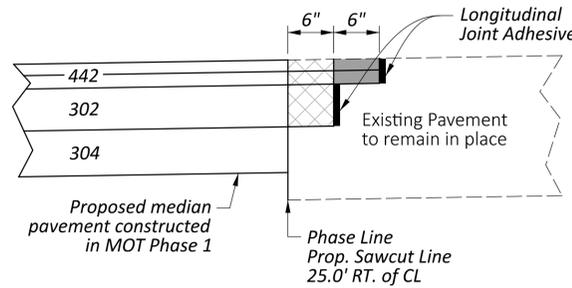


**ITEM 874 LONGITUDINAL JOINT PREPARATION, AS PER PLAN (PASS 1)**  
**ITEM 874 LONGITUDINAL JOINT PREPARATION, AS PER PLAN (PASS 2)**

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:

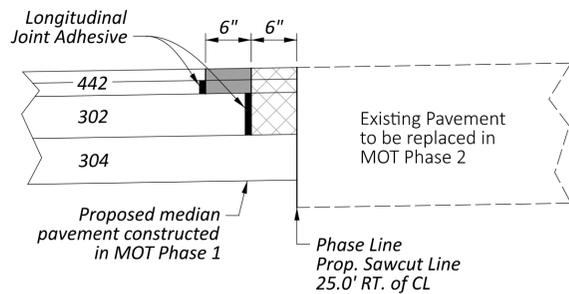
-  ITEM 874 LONGITUDINAL JOINT PREPARATION, AS PER PLAN (PASS 1)
-  ITEM 874 LONGITUDINAL JOINT PREPARATION, AS PER PLAN (PASS 2)



**PHASE 1 LAPPING DETAILS (E.B. / W.B. RESURFACING SECTIONS)**  
 DETAIL APPLIES:  
 STA. 639+65.00 - 653+75.00 = 1410.00 FT.  
 STA. 803+36.00 - 831+70.00 = 2834.00 FT.

- 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:  
 E.B.: STA. 653+75.00 - 747+61.78 = 9386.78 FT.  
 STA. 750+51.79 - 803+36.00 = 5284.21 FT.  
 TOTAL = 14,670.99  
 W.B.: STA. 653+75.00 - 747+96.78 = 9421.78 FT.  
 STA. 750+81.79 - 803+36.00 = 5254.21 FT.  
 TOTAL = 14,675.99 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:  
 Proof Rolling@ 1 HR per 3000 SY of stabilized subgrade  
 Plan Split 01/NHS: 104,914 SY ÷ 3000 = 35 HR  
 Plan Split 02/NHS: 123,636 SY ÷ 3000 = 42 HR  
 Total = 35 + 42 = 77 HR

Cement (from Table 600-3, Geotechnical Design Manual)  
 0.75 X 12 inches X 115 X 0.05 = 51.75 lbs per SY  
 Plan Split 01/NHS: (51.75 lb/SY X 104,914 SY) ÷ 2000 lb/ton = 2715 ton  
 Plan Split 02/NHS: (51.75 lb/SY X 123,636 SY) ÷ 2000 lb/ton = 3200 ton  
 Total = 2715 + 3200 = 5915 ton

Curing Coat  
 Plan Split 01/NHS: 104,914 SY (from sheet P.447)  
 Plan Split 02/NHS: 123,636 SY (from sheet P.447)  
 Total = 104,914 + 123,636 = 228,550 SY

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

(16,630 ft X 16 ft wide X 2 ft thick) ÷ 27 = 19,710 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 GEOGRID	5000 SY

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

**Seeding and Mulching**

The following quantities are provided to promote growth and care of permanent seeded areas:

ITEM 659 SOIL ANALYSIS TEST	2 EACH
ITEM 659 SEEDING AND MULCHING, CLASS 2	51,873 SY
50,993 SY (from P.638) + 410 (from P.64) + 240 (from P.66)	
+ 230 (from P.70) = 51,873 SY	

ITEM 659 REPAIR SEEDING AND MULCHING	2594 SY
5% X 51,873 SY = 2594 SY	

ITEM 659 INTER-SEEDING	2594 SY
5% X 51,873 SY = 2594 SY	

ITEM 659 COMMERCIAL FERTILIZER	7 TON
51,873 SY ÷ 7410 = 7 ton	

ITEM 659 LIME	10.7 ACRE
51,873 SY ÷ 4840 = 10.7 acre	

ITEM 659 WATER	295 MGAL
((51,873 + 2594) X 0.0027) X 2 applications = 295 MGAL	

ITEM 659 MOWING	117 MSF
(51,873 SY X 9 SF/SY X 25%) ÷ 1000 = 117 MSF	

Seeding and mulching shall be applied to all areas of exposed soil between the Right-of-Way lines, and within the construction limits for areas outside the Right-of-Way lines covered by work agreement or slope easement. Quantity calculations for seeding and mulching are based on these limits.

**Vegetated Filter Strip**

This plan utilizes vegetated filter strips for post construction storm water treatment. Place either ITEM 660 SODDING or ITEM 659 SEEDING AND MULCHING with a 4-inch lift of topsoil and ITEM 670 SLOPE EROSION PROTECTION to all disturbed areas designated as vegetated filter strips, the edge of shoulder, and the foreslope as specified in the plans. See sheet P.448 for more details.

The following estimated quantities are provided in the general summary for use as directed by the Engineer to improve the proposed BMP locations in the plans:

ITEM 659 TOPSOIL	(600 CY)
ITEM 670 SLOPE EROSION PROTECTION	(5400 SY)

(Quantities based on 20% of plan vegetated filter strip areas.)

**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 Bar. 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. Do not slip-form concrete barrier wall section(s) when ambient air temperature is greater than 85°F or is predicted to go above 85°F during placement. Do not slip-form concrete barrier wall section(s) when evaporation rates are predicted to exceed 0.1 lbs/ft<sup>2</sup>/hr, as determined according to Figure 1 in ACI 308-81 (see CMS 511.07) during placement.
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. 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.

DESIGN AGENCY	
DESIGNER	BRH
REVIEWER	CMY 09/05/25
PROJECT ID	95445
SHEET	P.20
TOTAL	895