-09152025-1723	9/15/2025	10/15/2025	E - Other [CF Not in Last Mont
45 South Carolir	04690	0000000000004690	District 7	(02) Aiken	S01 SCDOT	I-20 EB	N AUGUSTA GREENEWAY	04690-01072026-1149	1/8/2026	2/7/2026	E - Other [CF Not in Last Mont
45 South Carolir	01652	0000000000001652	District 3	(42) Spartanbur	S01 SCDOT	US 221	CSXT RR	01652-01222026-335	1/22/2026	2/21/2026	E - Other [CF Not in Last Mont
45 South Carolir	04063	0000000000004063	District 6	(10) Charleston	S01 SCDOT	S-10-195/EAGLE DR	I-26	04063-02262026-323	2/26/2026	3/28/2026	E - Other [CF Not in Last Mont
45 South Carolir	04920	0000000000004920	District 7	(02) Aiken	S01 SCDOT	S-2-1139	UNNAMED STREAM	04920-02262026-216	2/26/2026	3/28/2026	E - Other [CF Not in Last Mont
45 South Carolir	05371	0000000000005371	District 3	(39) Pickens	L01 County	L-39-517	TRIB TO HARTWELL	05371-04272026-1527	4/27/2026	5/27/2026	E - Other [CF Not in Last Mont
45 South Carolir	08786	0000000000008786	District 3	(42) Spartanbur	S01 SCDOT	SC 129	I-85	08786-04302026-145	4/30/2026	5/30/2026	E - Other [CF Not in Last Mont
45 South Carolir	07273	0000000000007273	District 1	(32) Lexinton	S01 SCDOT	S-32-292	ROCK CREEK	07273-05122026-164	5/12/2026	6/11/2026	E - Other [CF Not in Last Mont



Overview

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Questions?