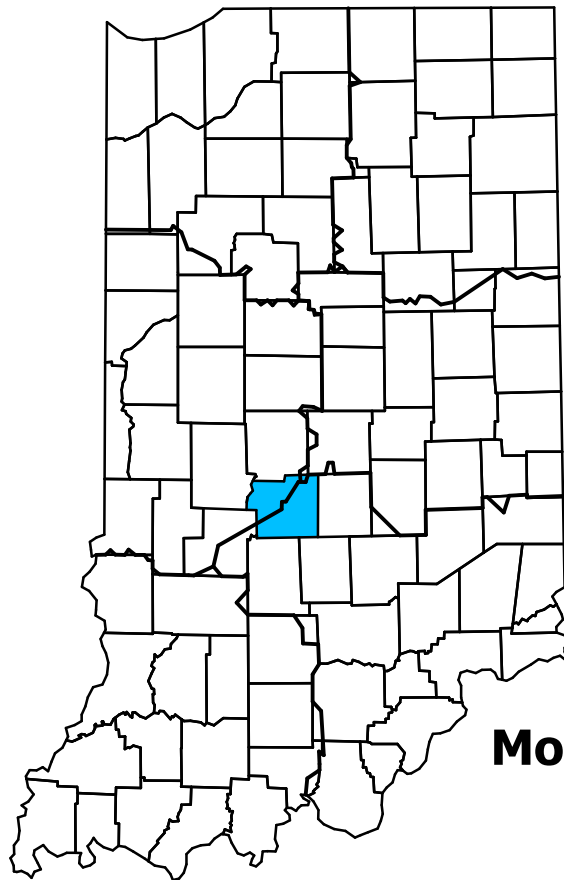


MORGAN COUNTY HIGHWAY DEPARTMENT

TECHNICAL DESIGN STANDARDS



Morgan County

PREPARED BY



THESE MORGAN COUNTY HIGHWAY DEPARTMENT STANDARD DRAWINGS
ARE APPROVED ON 1-16-2024 BY:

THE MORGAN COUNTY HIGHWAY DEPARTMENT:

BY: Justin Schneck
Justin Schneck, PE, County Engineer

2/20/24
Date

THE MORGAN COUNTY BOARD OF COMMISSIONERS:

BY: Bryan Collier
Bryan Collier, Commissioner

2/20/24
Date

Don Adams
Don Adams, Commissioner

2/20/24
Date

Kenny Hale
Kenny Hale, Commissioner

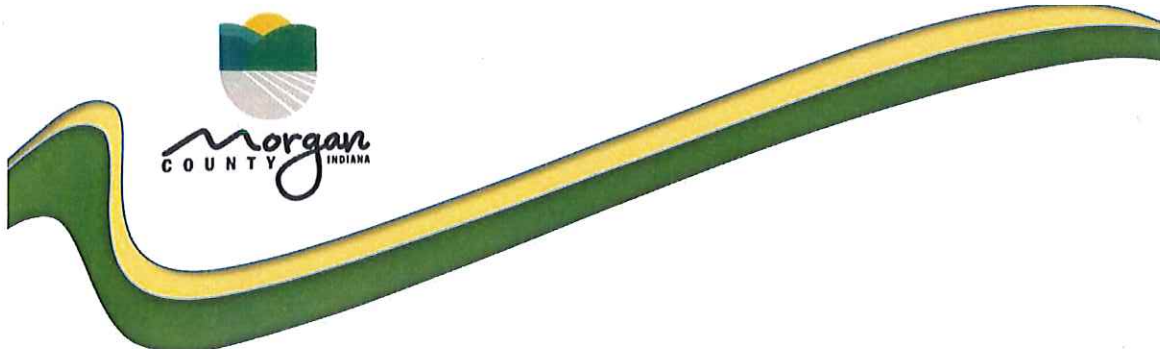
2/20/24
Date

ATTEST:

Linda Pruitt
Linda Pruitt, County Auditor

2/20/24
Date

ALL PREVIOUS STANDARD DRAWINGS ARE HEREBY REPEALED AND
REPLACED WITH THESE STANDARD DRAWINGS, EFFECTIVE 1-16-2024.



MORGAN COUNTY HIGHWAY DEPARTMENT
5400 BLUE BLUFF RD
MARTINSVILLE, INDIANA 46151

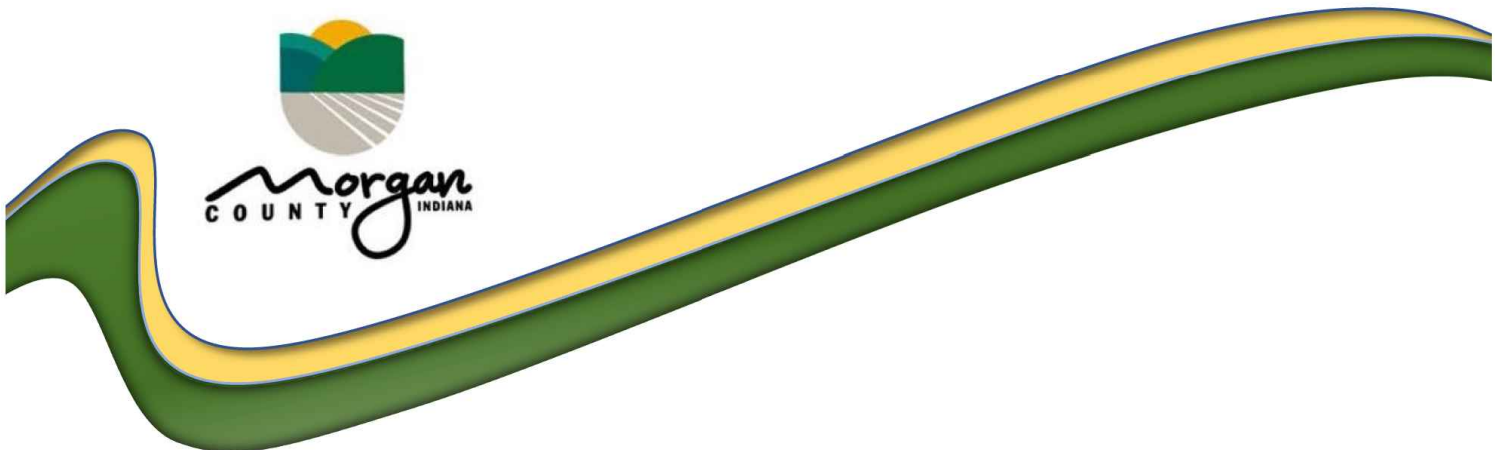
INDEX OF MORGAN COUNTY STANDARD DRAWINGS

Section 100.....	General Provisions
Section 200.....	Earthwork
Section 300.....	Aggregate Pavements And Bases
Section 400.....	Asphalt Pavements
Section 500.....	Concrete Pavements (Not Used)
Section 600.....	Incidental Construction
Section 700.....	Structures (Not Used)
Section 800.....	Traffic Control Devices
Section 900.....	Street Signs



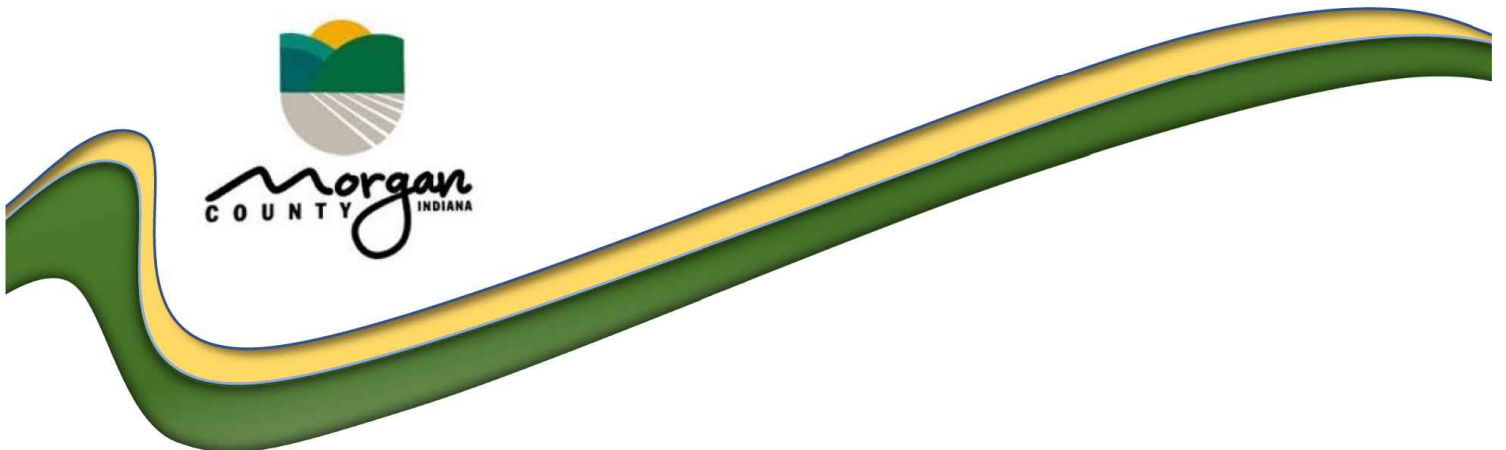
INDEX OF MORGAN COUNTY STANDARDS
100 SERIES STANDARD DRAWINGS
GENERAL PROVISIONS

1. All construction within Morgan County public right-of-way shall follow these standards while also being in accordance with the latest versions of the Indiana Design Manual, Indiana Department of Transportation (INDOT) Standard Specifications, INDOT Standard Drawings, and Indiana Manual on Uniform Traffic Control Devices for Streets and Highways. Any deviation shall be brought to the attention of the County Engineer, or their appointed representative, for review and approval before construction commences.
2. Technical Design Standards shall be used in conjunction with the Unified Development Ordinance, Thoroughfare Plan, Comprehensive Plan and other current County documents. Any discrepancy or deviation from these standards or County Documents shall be brought to the attention of the County Engineer, or their appointed representative, for review and approval.



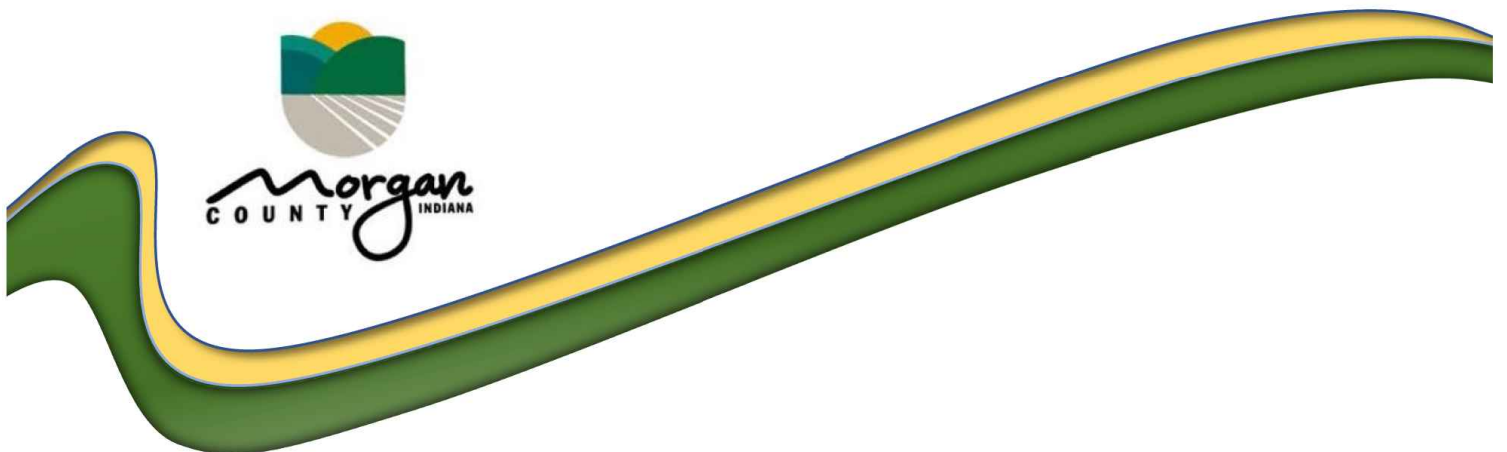
INDEX OF MORGAN COUNTY STANDARDS
200 SERIES STANDARD DRAWINGS
EARTHWORK

All construction involving clearing, grading, excavation, fill, stormwater management, subgrade, backfill, and other related items shall be in accordance with the 200 Division of the INDOT Standard Drawings and Specifications.

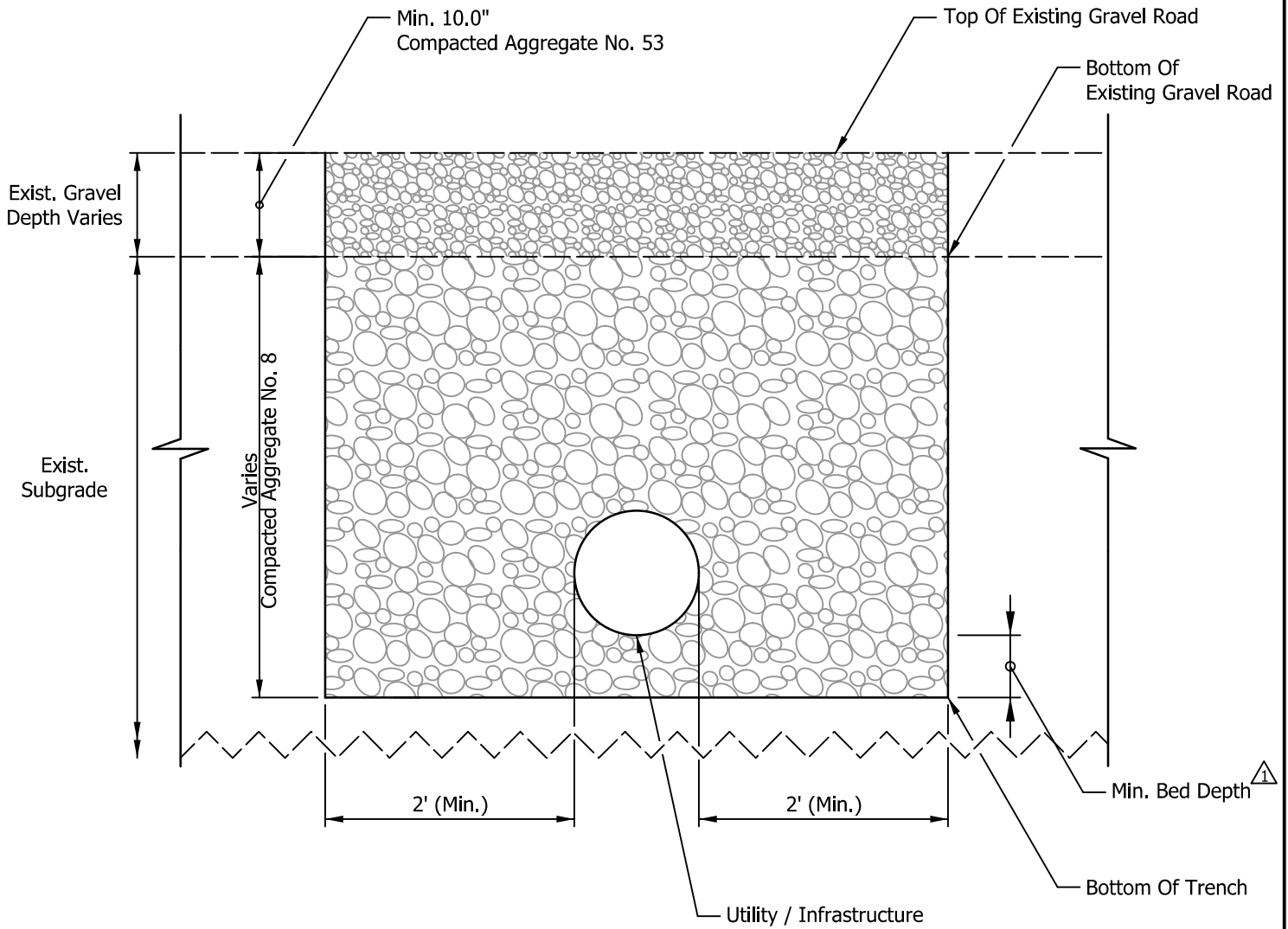


INDEX OF MORGAN COUNTY STANDARDS
300 SERIES STANDARD DRAWINGS
AGGREGATE PAVEMENTS AND BASES

Typical Gravel Road Cut Patch Detail.....MC-302-001



11/14/2013 06:54 AM I:\140051-Morgan Co. Standards\09Road\04 Design Files\02 DGN\Plans\3005\302-001_MC_Full Depth Gravel Road Cut_Typical.dgn



NOTES:



Bed Depth	
Pipe Diameter (in.)	Min. Bed Depth (in.)
6" To 15"	6"
18" And Above	8"

MORGAN COUNTY HIGHWAY DEPARTMENT



TYPICAL GRAVEL ROAD CUT PATCH DETAIL

STANDARD DRAWING

NO. MC-302-001

SHEET 1 OF 1

SCALE: NO SCALE

INDEX OF MORGAN COUNTY STANDARDS
400 SERIES STANDARD DRAWINGS
ASPHALT PAVEMENTS

Typical Rural Arterial Street Cross Section.....MC-400-001

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

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

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

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

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

Typical Rural Minor Collector Street Cross Section.....MC-400-005

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

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

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

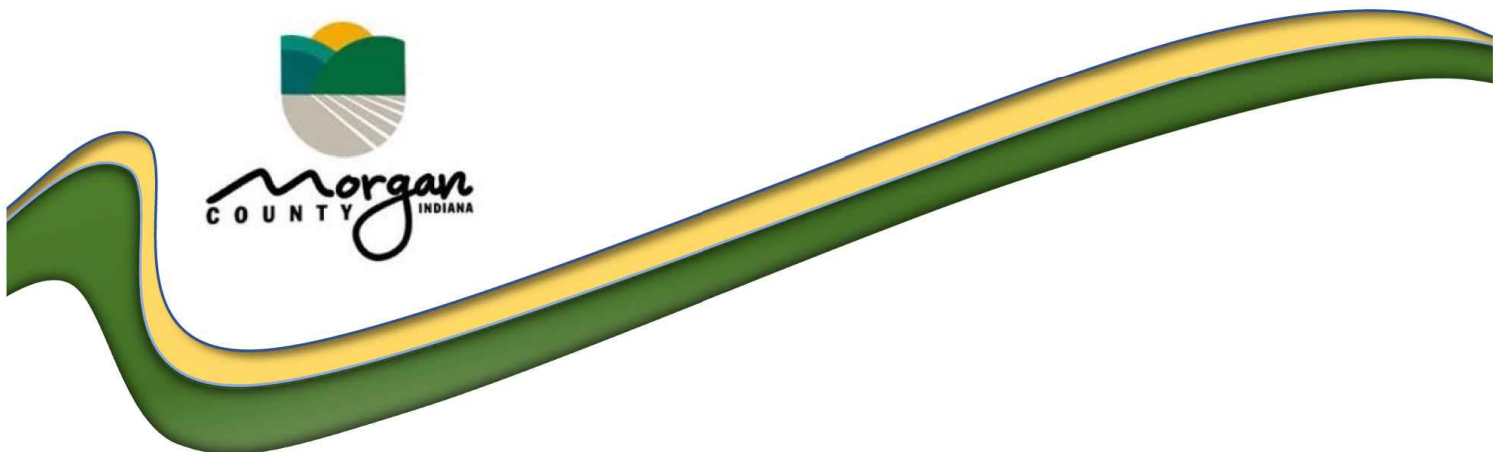
Typical Underdrain Detail.....MC-401-001

Typical Full Depth Patch Detail.....MC-402-001

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

Terminus Transitions.....MC-403-001

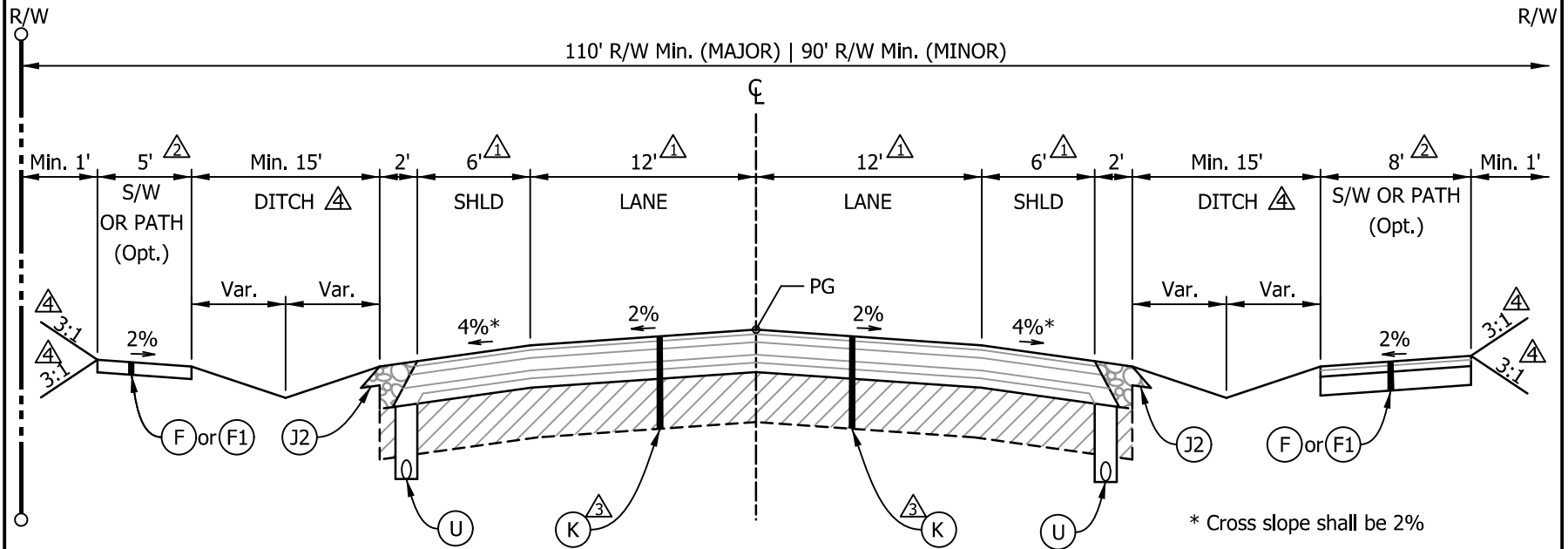
Typical Safety Edge Details.....MC-403-002





TYPICAL RURAL ARTERIAL STREET
CROSS SECTION

MORGAN COUNTY HIGHWAY DEPARTMENT



* Cross slope shall be 2%

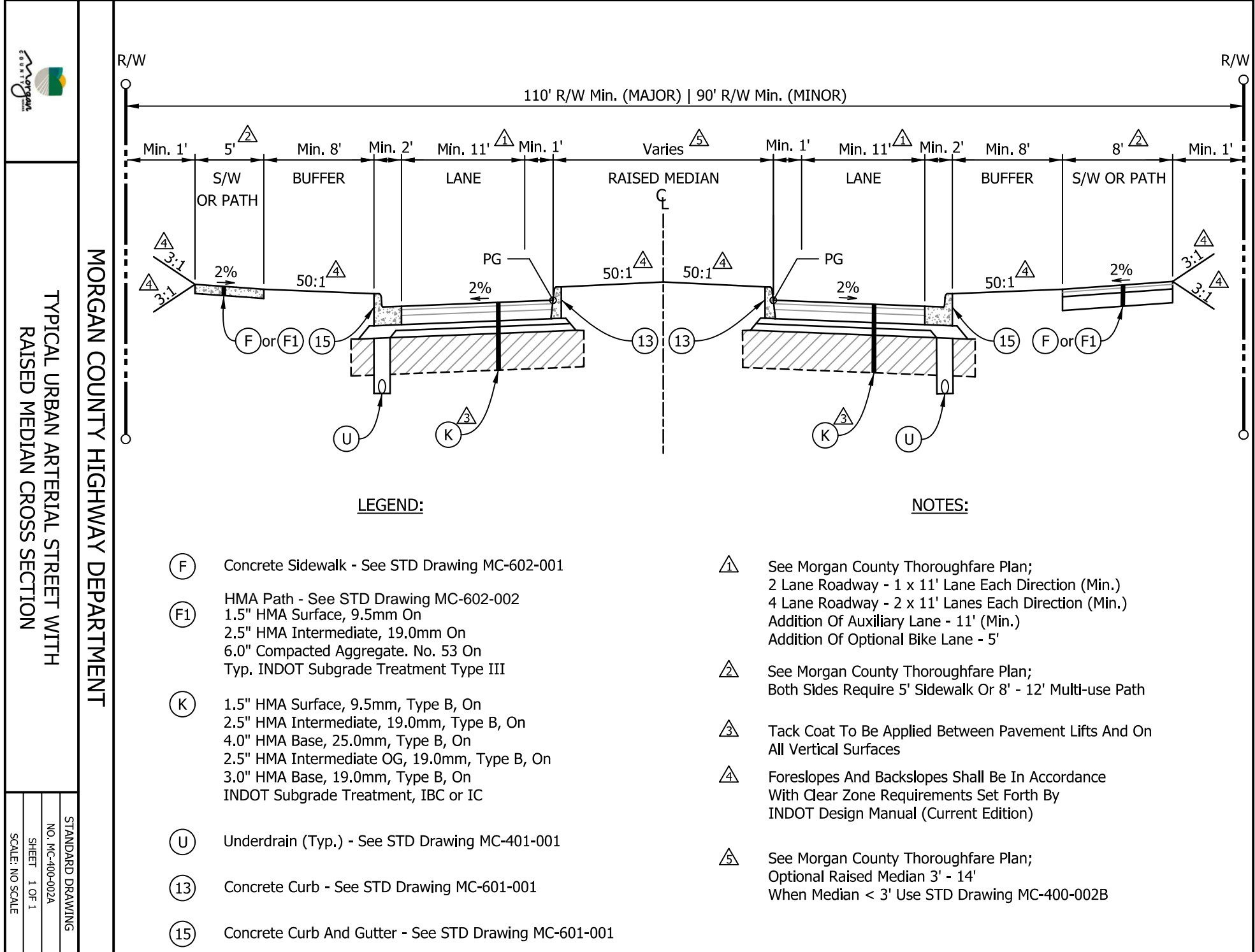
LEGEND:

- (F) Concrete Sidewalk - See STD Drawing MC-602-001
- (F1) HMA Path - See STD Drawing MC-602-002
 - 1.5" HMA Surface, 9.5mm On
 - 2.5" HMA Intermediate, 19.0mm On
 - 6.0" Compacted Aggregate. No. 53 On
 - Typ. INDOT Subgrade Treatment Type III
- (J2) 6.0" Compacted Aggregate Shoulder
- (K) 1.5" HMA Surface, 9.5mm, Type B, On
 2.5" HMA Intermediate, 19.0mm, Type B, On
 4.0" HMA Base, 25.0mm, Type B, On
 2.5" HMA Intermediate OG, 19.0mm, Type B, On
 3.0" HMA Base, 19.0mm, Type B, On
 INDOT Subgrade Treatment, IBC or IC
- (U) Underdrain (Typ.) - See STD Drawing MC-401-001

NOTES:

- △ See Morgan County Thoroughfare Plan;
 - 2 Lane Roadway - 1 x 12' Lane Each Direction
 - 4 Lane Roadway - 2 x 12' Lanes Each Direction
 - 4' Paved Shoulder - Minor*
 - 6' Paved Shoulder - Major
- △ See Morgan 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 MC-403-002

STANDARD DRAWING
NO. MC-400-001
SHEET 1 OF 1
SCALE: NO SCALE



LEGEND:

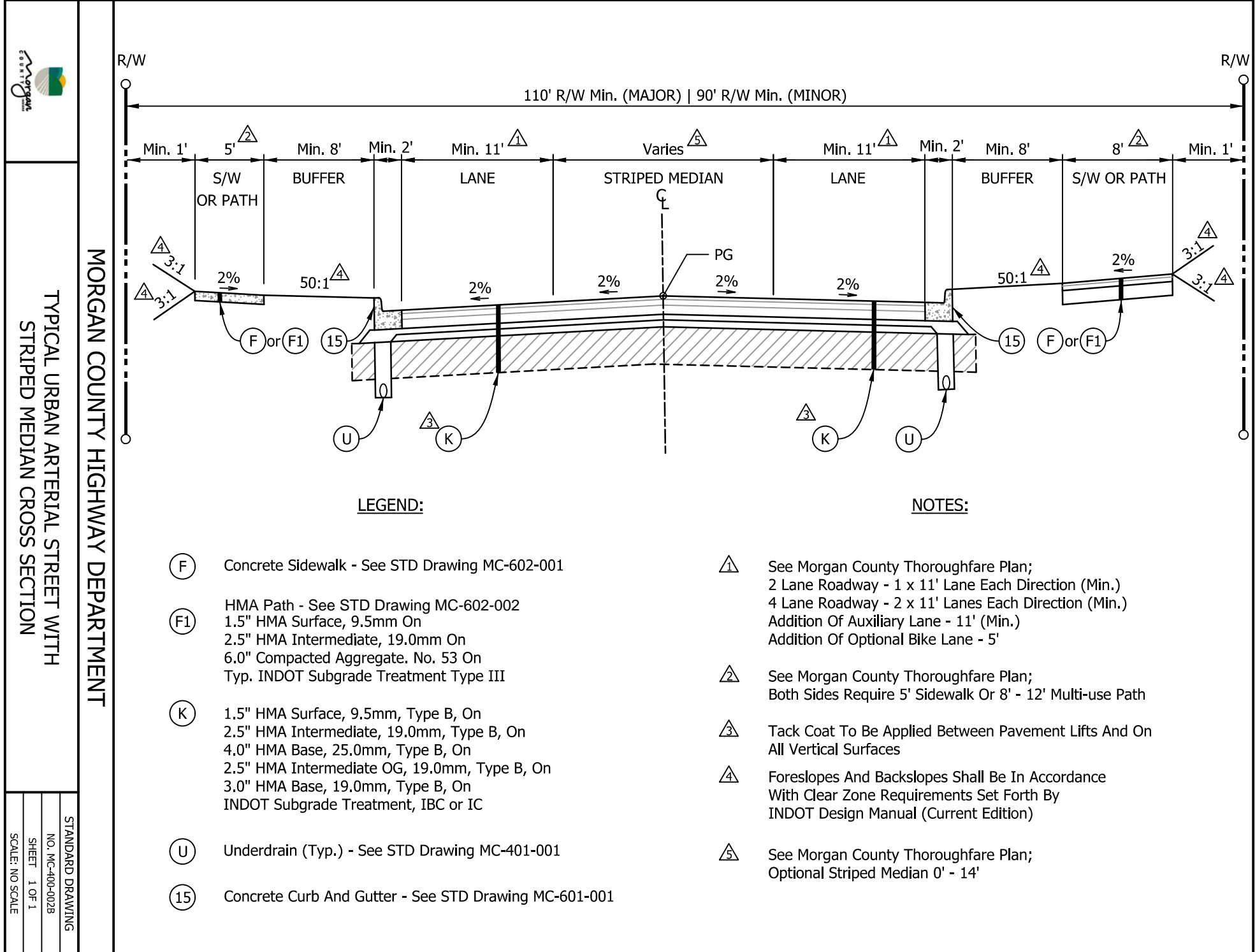
- (F) Concrete Sidewalk - See STD Drawing MC-602-001
- (F1) HMA Path - See STD Drawing MC-602-002
1.5" HMA Surface, 9.5mm On
2.5" HMA Intermediate, 19.0mm On
6.0" Compacted Aggregate. No. 53 On
Typ. INDOT Subgrade Treatment Type III
- (K) 1.5" HMA Surface, 9.5mm, Type B, On
2.5" HMA Intermediate, 19.0mm, Type B, On
4.0" HMA Base, 25.0mm, Type B, On
2.5" HMA Intermediate OG, 19.0mm, Type B, On
3.0" HMA Base, 19.0mm, Type B, On
INDOT Subgrade Treatment, IBC or IC
- (U) Underdrain (Typ.) - See STD Drawing MC-401-001
- (13) Concrete Curb - See STD Drawing MC-601-001
- (15) Concrete Curb And Gutter - See STD Drawing MC-601-001

NOTES:

- △ See Morgan 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'
- △ See Morgan County Thoroughfare Plan;
Both Sides Require 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)
- △ See Morgan County Thoroughfare Plan;
Optional Raised Median 3' - 14'
When Median < 3' Use STD Drawing MC-400-002B

MORGAN COUNTY HIGHWAY DEPARTMENT
TYPICAL URBAN ARTERIAL STREET WITH
RAISED MEDIAN CROSS SECTION

STANDARD DRAWING
NO. MC-400-002A
SHEET 1 OF 1
SCALE: NO SCALE



MORGAN COUNTY HIGHWAY DEPARTMENT
TYPICAL URBAN ARTERIAL STREET WITH STRIPED MEDIAN CROSS SECTION

LEGEND:

NOTES:

- (F) Concrete Sidewalk - See STD Drawing MC-602-001
- (F1) HMA Path - See STD Drawing MC-602-002
 1.5" HMA Surface, 9.5mm On
 2.5" HMA Intermediate, 19.0mm On
 6.0" Compacted Aggregate, No. 53 On
 Typ. INDOT Subgrade Treatment Type III
- (K) 1.5" HMA Surface, 9.5mm, Type B, On
 2.5" HMA Intermediate, 19.0mm, Type B, On
 4.0" HMA Base, 25.0mm, Type B, On
 2.5" HMA Intermediate OG, 19.0mm, Type B, On
 3.0" HMA Base, 19.0mm, Type B, On
 INDOT Subgrade Treatment, IBC or IC
- (U) Underdrain (Typ.) - See STD Drawing MC-401-001
- (15) Concrete Curb And Gutter - See STD Drawing MC-601-001

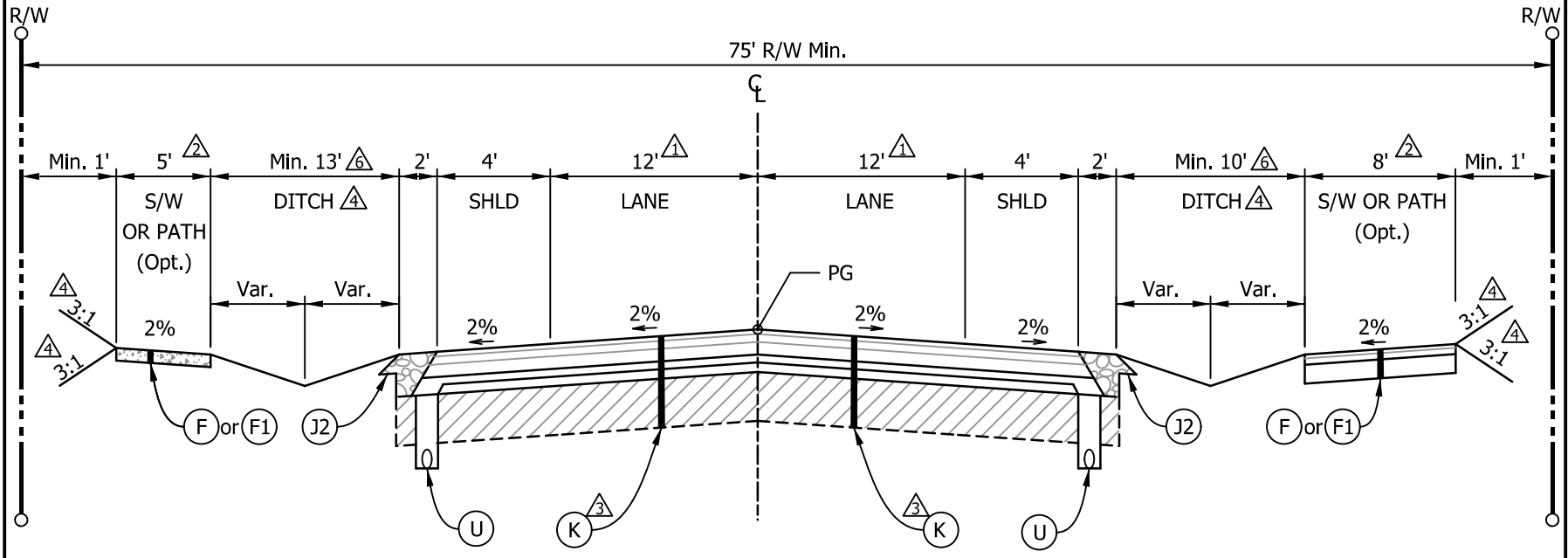
- △ See Morgan County Thoroughfare Plan;
 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)
 4 Lane Roadway - 2 x 11' Lanes Each Direction (Min.)
 Addition Of Auxiliary Lane - 11' (Min.)
 Addition Of Optional Bike Lane - 5'
- △ See Morgan County Thoroughfare Plan;
 Both Sides Require 5' Sidewalk Or 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)
- △ See Morgan County Thoroughfare Plan;
 Optional Striped Median 0' - 14'

STANDARD DRAWING
 NO. MC-400-002B
 SHEET 1 OF 1
 SCALE: NO SCALE



TYPICAL RURAL MAJOR COLLECTOR STREET
CROSS SECTION

MORGAN COUNTY HIGHWAY DEPARTMENT



LEGEND:

NOTES:

- (F) Concrete Sidewalk - See STD Drawing MC-602-001
- (F1) HMA Path - See STD Drawing MC-602-002
1.5" HMA Surface, 9.5mm On
2.5" HMA Intermediate, 19.0mm On
6.0" Compacted Aggregate, No. 53 On
Typ. INDOT Subgrade Treatment Type III
- (J2) 6.0" Compacted Aggregate Shoulder
- (K) 1.5" HMA Surface, 9.5mm, Type B, On
2.5" HMA Intermediate, 19.0mm, Type B, On
4.0" HMA Base, 25.0mm, Type B, On
2.5" HMA Intermediate OG, 19.0mm, Type B, On
3.0" HMA Base, 19.0mm, Type B, On
INDOT Subgrade Treatment, IBC or IC
- (U) Underdrain (Typ.) - See STD Drawing MC-401-001

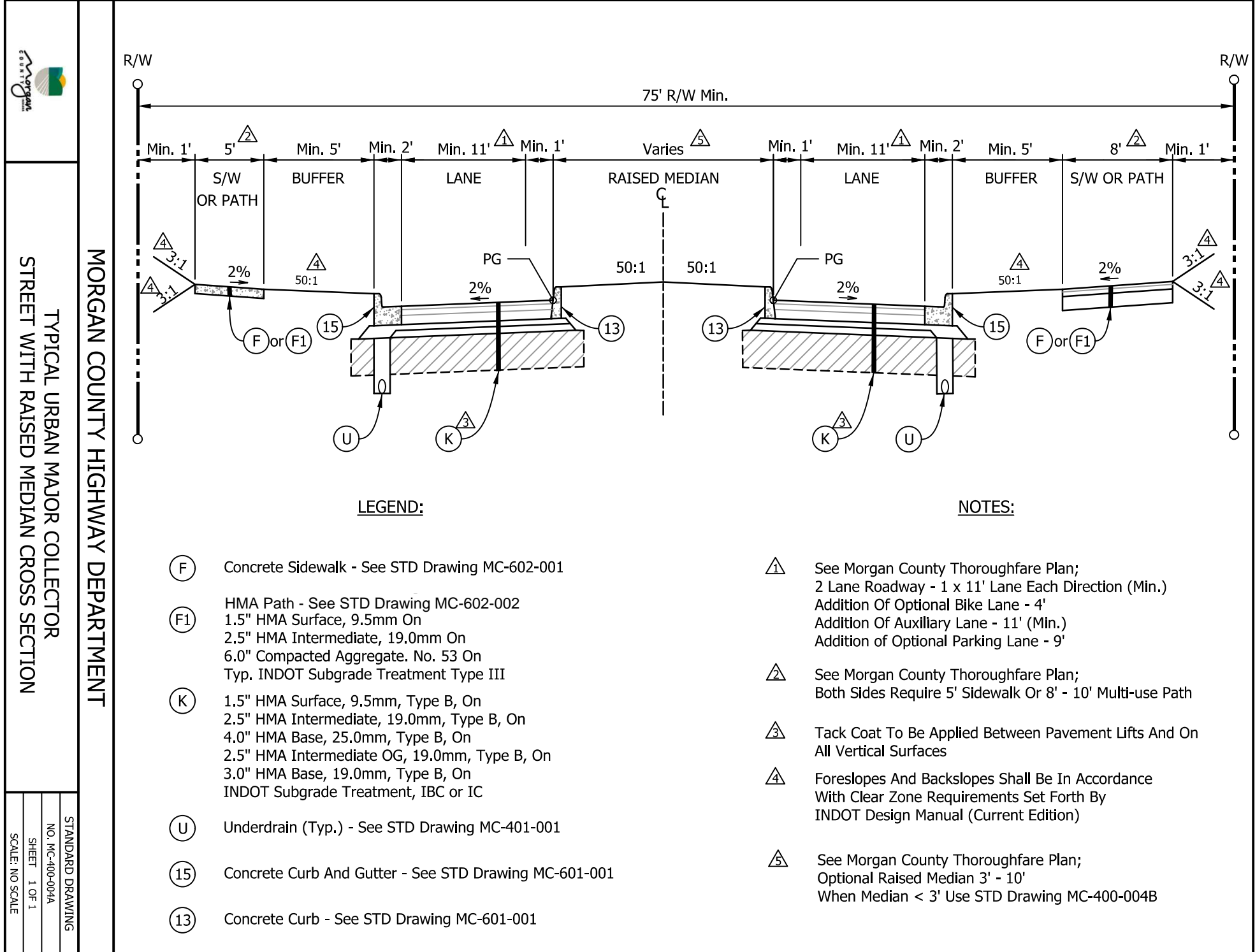
- △ See Morgan County Thoroughfare Plan;
2 Lane Roadway - 1 x 12' Lane Each Direction
- △ See Morgan County Thoroughfare Plan;
Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path
- △ Tack Coat To Be Applied Between Pavement Lifts And On
All Vertical Surfaces
- △ Foreslopes And Backslopes Shall Be In Accordance
With Clear Zone Requirements Set Forth By
INDOT Design Manual (Current Edition)
- 5. For Safety Edge Details, See STD Drawing MC-403-002
- △ Ditch Shall Be 13' Where Sidewalks Are
Used And 6'-10' Where Path Is Used To
Utilize Full 1/2 R\W Width

STANDARD DRAWING

NO. MC-400-003

SHEET 1 OF 1

SCALE: NO SCALE



MORGAN COUNTY HIGHWAY DEPARTMENT
 TYPICAL URBAN MAJOR COLLECTOR
 STREET WITH RAISED MEDIAN CROSS SECTION

MORGAN COUNTY HIGHWAY DEPARTMENT

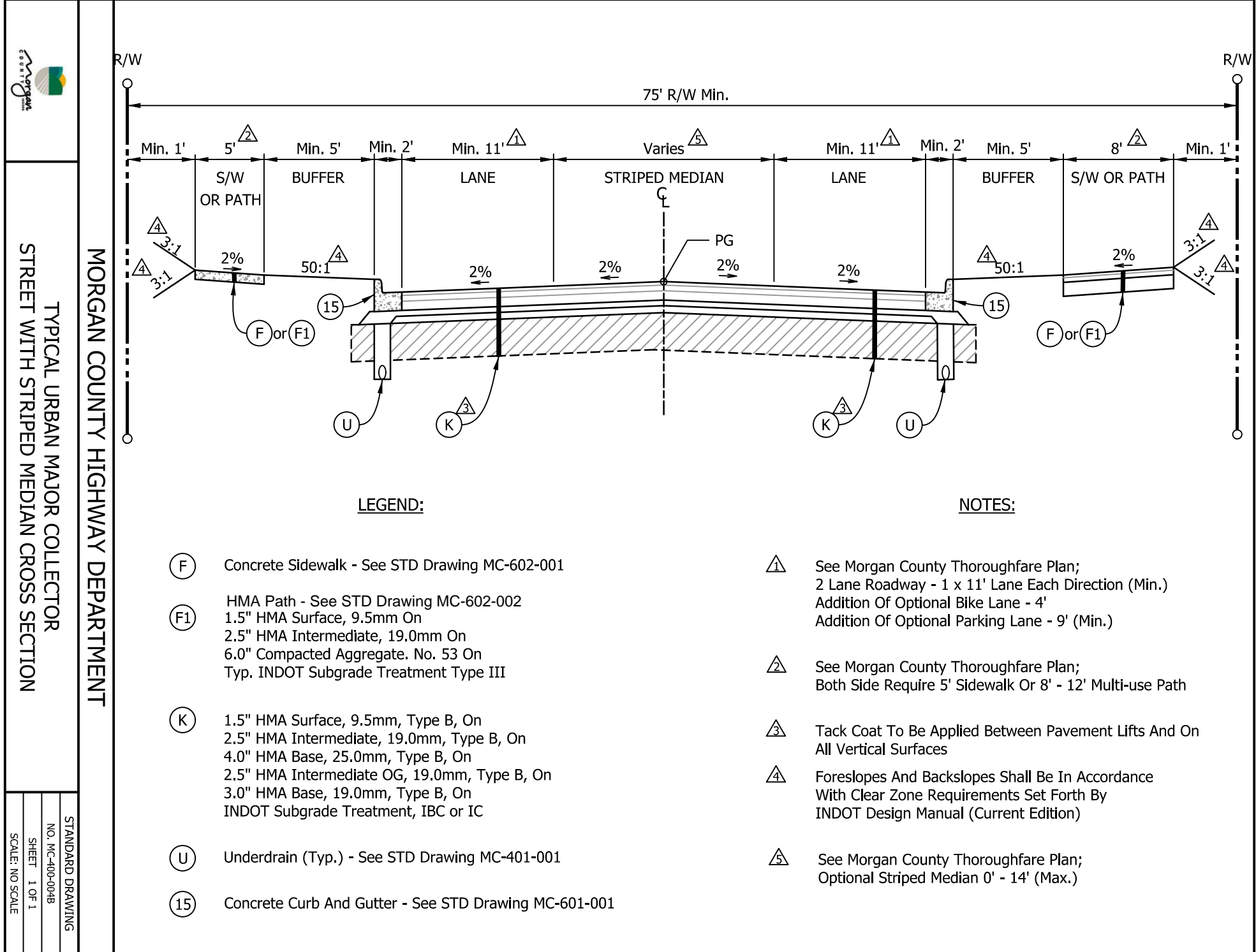
LEGEND:

- (F) Concrete Sidewalk - See STD Drawing MC-602-001
- (F1) HMA Path - See STD Drawing MC-602-002
 1.5" HMA Surface, 9.5mm On
 2.5" HMA Intermediate, 19.0mm On
 6.0" Compacted Aggregate. No. 53 On
 Typ. INDOT Subgrade Treatment Type III
- (K) 1.5" HMA Surface, 9.5mm, Type B, On
 2.5" HMA Intermediate, 19.0mm, Type B, On
 4.0" HMA Base, 25.0mm, Type B, On
 2.5" HMA Intermediate OG, 19.0mm, Type B, On
 3.0" HMA Base, 19.0mm, Type B, On
 INDOT Subgrade Treatment, IBC or IC
- (U) Underdrain (Typ.) - See STD Drawing MC-401-001
- (15) Concrete Curb And Gutter - See STD Drawing MC-601-001
- (13) Concrete Curb - See STD Drawing MC-601-001

NOTES:

- △ See Morgan County Thoroughfare Plan;
 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)
 Addition Of Optional Bike Lane - 4'
 Addition Of Auxiliary Lane - 11' (Min.)
 Addition Of Optional Parking Lane - 9'
- △ See Morgan County Thoroughfare Plan;
 Both Sides Require 5' Sidewalk Or 8' - 10' 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)
- △ See Morgan County Thoroughfare Plan;
 Optional Raised Median 3' - 10'
 When Median < 3' Use STD Drawing MC-400-004B

STANDARD DRAWING
 NO. MC-400-004A
 SHEET 1 OF 1
 SCALE: NO SCALE



MORGAN COUNTY HIGHWAY DEPARTMENT
 TYPICAL URBAN MAJOR COLLECTOR
 STREET WITH STRIPED MEDIAN CROSS SECTION

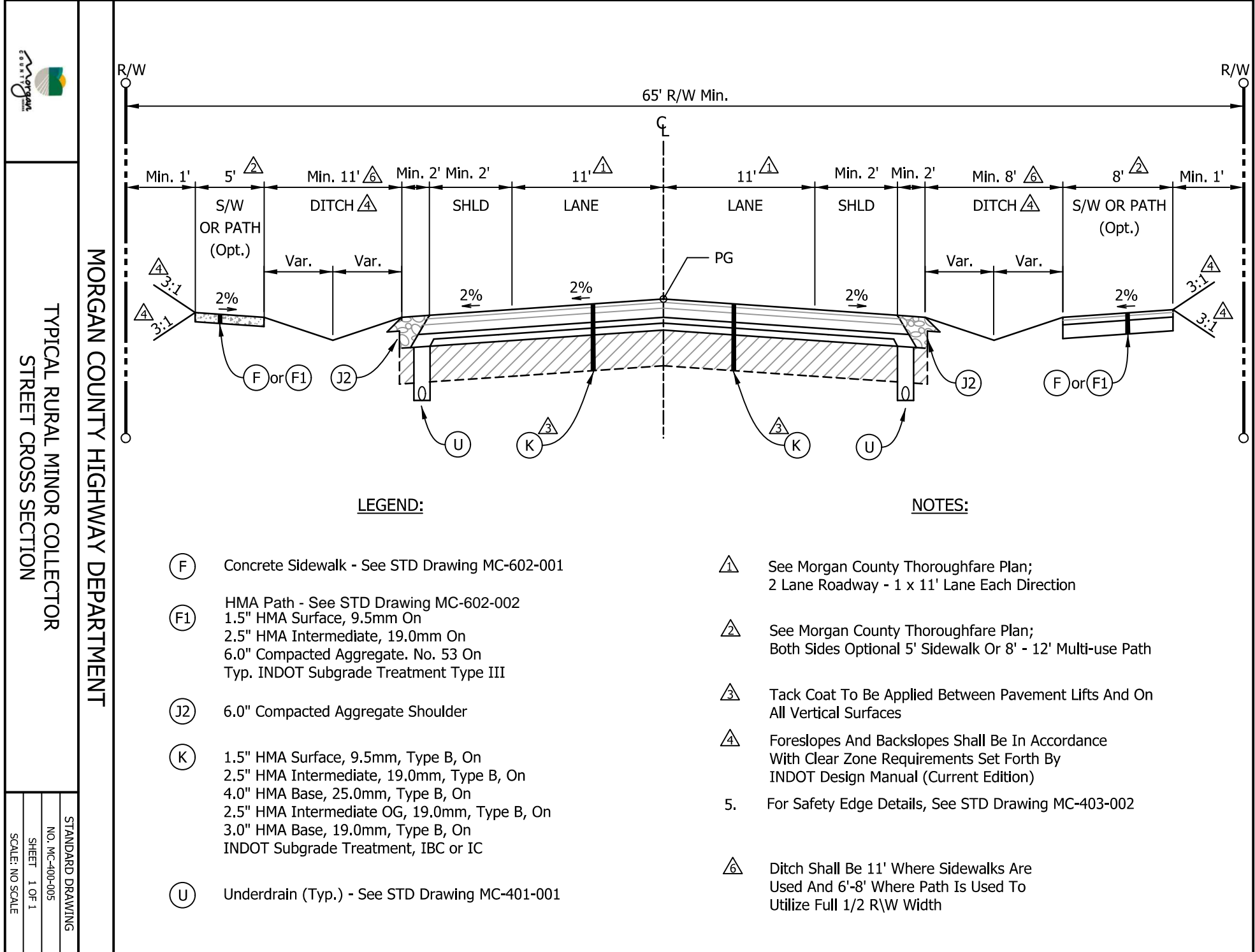
LEGEND:

- (F) Concrete Sidewalk - See STD Drawing MC-602-001
- (F1) HMA Path - See STD Drawing MC-602-002
 1.5" HMA Surface, 9.5mm On
 2.5" HMA Intermediate, 19.0mm On
 6.0" Compacted Aggregate. No. 53 On
 Typ. INDOT Subgrade Treatment Type III
- (K) 1.5" HMA Surface, 9.5mm, Type B, On
 2.5" HMA Intermediate, 19.0mm, Type B, On
 4.0" HMA Base, 25.0mm, Type B, On
 2.5" HMA Intermediate OG, 19.0mm, Type B, On
 3.0" HMA Base, 19.0mm, Type B, On
 INDOT Subgrade Treatment, IBC or IC
- (U) Underdrain (Typ.) - See STD Drawing MC-401-001
- (15) Concrete Curb And Gutter - See STD Drawing MC-601-001

NOTES:

- △1 See Morgan County Thoroughfare Plan;
 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)
 Addition Of Optional Bike Lane - 4'
 Addition Of Optional Parking Lane - 9' (Min.)
- △2 See Morgan 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 Morgan County Thoroughfare Plan;
 Optional Striped Median 0' - 14' (Max.)

STANDARD DRAWING
 NO. MC-400-004B
 SHEET 1 OF 1
 SCALE: NO SCALE



MORGAN COUNTY HIGHWAY DEPARTMENT
 TYPICAL RURAL MINOR COLLECTOR
 STREET CROSS SECTION

LEGEND:

- (F) Concrete Sidewalk - See STD Drawing MC-602-001
- (F1) HMA Path - See STD Drawing MC-602-002
 1.5" HMA Surface, 9.5mm On
 2.5" HMA Intermediate, 19.0mm On
 6.0" Compacted Aggregate. No. 53 On
 Typ. INDOT Subgrade Treatment Type III
- (J2) 6.0" Compacted Aggregate Shoulder
- (K) 1.5" HMA Surface, 9.5mm, Type B, On
 2.5" HMA Intermediate, 19.0mm, Type B, On
 4.0" HMA Base, 25.0mm, Type B, On
 2.5" HMA Intermediate OG, 19.0mm, Type B, On
 3.0" HMA Base, 19.0mm, Type B, On
 INDOT Subgrade Treatment, IBC or IC
- (U) Underdrain (Typ.) - See STD Drawing MC-401-001

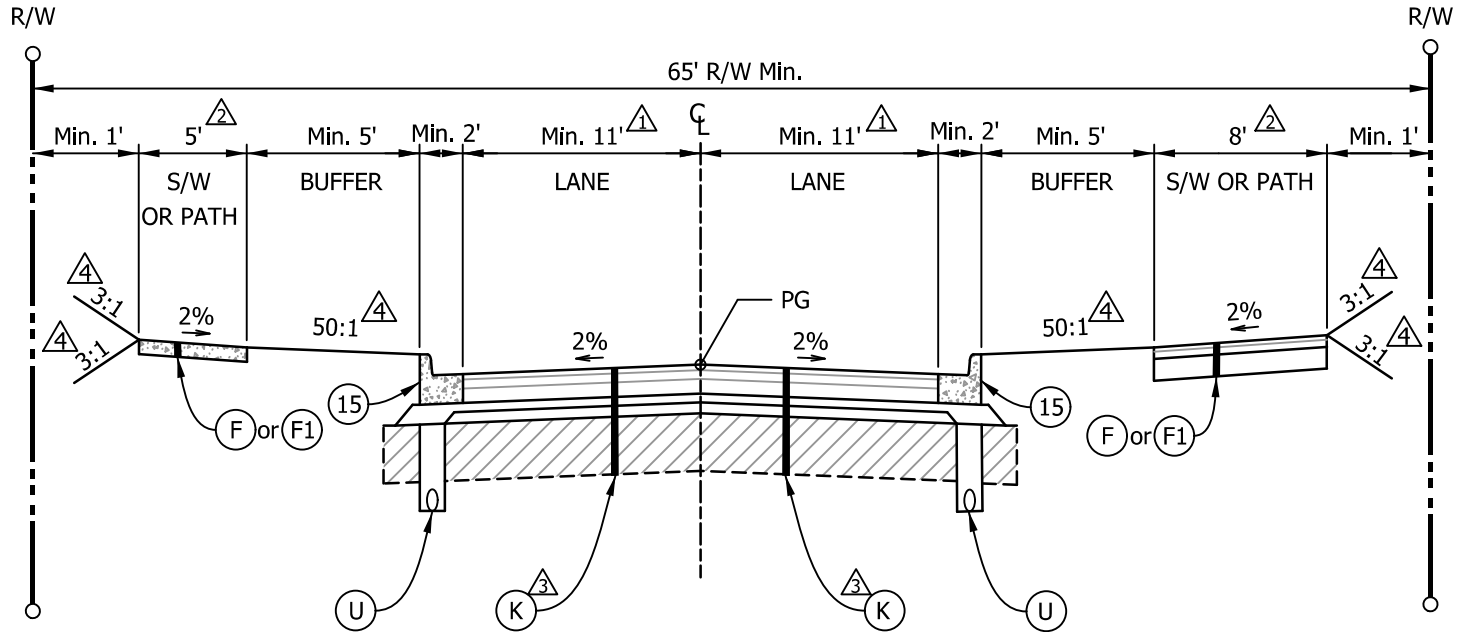
NOTES:

- △ See Morgan County Thoroughfare Plan;
2 Lane Roadway - 1 x 11' Lane Each Direction
- △ See Morgan 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 MC-403-002
- △ Ditch Shall Be 11' Where Sidewalks Are
Used And 6'-8' Where Path Is Used To
Utilize Full 1/2 R\W Width



TYPICAL URBAN MINOR COLLECTOR STREET CROSS SECTION

MORGAN COUNTY HIGHWAY DEPARTMENT



LEGEND:

NOTES:

- (F) Concrete Sidewalk - See STD Drawing MC-602-001
- (F1) HMA Path - See STD Drawing MC-602-002
1.5" HMA Surface, 9.5mm On
2.5" HMA Intermediate, 19.0mm On
6.0" Compacted Aggregate. No. 53 On
Typ. INDOT Subgrade Treatment Type III
- (K) 1.5" HMA Surface, 9.5mm, Type B, On
2.5" HMA Intermediate, 19.0mm, Type B, On
4.0" HMA Base, 25.0mm, Type B, On
2.5" HMA Intermediate OG, 19.0mm, Type B, On
3.0" HMA Base, 19.0mm, Type B, On
INDOT Subgrade Treatment, IBC or IC
- (U) Underdrain (Typ.) - See STD Drawing MC-401-001
- (15) Concrete Curb And Gutter - See STD Drawing MC-601-001

- △1 See Morgan County Thoroughfare Plan;
2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)
Addition Of Optional Bike Lane - 4'
Addition Of Optional Parking Lane - 9' (Min.)
- △2 See Morgan 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)

STANDARD DRAWING

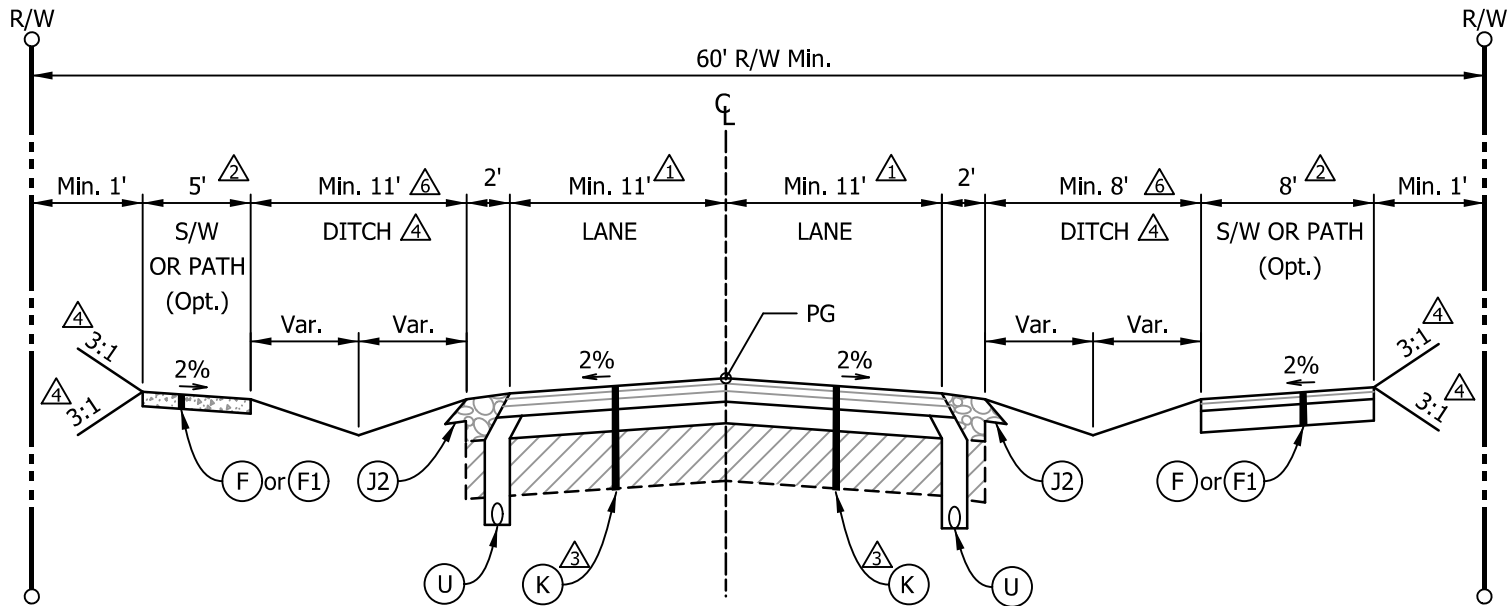
NO. MC-400-006

SHEET 1 OF 1

SCALE: NO SCALE



MORGAN COUNTY HIGHWAY DEPARTMENT
TYPICAL RURAL LOCAL STREET/RESIDENTIAL FEEDER
CROSS SECTION



LEGEND:

(F) Concrete Sidewalk - See STD Drawing MC-602-001

(F1) HMA Path - See STD Drawing MC-602-002
 1.5" HMA Surface, 9.5mm On
 2.5" HMA Intermediate, 19.0mm On
 6.0" Compacted Aggregate, No. 53 On
 Typ. INDOT Subgrade Treatment Type III

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

(J2) 6.0" Compacted Aggregate Shoulder

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

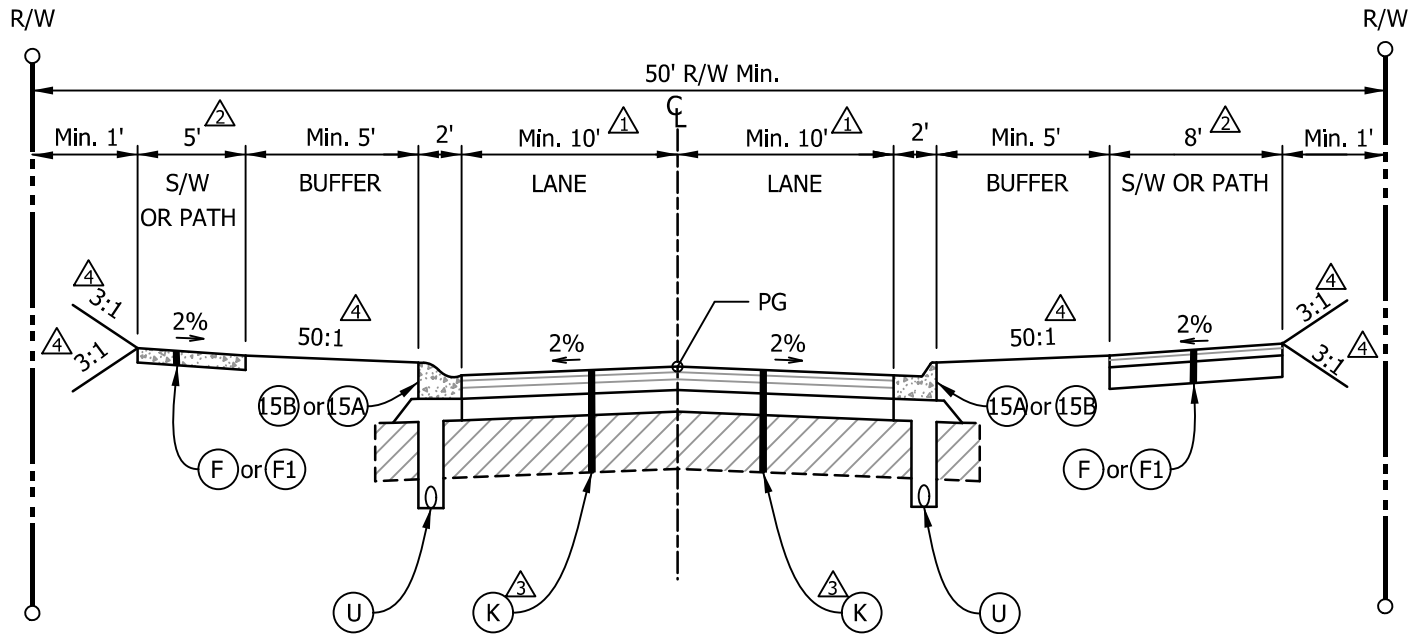
NOTES:

- △ See Morgan County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)
- △ See Morgan 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 MC-403-002
- △ Ditch Shall Be 11' Where Sidewalks Are Used And 6'-8' Where Path Is Used To Utilize Full 1/2 R\W Width



MORGAN COUNTY HIGHWAY DEPARTMENT
TYPICAL URBAN LOCAL STREET/RESIDENTIAL FEEDER CROSS SECTION

STANDARD DRAWING
 NO. MC-400-008
 SHEET 1 OF 1
 SCALE: NO SCALE



LEGEND:

(F) Concrete Sidewalk - See STD Drawing MC-602-001

(F1) HMA Path - See STD Drawing MC-602-002
 1.5" HMA Surface, 9.5mm On
 2.5" HMA Intermediate, 19.0mm On
 6.0" Compacted Aggregate, No. 53 On
 Typ. INDOT Subgrade Treatment Type III

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, IBC or IC	Yes	Yes

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

(15A) Mountable Concrete Curb And Gutter (Typ.) - See STD Drawing MC-601-001 Local Streets Only

(15B) Rolled Curb (Typ.) - See STD Drawing MC-601-001 Subdivision Only

NOTES:

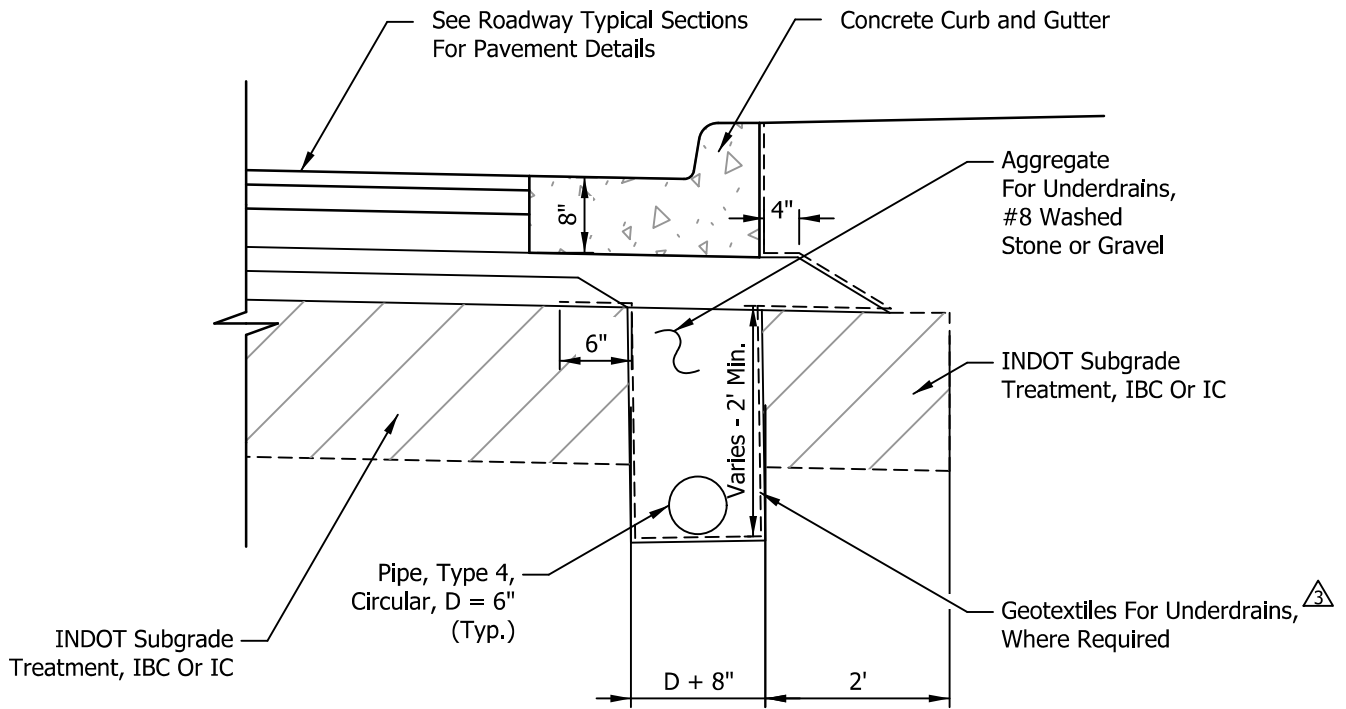
△ See Morgan County Thoroughfare Plan;
 2 Lane Roadway - 1 x 10' Lane Each Direction (Min.)
 Addition Of Optional Bike Lane - 4'
 Addition Of Optional Parking Lane - 9' (Min.)

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

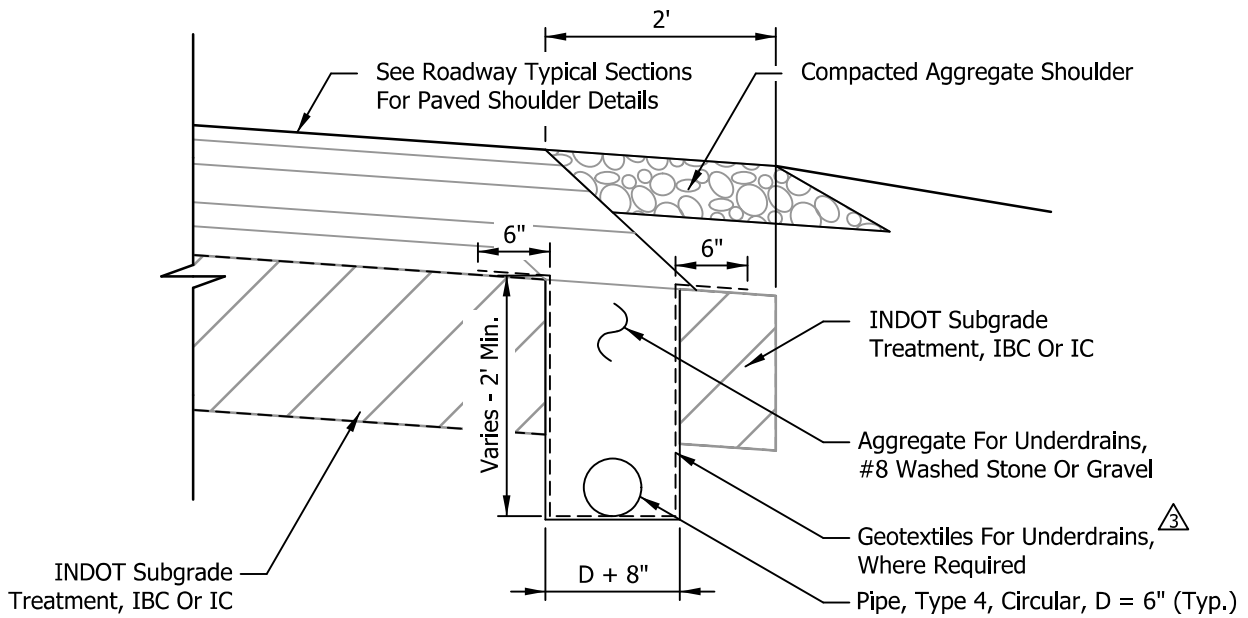
△ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces

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

11/14/2013 09:07:14 AM I:\140051-Morgan Co. Standards\09Road\04 Design Files\02 DGN\Plans\40051\401-001_MC_UnderDrain Detail.dgn



CURB AND GUTTER UNDERDRAIN DETAIL



PAVED SHOULDER UNDERDRAIN DETAIL

NOTES:

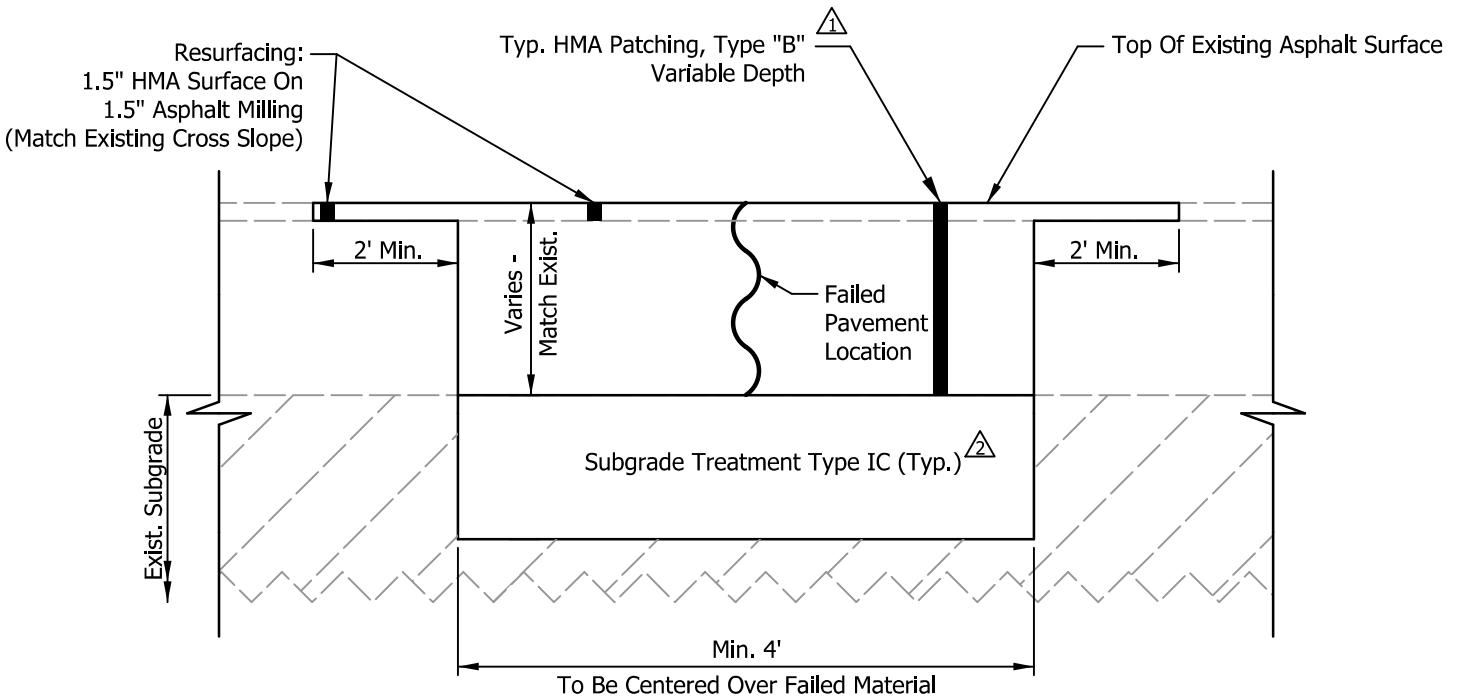
1. Underdrain Outlets To Be Connected To Existing/Proposed Storm System Or Roadside Ditches As Approved By Morgan County Highway Engineer
 2. No Blind Taps Into Storm System Permitted
- ⚠ Per INDOT Standard Specifications

MORGAN COUNTY HIGHWAY DEPARTMENT

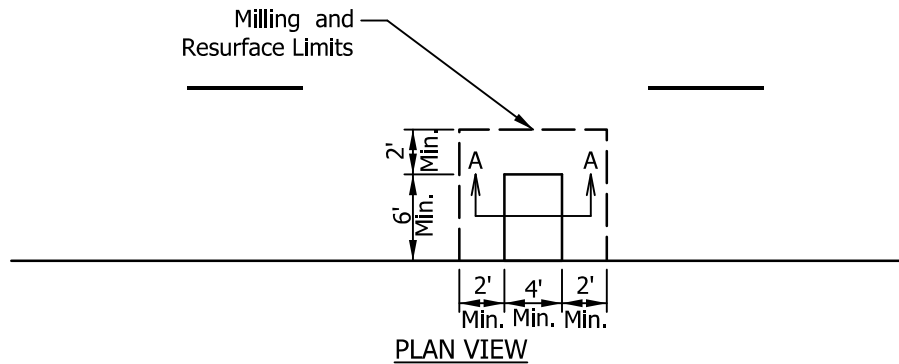


TYPICAL UNDERDRAIN DETAILS

STANDARD DRAWING
NO. MC-401-001
SHEET 1 OF 1
SCALE: NO SCALE



SECTION A-A



PLAN VIEW

- Typ. HMA Patching To Consist Of:
 1.5" HMA Surface, 9.5mm Type B on
 1.5" Surface Milling, on
 Variable Depth 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

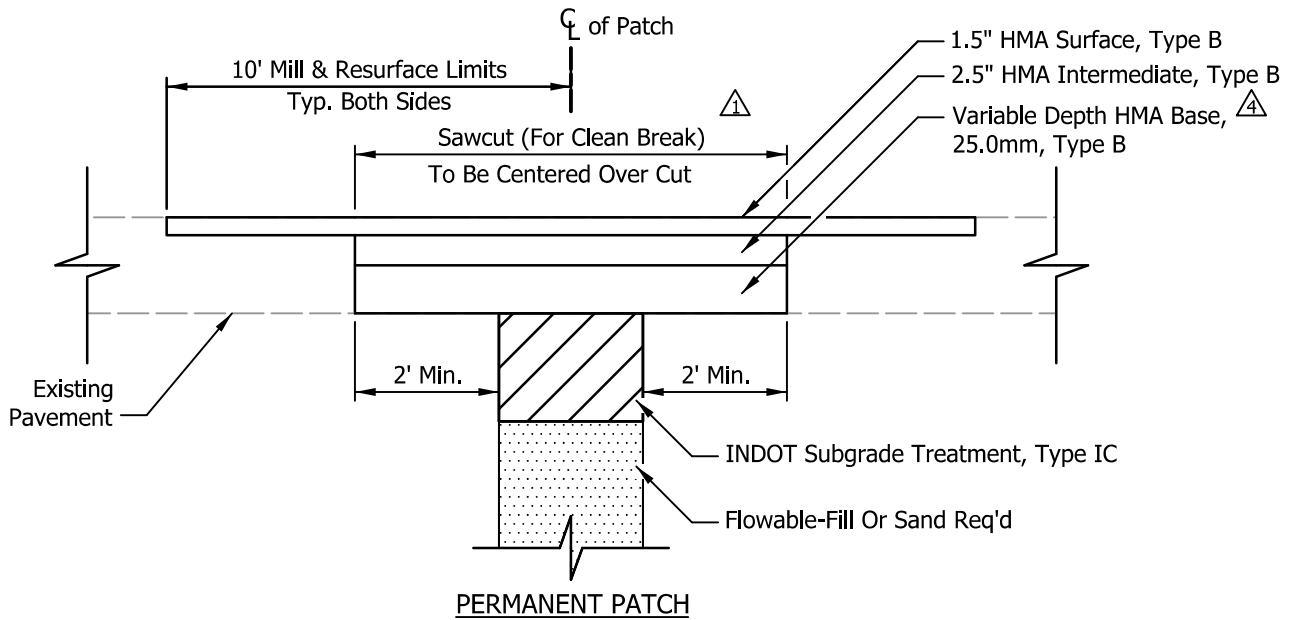
- INDOT Subgrade Treatment Type IC May Be Substituted With The Following;
 Excavate And Replace 12" Of The Subgrade With Flowable - Fill

MORGAN COUNTY HIGHWAY DEPARTMENT

TYPICAL FULL DEPTH PATCH DETAIL

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

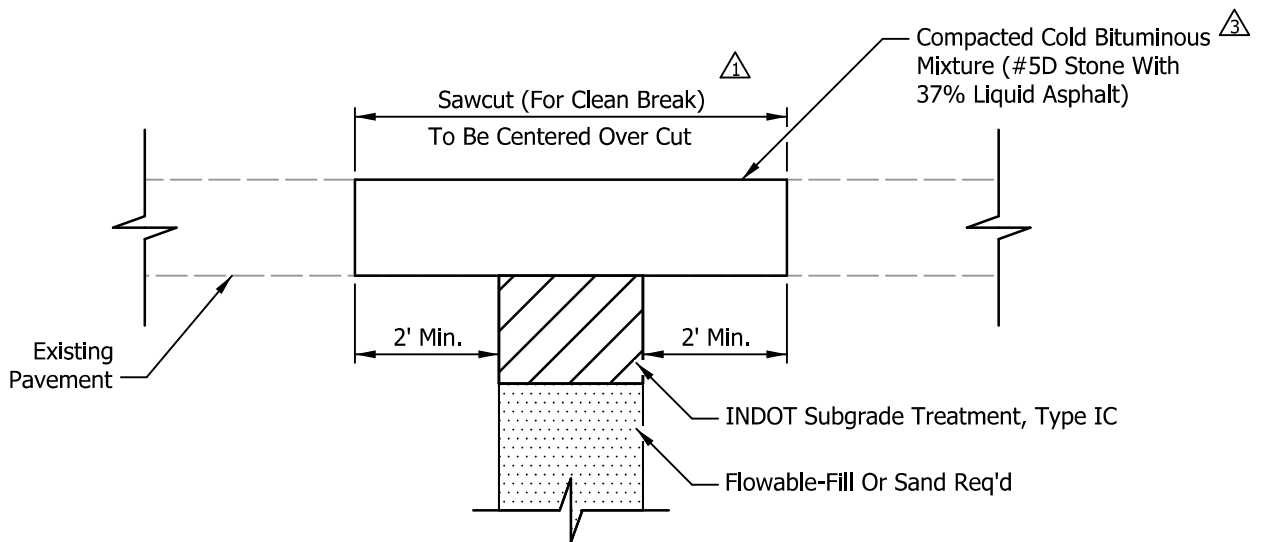




PERMANENT PATCH

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 From Edge Of Pavement To Edge Of Pavement, 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.



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.

MORGAN COUNTY HIGHWAY DEPARTMENT

TYPICAL HMA ROAD CUT PATCH DETAIL

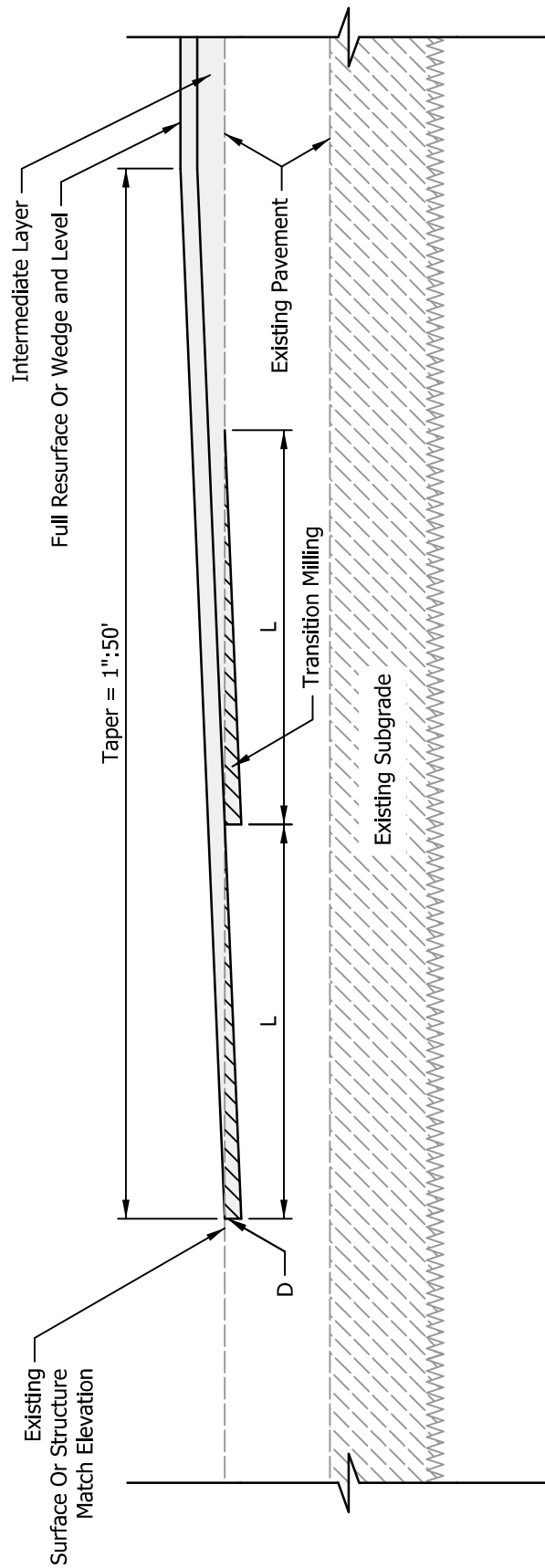
STANDARD DRAWING

NO. MC-402-002

SHEET 1 OF 1

SCALE: NO SCALE





D = 1.5" or 2 times the maximum particle size of HMA course

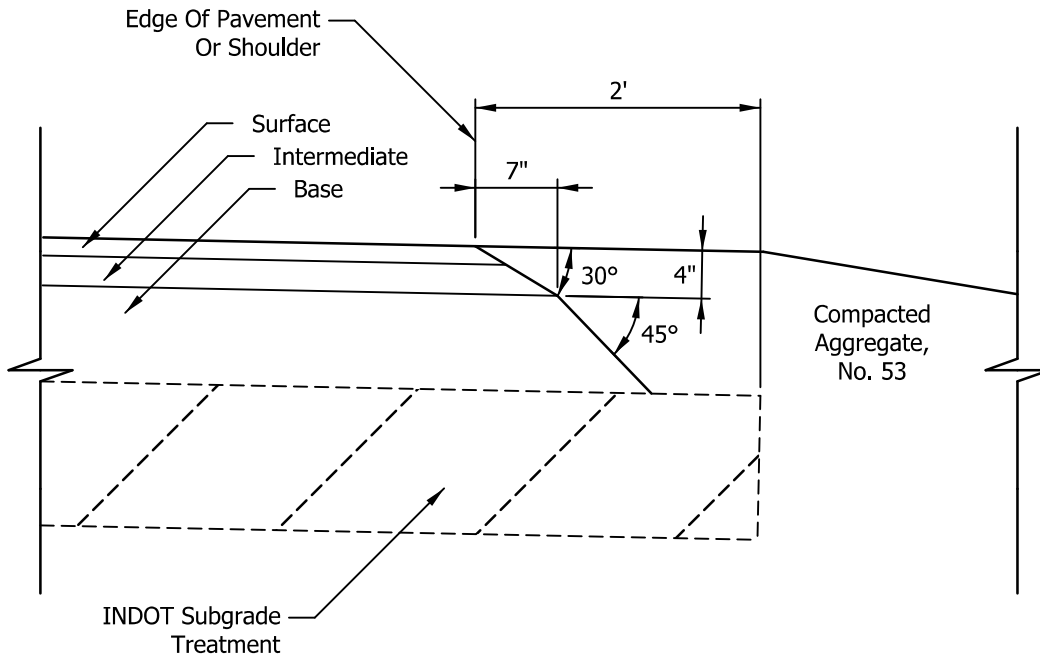
L = D x 60

MORGAN COUNTY HIGHWAY DEPARTMENT

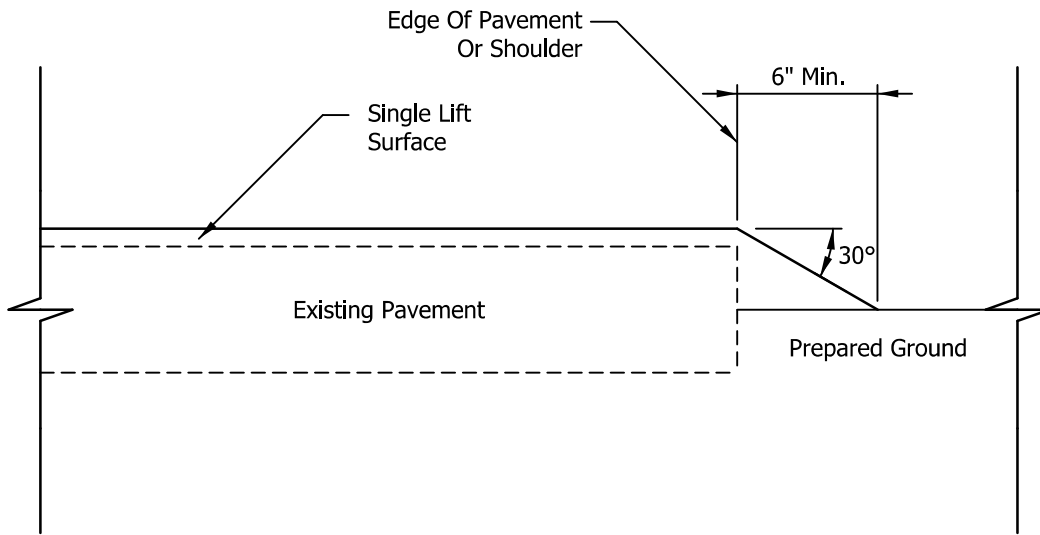
TYPICAL TERMINUS TRANSITION



STANDARD DRAWING
NO. MC-403-001
SHEET 1 OF 1
SCALE: NO SCALE



HMA SAFETY EDGE



SINGLE LIFT SURFACE SAFETY EDGE

MORGAN COUNTY HIGHWAY DEPARTMENT

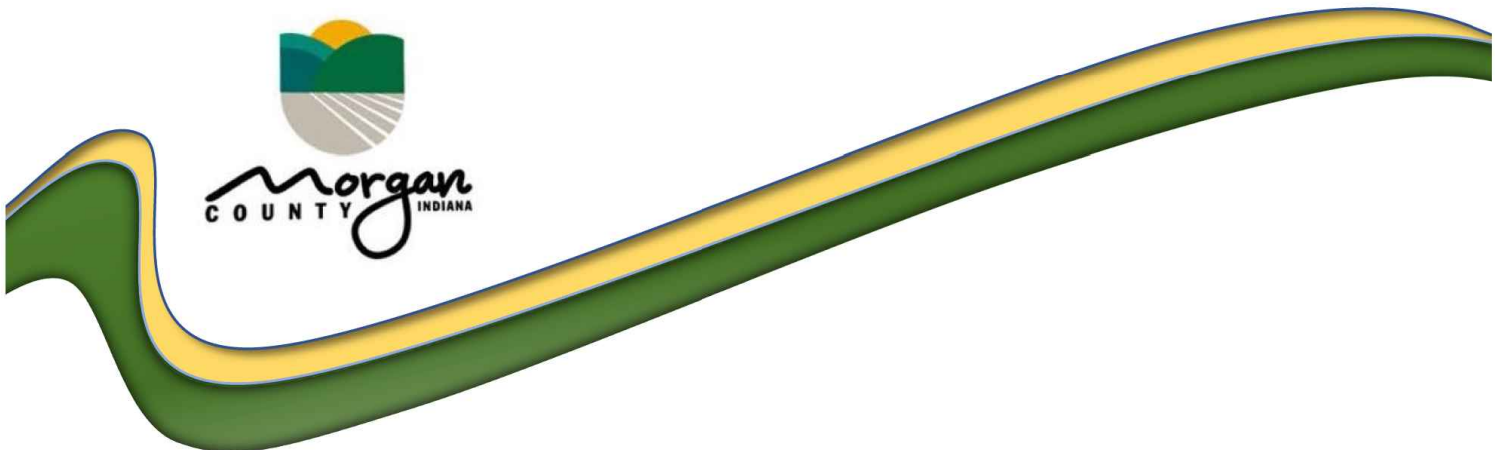
TYPICAL SAFETY EDGE DETAILS



STANDARD DRAWING
NO. MC-403-002
SHEET 1 OF 1
SCALE: NO SCALE

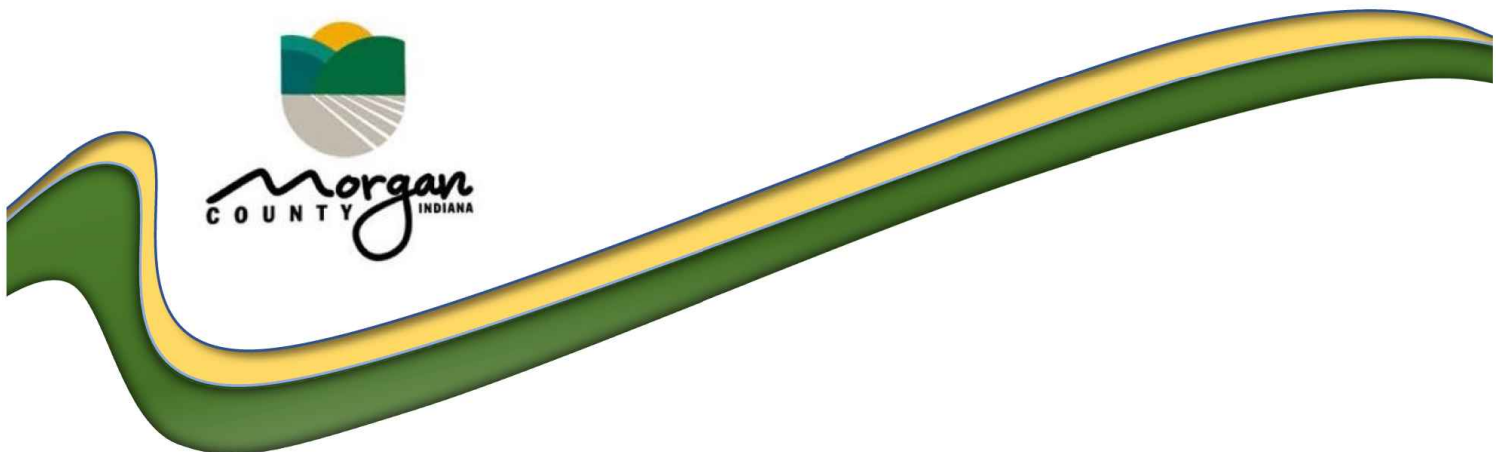
INDEX OF MORGAN COUNTY STANDARDS
500 SERIES STANDARD DRAWINGS
CONCRETE PAVEMENTS

NOT USED

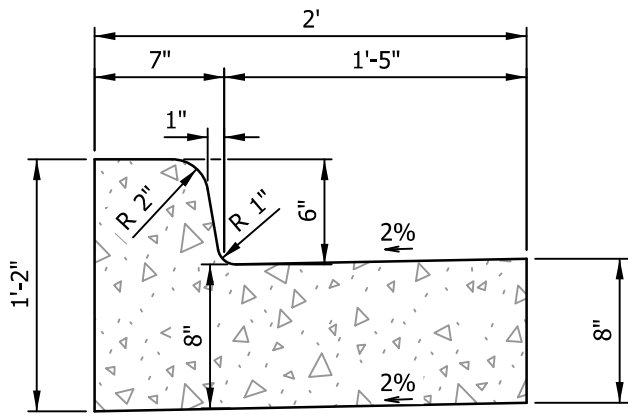


INDEX OF MORGAN COUNTY STANDARDS
600 SERIES STANDARD DRAWINGS
INCIDENTAL CONSTRUCTION

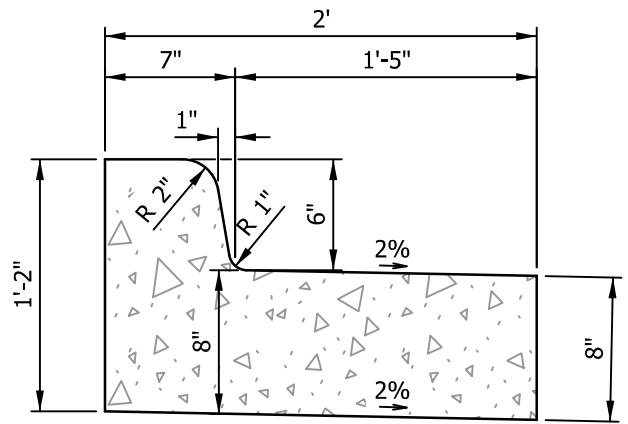
Typical Concrete Curb and Gutter and Concrete Curb	MC-601-001
Typical Concrete Curb and Gutter(Continued).....	MC-601-002
Typical Concrete Sidewalk Detail	MC-602-001
Typical HMA Multi-Use Path.....	MC-602-002
Typical Subdivision Residential Drive.....	MC-603-001
Typical Urban Commercial Drive.....	MC-603-002
Typical Field Entrance.....	MC-603-003
Typical Rural Residential Drive.....	MC-603-004
Typical Rural Commercial Drive.....	MC-603-005
Typical Subdivision Entrance.....	MC-603-006
Typical Acceleration/Deceleration Lane.....	MC-603-007
Typical Mailbox Approach.....	MC-603-008
Typical Culvert Detail With Open Ditches.....	MC-603-009
Typical Cul-De-Sac.....	MC-604-001
Typical Temporary Cul-De-Sac.....	MC-604-002



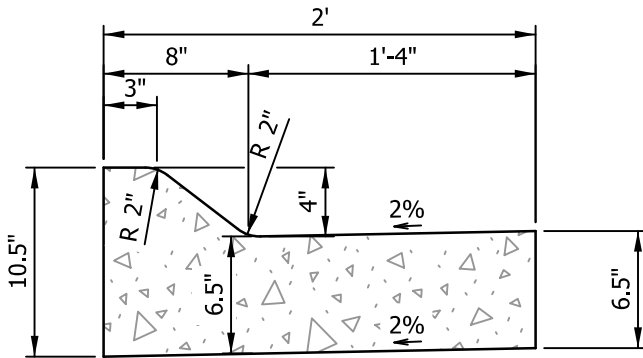
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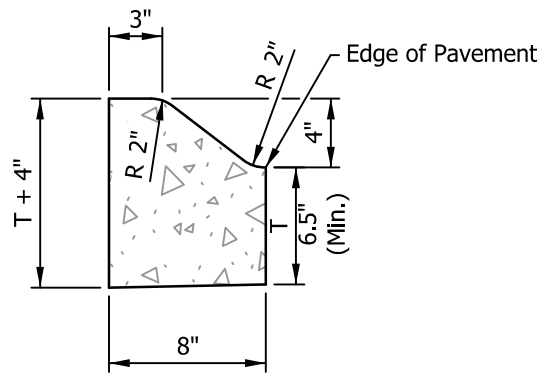
**CONCRETE CURB AND GUTTER
STANDARD (Typ.)**



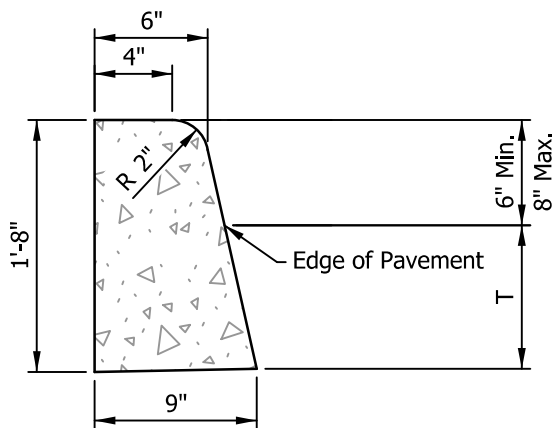
**CONCRETE CURB AND GUTTER
MODIFIED (Typ.)**



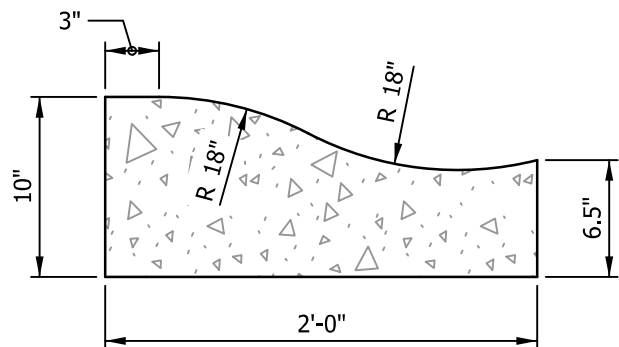
**CONCRETE CURB AND GUTTER
MOUNTABLE (Typ.)**



**CONCRETE CURB
MOUNTABLE**



**CONCRETE CURB
BARRIER**



ROLLED CURB

NOTES

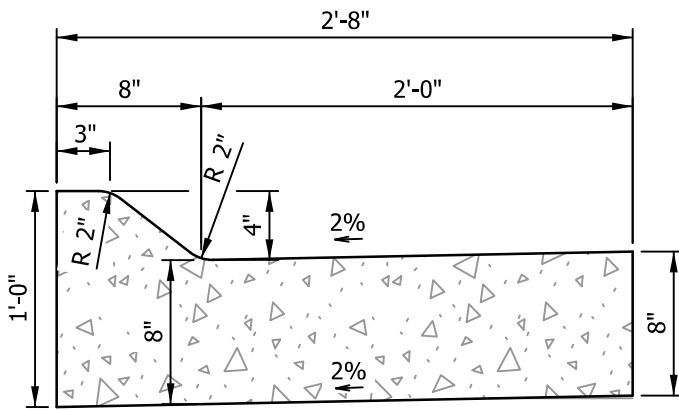
T = Nominal Pavement Thickness

MORGAN COUNTY HIGHWAY DEPARTMENT

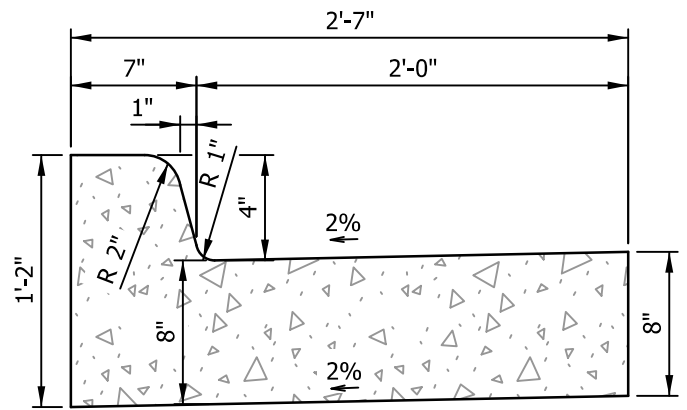


**CONCRETE CURB AND GUTTER
AND CURB**

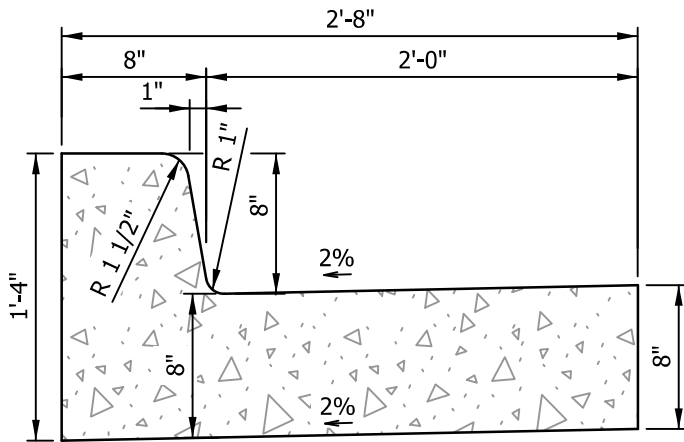
STANDARD DRAWING
NO. MC-601-001
SHEET 1 OF 1
SCALE: NO SCALE



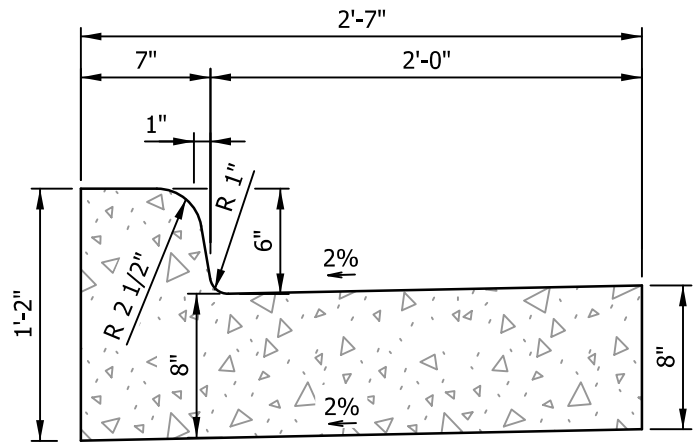
**COMBINED CONCRETE CURB
AND GUTTER, TYPE B
(SLOPING)**



**COMBINED CONCRETE CURB
AND GUTTER
(VERTICAL)**



**COMBINED CONCRETE CURB
AND GUTTER, TYPE C
(VERTICAL)**



**MONOLITHIC CURB
(VERTICAL)**

MORGAN COUNTY HIGHWAY DEPARTMENT



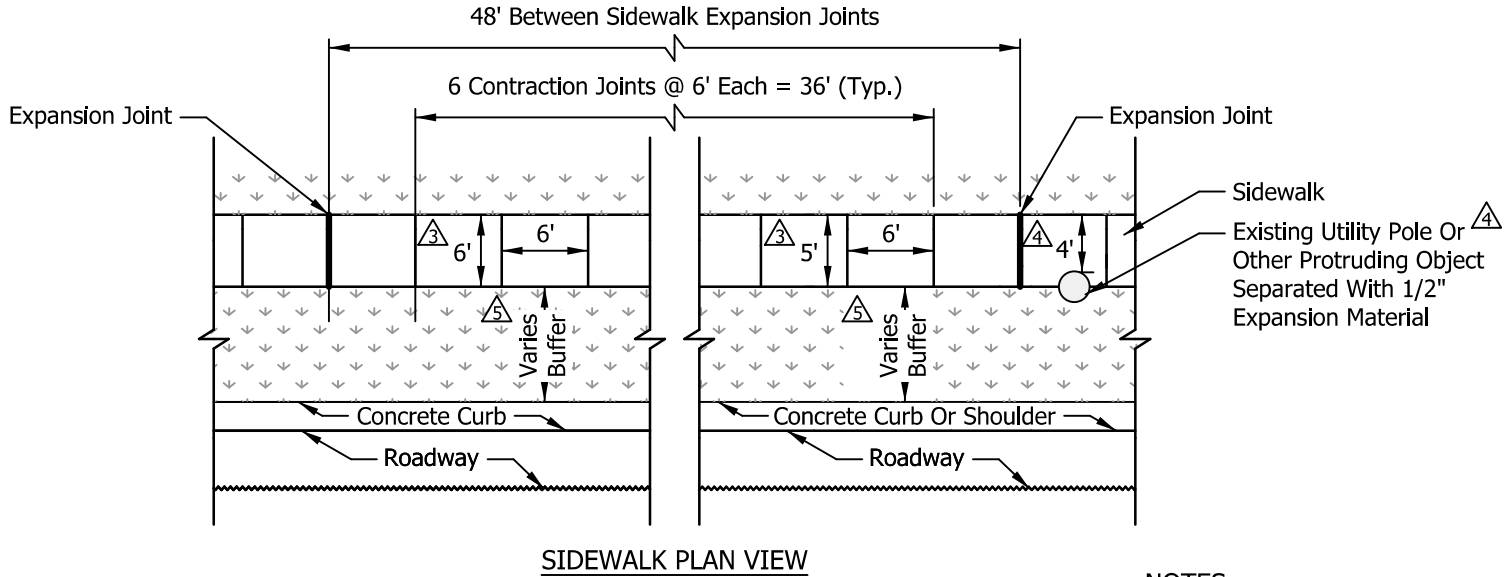
**CONCRETE CURB AND GUTTER
AND CURB (CONTINUED)**

STANDARD DRAWING
NO. MC-601-002
SHEET 1 OF 1
SCALE: NO SCALE



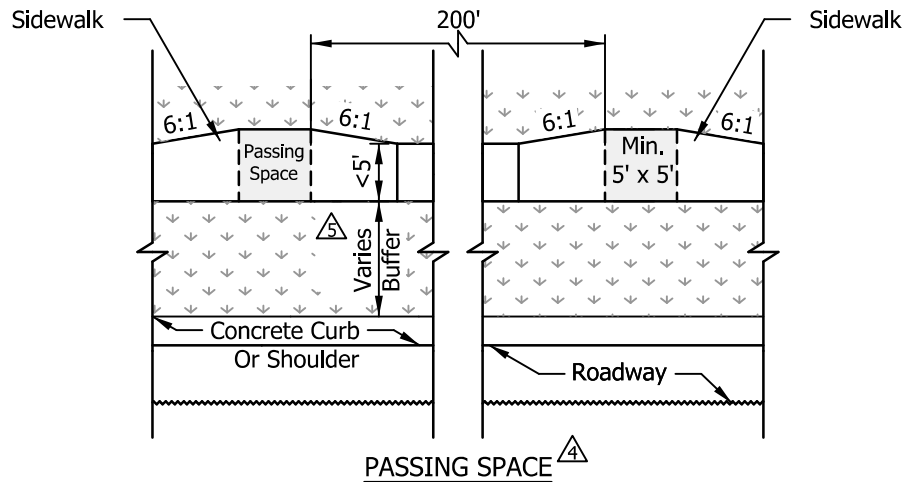
TYPICAL CONCRETE SIDEWALK

MORGAN COUNTY HIGHWAY DEPARTMENT



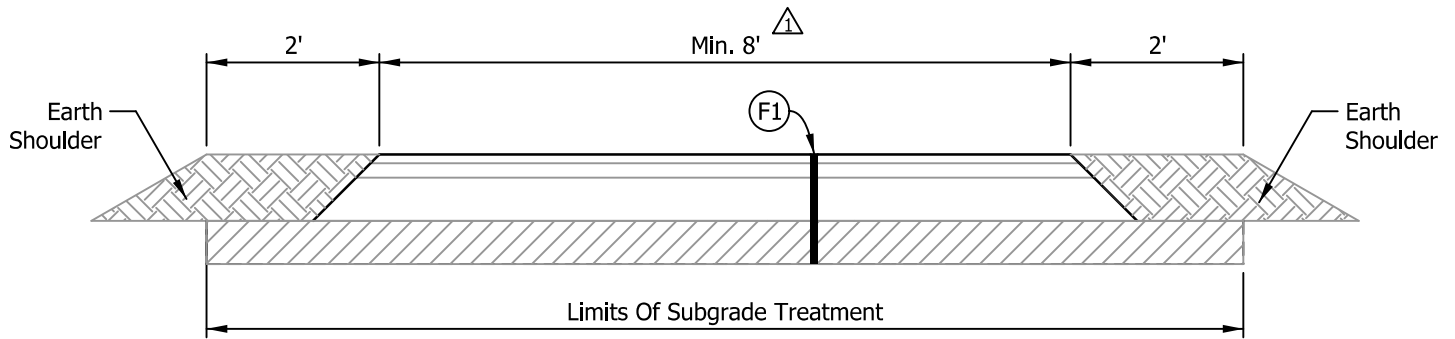
NOTES:

1. All Slopes Are Absolute Rather Than Relative To The Sidewalk Or Roadway Grade And Are Given As Maximums. Slopes At Least 0.50% Less Than The Maximum Are Preferred.
 2. The Grade Of The Sidewalk Is Measured In The Direction Of Pedestrian Travel And Shall Not Exceed The Grade Of The Adjacent Roadway. The Cross Slope Is Measured Perpendicular To The Direction Of Pedestrian Travel And Shall Not Exceed 2.00%
- ⚠ Where There Is A Buffer Between The Sidewalk And The Curb, The Preferred Minimum Sidewalk Clear Width Is 5'. Where There Is No Buffer Between The Sidewalk And The Curb, The Preferred Minimum Sidewalk Width Is 6'.
- ⚠ A 4' Minimum Clear Width Shall Be Provided Adjacent To Street Furniture, Mailbox, Utility Pole, Or Other Protruding Object. Where The Sidewalk Clear Width Is Less Than 5', A Passing Space With Dimensions Of 5' X 5' Shall Be Provided At 200' Intervals
- ⚠ See Roadway Typical Sections for Dimensions



LEGEND:

- (F) 4" Sidewalk, Concrete On
4" Compacted Aggregate No. 53



LEGEND:

- (F1) 1.5" HMA Surface, 9.5mm On
- 2.5" HMA Intermediate, 19.0mm On
- 6.0" Compacted Aggregate. No. 53 On
- Typ. INDOT Subgrade Treatment Type III

NOTES:

- △ Width Varies, Typ. 8' - 12'
- Cross Slope Varies, Typ. Max. 2.0% (1.5% Desired)

MORGAN COUNTY HIGHWAY DEPARTMENT

TYPICAL HMA MULTI-USE PATH



STANDARD DRAWING

NO. MC-602-002

SHEET 1 OF 1

SCALE: NO SCALE

See Latest Version Of INDOT
Standard Drawing For Class I Drive

11/11/2013 9:07:30 AM I:\140051-Morgan Co. Standards\09Road\04 Design files\02 DGN\Plans\600s\603-001_MC_Res Drive_Sht_Typical.dgn

MORGAN COUNTY HIGHWAY DEPARTMENT



TYPICAL SUBDIVISION RESIDENTIAL DRIVEWAY

STANDARD DRAWING

NO. MC-603-001

SHEET 1 OF 1

SCALE: NO SCALE

See Latest Version Of INDOT
Standard Drawing For Class III Drive

11/14/2013 9:07:32 AM I:\140051-Morgan Co. Standards\09Road\04 Design files\02 DGN\Plans\600s\603-002_MC_Commercial Drive_Sht_Typical.dgn

MORGAN COUNTY HIGHWAY DEPARTMENT



TYPICAL URBAN COMMERCIAL DRIVEWAY

STANDARD DRAWING

NO. MC-603-002

SHEET 1 OF 1

SCALE: NO SCALE

See Latest Version Of INDOT
Standard Drawing For Class V Drive

11/14/2013 9:07:33 AM I:\140051-Morgan Co. Standards\09Road\04 Design files\02 DGN\Plans\600s\603-003_MC_Field Drive_Sht_Typical.dgn

MORGAN COUNTY HIGHWAY DEPARTMENT



TYPICAL FIELD ENTRANCE

STANDARD DRAWING

NO. MC-603-003

SHEET 1 OF 1

SCALE: NO SCALE

See Latest Version Of INDOT
Standard Drawing For Class II Drive

11/14/2013 9:07:34 AM I:\140051-Morgan Co. Standards\09Road\04 Design files\02 DGN\Plans\600s\603-004_MC_Rural Res Drive_Sht_Typical.dgn

MORGAN COUNTY HIGHWAY DEPARTMENT



TYPICAL RURAL RESIDENTIAL DRIVEWAY

STANDARD DRAWING

NO. MC-603-004

SHEET 1 OF 1

SCALE: NO SCALE

See Latest Version Of INDOT
Standard Drawing For Class IV Drive

11/14/2013 9:07:36 AM I:\140051-Morgan Co. Standards\09Road\04 Design files\02 DGN\Plans\6005\603-005_MC_Rural Commercial Drive_Sht_Typical.dgn

MORGAN COUNTY HIGHWAY DEPARTMENT



TYPICAL RURAL COMMERCIAL DRIVEWAY

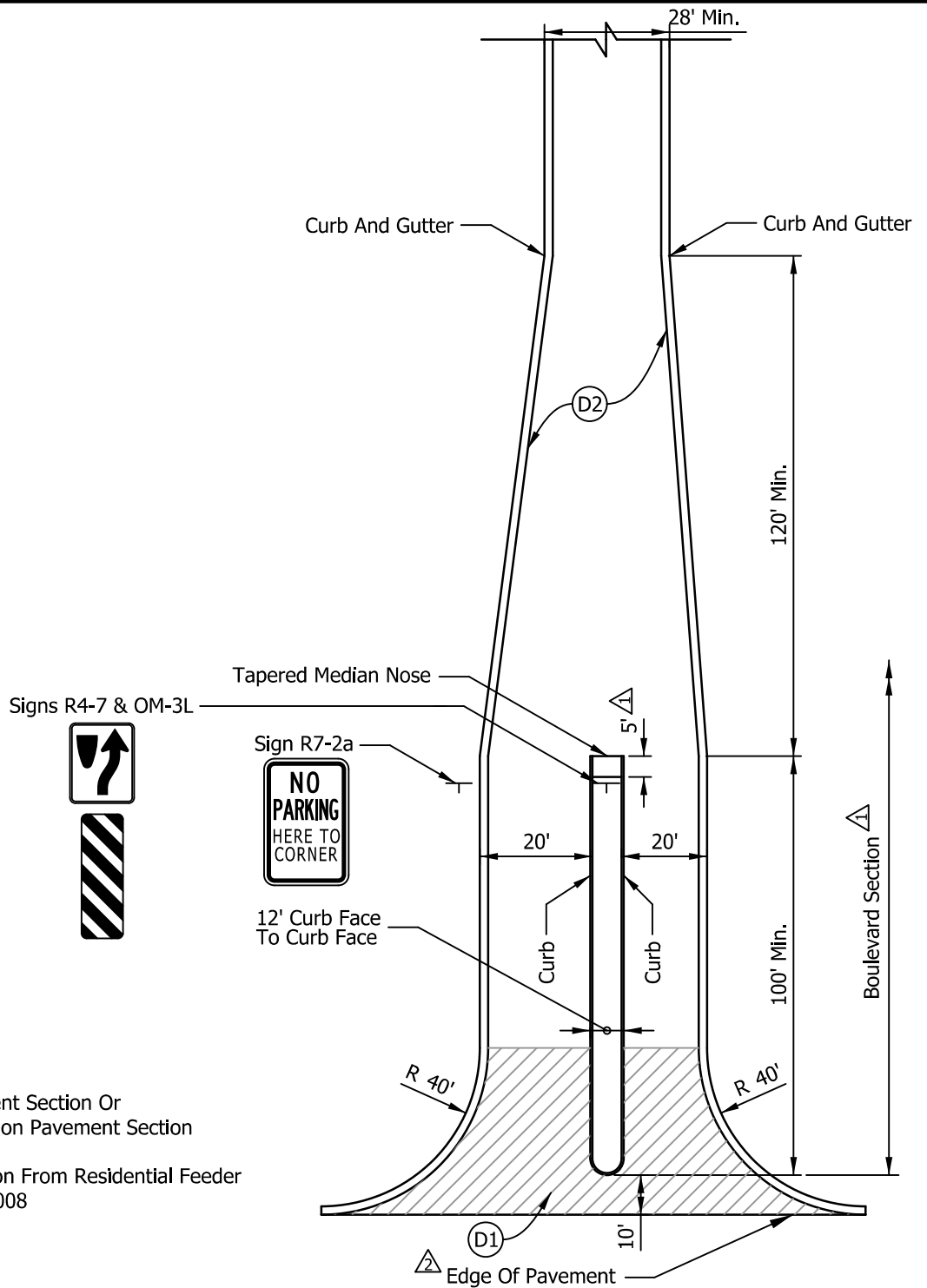
STANDARD DRAWING

NO. MC-603-005

SHEET 1 OF 1

SCALE: NO SCALE

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LEGEND:

- (D1) Match Existing Pavement Section Or Acceleration/Deceleration Pavement Section
- (D2) Match Pavement Section From Residential Feeder STD Drawing MC-400-008

NOTES:

- △ For Boulevard Sections, Continue Median Section; Maximum Length Between Breaks In Medians Shall Be 600' Minimum Length Between Islands Shall Be 30'
- △ For Major Subdivisions, Acceleration/Deceleration Taper To Be Used To Tie Into Existing, See STD Drawing Sheet Name
- 3. Vegetation Shall Not Obstruction Sight Line
- 4. All Sign Posts Shall Be Mounted On Breakaway Anchors.

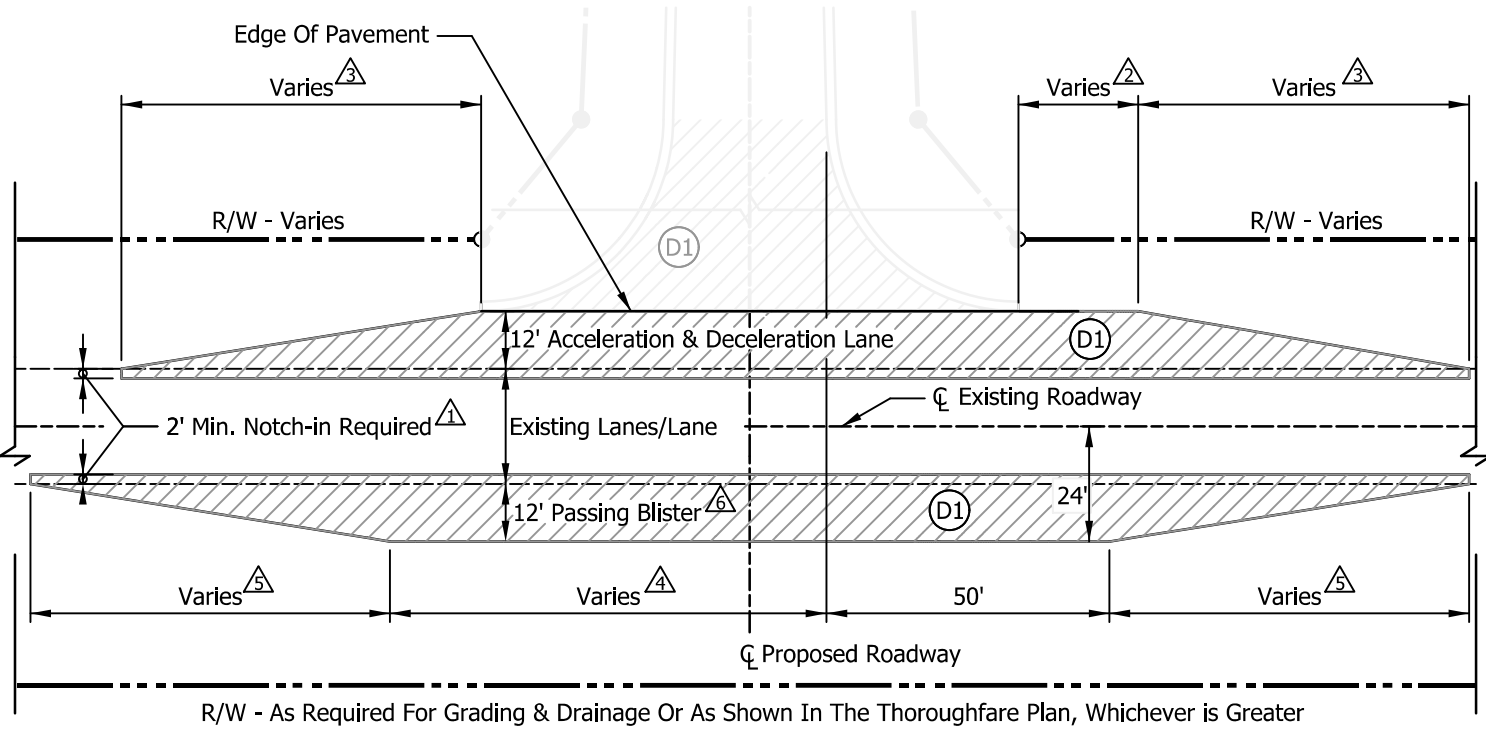
MORGAN COUNTY HIGHWAY DEPARTMENT

TYPICAL SUBDIVISION ENTRANCE



STANDARD DRAWING
NO. MC-603-006
SHEET 1 OF 1
SCALE: NO SCALE

11/14/2023 9:07:39 AM I:\140051-Morgan Co. Standards\09Road\04 Design_files\02_DGN\Plans\600s\603-007_MC_Accel Decel Taper_Sht_Typical.dgn



R/W - As Required For Grading & Drainage Or As Shown In The Thoroughfare Plan, Whichever is Greater

NOTES:

- 1 Acceleration/Deceleration & Passing Blister To Be Notched Into Existing Pavement With A Minimum Of 2' Clean Saw Cut Edge
- 2 Deceleration Tangent See Table
- 3 Acceleration/Deceleration Taper See Table
- 4 Passing Blister Variable Tangent See Table
- 5 Passing Blister Tapers See Table
- 6 Passing Blisters Required When Deemed Necessary By The County Engineer
- 7. Construction Plans Shall Include Centerline Profile Of The Existing Road Being Intersected By The Proposed Road. The Profile Shall Extend A Minimum Of 500' From The Entrance Centerline In Each Direction.

Accel And Decel Dimension		
Speed (MPH)	2	3
30 Or Less	75'	125'
Greater Than 30 & Less Than 50	100'	150'
Greater Than 50	100'	200'

Passing Blister Dimension		
Speed (MPH)	4	5
30 Or Less	150'	150'
Greater Than 30 & Less Than 50	150'	200'
Greater Than 50	200'	300'

LEGEND:

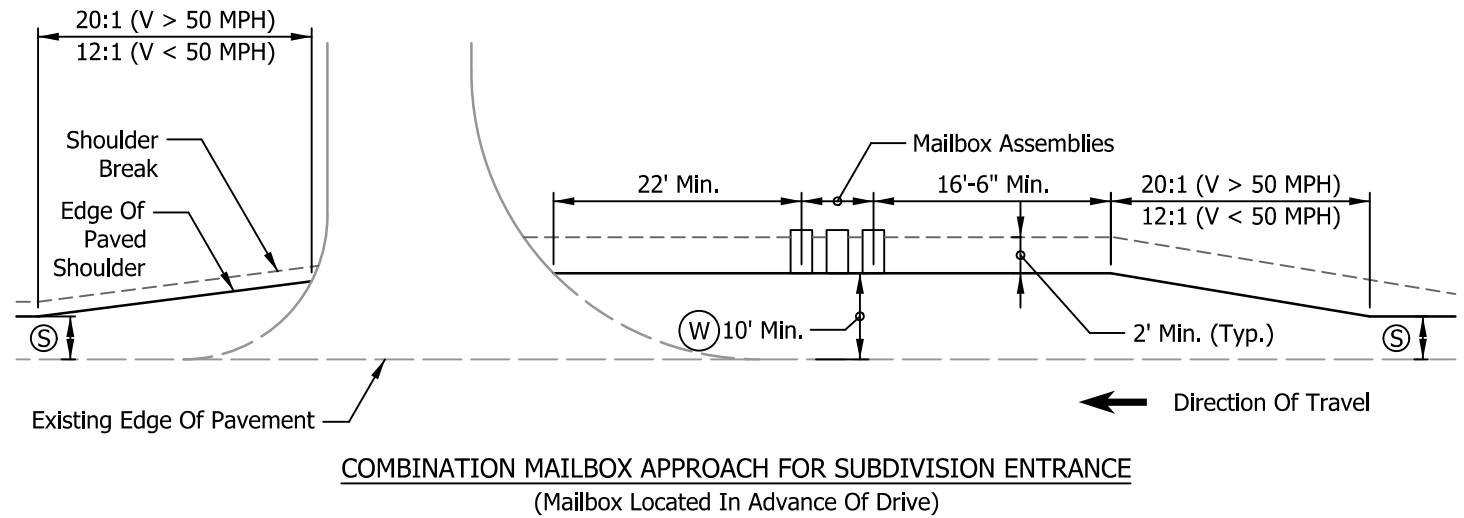
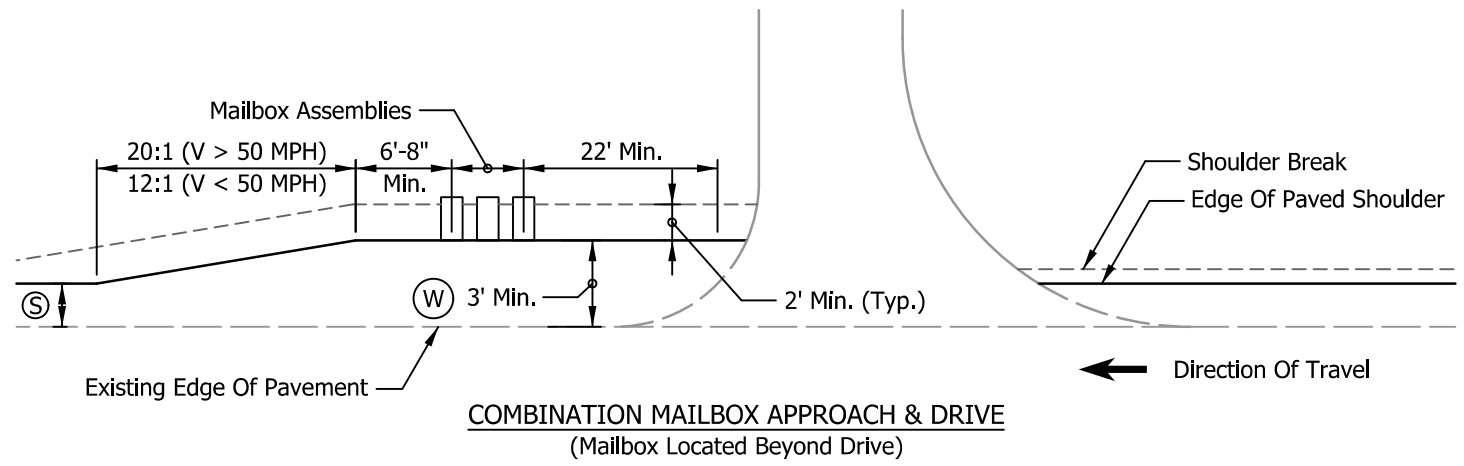
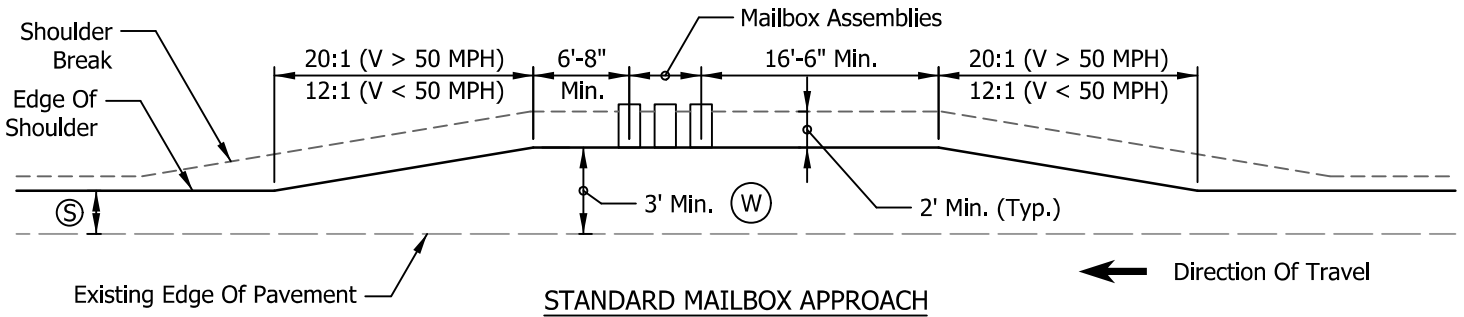
(D1) Match Existing Roadway Pavement Section

MORGAN COUNTY HIGHWAY DEPARTMENT



TYPICAL ACCELERATION / DECELERATION LANE

STANDARD DRAWING
NO. MC-603-007
SHEET 1 OF 1
SCALE: NO SCALE



LEGEND:

- (W) Match Existing Adjacent Pavement Section (Shoulder Or Lane)
- (S) Shoulder Width From Plans

MORGAN COUNTY HIGHWAY DEPARTMENT

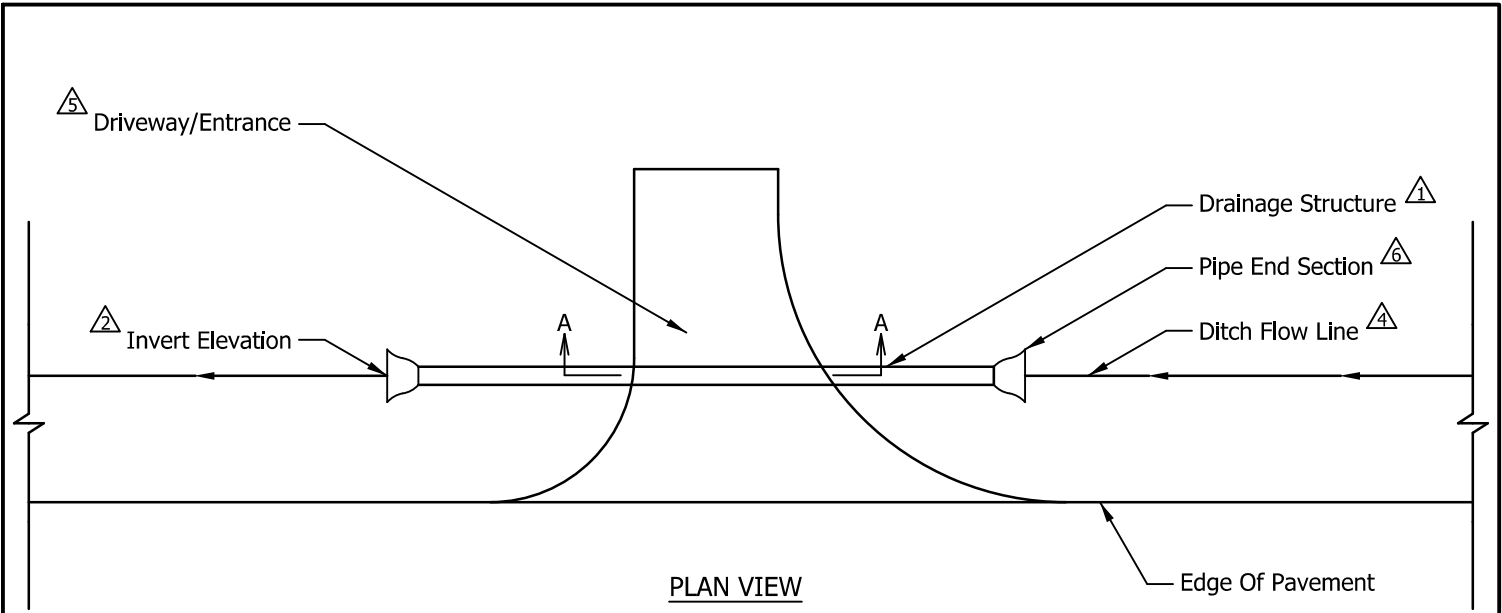
TYPICAL MAILBOX APPROACH

STANDARD DRAWING
NO. MC-603-008
SHEET 1 OF 1
SCALE: NO SCALE

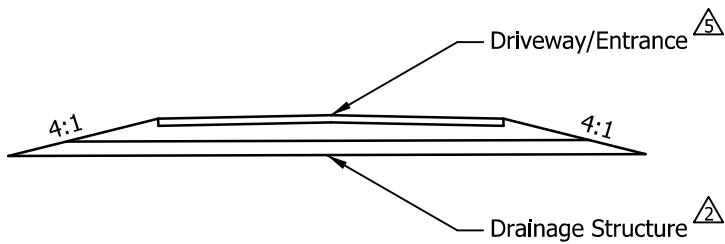
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PLAN VIEW



SECTION A-A

NOTES:

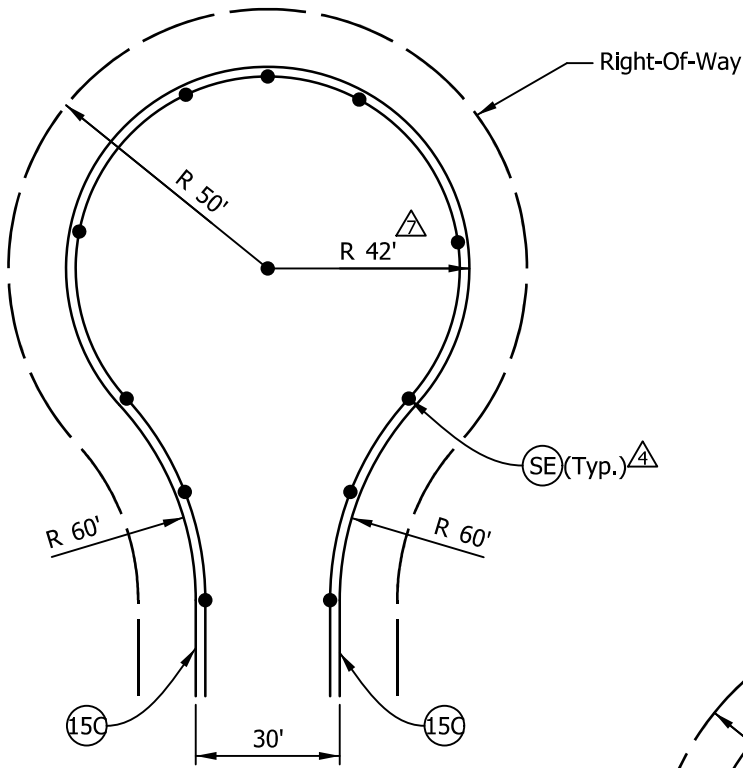
- 1 12" Min. Diameter Structure (15" Diameter Desirable)
Or As Directed By Morgan County Engineer
- 2 Invert Elevations Shall Be Provided At All Downstream And
Upstream Inverts.
- 3. Drainage Area For Structure Shall Be Provided.
- 4 Flow Line Elevations Shall Be Provided At The Beginning, End,
And Every Grade Break.
- 5 For Subdivision Residential Driveway Details - See STD Drawing MC-603-001
For Urban Commercial Driveway Details - See STD Drawing MC-603-002
For Field Entrance Details - See STD Drawing MC-603-003
- 6 Pipe End Sections Shall Be In Accordance With Clear Zone Criteria
Outlined In Current Version Of AASHTO Roadside Design Guide.
End Section Material Shall Match Pipe Material.

MORGAN COUNTY HIGHWAY DEPARTMENT



TYPICAL CULVERT DETAIL WITH OPEN DITCHES

STANDARD DRAWING
NO. MC-603-009
SHEET 1 OF 1
SCALE: NO SCALE



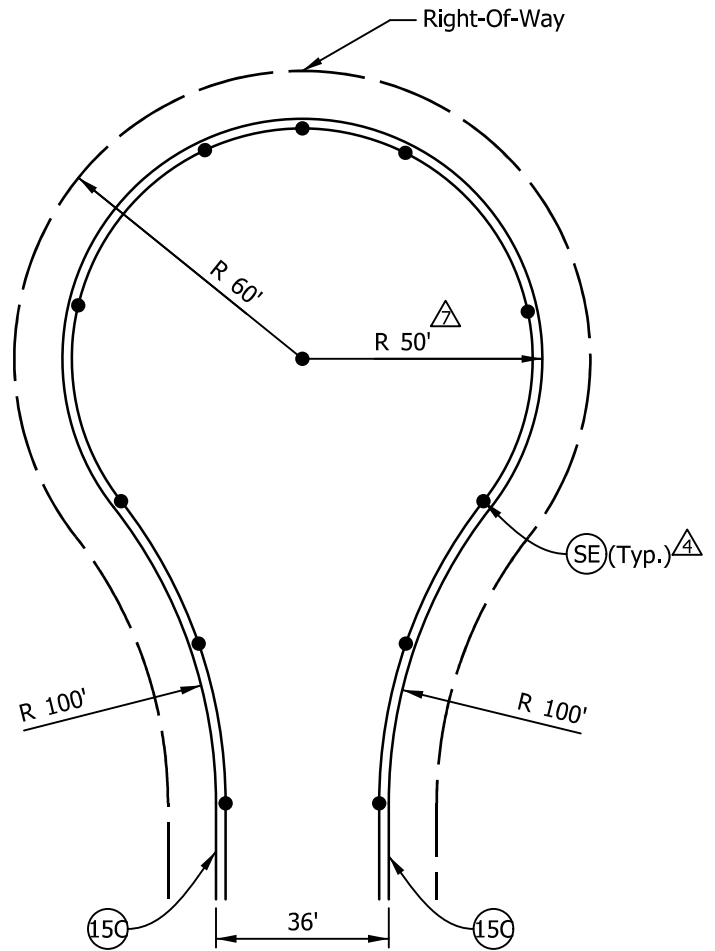
TYPE-1 (CUL-DE-SAC)

NOTES:

1. Type-1 Shall Be Used Only In Residential Subdivisions, All Others Shall Be Type-2.
2. Warning Signs Shall Be Posted At The Street Entrance, Indicating No Outlet.
3. One Detail Shall Be Provided For Each Cul-De-Sac. Each Detail Shall Be Identified By Street Name.
- △ Elevations Provided Shall Be Proposed Flow Line Of Gutter.
5. Street Width And Radius Lengths Are Measured To The Back Of Curb.
6. No Center Islands Permitted.
- △ Radius Shall Be In Accordance With Current Fire Protection Requirements. May Differ From Dimensions Shown.

LEGEND:

- ⊙ 150 Rolled Curb, See STD Drawing MC-601-001
- ⊙ SE Spot Elevations To Be Provided At Locations As Described Below:
Beginning, Middle, And End Of Curves Approximately 40' Spacing
Along Cul-De-Sac Edge Of Pavement Center Of Cul-De-Sac (High-Point)



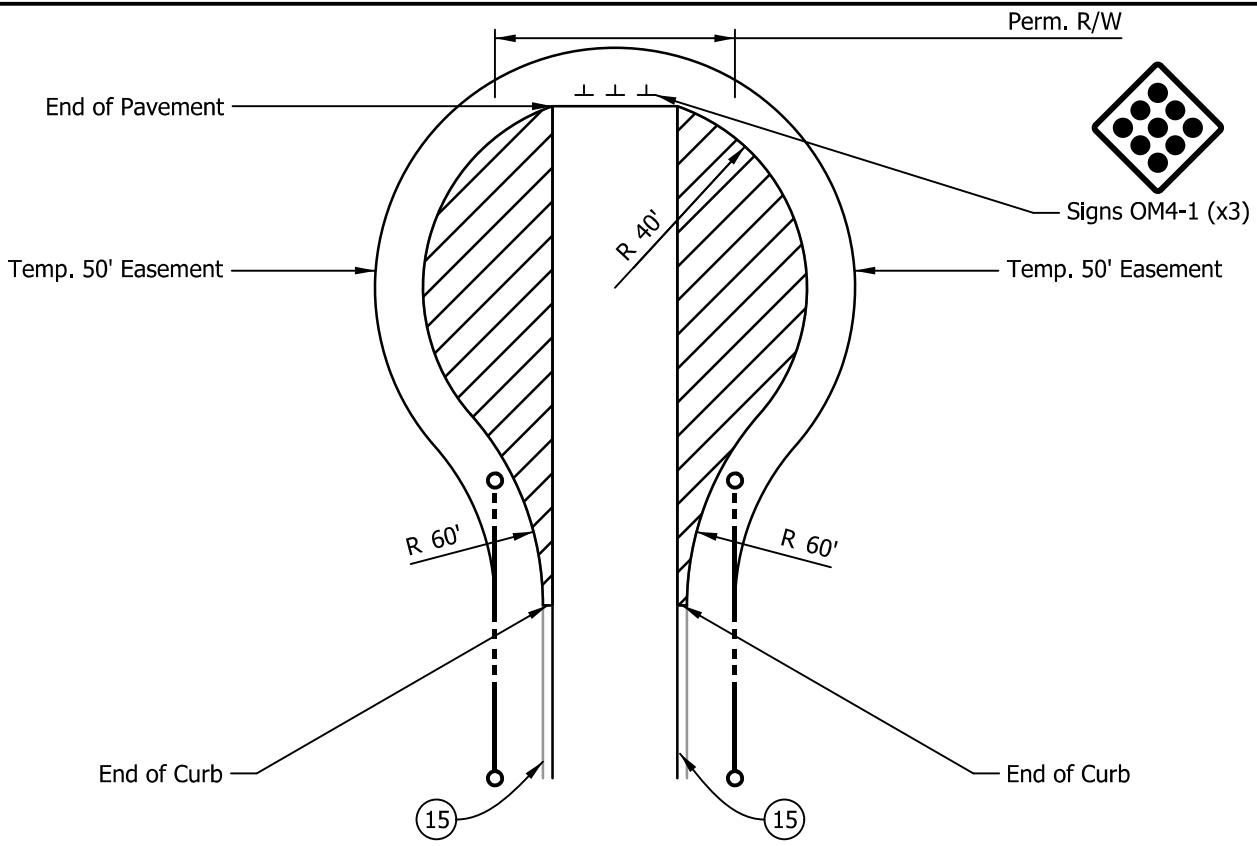
TYPE-2 (CUL-DE-SAC)

MORGAN COUNTY HIGHWAY DEPARTMENT

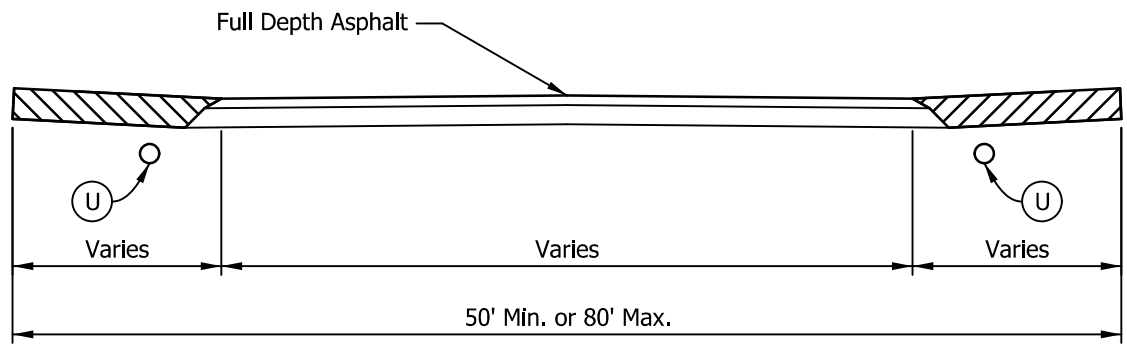


TYPICAL CUL-DE-SAC

STANDARD DRAWING
NO. MC-604-001
SHEET 1 OF 1
SCALE: NO SCALE



TEMPORARY CUL-DE-SAC



TEMPORARY CUL-DE-SAC TYPICAL

LEGEND

- ⑮ Concrete Curb And Gutter - See STD Drawing MC-601-001
- Ⓢ Underdrain (Typ.) - See STD Drawing MC-401-001
- Temporary Pavement To Be Removed When Street Is Continued. Thickness And Type To Match Permanent Pavement.

MORGAN COUNTY HIGHWAY DEPARTMENT

TYPICAL TEMPORARY CUL-DE-SAC

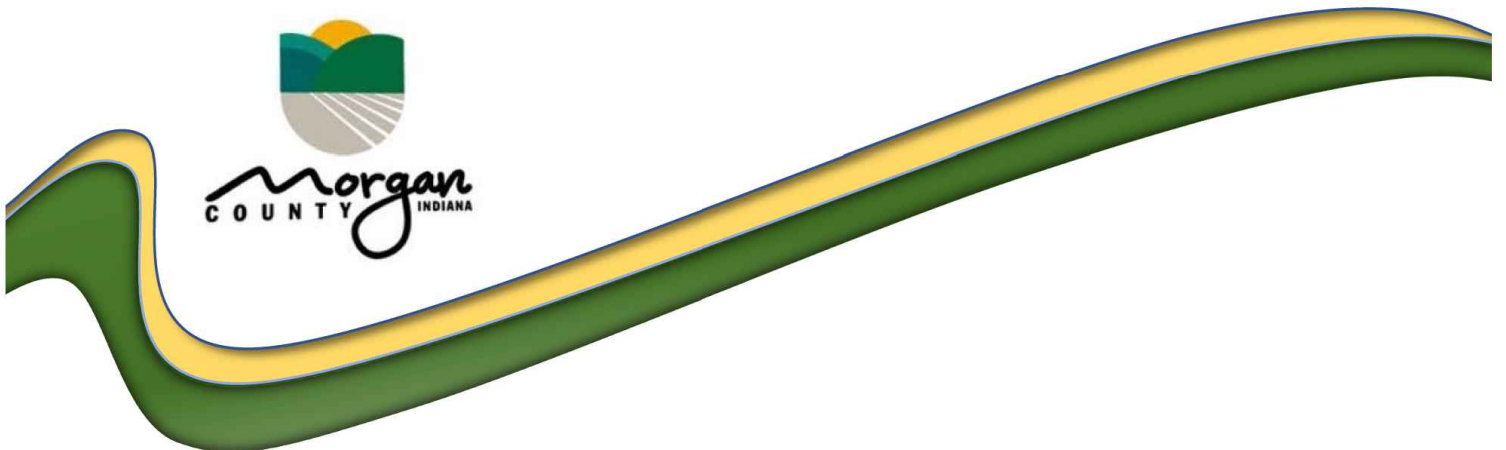
STANDARD DRAWING
NO. MC-604-002
SHEET 1 OF 1
SCALE: NO SCALE



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INDEX OF MORGAN COUNTY STANDARDS
700 SERIES STANDARD DRAWINGS
STRUCTURES

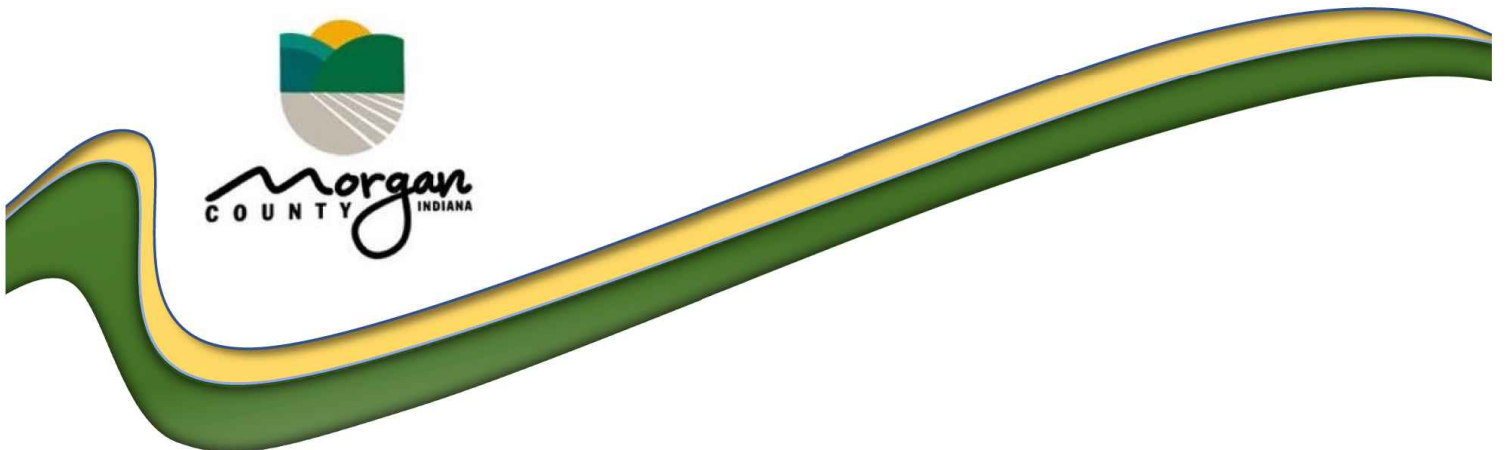
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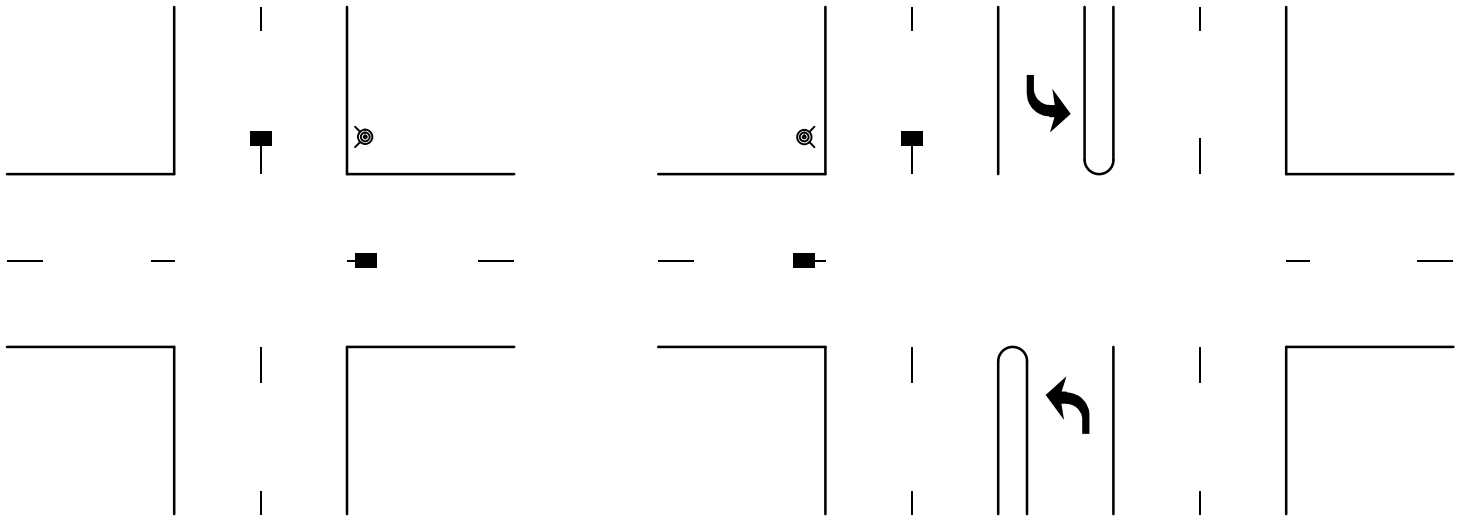
INDEX OF MORGAN COUNTY STANDARDS
800 SERIES STANDARD DRAWINGS
TRAFFIC CONTROL DEVICES

Typical Raised Pavement Markers Locations (Blue).....MC-800-001

The Materials, Installation, Placement, Operation, Maintenance, And All Other Incidentals Regarding Signage, Barricades, And Other Traffic Control Devices Shall Be In Accordance With The Latest Versions Of INDOT Standard Specifications, INDOT Standard Drawings, And The Indiana Manual On Uniform Traffic Control Devices For Streets And Highways.

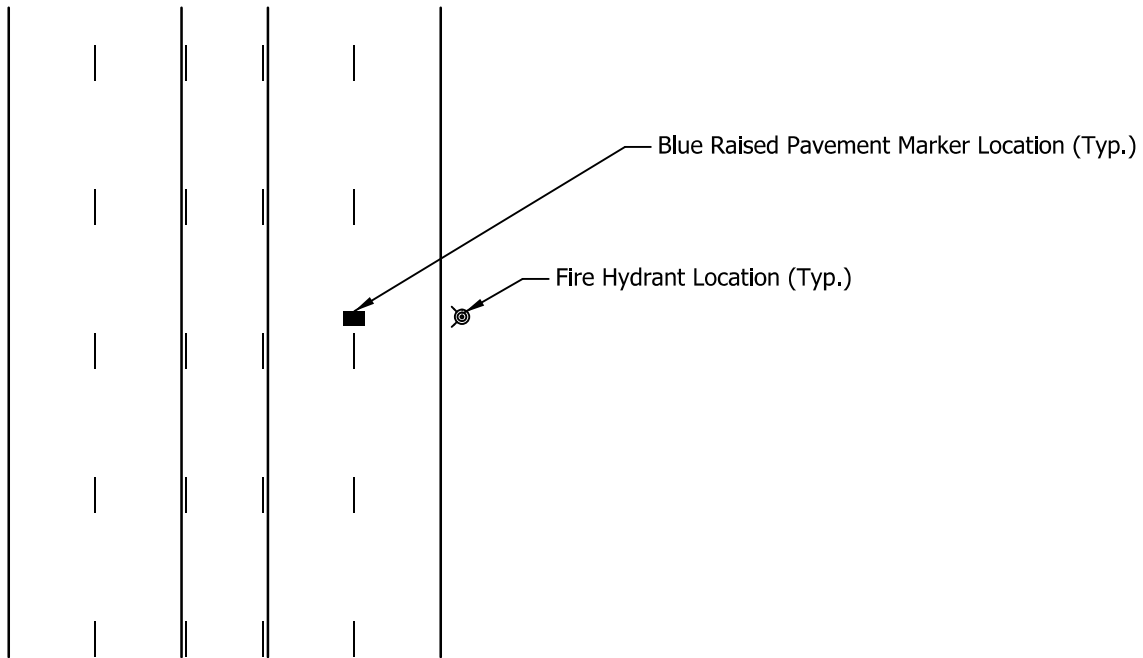


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TWO-LANE STREET
AT INTERSECTION

MULTI-LANE STREET
AT INTERSECTION



MULTI-LANE STREET
WITH TURN LANE OR
MEDIAN

MORGAN COUNTY HIGHWAY DEPARTMENT

TYPICAL RAISED PAVEMENT MARKER LOCATIONS
(BLUE)



STANDARD DRAWING

NO. MC-800-001

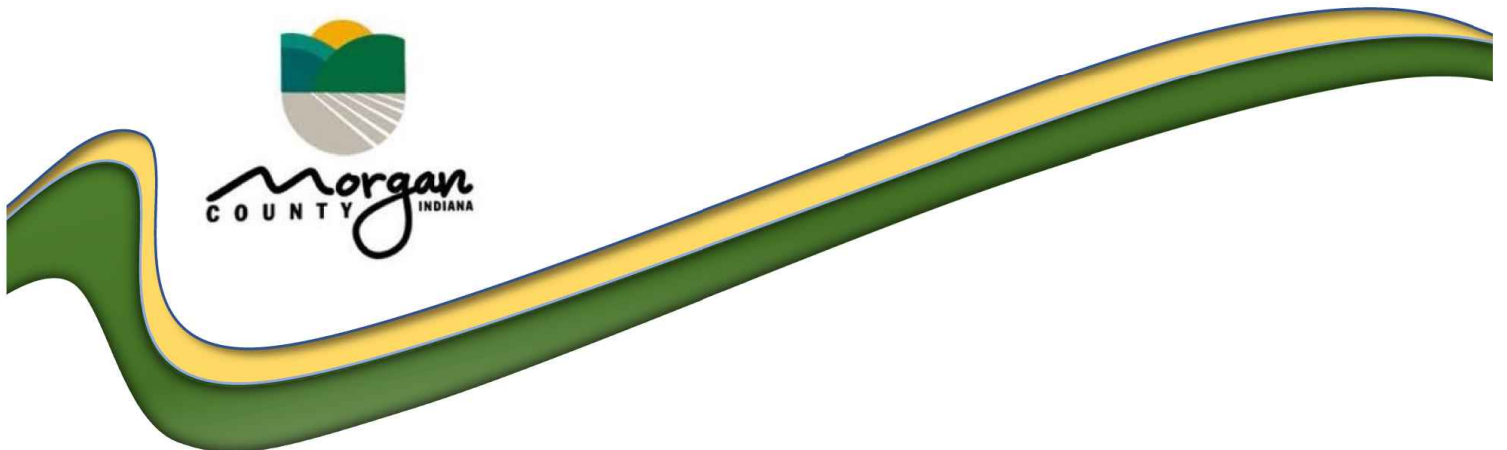
SHEET 1 OF 1

SCALE: NO SCALE

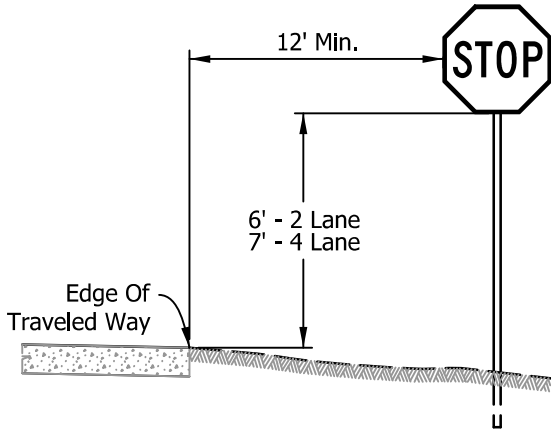
INDEX OF MORGAN COUNTY STANDARDS
900 SERIES STANDARD DRAWINGS
STREET SIGNS

Typical Position Of Signs In Relation To Roadway.....MC-900-001

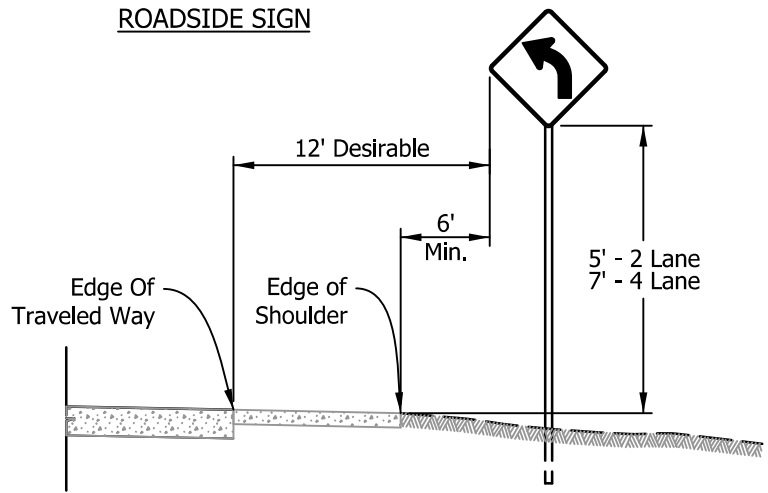
Typical Street Name Sign Details.....MC-900-002



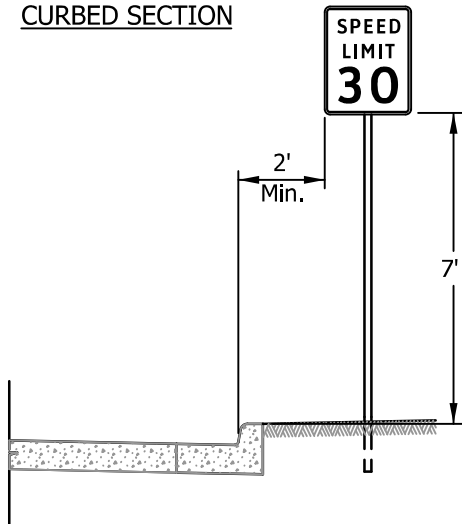
STOP SIGN



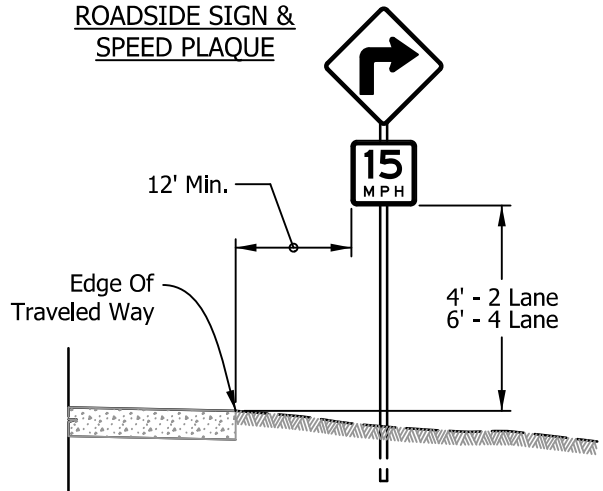
ROADSIDE SIGN



CURBED SECTION



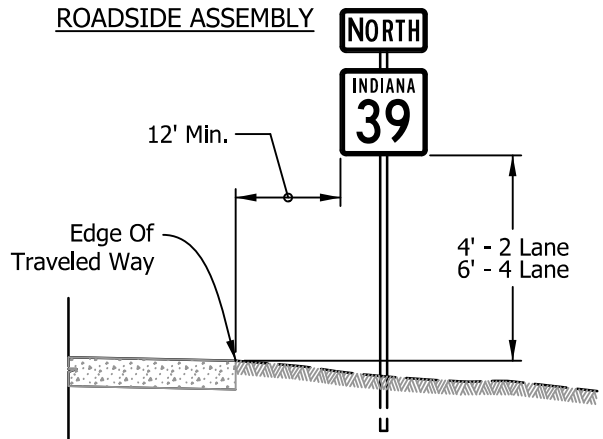
ROADSIDE SIGN & SPEED PLAQUE



NOTES:

- 1. See MUTCD Section 2A.19 For Reduced Lateral Offset Distances, 2' May Be Used In Areas Where Lateral Offsets Are Limited.
- 2. For Additional Information See MUTCD.
- 3. All Signs Shall Have H.I.P. Retroreflective Backgrounds.
- 4. All Sign Posts Shall Be Mounted On Breakaway Anchors.

ROADSIDE ASSEMBLY



MORGAN COUNTY HIGHWAY DEPARTMENT

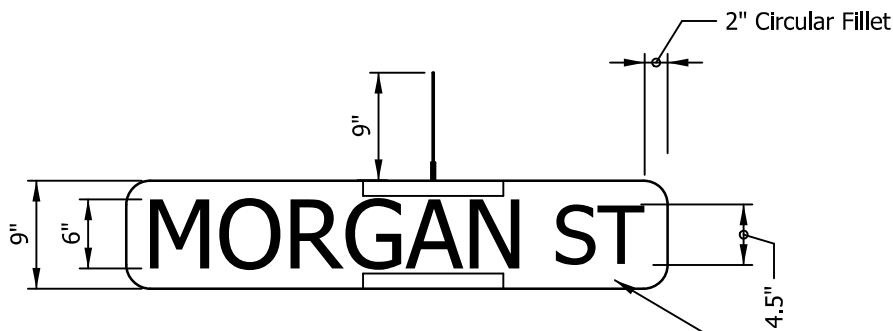
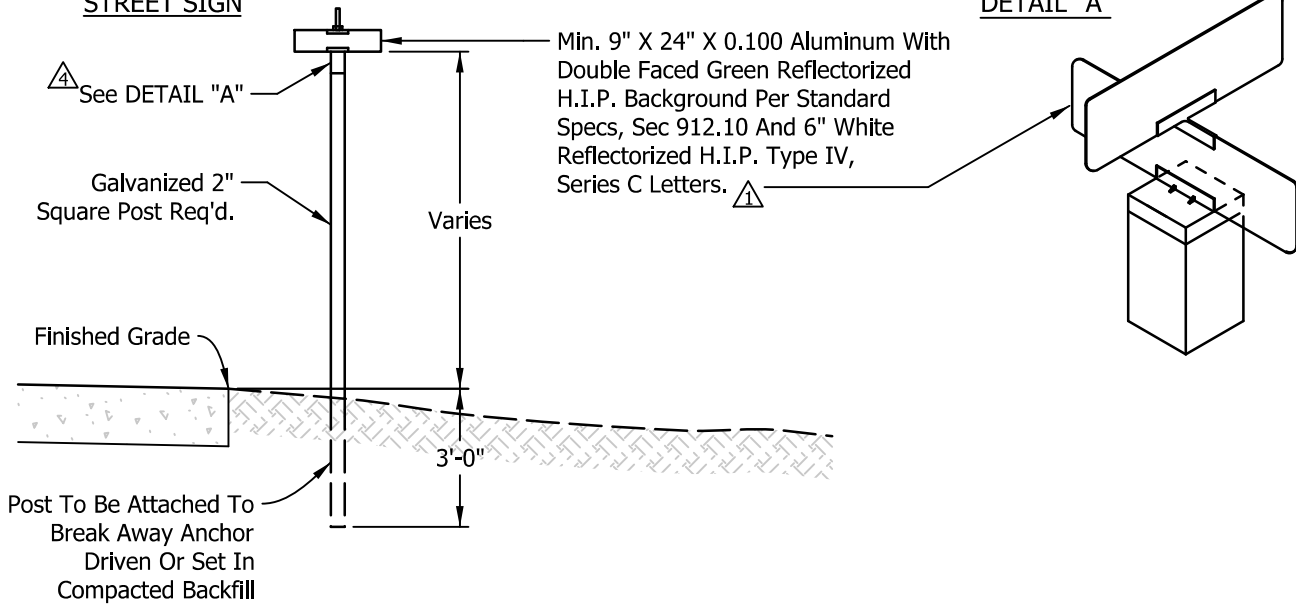
**TYPICAL POSITION OF SIGNS IN RELATION TO ROADWAY
(CONVENTIONAL ROADS AND STREETS)**

STANDARD DRAWING
NO. MC-900-001
SHEET 1 OF 1
SCALE: NO SCALE



STREET SIGN

DETAIL "A"



STREET SIGN SIZE

Min. 9" X 24" X 0.100 Aluminum With Double Faced Green Reflectorized H.I.P. Background Per Standard Specs, Sec 912.10 And 6" White Reflectorized H.I.P. Type IV, Series C Letters.

- Private Streets Shall Utilize Double Faced Blue Reflectorized H.I.P Background With 6" White Lettering.
- 2. One Sign Assemble Shall Be Located At Each Intersection On The Northeast Corner When Possible.
- 3. Stop Signs Shall Not Be Installed On The Street Name Sign Posts.
- All Hardware To Be Galvanized Steel
- 5. For Additional Information See MUTCD.
- 6. All Sign Posts Shall Be Mounted On Breakaway Anchors.

MORGAN COUNTY HIGHWAY DEPARTMENT

**TYPICAL STREET NAME SIGNS DETAILS
(DETAILS)**

STANDARD DRAWING
NO. MC-900-002
SHEET 1 OF 1
SCALE: NO SCALE

