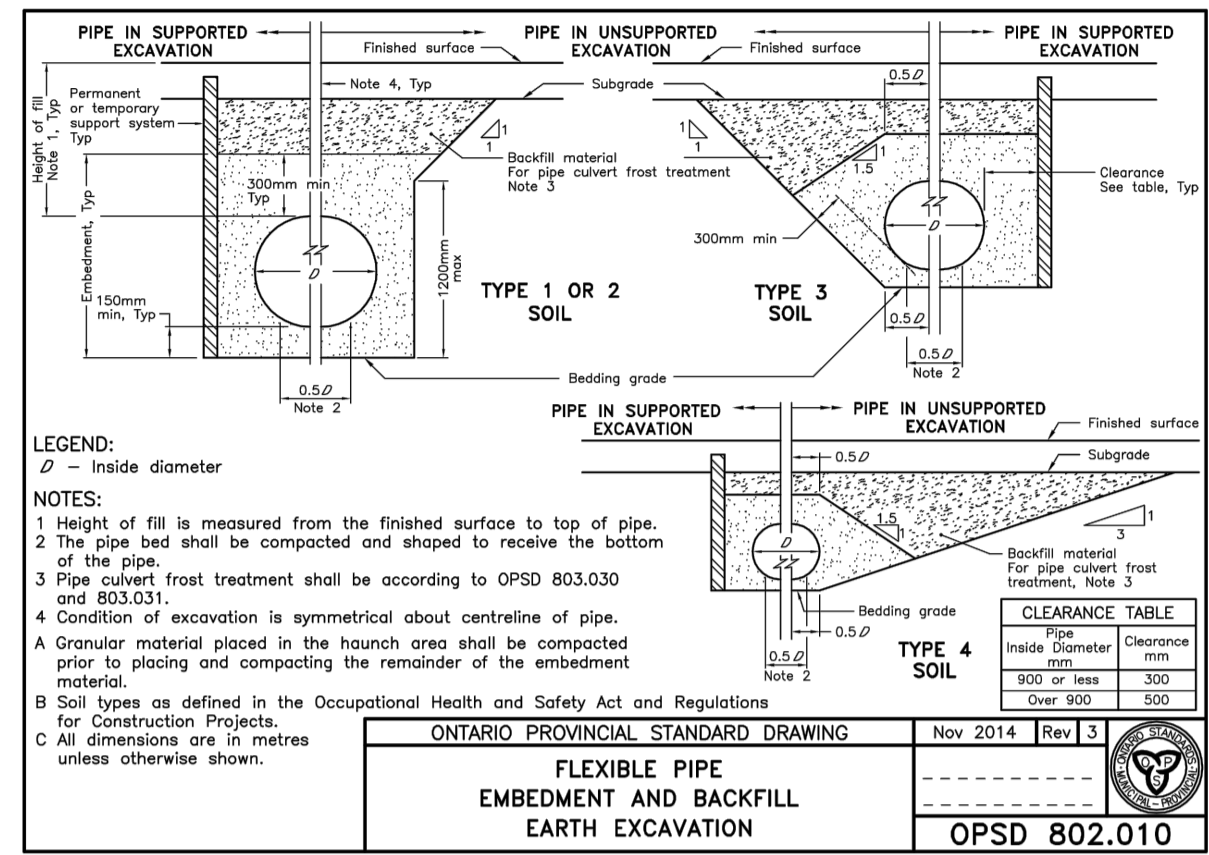
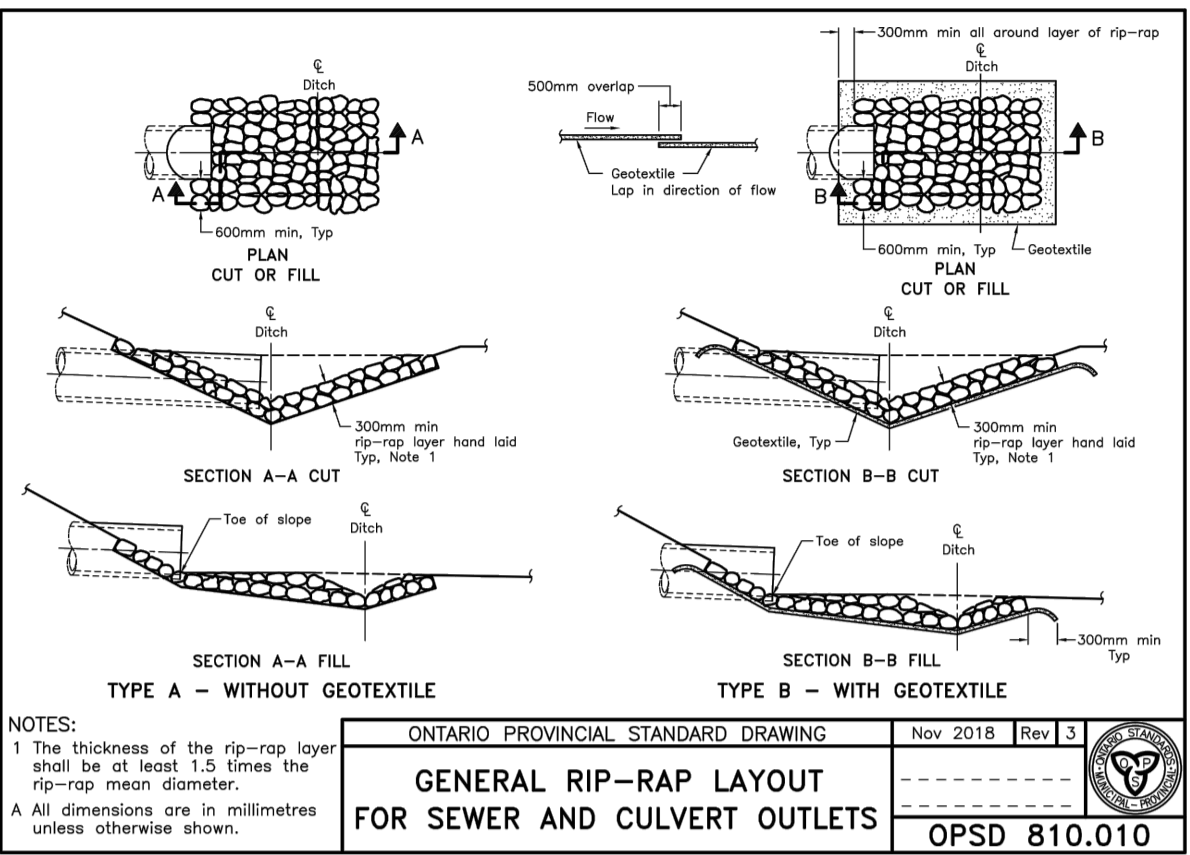


NOTES:
 1. FOR STORM INSULATION USE AN X VALUE OF 2000 IN THE ABOVE 'TI' EQUATION.
 2. FOR SANITARY INSULATION USE AN X VALUE OF 2500 IN THE ABOVE 'TI' EQUATION.
 3. FOR WATERMAIN INSULATION USE AN X VALUE OF 2400 IN THE ABOVE 'TI' EQUATION.
 4. INCREMENTS OF INSULATION THICKNESS SHALL BE ADJUSTABLE TO 25mm.
 5. STAGGER JOINTS OF MULTIPLE SHEETS.
 6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.

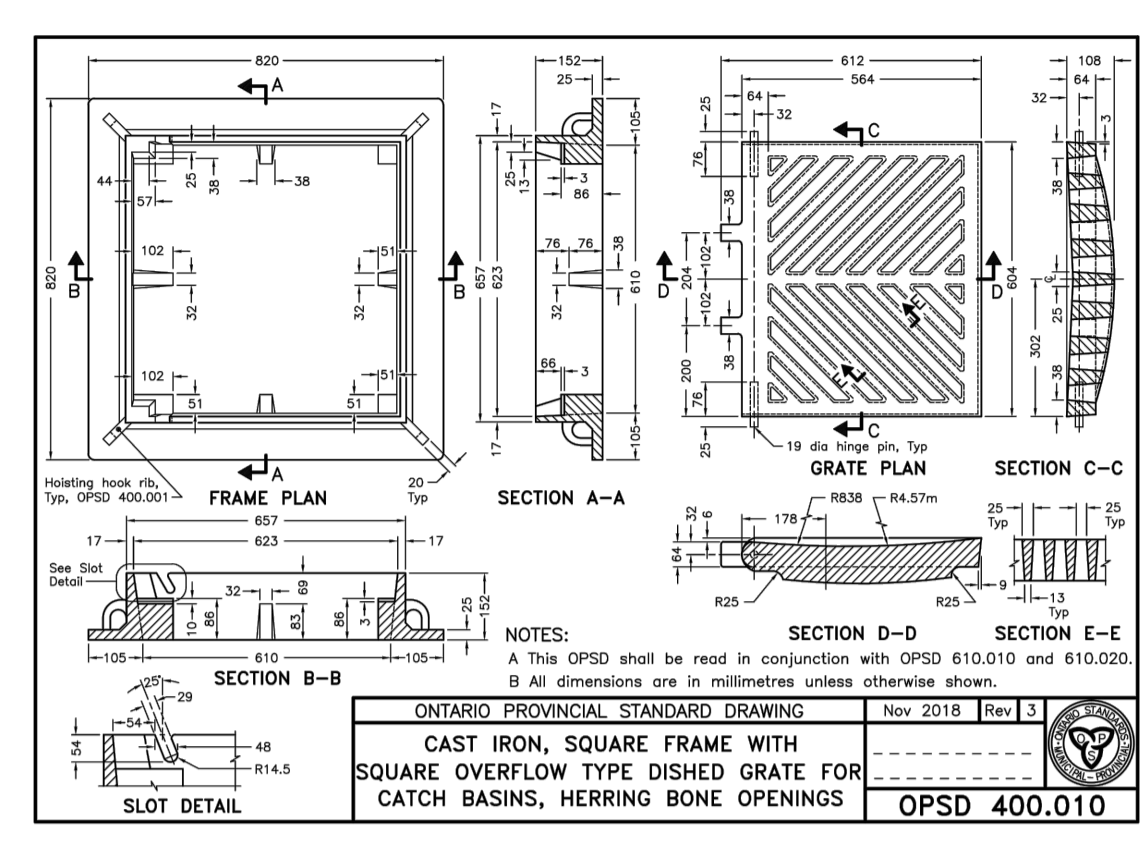
TYPICAL STORM AND SANITARY SEWER AND WATERMAIN INSULATION DETAIL (N.T.S.)



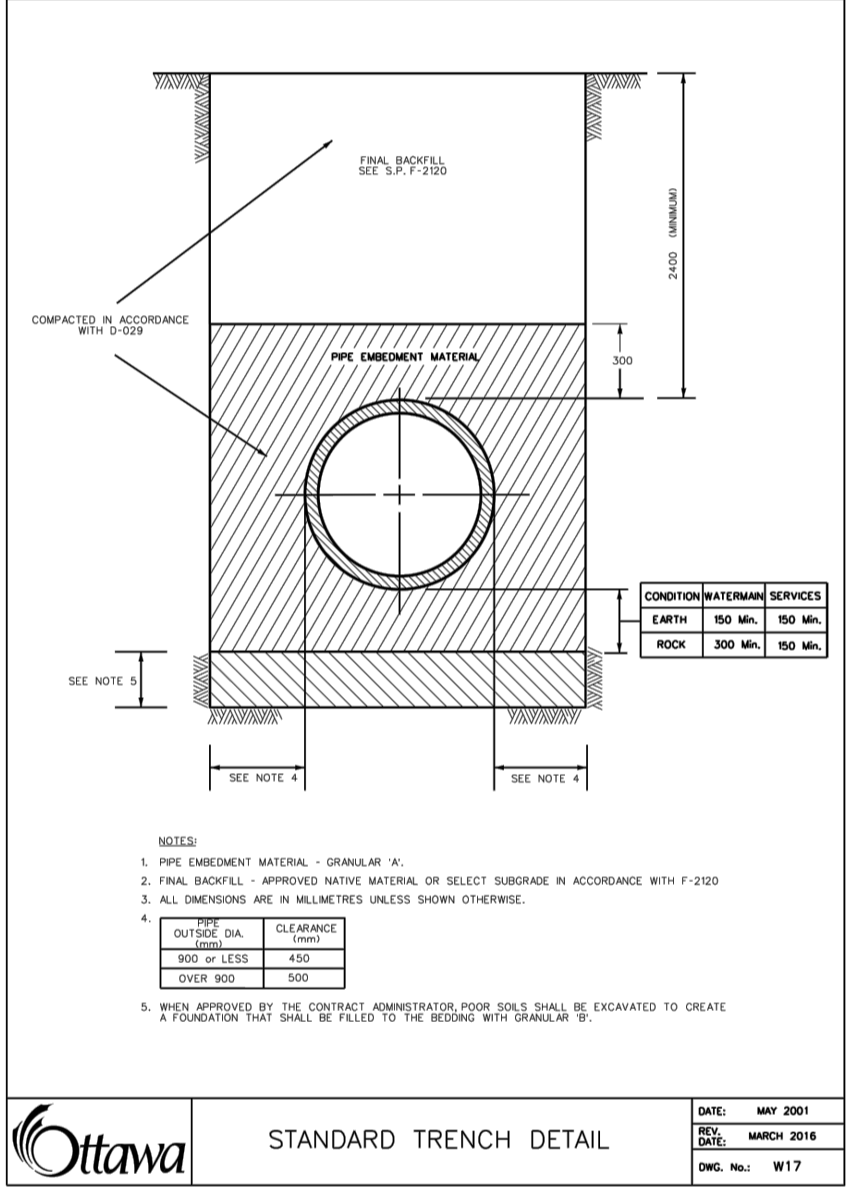
ONTARIO PROVINCIAL STANDARD DRAWING
 FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION
 Nov 2014 Rev 3
 OPSD 802.010



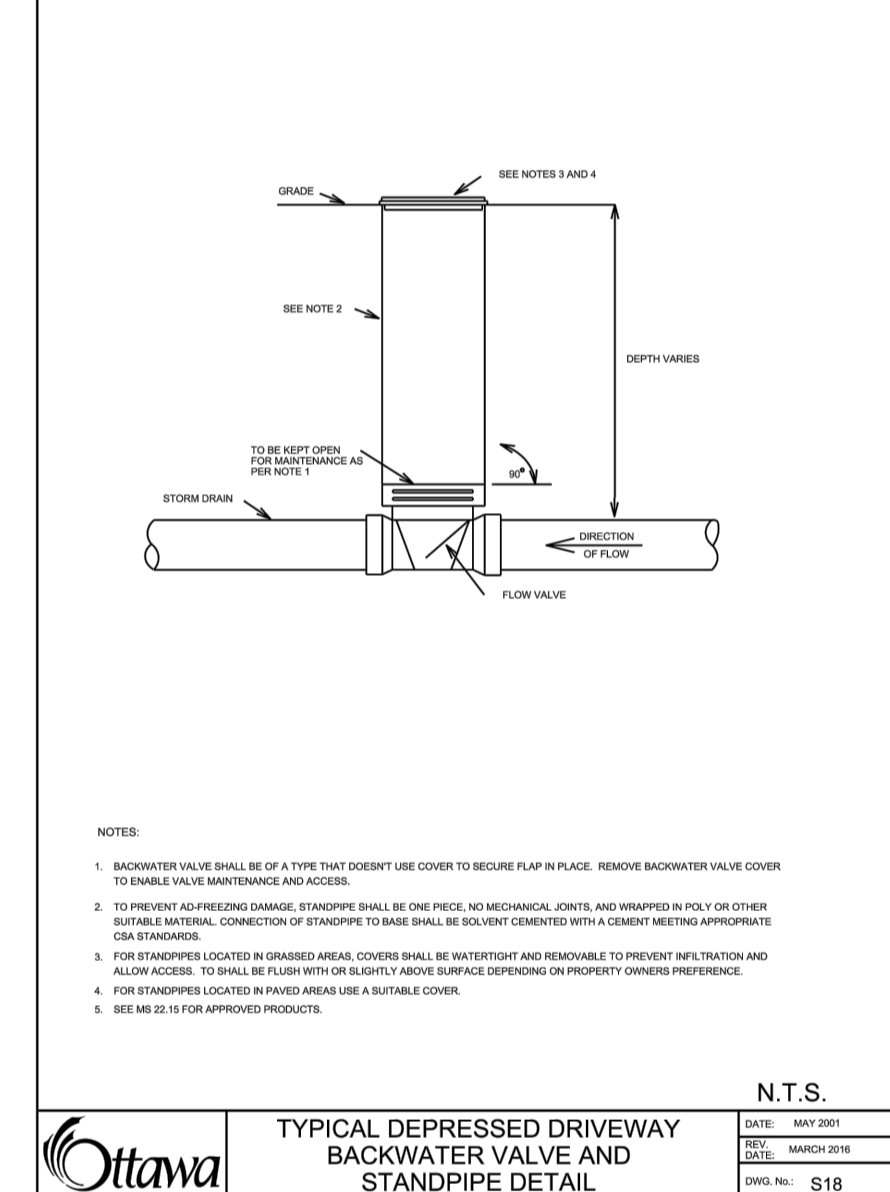
ONTARIO PROVINCIAL STANDARD DRAWING
 GENERAL RIP-RAP LAYOUT FOR SEWER AND CULVERT OUTLETS
 Nov 2018 Rev 3
 OPSD 810.010



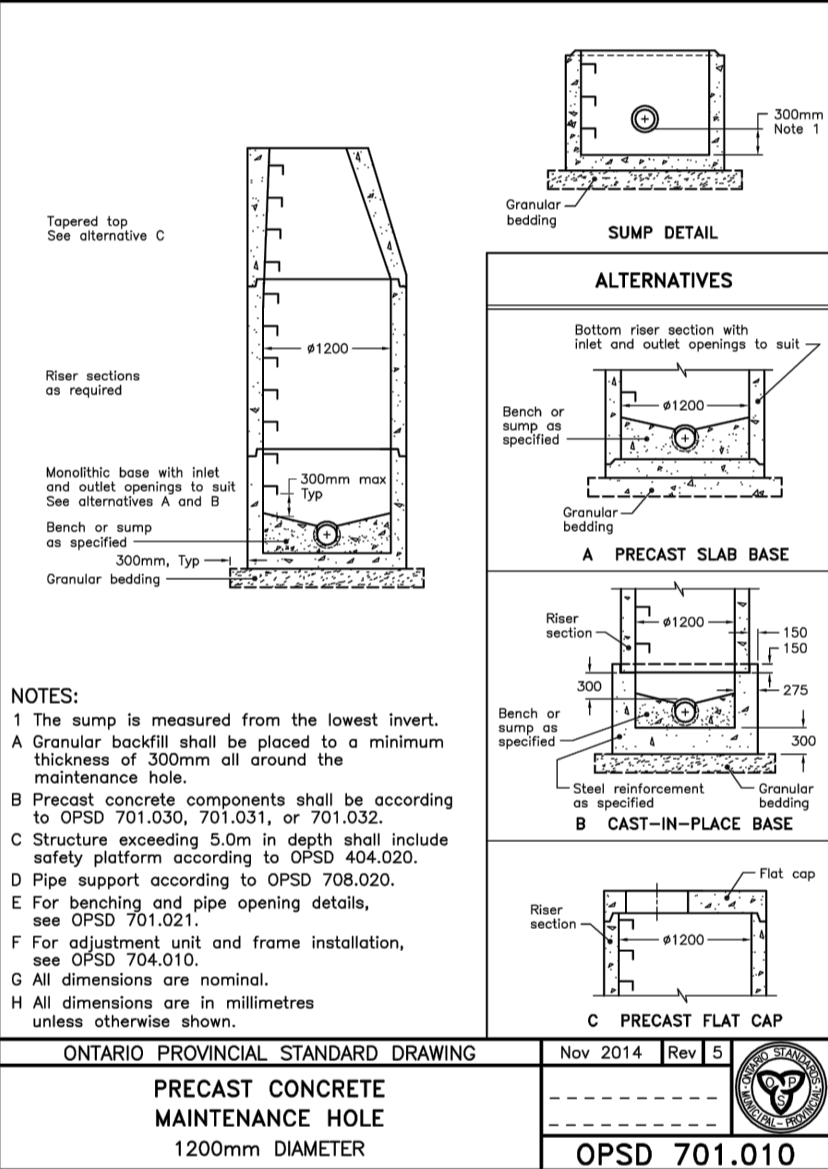
ONTARIO PROVINCIAL STANDARD DRAWING
 CAST IRON, SQUARE FRAME WITH SQUARE OVERFLOW TYPE DISH GRATE FOR CATCH BASINS, HERRING BONE OPENINGS
 Nov 2018 Rev 3
 OPSD 400.010



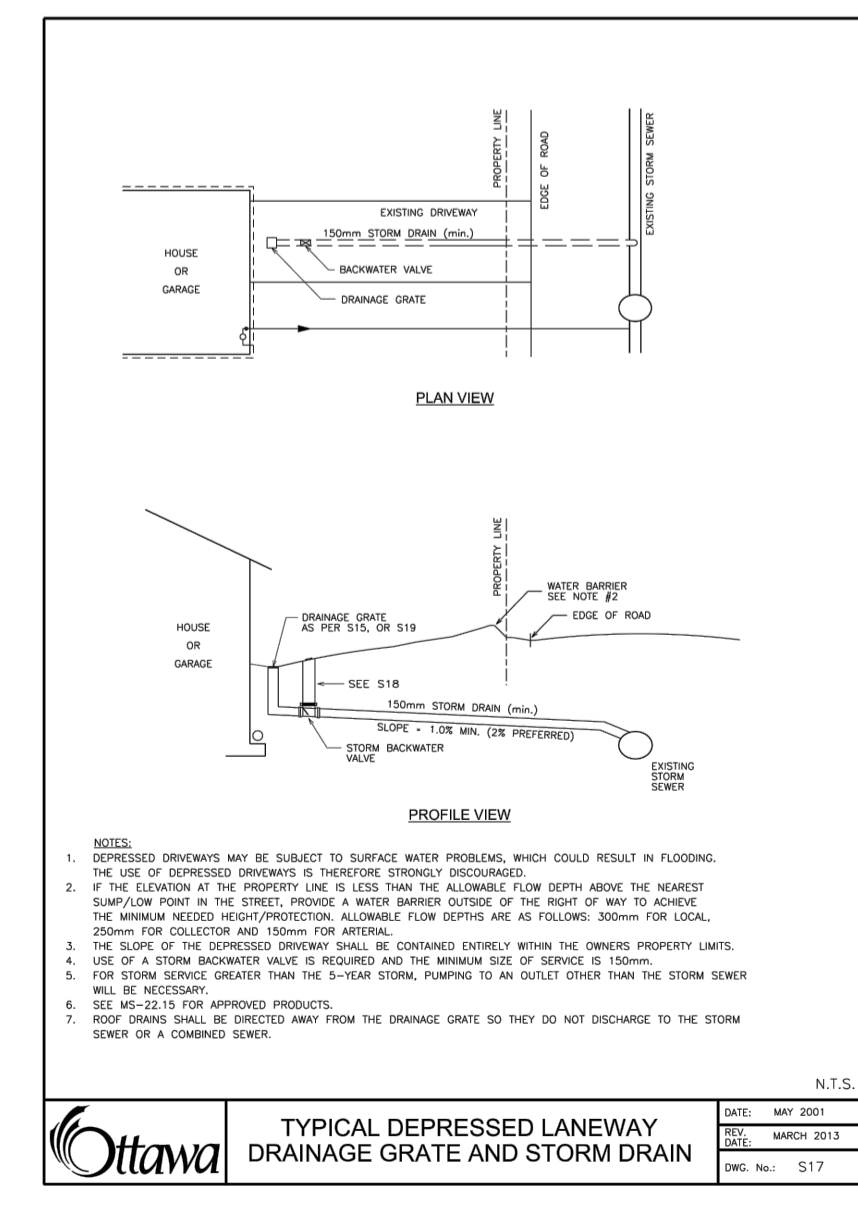
ONTARIO PROVINCIAL STANDARD DRAWING
 CONCRETE BARRIER CURB
 Nov 2012 Rev 2
 OPSD 600.110



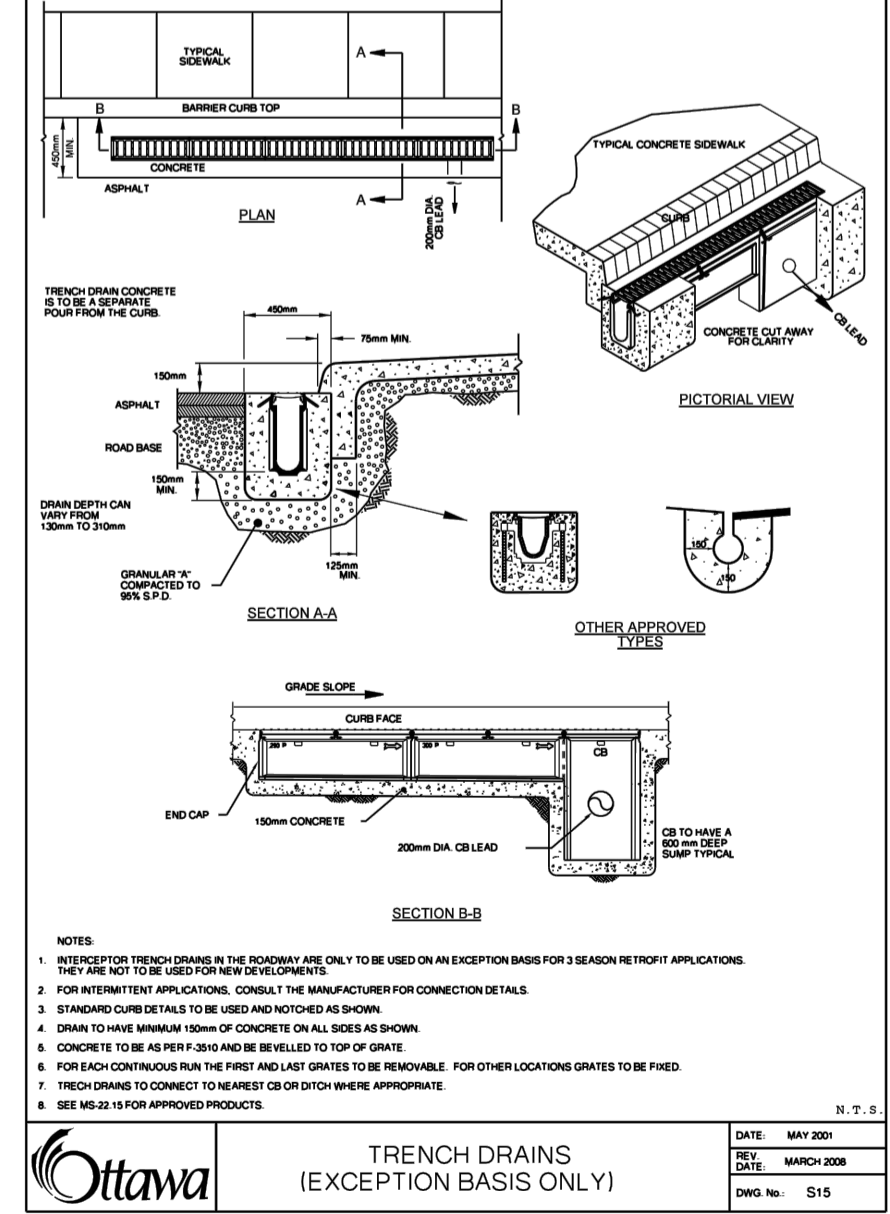
ONTARIO PROVINCIAL STANDARD DRAWING
 CONCRETE SIDEWALK
 Nov 2015 Rev 2
 OPSD 310.010



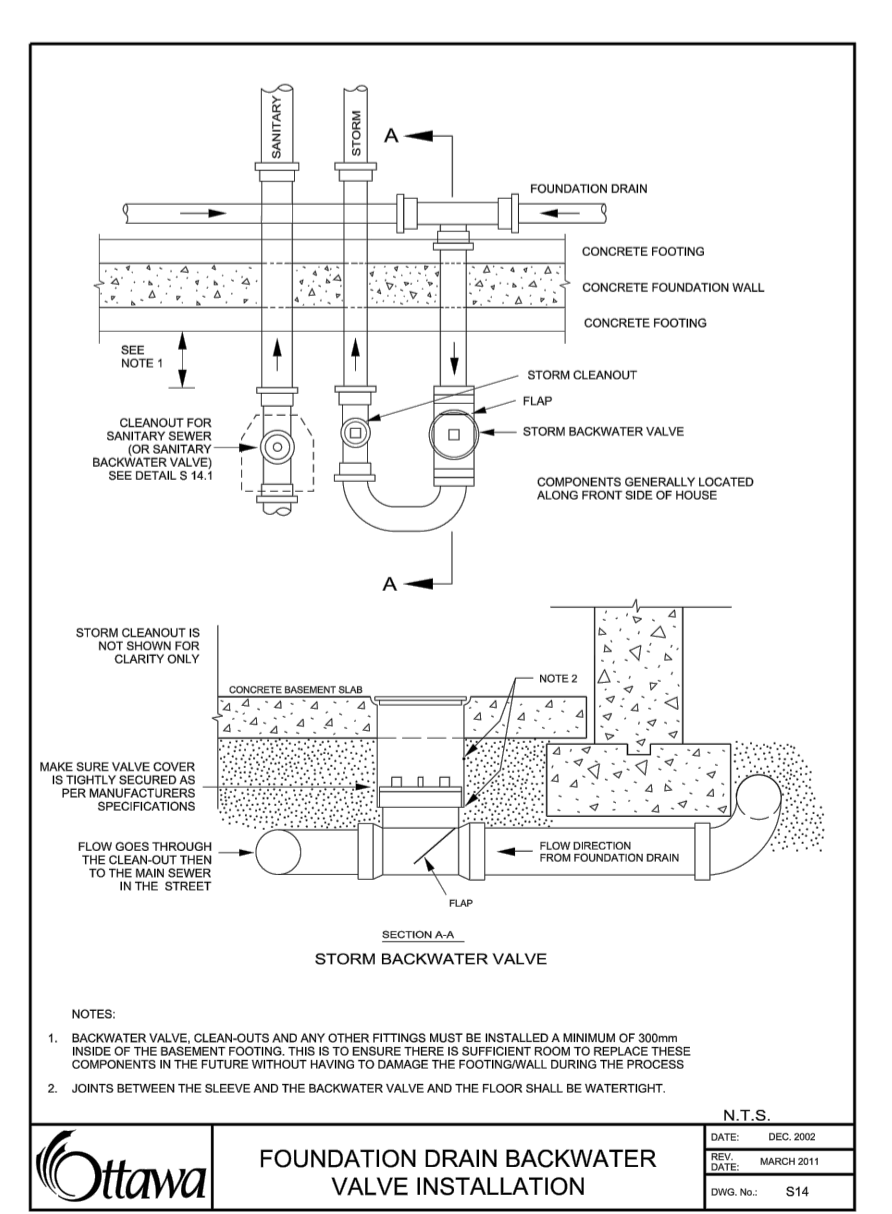
ONTARIO PROVINCIAL STANDARD DRAWING
 PRECAST CONCRETE MAINTENANCE HOLE 1200mm DIAMETER
 Nov 2014 Rev 5
 OPSD 701.010



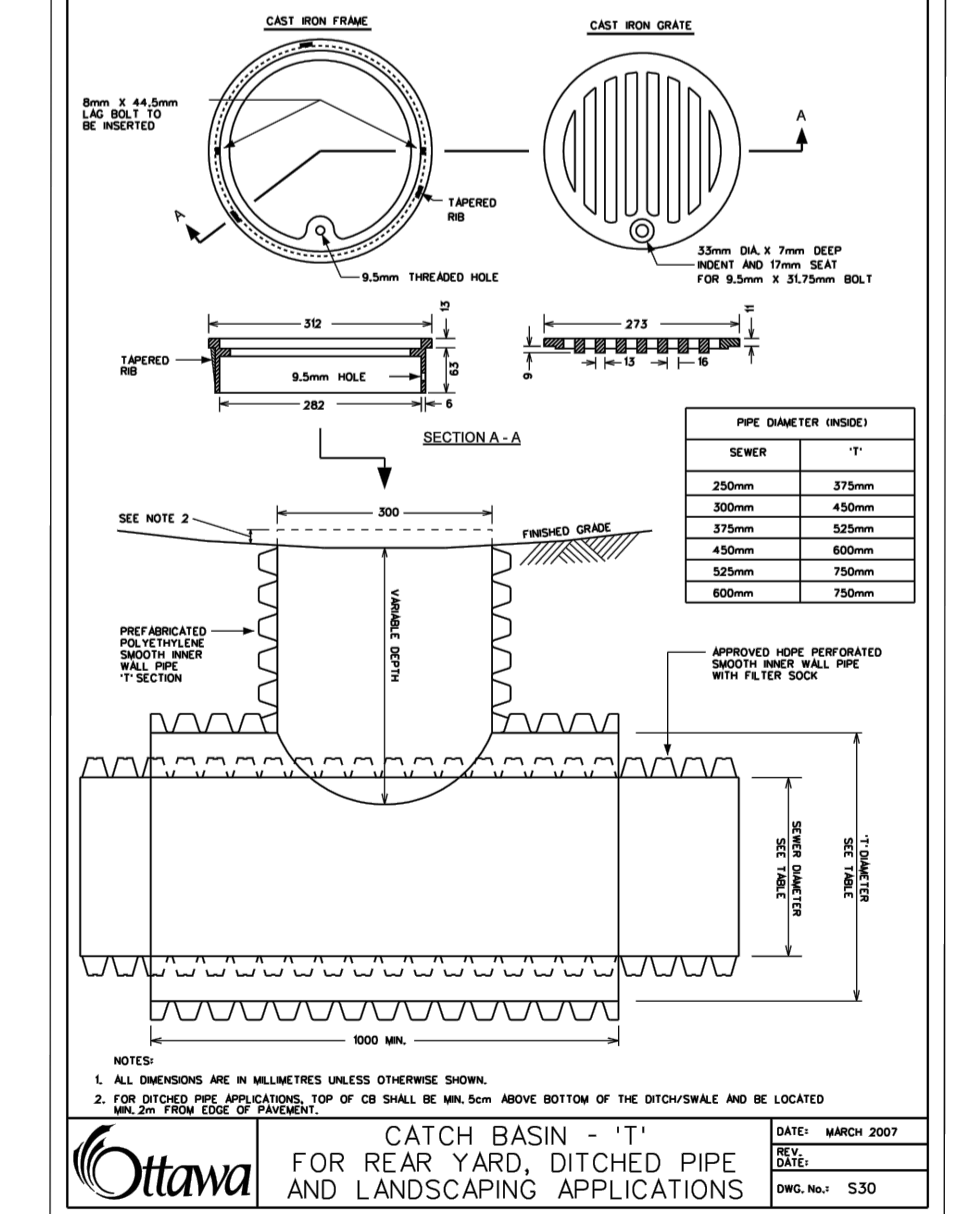
ONTARIO PROVINCIAL STANDARD DRAWING
 TYPICAL DEPRESSED LANEWAY DRAINAGE GRATE AND STORM DRAIN
 Nov 2001 Rev 2
 OPSD 517



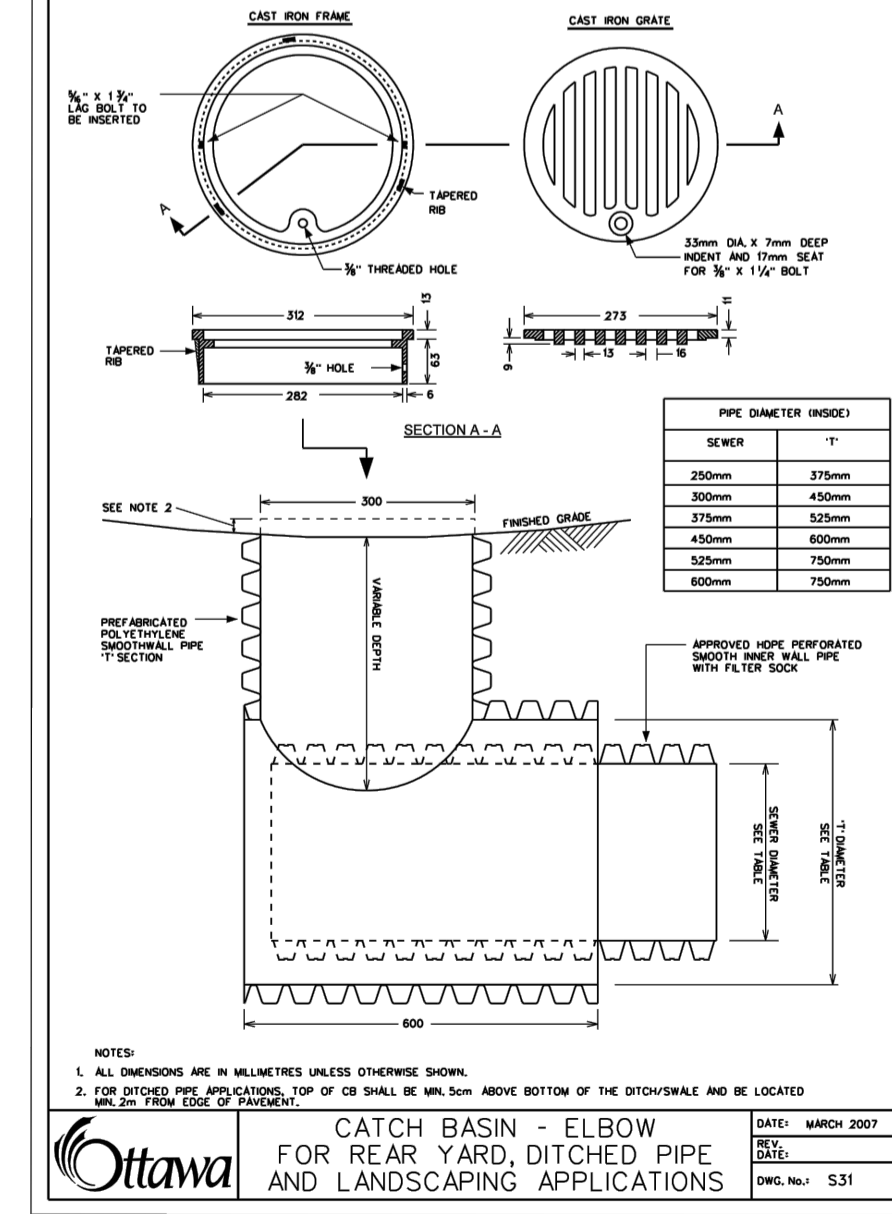
ONTARIO PROVINCIAL STANDARD DRAWING
 TRENCH DRAINS (EXCEPTION BASIS ONLY)
 Nov 2001 Rev 2
 OPSD 515



ONTARIO PROVINCIAL STANDARD DRAWING
 FOUNDATION DRAIN BACKWATER VALVE INSTALLATION
 Nov 2001 Rev 2
 OPSD 530



ONTARIO PROVINCIAL STANDARD DRAWING
 CATCH BASIN - ELBOW FOR REAR YARD, DITCHED PIPE AND LANDSCAPING APPLICATIONS
 Nov 2007 Rev 1
 OPSD 531



ONTARIO PROVINCIAL STANDARD DRAWING
 CATCH BASIN - ELBOW FOR REAR YARD, DITCHED PIPE AND LANDSCAPING APPLICATIONS
 Nov 2007 Rev 1
 OPSD 531

USE AND INTERPRETATION OF DRAWINGS
 GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ARE PART OF THE CONTRACT DOCUMENTS AND DESCRIBE THE USE AND INTENT OF THE DRAWING. THE CONTRACT DOCUMENTS INCLUDE NOT ONLY THE DRAWINGS, BUT ALSO THE OWNER-CONTRACTOR AGREEMENT, CONDITIONS OF THE CONTRACT, THE SPECIFICATIONS, ADDENDA, AND MODIFICATIONS ISSUED AFTER EXECUTION OF THE CONTRACT. THESE CONTRACT DOCUMENTS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ANY ONE SHALL BE BINDING AS REQUIRED BY ALL. WORK NOT COMPLETELY DELINEATED HEREON SHALL BE CONSTRUCTED OF THE SAME MATERIALS AND DETAIL AS SHOWN UNLESS OTHERWISE SHOWN COMPLETELY ELSEWHERE IN THE CONTRACT DOCUMENTS.
 BY USE OF THE DRAWINGS FOR CONSTRUCTION OF THE PROJECT, THE OWNER CONFIRMS THAT HE HAS REVIEWED AND APPROVED THE DRAWINGS. THE CONTRACTOR CONFIRMS THAT HE HAS NOTICED THE SITE, FAMILIARIZED HIMSELF WITH THE LOCAL CONDITIONS, VERIFIED FIELD DIMENSIONS AND CORRELATED HIS OBSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 AS INSTRUMENTS OF SERVICE ALL DRAWINGS, SPECIFICATIONS, CAD FILES OR OTHER ELECTRONIC MEDIA AND COPIES THERE OF FURNISHED BY THE ENGINEER ARE HIS PROPERTY. THEY ARE TO BE USED ONLY FOR THIS PROJECT AND ARE NOT TO BE USED ON ANY OTHER PROJECT, INCLUDING REPEATS OF THE PROJECT. CHANGES TO THE DRAWINGS MAY ONLY BE MADE BY THE ENGINEER.
 UNLESS THE REVISION TITLE IS 'ISSUED FOR APPROVAL', THESE DRAWINGS SHALL BE CONSIDERED PRELIMINARY AND SHALL NOT BE USED AS A CONSTRUCTION DOCUMENT.
 THESE DRAWINGS ILLUSTRATE THE WORK TO BE DONE. THE ENGINEER IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK, OR THE SAFETY ASPECTS OF CONSTRUCTION, AND NOTHING ON THESE DRAWINGS EXPRESSED OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL DETERMINE ALL CONDITIONS AT THE SITE AND SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGEMENT OF THE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE BID PRICE. NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.
 UNAUTHORIZED CHANGES
 IN THE EVENT THE CLIENT, THE CLIENT'S CONTRACTORS OR SUBCONTRACTORS, OR ANYONE FOR WHOM THE CLIENT IS LEGALLY LIABLE MAKES OR PERMITS TO BE MADE ANY CHANGES TO THESE PLANS, SPECIFICATIONS OR OTHER CONSTRUCTION DOCUMENTS PREPARED BY LRI ASSOCIATES LTD. (LRI) WITHOUT OBTAINING LRI'S PRIOR WRITTEN CONSENT, THE CLIENT SHALL ASSUME FULL RESPONSIBILITY FOR THE RESULTS OF SUCH CHANGES. THEREFORE THE CLIENT AGREES TO WAIVE ANY CLAIM AGAINST LRI AND TO RELEASE LRI FROM ANY LIABILITY ARISING DIRECTLY OR INDIRECTLY FROM SUCH UNAUTHORIZED CHANGES.
 IN ADDITION, THE CLIENT AGREES TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS LRI FROM ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND COST OF DEFENSE, ARISING FROM SUCH CHANGES.
 IN ADDITION, THE CLIENT AGREES TO INCLUDE IN ANY CONTRACTS FOR CONSTRUCTION APPROPRIATE LANGUAGE THAT PROHIBITS THE CONTRACTOR OR ANY SUBCONTRACTORS OF ANY TIER FROM MAKING ANY CHANGES OR MODIFICATIONS TO LRI'S CONSTRUCTION DOCUMENTS WITHOUT THE PRIOR WRITTEN APPROVAL OF LRI AND THAT FURTHER REQUIRES THE CONTRACTOR TO INDEMNIFY BOTH LRI AND THE CLIENT FROM ANY LIABILITY OR COST ARISING FROM SUCH CHANGES MADE WITHOUT SUCH PROPER AUTHORIZATION.
 GENERAL NOTES
 EXISTING SERVICES AND UTILITIES SHOWN ON THESE DRAWINGS ARE TAKEN FROM THE BEST AVAILABLE RECORDS, BUT MAY NOT BE COMPLETE OR TO DATE. CONTRACTOR SHALL VERIFY IN FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH THE UTILITY COMPANIES BEFORE DIGGING OR PERFORMING WORK.
 CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS BEFORE START OF CONSTRUCTION.
 THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.
 CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.

NOT FOR CONSTRUCTION TENDER OR PERMIT

01	ISSUED FOR APPROVAL	A.S.	17 JUL 2020
No.	REVISIONS	BY	DATE

NOT AUTHENTIC UNLESS SIGNED AND DATED

LRJ
 ENGINEERING | INGÉNIERIE

5430 Canotek Road | Ottawa, ON, K1J 9G2
 www.lri.ca | (613) 842-3434

CLIENT	LANDRIC HOMES INC.		
DESIGNED BY:	A.S.	DRAWN BY:	A.S.
		APPROVED BY:	M.B.
PROJECT	BLOCK 9 APARTMENT BUILDINGS ERIC CZAPNIK WAY, ORLEANS		
DRAWING TITLE	CONSTRUCTION DETAIL PLAN		
PROJECT NO.	200041		
DATE	APRIL 2020		