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### GENERAL NOTES:
1. Shoulder corrugations use a conventional milled pavement corrugation pattern.
2. Rumble strips and rumble stripes use a sinusoidal milled pavement corrugation pattern.
1. Continuous corrugation installation shall be used on Interstates and intermittent installation shall be used on all other facilities.

2. Refer to E 606-SHCG-03 for corrugation instructions for HMA shoulders adjacent to a widened PCCP outside lane.

NOTES:
NOTES:

1. Continuous corrugations shall be required on every PCCP shoulder panel on Interstates. Intermittent corrugations shall be required for all other facilities.

2. On facilities with a widened outside PCCP lane, the corrugations shall be installed on the portion of the PCCP located outside the edge of travel lane and in accordance with this sheet.
INDIANA DEPARTMENT OF TRANSPORTATION

SHOULDER CORRUGATION LIMITS:
APPROACH WITH AND WITHOUT TURN LANE

SEPTEMBER 2019

STANDARD DRAWING NO. E 606-SHCG-05

LEGEND

- **B**: Begin Shoulder Corrugations
- **C**: Shoulder Corrugations
- **E**: End Shoulder Corrugations
- ** Broken Line**: Shoulder
- ** Double Arrow**: Direction of Traffic

APPROACH WITH TURN LANE

[Diagram showing the approach with turn lane]

APPROACH WITHOUT TURN LANE

[Diagram showing the approach without turn lane]
MEDIAN CROSSOVER / LEFT TURN LANE

LEGEND

B Begin Shoulder Corrugations
C Shoulder Corrugations
E End Shoulder Corrugations

Edge of paved shoulder
Mailboxes
Edge of travel lane

TYPICAL MAILBOX APPROACH

INDIANA DEPARTMENT OF TRANSPORTATION
SHOULDER CORRUGATION LIMITS:
MEDIAN CROSSOVER AND
TYPICAL MAILBOX APPROACH
SEPTEMBER 2019

STANDARD DRAWING NO. E 606-SHCG-06
NOTES:

1. See Standard Drawing E 606-SHCG-09 for break in rumble stripe near an intersection, drive, bridge, or railroad crossing.

2. Rumble stripe shall be centered about the roadway centerline.

3. The liquid asphalt sealant width shall be a minimum of 24 in. centered on the pavement center joint line, and shall be extended, where directed, to provide coverage beyond the edge of the corrugation.

4. The corrugations shall be no closer than 6 in. to a casting or a concrete pavement transverse joint.
NOTES:

1. See Standard Drawing E 606-SHCG-09 for break in longitudinal rumble stripe limits near an intersection, drive, bridge, or railroad crossing.

2. Where the paved shoulder width is at least 2 ft, a 12-ft longitudinal gap in the corrugations shall be provided every 60 ft to accommodate bicycles.

3. The liquid asphalt sealant width shall be a minimum of 24 in. centered on the shoulder joint line.

4. The corrugations shall be no closer than 6 in. to a casting or a concrete pavement transverse joint.

5. New edge of travel lane if shoulder joint is not apparent.
End ELRS 100 ft from point of curvature on approach lane if there is no right-turn lane.

Begin ELRS for receiving lane with CLRS

End CLRS at taper for left-turn lane.

Point of Curvature

End ELRS at taper for a right-turn lane

Point of Curvature

Begin ELRS for receiving lane with CLRS

Break near a railroad crossing

Break near a commercial or industrial driveway

Break near an intersection

CLRS = Centerline Longitudinal Rumble Stripe
ELRS = Edgeline Longitudinal Rumble Stripe

EDGELINE LONGLATIDUAL RUMBLE STRIPE

ELRS = CENTERLINE LONGLATIDUAL RUMBLE STRIPE

Notes:


2. Rumble stripe shall begin or end at the stop bar location.

3. Rumble stripe shall be continued through driveway access points for minor driveways.

4. Gap is 15 ft for a railroad crossing without gates or signals and 25 ft for railroad crossing with gates or signals.

5. For a bridge deck, end corrugations a maximum of 5 ft and a minimum of 6 in. before an approach slab and begin corrugations a maximum of 6 in. and a maximum of 5 ft after the approach slab on the other side of the bridge deck.

6. End ELRS 400 ft from point of curvature on approach lane if there is no right-turn lane and the paved shoulder width is 8 ft or greater.

Key:

CLRS = Centerline Longitudinal Rumble Stripe
ELRS = Edgeline Longitudinal Rumble Stripe

Indiana Department of Transportation

Rumble Stripe Limits: Near an Intersection, Drive, Bridge, or Railroad

September 2019

Standard Drawing No. E 606-SHCG-09

No. 60900348

Design Standards Engineer

Date 5/21/19

Chief Engineer

Date 6/03/2019
NOTES:
1. See Standard Drawing E 606-SHCG-11 for rumble strip limits near an intersection, drive, bridge, or railroad.
2. Where the paved shoulder width is at least 3 ft, a 12 ft longitudinal gap in the corrugations shall be provided every 60 ft to accommodate bicycles.
3. The liquid asphalt sealant width shall be a minimum of 24 in. centered on the shoulder joint line.
4. The corrugations shall be no closer than 6 in. to a casting.
End SLRS 100 ft from point of curvature on approach lane if there is no right-turn lane.

End CLRS at taper for a left-turn lane.

Begin SLRS for receiving lane with CLRS

Begin SLRS

Point of Curvature

Point of Curvature

Point of Curvature

Break near an intersection

Break near a commercial or industrial driveway

Break near a railroad crossing

Notes:


2. Rumble strip shall begin or end at the stop bar location.

3. Rumble strip shall be continued through driveway access points for minor driveways.

4. Gap is 15 ft for a railroad crossing without gates or signals and 25 ft for railroad crossing with gates or signals.

5. For a bridge deck, end corrugations a maximum of 5 ft and a minimum of 6 in. before an approach slab and begin corrugations a minimum of 6 in. and a maximum of 5 ft after the approach slab on the other side of the bridge deck.

6. End SLRS 400 ft from point of curvature on approach lane if there is no right-turn lane and the paved shoulder width is 8 ft or greater.

Key:

CLRS = Centerline Longitudinal Rumble Stripe

SLRS = Shoulder Longitudinal Rumble Strip

Indiana Department of Transportation

Rumble strip limits:
Near an intersection, drive, bridge, or railroad
September 2019

Standard Drawing No. E 606-SHCG-11

No. 5/21/19

Design Standards Engineer

State of Indiana

Chief Engineer

6/03/2019