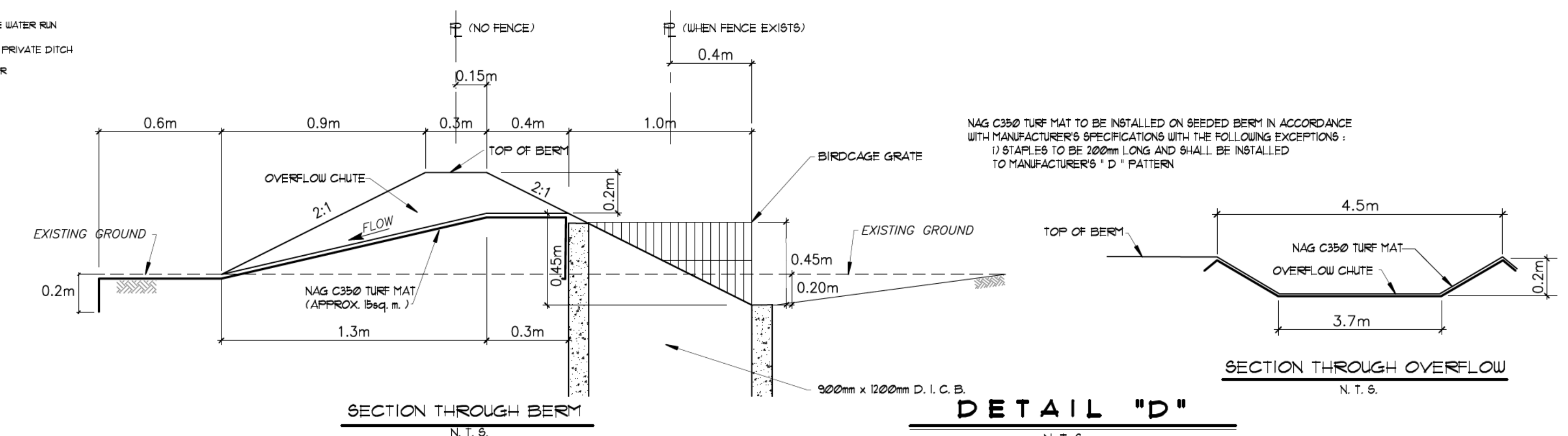


PLAN LEGEND

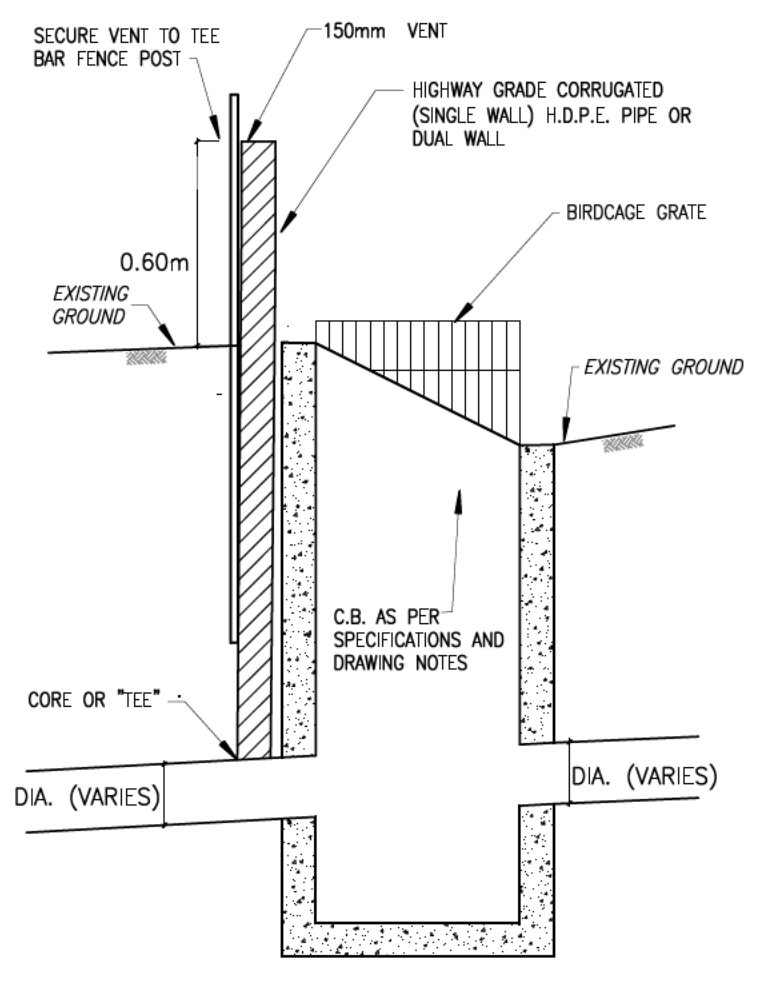
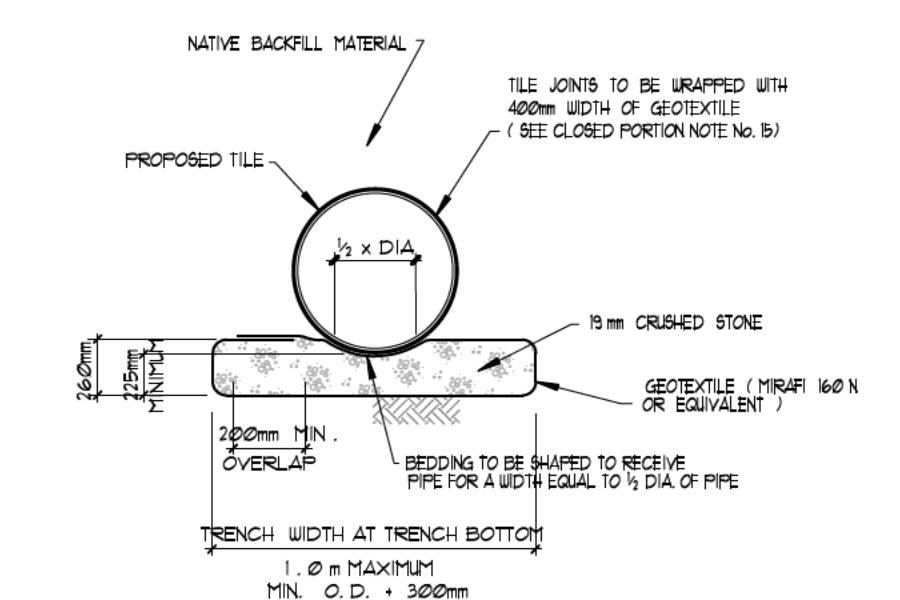
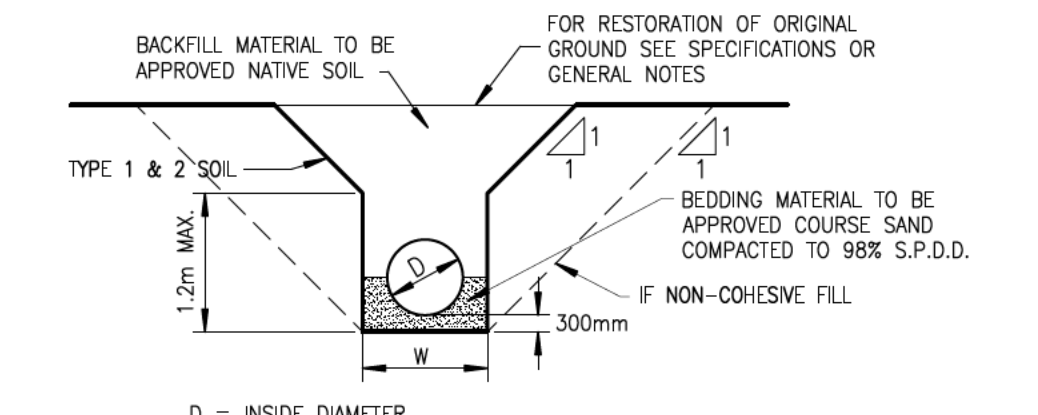
- LIMIT OF WATERSHED AREA
- PROPOSED DRAINAGE WORKS
- EXTERIOR OR INTERIOR WATERSHED
- TO BE INCLUDED FOR FUTURE MAINTENANCE
- EXIST. MUNICIPAL DRAIN
- PRIVATE TILE OR SURFACE WATER RUN
- EXIST. WATERCOURSE OR PRIVATE DITCH
- ASSESSMENT ROLL NUMBER
OWNERS NAME
HECTARES OWNED
- BUSH AREA

PLAN SCALE 1 : 5,000



GENERAL NOTES

- 1/ OUR SPECIFICATIONS DATED JANUARY 2020 APPLY TO THIS PROJECT.
- 2/ THE WORKING WIDTH AVAILABLE TO THE CONTRACTOR TO CONSTRUCT THE NEW DRAINS SHALL CONSIST OF THOSE LANDS IMMEDIATELY ADJACENT TO THE DRAIN AND CONNECTIONS AND SHALL NOT EXCEED THE FOLLOWING AVERAGE WIDTHS:
CLOSED PORTIONS - 20 meters
CLOSED PORTIONS (THROUGH BUSH) - 30 meters (CENTERED ON THE DRAIN)
THE WORKING WIDTH FOR PURPOSES OF FUTURE MAINTENANCE SHALL BE THE SAME AS ABOVE EXCEPT FOR CLOSED PORTIONS (NOT THROUGH BUSH) WHICH SHALL BE 10m.
- 3/ ALL OWNERS ALONG THE COURSE OF THE DRAIN SHALL MAKE AN ACCESS ROUTE FROM THE NEAREST ROAD TO THE DRAIN LOCATION AVAILABLE TO THE CONTRACTOR THE AVERAGE WIDTH OF THIS ROUTE SHALL NOT EXCEED 8 METERS. THE ACCESS ROUTE SHALL ALSO APPLY FOR FUTURE MAINTENANCE PURPOSES.
- 4/ a) ALL UTILITIES TO BE LOCATED AND EXPOSED PRIOR TO CONSTRUCTION SO THAT THE NEW TILE GRADES CAN BE CONFIRMED. IF THERE IS A CONFLICT IN ELEVATION BETWEEN THE PROPOSED DRAIN AND THE UTILITY, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY.
b) CONTRACTOR TO NOTIFY ALL UTILITIES 12 HOURS PRIOR TO HIS SCHEDULED TIME FOR STARTING THE ABOVE WORK.
c) THE COST FOR THIS WORK SHALL BE INCLUDED IN THE ITEM ON THE EXTENT OF WORK AND NO EXTRA PAYMENT SHALL BE MADE TO THE CONTRACTOR, EXCEPT IF ROAD RESTORATION IS REQUIRED.
- 5/ ALL TREES, SCRUB, BRUSH, ETC. TO BE CLEARED AND GRUBBED IN ACCORDANCE WITH "SECTION B.3 AND C.4" SPECIFICATIONS.
- 6/ RIP-RAP TO BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH "SECTION A.12" IN THE SPECIFICATIONS.
- 7/ TURF REINFORCEMENT MAT SHALL BE "NORTH AMERICAN GREEN C 350" OR APPROVED EQUAL. MAT SHALL BE INSTALLED ON SEEDED BANK IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS WITH THE FOLLOWING EXCEPTIONS:
a) STAPLES TO BE 200mm LONG AND SHALL BE INSTALLED TO MANUFACTURER'S "D" PATTERN
b) MAT TO BE KEPT 300mm BELOW DITCH BOTTOM, 200mm INTO BANK SLOPE AT UPSTREAM LIMIT AND SHALL BE STAPLED 200mm BELOW TOE OF BANK.
- 8/ CONTRACTOR TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE ENGINEER, DRAINAGE SUPERINTENDENT, AND THE AFFECTED OWNERS. ALL PARTIES SHALL RECEIVE 48 HOURS NOTICE TO THE MEETING.
- 9/ ALL CONCRETE AND PLASTIC TILE AND PIPE TO CONFORM TO "SECTION C.1" IN THE SPECIFICATIONS.
a) SEWER PIPE TO BE CONCRETE, H. D. P. E. PLASTIC 320 KPA (BELL & SPIGOT WITH RUBBER GASKETS, CONFORMING TO C.S.A. 1076-08), PVC ULTRA RIB OR PVC SDR 35
b) CONCRETE TILE SHALL BE HEAVY DUTY UNLESS SPECIFIED 2000 D OR 2400 D ON PROFILE
c) SMOOTH WALL PLASTIC PIPE (PERFORATED WITH SOCK) SHALL BE FLEXIBLE (COLLAPSE) DUAL WALL 250KPA OR STRONGER PIPE SUCH AS "GOLDFLEX" MATS OR APPROVED EQUAL. FILTER SOCK SHALL BE "TEXEL F100-D", "TERRAFIX 200R" OR APPROVED EQUAL.
10/ ALL CATCHBASINS SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH "SECTION C.16" IN THE SPECIFICATIONS EXCEPT AS FOLLOWS:
a) ALL CATCHBASIN LEADS TO BE CONNECTED TO NEW TILE DRAIN WITH PRE-FABRICATED "WYE"
b) ALL NON ROAD DITCH INLET CATCHBASINS TO HAVE BERMS (CONSTRUCTED WITH SUBSOIL) WITH OVERFLOW CHUTE PROTECTED WITH N. A. G. C350 TURF REINFORCEMENT MAT (SEE DETAIL 'D')
c) ALL ON-LINE CATCHBASINS TO HAVE 150mm DIA VERTICAL PIPE VENT IMMEDIATELY DOWNSTREAM (SEE DETAIL 'E')
d) ALL OFF-SET CATCHBASIN LOCATIONS TO HAVE 150mm DIA VERTICAL PIPE VENT WITH TEE BAR SUPPORT AT FENCE LINES EXTENDING 600mm ABOVE GROUND AND CONNECTED TO THE DRAIN TILE WITH APPROVED FITTING.
- 11/ NEW TILE DRAINS TO BE LOCATED AS FOLLOWS:
MAIN DRAIN
a) STA 0 + 000 to STA 0 + 040 - ON THE NORTH SIDE OF THE EXISTING SURFACE CULVERT UNDER PROSPECT HILL ROAD. EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION.
b) STA 0 + 040 to STA 0 + 300+ - ON THE EAST SIDE OF THE EXISTING 300mm 1967 TILE DRAIN.
c) STA 0 + 300+ to STA 0 + 917 - NEW TILE DRAIN TO BE PLACED IN SAME LOCATION AS EXISTING 1967 TILE DRAIN WHERE POSSIBLE. EXIST. TILE TO BE DESTROYED AND EXPOSED TILE SHALL BE DISPOSED OF OFF-SITE.
d) STA 0 + 917 to STA 1 + 040 - NEW TILE DRAIN TO BE PLACED IN SAME LOCATION AS EXISTING 1967 TILE DRAIN WHERE POSSIBLE. EXIST. TILE TO BE DESTROYED AND REMAINING EXPOSED TILE SHALL BE DISPOSED OF OFF-SITE.
e) STA 1 + 040 to STA 1 + 149 - EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION.
f) STA 1 + 149 to STA 1 + 261 - NEW TILE DRAIN TO BE PLACED IN SAME LOCATION AS EXISTING 1993 TILE DRAIN WHERE POSSIBLE. EXIST. TILE TO BE DESTROYED AND EXPOSED TILE SHALL BE DISPOSED OF OFF-SITE.
g) STA 1 + 261 to STA 1 + 515 - NEW TILE DRAIN TO BE PLACED 10m SOUTH OF TREE LINE.
h) STA 1 + 515 to STA 1 + 618 - NEW TILE DRAIN TO BE PLACED 15m EAST OF TREE LINE.
i) STA 1 + 618 to STA 2 + 120 - NEW TILE DRAIN TO BE PLACED IN SAME LOCATION AS EXISTING PRIVATE TILE DRAIN WHERE POSSIBLE. EXIST. TILE TO BE DESTROYED AND REMAINING EXPOSED TILE SHALL BE DISPOSED OF OFF-SITE.
- EXISTING TILE DRAINS TO BE EXPOSED IN AS MANY LOCATIONS AS ARE NECESSARY TO CONFIRM THEIR EXACT LOCATION AND ELEVATION PRIOR TO CONSTRUCTION. EXACT LOCATION OF NEW TILE DRAINS THEN TO BE CONFIRMED BY DRAINAGE SUPERINTENDENT OR ENGINEER.
- 12/ a) INSTALLATION OF TILE AND TRENCH WIDTHS SHALL BE IN ACCORDANCE WITH "SECTION C - TILE DRAIN" IN THE SPECIFICATIONS.
b) SEWER PIPE UNDER TRAVEL PORTION OF ROADS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILED DRAWING No. 02 IN THE SPECIFICATIONS.
c) ALL OTHER SEWER PIPE TO BE INSTALLED IN ACCORDANCE WITH DETAIL "A" OR "B"
d) ALL CONCRETE TILE AND TILE-PIPE JOINTS TO BE WRAPPED WITH GEOTEXTILE IN ACCORDANCE WITH "SECTION C.8" IN THE SPECIFICATIONS.
e) NO CONSTRUCTION EQUIPMENT OR FARM MACHINERY SHALL CROSS OVER THE MOUND BACKFILLED TILE TRENCHES UNTIL SUFFICIENT SETTLEMENT HAS OCCURRED.
f) STRIP AND STOCKPILE TOPSOIL FROM CONSTRUCTION AREA (4 metre width) EXCEPT LANEWAYS & ROADS. EXCESS SPOIL TO BE LEVELLED AND TOPSOIL RELEVELLED OVER SPOIL, MOUND TRENCH AND REMAINING CONSTRUCTION AREA.
- 13/ a) IT SHALL BE NOTED THAT AREAS OF POOR SOIL CONDITION MAY BE ENCOUNTERED ALONG THE COURSE OF THE DRAIN. IF SUCH CONDITIONS ARE ENCOUNTERED AND IF THE TRENCH WALLS AND/OR TRENCH BOTTOM AND/OR TRENCH BOTTOM BECOME UNSTABLE, THEN THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE DRAINAGE SUPERINTENDENT OR ENGINEER.
b) IF SO ORDERED BY THE DRAINAGE SUPERINTENDENT OR ENGINEER, THE CONTRACTOR SHALL INSTALL THE TILE OR PIPE ON A BEDDING OF 100mm (3/8") CRUSHED STONE THROUGH THE AREA OF UNSTABLE TRENCH. THE CRUSHED STONE SHALL BE COMPLETELY WRAPPED IN GEOTEXTILE SUCH AS "TERRAFIX 360 R" OR APPROVED EQUAL. (SEE DETAIL 'C') THE LIMITS OF THIS WORK SHALL BE DETERMINED BY THE DRAINAGE SUPERINTENDENT OR ENGINEER.
c) PAYMENT FOR THIS WORK SHALL BE IN ACCORDANCE WITH THE CONTINGENCY AMOUNTS SHOWN IN THE 'FORM OF TENDER'.
- 14/ a) IF IT BECOMES IMPRACTICAL TO INSTALL THE NEW TILE IN THE EXISTING TILE LOCATION DUE TO EXISTING TILE ALIGNMENT AND/OR TOO MUCH WATER FLOWING THROUGH THE TILE, THEN THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND/OR THE DRAINAGE SUPERINTENDENT.
b) IF SO ORDERED BY THE ENGINEER AND/OR DRAINAGE SUPERINTENDENT THEN THE CONTRACTOR SHALL INSTALL THE NEW TILE IMMEDIATELY ADJACENT TO THE EXISTING TILE. AFTER CONSTRUCTION IS COMPLETED THE EXISTING TILE SHALL BE DESTROYED WITH A RUBBER TIRE BACKHOE. TILE CONNECTIONS INTO THE EXISTING TILE SHALL BE CONNECTED TO THE NEW TILE.
- 15/ a) THE CONTRACTOR SHALL ENSURE THAT ALL TRIBUTARY DRAINS ARE CONNECTED DURING TIME OF CONSTRUCTION. ANY MISSED TILE CONNECTIONS THAT ARE FOUND DURING THE WARRANTY PERIOD OF THE CONTRACT SHALL BE COMPLETED BY THE CONTRACTOR AND SHALL BE PAID THE AMOUNT SET OUT ON PAGE 2 OF THE 'FORM OF TENDER'. NO ADDITIONAL PAYMENT FOR MOBILIZATION WILL BE ALLOWED. THE CONTRACTOR IS NOT RESPONSIBLE FOR COMPLETING MISSED TILE CONNECTIONS THAT ARE FOUND AFTER THE WARRANTY PERIOD FOR THE CONTRACT HAS EXPIRED.
b) ALL TILE CONNECTIONS TO BE MADE WITH CORING MACHINE AND PLASTIC ADAPTOR OR PREFABRICATED FITTINGS.
c) THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A LIST SHOWING STATIONS OF ALL TILE CONNECTIONS UPON COMPLETION OF CONSTRUCTION.
- 16/ SILT FENCE TO BE PLACED ACROSS DITCH BOTTOM AT STA 0 + 000 DURING CONSTRUCTION TO PREVENT SILT FROM FLUSHING DOWNSTREAM, AND ARE TO BE MAINTAINED AS NECESSARY DURING CONSTRUCTION. SILT FENCE AND SILT TO BE REMOVED AND DISPOSED OF AFTER CONSTRUCTION.



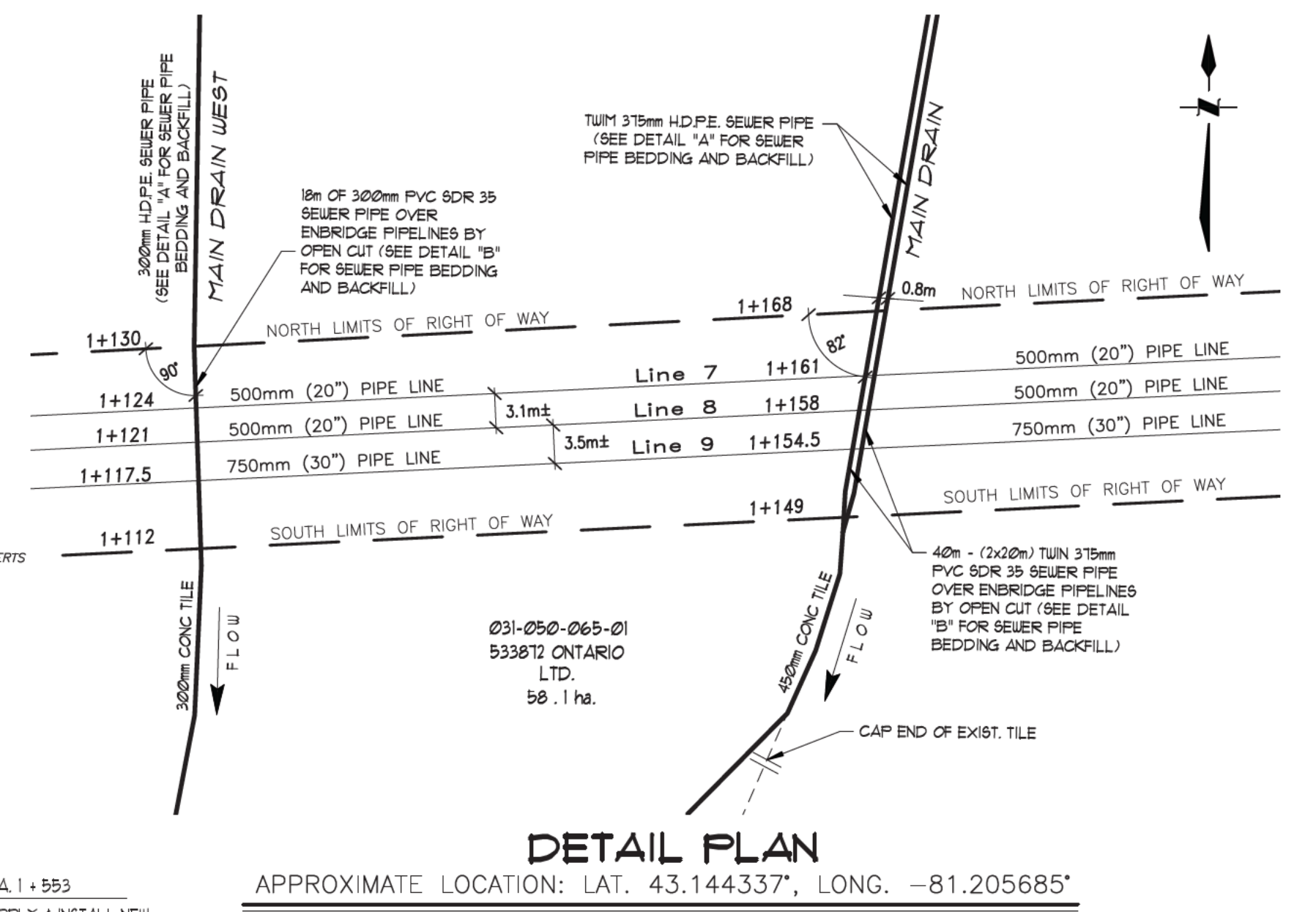
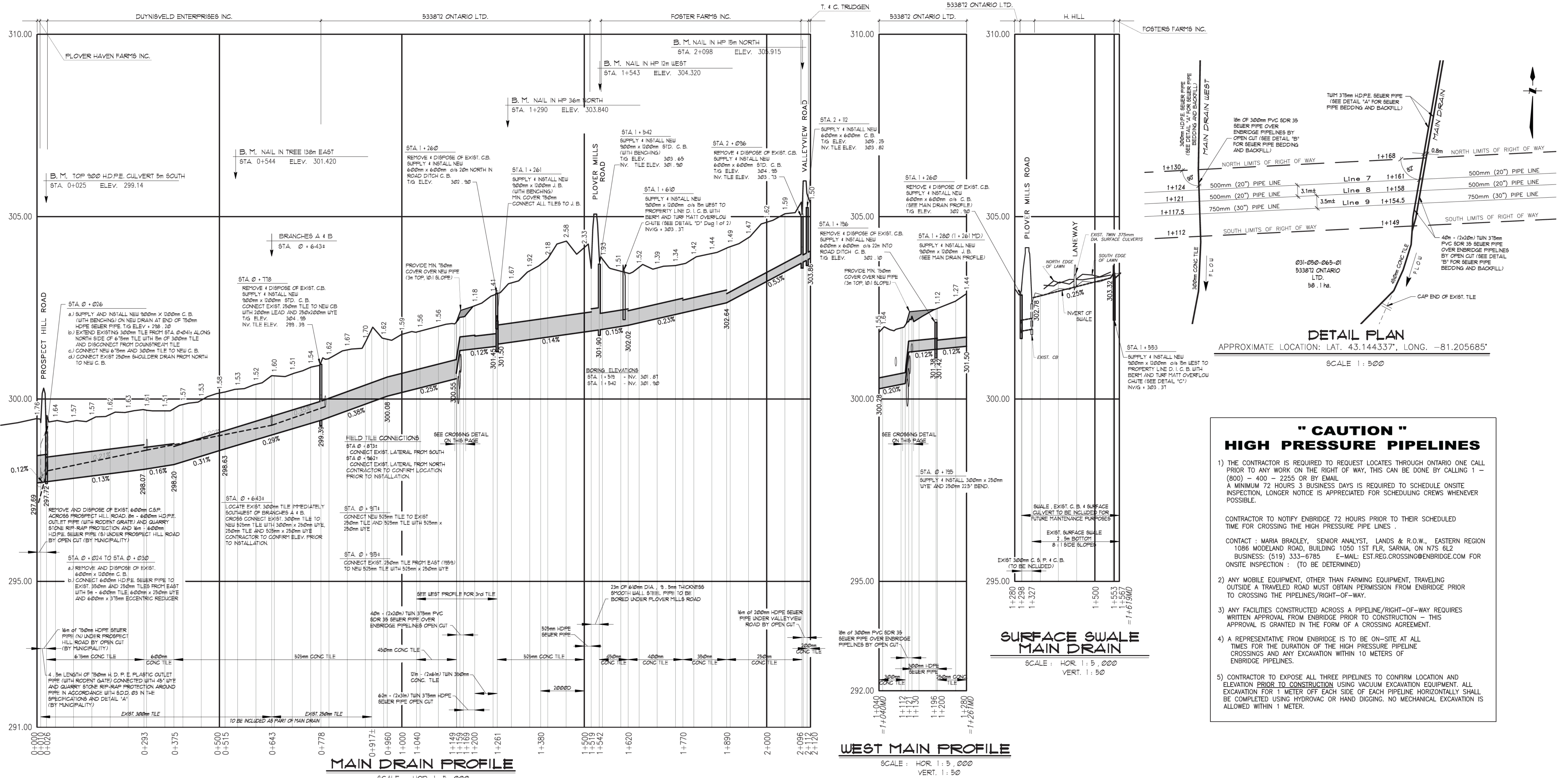
O'REILLY DRAIN 2024

Municipality of **Thames Centre**

Drainage Superintendent: TRAVIS FITT 519-268-7334 EXT. 234	No.	REVISIONS	DATE
Drawn By: AV	Field Book	JOB No.	Drawing No.
Date: OCT 16, 2024	GPS, D - 276	2 2 3 1 9 2	1 of 2

PLAN, PROFILES & DETAILS

SPRIET ASSOCIATES
LONDON LIMITED
CONSULTING ENGINEERS
155 YORK STREET - LONDON (519) 672-4100 - NEA 1A8



DETAIL PLAN
 APPROXIMATE LOCATION: LAT. 43.144337°, LONG. -81.205685°
 SCALE 1 : 500

" CAUTION "
HIGH PRESSURE PIPELINES

1) THE CONTRACTOR IS REQUIRED TO REQUEST LOCATES THROUGH ONTARIO ONE CALL PRIOR TO ANY WORK ON THE RIGHT OF WAY, THIS CAN BE DONE BY CALLING 1 - (800) - 400 - 2255 OR BY EMAIL: A MINIMUM 72 HOURS 3 BUSINESS DAYS IS REQUIRED TO SCHEDULE ONSITE INSPECTION, LONGER NOTICE IS APPRECIATED FOR SCHEDULING CREWS WHENEVER POSSIBLE.

CONTRACTOR TO NOTIFY ENBRIDGE 72 HOURS PRIOR TO THEIR SCHEDULED TIME FOR CROSSING THE HIGH PRESSURE PIPE LINES .

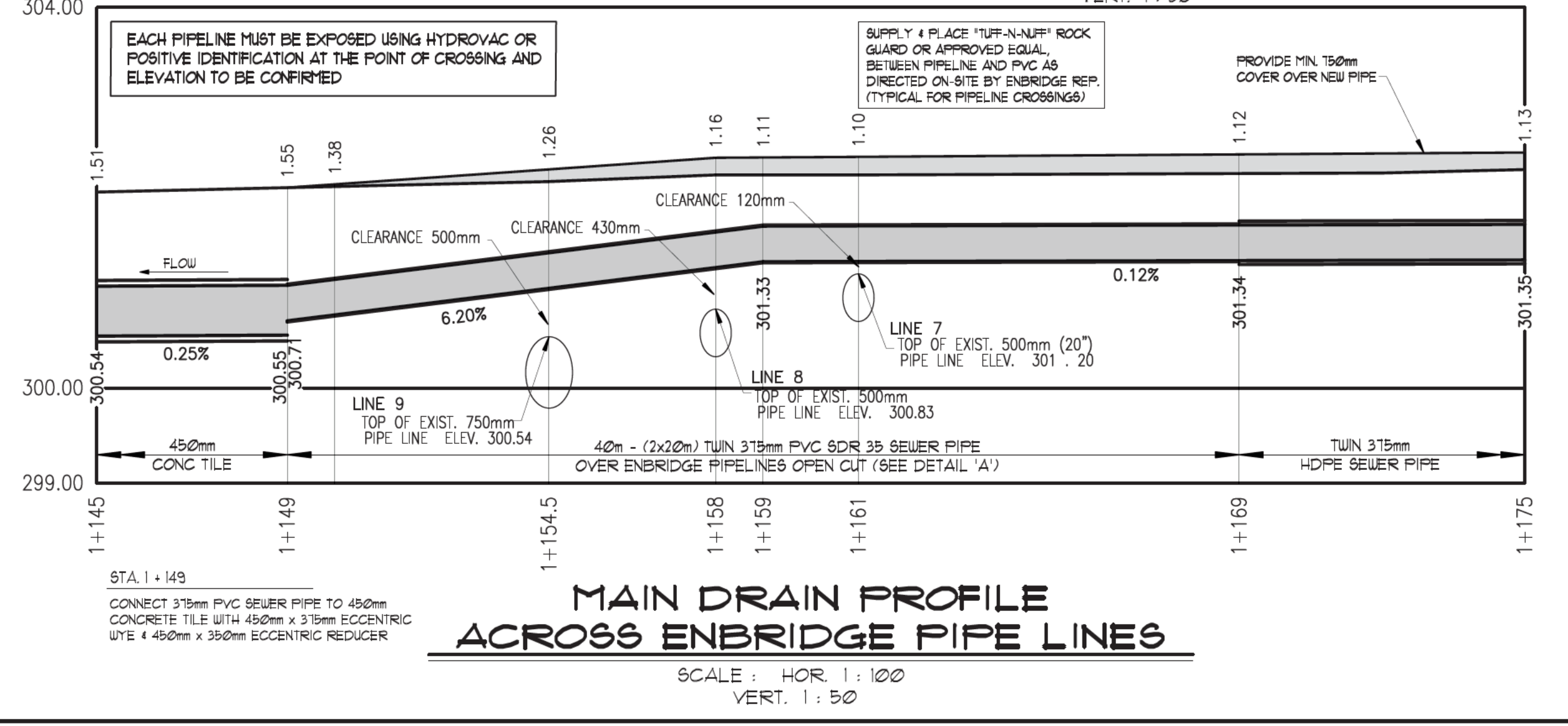
CONTACT : MARIA BRADLEY, SENIOR ANALYST, LANDS & R.O.W., EASTERN REGION 1086 MODELAND ROAD, BUILDING 1050 1ST FLR, SARNIA, ON N7S 6L2 BUSINESS: (519) 333-6785 E-MAIL: EST.REG.CROSSING@ENBRIDGE.COM FOR ONSITE INSPECTION : (TO BE DETERMINED)

2) ANY MOBILE EQUIPMENT, OTHER THAN FARMING EQUIPMENT, TRAVELING OUTSIDE A TRAVELED ROAD MUST OBTAIN PERMISSION FROM ENBRIDGE PRIOR TO CROSSING THE PIPELINES/RIGHT-OF-WAY.

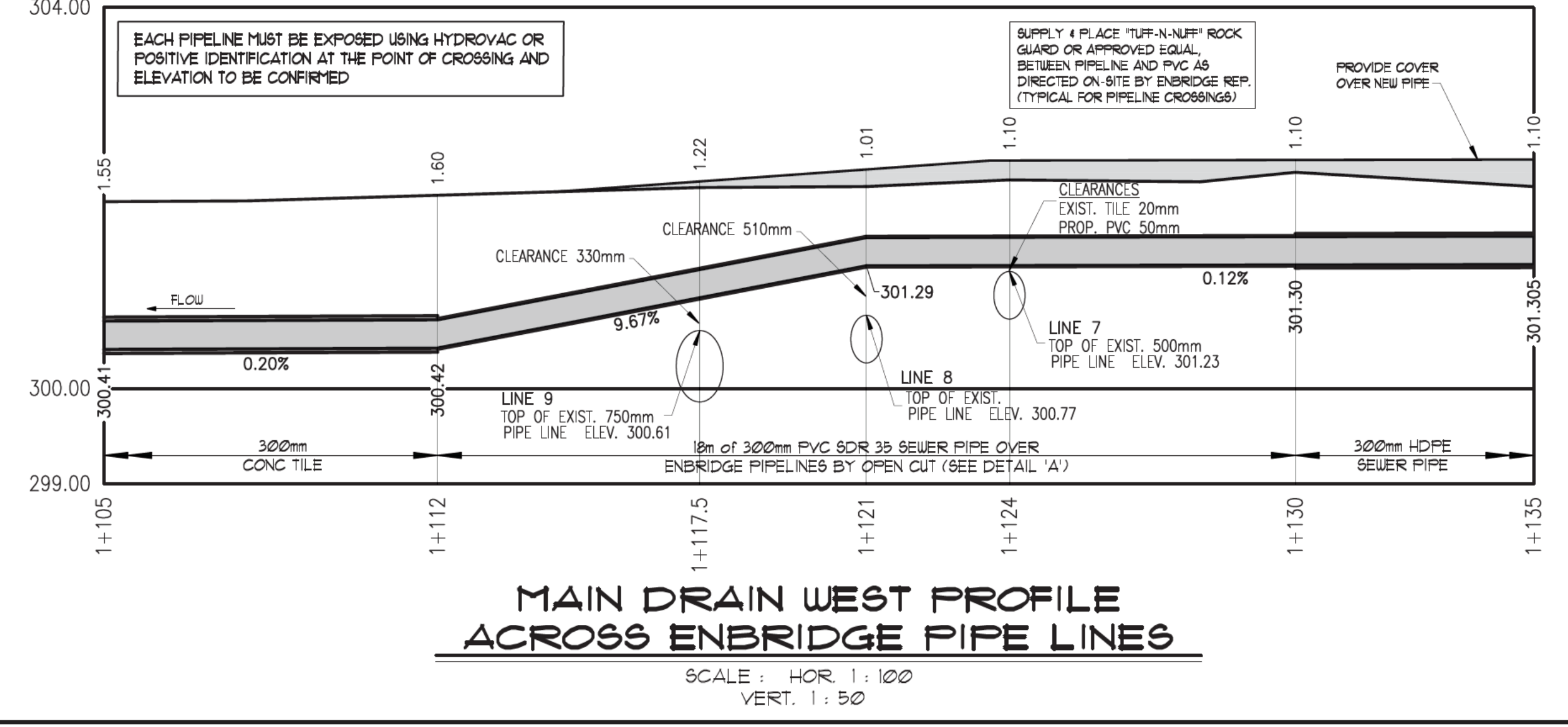
3) ANY FACILITIES CONSTRUCTED ACROSS A PIPELINE/RIGHT-OF-WAY REQUIRES WRITTEN APPROVAL FROM ENBRIDGE PRIOR TO CONSTRUCTION - THIS APPROVAL IS GRANTED IN THE FORM OF A CROSSING AGREEMENT.

4) A REPRESENTATIVE FROM ENBRIDGE IS TO BE ON-SITE AT ALL TIMES FOR THE DURATION OF THE HIGH PRESSURE PIPELINE CROSSINGS AND ANY EXCAVATION WITHIN 10 METERS OF ENBRIDGE PIPELINES.

5) CONTRACTOR TO EXPOSE ALL THREE PIPELINES TO CONFIRM LOCATION AND ELEVATION PRIOR TO CONSTRUCTION USING VACUUM EXCAVATION EQUIPMENT. ALL EXCAVATION FOR 1 METER OFF EACH SIDE OF EACH PIPELINE HORIZONTALLY SHALL BE COMPLETED USING HYDROVAC OR HAND DIGGING. NO MECHANICAL EXCAVATION IS ALLOWED WITHIN 1 METER.



MAIN DRAIN PROFILE ACROSS ENBRIDGE PIPE LINES
 SCALE : HOR. 1 : 100
 VERT. 1 : 50



MAIN DRAIN WEST PROFILE ACROSS ENBRIDGE PIPE LINES
 SCALE : HOR. 1 : 100
 VERT. 1 : 50

O'REILLY DRAIN 2024

Municipality of **Thames Centre**

Drainage Superintendent: TRAVIS FITT
 519-268-7334 EXT. 234

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