

# ROADWAY BULLETIN

## NCDOT CONSTRUCTION UNIT



Volume 4 / Issue 4

Winter 2024

### 2024 CHANGES TO PORTABLE CONCRETE BARRIER

Section 1170 of the 2024 Standard Drawings now shows MASH crash tested and PCB (F Shaped K-Wall). An easy way to tell if your barrier is the MASH approved K-Wall is it will include 3 blockouts for anchorage.

#### K-WALL WITH 3 BLOCKOUTS (ON BOTH SIDES)



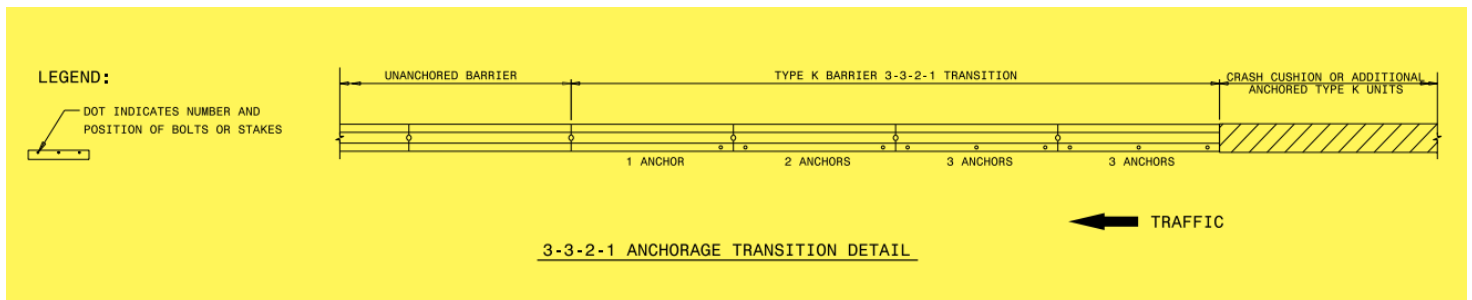
It is important to note, **when it is an unanchored run of PCB**, the new K-Wall barrier requires it's last 4 sections to follow an anchoring sequence before terminating at a temporary crash cushion. This is detailed in Standard 1170.01 Sheet 5, as shown below. This anchorage is incidental to the barrier and will be noted in a Special Provision included with contracts with PCB.

PCB that already was required to be anchored should be fully anchored as required by the plans and standards and will be paid as anchored barrier.

#### NOTE IN PORTABLE CONCRETE BARRIER SP (12/17/24)

As shown in the *Roadway Standard Drawings*, No. 1170.01, anchorage transition sections between *Portable Concrete Barrier* and *Temporary Crash Cushions* as found in Section 1160 will be measured and paid as *Portable Concrete Barrier*. No additional payment will be made for equipment, materials or labor to meet the anchorage transition requirements.

#### DETAIL SHOWN IN STANDARD 1170.01 SHEET 5



In This Issue:

1. 2024 Changes to PCB
2. Note to REs: Prime Coat on Temporary Pavement
3. Updated M&T 903

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Email:

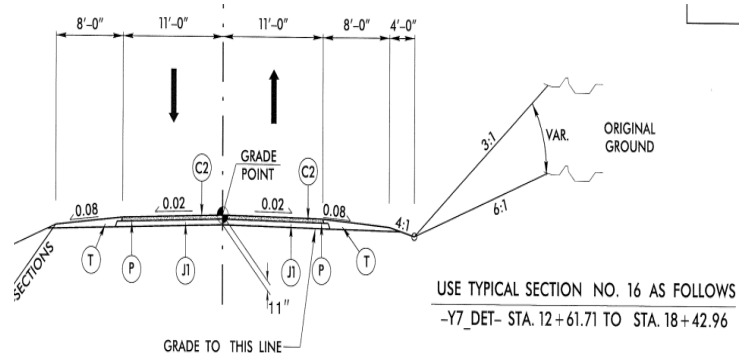
[Brian Skeens and Liam Shannon](#)

## NOTE TO RESIDENT ENGINEERS: PRIME COAT ON TEMPORARY PAVEMENT

Prime coat is used as part of the NCDOT design for pavement structures with aggregate base course and a surface course. It's main purpose is to separate moisture between the stone and asphalt layer. However, it can be a challenging process to properly place and cure. It can take over a day after placement to break, and a tack truck has to be changed out and loaded with the prime material. If not given enough time to break, it can be come off on trucks and equipment placing asphalt and end up all over nearby roads and vehicles (trust me).

Due to these challenges, and the observed lack of need for prime coat on short term temporary pavement structures, the NCDOT is working to inform our design engineers that temporary pavement in place less than 6 months does not need it.

If you have plans where prime coat is called for that meets these conditions, please contact your Division Construction Engineer and your Area Construction Engineer to follow through on the recommendation to delete it from the pavement structure.



## UPDATED M&T 903 FORM COMING IN 2025!

Be on the lookout for an updated 903 form coming to your projects as soon as January. The form reorders how information is presented and should make it easier for inspectors to determine if water can still be added and how much. More information and details are available through the Materials and Tests Unit. A copy of the memo can be found [here](#).

M&T Form 903

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**  
Batch ticket for Central and Transit Ready-Mix Concrete. This document is to be completed individually and shall accompany each load of concrete delivered to projects that receive State and/or Federal funding.

**TO BE COMPLETED BY BATCH TECHNICIAN**

Ticket No. _____		Date: _____		Project No. _____	
P&M Company _____		Truck Load _____ (yd <sup>3</sup> )		Batch No. /M _____	
Truck No. _____		Accumulated Yards _____ (yd <sup>3</sup> )			
<b>Mix Design Quantities (per 1 yd<sup>3</sup>)</b>					
Cement _____ (Bls.)	Fluxion _____ (Bls.)	Sand _____ (Bls.)	Water _____ (gals.)	Water Reducer _____ (gals.)	Other Admix. _____
Stone 1 _____ (Bls.)	Stone 2 _____ (Bls.)	Water _____ (gals.)	Mix Water per yd <sup>3</sup> _____ (gals.)	Monitor Contents _____	
<b>Batched Quantities (per Load)</b>					
Cement _____ (Bls.)	Tolerance _____ (%)	Fluxion _____ (Bls.)	Tolerance _____ (%)	Water _____ (gals.)	Tolerance _____ (%)
Free Moisture P.A. _____ (%)	Sand _____ (Bls.)	Tolerance _____ (%)	Water in P.A. Moist. _____ (gals.)	Water in C.A. Moist. _____ (gals.)	Water in C.A. Moist. _____ (gals.)
Free Moisture C.A. 1 _____ (%)	Stone 1 _____ (Bls.)	Tolerance _____ (%)	Water in C.A. Moist. _____ (gals.)	Water in C.A. Moist. _____ (gals.)	Water in C.A. Moist. _____ (gals.)
Free Moisture C.A. 2 _____ (%)	Stone 2 _____ (Bls.)	Tolerance _____ (%)	Water in C.A. Moist. _____ (gals.)	Water in C.A. Moist. _____ (gals.)	Water in C.A. Moist. _____ (gals.)
Time batching completed _____	Water Wt. _____ (gals.)	Size (if any) _____ (Bls.)	Total Water _____ (gals.)	Water may be added _____ (gals./yd <sup>3</sup> )	Other Admix. _____
Number of revolutions at plant _____	Air agent or /1000 _____ (continuous)	Water Reducer or /1000 _____ (continuous)	Water Reducer or /1000 _____ (continuous)	Water Reducer or /1000 _____ (continuous)	Water Reducer or /1000 _____ (continuous)
Comments: _____					

By signing this, I certify that all the above information is correct and has been verified with batching documentation.

Certified Batch Technician: \_\_\_\_\_ Cert. No.: \_\_\_\_\_ Exp. \_\_\_\_\_

**TO BE COMPLETED BY ON-SITE INSPECTOR**

Structure Member _____	Location & Station _____	Placement Method (i.e. Truck, Pump, Conveyor, etc.) _____	Additional Water _____ (gals.)	Additional Air Agent _____ (oz)	No. revolutions at job site _____
Free discharge height _____	Time of discharge completion _____	Curing time used _____	Yes / No _____	Yes / No _____	Yes / No _____
Air temperature _____	Concrete Temp. _____	Slump _____	Pressure air test _____		
Air indicator steam reading _____					
Sample Number on Cylinder set made from this load: _____					
Comments: _____					

By signing this, I certify that all tests indicated by me have been completed and that all the above information is correct.

Certified Field Technician: \_\_\_\_\_ Cert. No.: \_\_\_\_\_ Exp. \_\_\_\_\_

<b>State Construction Engineer</b>					
<b>Troy Brooks</b>					
<b>Assistant State Construction Engineer Eastern Region</b>		<b>Assistant State Construction Engineer Western Region</b>		<b>State Bridge Construction Engineer</b>	
<b>Liam Shannon</b>		<b>Brian Skeens</b>		<b>Aaron Earwood</b>	
<b>Division</b>	<b>Area Construction Engineer</b>	<b>Division</b>	<b>Area Construction Engineer</b>	<b>RBCE -Eastern</b>	<b>RBCE - Western</b>
1 & 2	Vacant	7 & 9	Marcus Kiser	Randy Hall	Aaron Griffith
3 & 4	David Candela	10	Christopher Fine	Patrick Cheeves	Tyler Rogers
5	Meredith Hayes	11 & 12	Mark Biggerstaff		
6 & 8	John Partin	13 & 14	Aaron Powell		