PAVEMENT JOINT DETAILS
If a portion of the slab to be replaced is closer than 6' to a transverse joint, then the entire slab up to the joint is to be replaced.

* Reinforced concrete pavement (RC) - 34" x 34"
Plain concrete pavement (PC) - 18" x 34"
Plain concrete base (BC) - 18" x 0"

Shouled when not dowelled

A type "J" joint with the addition of a preformed filler may be used if the engineer determines the existing dowels are adequate.

<table>
<thead>
<tr>
<th>Joint Type</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>PJ - 2</td>
</tr>
<tr>
<td>E</td>
<td>PJ - 7</td>
</tr>
<tr>
<td>H</td>
<td>PJ - 3</td>
</tr>
<tr>
<td>J</td>
<td>PJ - 4</td>
</tr>
<tr>
<td>K</td>
<td>PJ - 6</td>
</tr>
<tr>
<td>L</td>
<td>PJ - 2</td>
</tr>
<tr>
<td>X</td>
<td>PJ - 5</td>
</tr>
</tbody>
</table>
EXISTING LONGITUDINAL JOINT

Saw cut existing slab to the depth necessary to cut exist. tie bars

ITEM 705.04 SEAL SEE SHEET PJ-6

8" x 5/8" HOOK BOLT (50° O/C)

T/2

EXIST. CONCRETE

5/8" THREADED SELF-DRILLING ANCHOR

TYPE "D" JOINT

T/4 MIN.

IMPRESSED JOINT WITH ITEM 705D4 SEAL
SEE JOINT SEAL DETAILS ON SHEET PJ-6

T/2

4 BAR x 4'-0" LONG (30" O/C & CENTERED ACROSS THE JOINT)

TYPE "L" JOINT
**SAW CUT EXISTING JOINT TO THE DEPTH NECESSARY TO CUT THE EXISTING TIE BARS**

**ITEM TO5.04 SEAL SEE DETAIL ON SHEET PJ-6**

**1-1/4" # DEFORMED DOWEL (24" LONG @ 12" O/C)**

**OF REPAIR**

**1/2"**

**12"**

**3'-0" MIN.**

**DRILL 1-3/4" HOLE IN THE EXISTING CONC., PARTIALLY FILL WITH NON-SHRINKING GROUT BEFORE INSERTING DOWEL PER ITEM 510.02**

---

**TYPE "H" JOINT**

---

**DOWEL & HOLE SIZE**

<table>
<thead>
<tr>
<th>THICKNESS OF PAVEMENT</th>
<th>HOLE DIAMETER</th>
<th>DOWEL DIAMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 8-1/2&quot;</td>
<td>1-1/2&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>8-1/2&quot; to 10&quot;</td>
<td>1-3/4&quot;</td>
<td>1-1/4&quot;</td>
</tr>
<tr>
<td>OVER 10&quot;</td>
<td>DOWEL # 1/2&quot;</td>
<td>1-1/4&quot; or as shown</td>
</tr>
</tbody>
</table>

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CITY OF KENT, OHIO
DEPARTMENT OF PUBLIC SERVICE ENGINEERING DIVISION

CONSTRUCTION STANDARDS
TRANSVERSE JOINT
IN EXISTING CONCRETE PAVEMENT

DATE 6/12/89  BY  C. W. NO. PJ-3
CITY ENGINEER
SAW CUT THE EXISTING JOINT TO THE DEPTH NECESSARY TO CUT THE EXISTING DOWELS *

ITEM 705.04 SEAL SEE DETAIL ON SHEET PJ-7

DOWEL CAP SEE DETAIL ON SHEET PJ-4

C OF REPAIR

1/2

EXISTING CONCRETE

1.1/4" # SMOOTH DOWEL (18" LONG @ 12" O/C ) COAT WITH GREASE *

DRILL 1.3/4" # HOLE IN THE EXIST. CONC.
PARTIALLY FILL WITH NON-SHRINKING GROUT
BEFORE INSERTING GREASED DOWEL PER ITEM 510.02 *

3'-0" MIN.

9"

PREFORMED FILLER ITEM 705.03

TYPE "X" JOINT

* SEE DOWEL AND HOLE SIZE TABLE ON SHEET PJ-3

+ IF EXISTING DOWELS ARE TO REMAIN PROVIDE A NEW DOWEL CAP AND COAT EXISTING DOWEL WITH GREASE
ALL JOINTS SHALL BE IMPRESSED INTO THE CONCRETE A DEPTH OF 1-1/2" WHILE IT IS PLASTIC, AND MAINTAINED UNTIL THE CONCRETE HAS ACHIEVED AN INITIAL SET. THE JOINT SHALL BE SAW CUT AFTER THE CONCRETE IS SUFFICIENTLY HARD TO PREVENT EDGE RAVELLING TO THE FULL DEPTH EQUAL TO 1/4 THICKNESS OF THE SLAB. IN ADDITION THE SEALANT RESERVOIR SHALL BE SAW CUT TO THE DIMENSIONS AS DETERMINED FROM THE TABLE AT RIGHT. THE JOINT SHALL BE THOROUGHLY CLEANED AND FREE OF ANYTHING THAT WILL INHIBIT THE SEALANT FROM FORMING A BOND WITH THE SIDES OF THE JOINT. HOWEVER, BONDING WITH THE BOTTOM OF THE JOINT IS PROHIBITED.

<table>
<thead>
<tr>
<th>Joint Spacing or Type (ft)</th>
<th>Joint Width (w)  (in)</th>
<th>Sealant Depth (d) (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15' or Less</td>
<td>1/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>20'</td>
<td>3/8&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>30'</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>40'</td>
<td>5/8&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Expansion Joint</td>
<td>1&quot;</td>
<td>1 3/4&quot;</td>
</tr>
</tbody>
</table>

CITY OF KENT, OHIO
DEPARTMENT OF PUBLIC SERVICE
ENGINEERING DIVISION
CONSTRUCTION STANDARDS
NEW TRANSVERSE JOINT
DATE 8/14/87  BY CLW NO. PJ-6
CITY ENGINEER
PREFORMED FILLER ITEM 705.03

ITEM 705.04 SEAL—SEE DETAIL BELOW

DOWEL CAP—SEE DETAIL SHEET PJ-4

INSTALL SLEEVES ON OPPOSITE ENDS OF ADJACENT DOWELS.

1 1/4" SMOOTH DOWEL (18" LONG @ 12" O/C).

*SEE DOWEL AND HOLE SIZE TABLE—SHEET PJ-3

TYPE "E" JOINT

CONCRETE EXPANSION JOINT SEAL DETAIL

CITY OF KENT, OHIO
DEPARTMENT OF PUBLIC SERVICE
ENGINEERING DIVISION
CONSTRUCTION STANDARDS
NEW TRANSVERSE EXPANSION JOINT
DATE 8/10/87  BY CLW  NO. PJ-7
CITY ENGINEER
**Item 407 Tack Coat (as directed by the engineer)**

**Item Asphalt Concrete Surface Course**

**Item Asphalt Concrete Intermediate Course**

**Item Asphalt Concrete Base Course**

**Existing Thickness for Repairs**

**Edge Build-Up Detail**

**Centerline or Edgeline of Traffic Lane**

**Surface Course**

**Intermediate Course**

**Base Course**

**Insulation Course or Subbase**

**Joint Lap Detail**

**Joint**

**MIN. LENGTH = 10' PER INCH OF d**

**4" Minimum width Hot Asphalt Cement Seal**

**Intermediate Courses**

**Surface of Exist. Pavmt.**

**Remove & Replace Exist. Pavement**

**Asphalt Cement Coating**

1. **The total thickness of item asphalt concrete surface course shall not be less than 1 1/4'' nor more than 2 1/2'' with the maximum thickness per any one course after compaction of 2''**

2. **The total thickness of item asphalt concrete intermediate course shall not be less than 2'' nor more than 4'' with the maximum thickness per any one course after compaction of 3''**

3. **The total thickness of item asphalt concrete base course shall not be less than 3'' nor more than 12'' with the maximum thickness per any one course after compaction of 2''**

4. **Total thickness of all resurfacing courses.**

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**CITY OF KENT, OHIO**

**DEPARTMENT OF PUBLIC SERVICE ENGINEERING DIVISION**

**CONSTRUCTION STANDARDS**

**FLEXIBLE PAVEMENT DETAILS**

**DATE 3/6/89**

**CITY ENGINEER**

[Signature]
LONGITUDINAL JOINT

JOINT WITH ITEM 706.04 SEAL.
SEE JOINT SEAL DETAILS SHEET PJ-6

T/2

EXIST. CONCRETE

6" x 5/8" HOOK BOLT
EACH END (30° O/C)

TYPE "L" JOINT (OPTIONAL)