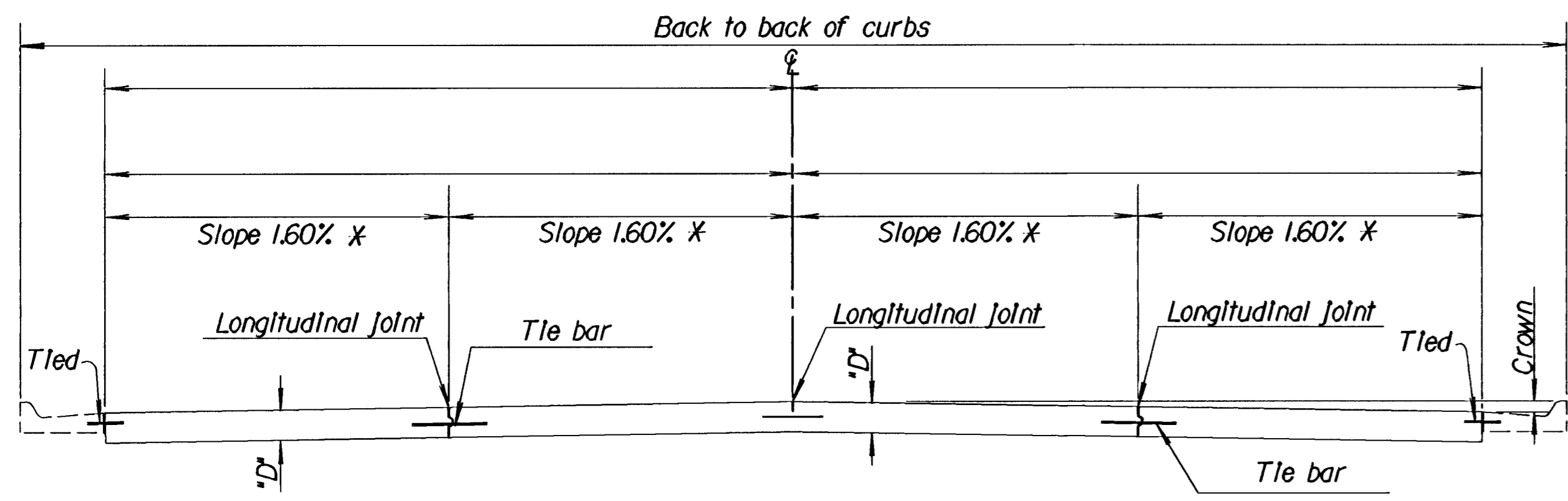
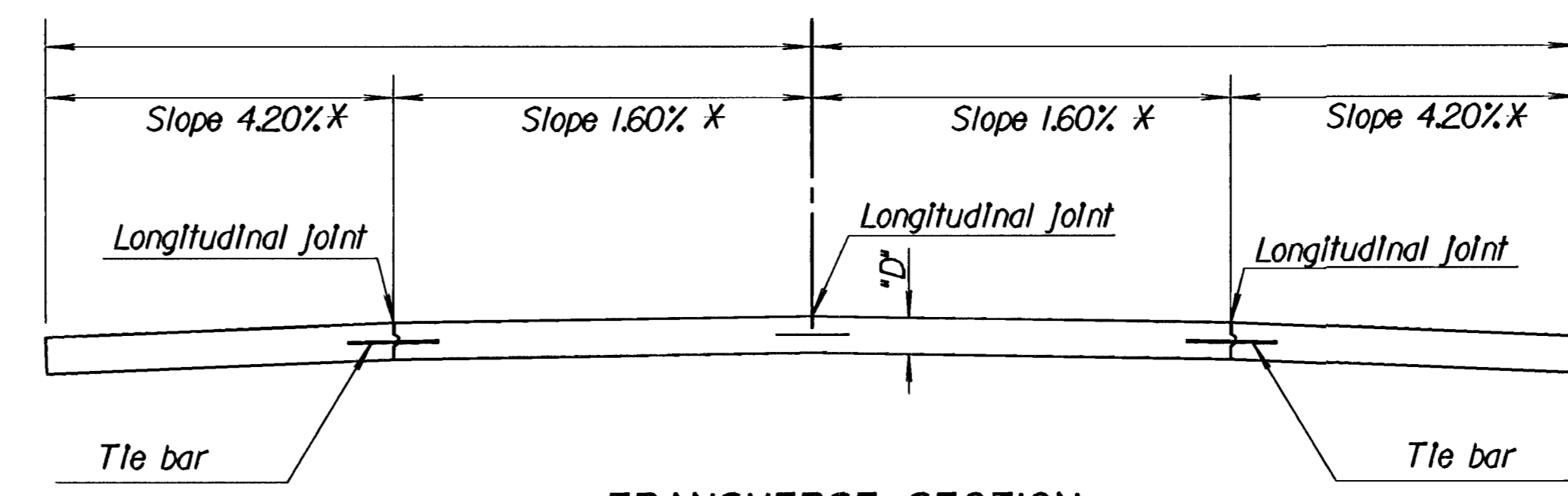


Note: Designer shall add applicable dowel sizes and pavement depth.



For Curb & Gutter details see Standard Drawing RD740 SI.

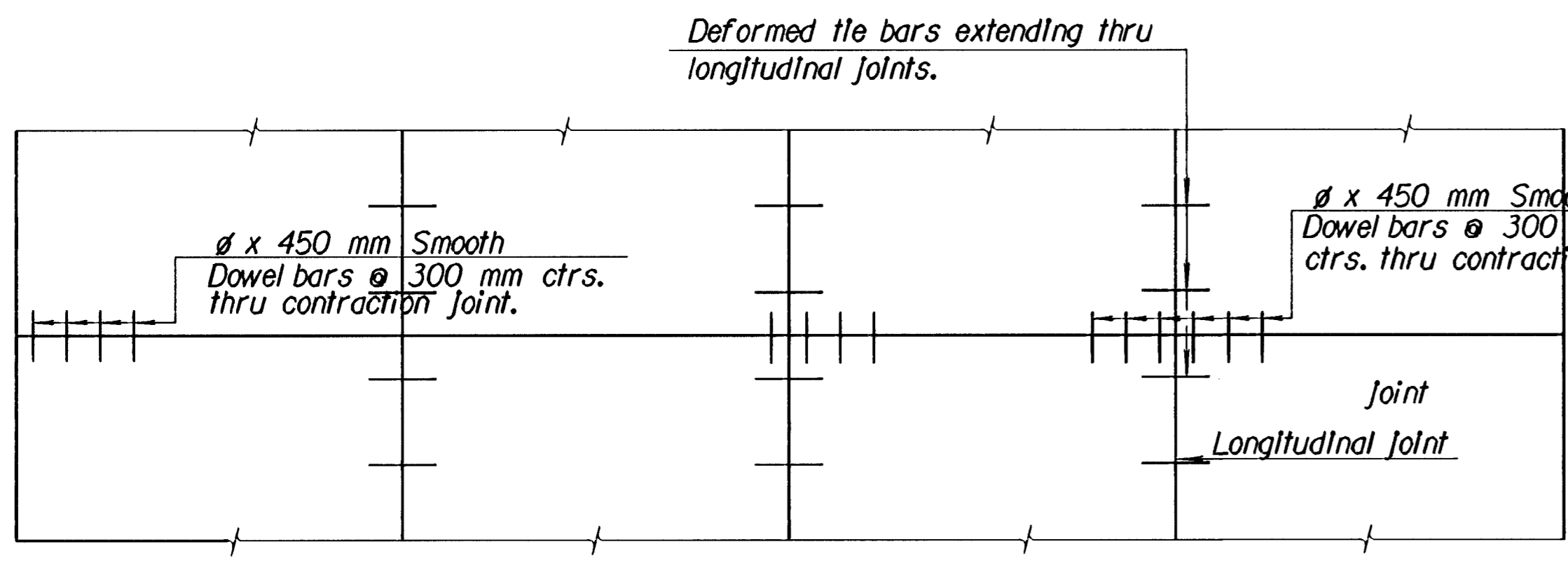
**TRANSVERSE SECTION
(4 - LANE WITH CURB & GUTTER)**



**TRANSVERSE SECTION
(2 - LANE WITH SHOULDERS)**

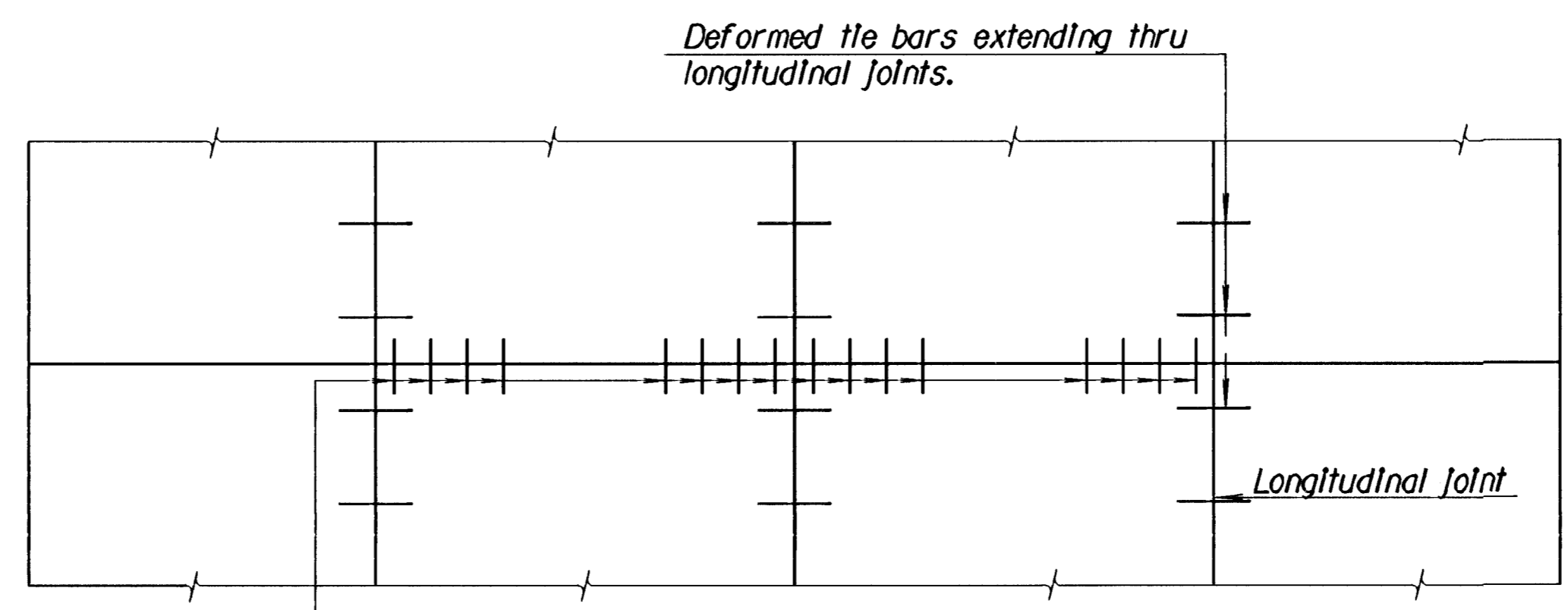
* Normal cross slopes. See Typical Section or Cross Sections for variations.

GENERAL NOTE
 All deformed tie bars shall be epoxy coated. Any damage to the epoxy coating shall be patched in accordance with the Standard Specifications. Deformed tie bars which require bending shall be billet steel reinforcing bars, Grade 300, and may or may not be epoxy coated. Pressure relief joints (without load transfer devices) shall be placed at the end of the bridge approach pavement slab. For details of pressure relief joint, see Concrete Bridge Approach Standard Drawing. Unless otherwise noted, load transfer devices as shown in detail shall be used at all contraction joints on mainline pavement. No dowels will be used on shoulder contraction joints unless specifically shown on plans. All joints on this project shall be sawed and filled with sealant. See special provision for type of sealant. Shape of all keyed joints shall be similar to section of recessed form leg as shown on this sheet. Tie bars shall be drilled and grouted at a 600 mm spacing into existing concrete pavement along all sawcuts of existing concrete pavement where abutting any proposed concrete pavement. All longitudinal joints shall be tied.



**PLAN
(4 - LANE WITH CURB & GUTTER)**

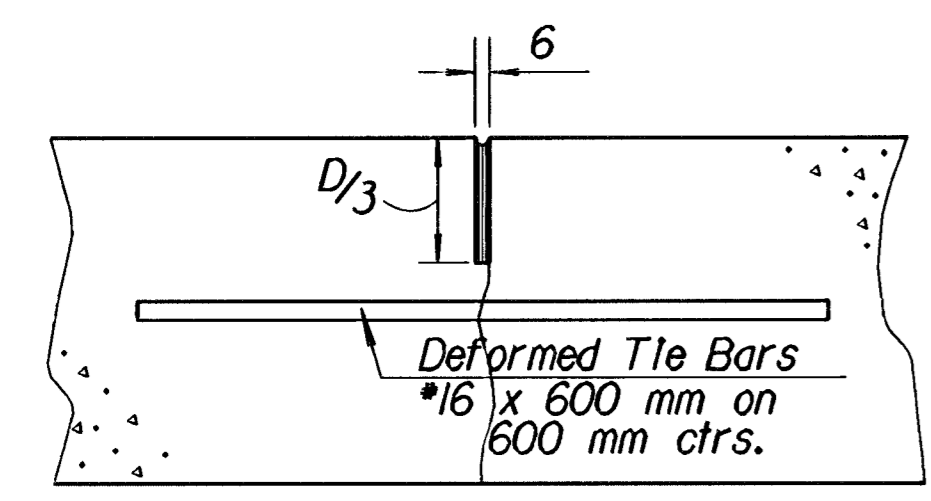
Contraction Joints spaced 5 m ctrs.



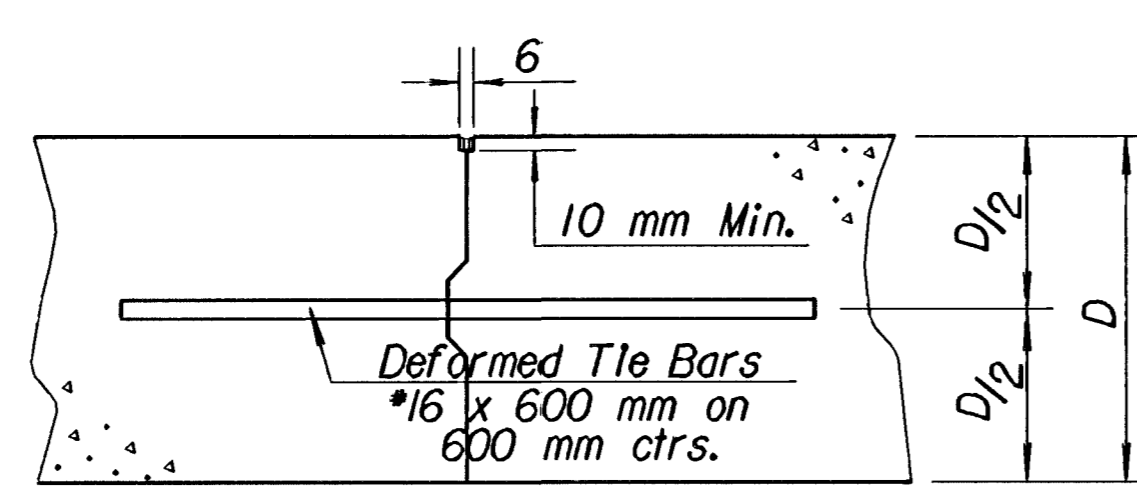
**PLAN
(2 - LANE WITH SHOULDERS)**

Contraction Joints spaced 5 m ctrs.

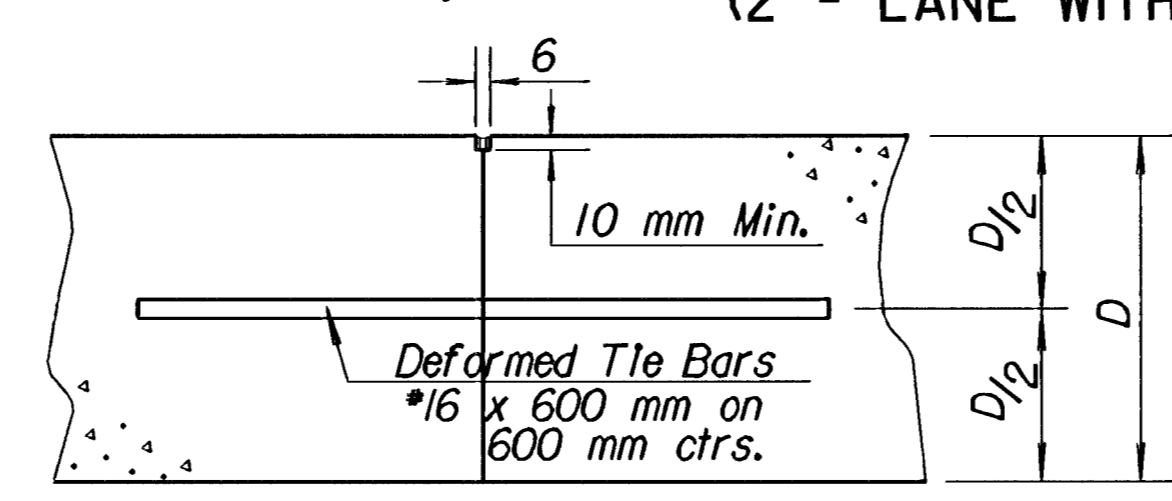
DOWEL SIZE	
D - mm	Dia. mm
160	25
180	25
200	25
220	29
240	32
260	32
280	35
300	38
320	41
340	44
360	44
400	51



Tied Non-Keyed



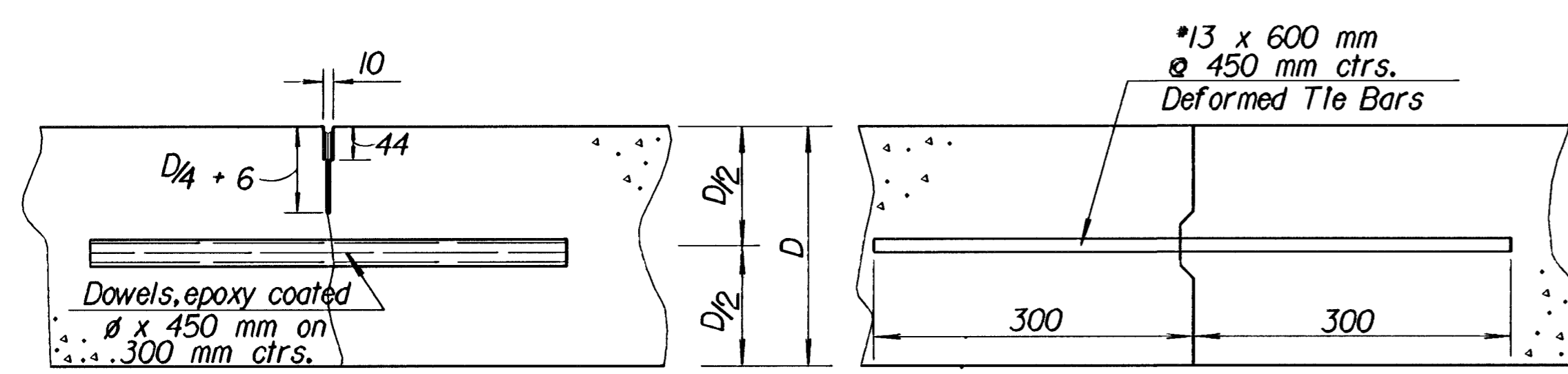
Tied Keyed Construction



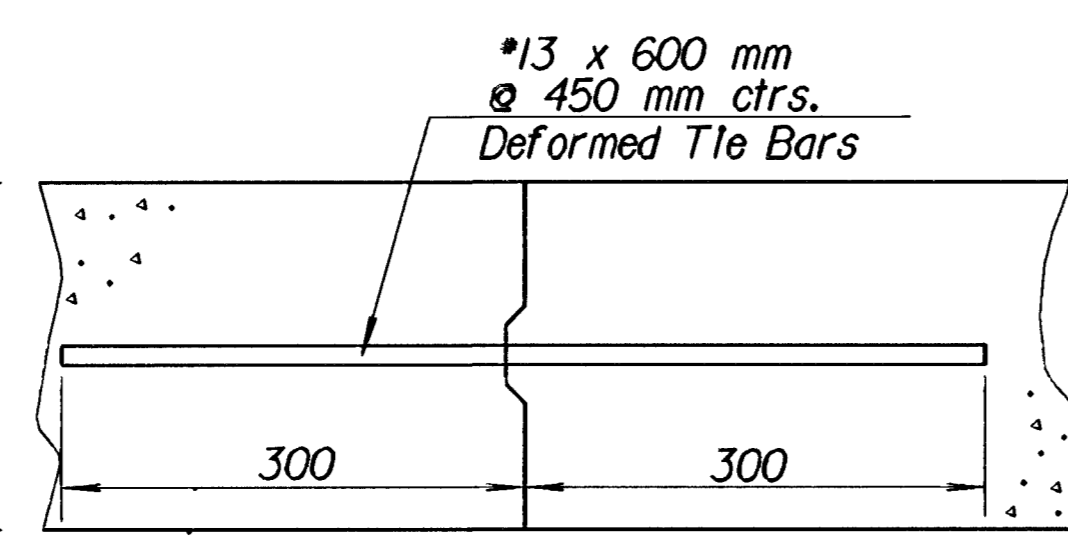
Tied Butt Construction

LONGITUDINAL JOINTS

Note: All sealant is 3 mm to 6mm below surface and is a minimum of 6 mm thick. A backer rod may be used to limit the amount of sealant needed to fill the reservoir. For longitudinal construction joints the contractor has the option of using either the keyed or butt type. At longitudinal construction joints where the adjacent slabs are at different elevations the depth of saw cut for the sealant reservoir should be measured from the top of the lower slab. This is to ensure that sufficient sealant is used in the joint.



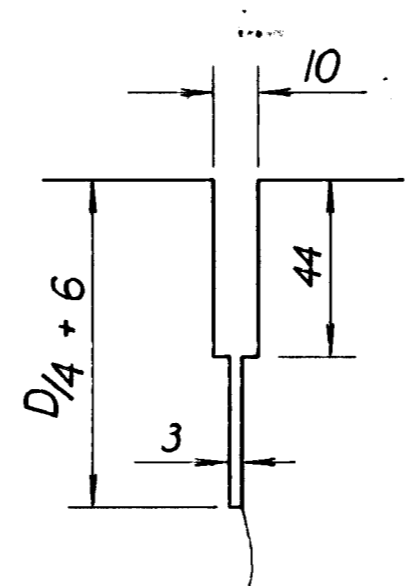
Contraction



Construction

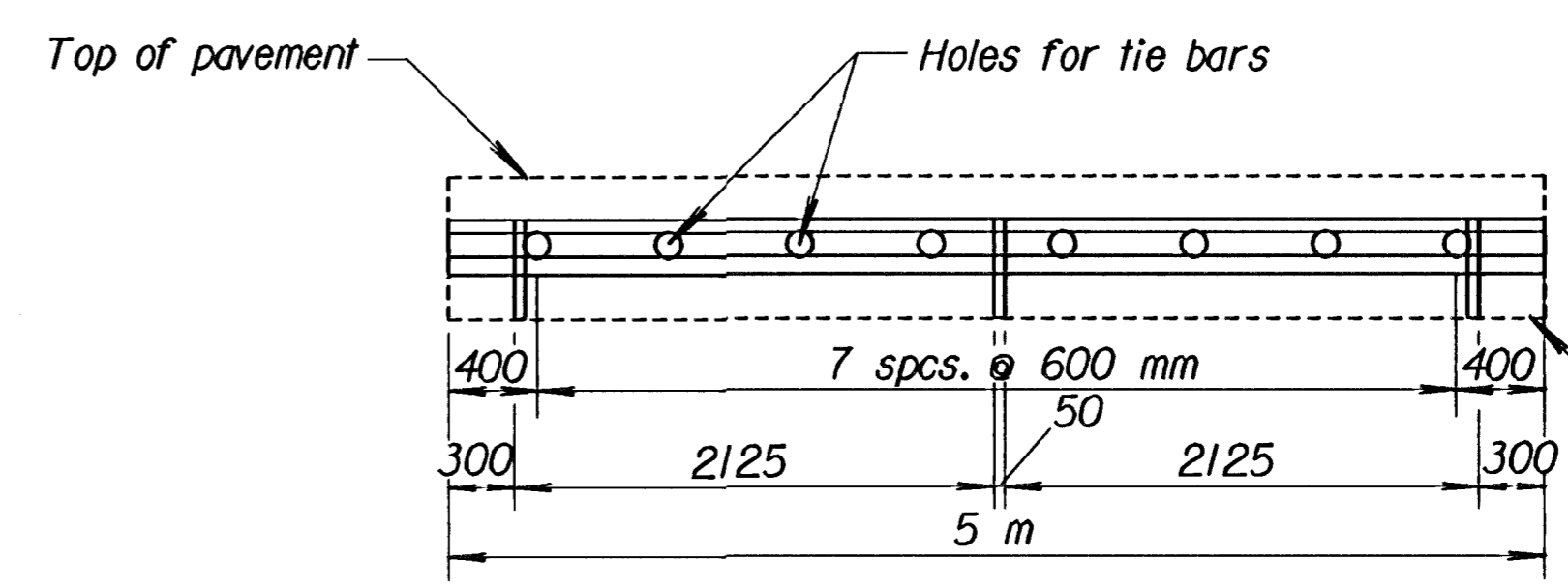
TRANSVERSE JOINTS

Note: Contraction joints will be constructed at the planned location or as directed by the Engineer. When necessary to interrupt continuous placement for a substantial length of time or at the end of a day's pour, the Contractor has the option of ending placement at a contraction joint or with a construction joint located a minimum of 1.5 m from a contraction joint. Either joint type may be constructed by placing a header at the end of the pour or by paving past the joint location, sawing the joint after the concrete has hardened, and drilling holes for the tie bars or dowels.



DETAIL OF CONTRACTION JOINT SAWCUT

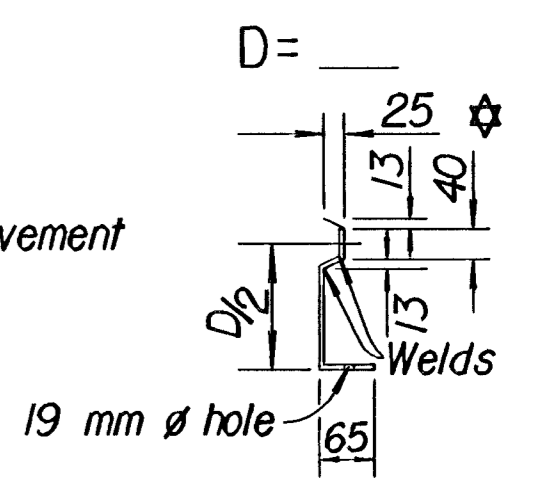
The 3 mm saw cut (D/4 + 6 mm depth) shall be done initially; the 10 mm saw cut shall be accomplished in a separate operation after concrete has gained sufficient strength to avoid spalling as determined by the Engineer.



METAL STRIP FOR LONGITUDINAL CONSTRUCTION JOINT

To be used only against forms. Shall not extend through contraction joints. For automated placement tie bars shall be spaced at uniform 600 mm centers. * Snap-In leg or other approved designs may be used in lieu of welded leg.

PAVEMENT DEPTH



SECTION OF RECESSED FORM LEG

Drawn By: KVE | Plotted: 4-25-02 | File: 2232\DOT\stds\RD651\SI.DGN

NO.	DATE	REVISIONS	BY	APP'D
6	3-01-01	Rev. Tie Bar Spacing	R.J.S.	J.O.B.
5	5-11-00	Rev. Const. Jt. & Metal Strip	R.J.S.	J.O.B.
4	1-27-00	Added Tied Non-Keyed Const. Joint	R.J.S.	J.O.B.
3	11-19-97	Revised Curb and Gutter reference	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT
 DOWEL JOINTED
 NON-REINFORCED**
 RD651-SI
 FHWA APPROVAL 4-19-01
 DESIGNED: QUANTITIES: APP'D: James O. Brewer
 DESIGN CK.: DETAIL CK.: TRACED: Bowser
 QUAN. CK.: TRACE CK.: Seifz