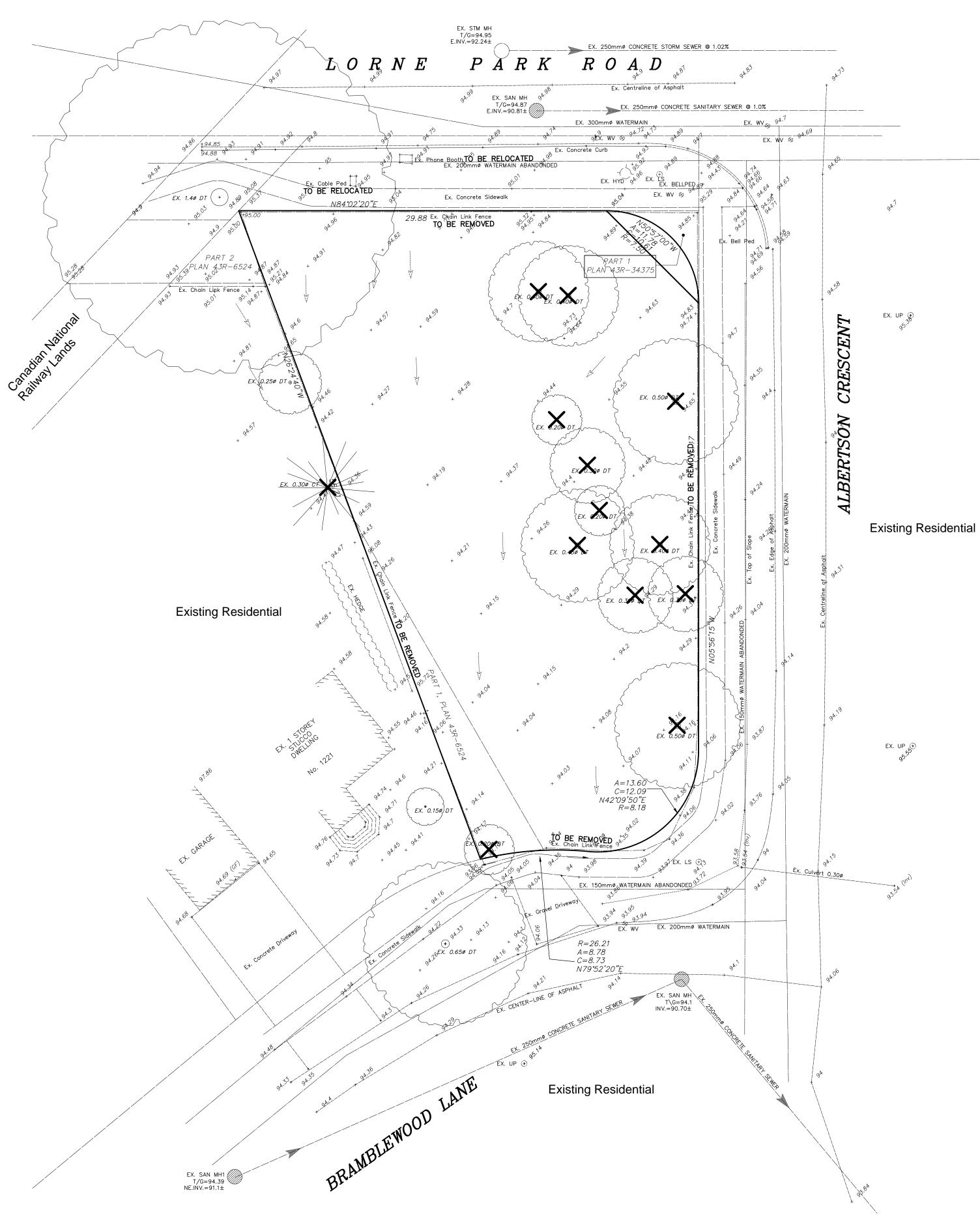
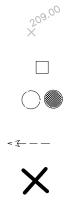
NOTES TO CONTRACTOR:

- **INSPECTION** 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 C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
- . <u>CONFIRMATION OF EXISTING INVERTS</u> 72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED.



LEGEND:



- EXISTING GROUND ELEVATION
- EXISTING CATCHBASIN
- EXISTING STORM/SANITARY MANHOLE
- EXISTING DIRECTION OF SHEET FLOW
- FEATURE TO BE REMOVED



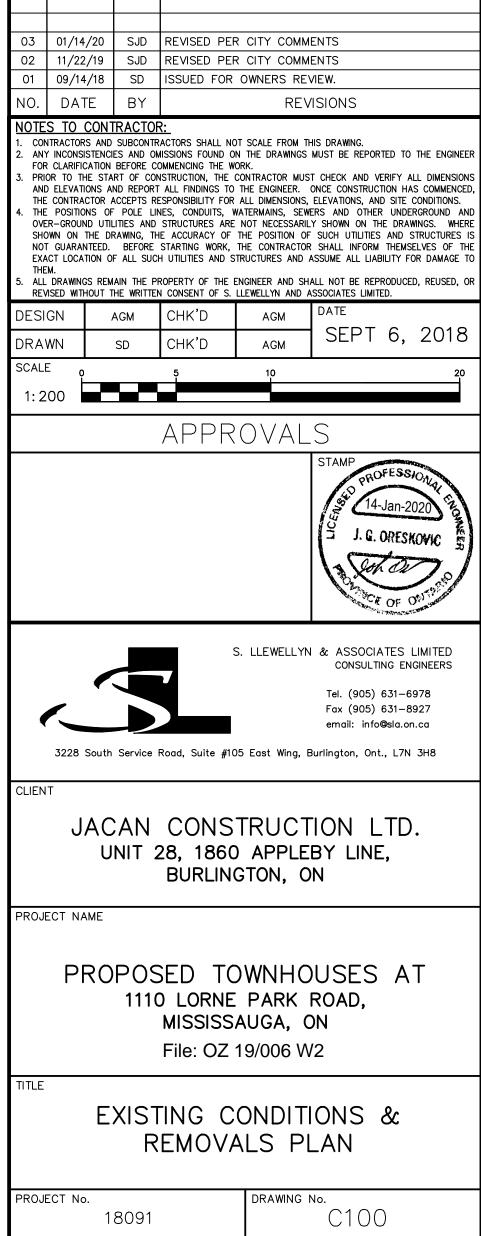




BENCH MARK NOTE:

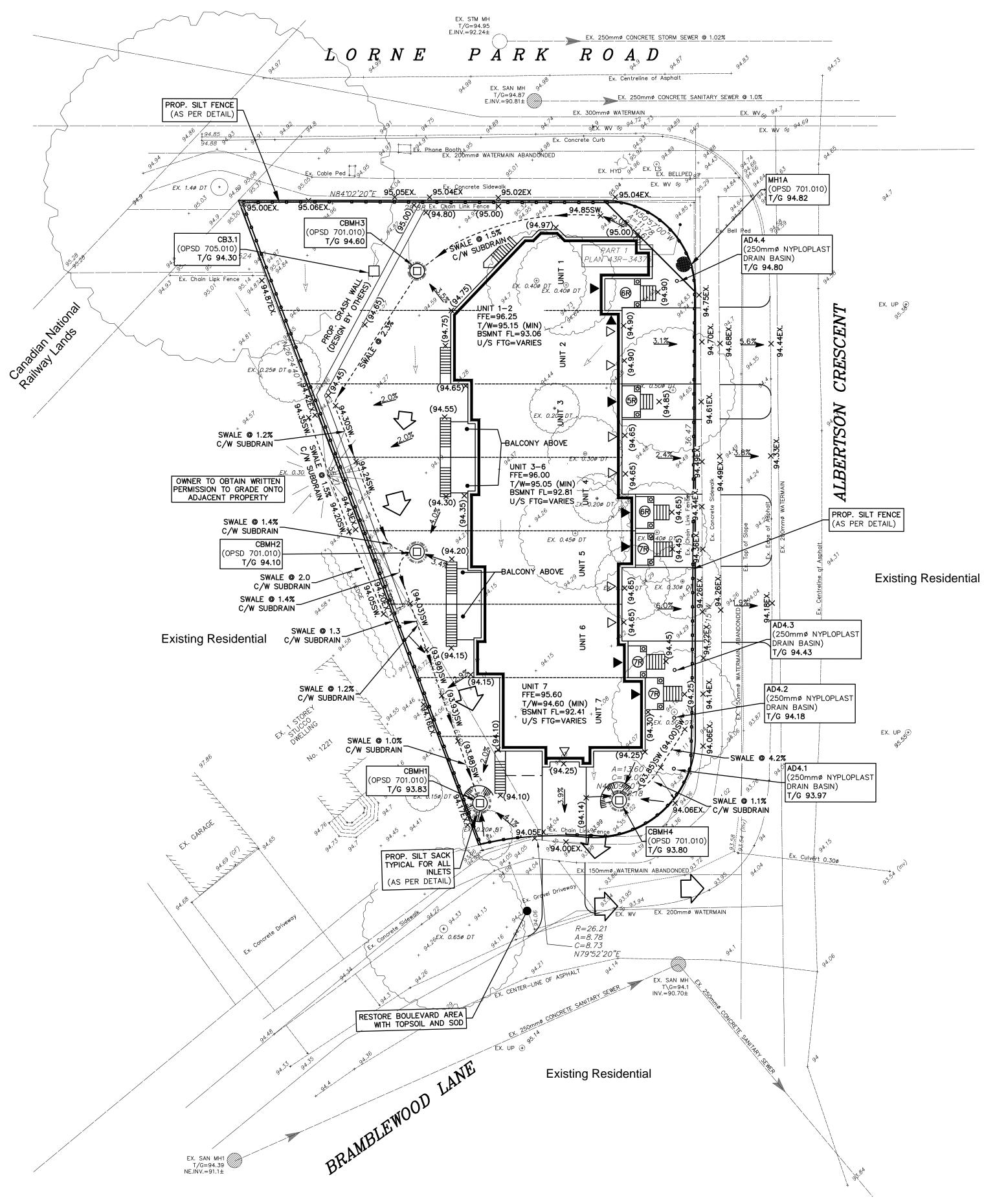
CITY OF MISSISSAUGA BENCHMARK No. 132 (CGVD 1928 : PRE 1978) LOCATED ON THE SOUTH FACE AT THE EAST CORNER OF A RED BRICK HOUSE, No. 1023, ON THE NORTH SIDE OF LORNE PARK ROAD, 68 METRES WEST OF LAKESHORE ROAD WEST.

ELEVATION 93.63m.



NOTES TO CONTRACTOR:

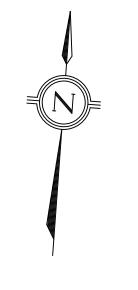
- INSPECTION
- CONTRACTOR IS RESPONSIBLE FOR CONTACTING ENGINEER 48 HRS PRIOR TO COMMENCING WORK TO ARRANGE FOR INSPECTION. ENGINEER TO DETERMINE DEGREE OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF UNDERGROUND SERVICE INSTALLATION AS MANDATED BY ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
- 2. <u>CONFIRMATION OF EXISTING INVERTS</u> 72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED.



LEGEND:

209.00 ×	
×	EXISTING GROUND ELEVATION
(100.00)	PROPOSED GROUND ELEVATION
100.00EX	PROPOSED ELEVATION TO MATCH EXISTING
(100.00)SW	PROPOSED SWALE ELEVATION
2.0%	PROPOSED DIRECTION OF SHEET FLOW
	EXISTING CATCHBASIN
$\bigcirc $	EXISTING STORM/SANITARY MANHOLE
	PROPOSED CATCHBASIN
$\bigcirc ullet$	PROPOSED STORM/SANITARY MANHOLE
	PROPOSED CATCHBASIN MANHOLE
$\langle $	EMERGENCY OVERLAND FLOW ROUTE
	EXISTING DIRECTION OF SHEET FLOW
oo	PROPOSED SILTATION CONTROL FENCE
	PROPOSED CATCHBASIN SILT SACK

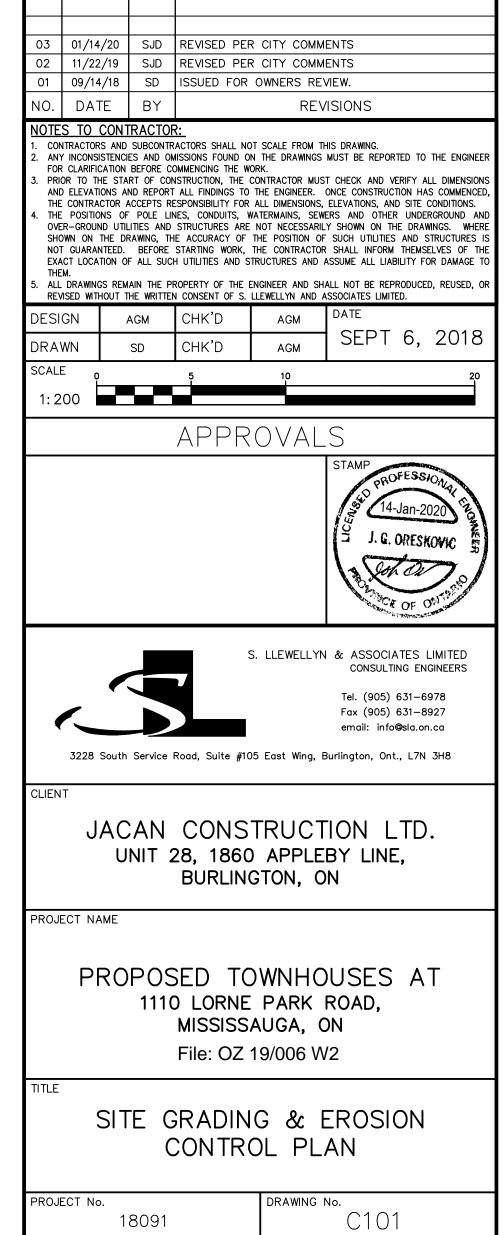
3:1 MAX SLOPE





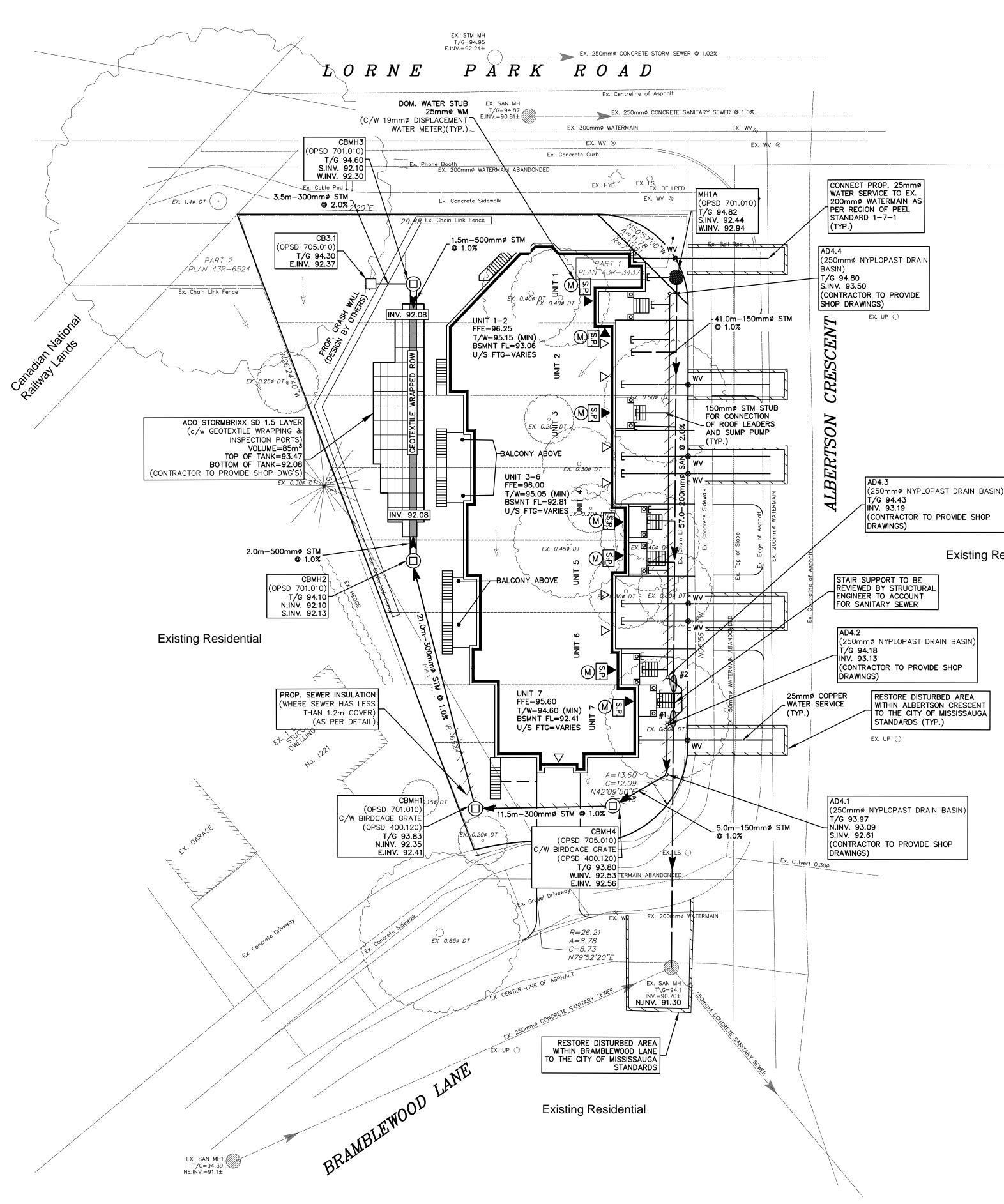
BENCH MARK NOTE: CITY OF MISSISSAUGA BENCHMARK No. 132 (CGVD 1928 : PRE 1978) LOCATED ON THE SOUTH FACE AT THE EAST CORNER OF A RED BRICK HOUSE, No. 1023, ON THE NORTH SIDE OF LORNE PARK ROAD, 68 METRES WEST OF LAKESHORE ROAD WEST.

ELEVATION 93.63m.



NOTES TO CONTRACTOR:

- NOT THE PROPERTY OF THE PROPER 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 C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
- 2. <u>CONFIRMATION OF EXISTING INVERTS</u> 72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED. WILL NOT BE CONSIDERED.



LEGEND:

	EXISTING CATCHBASIN
$\bigcirc $	EXISTING STORM/SANITARY MANHOLE
	PROPOSED DOUBLE CATCHBASIN
	PROPOSED CATCHBASIN
$\bigcirc ullet$	PROPOSED STORM/SANITARY MANHOLE
	PROPOSED CATCHBASIN MANHOLE
\otimes	PROPOSED CURB STOP/GATE VALVE
S.P.	PROPOSED SUMP PUMP







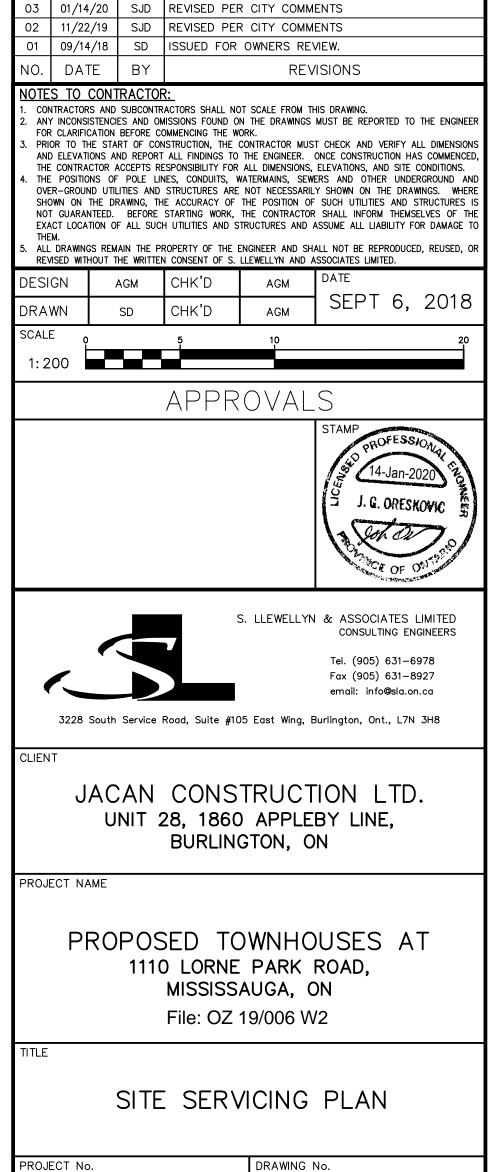
<u>SEWER & WATER</u>
CROSSING CHART:
CROSSING NO. 1 (STM & SAN) STM. INV.=93.14 SAN. OBV.=91.91
CROSSING NO. 2 (STM & SAN) STM. INV.=93.18 SAN. OBV.=91.97

BENCH MARK NOTE:

CITY OF MISSISSAUGA BENCHMARK No. 132 (CGVD 1928 : PRE 1978) LOCATED ON THE SOUTH FACE AT THE EAST CORNER OF A RED BRICK HOUSE, No. 1023, ON THE NORTH SIDE OF LORNE PARK ROAD, 68 METRES WEST OF LAKESHORE ROAD WEST.

ELEVATION 93.63m.

Existing Residential



PROJECT No. 18091

C102

S: \18091\working\current\18091-grading and servicing.dwg Plotted: January 14, 2020 4:21:57 PM By: Steven DeGrow

GENERAL NOTES

- 1. THIS/THESE PLAN(S) IS/ARE NOT TO BE USED FOR CONSTRUCTION UNTIL SEALED BY THE ENGINEER AND INDICATED ISSUED FOR CONSTRUCTION ON THE DRAWING.
- 2. THIS/THESE PLAN(S) IS/ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF S. LLEWELLYN AND ASSOCIATES LIMITED.
- 3. INFORMATION REGARDING ANY EXISTING SERVICES AND/OR UTILITIES SHOWN ON THE APPROVED SET OF CONSTRUCTION DRAWINGS ARE FURNISHED AS THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL INTERPRET THIS INFORMATION AS HE SEES FIT WITH THE UNDERSTANDING THAT THE OWNER AND HIS AGENTS DISCLAIM ALL RESPONSIBILITY FOR ITS ACCURACY AND /OR SUFFICIENCY. THE CONTRACTOR SHALL
- ASSUME LIABILITY FOR ANY DAMAGE TO EXISTING WORKS. 4. EXISTING TOPOGRAPHIC AND LEGAL INFORMATION TAKEN FROM PLANS PREPARED BY BARICH GRENKIE SURVEYING LTD., DATED MAY 19, 2018.
- 5. SITE PLAN INFORMATION TAKEN FROM PLANS PREPARED BY EUGENE KUAN ARCHITECT, DATED MARCH 2018.
- 6. THIS/THESE PLAN(S) TO BE READ IN CONJUNCTION WITH THE STORM WATER MANAGEMENT (SWM) REPORT PREPARED BY S. LLEWELLYN AND ASSOCIATES LIMITED. THIS (THESE) PLAN(S) TO BE USED FOR SERVICING AND GRADING ONLY, FOR BUILDING
- LOCATION REFER TO THE SITE PLAN. 8. MUNICIPAL APPROVAL OF THESE DRAWINGS IS FOR MATERIAL AND COMPLIANCE WITH CITY
- OF MISSISSAUGA AND PROVINCIAL SPECIFICATIONS AND STANDARDS ONLY. APPROVAL AND INSPECTION OF THE WORKS BY THE CITY OF MISSISSAUGA STAFF DOES NOT CERTIFY THE LINE AND GRADE OF THE WORKS NOR RELIEVE THE CONTRACTOR OF CERTIFICATION OF ALL WORKS BY THE OWNER'S ENGINEER.
- 9. ALTERNATE MATERIALS MAY BE ACCEPTABLE PROVIDED WRITTEN APPROVAL HAS FIRST BEEN OBTAINED FROM THE CITY OF MISSISSAUGA AND THE THE ENGINEER. 10. THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNER'S BONDED CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS NORMALLY REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING:

ROAD CUT PERMITS SEWER PERMITS APPROACH APPROVAL PERMITS

RELOCATION OF SERVICES COMMITTEE OF ADJUSTMENT

- ENCROACHMENT AGREEMENTS 12. PRIOR TO CONSTRUCTION THE CONTRACTOR MUST:
- CHECK AND VERIFY ALL DIMENSIONS AND EXISTING ELEVATIONS WHICH INCLUDE BUT ARE NOT LIMITED TO THE BENCHMARK ELEVATIONS, EXISTING SERVICE CONNECTIONS, EXISTING INVERTS AND REPORT FINDING IN WRITING TO THE
- FNGINFFR. OBTAIN ALL UTILITY LOCATES AND REQUIRED PERMITS AND LICENSES
- VERIFY ALL FINISHED FLOOR ELEVATIONS AND BASEMENT FLOOR ELEVATIONS WHICH MAY APPEAR ON THESE PLANS COMPLY WITH THE FINAL ARCHITECTURAL
- DRAWINGS. iv. CONFIRM ALL DRAWINGS USED FOR CONSTRUCTION ARE OF THE MOST RECENT REVISION
- NOTIFY THE ENGINEER OF THE PROPOSED CONSTRUCTION SCHEDULE FOR COORDINATION OF NECESSARY INSPECTIONS. 13. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ENGINEER 48 HOURS
- PRIOR TO THE COMMENCING SITE WORKS TO ARRANGE FOR INSPECTION. THE ENGINEER SHALL DETERMINE THE EXTENT OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF THE UNDERGROUND SERVICE INSTALLATION AS MANDATED BY THE ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO MAKE SUITABLE ARRANGEMENTS FOR INSPECTION WILL LEAD TO POST CONSTRUCTION TESTING AND INSPECTION AS DETERMINED BY THE ENGINEER, THE COSTS OF WHICH INCLUDING ANY DELAYS IN CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR. FULL PAYMENT FOR UN-INSPECTED WORKS MAY BE WITHHELD UNTIL THE COMPLETION OF THE POST CONSTRUCTION INSPECTION AND TESTING TO THE SATISFACTION OF THE ENGINEER.
- 14. INSPECTION BY THE OWNER'S ENGINEER IS FOR CERTIFICATION AND GENERAL CONFORMANCE PURPOSES AND DOES NOT CERTIFY LINE AND GRADE OR IMPLY AN ASSURANCE OF QUALITY CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THE INSTALLATION OF THE WORKS TO PROPER LINE, GRADE AND QUALITY TO CURRENT INDUSTRY STANDARDS
- 15. ANY UTILITY RELOCATIONS AND RESTORATIONS DUE TO THE DEVELOPMENT TO BE UNDERTAKEN AT THE EXPENSE OF THE OWNER/DEVELOPER AND SHALL BE COORDINATED BY THE CONTRACTOR. 16. ALL RESTORATIONS AND RECONSTRUCTIONS SHALL BE TO COMPLETED TO MATCH EXISTING
- CONDITIONS OR BETTER AND ARE TO BE PERFORMED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF MISSISSAUGA.
- 17. SERVICING CONTRACTOR TO MAINTAIN A "CONFINED TRENCH CONDITION" IN ALL SEWER AND WATERMAIN INSTALLATION TRENCHES. 18. THE SITE SERVICING CONTRACTOR SHALL TERMINATE ALL SERVICES 1.0M FROM THE BUILDING FACE.
- 19. NO BLASTING WILL BE PERMITTED.

LEGISLATION. REGULATION AND CODES 1. ALL WORK WITHIN THE CITY RIGHT-OF-WAY SHALL BE CONSTRUCTED ACCORDING TO THE

- LATEST CITY OF MISSISSAUGA STANDARD DRAWINGS AND SPECIFICATIONS. ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS MAY, SUBJECT TO THE APPROVA OF THE CITY OF MISSISSAUGA, BE USED WHERE NO CITY STANDARD OR SPECIFICATION IS AVAILABLE
- 2. ALL WORK SHALL BE COMPLETED ACCORDING TO THE CURRENT OCCUPATIONAL HEALTH AND SAFELY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT. 3. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL BE ACCORDING TO THE CURRENT ONTARIO TRAFFIC MANUAL BOOK 7: CONDITIONS FIELD

CONSTRUCTION NOTES

- . ALL MATERIAL FOR SEWER, FORCEMAIN, WATERMAIN, HYDRANTS AND APPURTENANCES, SHALL BE ACCORDING TO CITY OF MISSISSAUGA MATERIAL/MANUFACTURER SPECIFICATIONS. 2. ALL AREAS DISTURBED DURING CONSTRUCTION WITHIN THE CITY'S RIGHT-OF-WAY SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AND IN ACCORDANCE WITH CITY OF
- MISSISSAUGA STANDARD 2220.030. 3. ALL EXISTING UTILITIES SHOWN ON DRAWINGS (PLAN AND PROFILE) ARE FOR REFERENCE PURPOSES ONLY. THE CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE ACTUAL LOCATION AND DEPTH OF ANY UTILITY AND SHALL BE LIABLE FOR ALL OR ANY DAMAGE 4. ANY DISCREPANCIES BETWEEN SITE CONDITIONS AND CONSTRUCTION DRAWINGS MUST BE
- REPORTED TO THE CITY PRIOR TO COMMENCEMENT OF CONSTRUCTION AND APPROPRIATE ACTION TAKEN TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR. 5. ALL SURVEY STAKE LAYOUT POINTS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE LAYOUT
- SHALL BE IMMEDIATELY REPORTED TO THE CITY. 6. AT ALL LOCATIONS WHERE THE PROPOSED WATERMAIN CROSSES UNDER OR ABOVE THE EXISTING SEWERS, OR UTILITIES, GRANULAR A BEDDING MATERIAL IS TO EXTEND FROM THE
- LOWER PIPE TO THE TOP OF THE UPPER PIPE. GRANULAR A TO BE COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY. CONTRACTOR TO PROVIDE ADEQUATE SUPPORT DURING CONSTRUCTION BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS. MAINTAIN 300mm MINIMUM VERTICAL CLEARANCES BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS LESS THAN 300mm IN DIAMETER. MAINTAIN 600mm MINIMUM VERTICAL CLEARANCE BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS EQUAL TO OR GREATER THAN 300mm IN DIAMETER.
- 8. ALL DIMENSIONS ARE EXPRESSED IN METRES (m) AND PIPE SIZES ARE EXPRESSED IN MILLIMETRES (mm) UNLESS OTHERWISE NOTED. WATERMAINS
- PVC WATERMAINS SHALL BE A MINIMUM DR 18 CLASS 235 (AWWA) C900-07. 2. EMBEDMENT MATERIAL FOR FLEXIBLE PIPE SHALL BE ACCORDING TO OPSS 1010 AND USING GRANULAR A COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY. MINIMUM COVER ON WATERMAINS SHALL BE 1.8m.
- ALL CURB AND VALVE BOXES TO BE LOCATED AT STREET LINE. 5. WATERMAINS MUST FOLLOW THE ONTARIO MINISTRY OF THE ENVIRONMENT PROCEDURE F-6-1 THAT GOVERN THE SEPARATION OF SEWERS AND WATERMAINS. A MINIMUM VERTICAL CLEARANCE OF 0.30m WHEN CROSSING OVER AND 0.5 M WHEN CROSSING UNDER SEWERS
- AND ALL OTHER UTILITIES IS REQUIRED. MUST ALSO MAINTAIN 2.5m HORIZONTAL SEPARATION WITH SEWERS. 3. ALL VALVES TO BE INSTALLED AS PER REGION OF PEEL STANDARD 1-7-1.
- 7. TRACER WIRE TO BE INSTALLED AS PER REGION OF PEEL STANDARDS (SECTION W.4.7).
- 8. HYDROSTATIC PRESSURE TEST AND LEAKAGE TESTING OF THE WATERMAIN SHALL BE ACCORDING TO REGION OF PEEL STANDARDS (W.5.1).
- 9. SWABBING OF WATERMAIN IS TO BE IN ACCORDANCE WITH THE REGION OF PEEL STANDARDS (SECTION W.5.2).
- 10. FLUSHING AND DISINFECTING OF WATERMAIN ARE TO BE IN ACCORDANCE WITH THE REGION OF PEEL STANDARDS (SECTION W.5.3).

EROSION AND SEDIMENT CONTROL

- EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED PRIOR TO, AND MAINTAINED DURING CONSTRUCTION PHASES, TO PREVENT ENTRY OF SEDIMENT INTO THE WATER. ALL DAMAGED EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE REPAIRED OR REPLACED WITHIN 48 HOURS OF INSPECTION OR BOTH. 2. ALL DISTURBED AREAS WILL BE MINIMIZED TO EXTENT POSSIBLE AND TEMPORARILY OR
- PERMANENTLY STABILIZED OR RESTORED AS THE WORK PROGRESSES. 3. THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO MINIMIZE SEDIMENT LADEN RUNOFF FROM LEAVING THE WORK AREA. IF THE PRESCRIBED MEASURES ON THE PLANS ARE NOT EFFECTIVE IN PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE. THEN ALTERNATIVE MEASURES MUST BE IMPLEMENTED IMMEDIATELY TO MINIMIZE POTENTIAL ECOLOGICAL IMPACTS AND A CREDIT VALLEY CONSERVATION AUTHORITY ENFORCEMENT OFFICER SHOULD BE IMMEDIATELY CONTACTED.
- ADDITIONAL ESC MEASURES TO BE KEPT ON SITE AND USED AS NECESSARY. 4. ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS,, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE WATER. VEHICULAR REFUELING AND MAINTENANCE OF REFUELING WILL BE CONDUCTED A MINIMUM OF 30m FROM THE WATER.
- 5. ALL GRADES WITHIN THE REGULATORY FLOOD PLAIN WILL BE MAINTAINED OR MATCHED. 6. FILTER FABRIC TO BE PLACED UNDER GRATES ON ALL CATCHBASINS TO TRAP SEDIMENT. SILT TRAPS ARE TO BE CLEANED REGULARLY AND ARE NOT TO BE REMOVED UNTIL SUCH

TIME AS THE CURBS ARE CONSTRUCTED AND THE BOULEVARDS ARE SODDED OR BACKYARDS GRADED AND SODDED. FILTER FABRIC FOR SILT CONTROL TO BE TERRA FIX 270R OR APPROVED EQUIVALENT.

SANITARY AND STORM SEWERS

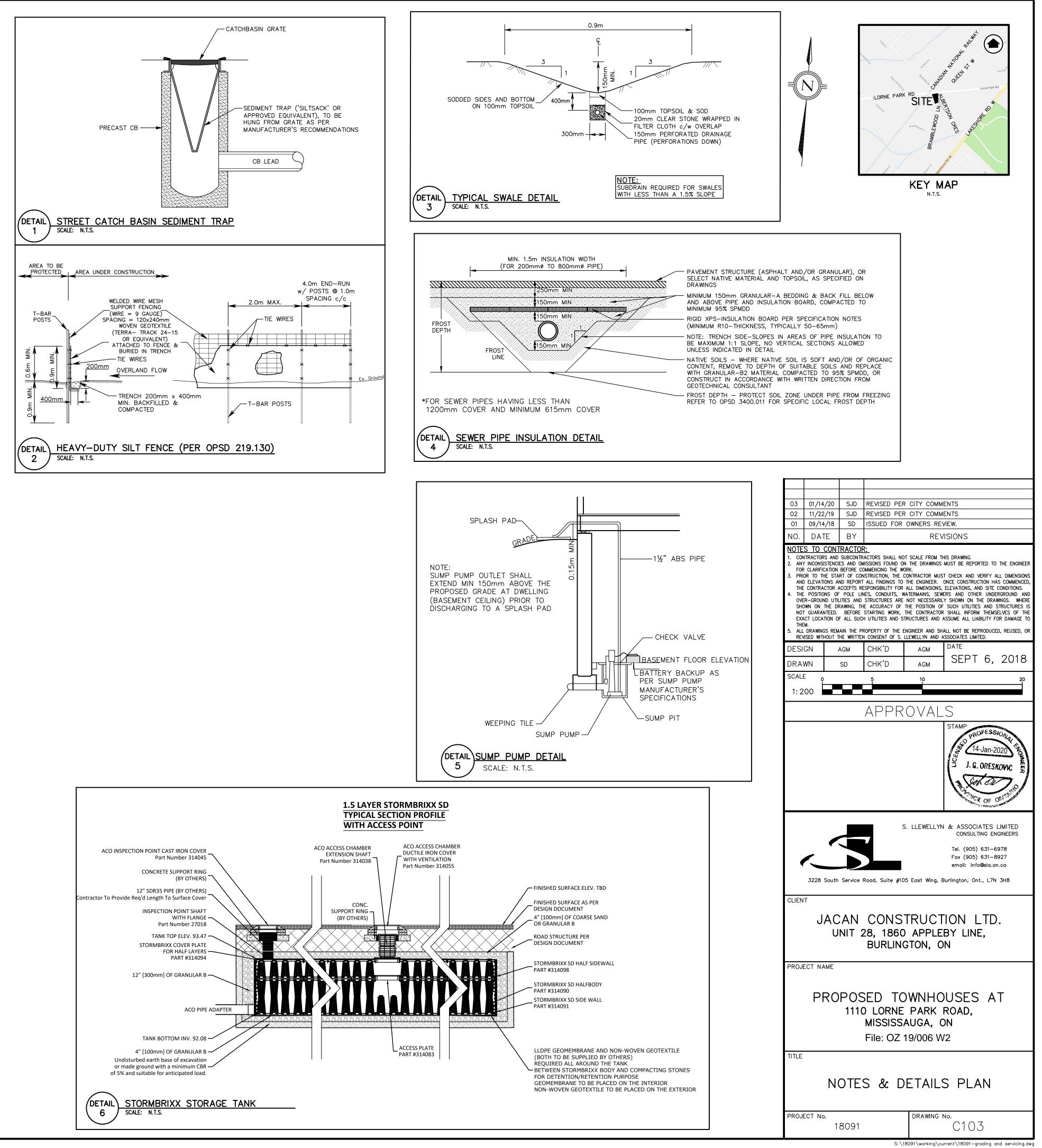
- 1. CONSTRUCTION OF SANITARY & STORM SEWERS & PRIVATE DRAINS SHALL BE IN ACCORDANCE WITH CITY AND REGION STANDARDS & SPECIFICATIONS (LATEST EDITION) AND MINSTRY OF ENVIRONMENT (MOE) GUIDELINES (LATEST EDITION)
- 2. SANITARY SERVICE CONNECTIONS SHALL BE SINGLE, 150m MINIMUM, PVC DR 28 INSTALLED AT 2 PERCENT AND THE COLOUR SHALL BE GREEN, FOR SINGLE RESIDENTIAL DWELLINGS.
- 3. EMBEDMENT MATERIAL FOR FLEXIBLE PIPE SHALL BE ACCORDING TO OPSD 802.010 AND USING GRANULAR A COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
- 4. BEDDING FOR RIGID PIPE SHALL BE CLASS B BEDDING MATERIAL ACCORDING TO OPSD 802.031 AND USING GRANULAR A BEDDING MATERIAL AND COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
- 5. ALL SEWERS TO BE VIDEO INSPECTED AS PER OPSS 409. 6. ALL SEWERS TO BE FLUSHED PRIOR TO VIDEO INSPECTION.
- 7. MANHOLES FRAMES AND COVERS SHALL BE AS PER OPSD 401.010 (STORM-OPEN, SANITARY-CLOSED).
- 8. CATCHBASIN FRAMES AND GRATES SHALL BE AS PER OPSD 400.100 IN PACED AREAS AND 400.120 IN LANDSCAPED AREAS. 9. SANITARY SEWERS 200mm TO 375mm IN DIAMETER SHALL BE PVC PIPE, CSA B182.2,
- SDR-35. 10. STORM SEWERS 250mm TO 450mm IN DIAMETER SHALL BE PVC PIPE, CSA B182.2,
- SDR-35 11. STORM SEWERS GREATER THAN 450mm IN DIAMETER SHALL BE CONCRETE PIPE, CSA A257.2 (AS SPECIFIED).
- 12. ALL PVC STORM SEWERS ARE TO BE TESTED FOR DEFLECTION (MANDREL PASSAGE) AFTER INSTALLATION AS PER OPSS 410. SANITARY SEWERS SHALL BE TESTED FOR DEFLECTION (MANDREL PASSAGE) AND LEAKAGE (LOW AIR PRESSURE METHOD) AS PER OPSS 410. PRIOR TO ASSUMPTION BY THE CITY, PIPE DEFLECTION TESTING SHALL BE REPEATED.

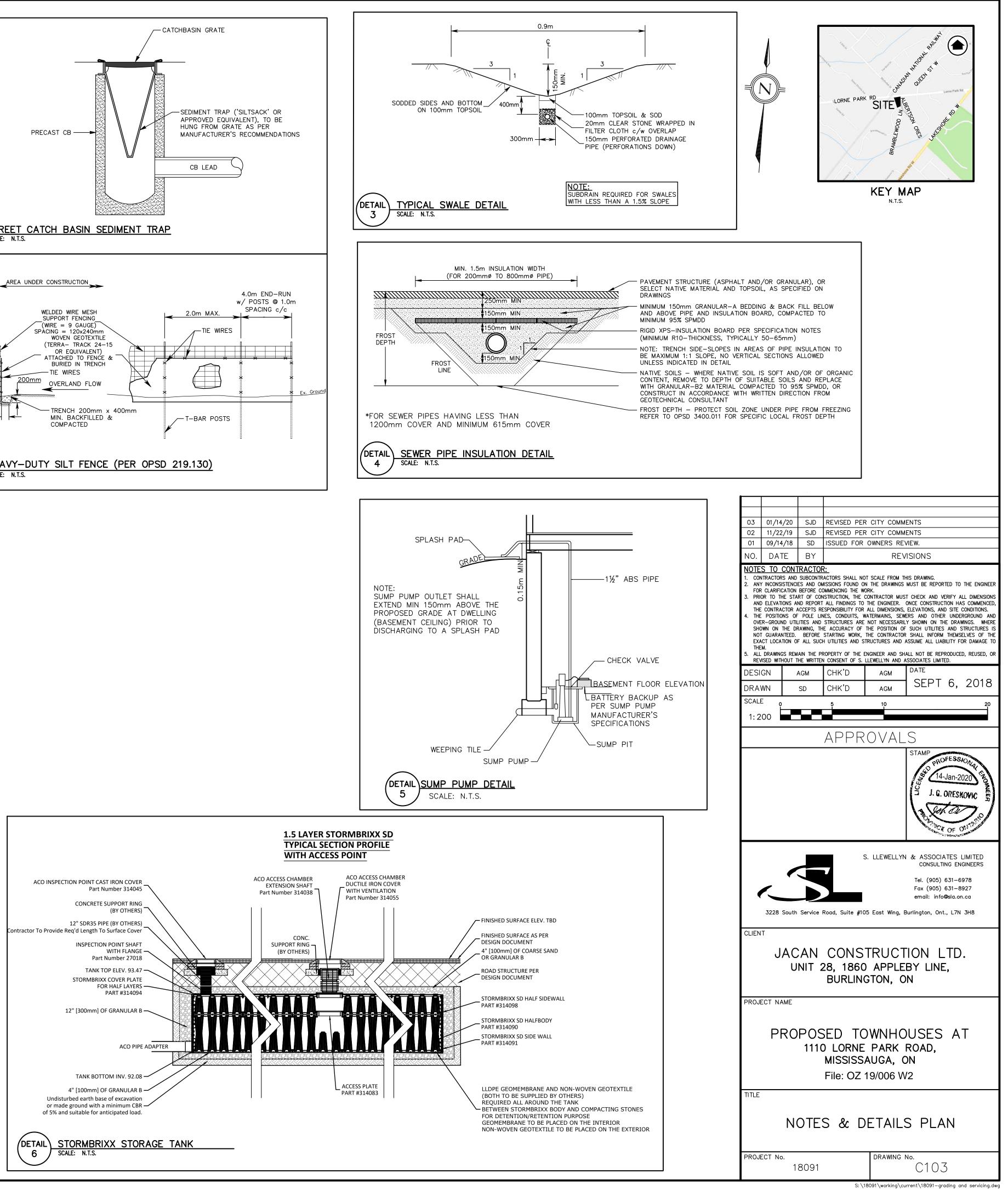
GRADING NOTES

- 1. ALONG ADJOINING PROPERTIES GRADE TO MEET EXISTING OR PROPOSED ELEVATIONS WITH SODDED SLOPES (MIN. 3H TO 1V) AND/OR RETAINING WALLS AS SPECIFIED.
- 2. ALL RETAINING WALLS, WALKWAYS, CURBS, ETC., SHALL BE PLACED A MIN. OF 0.45m OFF THE PROPERTY LINE. ALL WALLS 1.0M OR HIGHER SHALL BE DESIGNED BY A P.ENG.
- 3. SHOULD A RETAINING WALL BE REQUIRED, THE TOP OF WALL ELEVATIONS SHALL BE SET 150mm ABOVE THE PROPOSED SIDE YARD SWALES.
- 4. RETAINING WALLS 0.6m IN HEIGHT OR GREATER REQUIRE CONSTRUCTION OF A FENCE OR GUARD RAIL AT THE TOP OF THE REAR OF THE WALL. GUARDS FOR RETAINING WALLS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF
- EXTERIOR GUARDS AS CONTAINED IN THE ONTARIO BUILDING CODE. 5. TOP OF FOUNDATION WALLS FOR BUILDINGS SHALL BE 150mm (MIN) ABOVE FINISHED GRADE.
- 6. DRIVEWAY SLOPES SHALL NOT BE LESS THAN 2% AND NOT MORE THAN 8.0%. REVERSED SLOPED DRIVEWAYS IN NEW DEVELOPMENTS ARE NOT PERMITTED.
- 7. IF GRADING IS REQUIRED ON LANDS ADJACENT TO THE DEVELOPMENT WHICH ARE NOT OWNED BY THE DEVELOPER, THEN THE DEVELOPER MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER TO ALLOW THE DEVELOPER TO GRADE ON THE
- ADJACENT LANDS, OTHERWISE RETAINING WALLS MUST BE USED. 8. THE WRITTEN PERMISSION REQUIRED FROM THE ADJACENT LANDOWNER SHALL BE OBTAINED PRIOR TO ENTERING THE LANDS. SHOULD PERMISSION NOT BE OBTAINED OR IS WITHDRAWN PRIOR TO COMMENCING THE WORK, THEN THE DEVELOPER SHALL LIMIT HIS ACTIVITIES TO THE LIMITS OF THE DEVELOPMENT SITE.
- 9. DRIVEWAY AND DRIVEWAY APPROACHES SHALL BE LOCATED SUCH THAT HYDRO VAULTS AND OTHER STREET FURNITURE ARE A MIN. OF 1.2m FROM THE PROJECTIONS OF THE OUTSIDE GARAGE WALLS.
- 10. ANY CHANGES IN GRADES AND CATCH BASINS REQUIRE THE APPROVAL OF THE CITY'S MANAGER OF DEVELOPMENT ENGINEERING.
- 11. ALL DRIVEWAYS FROM PROPERTY LINES FOR THE FIRST 7.5m SHALL BE WITHIN 5% MAXIMUM GRADE, THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 10% MAXIMUM GRADES.

REGION OF PEEL NOTES:

- 1. ALL MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO THE CURRENT PEEL PUBLIC WORKS STANDARDS AND SPECIFICATIONS. 2. WATERMAIN AND / OR WATER SERVICE MATERIALS 100 MM (4") AND LARGER MUST BE DR
- 18 P.V.C. PIPE MANUFACTURED TO A.W.W.A. SPEC. C900-16 SPEC COMPLETE WITH TRACER WIRE. SIZE 50 MM (2") AND SMALLER MUST BE TYPE K'SOFT COPPER PIPE PER A.S.T.M. B88-49 SPECIFICATION.
- 3. WATERMAINS AND / OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 1.7 M (5'6") WITH A MINIMUM HORIZONTAL SPACING OF 1.2 M (4") FROM THEMSELVES AND ALL OTHER UTILITIES.
- 4. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED WITH AT LEAST A 50 MM (2") OUTLET ON 100 MM (4") AND LARGER LINES. COPPER LINES ARE TO HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE LINE. THEY MUST ALSO BE HOSED OR PIPED TO ALLOW THE WATER TO DRAIN ONTO A PARKING LOT OR DOWN A DRAIN. ON FIRE LINES, FLUSHING OUTLET TO BE 100 MM (4") DIAMETER MINIMUM ON A HYDRANT
- 5. ALL CURB STOPS TO BE 3.0 M (10') OFF THE FACE OF THE BUILDING UNLESS OTHERWISE
- 6. HYDRANT AND VALVE SET TO REGION STANDARD 1 6 1 DIMENSION A AND B, 0.7 M (2') AND 0.9M (3') AND TO HAVE PUMPER NOZZLE.
- 7. WATERMAINS TO BE INSTALLED TO GRADES AS SHOWN ON APPROVED SITE PLAN. COPY OF GRADE SHEET MUST BE SUPPLIED TO INSPECTOR PRIOR TO COMMENCEMENT OF WORK,
- WHERE REQUESTED BY INSPECTOR 8. WATERMAINS MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.3 M (12") OVER / 0.5 M
- (20") UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING. 9. ALL PROPOSED WATER PIPING MUST BE ISOLATED FROM EXISTING LINES IN ORDER TO
- ALLOW INDEPENDENT PRESSURE TESTING AND CHLORINATING FROM EXISTING SYSTEMS. 10. ALL LIVE TAPPING AND OPERATION OF REGION WATER VALVES SHALL BE ARRANGED
- THROUGH THE REGIONAL INSPECTOR ASSIGNED OR BY CONTACTING THE OPERATIONS AND MAINTENANCE DIVISION 11. LOCATION OF ALL EXISTING UTILITIES IN THE FIELD TO BE ESTABLISHED BY THE
- CONTRACTOR 12. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR LOCATES, EXPOSING, SUPPORTING AND PROTECTING OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES EXISTING AT THE TIME OF CONSTRUCTION IN THE AREA OF THEIR WORK WHETHER SHOWN ON THE PLANS OR NOT AND FOR ALL REPAIRS AND CONSEQUENCES RESULTING FROM
- DAMAGE TO SAME. 13. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE TO GIVE 72 HOURS WRITTEN NOTICE TO THE UTILITIES PRIOR TO CROSSING SUCH UTILITIES, FOR THE PURPOSE OF INSPECTION BY THE CONCERNED UTILITY. THIS INSPECTION WILL BE FOR THE DURATION OF THE CONSTRUCTION, WITH THE CONTRACTOR RESPONSIBLE FOR ALL COSTS ARISING FROM SUCH INSPECTION.
- 14. ALL PROPOSED WATER PIPING MUST BE ISOLATED THROUGH A TEMPORARY CONNECTION THAT SHALL INCLUDE AN APPROPRIATE CROSS-CONNECTION CONTROL DEVICE, CONSISTENT WITH THE DEGREE OF HAZARD, FOR BACKFLOW PREVENTION OF THE ACTIVE DISTRIBUTION SYSTEM, CONFORMING TO REGION OF PEEL STANDARDS 1-7-7 OR 1-7-8.





Plotted: January 14, 2020 4:22:44 PM By: Steven DeGrow