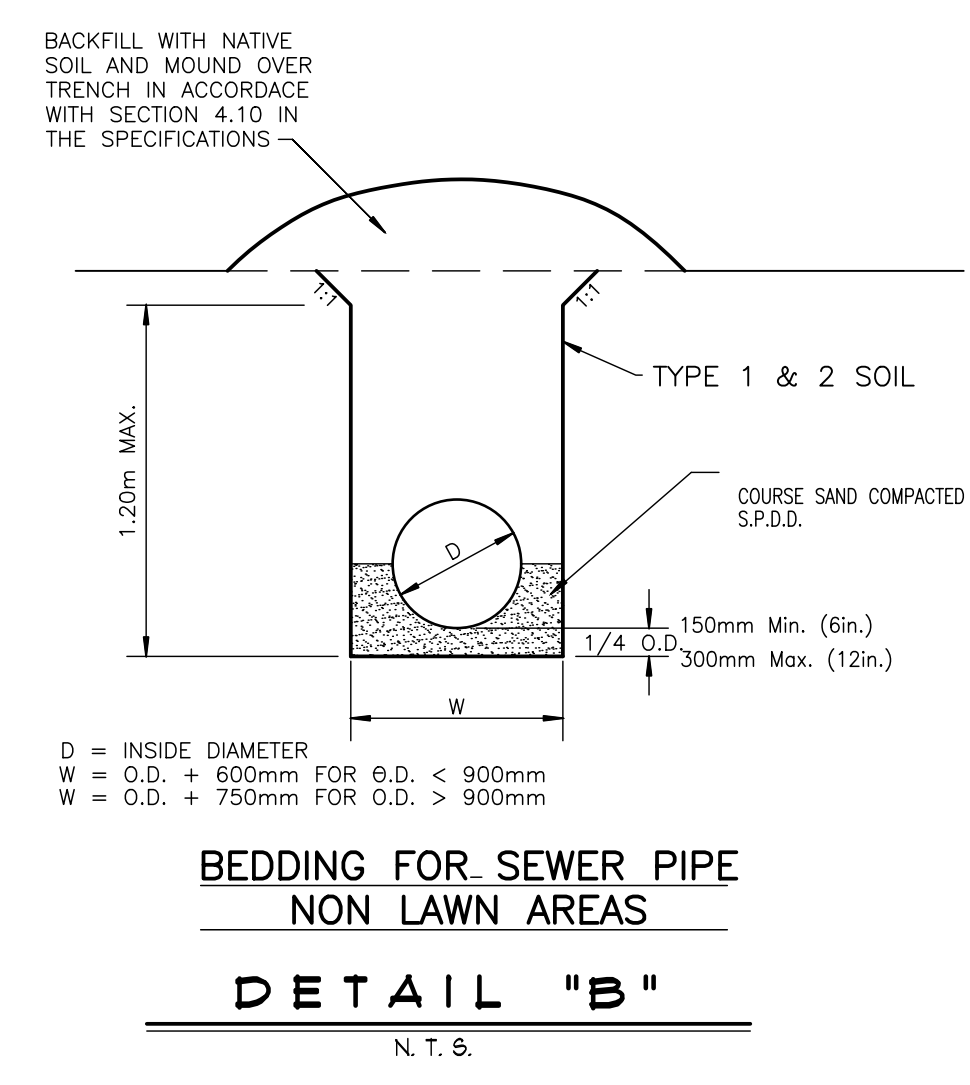
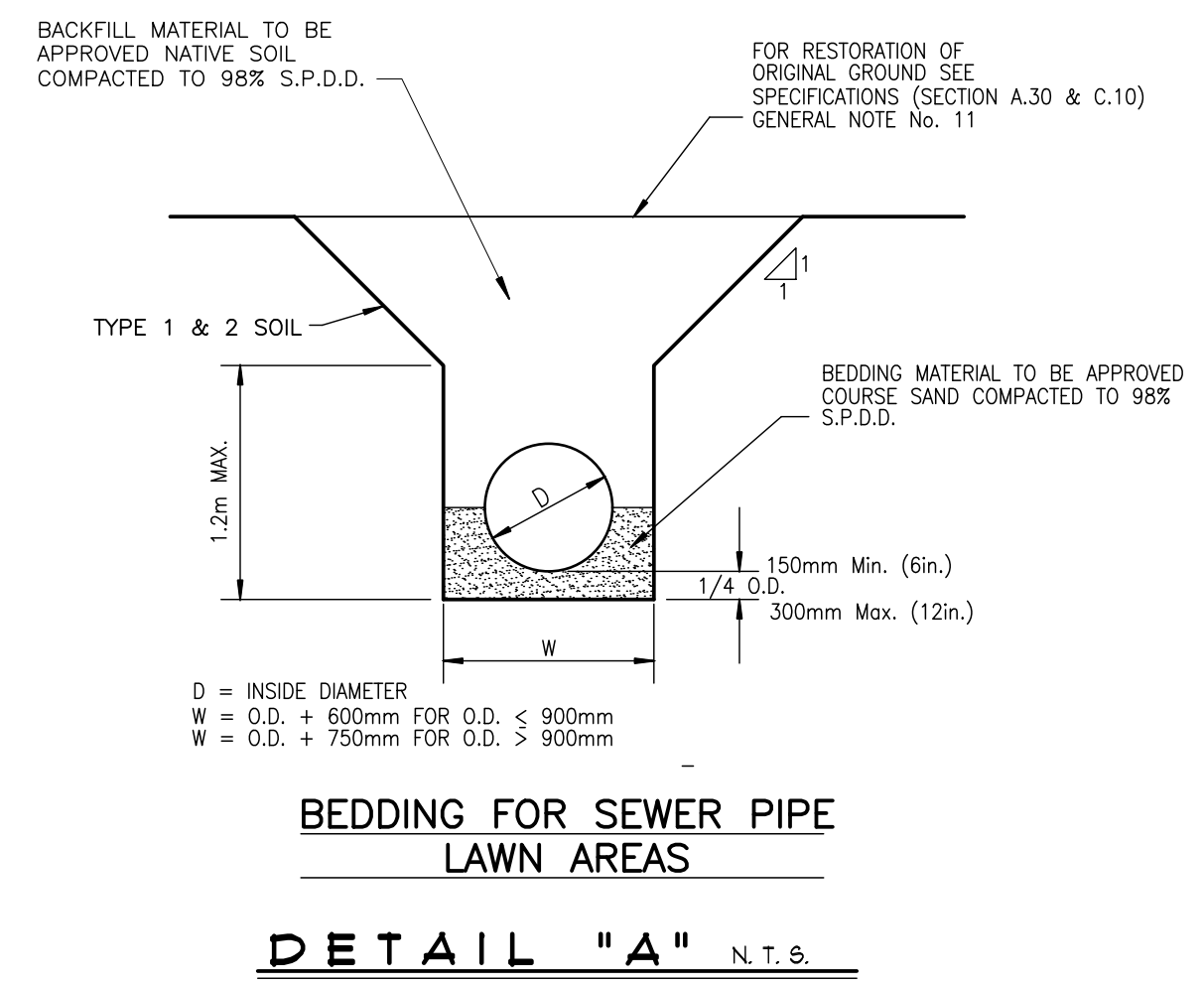


- ### GENERAL NOTES
- OUR SPECIFICATIONS DATED JANUARY 2020 APPLY TO THIS PROJECT.
 - THE WORKING WIDTH AVAILABLE TO THE CONTRACTOR TO CONSTRUCT THE NEW DRAINS SHALL CONSIST OF THOSE LANDS IMMEDIATELY ADJACENT TO THE DRAIN AND CONNECTIONS AND SHALL NOT EXCEED THE FOLLOWING AVERAGE WIDTHS:
 - OPEN PORTIONS - 18 meters
 - CLOSED PORTIONS - 20 metersCLOSED PORTIONS (THROUGH BUSH) - 10 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) SHALL BE 10m.
 - 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.
 - 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.
 - ALL TREES, SCRUB, BRUSH, ETC. TO BE CLEARED AND GRUBBED IN ACCORDANCE WITH "SECTION B.3 AND C.4" SPECIFICATIONS.
 - RIP-RAP TO BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH "SECTION A.12" IN THE SPECIFICATIONS.
 - CONTRACTOR TO ARRANGE A FIRE-CONSTRUCTION MEETING WITH THE ENGINEER, DRAINAGE SUPERINTENDENT, AND THE AFFECTED OWNERS. ALL PARTIES SHALL RECEIVE 48 HOURS NOTICE TO THE MEETING.
- ### CLOSED PORTIONS
- a) 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. 1026-08), PVC ULTRA RIB OR PVC SDR 35.
b) CONCRETE TILE SHALL BE HEAVY UNLESS SPECIFIED 2000 D OR 2400 D ON PROFILE.
c) PLASTIC TILE SHALL BE H.D.P.E. 8000TH WALL FLEXIBLE (COLLAPSE) L. 15KPA OR STRONGER PIPE SUCH AS "IDEAL", "AD8" OR APPROVED EQUAL. TILE TO BE PERFORATED WHERE SPECIFIED.
 - a) 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 CONCRETE "WYE".
b) ALL NON ROAD DITCH INLET CATCHBASINS TO HAVE BERRIS (CONSTRUCTED WITH SUBSOIL) WITH OVERFLOW CHUTE PROTECTED WITH N.A.G. C350 TURF REINFORCEMENT MAT (SEE DETAIL "C").
c) ALL CATCHBASINS TO HAVE 100mm DIA. VERTICAL PIPE VENT IMMEDIATELY DOWNSIDE, EXTENDING FOR 600mm ABOVE CATCHBASIN TOP. PIPE VENT TO BE HIGHWAY GRADE SINGLE OR DUAL WALL, PLASTIC CONNECTED TO MAIN TILE WITH APPROVED FITTING. (SEE DETAIL "E" ON DUG 2 of 2).
 - a) ALL PREFABRICATED FITTINGS SPECIFIED AS CONCRETE MAY BE SUBSTITUTED WITH SAME SIZE PLASTIC WHERE AVAILABLE BUT SHALL BE COMPLETELY ENCASED WITH 20 MPa CONCRETE (MINIMUM 150mm THICKNESS).
- ### NEW TILE DRAINS TO BE LOCATED AS FOLLOWS:
- MAIN DRAIN
- a) STA. 0+000 TO STA. 1+430 - NEW TILE DRAIN TO BE PLACED IN SAME LOCATION AS EXISTING TILE DRAIN WHERE POSSIBLE. EXIST. TILE TO BE DESTROYED AND EXPOSED TILE SHALL BE DISPOSED OF OFF-SITE.
- BRANCH A
- a) STA. 0+000 TO STA. 0+251 - NEW TILE DRAIN TO BE PLACED IN SAME LOCATION AS EXISTING TILE DRAIN WHERE POSSIBLE. EXIST. TILE TO BE DESTROYED AND 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.
- 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 AND LANEWAY 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 MOUNDED 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, MOUNDED TRENCH AND REMAINING CONSTRUCTION AREA.
g) WHERE THE TILE SIZE IS LARGER THAN 675mm, THE EXCESS TRENCH MATERIAL (APPROXIMATELY EQUAL TO THE VOLUME OF THE TILE BEING INSTALLED) SHALL BE HAILED AWAY AND DISPOSED OF BY THE CONTRACTOR. ENOUGH MATERIAL SHALL BE RETAINED TO PROVIDE SUFFICIENT MOUNDING OVER TILE TO ALLOW FOR SETTLEMENT.
- ### RESTORATION OF LAWN AREAS SHALL BE IN ACCORDANCE WITH "SECTIONS A.14 AND C.10" IN THE SPECIFICATION WITH THE FOLLOWING EXCEPTIONS:
- a) IT IS NOT NECESSARY TO STRIP TOPSOIL.
 - b) 100mm DEPTH OF IMPORTED FIRST QUALITY TOPSOIL IS TO BE LEVELLED OVER THE TRENCH AND ADJACENT AREAS DISTURBED BY CONSTRUCTION.
 - c) TOPSOILED AREAS TO BE SEEDED IN ACCORDANCE WITH "SECTION A.14" IN THE SPECIFICATIONS.
- a) IT SHALL BE NOTED THAT AREAS OF POOR SOIL CONDITION WILL 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 150mm (3/4") CRUSHED STONE THROUGH THE AREA OF UNSTABLE TRENCH. THE CRUSHED STONE SHALL BE COMPLETELY UNWRAPPED IN GEOTEXTILE SUCH AS "TERRAFIX 360 R" OR APPROVED EQUAL. (SEE DETAIL "D") 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".
d) 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.
e) 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.
f) 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.
g) ALL TILE CONNECTIONS TO BE MADE WITH CORING MACHINE AND PLASTIC ADAPTOR OR PREFABRICATED FITTINGS.
h) THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A LIST SHOWING STATIONS OF ALL TILE CONNECTIONS UPON COMPLETION OF CONSTRUCTION.
- ### OPEN PORTIONS
- EXISTING DITCH BOTTOM ONLY TO BE CLEANED OUT IN ACCORDANCE WITH SPECIFICATIONS UNLESS OTHERWISE NOTED ON PROFILES AND IN SECTIONS.
 - WORK TO BE COMPLETED FROM AND EXCAVATED MATERIAL TO BE DEPOSITED AND LEVELLED ON THE FOLLOWING SIDES OF THE DITCH IN ACCORDANCE WITH "SECTION B.5" IN THE SPECIFICATIONS:
STA. 0+000 TO STA. 0+025 - NORTH SIDE
 - SILT FENCE TO BE PLACED ACROSS DITCH BOTTOM AT STA. 0+025 DURING CONSTRUCTION TO PREVENT SILT FROM FLUSHING DOWNSIDE, AND ARE TO BE MAINTAINED AS NECESSARY DURING CONSTRUCTION. SILT FENCE AND SILT TO BE REMOVED AND DISPOSED OF AFTER CONSTRUCTION.

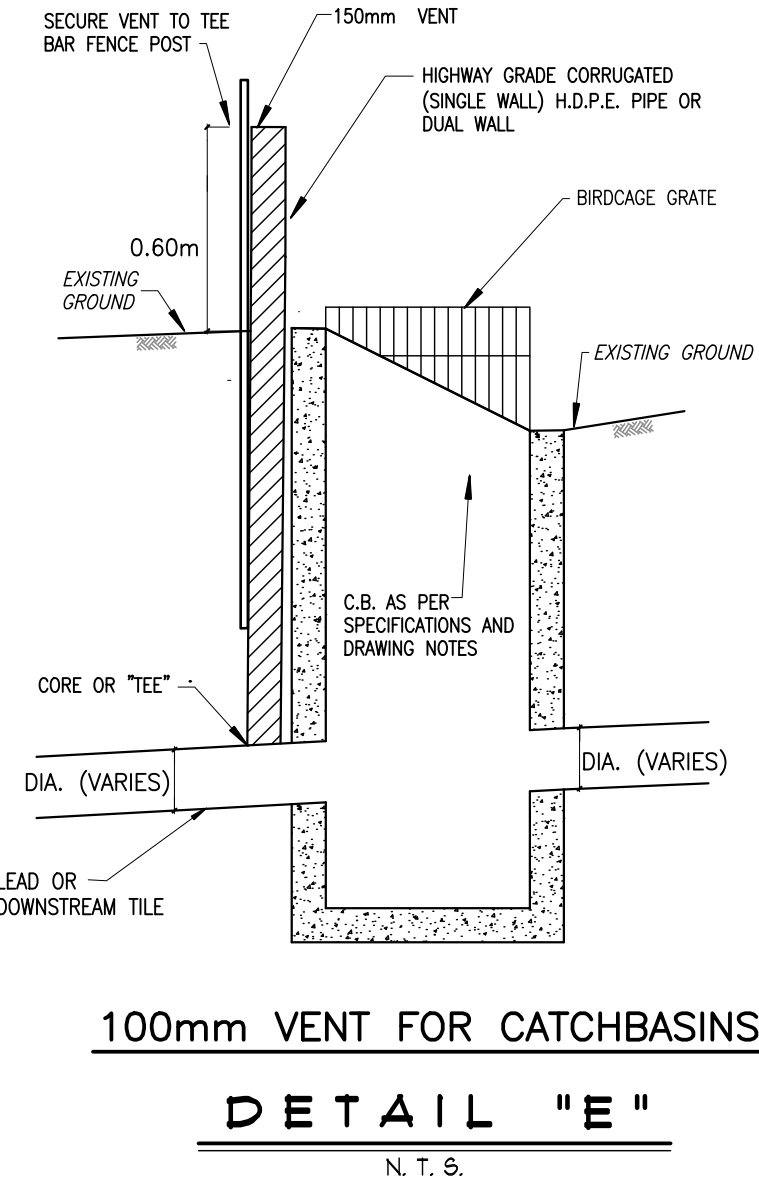
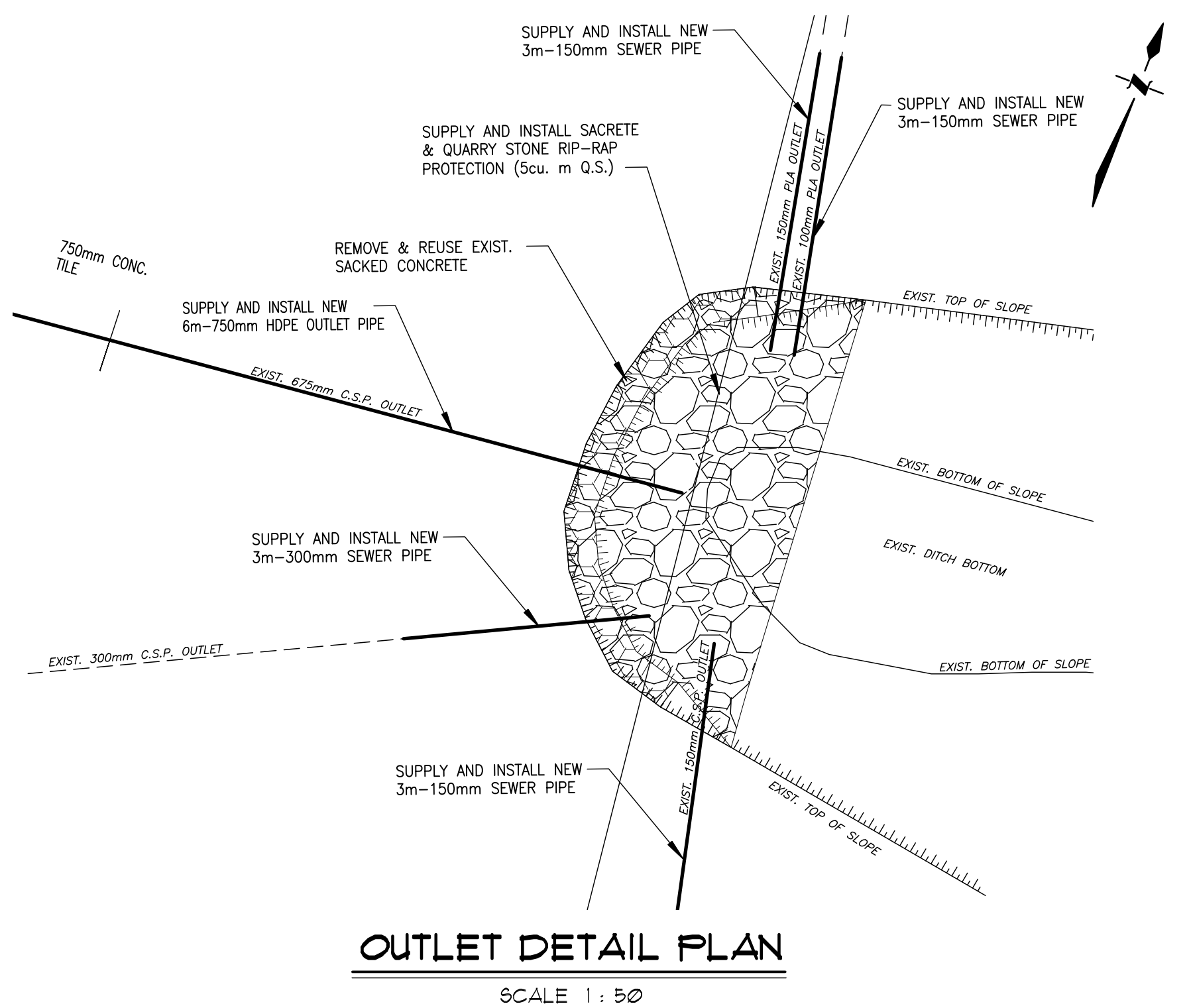
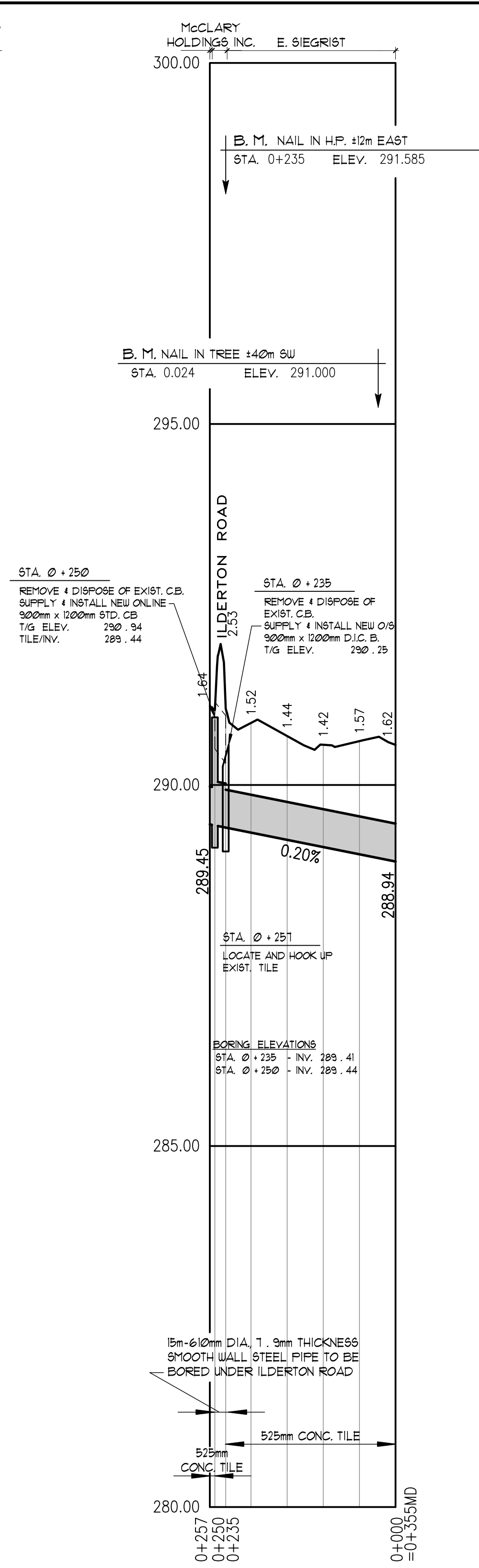
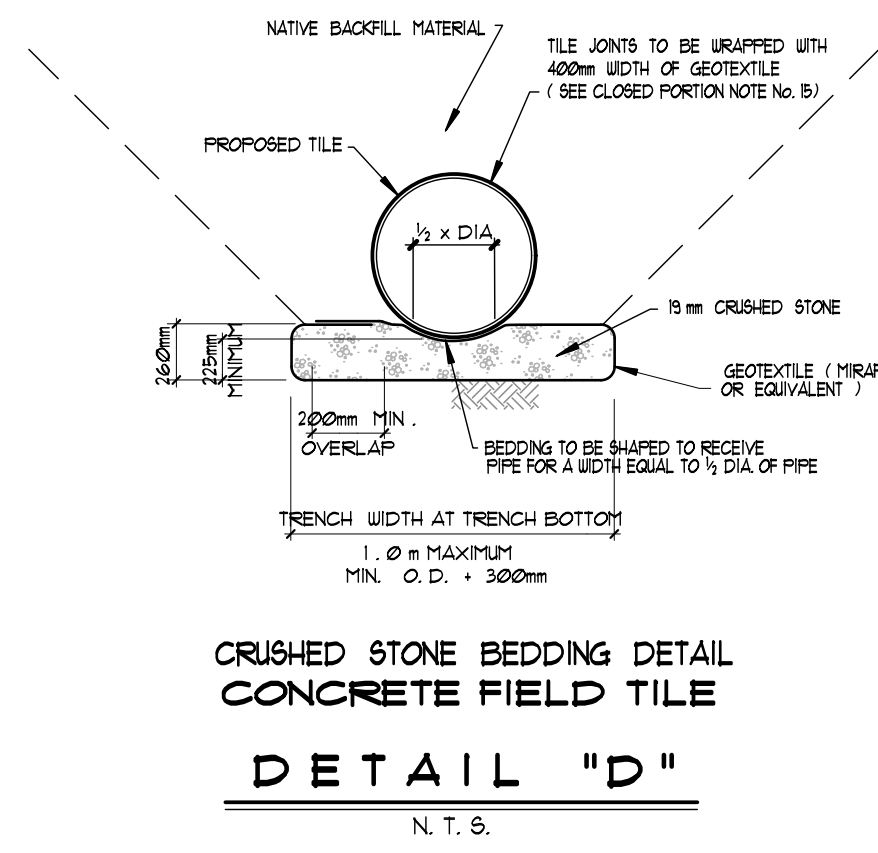
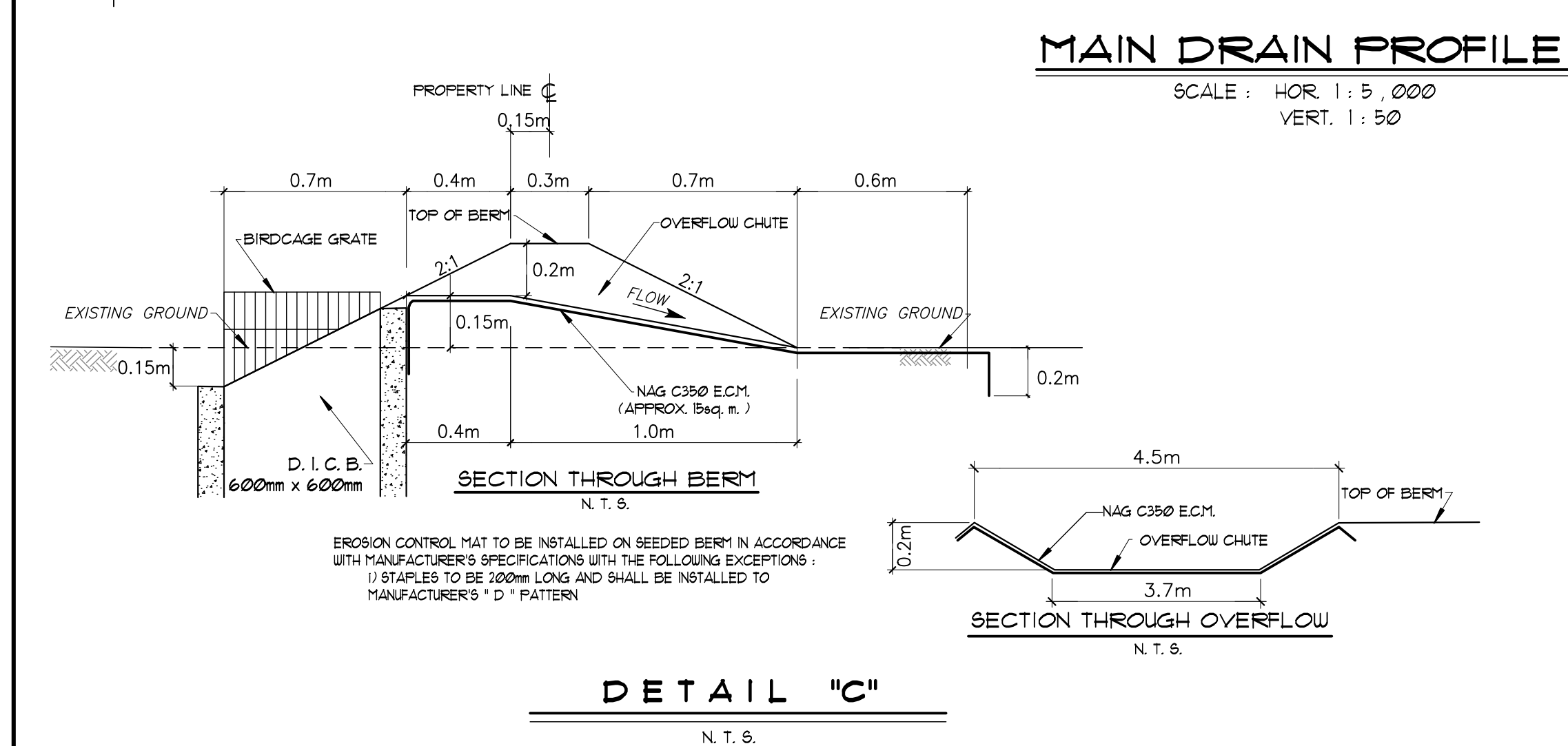
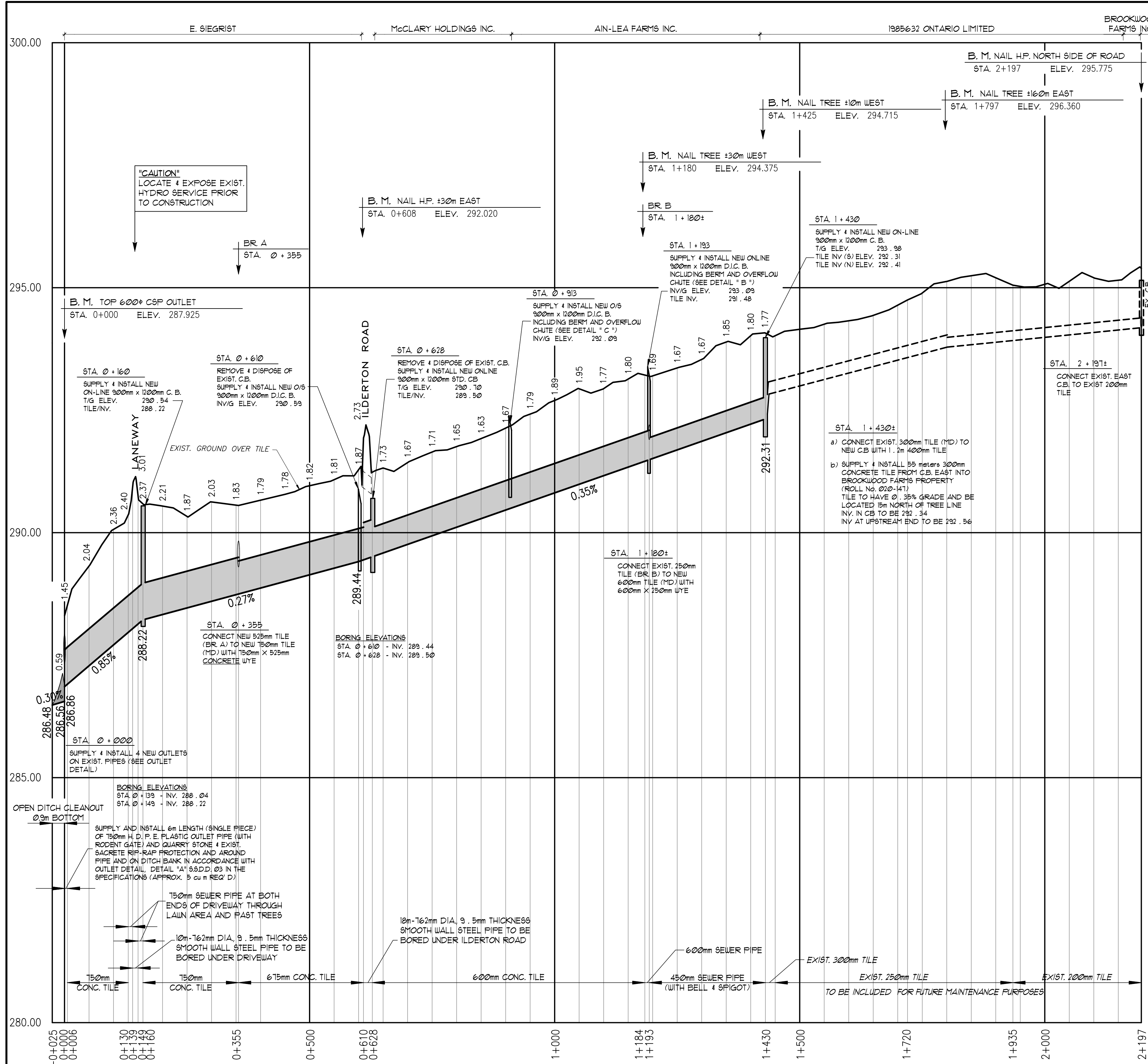


MOIR DRAIN 2025

Municipality of **middlesex centre**
in the centre of it all

Drainage Superintendent: DAN ANDERSON 519-666-0190 EXT. 229	No. _____	REVISIONS	DATE
Drawn By: TF & ML Date: MAY 9, 2025	Field Book D - 218	JOB No. 224083	Drawing No. 1 of 2
PLAN, PROFILES, & DETAIL			
SPRIET ASSOCIATES LONDON LIMITED CONSULTING ENGINEERS 155 YORK STREET - LONDON (519) 672-4100 - NEA 148			

M. P. DAVOS
PROVINCE OF ONTARIO



MOIR DRAIN 2025
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in the centre of it all

Drainage Superintendent: DAN ANDERSON 519-666-0190 EXT. 229	No. _____	REVISIONS _____	DATE _____
Drawn By: TF 4 ML Date: MAY 9, 2025	Field Book D - 218	JOB No. 224083	Drawing No. 2 of 2
PROFILES & DETAILS			
SPRIET ASSOCIATES LONDON LIMITED CONSULTING ENGINEERS 155 YORK STREET - LONDON (519) 672-4100 - NEA 1A8			