City of Saskatoon Standard Construction Drawings
Effective March 20, 2024

To access the current drawings, please visit the City of Saskatoon specifications and standards website:
https://www.saskatoon.ca/business-development/development-regulation/specifications-standards/drawings

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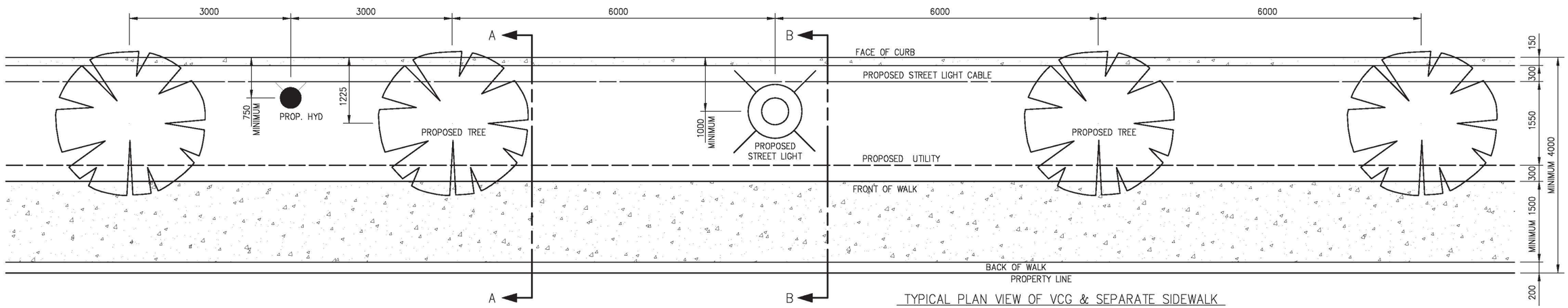
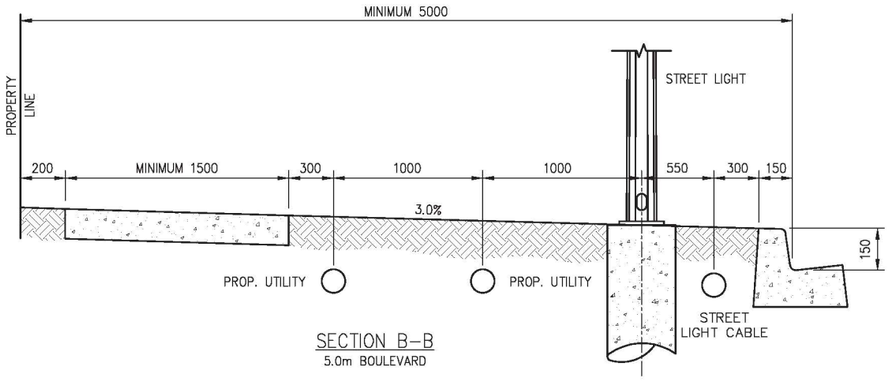


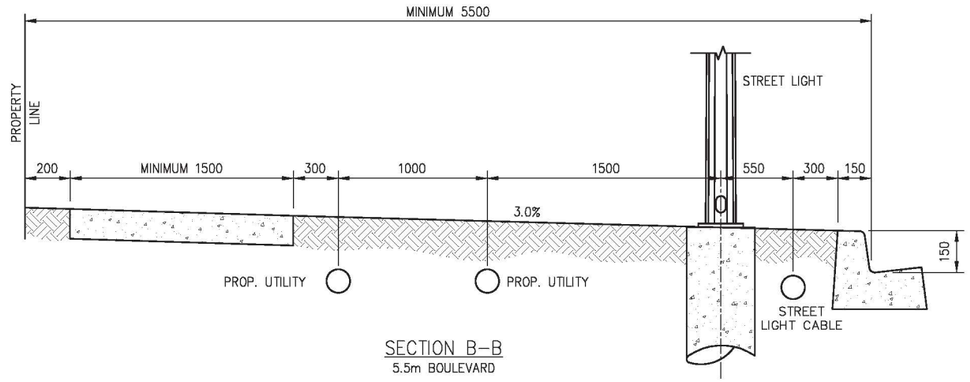
TYPICAL PLAN VIEW OF VCG & SEPARATE SIDEWALK

N.T.S.



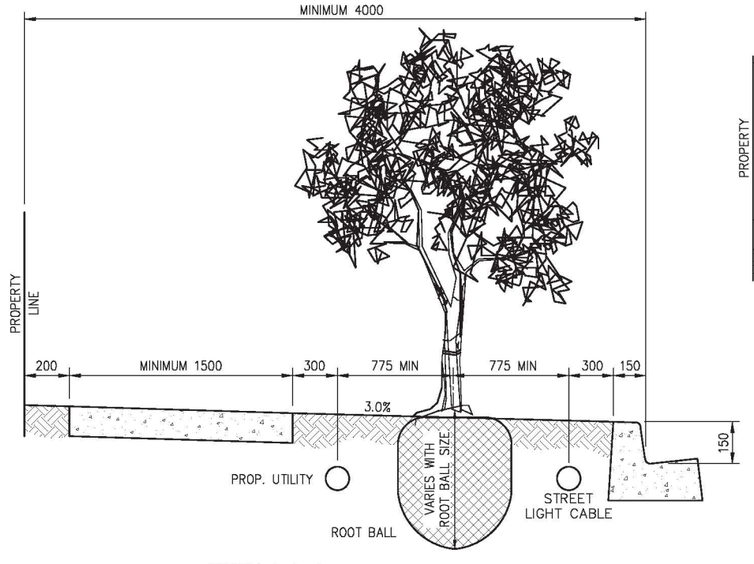
SECTION B–B

5.0m BOULEVARD



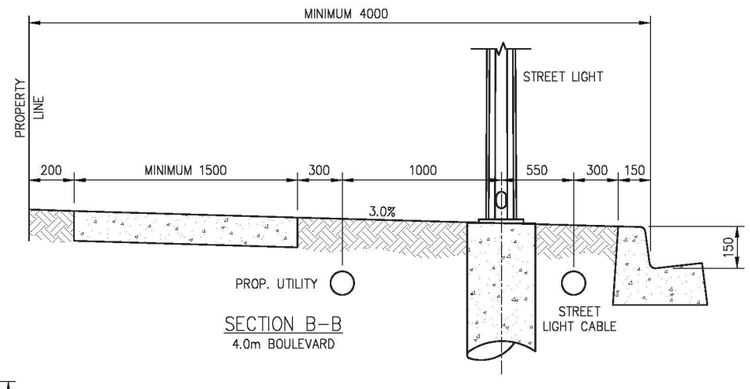
SECTION B–B

5.5m BOULEVARD



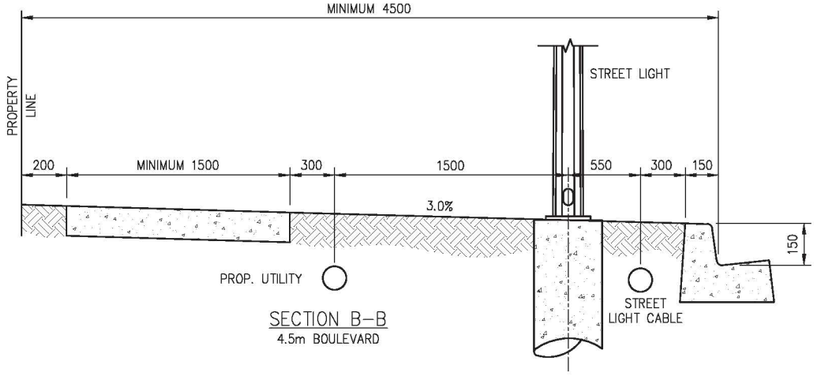
SECTION A–A

TREE PLACEMENT



SECTION B–B

4.0m BOULEVARD



SECTION B–B

4.5m BOULEVARD

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2002–FEB–12	RBY
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ

City of Saskatoon

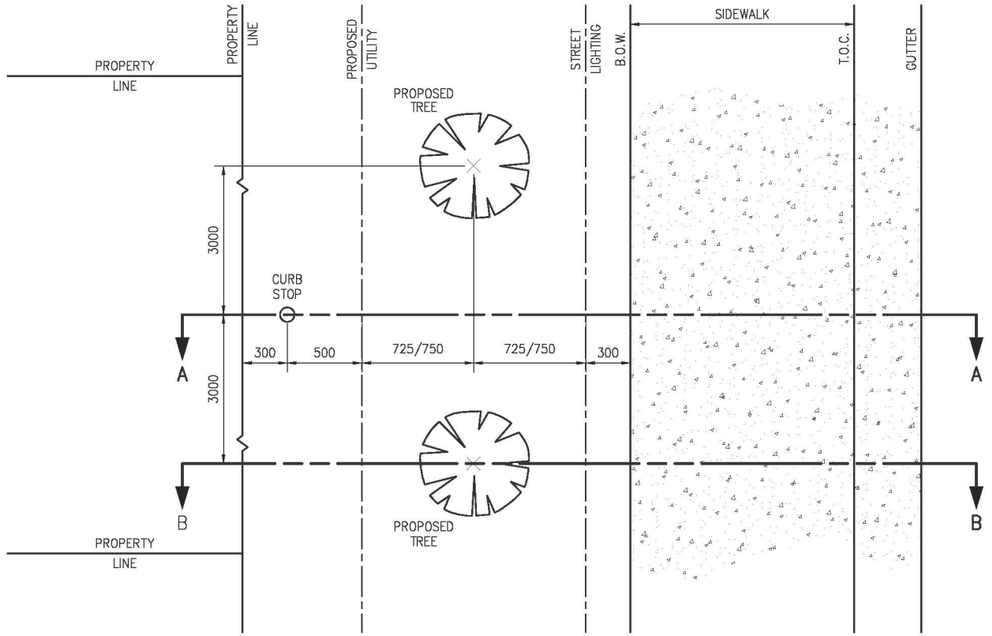
BOULEVARD TREE & UTILITY PLACEMENT SEPARATE SIDEWALK, VERTICAL CURB, AND GUTTER DETAILS

APPROVALS

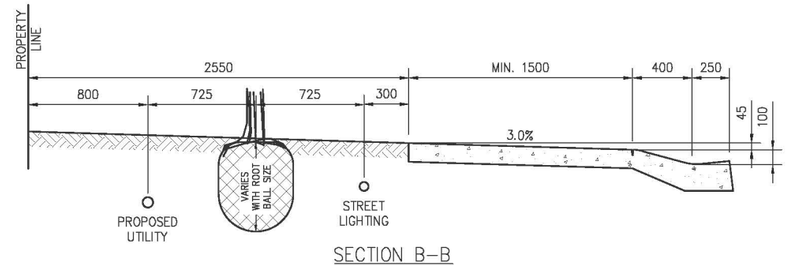
Chelsea Lanning (Apr 22, 2020)	
SIGNATURE	SIGNATURE
Chelsea Lanning	Matt Jurkiewicz
NAME	NAME
Apr 22, 2020	Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT. N.T.S.

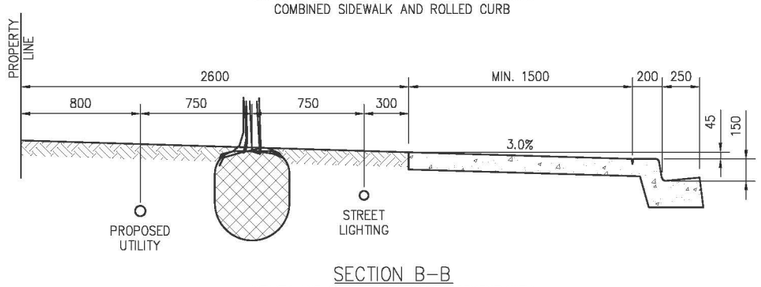
PLAN NO. 102–0001–002r002



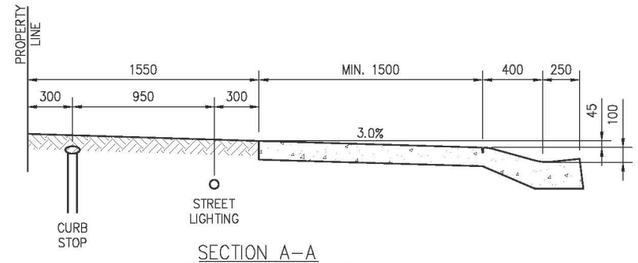
PLAN VIEW
BOULEVARD TREE & UTILITY PLACEMENT WITH
COMBINED WALK & ROLLED/VERTICAL CURB



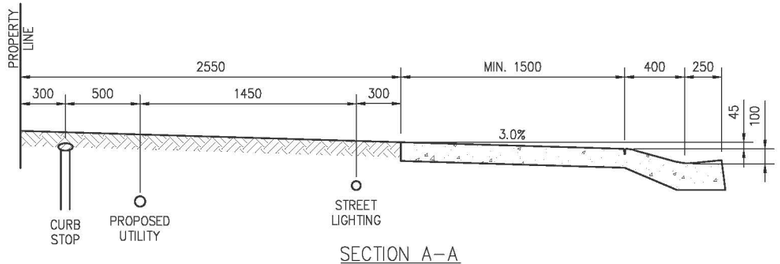
SECTION B–B
UTILITY AND STREET LIGHTING PLACEMENT WITH
COMBINED SIDEWALK AND ROLLED CURB



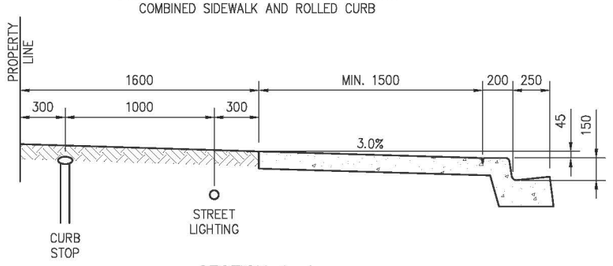
SECTION B–B
UTILITY AND STREET LIGHTING PLACEMENT WITH
COMBINED SIDEWALK AND VERTICAL CURB



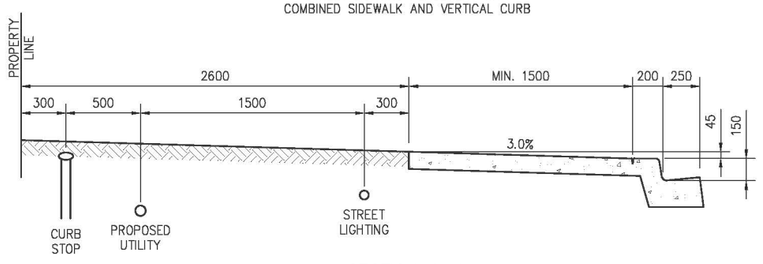
SECTION A–A
STREET LIGHTING PLACEMENT WITH
COMBINED SIDEWALK AND ROLLED CURB



SECTION A–A
UTILITY AND STREET LIGHTING PLACEMENT WITH
COMBINED SIDEWALK AND ROLLED CURB



SECTION A–A
STREET LIGHTING PLACEMENT WITH
COMBINED SIDEWALK AND VERTICAL CURB



SECTION A–A
UTILITY AND STREET LIGHTING PLACEMENT WITH
COMBINED SIDEWALK AND VERTICAL CURB

NOTES:

1. UTILITIES MAY BE PLACED IN THE ROADWAY ALONG 15.0m R.O.W. STREET FRONTS FOR LOOPING SYSTEMS AND WHEN REAR YARD CONSTRUCTION IS NOT AVAILABLE.
2. ON 15.0m R.O.W. STREETS WITH 2.5m OR 3.0m BOULEVARDS, UTILITIES WILL BE PLACED ALONG THE LOT FLANKAGE IF REQUIRED, AND TREES WILL NOT BE PLANTED WHERE UTILITIES ARE PLACED ALONG FLANKAGE.
3. IF STREET LIGHTING IS NOT REQUIRED ON STREET FRONT THEN OTHER UTILITY MAY BE PLACED.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2003–MAR–20	MRH
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ

City of Saskatoon

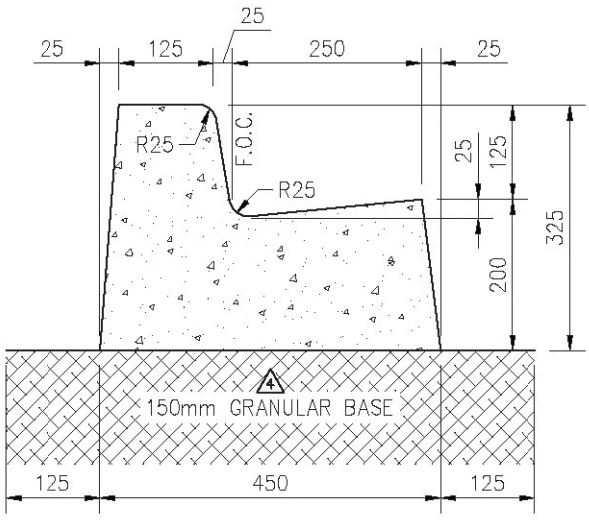
BOULEVARD TREE AND UTILITY PLACEMENT
COMBINED SIDEWALK AND CURB DETAILS

APPROVALS

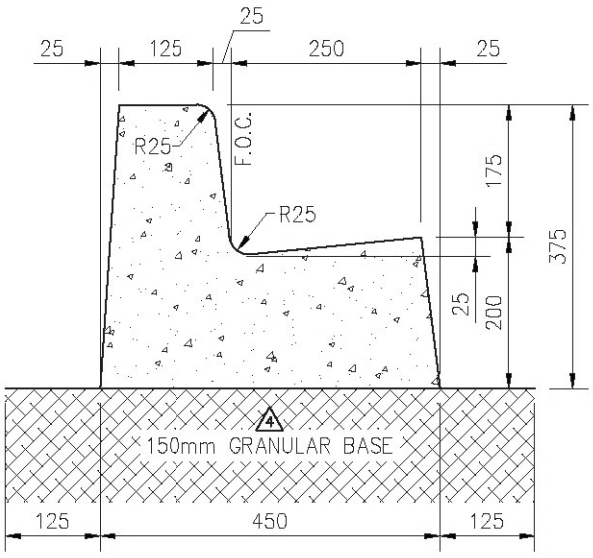
Chelsea Lanning (Apr 22, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 22, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT. N.T.S.

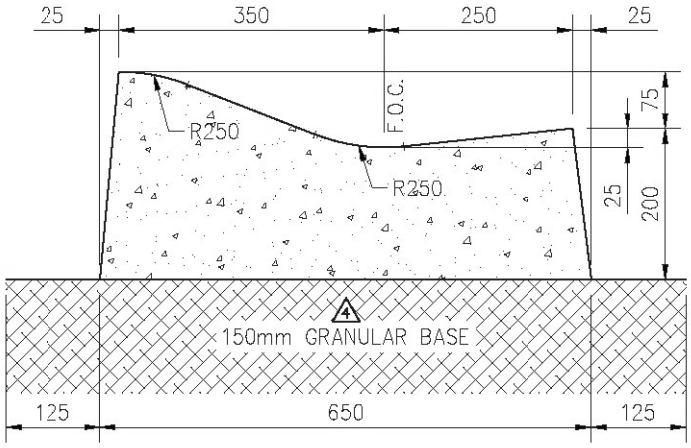
PLAN NO. 102–0001–003r002



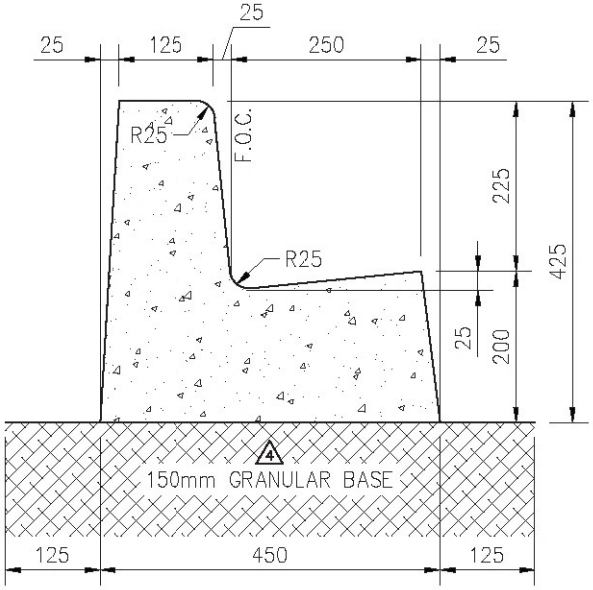
150mm VERTICAL C&G



200mm VERTICAL C&G



ROLLED CURB & GUTTER



250mm VERTICAL C&G

APPROVED FOR USE AT TRANSIT STOPS

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH TOP & FACE OF CURB AND GUTTER LONGITUDINALLY.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-JUN-23	RO
2	REMOVED CONCRETE SWALE	2012-DEC-14	HLO
3	ADDED 250mm VERTICAL CURB & GUTTER	2020-JAN-31	PRZ
4	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-08	DLH

City of Saskatoon

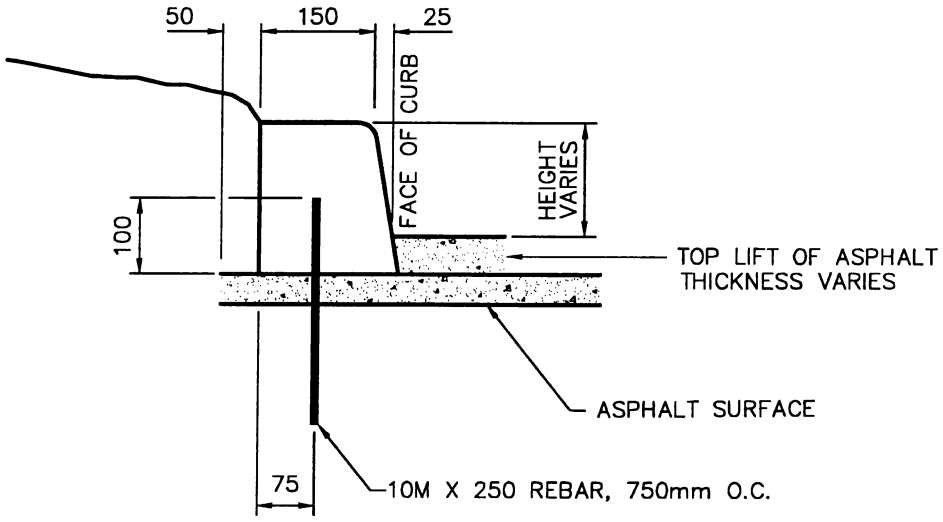
FULL HEIGHT CURBS WITH GUTTER

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Chris Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:10 VERT. 1:10

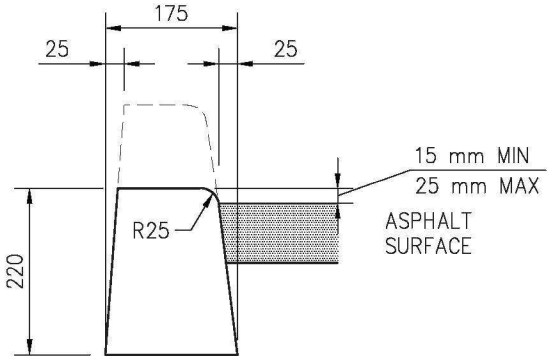
PLAN NO. 102-0002-001r004



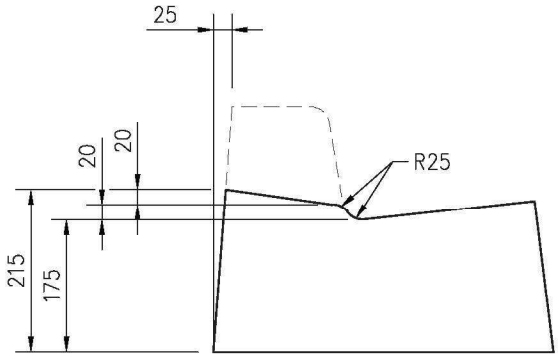
NOTES:

1. WHERE CURB IS PLACED ON TOP LIFT OF ASPHALT, THE TOTAL STRUCTURE HEIGHT WILL BE REDUCED TO MAINTAIN A 200mm FACE OF CURB. ALL OTHER DIMENSIONS TO REMAIN THE SAME.
2. CURB GRADE CAN BE ESTABLISHED INDEPENDENTLY OF THE BOTTOM LIFT ELEVATIONS.
3. CONTROL JOINTS EVERY 1500mm.
4. REBAR TO BE STAINLESS STEEL, EPOXY COATED, OR GALVANIZED. (EPOXY CAN NOT BE DRIVEN.)
5. CONCRETE STANDARD: 32 MPa DURA-MIX CONCRETE, 5-8% AIR AS PER SPEC.
6. COMPACTION STANDARD: 98% STANDARD PROCTOR AS PER SPEC.
7. BROOM FINISH EXPOSED SURFACES LONGITUDINALLY.
8. BROOM OVER ALL CONTROL JOINTS.

REVISIONS		CITY OF SASKATOON INFRASTRUCTURE SERVICES	APPROVED GENERAL MANAGER P. ENG. ENGINEER ENGINEER
1			
2			
3			
DRAWN BY R. OTTENBREIT DATE FEBRUARY 1, 1999		CURB ON ASPHALT	SCALES : HOR. 1:10 VERT. 1:10
CHECKED BY DATE		C-2	PLAN NO. 102-0002-002r001



150mm SEPARATE CURB



VERTICAL CURB & GUTTER

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH TOP & FACE OF CURB AND GUTTER LONGITUDINALLY.
   BROOM OVER ALL CONTROL JOINTS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	ADDED MISSING DIMENSION AND UPDATED STANDARDS	2023-JAN-13	MLP

City of Saskatoon

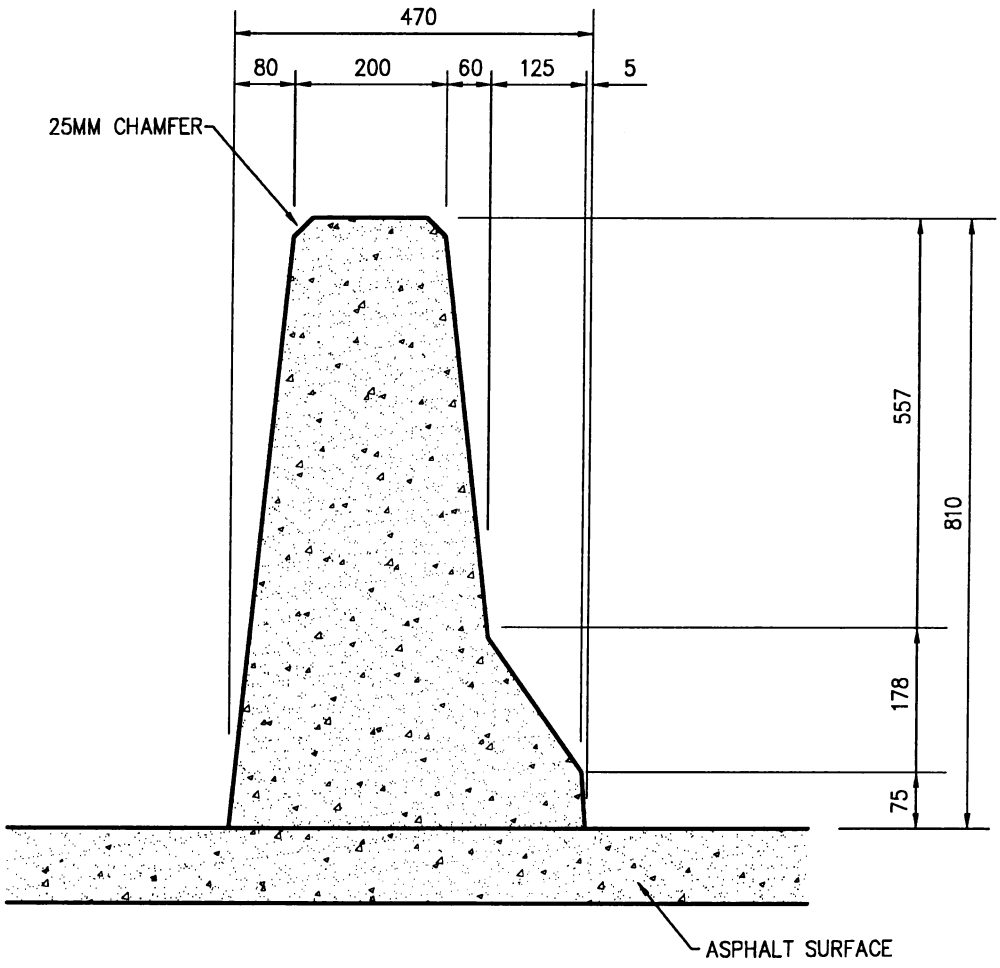
SEPARATE DROPPED CURB CROSSING

APPROVALS

SIGNATURE	Todd Grabowski
NAME: Tim Bushman	NAME: Todd Grabowski
DATE SIGNED: Feb 20, 2024	DATE SIGNED: Feb 27, 2024

SCALES: HOR. 1:10 VERT. 1:10

PLAN NO. 102-0002-003r002



NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. SILANE SEALER TO BE APPLIED TO BARRIER SURFACE
4. CONTROL JOINTS TO BE CONSTRUCTED AT 2.5M SPACINGS

REVISIONS	
1	
2	
3	

DRAWN BY R. OTTENBREIT
DATE FEBRUARY 1, 1999

CHECKED BY
DATE

CITY OF SASKATOON
INFRASTRUCTURE SERVICES

810MM CONCRETE BARRIER CURB

C-4

APPROVED

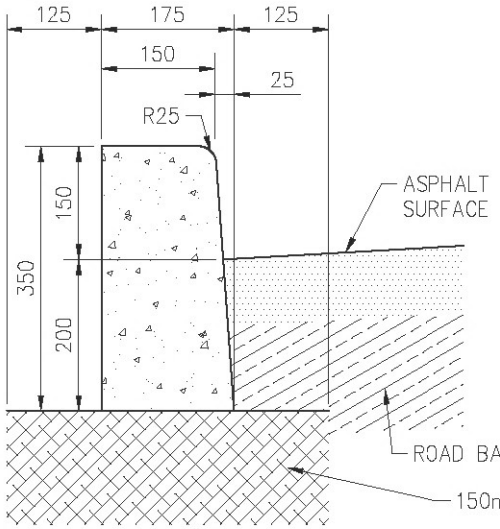
GENERAL MANAGER P. ENG.

ENGINEER

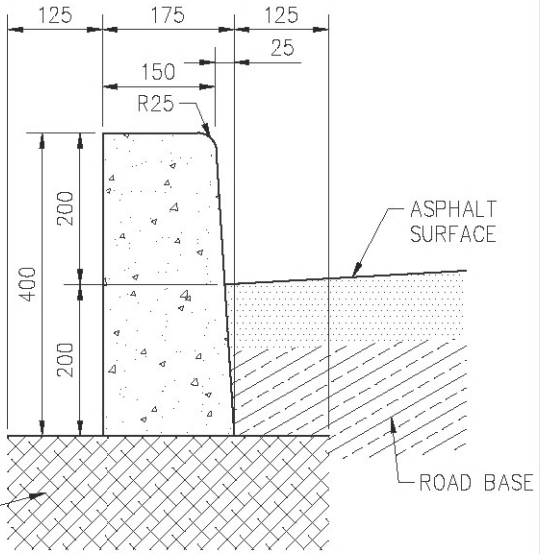
ENGINEER

SCALES : HOR. 1:10 VERT.

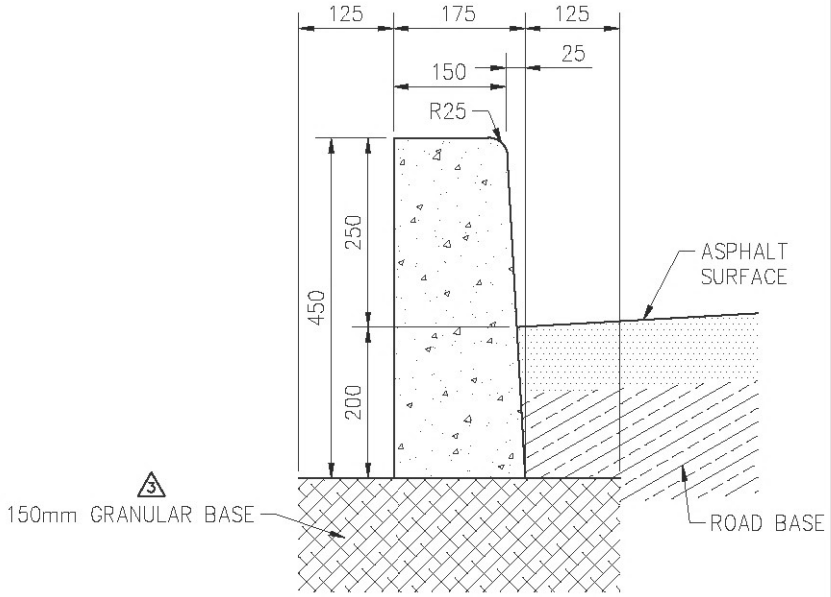
PLAN NO. 102-0002-004r001



150mm CURB



200mm CURB



250mm CURB

APPROVED FOR USE AT TRANSIT STOPS

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH TOP & FACE OF CURB AND GUTTER LONGITUDINALLY.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5M

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-1	RO
2	ADDED 200mm & 250mm CURBS	2020-JAN-31	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-08	DLH

City of Saskatoon

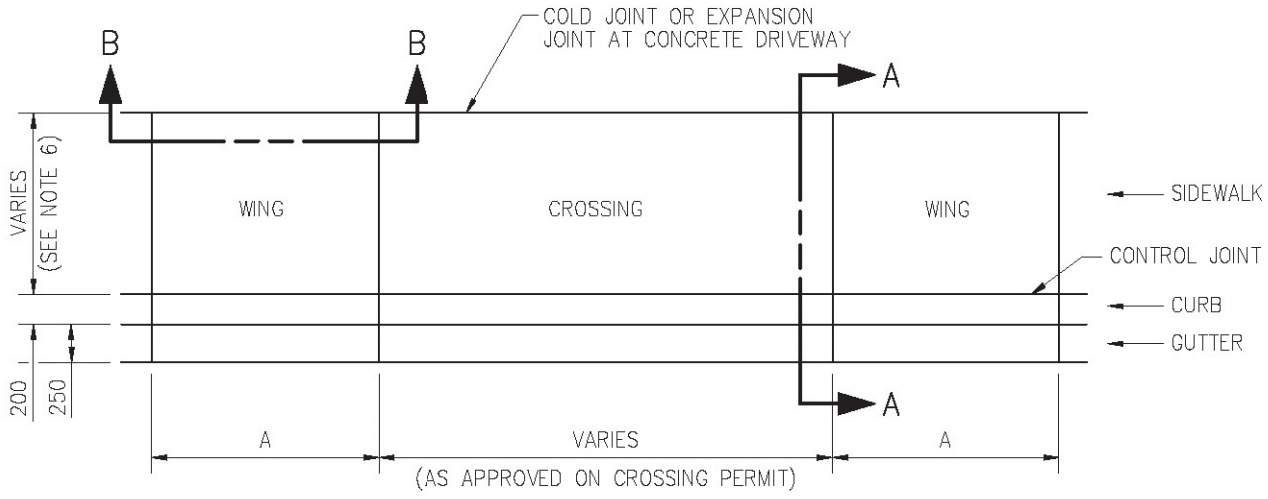
SEPARATE VERTICAL CURBS

APPROVALS

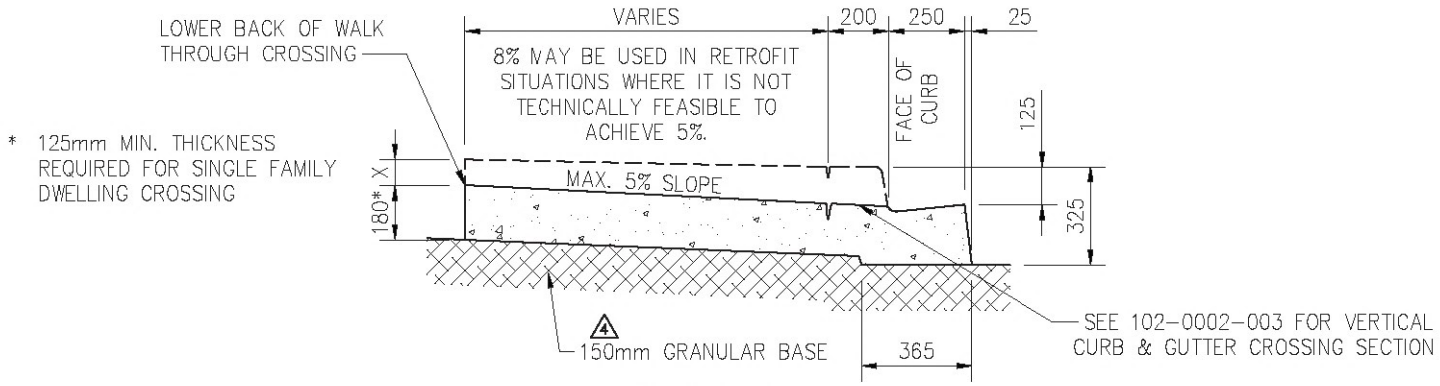
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:10 VERT. 1:10

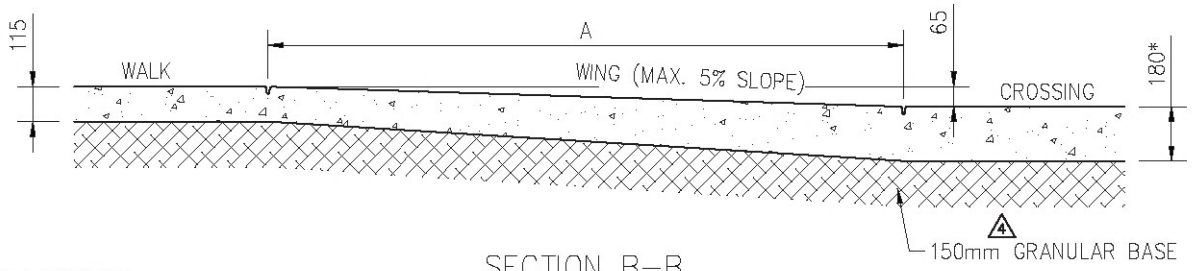
PLAN NO. 102-0002-005r003



PLAN VIEW
SCALE 1:50



SECTION A-A
THROUGH CROSSING
SCALE 1:25



SECTION B-B
AT BACK OF WING
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB & GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m
6. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

A = LENGTH OF WING MAY VARY TO ACCOMMODATE 5% MAXIMUM SLOPE

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2		2009-FEB-09	VK
3	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
3	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
4	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-02	DLH

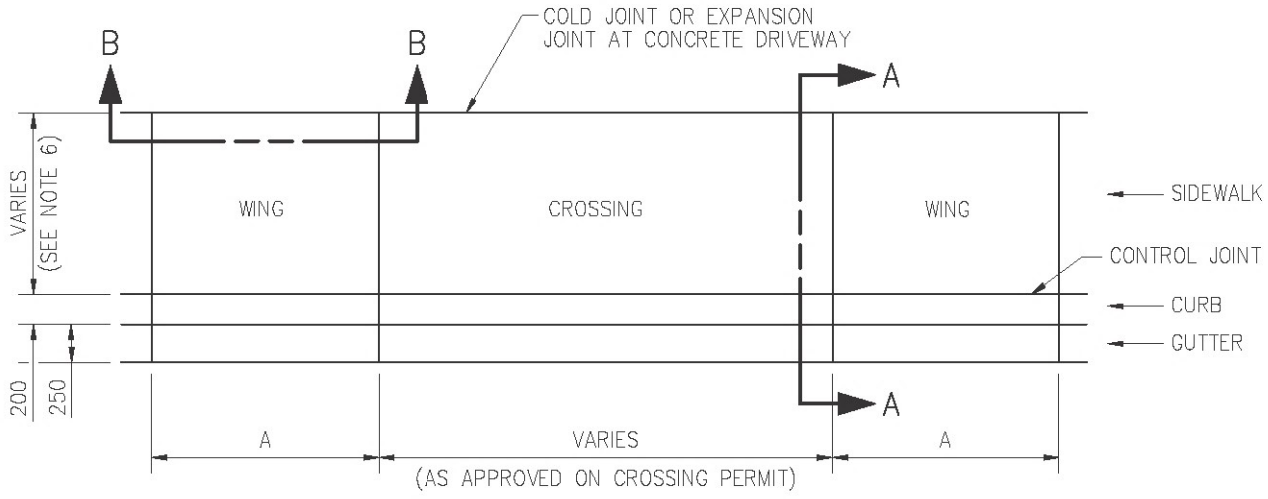
City of Saskatoon

CROSSING
COMBINED SIDEWALK,
150mm VERTICAL CURB & GUTTER

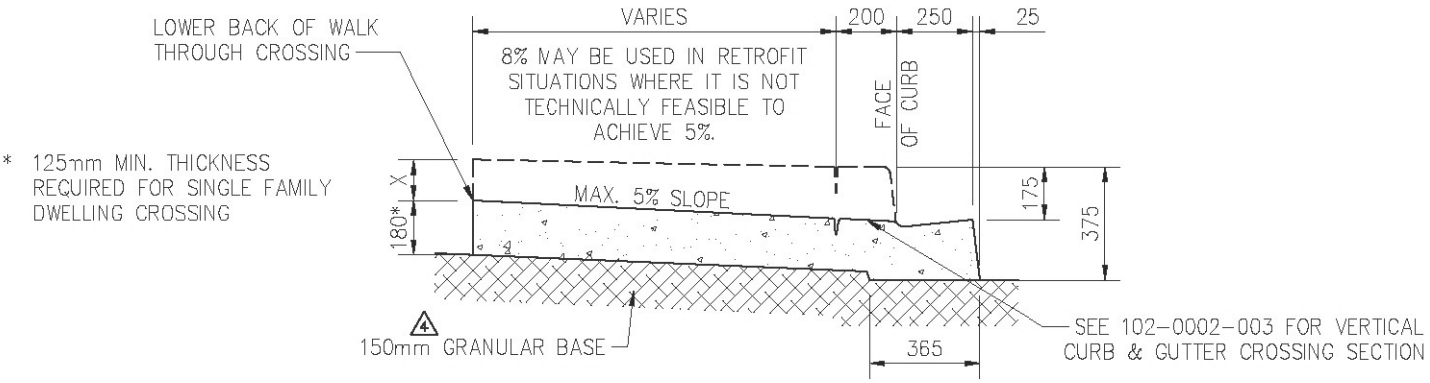
APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

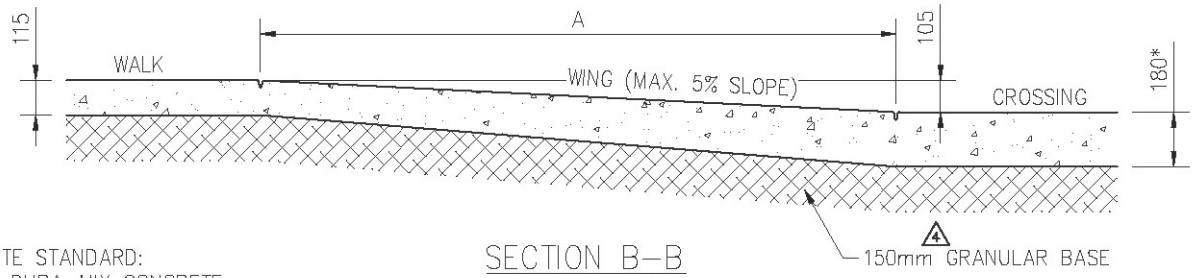
SCALES: HOR. AS NOTED VERT.
PLAN NO. 102-0002-006r004



PLAN VIEW
SCALE 1:50



SECTION A-A
THROUGH CROSSING
SCALE 1:25



SECTION B-B
AT BACK OF WING
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB & GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m
6. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

A = LENGTH OF WING MAY VARY TO ACCOMMODATE 5% MAXIMUM SLOPE

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UNKNOWN CHANGES	2009-FEB-09	VK
3	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
3	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
4	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-04	DLH

City of Saskatoon

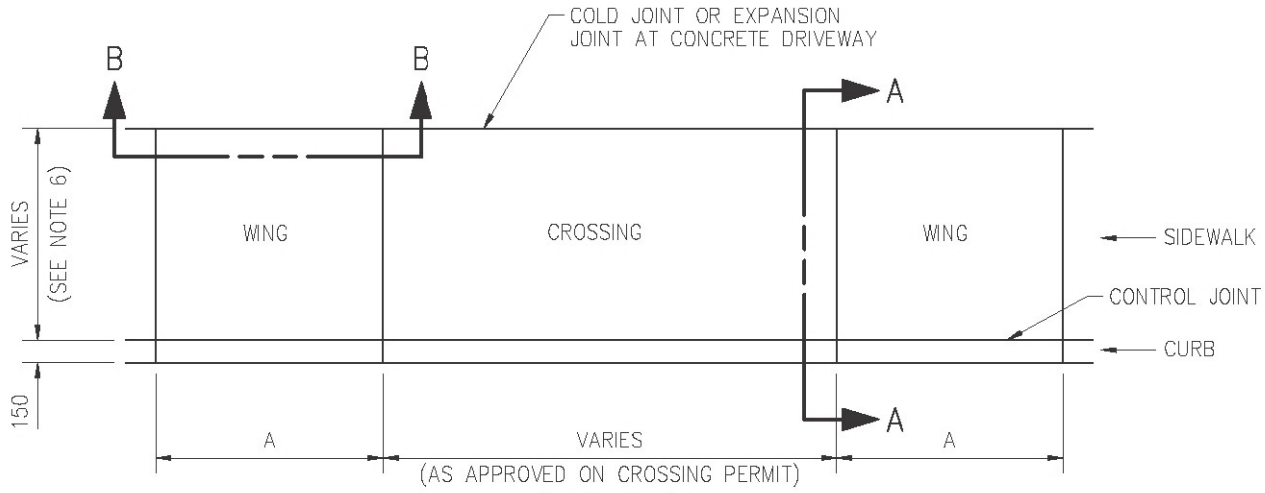
CROSSING
COMBINED SIDEWALK,
200mm VERTICAL CURB & GUTTER

APPROVALS

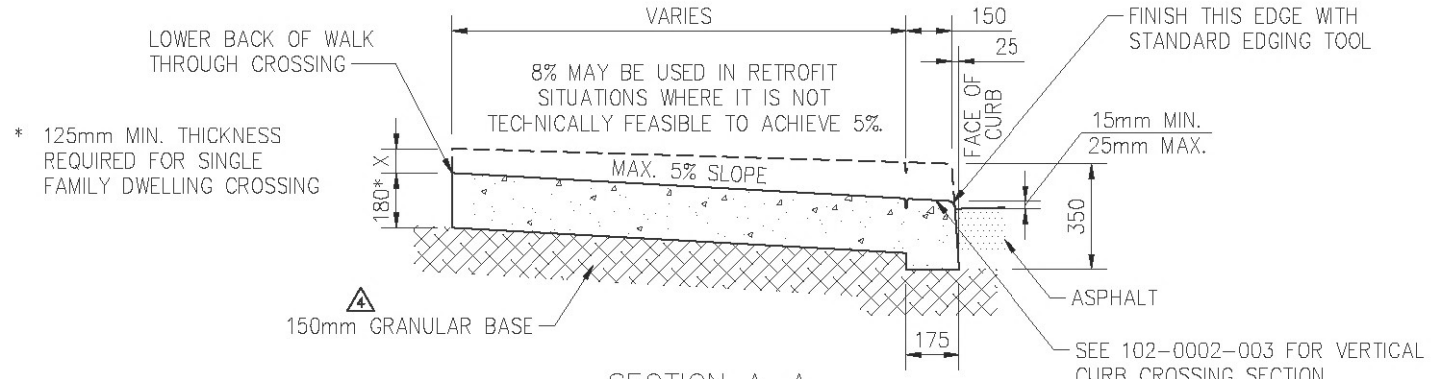
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

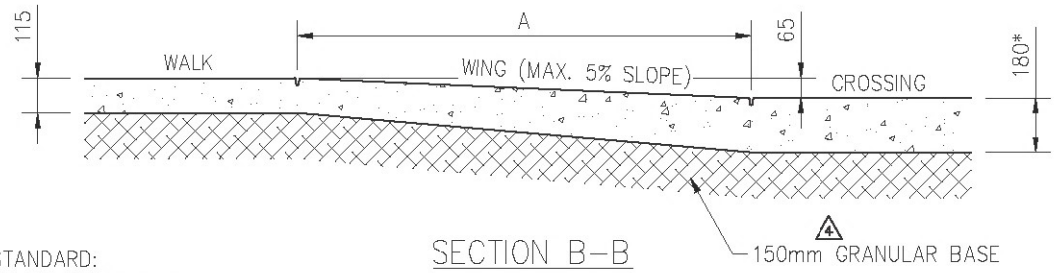
PLAN NO. 102-0002-007r004



PLAN VIEW
SCALE 1:50



SECTION A-A
THROUGH CROSSING
SCALE 1:25



SECTION B-B
AT BACK OF WING
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m
6. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

A = LENGTH OF WING MAY VARY TO ACCOMMODATE 5% MAXIMUM SLOPE

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2		2009-FEB-09	VK
3	REVISED DETAILS AT FACE OF CURB	2015-NOV-27	HLO
4	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
4	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
5	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-04	DLH

City of Saskatoon

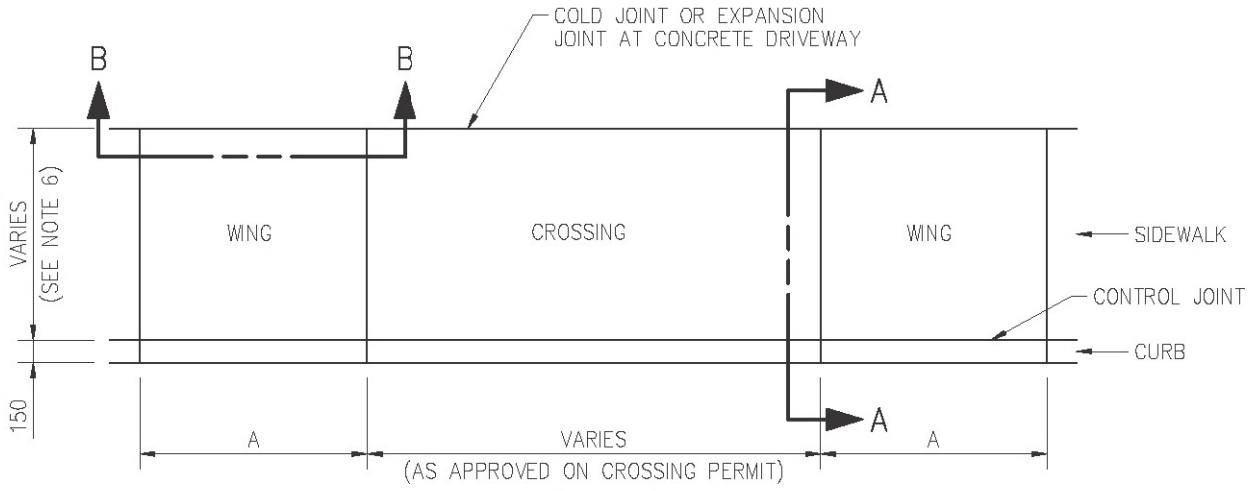
CROSSING
COMBINED SIDEWALK &
150mm VERTICAL CURB

APPROVALS

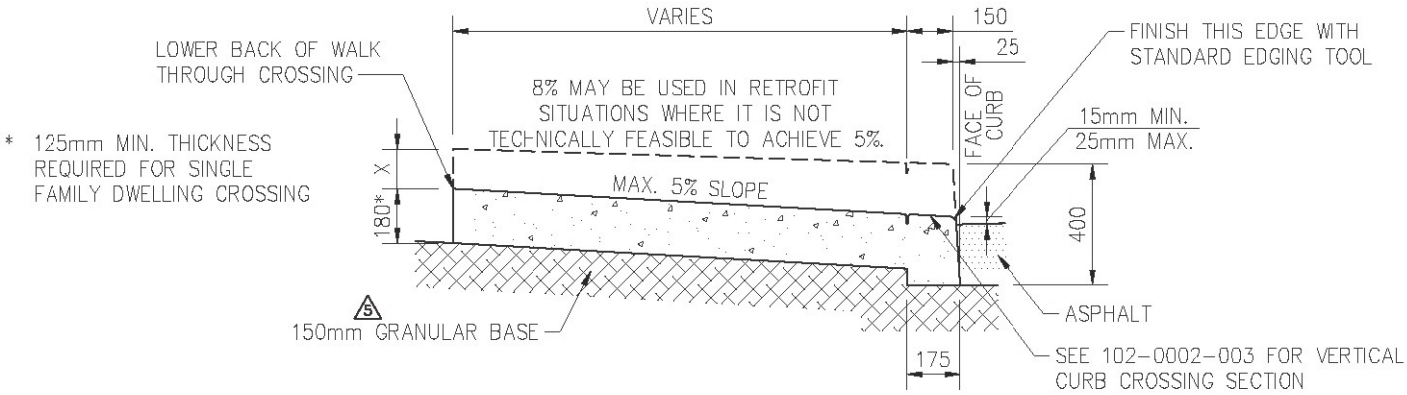
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

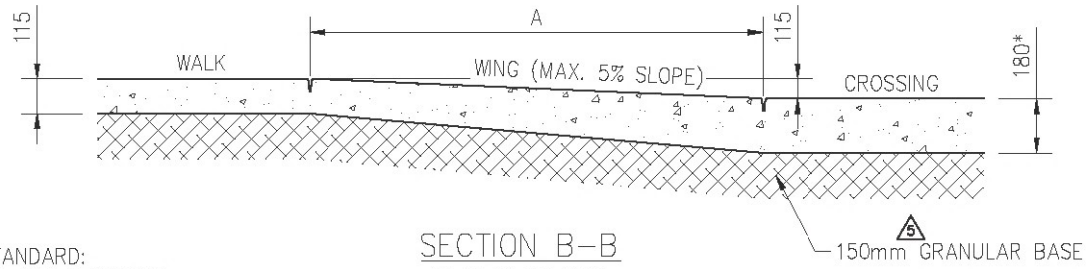
PLAN NO. 102-0002-008r005



PLAN VIEW
SCALE 1:50



SECTION A–A
THROUGH CROSSING
SCALE 1:25



SECTION B–B
AT BACK OF WING
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m
6. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

A = LENGTH OF WING MAY VARY TO ACCOMMODATE 5% MAXIMUM SLOPE

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UNKNOWN CHANGES	2009-FEB-09	VK
3	REVISED DETAILS AT FACE OF CURB	2015-NOV-27	HLO
4	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
4	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
5	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-04	DLH

City of Saskatoon

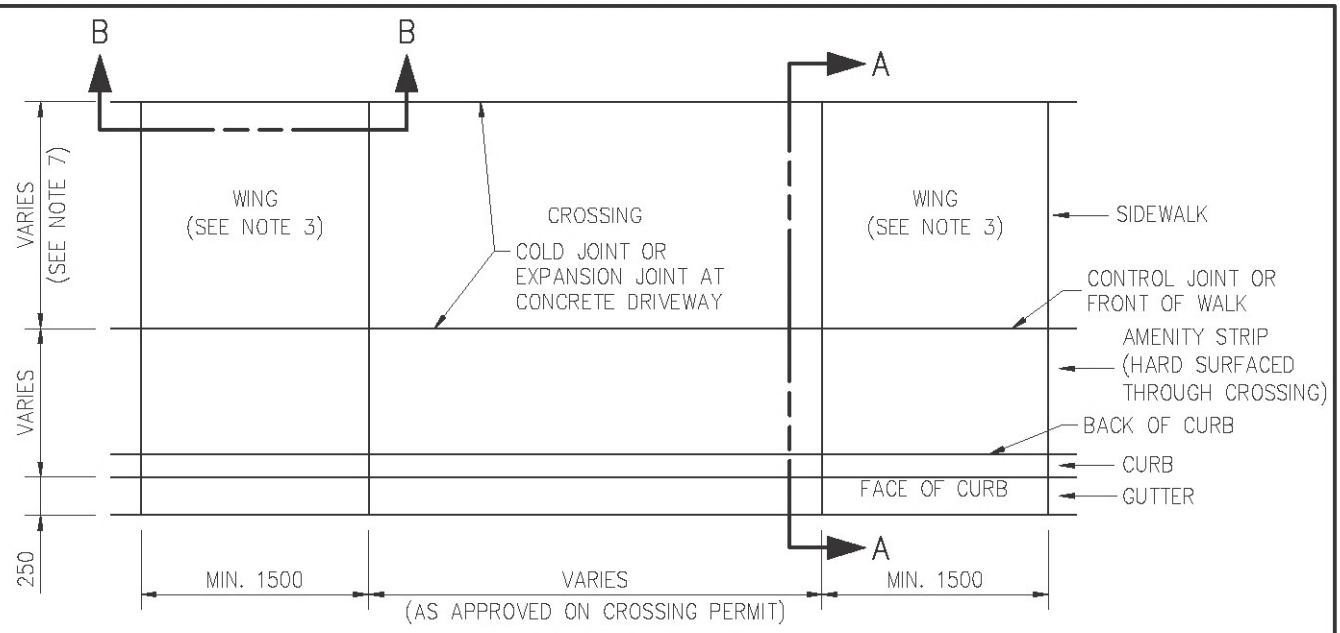
CROSSING
COMBINED SIDEWALK &
200mm VERTICAL CURB

APPROVALS

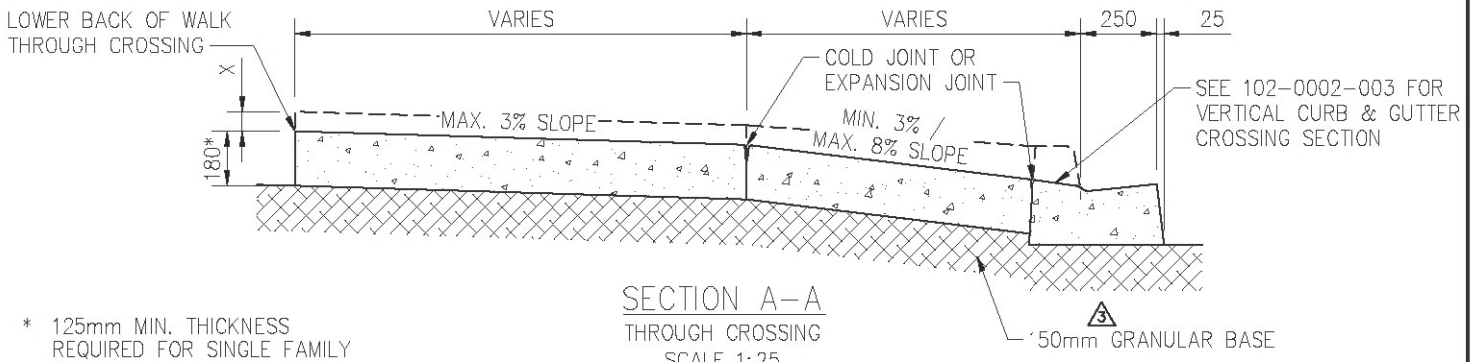
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-009r005

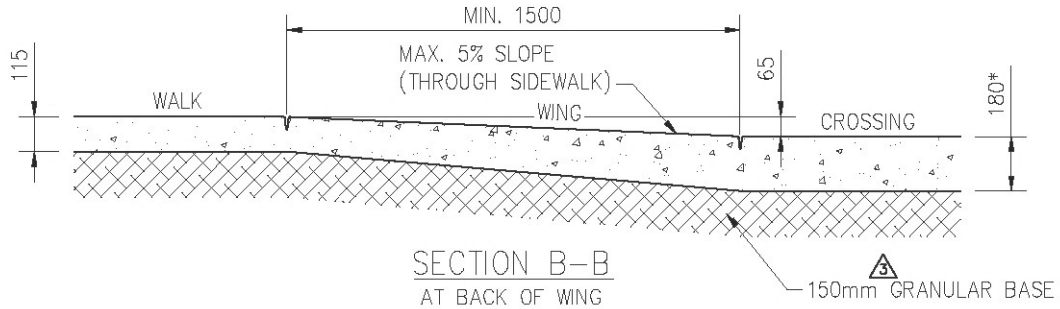


PLAN VIEW
SCALE 1:50



* 125mm MIN. THICKNESS REQUIRED FOR SINGLE FAMILY DWELLING CROSSING

SECTION A–A
THROUGH CROSSING
SCALE 1:25



SECTION B–B
AT BACK OF WING
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. WINGS MAY BE REQUIRED TO DEPRESS THE CROSSING AND TO REDUCE THE AMENITY STRIP HARD SURFACE SLOPE TO MAXIMUM.
4. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB & GUTTER LONGITUDINALLY.
5. BROOM OVER ALL CONTROL JOINTS.
6. SPACING OF CONTROL JOINTS TO BE 1.5m.
7. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.
8. SIDEWALK GRADE SHALL BE MAINTAINED THROUGH CROSSING.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-09	DLH

City of Saskatoon

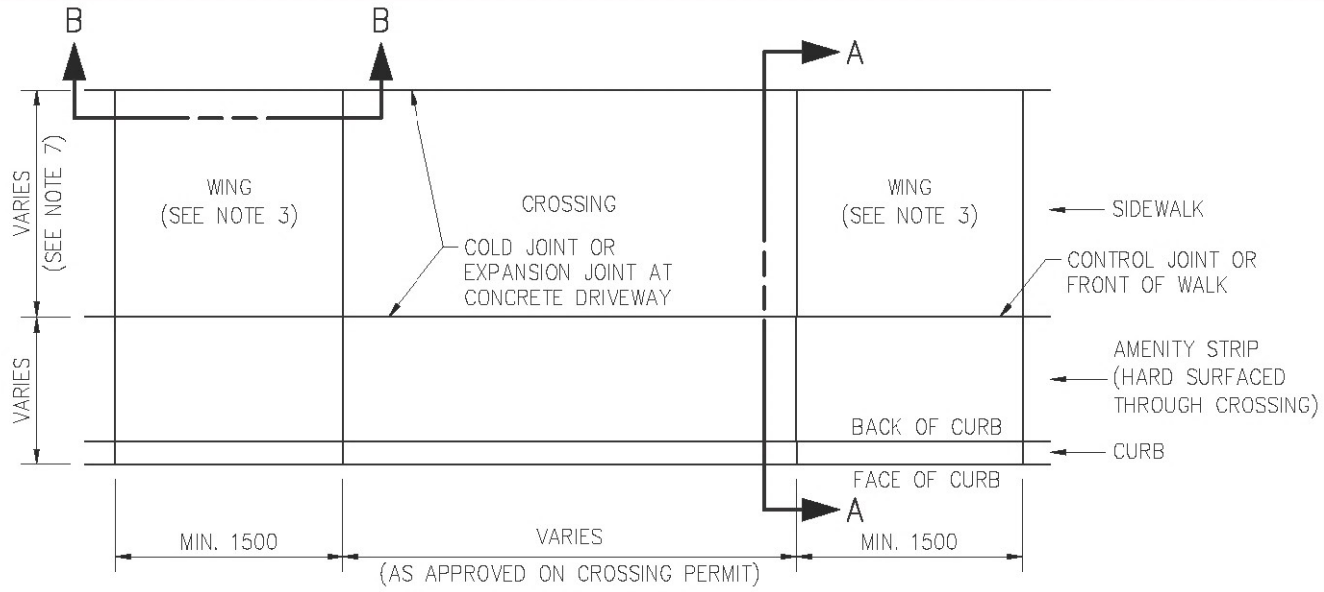
CROSSING
SEPARATE SIDEWALK,
VERTICAL CURB & GUTTER

APPROVALS

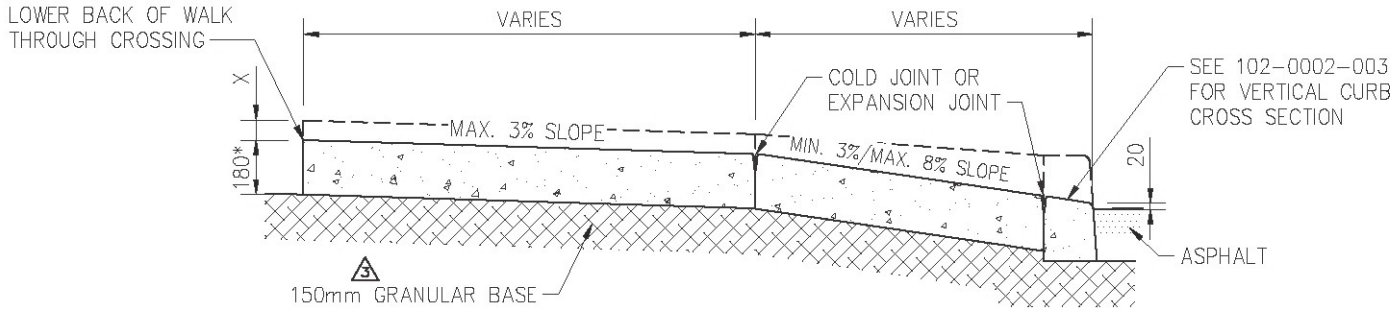
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-010r003

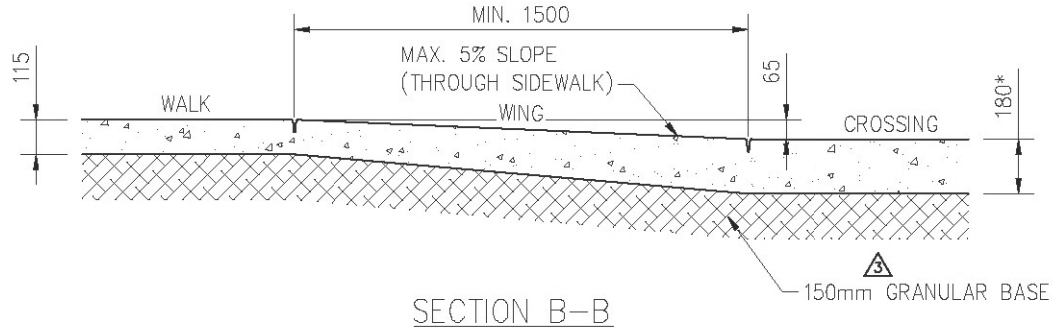


PLAN VIEW
SCALE 1:50



* 125mm MIN. THICKNESS REQUIRED FOR SINGLE FAMILY DWELLING CROSSING

SECTION A-A
THROUGH CROSSING
SCALE 1:25



SECTION B-B
AT BACK OF WALK
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. WINGS MAY BE REQUIRED TO DEPRESS THE CROSSING AND TO REDUCE THE AMENITY STRIP HARD SURFACE SLOPE TO MAXIMUM.
4. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB LONGITUDINALLY.
5. BROOM OVER ALL CONTROL JOINTS.
6. SPACING OF CONTROL JOINTS TO BE 1.5m.
7. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.
8. SIDEWALK GRADE SHALL BE MAINTAINED THROUGH CROSSING.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-1	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-09	DLH

City of Saskatoon

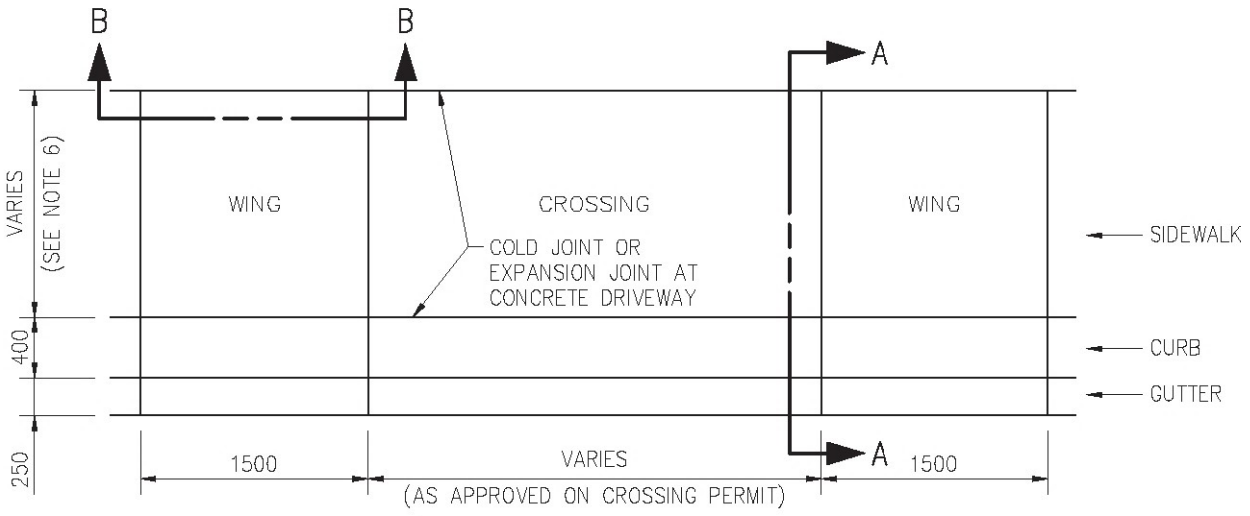
CROSSING
SEPARATE SIDEWALK
& VERTICAL CURB

APPROVALS

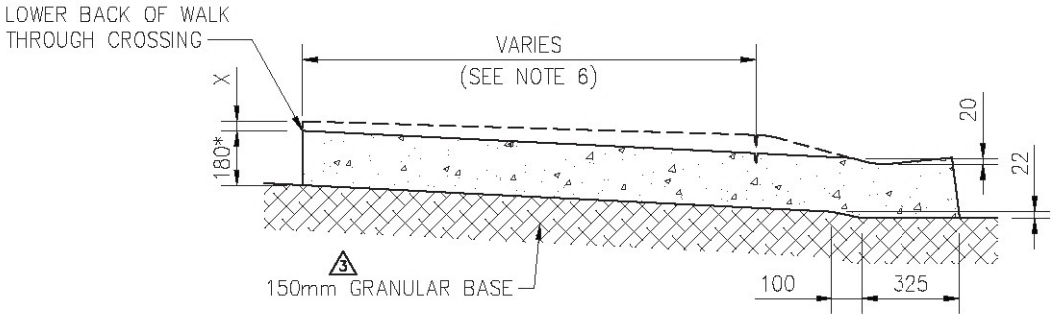
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-011r003

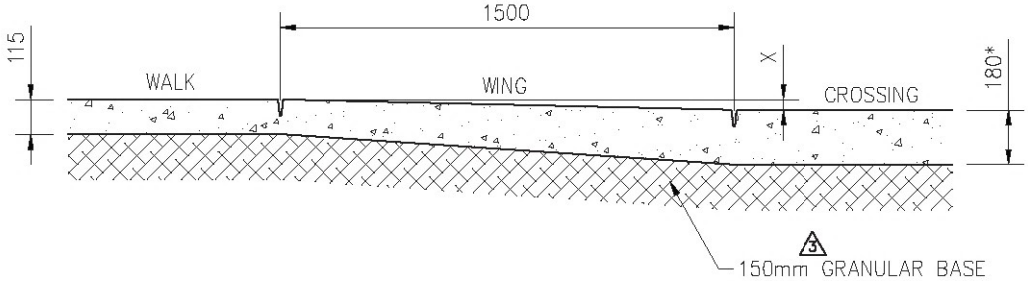


PLAN VIEW
SCALE 1:50



SECTION A–A
THROUGH CROSSING
SCALE 1:25

* 125mm MIN. THICKNESS
REQUIRED FOR SINGLE FAMILY
DWELLING CROSSING



SECTION B–B
AT BACK OF WING
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5–8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB & GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m.
6. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999–FEB–01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020–SEP–09	DLH

City of Saskatoon

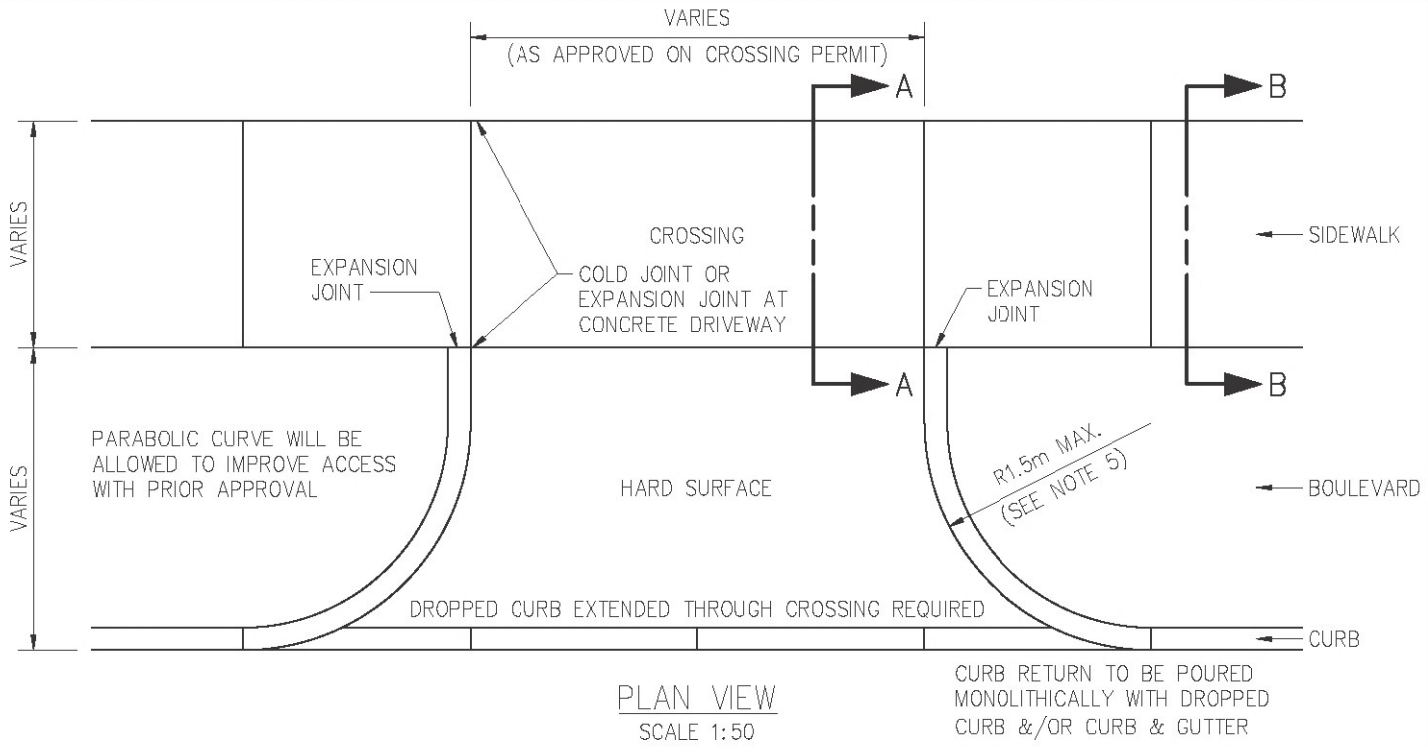
CROSSING
COMBINED SIDEWALK,
ROLLED CURB & GUTTER

APPROVALS

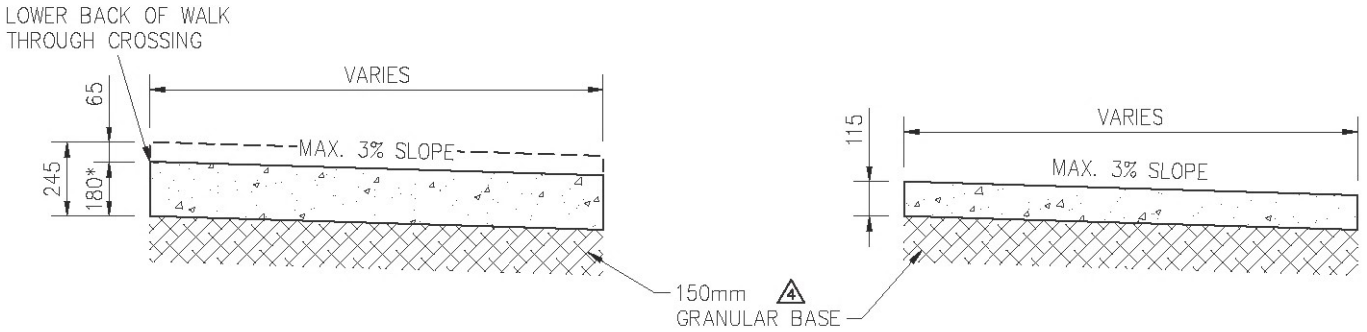
SIGNATURE	SIGNATURE
Shirley Matt	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102–0002–012r003



PLAN VIEW
SCALE 1:50



SECTION A–A
THROUGH CROSSING
SCALE 1:25

* 125mm MIN. THICKNESS REQUIRED FOR SINGLE FAMILY DWELLING CROSSING

SECTION B–B
THROUGH SIDEWALK
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA–MIX CONCRETE
   5–8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY. BROOM FINISH CURB & GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. TRUCK SWEPT PATH ANALYSIS OR TRAFFIC IMPACT STUDY REQUIRED FOR APPROVAL OF LARGER CORNER RADIUS.
6. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.
7. CONCRETE SIDEWALK TO CONTINUE THROUGH CROSSING AND GRADE SHALL BE MAINTAINED THROUGH CROSSING.
8. IF WINGS REQUIRED, MAX 5% SLOPE.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999–FEB–01	RO
2	ADDED MAX RADIUS NOTE	2016–MAY–06	AMR
3	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
3	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ
4	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020–SEP–09	DLH

City of Saskatoon

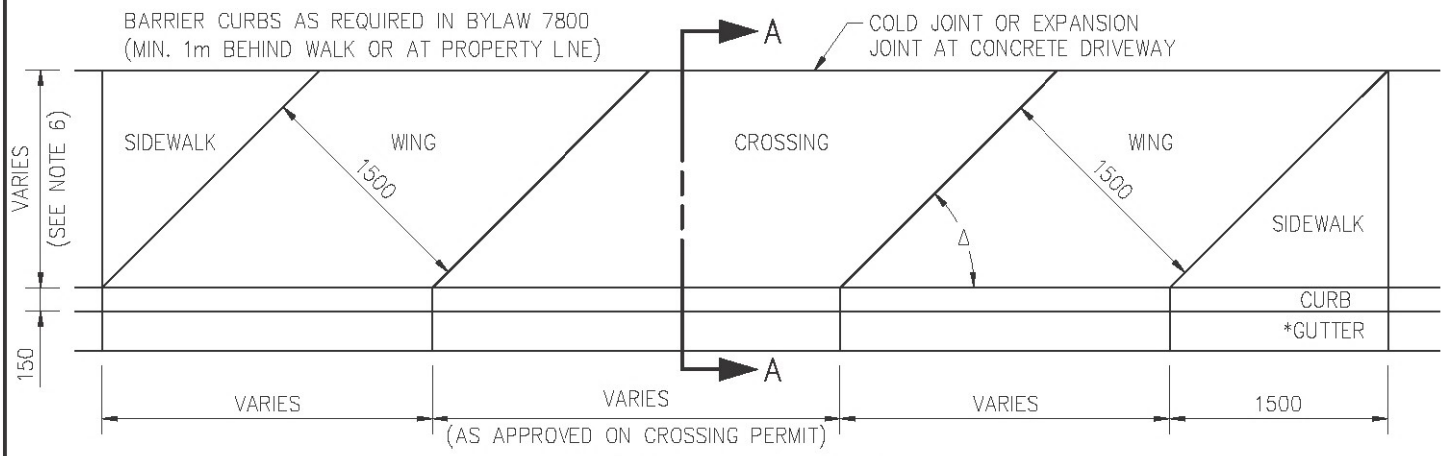
CURB RETURN CROSSING
SEPARATE SIDEWALK & VERTICAL CURB

APPROVALS

SIGNATURE	SIGNATURE
Shirley Matt	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102–0002–013r004

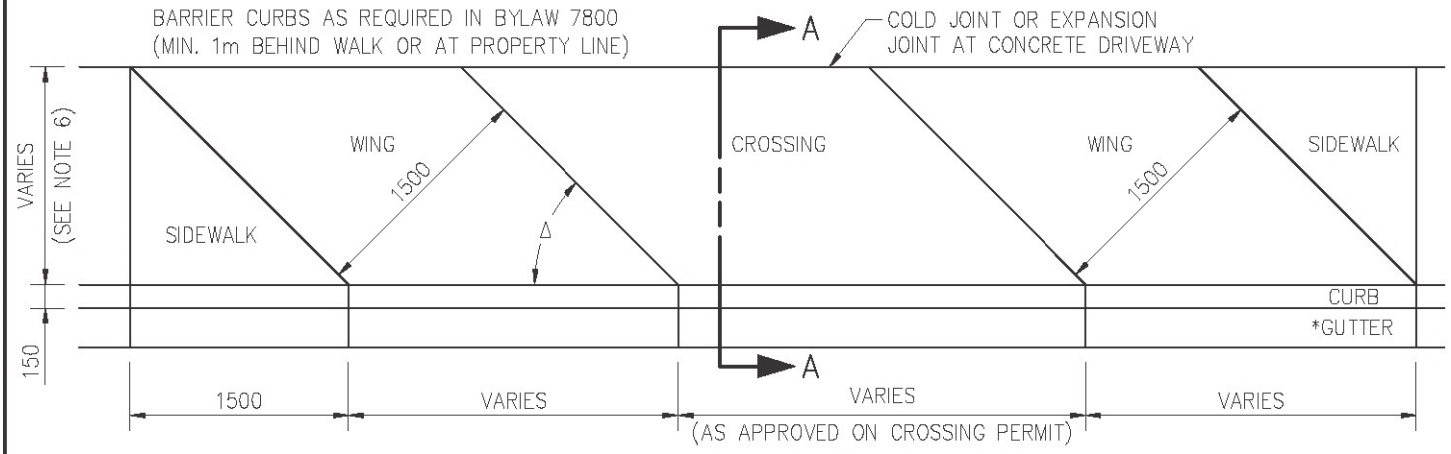


OUTBOUND CROSSING

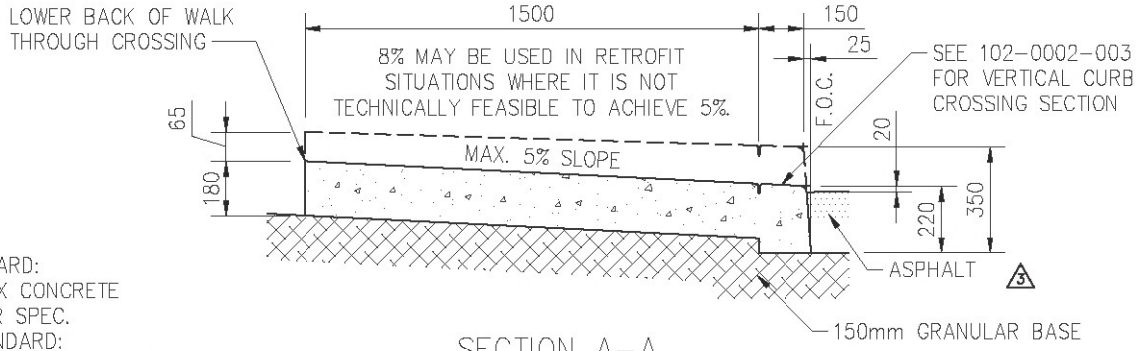
* GUTTER MAY BE REQUIRED TO MATCH EXISTING

Δ = 60°–70° FOR COMMERCIAL APPLICATION

Δ = 45°–60° FOR INDUSTRIAL APPLICATION



INBOUND CROSSING



SECTION A–A

THROUGH CROSSING

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA–MIX CONCRETE
   5–8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB & GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m
6. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.
7. MAX. 5% SLOPE ON WINGS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999–FEB–01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ
3	UPDATED TO ALIGNE WITH SIDEWALK BEST PRACTICES REPORT	2020–SEP–09	DLH

City of Saskatoon

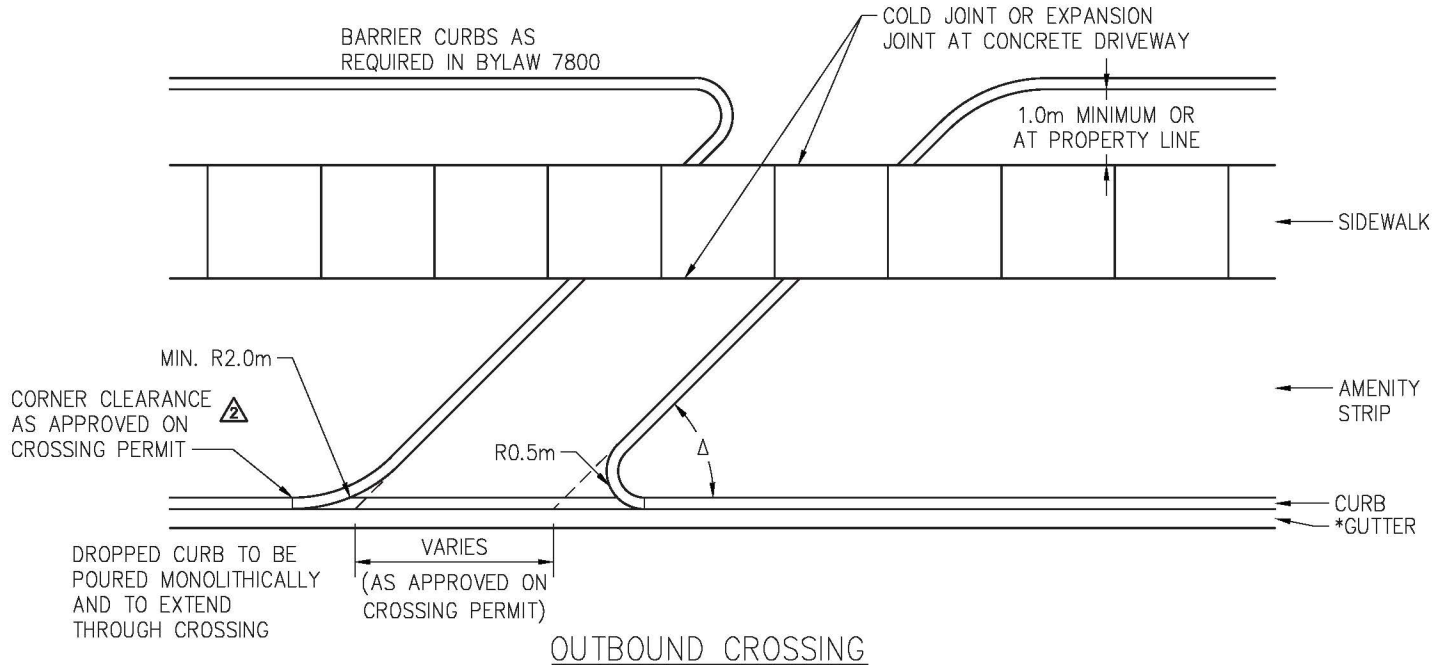
DIRECTIONAL CROSSING
COMBINED SIDEWALK & VERTICAL CURB

APPROVALS

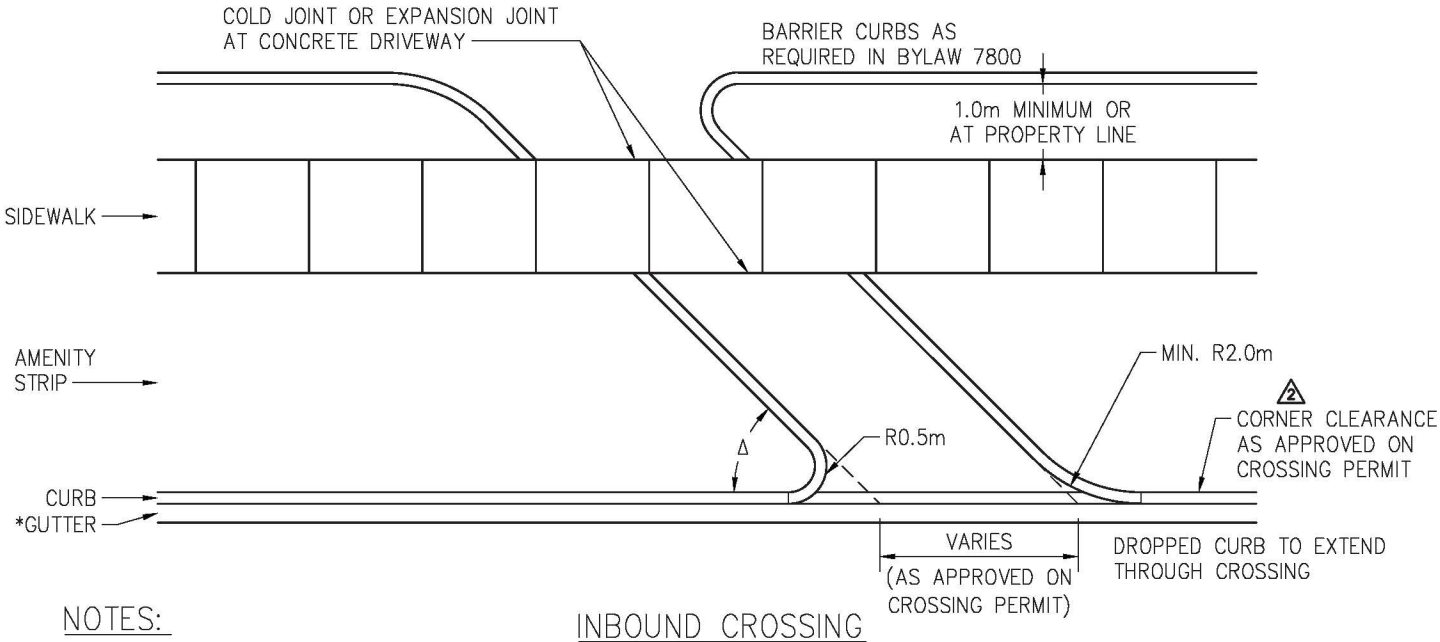
SIGNATURE	SIGNATURE
Shirley Matt	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT.

PLAN NO. 102–0002–014r003



OUTBOUND CROSSING



INBOUND CROSSING

NOTES:

1. CONCRETE STANDARD:
   32 MPA DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5M
6. SIDEWALK GRADE SHALL BE MAINTAINED THROUGH CROSSING.

2 * GUTTER MAY BE REQUIRED TO MATCH EXISTING
Δ = 60°-70° FOR COMMERCIAL APPLICATION
Δ = 45°-60° FOR INDUSTRIAL APPLICATION

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ

City of Saskatoon

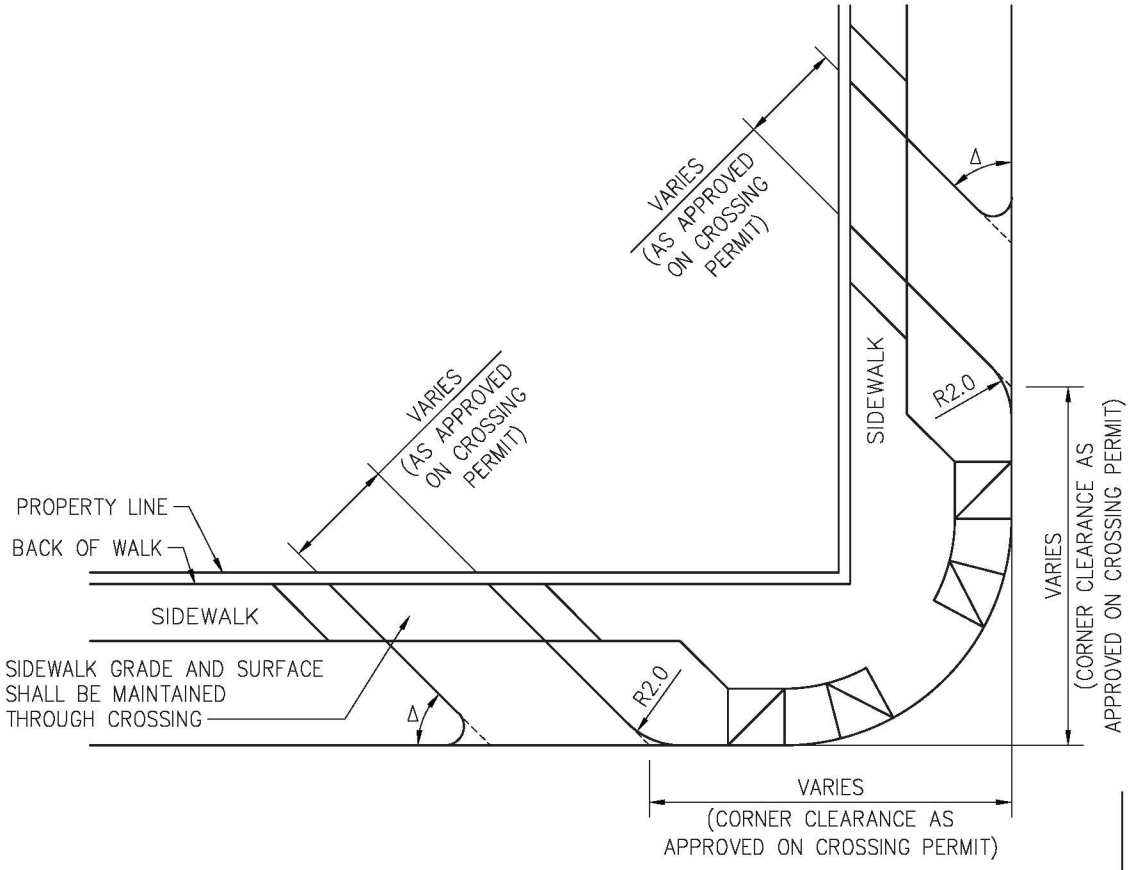
DIRECTIONAL CROSSING
SEPARATE SIDEWALK & CURB

APPROVALS

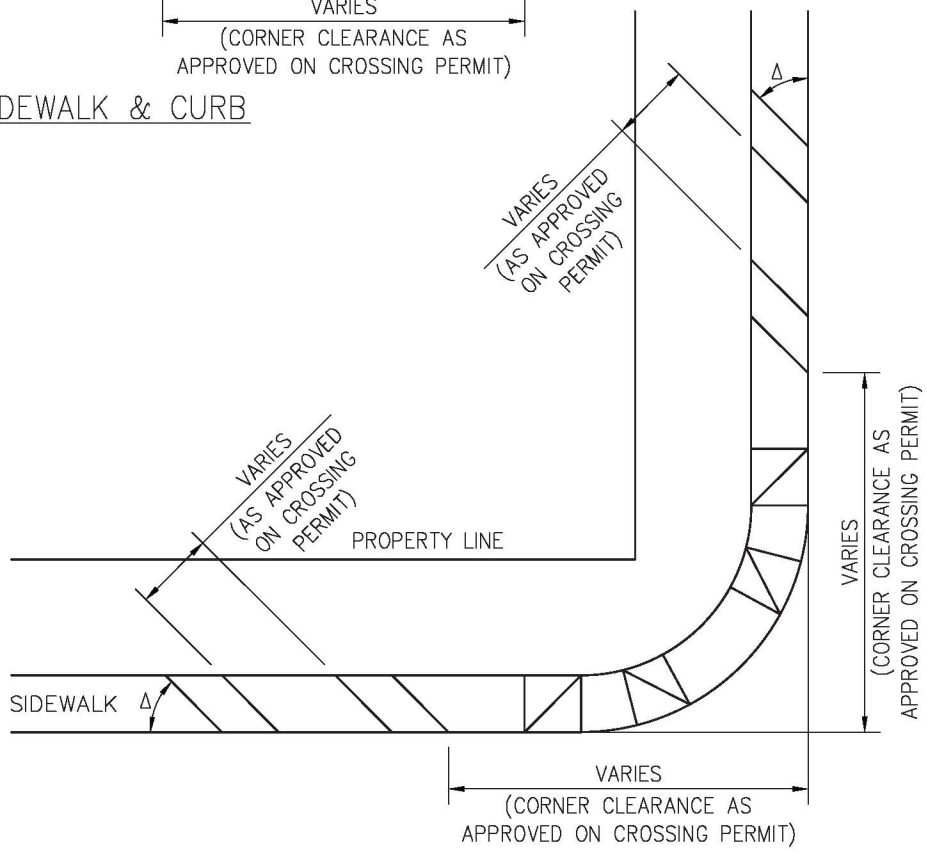
Chelsea Lanning (Apr 22, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 22, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:100 VERT.

PLAN NO. 102-0002-015r002



SEPARATE SIDEWALK & CURB



Δ = 60°–70° FOR COMMERCIAL APPLICATION
Δ = 45°–60° FOR INDUSTRIAL APPLICATION

COMBINED SIDEWALK & CURB

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA–MIX CONCRETE
   5–8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB & GUTTER
   LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999–FEB–01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ

City of Saskatoon

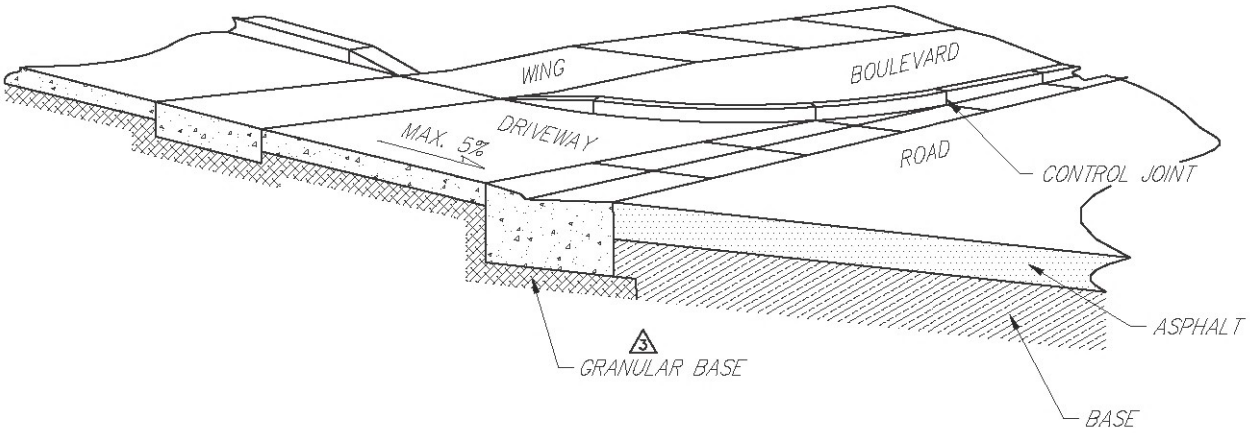
DIRECTIONAL CROSSING
CORNER LOCATION

APPROVALS

Chelsea Lanning (Apr 22, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 22, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:200 VERT.

PLAN NO. 102–0002–016r002



NOTES:

1. SIDEWALK GRADE AND SURFACE SHALL BE MAINTAINED THROUGH DRIVEWAY.
2. IF WINGS ARE REQUIRED, MAX 5% SLOPE.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-09	DLH

City of Saskatoon

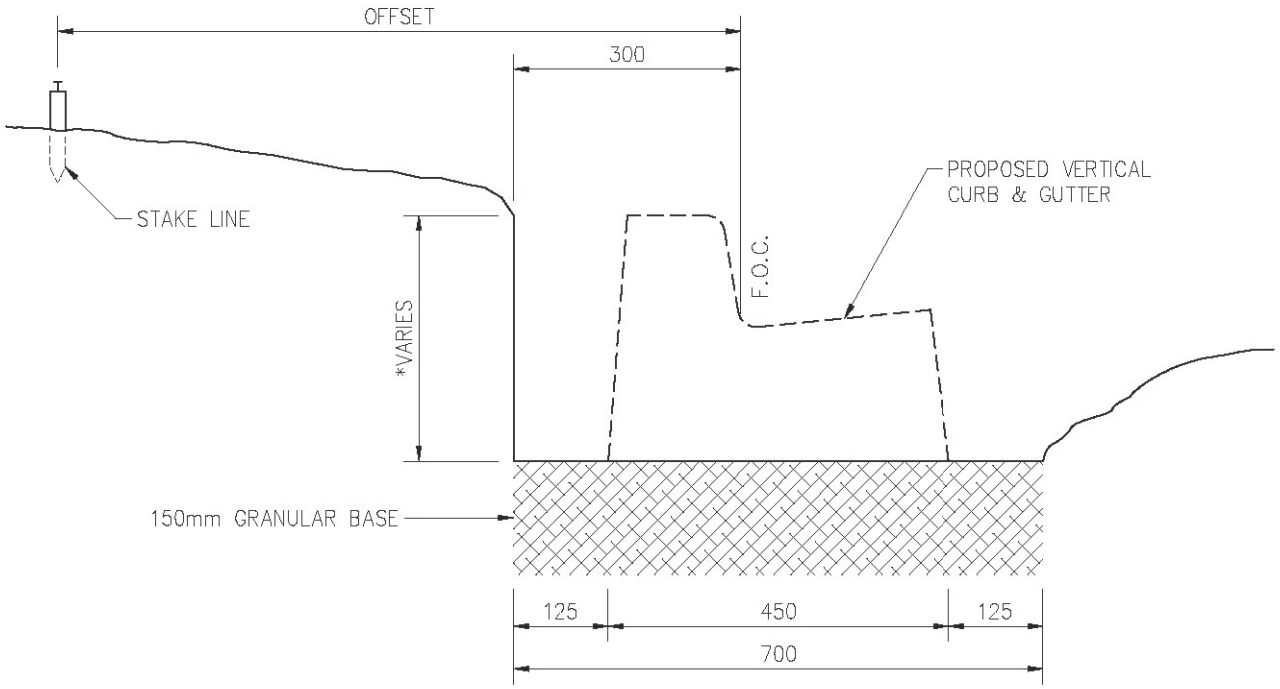
CROSSING
CURB DETAIL
PERSPECTIVE VIEW

APPROVALS

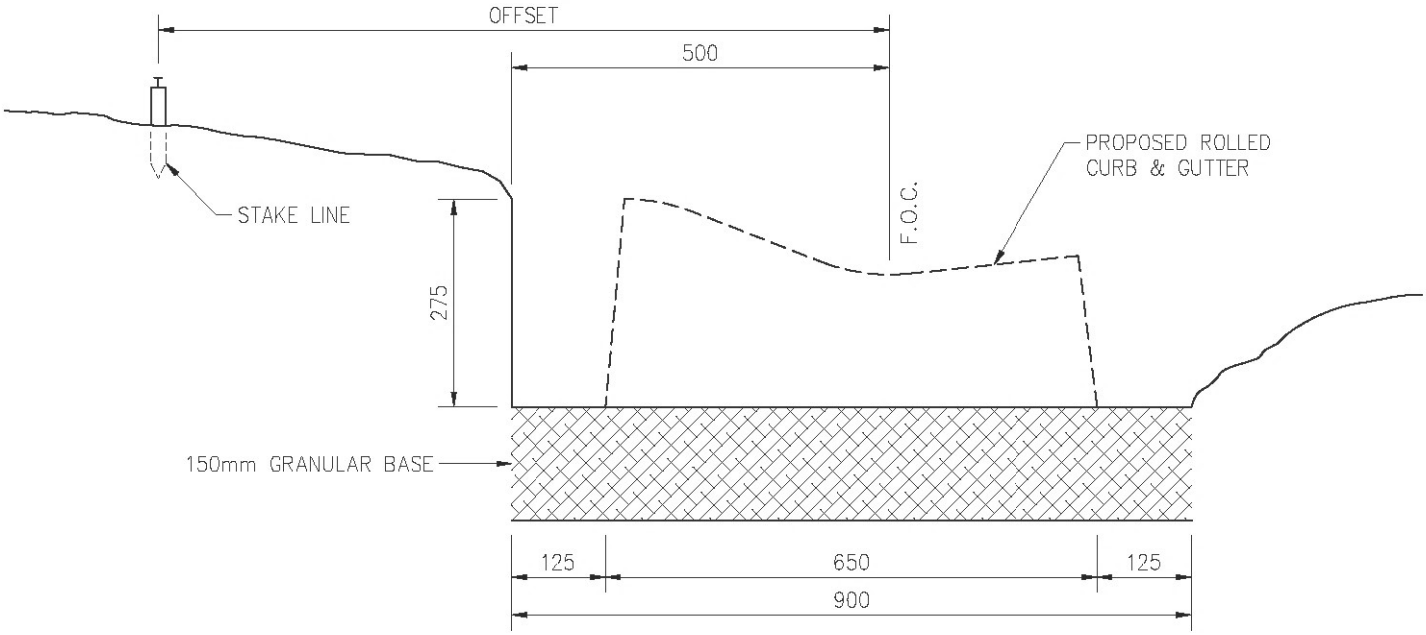
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT.

PLAN NO. 102-0002-017r003



* 325mm WITH 150mm VERTICAL CURB
375mm WITH 200mm VERTICAL CURB



	PLAN DESCRIPTION/REVISION	DATE	BY
1	UPDATED NOTES	1999-JUN-23	RO
2	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-09	DLH

City of Saskatoon

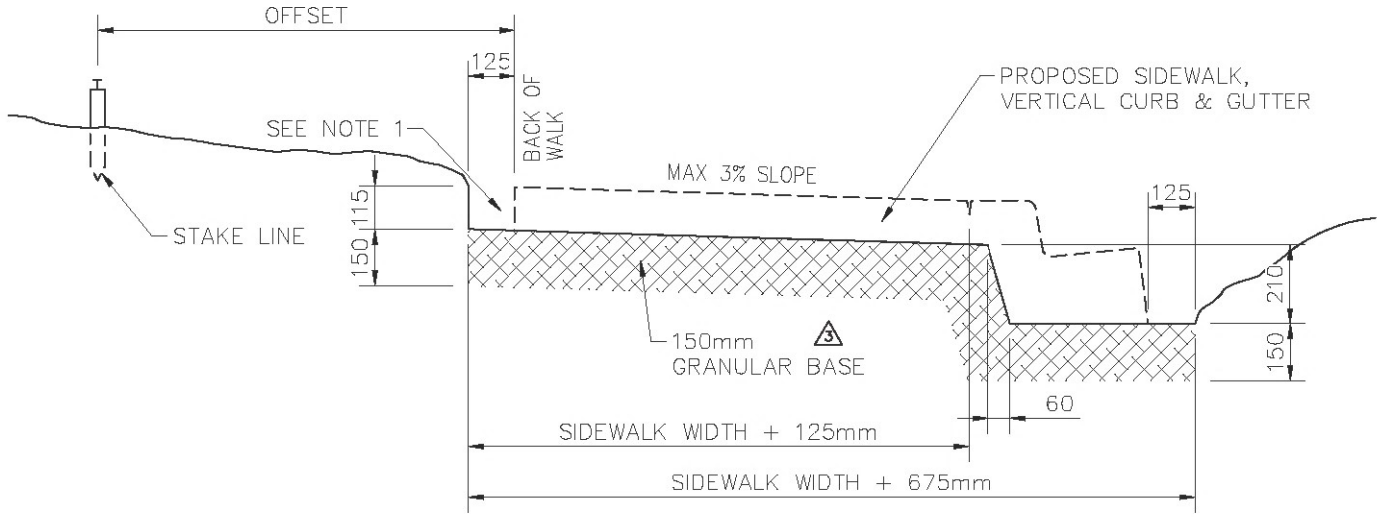
GRADE CONSTRUCTION
FOR CURB & GUTTER

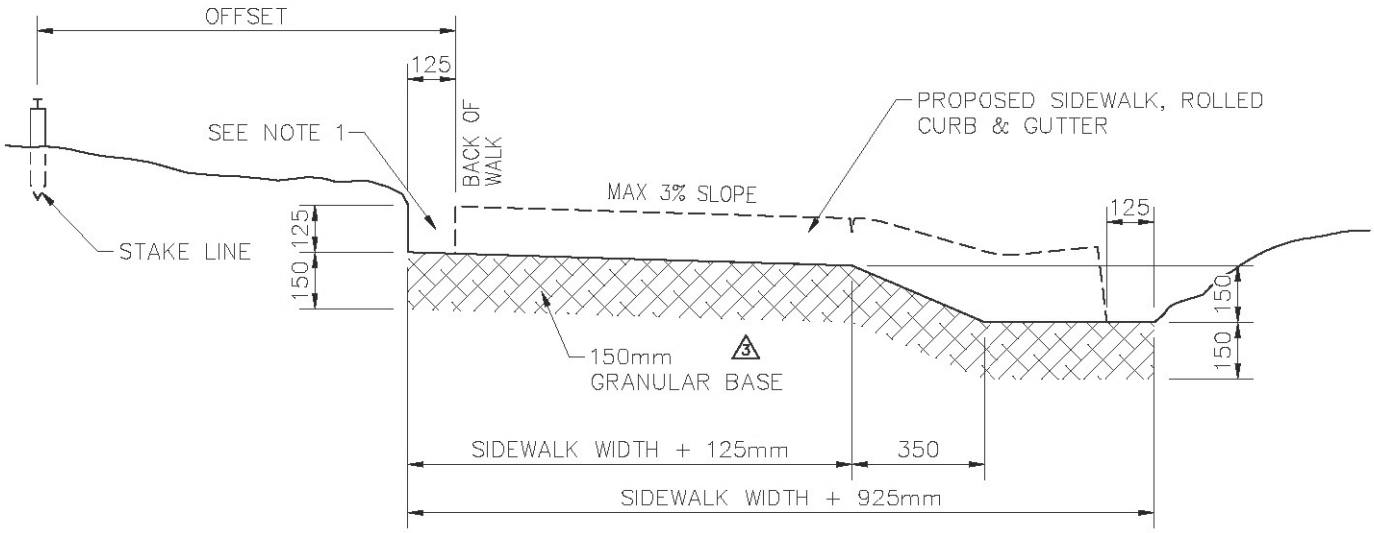
APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:10 VERT.

PLAN NO. 102-0002-018r002





NOTES:

1. TO BE BACKFILLED LEVEL WITH CONCRETE WALK AND COMPACTED WITH COMPACTION EQUIPMENT.
2. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-JUN-23	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-10	DLH

City of Saskatoon

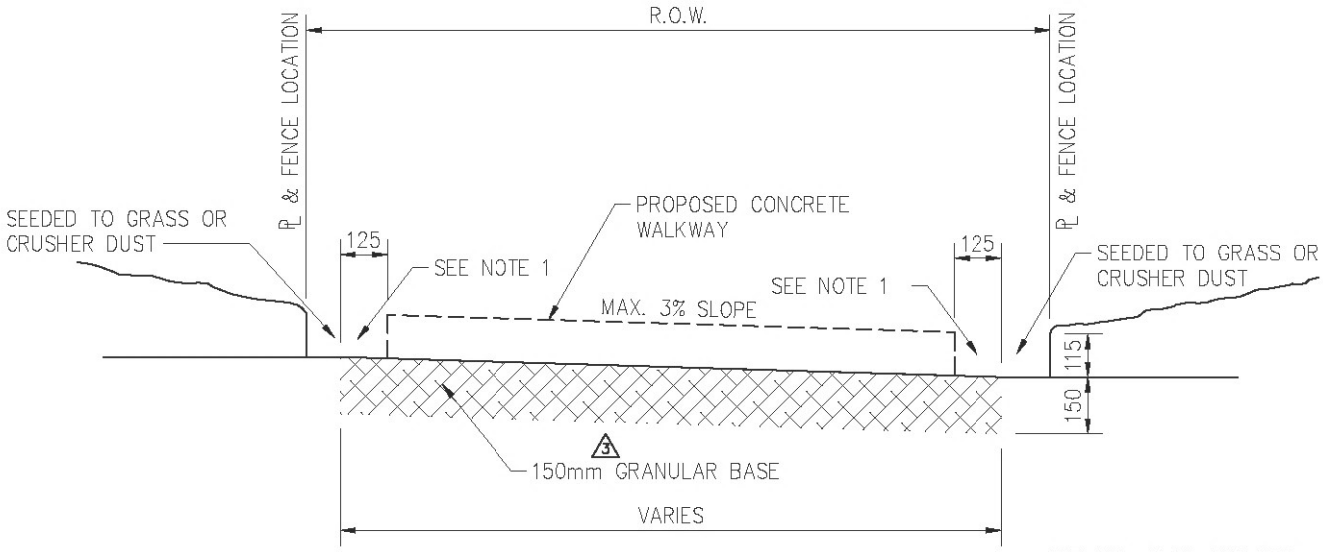
GRADE CONSTRUCTION FOR SIDEWALK, CURB & GUTTER

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

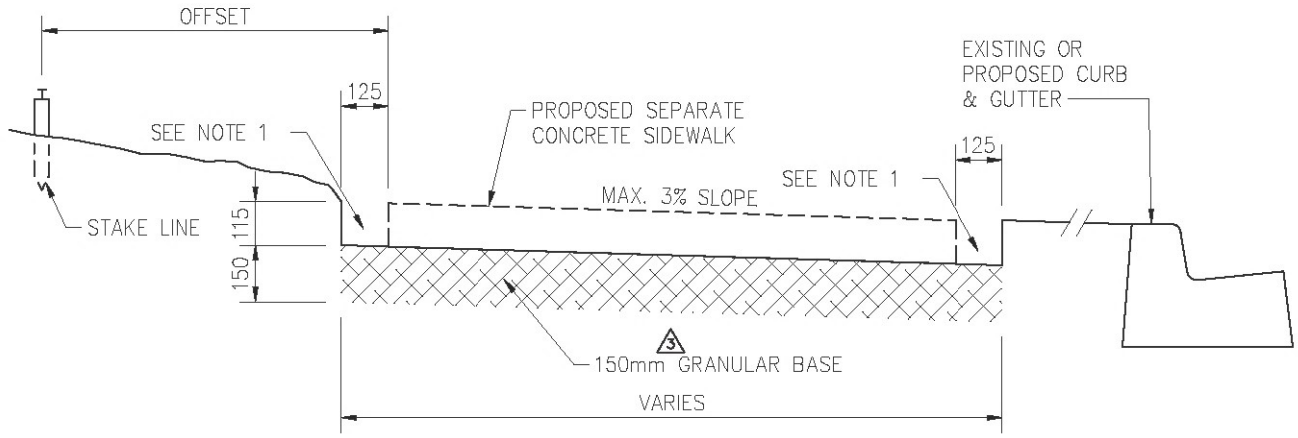
SCALES: HOR. 1:20 VERT.

PLAN NO. 102-0002-019r003



SEE 102-0002-032 FOR TYPICAL WALKWAY WIDTHS

WALKWAY



SEPARATE SIDEWALK

NOTES

1. TO BE BACKFILLED LEVEL WITH CONCRETE WALK AND COMPACTED WITH COMPACTION EQUIPMENT.
2. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-11	DLH

City of Saskatoon

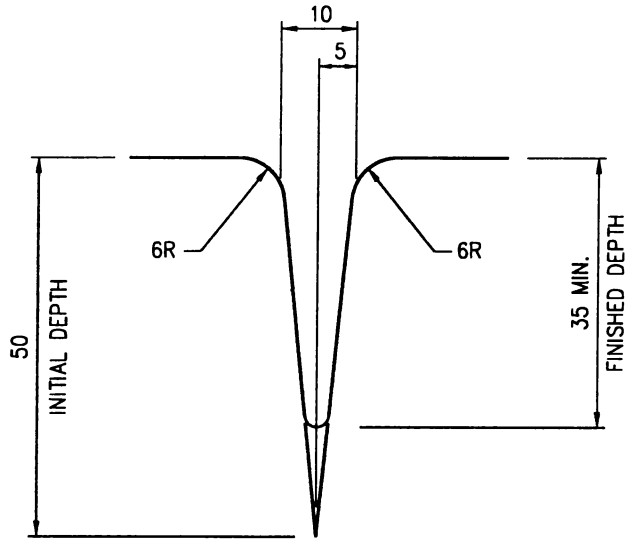
GRADE CONSTRUCTION FOR WALKWAY & SEPARATE SIDEWALK

APPROVALS

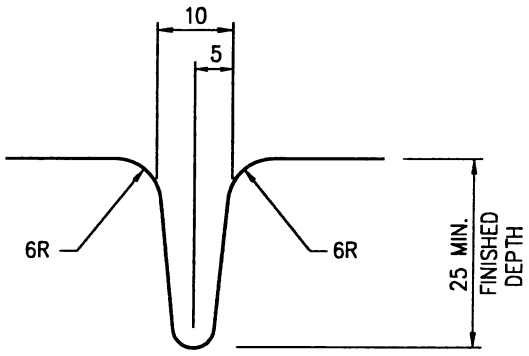
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:20 VERT.

PLAN NO. 102-0002-020r003



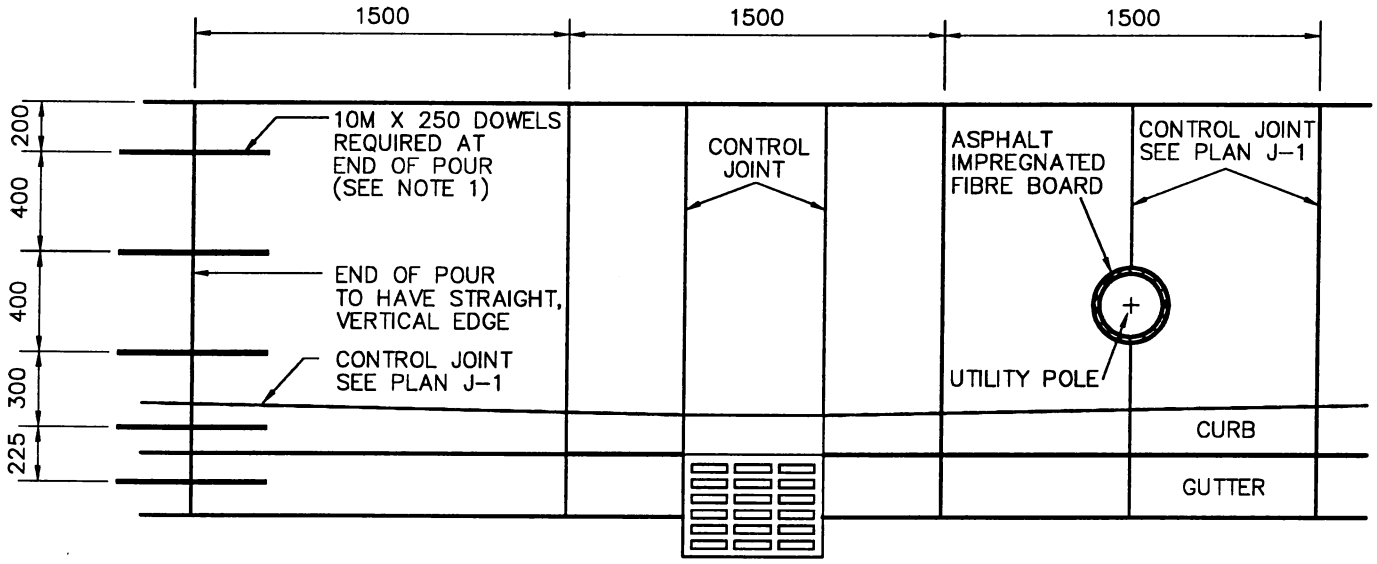
LONGITUDINAL CONTROL JOINT



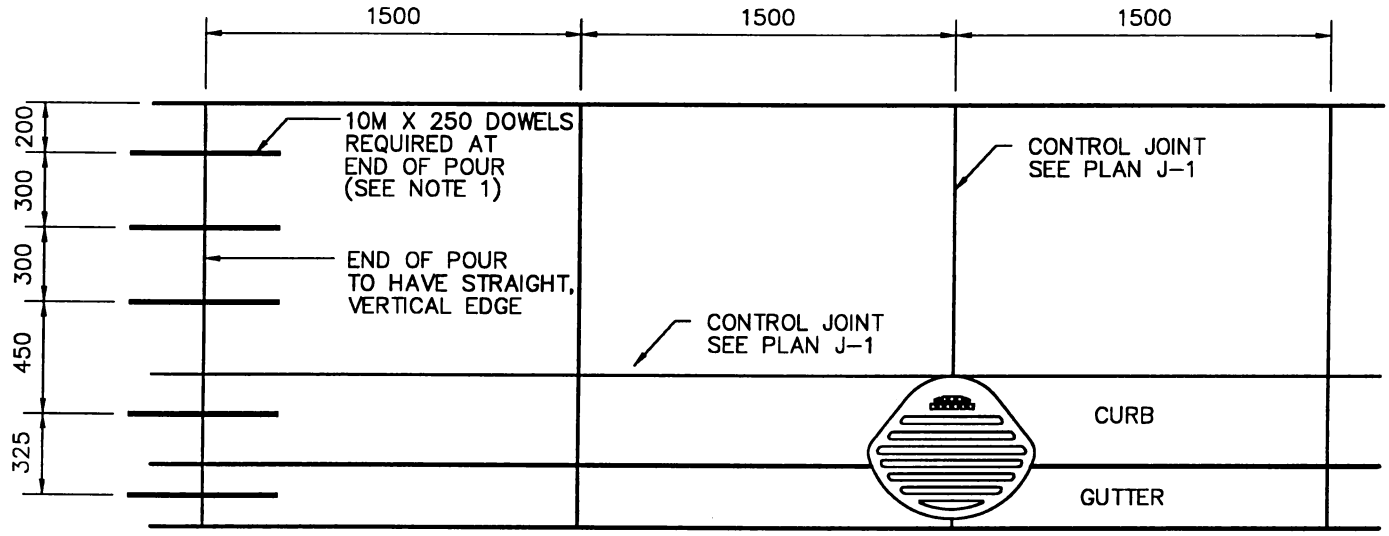
TRANSVERSE CONTROL JOINT

TRANSVERSE CONTROL JOINTS MUST EXTEND ACROSS WALK & CURB, DOWN THE FACE OF CURB, AND ACROSS GUTTER

REVISIONS		CITY OF SASKATOON INFRASTRUCTURE SERVICES	APPROVED GENERAL MANAGER P. ENG.
1			
2			ENGINEER
3			ENGINEER
DRAWN BY R. OTTENBREIT DATE FEBRUARY 1, 1999		CONTROL JOINTS	SCALES : HOR. 1:1 VERT.
CHECKED BY DATE		J-1	PLAN NO. 102-0002-021r001



VERTICAL CURB



ROLLED CURB

NOTES:

1. REBAR TO BE STAINLESS STEEL, EPOXY COATED, OR GALVANIZED. (EPOXY CAN NOT BE DRIVEN)

REVISIONS	
1	MOVED CURB CNTRL. JOINT
2	
3	

CITY OF SASKATOON
INFRASTRUCTURE SERVICES

APPROVED

GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER

DRAWN BY R. OTTENBREIT
DATE FEBRUARY 1, 1999

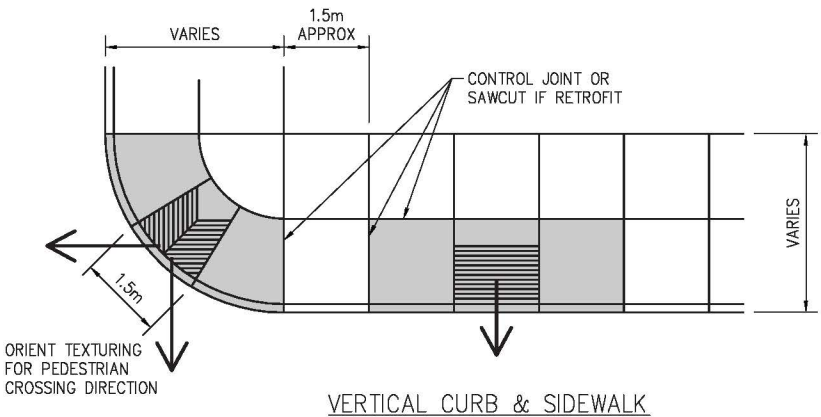
CHECKED BY
DATE

DOWEL/CONTROL JOINT LOCATION & SPACING

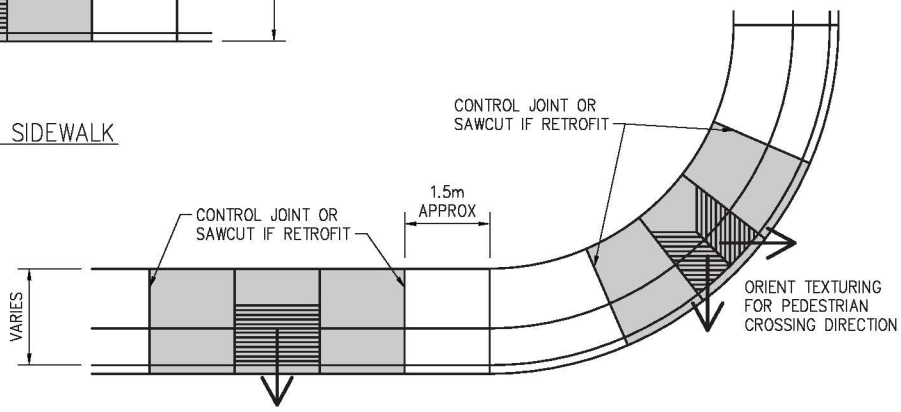
SCALES : HOR. 1:30 VERT.

J-2

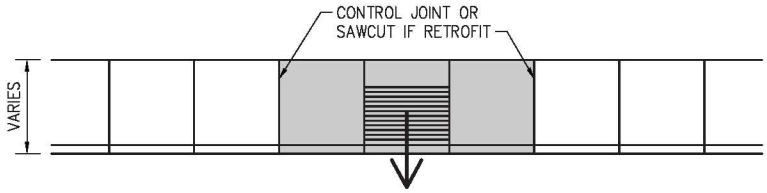
PLAN NO. 102-0002-022r001



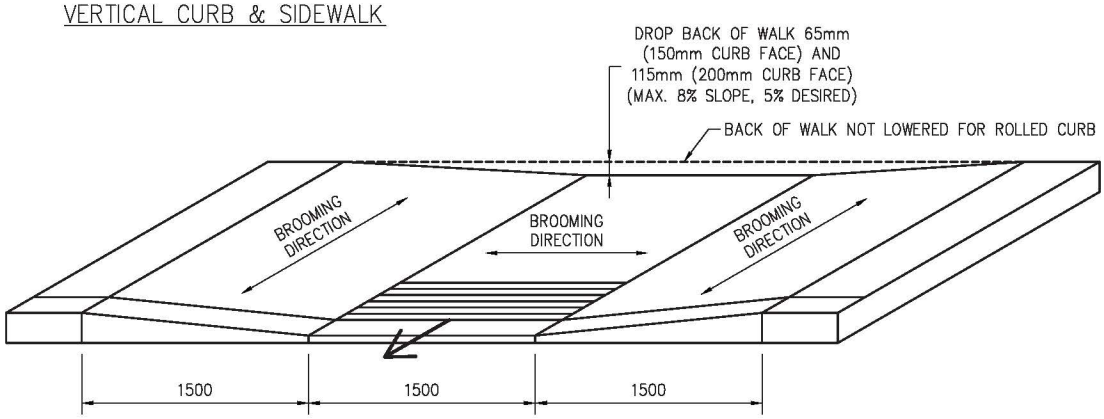
VERTICAL CURB & SIDEWALK



ROLLED CURB & SIDEWALK



VERTICAL CURB & SIDEWALK



TYPICAL FRONT VIEW

NOTES:

2. 1. PEDESTRIAN RAMP STANDARDS TO COMPLY WITH:
   –ACCESSIBILITY STANDARD, SASK. HUMAN RIGHTS COMMISSION, AUGUST 14, 1980
   –BUILDING STANDARDS FOR HANDICAPPED, CURRENT VERSION OF NATIONAL BUILDING CODE
2. SIDEWALK CONFIGURATIONS THAT DO NOT MATCH REQUIRE FIELD APPROVAL.
3. BROOM FINISH WALK, CURB FACE & GUTTER. BROOM OVER ALL CONTROL JOINTS.
4. BROOMING DIRECTION SHOULD BE PARALLEL TO THE CURB FOR THE PEDESTRIAN RAMPS AND PERPENDICULAR TO THE CURB FOR THE WINGS.

2 REFERENCE DRAWINGS:

- SEE 102–0002–026 FOR TEXTURE DETAILS REQUIRED ON ALL PEDESTRIAN RAMPS.
- SEE 102–0002–075 & 102–0002–076 FOR PEDESTRIAN RAMP PLACEMENT REQUIREMENTS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999–AUG–25	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ

City of Saskatoon

PEDESTRIAN RAMP DETAILS

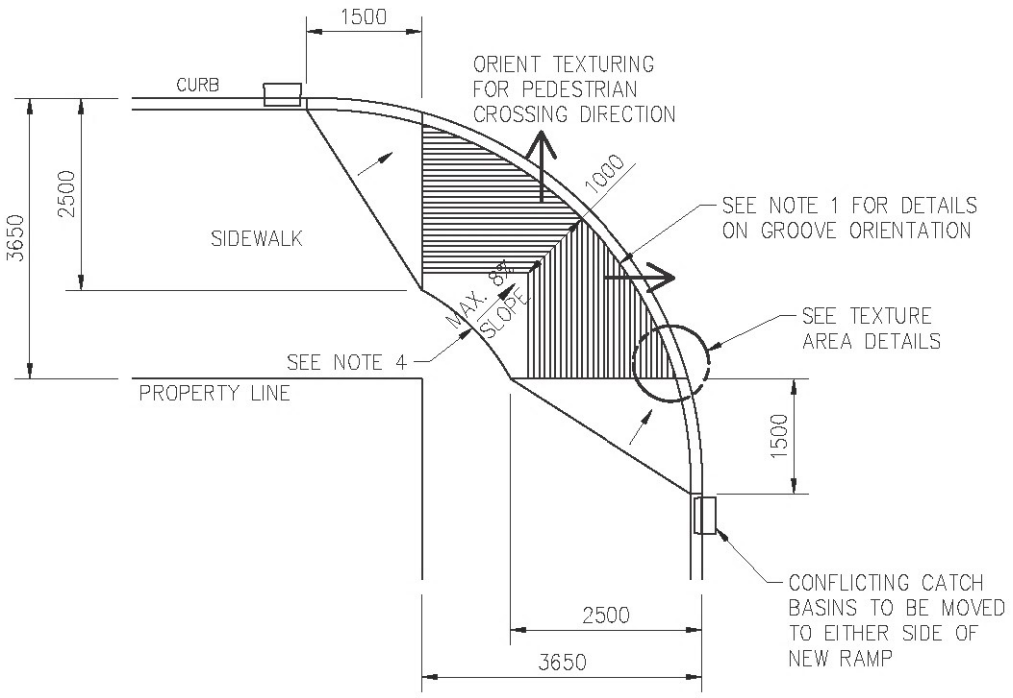
APPROVALS

Chelsea Lanning
Chelsea Lanning (Apr 22, 2020)
SIGNATURE
Chelsea Lanning
NAME
Apr 22, 2020
DATE SIGNED

SIGNATURE
Matt Jurkiewicz
NAME
Apr 30, 2020
DATE SIGNED

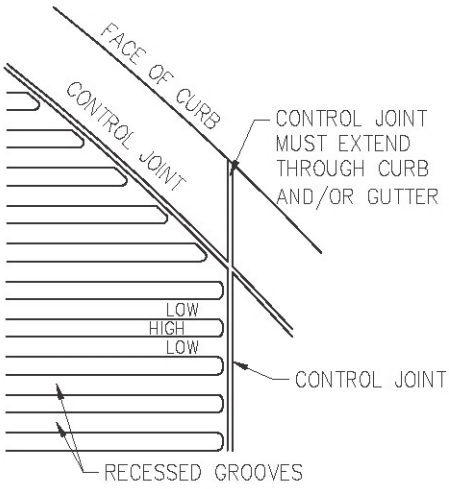
SCALES: HOR. N.T.S. VERT.

PLAN NO. 102–0002–023r002

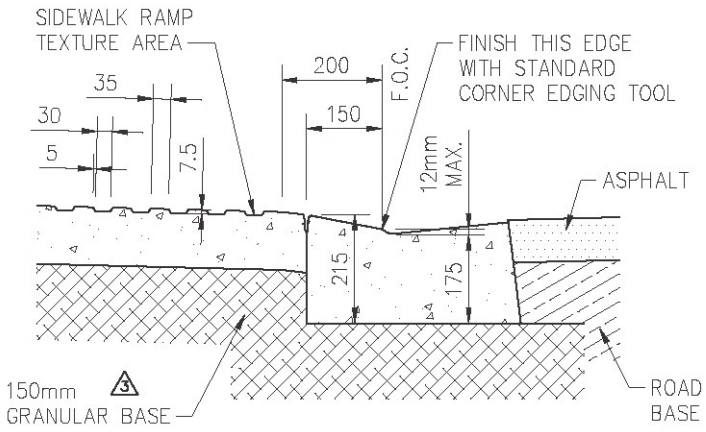


PEDESTRIAN RAMP

SCALE N.T.S.



PLAN VIEW



CROSS SECTION

TEXTURE DETAILS

SCALE 1:15

NOTES:

1. GROOVES ON TEXTURED AREA ARE TO BE PLACED PERPENDICULAR TO THE CROSSWALK LINES OR WHERE NO CROSSWALK EXISTS, PERPENDICULAR TO A LINE BETWEEN THE TWO PEDESTRIAN RAMPS.
2. CONTROL JOINT MUST INTERCEPT THE BOTTOM OF RECESSED GROOVES.
3. CONTROL JOINT MUST BE SLIGHTLY DEEPER THAN RECESSED GROOVES.
4. CROP BACK OF WALK AS PER DRAWING 102-0002-023.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-AUG-25	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-08	DLH

City of Saskatoon

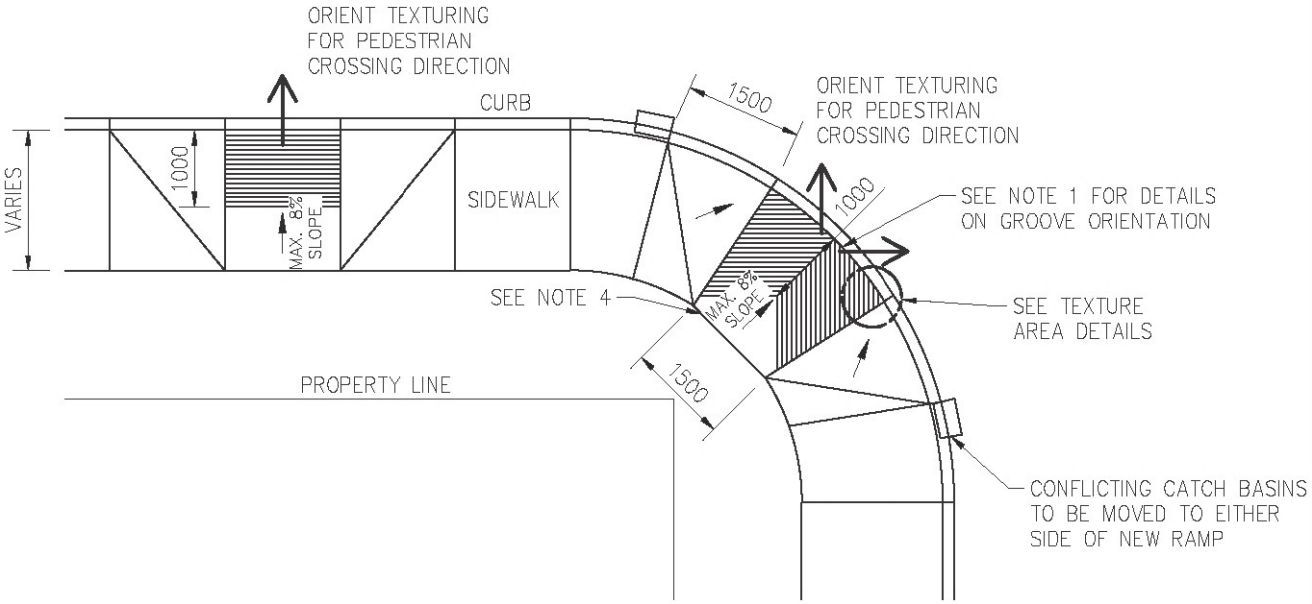
WIDE PEDESTRIAN RAMP
TEXTURE DETAILS

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

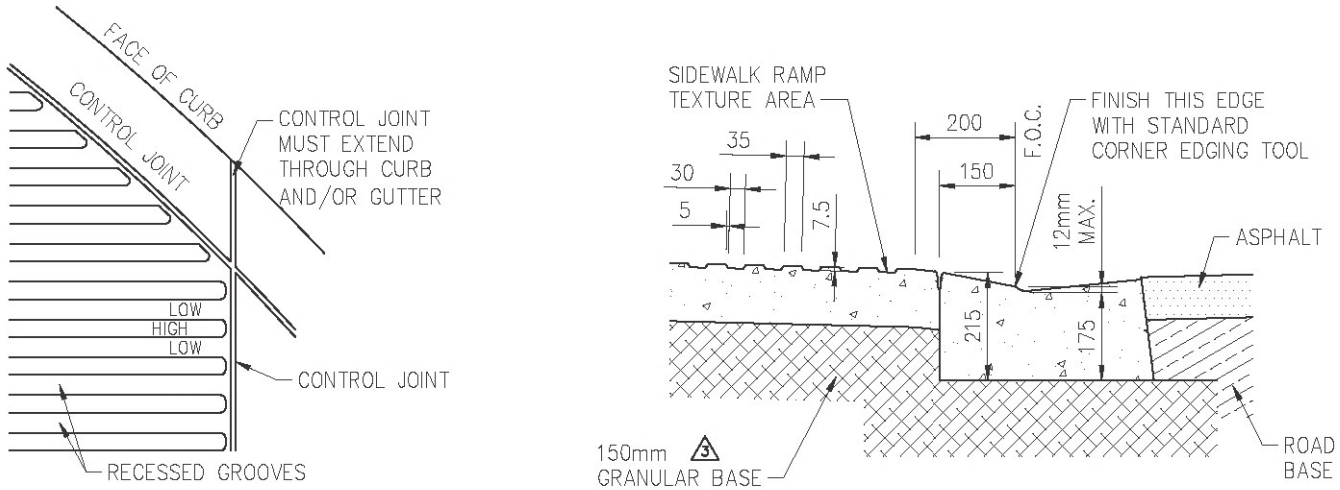
SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-025r003



PEDESTRIAN RAMP

SCALE N.T.S.



TEXTURE DETAILS

SCALE 1:15

NOTES:

1. GROOVES ON TEXTURED AREA ARE TO BE PLACED PERPENDICULAR TO THE CROSSWALK LINES OR WHERE NO CROSSWALK EXISTS, PERPENDICULAR TO A LINE BETWEEN THE TWO PEDESTRIAN RAMPS.
2. CONTROL JOINT MUST INTERCEPT THE BOTTOM OF RECESSED GROOVES.
3. CONTROL JOINT MUST BE SLIGHTLY DEEPER THAN RECESSED GROOVES.
4. DROP BACK OF WALK AS PER DRAWING 102-0002-023.
5. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-AUG-25	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-08	DLH

City of Saskatoon

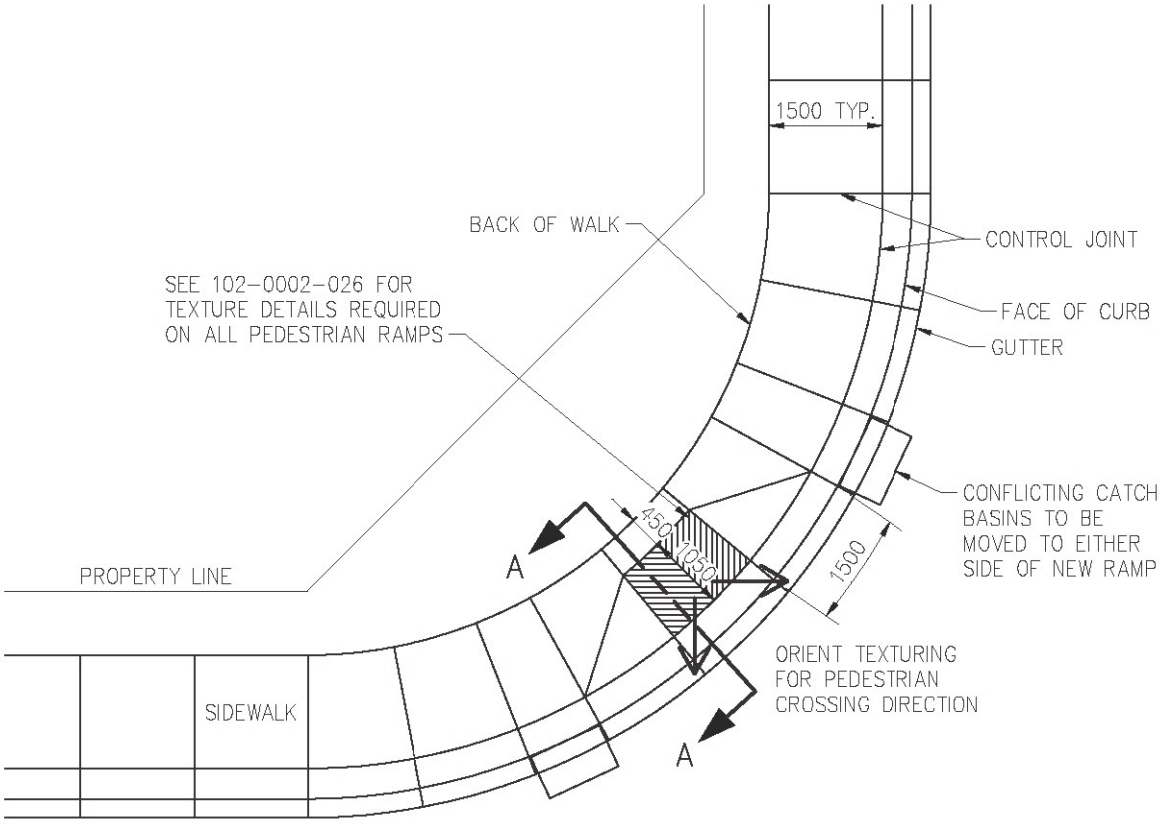
PEDESTRIAN RAMP
TEXTURE DETAILS

APPROVALS

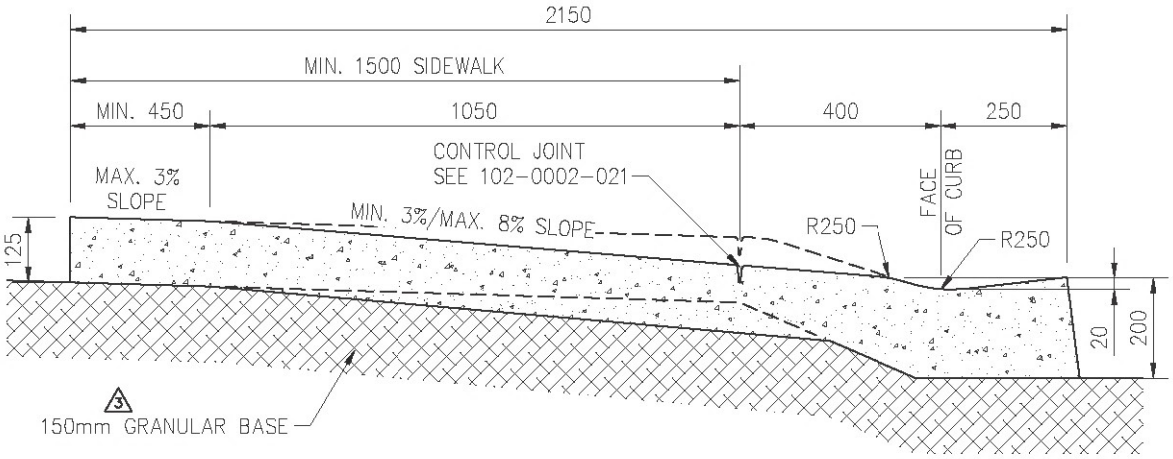
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-026r003



PEDESTRIAN RAMP
SCALE 1:100



SECTION A-A
SCALE 1:15

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK, CURB FACE & GUTTER.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m.
5. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-07	DLH

City of Saskatoon

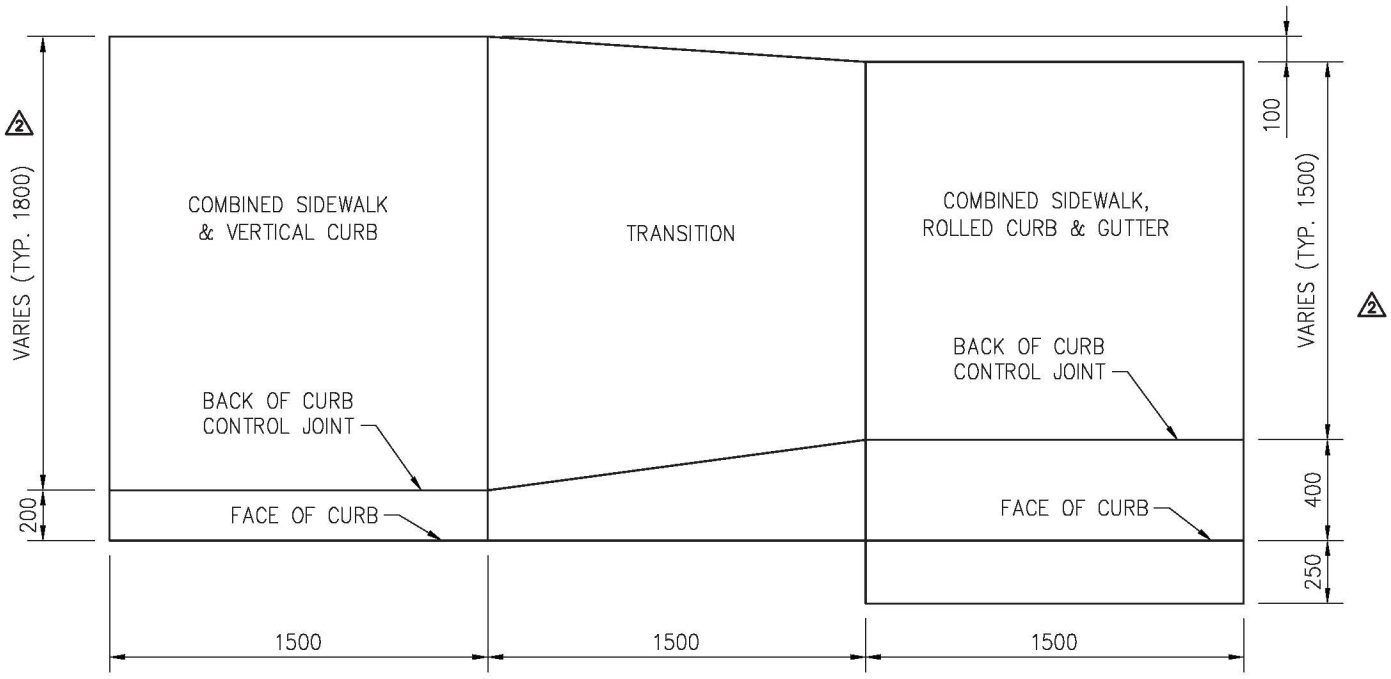
PEDESTRIAN RAMP
ROLLED CURB

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
J	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-027r003



NOTES:

1. IN TRANSITIONS, ALWAYS LINE UP FACE OF CURB.
2. GUTTER & BACK OF WALK TRANSITIONS TO OCCUR OVER ONE PANEL.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ

City of Saskatoon

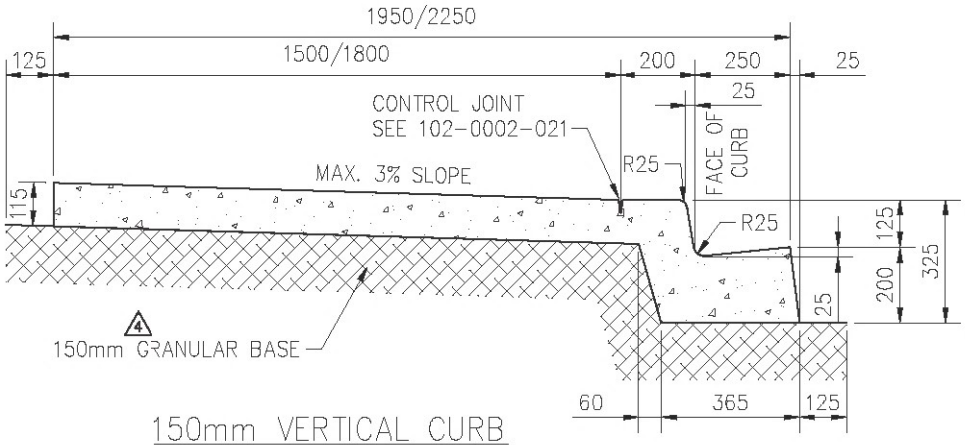
TYPICAL TRANSITION
COMBINED SIDEWALK & CURB

APPROVALS

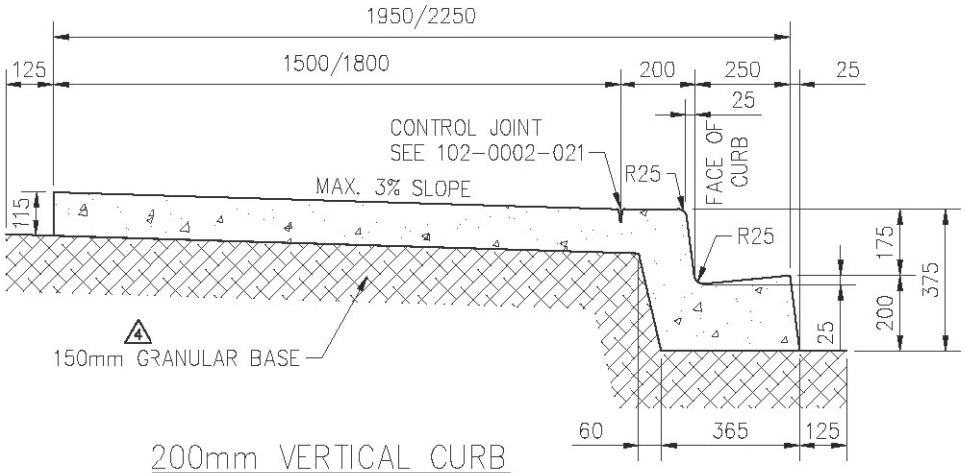
Chelsea Lanning (Apr 22, 2020)	
SIGNATURE	SIGNATURE
Chelsea Lanning	Matt Jurkiewicz
NAME	NAME
Apr 22, 2020	Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:30 VERT.

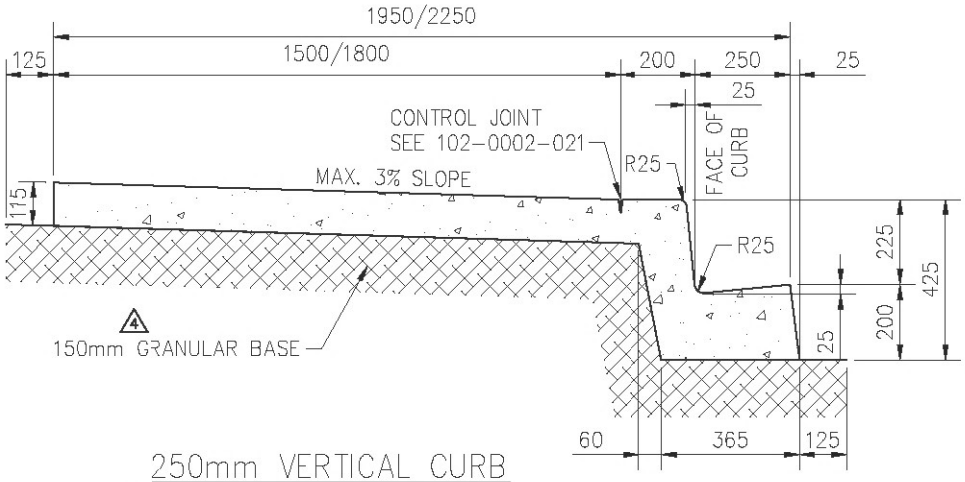
PLAN NO. 102-0002-028r002



150mm VERTICAL CURB



200mm VERTICAL CURB



250mm VERTICAL CURB

APPROVED FOR USE AT TRANSIT STOPS

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK, CURB FACE & GUTTER.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m
5. VERIFY SIDEWALK WIDTH ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.
   SIDEWALK WIDTH MAY VARY TO MATCH EXISTING FOR RETROFIT APPLICATIONS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	ADDED 250mm VERTICAL CURB	2020-JAN-31	PRZ
3	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
3	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
4	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-14	DLH

City of Saskatoon

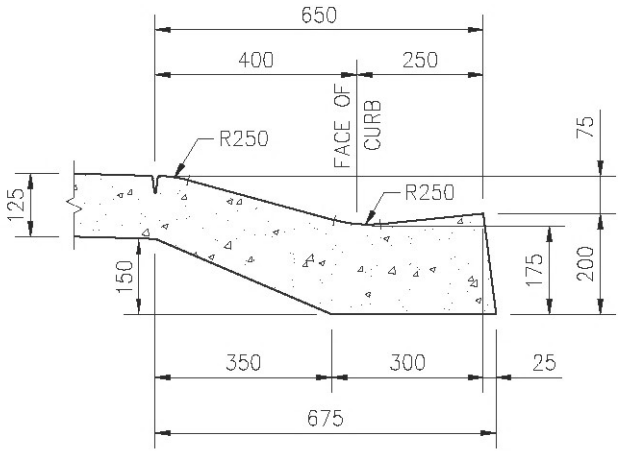
COMBINED SIDEWALK,
VERTICAL CURB & GUTTER

APPROVALS

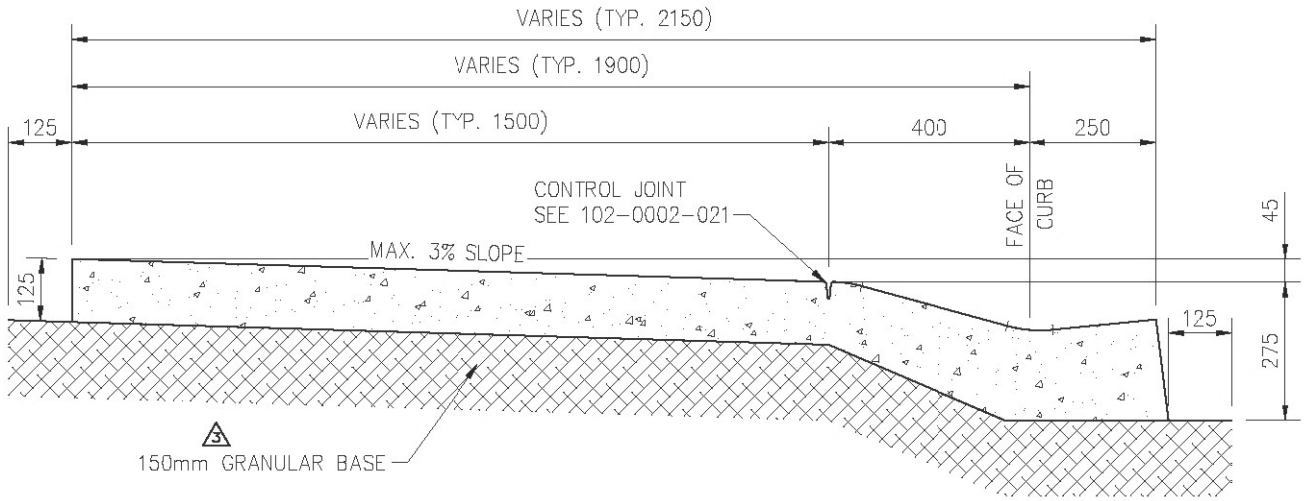
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:20 VERT.

PLAN NO. 102-0002-029r004



ROLLED CURB & GUTTER



NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB & GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m.
6. SIDEWALK WIDTH MAY VARY TO MATCH EXISTING FOR RETROFIT APPLICATIONS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-15	DLH

City of Saskatoon

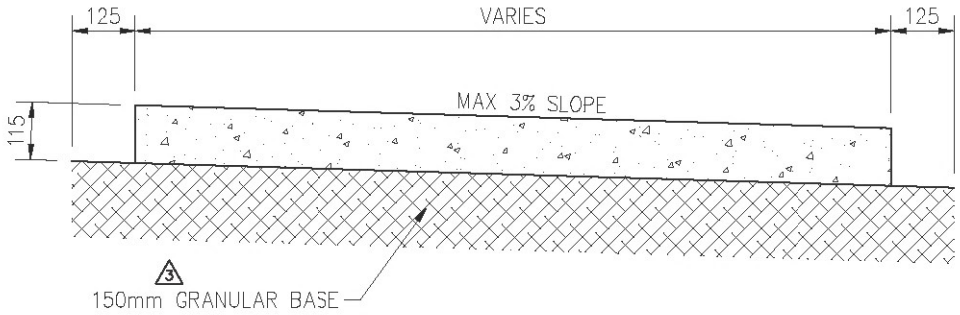
COMBINED SIDEWALK,
ROLLED CURB & GUTTER

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:15 VERT.

PLAN NO. 102-0002-030r003



NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH SIDEWALK.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m
6. SIDEWALK WIDTH VARIES ACCORDING TO ROAD CLASSIFICATION REQUIREMENTS OR TO MATCH EXISTING FOR RETROFIT APPLICATIONS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-15	DLH

City of Saskatoon

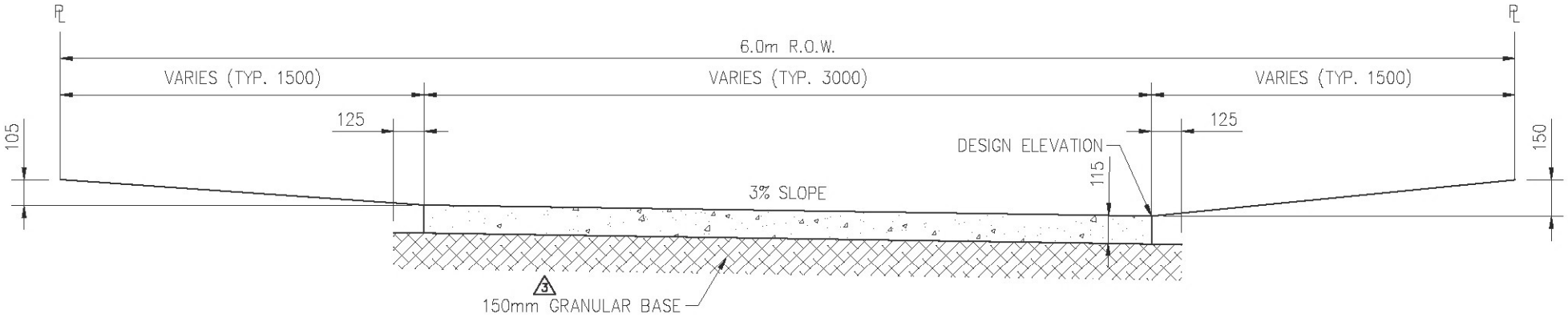
SEPERATE SIDEWALK

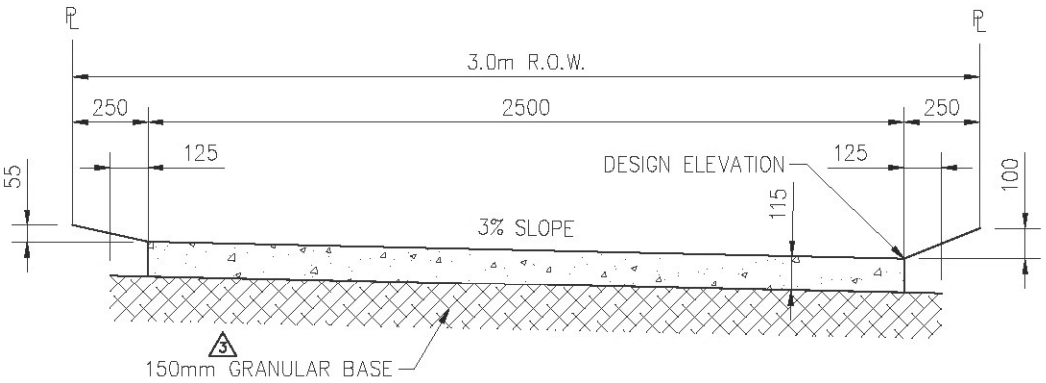
APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:15 VERT.

PLAN NO. 102-0002-031r003





NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK, CURB FACE & GUTTER.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m.
5. GUIDELINES FOR CONSTRUCTING WALKWAYS:
   - THE CONCRETE SLAB SHOULD BE 115mm THICK & 1.5m WIDE
   - THE WALKWAY SHOULD SLOPE THE SAME DIRECTION AS THE ADJACENT STREET GUTTER
6. EDGES OF WALKWAY R.O.W. ARE AT SAME ELEVATION.
7. ALTERNATE STRUCTURE MAY BE ASPHALT SURFACED, SEE PLAN 102-0002-055.
8. REMAINING R.O.W. - SEEDED TO GRASS OR COMPACTED CRUSHER DUST

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-15	DLH

City of Saskatoon

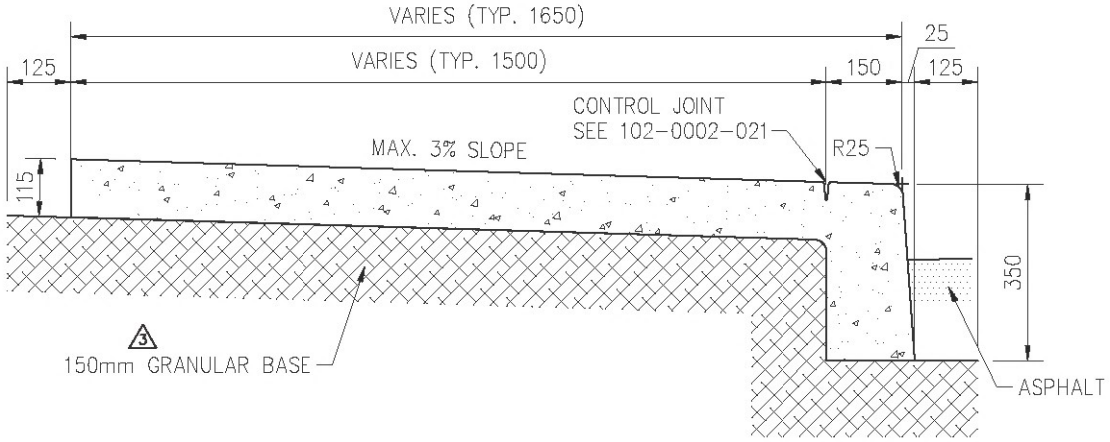
CONCRETE WALKWAY

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:25 VERT.

PLAN NO. 102-0002-032r003



150mm VERTICAL CURB

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK, CURB FACE & GUTTER.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m.
5. VERIFY SIDEWALK WIDTH ACCORDING TO STREET CLASSIFICATION REQUIREMENTS. SIDEWALK WIDTH MAY VARY TO MATCH EXISTING FOR RETROFIT APPLICATIONS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-15	DLH

City of Saskatoon

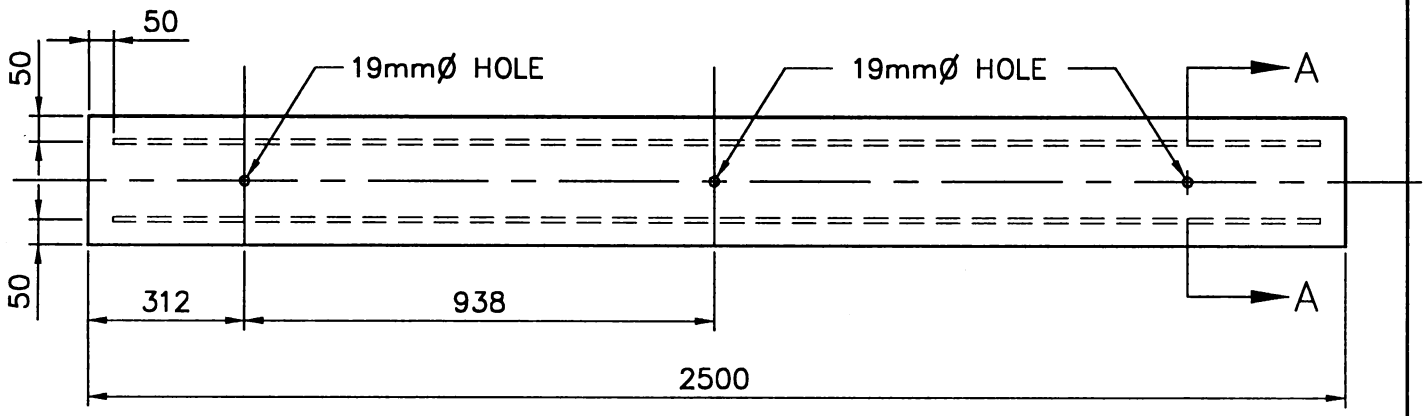
COMBINED SIDEWALK & VERTICAL CURB

APPROVALS

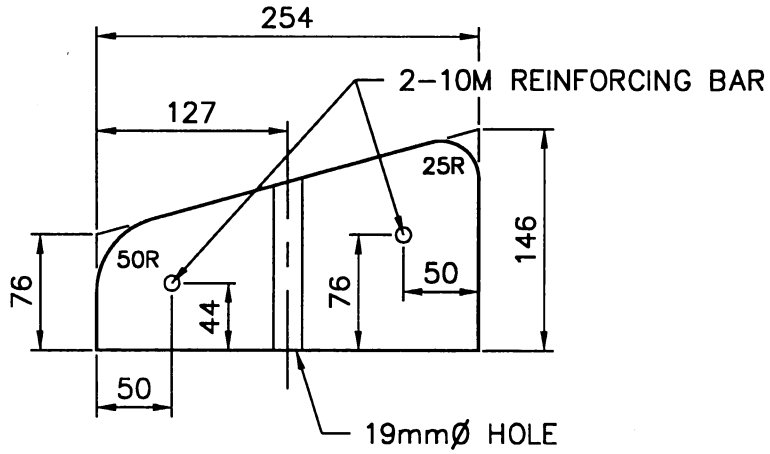
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:15 VERT.

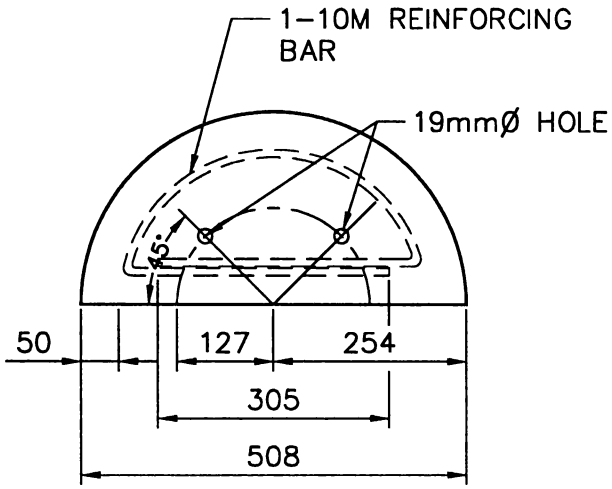
PLAN NO. 102-0002-033r003



PLAN OF CURB
SCALE 1:15



CURB SECTION A-A
SCALE 1:5



PLAN OF MEDIAN CURB END
SCALE 1:10

NOTE:

1. CURBS SHALL BE SECURED TO THE FOUNDATION WITH DRIFT PINS, PINS SHALL BE 16mmØ x 381mm. EACH PIN SHALL HAVE A SHARPENED POINT AND NO HEAD.
2. IF REQUIRED, RADII, LARGER THAN 254mm, WILL BE SPECIFIED.
3. DIMENSIONS ARE IN MILLIMETERES.
4. MINOR VARIATIONS IN DIMENSIONS MAY BE TOLERATED AT THE DISCRETION OF THE ENGINEER.

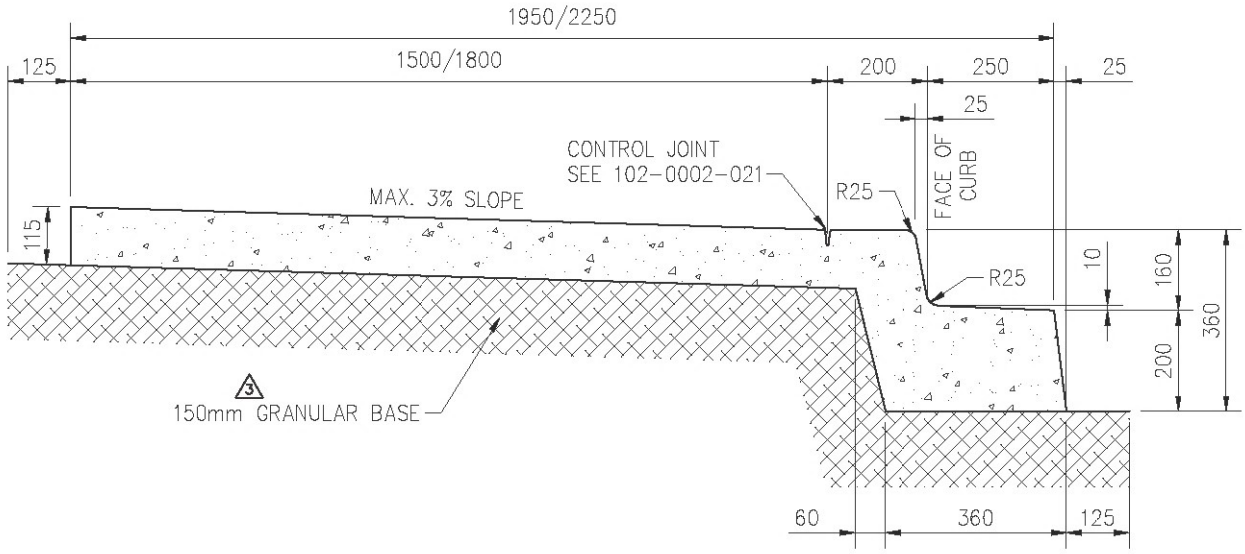
REVISIONS			
1			
2			
3			
DRAWN BY J. LEIER			
DATE 00-02-10			
CHECKED BY			
DATE			

City of Saskatoon
INFRASTRUCTURE SERVICES

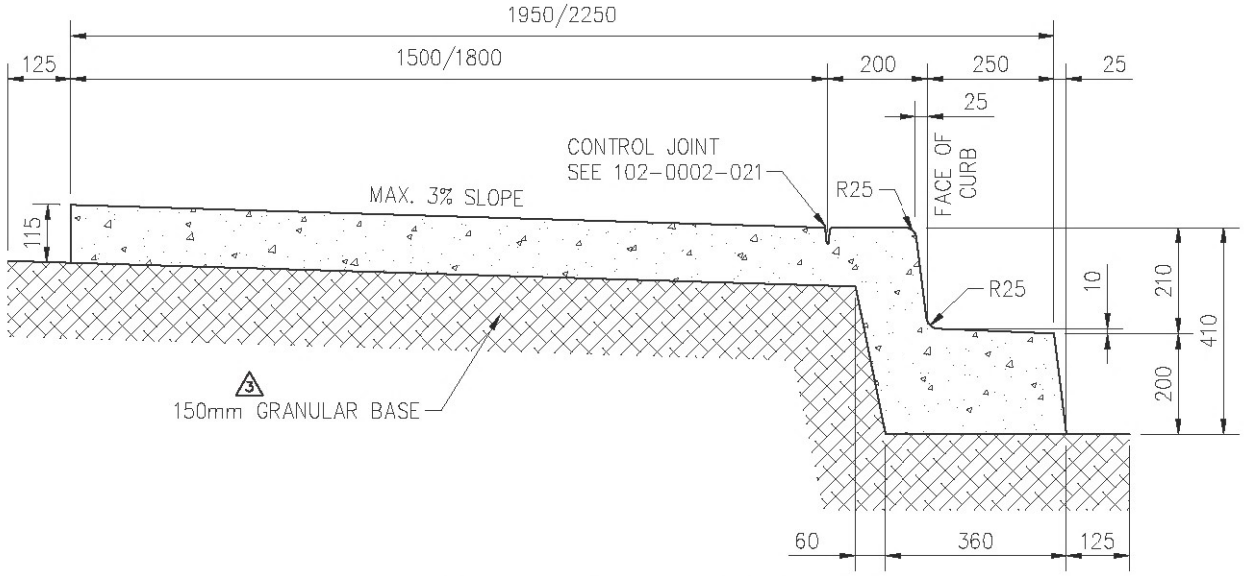
PRECAST CONCRETE CURB

MISC. 324

APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. AS NOTED VERT.
PLAN NO. 102-0002-035r001



150mm VERTICAL CURB



200mm VERTICAL CURB

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK, CURB FACE & GUTTER.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m.
5. VERIFY SIDEWALK WIDTH ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.
   SIDEWALK WIDTH MAY VARY TO MATCH EXISTING FOR RETROFIT APPLICATIONS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2000-JUL-10	RK
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-15	DLH

City of Saskatoon

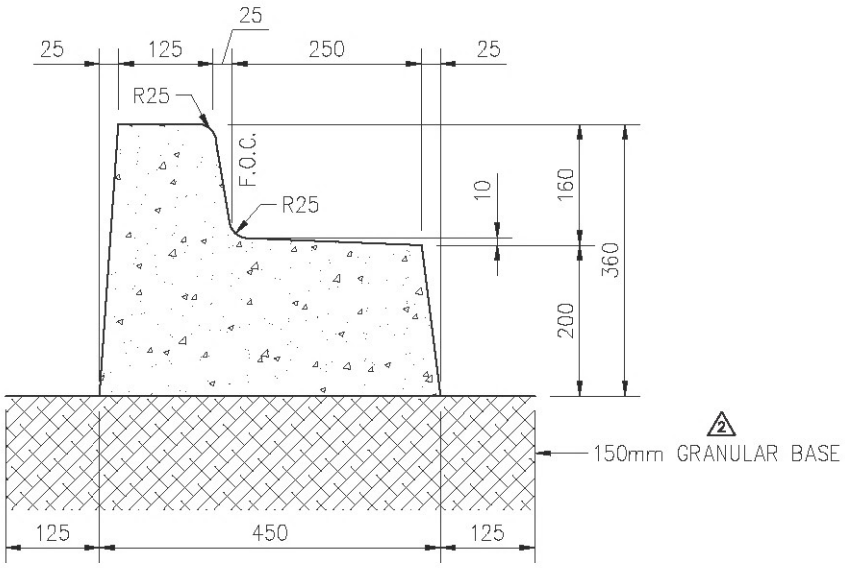
COMBINED SIDEWALK,
REVERSED VERTICAL CURB & GUTTER

APPROVALS

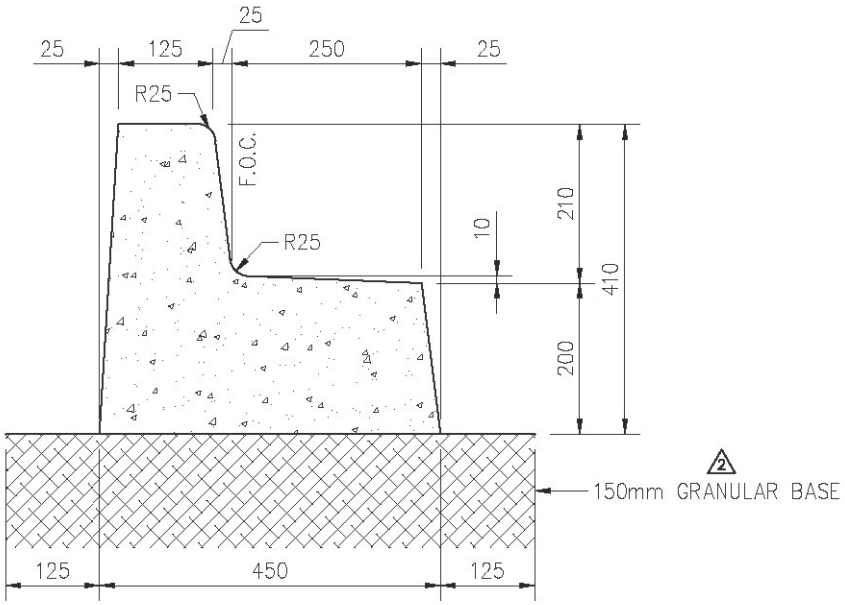
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:15 VERT.

PLAN NO. 102-0002-036r003



150mm VERTICAL CURB & GUTTER



200mm VERTICAL CURB & GUTTER

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH TOP & FACE OF CURB AND GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2000-AUG-10	RK
2	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-23	DLH

City of Saskatoon

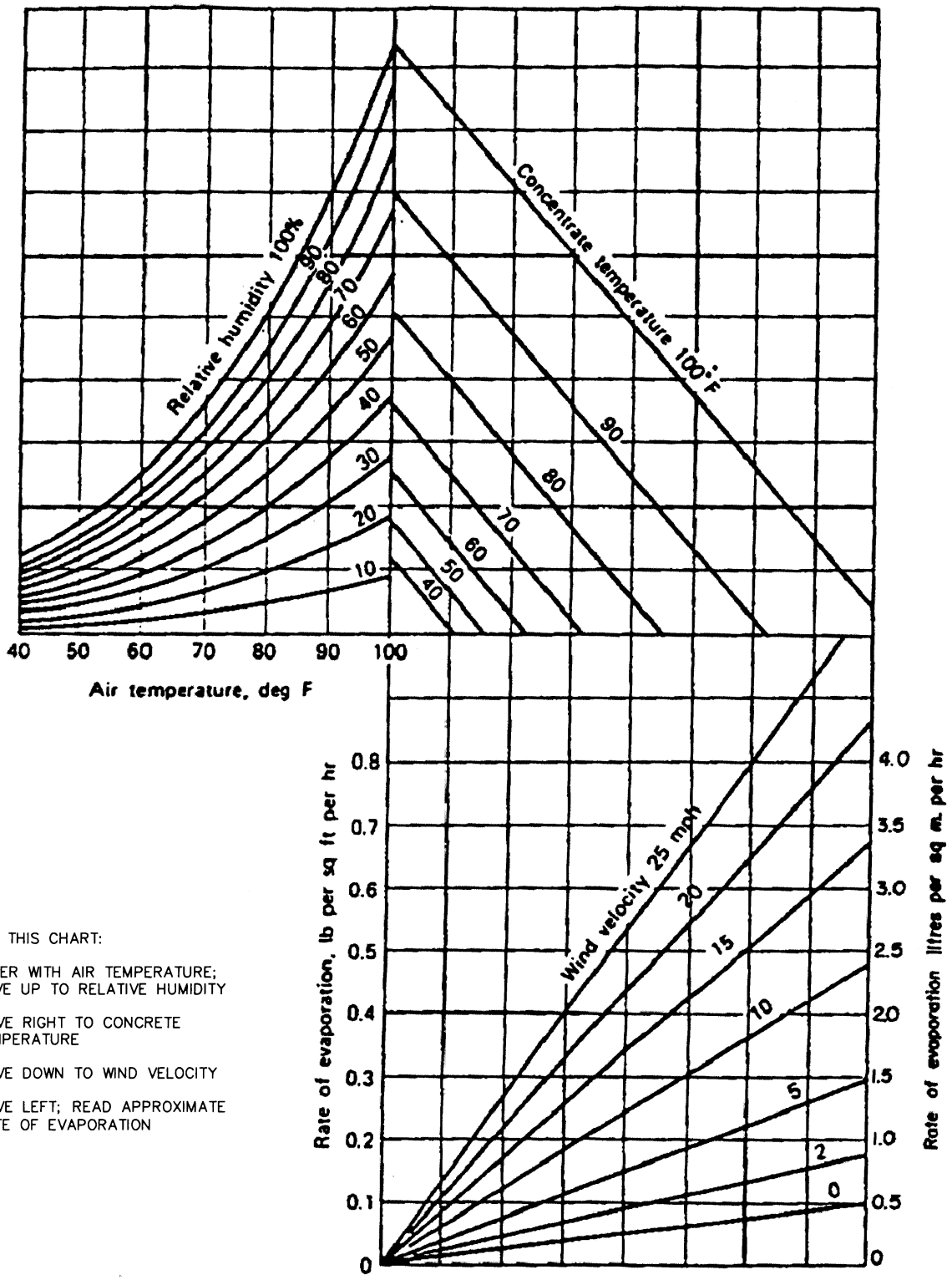
VERTICAL CURB AND REVERSED GUTTER

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:10 VERT.

PLAN NO. 102-0002-037r002



TO USE THIS CHART:

1. ENTER WITH AIR TEMPERATURE; MOVE UP TO RELATIVE HUMIDITY
2. MOVE RIGHT TO CONCRETE TEMPERATURE
3. MOVE DOWN TO WIND VELOCITY
4. MOVE LEFT; READ APPROXIMATE RATE OF EVAPORATION

REVISIONS	
1	
2	
3	

DRAWN BY R. OTTENBREIT
DATE 02-09-26

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

CONCRETE PLACEMENT
RATE OF MOISTURE LOSS CHART

APPROVED

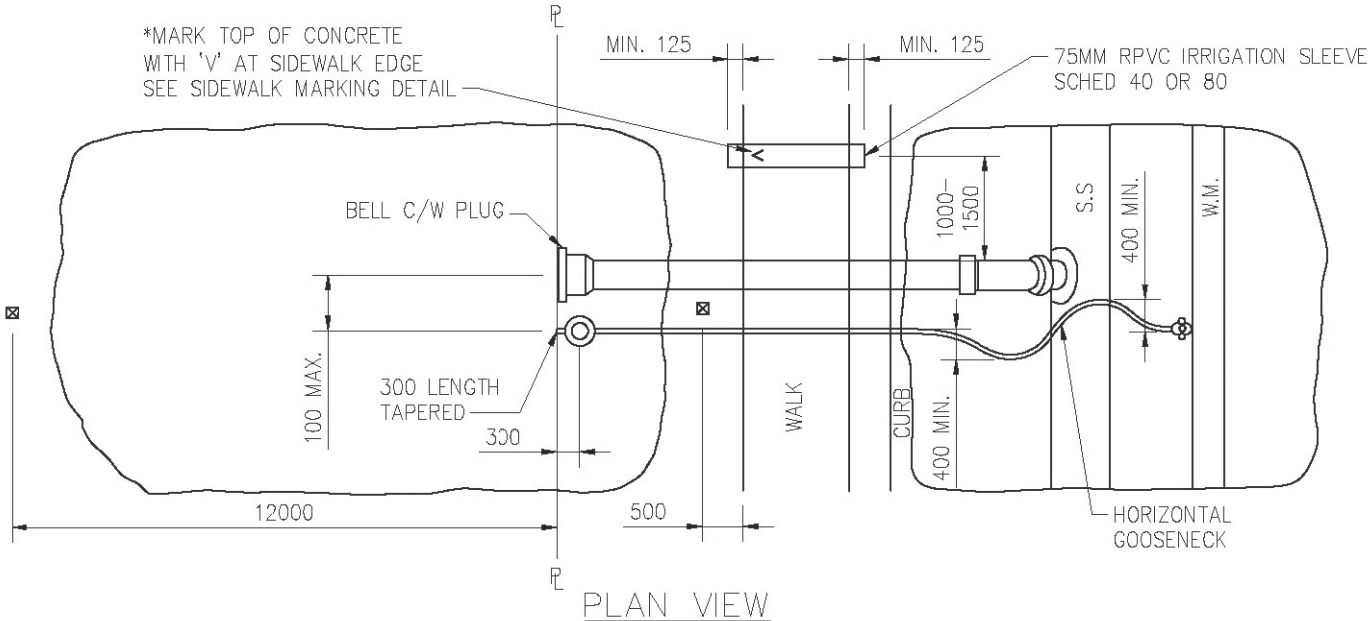
GENERAL MANAGER P. ENG.

ENGINEER A. Boyko

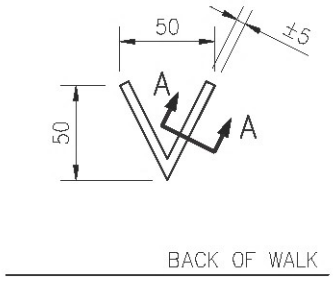
ENGINEER

SCALES : HOR. N/A

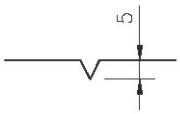
PLAN NO. 102-0002-038r001



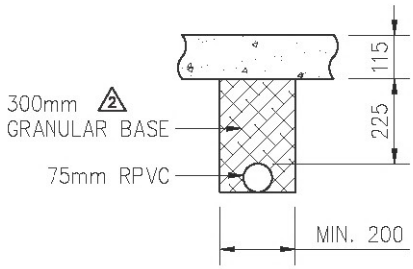
PLAN VIEW
N.T.S.



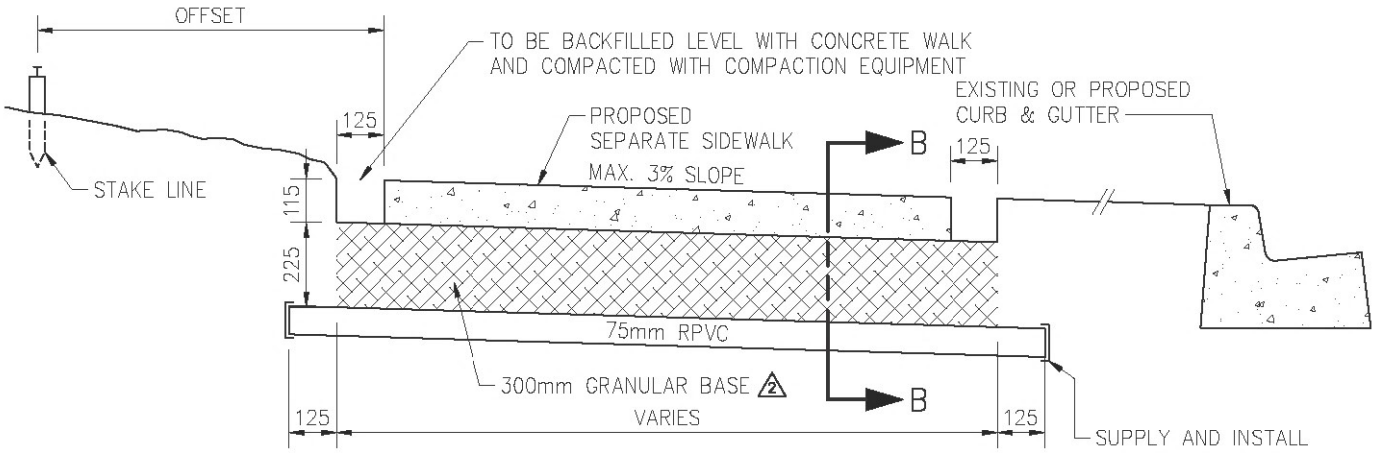
SIDEWALK MARKING DETAIL
N.T.S.



SECTION A–A
N.T.S.



SECTION B–B
SCALE 1:20



CROSS SECTION
SCALE 1:20

NOTES:

1. SLEEVE TO BE INSTALLED AHEAD OF SIDEWALK SUB-GRADE PREPARATION.
2. IRRIGATION SLEEVE REQUIRED AT EACH SERVICE CONNECTION OF EACH LOT WHERE SEPARATE SIDEWALK IS SHOWN.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2003-FEB-25	AY
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-SEP-24	DLH

City of Saskatoon

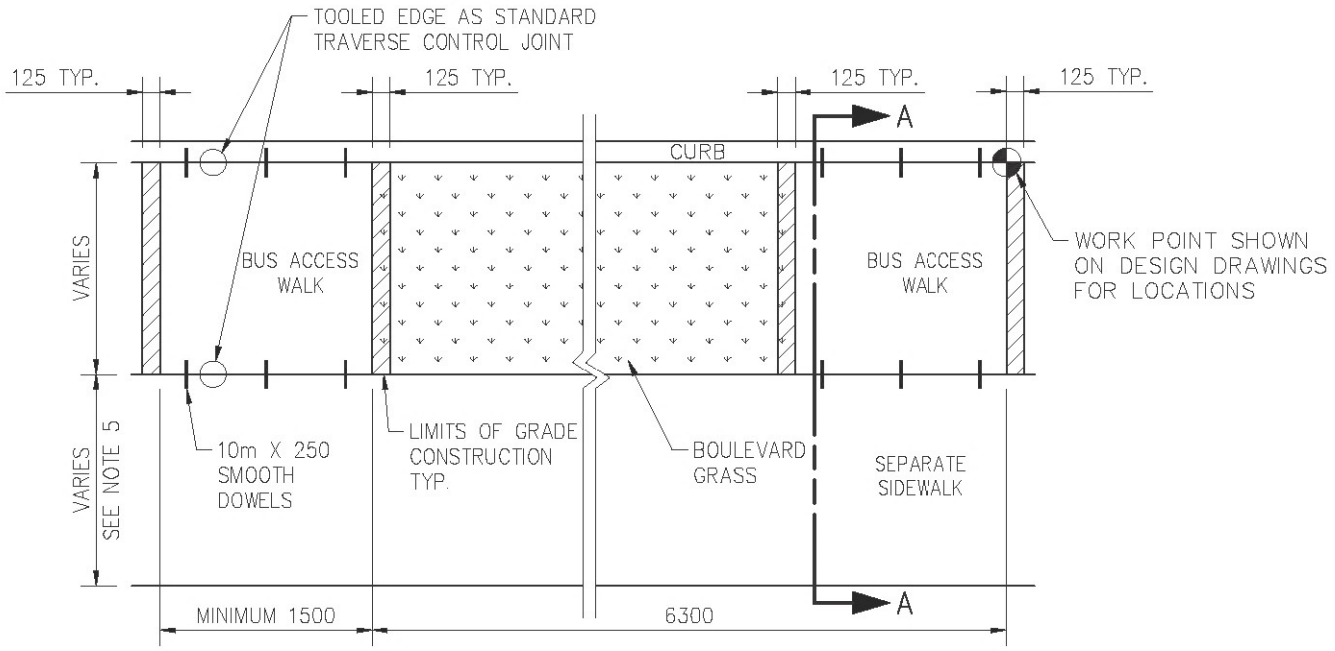
SEPARATE SIDEWALK
IRRIGATION SLEEVE

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

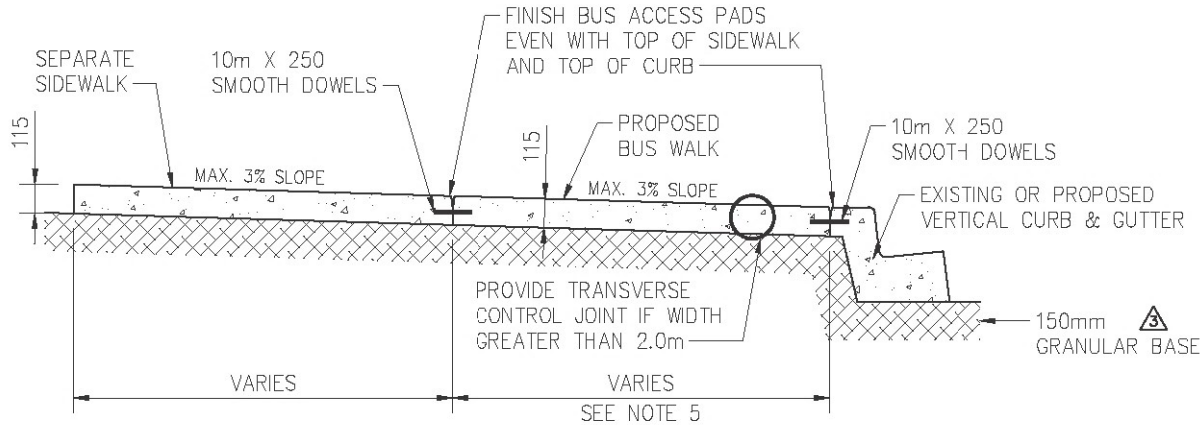
SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-039r003



PLAN VIEW

SCALE 1:75



SECTION A–A

SCALE 1:30

NOTES:

1. CONCRETE STANDARD:
   32MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. BROOM FINISH BUS WALK PARALLEL TO STREET.
3. LIMITS OF GRADE CONSTRUCTION TO BE BACKFILLED LEVEL WITH PAD AND COMPACTED WITH COMPACTION EQUIPMENT.
4. REBAR TO BE STAINLESS STEEL, EPOXY COATED, OR GALVANIZED (EPOXY CAN NOT BE DRIVEN).
5. VERIFY SIDEWALK WIDTH ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2003-FEB-25	AY
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-20	DLH

City of Saskatoon

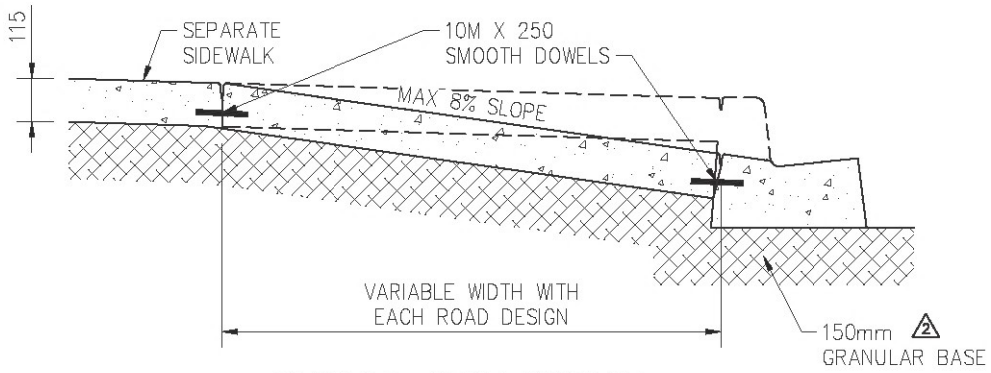
SEPARATE SIDEWALK
BUS STOP DETAIL

APPROVALS

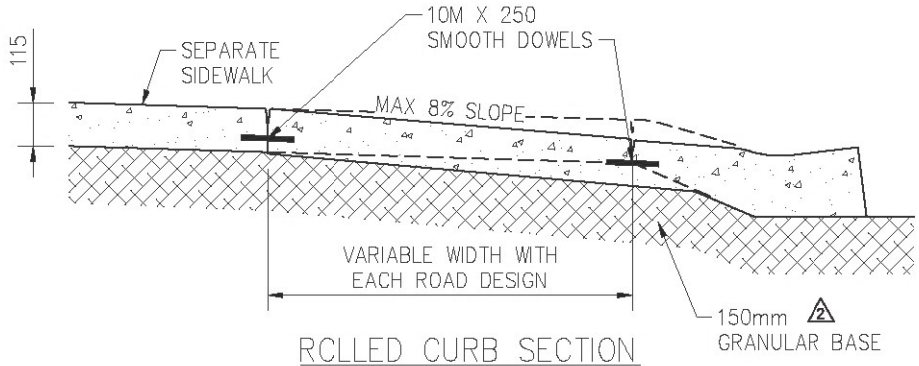
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT.

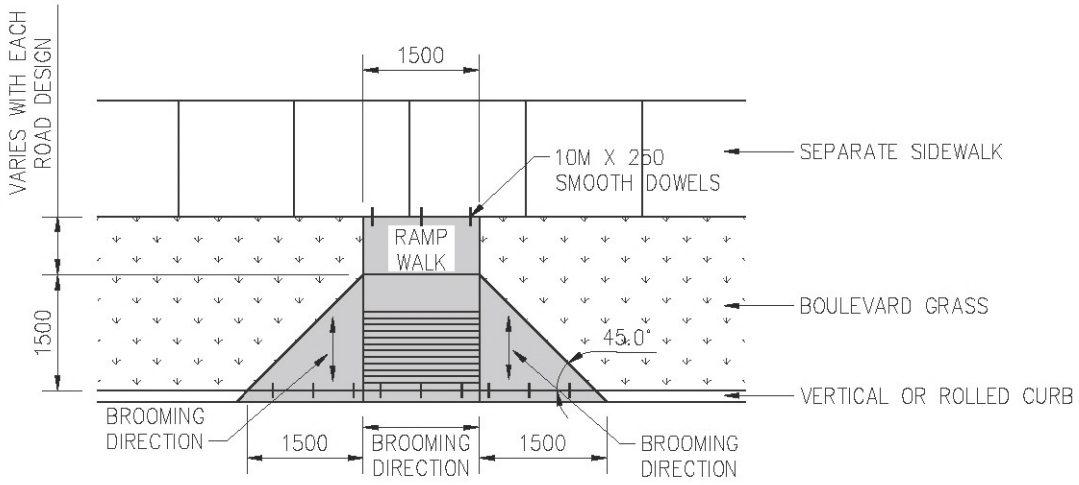
PLAN NO. 102-0002-040r003



VERTICAL CURB SECTION



RCLLED CURB SECTION



CURB & SIDEWALK PLAN VIEW

NOTES:

1. REBAR TO BE STAINLESS STEEL, EPOXY COATED, OR GALVANIZED. (EPOXY CAN NOT BE DRIVEN).

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2003-FEB-27	AY
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-05	DLH

City of Saskatoon

PERPENDICULAR SEPARATE PEDESTRIAN RAMP DETAILS

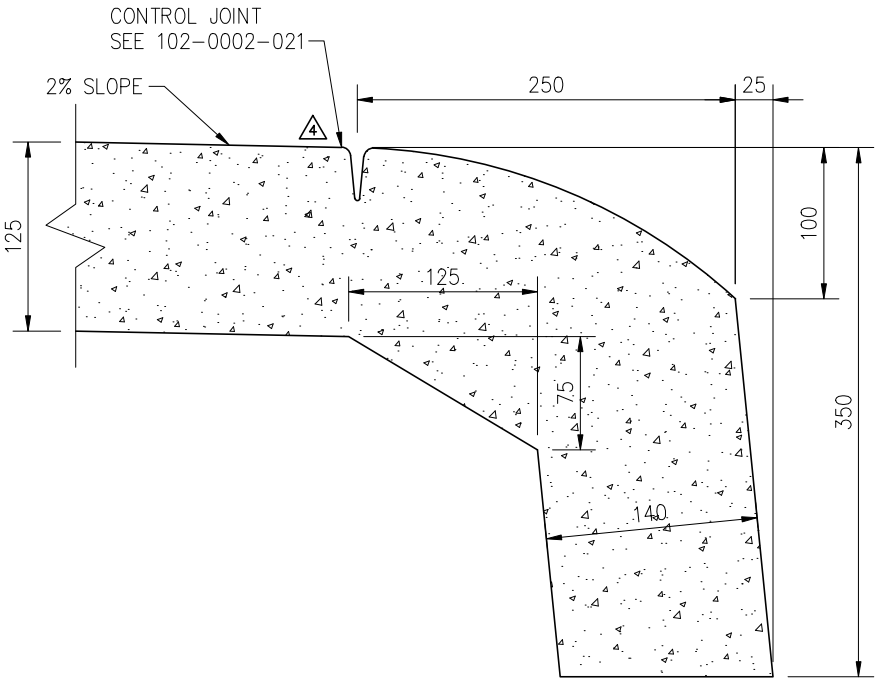
APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:20 VERT.

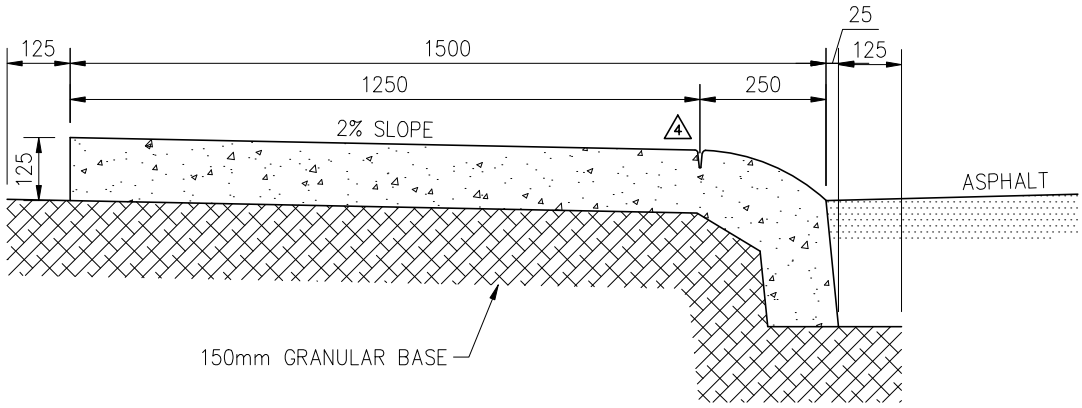
PLAN NO. 102-0002-041r003

ROLLED CURB AND SIDEWALK
1978 STYLE
EXCLUSIVELY FOR REPLACEMENTS



ROLLED CURB DETAIL

SCALE 1:5



NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK AND CURB.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1978-MAY-30	P.F.
2	UPDATED DRAWING TO AUTOCAD	2015-NOV-26	HLO
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-06	DLH
4	ADDED CONTROL JOINT	2021-FEB-03	AR

City of Saskatoon

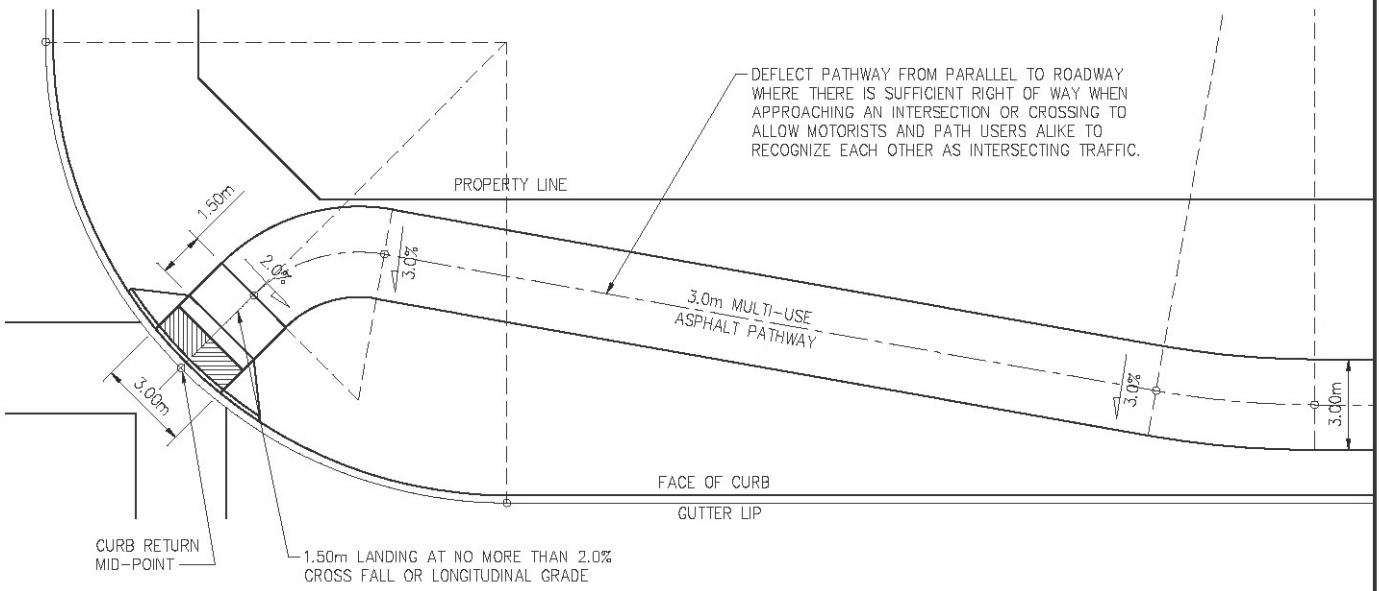
ROLLED CURB & SIDEWALK
1978 STYLE
FOR REPLACEMENT PURPOSES ONLY

APPROVALS

Andy McMeekin (May 3, 2021 11:04 MDT)	
SIGNATURE	SIGNATURE
Andy McMeekin	Maciej Jurkiewicz
NAME	NAME
May 3, 2021	May 3, 2021
DATE SIGNED	DATE SIGNED

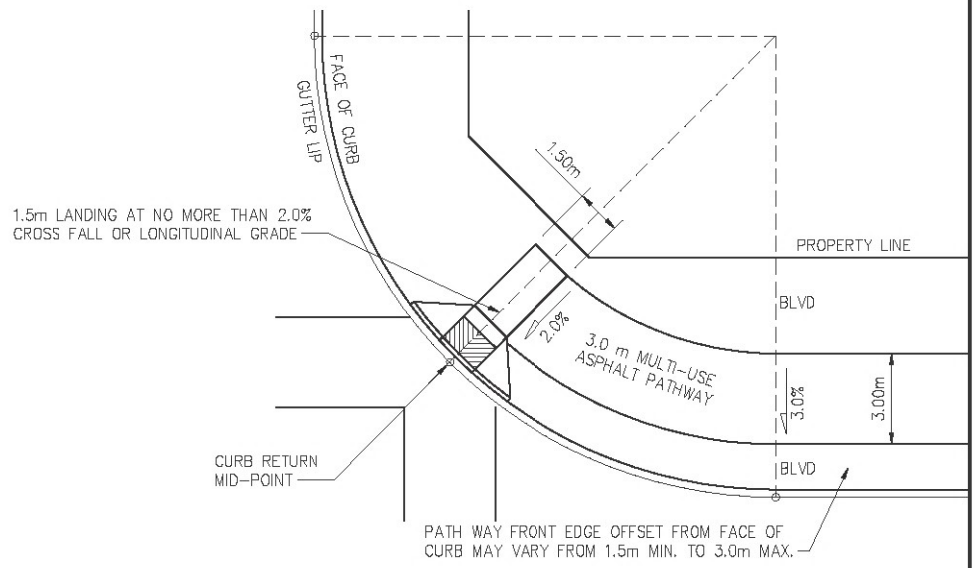
SCALES: HOR. 1:15 VERT.

PLAN NO. 102-0002-042r004



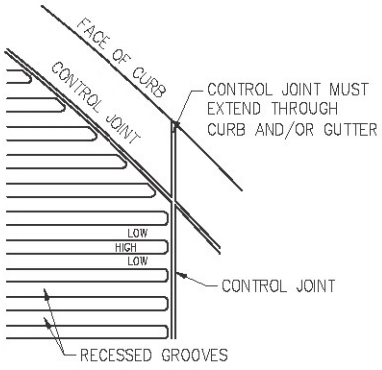
MULTI-USE PATHWAY RAMP CONFIGURATIONS

SCALE 1:250

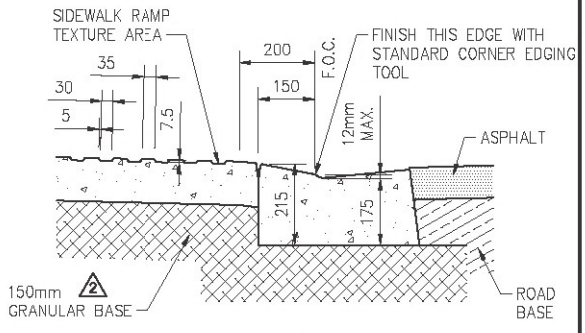


NOTES:

1. GROOVES ON TEXTURED AREA ARE TO BE PLACED PERPENDICULAR TO THE CROSSWALK LINES OR WHERE NO CROSSWALK EXISTS, PERPENDICULAR TO A LINE BETWEEN THE TWO RAMPS.
2. CONTROL JOINT MUST INTERCEPT THE BOTTOM OF RECESSED GROOVES.
3. CONTROL JOINT MUST BE SLIGHTLY DEEPER THAN RECESSED GROOVES.
4. DROP BACK OF WALK AS PER DRAWING 102-0002-023.



PLAN VIEW



CROSS SECTION

TEXTURE DETAILS

SCALE 1:15

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2010-JAN-18	LCI
2	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-08	DLH

City of Saskatoon

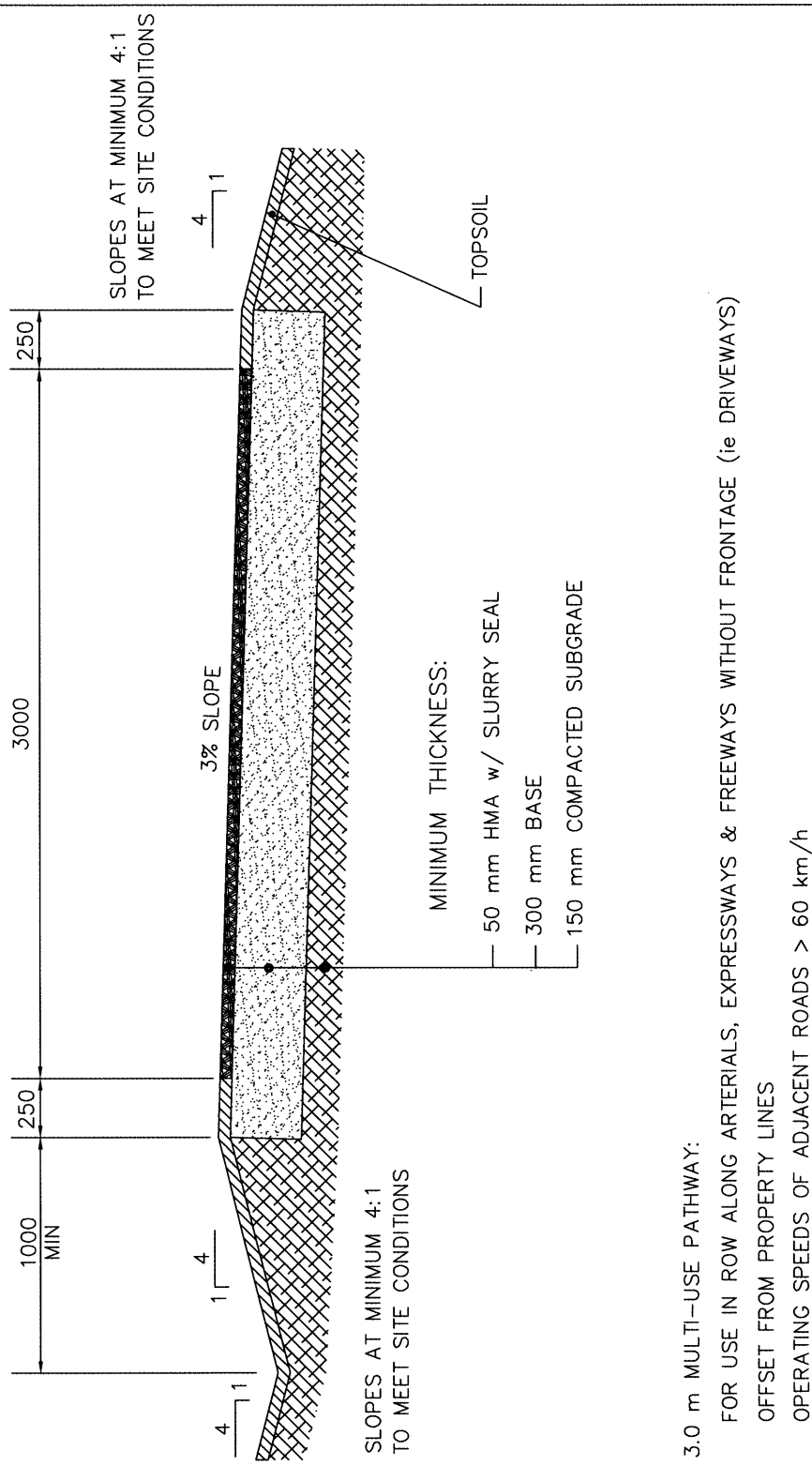
3.0m MULTI-USE PATHWAY RAMP CONFIGURATIONS

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-052r002



BASED ON ASPHALT PATHWAY
102-0002-034

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	INCREASED BASE FROM 100mm to 300mm 2016-JAN-06 HLO
1	ADDED NOTE STATING MINIMUM THICKNESS 2014-DEC-15 HLO

DRAWN BY LCI
DATE 2011-JUL-11
SCALE : HOR. 1:30 VERT. _____

City of Saskatoon
Infrastructure Services Department

3000 MULTI-USE PATHWAY
ASPHALT

CHIEF ENGINEER
JAN 08 2016
DATE

ENGINEER
JAN 08 2016
DATE

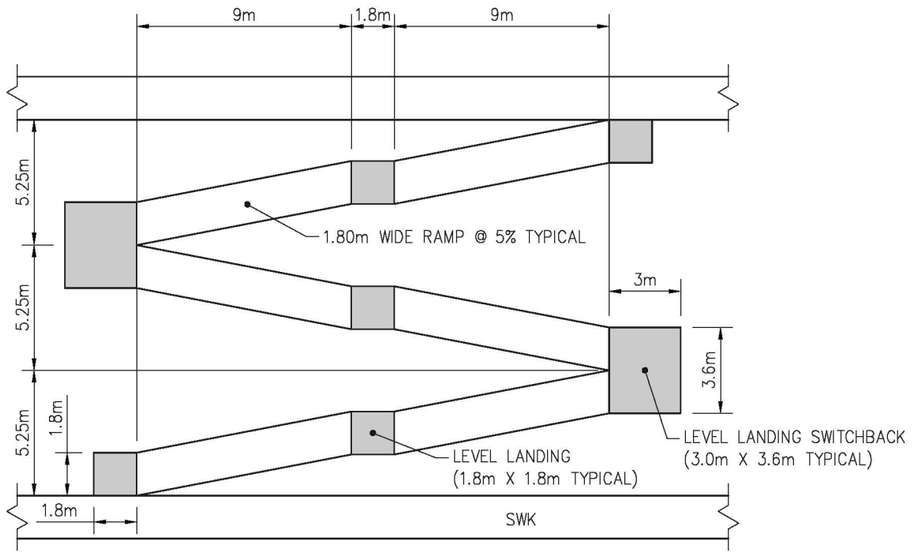
PLAN NO. 102-0002-055r003

SIDEWALK RAMP GRADE CRITERIA *	
ADJACENT TO PUBLIC ROW	
MAXIMUM SIDEWALK GRADE ADJACENT TO ROADWAY	NO LIMIT IF IT FOLLOWS THE GRADE OF THE STREET
MAXIMUM CROSS SLOPE	2%
NOT ADJACENT TO PUBLIC ROW	
MAXIMUM SIDEWALK RAMP GRADE WITHOUT RAILINGS	5% (1V:20H)
MAXIMUM RAMP GRADE WITH HANDRAILS AND LANDINGS	8.3% (1V:12H)

* PED FACILITIES (AASHTO) EXHIBIT 3–11 PG 63

EXAMPLE SHOWN: ③

- 3.5:1 ROADWAY SIDE SLOPE
- 1.8m X 1.8m LEVEL LANDINGS / 3.0m X 3.6m AT SWITCHBACKS
- 9.0m HORIZONTAL RUNS PER 0.75m ELEVATION RISE (1V:12H)
- DOES NOT EXTEND TOE OF SLOPE
- BALANCE OF CUT AND FILL



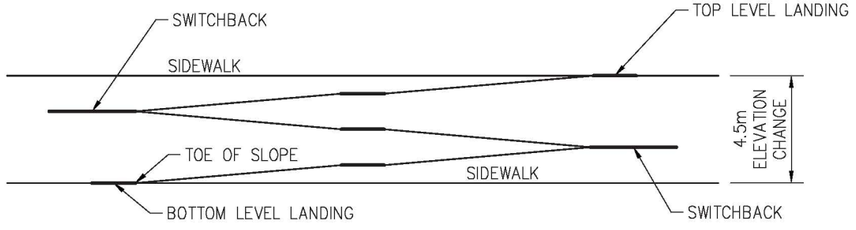
PLAN VIEW ③

REFERENCES:

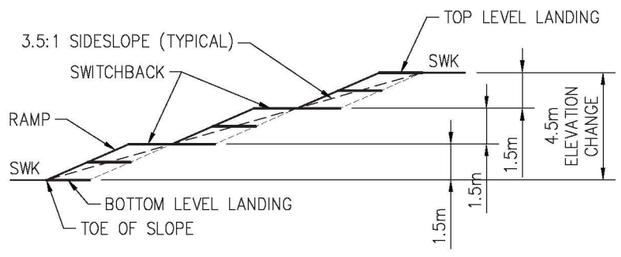
- GUIDE FOR THE PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES (AASHTO)
- AMERICANS WITH DISABILITIES ACT (ADA)
- STANDARDS FOR ACCESSIBLE DESIGN CAN/CSA–B651–12 ③

NOTES: ③

1. A WALKWAY WITH A SLOPE GENTLER THAN 5% (1:20) IS NOT CONSIDERED A RAMP AND MAY BE ANY LENGTH (CSA–B651–12).
2. RAMPS SHALL HAVE LEVEL LANDINGS AT THE TOP & BOTTOM OF EACH RUN AND ALSO WHERE THE RAMP CHANGES (CSA–B651–12 4.3.4.1) DIRECTION.
3. RAMP SLOPE SHALL NOT BE STEEPER THAN 8.3% (1V:12H) AND MAX HORIZ. LENGTH BETWEEN LANDINGS SHALL NOT EXCEED 9.0m (CSA–B651–12 4.3.1).
4. MAXIMUM CROSS SLOPE SHALL BE 2% (CSA–B651–12).
5. HANDRAIL REQUIREMENTS SEE NBCC–2010.



FRONT ELEVATION VIEW ③



END ELEVATION VIEW ③

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2013–OCT–09	LCI
2	UPDATED PLAN VIEW LENGTH	2017–JAN–26	
3	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
3	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ

City of Saskatoon

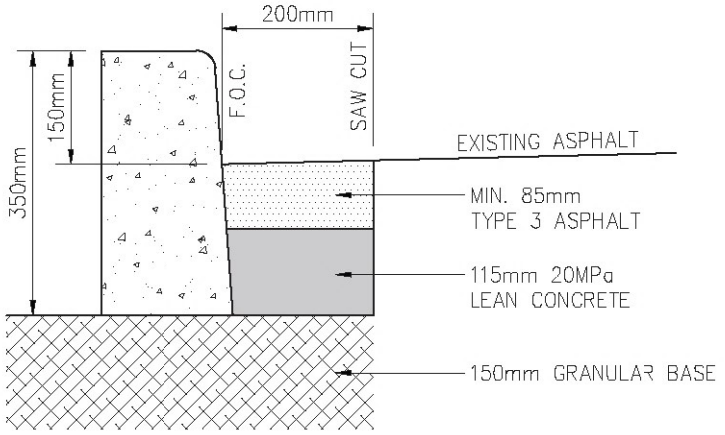
ROADWAY SIDESLOPE RAMP
PEDESTRIAN ACCESS ROUTE
WHEELCHAIR ACCESSIBLE

APPROVALS

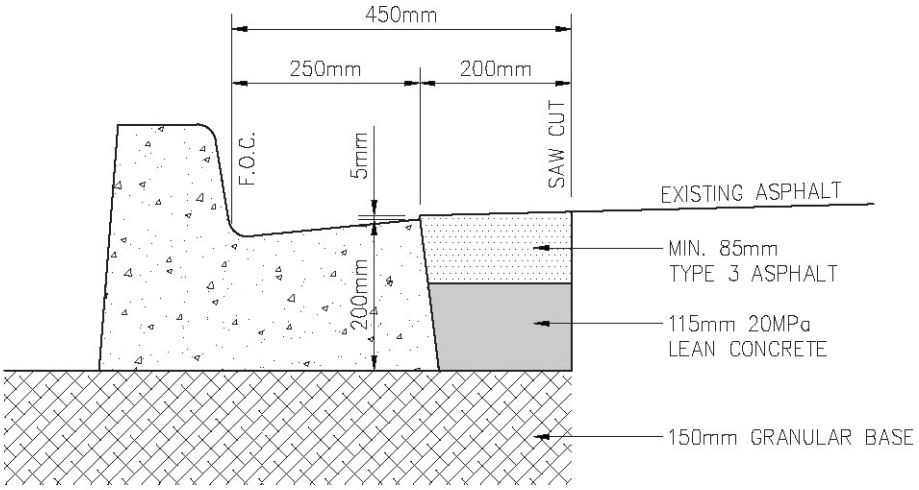
Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:250 VERT.

PLAN NO. 102–0002–057r003



CURB



CURB & GUTTER

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2009-JAN-27	VK
2	ASPHALT DEPTH MIN. 85mm	2014-DEC-15	HLO
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2021-FEB-10	DLH

City of Saskatoon

GUTTER PATCH PAVING

APPROVALS

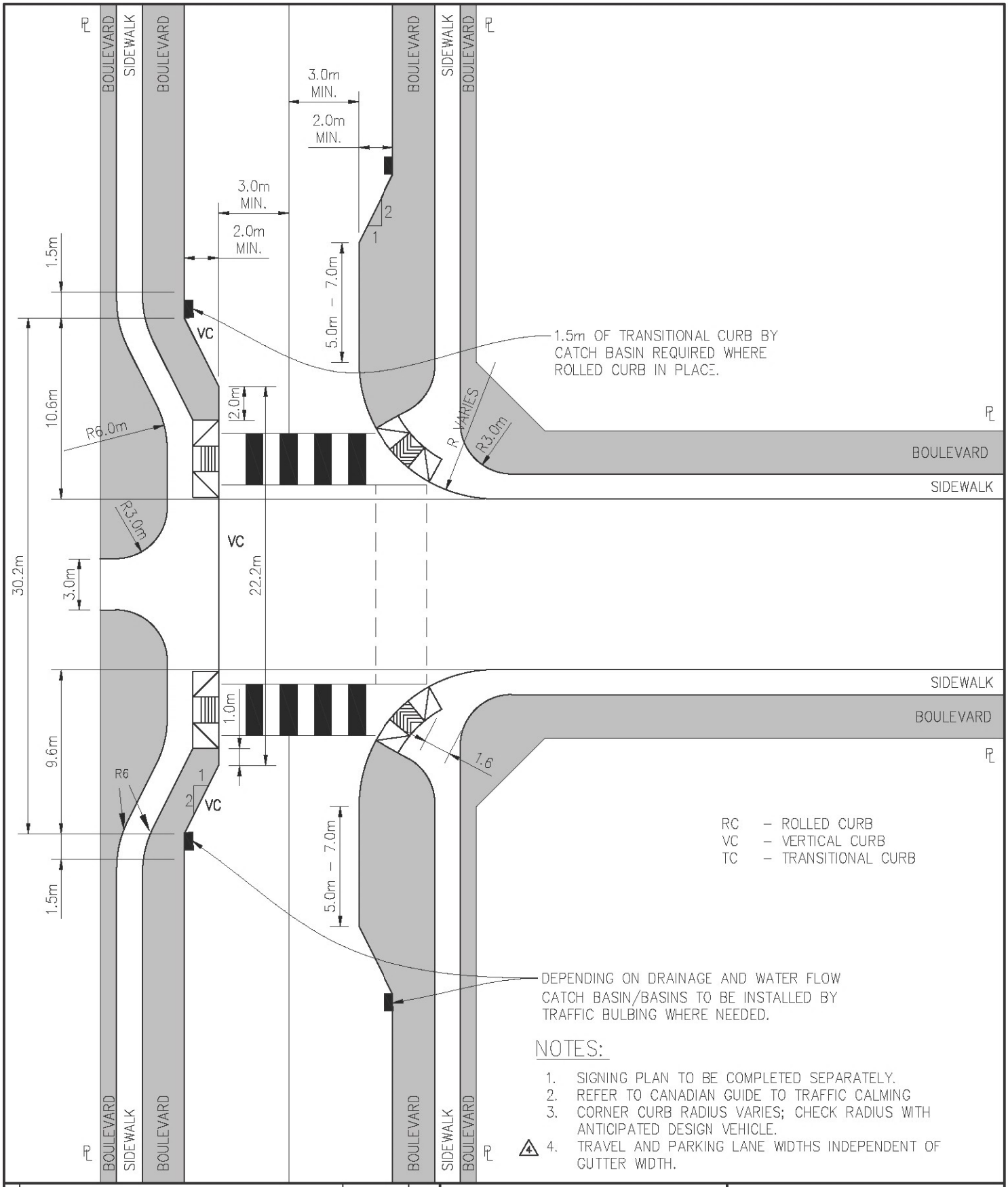
Shirley Matt (Feb 10, 2021 12:20 CST)

SIGNATURE
Shirley Matt
NAME
Feb 10, 2021
DATE SIGNED

SIGNATURE
Maciej Jurkiewicz
NAME
Feb 10, 2021
DATE SIGNED

SCALES:
HOR. 1:10
VERT.

PLAN NO.
102-0002-049-r003



NOTES:

1. SIGNING PLAN TO BE COMPLETED SEPARATELY.
2. REFER TO CANADIAN GUIDE TO TRAFFIC CALMING
3. CORNER CURB RADIUS VARIES; CHECK RADIUS WITH ANTICIPATED DESIGN VEHICLE.
4. TRAVEL AND PARKING LANE WIDTHS INDEPENDENT OF GUTTER WIDTH.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2011-DEC-14	EDH
2	REVISED TITLE AND REMOVED CROSS SECTION DETAILS	2014-DEC-15	HLO
3	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
3	MANUAL AND POLICY C07-030 – STREET DESIGN	2020-FEB-13	PRZ
4	ADDED NOTE ABOUT LANE WIDTHS	2022-OCT-05	DLH

City of Saskatoon

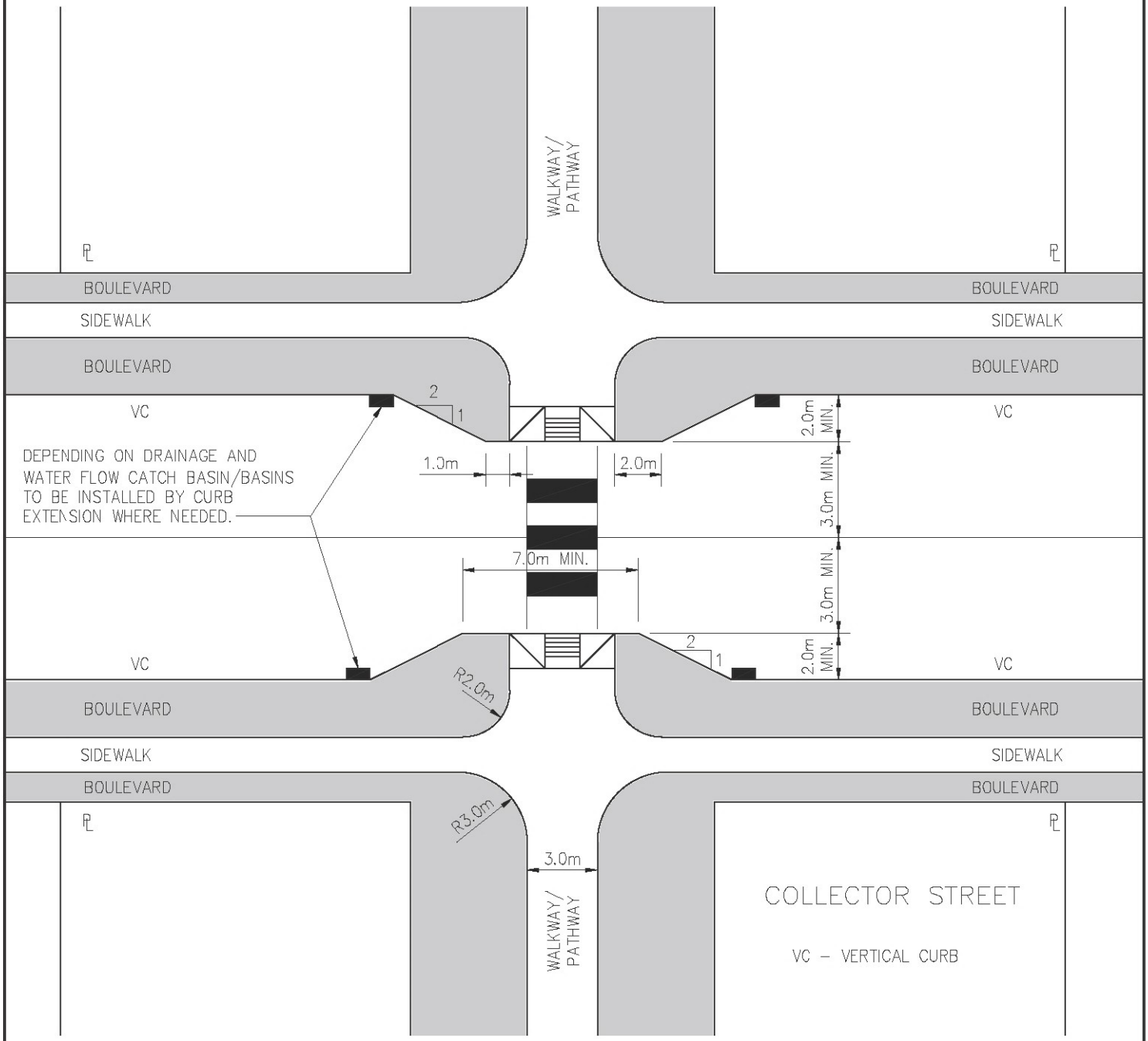
TRAFFIC CALMING CURB EXTENSIONS AT T-INTERSECTION (COLLECTOR & LOCAL STREETS)

APPROVALS

Chelsea Lanning (Jan 31, 2023 11:31 CST)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Mitchell Parker
NAME: Jan 31, 2023	NAME: Jan 31, 2023
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:300 VERT.

PLAN NO. 102-0002-062r004



NOTES:

1. SIGNING PLAN TO BE COMPLETED SEPARATELY.
4 2. TRAVEL AND PARKING LANE WIDTHS INDEPENDENT OF GUTTER WIDTH.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2011-DEC-14	EDH
2	REVISED TITLE AND REMOVED CROSS SECTION DETAILS	2014-DEC-15	HLO
3	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
3	MANUAL AND POLICY C07-030 – STREET DESIGN	2020-FEB-13	PRZ
4	ADDED NOTE ABOUT LANE WIDTHS	2022-OCT-05	DLH

City of Saskatoon

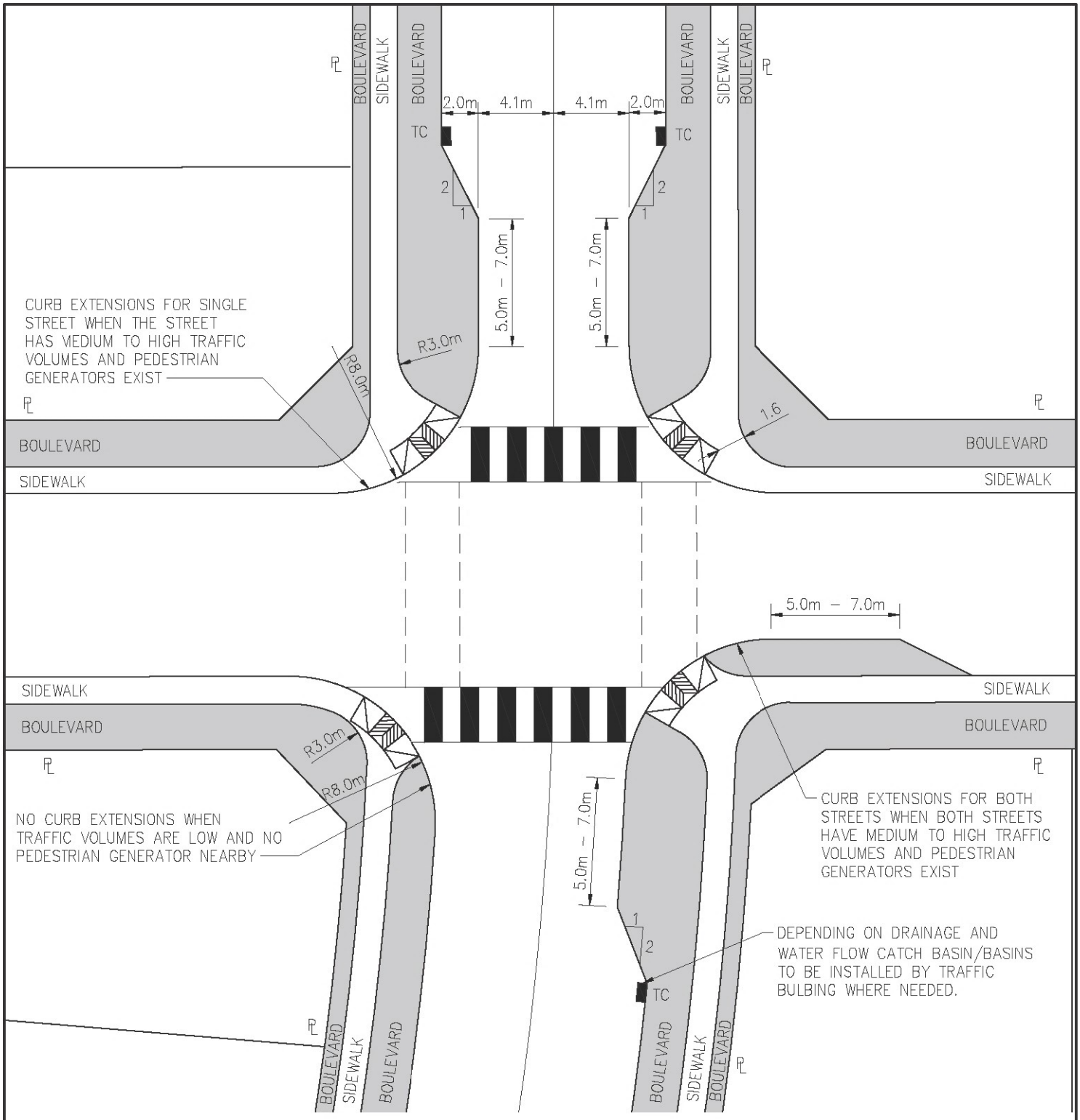
TRAFFIC CALMING CURB EXTENSIONS
AT A MID-BLOCK CROSSING
(COLLECTOR STREET)

APPROVALS

Chelsea Lanning (Jan 31, 2023 11:30 CST)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Mitchell Parker
NAME: Jan 31, 2023	NAME: Jan 31, 2023
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:200 VERT.

PLAN NO. 102-0002-064r004



NOTES:

1. SIGNING PLAN TO BE COMPLETED SEPARATE_Y.
2. APPROPRIATE CONFIGURATION OF CURB EXTENSIONS TO BE DETERMINED BY PEDESTRIAN NETWORK REQUIREMENTS AND TRAFFIC VOLUMES.
3. SIDEWALK PLACEMENT AND WIDTH BASED ON STREET CLASSIFICATION REQUIREMENTS.
4. TRAVEL AND PARKING LANE WIDTHS INDEPENDENT OF GUTTER WIDTH.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2011-DEC-14	EDH
2	REVISED TITLE AND REMOVED CROSS SECTION DETAILS	2014-DEC-15	HLO
3	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
3	MANUAL AND POLICY C07-030 – STREET DESIGN	2020-FEB-13	PRZ
4	ADDED NOTE ABOUT LANE WIDTHS	2022-OCT-05	DLH

City of Saskatoon

TRAFFIC CALMING
CURB EXTENSION OPTIONS
(COLLECTOR OR LOCAL STREETS)

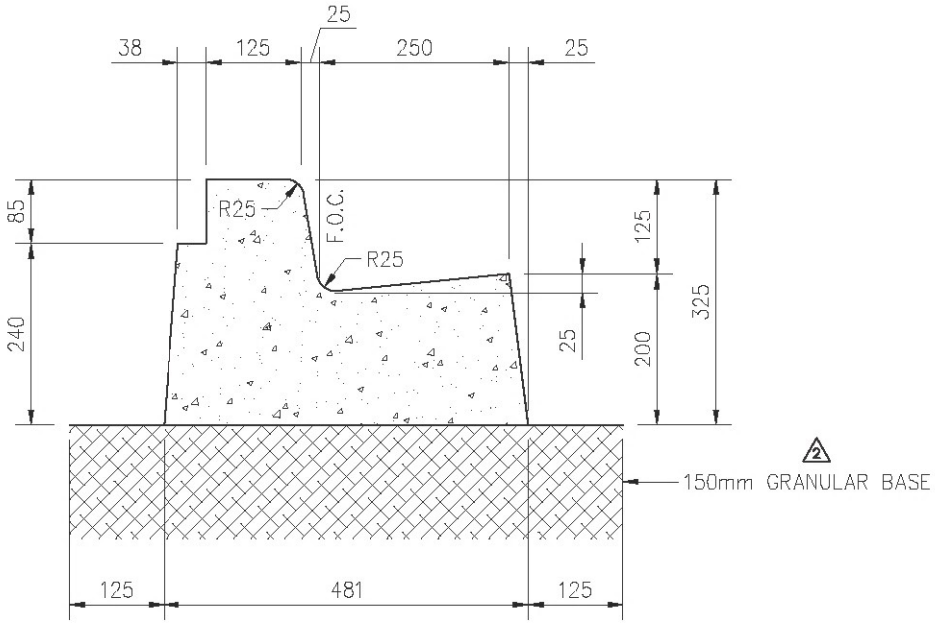
APPROVALS

Chelsea Lanning
Chelsea Lanning (Jan 31, 2023 11:30 CST)
SIGNATURE
Chelsea Lanning
NAME
Jan 31, 2023
DATE SIGNED

SIGNATURE
Mitchell Parker
NAME
Jan 31, 2023
DATE SIGNED

SCALES: HOR. 1:300 VERT.

PLAN NO. 102-0002-065r004



NOTES:

1. CONCRETE STANDARD:
   32MPa DURA-MIX CONCRETE
   5-8% AIR AS PER COS SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER COS SPEC.
3. BROOM FINISH TOP & FACE OF CURB AND GUTTER LONGITUDINALLY.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m.
5. IF PAVER LIP IS NOT INTEGRALLY POURED IT MUST BE PINNED TO CURB & GUTTER AS PER STANDARD COS SPEC.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2014-DEC-15	DJC
2	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-06	DLH

City of Saskatoon

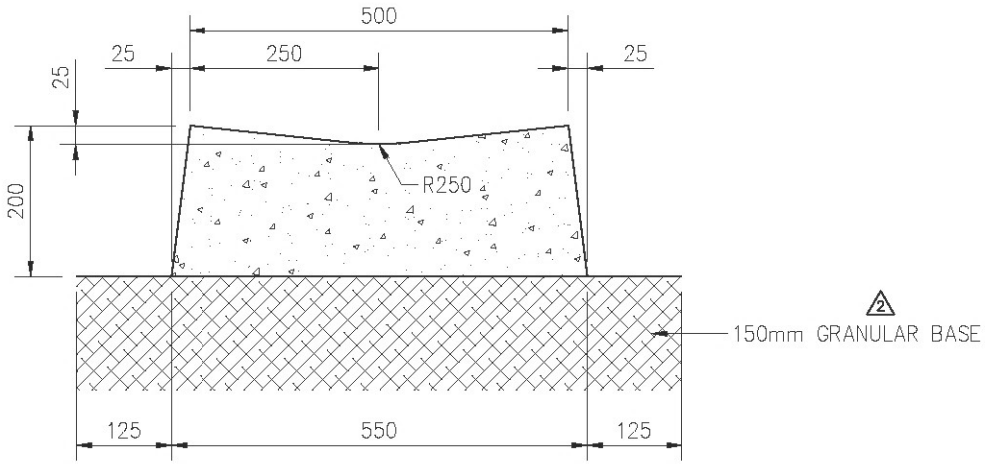
150mm VERTICAL CURB & GUTTER WITH PAVER LIP

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:10 VERT.

PLAN NO. 102-0002-067r002



NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH TOP.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2012-DEC-12	HLD
2	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-06	DLH

City of Saskatoon

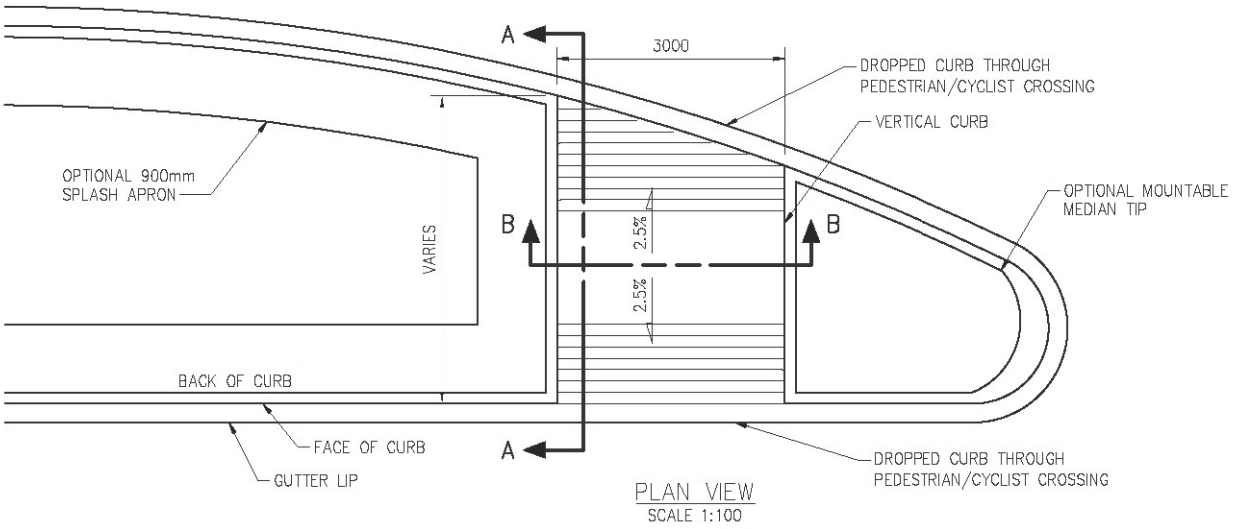
CONCRETE SWALE

APPROVALS

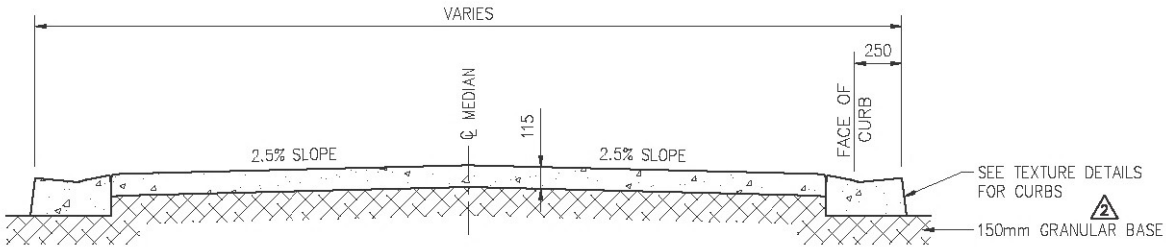
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:10 VERT.

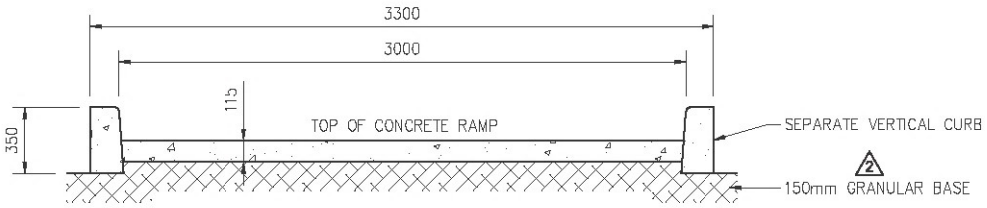
PLAN NO. 102-0002-069r002



PLAN VIEW
SCALE 1:100



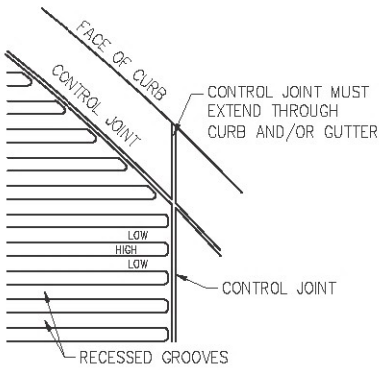
SECTION A–A
SCALE 1:50



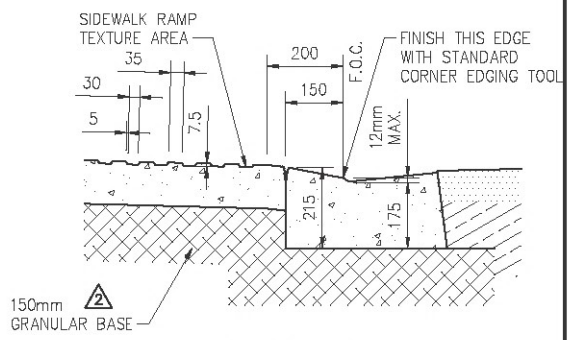
SECTION B–B
SCALE 1:50

NOTES:

1. GROOVES ON TEXTURED AREA ARE TO BE PLACED PERPENDICULAR TO THE CROSSWALK LINES.
2. CONTROL JOINTS MUST INTERCEPT THE BOTTOM OF RECESSED GROOVES.
3. CONTROL JOINTS MUST BE SLIGHTLY DEEPER THAN RECESSED GROOVES.
4. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5–8% AIR AS PER SPEC.
5. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
6. BROOM FINISH CURB FACE & GUTTER.
   BROOM OVER ALL CONTROL JOINTS.



PLAN VIEW



CROSS SECTION

TEXTURE DETAILS
SCALE 1:20

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2013-JUL-30	JLP
2	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-07	DLH

City of Saskatoon

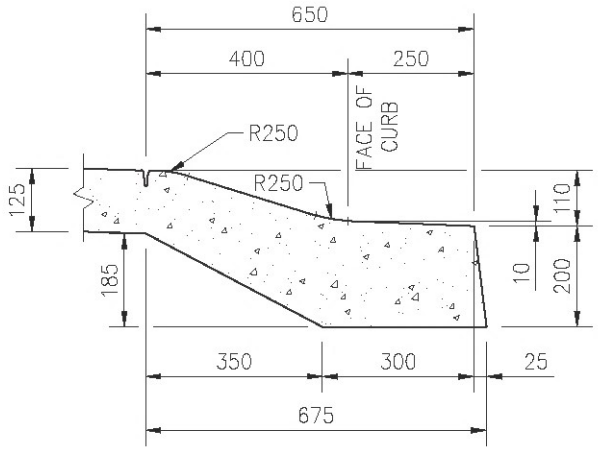
MEDIAN CUT-THROUGH DETAILS
PEDESTRIAN OR CYCLIST CROSSING

APPROVALS

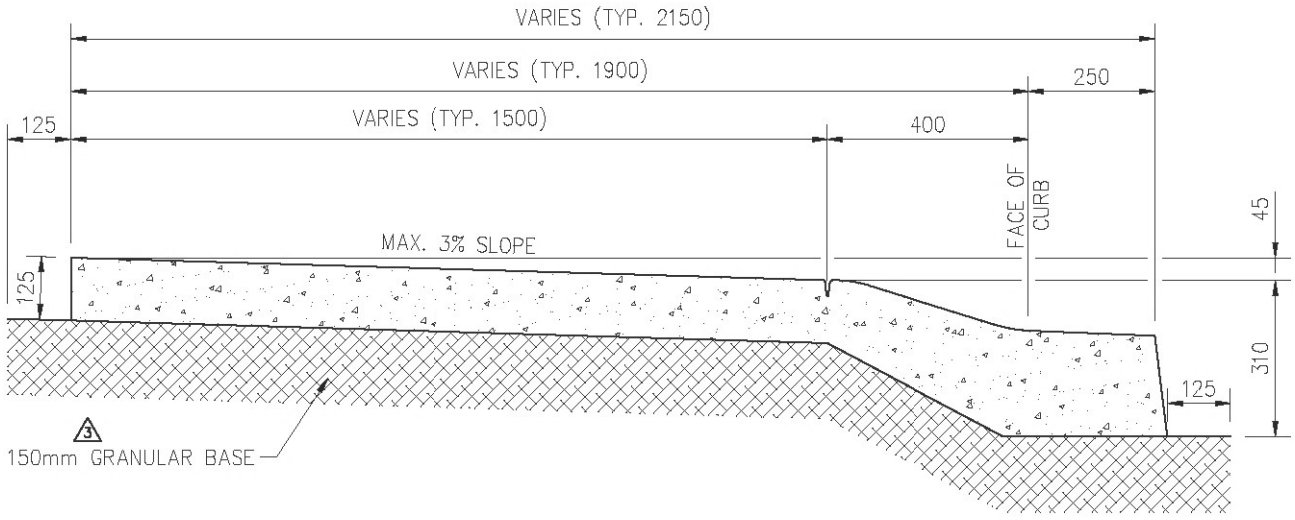
Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-070r002



ROLLED CURB & REVERSED GUTTER



NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK TRANSVERSELY.
   BROOM FINISH CURB & GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS.
5. SPACING OF CONTROL JOINTS TO BE 1.5m.
6. VERIFY SIDEWALK WIDTH ACCORDING TO STREET CLASSIFICATION REQUIREMENTS. SIDEWALK WIDTH MAY VARY TO MATCH EXISTING FOR RETROFIT APPLICATIONS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2013-SEP-10	KSD
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ
3	UPDATED TO ALIGN WITH SIDEWALK BEST PRACTICES REPORT	2020-OCT-06	DLH

City of Saskatoon

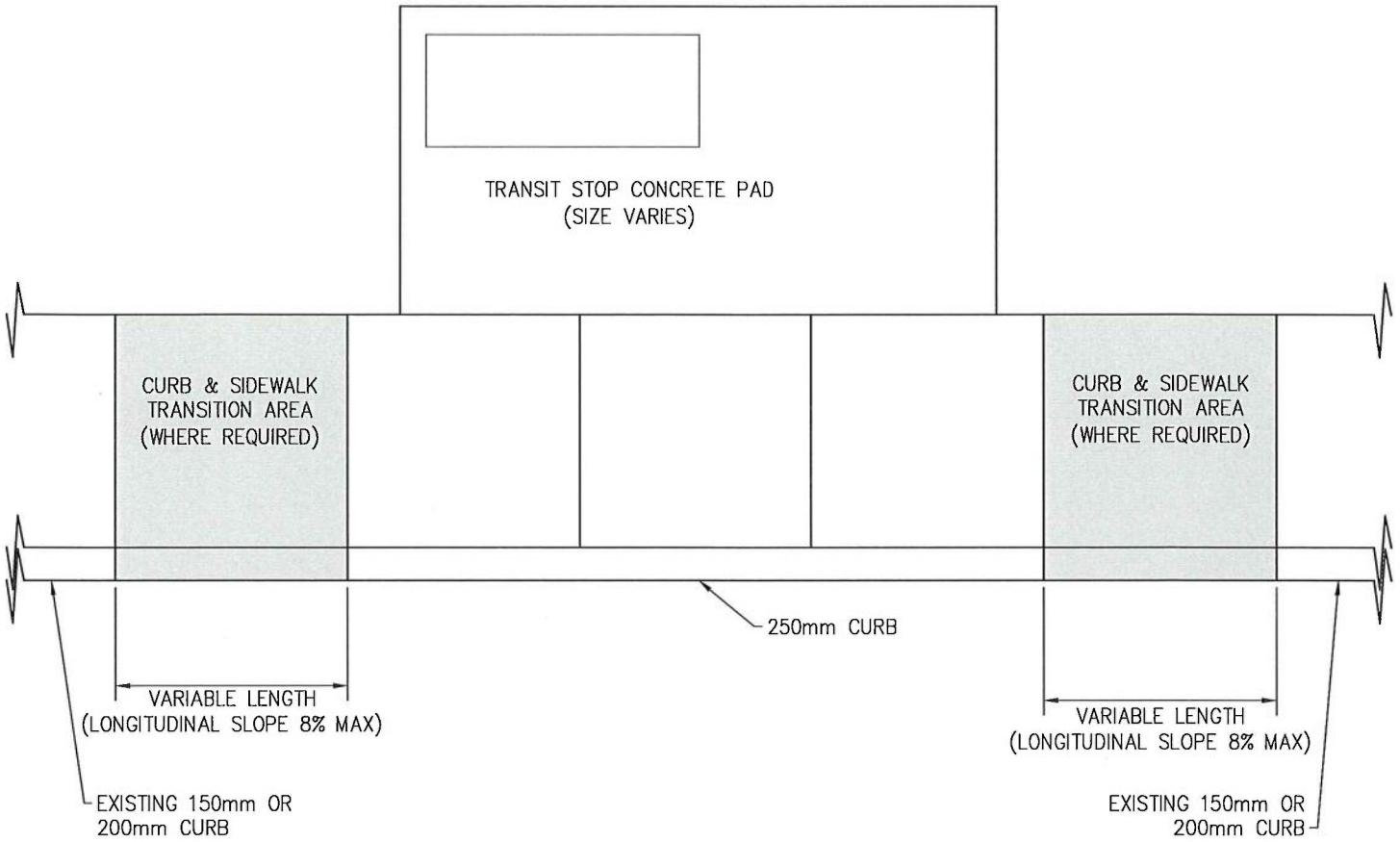
COMBINED SIDEWALK, ROLLED CURB AND REVERSED GUTTER

APPROVALS

Chris Duriez	
SIGNATURE	SIGNATURE
Christopher Duriez	Maciej Jurkiewicz
NAME	NAME
Jan 25, 2021	Jan 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:15 VERT.

PLAN NO. 102-0002-071r003



NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK, CURB FACE & GUTTER LONGITUDINALLY.
4. BROOM OVER ALL CONTROL JOINTS
5. SPACING OF CONTROL JOINTS TO BE 1.5M

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-JAN-31	PRZ

City of Saskatoon

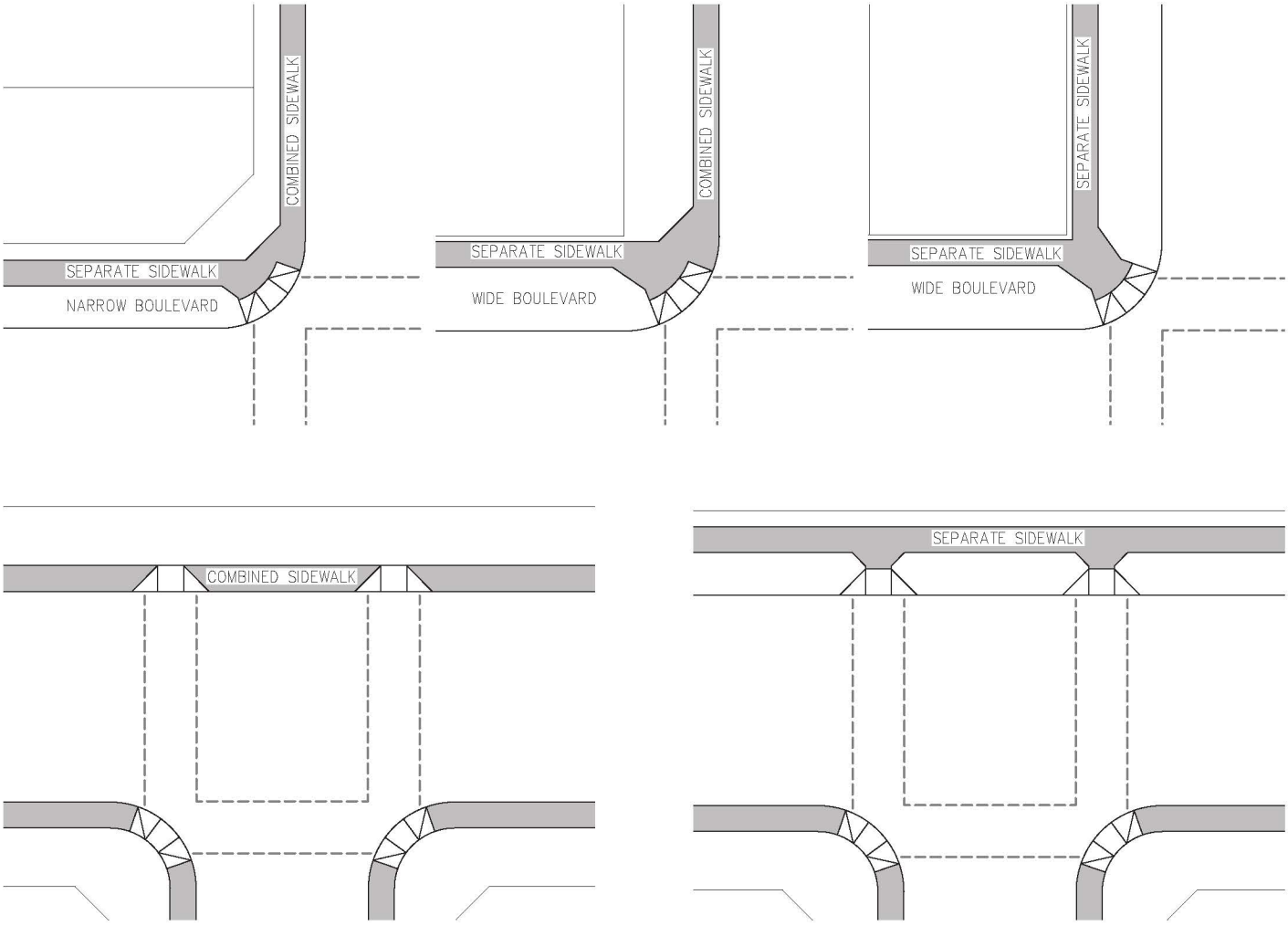
TRANSITION TO 250mm VERTICAL CURB
APPROVED FOR USE AT TRANSIT STOPS

APPROVALS

SIGNATURE	SIGNATURE
NAME: Eric Purdy	
DATE SIGNED: Feb 20, 2020	DATE SIGNED: FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102-0002-074r001



NOTES:

1. PEDESTRIAN RAMP TEXTURING TO BE DESIGNED AS PER DWG 102-0002-026.
2. ALTERNATE CONFIGURATION MAY BE REQUIRED IN RETROFIT SITUATIONS.
3. WHERE A PEDESTRIAN RAMP LOCATION CONFLICTS WITH A DRIVEWAY AT A T-INTERSECTION, ONE RAMP MAY BE SHIFTED NO MORE THAN 1.5m.
4. PAVEMENT MARKINGS ARE NOT SHOWN, SEE DWG 102-0034-018.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2019-SEP-17	KAS

City of Saskatoon

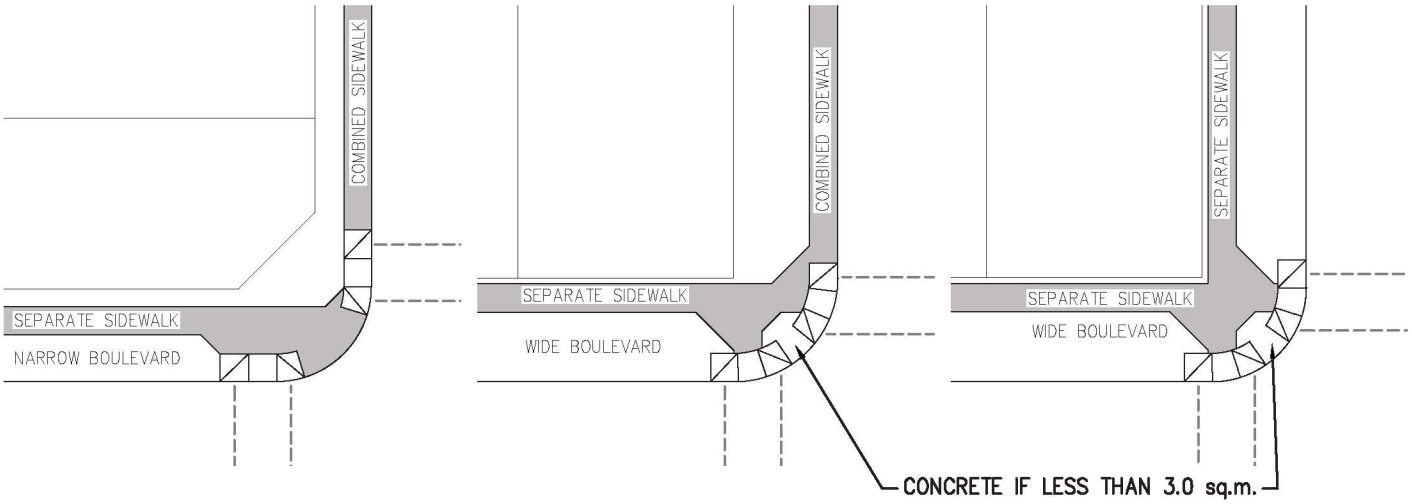
PEDESTRIAN RAMP PLACEMENT
LOCAL & COLLECTOR INTERSECTIONS

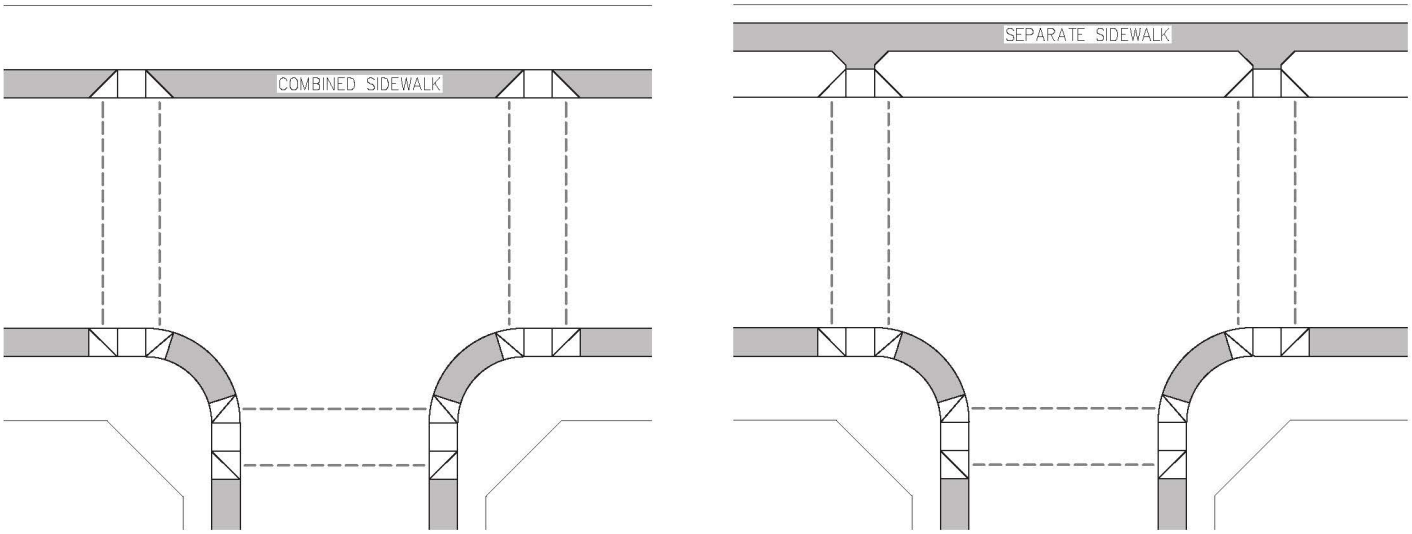
APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT.

PLAN NO. 102-0002-075r001





NOTES:

1. PEDESTRIAN RAMP TEXTURING TO BE DESIGNED AS PER DWG 102-0002-026.
2. ALTERNATE CONFIGURATION MAY BE REQUIRED IN RETROFIT SITUATIONS.
3. WHERE A PEDESTRIAN RAMP LOCATION CONFLICTS WITH A DRIVEWAY AT A T-INTERSECTION, ONE RAMP MAY BE SHIFTED NO MORE THAN 1.5m.
4. LARGER RAMPS MAY BE REQUIRED IF ACCOMMODATING AAA CYCLING FACILITIES.
5. PAVEMENT MARKINGS ARE NOT SHOWN, SEE DWG 102-0034-018.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2019-SEP-17	KAS

City of Saskatoon

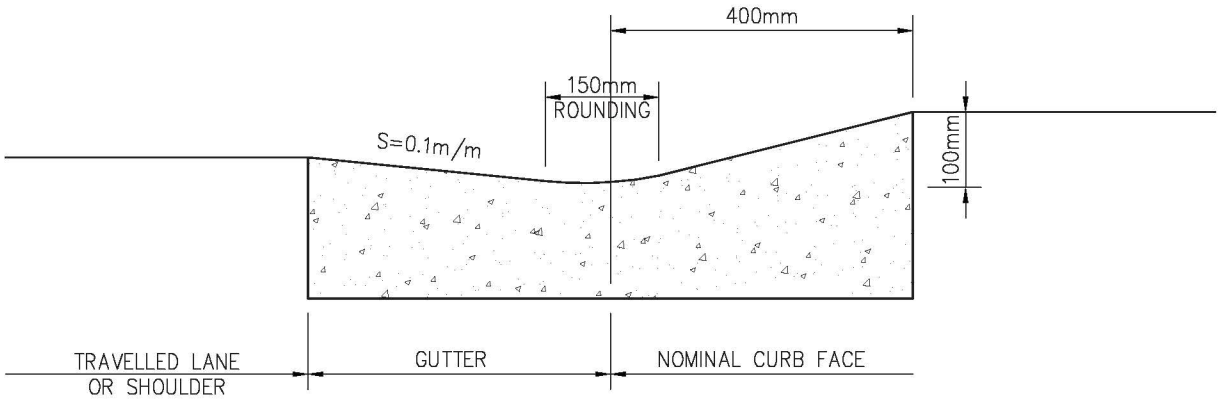
PEDESTRIAN RAMP PLACEMENT
ARTERIAL INTERSECTIONS

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT.

PLAN NO. 102-0002-076r001



NOTES:

1. MAY BE USED ON HIGH SPEED ROADWAY APPLICATIONS WHERE VERTICAL CURB IS NOT APPROPRIATE AND RIGHT-OF-WAY CANNOT ACCOMMODATE A RURAL CROSS-SECTION.
2. MUST BE INSTALLED IN CONCERT WITH APPROPRIATE ROADSIDE SAFETY SYSTEMS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-FEB-20	PRZ

City of Saskatoon

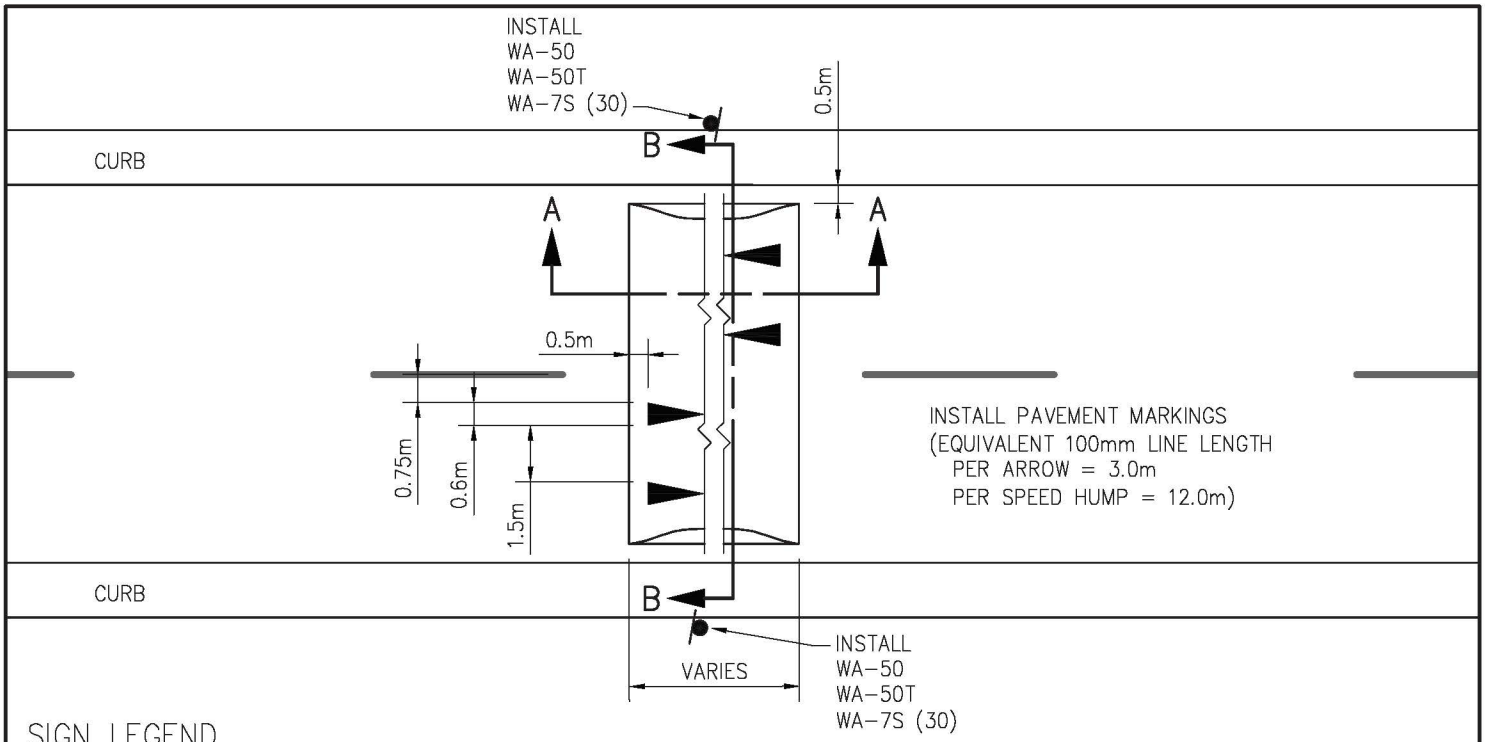
MOUNTABLE CURB

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE	SIGNATURE
Chelsea Lanning	Matt Jurkiewicz
NAME	NAME
Apr 23, 2020	Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:10 VERT.

PLAN NO. 102-0002-077r001

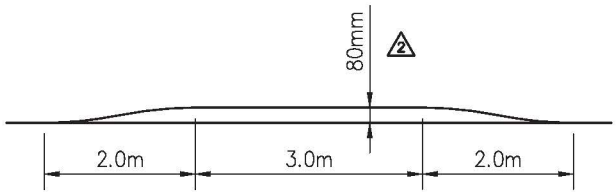


SIGN LEGEND

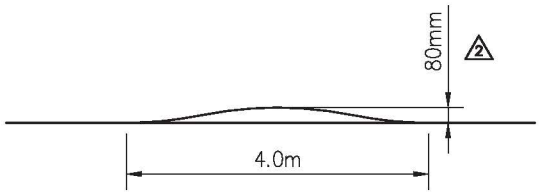
WA-50 NEIGHBOURHOOD SPEED HUMP
WA-50T SPEED HUMP (TAB)
WA-7S ADVISORY SPEED (TAB) km/h

PLAN OF SPEED HUMP

SCALE – 1:200



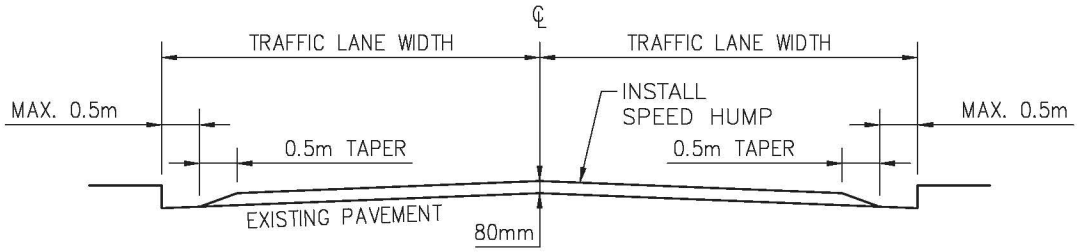
COLLECTOR STREET PROFILE



LOCAL STREET PROFILE

SECTION A-A

SCALE: HOR. 1:100 VER. 1:50



SECTION B-B

ROAD CROSS SECTION
SCALE: HOR. 1:100 VER. 1:50

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING – REPLACES 102-0008-002	2020-FEB-28	PRZ

City of Saskatoon

TRAFFIC CALMING
SPEED HUMP DETAILS

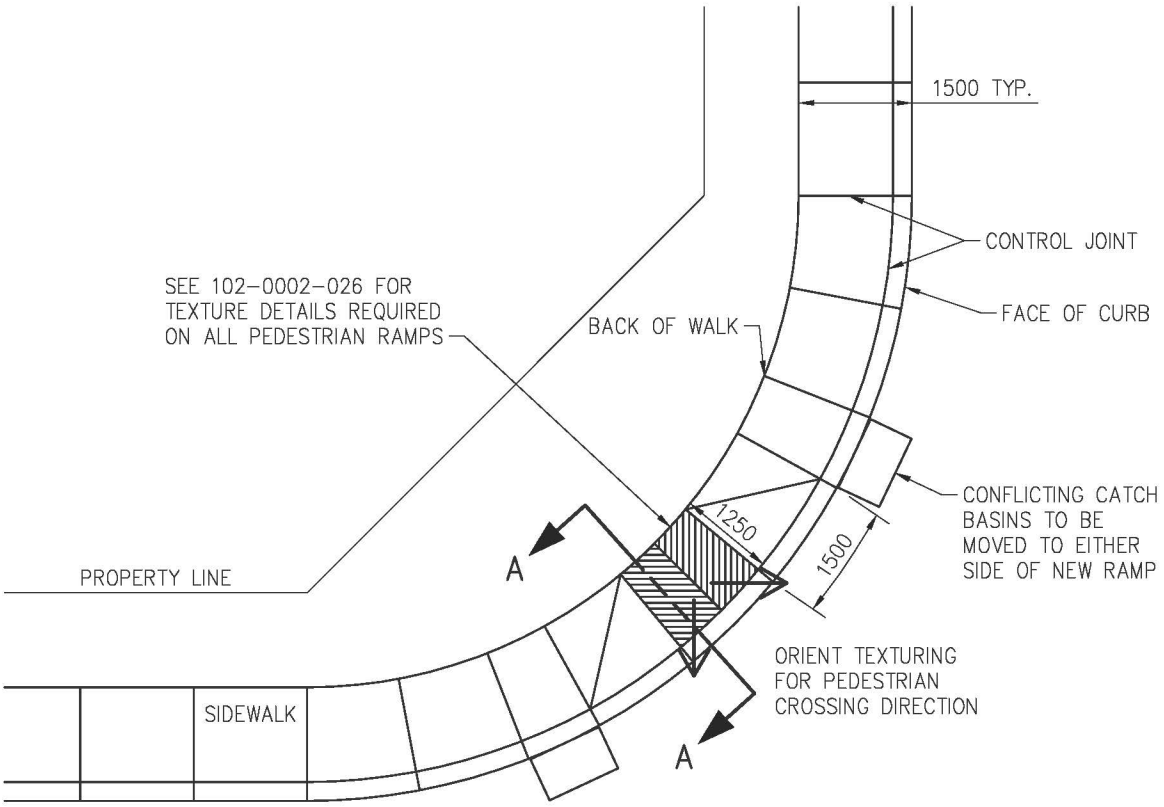
APPROVALS

Chelsea Lanning
Chelsea Lanning (Apr 23, 2020)
SIGNATURE
Chelsea Lanning
NAME
Apr 23, 2020
DATE SIGNED

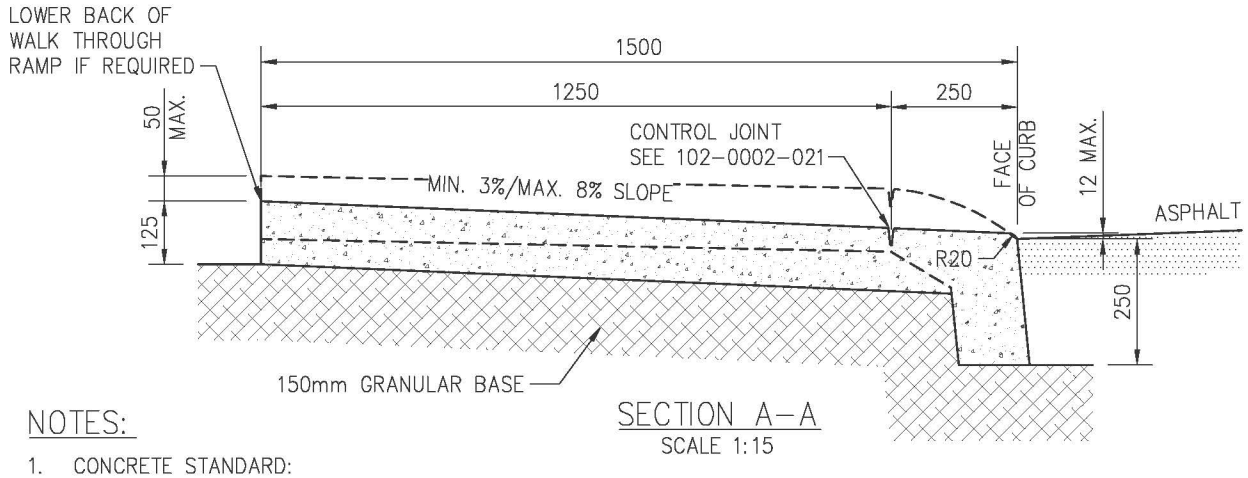
SIGNATURE
Matt Jurkiewicz
NAME
Apr 30, 2020
DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO.
102-0002-078r001



PEDESTRIAN RAMP
SCALE 1:100



SECTION A-A
SCALE 1:15

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. BROOM FINISH WALK, CURB FACE & GUTTER.
   BROOM OVER ALL CONTROL JOINTS.
4. SPACING OF CONTROL JOINTS TO BE 1.5m.
5. SIDEWALK WIDTH VARIES ACCORDING TO STREET CLASSIFICATION REQUIREMENTS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2021-FEB-03	AR

City of Saskatoon

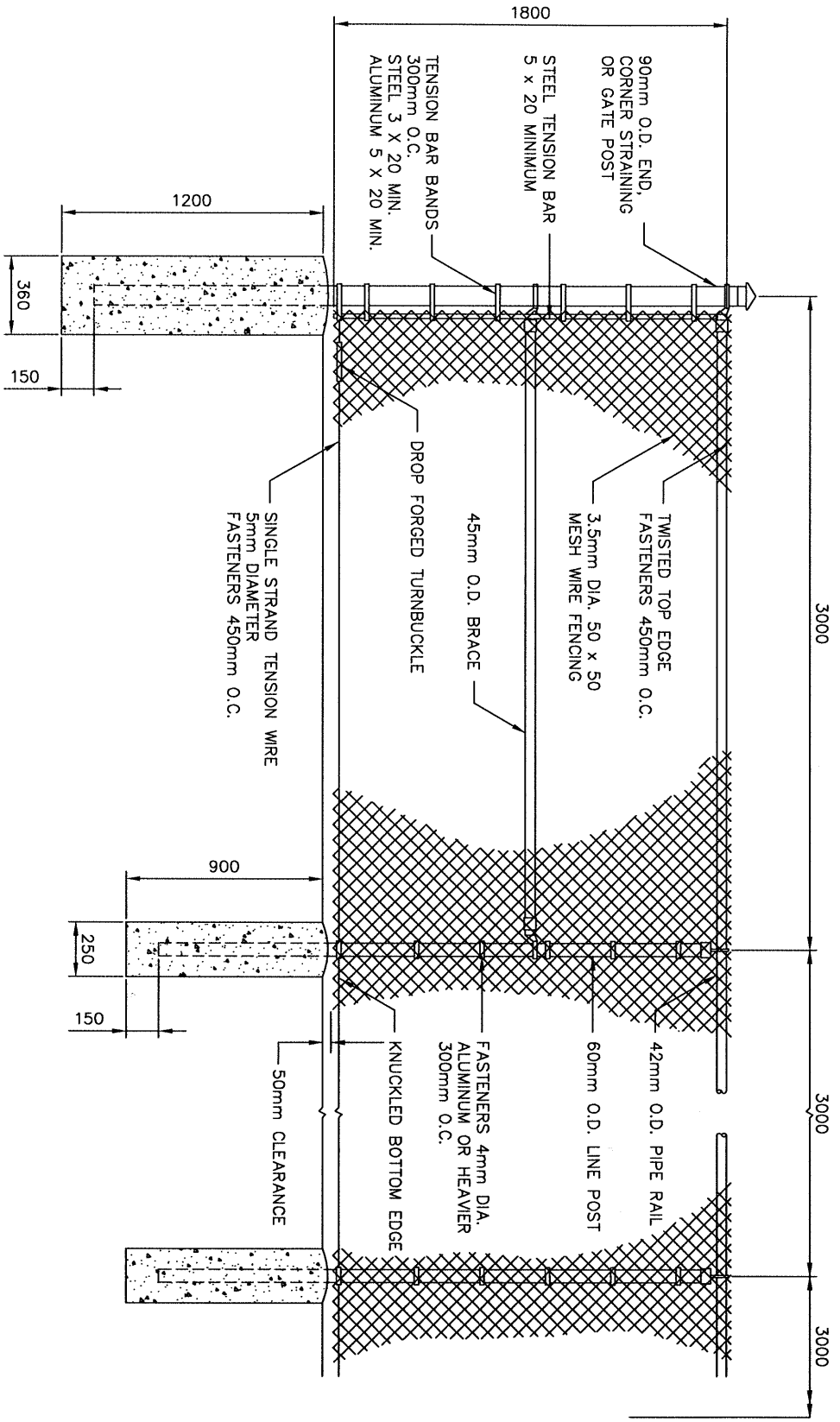
PEDESTRIAN RAMP
1978 STYLE ROLLED CURB
FOR REPLACEMENT PURPOSES ONLY

APPROVALS

Andy McMeekin (May 3, 2021 11:03 MDT)	
SIGNATURE: Andy McMeekin	SIGNATURE: Maciej Jurkiewicz
NAME: May 3, 2021	NAME: May 3, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

PLAN NO. 102-0002-079r001



NOTES:

MEDIAN FENCING: ALL MEDIAN FENCING WOULD BE WITHIN THE CLEAR ZONE AND THEREFORE A TOP RAIL SHOULD NOT BE USED REGARDLESS OF FENCE HEIGHT.

PROPERTY LINE FENCING: FOR ARTERIALS POSTED AT 60 km/h OR LESS, A TOP RAIL MAY BE USED. FOR ROADWAYS POSTED AT 70 km/h OR HIGHER NO TOP RAIL SHOULD BE USED UNLESS THE CLEAR ZONE HAS BEEN DETERMINED AND THE FENCING FALLS OUTSIDE OF THE CLEAR ZONE.

REVISIONS		
1	JULY 25, 2001	J. LEIER
2	MAY 03, 2013	RBY
3		

DRAWN BY J. LEIER
DATE 00-02-04

CHECKED BY
DATE

City of Saskatoon

INFRASTRUCTURE SERVICES

CHAIN LINK FENCE DETAILS

1.8m FENCE

APPROVED

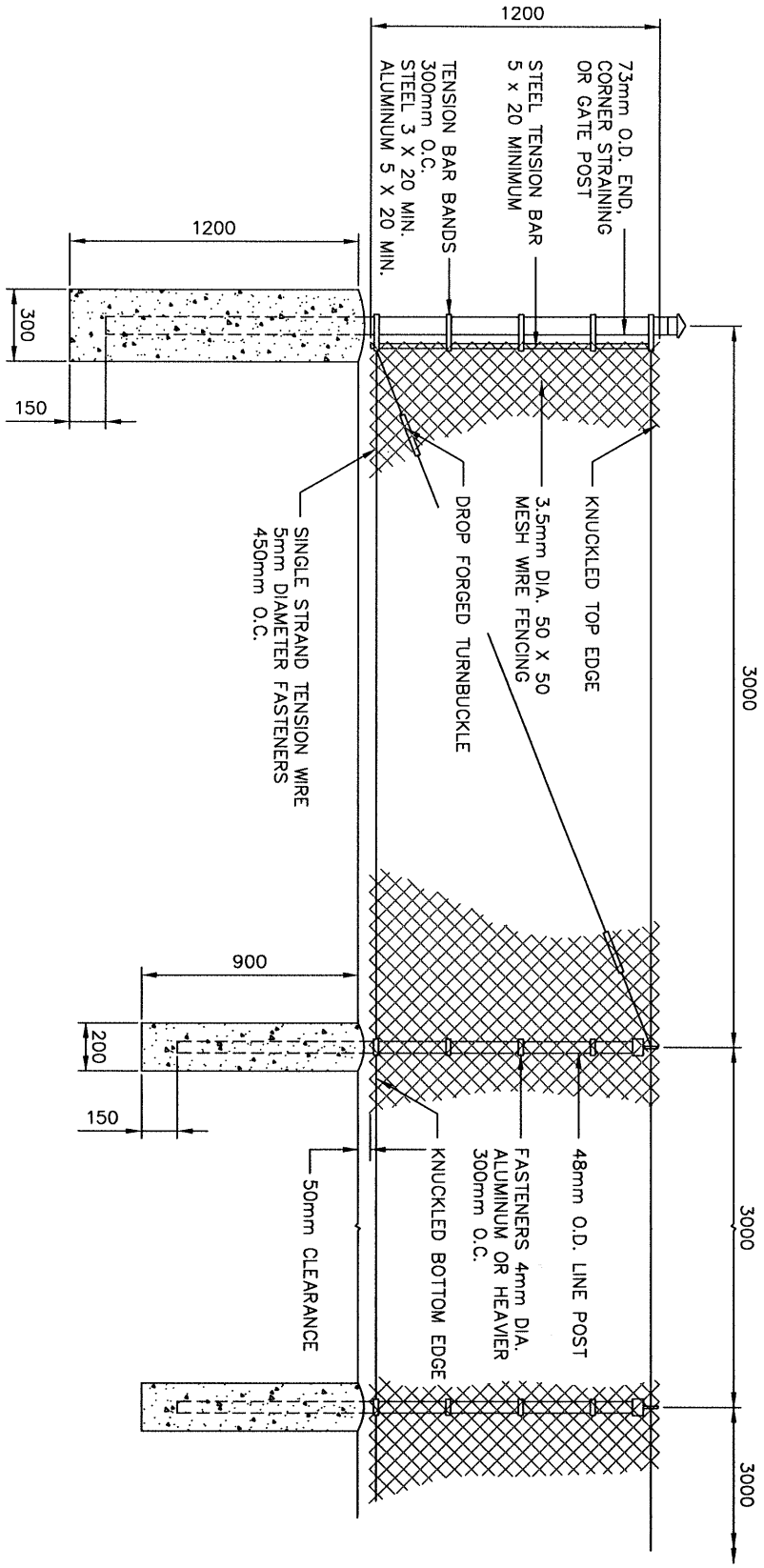
GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER

SCALES : HOR. 1:30 VERT.

PLAN NO. 102-0004-001r002



NOTES:

MEDIAN FENCING: ALL MEDIAN FENCING WOULD BE WITHIN THE CLEAR ZONE AND THEREFORE A TOP RAIL SHOULD NOT BE USED REGARDLESS OF FENCE HEIGHT.

PROPERTY LINE FENCING: FOR ARTERIALS POSTED AT 60 km/h OR LESS, A TOP RAIL MAY BE USED. FOR ROADWAYS POSTED AT 70 km/h OR HIGHER NO TOP RAIL SHOULD BE USED UNLESS THE CLEAR ZONE HAS BEEN DETERMINED AND THE FENCING FALLS OUTSIDE OF THE CLEAR ZONE.

REVISIONS		
1	JULY 25, 2001	J. LEIER
2	MAY 03, 2013	RBY
3		

City of Saskatoon

INFRASTRUCTURE SERVICES

APPROVED

GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER

DRAWN BY J. LEIER

DATE 00-02-04

CHECKED BY

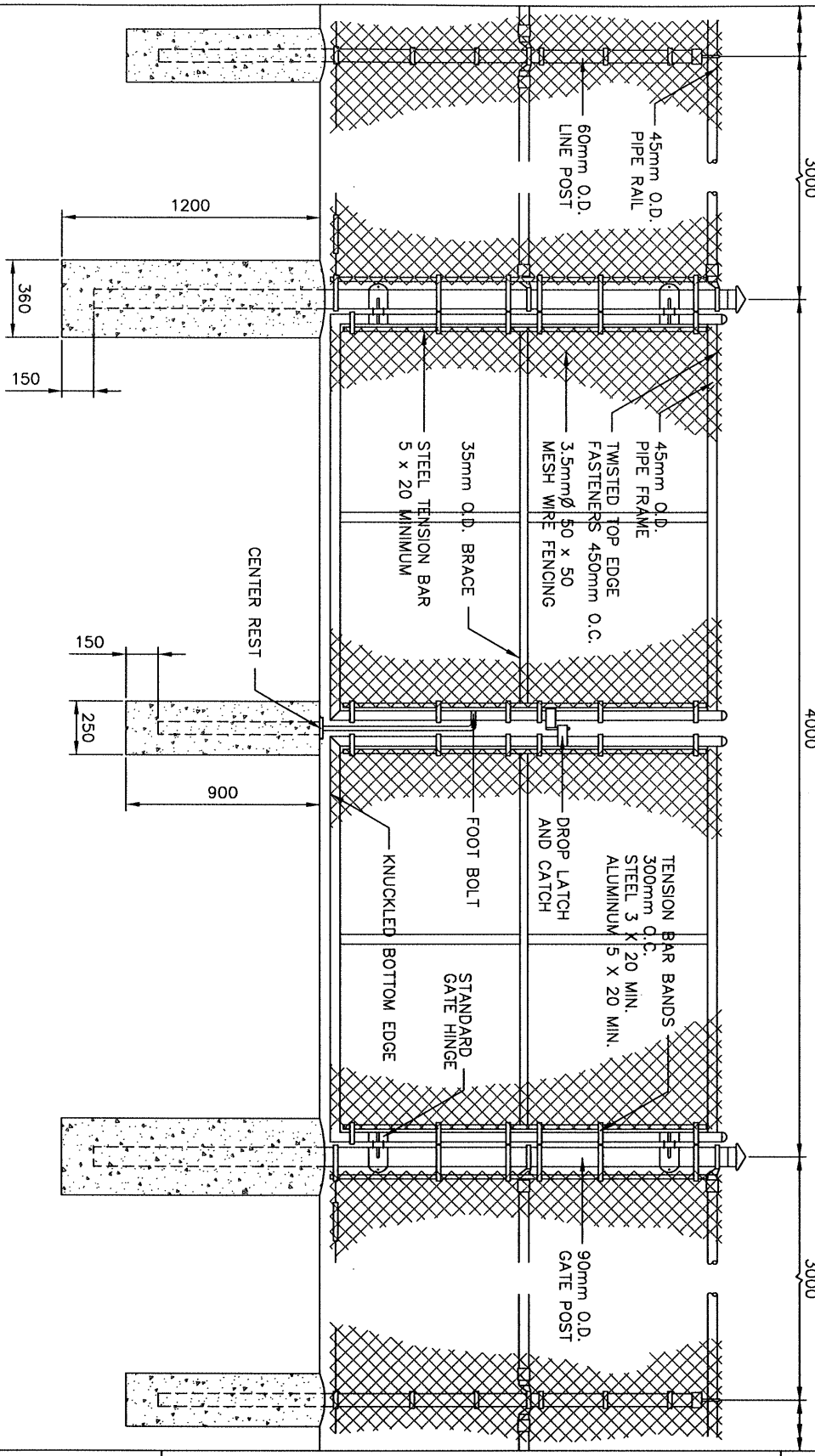
DATE

CHAIN LINK FENCE DETAILS

1.2m FENCE

SCALES : HOR. 1:30 VERT.

PLAN NO. 102-0004-002r002



NOTES:

MEDIAN FENCING: ALL MEDIAN FENCING WOULD BE WITHIN THE CLEAR ZONE AND THEREFORE A TOP RAIL SHOULD NOT BE USED REGARDLESS OF FENCE HEIGHT.

PROPERTY LINE FENCING: FOR ARTERIALS POSTED AT 60 km/h OR LESS, A TOP RAIL MAY BE USED. FOR ROADWAYS POSTED AT 70 km/h OR HIGHER NO TOP RAIL SHOULD BE USED UNLESS THE CLEAR ZONE HAS BEEN DETERMINED AND THE FENCING FALLS OUTSIDE OF THE CLEAR ZONE.

REVISIONS		
1	JULY 25, 2001	J. LEIER
2	MAY 03, 2013	RBY
3		

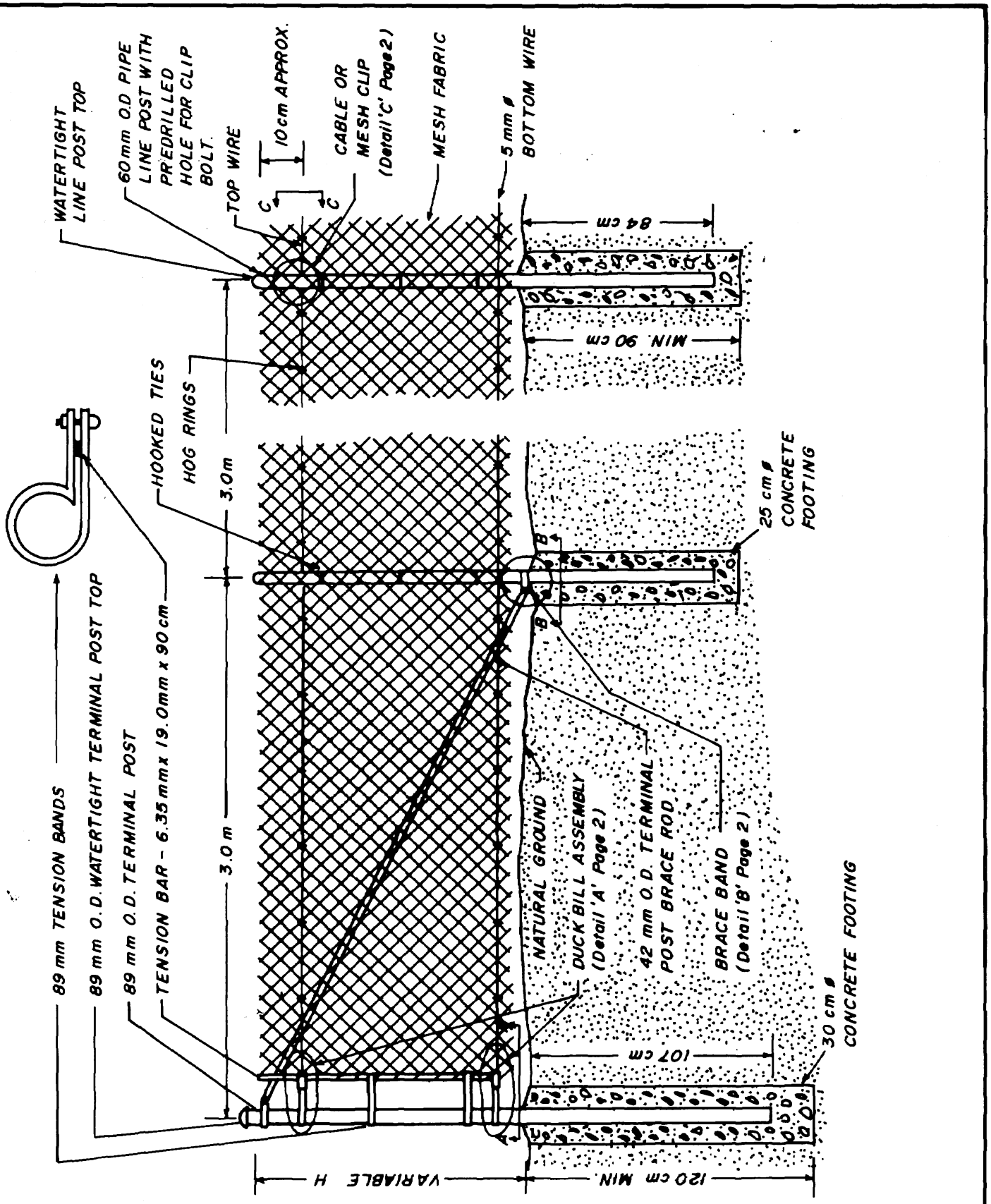
DRAWN BY J. LEIER
DATE 00-02-04
CHECKED BY
DATE

City of Saskatoon
INFRASTRUCTURE SERVICES

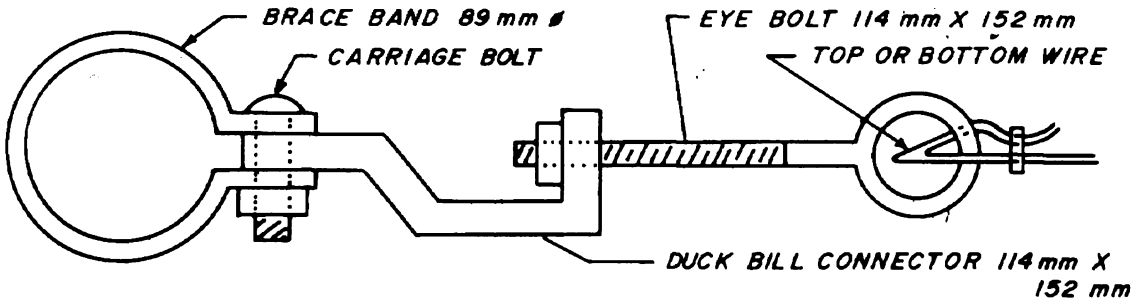
CHAIN LINK FENCE DETAILS

GATE DETAIL

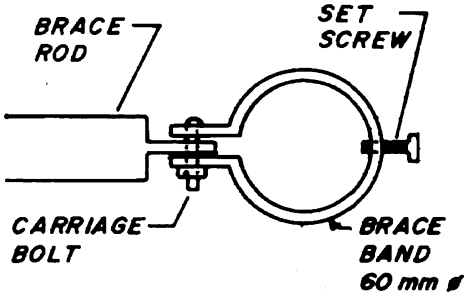
APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. 1:30 VERT.
PLAN NO. 102-0004-003r002



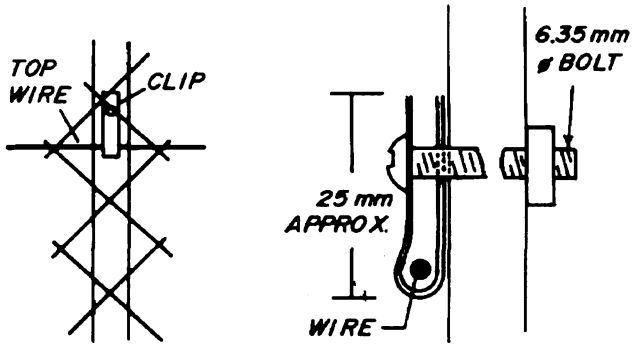
REVISIONS	CITY OF SASKATOON	APPROVED
1	ENGINEERING DEPARTMENT	CITY ENGINEER P. ENG.
2		ENGINEER
3	CHAIN LINK FENCE TYPE A	ENGINEER
DRAWN BY CJP		SCALES: HOR. N.T.S. VERT.
DATE 91 08 06		PLAN NO: 102-0004-005r001
CHECKED BY JRC		
DATE 91-11-18		



DETAIL 'A' - DUCK BILL ASSEMBLY



DETAIL 'B' - BRACE BAND

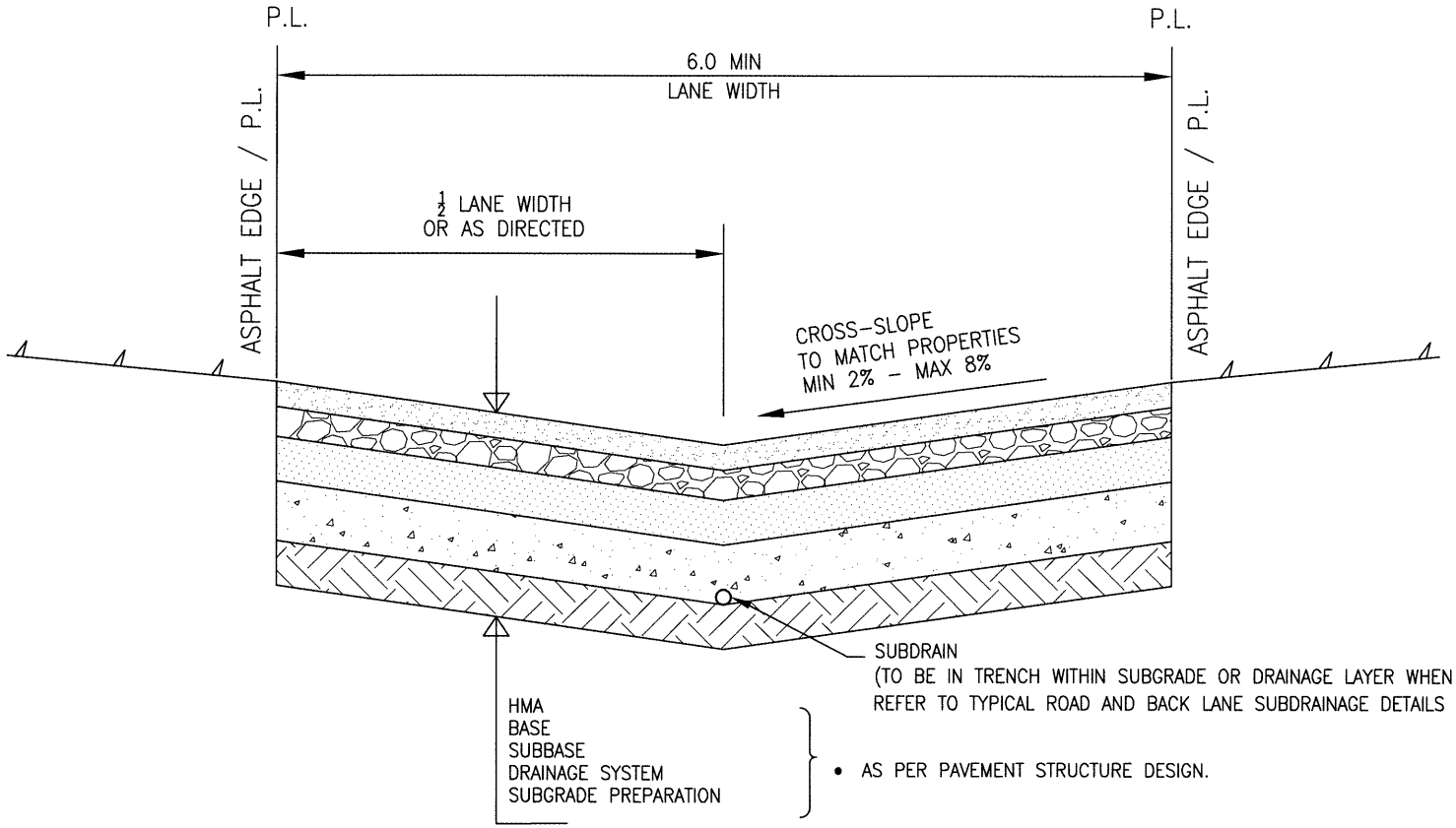


DETAIL 'C' - CABLE OR MESH CLIP

NOTES:

1. MAXIMUM SPACING BETWEEN BRACING SHALL BE 150 METRES.
2. TOP WIRE ONLY IS TO BE THREADED THROUGH CLIPS WITH MESH ATTACHED TO WIRE.
3. CHAIN LINK FABRIC SHALL BE FASTENED AT NOT MORE THAN 35 cm ON LINE POSTS AND NOT MORE THAN 45 cm ON THE TOP AND BOTTOM WIRE.
4. TOP WIRE WILL BE 6.4 mm 7 STRAND GUY WIRE, GRADE 50.
5. ALL MATERIALS AND INSTALLATION TO MEET STANDARD SPECIFICATION FOR SUPPLY AND ERECTION OF CHAIN LINK FENCE.

REVISIONS	CITY OF SASKATOON	APPROVED
1	ENGINEERING DEPARTMENT	CITY ENGINEER P. ENG.
2		ENGINEER
3	CHAIN LINK FENCE TYPE A	ENGINEER
DRAWN BY CJP		SCALES: HOR. N.T.S. VERT.
DATE 91 07 24		PLAN NO: 102-0004-006r001
CHECKED BY RLC		
DATE 92 11 18		



NOTE:

- BACK LANES WILL BE COMPRISED OF THE SAME STRUCTURE AS THE LOCAL ROADWAY CLASSIFICATION WITHIN THE ROAD GROUP AS OUTLINED IN THE PAVEMENT DESIGN GUIDE.
- DRAINAGE AGGREGATE TO BE ENVELOPED BY NON-WOVEN GEOTEXTILE FOR SUBDRAIN OR FULL DRAINAGE LAYER.
- SUBDRAIN TO BE CONNECTED TO CATCHBASIN AS PER DRAWING 102-0010-015 OR TEE INTO ADJACENT ROADWAY SUBDRAIN PIPE.

SCALE IN METRES

0 2 4

REVISIONS	
1	ADD SUBDRAIN, DRAINAGE LAYER AND NOTES 2014-DEC-15 HLO
2	RELOCATE SUBDRAIN TO LOWEST POINT 2015-DEC-31 HLO
3	

DRAWN BY LCI

DATE 2009-06-18

SCALES : HOR. 1:50

VERT. 1:25

City of Saskatoon
Transportation & Utilities Department

LANE, PAVED
TYPICAL LANE CROSS SECTION

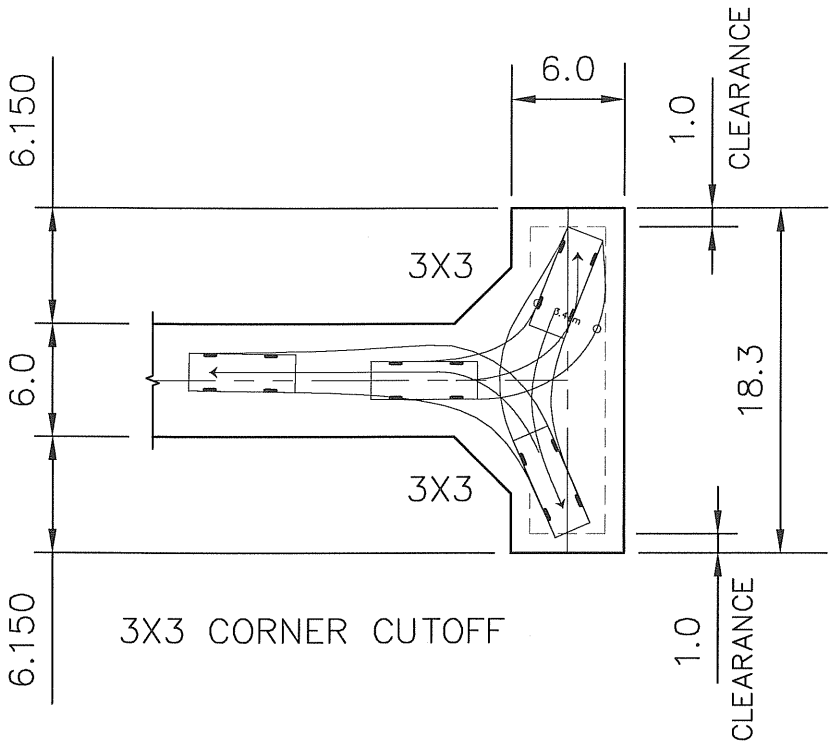
CHIEF ENGINEER

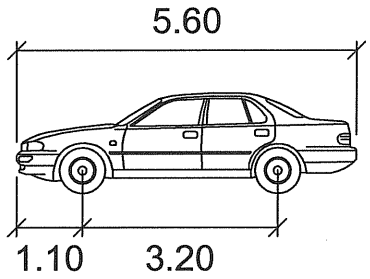
JAN 08 2016
DATE

ENGINEER

ENGINEER

PLAN NO. 102-0005-002r003





P	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.00
Steering Angle	: 36.2
Steering Angle	: 36.2

Vd: 1999 TAC LARGE CAR

VEHICLE PATH: ONE STEERING REVERSAL

PLAN DESCRIPTION/REVISIONS	
4	XXX XXX
3	
2	
1	

DRAWN BY LCI

DATE 2010-JAN-12

SCALE : HOR. 1:400 VERT. _____

City of Saskatoon
Infrastructure Services Department

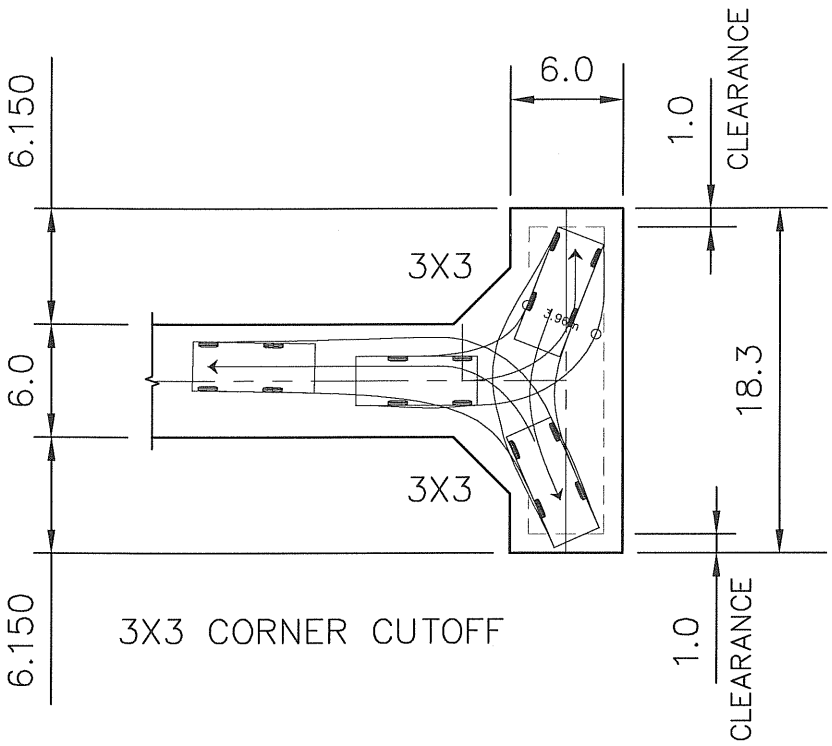
RESIDENTIAL LANE DEAD-END
TURNAROUND T-TYPE
DESIGN VEHICLE: LARGE CAR

APPROVED

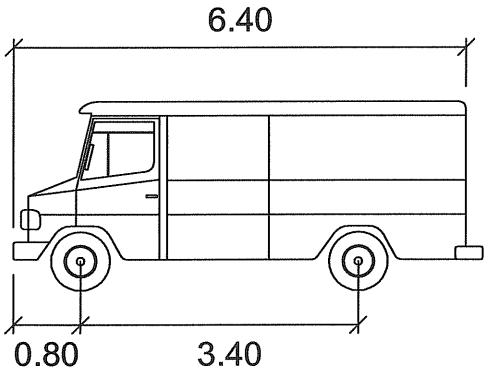
GENERAL MANAGER

ENGINEER

PLAN NO. 102-0005-003r001



3X3 CORNER CUTOFF



LSU

	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.00
Steering Angle	: 40.8

Vd: 1999 TAC (LSU) LIGHT SINGLE UNIT

VEHICLE PATH: ONE STEERING REVERSAL

PLAN DESCRIPTION/REVISIONS	
4	XXX XXX
3	
2	
1	

DRAWN BY LCI

DATE 2010-JAN-12

SCALE : HOR. 1:400 VERT. _____

City of Saskatoon
Infrastructure Services Department

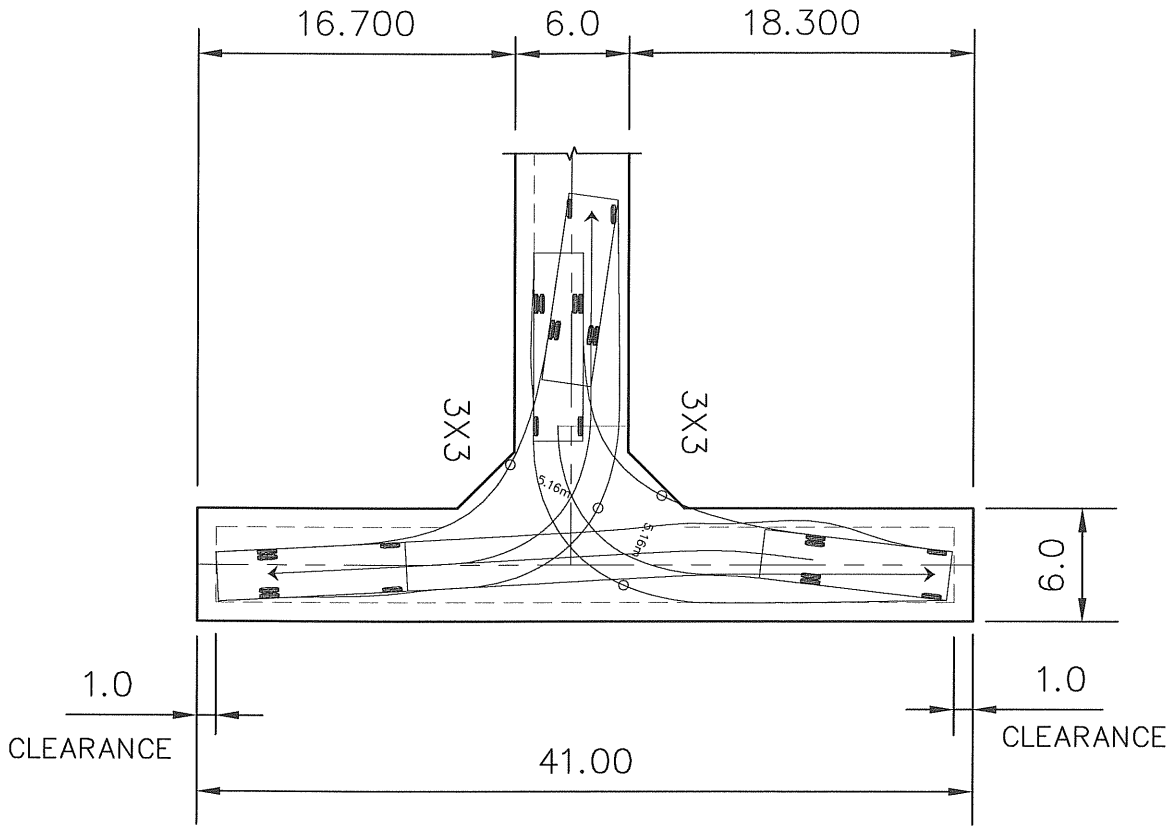
RESIDENTIAL LANE DEAD-END
TURNAROUND T-TYPE
DESIGN VEHICLE: LIGHT SINGLE UNIT

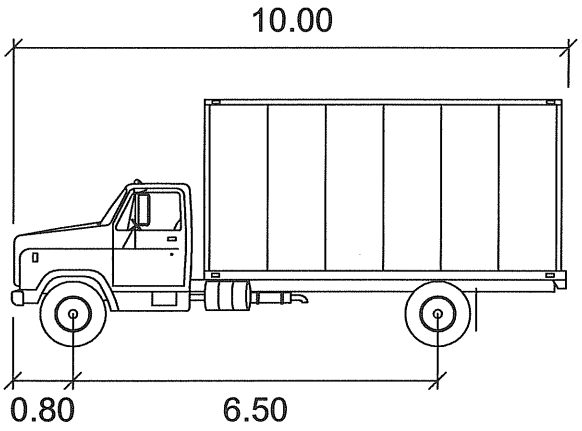
APPROVED

GENERAL MANAGER

ENGINEER

PLAN NO. 102-0005-004r001





MSU	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.00
Steering Angle	: 40.1

Vd: 1999 TAC (MSU) MEDIUM SINGLE UNIT
VEHICLE PATH: ONE STEERING REVERSAL

PLAN DESCRIPTION/REVISIONS	
4	XXX XXX
3	
2	
1	

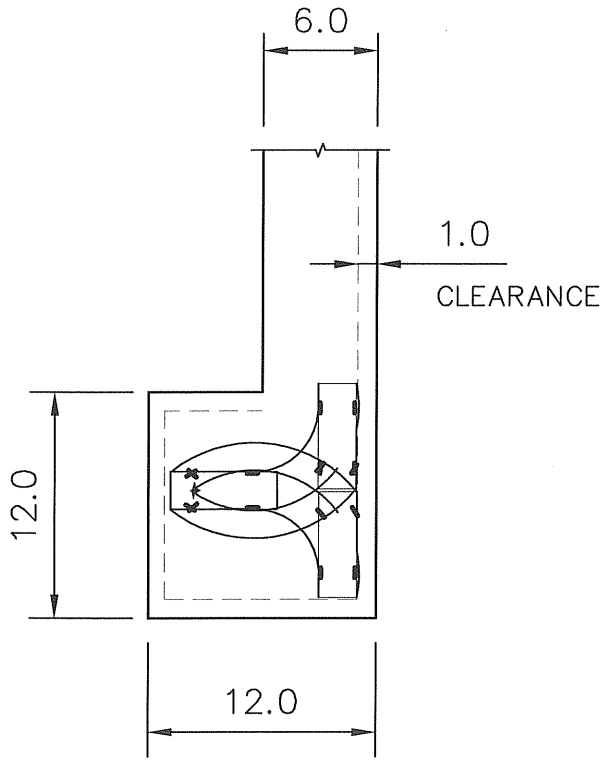
DRAWN BY LCI
DATE 2010-JAN-12
SCALE : HOR. 1:400 VERT. _____

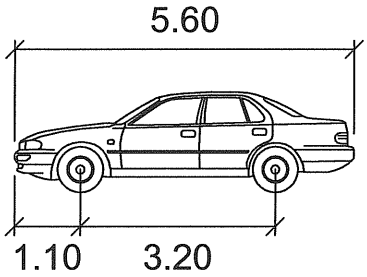
City of Saskatoon
Infrastructure Services Department

COMMERCIAL LANE DEAD-END
TURNAROUND T-TYPE
DESIGN VEHICLE: MEDIUM SINGLE UNIT

APPROVED
GENERAL MANAGER
ENGINEER
PLAN NO. 102-0005-005r001

C:\General Projects\Development Standards\1020005005r001_UKN.dwg, 1020005005, 2010/06/15 8:54:24 AM





P	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.00
Steering Angle	: 36.2
Steering Angle	: 36.2

Vd: 1999 TAC LARGE CAR

VEHICLE PATH: ONE STEERING REVERSAL

WHEELS ROTATED TO MAX STREERING ANGLE FROM STOPPED CONDITION

PLAN DESCRIPTION/REVISIONS	
4	XXX XXX
3	
2	
1	

DRAWN BY LCI

DATE 2010-JAN-12

SCALE : HOR. 1:400 VERT. _____

City of Saskatoon
Infrastructure Services Department

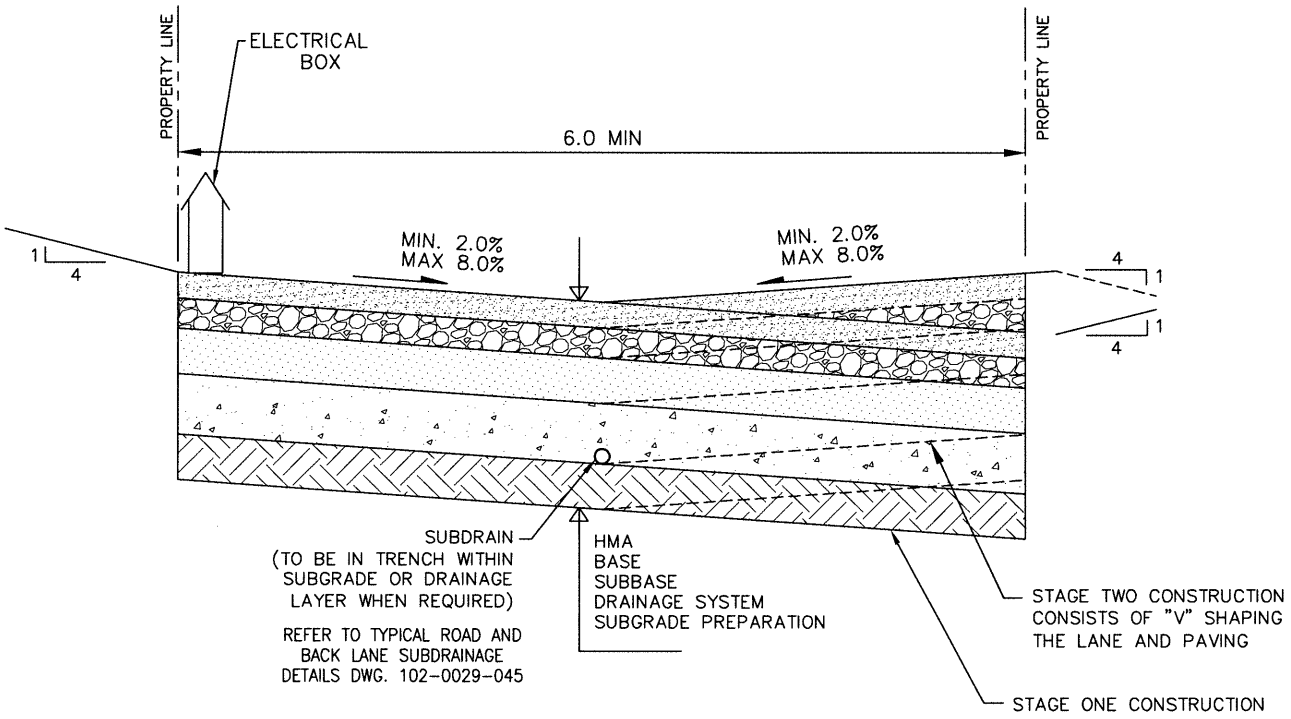
RESIDENTIAL LANE DEAD-END
TURNAROUND L-TYPE
DESIGN VEHICLE: LARGE CAR

APPROVED

GENERAL MANAGER

ENGINEER

PLAN NO. 102-0005-006r001



NOTE:
- BACK LANES WILL BE COMPRISED OF THE SAME STRUCTURE AS THE LOCAL ROADWAY CLASSIFICATION WITHIN THE ROAD GROUP AS OUTLINED IN THE PAVEMENT DESIGN GUIDE.
- DRAINAGE AGGREGATE TO BE ENVELOPED BY NON-WOVEN GEOTEXTILE FOR SUBDRAIN OR FULL DRAINAGE LAYER.
- SUBDRAIN TO BE CONNECTED TO CATCHBASIN AS PER DRAWING 102-0010-015 OR TEE INTO ADJACENT ROADWAY SUBDRAIN PIPE.

SCALE IN METRES

0 2 4

REVISIONS	
1	ADD SUBDRAIN & DRAINAGE LAYER, REVISE NOTES 2014-DEC-15 HLO
2	RELOCATE SUBDRAIN TO LOWEST POINT 2015-DEC-31 HLO
3	

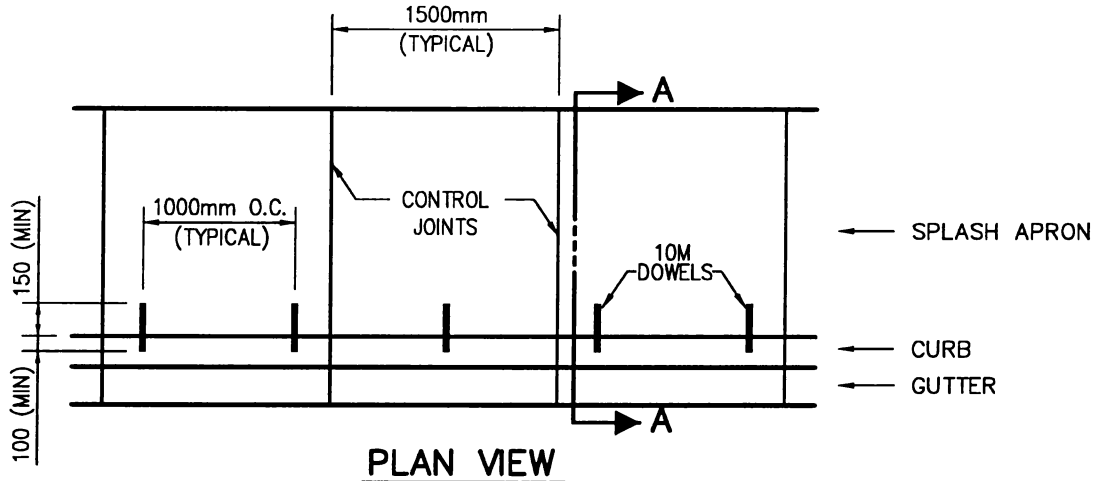
DRAWN BY R. KING
DATE 00-06-27
SCALES :
HOR. 1:50 VERT.

City of Saskatoon
Transportation & Utilities Department

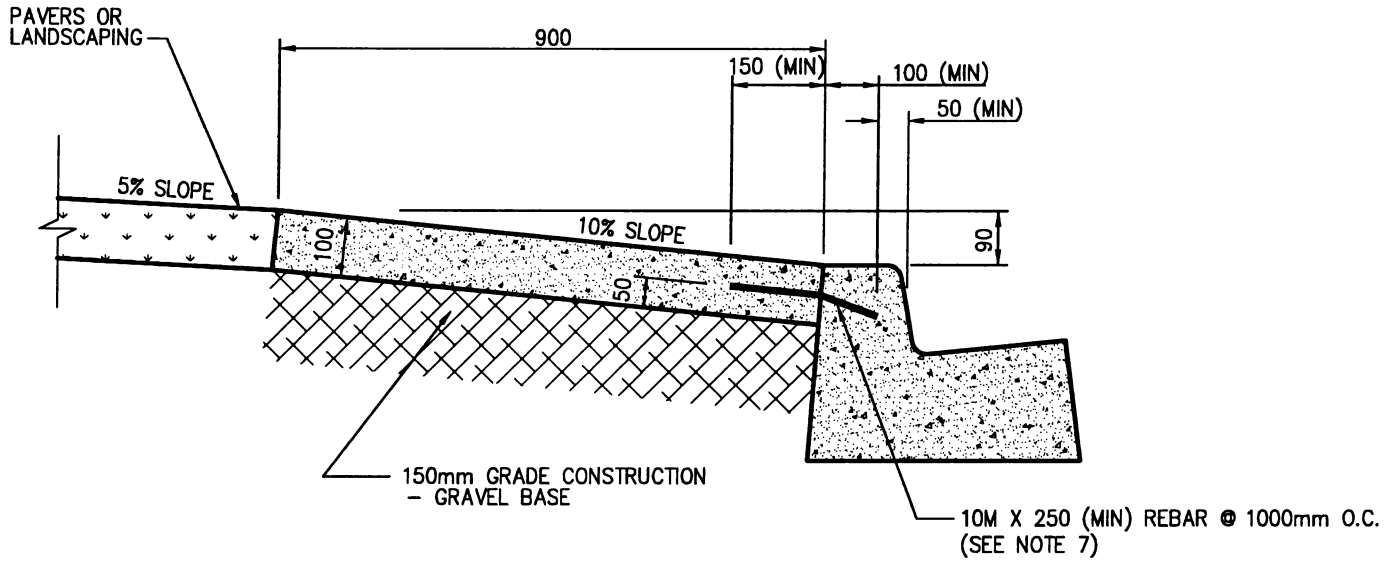
LANE, PAVED
2 STAGE CONSTRUCTION

CHIEF ENGINEER
JAN 08 2016
DATE
ENGINEER
ENGINEER

PLAN NO. 102-0005-007r002



PLAN VIEW



SECTION A–A

NOTES:

1. PROVIDE CONTROL JOINTS EVERY 1500mm TO MATCH CONTROL JOINTS ON CURBING.
2. DOWELS TO BE 10M, PLACED 1.0m O.C.
3. BACKFILL CURB AND COMPACT SUBGRADE TO 98% STANDARD PROCTOR.
4. FOR EXISTING CURB, DRILL AND INSERT DOWELS. FOR NEW CONSTRUCTION INSERT DOWELS WHEN CASTING THE CURB.
5. 150mm GRANULAR BASE COMPACTED TO 98% STANDARD PROCTOR.
6. CONCRETE STANDARD: 32 MPa DURA–MIX CONCRETE 5–8% AIR AS PER SPEC.
7. REBAR TO BE STAINLESS STEEL, EPOXY COATED, OR GALVANIZED. (EPOXY CAN NOT BE DRIVEN)

REVISIONS	
1	
2	
3	

DRAWN BY R. OTTENBREIT
DATE FEBRUARY 1, 1999

CHECKED BY
DATE

CITY OF SASKATOON
INFRASTRUCTURE SERVICES

SPLASH APRON

M–1

APPROVED

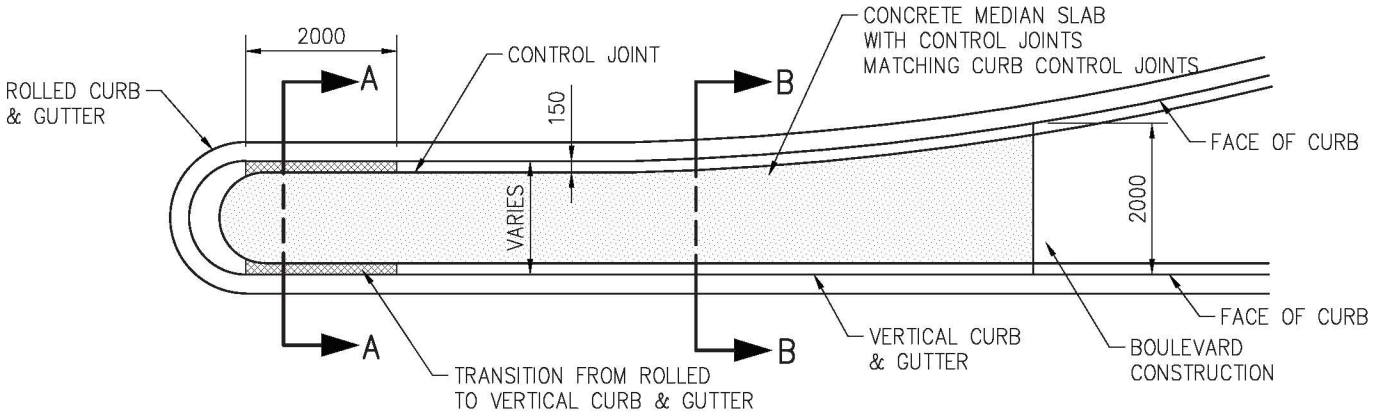
GENERAL MANAGER P. ENG.

ENGINEER

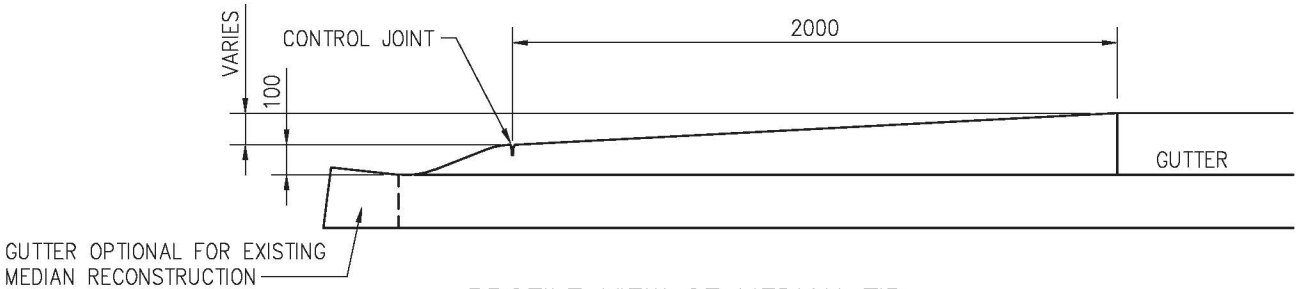
ENGINEER

SCALES : HOR. 1:50 VERT. 1:12.5

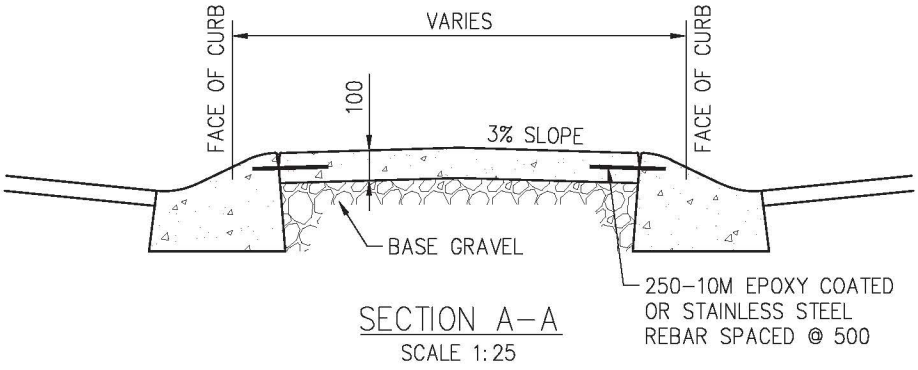
PLAN NO. 102–0006–001r001



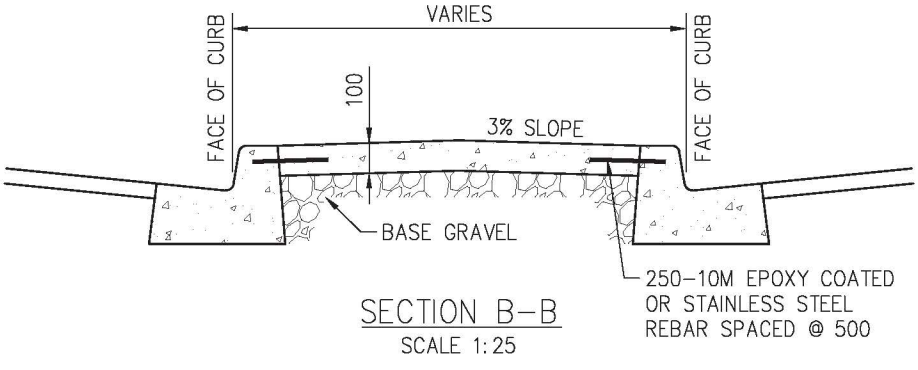
PLAN VIEW
SCALE 1:100



PROFILE VIEW OF MEDIAN TIP
SCALE 1:25



SECTION A-A
SCALE 1:25



SECTION B-B
SCALE 1:25

NOTES:

1. CONCRETE STANDARD:
   32 MPa DURA-MIX CONCRETE
   5-8% AIR AS PER SPEC.
2. COMPACTION STANDARD:
   98% STANDARD PROCTOR AS PER SPEC.
3. RAISED MEDIANS WITH PORTIONS IN EXCESS
   ⚠2 OF 2.0m WIDTH SHALL BE LANDSCAPED TO THE REQUIREMENTS OF THE PARKS DIVISION OF THE COMMUNITY SERVICES DEPARTMENT AND SHALL NOT IMPEDE VISIBILITY OF THE INTERSECTION.
4. MEDIANS 2.0m IN WIDTH OR LESS SHALL BE HARD SURFACED THROUGHOUT.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	1999-FEB-01	RO
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020-FEB-13	PRZ
2	MANUAL AND POLICY C07-030 - STREET DESIGN	2020-FEB-13	PRZ

City of Saskatoon

MOUNTABLE MEDIAN TIP

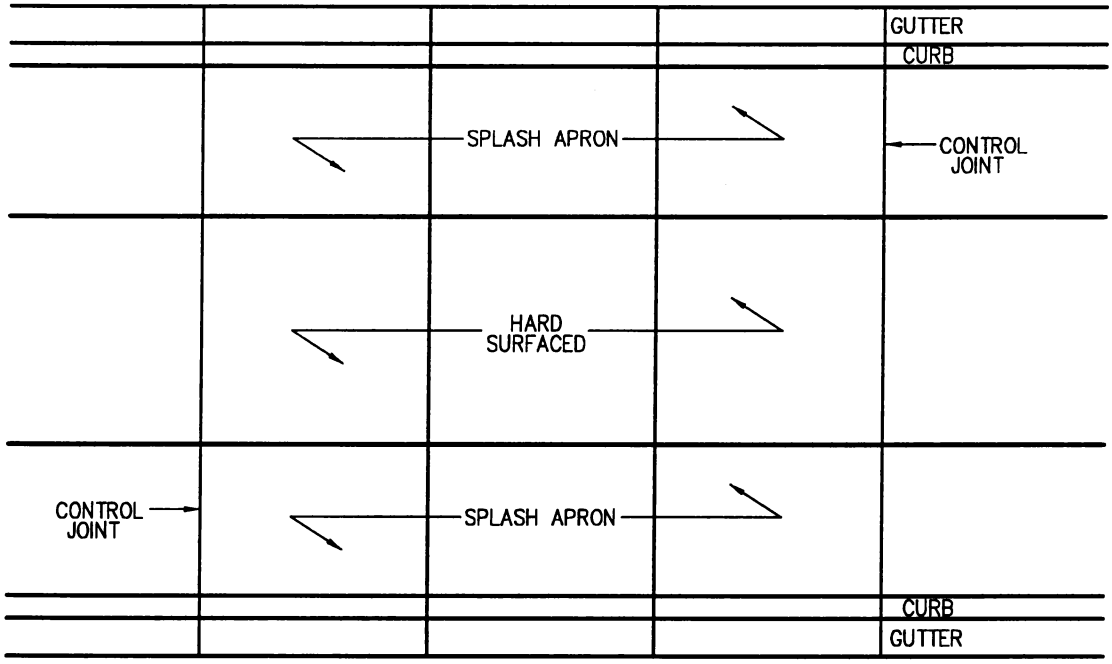
APPROVALS

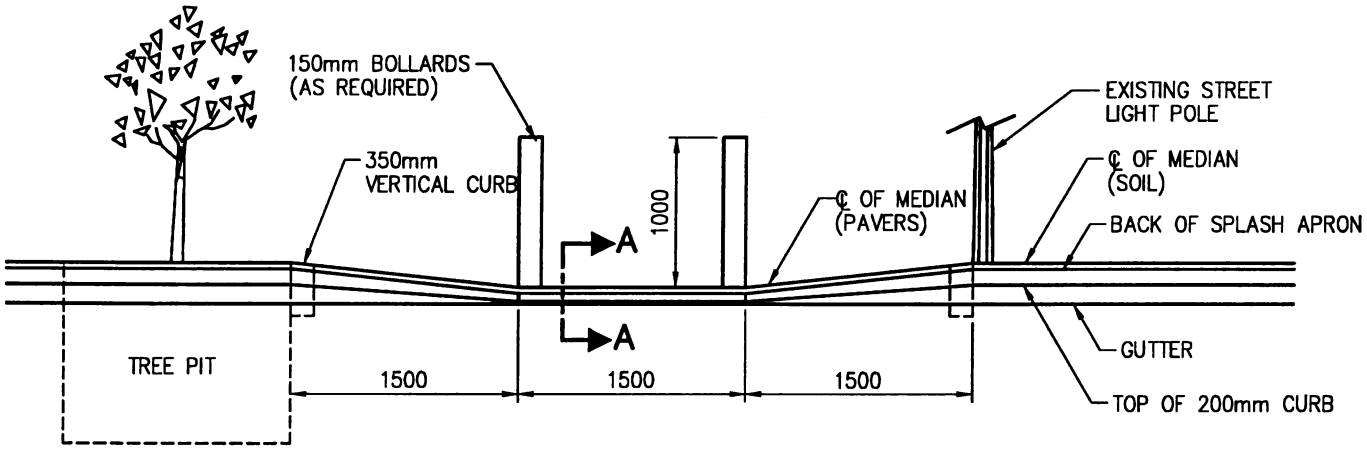
Chelsea Lanning
Chelsea Lanning (Apr 23, 2020)
SIGNATURE
Chelsea Lanning
NAME
Apr 23, 2020
DATE SIGNED

SIGNATURE
Matt Jurkiewicz
NAME
Apr 30, 2020
DATE SIGNED

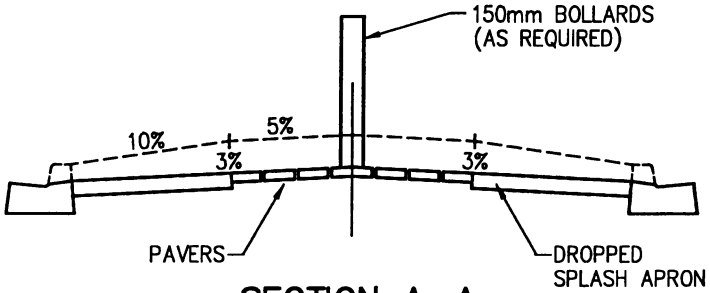
SCALES: HOR. AS NOTED VERT.

PLAN NO.
102-0006-002r002





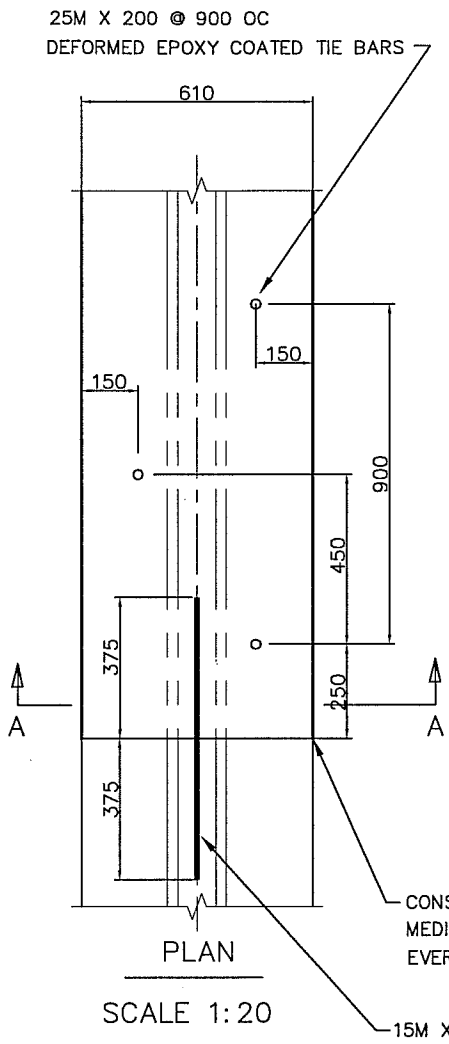
MEDIAN RAMP DETAIL (TREE PIT/LIGHT POLE)



SECTION A–A

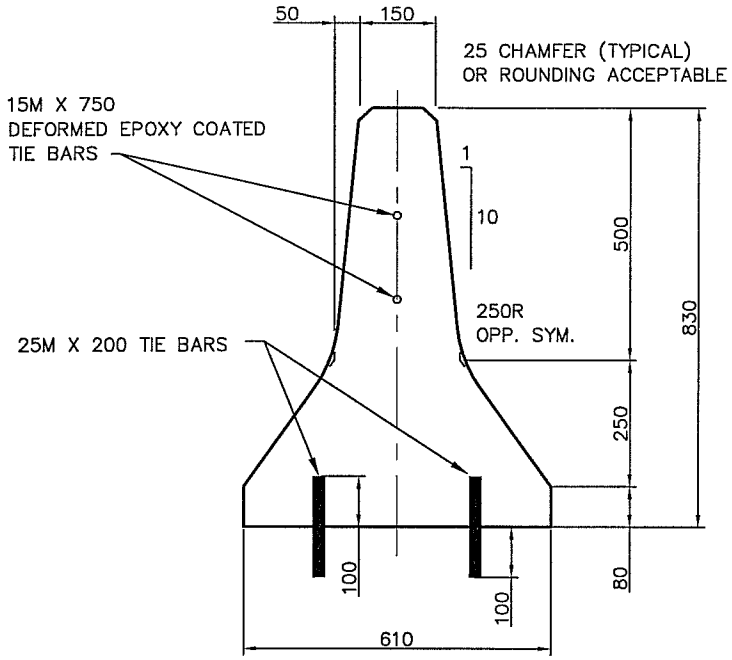
NTS

REVISIONS		CITY OF SASKATOON	APPROVED
1		INFRASTRUCTURE SERVICES	GENERAL MANAGER P. ENG.
2			ENGINEER
3			ENGINEER
DRAWN BY R. OTTENBREIT		MEDIAN RAMP	SCALES : HOR. 1:50 VERT.
DATE FEBRUARY 1, 1999			
CHECKED BY			M-3 PLAN NO. 102-0006-003r001
DATE			



PLAN

SCALE 1:20



SECTION A–A

SCALE 1:15

NOTE: ALTERNATE CROSS SECTIONS IN GENERAL COMPLIANCE WITH DIMENSIONS WILL BE CONSIDERED BY THE ENGINEER

INSTALL LIGHT POLE BASES AND CONDUITS PRIOR TO SLIPFORMING

SLIPFORM OVER TOP OF POLE BASES. ONCE MACHINE IS PAST, IMMEDIATELY REMOVE CONCRETE OVER POLES BASE AND CLEAN THOROUGHLY

MEDIAN BARRIER SLOPED END TREATMENT

AS PER COS BARRIER TRANSITION
102–0002–044r001_UKN.DWG

ALL DIMENSIONS IN MILLIMETRES
UNLESS OTHERWISE NOTED

PLAN DESCRIPTION/REVISIONS	
4	XXX XXX
3	
2	
1	

DRAWN BY LCI
DATE 2010–DEC–20
SCALE : HOR. 1:10 VERT. _____

City of Saskatoon
Infrastructure Services Department

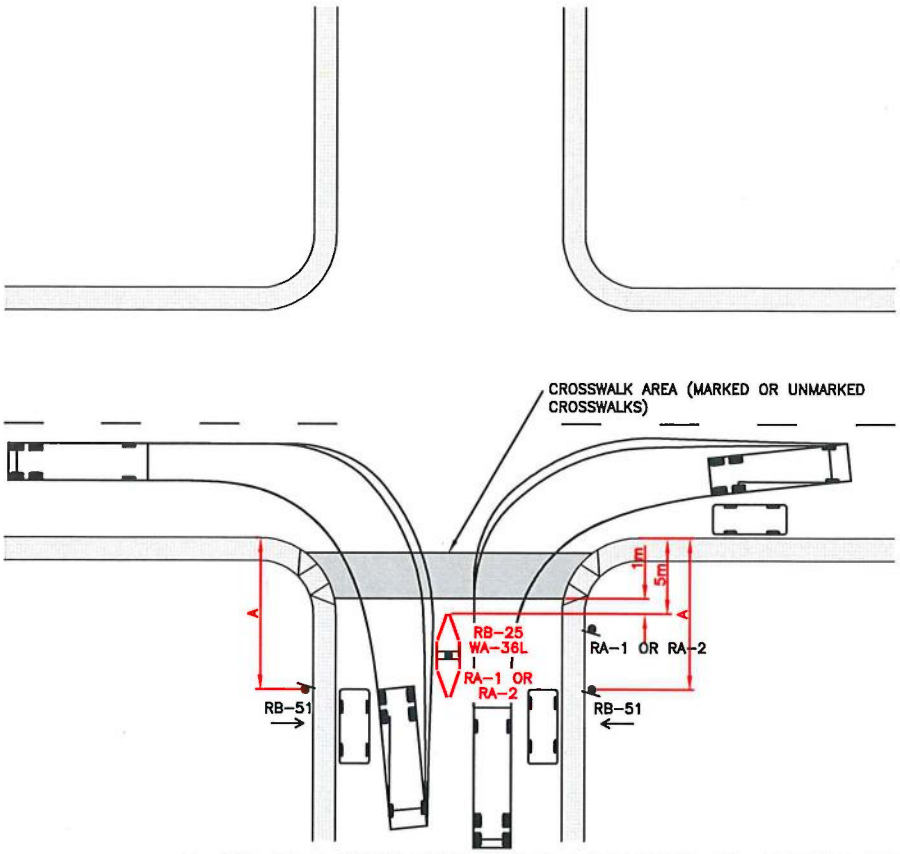
830 MEDIAN BARRIER
SLIP–FORMED CONCRETE

APPROVED

GENERAL MANAGER

ENGINEER

PLAN NO. 102-0006-005r001

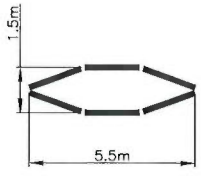


A: TO BE VERIFIED WITH VEHICLE TRACKING TO CONFIRM VEHICLE MOVEMENTS DO NOT INTERFERE WITH PARKED VEHICLES. (CONFIRM VEHICLES TO BE USED)

NOTE:

1. SIGNAGE RB–25 SHOULD BE DOUBLE SIDED AND INSTALLED IN CENTRE OF MEDIAN.
2. ALIGNMENT WITH EXISTING STOP & YIELD SIGN SHOULD BE REVIEWED. WHEN INSTALLING A STOP OR YIELD SIGN ON THE MEDIAN ISLAND, CONSIDER SIGN POSITION IN RELATION TO THE STOP OR YIELD SIGN LOCATED ON THE BOULEVARD.
3. MEDIAN SHOULD NOT BE INSTALLED OVER MANHOLES OR UTILITY VAULTS.
4. MEDIAN SHOULD NOT OBSTRUCT PEDESTRIAN CROSSWALK.

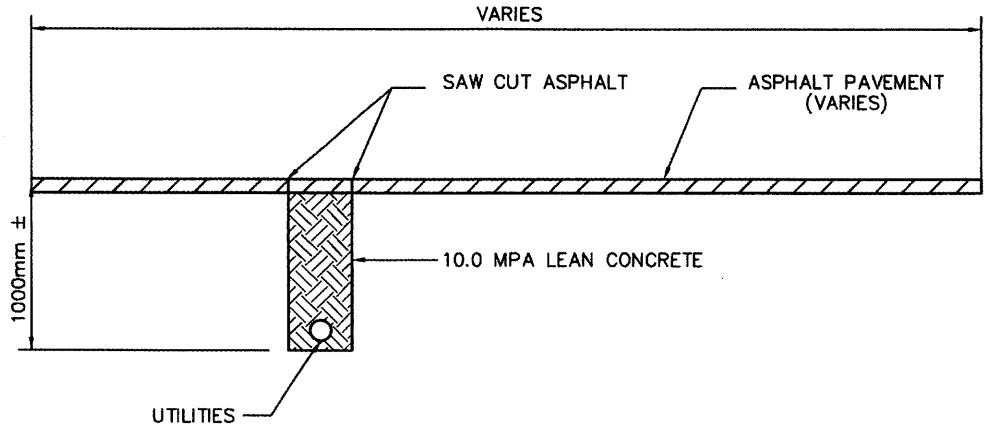
TEMPORARY MEDIAN DETAIL



PLAN DESCRIPTION/REVISIONS	City of Saskatoon Transportation	APPROVED
	TRAFFIC CALMING TEMPLATE TEMPORARY MEDIAN ISLAND	ENGINEER
DRAWN BY SJK DATE 2019–MAY–22		ENGINEER
SCALE : HOR. 1:500 VERT. 1:500		PLAN NO. 102–0006–006r001

TYPICAL ASPHALT CUT

0 – <300mm CUT



* ASPHALT SHALL BE PLACED AT 75mm THICK OR MATCH EXISTING THICKNESS WHICHEVER IS GREATER.
* IF EXISTING ASPHALT IS GREATER THAN 75mm, ASPHALT MUST BE PLACED IN TWO LIFTS.
* ALL EXCAVATED MATERIAL TO BE HAULED AWAY.

1. ALL UTILITY CONSTRUCTION AND MAINTENANCE ACTIVITY INVOLVING EXCAVATION IN A CITY STREET OR LANE RIGHT–OF WAY MUST BE REPORTED TO THE CONSTRUCTION & DESIGN DIVISION CITY OF SASKATOON.

2. REPAIRS/RESTORATION OF THE STREET/LANE SURFACE SHALL BE DONE AS SHOWN.

REVISIONS		
1	MRH	03–12–22
2	HLO	06–01–20
3	HLO	07–02–28
4	REVISED DIVISION NAME 2015–DEC–01	HLO

DRAWN BY RAV

DATE 98–11–06

SCALES : HOR. NTS VERT. _____

City of Saskatoon
Transportation & Utilities Department

UTILITIES PLACEMENT STANDARDS

CHIEF ENGINEER

JAN 0 8 2016
DATE

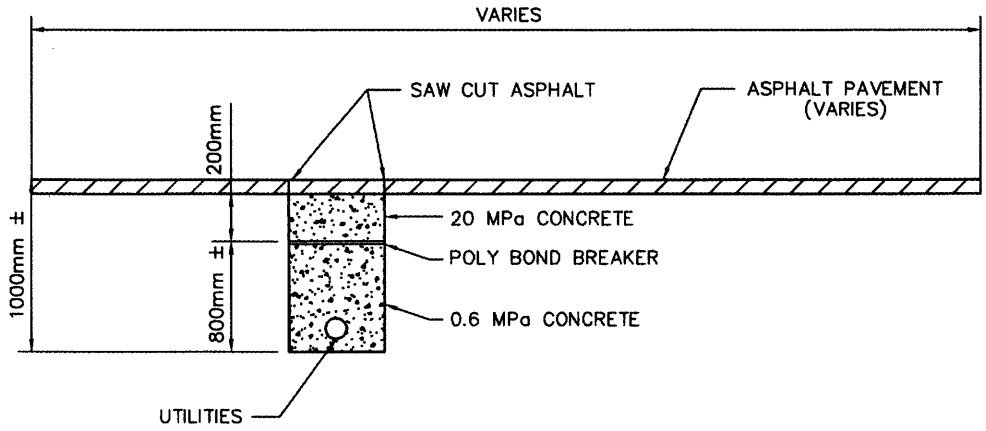
ENGINEER

JAN 0 8 2016
DATE

PLAN NO. 102–0007–001r005

TYPICAL STREET

300mm – 1000mm CUT



* ASPHALT SHALL BE PLACED AT 75mm THICK OR MATCH EXISTING THICKNESS WHICHEVER IS GREATER.
* IF EXISTING ASPHALT IS GREATER THAN 75mm, ASPHALT MUST BE PLACED IN TWO LIFTS.
* ALL EXCAVATED MATERIAL TO BE HAULED AWAY.

1. ALL UTILITY CONSTRUCTION AND MAINTENANCE ACTIVITY INVOLVING EXCAVATION IN A CITY STREET OR LANE RIGHT–OF WAY MUST BE REPORTED TO THE CONSTRUCTION & DESIGN DIVISION CITY OF SASKATOON.

2. REPAIRS/RESTORATION OF THE STREET/LANE SURFACE SHALL BE DONE AS SHOWN.

REVISIONS	
1	MRH 03–12–22
2	HLO 06–01–20
3	HLO 07–02–28
4	REVISED DIVISION NAME 2015–DEC–01 HLO

DRAWN BY RAV

DATE 98–11–06

SCALES : HOR. NTS VERT.

City of Saskatoon
Transportation & Utilities Department

UTILITIES PLACEMENT STANDARDS

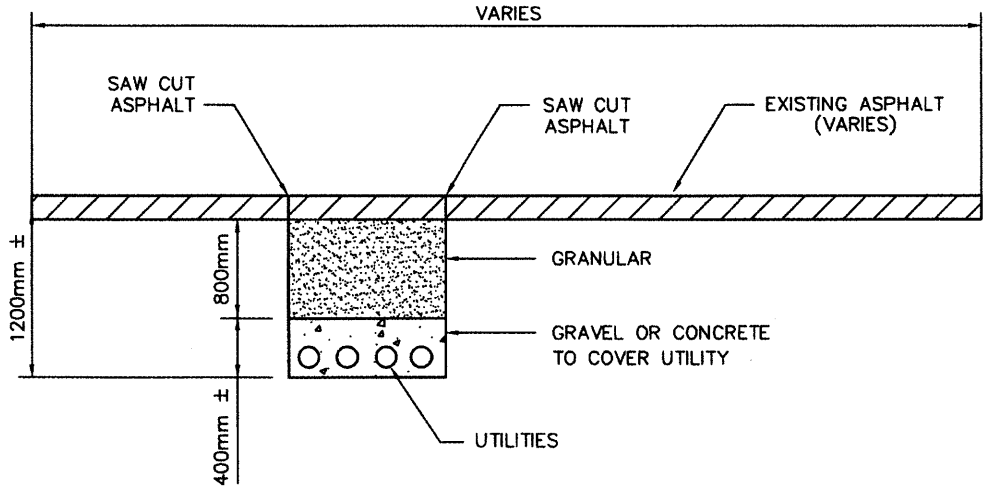
CHIEF ENGINEER JAN 0 8 2016 DATE

ENGINEER JAN 0 8 2016 DATE

PLAN NO. 102–0007–002r005

TYPICAL STREET

300mm – 1000mm CUT



* ASPHALT SHALL BE PLACED AT 75mm THICK OR MATCH EXISTING THICKNESS WHICHEVER IS GREATER. IF EXISTING ASPHALT IS GREATER THAN 75mm, ASPHALT MUST BE PLACED IN TWO LIFTS.
* THE STREET BASE GRAVEL SHALL BE PLACED IN 150 MM LIFTS (MAXIMUM) AND COMPACTED TO 100 PERCENT OF STANDARD PROCTOR DENSITY AT EXISTING FIELD MOISTURE CONTENT.
* COMPACTION TEST REPORTS MUST BE PROVIDED REPORTS CAN BE FAXED TO 975-2971.
* ALL EXCAVATED MATERIAL TO BE HAULED AWAY.

1. ALL UTILITY CONSTRUCTION AND MAINTENANCE ACTIVITY INVOLVING EXCAVATION IN A CITY STREET OR LANE RIGHT-OF WAY MUST BE REPORTED TO THE CONSTRUCTION & DESIGN DIVISION CITY OF SASKATOON.

2. REPAIRS/RESTORATION OF THE STREET/LANE SURFACE SHALL BE DONE AS SHOWN.

REVISIONS	
1	MRH 03-12-22
2	HLO 06-01-20
3	HLO 07-02-28
4	REVISED DIVISION NAME 2015-DEC-01 HLO
DRAWN BY	RAV
DATE	98-11-06
SCALES : HOR.	NTS VERT.

City of Saskatoon
Transportation & Utilities Department

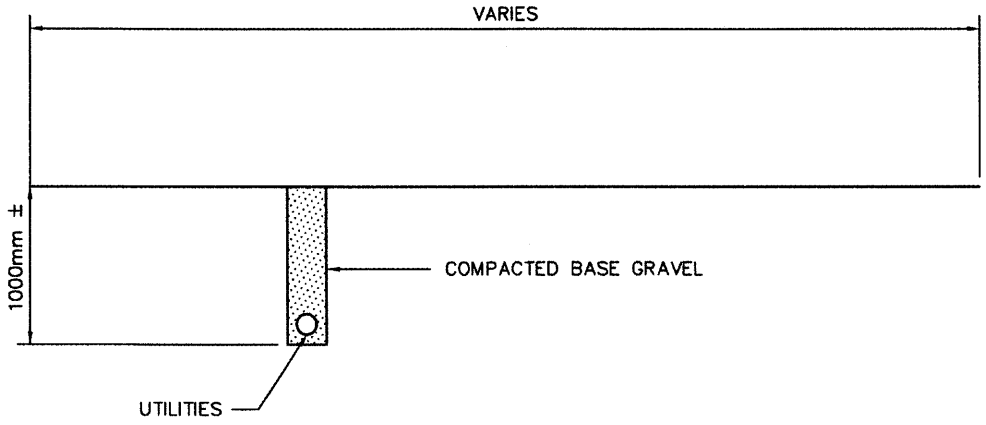
UTILITIES PLACEMENT STANDARDS

CHIEF ENGINEER — JAN 0 8 2016 — DATE

ENGINEER — JAN 0 8 2016 — DATE

PLAN NO. 102-0007-003r005

TYPICAL GRAVEL LANE



* FILL BASE GRAVEL SHALL BE PLACED IN 150MM LIFTS (MAXIMUM) AND COMPACTED TO 95 PERCENT OF STANDARD PROCTOR DENSITY AT EXISTING FIELD MOISTURE CONTENT.

* ALL EXCAVATION MATERIAL IS TO BE HAULED TO AN APPROVED DISPOSAL SITE AWAY FROM THE CONSTRUCTION AREA.

1. ALL UTILITY CONSTRUCTION AND MAINTENANCE ACTIVITY INVOLVING EXCAVATION IN A CITY STREET OR LANE RIGHT-OF WAY MUST BE REPORTED TO THE CONSTRUCTION & DESIGN DIVISION CITY OF SASKATOON.

2. REPAIRS/RESTORATION OF THE STREET/LANE SURFACE SHALL BE DONE AS SHOWN.

REVISIONS	
1	CC 02-04-08
2	HLO 06-01-20
3	REVISED DIVISION NAME 2015-DEC-01 HLO

DRAWN BY RAV
DATE 98-11-06
SCALES : HOR. NTS VERT.

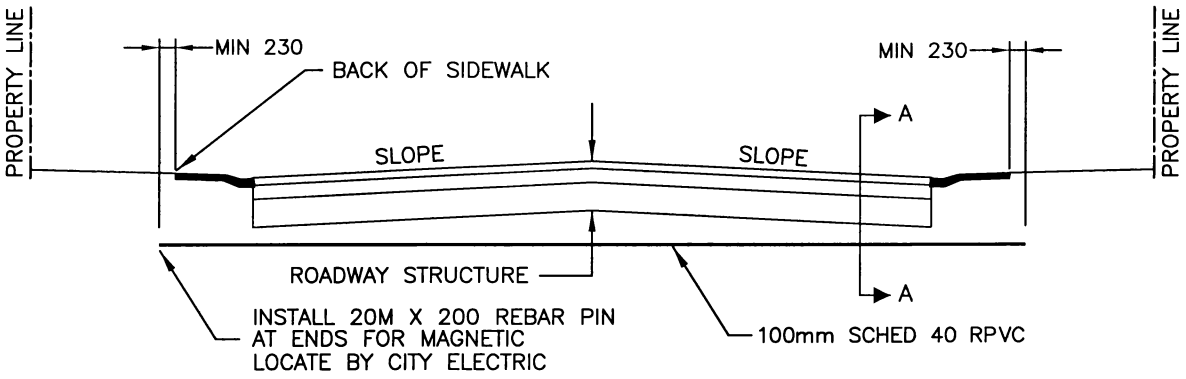
City of Saskatoon
Transportation & Utilities Department

UTILITIES PLACEMENT STANDARDS

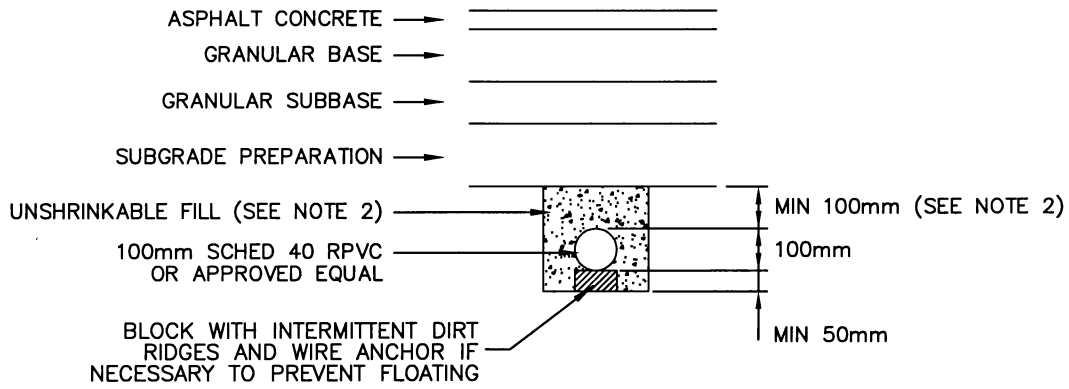
CHIEF ENGINEER JAN 0 8 2016 DATE

ENGINEER JAN 0 8 2016 DATE

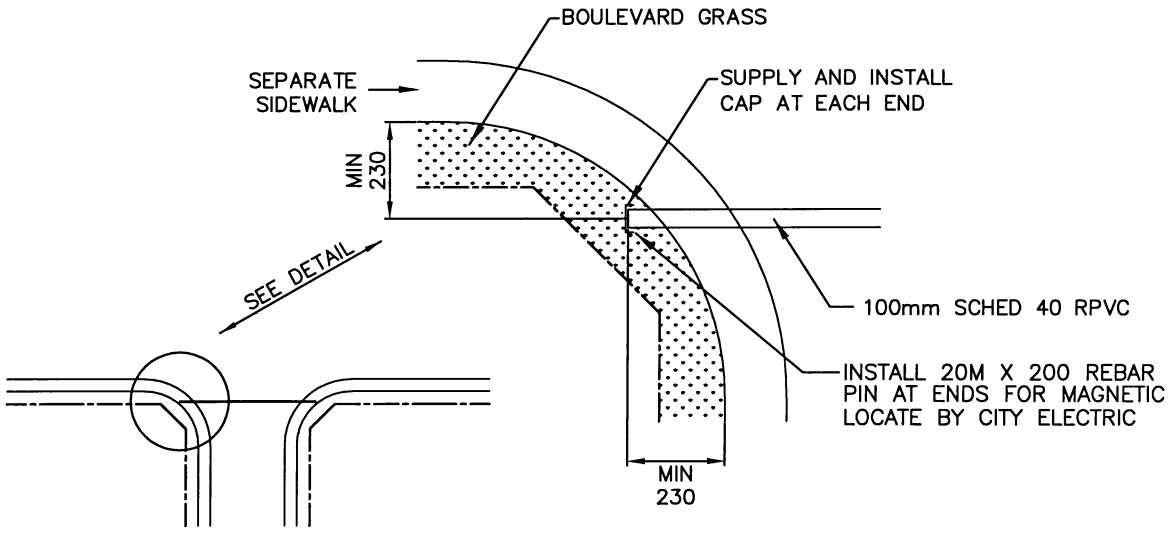
PLAN NO. 102-0007-005r003



PROFILE



SECTION A–A



TYPICAL PLAN

NOTES:

1. PULL ROPE MUST BE INSTALLED IN SLEEVE (1/4" POLY ROPE OR APPROVED EQUAL)
2. UNSHRINKABLE FILL MAY EXTEND TO UNDERSIDE OF SUBBASE IF INSTALLED AFTER SUBGRADE PREPARATION
3. UNSHRINKABLE FILL AS PER STANDARD SPECIFICATIONS DIV. 8 SEC. 08000
4. AFTER BACKFILL, PULL 75mm MANDRELL THROUGH SLEEVE IN PRESENCE OF ENGINEER

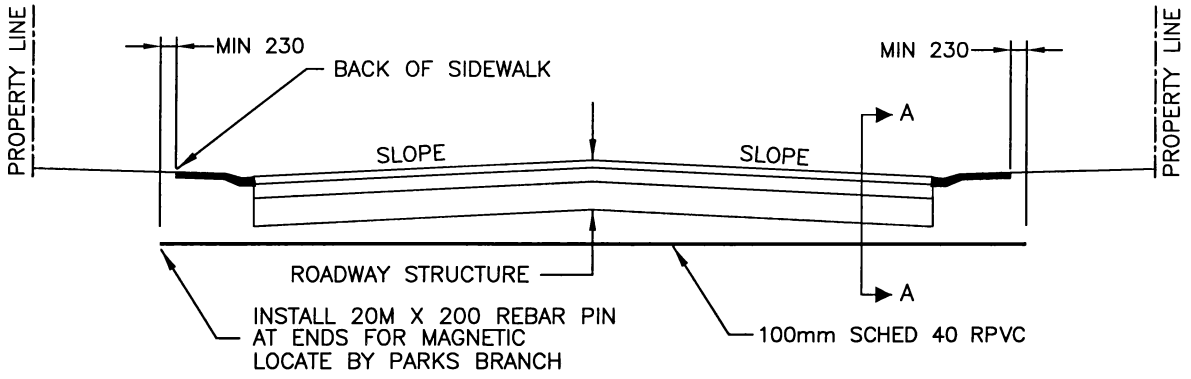
REVISIONS	
1	
2	
3	

DRAWN BY A. YOUNG
DATE 2003-02-25
CHECKED BY
DATE

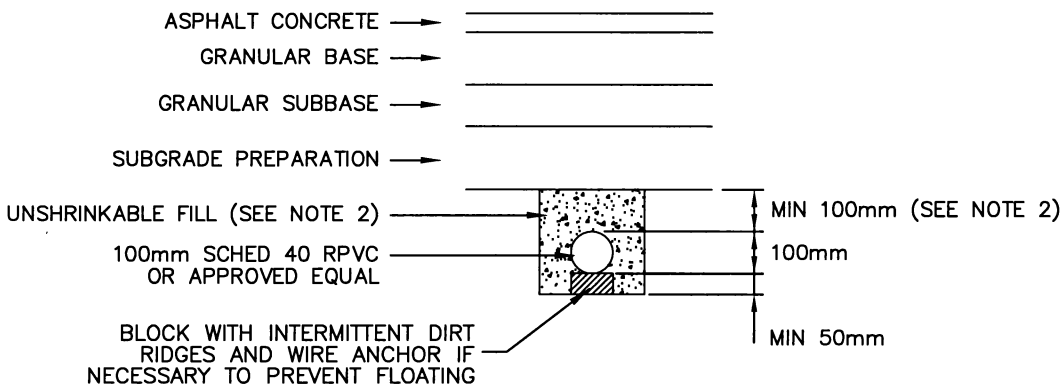
City of Saskatoon
Infrastructure Services Department

TYPICAL ROADWAY CROSSING ELECTRICAL SLEEVE

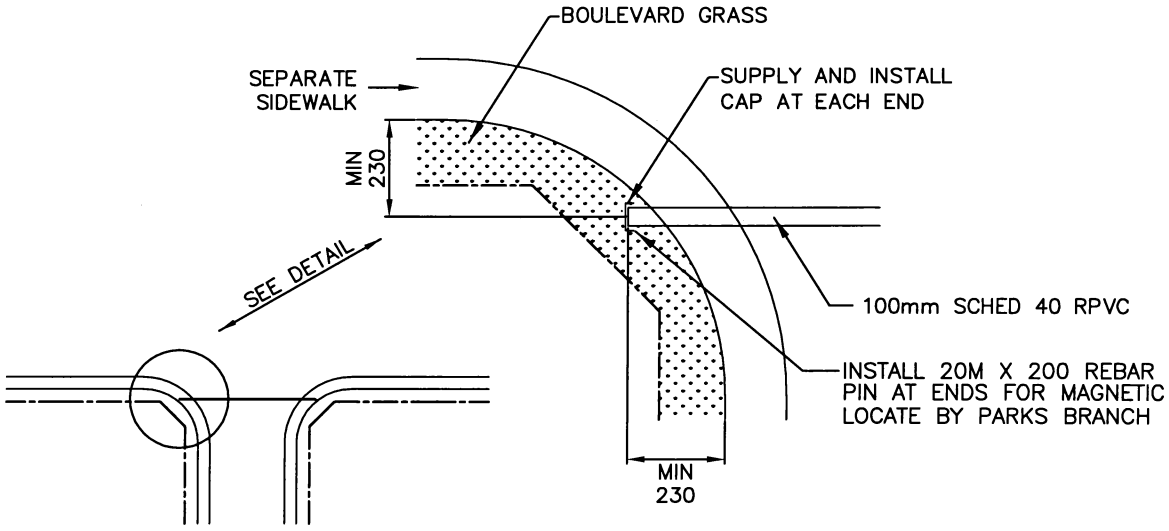
APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. NTS
PLAN NO. 102–0007–006r001



PROFILE



SECTION A–A



TYPICAL PLAN

NOTES:

1. PULL ROPE MUST BE INSTALLED IN SLEEVE (1/4" POLY ROPE OR APPROVED EQUAL)
2. UNSHRINKABLE FILL MAY EXTEND TO UNDERSIDE OF SUBBASE IF INSTALLED AFTER SUBGRADE PREPARATION
3. UNSHRINKABLE FILL AS PER STANDARD SPECIFICATIONS DIV. 8 SEC. 08000
4. AFTER BACKFILL PULL 75mm MANDRELL THROUGH SLEEVE IN PRESENCE OF ENGINEER

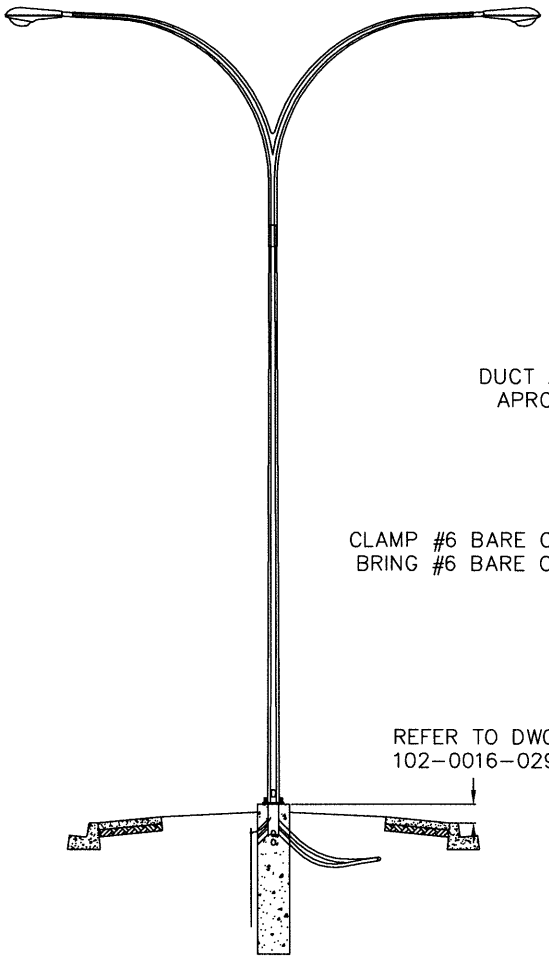
REVISIONS	
1	
2	
3	

DRAWN BY A. YOUNG
DATE 2003-02-27
CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

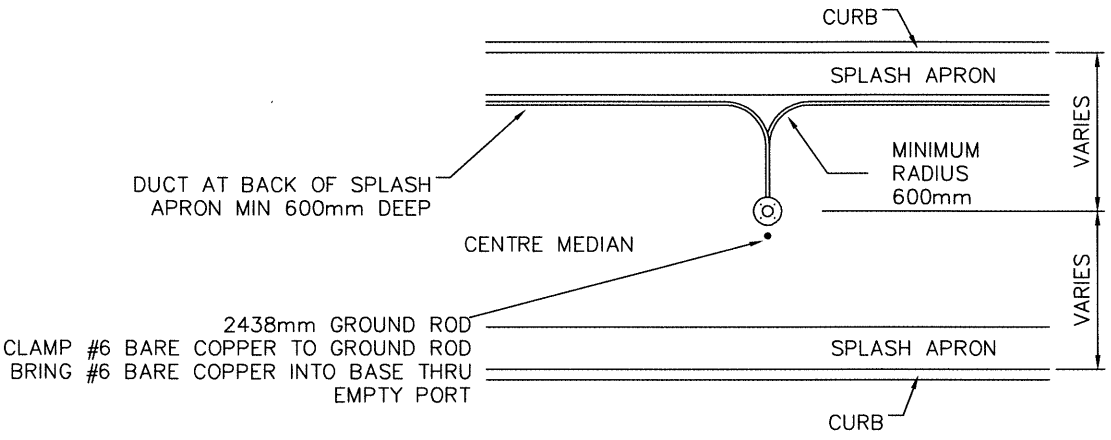
TYPICAL ROADWAY CROSSING IRRIGATION SLEEVE

APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. NTS
PLAN NO. 102-0007-007r001



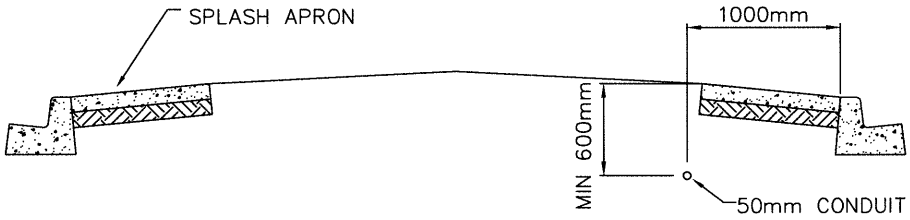
ELEVATION AT POLE

NTS



PLAN VIEW

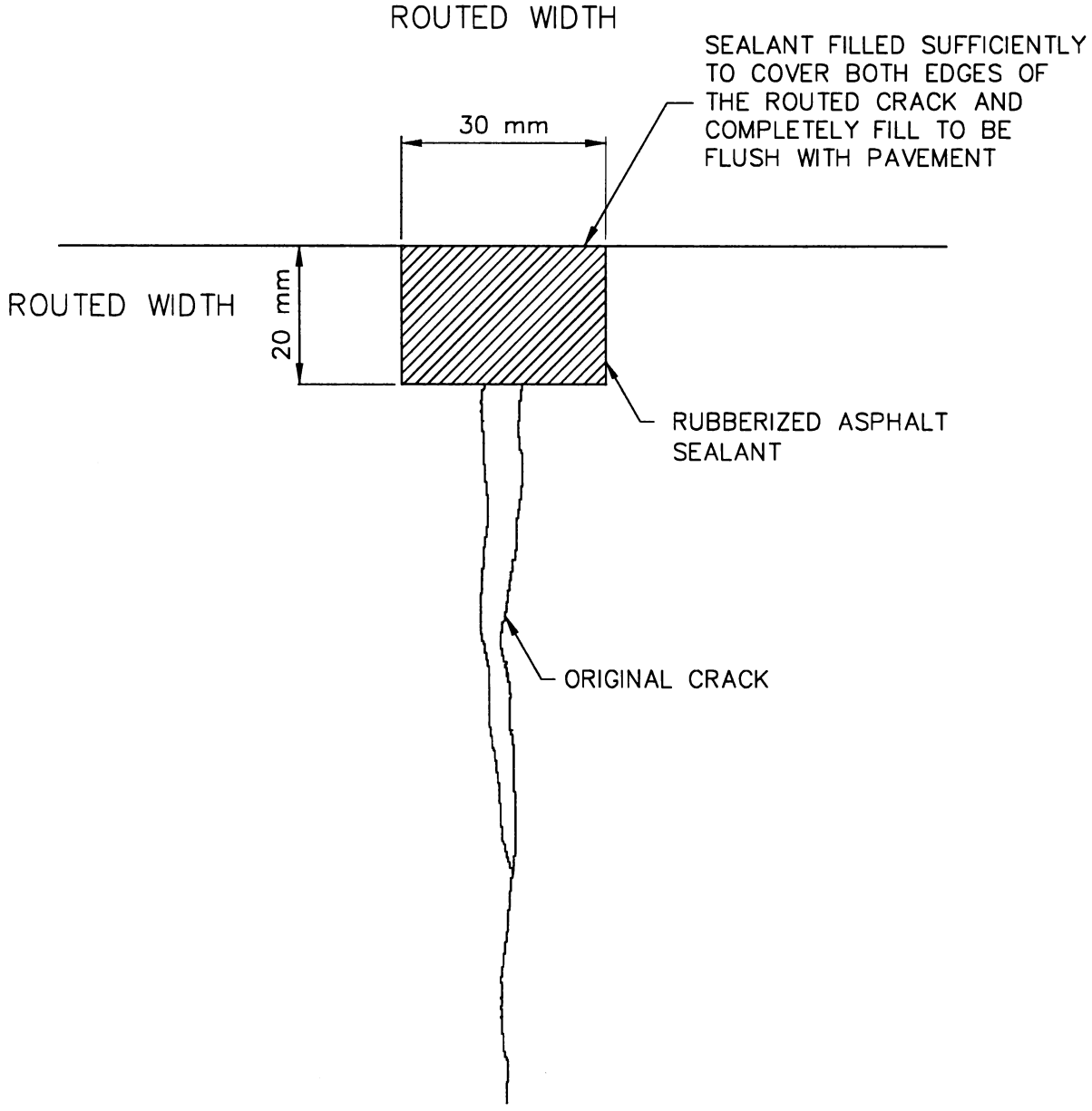
NTS



ELEVATION AT MIDSPAN

NTS

PLAN DESCRIPTION/REVISIONS		City of Saskatoon Transportation & Utilities Department	APPROVED ENGINEER ENGINEER
4			
3			
2			
1			
DRAWN BY DJC DATE 2014-DEC-17		BASE/DUCTING INSTALLATION TYPICAL MEDIAN CROSS SECTION	
SCALE : HOR. N.T.S. VERT. N.T.S.			PLAN NO. 102-0007-008r001



REVISIONS	
1	
2	
3	

DRAWN BY J. LEIER
DATE 00-01-20

CHECKED BY
DATE

—City of— Saskatoon

INFRASTRUCTURE SERVICES

CROSS SECTION FOR RUBBERIZED ASPHALT CRACK SEALANT

APPROVED

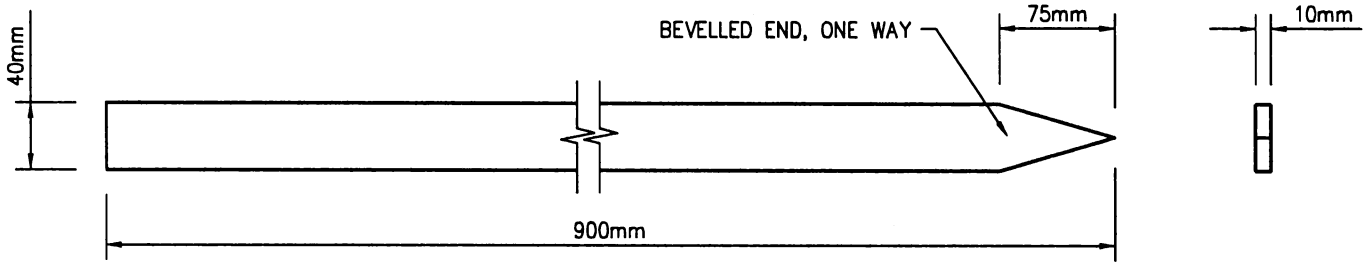
GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER

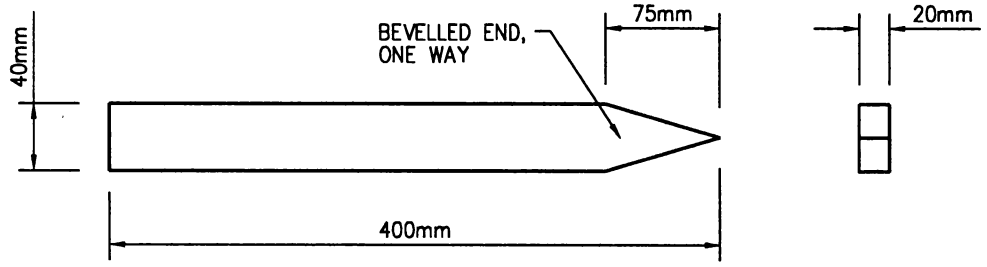
SCALES : HOR. NTS VERT.

PLAN NO. 102-0008-001r001



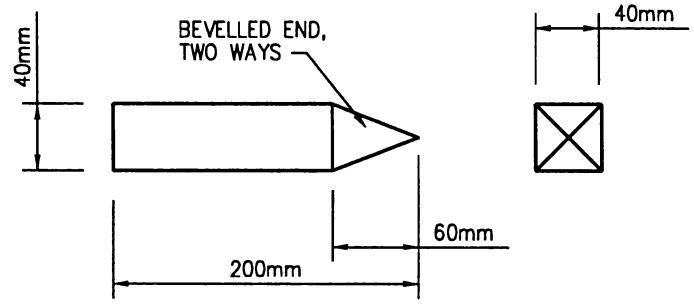
LATH 10mm x 40mm x 900mm

BUNDLES OF 100



STAKES 20mm x 40mm x 400mm

BUNDLES OF 50



HUBS 40mm x 40mm x 200mm

BUNDLES OF 25

MATERIAL:

SEASONED SPRUCE, CLEAR OF KNOTS.

SHOULD BE ABLE TO WITHSTAND MODERATE TO HEAVY HAMMERING.

SMOOTHNESS:

LATH SHALL BE PLANED ON ONE 40mm SIDE AND PLANED OR RESAWN ON THE OTHER.

20mm x 40mm STAKES SHALL BE PLANED ON ALL SIDES.

PAINTING:

THE TOP 200mm OF LATH AND 20mm x 40mm STAKES SHALL BE PAINTED FLOURECENT PINK.

THE TOP 100mm OF 40mm X 40mm HUBS SHALL BE PAINTED FLOURECENT PINK.

REVISIONS	
1	95-06-16 LCI
2	96-06-26 LCI
3	00-02-15 METRIC JLL

DRAWN BY SLM

DATE 92-04-02

CHECKED BY

DATE

—City of— Saskatoon

INFRASTRUCTURE SERVICES

SPECIFICATIONS FOR SURVEY STAKES

APPROVED

GENERAL MANAGER P. ENG.

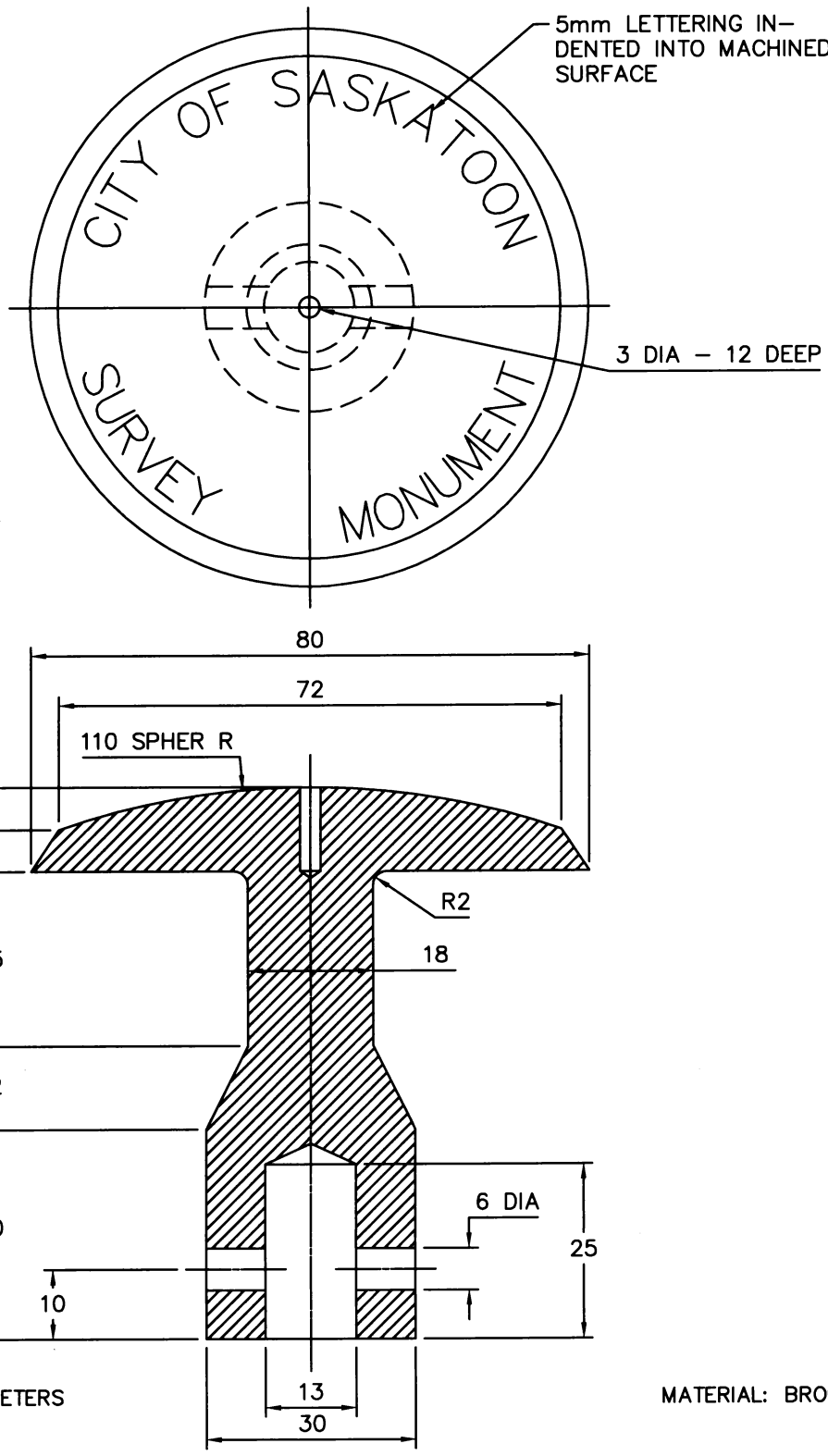
ENGINEER

ENGINEER

SCALES : HOR. 1:5 VERT.

PLAN NO. 102-0009-001r001

H:\S_LIBRARY_DEPT\102\102009001r001.dwg



ALL DIMENSIONS IN MILLEMETERS
UNLESS OTHERWISE NOTED

MATERIAL: BRONZE

REVISIONS	
1	
2	
3	

DRAWN BY J.M.H.
DATE DECEMBER 4, 2002

CHECKED BY
DATE

City of Saskatoon
INFRASTRUCTURE SERVICES

SURVEY TABLET MARKER TYPE 1

APPROVED

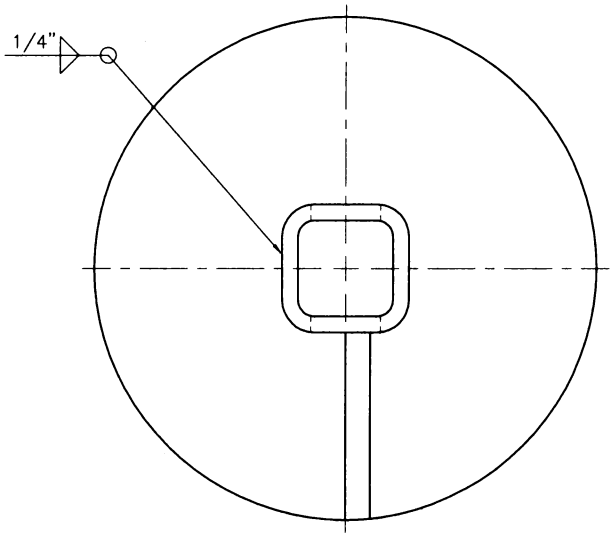
GENERAL MANAGER P. ENG.

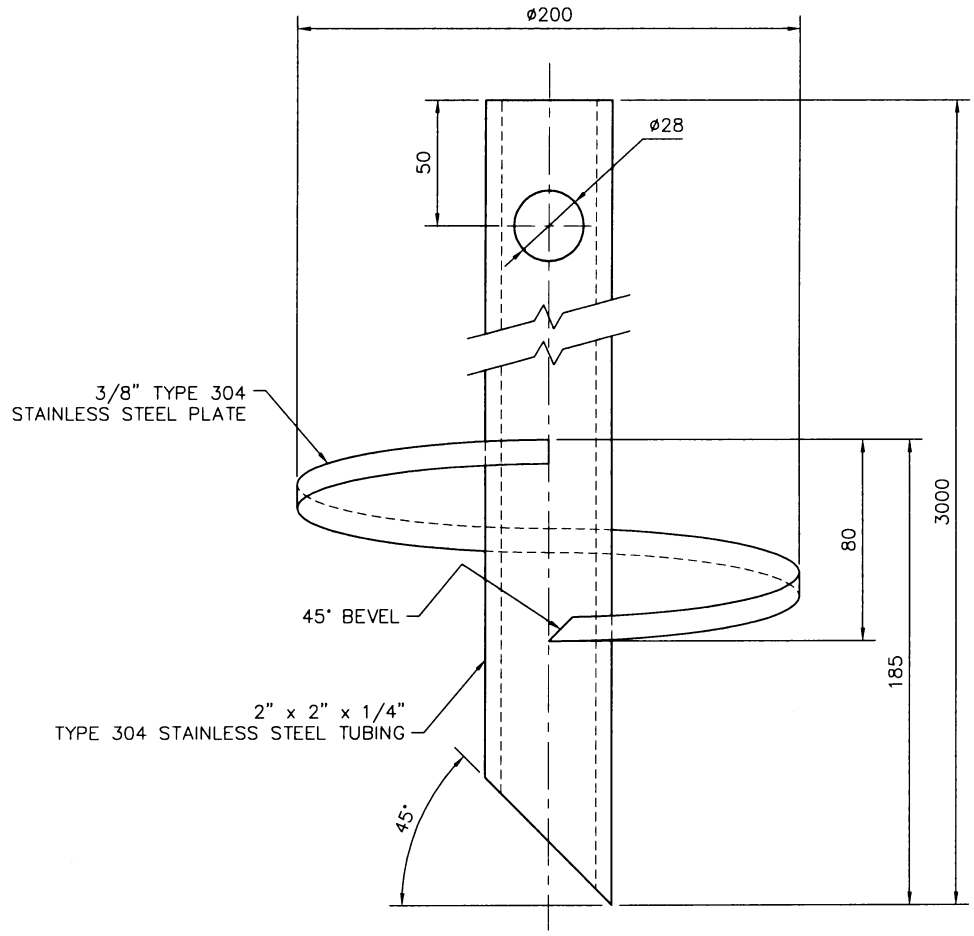
ENGINEER A. Boyko

ENGINEER

SCALES : HOR. 1:1 VERT. 1:1

PLAN NO. 102–0009–002r001





ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS	
1	DIM 70mm to 80mm CC
2	
3	

DRAWN BY C. CARTER
DATE 10/16/01

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

COS SURVEY MARKER

APPROVED

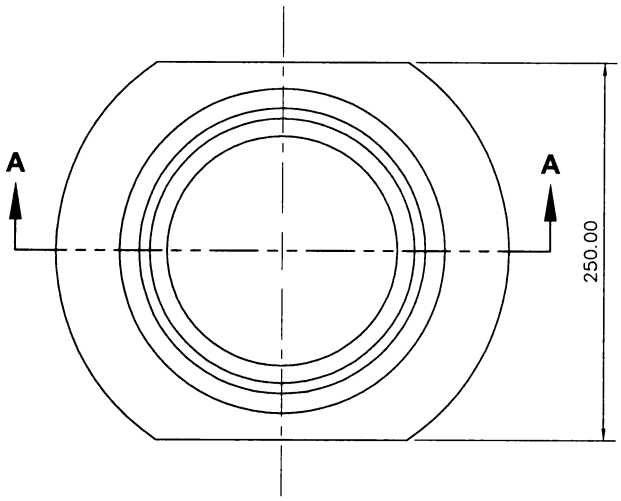
GENERAL MANAGER P. ENG.

ENGINEER

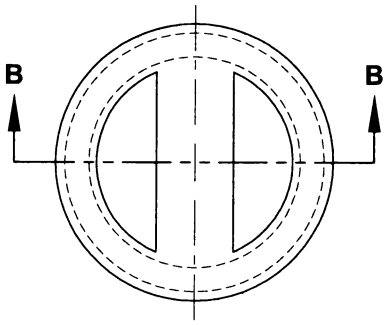
ENGINEER

SCALES : HOR. 1:3

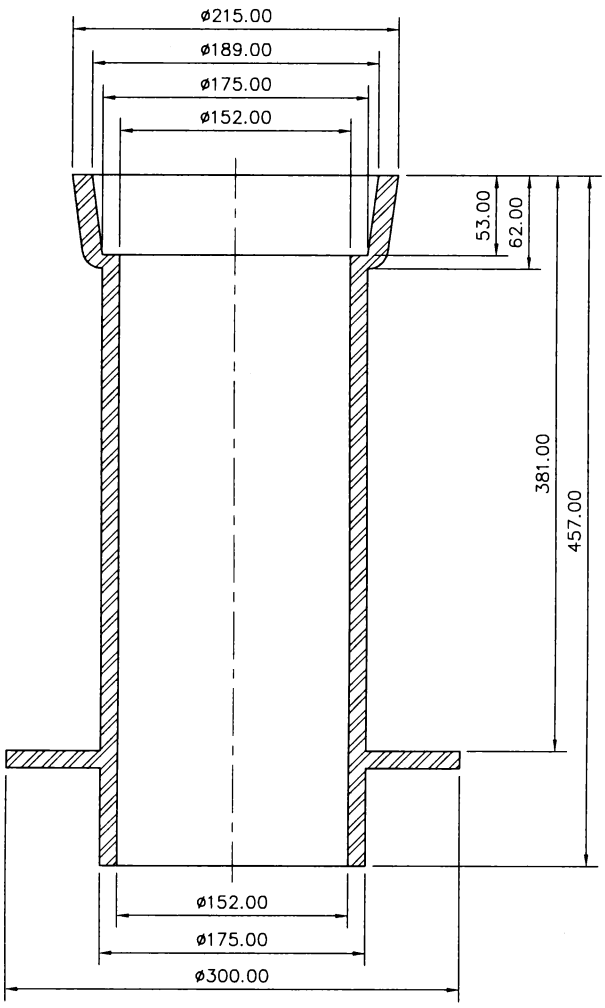
PLAN NO. 102-0009-003r001



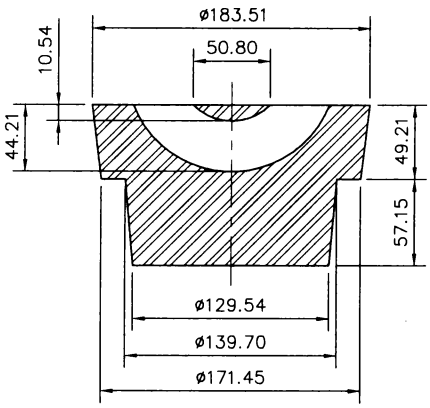
PLAN VIEW



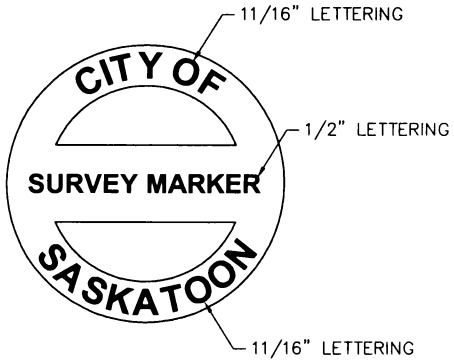
PLAN VIEW



SECTION VIEW A–A



SECTION VIEW B–B



TEXT LOCATION DETAIL

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

REVISIONS			
1			
2			
3			

City of Saskatoon
Infrastructure Services Department

DRAWN BY C. CARTER
DATE 10/23/01

CHECKED BY
DATE

COS SURVEY MARKER CASING

APPROVED

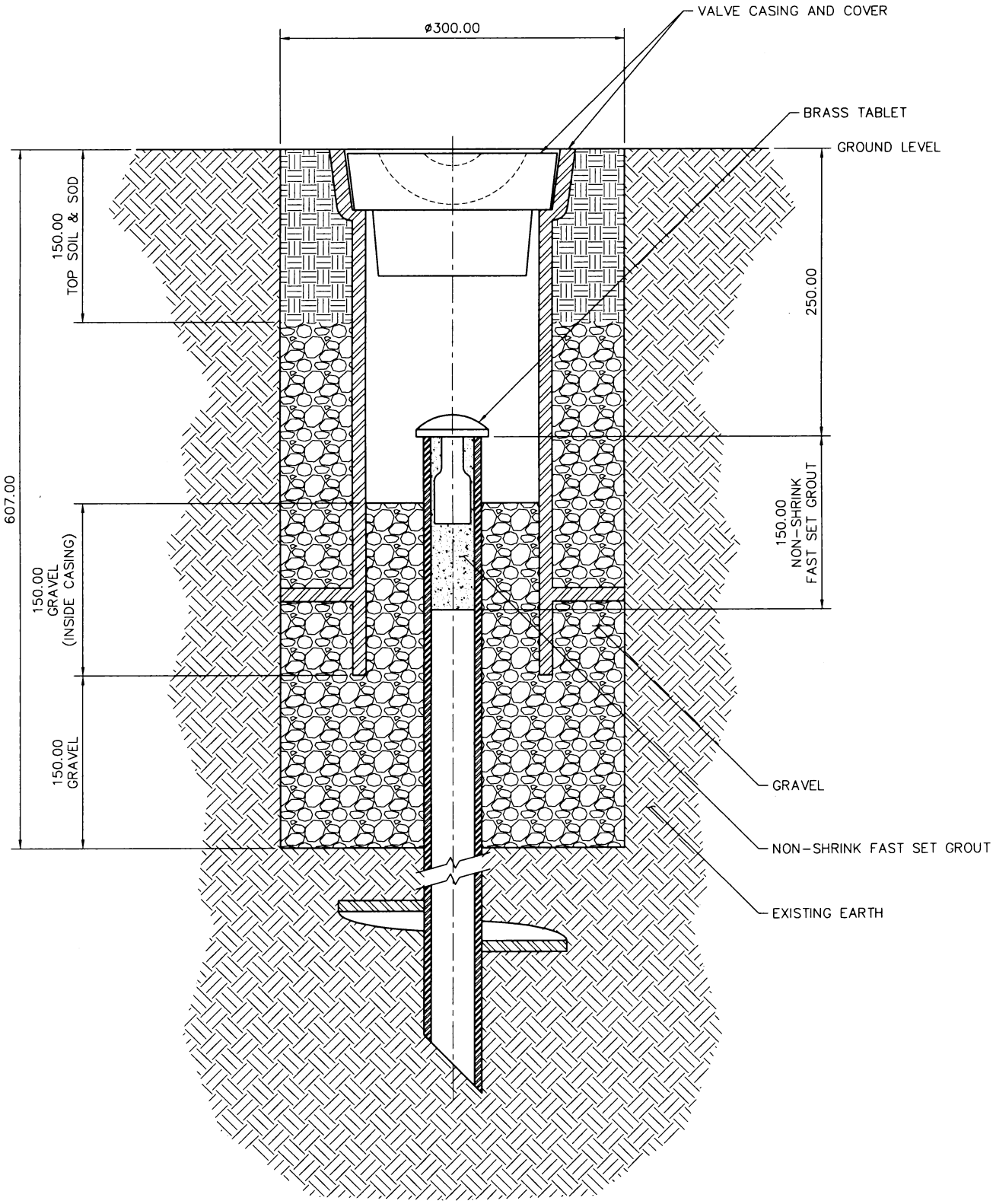
GENERAL MANAGER P. ENG.

A. Boyle
ENGINEER

ENGINEER

SCALES : HOR. 1:5 VERT.

PLAN NO. 102–0009–004r001



SECTION VIEW

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS			
1			
2			
3			

DRAWN BY C. CARTER
DATE 10/23/01

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

COS SURVEY MARKER INSTALLATION

APPROVED

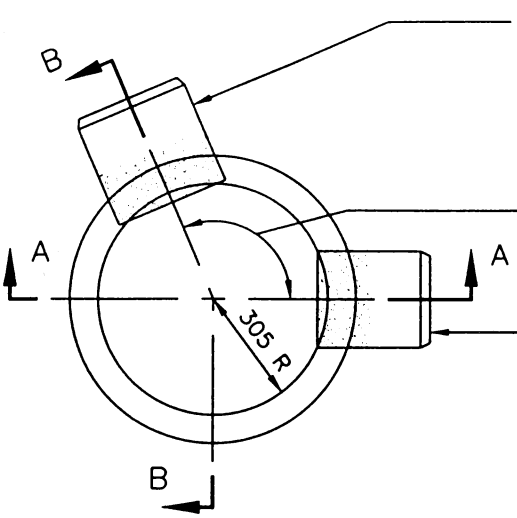
GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER

SCALES : HOR. 1:5 VERT.

PLAN NO. 102-0009-005r001



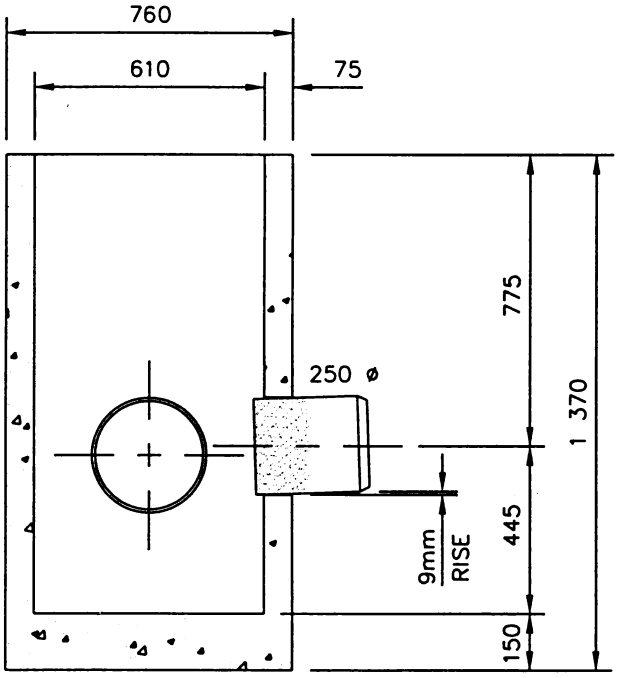
CAST-IN-PLACE CB OUTLET

- 300 mm ø x 300 mm LONG SDR35 PVC C/W BONDED EXTERIOR GROUT COAT
- END BEVELLED TO PVC PIPE SPECIFICATIONS
- SLOPED FOR DISCHARGE AT 3% GRADE

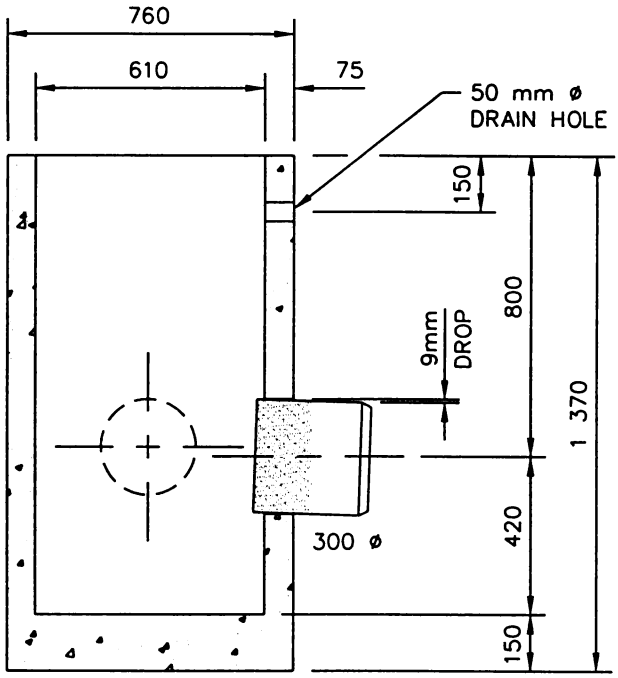
ANGLE OF DISCHARGE PIPE TO BE SPECIFIED PRIOR TO MANUFACTURE

CAST-IN-PLACE CB INLET

- 250 mm ø x 300 mm LONG SDR35 PVC C/W BONDED EXTERIOR GROUT COAT
- END BEVELLED TO PVC PIPE SPECIFICATIONS
- SLOPED FOR INTAKE AT 3% GRADE



A–A



B–B

SPECIFICATIONS

- MANUFACTURED IN ACCORDANCE WITH A.S.T.M. SPECIFICATIONS C–478 & ALL CURRENT REVISIONS.
- MINIMUM CONCRETE STRENGTH SHALL BE 27.6 MPa IN 28 DAYS.
- REINFORCING STEEL FOR BASE SHALL BE 10 M REINFORCING RODS PLACED 150 mm O.C. EACH WAY.
- ALL CONCRETE SHALL BE PLACED MONOLITHICALLY.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS			
1			
2			
3			
DRAWN BY MJ DATE 99-01-27			
CHECKED BY DATE			

—City of— Saskatoon
INFRASTRUCTURE SERVICES

STORM DRAINAGE CATCH BASIN (FOR TANDEM INSTALLATION)

APPROVED

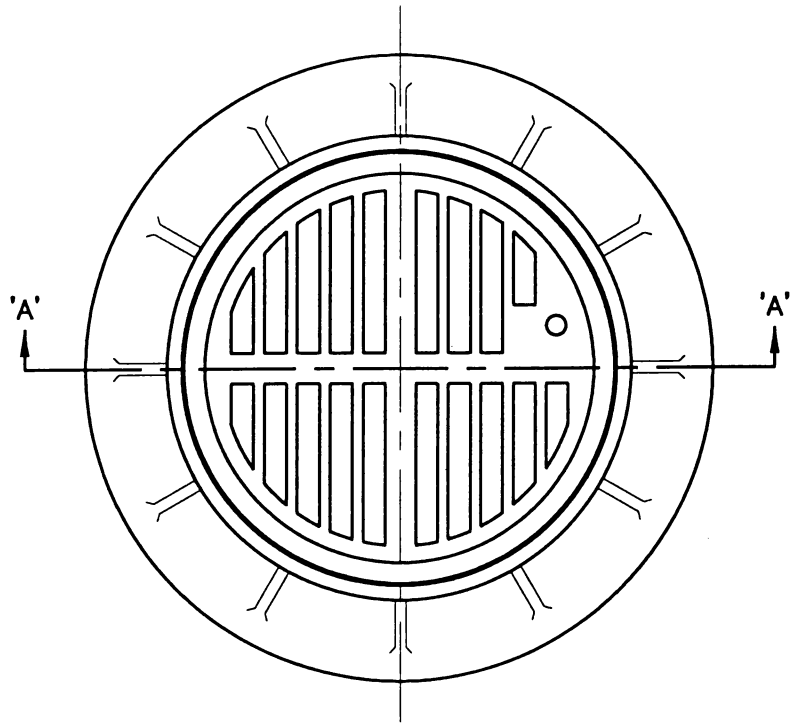
GENERAL MANAGER P. ENG.

ENGINEER A. Boyko

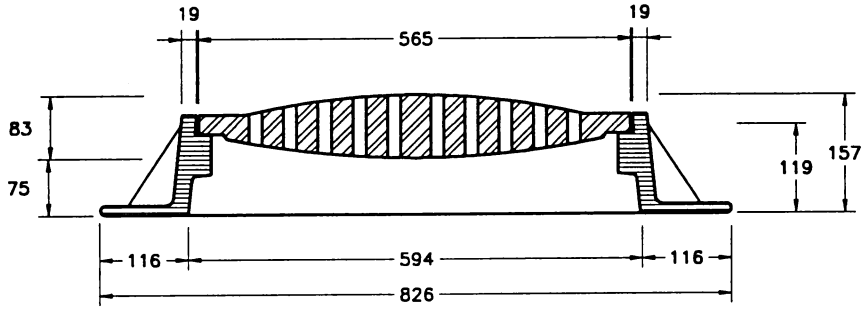
ENGINEER

SCALES : HOR. 1:20 VERT.

PLAN NO. 102-0010-002r001



PLAN VIEW



SECTION 'A' – 'A'

SPECIFICATIONS :

THE CASTINGS SHALL BE TRUE TO PATTERN AND FREE FROM CRACKS, GAS HOLES, FLAWS, AND EXCESSIVE SHRINKAGE. SURFACES OF THE CASTINGS SHALL BE FREE FROM BURNT ON SAND AND SHALL BE REASONABLY SMOOTH. RUNNERS, RISERS, FINS, AND OTHER CAST ON PIECES SHALL BE REMOVED. IN OTHER RESPECTS THE CASTINGS SHALL CONFORM TO WHATEVER POINTS MAY BE AGREED UPON BETWEEN THE MANUFACTURER AND THE ENGINEER.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS	
1	
2	
3	

DRAWN BY JB
DATE 99-02-18

CHECKED BY
DATE

CITY OF SASKATOON
PUBLIC WORKS

500mm ROUND CATCH BASIN FRAME AND COVER

APPROVED

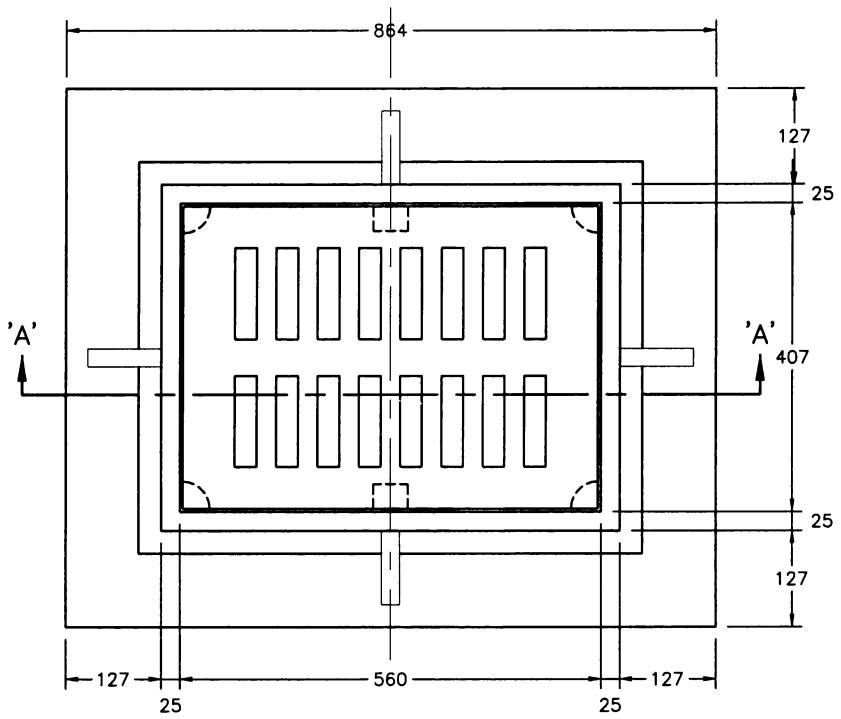
GENERAL MANAGER P. ENG.

ENGINEER A. Boyko

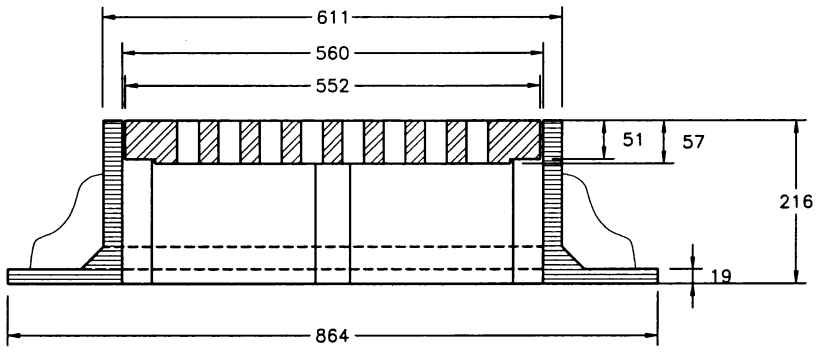
ENGINEER

SCALES : HOR. 1:10 VERT.

PLAN NO. 102-0010-003r001



PLAN VIEW

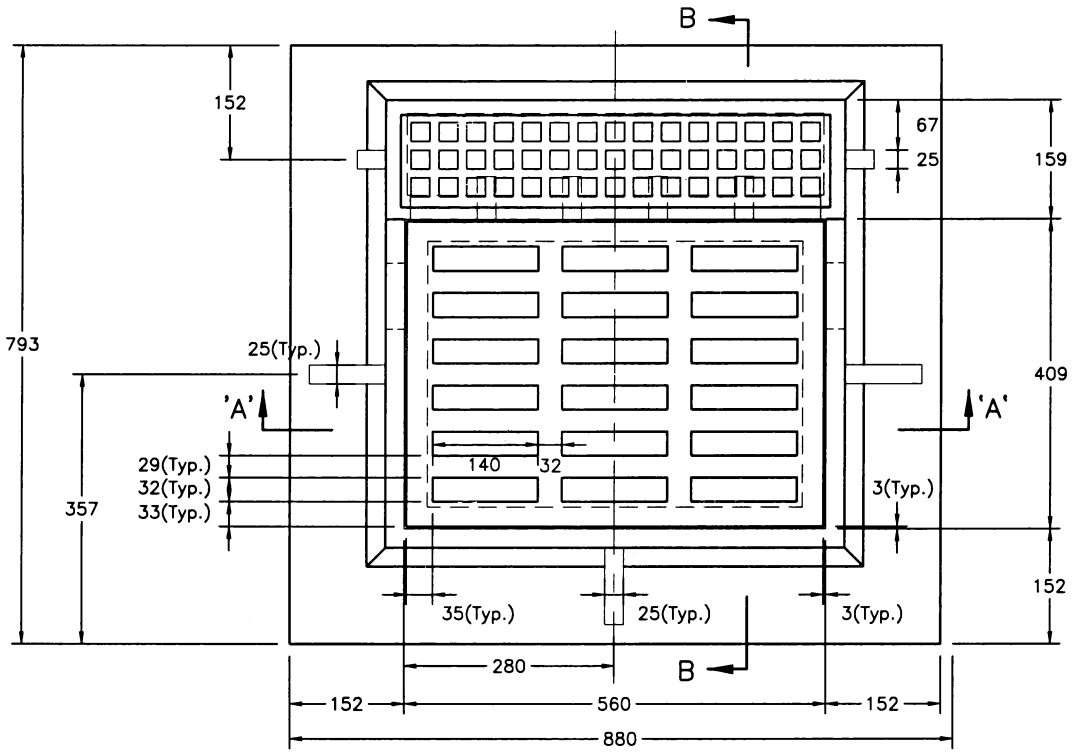


SECTION 'A' – 'A'

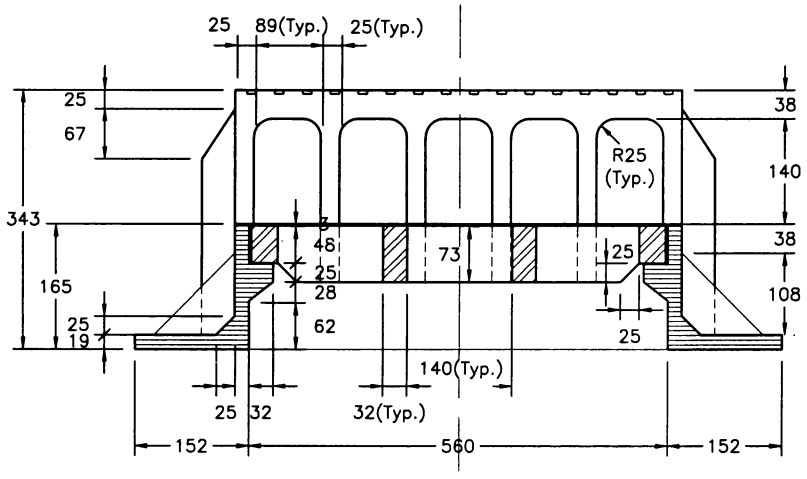
SPECIFICATIONS :

THE CASTINGS SHALL BE TRUE TO PATTERN AND FREE FROM CRACKS, GAS HOLES, FLAWS, AND EXCESSIVE SHRINKAGE. SURFACES OF THE CASTINGS SHALL BE FREE FROM BURNT ON SAND AND SHALL BE REASONABLY SMOOTH. RUNNERS, RISERS, FINS, AND OTHER CAST ON PIECES SHALL BE REMOVED. IN OTHER RESPECTS THE CASTINGS SHALL CONFORM TO WHATEVER POINTS MAY BE AGREED UPON BETWEEN THE MANUFACTURER AND THE ENGINEER.

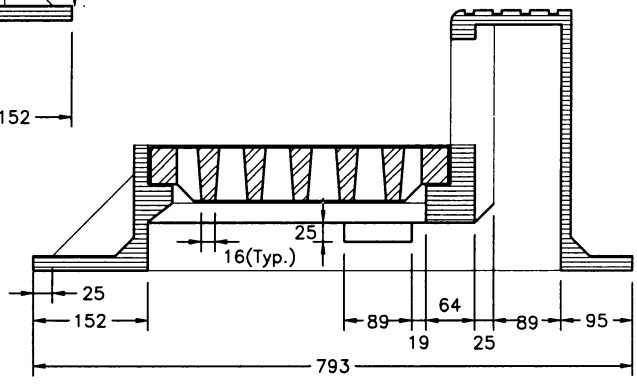
REVISIONS		CITY OF SASKATOON PUBLIC WORKS	APPROVED
1			GENERAL MANAGER A. Boyko P. ENG.
2			ENGINEER
3			ENGINEER
DRAWN BY JB DATE 99-02-18		CATCH BASIN FRAME AND COVER SURFACE INLET MODEL	SCALES : HOR. 1:10 VERT.
CHECKED BY DATE			PLAN NO. 102-0010-004r001



PLAN VIEW



SECTION 'A' – 'A'

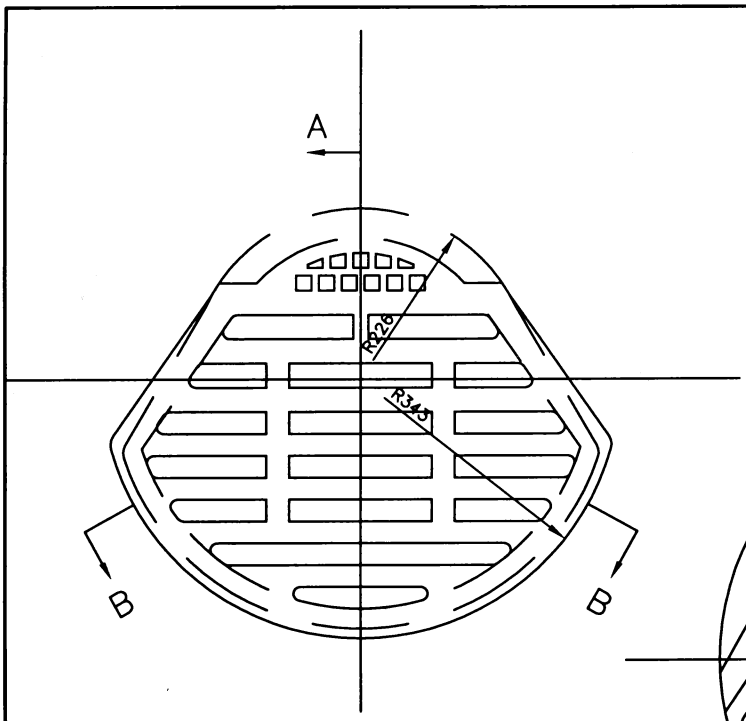


SECTION 'B – B'

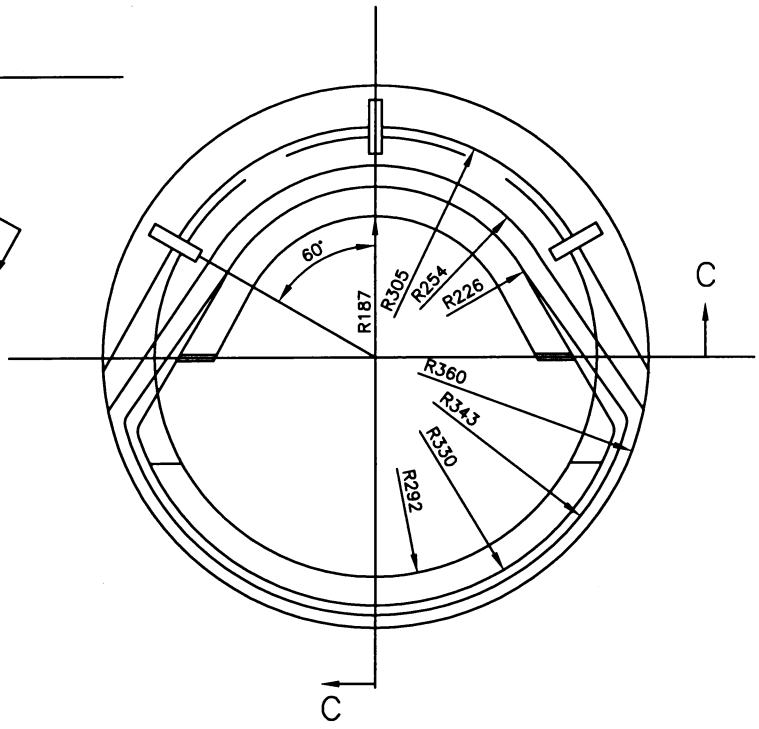
SPECIFICATIONS :

THE CASTINGS SHALL BE TRUE TO PATTERN AND FREE FROM CRACKS, GAS HOLES, FLAWS, AND EXCESSIVE SHRINKAGE. SURFACES OF THE CASTINGS SHALL BE FREE FROM BURNT ON SAND AND SHALL BE REASONABLY SMOOTH. RUNNERS, RISERS, FINS, AND OTHER CAST ON PIECES SHALL BE REMOVED. IN OTHER RESPECTS THE CASTINGS SHALL CONFORM TO WHATEVER POINTS MAY BE AGREED UPON BETWEEN THE MANUFACTURER AND THE ENGINEER.

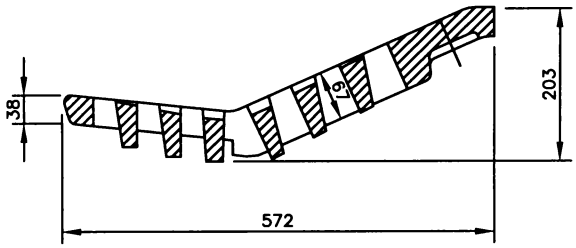
REVISIONS		CITY OF SASKATOON PUBLIC WORKS	APPROVED
1			GENERAL MANAGER P. ENG.
2			A. Doyle ENGINEER
3			ENGINEER
DRAWN BY JB DATE 99-02-18		CATCH BASIN FRAME AND COVER CURB INLET MODEL	SCALES : HOR. 1:10 VERT.
CHECKED BY DATE			PLAN NO. 102-0010-005r001



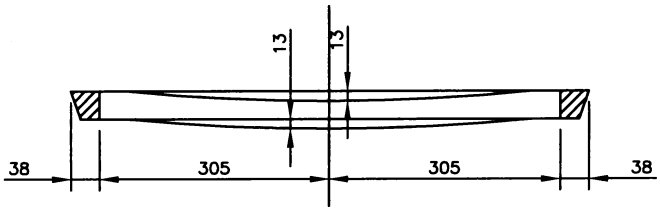
PLAN OF COVER



PLAN OF FRAME



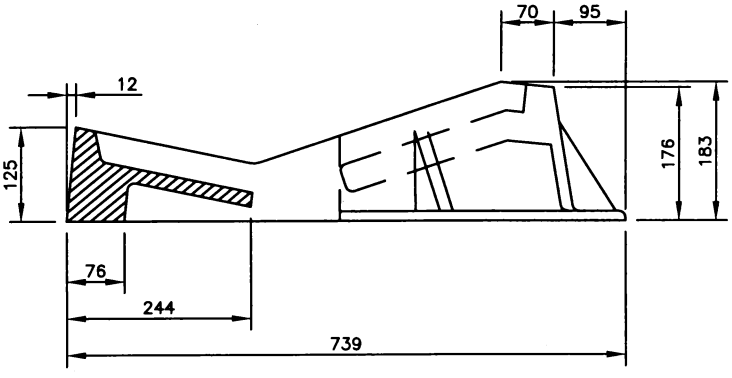
SECTION 'A'



SECTION 'B'

SPECIFICATIONS :

THE CASTINGS SHALL BE TRUE TO PATTERN AND FREE FROM CRACKS, GAS HOLES, FLAWS, AND EXCESSIVE SHRINKAGE. SURFACES OF THE CASTINGS SHALL BE FREE FROM BURNT ON SAND AND SHALL BE REASONABLY SMOOTH. RUNNERS, RISERS, FINS, AND OTHER CAST ON PIECES SHALL BE REMOVED. IN OTHER RESPECTS THE CASTINGS SHALL CONFORM TO WHATEVER POINTS MAY BE AGREED UPON BETWEEN THE MANUFACTURER AND THE ENGINEER.



SECTION 'C'

REVISIONS	
1	
2	
3	

DRAWN BY CDC
DATE 03-04-03

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

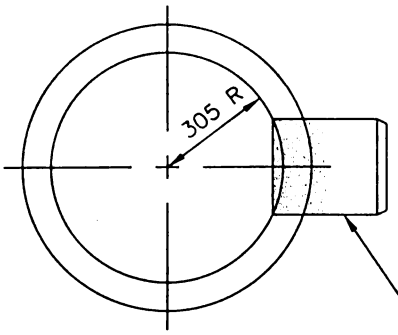
ROLLED CURB
CATCH BASIN

APPROVED

GENERAL MANAGER A. Boyko P. ENG.
ENGINEER D. L. Dryndale
ENGINEER

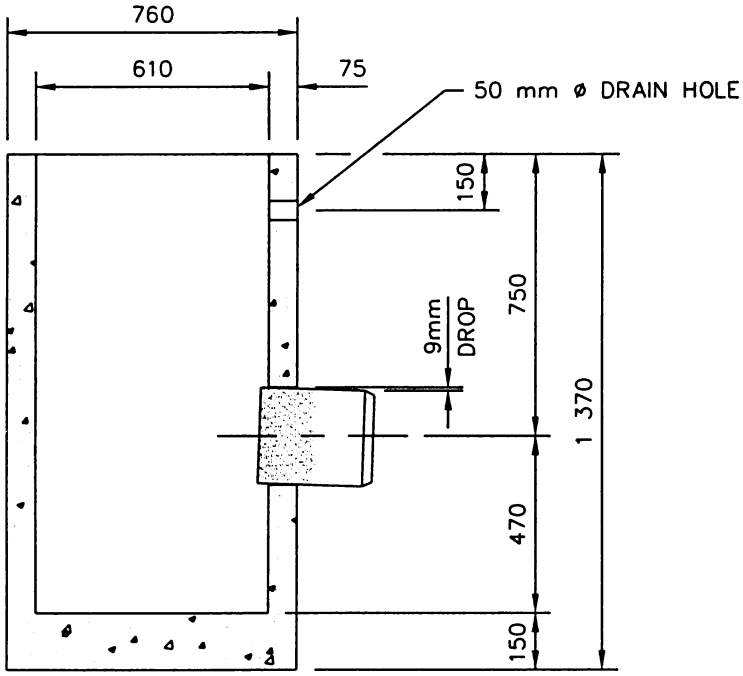
SCALES : HOR. 1:10

PLAN NO. 102-0010-006r002



CAST-IN-PLACE CB OUTLET

- 250 mm ø x 300 mm LONG SDR35 PVC C/W BONDED EXTERIOR GROUT COAT
- END BEVELLED TO PVC PIPE SPECIFICATIONS
- SLOPED FOR DISCHARGE AT 3% GRADE



SPECIFICATIONS

- MANUFACTURED IN ACCORDANCE WITH A.S.T.M. SPECIFICATIONS C-478 & ALL CURRENT REVISIONS.
- MINIMUM CONCRETE STRENGTH SHALL BE 27.6 MPa IN 28 DAYS.
- REINFORCING STEEL FOR BASE SHALL BE 10 M REINFORCING RODS PLACED 150 mm O.C. EACH WAY.
- ALL CONCRETE SHALL BE PLACED MONOLITHICALLY.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS	
1	REDRAWN 98-03-04
2	
3	

DRAWN BY MJ
DATE 98-03-04
CHECKED BY
DATE

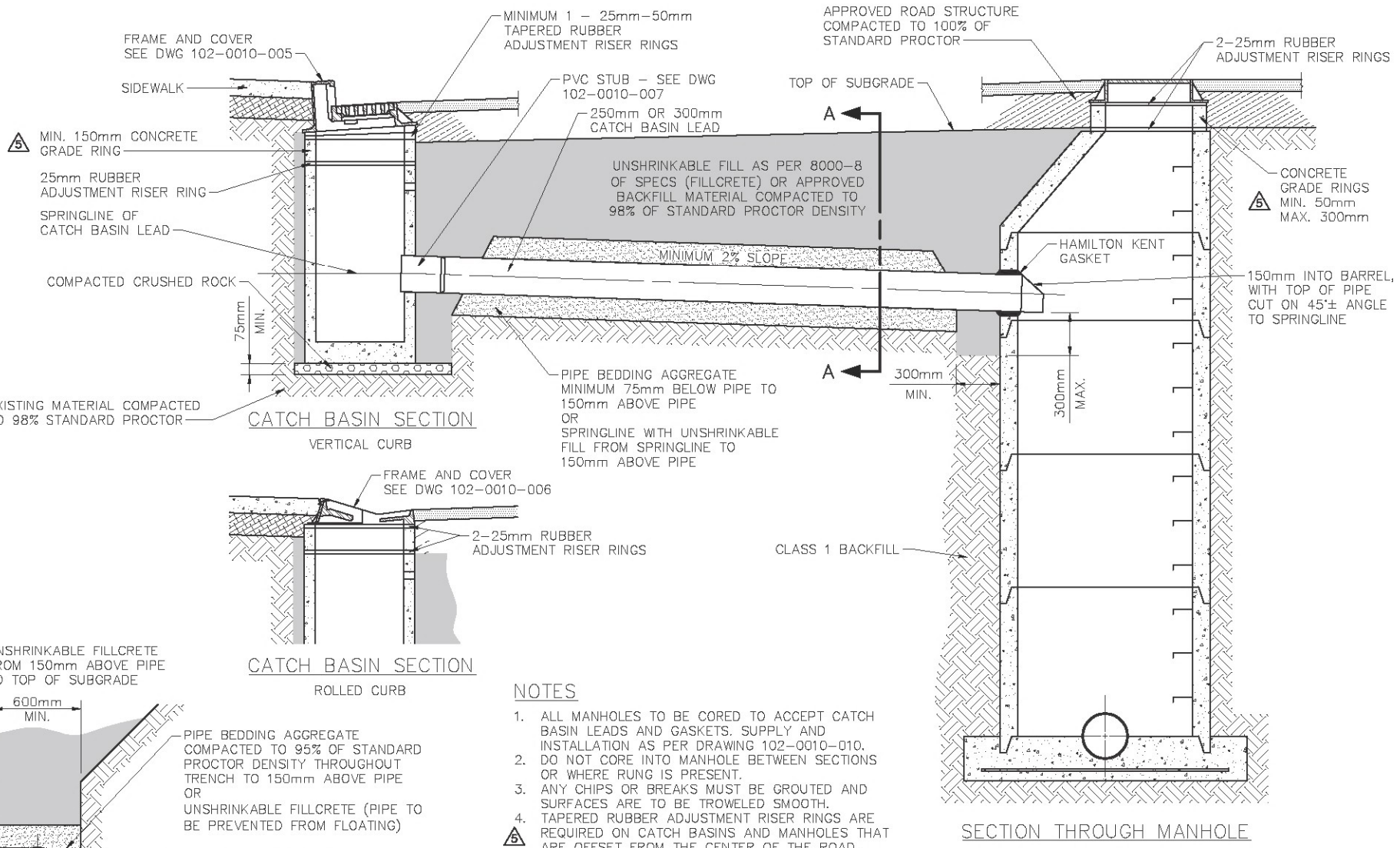
City of Saskatoon
INFRASTRUCTURE SERVICES

PRECAST REINFORCED ROUND CATCH BASIN

08020-DID

APPROVED
GENERAL MANAGER P. ENG.
A. Boyko
ENGINEER
ENGINEER

SCALES : HOR. 1:20 VERT.
PLAN NO. 102-0010-007r001



NOTES

1. ALL MANHOLES TO BE CORED TO ACCEPT CATCH BASIN LEADS AND GASKETS. SUPPLY AND INSTALLATION AS PER DRAWING 102-0010-010.
2. DO NOT CORE INTO MANHOLE BETWEEN SECTIONS OR WHERE RUNG IS PRESENT.
3. ANY CHIPS OR BREAKS MUST BE GROUTED AND SURFACES ARE TO BE TROWELED SMOOTH.
4. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE 5 REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2009-FEB-04	RO
2	ADDED NOTE 1	2003-MAR	RO
3	ADDED FILLCRETE	2009-FEB-04	MLB
4	BEDDING SAND CHANGED TO PIPE BEDDING AGGREGATE	2013-JAN-03	HLO
5	ADDED NOTE 4 AND REVISED GRADE RING MIN.	2020-DEC-31	DLH

City of Saskatoon

INSTALLATION OF CATCH BASIN LEAD FOR SIDEWALK CONSTRUCTION

APPROVALS

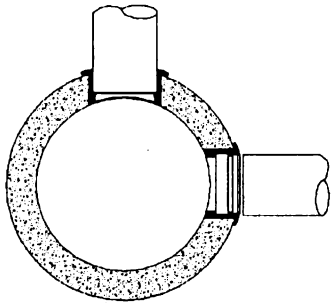
SIGNATURE	NAME	DATE SIGNED
J	Jan 27, 2021	
Maciej Jurkiewicz	Jan 27, 2021	

SCALES: HOR. 1:40 VERT.

PLAN NO. 102-0010-009r005

INSTALLATION

Insert connector into pre-formed hole in concrete pipe, or manhole, ensuring that flanged face is flush with exterior concrete wall. Clean any dirt or debris from the end of the PVC pipe and then thoroughly lubricate the exterior using Tylox® pipe gasket lubricant.
Insert PVC pipe into connector. On pipe to pipe connector ensure that end of pipe is flush with internal stop within connector



MATERIALS

HKT connectors are available in the following materials:

- Isoprene/SBR Blend

Other compounds available as special order.

Please consult your Hamilton Kent agent for your specific requirements.

PHYSICAL PROPERTIES

Physical Test	ASTM	Requirements
Hardness	D2240	47 ± 5
Tensile	D412	2000 (Min.)
Elongation	D412	450%
Compression Set	D395B	15 (Max.)
Air Oven Aging, Tensile (% of original)	D573	15 (Max.)
Air Oven Aging, Elongation (% of original)	D572	20 (Max.)
Durometer Change, Low Temperature.	D2240	+3
Water Aging (% Weight Change)	D471	-0 to +10
Ozone Resistance	D1149	No Cracks

SPECIFICATIONS

HKT connectors are manufactured to meet the material requirements of the following specifications:

- ASTM C923
- ASTM C443
- CSA A257

Other specifications may be available as special order. Please consult your Hamilton Kent agent for your specific requirements.

AVAILABLE SIZES & DIMENSIONS

PVC Pipe Size		Core (Nominal)	Cored Hole Dia. Range	Main Pipe Dia. Range (HKP-PP)
mm	in	in	in	in
100	4	5	4.960 – 5.010	12 – 30
150	6	7	6.995 – 4.055	12 – 30
200	8	10	10.055 – 10.145	12 – 30
250	10	12	12.040 – 12.130	12 – 30
300	12	14	14.025 – 14.115	18 – 30
375*	15*	18	17.975 – 18.070	Not Available

* 375mm (15") not available in HKT-PP

Hamilton Kent
make the connection

Hamilton Kent
77, Carlingview Drive
Toronto, Ontario, Canada. M9W 5J6
Phone (800) 268-8479
Fax (888) 674-6960
Web-Site www.hamiltonkent.com
E-mail sales@hamiltonkent.com

Lit_TSS_0306_ER1

REVISIONS	
1	
2	
3	

DRAWN BY HLO
DATE 06-01-27

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

HAMILTON KENT
PIPE TO MANHOLE CONNECTOR
SPECIFICATION SHEET

APPROVED

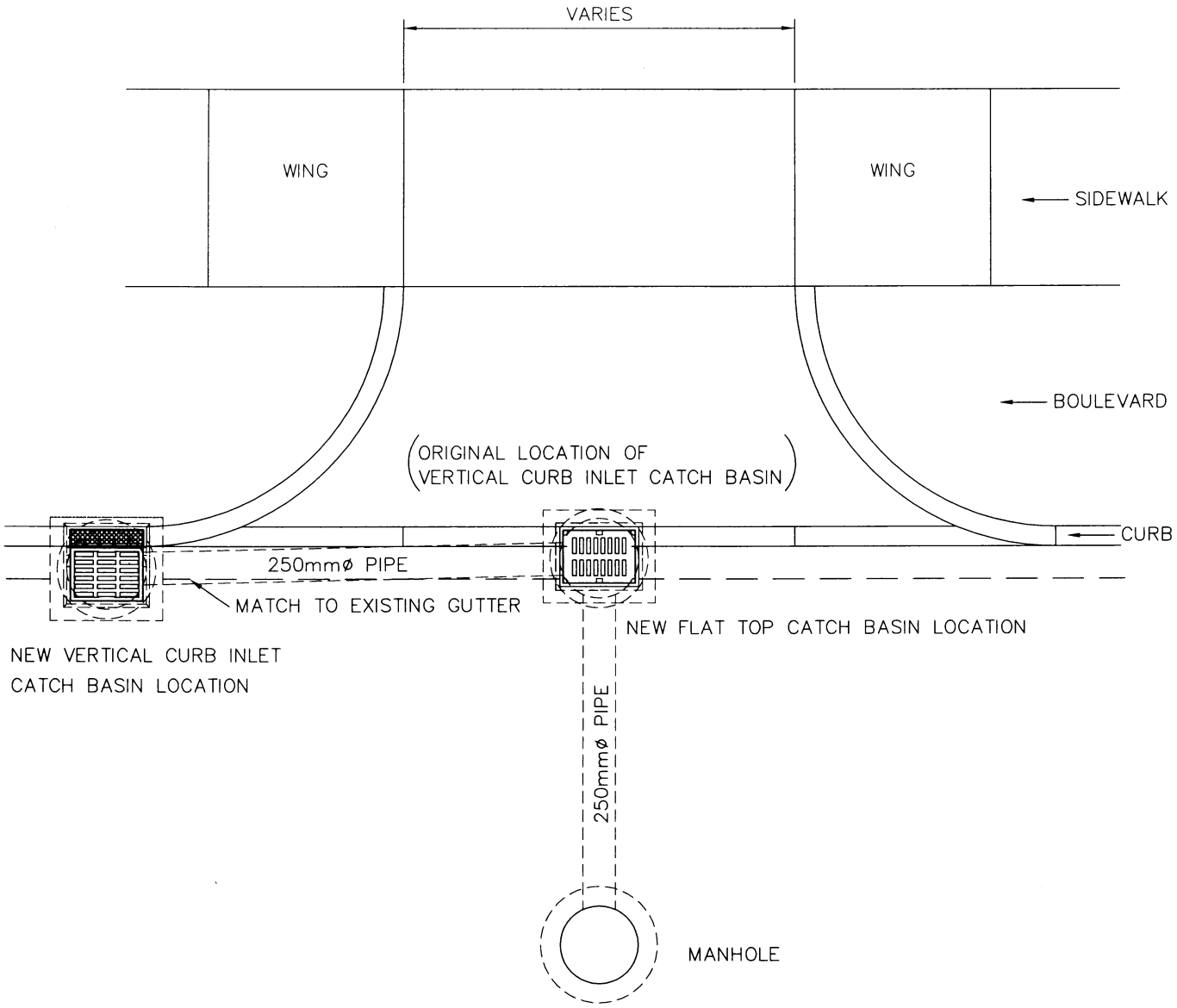
GENERAL MANAGER P. ENG.

ENGINEER A. Boyko

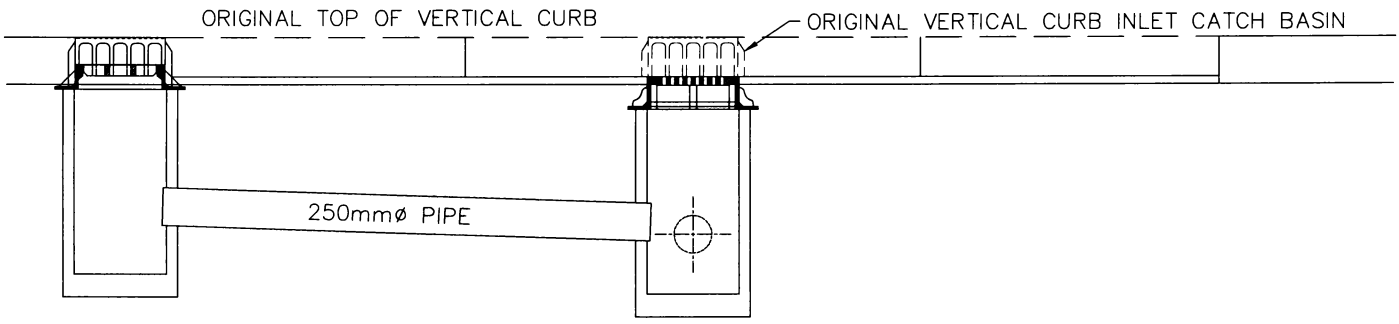
ENGINEER

SCALES : HOR.

PLAN NO. 102-0010-010r002



PLAN VIEW



PROFILE VIEW

REVISIONS			
1			
2			
3			

DRAWN BY RBY
DATE NOVEMBER 16, 2004

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

TYPICAL CATCH BASIN CONVERSION AT DRIVEWAY OR CROSSING

APPROVED

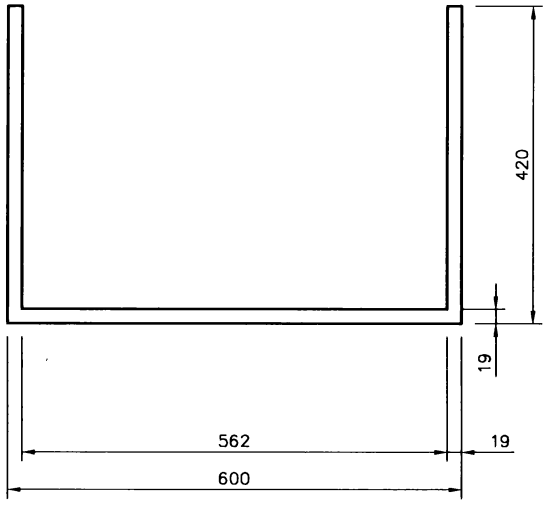
GENERAL MANAGER P. ENG.

ENGINEER

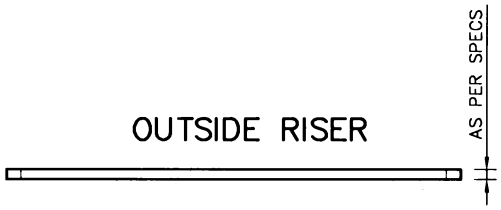
ENGINEER

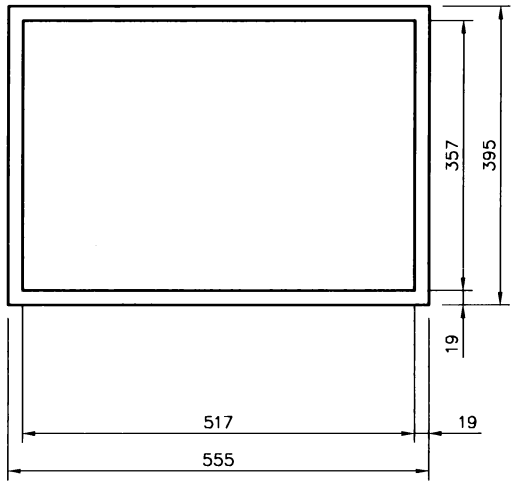
SCALES : HOR. 1:50

PLAN NO. 102-0010-012r001

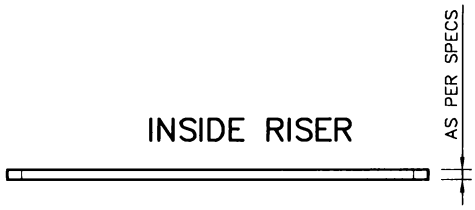


OUTSIDE RISER





INSIDE RISER



NOTE:

- RISERS TO CONFORM WITH DRAWING 102–0010–005: CATCH BASIN FRAME AND COVER, CURB INLET MODEL.
- RISERS TO BE MANUFACTURED WITH CSA G40.21–M GRADE 300W 19mm ($\frac{3}{4}$") PLATE STEEL
- FULL WELDED CORNERS, GROUNDED SMOOTH
- WELDS TO BE FREE OF VOIDS AND FLUX
- NO PAINTING REQUIRED

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS	
1	CHANGED DIMENSIONS
2	
3	

DRAWN BY CDC
DATE 04–12–21

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

CURB INLET RISERS FOR CATCHBASIN FRAME AND COVER

APPROVED

GENERAL MANAGER P. ENG.

ENGINEER

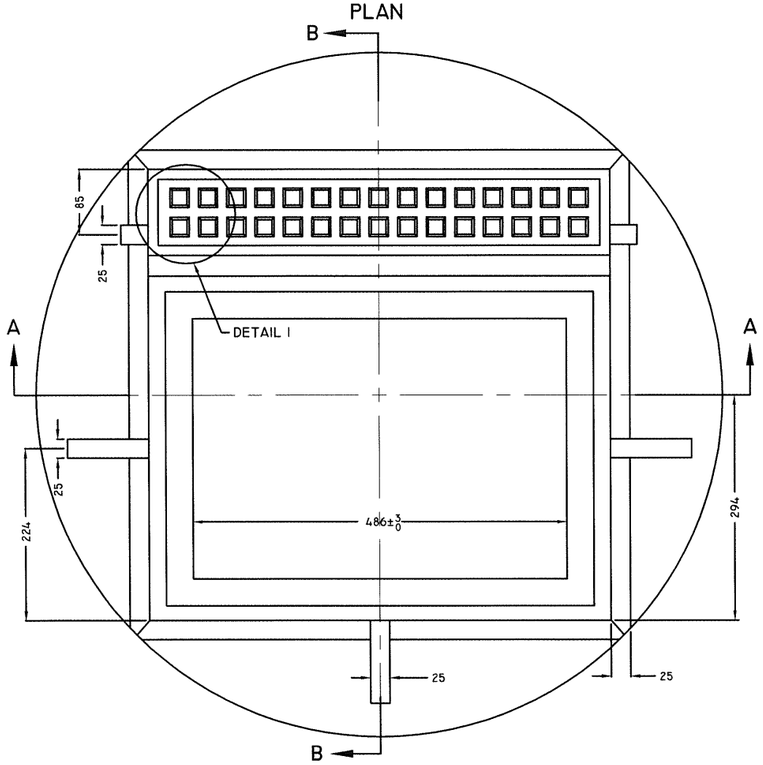
ENGINEER Daniel Doak Jan 25/05

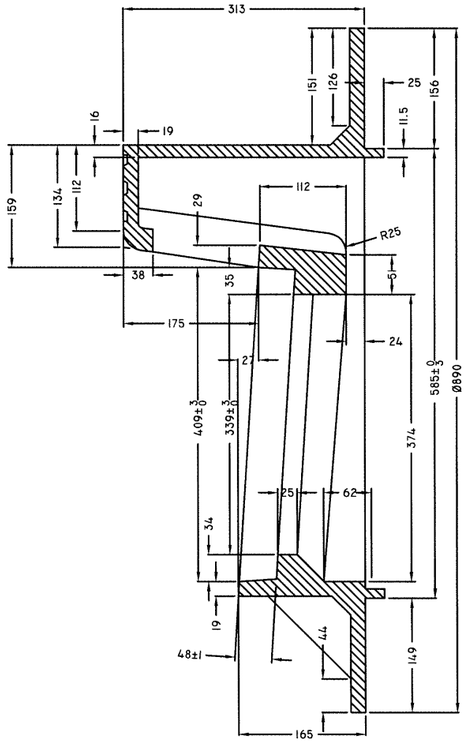
SCALES : HOR. 1:10

PLAN NO. 102–0010–013r002

FRAME

PLAN

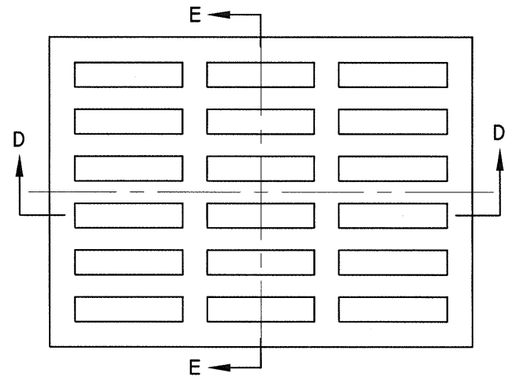


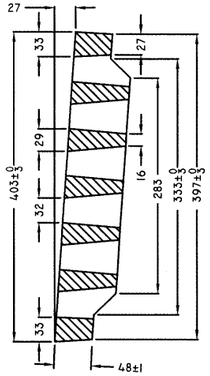


SECTION B-B

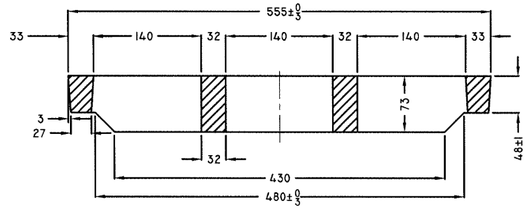
GRATED COVER

PLAN

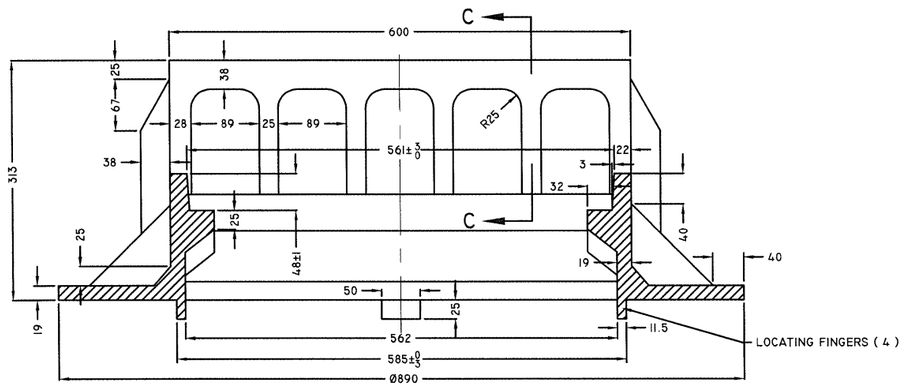




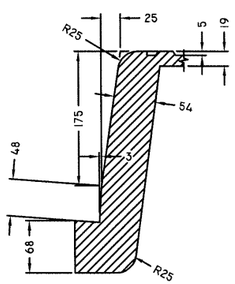
SECTION E-E



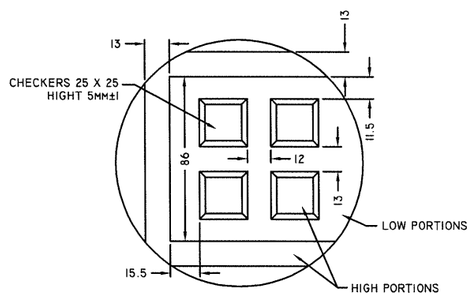
SECTION D-D



SECTION A-A



SECTION C-C



DETAIL 1

SPECIFICATIONS

(1) CASTINGS SHALL CONFORM TO ALL REQUIREMENTS OF A.S.T.M. DESIGNATION A48 CLASS 20B.
(2) CASTINGS SHALL BE PRODUCED TO THE DIMENSIONS AND WITHIN +/-2MM **TOLERANCES EXCEPT FOR DIMENSIONS LESS THAN 10MM.**
(3) CASTINGS SHALL BE MARKED WITH THE PROPER IDENTIFICATION MARKINGS WHICH WILL INCLUDE:
  (A) MARKINGS AS REQUESTED AT TIME OF ORDER.
  (B) FOUNDRY IDENTIFICATION MARKING, AND YEAR OF CASTING.
  (C) THESE MARKINGS SHALL BE SO LOCATED IN SUCH A MANNER AND OF SUCH SIZE THAT THEY ARE EASILY IDENTIFIABLE AFTER INSTALLATION.
(4) ALL CASTING WILL BE FREE OF DEFECTS, BE TRUE TO PATTERN AND BE FREE FROM CRACKS, GAS HOLES, FLAWS AND EXCESSIVE SPRINKAGE. SURFACES OF CASTING SHALL BE FREE FROM BURNT ON SAND AND SHALL BE REASONABLY SMOOTH.
(5) CASTING SHALL NOT ROCK WHEN INSTALLED. THE MANUFACTURER SHALL TRIAL FIT THE CASTINGS AGAINST A STANDARD FRAME.

MEASUREMENTS IN MILLIMETERS

NO.	REVISIONS	DATE	BY
11			
10			
9			
8			
7			
6			
5			
4			
3			
2	CORRECTION OF TWO INCORRECT DIMENSIONS	2017-JAN-25	HLO
1	BASE PLAN	2007-JAN-14	HLO

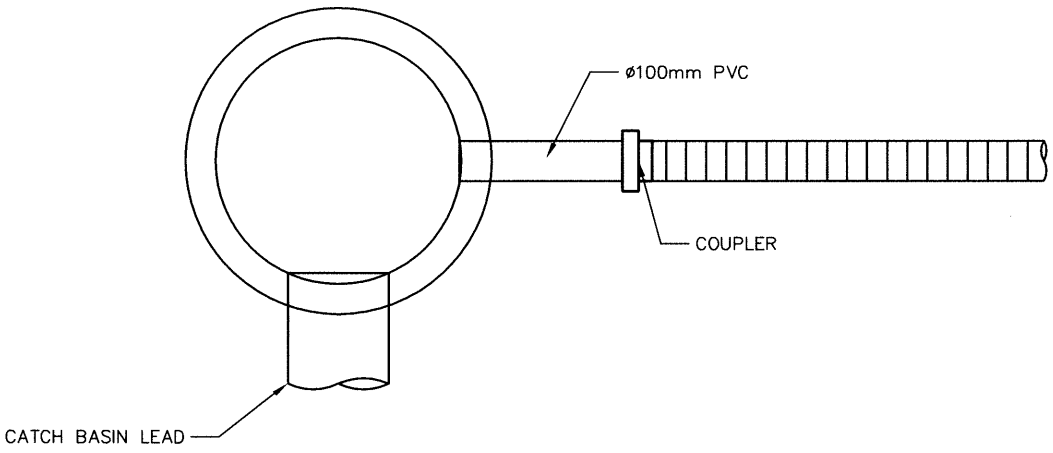
SCALES : HOR. NTS VERT. NTS

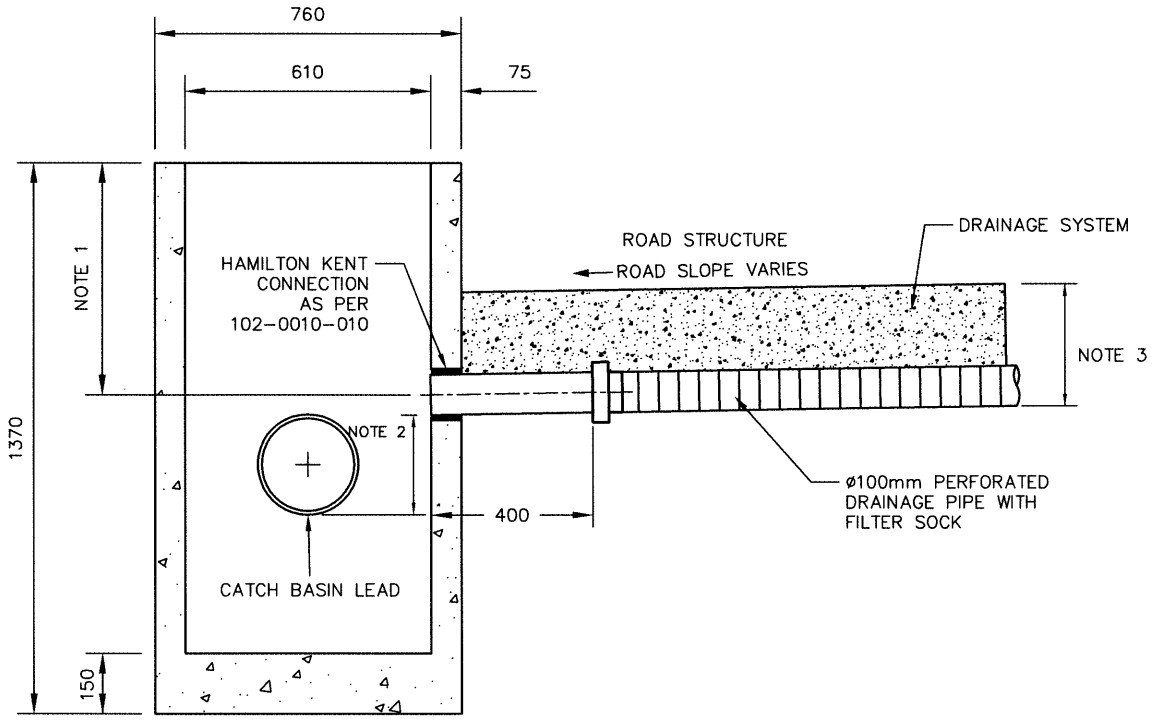
City of Saskatoon
Transportation & Utilities Department

CURB INLET CATCH BASIN
FRAME AND COVER

CHIEF ENGINEER — DATE JAN 30/17
ENGINEER — DATE JAN 30, 2017

PLAN NO.
102-0010-014r002





NOTE:

1) HEIGHT VARIES – DEPENDENT ON PAVEMENT STRUCTURAL DESIGN
2) THE INVERT FOR THE CATCH BASIN LEAD IS TO BE A MINIMUM 50mm LOWER THAN THE INVERT OF THE DRAINAGE LEAD
3) EDGE DRAIN OR DRAINAGE LAYER AS PER 102-0029-045

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	DRAINAGE PIPE MOVED TO LOWEST POINT IN ROAD STRUCTURE 2015-DEC-01 HLO

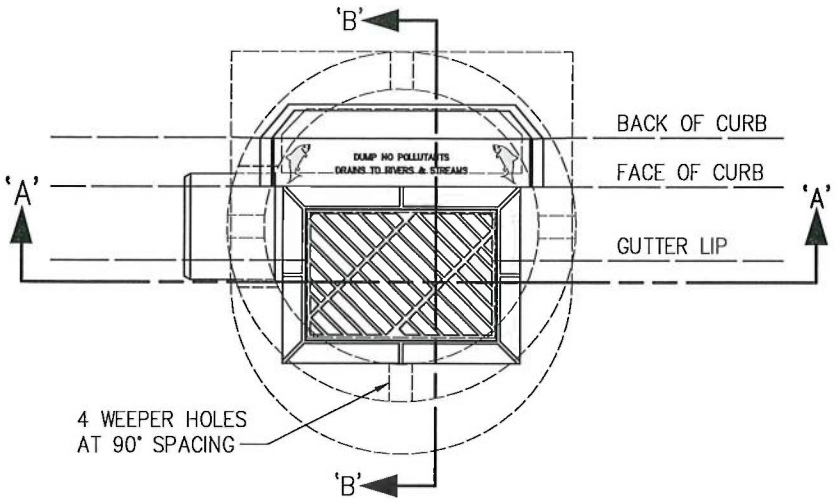
DRAWN BY DJC
DATE 2014-DEC-09
SCALE : HOR. N.T.S. VERT. N.T.S.

City of Saskatoon
Transportation & Utilities Department

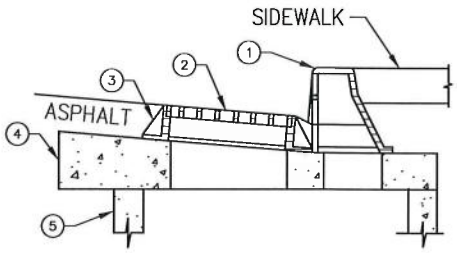
ROADWAY SUBDRAINAGE PIPE CONNECTION TO CATCH BASIN

CHIEF ENGINEER — JAN 06 2016 — DATE
ENGINEER — JAN 06 2016 — DATE

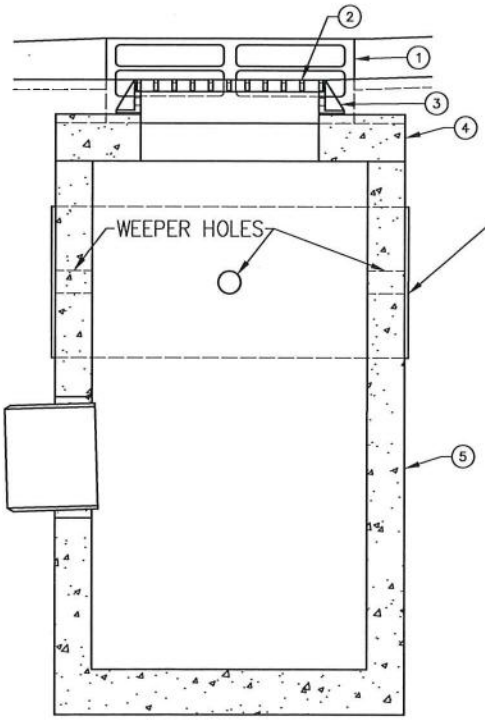
PLAN NO. 102-0010-015r002



PLAN



SECTION 'B–B'



500mm WIDE, NON–WOVEN GEOTEXTILE FABRIC, WRAPPED AROUND THE CATCH BASIN, OVERLAPPING BY 300mm, AND COVERING THE WEEPER HOLES.

SECTION 'A–A'

PART LIST			
NO.	PART	DRAWING	QTY
1	SIDE INLET	102–0010–020	1
2	GRATE	102–0010–021	1
3	FRAME	102–0010–022	1
4	SLAB TOP	102–0010–023	1
5	900mm BASE	102–0010–019	1

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–JAN–30	DLH

City of Saskatoon

VERTICAL CURB
900mm CATCH BASIN ASSEMBLY
TYPE K–1

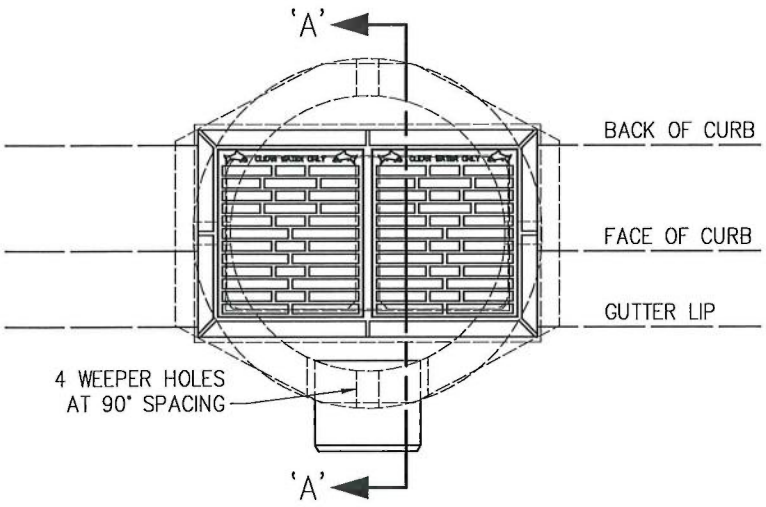
APPROVALS

SIGNATURE: Ca Cole
NAME: ANNE COLE
DATE SIGNED: 18 FEB 2020

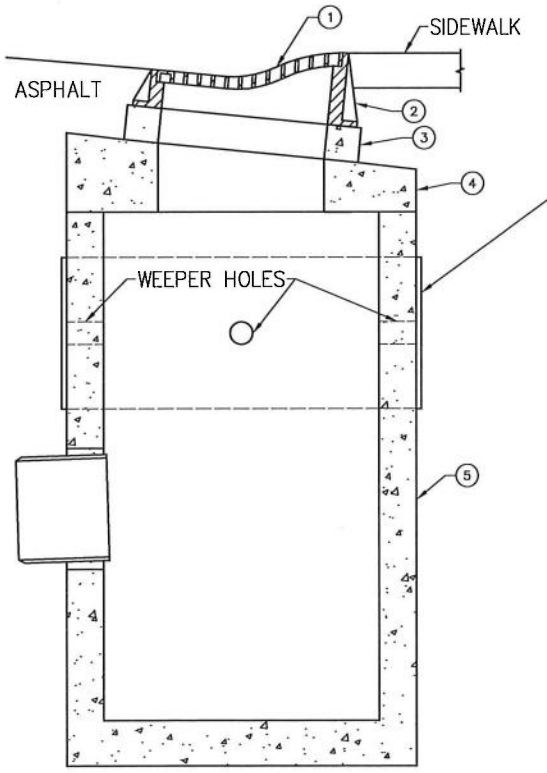
SIGNATURE: Matt Jurkiewicz
NAME:
DATE SIGNED: FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102–0010–016r001



PLAN



500mm WIDE, NON-WOVEN GEOTEXTILE FABRIC, WRAPPED AROUND THE CATCH BASIN, OVERLAPPING BY 300mm, AND COVERING THE WEEPER HOLES.

SECTION 'A-A'

PART LIST			
NO.	PART	DRAWING	QTY
1	GRATE	102-0010-024	2
2	FRAME	102-0010-025	1
3	COLLAR	102-0010-026	1
4	SLAB TOP	102-0010-027	1
5	900mm BASE	102-0010-019	1

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-JAN-30	DLH

City of Saskatoon

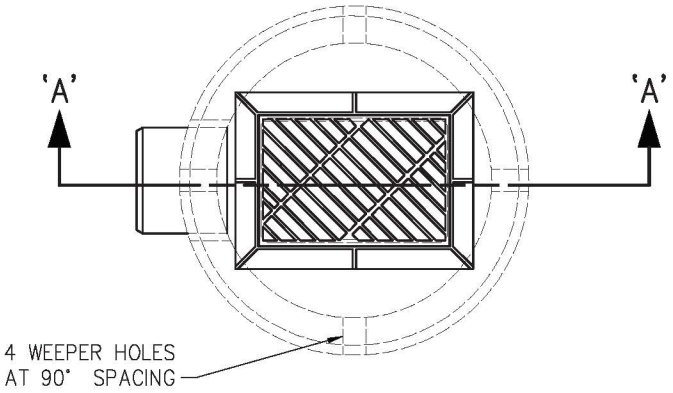
ROLLED CURB
900mm CATCH BASIN ASSEMBLY
TYPE K-2

APPROVALS

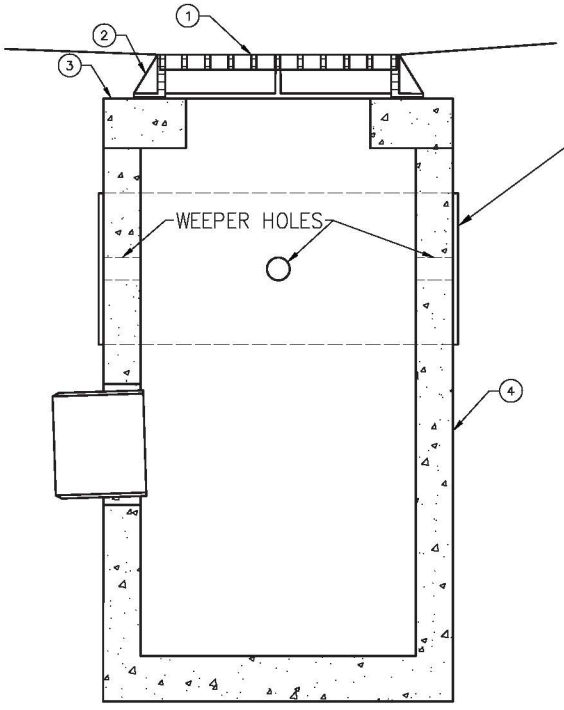
SIGNATURE: Anna Cole	SIGNATURE: Matt Jurkiewicz
NAME: Anna Cole	NAME:
DATE SIGNED: 18 Feb 2020	DATE SIGNED: FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102-0010-017r001



PLAN



500mm WIDE, NON-WOVEN GEOTEXTILE FABRIC, WRAPPED AROUND THE CATCH BASIN, OVERLAPPING BY 300mm, AND COVERING THE WEEPER HOLES.

SECTION 'A-A'

PART LIST			
NO.	PART	DRAWING	QTY
1	GRATE	102-0010-021	1
2	FRAME	102-0010-022	1
3	SLAB TOP	102-0010-028	1
4	900mm BASE	102-0010-019	1

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-JAN-30	DLH
2	CORRECTED DRAWING NUMBERS FOR GRATE AND FRAME	2021-MAR-25	DLH

City of Saskatoon

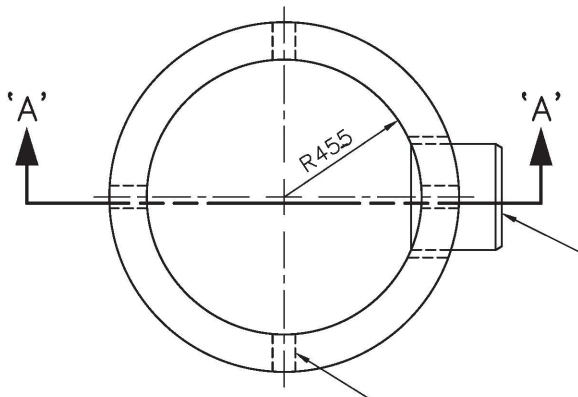
SURFACE INLET
900mm CATCH BASIN ASSEMBLY
TYPE K-3

APPROVALS

Anna Cole	Maciej Jurkiewicz
SIGNATURE	SIGNATURE
NAME	NAME
Mar 25, 2021	Mar 25, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT. N.T.S.

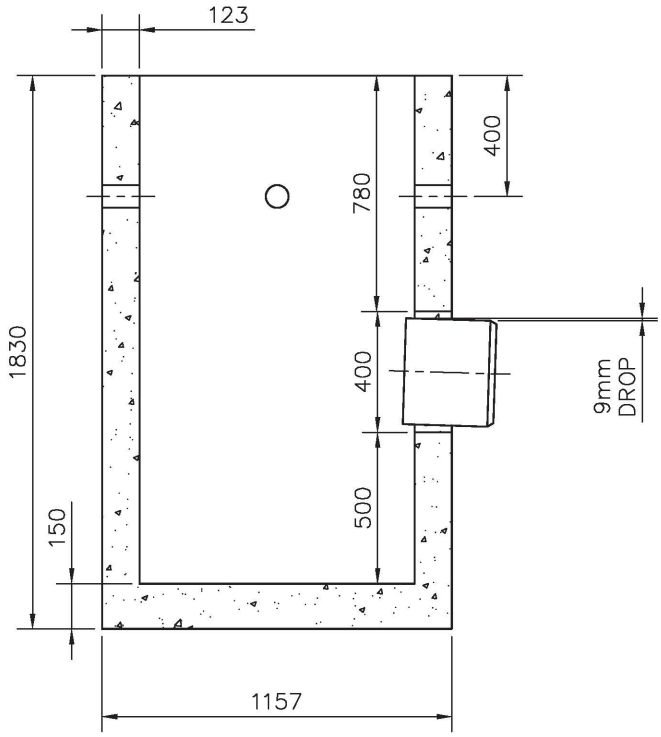
PLAN NO. 102-0010-018r002



PLAN

CAST–IN–PLACE CB OUTLET
TYPICAL:
- 375mm ø x 300mm LONG SDR35 PVC C/W BONDED EXTERIOR GROUT COAT
- END BEVELLED TO PVC PIPE SPECIFICATIONS
- SLOPED FOR DISCHARGE AT 3% GRADE

4 x 75mm ø WEEPER HOLES EQUALLY SPACED AT 90°



SECTION A–A

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- MANUFACTURED TO ASTM C478 & CSA 257.4
- CEMENT: SULPHATE RESISTANT TYPE: TYPE HS (TYPE 50) TO CSA A3001 OR TYPE V TO ASTM C150
- CONCRETE COMPRESSIVE STRENGTH: 30 MPa AT 28 DAYS
- AIR CONTENT: 4 TO 7% EXCEPT WHERE NO–SLUMP CONCRETE IS USED
- REINFORCING STEEL: DEFORMED BARS TO CSA G30.18, fy = 400MPa

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–JAN–30	DLH
2	CHANGED CAST–IN–PLACE OUTLET SIZE TO 375mm	2021–DEC–09	DLH

City of Saskatoon

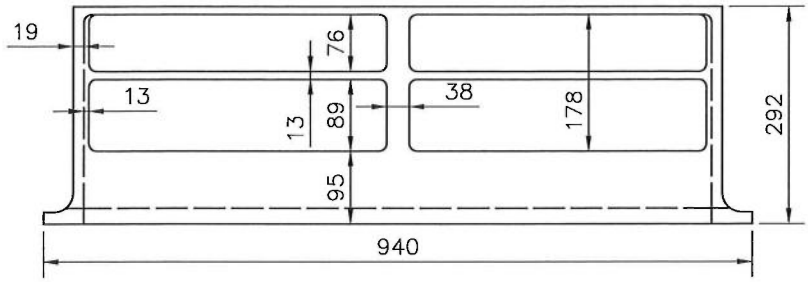
PRECAST MONOLITHIC
900mm CATCH BASIN BASE

APPROVALS

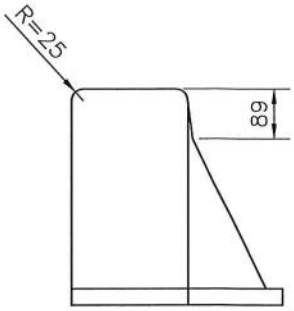
SIGNATURE	SIGNATURE
Anna Cole	Maciej Jurkiewicz
NAME	NAME
Dec 9, 2021	Dec 9, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT. N.T.S.

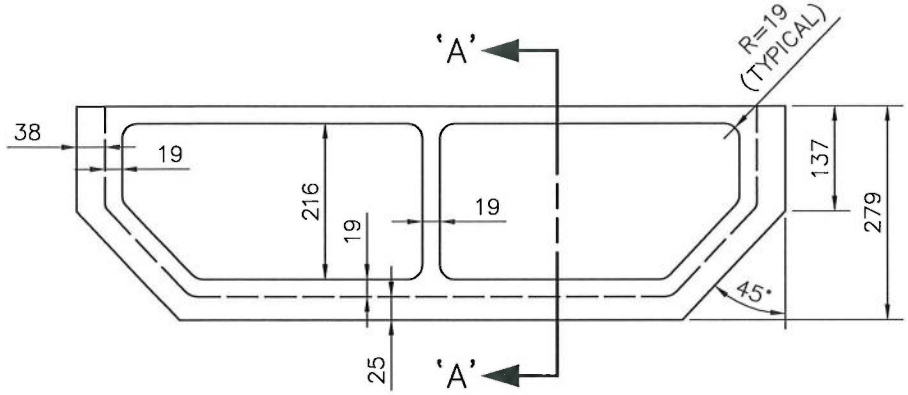
PLAN NO. 102–0010–019r002



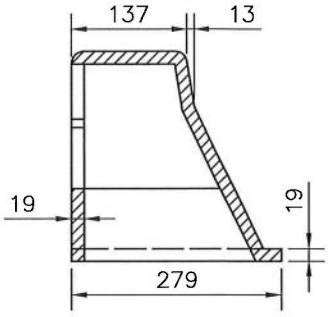
FRONT VIEW



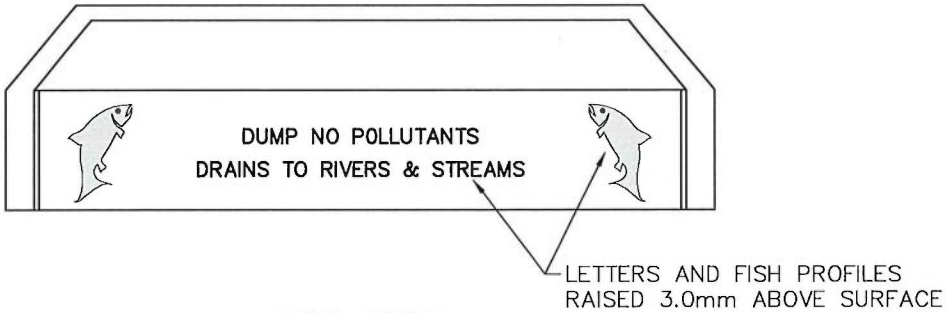
END VIEW



BOTTOM VIEW



SECTION 'A–A'



TOP VIEW

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- DUCTILE IRON TO CONFORM TO A.S.T.M. A536, GRADE 80–55–06
- MASS = 86 KILOGRAMS ±5%
- COATED CASTING ACCEPTED ONLY WHEN REQUIRED BY CITY.

NOTES:

1. GRATE OPEN AREAS
   FRONT = 0.124m²
   BOTTOM = 0.159m²

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–FEB–11	DLH

City of Saskatoon

CATCH BASIN SIDE INLET
TYPE K–1

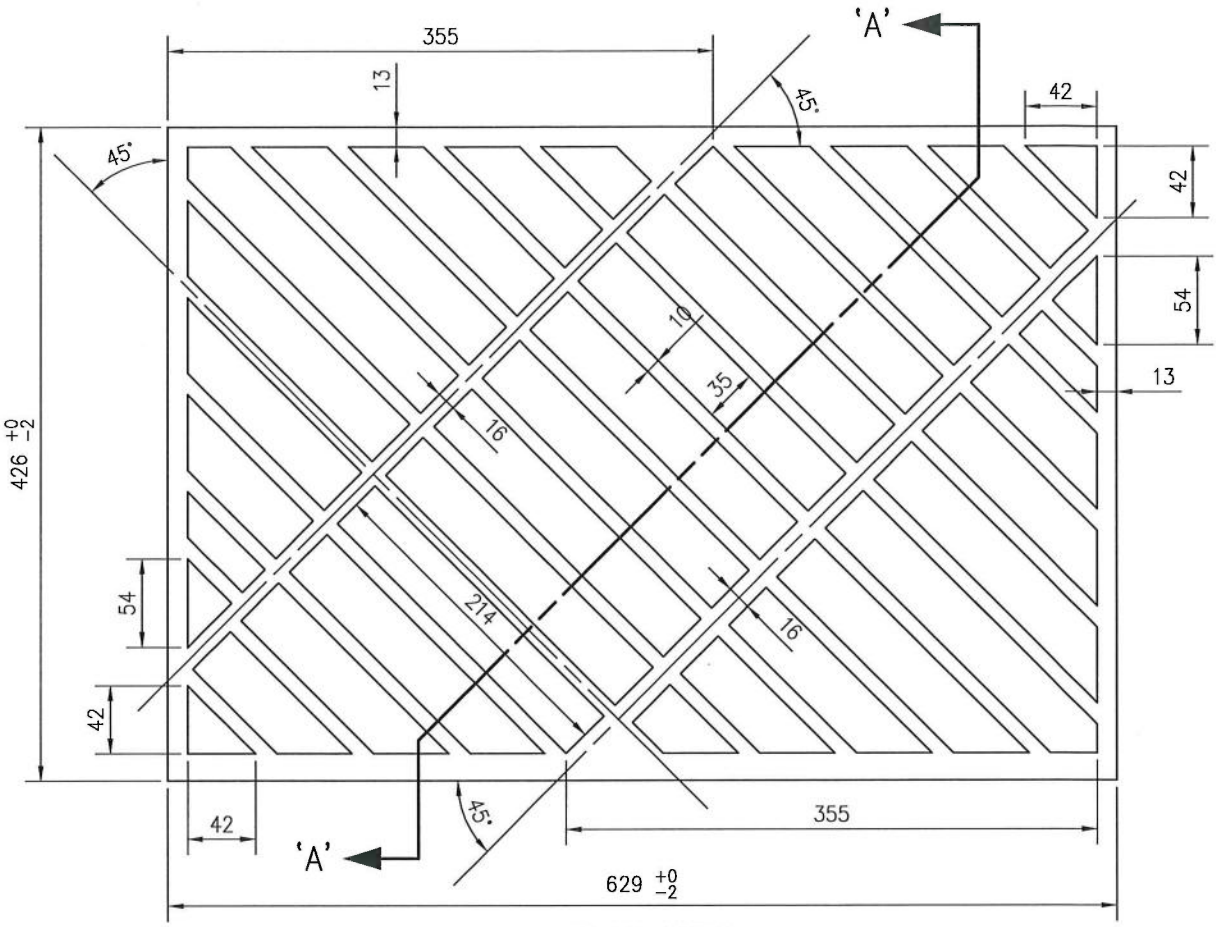
APPROVALS

SIGNATURE: Anna Cole
NAME: ANNA COLE
DATE SIGNED: 18-FEB-2020

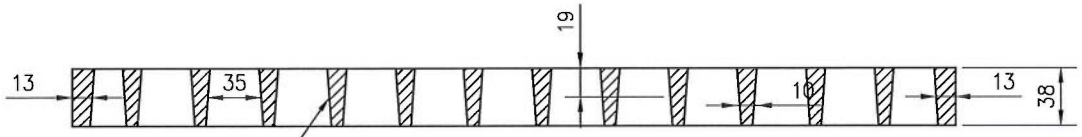
SIGNATURE: Matt Jurkowski
NAME: MATT JURKOWSKI
DATE SIGNED: FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102–0010–020r001



PLAN VIEW



TAPER ON BARS IS TO BE ±1mm FROM TOP TO BOTTOM.

SECTION 'A–A'

NOTES:

1. GRATE OPEN AREA = 0.1706m

MATERIAL SPECIFICATIONS

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- DUCTILE IRON TO CONFORM TO A.S.T.M. A536, GRADE 80–55–06
- MASS = 24 KILOGRAMS ±5%
- COATED CASTINGS ACCEPTED ONLY WHEN REQUIRED BY CITY.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–JAN–30	DLH

City of Saskatoon

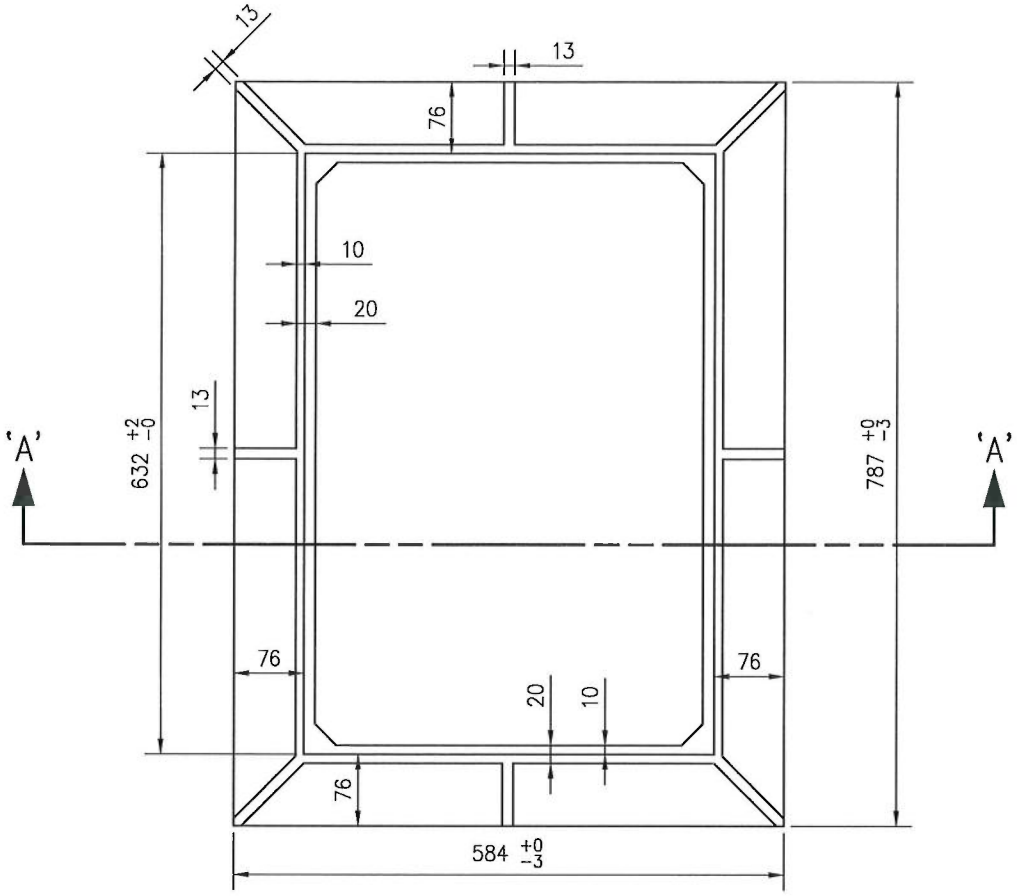
CATCH BASIN SURFACE INLET GRATE
TYPE K–1

APPROVALS

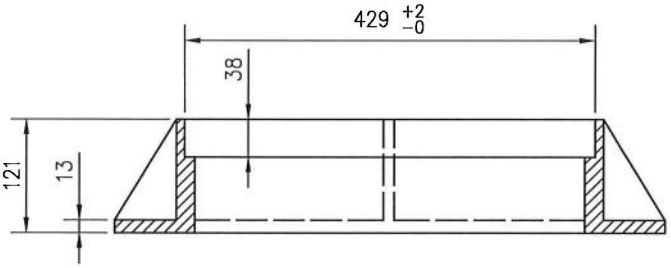
SIGNATURE	SIGNATURE
NAME: ANNA COLE	NAME: Matt Jurkiewicz
DATE SIGNED: 18-FEB-2020	DATE SIGNED: FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102–0010–021r001



PLAN



SECTION 'A–A'

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- GREY CAST IRON TO CONFORM TO A.S.T.M. A48 CLASS 35B
- MASS = 57 KILOGRAMS ±5%
- COATED CASTINGS ACCEPTED ONLY WHEN REQUIRED BY CITY.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-JAN-30	DLH

City of Saskatoon

CATCH BASIN SURFACE INLET FRAME
TYPE K-1

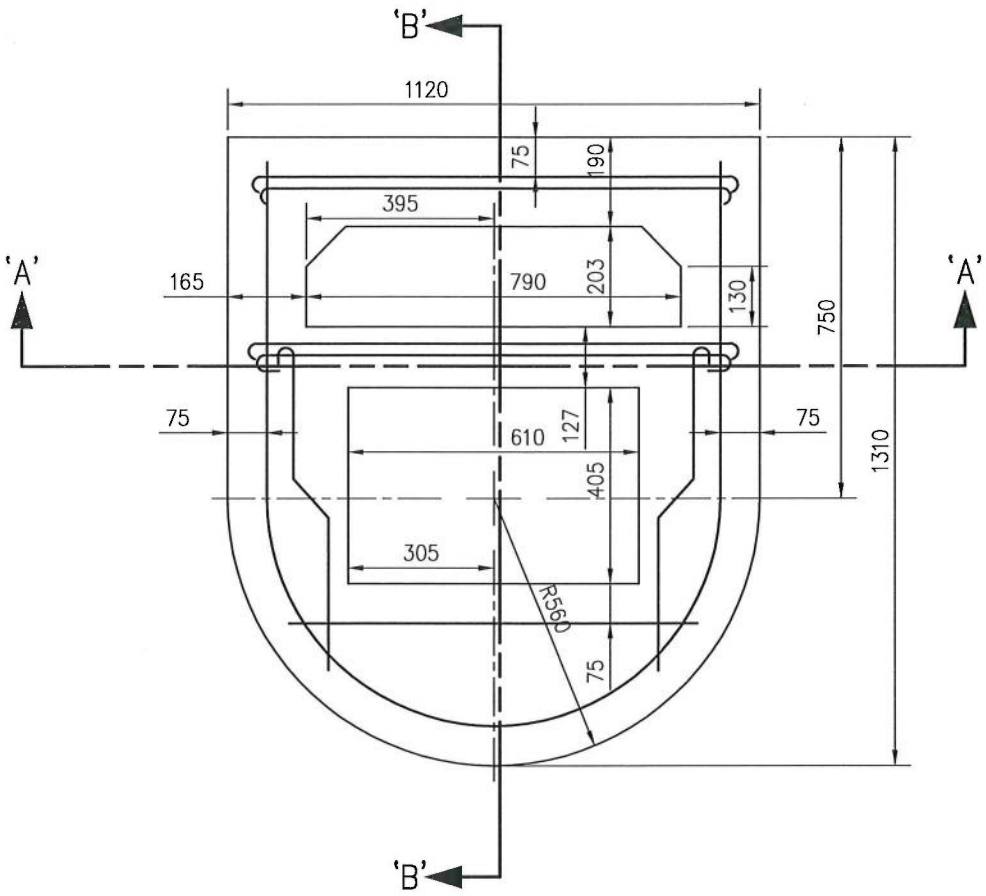
APPROVALS

SIGNATURE
NAME ANNA COLE
DATE SIGNED 18-Feb-2020

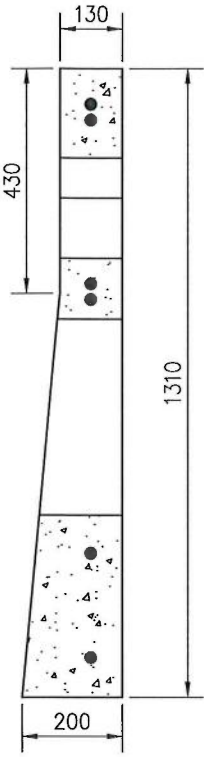
SIGNATURE
NAME Matt Jurkiewicz
DATE SIGNED FEB 20 2020

SCALES: HOR. N.T.S. VERT.

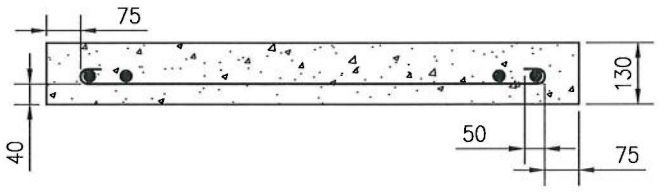
PLAN NO. 102-0010-022r001



PLAN



SECTION 'B–B'



SECTION 'A–A'

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- CEMENT: SULPHATE RESISTANT TYPE: TYPE HS (TYPE 50) TO CSA A3001 OR TYPE V TO ASTM C150
- CONCRETE COMPRESSIVE STRENGTH: 30 MPa AT 28 DAYS
- AIR CONTENT: 4 TO 7% EXCEPT WHERE NO–SLUMP CONCRETE IS USED
- CONCRETE CLEAR COVER: 30mm MIN
- REINFORCING STEEL: DEFORMED BARS TO CSA G30.18, fy = 400 MPa TO BE 15M BARS WITH COLD BENDS, INSIDE RADIUS 30mm & SLANTED

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–JAN–30	DLH

City of Saskatoon

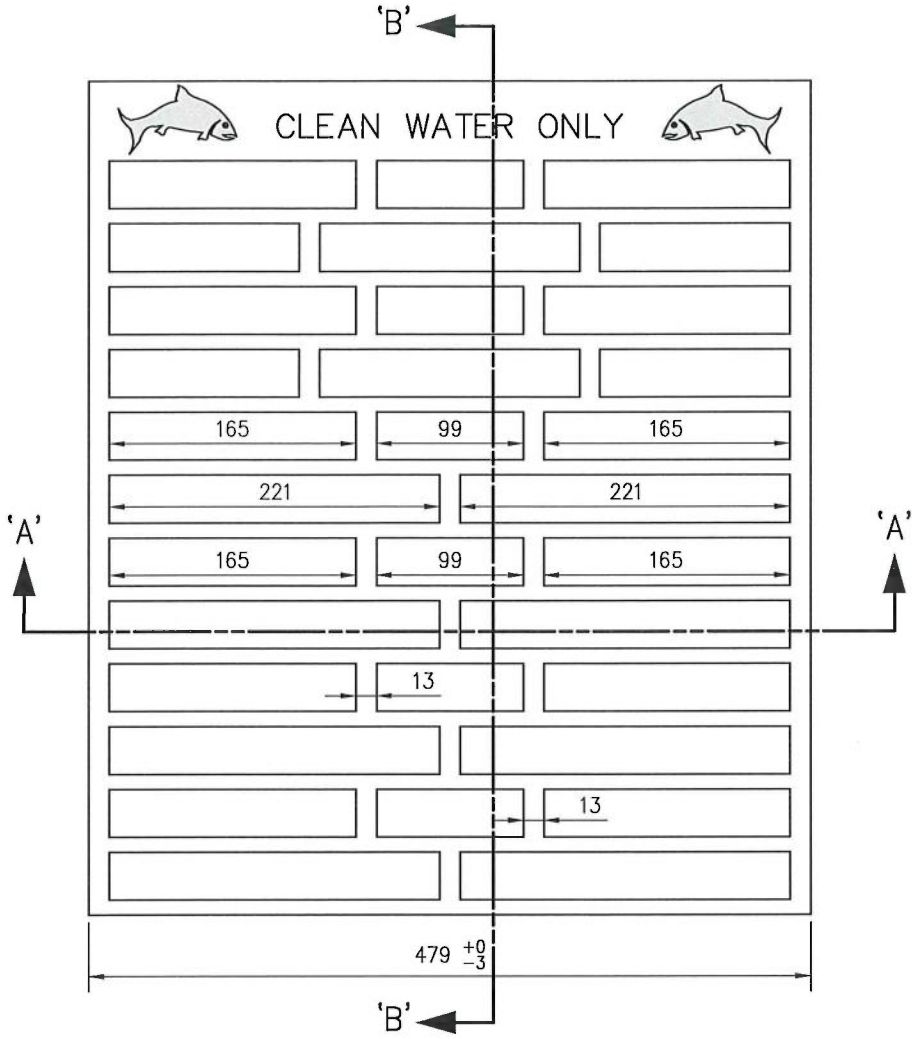
CATCH BASIN PRECAST SLAB TOP
TYPE K–1

APPROVALS

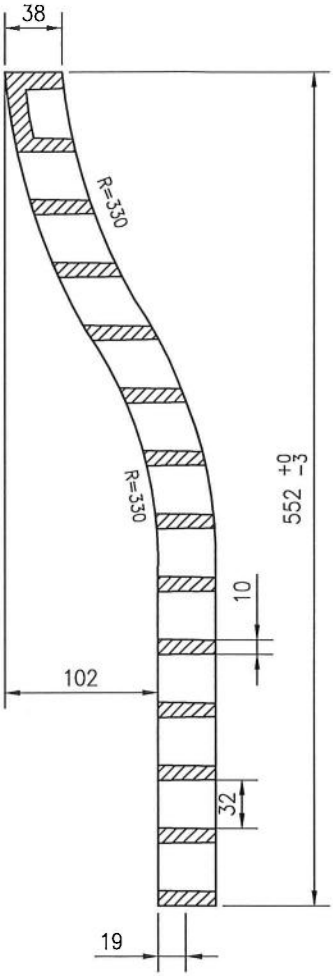
SIGNATURE	SIGNATURE
NAME: ANNA COLE	NAME: Matt Jurkiewicz
DATE SIGNED: 18-Feb-2020	DATE SIGNED: FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

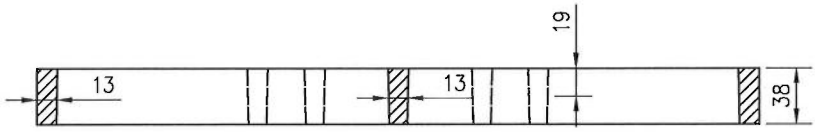
PLAN NO. 102–0010–023r001



PLAN



SECTION 'B–B'



SECTION 'A–A'

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- DUCTILE IRON TO CONFORM TO A.S.T.M. A536 GRADE 80–55–06 (LATEST EDITION)
- MASS = 23 KILOGRAMS +5%.
- COATED CASTINGS ACCEPTED ONLY WHEN REQUIRED BY CITY

NOTES:

1. GRATE OPEN AREA = 0.1664m

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–JAN–30	DLH

City of Saskatoon

ROLLED CURB CATCH BASIN GRATE
TYPE K–2

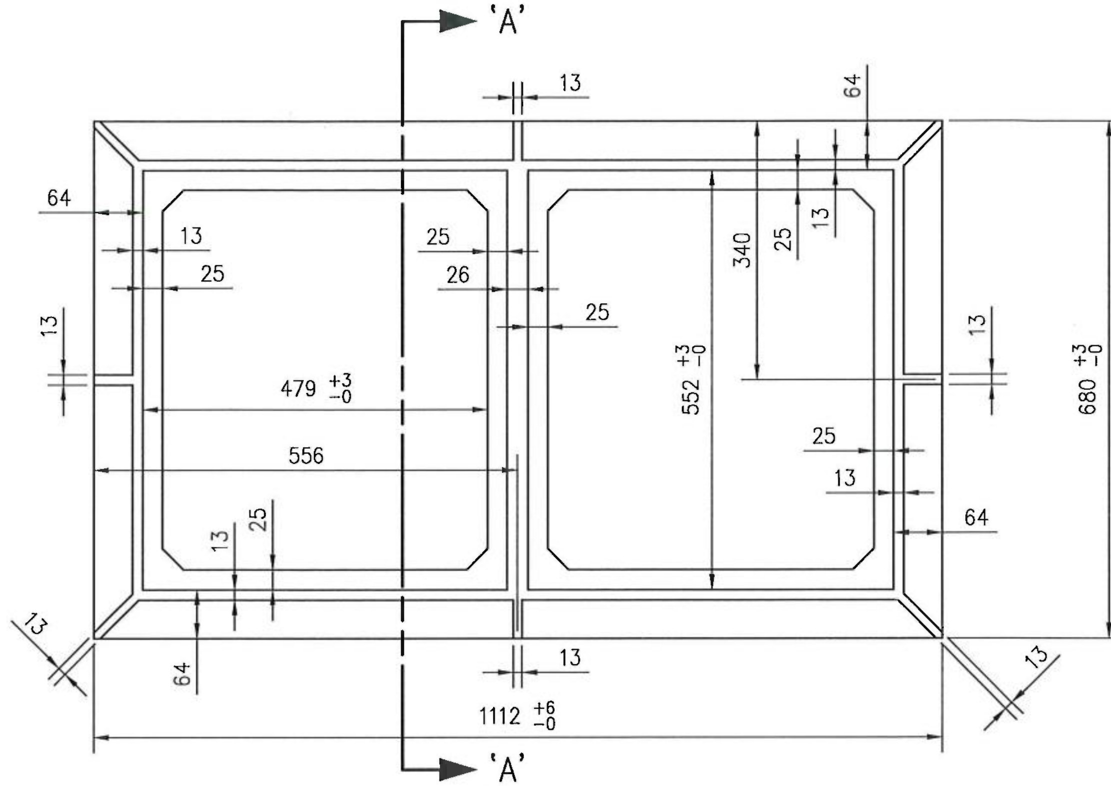
APPROVALS

SIGNATURE
NAME ANNA COLE
DATE SIGNED Feb 18, 2020

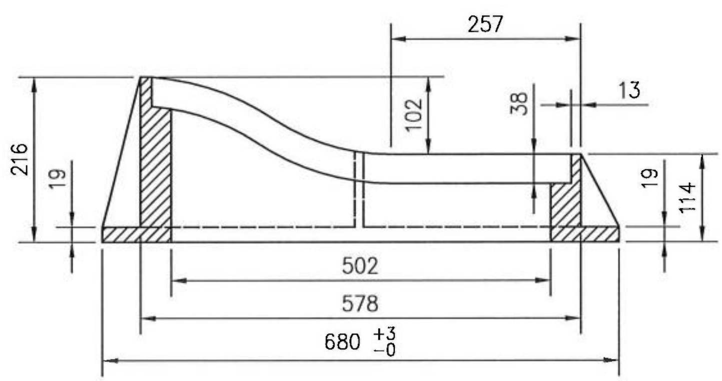
SIGNATURE
NAME MATT JURISEWICZ
DATE SIGNED FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102–0010–024r001



PLAN



SECTION 'A–A'

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO THE LATEST EDITION)

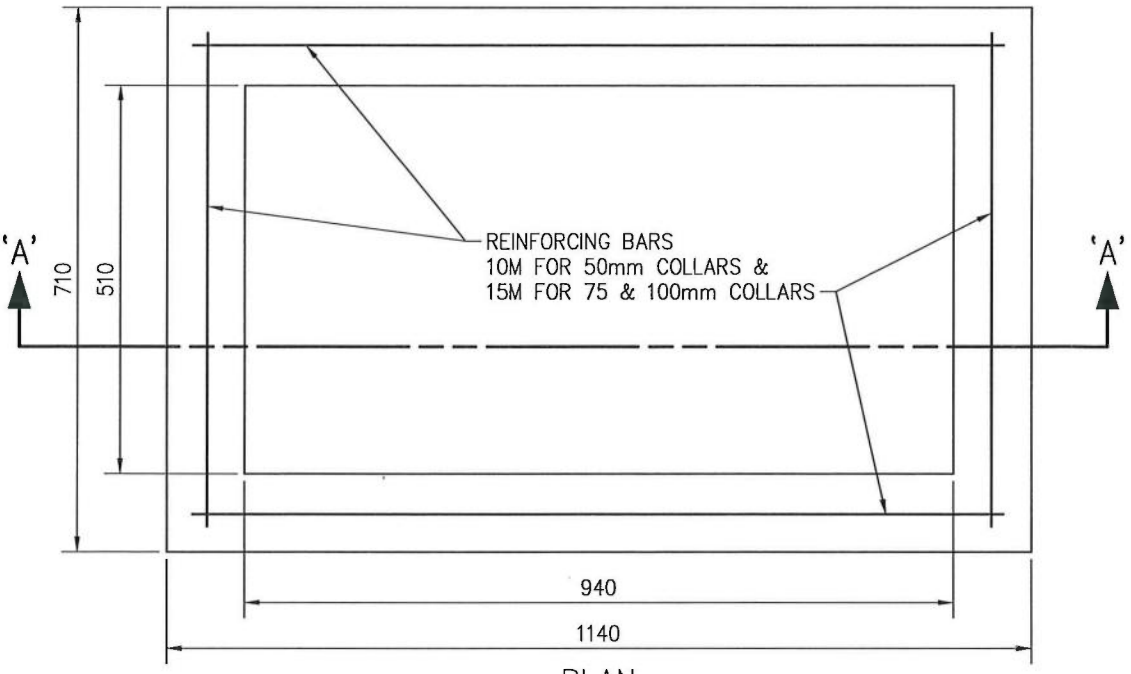
- GREY CAST IRON TO CONFORM TO A.S.T.M. A48 CLASS 35B.
- MASS = 186 KILOGRAMS ±5%
- COATED CASTINGS ACCEPTED ONLY WHEN REQUIRED BY CITY.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–FEB–06	DLH

City of Saskatoon

ROLLED CURB CATCH BASIN FRAME
TYPE K–2

APPROVALS	
SIGNATURE: [signature]	SIGNATURE: [signature]
NAME: Anna Cocg	NAME: Matt Jurkiewicz
DATE SIGNED: 18 Feb 2020	DATE SIGNED: FEB 20 2020
SCALES: HOR. N.T.S. VERT. N.T.S.	PLAN NO. 102–0010–025r001



PLAN

SECTION 'A–A'

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- CEMENT: SULPHATE RESISTANT TYPE: TYPE HS (TYPE 50) TO CSA A3001 OR TYPE V TO ASTM C150
- CONCRETE COMPRESSIVE STRENGTH: 30 MPa AT 28 DAYS
- AIR CONTENT: 4 TO 7% EXCEPT WHERE NO–SLUMP CONCRETE IS USED
- CONCRETE CLEAR COVER: 30mm MIN, EXCEPT FOR 50mm COLLAR SIZE
- REINFORCING STEEL: DEFORMED BARS TO CSA G30.18, fy = 400MPa TO BE 10M FOR 50mm COLLAR AND 15M FOR 75 & 100mm COLLARS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–JAN–30	DLH

City of Saskatoon

CATCH BASIN PRECAST COLLARS
TYPE K–2

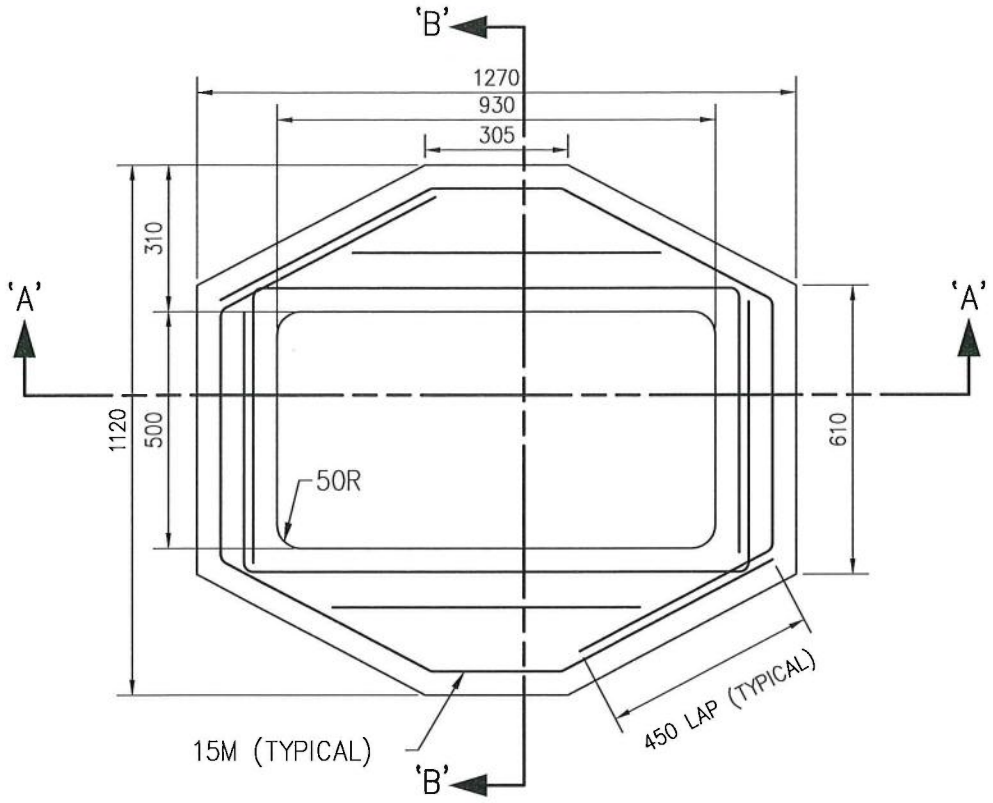
APPROVALS

SIGNATURE
NAME Angela Gee
DATE SIGNED 18-Feb-2020

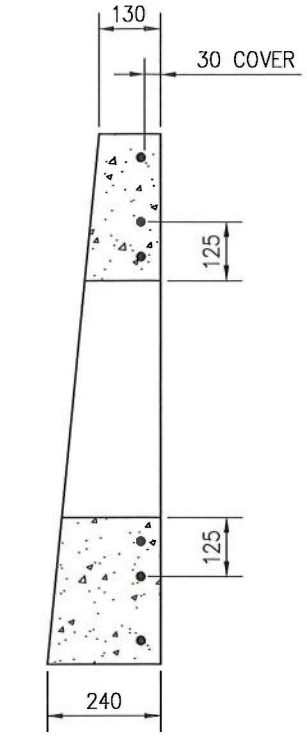
SIGNATURE
NAME Matt Jurkiewicz
DATE SIGNED FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

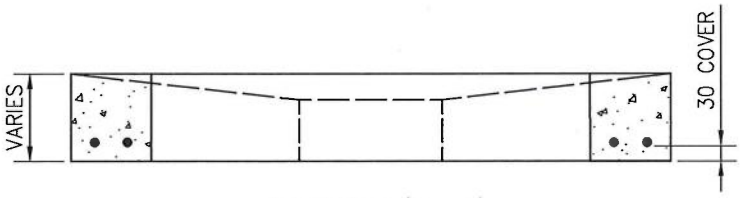
PLAN NO. 102–0010–026r001



PLAN



SECTION 'B–B'



SECTION 'A–A'

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- CEMENT: SULPHATE RESISTANT TYPE: TYPE HS (TYPE 50) TO CSA A3001 OR TYPE V TO ASTM C150
- CONCRETE COMPRESSIVE STRENGTH: 30 MPa AT 28 DAYS
- AIR CONTENT: 4 TO 7% EXCEPT WHERE NO-SLUMP CONCRETE IS USED
- CONCRETE CLEAR COVER: 30mm MIN
- REINFORCING STEEL: DEFORMED BARS TO CSA G30.18, fy = 400 MPa TO BE 15M BARS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-JAN-30	DLH

City of Saskatoon

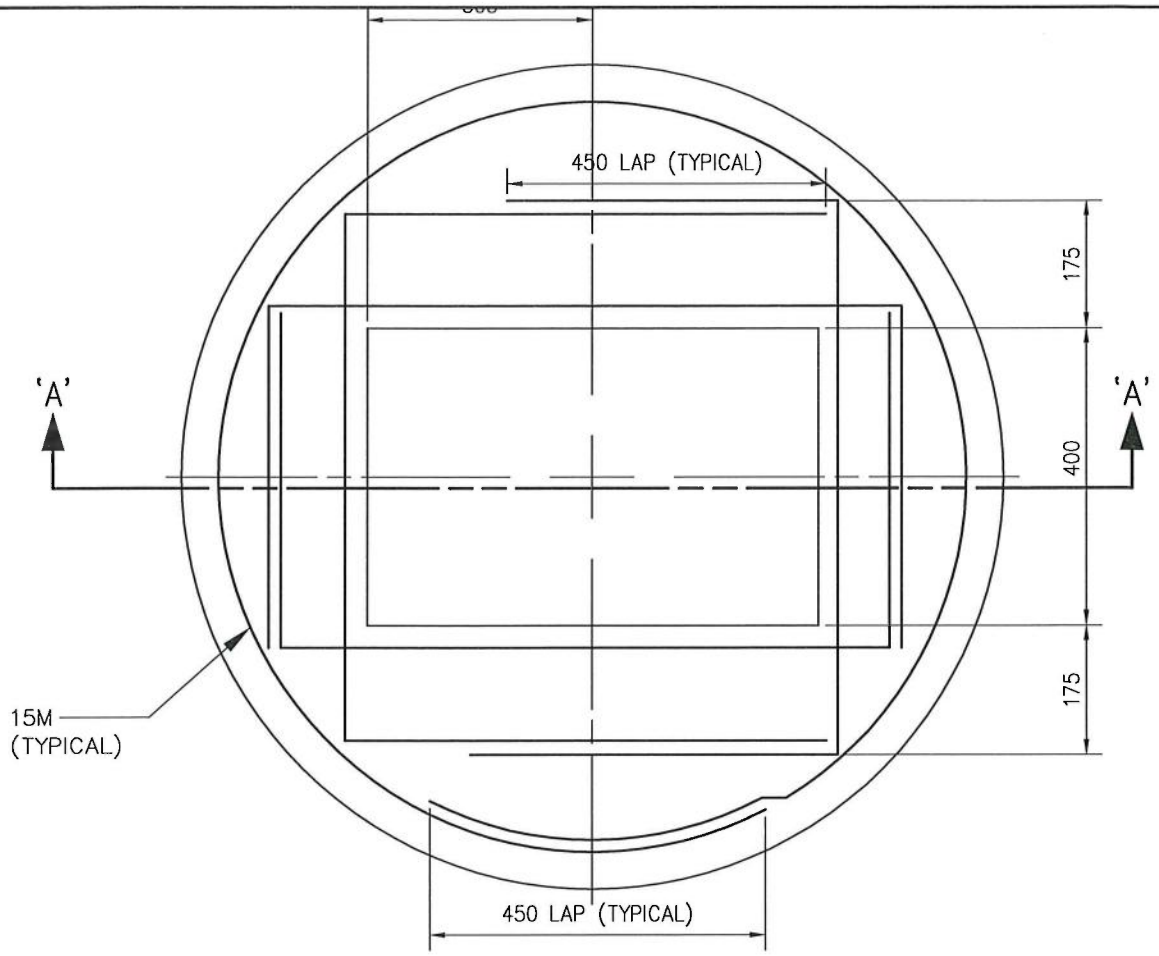
CATCH BASIN PRECAST SLAB TOP
TYPE K-2

APPROVALS

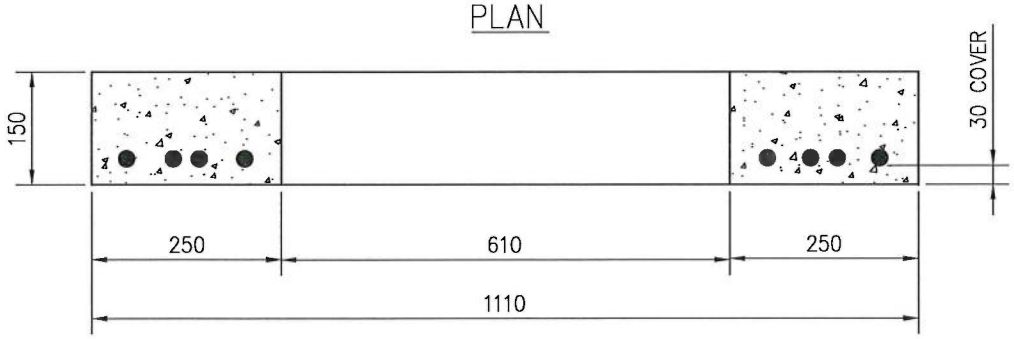
SIGNATURE	SIGNATURE
NAME: Anna Culg	NAME: Matt Jurgewicz
DATE SIGNED: 18 Feb 2020	DATE SIGNED: FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102-0010-027r001



PLAN



SECTION 'A–A'

NOTES:

1. USE ROUND TOP IN PARKING LOTS, LANES OR DRIVEWAYS

MATERIAL SPECIFICATIONS:

(ALL SPECIFICATIONS & STANDARDS REFER TO LATEST EDITION)

- CEMENT: SULPHATE RESISTANT TYPE: TYPE HS (TYPE 50) TO CSA A3001 OR TYPE V TO ASTM C150
- CONCRETE COMPRESSIVE STRENGTH: 30 MPa AT 28 DAYS
- AIR CONTENT: 4 TO 7% EXCEPT WHERE NO-SLUMP CONCRETE IS USED
- CONCRETE CLEAR COVER: 30mm MIN
- REINFORCING STEEL: DEFORMED BARS TO CSA G30.18, fy = 400 MPa
  REINFORCING STEEL TO BE SLANTED WHERE NECESSARY TO ACCOMMODATE SLAB THICKNESS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-JAN-30	DLH

City of Saskatoon

CATCH BASIN PRECAST SLAB TOP
TYPE K-3

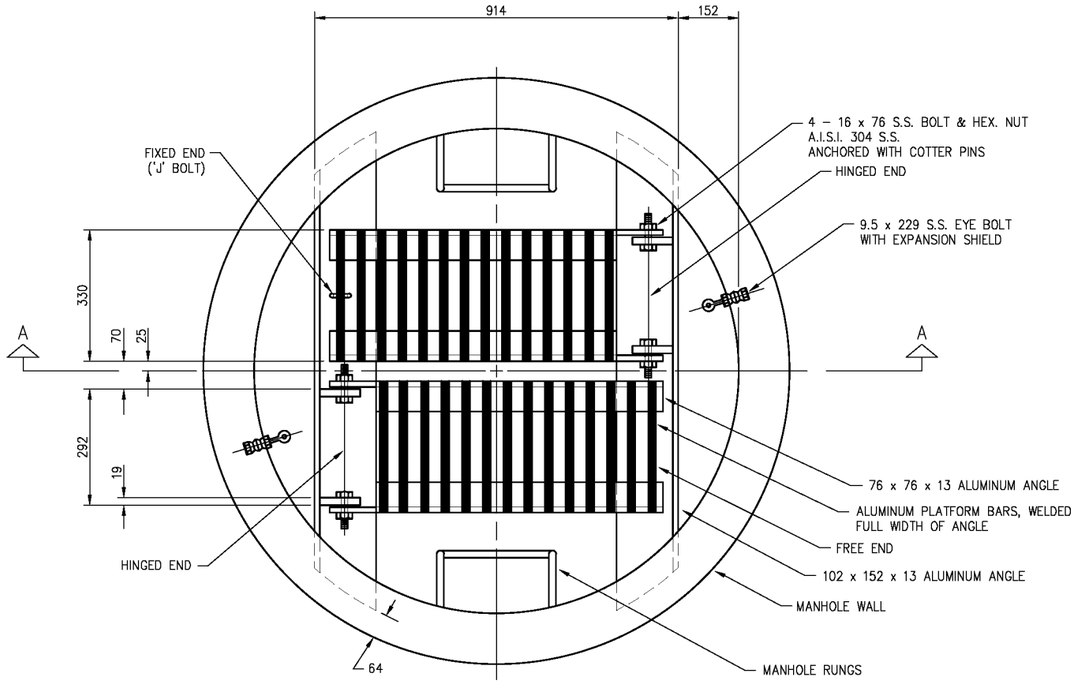
APPROVALS

SIGNATURE
NAME Anna Cale
DATE SIGNED 18 Feb 2020

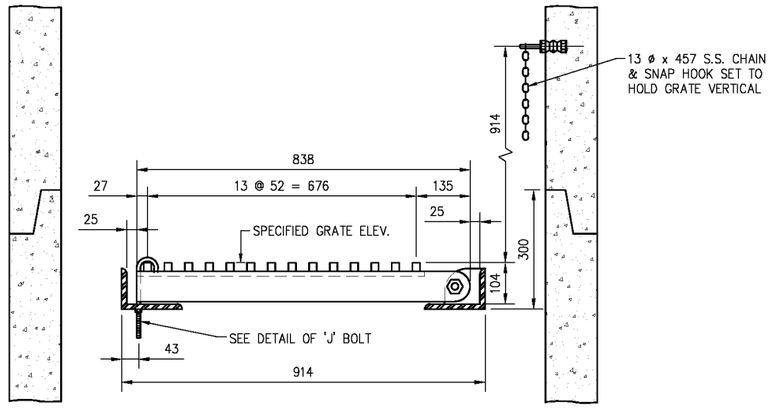
SIGNATURE
NAME Matt Jurkiewicz
DATE SIGNED FEB 20 2020

SCALES: HOR. N.T.S. VERT. N.T.S.

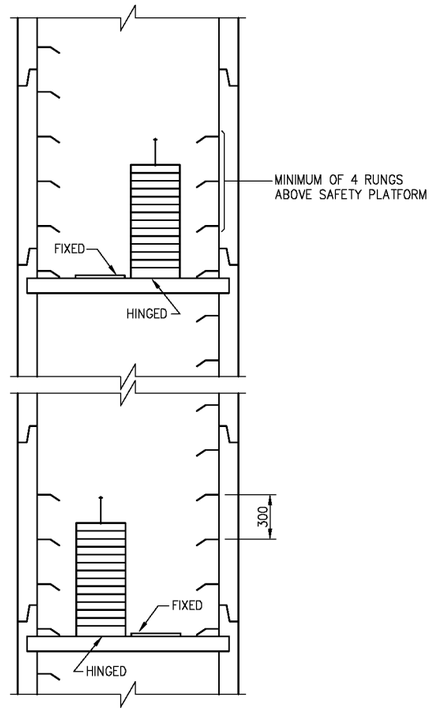
PLAN NO. 102-0010-028r001



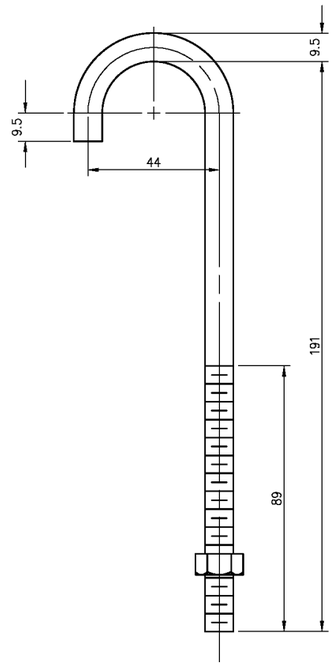
PLAN
1 : 15



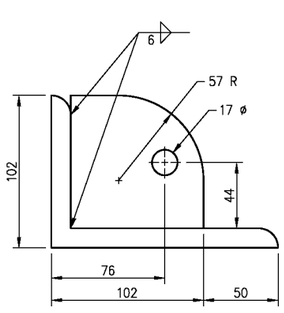
SECTION A–A
1 : 15

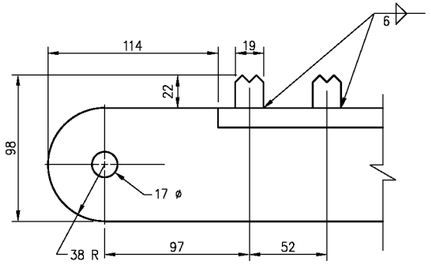


ELEVATION
1 : 40



DETAIL OF 'J' BOLT
1 : 2





ENLARGED VIEW OF HINGE
1 : 4

NOTES:

1. ALUMINUM TO BE OF APPROVED ALLOY.
2. AT ALL POINTS WHERE ALUMINUM AND CONCRETE COME IN CONTACT (ENDS OF BASE ANGLES), ALUMINUM SURFACES TO BE COATED WITH 2 COATS OF STATIC ASPHALT PAINT.
3. ALL 102 x 152 x 13 ALUMINUM ANGLE SUPPORTS TO BE INSTALLED DURING PRECASTING OF MANHOLE SECTION.
4. "S.S." DENOTES STAINLESS STEEL.
5. SAFETY PLATFORMS MEETING CITY OF SASKATOON STANDARD SPECIFICATIONS MAY BE INSTALLED IN ALL MANHOLES WITH DEPTHS GREATER THAN 6.0 METRES IN SUCH A MANNER SO THAT NO VERTICAL FALL DISTANCE EXCEEDS 5.0 METRES OR IS LESS THAN 2.4 METRES.
6. SAFETY PLATFORMS WHERE POSSIBLE SHALL BE PLACED ABOVE INLETS IN SANITARY SEWER MANHOLES.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

	PLAN DESCRIPTION/REVISION	DATE	BY
1	REVISED & REFORMATTED FROM 08010–D9	1999–MAR–08	MJ
2	REVISED NOTE REGARDING SAFETY PLATFORMS	2007–JAN–22	HLO
3	REVISED NOTE 5	2020–APR–01	DLH

City of Saskatoon

MANHOLE SAFETY PLATFORM

APPROVALS

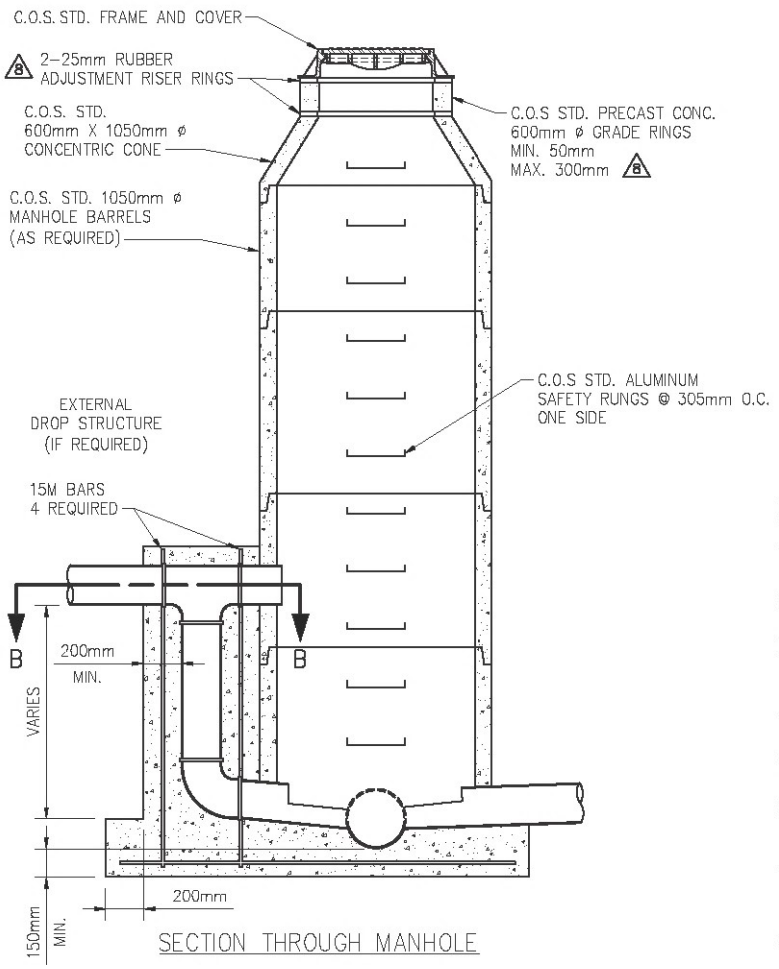
SIGNATURE: Mitchell Parker	SIGNATURE: Matt Jurkiewicz
NAME: Apr 14, 2020	NAME: Apr 14, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. SCALE — VERT. SCALE

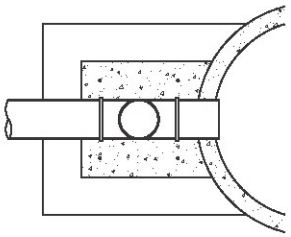
PLAN NO. 102–0011–001r003

1050mm MANHOLE BARRELS AND CONCENTRIC CONE TO BE USED EXCLUSIVELY FOR REHABILITATION WORK ON EXISTING 1050mm MANHOLE BASES.

FOR NEW INSTALLATIONS AND RECONSTRUCTION SEE COS STANDARD SPECIFICATIONS.



SECTION THROUGH MANHOLE

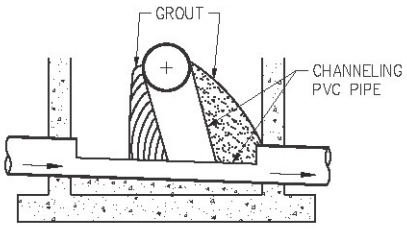


SECTION B-B

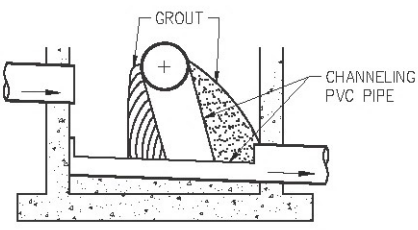
NOTES:

1. DROP STRUCTURE REQUIRED WHEN CROWN OF INLET PIPE IS 0.75m OR MORE ABOVE CROWN OF OUTLET PIPE.
2. USE 4 - 15M BARS PLACED AS SHOWN WHEN EXTERIOR DROP SECTION IS 1.5m OR MORE.
3. ALL CAST IN PLACE CONCRETE TO BE 35MPa SULPHATE RESISTANT. ALL GROUT TO BE NON-SHRINK, TYPE HS SULPHATE RESISTANT, CEMENTITIOUS GROUT.
4. PLACE 10M BARS AT 200mm O.C. EACH WAY IN BASE OF MANHOLES OVER 4.5 m DEEP.
5. ALL PRECAST CONCRETE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM SPECIFICATION C478.
6. SAFETY PLATFORMS AS PER CITY OF SASKATOON STANDARD SPECIFICATIONS SHALL BE INSTALLED IN ALL MANHOLES WITH DEPTHS GREATER THAN 6.0m.
7. SAFETY PLATFORMS SHALL BE INSTALLED IN SUCH A MANNER SO THAT NO VERTICAL FALL DISTANCE EXCEEDS 5.0m OR IS LESS THAN 2.4m.
8. MANHOLE RUNGS SHALL BE ORIENTED SUCH THAT THEY DO NOT INTERFERE WITH THE INCOMING PIPE.
9. PVC CHANNELING SHALL BE SEAMLESS FOR STRAIGHT THROUGH BASES.
10. PIPE TO MANHOLE CONNECTIONS SHALL BE WATERTIGHT.
11. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD.

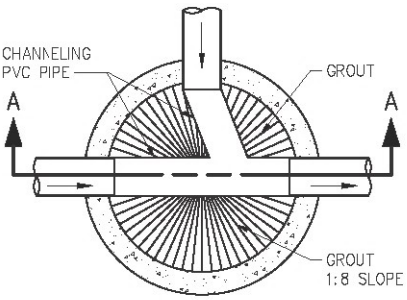
CHANNELIZATION DETAILS FOR INTERIOR DROP OF LESS THAN 0.75m



SECTION A-A



SECTION A-A



PLAN VIEW

	PLAN DESCRIPTION/REVISION	DATE	BY
1	RENUMBERED FROM 08010-D3A	2000-AUG-30	RO
2		2006-JAN-20	HLO
3		2007-JAN-22	HLO
4		2012-JAN-05	HLO
5	NOTE 3 - 35MPa CONC., NOTES 6&7	2014-DEC-12	MJ
6	ADDED GROUT AROUND PIPES AT MANHOLE BASE AND NOTES 8 & 9	2015-NOV-26	HLO
7	REMOVE GROUT AROUND PIPES AT MANHOLE BASE, REVISED NOTE 3,	2017-JAN-25	HLO
7	AND ADDED NOTE 10	2017-JAN-25	HLO
8	ADDED NOTE 11, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021-JAN-07	DLH

City of Saskatoon

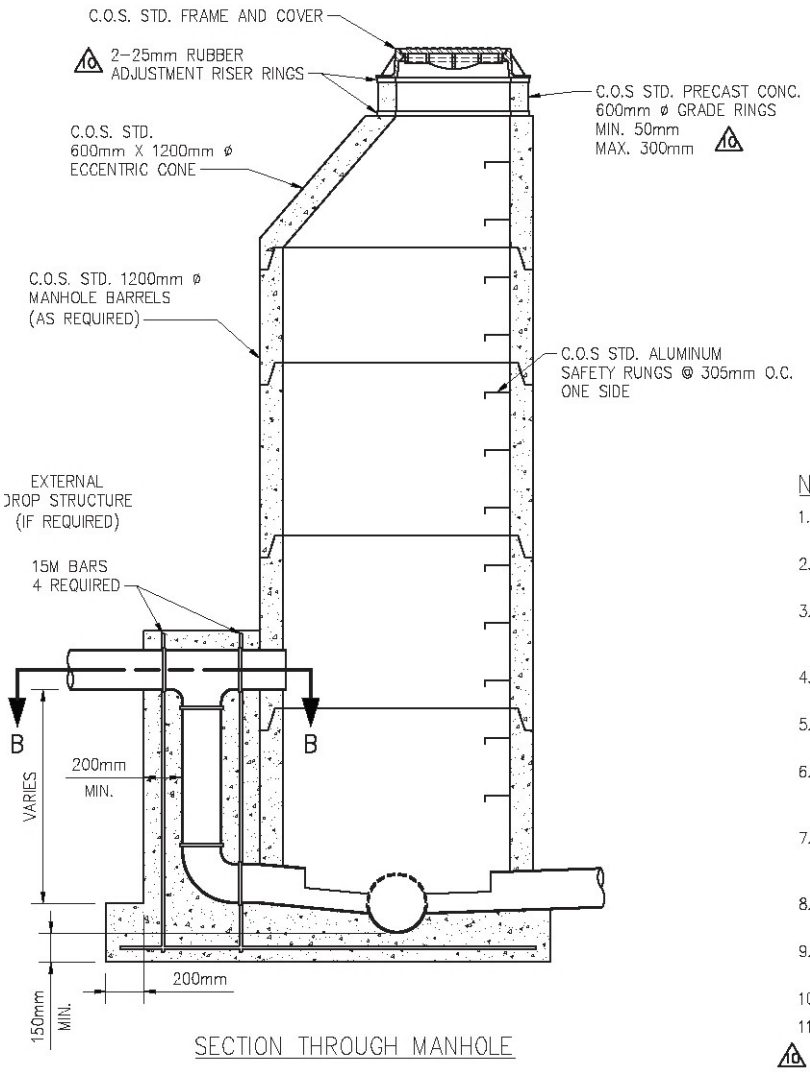
STANDARD 1050mm MANHOLE FOR 200mm TO 525mm SANITARY SEWERS FOR REHABILITATION WORK ONLY

APPROVALS

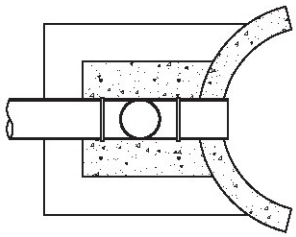
SIGNATURE	SIGNATURE
Jeff P D Thomson	Maciej Jurkiewicz
NAME	NAME
Jan 27, 2021	Jan 27, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:40 VERT.

PLAN NO. 102-0011-004r008



SECTION THROUGH MANHOLE



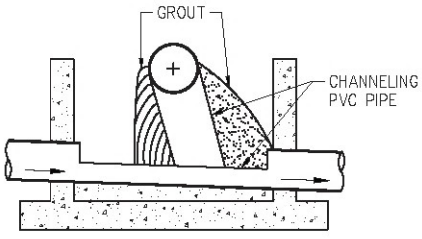
SECTION B–B

NOTES

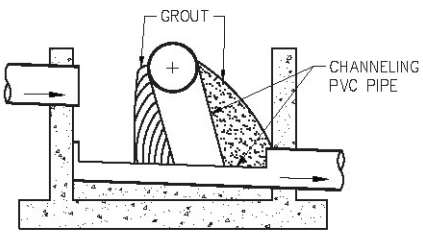
1. EXTERNAL DROP STRUCTURE REQUIRED WHEN CROWN OF INLET PIPE IS 0.75m OR MORE ABOVE CROWN OF OUTLET PIPE.
2. USE 4 – 15M BARS PLACED AS SHOWN WHEN EXTERIOR DROP SECTION IS 1.5m OR MORE.
3. ALL CAST IN PLACE CONCRETE TO BE 35 MPa SULPHATE RESISTANT. ALL GROUT TO BE NON–SHRINK, TYPE HS SULPHATE RESISTANT, CEMENTITIOUS GROUT.
4. PLACE 10M BARS AT 200mm O.C. EACH WAY IN BASE OF MANHOLES OVER 4.5m DEEP.
5. ALL PRECAST CONCRETE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM SPECIFICATION C478.
6. SAFETY PLATFORMS AS PER CITY OF SASKATOON STANDARD SPECIFICATIONS SHALL BE INSTALLED IN ALL MANHOLES WITH DEPTHS GREATER THAN 6.0 METERS.
7. SAFETY PLATFORMS SHALL BE INSTALLED IN SUCH A MANNER SO THAT NO VERTICAL FALL DISTANCE EXCEEDS 5.0 METERS OR IS LESS THAN 2.4 METERS.
8. MANHOLE RUNGS SHALL BE ORIENTED SUCH THAT THEY DO NOT INTERFERE WITH THE INCOMING PIPE.
9. PVC CHANNELING SHALL BE SEAMLESS FOR STRAIGHT THROUGH BASES.
10. PIPE TO MANHOLE CONNECTIONS SHALL BE WATERTIGHT.
11. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD.

10

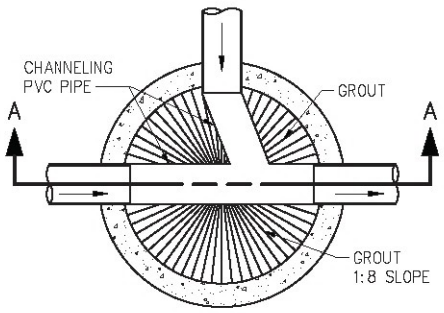
CHANNELIZATION DETAILS FOR INTERIOR DROP OF LESS THAN 0.75M



SECTION A–A



SECTION A–A



PLAN VIEW

	PLAN DESCRIPTION/REVISION	DATE	BY
3		2006–APR–04	HLO
4		2007–JAN–22	HLO
5		2009–NOV–16	MLB
6		2012–JAN–05	HLO
7	NOTES 3 – 35MPa CONC., 6, 7, & 8	2014–DEC–12	MJ
8	ADDED GROUT AROUND PIPES AT MANHOLE BASE AND ADDED NOTES 8 & 9	2015–NOV–26	HLO
9	REMOVE GROUT AROUND PIPES AT MANHOLE BASE, REVISE NOTE 3,	2017–JAN–25	HLO
9	AND ADDED NOTE 10	2017–JAN–25	HLO
10	ADDED NOTE 11, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021–JAN–11	DLH

City of Saskatoon

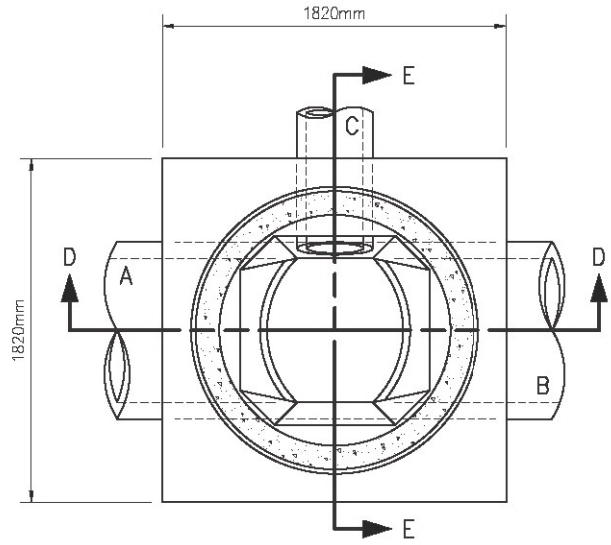
STANDARD 1200mm MANHOLE FOR 200mm TO 600mm SANITARY SEWERS WITH DROP STRUCTURE

APPROVALS

SIGNATURE	SIGNATURE
NAME: Jeff P D Thomson	NAME: Maciej Jurkiewicz
DATE SIGNED: Jan 27, 2021	DATE SIGNED: Jan 27, 2021

SCALES: HOR. 1:40 VERT.

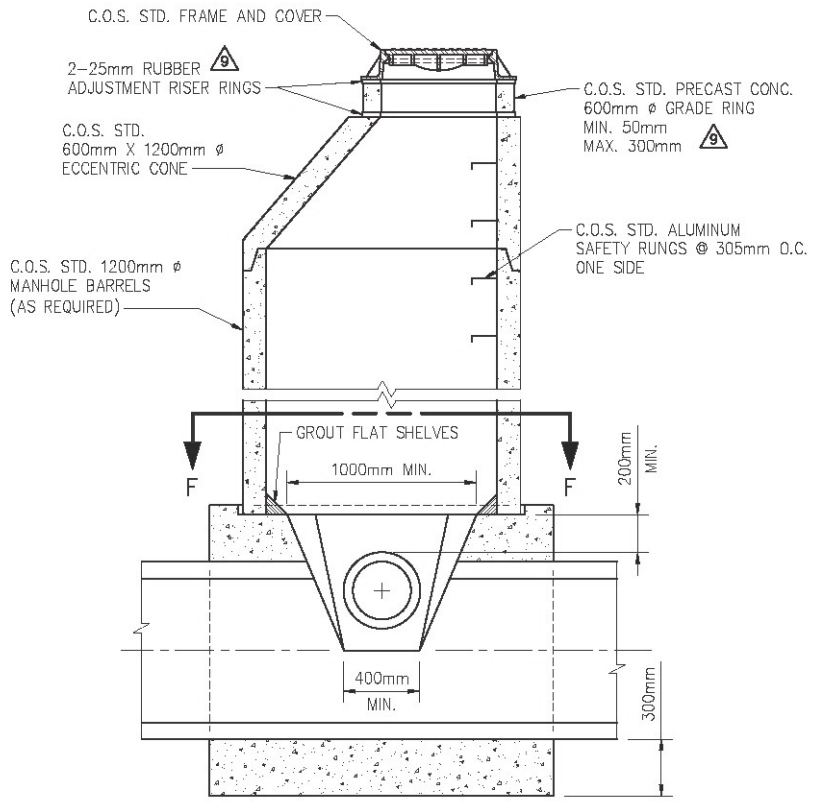
PLAN NO. 102–0011–005r010



SECTION D–D

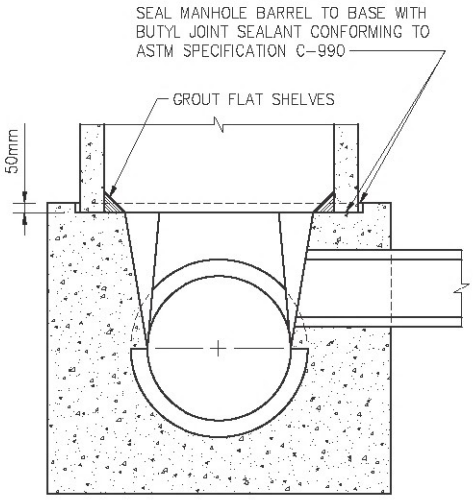
NOTES:

1. ALL POURED IN PLACE CONCRETE TO BE 35 MPa SULPHATE RESISTANT. ALL GROUT TO BE NON–SHRINK, TYPE HS SULPHATE RESISTANT, CEMENTITIOUS GROUT.
2. EXTERIOR DROP STRUCTURE REQUIRED FOR SANITARY SEWERS WHEN CROWN OF INLET PIPE IS 0.75m OR MORE ABOVE CROWN OF OUTLET PIPE.
3. ALL PRECAST CONCRETE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.T.M. SPECIFICATION C–478.
4. ALL WALLS SHALL BE FORMED INSIDE AND OUTSIDE, AND POURED IN PLACE.
5. SAFETY PLATFORMS AS PER CITY OF SASKATOON STANDARD SPECIFICATIONS SHALL BE INSTALLED IN ALL MANHOLES WITH DEPTHS GREATER THAN 6.0 METERS.
6. SAFETY PLATFORMS SHALL BE INSTALLED IN SUCH A MANNER SO THAT NO VERTICAL FALL DISTANCE EXCEEDS 5.0 METERS OR IS LESS THAN 2.4 METERS.
7. PVC CHANNELING SHALL BE SEAMLESS FOR STRAIGHT THROUGH BASES.
8. PIPE TO MANHOLE CONNECTIONS SHALL BE WATERTIGHT.
9. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD. (9)



SECTION D–D

A	B (MAX.)	C (MAX.)
675mm	675mm	600mm
750mm	750mm	525mm
900mm	900mm	300mm
NOTE: IF C > C (Max.) IN TABLE THEN A SPECIAL DESIGN IS REQUIRED.		



SECTION E–E

	PLAN DESCRIPTION/REVISION	DATE	BY
2		2006–JAN–20	HLO
3		2006–APR–04	HLO
4		2007–JAN–22	HLO
5		2012–JAN–05	HLO
6	NOTES 1 – 35MPa CONC., 5 & 6	2014–DEC–12	MJ
7	ADDED GROUT AROUND MANHOLE BASE & ADDED NOTE 7	2015–NOV–26	HLO
8	SEAL BARREL TO BASE WITH BUTYL SEALANT, REVISED NOTE 1,	2017–JAN–25	HLO
8	AND ADDED NOTE 8	2017–JAN–25	HLO
9	ADDED NOTE 9, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021–JAN–12	DLH

City of Saskatoon

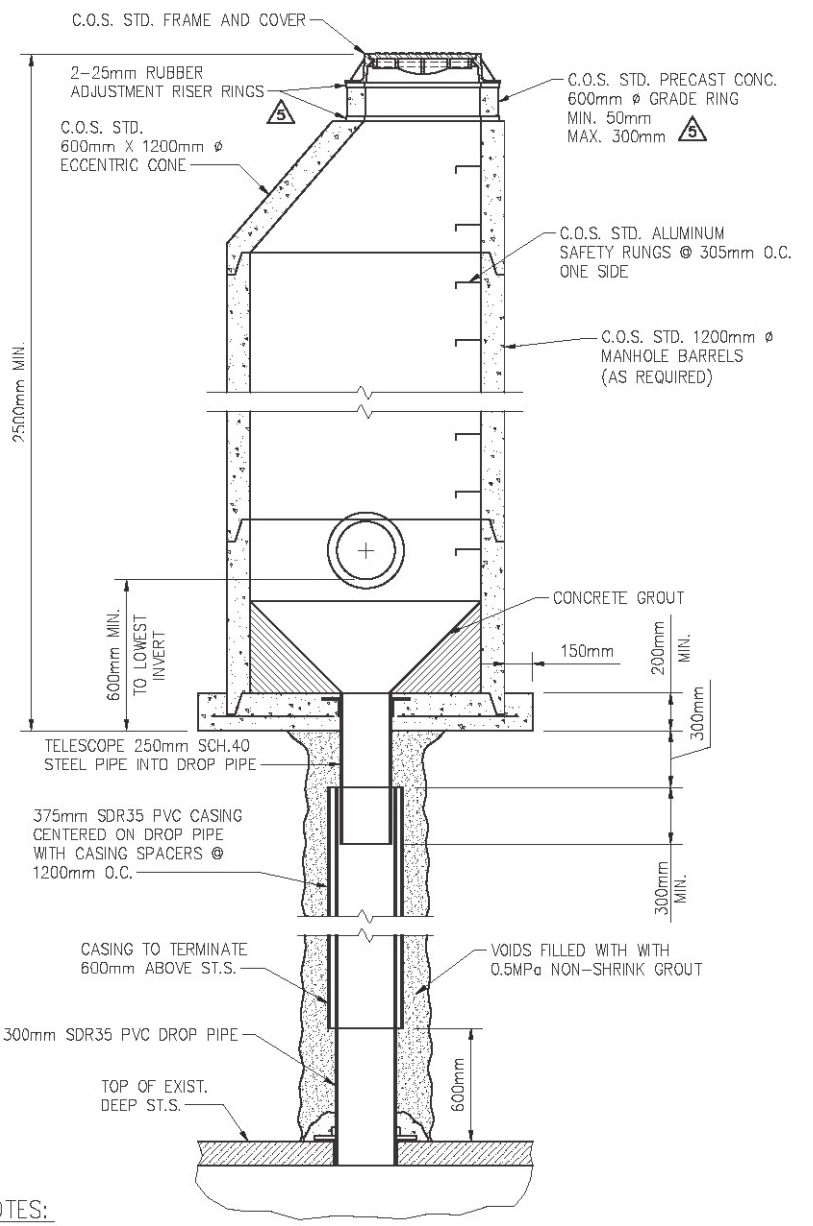
STANDARD 1200mm MANHOLE FOR SEWERS BETWEEN 600mm & 900mm

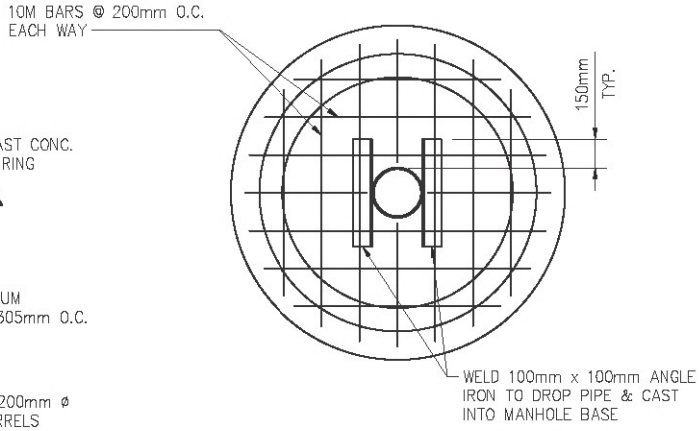
APPROVALS

SIGNATURE	SIGNATURE
NAME: Jeff P D Thomson	NAME: Maciej Jurkiewicz
DATE SIGNED: Jan 27, 2021	DATE SIGNED: Jan 27, 2021

SCALES: HOR. 1:40 VERT.

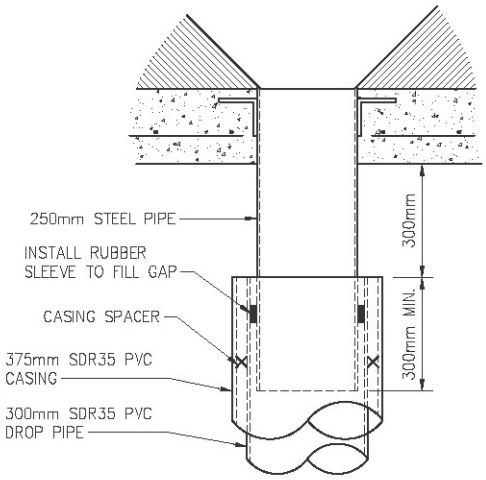
PLAN NO. 102–0011–006r009





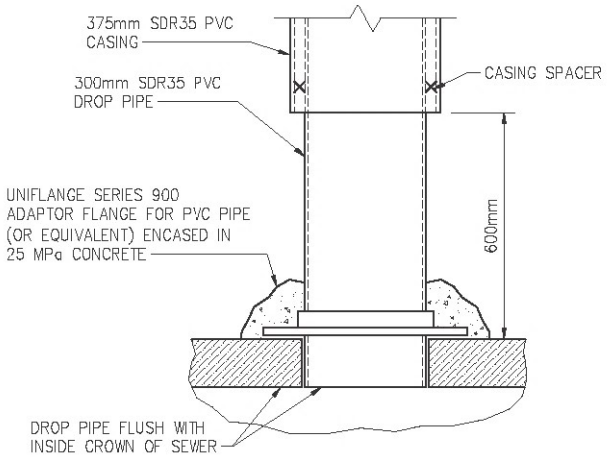
MANHOLE BASE REINFORCING

SCALE 1:40



TELESCOPING SECTION

SCALE 1:20



CONNECTION AT ST.S. TRUNK

SCALE 1:20

NOTES:

1. ALL REINFORCING STEEL DETAILS SHALL BE IN ACCORDANCE WITH A.C.I. STD. 315.65 UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL UNLESS OTHERWISE NOTED SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE NEW BILLET STEEL CONFORMING TO CURRENT C.S.A. STD. G30.12
3. CONCRETE COVER FOR REINFORCING STEEL UNLESS OTHERWISE NOTED SHALL BE 75mm CLEAR COVER FOR FORMED CONCRETE EXPOSED TO EARTH.
4. ALL POURED IN PLACE CONCRETE TO BE 35 MPa (IN 28 DAYS) SULPHATE RESISTANT.
5. ALL PRECAST CONCRETE SECTIONS SHALL BE A.S.T.M. SPECIFICATION C-478.
6. MINIMUM COMPACTION OF TRENCH BACKFILL SHALL BE 98% OF MAXIMUM PROCTOR DENSITY.
7. DROP PIPE SECTION TO BE AUGURED.
8. IF MANHOLE BARRELS AUGURED, NON-SHRINKABLE BACKFILL TO BE USED.
9. SAFETY PLATFORMS AS PER CITY OF SASKATOON STANDARD SPECIFICATIONS SHALL BE INSTALLED IN ALL MANHOLES WITH DEPTHS GREATER THAN 6.0 METERS.
10. SAFETY PLATFORMS SHALL BE INSTALLED IN SUCH A MANNER SO THAT NO VERTICAL FALL DISTANCE EXCEEDS 5.0 METERS OR IS LESS THAN 2.4 METERS.
11. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD.

5

	PLAN DESCRIPTION/REVISION	DATE	BY
1	RENUMBERED FROM 402-0003-008r001	2000-AUG-30	MJ
2		2007-JAN-22	HLO
3	CORRECTED TRENCH BACKFILL FROM 95% TO 98% DENSITY	2013-DEC-11	HLO
4	NOTE 4 - 35MPa CONC., NOTES 9&10	2014-DEC-14	MJ
5	ADDED NOTE 11, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021-JAN-12	DLH

City of Saskatoon

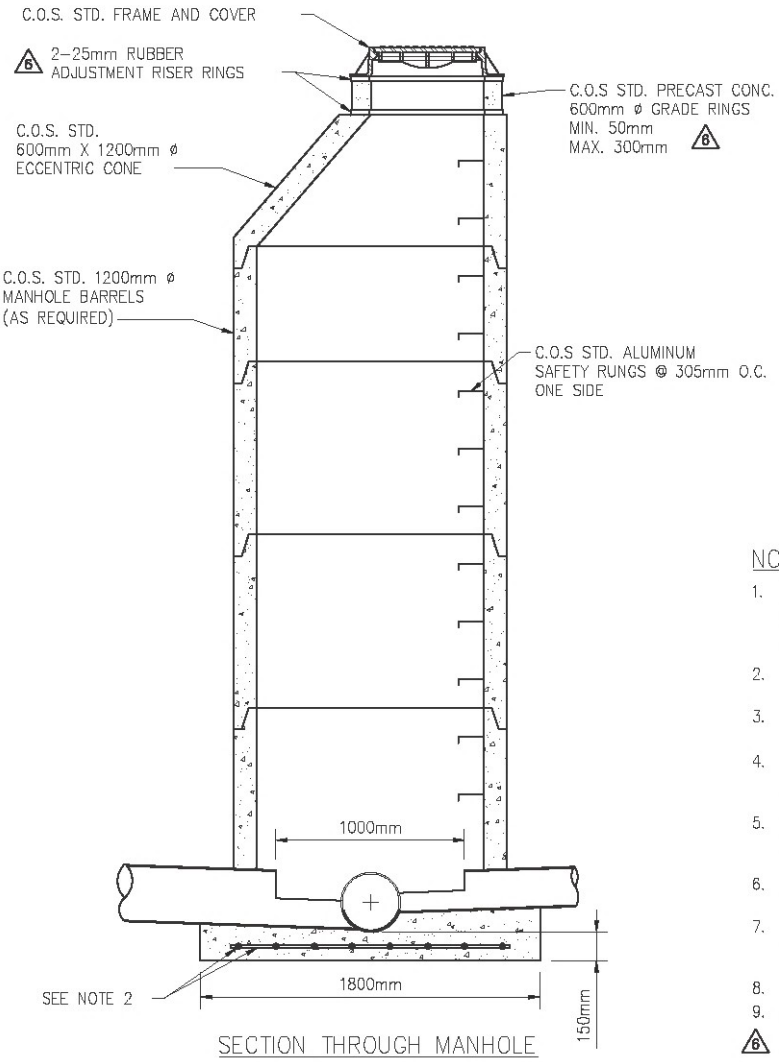
DROP STRUCTURE MANHOLE FOR CONNECTION TO TRUNK STORM SEWERS

APPROVALS

SIGNATURE	SIGNATURE
Jeff P D Thomson	Maciej Jurkiewicz
NAME	NAME
Jan 27, 2021	Jan 27, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:40 VERT.

PLAN NO. 102-0011-008r005

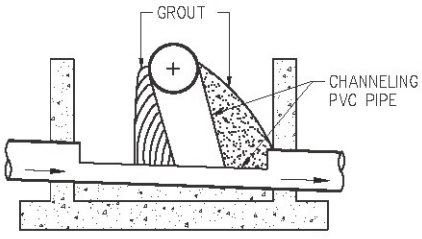


SECTION THROUGH MANHOLE

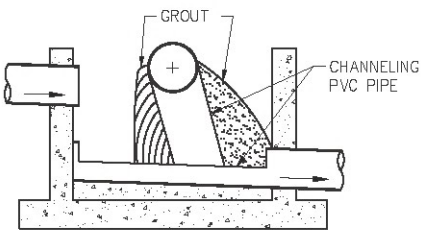
NOTES:

1. ALL CAST IN PLACE CONCRETE INCLUDING CHANNELING AND BENCHING TO BE 35 MPa (IN 28 DAYS) SULPHATE RESISTANT. ALL GROUT TO BE NON-SHRINK, TYPE HS SULPHATE RESISTANT, CEMENTITIOUS GROUT.
2. PLACE 10M BARS AT 200mm O.C. EACH WAY IN BASE OF MANHOLES OVER 4.5m DEEP.
3. ALL PRECAST CONCRETE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM SPECIFICATION C478/C.O.S. SPEC'S.
4. SAFETY PLATFORMS MEETING CITY OF SASKATOON STANDARD SPECIFICATIONS SHALL BE INSTALLED IN ALL MANHOLES WITH DEPTHS GREATER THAN 6.0 METERS.
5. SAFETY PLATFORMS SHALL BE INSTALLED IN SUCH A MANNER SO THAT NO VERTICAL FALL DISTANCE EXCEEDS 5.0 METERS OR IS LESS THAN 2.4 METERS.
6. MANHOLE RUNGS SHALL BE ORIENTED SUCH THAT THEY DO NOT INTERFERE WITH THE INCOMING PIPE.
7. PVC CHANNELING REQUIRED FOR SANITARY SEWERS, GROUT CHANNELING IS ALLOWABLE FOR STORM SEWERS. PVC CHANNELING SHALL BE SEAMLESS FOR STRAIGHT THROUGH BASES.
8. PIPE TO MANHOLE CONNECTIONS SHALL BE WATERTIGHT.
9. 6 TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM CENTER OF THE ROAD.

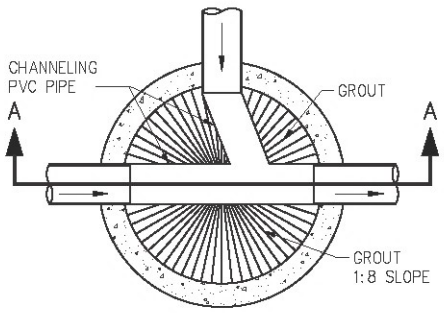
CHANNELIZATION DETAILS FOR INTERIOR DROP OF LESS THAN 0.75M



SECTION A-A



SECTION A-A



PLAN VIEW

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2009-FEB-20	MLB
2		2012-JAN-05	HLO
3	REVISED NOTES 1, 4, 5, 6, & 7	2014-DEC-12	MJ
4	ADDED GROUT AROUND PIPES AT MH BASE AND REVISED NOTES 6 & 7	2015-NOV-26	HLO
5	REMOVED GROUT AROUND PIPES AT MH BASE, REVISED NOTES 1 & 3,	2017-JAN-25	HLO
5	AND ADDED NOTE 8.	2017-JAN-25	HLO
6	ADDED NOTE 9, GRADE RING MIN., & RUBBER ADJ. RISER RINGS	2021-JAN-13	DLH

City of Saskatoon

STANDARD 1200mm MANHOLE
FOR 200mm TO 600mm SEWERS

APPROVALS

SIGNATURE	SIGNATURE
Jeff P D Thomson	Maciej Jurkiewicz
NAME	NAME
Jan 27, 2021	Jan 27, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:40 VERT.

PLAN NO. 102-0011-009R006

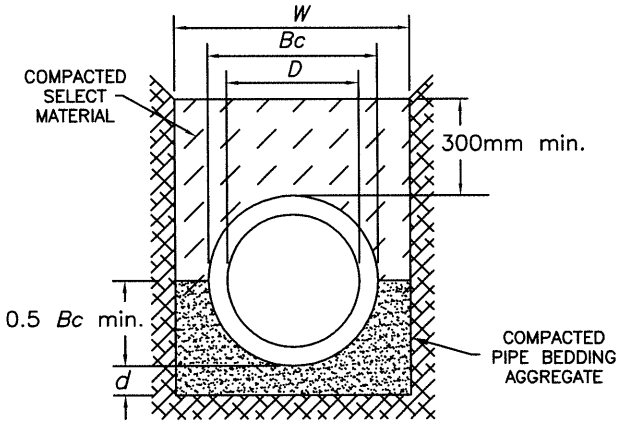
NOTES:

1. ALL CONCRETE TO BE MADE WITH TYPE HS/HSB SULPHATE RESISTANT CEMENT.
2. BEDDING AGGREGATE TO CONFORM TO GRADATION IN SECTION 03001–3.2.7 OF SPECIFICATIONS.
3. SELECT BACKFILL TO BE FREE OF ALL LUMPS, STONES AND SUBSTANCE WHICH COULD REACT CHEMICALLY WITH PIPE MATERIAL.
4. PNEUMATIC OR MECHANICAL EQUIPMENT SHALL BE USED TO COMPACT THE BEDDING MATERIAL AND THE SELECT BACKFILL MATERIAL TO 98% OF ITS STANDARD PROCTOR DENSITY (PLACED IN 150mm LAYERS).
5. COMPACT SELECT MATERIAL MUST BE CLASS 4 OR BETTER AS CHARACTERIZED IN ASTM D2321.
6. UNSUPPORTED STRAIGHT WALL TRENCH USED ONLY FOR UNDISTURBED SOIL. DISTURBED SOIL TRENCHES MUST BE 1:1 SIDEWALL SLOPE FROM BOTTOM OF TRENCH. IN EITHER CASE, COMPACTED PIPE AGGREGATE MUST BE INSTALLED TO TRENCH WALL.

NOMINAL PIPE SIZE	*W* (min.)
150mm – 600mm	*Bc* + 450mm
675mm & larger	1.25 *Bc* + 300mm

DEPTH OF BEDDING MATERIAL BELOW PIPE (*d*)

D	*d* (MIN)
≤1500mm	100mm
1650mm & larger	150mm



GRANULAR FOUNDATION
CLASS B

REVISIONS	
1	
2	
3	
4	

DRAWN BY JEL
DATE 2017–JAN–25
SCALE: HOR. NTS VER. NTS

City of Saskatoon
Transportation & Utilities Department

CIRCULAR PVC PIPE BEDDINGS

CHIEF ENGINEER
JAN 3 0 2017
DATE

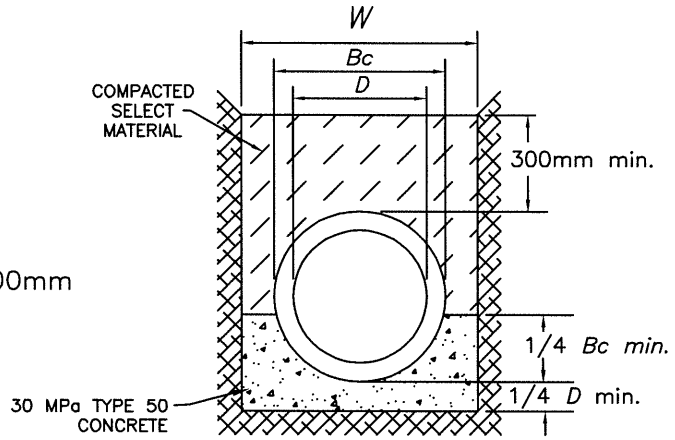
ENGINEER
JAN 3 0 2017
DATE

PLAN NO. 102–0011–010r001

NOTES:

1. ALL CONCRETE TO BE MADE WITH TYPE HS/HSB SULPHATE RESISTANT CEMENT.
2. BEDDING AGGREGATE TO CONFORM TO GRADATION IN SECTION 03001–3.2.7 OF SPECIFICATIONS.
3. SELECT BACKFILL TO BE FREE OF ALL LUMPS, STONES AND SUBSTANCE WHICH COULD REACT CHEMICALLY WITH PIPE MATERIAL.
4. PNEUMATIC OR MECHANICAL EQUIPMENT SHALL BE USED TO COMPACT THE BEDDING MATERIAL AND THE SELECT BACKFILL MATERIAL TO 98% OF ITS STANDARD PROCTOR DENSITY (PLACED IN 150mm LAYERS).
5. COMPACT SELECT MATERIAL MUST BE CLASS 4 OR BETTER AS CHARACTERIZED IN ASTM D2321.
6. UNSUPPORTED STRAIGHT WALL TRENCH USED ONLY FOR UNDISTURBED SOIL. DISTURBED SOIL TRENCHES MUST BE 1:1 SIDEWALL SLOPE FROM BOTTOM OF TRENCH. IN EITHER CASE COMPACTED PIPE AGGREGATE MUST BE INSTALLED TO TRENCH WALL.

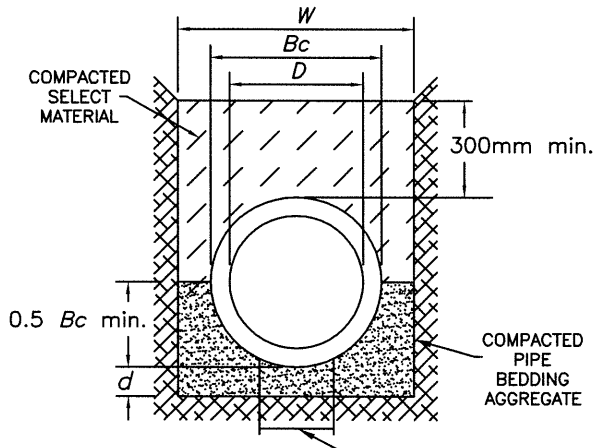
NOMINAL PIPE SIZE	*W* (min.)
200mm – 600mm	*Bc* + 450mm
675mm & larger	1.25 *Bc* + 300mm



CONCRETE CRADLE
CLASS A

DEPTH OF BEDDING MATERIAL BELOW PIPE (*d*)

D	*d* (MIN)
675mm & smaller	75mm
750mm to 1500mm	100mm
1650mm & larger	150mm



GRANULAR FOUNDATION
CLASS B

REVISIONS	
1	
2	
3	
4	

DRAWN BY JEL
DATE 2017–JAN–25
SCALE: HOR. NTS VER. NTS

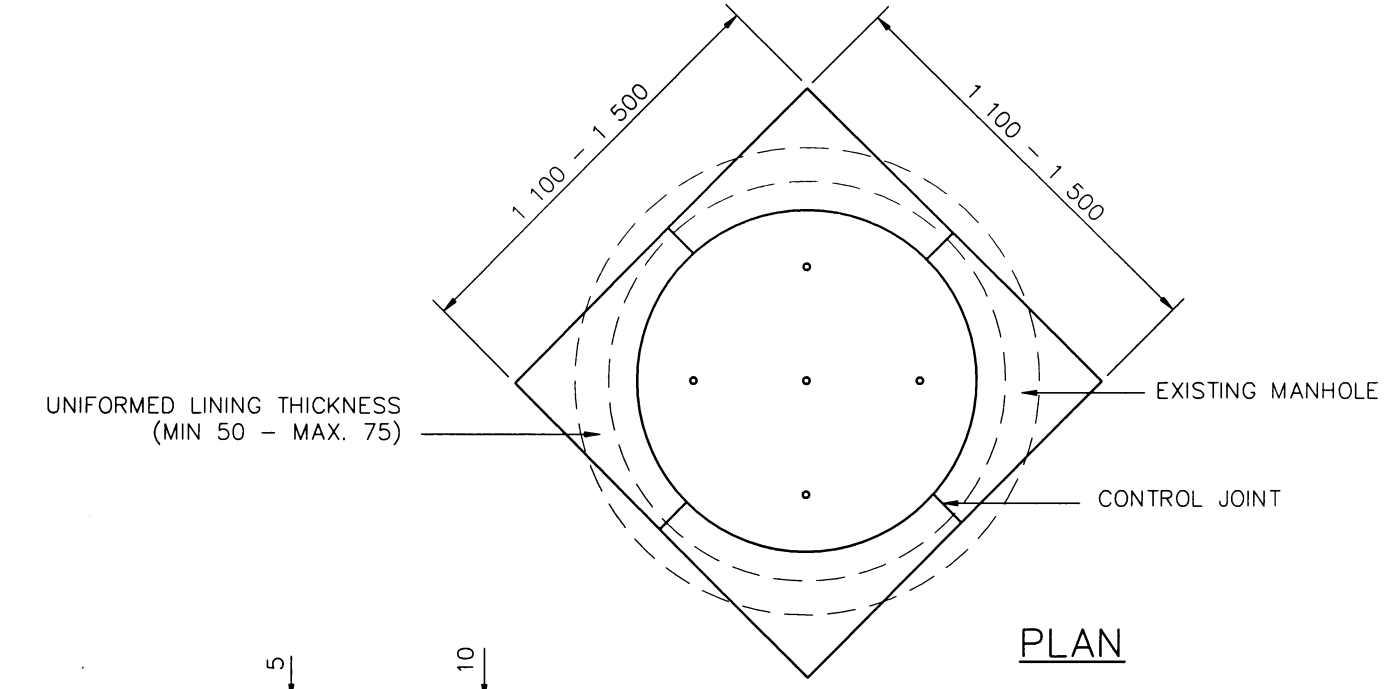
City of Saskatoon
Transportation & Utilities Department

CIRCULAR CONCRETE PIPE BEDDINGS

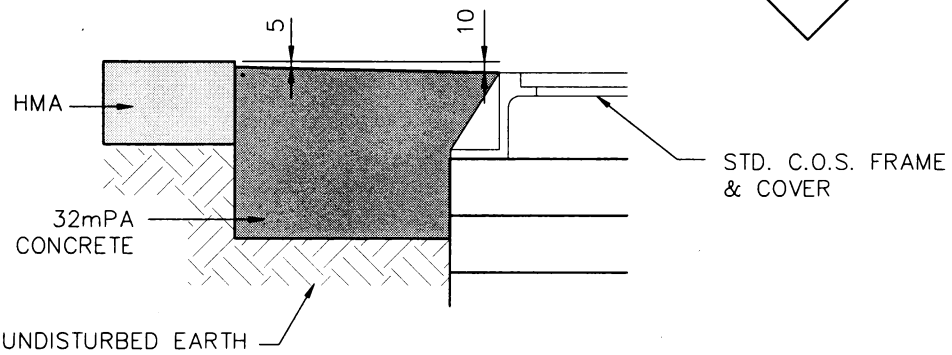
CHIEF ENGINEER
JAN 3 0 2017
DATE

ENGINEER
JAN 3 0 2017
DATE

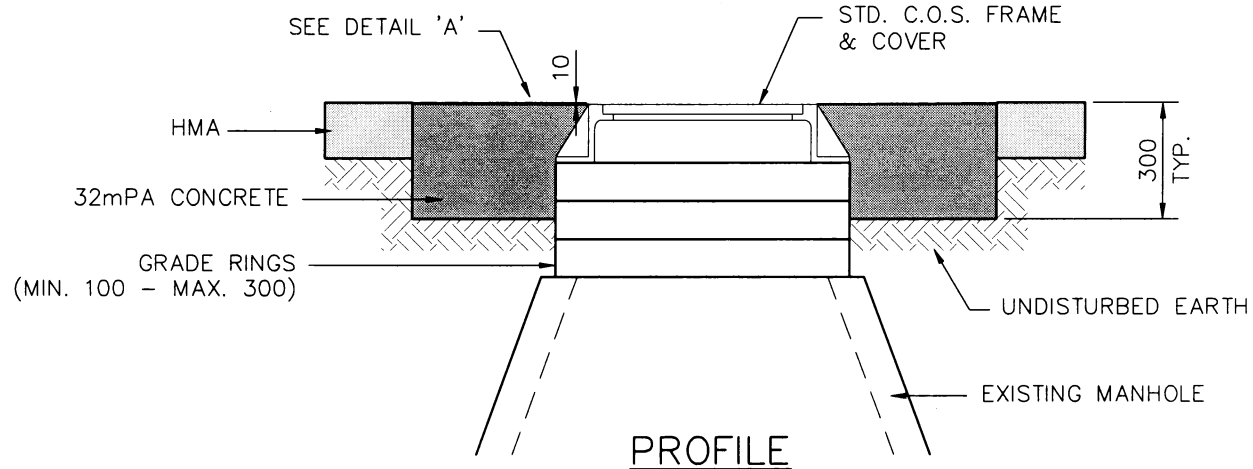
PLAN NO. 102–0011–011r001



PLAN



DETAIL 'A'



PROFILE

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

REVISIONS	
1	REVISED 2000-10-18 MJ
2	
3	

DRAWN BY RPL
DATE 95-04-06

CHECKED BY
DATE

City of Saskatoon
INFRASTRUCTURE SERVICES

CONCRETE MANHOLE COLLARS

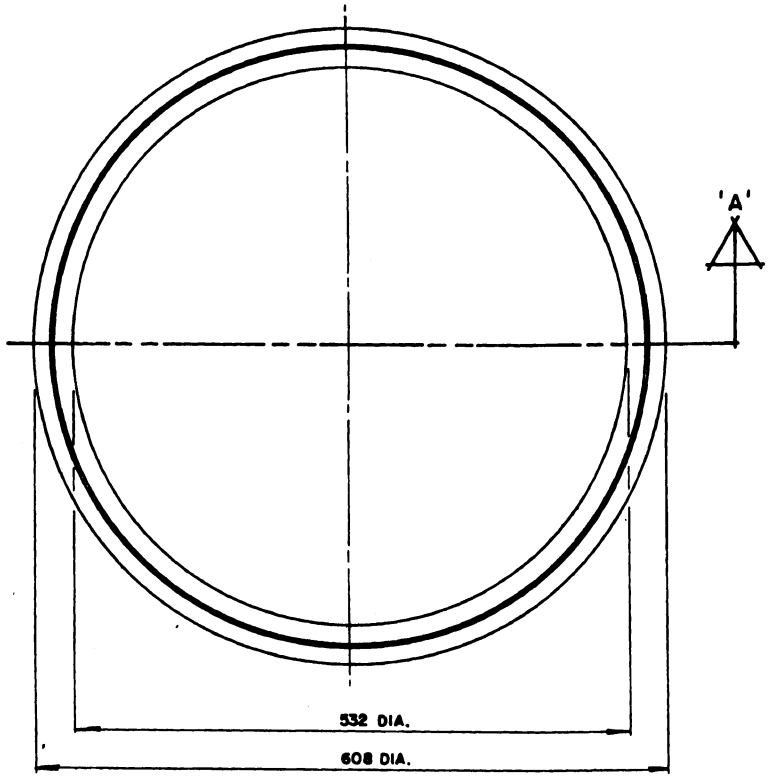
APPROVED

GENERAL MANAGER P. ENG.
ENGINEER A. Boyko 00-10-20

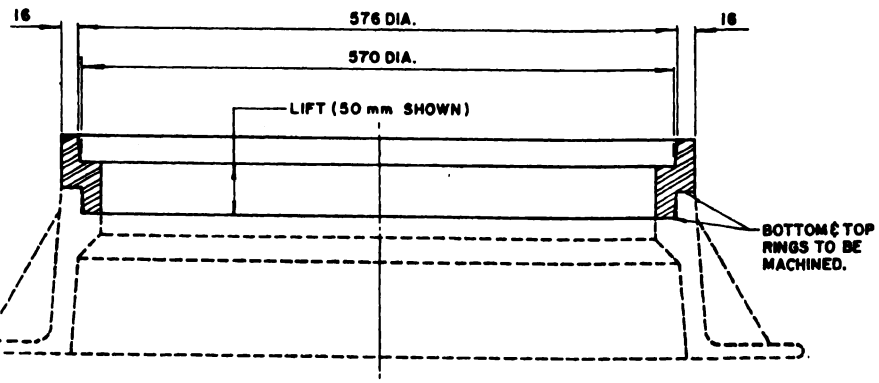
ENGINEER

SCALES : HOR. 1:20 VERT.

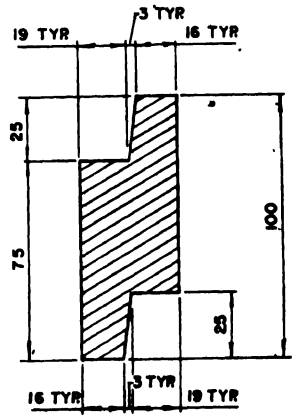
PLAN NO. 102-0011-012r001



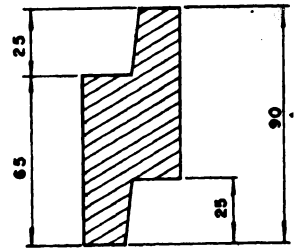
PLAN VIEW
scale 1:5



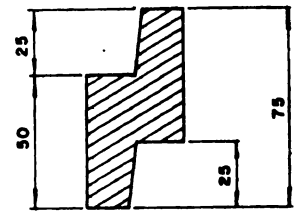
SECTION 'A'
scale 1:5



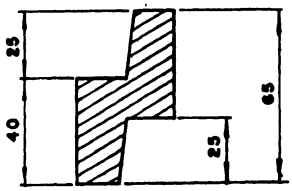
75 mm LIFT



65 mm LIFT



50 mm LIFT



40 mm LIFT
scale 1:2

REVISIONS	
1	
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DRAWN BY HLO
DATE 08-02-28

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

LIFTER RING DETAILS

APPROVED

GENERAL MANAGER P. ENG.

ENGINEER H. Boyko

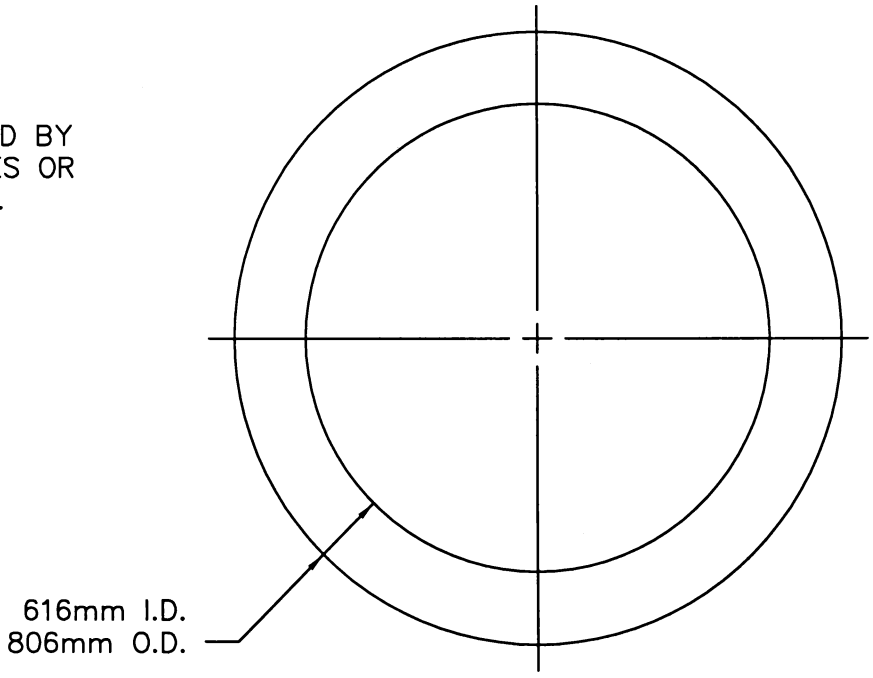
ENGINEER

SCALES : HOR.

PLAN NO. 102-0011-013r001

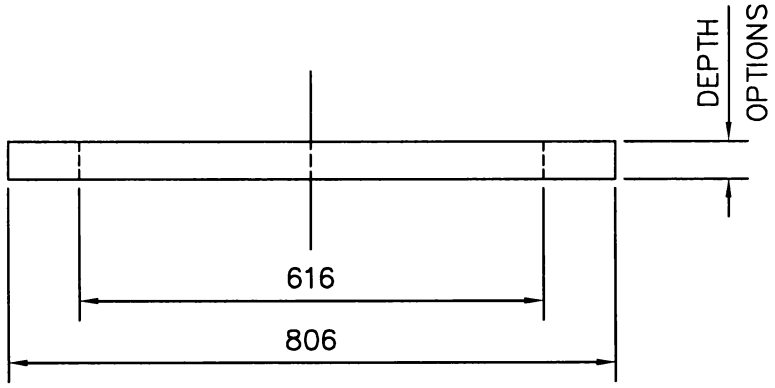
NOTE:

1. AS MANUFACTURED BY GNR TECHNOLOGIES OR APPROVED EQUAL.

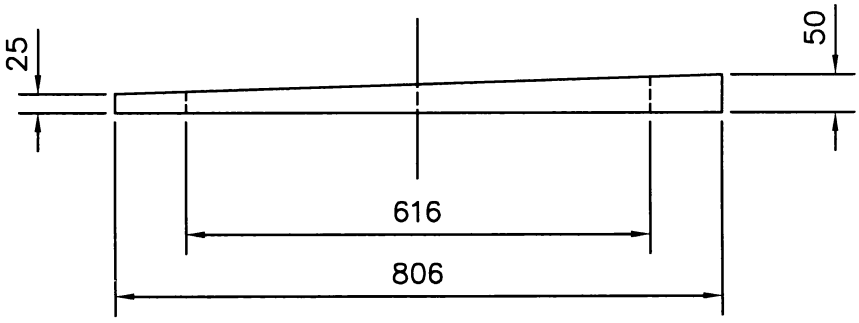


FLAT STYLE

DEPTH – 12mm
DEPTH – 25mm
DEPTH – 50mm



TAPERED STYLE



ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS	
1	
2	
3	

DRAWN BY MJ
DATE 2003-04-16

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

RUBBER MANHOLE ADJUSTMENT RISER

APPROVED

GENERAL MANAGER P. ENG.
A. Boyko
ENGINEER

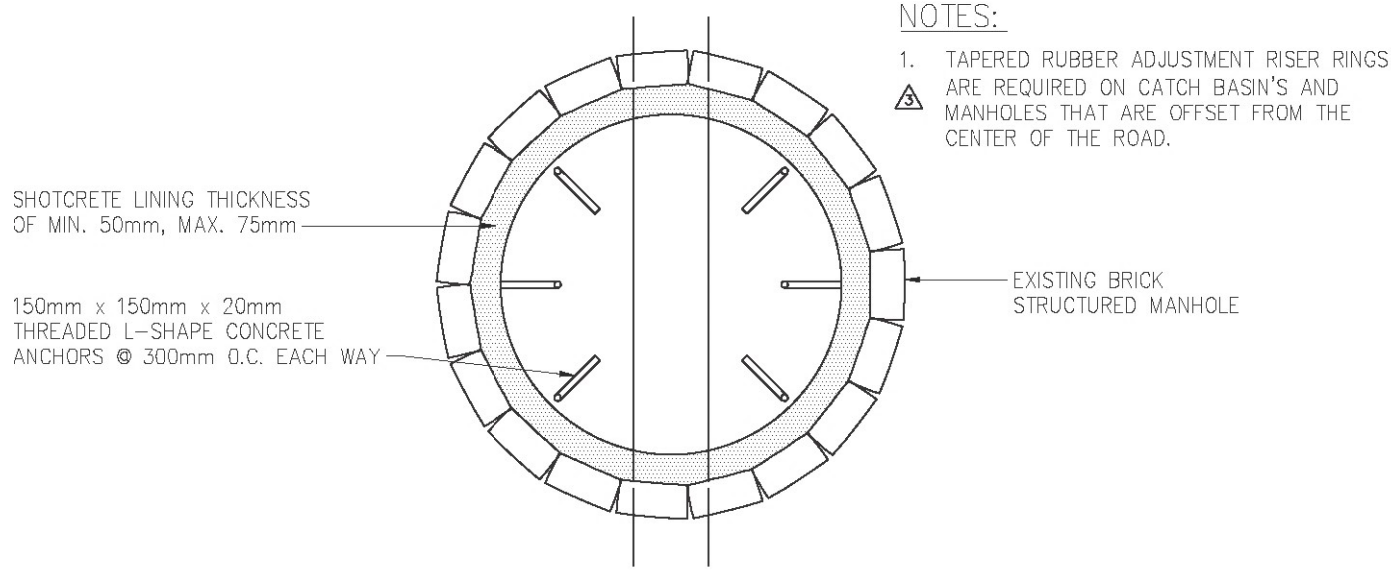
ENGINEER

SCALES : HOR. 1:10

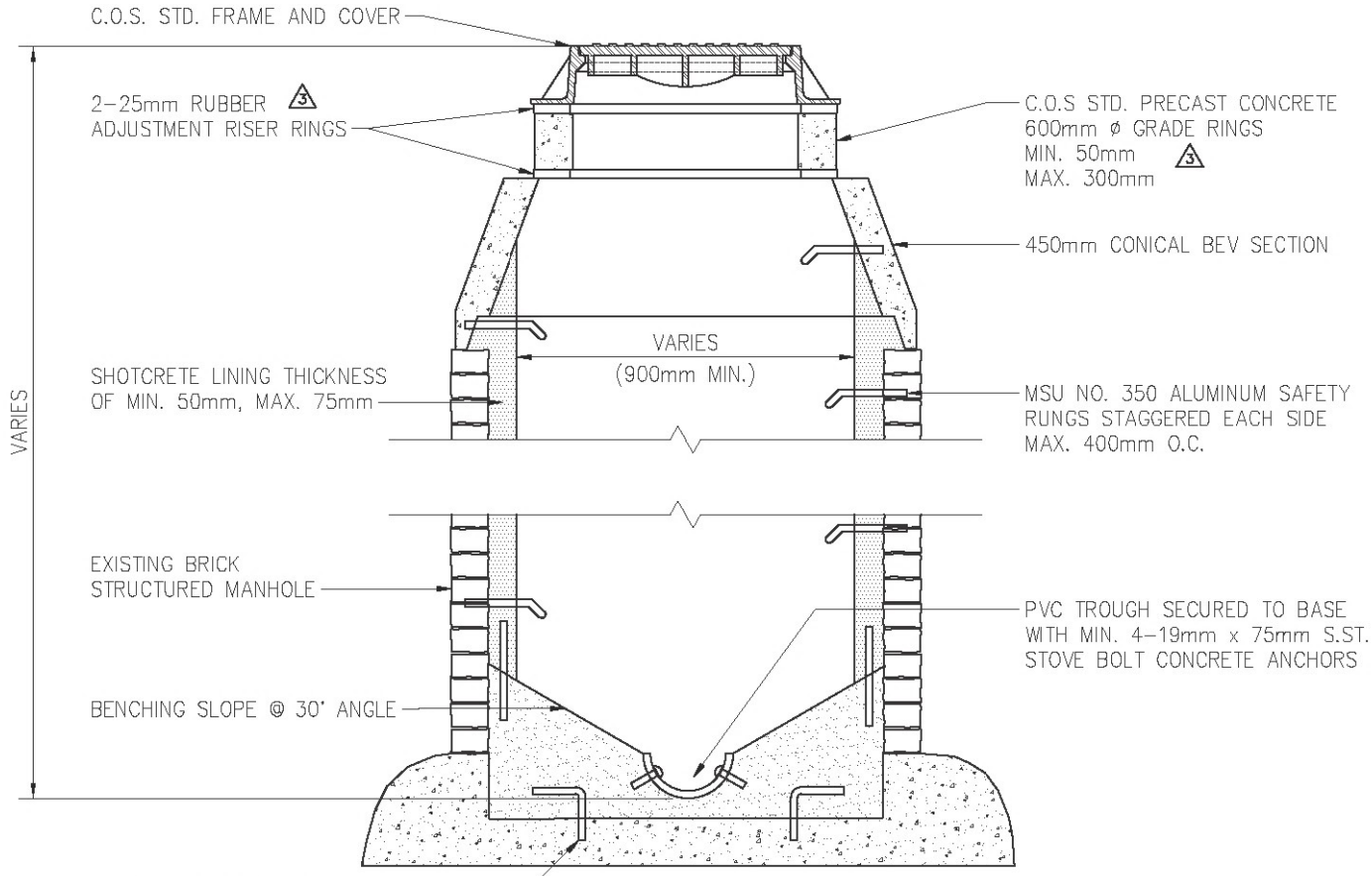
PLAN NO. 102-0011-014r001

NOTES:

1. TAPERED RUBBER ADJUSTMENT RISER RINGS ③ ARE REQUIRED ON CATCH BASIN'S AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD.



PLAN



SECTION

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2006-JAN-25	HLO
2	REMOVED NOTE	2012-DEC-17	HLO
3	ADDED NOTE 1, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021-JAN-13	DLH

City of Saskatoon

MANHOLE REHABILITATION

BASE RECONSTRUCTION WHERE THICKNESS OF CONCRETE BELOW INVERT EXCEEDS 125mm

APPROVALS

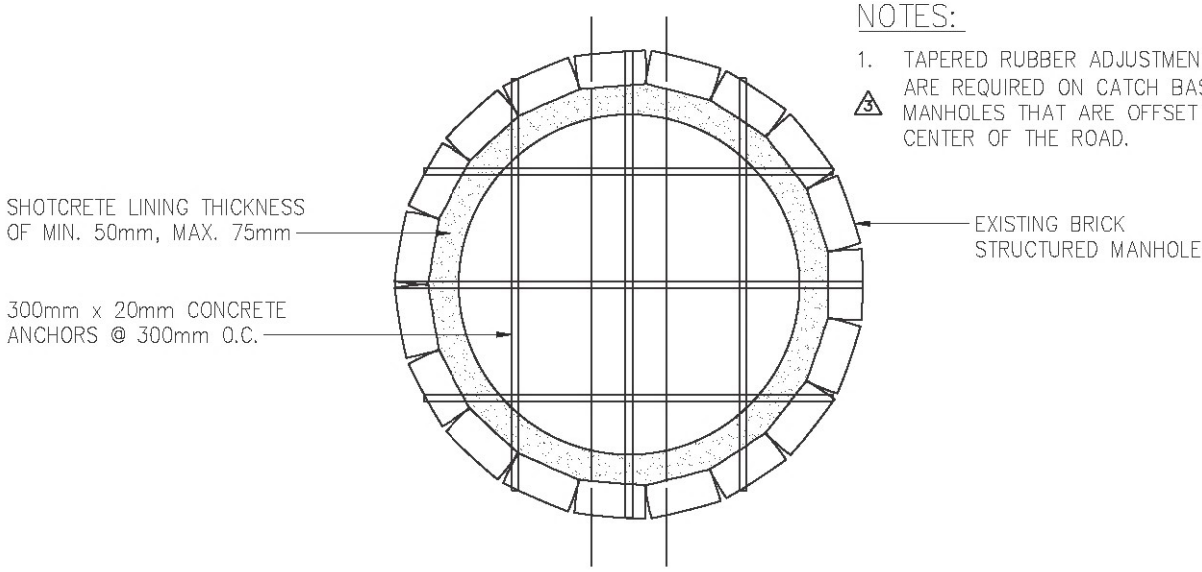
SIGNATURE	SIGNATURE
Jeff P D Thomson	Maciej Jurkiewicz
NAME	NAME
Jan 27, 2021	Jan 27, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:20 VERT.

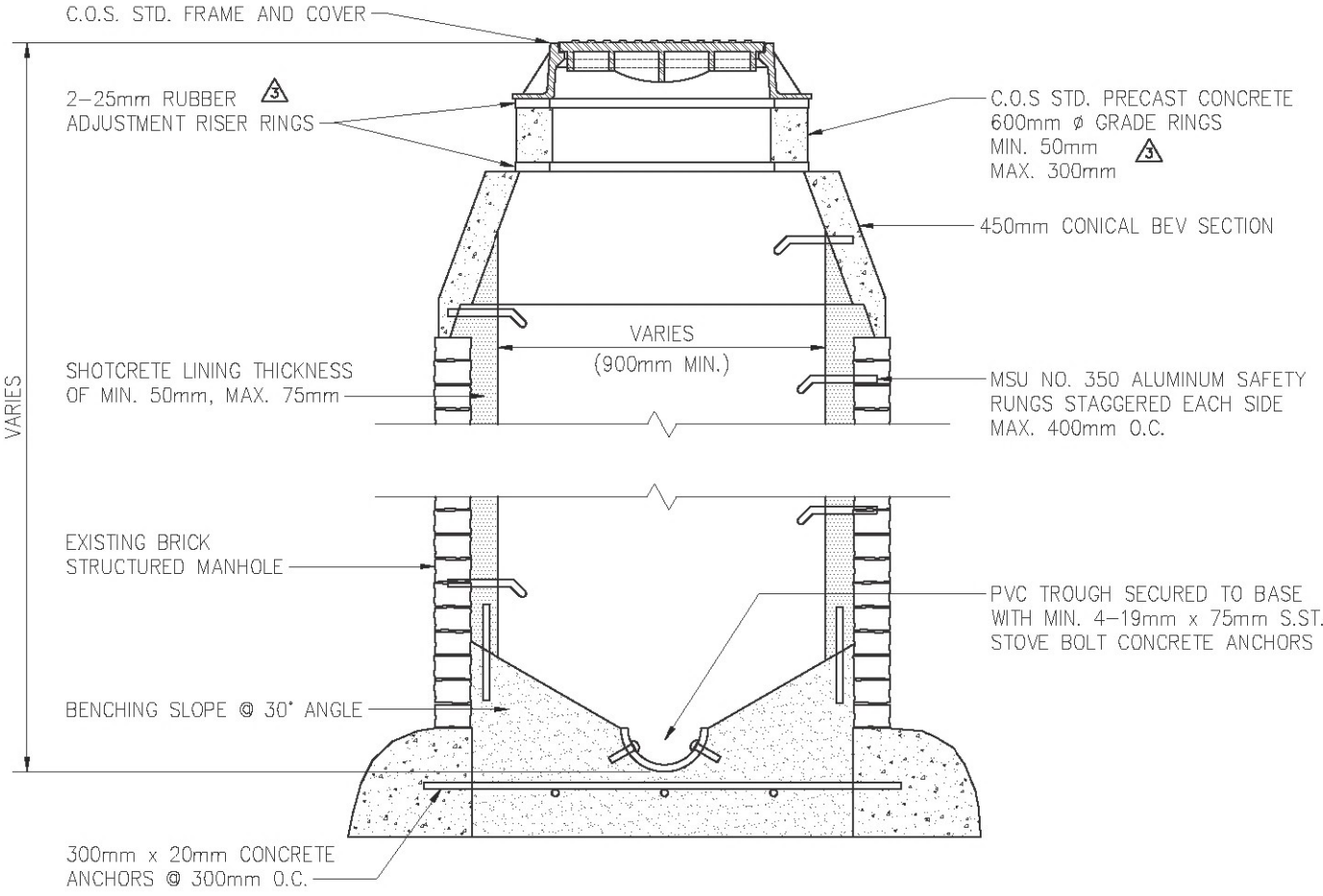
PLAN NO. 102-0011-016r003

NOTES:

1. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASIN'S AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD. ③



PLAN



SECTION

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2006–JAN–25	HLO
2	REMOVED NOTE	2012–DEC–17	HLO
3	ADDED NOTE 1, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021–JAN–13	DLH

City of Saskatoon

MANHOLE REHABILITATION

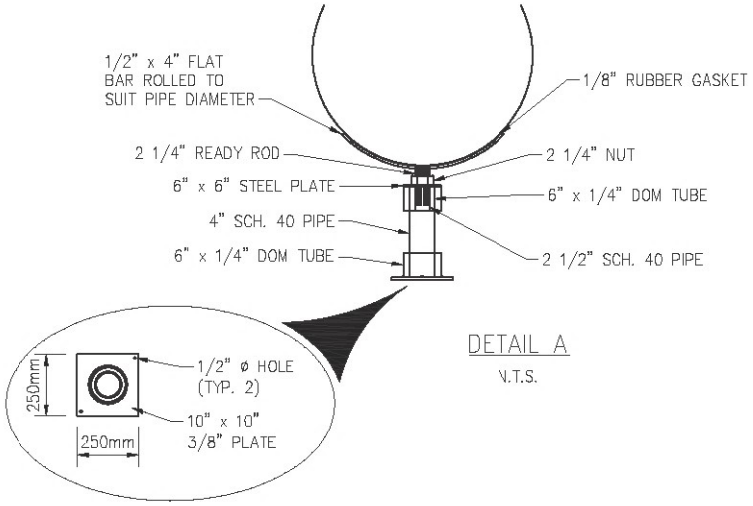
BASE RECONSTRUCTION WHERE THICKNESS OF CONCRETE BELOW INVERT DOES NOT EXCEED 125mm

APPROVALS

SIGNATURE	SIGNATURE
Jeff P D Thomson	Maciej Jurkiewicz
NAME	NAME
Jan 27, 2021	Jan 27, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:20 VERT.

PLAN NO. 102–0011–017r003

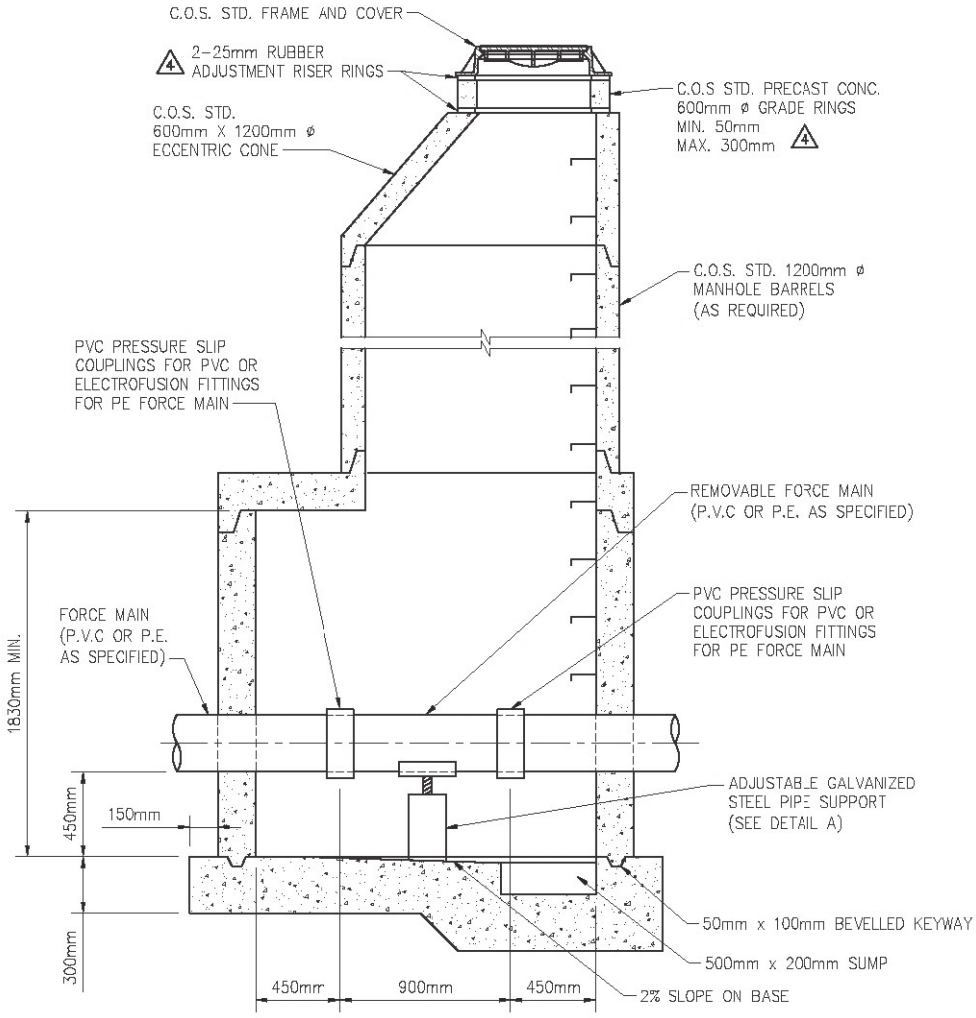


DETAIL A

N.T.S.

NOTES:

1. ALL POURED IN PLACE CONCRETE TO BE 35 MPa SULPHATE RESISTANT.
2. ALL PRECAST CONCRETE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.T.M SPECIFICATION C-478.
3. FORCE MAIN INSPECTION MANHOLES SHALL BE INSTALLED AT LOCATIONS ON EITHER SIDE OF A HORIZONTAL ALIGNMENT DEFLECTION IN SUCH A POSITION THAT PERMITS INSPECTION & CLEANING OF FORCE MAIN IN MULTIPLE DIRECTIONS.
4. SAFETY PLATFORMS AS PER CITY OF SASKATOON STANDARD SPECIFICATIONS SHALL BE INSTALLED IN ALL MANHOLES WITH DEPTHS GREATER THAN 6.0 METERS.
5. SAFETY PLATFORMS SHALL BE INSTALLED IN SUCH A MANNER SO THAT NO VERTICAL FALL DISTANCE EXCEEDS 5.0 METERS OR IS LESS THAN 2.4 METERS.
6. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD. (4)



SECTION

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2006-JAN-25	HLO
2		2007-JAN-22	HLO
3	REVISED MANHOLE WITH DETAIL, NOTES 1, 3, 4, & 5	2014-DEC-12	MJ
4	ADDED NOTE 6, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021-JAN-13	DLH

City of Saskatoon

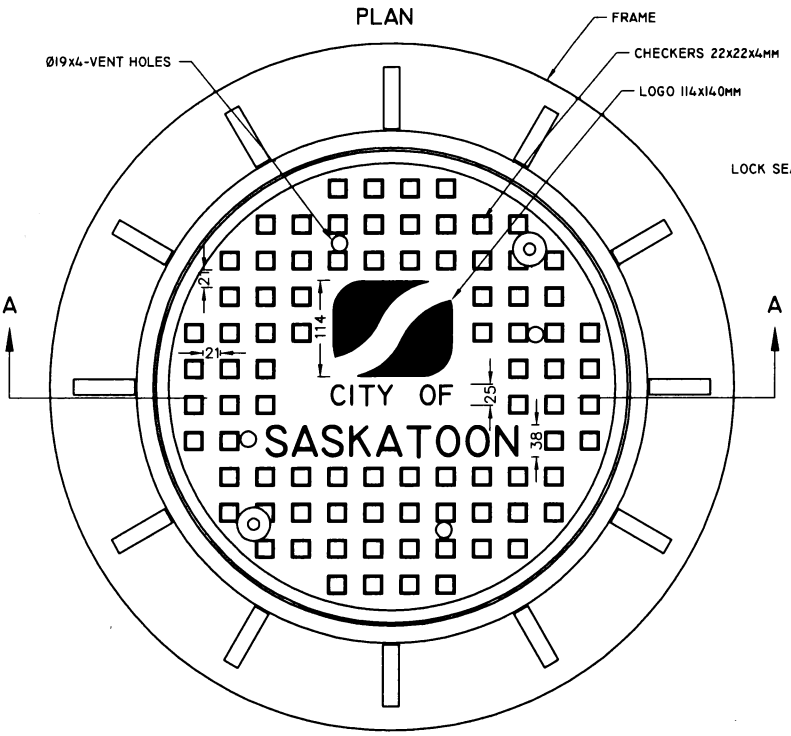
SEWER FORCE MAIN
INSPECTION MANHOLE

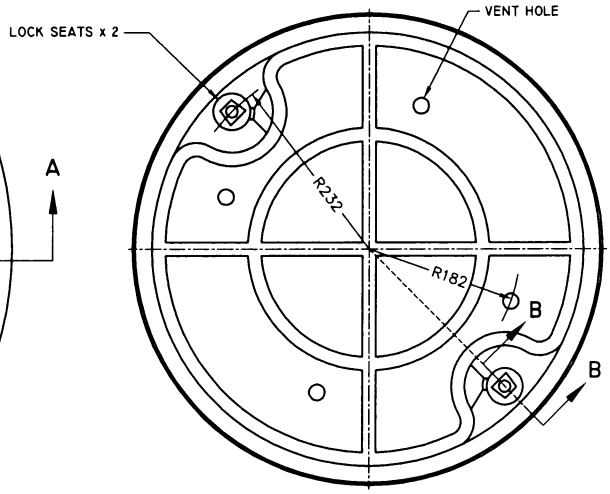
APPROVALS

SIGNATURE	SIGNATURE
Jeff P D Thomson	Maciej Jurkiewicz
NAME	NAME
Jan 27, 2021	Jan 27, 2021
DATE SIGNED	DATE SIGNED

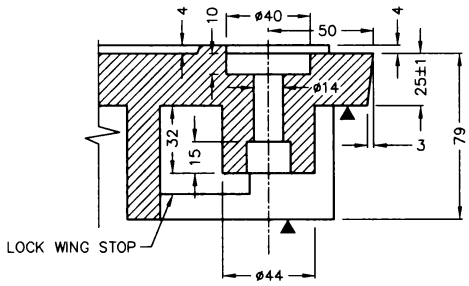
SCALES: HOR. 1:40 VERT.

PLAN NO. 102-0011-018r004

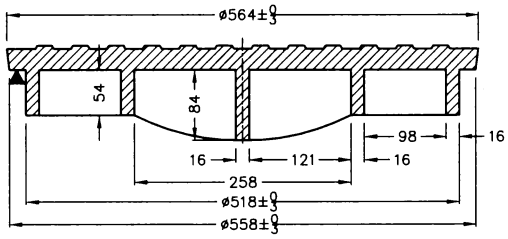




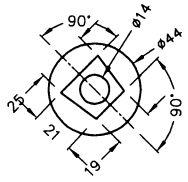
BOTTOM - MANHOLE COVER



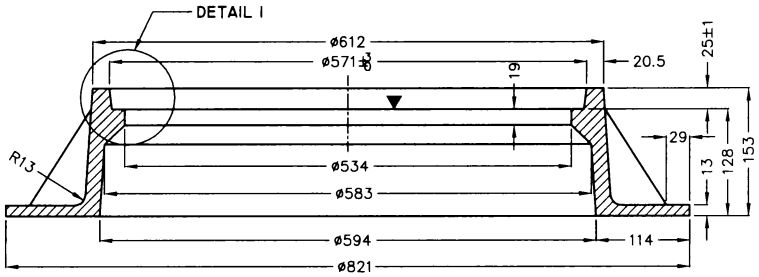
SECTION B-B
SCALE 1:2



SECTION A-A - COVER



LOCK SEAT DETAILS



SECTION A-A - FRAME

REVISIONS	
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DRAWN BY CDC
DATE 06-01-30

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

STANDARD LOCKABLE COS MH FRAME & COVER FOR PUBLIC PROPERTIES

APPROVED

GENERAL MANAGER P. ENG.

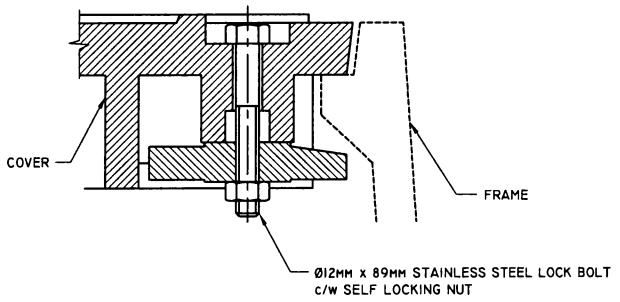
ENGINEER A. Boyko

ENGINEER

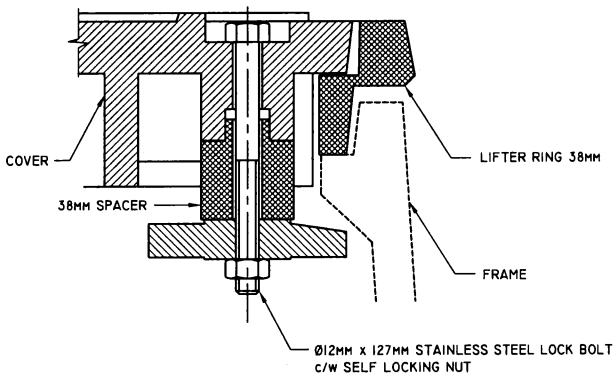
SCALES : HOR. NTS

PLAN NO. 102-0011-019r002

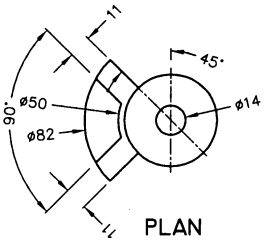
SECTION VIEW OF COVER WITH FRAME



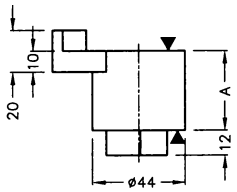
SECTION VIEW OF COVER WITH FRAME AND 38MM LIFTER RING



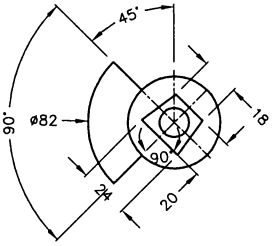
SPACER WITH WING STOP



PLAN

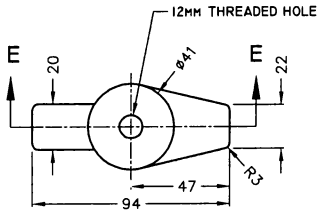


SIDE VIEW

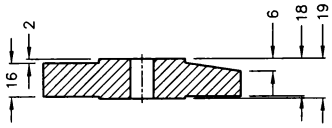


BOTTOM VIEW

LOCK WING DETAILS



PLAN



SECTION E-E

TABLE I
MANUFACTURING TOLERANCE

ALL DIMENSIONS SHALL CONFORM TO ±3MM TOLERANCE EXCEPT:

(1) AS NOTED
(2) MACHINED SURFACES - ▼
(3) NO DEVIATION SHALL BE ACCEPTABLE FOR DIMENSION WHICH ARE LESS THEN 10MM

LIFTER RING SIZE	DIMENSION A	BOLT SIZE
38	38	12 x 127
51	51	12 x 140
64	64	12 x 153
76	76	12 x 165

REVISIONS	
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DATE 06-01-30

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

LOCK WING & SPACERS
FOR STANDARD COS MANHOLE COVERS

APPROVED

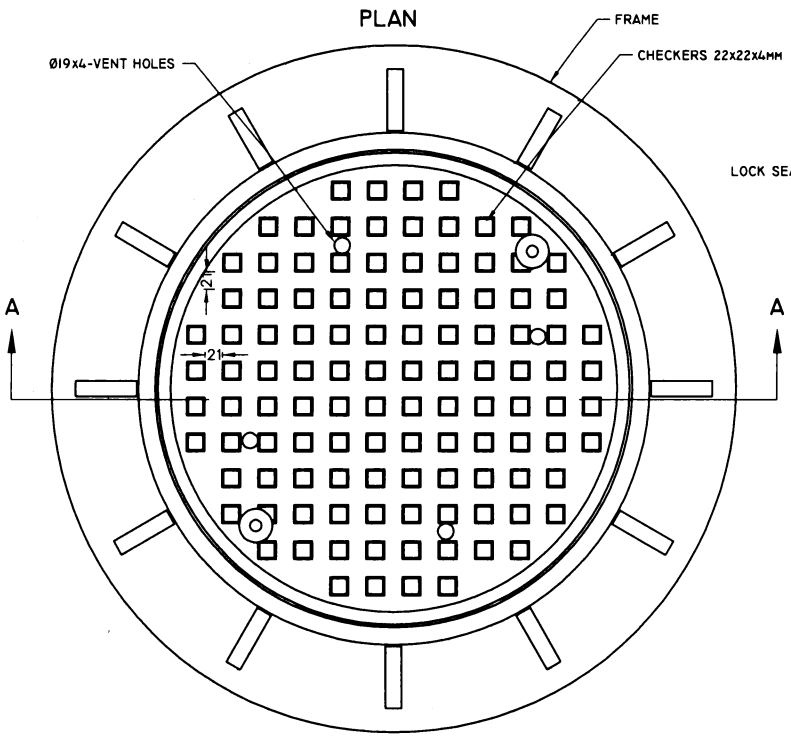
GENERAL MANAGER P. ENG.

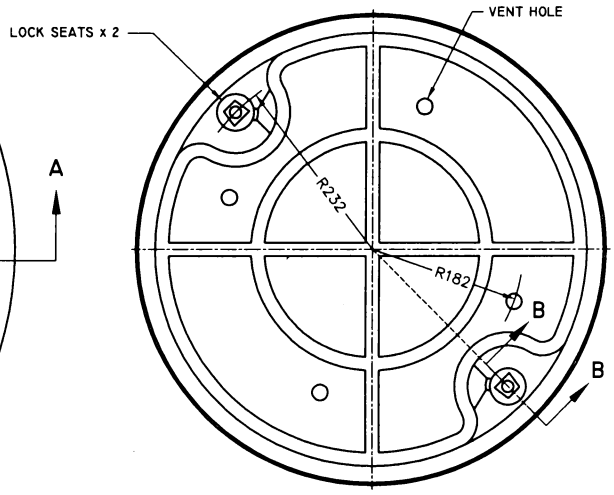
ENGINEER A. Boyko

ENGINEER

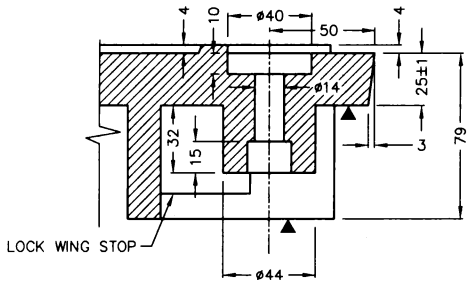
SCALES : HOR. NTS

PLAN NO. 102-0011-020r002

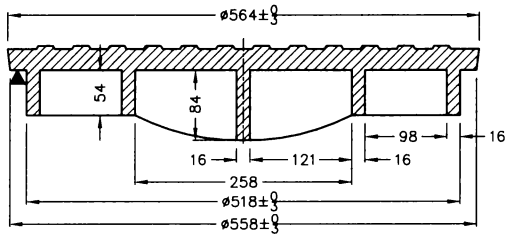




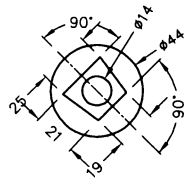
BOTTOM - MANHOLE COVER



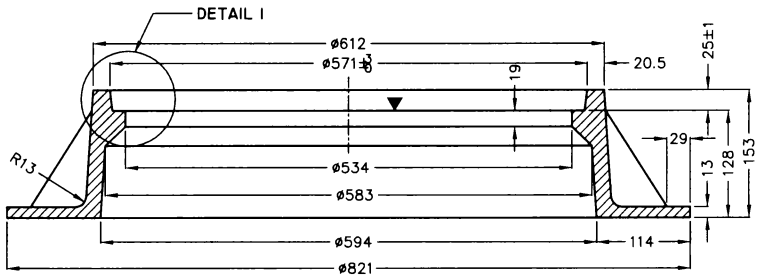
SECTION B-B
SCALE 1:2



SECTION A-A - COVER



LOCK SEAT DETAILS



SECTION A-A - FRAME

REVISIONS	
1	
2	
3	

DRAWN BY CDC
DATE 06-01-30

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

STANDARD LOCKABLE COS MH FRAME & COVER
FOR PRIVATE PROPERTIES

APPROVED

GENERAL MANAGER P. ENG.

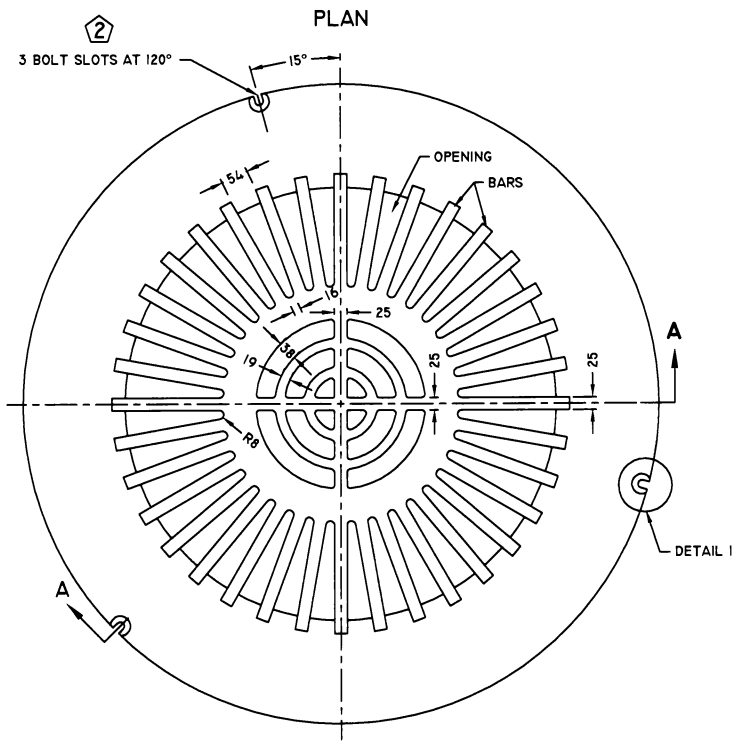
ENGINEER

ENGINEER

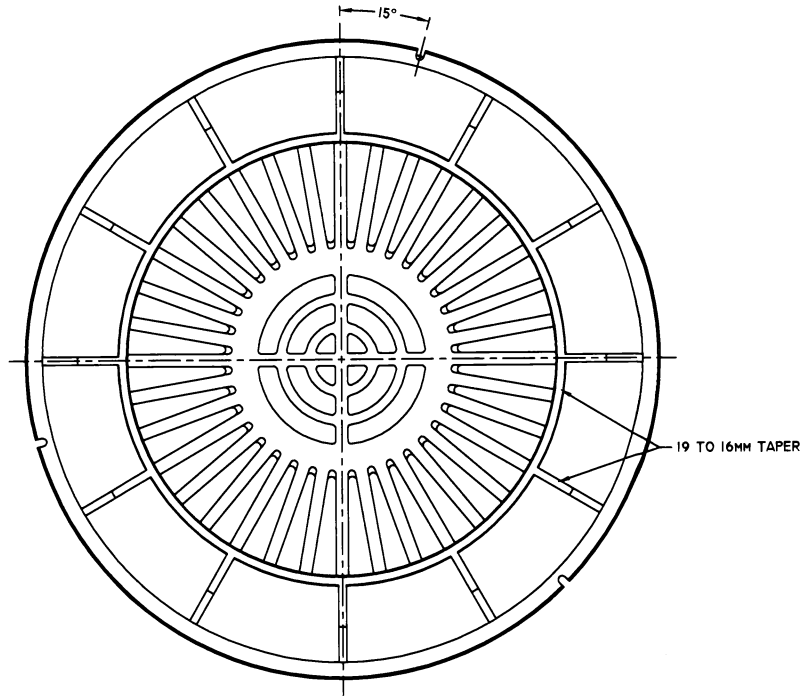
SCALES : HOR. NTS

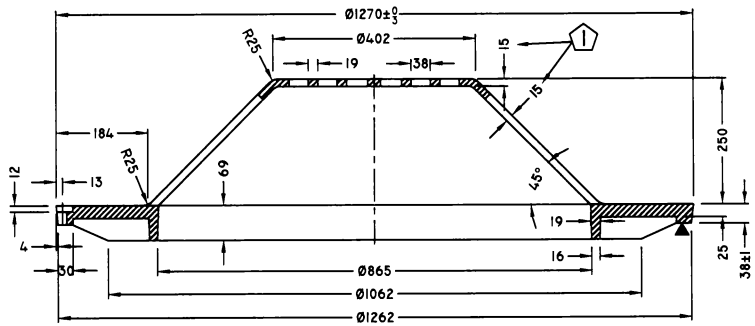
PLAN NO. 102-0011-021r002

PLAN

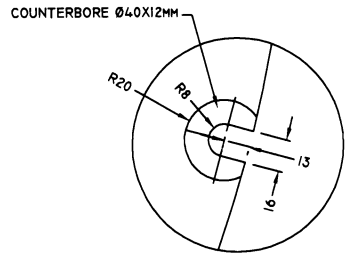


BOTTOM VIEW

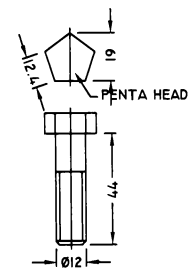




SECTION A-A



DETAIL 1
SCALE 1:2



STAINLESS STEEL 12MM BOLT
WITH COARSE THREAD
NTS

MATERIAL SPECIFICATION:

DUCTILE IRON TO CONFORM TO
A.S.T.M. A536 (LATEST EDITION)
GRADE 65-45-12.

▲ MACHINED SURFACES

MEASUREMENTS IN MILLIMETERS
ASPHALTIC DIP FINISH

REVISIONS	
1	
2	
3	

DRAWN BY LBKM
DATE 08-01-16

CHECKED BY
DATE

City of
Saskatoon
Infrastructure Services Department

TF-48 BEEHIVE GRATE

APPROVED

GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER JAN 16, 08

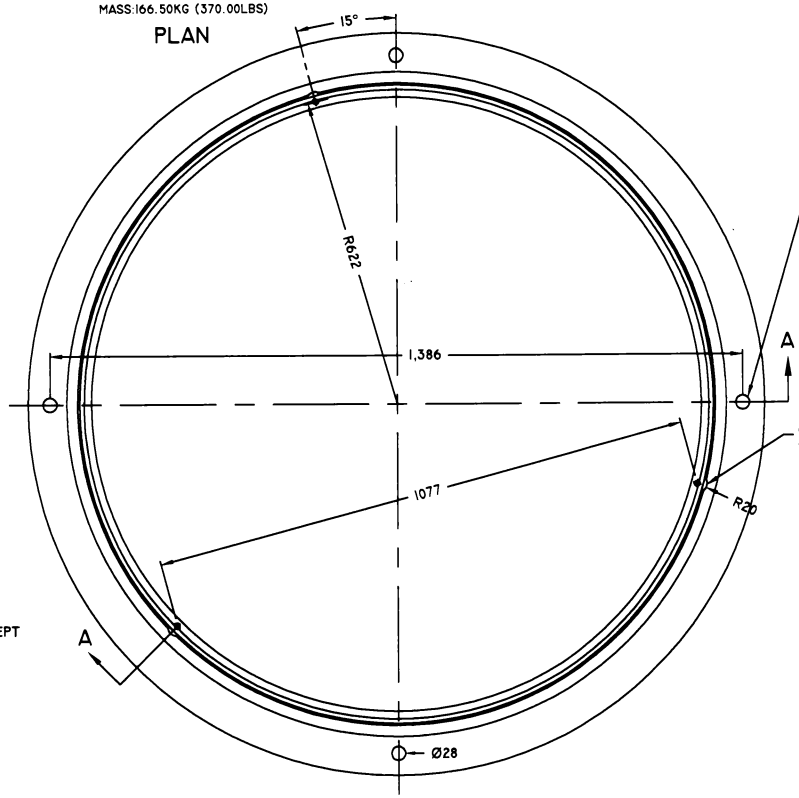
SCALES : HOR. 1:15

PLAN NO. 102-0011-022r001

FRAME

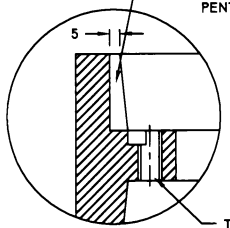
MASS:166.50KG (370.00LBS)

PLAN

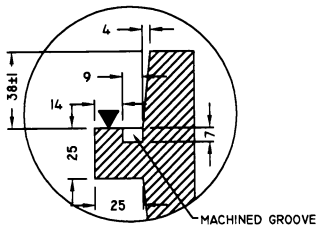


ANCHOR HOLES FOR ANCHORING TO TOP OF MANHOLE BARREL WITH STAINLESS STEEL HILTI QWIK BOLTS (25MM Ø) OR APPROVED EQUAL.

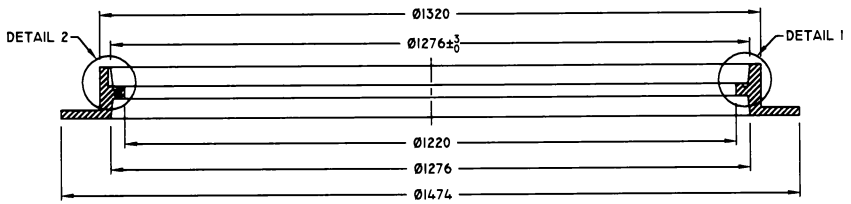
NOTCHES IN FRAME TO ACCEPT PENTA SOCKET



DETAIL 2



DETAIL 1



SECTION A-A

MATERIAL SPECIFICATION:

DUCTILE IRON TO CONFORM TO A.S.T.M. A536 (LATEST EDITION) GRADE 65-45-12.

▲ MACHINED SURFACES

MEASUREMENTS IN MILLIMETERS

ASPHALTIC DIP FINISH

REVISIONS	
1	
2	
3	

DRAWN BY LBKM

DATE 08-01-16

CHECKED BY

DATE

City of Saskatoon

Infrastructure Services Department

TF-48 BEEHIVE FRAME

APPROVED

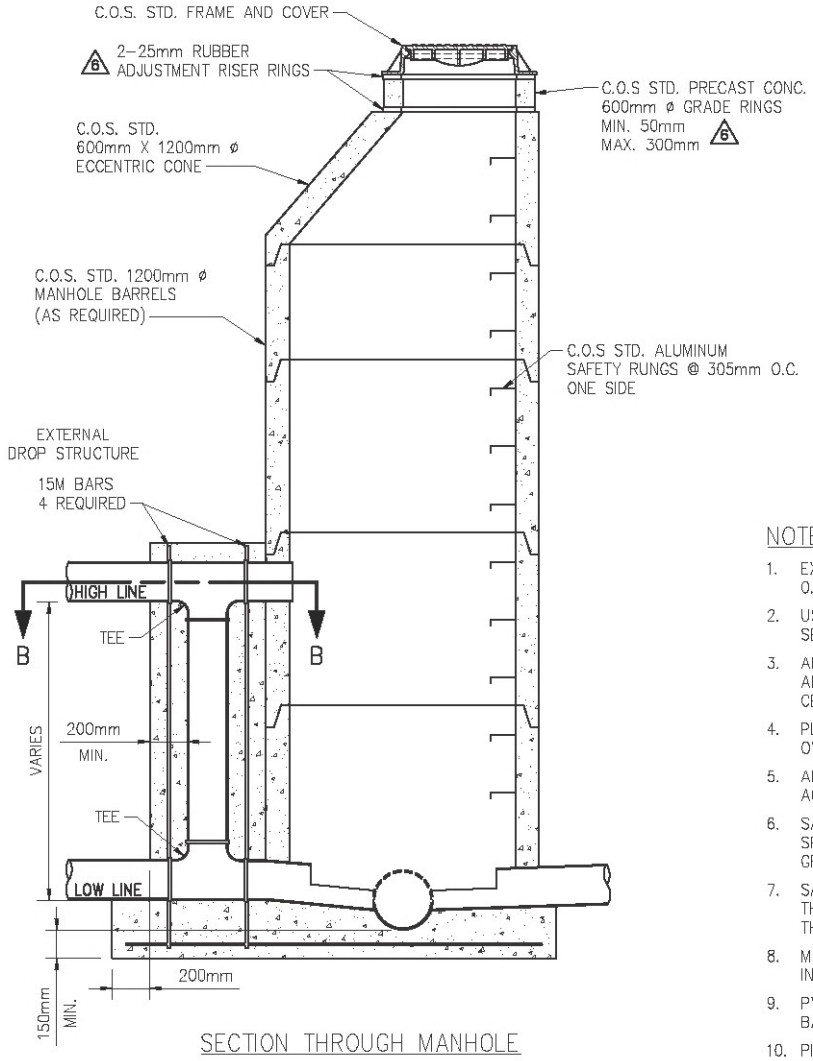
GENERAL MANAGER P. ENG.

ENGINEER

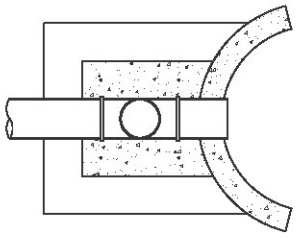
ENGINEER JW 16,08

SCALES : HOR. 1:15

PLAN NO. 102-0011-023r001



SECTION THROUGH MANHOLE



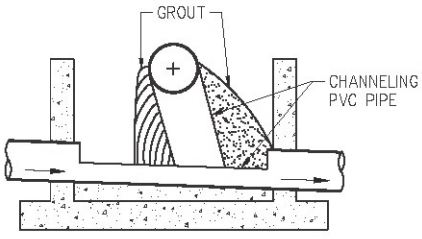
SECTION B-B

NOTES:

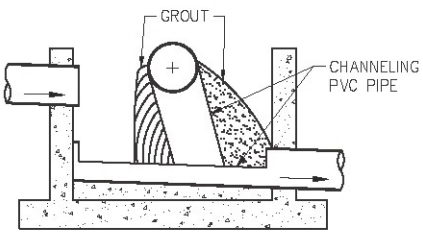
1. EXTERNAL DROP STRUCTURE REQUIRED WHEN CROWN OF INLET PIPE IS 0.75m OR MORE ABOVE CROWN OF OUTLET PIPE.
2. USE 4 – 15M BARS PLACED AS SHOWN WHEN EXTERIOR DROP SECTION IS 1.5m OR MORE.
3. ALL CAST IN PLACE CONCRETE TO BE 35 MPa SULPHATE RESISTANT. ALL GROUT TO BE NON-SHRINK, TYPE HS SULPHATE RESISTANT, CEMENTITIOUS GROUT.
4. PLACE 10M BARS AT 200mm O.C. EACH WAY IN BASE OF MANHOLES OVER 4.5m DEEP.
5. ALL PRECAST CONCRETE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM SPECIFICATION C478.
6. SAFETY PLATFORMS MEETING CITY OF SASKATOON STANDARD SPECIFICATIONS SHALL BE INSTALLED IN ALL MANHOLES WITH DEPTHS GREATER THAN 6.0 METERS.
7. SAFETY PLATFORMS SHALL BE INSTALLED IN SUCH A MANNER SO THAT NO VERTICAL FALL DISTANCE EXCEEDS 5.0 METERS OR IS LESS THAN 2.4 METERS.
8. MANHOLE RUNGS SHALL BE ORIENTED SUCH THAT THEY DO NOT INTERFERE WITH THE INCOMING PIPE.
9. PVC CHANNELING SHALL BE SEAMLESS FOR STRAIGHT THROUGH BASES.
10. PIPE TO MANHOLE CONNECTIONS SHALL BE WATERTIGHT.
11. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD.

6

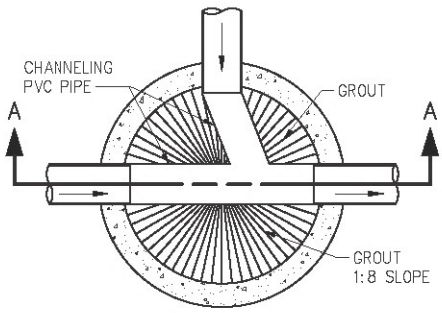
CHANNELIZATION DETAILS FOR INTERIOR DROP OF LESS THAN 0.75M



SECTION A-A



SECTION A-A



PLAN VIEW

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2008-FEB-19	HLO
2		2012-JAN-05	HLO
3	NOTES 3 – 35MPa CONC., 6, 7, & 8	2014-DEC-12	MJ
4	ADDED GROUT AROUND PIPES AT MH BASE AND NOTES 8 & 9	2015-NOV-26	HLO
5	REMOVED GROUT AROUND PIPES AT MANHOLE BASE, REVISED NOTE 3,	2017-JAN-25	HLO
5	AND ADDED NOTE 10	2017-JAN-25	HLO
6	ADDED NOTE 11, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021-JAN-14	DLH

City of Saskatoon

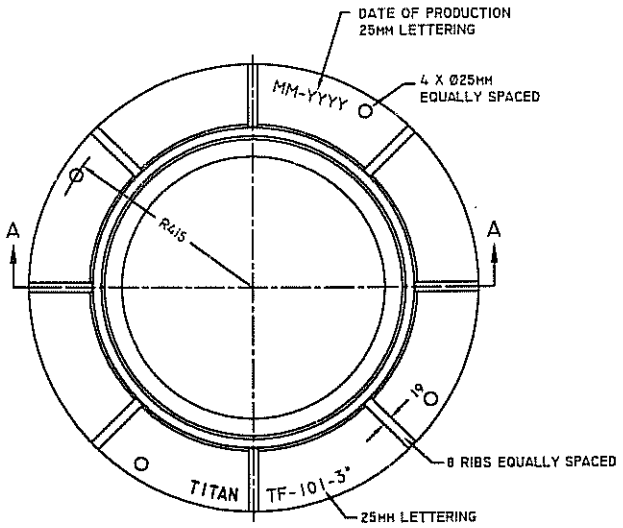
SANITARY SEWER MANHOLE
DROP STRUCTURE BETWEEN
HIGH LINE AND LOW LINE

APPROVALS

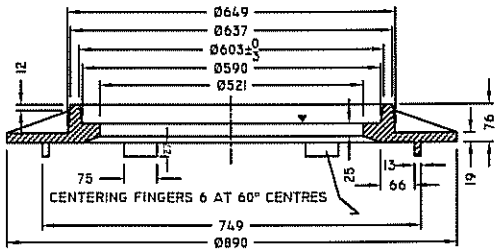
SIGNATURE	SIGNATURE
Jeff P D Thomson	Maciej Jurkiewicz
NAME	NAME
Jan 27, 2021	Jan 27, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:40 VERT.

PLAN NO. 102-0011-024r006



PLAN



SECTION A-A

SPECIFICATIONS

(1) CASTINGS SHALL CONFORM TO ALL REQUIREMENTS OF A.S.T.M. DESIGNATION A48 CLASS 30
(2) CASTINGS SHALL BE PRODUCED TO THE DIMENSIONS AND WITHIN THE TOLERANCES NOTED IN THE TABLE I.
(3) CASTINGS SHALL BE MARKED WITH THE PROPER IDENTIFICATION MARKINGS WHICH WILL INCLUDE:

(A) MARKINGS AS REQUESTED AT TIME OF ORDER.
(B) FOUNDRY IDENTIFICATION MARKING, AND YEAR OF CASTING.
(C) THESE MARKINGS SHALL BE SO LOCATED IN SUCH A MANNER AND OF SUCH SIZE THAT THEY ARE EASILY IDENTIFIABLE AFTER INSTALLATION.

(4) ALL CASTING WILL BE FREE OF DEFECTS, BE TRUE TO PATTERN AND BE FREE FROM CRACKS, GAS HOLES, FLAWS AND EXCESSIVE SPRINKAGE. SURFACES OF CASTING SHALL BE FREE FROM BURNT ON SAND AND SHALL BE REASONABLY SMOOTH.

(5) CASTING SHALL NOT ROCK WHEN INSTALLED. THE MANUFACTURER SHALL TRIAL FIT THE CASTINGS AGAINST A STANDARD FRAME.

▼ - BEARING SURFACES

MEASUREMENTS IN MILLIMETERS

TABLE I
MANUFACTURING TOLERANCE

ALL DIMENSIONS SHALL CONFORM TO ±2MM TOLERANCE EXCEPT:
(1) AS NOTED.
(2) NO DEVIATION SHALL BE ACCEPTABLE FOR DIMENSIONS WHICH ARE LESS THEN 10MM

REVISIONS	
1	
2	
3	

DRAWN BY MLB
DATE 08-11-21

CHECKED BY
DATE

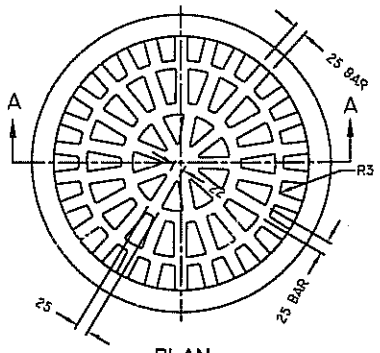
City of Saskatoon
Infrastructure Services Department

TF-101 BEEHIVE FRAME

APPROVED
GENERAL MANAGER Nov 21/08 P. ENG.
ENGINEER
ENGINEER Nov 21, 08

SCALES : HOR. 1:15

PLAN NO. 102-0011-025r001



PLAN

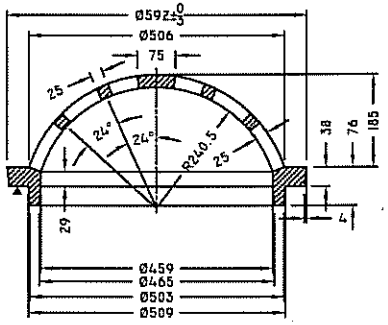
SPECIFICATIONS

(1) CASTINGS SHALL CONFORM TO ALL REQUIREMENTS OF A.S.T.M. DESIGNATION A48 CLASS 30
(2) CASTINGS SHALL BE PRODUCED TO THE DIMENSIONS AND WITHIN THE TOLERANCES NOTED IN THE TABLE I.
(3) CASTINGS SHALL BE MARKED WITH THE PROPER IDENTIFICATION MARKINGS WHICH WILL INCLUDE:

- (A) MARKINGS AS REQUESTED AT TIME OF ORDER.
- (B) FOUNDRY IDENTIFICATION MARKING, AND YEAR OF CASTING.
- (C) THESE MARKINGS SHALL BE SO LOCATED IN SUCH A MANNER AND OF SUCH SIZE THAT THEY ARE EASILY IDENTIFIABLE AFTER INSTALLATION.

(4) ALL CASTING WILL BE FREE OF DEFECTS, BE TRUE TO PATTERN AND BE FREE FROM CRACKS, GAS HOLES, FLAWS AND EXCESSIVE SPRINKAGE. SURFACES OF CASTING SHALL BE FREE FROM BURNT ON SAND AND SHALL BE REASONABLY SMOOTH.

(5) CASTING SHALL NOT ROCK WHEN INSTALLED. THE MANUFACTURER SHALL TRIAL FIT THE CASTINGS AGAINST A STANDARD FRAME.



SECTION A-A

▼ - BEARING SURFACES

MEASUREMENTS IN MILLIMETERS

TABLE I
MANUFACTURING TOLERANCE

ALL DIMENSIONS SHALL CONFORM TO ±2MM TOLERANCE EXCEPT:
(1) AS NOTED.
(2) NO DEVIATION SHALL BE ACCEPTABLE FOR DIMENSIONS WHICH ARE LESS THEN 10MM

REVISIONS	
1	
2	
3	

DRAWN BY MLB
DATE 08-11-21

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

TF-101 BEEHIVE GRATE

APPROVED
GENERAL MANAGER Dec 2/08
ENGINEER P. ENG.
ENGINEER Nov 21, 08

SCALES : HOR. 1:15

PLAN NO. 102-0011-026r001

GENERAL NOTES AND SPECIFICATIONS

1. GENERAL NOTES
   - 1.1. WORK SHALL CONFORM TO THE CURRENT EDITION OF THE FOLLOWING CODES AND STANDARDS:
     - 1.1.1. CAN/CSA–A23.4 PRECAST CONCRETE MATERIALS AND CONSTRUCTION
     - 1.1.2. CAN/CSA–A23.3 DESIGN OF CONCRETE STRUCTURES
     - 1.1.3. CAN/CSA–G30.18 CARBON STEEL BARS FOR CONCRETE REINFORCEMENT
     - 1.1.4. CAN/CSA–S6 CANADIAN HIGHWAY BRIDGE DESIGN CODE
     - 1.1.5. CAN/CSA–A257 STANDARDS FOR CONCRETE PIPE AND MANHOLE SECTIONS
     - 1.1.6. ASTM C478 STANDARD SPECIFICATION FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS
   - 1.2. CITY OF SASKATOON TAKES RESPONSIBILITY FOR GENERAL ARRANGEMENT, SIZING, AND REINFORCING STEEL AS SHOWN.
   - 1.3. AS PER REQUIREMENTS OF CAN/CSA–A23.4 PRECAST MANUFACTURER TO SUBMIT SEALED SHOP DRAWINGS FOR ALL ELEMENTS NOT DETAILED IN THIS STANDARD.
   - 1.4. DEVIATION FROM THE DESIGN SHOWN IS PERMITTED ONLY BY APPROVAL OF THE ENGINEER AND WITH SUBMISSION OF SITE SPECIFIC SHOP DRAWING SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF SASKATCHEWAN.
   - 1.5. SEE DRAWING 102–0011–029 FOR FOR SECTIONS AND DETAILS.
   - 1.6. SEE DRAWING 102–0011–030 FOR CAST–IN–PLACE CONSTRUCTION.
2. CONSTRUCT PRECAST MANHOLE ACCORDING TO THE GEOMETRY AND REINFORCING PROVIDED. CONFIRM INLET/OUTLET QUANTITIES AND ORIENTATION. CONFIRM CONCRETE PIPE OUTSIDE DIAMETERS WITH PIPE SUPPLIER/CONTRACTOR PRIOR TO FABRICATION. DESIGN OF MANHOLE CHAMBER TO BE GOVERNED BY LARGEST PIPE ENTERING/EXITING THE CHAMBER AND DEPTH OF CHAMBER FROM FINAL GRADE TO TOP OF SLAB. CORNER GEOMETRY OTHER THAN 90° PERMITTED PROVIDED ELEMENT THICKNESS TO SPAN RATIO SHOWN IN TABLES IS NOT EXCEEDED.
3. CONCRETE MATERIAL
   - 3.1 REQUIREMENTS FOR CONCRETE MATERIAL
     - 3.1.1. CLASS OF EXPOSURE: A–1, S–2
     - 3.1.2. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: 35MPa
     - 3.1.3. MAXIMUM WATER–CEMENT RATIO: 0.40
     - 3.1.4. AIR CONTENT: 5%–8%
     - 3.1.5. CEMENT TYPE: HS/HSb
   - 3.2. CONCRETE COVER TO OUTSIDE LAYER OF REINFORCING STEEL TO BE 50mm AT ALL LOCATIONS UNLESS NOTED OTHERWISE.
4. REINFORCING STEEL
   - 4.1.1. BARS TO BE BILLET STEEL, DEFORMED TO GRADE 400, PLAIN FINISH.
   - 4.1.2. PROVIDE LAP LENGTHS ON CORNER BARS AS FOLLOWS:
     - 10M = 450mm
     - 15M = 750mm
     - 20M = 900mm
     - 25M = 1300mm
     - 30M = 1600mm
     - 35M = 1900mm

     TRIM AT PIPE OPENINGS AS REQUIRED.
5. FOUNDATION
   - 5.1. EXCAVATE IN–SITU MATERIAL TO UNDERSIDE OF BOTTOM SLAB ELEVATION.
   - 5.2. ENSURE SURFACE IS VIRGIN, UNDISTURBED MATERIAL. OVER EXCAVATE IF REQUIRED.
   - 5.3. EXCAVATE DEPTH EQUAL TO BOTTOM SLAB THICKNESS TO MAXIMUM OF 600mm.
   - 5.4. BOULDERS AND COBBLES NOT PERMITTED TO PROTRUDE IN DEPTH OF GRANULAR BASE.
   - 5.5. SUBGRADE MATERIAL TO BE REVIEWED AND DEEMED ACCEPTABLE BY A PROFESSIONAL GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF GRANULAR BASE.
   - 5.6. GRANULAR MATERIAL TO CONFORM TO C.O.S. SPECIFICATION 03001 ITEM 3.2.7.
   - 5.7. DO NOT PLACE GRANULAR MATERIAL ON DESICCATED, FROZEN, OR WET SUBGRADE.
   - 5.8. PLACE GRANULAR MATERIAL IN 150mm LIFTS COMPACTED TO 98° STANDARD PROCTOR DENSITY.
6. MISCELLANEOUS REQUIREMENTS
   - 6.1. CONTRACTOR TO SUPPLY AND PLACE CHAMBER, MANHOLE BARRELS AND CONE, LADDER RUNGS, WALL PIPE RAIL, FRAME AND LOCKING COVER. SEE CITY OF SASKATOON STANDARDS FOR MORE INFORMATION.

NOTE:

THESE NOTES AND SCHEDULES TO BE USED IN CONJUNCTION WITH DRAWINGS 102–0011–029 – SECTIONS & DETAILS 102–0011–030 – CAST–IN–PLACE DETAILS

MAINTENANCE HOLE CHAMBERS LESS THAN 6 METERS DEEP

NOTE: CONCRETE THICKNESS AND REINFORCING GOVERNED BY LARGEST PIPE ENTERING THE CHAMBER

MANHOLE TYPE	BOTTOM SLAB			ALL WALLS							TOP SLAB		
	THICKNESS T1	HORIZONTAL		THICKNESS T2	HORIZ. & VERT.					CORNERS		THICKNESS T3	HORIZONTAL	
		"A" BARS UPPER FACE	"B" BARS LOWER FACE		"C" BARS OUTSIDE	"D" BARS INSIDE	"E" BARS EACH FACE	HEIGHT "H"	STIRRUPS "H"	"G" BARS VERTICAL	"G" BARS TIES		"F" BARS UPPER FACE	"G" BARS LOWER FACE
1050–1350	300	15M @ 200	10M @ 200	300	10M @ 150	10M @ 250	3–15M	450	10M @ 250	5–20M	A–10M @ 300	250	10M @ 250	20M @ 200
1500	300	15M @ 150	10M @ 150	300	15M @ 250	10M @ 250	4–15M	600	10M @ 250	5–20M	A–10M @ 300	275	10M @ 250	20M @ 200
1800	300	20M @ 175	15M @ 175	300	15M @ 225	10M @ 225	4–15M	800	10M @ 250	5–20M	A–10M @ 300	300	10M @ 250	20M @ 175
2100	325	20M @ 150	15M @ 150	300	15M @ 150	10M @ 150	5–15M	800	10M @ 250	7–20M	B–10M @ 300	300	10M @ 250	25M @ 200
2400	350	25M @ 225	20M @ 225	325	20M @ 225	15M @ 225	4–20M	800	10M @ 250	7–20M	B–10M @ 300	325	10M @ 250	25M @ 175
3000	400	25M @ 175	20M @ 175	375	20M @ 150	15M @ 150	5–20M	800	10M @ 200	7–20M	B–10M @ 300	375	10M @ 250	25M @ 150

MAINTENANCE HOLE CHAMBERS LESS THAN 12 METERS DEEP

NOTE: CONCRETE THICKNESS AND REINFORCING GOVERNED BY LARGEST PIPE ENTERING THE CHAMBER

MANHOLE TYPE	BOTTOM SLAB			ALL WALLS							TOP SLAB		
	THICKNESS T1	HORIZONTAL		THICKNESS T2	HORIZ. & VERT.					CORNERS		THICKNESS T3	HORIZONTAL	
		"A" BARS UPPER FACE	"B" BARS LOWER FACE		"C" BARS OUTSIDE	"D" BARS INSIDE	"E" BARS EACH FACE	HEIGHT "H"	STIRRUPS "H"	"G" BARS VERTICAL	"G" BARS TIES		"F" BARS UPPER FACE	"G" BARS LOWER FACE
1050–1350	400	25M @ 200	15M @ 200	350	15M @ 250	10M @ 250	4–15M	600	10M @ 250	7–20M	B–10M @ 300	350	10M @ 250	20M @ 150
1500	400	30M @ 250	20M @ 250	350	15M @ 200	10M @ 200	3–20M	600	10M @ 250	7–20M	B–10M @ 300	350	10M @ 250	25M @ 200
1800	400	30M @ 200	20M @ 200	350	20M @ 225	15M @ 225	5–20M	800	10M @ 250	7–20M	B–10M @ 300	400	10M @ 250	25M @ 200
2100	450	30M @ 200	20M @ 200	400	20M @ 200	15M @ 200	5–20M	800	10M @ 250	7–20M	B–10M @ 300	450	10M @ 250	30M @ 225
2400	500	30M @ 175	20M @ 175	450	20M @ 175	15M @ 175	5–20M	800	10M @ 200	7–25M	B–10M @ 400	450	10M @ 250	30M @ 200
3000	600	35M @ 200	25M @ 200	550	25M @ 225	20M @ 225	4–25M	1000	10M @ 150	10–25M	C–10M @ 400	550	10M @ 250	30M @ 175

MAINTENANCE HOLE CHAMBERS LESS THAN 20 METERS DEEP

NOTE: CONCRETE THICKNESS AND REINFORCING GOVERNED BY LARGEST PIPE ENTERING THE CHAMBER

MANHOLE TYPE	BOTTOM SLAB			ALL WALLS							TOP SLAB		
	THICKNESS T1	HORIZONTAL		THICKNESS T2	HORIZ. & VERT.					CORNERS		THICKNESS T3	HORIZONTAL	
		"A" BARS UPPER FACE	"B" BARS LOWER FACE		"C" BARS OUTSIDE	"D" BARS INSIDE	"E" BARS EACH FACE	HEIGHT "H"	STIRRUPS "H"	"G" BARS VERTICAL	"G" BARS TIES		"F" BARS UPPER FACE	"G" BARS LOWER FACE
1050–1350	500	30M @ 225	20M @ 225	400	20M @ 250	15M @ 250	4–20M	600	10M @ 250	7–20M	B–10M @ 300	400	10M @ 250	25M @ 175
1500	550	30M @ 225	20M @ 225	450	20M @ 250	15M @ 250	3–25M	600	10M @ 250	7–20M	B–10M @ 300	450	10M @ 250	30M @ 225
1800	600	30M @ 200	20M @ 200	500	20M @ 225	15M @ 225	3–25M	800	10M @ 250	7–25M	B–10M @ 400	500	10M @ 250	30M @ 200
2100	700	30M @ 175	20M @ 175	550	20M @ 175	15M @ 175	3–25M	800	10M @ 150	10–25M	C–10M @ 400	550	10M @ 250	35M @ 225
2400	750	35M @ 225	25M @ 225	650	25M @ 250	20M @ 250	4–25M	1000	10M @ 150	10–25M	C–10M @ 400	650	10M @ 250	35M @ 200
3000	900	35M @ 150	25M @ 175	750	30M @ 250	25M @ 250	4–30M	1000	10M @ 100	10–25M	C–10M @ 400	750	10M @ 250	35M @ 200

ALL DIMENSIONS IN mm (MILLIMETRES) UNLESS NOTED OTHERWISE

11				
10				
9				
8				
7				
6				
5				
4				
3				
2	REVISED AIR CONTENT FROM 4%–7% TO 5%–8%	2017–JAN–25	HLO	
1	DESIGN PROVIDED BY WSP – 203 WELLMAN CRES. – SASKATOON	2014–JUN–23	J.W.C.	
	PLAN DESCRIPTION/REVISION	DATE	BY	

SEAL

A TRUE COPY OF SEALED ENGINEERED DRAWING ON RECORD AT SASKATOON WATER

SCALES : HOR. NTS VERT. NTS

DRAWN BY J.W.C. AT WSP (GENIVAR)

DATE 2014–APR–2

City of Saskatoon
Transportation & Utilities Department

STD. M.H. TYPES FOR LARGE SEWERS
NOTES AND SCHEDULES

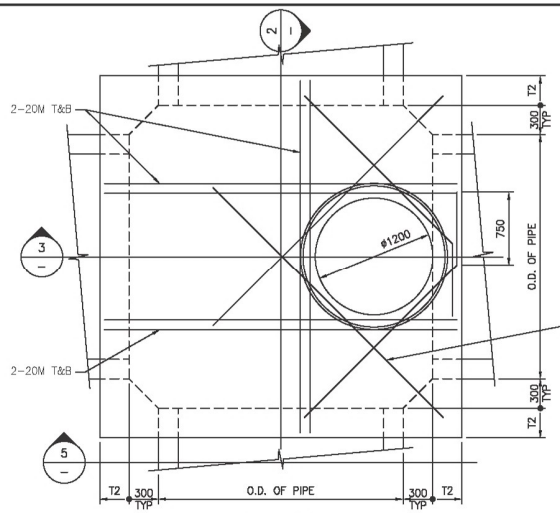
FOR SEWERS LESS THAN 20 METERS DEEP

CHIEF ENGINEER JAN 30/17 DATE

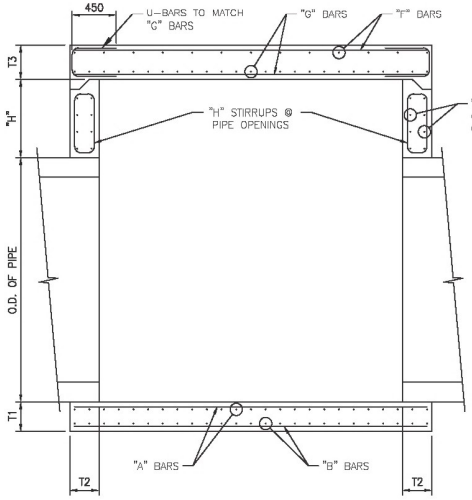
ENGINEER JAN 30, 2017 DATE

SHEET NO.

PLAN NO. 102–0011–028r002



1 PLAN–TOP SLAB



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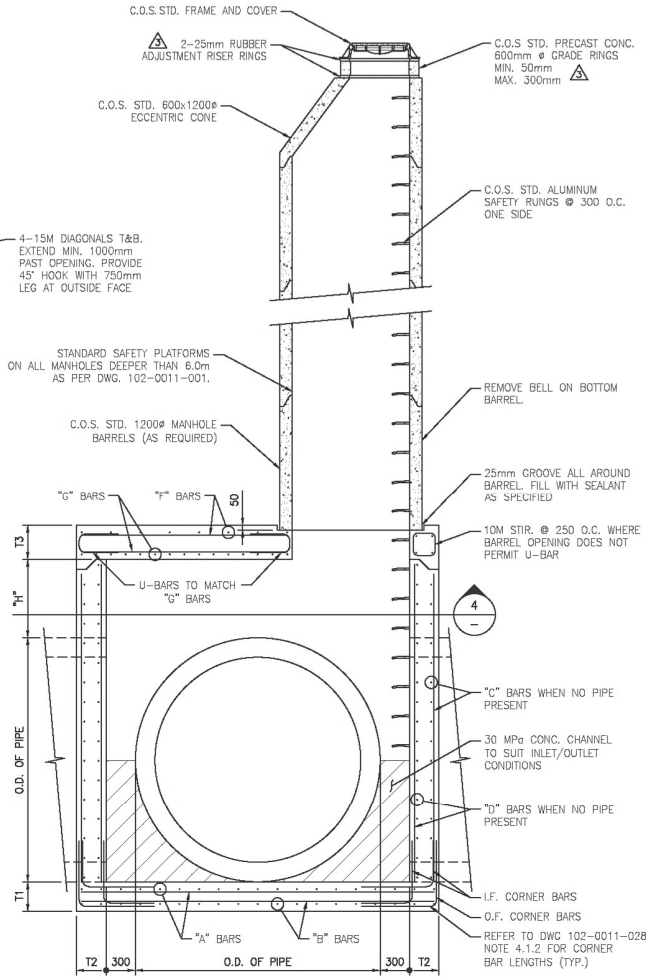

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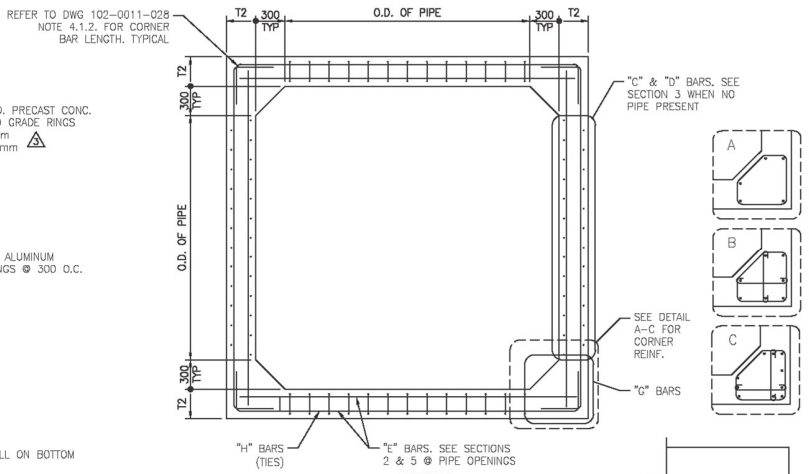

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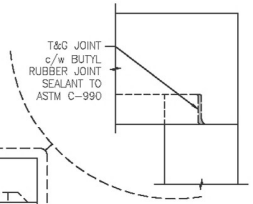
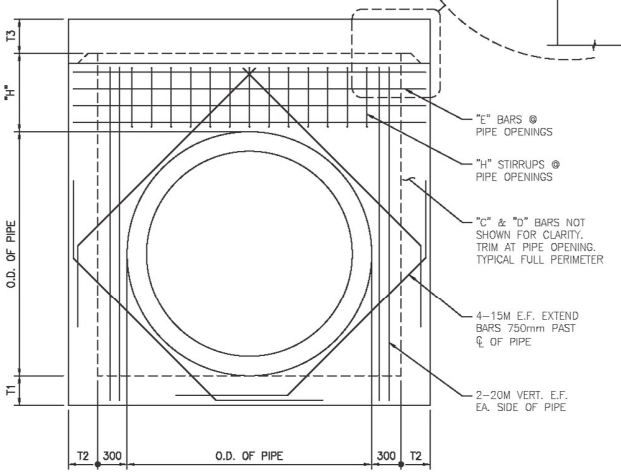




5 SECTION

NOTE:

1. THESE SECTIONS AND DETAILS TO BE USED IN CONJUNCTION WITH DRAWINGS
   102–0011–028 – NOTES AND SCHEDULES
   102–0011–030 – CAST–IN–PLACE DETAILS
2. TAPERED RUBBER ADJUSTMENT RISER RINGS ARE REQUIRED ON CATCH BASINS AND MANHOLES THAT ARE OFFSET FROM THE CENTER OF THE ROAD. 3

ALL DIMENSIONS IN mm (MILLIMETRES) UNLESS NOTED OTHERWISE

	PLAN DESCRIPTION/REVISION	DATE	BY
1	DESIGN PROVIDED BY WSP	2014–JUN–23	JWC
2	REMOVED SAFETY RAIL – ADDED REFERENCE TO SAFETY PLATFORMS	2014–DEC–19	HLD
3	ADDED NOTE 2, GRADE RING MIN., AND RUBBER ADJ. RISER RINGS	2021–JAN–14	DLH

City of Saskatoon

STANDARD MANHOLE TYPES FOR LARGE SEWERS LESS THAN 20 METERS DEEP SECTIONS AND DETAILS

APPROVALS

SIGNATURE	SIGNATURE
Jeff P D Thomson	Maciej Jurkiewicz
NAME	NAME
Jan 27, 2021	Jan 27, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT.

PLAN NO. 102–0011–029r003

CAST-IN-PLACE CONSTRUCTION

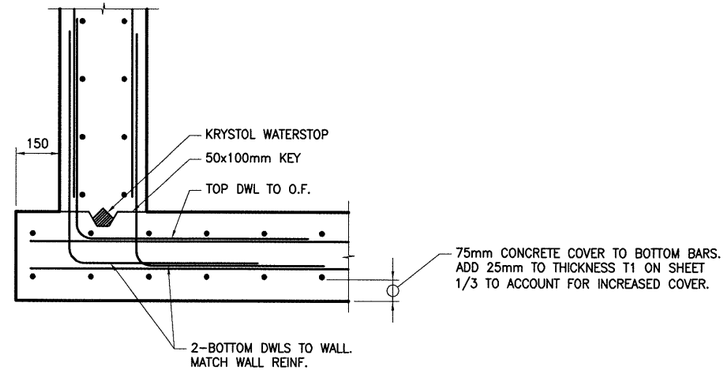
GENERAL NOTES AND SPECIFICATIONS

1. GENERAL NOTES
   - 1.1 ALL WORK SHALL CONFORM TO SPECIFICATIONS LISTED ON DRAWINGS 102-0011-028 AND 102-0011-029 UNLESS OTHERWISE STATED.
   - 1.2 WORK SHALL CONFORM TO THE CURRENT EDITION OF THE FOLLOWING CODES AND STANDARDS:
     - 1.2.1. CAN/CSA-A23.1 CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION
     - 1.2.2. CAN/CSA-A23.3 DESIGN OF CONCRETE STRUCTURES
     - 1.2.3. CAN/CSA-G30.18 CARBON STEEL BARS FOR CONCRETE REINFORCEMENT
     - 1.2.4. CAN/CSA-S6 CANADIAN HIGHWAY BRIDGE DESIGN CODE
     - 1.2.5. CAN/CSA-A257 STANDARDS FOR CONCRETE PIPE AND MANHOLE SECTIONS
   - 1.3. DEVIATION FROM THE DESIGN SHOWN IS PERMITTED ONLY BY APPROVAL OF THE ENGINEER AND WITH SUBMISSION OF SITE SPECIFIC SHOP DRAWING SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF SASKATCHEWAN.
2. CONSTRUCT CAST-IN-PLACE MANHOLE ACCORDING TO THE GEOMETRY AND REINFORCING PROVIDED ON DRAWING 102-0011-028. CONFIRM ARRANGEMENT, ORIENTATION, DIAMETERS AND QUANTITY OF INLETS AND OUTLET PIPES WITH CONTRACTOR. DESIGN OF MANHOLE CHAMBER TO BE GOVERNED BY LARGEST PIPE ENTERING THE CHAMBER AND DEPTH OF CHAMBER FROM FINAL GRADE TO TOP OF SLAB.
3. CONCRETE TESTING
   - 3.1. CONCRETE TESTING SHALL FOLLOW SECTION 06005 – READY MIX CONCRETE IN THE CITY OF SASKATOON STANDARD CONSTRUCTION SPECIFICATIONS.
4. CAST-IN-PLACE CONCRETE TO BE IN ACCORDANCE WITH THE FOLLOWING TABLE:

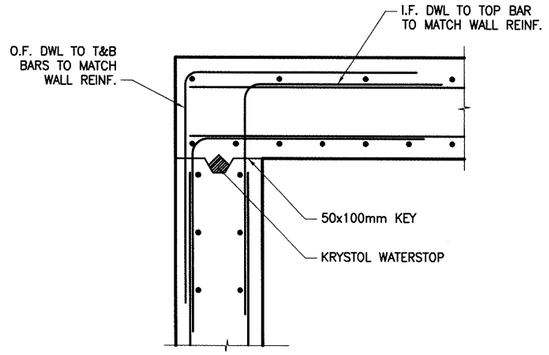
STRENGTH f'c (MPa)	CEMENT SYMBOL	CLASS OF EXPOSURE	MAX AGGREGATE (mm)	SLUMP (mm)	TOTAL AIR %
35	HS/HSb	A-1, S-2	20	75±25	5-8

ADDITION OF SUPERPLASTICIZOR TO ACHIEVE WORKABLE MIX IS PERMITTED. TEST SUMP BEFORE AND AFTER ADDITION OF SUPERPLASTICIZOR.

5. CEMENTITIOUS WATERPROOFING
   - 5.1. HORIZONTAL CONSTRUCTION JOINTS: KRYSTOL WATERSTOP SYSTEM (INTERNAL)
   - 5.2. FORM-TIE HOLES, MINOR HONEYCOMB AREAS SHALL BE CHIPPED BACK AND PATCHED WITH KRYSTOL WATERSTOP GROUT.



1 BASE SLAB TO WALL DETAIL



2 WALL TO TOP SLAB DETAIL

NOTE:

THESE CAST-IN-PLACE DETAILS TO BE USED IN CONJUNCTION WITH DRAWINGS
102-0011-028 – NOTES AND SCHEDULES
102-0011-029 – SECTIONS AND DETAILS

ALL DIMENSIONS IN mm (MILLIMETRES) UNLESS NOTED OTHERWISE

	PLAN DESCRIPTION/REVISION	DATE	BY
10			
9			
8			
7			
6			
5			
4			
3			
2			
1	REVISED AIR CONTENT FROM 4%-7% TO 5%-8%	2017-JAN-25	HLO
	DESIGN PROVIDED BY WSP – 203 WELLMAN CRES. – SASKATOON	2014-JUN-23	J.W.C.

A TRUE COPY OF SEALED ENGINEERED DRAWING ON RECORD AT SASKATOON WATER

SEAL

SCALES : HOR. NTS VERT. NTS

DRAWN BY J.W.C. AT WSP (GENIVAR)

DATE 2014-APR-2

City of Saskatoon
Transportation & Utilities Department

STD. M.H. TYPES FOR LARGE SEWERS
CAST-IN-PLACE DETAILS

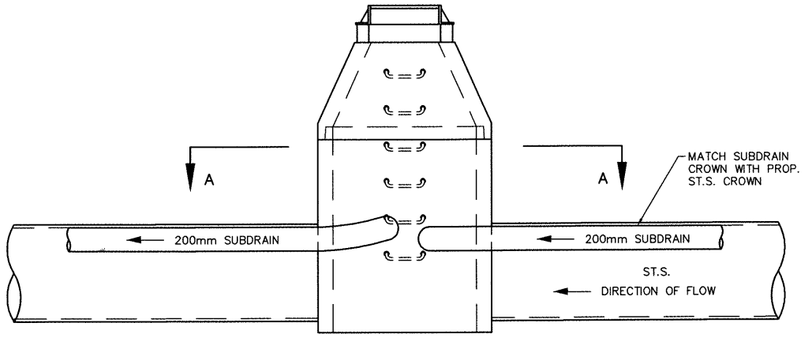
FOR SEWERS LESS THAN
20 METERS DEEP

CHIEF ENGINEER JAN 30/17 DATE

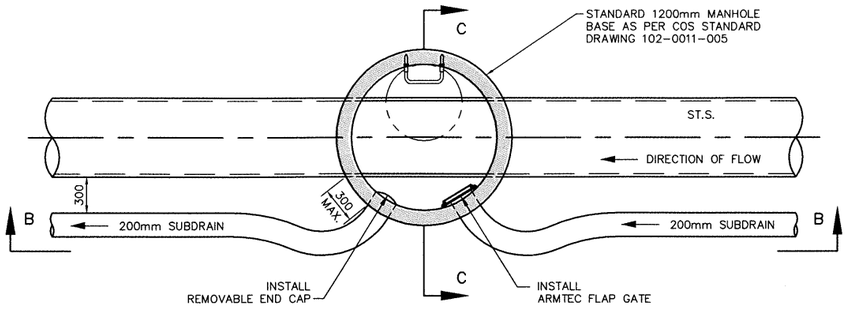
ENGINEER JAN 30, 2017 DATE

SHEET NO.

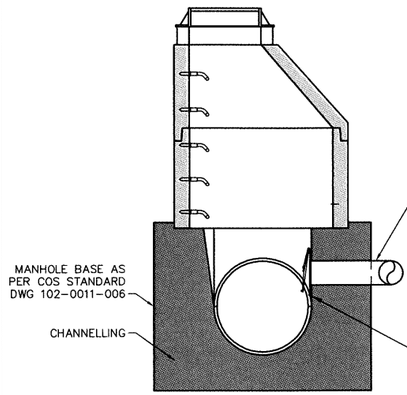
PLAN NO. 102-0011-030r002



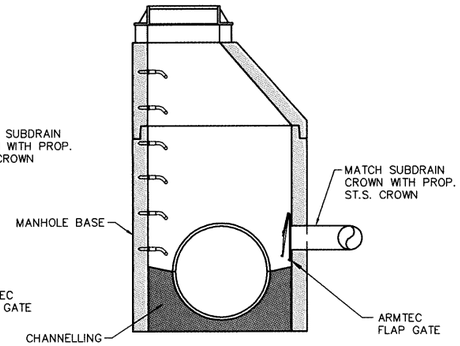
SECTION 'B–B'



PLAN VIEW A
SECTION 'A–A'

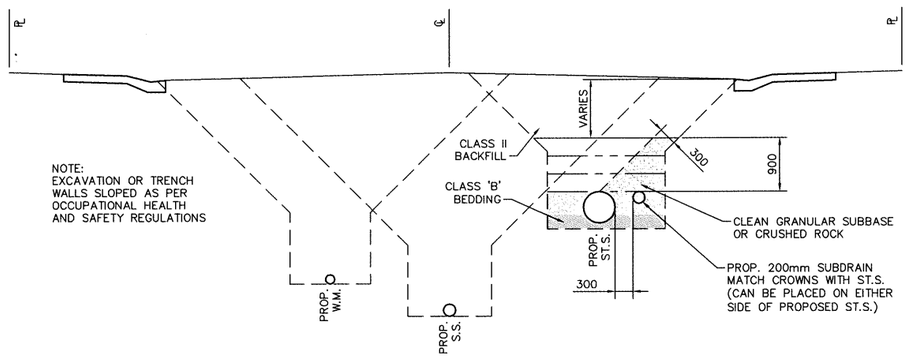


SECTION 'D–D'

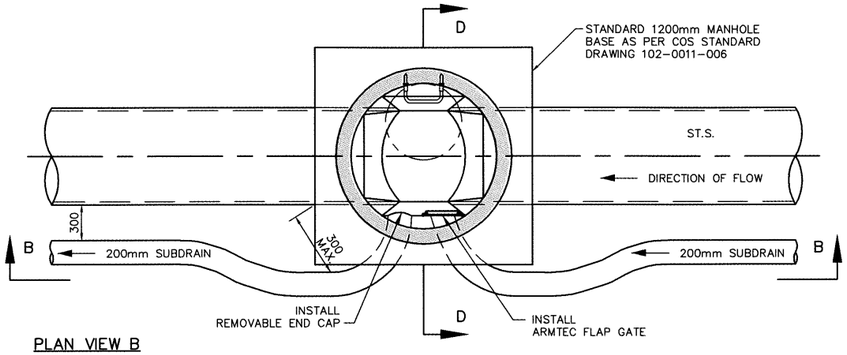


SECTION 'C–C'

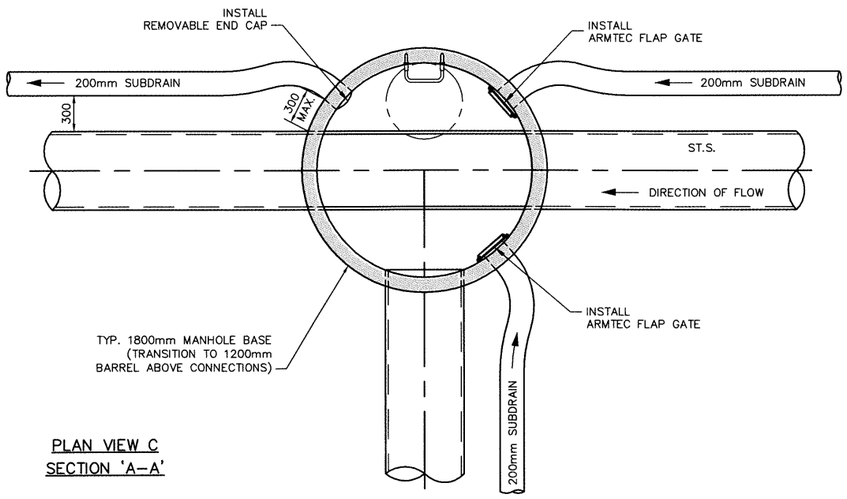
TYPICAL ST.S. MANHOLE SUBDRAIN CONNECTIONS



TYPICAL SUBDRAIN COMBINED WITH STORM SEWER



PLAN VIEW B
SECTION 'A–A'



PLAN VIEW C
SECTION 'A–A'

NOTES:

1. PIPE SHALL BE BOSS 2000 HDPE FACTORY PERFORATED SUBDRAIN OR APPROVED EQUIVALENT AND SHALL BE CONSTRUCTED WITH ARMTEC WOVEN GEOTEXTILE SOCK OR APPROVED EQUIVALENT.
2. PIPE SHALL BE EMBEDDED IN CLEAN GRANULAR SUBBASE OR CRUSHED ROCK AS PER COS STANDARD CONSTRUCTION SPECIFICATIONS UNLESS OTHERWISE NOTED.
3. SUBDRAIN SHALL BE GRADED PARALLEL TO ST.S. PIPE AND SHALL BE CONNECTED TO ST.S. MANHOLES AT ALL INTERSECTIONS.
4. ARMTEC MODEL 20C FLAP GATE OR EQUIVALENT SHALL BE INSTALLED AT ALL DOWNSTREAM CONNECTIONS TO ST.S. MANHOLES AS PER MANUFACTURER'S INSTALLATION GUIDELINES AND RECOMMENDATIONS.
5. REMOVABLE END CAPS c/w SNAP ADAPTERS SHALL BE INSTALLED AT ALL UPSTREAM CONNECTIONS TO ST.S. MANHOLES.
6. A MINIMUM OF 300mm HORIZONTAL AND 150mm VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN PIPES IN COMMON TRENCH.
7. BACKFILL & COMPACT CLAY & GRANULAR MATERIAL SIMULTANEOUSLY IN 300mm LIFTS.
8. LOCATION & ELEVATION OF SUBDRAIN CONNECTION SHALL BE DETERMINED IN THE FIELD.
9. ALIGNMENT OF SUBDRAIN CONNECTION TO MANHOLE (UPSTREAM & DOWNSTREAM) SHALL BE DETERMINED IN THE FIELD AND AS PER TABLE 1.
10. FOR MANHOLES WITH TEE OR CROSS STORM SEWER JUNCTION TYPE, THE ALIGNMENT OF SUBDRAIN CONNECTION TO MANHOLE (UPSTREAM & DOWNSTREAM) SHALL BE DESIGNED TO HAVE SUBDRAINS CONNECTING ON DIFFERENT SIDES OF THE MANHOLE. A LARGER MANHOLE MAY ALSO BE APPROVED WITH A MINIMUM SPACING OF 300mm BETWEEN EACH PIPE OR SUBDRAIN.

TABLE 1
SUBDRAIN CONNECTION TO STORM MANHOLE

STORM SEWER SIZE (mm)	MANHOLE/ST. SEWER JUNCTION TYPE	CONSTRUCTION COMMENTS
300 – 600	STRAIGHT THROUGH	USE STANDARD COS 1200mm MANHOLE BASE AND MAKE CONNECTION AS SHOWN IN THE PLAN VIEW A & SECTION B–B & SECTION C–C
675 – 900	STRAIGHT THROUGH	USE STANDARD COS 1200mm MANHOLE BASE AS PER STANDARD COS DRAWING 102–0011–006 AND MAKE CONNECTION AS SHOWN IN PLAN B & SECTION D–D
300 – 600	TEE OR CROSS	USE STANDARD 1800mm MANHOLE BASE AND MAKE CONNECTION AS SHOWN IN PLAN C & SECTION B–B & SECTION C–C
675 – 900	TEE OR CROSS	USE STANDARD 1800mm MANHOLE BASE OR LARGE SIZE MANHOLE AS PER COS STANDARD DRAWING NUMBER 102–0011–028, 102–0011–029 & 102–0011–029 AND MAKE CONNECTIONS THROUGH CHAMBER WALLS
1050 – LARGER	ALL JUNCTIONS	USE STANDARD LARGE SIZE MANHOLE AS PER COS STANDARD DRAWING NUMBER 102–0011–028, 102–0011–029 & 102–0011–030 AND MAKE CONNECTIONS THROUGH CHAMBER WALLS

DETAILS ARE A VISUAL REPRESENTATION ONLY AND ARE NOT INTENDED TO BE SCALED

DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

	PLAN DESCRIPTION/REVISION	DATE	BY
10			
9			
8			
7			
6			
5			
4			
3			
2	REPOSITIONED FLAP GATE FLUSH AGAINST MANHOLE INTERIOR WALL ADDED NOTE REGARDING EXCAVATION SLOPES AND ADDED NOTE 10	2015–NOV–24	HLO
1	REVISED SUBDRAIN PLACEMENT	2014–DEC–09	MJ

SEAL

APPROVED BY: Jake Chan Jan. 6, 2016 DATE

APPROVED BY: 06/01/2016 DATE

DRAWN BY DLH DATE 2014–JUL–10

City of Saskatoon
Transportation & Utilities Department

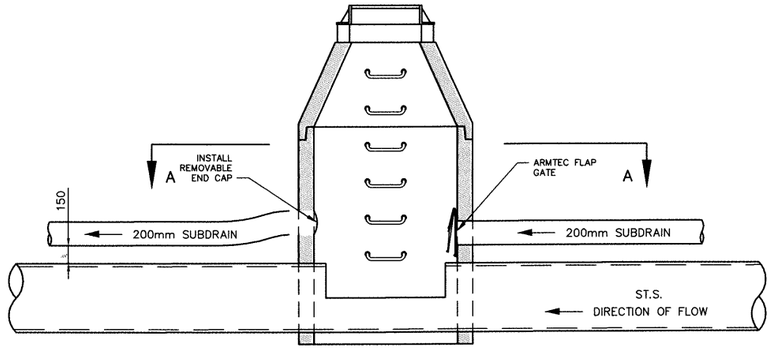
STANDARD ST.S. SUBDRAIN DETAIL
ST.S. CROWN DEPTH UP TO 2.3m

ENGINEER JAN 0 8 2016 DATE

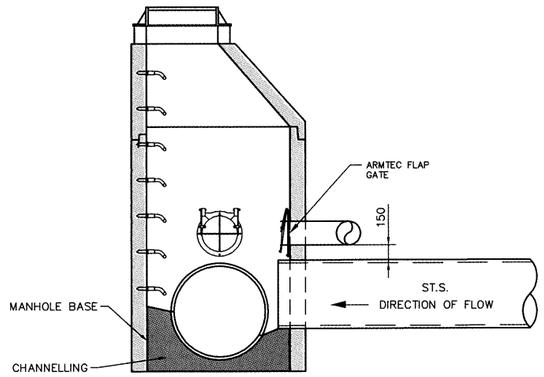
SCALES : HOR. NTS VERT.

SHEET NO.

PLAN NO. 102–0011–031r003

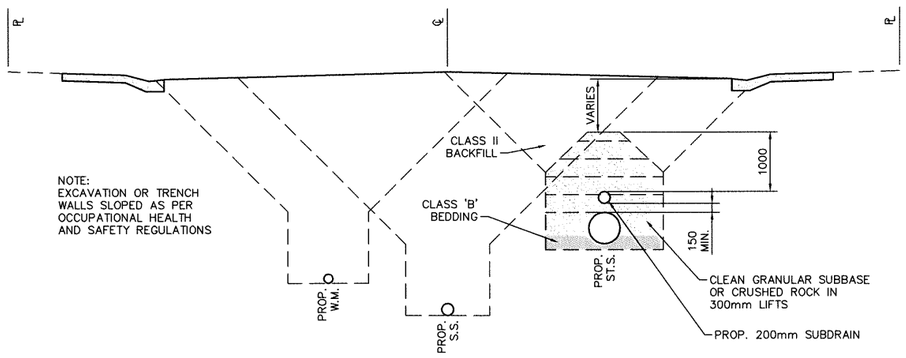


SECTION 'B–B'

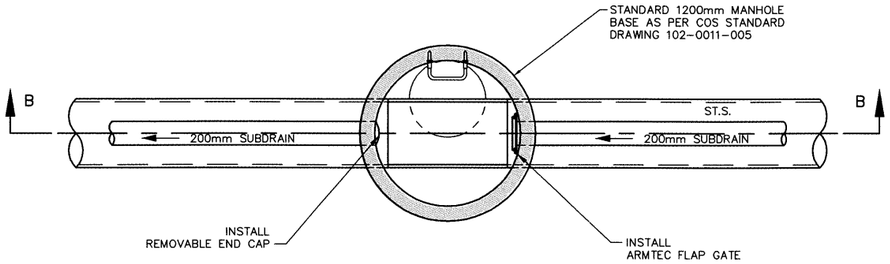


SECTION 'C–C'

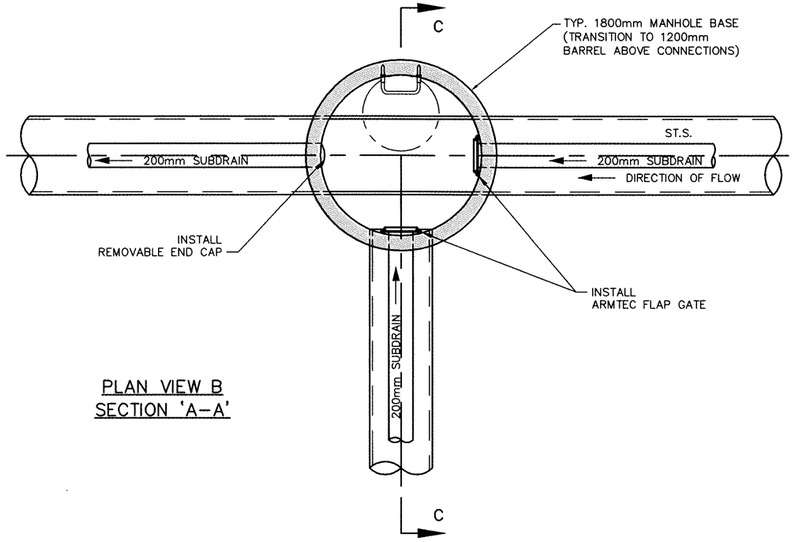
TYPICAL ST.S. MANHOLE SUBDRAIN CONNECTION



TYPICAL SUBDRAIN COMBINED WITH STORM SEWER



PLAN VIEW A
SECTION 'A–A'



PLAN VIEW B
SECTION 'A–A'

NOTES:

1. PIPE SHALL BE BOSS 2000 HDPE FACTORY PERFORATED SUBDRAIN OR APPROVED EQUIVALENT AND SHALL BE CONSTRUCTED WITH ARMTEC WOVEN GEOTEXTILE SOCK OR APPROVED EQUIVALENT.
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6. A MINIMUM OF 300mm HORIZONTAL AND 150mm VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN PIPES IN COMMON TRENCH.
7. BACKFILL & COMPACT CLAY & GRANULAR MATERIAL SIMULTANEOUSLY IN 300mm LIFTS.
8. LOCATION & ELEVATION OF SUBDRAIN CONNECTION SHALL BE DETERMINED IN THE FIELD.
9. ALIGNMENT OF SUBDRAIN CONNECTION TO MANHOLE (UPSTREAM & DOWNSTREAM) SHALL BE DETERMINED IN THE FIELD AND AS PER DETAIL.

DETAILS ARE A VISUAL REPRESENTATION ONLY AND ARE NOT INTENDED TO BE SCALED

DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

	PLAN DESCRIPTION/REVISION	DATE	BY
10			
9			
8			
7			
6			
5			
4			
3	REPOSITIONED FLAP GATE FLUSH AGAINST MANHOLE INTERIOR WALL AND ADDED NOTE REGARDING EXCAVATION SLOPES.	2015-NOV-24	HLO
2	REVISE SUBDRAIN & PIPING	2014-DEC-16	MJ
1	ISSUED FOR CONSTRUCTION	2014-JUL-08	DLH

SEAL

APPROVED BY: Jake Chen — DATE: JAN. 6, 2016

APPROVED BY: — DATE: 06/01/2016

DRAWN BY: DLH — DATE: 2014-JUL-10

City of Saskatoon
Transportation & Utilities Department

STANDARD ST.S. SUBDRAIN DETAIL
ALTERNATIVE INSTALLATION WHERE
ST.S. CROWN IS DEEPER THAN 2.3m

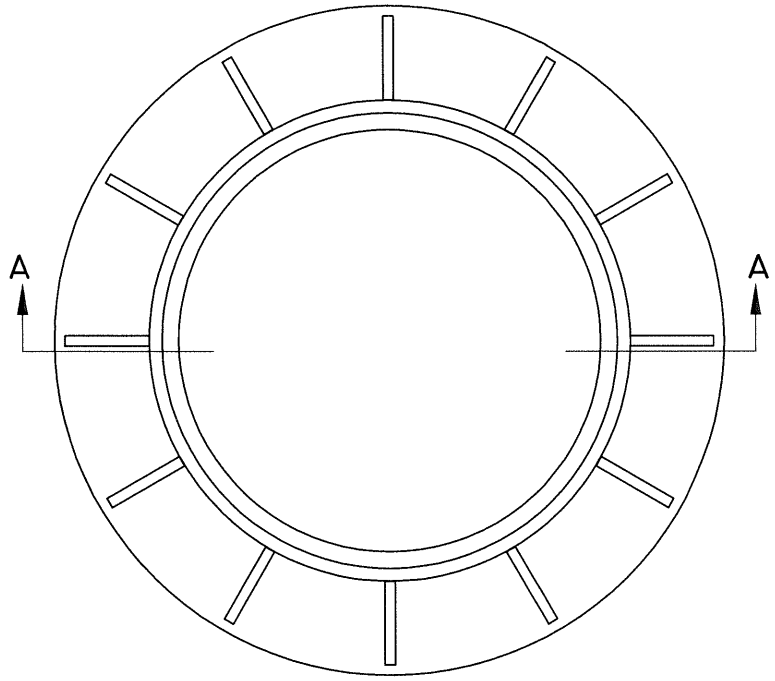
ENGINEER — DATE: JAN 08 2016

SCALES: HOR. NTS VERT.

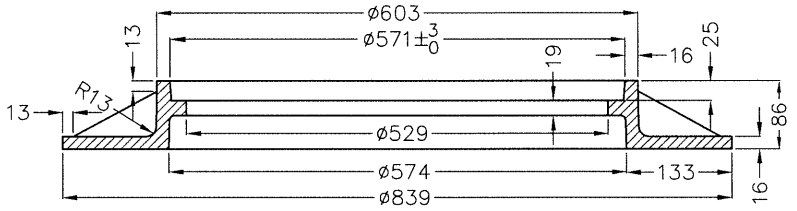
SHEET NO.

PLAN NO. 102–0011–032r003

TO BE USED EXCLUSIVELY
FOR REHABILITATION WORK



PLAN



SECTION A-A

MEASUREMENTS IN MILLIMETERS

REVISIONS	
1	
2	
3	
4	

DRAWN BY HLO
DATE 2017-JAN-25
SCALE: HOR. NTS VER. NTS

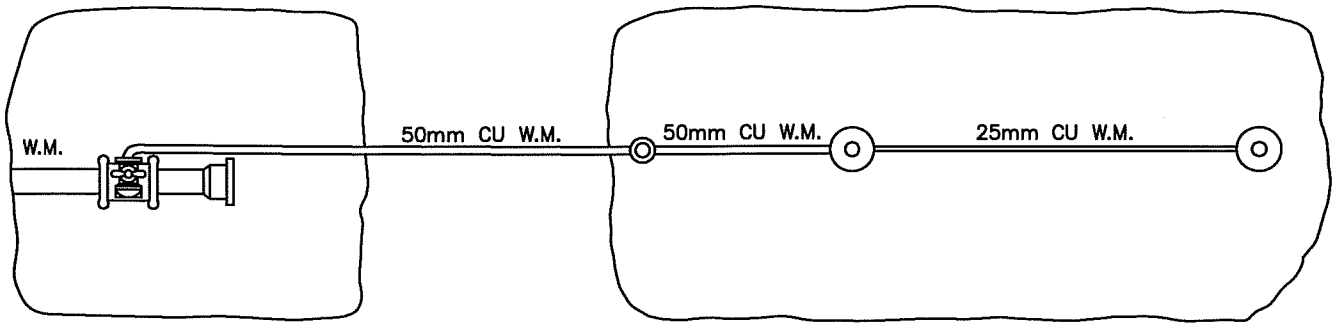
City of Saskatoon
Transportation & Utilities Department

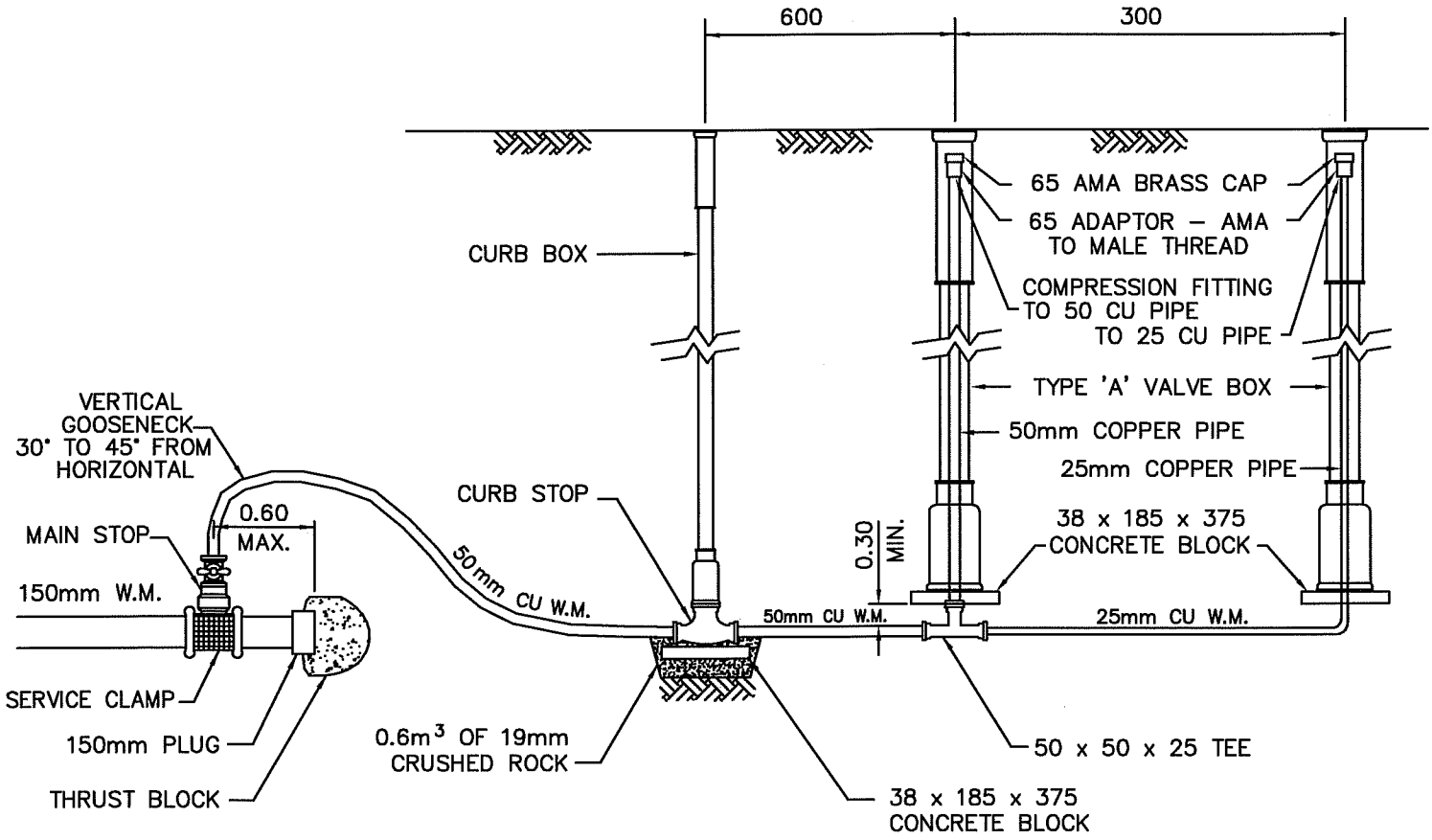
STANDARD LOW PROFILE MANHOLE FRAME
FOR REHABILITATION WORK ONLY

CHIEF ENGINEER
JAN 3 0 2017
DATE

ENGINEER
JAN 3 0 2017
DATE

PLAN NO. 102-0011-034r001





ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS	
1	RENUMBERED 2000-08-28 (402-0004-001r001)
2	HLO 2006-01-20
3	ADDED SECOND FLUSHER HLO 2009-12-10
4	HLO 2012-01-05

DRAWN BY MJ
DATE 99-03-08

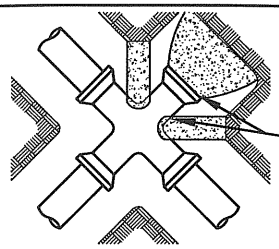
City of Saskatoon
Infrastructure Services Department

COPPER DEAD END WATER MAIN FLUSHER

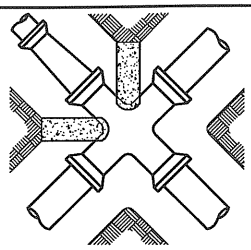
APPROVED
GENERAL MANAGER Jan 6, 2012 P. ENG.
ENGINEER
ENGINEER

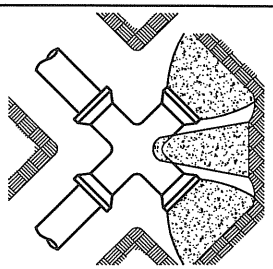
SCALES : HOR. NTS VERT.

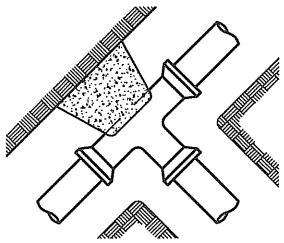
PLAN NO. 102-0012-001r004

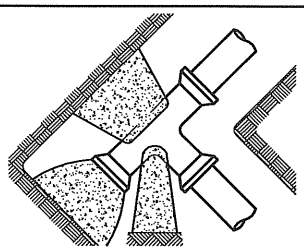
① 

CROSS

② 
REDUCER

③ 
CROSS

④ 
TEE

⑤ 
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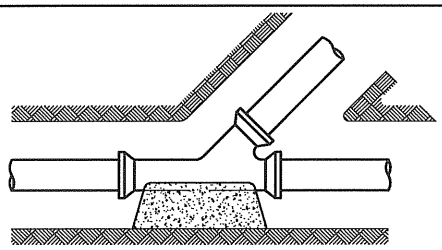
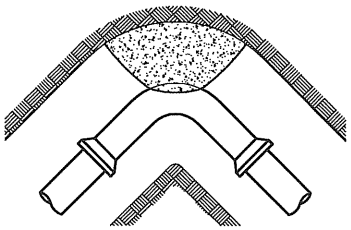
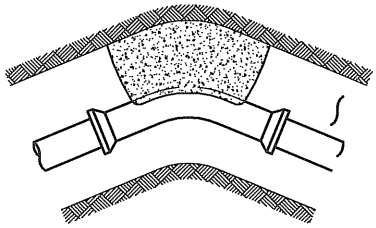
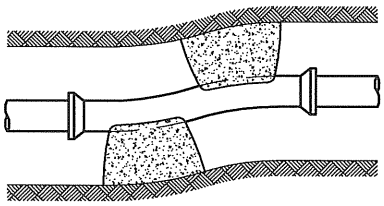
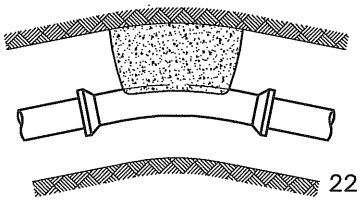
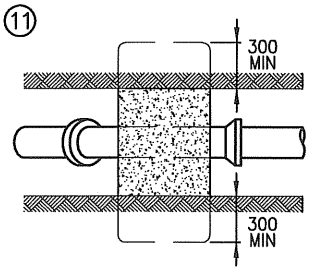
⑥ 
WYE

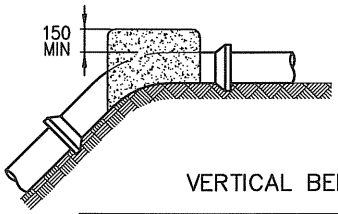
⑦ 
90° BEND

⑧ 
45° BEND

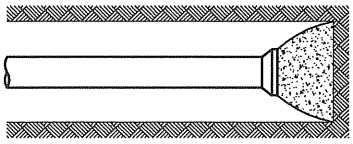
⑨ 
OFFSET BEND

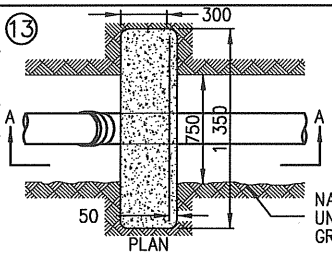
⑩ 
22 1/2° BEND &
11 1/4° BEND

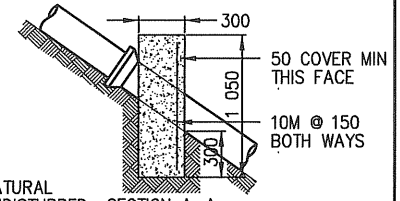
⑪ 



VERTICAL BEND

⑫ 
DEAD END

⑬ 



STEEP GRADES

NOTE: FOR STEEP SLOPES (FIG. 13) ANCHOR PIPE EVERY SECOND JOINT, BUT IF SOIL CONDITIONS ARE BAD, ANCHOR EVERY JOINT.

NOTE: 6 MIL POLYETHELENE SHEETING SHALL BE PLACED BETWEEN THE REACTION BLOCKING AND THE PIPE OR FITTINGS

BEARING AREA OF BLOCKS IN SQ. METERS

DWG. NO.	PIPE SIZE						
	100	150	200	250	300	350	400
1, 4, 12	.186	.372	.650	1.022	1.440	1.952	2.602
3, 5, 7	.279	.511	.883	1.440	2.045	2.695	3.532
2	.093	.139	.232	.325	.465	.697	.929
6, 8, 11	.139	.279	.465	.604	1.115	1.394	1.859
10	.093	.139	.279	.418	.588	.836	1.115
9	.279	.558	.976	1.162	2.184	2.974	3.903

REVISIONS	
1	ADDED 6 MIL POLY REQUIREMENT HLO 2010-12-14
2	
3	

DRAWN BY JLL
DATE 1996-03-05

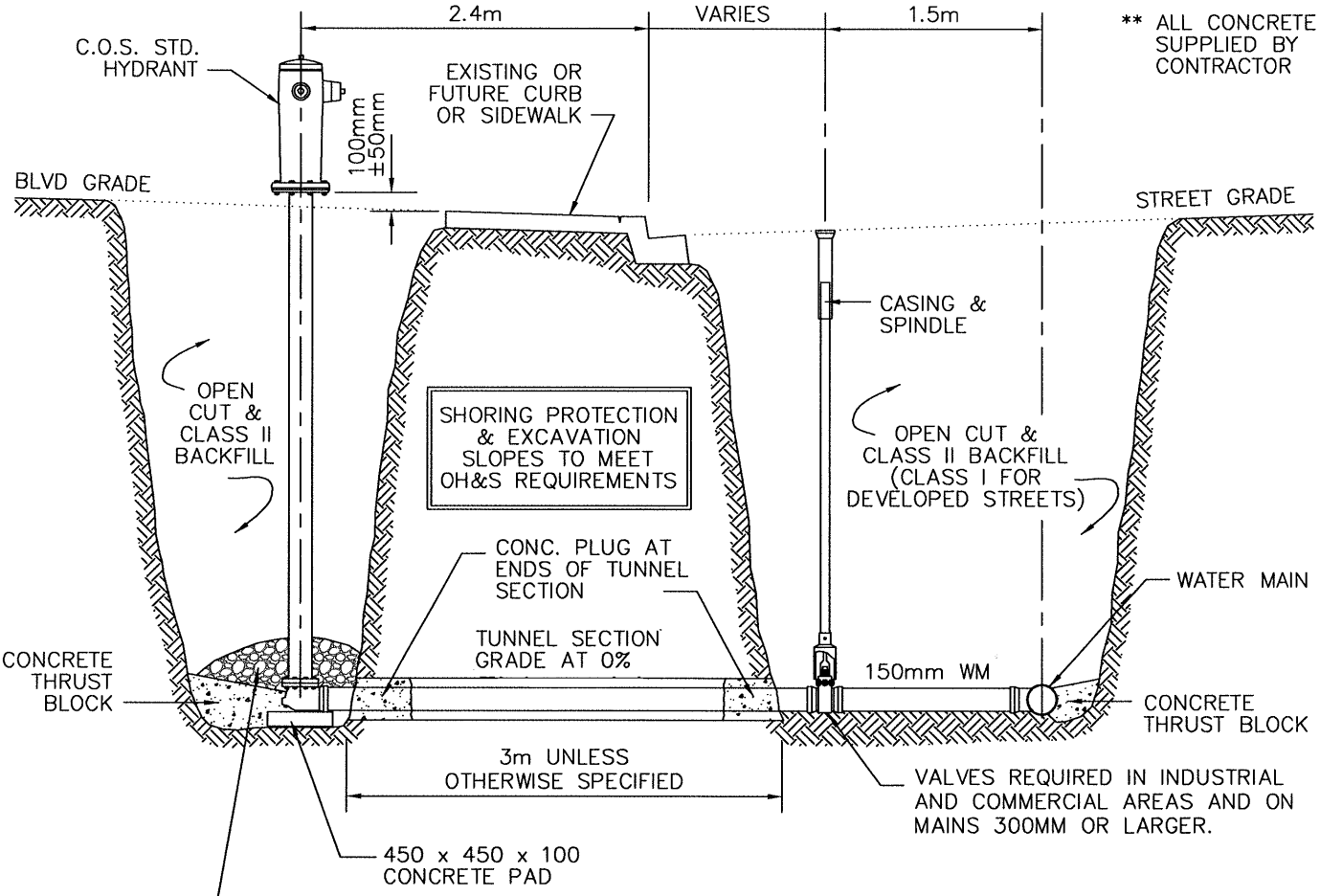
City of Saskatoon
Infrastructure Services Department

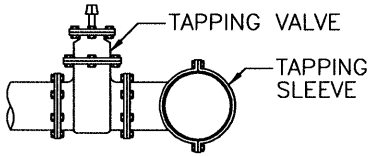
REACTION BLOCKING AND WATER MAIN ANCHORING

GENERAL MANAGER P. ENG.
ENGINEER

SCALES : HOR. 1:50 VERT.

PLAN NO. 102-0012-002r002





ALTERNATE FOR EXISTING MAIN

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

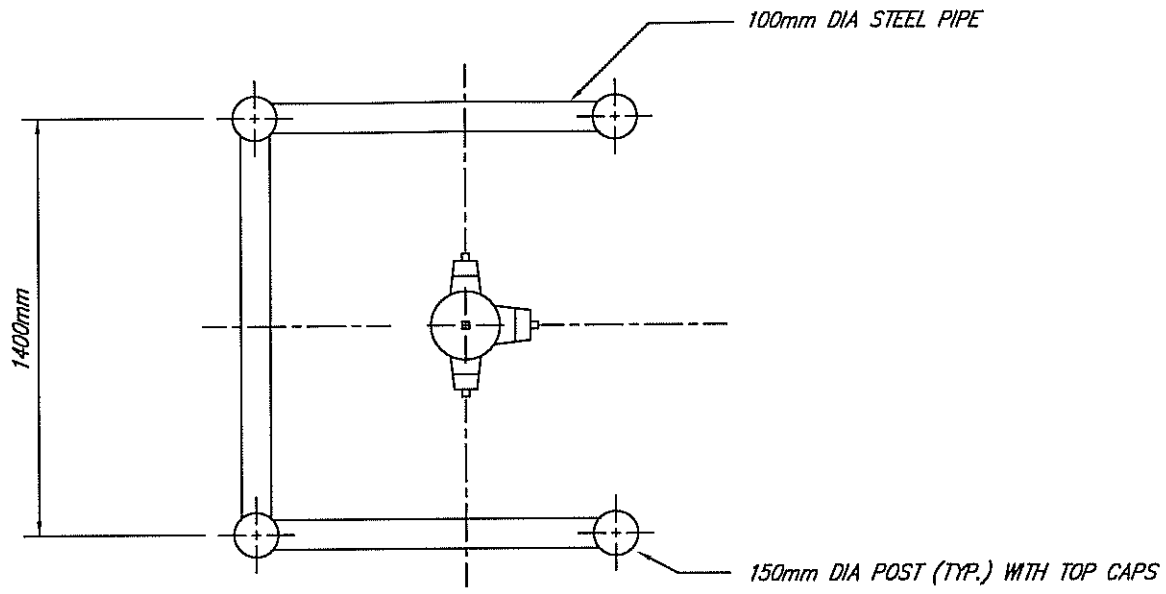
REVISIONS	
1	MJ 2006-06-22
2	HLO 2012-01-05
3	SPECIFIED TUNNEL SECT. GRADE JAB – 2013 DEC 16

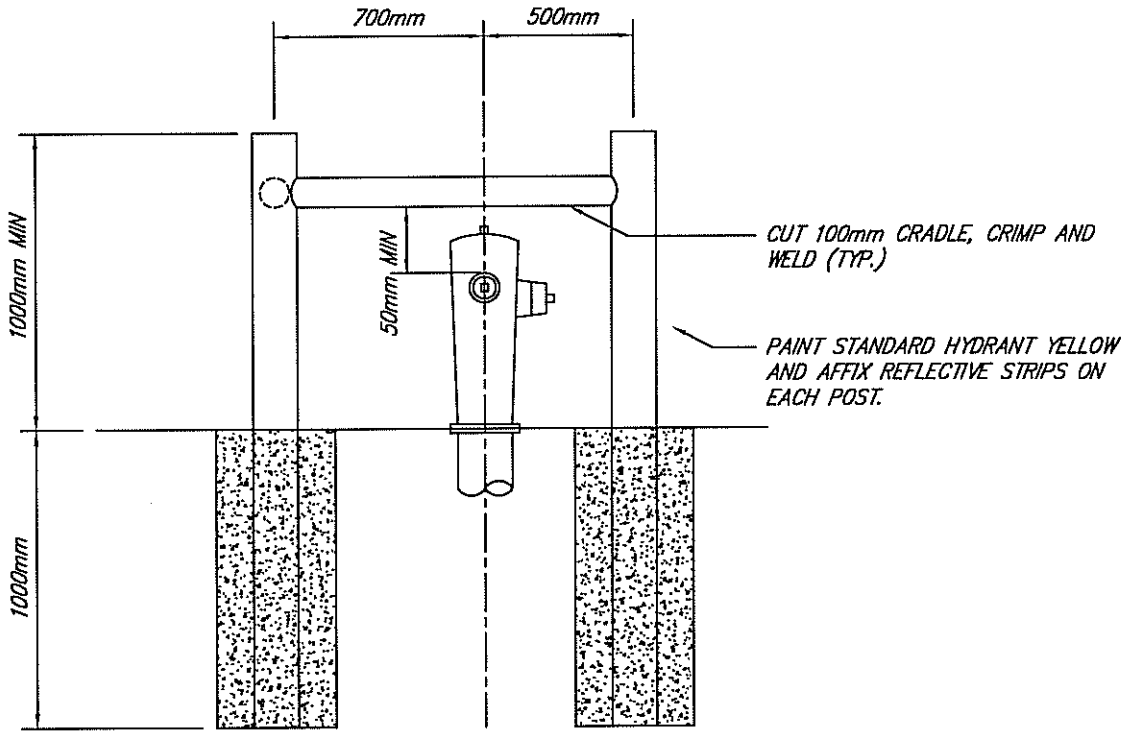
DRAWN BY JLL
DATE 96-03-05
CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

FIRE HYDRANT STANDARD INSTALLATION

APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. VERT. NTS
PLAN NO. 102-0012-003r004





REVISIONS	
1	
2	
3	

DRAWN BY JMH
DATE 06-01-25

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

SQUARE HYDRANT GUARD

APPROVED

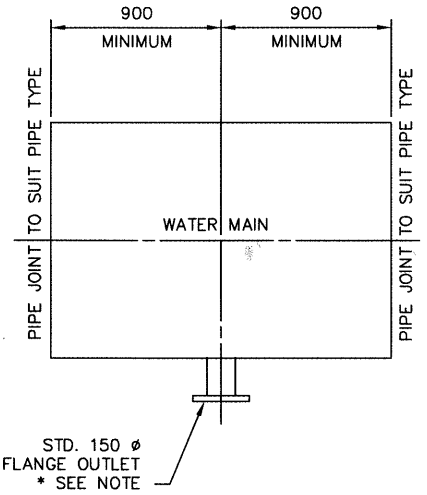
GENERAL MANAGER P. ENG.

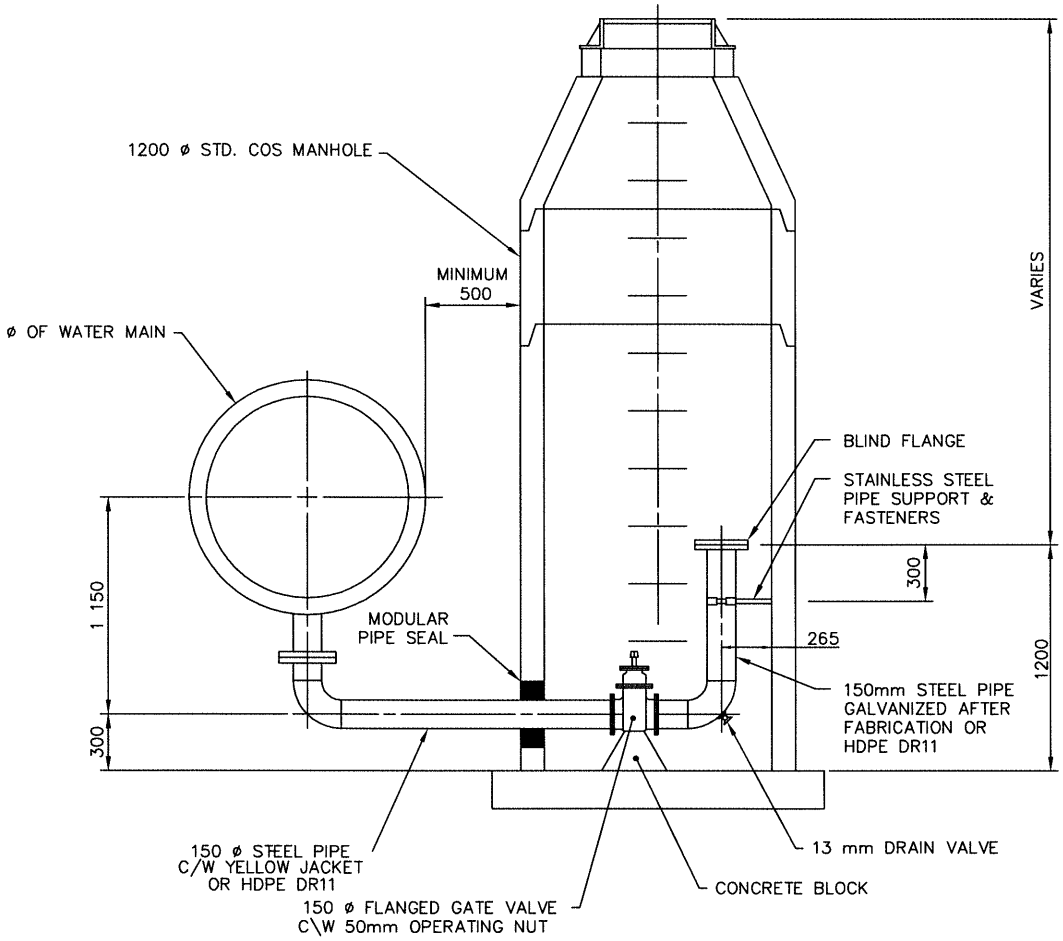
ENGINEER

ENGINEER

SCALES : HOR. 1:25

PLAN NO. 102-0012-004r002





* REFER TO THE STANDARD SPECIFICATION SECTION 15001–9 FOR APPROVED TAPPING SLEEVES.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS	
1	ADDED HDPE DR11 HLO 2013–01–03
2	ADDED SPECIFICIATION NOTE & LOWER BLIND FLG ASSEMBLY JAB – 2013 DEC 16
3	DECREASED DISTANCE BETWEEN MAIN AND MANHOLE HLO 2014–DEC–15
4	

DRAWN BY MJ

DATE 2003–04–02

City of Saskatoon
Infrastructure Services Department

PUMPED DRAIN STRUCTURE

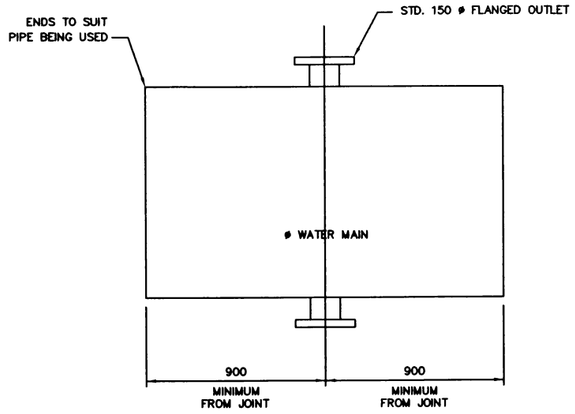
APPROVED

ENGINEER

ENGINEER

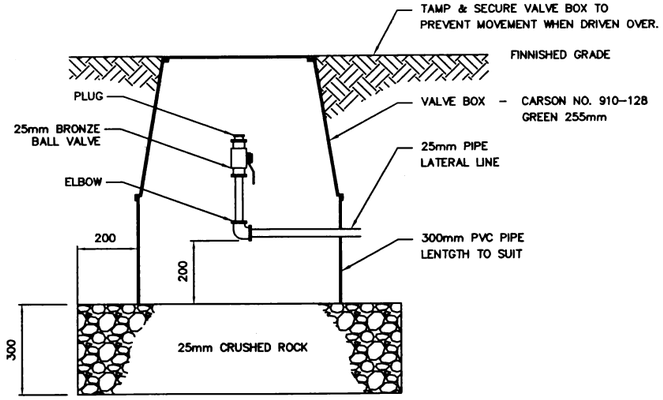
SCALES : HOR. 1:40

PLAN NO. 102–0012–005r004



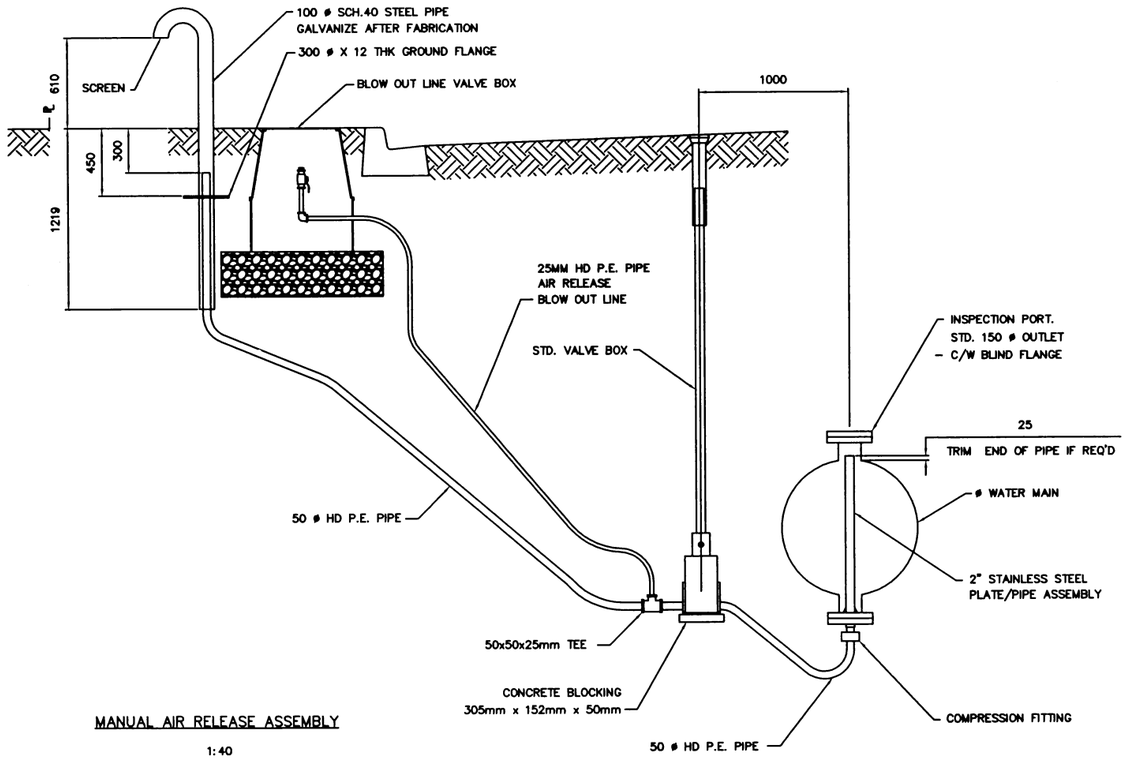
150 ø OUTLET

1:30



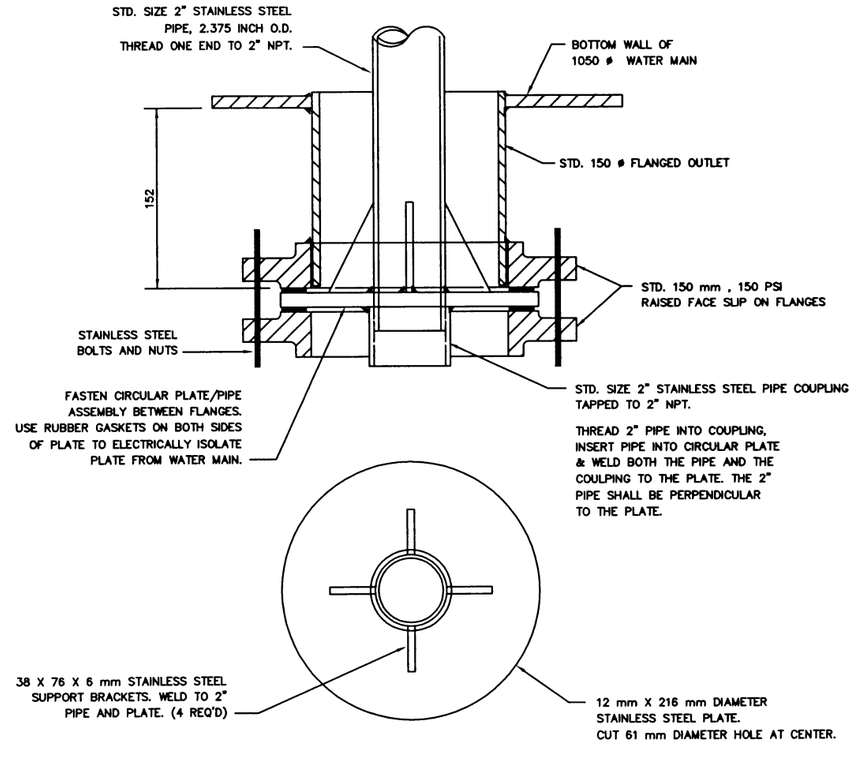
BLOW OUT LINE VALVE BOX

1:20



MANUAL AIR RELEASE ASSEMBLY

1:40



PLATE/PIPE ASSEMBLY

1:5

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

NO.	DESCRIPTION	DATE	BY
1	BASE PLAN MJ	03-04-02	
1	ADDED NOTE	07-04-03	LBKM
2	PE PIPE NOW REQUIRED INSTEAD OF COPPER APR 4,07		

STAMP

	MUNICIPAL ENGINEERING	PUBLIC WORKS
ENGINEER	April 04, 2007	
DRAWN BY		
DATE		
CHECKED BY	APR 4,07	
DATE		

City of Saskatoon
Infrastructure Services Department

MANUAL AIR RELEASE

C301/303 PIPE

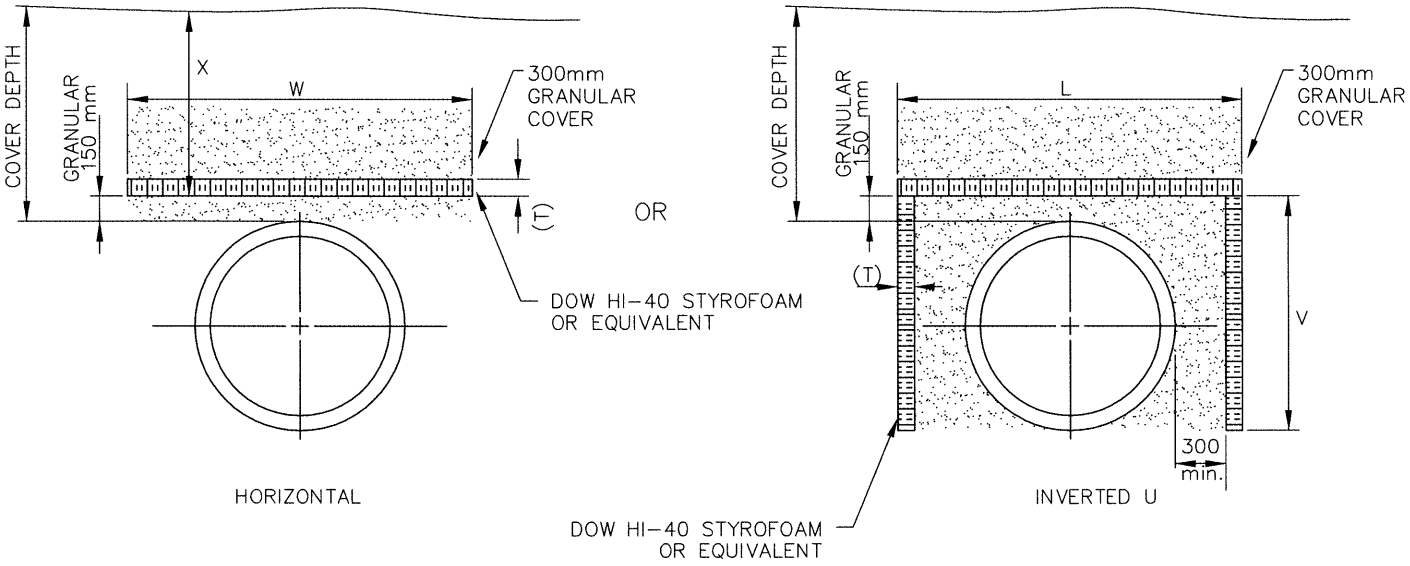
GENERAL MANAGER — APR 4/07

SCALES : HOR. AS SHOWN VERT. –

SHEET NO.

PLAN NO. 102-0012-006r002

COVER DEPTH m	THICKNESS (T) mm (IN)
1.1 - 1.4	90 (3.5)
1.4 - 1.7	75 (3.0)
1.7 - 2.0	75 (3.0)
2.0 - 2.3	50 (2.0)
2.3 - 2.6	40 (1.5)
2.6 - 2.9	40 (1.5)
BELOW 2.9	-



D = PIPE DIAMETER

W = D+2(2.9−X)−0.3

W = L+2V

V TO BE LESS THAN OR EQUAL TO L

NOTES:
1. ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED
2. APPLICABLE WHEN USING FILLCRETE OR GRANULAR BACKFILL
3. COMPRESSION STRENGTH OF STYROFOAM: 275 KPa (min)

PLAN DESCRIPTION/REVISIONS	
4	
3	CLARIFY D = PIPE DIAMETER 2015-DEC-01 HLO
2	RV UPDATE SPECS. 2012-NOV-20
1	JMH 06-01-25

DRAWN BY MJ

DATE 2003-04-02

SCALE : HOR. NTS VERT. _____

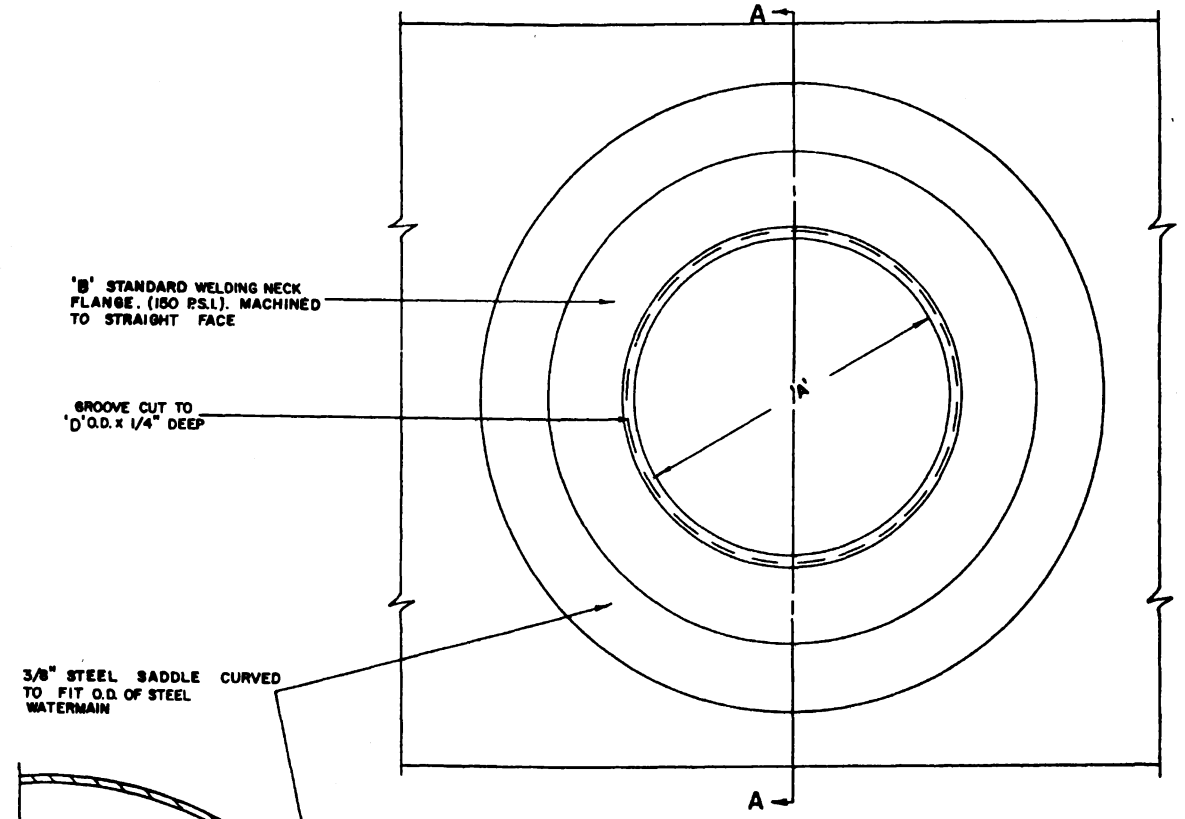
City of Saskatoon
Infrastructure Services Department

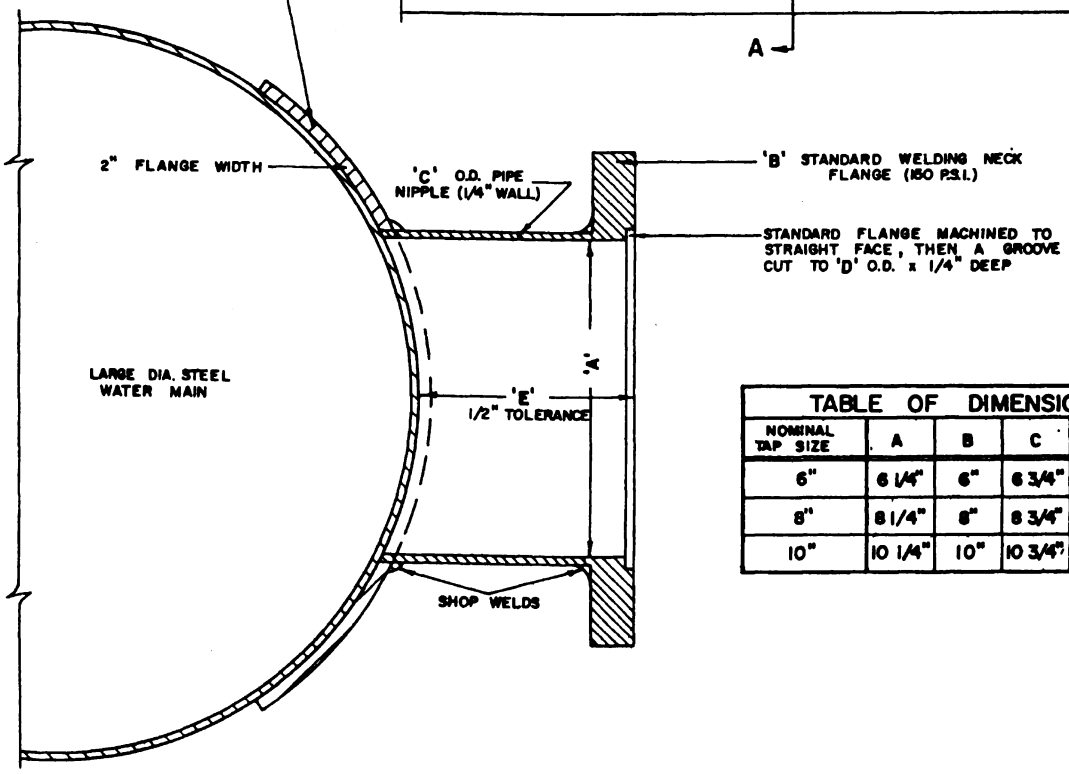
TYPICAL PIPE INSULATION

CHIEF ENGINEER JAN 0 8 2016
DATE

ENGINEER JAN 0 8 2016
DATE

PLAN NO. 102-0012-007r004





SECTION A-A

TABLE OF DIMENSIONS					
NOMINAL TAP SIZE	A	B	C	D	E
6"	6 1/4"	6"	6 3/4"	7"	6 1/2"
8"	8 1/4"	8"	8 3/4"	9"	6 1/2"
10"	10 1/4"	10"	10 3/4"	11"	7"

REVISIONS	
1	
2	
3	

DRAWN BY HLO
DATE 06-01-27

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

WELDED TYPE TAPPING SADDLE FOR LARGE DIAMETER STEEL WATERMAINS

APPROVED

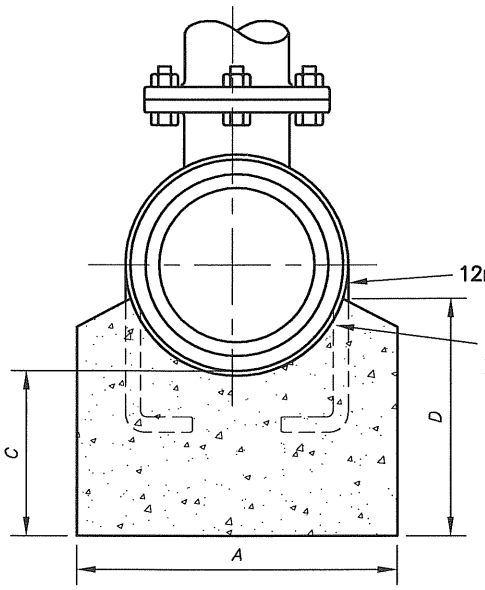
GENERAL MANAGER P. ENG.

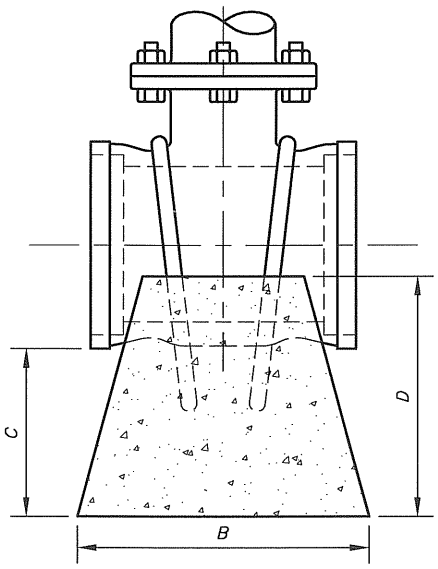
ENGINEER A. Boyko

ENGINEER

SCALES : HOR. ____ ____

PLAN NO. 102-0012-009r001





DIA	A	B	C	D
300	600	400	300	400
350	700	475	350	475
400	800	550	400	550

NOTE:
CONCRETE SHALL BE 20MPa AT
28 DAYS, AND BE SULPHATE RESISTANT

REVISIONS	
1	HLO 2007-01-22
2	ADDED 6 MIL POLY REQUIREMENT HLO 2010-12-14
3	

DRAWN BY RAM
DATE 2004-09-29

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

VALVE ANCHORING DETAILS FOR 300 MM & LARGER VALVES

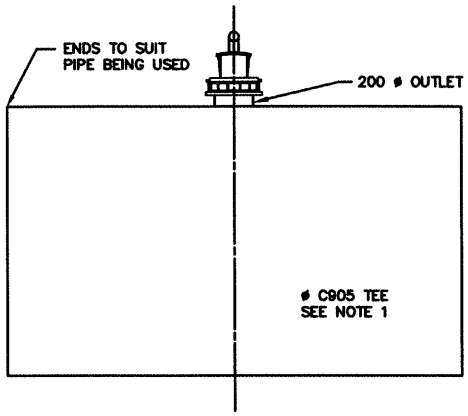
APPROVED

GENERAL MANAGER P. ENG.

ENGINEER

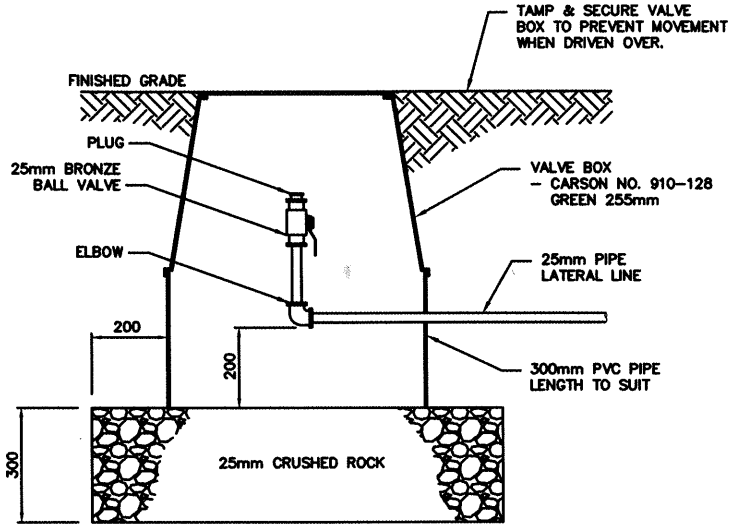
SCALES : HOR. 1:10

PLAN NO. 102-0012-010r003



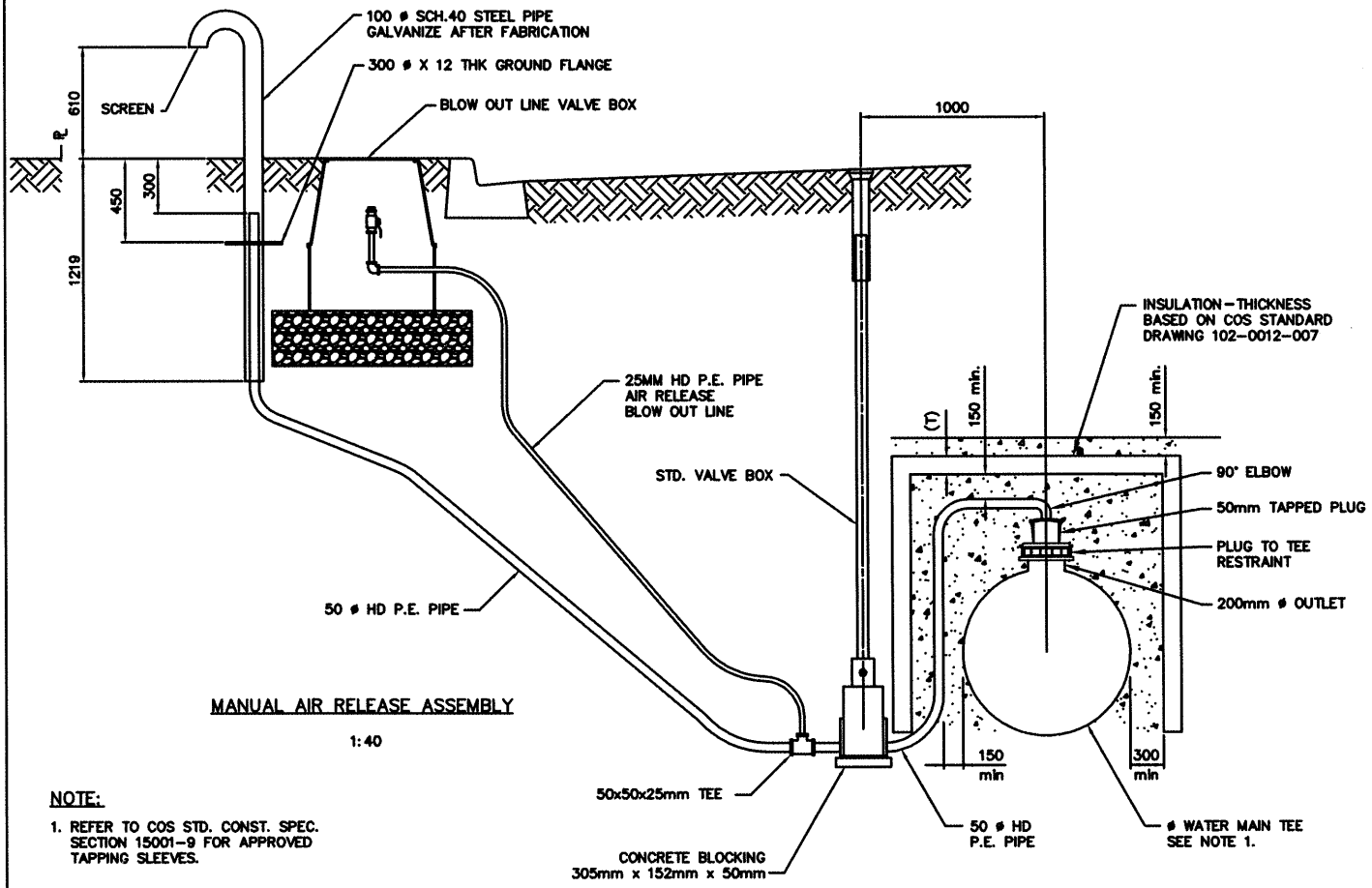
150 ø OUTLET

1:30



BLOW OUT LINE VALVE BOX

1:20



MANUAL AIR RELEASE ASSEMBLY

1:40

NOTE:

1. REFER TO COS STD. CONST. SPEC. SECTION 15001-9 FOR APPROVED TAPPING SLEEVES.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

PLAN DESCRIPTION/REVISIONS	
4	
3	MJ - 2014 DEC. 8
2	ADDED SPECIFICIATION NOTE JAB - 2013 DEC. 16
1	BASE - PE PIPE AIR REVISED

DRAWN BY LBKM

DATE 07-04-03

SCALE : HOR. AS SHOWN VERT. _____

City of Saskatoon
Transportation & Utilities Department

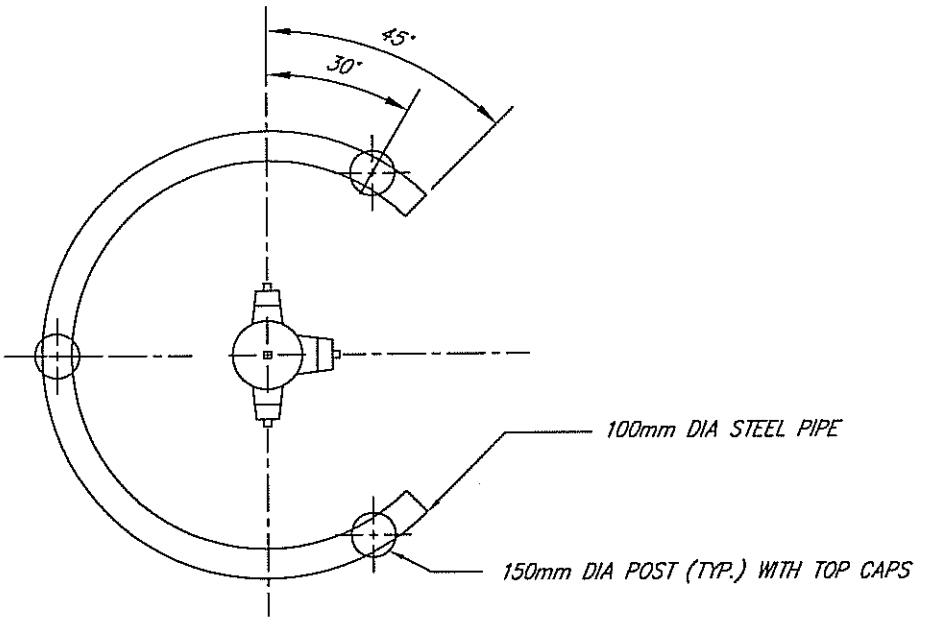
MANUAL AIR RELEASE
C905 PIPE

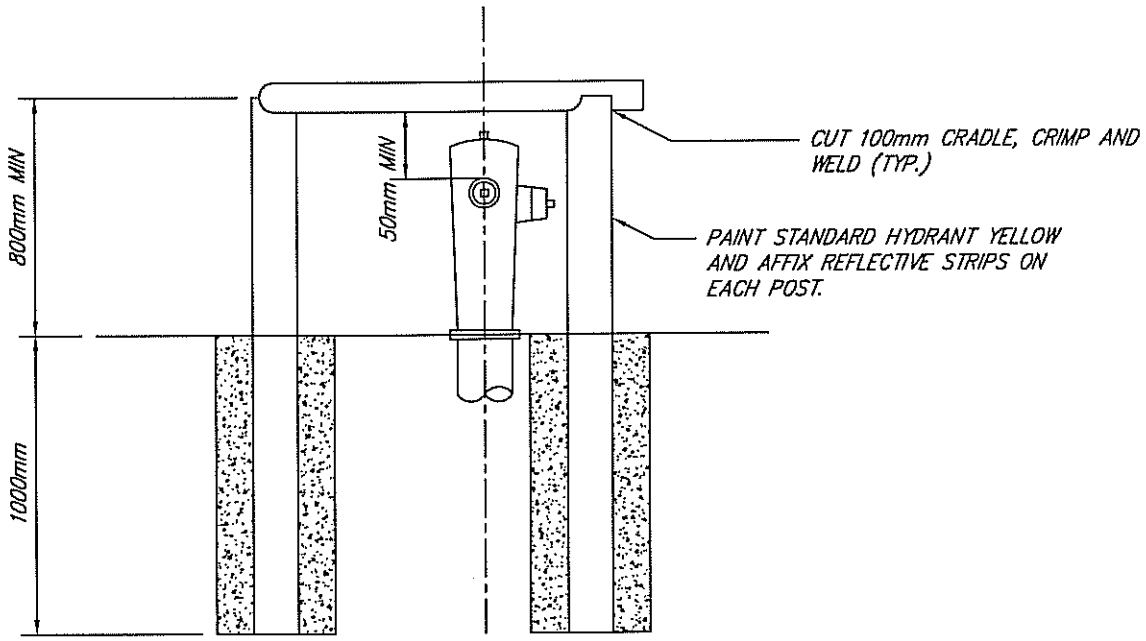
APPROVED

ENGINEER

ENGINEER

PLAN NO. 102-0012-011r003





REVISIONS	
1	
2	
3	

DRAWN BY RWDT
DATE 08-10-14

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

CIRCULAR HYDRANT GUARD

APPROVED

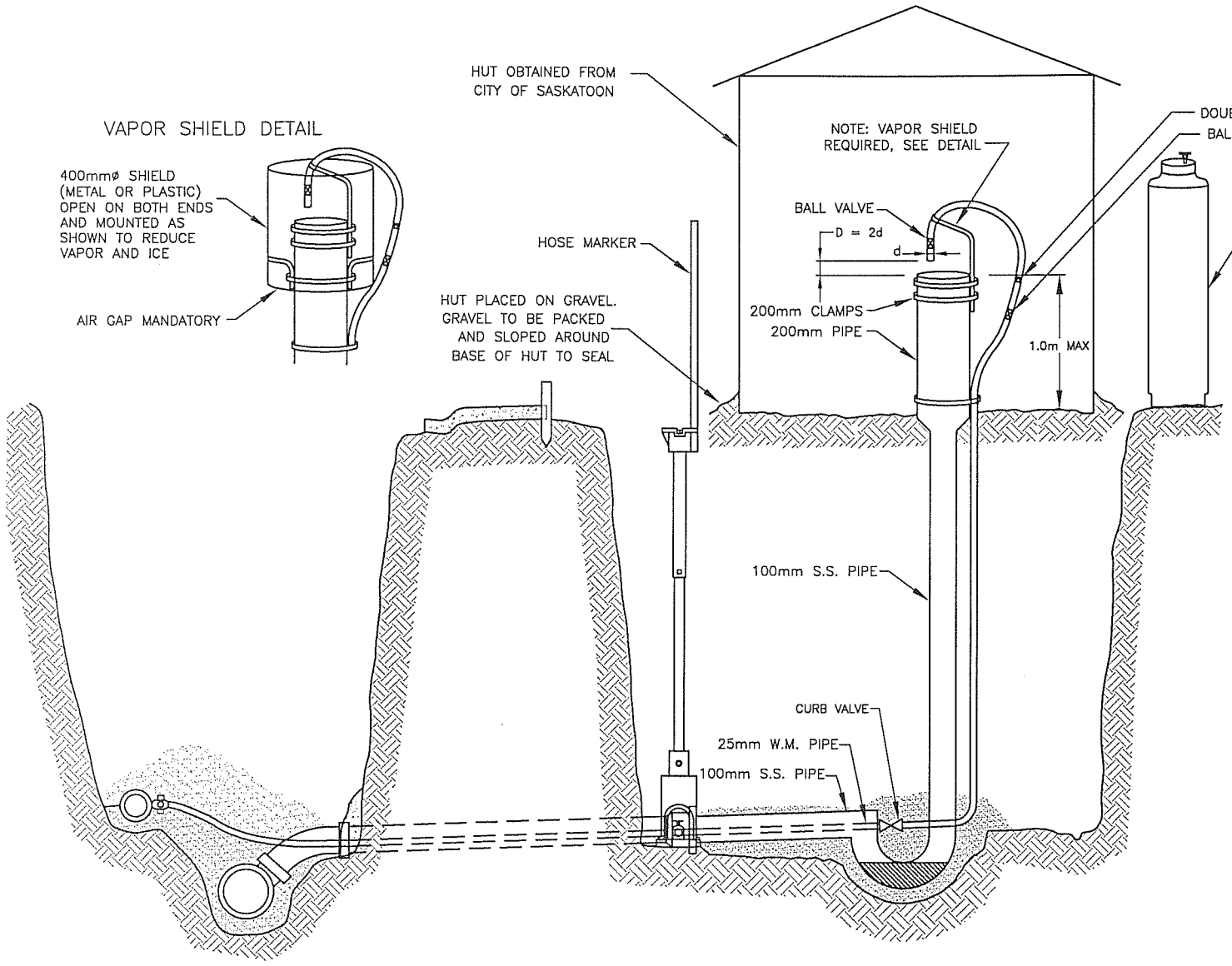
GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER

SCALES : HOR. 1:25

PLAN NO. 102-0012-012r001



NOTES ON HUT

- PLACED ON LEVEL GROUND AROUND CIRCULATOR
- DIMENSIONS ARE 4' x 4' x 5' HIGH
- MADE OF 2 X 4 FRAMING WITH 1/2" PLYWOOD AND ENCASED IN METAL CLADDING
- INTERIOR LINED WITH 1–1/2" INSULATION
- INCLUDES A LOCKING DOOR
- CONTAINS PROPANE HEATER SUFFICIENT TO KEEP INTERIOR TEMPERATURE ABOVE ZERO
- FOR CITY OF SASKATOON PROJECTS, THE WATER CIRCULATOR SERVICE CONNECTION AND HUT ARE MADE AVAILABLE TO THE CONTRACTOR

REVISIONS		
3		
2		
1	09–12–04	HLO
DRAWN BY LBKM	DATE 07–09–04	

APPROVED

GENERAL MANAGER — DATE Dec 21, 09

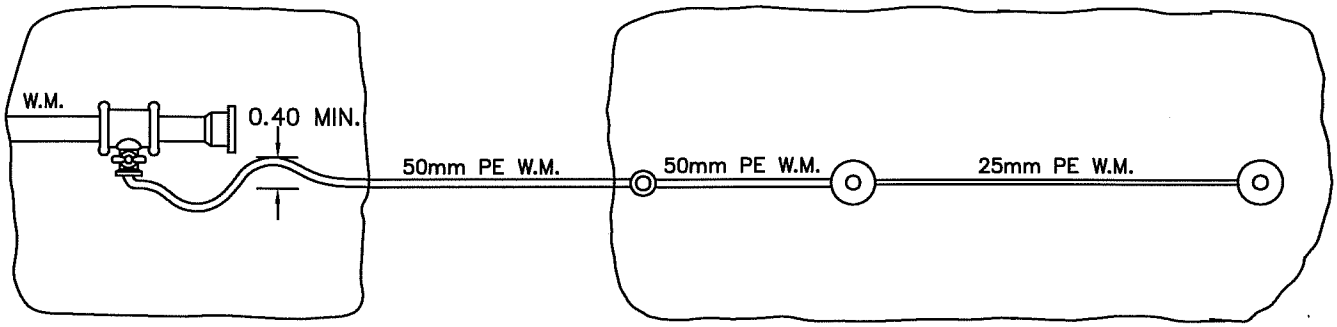
ENGINEER — DATE Dec 15/09

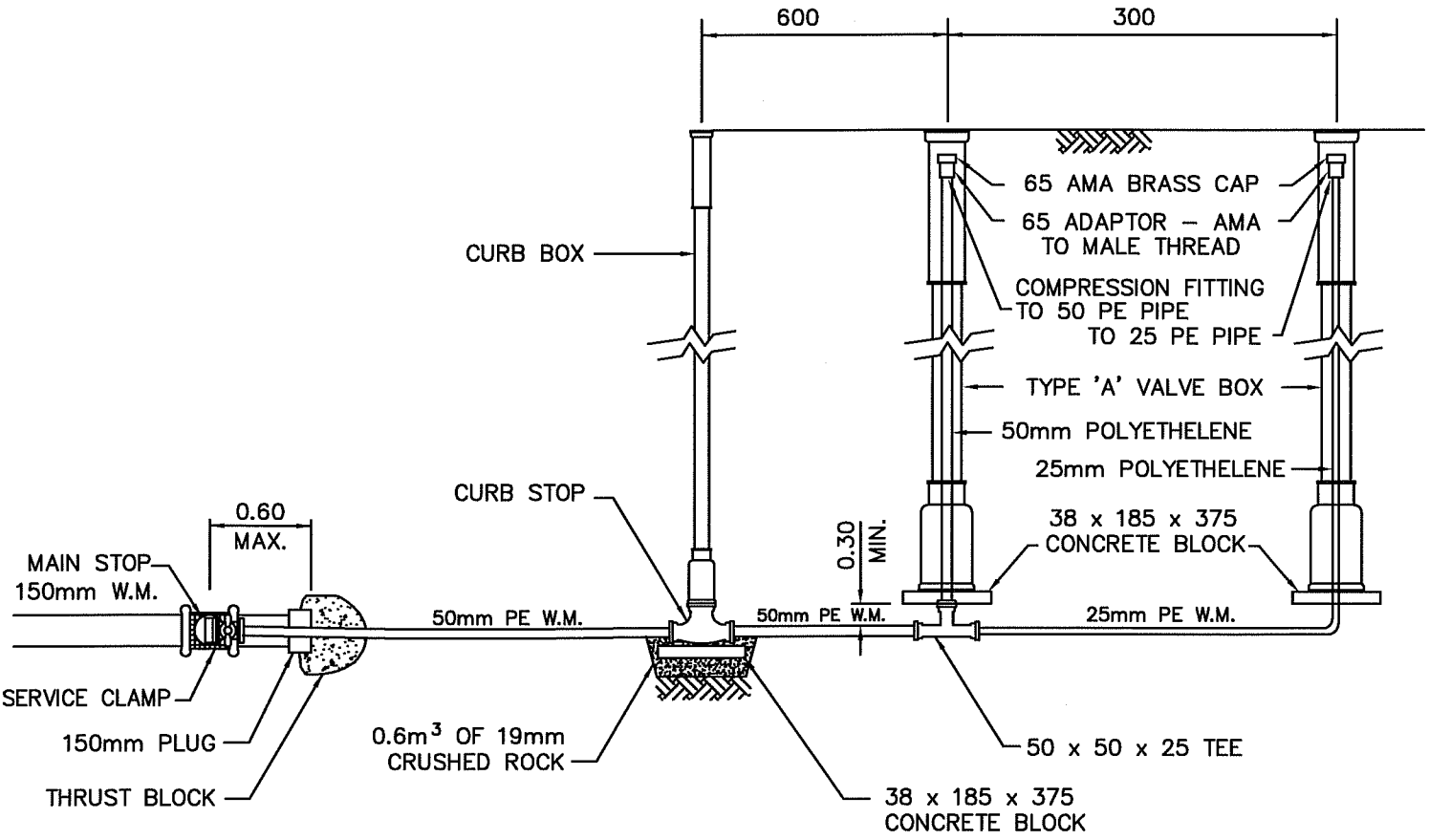
City of Saskatoon
Infrastructure Services Department

WATER CIRCULATOR SERVICE CONNECTION

SCALE : HOR. NTS VERT.

102–0012–013r001





ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS		
1	HLO	2012-01-05
2		
3		

DRAWN BY HLO
DATE 2009-12-10

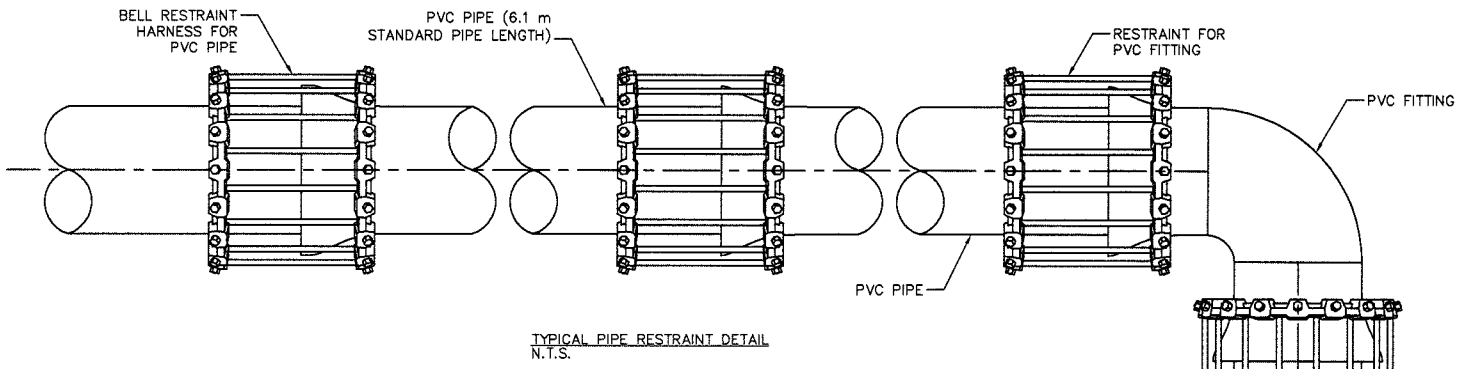
City of Saskatoon
Infrastructure Services Department

POLYETHELENE DEAD END WATER MAIN FLUSHER

APPROVED
GENERAL MANAGER: Jan 6, 2012 P. ENG.
ENGINEER
ENGINEER

SCALES : HOR. NTS VERT. ____

PLAN NO. 102-0012-014r002



TYPICAL PIPE RESTRAINT DETAIL
N.T.S.

NOTES:

1. ALL PRIMARY WATER MAINS (PIPE DIAMETER >400mm) SHALL BE DESIGNED WITH PIPE RESTRAINERS UNLESS SPECIFIED OTHERWISE.
2. ALL PIPE RESTRAINER PRODUCTS SHALL CONFORM TO ASTM A536, ASTM F1674, AND AWWA C111.
3. ALL PIPE RESTRAINER PRODUCTS SHALL BE APPROVED BY THE ENGINEER AND OR SHALL BE LISTED ON THE CITY OF SASKATOON APPROVED PRODUCT LIST IN CONSTRUCTION MATERIALS FOR WATER MAINS SECTION 15001-3.
4. ALL THE JOINT RESTRAINING DEVICES SHALL BE TAPE COATED WITH DENSO WRAP/PASTE AS DETAILED IN SECTION 01005-31 OF THE SPECIFICATION.

BELL RESTRAINT HARNESS FOR C905 PVC PIPE (OR APPROVED EQUIVALENT)

NOMINAL PIPE SIZE	PIPE OD	MAXIMUM BELL OD CLEARANCE	THRUST BOLT	OVERALL LENGTH
in/mm	in/mm	in/mm	NUMBER	in/mm
18/450	19.5/495	24.88/632	6	27.76/705
20/525	21.6/549	27.13/689	7	30.01/762
24/600	25.8/655	31.63/803	8	35/889
30/750	32.0/813	39.25/997	10	42.88/1089
36/900	38.3/973	46.13/1172	12	49.76/1264
42/1050	44.5/1130	49.00/1245	14	54.12/1375
48/1200	50.8/1290	56.00/1422	16	61.08/1551

RESTRAINT FOR C905 PVC PIPE AT PVC FITTINGS (OR APPROVED EQUIVALENT)

NOMINAL PIPE SIZE	PIPE OD	MAXIMUM BELL OD CLEARANCE	THRUST BOLT	OVERALL LENGTH
in/mm	in/mm	in/mm	NUMBER	in/mm
18/450	19.5/495	24.88/632	6	18/457
20/525	21.6/549	27.13/689	7	18/457
24/600	25.8/655	31.63/803	8	28/711
30/750	32.0/813	39.25/997	10	28/711
36/900	38.3/973	46.13/1172	12	28/711
42/1050	44.5/1130	49.00/1245	14	36/914
48/1200	50.8/1290	56.00/1422	16	48/1219

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	RESTRAINT JOINTS ON PVC PIPE

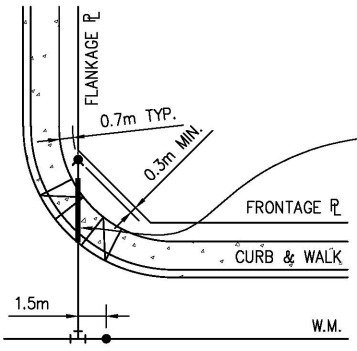
DRAWN BY HCS
DATE 2013-JUN-04
SCALE : HOR. NTS VERT. ____

City of Saskatoon
Infrastructure Services Department

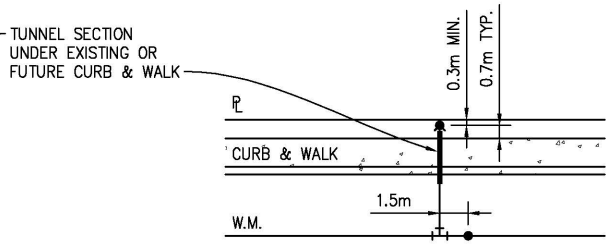
RESTRAINT JOINTS ON C905 PVC PIPE

APPROVED
GENERAL MANAGER
ENGINEER
ENGINEER

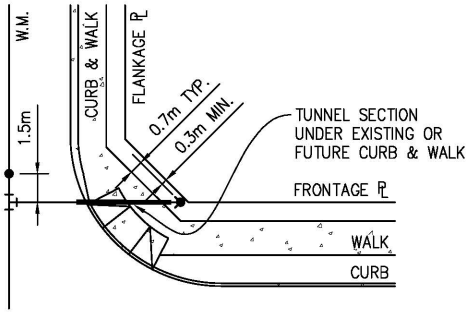
PLAN NO. 102-0012-015r001



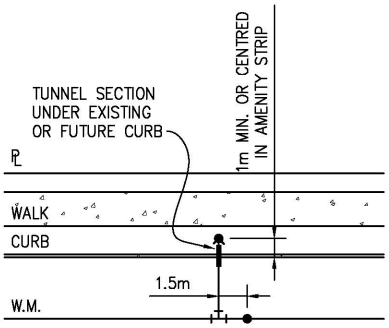
RESIDENTIAL
LOCAL–LOCAL INTERSECTION



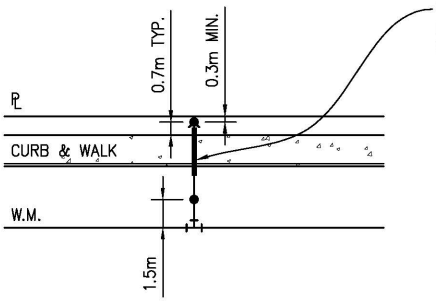
RESIDENTIAL
LOCAL MID–BLOCK



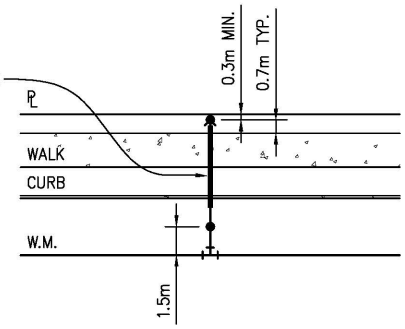
RESIDENTIAL
LOCAL–COLLECTOR INTERSECTION



RESIDENTIAL
COLLECTOR MID–BLOCK



COMMERCIAL (INDUSTRIAL)
LOCAL MID–BLOCK



COMMERCIAL (INDUSTRIAL)
COLLECTOR MID–BLOCK

NOTES:

1. ALL HYDRANT LEADS CONNECTED TO MAINS 300mm OR LARGER SHALL BE VALVED.
2. ALL HYDRANT LEADS IN COMMERCIAL, INDUSTRIAL, AND HIGH DENSITY RESIDENTIAL AREAS SHALL BE VALVED.
3. VALVES ON MAINS SHALL BE INSTALLED PER CITY'S STANDARDS.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2013–DEC–12	JAB
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2022–AUG–02	DLH
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2022–AUG–02	DLH

City of Saskatoon

FIRE HYDRANT
STANDARD LOCATIONS

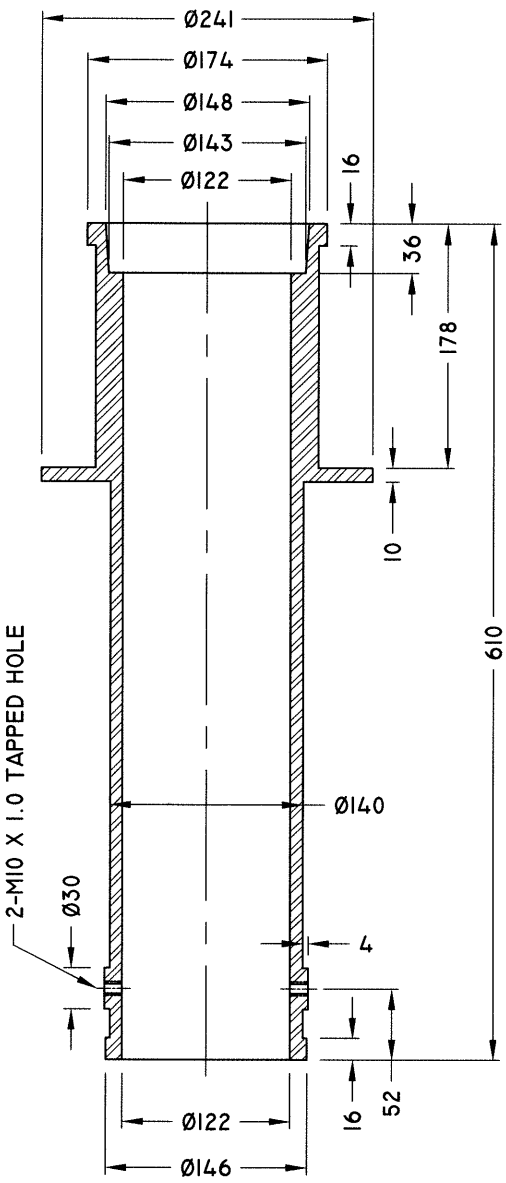
APPROVALS

SIGNATURE	SIGNATURE
Nisar Khan	Mitchell Parker
NAME	NAME
Jan 19, 2023	Jan 19, 2023
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:400 VERT.

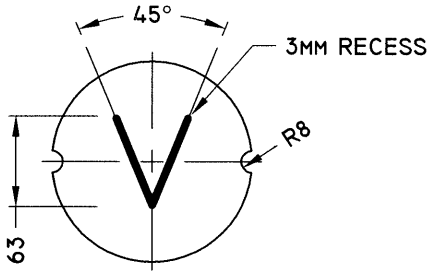
PLAN NO. 102–0012–016r002

TOP WITH FLANGE

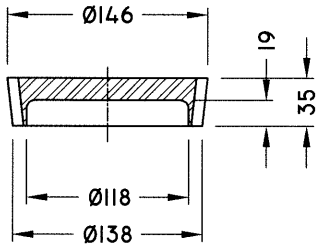


SECTION THRU MAIN BODY

LID



PLAN



SECTION

CAST IRON FUSION BONDED EPOXY

UNLESS OTHERWISE SPECIFIED THE MATERIALS AND APPLICATION OF THIS COATING SHALL CONFORM TO THE AWWA STANDARD C213-96.
THE COATING MATERIAL SHALL BE A 100% SOLID, THERMOSETTING, FUSION BONDED, DRY POWDER EPOXY RESIN, APPROVED FOR CONTACT WITH POTABLE WATER BY THE NATIONAL SANITATION FOUNDATION (NSF). POWDERS SHALL BE ONE OF THE FOLLOWING PRODUCTS OR APPROVED EQUAL:

VALSPAR, D 1003 LD
VALSPAR, G 1003 RB
NAP-GARD MARK X 7-2500
3M, SCOTCHKOTE 134

THE SURFACE PREPARATION SHALL CONFORM TO SEC. 3.2 OF THE AWWA STANDARD C213-96. THESE COATINGS SHALL BE THE FLUIDIZED BED METHOD OR THE ELECTROSTATIC POWDER SPRAY GUN METHOD. THE COATING THICKNESS SHALL BE 0.50MM (15 MIL) MINIMUM, 0.64MM (20 MIL) MAXIMUM.

MATERIAL SPECIFICATIONS AND MASS:
GREY CAST IRON CLASS 20 ASTM A48 (LATEST EDITION)

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	

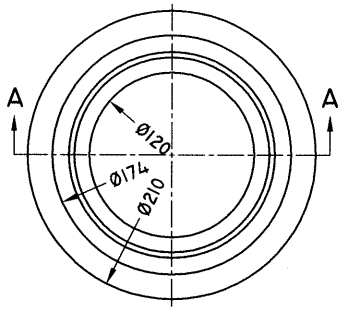
DRAWN BY HLO
DATE 2015-DEC-31
SCALE : HOR. NTS VERT. NTS

City of Saskatoon
Transportation & Utilities Department

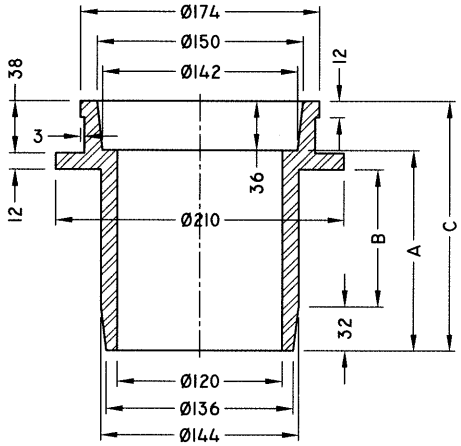
TYPE 'C' VALVE BOX TOP AND LID

CHIEF ENGINEER JAN 0 8 2016
DATE
ENGINEER
ENGINEER

PLAN NO. 102-0012-017r001



PLAN



SECTION A-A

MASS	RING \ DIM	A	B	C
5.13KG(11.40LBS)	NO.1	50	0	86
5.49KG(12.2ILBS)	NO.2	75	25	III
5.99KG(13.3ILBS)	NO.3	100	50	136
7.56KG(16.80LBS)	NO.4	150	100	186

* GENERAL TOLERANCES - ±1
* NO DEVIATION SHALL BE ACCEPTABLE FOR DIMENSIONS WHICH ARE LESS THEN 10MM

MATERIAL SPECIFICATIONS AND MASS:
GREY CAST IRON CLASS 20 ASTM A48 (LATEST EDITION)

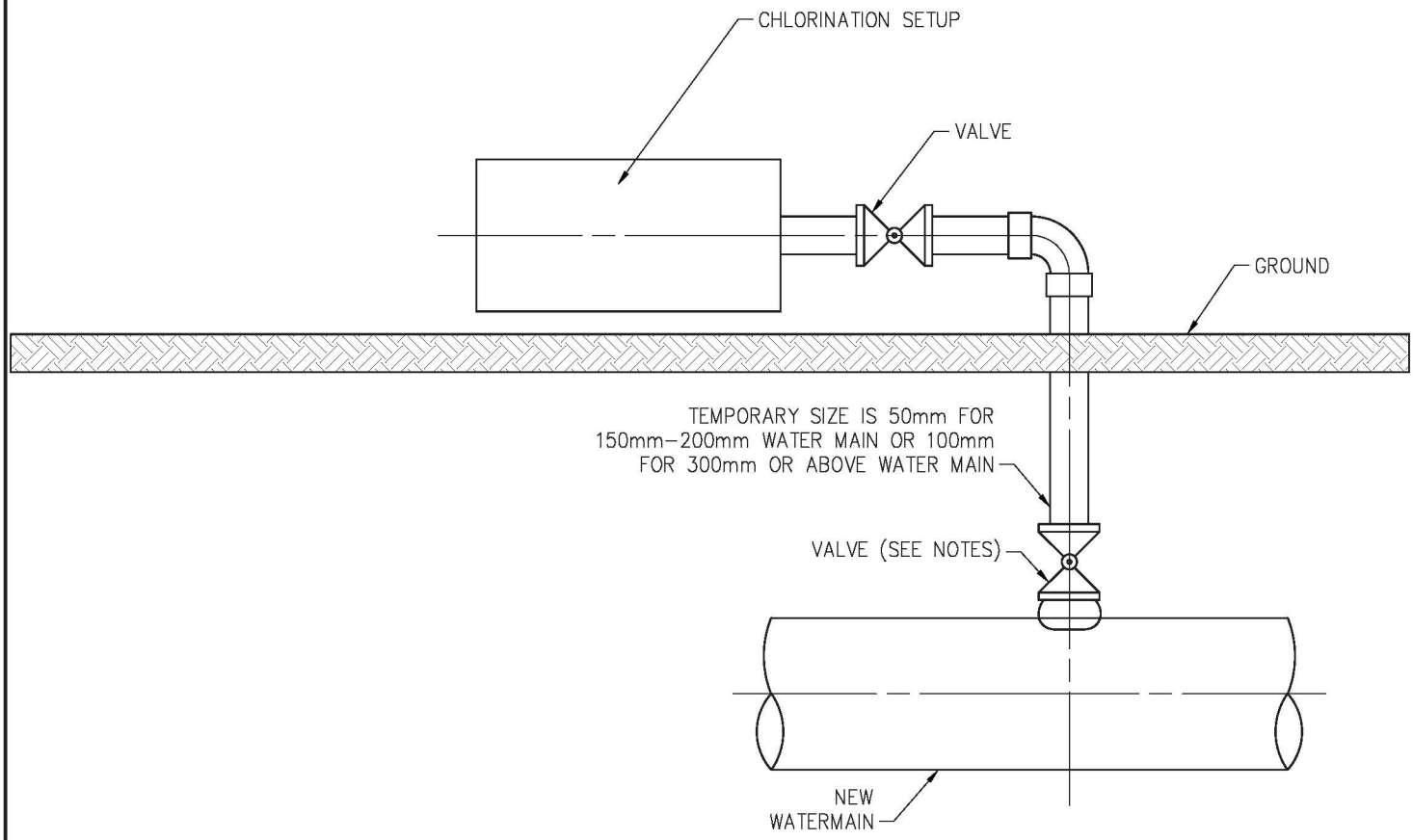
PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	

DRAWN BY HLO
DATE 2015-DEC-31
SCALE : HOR. NTS VERT. NTS

City of Saskatoon
Transportation & Utilities Department

TYPE 'C' LIFTER RINGS

CHIEF ENGINEER
JAN 0 8 2016
DATE
ENGINEER
ENGINEER
PLAN NO. 102-0012-018r001



NOTES
1) GATE VALVE FOR 100mm TAPPING
2) MAIN STOP FOR 25mm AND 50mm TAPPINGS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD SPECIFICATION DRAWING	2021-MAY-03	IJK

City of Saskatoon

CHLORINE INJECTION POINT

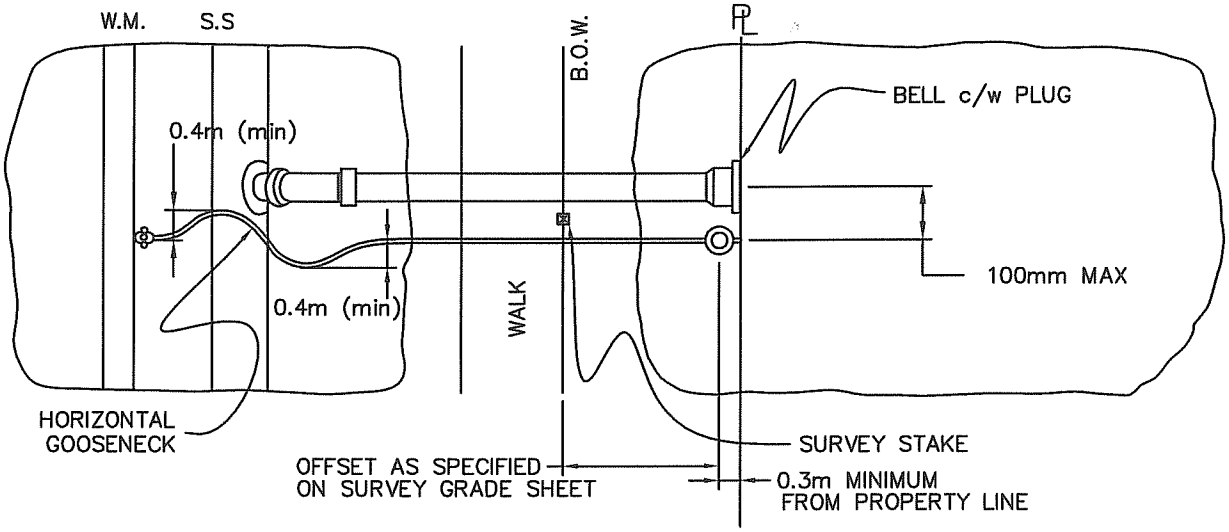
APPROVALS

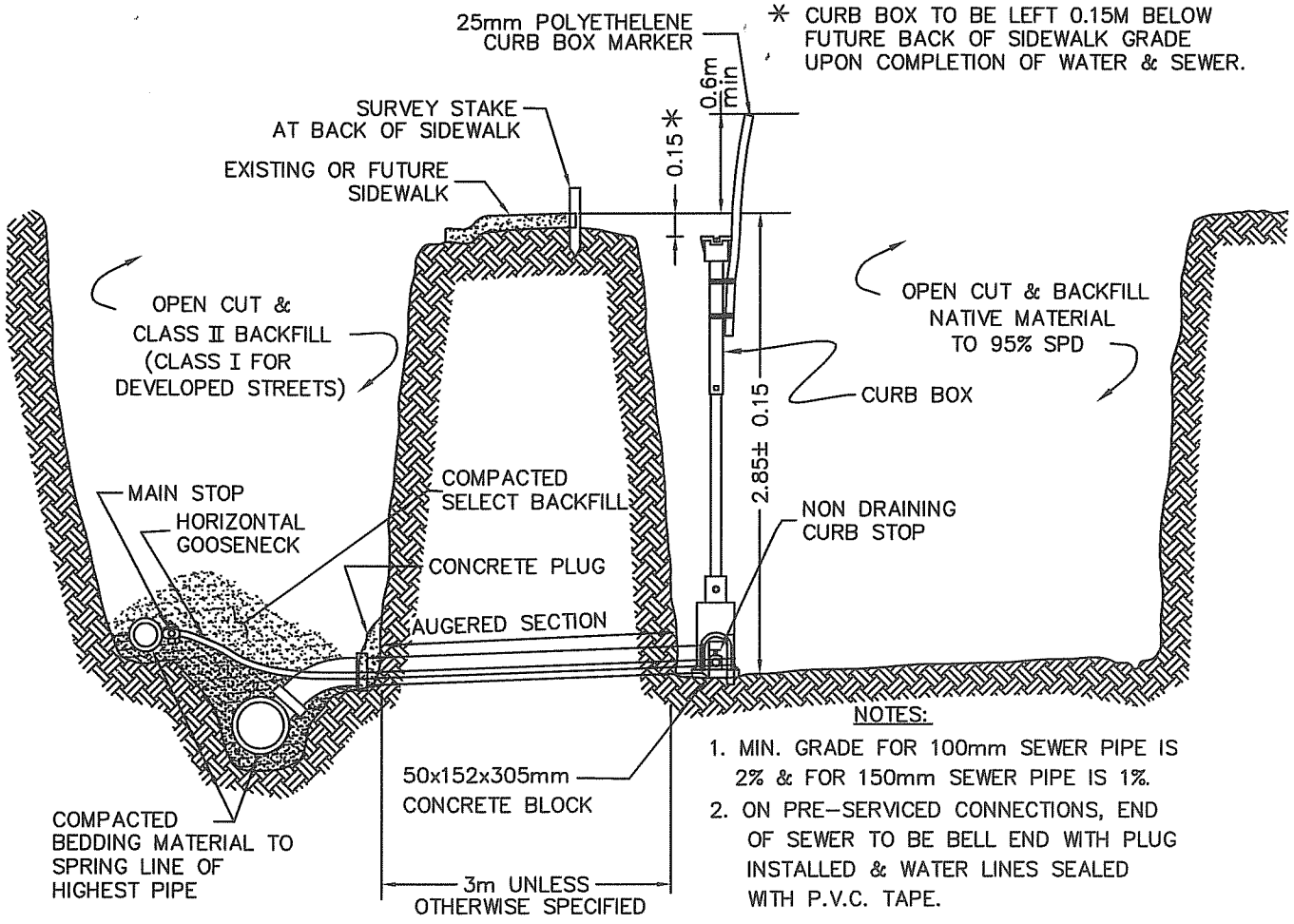
Sohrab Khan
Sohrab Khan (May 3, 2021 19:17 MDT)
SIGNATURE
Sohrab Khan
NAME
May 3, 2021
DATE SIGNED

SIGNATURE
Maciej Jurkiewicz
NAME
May 3, 2021
DATE SIGNED

SCALES:
HOR. 1:10
VERT.

PLAN NO.
102-0012-025r001





NOTES:

1. MIN. GRADE FOR 100mm SEWER PIPE IS 2% & FOR 150mm SEWER PIPE IS 1%.
2. ON PRE-SERVICED CONNECTIONS, END OF SEWER TO BE BELL END WITH PLUG INSTALLED & WATER LINES SEALED WITH P.V.C. TAPE.

REVISIONS		
1	RBY	02/07/2000
2	JMH	22/01/2003
3	JMH	30/04/2003
4	ADDED NOTES REGARDING CURB BOX HEIGHT & MARKER HLO	10/12/2009
5	REVISED CURB BOX HEIGHT AND BACKFILL MATERIAL NOTES HLO	03/01/2013

DRAWN BY G.R.F.
DATE MAR. 30, 1992

City of Saskatoon
Infrastructure Services Department

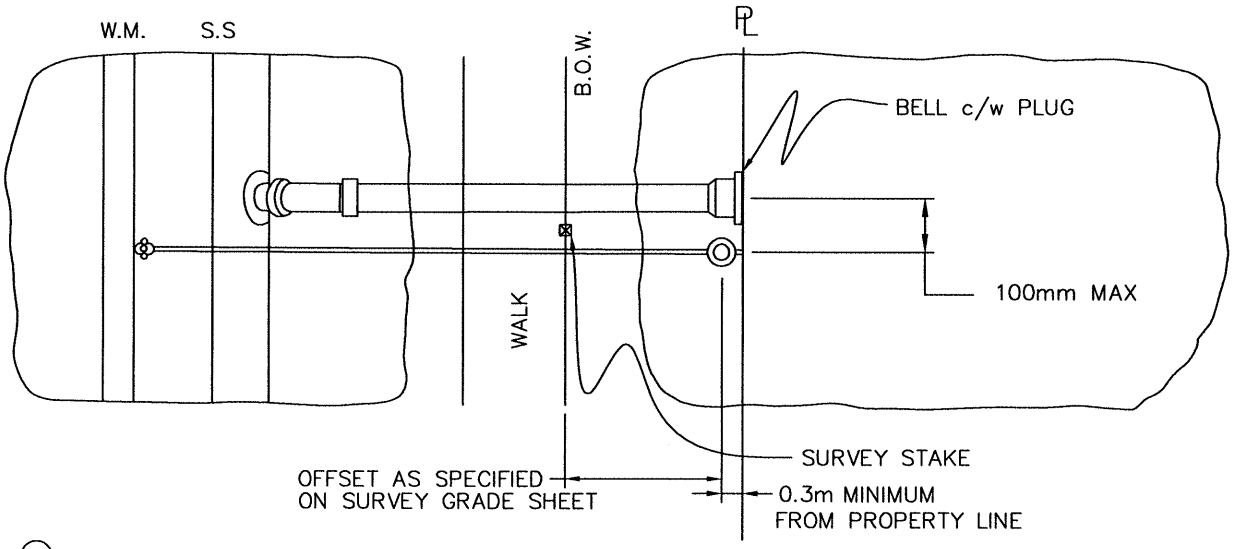
TYP. SEWER & POLYETHELENE WATER SERVICE CONNECTION

APPROVED

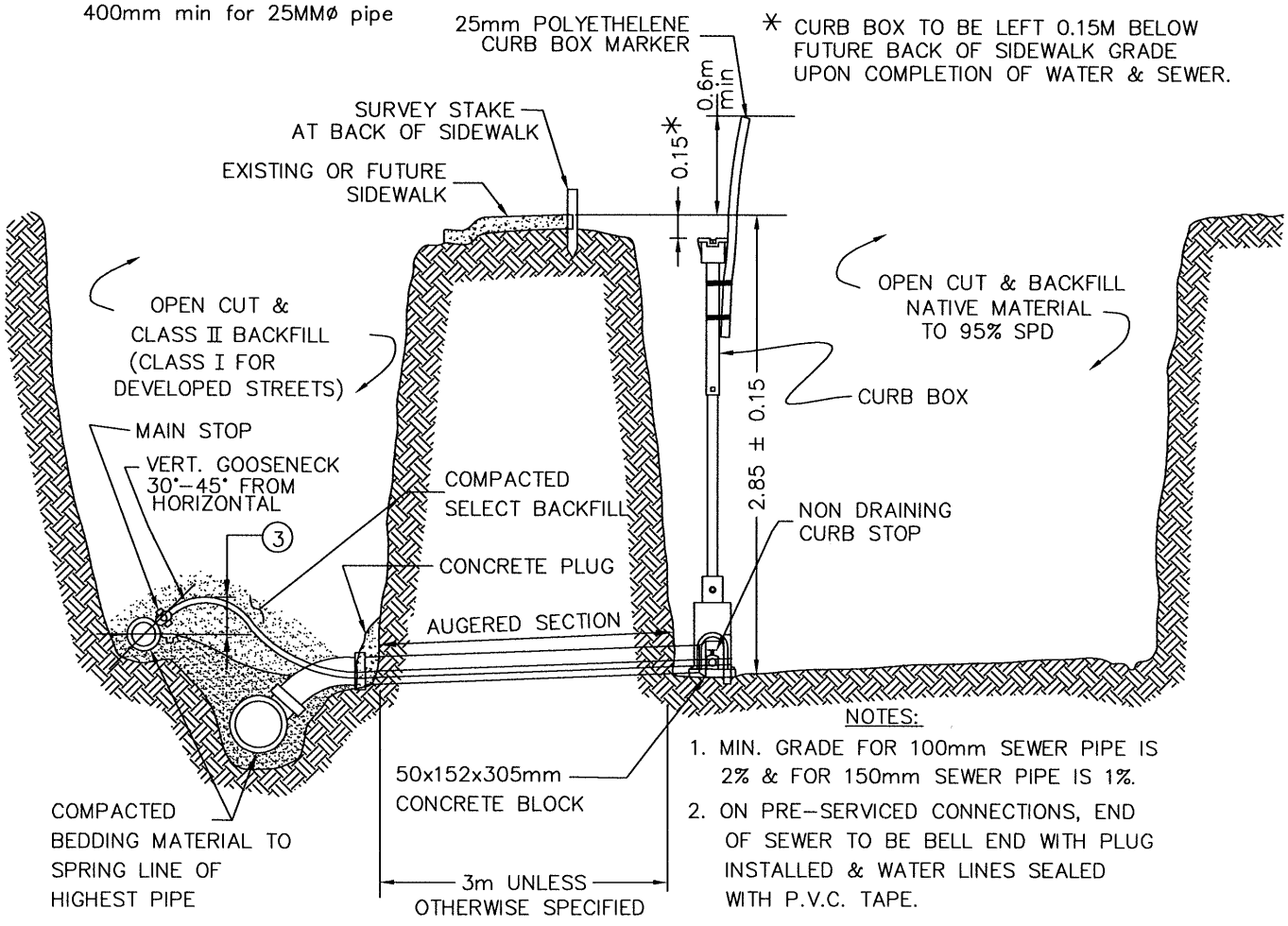
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER

SCALES : HOR. NTS VERT.

PLAN NO. 102-0013-001r005



(3) 300mm min for 19mmø pipe
400mm min for 25MMø pipe



NOTES:

1. MIN. GRADE FOR 100mm SEWER PIPE IS 2% & FOR 150mm SEWER PIPE IS 1%.
2. ON PRE–SERVICED CONNECTIONS, END OF SEWER TO BE BELL END WITH PLUG INSTALLED & WATER LINES SEALED WITH P.V.C. TAPE.

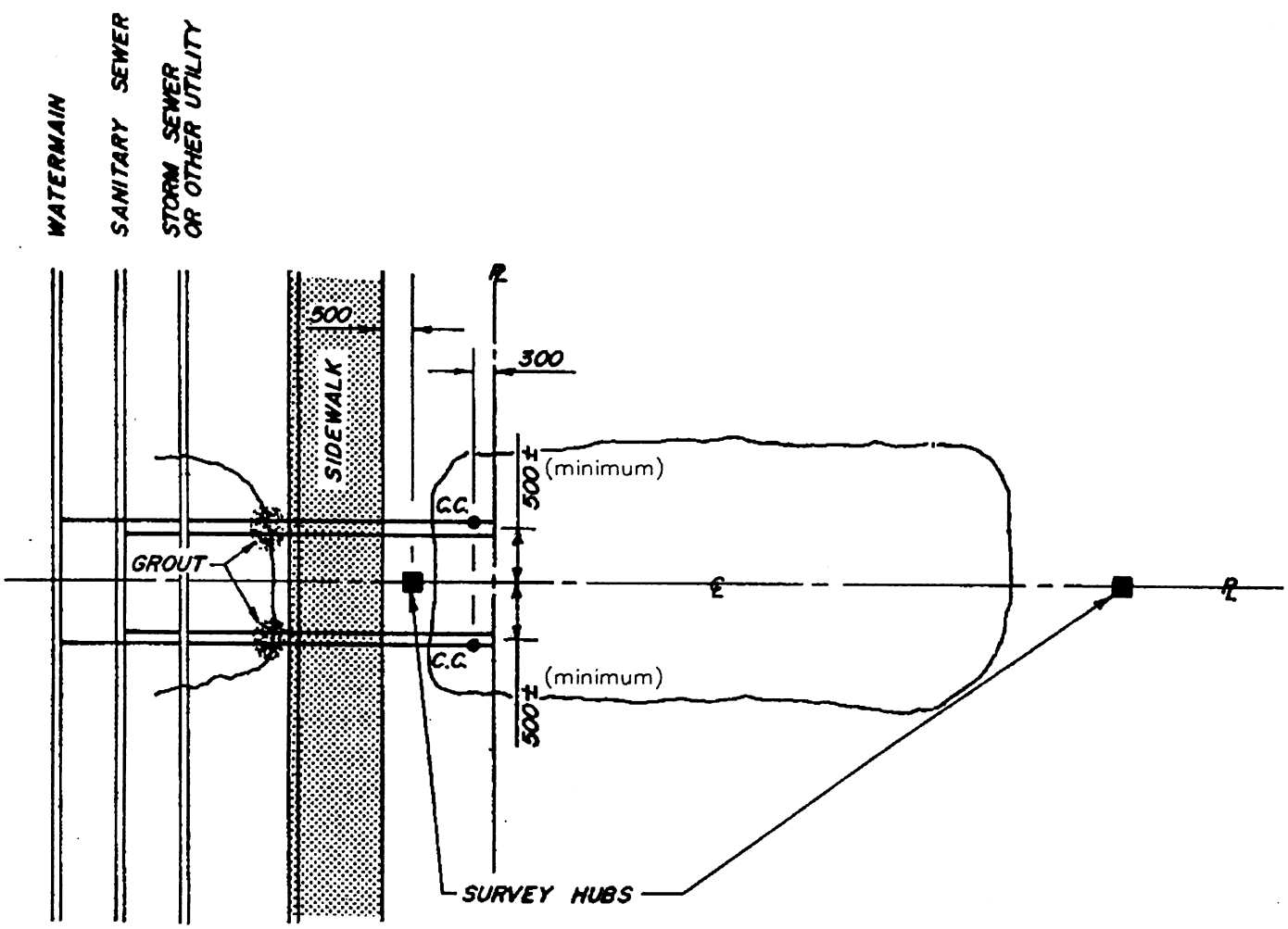
REVISIONS	
1	RBY 02/07/2000
2	JMH 22/01/2003
3	JMH 30/04/2003
4	ADDED NOTES REGARDING CURB BOX HEIGHT & MARKER HLO 20/11/2009
5	CHANGE NOTE REGARDING CURB BOX HEIGHT REQUIREMENT HLO 2013–DEC–11

DRAWN BY G.R.F.
DATE MAR. 30, 1992

City of Saskatoon
Infrastructure Services Department

TYP. SEWER & COPPER WATER SERVICE CONNECTION

APPROVED
JW 6.14
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. NTS VERT.
PLAN NO. 102–0013–002r005



1. CURB BOX (WATER LINES) TO BE LAYED TO THE OUTSIDE
2. CENTER LINE MUST BE LOCATED @ DUPLEX E.O.P.s
3. GRADES FOR BOTH CONNECTIONS WILL BE IDENTICAL UNLESS OTHERWISE STIPULATED.
4. DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SHOWN.

REVISIONS	
1	RBY 02/02/2000
2	
3	

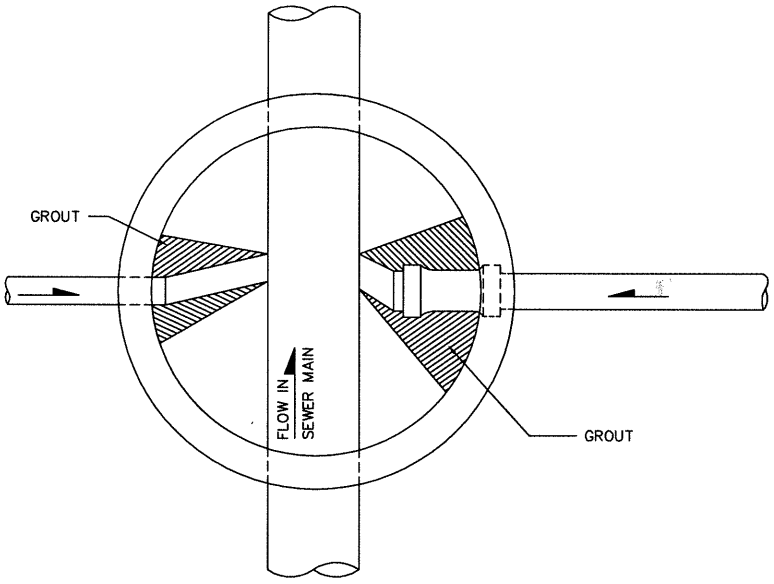
DRAWN BY R.F.
DATE APR. 1, 1992
CHECKED BY
DATE

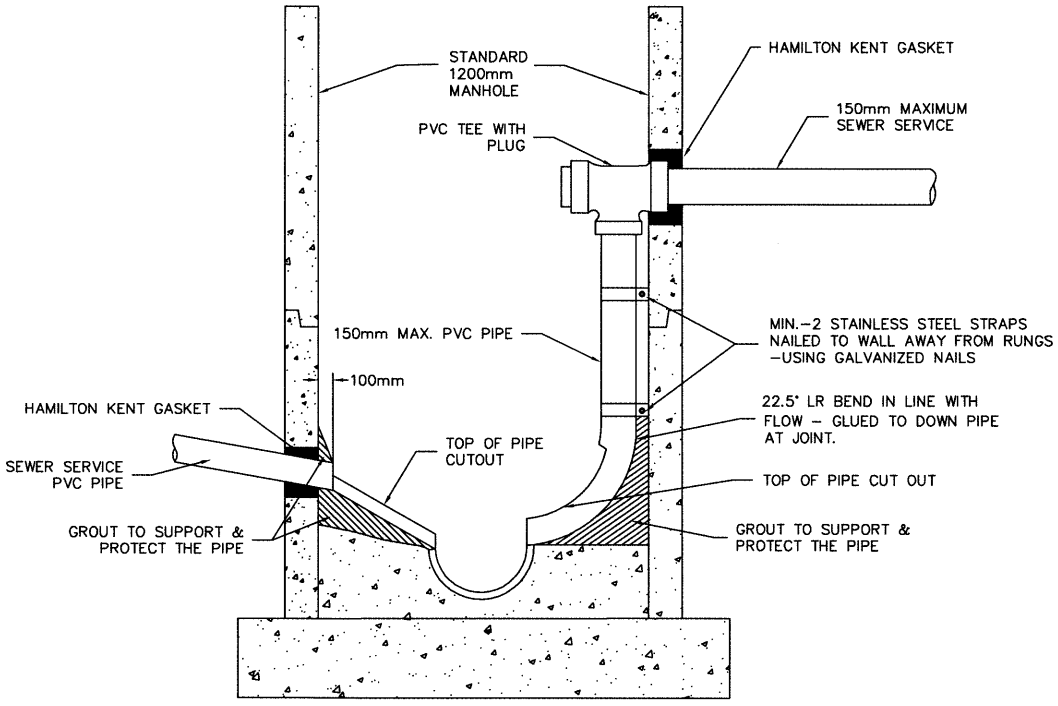
City of Saskatoon
INFRASTRUCTURE SERVICES

TYPICAL DUPLEX WATER AND SEWER SERVICE CONNECTIONS

08025-3

APPROVED
GENERAL MANAGER P. ENG.
A. Boyko
ENGINEER
ENGINEER
SCALES : HOR. N.T.S. VERT.
PLAN NO. 102-0013-003r001





NOTES:

1) INTERIOR DROP STRUCTURE TO BE USED WHERE DIFFERENCE BETWEEN MAIN AND SERVICE PIPE CROWNS EXCEEDS 750mm.

2) SERVICE ENTRANCE & DROP STRUCTURE MUST BE LOCATED CLEAR OF MH RUNGS.

3) MAXIMUM 150mm DIAMETER SERVICE PIPE FOR INTERNAL DROP STRUCTURES.

REVISIONS	
1	RBY 2000-08-02
2	HLO 2012-01-05
3	DJC 2012-01-05

DRAWN BY E.D.N.
DATE APR. 1, 1992

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

INTERIOR DROP STRUCTURE AT SANITARY SEWER MANHOLE

APPROVED

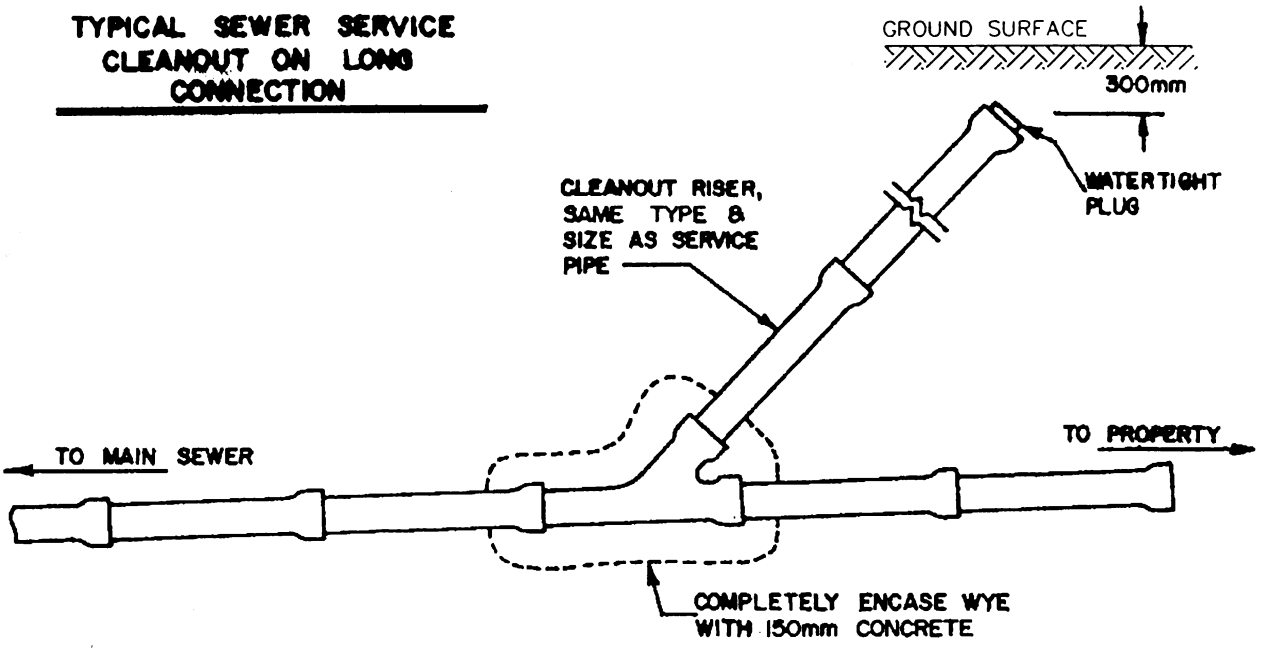
ENGINEER

ENGINEER

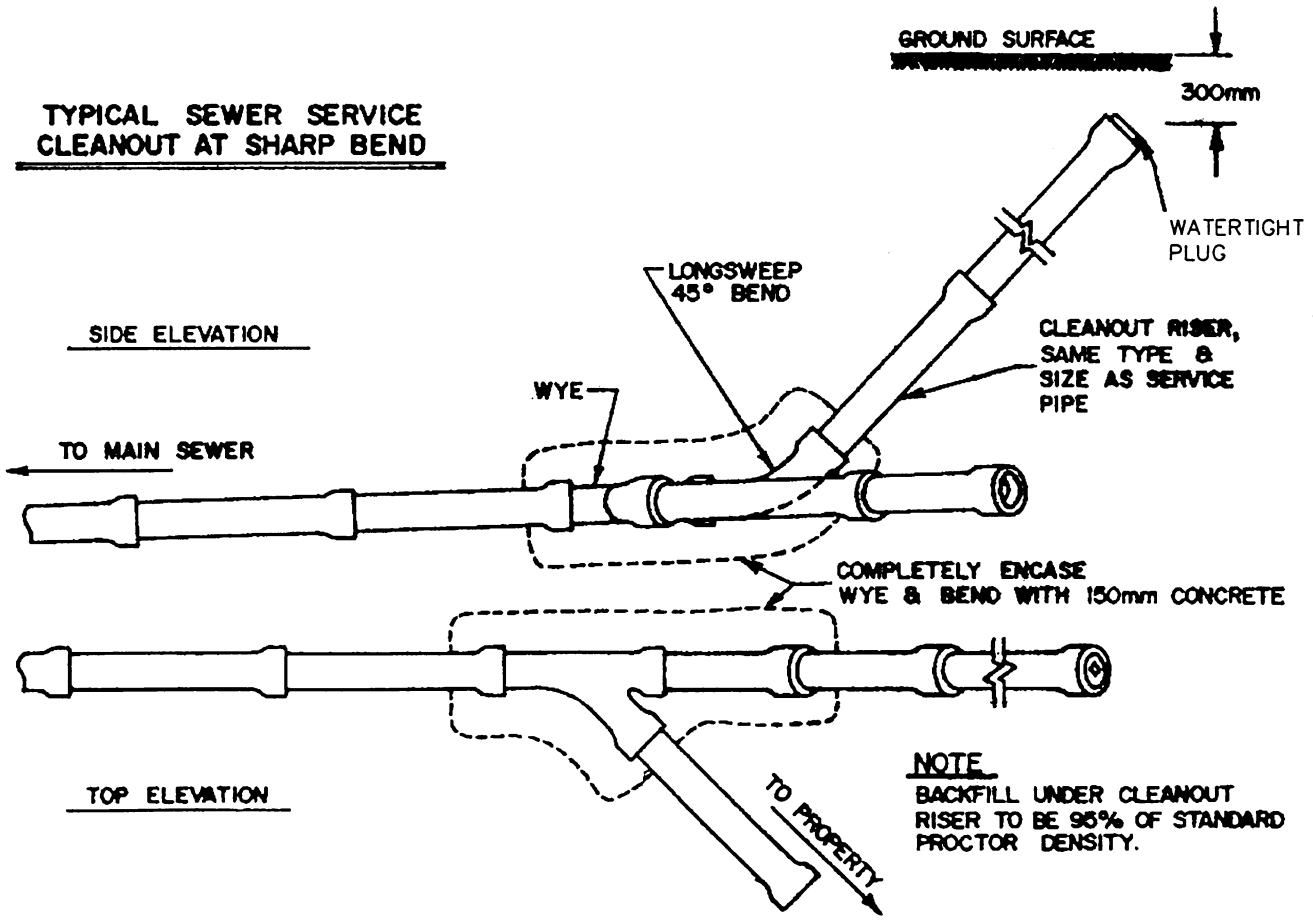
SCALES : HOR. N.T.S. VERT.

PLAN NO. 102-0013-004r003

TYPICAL SEWER SERVICE CLEANOUT ON LONG CONNECTION



TYPICAL SEWER SERVICE CLEANOUT AT SHARP BEND



NOTE
BACKFILL UNDER CLEANOUT RISER TO BE 95% OF STANDARD PROCTOR DENSITY.

REVISIONS	
1	RBY 02/08/2000
2	
3	

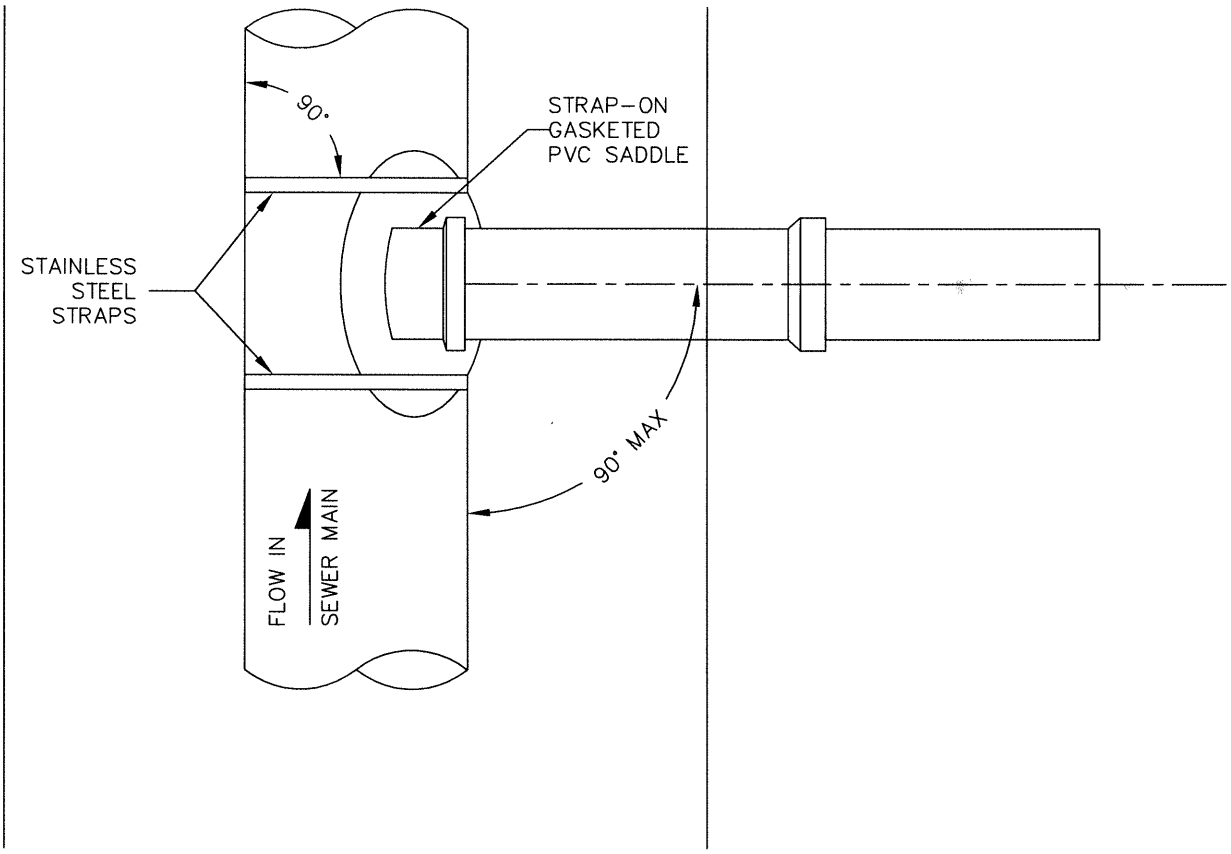
DRAWN BY E.D.N.
DATE APR. 1, 1992
CHECKED BY
DATE

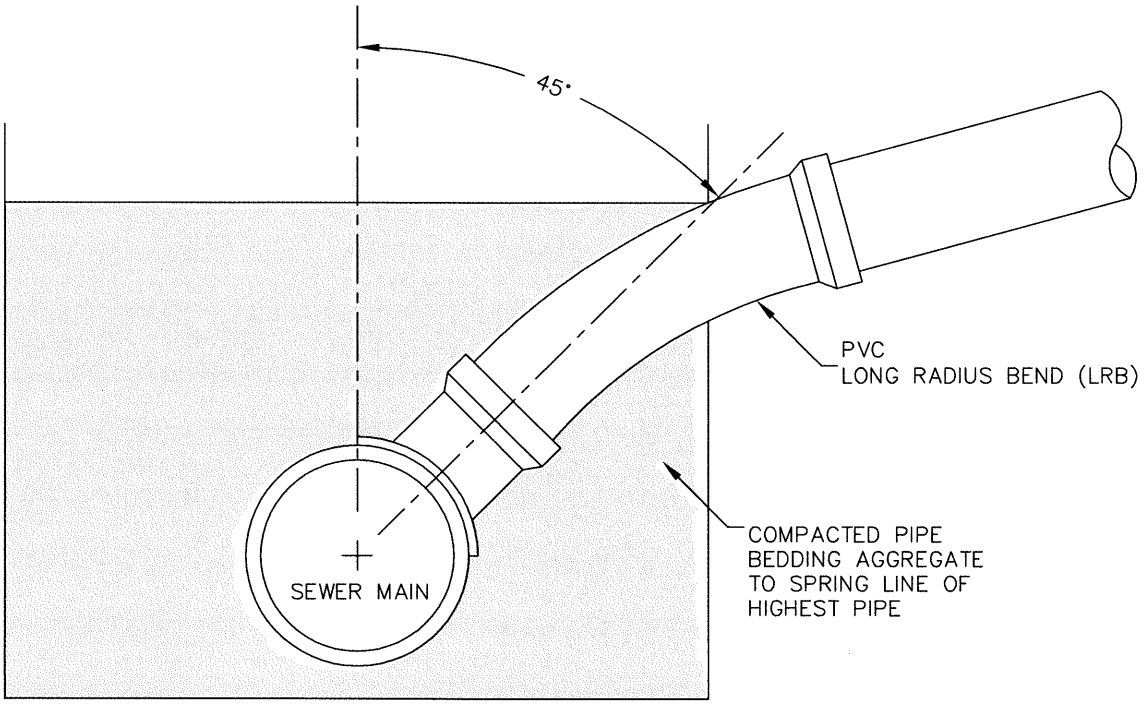
City of Saskatoon
INFRASTRUCTURE SERVICES

TYPICAL SEWER SERVICE CLEANOUT

08025-6

APPROVED
GENERAL MANAGER / P. ENG.
A. Boyko
ENGINEER
ENGINEER
SCALES : HOR. N.T.S. VERT.
PLAN NO. 102-0013-005r001





PLAN DESCRIPTION/REVISIONS	
4	
3	
2	DJC 2014–DEC–08
1	RBY 02/08/2000

DRAWN BY E.D.N.
DATE APR. 1, 1992
SCALE : HOR. N.T.S. VERT. N.T.S.

City of Saskatoon
Transportation & Utilities Department

TYPICAL SEWER TAPPING

APPROVED

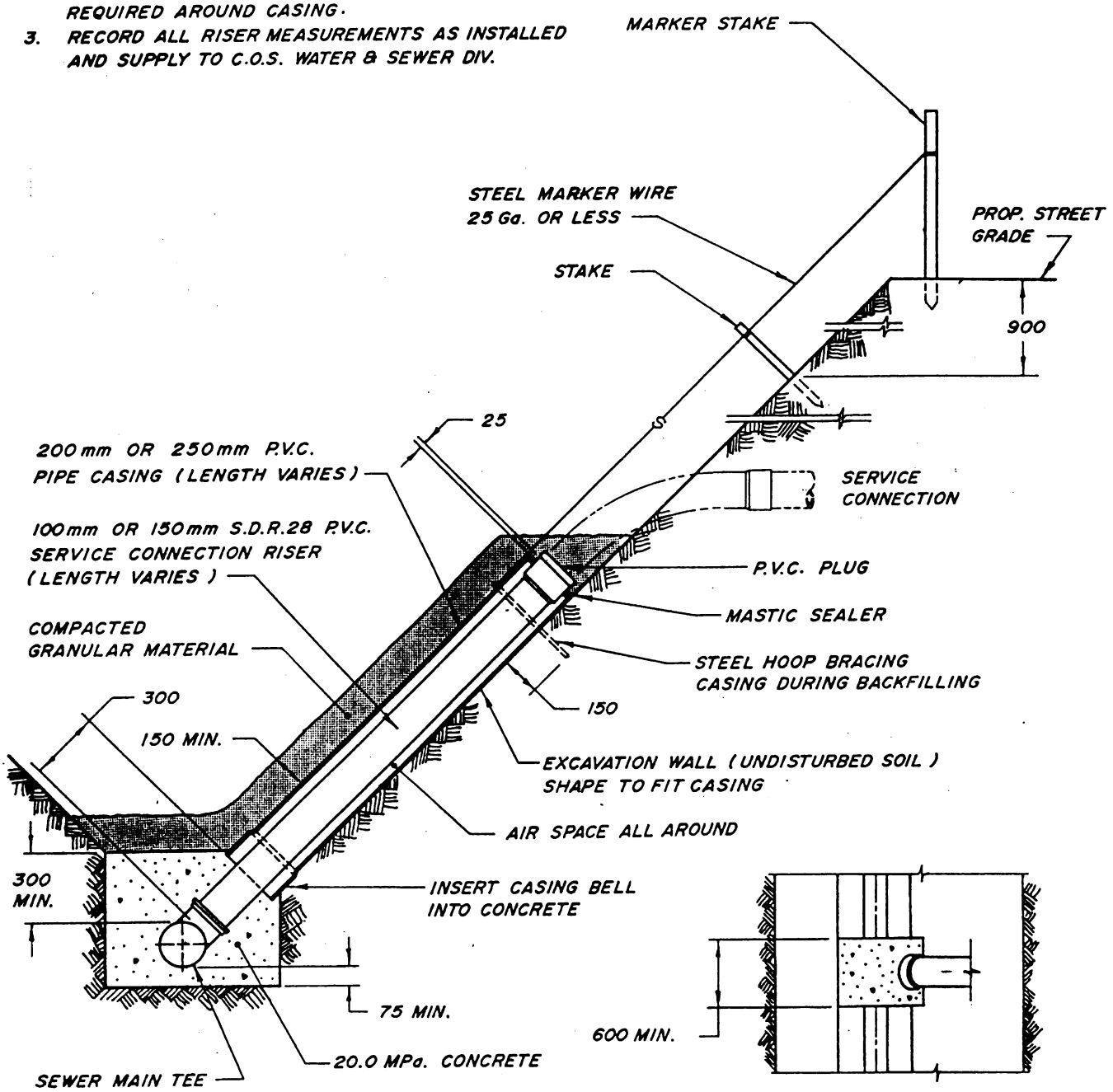
CHIEF ENGINEER

ENGINEER

PLAN NO. 102–0013–007r002

NOTE

1. TEE & JUNCTION TO BE SUPPORTED TO UNDISTURBED SOIL WITH POURED IN PLACE SULPHATE RESISTANT CONCRETE, MAX. 20mm AGGREGATE.
2. BACKFILL EXCAVATION IN LIFTS, COMPACTED GRANULAR MATERIAL TO 150mm MIN. REQUIRED AROUND CASING.
3. RECORD ALL RISER MEASUREMENTS AS INSTALLED AND SUPPLY TO C.O.S. WATER & SEWER DIV.



REVISIONS	
1	RBY 02/02/2000
2	
3	

DRAWN BY L.C.I.
DATE APR. 1, 1992

CHECKED BY
DATE

City of Saskatoon
INFRASTRUCTURE SERVICES

P.V.C. SERVICE CONNECTION RISER ASSEMBLY

08025-4

APPROVED

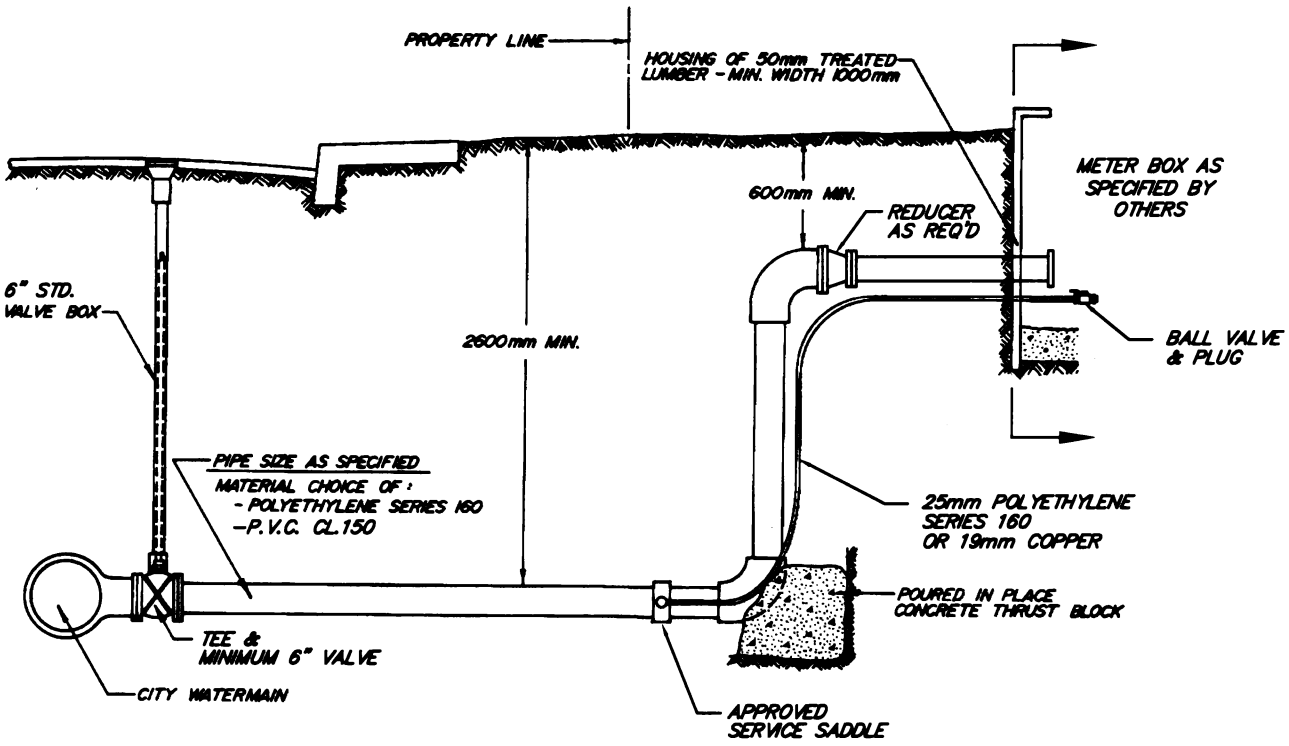
GENERAL MANAGER P. ENG.

ENGINEER A. Boyko

ENGINEER

SCALES: HOR. N.T.S. VERT.

PLAN NO. 102-0013-008r001



ELEVATION VIEW: SERVICE 100mm DIAM. & LARGER

NOTE:
ALL JOINTS RESTRAINED

REVISIONS	
1	RBY 02/08/2000
2	MJ 2006-01-31
3	

DRAWN BY E.D.N.
DATE APR. 1, 1992

CHECKED BY
DATE

City of Saskatoon
INFRASTRUCTURE SERVICES

100mm SEASONAL WATER SERVICE CONNECTION

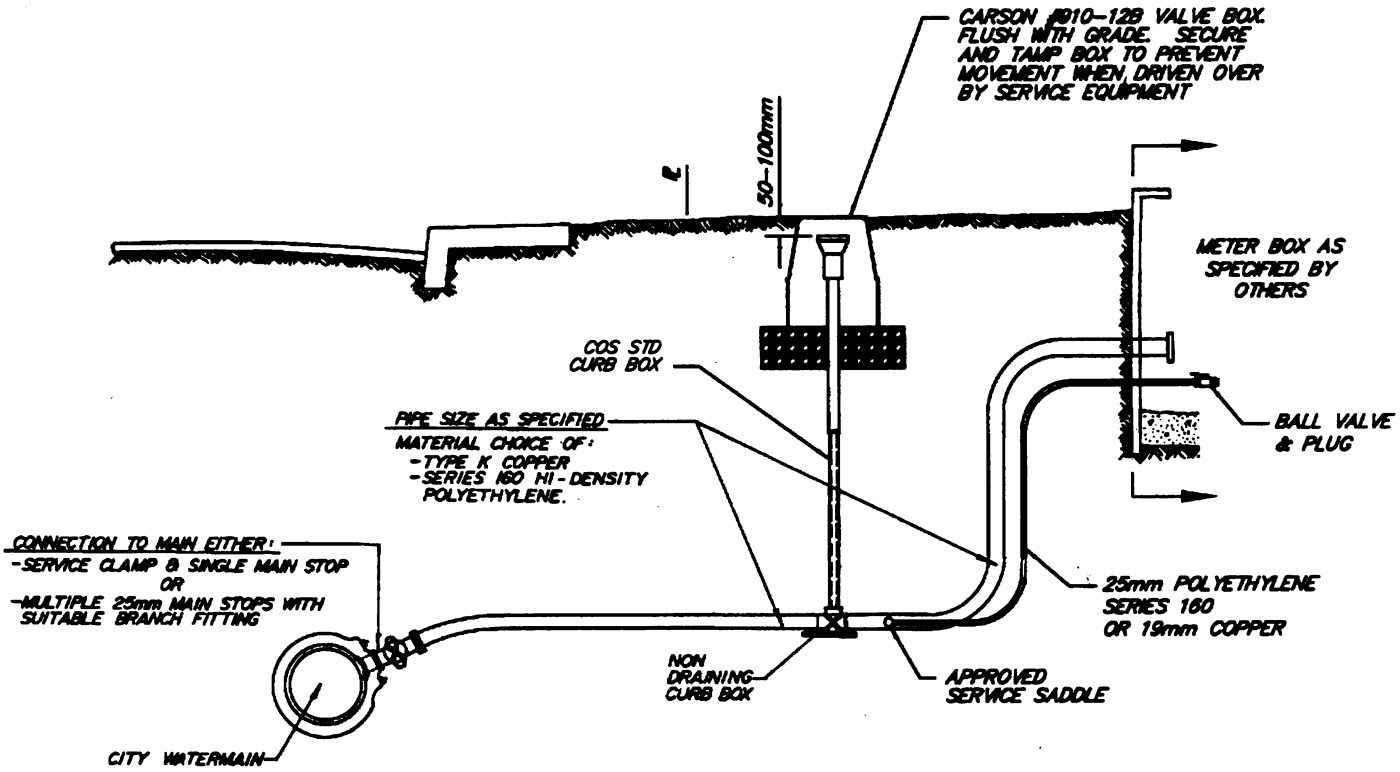
APPROVED

GENERAL MANAGER
P. ENG.
ENGINEER A. Boyko

ENGINEER

SCALES : HOR. N.T.S. VERT.

PLAN NO. 102-0013-009r001



ELEVATION VIEW: SERVICE 25mm TO 50mm DIAM. INCLUSIVE

NOTES:

1) METER & CONTROLS TO BE ONE STANDARD SIZE SMALLER THAN PIPE.

2) SOLVENT-WELD FITTINGS & COMPANION FLANGES MAY BE USED WITH P.V.C. PIPE FOR ALL WORK OFF-STREET.

3) ALL WORK ON STREET TO CONFORM TO STL CITY SPEC. FOR SERVICE CONNECTIONS.

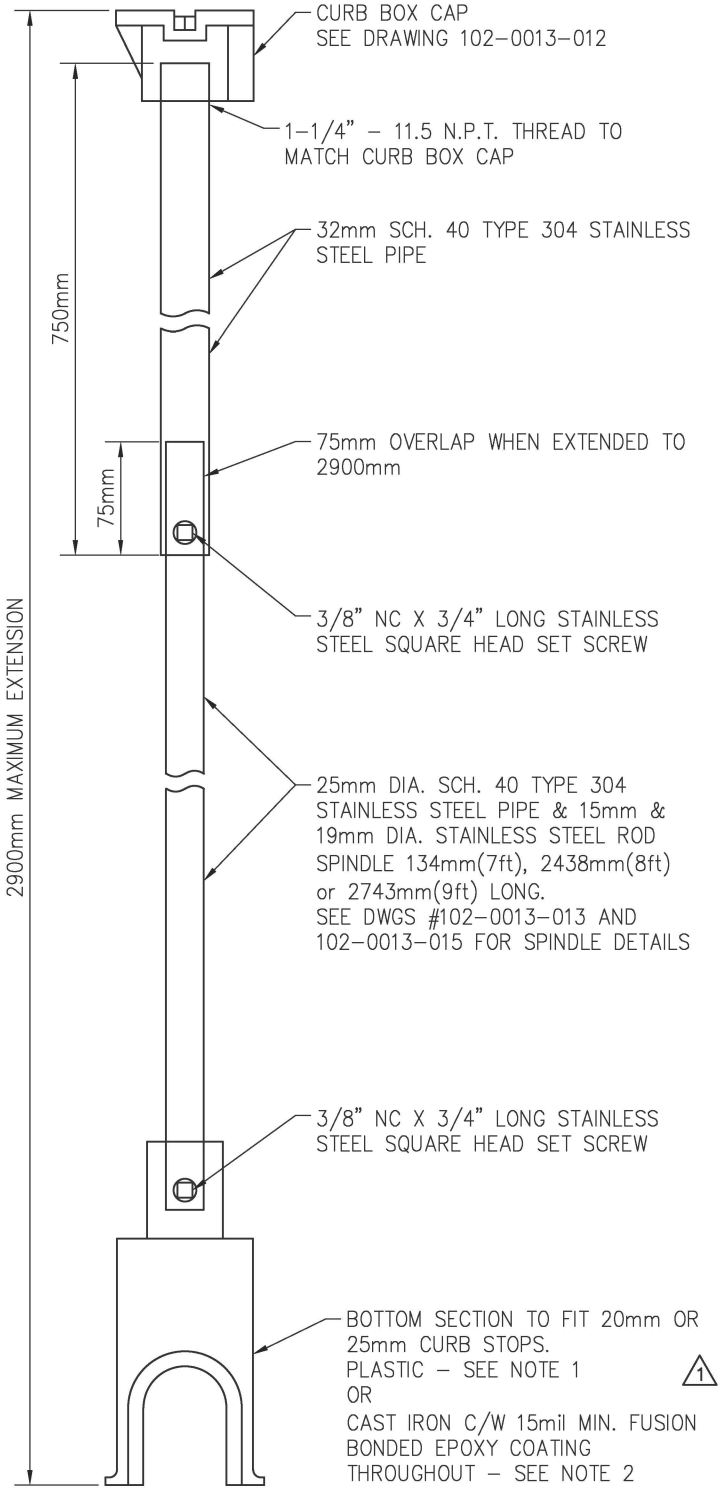
REVISIONS	
1	RBY 02/08/2000
2	MJ 2006-01-31
3	

DRAWN BY E.D.N.
DATE APR. 1, 1992
CHECKED BY
DATE

City of Saskatoon
INFRASTRUCTURE SERVICES

50mm SEASONAL WATER SERVICE CONNECTION

APPROVED
GENERAL MANAGER P. ENG.
A. Boyko
ENGINEER
ENGINEER
SCALES: HOR. N.T.S. VERT.
PLAN NO. 102-0013-010r001



NOTES 1

1. PLASTIC BOTTOM SECTION
   NON-CORRODIBLE ACRYLONITRILE BUTADIENE STYRENE (ABS) PLASTIC OR TOLUENE DIISOCYANATE (TDI)-TERMINATED LIQUID URETHANE PREPOLYMER.

2. CAST IRON BOTTOM SECTION C/W FUSION BONDED EPOXY
   UNLESS OTHERWISE SPECIFIED THE MATERIALS AND APPLICATION OF THIS COATING SHALL CONFORM TO THE AWWA STANDARD C213-96. THE COATING MATERIAL SHALL BE A 100% SOLID, THERMOSETTING, FUSION BONDED, DRY POWDER EPOXY RESIN, APPROVED FOR CONTACT WITH POTABLE WATER BY THE NATIONAL SANITATION FOUNDATION (NSF). POWDERS SHALL BE ONE OF THE FOLLOWING PRODUCTS OR APPROVED EQUAL:

   VALSPAR, D 1003 LD
   VALSPAR, G 1003 RB
   NAP-GARD MARK X 7-2500
   3M, SCOTCHKOTE 134

   THE SURFACE PREPARATION SHALL CONFORM TO SEC. 3.2 OF THE AWWA STANDARD C213-96. THESE COATINGS SHALL BE APPLIED TO A PREHEATED SURFACE BY THE FLUIDIZED BED METHOD OR THE ELECTROSTATIC POWDER SPRAY GUN METHOD. THE COATING THICKNESS SHALL BE 0.38MM (15 MIL) MINIMUM, 0.64 MM (25 MIL) MAXIMUM.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2003-MAR-10	JMH
2		2006-JAN-26	HLO
3		2007-FEB-07	HLO
4		2010-DEC-20	HLO
5	ADDED 2438/2743mm SPINDLE LENGTHS	2011-FEB-22	HLO
6	ADDED PLASTIC BOTTOM SECTION & NOTE, REARRANGED NOTE ORDER,	2020-APR-01	DLH
6	AND CORRECTED COATING THICKNESSES	2020-APR-01	DLH

City of Saskatoon

STANDARD CURB BOX

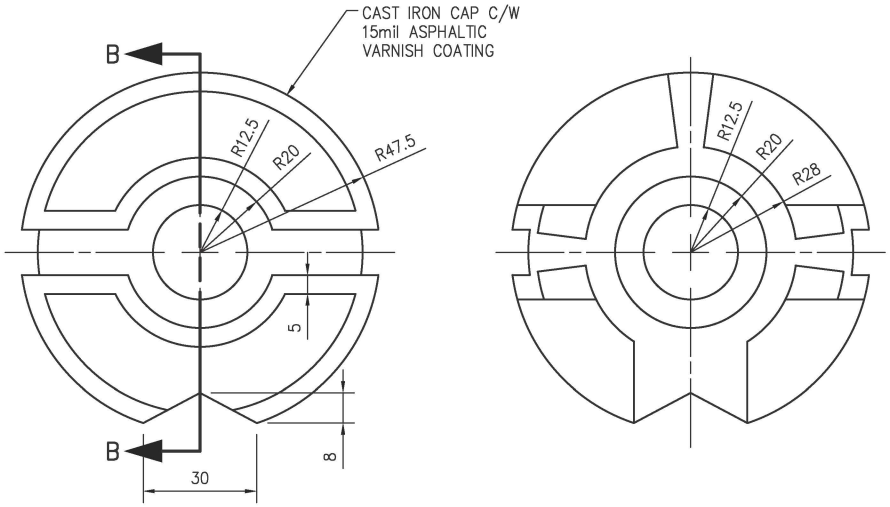
APPROVALS

Sohrab Khan (May 3, 2020)	
SIGNATURE	SIGNATURE
Sohrab Khan	Tim Bushman
NAME	NAME
May 3, 2020	May 6, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT. N.T.S.

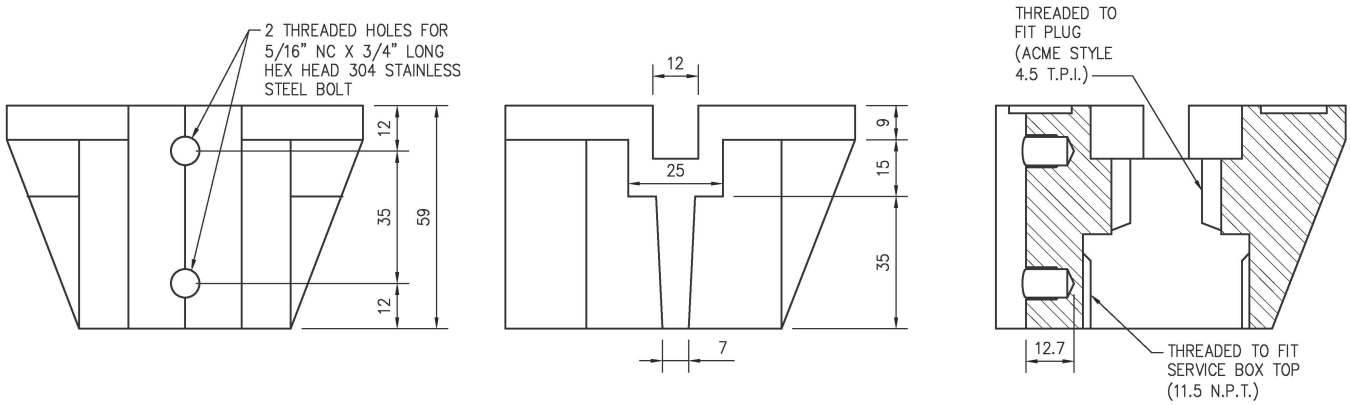
PLAN NO. 102-0013-011r006

CURB BOX CAP



TOP

BOTTOM

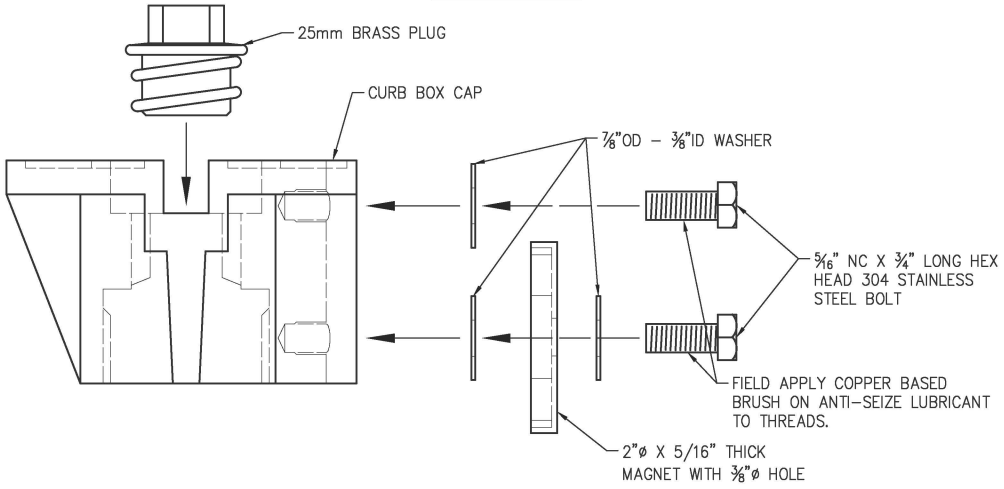


FRONT

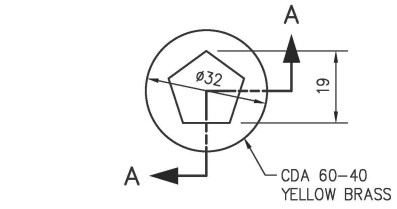
SIDE

SECTION B–B

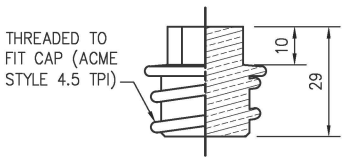
ASSEMBLY



25mm BRASS PLUG



PLAN



SECTION A–A

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2003–JAN–21	JMH
2		2006–JAN–26	HLO
3		2007–FEB–07	HLO
4		2010–DEC–13	HLO
5	ADDED DETAILS TO CURB BOX CAP AND ADDED BRASS PLUG DETAIL	2020–APR–03	DLH

City of Saskatoon

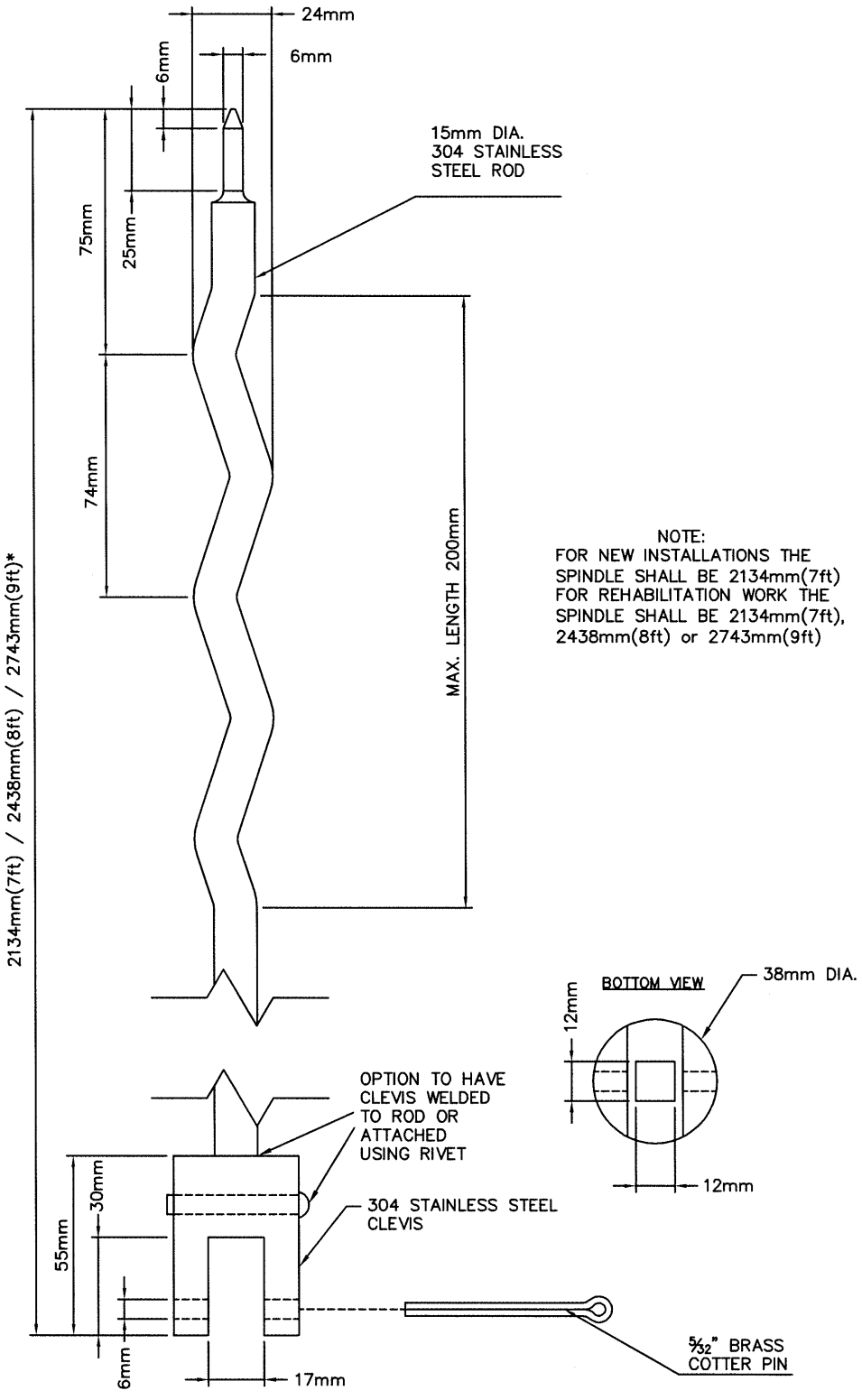
CURB BOX CAP

APPROVALS

Sohrab Khan (May 3, 2020)	
SIGNATURE: Sohrab Khan	SIGNATURE: Tim Bushman
NAME: May 3, 2020	NAME: May 6, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT. N.T.S

PLAN NO. 102–0013–012r005



REVISIONS	
1	ADDED 2438/2743mm SPINDLE LENGTHS HLO 2011-02-22
2	ADDED OPTION TO WELD CLEVIS TO ROD HLO 2017-JAN-25
3	
4	

DRAWN BY J.M.H.
DATE MARCH 12, 2003
SCALES : HOR. 1:2 VERT. 1:2

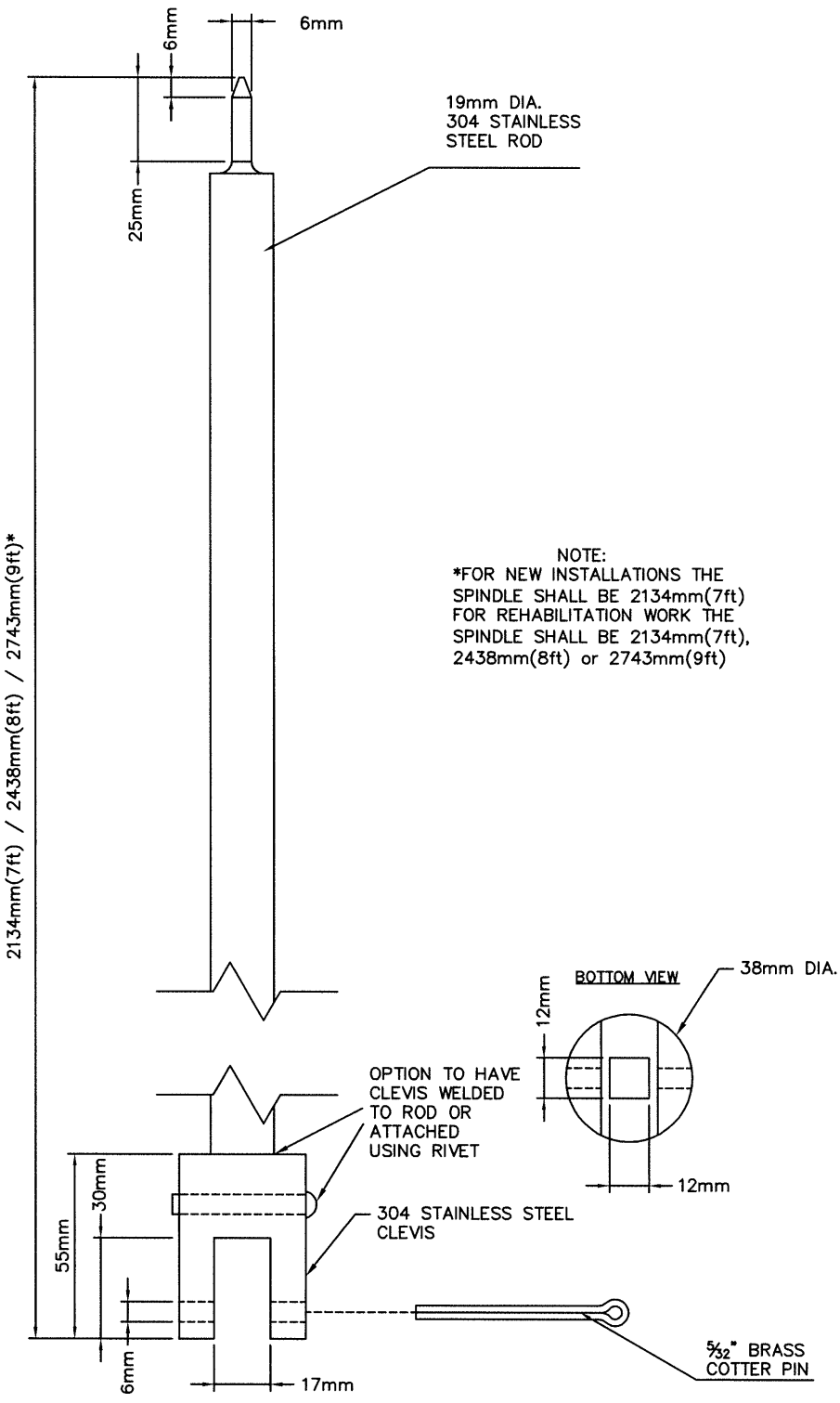
City of Saskatoon
Transportation & Utilities Department

15mm SPINDLE DETAILS

CHIEF ENGINEER JAN 3 0 2017 DATE

ENGINEER JAN 3 0 2017 DATE

PLAN NO. 102-0013-013r003



REVISIONS	
1	ADDED 2438/2743mm SPINDLE LENGTHS HLO 2011-02-22
2	ADDED OPTION TO WELD CLEVIS TO ROD HLO 2017-JAN-25
3	
4	

DRAWN BY J.M.H.
DATE MARCH 12, 2003
SCALES : HOR. 1:2 VERT. 1:2

City of Saskatoon
Transportation & Utilities Department

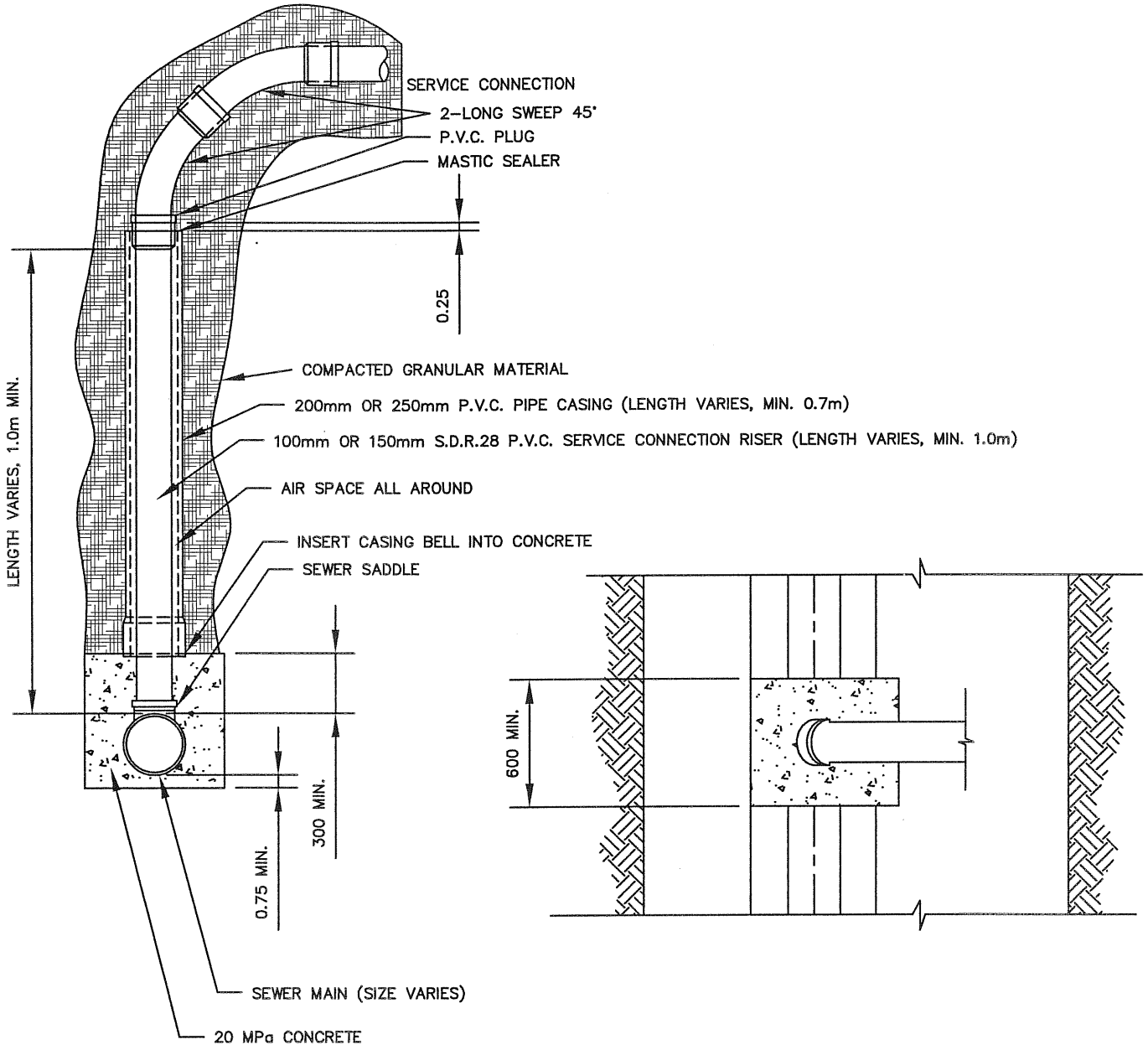
19mm SPINDLE DETAILS

CHIEF ENGINEER JAN 3 0 2017
DATE

ENGINEER JAN 3 0 2017
DATE

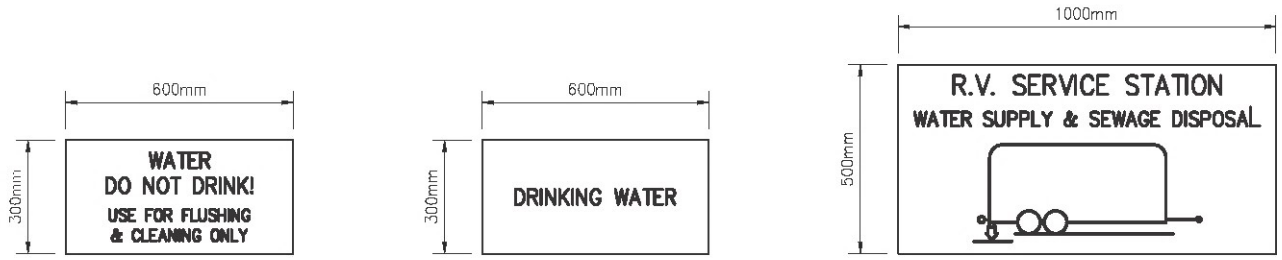
PLAN NO. 102-0013-015r003

NOTE:
1. TEE & JUNCTION TO BE SUPPORTED TO UNDISTURBED SOIL WITH POURED IN PLACE SULPHATE RESISTANT CONCRETE
2. BACKFILL EXCAVATION IN LIFTS, COMPACTED GRANULAR MATERIAL TO 150mm MIN.
3. RECORD ALL RISER MEASUREMENTS AS INSTALLED AND SUPPLY TO C.O.S. WATER AND SEWER DIVISION



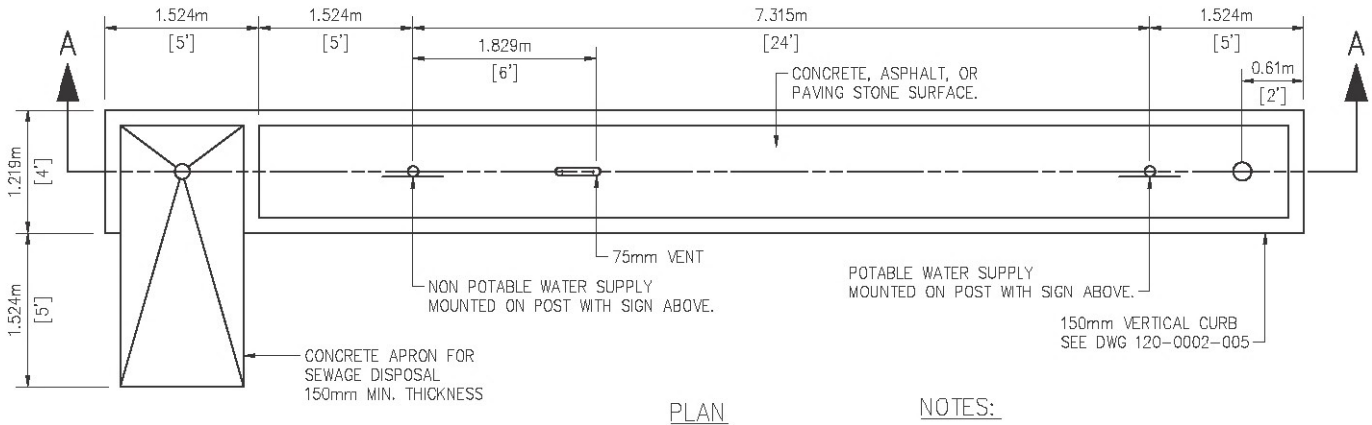
*RISERS PERMITTED WHEN SEWER INVERT MINIMUM 5.0m BELOW PAVEMENT

REVISIONS		City of Saskatoon Infrastructure Services Department	APPROVED
1			GENERAL MANAGER
2			ENGINEER
3			ENGINEER
DRAWN BY RAM		PVC SERVICE CONNECTION VERTICAL RISER ASSEMBLY (RECONSTRUCTION ONLY)	SCALES : HOR. N.T.S. VERT.
DATE MAR. 27, 2007			
CHECKED BY			PLAN NO. 102–0013–016r001
DATE			



SIGNS

SCALE 1:20

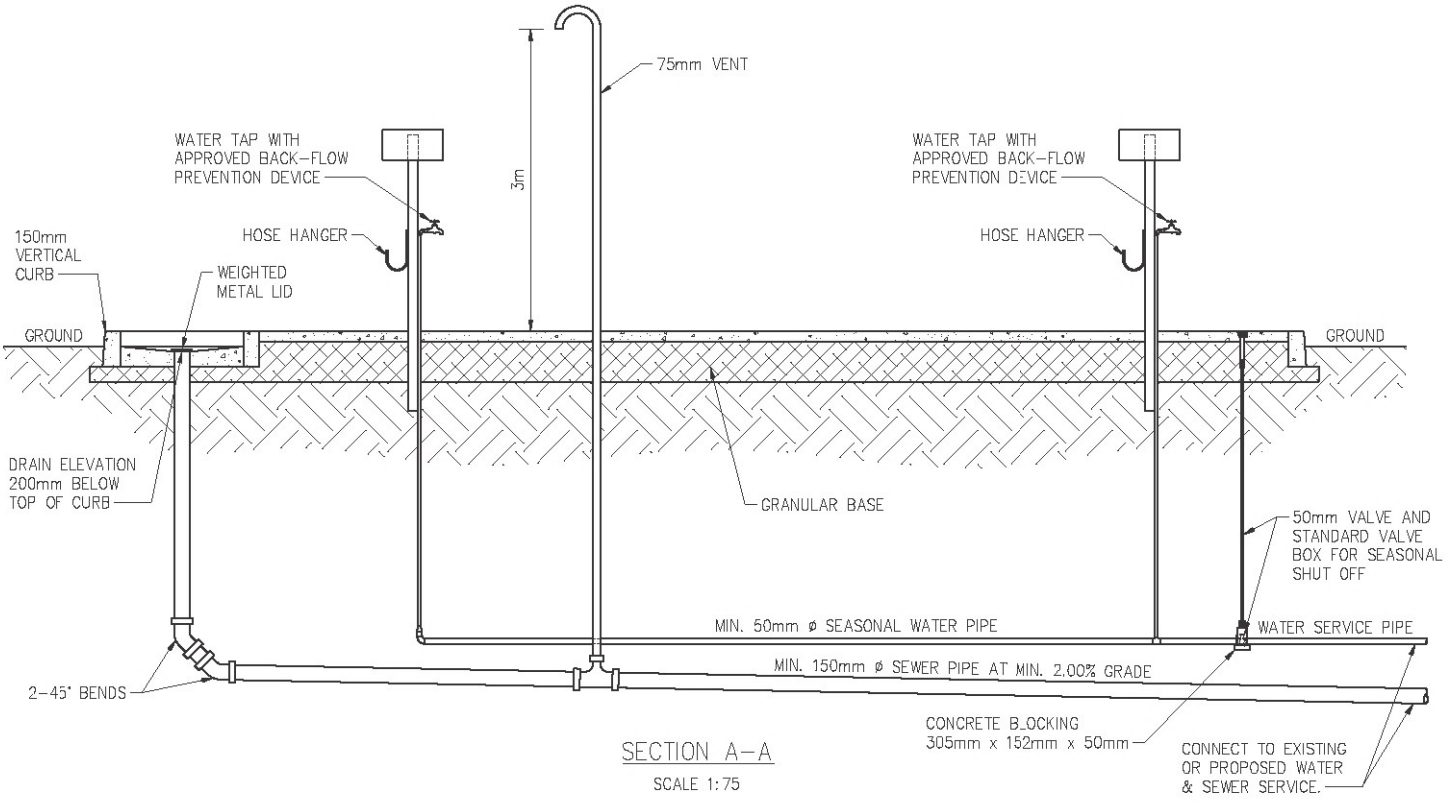


PLAN

SCALE 1:75

NOTES:

1. 2.9m MINIMUM DEPTH OF COVER TO CROWN FOR ALL WATER SERVICE PIPES.



SECTION A-A

SCALE 1:75

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD SPECIFICATION DRAWING	2021-JAN-29	DLH

City of Saskatoon

RECREATION VEHICLE
SERVICE STATION WITH
SEWAGE DISPOSAL & WATER SUPPLY

APPROVALS

SIGNATURE	SIGNATURE
Nisar Khan	Maciej Jurkiewicz
NAME	NAME
Feb 11, 2021	Feb 11, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. AS NOTED VERT.

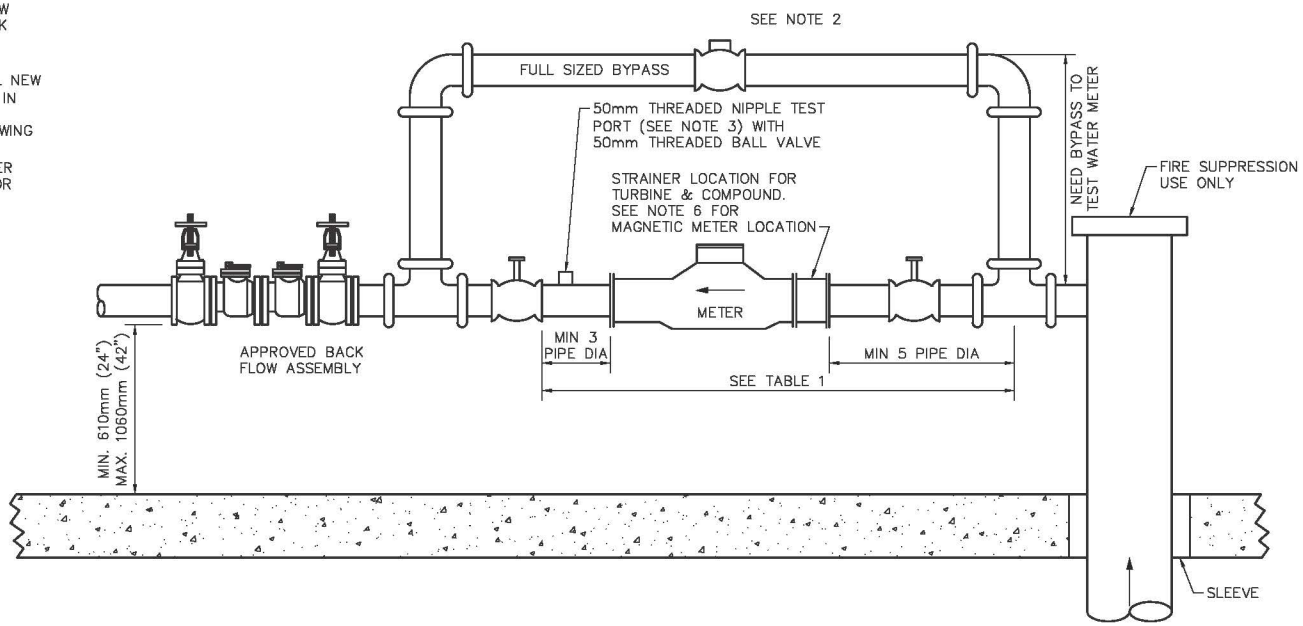
PLAN NO. 102-0013-020r001

NOTES:

1. CLEARANCE AROUND METER: 200mm (8") TO REAR, 500mm (20") TO SIDES, 1000mm (39") IN FRONT.
2. VALVES: GATE OR BALL, BYPASS VALVE SHALL BE LOCKABLE.
3. TEST PORT: FOR TURBINE METERS, COMPOUND AND MAGNETIC METERS.
4. GASKETS: 3mm THICK.
5. STRAINER LENGTH: 75mm–150mm, 100mm–187.5mm, 150mm–225mm.
6. METER LENGTH
   A. TURBINE: 75mm–300mm, 100mm–350mm, 150mm–450mm.
   B. COMPOUND: 75mm–425mm, 100mm–500mm, 150mm–600mm.
   C. AQUAMASTER MAGNETIC FLOWMETER: 75mm–200mm, 100mm–250mm, 150mm–300mm STRAINER LOCATED AFTER DOWN STREAM PIPE LENGTHS. CHECK WITH WATER METER SECTION FOR POWER REQUIREMENTS.
7. APPROVED BACK FLOW ASSEMBLY TO BE INSTALLED DOWNSTREAM FROM BYPASS.
8. FOR POSSIBLE 3" SUBSTITUTION USE 2" PARALLEL INSTALLATION (SEE DWG 102–0013–025)
9. FIVE PIPE DIAMETERS OF STRAIGHT PIPE AHEAD OF STRAINER.
10. ALLOW ADEQUATE ROOM FOR TESTING OF APPROVED BACK FLOW ASSEMBLY.
11. THERE SHALL BE NO TAPS, TAKE–OFFS OR TIE–INS TO THE SERVICE PLUMBING UPSTREAM OF THE APPROVED BACK FLOW ASSEMBLY.
12. THERE SHALL BE NO BYPASSES AROUND THE APPROVED BACK FLOW ASSEMBLY UNLESS THE BYPASS IS FITTED WITH AN APPROVED BACK FLOW ASSEMBLY OF THE SAME TYPE.
13. APPROVED BACK FLOW ASSEMBLY, APPROPRIATE FOR THE HAZARD CLASSIFICATION, TO BE INSTALLED DOWNSTREAM FROM BYPASS. ALL NEW METER INSTALLATIONS MORE THAN THIRTY–EIGHT (38) MILLIMETRES IN DIAMETER SHALL BE FIRST APPROVED BY THE SASKATOON WATER DEPARTMENT, THROUGH THE SUBMISSION OF A METER SETTING DRAWING ACCEPTABLE TO THE SASKATOON WATER DEPARTMENT.
14. THE OWNER SHALL PROVIDE A SUITABLE SITE FOR THE WATER METER AT A HORIZONTAL SETTING, WITHIN 2m OF THE POINT OF ENTRY FOR THE WATER SERVICE CONNECTION INSIDE THE BUILDING AS PER BYLAW #7567.
15. CORPORATION COUPLING/PIPING MUST BE SECURED SO THAT THE SERVICE IS HELD FIRMLY IN PLACE.

TABLE 1	
METER SIZE	MIN LENGTH
75ø	1300mm
100ø	1500mm
150ø	1800mm

NOTE:
FOR 50mm MULTI METER INSTALLATION SEE DRAWING 102–0013–025



	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD SPECIFICATION DRAWING	2011–JUL–11	TPD
2	REVISED BYPASS	2016–MAY–24	DMR
3	CHGD DWG NUMBER, TITLE BLOCK & NOTE 13. REMOVED CONTACT INFO.	2024–FEB–28	MJ/DLH

City of Saskatoon

TYPICAL LARGE METER INSTALLATION
75mm, 100mm & 150mm
COMPOUND, TURBINE METERS, &
AQUAMASTER MAGNETIC FLOWMETER

APPROVALS

SIGNATURE	SIGNATURE
Christopher Richards	Russ Munro
NAME	NAME
Mar 18, 2024	Mar 19, 2024
DATE SIGNED	DATE SIGNED

SCALES: HOR. NTS VERT.

PLAN NO. 102–0013–022r003

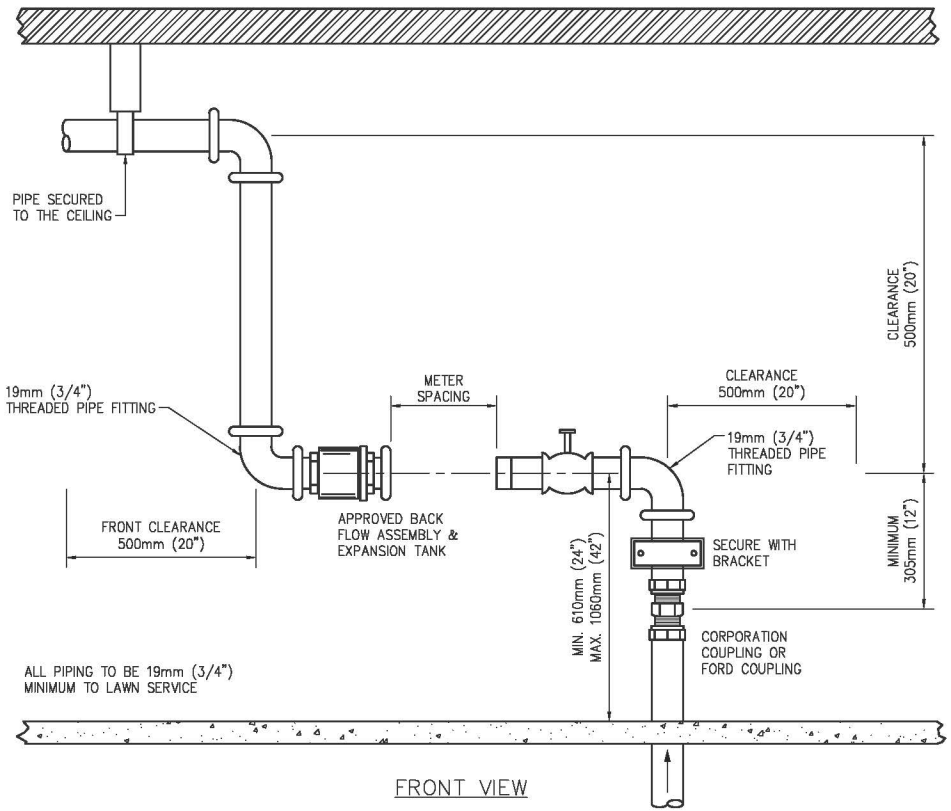
EXTRACT FROM BYLAW #7567 PASSED ON SEPTEMBER 9, 1996

NEW WATER METERS

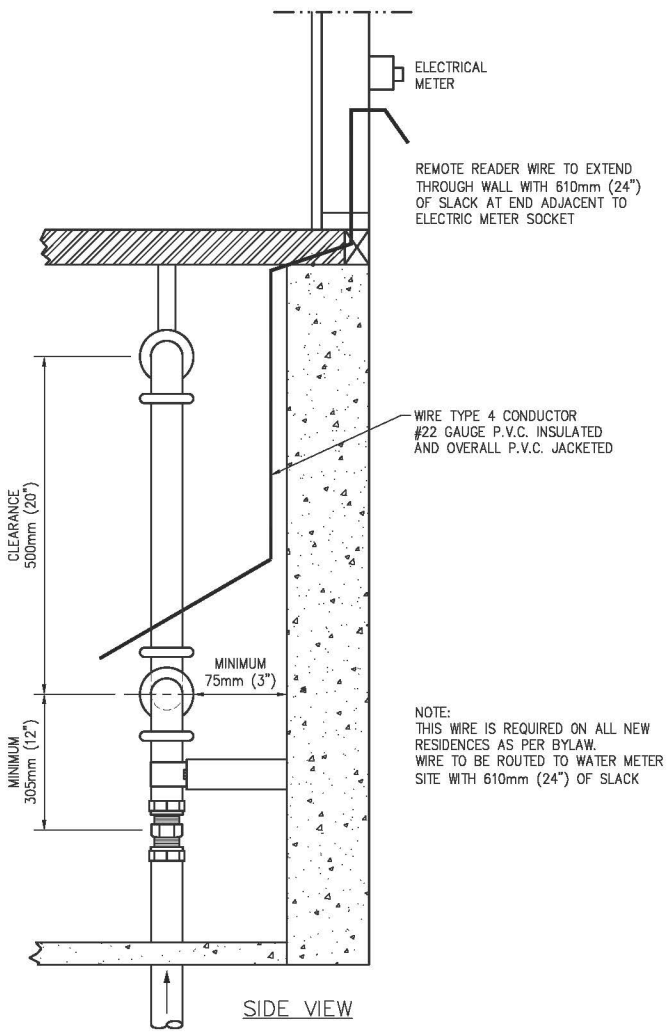
24. (1) ALL RESIDENTIAL AND MULTI–UNIT RESIDENTIAL DWELLINGS UNITS CONSTRUCTED AFTER THE PASSAGE OF THIS BYLAW SHALL HAVE A REMOTE READOUT WATER METER AT A LOCATION DETERMINED BY SASKATOON WATER DEPARTMENT.

(2) THE WIRE TYPE USED FOR THE INSTALLATION OF A REMOTE READOUT WATER METER SHALL BE CSA TYPE PCC, FT4, 22AWG OR EQUIVALENT, INSTALLED AT THE OWNER'S EXPENSE.

METER SPACING (F.I.P. TO F.I.P.)
16mm (5/8") = 300mm (11 3/4)
19mm (3/4") = 330mm (13")
25mm (1") = 380mm (15")



FRONT VIEW



SIDE VIEW

NOTES:

1. METER MUST BE SITUATED IN AN ACCESSIBLE LOCATION WITH NO PERMANENT FIXTURES WITHIN 500mm (20") OF THE METER.
2. APPROVED BACK FLOW ASSEMBLY, APPROPRIATE FOR THE HAZARD CLASSIFICATION MUST BE INSTALLED WITHIN 3m OF SERVICE ENTRY.
3. THE OWNER SHALL PROVIDE A SUITABLE SITE FOR THE WATER METER AT A HORIZONTAL SETTING, WITHIN 2m OF POINT OF ENTRY FOR THE WATER SERVICE CONNECTION INSIDE THE BUILDING AS PER BYLAW #7567.
4. CORPORATION COUPLING MUST BE SECURED SO THAT THE SERVICE IS HELD FIRMLY IN PLACE.
5. CURB COCK (CC) MUST BE BETWEEN 150mm & 230mm (6"–9") FROM BELOW FINISHED BACK OF SIDEWALK GRADE, AND POLY PIPE MARKER LEFT IN PLACE AND EXPOSED.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD SPECIFICATION DRAWING	2011–JUN–30	TPD
2	CHGD NUMBER SYSTEM & TITLE BLOCK. ADDED CORPORATION COUPLING	2015–SEP–16	CJP
3	CHGD DWG NUMBER, CHGD TITLE BLOCK, AND REMOVED CONTACT INFO	2024–FEB–28	MJ/DLH

City of Saskatoon

TYPICAL WATER METER INSTALLATION
(5/8"– 1" METER)

APPROVALS

SIGNATURE	SIGNATURE
Christopher Richards	Russ Munro
NAME	NAME
Mar 18, 2024	Mar 19, 2024
DATE SIGNED	DATE SIGNED

SCALES: HOR. NTS VERT.

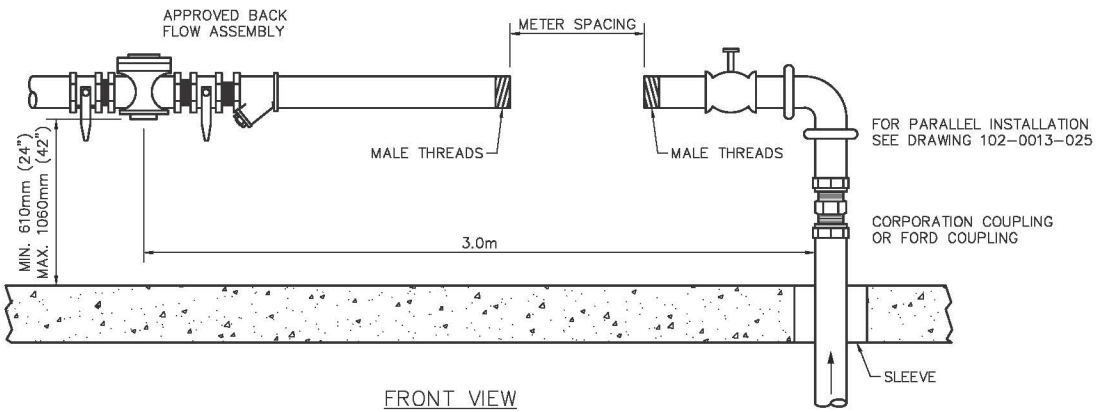
PLAN NO. 102–0013–023r003

NOTES:

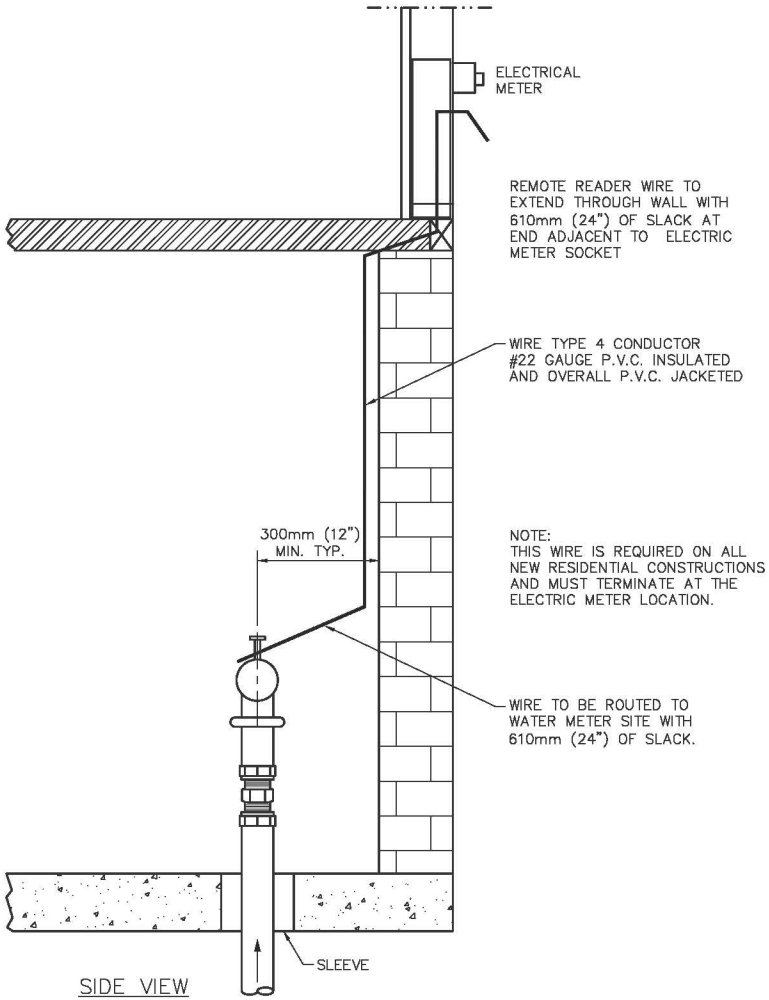
1. FULL PORT BALL VALVE UPSTREAM.
2. CLEARANCE AROUND METER: 500mm(20") TO SIDES AND 1000mm (39") IN FRONT.
3. *BYPASS IS NOT REQUIRED.* CONTACT WATER METER SECTION FOR APPROVAL REQUIREMENTS.
4. METER SPACING: (M.I.P. TO M.I.P.)
   38mm(1 1/2") – 370mm(14 1/2")
   50mm(2") – 465mm(18 1/4")
5. PREFERRED IN AREA WITH FLOOR DRAIN WITHIN 2000mm(78").
6. APPROVED BACK FLOW ASSEMBLY IS TO BE INSTALLED DOWNSTREAM OF METER.
7. ALLOW ADEQUATE ROOM FOR TESTING OF APPROVED BACK FLOW ASSEMBLY.
8. THERE SHALL BE NO TAPS, TAKE–OFFS OR TIE–INS TO THE SERVICE PLUMBING UPSTREAM OF THE APPROVED BACK FLOW ASSEMBLY.
9. THERE SHALL BE NO BYPASSES AROUND THE APPROVED BACK FLOW ASSEMBLY UNLESS THE BYPASS IS FITTED WITH AN APPROVED BACK FLOW ASSEMBLY OF THE SAME TYPE.
10. APPROVED BACK FLOW ASSEMBLY, APPROPRIATE FOR THE HAZARD CLASSIFICATION MUST BE INSTALLED WITHIN 3m OF SERVICE ENTRY. ALL NEW METER INSTALLATIONS MORE THAN THIRTY–EIGHT (38) MILLIMETRES IN DIAMETER SHALL BE FIRST APPROVED BY THE SASKATOON WATER DEPARTMENT, THROUGH THE SUBMISSION OF A METER SETTING DRAWING ACCEPTABLE TO THE SASKATOON WATER DEPARTMENT.
11. THE OWNER SHALL PROVIDE A SUITABLE SITE FOR THE WATER METER AT A HORIZONTAL SETTING, WITHIN 2m OF POINT OF ENTRY FOR THE WATER SERVICE CONNECTION INSIDE THE BUILDING AS PER BYLAW #7567.
12. CORPORATION COUPLING/PIPING MUST BE SECURED SO THAT THE SERVICE IS HELD FIRMLY IN PLACE.
13. IF SERVICE IS GREATER THAN 50mm SEE DRAWING 102–0013–022 OR 102–0013–025.

HORIZONTAL 500mm(20")
VERTICAL 500mm(20")

FOR PARALLEL INSTALLATION
SEE DRAWING 102–0013–025



FRONT VIEW



SIDE VIEW

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD SPECIFICATION DRAWING	2011–JUN–30	TPD
2	CHGD NUMBER SYSTEM & TITLE BLOCK. ADDED CORPORATION COUPLING	2015–SEP–16	CJP
3	ADDED NOTE 13	2016–MAY–24	DMR
4	CHGD DWG NUMBER, TITLE BLOCK & NOTE 10. REMOVED CONTACT INFO	2024–FEB–28	MJ/DLH

City of Saskatoon

TYPICAL INTERMEDIATE WATER METER INSTALLATION (1 1/2" – 2" METER)

APPROVALS

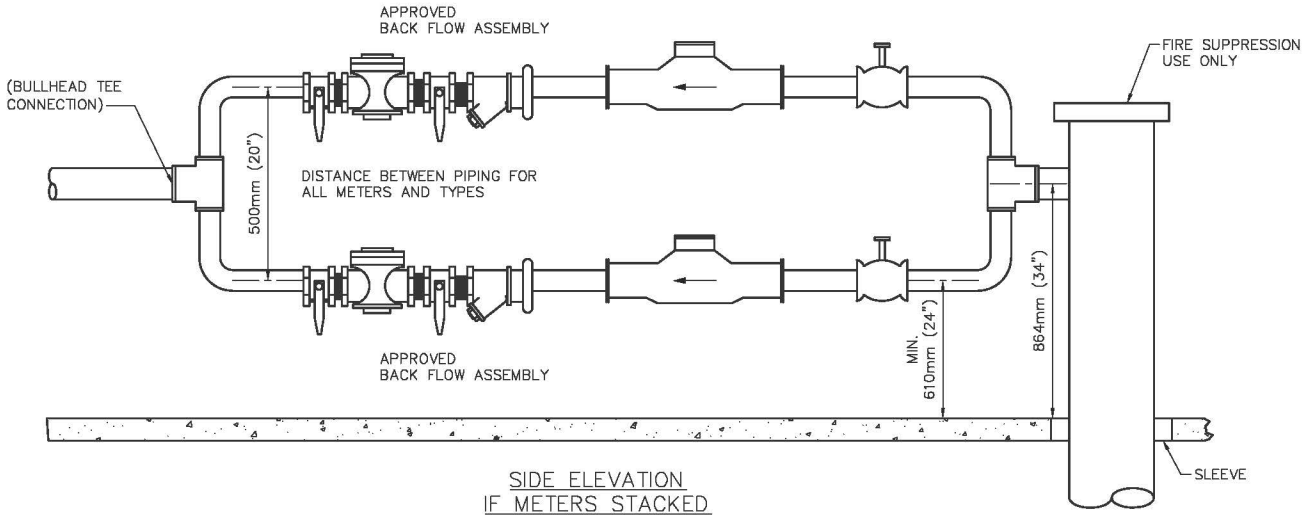
SIGNATURE	SIGNATURE
Christopher Richards	Russ Munro
NAME	NAME
Mar 18, 2024	Mar 19, 2024
DATE SIGNED	DATE SIGNED

SCALES: HOR. NTS VERT.

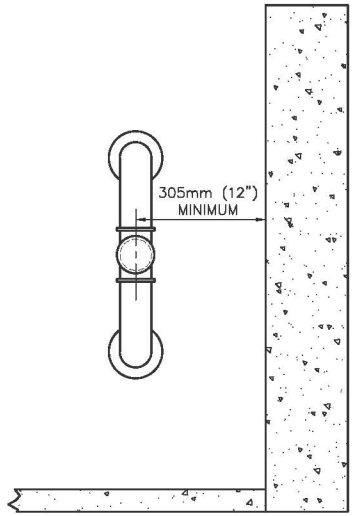
PLAN NO. 102–0013–024r004

NOTES:

1. APPROVED BACK FLOW ASSEMBLY, APPROPRIATE FOR THE HAZARD CLASSIFICATION, TO BE INSTALLED DOWNSTREAM FROM METER SETTING. ALL NEW METER INSTALLATIONS MORE THAN THIRTY–EIGHT (38) MILLIMETRES IN DIAMETER SHALL BE FIRST APPROVED BY THE SASKATOON WATER DEPARTMENT, THROUGH THE SUBMISSION OF A METER SETTING DRAWING ACCEPTABLE TO THE SASKATOON WATER DEPARTMENT.
2. ALLOW ADEQUATE ROOM FOR TESTING OF APPROVED BACK FLOW ASSEMBLY.
3. THERE SHALL BE NO TAPS, TAKE–OFFS OR TIE–INS TO THE SERVICE PLUMBING UPSTREAM OF THE BACKFLOW PREVENTER.
4. THERE SHALL BE NO BYPASSES AROUND THE BACK FLOW PREVENTER UNLESS THE BYPASS IS FITTED WITH AN APPROVED BACK FLOW ASSEMBLY OF THE SAME TYPE.
5. APPROVED BACK FLOW ASSEMBLY, APPROPRIATE FOR THE HAZARD CLASSIFICATION MUST BE INSTALLED WITHIN 3m OF SERVICE ENTRY.
6. THE OWNER SHALL PROVIDE A SUITABLE SITE FOR THE WATER METER AT A HORIZONTAL SETTING, WITHIN 2m OF POINT OF ENTRY FOR THE WATER SERVICE CONNECTION INSIDE THE BUILDING AS PER BYLAW #7567.
7. CORPORATION COUPLING/PIPING MUST BE SECURED SO THAT THE SERVICE IS HELD FIRMLY IN PLACE.
8. METER SPACING (MIP TO MIP) 50mm (2") – 465mm (18 1/4")
9. CLEARANCE AROUND METER 500mm (20") TO SIDES 1000mm (39") IN FRONT.



SIDE ELEVATION
IF METERS STACKED



FRONT VIEW

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD SPECIFICATION DRAWING	2011–JUN–30	TPD
2	CHGD NUMBER SYSTEM & TITLE BLOCK. ADDED CORPORATION COUPLING	2015–SEP–16	CJP
3	REVISED BULLHEAD TEE IN ELEVATION VIEW	2016–MAR–10	CJP
4	DELETED PLAN VIEW & REVISED SIDE ELEVATION	2016–MAY–24	DMR
5	CHGD DWG NUMBER, TITLE BLOCK & NOTE 1. REMOVED CONTACT INFO	2016–MAY–24	DMR

City of Saskatoon

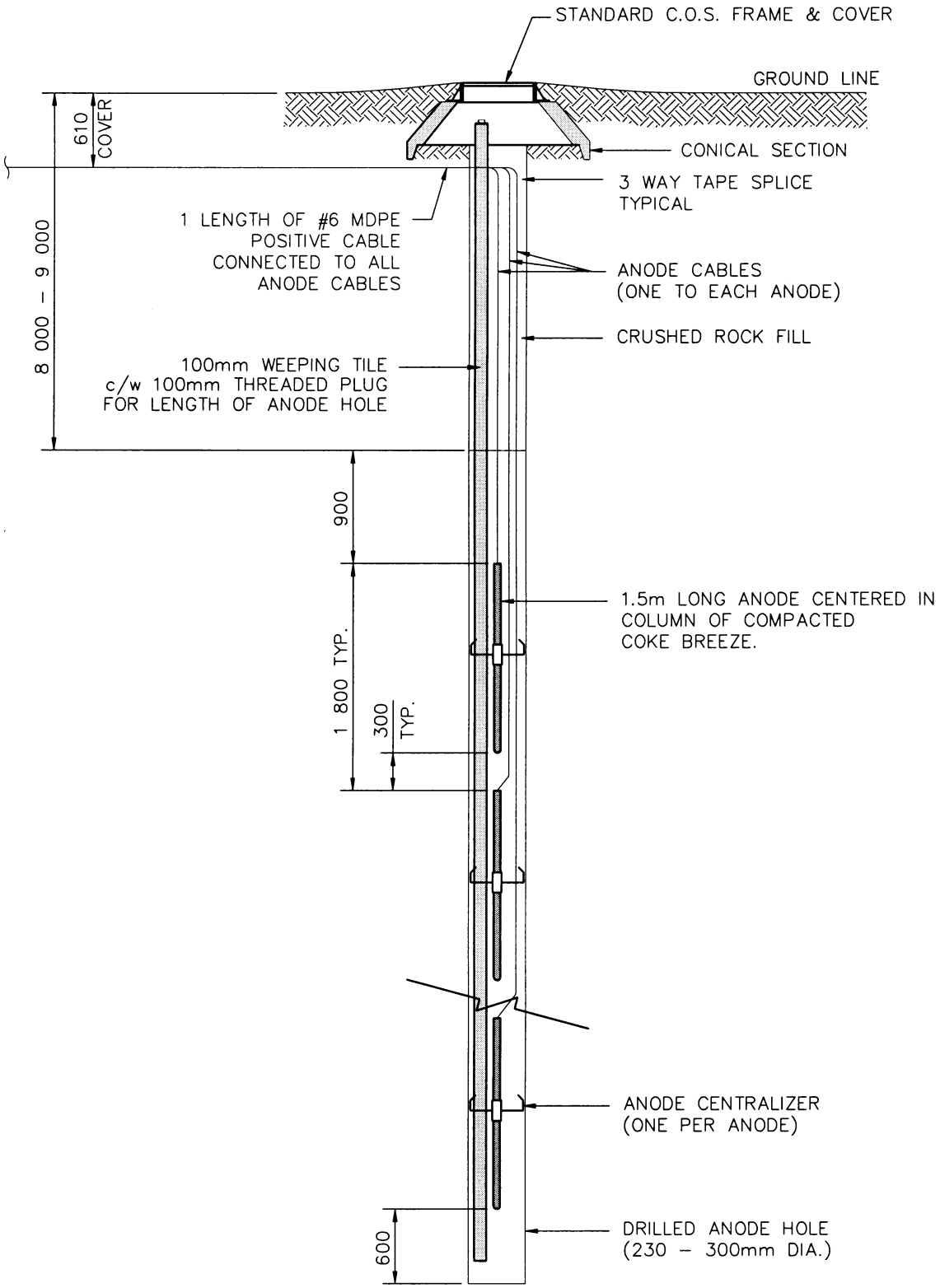
TYPICAL LAYOUT FOR PARALLEL
WATER METERS
(NO BYPASS)

APPROVALS

SIGNATURE	SIGNATURE
Christopher Richards	Russ Munro
NAME	NAME
Mar 18, 2024	Mar 19, 2024
DATE SIGNED	DATE SIGNED

SCALES: HOR. NTS VERT.

PLAN NO. 102–0013–025r005



ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

REVISIONS	
1	REV. MJ 2000-10-13
2	
3	

DRAWN BY G.R.F.
DATE 91-07-25

CHECKED BY
DATE

City of Saskatoon
INFRASTRUCTURE SERVICES

MULTIPLE IMPRESSED CURRENT ANODE GROUND BED VERTICAL INSTALLATION

APPROVED

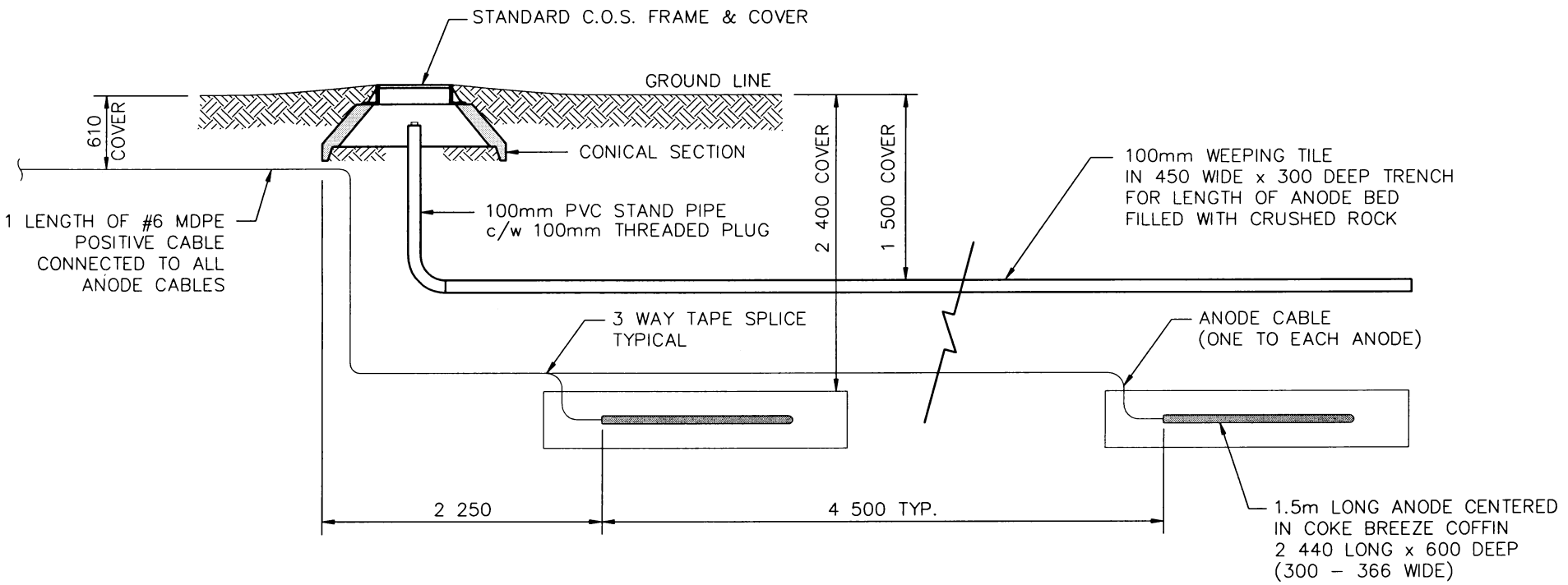
GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER

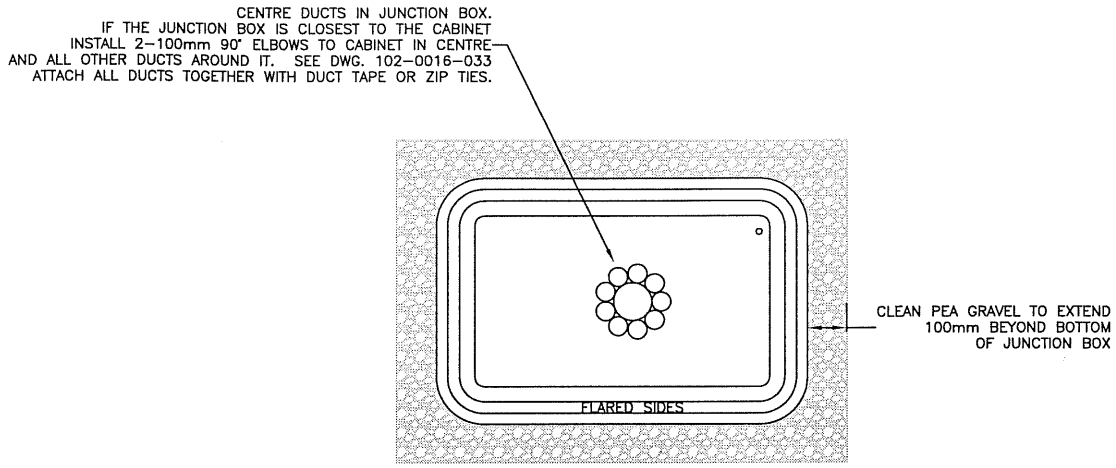
SCALES : HOR. NTS VERT.

PLAN NO. 102-0014-001r001



ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

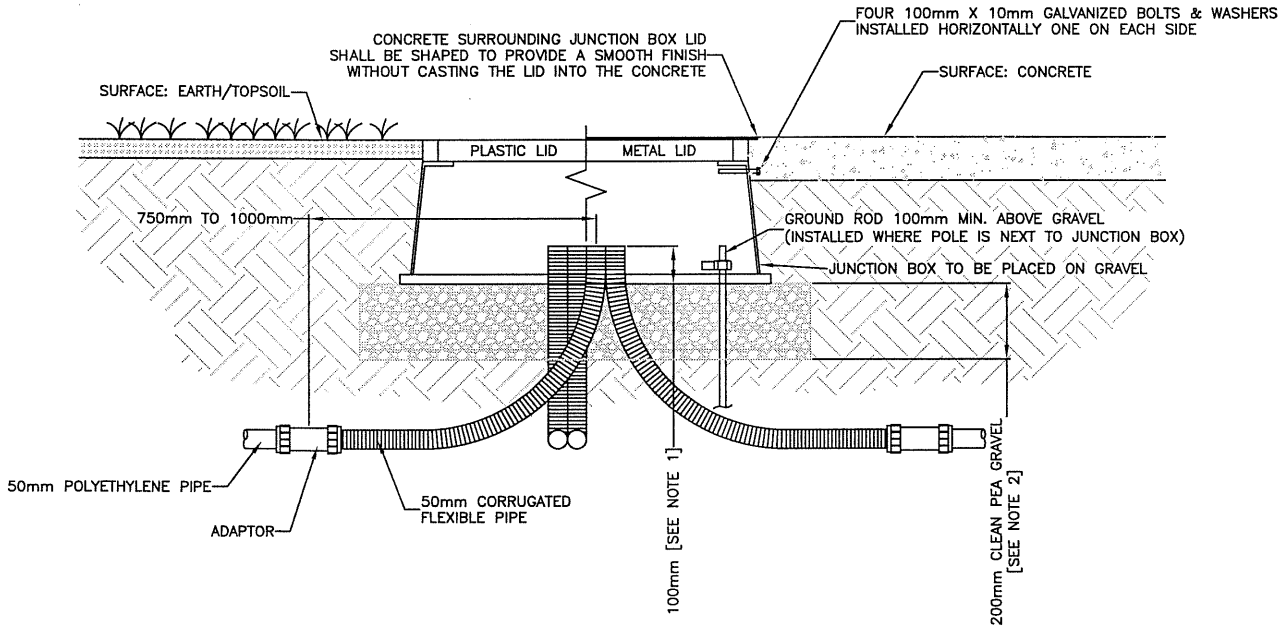
DRAWN BY GRF DATE 91-07-22 CHECKED BY A. Boyko DATE	REVISIONS 1 REV. MJ 2000-10-17 2 3	City of Saskatoon INFRASTRUCTURE SERVICES
MULTIPLE IMPRESSED CURRENT ANODE GROUND BED HORIZONTAL INSTALLATION	GENERAL MANAGER P. ENG. DATE Oct. 30, 2000 SCALES : HOR. NTS VERT. ____ PLAN NO. 102-0014-002r001	



TOP VIEW

NOTES:

1. CONDUIT TO BE CUT PARALLEL TO SURFACE
2. CLEAN PEA GRAVEL SHALL BE SUFFICIENTLY COMPACTED TO PREVENT SHIFTING OF THE JUNCTION BOX



FRONT VIEW

PLAN DESCRIPTION/REVISIONS	
4	REVISED NOTES
3	REVISED DUCT LAYOUT
2	
1	

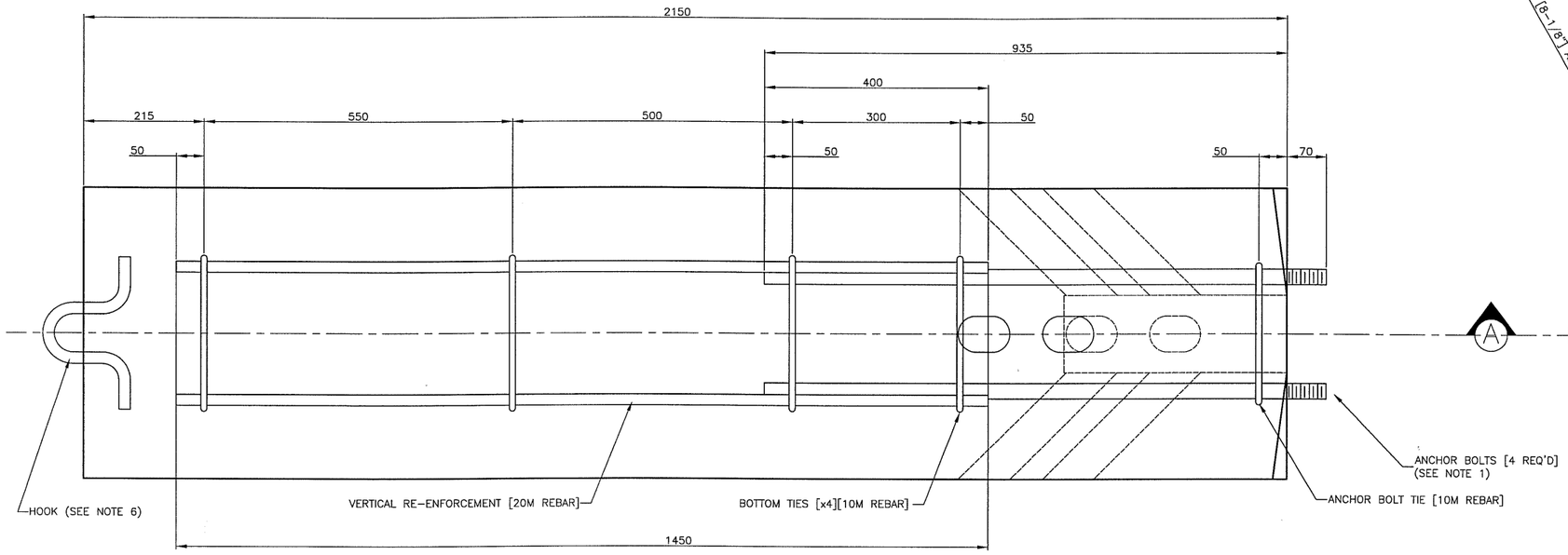
DRAWN BY RPH
DATE 2003-APR-28
SCALE : HOR. NTS VERT. _____

City of Saskatoon
Infrastructure Services Department

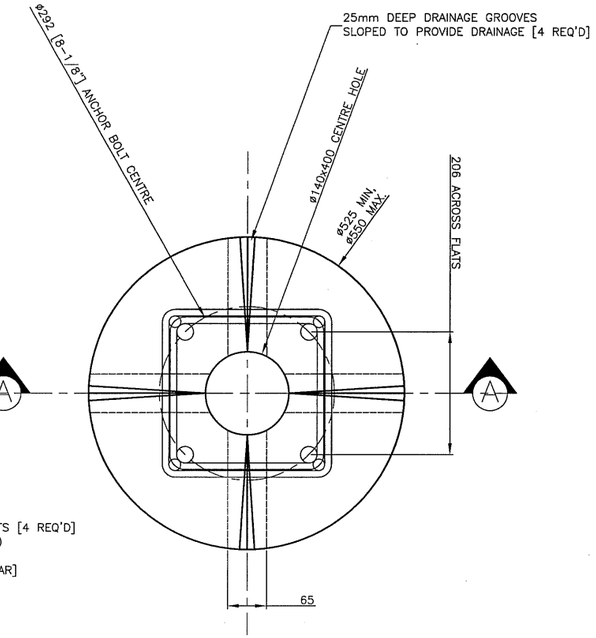
JUNCTION BOX INSTALLATION DETAILS SPECIFICATION 12600-7

APPROVED
GENERAL MANAGER MAR 14, 11
ENGINEER Goran Jaric
ENGINEER

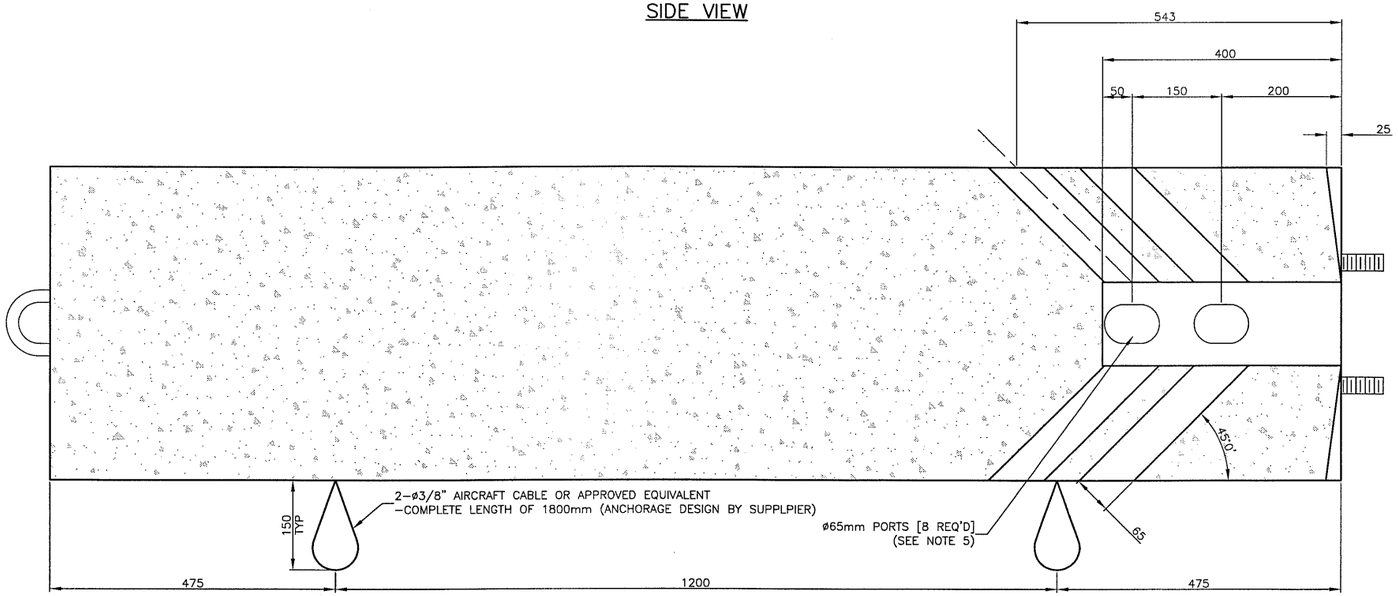
PLAN NO. 102-0016-019r004



SIDE VIEW



TOP VIEW



SECTION A-A

NOTES

1. ANCHOR BOLTS SHALL BE ø1-1/8" x 1005mm DEFORMED STEEL BAR, SIZED TO ACCOMMODATE AN 1-1/8"(I.D.) NUT, THREADED TOP 85mm, HOT-DIPPED GALVANIZED TOP 300mm, SUPPLIED WITH GALVANIZED NUT AND WASHER.

2. ANCHOR BOLTS SHALL BE CENTRED PRECISELY IN BASE, AND SHALL HAVE A 206mm BOLT SQUARE OR A ø292mm [8-1/8"] BOLT CENTRE.

3. CONCRETE SHALL BE 35 MPa ALKALI RESISTANT, ø38mm AGGREGATE, AND STEAM CURED. TOP SHALL BE SMOOTH, LEVEL, AND HAVE 4 DRAINAGE GROOVES AS SHOWN

4. REINFORCING CAGE SHALL BE SPOT-WELDED TOGETHER AND TO THE ANCHOR BOLTS.

5. ALL CABLE PORTS SHALL BE A MIN. OF 65mm I.D. AND SHALL BE CLEAR AND FREE OF DEBRIS.

6. INTEGRATE REBAR LOOP AT BOTTOM OF BASE, TO BE USED AS AN ATTACHMENT POINT FOR CHAIN HOOK TO ASSIST IN LOADING AND UNLOADING OF POLE BASE. MUST BE INSTALLED IN SUCH A MANNER TO WITHSTAND THE WEIGHT OF THE POLE BASE.

7. ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED.

	PLAN DESCRIPTION/REVISION	DATE	BY
11			
10			
9			
8			
7			
6			
5			
4	REVISED BASE DIAMETER AND NOTE 5	2010-APR-27	BAJ
3			
2	ADDED AIRCRAFT CABLE LIFTING HOOKS	2007-MAR	TLM
1	ADDED HOOK AND NOTES	2005-JAN	RPH

CONSTRUCTION & DESIGN	TRANSPORTATION	PUBLIC WORKS
ENGINEER	ENGINEER	ENGINEER
DATE	ENGINEER DATE	DATE

DRAWN BY RPH DATE 2004-JUN-28 CHECKED BY DATE

City of Saskatoon
Infrastructure Services Department

TRAFFIC SIGNAL SPECIFICATION

PRE-CAST TRAFFIC SIGNAL POLE BASE

SPECIFICATION No. 12600

GENERAL MANAGER DATE

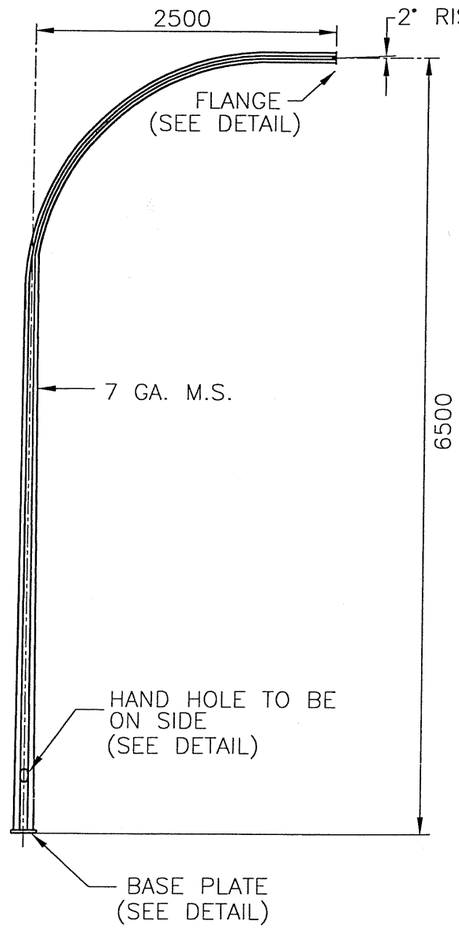
SCALES : HOR. 1:10 VERT.

SHEET NO. 1 OF 1

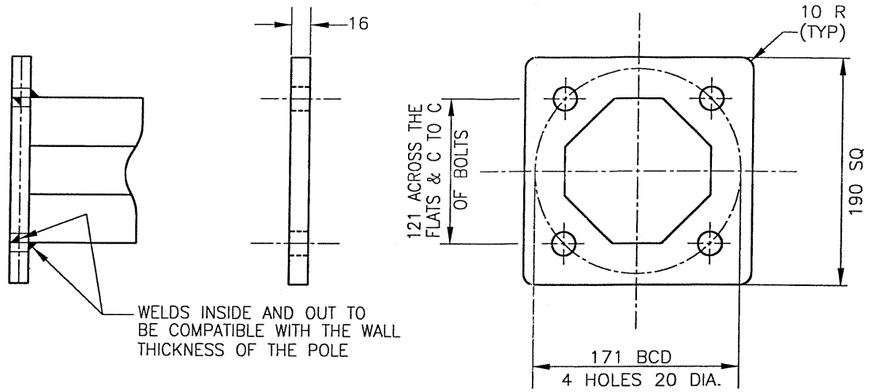
PLAN NO. 102-0016-020r004

TRAFFIC SIGNAL CORRIDOR STANDARD

NTS



FLANGE DETAIL

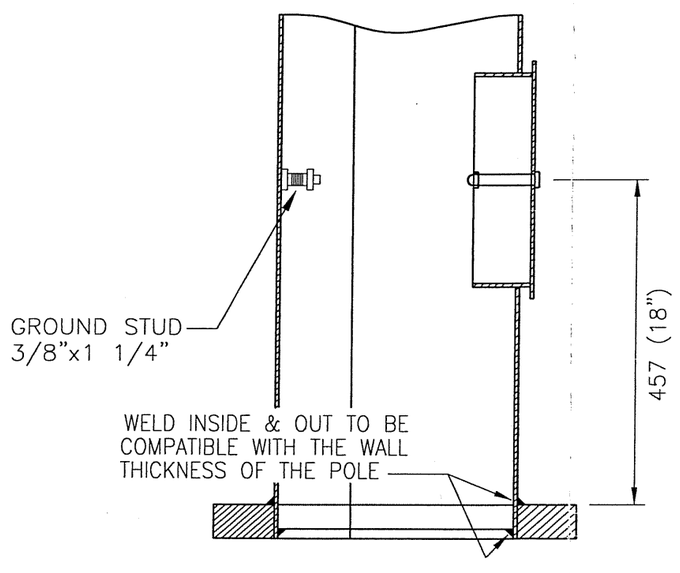


NOTES

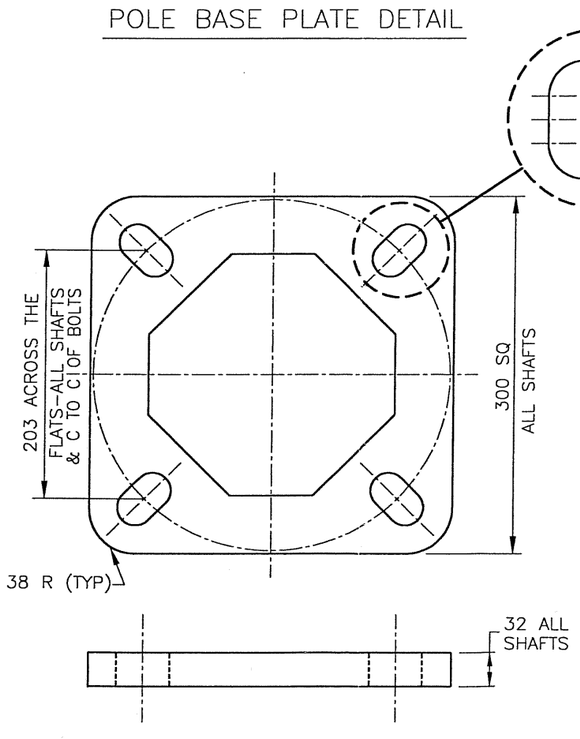
1. MAST ARM RISES APPLY TO UNLOADED STRUCTURE IN THE STANDING POSITION.
2. ALL POLES AND ARMS TO HAVE AN OCTAGONAL CROSS SECTION, TO BE STRAIGHT AND TRUE.
3. ALL WELDS TO BE CONTINUOUS.
4. STEEL GAUGES SHALL BE METRIC EQUIVALENT WHEN AVAILABLE.
5. NUT COVERS TO ACCOMMODATE ANCHOR BOLT EXTENSION OF 60mm ABOVE BASE PLATE.
6. 6 – 3mm TO 4 mm LEVELLING SHIMS SHALL BE SUPPLIED WITH EACH POLE.
7. FINISH SHALL BE: HOT–DIP GALVANIZED
8. ALL POLES SHALL BE INDIVIDUALLY WRAPPED.
9. ALL POLES SHALL BE DESIGNED TO SUPPORT SIGNAL HEADS AND/OR SIGNS HAVING A MAX. WEIGHT OF 50kg AND A MAX. TOTAL PROJECTED AREA OF 1.1m^2, MOUNTED AT THE END OF THE TRAFFIC SIGNAL ARM. MAXIMUM SIGNAL ARM LENGTH 5m.
10. WIND LOAD – 100mph OR 160kph
11. GROUND STUD MUST BE RE–THREADED AFTER GALVANIZING

HAND HOLE DETAIL

SEE PLAN 102–0016–025
FOR ADDITIONAL HANDHOLE DETAIL



POLE BASE PLATE DETAIL



NO.	DESCRIPTION	DATE	BY
1	REVISED NOTES REVISIONS	JAN 05 DATE	RPH BY

STAMP: APPROVED FOR CONSTRUCTION, JAN 26 2005, DATE

	MUNICIPAL ENGINEERING	PUBLIC WORKS
ENGINEER	Goran Lazic	
DRAWN BY	CJP	
DATE	96 06 28	
CHECKED BY		

City of Saskatoon
Infrastructure Services Department

SPECIFICATIONS FOR:
TRAFFIC SIGNAL CORRIDOR POLE
SPECIFICATION NO. 12501

GENERAL MANAGER / P. ENG. / DATE

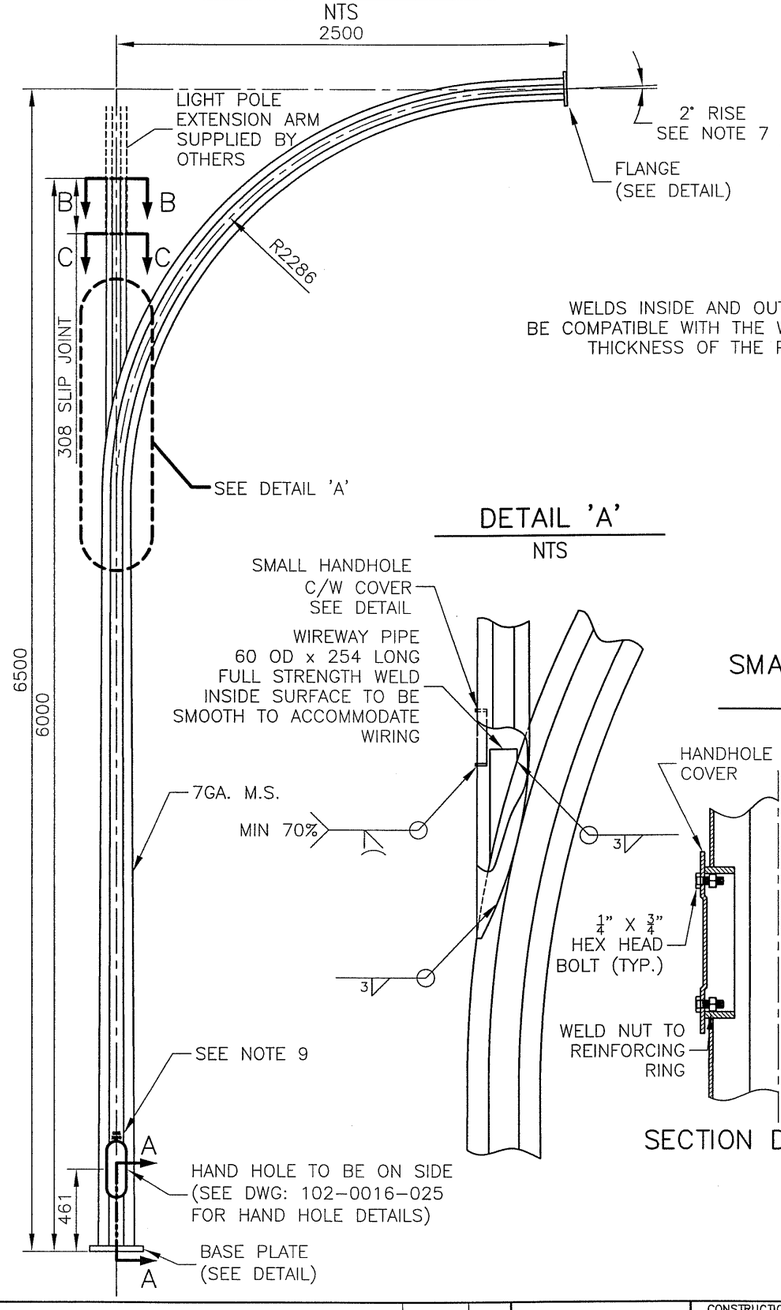
SCALES : HOR. 1:50 VERT.

SHEET NO.

PLAN NO. 102–0016–021r001

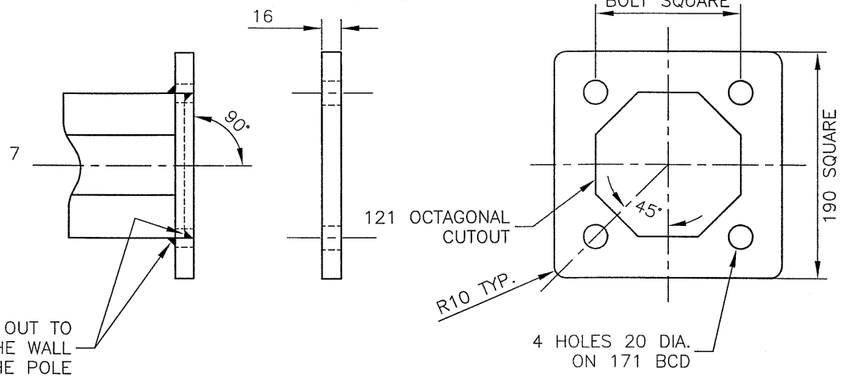
TRAFFIC SIGNAL CORRIDOR STANDARD

NTS



FLANGE DETAIL

SCALE 1:50



NOTES

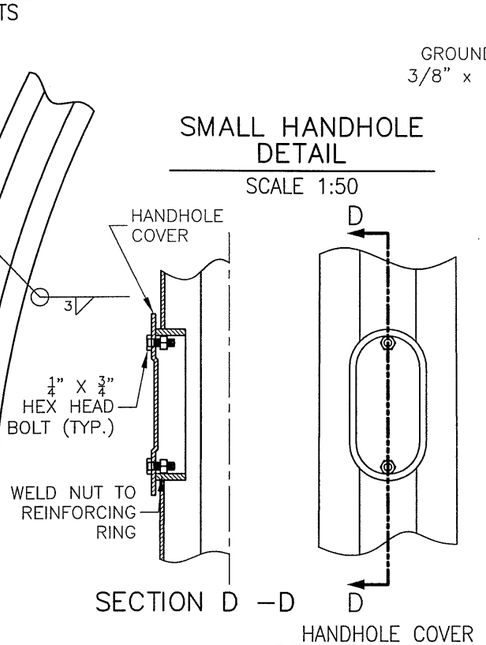
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. STEEL GAUGES SHALL BE METRIC EQUIVALENT WHEN AVAILABLE.
3. ALL WELDS TO BE CONTINUOUS.
4. ALL POLES SHALL BE DESIGNED TO SUPPORT SIGNAL HEADS AND/OR SIGNS HAVING A MAX. WEIGHT OF 50kg AND A MAX. TOTAL PROJECTED AREA OF 1.1m², MOUNTED AT THE END OF THE TRAFFIC SIGNAL ARM. MAXIMUM SIGNAL ARM LENGTH 5m.
5. WIND LOAD – 100mph OR 160kph
6. ALL POLES AND ARMS TO HAVE AN OCTAGONAL CROSS SECTION, TO BE STRAIGHT AND TRUE.
7. MAST ARM RISES APPLY TO UNLOADED STRUCTURE IN THE STANDING POSITION.
8. NUT COVERS TO ACCOMMODATE ANCHOR BOLT EXTENSION OF 60mm ABOVE BASE PLATE.
9. SUPPLIER TO WELD INITIALS & YEAR ABOVE HAND HOLE
10. FINISH SHALL BE: HOT-DIP GALVANIZED
11. GROUND STUD MUST BE RE-THREADED AFTER GALVANIZING
12. ALL POLES SHALL BE INDIVIDUALLY WRAPPED.
13. 6 – 3mm TO 4 mm LEVELING SHIMS SHALL BE SUPPLIED WITH EACH POLE.

DETAIL 'A'

NTS

SMALL HANDHOLE DETAIL

SCALE 1:50

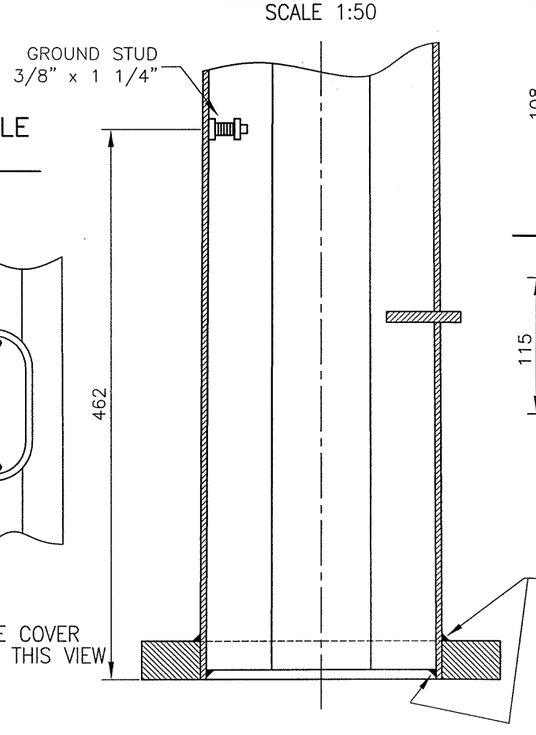


SECTION D – D

HANDHOLE COVER REMOVED IN THIS VIEW

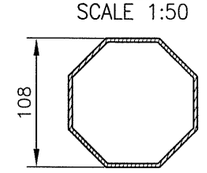
SECTION A – A

SCALE 1:50



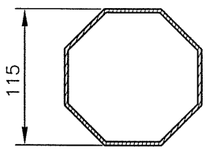
SECTION B – B

SCALE 1:50



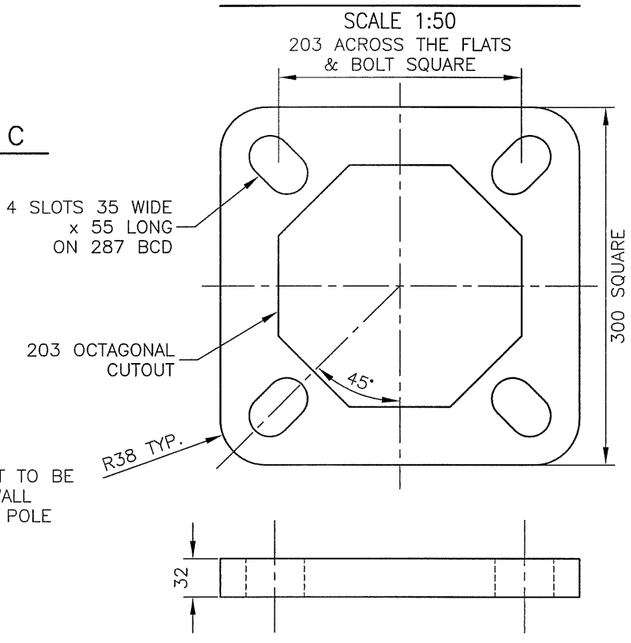
SECTION C – C

SCALE 1:50



POLE BASE PLATE DETAIL

SCALE 1:50



11			
10			
9			
8			
7			
6			
5			
4			
3	REVISED SLOT DIMENSIONS, UPDATED DRAWING	2010-NOV-08	BAJ
2	REVISED NOTES	2005-JAN	RPH
1	ADDED DETAIL A AND RELATED	2004-FEB	RPH
	PLAN DESCRIPTION/REVISION	DATE	BY

CONSTRUCTION & DESIGN	TRANSPORTATION	PUBLIC WORKS
ENGINEER	ENGINEER Nov 8/2010	ENGINEER
DATE	DATE	DATE

DRAWN BY CJP DATE 1996-JUN-28 CHECKED BY DATE

City of Saskatoon
Infrastructure Services Department

TRAFFIC SIGNAL SPECIFICATION

COMBINATION STREET LIGHT AND TRAFFIC SIGNAL POLE

SPECIFICATION NO. 12500

GENERAL MANAGER

Mar 14, 11
DATE

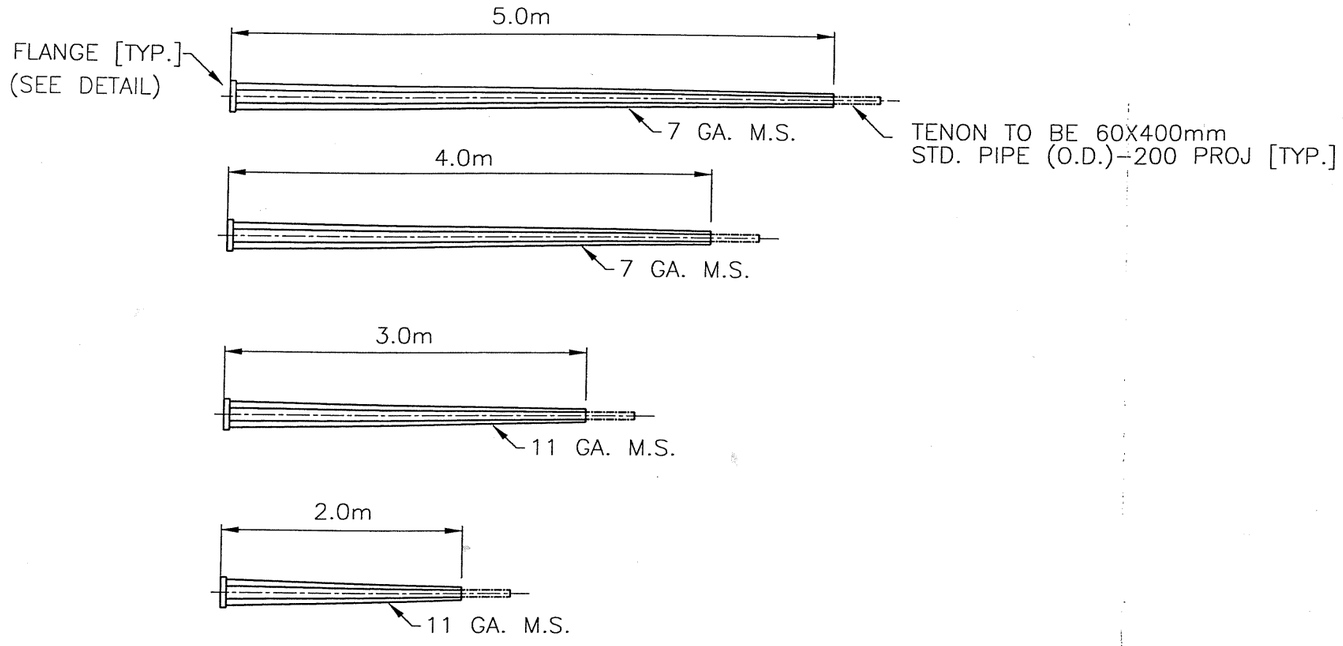
SCALES : HOR. 1:50 VERT.

SHEET NO. 1 OF 1

PLAN NO. 102-0016-022r002

TRAFFIC SIGNAL ARMS

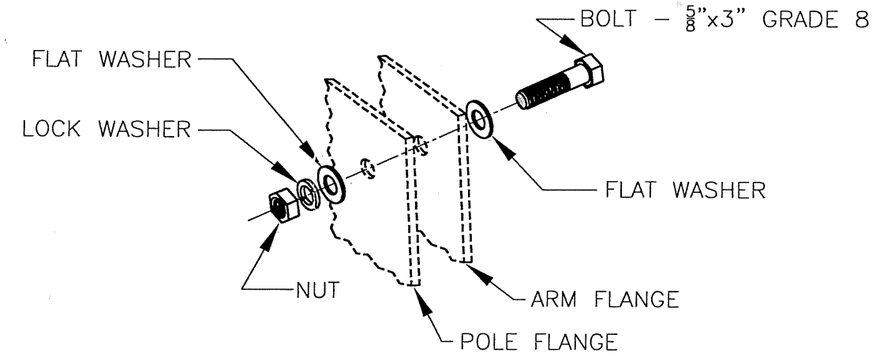
NTS



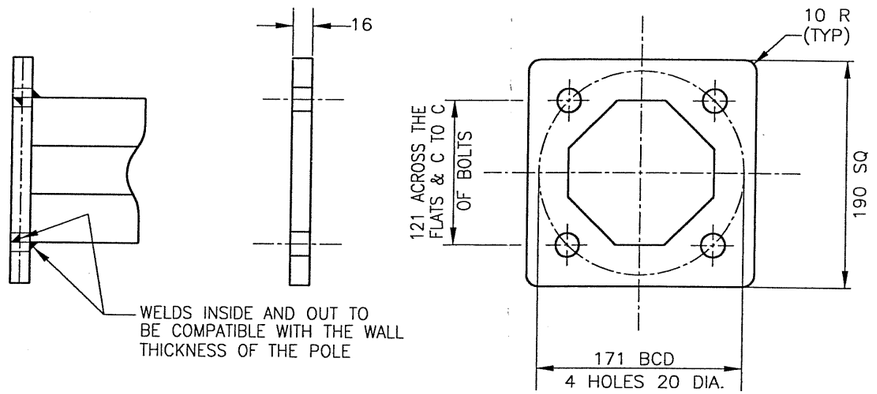
NOTES

1. ALL ARMS TO HAVE AN OCTAGONAL CROSS SECTION, TO BE STRAIGHT AND TRUE.
2. ALL WELDS TO BE CONTINUOUS.
3. STEEL GAUGES SHALL BE METRIC EQUIVALENT WHEN AVAILABLE.
4. EACH ARM TO BE SUPPLIED WITH FOUR GALVANIZED 5/8" X 3" LG. GRADE 8 N.C. S.A.E. HEX HEAD BOLTS C/W NUTS AND WASHERS FOR FLANGE CONNECTIONS. ATTACH LOOSELY DURING SHIPPING (SEE BOLT ASSEMBLY DETAIL)
5. FINISH SHALL BE: HOT-DIP GALVANIZED
6. ALL ARMS SHALL BE INDIVIDUALLY WRAPPED.
7. ALL ARMS SHALL BE DESIGNED TO SUPPORT SIGNAL HEADS AND/OR SIGNS HAVING A MAX. WEIGHT OF 50kg AND A MAX. TOTAL PROJECTED AREA OF 1.1m², MOUNTED AT THE END OF THE TRAFFIC SIGNAL ARM.

BOLT ASSEMBLY



FLANGE DETAIL



NO.	DESCRIPTION	DATE	NO.	REVISIONS	DATE	BY
11						
10						
9						
8						
7						
6						
5						
4						
3						
2						
1	BASE PLAN		1	REVISED NOTES	JAN 05	RPH

STAMP: APPROVED FOR CONSTRUCTION, JAN 26 2005, DATE

	MUNICIPAL ENGINEERING	PUBLIC WORKS
ENGINEER	ENGINEER	ENGINEER
ENGINEER	ENGINEER	ENGINEER
DRAWN BY	DRAWN BY CJP	DRAWN BY
DATE	DATE 96 06 28	DATE
CHECKED BY	CHECKED BY	CHECKED BY
DATE	DATE	DATE

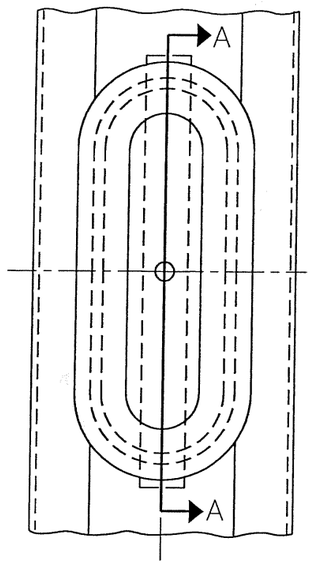
City of Saskatoon
Infrastructure Services Department

SPECIFICATIONS FOR:
TRAFFIC SIGNAL ARMS
SPECIFICATION NO. 12502

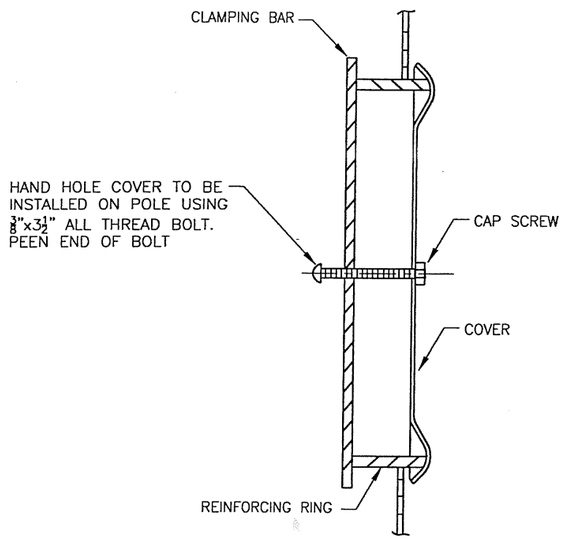
GENERAL MANAGER, P. ENG, DATE

SCALES: HOR. 1:50, VERT.
SHEET NO.
PLAN NO. 102-0016-023r001

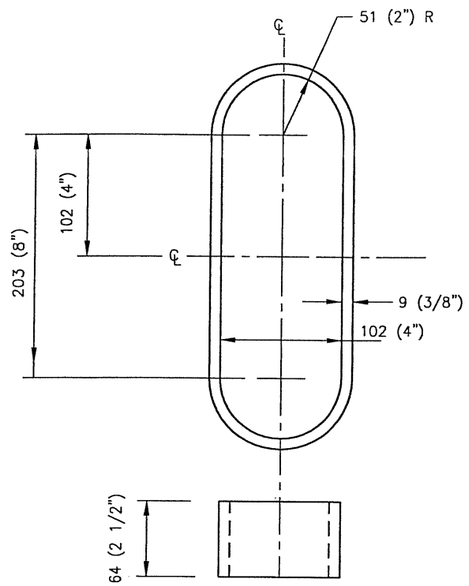
FRONT VIEW



SECTION A–A



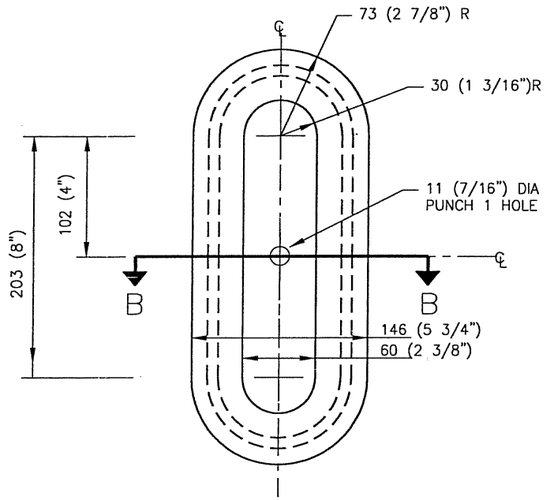
REINFORCING RING



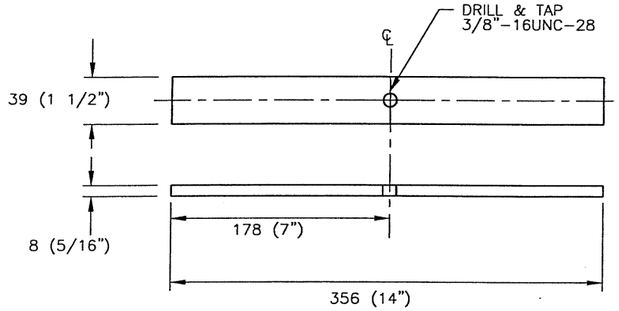
NOTES:

1. FINISH SHALL BE: HOT–DIP GALVANIZED
2. RE–THREAD BOLTS AFTER GALVANIZING

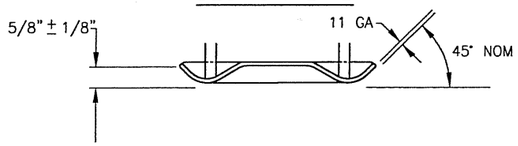
COVER



CLAMPING BAR



SECTION B–B



NO.	DESCRIPTION	DATE	BY
1	REVISED NOTES	JAN. 05	RPH
1	BASE PLAN		

STAMP: APPROVED FOR CONSTRUCTION — JAN 26 2005 — DATE

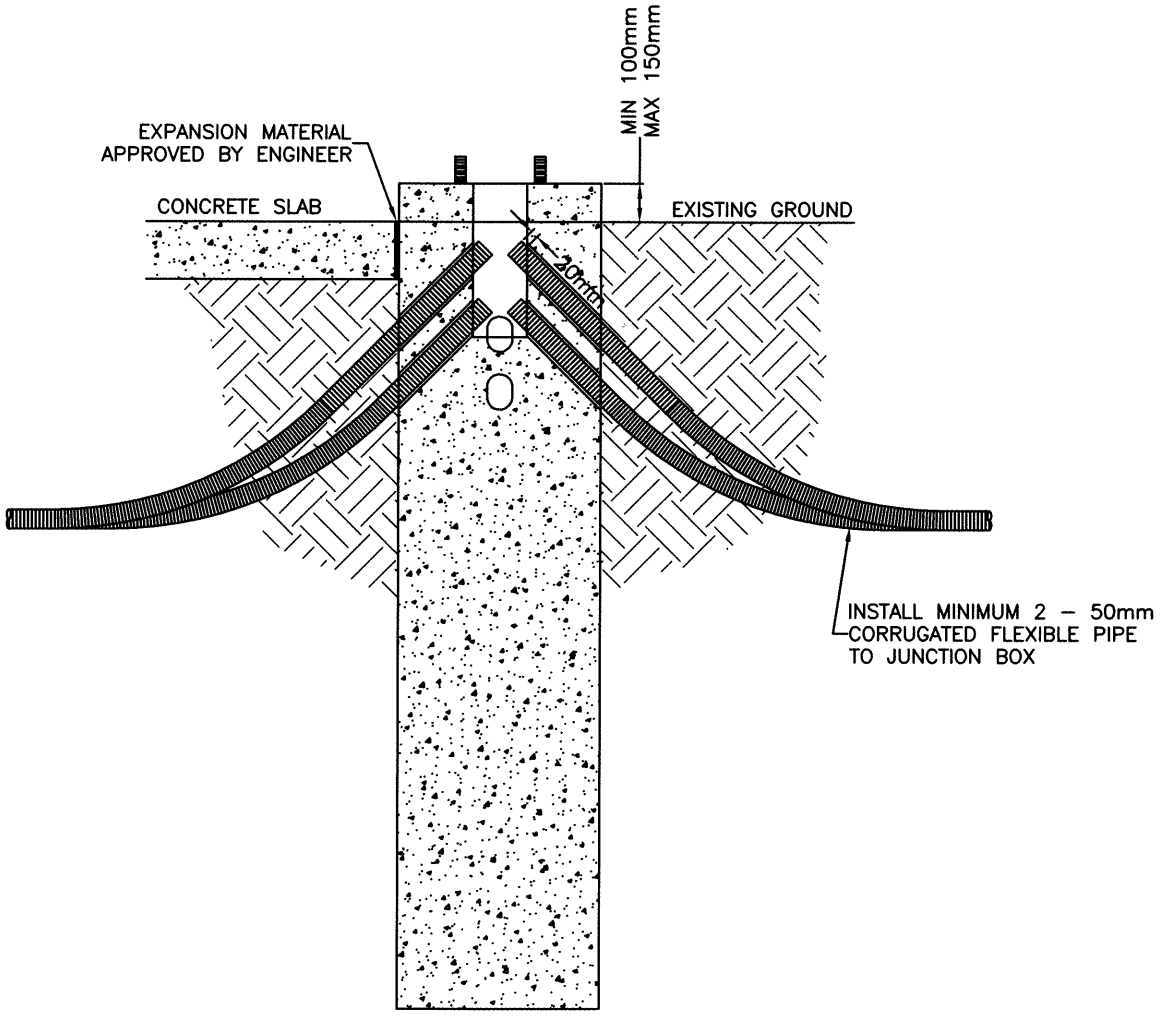
	MUNICIPAL ENGINEERING	PUBLIC WORKS
ENGINEER		
ENGINEER		
DRAWN BY	CJP	
DATE	96 06 28	
CHECKED BY		
DATE		

City of Saskatoon
Infrastructure Services Department

SPECIFICATIONS FOR:
HAND HOLE ASSEMBLY

GENERAL MANAGER — P. ENG — DATE: MAR 19 11

SCALES: HOR. NTS — VERT. —
SHEET NO.
PLAN NO. 102–0016–025r001



NOTE:
EXCAVATION FOR THE POLE BASE SHALL BE OF SUFFICIENT WIDTH TO ALLOW FOR THE MECHANICAL COMPACTION OF BACKFILL MATERIAL. ALL LOOSE MATERIAL SHALL BE REMOVED FROM THE EXCAVATION AND BACKFILLED WITH BASE AGGREGATE AS PER SECTION 03001–3.2.2 (AVAILABLE ON THE CITY'S WEBSITE).

PLAN DESCRIPTION/REVISIONS	
4	
3	ADDED EXCAVATION NOTE 2018–FEB–27 AMR
2	UPDATED INFO 2014–DEC–18 DJC
1	

DRAWN BY BAJ
DATE 2010–FEB–05
SCALE : HOR. _____ VERT. _____

City of Saskatoon
Infrastructure Services Department

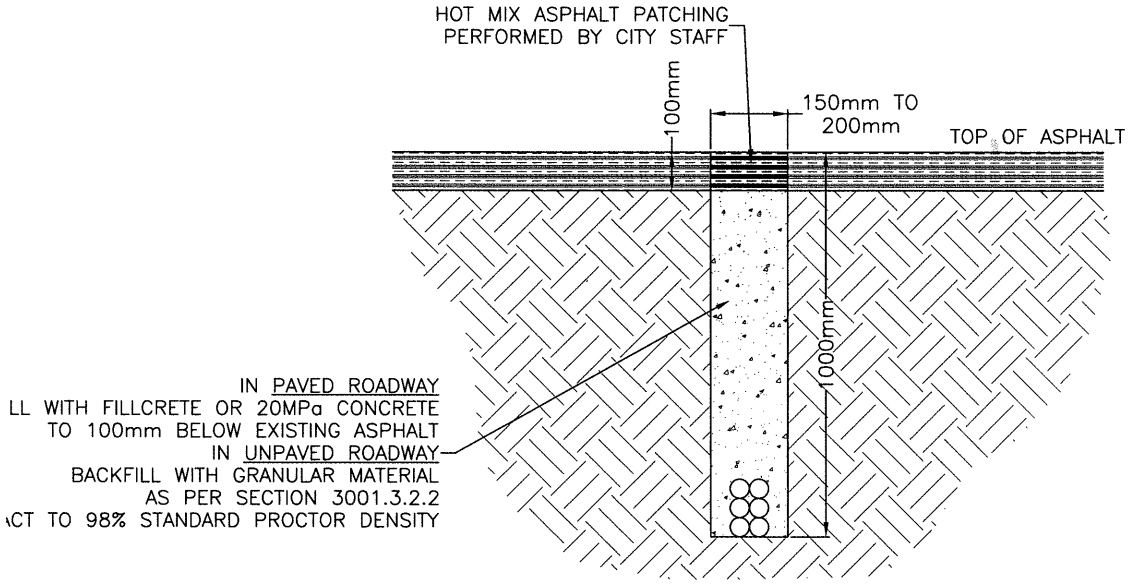
PRE–CAST POLE BASE
INSTALLATION DETAILS
SPECIFICATION 12600–8

APPROVED

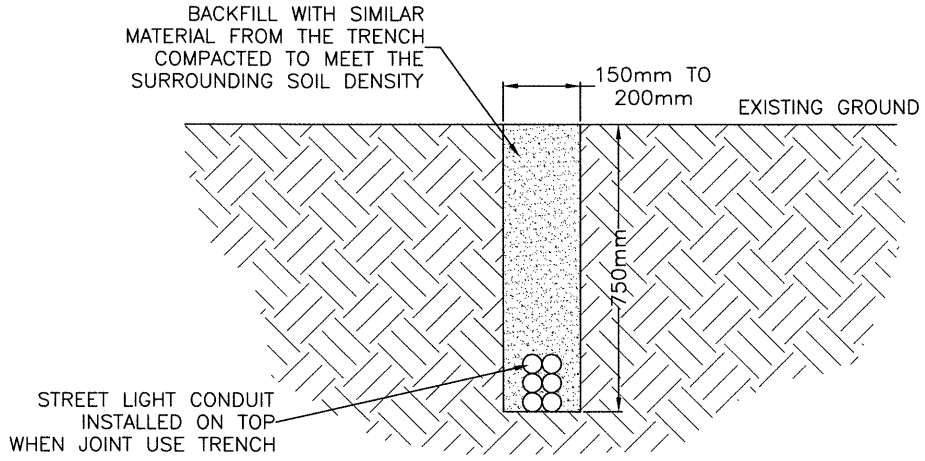
Goran Jazic
ENGINEER

ENGINEER

PLAN NO. 102–0016–029r003



TRENCHING IN ROADWAYS



TRENCHING IN NATURAL GROUND

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	REMOVED BACK OF CURB DETAIL 2014-DEC-18 DJC

DRAWN BY BAJ

DATE 2010-FEB-05

SCALE : HOR. _____ VERT. _____

City of Saskatoon
Infrastructure Services Department

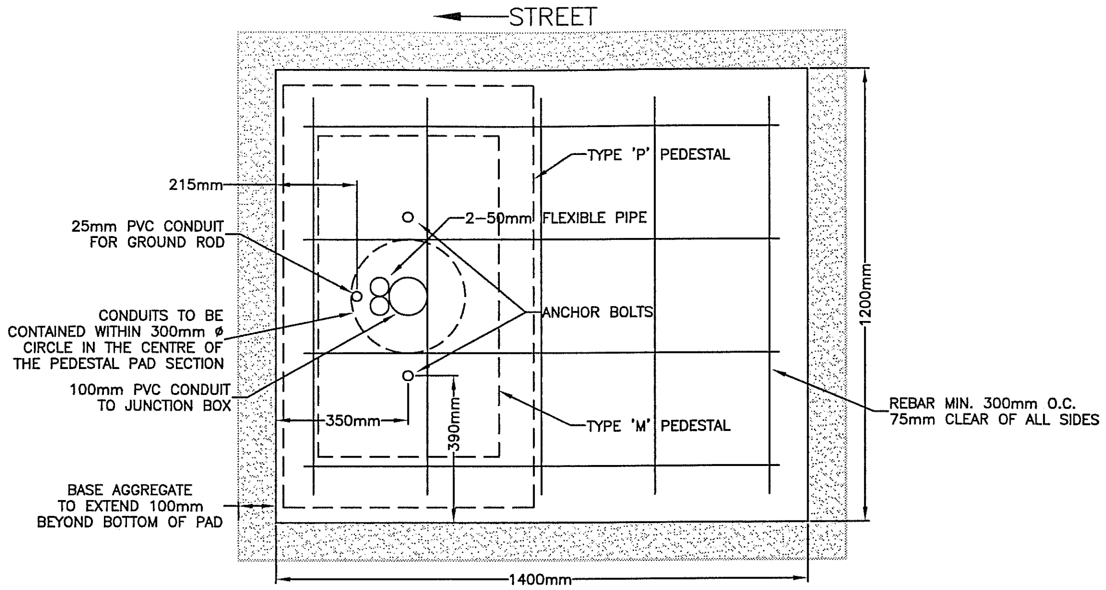
TRENCHING
INSTALLATION DETAILS
SPECIFICATION 12600-5

APPROVED

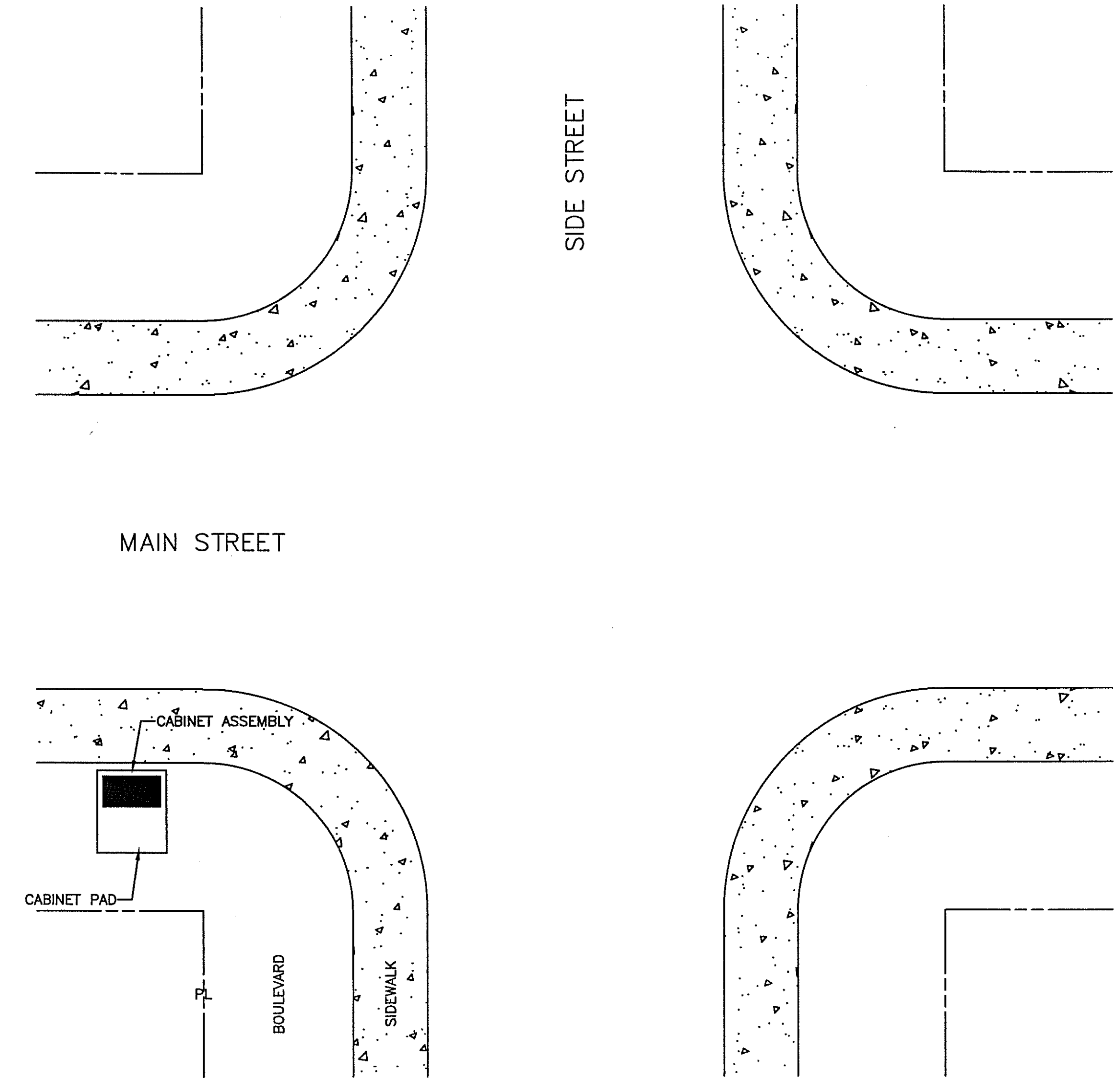
ENGINEER

ENGINEER

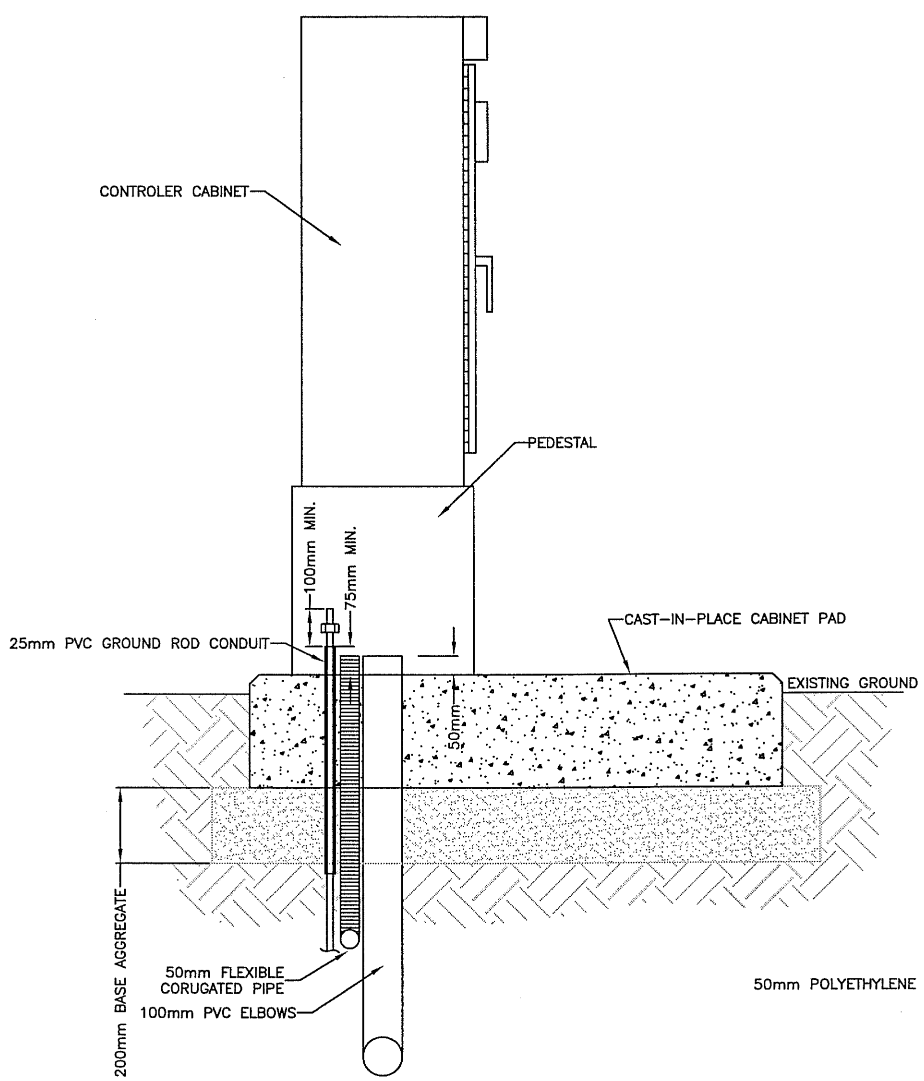
PLAN NO. 102-0016-032r002



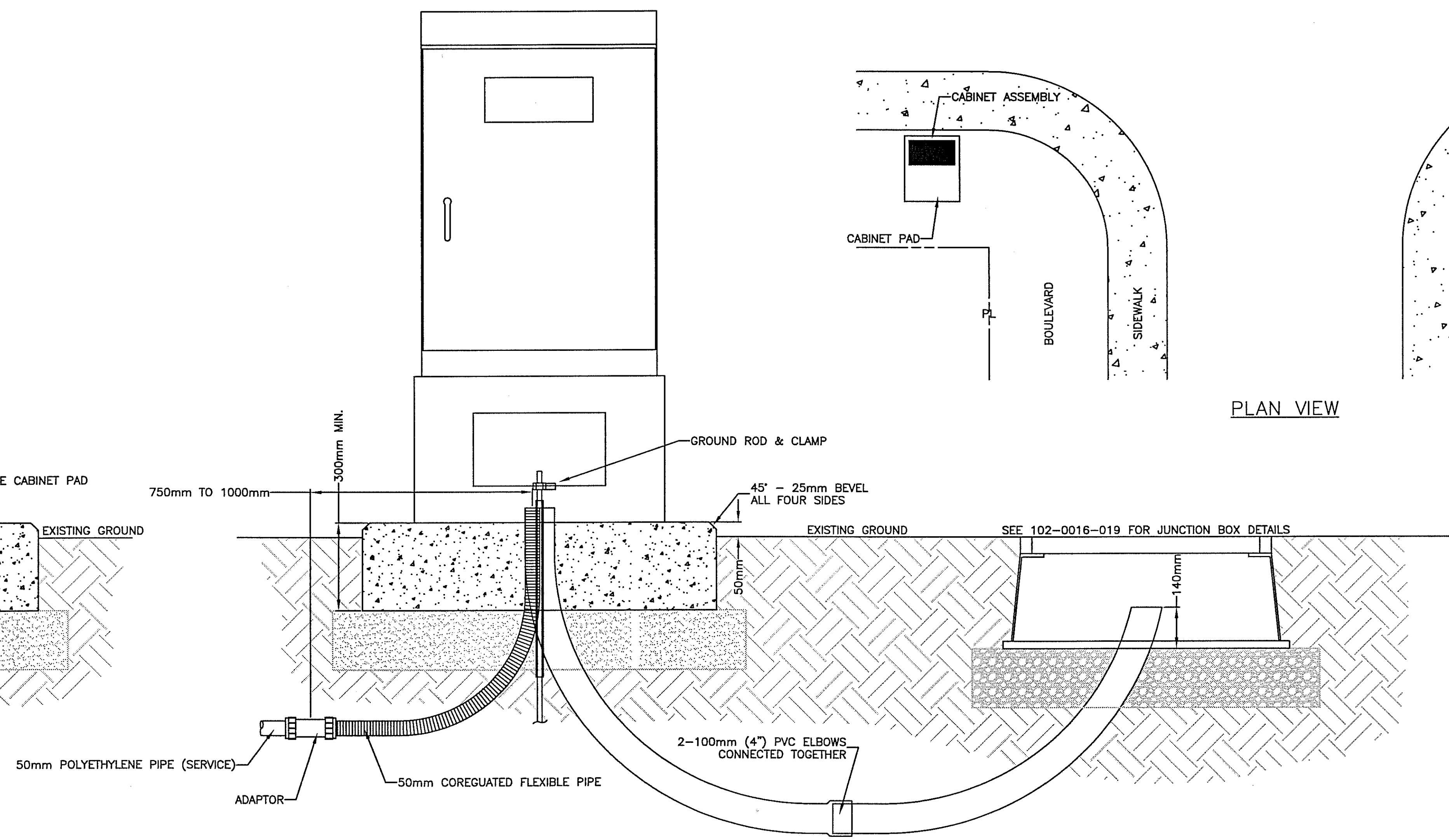
TOP VIEW



PLAN VIEW



SIDE VIEW



FRONT VIEW

	PLAN DESCRIPTION/REVISION	DATE	BY
11			
10			
9			
8			
7			
6			
5			
4			
3	RELOCATED GROUND ROD	2011-JUN-21	BAJ
2	REVISED NOTES	2011-FEB-28	BAJ
1	NEW SPEC DRAWING	2010-FEB-04	BAJ

CONSTRUCTION & DESIGN	TRANSPORTATION	PUBLIC WORKS
ENGINEER	ENGINEER	ENGINEER
DATE	DATE June 27/11	DATE

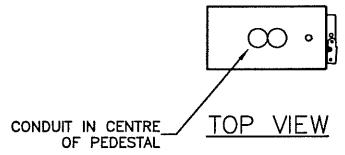
DRAWN BY BAJ DATE 2010-FEB-04 CHECKED BY DATE

City of Saskatoon
Infrastructure Services Department

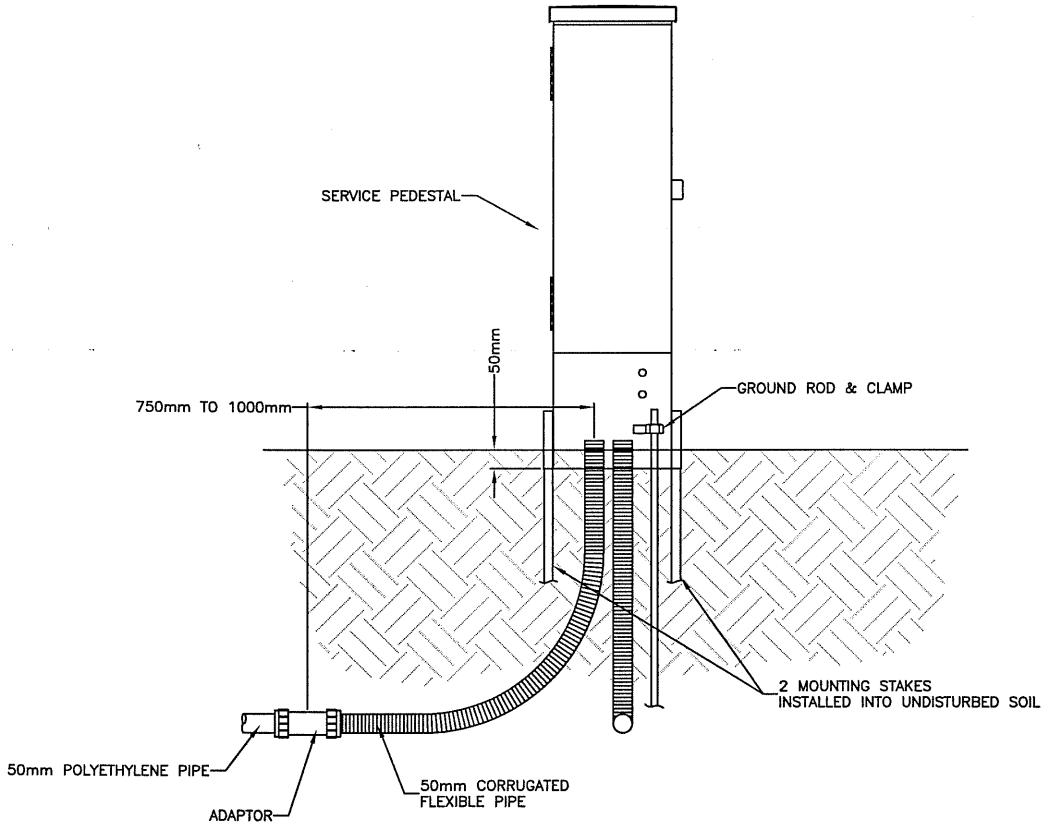
TRAFFIC SIGNALS SPECIFICATION

CAST-IN-PLACE CABINET BASE
IN NATURAL GROUND INSTALLATION DETAILS
SPECIFICATION 12600-9.1

GENERAL MANAGER
DATE Jun 30/11
SCALES : HOR. NTS VERT.
SHEET NO. 1 OF 1
PLAN NO. 102-0016-033r003



TOP VIEW



FRONT VIEW

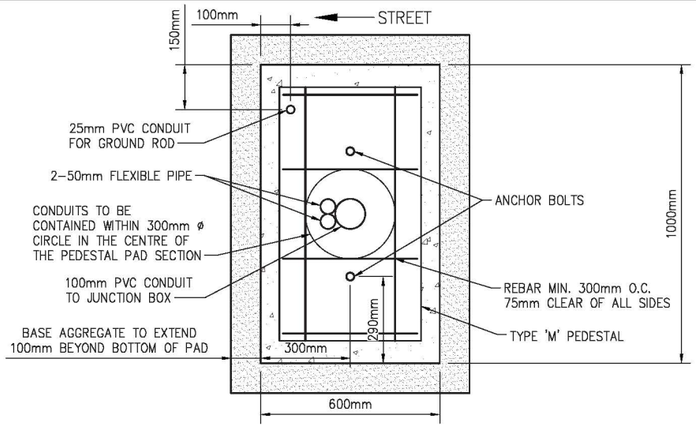
PLAN DESCRIPTION/REVISIONS	
4	
3	
2	REVISED NOTES & SIZE OF CABINET
1	NEW SPEC DRAWING

DRAWN BY BAJ
DATE 2010-FEB-05
SCALE : HOR. _____ VERT. _____

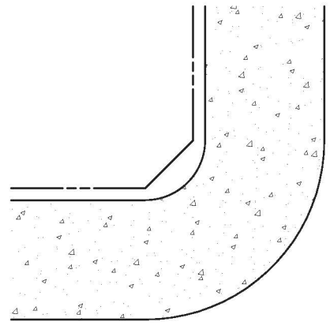
City of Saskatoon
Infrastructure Services Department

SERVICE PEDESTAL INSTALLATION DETAILS SPECIFICATION 12600-11

APPROVED
GENERAL MANAGER — MAR 14, 11
ENGINEER
ENGINEER
PLAN NO. 102-0016-034r002

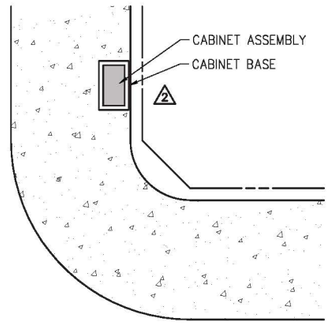


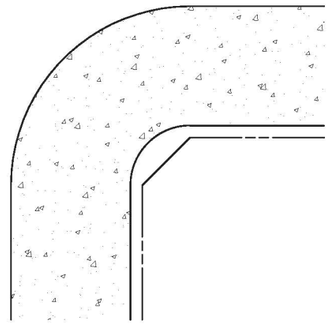
TOP VIEW



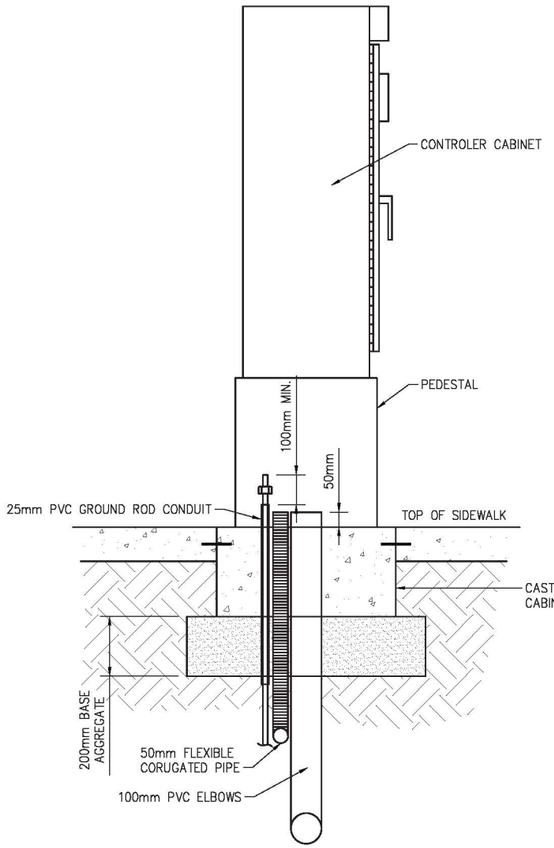
MAIN STREET

SIDE STREET

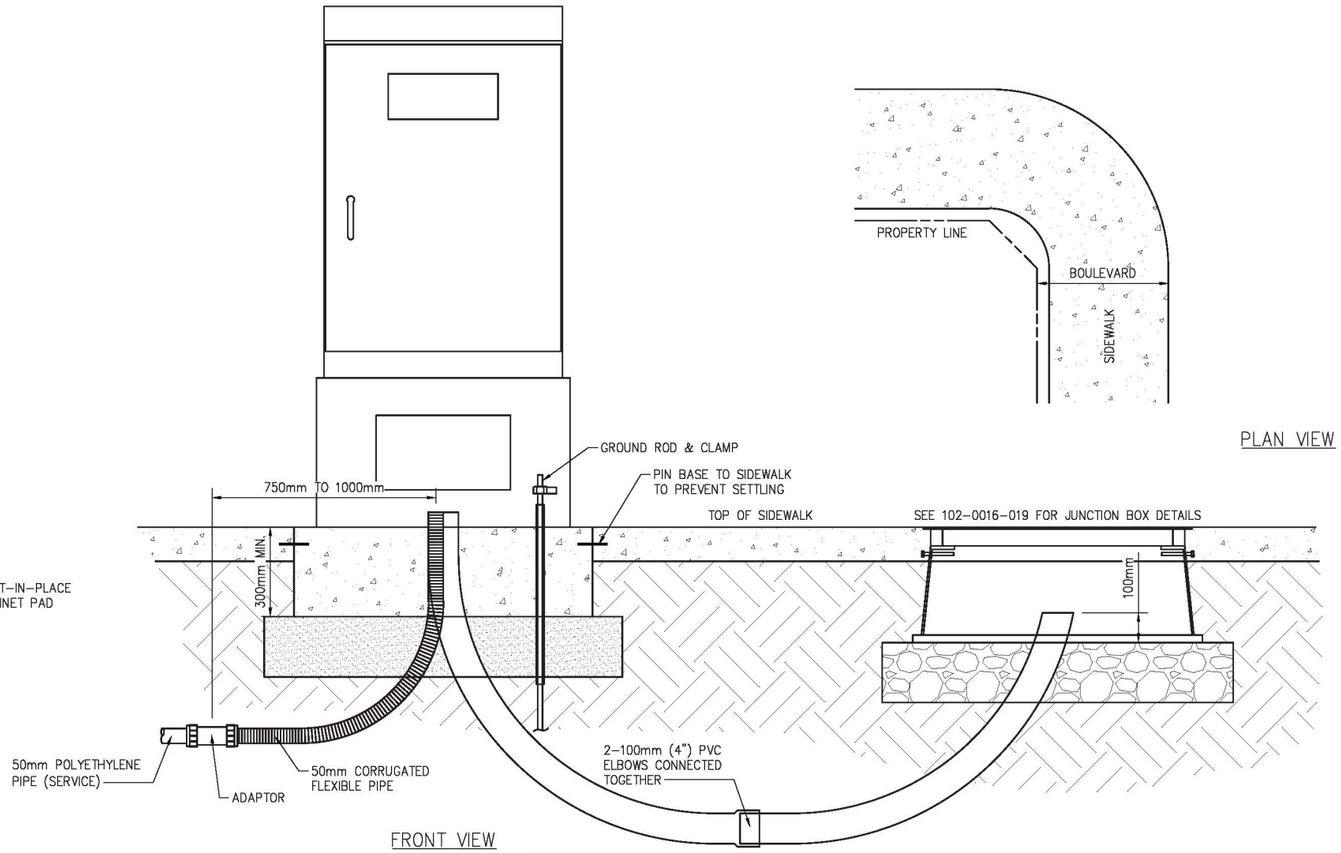




PLAN VIEW



SIDE VIEW



FRONT VIEW

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2011–FEB–28	BAJ
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ

City of Saskatoon

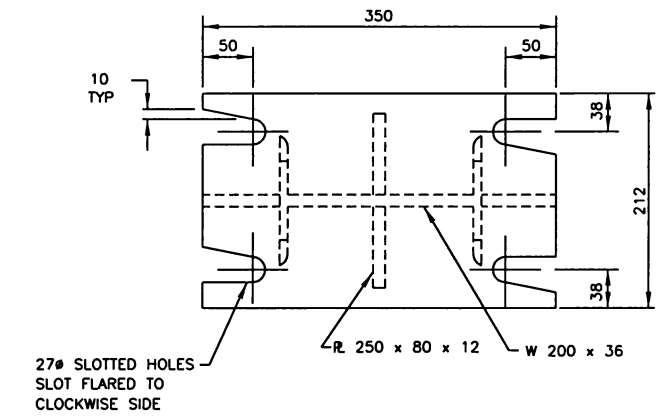
CAST–IN–PLACE CABINET BASE SIDEWALK INSTALLATION DETAILS SPECIFICATION 12600–9.2

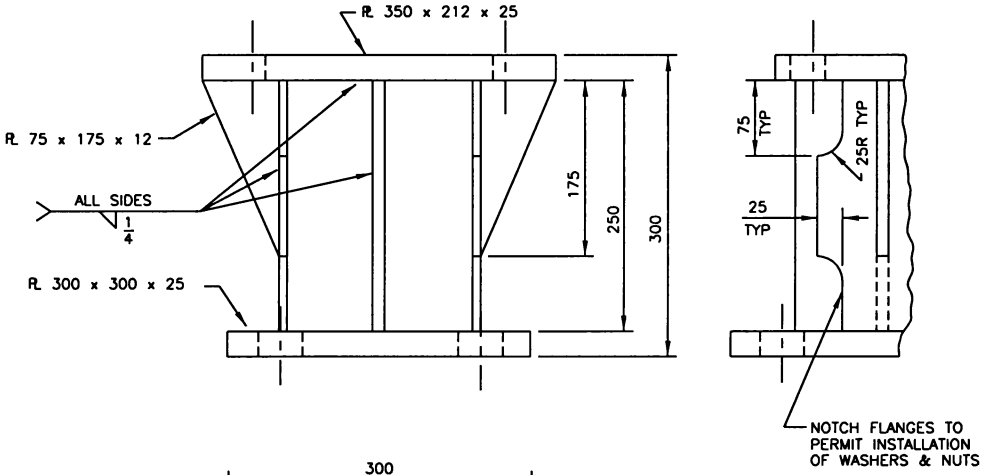
APPROVALS

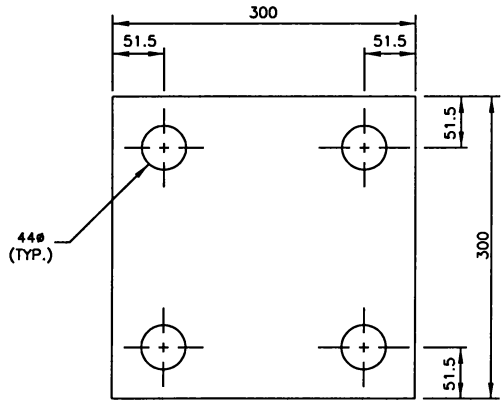
Chelsea Lanning (Apr 23, 2020)	
SIGNATURE	SIGNATURE
Chelsea Lanning	Matt Jurkiewicz
NAME	NAME
Apr 23, 2020	Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT.

PLAN NO. 102–0016–039r002







NOTES:
1. Structural steel to CSA G4021 grade 300W.
2. Weld electrode to CSA W481, E70-XX
3. Fabrication and erection of structural steel to CSA S16.
4. All structural steel to be galvanized.

D:\1WORKING\102\0017\102001701OR003.DWG LAYOUT1.LYT 2003-01-08 14:42 BY ISREGANH

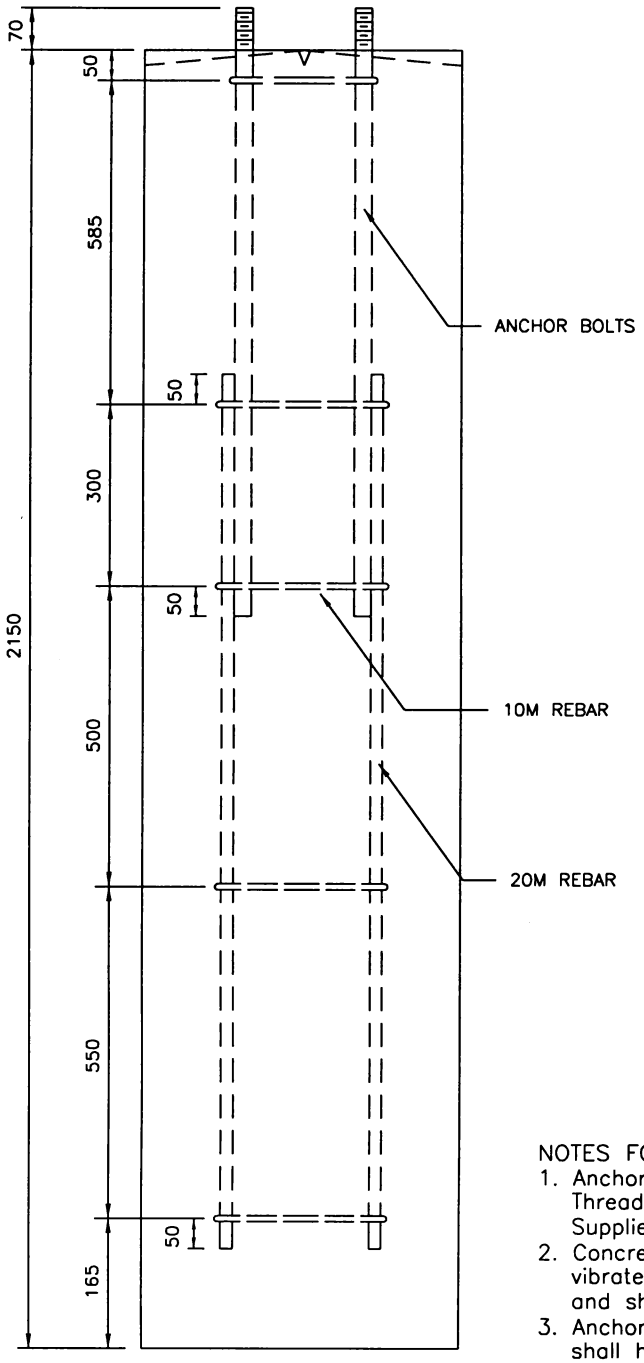
REVISIONS	
1	
2	REVISED HOLE DIMS 01 03 RPH
3	

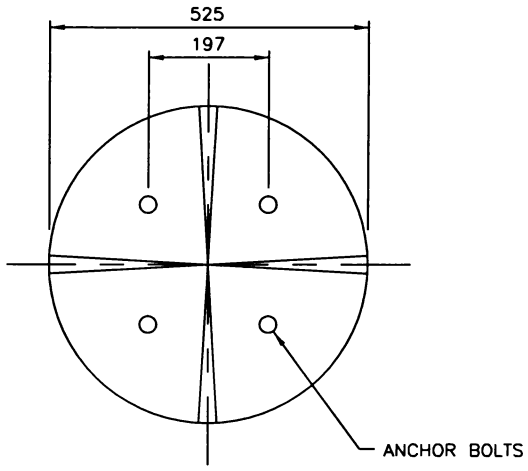
DRAWN BY CJP
DATE 01 09 06
CHECKED BY
DATE Jan 8/03

City of Saskatoon
INFRASTRUCTURE SERVICES

ADAPTER PLATE FOR ROADSIDE GUIDESIGN

APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. 1:7.5 VERT.
PLAN NO. 102-0017-010r003



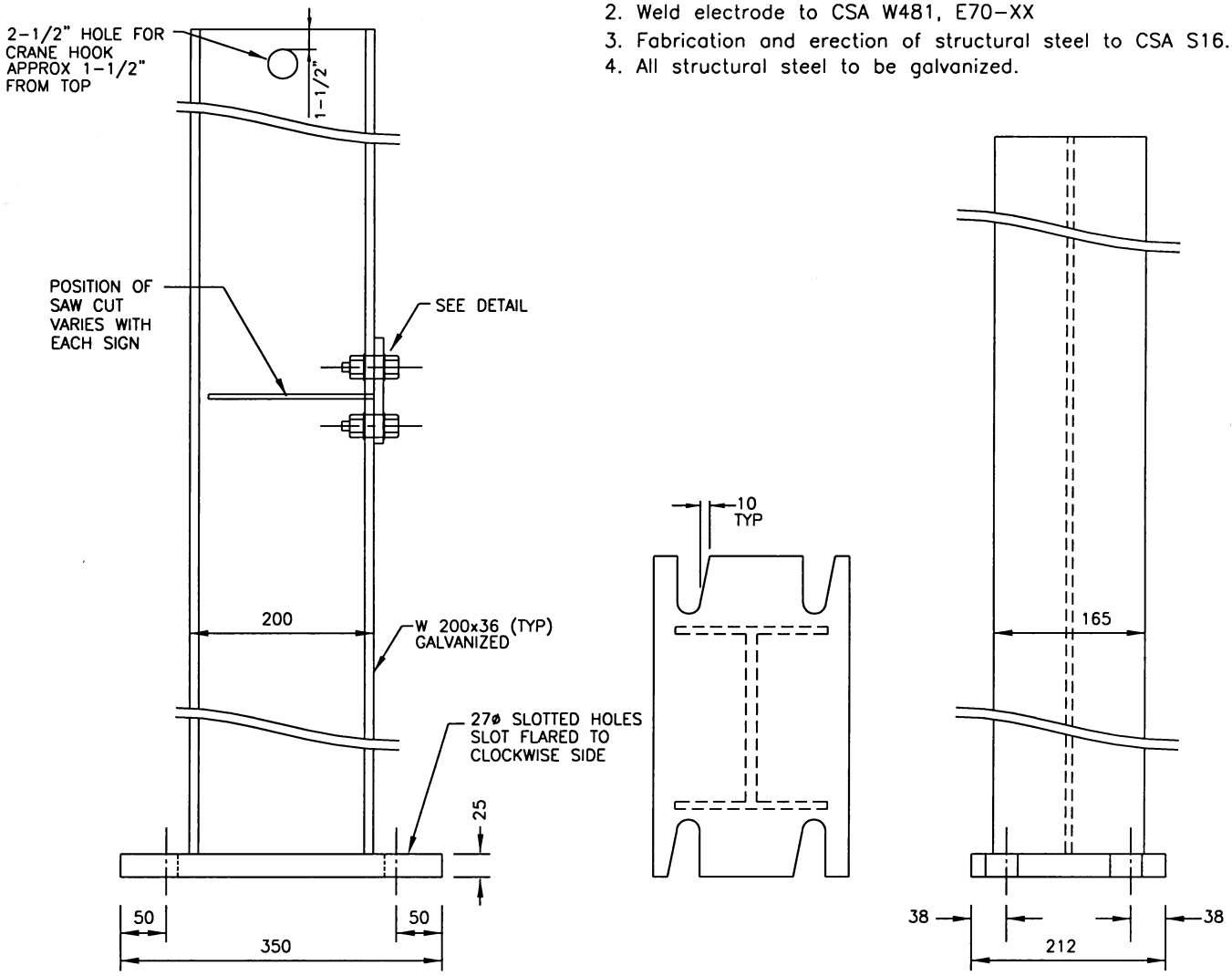


NOTES FOR PRE-CAST CONCRETE BASE:

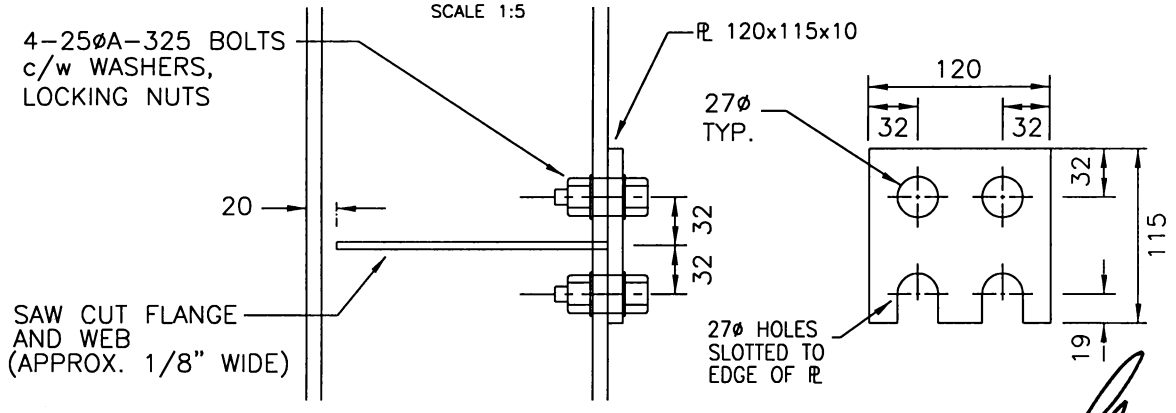
1. Anchor bolts shall be 25ø x 1000mm deformed steel bar. Threaded top, 85mm. Hot dip galvanized, top 300mm. Supplied with galvanized nuts and washers.
2. Concrete shall be 35 MPa alkali resistant 38ø aggregate vibrated and steam cured, Top shall be smooth and level, and shall have 4 drainage groves as shown.
3. Anchor bolts shall be centered precisely in the base, and shall have a 197mm bolt square.
4. Reinforcing cage shall be spot welded together and to the anchor bolts

REVISIONS			INFRASTRUCTURE SERVICES	APPROVED
1			City of Saskatoon	GENERAL MANAGER P. ENG.
2				ENGINEER
3				ENGINEER
DRAWN BY CJP			CONCRETE BASE FOR	SCALES : HOR. 1:12.5 VERT.
DATE 01 09 06			ROADSIDE GUIDESIGN	PLAN NO. 102-0017-011r001
CHECKED BY				
DATE				

NOTES:
1. Structural steel to CSA G4021 grade 300W.
2. Weld electrode to CSA W481, E70-XX
3. Fabrication and erection of structural steel to CSA S16.
4. All structural steel to be galvanized.



DETAIL
SCALE 1:5



D:\1WORKING\102\0017\102001701 2R003.DWG LAYOUT1.LYT 2003-01-08 14:16 BY ISREGANH

REVISIONS	
1	Added crane hook hole 05 02 CJP
2	REVISED HOLE DIMS 01 03 RPH
3	

DRAWN BY CJP
DATE 01 09 06
CHECKED BY
DATE Jan 8/03

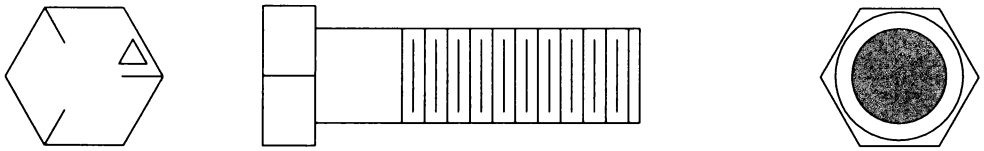
City of Saskatoon
INFRASTRUCTURE SERVICES

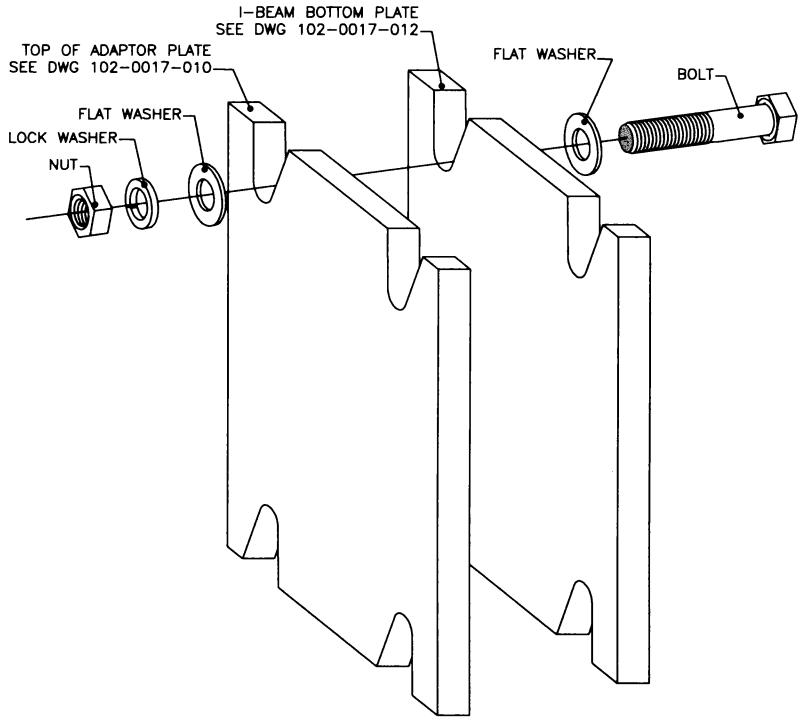
I-BEAM FOR ROADSIDE GUIDESIGN

APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. 1:7.5 VERT.
PLAN NO. 102-0017-012r003

BOLT

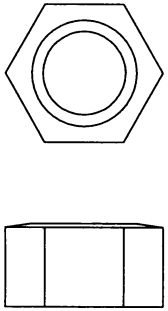
STANDARD BOLT – 1"x3½"





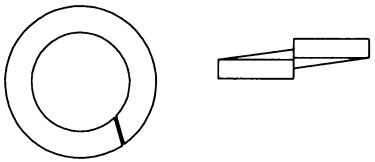
NUT

STANDARD NUT – 1"



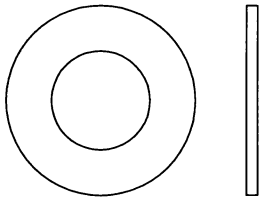
LOCK WASHER

STANDARD LOCK WASHER – 1"



FLAT WASHER x2

STANDARD FLAT WASHER – 1"



NOTE: BOLT ASSEMBLY TO BE –GRADE 5 QUALITY
–GALVANIZED

NO.	REVISIONS	DATE	BY
1	REVISED BOLT LENGTH TO 3-1/2"	NOV 17 05	RPH

MUNICIPAL ENGINEERING
ENGINEER
Nov 20, 2006
ENGINEER

DRAWN BY RPH
DATE JAN 15 02
CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

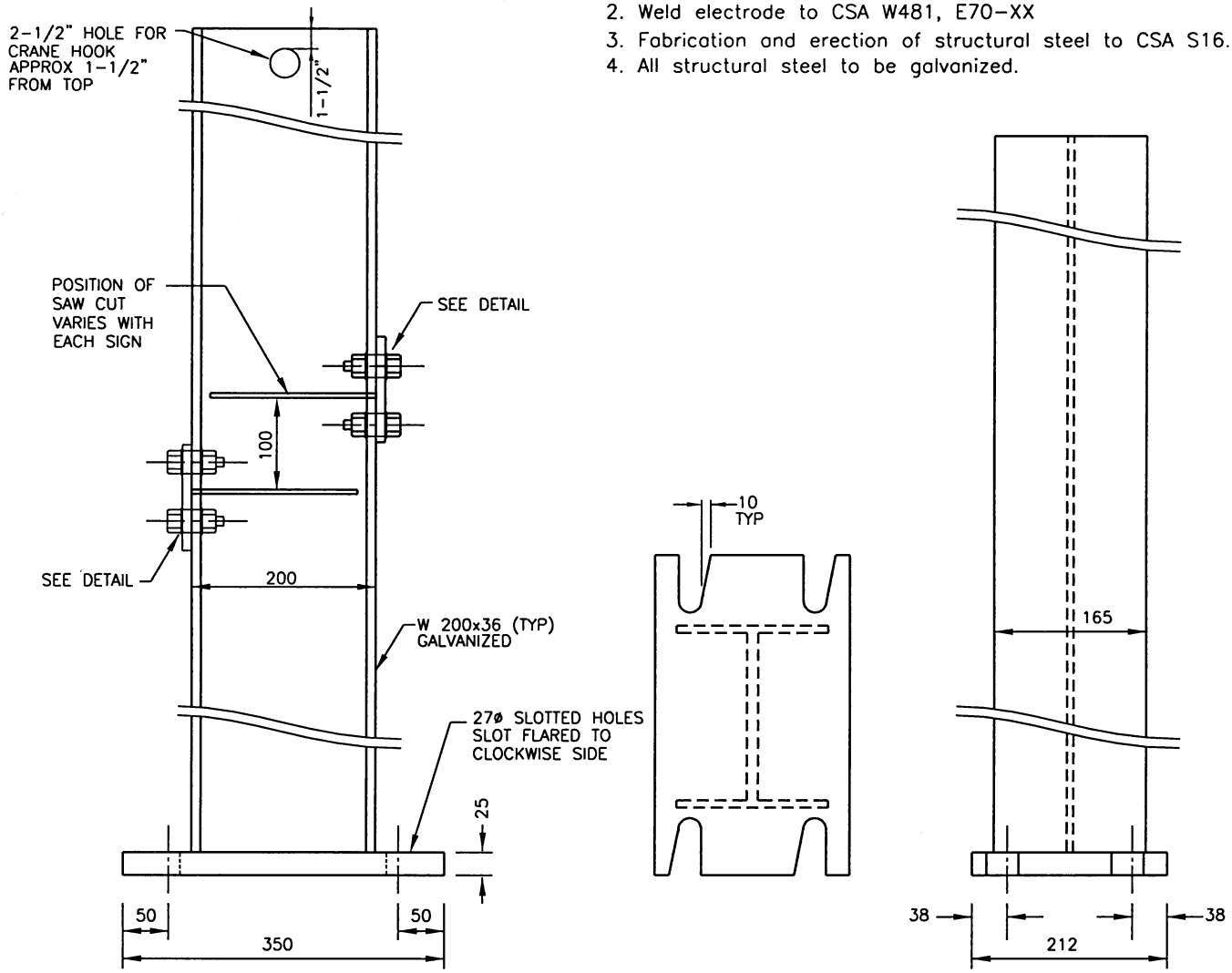
BOLT ASSEMBLY
I-BEAM TO ADAPTER PLATE
FOR GROUND MOUNTED SIGNS

GENERAL MANAGER
DATE

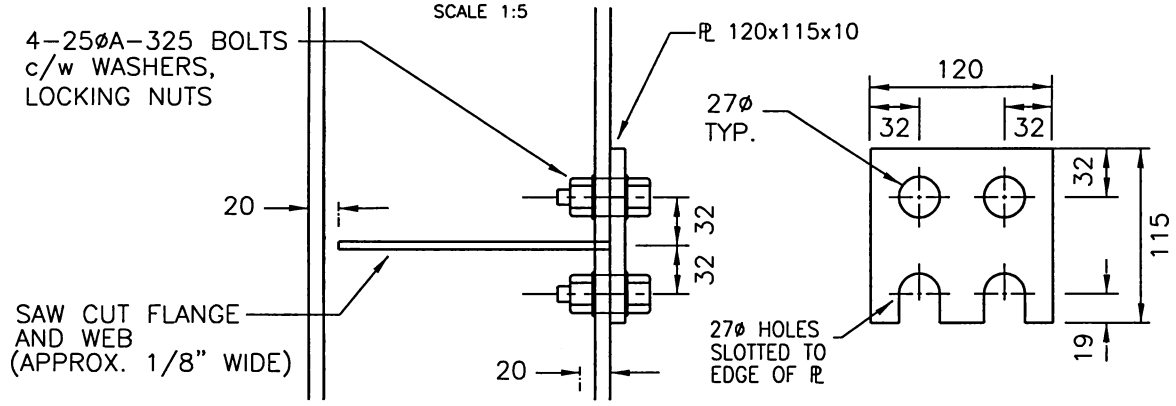
SCALES : HOR. 1:2
VERT.
SHEET NO.

PLAN NO.
102-0017-013r002

NOTES:
1. Structural steel to CSA G4021 grade 300W.
2. Weld electrode to CSA W481, E70-XX
3. Fabrication and erection of structural steel to CSA S16.
4. All structural steel to be galvanized.



DETAIL
SCALE 1:5



D:\1WORKING\102\0017\102001701SR001.DWG LAYOUT1.LYT 2003-05-06 08:34 BY ISREGANH

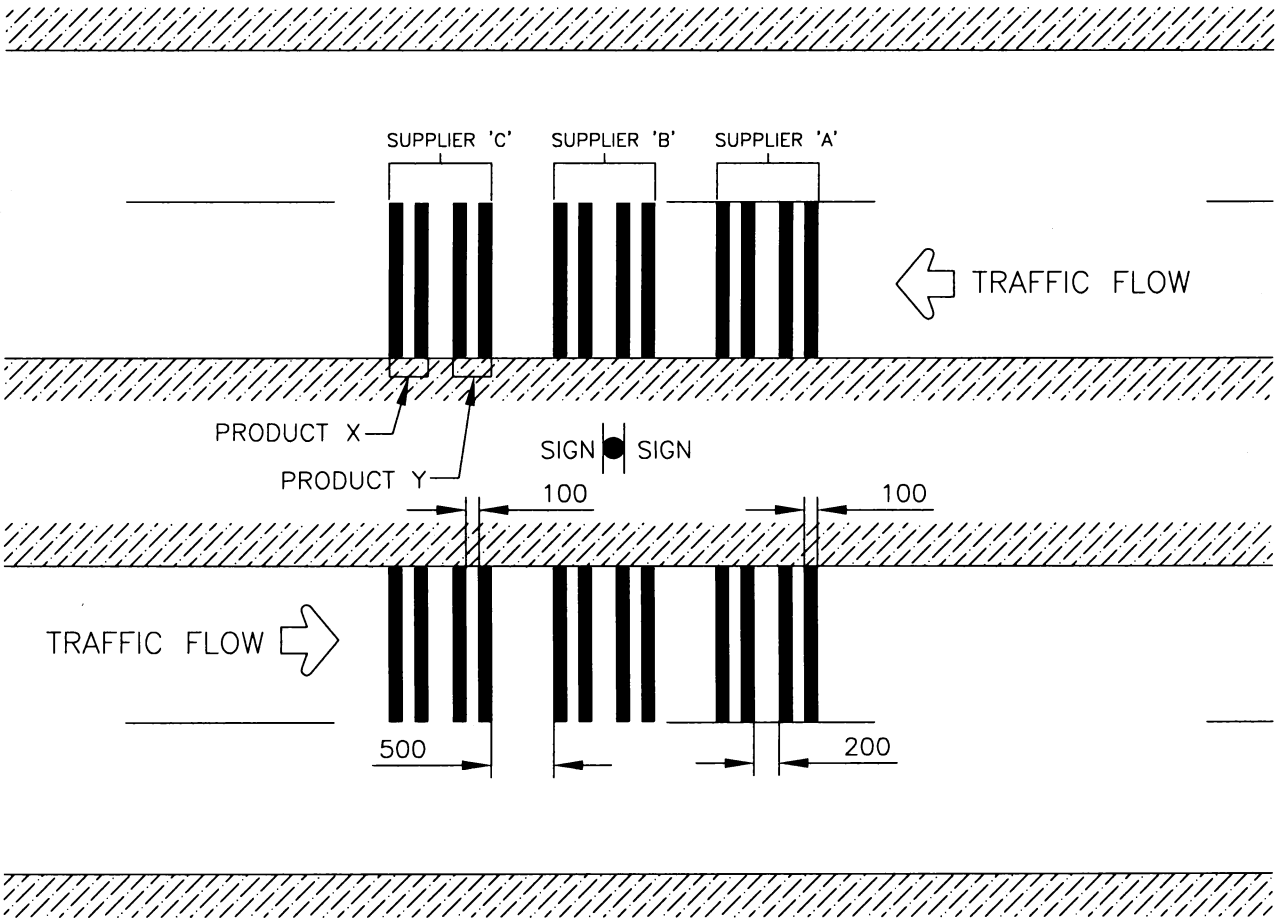
REVISIONS	
1	
2	
3	

DRAWN BY RPH
DATE MAY 06 2003
CHECKED BY
DATE

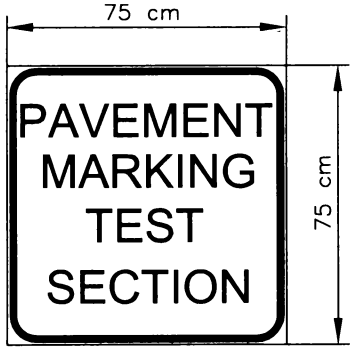
City of Saskatoon
Infrastructure Services Department

I-BEAM FOR MEDIAN GUIDESIGN

APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. 1:7.5 VERT.
PLAN NO. 102-0017-015r001



- ALL TEST LINES TO BE 100mm WIDE, WITH A 100mm BUFFER BETWEEN EACH SAME PRODUCT TEST LINE
- A 200mm BUFFER REQUIRED BETWEEN EACH DIFFERENT PRODUCT TEST LINE GROUP
- SUPPLIERS TEST SECTIONS TO BE SEPARATED BY A 500mm BUFFER
- ALL TEST SECTIONS TO BE ACCOMPANIED BY THIS SIGN:



REVISIONS	
1	
2	
3	

DRAWN BY RPH
DATE MAY 12 2003

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

PAVEMENT MARKING TEST SECTIONS TEMPLATE

APPROVED

GENERAL MANAGER P. ENG.

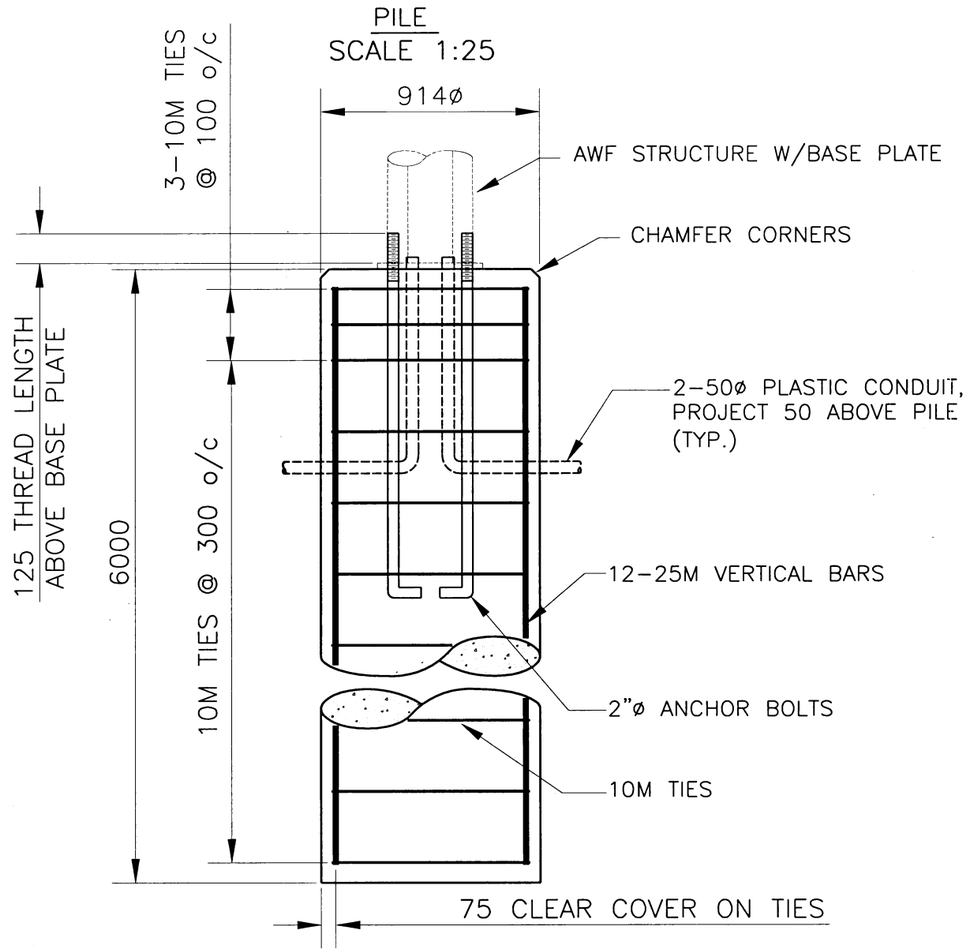
ENGINEER A. Boyko

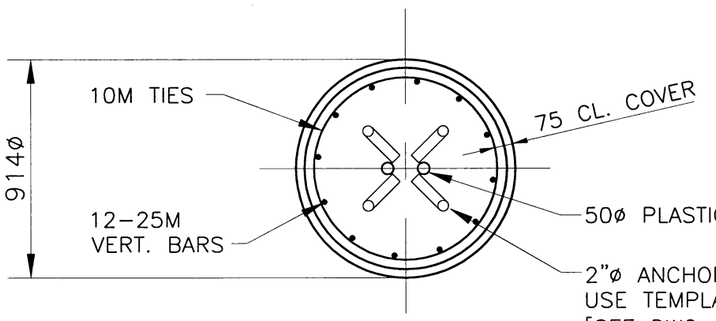
ENGINEER

SCALES : HOR. NTS VERT.

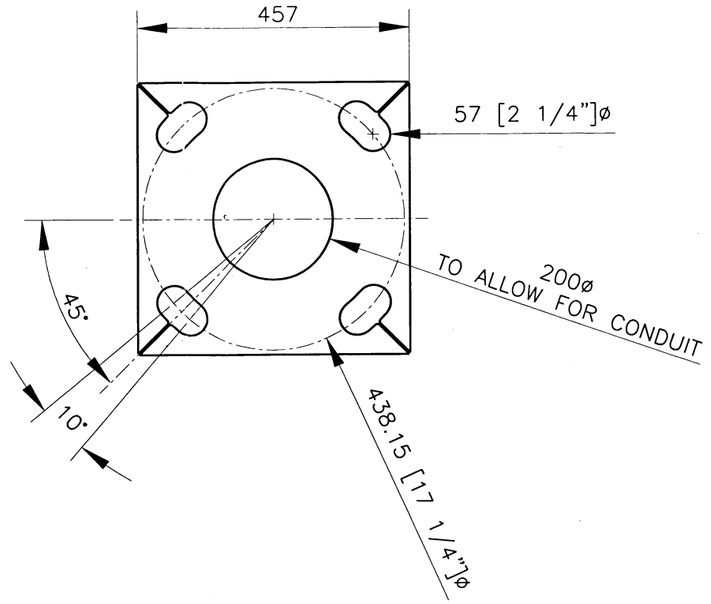
PLAN NO. 102-0017-016r001

PILE
SCALE 1:25

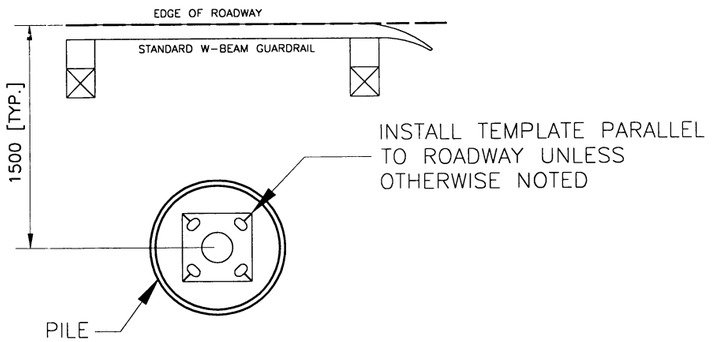




ANCHOR BOLT TEMPLATE
SCALE 1:10



GENERAL ARRANGMENT
SCALE 1:40



NOTE: THIS DRAWING IS ONLY TO BE USED WITH STANDARD ADVANCE WARNING FLASHER STRUCTURES

NO.	DESCRIPTION	DATE	BY
1	BASE PLAN		

REVISIONS

STAMP

MUNICIPAL ENGINEERING: ENGINEER; ENGINEER; DRAWN BY RPH; DATE AUG 6 2003; CHECKED BY; DATE

PUBLIC WORKS: ENGINEER; ENGINEER; DRAWN BY AVG; DATE 06/03; CHECKED BY; DATE

City of Saskatoon
Infrastructure Services Department

ADVANCE WARNING FLASHER STRUCTURE

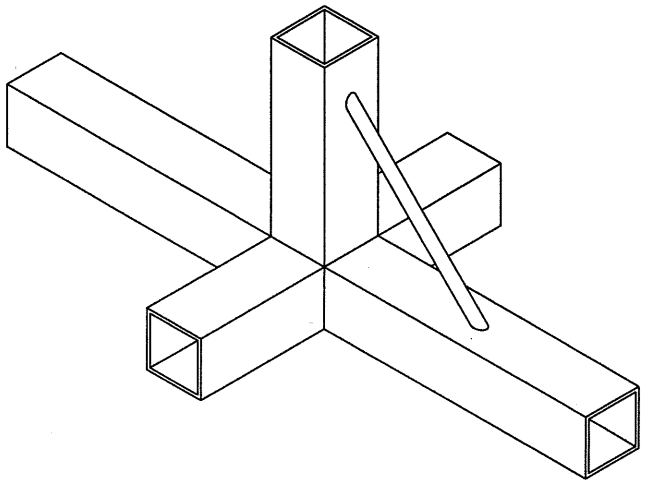
PILE AND ANCHOR BOLT TEMPLATE

P. ENG
GENERAL MANAGER — DATE

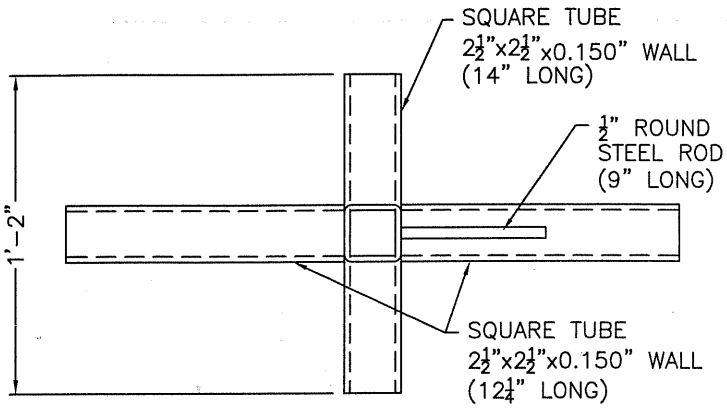
SCALES : HOR. AS NOTED; VERT. —
SHEET NO.

PLAN NO.
102-0017-017r001

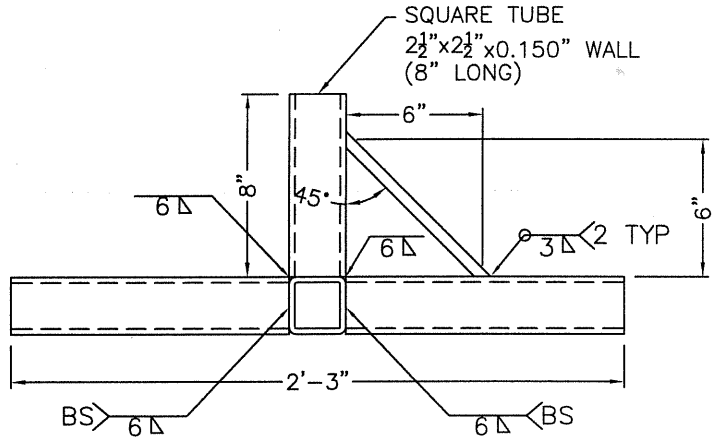
D:\1WORKING\102\0017\102001701 7R001.DWG LAYOUT1.LYT 2003-08-06 10:25 BY ISREGANH



TEMPORARY SIGN BASE ASSEMBLY



TOP VIEW



FRONT VIEW

LIST OF MATERIALS:
(PER ASSEMBLY)

2 – 2½"x2½" x 0.150" WALL x 12¼"
1 – 2½"x2½" x 0.150" WALL x 14"
1 – 2½"x2½" x 0.150" WALL x 8"
1 – ø½" x 9" STEEL ROD

REVISIONS	
1	ADDED MTRL LENGTHS
2	
3	

DRAWN BY CJP
DATE JANUARY 5, 2007

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

TEMPORARY SIGN BASE
HSS Tube A500 Grade C

APPROVED

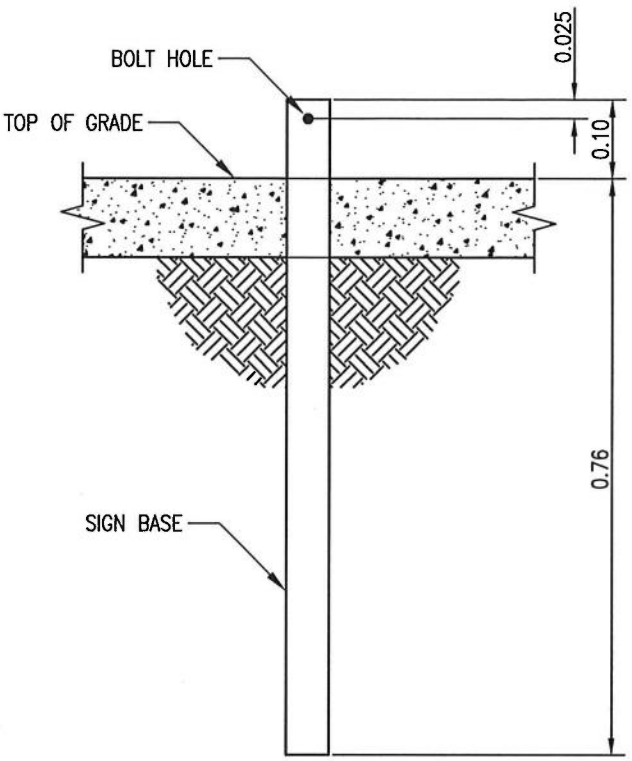
GENERAL MANAGER P. ENG. May 11

ENGINEER Goran Lovric

ENGINEER

SCALES : HOR. NTS

PLAN NO. 102–0017–031r002



PLAN DESCRIPTION/REVISIONS		City of Saskatoon Transportation	APPROVED
4			
3			
2			
1			
DRAWN BY SJK DATE 2019-MAY-01 SCALE : HOR. NTS VERT.		SIGNAGE TYPICAL INSTALLATION DEPTH SIGN POST BASE	ENGINEER ENGINEER PLAN NO. 102-0017-054r001

3'–0" (914mm)

2'–0" (610mm)

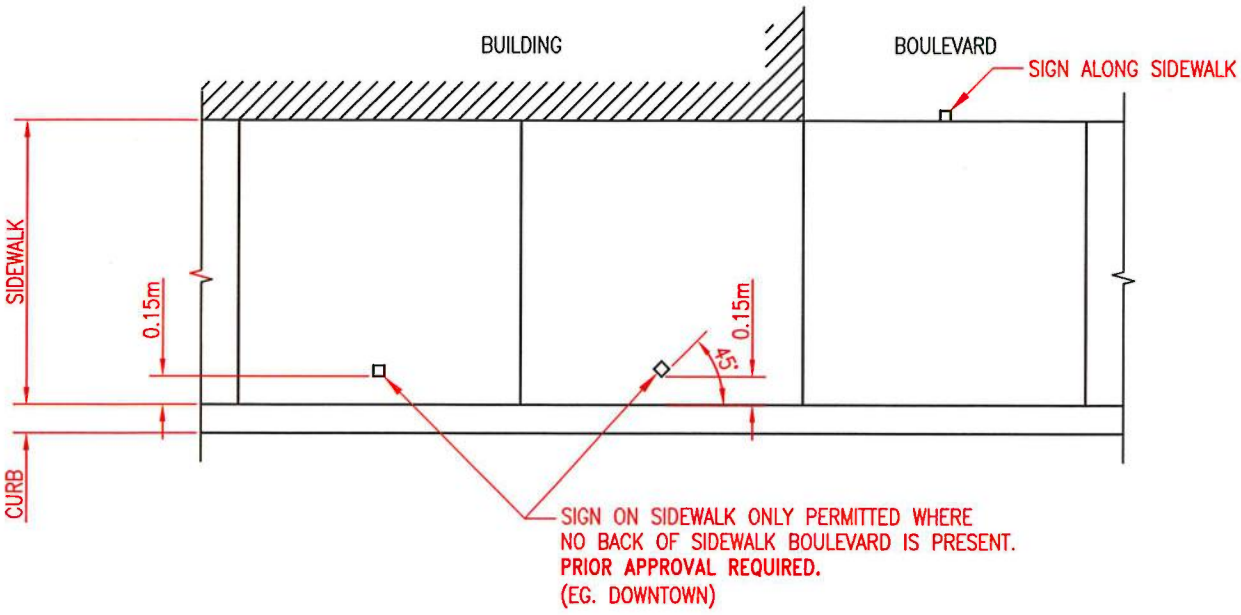
USE IN GRASS/DIRT/GRAVEL

1'–6" (457mm)

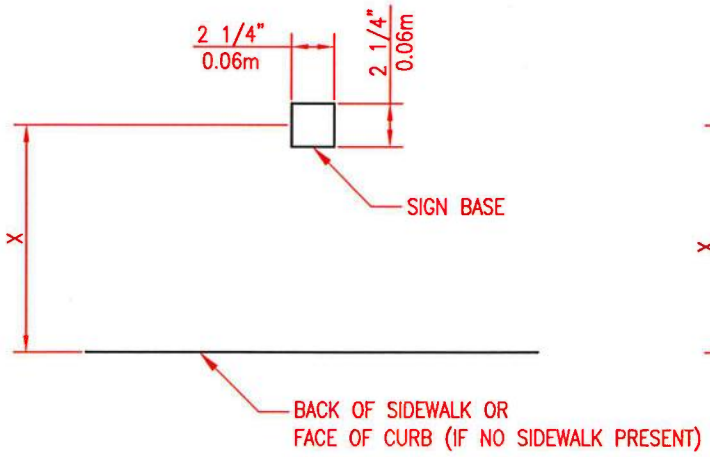
1'–0" (305mm)

USE IN CONCRETE/ASPHALT

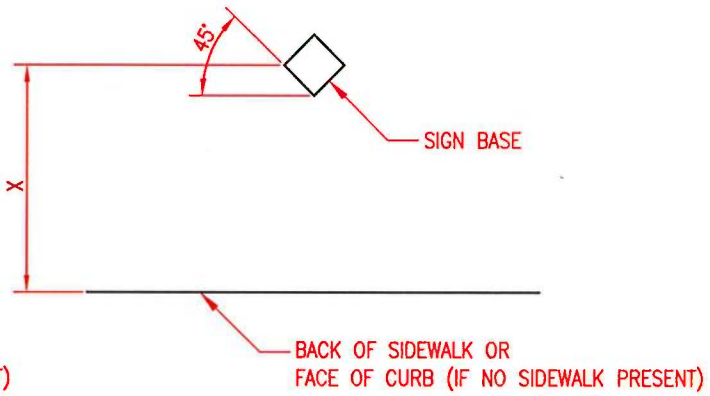
PLAN DESCRIPTION/REVISIONS		City of Saskatoon Transportation	APPROVED
4			
3			
2			
1			
DRAWN BY SJK DATE 2019-MAY-01		SIGNAGE TYPICAL SIGN POST BASE DETAIL	ENGINEER ENGINEER
SCALE : HOR. NTS VERT.			PLAN NO. 102–0017–055r001



X: 1.0m FROM FRONT OF CURB OR
0.0m FROM BACK OF SIDEWALK.

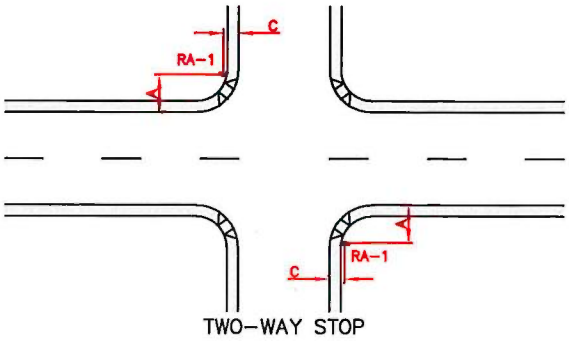


STOP/YIELD/PEDESTRIAN ETC.

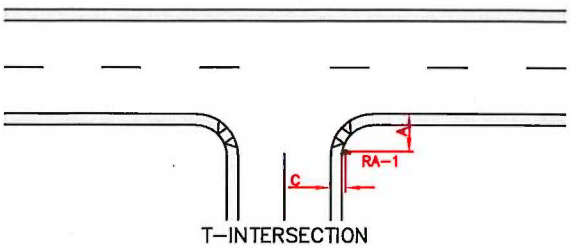


PARKING/BUS STOPS ETC.

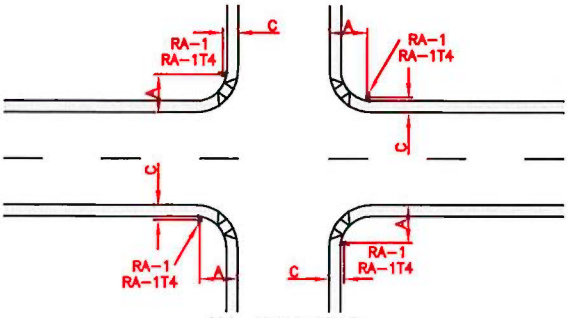
PLAN DESCRIPTION/REVISIONS		City of Saskatoon Transportation	APPROVED
4			
3			
2			
1			
DRAWN BY SJK DATE 2019-MAY-01		SIGNAGE TYPICAL INSTALLATION SIGN POST	ENGINEER ENGINEER
SCALE : HOR. NTS VERT.			PLAN NO. 102-0017-056r001



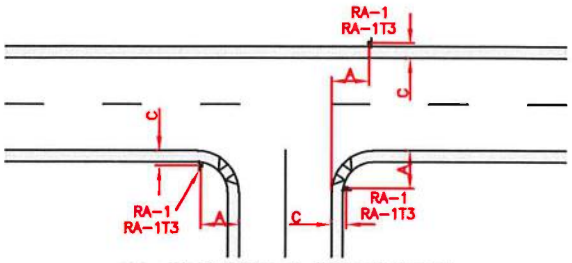
TWO-WAY STOP



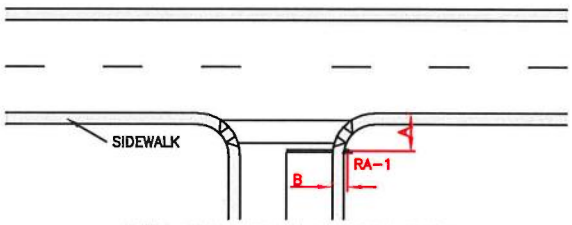
T-INTERSECTION



ALL-WAY STOP



ALL-WAY STOP T-INTERSECTION



WITH CROSSWALK & STOP BAR

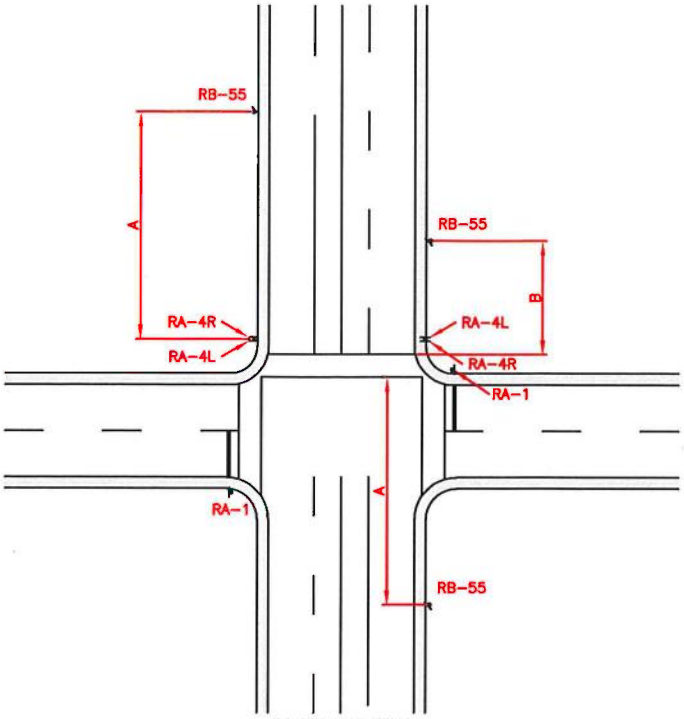
A. MIN. 1.5m MAX. 10m PREFERABLY LESS THAN 5m.
B. MIN. 0.3m MAX. 2.0m
C. MIN. 2.0m MAX. 4.5m

NOTE: SIMILAR PRINCIPLES FOR YIELD SIGN (RA-2).

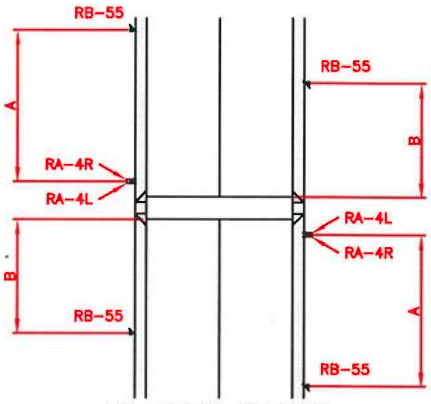
SIGN LEGEND

RA-1	STOP SIGN
RA-1T3	THREE WAY TAB
RA-1T4	FOUR WAY TAB

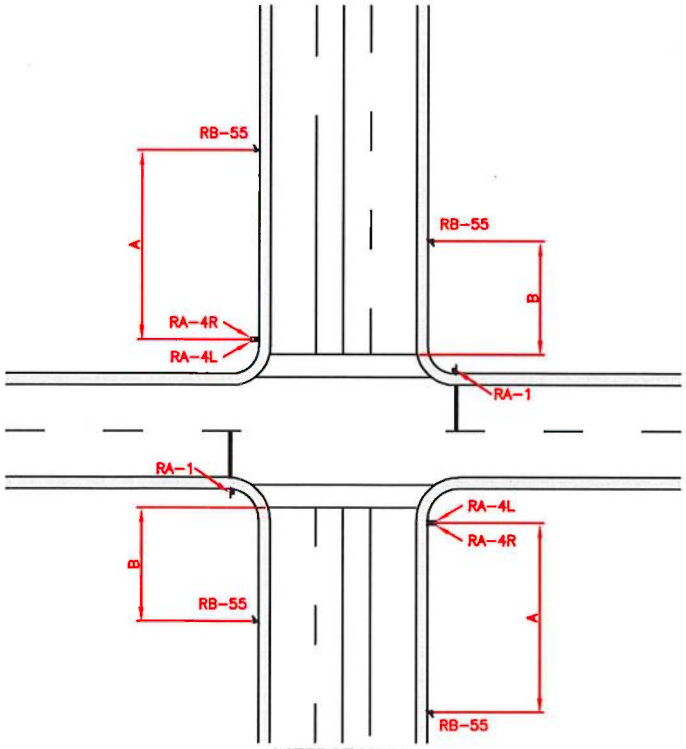
PLAN DESCRIPTION/REVISIONS	City of Saskatoon Transportation	APPROVED
		ENGINEER
DRAWN BY SJK DATE 2019-MAY-01 SCALE : HOR. NTS VERT.	SIGNAGE TYPICAL INSTALLATION TRAFFIC CONTROL SIGN	ENGINEER PLAN NO. 102-0017-057r001



INTERSECTION
CROSSWALK ON ONE SIDE



MID–BLOCK CROSSING



INTERSECTION
CROSSWALK ON BOTH SIDES

A. MINIMUM 15m, PREFERABLY 30m
B. MINIMUM 10m, PREFERABLY 15m

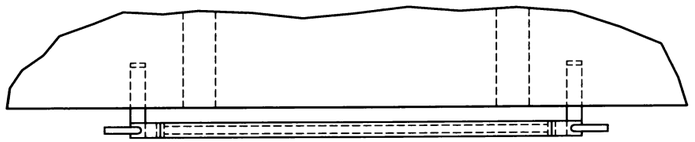
SIGN LEGEND

RA–1	STOP SIGN
RA–4L/R	PEDESTRIAN CROSSWALK LEFT/RIGHT
RB–55	NO STOPPING SIGN

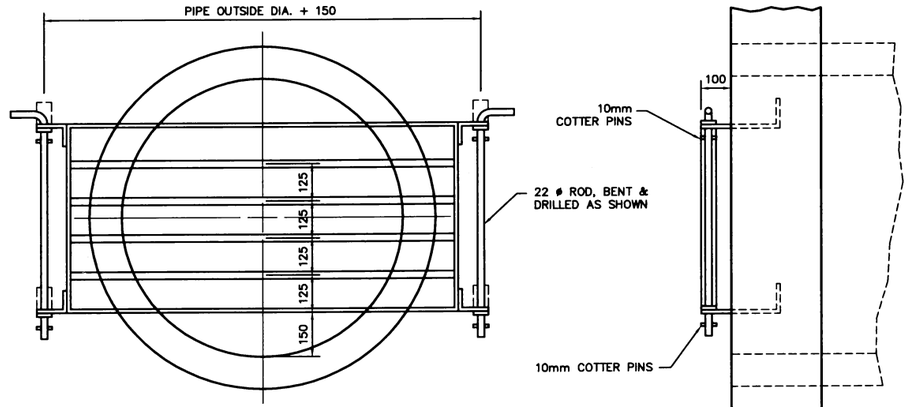
RA–4L RA–4R

NOTE: INSTALL SIGN SO THAT PEDESTRIAN APPEARS TO APPROACH ROADWAY.

PLAN DESCRIPTION/REVISIONS	City of Saskatoon Transportation	APPROVED
	SIGNAGE TYPICAL INSTALLATION CROSSWALK	ENGINEER ENGINEER
DRAWN BY SJK DATE 2019–MAY–01 SCALE : HOR. NTS VERT.		PLAN NO. 102–0017–058r001

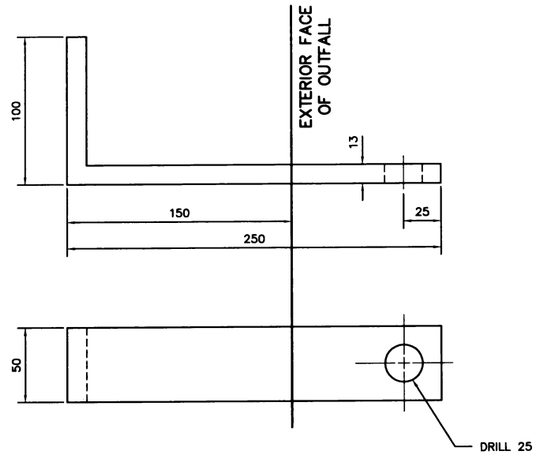


TOP VIEW

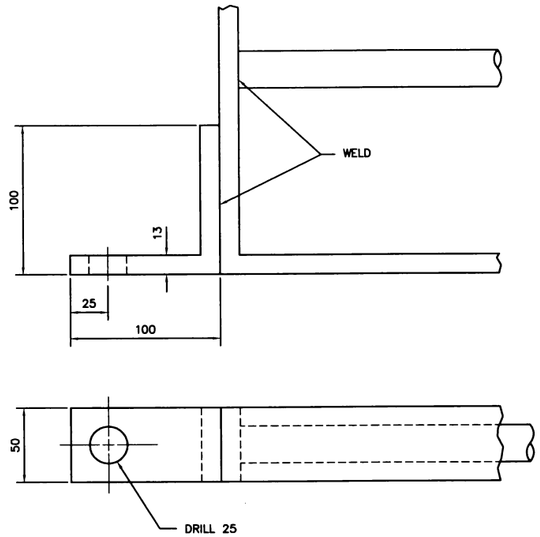


FRONT VIEW

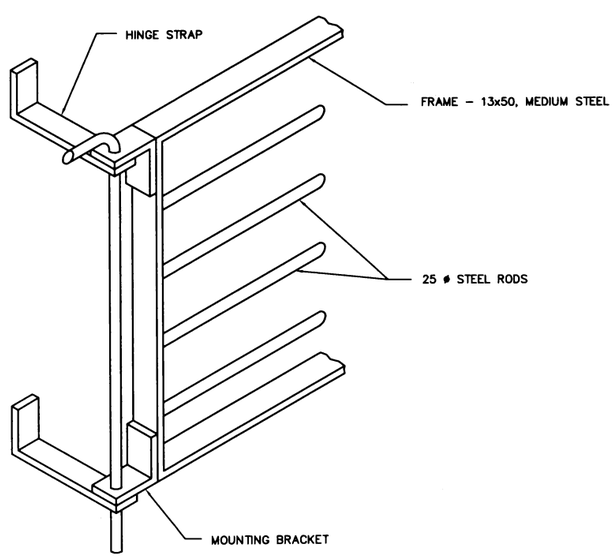
SIDE VIEW



HINGE STRAP
(4 REQUIRED)



MOUNTING BRACKET
(4 REQUIRED)



ASSEMBLY

PIPE DIAMETER	300	375	450	525	600	675	750	900	1050	1200
# OF RODS IN FRAME	0	0	1	1	2	3	3	4	6	7

NOTE:

1. GRATE ASSEMBLY SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. GALVANIZING SHALL BE 56.8 g ZINC & IN ACCORDANCE WITH CSA SPEC. G164–1965.
3. ALL STEEL SHALL BE A.S.T.M. A–36 MIN.

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NO.	DESCRIPTION	DATE	BY
11			
10			
9			
8			
7			
6			
5			
4			
3			
2			
1	BASE PLAN		

REVISIONS

STAMP

ENGINEER
ENGINEER
DRAWN BY
DATE
CHECKED BY
DATE

MUNICIPAL ENGINEERING
A. Boyko
ENGINEER
ENGINEER
DRAWN BY
DATE
CHECKED BY
DATE

PUBLIC WORKS
ENGINEER
ENGINEER
DRAWN BY
DATE
CHECKED BY
DATE

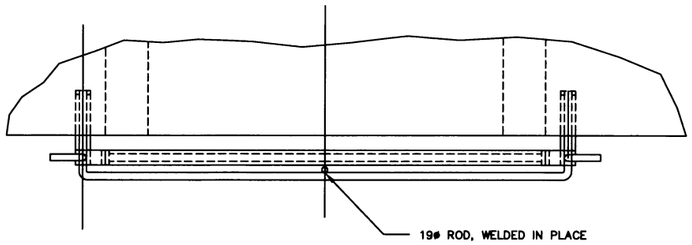
City of Saskatoon
INFRASTRUCTURE SERVICES

GRATING FOR CONCRETE ENDWALL
PIPE DIAMETER UP TO 1200mm

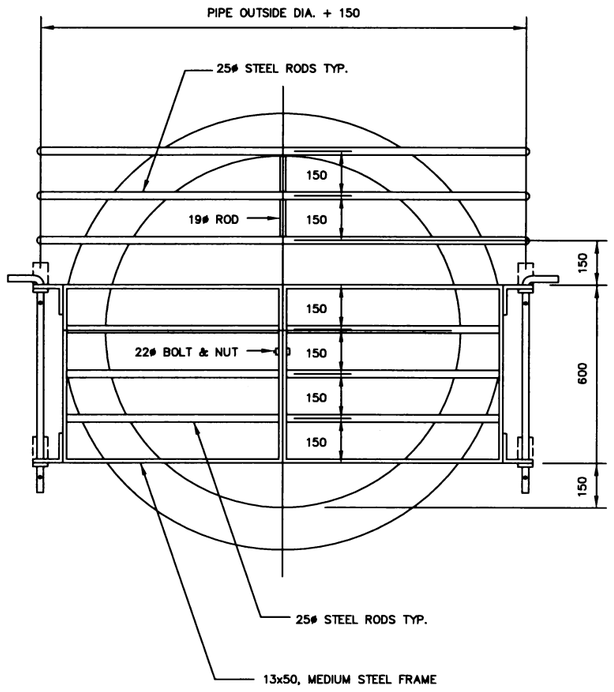
GENERAL MANAGER
DATE Mar. 25/02

SCALES : HOR. 1:20 VERT.
SHEET NO.

PLAN NO.
102–0018–001r001

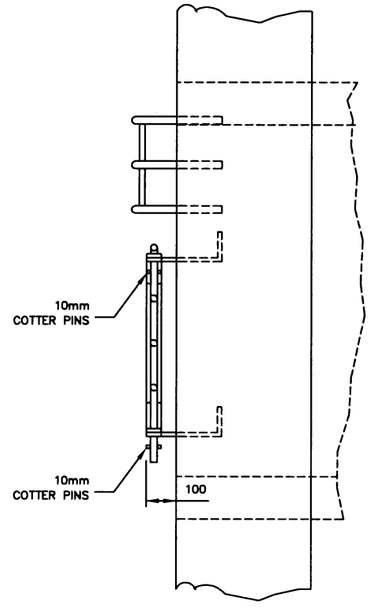


TOP VIEW

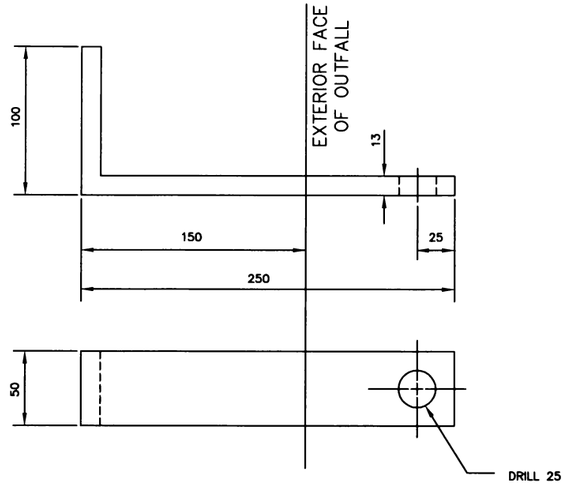


FRONT VIEW

PIPE DIAMETER	1350	1500	1800
# OF RODS (FIXED)	3	4	6

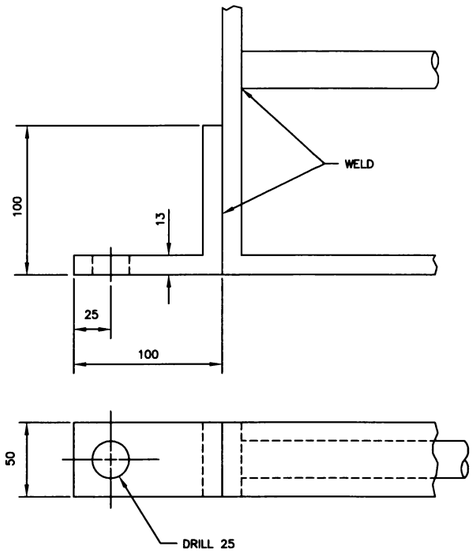


SIDE VIEW



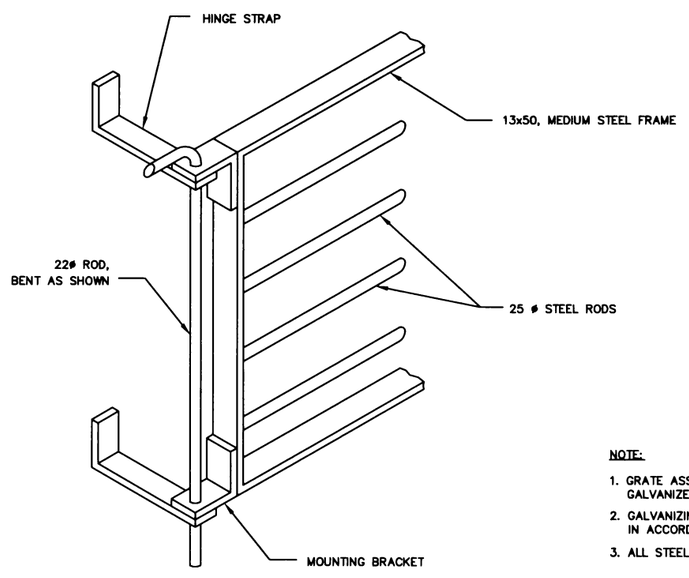
HINGE STRAP

(4 REQUIRED)



MOUNTING BRACKET

(4 REQUIRED)



ASSEMBLY

NOTE:

1. GRATE ASSEMBLY SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. GALVANIZING SHALL BE 56.8 g ZINC & IN ACCORDANCE WITH CSA SPEC. G164-1965.
3. ALL STEEL SHALL BE A.S.T.M. A-36 MIN.

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED

NO.	DESCRIPTION	DATE	NO.	REVISIONS	DATE	BY
11						
10						
9						
8						
7						
6						
5						
4						
3						
2						
1	BASE PLAN					

STAMP

	MUNICIPAL ENGINEERING	PUBLIC WORKS
ENGINEER	A. Boyko ENGINEER	ENGINEER
ENGINEER	ENGINEER	ENGINEER
DRAWN BY / DATE	DRAWN BY / DATE	DRAWN BY / DATE
CHECKED BY / DATE	CHECKED BY / DATE	CHECKED BY / DATE

City of Saskatoon

INFRASTRUCTURE SERVICES

GRATING FOR CONCRETE ENDWALL

PIPE DIAMETER 1350mm TO 1800mm

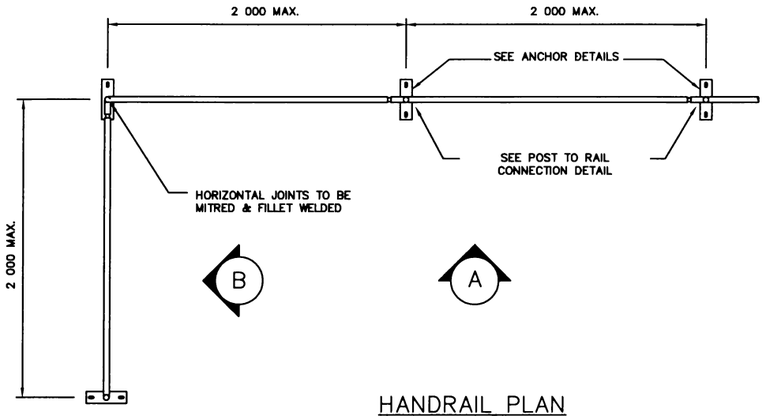
GENERAL MANAGER P. ENG

DATE

SCALES : HOR. 1:40 VERT.

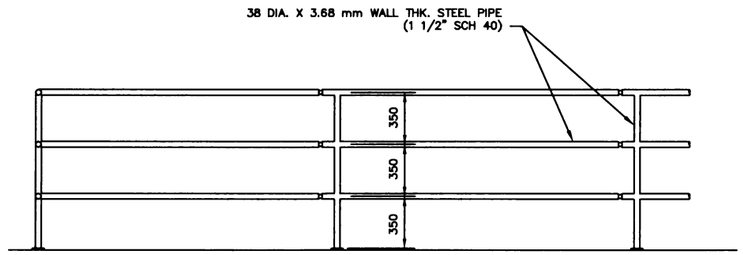
SHEET NO.

PLAN NO. 102-0018-002r001



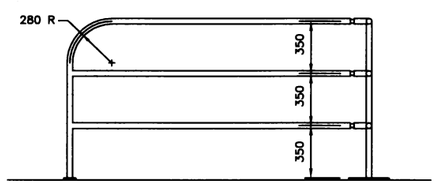
HANDRAIL PLAN

1 : 40



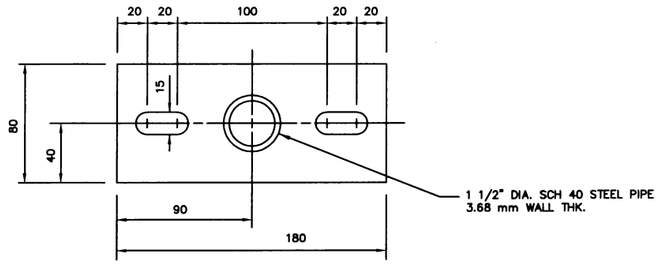
ELEVATION A

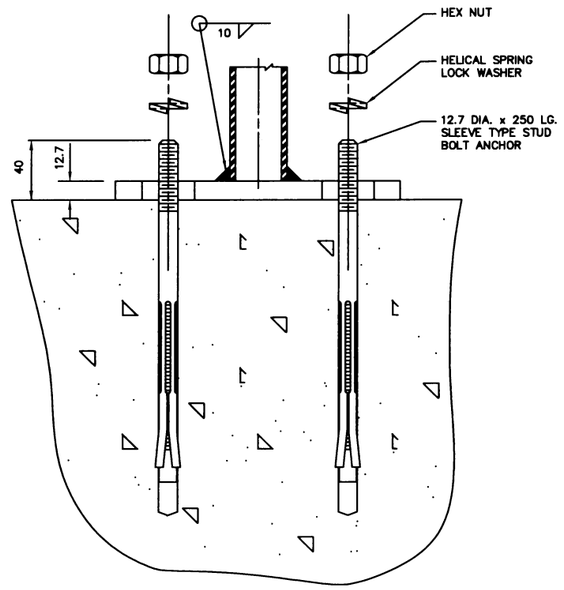
1 : 40



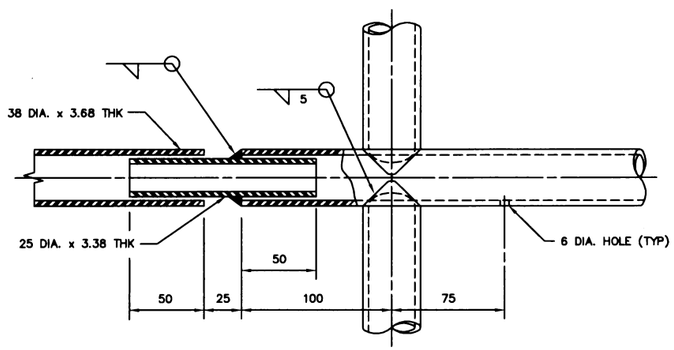
ELEVATION B

1 : 40





ANCHOR BOLT DETAIL



POST TO RAIL DETAIL ELEVATION

GENERAL NOTES

1. BASE PLATES, HANDRAILS & ANCHOR BOLTS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. GALVANIZING SHALL BE 56.8 g ZINC AND IN ACCORDANCE WITH C.S.A. SPECIFICATION G164-1965.
3. MEASUREMENTS FOR THE HEIGHT OF HANDRAIL ARE TAKEN FROM TOP OF BASE PLATE TO C OF HORIZONTAL PIPES.
4. ALL STEEL SHALL BE A.S.T.M. A-36 MIN.
5. POSTS SHALL BE VERTICAL. ALL EXPOSED CORNERS TO BE GROUND SMOOTH.
6. 6mm DIA. HOLES ARE TO PERMIT GASES TO ESCAPE DURING GALVANIZING.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

NO.	DESCRIPTION	DATE	BY
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1	BASE PLAN GRF		

REVISIONS

STAMP

ENGINEER
ENGINEER
DRAWN BY
DATE
CHECKED BY
DATE

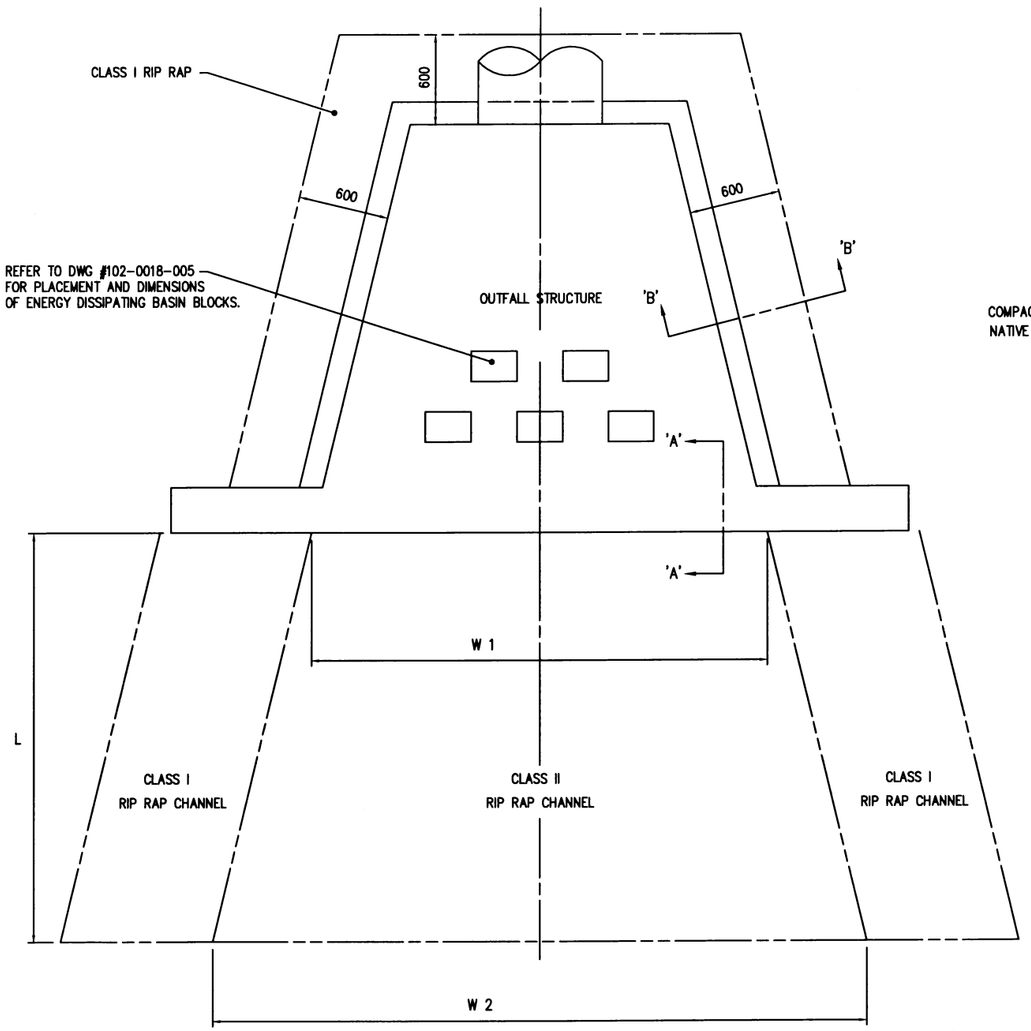
MUNICIPAL ENGINEERING
A. Boyko
ENGINEER
ENGINEER
DRAWN BY
DATE
CHECKED BY
DATE

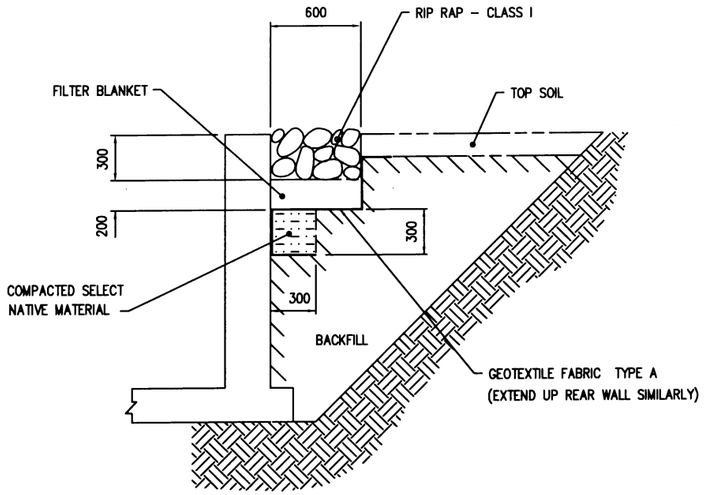
PUBLIC WORKS
ENGINEER
ENGINEER
DRAWN BY
DATE
CHECKED BY
DATE

INFRASTRUCTURE SERVICES
City of Saskatoon

STANDARD HANDRAIL

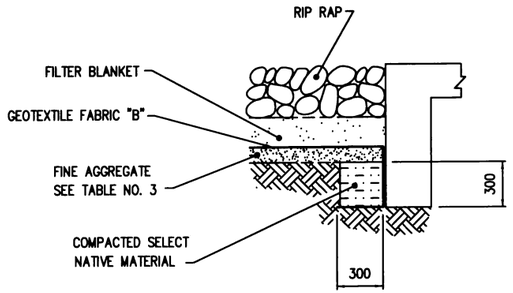
GENERAL MANAGER — P. ENG
DATE
SCALES : HOR. 1:4 VERT.
SHEET NO.
PLAN NO. 102-0018-003r001





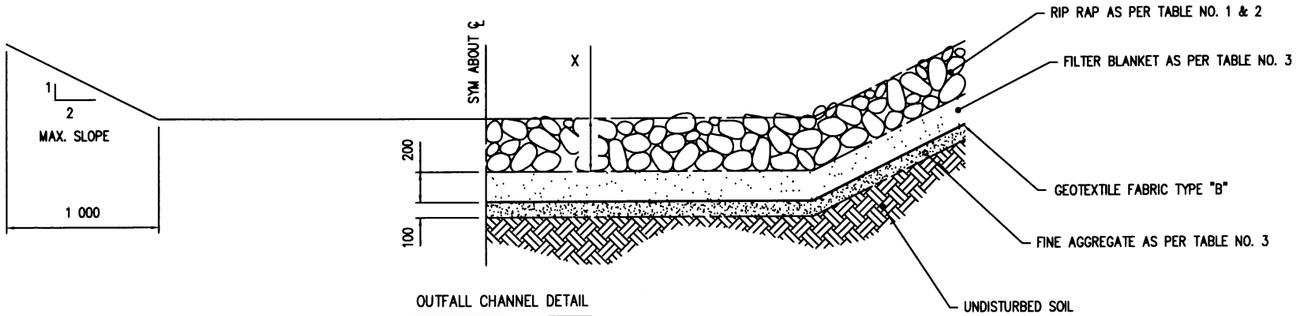
SECTION B – B

1:20



SECTION A – A

1:20



OUTFALL CHANNEL DETAIL

1:20

TABLE NO.1

OUTFALL LOCATION	RIP RAP CLASS	L	W 1	W 2	X
EXAMPLE STREET	CLASS II	6 400	3 000	6 030	625

TABLE NO. 2

RIP RAP STONE SIZE				
% OF TOTAL WEIGHT SMALLER THAN GIVEN SIZE	CLASS I		CLASS II	
	kg	DIA	kg	DIA
100	50	350	300	625
80	25	275	200	525
50	10	200	100	425
10	1	100	10	200

TABLE NO. 3

FILTER BLANKET				FINE AGGREGATE	
FOR CLASS I RIP RAP		FOR CLASS II RIP RAP		% PASSING BY WEIGHT	SIZE
% PASSING	SIEVE SIZE	% PASSING	SEIVE SIZE		
100	38	100	50	100	10
90	25	80	38	97	5
70	18	60	25	88	2
45	10	45	18	63	900 µm
25	5	25	10	32	400 µm
10	2	10	5	7	160 µm

TABLE NO. 4

GEOTEXTILE		
GEOTEXTILE "A"	MASS	240 g/m²
	THICKNESS	2.75 mm
GEOTEXTILE "B"	MASS	240 g/m²
	THICKNESS	3.30 mm

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

NO.	DESCRIPTION	DATE	BY
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1	BASE PLAN JMH	06-01-25	

STAMP

	MUNICIPAL ENGINEERING	PUBLIC WORKS
	A. Boyko ENGINEER	ENGINEER
	ENGINEER	ENGINEER
DRAWN BY	DRAWN BY	DRAWN BY
DATE	DATE	DATE
CHECKED BY	CHECKED BY	CHECKED BY
DATE	DATE	DATE

City of Saskatoon
Infrastructure Services Department

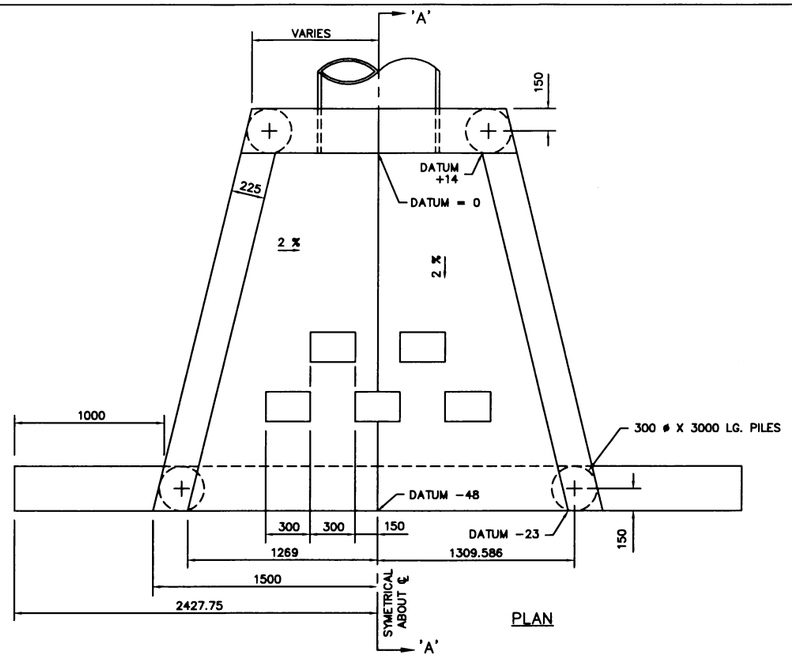
STANDARD RIPRAP DETAIL

GENERAL MANAGER — DATE Aug 21/06

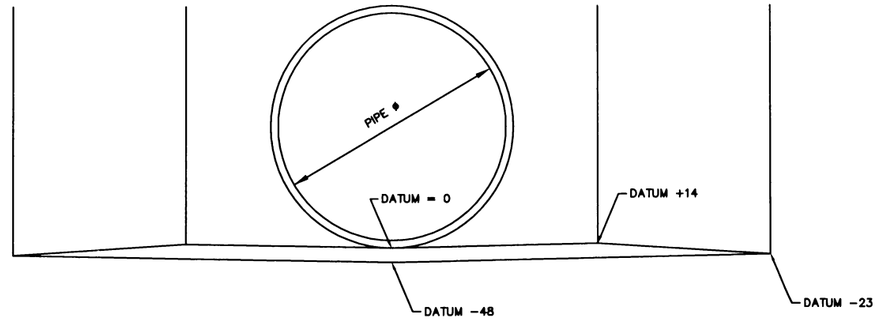
SCALES : HOR. 1:20 VERT. –

SHEET NO.

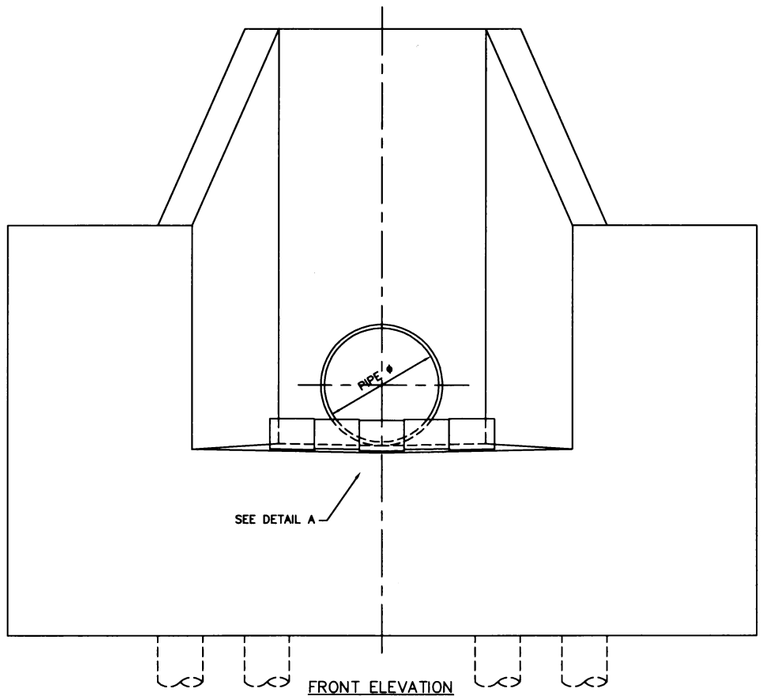
PLAN NO. 102-0018-004r001



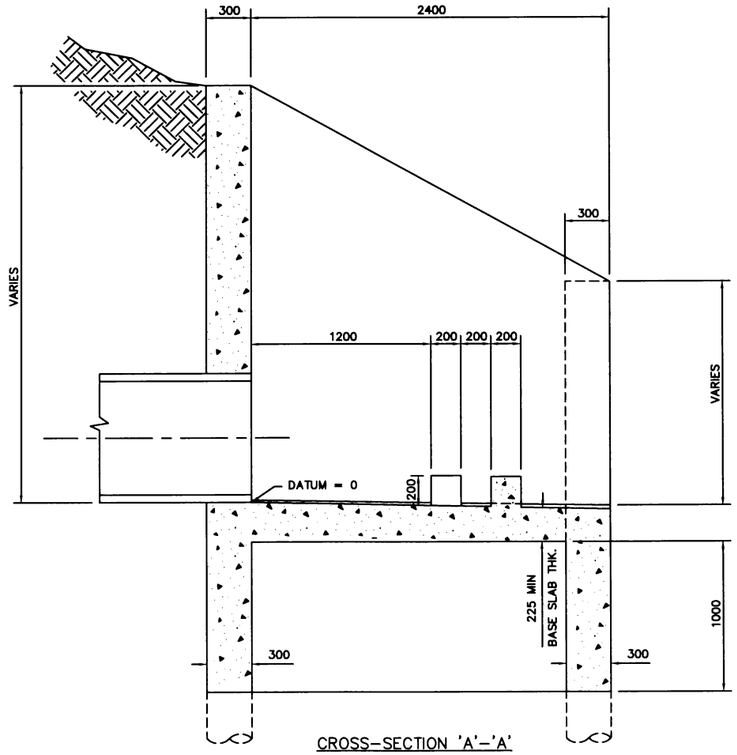
PLAN



DETAIL A



FRONT ELEVATION



CROSS-SECTION 'A'-'A'

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

NO.	DESCRIPTION	DATE	BY
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1	BASE PLAN JMH	06-01-25	

REVISIONS

STAMP

MUNICIPAL ENGINEERING: A. Boyle ENGINEER

PUBLIC WORKS: ENGINEER

DRAWN BY / DATE

CHECKED BY / DATE

City of Saskatoon
Infrastructure Services Department

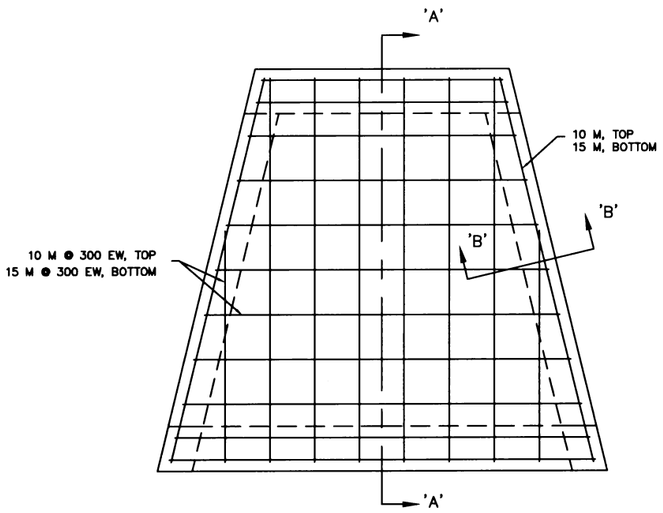
STORM SEWER OUTFALL

GENERAL MANAGER P. ENG DATE

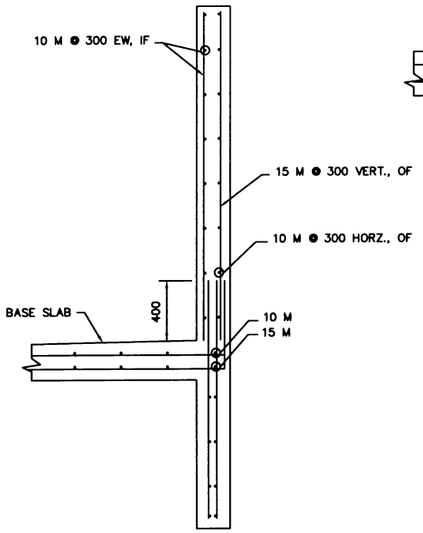
SCALES : HOR. 1:20 VERT. —

SHEET NO.

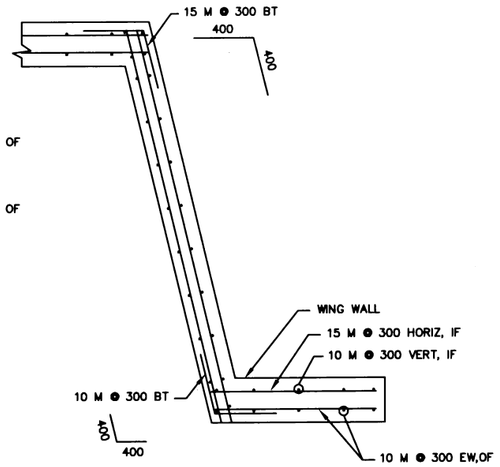
PLAN NO. 102-0018-005r001



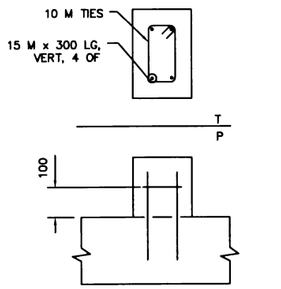
BASE SLAB REINFORCEMENT



SECTION B – B



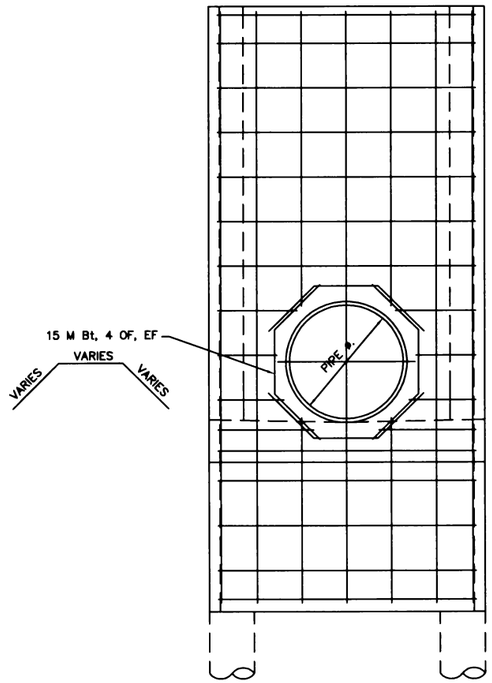
SECTION 'C'–'C'



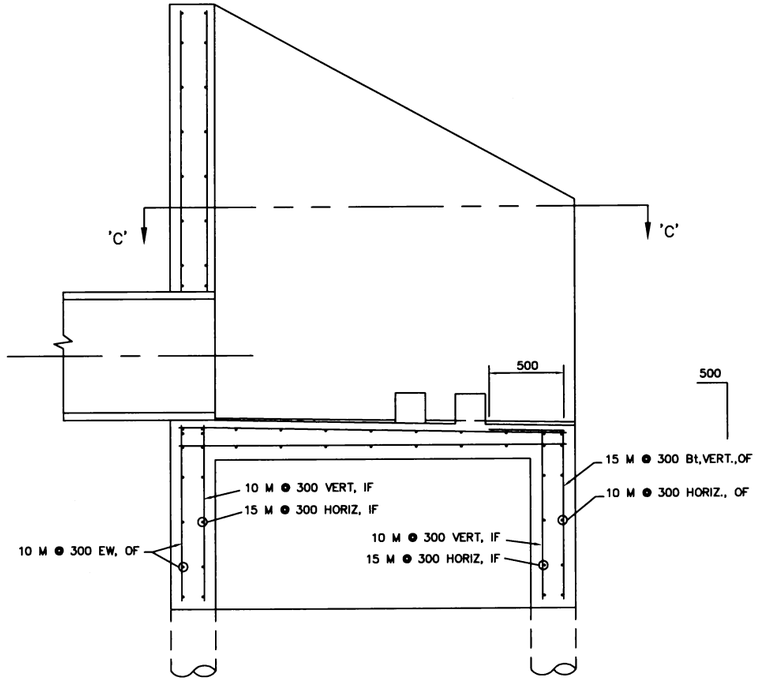
ENERGY DISSIPATION BLOCK
1:10

GENERAL NOTES

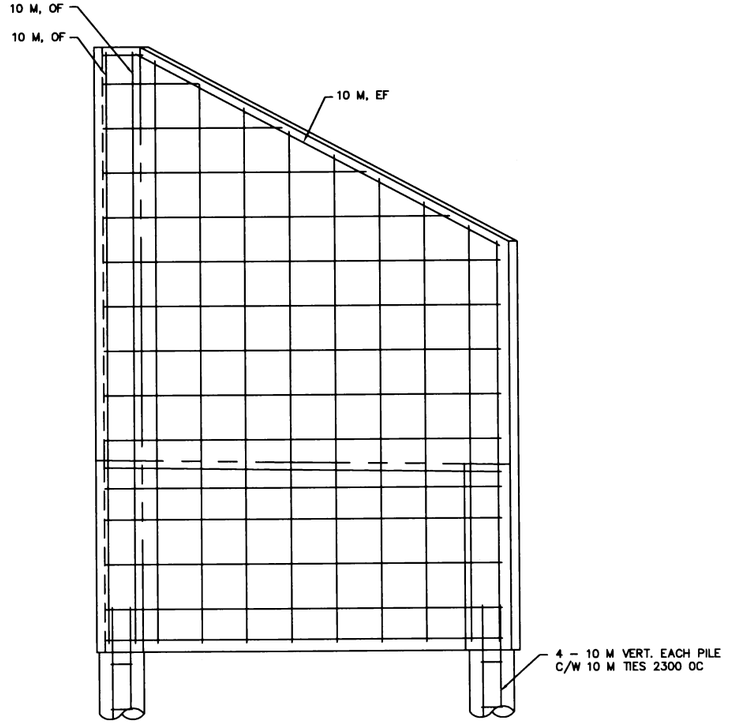
1. CONCRETE COVER FOR REINFORCING STEEL, UNLESS OTHERWISE NOTED ON DRAWING, SHALL BE
   a) 75 CLEAR – FORMED CONCRETE EXPOSED TO EARTH.
   b) 50 CLEAR – FORMED CONCRETE EXPOSED TO WATER OR WEATHER.
2. SULPHATE RESISTANT CONCRETE TO BE USED (30 MPa IN 28 DAYS) MAX. 19mm AGGREGATE.
3. ALL EXPOSED EDGES OF WALLS TO BE CHAMFERED.
4. USE DEFORMED BARS, fy = 400MPa.
5. ALL FORMED SURFACES TO BE IN CONTACT WITH EARTH BACKFILL SHALL BE COVERED WITH TWO COATS OF EMULSIFIED ASPHALT WATERPROOFING.
6. CUT OR SPLAY REINFORCING STEEL AS REQUIRED FOR PIPE CLEARANCE.
7. BENDS IN REINFORCING STEEL SHALL CONFORM TO STANDARD BENDING DETAILS IN A.C.I. "351 – 80"
8. SPLICES OF REINFORCEMENT SHALL BE MADE ONLY AS REQUIRED OR PERMITTED ON DESIGN DWGS., IN SPECIFICATION OR AS AUTHORIZED BY THE DESIGN ENGINEER.
9. FOOTINGS TO REST ON UNDISTURBED SOIL.



REAR WALL REINFORCEMENT



SECTION A – A



SIDE WALL REINFORCEMENT

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

NO.	DESCRIPTION	DATE	BY
1	BASE PLAN JMH	06-01-25	

REVISIONS

STAMP

MUNICIPAL ENGINEERING — A. Boyko ENGINEER — DRAWN BY — DATE — CHECKED BY — DATE

PUBLIC WORKS — ENGINEER — DRAWN BY — DATE — CHECKED BY — DATE

City of Saskatoon
Infrastructure Services Department

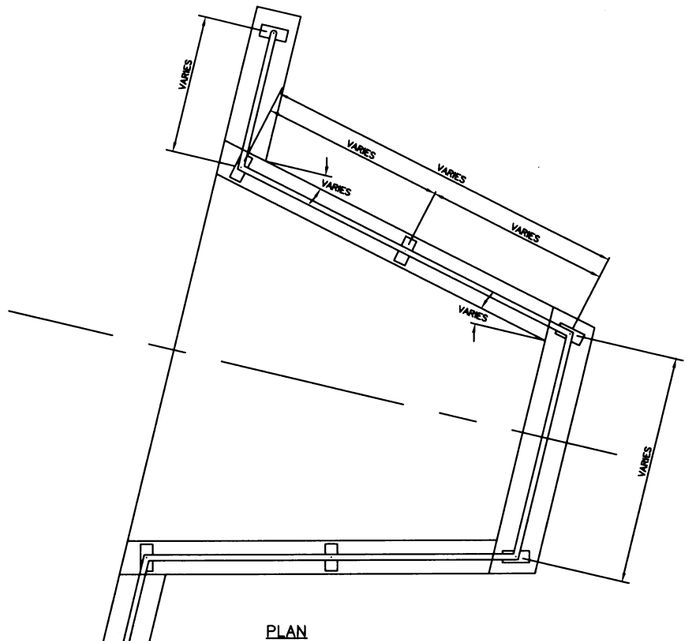
STORM SEWER OUTFALL
REINFORCEMENT DETAILS

GENERAL MANAGER — P. ENG — DATE

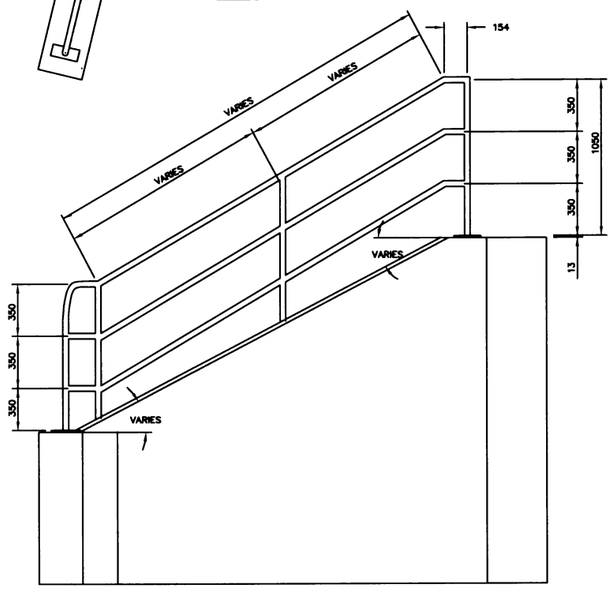
SCALES : HOR. 1:20 VERT. –

SHEET NO.

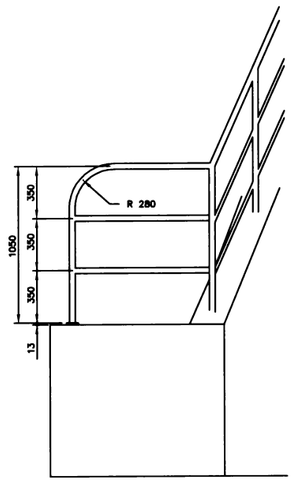
PLAN NO. 102–0018–006r001



PLAN



SIDE ELEVATION



FRONT ELEVATION

NOTE:

1. HANDRAIL SHALL BE 3-RAIL & 1050mm HIGH AS SHOWN ON PLAN 102-0018-003r001.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED

NO.	DESCRIPTION	DATE	BY
1	BASE PLAN DT	90-08-15	

REVISIONS

STAMP

MUNICIPAL ENGINEERING — A. Bojko — ENGINEER — ENGINEER — DRAWN BY — DATE — CHECKED BY — DATE

PUBLIC WORKS — ENGINEER — ENGINEER — DRAWN BY — DATE — CHECKED BY — DATE

City of Saskatoon
Infrastructure Services Department

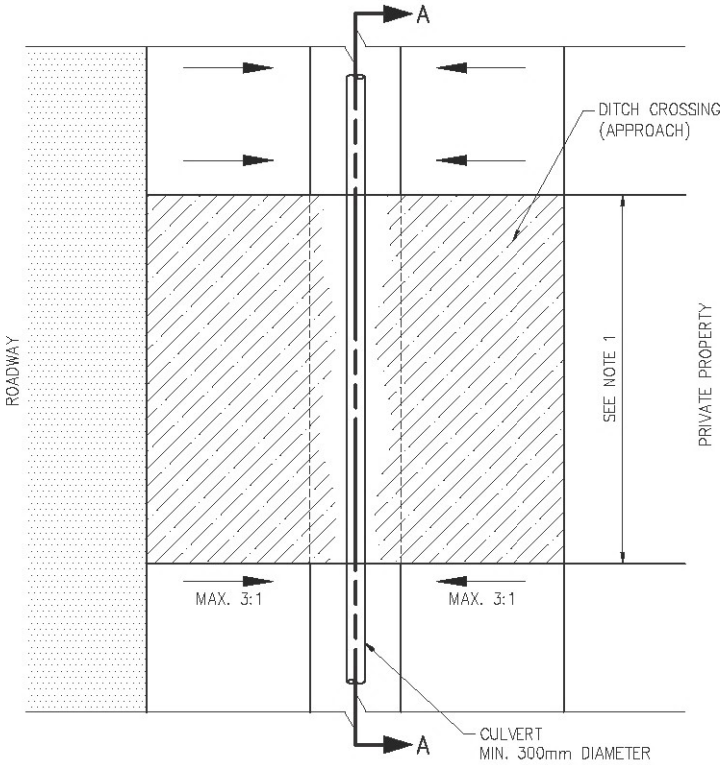
GENERAL MANAGER — P. DRE — DATE

SCALES : HOR. 1:20 VERT. —

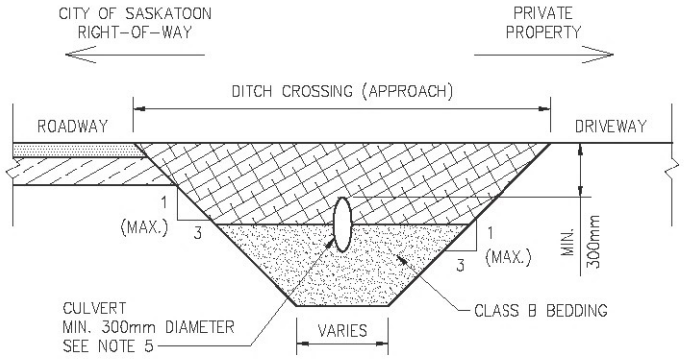
SHEET NO.

PLAN NO. 102-0018-007r001

HANDRAIL DETAILS



PLAN VIEW



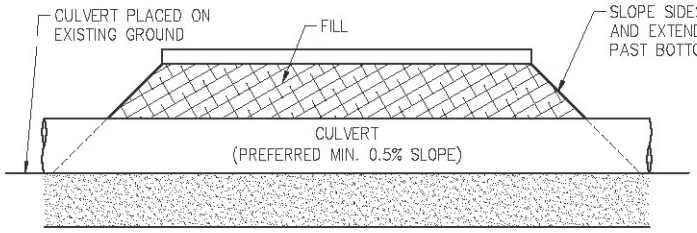
PROFILE VIEW

3X VERTICAL EXAGGERATION

NOTES:

1. MAXIMUM DRIVEWAYS WIDTHS SHALL BE THE LESSER OF:
   - 1.1. RESIDENTIAL = 6.1m
   - 1.2. COMMERCIAL = 10.7m
   - 1.3. INDUSTRIAL = 12.2m

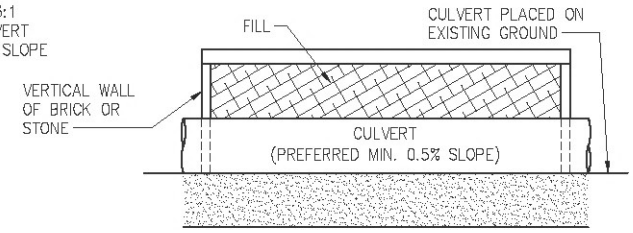
   OR
   - 1.4. PRIVATE PROPERTIES IN MONTGOMERY PLACE WITH DITCH & CULVERT DRAINAGE MAY HAVE A MAXIMUM CROSSING WIDTH OF ONE-THIRD OF PROPERTY FRONTAGE UP TO A MAXIMUM OF 16m.
2. MINIMUM CULVERT SIZES SHALL:
   - 2.1. RESIDENTIAL = 300mm
   - 2.2. COMMERCIAL = 450mm
   - 2.3. INDUSTRIAL = 450mm
3. ANY ALTERNATE CULVERT SIZE AND MINIMUM COVER SHALL BE REVIEWED AND APPROVED BY THE CITY.
4. ALL DRIVEWAYS REQUIRE AN APPLICATION FOR A PRIVATE DRIVEWAY CROSSING PERMIT.
5. CULVERT MATERIAL SPECIFICATIONS:
   - 5.1. CORRUGATED STEEL PIPE (CSP)
     - 5.1.1. 68mm x 13mm CORRUGATION PROFILE.
   - 5.2. POLYVINYL CHLORIDE (PVC)
     - 5.2.1. SOLID WALL PVC
       CERTIFIED TO CSA B182.2 AND CONFORMING TO ASTM D3034 WITH MINMUM PIPE STIFFNESS OF 320MPa @ 5% DEFLECTION.
     - 5.2.2. PROFILE PIPE
       CERTIFIED TO CSA B182.4 AND CONFORMING TO ASTM F794 WITH MINIMUM PIPE STIFFNESS OF 320MPa @ 5% DEFLECTION.
   - 5.3. REINFORCED CONCRETE PIPE (RCP)
     - 5.3.1. 300mm – 600mm COVER
       RCP TO BE ASTM CLASS V.
     - 5.3.2. MORE THAN 600mm COVER
       RCP CLASS TO BE REVIEWED AND APPROVED BY THE CITY.
   - 5.4. CORRUGATED POLYETHYLENE (CPE)
     - 5.4.1. CERTIFIED TO CSA 182.8 AND CONFORMING TO ASTM 3350 WITH MINIMUM PIPE STIFFNESS OF 320MPa AT 5% DEFLECTION.



SECTION A-A – OPTION 1

3X VERTICAL EXAGGERATION

* IF DITCH CROSSINGS (APPROACHES) ARE IN CLOSE PROXIMITY THAT DOES NOT ALLOW 3:1 SIDE SLOPE, OPTION 2 (VERTICAL SIDE WALL) SHALL BE USED.



SECTION A-A – OPTION 2

3X VERTICAL EXAGGERATION

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL DRAWING	2000-JUL-26	MRH
2	DIMENSION CHANGE AND NOTES ADDED	2018-MAR-05	EDH
3	ADDED MONTGOMERY PLACE MAXIMUM CROSSING WIDTH AND	2019-DEC-31	DLH
3	CULVERT MATERIAL SPECIFICATIONS	2019-DEC-31	DLH

City of Saskatoon

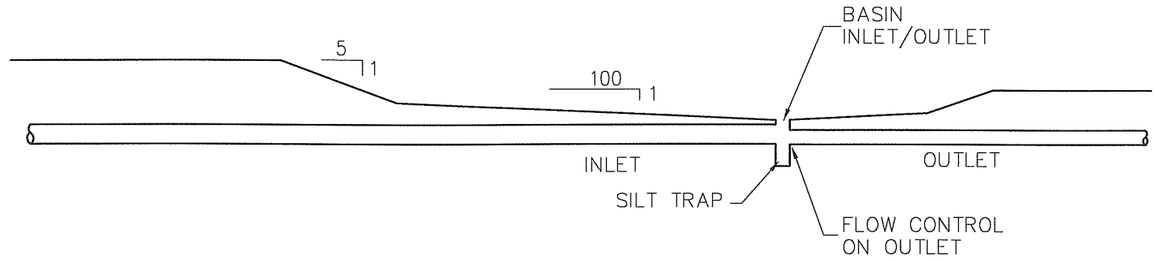
STANDARD DITCH CROSSING
CULVERT REQUIREMENTS

APPROVALS

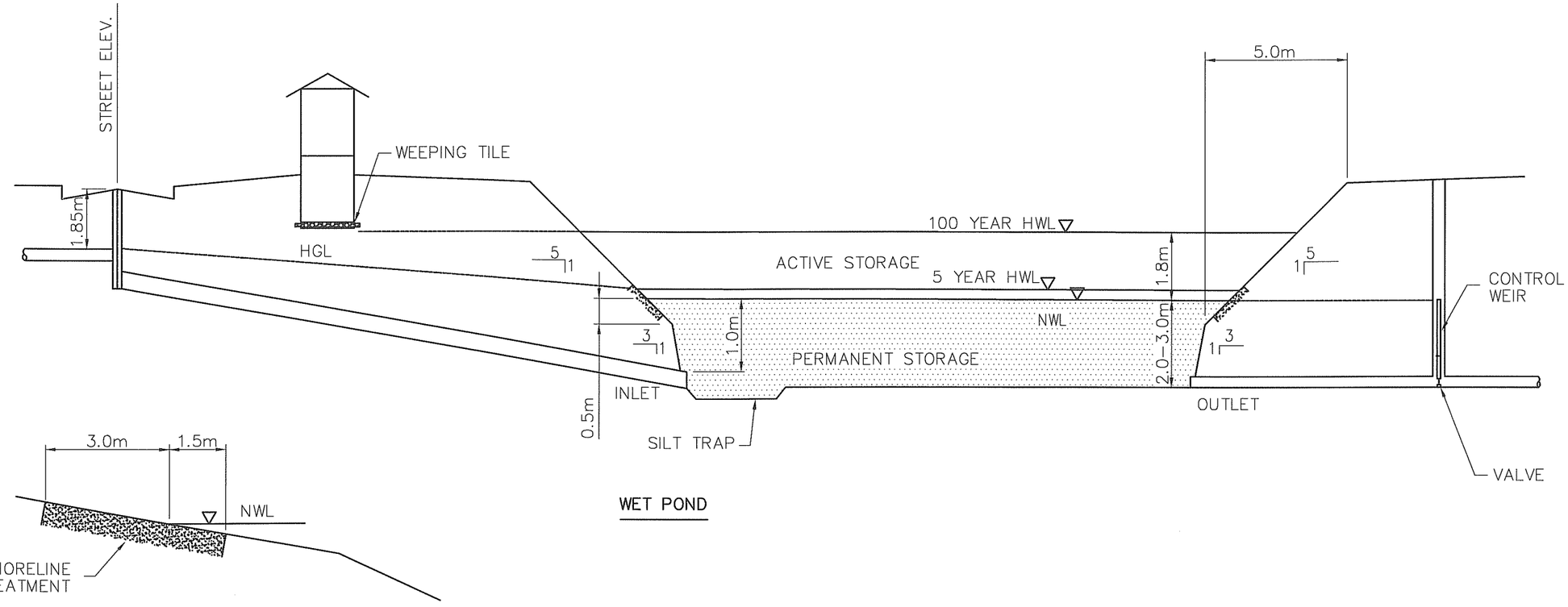
SIGNATURE	SIGNATURE
Mitchell McMann	Maciej Jurkiewicz
NAME	NAME
J	Jan 22, 2021
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:125 VERT. AS NOTED

PLAN NO. 102-0018-009r003



DRY POND



WET POND

	PLAN DESCRIPTION/REVISION	DATE	BY
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CONSTRUCTION & DESIGN	TRANSPORTATION	PUBLIC WORKS
ENGINEER	ENGINEER	ENGINEER
DATE 12/04/12	DATE	DATE
DRAWN BY CJP DATE 2012-APRIL-21	CHECKED BY DATE	

City of Saskatoon
Infrastructure Services Department

STORMWATER STORAGE BASIN
TYPICAL CROSS SECTIONS

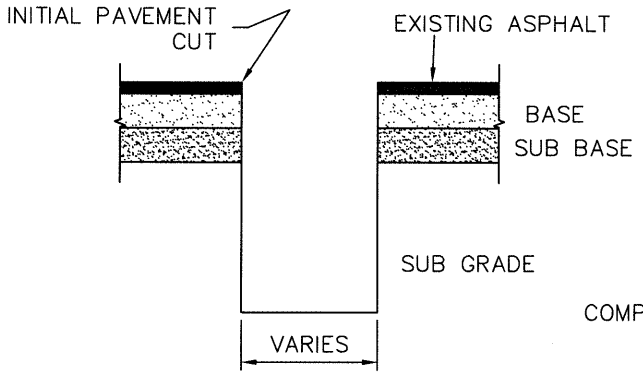
GENERAL MANAGER
APR 12/12 DATE

SCALES : HOR. 1:150 VERT.

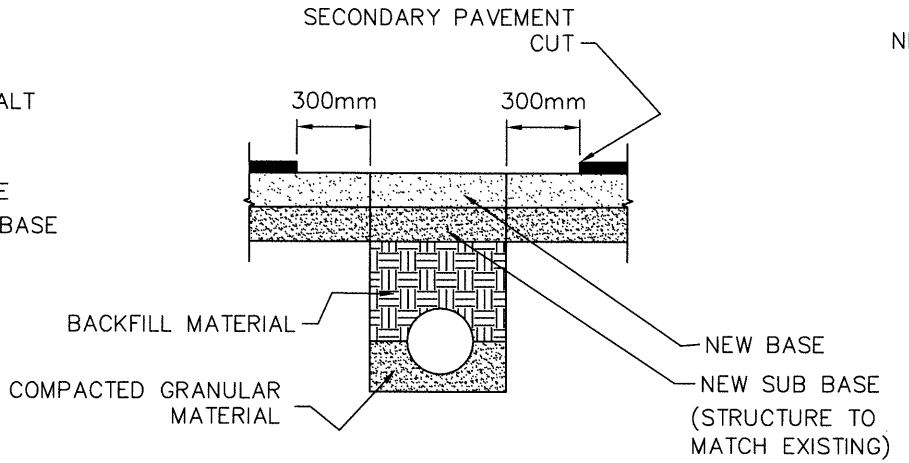
SHEET NO. PLAN NO. 102-0018-010r001

VERTICAL–WALLED TRENCH

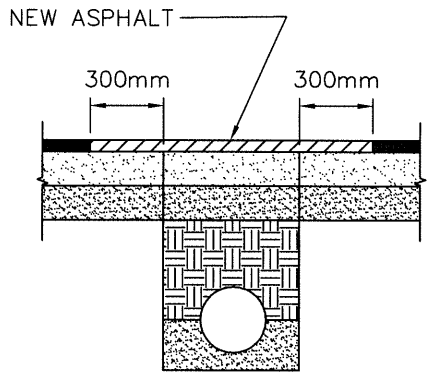
STEP 1



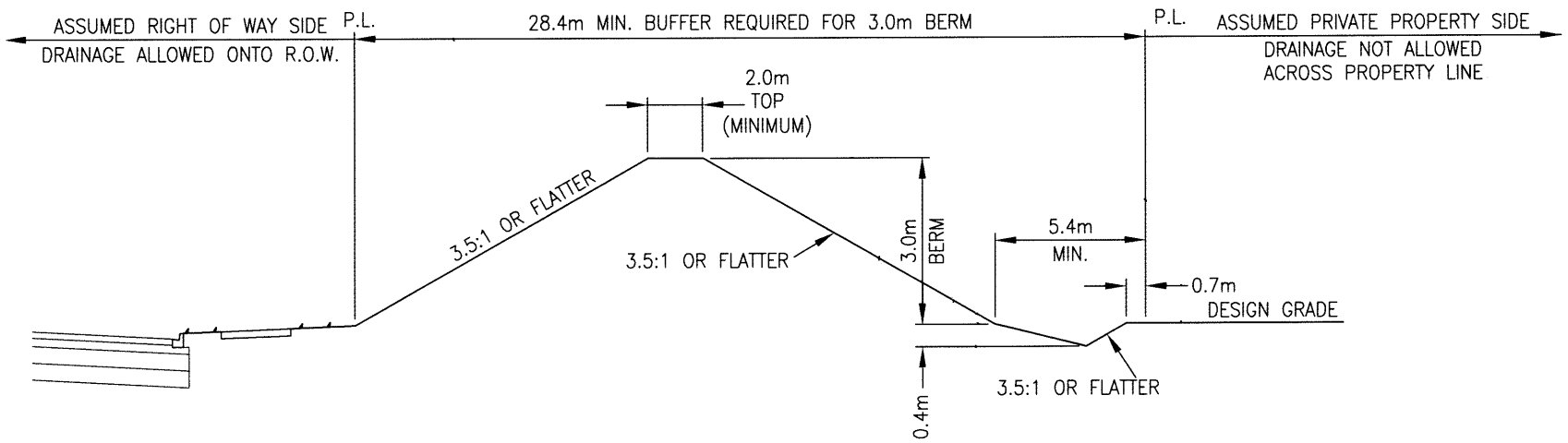
STEP 2

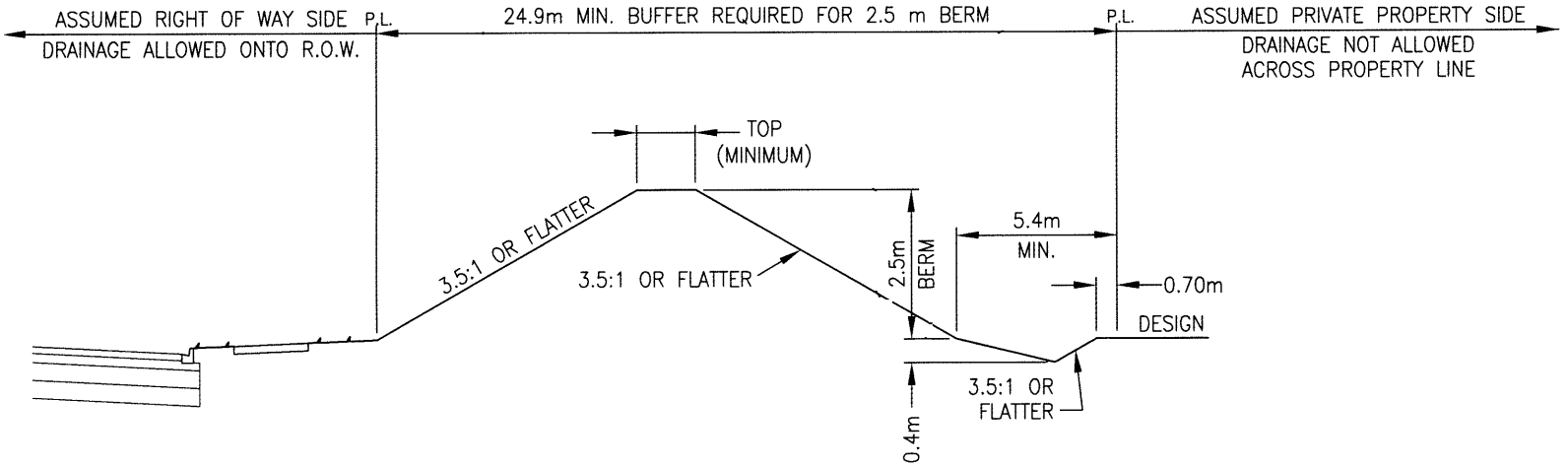


STEP 3



DRAWN BY	REVISIONS	APPROVED
DATE 06/19/00	1 MATCH EXISTING STRUCTURE NOTE 15–DEC–2014 HLO	ENGINEER P./ENG.
CHECKED BY	2	ENGINEER
DATE	3	SCALES : HOR. NTS VERT.
City of Saskatoon Transportation & Utilities Department	KEYING OF TRENCH	PLAN NO. 102–0019–001r002





NOTE:
THESE ARE FOR EXAMPLE ONLY;
CALCULATE THE BUFFER REQUIREMENT BASED ON THE DESIRED BERM HEIGHT

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	CHANGED BUFFER WIDTH JVS 2014 JUN 25
1	INCREASED BUFFER WIDTH JAB 2013 DEC 18

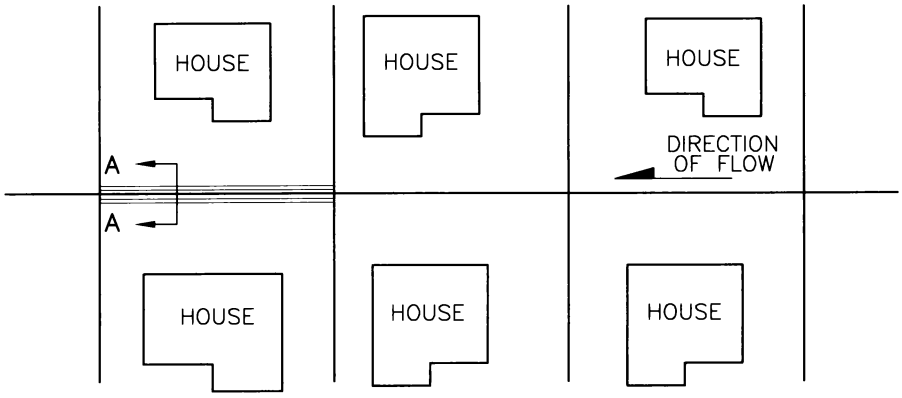
DRAWN BY MRH
DATE 2009 MAR 30
SCALE : HOR. 1:250 VERT. 1:125

City of Saskatoon
Transportation & Utilities Department

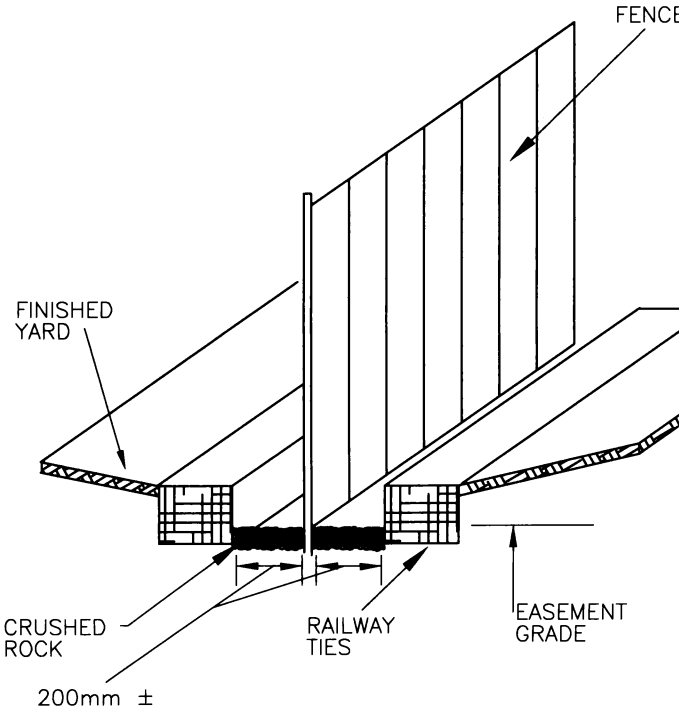
TYPICAL BERM REQUIREMENT

APPROVED
CHIEF ENGINEER
ENGINEER
ENGINEER

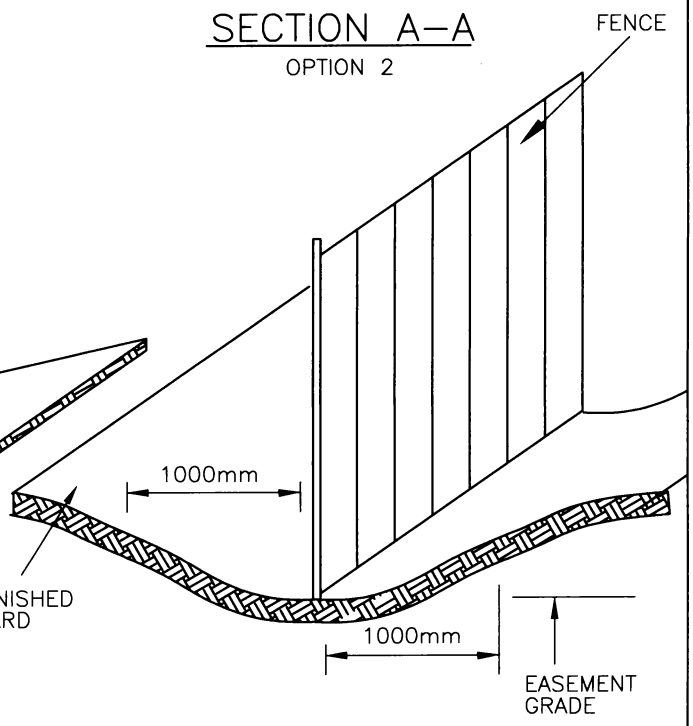
PLAN NO. 102-0021-001r003



SECTION A–A
OPTION 1



SECTION A–A
OPTION 2



NOTE: REAR LOT GRADES ARE DESIGNED TO FLOW ALONG THE FENCE LINE, SEE LOT GRADE "PREGRADES" AND DIRECTION OF FLOW.

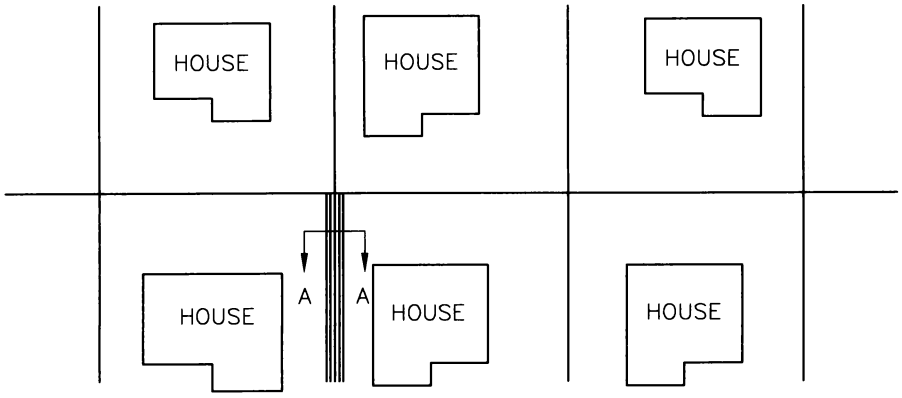
REVISIONS	
1	
2	
3	

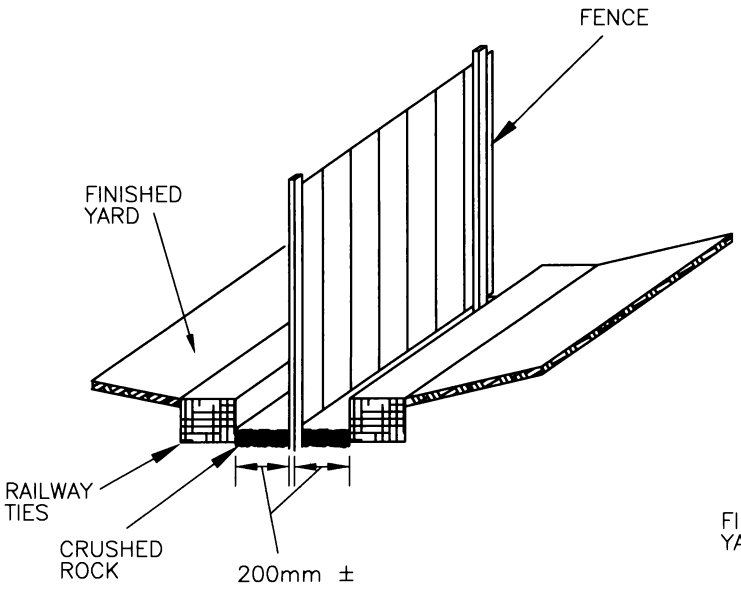
DRAWN BY RPL/MRH
DATE 03/07/96
CHECKED BY
DATE

CITY OF SASKATOON
INFRASTRUCTURE SERVICES DEPARTMENT

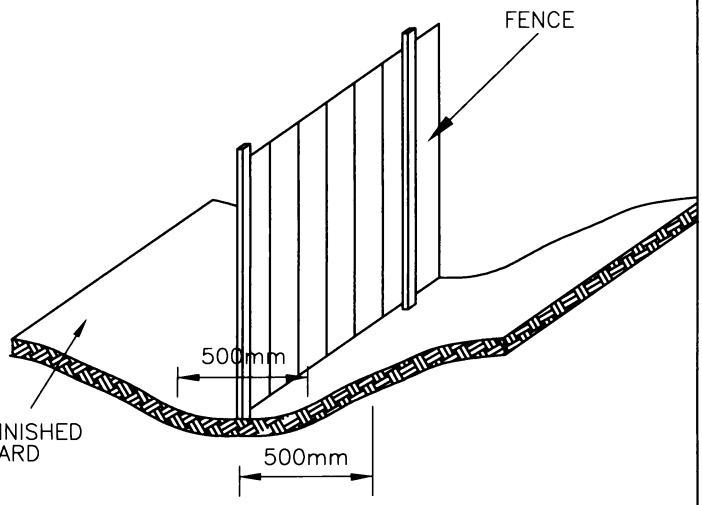
EASEMENT GRADING
BACK YARD

APPROVED
CITY ENGINEER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. N.I.S. VERT. N.I.S.
PLAN NO. 102–0022–003r001

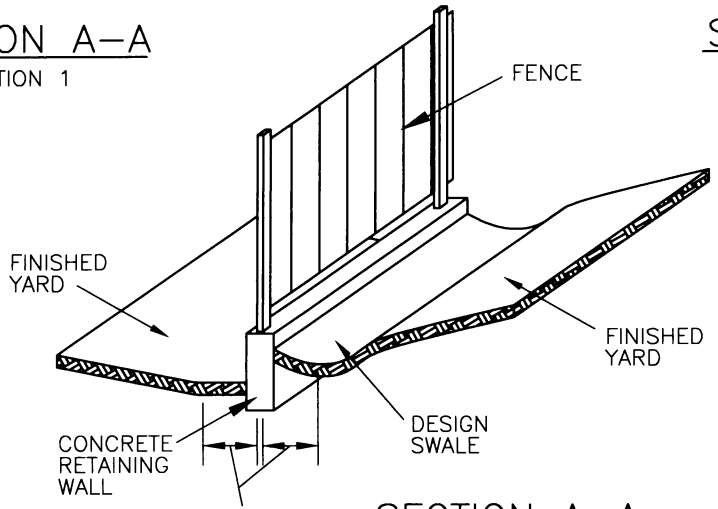




SECTION A–A
OPTION 1



SECTION A–A
OPTION 2



SECTION A–A
OPTION 3

REVISIONS	
1	OPTION 3 – 05/05/00
2	
3	

DRAWN BY MRH
DATE 25/09/96

CHECKED BY
DATE

CITY OF SASKATOON
INFRASTRUCTURE SERVICES DEPARTMENT

EASEMENT GRADING
SIDE YARD GRADING

APPROVED

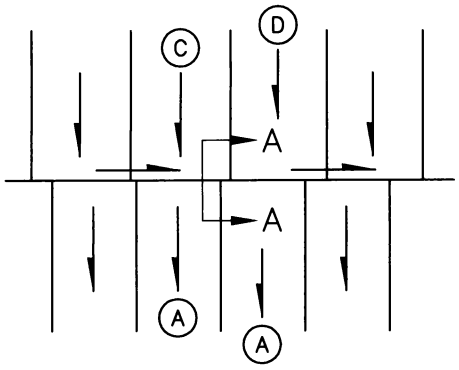
CITY ENGINEER P. ENG.

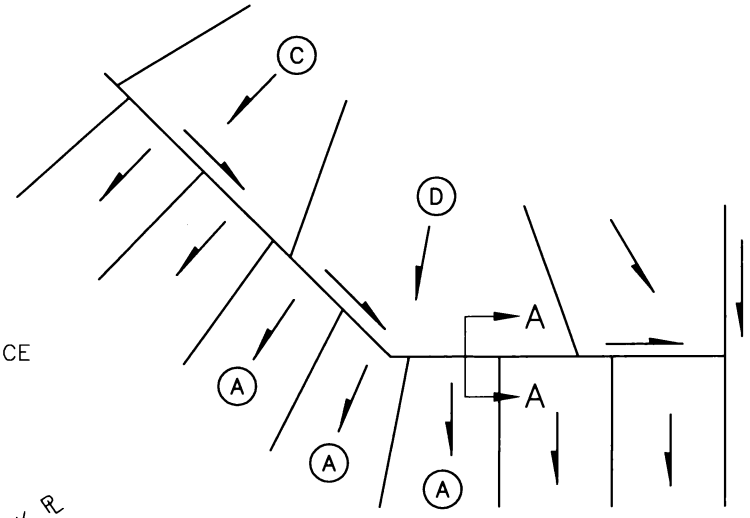
ENGINEER A. Boyko

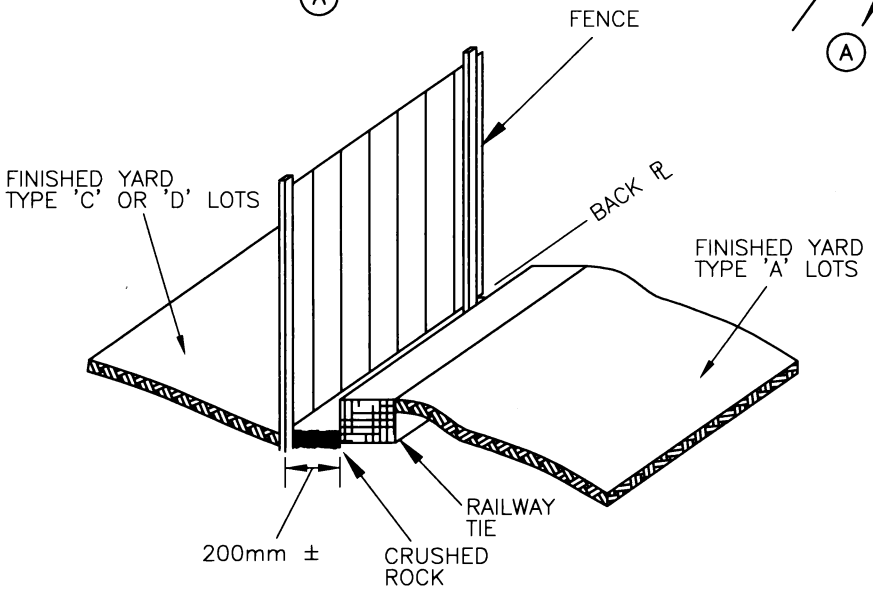
ENGINEER D.J. Drysdale

SCALES : HOR. N.T.S. VERT. N.T.S.

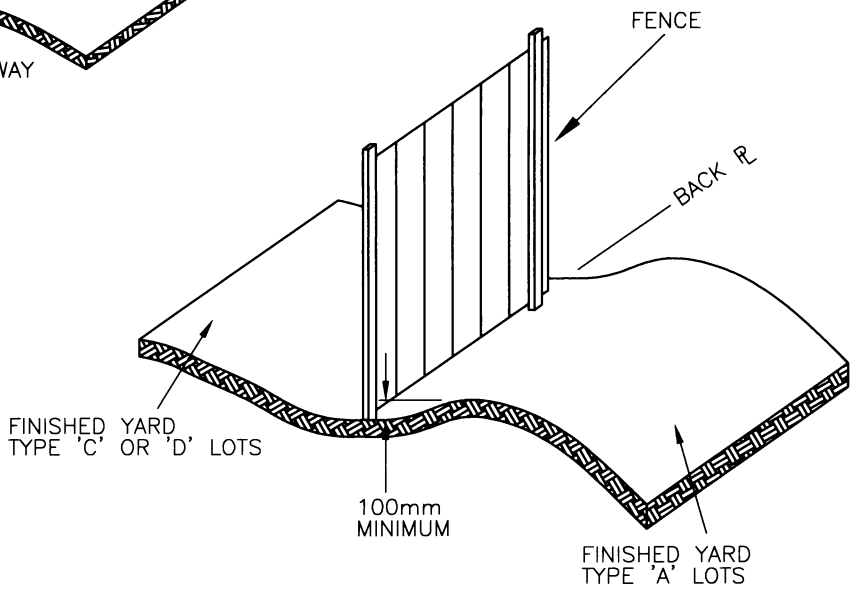
PLAN NO. 102–0022–004r001







SECTION A–A
OPTION 1



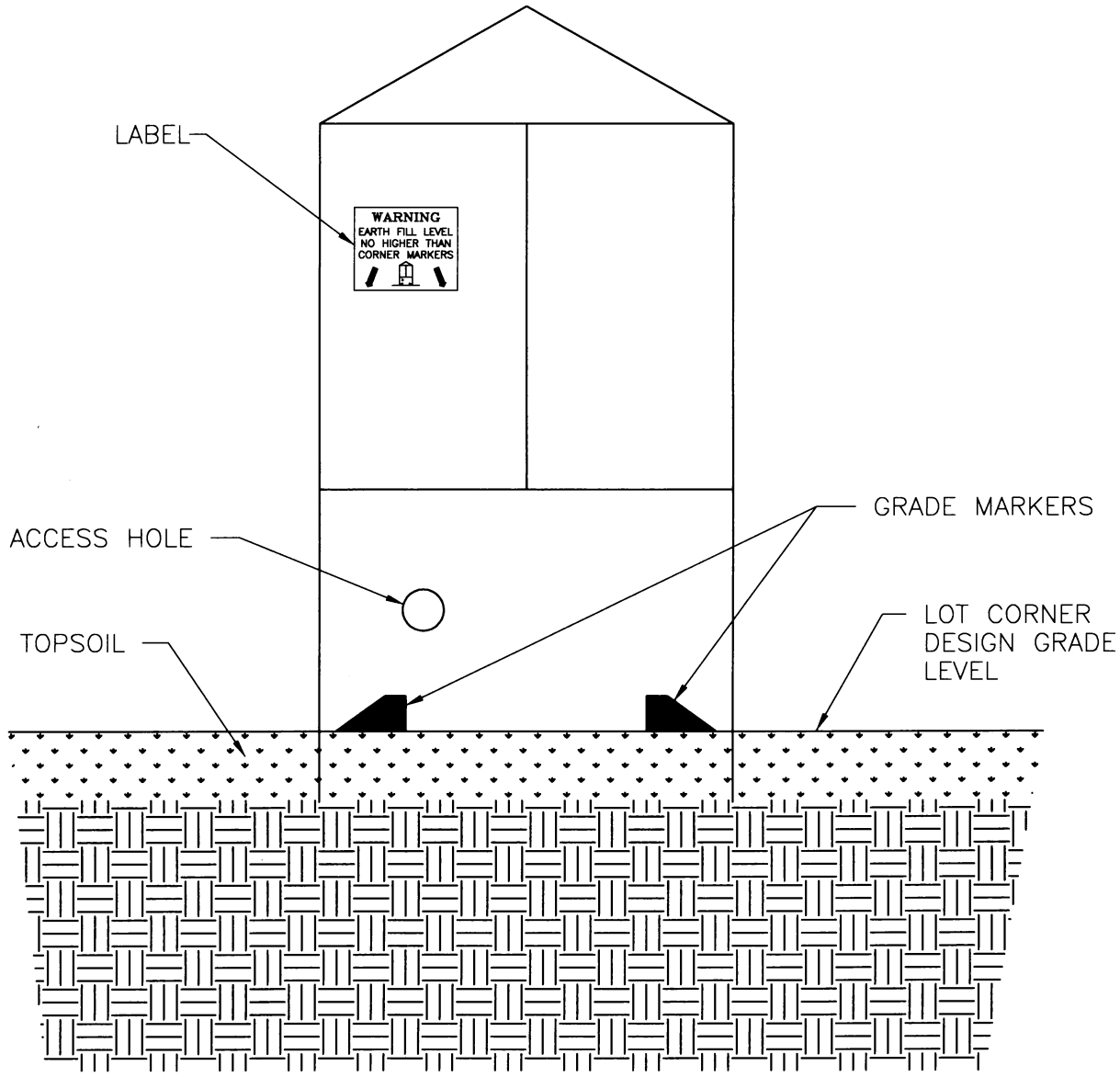
SECTION A–A
OPTION 2

THE PURPOSE OF THIS DRAINAGE SWALE IS TO ENSURE THAT DRAINAGE FROM THE BACK OF THE TYPE 'C' AND 'D' LOTS DOES NOT ENTER THE TYPE 'A' LOTS ON THE OTHER SIDE OF THE EASEMENT.

THE UTILITY KIOSKS LOCATED ALONG THE UTILITY EASEMENTS WILL HAVE THE ELEVATION MARKED TO SHOW THE FINAL GRADE AT THE BACK PROPERTY LINE.

THIS WOULD APPLY TO THE BACK OF ALL TYPE 'A' LOTS.

REVISIONS		CITY OF SASKATOON INFRASTRUCTURE SERVICES DEPARTMENT	APPROVED
1			CITY ENGINEER P. ENG.
2			ENGINEER A. Boyko
3			ENGINEER D.J. Drysdale
DRAWN BY MRH DATE 13/06/02		DRAINAGE SWALE BACK OF LOT, 1 OF 2	SCALES : HOR. N.I.S. VERT. N.I.S.
CHECKED BY DATE			PLAN NO. 102–0022–005r001



NOTE:

1. LABEL TWO SIDES FACING HOUSES.
2. PLACE GRADE MARKERS ON ALL FOUR SIDES NEAR CORNERS.

REVISIONS	
1	
2	
3	

DRAWN BY G. HRYCAK
DATE 10/10/96

CHECKED BY
DATE

CITY OF SASKATOON
INFRASTRUCTURE SERVICES DEPARTMENT

GRADE MARKERS
ELECTRICAL KIOSK

APPROVED

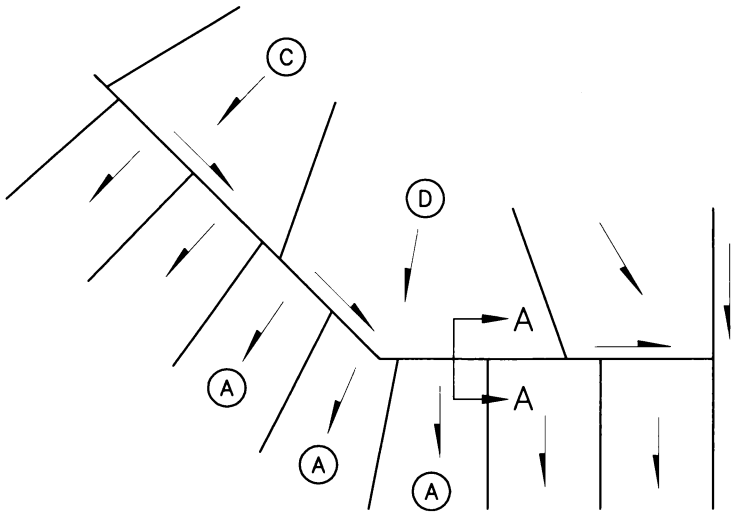
CITY ENGINEER P. ENG.

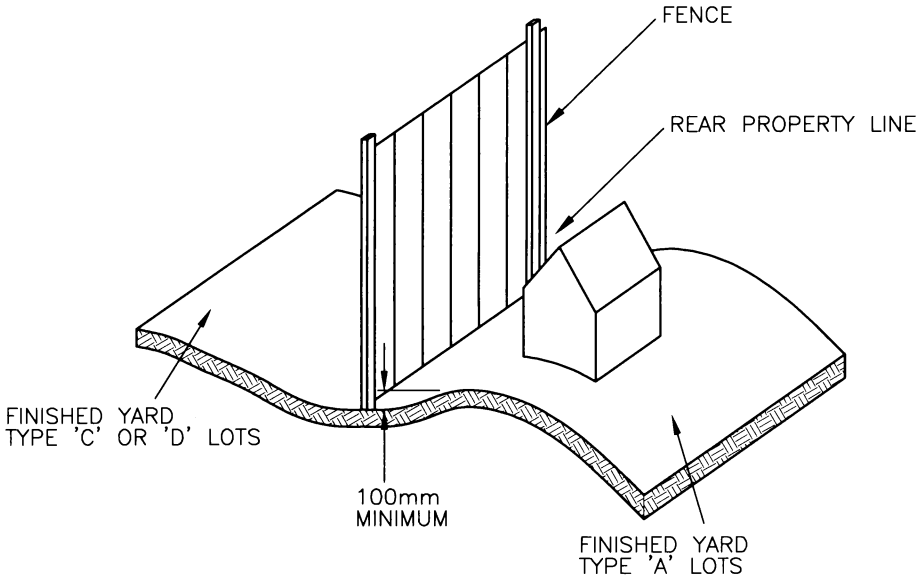
ENGINEER A. Boyko

ENGINEER D.J. Drysdale

SCALES : HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102-0022-006r001





SECTION A–A

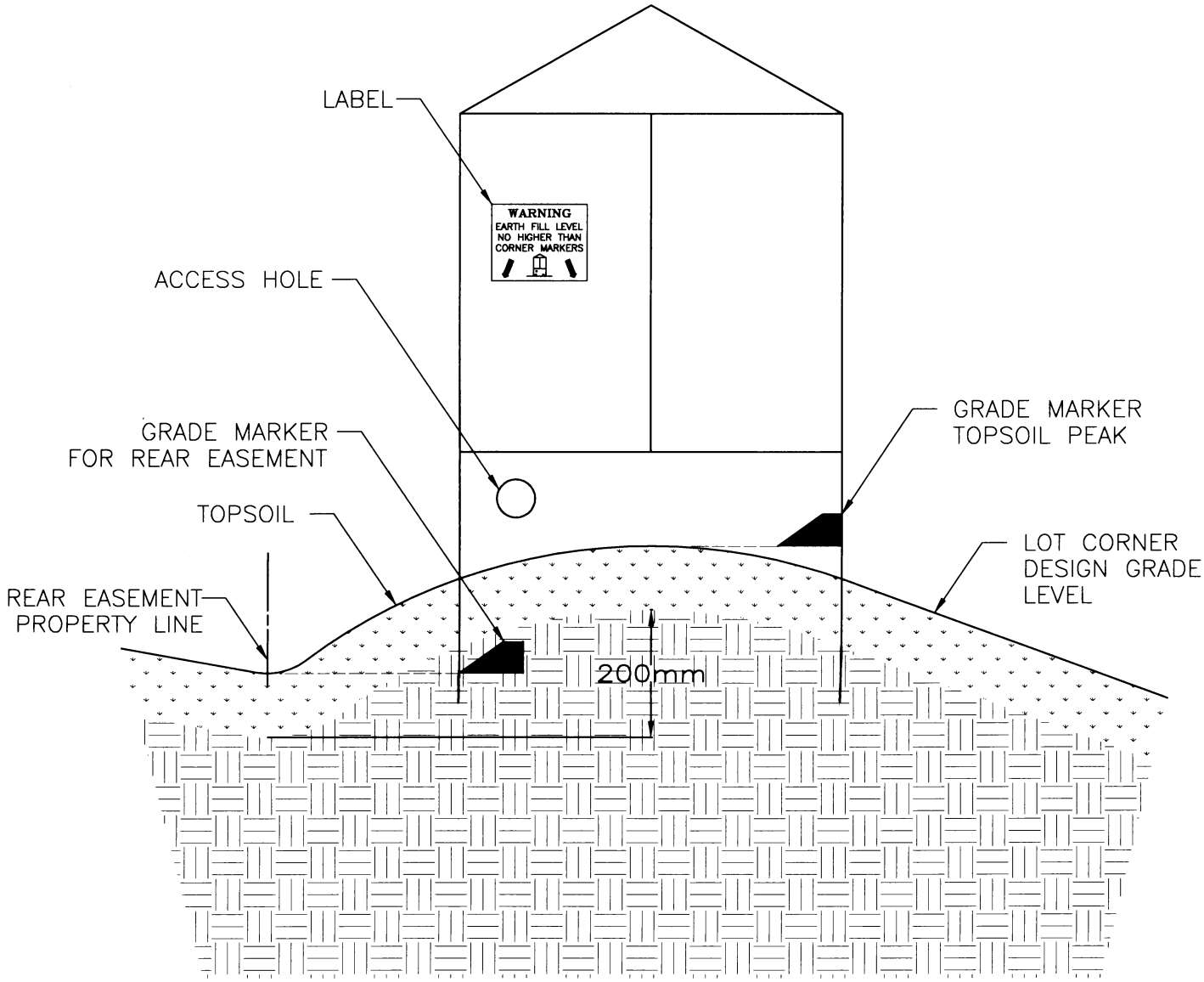
OPTION 3

THE PURPOSE OF THIS DRAINAGE SWALE IS TO ENSURE THAT DRAINAGE FROM THE BACK OF THE TYPE 'C' AND 'D' LOTS DOES NOT ENTER THE TYPE 'A' LOTS ON THE OTHER SIDE OF THE EASEMENT.

THE UTILITY KIOSKS LOCATED ALONG THE UTILITY EASEMENTS WILL HAVE THE ELEVATION MARKED TO SHOW THE FINAL GRADE AT THE BACK PROPERTY LINE.

THIS WOULD APPLY TO THE BACK OF ALL TYPE 'A' LOTS.

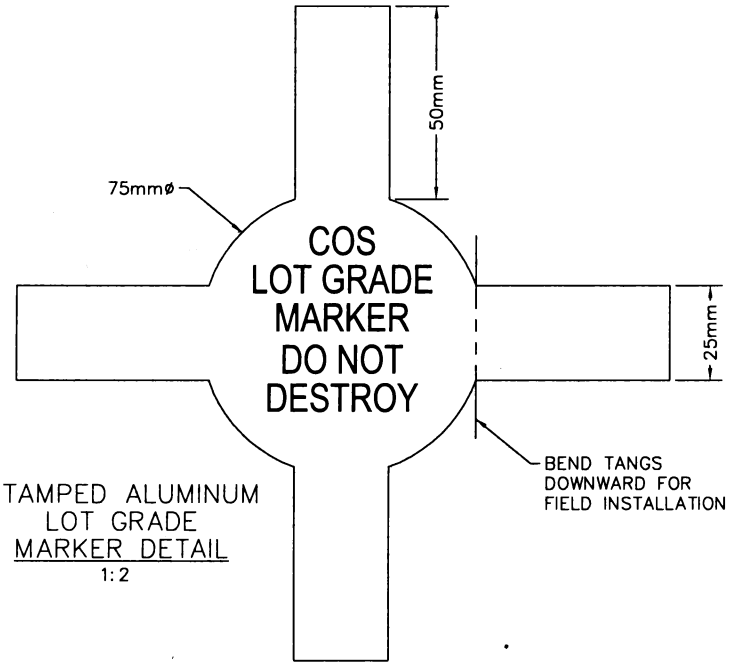
REVISIONS		CITY OF SASKATOON INFRASTRUCTURE SERVICES DEPARTMENT	APPROVED
1			CITY ENGINEER A. Boyko P. ENG.
2			ENGINEER D.D. Drysdale
3			ENGINEER
DRAWN BY C. CARTER DATE 23/07/02		DRAINAGE SWALE BACK OF LOT, 2 OF 2	SCALES : HOR. N.T.S. VERT. N.T.S.
CHECKED BY DATE			PLAN NO. 102–0022–007r001



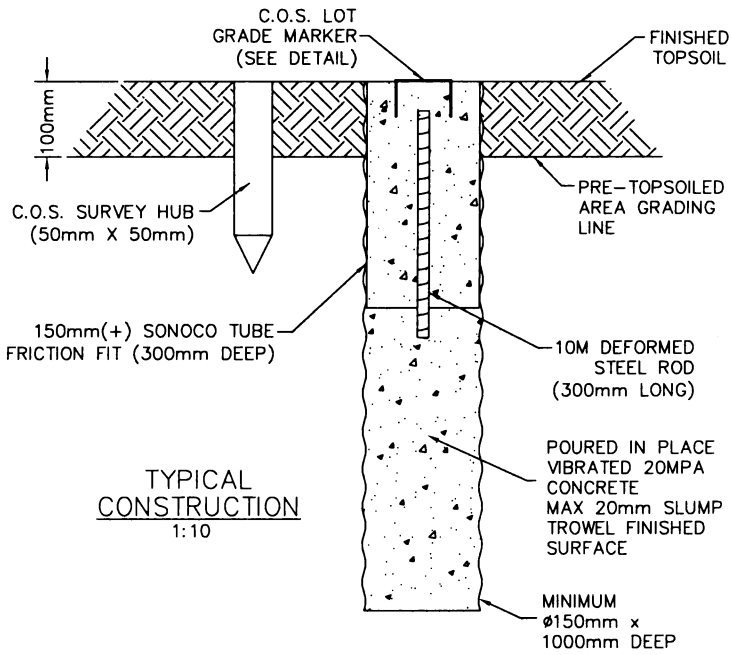
NOTE:

1. LABEL TWO SIDES FACING HOUSES.
2. PLACE GRADE MARKERS ON ALL FOUR SIDES NEAR CORNERS.

REVISIONS		CITY OF SASKATOON INFRASTRUCTURE SERVICES DEPARTMENT	APPROVED
1			CITY ENGINEER P. ENG.
2			ENGINEER
3			ENGINEER
DRAWN BY C. CARTER DATE 23/07/02		GRADE MARKERS ELECTRICAL KIOSK	SCALES : HOR. N.T.S. VERT. N.T.S.
CHECKED BY DATE			PLAN NO. 102-0022-008r001

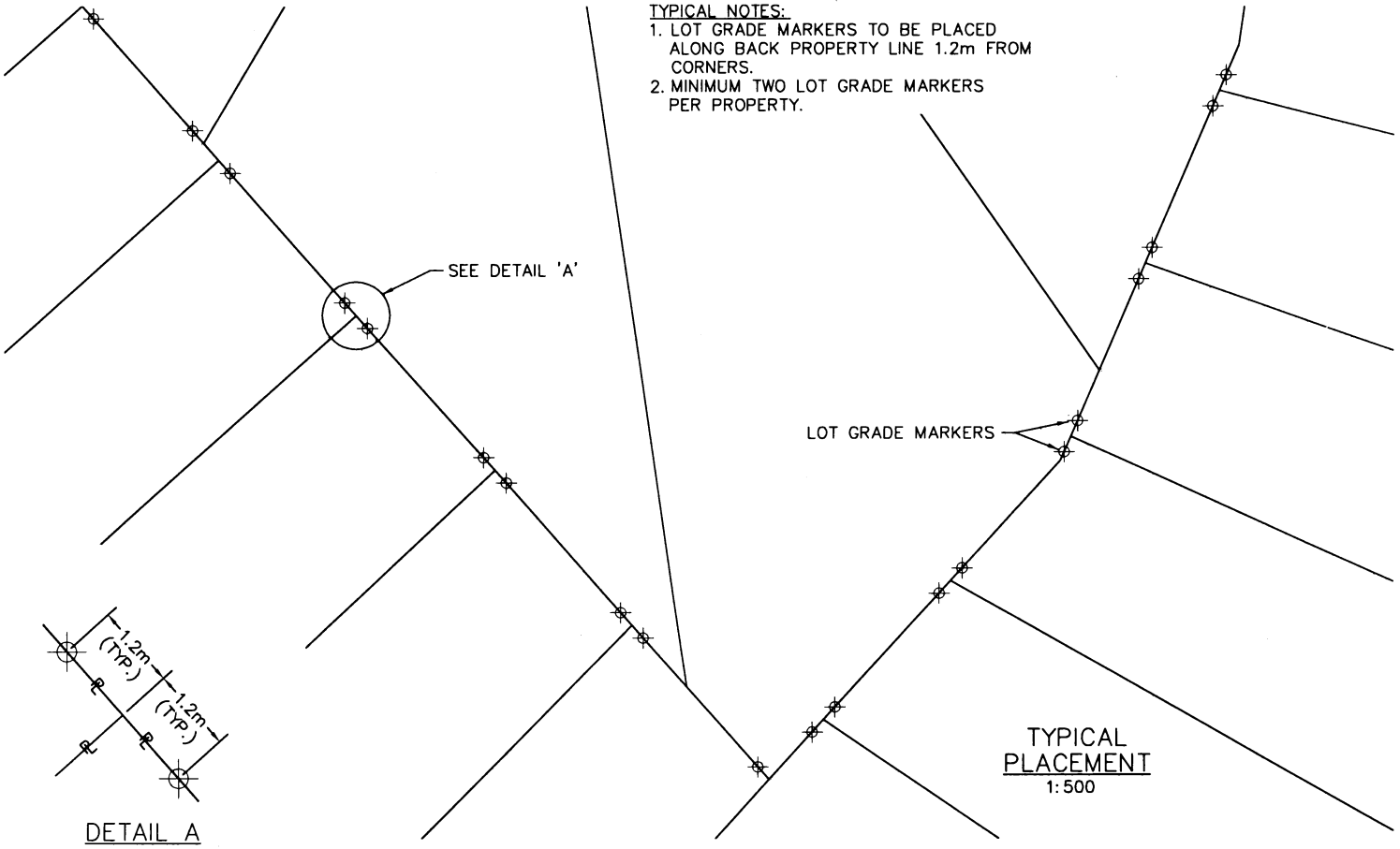


STAMPED ALUMINUM
LOT GRADE
MARKER DETAIL
1:2



TYPICAL
CONSTRUCTION
1:10

TYPICAL NOTES:
1. LOT GRADE MARKERS TO BE PLACED ALONG BACK PROPERTY LINE 1.2m FROM CORNERS.
2. MINIMUM TWO LOT GRADE MARKERS PER PROPERTY.



DETAIL A
N.T.S.

TYPICAL
PLACEMENT
1:500

REVISIONS		
1	HLO	2006-01-25
2		
3		

DRAWN BY R. OTTENBREIT
DATE 2004-06-02

CHECKED BY
DATE

City of
Saskatoon
Infrastructure Services Department

C.O.S. LOT GRADE MARKERS
CONSTRUCTION AND PLACEMENT

APPROVED

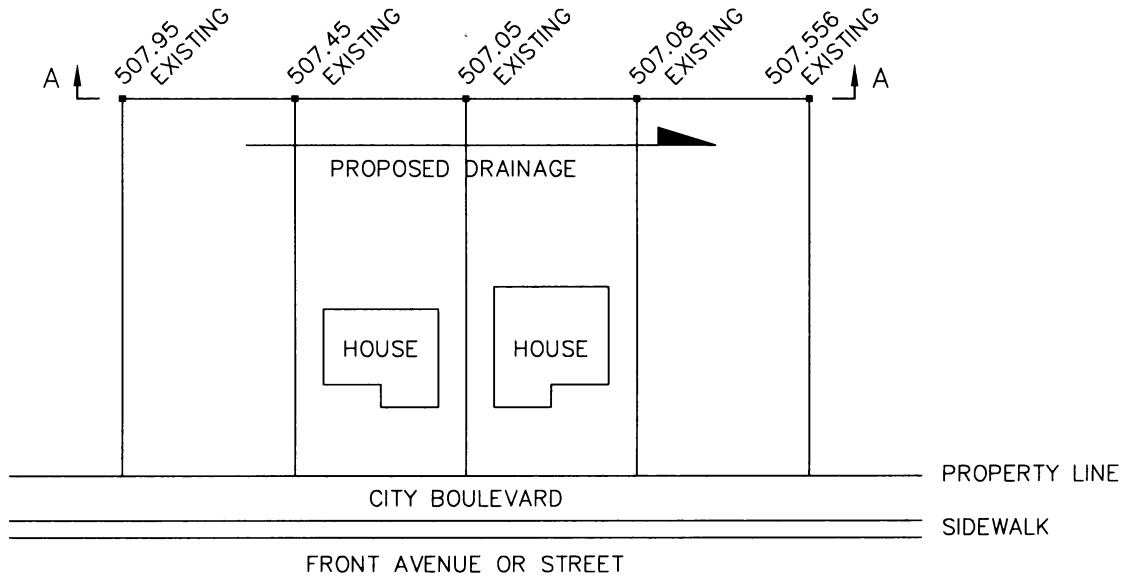
GENERAL MANAGER P. ENG.

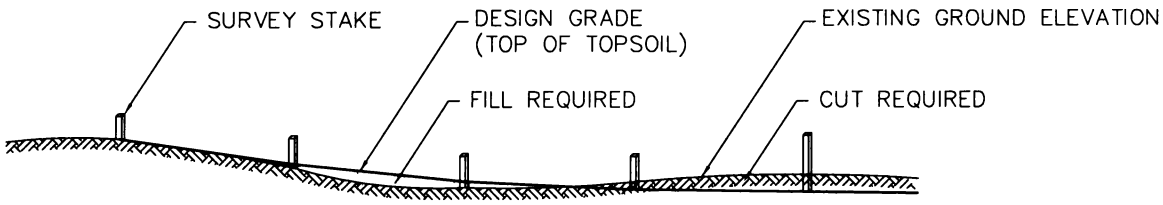
A. Boyko
ENGINEER

ENGINEER

SCALES : HOR. AS NOTED

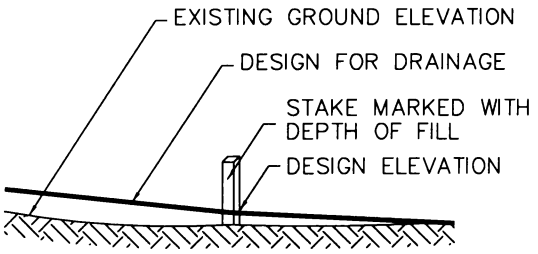
PLAN NO. 102-0022-009r002



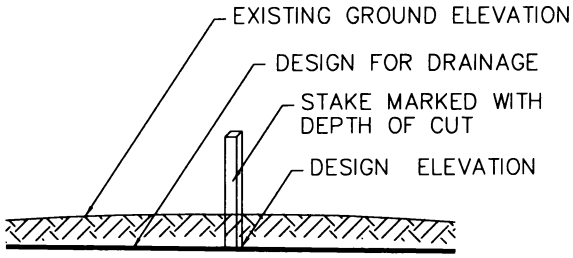


PROFILE ALONG A–A

REAR LOT LINE ALONG FENCE

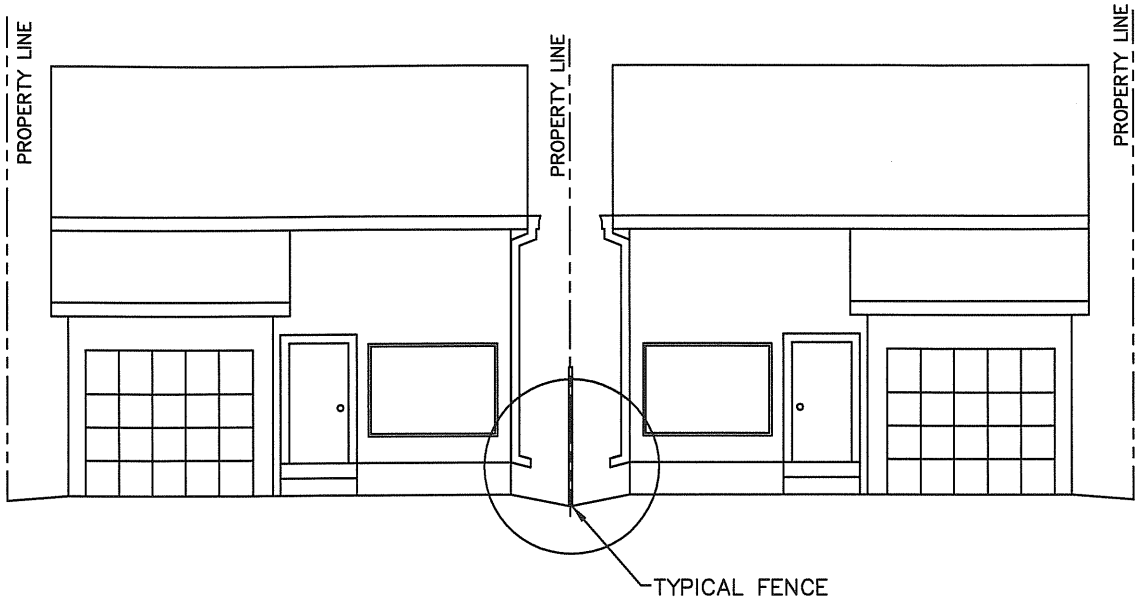


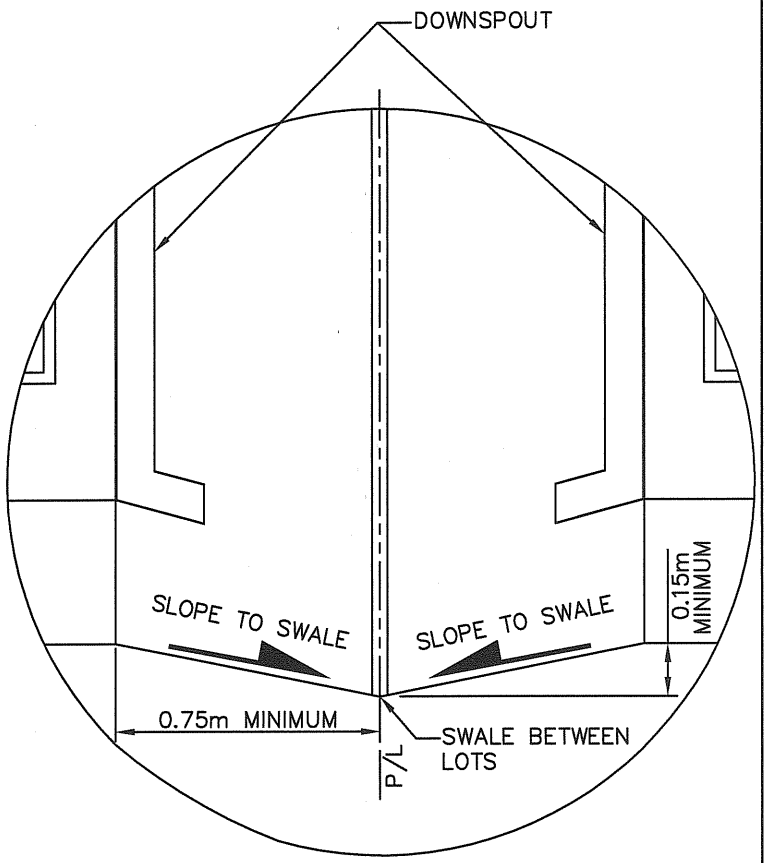
FILL STAKE



CUT STAKE

REVISIONS		City of Saskatoon Infrastructure Services Department	APPROVED
1			GENERAL MANAGER P. ENG.
2			A. Boyko ENGINEER
3			ENGINEER
DRAWN BY JMH DATE 06-01-25		DRAINAGE IMPROVEMENT	SCALES : HOR.
CHECKED BY DATE			PLAN NO. 102-0022-010r001





NOTES:

1. 0.75m MINIMUM DISTANCE FROM FOUNDATION WALL TO PROPERTY LINE
2. MINIMUM 0.15m DROP FROM FOUNDATION WALL TO PROPERTY LINE.

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	

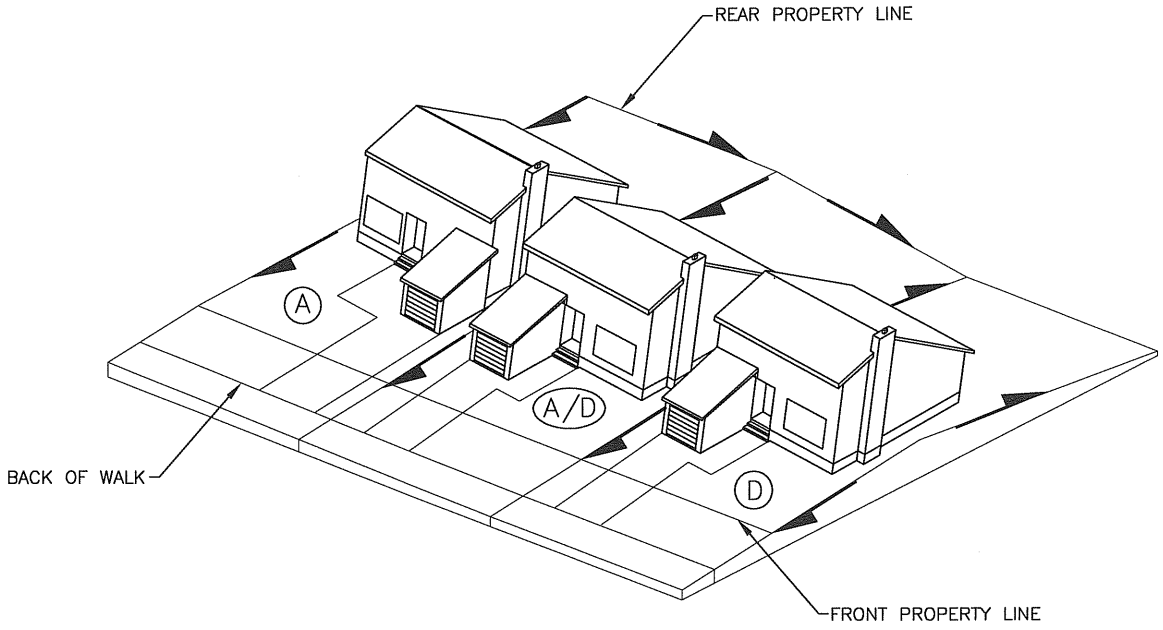
DRAWN BY LMD
DATE 2010-AUG-18
SCALE : HOR. N.T.S VERT. N.T.S.

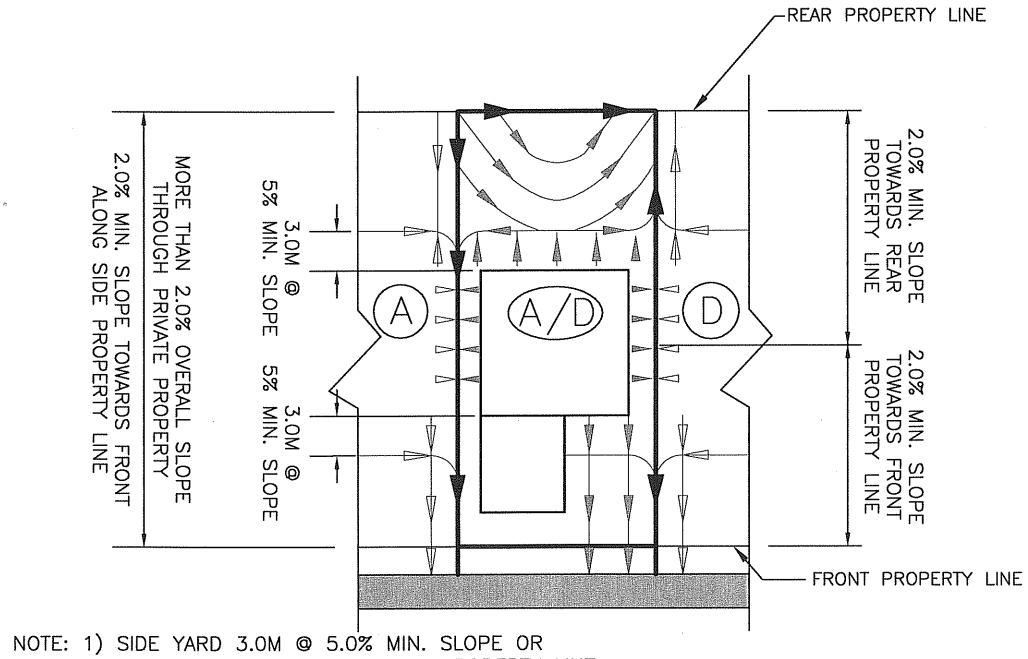
City of Saskatoon
Infrastructure Services Department

SIDE YARD DRAINAGE SWALE

APPROVED
GENERAL MANAGER Nov 3, 10
ENGINEER

PLAN NO. 102-0022-012r001

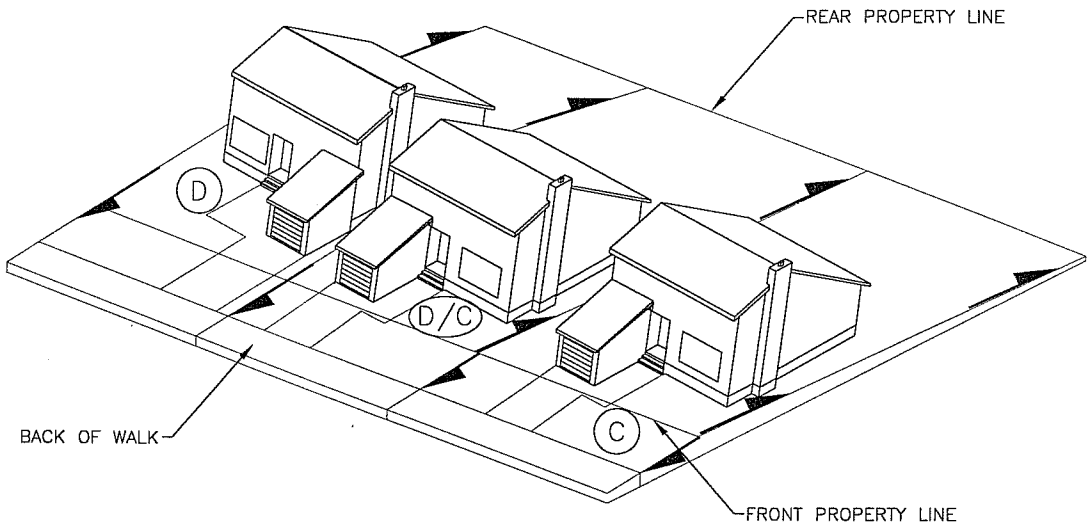


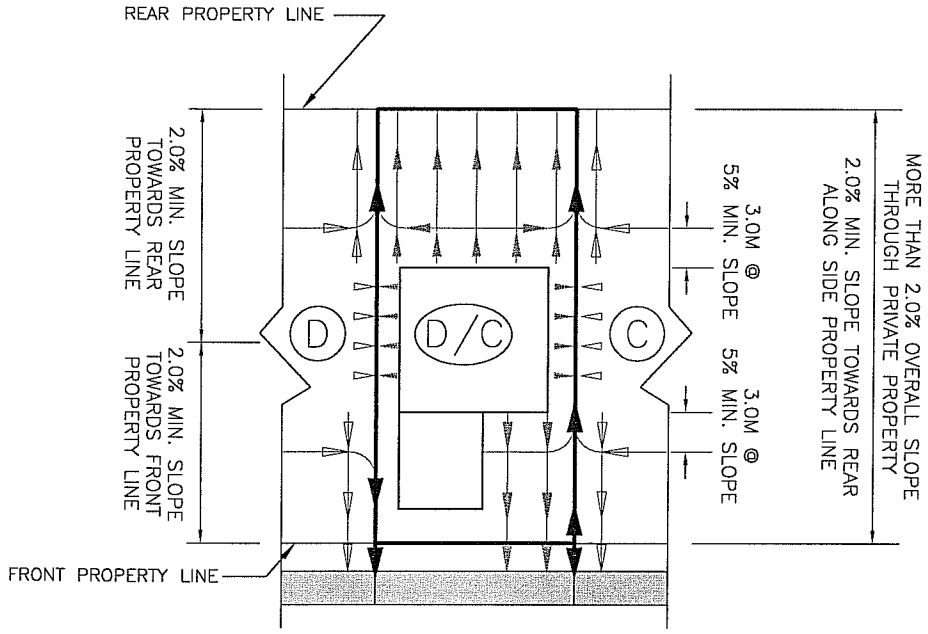


NOTE: 1) SIDE YARD 3.0M @ 5.0% MIN. SLOPE OR
MIN. 0.15M DROP FROM WALL TO PROPERTY LINE
2) LOT TYPE D/A IS REVERSE OF LOT TYPE A/D

PLAN VIEW
TRANSITION LOT TYPE A/D

PLAN DESCRIPTION/REVISIONS		City of Saskatoon Infrastructure Services Department	APPROVED
4			GENERAL MANAGER Nov 3, 10
3		LOT GRADING	
2		TRANSITION LOT TYPE A/D & D/A	ENGINEER
1			PLAN NO. 102-0022-013r001
DRAWN BY LMD			
DATE 2010-SEP-14			
SCALE : HOR. ____ VERT. ____			

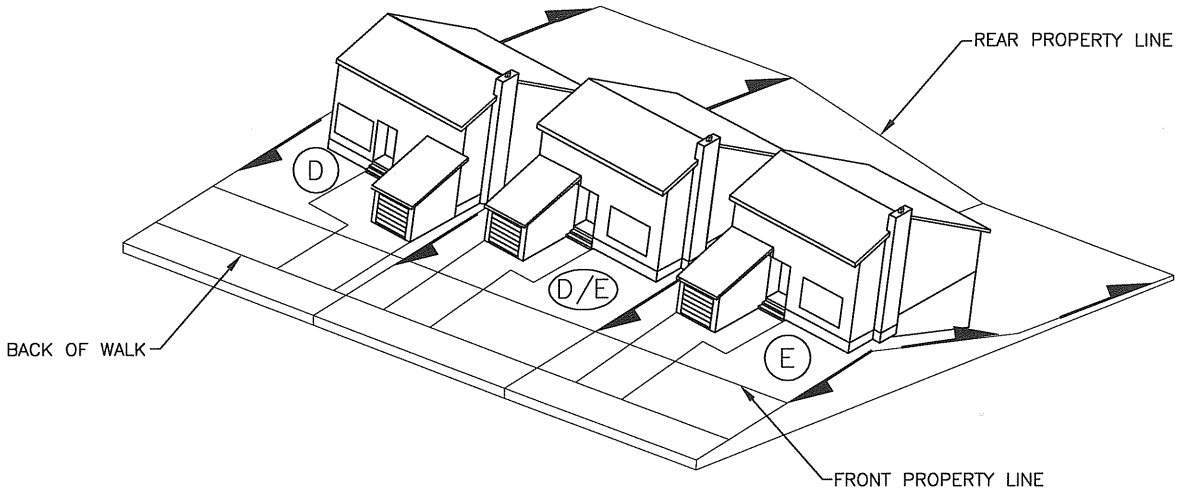


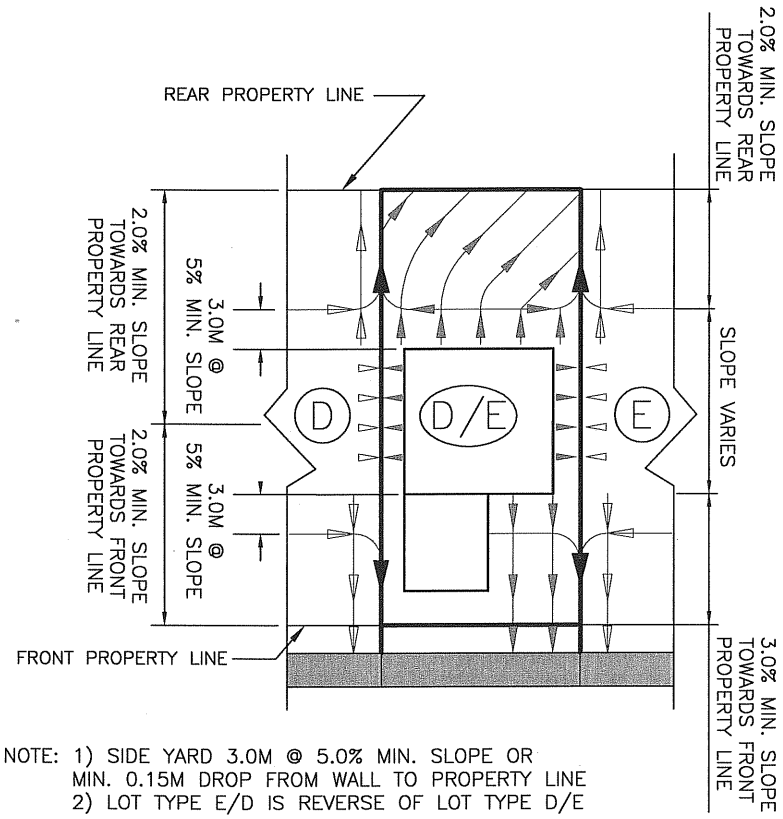


NOTE: 1) SIDE YARD 3.0M @ 5.0% MIN. SLOPE OR MIN. 0.15M DROP FROM WALL TO PROPERTY LINE
2) LOT TYPE C/D IS REVERSE OF LOT TYPE D/C

PLAN VIEW
TRANSITION LOT TYPE D/C

PLAN DESCRIPTION/REVISIONS		City of Saskatoon Infrastructure Services Department	APPROVED
4			
3			
2			
1			GENERAL MANAGER
DRAWN BY LMD		LOT GRADING	ENGINEER
DATE 2010-SEP-14		TRANSITION LOT TYPE D/C & C/D	PLAN NO. 102-0022-014r001
SCALE : HOR. ____ VERT. ____			

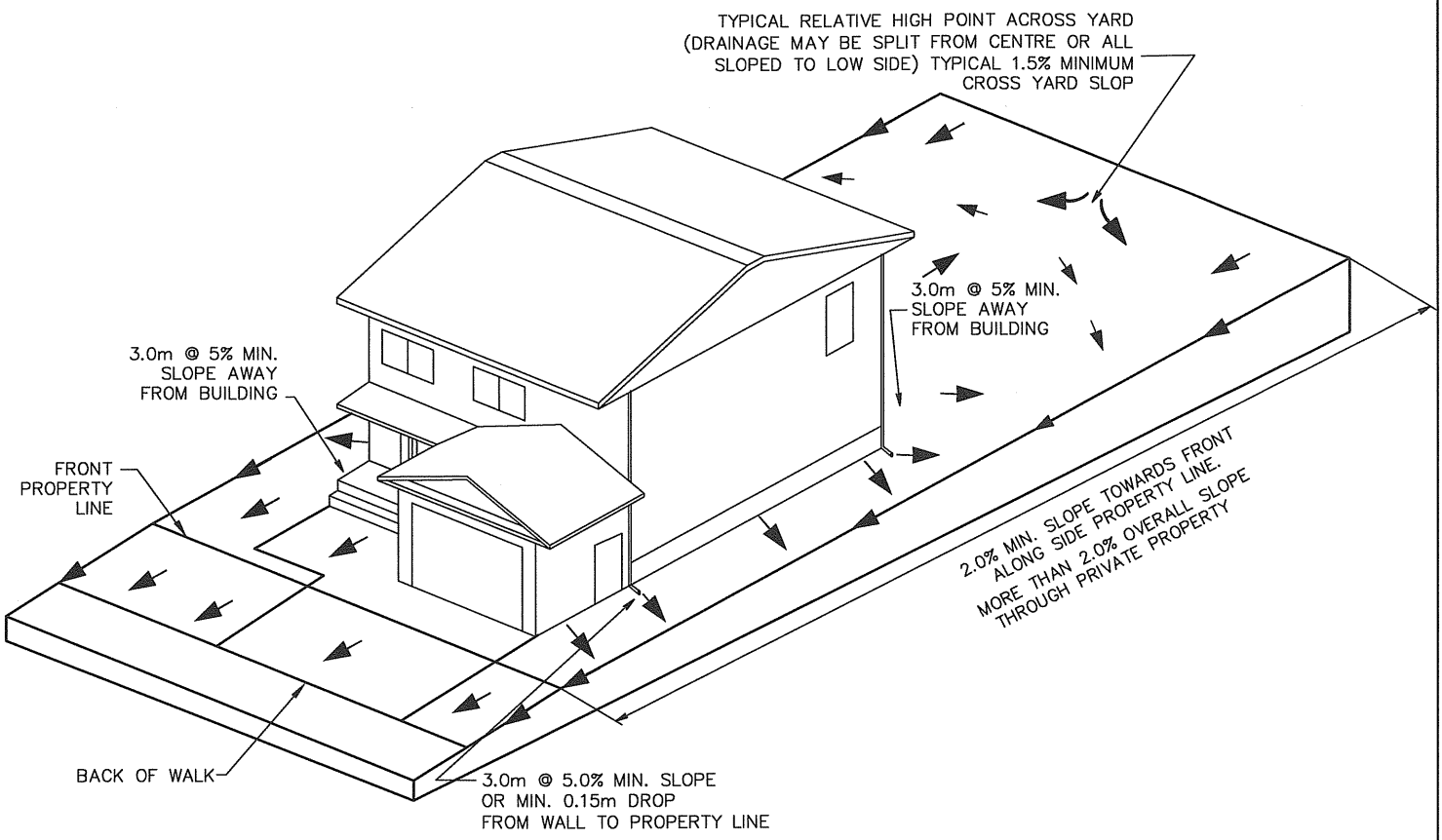


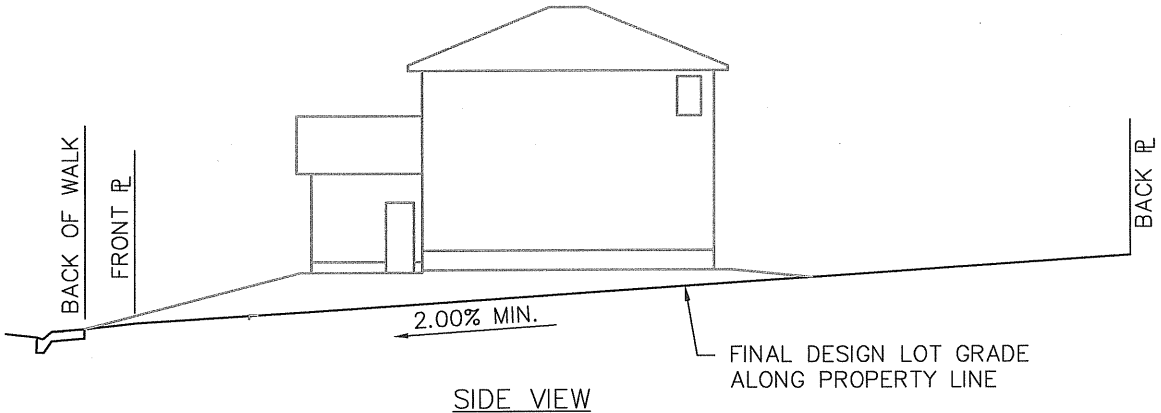


NOTE: 1) SIDE YARD 3.0M @ 5.0% MIN. SLOPE OR MIN. 0.15M DROP FROM WALL TO PROPERTY LINE
2) LOT TYPE E/D IS REVERSE OF LOT TYPE D/E

PLAN VIEW
TRANSITION LOT TYPE D/E

PLAN DESCRIPTION/REVISIONS		City of Saskatoon Infrastructure Services Department	APPROVED
4			
3			
2			
1			
DRAWN BY LMD DATE 2010-SEP-14		LOT GRADING TRANSITION LOT TYPE D/E & E/D	GENERAL MANAGER ENGINEER PLAN NO. 102-0022-015r001
SCALE : HOR. _____ VERT. _____			





SIDE VIEW

BACK TO FRONT DRAINAGE

REVISIONS	
1	
2	
3	

DRAWN BY LMD

DATE 04-OCT-2010

CHECKED BY

DATE

CITY OF SASKATOON

INFRASTRUCTURE SERVICES DEPARTMENT

LOT GRADING
TYPE A

APPROVED

Nov 3, 10

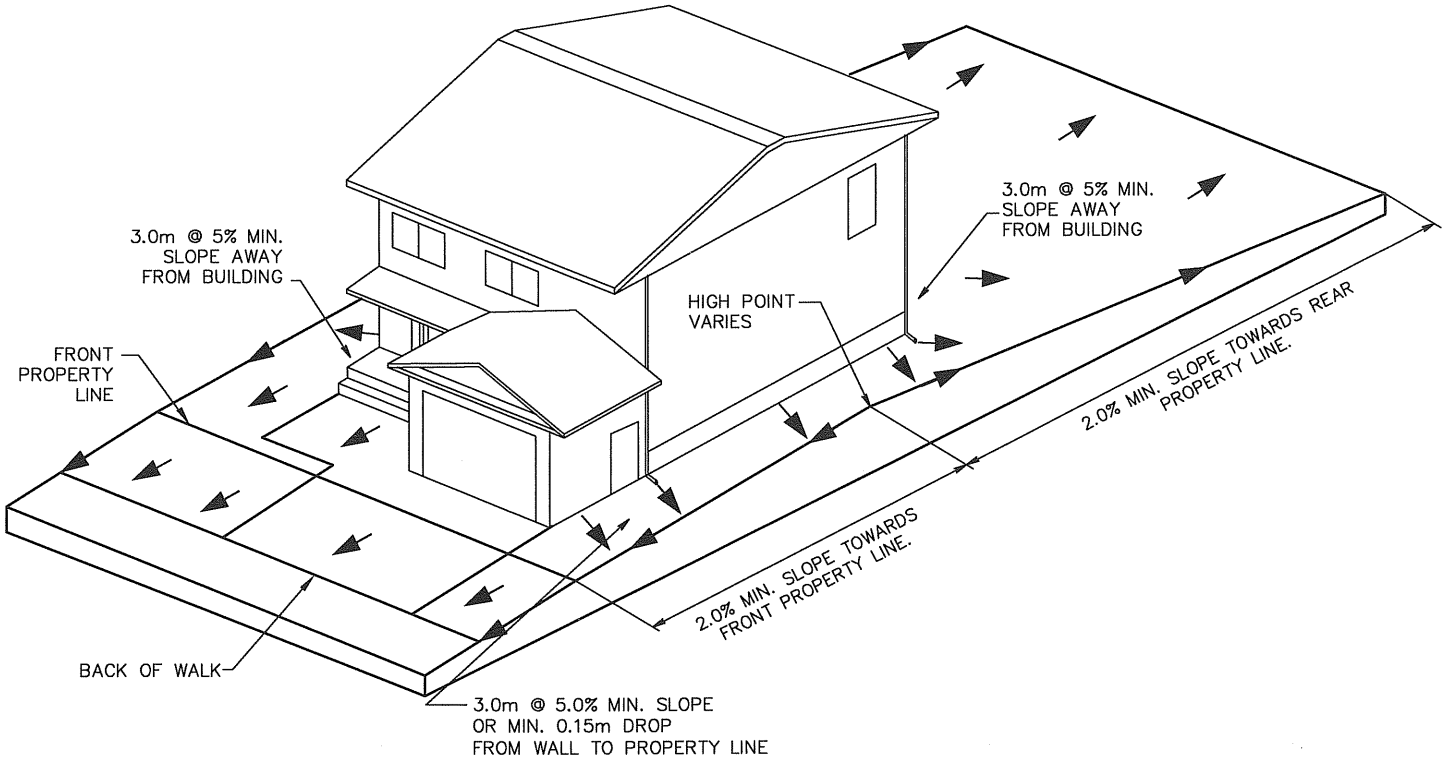
CITY ENGINEER P. ENG.

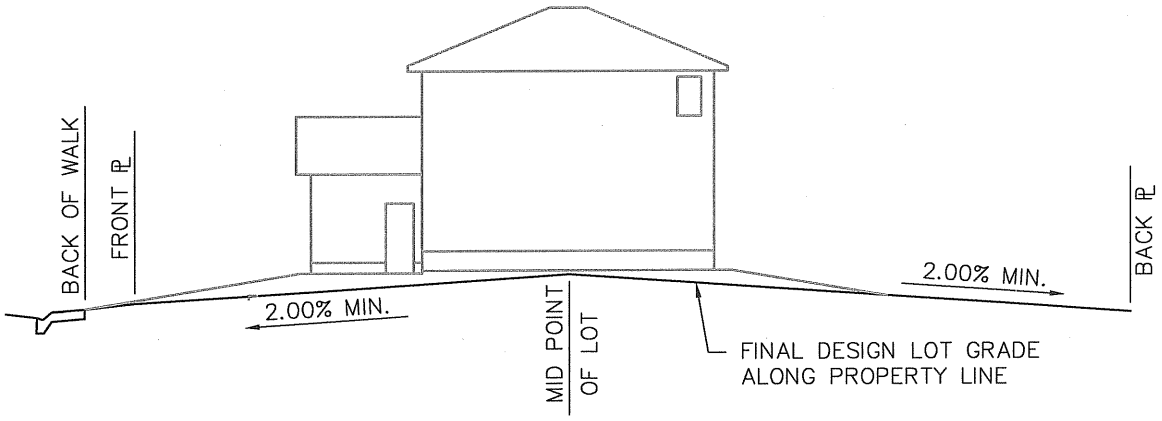
ENGINEER

ENGINEER

SCALES : HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102-0022-016r001





SIDE VIEW

SPLIT DRAINAGE

REVISIONS	
1	
2	
3	

DRAWN BY LMD

DATE 04-OCT-2010

CHECKED BY

DATE

CITY OF SASKATOON

INFRASTRUCTURE SERVICES DEPARTMENT

LOT GRADING
TYPE D

APPROVED

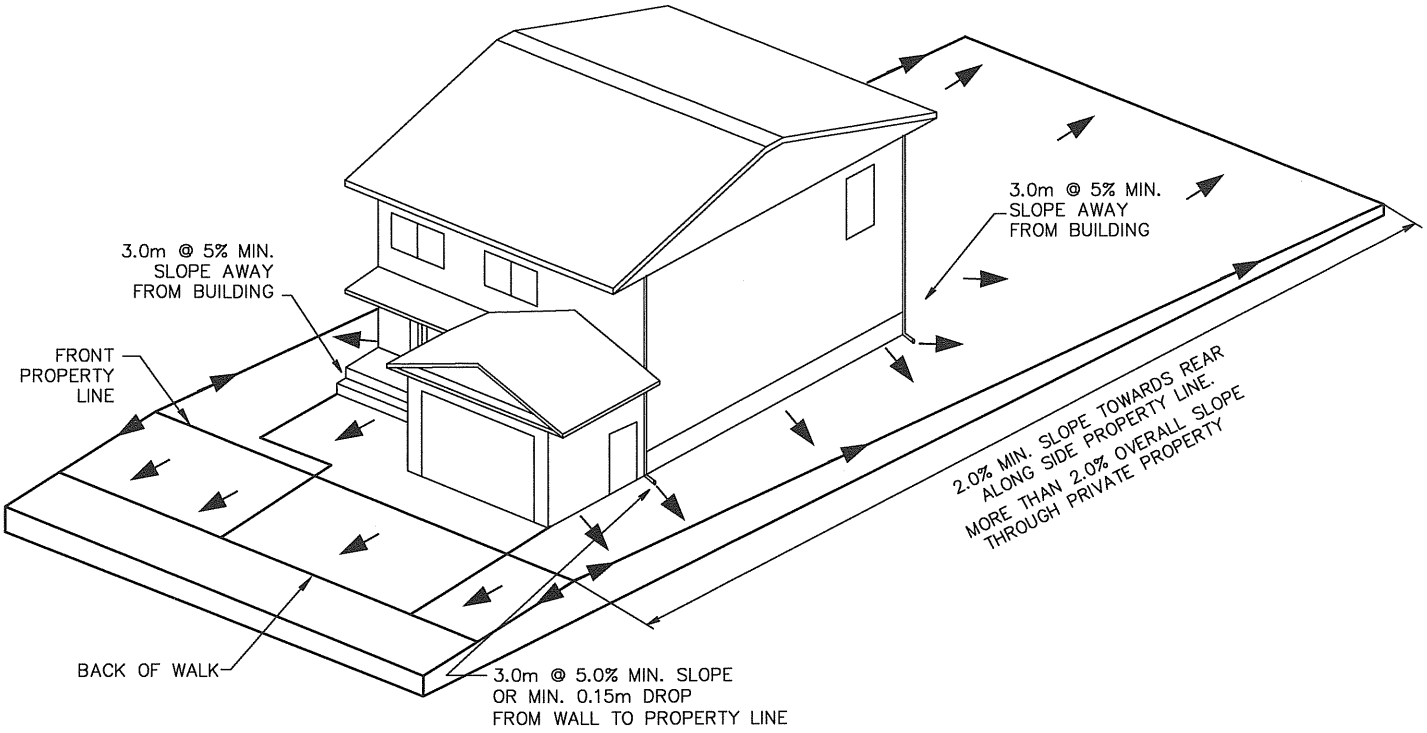
CITY ENGINEER P. ENG. Nov 3, 10

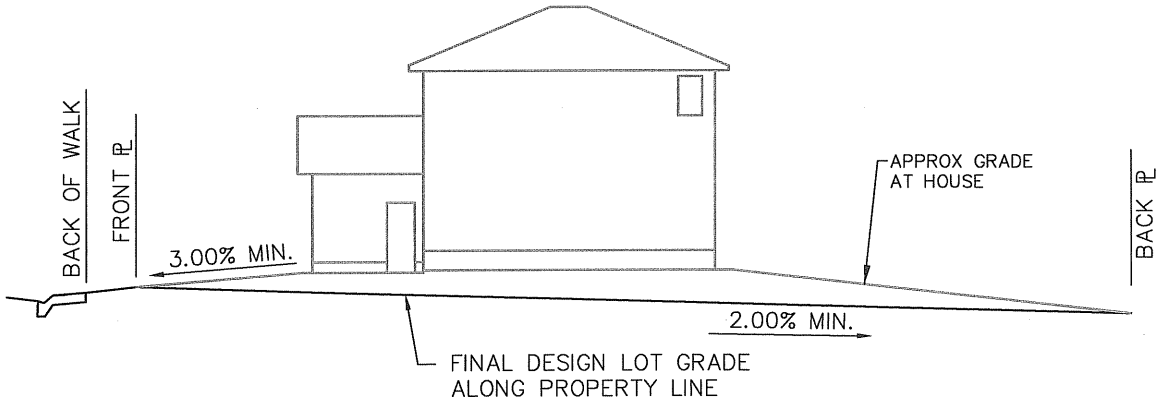
ENGINEER

ENGINEER

SCALES : HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102-0022-017r001





SIDE VIEW

FRONT TO BACK DRAINAGE

REVISIONS	
1	
2	
3	

DRAWN BY LMD

DATE 04-OCT-2010

CHECKED BY

DATE

CITY OF SASKATOON

INFRASTRUCTURE SERVICES DEPARTMENT

LOT GRADING
TYPE C

APPROVED

NOV 3, 10

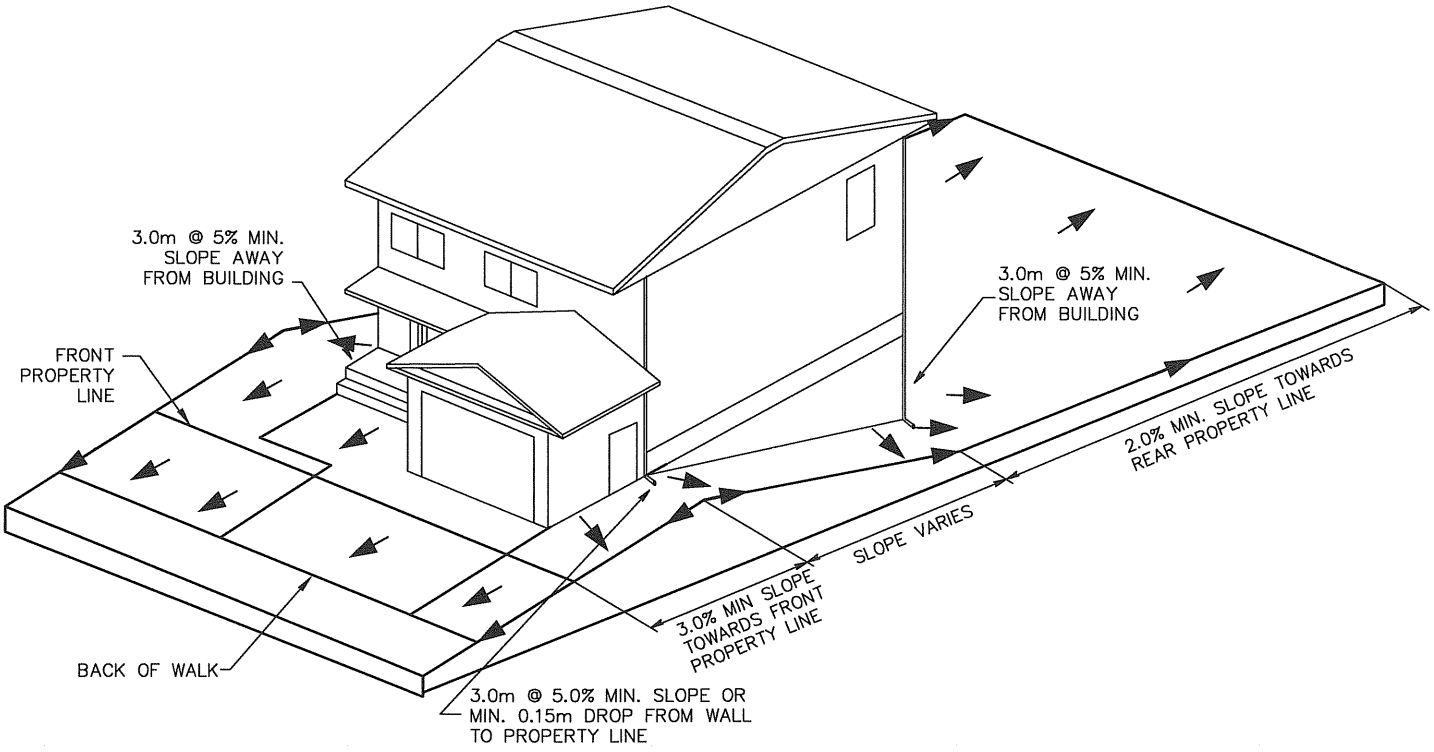
CITY ENGINEER P. ENG.

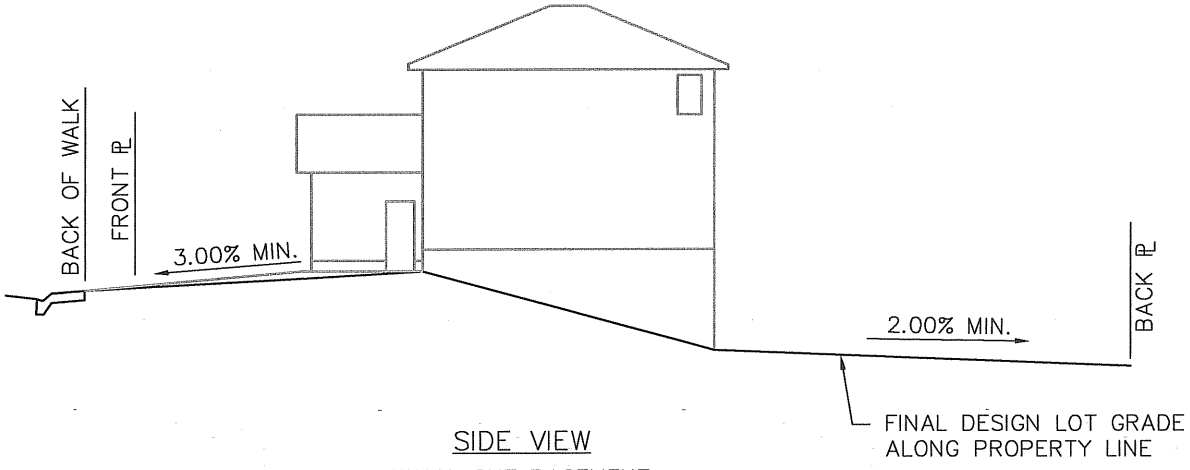
ENGINEER

ENGINEER

SCALES : HOR. N.T.S. VERT. N.T.S.

PLAN NO. 102-0022- 018r001

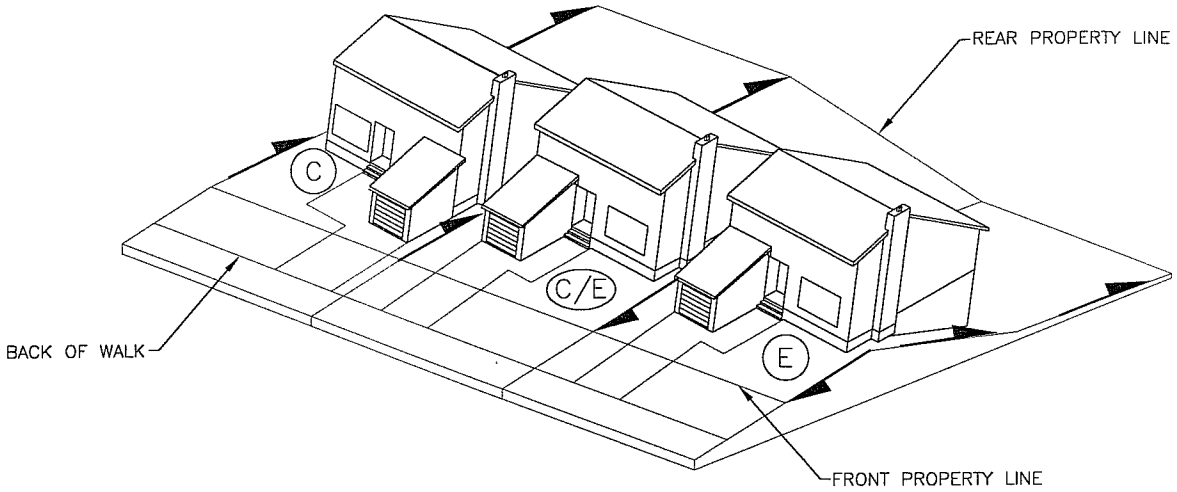


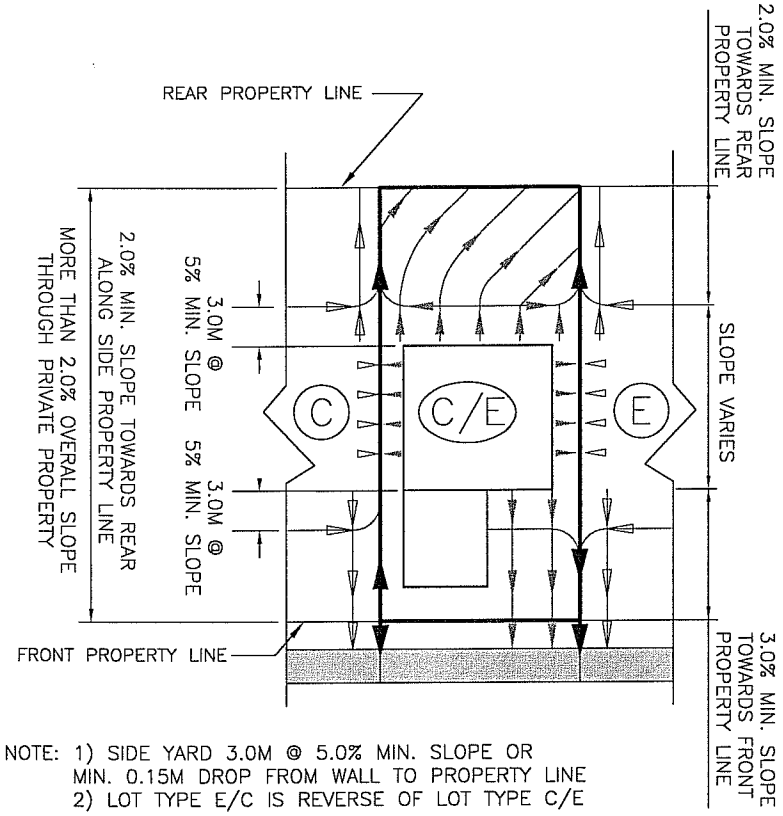


SIDE VIEW

WALK–OUT BASEMENT

REVISIONS		CITY OF SASKATOON INFRASTRUCTURE SERVICES DEPARTMENT	APPROVED CITY ENGINEER Nov 3, 10 P. ENG. ENGINEER ENGINEER
1			
2			
3			
DRAWN BY LMD DATE 04–OCT–2010		LOT GRADING TYPE E	SCALES : HOR. N.T.S. VERT. N.T.S.
CHECKED BY DATE			PLAN NO. 102–0022–019r001

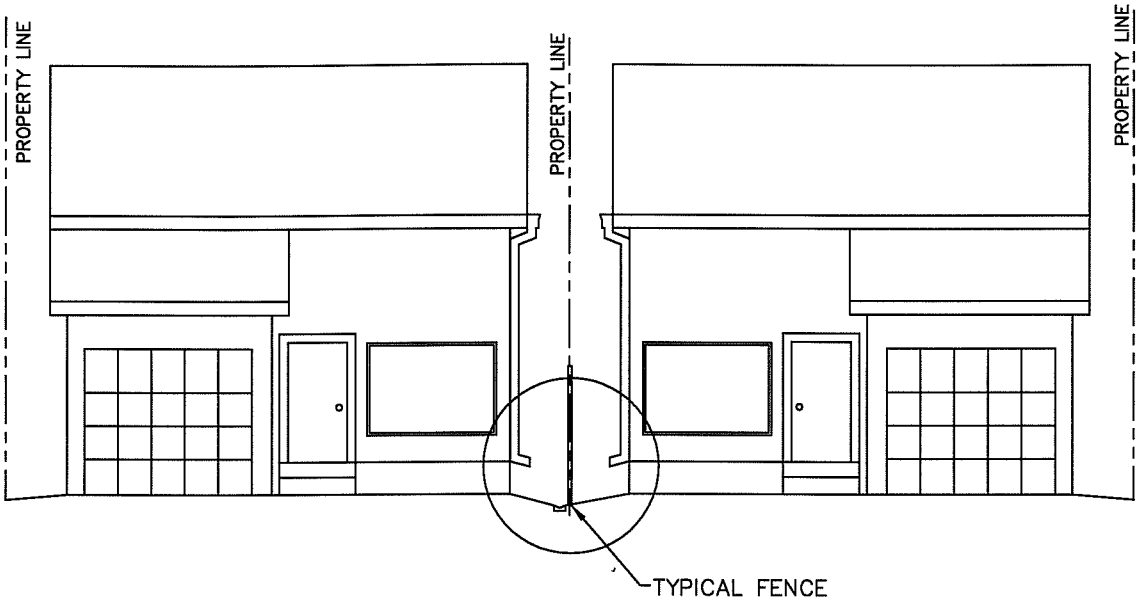


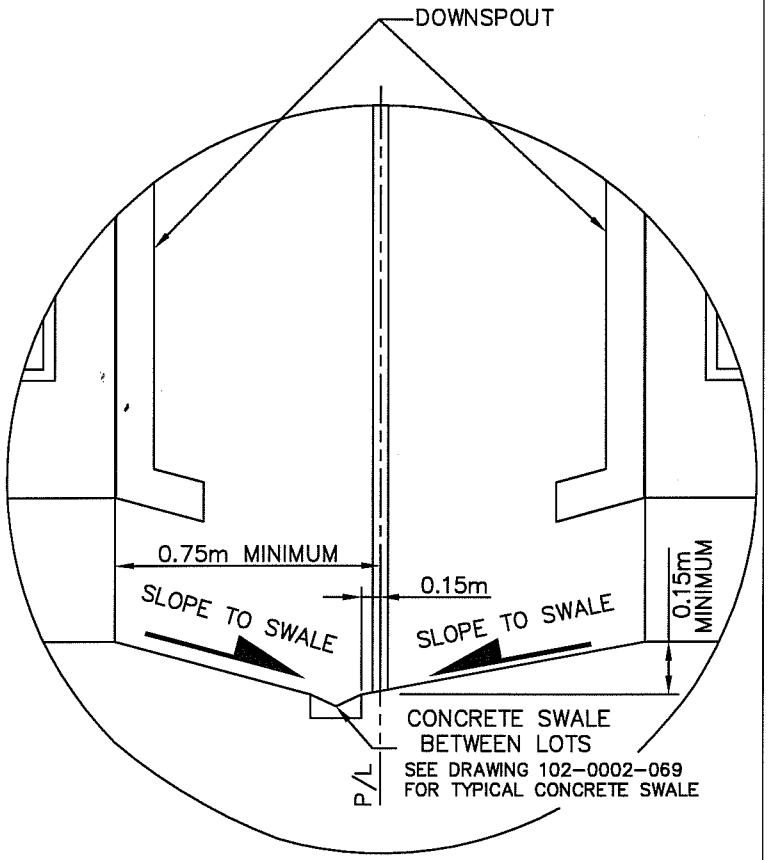


NOTE: 1) SIDE YARD 3.0M @ 5.0% MIN. SLOPE OR MIN. 0.15M DROP FROM WALL TO PROPERTY LINE
2) LOT TYPE E/C IS REVERSE OF LOT TYPE C/E

PLAN VIEW
TRANSITION LOT TYPE C/E

PLAN DESCRIPTION/REVISIONS		City of Saskatoon Infrastructure Services Department	APPROVED
4			GENERAL MANAGER
3		LOT GRADING	
2		TRANSITION LOT TYPE C/E & E/C	ENGINEER
1			PLAN NO. 102-0022-021r001
DRAWN BY HLO			
DATE 2011-MAR-23			
SCALE : HOR. ____ VERT. ____			





NOTES:

1. 0.75m MINIMUM DISTANCE FROM FOUNDATION WALL TO PROPERTY LINE
2. MINIMUM 0.15m DROP FROM FOUNDATION WALL TO PROPERTY LINE.
3. 0.15m BETWEEN PROPERTY LINE AND CONCRETE SWALE.

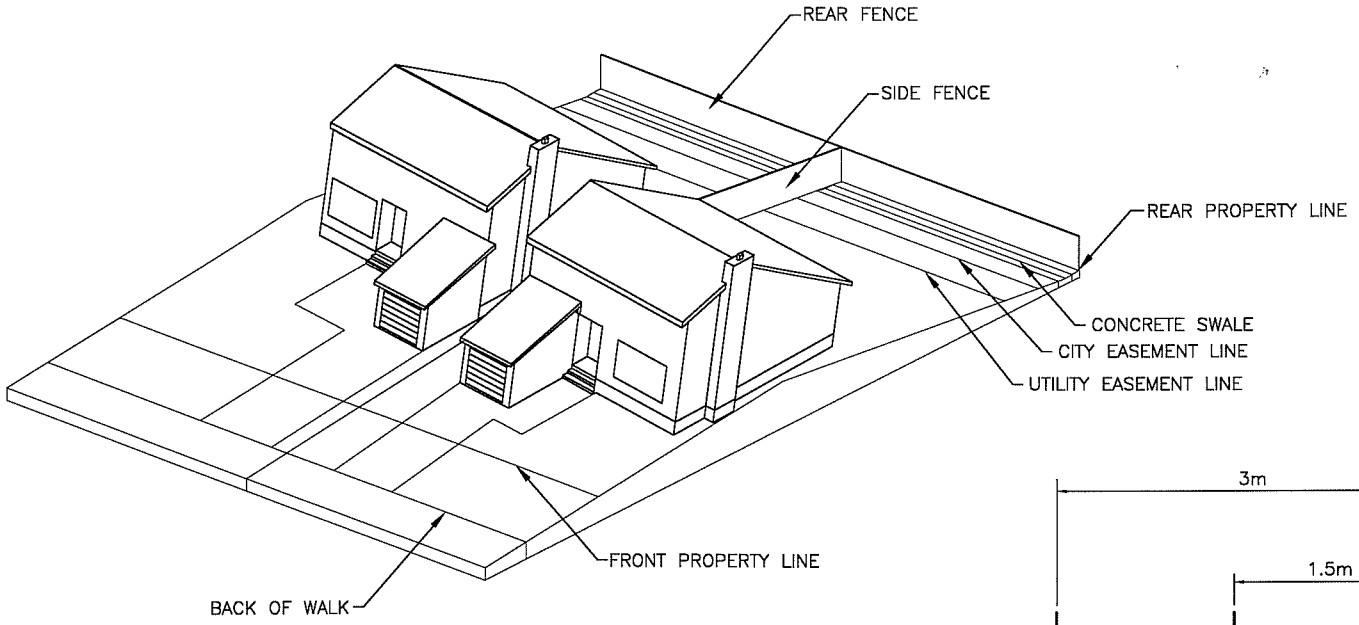
PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	ADD CONCRETE SWALE DRAWING NUMBER HLO DEC 12, 2012

DRAWN BY RWDT
DATE 2011-OCT-29
SCALE : HOR. N.T.S VERT. N.T.S.

City of Saskatoon
Infrastructure Services Department

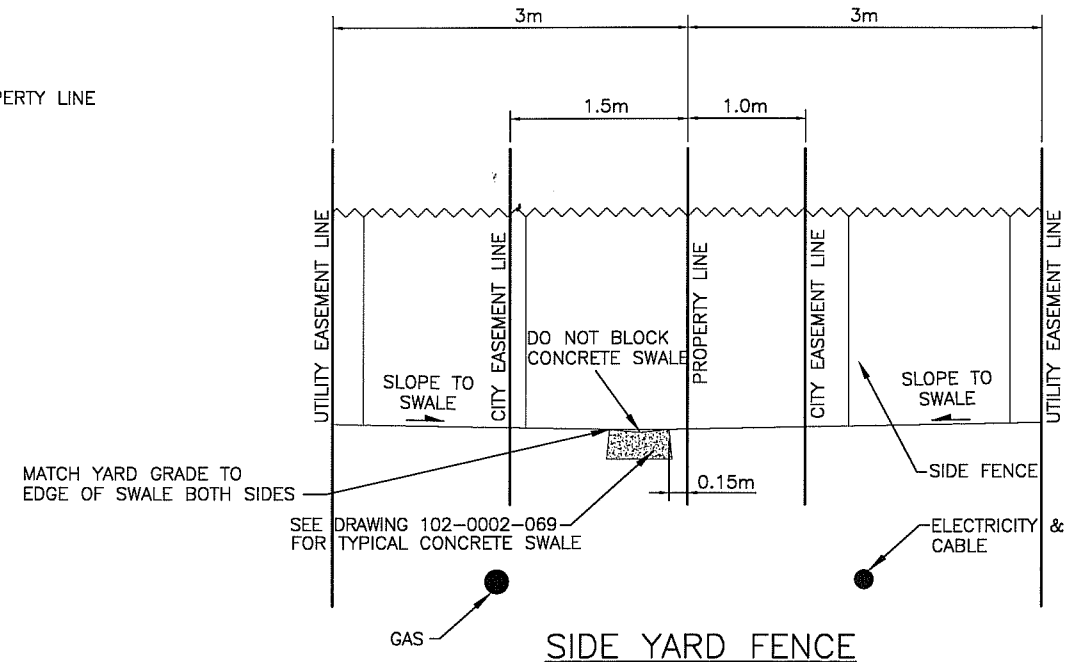
SIDE YARD
TYP. CONCRETE DRAINAGE SWALE

APPROVED
GENERAL MANAGER
ENGINEER
PLAN NO. 102-0022-022r002



NOTES:

1. UTILITIES SHALL BE PLACED WITHIN THE UTILITY EASEMENT, BUT NOT WITHIN THE CITY EASEMENT.
2. THE CONCRETE SWALE SHALL BE BUILT 0.15m FROM THE REAR PROPERTY LINE WITHIN THE 1.5m CITY EASEMENT.
3. UTILITY LOCATIONS MAY VARY



SIDE YARD FENCE
N.T.S.

PLAN DESCRIPTION/REVISIONS	
4	
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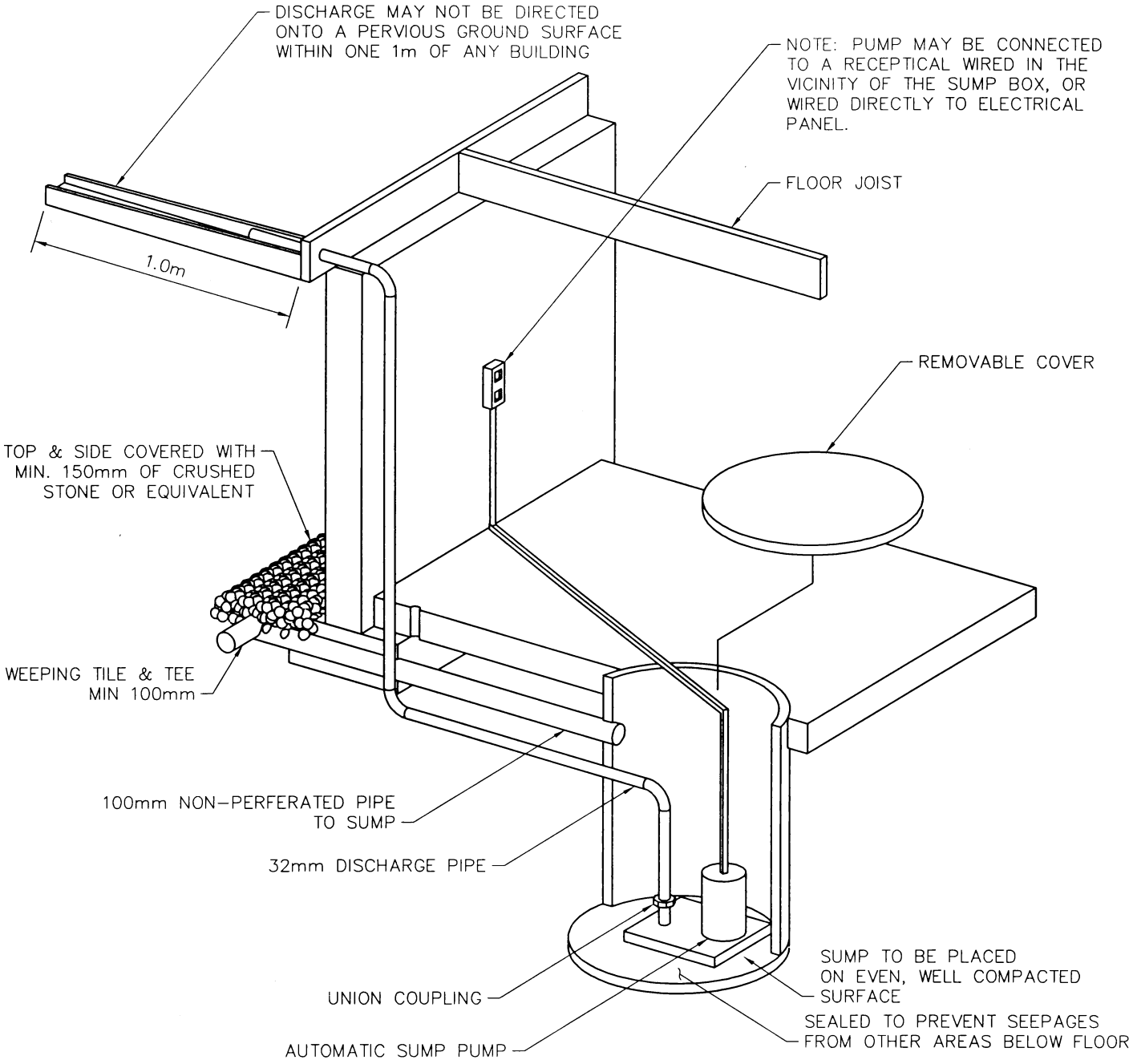
1	ADD CONCRETE SWALE DRAWING NUMBER HLO DEC 12, 2012

DRAWN BY RWDT
DATE 2011-OCT-29
SCALE : HOR. N.T.S VERT. N.T.S.

City of Saskatoon
Infrastructure Services Department

BACK YARD
TYP. CONCRETE DRAINAGE SWALE

APPROVED
GENERAL MANAGER
ENGINEER
PLAN NO. 102-0022-023r002



- ENSURE EXCAVATION FOR THE SUMP IS A MINIMUM 450mm FROM THE FOOTINGS.
- PROVISION IS REQUIRED TO PREVENT SOIL GAS FROM ENTERING THE DWELLING FROM THE SUMP AND WEEPING TILE.
- SUMP PIT MAY BE CONSTRUCTED OF:
  - A) CONCRETE
  - B) CORROSION RESISTANT STEEL
  - C) PLASTIC

CODE REFERENCE ON SUMP:
NATIONAL BUILDING CODE SECTION 9.14.2
FOUNDATION DRAINAGE
9.14.5.2 SUMP PITS

WHERE A SUMP PIT IS PROVIDED IT SHALL BE:
- A) NOT LESS THAN 750mm DEEP.
- B) NOT LESS THAN 0.25sq.m IN AREA, AND
- C) PROVIDED WITH A COVER.

REVISIONS	
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DRAWN BY C. CARTER
DATE 10/30/02

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

SUMP WITH PUMPED DISCHARGE TO SURFACE

APPROVED

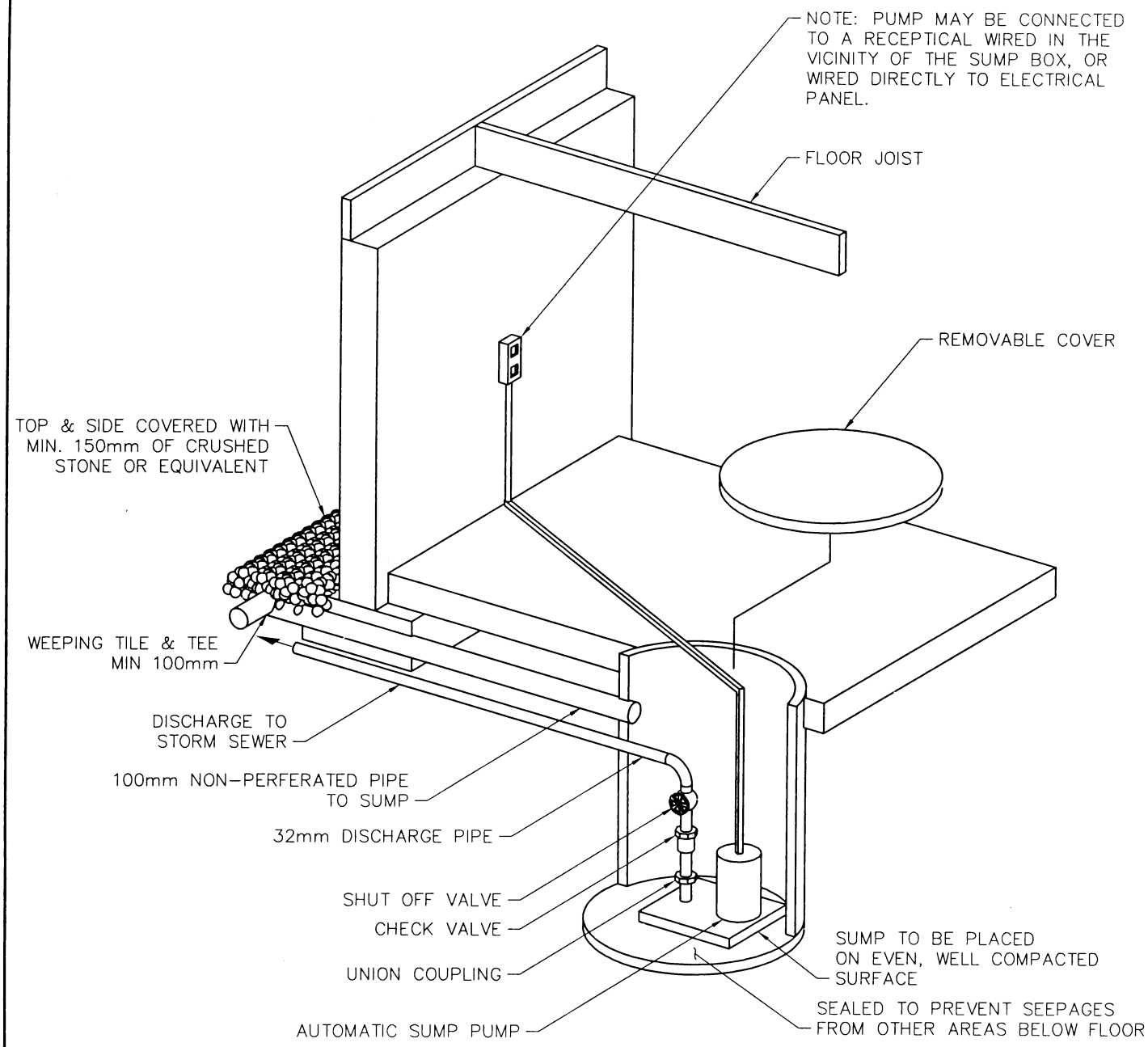
GENERAL MANAGER P. ENG.

ENGINEER

ENGINEER

SCALES : HOR. NTS

PLAN NO. 102-0025-001r004



- ENSURE EXCAVATION FOR THE SUMP IS A MINIMUM 450mm FROM THE FOOTINGS.
- PROVISION IS REQUIRED TO PREVENT SOIL GAS FROM ENTERING THE DWELLING FROM THE SUMP AND WEEPING TILE.
- SUMP PIT MAY BE CONSTRUCTED OF:
  A) CONCRETE
  B) CORROSION RESISTANT STEEL
  C) PLASTIC

CODE REFERENCE ON SUMP:
NATIONAL BUILDING CODE SECTION 9.14.2
FOUNDATION DRAINAGE
9.14.5.2 SUMP PITS

WHERE A SUMP PIT IS PROVIDED IT SHALL BE:
A) NOT LESS THAN 750mm DEEP.
B) NOT LESS THAN 0.25sq.m IN AREA, AND
C) PROVIDED WITH A COVER.

REVISIONS	
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DRAWN BY C. CARTER
DATE 10/30/02

CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

SUMP WITH PUMPED DISCHARGE TO STORM SEWER

APPROVED

GENERAL MANAGER P. ENG.

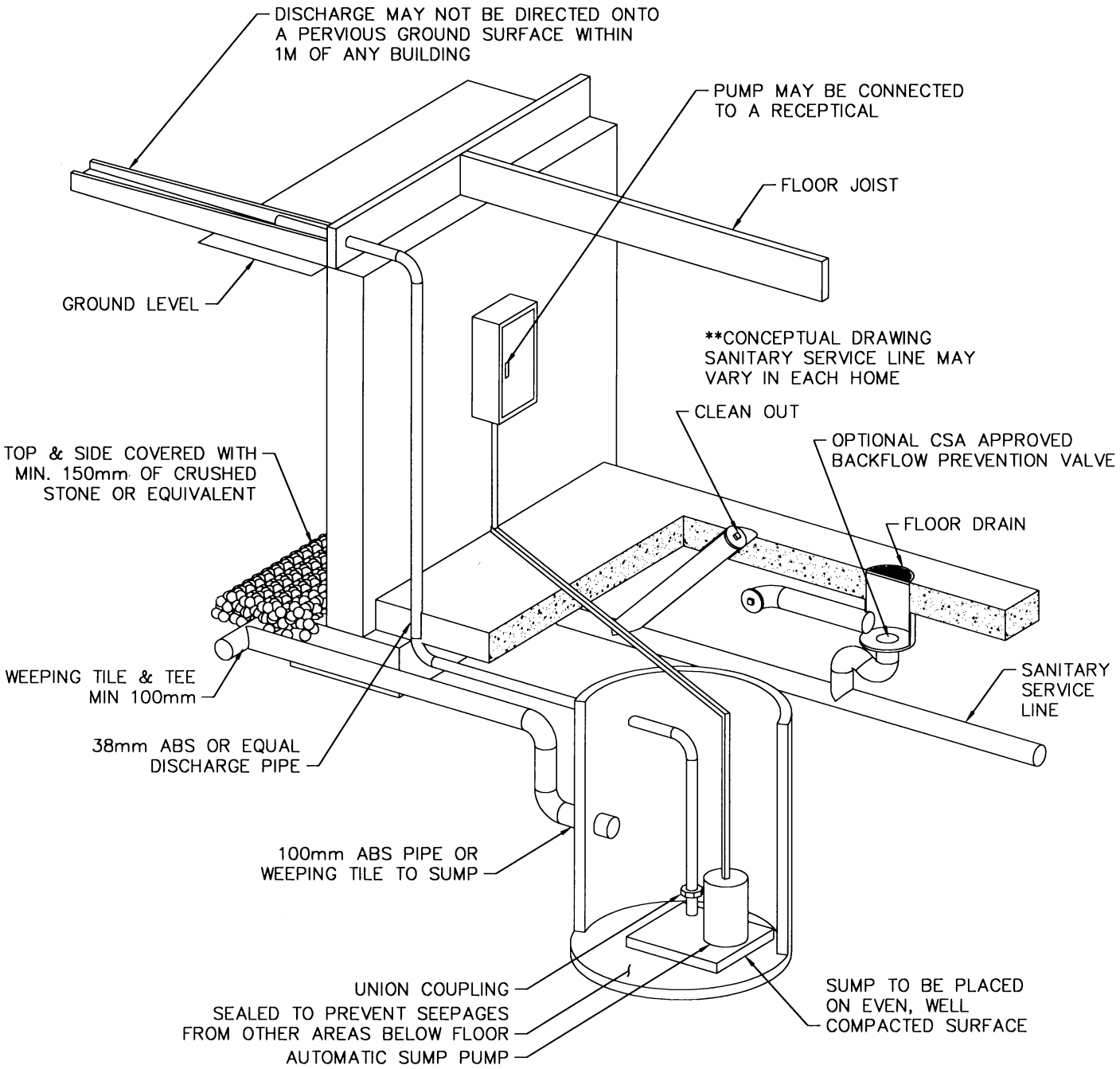
ENGINEER

J. Reid Corbett
ENGINEER

SCALES : HOR. NTS

PLAN NO. 102-0025-002r004

PERMANENT CHANGES TO PLUMBING REQUIRES A PLUMBING PERMIT



CODE REFERENCE ON SUMP:
NATIONAL BUILDING CODE SECTION 9.14.2
FOUNDATION DRAINAGE
9.14.5.2 SUMP PITS

SUMP PIT MAY BE CONSTRUCTED OF:
A) CONCRETE
B) CORROSION RESISTANT STEEL
C) PLASTIC

WHERE A SUMP PIT IS PROVIDED IT SHALL BE:
A) NOT LESS THAN 750mm DEEP.
B) NOT LESS THAN 0.25sq.m IN AREA, AND
C) PROVIDED WITH A COVER.

REVISIONS	
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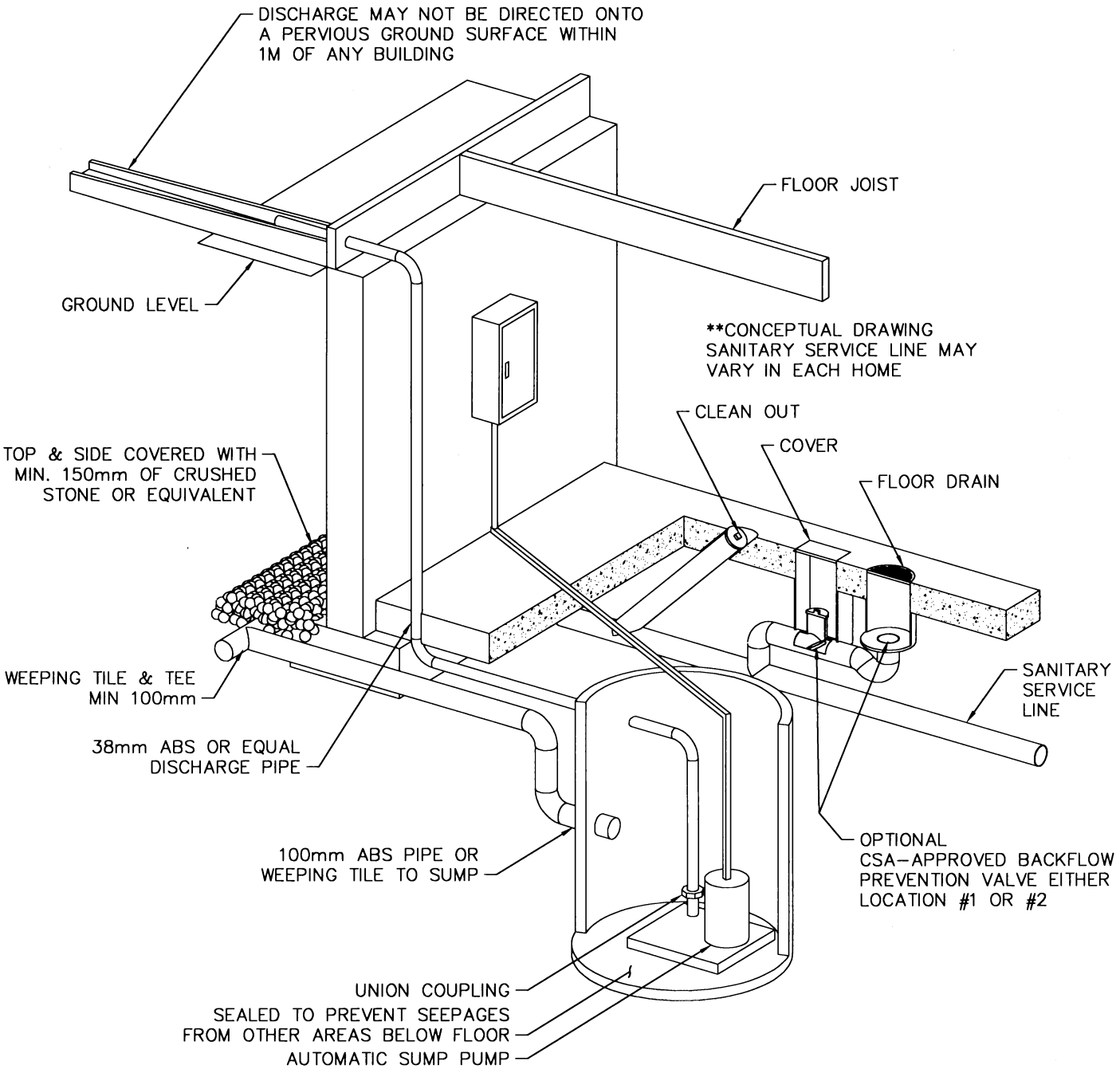
DRAWN BY C. CARTER
DATE 05/05/03
CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

SUMP PUMP RETROFIT #1

APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. NTS
PLAN NO. 102-0025-003r001

PERMANENT CHANGES TO PLUMBING REQUIRES A PLUMBING PERMIT



CODE REFERENCE ON SUMP:
NATIONAL BUILDING CODE SECTION 9.14.2
FOUNDATION DRAINAGE
9.14.5.2 SUMP PITS

SUMP PIT MAY BE CONSTRUCTED OF:
A) CONCRETE
B) CORROSION RESISTANT STEEL
C) PLASTIC

WHERE A SUMP PIT IS PROVIDED IT SHALL BE:
A) NOT LESS THAN 750mm DEEP.
B) NOT LESS THAN 0.25sq.m IN AREA, AND
C) PROVIDED WITH A COVER.

REVISIONS	
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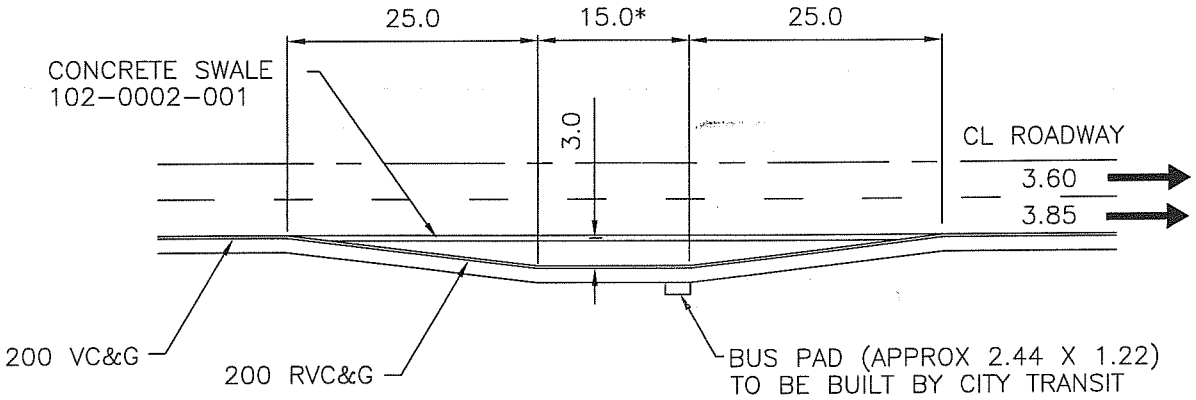
DRAWN BY C. CARTER
DATE 01/05/04
CHECKED BY
DATE

City of Saskatoon
Infrastructure Services Department

SUMP WITH PUMPED DISCHARGE TO SURFACE PLUS BACKFLOW PREVENTION SUMP PUMP RETROFIT #2

APPROVED
GENERAL MANAGER P. ENG.
ENGINEER
ENGINEER
SCALES : HOR. NTS
PLAN NO. 102–0025–004r001



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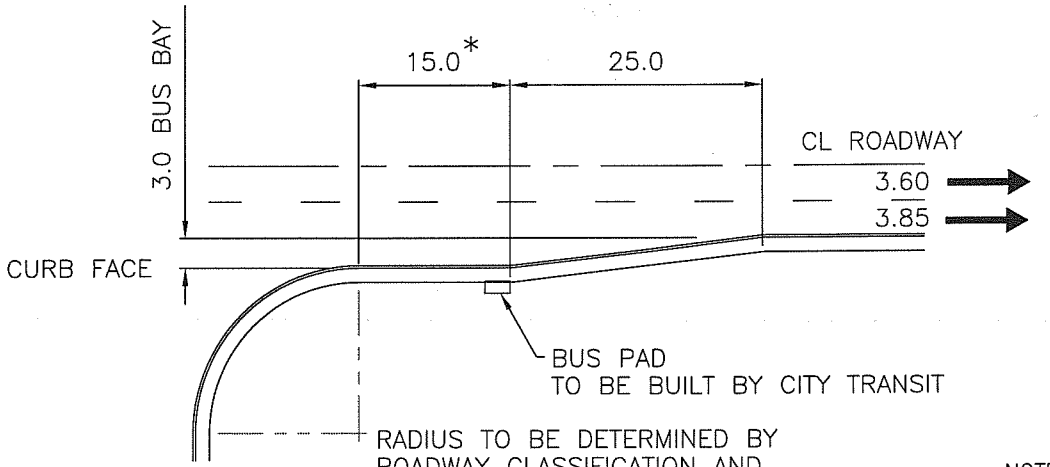

CORNER TYPE

NOTES:

* DIMENSIONS ACCOMMODATE A SINGLE CITY BUS.

SCALE IN METRES

0 10 20 30

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DRAWN BY LCI

DATE 2009-05-08

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VERT. ____

City of Saskatoon
Infrastructure Services Department

BUS BAY TURNOUT

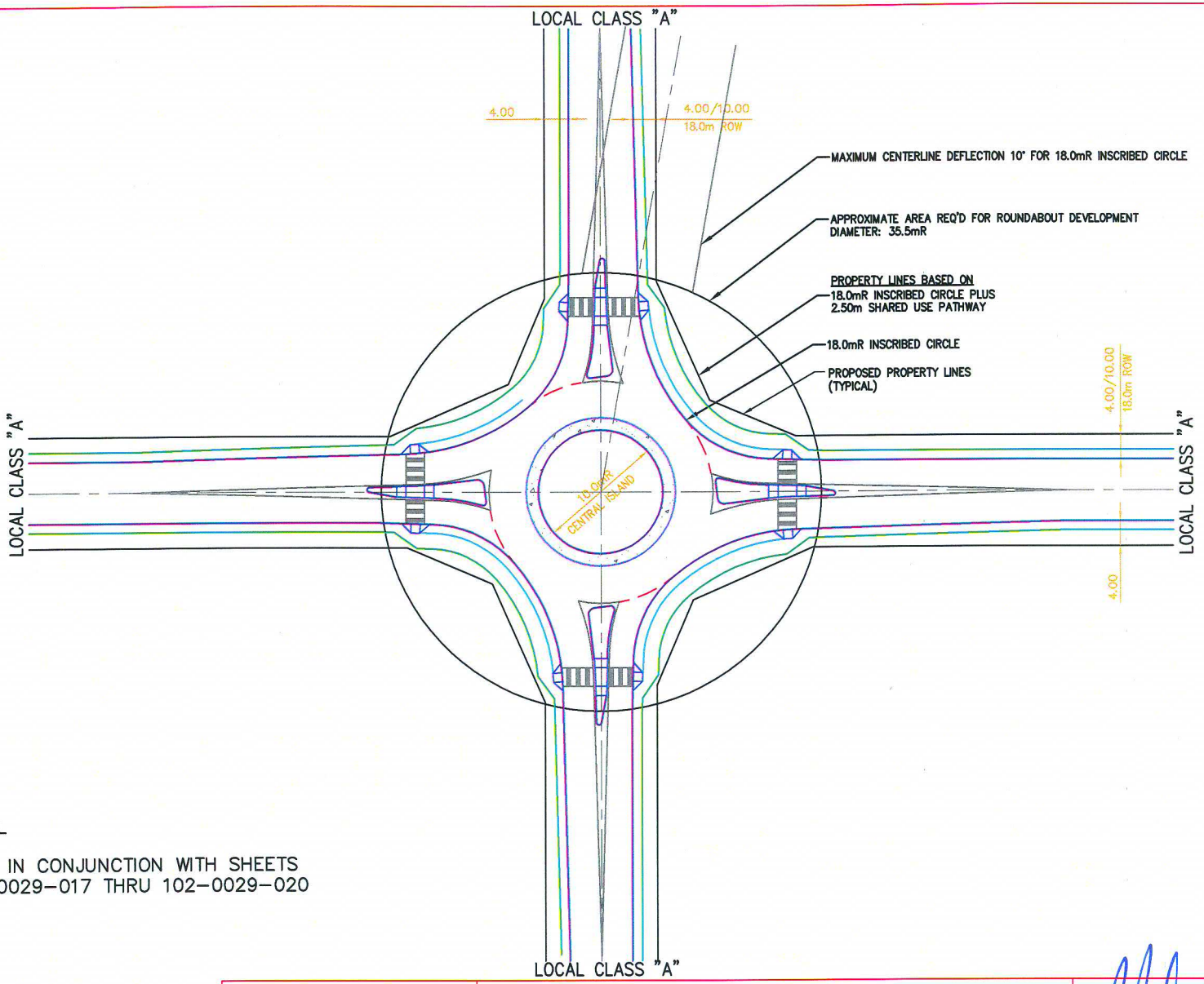
APPROVED

GENERAL MANAGER

ENGINEER

ENGINEER

PLAN NO. 102-0029-014r001



NOTE:

READ IN CONJUNCTION WITH SHEETS
102-0029-017 THRU 102-0029-020

NOTE:
GEOMETRICS BASED ON WB-15 AS DESIGN VEHICLE BUT THE DESIGN DOES NOT TAKE INTO ACCOUNT SPEED OR NECESSARY CLEARANCES FOR THE WB-15 AS IT IS NOT THE PRIMARY VEHICLE.

REVISIONS	
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DATE 2009-OCT-14
SCALES : HOR. 1:1000
VERT.

City of Saskatoon
Infrastructure Services Department

ROUNDABOUT FUNCTIONAL DESIGN
ROAD CLASSIFICATION
LOCAL CLASS "A"

APPROVED
Feb 23, 10
GENERAL MANAGER
Goran Lazic
ENGINEER
ENGINEER
PLAN NO. 102-0029-017r001

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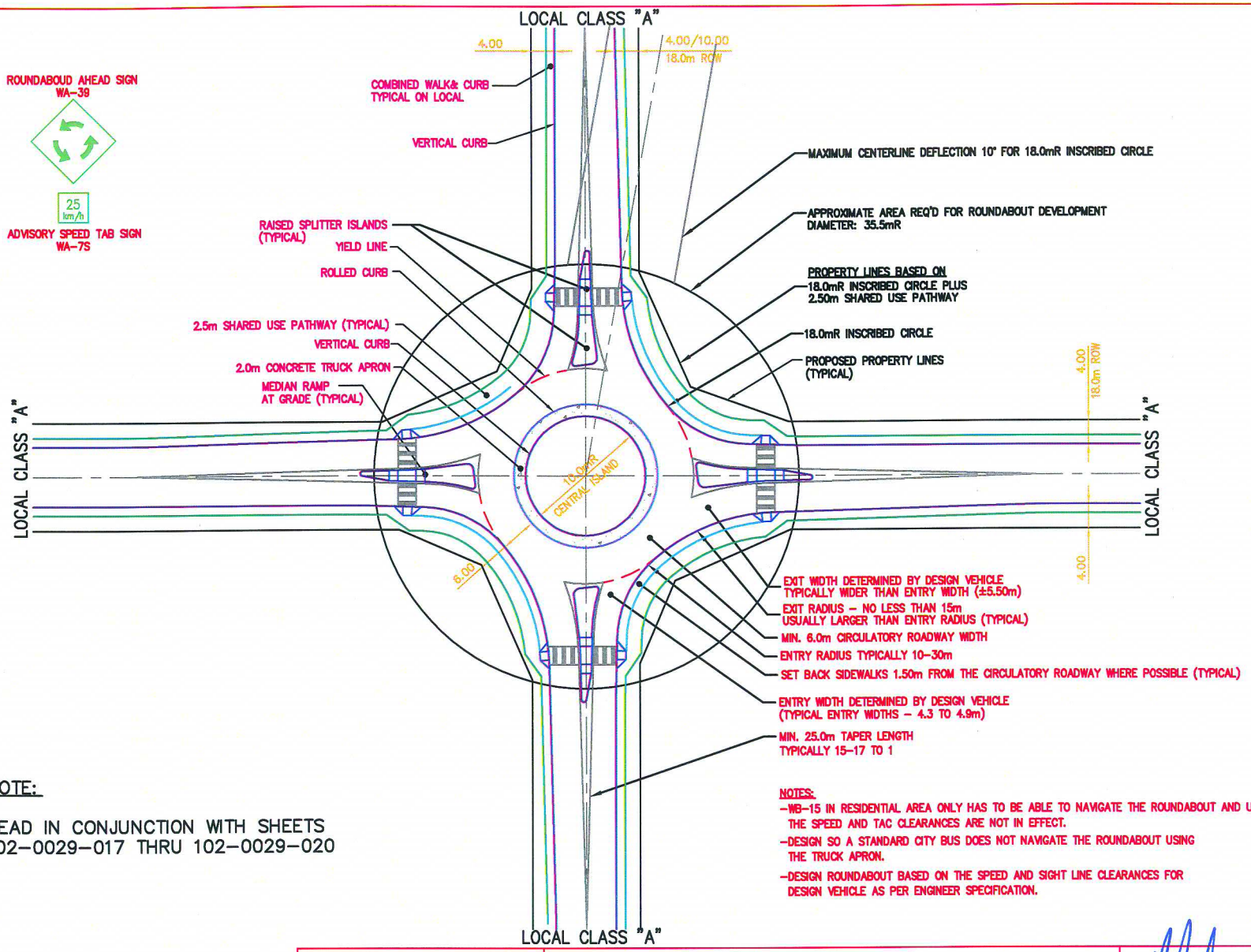

NOTE:

READ IN CONJUNCTION WITH SHEETS 102–0029–017 THRU 102–0029–020

NOTES:
- WB–15 IN RESIDENTIAL AREA ONLY HAS TO BE able TO NAVIGATE THE ROUNDABOUT AND USES THE TRUCK APRON. THE SPEED AND TAC CLEARANCES ARE NOT IN EFFECT.
- DESIGN SO A STANDARD CITY BUS DOES NOT NAVIGATE THE ROUNDABOUT USING THE TRUCK APRON.
- DESIGN ROUNDABOUT BASED ON THE SPEED AND SIGHT LINE CLEARANCES FOR DESIGN VEHICLE AS PER ENGINEER SPECIFICATION.

NOTE:
GEOMETRICS BASED ON WB–15 AS DESIGN VEHICLE BUT THE DESIGN DOES NOT TAKE INTO ACCOUNT SPEED OR NECESSARY CLEARANCES FOR THE WB–15 AS IT IS NOT THE PRIMARY VEHICLE.

REVISIONS	
1	XXX XXX
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DRAWN BY RBY
DATE 2009–OCT–14
SCALES : HOR. 1:1000
VERT. _____

City of Saskatoon
Infrastructure Services Department

ROUNDABOUT DETAILED DESIGN
ROAD CLASSIFICATION
LOCAL CLASS "A"

APPROVED
FEB 23/10
GENERAL MANAGER
Goran Lazic
ENGINEER
ENGINEER

PLAN NO. 102–0029–018r001

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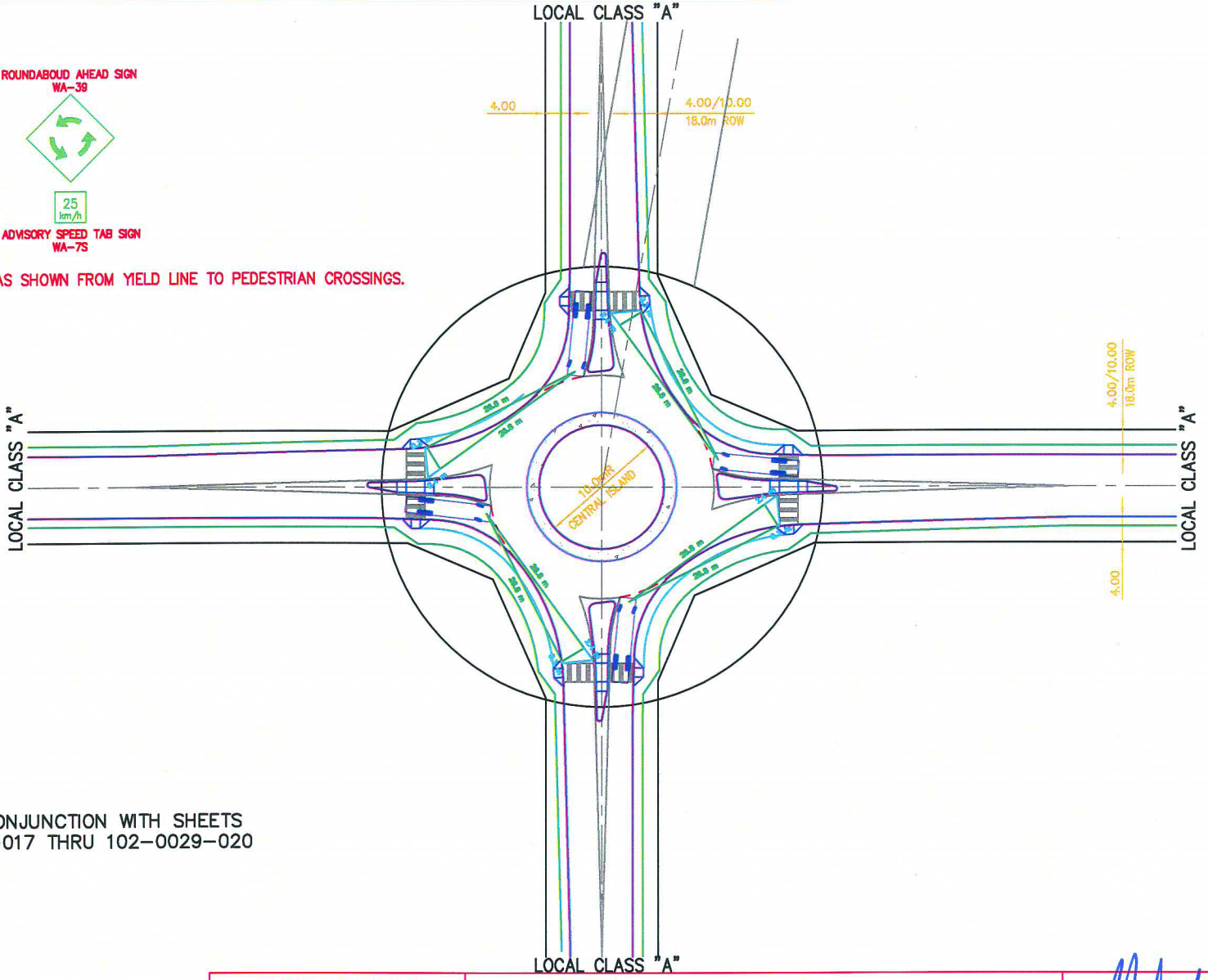
ROUNDABOUD AHEAD SIGN
WA-39

ADVISORY SPEED TAB SIGN
WA-7S

MINIMUM SIGHT DISTANCES AS SHOWN FROM YIELD LINE TO PEDESTRIAN CROSSINGS.



NOTE:

READ IN CONJUNCTION WITH SHEETS
102-0029-017 THRU 102-0029-020

NOTE:
GEOMETRICS BASED ON WB-15 AS DESIGN VEHICLE BUT THE DESIGN DOES NOT TAKE INTO ACCOUNT SPEED OR NECESSARY CLEARANCES FOR THE WB-15 AS IT IS NOT THE PRIMARY VEHICLE.

REVISIONS	
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DATE 2009-OCT-14
SCALES : HOR. 1:1000
VERT.

City of Saskatoon
Infrastructure Services Department

ROUNDABOUT SIGHT LINES DESIGN
ROAD CLASSIFICATION
LOCAL CLASS "A"

APPROVED
FEB 23/10
GENERAL MANAGER
ENGINEER
ENGINEER
PLAN NO. 102-0029-019r001

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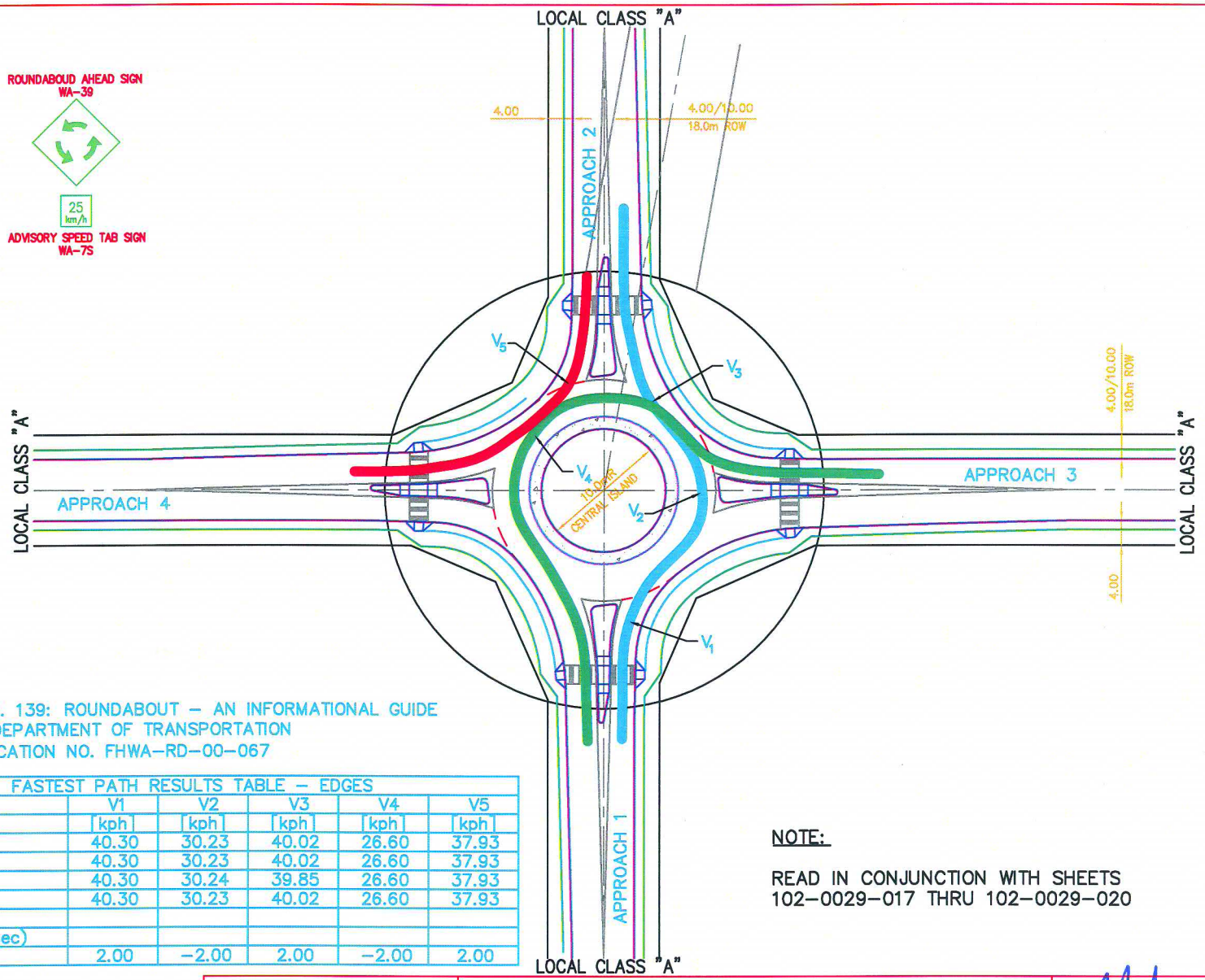

SEE P. 139: ROUNDABOUT – AN INFORMATIONAL GUIDE
U.S. DEPARTMENT OF TRANSPORTATION
PUBLICATION NO. FHWA-RD-00-067

FASTEST PATH RESULTS TABLE – EDGES						
	ENTRY LEG	V1	V2	V3	V4	V5
		[kph]	[kph]	[kph]	[kph]	[kph]
1	Approach 1	40.30	30.23	40.02	26.60	37.93
2	Approach 2	40.30	30.23	40.02	26.60	37.93
3	Approach 3	40.30	30.24	39.85	26.60	37.93
4	Approach 4	40.30	30.23	40.02	26.60	37.93
	Accel(m/sec/sec)					
	SE(%)	2.00	-2.00	2.00	-2.00	2.00

NOTE:

READ IN CONJUNCTION WITH SHEETS
102-0029-017 THRU 102-0029-020

NOTE:
GEOMETRICS BASED ON WB-15 AS DESIGN VEHICLE BUT THE DESIGN DOES NOT TAKE INTO ACCOUNT SPEED OR NECESSARY CLEARANCES FOR THE WB-15 AS IT IS NOT THE PRIMARY VEHICLE.

REVISIONS	
1	XXX XXX
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DRAWN BY RBY
DATE 2009-OCT-14
SCALES : HOR. 1:1000
VERT.

City of Saskatoon
Infrastructure Services Department

ROUNDABOUT OPERATING SPEEDS DESIGN
ROAD CLASSIFICATION
LOCAL CLASS "A"

APPROVED
GENERAL MANAGER Feb23,10
ENGINEER
ENGINEER

PLAN NO. 102-0029-020r001

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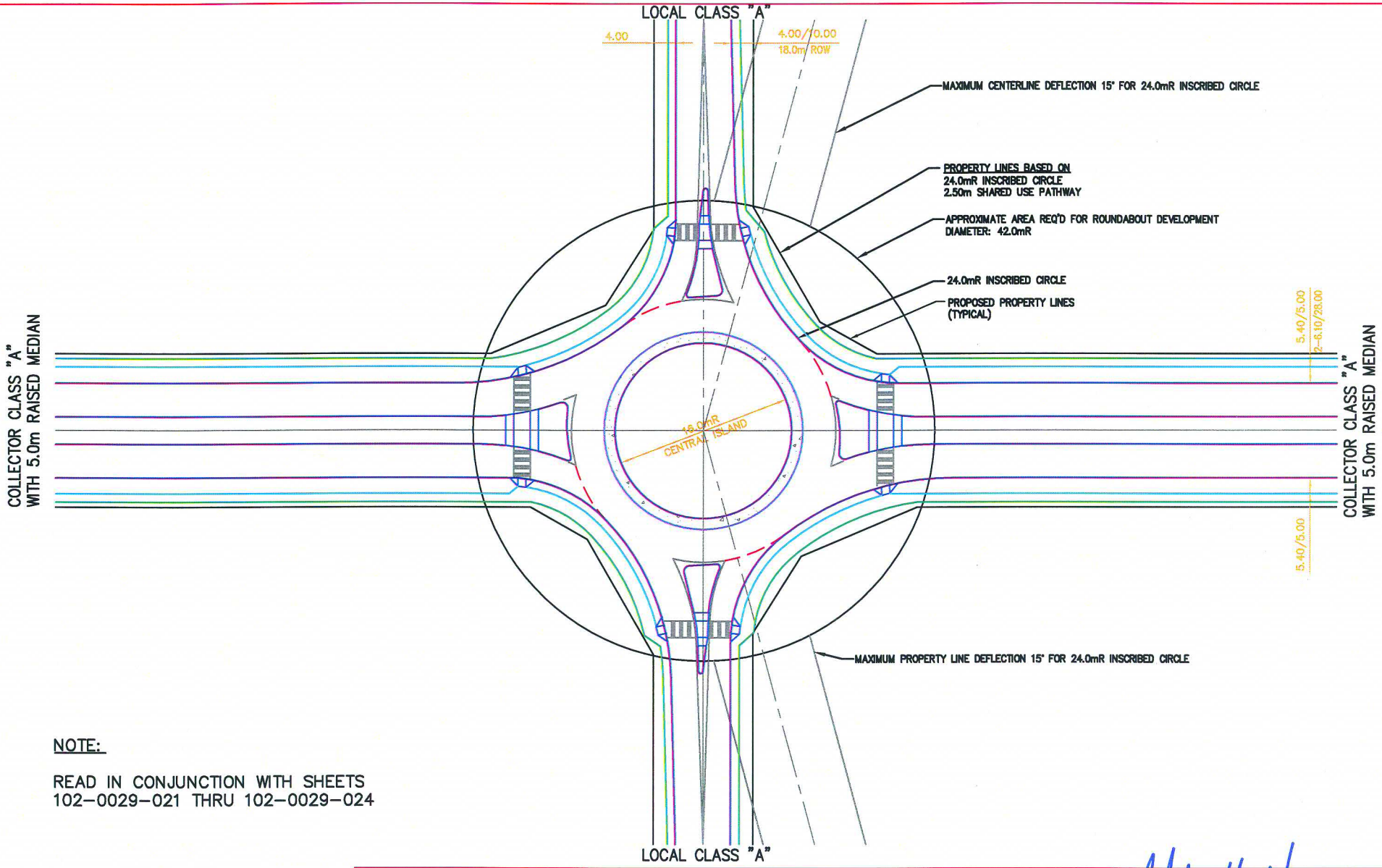

NOTE:

READ IN CONJUNCTION WITH SHEETS
102-0029-021 THRU 102-0029-024

NOTE:
GEOMETRICS BASED ON WB-15 AS DESIGN VEHICLE BUT THE DESIGN DOES NOT TAKE INTO ACCOUNT SPEED OR NECESSARY CLEARANCES FOR THE WB-15 AS IT IS NOT THE PRIMARY VEHICLE.

REVISIONS	
1	XXX XXX
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DRAWN BY RBY
DATE 2009-OCT-14
SCALES : HOR. 1:1000
VERT.

City of Saskatoon
Infrastructure Services Department

ROUNDABOUT FUNCTIONAL DESIGN
ROAD CLASSIFICATION
COLLECTOR CLASS "A" / LOCAL CLASS "A"

APPROVED
GENERAL MANAGER FEB 23/10
ENGINEER
ENGINEER
PLAN NO. 102-0029-021r001

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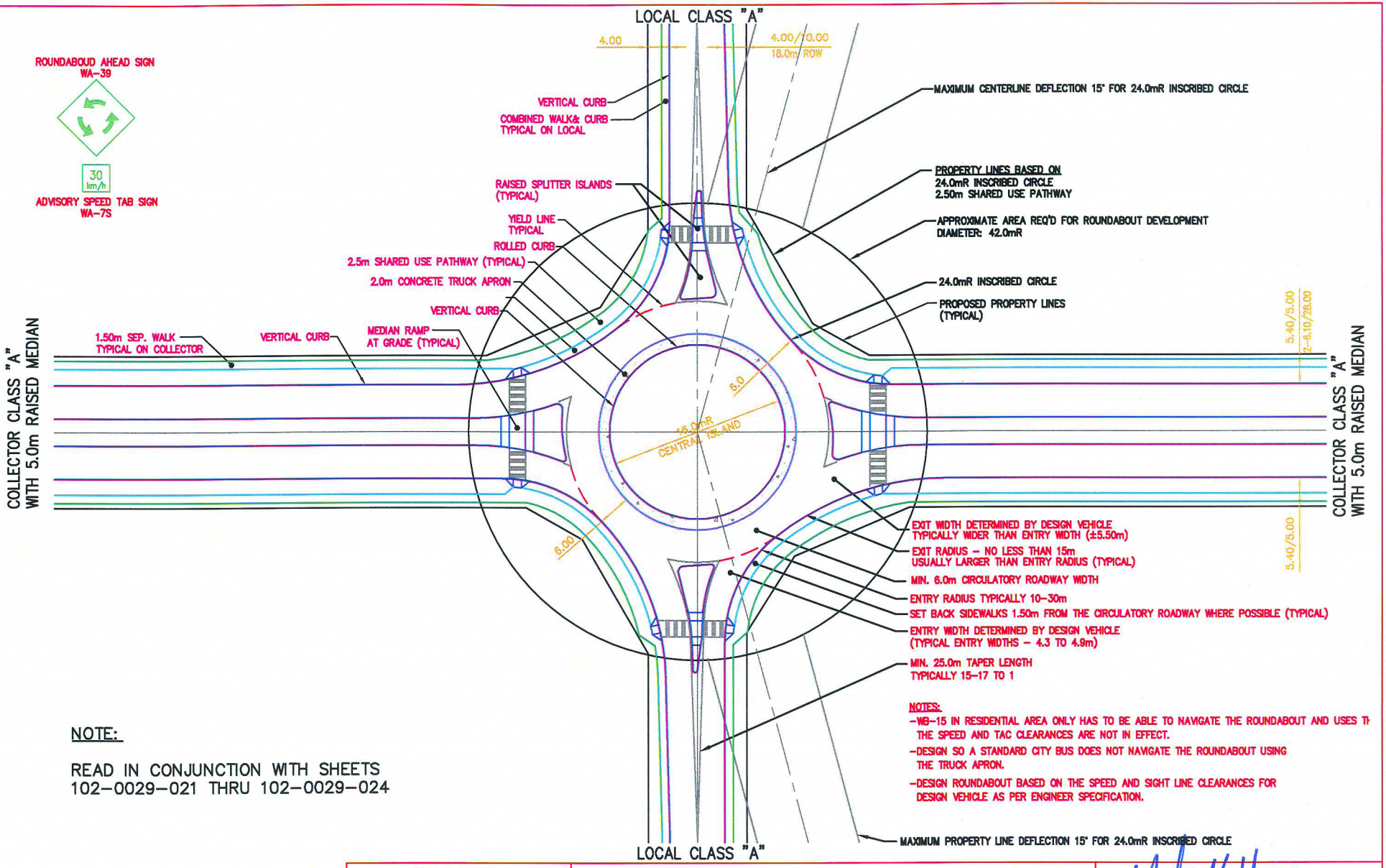

NOTE:

READ IN CONJUNCTION WITH SHEETS
102-0029-021 THRU 102-0029-024

NOTE:
GEOMETRICS BASED ON WB-15 AS DESIGN VEHICLE BUT THE DESIGN DOES NOT TAKE INTO ACCOUNT SPEED OR NECESSARY CLEARANCES FOR THE WB-15 AS IT IS NOT THE PRIMARY VEHICLE.

REVISIONS	
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DATE 2009-OCT-14
SCALES : HOR. 1:1000
VERT. _____

City of Saskatoon
Infrastructure Services Department

ROUNDABOUT DETAILED DESIGN
ROAD CLASSIFICATION
COLLECTOR CLASS "A" / LOCAL CLASS "A"

APPROVED
FEB 23/10
GENERAL MANAGER
ENGINEER
ENGINEER
PLAN NO. 102-0029-022r001

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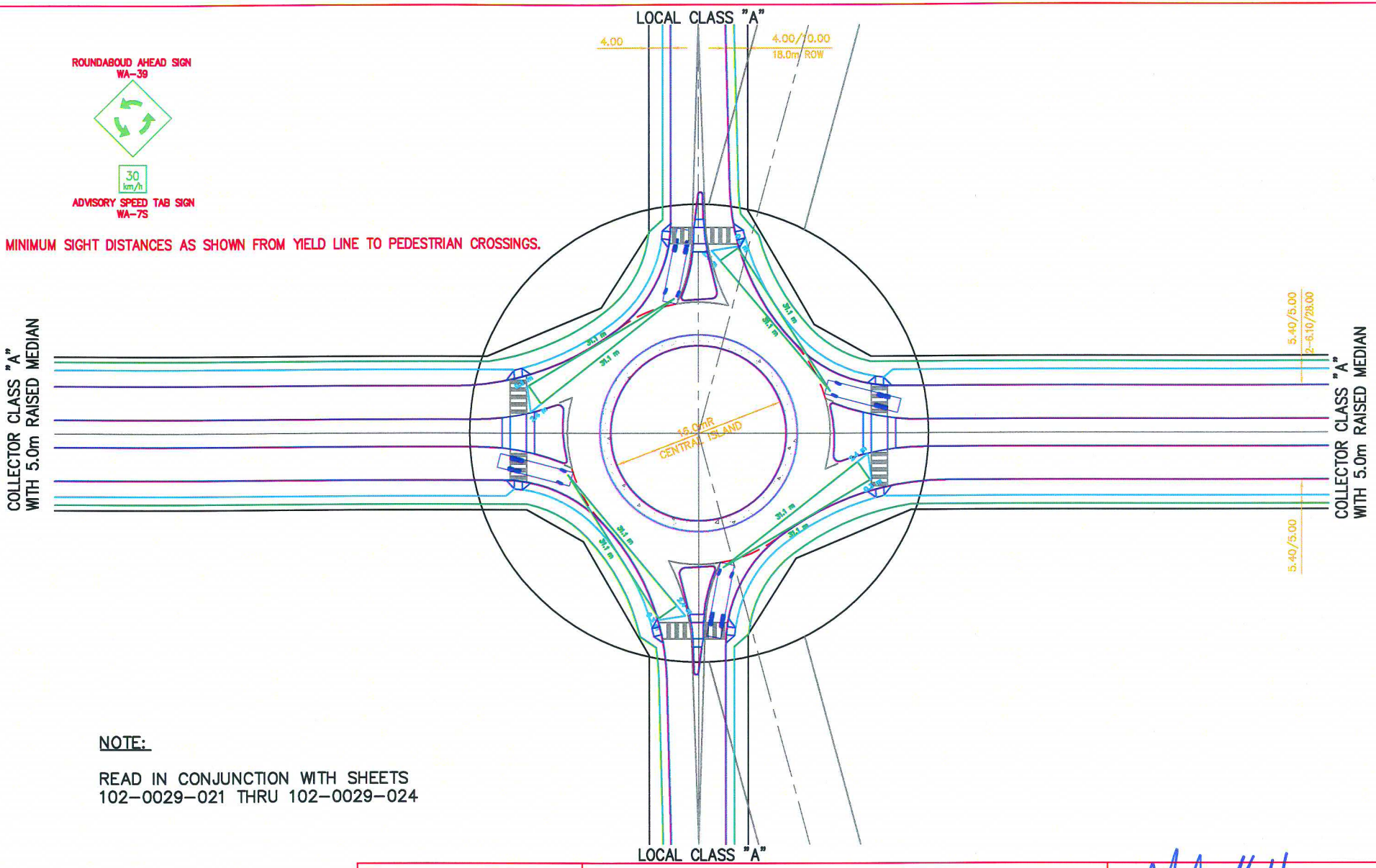

ROUNDABOUD AHEAD SIGN
WA-39

30
km/h

ADVISORY SPEED TAB SIGN
WA-7S

MINIMUM SIGHT DISTANCES AS SHOWN FROM YIELD LINE TO PEDESTRIAN CROSSINGS.

NOTE:

READ IN CONJUNCTION WITH SHEETS
102-0029-021 THRU 102-0029-024

NOTE:
GEOMETRICS BASED ON WB-15 AS DESIGN VEHICLE BUT THE DESIGN DOES NOT TAKE INTO ACCOUNT SPEED OR NECESSARY CLEARANCES FOR THE WB-15 AS IT IS NOT THE PRIMARY VEHICLE.

REVISIONS	
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DRAWN BY RBY
DATE 2009-OCT-14
SCALES : HOR. 1:1000
VERT.

City of Saskatoon
Infrastructure Services Department

ROUNDABOUT SIGHT LINES DESIGN
ROAD CLASSIFICATION
COLLECTOR CLASS "A" / LOCAL CLASS "A"

APPROVED
GENERAL MANAGER FEB 23, 10
ENGINEER
ENGINEER

PLAN NO. 102-0029-023r001

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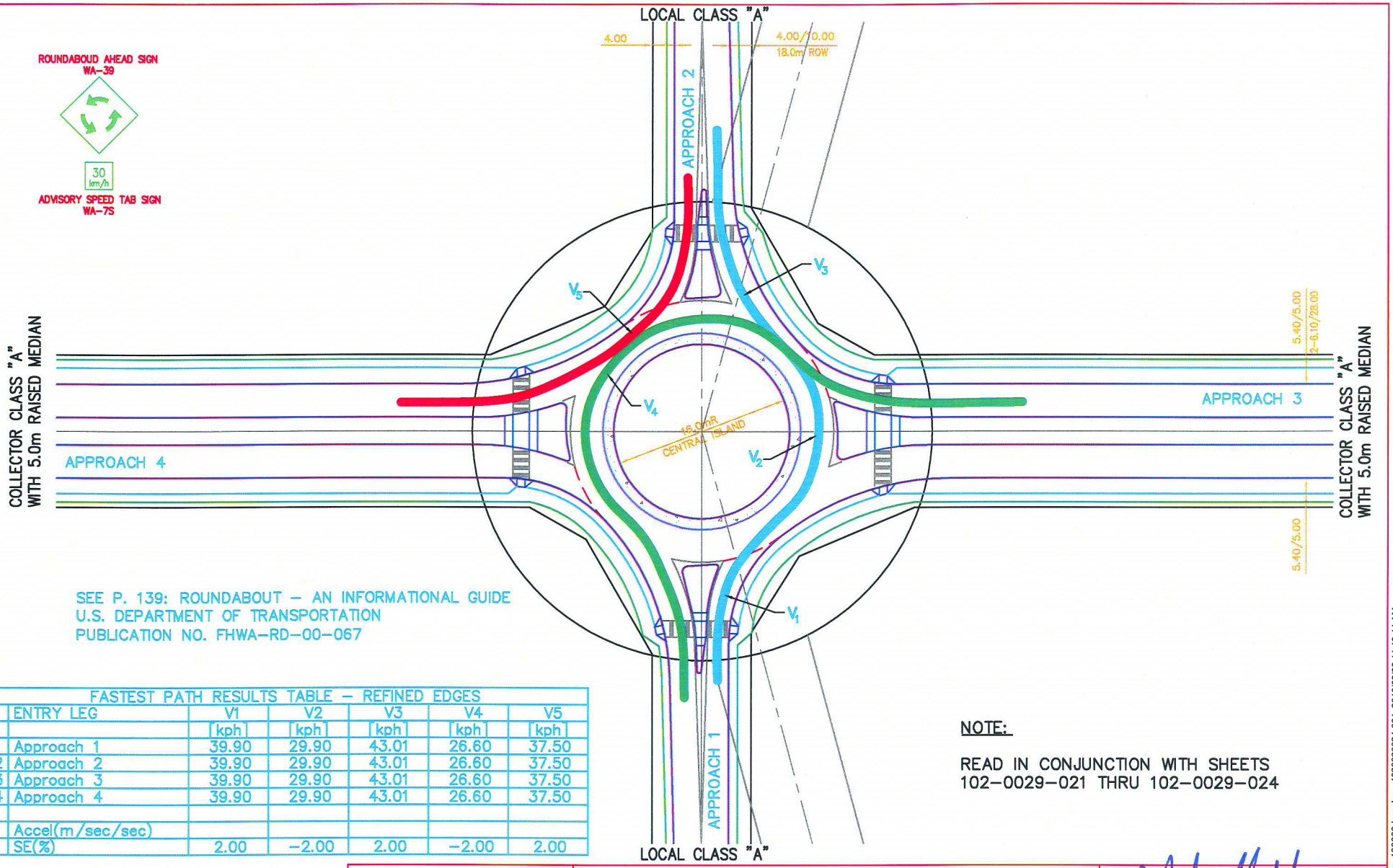

SEE P. 139: ROUNDABOUT – AN INFORMATIONAL GUIDE
U.S. DEPARTMENT OF TRANSPORTATION
PUBLICATION NO. FHWA-RD-00-067

FASTEST PATH RESULTS TABLE – REFINED EDGES

	ENTRY LEG	V1 [kph]	V2 [kph]	V3 [kph]	V4 [kph]	V5 [kph]
1	Approach 1	39.90	29.90	43.01	26.60	37.50
2	Approach 2	39.90	29.90	43.01	26.60	37.50
3	Approach 3	39.90	29.90	43.01	26.60	37.50
4	Approach 4	39.90	29.90	43.01	26.60	37.50
	Accel(m/sec/sec)					
	SE(%)	2.00	-2.00	2.00	-2.00	2.00

NOTE:

READ IN CONJUNCTION WITH SHEETS
102-0029-021 THRU 102-0029-024

NOTE:
GEOMETRICS BASED ON WB-15 AS DESIGN VEHICLE BUT THE DESIGN DOES NOT TAKE INTO ACCOUNT SPEED OR NECESSARY CLEARANCES FOR THE WB-15 AS IT IS NOT THE PRIMARY VEHICLE.

REVISIONS	
1	XXX XXX
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DRAWN BY RBY
DATE 2009-OCT-14
SCALES : HOR. 1:1000
VERT.

City of Saskatoon
Infrastructure Services Department

ROUNDABOUT OPERATING SPEEDS DESIGN
ROAD CLASSIFICATION
COLLECTOR CLASS "A" / LOCAL CLASS "A"

APPROVED
FEB 23/10
GENERAL MANAGER
Goran Lazic
ENGINEER
ENGINEER

PLAN NO. 102-0029-024r001

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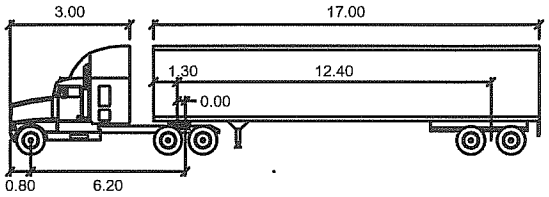
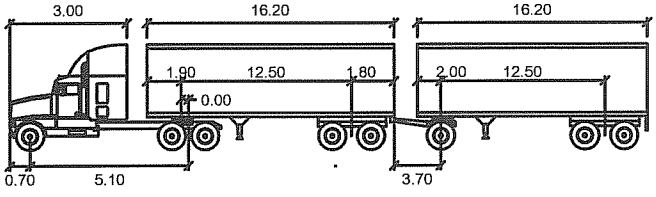
VEHICLE NAME	WB-20	WB-36
SOURCE LIBRARY: AUTOTURN 7.0	TAC 1999	ALBERTA INFRASTRUCTURE HIGHWAY GEOMETRIC
VEHICLE TYPE	SEMI-TRAILER CB	DOUBLE TRAILER CB-A
CLASS	TRANSPORT TRUCK	TRANSPORT TRUCK
LOCK TO LOCK TIME	6.0 SEC.	6.0 SEC.
STEERING LOCK ANGLE	28.3 DEGREES	17.1 DEGREES
UNITS OF MEASURE	METERS	METERS
OVERALL VEHICLE LENGTH	22.7	38.0
# OF AXLES	5.0	8.0
TRACTOR WIDTH	2.6	2.6
TRAILER WIDTH	2.6	2.6
MIN. TURNING RADIUS BASED ON CENTERLINE	13.07 @ 90 DEGREES	17.34 @ 90 DEGREES
FRONT OVERHANG	0.8	0.8
REAR OVERHANG	3.3	1.7
ARTICULATING ANGLE	70.0 DEGREES	70.0 DEGREES



WB-20 meters Overall Vehicle length 22.70m

Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 28.3
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

SOURCE: TAC 1999

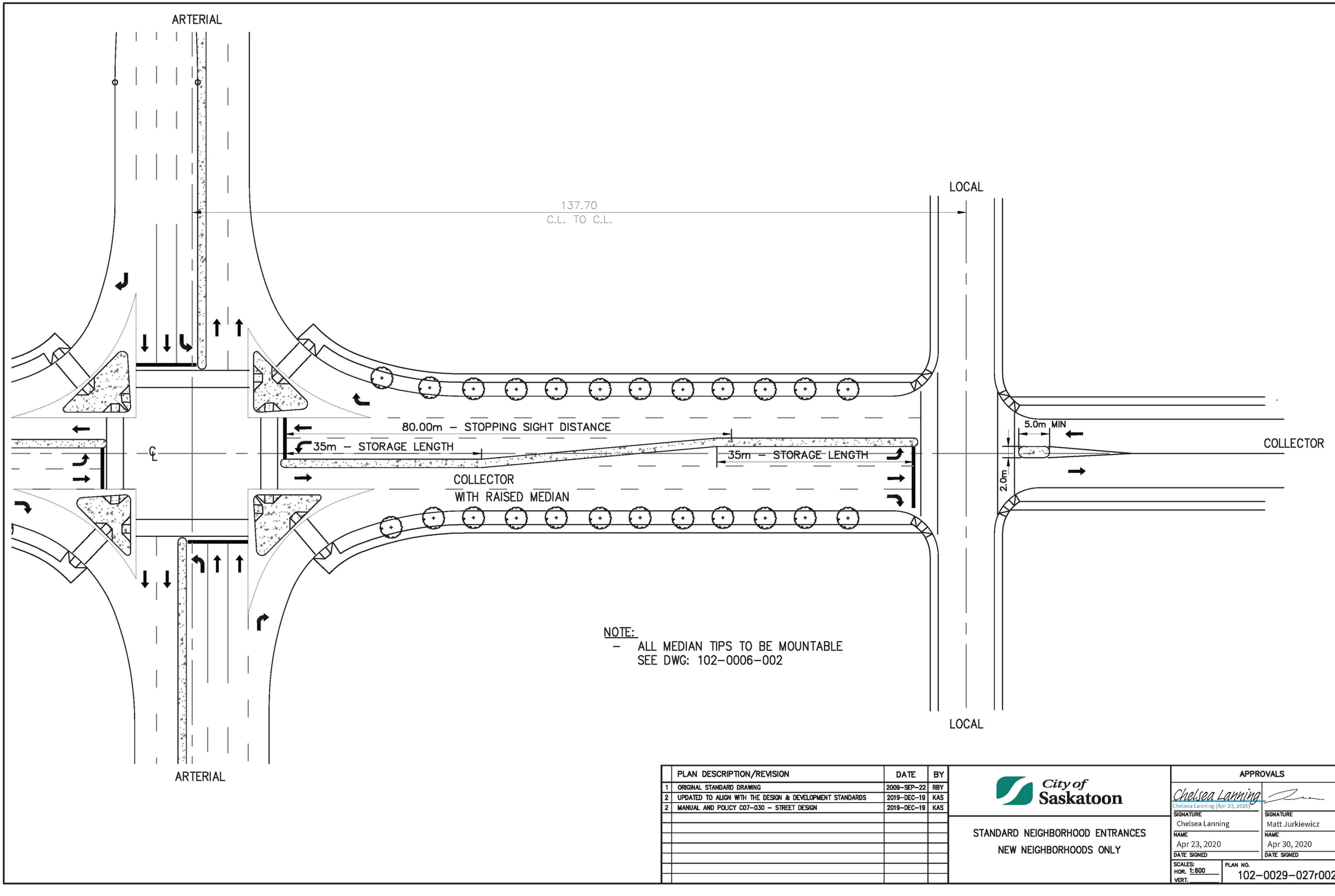


WB36 meters Overall Vehicle length 38.0m

Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 17.1
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

SOURCE: ALBERTA INFRASTRUCTURE; HIGHWAY GEOMETRIC

PLAN DESCRIPTION/REVISIONS	City of Saskatoon Infrastructure Services Department	APPROVED
4		GENERAL MANAGER
3		
2		
1	DESIGN VEHICLES FOR ARTERIALS, EXPRESSWAYS, FREEWAYS & HIGHWAY GEOMETRIC DESIGN	ENGINEER
DRAWN BY RBY DATE 2011-JULY-28		PLAN NO. 102-0029-026r001
SCALE : HOR. NA VERT. NA		



	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2009–SEP–22	RBY
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2019–DEC–19	KAS
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2019–DEC–19	KAS

City of Saskatoon

STANDARD NEIGHBORHOOD ENTRANCES
NEW NEIGHBORHOODS ONLY

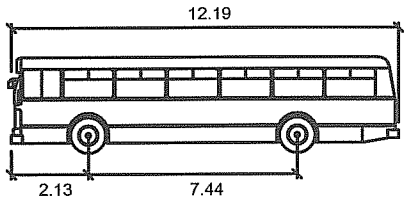
APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE	SIGNATURE
Chelsea Lanning	Matt Jurkiewicz
NAME	NAME
Apr 23, 2020	Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:800 VERT.

PLAN NO. 102–0029–027r002

VEHICLE NAME	**D40LF**
SOURCE LIBRARY: AUTOTURN 7.0	COS CUSTOM VEHICLES
VEHICLE TYPE	STANDARD BUS
CLASS	BUS
LOCK TO LOCK TIME	6.0 SEC.
STEERING LOCK ANGLE	33.7 DEGREES
UNITS OF MEASURE	METERS
OVERALL VEHICLE LENGTH	12.19
# OF AXLES	2.00
TRACTOR WIDTH	2.6
MIN. TURNING RADIUS BASED ON CENTERLINE	13.40 @ 90 DEGREES
FRONT OVERHANG	2.13
REAR OVERHANG	2.62



D40LF Overall Vehicle length 12.19m
meters

Bus Width	: 2.60
Bus Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 33.7

SOURCE: COS CUSTOM VEHICLES

PLAN DESCRIPTION/REVISIONS		
4		
3		
2		
1		
DRAWN BY RBY		
DATE 2011-AUG-02		
SCALE : HOR. NA VERT. NA		

City of Saskatoon
Infrastructure Services Department

D40LF (STANDARD COS BUS)
DESIGN VEHICLE FOR COLLECTORS AND ROUNDABOUTS

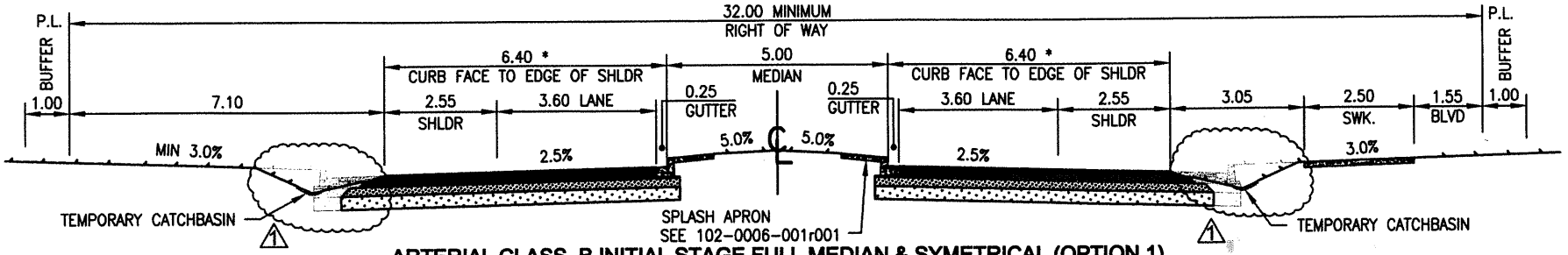
AG

APPROVED

GENERAL MANAGER

ENGINEER

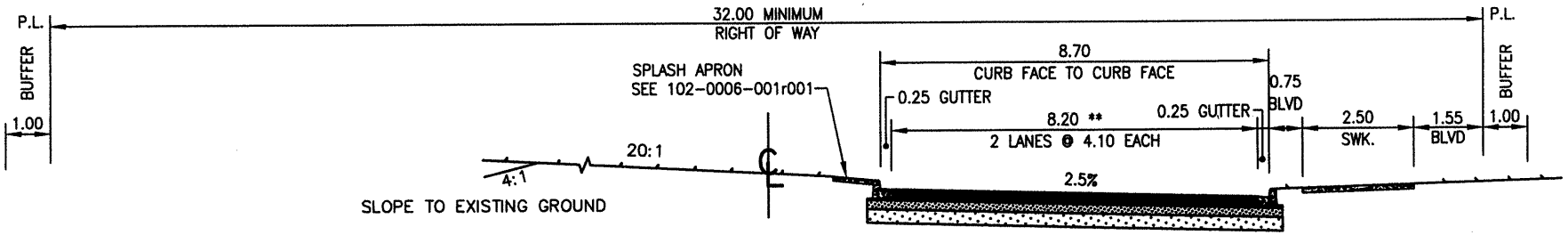
PLAN NO. 102-0029-031r001



ARTERIAL CLASS B INITIAL STAGE FULL MEDIAN & SYMETRICAL (OPTION 1)

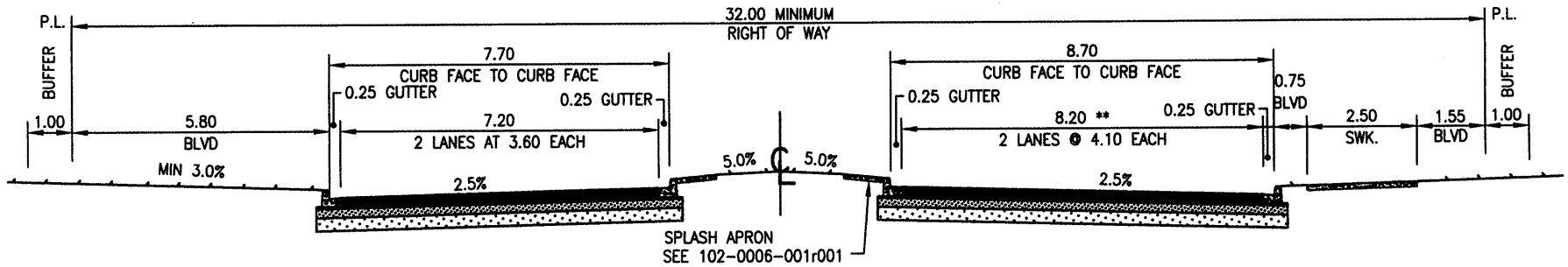
PREFERRED FOR HIGH SPEED, OR MIXED TRAFFIC (INDUSTRIAL, COMMERCIAL), OR MULTI-YEAR GAP BETWEEN STAGES

NOTE ⚠1: ECONOMICS OF COMPLETE CROSS SECTION VERSUS SINGLE LANE TO BE A PROJECT-SPECIFIC DECISION.



ARTERIAL CLASS B INITIAL STAGE, ONE SIDE ONLY (OPTION 2)

PREFERRED FOR LOW SPEED, OR MIXED TRAFFIC (INDUSTRIAL, COMMERCIAL), OR 1-2 YEAR GAP BETWEEN STAGES



ARTERIAL CLASS B FINAL STAGE (ASYMETRICAL)

* TAC 1999, TABLE 2.3.7.1 (CASE II: C)

** TAC 1999, TABLE 2.3.7.1 (CASE III: C)

REVISIONS:

REVISED ENTIRE DRAWING TO MATCH TAC 1999 DESIGN PAVEMENT WIDTHS FOR INDUSTRIAL/COMMERCIAL TRAFFIC CONDITIONS.

SEE NOTE ⚠1

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	

DRAWN BY RBY

DATE 2013-JUNE-17

SCALE : HOR. 1:150 VERT. _____

City of Saskatoon
Infrastructure Services Department

CLASS B ARTERIAL STAGING OPTIONS
INDUSTRIAL/ COMMERCIAL

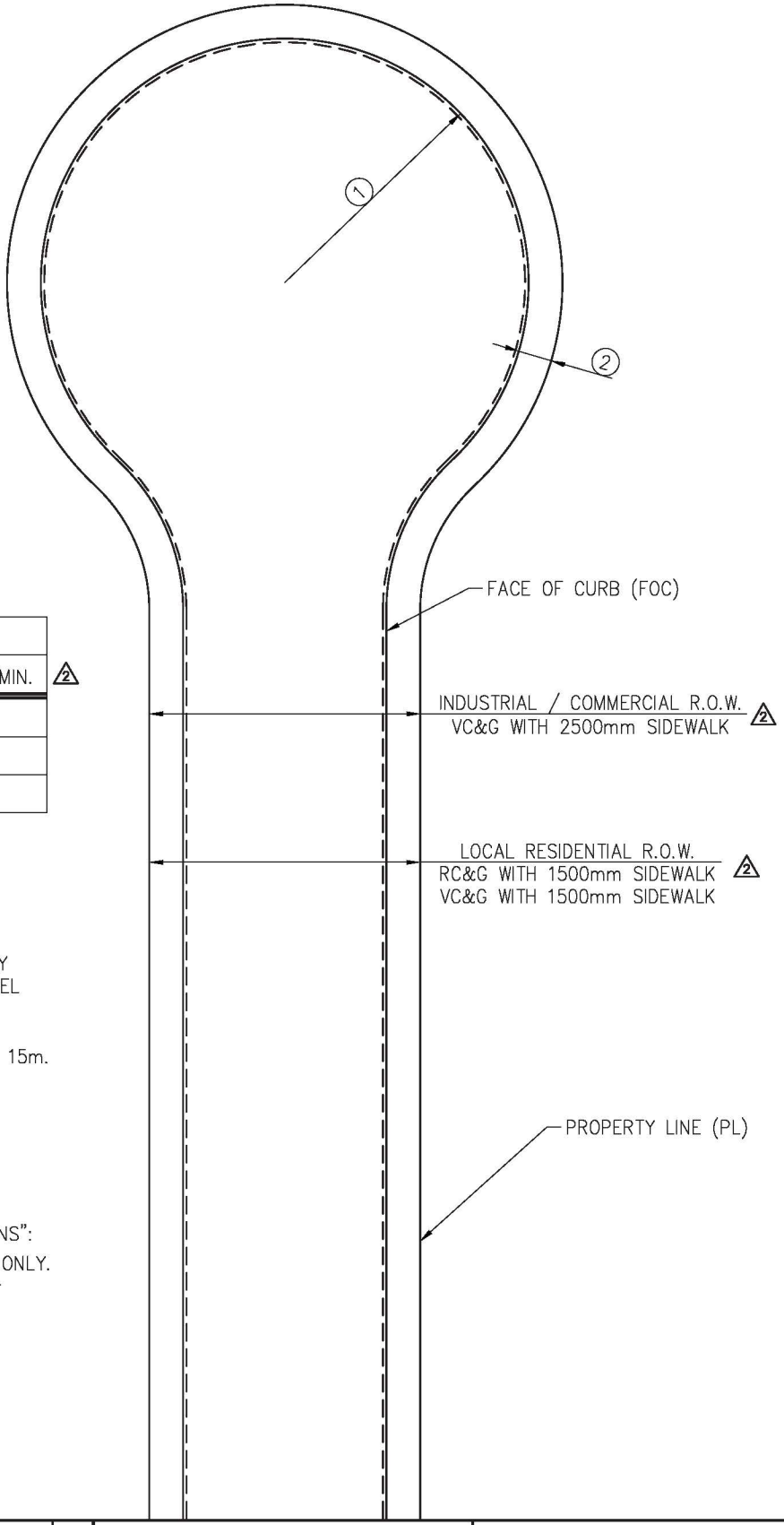
APPROVED

GENERAL MANAGER

ENGINEER

ENGINEER

PLAN NO. 102-0029-032r002



CUL–DE–SAC PARAMETERS		
CLASSIFICATION	(1) R(m)	(2) FOC TO PL(m) MIN. 2
RESIDENTIAL	15.0	3.00
COMMERCIAL	18.0	3.50
INDUSTRIAL	18.0	3.50

NOTES:

THE CUL–DE–SAC MUST ALLOW A MEDIUM HEAVY SINGLE–UNIT VEHICLE TURNAROUND AND PARALLEL PARKING. THEREFORE, THE MINIMUM RADIUS FOR COMMERCIAL/ INDUSTRIAL SHOULD BE 18m; FOR LOCAL RESIDENTIAL MINIMUM RADIUS SHOULD BE 15m.

THE FOLLOWING CONDITIONS APPLY (AT THE DEVELOPER'S EXPENSE):

1. MINIMUM RADIUS OF 18m.
2. BUILT WITH VERTICAL CURB.
3. ENTRY MUST BE POSTED WITH "NO EXIT SIGNS": FOR COMMERCIAL & INDUSTRIAL ROADWAYS ONLY.
4. R.O.W. MUST BE DEDICATED AT THE TIME OF SUBDIVISION.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2014–APR–14	RBY
2	UPDATED TO ALIGN WITH THE DESIGN & DEVELOPMENT STANDARDS	2020–FEB–13	PRZ
2	MANUAL AND POLICY C07–030 – STREET DESIGN	2020–FEB–13	PRZ

City of Saskatoon

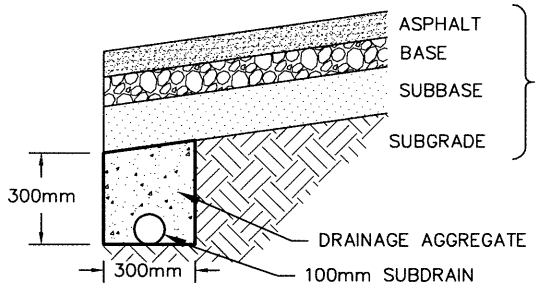
CUL–DE–SAC PARAMETERS
RESIDENTIAL, COMMERCIAL AND
INDUSTRIAL ROADWAYS

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE	SIGNATURE
Chelsea Lanning	Matt Jurkiewicz
NAME	NAME
Apr 23, 2020	Apr 30, 2020
DATE SIGNED	DATE SIGNED

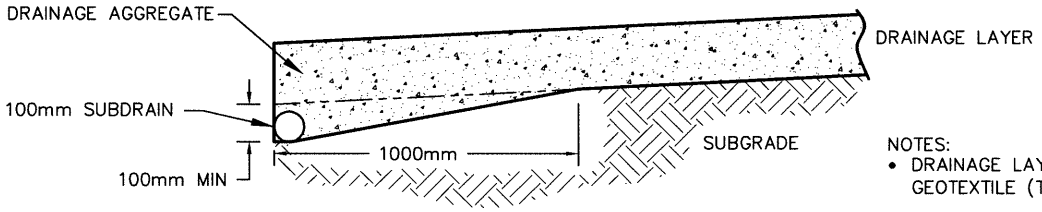
SCALES: HOR. 1:500 VERT.

PLAN NO. 102–0029–035r002



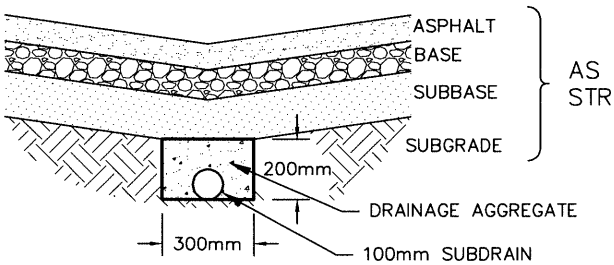
NOTES:
- DRAINAGE AGGREGATE ENVELOPED WITH NON-WOVEN GEOTEXTILE (TOP, BOTTOM & SIDES).
- INTERIOR FACE OF EDGE DRAIN MAY BE VERTICAL OR SLOPED.

EDGE DRAINAGE SYSTEM



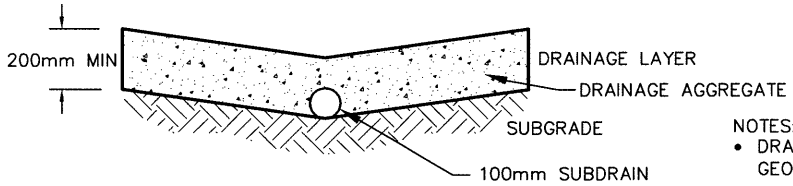
NOTES:
- DRAINAGE LAYER ENVELOPED WITH NON-WOVEN GEOTEXTILE (TOP, BOTTOM & SIDES).

FULL DRAINAGE LAYER SYSTEM



NOTES:
- DRAINAGE AGGREGATE ENVELOPED WITH NON-WOVEN GEOTEXTILE (TOP, BOTTOM & SIDES).
- FACES OF CENTRE DRAIN MAY BE VERTICAL OR SLOPED.

CENTRE DRAIN – NO DRAINAGE LAYER
TYPICAL OF BACK LANE



NOTES:
- DRAINAGE LAYER ENVELOPED WITH NON-WOVEN GEOTEXTILE (TOP, BOTTOM & SIDES).

CENTRE DRAIN – WITH DRAINAGE LAYER
TYPICAL OF BACK LANE

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	RELOCATE SUBDRAIN TO LOWEST POINT 2015-DEC-01 HLO

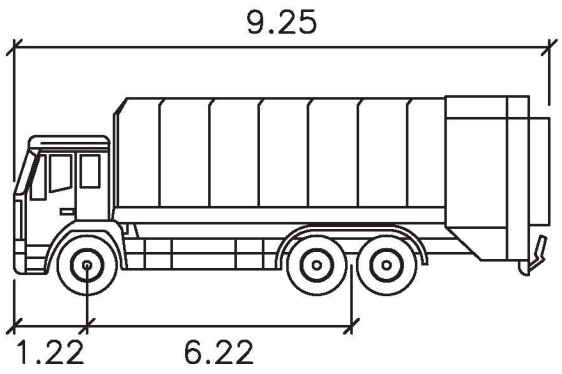
DRAWN BY HLO
DATE 2014-DEC-15
SCALE : HOR. N.T.S. VERT. N.T.S.

City of Saskatoon
Transportation & Utilities Department

TYPICAL ROAD AND BACK LANE
SUBDRAINAGE DETAILS

CHIEF ENGINEER JAN 08 2016
DATE
ENGINEER
ENGINEER
PLAN NO. 102-0029-045r002

VEHICLE NAME	**1285 INT SIDE LOADER**
SOURCE LIBRARY: AUTOTURN 10.2	COS CUSTOM VEHICLES
VEHICLE TYPE	SIDE LOAD GARBAGE TRUCK
CLASS	REFUSE COLLECTION
LOCK TO LOCK TIME	6.0 SEC.
STEERING LOCK ANGLE	36.3 DEGREES
UNITS OF MEASURE	METERS
OVERALL VEHICLE LENGTH	9.25
# OF AXLES	3
TRACTOR WIDTH	2.44
MIN. TURNING RADIUS BASED ON CENTERLINE	12.46 @ 90 DEGREES
FRONT OVERHANG	1.22
REAR OVERHANG	1.81



	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-FEB-13	SJK

City of Saskatoon

DESIGN VEHICLE
SIDE LOAD GARBAGE TRUCK

APPROVALS

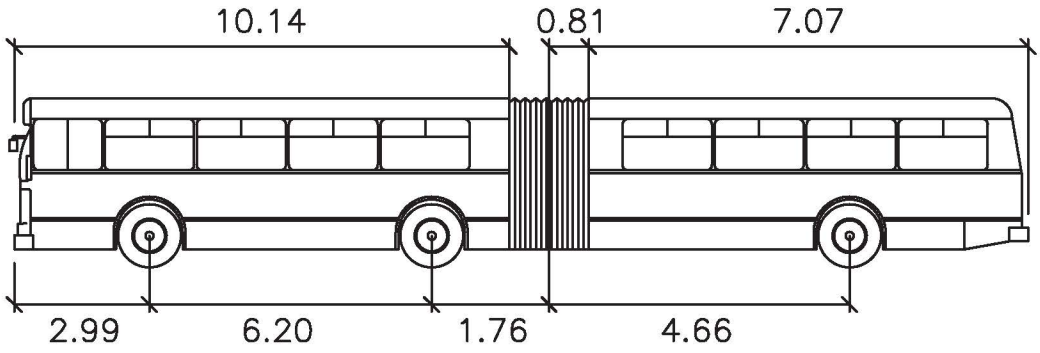
Chelsea Lanning
Chelsea Lanning (Apr 23, 2020)
SIGNATURE
Chelsea Lanning
NAME
Apr 23, 2020
DATE SIGNED

SIGNATURE
Matt Jurkiewicz
NAME
Apr 30, 2020
DATE SIGNED

SCALES:
HOR. N.T.S.
VERT.

PLAN NO.
102-0029-048r001

VEHICLE NAME	**NOVA LFS 60**
SOURCE LIBRARY: AUTOTURN 10.2	COS CUSTOM VEHICLES
VEHICLE TYPE	ARTICULATING BUS
CLASS	BUS
LOCK TO LOCK TIME	6.0 SEC.
STEERING LOCK ANGLE	40.0 DEGREES
ARTICULATING ANGLE	50.0 DEGREES
UNITS OF MEASURE	METERS
OVERALL VEHICLE LENGTH	18.83
# OF AXLES	3
TRACTOR WIDTH	2.60
MIN. TURNING RADIUS BASED ON CENTERLINE	10.57 @ 90 DEGREES
FRONT OVERHANG	2.99
REAR OVERHANG	3.22



	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-FEB-13	SJK

City of Saskatoon

DESIGN VEHICLE
ARTICULATING BUS

APPROVALS

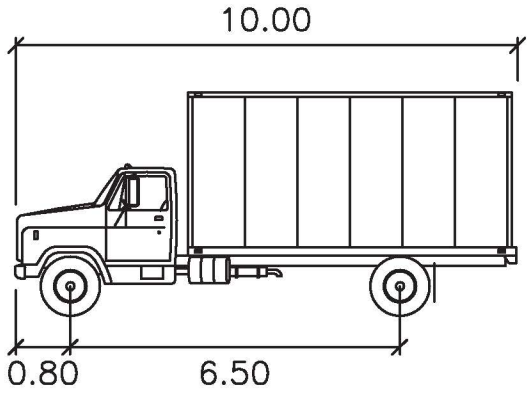
Chelsea Lanning
Chelsea Lanning (Apr 23, 2020)
SIGNATURE
Chelsea Lanning
NAME
Apr 23, 2020
DATE SIGNED

SIGNATURE
Matt Jurkiewicz
NAME
Apr 30, 2020
DATE SIGNED

SCALES:
HOR. N.T.S.
VERT.

PLAN NO.
102-0029-050r001

VEHICLE NAME	**MSU**
SOURCE LIBRARY: AUTOTURN 10.2	CANADIAN DESIGN VEHICLES
VEHICLE TYPE	MEDIUM SINGLE UNIT TRUCK
CLASS	COMMERCIAL TRUCK
LOCK TO LOCK TIME	4.0 SEC.
STEERING LOCK ANGLE	40.2 DEGREES
UNITS OF MEASURE	METERS
OVERALL VEHICLE LENGTH	10.00
# OF AXLES	2
TRACTOR WIDTH	2.60
MIN. TURNING RADIUS BASED ON CENTERLINE	10.05 @ 90 DEGREES
FRONT OVERHANG	0.80
REAR OVERHANG	2.70



	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-FEB-13	SJK

City of Saskatoon

DESIGN VEHICLE
MEDIUM SINGLE UNIT TRUCK
(MSU)

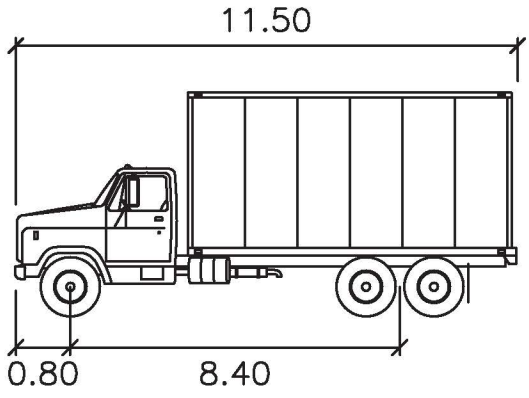
APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. N.T.S. VERT.

PLAN NO. 102-0029-051r001

VEHICLE NAME	**HSU**
SOURCE LIBRARY: AUTOTURN 10.2	CANADIAN DESIGN VEHICLES
VEHICLE TYPE	HEAVY SINGLE UNIT TRUCK
CLASS	COMMERCIAL TRUCK
LOCK TO LOCK TIME	6.0 SEC.
STEERING LOCK ANGLE	40.0 DEGREES
UNITS OF MEASURE	METERS
OVERALL VEHICLE LENGTH	11.50
# OF AXLES	3
TRACTOR WIDTH	2.60
MIN. TURNING RADIUS BASED ON CENTERLINE	13.05 @ 90 DEGREES
FRONT OVERHANG	0.80
REAR OVERHANG	2.30



	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-FEB-13	SJK

City of Saskatoon

DESIGN VEHICLE
HEAVY SINGLE UNIT TRUCK
(HSU)

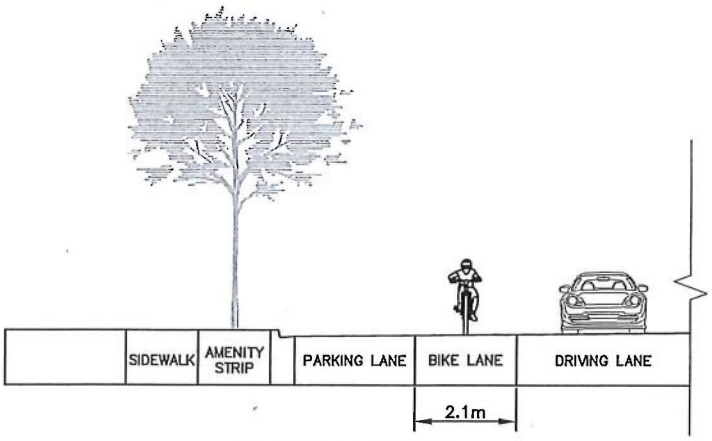
APPROVALS

Chelsea Lanning
Chelsea Lanning (Apr 23, 2020)
SIGNATURE
Chelsea Lanning
NAME
Apr 23, 2020
DATE SIGNED

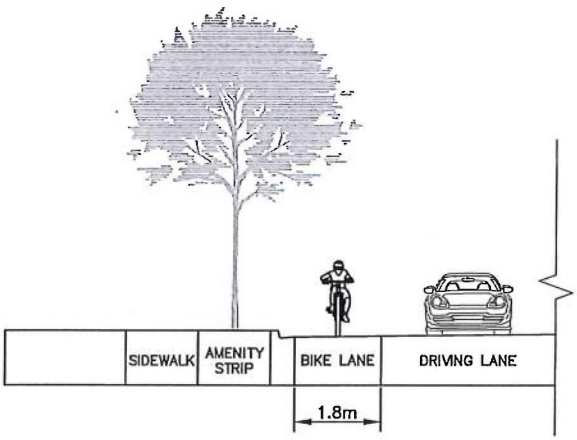
SIGNATURE
Matt Jurkiewicz
NAME
Apr 30, 2020
DATE SIGNED

SCALES:
HOR. N.T.S.
VERT.

PLAN NO.
102-0029-052r001



WITH ON-STREET PARKING

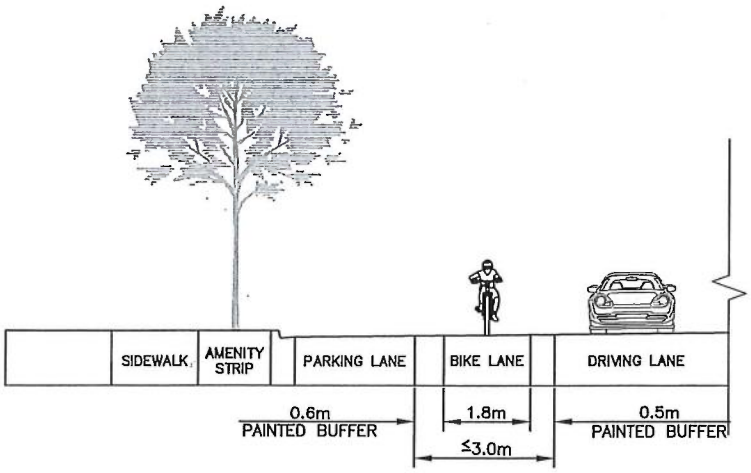


NO ON-STREET PARKING

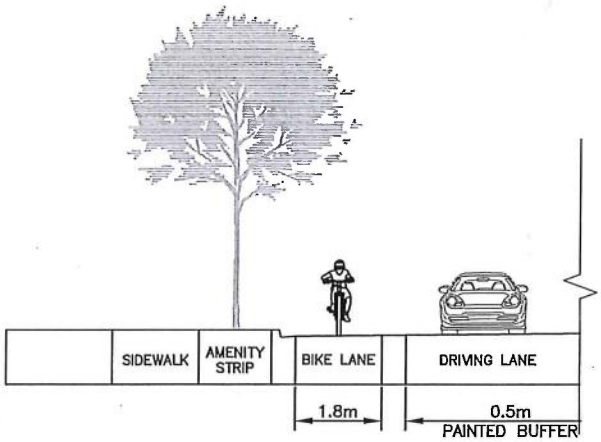
NOTES:

1. ON-STREET BIKE LANE ONLY FOR USE ON COLLECTOR STREETS.
2. DIMENSIONS NOTED ARE MINIMUMS.
3. NUMBER OF DRIVEWAYS AND ACCESS POINTS SHOULD BE MINIMIZED ON CYCLING ROUTES.
4. PAVEMENT MARKINGS ARE REQUIRED FOR CYCLING FACILITIES. SEE DWG No. 102-0034-001, 102-0034-002, 102-0034-003, 102-0034-007, 102-0034-009, 102-0034-016 AND 102-0034-017

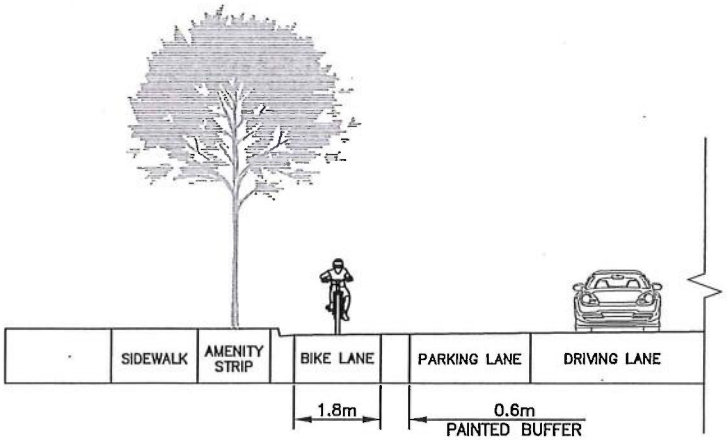
PLAN DESCRIPTION/REVISIONS	City of Saskatoon Transportation	APPROVED
	CROSS-SECTIONS ON-STREET BIKE LANE (NON ALL AGES & ABILITIES)	ENGINEER EIT ENGINEER PLAN NO. 102-0029-053r001
DRAWN BY SJK DATE 2019-NOV-18 SCALE : HOR. 1:150 VERT. 1:150		



WITH ON-STREET PARKING



NO ON-STREET PARKING

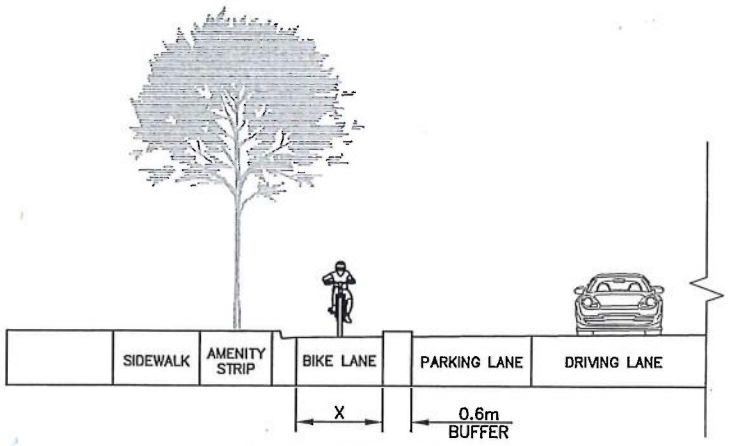


WITH ON-STREET PARKING AS ADDITIONAL BUFFER

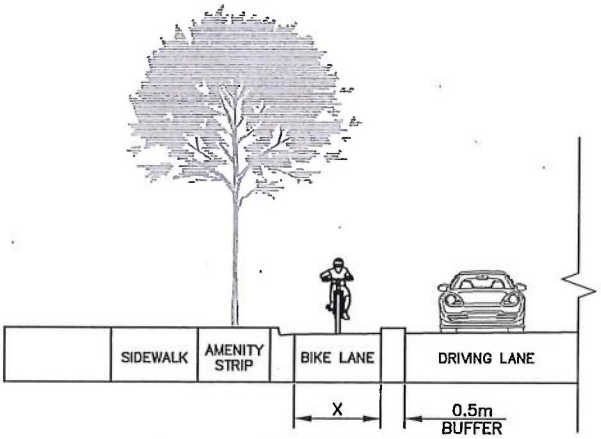
NOTES:

1. BUFFERED BIKE LANE ONLY FOR USE ON COLLECTOR STREETS.
2. DIMENSIONS NOTED ARE MINIMUMS.
3. NUMBER OF DRIVEWAYS AND ACCESS POINTS SHOULD BE MINIMIZED ON CYCLING ROUTES.
4. PAVEMENT MARKINGS ARE REQUIRED FOR CYCLING FACILITIES. SEE DWG No. 102-0034-001, 102-0034-002, 102-0034-003, 102-0034-007, 102-0034-009, 102-0034-016 AND 102-0034-017.

PLAN DESCRIPTION/REVISIONS	City of Saskatoon Transportation	APPROVED
		EIT ENGINEER
DRAWN BY SJK DATE 2019-NOV-18 SCALE : HOR. 1:150 VERT. 1:150	CROSS-SECTIONS BUFFERED BIKE LANE (NON ALL AGES & ABILITIES)	ENGINEER PLAN NO. 102-0029-054r001



WITH ON-STREET PARKING



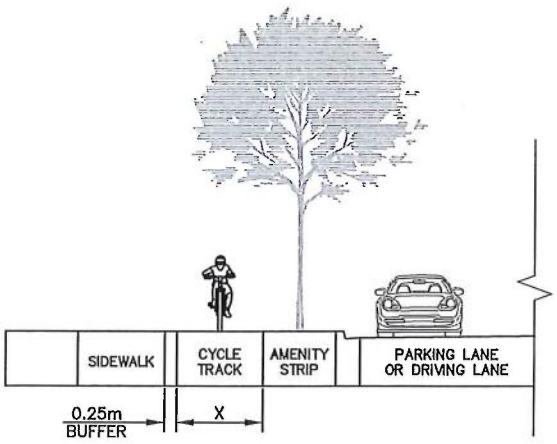
NO ON-STREET PARKING

NOTES:

1. PROTECTED BIKE LANE FOR USE ON COLLECTOR AND ARTERIAL STREETS.
2. DIMENSIONS NOTED ARE MINIMUMS.
3. PROTECTED BIKES LANES ADJACENT TO PARKING LANES SHALL INCORPORATE ACCESSIBILITY REQUIREMENTS.
4. BUFFER DESIGN AND VERTICAL DELINEATORS TO BE APPROVED BY TRANSPORTATION DIVISION AT DESIGN.
5. NUMBER OF DRIVEWAYS AND ACCESS POINTS SHOULD BE MINIMIZED ON CYCLING ROUTES.
6. PAVEMENT MARKINGS ARE REQUIRED FOR CYCLING FACILITIES. SEE DWG No. 102-0034-001, 102-0035-002, 102-0034-003, 102-0034-007, 102-0034-009, 102-0034-016 AND 102-0034-017.

X = 1.8m (min.) FOR COLLECTOR STREETS
2.0m (min.) FOR ARTERIAL STREETS

PLAN DESCRIPTION/REVISIONS	City of Saskatoon Transportation	APPROVED
	CROSS-SECTIONS PROTECTED BIKE LANE (ALL AGES & ABILITIES)	ENGINEER EIT ENGINEER
DRAWN BY SJK DATE 2019-NOV-18 SCALE : HOR. 1:150 VERT. 1:150		PLAN NO. 102-0029-055r001

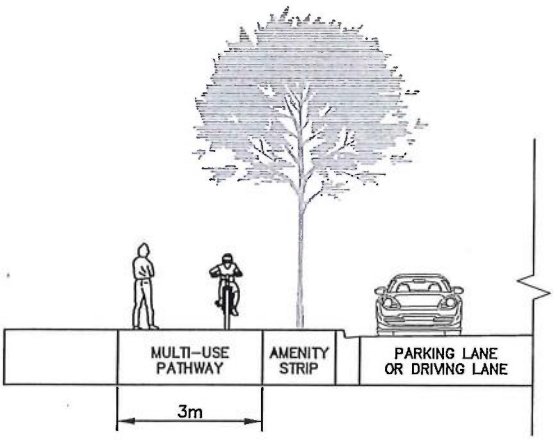


NOTES:

1. RAISED CYCLE TRACK FOR USE ON COLLECTOR AND ARTERIAL STREETS.
2. DIMENSIONS NOTED ARE MINIMUMS.
3. BUFFER BETWEEN CYCLE TRACK AND SIDEWALK IS REQUIRED TO DESIGNATE SPACE FOR EACH USER AND PROVIDE GUIDANCE FOR THE VISUALLY IMPAIRED.
4. BUFFER BETWEEN CYCLE TRACK AND SIDEWALK SHALL BE HARD SURFACE WITH DIFFERENT COLORS AND TEXTURES TO DISTINGUISH FROM BOTH CONCRETE AND ASPHALT.
5. ASPHALT CYCLE TRACK, CONCRETE SIDEWALK.
6. CYCLE TRACK AND SIDEWALK GRADE SHALL BE MAINTAINED THROUGH DRIVEWAY CROSSINGS.
7. NUMBER OF DRIVEWAYS AND ACCESS POINTS SHOULD BE MINIMIZED ON CYCLING ROUTES.
8. PAVEMENT MARKINGS ARE REQUIRED FOR CYCLING FACILITIES. SEE DWG No. 102-0034-001, 102-0034-002, 102-0034-003, 102-0034-007 AND 102-0034-017.

X = 1.8m (min.) FOR COLLECTOR STREETS
2.0m (min.) FOR ARTERIAL STREETS

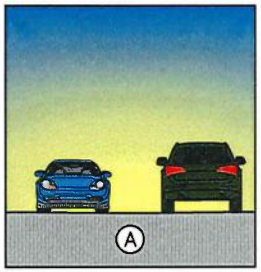
PLAN DESCRIPTION/REVISIONS	City of Saskatoon Transportation	APPROVED
		ENGINEER EIT.
DRAWN BY SJK DATE 2019-NOV-18	CROSS-SECTIONS RAISED CYCLE TRACK (ALL AGES & ABILITIES)	ENGINEER
SCALE : HOR. 1:150 VERT. 1:150		PLAN NO. 102-0029-056r001



NOTES:

1. MULTI-USE PATH FOR USE ON COLLECTOR AND ARTERIAL STREETS.
2. DIMENSIONS NOTED ARE MINIMUMS.
3. MULTI-USE PATH GRADE SHALL BE MAINTAINED THROUGH DRIVEWAY CROSSINGS.
4. NUMBER OF DRIVEWAYS AND ACCESS POINTS SHOULD BE MINIMIZED ON CYCLING ROUTES.
5. PAVEMENT MARKINGS ARE REQUIRED AT INTERSECTIONS. SEE DWG No. 102-0034-017.

PLAN DESCRIPTION/REVISIONS	City of Saskatoon Transportation	APPROVED
	CROSS-SECTIONS MULTI-USE PATHWAY (ALL AGES & ABILITIES)	ENGINEER EIT ENGINEER
DRAWN BY SJK DATE 2019-NOV-18 SCALE : HOR. 1:150 VERT. 1:150		PLAN NO. 102-0029-057r001



NOTES:

ROW (RIGHT-OF-WAY) REQUIRED:6m

A: DRIVING LANES - 2 DRIVING LANES USED FOR ACCESS TO PRIVATE PROPERTY, UTILITY ACCESS ETC. MAY BE USED FOR LOADING/UNLOADING ACTIVITIES IN COMMERCIAL AREAS.
OR
SHARED SPACE, ALL MODES; NO DELINEATION, NO SEPARATION.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-FEB-03	SJK

City of Saskatoon

INDICATIVE CROSS-SECTION
LANE

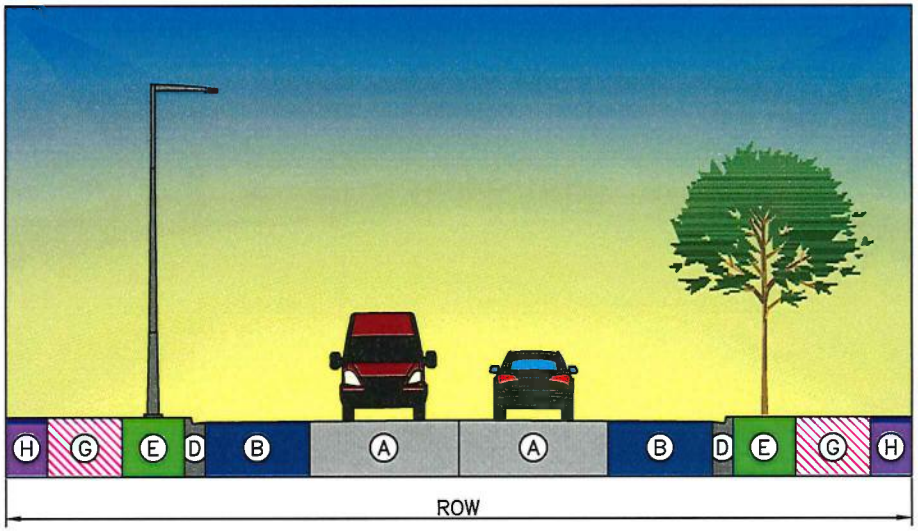
APPROVALS

SIGNATURE
Chelsea Lanning
NAME
Feb 24, 2020
DATE SIGNED

SIGNATURE
Jay Magus
NAME
Feb 24, 2020
DATE SIGNED

SCALES:
HOR. ———
VERT. ———

PLAN NO.
102-0029-058r001



NOTES:

ROW (RIGHT-OF-WAY) REQUIRED: 15m-22m

A: DRIVING LANES - 1 OR 2 DRIVING LANES.
B: PARKING LANE - UNMARKED, BOTH SIDES.
D: CURB & GUTTER - IF REAR LANES ARE PROVIDED FOR ADJACENT DEVELOPMENT, 150mm VERTICAL CURB, ELSE ROLLED CURB.
E: AMENITY STRIP - MAY CONTAIN ROADWAY LIGHTING, STREET TREES & OTHER AMENITIES.
G: SIDEWALK - PEDESTRIAN FACILITY REQUIRED ON BOTH SIDES OF STREET.
H: BOULEVARD - MAY CONTAIN ROADWAY LIGHTING & OTHER AMENITIES.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2018-NOV-30	SJK

City of Saskatoon

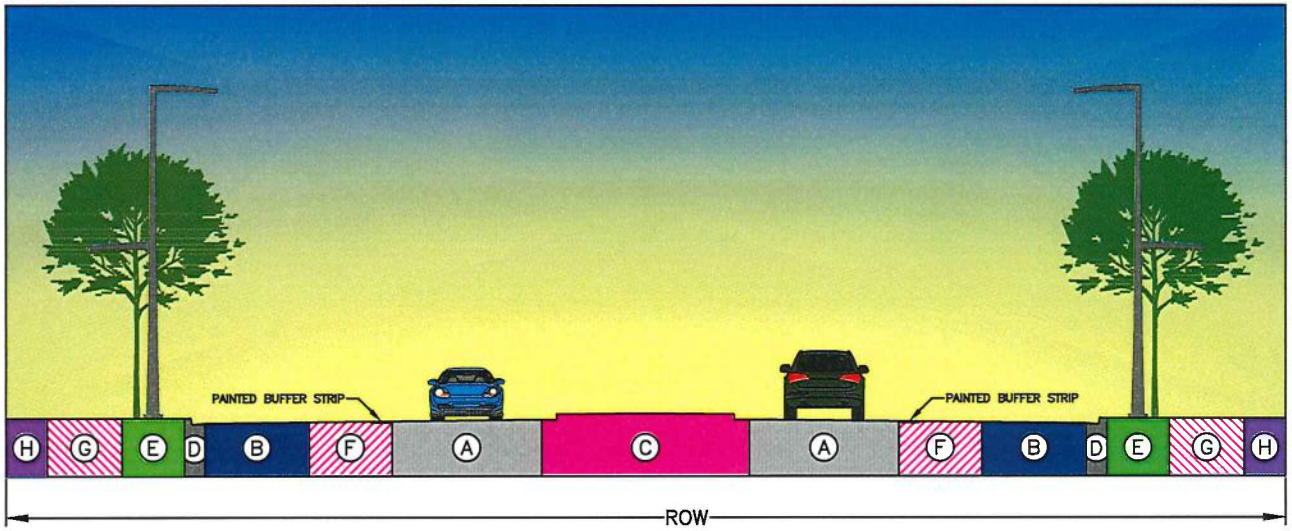
INDICATIVE CROSS-SECTION
LOCAL

APPROVALS

SIGNATURE	SIGNATURE
NAME: Chelsea Lanning	NAME: Jay Magus
DATE SIGNED: Feb 24, 2020	DATE SIGNED: Feb 24, 2020

SCALES: HOR. ——— VERT. ———

PLAN NO. 102-0029-059r001



NOTES:
RIGHT-OF-WAY (ROW) REQUIRED: 21m-41m

A: DRIVING LANES - 2-4 DRIVING LANES.
B: PARKING LANE - UNMARKED, BOTH SIDES.
C: MEDIAN - MAY BE PRESENT, MAY CONTAIN ROADWAY LIGHTING.
D: CURB & GUTTER - 150mm VERTICAL CURB.
E: AMENITY STRIP - MAY CONTAIN ROADWAY LIGHTING, TRANSIT WAITING AREAS, STREET TREES & OTHER AMENITIES.
F: CYCLING FACILITY - FACILITY MAY BE REQUIRED (SEE AT PLAN), BOTH SIDES.
G: SIDEWALK - PEDESTRIAN FACILITY REQUIRED ON BOTH SIDES OF STREET.
H: BOULEVARD - COULD BE HARD OR SOFT-SCAPED DEPENDING ON ADJACENT LAND USE. MAY CONTAIN UTILITIES.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2018-NOV-27	SJK

City of Saskatoon

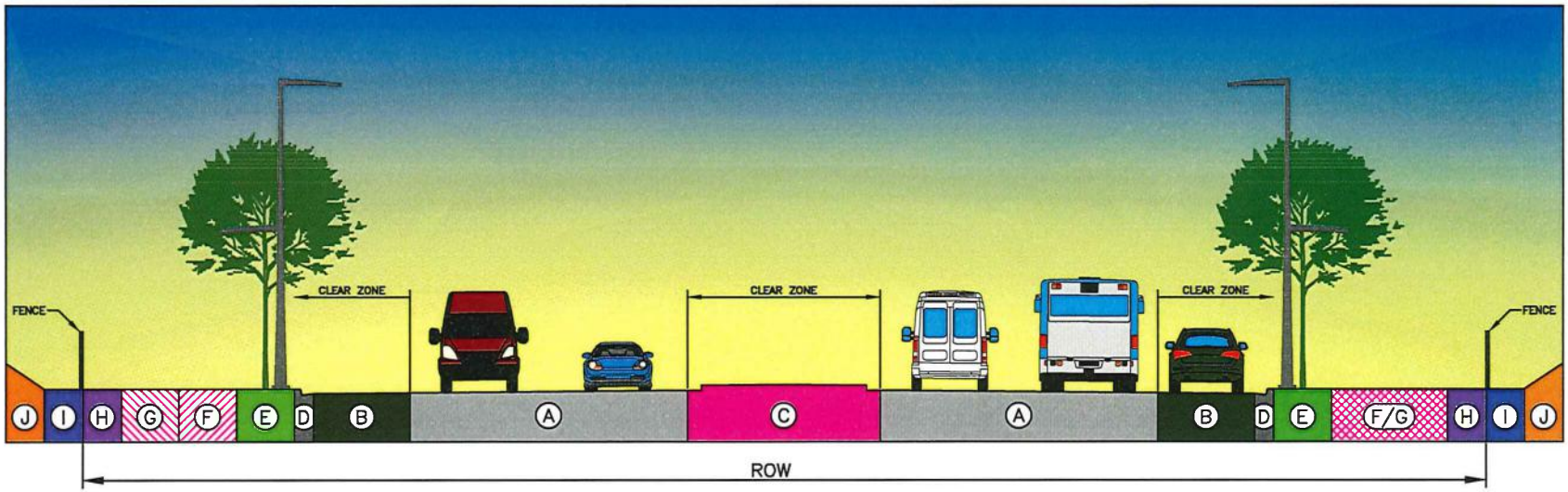
INDICATIVE CROSS-SECTION
COLLECTOR

APPROVALS

SIGNATURE	SIGNATURE
NAME: Chelsea Lanning	NAME: Jay Magus
DATE SIGNED: Feb 24, 2020	DATE SIGNED: Feb 24, 2020

SCALES: HOR. ——— VERT.

PLAN NO. 102-0029-060r001



NOTES:

RIGHT-OF-WAY (ROW) REQUIRED: 33m-43m.

- A: DRIVING LANES - 4 OR 6 DRIVING LANES. (SEE FUNCTIONAL PLAN)
- B: PARKING LANES - MAY BE PRESENT BASED ON LAND USE IF POSTED SPEED LIMIT ≤ 50kph.
- C: MEDIAN - MAY CONTAIN ROADWAY LIGHTING, LEFT TURN BAYS AND ACCESS CONTROL.
- D: CURB & GUTTER - VERTICAL CURB. 150mm IF PARKING IS PRESENT, OTHERWISE 200mm.
- E: AMENITY STRIP - MAY CONTAIN ROADWAY LIGHTING, TRANSIT WAITING AREAS, BICYCLE PARKING, STREET TREES AND OTHER AMENITIES.
- F: CYCLING FACILITY - ALL AGES & ABILITIES (AAA) FACILITY REQUIRED.
- G: SIDEWALK - PEDESTRIAN FACILITY REQUIRED ON BOTH SIDES OF STREET.
- F/G: MULTI-USE PATHWAY - PEDESTRIAN & CYCLIST COMBINED FACILITY MAY BE APPROPRIATE BASED ON ADJACENT LAND USE.
- H: BOULEVARD - COULD BE HARD OR SOFT-SCAPED DEPENDING ON ADJACENT LAND USE. MAY CONTAIN UTILITIES.
- I: BUFFER STRIP - IMPLEMENT IF STREET IS FULL ACCESS CONTROLLED.
- J: BERM - ONLY IMPLEMENTED IN CONJUNCTION WITH BUFFER STRIP.

FENCE OPTIONAL

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2018-NOV-27	SJK

City of Saskatoon

INDICATIVE CROSS-SECTION
ARTERIAL

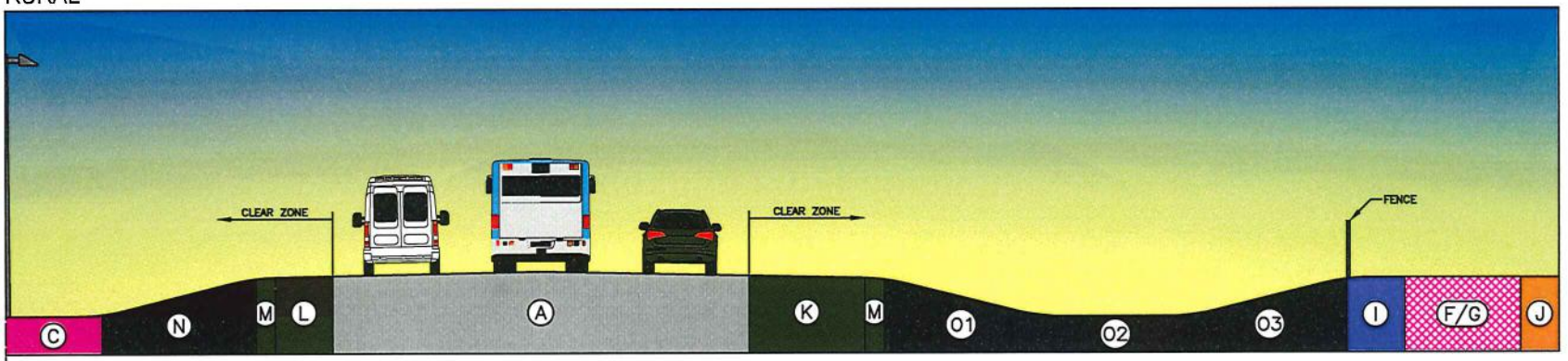
APPROVALS

SIGNATURE	SIGNATURE
NAME: Chelsea Laaning	NAME: Jay Magus
DATE SIGNED: Feb 24, 2020	DATE SIGNED: Feb 24, 2020

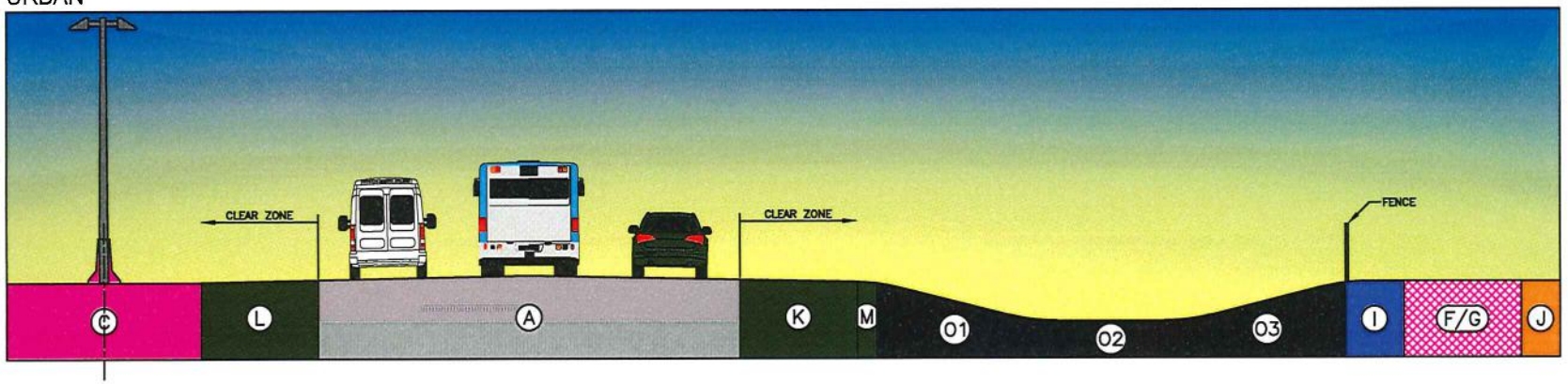
SCALES: HOR. ——— VERT. ———

PLAN NO. 102-0029-061r001

RURAL



URBAN



NOTES:
RIGHT-OF-WAY (ROW) REQUIRED: 75m-125m.

A: DRIVING LANES - 3 DRIVING LANES EACH DIRECTION.
C: MEDIAN - MAY BE DEPRESSED MEDIAN OR BARRIER SYSTEM. MEDIAN CURB INCREASES TO 3.0m IF BARRIER SYSTEM IS USED.
F/G: MULTI-USE PATHWAY - AS PER AT PLAN (IF REQUIRED). IF PRESENT, FENCE LOCATED ON ROAD SIDE OF PATHWAY.
I: MUNICIPAL BUFFER STRIP - ENSURES ACCESS CONTROL.
J: BERM - IMPLEMENTED WITH FENCE OR OTHER BARRIER ALONG ROW.
K: SHOULDER (RIGHT) ≥ 3.0m.
L: SHOULDER (LEFT) ≥ 1.5m.
M: ROUNDING ≥ 0.5m.
N: SIDE SLOPE 1 - 4:1 OR FLATTER.
O1: SIDE SLOPE 2 - 4:1 OR FLATTER.
O2: DRAINAGE CHANNEL
O3: BACK SLOPE - 4:1 OR FLATTER

FENCE ALWAYS REQUIRED

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2018-NOV-27	SJK

City of Saskatoon

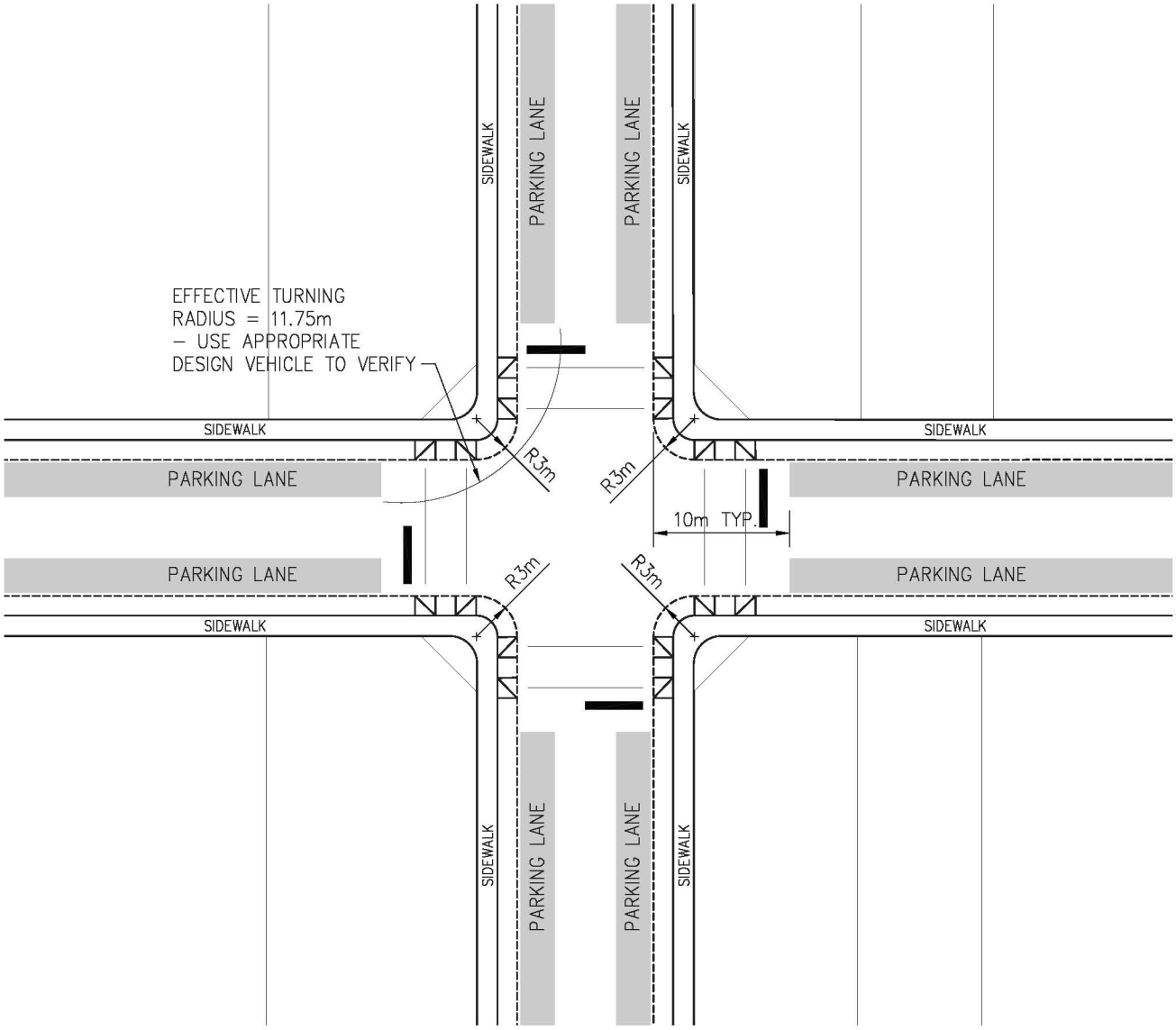
INDICATIVE CROSS-SECTION
FREEWAY / EXPRESSWAY

APPROVALS

SIGNATURE	SIGNATURE
NAME: Chelsea Lanning	NAME: Jay Magus
DATE SIGNED: Feb 24, 2020	DATE SIGNED: Feb 24, 2020

SCALES: HOR. ——— VERT. ———

PLAN NO. 102-0029-062r001



NOTES:

1. URBAN, COMMERCIAL, DOWNTOWN APPLICATION, TYPICALLY SIGNALIZED
2. CORNER RADIUS – 3m TYPICAL
3. ON–STREET PARKING ON ALL LEGS
4. VERIFY DESIGN VEHICLE TURNING REQUIREMENTS
5. IF CURB EXTENSIONS OR BUS BULBS ARE INCLUDED, RADIUS MAY INCREASE.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–APR–16	DLH

City of Saskatoon

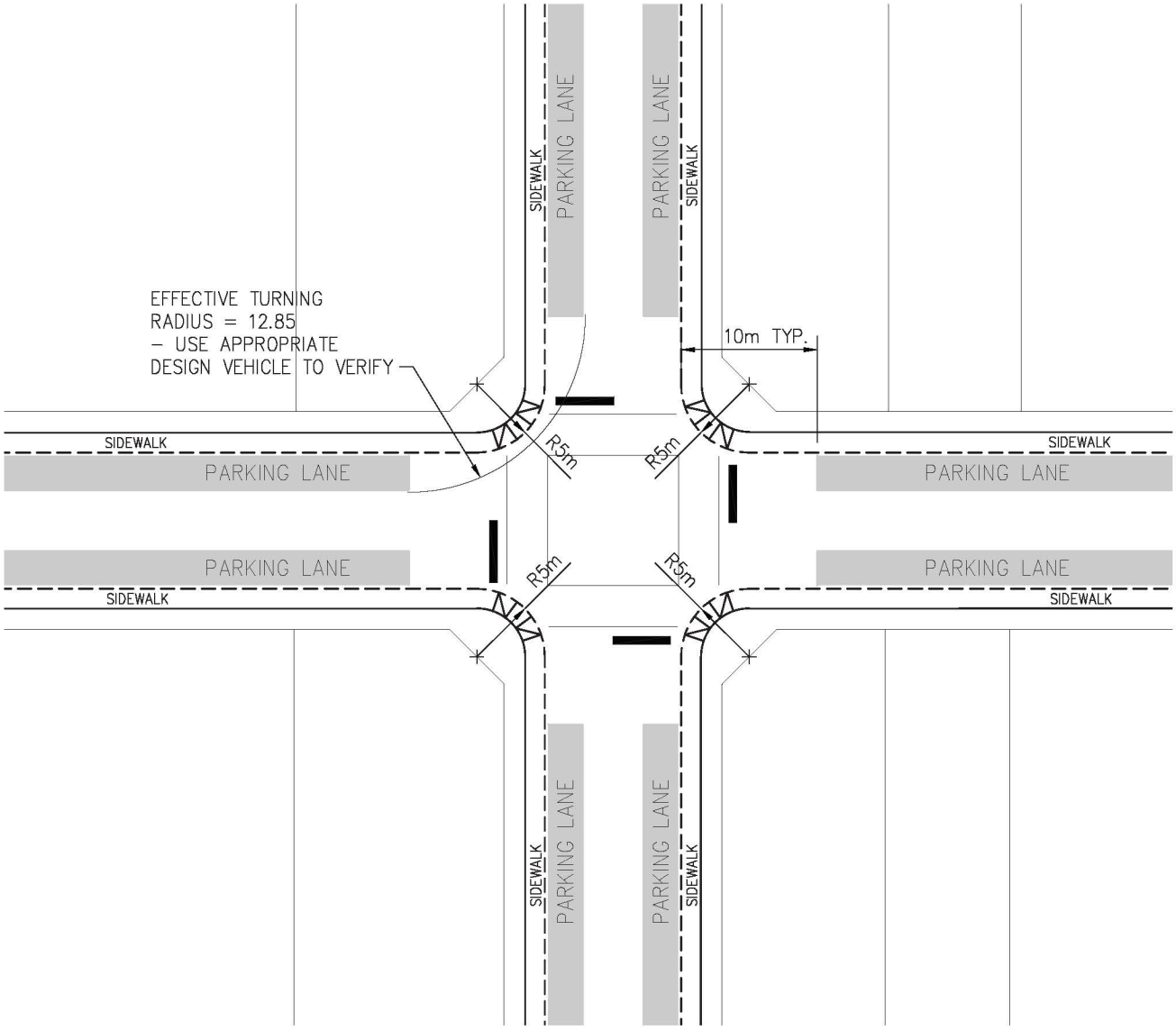
COMMERCIAL AND DOWNTOWN STREETS
WITH ON–STREET PARKING ON ALL LEGS
CORNER RADIUS = 3m

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:500 VERT.

PLAN NO. 102–0029–063r001



* SEE DRAWING 102–0002–075 FOR PEDESTRIAN RAMP LOCATIONS

NOTES:

1. SUBURBAN, RESIDENTIAL APPLICATION
2. CORNER RADIUS – 5m TYPICAL
3. ON–STREET PARKING ON ALL LEGS
4. VERIFY DESIGN VEHICLE TURNING REQUIREMENTS
5. IF CURB EXTENSIONS OR BUS BULBS ARE INCLUDED, RADIUS MAY INCREASE.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–APR–16	DLH

City of Saskatoon

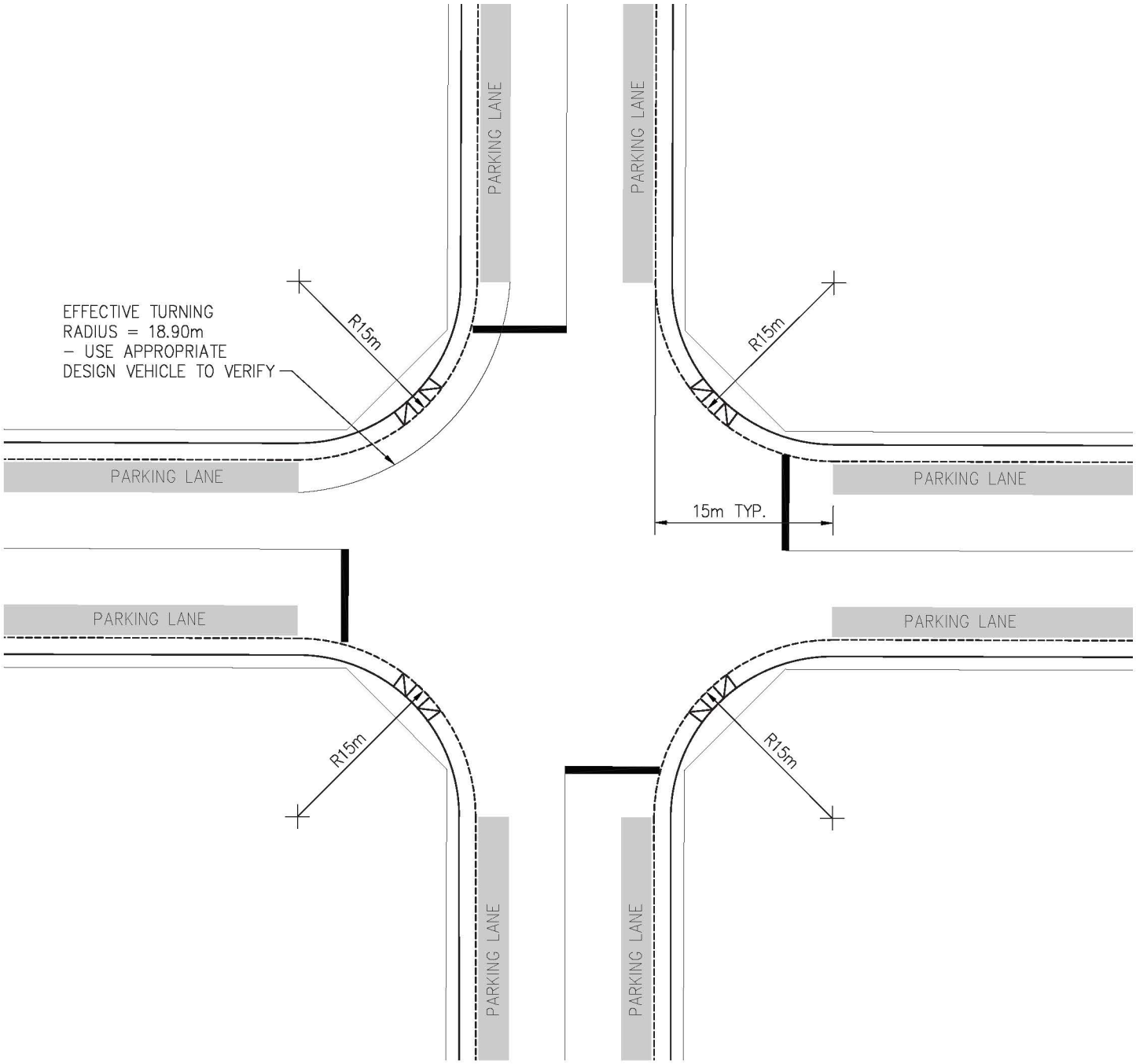
LOCAL AND COLLECTOR STREETS
WITH ON–STREET PARKING ON ALL LEGS
CORNER RADIUS = 5m

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE	SIGNATURE
Chelsea Lanning	Matt Jurkiewicz
NAME	NAME
Apr 23, 2020	Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:500 VERT.

PLAN NO. 102–0029–064r001



* SEE DRAWING 102–0002–075 FOR PEDESTRIAN RAMP LOCATIONS

NOTES:

1. SUBURBAN, INDUSTRIAL APPLICATION
2. CORNER RADIUS – 15m TYPICAL
3. ON–STREET PARKING ON ALL LEGS
4. VERIFY DESIGN VEHICLE TURNING REQUIREMENTS
5. CURB EXTENSIONS AND BUS BULBS ARE PROHIBITED

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–APR–16	DLH

City of Saskatoon

INDUSTRIAL STREETS

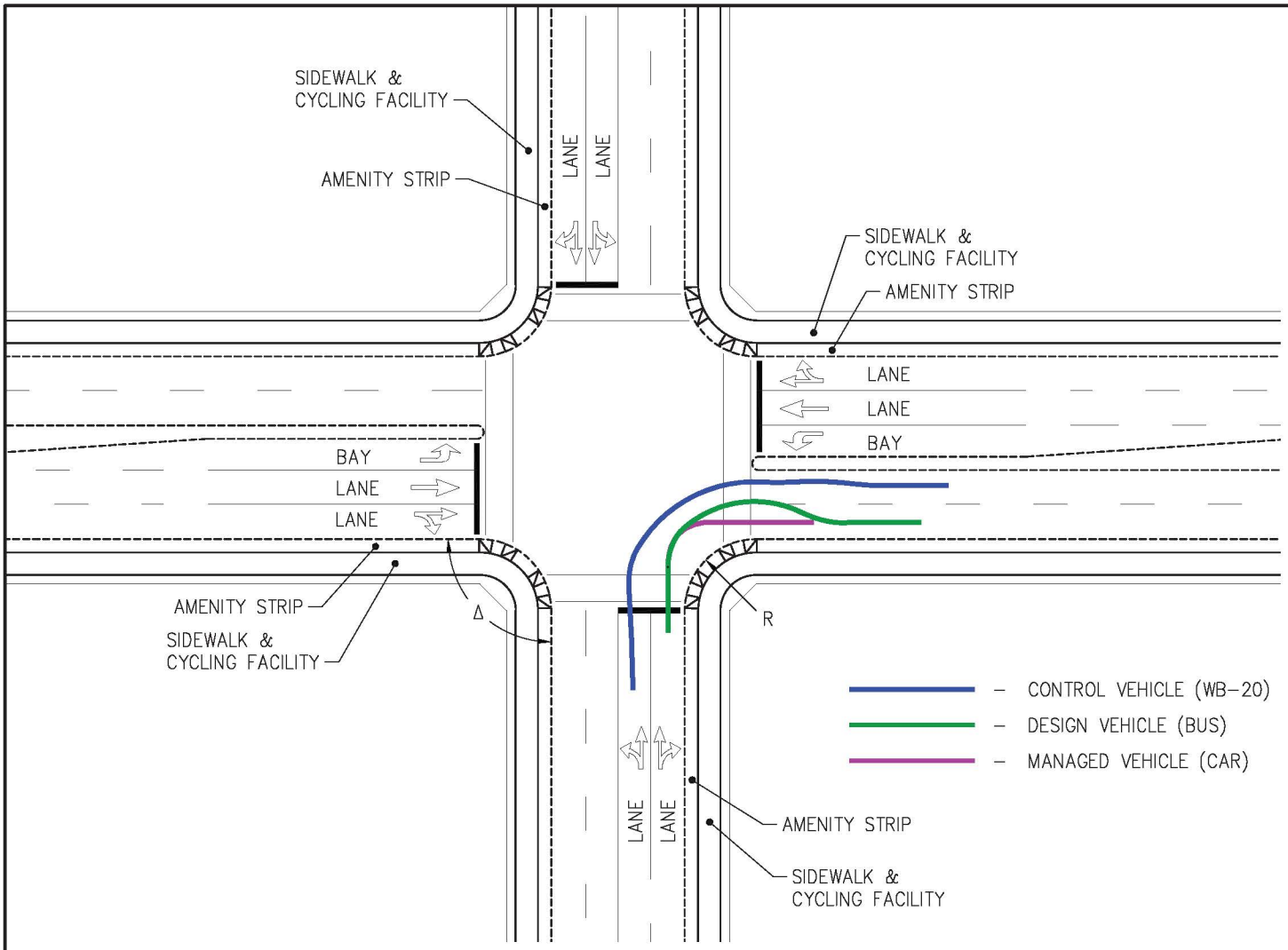
CORNER RADIUS = 15m

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

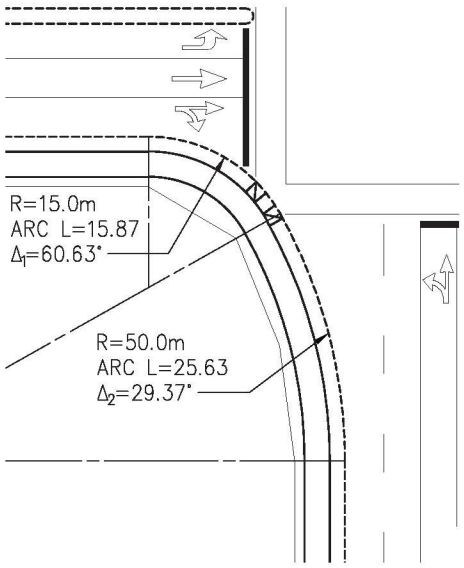
SCALES: HOR. 1:600 VERT.

PLAN NO. 102–0029–065r001



NOTES:

1. PARKING TYPICALLY NOT PERMITTED
2. RADIUS DETERMINED BY DESIGN VEHICLE. TWO CENTRED COMPOUND CURVES MAY BE REQUIRED IN INDUSTRIAL AREAS.
3. PEDESTRIAN RAMPS REQUIRED IN ALL CROSSING DIRECTIONS.
4. ROAD CROSS-SECTION TO BE DEVELOPED BASED ON TRANSPORTATION REQUIREMENTS AND LAND USE COMPATIBILITY.
5. Δ MAY VARY FROM 70° TO 110°
6. FOR UNCHANNELIZED INTERSECTIONS, CORNER RADIUS SHOULD BE AS FOLLOWS.
   - 6.1. MANAGED VEHICLE: RADIUS SHOULD BE AS SMALL AS POSSIBLE TO ACCOMMODATE MOVEMENT FROM LANE TO LANE.
   - 6.2. DESIGN VEHICLE: SHOULD BE ACCOMMODATED FROM ITS LANE TO LANE GROUP.
   - 6.3. CONTROL VEHICLE: SHOULD BE ACCOMMODATED FROM ITS LANE GROUP TO LANE GROUP.
7. MOUNTABLE MEDIAN TIPS



TWO CENTRED COMPOUND CURVES
RIGHT TURN

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-APR-20	DLH

City of Saskatoon

ARTERIAL TO ARTERIAL INTERSECTION

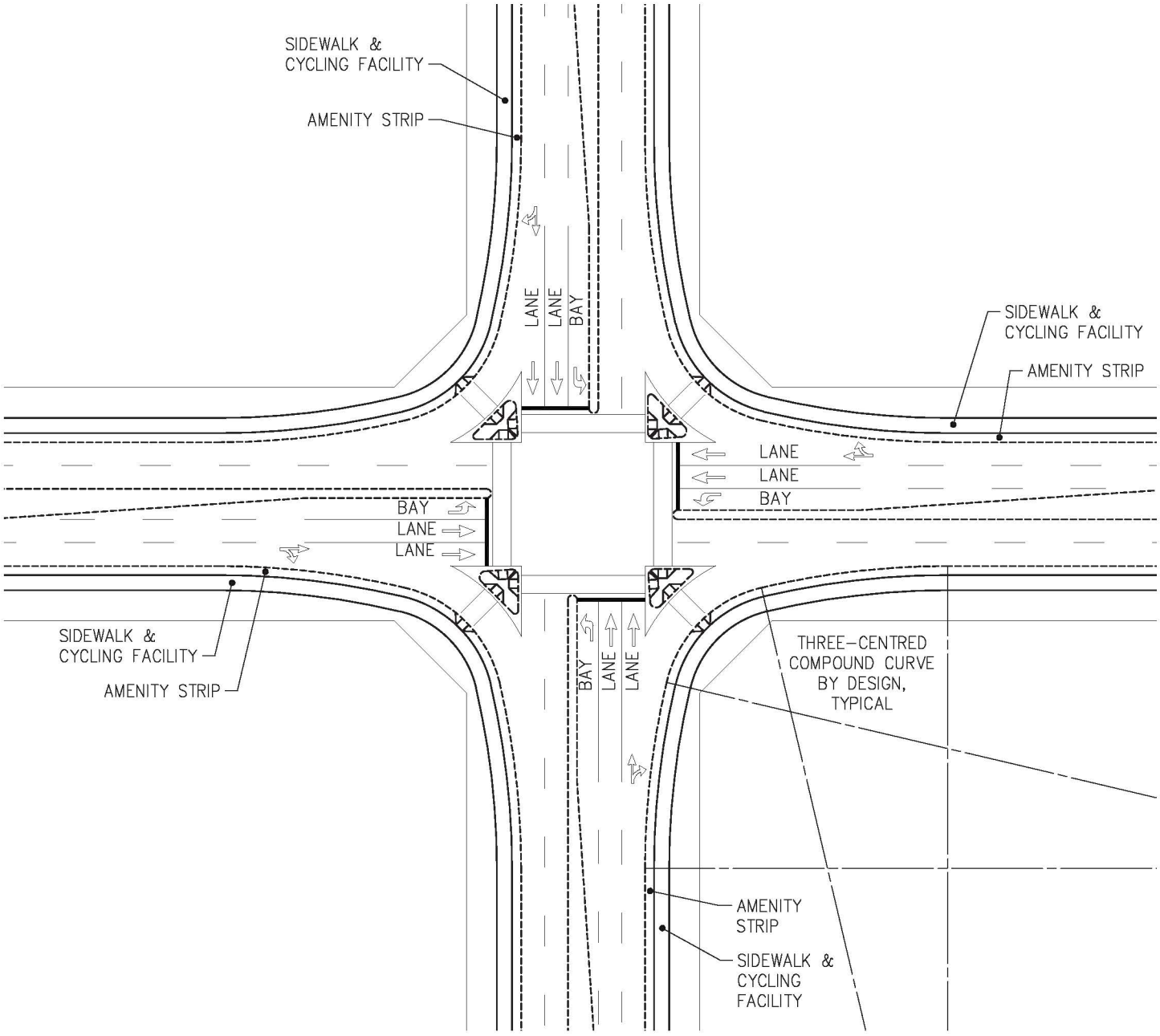
UNCHANNELIZED LAYOUT

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:750 VERT.

PLAN NO. 102-0029-068r001



NOTES:

1. PARKING NOT PERMITTED
2. RIGHT TURN RADIUS DETERMINED BY DESIGN VEHICLE. THREE CENTRED COMPOUND CURVES LIKELY REQUIRED – SEE DWG 102-0029-070.
3. PEDESTRIAN RAMPS REQUIRED IN ALL CROSSING DIRECTIONS.
4. ISLANDS MUST CONTAIN A MINIMUM 1.5m X 1.5m LANDING AREA FREE OF OBSTRUCTION FOR ACCESSIBILITY REQUIREMENT.
5. ROAD CROSS-SECTION TO BE DEVELOPED BASED ON TRANSPORTATION REQUIREMENTS AND LAND USE COMPATIBILITY.
6. MOUNTABLE MEDIAN TIPS

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-APR-20	DLH

City of Saskatoon

ARTERIAL TO ARTERIAL INTERSECTION

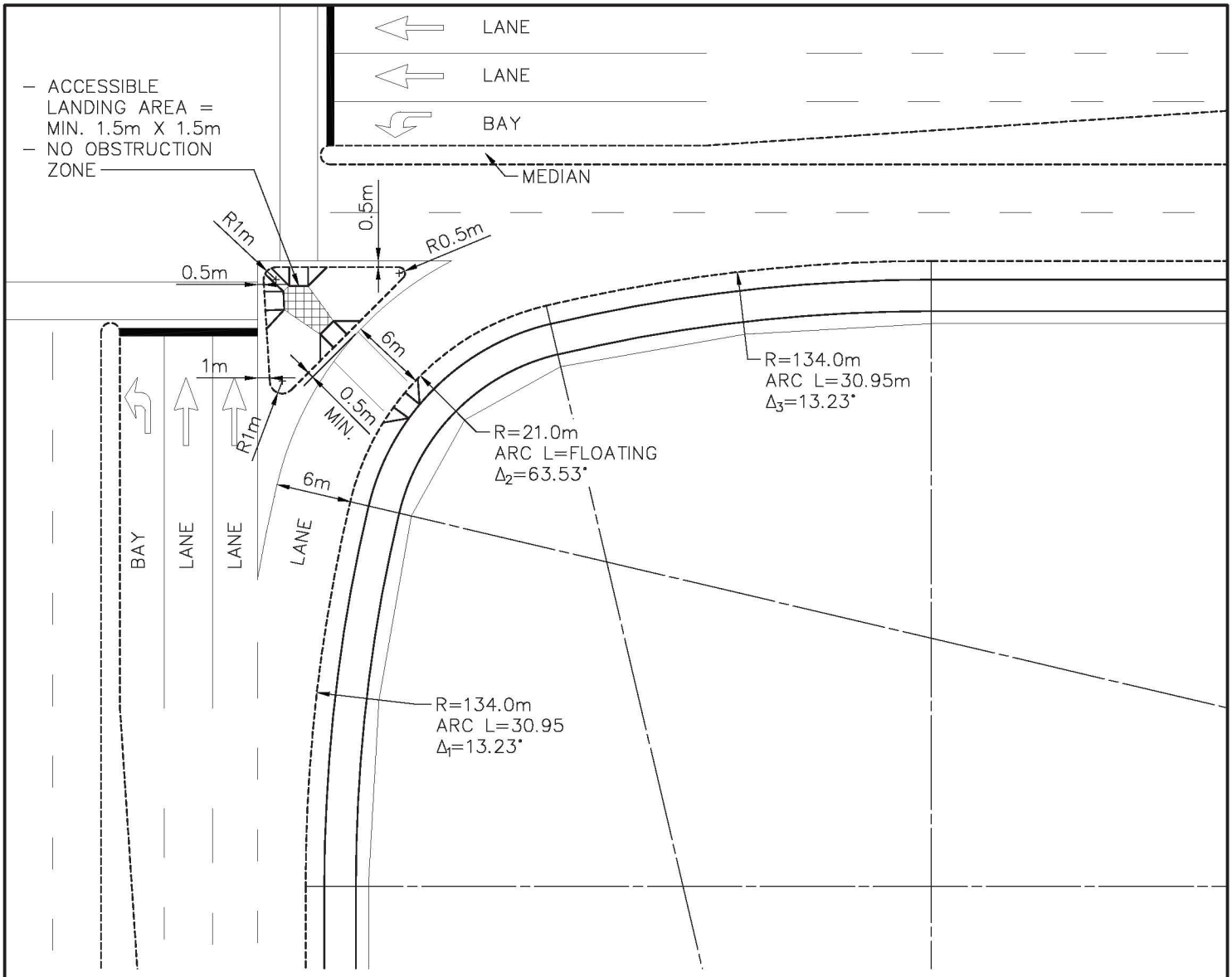
CHANNELIZED LAYOUT

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:1000 VERT.

PLAN NO. 102-0029-069r001



NOTES:

1. YIELD CONTROL TYPICALLY

DESIGN GUIDANCE:

1. SELECT APPROPRIATE DESIGN VEHICLE
2. ENSURE THAT GEOMETRICS WILL ACCOMMODATE THE SWEPT PATH OF THE SELECTED DESIGN VEHICLE.
3. THREE–CENTERED CURVES ARE PREFERRED: HOWEVER TWO–CENTERED CURVES OR TAPERED SIMPLE CURVES OR CURVES, SPIRALS MAY BE CONSIDERED DURING DESIGN

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020–APR–20	DLH

City of Saskatoon

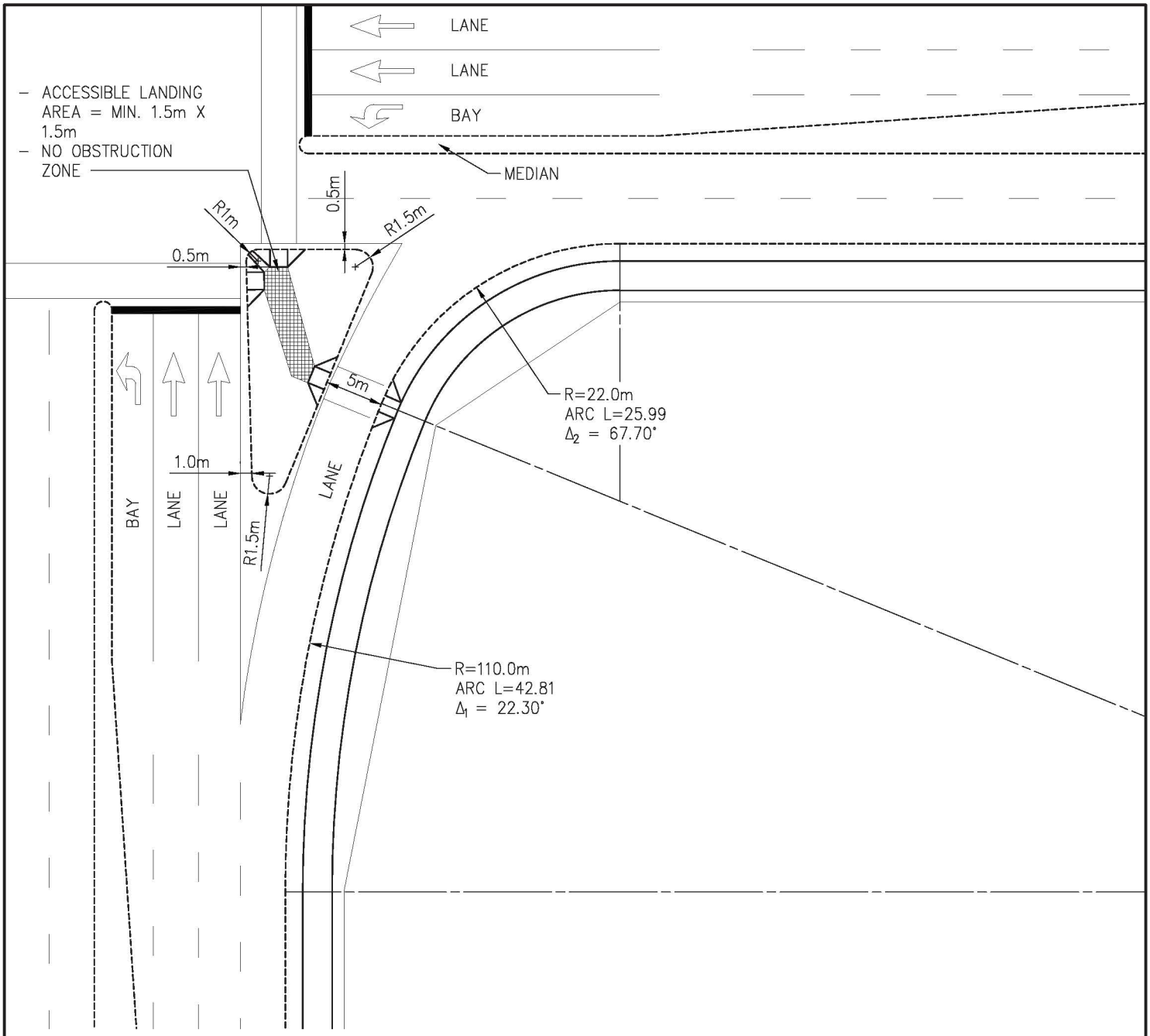
ARTERIAL CHANNELIZED INTERSECTION
45° ENTRY ANGLE
LANE DROP

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:500 VERT.

PLAN NO. 102–0029–070r001



NOTES:

1. YIELD CONTROL TYPICALLY
2. 60° HIGH ENTRY ANGLE DESIGN PREFERRED
3. HIGH ENTRY ANGLE CONFIGURATION SLOWS RIGHT TURN APPROACH SPEEDS & INCREASES VISIBILITY.

DESIGN GUIDANCE:

1. SELECT APPROPRIATE DESIGN VEHICLE
2. ENSURE THAT GEOMETRICS WILL ACCOMMODATE THE SWEPT PATH OF THE SELECTED DESIGN VEHICLE.

	PLAN DESCRIPTION/REVISION	DATE	BY
1	ORIGINAL STANDARD DRAWING	2020-APR-20	DLH

City of Saskatoon

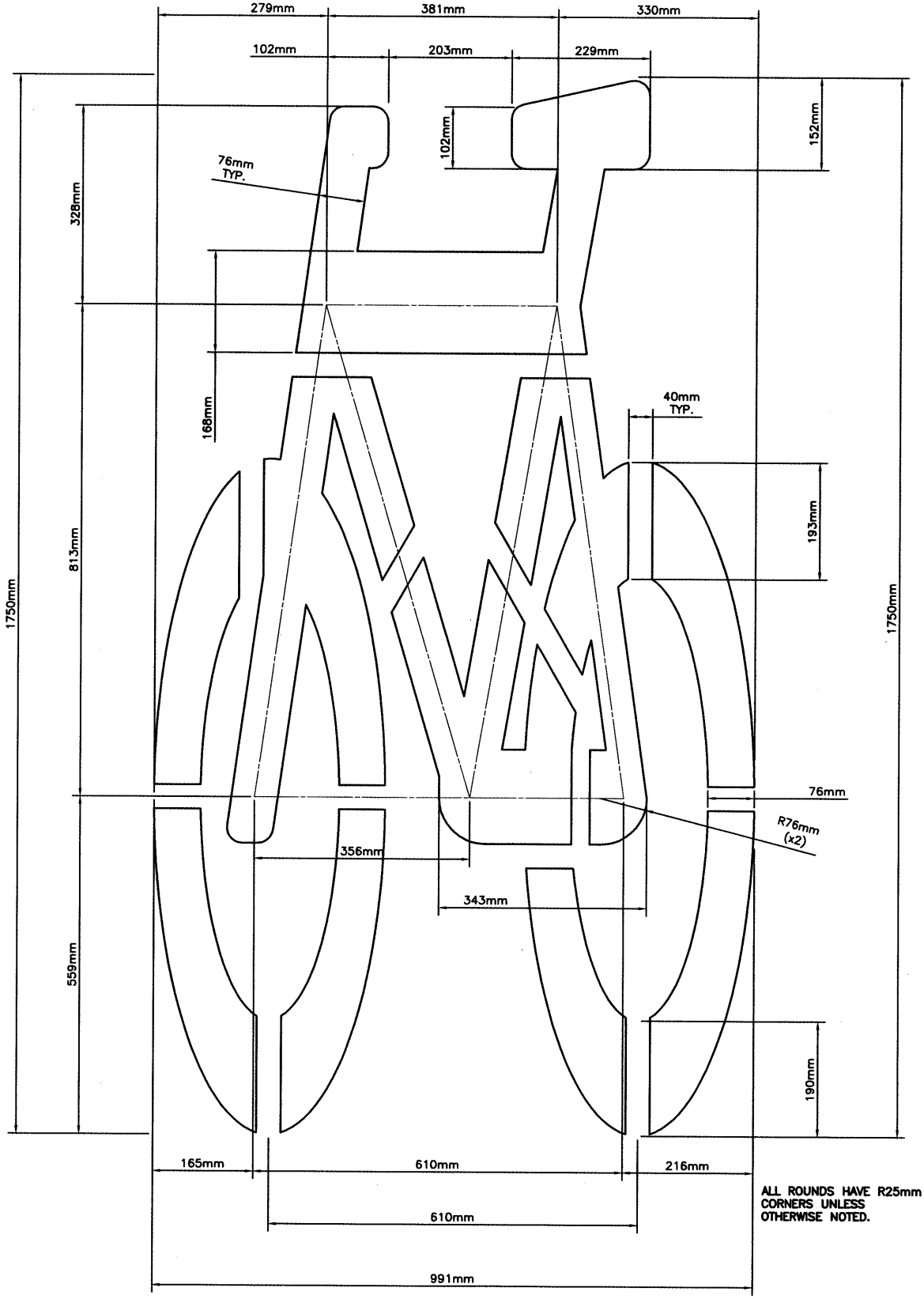
ARTERIAL CHANNELIZED INTERSECTION
HIGH ENTRY ANGLE
LANE DROP

APPROVALS

Chelsea Lanning (Apr 23, 2020)	
SIGNATURE: Chelsea Lanning	SIGNATURE: Matt Jurkiewicz
NAME: Apr 23, 2020	NAME: Apr 30, 2020
DATE SIGNED	DATE SIGNED

SCALES: HOR. 1:500 VERT.

PLAN NO. 102-0029-071r001



REVISIONS	
1	
2	INCREASE STENCIL TABS
3	

DRAWN BY EDH
DATE 2009-02-11
SCALES : HOR. NTS
VERT. ____

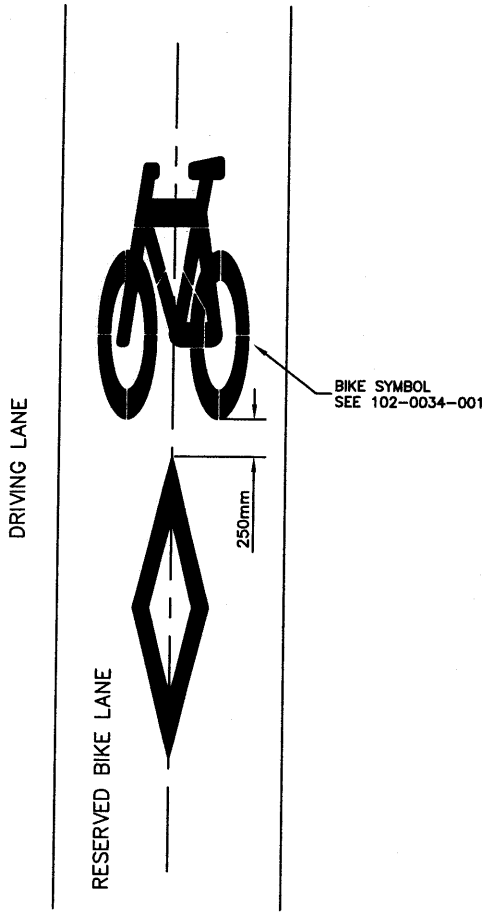
City of Saskatoon
Infrastructure Services Department

BIKE STENCIL
BIKE PAVEMENT MARKING

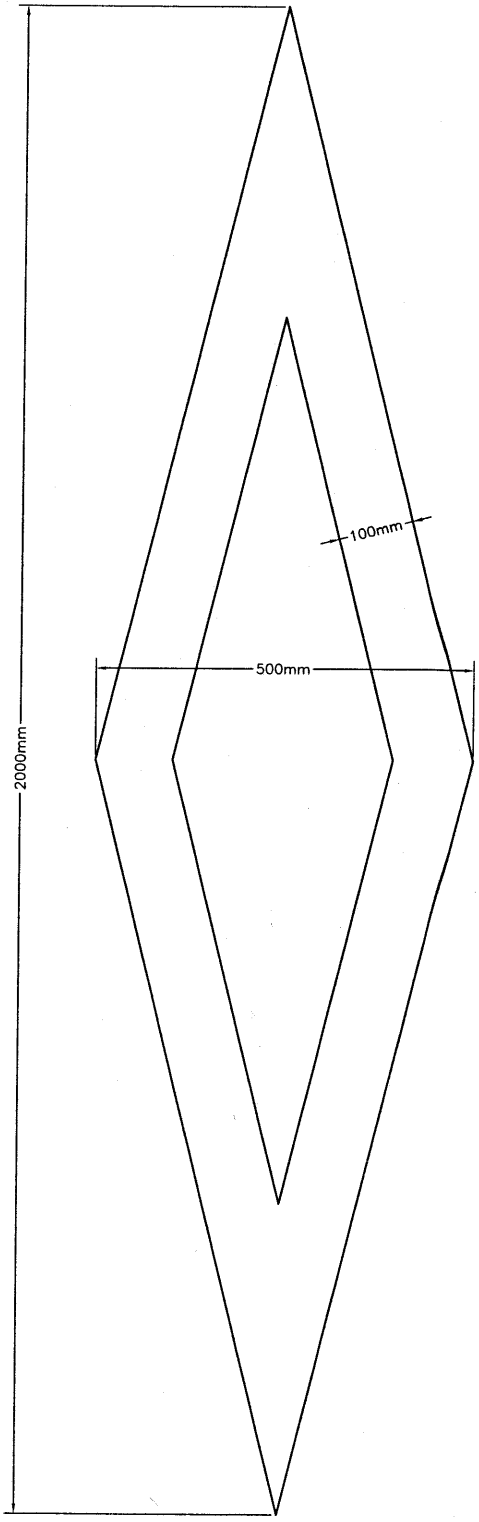
APPROVED

GENERAL MANAGER
Gord Lavé
ENGINEER
ENGINEER

PLAN NO. 102-0034-001r002



PAVEMENT MARKING LAYOUT
AS SEEN BY THE DRIVER & BICYCLIST



REVISIONS	
1	
2	
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DRAWN BY BAJ
DATE 2009-06-19
SCALES : HOR. NTS
VERT. ____

City of Saskatoon
Infrastructure Services Department

BIKE DIAMOND SYMBOL STENCIL
RESERVED BIKE LANE PAVEMENT MARKING

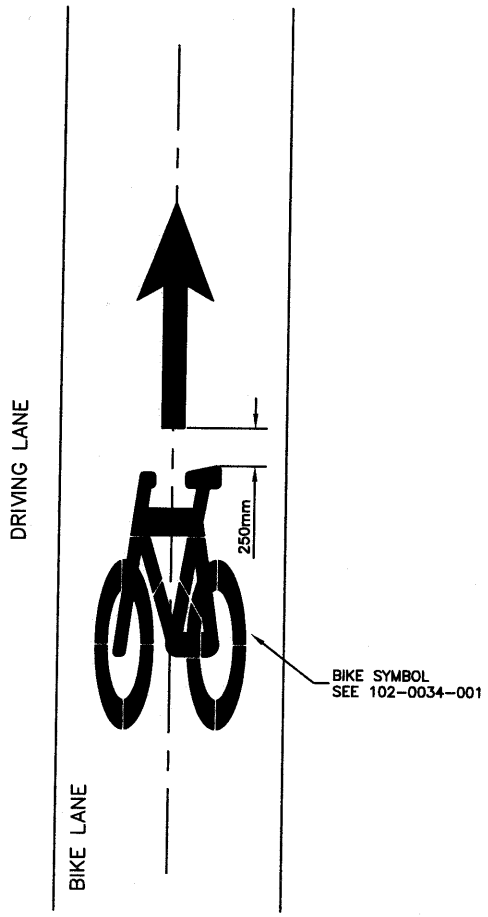
APPROVED

GENERAL MANAGER

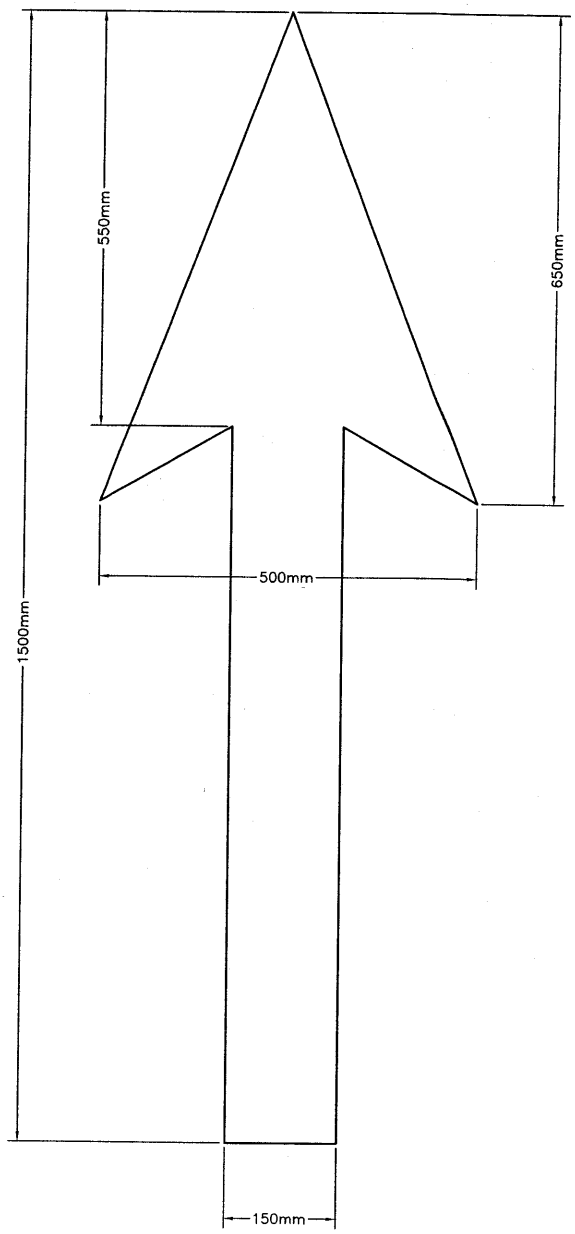
ENGINEER

ENGINEER

PLAN NO. 102-0034-002r001



PAVEMENT MARKING LAYOUT
AS SEEN BY THE DRIVER & BICYCLIST



REVISIONS	
1	
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DRAWN BY BAJ
DATE 2009-06-19
SCALES : HOR. NTS
VERT. ____

City of Saskatoon
Infrastructure Services Department

BIKE ARROW STENCIL
BIKE DIRECTION PAVEMENT MARKING

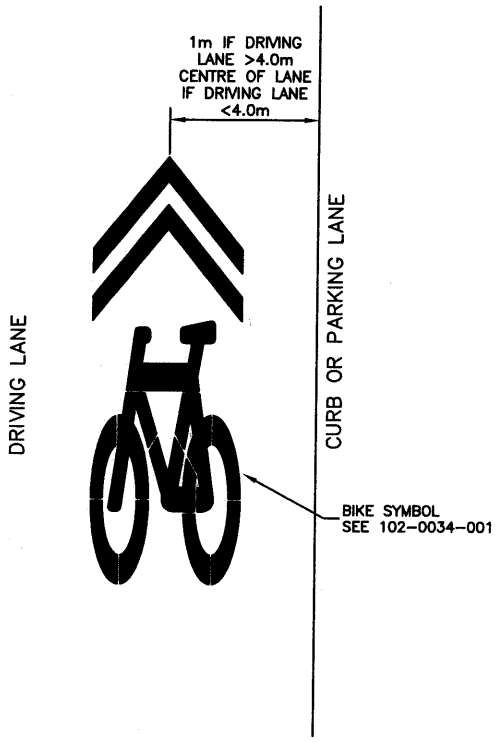
APPROVED

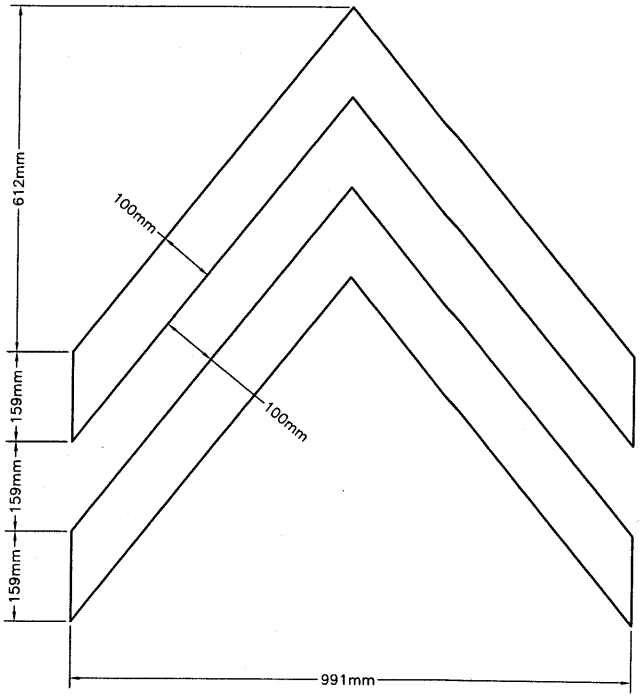
GENERAL MANAGER

ENGINEER

ENGINEER

PLAN NO. 102-0034-003r001





PAVEMENT MARKING LAYOUT
AS SEEN BY THE DRIVER & BICYCLIST

REVISIONS	
1	
2	
3	

DRAWN BY EDH
DATE 2009-02-11
SCALES : HOR. NTS
VERT. ———

City of Saskatoon
Infrastructure Services Department

SHARROW STENCIL
SHARED BIKE LANE PAVEMENT MARKING

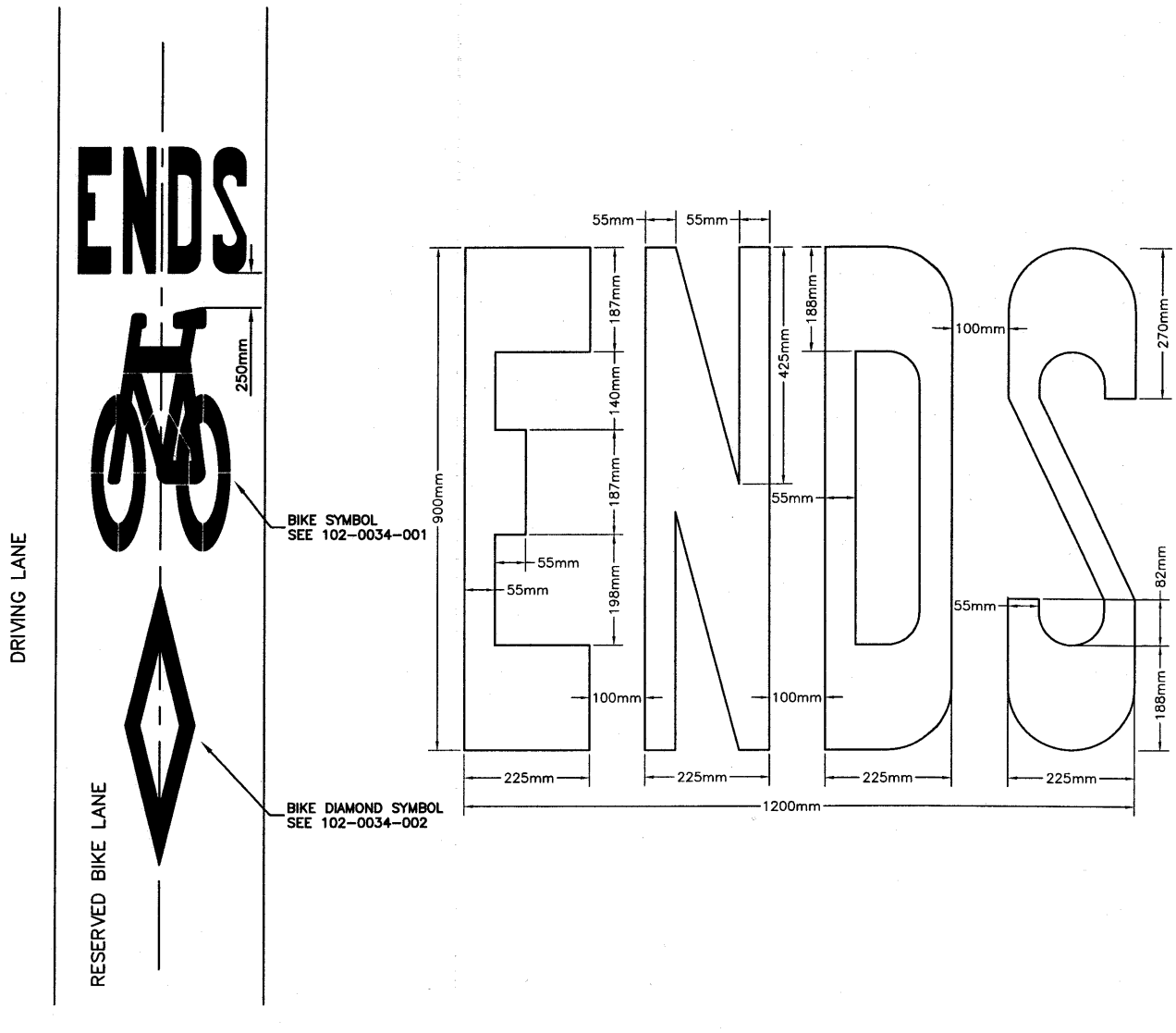
APPROVED

GENERAL MANAGER

ENGINEER

ENGINEER

PLAN NO. 102-0034-004r001



PAVEMENT MARKING LAYOUT
AS SEEN BY THE DRIVER & BICYCLIST

REVISIONS	
1	
2	
3	

DRAWN BY BAJ
DATE 2009-06-19
SCALES : HOR. NTS
VERT. ____

City of Saskatoon
Infrastructure Services Department

BIKE ENDS STENCIL
RESERVED BIKE LANE ENDS PAVEMENT MARKING

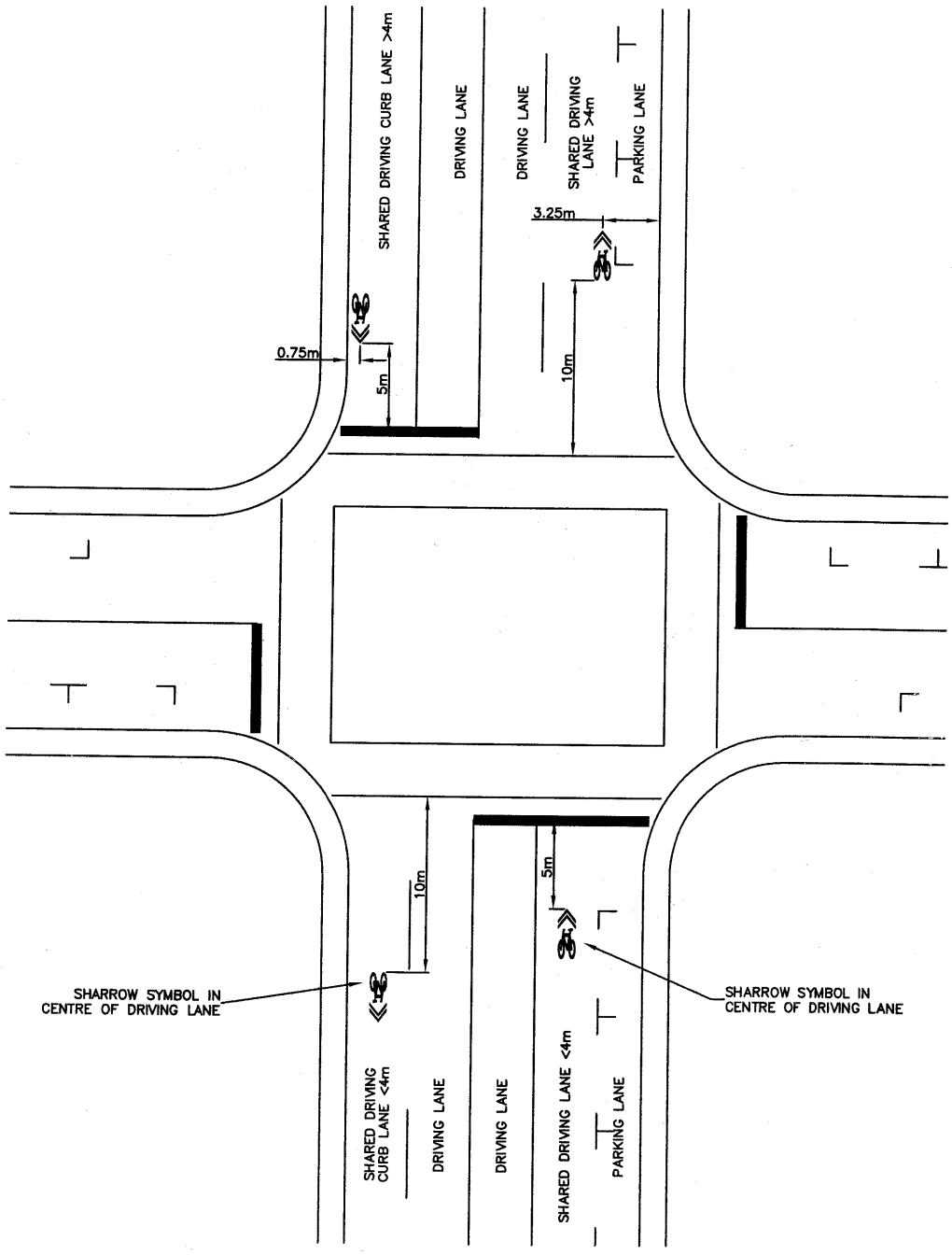
APPROVED

GENERAL MANAGER

ENGINEER

ENGINEER

PLAN NO. 102-0034-007r001



NOTE:
SHARROW TO BE PLACED DISTANCES FROM CROSSWALKS AND STOP BARS UNLESS SPECIFIED OTHERWISE
OR PLACED BESIDE WC-47 OR WC-48

SEE DWGS
102-0034-001 FOR BIKE SYMBOL
102-0034-004 FOR SHARROW SYMBOL

REVISIONS	
1	
2	
3	

DRAWN BY BAJ
DATE 2009-07-28
SCALES : HOR. NTS
VERT. ____

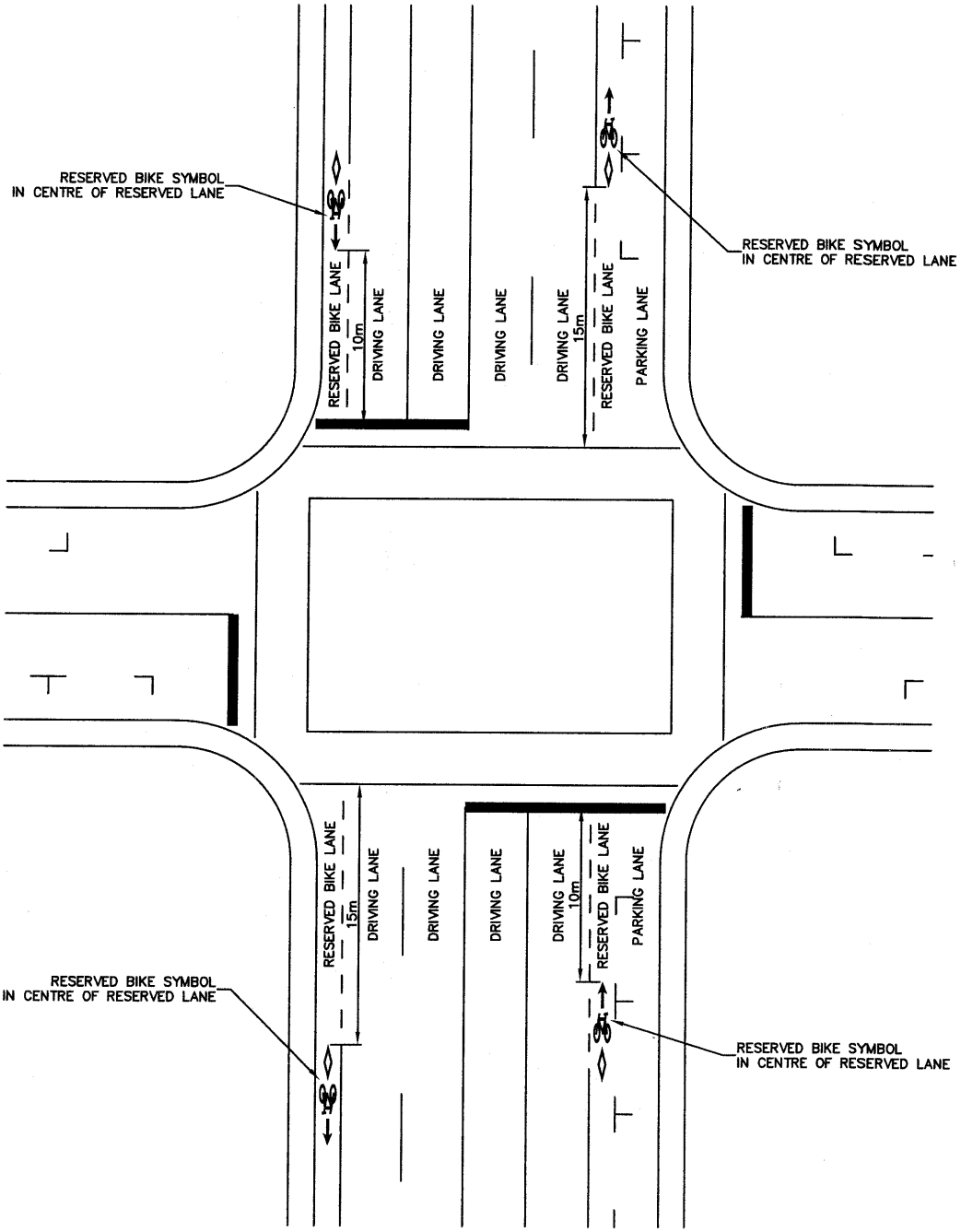
City of Saskatoon
Infrastructure Services Department

TYPICAL PAVEMENT MARKINGS
SHARED BIKE LANE
SHARROW SYMBOL PLACEMENT

APPROVED

GENERAL MANAGER Goran Lazic
ENGINEER
ENGINEER

PLAN NO. 102-0034-008r001



NOTE:
RESERVED BIKE SYMBOL TO BE PLACED
DISTANCES FROM CROSSWALKS AND
STOP BARS UNLESS SPECIFIED OTHERWISE OR
PLACED BESIDE RB-91 OR RB-92

SEE DWGS
102-0034-001 FOR BIKE SYMBOL
102-0034-002 FOR BIKE DIAMOND SYMBOL
102-0034-003 FOR BIKE ARROW SYMBOL

REVISIONS	
1	
2	
3	

DRAWN BY BAJ
DATE 2009-07-28
SCALES : HOR. NTS
VERT. ———

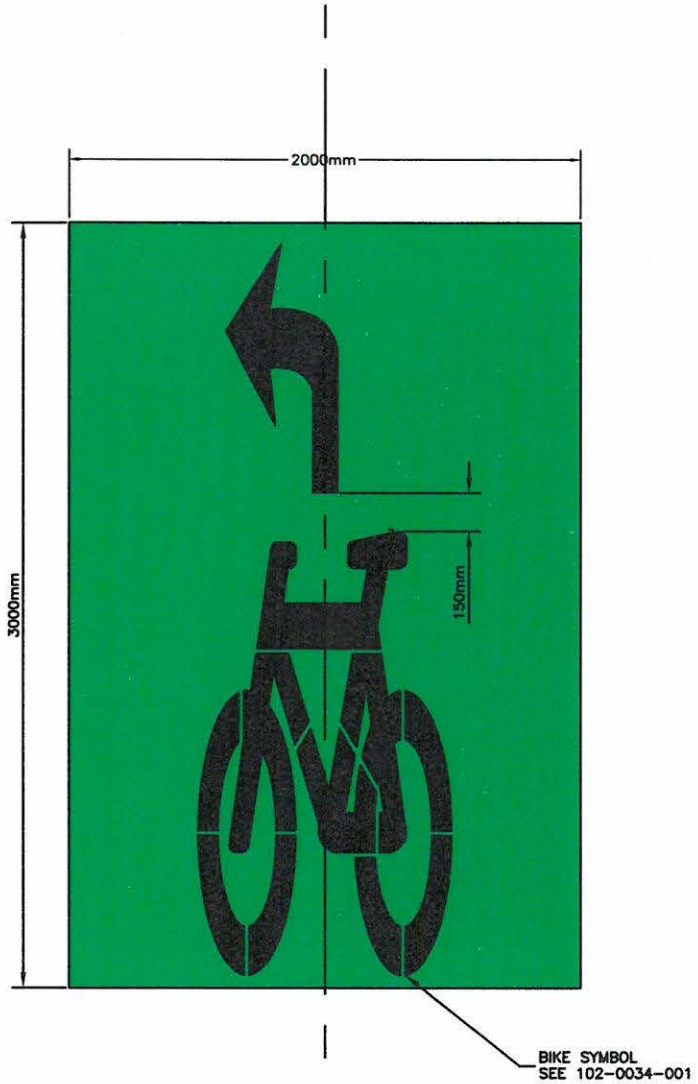
City of Saskatoon
Infrastructure Services Department

TYPICAL PAVEMENT MARKINGS
RESERVED BIKE LANE
RESEVED BIKE SYMBOLS PLACEMENT

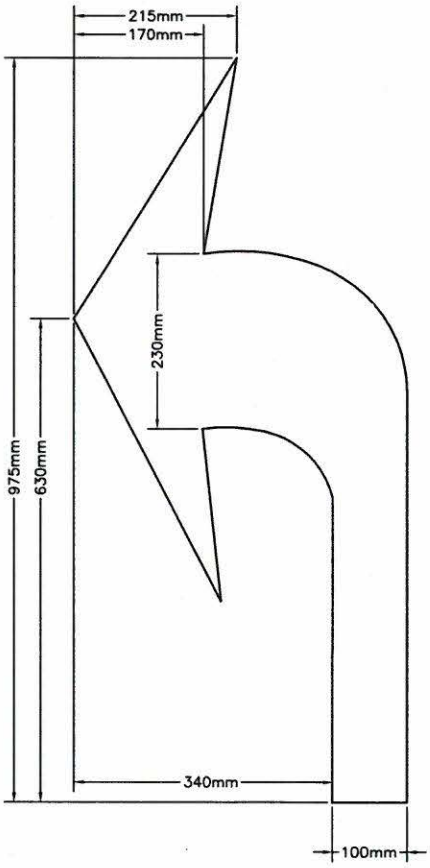
APPROVED

GENERAL MANAGER
ENGINEER
ENGINEER

PLAN NO. 102-0034-009r001



PAVEMENT MARKING LAYOUT
AS SEEN BY THE DRIVER & BICYCLIST



REVISIONS	
1	
2	
3	

DRAWN BY TJL
DATE 2016-04-01
SCALES : HOR. NTS
VERT. ____

City of Saskatoon
Infrastructure Services Department

TWO-STAGE TURN BIKE BOX
BIKE DIRECTION PAVEMENT MARKING

APPROVED

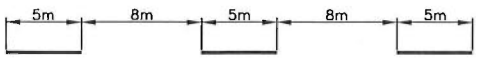
GENERAL MANAGER

ENGINEER

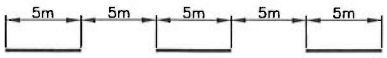
ENGINEER

PLAN NO. 102-0034-016r001

LONGITUDINAL



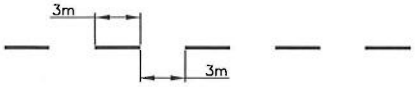
DASHED LANE LINE (100mm WIDE)



TURN BAY LINE (100mm WIDE)

SOLID LINE (100mm WIDE)

WIDE SOLID LINE (200mm WIDE)



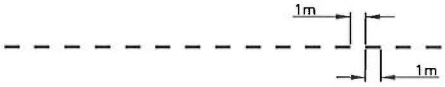
BUS BAY LINE (100mm WIDE)

GUIDING LINE (100mm WIDE)

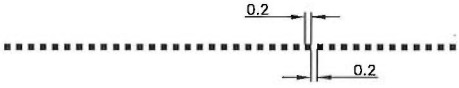
CONTINUITY LANE LINE (200mm WIDE)

ROUNDABOUT YIELD LINE – SINGLE LANE EXPRESS (WHITE)

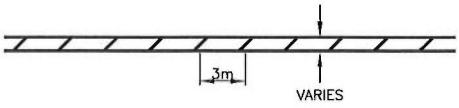
ROUNDABOUT YIELD LINE – MULTI LANE EXPRESS (WHITE)



DASHED BIKE LANE LINE (100mm WIDE)



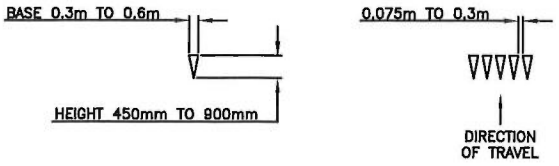
ELEPHANTS FEET BICYCLE CROSSING LINE (200mm WIDE)



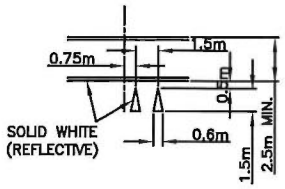
BIKE LANE BUFFER STRIP
- SOLID LINE 100mm WIDE
- DIAGONAL HATCHING 100mm WIDE
- DIAGONAL HATCHING ANGLED AT A 1:1 OR 2:1 RATIO

PLAN DESCRIPTION/REVISIONS		City of Saskatoon Transportation & Construction Department	APPROVED
4			Goran Lazic ENGINEER
3		LONGITUDINAL PAVEMENT MARKINGS	Mahdi Bandi ENGINEER
2			
1			
DRAWN BY SJK			PLAN NO. 102-0034-017r001
DATE 2019-NOV-29			
SCALE : HOR. 1:500 VERT. 1:500			

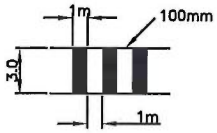
TRANSVERSE



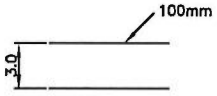
ADVANCE YIELD TO PEDESTRIAN LINE (WHITE)



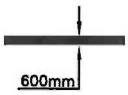
SPEED HUMP WARNING MARKINGS (WHITE)



ZEBRA CROSSWALKS (WHITE)



STANDARD CROSSWALKS (WHITE)



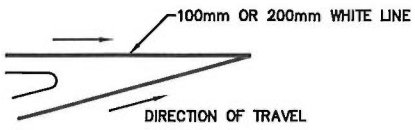
STOP BAR (WHITE)

PEDESTRIAN STOP BAR (WHITE)

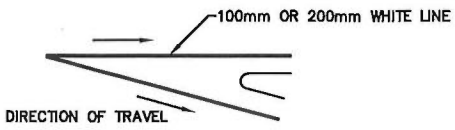
PLAN DESCRIPTION/REVISIONS		City of Saskatoon Transportation & Construction Department	APPROVED
4			
3			
2			
1		TRANSVERSE PAVEMENT MARKINGS	ENGINEER ENGINEER
DRAWN BY SJK DATE 2019-NOV-29			PLAN NO. 102-0034-018r001
SCALE : HOR. 1:500 VERT. 1:500			

WITHOUT DIAGONAL LINES

MERGING

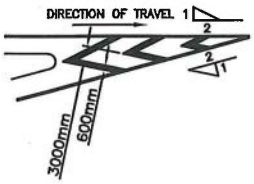


DIVERGING



WITH OPTIONAL DIAGONAL LINES

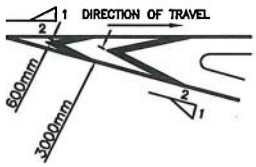
MERGING



CONVERGING GORE AREA MARKINGS

< 70km/hr 2000mm SPACING
≥ 70km/hr 3000mm SPACING

DIVERGING



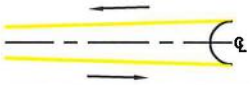
DIVERGING GORE AREA MARKINGS

< 70km/hr 2000mm SPACING
≥ 70km/hr 3000mm SPACING

NOTE: WHITE EDGE LINE AND FIRST THREE CHEVRONS TO BE PERMANENT MARKINGS.

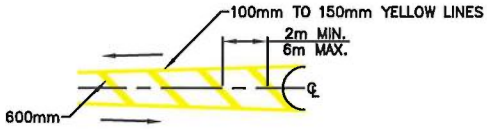
GORE AREA FOR OBJECT IN CENTRE OF ROADWAY

WITHOUT DIAGONAL LINES

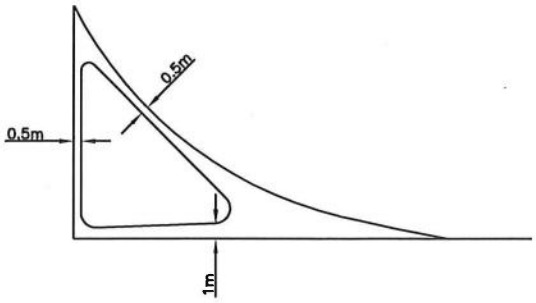


DETAIL OF APPROACH PAVEMENT MARKINGS

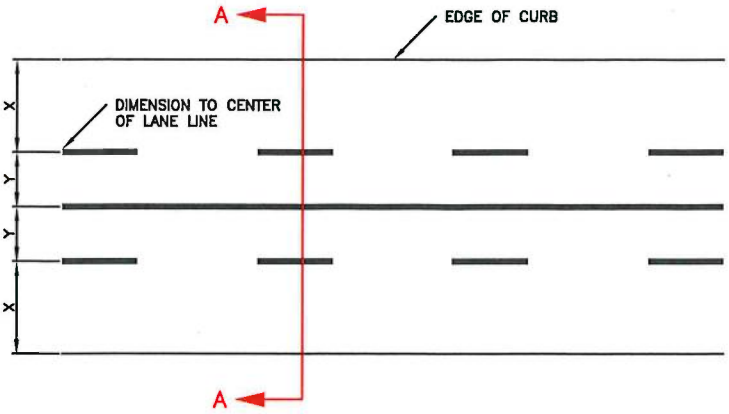
WITH OPTIONAL DIAGONAL LINES

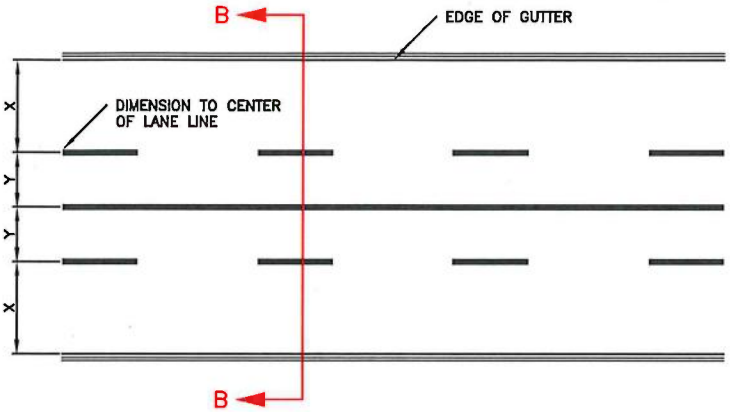


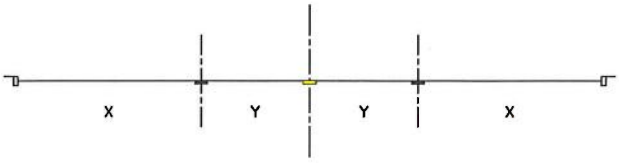
DETAIL OF APPROACH PAVEMENT MARKINGS



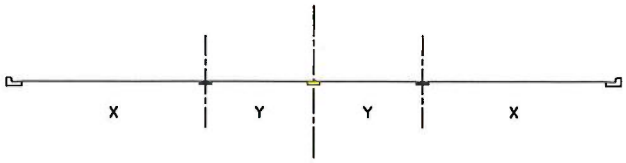
PLAN DESCRIPTION/REVISIONS		City of Saskatoon Transportation & Construction Department	APPROVED
4			
3			
2			
1			
DRAWN BY SJK DATE 2019-NOV-29		GORE MARKS	Goran Jazic ENGINEER Nathali Bandara ENGINEER
SCALE : HOR. 1:500 VERT. 1:500			PLAN NO. 102-0034-019r001





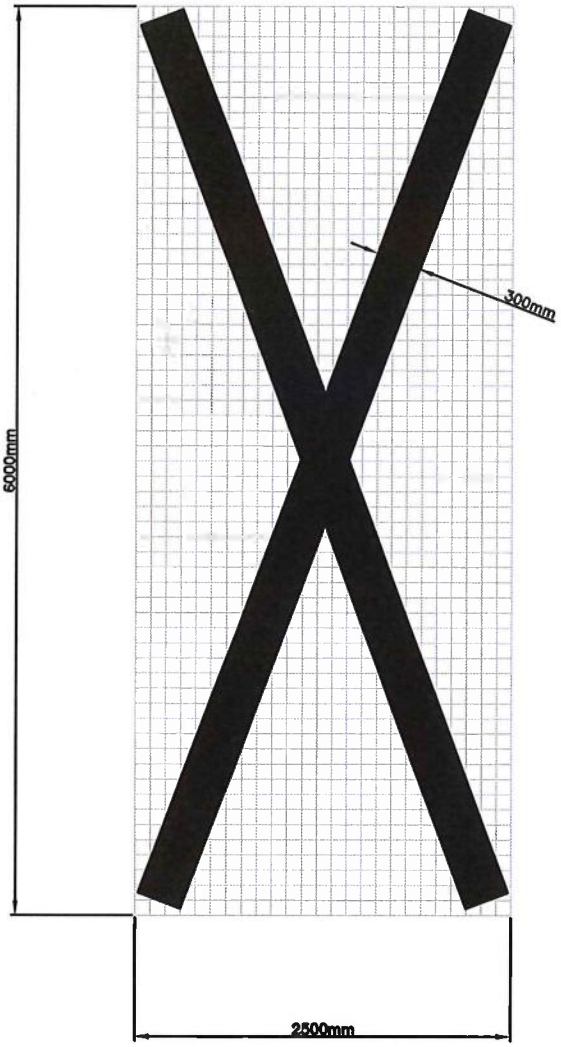


SECTION A–A

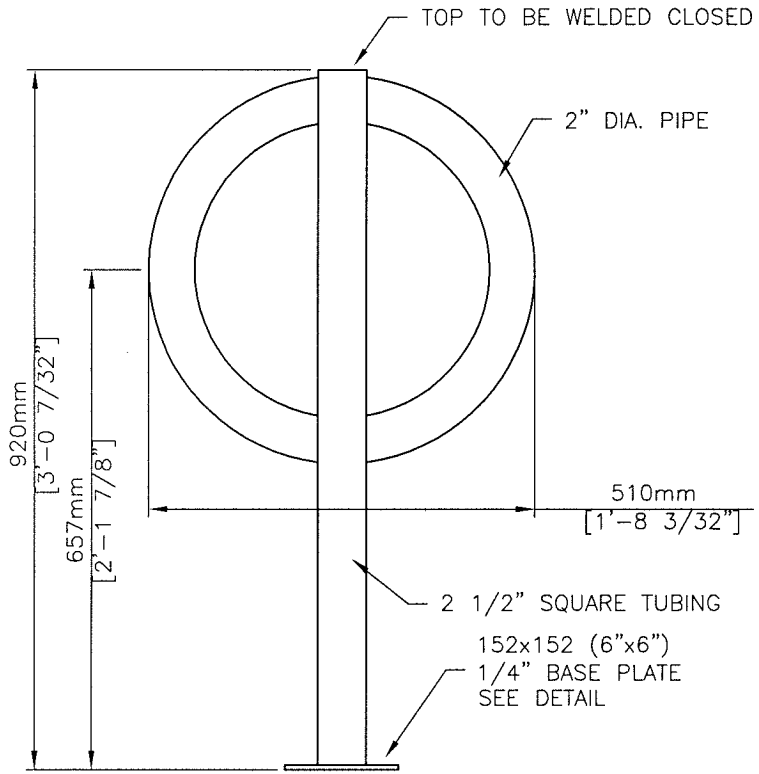


SECTION B–B

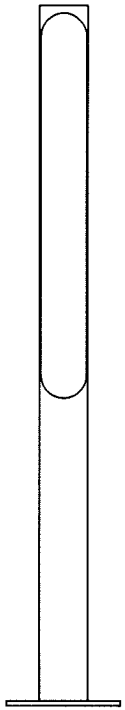
PLAN DESCRIPTION/REVISIONS		City of Saskatoon Transportation & Construction Department	APPROVED
4			
3			
2			
1			
DRAWN BY SJK DATE 2019-NOV-29		LANE LINE DIMENSIONING PRACTICE	ENGINEER ENGINEER
SCALE : HOR. 1:500 VERT. 1:500			PLAN NO. 102-0034-020r001



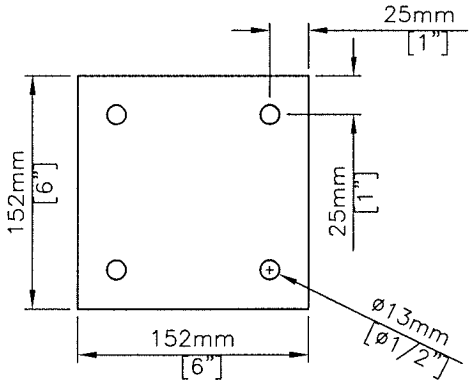
PLAN DESCRIPTION/REVISIONS		APPROVED
	City of Saskatoon Transportation & Construction Department	ENGINEER
DRAWN BY SJK DATE 2020-JAN-09	STANDARD SPECIFICATION RAILWAY CROSSING SYMBOL	ENGINEER
SCALE : HOR. NTS VERT. NTS		PLAN NO. 102-0034-021r001



FRONT VIEW



SIDE VIEW



BASE PLATE DETAIL
SCALE 1:5

NOTES:
1. BICYCLE STAND TO BE GALVANIZED

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	ISSUED FOR TENDER

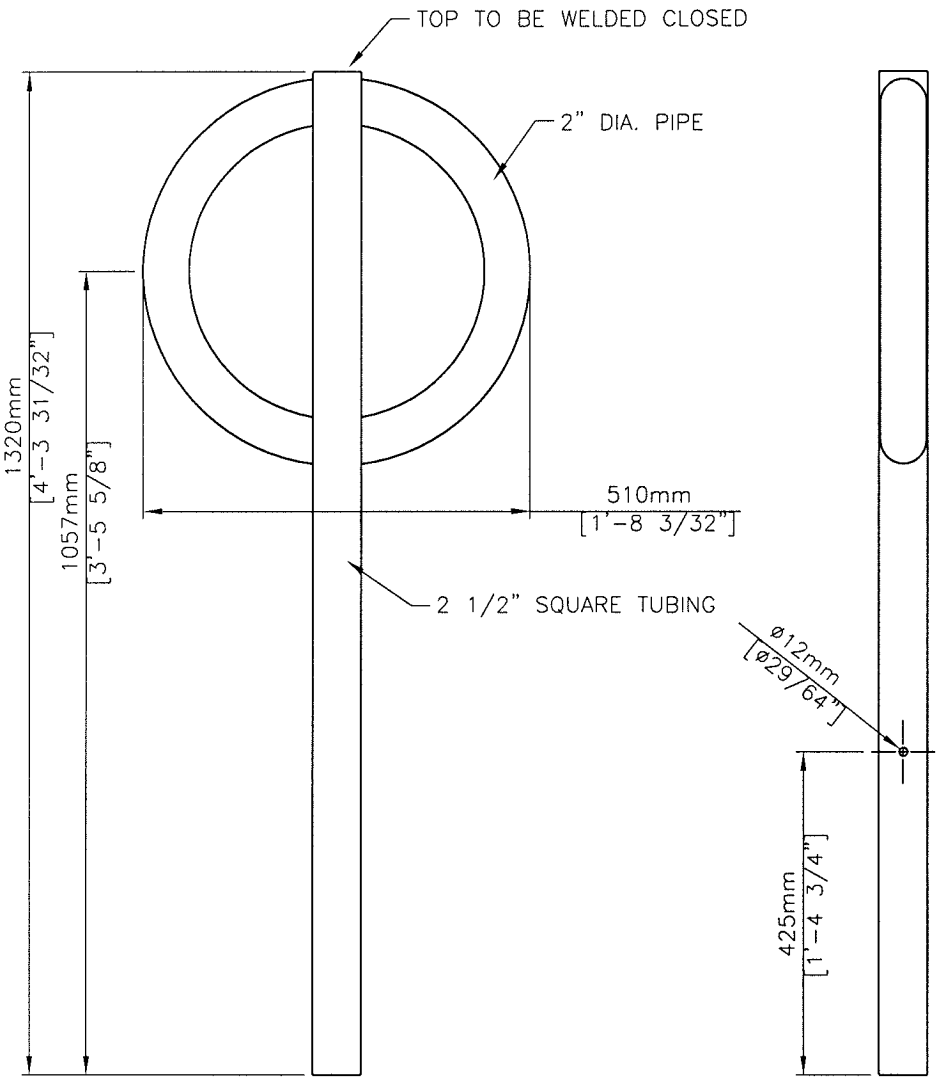
DRAWN BY BAJ
DATE 2012-FEB-15
SCALE : HOR. 1:10 VERT. _____

City of Saskatoon
Infrastructure Services Department

BICYCLE STAND
SURFACE MOUNT INSTALLATION

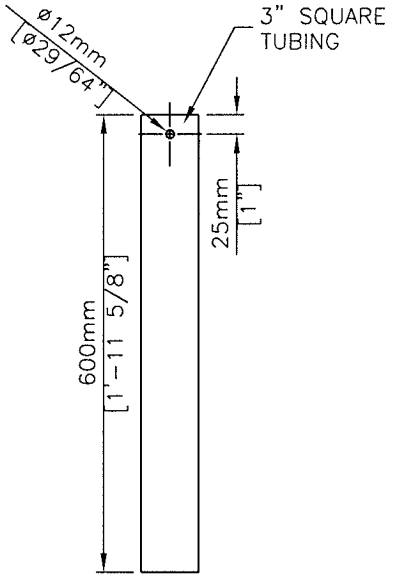
APPROVED
GENERAL MANAGER
ENGINEER
ENGINEER

PLAN NO. 102-0038-001r001

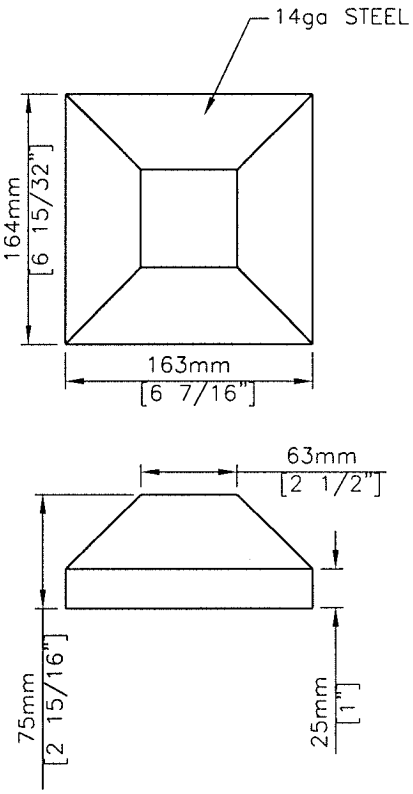


STAND FRONT VIEW

STAND SIDE VIEW



SLEEVE SIDE VIEW



COVER PLATE DETAIL
SCALE 1:5

NOTES:
1. BICYCLE STAND AND COVER PLATE TO BE GALVANIZED

PLAN DESCRIPTION/REVISIONS	
4	
3	
2	
1	ISSUED FOR TENDER

DRAWN BY BAJ
DATE 2012-FEB-15
SCALE : HOR. 1:10 VERT. _____

City of Saskatoon
Infrastructure Services Department

BICYCLE STAND
SLEEVE INSTALATION

APPROVED
GENERAL MANAGER
ENGINEER
ENGINEER

PLAN NO. 102-0038-002r001