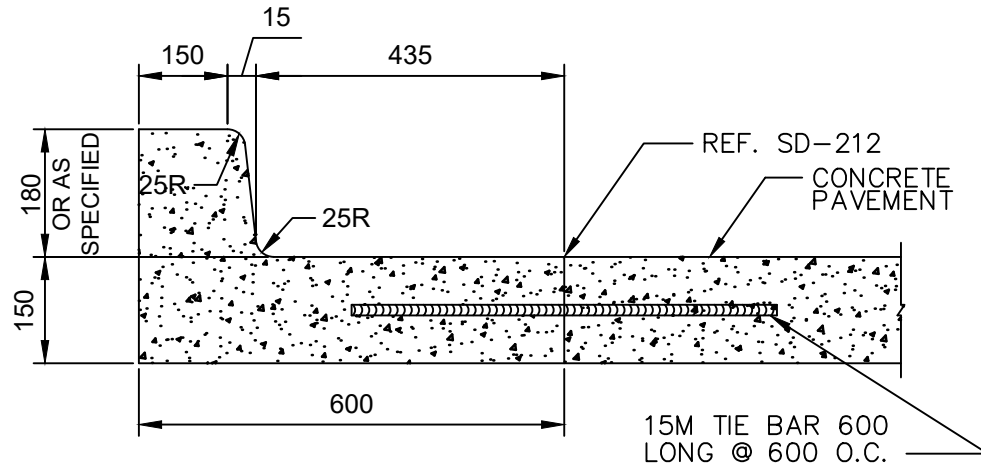
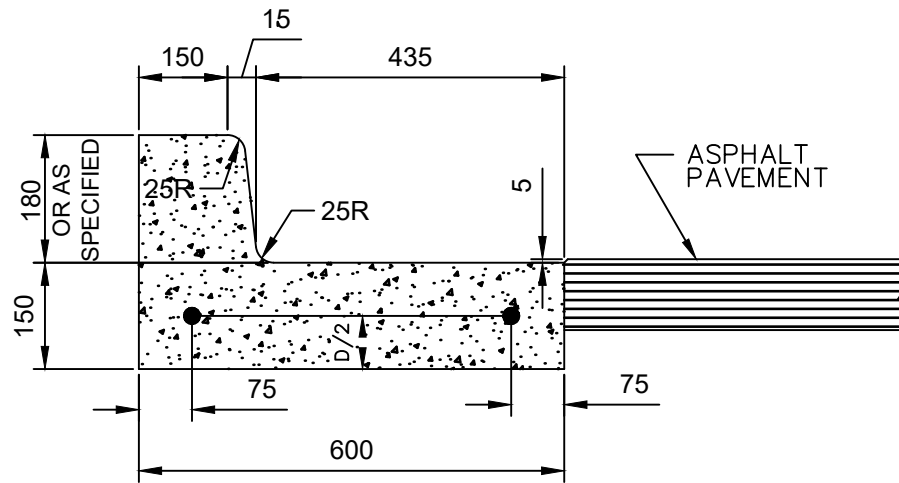


## **APPENDIX 'E' – STANDARD CONSTRUCTION DETAILS**



CURB AND GUTTER  
FOR CONCRETE PAVEMENTS



CURB AND GUTTER  
FOR ASPHALT PAVEMENTS

- NOTE: 1. REDUCE CURB HEIGHT TO 40.  
APPLICABLE FOR PRIVATE  
APPROACHES ON LOCAL RESIDENTIAL  
STREETS. REF SD-202B
2. TRANSVERSE SAW CUT EVERY 3000  
OR AT PAVEMENT JOINTS.

3. THIS DETAIL SHALL ONLY BE  
USED FOR REPAIRS OF EXISTING  
CURB AND GUTTER OR AS  
DIRECTED BY THE CONTRACT  
ADMINISTRATOR.

DIMENSIONS IN MILLIMETRES



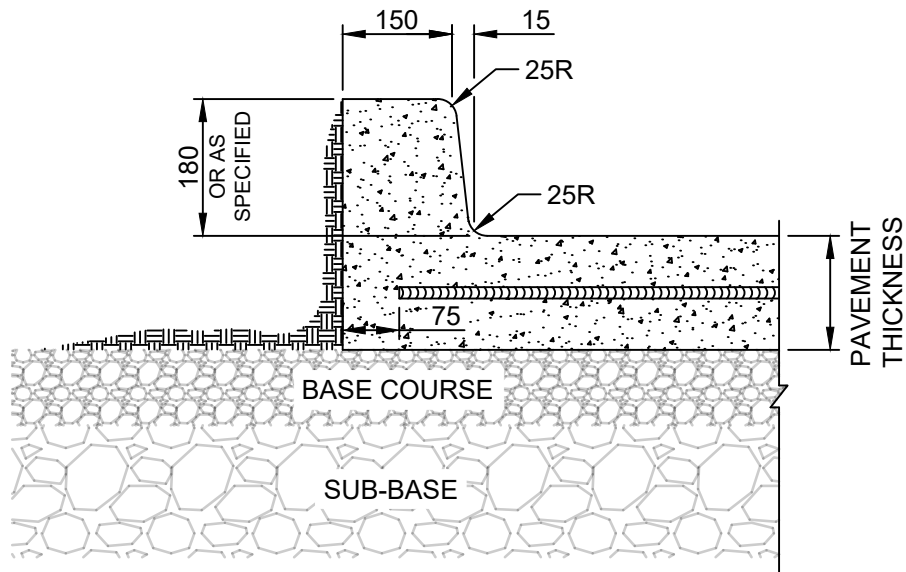
THE CITY OF WINNIPEG  
PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
CW 3325

Revisions			
No.	Date	Description	By
1.	OCT 24	ADDED NOTE 3	R.B.

CURB AND GUTTER

Designed By: B.P.	Drawn By: R.B.	Scale : N.T.S.
Checked By: D.R.K.	Date: 2008-12-15	Drawing No.
Approved: PAVEMENT MANAGEMENT BRANCH		SD-200



DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
CW 3230, CW 3310

Revisions

No.	Date	Description	By
1.	JAN 26	GENERAL REVISION	A.G.

BARRIER CURB  
INTEGRAL

Designed By:  
L.S.W.L.

Drawn By:  
T.K.

Scale :  
N.T.S

Checked By:  
L.S.W.L.

Date:  
1981-02-16

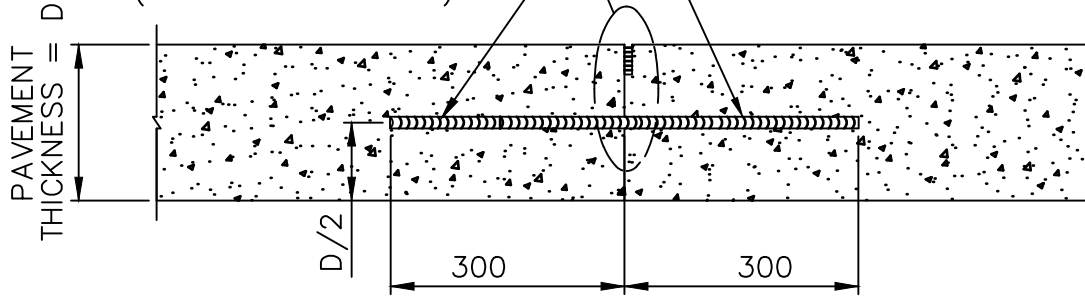
Drawing No.

Approved:  
PAVEMENT MANAGEMENT BRANCH

SD-204

BUTT JOINT  
REF. SD-212

BAR MAT REINFORCEMENT  
REF. SD-217  
(WHERE APPLICABLE)

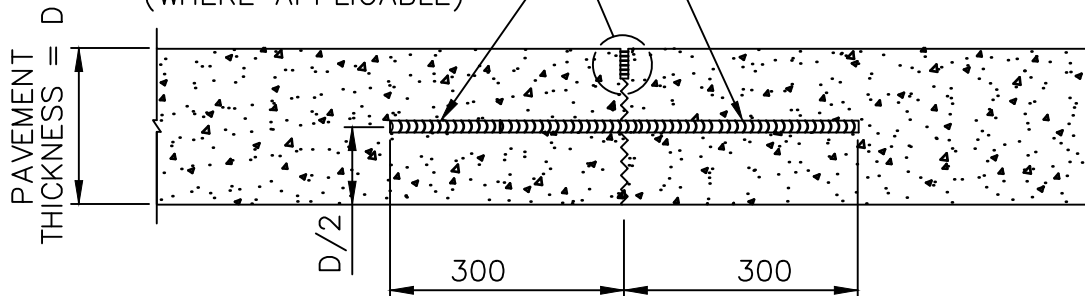


600 LONG TIE BARS:  
15M @ 600 O.C. FOR PAVEMENTS D<200  
20M @ 600 O.C. FOR PAVEMENTS D=200  
25M @ 600 O.C. FOR PAVEMENTS D>200

FORMED LONGITUDINAL JOINT

SAWN JOINT REF. SD-212

BAR MAT REINFORCEMENT  
REF. SD-217  
(WHERE APPLICABLE)



600 LONG TIE BARS:  
15M @ 600 O.C. FOR PAVEMENTS D<200  
20M @ 600 O.C. FOR PAVEMENTS D=200  
25M @ 600 O.C. FOR PAVEMENTS D>200

SAWN LONGITUDINAL JOINT

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
CW 3230, CW 3310

Revisions

No.	Date	Description	By
1.	OCT 24	TIE BAR SIZE	A.G.

LONGITUDINAL JOINT FOR  
CONCRETE PAVEMENT

Designed By:  
L.S.W.L.

Drawn By:  
R.B.

Scale :  
N.T.S.

Checked By:  
D.R.K.

Date:  
2025-12-15

Drawing No.

Approved:  
PAVEMENT MANAGEMENT BRANCH

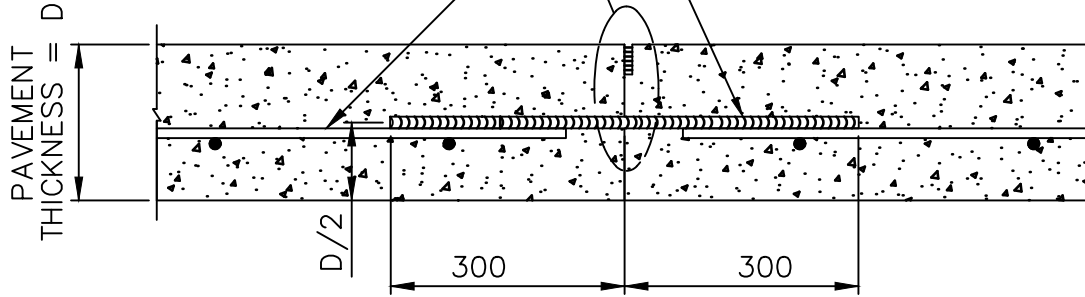
SD-210A

BUTT JOINT  
REF. SD-212

BAR MAT REINFORCEMENT  
REF. SD-217  
(WHERE APPLICABLE)

600 LONG TIE BARS:

- 15M @ 600 O.C. FOR PAVEMENTS  $D < 200$
- 20M @ 600 O.C. FOR PAVEMENTS  $D = 200$
- 25M @ 600 O.C. FOR PAVEMENTS  $D > 200$



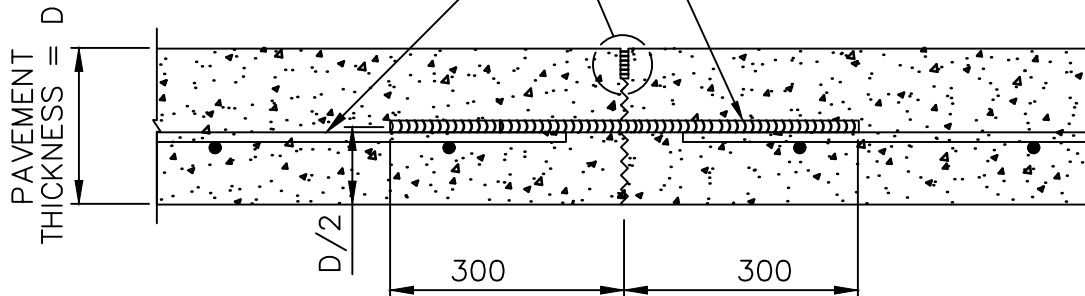
FORMED LONGITUDINAL JOINT

SAWN JOINT REF. SD-212

BAR MAT REINFORCEMENT  
REF. SD-217  
(WHERE APPLICABLE)

600 LONG TIE BARS:

- 15M @ 600 O.C. FOR PAVEMENTS  $D < 200$
- 20M @ 600 O.C. FOR PAVEMENTS  $D = 200$
- 25M @ 600 O.C. FOR PAVEMENTS  $D > 200$



SAWN LONGITUDINAL JOINT

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
CW 3230, CW 3310

Revisions			

No.	Date	Description	By

Designed By: A.G.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No.
Approved: PAVEMENT MANAGEMENT BRANCH		SD-210B

LONGITUDINAL JOINT FOR  
CONCRETE PAVEMENTS WITH BAR  
MAT REINFORCEMENT

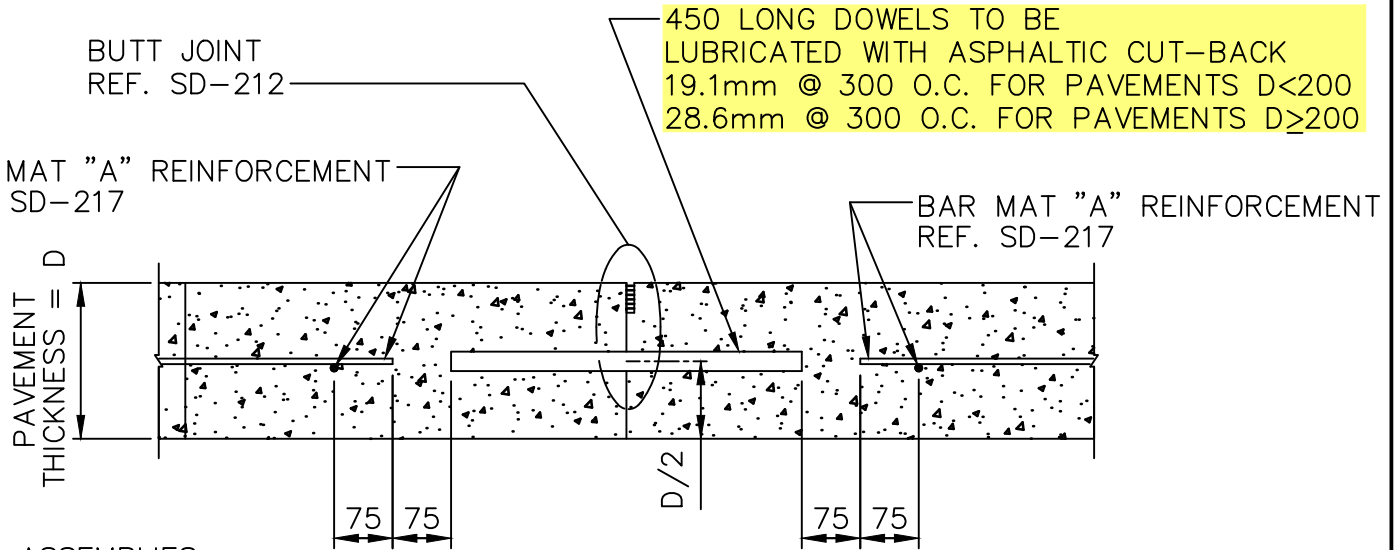
450 LONG DOWELS TO BE LUBRICATED WITH ASPHALTIC CUT-BACK  
 19.1mm @ 300 O.C. FOR PAVEMENTS D < 200  
 28.6mm @ 300 O.C. FOR PAVEMENTS D ≥ 200

BUTT JOINT  
 REF. SD-212

BAR MAT "A" REINFORCEMENT  
 REF. SD-217

BAR MAT "A" REINFORCEMENT  
 REF. SD-217

PAVEMENT THICKNESS = D



NOTE:  
 DOWEL ASSEMBLIES  
 NOT SHOWN

CONSTRUCTION JOINT MAT "A"

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
 PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
 CW 3230, CW 3310

Revisions

No.	Date	Description	By
1.	OCT 24	GENERAL REVISION	R.B.

CONSTRUCTION JOINT  
 FOR REINFORCED  
 CONCRETE PAVEMENT

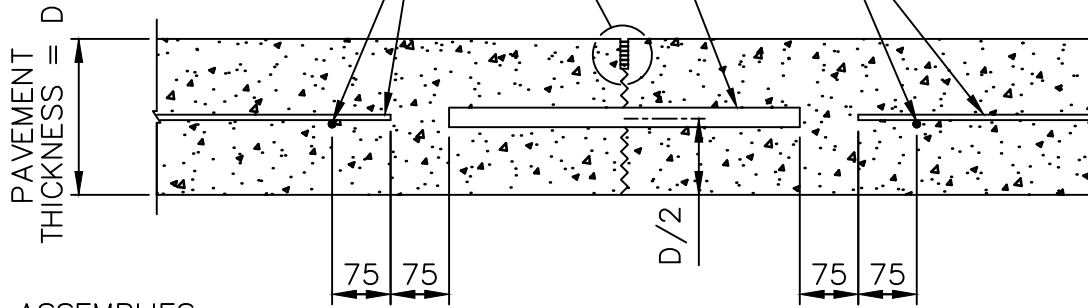
Designed By: A.G.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No. SD-211A
Approved: PAVEMENT MANAGEMENT BRANCH		

SAWN JOINT REF. SD-212

BAR MAT "A" REINFORCEMENT  
REF. SD-217

450 LONG DOWELS TO BE  
LUBRICATED WITH ASPHALTIC CUT-BACK  
19.1mm @ 300 O.C. FOR PAVEMENTS D<200  
28.6mm @ 300 O.C. FOR PAVEMENTS D≥200

BAR MAT "A" REINFORCEMENT  
REF. SD-217



NOTE:  
DOWEL ASSEMBLIES  
NOT SHOWN

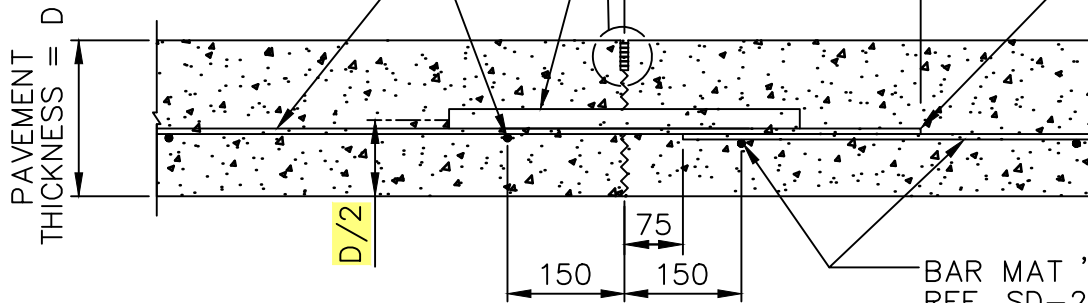
CONTRACTION JOINT MAT "A"

450 LONG DOWELS TO BE  
LUBRICATED WITH ASPHALTIC CUT-BACK  
19.1mm @ 300 O.C. FOR PAVEMENTS D<200  
28.6mm @ 300 O.C. FOR PAVEMENTS D≥200

EXTENSION OF LONGITUDINAL BAR  
TO BE LUBRICATED WITH ASPHALTIC  
CUT-BACK PRIOR TO CONCRETE  
PLACEMENT

BAR MAT 'B' REINFORCEMENT  
REF. SD-217

SAWN JOINT REF. SD-212



BAR MAT 'A' REINFORCEMENT  
REF. SD-217

CONTRACTION JOINT MAT "B"

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
CW 3230, CW 3310

Revisions

No.	Date	Description	By

CONTRACTION JOINT  
FOR REINFORCED  
CONCRETE PAVEMENT

Designed By:  
A.G.

Drawn By:  
R.B.

Scale :  
N.T.S.

Checked By:  
B.K.

Date:  
2025-12-15

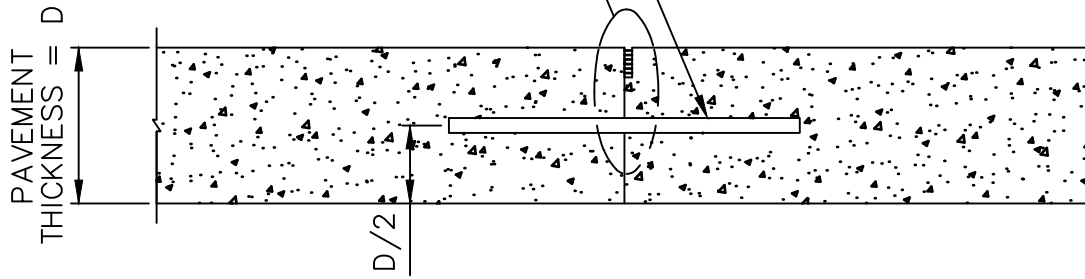
Drawing No.

Approved:  
PAVEMENT MANAGEMENT BRANCH

SD-211B

BUTT JOINT REF. SD-212

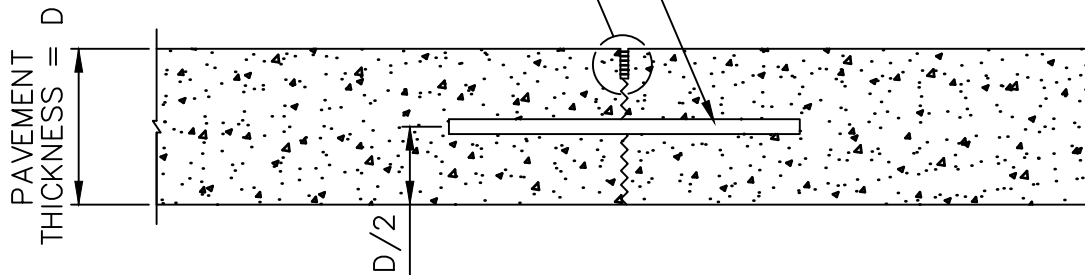
450 LONG DOWELS TO BE LUBRICATED WITH ASPHALTIC CUT-BACK  
 19.1mm @ 300 O.C. FOR PAVEMENTS  $D < 200$   
 28.6mm @ 300 O.C. FOR PAVEMENTS  $D \geq 200$



CONSTRUCTION JOINT

SAWN JOINT REF. SD-212

450 LONG DOWELS TO BE LUBRICATED WITH ASPHALTIC CUT-BACK  
 19.1mm @ 300 O.C. FOR PAVEMENTS  $D < 200$   
 28.6mm @ 300 O.C. FOR PAVEMENTS  $D \geq 200$



CONTRACTION JOINT

NOTE: DOWEL ASSEMBLIES NOT SHOWN.

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
 PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
 CW 3230, CW 3310

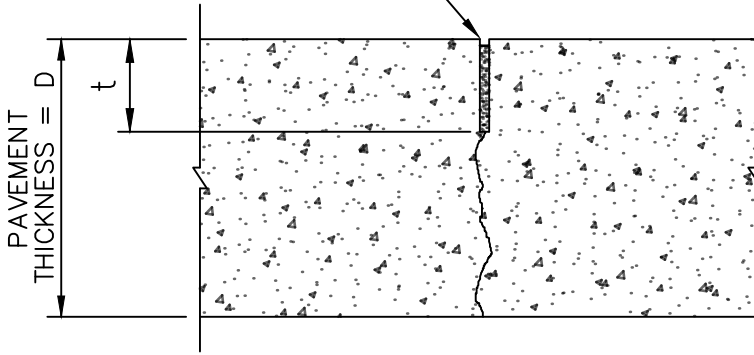
Revisions			
No.	Date	Description	By
1.	OCT 24	GENERAL REVISION	A.G.

CONSTRUCTION JOINT AND  
 CONTRACTION JOINT FOR  
 PLAIN DOWELLED  
 CONCRETE PAVEMENT

Designed By: L.S.W.L.	Drawn By: R.B.	Scale : N.T.S.
Checked By: D.R.K.	Date: 2025-12-15	Drawing No.
Approved: PAVEMENT MANAGEMENT BRANCH		SD-211C

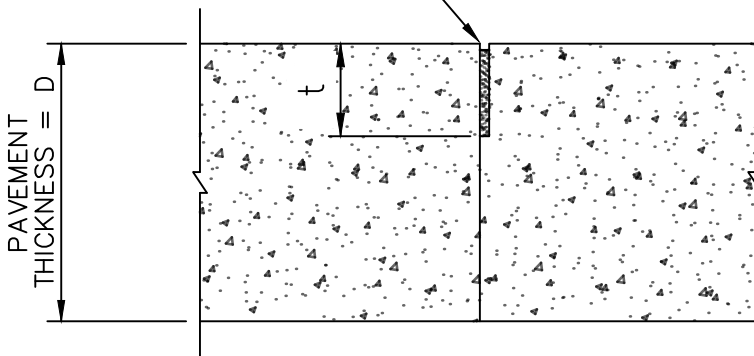
TRANSVERSE JOINT:  $t=D/3$   
 LONGITUDINAL JOINT:  $t=D/4$

SEE DETAIL "A"

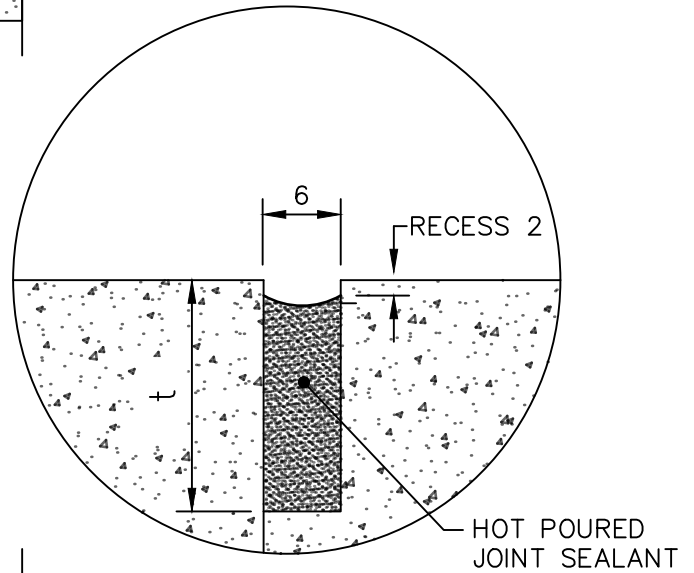


SAWN JOINT

SEE DETAIL "A"



BUTT JOINT



DETAIL "A"

NOTES:

1. SEALING OF CONCRETE JOINTS NOT REQUIRED IF THE JOINTS ARE BEING OVERLAYED WITH ASPHALT.
2. REINFORCING NOT SHOWN.

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
 PUBLIC WORKS DEPARTMENT

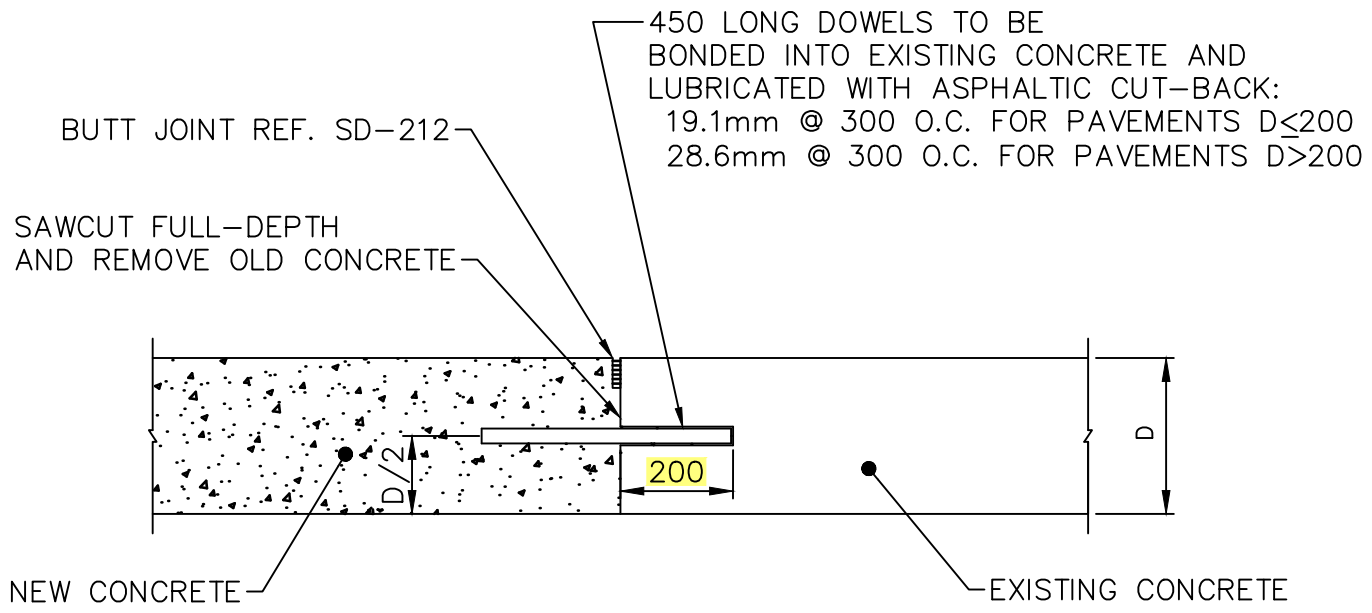
Reference Spec. No.  
 CW 3230, CW 3310

Revisions

No.	Date	Description	By
2.	MAY 25	SAW CUT WIDTH AND DEPTH	R.B.
1.	OCT 06	GENERAL REVISION	L.W.B.

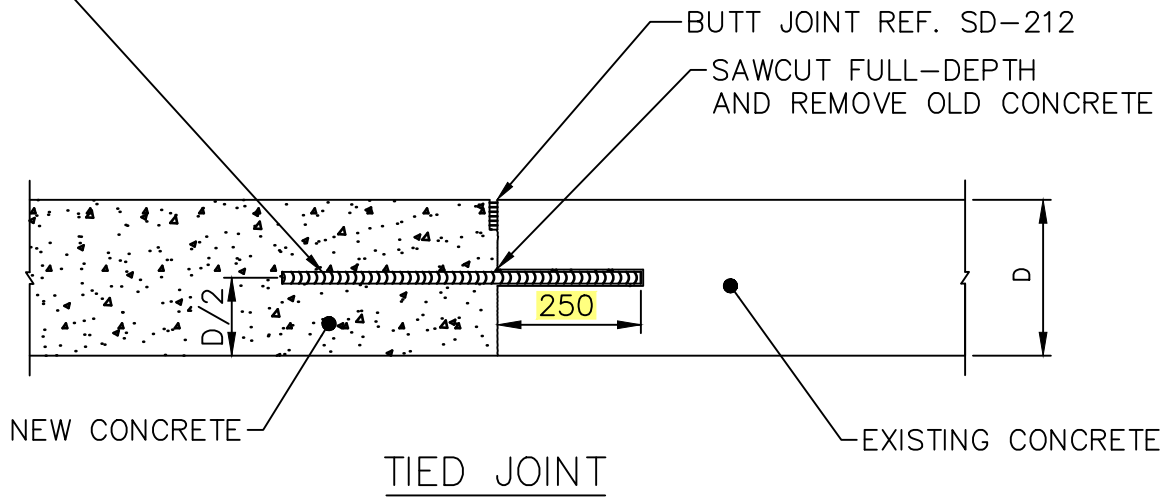
SAWN JOINT AND BUTT JOINT FOR  
 CONCRETE PAVEMENTS

Designed By: A.G.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No.
Approved: PAVEMENT MANAGEMENT BRANCH		SD-212



TRANSVERSE (MOVING) JOINT

600 LONG TIE BARS:  
 15M @ 600 O.C. FOR PAVEMENTS D<200  
 20M @ 600 O.C. FOR PAVEMENTS D=200  
 25M @ 600 O.C. FOR PAVEMENTS D>200  
 WITH MINIMUM 2 BARS PER SIDE



TIED JOINT

NOTE:  
 BAR MAT REINFORCEMENT  
 NOT SHOWN REF. SD-217

DIMENSIONS IN MILLIMETRES



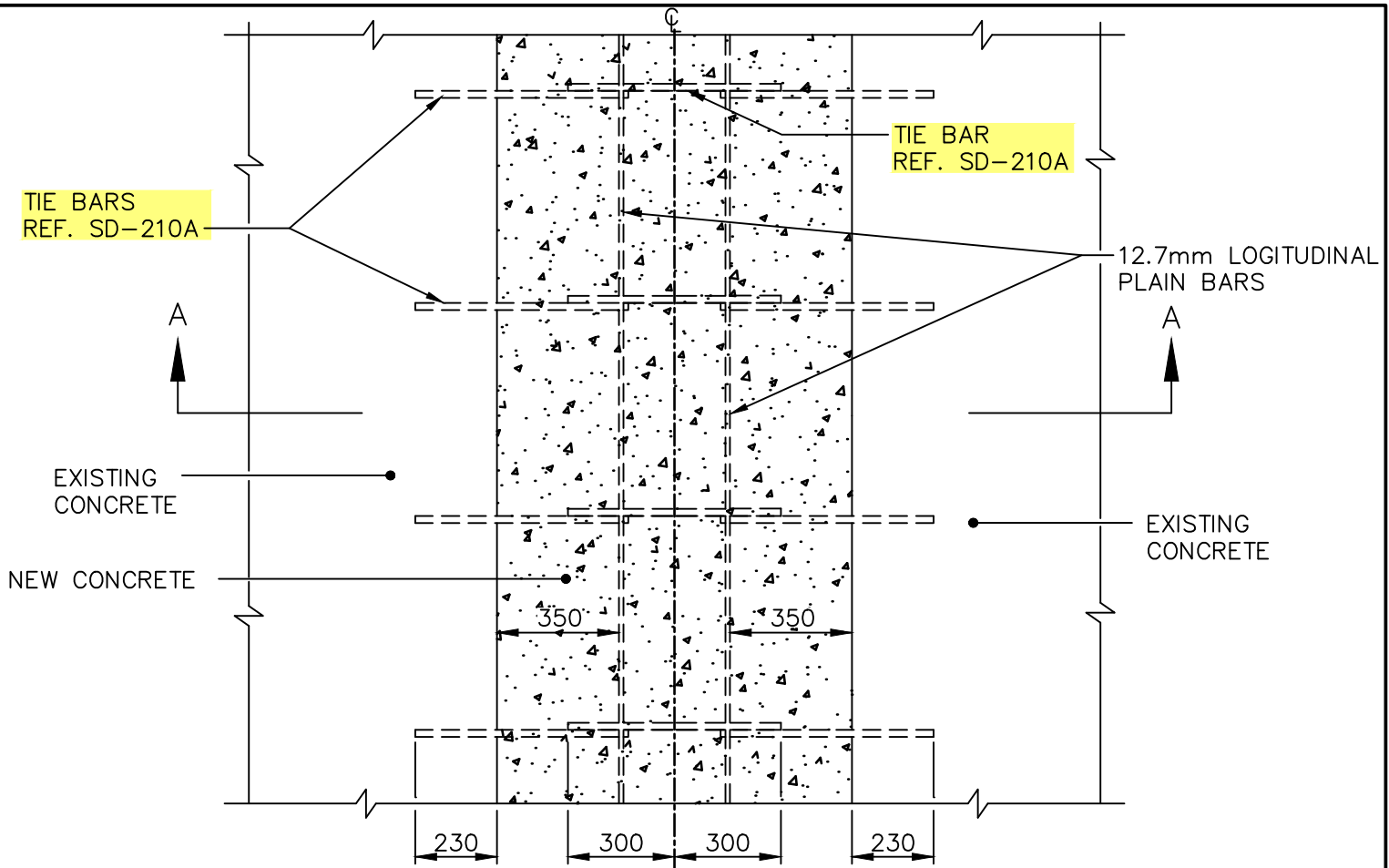
**THE CITY OF WINNIPEG**  
 PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
 CW 3230, CW 3310

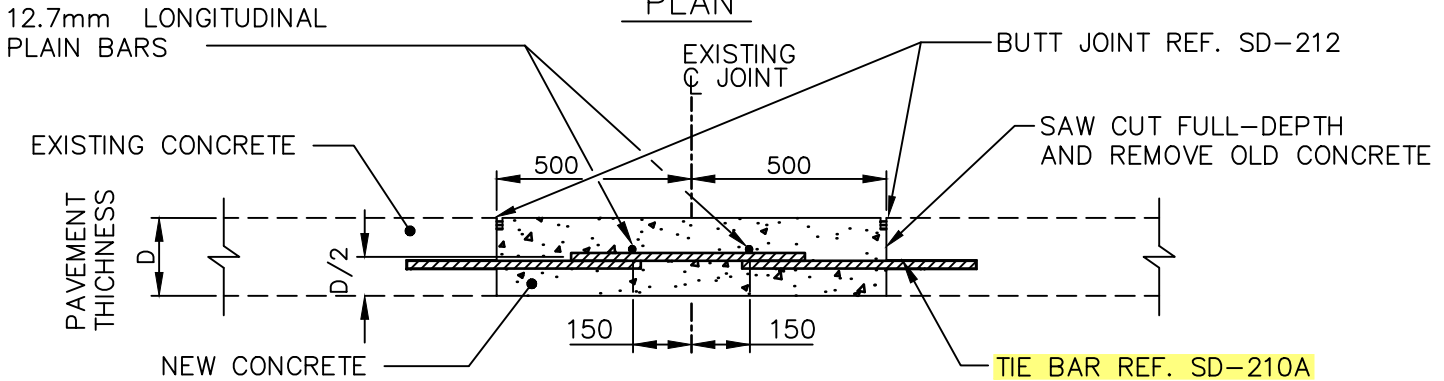
Revisions			
No.	Date	Description	By
2.	OCT 24	TIE BAR DETAILS	A.G.
1.	OCT 13	GENERAL REVISION	L.W.B.

FULL-DEPTH PATCHES AND  
 SLAB REPLACEMENT

Designed By: B.P.	Drawn By: R.B.	Scale : N.T.S.
Checked By: D.R.K.	Date: 2025-12-15	Drawing No. SD-213B
Approved: PAVEMENT MANAGEMENT BRANCH		



PLAN




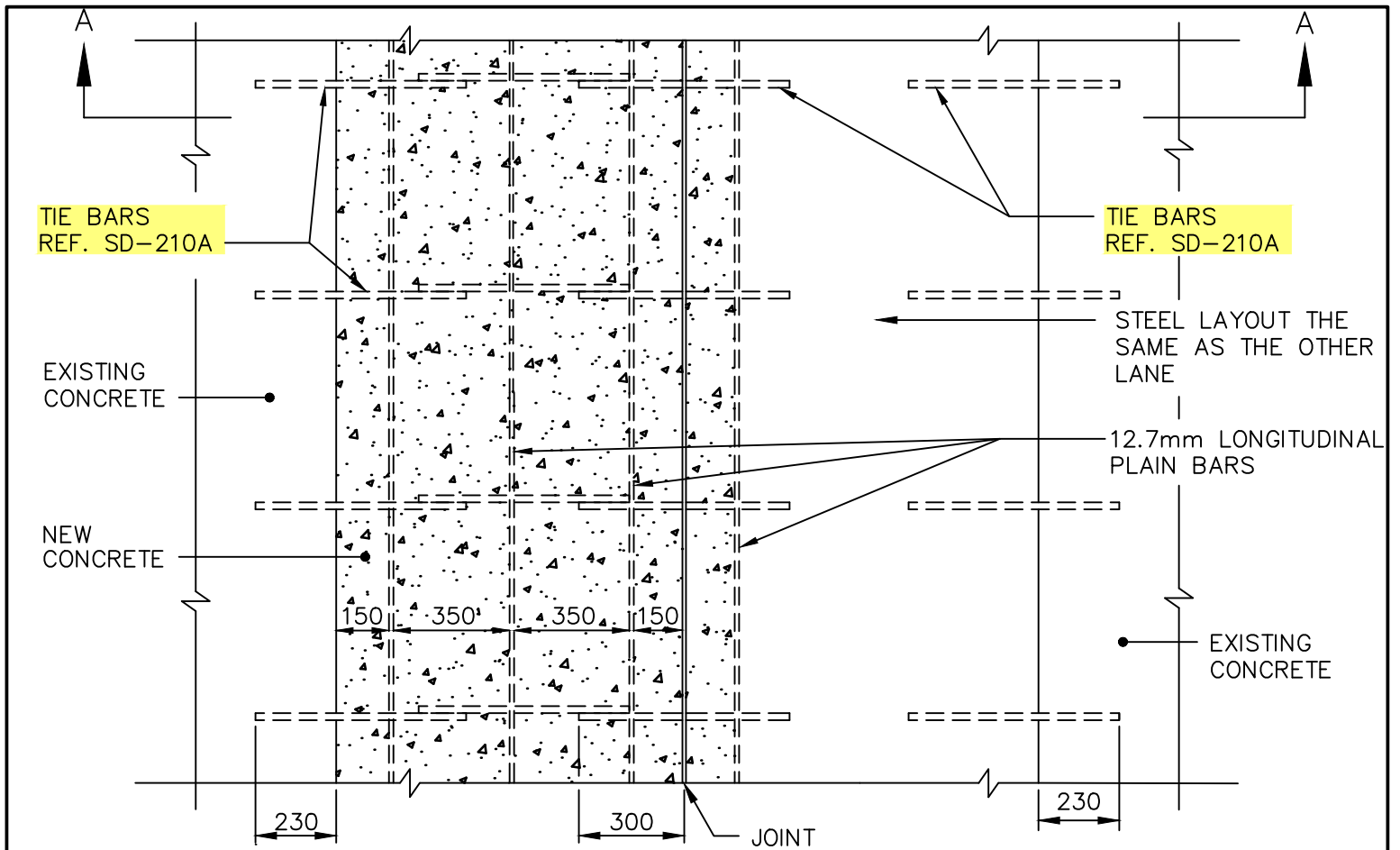
SECTION A-A

NOTE:

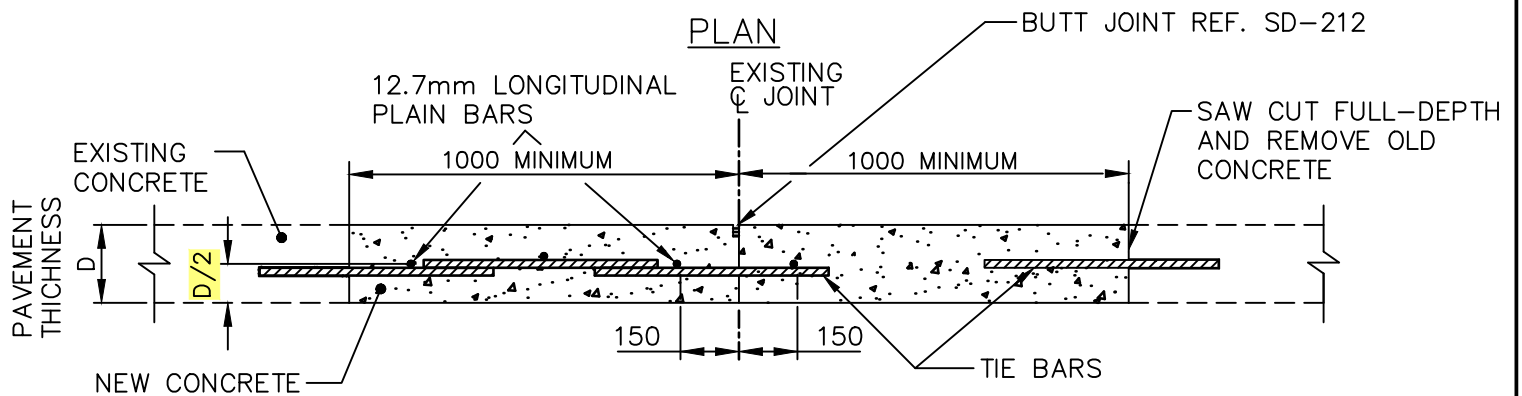
1. IF JOINT REPAIR IS GREATER THAN 1000 WIDE ON EITHER SIDE OF THE JOINT, USE ADDITIONAL 12.7mm LONGITUDINAL PLAIN BARS AT 450 O.C. OR USE BAR MAT REF. SD-217.
2. INSTALL DOWELS AT PATCH ENDS, REF. SD-213B.

DIMENSIONS IN MILLIMETRES

 <p><b>THE CITY OF WINNIPEG</b> PUBLIC WORKS DEPARTMENT</p>	Revisions			
	No.	Date	Description	By
Reference Spec. No. CW 3230, CW 3310	3.	OCT 24	TIE BAR DETAILS	A.G.
	2.	FEB 04	GENERAL REVISION	J.G.
	1.	JAN 03	GENERAL REVISION	A.P.
LONGITUDINAL JOINT REPAIR DETAILS FULL-WIDTH PATCH (BOTH SIDES AT SAME TIME)	Designed By: L.S.W.L.		Drawn By: R.B.	Scale : N.T.S.
	Checked By: B.P.		Date: 2025-12-15	Drawing No. SD-214A
	Approved: PAVEMENT MANAGEMENT BRANCH			



PLAN



SECTION A-A

NOTE:

1. IF JOINT REPAIR IS GREATER THAN 1000 WIDE ON EITHER SIDE OF THE JOINT, USE ADDITIONAL 12.7mm LONGITUDINAL PLAIN BARS AT 450 O.C. OR USE BAR MAT REF. SD-217.
2. INSTALL DOWELS AT PATCH ENDS, REF. SD-213B.

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
CW 3230, CW 3310

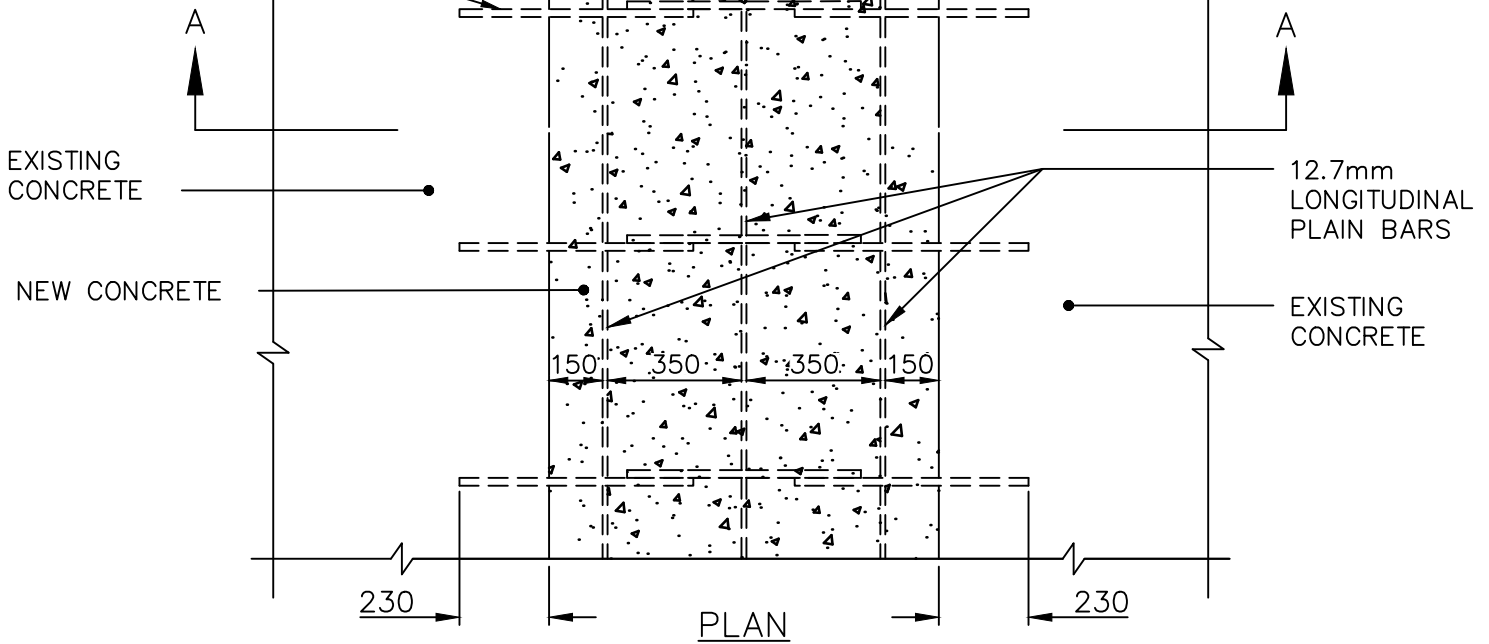
Revisions

No.	Date	Description	By
1.	OCT 24	TIE BAR DETAILS AND LOCATION	A.G.

LONGITUDINAL JOINT  
REPAIR DETAILS  
LANE-AT-A-TIME PATCH

Designed By: L.S.W.L.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.P.	Date: 2025-12-15	Drawing No.
Approved: PAVEMENT MANAGEMENT BRANCH		SD-214B

TIE BARS  
REF. SD-210A



EXISTING  
CONCRETE

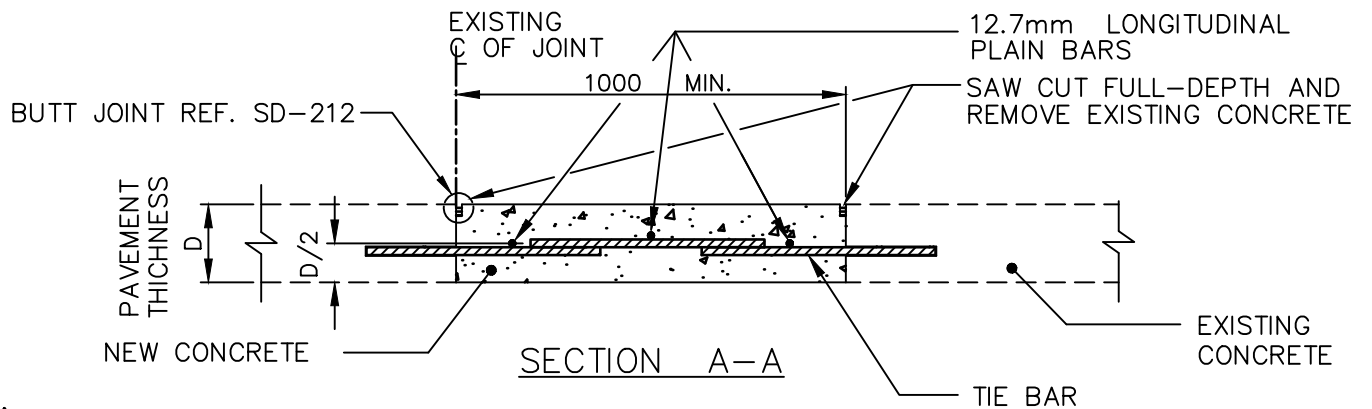
NEW CONCRETE

LONGITUDINAL  
JOINT

12.7mm  
LONGITUDINAL  
PLAIN BARS

EXISTING  
CONCRETE

PLAN



BUTT JOINT REF. SD-212

EXISTING  
C. OF JOINT

1000 MIN.

12.7mm LONGITUDINAL  
PLAIN BARS  
SAW CUT FULL-DEPTH AND  
REMOVE EXISTING CONCRETE

PAVEMENT  
THICKNESS  
D

NEW CONCRETE

SECTION A-A

EXISTING  
CONCRETE

TIE BAR

NOTE:

- IF JOINT REPAIR IS GREATER THAN 1000 WIDE ON EITHER SIDE OF THE JOINT, USE ADDITIONAL 12.7mm LONGITUDINAL PLAIN BARS AT 450 O.C. OR USE BAR MAT REF. SD-217.
- INSTALL DOWELS AT PATCH ENDS, REF. SD-213B.

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

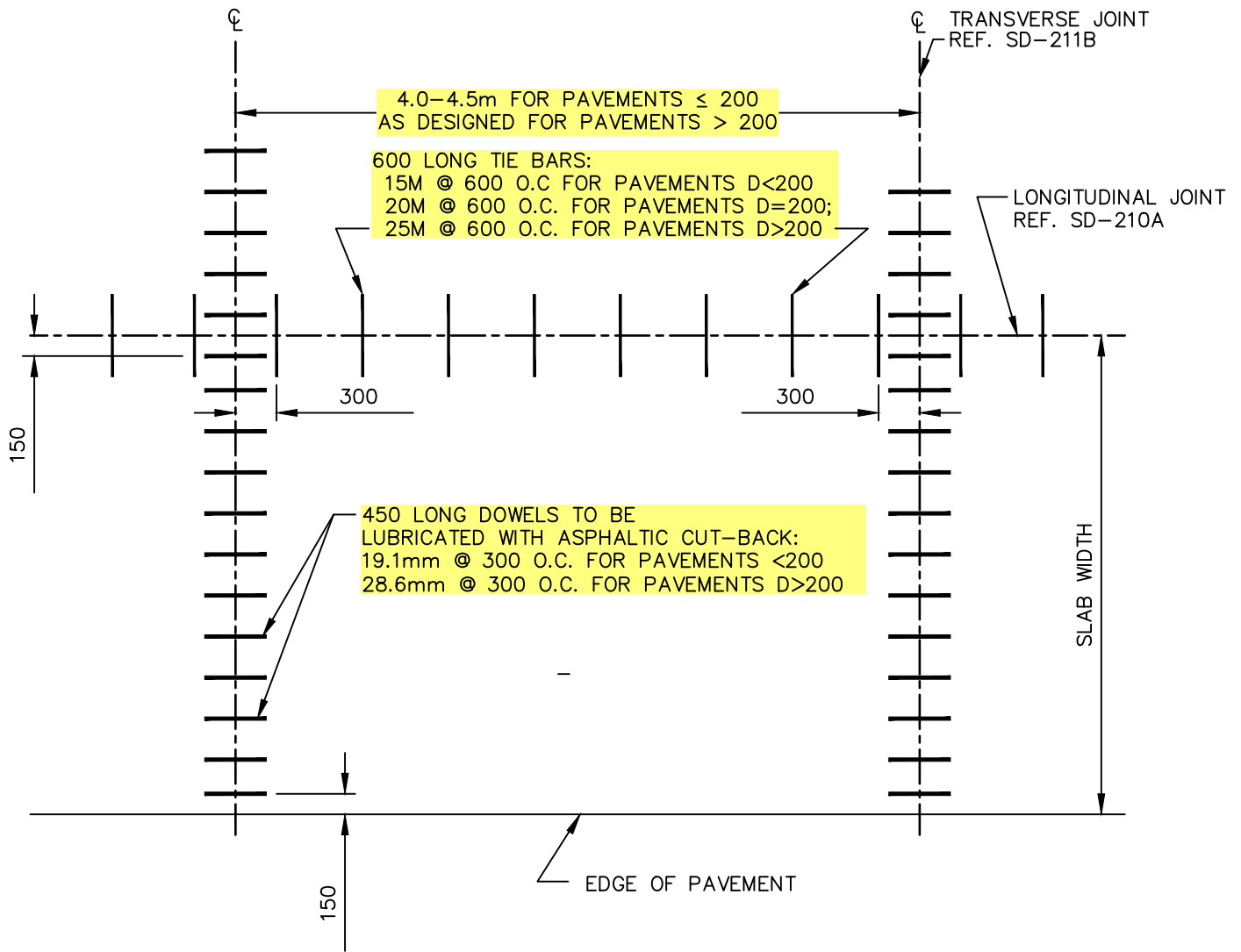
Reference Spec. No.  
CW 3230, CW 3310

Revisions

No.	Date	Description	By
3.	OCT 24	TIE BAR DETAILS	A.G.
2.	FEB 04	GENERAL REVISION	J.G.
1.	JAN 03	GENERAL REVISION	L.W.B.

LONGITUDINAL JOINT PATCH DETAILS  
ONE SIDE ONLY

Designed By: L.S.W.L.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.P.	Date: 2025-12-15	Drawing No. SD-214C
Approved: PAVEMENT MANAGEMENT BRANCH		



DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

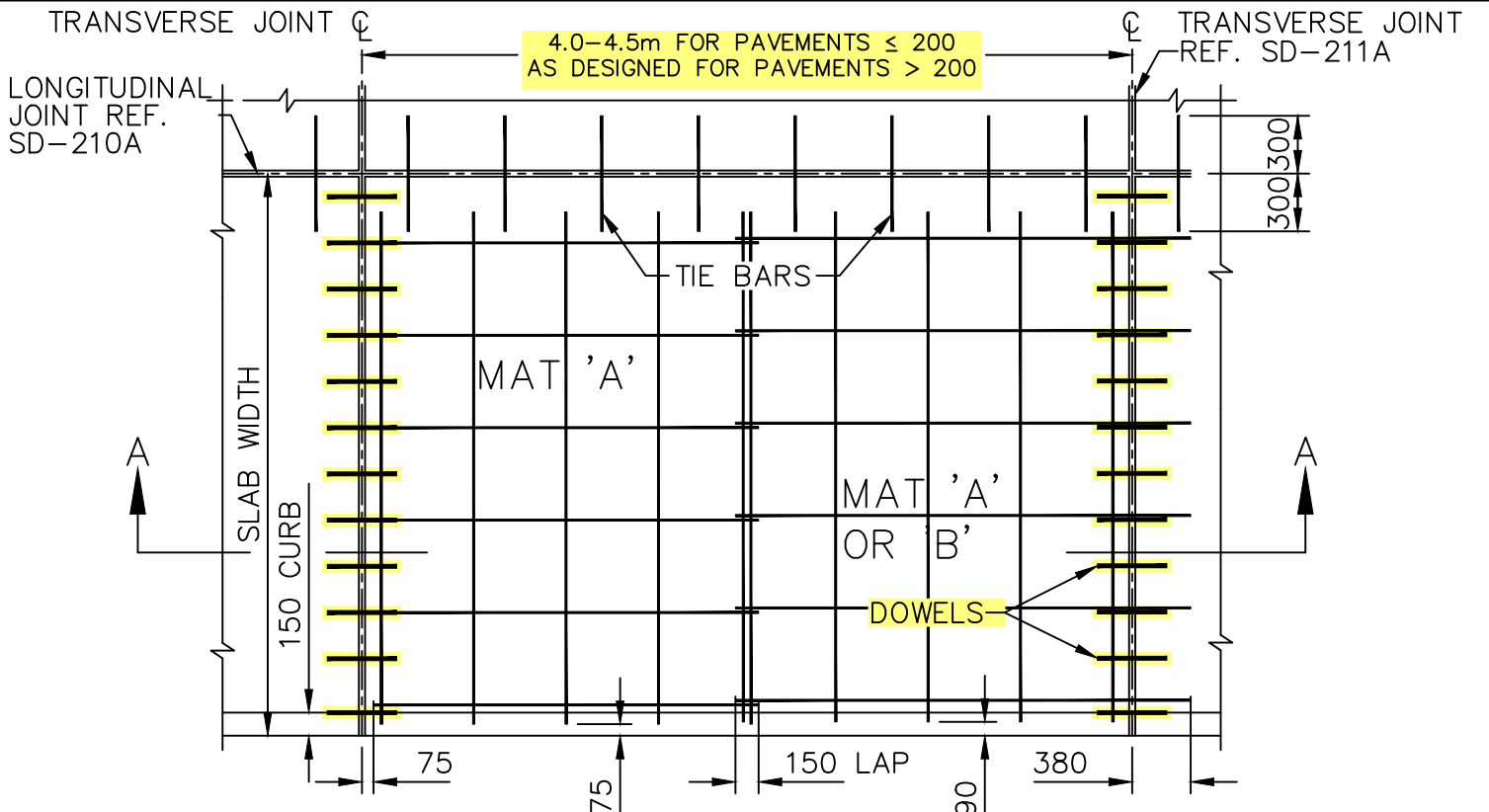
Reference Spec. No.  
CW 3230, CW 3310

Revisions

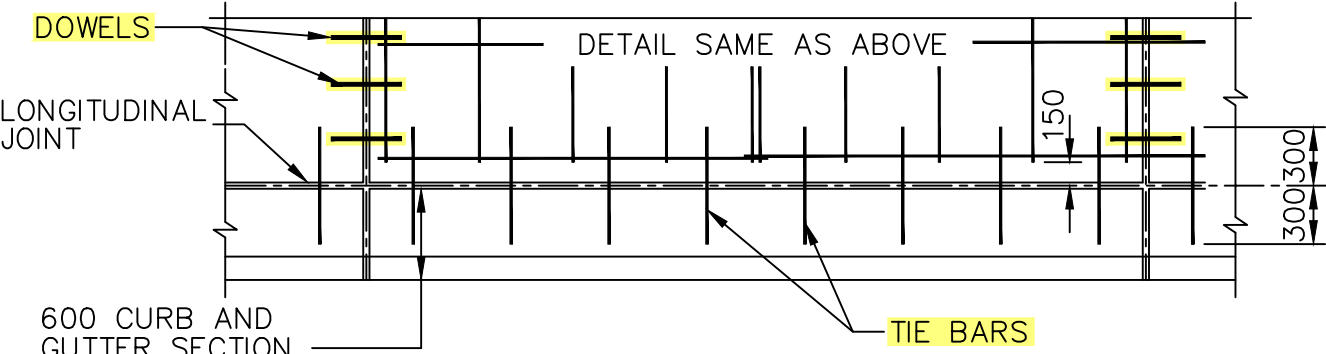
No.	Date	Description	By
2.	OCT 24	TIE BAR AND DOWEL DETAILS	R.B.
1.	DEC 31	GENERAL REVISION	A.R.

LOAD TRANSFER DEVICE FOR  
PLAIN DOWELLED CONCRETE  
PAVEMENT

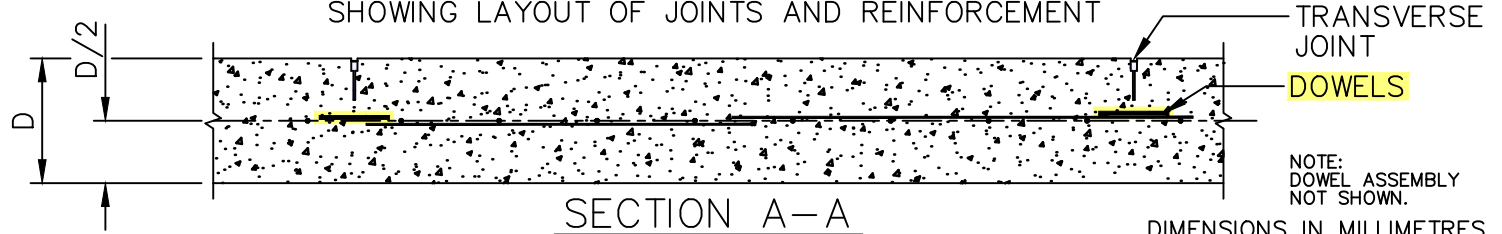
Designed By: A.G.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No. SD-215
Approved: PAVEMENT MANAGEMENT BRANCH		



PART PLAN OF PAVEMENT WITH CURB  
SHOWING LAYOUT OF JOINTS AND REINFORCEMENT



PART PLAN OF PAVEMENT WITH CURB AND GUTTER  
SHOWING LAYOUT OF JOINTS AND REINFORCEMENT



SECTION A-A  
DIMENSIONS IN MILLIMETRES



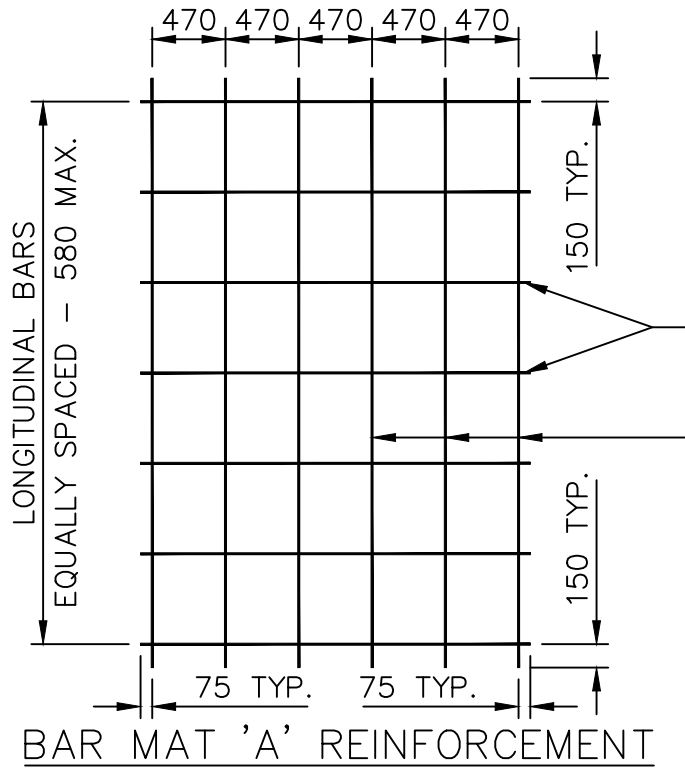
**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
CW 3230, CW 3310

Revisions			
No.	Date	Description	By
1.	OCT 24	ADDED DOWELS	R.B.
1.	JAN 03	GENERAL REVISION	L.W.B.

STEEL REINFORCEMENT FOR  
REINFORCED CONCRETE  
PAVEMENT

Designed By: A.G.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No. SD-216
Approved: PAVEMENT MANAGEMENT BRANCH		

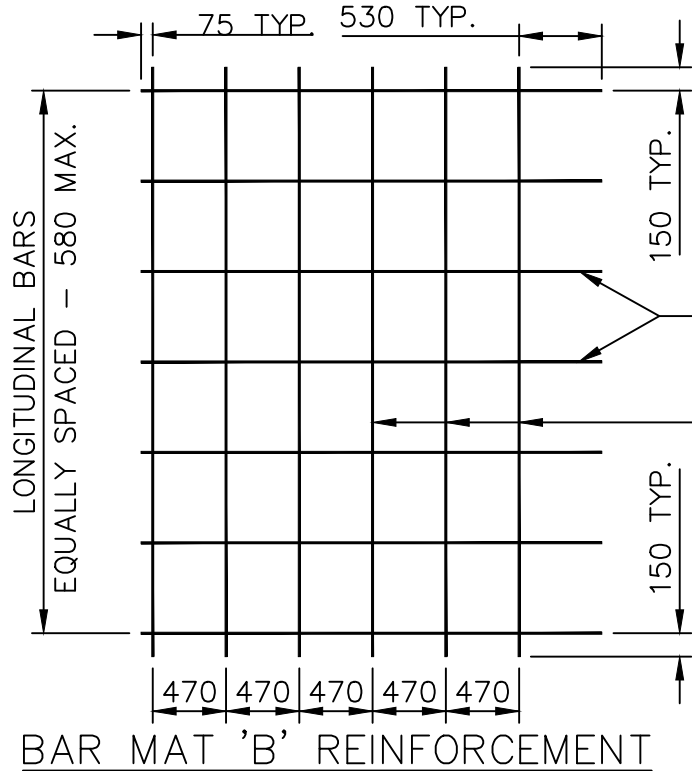


12.7mm LONGITUDINAL PLAIN BARS,  
2500 LONG.

12.7mm TRAVERSE PLAIN BARS,  
LENGHT OF BARS = SLAB WIDTH - 150

NOTE

- 1) ALL BAR MAT JOINTS TO BE ELECTRICALLY SPOT WELDED.
- 2) ALL DIMENSIONS ARE TO CENTRES OF BARS.



12.7mm LONGITUDINAL PLAIN BARS,  
2955 LONG.

12.7mm TRANSVERSE PLAIN BARS,  
LENGTH OF BARS = SLAB WIDTH - 150

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec. No.  
CW 3230, CW 3310

Revisions

No.	Date	Description	By
2.	OCT 24	GENERAL REVISION	A.G.
1.	JAN 01	GENERAL REVISION	A.R.

LAYOUT FOR TYPE "A" AND "B"  
BAR MAT REINFORCEMENT

Designed By:  
B.P.

Drawn By:  
R.B

Scale :  
N.T.S.

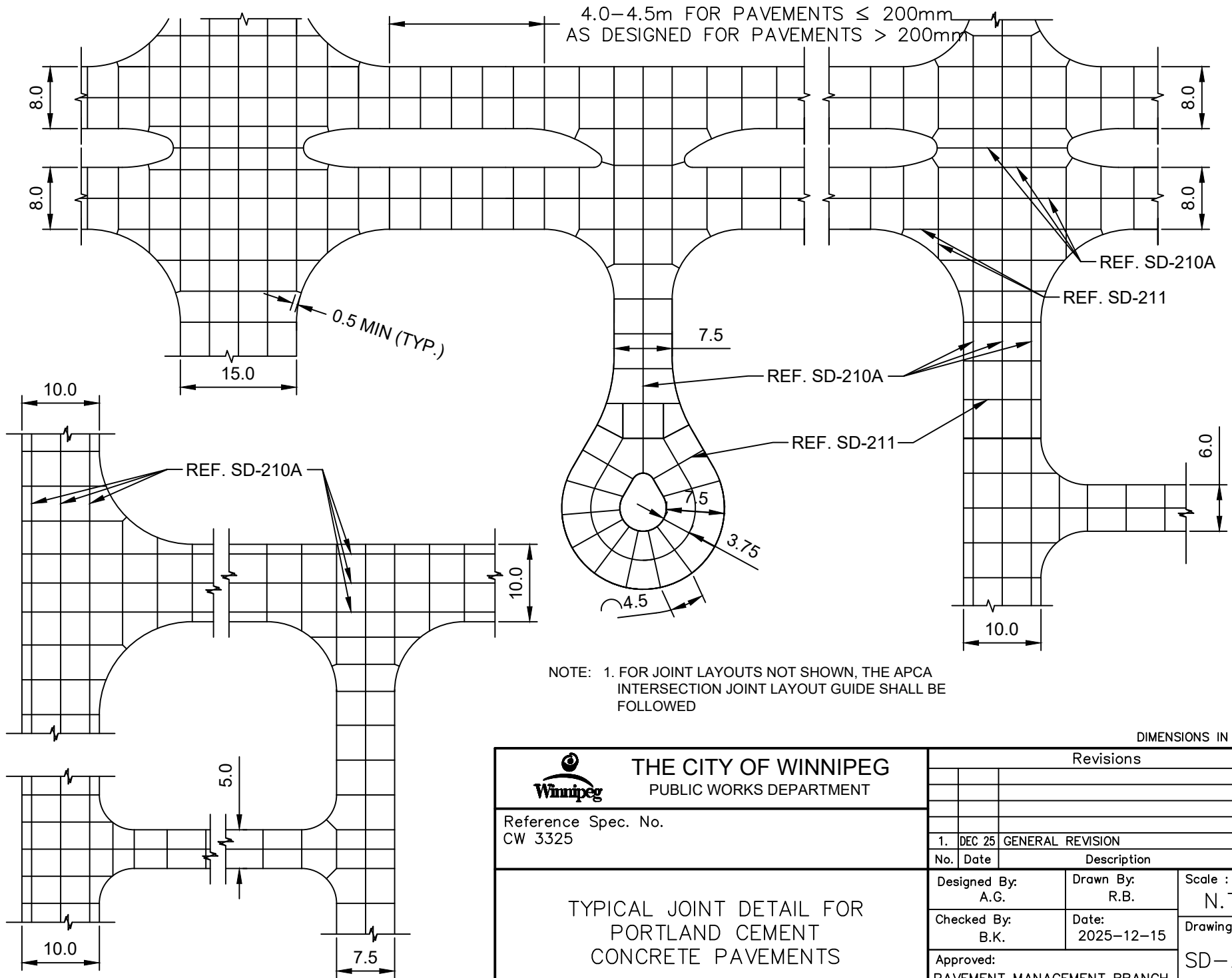
Checked By:  
D.R.K.

Date:  
2025-12-15

Drawing No.


Approved:  
PAVEMENT MANAGEMENT BRANCH

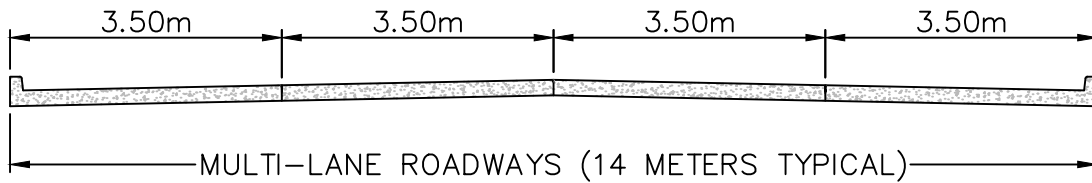
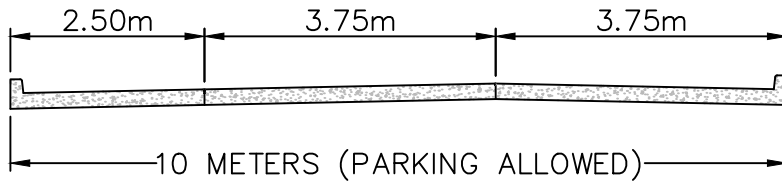
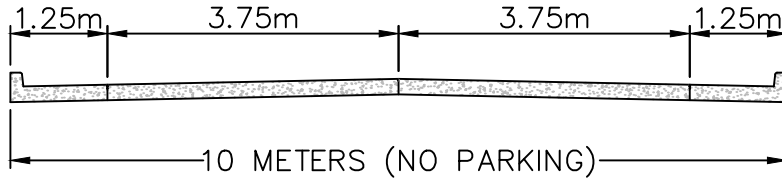
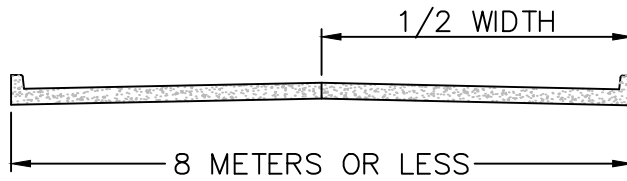
SD-217



NOTE: 1. FOR JOINT LAYOUTS NOT SHOWN, THE APCA INTERSECTION JOINT LAYOUT GUIDE SHALL BE FOLLOWED

DIMENSIONS IN METRES

 <b>THE CITY OF WINNIPEG</b> PUBLIC WORKS DEPARTMENT	Revisions		
	No.	Date	Description
Reference Spec. No. CW 3325	1.	DEC 25	GENERAL REVISION
TYPICAL JOINT DETAIL FOR PORTLAND CEMENT CONCRETE PAVEMENTS	By		R.B.
	Designed By:	Drawn By:	Scale :
	A.G.	R.B.	N.T.S.
	Checked By:	Date:	Drawing No.
B.K.	2025-12-15	SD-218A	
Approved:	PAVEMENT MANAGEMENT BRANCH		



DIMENSIONS IN METRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec No.  
CW 3310

LOCATION OF LONGITUDINAL JOINTS  
IN CONCRETE PAVEMENTS

Revisions

No.	Date	Description	By
1.	DEC 25	GENERAL REVISION	R.B.

Designed By:  
L.S.W.Z

Drawn By:  
H.N.

Scale :  
N.T.S.

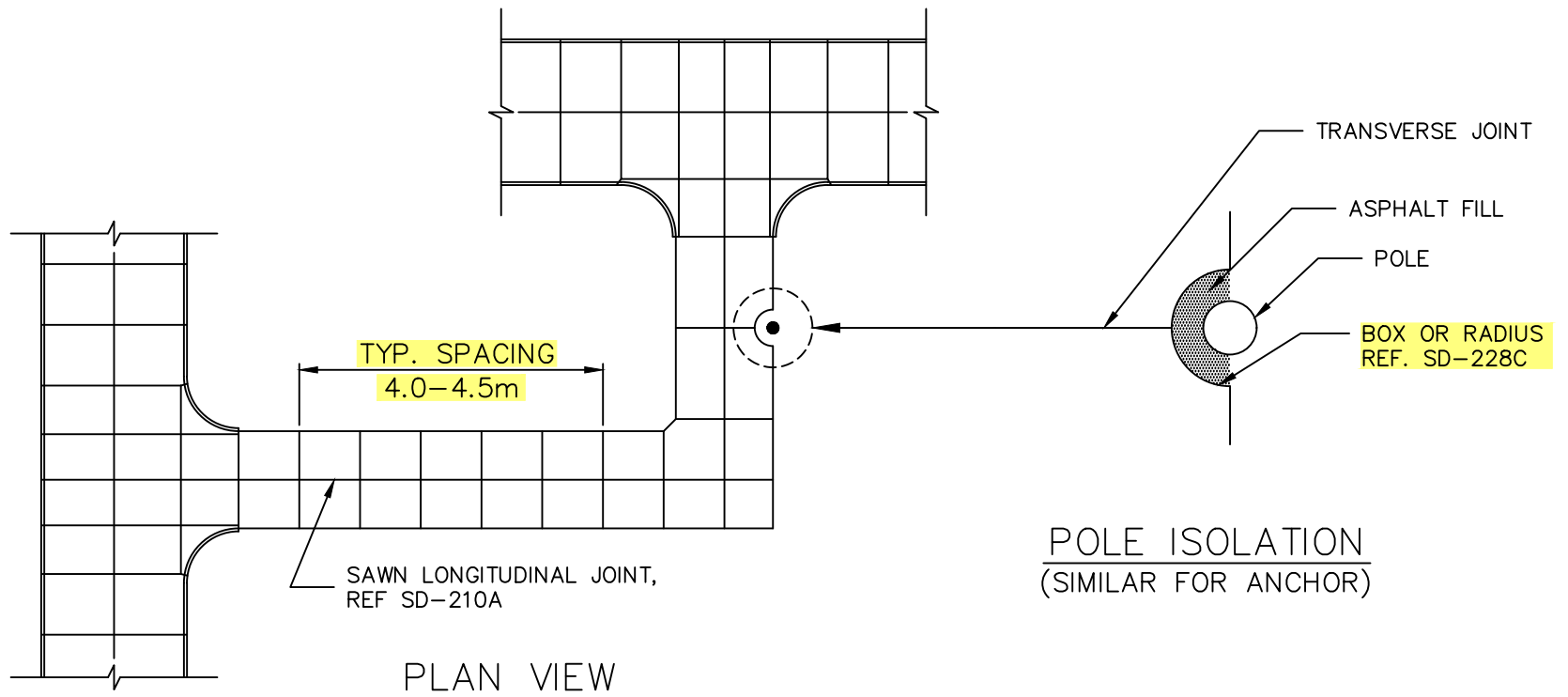
Checked By:  
L.S.W.Z

Date:  
2025-12-15

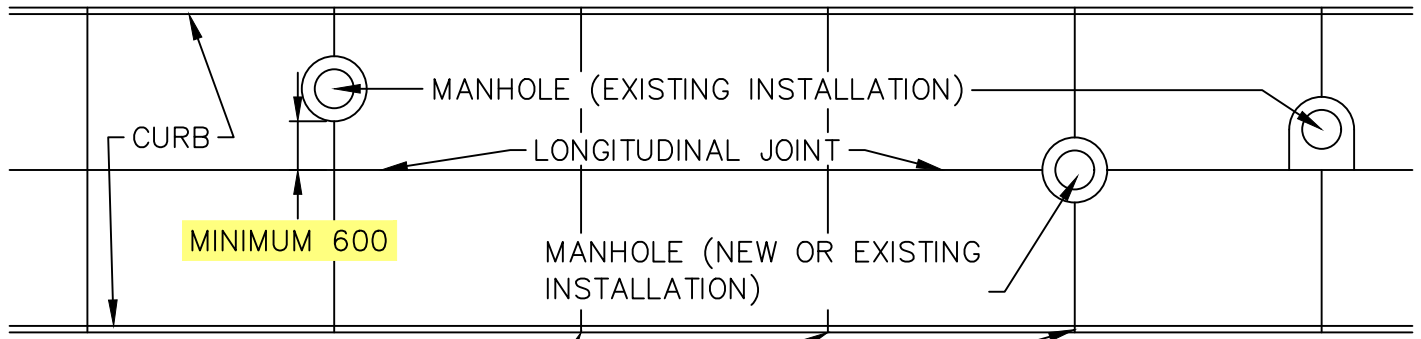
Drawing No.

Approved:  
PAVEMENT MANAGEMENT BRANCH

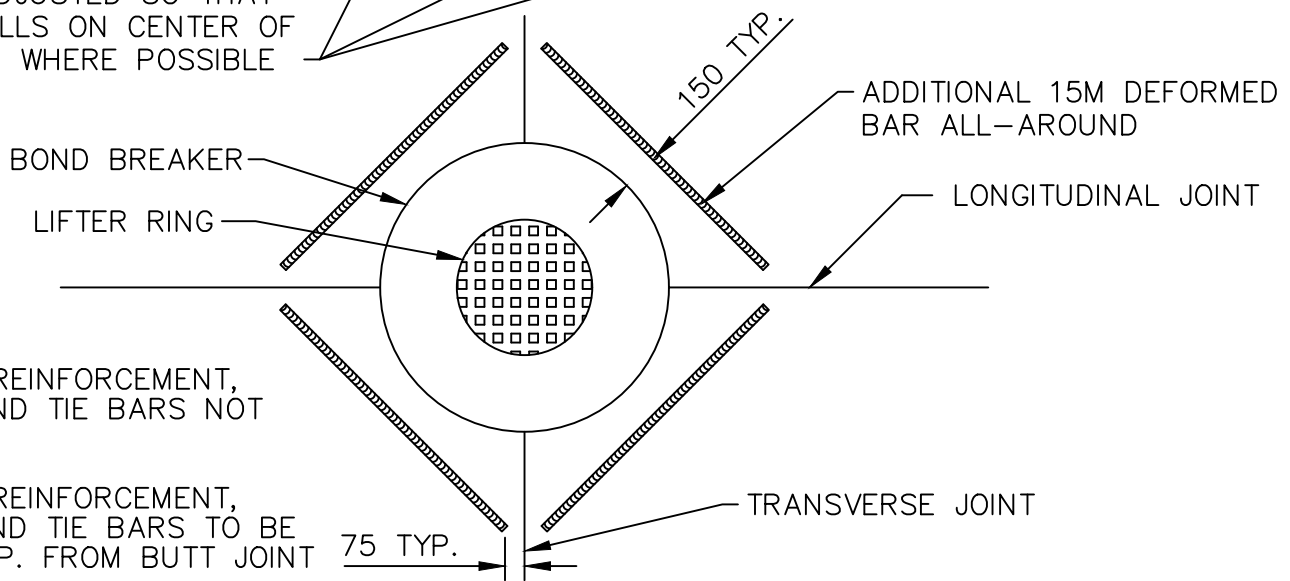
SD-218B



 <b>THE CITY OF WINNIPEG</b> PUBLIC WORKS DEPARTMENT	Revisions		
Reference Spec No. CW 3230, CW 3310			
<b>TYPICAL PUBLIC LANE DETAILS</b>	1.	OCT 24	GENERAL REVISION
	No.	Date	Description
	By	By	By
	R.B.	R.B.	R.B.
	Designed By: S.L.W.L.	Drawn By: R.B.	Scale : N.T.S.
	Checked By: A.G.	Date: 2025-12-15	Drawing No.
	Approved: PAVEMENT MANAGEMENT BRANCH		SD-219



TRANSVERSE JOINT SPACING TO BE ADJUSTED SO THAT JOINT FALLS ON CENTER OF MANHOLE WHERE POSSIBLE

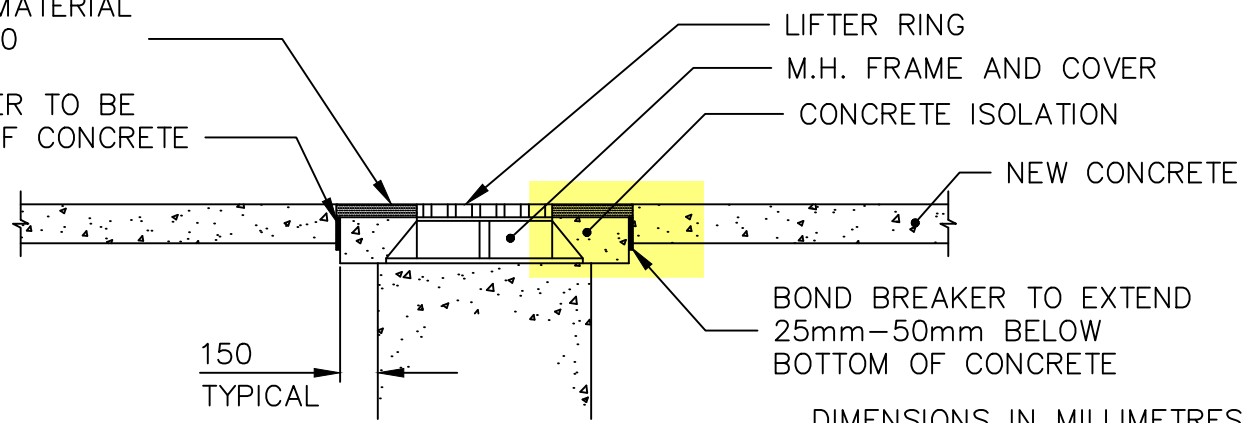


NOTE:

1. BAR MAT REINFORCEMENT, DOWELS AND TIE BARS NOT SHOWN
2. BAR MAT REINFORCEMENT, DOWELS AND TIE BARS TO BE 100mm TYP. FROM BUTT JOINT

ASPHALT MATERIAL MINIMUM 50

BOND BREAKER TO BE BELOW TOP OF CONCRETE AND SEALED



DIMENSIONS IN MILLIMETRES



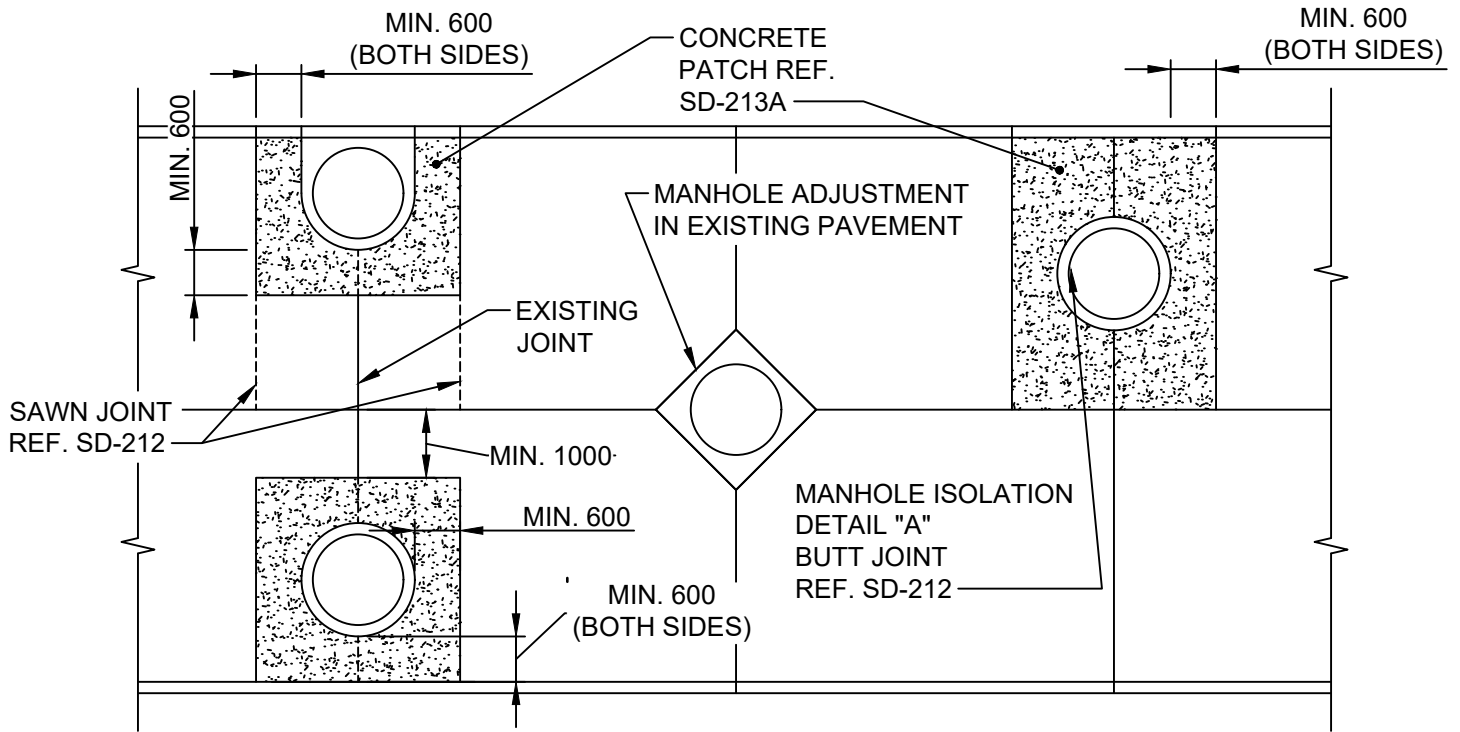
**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

Reference Spec No.  
CW 3310

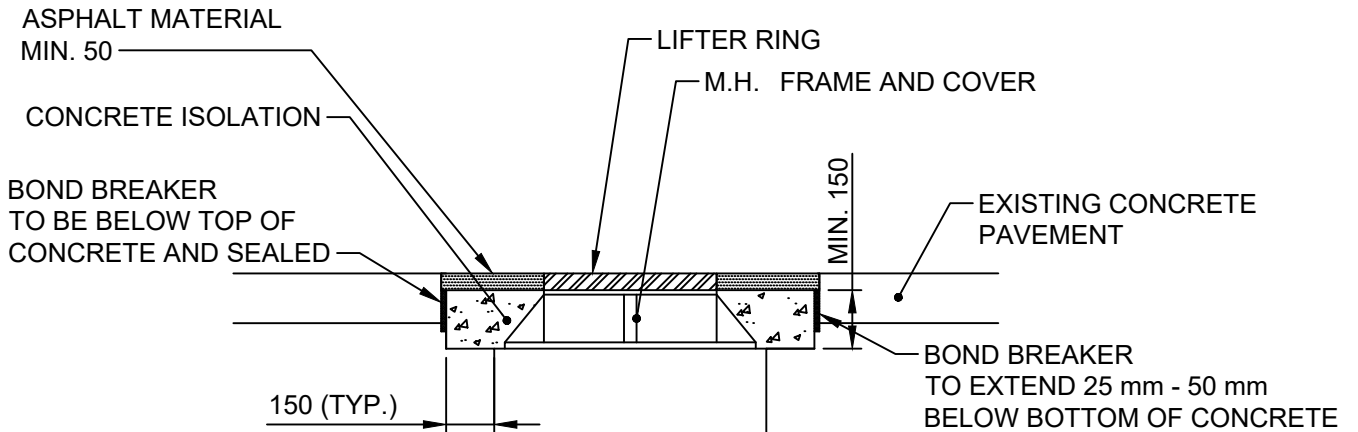
Revisions			
No.	Date	Description	By
2.	DEC 25	GENERAL REVISION	A.G.
1.	JAN 03	GENERAL REVISION	L.W.B.

MANHOLE ISOLATION  
DETAIL FOR CONCRETE  
PAVEMENTS

Designed By: L.S.W.L.	Drawn By: R.B.	Scale : N.T.S.
Checked By: D.R.K.	Date: 2025-12-15	Drawing No. SD-220A
Approved: PAVEMENT MANAGEMENT BRANCH		



**ISOLATION FOR M.H. ADJUSTMENT OR RESTORATION**



**DETAIL "A"**

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

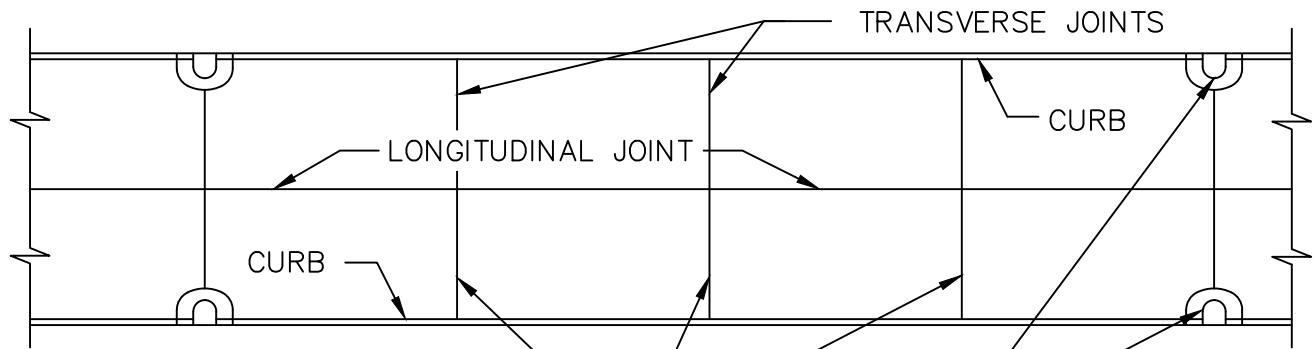
Reference Spec. No.  
CW 3210, CW 3230, CW 3310

Revisions

No.	Date	Description	By
1.	DEC 25	GENERAL REVISION	R.B.

MANHOLE ISOLATION DETAIL  
IN EXISTING PAVEMENTS

Designed By: A.G.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No. SD-220B
Approved: PAVEMENT MANAGEMENT BRANCH		

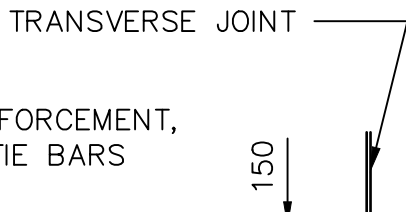


TRANSVERSE JOINT SPACING TO BE ADJUSTED SO THAT JOINT FALLS ON CENTRE OF CURB AND GUTTER INLET ISOLATION

CURB AND GUTTER INLETS

NOTE:

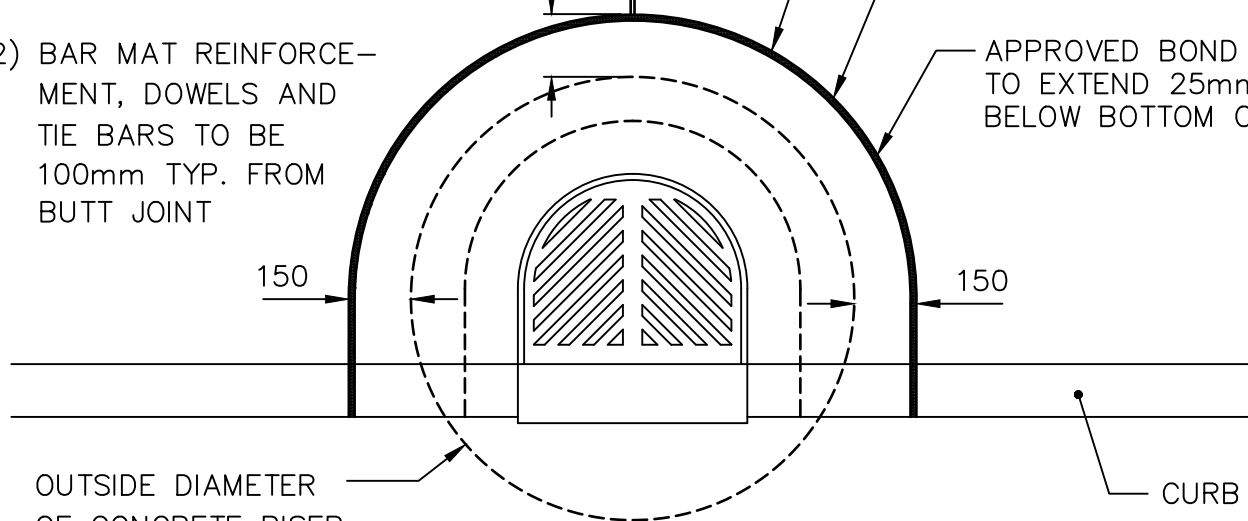
- 1) BAR MAT REINFORCEMENT, DOWELS AND TIE BARS NOT SHOWN
- 2) BAR MAT REINFORCEMENT, DOWELS AND TIE BARS TO BE 100mm TYP. FROM BUTT JOINT



BUTT JOINT ALL AROUND REF. SD-212

APPROVED BOND BREAKER TO BE BELOW TOP OF CONC. AND SEALED

APPROVED BOND BREAKER TO EXTEND 25mm-50mm BELOW BOTTOM OF CONC.



OUTSIDE DIAMETER OF CONCRETE RISER  
REF. SD-023  
SD-024

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

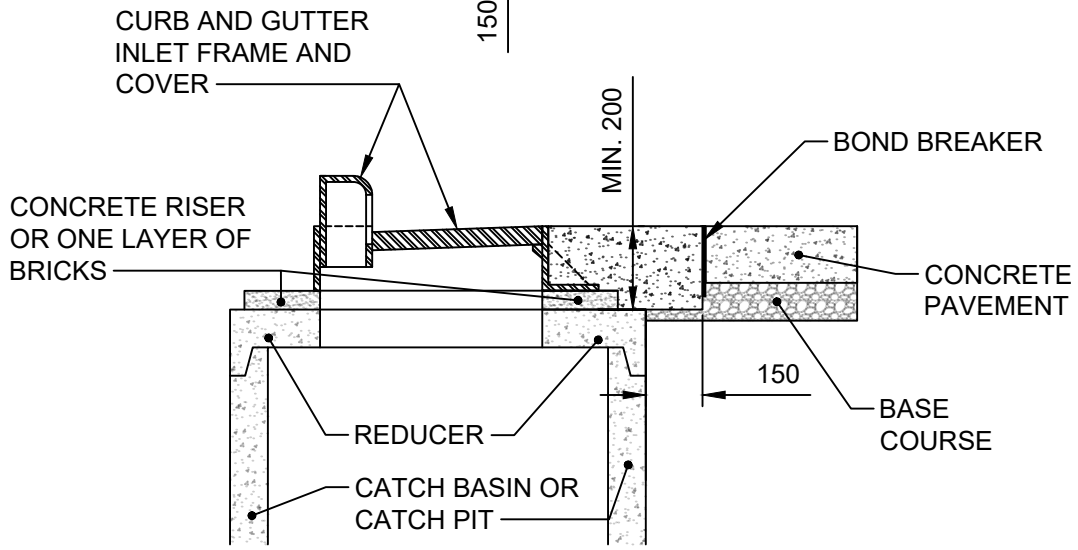
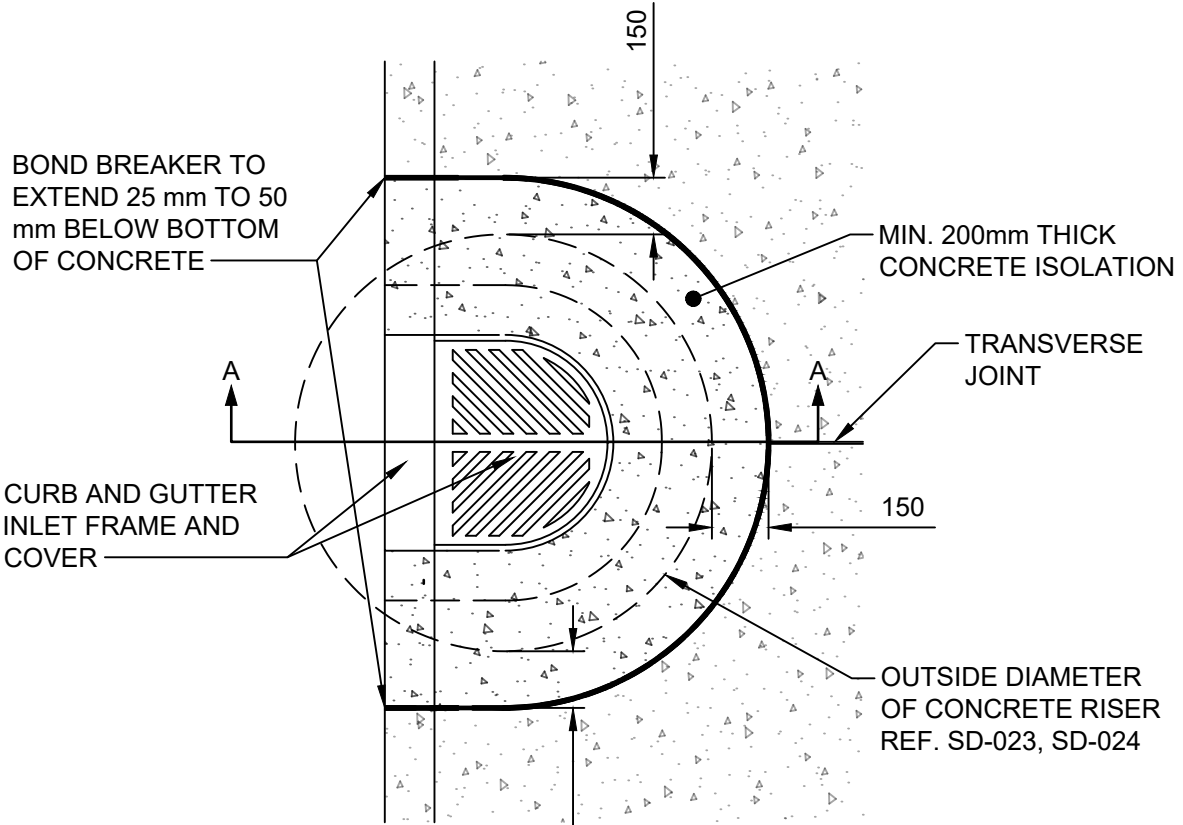
Reference Spec. No.  
CW 3210, CW 3230, CW 3310

Revisions

No.	Date	Description	By
1.	DEC 25	ADDED ROUNDED FRAME	T.K.

CURB AND GUTTER INLET  
ISOLATION DETAIL

Designed By: A.G.	Drawn By: T.K.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No. SD-220C
Approved: PAVEMENT MANAGEMENT BRANCH		



**SECTION A-A**

DIMENSIONS IN MILLIMETRES



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

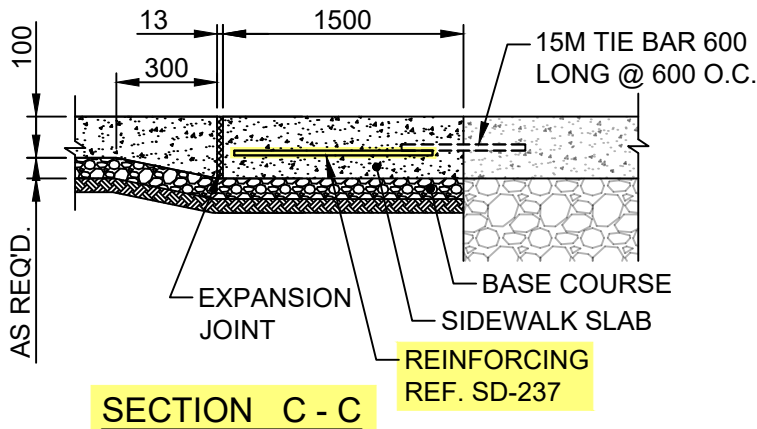
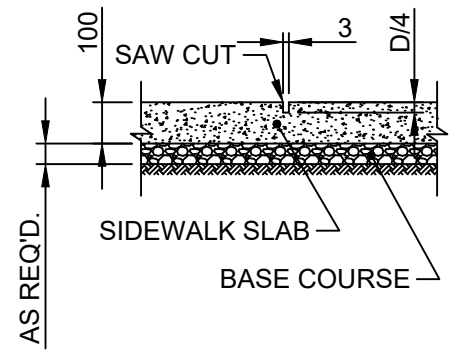
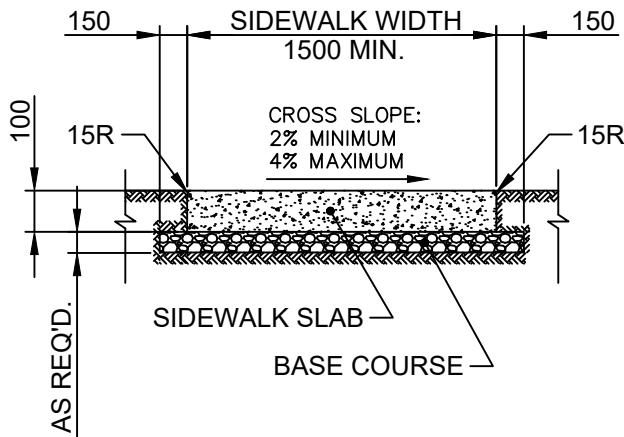
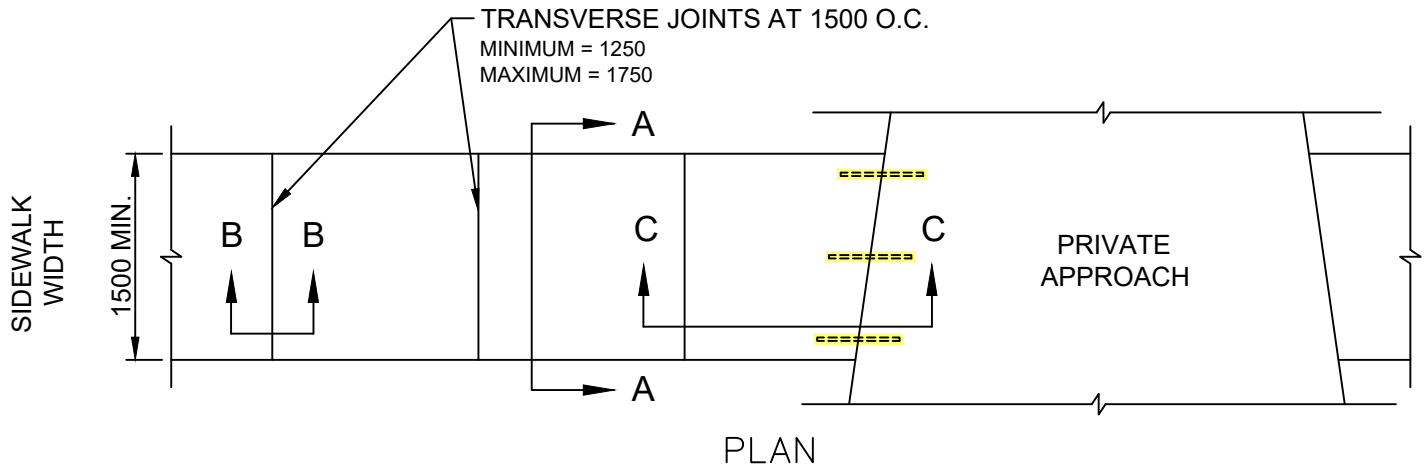
Reference Spec. No.  
CW 3325

Revisions			

**BARRIER CURB AND GUTTER  
INLET ISOLATION DETAIL FOR  
EXPOSED CONCRETE PAVEMENTS**

No.	Date	Description	By

Designed By: A.G.	Drawn By: T.K.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No. SD-220D
Approved: PAVEMENT MANAGEMENT BRANCH		



NOTE:

1. SIDEWALK SLAB SURFACE WILL BE GIVEN A TEXTURED BROOM FINISH. NO EDGER MARKS WILL BE LEFT
2. LONGITUDINAL JOINTS AT 1500 O.C. MAXIMUM
3. FOR PRIVATE APPROACHES WITH CURBS, CURB RAMPS SHALL BE INSTALLED

DIMENSIONS IN MILLIMETRES

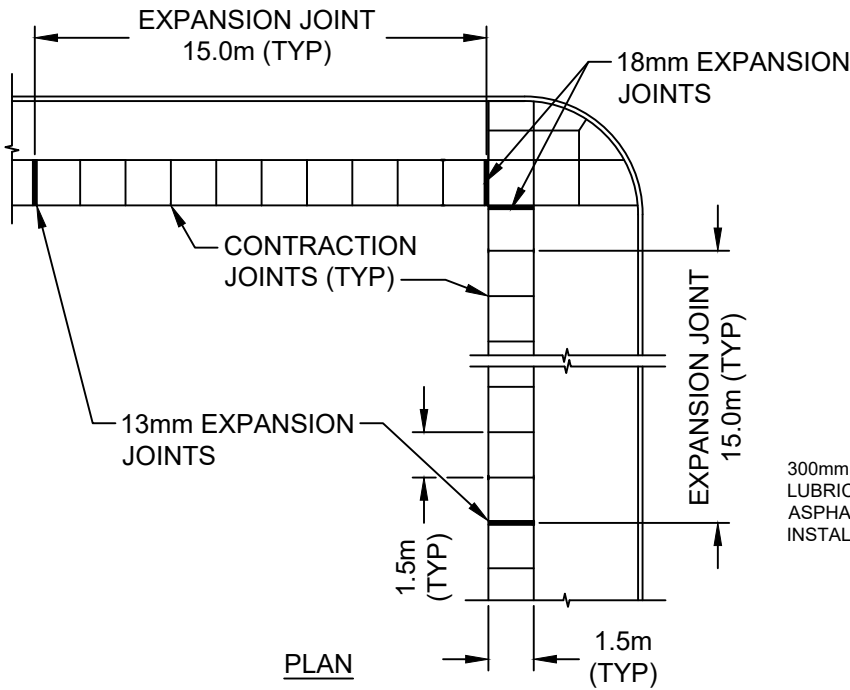


THE CITY OF WINNIPEG  
PUBLIC WORKS DEPARTMENT

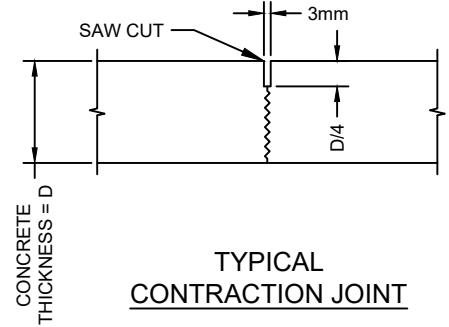
Reference Spec. No.  
CW 3235, CW 3310, CW 3325

CONCRETE SIDEWALK

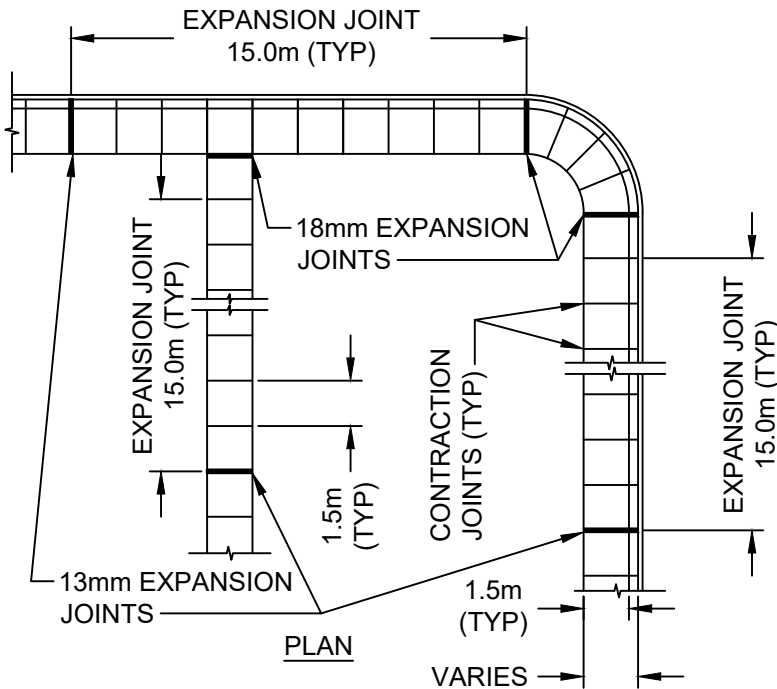
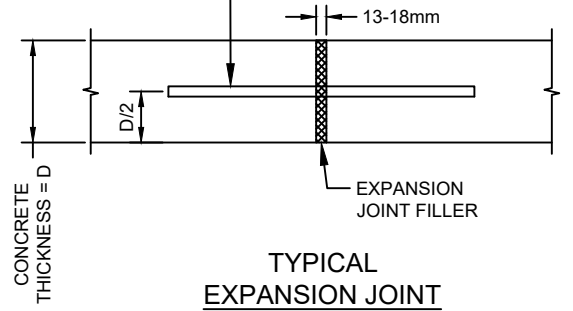
Revisions			
No.	Date	Description	By
1.	DEC 25	ADDED TIE BARS AND REINFORCING	T.K.
Designed By: A.G.			
Drawn By: R.B.			
Checked By: B.K.			
Date: 2025-12-15			
Approved: PAVEMENT MANAGEMENT BRANCH			
Scale : N.T.S.			Drawing No.
			SD-228A



PLAN



300mm LONG 10M DOWELS  
LUBRICATED WITH  
ASPHALTIC CUT-BACK,  
INSTALLED 450mm O/C



PLAN

VARIES

NOTES:

1. IF SIDEWALK IS CONSTRUCTED DURING COLD WEATHER CONCRETING PERIOD, EXPANSION JOINTS SHALL BE INSTALLED EVERY 12.0m
2. EXPANSION JOINTS SHALL NOT BE INSTALLED WHEN CONSTRUCTING MONOLITHIC CURB AND SIDEWALK
3. EXPANSION JOINTS SHALL BE INSTALLED WHEN INSTALLING SEPARATE CONCRETE SPLASH STRIP
4. WHEN REPLACING HEAVED PANELS IN AN EXISTING SIDEWALK, EXPANSION JOINTS SHALL BE INSTALLED ON BOTH ENDS OF THE REPLACED PANELS
5. DOWELS SHALL BE DRILLED AND EXPANSION JOINT FILLER INSTALLED WHEN TYING INTO EXISTING SIDEWALK



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

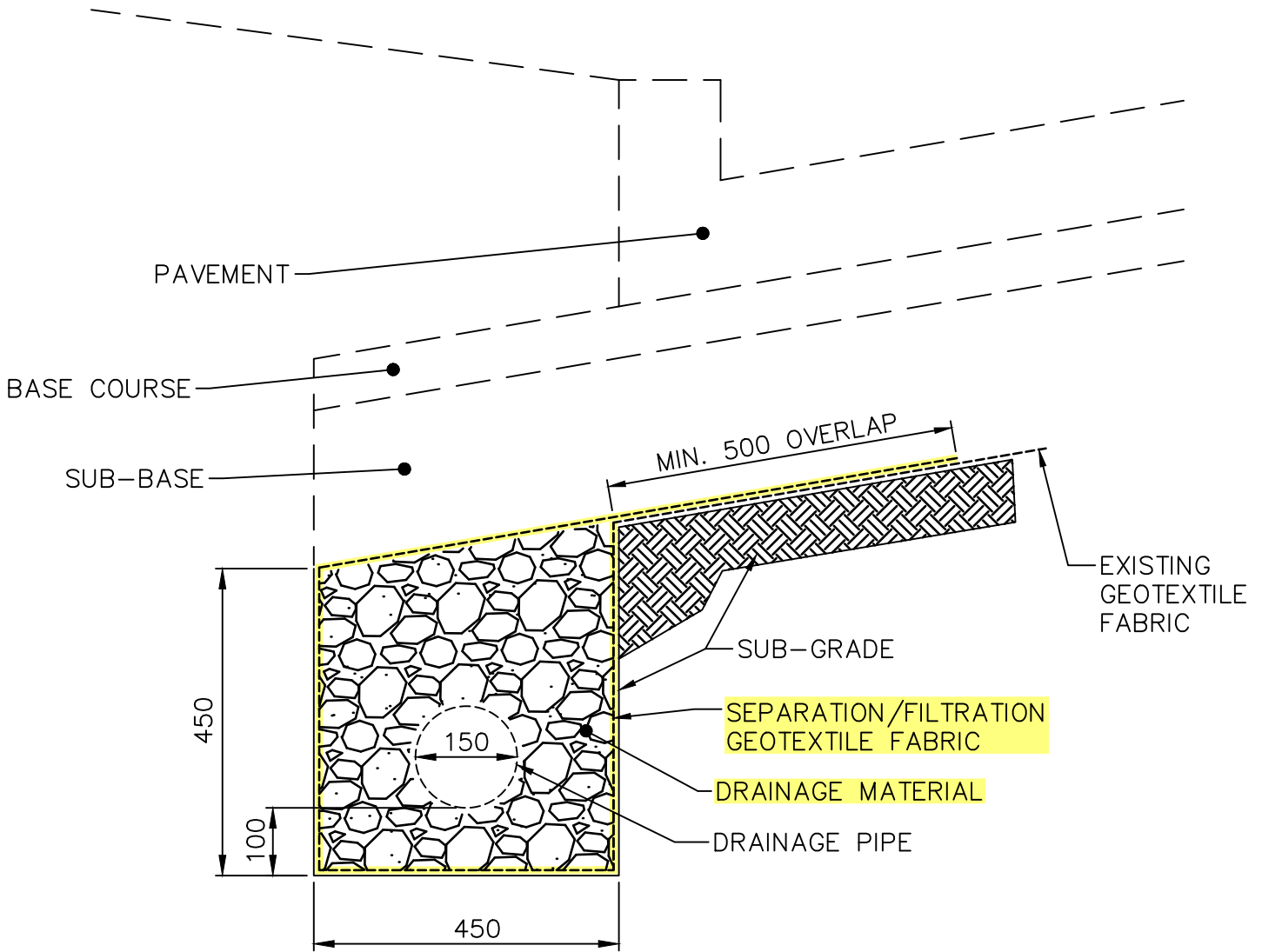
Reference Spec. No.  
CW 3325

Revisions

No.	Date	Description	By

**SIDEWALK EXPANSION JOINTS**

Designed By: A.G.	Drawn By: R.B.	Scale : N.T.S.
Checked By: B.K.	Date: 2025-12-15	Drawing No.
Approved: PAVEMENT MANAGEMENT BRANCH		SD-228D



DIMENSIONS IN MILLIMETERS



**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT

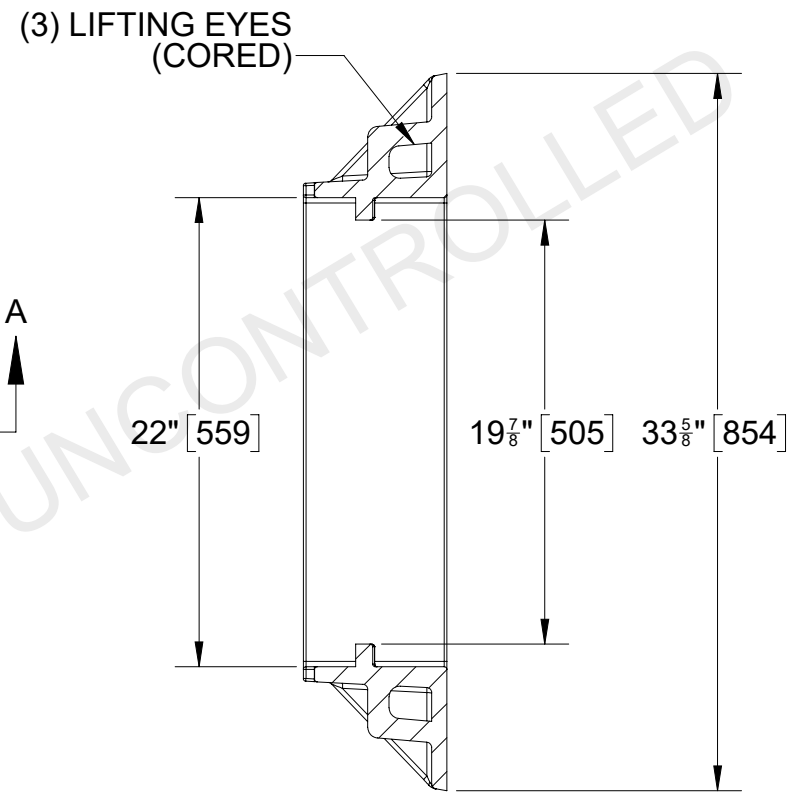
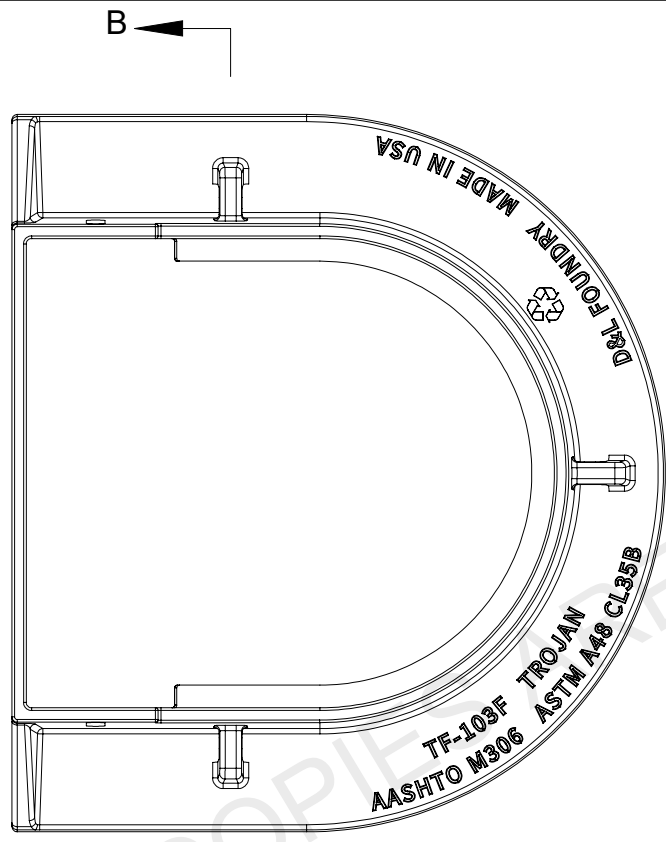
Reference Spec. No.  
CW 3110, CW 3120, CW 3130

Revisions

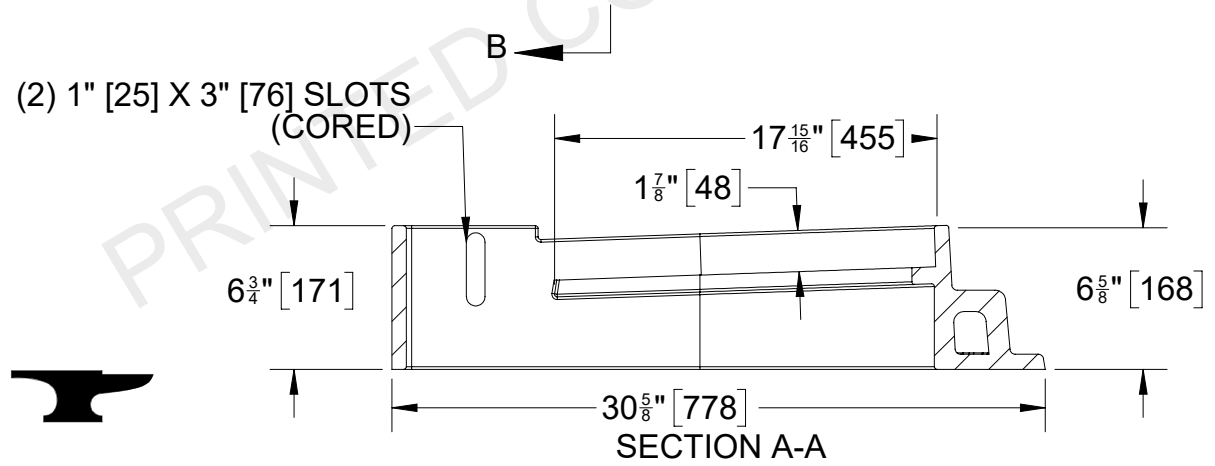
No.	Date	Description	By
1.	DEC 25	GENERAL REVISION	A.G.

SUBDRAIN INSTALLATION  
DETAIL

Designed By: B.P.	Drawn By: R.B.	Scale : N.T.S.
Checked By: A.G.	Date: 2025-12-15	Drawing No.
Approved: PAVEMENT MANAGEMENT BRANCH		SD-245



SECTION B-B



SECTION A-A



**D&L Foundry, Inc.**  
**"The Iron Men"**  
 MADE IN THE USA  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF D&L FOUNDRY, ANY REPRODUCTION IN PART OR AS WHOLE WITHOUT THE WRITTEN PERMISSION OF D&L FOUNDRY IS PROHIBITED

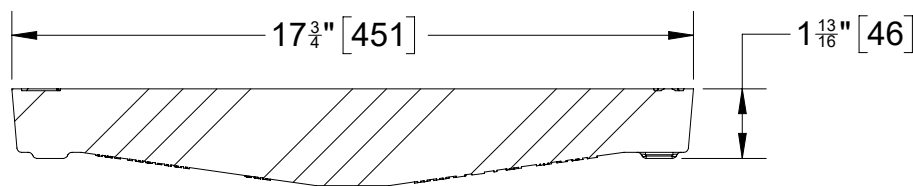
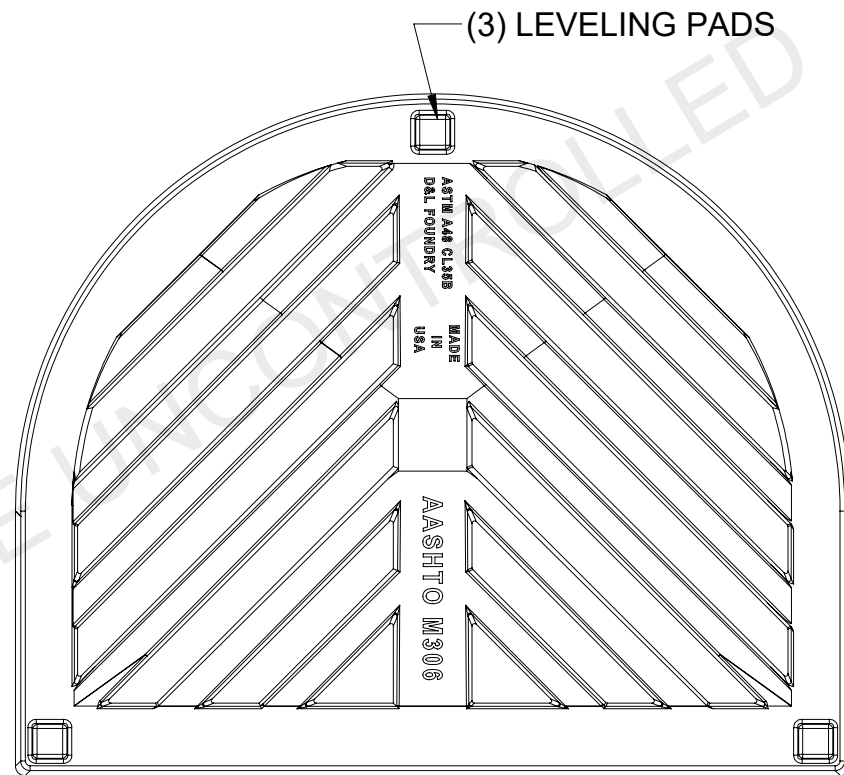
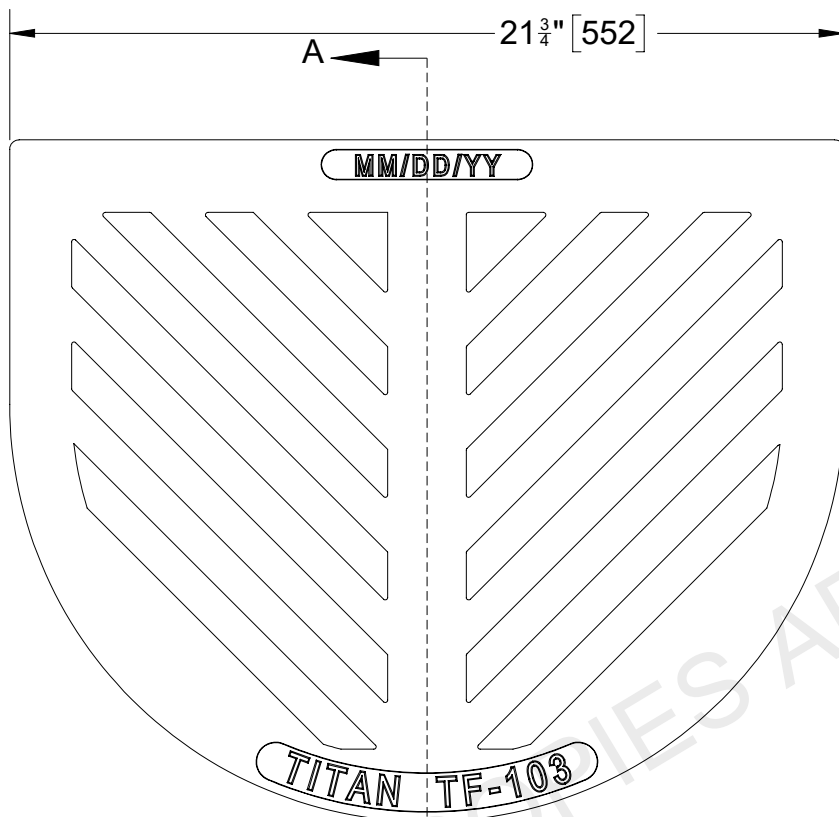
**PART NUMBER**  
**TF-103F**  
**MODIFIED**

DATE	DESCRIPTION	DRAWN	APPROVED
7/18/24	NEW PATTERN FOR TF-103 SERIES	D.C.	

GRAY IRON CONFORMS TO  
 ASTM A48 CL35B  
 AASHTO M306  
  
 AASHTO M306

REFERENCE INFORMATION	
TOOLING NUMBERS	PATTERN LOCATION
COPE: -NEW	COPE: -NEW
DRAG: -NEW	DRAG: -NEW
▷ DESIGNATES MACHINED SURFACE	

**TOLERANCE**  
 ALL TOLERNCES ARE  $\pm \frac{1}{32}$  PER FOOT, OR 1.6 MM PER 300MM MEASUREMENTS LESS THAN ONE FOOT (300MM) ARE  $\pm \frac{1}{32}$ , OR 1.6MM UNLESS OTHERWISE SPECIFIED



SECTION A-A



NOTES: 5X1 GRATE BARS



D&L Foundry, Inc.  
"The Iron Men"  
MADE IN THE USA

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF D&L FOUNDRY, ANY REPRODUCTION IN PART OR AS WHOLE WITHOUT THE WRITTEN PERMISSION OF D&L FOUNDRY IS PROHIBITED

PART NUMBER  
TF-103G  
MODIFIED

DATE	DESCRIPTION	DRAWN	APPROVED
7/18/24	NEW GRATE DESIGN FOR TF-103 SERIES	D.C.	

GRAY IRON CONFORMS TO  
ASTM A48 CL.35B  
AASHTO M306

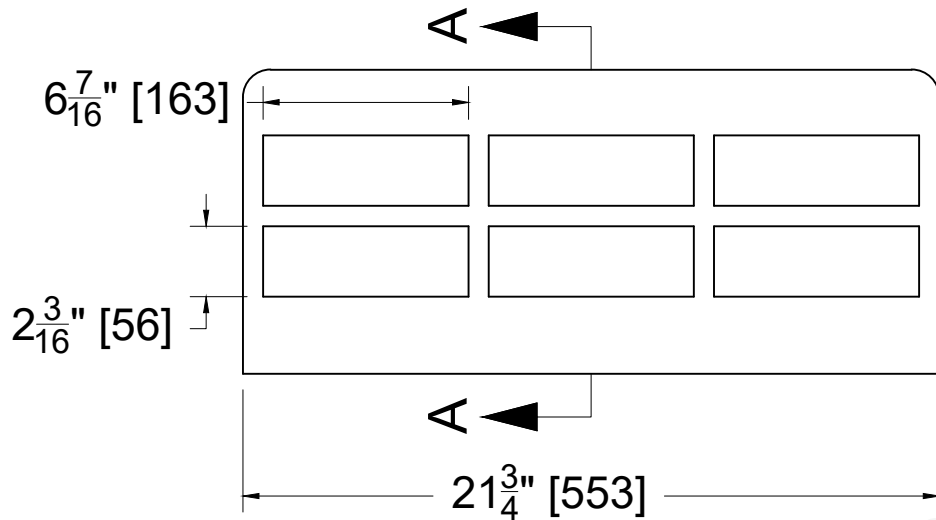
AASHTO M306

REFERENCE INFORMATION	
TOOLING NUMBERS	
TOOLS	PATTERN LOCATION
COPE: -NEW	COPE: -NEW
DRAG: -NEW	DRAG: -NEW

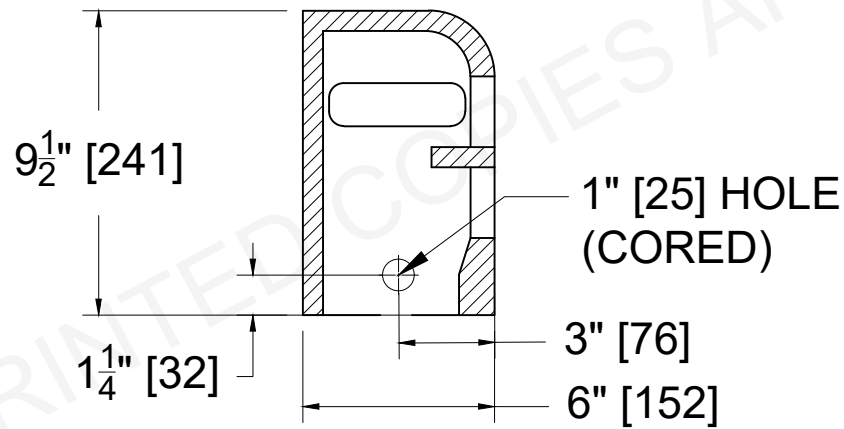
▷ DESIGNATES MACHINED SURFACE

TOLERANCE

ALL TOLERNCES ARE  $\pm \frac{1}{32}$  PER FOOT,  
OR 1.6 MM PER 300MM  
MEASUREMENTS LESS THAN ONE FOOT (300MM)  
ARE  $\pm \frac{1}{32}$ , OR 1.6MM  
UNLESS OTHERWISE SPECIFIED



TF-103    ASTM A48 CL35B    D&L FOUNDRY    Ⓢ  
 MM/DD/YYYY    AASHTO M306



**SECTION A-A**



**D&L Foundry, Inc.**  
**"The Iron Men"**  
 MADE IN THE USA

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF D&L FOUNDRY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF D&L FOUNDRY IS PROHIBITED

**PART NUMBER**  
  
**TF-103SI**

DATE	DESCRIPTION	DRAWN	APPROVED
9/15/20	DRAWING OF EXISTING PART	DF	D.C.
11/2/21	ECR 2276 - CHANGE SLOT IN SIDE TO A HOLE TO MATCH THE PATTERN	DF	D.C.
11/5/21	ECR 2281 - ADD CENTER MARK AND DIMENSIONS OF SIDE HOLE LOCATION	DF	D.C.

GRAY IRON  
 CONFORMS TO  
 ASTM A48 CL35B

AASHTO M306

REFERENCE INFORMATION	
TOOLING NUMBERS	
TOOLS	PATTERN LOCATION
COPE: -6237	COPE: -6237
DRAG: -6238	DRAG: -6238
DESIGNATES MACHINED SURFACE	

**TOLERANCES**

ALL TOLERANCES ARE +/- 1/32" PER FOOT, OR 1.6 MM PER 300 MM MEASUREMENTS LESS THAN ONE FOOT ARE +/- 1/16", OR 1.6 MM UNLESS OTHERWISE SPECIFIED