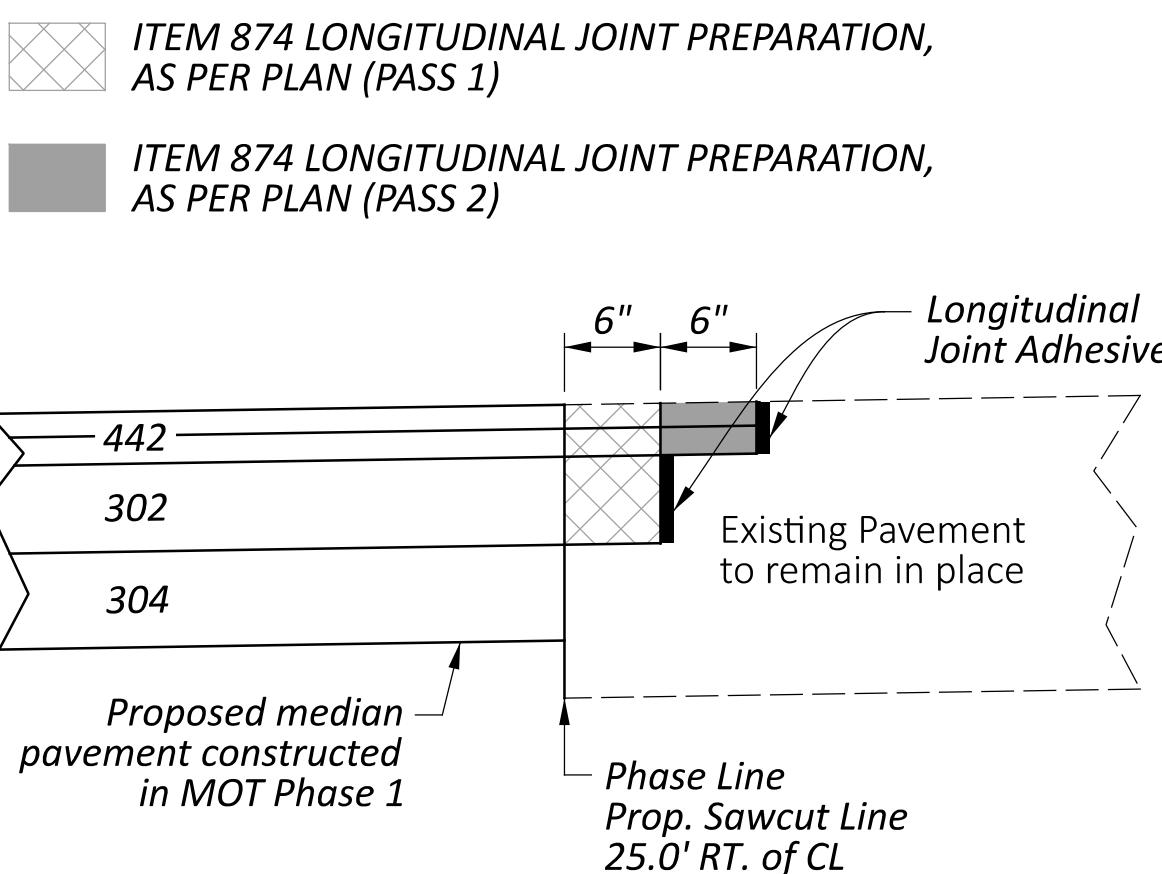


**ITEM 874 LONGITUDINAL JOINT PREPARATION, AS PER PLAN (PASS 1)**  
**ITEM 874 LONGITUDINAL JOINT PREPARATION, AS PER PLAN (PASS 2)**

This work shall consist of creating lapped pavement layers at the phase construction joint as per the "LONGITUDINAL JOINT PREPARATION Method 1" detail on SCD BP-3.1, except as modified below:



**PHASE 1 LAPPING DETAILS (E.B. / W.B. RESURFACING SECTIONS)**

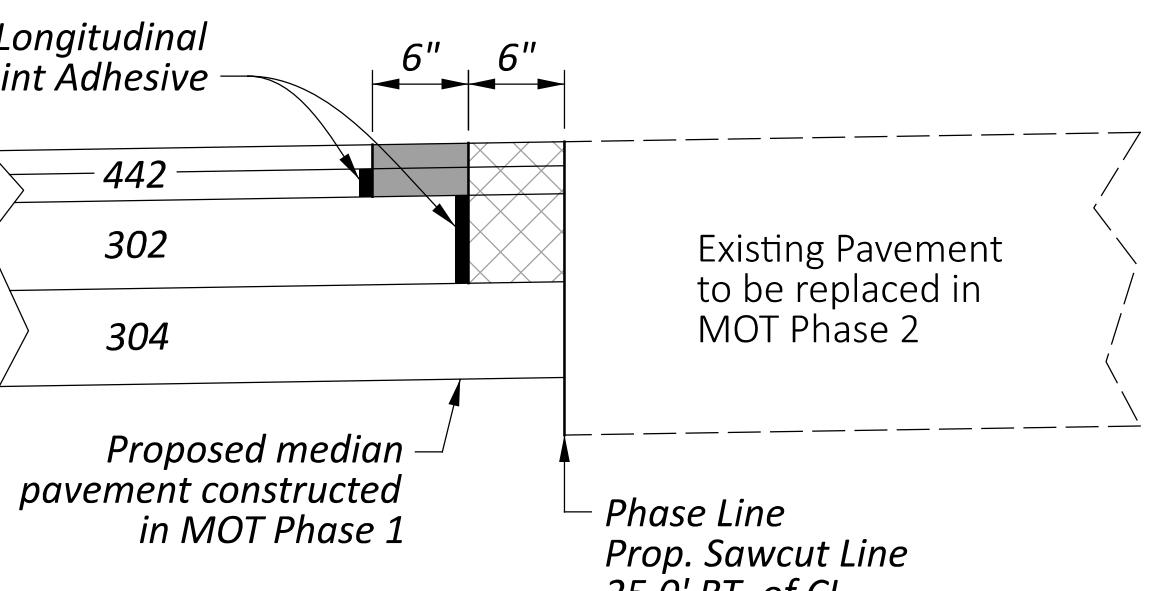
**DETAIL APPLIES:**

$$\begin{aligned} \text{STA. } 639+65.00 - 653+75.00 &= 1410.00 \text{ FT.} \\ \text{STA. } 803+36.00 - 831+70.00 &= 2834.00 \text{ FT.} \end{aligned}$$

**Phase 1 Sequence:**

1. Sawcut and remove existing inside shoulder pavement.
2. Construct median subgrade to 304 layer.
3. Trim 6" into existing pavement (874 Pass 1 - max. depth of 8.75").
4. Construct 302 layer.
5. Trim 6" into existing pavement. (874 Pass 2 - max depth of 3.25").
6. Place 442 layers.

(Note: Detail shown at E.B. sawcut line, but also applies to W.B. sawcut.)



**PHASE 2/3 LAPPING DETAILS (E.B. / W.B. REPLACEMENT SECTION)**

**DETAIL APPLIES:**

$$\text{E.B.: STA. } 653+75.00 - 747+61.78 = 9386.78 \text{ FT.}$$

$$\text{STA. } 750+51.79 - 803+36.00 = 5284.21 \text{ FT.}$$

$$\text{TOTAL } = 14,670.99$$

$$\text{W.B.: STA. } 653+75.00 - 747+96.78 = 9421.78 \text{ FT.}$$

$$\text{STA. } 750+81.79 - 803+36.00 = 5254.21 \text{ FT.}$$

$$\text{TOTAL } = 14,675.99 \text{ FT.}$$

**Phase 2 Sequence:**

1. Remove existing E.B. pavement.
2. Construct E.B. subgrade to 304 layer.
3. Trim 6" into Phase 1 pavement (874 Pass 1 - 8.75" depth).
4. Construct E.B. 302 layer.
5. Trim 6" into Phase 1 pavement. (874 Pass 2 - 3.25" depth).
6. Place 442 layers.

(Note: Detail shown at E.B. sawcut line in MOT Phase 2, but also applies to W.B. sawcut in MOT Phase 3.)

**ITEM 206 CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP**

The following quantities have been provided to be used as per Item 206 at the direction of the Project Engineer. The entire project shall utilize cement stabilization unless detailed otherwise.

ITEM 204 PROOF ROLLING	77 HR
ITEM 206 CEMENT	5915 TON
ITEM 206 CURING COAT	228,550 SY
ITEM 206 MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	LS

**Calculation:**

$$\begin{aligned} \text{Proof Rolling@ 1 HR per 3000 SY of stabilized subgrade} \\ \text{Plan Split 01/NHS: } 104,914 \text{ SY} \div 3000 = 35 \text{ HR} \\ \text{Plan Split 02/NHS: } 123,636 \text{ SY} \div 3000 = 42 \text{ HR} \\ \text{Total} = 35 + 42 = 77 \text{ HR} \end{aligned}$$

**Cement (from Table 600-3, Geotechnical Design Manual)**

$$\begin{aligned} 0.75 \times 12 \text{ inches} \times 115 \times 0.05 &= 51.75 \text{ lbs per SY} \\ \text{Plan Split 01/NHS: } (51.75 \text{ lb/SY} \times 104,914 \text{ SY}) \div 2000 \text{ lb/ton} &= 2715 \text{ ton} \\ \text{Plan Split 02/NHS: } (51.75 \text{ lb/SY} \times 123,636 \text{ SY}) \div 2000 \text{ lb/ton} &= 3200 \text{ ton} \\ \text{Total} = 2715 + 3200 &= 5915 \text{ ton} \end{aligned}$$

**Curing Coat**

$$\begin{aligned} \text{Plan Split 01/NHS: } 104,914 \text{ SY (from sheet P.447)} \\ \text{Plan Split 02/NHS: } 123,636 \text{ SY (from sheet P.447)} \\ \text{Total} = 104,914 + 123,636 &= 228,550 \text{ SY} \end{aligned}$$

**Ditch Undercut Quantities**

The following estimated quantities are provided to accomplish ditch undercuts in the existing median area as shown on the cross sections and as discussed in Section 501 of the Geotechnical Design Manual. This undercut is assumed as 2.0' deep and 16.0' wide for estimating purposes. Actual ditch undercut shall be as directed by the Engineer.

**Calculation:**

$$\begin{aligned} \text{Sta. } 639+65 \text{ to Sta. } 647+75 &= 810 \text{ ft} \\ \text{Sta. } 648+25 \text{ to Sta. } 669+40 &= 2115 \text{ ft} \\ \text{Sta. } 673+75 \text{ to Sta. } 694+50 &= 2075 \text{ ft} \\ \text{Sta. } 697+65 \text{ to Sta. } 705+75 &= 810 \text{ ft} \\ \text{Sta. } 706+75 \text{ to Sta. } 726+25 &= 1950 \text{ ft} \\ \text{Sta. } 726+75 \text{ to Sta. } 746+25 &= 1950 \text{ ft} \\ \text{Sta. } 752+15 \text{ to Sta. } 763+75 &= 1160 \text{ ft} \\ \text{Sta. } 764+50 \text{ to Sta. } 800+00 &= 3550 \text{ ft} \\ \text{Sta. } 800+50 \text{ to Sta. } 810+00 &= 950 \text{ ft} \\ \text{Sta. } 811+00 \text{ to Sta. } 812+65 &= 165 \text{ ft} \\ \text{Sta. } 813+05 \text{ to Sta. } 820+60 &= 755 \text{ ft} \\ \text{Sta. } 821+10 \text{ to Sta. } 831+00 &= 990 \text{ ft} \\ \text{Total: } 17,280 \text{ ft} \\ (\text{Deduction: } 26 \text{ existing median inlets} \times 25' = 650 \text{ ft}) \\ \text{Total: } 16,630 \text{ ft} \end{aligned}$$

$$(16,630 \text{ ft} \times 16 \text{ ft wide} \times 2 \text{ ft thick}) \div 27 = 19,710 \text{ CY}$$

The following quantities have been carried to the General Summary to accomplish the work described above:

ITEM 203 EXCAVATION	19,710 CY (Plan Split 01/NHS)
ITEM 203 EMBANKMENT	19,710 CY (Plan Split 01/NHS)

**Post Construction Storm Water Treatment**

This plan utilizes structural best management practices (BMP's) for post construction storm water treatment.

**Undercut Contingency Quantities**

In the event any area fails the proof rolling after chemical stabilization, the following quantities have been included in the general summary and may be used for stabilizing the failed areas as directed by the Project Engineer:

ITEM 204 EXCAVATION OF SUBGRADE	3500 CY
ITEM 204 GRANULAR MATERIAL, TYPE B	3500 CY
ITEM 204 GEOTEXTILE FABRIC	5000 SY
ITEM 204 GEORGRID	5000 SY

The above quantities may also be used for stabilizing failed areas in the temporary pavement locations required for the maintenance of traffic.

**Endangered Bat Habitat Removal**

This project is located within the known habitat ranges of the federally listed and protected Indiana bat, and Northern Long-Eared Bat. No trees shall be removed under this project from April 1 through September 30. All necessary tree removal shall occur from October 1 through March 31. This requirement is necessary to avoid and minimize impacts to these species as required by the Endangered Species Act (ESA). For the purposes of this note, a tree is defined as: alive, dying, or dead woody plant, with a trunk 3 inches or greater in diameter at a height of 4.5 feet above the ground surface, and with a minimum height of 13 feet.

**Permits - Waterway Permits**

Do not place any temporary or permanent fill within the jurisdictional boundaries of all streams, wetlands, and jurisdictional ditches during construction of this project, including scaffolding or bacing. Do not place any equipment within the jurisdictional boundary of any waterway. If debris enters the waterway during construction, remove the debris immediately using equipment staged outside the jurisdictional boundary.

**ITEM 622 CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN**

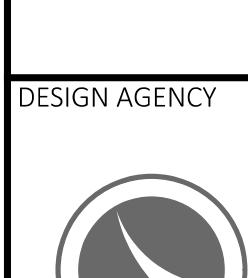
**ITEM 622 CONCRETE BARRIER END SECTION, TYPE C1, AS PER PLAN**

**ITEM 622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN**

**ITEM 611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1, AS PER PLAN**

In addition to the requirements of C&MS 622:

1. When placing barrier wall concrete assure the ambient air temperature is 85 °F (30 °C) or less and not predicted to go above 85 °F (30 °C) during the concrete placement; and evaporation rates, determined according to Figure 1 in ACI 308-81 (see CMS 511.07), do not exceed 0.1 lbs/ft²/hour (0.5 kg/m²/hour).
2. Apply two layers of Method B Membrane Cure according to 511.13.B. The resulting application should look like a sheet of white paper.
3. Remove and replace any unreinforced barrier section where more than two cracks that are greater in length than half the height of the barrier wall are present within one twenty-foot section. Remove and replace any reinforced end anchorage or end section with more than one crack present within the end anchorage or end section. Removal shall consist of saw cutting the existing barrier at the contraction joints, removal of the concrete, and dowel the replacement section into the abutting sections per the construction joint detail from the corresponding standard construction drawing. For any section with a singular through crack with displacement or a horizontal protrusion/reveal greater than 1 inch of displacement, saw cut the crack to a depth of 1 inch and clean it out before sealing with a polyurethane or polymeric material conforming to ASTM C920, Type S. Do not repair cracks via epoxy injection in unreinforced barrier sections. Reinforced sections with one crack that does not have greater than 1 inch of displacement shall be repaired and sealed by epoxy injection per 512.07.
4. Sections of barrier wall that contain an ITS junction box (see P.764) shall be hand-poured per ODOT SS 809.15.B. The length of the hand-poured section shall be a minimum of 6 feet with the junction box centered in the section. Construction joints will be required on each end of the hand-poured section per SCD RM-4.3.



DESIGNER  
BRH

REVIEWER  
CMY 09/05/25

PROJECT ID

95445

SHEET TOTAL  
P.20 895

BRIDGE PAVEMENT MARKINGS																			
LOCATION	SFN	BRIDGE NUMBER	646			646			646			646			646			COMMENTS	
			EDGE LINE, 6"			LANE LINE, 6"			CENTERLINE, 6"			CHANNELIZING LINE, 8"			LANE ARROW				
			MILE		MILE		MILE		FT		EACH		EACH		EACH				
			#	F	T	#	F	T	#	F	T	#	F	T	#	F	T		
1	4501772	LIC-16-14.151	0		0	0		0	0		0	0		0	0	0	0	0	SR-16 OVER SR-37
2	4506333	LIC-661-0.030	2	356	0.13	0		0	1	356	0.07	2	356	712	6	0	2	0	SR-661 OVER SR-16
3	4500725	LIC-16-15.590	4	225	0.17	2	225	0.09			0	0		0	0	0	0	0	SR-16 OVER RACCOON CREEK
4	4500830	LIC-16-17.190	2	240	0.09	2	240	0.09	1	240	0.05	2	240	480	4	0	4	0	THORNWOOD DRIVE OVER SR-16
TOTALS			0.39			0.18			0.12			1192			10			6	

QUANTITIES CARRIED TO BRIDGE SUB-SUMMARY.

BRIDGE PAVEMENT MARKINGS CALCULATIONS

DESIGN AGENCY



DESIGNER	CHECKER
TAG	JKS

REVIEWER

TAG	09/15/25
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PROJECT ID

95445

SHEET TOTAL

P.844 895