GI INLETS AND OUTLETS
DESIGN NOTES AND GUIDANCE

PURPOSE:

THE FOLLOWING DETAILS PROVIDE DESIGN ALTERNATIVES FOR CONVEYING WATER INTO AND OUT OF ROADSIDE GREEN INFRASTRUCTURE SYSTEMS. CAD FILES OF THESE DETAILS CAN BE PROVIDED UPON REQUEST TO THE GREEN INFRASTRUCTURE IMPLEMENTATION BRANCH (GREEN.INFRASTRUCTURE@VANCOUVER.CA).

DESIGNER NOTES & GUIDELINES:

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED.
2. THE DESIGNER MUST SIZE INLETS AND OUTLETS PER DESIGN GUIDANCE INCLUDED IN THE GI DESIGN MANUAL.
3. GI SYSTEMS WITH INTERNAL CATCHBASINS CONNECTED TO MUNICIPAL SEWERS SHOULD BE DESIGNED TO ACCOMMODATE THE FULL DESIGN FLOW OF THE RECEIVING SEWER.
4. INLETS FOR GI SYSTEMS THAT ARE ARE NOT DIRECTLY CONNECTED TO MUNICIPAL SEWER SYSTEMS SHOULD BE DESIGNED TO ACCOMMODATE THE PEAK FLOW OF THE 24hr 48mm GI DESIGN STORM.
5. ALL GI INLETS SHOULD BE DESIGNED WITH A SAFETY FACTOR OF 1.5.

STANDARD DRAWING DESCRIPTIONS		
2.1.	STRAIGHT STEEL INLET COVER	THE STRAIGHT STEEL CURB INLET COVER IS A STEEL COVER THAT PROVIDES A CONTINUOUS, FLUSH TOP-OF-CURB SURFACE OVER A CURB CUT. GI2.1 AND GI2.2 ARE OFTEN PAIRED WITH GI4.5.
2.2.	CURVED STEEL INLET COVER	THE CURVED STEEL CURB INLET IS A MODIFICATION OF THE STRAIGHT STEEL COVER INLET USED TO COVER CURB CUTS ON A ROADWAY BULGE.
2.3.	OPEN CURB CUT INLET	GI2.3. SHOWS THE CURB AND GUTTER GEOMETRY FOR A ROADSIDE CURB CUT INLET WITHOUT A STEEL COVER. INTENDED FOR LOWER TRAFFIC AREAS OR AREAS WITHOUT STREET PARKING.
2.4.	COVERED CURB CUT INLET	GI2.4 IS A SIMILAR DESIGN TO GI2.3 BUT WITH A STEEL INLET COVER SUCH AS THOSE SHOWN IN GI2.1 AND GI2.2. THIS TYPE OF CURB INLET MAY ALSO BE PAIRED WITH A SEDIMENT CONTROL FEATURE SUCH AS THOSE SHOWN IN GI4.4 AND GI4.5.
2.5.	PRETREATMENT SEDIMENT PAD	PRETREATMENT SEDIMENT PADS ARE PLACED DOWNSTREAM OF A CURB CUT INLET AND ARE USED TO PREVENT EROSION OF BIORETENTION MEDIA AND REDUCE SEDIMENT ENTERING INTO GREEN INFRASTRUCTURE ASSETS. THEY MAY BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE CURB CUT OPENING OF BIORETENTION SYSTEMS OR TREE TRENCHES. INTENDED FOR SMALLER DRAINAGE AREAS, SUCH AS THE DOWNSTREAM INLETS OF A BIORETENTION SYSTEM.
2.6.	PRETREATMENT SEDIMENT BASIN	PRETREATMENT SEDIMENT BASINS HAVE A SIMILAR FUNCTION AND ARE PLACED IN SIMILAR LOCATIONS TO SEDIMENT PADS, BUT THEY ARE INTENDED FOR LARGER CONTRIBUTING DRAINAGE AREAS AND HIGHER SEDIMENT LOADS, SUCH AS THE MOST UPSTREAM INLET OF A BIORETENTION SYSTEM.

DESIGNER CHECKLIST (MUST SPECIFY, AS APPLICABLE):

- ☐ INLET WIDTH AND LENGTH
- ☐ CROSS-SLOPE AND LONGITUDINAL SLOPE
- ☐ INLET CAPACITY DURING SEWERS DESIGN STORM (DEPTH OF FLOW AT DESIGN STORM PEAK FLOW)
- ☐ DOWNSTREAM PRETREATMENT COMPONENTS

LAYOUT REQUIREMENTS:

1. REFER TO THE CITY OF VANCOUVER ACCESSIBILITY STRATEGY, STANDARD DRAWINGS AND CONSTRUCTION SPECIFICATIONS FOR RIGHT-OF-WAY, PARKING SPACE, AND ACCESSIBLE PATH REQUIREMENTS.
2. LOCATE CURB CUTS AND GUTTER MODIFICATIONS TO AVOID CONFLICTS WITH ACCESSIBILITY REQUIREMENTS (E.G., LOCATE OUTSIDE OF CROSSWALKS).

CITY OF VANCOUVER

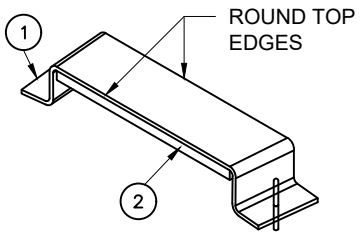
STANDARD DETAIL DRAWINGS

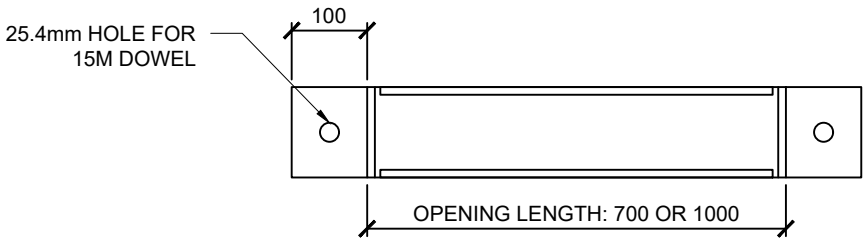
ENGINEERING SERVICES - VANCOUVER, B.C.

DRAWING No.

GI2.1

700mm INLET PARTS LIST						
ITEM	QTY	PART #	MATERIAL	LENGTH	WIDTH	HEIGHT
(1)	1	STEEL CURB INLET	12.7mm THK. 300W STEEL	1337.1	150	250
(2)	2	SUPPORT STRIP	12.7mm THK. 300W STEEL	649.2	12.7	40
1000mm INLET PARTS LIST						
(1)	1	1000mm STEEL CURB INLET	12.7mm THK. 300W STEEL	1637.1	150	250
(2)	2	STEEL STRIP FOR 1000mm INLET	12.7mm THK. 300W STEEL	949.2	12.7	60





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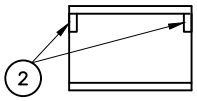

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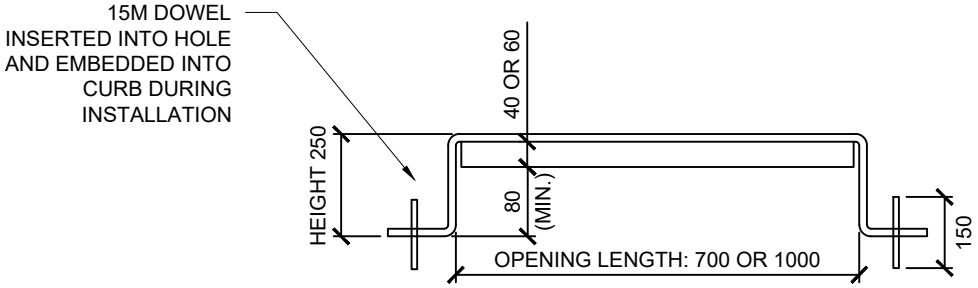


FRONT

NOTES:

1. ALL DIMENSIONS IN MILLIMETERS.
2. ENSURE NO SHARP EDGES.
3. STEEL INLET COVER TO BE 20mm GREATER THAN THE HEIGHT OF THE CURB FACE TO ACCOUNT FOR GUTTER PAN DEPRESSION.
4. DESIGN CRITERIA, APPLIED LOADING CONSTRAINTS, AND MAXIMUM VERTICAL POINT LOADING FOR VARIOUS COVER WIDTHS MAY BE PROVIDED UPON REQUEST.
5. PROVIDE STEEL IN CONFORMANCE WITH CITY OF VANCOUVER CONSTRUCTION SPECIFICATIONS.
6. STRUCTURAL MEMBER SIZING AND ORIENTATION OF ELEMENT TO BE CONFIRMED BY THE ENGINEER.
7. SUPPORT STRIP HEIGHT MAY BE INCREASED TO 80mm IN AREAS WITH A HIGH LIKELIHOOD OF VEHICLE LOADING
8. STEEL INLET COVERS MUST BE PURCHASED FROM THE CITY OF VANCOUVER - MAINTENANCE AND ENGINEERING SUPPORT TEAM

MAXIMUM DESIGN STORM PEAK FLOW (m^3/s)	OPENING LENGTH (mm)	SUPPORT STRIP LENGTH (mm)	SUPPORT STRIP HEIGHT (mm)
0.008	700	650	40
0.010	1000	950	60

REV.	REVISION DATE	APPROVED

INLETS AND OUTLETS

STRAIGHT STEEL INLET COVER

ISSUE DATE: FEBRUARY 2026

APPROVED BY: N. MEAD-FOX

CITY OF VANCOUVER

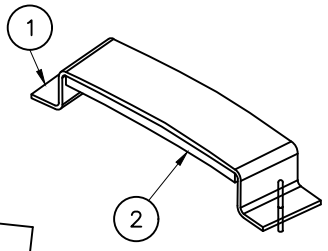
STANDARD DETAIL DRAWINGS

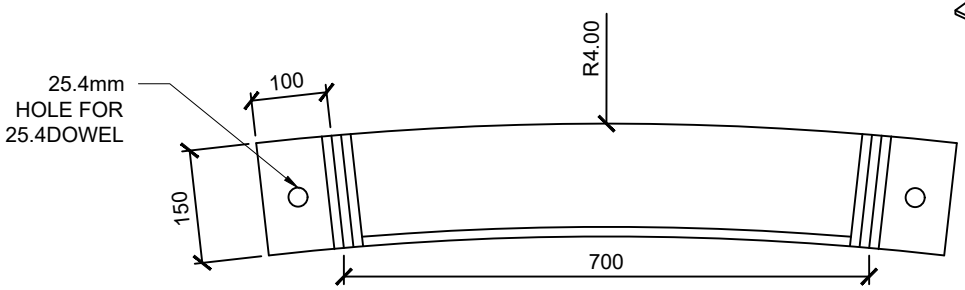
ENGINEERING SERVICES - VANCOUVER, B.C.

DRAWING No.

GI2.2

700mm INLET PARTS LIST						
ITEM	QTY	PART #	MATERIAL	LENGTH	WIDTH	HEIGHT
(1)	1	STEEL CURB INLET	12.7mm THK. 300W STEEL	1360.7	150	250
(2)	1	SUPPORT STRIP	12.7mm THK. 300W STEEL	650.9	12.7	40
1000mm INLET PARTS LIST						
(1)	1	1000mm STEEL CURB INLET	12.7mm THK. 300W STEEL	1660.7	150	250
(2)	1	STEEL STRIP FOR 1000mm INLET	12.7mm THK. 300W STEEL	950.9	12.7	60





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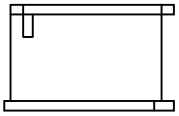

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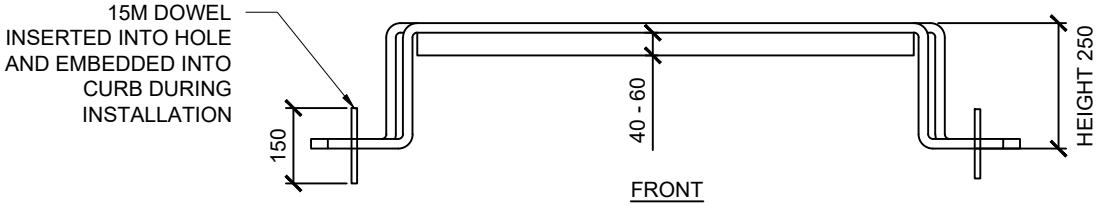


FRONT

NOTES

1. ALL DIMENSIONS IN MILLIMETERS.
2. ENSURE NO SHARP EDGES.
3. STEEL INLET COVER ARE TO BE 20mm GREATER THAN THE HEIGHT OF THE CURB FACE TO ACCOUNT FOR GUTTER PAN DEPRESSION.
4. DESIGN CRITERIA, APPLIED LOADING CONSTRAINTS, AND MAXIMUM VERTICAL POINT LOADING FOR VARIOUS COVER WIDTHS MAY BE PROVIDED UPON REQUEST.
5. PROVIDE STEEL IN CONFORMANCE WITH CITY OF VANCOUVER CONSTRUCTION SPECIFICATIONS.
6. STRUCTURAL MEMBER SIZING AND ORIENTATION OF ELEMENT TO BE CONFIRMED BY THE ENGINEER.
7. SUPPORT STRIP HEIGHT MAY BE INCREASED TO 80mm IN AREAS WITH A HIGH LIKELIHOOD OF VEHICLE LOADING
8. STEEL INLET COVERS MUST BE PURCHASED FROM THE CITY OF VANCOUVER - MAINTENANCE AND ENGINEERING SUPPORT TEAM

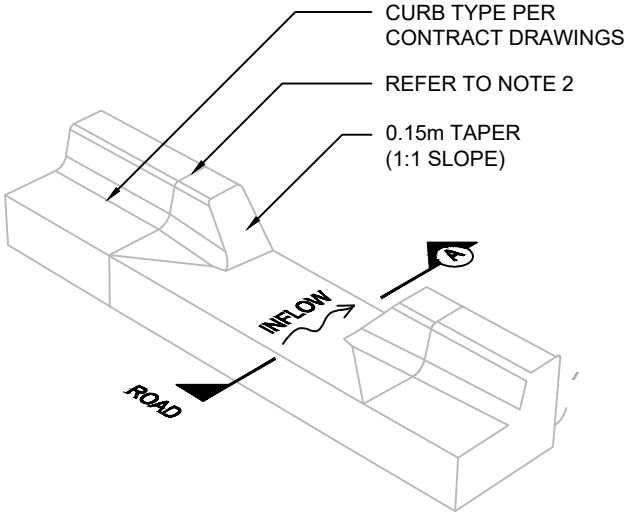
MAXIMUM DESIGN STORM PEAK FLOW (m^3/s)	OPENING LENGTH (mm)	SUPPORT STRIP LENGTH (mm)	SUPPORT STRIP HEIGHT (mm)
0.008	700	650	40
0.010	1000	950	60

REV.	REVISION DATE	APPROVED

INLETS AND OUTLETS
CURVED STEEL INLET COVER

ISSUE DATE: FEBRUARY 2026

APPROVED BY: N. MEAD-FOX



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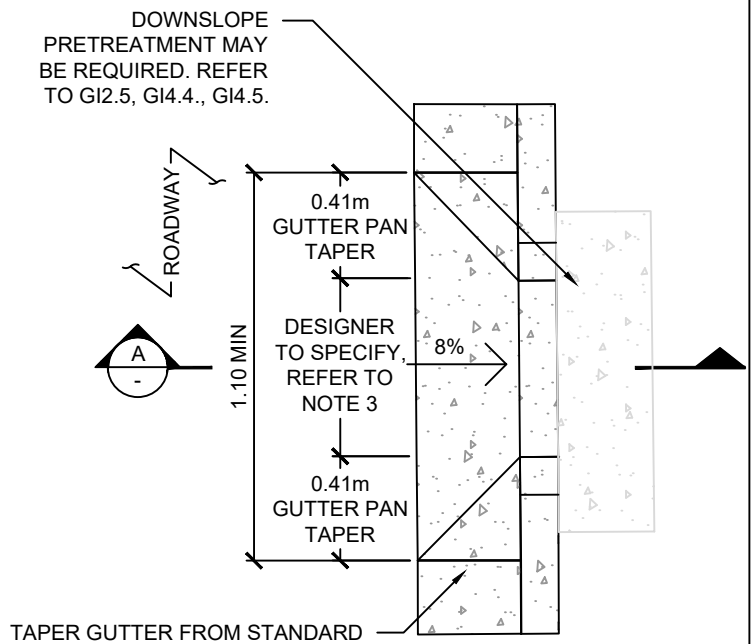

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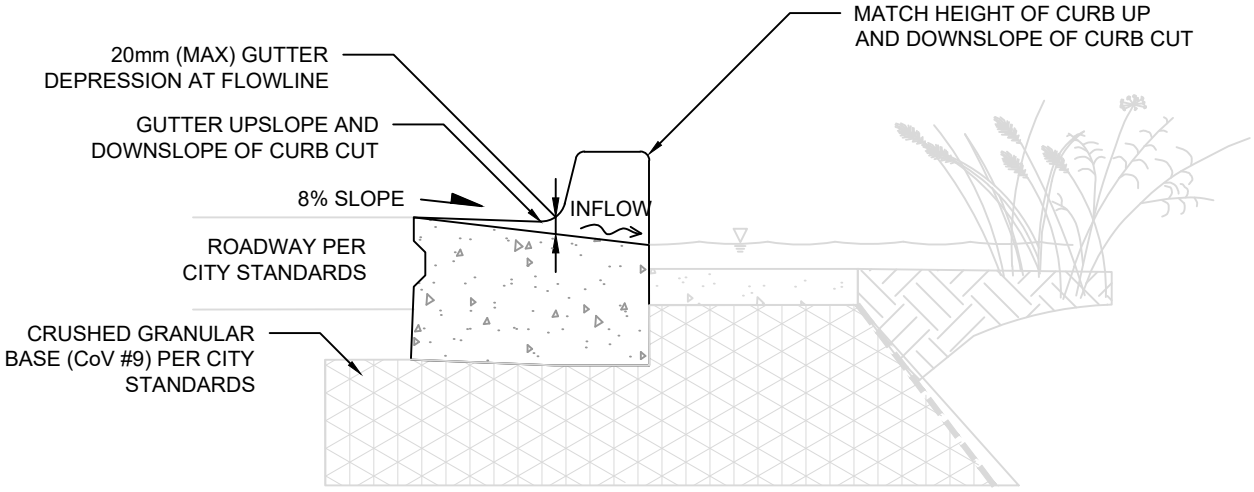


SECTION A

NOTES

1. ALL MATERIAL AND WORKMANSHIP FOR CURB CUTS SHALL CONFORM TO CITY OF VANCOUVER STANDARD SPECIFICATIONS AND GUIDELINES
2. IF CURB CUT CANNOT BE INSTALLED AT CURB CONTROL JOINTS, BOND NEW CURB AND GUTTER TO EXISTING CURB AND GUTTER WITH EPOXY AND DOWEL CONNECTION
3. REFER TO ENGINEERING DESIGN MANUAL FOR GUIDANCE ON DESIGNING INLET CURB CUT WIDTH.
4. REFER TO GI2.5, GI4.4 AND GI4.5 FOR PRETREAMENT SEDIMENT PAD DETAILS

REV.	REVISION DATE	APPROVED

INLETS AND OUTLETS
OPEN CURB CUT INLET

ISSUE DATE: FEBRUARY 2026

APPROVED BY: N. MEAD-FOX

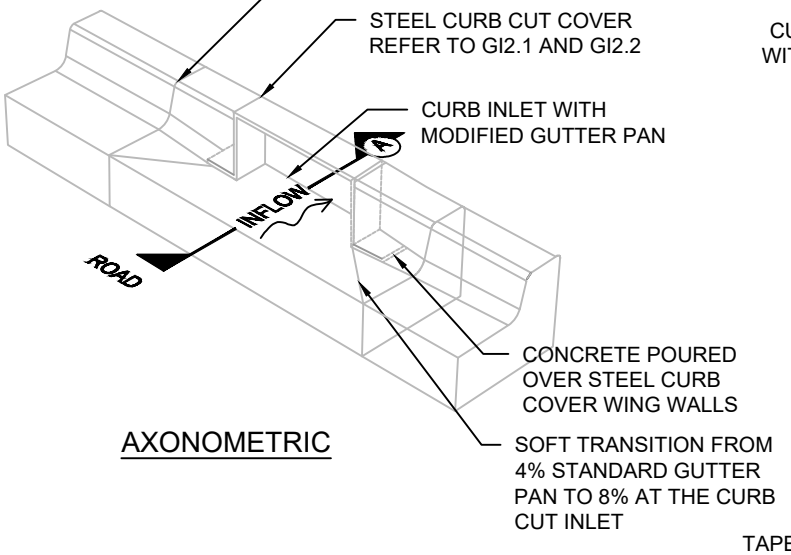
CITY OF VANCOUVER

STANDARD DETAIL DRAWINGS

ENGINEERING SERVICES - VANCOUVER, B.C.

DRAWING No.

GI2.4



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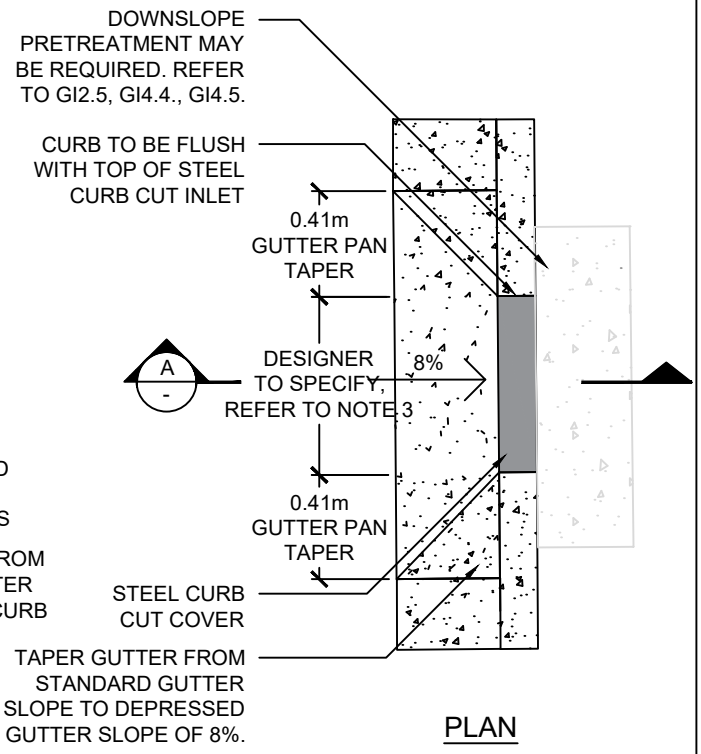

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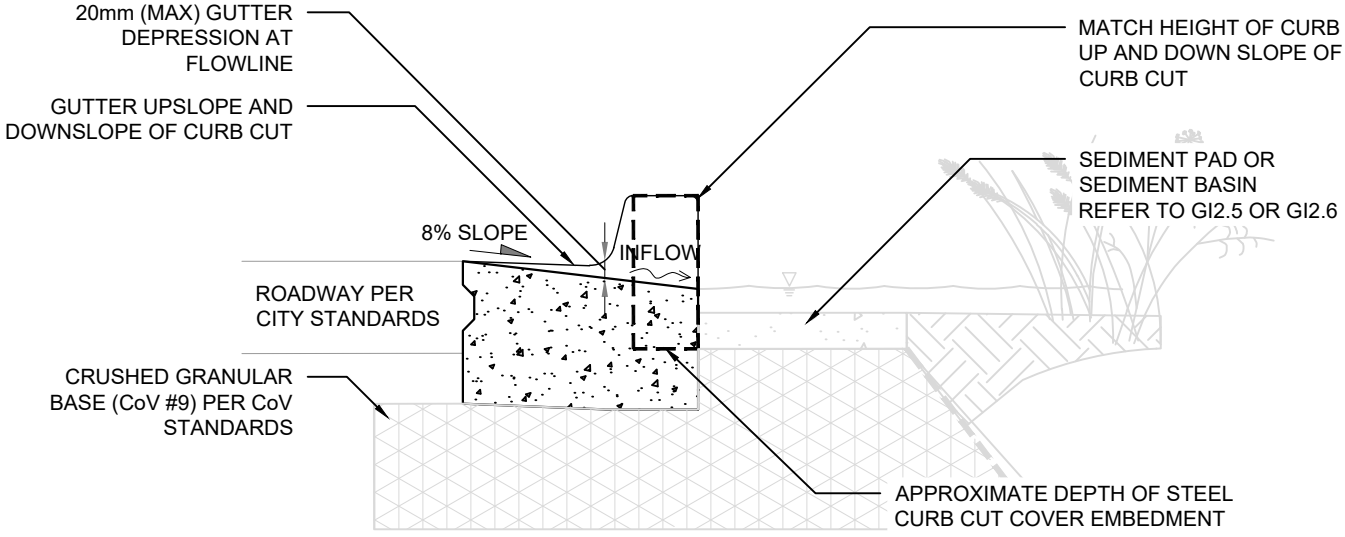

SECTION A

NOTES

1. ALL MATERIAL AND WORKMANSHIP FOR CURB CUTS SHALL CONFORM TO CITY OF VANCOUVER STANDARD SPECIFICATIONS AND GUIDELINES
2. IF CURB CUT CANNOT BE INSTALLED AT CURB CONTROL JOINTS, BOND NEW CURB AND GUTTER TO EXISTING CURB AND GUTTER WITH EPOXY AND DOWEL CONNECTION
3. REFER TO ENGINEERING DESIGN MANUAL FOR GUIDANCE ON DESIGNING INLET CURB CUT WIDTH.
4. CONCRETE TO BE POURED IN PLACE OVER STEEL COVER WING WALLS.
5. REFER TO GI2.5, GI4.4 AND GI4.5 FOR PRETREAMENT SEDIMENT PAD DETAILS

REV.	REVISION DATE	APPROVED

INLETS AND OUTLETS
COVERED CURB CUT INLET

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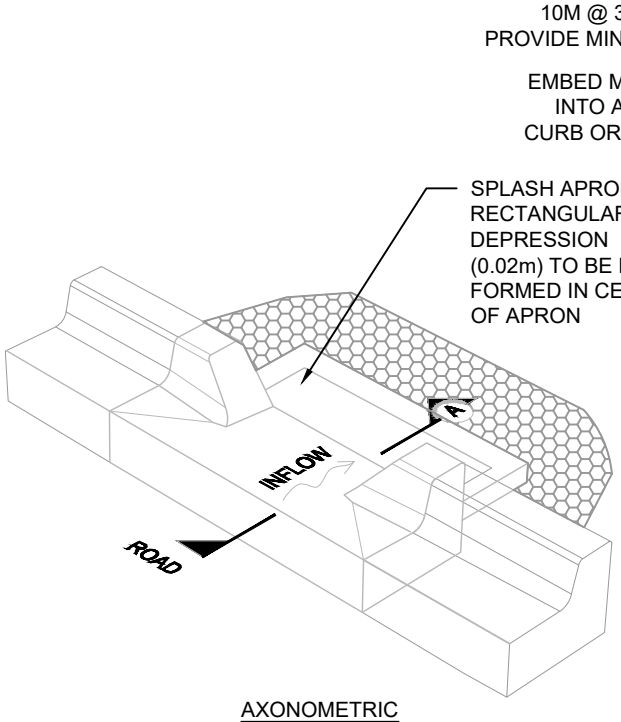
APPROVED BY: N. MEAD-FOX

CITY OF VANCOUVER

STANDARD DETAIL DRAWINGS
ENGINEERING SERVICES - VANCOUVER, B.C.

DRAWING No.
GI2.5



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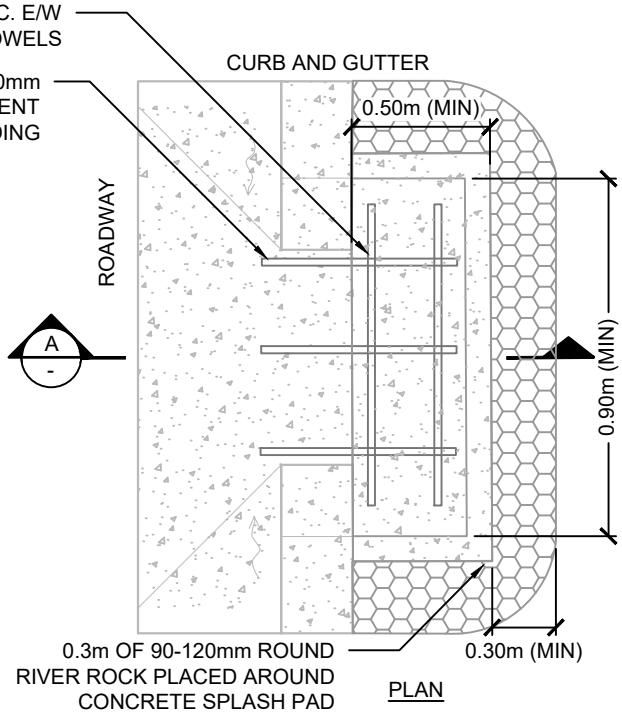

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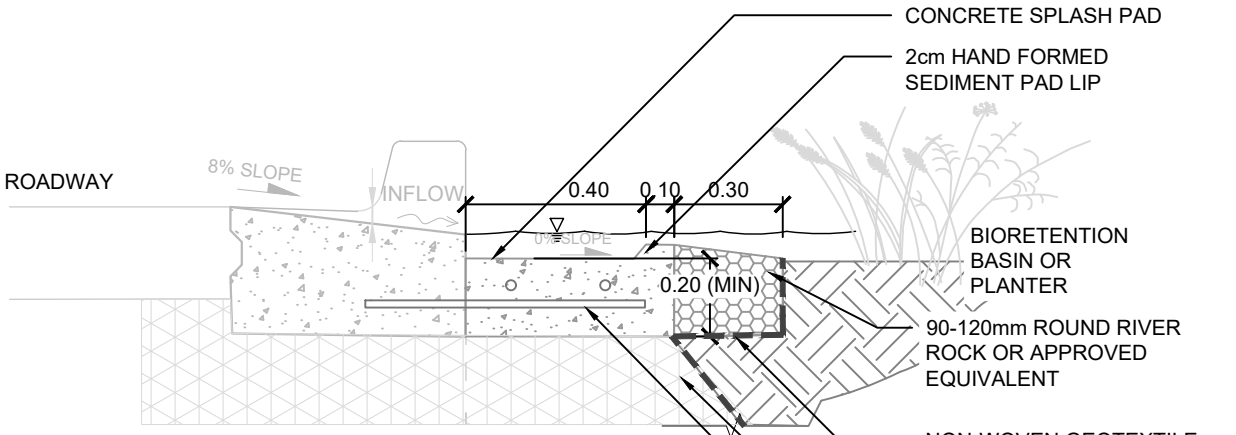


SECTION A

NOTES
1. HAND PACK GROWING MEDIUM AND #9 BASE UNDER AND AROUND THE SEDIMENT PAD TO A DISTANCE OF 0.3m
2. ROUND RIVER ROCK MAY BE REPLACED WITH ALTERNATIVE EROSION AND SEDIMENT CONTROL MEASURES SUCH AS COMPOST SOCKS.
3. ALL MATERIAL AND WORKMANSHIP FOR CURB CUTS SHALL CONFORM TO CITY OF VANCOUVER STANDARD SPECIFICATIONS AND GUIDELINES
4. IF CURB CUT CANNOT BE INSTALLED AT CURB CONTROL JOINTS, BOND NEW CURB AND GUTTER TO EXISTING CURB AND GUTTER WITH EPOXY AND DOWEL CONNECTION.
5. GI2.5. TO BE USED WHEN CONTRIBUTING DRAINAGE AREA IS LESS THAN 100 m^2. REFER TO GI2.6, GI4.4 AND GI4.5 FOR ALTERNATE PRETREATMENT OPTIONS.

REV.	REVISION DATE	APPROVED

INLETS AND OUTLETS
PRETREATMENT SEDIMENT PAD

ISSUE DATE: FEBRUARY 2026

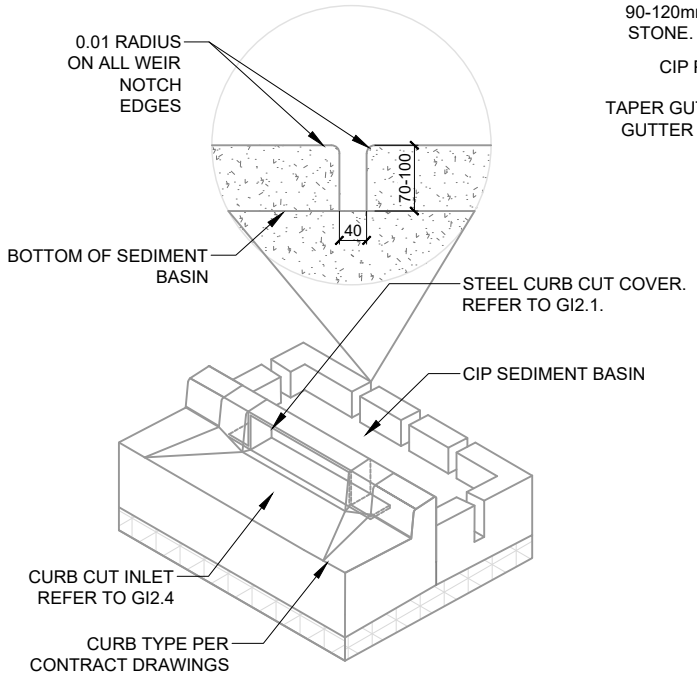
APPROVED BY: N. MEAD-FOX

CITY OF VANCOUVER

STANDARD DETAIL DRAWINGS
ENGINEERING SERVICES - VANCOUVER, B.C.

DRAWING No.
GI2.6

WEIR NOTCH DETAIL



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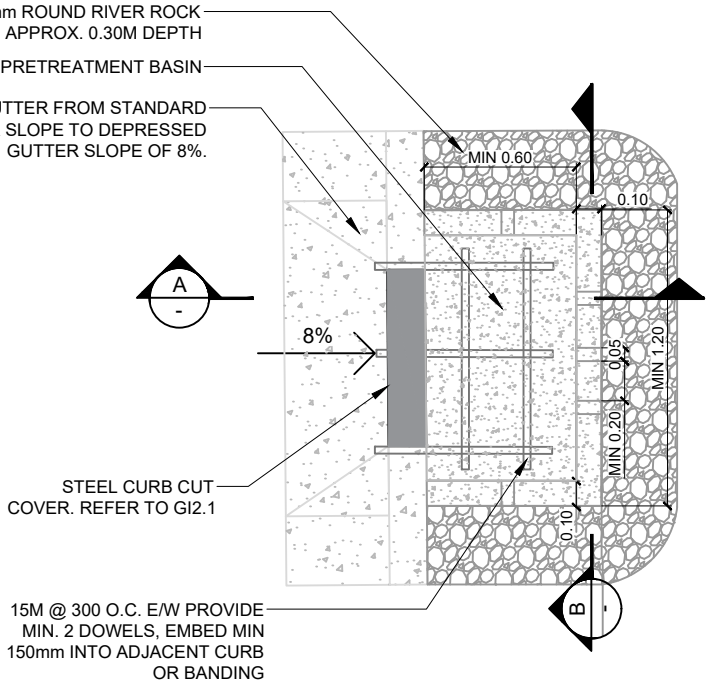

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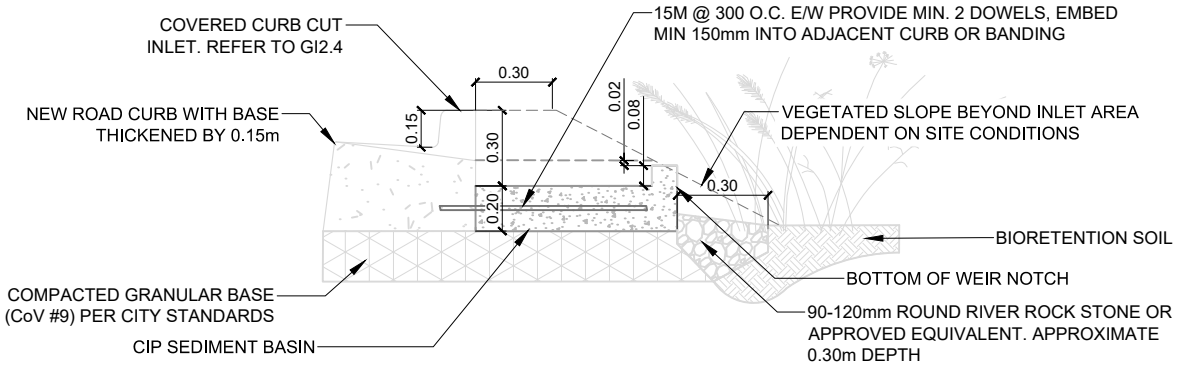
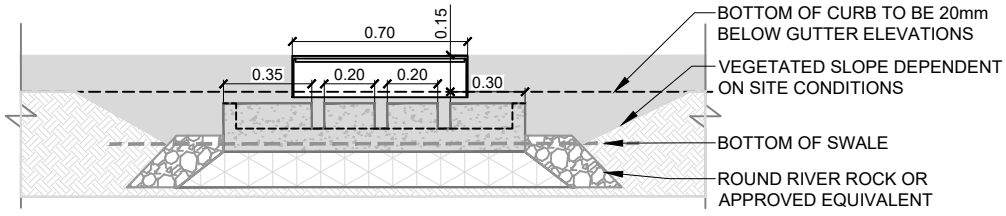


SECTION A



SECTION B

NOTES
1. BOTTOM OF WEIR NOTCHES TO BE FLUSH WITH BOTTOM OF SEDIMENT PAD
2. HAND PACK GROWING MEDIUM AND #9 BASE UNDER AND AROUND THE SEDIMENT PAD TO A DISTANCE OF 0.3m
3. TOP OF SOIL/MULCH SHOULD BE AT MINIMUM 0.05 METERS BELOW THE WEIR WALL NOTCHES
4. ROUND RIVER ROCK MAY BE REPLACED WITH ALTERNATIVE EROSION CONTROL MEASURES
5. ALL MATERIAL AND WORKMANSHIP FOR CURB CUTS SHALL CONFORM TO CITY OF VANCOUVER STANDARD SPECIFICATIONS AND GUIDELINES
6. IF CURB CUT CANNOT BE INSTALLED AT CURB CONTROL JOINTS, BOND NEW CURB AND GUTTER TO EXISTING CURB AND GUTTER WITH EPOXY AND DOWEL CONNECTION.

REV.	REVISION DATE	APPROVED

INLETS AND OUTLETS
PRETREATMENT SEDIMENT BASIN

ISSUE DATE: FEBRUARY 2026

APPROVED BY: N. MEAD-FOX