

# LEGEND

## CONTROL / MONUMENTS / PROPERTY / SURVEY

- IRON BAR
- STANDARD IRON BAR
- ROUND IRON BAR
- CUT CROSS
- CONCRETE MONUMENT
- NAIL
- TOTAL STATION POINT
- BENCHMARK
- PROPERTY LINE / RIGHT-OF-WAY / EASEMENT
- - - - - SETBACK LINE

## GROUND FEATURES / SURFACE OBJECTS / GRADING

- 101.21 x PROPOSED GRADING ELEVATIONS
- 100.00 x EXISTING GRADE ELEVATIONS
- MAJOR OVERLAND FLOW ROUTE
- 0.0% SURFACE GRADE (SLOPE%)
- FENCE LINES
- FENCE GATE
- LIMIT OF MAXIMUM PONDING
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- TOP OF BANK
- PROPOSED SILT FENCE
- PROPOSED CONCRETE SIDEWALK/WALKWAY
- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED LIGHT DUTY ASPHALT
- PROPOSED UNIT PAVERS
- PROPOSED STONEDUST PATH
- PROPOSED SWALE

## WATER / STORM / SANITARY

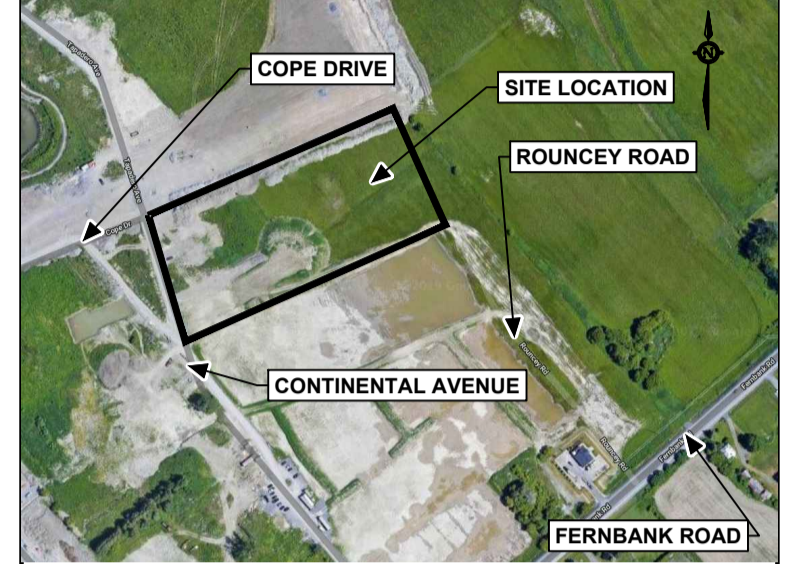
- W — PROPOSED WATERMAIN
- REMOTE WATER METER
- WATER METER
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT
- WV PROPOSED WATER VALVE
- DRAINAGE MANHOLE
- ◻ CATCH BASIN (SINGLE)
- REAR YARD CATCH BASIN/ TWIN CATCH BASIN
- STM — PROPOSED STORM SEWER
- - - - - PROPOSED HDPE PERFORATED PIPE
- - - - - SD - - - - - PROPOSED SUBDRAIN
- SANITARY MANHOLE
- SAN — PROPOSED SANITARY SEWER
- PROPOSED CAP (STORM, SANITARY & WATER)
- PROPOSED ROOF DRAIN
- PROPOSED ROOF SCUPPER

## MISCELLANEOUS

- BIKE RACK
- EARTH BINS
- BARRIER FREE PARKING SYMBOL
- AREA ID
- RUNOFF COEFFICIENT
- AREA (ha)
- PROPOSED DRAINAGE AREA BOUNDARY
- PROPOSED BUILDING



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No.	DESCRIPTION	YYYY-MM-DD
3	REVISED PER CITY COMMENTS	2020-02-18
2	ISSUED FOR BUILDING PERMIT	2019-12-19
1	ISSUED FOR SITE PLAN CONTROL	2019-11-28



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project  
**FERNBANK ELEMENTARY SCHOOL**

480 COPE DRIVE, OTTAWA, ONTARIO

seal

drawing title <b>LEGEND</b>	
scale N.T.S.	drawn by M.S.
date DEC 2019	checked by B.K.
project number	drawing number <b>C01</b>
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
revision	

**GENERAL NOTES**

- DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND LANDSCAPE DRAWINGS.
- ALL SERVICES, MATERIALS, CONSTRUCTION METHODS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND REGULATIONS OF THE CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS, ONTARIO PROVINCIAL STANDARD SPECIFICATION (OPSS) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD), UNLESS OTHERWISE SPECIFIED, TO THE SATISFACTION OF THE CITY AND THE CONSULTANT.
- THE POSITION OF EXISTING POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS. WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING THE COURSE OF CONSTRUCTION. ANY RELOCATION OF EXISTING UTILITIES REQUIRED BY THE DEVELOPMENT OF SUBJECT LANDS IS TO BE UNDERTAKEN AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR MUST NOTIFY ALL EXISTING UTILITY COMPANY OFFICIALS FIVE (5) BUSINESS DAYS PRIOR TO START OF CONSTRUCTION AND HAVE ALL EXISTING UTILITIES AND SERVICES LOCATED IN THE FIELD OR EXPOSED PRIOR TO THE START OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO POWER, COMMUNICATION AND GAS LINES.
- ALL TRENCHING AND EXCAVATIONS TO BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS AND AS PER THE RECOMMENDATIONS INCLUDED IN THE GEOTECHNICAL REPORT.
- REFER TO ARCHITECTS PLANS FOR BUILDING DIMENSIONS & LAYOUT. REFER TO LANDSCAPE PLAN FOR LANDSCAPED DETAILS AND OTHER RELEVANT INFORMATION. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- TOPOGRAPHIC SURVEY COMPLETED AND PROVIDED BY FARLEY, SMITH & DENIS SURVEYING DATED SEPTEMBER 23, 2019. CONTRACTOR TO VERIFY IN THE FIELD PRIOR TO CONSTRUCTION OF ANY WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. VERIFY THAT JOB BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED.
- ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCHBASIN OUTLETS ARE PROVIDED.
- ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE WITH STEP JOINTS OF 500mm WIDTH MINIMUM.
- ALL DISTURBED AREAS OUTSIDE PROPOSED GRADING LIMITS TO BE RESTORED TO ORIGINAL ELEVATIONS AND CONDITIONS UNLESS OTHERWISE SPECIFIED. ALL RESTORATION SHALL BE COMPLETED WITH THE GEOTECHNICAL REQUIREMENTS FOR BACKFILL AND COMPACTION.
- ABUTTING PROPERTY GRADES TO BE MATCHED UNLESS OTHERWISE SHOW.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION, INCLUDING WATER PERMIT AND ROAD CUT PERMIT.
- MINIMIZE DISTURBANCE TO EXISTING VEGETATION DURING THE EXECUTION OF ALL WORKS.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE PROPOSED BUILDING, PARKING AND ROADWAY LOCATIONS.
- AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. STORM SEWER, SANITARY SEWER, WATER ETC.) THE CONTRACTOR SHALL DETERMINE THE PRECISE LOCATION AND DEPTH OF EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
- CONTRACTOR TO OBTAIN POST-CONSTRUCTION TOPOGRAPHIC SURVEY COMPLETED BY OLS OR P.ENG CONFIRMING COMPLIANCE WITH DESIGN GRADING AND SERVICING. SURVEY IS TO INCLUDE LOCATION AND INVERTS FOR BURIED UTILITIES.
- ABIDE BY RECOMMENDATIONS OF GEOTECHNICAL REPORT. REPORT ANY VARIATIONS IN OBSERVED CONATIONS FROM THOSE INCLUDED IN THE REPORT.
- REFERENCE DOCUMENTS
  - DESIGN BRIEF, PREPARED BY JP2G
  - PRELIMINARY GEOTECHNICAL REPORT, PREPARED BY EXP
- PROVIDE CCTV INSPECTION REPORT FOR ALL SEWERS AND CATCHBASIN LEADS 200mm DIAMETER AND LARGER. REPEAT CCTV INSPECTION FOLLOWING RECTIFICATION OF ANY DEFICIENCIES.

**WATERMAIN NOTES**

- ALL WATERMAIN AND WATERMAIN APPURTENANCES, MATERIALS CONSTRUCTION AND TESTING METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA AND MINISTRY OF ENVIRONMENT STANDARDS AND SPECIFICATIONS.
- ALL WATERMAIN 300mm DIAMETER AND SMALLER TO BE POLYVINYL CHLORIDE (PVC) CLASS 150 DR18 MEETING AWWA SPECIFICATION C900.
- ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE. WHERE WATERMAINS CROSS OVER OTHER UTILITIES, A MINIMUM 0.30m CLEARANCE SHALL BE MAINTAINED. WHERE WATERMAINS CROSS UNDER OTHER UTILITIES, A MINIMUM 0.50m CLEARANCE SHALL BE MAINTAINED. WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED, THE WATERMAIN SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2. WHERE 2.4m MINIMUM DEPTH CANNOT BE ACHIEVED, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA DETAIL W22. WHERE A WATERMAIN IS IN CLOSE PROXIMITY TO AN OPEN STRUCTURE, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W23.
- CONCRETE THRUST BLOCKS AND MECHANICAL RESTRAINTS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, REDUCERS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W25.3 AND W25.4.
- CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARDS W40 AND W42.
- ALL VALVES AND VALVE BOXES AND CHAMBERS, HYDRANTS AND HYDRANT VALVES AND ASSEMBLIES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS.
- FIRE HYDRANT LOCATION AND INSTALLATION AS PER CITY OF OTTAWA STANDARD W18 AND W19. CONTRACTOR TO PROVIDE FLOW TEST AND PAINTING OF NEW HYDRANT IN ACCORDANCE WITH CITY STANDARDS.
- IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

**SANITARY SEWER AND MANHOLE NOTES**

- ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- PROVIDE CCTV INSPECTION FOR ALL NEW SANITARY PIPING. PROVIDE DYE TESTING FOR NEW SERVICES.
- SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR35 (UNLESS SPECIFIED OTHERWISE) WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH CSA B-182.2.3.4.
- SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
- ALL SANITARY MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSD 701.01. FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.
- MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES AS PER OPSD 701.021.
- ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
- IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

**STORM SEWER AND STRUCTURE NOTES**

- ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- STORM SEWERS 450mm DIAMETER AND SMALLER SHALL BE PVC SDR35 WITH RUBBER GASKET PER CSA A-257.3..
- STORM SEWER LARGER THAN 450mm SHALL BE REINFORCED CONCRETE CLASS 65-D.
- SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
- ALL STORM MANHOLES TO BE AS PER STORM STRUCTURE TABLE ON DRAWING C03.
- ANY NEW OR EXISTING STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
- CATCHBASINS IN LANDSCAPED AREAS SHALL BE AS PER CITY OF OTTAWA STANDARD S30 AND S31.
- ALL CATCHBASIN LEADS TO BE MINIMUM 200mm DIAMETER AT MINIMUM 1.0% SLOPE UNLESS OTHERWISE SPECIFIED.
- STORM CATCHBASINS AS PER OPSD 705.010 AND FRAME/COVER AS PER CITY STANDARD DRAWING S19. STORM CATCHBASIN MANHOLES (CBMH) AS INDICATED IN TABLE WITH SUMP. ADJUSTMENT SECTIONS SHALL BE AS PER OPSD 704.010.
- INSTALLATION OF FLOW CONTROL ICD'S TO BE VERIFIED BY QUALITY VERIFICATION ENGINEER RETAINED BY THE CONTRACTOR.

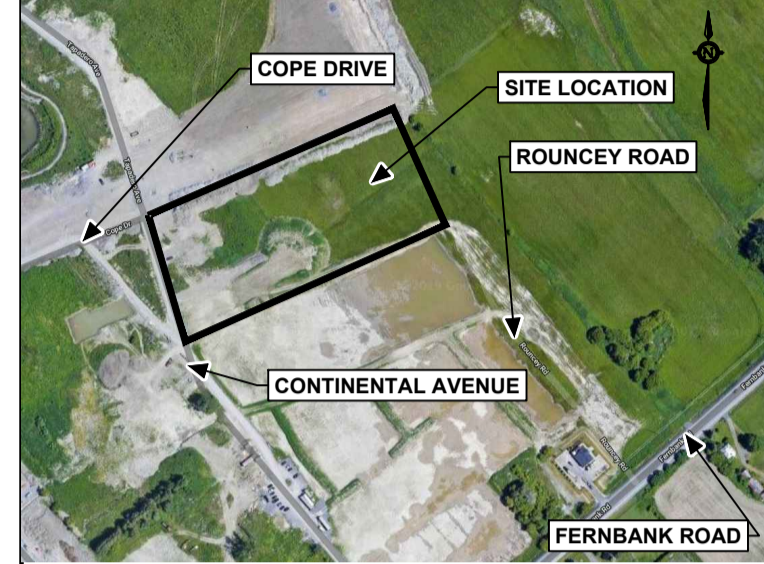
**EROSION AND SEDIMENT CONTROL NOTES**

CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES.

- PRIOR TO START OF CONSTRUCTION:
  - INSTALL SILT FENCE IN LOCATION SHOWN ON DRAWINGS.
  - INSTALL FILTER FABRIC OR SILT SACK FILTERS IN ALL CATCHBASINS AND MANHOLES TO REMAIN DURING CONSTRUCTION WITHIN THE SITE (SEE TYPICAL DETAIL).
  - INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
- DURING CONSTRUCTION:
  - MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE AND IMPACTS TO EXISTING GRADING.
  - PERIMETER VEGETATION TO REMAIN IN PLACE UNTIL PERMANENT STORM WATER MANAGEMENT IS IN PLACE. OTHERWISE IMMEDIATELY INSTALL SILT FENCE WHEN THE EXISTING SITE IS DISTURBED AT THE PERIMETER.
  - PROTECT DISTURBED AREAS FROM OVERLAND FLOW BY PROVIDING TEMPORARY SWALES TO THE SATISFACTION OF THE FIELD ENGINEER. TIE-IN TEMPORARY SWALE TO EXISTING CATCHBASINS AS REQUIRED.
  - PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS.
  - INSPECT SILT FENCES, FILTER FABRIC FILTERS AND CATCHBASIN SUMPS WEEKLY AND WITHIN 24 HOURS AFTER A STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY.
  - DRAWING TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
  - EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES.
  - DO NOT LOCATE TOPSOIL PILES AND EXCAVATED MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS).
  - CONTROL WIND-BLOWN DUST OFF SITE BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED AND TO THE SATISFACTION OF THE ENGINEER).
  - NO ALTERNATIVE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE FIELD ENGINEER.
  - CITY ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING AS REQUIRED.
  - DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPED.
  - ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.
  - TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ABUTTING PROPERTIES OR PUBLIC STREETS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED.
  - ALL EROSION CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
  - THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

**PARKING LOT AND WORK IN PUBLIC RIGHTS OF WAY NOTES**

- CONTRACTOR TO REINSTATE ROAD CUTS AS PER CITY OF OTTAWA DETAIL R10.
- CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING TO THE SATISFACTION OF THE GEOTECHNICAL CONSULTANT PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL.
- FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS.
- CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR B MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. CONTRACTOR TO PROVIDE TESTING AND CERTIFICATION TO SHOW THAT THE MATERIAL COMPLIES WITH THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- GRANULAR A MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR B PLACEMENT.
- CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR A MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF GRANULAR A MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- ASPHALT MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR A PLACEMENT.
- CONTRACTOR TO SUPPLY, PLACE AND COMPACT ASPHALT MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. CONTRACTOR TO PROVIDE TESTING AND CERTIFICATION TO SHOW THAT THE MATERIAL MEETS THE REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS AND FOR PROVIDING THE CONSULTANT WITH VERIFICATION PRIOR TO PLACEMENT.
- ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, THE CONTRACTOR IS TO NOTIFY THE CONSULTANT. CONSULTANT IS TO DETERMINE APPROPRIATE DISPOSAL METHOD/LOCATION.
- PAVEMENT STRUCTURE (MATERIAL TYPES AND THICKNESS) FOR HEAVY DUTY, LIGHT DUTY AND BASKETBALL COURT AREAS TO BE AS SPECIFIED IN THE GEOTECHNICAL REPORT AND SHOWN ON THE PLANS.



No.	DESCRIPTION	YYYY-MM-DD
1	REVISED PER CITY COMMENTS	2020-02-18

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project  
**FERNBANK ELEMENTARY SCHOOL**

480 COPE DRIVE, OTTAWA, ONTARIO

seal

drawing title

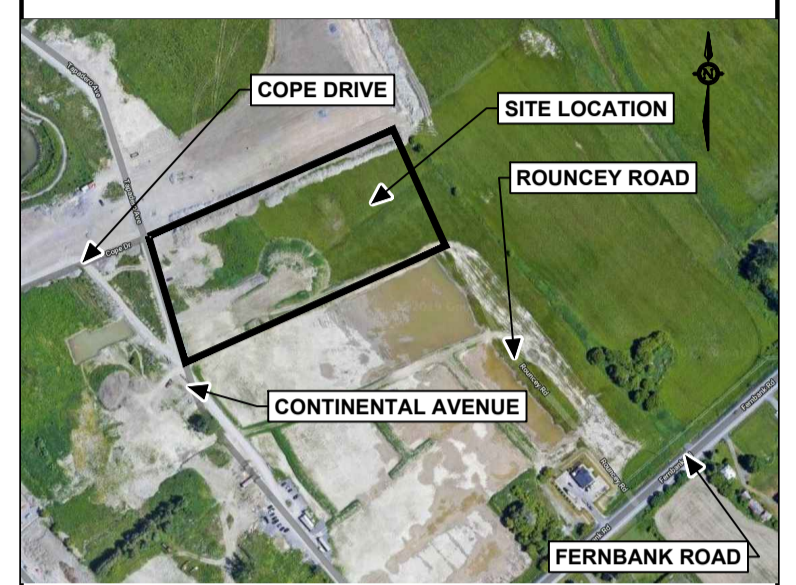
**LEGEND**

scale N.T.S	drawn by M.S.
date DEC 2019	checked by B.K.
project number	drawing number <b>C02</b>
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
revision	



OTTAWA-CARLETON DISTRICT SCHOOL BOARD

Jp2g Consultants Inc. ENGINEERS • PLANNERS • PROJECT MANAGERS



Revision table with columns: No., Description, Date. Includes entries for 'REVISED PER CITY COMMENTS', 'ISSUED FOR BUILDING PERMIT', and 'ISSUED FOR SITE PLAN CONTROL'.



N45 ARCHITECTURE INC. 43 Eccles Street, 2nd Floor - Ottawa, Ontario, K1R 6S3

Project information: FERNBANK ELEMENTARY SCHOOL, 480 COPE DRIVE, OTTAWA, ONTARIO. Includes a professional engineer seal for the Province of Ontario.

Drawing title: SERVICING TABLES. Includes scale (N.T.S.), date (DEC 2019), project number (C03), and drawing number (C03).

WATER SERVICE TABLE with columns: ID, DESCRIPTION, FINISHED GRADE (m), T/O WATERMAIN (m), CHAINAGE (m), OFFSET (m). Lists 17 items including connections, bends, tees, valves, and hydrants.

NOTE: PROVIDE MINIMUM 2.4m COVER OVER T/O WATERMAIN TO FINISHED GRADE, OTHERWISE PROVIDE THERMAL INSULATION HL40 AS PER CITY OF OTTAWA DETAIL W22.

CROSSING TABLE with columns: LOCATION, OVER / UNDER, FINISHED GRADE (m), INVERT, OBVERT, CLEARANCE (m). Lists 6 crossing points for watermain and sanitary sewer.

MANHOLE AND CATCHBASIN SCHEDULE with columns: STRUCTURE ID, TOP OF FRAME ELEVATION (m), PIPE INVERT ELEVATION (m), STRUCTURE DIAMETER (mm) / OPSD No., FRAME (CITY OF OTTAWA OR OPSD). Lists 30 structures including catchbasins (CB, CBMH, TCB) and manholes (STMH, SANMH, EXSANMH).

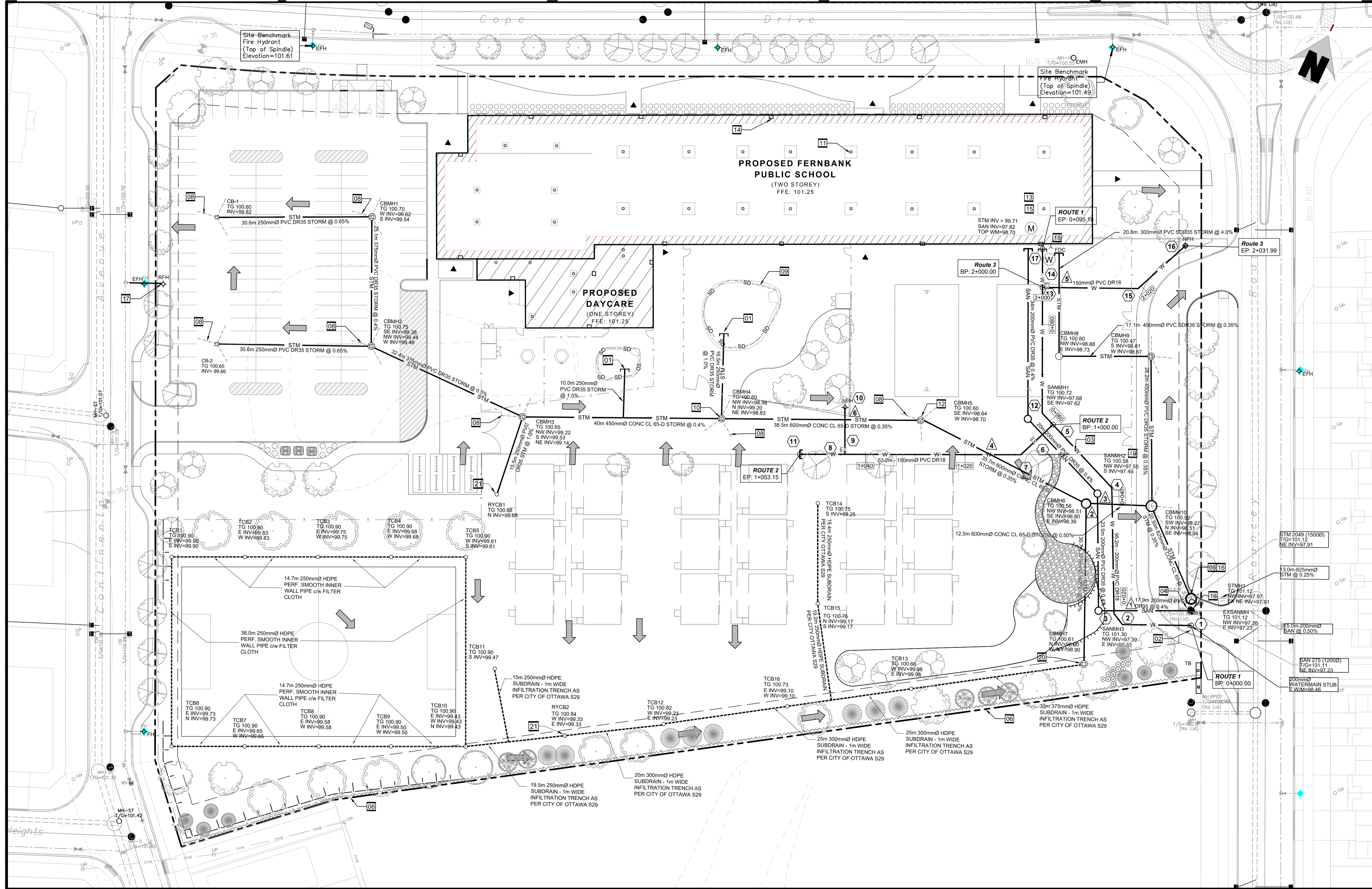
- GENERAL NOTES**
- DESIGN AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH MOST RECENT ONTARIO BUILDING CODE.
  - THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS WITH RESPECT TO SITE CONDITIONS AND ALL MATERIALS TO THE PROJECT. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL MATERIAL RELEVANT TO THE PROJECT.
  - ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH THE CONTRACT DOCUMENTS.
  - ALL UNITS ARE IN METERS UNLESS NOTED OTHERWISE.
  - CONTRACTOR MUST COMPLY WITH LOCAL BY-LAWS, CANADIAN CONSTRUCTION SAFETY CODE AND ALL REGULATIONS SET BY AUTHORITIES HAVING JURISDICTION. IN CASE OF CONFLICT OR DISCREPANCY, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
  - CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED UTILITY LOCATES, INSPECTIONS, PERMITS, AND APPROVALS, INCLUDING ALL ASSOCIATED COSTS. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND BASED ON BEST AVAILABLE INFORMATION.

- DRAWING NOTES**
- CONNECT NEW PLAY AREA SUB-DRAIN TO NEW 250mmØ STORM SEWER STUB. PROVIDE WATERTIGHT CONNECTION WITH SOLENO PRE-MANUFACTURED END CAP OR APPROVED EQUIVALENT FITTED FOR A 250mm PVC PIPE.
  - CONNECT NEW 200mmØ WATERMAIN TO EXISTING 200mmØ STUB. CONTRACTOR TO COORDINATE WITH CITY OF OTTAWA FORCES.
  - SUPPLY AND INSTALL NEW 200mmØ PVC DR18 WATERMAIN WITH MINIMUM 2.4m COVER. OTHERWISE PROVIDE THERMAL INSULATION IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAIL DRAWING W22.
  - BREAK INTO EXISTING SANITARY MANHOLE AND CONNECT NEW 200mm Ø PVC SANITARY SEWER TO EXISTING MANHOLE. ADJUST BENCHING TO SUIT NEW SANITARY SEWER CONNECTION. PROVIDE WATERTIGHT CONNECTION.
  - REMOVE EXISTING 1500mmØ MANHOLE AND REPLACE WITH NEW 1800mm Ø MANHOLE STMH-2. PROVIDE WATERTIGHT CONNECTION. S TO EXISTING AND NEW STORM SEWERS.
  - INSTALL SILT FENCE IN ACCORDANCE WITH OPSD 219.130.

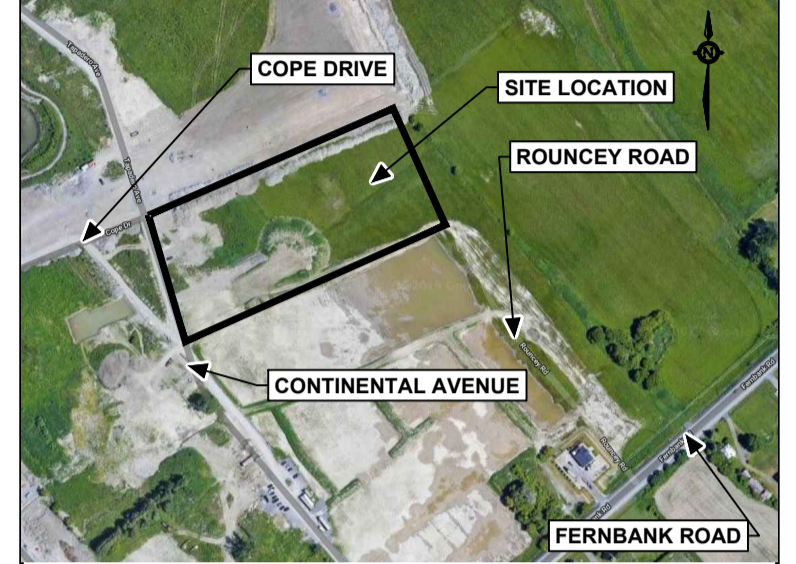
- DRAWING NOTES (Continued)**
- CONNECT SERVICES TO INTERIOR PLUMBING 1m FROM BUILDING FOUNDATION. SEE MECHANICAL AND ARCHITECTURAL PLANS.
  - INSTALL 3.0m LONG 100mmØ PERFORATED DRAIN PIPE c/w FILTER SOCK, EXTENDING FROM CBMH / STMH AT PAVEMENT SUBGRADE LEVEL.
  - INSTALL NEW 100mmØ PERFORATED DRAIN PIPE c/w FILTER SOCK SURROUNDED IN 25mm CLEAR STONE, 150mm IN DEPTH. REFER TO LANDSCAPE PLAN FOR EXACT LOCATION.
  - CONNECT PLAY AREA SUBDRAIN TO STORM MANHOLE.
  - WATTS RD-100 FLOW CONTROL ROOF DRAIN OR APPROVED EQUIVALENT TO BE INSTALLED MAXIMUM DISCHARGE 0.63l/s PER ROOF DRAIN. MAXIMUM DISCHARGE 18.3 l/s TOTAL. 100-YEAR ROOF PONDING DEPTH 0.12m.
  - INSTALL FLOW REGULATOR INSIDE CATCHBASIN MANHOLE CBMH5 OUTLET. MAXIMUM DISCHARGE 300 l/s. MAXIMUM HEAD 2.21 m. ORIFICE PLATE REFER TO DRAWING C06.
  - INSTALL PRESSURE REDUCING VALVE. REFER TO MECHANICAL PLANS.

- DRAWING NOTES (Continued)**
- NEW EMERGENCY OVERFLOW SCUPPER.
  - INSTALL BACKFLOW PREVENTER VALVE. REFER TO MECHANICAL PLANS.
  - EXISTING MANHOLE INVERTS, STMH2 AND EXSANMH, TO BE CONFIRMED PRIOR TO CONSTRUCTION. INVERT ELEVATIONS FOR MANHOLES AND CATCHBASINS LOCATED ON "MANHOLE AND CATCHBASIN SCHEDULE" ON DRAWING C03.
  - EXISTING FIRE HYDRANT TO BE RELOCATED BEHIND NEW LAYBY.
  - SIAMESE CONNECTION
  - PROVIDE WATERTIGHT SANITARY MANHOLE COVER TO SANMH2
  - INSTALL FLOW REGULATOR INSIDE CATCHBASIN MANHOLE CBMH7 OUTLET. MAXIMUM DISCHARGE 35 l/s. MAXIMUM HEAD 1.81 m. ORIFICE PLATE REFER TO DRAWING C06.
  - REAR YARD CATCHBASIN IN ACCORDANCE TO S30/S31 ON DRAWING C06.

- DRAWING NOTES (Continued)**



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**N45 ARCHITECTURE INC.**  
 43 Eccles Street, 2nd Floor - Ottawa, Ontario, K1R 6S3  
 tel. 613.224.0095 fax 613.224.9811

project  
**FERNBANK ELEMENTARY SCHOOL**

480 COPE DRIVE, OTTAWA, ONTARIO

Professional Engineer Seal: *Robert M. Hensley*, License No. 1802, Province of Ontario

drawing title	
<b>SITE SERVICING PLAN</b>	
scale 1:400	drawn by M.S.
date DEC 2019	checked by B.K.
project number	drawing number <b>C04</b>
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
revision	

- GENERAL NOTES**
- DESIGN AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH MOST RECENT ONTARIO BUILDING CODE.
  - THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS WITH RESPECT TO SITE CONDITIONS AND ALL MATERIALS TO THE PROJECT. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL MATERIAL RELEVANT TO THE PROJECT.
  - ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH THE CONTRACT DOCUMENTS.
  - ALL UNITS ARE IN METERS UNLESS NOTED OTHERWISE.
  - CONTRACTOR MUST COMPLY WITH LOCAL BY-LAWS, CANADIAN CONSTRUCTION SAFETY CODE AND ALL REGULATIONS SET BY AUTHORITIES HAVING JURISDICTION. IN CASE OF CONFLICT OR DISCREPANCY, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
  - CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED UTILITY LOCATES, INSPECTIONS, PERMITS, AND APPROVALS, INCLUDING ALL ASSOCIATED COSTS. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND BASED ON BEST AVAILABLE INFORMATION.

- DRAWING NOTES**
- MATCH EXISTING GRADES AT PROPERTY LINES AND LIMITS OF WORK.
  - CONNECT NEW SIDEWALK TO MATCH EXISTING SIDEWALK ELEVATION
  - INSTALL SILT FENCE IN ACCORDANCE TO OPSD 219.130
  - NEW EMERGENCY OVERFLOW SCUPPER
  - NEW ROOF DRAIN.
  - ANY DISTURBED AREA WITHIN THE RIGHT-OF-WAY SHALL BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION OF THE CITY OF OTTAWA AND IN ACCORDANCE WITH THE CITY STANDARDS FOR ROAD CUTS
  - PROVIDE CURB CUT PER DETAIL 4/C06
  - LIGHT DUTY ASPHALT PER DETAIL 1/C6
  - HEAVY DUTY ASPHALT PER DETAIL 2/C6
  - PROVIDE DEPRESSED SIDEWALK ACCESS
  - STONEDUST PATHWAY - SEE LANDSCAPE

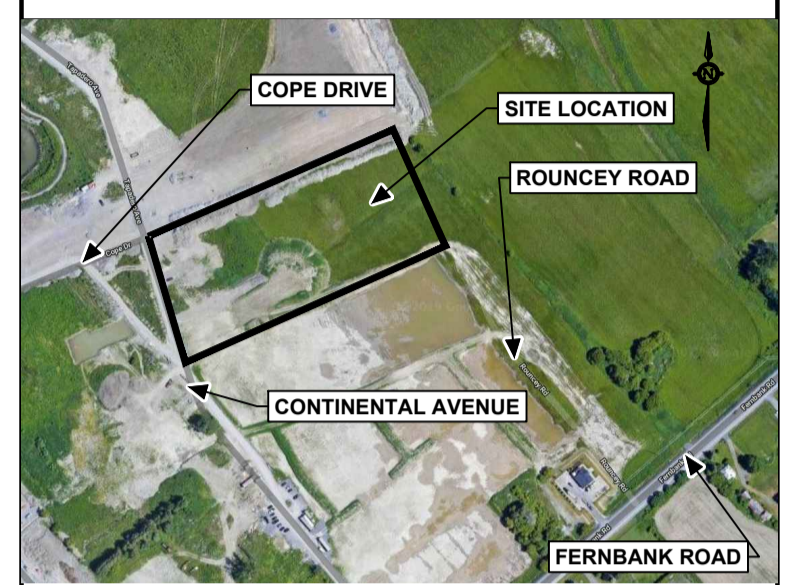
- DRAWING NOTES (Continued)**

- EROSION AND SEDIMENT CONTROL NOTES**
- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATER COURSE, DURING CONSTRUCTION ACTIVITIES; THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, INSTALLING SILT FENCES AND OTHER EFFECTIVE SEDIMENT TRAPS, AND INSTALLING AND MAINTAINING MUD MATS FOR OUTGOING CONSTRUCTION TRAFFIC DURING CONSTRUCTION ACTIVITIES.
  - PREVENT SOIL LOSS DURING CONSTRUCTION (BY STORM WATER RUNOFF OR WIND EROSION).
  - PROTECT TOPSOIL BY STOCKPILING FOR REUSE.
  - PREVENT SEDIMENTATION OF STORM SEWERS AND RECEIVING STREAMS.
  - PREVENT AIR POLLUTION FROM DUST AND PARTICULATE MATTER.
  - ALL STORM MANHOLES AND CATCHBASIN MANHOLES TO HAVE 300mm SUMPS; ALL CATCHBASINS TO HAVE 600mm SUMPS.
  - INSTALL FILTER BAG INSERT IN ALL STORM MANHOLES AND CATCH BASINS IMPACTED DURING CONSTRUCTION, INCLUDING CATCH BASINS IN THE RIGHT OF WAY.
  - STORM WATER PUMPED INTO CITY SERVICE SHALL FLOW THROUGH A FILTER SOCK.

- EROSION AND SEDIMENT NOTES (Continued)**
- THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.



**Jp2g Consultants Inc.**  
 ENGINEERS • PLANNERS • PROJECT MANAGERS  
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 Phone: (613) 628-7800 Fax: (613) 628-2600



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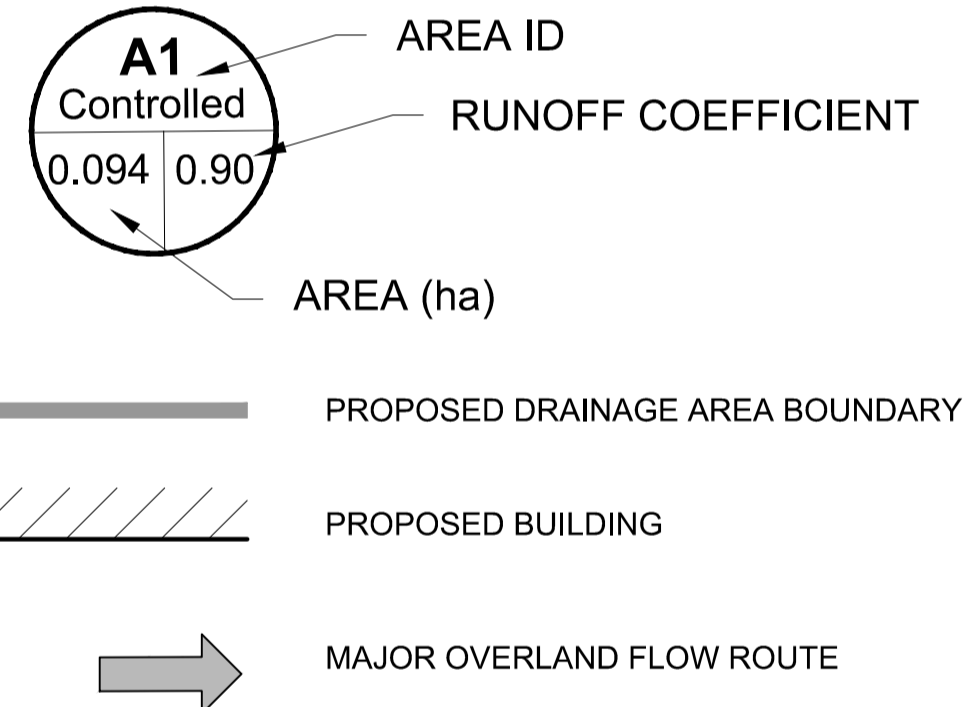
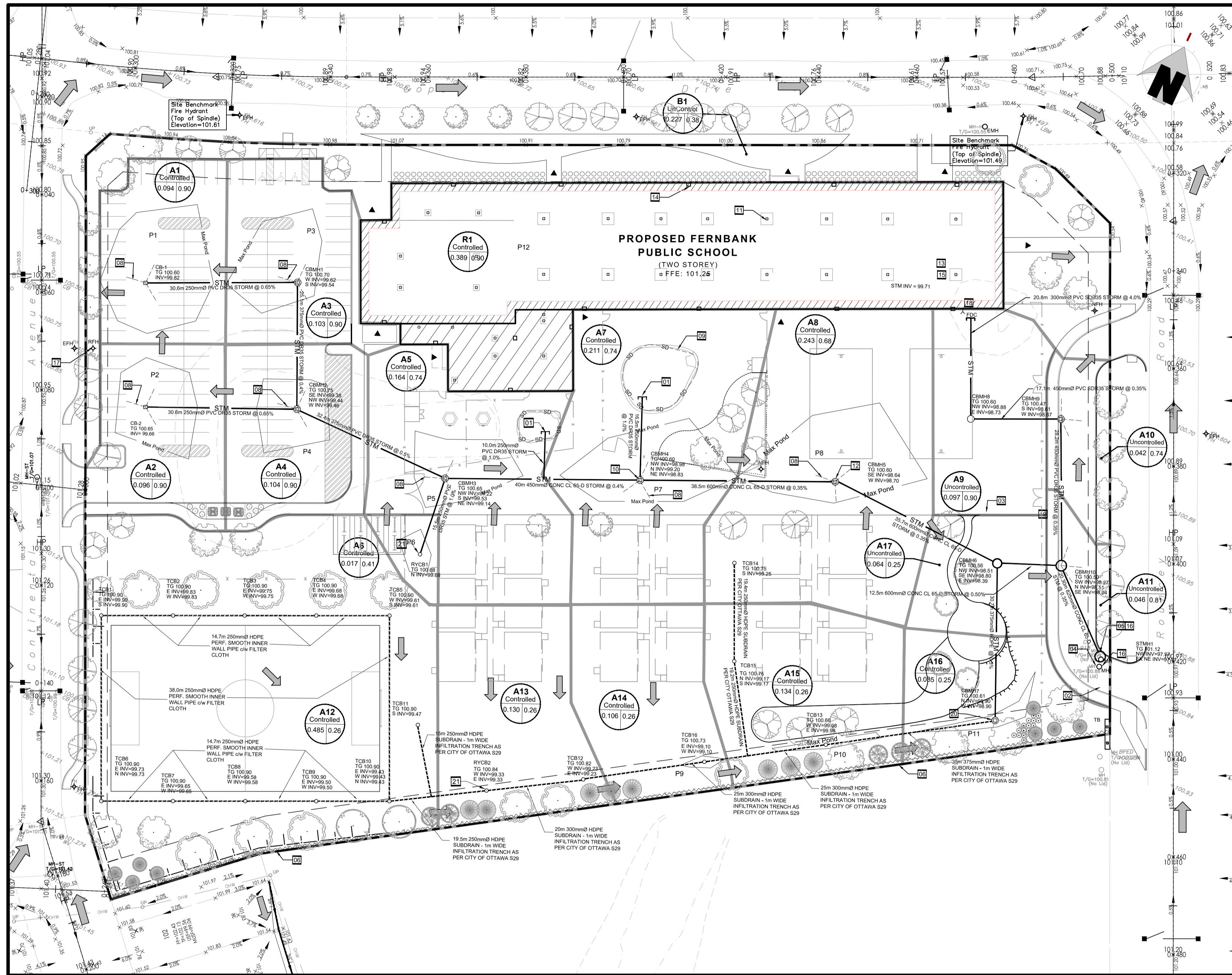
seal

drawing title  
**SITE GRADING AND DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN**

scale 1:400	drawn by M.S.
date DEC 2019	checked by B.K.
project number	drawing number <b>C05</b>
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
revision	

PONDING TABLE					
POND NO.	LOCATION	POND ELEV. (m)	TOP OF CB ELEV. (m)	POND DEPTH (m)	POND VOL. (m <sup>3</sup> )
P1	CB1	100.85	100.60	0.25	37.93
P2	CB2	100.85	100.67	0.18	15.42
P3	CBM1	100.85	100.70	0.15	13.81
P4	CBM2	100.85	100.72	0.13	24.81
P5	CBM3	100.85	100.65	0.20	15.98
P6	RYCB1	100.85	100.59	0.26	3.44
P7	CBM4	100.85	100.62	0.18	30.60
P8	CBM5	100.85	100.60	0.25	41.66
P9	TCB12	100.76	100.71	0.06	0.38
P10	TCB13	100.76	100.76	0.10	1.00
P11	CBM7	100.76	100.61	0.15	4.58
P12	ROOF			0.12	153.01
				Total=	342.62

NOTE: PONDING VOLUME CALCULATED BY MULTIPLYING THE PONDING AREA BY THE MAXIMUM PONDING DEPTH AND DIVIDING BY 3 FOR A CONICAL POND



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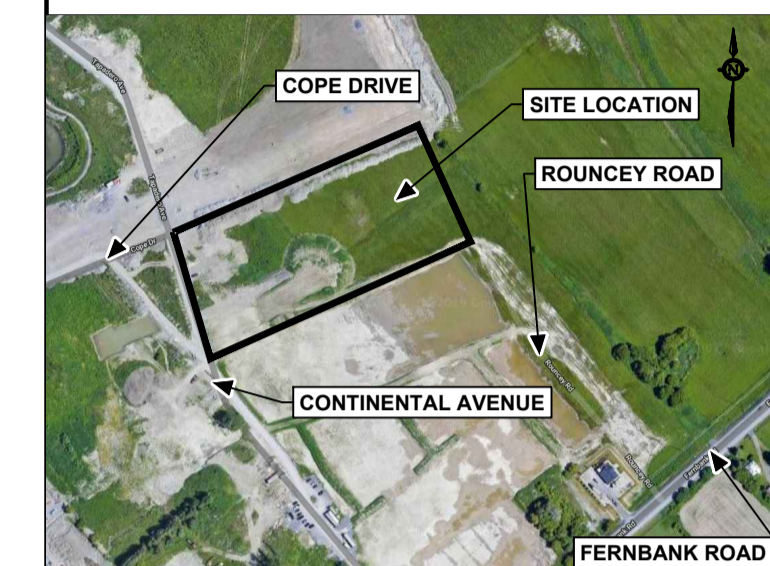
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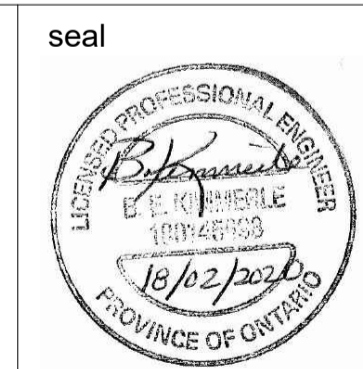
480 COPE DRIVE, OTTAWA, ONTARIO

seal

drawing title	
<b>STORM DRAINAGE PLAN</b>	
scale 1:500	drawn by M.S.
date DEC 2019	checked by B.K.
project number	drawing number <b>SD1</b>
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
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DETAILS	
scale NOTED	drawn by M.S.
date DEC 2019	checked by B.K.
project number	drawing number <b>C06</b>
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
revision	

