

**GENERAL NOTES:**

1. THE OWNER'S PROFESSIONAL ENGINEER IS REQUIRED TO FIELD REVIEW THE INSTALLATION OF SERVICES INCLUDED IN THIS PROJECT IN ACCORDANCE WITH THE GENERAL REVIEW COMMITMENT CERTIFICATION PROCESS. THE OWNER'S CONTRACTOR IS TO PROVIDE AT LEAST 48 HOURS NOTICE PRIOR TO COMMENCING CONSTRUCTION OF THE SITE SERVICES.
2. THE OWNER/OWNER'S CONTRACTOR SHALL HAVE ITS PROFESSIONAL ENGINEER PROVIDE FULL-TIME ONSITE REVIEW DURING CONSTRUCTION ON AN EXISTING MUNICIPAL STREET OR ASSEMBLY AND PROVIDE A CERTIFICATE OF COMPLETION OF WORKS UPON COMPLETION OF ALL WORKS TO BE CONSTRUCTED.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE CURRENT ONTARIO BUILDING CODE (OBC) AND ANY APPLICABLE STATUTES, REGULATIONS, CODES AND BY-LAWS.
4. STRIK, BALDINELLI, MONIZ LTD. (SBM) IS NOT RESPONSIBLE FOR THE INFORMATION (EXISTING TOPOGRAPHY, BENCHMARKS, PROPERTY BOUNDARY, ETC.) PROVIDED BY OTHERS.

**CONSTRUCTION NOTES:**

1. REFER TO THE DRAFT PLAN/LOT GRADING PLANS FOR LAYOUT DIMENSIONING.
2. THE OWNER'S CONTRACTOR IS TO CONTACT THE CONSULTING ENGINEER (SBM) FOR FINAL ONSITE REVIEW. THE CONTRACTOR IS TO PROVIDE AT LEAST 48 HOURS NOTICE PRIOR TO REQUIRED ONSITE REVIEW.
3. THE OWNER'S CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES UNDER THE OCCUPATIONAL HEALTH AND SAFETY ACT AS REQUIRED BY THE MINISTRY OF LABOUR TO EXECUTE THE WORK.
4. THE OWNER'S CONTRACTOR IS TO REVIEW AND CONFIRM ALL EXISTING CONDITION INFORMATION & INFORM SBM OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. SBM IN NO WAY ACCEPTS RESPONSIBILITY FOR ANY INACCURACIES FOUND ON THIS PLAN RELATIVE TO EXISTING CONDITIONS FOR THE SITE.
5. PRIOR TO COMMENCING ANY CONSTRUCTION, ALL SEWER OUTLET INFORMATION, BENCHMARKS, ELEVATIONS, DIMENSIONS, GRADES, ETC. MUST BE CHECKED BY THE CONTRACTOR AND VERIFIED AND ANY DISCREPANCIES REPORTED TO THE ENGINEERS.
6. PRIOR TO COMMENCING ANY WORK ON THE INSTALLATION OF SERVICES & GRADING, AN APPROVED SET OF PLANS AND SPECIFICATIONS MUST BE AVAILABLE ON THE JOB AND SHALL REMAIN THERE WHILE WORK IS BEING DONE.
7. STRIP FULL DEPTH OF TOPSOIL IN AREAS TO BE DISTURBED AND STOCK PILE FOR RE-USE IN GRASSED/LANDSCAPED AREAS.
8. OWNER'S CONTRACTOR IS RESPONSIBLE FOR ALL AS-BUILT INVERTS AND GRADES, RECORD ANY DEVIATION OF PIPE OR STRUCTURE LOCATION INVOLVED WITH THIS PROJECT AND OWNER'S CONTRACTOR TO PROVIDE A COPY OF THE AS-BUILT DRAWING SHOWING ALL CHANGES CLEARLY MARKED IN RED.
9. THE OWNER'S CONTRACTOR SHALL CONSTRUCT TEMPORARY MEASURES TO CONTROL SILT ENTERING THE STORM DRAINAGE SYSTEM TO THE SPECIFICATIONS OUTLINED IN THE GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES PREPARED BY THE MINISTRY OF NATURAL RESOURCES. THESE MEASURES ARE TO BE INSTALLED PRIOR TO COMMENCING ANY CONSTRUCTION FOR THIS PROJECT AND ARE TO REMAIN IN PLACE UNTIL CONSTRUCTION HAS BEEN COMPLETED TO BASE ASPHALT AND SOD OR TO THE SATISFACTION OF THE MUNICIPAL ENGINEER.
10. THE CONTRACTOR SHALL INFORM VOYAGE & COUNTY OF MIDDLESEX AT LEAST ONE WEEK PRIOR TO COMMENCING CONSTRUCTION ON ANY STREET THAT IS AN INTER-COMMUNITY TRANSIT SERVICE BUS ROUTE THAT WILL BE AFFECTED BY CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR:
  - 11.1. CONNECTING ANY EXISTING SEWER OR DRAIN ENCOUNTERED DURING CONSTRUCTION TO A NEW SEWER OF SIMILAR TYPE, SIZE AND MATERIAL OR INTO ANOTHER EXISTING SEWER OF THE SAME TYPE AND TO REPORT ON AS-BUILT DRAWINGS.
  - 11.2. ENSURING THAT THERE IS NO INTERRUPTION OF ANY SURFACE OR SUBSURFACE DRAINAGE FLOW THAT WOULD ADVERSELY AFFECT NEIGHBOURING PROPERTIES.
12. NO FOUNDATION DRAIN CONNECTIONS WILL BE PERMITTED TO THE SANITARY SEWERS AND NO DIRECT GRAVITY CONNECTIONS FROM THE FOUNDATION DRAINS WILL BE PERMITTED TO THE STORM SYSTEM UNLESS THE STORM SYSTEM HAS THE CAPACITY TO PROVIDE FOR SUCH CONNECTIONS TO THE SATISFACTION OF THE MUNICIPAL ENGINEER.
13. WORK ON OR ADJACENT TO THE MUNICIPAL/COUNTY RIGHT OF WAY (R.O.W.) SHALL BE COMPLETED IN ACCORDANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7 CURRENT EDITION AND THE ONTARIO TRAFFIC MANUAL BOOK 18 CURRENT EDITION.

**SURFACE WORKS NOTES:**

1. ALL WORK IN THE MUNICIPAL/COUNTY ROAD ALLOWANCE SHALL MEET THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY OF MIDDLESEX CENTRE ENVIRONMENTAL AND ENGINEERING SERVICES DEPARTMENT. THE MUNICIPALITY OF MIDDLESEX CENTRE INFRASTRUCTURE DESIGN STANDARDS ARE TO BE APPLIED TO WORKS WITHIN THE CITY ROAD ALLOWANCE UNLESS OTHERWISE APPROVED BY THE MUNICIPAL ENGINEER. THE CONTRACTOR IS REQUIRED TO OBTAIN & PAY FOR PERMIT TO WORK IN MUNICIPAL/COUNTY R.O.W.
2. ALL SURFACES WHICH ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION AT LEAST AS GOOD AS ORIGINAL, OR AS PER BELOW (WHICHEVER IS GREATER) OR IF WITHIN THE CITY RIGHT OF WAY TO THE SATISFACTION OF THE MUNICIPAL ENGINEER, ALL AT NO COST TO THE MUNICIPALITY.
  - 2.1. GRASSED AREAS TO BE RESTORED w/ 100mm TOPSOIL + SOD.
  - 2.2. ANY ASPHALT AREA DISTURBED DURING CONSTRUCTION SHALL BE RESTORED AS FOLLOWS:
    - 2.2.1. PROOF ROLL SUBGRADE (TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER) PRIOR TO PLACEMENT OF GRANULARS (98% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD) MIN.).
    - 2.2.2. MILL ADJACENT ASPHALT TO BE TIED INTO 50mm DEEP x 500mm WIDE PRIOR TO RESTORATION SEE DETAIL ON SHEET C1.
    - 2.2.3. MIN. RECOMMENDED PAVEMENT STRUCTURE (TO BE REVIEWED & APPROVED BY THE GEOTECHNICAL ENGINEER)
      - 40mm HL3 SURFACE ASPHALT COMPACTED TO 97% MARSHALL MIX DESIGN BULK DENSITY
      - 50mm HL8 BINDER ASPHALT COMPACTED TO 97% MARSHALL MIX DESIGN BULK DENSITY
      - ASPHALT TO BE SUPPLIED AND PLACED IN ACCORDANCE WITH OPSS 310 & 1150
      - 150mm OF GRANULAR 'A' COMPACTED TO 100% SPMDD
  - 2.3. RESTORE ALL PAVEMENT MARKINGS TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS AND MARKINGS SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 710 "CONSTRUCTION SPECIFICATION FOR PAVEMENT MARKINGS".
  - 2.4. ALL EXTERIOR HORIZONTAL CONCRETE SHALL BE MIN 100mm THICK, 32 MPa AT 28 DAYS c/w 5-8% AIR ENTRAINMENT, SLUMP OF 80mm (±20mm) OR 30mm (±10mm) WHEN USING A FORMING MACHINE AND TEMPERATURE BETWEEN 10-28°C. ON MIN 100mm THICK GRANULAR 'A' COMPACTED TO 100% SPMDD.
3. ALL AREAS OUTSIDE THE CONSTRUCTION LIMITS SHALL NOT BE DISTURBED. ANY DAMAGED TO THOSE AREAS ARE TO BE REPAIRED AT THE CONTRACTORS EXPENSE.

**SERVICING NOTES:**

1. ALL SITE SERVICES SHALL BE INSTALLED TO 1.0m OUTSIDE FOUNDATION WALL.
2. ALL ORGANIC, UNSTABLE OR UNSUITABLE MATERIALS BENEATH THE ROAD ALLOWANCE, SERVICES, UTILITIES, OR FOUNDATIONS MUST BE REMOVED AND THESE AREAS BACKFILLED WITH AN APPROVED FILL MATERIAL, ALL TO THE SATISFACTION OF A GEOTECHNICAL ENGINEER AND SHOULD BE PLACED IN LIFTS NOT EXCEEDING 300mm (LOOSE) THAT ARE COMPACTED TO 95% SPMDD (100% FOR PAVED SURFACES). THE FILL MATERIAL SHOULD COMPRISE OF CLEAN, COMPACTIBLE FILL WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT.
3. REMOVE ALL TRENCH WATER WHEN PIPE LAYING IS IN PROGRESS. ALL REQUIREMENTS FOR DEWATERING PERMITS (INCLUDING THE MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS (M.E.C.P.'S) PERMIT TO TAKE WATER, IF REQUIRED) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. CONNECTIONS FROM FOUNDATIONS, WEEPING TILE, SUMP PUMP, AND ROOF DRAINS ARE NOT PERMITTED TO ENTER THE SANITARY SEWER SYSTEM AND SHALL BE IN ACCORDANCE WITH THE MUNICIPALITY OF MIDDLESEX CENTRE'S BY-LAWS.
5. WATER SERVICE SHALL BE PASSED UNDER FOOTINGS WITH 0.60m MIN SEPARATION.
6. WHERE ANY WATER SERVICE CONNECTION IS REQUIRED TO BE MADE FOLLOWING THE CONSTRUCTION OF CURB, GUTTER, CONCRETE SIDEWALKS, AND/OR WEARING SURFACE COAT OF ASPHALT ON ANY STREET IN A NEW SUBDIVISION, SUCH WATER SERVICE CONNECTION SHALL NOT BE MADE USING 'OPEN CUT' METHODS BUT SHALL BE MADE USING TRENCHLESS TECHNOLOGIES AND IN SUCH A MANNER AS TO ELIMINATE THE POSSIBILITY OF SETTLEMENT OF SUCH CURB, GUTTER, CONCRETE SIDEWALKS AND/OR WEARING SURFACE COAT OF ASPHALT; IT BEING UNDERSTOOD THAT THIS POLICY SHALL APPLY EXCEPT WHERE IN THE OPINION OF THE MUNICIPAL/COUNTY ENGINEER, GROUND CONDITIONS ARE SUCH THAT THE USE OF DRILLING OR BORING METHODS BECOME UNREASONABLE OR UNECONOMICAL.
7. ALL WATERMAIN MATERIAL AND CONNECTION SHALL CONFORM TO THE CURRENT MUNICIPALITY OF MIDDLESEX CENTRE'S STANDARDS AND SPECIFICATIONS.
8. ALL WATERMAIN VALVES SHALL BE GATE VALVES MANUFACTURED TO AWMA C500 AND EPOXY COATED TO AWMA C550 AND ARE TO OPEN COUNTER-CLOCKWISE.
9. INSTALLATION, HYDROSTATIC TESTING, SWABBING, FLUSHING AND DISINFECTION SHALL BE DONE IN ACCORDANCE WITH THE MUNICIPALITY OF MIDDLESEX CENTRE'S STANDARDS AND SPECIFICATIONS.
10. SEPARATION BETWEEN BURIED WSC & PDC AS OUTLINED IN THE CURRENT EDITION OF THE M.E.C.P. "DESIGN GUIDELINES FOR DRINKING-WATER SYSTEMS" SECTION F-6-1 "PROCEDURES TO GOVERN SEPARATION OF SEWERS AND WATERMANS" AND INSULATE WATER SERVICE AS PER CLAUSE 7.3.5.4. "PROTECTION FROM FROST" OF THE CURRENT EDITION OF THE ONTARIO BUILDING CODE, WHERE REQUIRED, ALL SUBSTITUTIONS MUST BE APPROVED BY THE MUNICIPALITY ENGINEER.
11. WATER SERVICE TO BE PEX AND ALL WATER PIPE TO HAVE 12AWG TRACER WIRE INSTALLED ON ALL PVC WATERMANS, VALVES, AND FIRE HYDRANTS. APPROVED TRACER WIRE FOR OPEN CUT INSTALLATION: "COPPERHEAD 1230-HS". WATERMAIN TO BE INSTALLED 2.1m BELOW ROAD GRADE OR 1.1m BELOW THE BOTTOM OF DITCH, WHICHEVER IS GREATER AND SHALL NOT BE LESS THAN 1.5m COVER COVER. PEX WATER SERVICE REQUIRES BRASS FITTINGS. PROVIDE PIPE RESTRAINTS AS REQUIRED BY THE PIPE MANUFACTURER.
12. WATERMANS/SERVICES SHALL CROSS ABOVE SEWERS WITH SUFFICIENT VERTICAL SEPARATION TO ALLOW FOR PROPER BEDDING AND STRUCTURAL SUPPORT OF THE WATERMAIN/SERVICE AND SEWER MAINS AS OUTLINED IN THE CURRENT EDITION OF THE M.E.C.P. "DESIGN GUIDELINES FOR DRINKING-WATER SYSTEMS" SECTION F-6-1 "PROCEDURES TO GOVERN SEPARATION OF SEWERS AND WATERMANS" AND INSULATE WATER SERVICE AS PER CLAUSE 7.3.5.4. "PROTECTION FROM FROST" OF THE CURRENT EDITION OF THE ONTARIO BUILDING CODE, WHERE REQUIRED.
13. ALL SUBSTITUTIONS MUST BE APPROVED BY THE CITY ENGINEER.
14. THE ELEVATION OF THE GROUND WATER TABLE IS UNKNOWN. CONTRACTOR TO ADVISE SBM IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION OPERATIONS; FURTHER REVIEW/INVESTIGATION BY A GEOTECHNICAL ENGINEER MAY BE REQUIRED. IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION OPERATIONS, CIVIL STRUCTURES ARE TO BE DESIGNED FOR HYDROSTATIC PRESSURE AND UPLIFT/BUOYANCY FORCES. PROVIDE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO FOR REVIEW

**SEDIMENT & EROSION CONTROL MEASURES:**

1. PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION.
2. SEDIMENT AND EROSION CONTROL MEASURES TO BE REMOVED AT COMPLETION OF PROJECT (FOLLOWING COMPLETION OF BASE ASPHALT AND SOD).
3. MAINTAIN EROSION CONTROL MEASURES DURING CONSTRUCTION.
4. ALL COLLECTED SEDIMENT TO BE DISPOSED OF AT AN APPROVED LOCATION.
5. MINIMIZE AREA DISTURBED DURING CONSTRUCTION.
6. ALL DEWATERING TO BE DISPOSED OF IN AN APPROVED SEDIMENTATION BASIN.
7. PROTECT ALL CATCH BASINS, MAINTAINING HOLES AND PIPE ENDS FROM SEDIMENT INTRUSION WITH GEOTEXTILE FABRIC (TERRAFIX 270 R), SILT SACKS, OR APPROVED EQUAL.
8. KEEP ALL SUMPS CLEAN DURING CONSTRUCTION.
9. PREVENT WIND-BLOWN DUST.
10. STRAW BALES TO BE USED IN LOCALIZED AREAS AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION FOR WORKS WHICH ARE IN OR ADJACENT TO FLOOD LINES, FILL LINES AND HAZARDOUS SLOPES.
11. STRAW BALES TO BE TERMINATED BY ROUNDING BALES TO CONTAIN AND FILTER RUNOFF.
12. OBTAIN APPROVAL FROM THE UPPER THAMES RIVER CONSERVATION AUTHORITY (UTRCA) PRIOR TO CONSTRUCTION FOR WORKS WHICH ARE IN, OR ADJACENT TO FLOOD LINES, FILL LINES AND HAZARDOUS SLOPES.
13. ALL SILT FENCING AND DETAILS ARE AT THE MINIMUM TO BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
14. ALL OF THE ABOVE NOTES AND ANY SEDIMENT & EROSION CONTROL MEASURES ARE AT THE MINIMUM TO BE IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
15. SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE INSPECTED WEEKLY OR FOLLOWING SIGNIFICANT RAINFALL EVENTS.
16. ON-SITE SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE REVIEWED AND MODIFIED TO MEET THE CHANGING SITE.
17. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REPAIRED WITHOUT DELAY BY THE OWNERS CONTRACTOR AS INSTRUCTED BY THE CONTRACT ADMINISTRATOR/ENGINEER AT NO EXPENSE TO THE OWNER.

**UTILITIES NOTES:**

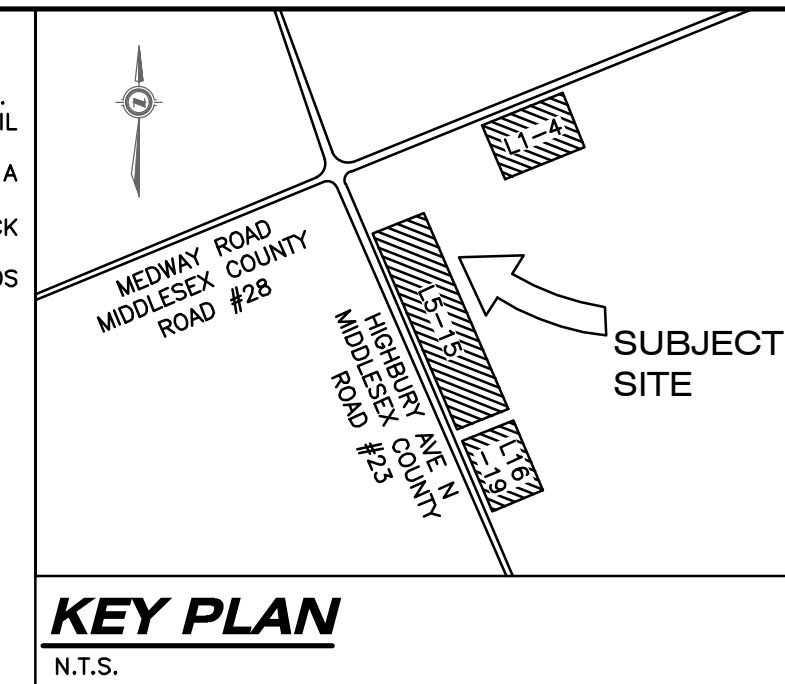
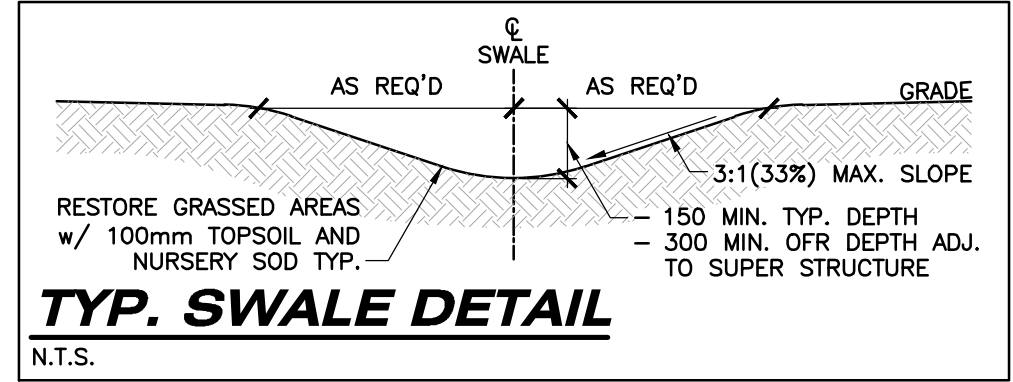
1. ALL WORK FOR COORDINATION, DESIGN, AND CONSTRUCTION OF UTILITIES IS BY OTHERS. SBM DESIGN AND DRAWINGS ARE FOR MUNICIPAL SERVICING ONLY. ANY UTILITY INFORMATION SHOWN IS FOR REFERENCE/COORDINATION PURPOSES ONLY AND MAY NOT BE ACCURATE.
2. THE UTILITIES PROVIDERS MUST BE INFORMED AT LEAST TWO WEEKS PRIOR TO CONSTRUCTION ON ANY EXISTING CITY ROAD ALLOWANCE. ALL EXISTING UNDERGROUND SERVICE OR UTILITIES WITHIN THE LIMITS OF THE CONSTRUCTION SITE SHALL BE LOCATED AND MARKED. ANY UTILITIES, DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE GOVERNING BODY AT THE CONTRACTOR'S EXPENSE.
3. ALL EXISTING UNDERGROUND UTILITY (TELEPHONE, HYDRO, GAS, CABLE, SEWER, WATERMANS, ETC.) THAT WILL BE CROSSED UNDER DURING THE INSTALLATION OF SERVICES FOR THIS DEVELOPMENT SHALL BE SUPPORTED, AS MAY BE REQUIRED BY THE OWNERS OF THE UTILITY BEING CROSSED UNDER.
4. OWNER'S CONTRACTOR TO LOCATE/FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
5. OWNER'S CONTRACTOR TO COORDINATE WITH UTILITIES PROVIDER FOR BRACING, DECOMMISSIONING AND/OR RELOCATION OF EXISTING GAS, HYDRO, TELEPHONE, CABLE, ETC. SERVICES, IF REQUIRED.

**LEGEND:**

<ul style="list-style-type: none"> <li>271.00 EXISTING SPOT ELEVATION</li> <li>271.00 EXISTING SPOT ELEVATION (TO REMAIN)</li> <li>271.00 PROPOSED SPOT ELEVATION</li> <li>271.00 PROPOSED SWALE ELEVATION</li> <li>EXISTING CATCH BASIN</li> <li>PROPOSED CATCH BASIN</li> <li>EXISTING CLEANOUT</li> <li>PROPOSED CLEANOUT</li> <li>PROPOSED CATCH BASIN MAINTENANCE HOLE</li> <li>EXISTING MAINTENANCE HOLE</li> <li>PROPOSED MAINTENANCE HOLE</li> <li>PROPOSED SWALE</li> <li>PROPOSED SLOPE</li> <li>PROPOSED DRAINAGE DIRECTION</li> <li>EXISTING OVERLAND FLOW ROUTE</li> <li>PROPOSED OVERLAND FLOW ROUTE</li> <li>PROPOSED SIGN, TYPE OF SIGN</li> <li>EXISTING STORM SEWER</li> <li>PROPOSED STORM SEWER</li> <li>EXISTING SANITARY SEWER</li> <li>PROPOSED SANITARY SEWER</li> <li>EXISTING WATERMAIN</li> <li>PROPOSED WATERMAIN</li> <li>EXISTING FIRE HYDRANT</li> <li>PROPOSED FIRE HYDRANT</li> <li>EXISTING WATER VALVE</li> <li>PROPOSED WATER VALVE</li> <li>EXISTING WATER METER</li> <li>PROPOSED WATER METER</li> <li>PROPOSED CURB STOP</li> <li>PROPOSED SUMP PUMP (SEE ARCHITECTURAL DRAWINGS)</li> <li>PROPOSED RAMP</li> </ul>	<ul style="list-style-type: none"> <li>TC TOP OF CURB</li> <li>BC BOTTOM OF CURB</li> <li>TW GROUND ELEVATION AT TOP OF RETAINING WALL</li> <li>BW GROUND ELEVATION AT BOTTOM OF RETAINING WALL</li> <li>HP HIGH POINT</li> <li>TL TOP OF LID</li> <li>BUILDING ENTRANCE</li> <li>OVERHEAD DOOR</li> <li>PROPOSED LIGHT-DUTY ASPHALT</li> <li>PROPOSED HEAVY-DUTY ASPHALT</li> <li>PROPOSED CONCRETE</li> <li>PROPOSED RETAINING WALL (DESIGNED BY OTHERS)</li> <li>MILL/PAVE LAP JOINT AS PER DETAIL ON THIS PAGE</li> <li>LIMITS OF DRAINAGE AREA</li> <li>PROPOSED SILT SACK</li> <li>PROPOSED STRAW BALE BARRIER</li> <li>EXISTING BUILDING</li> <li>PROPOSED BUILDING</li> <li>PROPOSED SILT FENCE</li> <li>PROPOSED TREE PRESERVATION FENCE</li> <li>LIMITS OF SUBJECT PROPERTY</li> <li>DECIDUOUS/CONIFEROUS TREE</li> <li>DECIDUOUS/CONIFEROUS TREE TO BE REMOVED</li> </ul>
--	--

**REFERENCE DOCUMENTS:**

1. SERVICING MEMORANDUM PREPARED BY SBM, PROJECT NO: SBM-21-0716, DATED MARCH 12, 2021.
2. INFORMATION OBTAINED FROM AS-CONSTRUCTED DRAWINGS BY SPRIET ASSOCIATES LTD, DATED APRIL 15, 1994.
3. TOPOGRAPHIC INFORMATION OBTAINED FROM PLANS BY CALLON DIETZ INC. FILE NO. 20-23779 A SURVEYED FEBRUARY 12, 2021.
4. LEGAL INFORMATION OBTAINED FROM AUTOCAD COORDINATION FILE 'DRAFT PLAN' PROVIDED BY BROCK DEVELOPMENT GROUP INC. VIA EMAIL FEBRUARY 22, 2021.
5. INFORMATION OBTAINED FROM SOIL TESTING FOR WASTEWATER SERVICING REPORT BY BOS ENGINEERING & ENVIRONMENTAL SERVICES INC. DATED JANUARY 4, 2021.



**LEGAL INFORMATION**

PART OF NORTH HALF OF LOT 8 CONCESSION 6 IN THE (GEOGRAPHIC TOWNSHIP OF LONDON) MUNICIPALITY OF MIDDLESEX CENTRE COUNTY OF MIDDLESEX

**SITE BENCHMARK:**

MONUMENT TYPE: BOLT (BM02-50)  
 LOCATION: BRICK PRIVACY WALL ON THE SOUTHWEST CORNER OF SUNNINGDALE ROAD EAST AND SOUTH WENIGE DRIVE. BOLT SET IN THE NORTH FACE OF THE WALL, 0.21m BELOW THE BRICK AND 0.71m WEST OF THE 45 DEGREE ANGLE OF THE WALL.  
 GEODETIC ELEVATION: 259.153 (CGVD28, 1978)

MONUMENT TYPE: BOLT (BM02-43)  
 LOCATION: CONCRETE BOX CULVERT CROSSING SUNNINGDALE ROAD EAST, 320m WEST OF THE CENTRELINE OF HIGHBURY AVENUE NORTH. BOLT SET IN THE EAST FACE ON THE NORTH SIDE OF SUNNINGDALE ROAD EAST, 0.12m SOUTH OF THE NORTHEAST CORNER AND 0.12m DOWN FROM THE TOP.  
 GEODETIC ELEVATION: 260.902 (CGVD28, 1978)

(CONTRACTOR TO CONFIRM BENCHMARK ELEVATIONS)

**LIST OF ITEMS REQUIRING ENGINEER'S REVIEW**

NOTE: CONTRACTOR TO PROVIDE MIN. 48 HOURS NOTICE PRIOR TO REQUESTED FIELD REVIEW TIME.

EROSION AND SEDIMENT CONTROL MEASURES, UPON COMPLETION
SERVICING IN MUNICIPAL RIGHT-OF-WAY (R.O.W.), EXISTING AND FUTURE, DURING CONSTRUCTION
GRADING - ROAD SUBGRADE, PRIOR TO GRANULARS
GRADING - GRANULAR 'B', PRIOR TO GRANULAR 'A'
GRADING - GRANULAR 'A', PRIOR TO BASE ASPHALT
GRADING - BASE ASPHALT, PRIOR TO TOP COAT ASPHALT
GRADING - TOP COAT ASPHALT
GRADING - BOULEVARDS (ROUGH GRADING)
WATERMAIN COMMISSIONING, DURING PROCEDURE

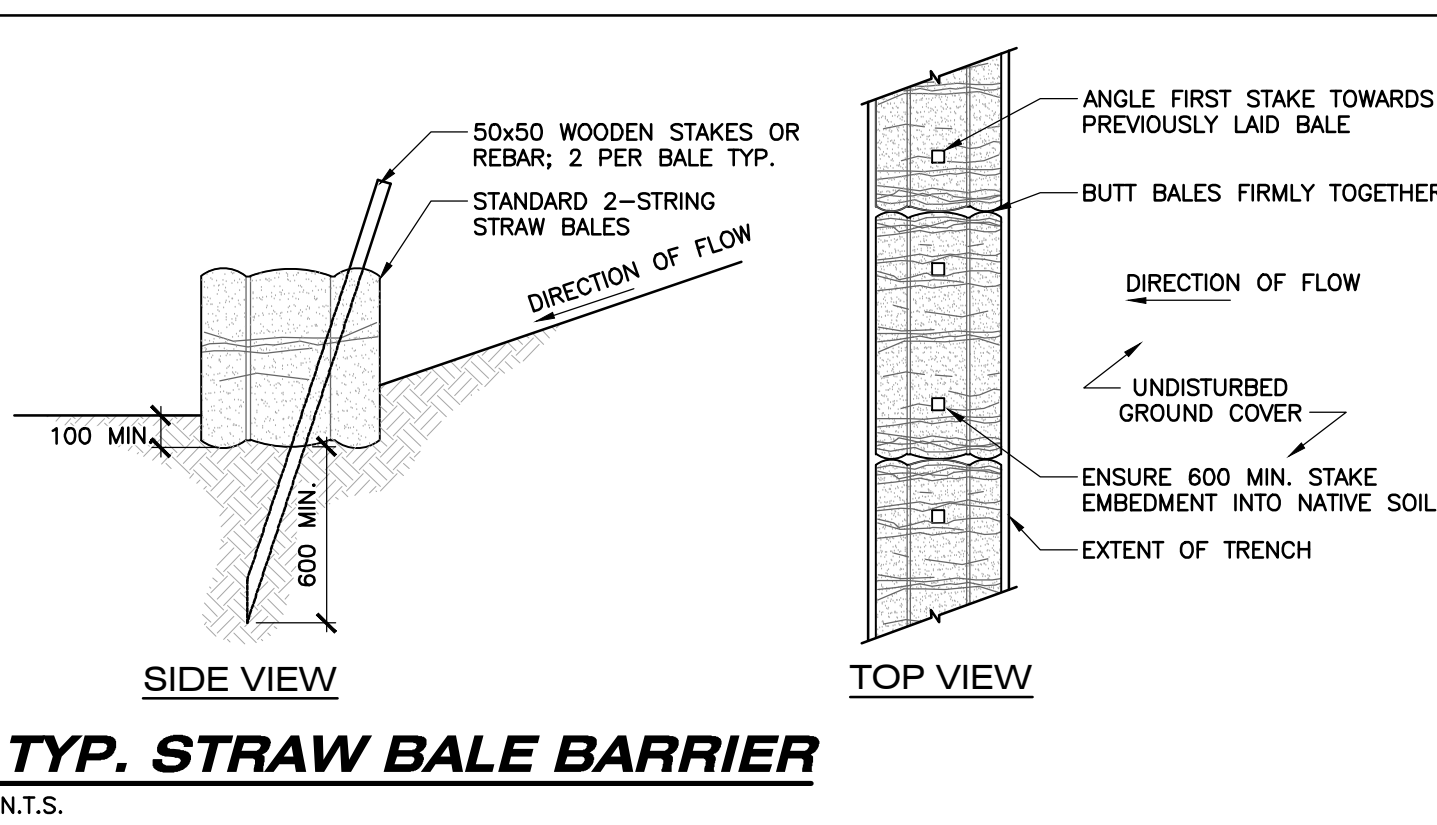
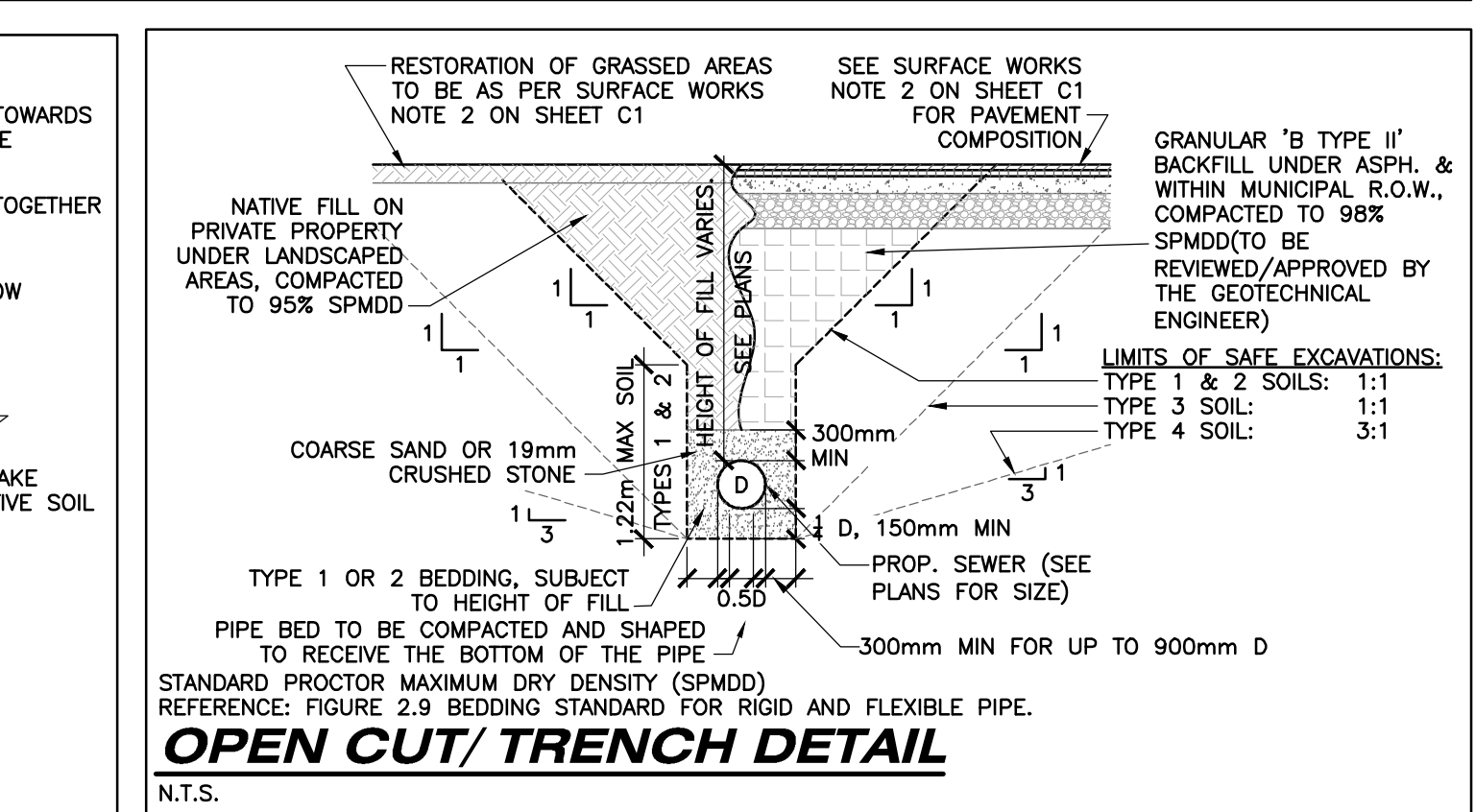
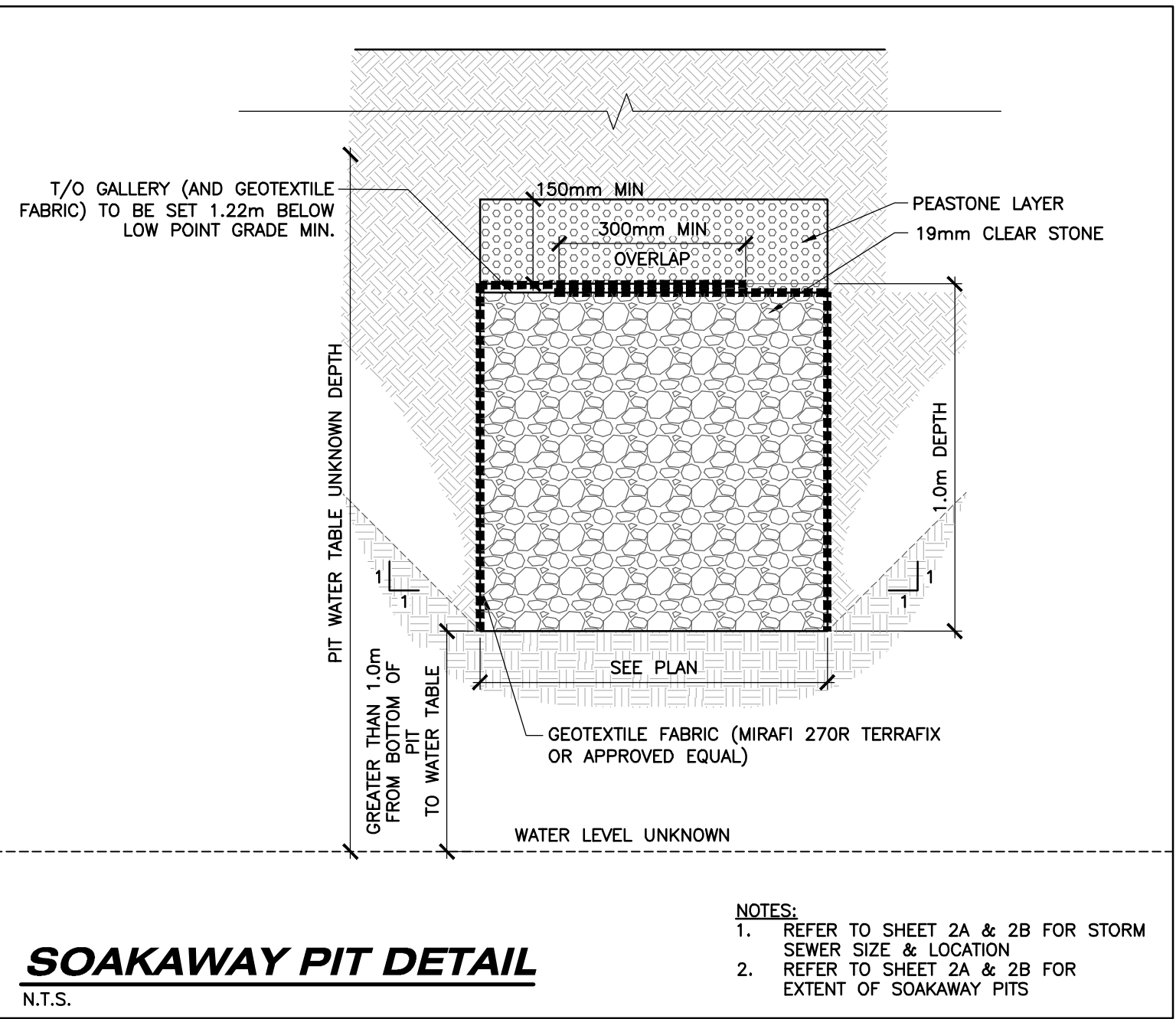
**LIST OF SUBMITTALS**

NOTE: CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING MATERIALS.

SHOP DRAWINGS - RETAINING WALL
PRODUCT SPECIFICATIONS - SEWER AND WATERMAIN, INCLUDING APPURTENANCES
ASPHALT JOB MIX FORMULA(E)
CONCRETE (CURB AND SIDEWALK) MIX DESIGN(S)
GRANULAR 'A' AND 'B' SIEVE ANALYSIS
EXCESS FILL - DUMP SITE INFORMATION AND PERMISSION LETTER
MATERIAL TESTING REPORT - ENGINEERED FILL SOURCE LETTER (RE CONTAMINANTS, ETC.)
MATERIAL TESTING REPORT - ENGINEERED FILL COMPACTION
MATERIAL TESTING REPORT - ENGINEERED FILL PLAN
MATERIAL TESTING REPORT - SUBGRADE COMPACTION/PREPARATION
MATERIAL TESTING REPORT - GRANULAR COMPACTION
MATERIAL TESTING REPORT - CONCRETE CYLINDERS
MATERIAL TESTING REPORT - ASPHALT COMPACTION
MATERIAL TESTING REPORT - ASPHALT SAMPLES
AS-BUILT SURVEY FOR EARTHWORKS QUANTITIES
WATERMAIN TESTING RESULTS

**LIST OF DRAWINGS**

1	NOTES, LEGEND, AND DETAILS
2A	DEVELOPMENT ENGINEERING PLAN - LOTS 1-4 & 16-19
2B	DEVELOPMENT ENGINEERING PLAN - LOTS 5-15
3	STANDARD DETAIL



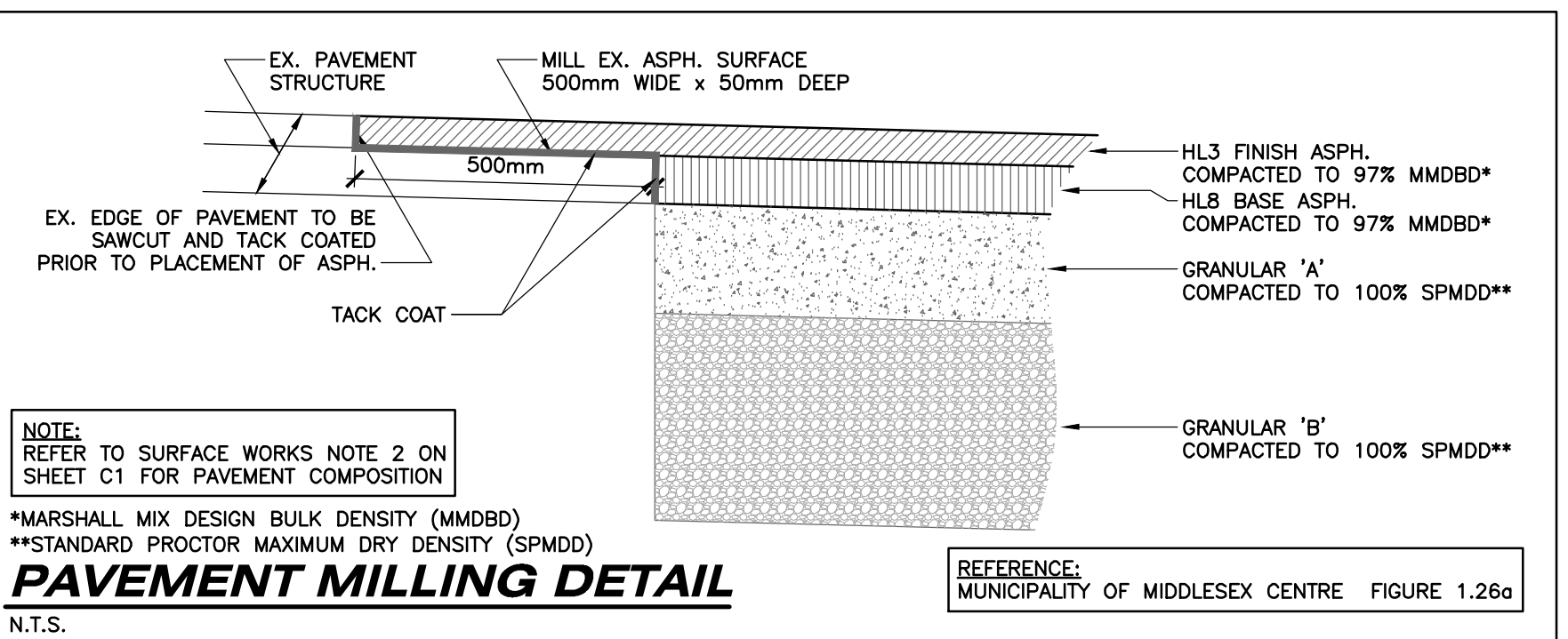
**LIST OF STANDARD DETAILS:**

ONTARIO PROVINCIAL STANDARDS:

OPSD 219.110	LIGHT-DUTY SILT FENCE BARRIER
OPSD 219.180	STRAW BALE FLOW CHECK DAM

MUNICIPALITY OF MIDDLESEX CENTRE FIGURES:

1.8b	STANDARD FOR SINGLE AND DOUBLE DRIVEWAY ENTRANCE (RURAL)
1.26a	STEPPEL MILLED JOINT PAVEMENT DETAIL
2.1	BEDDING STANDARD FOR RIGID AND FLEXIBLE PIPE
5.1	STANDARD SERVICING LOCATIONS FOR SINGLE FAMILY AND SEMI-DETACHED LOTS
5.2	INSULATION STANDARD FOR SHALLOW MAINS AND OFFSETS
5.10	STANDARD INSTALLATION OF <50mm WATER SERVICE CONNECTION AND LAYOUT DETAIL
5.12	CATHODIC PROTECTION ASSEMBLIES FOR 20mm TO 50mm WATER SERVICE



AS CONSTRUCTED SERVICES	COMPLETION	No.	REVISIONS	D/M/Y	BY	CONSULTANT
DESIGN	JSF/EL	1	ISSUED FOR CLIENT REVIEW	18/03/21	JSF	
DRAWN	JSF					
CHECKED	LS					
APPROVED	NGU					
DATE	09/03/2021					
CAD	21-0716					

**STRIK BALDINELLI MONIZ**  
 PLANNING - CIVIL - STRUCTURAL - MECHANICAL - ELECTRICAL  
 1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8  
 Tel: (519) 471-6667 Fax: (519) 471-0034  
 Email: sbm@sbmltd.ca



ENGINEER'S STAMP

**BROCK DEVELOPMENT GROUP**  
 1584 ROUTLEDGE PARK  
 LONDON, ONTARIO  
 N6H 5L6

P: 519.281.6769  
 E: INFO@BROCKD.G.COM

CLIENT

**BALLYMOTE SUBDIVISION**  
 21488 Highbury Ave N  
 Ballymote, ON

SCALE: N/A

PROJECT No. **SBM-21-0716**  
 SHEET No. **1**  
 PLAN FILE No. —



**GRADING CERTIFICATE:**

I HEREBY CERTIFY THAT THE PROPOSED GRADING AND APPURTENANT DRAINAGE WORKS COMPLY WITH SOUND ENGINEERING DESIGN AND THAT THE PROPOSED GRADING IS COMPATIBLE WITH EXISTING DRAINAGE PATTERNS ON AND ACROSS THESE LANDS AND THE ADJOINING LANDS OR APPLICABLE CITY BY-LAWS.

**GRADING NOTES:**

- EXISTING GRADES AND DRAINAGE OF ADJUTING LANDS IS NOT TO BE DISTURBED.
- LOCALIZED SURFACE DRAINAGE FROM ADJUTING PROPERTIES TO BE DEVELOPED IN THE FUTURE MAY BE DISCHARGED ONTO THE PROPOSED LOTS IN THIS SUBDIVISION.
- BASEMENT OPENINGS TO BE MINIMUM 300mm ABOVE THE CENTRELINE OF ROAD UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF PUBLIC WORK AND ENGINEERING.
- GROUND ELEVATIONS AT BUILDINGS ADJUTING OVERLAND FLOW ROUTES ARE TO BE 300mm ABOVE OVERLAND FLOW ROUTE ELEVATIONS.
- GROUND ELEVATIONS AT BUILDING OPENING OVERLAND FLOW ROUTES ARE TO BE 450mm ABOVE OVERLAND FLOW ROUTE ELEVATIONS.
- SUMP PUMP DISCHARGE MUST BE DIRECTED AWAY FROM DRIVEWAYS AND SIDEWALKS AND MUST NOT EXTEND BEYOND PROPERTY LIMITS. NO SANITARY SEWER CONNECTIONS PERMITTED.
- A MINIMUM OF 150mm (6") FROM THE TOP OF FOUNDATION TO THE FINISHED GRADE OUTSIDE THE BUILDING MUST BE PROVIDED, TYPICAL.
- RETAINING WALLS, 1000mm OR GREATER, & GUARD RAILS ON TOP (IF REQUIRED) ARE TO BE DESIGNED BY AND CONSTRUCTED TO THE SPECIFICATIONS OF A REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
- THE MIN. TOP OF FOUNDATION ELEVATION, UNDERSIDE OF FOOTING ELEVATION, BASEMENT WINDOW SILL ELEVATION, ETC. ARE TO BE CONFIRMED BY THE CONTRACTOR IN CONSULTATION WITH THE BUILDING DESIGNER, BASED ON THE FINISHED FLOOR ELEVATION PROVIDED. CONTACT STRIK, BALDINELLI, MONIZ LTD. (SBM) FOR CLARIFICATION, IF REQUIRED.

THE OWNER'S CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES IN COMPLIANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7 FOR ALL WORKS WITHIN THE MUNICIPALITY RIGHT-OF-WAY. THE OWNER'S CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE MUNICIPALITY/ENGINEER FOR REVIEW PRIOR TO PROCEEDING WITH CONSTRUCTION.

**CULVERT NOTE:**  
CULVERTS TO BE PLACED MATCHING EXISTING DITCH GRATE

**INSULATION NOTE:**  
INSULATE SEWERS AS PER THE A-7.3.5.4.(1) FROM THE CURRENT ONTARIO BUILDING CODE COMPENDIUM WHERE 1.22m COVER CANNOT BE PROVIDED.

UNLESS OTHERWISE NOTED ON THE PLANS, GEOTEXTILE SHALL BE NON-WOVEN TO MEET CLASS 2-OPSS 1860.07.02 (I.E. TERRAFIX 270R, OR APPROVED EQUAL) WITH 300mm MIN. OVERLAPS.

ALL WATERMAIN CONSTRUCTION TO CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY OF MIDDLESEX CENTRE PUBLIC WORKS & ENGINEERING DEPARTMENT. WHERE WATERMAIN SERVICE IS LESS THAN 2.1m BELOW ROAD GRADE OR 1.1m BELOW THE BOTTOM OF DITCH, WHICHEVER IS GREATER AND SHALL NOT BE LESS THAN 1.5m COVER (EVEN TEMPORARY CONDITIONS), THE WATERMAIN/SERVICE SHALL BE ADEQUATELY INSULATED OVER THE AFFECTED LENGTH AS PER THE MUNICIPALITY OF MIDDLESEX CENTRE FIGURE 5.2.

SILT FENCE TO BE CONSTRUCTED ON PROPERTY LINE. LINE WORK IS NOT SHOWN FOR CLARITY.

OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR REGULAR MONITORING & CLEANUP OF TRACKED MUD/DEBRIS ON ADJUTING LANDS & PUBLIC ROADS TO THE SATISFACTION OF THE ENGINEER/MUNICIPALITY OF MIDDLESEX CENTRE.

OWNER'S CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO AVOID MIXING TOPSOIL WITH SUBSOIL, WHERE REQUIRED FOR REUSE ON-SITE.

TOPSOIL STOCKPILE SIZES/LOCATIONS TO BE DETERMINED IN THE FIELD. SILT FENCE SHALL BE CONSTRUCTED AT TOE OF DOWNGRADE EDGES OF TOPSOIL STOCKPILE.

ALL NATIVE FILL PLACED SHALL MEET THE REQUIREMENTS FOR ENGINEERED FILL, COMPACTED TO 100% SPMDR OR AS OUTLINED IN THE GEOTECHNICAL REPORT.

FILTER FABRIC AND STRAW BALE BARRIERS SHALL BE INSTALLED AND MAINTAINED IN EXISTING DICB'S FOR DURATION OF PROJECT UNTIL SURFACES ARE PAVED AND BOULEVARDS ARE SODDED.

**SITE PREPARATION NOTE:**  
THIS PLAN HAS BEEN PREPARED TO IDENTIFY REMOVALS, EROSION & SEDIMENT CONTROL MEASURES AND TEMPORARY CONSTRUCTION WORKS FOR THE BENEFIT OF THE OWNER'S CONTRACTOR IN ADVANCE OF SERVICING WORKS. IT IS NOT INTENDED TO IDENTIFY PERMANENT GRADING PATTERNS.

**DISPOSAL NOTE:**  
ALL ITEMS NOTED AS "TO BE REMOVED" SHALL BE DISCARDED OFF-SITE AT AN APPROVED FACILITY.

OWNER'S CONTRACTOR TO CLEAR AND GRUB SITE PRIOR TO CONSTRUCTION AND DISPOSE OF ALL DEBRIS AND EXCESS FILL/TOPSOIL OFF-SITE AT AN APPROVED FACILITY.

SUMP PUMP AND DRAIN LOCATIONS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. REFER TO ARCHITECTS PLANS FOR SUMP PUMP DESIGN.

SERVICE STUBS TO BE CAPPED AT 1.0m O/S FROM BUILDING ENVELOPE FOR CONNECTION ONCE BUILDING SERVICES ARE INSTALLED.

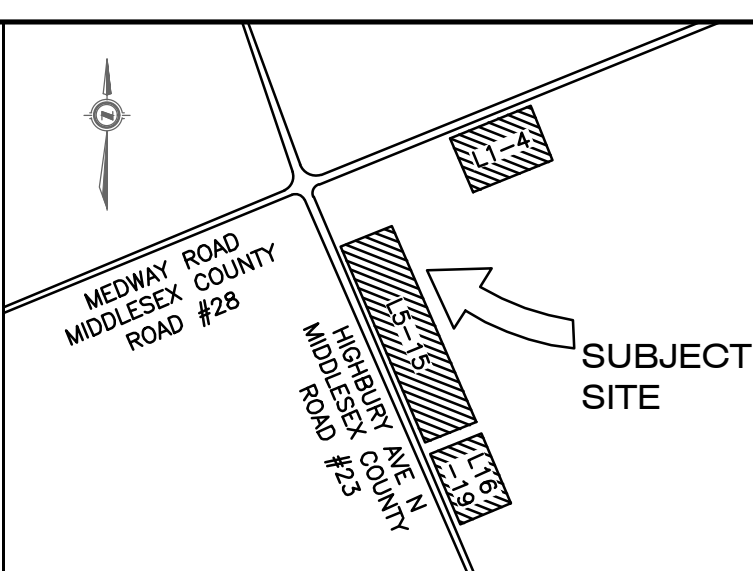
ALL PROP WATER METERS ARE c/w DOUBLE CHECK VALVE ASSEMBLIES (DCVA) FOR PREMISE ISOLATION

SEDIMENT AND EROSION CONTROL MEASURES MAY ONLY BE REMOVED UPON STABILIZATION OF CONTRIBUTING CATCHMENT AREA AND SUBJECT TO APPROVAL OF ENGINEER/MUNICIPALITY OF MIDDLESEX CENTRE.

**STORM DRAINAGE NOTE:**  
STORM DRAINAGE MAY TEMPORARILY NEED TO BE CONTROLLED AND PUMPED FROM STORM SEWER SYSTEM. ANY SUCH TEMPORARY MEASURES SHALL BE CONDUCTED AT NO EXTRA COST TO THE CONTRACT AND BE BASED UPON THE OWNER'S CONTRACTOR'S WATER CONTROL PLANS, WHICH MUST BE APPROVED BY THE CONTRACT ADMINISTRATOR/ENGINEER PRIOR TO CONSTRUCTION.

OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY CONSTRUCTION MEASURES SUCH AS, BUT NOT LIMITED TO, PIPE COVER AT NO ADDITIONAL CHARGE TO THE CONTRACT.

**STORM SERVICING NOTE:**  
NO BUILDING DRAIN (SUMP/WEEPING TILE/RAIN WATER LEADER) CONNECTIONS WILL BE PERMITTED INTO THE SANITARY SEWERS.

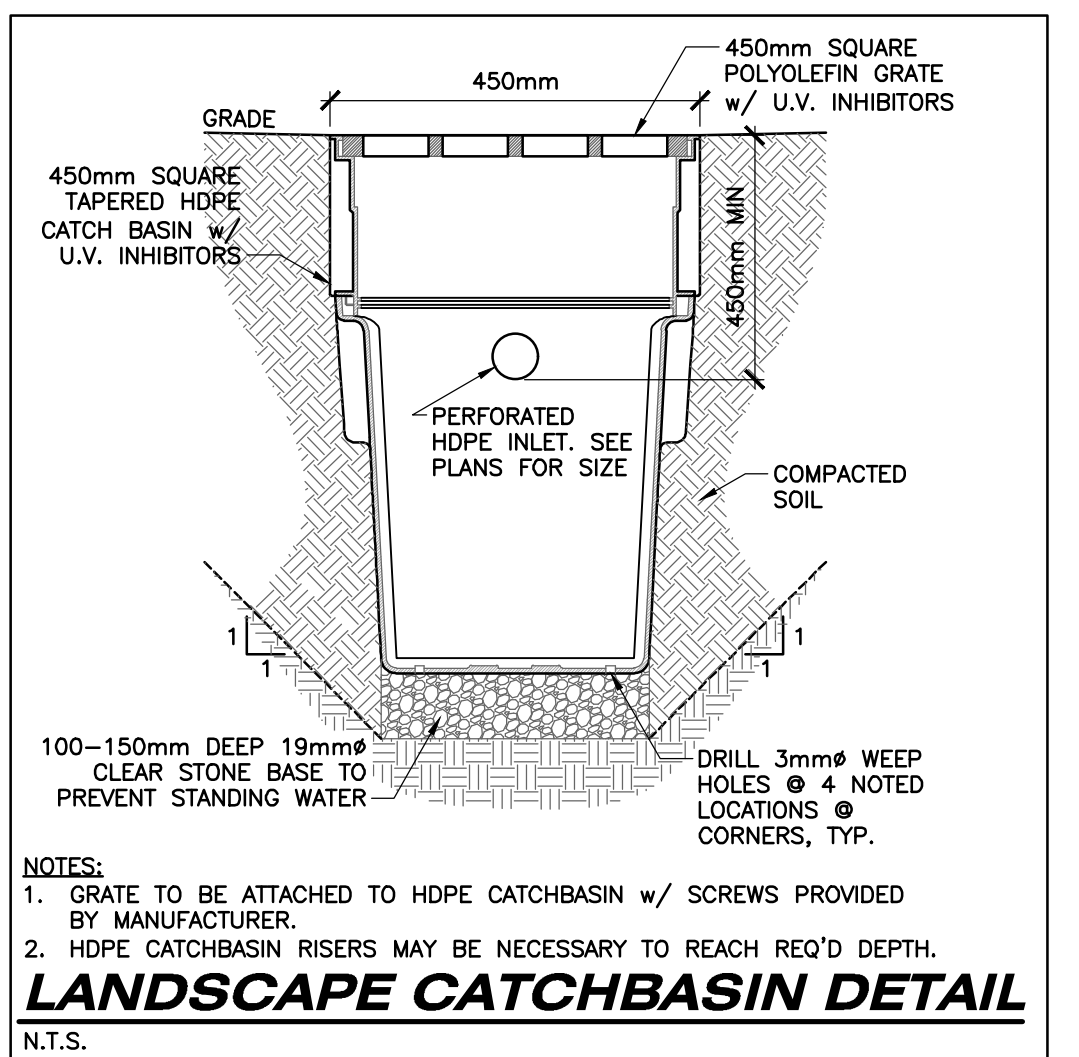
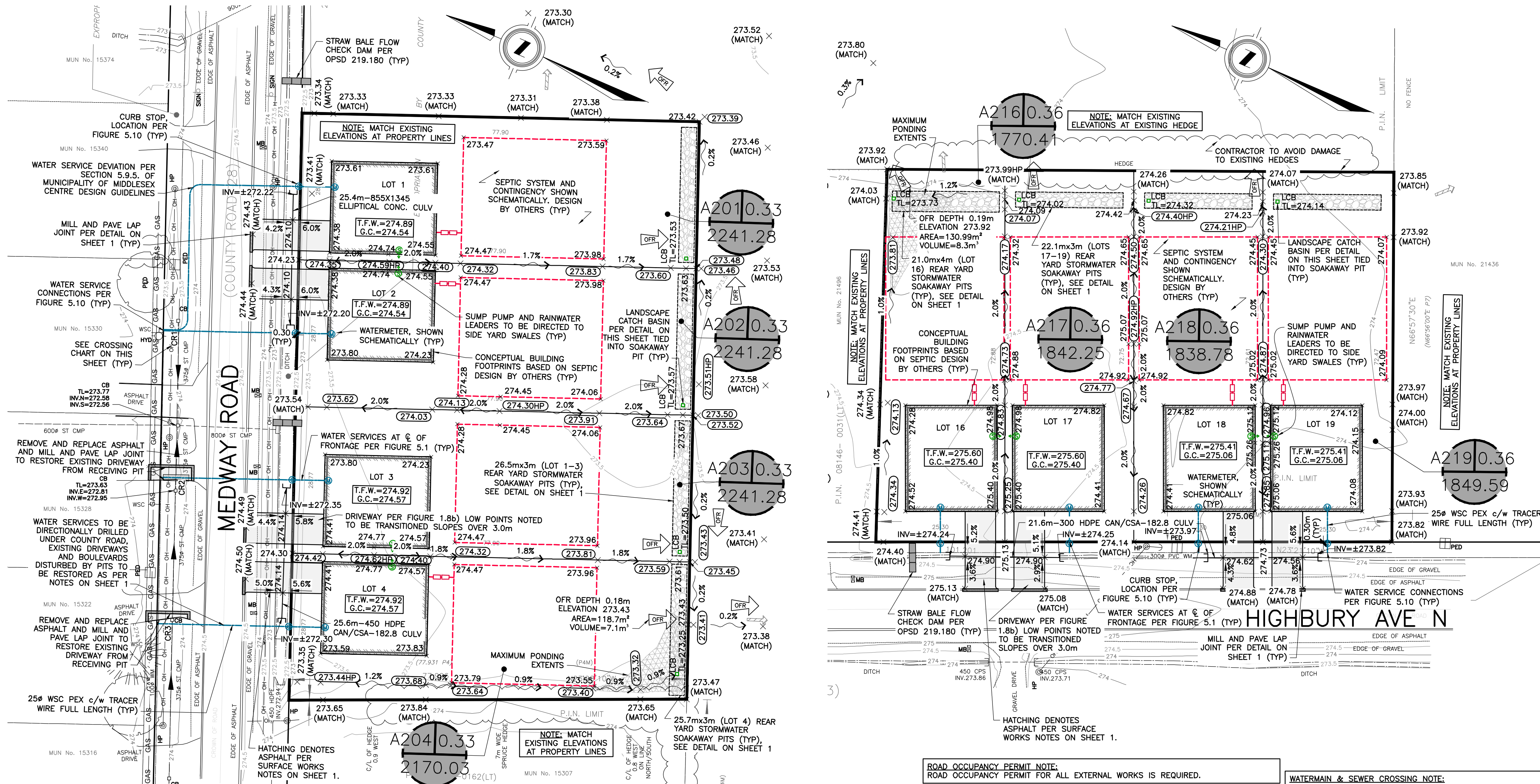


**LEGAL INFORMATION**

PART OF  
NORTH HALF OF LOT 8  
CONCESSION 6  
IN THE  
(GEOGRAPHIC TOWNSHIP OF LONDON)  
MUNICIPALITY OF MIDDLESEX CENTRE  
COUNTY OF MIDDLESEX

**SITE BENCHMARK:**

MONUMENT TYPE: BOLT (BM02-50)  
LOCATION: BRICK PRIVACY WALL ON THE SOUTHWEST CORNER OF SUNNINGDALE ROAD EAST AND SOUTH WENGE DRIVE. BOLT SET IN THE NORTH FACE OF THE WALL, 0.21m BELOW THE BRICK AND 0.71m WEST OF THE 45 DEGREE ANGLE OF THE WALL.  
GEODETIC ELEVATION: 259.153 (CGVD28, 1978)  
MONUMENT TYPE: BOLT (BM02-43)  
LOCATION: CONCRETE BOX CULVERT CROSSING SUNNINGDALE ROAD EAST, 320m WEST OF THE CENTRELINE OF HIGHBURY AVENUE NORTH. BOLT SET IN THE EAST FACE ON THE NORTH SIDE OF SUNNINGDALE ROAD EAST, 0.12m SOUTH OF THE NORTHEAST CORNER AND 0.12m DOWN FROM THE TOP.  
GEODETIC ELEVATION: 260.902 (CGVD28, 1978)  
(CONTRACTOR TO CONFIRM BENCHMARK ELEVATIONS)



**PIPE CROSSINGS & VERTICAL CLEARANCES**

CROSSING No.	SEWER/WATERMAIN ELEVATIONS				VERTICAL CLEARANCES	*VERTICAL OFFSET		
	STM	INV.	25mm WM	OBV.				
CR1	375mm	STM	272.58	25mm WM	OBV.	271.97	0.61	NO
CR2	25mm	WM	273.18	375mm STM	OBV.	272.95	0.23	YES*
CR3	375mm	STM	272.64	25mm WM	OBV.	272.14	0.50	YES

\*INSULATION REQUIRED PER FIGURE 5.2 ON SHEET 3

**UTILITIES NOTE:**  
FOR CLARITY, NOT ALL EXISTING UTILITIES MAY BE SHOWN. THE OWNER'S CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL UTILITY LOCATES PRIOR TO CONSTRUCTION.

OWNER'S CONTRACTOR SHALL SUPPORT ALL EXISTING UTILITIES AS REQUIRED DURING THE INSTALLATION OF SERVICES TO THE SATISFACTION OF THE UTILITY OWNER AT NO EXTRA COST TO THE CONTRACT.

ALL SUMP PIT CONFIGURATIONS SHALL MEET, AT MINIMUM, OBC SECTION 7. ALL PUMPS ARE TO INCLUDE A CHECK VALVE.

BOULEVARD AREAS AND CONCRETE SIDEWALKS DISTURBED DURING INSTALLATION OF SERVICES SHALL BE RESTORED TO MATCH EX. CONDITION OR SURFACE WORKS NOTES ON SHEET 1, WHICHEVER IS GREATER, ALL AT NO COST TO THE MUNICIPALITY.

**ROAD OCCUPANCY PERMIT NOTE:**  
ROAD OCCUPANCY PERMIT FOR ALL EXTERNAL WORKS IS REQUIRED.

**RESTORATION NOTE:**  
ALL WORK IN THE ROAD ALLOWANCE SHALL MEET THE MINIMUM SPECIFICATIONS OF THE MUNICIPALITY OF MIDDLESEX CENTRE PUBLIC WORKS & ENGINEERING DEPARTMENT.

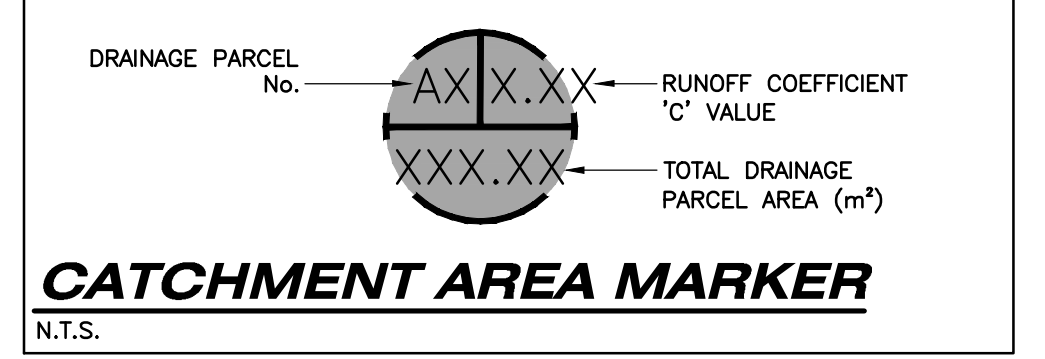
FOR GRADING ON ADJUTING LANDS, IF REQUIRED, DEVELOPER SHALL OBTAIN WRITTEN APPROVAL FROM ADJUTING LAND OWNER.

BOULEVARD AREAS AND CONCRETE SIDEWALKS DISTURBED DURING INSTALLATION OF SERVICES SHALL BE RESTORED TO MATCH EX. CONDITION OR SURFACE WORKS NOTES ON SHEET 1, WHICHEVER IS GREATER, ALL AT NO COST TO THE MUNICIPALITY.

ALL CLEARANCES TO ELECTRICAL CONDUCTORS AS SET OUT IN THE CURRENT OBC DIV. B-3.1.19.1 "ELECTRICAL CONDUCTOR CLEARANCES TO BUILDINGS" SHALL BE MAINTAINED.

**WATERMAIN & SEWER CROSSING NOTE:**  
1. UNDER PRACTICAL CONDITIONS, WATERMANS SHALL CROSS ABOVE SEWERS WITH SUFFICIENT VERTICAL SEPARATION TO ALLOW FOR PROPER BEDDING AND STRUCTURAL SUPPORT OF THE WATERMAIN AND SEWER. INSULATE AS PER FIGURE 5.2 (WHERE REQUIRED).  
2. WHEN IT IS NOT POSSIBLE FOR THE WATERMAIN TO CROSS ABOVE THE SEWER, THE WATERMAIN PASSING UNDER A SEWER SHALL BE PROTECTED BY:  
2.1. PROVIDING A VERTICAL SEPARATION OF AT LEAST 0.5 METRES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATERMAIN;  
2.2. PROVIDING ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING; AND  
2.3. ENSURING THAT THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

REFERENCE: JUNE 2012 MINISTRY OF THE ENVIRONMENT'S "WATERMAIN DESIGN CRITERIA FOR FUTURE ALTERATION AUTHORIZED UNDER A DRINKING WATER WORKS PERMIT"



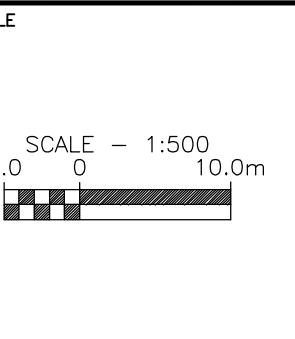
REFER TO NOTES, LEGEND, AND DETAILS ON SHEET 1 & 3

AS CONSTRUCTED SERVICES	COMPLETION	No.	REVISIONS	D/M/Y	BY	CONSULTANT
DESIGN	JSF/EL	1	ISSUED FOR CLIENT REVIEW	18/03/21	JSF	
DRAWN	JSF					
CHECKED	LS					
APPROVED	NGU					
DATE	09/03/2021					
CAD	21-0716					

**STRIK BALDINELLI MONIZ**  
PLANNING - CIVIL - STRUCTURAL - MECHANICAL - ELECTRICAL  
1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8  
Tel: (519) 471-6667 Fax: (519) 471-0034  
Email: sbm@sbmltd.ca

ENGINEER'S STAMP  
LICENSED PROFESSIONAL ENGINEER  
IN A QUANTITY SURVEYING  
10019337  
PROVINCE OF ONTARIO

CLIENT  
**BROCK DEVELOPMENT GROUP**  
1584 ROUTLEDGE PARK  
LONDON, ONTARIO  
N6H 5L6  
P: 519.281.6769  
E: INFO@BROCKDVG.COM



TITLE **DEVELOPMENT ENGINEERING PLAN - LOTS 1-4 & 16-19**  
**BALLYMOTE SUBDIVISION**  
21488 HIGHBURY AVE N  
BALLYMOTE, ON

PROJECT No. **SBM-21-0716**  
SHEET No. **2A**  
PLAN FILE No. —



**GRADING CERTIFICATE:**

I HEREBY CERTIFY THAT THE PROPOSED GRADING AND APPURTENANT DRAINAGE WORKS COMPLY WITH SOUND ENGINEERING DESIGN AND THAT THE PROPOSED GRADING IS COMPATIBLE WITH EXISTING DRAINAGE PATTERNS ON AND ACROSS THESE LANDS AND THE ADJOINING LANDS OR APPLICABLE CITY BY-LAWS.

**GRADING NOTES:**

- EXISTING GRADES AND DRAINAGE OF ABUTTING LANDS IS NOT TO BE DISTURBED.
- LOCALIZED SURFACE DRAINAGE FROM ABUTTING PROPERTIES TO BE DISCHARGED IN THE FUTURE MAY BE DISCHARGED ONTO THE PROPOSED LOTS IN THIS SUBDIVISION.
- BASEMENT OPENINGS TO BE MINIMUM 300mm ABOVE THE CENTRELINE OF ROAD UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF PUBLIC WORKS AND ENGINEERING.
- GROUND ELEVATIONS AT BUILDINGS ABUTTING OVERLAND FLOW ROUTES ARE TO BE 300mm ABOVE OVERLAND FLOW ROUTE ELEVATIONS.
- GROUND ELEVATIONS AT BUILDING OPENING ABUTTING OVERLAND FLOW ROUTES ARE TO BE 450mm ABOVE OVERLAND FLOW ROUTE ELEVATIONS.
- SUMP PUMP DISCHARGE MUST BE DIRECTED AWAY FROM DRIVEWAYS AND SIDEWALKS AND MUST NOT EXTEND BEYOND PROPERTY LIMITS. NO SANITARY SEWER CONNECTIONS PERMITTED.
- A MINIMUM OF 150mm (6") FROM THE TOP OF FOUNDATION TO THE FINISHED GRADE OUTSIDE THE BUILDING MUST BE PROVIDED, TYPICAL.
- RETAINING WALLS, 1000mm OR GREATER, & GUARD RAILS ON TOP (IF REQUIRED) ARE TO BE DESIGNED BY AND CONSTRUCTED TO THE SPECIFICATIONS OF A REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
- THE MIN. TOP OF FOUNDATION ELEVATION, UNDERSIDE OF FOOTING ELEVATION, BASEMENT WINDOW SILL ELEVATION, ETC. ARE TO BE CONFIRMED BY THE CONTRACTOR IN CONSULTATION WITH THE BUILDING DESIGNER, BASED ON THE FINISHED FLOOR ELEVATION PROVIDED. CONTACT STRIK, BALDINELLI, MONIZ LTD. (SBM) FOR CLARIFICATION, IF REQUIRED.

UNLESS OTHERWISE NOTED ON THE PLANS, GEOTEXTILE SHALL BE NON-WOVEN TO MEET CLASS 2-OPSS 1860.07.02 (I.E. TERRAFIX 270R, OR APPROVED EQUAL) WITH 300mm MIN. OVERLAPS.

ALL WATERMAIN CONSTRUCTION TO CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY OF MIDDLESEX CENTRE PUBLIC WORKS & ENGINEERING DEPARTMENT. WHERE WATERMAIN/SERVICE IS LESS THAN 2.1m BELOW ROAD GRADE OR 1.1m BELOW THE BOTTOM OF DITCH, WHICHEVER IS GREATER AND SHALL NOT BE LESS THAN 1.5m COVER (EVEN TEMPORARY CONDITIONS), THE WATERMAIN/SERVICE SHALL BE ADEQUATELY INSULATED OVER THE AFFECTED LENGTH AS PER THE MUNICIPALITY OF MIDDLESEX CENTRE FIGURE 5.2.

SILT FENCE TO BE CONSTRUCTED ON PROPERTY LINE. LINE WORK IS NOT SHOWN FOR CLARITY.

OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR REGULAR MONITORING & CLEANUP OF TRACKED MUD/DEBRIS ON ADJACENT LANDS & PUBLIC ROADS TO THE SATISFACTION OF THE ENGINEER/MUNICIPALITY OF MIDDLESEX CENTRE.

OWNER'S CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO AVOID MIXING TOPSOIL WITH SUBSOIL, WHERE REQUIRED FOR REUSE ON-SITE.

TOPSOIL STOCKPILE SIZES/LOCATIONS TO BE DETERMINED IN THE FIELD. SILT FENCE SHALL BE CONSTRUCTED AT TOE OF DOWNGRADE EDGES OF TOPSOIL STOCKPILE.

ALL NATIVE FILL PLACED SHALL MEET THE REQUIREMENTS FOR ENGINEERED FILL, COMPACTED TO 100% SPMD OR AS OUTLINED IN THE GEOTECHNICAL REPORT.

FILTER FABRIC AND STRAW BALE BARRIERS SHALL BE INSTALLED AND MAINTAINED IN EXISTING DITCHES FOR DURATION OF PROJECT UNTIL SURFACES ARE PAVED AND BOULEVARDS ARE SODDED.

**SITE PREPARATION NOTE:**  
THIS PLAN HAS BEEN PREPARED TO IDENTIFY REMOVALS, EROSION & SEDIMENT CONTROL MEASURES AND TEMPORARY CONSTRUCTION WORKS FOR THE BENEFIT OF THE OWNER'S CONTRACTOR IN ADVANCE OF SERVICING WORKS. IT IS NOT INTENDED TO IDENTIFY PERMANENT GRADING PATTERNS.

**DISPOSAL NOTE:**  
ALL ITEMS NOTED AS "TO BE REMOVED" SHALL BE DISCARDED OFF-SITE AT AN APPROVED FACILITY.

OWNER'S CONTRACTOR TO CLEAR AND GRUB SITE PRIOR TO CONSTRUCTION AND DISPOSE OF ALL DEBRIS AND EXCESS FILL/TOPSOIL OFF-SITE AT AN APPROVED FACILITY.

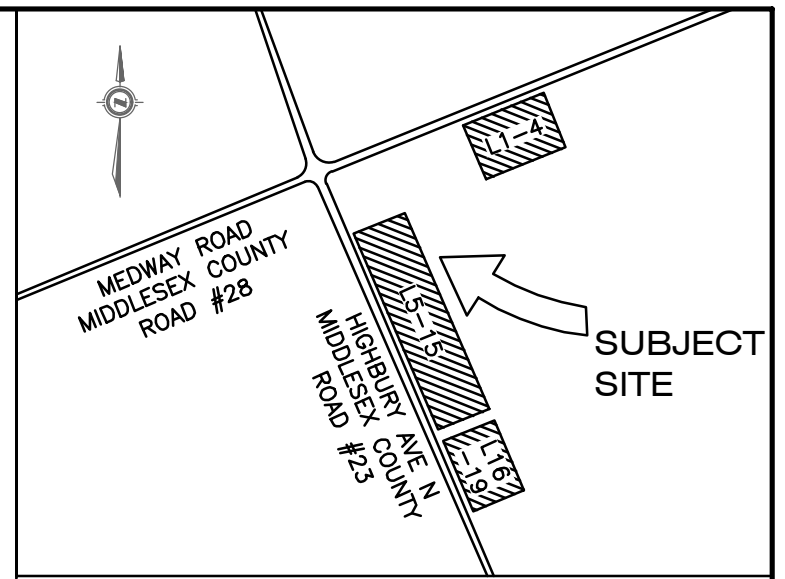
SUMP PUMP AND DRAIN LOCATIONS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. REFER TO ARCHITECTS PLANS FOR SUMP PUMP DESIGN.

SERVICE STUBS TO BE CAPPED AT 1.0m O/S FROM BUILDING ENVELOPE FOR CONNECTION ONCE BUILDING SERVICES ARE INSTALLED.

THE OWNER'S CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES IN COMPLIANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7 FOR ALL WORKS WITHIN THE MUNICIPALITY RIGHT-OF-WAY. THE OWNER'S CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE MUNICIPALITY/ENGINEER FOR REVIEW PRIOR TO PROCEEDING WITH CONSTRUCTION.

**CULVERT NOTE:**  
CULVERTS TO BE PLACED MATCHING EXISTING DITCH GRATE

**INSULATION NOTE:**  
INSULATE SEWERS AS PER THE A-7.3.5.4.(1) FROM THE CURRENT ONTARIO BUILDING CODE COMPENDIUM WHERE 1.22m COVER CANNOT BE PROVIDED.



**LEGAL INFORMATION**

PART OF  
NORTH HALF OF LOT 8  
CONCESSION 6  
IN THE  
(GEOGRAPHIC TOWNSHIP OF LONDON)  
MUNICIPALITY OF MIDDLESEX CENTRE  
COUNTY OF MIDDLESEX

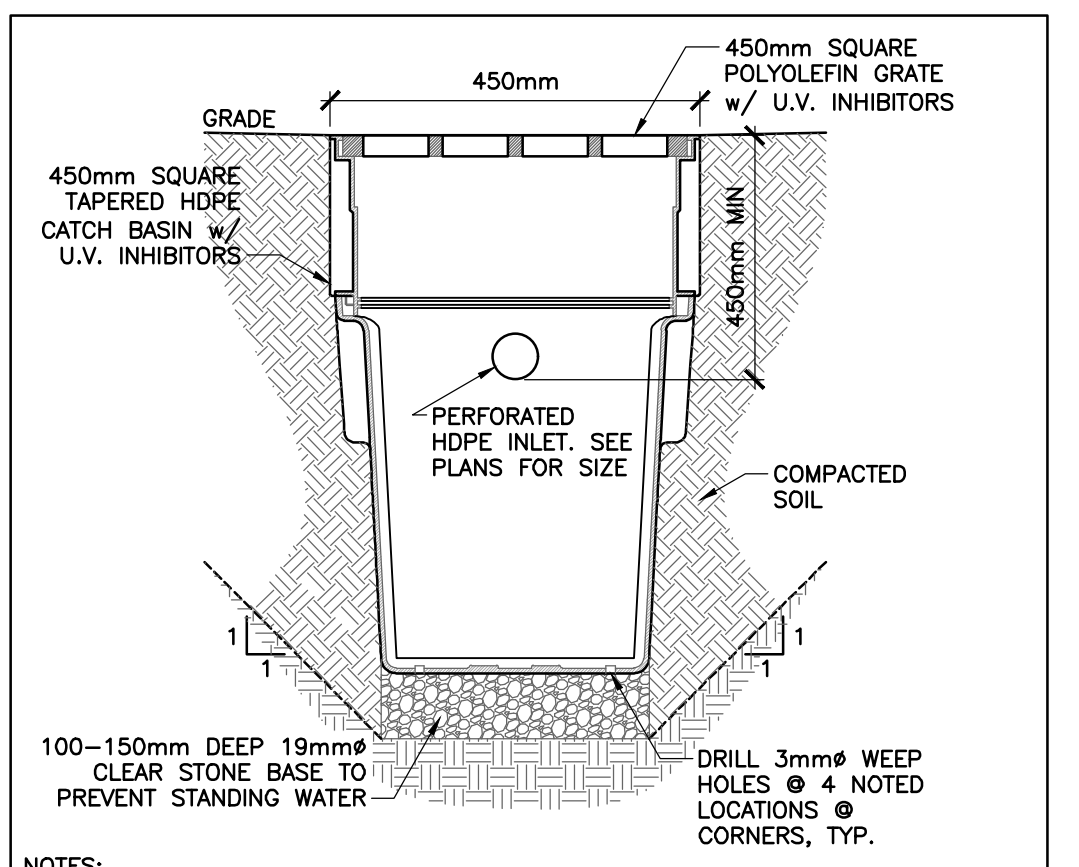
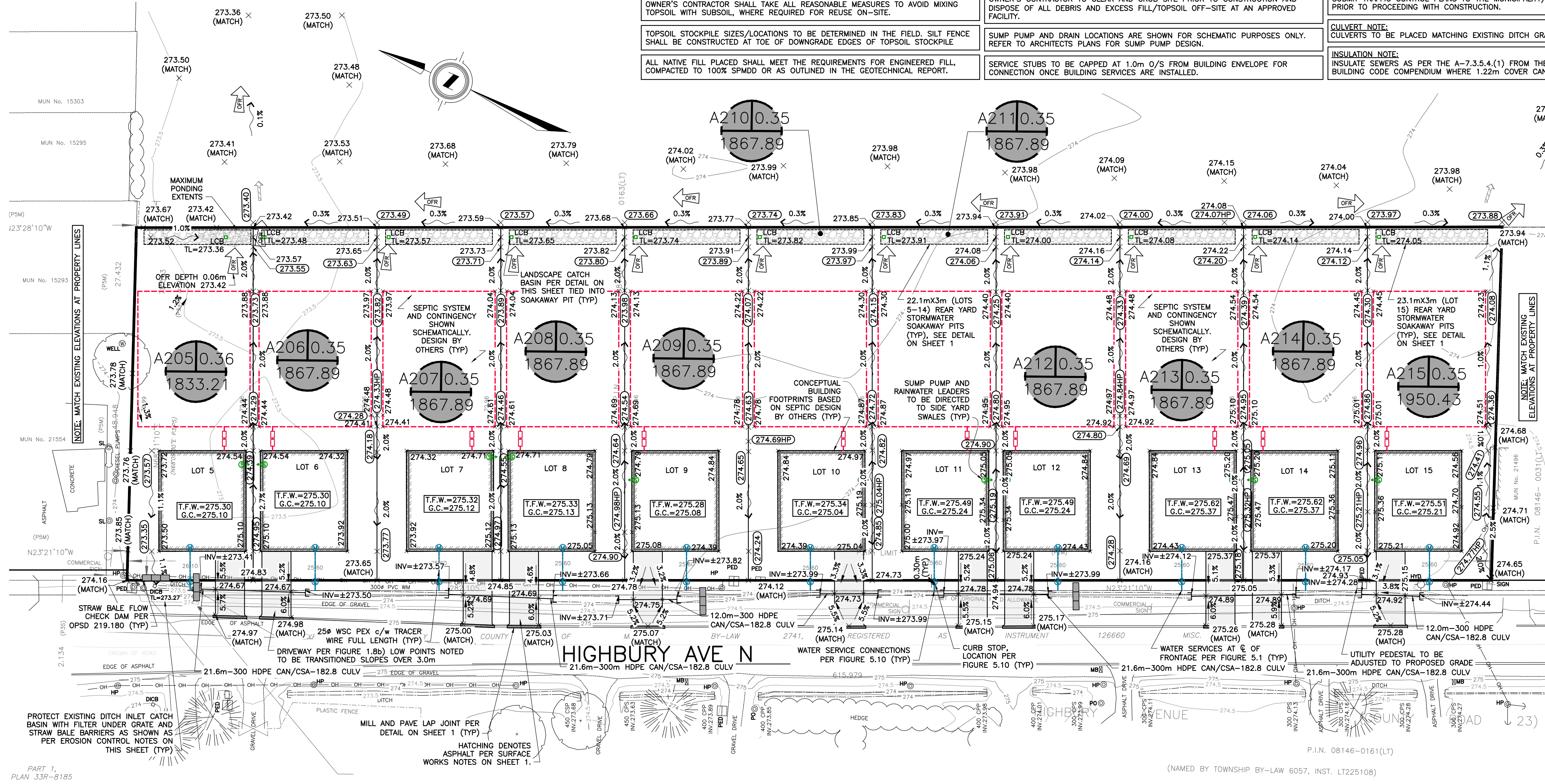
**SITE BENCHMARK:**

MONUMENT TYPE: BOLT (BM02-50)  
LOCATION: BRICK PRIVACY WALL ON THE SOUTHWEST CORNER OF SUNNINGDALE ROAD EAST AND SOUTH WESTVIEW DRIVE. BOLT SET IN THE NORTH FACE OF THE WALL, 0.21m BELOW THE BRICK AND 0.71m WEST OF THE 45 DEGREE ANGLE OF THE WALL.  
GEODETIC ELEVATION: 259.153 (CGVD28, 1978)

MONUMENT TYPE: BOLT (BM02-43)

LOCATION: CONCRETE BOX CULVERT CROSSING SUNNINGDALE ROAD EAST, 320m SET OF THE CENTRELINE OF HIGHBURY AVENUE NORTH. BOLT SET IN THE EAST FACE ON THE NORTH SIDE OF SUNNINGDALE ROAD EAST, 0.12m SOUTH OF THE NORTHEAST CORNER AND 0.12m DOWN FROM THE TOP.  
GEODETIC ELEVATION: 260.902 (CGVD28, 1978)

(CONTRACTOR TO CONFIRM BENCHMARK ELEVATIONS)



**NOTES:**  
1. GRATE TO BE ATTACHED TO HDPE CATCHBASIN w/ SCREWS PROVIDED BY MANUFACTURER.  
2. HDPE CATCHBASIN RISERS MAY BE NECESSARY TO REACH REQ'D DEPTH.  
**LANDSCAPE CATCHBASIN DETAIL**  
N.T.S.

**ROAD OCCUPANCY PERMIT NOTE:**  
ROAD OCCUPANCY PERMIT FOR ALL EXTERNAL WORKS IS REQUIRED.

**RESTORATION NOTE:**  
ALL WORK IN THE ROAD ALLOWANCE SHALL MEET THE MINIMUM SPECIFICATIONS OF THE MUNICIPALITY OF MIDDLESEX CENTRE PUBLIC WORKS & ENGINEERING DEPARTMENT.

FOR GRADING ON ADJACENT LANDS, IF REQUIRED, DEVELOPER SHALL OBTAIN WRITTEN APPROVAL FROM ADJACENT LAND OWNER.

BOULEVARD AREAS AND CONCRETE SIDEWALKS DISTURBED DURING INSTALLATION OF SERVICES SHALL BE RESTORED TO MATCH EX. CONDITION OR SURFACE WORKS NOTES ON SHEET 1, WHICHEVER IS GREATER, ALL AT NO COST TO THE MUNICIPALITY.

ALL CLEARANCES TO ELECTRICAL CONDUCTORS AS SET OUT IN THE CURRENT OBC DIV. B-3.1.19.1 "ELECTRICAL CONDUCTOR CLEARANCES TO BUILDINGS" SHALL BE MAINTAINED.

**WATERMAIN & SEWER CROSSING NOTE:**

- UNDER PRACTICAL CONDITIONS, WATERMANS SHALL CROSS ABOVE SEWERS WITH SUFFICIENT VERTICAL SEPARATION TO ALLOW FOR PROPER BEDDING AND STRUCTURAL SUPPORT OF THE WATERMAIN AND SEWER. INSULATE AS PER FIGURE 5.2 (WHERE REQUIRED).
- WHEN IT IS NOT POSSIBLE FOR THE WATERMAIN TO CROSS ABOVE THE SEWER, THE WATERMAIN PASSING UNDER A SEWER SHALL BE PROTECTED BY:
  - PROVIDING A VERTICAL SEPARATION OF AT LEAST 0.5 METRES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATERMAIN;
  - PROVIDING ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING; AND
  - ENSURING THAT THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

REFERENCE: JUNE 2012 MINISTRY OF THE ENVIRONMENT'S "WATERMAIN DESIGN CRITERIA FOR FUTURE ALTERATION AUTHORIZED UNDER A DRINKING WATER WORKS PERMIT"

**STORM SERVICING NOTE:**

NO BUILDING DRAIN (SUMP/WEeping TIE/RAIN WATER LEADER) CONNECTIONS WILL BE PERMITTED INTO THE SANITARY SEWERS.

**UTILITIES NOTE:**  
FOR CLARITY, NOT ALL EXISTING UTILITIES MAY BE SHOWN. THE OWNER'S CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL UTILITY LOCATES PRIOR TO CONSTRUCTION.

OWNER'S CONTRACTOR SHALL SUPPORT ALL EXISTING UTILITIES AS REQUIRED DURING THE INSTALLATION OF SERVICES TO THE SATISFACTION OF THE UTILITY OWNER AT NO EXTRA COST TO THE CONTRACT.

ALL SUMP PIT CONFIGURATIONS SHALL MEET, AT MINIMUM, OBC SECTION 7. ALL PUMPS ARE TO INCLUDE A CHECK VALVE.

ALL PROP WATER METERS ARE c/w DOUBLE CHECK VALVE ASSEMBLIES (DCVA) FOR PREMISE ISOLATION

SEDIMENT AND EROSION CONTROL MEASURES MAY ONLY BE REMOVED UPON STABILIZATION OF CONTRIBUTING CATCHMENT AREA AND SUBJECT TO APPROVAL OF ENGINEER/MUNICIPALITY OF MIDDLESEX CENTRE.

**STORM DRAINAGE NOTE:**  
STORM DRAINAGE MAY TEMPORARILY NEED TO BE CONTROLLED AND PUMPED FROM STORM SEWER SYSTEM. ANY SUCH TEMPORARY MEASURES SHALL BE CONDUCTED AT NO EXTRA COST TO THE CONTRACT AND BE BASED UPON THE OWNER'S CONTRACTOR'S WATER CONTROL PLANS, WHICH MUST BE APPROVED BY THE CONTRACT ADMINISTRATOR/ENGINEER PRIOR TO CONSTRUCTION.

OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY CONSTRUCTION MEASURES SUCH AS, BUT NOT LIMITED TO, PIPE COVER AT NO ADDITIONAL CHARGE TO THE CONTRACT.

AS CONSTRUCTED SERVICES	COMPLETION	No.	REVISIONS	D/M/Y	BY	CONSULTANT
DESIGN	JSF/EL	1	ISSUED FOR CLIENT REVIEW	18/03/21	JSF	
DRAWN	JSF					
CHECKED	LS					
APPROVED	NGU					
DATE	09/03/2021					
CAD	21-0716					

**STRIK BALDINELLI MONIZ**  
PLANNING - CIVIL - STRUCTURAL - MECHANICAL - ELECTRICAL  
1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8  
Tel: (519) 471-6667 Fax: (519) 471-0034  
Email: sbm@sbmltd.ca

ENGINEER'S STAMP  
LICENSED PROFESSIONAL ENGINEER  
N.A. QUINTRUBIANO  
100191337  
PROVINCE OF ONTARIO

CLIENT  
**BROCK DEVELOPMENT GROUP**  
1584 ROUTLEDGE PARK  
LONDON, ONTARIO  
N6H 5L6  
P: 519.281.6769  
E: INFO@BROCKDVG.COM

SCALE  
SCALE - 1:500  
5.0 10.0m

TITLE  
**DEVELOPMENT ENGINEERING PLAN - LOTS 5-15**

PROJECT No.  
**SBM-21-0716**

SHEET No.  
**2B**

PLAN FILE No.

**CATCHMENT AREA MARKER**

N.T.S.

REFER TO NOTES, LEGEND, AND DETAILS ON SHEET 1 & 3



