## DECATUR COUNTY CONSTRUCTION & DEVELOPMENT STANDARDS MANUAL

### SECTION 02500 PAVING AND SURFACING

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1.00 General

1.01 Description

A. Work in this section includes the installation of new and repair and replacement of highways, streets, roads, pavement, drives, parking areas, sidewalks, curbs, gutters and other paved areas damaged or destroyed during construction of the work.

1.02 Related Sections

A. Earthwork for Utilities Section 02222
B. Landscaping for Utilities Section 02902

1.03 References

A. Latest addition of Indiana Department of Transportation Standard Specification, including Supplements is made a part of the specifications by reference.

1.04 Quality Assurance

A. Perform Work in accordance with Indiana Department of Transportation Standard Specification.

B. Mixing Plant: Conform to Indiana Department of Transportation Standard Specification.

C. Approval of Material Conform to Indiana Department of Transportation Standard Specification.

1.05 Traffic Control

A. The Contractor shall plan construction operations so that exiting local traffic access can be maintained.

B. Appropriate traffic control devices (barricades, barrels, lights, flaggers, etc) shall be maintained during construction by the contractor.

C. Traffic control devices used for maintenance of traffic shall comply with the Indiana Manual on Uniform Traffic Control Devices.

2.00 Materials

2.01 Aggregate

A. Fine aggregates shall consist of natural sand of manufactured sand produced by crushing stone or gravel.
1. Fine aggregates used in Portland cement concrete and bituminous pavements shall be free of injurious amounts of organic materials

B. Coarse aggregates shall consist of clean, tough, durable fragments of crushed rock, crushed or uncrushed gravel.

C. Fine and coarse aggregates shall comply with Indiana Department of Transportation Standard Specification

2.02 Bituminous Materials

A. Bituminous Binder and Surface Courses shall conform to Indiana Department of Transportation Standard Specification. Base and Binder may contain up to a maximum of 25% of reclaimed asphalt pavement (RAP) in accordance with INDOT Specifications.

B. Tack Coat shall conform to Indiana Department of Transportation Standard Specification.

C. Asphalt Cement shall conform to Indiana Department of Transportation Standard Specification.

D. Coarse Aggregates shall conform to Indiana Department of Transportation Standard Specification.

E. Aggregate for Surface Course Mix shall conform to Indiana Department of Transportation Standard Specification.

F. Hauling Equipment shall conform to Indiana Department of Transportation Standard Specification.

G. Pavers and Rollers shall conform to Indiana Department of Transportation Standard Specification not less than 10 tons.

2.03 Hot Mix Asphalt

A. All Hot Mix Asphalt (HMA) materials shall conform to Indiana Department of Transportation Specification.

B. All coarse and fine aggregate materials shall conform to Indiana Department of Transportation Specification.

2.04 Portland Cement Concrete Pavement

A. All Portland Cement Concrete Pavement (PCCP) materials shall conform to Indiana Department of Transportation Specification.
3.00 Execution

3.01 Examination

A. Notify Engineer 48 hours prior to starting work.

B. Verify that compacted granular base is dry and ready to support paving and imposed loads.

C. Verify gradients and elevations of base are correct.

D. Beginning of installation means acceptance of substrate.

3.02 Preparation – Primer and Tack Coats

A. Apply primer coat in accordance with Indiana Department of Transportation Standard Specification.

B. Apply tack coat in accordance with Indiana Department of Transportation Standard Specification.

3.03 Placing Hot Mix Asphalt

A. Install Work in accordance with Indiana Department of Transportation Standard Specification.

B. Place asphalt within 24 hours of applying primer or tack coat.

C. Place to compacted thickness shown on typical pavement section on plans.

D. Install gutter drainage grilles and frames and manhole frames in correct position and elevation.

E. Compact pavement by rolling. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.

F. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.

3.04 Tolerances

A. Flatness: Maximum variation of 1/8 inch measured with 10 foot straight edge.

B. Compacted Thickness: Within ¼ inch of design thickness.
C. Variation from True Elevation: Within ½ inch.

3.05 Protection

A. Immediately after placement, protect pavement from mechanical injury until surface temperature is less than 140 degrees Fahrenheit.

3.06 Preparation – Portland Cement Concrete Pavement

A. Moisten base to minimize absorption of water from fresh concrete.
B. Place and secure forms to correct location, dimension, profile and gradient.
C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.07 Finishing

A. Drive Paving: Light broom.
B. Sidewalk Paving: Light broom.
C. Curbs and Gutters: Light broom.
D. Direction of Texturing: Transverse to pavement direction.
E. Inclined Vehicular Ramps: Broomed perpendicular to slope.
F. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

3.08 Tolerances

A. Maximum variation of surface flatness: ¼ inch in 10 feet.
B. Variation from True Position: Within ¼ inch.

3.09 Field Quality Control

A. Field inspection and testing will be performed under provision of Indiana Department of Transportation Specification.
B. Three concrete test cylinders will be taken for every 50 or less cubic yards of each class of concrete place each day.
C. One additional test cylinder will be taken during cold weather and cured on site under same conditions as concrete it represents.
D. One slump test will be taken for each set of test cylinders taken.

E. If test or inspection, indicate work does not meet specified requirements, remove work and replace at contractor’s expense.

3.10 Protection

A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures and mechanical injury.

B. Do not permit pedestrian or vehicular traffic over pavement until 75 percent design strength of concrete has been achieved.

3.11 Testing

A. Cost of testing shall be at contractor’s expense.

END SECTION 02500
## Decatur County Standards

**Section 02500**

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### Geometric Design Criteria

#### 2 Lane

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<th>Shoulder Width Min B</th>
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See Article 3 of Subdivision Control Ordinates for additional requirements.

The standards established by this table can be amended by the Plan Commission if determined necessary for safety, efficiency, maintenance, anticipated problems or future growth as advised by the Plan Department. Rights-of-way will increase as required for addition of sidewalks and paths.

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**Decatur County**

**Paving and Surfacing Pavement Sections**

Decatur County Standards
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FLEXIBLE HMA  \( d = 12" \)
- 165 lb/syd HMA, Type A. Surface
- 275 lb/syd HMA, Type A. Intermediate
- 8” Compacted Aggregate Base, No. 53

FULL DEPTH HMA  \( d = 10" \)
- 165 lb/syd HMA, Type A. Surface
- 275 lb/syd HMA, Type A. Intermediate
- 330 lb/syd HMA, Type A. Base

PORTLAND CEMENT CONCRETE  \( d = 8" \)
- 165 lb/syd HMA, Type A. Surface
- 330 lb/syd HMA, Type A. Base

LOCAL STREETS

FLEXIBLE HMA  \( d = 16" \)
- 165 lb/syd HMA, Type A. Surface
- 275 lb/syd HMA, Type A. Intermediate
- 12” Compacted Aggregate Base, No. 53
- Place in 2-6” lifts

FULL DEPTH HMA  \( d = 11" \)
- 165 lb/syd HMA, Type A. Surface
- 385 lb/syd HMA, Type A. Intermediate
- 330 lb/syd HMA, Type A. Base

PORTLAND CEMENT CONCRETE  \( d = 10" \)
- 165 lb/syd HMA, Type A. Surface
- 330 lb/syd HMA, Type A. Base

COLLECTOR STREETS

FLEXIBLE HMA  \( d = 20" \)
- 165 lb/syd HMA, Type A. Surface
- 385 lb/syd HMA, Type A. Intermediate
- 15” Compacted Aggregate Base, No. 53
- Place in 3-5” lifts

FULL DEPTH HMA  \( d = 12" \)
- 165 lb/syd HMA, Type A. Surface
- 275 lb/syd HMA, Type A. Intermediate
- 440 lb/syd HMA, Type A. Base

PORTLAND CEMENT CONCRETE  \( d = 11" \)
- 165 lb/syd HMA, Type A. Surface
- 440 lb/syd HMA, Type A. Base

ARTERIAL STREETS

GENERAL NOTES:
1. IF GREATER THAN 10% TRUCK TRAFFIC IS ANTICIPATED, ADD 1" TO ALL TOTAL THICKNESSES.
2. DEPTH OF CONCRETE CURB SHALL EQUAL DEPTH OF CONCRETE PAVEMENT.
Passing blister required when turning volumes exceed 300/day

Roadway shall be constructed to same specifications as subdivision roadway

Curb and gutter 24" wide
TYPICAL SIDEWALK SECTION

* THE SPACE BEHIND THE CURB SHALL BE FILLED WITH SUITABLE MATERIAL TO THE REQUIRED ELEVATION AND COMPACTED IN LAYERS NOT TO EXCEED 6" IN DEPTH.

SUBGRADE UNDER ALL CURBS, SIDEWALKS, AND DRIVES SHALL BE COMPACTED IN ACCORDANCE WITH I.N.D.O.T. SPECIFICATIONS.

PLAN VIEW
CONCRETE SIDEWALK
GENERAL NOTES

1. These dimensions are based on a 6" curb height. They shall be proportionally adjusted for other curb heights.

2. Where site infeasibility precludes construction to width shown, such width may be decreased to a minimum of 3'-0".

3. The bottom edge of the curb ramp shall be flush with the edge of adjacent pavement and gutter line.

4. Landing area at the top of curb ramps shall have maximum cross slope of 50:1 in any direction. When site infeasibility precludes a landing slope of 50:1 in any direction, the slope perpendicular to the curb face shall not exceed 50:1.

5. If site infeasibility precludes construction to the width shown, the landing width may be decreased to 3'-0" minimum. The running slope of the curb ramp may be steepened to a maximum of 10:1 for a maximum 6" rise.

SECTION B-B

Sidewalk Slope 50:1 Max.

Variable slope 12:1 max.

SECTION A-A

See PS-7 for alternate curb construction