

INDEX OF BOONE COUNTY STANDARDS  
400 SERIES STANDARD DRAWINGS  
ASPHALT PAVEMENTS

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Typical Urban Arterial Street With Raised Median Cross Section.....BC-400-002A

Typical Urban Arterial Street With Striped Median Cross Section.....BC-400-002B

Typical Rural Major Collector Cross Section.....BC-400-003

Typical Urban Major Collector With Raised Median Cross Section.....BC-400-004A

Typical Urban Major Collector With Striped Median Cross Section.....BC-400-004B

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Typical Urban Minor Collector Street Cross Section.....BC-400-006

Typical Rural Local Street/Residential Feeder Cross Section.....BC-400-007

Typical Urban Local Street/Residential Feeder Cross Section.....BC-400-008

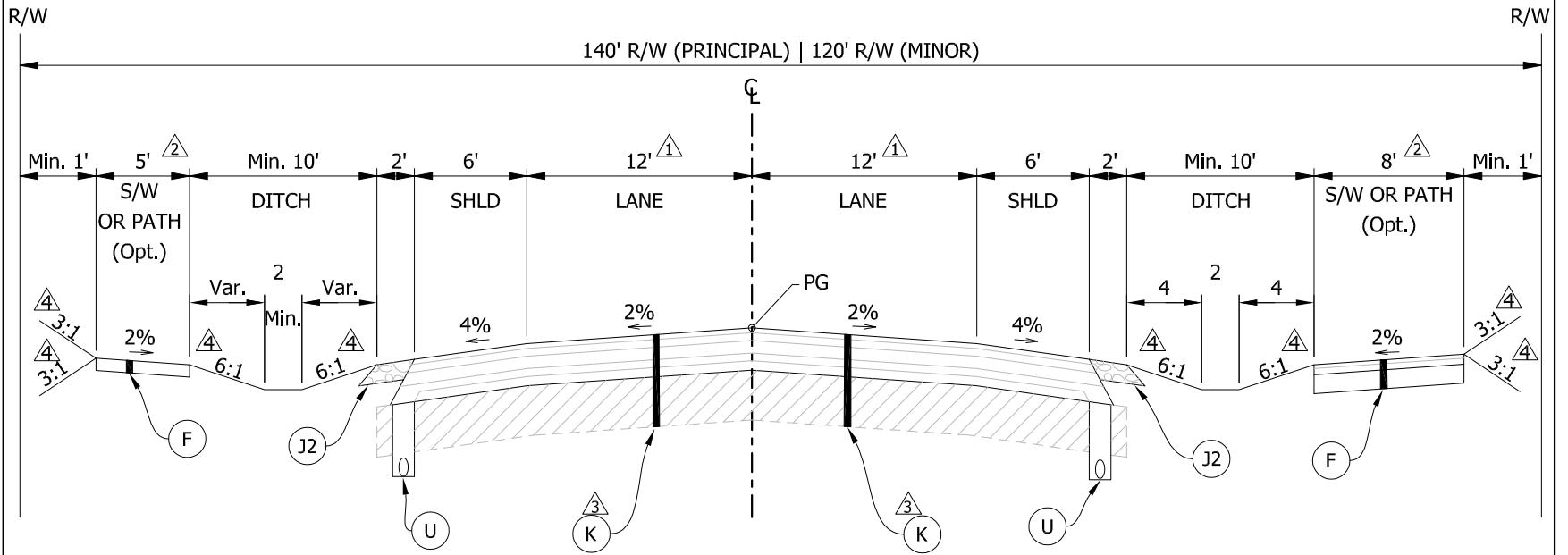
Typical Underdrain Detail.....BC-401-001

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Typical HMA Road Cut Patch Detail.....BC-402-002

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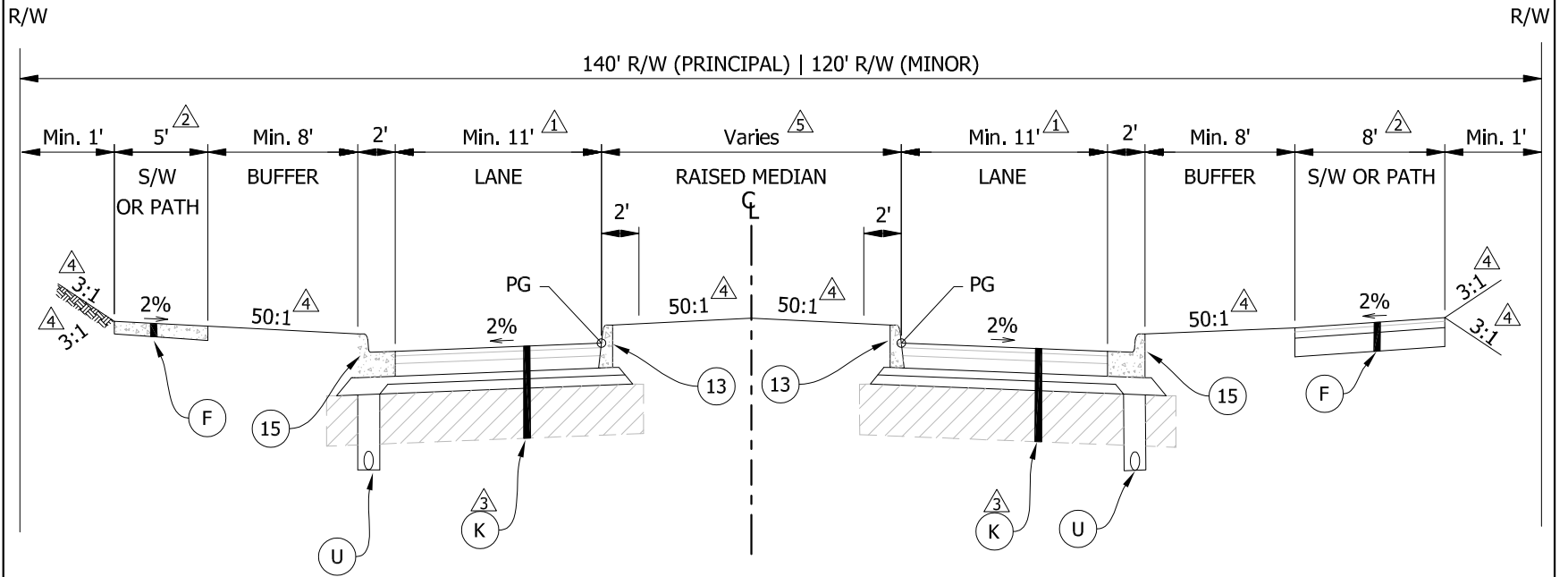
**LEGEND:**

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (J2) 6.0" Compacted Aggregate Shoulder
- (K)
 

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001

**NOTES:**

- ① See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 12' Lane Each Direction 4 Lane Roadway - 2 x 12' Lanes Each Direction Addition Of Auxilliary Lane - 12' Addition Of Optional Bike Lane - 5'
- ② See Boone County Thoroughfare Plan; Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path
- ③ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- ④ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- 5. For Safety Edge Details, See STD Drawing BC-403-002



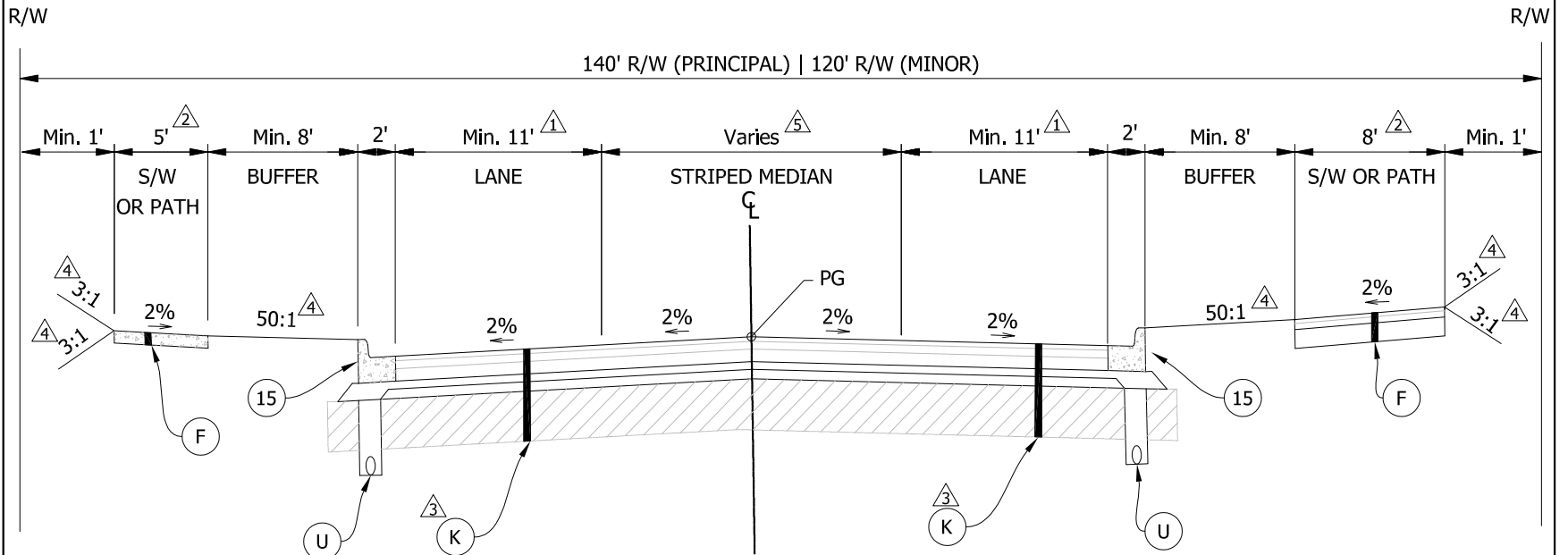
**LEGEND:**

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K)
 

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (13) Concrete Curb - See STD Drawing BC-601-001
- (15) Concrete Curb And Gutter - See STD Drawing BC-601-001

**NOTES:**

- △1 See Boone County Thoroughfare Plan;  
2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)  
4 Lane Roadway - 2 x 11' Lanes Each Direction (Min.)  
Addition Of Auxiliary Lane - 11' (Min.)  
Addition Of Optional Bike Lane - 5'
- △2 See Boone County Thoroughfare Plan;  
Both Sides Require 5' Sidewalk Or 8' - 12' Multi-use Path
- △3 Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- △4 Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- △5 See Boone County Thoroughfare Plan;  
Optional Raised Median 3' - 16'  
When Median < 3' Use STD Drawing BC-400-002B



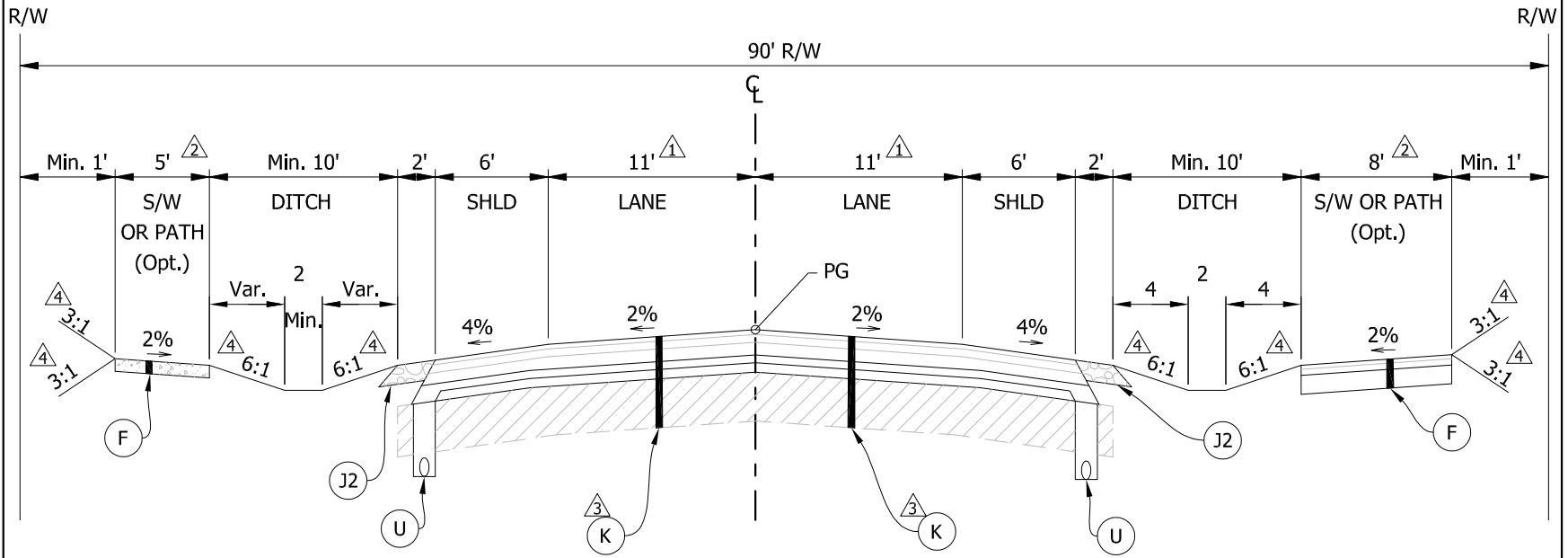
**LEGEND:**

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K)
 

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrde Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (15) Concrete Curb And Gutter - See STD Drawing BC-601-001

**NOTES:**

- ① See Boone County Thoroughfare Plan;  
2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)  
4 Lane Roadway - 2 x 11' Lanes Each Direction (Min.)  
Addition Of Auxiliary Lane - 11' (Min.)  
Addition Of Optional Bike Lane - 5'
- ② See Boone County Thoroughfare Plan;  
Both Sides Require 5' Sidewalk Or 8' - 12' Multi-use Path
- ③ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- ④ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- ⑤ See Boone County Thoroughfare Plan;  
Optional Striped Median 0' - 16'



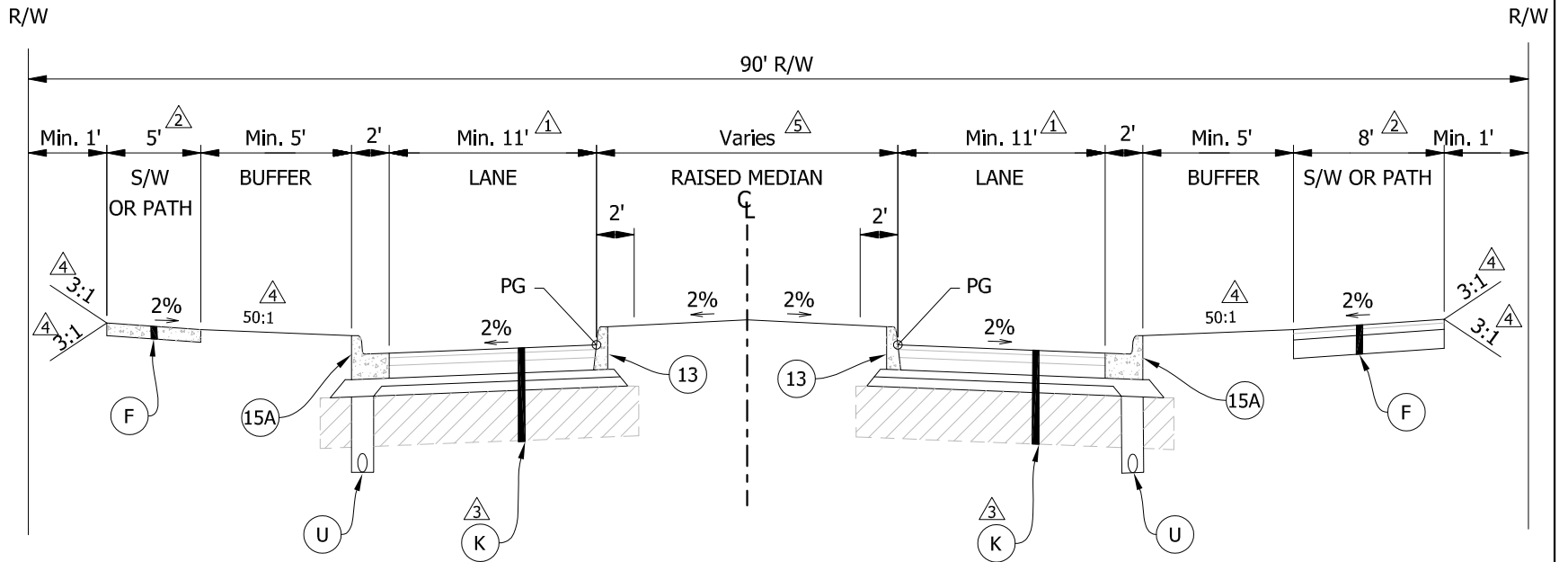
**LEGEND:**

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (J2) 6.0" Compacted Aggregate Shoulder
- (K) 

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001

**NOTES:**

- ① See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction  
Addition Of Optional Bike Lane - 5'  
Addition Of Auxiliary Lane - 11'
- ② See Boone County Thoroughfare Plan; Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path
- ③ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- ④ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- 5. For Safety Edge Details, See STD Drawing BC-403-002



**LEGEND:**

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or  
HMA Path - See STD Drawing BC-602-002
- (K)
 

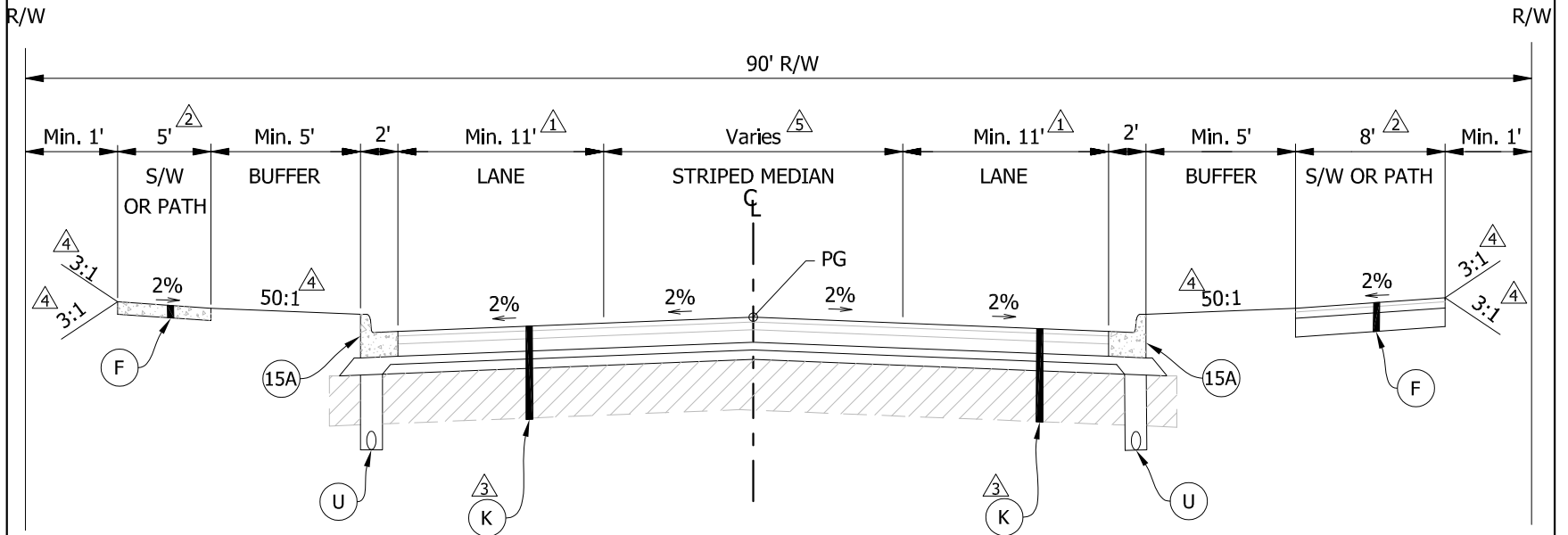
Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (15A) Mountable Concrete Curb And Gutter (Typ.) - See STD Drawing BC-601-001
- (13) Concrete Curb - See STD Drawing BC-601-001

**NOTES:**

- ① See Boone County Thoroughfare Plan;  
2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)  
Addition Of Optional Bike Lane - 5'  
Addition Of Auxiliary Lane - 11' (Min.)  
Addition Of Optional Parking Lane - 8' (Min.)
- ② See Boone County Thoroughfare Plan;  
Both Sides Require 5' Sidewalk Or 8' - 12' Multi-use Path
- ③ Tack Coat To Be Applied Between Pavement Lifts And On  
All Vertical Surfaces
- ④ Foreslopes And Backslopes Shall Be In Accordance  
With Clear Zone Requirements Set Forth By  
INDOT Design Manual (Current Edition)
- ⑤ See Boone County Thoroughfare Plan;  
Optional Raised Median 3' - 16'  
When Median < 3' Use STD Drawing BC-400-004B

**TYPICAL URBAN MAJOR COLLECTOR STREET WITH STRIPED MEDIAN CROSS SECTION**

**BOONE COUNTY HIGHWAY DEPARTMENT**



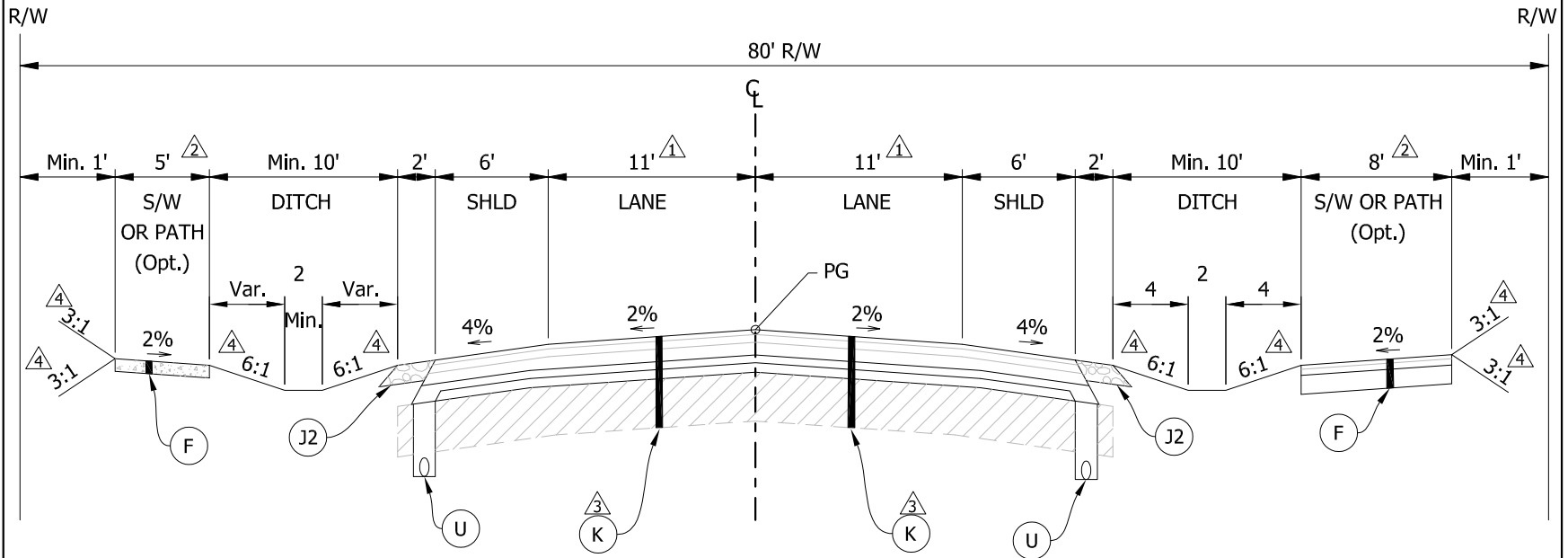
**LEGEND:**

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K)
 

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (15A) Mountable Concrete Curb And Gutter (Typ.) - See STD Drawing BC-601-001

**NOTES:**

- ① See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)  
Addition Of Optional Bike Lane - 5'  
Addition Of Optional Parking Lane - 8' (Min.)
- ② See Boone County Thoroughfare Plan; Both Side Require 5' Sidewalk Or 8' - 12' Multi-use Path
- ③ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- ④ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- ⑤ See Boone County Thoroughfare Plan; Optional Striped Median 0' - 16'



**LEGEND:**

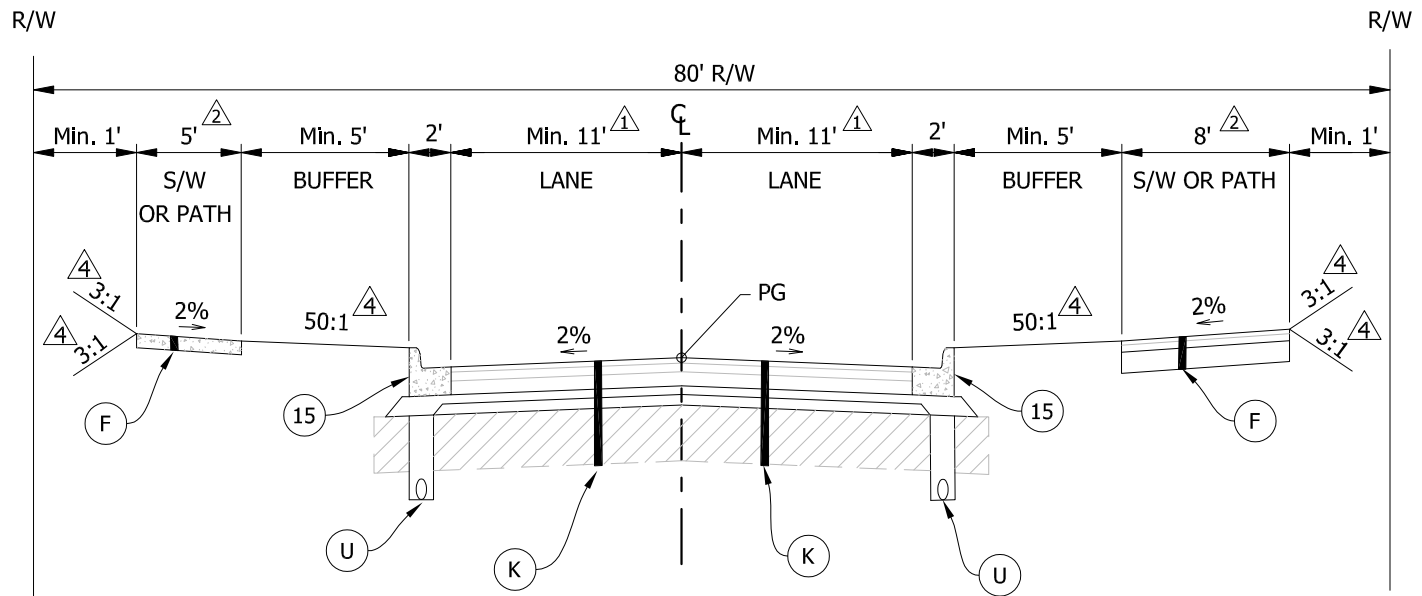
- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (J2) 6.0" Compacted Aggregate Shoulder
- (K)
 

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001

**NOTES:**

- △1 See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction
- △2 See Boone County Thoroughfare Plan; Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path
- △3 Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- △4 Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- 5. For Safety Edge Details, See STD Drawing BC-403-002





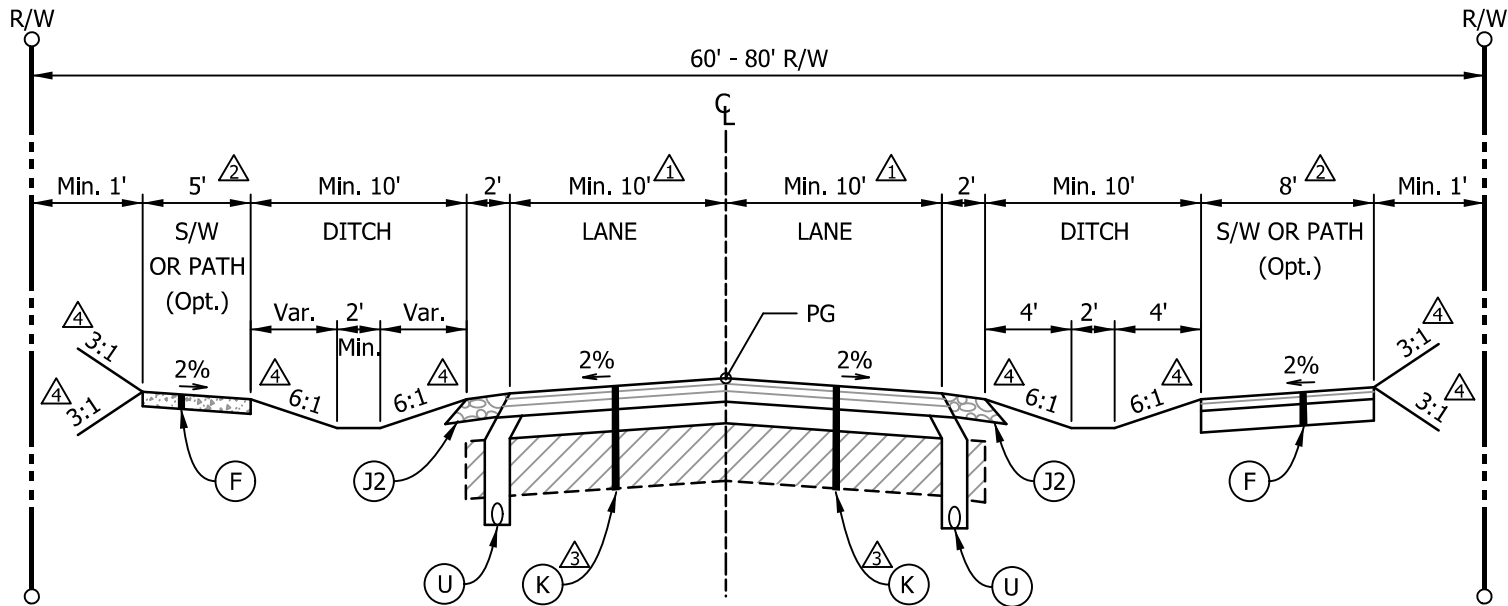
**LEGEND:**

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K) 

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (15) Concrete Curb And Gutter - See STD Drawing BC-601-001

**NOTES:**

- ① See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)  
Addition Of Optional Bike Lane - 4'  
Addition Of Optional Parking Lane - 8' (Min.)
- ② See Boone County Thoroughfare Plan; Both Sides Require 5' Sidewalk Or 8' - 12' Multi-use Path
- ③ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- ④ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)



**LEGEND:**

(F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002

(J2) 6.0" Compacted Aggregate Shoulder

Pavement Layer	Local Streets	Residential Feeder
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base, 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	-
Compacted Aggregate No. 53	6.0"	8.0"
INDOT Subgrade Treatment, IB or IC	Yes	Yes

(U) Underdrain (Typ.) - See STD Drawing BC-401-001

**NOTES:**

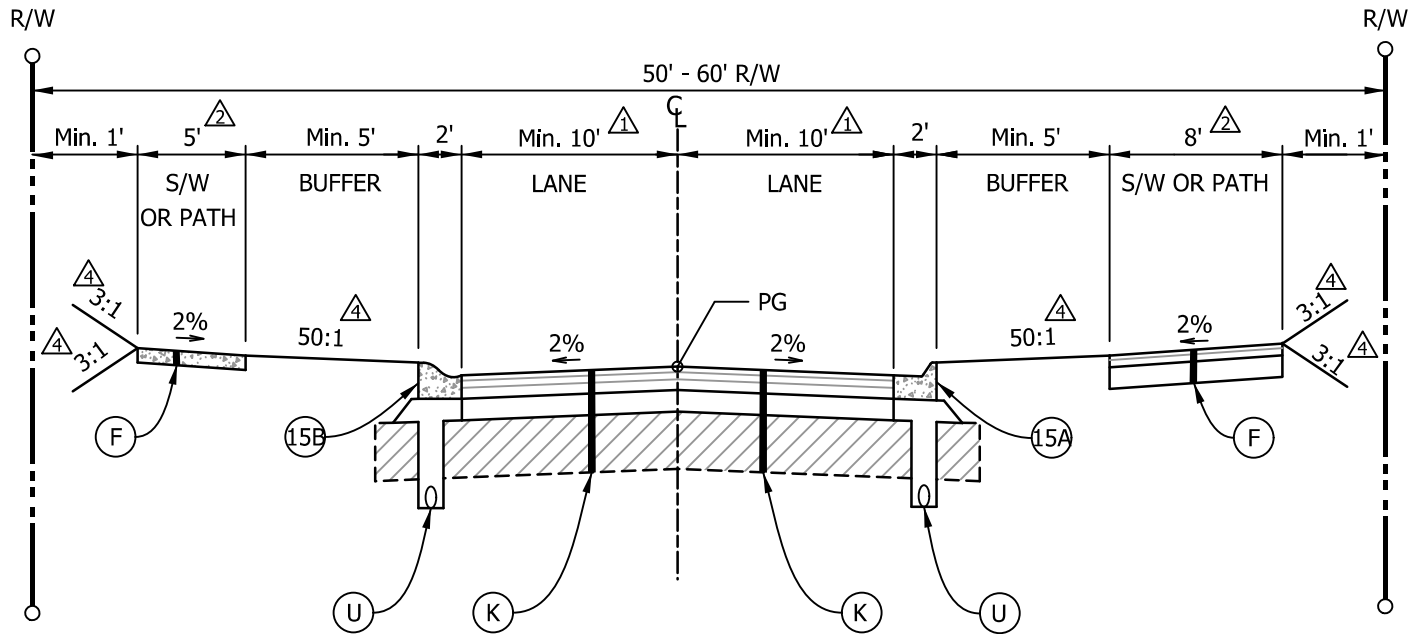
△ See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 10' Lane Each Direction (Min.)

△ See Boone County Thoroughfare Plan; Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path

△ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces

△ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)

5. For Safety Edge Details, See STD Drawing BC-403-002



**LEGEND:**

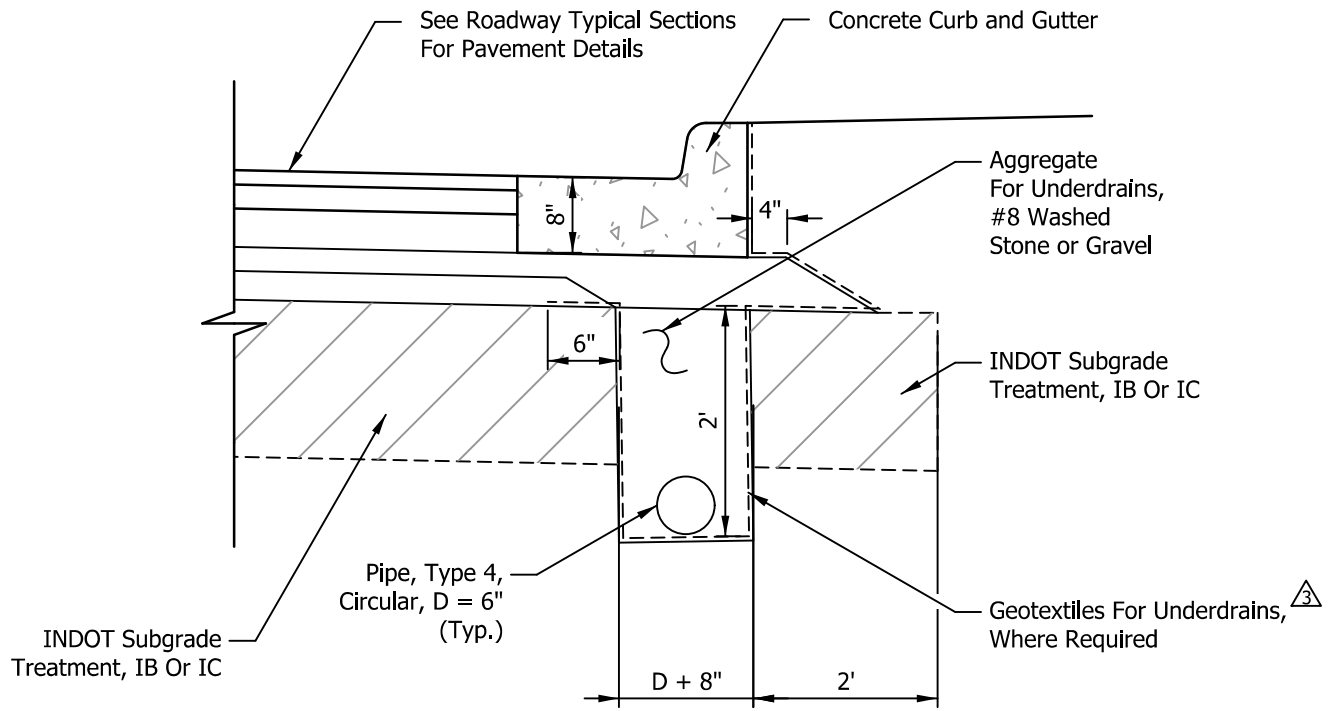
- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K) 

Pavement Layer	Local Streets	Residential Feeder
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base, 19.0mm, Type B	3.0"	2.5"
HMA Intermediate OG, 19.0mm, Type B	-	2.0"
Compacted Aggregate No. 53	6.0"	8.0"
INDOT Subgrade Treatment, IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (15A) Mountable Concrete Curb And Gutter (Typ.) - See STD Drawing BC-601-001 Local Streets Only
- (15B) Rolled Curb (Typ.) - See STD Drawing BC-601-001 Subdivision Only

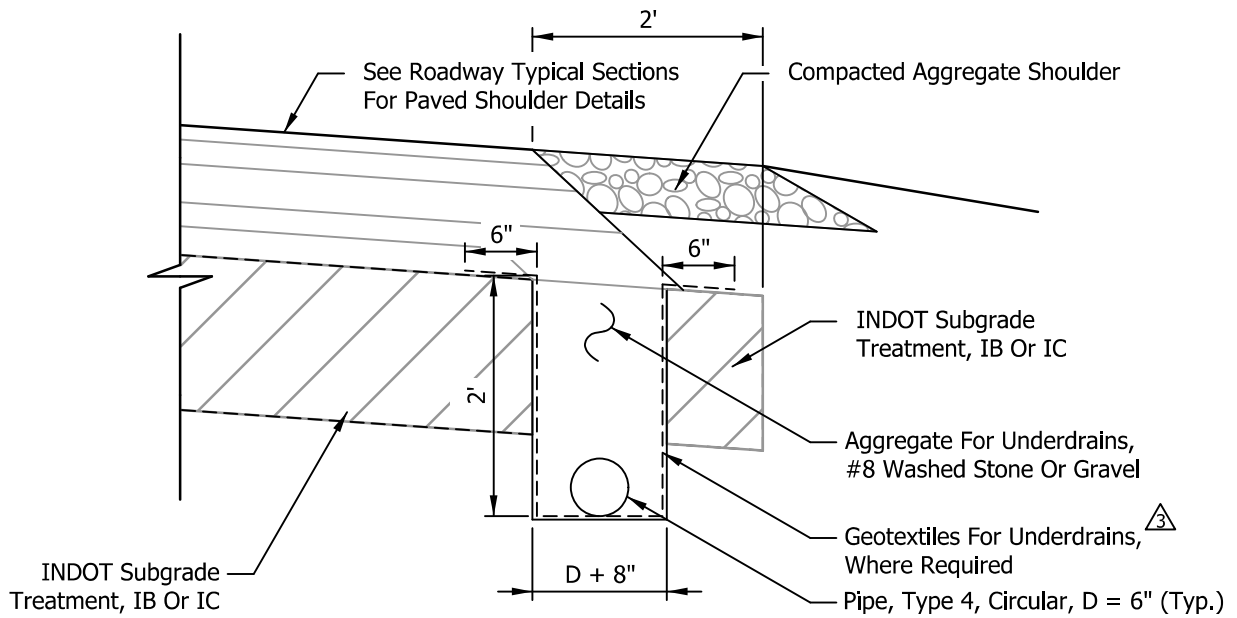
**NOTES:**

- △ See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 10' Lane Each Direction (Min.) Addition Of Optional Bike Lane - 4' Addition Of Optional Parking Lane - 8' (Min.)
- △ See Boone County Thoroughfare Plan; Both Sides Required 5' Sidewalk Or 8' - 12' Multi-use Path
- △ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- △ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)

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**CURB AND GUTTER UNDERDRAIN DETAIL**



**PAVED SHOULDER UNDERDRAIN DETAIL**

**NOTES:**

1. Underdrain Outlets To Be Connected To Existing/Proposed Storm System Or Roadside Ditches As Approved By Boone County Highway Engineer
  2. No Blind Taps Into Storm System Permitted
- ⚠ Per INDOT Standard Specifications

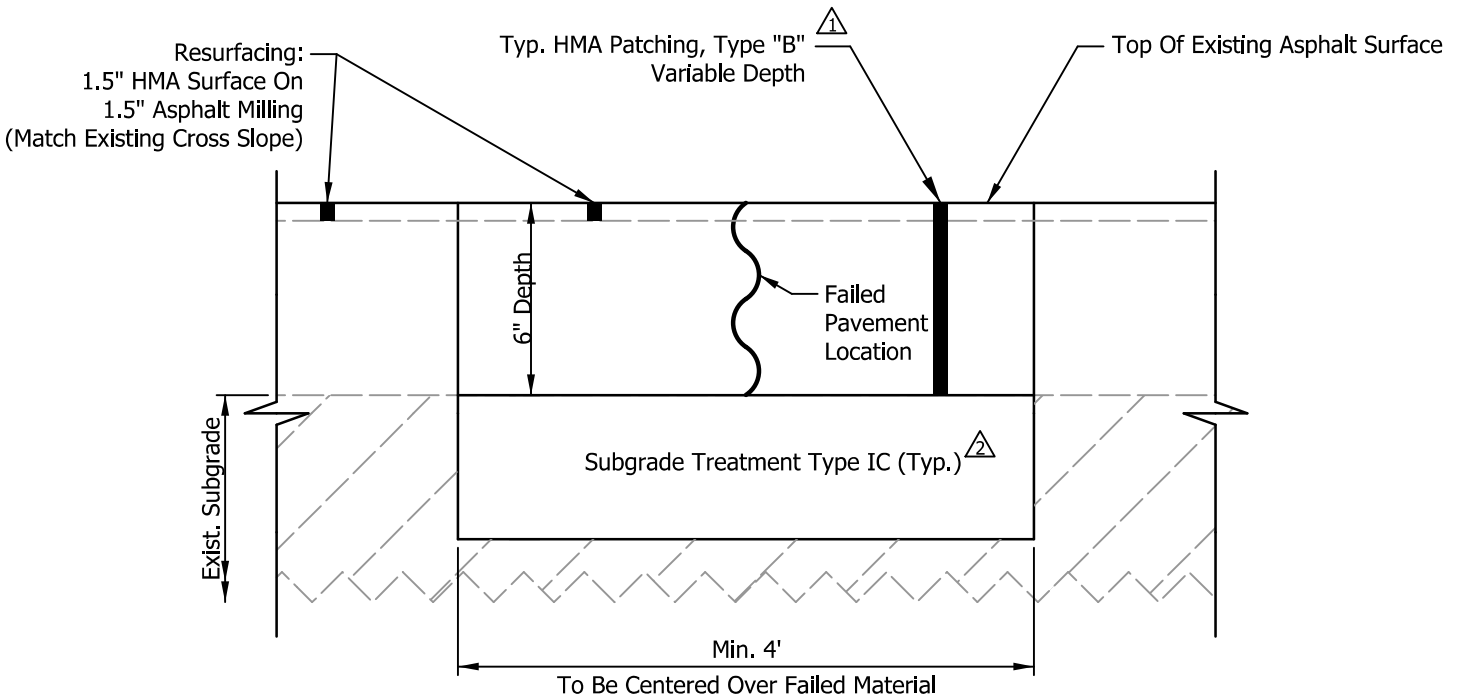
**BOONE COUNTY HIGHWAY DEPARTMENT**

**TYPICAL UNDERDRAIN DETAILS**

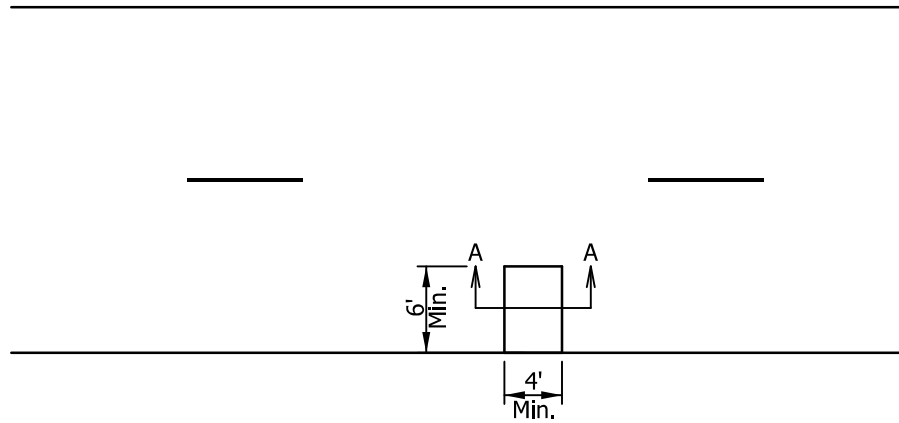


STANDARD DRAWING
NO. BC-401-001
SHEET 1 OF 1
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SECTION A-A



PLAN VIEW

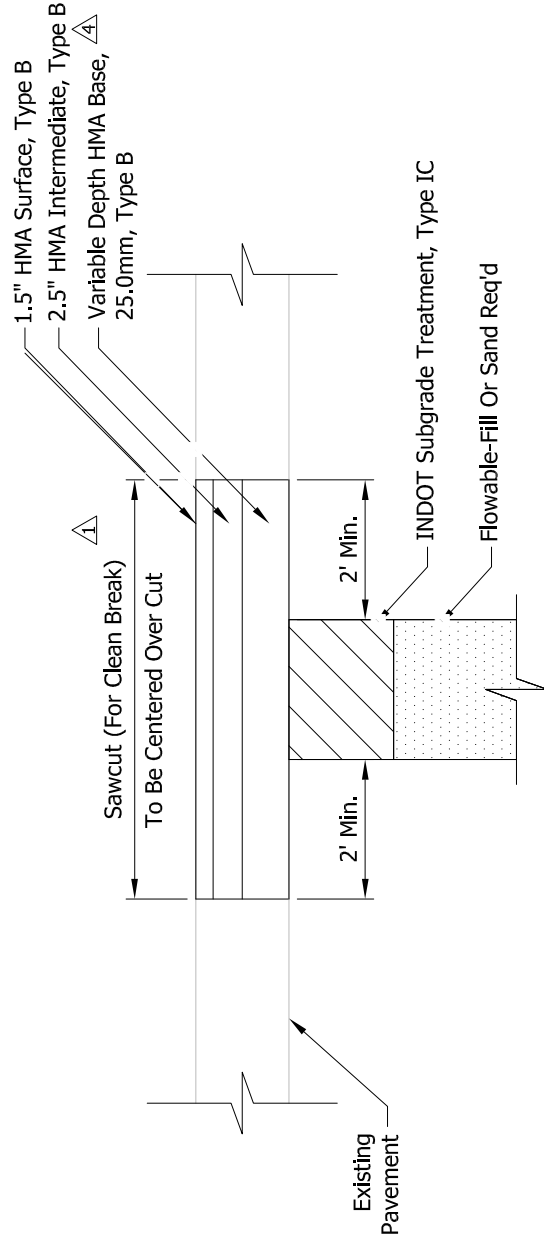
- Typ. HMA Patching To Consist Of:  
 6.0" HMA Base, 25.0mm, Type B  
 As Needed To Match Existing Mainline Pavement Thickness  
 Mill And Remove Existing Pavement - Clean Break Required  
 Place Patch Prior To Milling And Resurfacing
  
- INDOT Subgrade Treatment Type IC May Be Substituted With The Following;  
 Excavate And Replace 12" Of The Subgrade With Flowable - Fill  
 may Substitute INDOT Subgrade Treatment Type III As Approved By Boone  
 County Highway Engineer.

**BOONE COUNTY HIGHWAY DEPARTMENT**



**TYPICAL FULL DEPTH PATCH DETAIL**

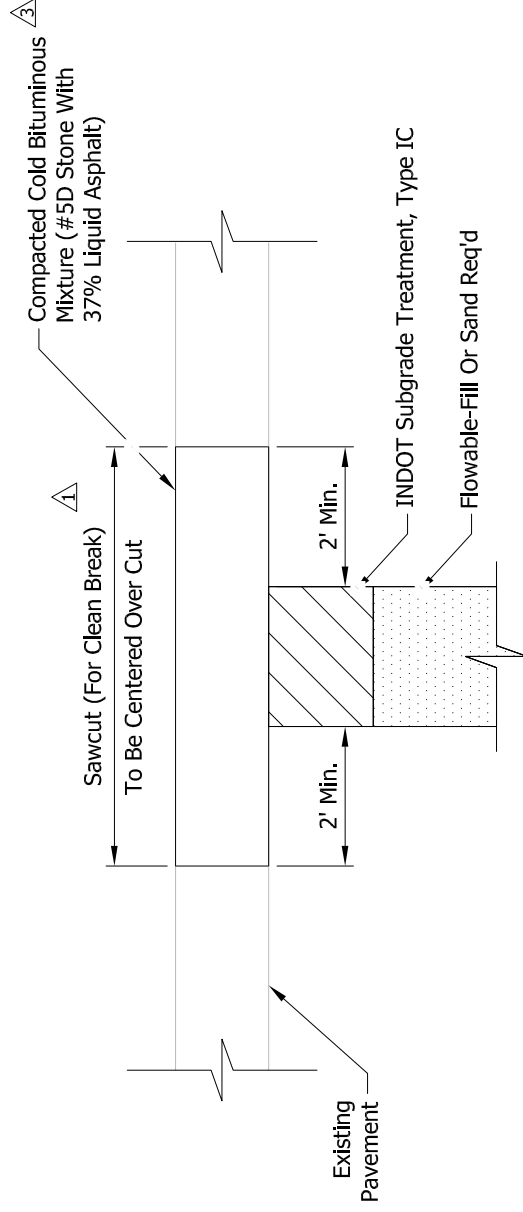
STANDARD DRAWING
NO. BC-402-001
SHEET 1 OF 1
SCALE: NO SCALE



**PERMANENT PATCH**

**NOTES:**

1. Saw Cut And Remove Existing Pavement - Clean Break Required
2. Contractor Shall Mill (1.5") Existing Pavement 10' In Each Direction From Trench Centerline or 2' Wider Than Excavation Limit, Whichever Is Greater, And From Edge Of Pavement To Edge Of Pavement Then Replace With 1.5" HMA Surface, 9.5mm, And Appropriate Pavement Markings.
3. The Existing Vertical Edge Of Pavement Is To Be Tack Coated Prior To The Placement Of New Asphalt.
4. Base Layer Thickness Determined By Roadway Classification Or Existing Pavement Thickness, But Shall Be Minimum 6".

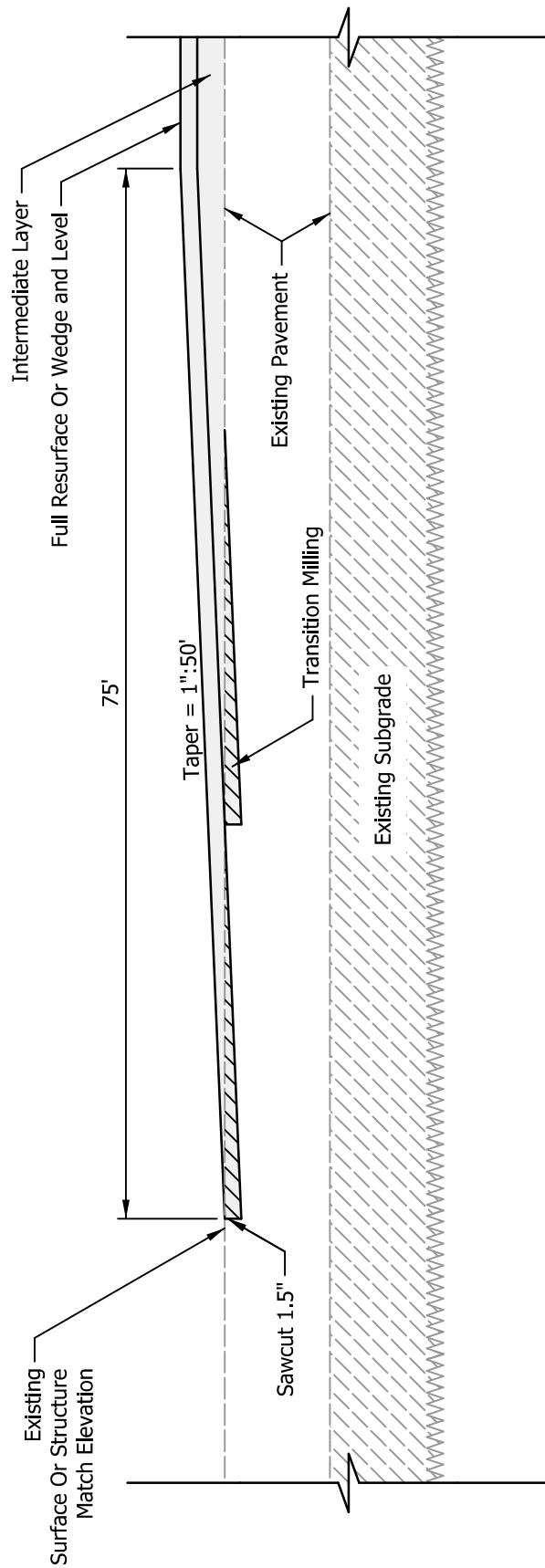


**TEMPORARY PATCH (FROM NOV. 10 - APRIL 15)**

**NOTES:**

1. Saw Cut And Remove Existing Pavement - Clean Break Required
2. The Existing Vertical Edge Of Pavement Is To Be Tack Coated Prior To The Placement Of New Asphalt.
3. Thickness Determined By Roadway Classification Or Existing Pavement Thickness.

REVISED APRIL 2021



# BOONE COUNTY HIGHWAY DEPARTMENT

## TYPICAL TERMINUS TRANSITION

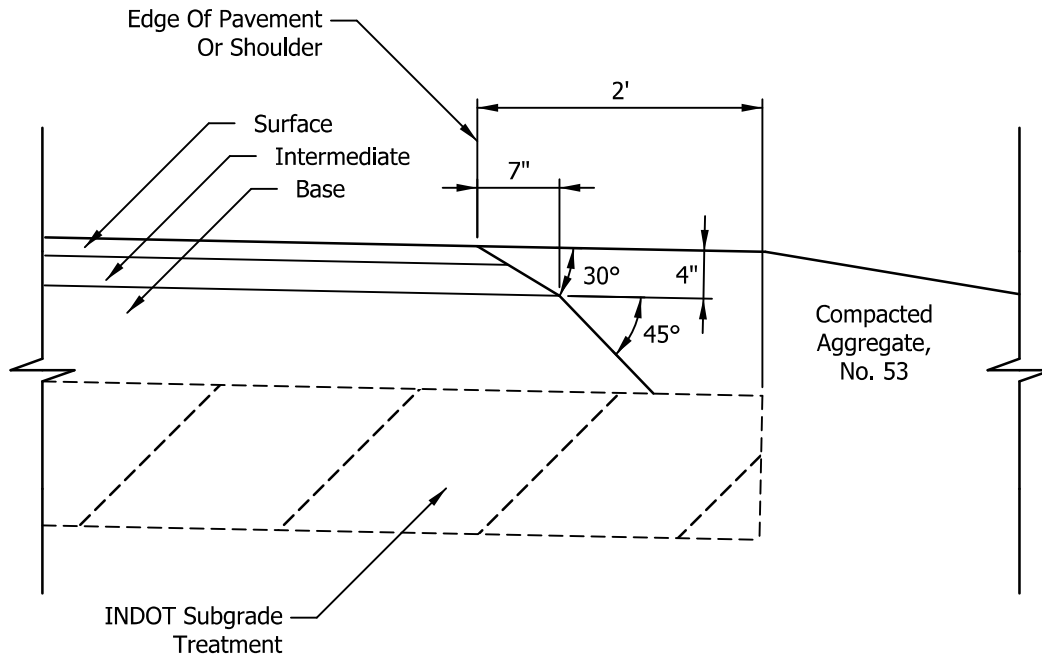


STANDARD DRAWING

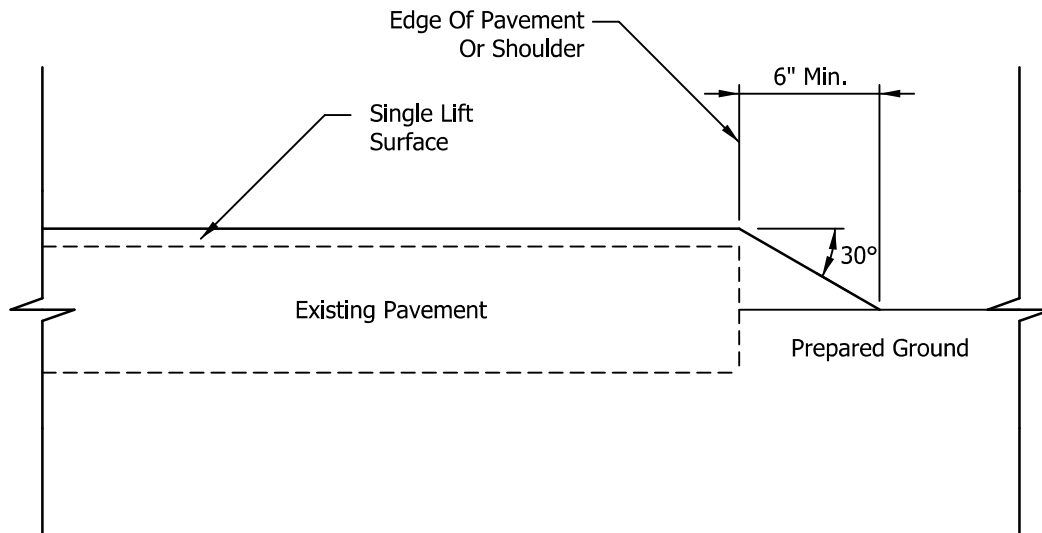
NO. BC-403-001

SHEET 1 OF 1

SCALE: NO SCALE



HMA SAFETY EDGE



SINGLE LIFT SURFACE SAFETY EDGE

BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL SAFETY EDGE DETAILS

STANDARD DRAWING

NO. BC-403-002

SHEET 1 OF 1

SCALE: NO SCALE