



Project Name: Brantford Animal Shelter

MTE File No.: 54934-100

To: Jake Cassidy

Date: 10/25/2024

cc: Joseph Ouellette

Addendum No.: 1

Enclosures: Civil Plans (Red clouded)

Prepared By: Derrick Rice

Refer to Addendum items listed here:

- Revised the 50mm water service to connect into the existing 200mm service for the lot (located near the southeast corner)
- Removed the proposed 300mm water main within the ROW
 - There is no longer a proposed Hydrant.
- Updated the limit of construction
- Updated plan to show a bigger curb radius from the driveway to the parking lot to accommodate the garbage truck (as per revised site plan)
- Revised the grades around the revised curb area
- Made minor adjustments to the grading at the handicapped spaces near the front entrance
 - Revised the concrete sidewalk to ramp down, instead of the parking lot ramping up to the sidewalk.
- Revised the heavy duty asphalt extents to include the area used by the garbage truck to turn around
- Revised plans as per updated site plan
 - More fence around garbage disposal
 - Shifted location of trees, proposed vegetation
- Revised plans to show existing curb-cut (located near the proposed entrance)
 - Labeled on C101 and noted to be restored to full height
 - Added existing entrance on opposite side of Kraemer's Way
- Changed the site benchmark
 - The previous one is a manhole lid that appears to be covered in asphalt and concrete curb as it doesn't show in Google Maps
- Added Key Map to C101 and C102 drawings
- Revised the legends on C101 and C102 to better match with the ROA templates
- Shifted notes and legends and details around in paperspace of C101 and C102
- Added more grade points and slope labels to C101 as per comments.
- Updated the crossing notes on C102
- Added dimensions between water service and other servicing as per comments
- Added a note on C102 showing the approximate location of water meter within building.
- Note 1.10 has been removed. These minimum cover requirements are specified later in note 2.9 and 3.8
- Note 2.2 has been revised to no longer allow for ribbed PVC sewer pipe.
- Notes 2.9 and 3.8 have been revised to reflect the 1.50m minimum cover requirement for storm and sanitary sewers.
- Notes 4.3 thru 4.5 have been added (specifying materials for 50mm services, connections to building as per city drawings, and PVC watermains delivered to site with end caps)
- Note 4.8 was added (specifying cathodic protection)
- Note 4.10 was modified as per the comments to include references to the city standard drawings.



- Note 4.11 was added.
- Note 4.16 was modified to show the 1.85m as per City comments.
- Note 1.11 has been revised.
- Note 4.11 was removed (redundant) and new point 4.13 was added.

End of Addendum 1

LEGEND OF EXISTING FEATURES

The diagram illustrates the legend for existing features on a site plan. It includes symbols for site boundaries, spot elevations, sanitary sewers, watermain, storm sewer, curb, fence, and embankment. The symbols are arranged in a grid-like fashion, with each symbol accompanied by a label and a corresponding elevation or description.

Symbol	Description
--- X 326.23 ---	SITE BOUNDARY
--- 326.00 ---	EXISTING SPOT ELEVATIONS/CONTOURS
--- Ex. 300mm ϕ SAN ---	EXISTING SANITARY SEWER
--- Ex. 200mm ϕ WTM ---	EXISTING WATERMAIN
--- Ex. H1D. SET ---	EXISTING STORM SEWER
--- Ex. 375mm ϕ STM ---	EXISTING CURB
--- Ex. M1 ---	EXISTING FENCE
--- Ex. Drop Curb ---	EXISTING EMBANKMENT (SLOPE AS NOTED)

The diagram also includes a section showing a series of 'X' marks representing a fence line, with labels for 'TOP' and 'BOTTOM'.

--- X 241.845 ---

--- X 241.858 ---

--- X 241.837 ---

--- X 241.893 ---

--- X 241.949 ---

KEYPLAN

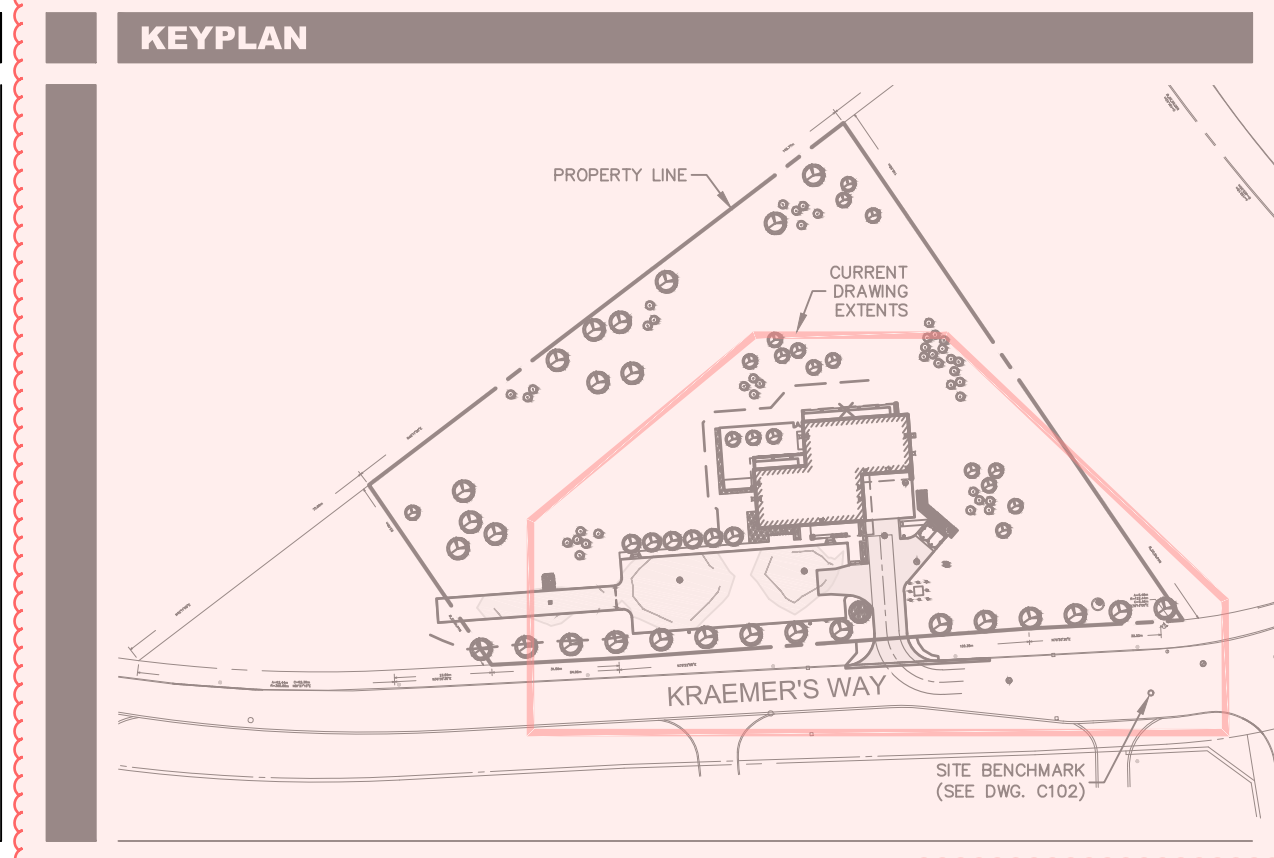
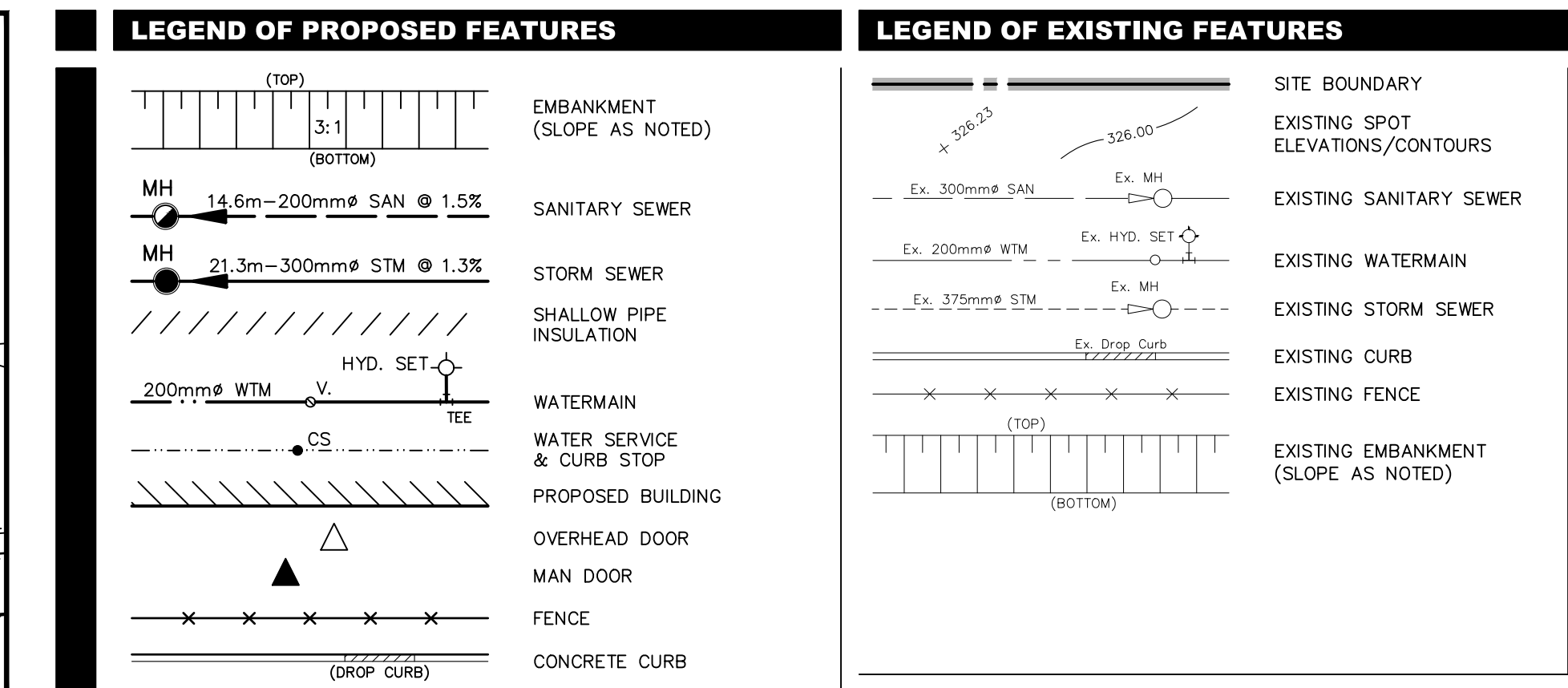
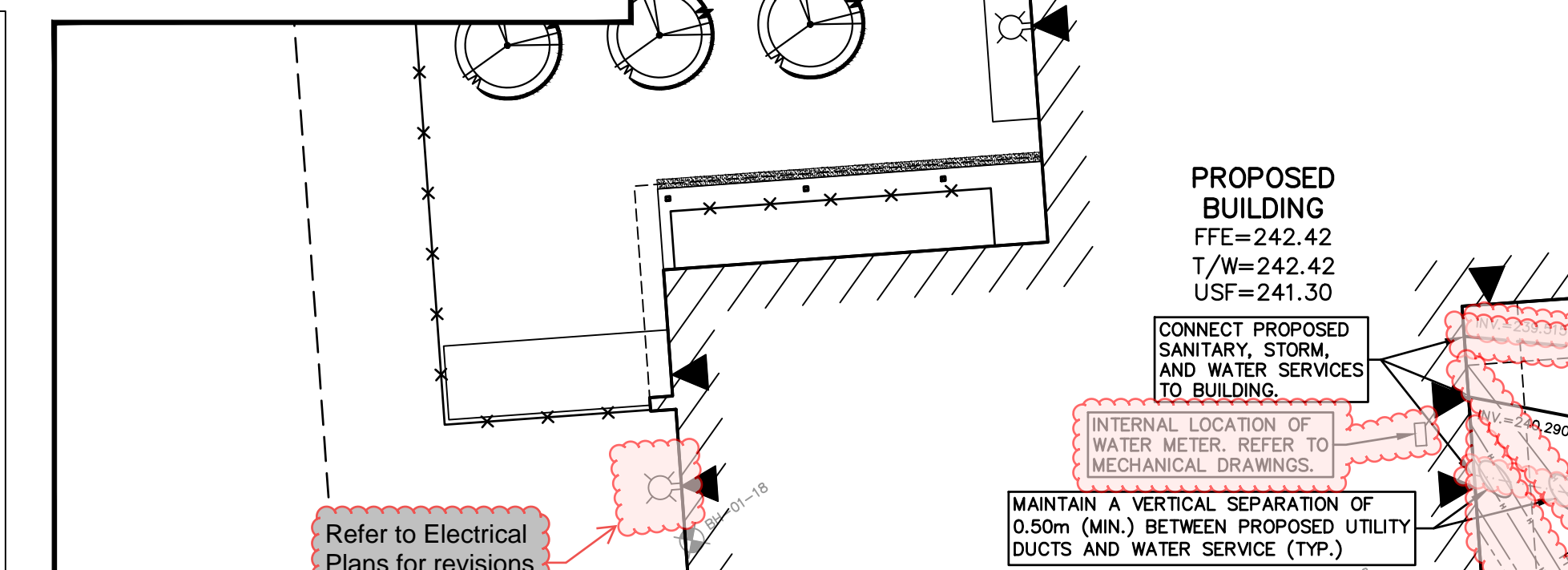
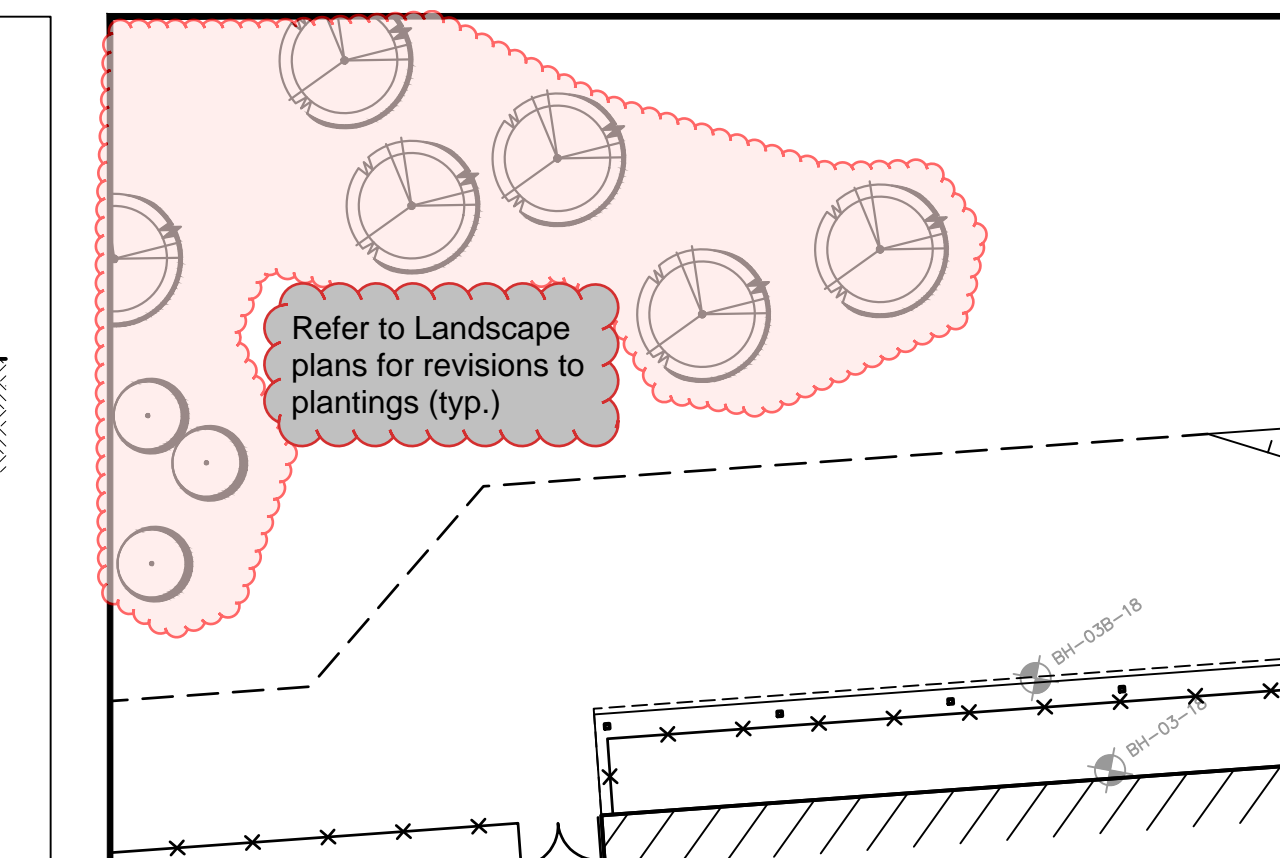
PROPERTY LINE

CURRENT DRAWING EXTENTS

KRAEMER'S WAY

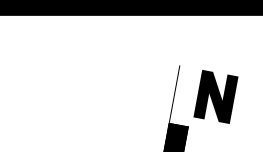



SITE BENCHMARK
(SEE DWG. C102)

ROA23-003 BRANTFORD ANIMAL SHELTER



STORMWATER MANAGEMENT (SWM) SUMMARY			
SITE DRAINAGE SYSTEM TYPE: SURFACE STORAGE			
WEIR WIDTH	2.00m		X1
WEIR DEPTH	0.10m		
WEIR SHAPE	RECTANGULAR		X2
WEIR ELEVATION	242.10m		X3
(REFER TO WEIR DETAIL THIS SHEET)			
ORIFICE #1 SIZE	509mmφ		
ORIFICE #1 INVERT	239.580m		X4
(REFER TO ONLINE ORIFICE DETAIL THIS SHEET)			
ORIFICE RELEASE RATE (100 Year Storm)	8.26 L/s		
UNCONTROLLED RELEASE RATE (100 Year Storm)	58.41 L/s		X5
TOTAL RELEASE RATE (100 Year Storm)	71.53 L/s		
ALLOWABLE RELEASE RATE (100 Year Storm)	80.61 L/s		X6
MAXIMUM PONDING DEPTH	0.26m		
MAXIMUM PONDING ELEVATION	242.11m		
REQUIRED SITE STORAGE	82.91m ³		
AVAILABLE SITE STORAGE	117.0m ³		

X1	<p>*CAUTION: CROSSING SAN OBV=239.377 STM INV=239.855</p>
X2	<p>*CAUTION: CROSSING MAINTAIN MIN 0.5m VERTICAL CLEARANCE BETWEEN STM. & WM. SAN OBV.=239.250 WM INV=240.40±</p>
X3	<p>*CAUTION: CROSSING SAN OBV=239.109 STM INV=239.545</p>
X4	<p>*CAUTION: CROSSING MAINTAIN MIN 0.5m VERTICAL CLEARANCE BETWEEN SAN. & WM. SAN OBV.=239.35± STM INV=239.897</p>
X5	<p>*CAUTION: CROSSING SAN OBV=238.152 STM INV=240.492</p>
X6	<p>*CAUTION: CROSSING SAN OBV=237.846 STM INV=239.137</p>

NOTES	PROJECT IDENTIFICATION	DRAWING IDENTIFICATION	ORIENTATION	SUB-CONSULTANT	PRIME CONSULTANT	DISCIPLINE SEAL	DRAWING SUBMISSION(S)	INTERNAL INFO	COPY		
THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY ERRORS OR OMISSIONS TO THE ARCHITECT PRIOR TO COMMENCING OR PROCEEDING WITH ANY WORK ON THIS PROJECT. ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE ARCHITECT. COPYRIGHT 2017. THESE DRAWINGS AND SPECIFICATIONS ARE DESIGNED FOR THE CLIENT AND THE PROPERTY INDICATED ON THESE DRAWINGS ONLY AND SHALL NOT BE CONSTRUCTED FOR ANY OTHER CLIENT OR ANY OTHER PROPERTY. DO NOT SCALE DRAWINGS.	<div>BRANTFORD ANIMAL SHELTER</div> <div>10 KRAEMER'S WAY</div> <div>BRATFORD, ONTARIO</div> <div>N3V 0A5</div> <div><div><div></div>DESIGN REVIEW</div><div><div></div>SITE PLAN APPROVAL</div><div><div></div>BUILDING PERMIT</div><div><div></div>BIDS DOCUMENTS</div><div><div></div>CONTRACT DOCUMENTS</div><div><div></div>CONSTRUCTION DOCUMENTS</div></div>	SITE SERVICING PLAN		<div></div> <div>Engineers, Scientists, Surveyors</div> <div>519-204-6510</div>	<div></div> <div>67 KING STREET WEST, CHATHAM ON N7M 1C7</div> <div>TEL . 519.397.0943 EMAIL . info@roastudio.com</div>			CIVIL	<div>PROJECT ID</div> <div>ROA23-003</div> <div>DRAWN BY</div> <div>TNH</div> <div>REVIEWED BY</div> <div>WHV</div> <div>DATE</div> <div>10.07.2024</div> <div>SCALE</div> <div>1:200</div>		
										MM-DD-YY	
							4			REISSUED FOR SPA	10-09-2024
							3			ISSUED FOR TENDER	08-08-2024
2	ISSUED FOR PERMIT	08-01-2024									
1	ISSUED FOR SERVICING REPORT	05-28-2024									

CONSTRUCTION NOTES AND SPECIFICATIONS

1. GENERAL
- 1.1. THESE PLANS ARE NOT FOR CONSTRUCTION UNTIL SIGNED AND SEALED BY ENGINEER AND APPROVED BY THE LOCAL MUNICIPALITY.
- 1.2. THESE PLANS ARE TO BE USED FOR SERVICING AND GRADING ONLY. ANY OTHER INFORMATION SHOWN IS FOR ILLUSTRATION PURPOSES ONLY. THESE PLANS MUST NOT BE USED TO SITE THE PROPOSED BUILDING.
- 1.3. NO CHANGES ARE TO BE MADE WITHOUT THE APPROVAL OF THE DESIGN ENGINEER.
- 1.4. THESE PLANS ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE PERMISSION OF MTE CONSULTANTS INC.
- 1.5. PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST:
- 1.5.1. CHECK AND VERIFY ALL EXISTING CONDITIONS, LOCATIONS AND ELEVATIONS WHICH INCLUDES BUT IS NOT LIMITED TO THE BENCHMARK ELEVATIONS, EXISTING SERVICE CONNECTIONS AND EXISTING INVERTS. REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING.
- 1.5.2. OBTAIN ALL UTILITY LOCATES AND REQUIRED PERMITS AND LICENSES.
- VERIFY THAT THE FINISHED FLOOR ELEVATIONS (WHICH MAY APPEAR ON THIS PLAN) COMPLY WITH THE FINAL ARCHITECTURAL DRAWINGS.
- 1.5.3. CONFIRM ALL DRAWINGS USED FOR CONSTRUCTION ARE OF THE MOST RECENT REVISION.
- 1.6. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO EXISTING WORKS. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY TO LOCAL MUNICIPALITY STANDARDS
- 1.7. ALL WORKS ON A MUNICIPAL RIGHT-OF-WAY WITH THE EXCEPTION OF WATERMAIN TAPPING, TO BE INSTALLED BY THE OWNER'S CONTRACTOR AT OWNER'S EXPENSE IN ACCORDANCE WITH THE LOCAL MUNICIPALITY'S PROCEDURE FOR OFF-SITE WORKS BY PRIVATE CONTRACTOR. THE OWNER AND CONTRACTOR ARE TO ENSURE OFF-SITE WORKS PERMIT IS IN PLACE PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL AFFECTED PROPERTY TO ORIGINAL CONDITION. ALL BOULEVARD AREAS SHALL BE RESTORED WITH 150mm TOPSOIL AND SOD.
- 1.8. ALL UNDERGROUND SERVICES ARE TO BE CONSTRUCTED IN FULL COMPLIANCE WITH THE ONTARIO PROVINCIAL BUILDING CODE (PART PLUMBING), THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) AND THE REQUIREMENTS OF THE LOCAL MUNICIPALITY, WHICH CODES AND REGULATIONS SHALL SUPERSEDE ALL OTHERS.
- 1.9. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ENGINEER 48 HRS PRIOR TO COMMENCING WORK TO ARRANGE FOR INSPECTION. ENGINEER TO DETERMINE DEGREE OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF UNDERGROUND SERVICE INSTALLATION AS MANDATED BY ONTARIO BUILDING CODE, DIVISION 6, PART 1, SECTION 1.2.2, GENERAL. REPAIR, FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
- 1.10. PLAN TO BE READ IN CONJUNCTION WITH MTE DRAWINGS C101, C102, AND THE FUNCTIONAL SERVICING REPORT PREPARED BY MTE CONSULTANTS INC.
- 1.11. SITE PLAN INFORMATION TAKEN FROM PLAN PREPARED BY ROA STUDIO INC., DATED OCTOBER 3, 2024.
- 1.12. EXISTING TOPOGRAPHIC AND LEGAL INFORMATION TAKEN FROM PLAN PREPARED BY McCAULAY, WHITE & MOIR LTD. DATED SEPTEMBER 19, 2017. MTE ASSUMES THAT ALL TOPOGRAPHICAL INFORMATION IS AN ACCURATE REPRESENTATION OF CURRENT CONDITIONS.
- 1.18. CONTRACTOR TO OBTAIN WRITTEN PERMISSION FROM ADJACENT PROPERTY OWNER PRIOR TO ENTERING UPON NEIGHBOURING LANDS TO UNDERTAKE ANY WORK. COPIES OF THESE NOTICES OF CONSENT SHALL BE SUBMITTED TO THE DEPARTMENT OF PUBLIC WORKS FOR APPROVAL PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT CONTRACTOR'S OWN RISK.
- 1.19. SITE SERVICING CONTRACTOR TO TERMINATE ALL SERVICES 1 METRE FROM FOUNDATION WALL.
- 1.20. FILTER FABRIC TO BE TERRAFIX 270R OR APPROVED EQUAL.
- 1.21. MAXIMUM GRASSED SLOPE TO BE 3:1. SLOPES GREATER THAN 3:1 TO BE LANDSCAPED WITH LOW MAINTENANCE GROUND COVER.
- 1.22. SIDE SLOPES OF ALL STOCKPILES OR EXTRACTION FACES TO BE MAINTAINED AT 70 DEGREES OR LESS BETWEEN EARLY APRIL AND LATE AUGUST TO DETER BANK SWALLOWS FROM NESTING.
- 1.23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD INCLUDING THE SUPPLY, INSTALLATION AND REMOVAL OF ALL NECESSARY SIGNALS, DELINEATORS, MARKERS, AND BARRIERS. SIGNS, ETC. SHALL CONFORM TO THE STANDARDS OF THE LOCAL MUNICIPALITY AND THE MTO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 1.24. THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
- 1.25. CONTRACTOR TO MAINTAIN A 'CONFINED TRENCH CONDITION' IN ALL SEWER AND SERVICE TRENCHES.
- 1.26. FOLLOWING COMPLETION OF PROPOSED WORKS AND PRIOR TO OCCUPANCY INSPECTION, ALL STORM AND SANITARY SEWERS ARE TO BE FLUSHED, AND ALL CATCHBASIN AND CATCHBASIN MANHOLE SUMPS ARE TO BE CLEANED OF DEBRIS AND SILT.
2. STORM SEWERS
- 2.1. PIPE BEDDING FOR RIGID PIPE TO BE CLASS "B" AS PER OPSD 802.030, 802.031, OR 802.032. PIPE BEDDING FOR FLEXIBLE PIPE TO BE CLASS "A" AS PER OPSD 802.010. BEDDING MATERIAL AND COVER MATERIAL TO BE GRANULAR "A". TRENCH BACKFILL TO BE NATIVE MATERIAL REPLACED IN 300mm LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- 2.2. STORM SEWERS 200mmØ TO 375mmØ SHALL BE POLYVINYL CHLORIDE (PVC) PIPE DR35 ASTM-D3034 WITH INTEGRAL BELL AND SPIGOT UTILIZING FLEXIBLE ELASTOMERIC SEALS.
- 2.3. MANHOLES AND MANHOLE CATCHBASINS TO BE 1200mmØ PRECAST WITH ALUMINIUM STEPS AT 300mm CENTRES AS PER OPSD 701.010 UNLESS OTHERWISE SPECIFIED.
- 2.4. CATCHBASINS TO BE 600mm SQUARE PRECAST AS PER OPSD 705.010.
- 2.5. ALL STORM STRUCTURES TO HAVE A MINIMUM 600mm DEEP SUMP. WHEN THE STRUCTURE INCLUDES THE INSTALLATION OF A SNOOT (OR APPROVED EQUIVALENT) THE SUMP DEPTH TO BE MIN 2.5 TIMES THE OUTLET PIPE DIAMETER SIZE.
- 2.6. MANHOLE AND CATCHBASIN, FRAMES, GRATES, CASTINGS AND LIDS TO BE QUALITY GREY IRON ASTM A48 CLASS 30B.
- 2.7. STORM MANHOLE LIDS TO BE PER OPSD 401.010 - TYPE 'A' CATCHBASIN AND CATCHBASIN MANHOLE GRATES TO BE PER OPSD 400.100. DITCH INLET CATCHBASIN GRATES TO BE PER OPSD 403.010.
- 2.8. ADJUSTMENT UNITS FOR STORM STRUCTURES TO BE IN ACCORDANCE WITH OPSD 704.010 OR 704.011.
- 2.9. STORM SEWERS AND SERVICES TO HAVE MINIMUM 1.50m COVER TO TOP OF PIPE. WHERE COVER TO TOP OF PIPE IS DEFICIENT CONTRACTOR SHALL INSTALL SHALLOW BURIED SEWER PIPE IN ACCORDANCE WITH APPLICABLE "SEWER PIPE INSULATION DETAIL" INDICATED IN DRAWING DETAILS.
- 2.10. UNDER NO CIRCUMSTANCES SHALL THE BUILDING FOUNDATION DRAINS BE CONNECTED DIRECTLY TO THE STORM SEWER SYSTEM.
- 2.11. ALL WEEPING TILE DRAINAGE TO BE PUMPED TO THE STORM SEWER SYSTEM.
3. SANITARY SEWERS
- 3.1. PIPE BEDDING FOR RIGID PIPE TO BE CLASS "B" AS PER OPSD 802.030. PIPE BEDDING FOR FLEXIBLE PIPE TO BE AS PER OPSD 802.010. BEDDING MATERIAL AND COVER MATERIAL TO BE GRANULAR "A". TRENCH BACKFILL TO BE NATIVE MATERIAL REPLACED IN 300mm LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- 3.2. SANITARY SEWERS 200mmØ TO 600mmØ INCLUSIVE SHALL BE POLYVINYL CHLORIDE (PVC) PIPE DR35 ASTM-D3034 WITH INTEGRAL BELL AND SPIGOT UTILIZING FLEXIBLE ELASTOMERIC SEALS.
- 3.3. MANHOLES TO BE 1200mmØ PRECAST WITH ALUMINIUM STEPS AT 300mm CENTRES AS PER OPSD 701.010 UNLESS OTHERWISE SPECIFIED.
- 3.4. MANHOLES TO BE BENCHED PER OPSD 701.021.
- 3.5. SANITARY MANHOLE LIDS TO BE PER OPSD 401.010 - TYPE 'A'.
- 3.6. MANHOLE FRAMES, CASTINGS AND LIDS TO BE QUALITY GREY IRON ASTM A48 CLASS 30B.
- 3.7. ADJUSTMENT UNITS FOR SANITARY STRUCTURES TO BE IN ACCORDANCE WITH OPSD 704.010 OR 704.011.
- 3.8. SANITARY SEWERS AND SERVICES TO HAVE MINIMUM 1.50m COVER TO TOP OF PIPE. WHERE COVER TO TOP OF PIPE IS DEFICIENT CONTRACTOR SHALL INSTALL SHALLOW BURIED PIPE IN ACCORDANCE WITH APPLICABLE "SEWER PIPE INSULATION DETAIL" INDICATED IN DRAWING DETAILS.
- 3.9. CONTRACTOR RESPONSIBLE FOR TESTING OF SANITARY SEWERS IN ACCORDANCE WITH OPS5 410.
4. WATERMAINS
- 4.1. PIPE BEDDING FOR RIGID PIPE TO BE CLASS "B" AS PER OPSD 802.030. PIPE BEDDING FOR FLEXIBLE PIPE TO BE AS PER OPSD 802.010. BEDDING MATERIAL AND COVER MATERIAL TO BE GRANULAR "A". TRENCH BACKFILL TO BE NATIVE MATERIAL REPLACED IN 300mm LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- 4.2. WATERMAINS 100mmØ AND LARGER SHALL BE PVC C900 CLASS 150 INSTALLED WITH MINIMUM 2.0 METRES OF COVER. FITTINGS 100mmØ AND LARGER SHALL BE PVC CLASS 150 (DR18) CSA B137.3.
- 4.3. WATER SERVICES 50mmØ AND SMALLER SHALL BE TYPE 'K' SOFT COPPER.
- 4.4. SERVICES TO CONNECT TO PROPOSED BUILDING AS PER CITY OF BRANTFORD STANDARD DWG. W-100B.
- 4.5. PVC DR18 PIPE FOR WATERMAINS SHALL BE DELIVERED TO SITE WITH BOTH ENDS CAPPED AND FACTORY SEALED. CONTRACTOR TO ENSURE CAPS REMAIN ON PIPE UNTIL THE TIME OF INSTALLATION.
- 4.6. WATERMAIN FITTINGS TO BE SUPPLIED WITH MECHANICAL JOINT RESTRAINTS. FOR WATERMAIN PIPE SIZES 150mmØ OR LESS, PIPE JOINTS TO BE RESTRAINED WITHIN 5.0m FROM ALL FITTINGS, IN EACH DIRECTION, UNLESS SHOWN OTHERWISE ON THE CONTRACT DRAWINGS. FOR WATERMAIN PIPE SIZES GREATER THAN 150mmØ ALL PIPE JOINTS TO BE RESTRAINED WITHIN 10.0m FROM ALL FITTINGS, IN EACH DIRECTION, UNLESS SHOWN OTHERWISE ON THE CONTRACT DRAWINGS. ALL TEES TO HAVE MINIMUM 2.0m SOLID PIPE LENGTH ON EACH RUN OF THE TEE, OR PROVIDE A THRUST BLOCK PER OPSD 1103.010.
- 4.7. ALL METALLIC FITTINGS (EXCLUDING CURB/MAIN STOP AND BRASS FITTINGS) AND APPURTENANCES INCLUDING SADDLES, VALVES, TEES, BENDS ETC ARE TO BE WRAPPED WITH AN APPROVED PETROLATUM SYSTEM CONSISTING OF PASTE, MASTIC AND TAPE. PARTICULAR ATTENTION SHALL BE PAID TO ANODE INSTALLATION. CONTRACTOR TO REFER TO THE MOST RECENT EDITION OF THE LOCAL MUNICIPALITY AND AREA MUNICIPALITIES DESIGN GUIDELINES AND SUPPLEMENTAL SPECIFICATIONS FOR MUNICIPAL SERVICES.
- 4.8. CATHODIC PROTECTION MUST BE PROVIDED FOR ALL CURB STOPS, MAIN STOPS, AND SADDLES LESS THAN 38mmØ WITH 5.5kg ANODES. CATHODIC PROTECTION MUST BE PROVIDED FOR ALL WATER SERVICES, CURB STOPS, MAIN STOPS, AND SADDLES GREATER THAN 38mmØ WITH 11kg ANODES.
- 4.9. WATERMAIN VALVES 100mmØ AND LARGER SHALL BE AS PER AWWA C509 - MUELLER A2360-23 OR APPROVED EQUIVALENT (OPEN LEFT) INCLUDING VALVE BOX AND 2.3kg ANODE INCLUDING ANODE PROTECTION INSTALLED PER LOCAL MUNICIPALITY STANDARDS.
- 4.10. PVC WATERMAIN SHALL HAVE TWO STRANDED COPPER, AWG8 TRACER WIRE STRAPPED TO TOP AT 3 METRE INTERVALS. TRACER WIRE SHALL BE BROUGHT TO THE SURFACE AT ALL HYDRANTS AND INSTALLED INSIDE A TEST BOX BEHIND THE HYDRANT AS PER CITY OF BRANTFORD STANDARD DWG. W-504-A AND W-504-B.
- 4.11. OWNER SHALL BE RESPONSIBLE FOR HIRING A PRIVATE CONTRACTOR TO CERTIFY THAT TRACER WIRES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE CITY'S LINEAR DESIGN AND CONSTRUCTION MANUAL AS REPORT INCLUDING DRAWINGS IS REQUIRED TO CONFIRM THAT THE TRACER WIRES WERE INSTALLED AND ARE WORKING AS INTENDED.
- 4.12. MAIN STOPS, CURB STOPS AND COUPLINGS SHALL BE AWWA C-800 COPPER TO COPPER FLANGED OR COMPRESSION CONNECTION OR APPROVED EQUIVALENT.
- 4.13. A CHECK VALVE SHALL BE INSTALLED INSIDE THE PROPERTY LINE FOR ALL SERVICES 50mmØ AND LARGER IN ACCORDANCE WITH CITY OF BRANTFORD STANDARD DWG. W-215.
- 4.14. SERVICE BOXES TO BE FERGUSON ECLIPSE TYPE FIGURE 222 SIZE NO. 9 OR APPROVED EQUIVALENT COMPLETE WITH ROD AND PLUG.

4.15. WATER CONNECTIONS MAY BE PLACED IN THE SAME TRENCH WITH A STORM OR SANITARY CONNECTION ONLY IF A MINIMUM VERTICAL SEPARATION OF 500mm IS MAINTAINED BETWEEN THE WATER SERVICE AND ANY OTHER PIPE. IN ACCORDANCE WITH SECTION 7.5.5.7(2)(a)(i) OF THE ONTARIO BUILDING CODE.

4.16. ALL WATERMAINS AND SERVICES TO HAVE MINIMUM 1.85m COVER ON TOP OF PIPE. WHERE COVER TO TOP OF PIPE IS DEFICIENT CONTRACTOR SHALL CONTACT DESIGN ENGINEER FOR "WATER PIPE INSULATION DETAIL".

4.17. ALL WATERMAIN TO BE PRESSURE TESTED IN ACCORDANCE WITH OPSS 441. DISINFECT ALL WATERMAIN IN ACCORDANCE WITH AWWA C 651-99 INCLUDING CHLORINATION, BACKFLOW-PREVENTOR AND 24 HOUR DUPLICATE SAMPLING. ALL TESTING AND DISINFECTION TO BE COMPLETED UNDER THE SUPERVISION OF THE ENGINEER. (CONTRACTOR TO SUBMIT WATER COMMISSIONING PLAN. THIS PLAN MUST BE APPROVED BY THE LOCAL MUNICIPALITY PRIOR TO ANY WATERMAIN WORK).

5. EROSION AND SEDIMENT CONTROL

5.1. CONTRACTOR TO INSTALL EROSION CONTROL MEASURES AS SHOWN PRIOR TO CONSTRUCTION AND MAINTAIN IN GOOD CONDITION UNTIL CONSTRUCTION IS COMPLETED AND ALL DISTURBED GROUND SURFACES HAVE BEEN RESTABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE COVER.

5.2. ALL SEDIMENT CONTROL FENCING TO BE INSTALLED PRIOR TO ANY AREA GRADING, EXCAVATING OR DEMOLITION COMMENCING.

5.3. EROSION CONTROL FENCING TO BE INSTALLED AROUND BASE OF ALL STOCKPILES. ALL STOCKPILES TO BE KEPT 2.5m MINIMUM FROM PROPERTY LINE.

5.4. EROSION PROTECTION TO BE PROVIDED AROUND ALL STORM AND SANITARY MHS AND CBS.

5.5. CONSTRUCTION ACCESS (MUD MAT) TO BE PROVIDED ON-SITE AT ALL LOCATIONS WHERE CONSTRUCTION VEHICLES EXIT THE SITE. CONSTRUCTION ACCESS (MUD MAT) SHALL BE A MINIMUM OF 6.0m WIDE, 15.0m LONG (LENGTH MAY VARY DEPENDING ON SITE LAYOUT) AND 0.3m DEEP AND SHALL CONSIST OF 200mm CLEAR STONE MATERIAL OR APPROVED EQUIVALENT. PROPOSED EROSION CONTROL TO BE INTO MUD MAT. CONTRACTOR TO ENSURE ALL VEHICLES LEAVE THE SITE VIA THE MUD MAT AND THAT THE MAT IS MAINTAINED IN A MANNER TO MAXIMIZE EFFECTIVENESS AT ALL TIMES.

5.6. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE DEVELOPMENT PROGRESSES. CONTRACTOR TO PROVIDE ALL ADDITIONAL EROSION CONTROL STRUCTURES.

5.7. EROSION CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN RESTABILIZED.

5.8. NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE ENGINEER AND THE LOCAL MUNICIPALITY'S DEPARTMENT OF PUBLIC WORKS.

5.9. CONTRACTOR TO CLEAN ROADWAY AND SIDEWALKS OF SEDIMENTS RESULTING FROM CONSTRUCTION TRAFFIC FROM THE SITE EACH DAY.

5.10. CONTRACTOR MUST REMOVE EROSION AND SEDIMENTATION FENCING PRIOR TO COMPLETION OF PROJECT. CONTRACTOR TO HAVE EROSION AND SEDIMENTATION FENCE INSPECTED WHEN VEGETATION HAS ESTABLISHED, BUT PRIOR TO FENCE BECOMING OVERGROWN. ENGINEER'S REPRESENTATIVE TO DETERMINE IF VEGETATION HAS REACHED THE CRITICAL POINT AND WILL THEN INSTRUCT CONTRACTOR TO REMOVE FENCE.

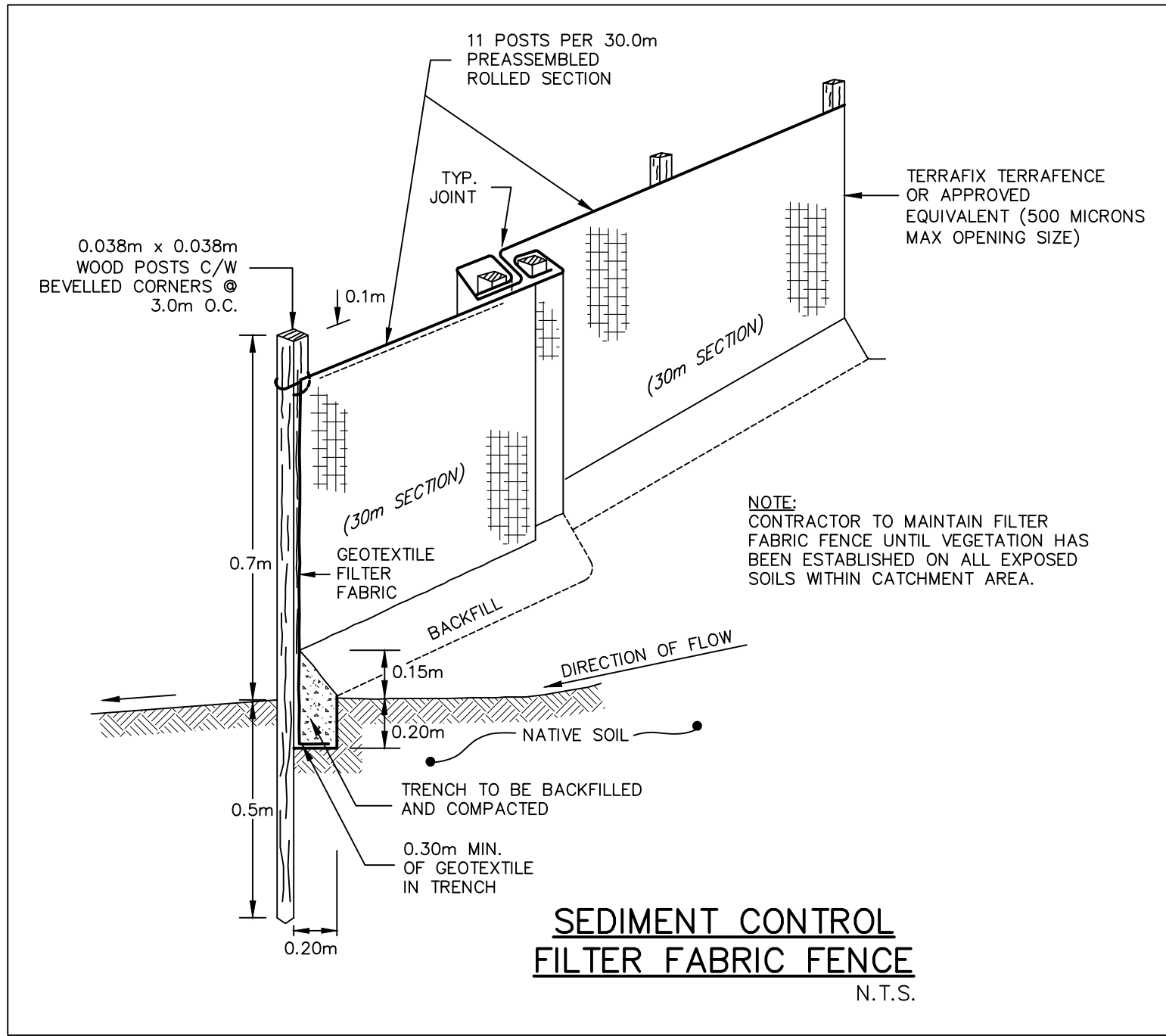
6. MAINTENANCE RECOMMENDATIONS

6.1. EROSION CONTROL STRUCTURES TO BE MONITORED REGULARLY AND ANY DAMAGE REPAIRED IMMEDIATELY. SEDIMENTS TO BE REMOVED WHEN ACCUMULATIONS REACH A MAXIMUM OF 1/3 THE HEIGHT OF THE FENCE.

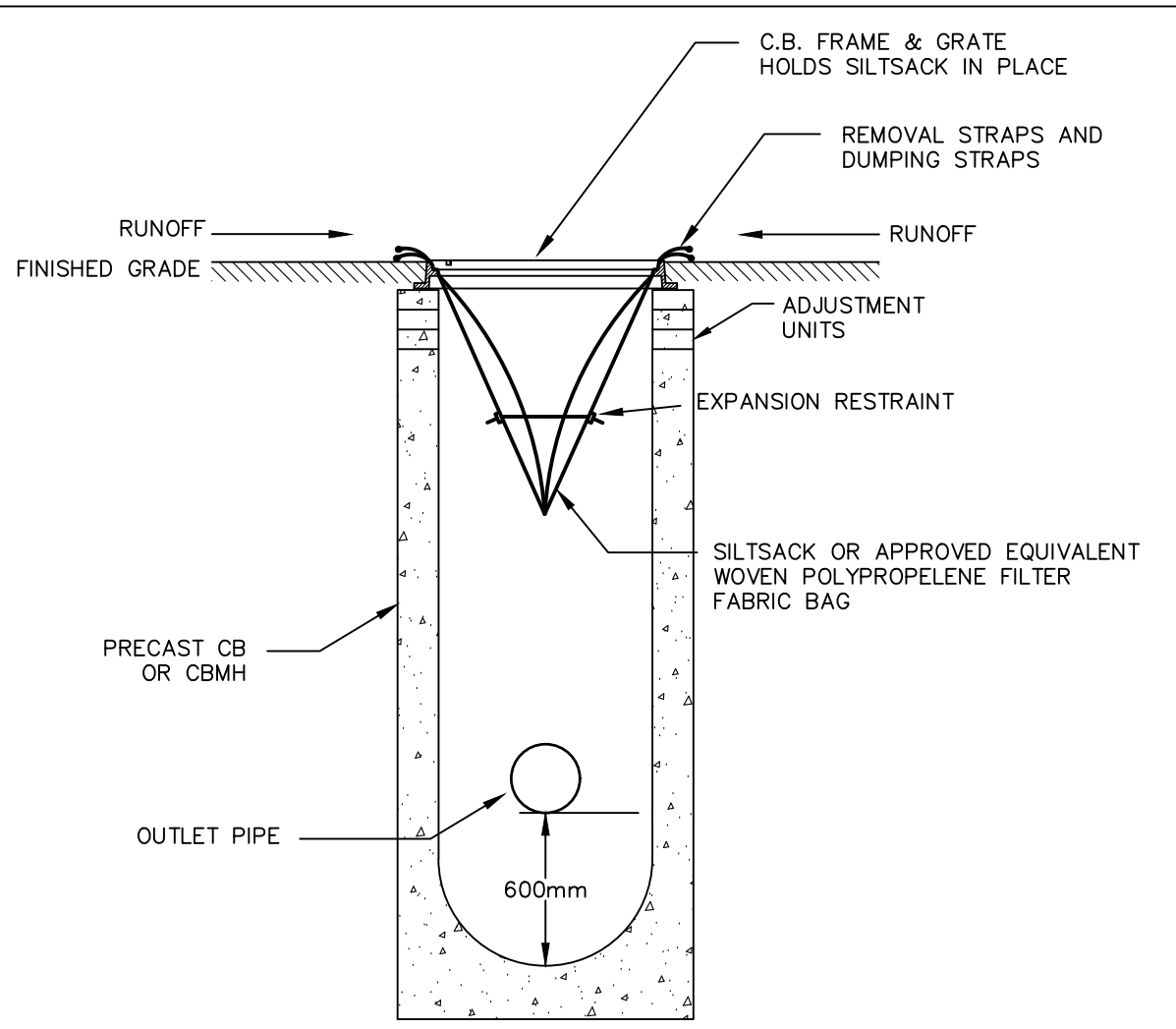
6.2. OWNER'S REPRESENTATIVE TO MONITOR EROSION CONTROL STRUCTURES TO ENSURE FENCING IS INSTALLED AND MAINTENANCE IS PERFORMED TO CITY REQUIREMENTS.

6.3. THE PROPOSED HYDRODOME(HD-4) WILL REQUIRE REGULAR ANNUAL MAINTENANCE. OWNER TO ENTER INTO A MAINTENANCE AGREEMENT WITH A SUITABLE CONTRACTOR TO COMPLETE THIS WORK.

Point 4.11 removed from previous drawing set.



SEDIMENT CONTROL
FILTER FABRIC FENCE
N.T.S.

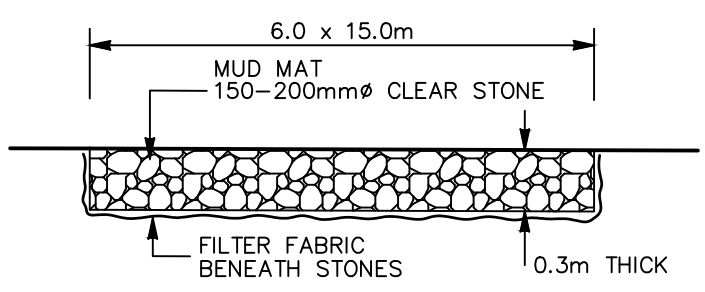


MAINTENANCE SCHEDULE

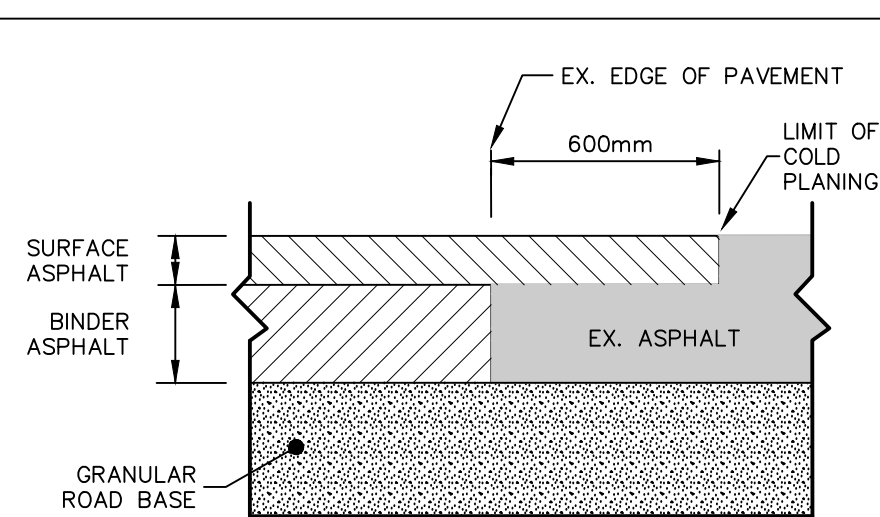
- INSPECT AFTER EVERY MAJOR RAIN EVENT.
- INSPECT EVERY 3 WEEKS MINIMUM.
- SILTSACK SHOULD NEVER BE OVER HALF FULL.
- FILL BAG CAN BE REMOVED, DUMPED, CLEANED AND REUSED (TO REMOVE INSERT 25mm REBAR INTO REMOVAL FLAP POCKETS) (TO DUMP INSERT 25mm REBAR INTO BOTH DUMPING STRAPS)

TEMPORARY SILTSACK SILTATION CONTROL IN CB
N.T.S.

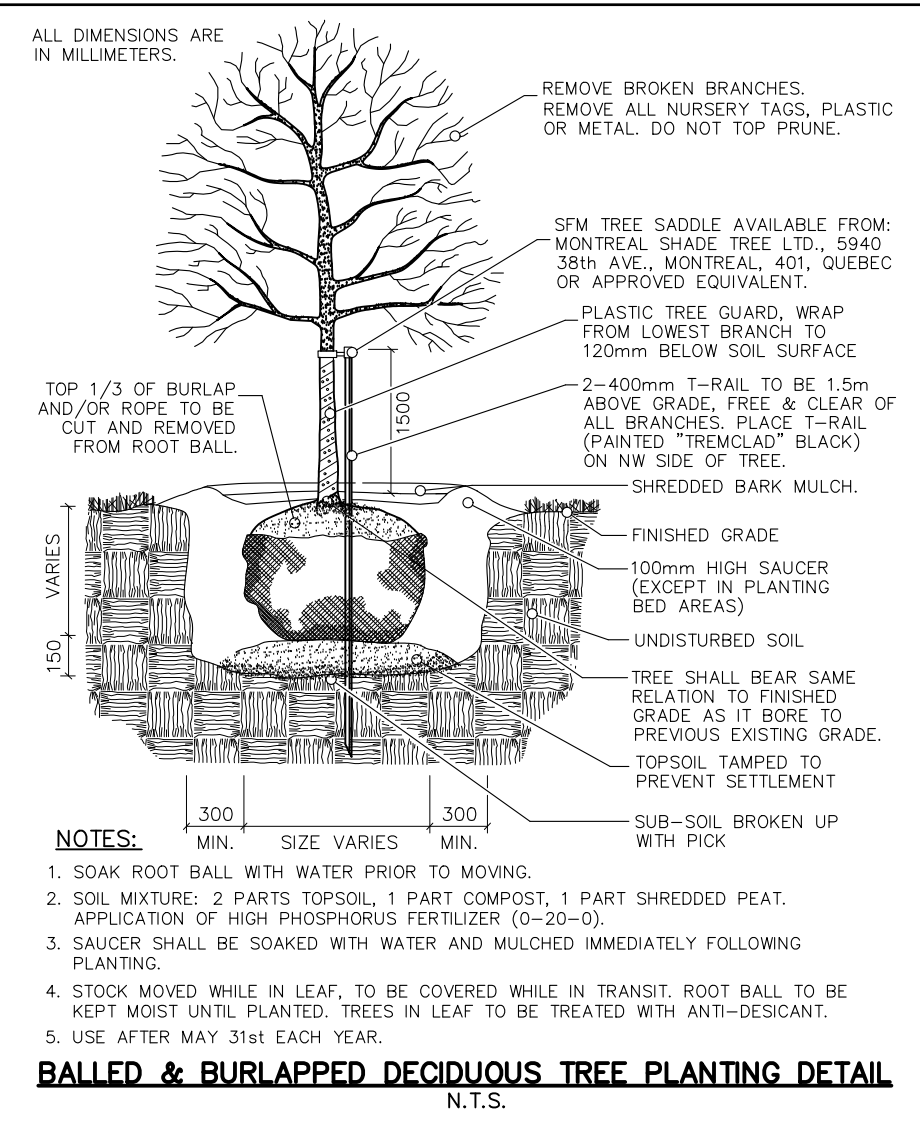
DESIGNATED ACCESS FOR ALL CONSTRUCTION TRAFFIC. INSTALL MUD MAT, AS PER DETAIL BELOW, PRIOR TO ANY OTHER CONSTRUCTION. MUD MAT TO BE MAINTAINED IN GOOD WORKING ORDER UNTIL GRADING WORKS ARE COMPLETED AND GRANULAR "A" & "B" HAVE BEEN PLACED.



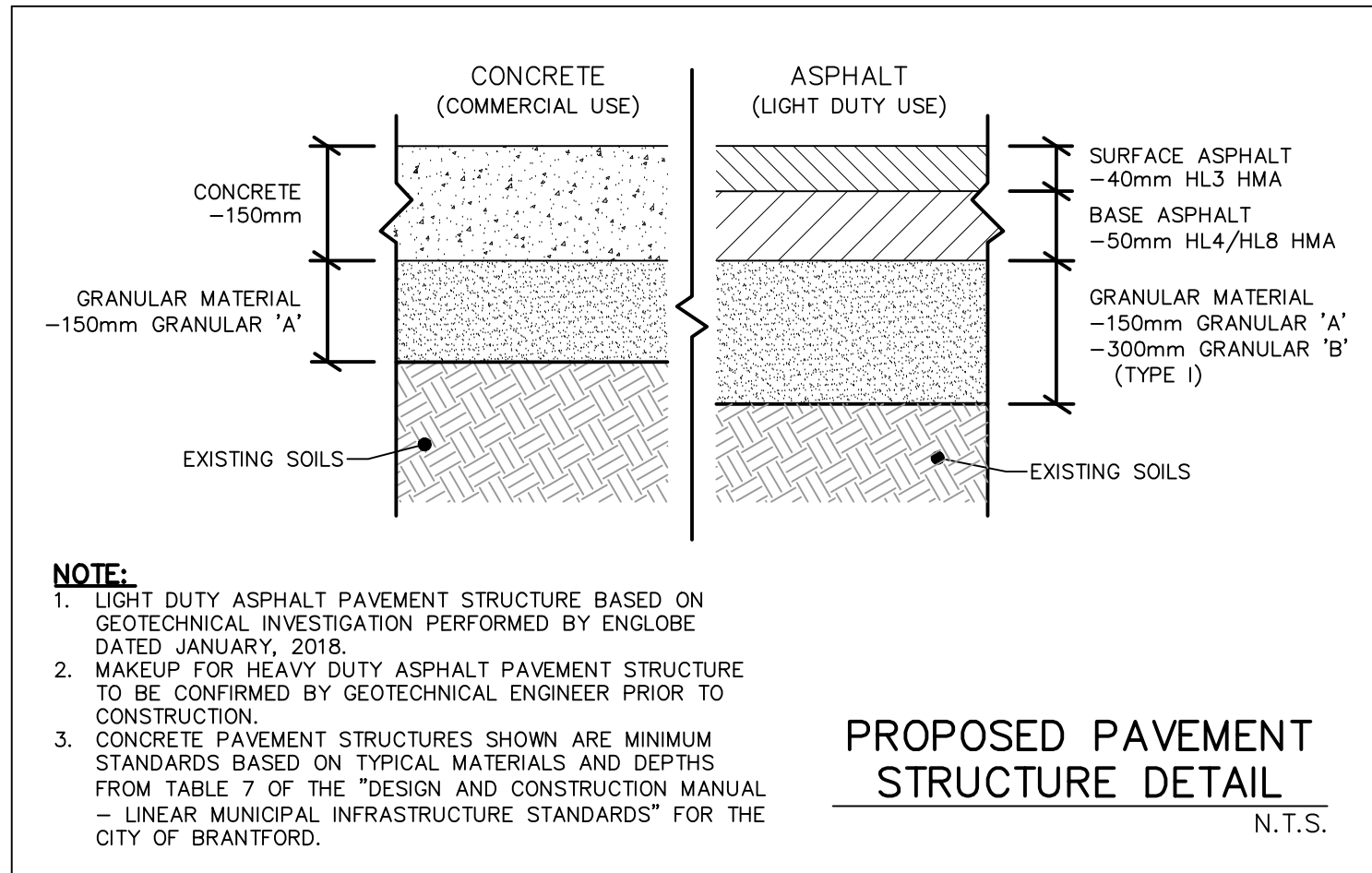
CONSTRUCTION ACCESS DETAIL
N.T.S.



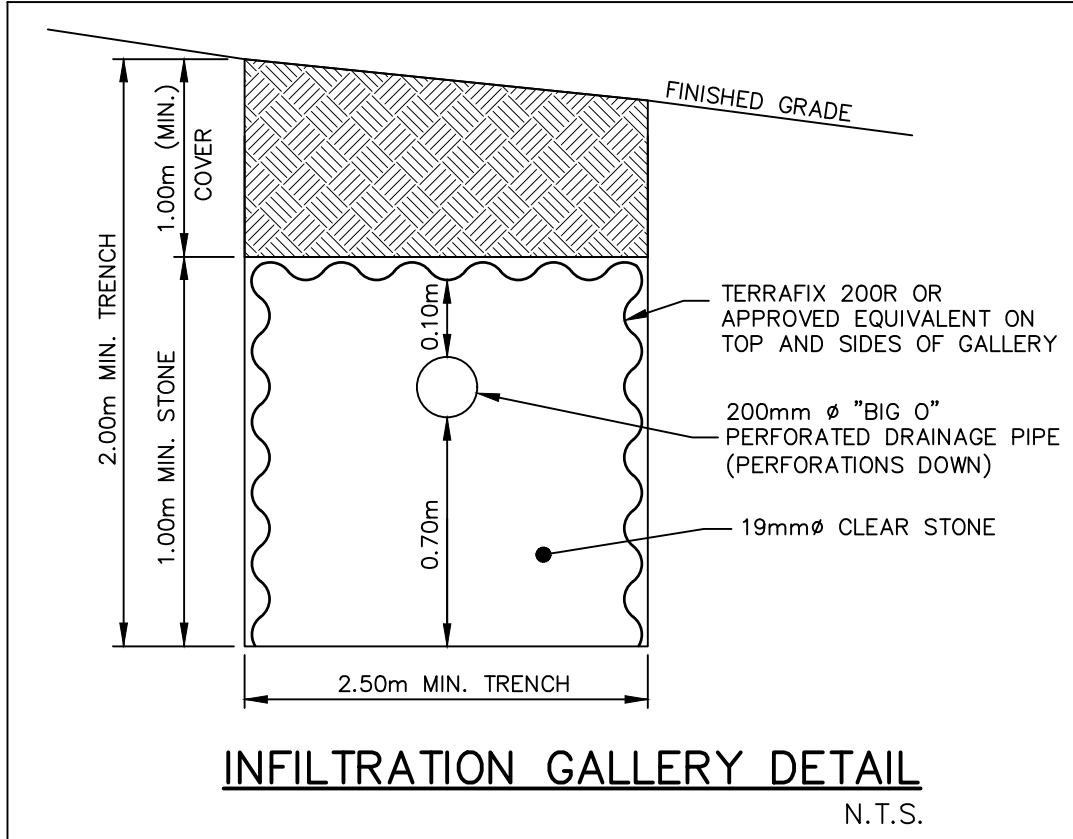
ASPHALT JOINT DETAIL
N.T.S.



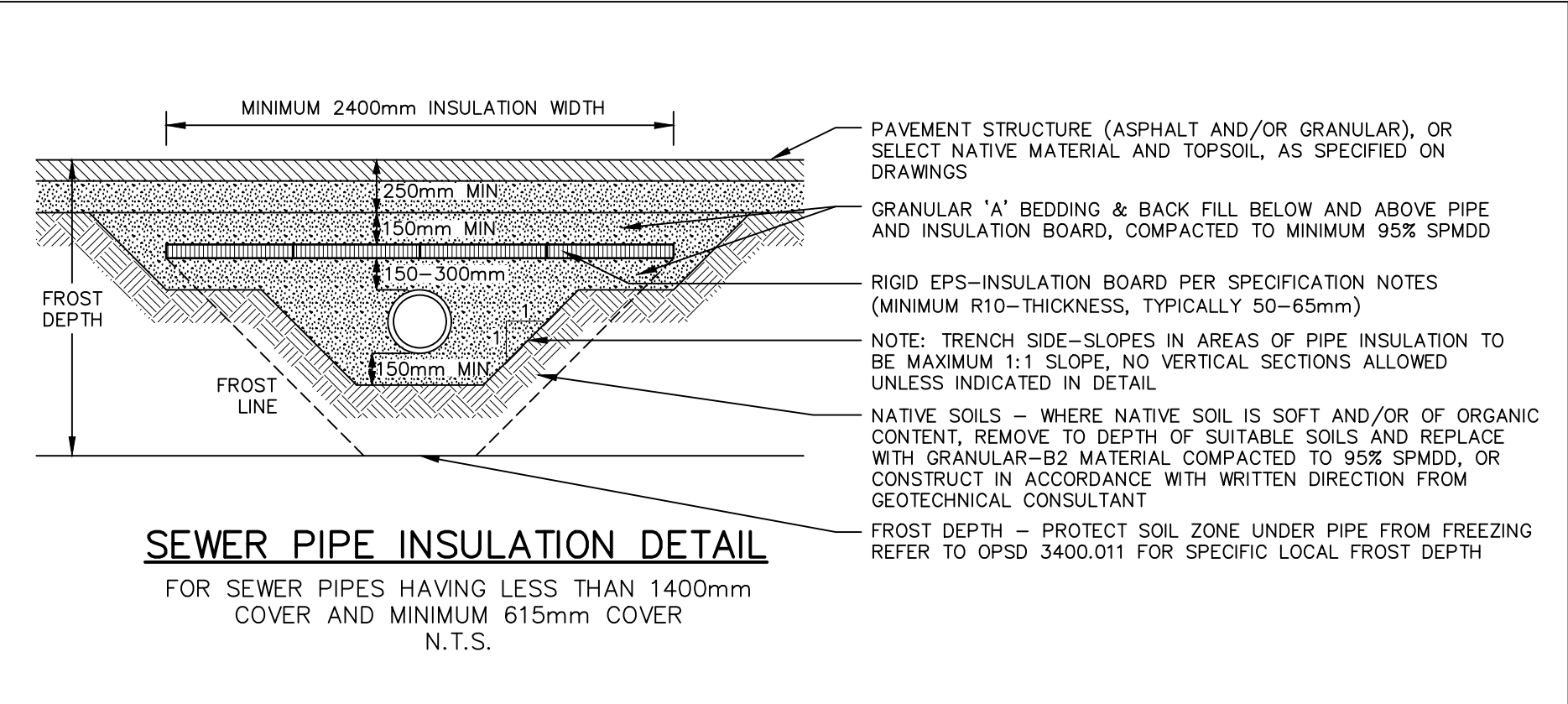
PROPOSED PAVEMENT
STRUCTURE DETAIL
N.T.S.



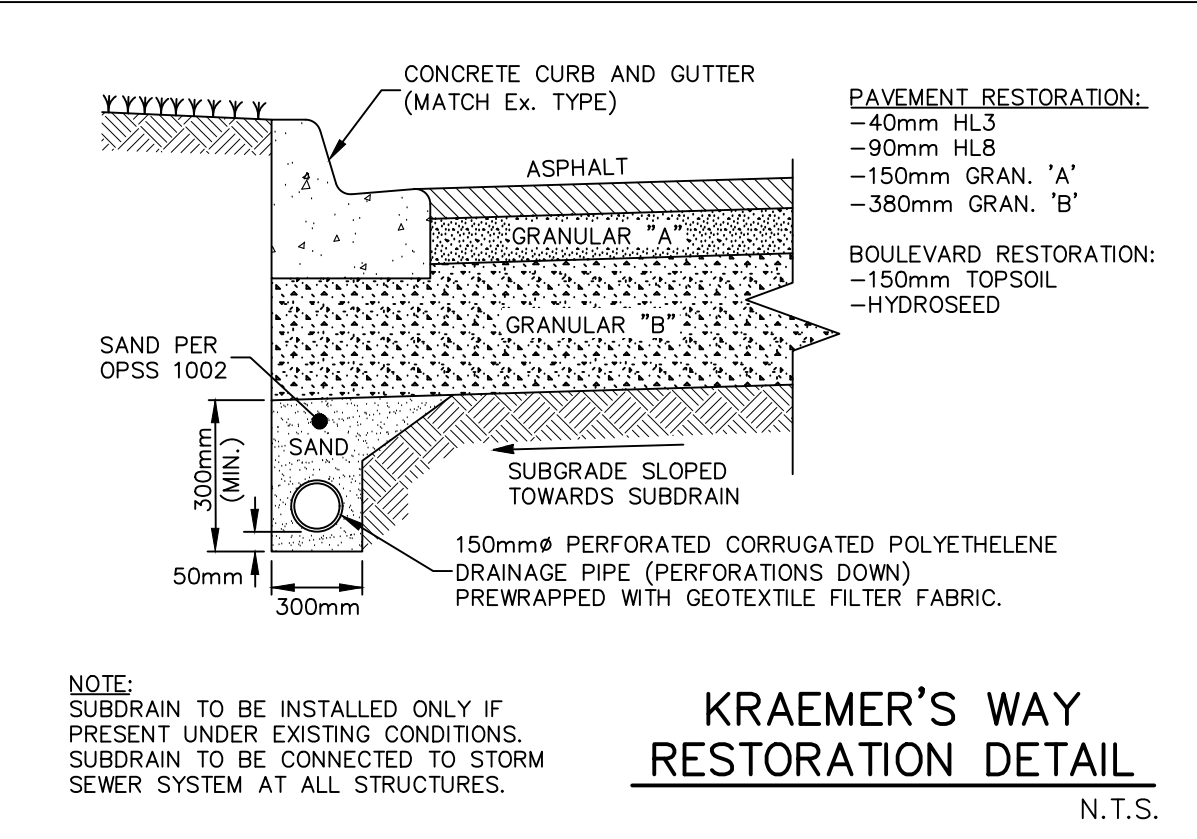
NOTE:
1. LIGHT DUTY ASPHALT PAVEMENT STRUCTURE BASED ON GEOTECHNICAL INVESTIGATION PERFORMED BY ENGLOBE DATED JANUARY, 2018.
2. MAKEUP FOR HEAVY DUTY ASPHALT PAVEMENT STRUCTURE TO BE CONFIRMED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
3. CONCRETE PAVEMENT STRUCTURES SHOWN ARE MINIMUM STANDARDS BASED ON TYPICAL MATERIALS AND DEPTHS FROM TABLE 7 OF THE "DESIGN AND CONSTRUCTION MANUAL - LINEAR MUNICIPAL INFRASTRUCTURE STANDARDS" FOR THE CITY OF BRANTFORD.



INFILTRATION GALLERY DETAIL
N.T.S.



SEWER PIPE INSULATION DETAIL
FOR SEWER PIPES HAVING LESS THAN 1400mm
COVER AND MINIMUM 615mm COVER
N.T.S.



KRAEMER'S WAY
RESTORATION DETAIL
N.T.S.

NOTES	PROJECT IDENTIFICATION	DRAWING IDENTIFICATION	ORIENTATION	SUB-CONSULTANT	PRIME CONSULTANT	PRIME CONSULTANT	DISCIPLINE SEAL	DRAWING SUBMISSION(S)	INTERNAL INFO	COPYRIGHT 2024																	
THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY ERRORS OR OMISSIONS TO THE ARCHITECT PRIOR TO COMMENCING OR PROCEEDING WITH ANY WORK ON THIS PROJECT. ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE ARCHITECT COPYRIGHT 2017 ". THESE DRAWINGS AND SPECIFICATIONS ARE DESIGNED FOR THE CLIENT AND THE PROPERTY INDICATED ON THESE DRAWINGS ONLY AND SHALL NOT BE CONSTRUCTED FOR ANY OTHER CLIENT OR ANY OTHER PROPERTY. DO NOT SCALE DRAWINGS.	<div>BRANTFORD ANIMAL SHELTER</div> <div>10 KRAEMER'S WAY</div> <div>BRATFORD, ONTARIO</div> <div>N3V 0A5</div> <div><div><div></div><div>DESIGN REVIEW</div></div><div><div></div><div>SITE PLAN APPROVAL</div></div><div><div></div><div>BUILDING PERMIT</div></div><div><div></div><div>BIDS DOCUMENTS</div></div><div><div></div><div>CONTRACT DOCUMENTS</div></div><div><div></div><div>CONSTRUCTION DOCUMENTS</div></div></div>	CONSTRUCTION NOTES AND DETAILS		<div></div> <div>Engineers, Scientists, Surveyors</div> <div>519-204-6510</div>	<div></div> <div>67 KING STREET WEST, CHATHAM ON N7M 1C7</div> <div>TEL . 519.397.0943 EMAIL . info@roastudio.com</div>		<table><tr><td></td><td></td><td>MM-DD-YY</td></tr><tr><td></td><td></td><td></td></tr><tr><td>4</td><td>REISSUED FOR SPA</td><td>10-09-2024</td></tr><tr><td>3</td><td>ISSUED FOR TENDER</td><td>08-08-2024</td></tr><tr><td>2</td><td>ISSUED FOR PERMIT</td><td>08-01-2024</td></tr><tr><td>1</td><td>ISSUED FOR SERVICING REPORT</td><td>05-28-2024</td></tr></table>			MM-DD-YY				4	REISSUED FOR SPA	10-09-2024	3	ISSUED FOR TENDER	08-08-2024	2	ISSUED FOR PERMIT	08-01-2024	1	ISSUED FOR SERVICING REPORT	05-28-2024	<div>CIVIL</div> <div><div>PROJECT ID</div><div>DRAWN BY</div><div>REVIEWED BY</div><div>DATE</div><div>SCALE</div></div> <div><div>ROA23-003</div><div>TNH</div><div>WHV</div><div>10.07.2024</div><div>1:200</div></div>	C103
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