GENERAL NOTES AND SPECIFICATIONS

- ALL MATERIALS AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH OPS AND CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS AND OPSD SUPPLEMENT. ONTARIO PROVINCIAL STANDARDS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND BEAR COST OF SAME INCLUDING WATER PERMIT AND

ASSOCIATED COSTS.

REINSTATEMENT.

- SERVICE AND UTILITY LOCATIONS ARE APPROXIMATE, CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND
- ALL DISTURBED AREAS SHALL BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION OF THE ENGINEER & THE CITY. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH OPSD 509.010 AND OPSS 310.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATION FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENTATION CONTROL PLAN THAT WILL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION FOR RECEIVING STORM SEWERS OR DRAINAGE DURING CONSTRUCTION ACTIVITIES. THIS PLAN SHALL INCLUDE BUT NOT BE LIMITED TO CATCH BASINS INSERTS, STRAW BALE CHECK DAMS AND SEDIMENT CONTROLS AROUND ALL DISTURBED AREAS. DEWATERING SHALL BE PUMPED INTO SEDIMENT TRAPS.
- SITE PLAN PREPARED BY MONTGOMERY SISAM ARCHITECTS INC. DATED AUGUST 19, 2020, DRAWING A-1.02, PROJECT No. 20019.
- TOPOGRAPHIC SURVEY SUPPLIED BY ANNIS. O'SULLIVAN, VOLEBEKK LTD.. JOB No.16382-15. PART OF LOT 27, CONCESSION 12, GEOGRAPHIC TOWNSHIP OF GOULBOURN, CITY OF OTTAWA,
- REFER TO LANDSCAPE ARCHITECTURE PLAN FOR ALL LANDSCAPING FEATURES (ie. TREES, WALKWAYS, PARK DETAILS, NOISE BARRIERS. FENCES etc.)
- 0. GEOTECHNICAL INVESTIGATION PROPOSED MIXED USE DEVELOPMENT REPORT No. PG3710-1 PREPARED BY PATERSON GROUP DATED FEBRUARY 5, 2016. GEOTECHNICAL INFORMATION PRESENTED ON THESE DRAWINGS MAY BE INTERPOLATED FROM THE ORIGINAL REPORT. REFER TO ORIGINAL GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS AND TO VERIFY ASSUMPTIONS MADE HEREIN.
- 1. STREET LIGHTING TO CITY OF OTTAWA STANDARDS.
- 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED. DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO ENGINEER.
- 3. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL BY THE CONTRACT ADMINISTRATOR AND DIRECTOR OF ENGINEERING HAS BEEN OBTAINED.
- 4. HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE TO BE NOTIFIED IF DEEPLY BURRIED ARCHEOLOGICAL REMAINS ARE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES.

- 1. ALL TOPSOIL AND ORGANIC MATERIAL TO BE STRIPPED FROM WITHIN THE FULL RIGHT OF WAY PRIOR TO CONSTRUCTION.
- GRANULAR 'B' COMPACTED IN 0.30m LAYERS. 3. ALL GRANULAR FOR ROADS SHALL BE

2. SUB-EXCAVATE SOFT AREAS & FILL WITH

- COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). 4. ROAD SUBDRAINS SHALL BE CONSTRUCTED AS
- 5. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE CONSULTANT.

PER CITY OF OTTAWA STANDARD R1.

- 6. CONTRACTOR TO OBTAIN A ROAD OCCUPANCY PERMIT 48 HOURS PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL ROAD ALLOWANCE IF REQUIRED BY THE MUNICIPALITY. ALL WORK ON THE MUNICIPAL RIGHT OF WAY AND EASEMENTS TO BE INSPECTED BY THE MUNICIPALITY PRIOR TO BACKFILLING.
- 7. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD R10, AND OPSD 509.010, AND OPSS 310.
- . CONCRETE CURBS SHALL BE CONSTRUCTED AS PER CITY STANDARD SC1.1 AND SC1.3 (BARRIER OR MOUNTABLE CURB AS SHOWN ON DRAWINGS).
- 9. CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PER CITY STANDARDS SC3 AND SC1.4.
- 10. PAVEMENT CONSTRUCTION AS PER GEOTECHNICAL INVESTIGATION PROPOSED MIXED USE DEVELOPMENT, PREPARED BY PATERSON GROUP DATED FEBRUARY 5, 2016. REPORT:PG3710-1
 - **HEAVY DUTY ASPHAL** 40mm SUPERPAVE 12.5 50mm SUPERPAVE 19.0 150mm OPSS GRANULAR A BASE 450mm OPSS GRANULAR B TYPE II
 - LIGHT DUTY AREAS 50mm SUPERPAVE 12.5 150 OPSS GRANULAR 'A' BASE 300 OPSS GRANULAR 'B' TYPE II

WATER SUPPLY SERVICING

- 1. THE CONTRACTOR SHALL CONSTRUCT WATERMAIN, WATER SERVICES, CONNECTIONS & APPURTENANCES AS PER CITY OF OTTAWA SPECIFICATIONS & SHALL CO-ORDINATE AND PAY ALL RELATED COSTS INCLUDING THE COST OF CONNECTION, INSPECTION & DISINFECTION BY CITY PERSONNEL.
- WATERMAIN PIPE MATERIAL SHALL BE PVC CL.150 DR18. DEFLECTION OF WATERMAIN PIPE IS NOT TO EXCEED 1/2 OF THAT SPECIFIED BY THE MANUFACTURER. PVC WATERMAINS TO BE INSTALLED WITH TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W36.
- 3. WATER SERVICES ARE TO BE TYPE K SOFT COPPER AS PER CITY OF OTTAWA STANDARD W26 (UNLESS OTHERWISE NOTED). WATER SERVICE TO EXTEND 1.0M BEYOND PROPERTY LINE. STAND POST TO BE INSTALLED AT PROPERTY LINE.
- 4. FIRE HYDRANTS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W18 AND W19.
- 5. WATER VALVES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W24.
- 6. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W17 UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL TO BE SPECIFIED BY PROJECT GEOTECHNICAL CONSULTANT.

- SERVICE CONNECTIONS SHALL BE INSTALLED A MINIMUM OF 2400mm FROM ANY CATCHBASIN, MANHOLE, OR OBJECT THAT MAY CONTRIBUTE TO FREEZING. THERMAL INSULATION SHALL BE INSTALLED ON ALL PROPOSED CB'S ON THE W/M STREET SIDE WHERE 2400mm SEPARATION CANNOT BE ACHIEVED.(AS PER CITY OF OTTAWA W22 & W23)
- 8. CATHODIC PROTECTION TO BE SUPPLIED ON METALLIC FITTINGS AS PER CITY OF OTTAWA W40 AND W42.
- THRUST BLOCKS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25.3 AND W25.4.
- 10. WATERMAIN TO HAVE MIN. 2.4m COVER. WHERE WATERMAIN COVER IS LESS THAN 2.4m, INSULATION TO BE SUPPLIED IN ACCORDANCE WITH CITY STANDARD W22.
- 11. WATERMAIN CROSSINGS ABOVE AND BELOW SEWERS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W25 AND W25.2.
- PRESSURE REDUCING VALVES (PRV'S) IF REQUIRED, TO BE INSTALLED AS PER ONTARIO PLUMBING CODE.

STORM AND SANITARY SEWERS

- SANITARY SEWERS 375mm DIA. OR SMALLER SHALL BE PVC SDR35, SANITARY SEWERS LARGER THAN 375mm SHALL BE CONCRETE CSA A 257.2 CLASS 100D AS PER OPSD 807.010.
- STORM SEWERS 375mm DIA. OR SMALLER SHALL BE PVC SDR 35. STORM SEWERS LARGER THAN 375mm DIA, SHALL BE CONCRETE CSA A 257.2 CLASS 100-D AS PER OPSD 807.010
- 3. ALL STORM AND SANITARY SEWER BEDDING SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS S6 AND S7, CLASS "B" BEDDING, UNLESS OTHERWISE NOTED. SUITABLE BEDDING AND COVER MATERIAL TO BE SPECIFIED BY GEOTECHNICAL CONSULTANT.
- 4. STORM AND SANITARY MANHOLES SHALL BE 1200mm DIAMETER IN ACCORDANCE WITH OPSD-701.01 (UNLESS OTHERWISE NOTED) c/w FRAME AND COVER AS PER CITY OF OTTAWA S24 AND S25. ALL STORM MANHOLES WITH SEWERS 900mm DIA SEWERS AND OVER IN SIZE SHALL BE BENCHED. ALL OTHER STORM MANHOLES SHALL BE COMPLETED WITH 300mm SUMPS AS PER CITY STANDARDS. SANITARY MANHOLES SHALL NOT HAVE SUMPS.
- 5. ALL SEWERS CONSTRUCTED WITH GRADES 0.50% OR LESS, TO BE INSTALLED WITH LASER AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
- 6. FOR STORM SEWER INSTALLATION (EXCLUDING CB LEADS) THE MINIMUM DEPTH OF COVER OVER THE CROWN OF THE SEWER IS 2.0m. FOR SANITARY SEWERS THE MINIMUM DEPTH OF COVER IS 2.5m OVER PIPE OBVERT.
- 7. ALL STORM AND SANITARY SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
- 8. STORM AND SANITARY SERVICE LATERALS TO BE SDR 28 INSTALLED AT MIN. 1.0% SLOPE.
- 9. CATCH BASINS SHALL BE IN ACCORDANCE WITH CITY STANDARDS c/w FRAME AND GRATE AS PER S20, AND S21 FOR REAR YARDS, AND S3 FOR STREET CB'S. PROVIDE 150mm ADJUSTED SPACERS. ALL CATCH BASINS SHALL HAVE SUMPS (600mm DEEP). STREET CATCH BASIN LEADS SHALL BE 200mm DIA.(MIN) PVC SDR 35 AT 1.0% GRADE WHERE NOT OTHERWISE SHOWN ON PLAN. CATCH BASINS WILL BE INSTALLED WITH INLET CONTROL DEVICES (ICD) AS PER ICD SCHEDULE ON STORM
- DRAINAGE PLAN. 10. STREET CATCH BASINS TO BE INSTALLED c/w SUBDRAINS 3m LONG IN FOUR ORTHOGONAL DIRECTIONS OR LONGITUDINALLY WHEN PLACED ALONG A CURB, AND AT AN ELEVATION OF 300mm

BELOW SUBGRADE LEVEL.

- 11. REAR LOT PERFORATED PIPE TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS S29. REAR LOT STRUCTURES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W30 AND W31.
- 12. CLAY SEALS TO BE INSTALLED AS PER CITY STANDARD DRAWING NO. S8. THE SEALS SHOULD BE AT LEAST 1.5m LONG (IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. GENERALLY, THE SEALS SHOULD EXTEND FROM THE FROST LINE AND FULLY PENETRATE THE BEDDING, SUBBEDDING AND COVER MATERIAL. THE BARRIERS SHOULD CONSIST OF RELATIVELY DRY AND COMPACTABLE BROWN SILTY CLAY PLACED IN MAXIMUM 225mm THICK LOOSE LAYERS COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S SPMDD. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT STRATEGIC LOCATIONS AT NO MORE THAN 60m INTERVALS IN THE SERVICE TRENCHES. FOR DETAILS REFER TO GEOTECHNICAL INVESTIGATION.
- 13. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300 mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA AND COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
- 14. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSS 410 AND OPSS 407. CONTRACTOR SHALL PERFORM VIDEO INSPECTION OF ALL STORM AND SANITARY SEWERS. A COPY OF THE VIDEO AND INSPECTION REPORT SHALL BE SUBMITTED TO

GRADING

1. ALL GRANULAR BASE & SUB BASE COURSE MATERIALS SHALL BE COMPACTED TO 98% STANDARD PROCTOR MAX. DRY DENSITY.

THE CONSULTANT FOR REVIEW.

- SUB-EXCAVATE SOFT AREAS & FILL WITH GRANULAR 'B' COMPACTED IN 0.15m LAYERS.
- 3. ALL DISTURBED GRASSED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, WITH SOD ON MIN. 100mm TOPSOIL. THE RELOCATION OF TREES AND SHRUBS SHALL BE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT OR ENGINEER.
- 100 YEAR PONDING DEPTH TO BE 0.30m (MAXIMUM).
- EMBANKMENTS TO BE SLOPED AT MIN. 3:1, UNLESS OTHERWISE SPECIFIED.
- 6. ALL SWALES TO BE MIN. 0.15m DEEP WITH MIN. 3:1 SIDE SLOPES UNLESS OTHERWISE NOTED. THE MINIMUM LONGITUDINAL SLOPE TO BE 1.5% OR 1.0% WHEN PERFORATED SUBDRAIN IS INSTALLED.
- ALL ROOF DOWNSPOUTS TO DISCHARGE TO THE GROUND ONTO SPLASH PADS AND SHALL NOT BE DIRECTED TO THE STORM SEWER, OR THE BUILDING FOUNDATION DRAIN.
- 8. TOP OF GRATE (T/G) ELEVATIONS FOR ALL STREET CATCHBASINS SHOWN ON PLANS REFER TO THE ELEVATION AT EDGE OF PAVEMENT, OR GUTTERLINE WHERE APPLICABLE.
- ALL RETAINING WALLS GREATER THAN 1.0m IN HEIGHT ARE TO BE DESIGNED, APPROVED, AND
- STAMPED BY STRUCTURAL ENGINEER. 10. FENCES OR RAILINGS ARE REQUIRED FOR RETAINING WALLS GREATER THAN 0.60m IN
- 11. EXCESS EXCAVATED MATERIAL SHALL BE

SEDIMENT CONTROL DETAILS.

REMOVED FROM THE SITE.

- 12. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR. REVIEW WITH CONTRACT ADMINISTRATOR AND THE CITY
- OF OTTAWA PRIOR TO TREE CUTTING. 13. REFER TO DRAWING EC DT-1 FOR EROSION AND
- 14. BEDROCK MAY BE ENCOUNTERED DURING **EXCAVATION AND CONSTRUCTION. CONTRACTORS** ARE TO BE PREPARED TO REMOVE BEDROCK -REFER TO PATERSONGROUP REPORT PG3710-1 FOR FURTHER DETAILS/REQUIREMENTS.

Best Management Practices

CONTRACTOR TO PROVIDE EROSION AND SEDIMENT CONTROLS (BEST MANAGEMENT PRACTICES) DURING CONSTRUCTION OF THIS PROJECT.

EROSION MUST BE MINIMIZED AND SEDIMENTS MUST BE REMOVED FROM CONSTRUCTION SITE RUN-OFF IN ORDER TO PROTECT DOWNSTREAM AREAS. DURING ALL CONSTRUCTION, EROSION AND SEDIMENTATION SHOULD BE CONTROLLED BY THE FOLLOWING TECHNIQUES:

- LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN
- REVEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE.
- MINIMIZE AREA TO BE CLEARED AND GRUBBED.
- SYNTHETIC MULCHES. INSTALL CATCH BASIN INSERTS OR EQUIVALENT IN ALL PROPOSED CATCH BASINS AND CATCH BASIN

4. PROTECT EXPOSED SLOPES WITH PLASTIC OR

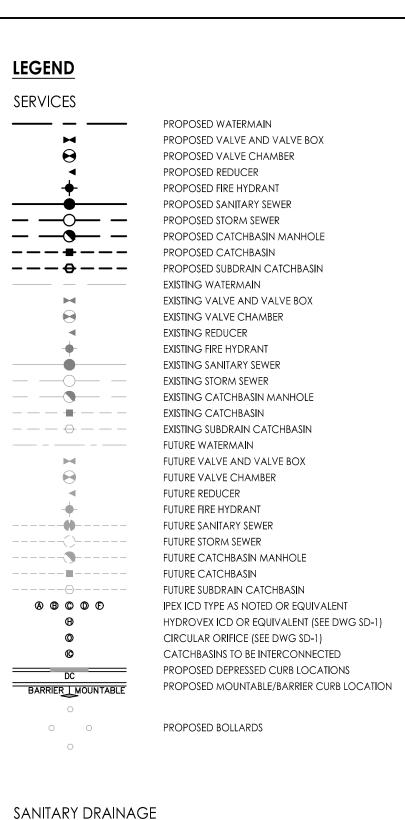
- MANHOLES AND IN ALL EXISTING CATCH BASINS THAT WILL RECEIVE RUN-OFF FROM THE SITE. A SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF ALL AND ANY STOCKPILES OF
- MATERIAL TO BE USED OR REMOVED FROM SITE. (LOCATION TO BE DETERMINED) 7. A VISUAL INSPECTION SHALL BE DONE DAILY ON SEDIMENT CONTROL MEASURES AND CLEANED OF

REQUIREMENTS OF THE CONTRACT.

ANY ACCUMULATED SILT AS REQUIRED. THE

DEPOSITS WILL BE DISPOSED OFF SITE AS PER THE

- SEDIMENT CONTROL BARRIERS MAY ONLY BE REMOVED TEMPORARILY WITH APPROVAL OF CONTRACT ADMINISTRATOR TO ACCOMMODATE CONSTRUCTION OPERATIONS. ALL AFFECTED BARRIERS MUST BE REINSTATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED. NO REMOVAL WILL OCCUR IF THERE IS A SIGNIFICANT RAINFALL EVENT ANTICIPATED (>10mm) UNLESS A NEW DEVICE HAS BEEN INSTALLED TO PROTECT EXISTING STORM AND SANITARY SEWER SYSTEMS, OR DOWNSTREAM WATERCOURSES.
- 9. NO REFUELING OR CLEANING OF EQUIPMENT IS PERMITTED NEAR ANY EXISTING WATERWAY.
- 10. CONTRACTOR SHALL REMOVE SEDIMENT CONTROL MEASURES WHEN, IN THE OPINION OF THE CONTRACT ADMINISTRATOR, THE MEASURE(S) IS NO LONGER REQUIRED. NO CONTROL MEASURES SHALL BE PERMANENTLEY REMOVED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CONTRACT ADMINISTRATOR.
- 11. THE CONTRACTOR SHALL PERIODICALLY, OR WHEN REQUESTED BY THE CONTRACT ADMINISTRATOR. CLEAN OUT ACCUMULATED SEDIMENTS AS REQUIRED.
- 12. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO THE WATERCOURSE. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
- 13. CONTRACTOR SHALL INSTALL MUD MATS AT BOTH ENTRANCES TO THE SITE.
- 14. STORMWATER SWALES TO BE COVERED WITH HYDRO-SEED AND MULCH.



--- POPULATION NUMBER OF RESIDENTIAL UNITS —— SANITARY DRAINAGE AREA ID#

— COMMERCIAL USE

SANITARY DRAINAGE AREA ID#

AREA IN Ha. —— SANITARY DRAINAGE AREA ID#

---- INFILTRATION \ 0.20 INFL/ ----- AREA IN Ha. SANITARY DRAINAGE AREA PROPOSED SANITARY SEWER

GRADING 2.0%

PROPOSED ELEVATION PROPOSED LOT CORNER ELEVATION EXISTING ELEVATION AT LOT CORNER FLOW DIRECTION AND GRADE FFE=99.99 FINISHED FIRST FLOOR ELEVATION ENGINEERED FILL REQUIRED TERRACING 3:1 SLOPE MAXIMUM (UNLESS OTHERWISE SHOWN) ----- PROPOSED SWALE DIRECTION OF OVERLAND FLOW PROPOSED VALVE BOX PROPOSED VALVE CHAMBER PROPOSED FIRE HYDRANT PROPOSED SANITARY SEWER MANHOLE PROPOSED STORM SEWER MANHOLE PROPOSED CATCHBASIN MANHOLE

PROPOSED CATCHBASIN

ORIGINAL GROUND ELEVATION

PROPOSED DOUBLE CATCHBASIN PROPOSED CATCHBASIN 'T' CATCHBASIN TO BE INSTALLED WITH CIRCULAR ORIFICE (SEE ICD TABLE) PROPOSED DEPRESSED CURB LOCATION PROPOSED MOUNTABLE/BARRIER CURB LOCATIONS APPROXIMATE LOCATION OF ACOUSTIC GATE

PROPOSED BOLLARDS

STORM DRAINAGE - RUNOFF COEFFICIENT STORM DRAINAGE AREA ha. STORM DRAINAGE BOUNDARY MAXIMUM PONDING LIMITS DIRECTION OF OVERLAND FLOW **− − −** PROPOSED STORM SEWER PROPOSED CATCHBASIN MANHOLE PROPOSED CATCHBASIN PROPOSED DOUBLE CATCH BASIN PROPOSED SUB DRAIN CATCH BASIN AS PER CITY OF OTTAWA STANDARD DETAIL DRAWINGS L10 PROPOSED PERFORATED SUBDRAIN EXISTING STORM SEWER _ ()__ _ _ _ _ _ EXISTING CATCHBASIN MANHOLE EXISTING CATCHBASIN -----EXISTING SUBDRAIN CATCHBASIN FUTURE STORM SEWER

EROSION CONTROL

PROPOSED SILT FENCE BOUNDARY AS PER OPSD 219.110 PROPOSED STRAW BALE LOCATION AS PER OPSD 219.100 PROPOSED MUD MAT LOCATION

FUTURE CATCHBASIN MANHOLE

FUTURE SUBDRAIN CATCHBASIN

CATCHBASIN TO BE INSTALLED WITH CIRCULAR

FUTURE CATCHBASIN

ORIFICE (SEE ICD TABLE)

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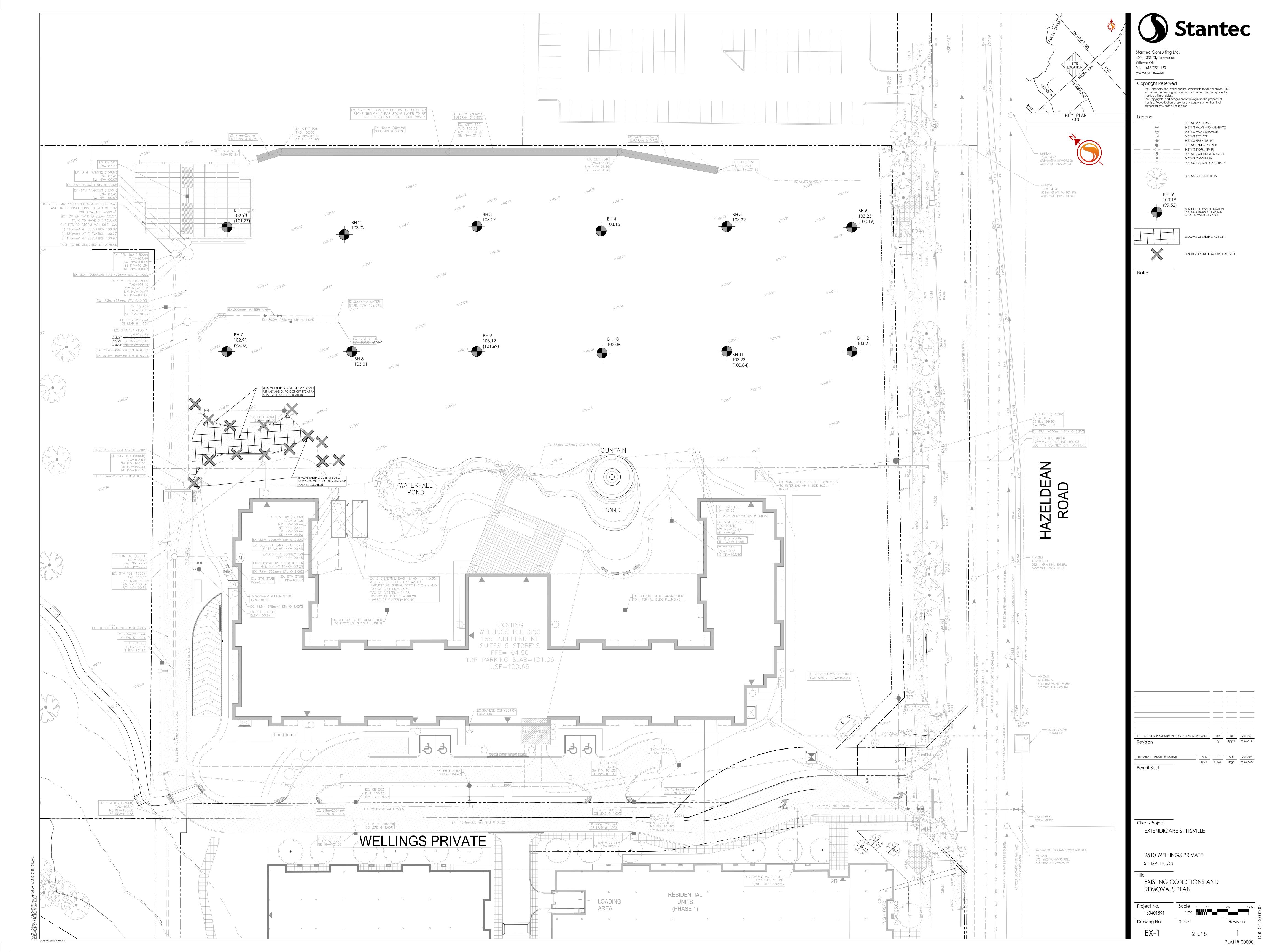
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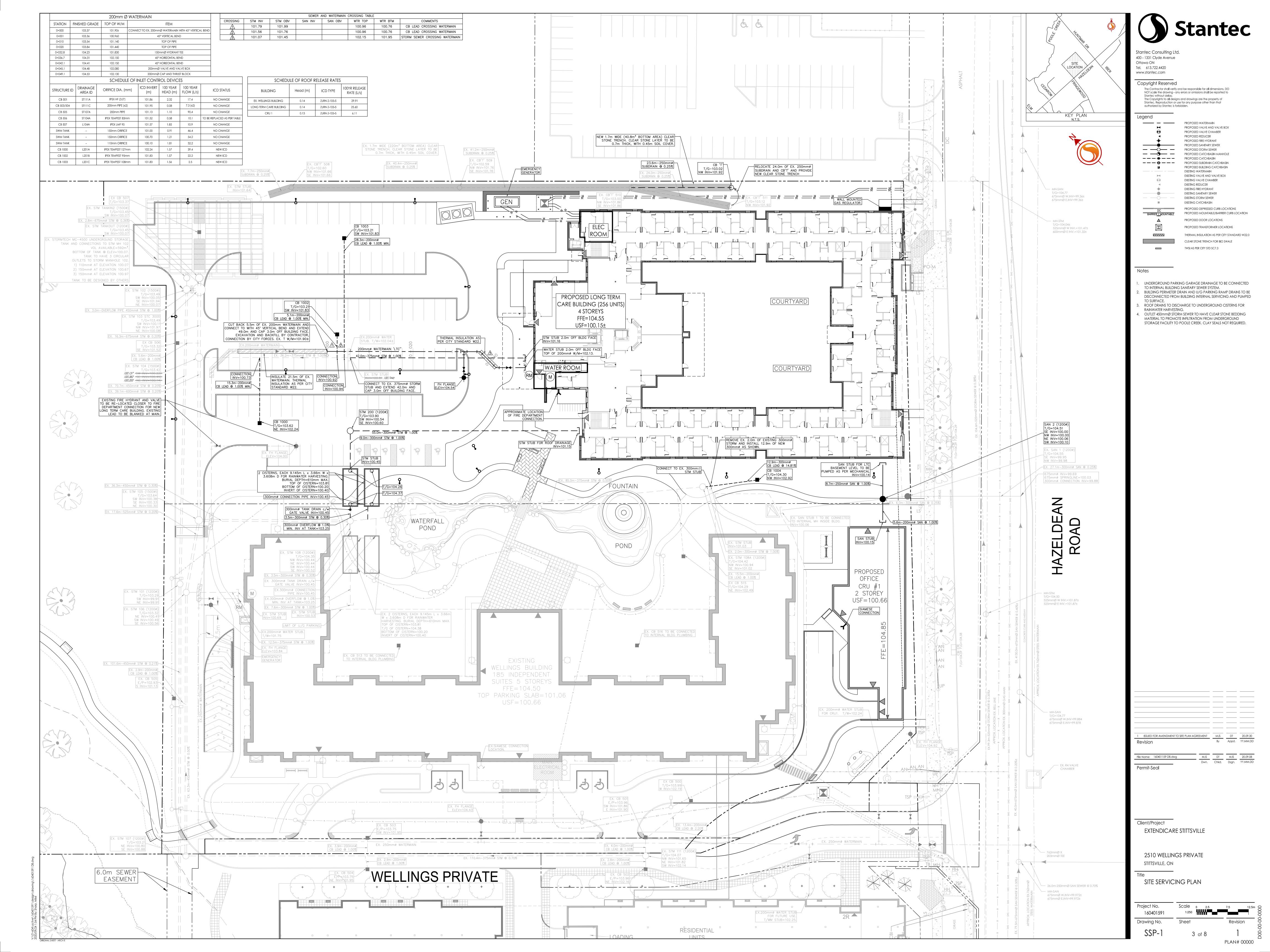
2510 WELLINGS PRIVATE STITTSVILLE, ON

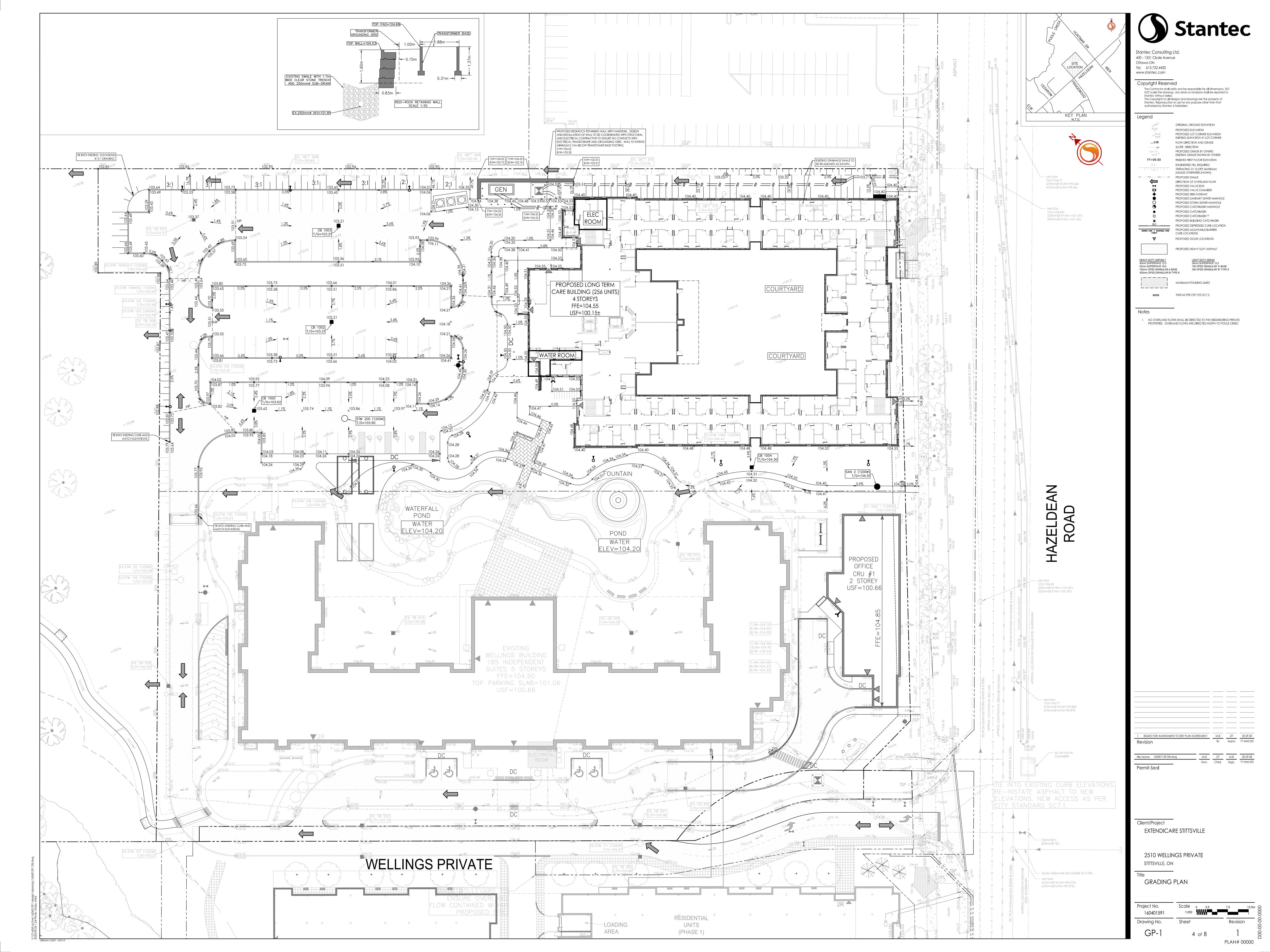
NOTES AND LEGENDS PLAN

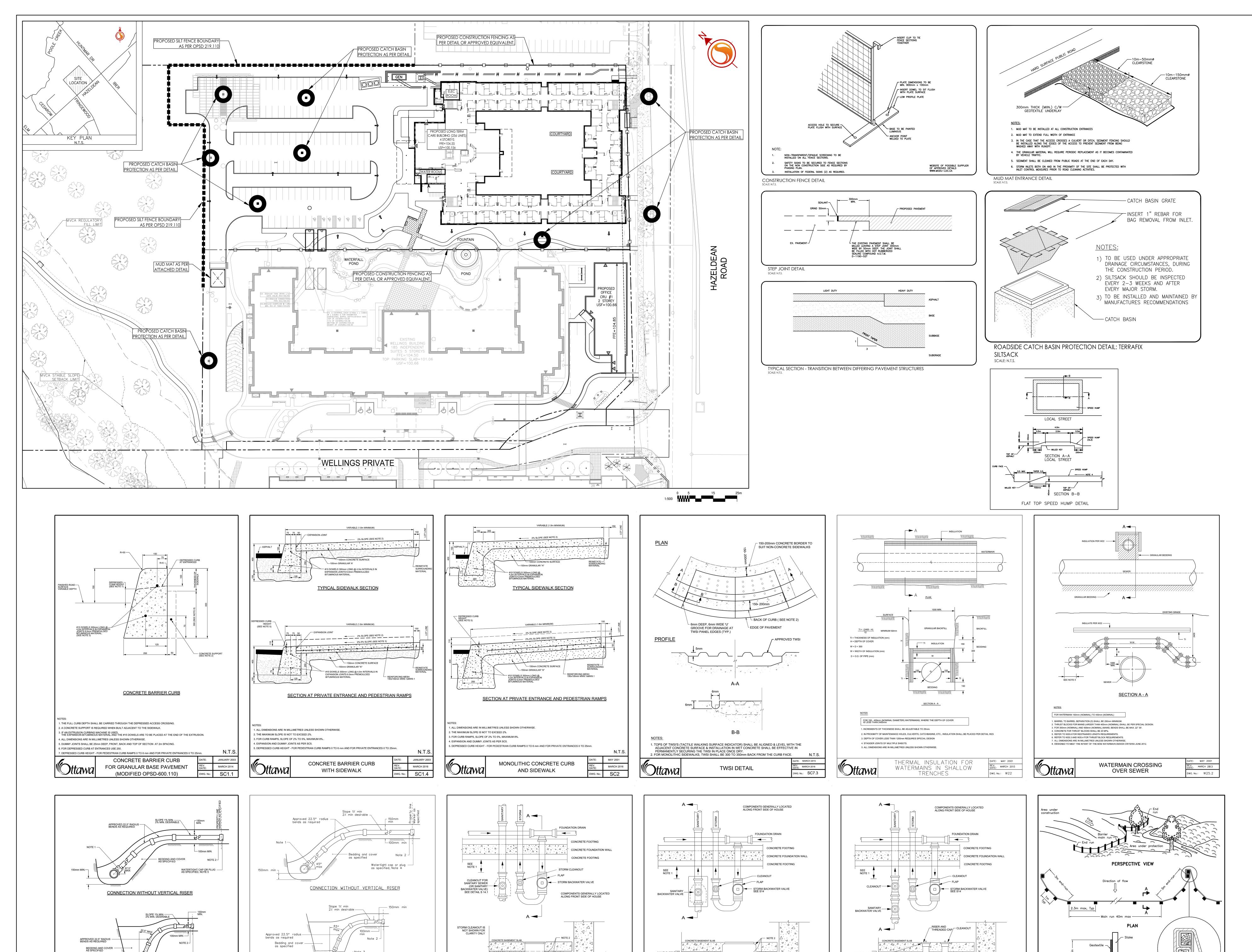
Project No. 160401591 Drawing No. Revision

PLAN# 00000









MAKE SURE VALVE COVER IS TIGHTLY SECURED AS PER MANUFACTURERS SPECIFICATIONS

SECTION A-A

BACKWATER VALVE, CLEAN-OUTS AND ANY OTHER FITTINGS MUST BE INSTALLED A MINIMUM OF 300mm INSIDE OF THE BASEMENT FOOTING. THIS IS TO ENSURE THERE IS SUFFICIENT ROOM TO REPLACE THESE COMPONENTS IN THE FUTURE WITHOUT HAVING TO DAMAGE THE FOOTING/WALL DURING THE PROCESS

JOINTS BETWEEN THE SLEEVE AND THE BACKWATER VALVE AND THE FLOOR SHALL BE WATERTIGHT.

STORM BACKWATER VALVE

FOUNDATION DRAIN BACKWATER

MARCH 2011

SECTION A-A

SANITARY BACKWATER VALVE

. BACKWATER VALVE, CLEAN-OUTS AND ANY OTHER FITTINGS MUST BE INSTALLED A MINIMUM OF 300mm

2. JOINTS BETWEEN THE ACCESS BOX SECTIONS AND THE ACCESS BOX AND THE BACKWATER VALVE AND THE FLOOR SLAB SHALL BE SEALED.

INSIDE OF THE BASEMENT FOOTING. THIS IS TO ENSURE THERE IS SUFFICIENT ROOM TO REPLACE THESE COMPONENTS IN THE FUTURE WITHOUT HAVING TO DAMAGE THE FOOTING/WALL DURING THE PROCESS

SANITARY BACKWATER

VALVE INSTALLATION TYPE 1

. MARCH 2011

— Note 1

<u>VERTICAL RISER</u>

1. ALL DIAMETERS OF SERVICE CONNECTIONS TO FLEXIBLE MAIN SEWER SHALL BE MADE USING APPROVED TEE OR WYE FITTINGS.

2. SANITARY SERVICES TO BE 135mm AND STORM SERVICES TO BE 100mm FOR NEW RESIDENCES UNLESS SPECIFIED OTHERWISE. SERVICE PIPE AND RADIUS BENDS TO BE APPROVED CSA B182.2, SDR28 PRODUCTS UNLESS SPECIFIED OTHERWISE.

4. CAP OR PLUG AT THE PROPERTY LINE SHALL BE ADEQUATELY BRACED TO WITHSTAND TESTING PRESSURE.

Watertight cap or plug — as specified, Note 4

SEWER SERVICE CONNECTIONS
FOR FLEXIBLE MAIN SEWER PIPE

DATE: MARCH 2006

REV. DATE: MARCH 2013

150mm min ¬

5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

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authorized by Stantec is forbidden.

PROPOSED SILT FENCE BOUNDARY AS PER OPSD 219.110

PROPOSED MUD MAT LOCATION PROPOSED CONSTRUCTION FENCING AS PER

DETAIL OR APPROVED EQUIVALENT.

PROPOSED CATCH BASIN PROTECTION AS



Best Management Practices

CONTRACTOR TO PROVIDE EROSION AND SEDIMENT CONTROLS (BEST MANAGEMENT PRACTICES) DURING CONSTRUCTION OF THIS PROJECT. EROSION MUST BE MINIMIZED AND SEDIMENTS MUST BE REMOVED FROM CONSTRUCTION SITE RUN-OFF IN ORDER TO PROTECT DOWNSTREAM AREAS. DURING ALL CONSTRUCTION, EROSION AND SEDIMENTATION SHOULD BE CONTROLLED BY THE FOLLOWING TECHNIQUES:

REVEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE. MINIMIZE AREA TO BE CLEARED AND GRUBBED.

LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME.

- PROTECT EXPOSED SLOPES WITH PLASTIC OR SYNTHETIC MULCHES.
- INSTALL CATCH BASIN INSERTS OR EQUIVALENT IN ALL PROPOSED CATCH BASINS AND CATCH BASIN
- MANHOLES AND IN ALL EXISTING CATCH BASINS THAT WILL RECEIVE RUN-OFF FROM THE SITE. A SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF ALL AND ANY STOCKPILES OF MATERIAL TO BE USED OR REMOVED FROM SITE. (LOCATION TO BE DETERMINED)
- A VISUAL INSPECTION SHALL BE DONE DAILY ON SEDIMENT CONTROL MEASURES AND CLEANED OF ANY ACCUMULATED SILT AS REQUIRED. THE DEPOSITS WILL BE DISPOSED OFF SITE AS PER THE REQUIREMENTS OF THE CONTRACT. SEDIMENT CONTROL BARRIERS MAY ONLY BE REMOVED TEMPORARILY WITH APPROVAL OF
- BARRIERS MUST BE REINSTATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED. NO REMOVAL WILL OCCUR IF THERE IS A SIGNIFICANT RAINFALL EVENT ANTICIPATED (>10mm) UNLESS A NEW DEVICE HAS BEEN INSTALLED TO PROTECT EXISTING STORM AND SANITARY SEWER SYSTEMS, OR DOWNSTREAM WATERCOURSES. NO REFUELING OR CLEANING OF EQUIPMENT IS PERMITTED NEAR ANY EXISTING WATERWAY.

CONTRACTOR SHALL REMOVE SEDIMENT CONTROL MEASURES WHEN, IN THE OPINION OF THE

- CONTRACT ADMINISTRATOR, THE MEASURE(S) IS NO LONGER REQUIRED. NO CONTROL MEASURES SHALL BE PERMANENTLEY REMOVED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE THE CONTRACTOR SHALL PERIODICALLY, OR WHEN REQUESTED BY THE CONTRACT ADMINISTRATOR,
- CLEAN OUT ACCUMULATED SEDIMENTS AS REQUIRED. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO THE WATERCOURSE. APPROPRIATE RESPONSE MEASURES, INCLUDING
- ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
- 3. CONTRACTOR SHALL INSTALL MUD MATS AT BOTH ENTRANCES TO THE SITE. 14. STORMWATER SWALES TO BE COVERED WITH HYDRO-SEED AND MULCH.

Revision Permit-Seal

Client/Project

Trench shall be

backfilled and

NOTE:

SECTION A-A

A All dimensions are in millimetres unless otherwise shown.

LIGHT-DUTY

SILT FENCE BARRIER

ONTARIO PROVINCIAL STANDARD DRAWING

NORMALLY OPEN FLAP

SANITARY BACKWATER VALVE

2. JOINTS BETWEEN CLEANOUT AND THE BACKWATER VALVE AND THE FLOOR SLAB SHALL BE SEALED.

BACKWATER VALVE, CLEANOUTS AND ANY OTHER FITTINGS MUST BE INSTALLED A MINIMUM OF 300mm

INSIDE OF THE BASEMENT FOOTING. THIS IS TO ENSURE THERE IS SUFFICIENT ROOM TO REPLACE THESE COMPONENTS IN THE FUTURE WITHOUT HAVING TO DAMAGE THE FOOTING/WALL DURING THE PROCESS

SANITARY BACKWATER

VALVE INSTALLATION TYPE 2

JOINT DETAIL

. – – – – – .

OPSD 219.110

EXTENDICARE STITTSVILLE

2510 WELLINGS PRIVATE STITTSVILLE, ON

EROSION CONTROL PLAN AND **DETAIL SHEET**

Project No. 160401591 Drawing No. Revision

PLAN# 00000

150mm MIN.-

VERTICAL RISER SHALL BE SAME AS SERVICE PIPE UNLESS OTHERWISE SPECIFIED.

7. APPROVED CUT-IN TOOL MUST BE USED FOR FIELD MADE CONNECTIONS.

5. CAP OR PLUG AT THE PROPERTY LINE SHALL BE ADEQUATELY BRACED TO WITHSTAND TESTING PRESSURE.

6. FOR NEW CONSTRUCTION, INSERTS MUST BE INSTALLED ON THE MAIN PIPE BEFORE THAT PIPE IS LAID. FOR SERVICES/BRANCHES 375mm DIA. OR LESS, APPROVED "CORED TEES" MAY BE USED.

NOTE 1

VERTICAL RISER

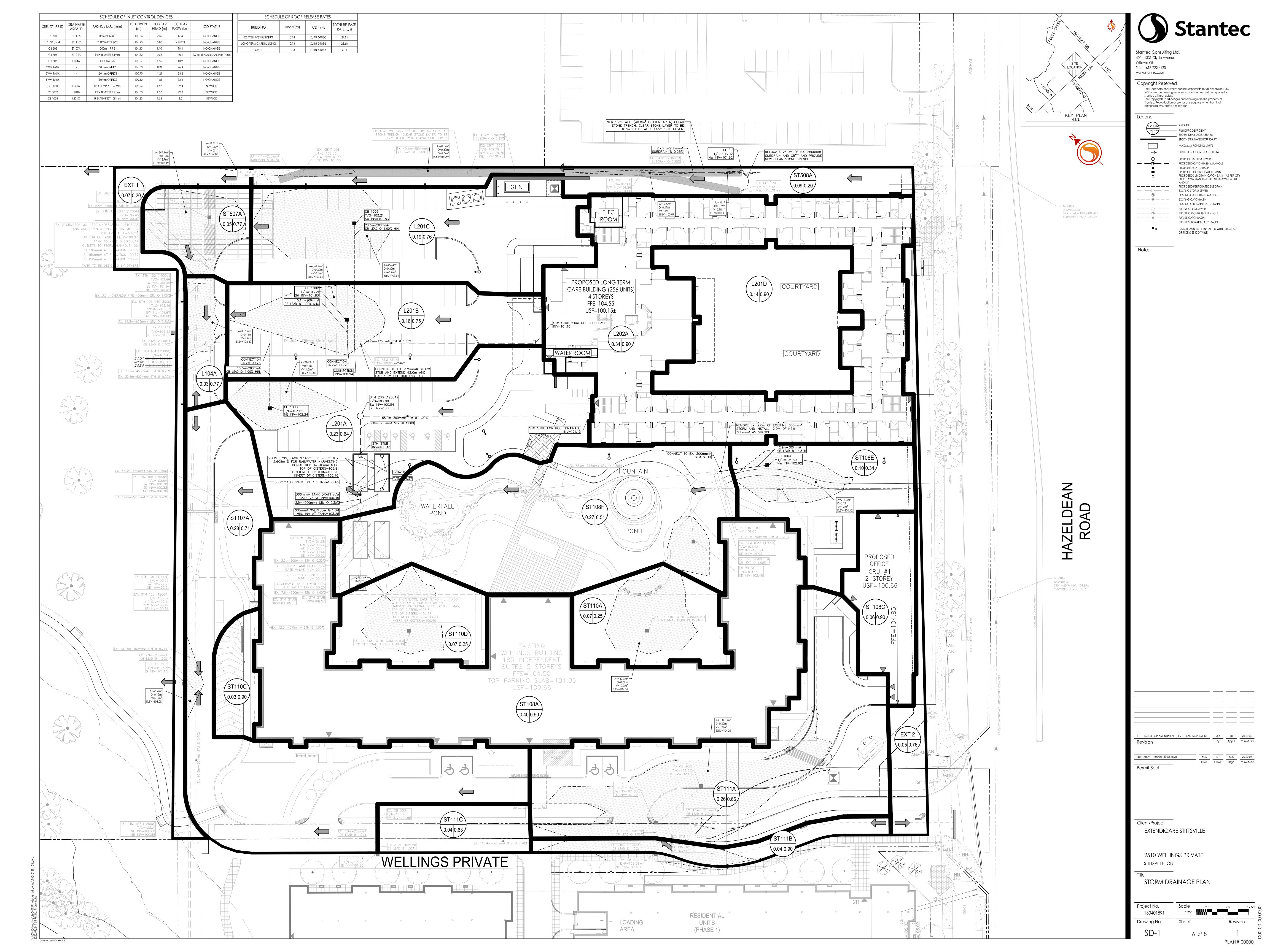
SEWER SERVICE CONNECTIONS

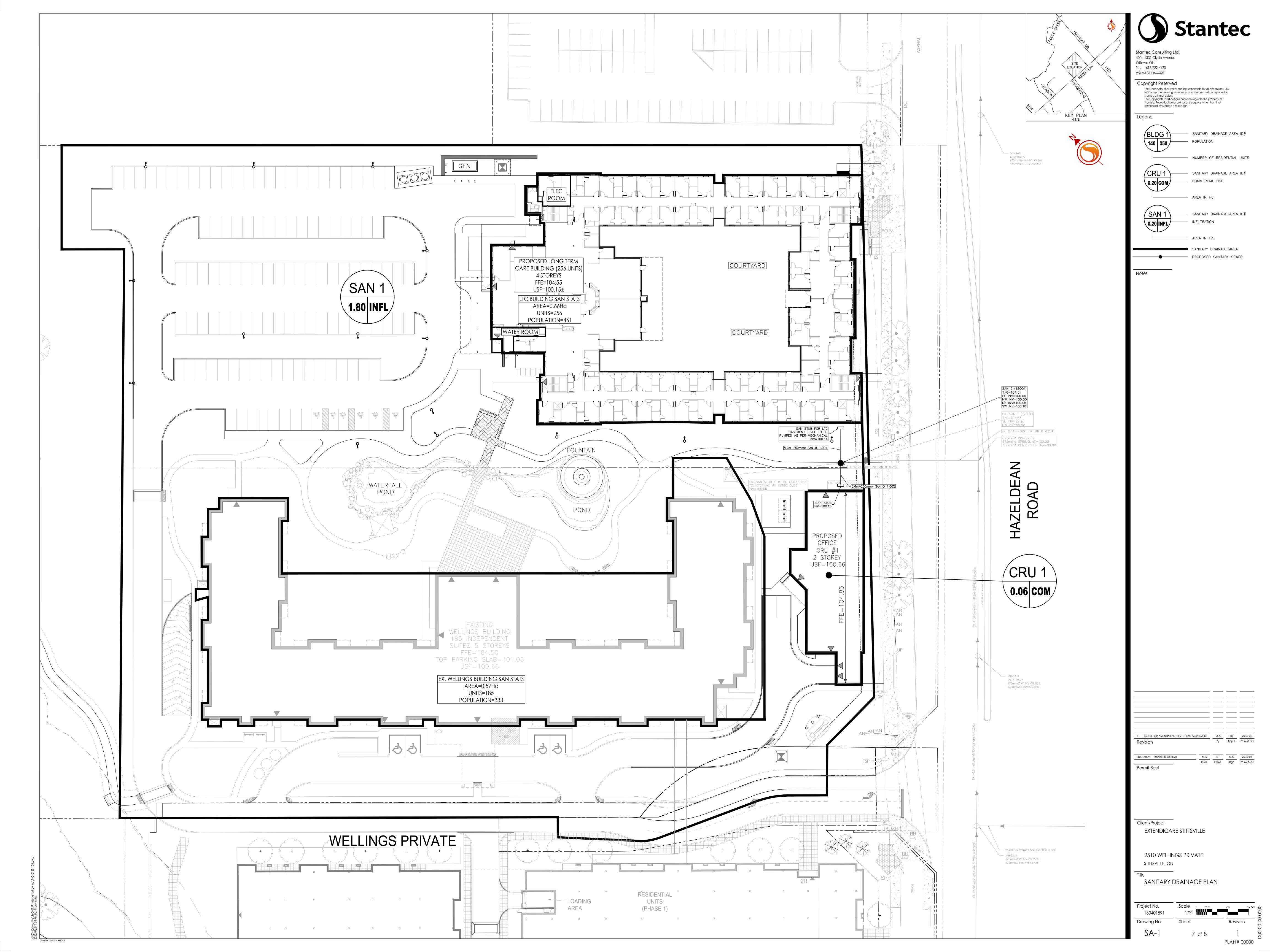
1. ALL DIAMETERES OF SERVICE CONNECTIONS THAT HAVE NOMINAL DIAMETERS NO GREATER THAN 50% OF THE NOMINAL DIAMETER OF THE RIGID SEWER PIPE SHALL BE MADE USING A BELL END INSERT AS PER \$11.2 OR AN APPROVED RUBBER GASKETED INSERT, INSTALLED ABOVE THE SPRING LINE.

WATERTIGHT CAP OR PLUG-AS SPECIFIED, NOTE 5

DATE: MARCH 2006

MARCH 2014





MINIMUM REQUIREMENTS DURING CONSTRUCTION IN ORDER TO PROVIDE A LETTER OF COMPLIANCE TO THE CITY OF OTTAWA FOR THE CIVIL SITE DEVELOPMENT WORKS IN ACCORDANCE WITH SITE GRADING, SERVICING AND EROSION CONTROL PLANS; STANTEC REQUIRES THE FOLLOWING DURING CONSTRUCTION; a. STANTEC SHALL REVIEW AND APPROVE ALL ALTERNATIVE PRODUCTS PRIOR TO CONSTRUCTION b. CHECK INSTALLATION AND FUNCTION OF EROSION SEDIMENT CONTROL FEATURES AND PROVIDE SIGN-OFF PRIOR TO CONSTRUCTION c. CHECK INSTALLATION AND CONNECTION OF STORM STRUCTURES AND SEWERS. d.CHECK INSTALLATION OF STORMWATER INFILTRATION SYSTEM, INCLUDING BUT NOT LIMITED TO i. INFILTRATION TESTING ON NATIVE SUB-GRADE MATERIAL TO CONFIRM DESIGN ASSUMPTIONS ii. CHECK SUB-GRADE ELEVATIONS PRIOR TO PLACEMENT OF GRANULAR MATERIALS
iii.CHECK FILTER FABRIC, CONCRETE FLOW BARRIERS, AND PLACEMENT AND COMPACTION OF DRAINAGE STONE iv.CHECK ELEVATIONS OF DRAINAGE GRANULAR PRIOR TO PLACEMENT OF UNIT PAVERS v. FINAL INFILTRATION TESTING ON COMPLETED STORMWATER INFILTRATION SYSTEM e. THE OWNER WILL NEED TO RETAIN AN OUTSIDE ENGINEER TO COORDINATE, INSPECT AND CERTIFY ALL RETAINING WALLS AND ASSOCIATED COMPONENTS INCLUDING BUT NOT LIMITED TO SUB-DRAINS AND HANDRAILS THE ABOVE ARE NECESSARY INSPECTIONS FOR US TO COMPLETE IN ORDER TO PROVIDE THE LETTER OF COMPLIANCE REQUIRED BY THE CITY TO CLEAR SITE DEVELOPMENT WORKS AND THE ONTARIO BUILDING CODE CONDITIONS. WITHOUT COMPLETING ALL OF THE REQUIREMENTS AS LAID OUT ABOVE, STANTEC RESPECTFULLY RESERVES THE RIGHT TO DENY PROVIDING SIGN-OFF ON BEHALF OF THE

WE ASK THAT NOTIFICATION FOR INSPECTION BE GIVEN TO STANTEC A MINIMUM OF 48 HOURS BEFORE COMMENCEMENT OF THE REQUIRED WORKS IN EACH SECTION. CONSTRUCTION GUIDANCE AND BEST MANAGEMENT PRACTICES • ALL FINISH GRADING ACTIVITIES IN THE INFILTRATION BMP SHOULD BE PERFORMED DURING DRY CONDITIONS TO PREVENT SOIL SMEARING AND COMPACTION. DEWATERING MAY BE NECESSARY PRIOR TO COMMENCING WORK. • EXCAVATION OF THE INFILTRATION BMP SHOULD BE DONE FROM THE OUTSIDE REACHING IN WHEN POSSIBLE, USING A BACK HOE OR BUCKET WITH EXTENSION ARM. A TOOTHED BUCKET IS RECOMMENDED SO COMPACTION CAUSED BY EXCAVATION CAN BE BROKEN UP BY SCARIFYING THE

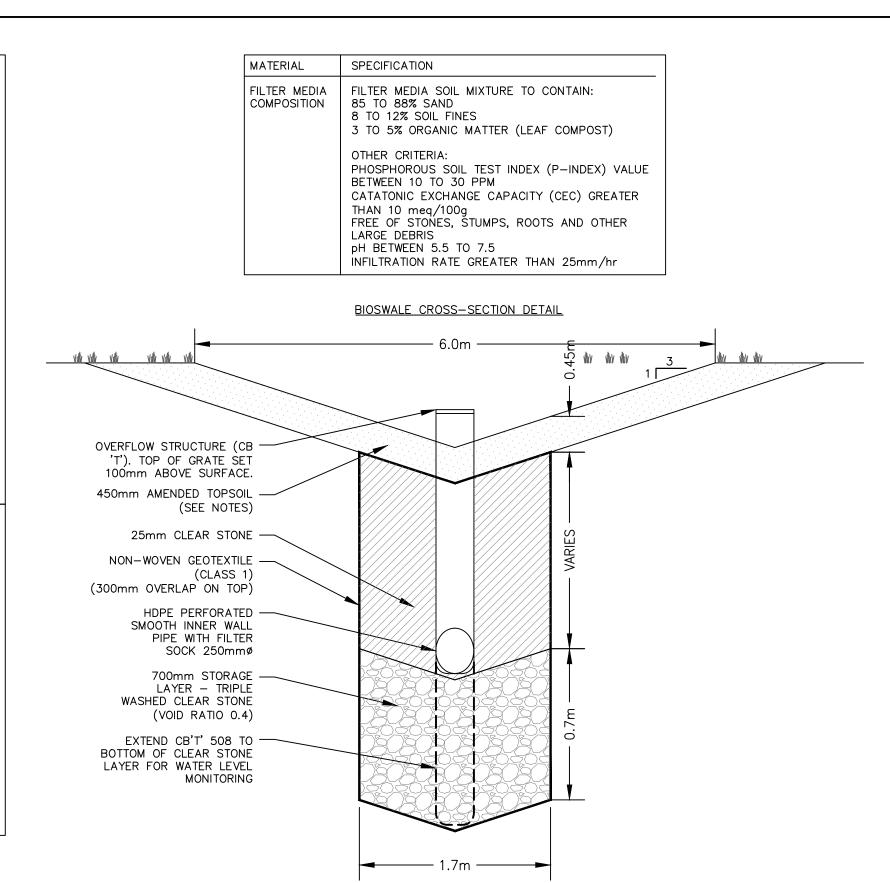
FINAL SITE INSPECTION INCLUDING GRADING CHECK AND PREPARATION OF A LETTER OF COMPLIANCE FOLLOWING THE INSTALLATION OF ALL SITE SERVICES AND STORMWATER INFILTRATION WORKS WILL BE

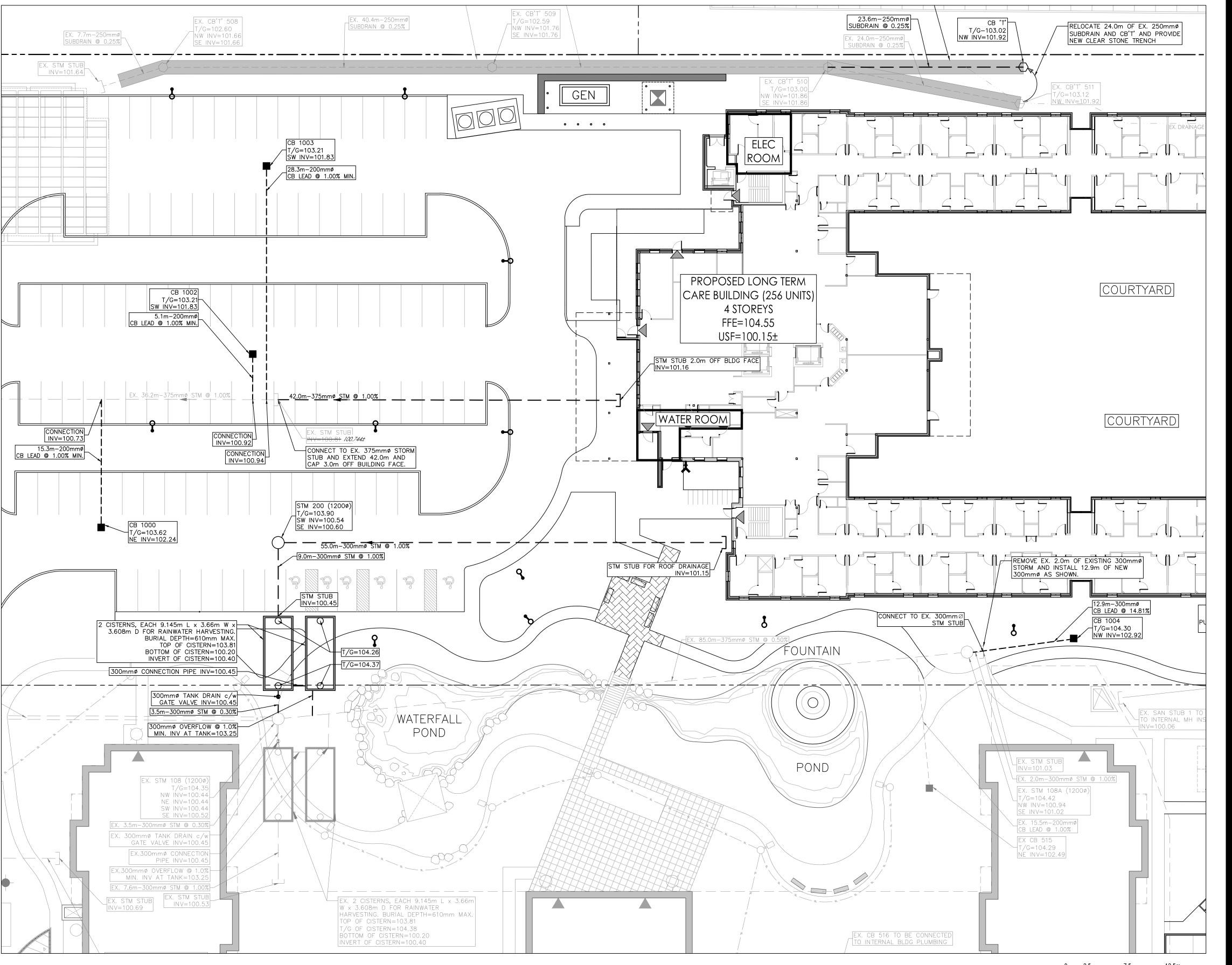
COMPLETED ONCE ALL KNOWN DEFICIENCIES ARE CORRECTED.

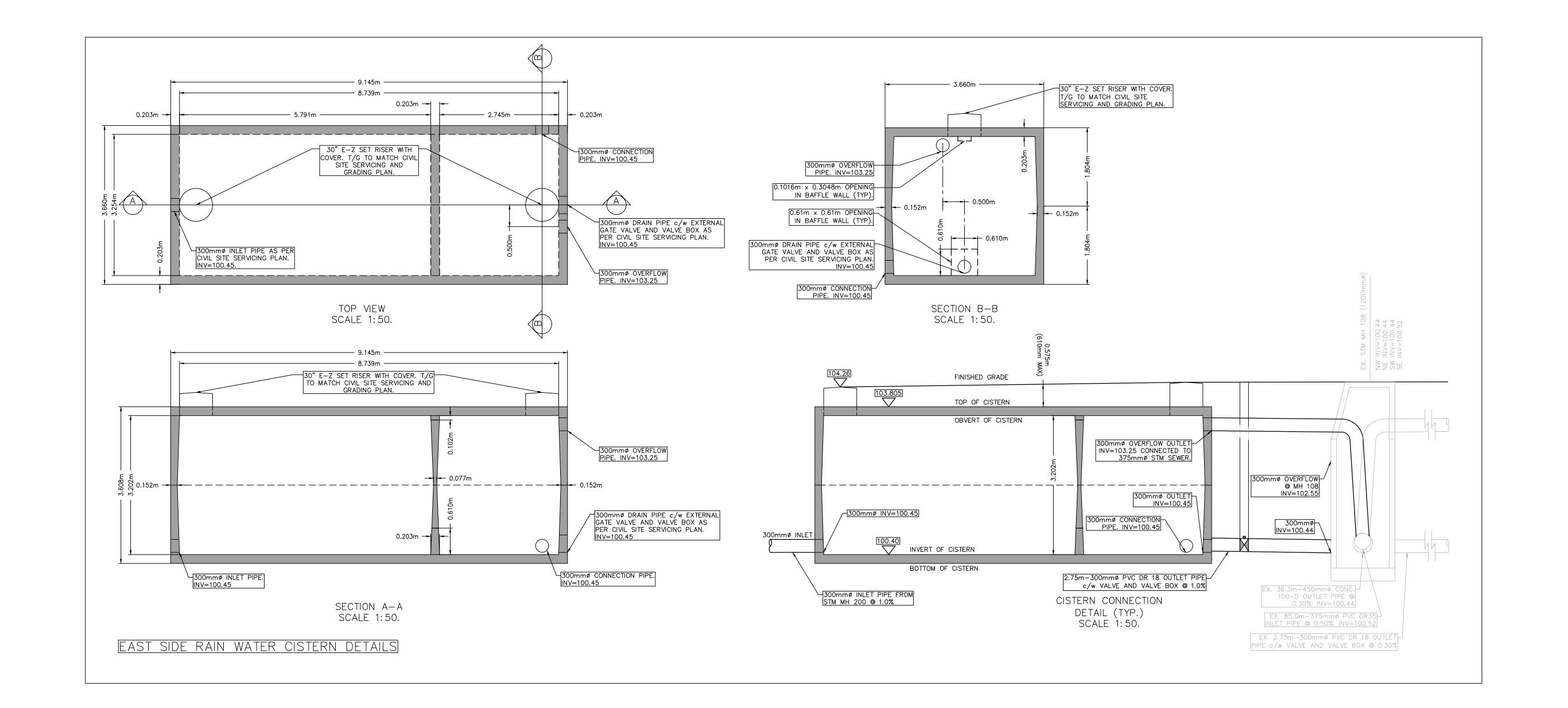
BE ASSOCIATED WITH THE MATERIAL

• IF EQUIPMENT IS NEEDED INSIDE THE FACILITY, LOW GROUND PRESSURE RATED OR MARSH TRACK EQUIPMENT SHOULD BE USED TO MINIMIZE COMPACTION. • ONCE EXCAVATED TO SUBGRADE, THE INFILTRATION BMP BOTTOM AND SIDE SLOPES SHOULD BE SCARIFIED OR TILLED TO LOOSEN COMPACTED SOILS. • ONCE EXCAVATED TO SUBGRADE, SOIL TYPES AND DESIGN PARAMETERS AND ASSUMPTIONS SHOULD BE CONFIRMED THROUGH IN-SITU PERMEABILITY TESTING (E.G., PERMEAMETER MEASUREMENTS TO DETERMINE HYDRAULIC CONDUCTIVITY). RESULTS OF PERMEABILITY TESTING SHOULD BE REVIEWED BY THE DESIGNER AND, IF NECESSARY, CHANGES TO THE BMP DESIGN MAY BE REQUIRED. ROCK MATERIAL CLEAN, WASHED GRANITIC ROCK MATERIAL IS RECOMMENDED. IF LIMESTONE IS USED NO FINES SHOULD

SOURCE: SEE CVC CONSTRUCTION GUIDE FOR ADDITIONAL INFORMATION AND TECHNIQUES









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Legend

Best Management Practices CONTRACTOR TO PROVIDE EROSION AND SEDIMENT CONTROLS (BEST MANAGEMENT PRACTICES) DURING CONSTRUCTION OF THIS PROJECT.

EROSION MUST BE MINIMIZED AND SEDIMENTS MUST BE REMOVED FROM

ALL CONSTRUCTION, EROSION AND SEDIMENTATION SHOULD BE CONTROLLED BY THE FOLLOWING TECHNIQUES:

CONSTRUCTION SITE RUN-OFF IN ORDER TO PROTECT DOWNSTREAM AREAS, DURING

LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME. REVEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE.

PROTECT EXPOSED SLOPES WITH PLASTIC OR SYNTHETIC MULCHES.

INSTALL CATCH BASIN INSERTS OR EQUIVALENT IN ALL PROPOSED CATCH BASINS AND CATCH BASIN MANHOLES AND IN ALL EXISTING CATCH BASINS THAT WILL RECEIVE RUN-OFF FROM THE SITE. A SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF ALL AND ANY

STOCKPILES OF MATERIAL TO BE USED OR REMOVED FROM SITE. (LOCATION TO BE DETERMINED) A VISUAL INSPECTION SHALL BE DONE DAILY ON SEDIMENT CONTROL MEASURES AND CLEANED OF ANY ACCUMULATED SILT AS REQUIRED. THE DEPOSITS WILL BE DISPOSED OFF SITE AS PER THE REQUIREMENTS OF THE CONTRACT. SEDIMENT CONTROL BARRIERS MAY ONLY BE REMOVED TEMPORARILY WITH

APPROVAL OF CONTRACT ADMINISTRATOR TO ACCOMMODATE CONSTRUCTION OPERATIONS. ALL AFFECTED BARRIERS MUST BE REINSTATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED. NO REMOVAL WILL OCCUR IF THERE IS A SIGNIFICANT RAINFALL EVENT ANTICIPATED (>10mm) UNLESS A NEW DEVICE HAS BEEN INSTALLED TO PROTECT EXISTING STORM AND SANITARY SEWER SYSTEMS, OR DOWNSTREAM WATERCOURSES. NO REFUELING OR CLEANING OF EQUIPMENT IS PERMITTED NEAR ANY EXISTING

CONTRACTOR SHALL REMOVE SEDIMENT CONTROL MEASURES WHEN, IN THE OPINION OF THE CONTRACT ADMINISTRATOR, THE MEASURE(S) IS NO LONGER REQUIRED. NO CONTROL MEASURES SHALL BE PERMANENTLEY REMOVED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CONTRACT

THE CONTRACTOR SHALL PERIODICALLY, OR WHEN REQUESTED BY THE CONTRACT ADMINISTRATOR, CLEAN OUT ACCUMULATED SEDIMENTS AS THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO THE WATERCOURSE. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.

CONTRACTOR SHALL INSTALL MUD MATS AT BOTH ENTRANCES TO THE SITE. STORMWATER SWALES TO BE COVERED WITH HYDRO-SEED AND MULCH.

__ ___ ___ ___ ___ ISSUED FOR AMENDMENT TO SITE PLAN AGREEMENT MJS DT 20.09.30 Revision File Name: 160401159 DB.dwg Permit-Seal

Client/Project EXTENDICARE STITTSVILLE

2510 WELLINGS PRIVATE

STITTSVILLE, ON

LOW IMPACT DEVELOPMEN

Project No. 160401591 Drawing No.

PLAN# 00000