

GENERAL NOTES:
SPECIFICATIONS

1. ONTARIO PROVINCIAL STANDARD SPECIFICATION, DIVISION 9
2. CANADIAN HIGHWAY BRIDGE DESIGN CODE, 2014
3. TOWNSHIP OF BROCK, ENGINEERING DESIGN CRITERIA & STANDARD DRAWINGS, 2018

SWALE

4. GRASS DITCH/ SWALE SHALL BE CONSTRUCTED WITH 3:1 SIDE SLOPES, WITH AN AVERAGE DEPTH OF 600MM BELOW GRADE. LONGITUDINAL SLOPE SHALL FOLLOW DRIVEWAY'S SLOPE. SEEDED WITH LAWN GRASS DURING MAY - SEPTEMBER, WATERED WEEKLY UNTIL FULLY ROOTED
5. PERMANENT RIVER-RUN STONE CHECK DAM SHALL BE INSTALLED WITH 30.0M INTERVALS, 450MM DEPTH.
6. LANDSCAPING SHRUBS OR OTHER SMALL-FORM VEGETATION MAY BE PLANTED WITHIN THE GRASS SWALES. ROOT-BALL AND RAISED SOIL AROUND EACH SHRUB MAY FORM A DAM UP TO 500MM IN HEIGHT WITHIN THE SWALE, BUT NOT FULLY OBSTRUCT THE SWALE

CULVERT

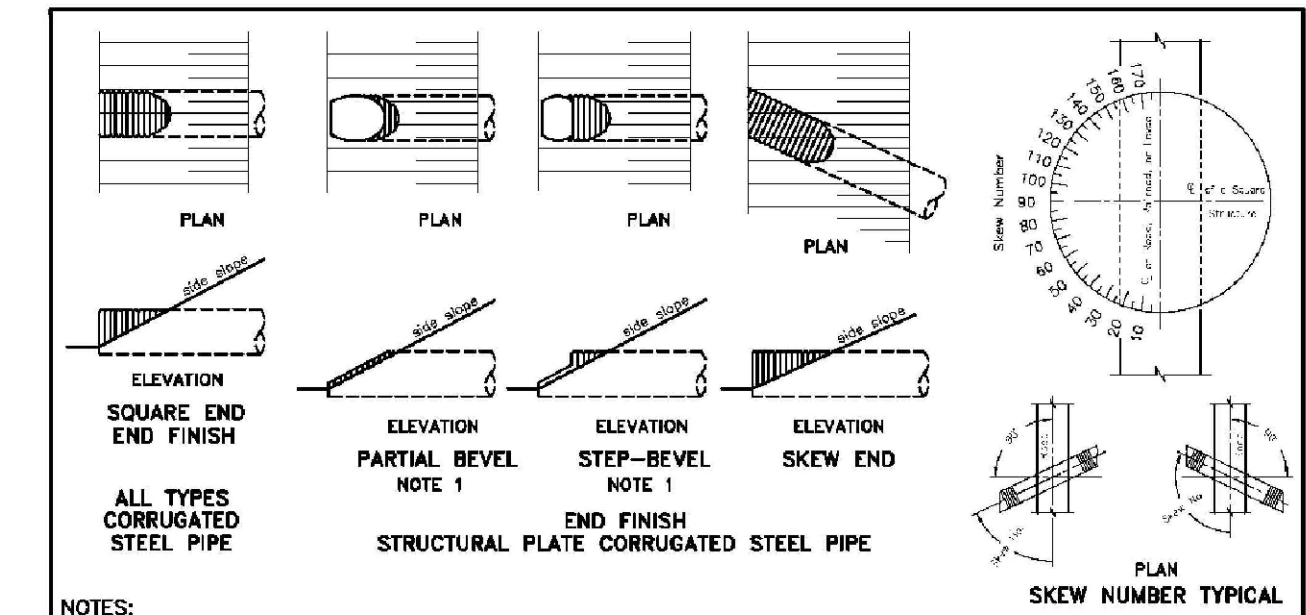
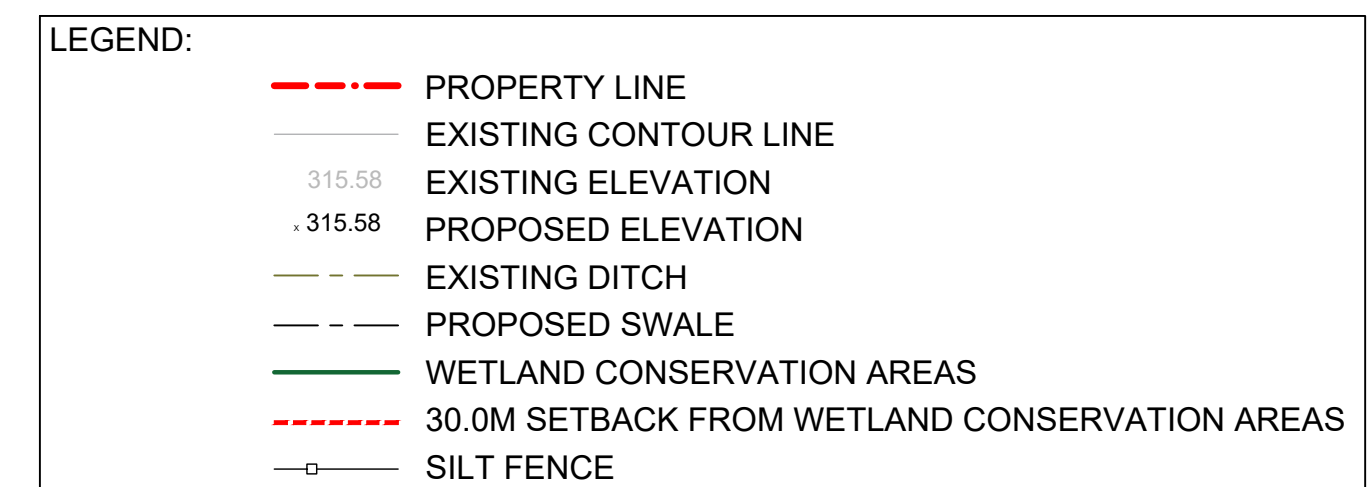
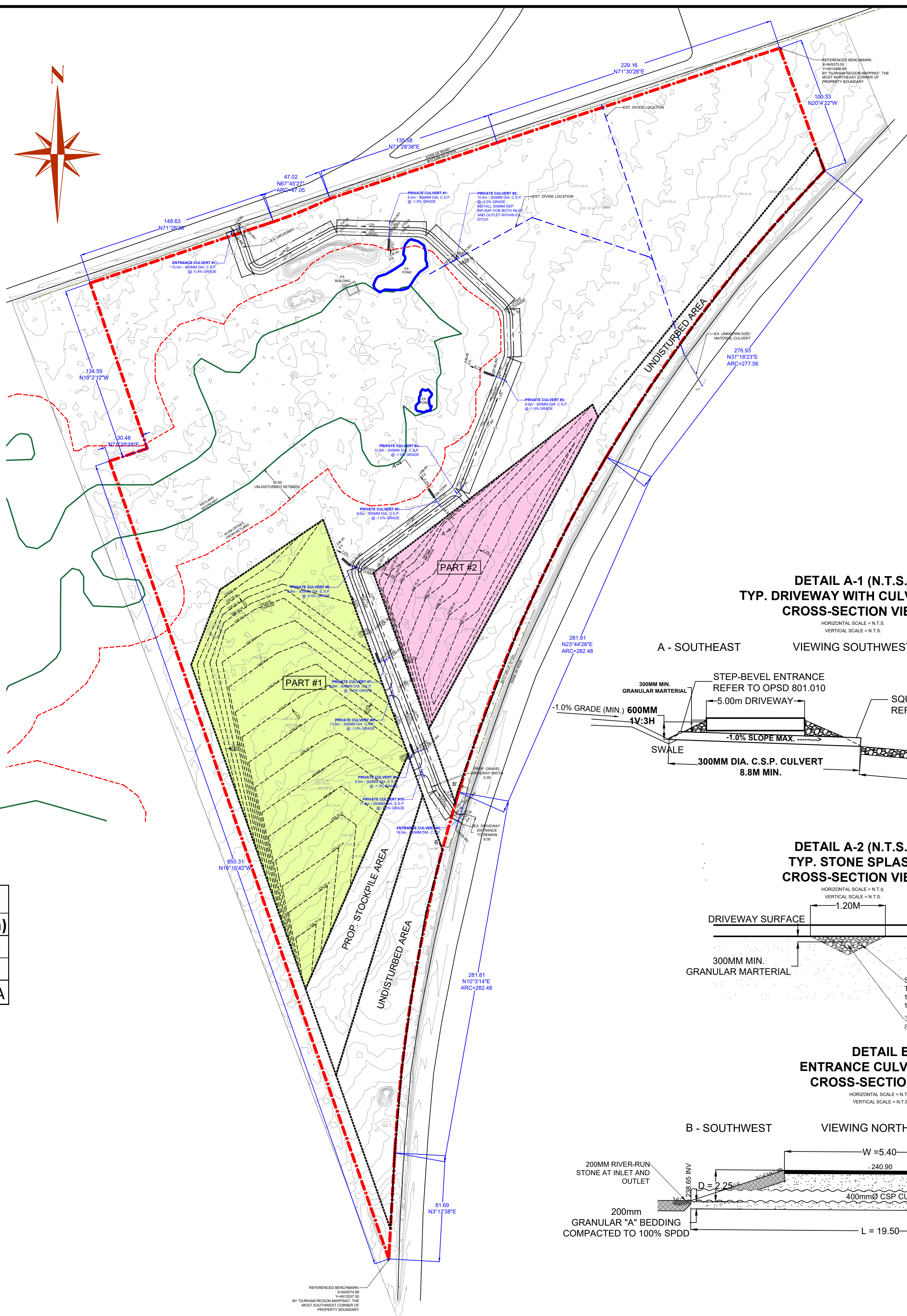
7. CORRUGATED STEEL PIPE SHALL BE 3.5MM THICK, 125MM X 25MM CORRUGATIONS.
8. BACKFILL MATERIAL SHALL BE PLACED IN MAXIMUM 200MM THICK LAYERS SIMULTANEOUSLY ON BOTH SIDES OF CULVERT AND COMPACTED TO 100% STANDARD PROCTOR DRY DENSITY.

DRIVEWAY

9. DRIVEWAY SHALL BE CONSTRUCTED USING THE FOLLOWING:
 - 150MM OF OPSS 1010 GRANULAR "A" BASE, VIRGIN CRUSH
 - 225MM OF OPSS 1010 GRANULAR "B" SUB-BASE, TYPE I, VIRGIN CRUSH
 - GRANULAR COMPACTION SHALL BE TO 98% SPMD

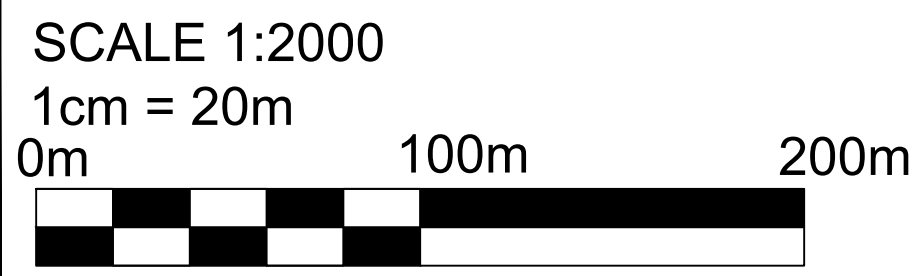
SITE SURVEY

10. LEGAL PROPERTY BOUNDARY IS REFERENCED BY "R.G. MCKIBBON ONTARIO LAND SURVEYOR" ON MARCH 10, 1973.
11. EXISTING TOPOGRAPHIC CONTOUR LINES AND LOCAL DITCH ARE REFERENCED BY "DRONE SERVICES CANADA INC." LIDAR SURVEY ON JANUARY 09, 2023 AND "KING EPCM" GPS SURVEY ON JANUARY 11, 2023 RESPECTIVELY.
12. UNIVERSAL TRANSVERSE MERCATOR (UTM): H: NAD83(CSRs) / UTM ZONE 17N; V: CGVD28 (HT2_0) GEOID.

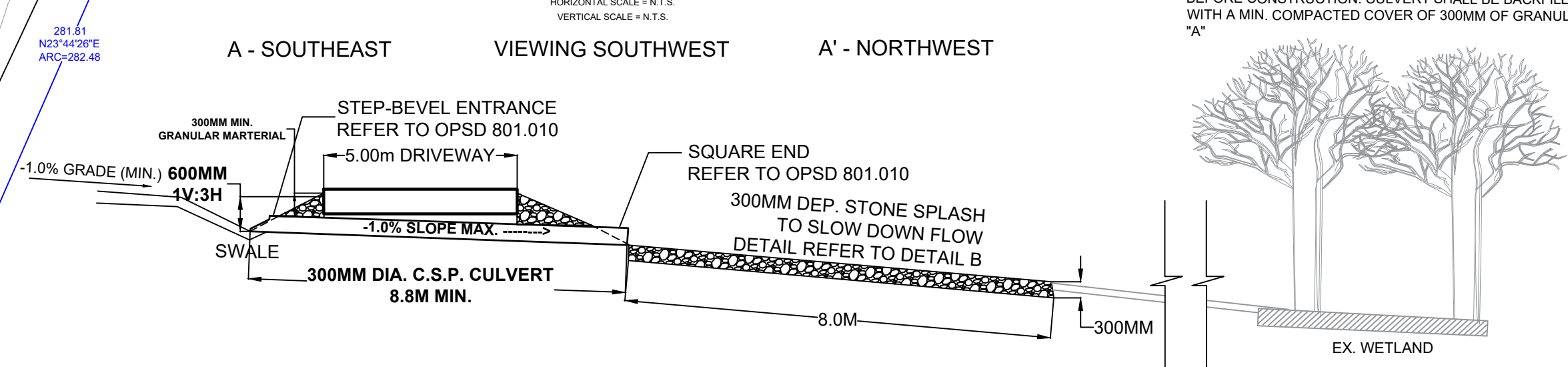


ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2017	Rev 3
CUT END FINISH CIRCULAR PIPE AND PIPE-ARCH CORRUGATED STEEL PIPE		
OPSD 801.010		

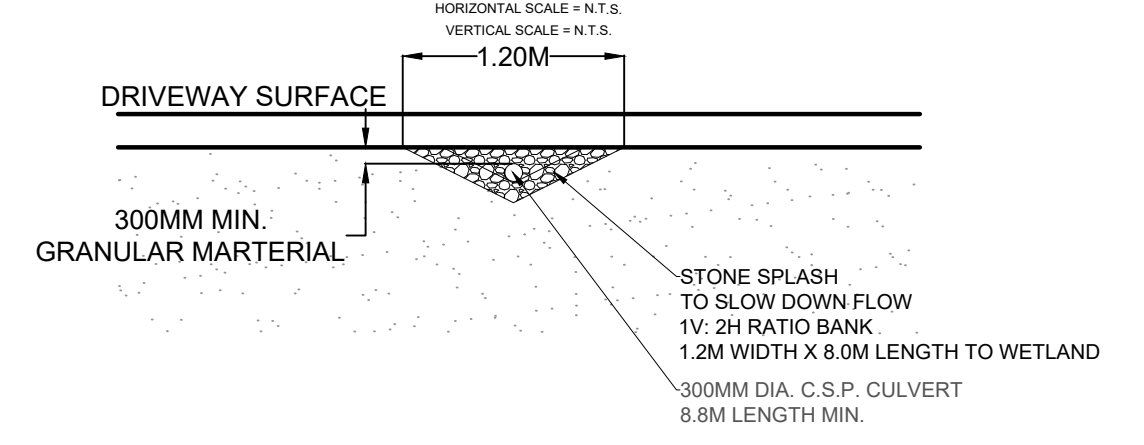
	Area(m2)	Backfill Volume (m3)	Backfill Depth(m)
Part-1	32,261	31,908	1.0
Part-2	14,003	10,732	0.8
Total	46,264	42,640	N/A



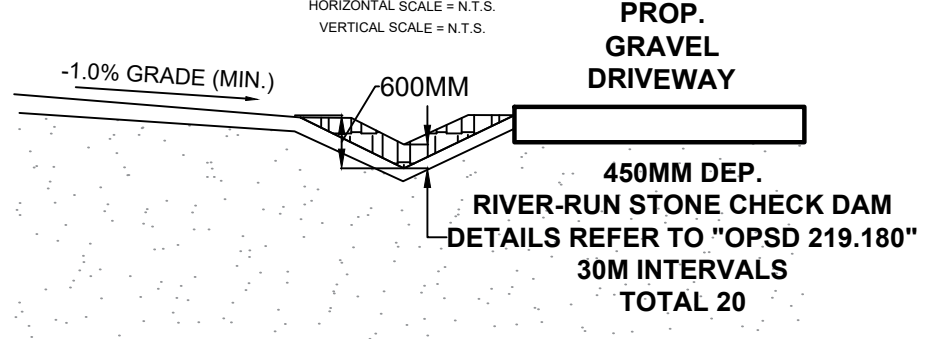
**DETAIL A-1 (N.T.S.)
TYP. DRIVEWAY WITH CULVERT A-A'
CROSS-SECTION VIEW**



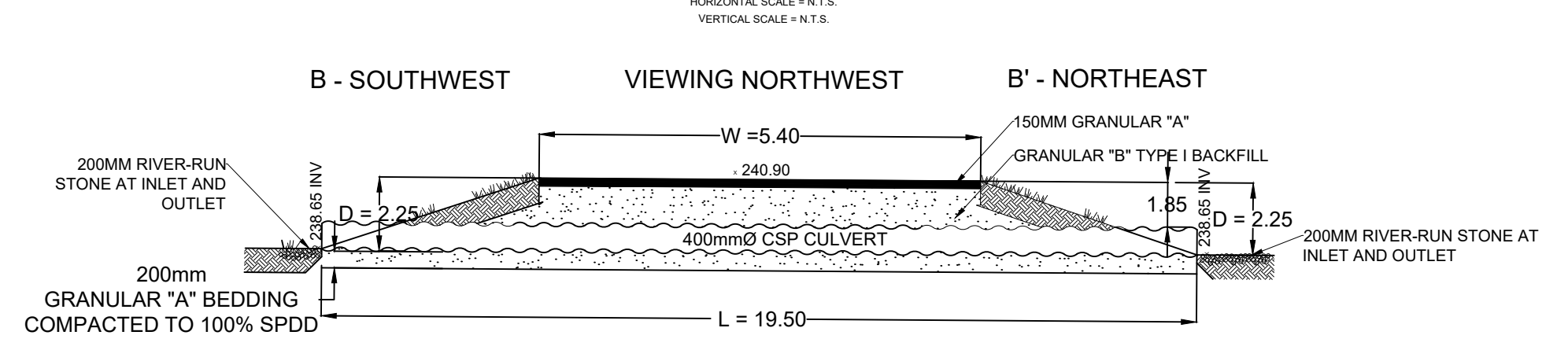
**DETAIL A-2 (N.T.S.)
TYP. STONE SPLASH
CROSS-SECTION VIEW**



**DETAIL A-3 (N.T.S.)
TYP. DITCH & CHECK DAM
CROSS-SECTION VIEW**



**DETAIL B
ENTRANCE CULVERT B-B'
CROSS-SECTION VIEW**



KEY MAP
N.T.S.

CLIENT
1000404455 ONTARIO INC. O/A.
Wanderosa Tree Farms

PROJECT NAME
CONSTRUCTION OF TOPSOIL FILL AND DRIVEWAY

PROJECT LOCATION
410B HWY48, BEAVERTON, ON
PART OF LOT 3 CONCESSION 14
INST. NO. 16025

PRINT TITLE
SITE GRADING PLAN

FILE No.
EGR - 1.1

No.	ISSUED FOR:	DATE	DRAW BY	CHECK
V1	INTERNAL REVIEW	FEB. 08, 2023	ZW	
V2	CLIENT REVIEW	FEB. 27, 2023	ZW	
V3	CLIENT REVIEW	MAR. 21, 2023	ZW	
V5	ISSUED FOR PERMITS	APR. 21, 2023	QC	TW

STAMP
LICENSED PROFESSIONAL ENGINEER
Y. T. WANG
100228476
May 21, 2023
PROVINCE OF ONTARIO

QC
APR. 21, 2023

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