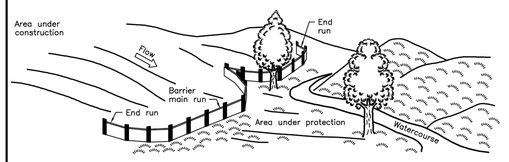
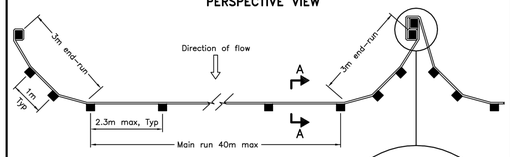
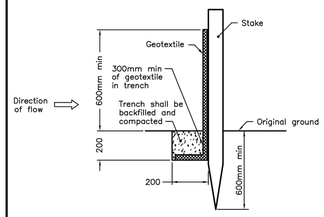


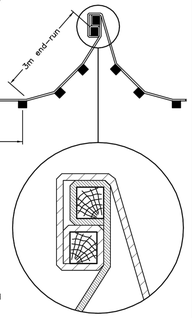
PERSPECTIVE VIEW



PLAN



SECTION A–A



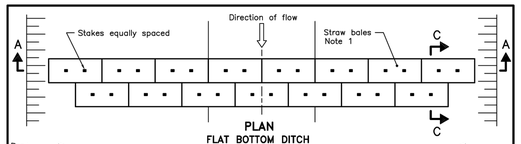
JOINT DETAIL

NOTE:
A All dimensions are in millimetres unless otherwise shown.

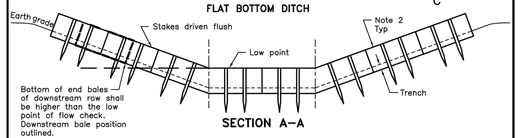
ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2015 | Rev 2

LIGHT–DUTY SILT FENCE BARRIER

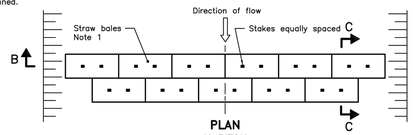
OPSD 219.110



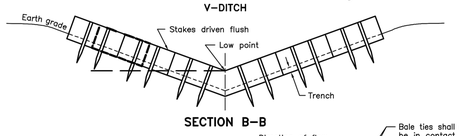
PLAN
FLAT BOTTOM DITCH



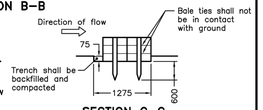
SECTION A–A



PLAN
V–DITCH



SECTION B–B



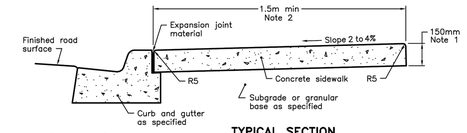
SECTION C–C

NOTES:
1 Number of bales varies and shall suit ditch.
2 Straw bales shall be butted tightly against adjoining bales and shaped to conform to the sides of the ditch to prevent water flow through barrier.
A All dimensions are in millimetres unless otherwise shown.

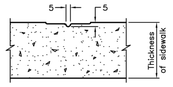
ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2015 | Rev 2

STRAW BALE FLOW CHECK DAM

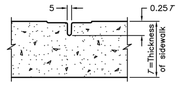
OPSD 219.180



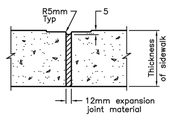
TYPICAL SECTION



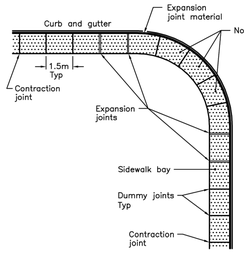
DUMMY JOINT



CONTRACTION JOINT



EXPANSION JOINT



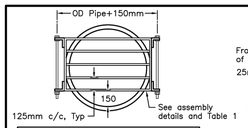
JOINT LAYOUT

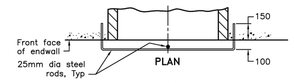
NOTES:
1 At commercial and industrial driveways, the thickness shall be 200mm.
2 Sidewalk width shall be wider when specified.
3 This OPSD shall be read in conjunction with OPSD 310.030, 310.031, 310.032, 310.033 and 310.039.
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2015 | Rev 2

CONCRETE SIDEWALK ADJACENT TO CURB AND GUTTER

OPSD 310.020





PLAN

TABLE 1 – NUMBER OF RODS IN FRAME	
PIPE DIA	No of RODS
450	1
525	1
600	2
675	3
750	3
825	4
900	4
975	5
1050	6
1200	7

PIPE DIA up to 1200mm

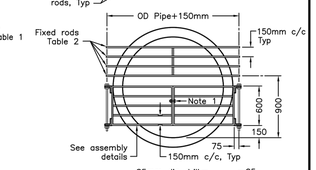
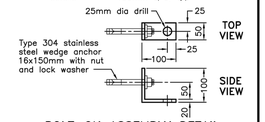
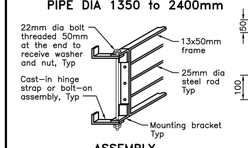


TABLE 2 – NUMBER OF RODS IN FIXED UPPER FRAME	
PIPE DIA	No of RODS
1350	1
1500	2
1650	3
1800	4
1950	5
2100	6
2250	7
2400	8

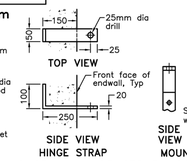
PIPE DIA 1350 to 2400mm

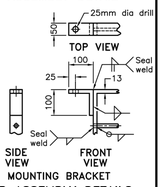


BOLT–ON ASSEMBLY DETAIL



ASSEMBLY





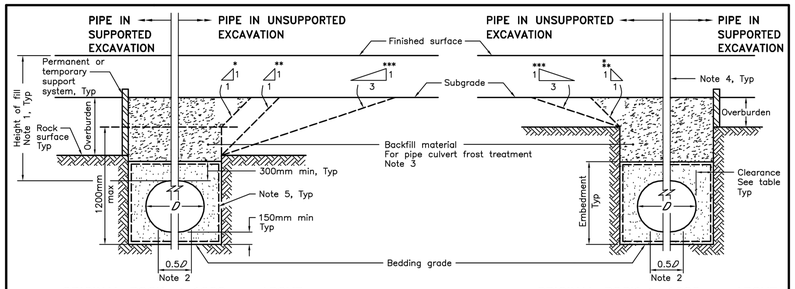
CAST–IN HINGE STRAP ASSEMBLY DETAILS

NOTES:
1 Grates shall be secured by either a bolt and nut or a locking device as specified.
A Metal surfaces shall be either painted with 2 coats of self priming abrasion resistant immersion grade epoxy or hot dip galvanized, as specified.
B Frame, hinge strap, mounting bracket, and steel rods shall be medium grade steel.
C All welding shall be according to CSA W59 and W47.1.
D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2018 | Rev 2

GRATING
FOR CONCRETE ENDWALL

OPSD 804.050



ORIGINAL ROCK < 1200mm ABOVE TRENCH BOTTOM

ORIGINAL ROCK ≥ 1200mm ABOVE TRENCH BOTTOM

NOTES:
1 Height of fill is measured from the finished surface to top of pipe.
2 The pipe bed shall be compacted and shaped to receive the bottom of the pipe.
3 Pipe culvert frost treatment shall be according to OPSD 803.030 and 803.031.
4 Condition of excavation is symmetrical about centreline of pipe.
5 Embedment material shall be wrapped in non–woven geotextile when specified.
A Granular material placed in the haunch area shall be compacted prior to placing and compacting the remainder of the embedment material.
B Soil types as defined in the Occupational Health and Safety Act and Regulations for Construction Projects.
C Fractured rock shall be treated as Type 1 soil.
D All dimensions are in metres unless otherwise shown.

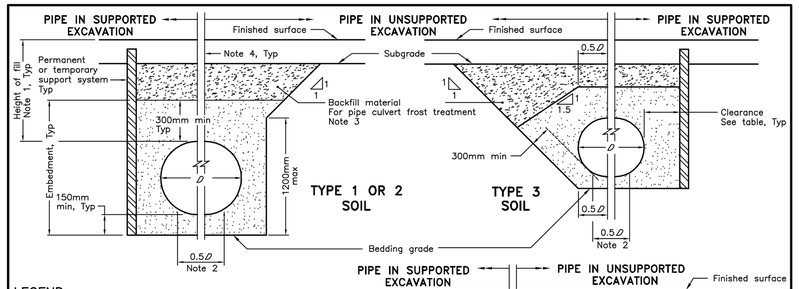
LEGEND:
D – Inside diameter
* – Type 1 or 2 soil
** – Type 3 soil
*** – Type 4 soil

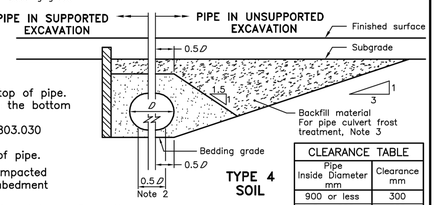
CLEARANCE TABLE	
Pipe Inside Diameter mm	Clearance mm
900 or less	300
Over 900	500

ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2014 | Rev 3

FLEXIBLE PIPE EMBEDMENT AND BACKFILL ROCK EXCAVATION

OPSD 802.013





LEGEND:
D – Inside diameter

NOTES:
1 Height of fill is measured from the finished surface to top of pipe.
2 The pipe bed shall be compacted and shaped to receive the bottom of the pipe.
3 Pipe culvert frost treatment shall be according to OPSD 803.030 and 803.031.
4 Condition of excavation is symmetrical about centreline of pipe.
A Granular material placed in the haunch area shall be compacted prior to placing and compacting the remainder of the embedment material.
B Soil types as defined in the Occupational Health and Safety Act and Regulations for Construction Projects.
C All dimensions are in metres unless otherwise shown.

CLEARANCE TABLE	
Pipe Inside Diameter mm	Clearance mm
900 or less	300
Over 900	500

ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2014 | Rev 3

FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION

OPSD 802.010

No	DATE	ISSUED FOR	App.
1	2021/11/23	SITE PLAN CONTROL	H.A.
2			
3			
4			
5			

No	DATE	REVISION	App.
1			
2			
3			
4			
5			

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Key Plan

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Stamps

Project
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3 996 Innes Road, Ottawa, ON.

Title	Drawn /: A.A.	Scale
DETAILS	Verif. /: H.A.	N/A
Date: 2021/11/23 Revision: 0		Drawing # DT-1