GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE. FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

<table>
<thead>
<tr>
<th>PAVEMENT DEPTH (D)</th>
<th>DOWEL BAR DIAMETER</th>
<th>CONTRACTION JOINT SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 1/2&quot;, 6&quot;, 6 1/2&quot;</td>
<td>3/4&quot;</td>
<td>12'</td>
</tr>
<tr>
<td>7&quot;, 7 1/2&quot;</td>
<td>1&quot;</td>
<td>14'</td>
</tr>
<tr>
<td>8&quot;, 8 1/2&quot;</td>
<td>1 1/2&quot;</td>
<td>16'</td>
</tr>
<tr>
<td>9&quot; &amp; ABOVE</td>
<td>1 3/4&quot;</td>
<td>18'</td>
</tr>
</tbody>
</table>

SECTION A - A

TWO-LANE TWO-WAY HIGHWAY

SECTION B - B

ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY

CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY

CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY
1. Obtain the engineer's approval for the use of alternative designs of the dowel assembly. Use mechanical dowel bar inserters or dowel assemblies when construction contraction joints.

2. Secure baskets with anchors to hold dowel bars in the correct position and alignment. Type, location, number and length of anchors are dependent upon field conditions.

3. Form or saw construction joints. Provide a 4" radius at formed joints.

4. Provide a smooth vertical face for the entire depth of the pavement when forming construction joints.

5. Install dowel bars at construction joints by forming or drilling. Install formed dowel bars 12 inches C-C and 12 inches from pavement edge. Remove excess concrete from the free end of the dowel bar if dowel bars are formed through a header board. Install drilled dowel bars according to the "drilled dowel bar construction joint" detail.

6. Apply a thin uniform coating of surface treatment to the free end of dowel bars to prevent bonding.

7. Anchor dowels and tie bars into drilled holes with an epoxy. Maximum drilled hole size is 1/8" greater than dowel bar diameter, 9 inches in length.

8. Grease end of bar.

GENERAL NOTES:

- Obtain the engineer's approval for the use of alternative designs of the dowel assembly. Use mechanical dowel bar inserters or dowel assemblies when construction contraction joints.

- Secure baskets with anchors to hold dowel bars in the correct position and alignment. Type, location, number and length of anchors are dependent upon field conditions.

- Form or saw construction joints. Provide a 4" radius at formed joints.

- Provide a smooth vertical face for the entire depth of the pavement when forming construction joints.

- Install dowel bars at construction joints by forming or drilling. Install formed dowel bars 12 inches C-C and 12 inches from pavement edge. Remove excess concrete from the free end of the dowel bar if dowel bars are formed through a header board. Install drilled dowel bars according to the "drilled dowel bar construction joint" detail.

- Apply a thin uniform coating of surface treatment to the free end of dowel bars to prevent bonding.

- Anchor dowel bars and tie bars into drilled holes with an epoxy. Maximum drilled hole size is 1/8" greater than dowel bar diameter, 9 inches in length.

- Grease end of bar.

SIDE VIEW (NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY

PLAN VIEW

EDGE OF PAVEMENT

DOWELED CONTRACTION JOINT

TRANSVERSE CONSTRUCTION JOINT

DRILLED DOWEL BAR CONSTRUCTION JOINT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

RURAL DOWELED CONCRETE PAVEMENT

APPROVED
May 2022
Peter Kemp P.E.
References:

FDM 14-10-10

Bid items associated with this drawing:

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<tr>
<th>Item Number</th>
<th>Description</th>
<th>UNIT</th>
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<tr>
<td>415.0060 - 0199</td>
<td>Concrete Pavement (inch)..................</td>
<td>SY</td>
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<tr>
<td>415.1080 - 1199</td>
<td>Concrete Pavement HES (inch)...............</td>
<td>SY</td>
</tr>
<tr>
<td>416.0620</td>
<td>Drilled Dowel Bars........................</td>
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Standardized Special Provisions associated with this drawing:

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<th>STSP NUMBER</th>
<th>TITLE</th>
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<tbody>
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</tbody>
</table>

Other SDDs associated with this drawing:

SDD 13C1       Concrete Pavement Longitudinal Joints and Ties is required.

Design Notes:

Always include SDDs 13C1 sheets "a" and " b" together in plan sets.
Always include SDD 13C1 when using this SDD.

FDM 11-15-1 provides pavement and shoulder width criteria.
FDM 14-10-10 provides guidance on concrete pavement design.
FDM 14-10-25 provides guidance for paved shoulders.

Contact Person:

Peter Kemp (608) 246-5393