

LONGITUDINAL JOINTS

NOTES

GENERAL: Longitudinal joints shall be used when called for on the typical section and shall be constructed as shown on this drawing in 451 and 452 pavement and 305 base. The joint shall be on the centerline of the pavement unless otherwise shown on the plans. Tie bars shall be 5/8 inch round, deformed bars. A satisfactory device shall be used to hold the tie bars in proper position or they may be installed by a mechanical installing device.

BUTT JOINT: The longitudinal joint between adjoining slabs poured in separate operations shall be a butt joint with hook bolts or tie bars, unless otherwise shown on plans. If tie bars are to be bent they shall be of billet grade steel and no part of the bend shall extend into the first slab poured.

Aluminum couplings for hook bolts may be substituted for steel, provided that the specified strength requirements for metal assemblies are met.

EXPANSION BOLT JOINT: Self-drilling anchors may be of the flush-end type or of the snap-off chuck-end type conforming to Federal Specification No. FF-S-325, Group III, Type 1(a) or (c) except for the outside diameter of the anchor. The hook bolt or alternate may be used to complete the assembly. Unless otherwise required by the plans expansion anchors and bolts shall be spaced at 30 inches where pavement widening is 6 feet or less in width and at 60 inches where widening exceeds 6 feet in width. Cost of expansion bolt joint shall be included in the unit price bid for new pavement and no separate payment will be made.

GROOVES: Grooves for sealing expansion bolt or butt joints in 451 or 452 pavements shall be formed by impressing a device or bar into the newly deposited concrete adjacent to the existing or previously poured lane. The device or bar shall be removed as soon as the concrete is in such condition as to preclude distortion of the concrete.

Adjoining slabs adjacent to grooved joints shall be edged with a thin metal edger having a radius of 1/8 inch. Any impression left in the surface of the pavement by the flat part of the edging tool shall be eliminated.

In lieu of the above method the longitudinal joint may be sawed to a depth of one inch and an approximate width of 1/8 inch.

After the joint is formed it shall be protected from dirt and foreign matter until the joint seal is placed.

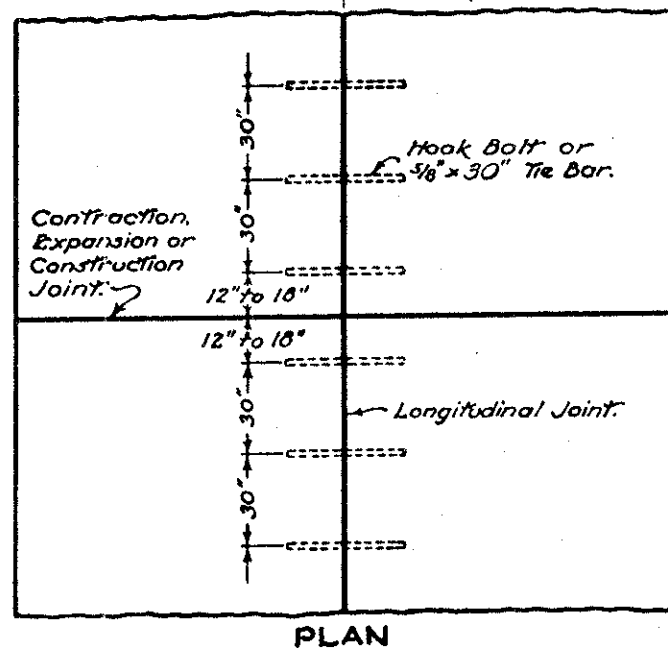
SEALING JOINTS: Sawed joints may be sealed with 705.01, 705.02 or 705.11 joint sealer.

Sealing of longitudinal joints in 305 base is not required.

HOOK BOLTS: Hook bolt inserts shall be turned to a tight fit when installed in threaded anchor shields, hook bolts or coupling.

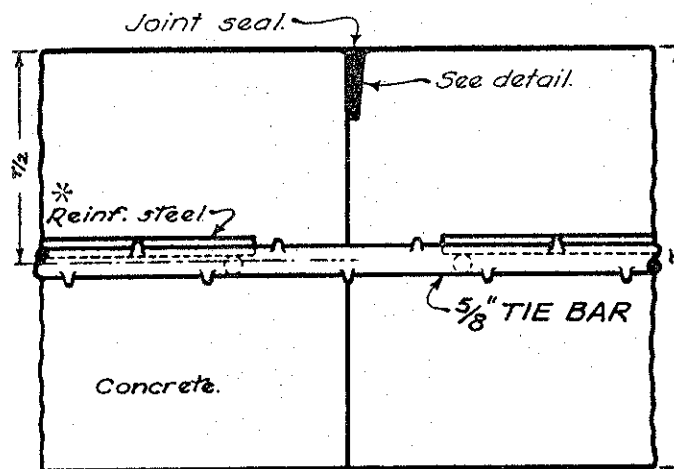
METAL STRENGTH: Tie bars, hook bolt assemblies and hook bolt alternate shall have a minimum strength of 11,000 pounds.

TIE BAR OR HOOK BOLT SPACING



PLAN

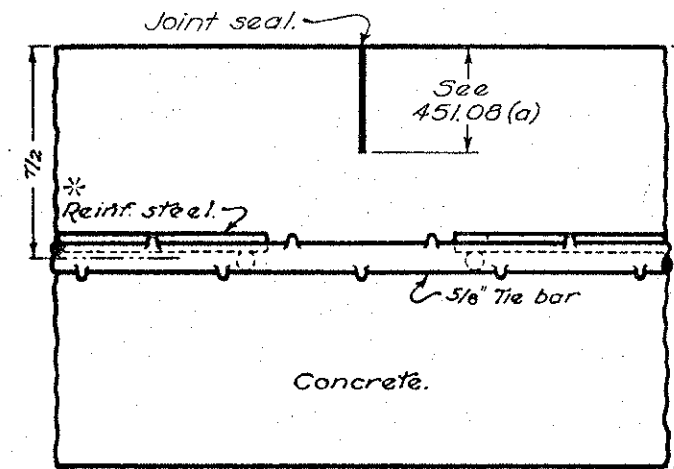
BUTT JOINT



DETAIL OF JOINT

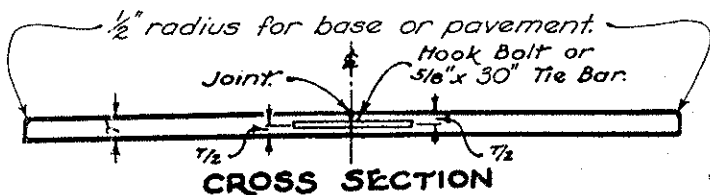
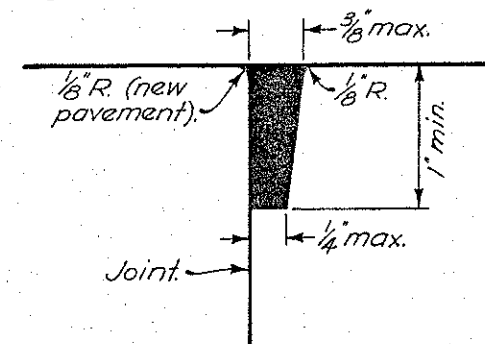
* For 451 only.

SAWED JOINT



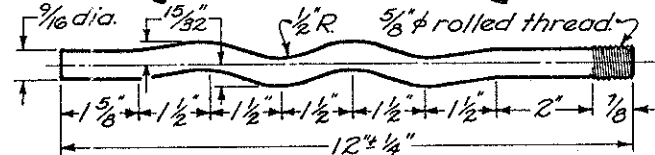
DETAIL OF JOINT

GROOVE AND SEAL DETAIL



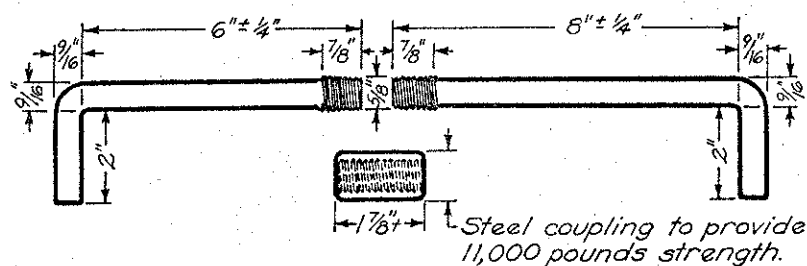
CROSS SECTION

HOOK BOLT ALTERNATE

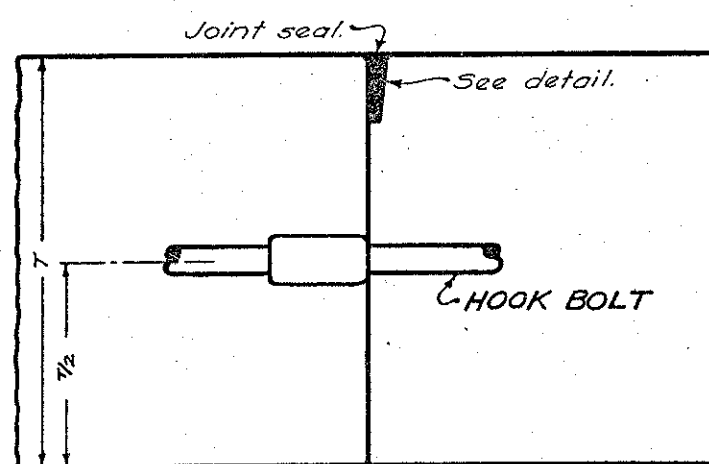


EXPANSION BOLT JOINT

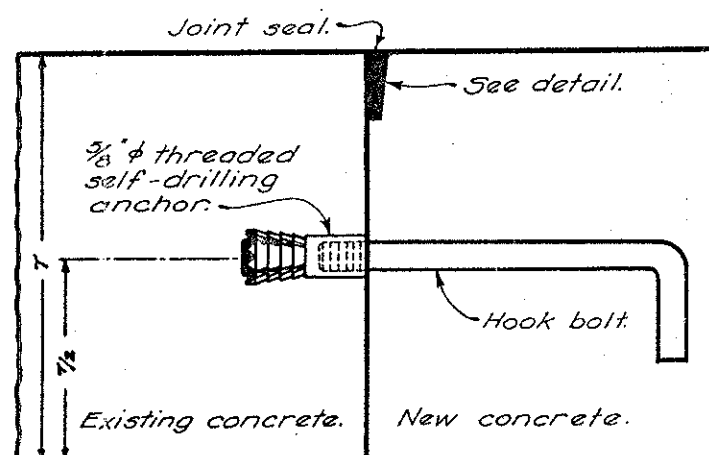
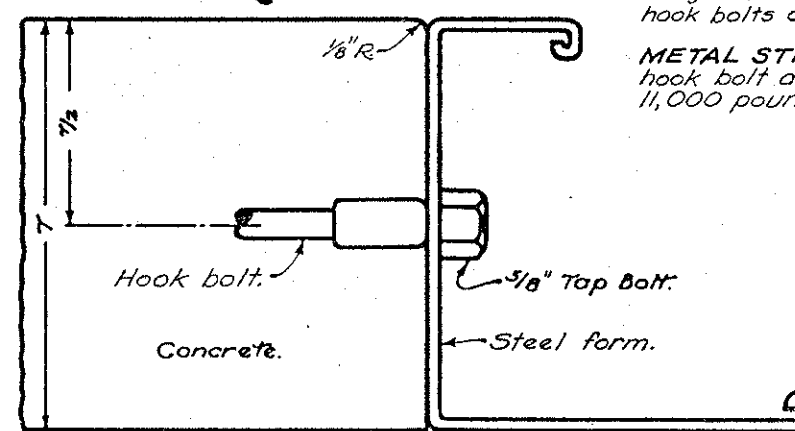
HOOK BOLT



BUTT JOINT



ACCEPTABLE METHOD OF FORMING JOINT



BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
LONGITUDINAL PAVEMENT JOINTS	
STANDARD CONSTRUCTION DRAWING BP-3	
APPROVED <i>M. Cunningham</i> ENGR., L. & D.	
DATE	6-1-63 12-20-63 1-10-67 5-1-68 12-1-68 1-1-71 12-6-76

LAK-44-414

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