

LOT 22

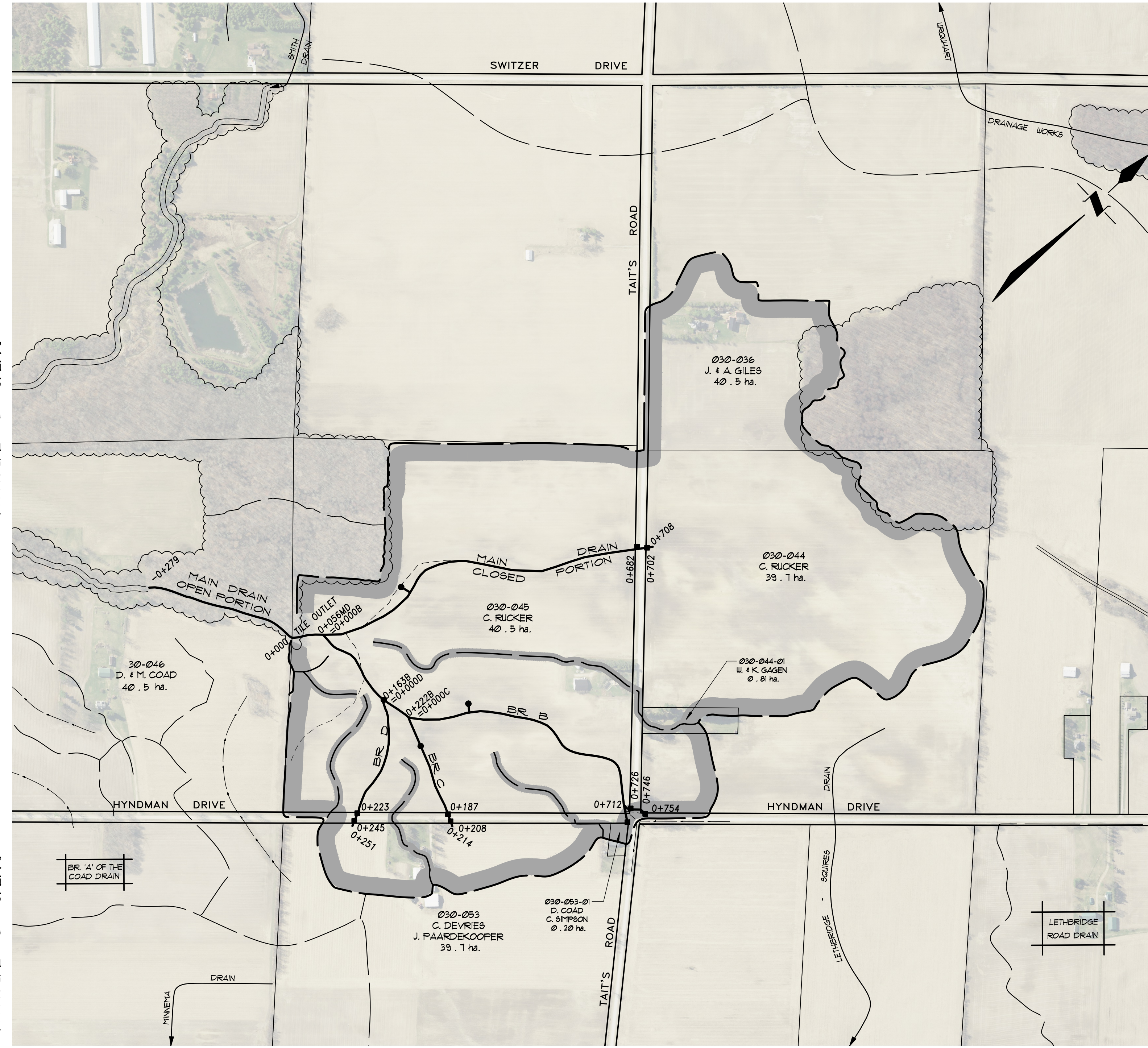
LOT 21

LOT 20

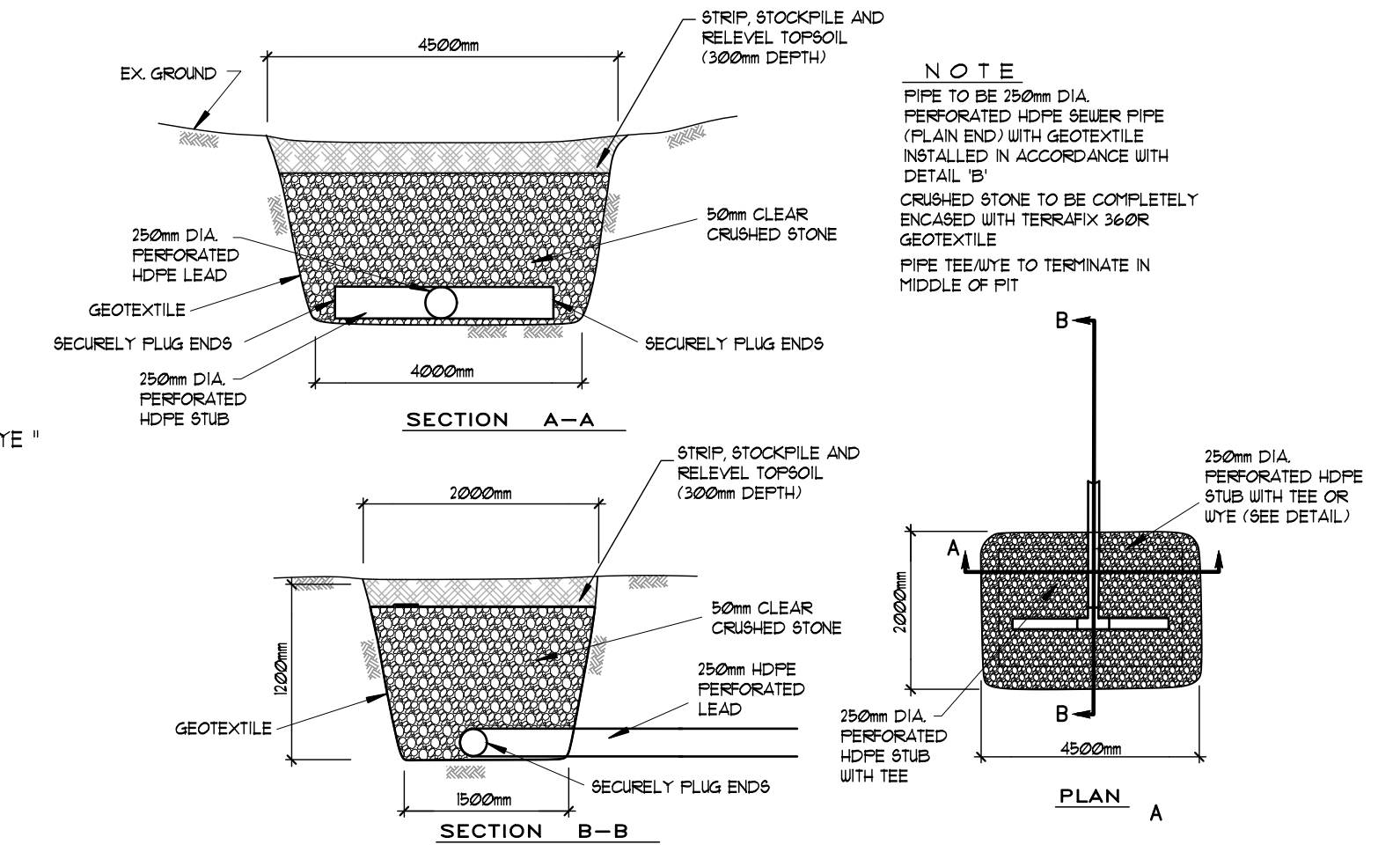
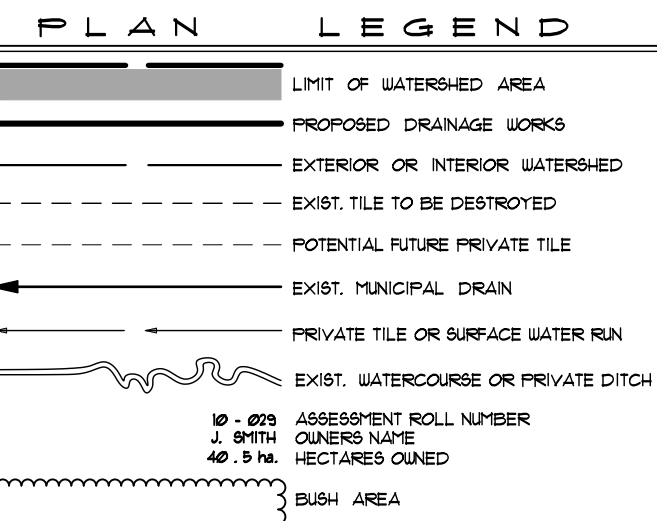
LOT 19

GENERAL NOTES

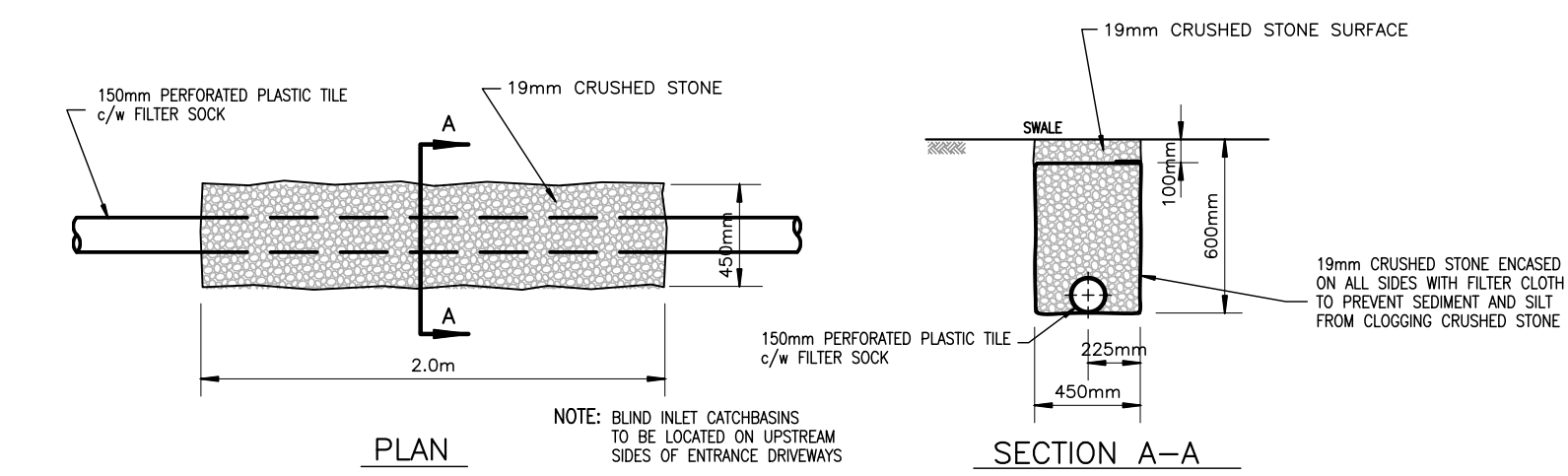
- OUR 'SPECIFICATIONS FOR THE CONSTRUCTION OF MUNICIPAL DRAINAGE WORKS, DATED JANUARY 2010 APPLY TO THIS PROJECT.
- THE WORKING WIDTH AVAILABLE TO THE CONTRACTOR TO CONSTRUCT THE NEW DRAINS SHALL CONSIST OF THOSE LANDS IMMEDIATELY ADJACENT TO THE DRAIN AND CONNECTIONS AND SHALL NOT EXCEED THE FOLLOWING AVERAGE WIDTHS:
 - 5 meters TOTAL (INCLUDING 2.4m BUFFER) REMOVE ONLY TREES ALONG BANK AND THOSE ABSOLUTELY NECESSARY TO COMPLETE CONSTRUCTION
 - CLOSED PORTIONS - 20 meters
 - THE WORKING WIDTH FOR PURPOSES OF FUTURE MAINTENANCE SHALL BE THE SAME AS ABOVE
- 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.
- 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.
 - CONTRACTOR TO NOTIFY ALL UTILITIES 12 HOURS PRIOR TO HIS SCHEDULED TIME FOR STARTING THE ABOVE WORK.
 - 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.
- RIP-RAP TO BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH 'SECTION A.12' IN THE SPECIFICATIONS.
- 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.
- ALL CONCRETE AND PLASTIC TILE AND PIPE TO CONFORM TO 'SECTION C.11' IN THE SPECIFICATIONS.
 - SEWER PIPE TO BE CONCRETE, H.D.P.E. PLASTIC 320 KPA (BELL & SPIGOT WITH RUBBER GASKETS, CONFORMING TO C.S.A. 1026-09), PVC ULTRA RIB OR PVC SDR 35
 - CONCRETE TILE SHALL BE HEAVY DUTY UNLESS SPECIFIED 1000 D OR 1400 D ON PROFILE.
 - SMOOTH WALL PLASTIC PIPE (PERFORATED WITH SOCK) SHALL BE FLEXIBLE (COILABLE) DUAL WALL PIPE SUCH AS 'GOLDFLEX', 'AD6' OR APPROVED EQUAL. FILTER SOCK SHALL BE 'TEXEL F100-D', 'TERRAFIX 100R' OR APPROVED EQUAL.
- ALL CATCHBASINS SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH 'SECTION C.16' IN THE SPECIFICATIONS. EXCEPT AS FOLLOWS:
 - ALL CATCHBASIN LEADS TO BE CONNECTED TO NEW TILE DRAIN WITH PRE-FABRICATED CONCRETE 'U' BENT
 - ALL CATCHBASINS TO HAVE 100mm DIA. VERTICAL PIPE VENT IMMEDIATELY DOWNSCREEN, 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 'B' ON DUG 2 OF 2)
- 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 50mm THICKNESS).
- NEW TILE DRAINS TO BE LOCATED AS FOLLOWS:
 - MAIN DRAIN
 - STA 0+000 to STA 0+125 - 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.
 - STA 0+125 to STA 0+356 - EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION
 - STA 0+356 to STA 0+700 - 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 'B'
 - STA 0+000 to STA 0+103 - EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION
 - STA 0+103 to STA 0+222 - 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.
 - STA 0+222 to STA 0+440 - EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION
 - STA 0+440 to STA 0+700 - 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.
 - BRANCHES 'C' & 'D'
 - NEW TILE DRAINS 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.
- INSTALLATION OF TILE AND TRENCH WIDTHS SHALL BE IN ACCORDANCE WITH 'SECTION C - TILE DRAIN' IN THE SPECIFICATIONS.
 - SEWER PIPE UNDER TRAVEL PORTION OF ROADS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILED DRAWING NO. 02 IN THE SPECIFICATIONS
 - ALL OTHER SEWER PIPE TO BE INSTALLED IN ACCORDANCE WITH DETAIL 'C'
 - ALL CONCRETE TILE AND TILE-PIPE JOINTS TO BE WRAPPED WITH GEOTEXTILE IN ACCORDANCE WITH 'SECTION C.8' IN THE SPECIFICATIONS.
 - NO CONSTRUCTION EQUIPMENT OR FARM MACHINERY SHALL CROSS OVER THE MOUNDED BACKFILLED TILE TRENCHES UNTIL SUFFICIENT SETTLEMENT HAS OCCURRED.
 - STRIP AND STOCKPILE TOPSOIL FROM CONSTRUCTION AREA (4 meters high) EXCEPT LANEWAYS & ROADS. EXCESS SPOIL TO BE LEVELLED AND TOPSOIL RELEVELLED OVER SPOIL, MOUNDED TRENCH AND REMAINING CONSTRUCTION AREA.
 - WHERE THE TILE SIZE IS LARGER THAN 675mm, THE EXCESS TRENCH MATERIAL (APPROXIMATELY EQUAL TO THE VOLUME OF THE TILE BEING INSTALLED) SHALL BE HAULED TO LOW AREA AT STA. 0+000 TO STA. 0+030. ENOUGH MATERIAL SHALL BE RETAINED TO PROVIDE SUFFICIENT MOUNDED OVER TILE TO ALLOW FOR SETTLEMENT.
- IT SHALL BE NOTED THAT AREAS OF POOR SOIL CONDITION WILL BE ENCOUNTERED ALONG THE COURSE OF THE DRAIN. THEREFORE THE CONTRACTOR SHALL INSTALL THE TILE OR PIPE ON A BEDDING OF 19mm (3/4") CRUSHED STONE THROUGHOUT. THE CRUSHED STONE SHALL BE COMPLETELY WRAPPED IN GEOTEXTILE SUCH AS 'TERRAFIX 360 R' OR APPROVED EQUAL. (SEE DETAILS 'C' AND '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.
 - 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.
- THE CONTRACTOR SHALL ENSURE THAT ALL TRIEBUTARY 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.
 - ALL TILE CONNECTIONS TO BE MADE WITH CORING MACHINE AND PLASTIC ADAPTOR OR PREFABRICATED FITTINGS.
 - THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A LIST SHOWING STATIONS OF ALL TILE CONNECTIONS UPON COMPLETION OF CONSTRUCTION.



PLAN SCALE 1:5,000



TYPICAL OFF-SET BLIND INLET BASIN N.T.S.



BLIND INLET CATCHBASIN (ON-LINE) N.T.S.

DETAIL 'A' N.T.S.

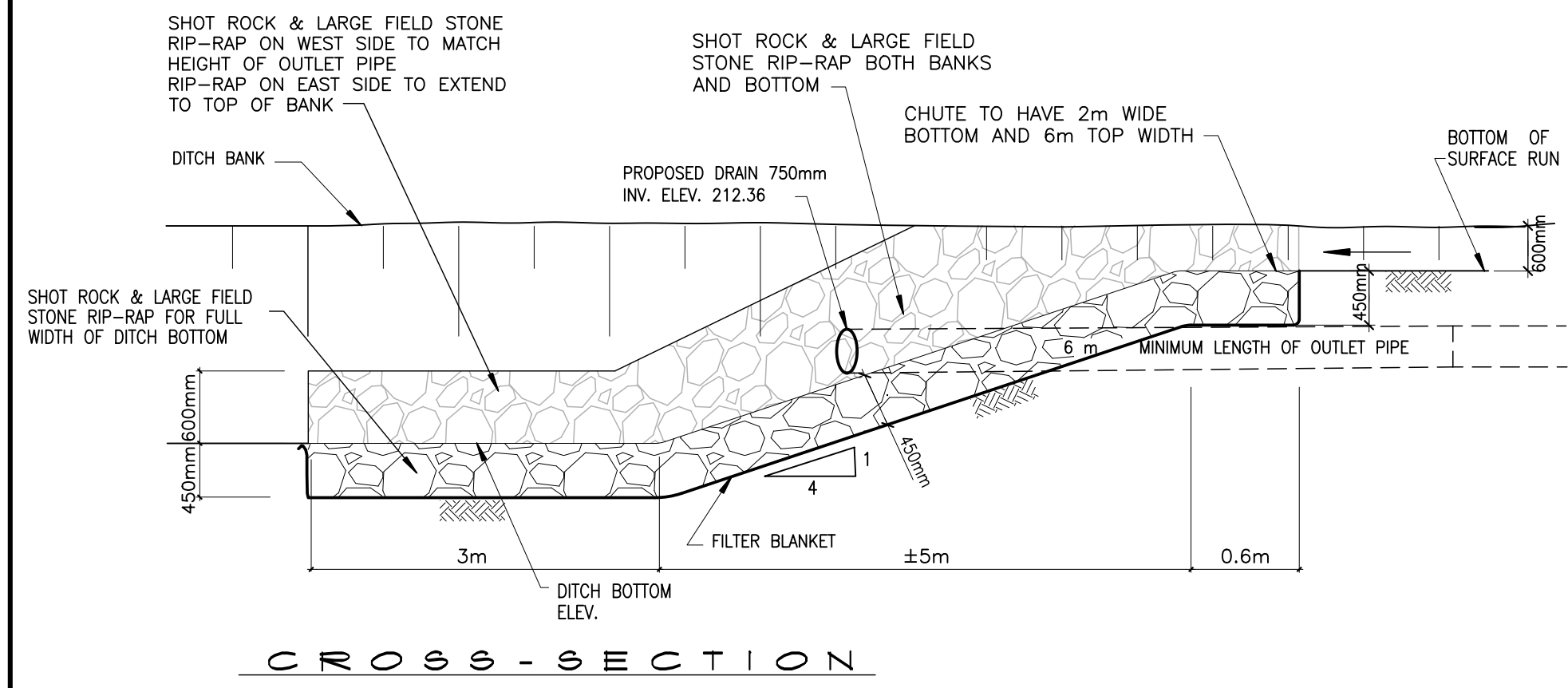
JAMES LETHBRIDGE
DRAIN 2026
 Municipality of
 Southwest Middlesex

Drainage Superintendent: ANDREW NEELY 519-207-2015 EXT. 114	No.	REVISIONS	DATE
Drawn By: ld	Field Book	JOB No.	Drawing No.
Date: JAN 30, 2026	D - 281, 282	2 2 5 0 5 2	1 of 2

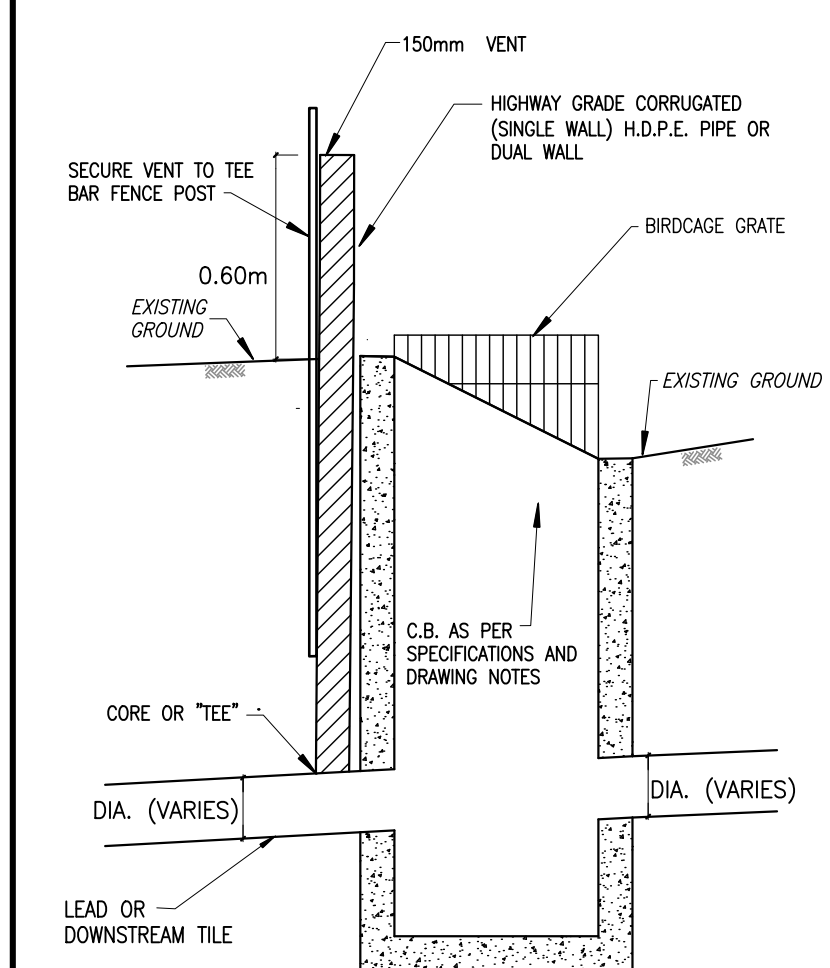
WATERSHED & LOCATION PLAN

SPRIET ASSOCIATES
 LONDON CONSULTING ENGINEERS LIMITED
 155 YORK STREET - LONDON (519) 672-4100 - NEA 148

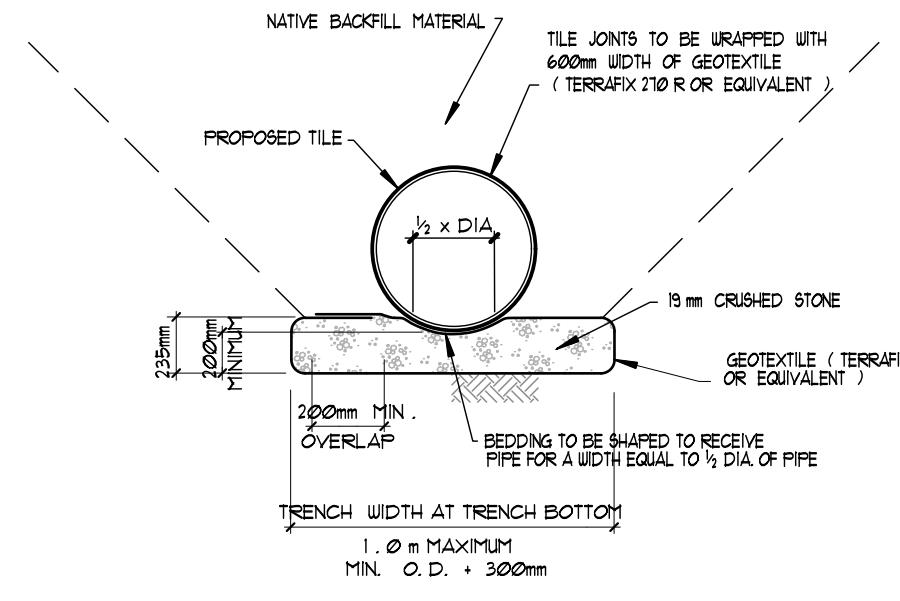
- OPEN PORTIONS**
- EXISTING DITCH BOTTOM ONLY TO BE CLEANED OUT IN ACCORDANCE WITH SPECIFICATIONS UNLESS OTHERWISE NOTED ON PROFILES AND IN SECTIONS.
 - WORK TO BE COMPLETED FROM AND EXCAVATED MATERIAL TO BE DEPOSITED AND LEVELLED ON THE SOUTH SIDE OF THE DITCH IN ACCORDANCE WITH 'SECTION B.5' IN THE SPECIFICATIONS.
 - A 2.1 METER WIDE BUFFER STRIP OF NEW & EXISTING VEGETATION BETWEEN THE TOP OF THE BANK AND THE CULTIVATED LANDS ON BOTH SIDES OF THE DITCH SHALL BE MAINTAINED AS PART OF THE OPEN PORTION OF THE DRAIN.
 - SILT FENCES TO BE PLACED ACROSS DITCH BOTTOM AT STA. 0+275 AND STA. 0+020 DURING CONSTRUCTION TO PREVENT SILT FROM FLUSHING DOWNSCREEN, AND ARE TO BE MAINTAINED AS NECESSARY DURING CONSTRUCTION. SILT FENCES AND SILT TO BE REMOVED AND DISPOSED OF AFTER CONSTRUCTION.



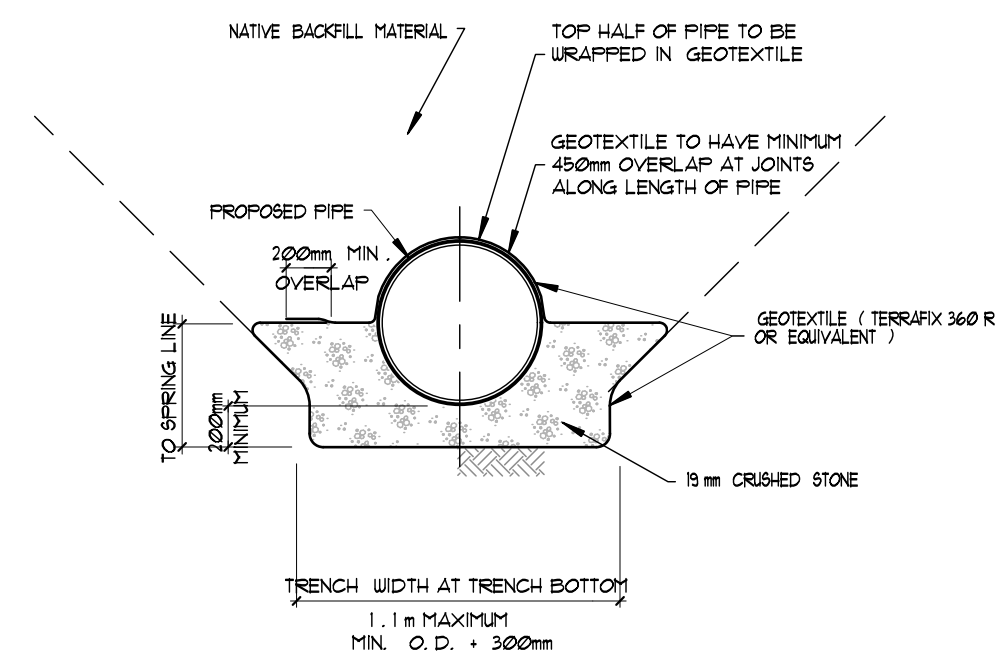
**CROSS-SECTION
TILE OUTLET DETAIL**
N.T.S.



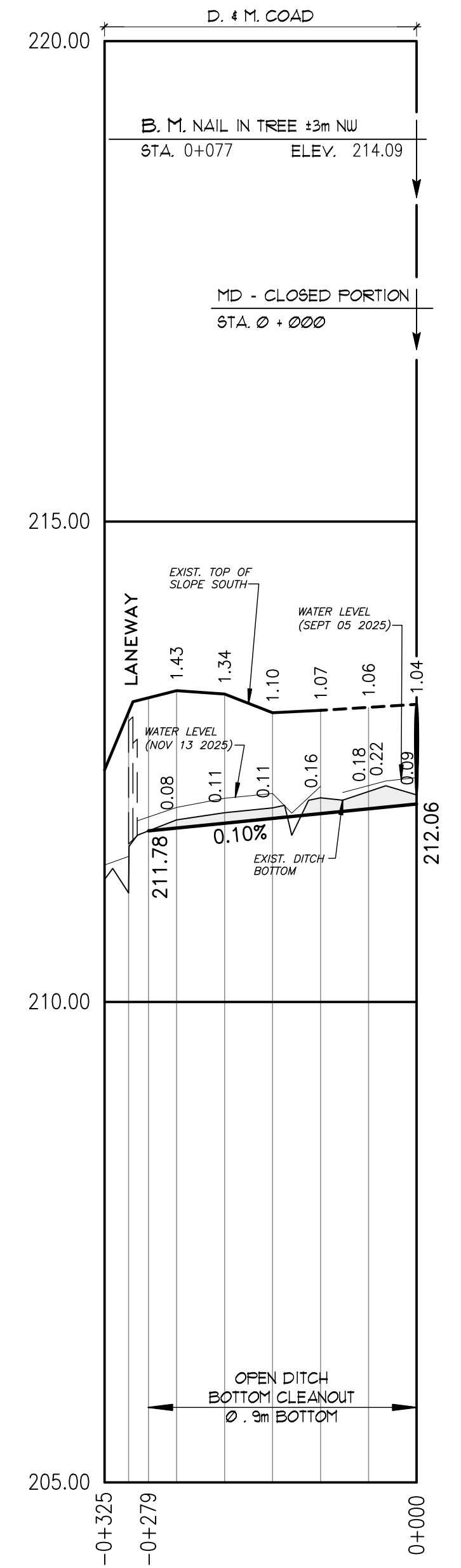
**100mm VENT FOR CATCHBASINS
DETAIL "B"**
N.T.S.



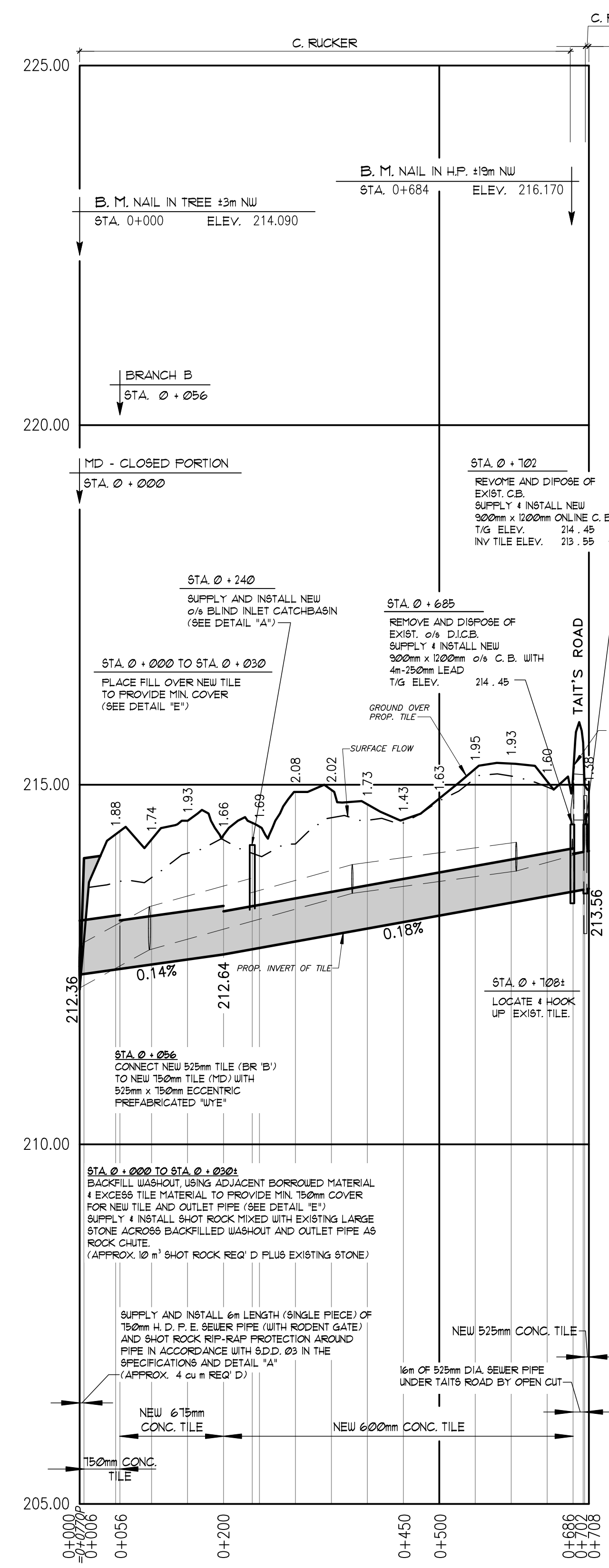
**CRUSHED STONE BEDDING DETAIL
CONCRETE FIELD TILE
DETAIL "D"**
N.T.S.



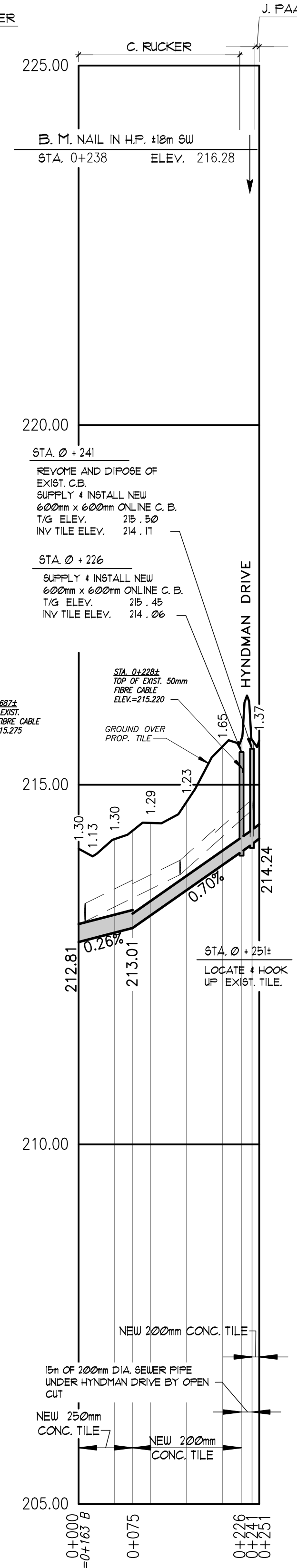
**CRUSHED STONE BEDDING DETAIL
PLASTIC SEWER PIPE
DETAIL "C"** N.T.S.



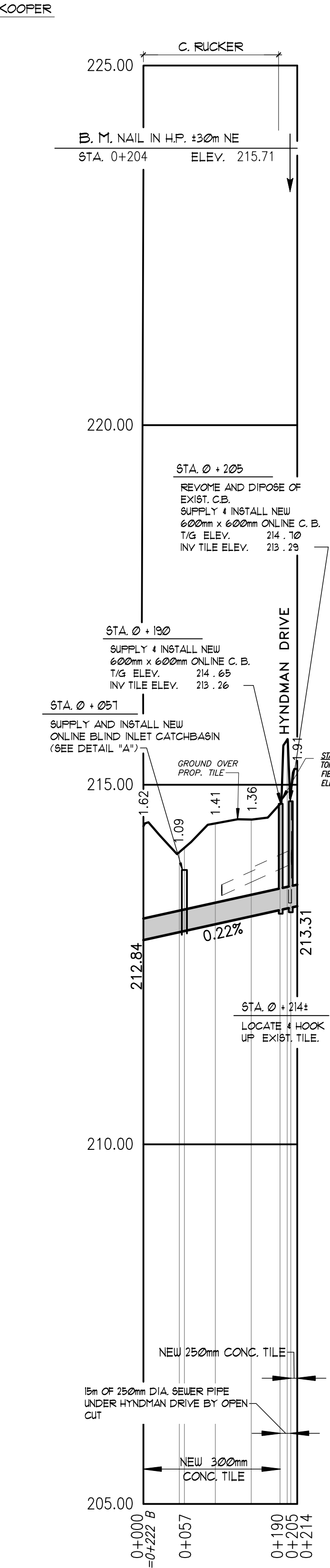
**MAIN DRAIN
OPEN PORTION**
SCALE: HOR 1:5,000
VERT. 1:50



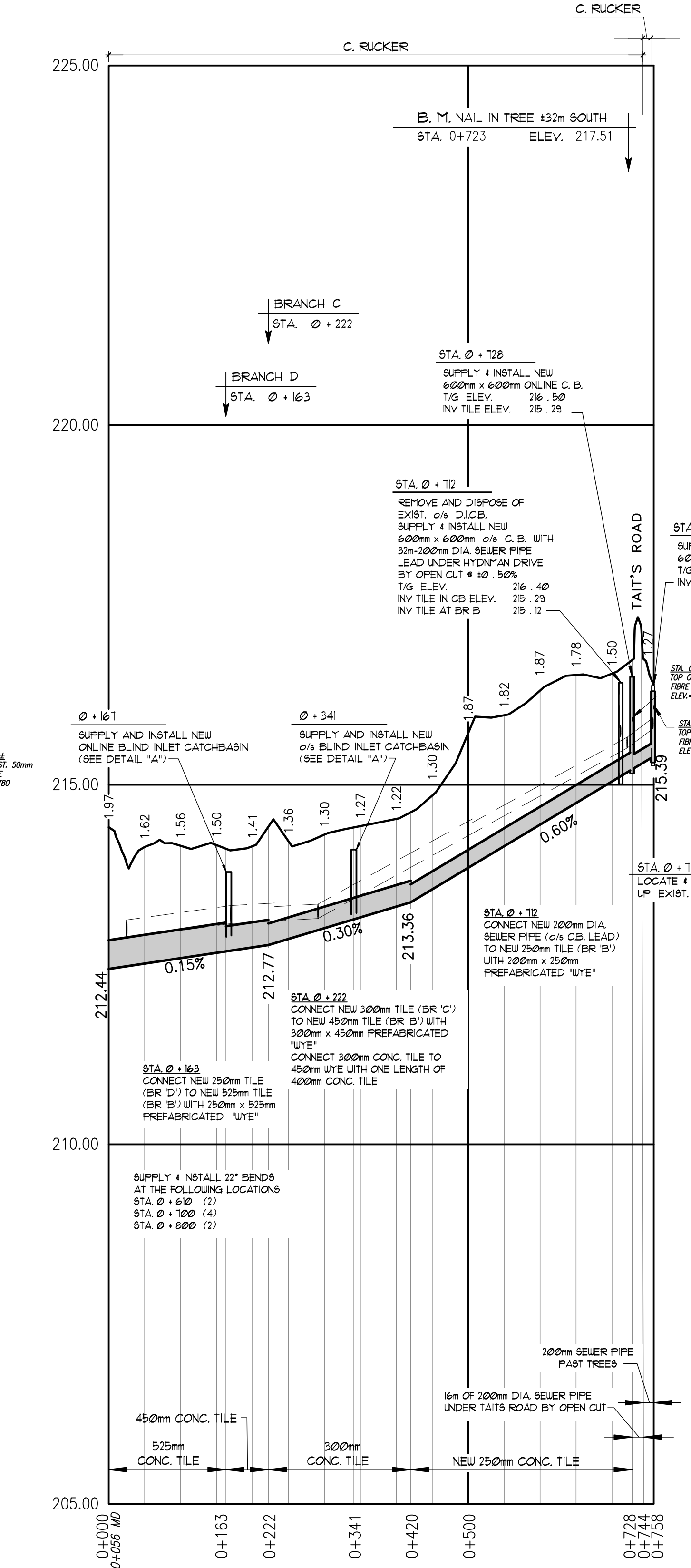
**MAIN DRAIN
CLOSED PORTION**
SCALE: HOR 1:5,000
VERT. 1:50



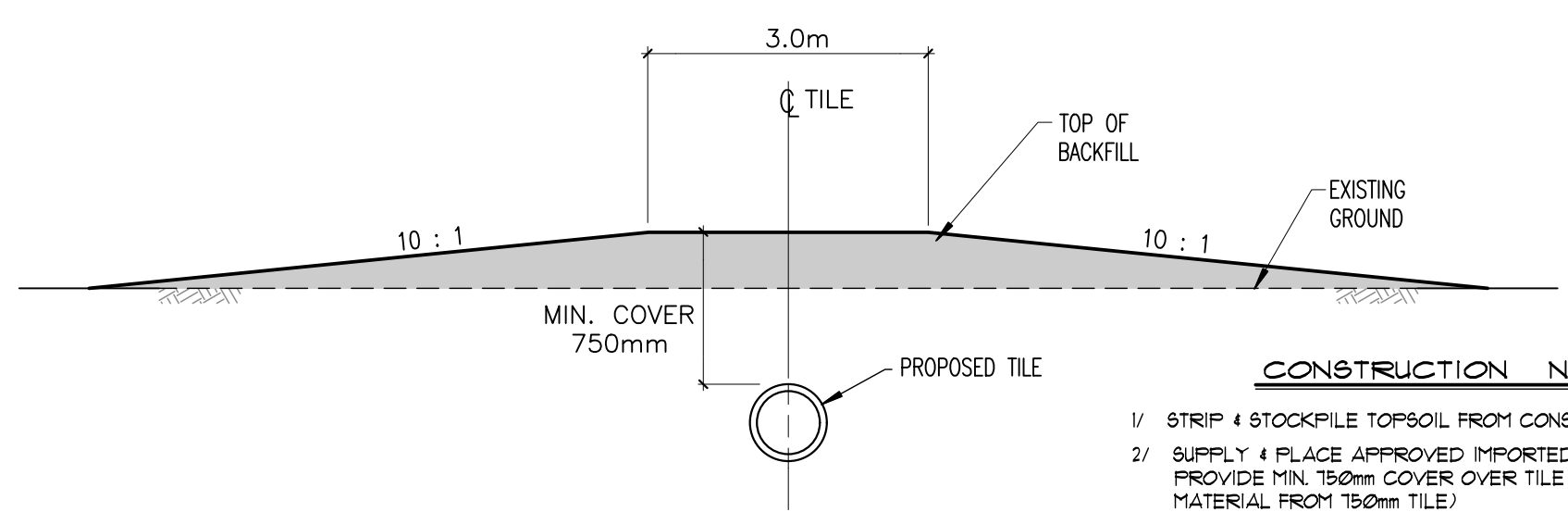
BRANCH D
SCALE: HOR 1:5,000
VERT. 1:50



BRANCH C
SCALE: HOR 1:5,000
VERT. 1:50



BRANCH B PROFILE
SCALE: HOR 1:5,000
VERT. 1:50



**MINIMUM COVER OVER NEW DRAIN
MAIN DRAIN STA. 0+000 TO 0+030
DETAIL "E"** N.T.S.

- CONSTRUCTION NOTES**
- STRIP & STOCKPILE TOPSOIL FROM CONSTRUCTION AREA
 - SUPPLY & PLACE APPROVED IMPORTED CLAY/LOAM FILL TO PROVIDE MIN. 750mm COVER OVER TILE (INCLUDING TRENCH MATERIAL FROM 150mm TILE)
 - RELEVEL TOPSOIL OVER FILL AND DISTURBED CONSTRUCTION AREA.

**JAMES LETHBRIDGE
DRAIN 2026**
Municipality of
Southwest Middlesex

Drainage Superintendent: ANDREW NEELY 519-287-2015 EXT. 114	No. _____ REVISIONS DATE
Drawn By: ld Date: JAN. 30, 2026	Field Book: D - 281, 282 JOB No.: 2 2 5 0 5 2 Drawing No.: 2 of 2
PROFILES & DETAILS <p>SPRIET ASSOCIATES CONSULTING ENGINEERS LIMITED 155 YORK STREET - LONDON (519) 672-4100 - NEA 1A8</p>	