



**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 MUNICIPAL 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 ADJUTING 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 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.

**WINDOW WELL NOTE:**  
ALL WINDOW WELLS SHALL BE PROJECTED UP TO ELEVATION 275.15m OR 150mm ABOVE FINISHED GRADE MIN, WHICHEVER IS GREATER, TO PROTECT AGAINST POTENTIAL FLOODING

FILTER FABRIC AND STRAW BALE BARRIERS SHALL BE INSTALLED AND MAINTAINED IN EXISTING DITCH'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 CONSTRUCTION ONCE BUILDING SERVICES ARE INSTALLED.

OVERFLOW PIPE FROM THE ROOF LEADER TO SPLASH PAD AS PER DETAIL ON THIS SHEET.

SOAKAWAY PIT DESIGNED IN ACCORDANCE WITH SECTION 4.5.6 OF M.E.C.P. STORMWATER MANAGEMENT PLANNING AND DESIGN MANUAL (SWM/P)

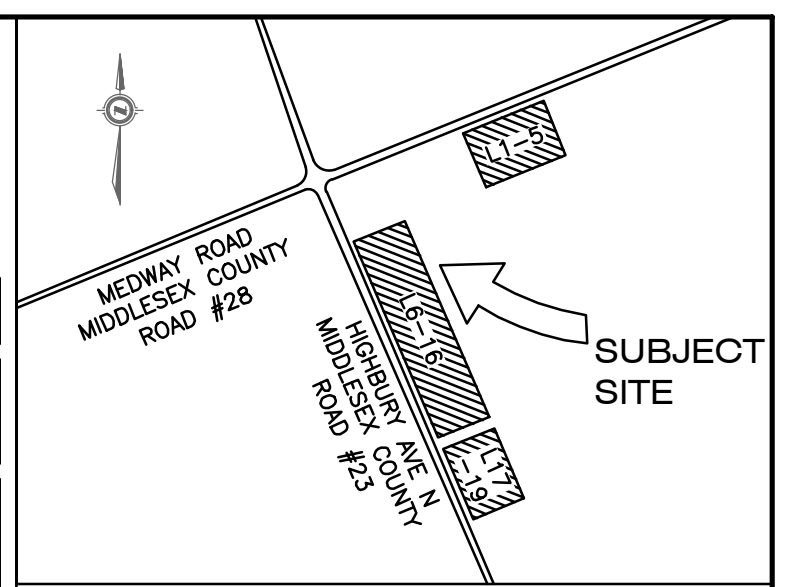
ALL PROP WATER METERS ARE c/w DOUBLE CHECK VALVE ASSEMBLIES (DCVA) FOR PREMISE ISOLATION

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**

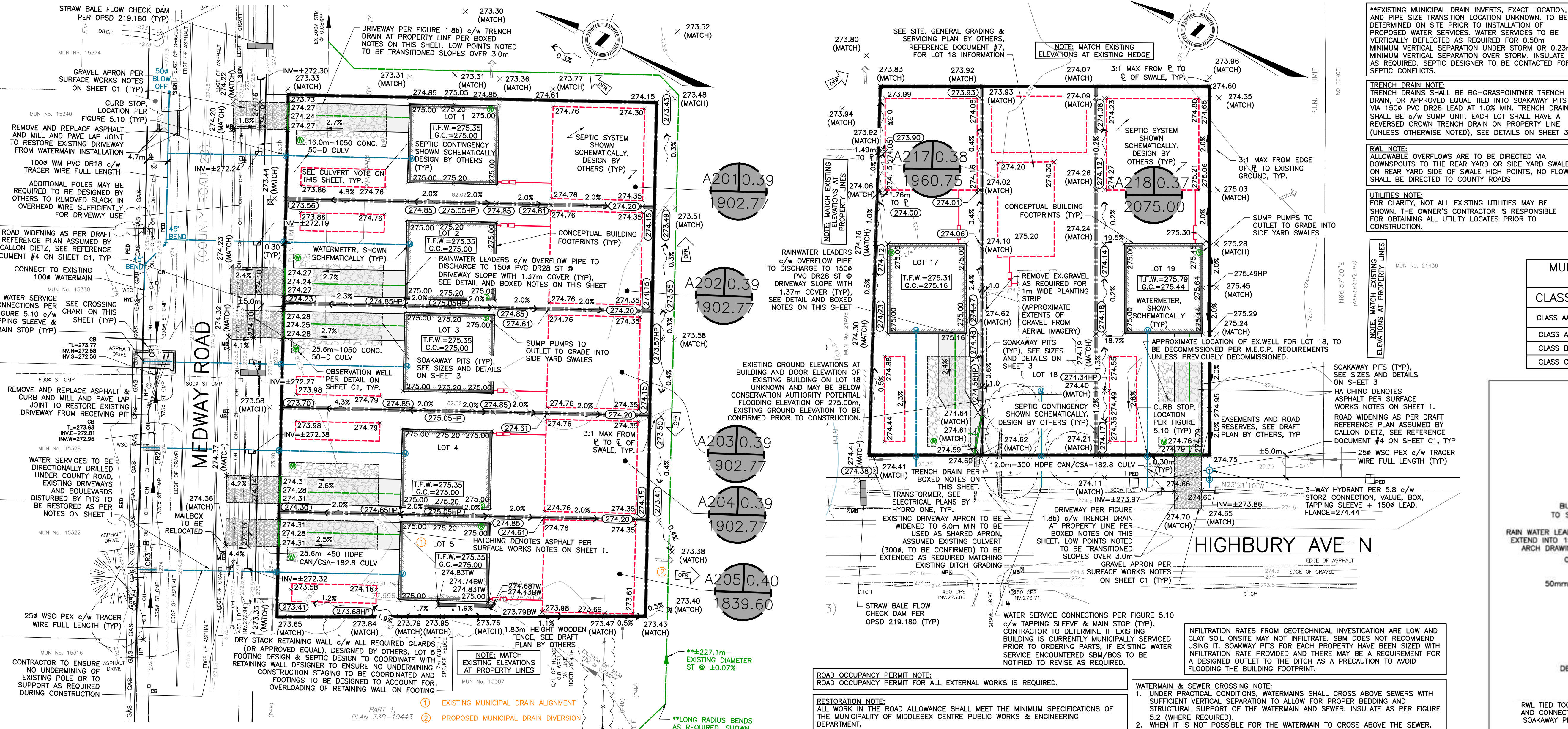
PART OF NORTH HALF OF LOT 8 CONVESSION 6 IN THE (GEOGRAPHIC TOWNSHIP OF LONDON) MUNICIPALITY OF MIDDLESEX CENTRE COUNTY OF MIDDLESEX

**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)
- MONUMENT TYPE: BOLT (BM02-42) 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)

MUNICIPALITY OF MIDDLESEX CENTRE HYDRANT COLOUR CODING

| CLASS    | RATED CAPACITY                     | COLOUR     |
|----------|------------------------------------|------------|
| CLASS AA | 1500 usgpm (5680 L/min) OR GREATER | LIGHT BLUE |
| CLASS A  | 1000-1499 usgpm (3785-5675 L/min)  | GREEN      |
| CLASS B  | 500-999 usgpm (1900-3780 L/min)    | ORANGE     |
| CLASS C  | 500 usgpm (1900 L/min) OR LESS     | RED        |



**PIPE CROSSINGS & VERTICAL CLEARANCES**

| CROSSING No. | SEWER/WATERMAIN ELEVATIONS                | VERTICAL CLEARANCES | *VERTICAL OFFSET |
|--------------|---|---------------------|------------------|
| CR1          | 25mm WM INV. 273.17 375mm STM OBV. 272.94 | 0.23                | YES*             |
| CR2          | 25mm WM INV. 273.22 375mm STM OBV. 272.99 | 0.23                | YES*             |
| CR3          | 25mm WM INV. 273.27 375mm STM OBV. 273.04 | 0.23                | YES*             |

\*INSULATION REQUIRED PER FIGURE 5.2 ON SHEET 3

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

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.

INFLTRATION RATES FROM GEOTECHNICAL INVESTIGATION ARE LOW AND CLAY SOIL ONSITE MAY NOT INFLTRATE. SBM DOES NOT RECOMMEND USING IT. SOAKAWAY PITS FOR EACH PROPERTY HAVE BEEN SIZED WITH INFLTRATION RATE PROVIDED AND THERE MAY BE A REQUIREMENT FOR A DESIGNED OUTLET TO THE DITCH AS A PRECAUTION TO AVOID FLOODING THE BUILDING FOOTPRINT.

**RWL OUTLET DETAIL**

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

|                         |            |     |   |          |     |  |
|-------------------------|------------|-----|---|----------|-----|--|
| AS CONSTRUCTED SERVICES | COMPLETION | No. | REVISIONS                                       | D/M/Y    | BY  | CONSULTANT   |
| DESIGN                  | JSF/EL     | 4   | ISSUED FOR APPROVAL                             | 15/09/21 | JSF | <p>STRIK BALDINELLI MONIZ<br/>PLANNING - CIVIL - STRUCTURAL - MECHANICAL - ELECTRICAL<br/>1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8<br/>Tel: (519) 471-6667 Fax: (519) 471-0034<br/>Email: sbm@sbmltd.ca</p> |
| DRAWING                 | JSF        | 5   | REVISED TO UTRCA/HYDRO ONE COORDINATION         | 16/02/22 | JSF |  |
| CHECKED                 | LS         | 6   | REVISED TO SEPTIC DESIGNER COORDINATION         | 07/03/22 | JSF |  |
| APPROVED                | Ngu        | 7   | CATCHMENT AREAS ADDED                           | 22/06/22 | JSF |  |
| DATE                    | 25/10/2023 | 8   | REVISED TO MUNICIPALITY COMMENTS                | 05/10/22 | JSF |  |
|                         |            | 9   | REVISED TO MUNICIPALITY COMMENTS                | 20/01/23 | JSF |  |
|                         |            | 10  | REVISED TO MUNICIPALITY COMMENTS                | 21/04/23 | JSF |  |
|                         |            | 11  | REVISED TO MUNICIPALITY COMMENTS                | 15/11/23 | JSF |  |
|                         |            | 12  | REVISED TO CLIENT COMMENTS/DRAFT PLAN REVISIONS | 31/01/24 | JSF |  |

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

SCALE: 1:500

TITLE: **DEVELOPMENT ENGINEERING PLAN - LOTS 1-5 & 17-19**

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 MUNICIPAL BY-LAWS.

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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.

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

**\*\*EXISTING MUNICIPAL DRAIN INVERTS, EXACT LOCATION, AND PIPE SIZE TRANSITION LOCATION UNKNOWN TO BE DETERMINED ON SITE PRIOR TO INSTALLATION OF PROPOSED WATER SERVICES. WATER SERVICES TO BE VERTICALLY DEFLECTED AS REQUIRED FOR 0.50m MINIMUM VERTICAL SEPARATION UNDER STORM OR 0.23m MINIMUM VERTICAL SEPARATION OVER STORM. INSULATE AS REQUIRED. SEPTIC DESIGNER TO BE CONTACTED FOR SEPTIC CONFLICTS.**

**WINDOW WELL NOTE:**  
ALL WINDOW WELLS SHALL BE PROJECTED UP TO ELEVATION 275.15m OR 150mm ABOVE FINISHED GRADE MIN, WHICHEVER IS GREATER, TO PROTECT AGAINST POTENTIAL FLOODING.

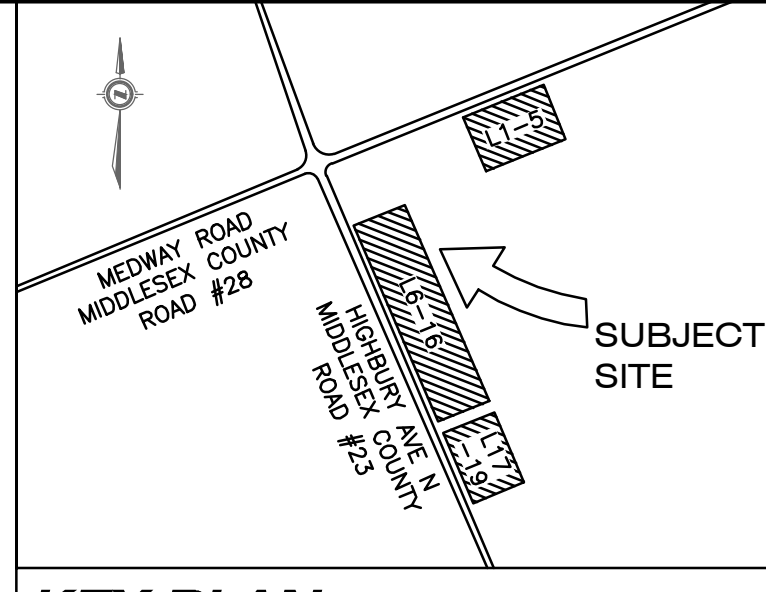
OVERFLOW PIPE FROM THE ROOF LEADER TO SPLASH PAD AS PER DETAIL ON THIS SHEET.

SOAKWAY PIT DESIGNED IN ACCORDANCE WITH SECTION 4.5.6 OF M.E.C.P. STORMWATER MANAGEMENT PLANNING AND DESIGN MANUAL (SWMP)

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.

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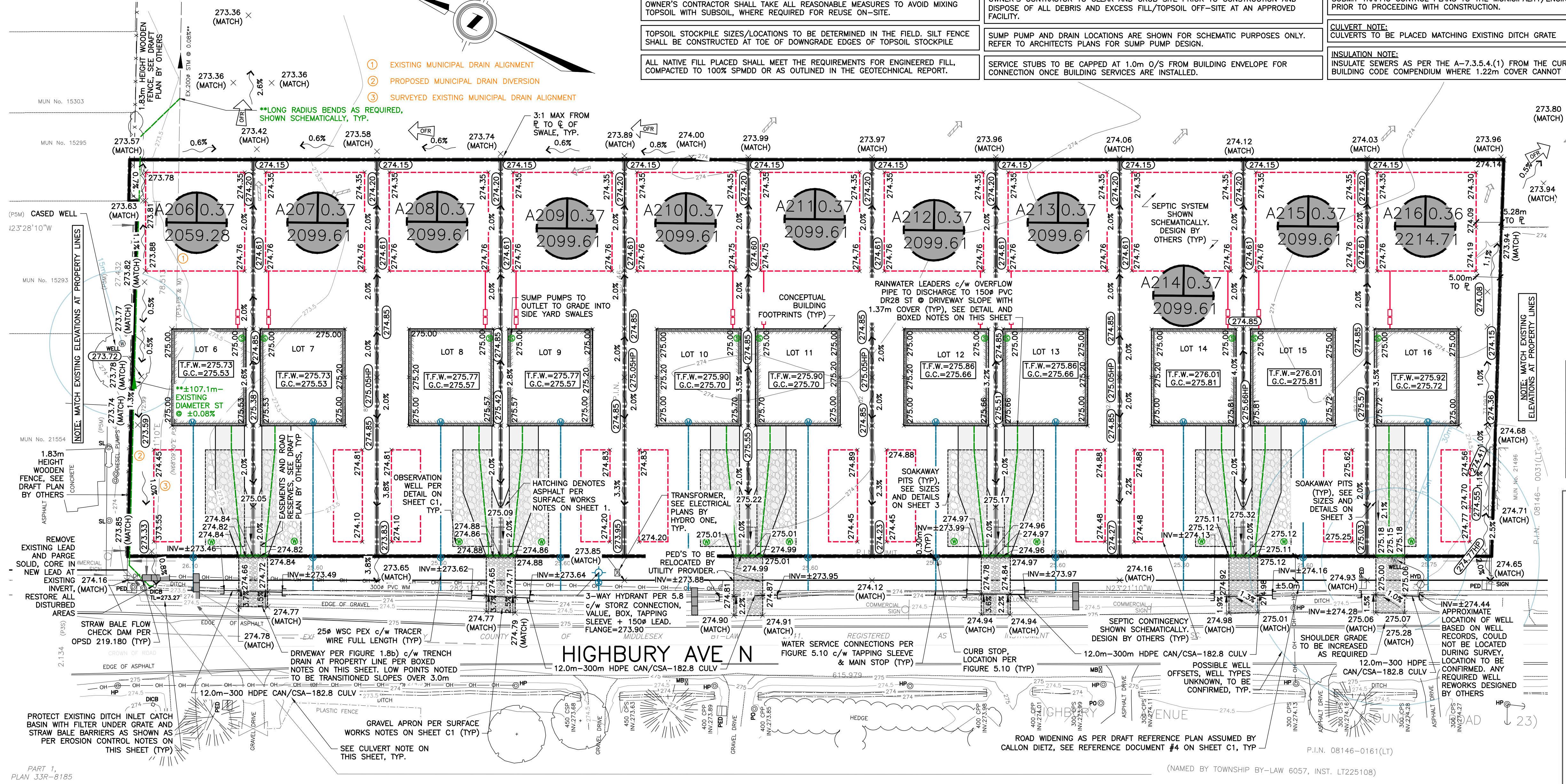
**LEGAL INFORMATION**

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

**SITE BENCHMARK:**

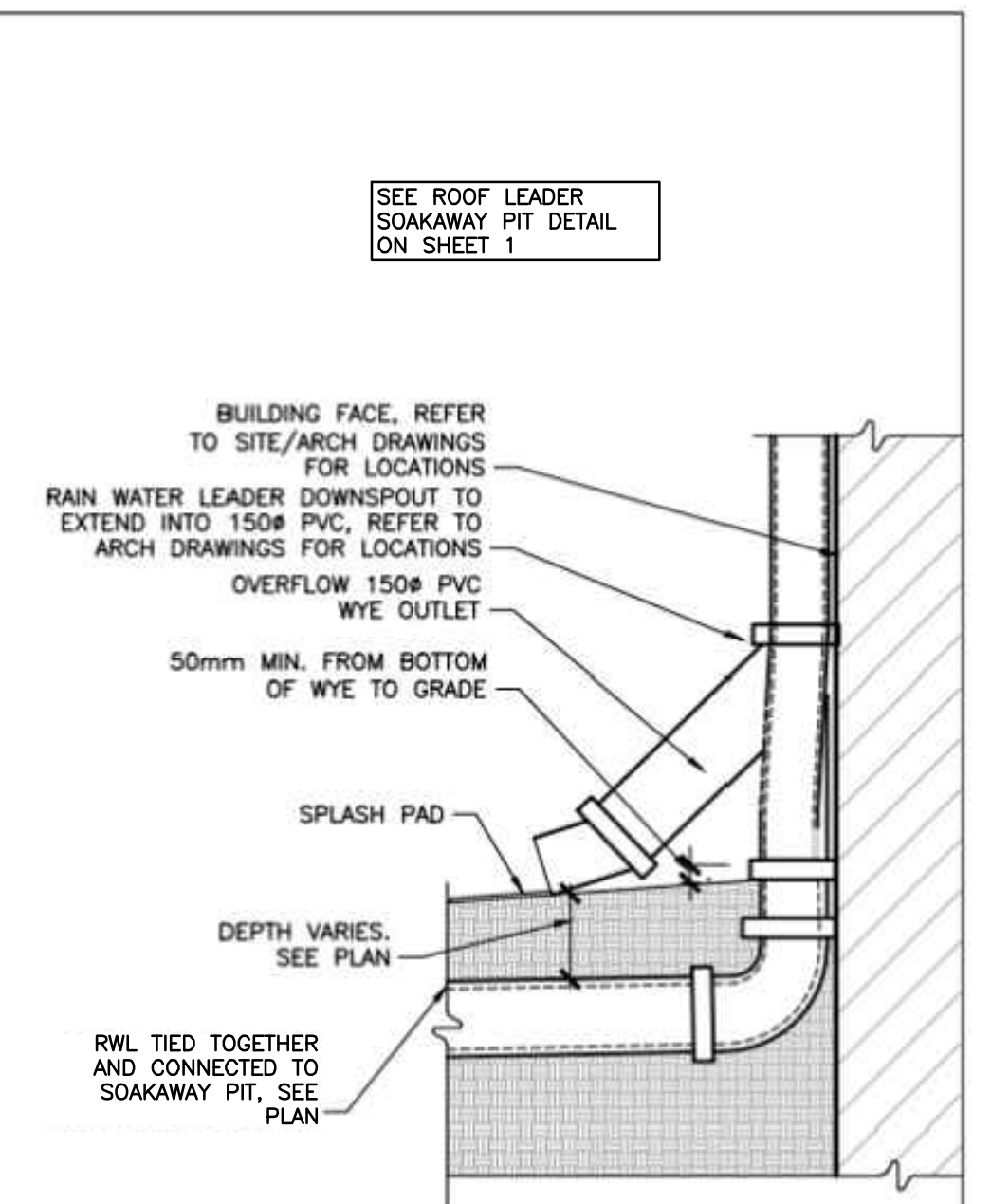
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GEODETIC ELEVATION: 260.902 (CGVD28, 1978)  
(CONTRACTOR TO CONFIRM BENCHMARK ELEVATIONS)



**MUNICIPALITY OF MIDDLESEX CENTRE HYDRANT COLOUR CODING**

| CLASS    | RATED CAPACITY                     | COLOUR     |
|----------|------------------------------------|------------|
| CLASS AA | 1500 usgpm (5680 L/min) OR GREATER | LIGHT BLUE |
| CLASS A  | 1000-1499 usgpm (3785-5675 L/min)  | GREEN      |
| CLASS B  | 500-999 usgpm (1900-3780 L/min)    | ORANGE     |
| CLASS C  | 500 usgpm (1900 L/min) OR LESS     | RED        |



**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.

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**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 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 TILE/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.

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 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.

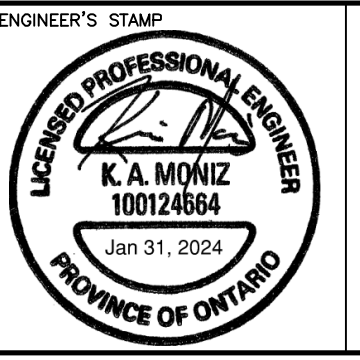
OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY CONSTRUCTION MEASURES SUCH AS, BUT NOT LIMITED TO, PIPE COVER AT NO ADDITIONAL CHARGE TO THE CONTRACT.

**TRENCH DRAIN NOTE:**  
TRENCH DRAINS SHALL BE BG-GRASPOINTNER TRENCH DRAIN, OR APPROVED EQUAL TIED INTO SOAKWAY PITS VIA 150# PVC DR28 LEAD AT 1.0% MIN. TRENCH DRAIN SHALL BE c/w SUMP UNIT. EACH LOT SHALL HAVE A REVERSED CROWN TRENCH DRAIN ON PROPERTY LINE (UNLESS OTHERWISE NOTED), SEE DETAILS ON SHEET 3.

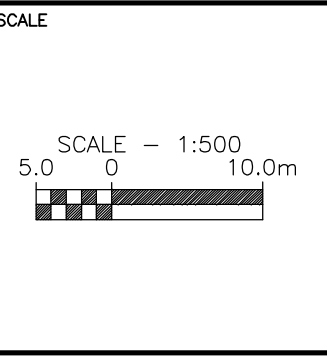
**RWL NOTE:**  
ALLOWABLE OVERFLOWS ARE TO BE DIRECTED VIA DOWNSPOUTS TO THE REAR YARD OR SIDE YARD SWALES ON REAR YARD SIDE OF SWALE HIGH POINTS, NO FLOWS SHALL BE DIRECTED TO CULVERT ROADS

| AS CONSTRUCTED SERVICES | COMPLETION | No. | REVISIONS                                       | D/M/Y    | BY  | CONSULTANT |
|-------------------------|------------|-----|---|----------|-----|------------|
| DESIGN                  | JSF/EL     | 4   | ISSUED FOR APPROVAL                             | 15/09/21 | JSF |            |
| DRAWN                   | JSF        | 5   | REVISED TO UTRCA/HYDRO ONE COORDINATION         | 16/02/22 | JSF |            |
| CHECKED                 | LS         | 6   | REVISED TO SEPTIC DESIGNER COORDINATION         | 07/03/22 | JSF |            |
| APPROVED                | NG         | 7   | CATCHMENT AREAS ADDED                           | 22/06/22 | JSF |            |
| DATE                    | 25/10/2023 | 8   | REVISED TO MUNICIPALITY COMMENTS                | 05/10/22 | JSF |            |
|                         |            | 9   | REVISED TO MUNICIPALITY COMMENTS                | 20/01/23 | JSF |            |
| CAD                     | 21-0716    | 10  | REVISED TO MUNICIPALITY COMMENTS                | 21/04/23 | JSF |            |
|                         |            | 11  | REVISED TO MUNICIPALITY COMMENTS                | 15/11/23 | JSF |            |
|                         |            | 12  | REVISED TO CLIENT COMMENTS/DRAFT PLAN REVISIONS | 31/01/24 | JSF |            |

**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



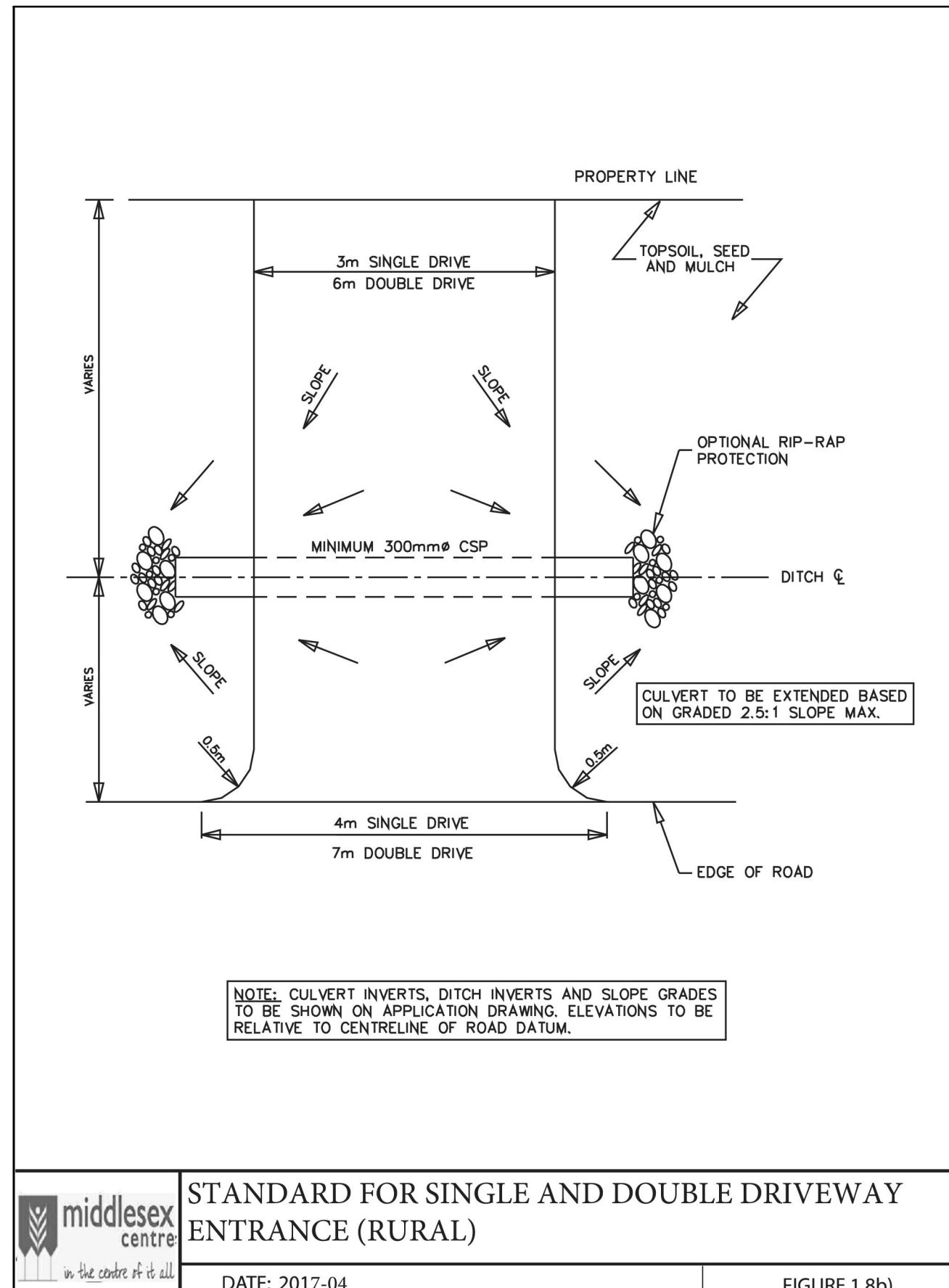
**BROCK DEVELOPMENT GROUP**  
1584 ROUTLEDGE PARK  
LONDON, ONTARIO  
N6H 5L6  
P: 519.281.6769  
E: INFO@BROCKD.G.M



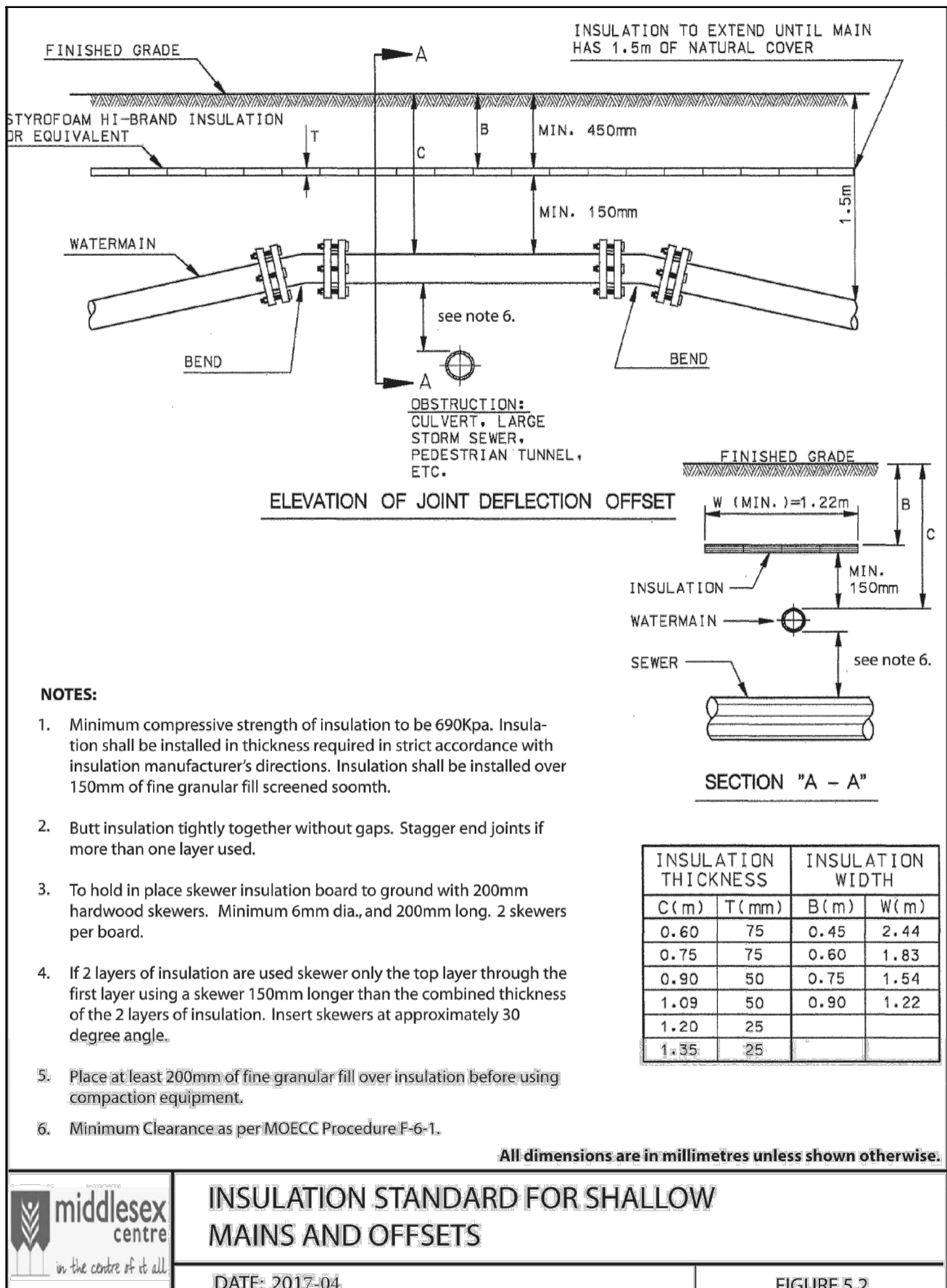
**DEVELOPMENT ENGINEERING PLAN - LOTS 6-16**

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

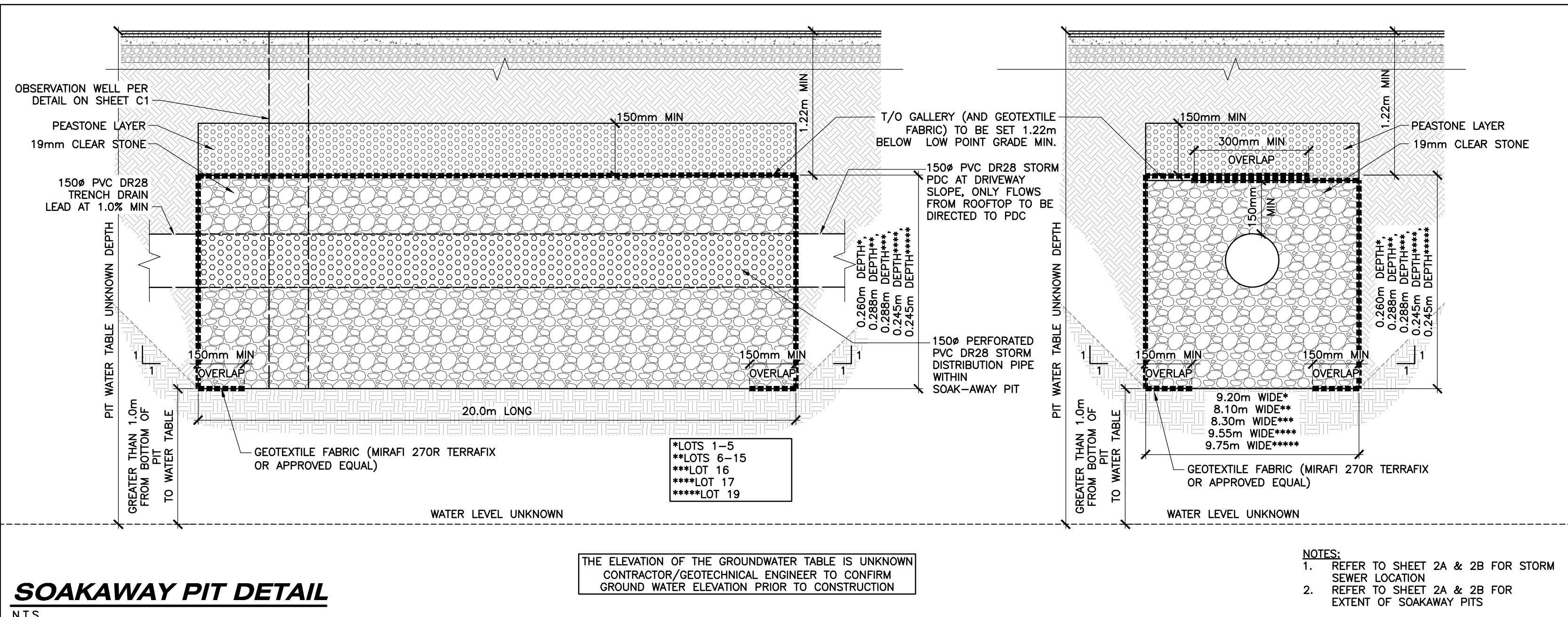
PROJECT No. **SBM-21-0716**  
SHEET No. **2B**  
PLAN FILE No. \_\_\_\_\_



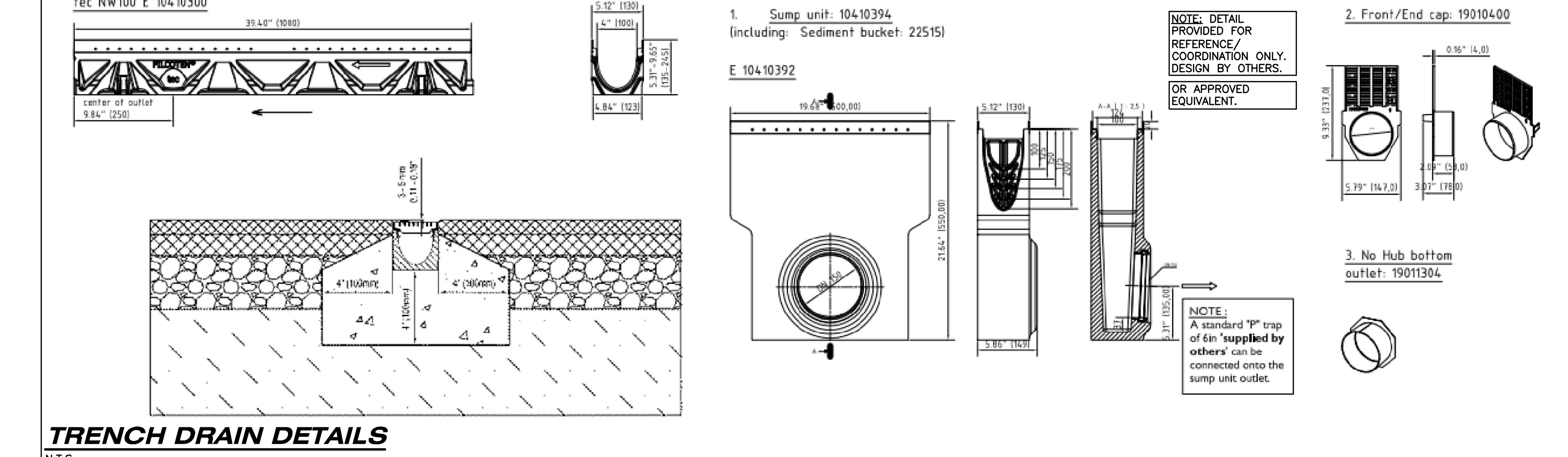
**STANDARD FOR SINGLE AND DOUBLE DRIVEWAY ENTRANCE (RURAL)**  
 DATE: 2017-04  
 FIGURE 1.8b)



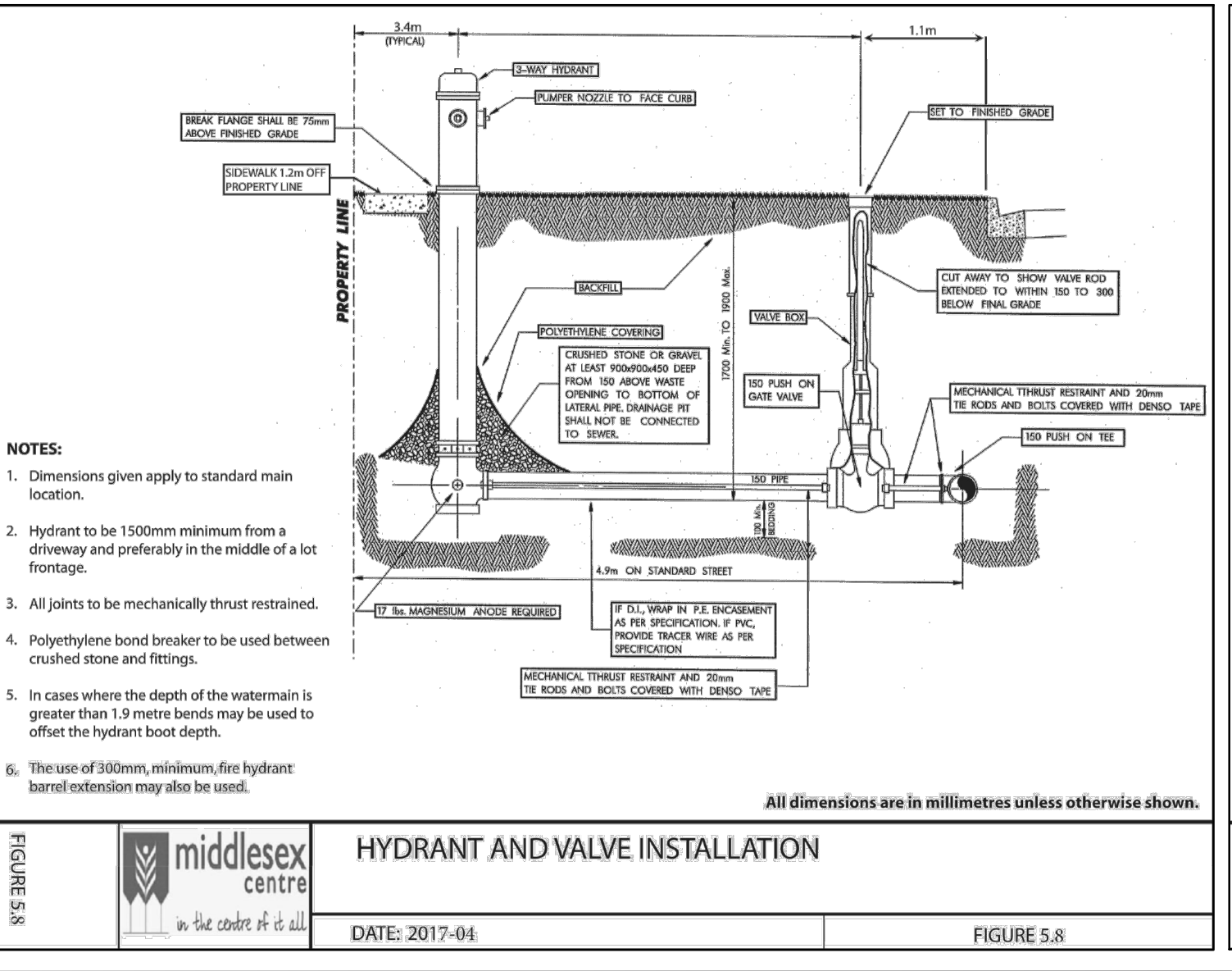
**INSULATION STANDARD FOR SHALLOW MAINS AND OFFSETS**  
 DATE: 2017-04  
 FIGURE 5.2



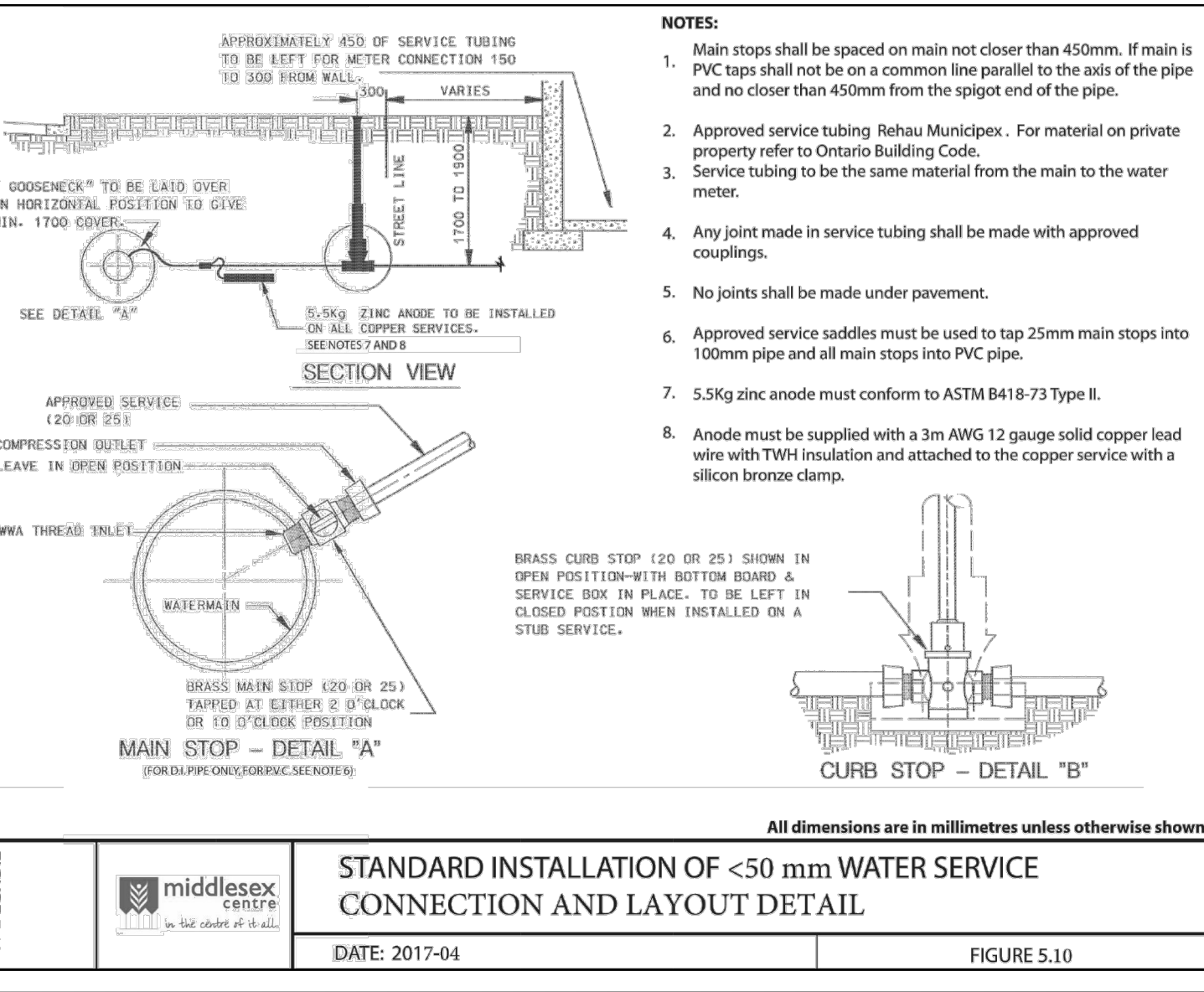
**SOAKAWAY PIT DETAIL**  
 N.T.S.



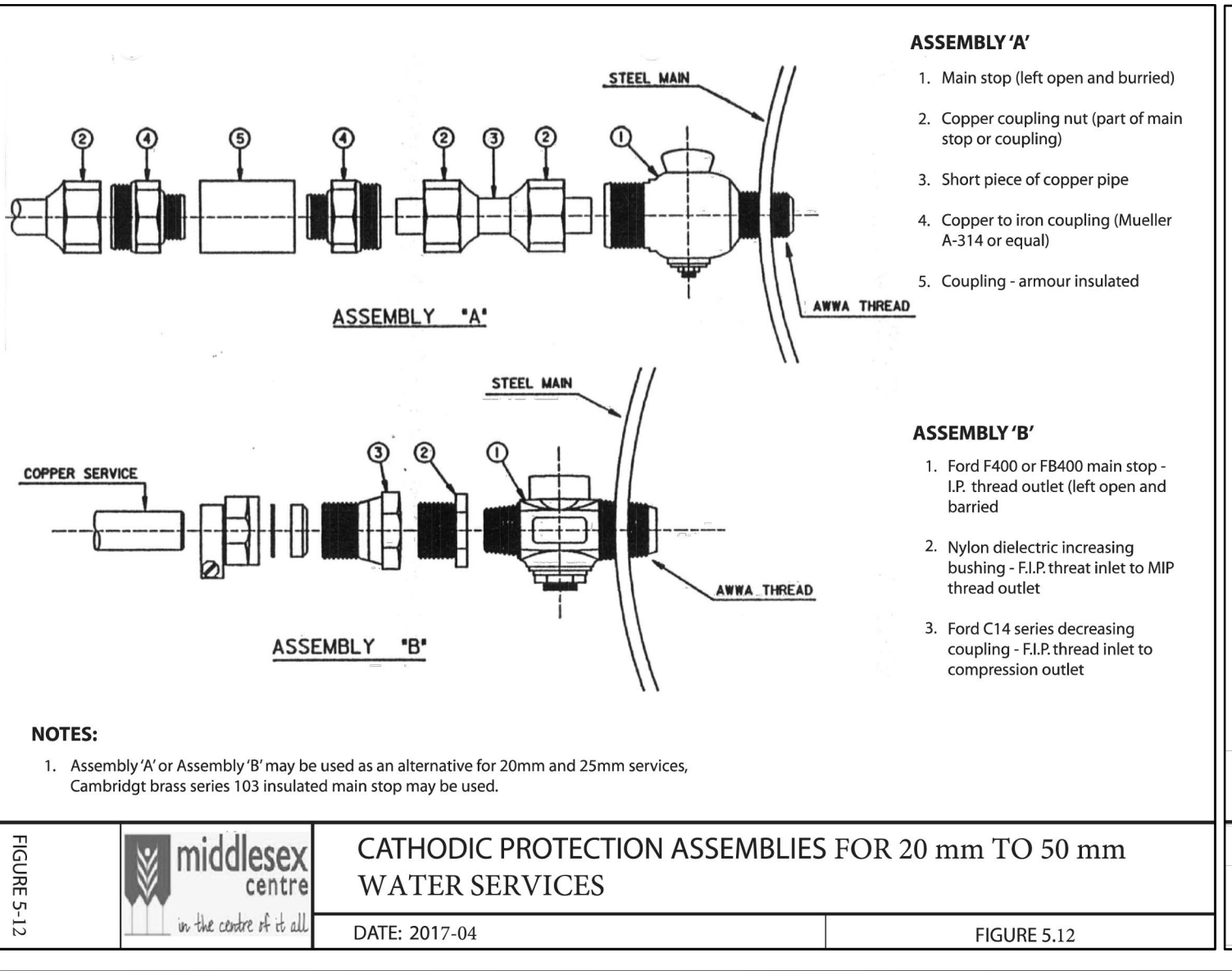
**TRENCH DRAIN DETAILS**  
 N.T.S.



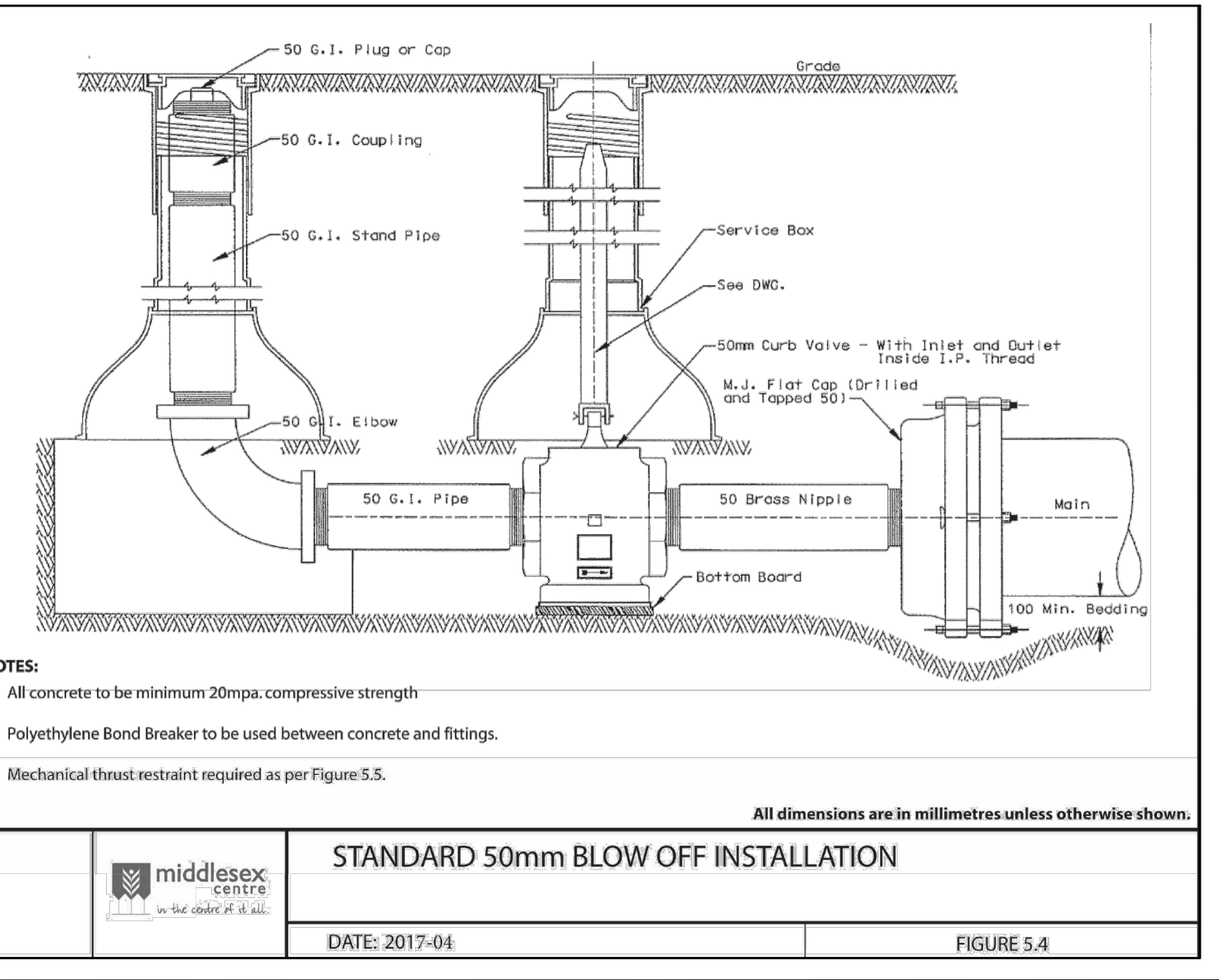
**HYDRANT AND VALVE INSTALLATION**  
 DATE: 2017-04  
 FIGURE 5.8



**STANDARD INSTALLATION OF <50 mm WATER SERVICE CONNECTION AND LAYOUT DETAIL**  
 DATE: 2017-04  
 FIGURE 5.10



**CATHODIC PROTECTION ASSEMBLIES FOR 20 mm TO 50 mm WATER SERVICES**  
 DATE: 2017-04  
 FIGURE 5.12



**STANDARD 50mm BLOW OFF INSTALLATION**  
 DATE: 2017-04  
 FIGURE 5.4

| AS CONSTRUCTED SERVICES | COMPLETION | No. | REVISIONS                                       | D/M/Y    | BY  | CONSULTANT   | ENGINEER'S STAMP | C.TECH'S STAMP   | CLIENT | SCALE  | TITLE         | PROJECT No. |
|-------------------------|------------|-----|---|----------|-----|--|------------------|--|--------|--|---------------|-------------|
|                         |            | 4   | ISSUED FOR APPROVAL                             | 15/09/21 | JSF | <b>STRIK BALDINELLI MONIZ</b><br>PLANNING - CIVIL - STRUCTURAL - MECHANICAL - ELECTRICAL<br>1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8<br>Tel: (519) 471-6667 Fax: (519) 471-0034<br>Email: sbm@sbmltd.ca |                  | <b>BROCK DEVELOPMENT GROUP</b><br>1584 ROUTLEDGE PARK<br>LONDON, ONTARIO<br>N6H 5L6<br>P: 519.281.6769<br>E: INFO@BROCKDVG.COM | N/A    | <b>STANDARD DETAILS</b><br><b>BALLYMOTE SUBDIVISION</b><br>21488 HIGHBURY AVE N<br>BALLYMOTE, ON | SBM-21-0716   |             |
|                         |            | 5   | REVISED TO UTRCA/HYDRO ONE COORDINATION         | 16/02/22 | JSF |  |                  |  |        |  | SHEET No.     |             |
|                         |            | 6   | REVISED TO SEPTIC DESIGNER COORDINATION         | 07/03/22 | JSF |  |                  |  |        |  | 3             |             |
|                         |            | 7   | CATCHMENT AREAS ADDED                           | 22/06/22 | JSF |  |                  |  |        |  | PLAN FILE No. |             |
|                         |            | 8   | REVISED TO MUNICIPALITY COMMENTS                | 05/10/22 | JSF |  |                  |  |        |  |               |             |
|                         |            | 9   | REVISED TO MUNICIPALITY COMMENTS                | 20/01/23 | JSF |  |                  |  |        |  |               |             |
|                         |            | 10  | REVISED TO MUNICIPALITY COMMENTS                | 21/04/23 | JSF |  |                  |  |        |  |               |             |
|                         |            | 11  | REVISED TO MUNICIPALITY COMMENTS                | 15/11/23 | JSF |  |                  |  |        |  |               |             |
|                         |            | 12  | REVISED TO CLIENT COMMENTS/DRAFT PLAN REVISIONS | 31/01/24 | JSF |  |                  |  |        |  |               |             |