

## SUDAS Revision Submittal Form

**Status Date:** As of 5/7/2021      **Topic:** Concrete boxouts  
**Manual:** Specifications      **Manual Location:** Figures 7010.103 and 7020.201

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**Requested Revision:**    *See attached figures*

**Reason for Revision:**    Added requirement for minimum amount of concrete outside of the casting when it is not centered. Added use of 'B' joint for post PCC construction cut and extracted boxouts.

**Comments:**                None.

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**District:**                 1     2     3     4     5     6      **2/24/2021 Webinar**

**Comments:**                None.

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**District:**                 1     2     3     4     5     6      **April 2021 Webinars**

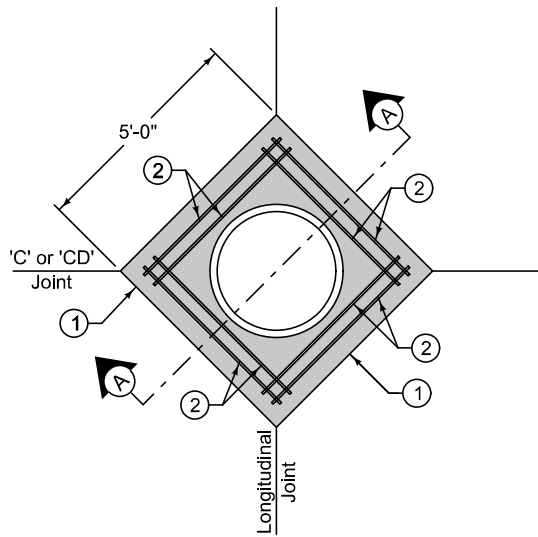
**Comments:**                None.

**Action:**                  Deferred                             Not Approved                     Approved

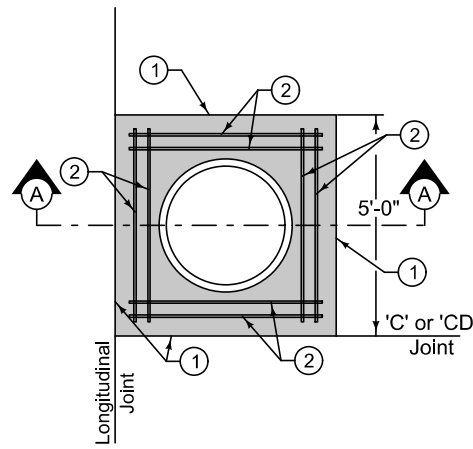
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**Final District Action Summary:**    All 6 districts approved.

**Board of Directors Action:**        Approved.



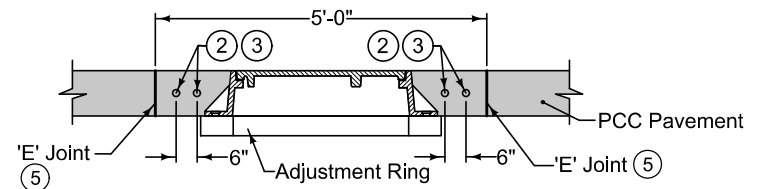
AT JOINT INTERSECTION



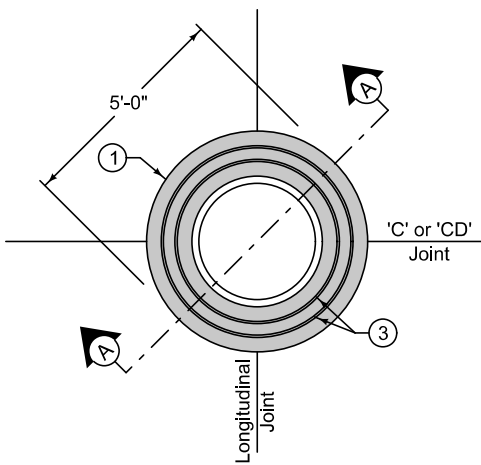
OFFSET AT JOINT INTERSECTION

Construct boxout with Class C concrete or match pavement class. Minimum 2 inches clear on reinforcement. Minimum 12 inches of concrete between outside of casting and nearest joint. Center casting within boxout area if possible.

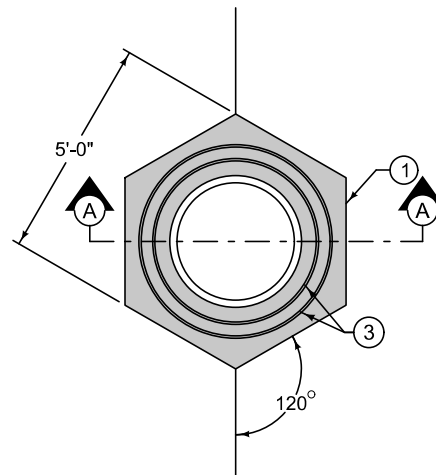
- ① 'KT-1', 'KT-2', 'BT-1', or 'BT-2' joint if three-piece floating casting (SW 601 Type B and D or SW-602 Type F) is used. 'E' joint if two-piece fixed casting (SW 601 Type A and C or SW-602 Type E) is used.
- ② 4 foot 8 inch (typ.) #4 bar. Place at mid-slab.
- ③ #4 hoops (variable length). Place at mid-slab.
- ④ No boxout is required for three-piece floating castings (SW 601 Type B and D or SW-602 Type F). If a boxout is used with a three-piece casting, construct as detailed in Section A-A for three-piece floating casting.
- ⑤ When circular boxout is cut and extracted post PCC construction, a 'B' joint may be substituted for the 'E' joint, if approved.



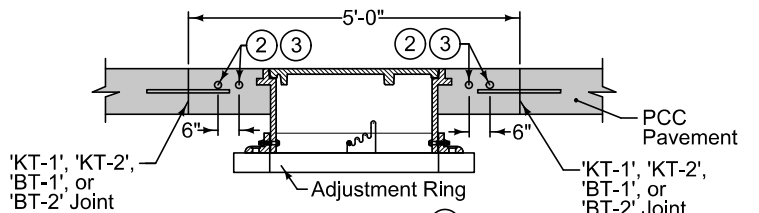
SECTION A-A  
(For two-piece fixed casting)



CIRCULAR



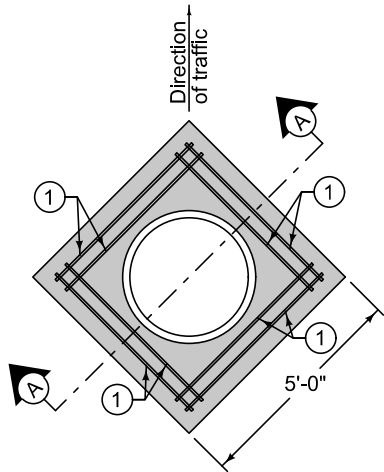
AT A SINGLE JOINT



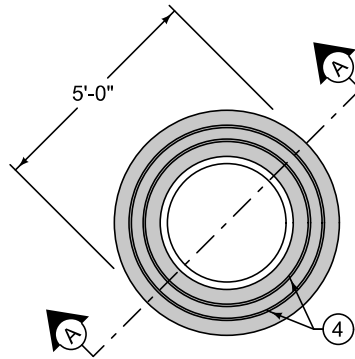
SECTION A-A ④  
(For three-piece floating casting)

FIGURE 7010.103 SHEET 1 OF 1

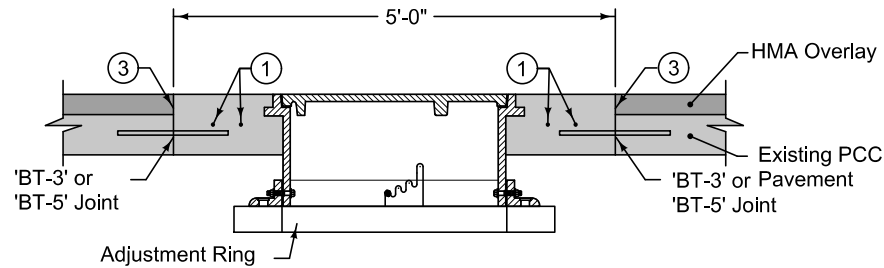
SUDAS IOWADOT	REVISION 2 04-19-22
	<b>PV-103</b> SHEET 1 of 1
REVISIONS: Address post construction circular boxout replacement.	
Paul D. Weigand SUDAS DIRECTOR	
Stuart Miller DESIGN METHODS ENGINEER	
<b>MANHOLE BOXOUTS IN PCC PAVEMENT</b>	



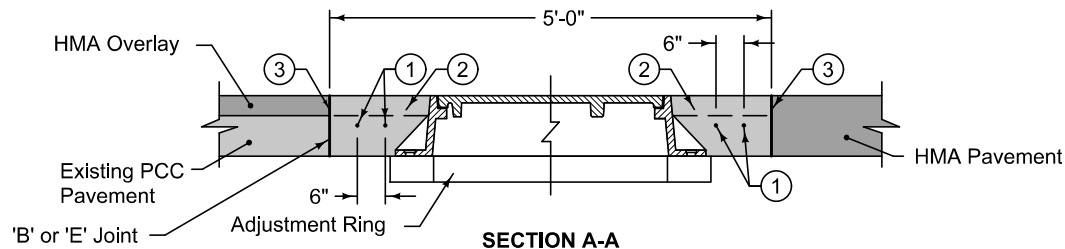
RECTANGULAR



CIRCULAR



SECTION A-A  
(For three-piece floating casting)



SECTION A-A  
(For two-piece fixed casting)

Construct boxout with Class C concrete or match pavement class. Minimum 2 inches clear on reinforcement. Minimum 12 inches of concrete between outside of casting and nearest joint. Center casting within boxout area if possible.

- ① 4 foot 8 inch (typ.) #4 bar. Place at mid-slab.
- ② If boxout is constructed prior to placement of HMA overlay or final lift of HMA pavement, boxout may be constructed low, with a 'B' joint in place of the 'E' joint, and then final lift or overlay placed.
- ③ Apply tack coat.
- ④ #4 hoops (variable length). Place at mid-slab.

SUDAS IOWADOT	REVISION	1	10-19-21
	FIGURE 7020.201	STANDARD ROAD PLAN	PV-201
REVISIONS: Added note 12 Inch minimum around casting.		SHEET 1 of 1	
Paul D. Wigand SUDAS DIRECTOR		Steve Miller DESIGN METHODS ENGINEER	
<b>MANHOLE BOXOUTS IN HMA PAVEMENT AND HMA OVERLAYS</b>			