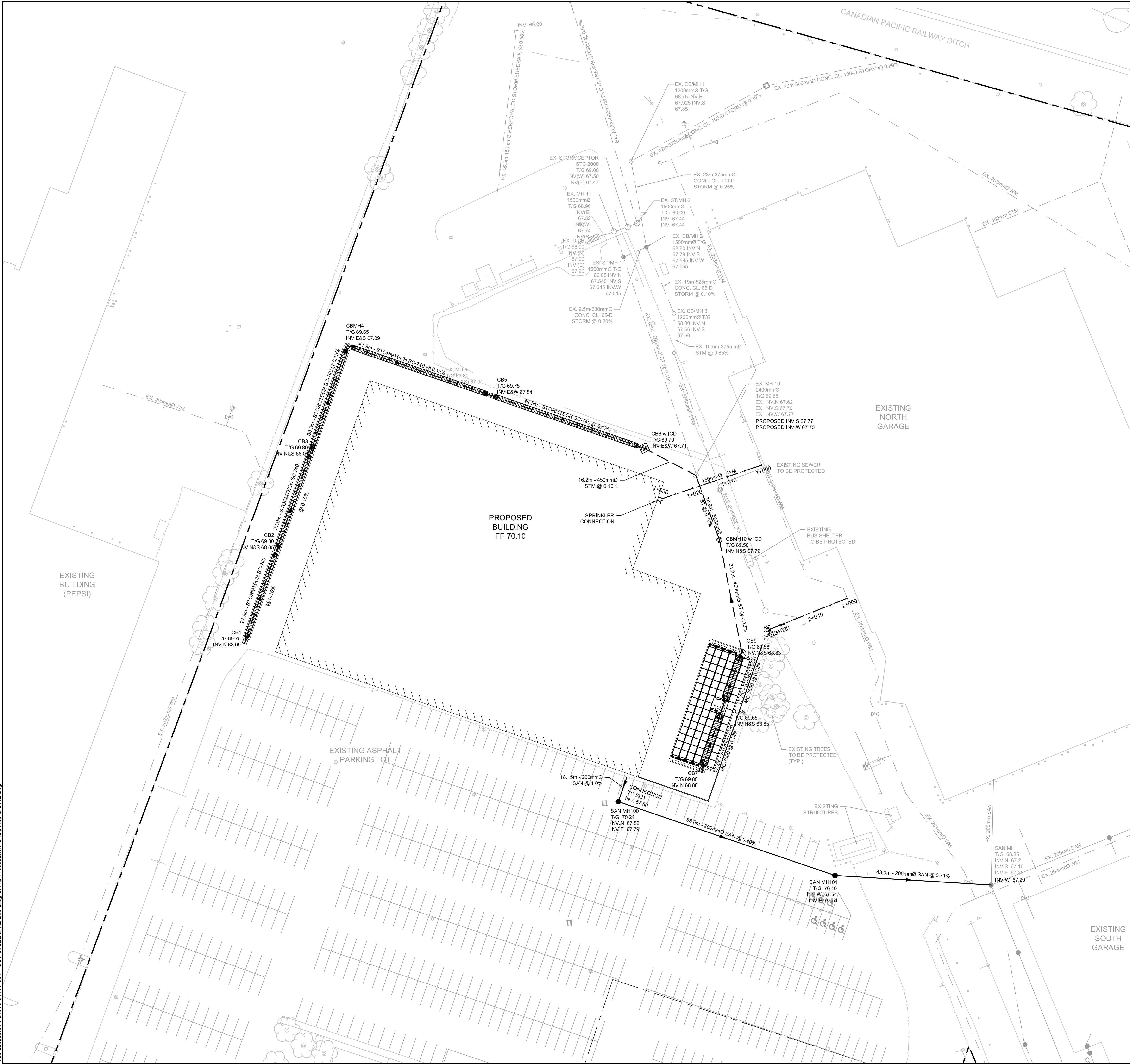


File Location: P:\131000\31489-004 - OCT St Laurent, E-Bus Bldg SPA\5-Production1-CM\31489-C-002.dwg

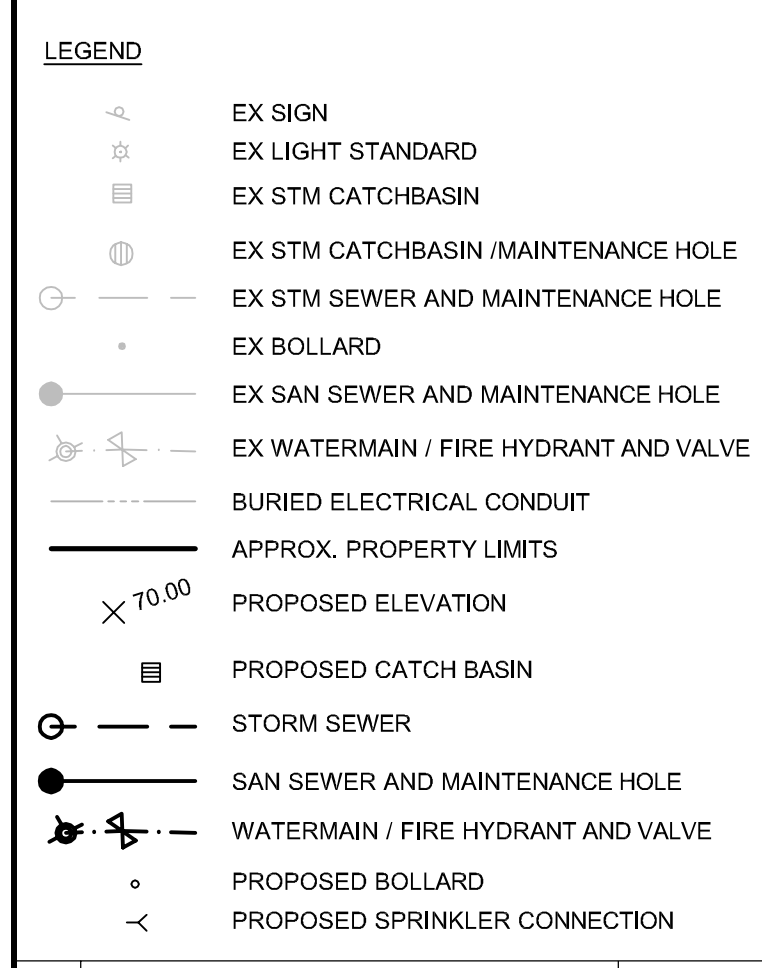
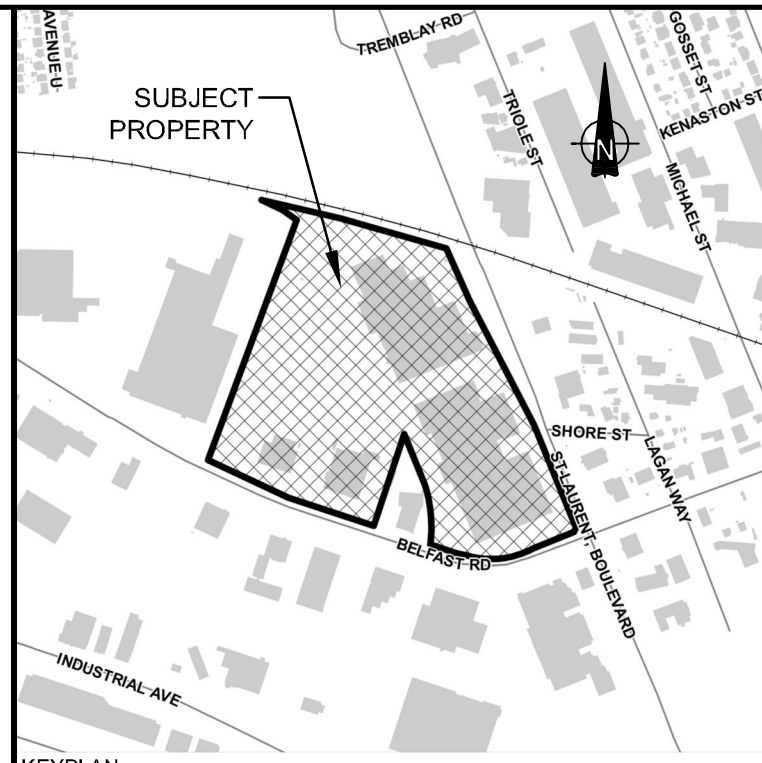


GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITIES AND SERVICES. ALL UTILITIES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION.
2. **SITE BENCHMARK:** SW CORNER CONCRETE LIGHT STAND BASE - ELEVATION 69.72
3. THE CONTRACTOR RESPONSIBLE FOR VERIFYING THAT THE SITE BENCHMARK(S) HAVE NOT BEEN ALTERED OR DISTURBED AND THAT THEIR RELATIVE ELEVATION(S) AND DESCRIPTION(S) AGREE WITH THE INFORMATION DEPICTED ON THE PLAN.
4. THE CONTRACTOR TO CARRY OUT WORKS PER THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS AND PER THE ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS.
5. THE CONTRACTOR TO READ THE SITE'S SERVICING DESIGN PLAN IN CONJUNCTION WITH THE LATEST SITE SERVICING REPORT AND GEOTECHNICAL REPORT.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS BEFORE CONSTRUCTION.
7. THE CONTRACTOR TO COMPLY WITH THE CITY OF OTTAWA AND OC TRANSPO REQUIREMENTS FOR TRAFFIC CONTROL.
8. THE CONTRACTOR TO REFER TO THE ARCHITECT'S PLANS FOR BUILDING DIMENSIONS AND SITE LAYOUT DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
9. THE CONTRACTOR RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ANY ASSOCIATED WORKS TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA.
10. THE CONTRACTOR TO MATCH EXISTING ELEVATIONS AT PROPERTY LIMITS AND ENSURE POSITIVE DRAINAGE TOWARDS A SUITABLE OUTLET, WHETHER INDICATED OR NOT ON THE PLANS.
11. THE CONTRACTOR TO INSTALL THE PAVEMENT STRUCTURE PER THE SITE'S GEOTECHNICAL INVESTIGATION REPORT RECOMMENDATIONS.
12. THE CONTRACTOR TO PROVIDE ALL PAVEMENT MARKINGS AS SHOWN, INCLUDING HANDICAPPED PARKING SYMBOLS WHERE APPLICABLE.

SERVICING NOTES

13. ALL GROUNDWATER PUMPED FROM THE SITE TO BE METERED, AND A PERMIT TO TAKE WATER OBTAINED BY THE CONTRACTOR AS APPLICABLE.
14. THE NOMINAL DIAMETER OF PIPES IS REFERRED TO IN THE PLAN VIEW.
15. SERVICES TO BE TERMINATED 1.0m FROM BUILDING WALL (TYPICAL).
16. THE CONTRACTOR TO INSULATE ALL STORM SEWERS THAT HAVE LESS THAN 1.5 m OF COVER WITH 50 mm X 1200 mm HI-40 INSULATION AND PROVIDE 100 MM CLEARANCE BETWEEN PIPE AND INSULATION.
17. ALL MAINTENANCE HOLES TO BE 1200 mm DIAMETER UNLESS OTHERWISE INDICATED AS PER OPSD 701.010 w/ FRAME AND COVERS AS PER CITY STANDARD DRAWINGS 24 AND 24.1.
18. CATCH BASINS SHALL BE PER OPSD 705.010, FRAME AND GRATES PER OPSD 400.10, STORM SEWER MATERIAL AS SPECIFIED.
19. THE CONTRACTOR TO INSPECT THE INSTALLED SEWERS USING CCTV AS REQUIRED BY THE CITY.
20. FOR ALL PROPOSED CONNECTION POINTS (IF ANY), THE CONTRACTOR IS RESPONSIBLE FOR THE REINSTATEMENT OF ALL SURFACES TO EXISTING CONDITIONS OR BETTER. PAVEMENT STRUCTURE RESTORATION SHALL BE PER CITY OF OTTAWA STANDARDS. THE THICKNESS OF GRANULAR AND ASPHALT LAYERS SHALL MATCH EXISTING.
21. SUPPLY AND INSTALL ADS MC-3500 STORMTECH CHAMBERS COMPLETE WITH END UNITS, GEOTEXTILE AND GRANULAR BEDDING/BACKFILL AS PER MANUFACTURER'S INSTRUCTIONS. INSTALLED STORAGE VOLUME SHALL BE 100 METERS CUBED MINIMUM.
22. ALL WATERMANS SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
23. WATERMANS TO BE PVC DR 18.
24. HYDRANT SHALL BE INSTALLED AS PER CITY STANDARD DRAWING W19.
25. WATERMANS CROSSING BELOW OR OVER A SEWER SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWING W25 AND W25.2.
26. ALL CONNECTIONS TO THE EXISTING WATERMAIN TO BE PER THE CITY OF OTTAWA DESIGN GUIDELINES. CONTRACTOR TO PROVIDE EXCAVATION BACKFILLING, COMPACTION AND REINSTATEMENTS PER THE LATEST GEOTECHNICAL INVESTIGATION REPORT FOR THE SITE.
27. THE WATERMAIN CONNECTION, WATER METER AND REMOTE RECEPTACLE BY CITY FORCES EXCAVATION AND REINSTATEMENT BY THE CONTRACTOR.
28. WATER SERVICE DISINFECTION AND INSPECTION BY CITY FORCES. ALL DEFLECTIONS AS PER MANUFACTURER'S SPECIFICATIONS MINIMUM COVER TO BE 2.4 M (IF NOT ACHIEVED, PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD DRAWING W22).
29. REFER TO MECHANICAL DRAWING FOR INTERNAL WATER, SPRINKLER AND SANITARY SERVICE CONNECTIONS.



No.	ISSUE / REVISION	DD/MM/YY
01	ISSUED FOR CITY SITE PLAN CONTROL	28/04/22

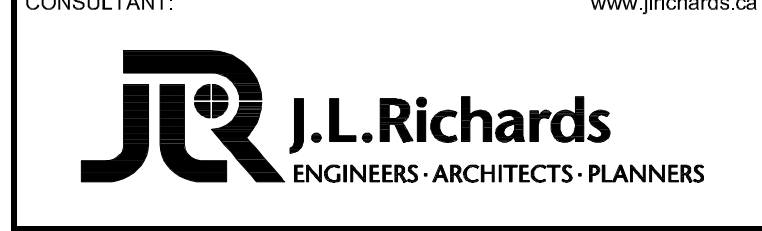
This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.

VERIFY SHEET SIZE AND SCALES. BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING.

SCALE: 1:500

CLIENT:

CONSULTANT: www.jlrichards.ca



CONSULTANT:

PROFESSIONAL STAMP

PROJECT NORTH

PROJECT: **OC TRANSPO E-BUS BUILDING SITE PLAN APPLICATION**

1500 ST. LAURENT BOULEVARD, OTTAWA, ONTARIO

DRAWING:

SITE SERVICING PLAN

DESIGN: MD

DRAWN: TB

CHECKED: MD/LJ

JLR #: 31489-004

DRAWING #: **C002**

WATERMAIN TABLE- STA 1+000 TO 1+030
EXISTING WM TO BLDG
PVC DR-18 CL-150

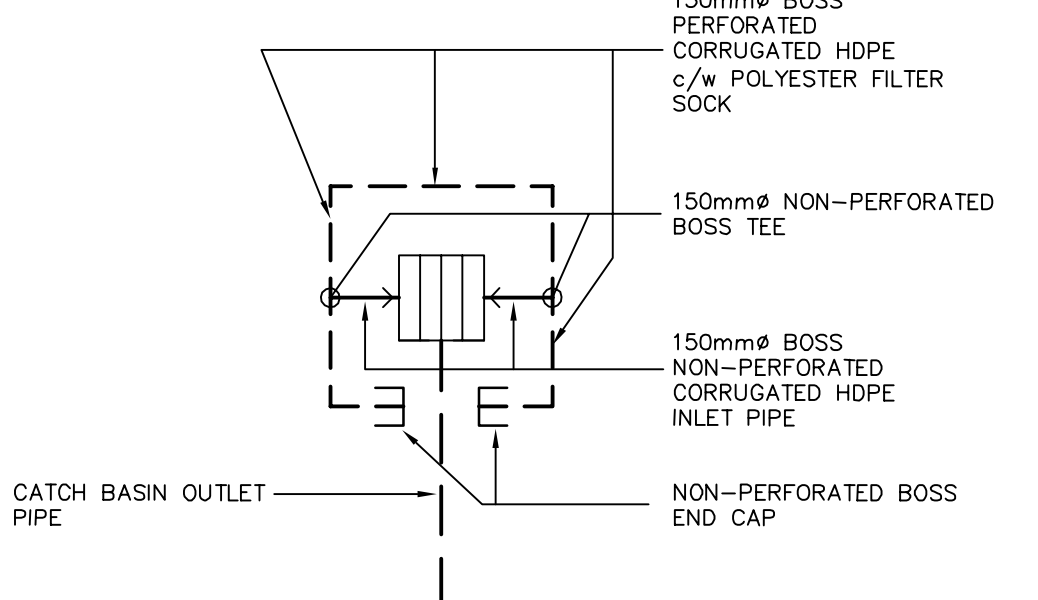
STATION	DETAIL	FINISHED GRADE	TOP OF WM
1+000	CONNECT TO EX. WM	69.07	66.67
1+010		69.41	67.01
1+020		69.74	67.34
1+029	SERVICE AT BLDG	70.04	67.64

NOTE: ALL WM CONSTRUCTED AT LESS THAN 2.4m BELOW FINISHED GRADE SHALL BE INSULATED IN ACCORDANCE WITH THE CITY OF OTTAWA'S REQUIREMENTS AS SET OUT IN THE CITY OF OTTAWA SPECIFICATION (F-4415).

WATERMAIN TABLE- STA 2+000 TO 2+023
EXISTING WM TO HYDRANT
PVC DR-18 CL-150

STATION	DETAIL	FINISHED GRADE	TOP OF WM
2+000	CONNECT TO EX. WM	69.00	66.60
2+010		69.28	66.88
2+019	HYDRANT VALVE & VALVE BOX	69.56	67.16
2+023	HYDRANT	70.15	67.75

NOTE: ALL WM CONSTRUCTED AT LESS THAN 2.4m BELOW FINISHED GRADE SHALL BE INSULATED IN ACCORDANCE WITH THE CITY OF OTTAWA'S REQUIREMENTS AS SET OUT IN THE CITY OF OTTAWA SPECIFICATION (F-4415).

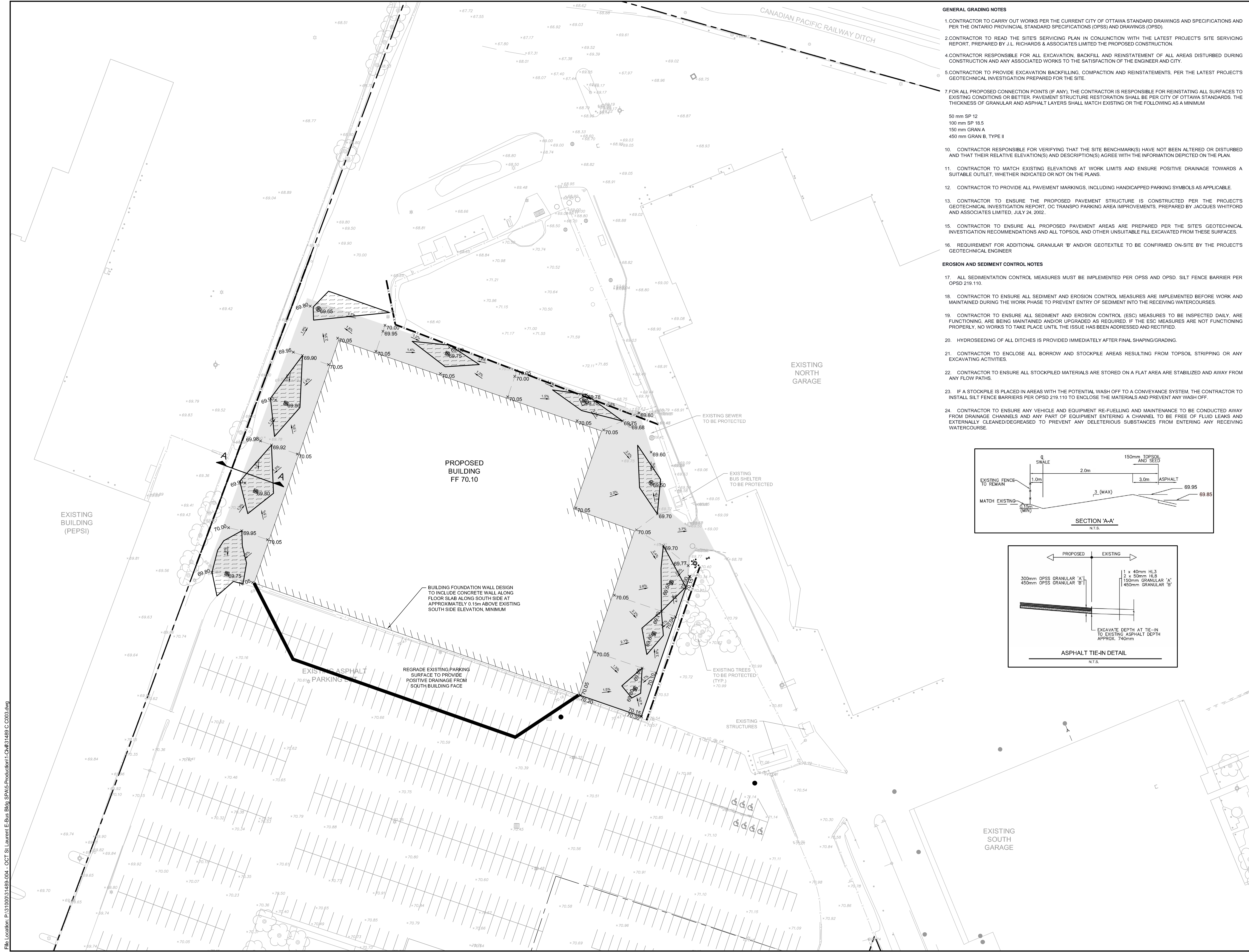


TYPICAL CATCH BASIN / STORM MANHOLE STRUCTURE SUB-DRAIN DETAIL
N.T.S.

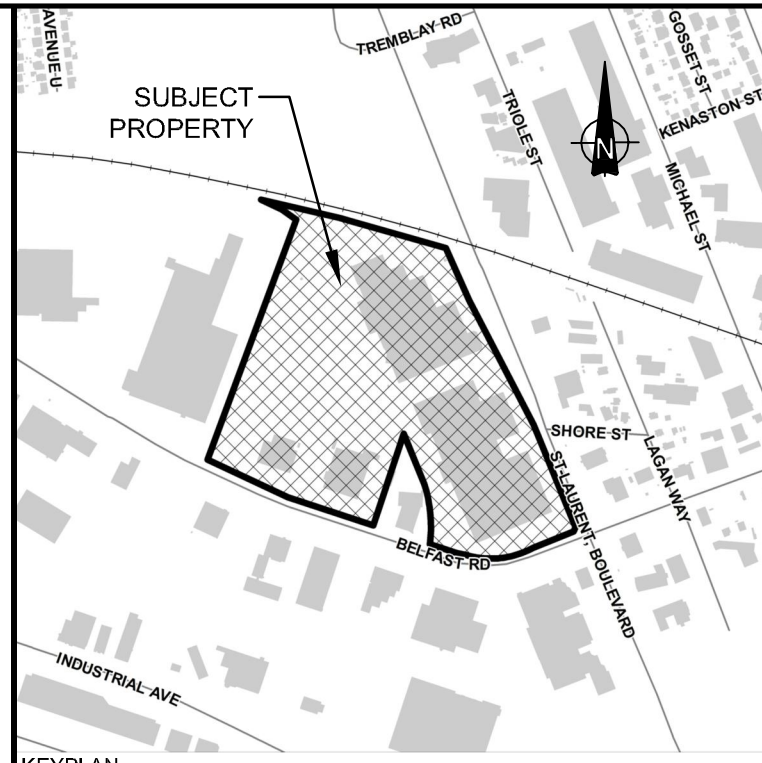
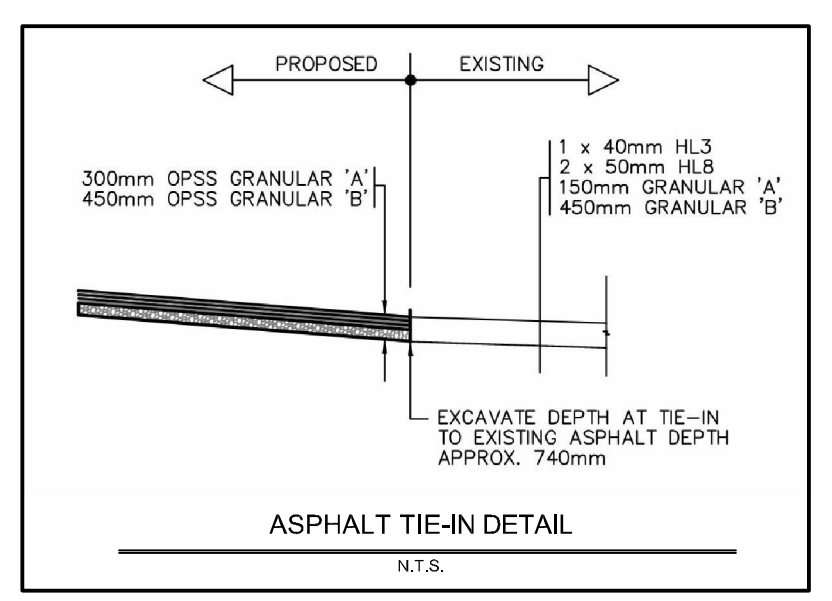
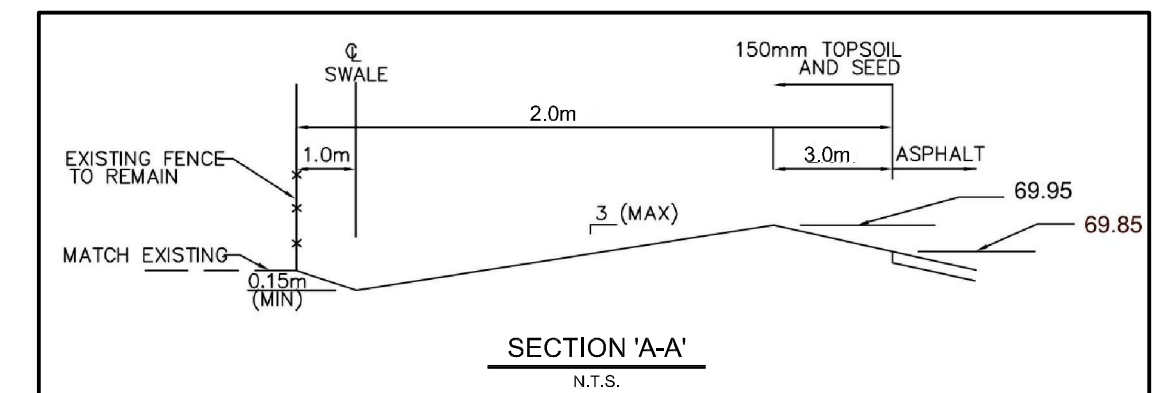
Plan No:

City File No:

PLOT DATE: Thursday, April 28, 2022 3:26:16 PM



- GENERAL GRADING NOTES**
- CONTRACTOR TO CARRY OUT WORKS PER THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS AND PER THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) AND DRAWINGS (OPSD).
 - CONTRACTOR TO READ THE SITE'S SERVICING PLAN IN CONJUNCTION WITH THE LATEST PROJECT'S SITE SERVICING REPORT, PREPARED BY J.L. RICHARDS & ASSOCIATES LIMITED THE PROPOSED CONSTRUCTION.
 - CONTRACTOR RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ANY ASSOCIATED WORKS TO THE SATISFACTION OF THE ENGINEER AND CITY.
 - CONTRACTOR TO PROVIDE EXCAVATION BACKFILLING, COMPACTION AND REINSTATEMENTS, PER THE LATEST PROJECT'S GEOTECHNICAL INVESTIGATION PREPARED FOR THE SITE.
 - FOR ALL PROPOSED CONNECTION POINTS (IF ANY), THE CONTRACTOR IS RESPONSIBLE FOR REINSTATING ALL SURFACES TO EXISTING CONDITIONS OR BETTER. PAVEMENT STRUCTURE RESTORATION SHALL BE PER CITY OF OTTAWA STANDARDS. THE THICKNESS OF GRANULAR AND ASPHALT LAYERS SHALL MATCH EXISTING OR THE FOLLOWING AS A MINIMUM:
50 mm SP 12
100 mm SP 18.5
150 mm GRAN A
450 mm GRAN B, TYPE II
 - CONTRACTOR RESPONSIBLE FOR VERIFYING THAT THE SITE BENCHMARK(S) HAVE NOT BEEN ALTERED OR DISTURBED AND THAT THEIR RELATIVE ELEVATION(S) AND DESCRIPTION(S) AGREE WITH THE INFORMATION DEPICTED ON THE PLAN.
 - CONTRACTOR TO MATCH EXISTING ELEVATIONS AT WORK LIMITS AND ENSURE POSITIVE DRAINAGE TOWARDS A SUITABLE OUTLET, WHETHER INDICATED OR NOT ON THE PLANS.
 - CONTRACTOR TO PROVIDE ALL PAVEMENT MARKINGS, INCLUDING HANDICAPPED PARKING SYMBOLS AS APPLICABLE.
 - CONTRACTOR TO ENSURE THE PROPOSED PAVEMENT STRUCTURE IS CONSTRUCTED PER THE PROJECT'S GEOTECHNICAL INVESTIGATION REPORT, OC TRANSPO PARKING AREA IMPROVEMENTS, PREPARED BY JACQUES WHITFORD AND ASSOCIATES LIMITED, JULY 24, 2002.
 - CONTRACTOR TO ENSURE ALL PROPOSED PAVEMENT AREAS ARE PREPARED PER THE SITE'S GEOTECHNICAL INVESTIGATION RECOMMENDATIONS AND ALL TOPSOIL AND OTHER UNSUITABLE FILL EXCAVATED FROM THESE SURFACES.
 - REQUIREMENT FOR ADDITIONAL GRANULAR 'B' AND/OR GEOTEXTILE TO BE CONFIRMED ON-SITE BY THE PROJECT'S GEOTECHNICAL ENGINEER.
- EROSION AND SEDIMENT CONTROL NOTES**
- ALL SEDIMENTATION CONTROL MEASURES MUST BE IMPLEMENTED PER OPSS AND OPSD. SILT FENCE BARRIER PER OPSD 219.110.
 - CONTRACTOR TO ENSURE ALL SEDIMENT AND EROSION CONTROL MEASURES ARE IMPLEMENTED BEFORE WORK AND MAINTAINED DURING THE WORK PHASE TO PREVENT ENTRY OF SEDIMENT INTO THE RECEIVING WATERCOURSES.
 - CONTRACTOR TO ENSURE ALL SEDIMENT AND EROSION CONTROL (ESC) MEASURES TO BE INSPECTED DAILY, ARE FUNCTIONING, ARE BEING MAINTAINED AND/OR UPGRADED AS REQUIRED. IF THE ESC MEASURES ARE NOT FUNCTIONING PROPERLY, NO WORKS TO TAKE PLACE UNTIL THE ISSUE HAS BEEN ADDRESSED AND RECTIFIED.
 - HYDROSEEDING OF ALL DITCHES IS PROVIDED IMMEDIATELY AFTER FINAL SHAPING/GRADING.
 - CONTRACTOR TO ENCLOSE ALL BORROW AND STOCKPILE AREAS RESULTING FROM TOPSOIL STRIPPING OR ANY EXCAVATING ACTIVITIES.
 - CONTRACTOR TO ENSURE ALL STOCKPILED MATERIALS ARE STORED ON A FLAT AREA ARE STABILIZED AND AWAY FROM ANY FLOW PATHS.
 - IF A STOCKPILE IS PLACED IN AREAS WITH THE POTENTIAL WASH OFF TO A CONVEYANCE SYSTEM, THE CONTRACTOR TO INSTALL SILT FENCE BARRIERS PER OPSD 219.110 TO ENCLOSE THE MATERIALS AND PREVENT ANY WASH OFF.
 - CONTRACTOR TO ENSURE ANY VEHICLE AND EQUIPMENT RE-FUELLING AND MAINTENANCE TO BE CONDUCTED AWAY FROM DRAINAGE CHANNELS AND ANY PART OF EQUIPMENT ENTERING A CHANNEL TO BE FREE OF FLUID LEAKS AND EXTERNALLY CLEANED/DEGREASED TO PREVENT ANY DELETERIOUS SUBSTANCES FROM ENTERING ANY RECEIVING WATERCOURSE.



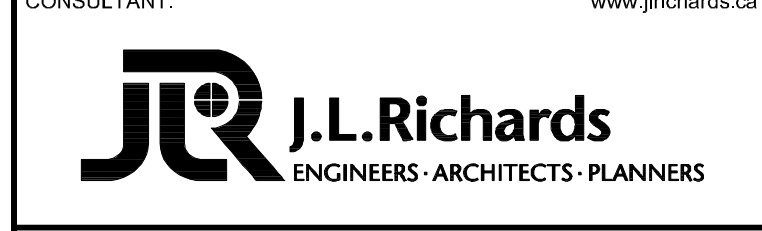
KEYPLAN LEGEND

- EX SIGN
- EX LIGHT STANDARD
- EX STM CATCHBASIN
- EX STM CATCHBASIN / MAINTENANCE HOLE
- EX STM SEWER AND MAINTENANCE HOLE
- EX BOLLARD
- EX SAN SEWER AND MAINTENANCE HOLE
- EX WATERMANN / FIRE HYDRANT AND VALVE
- BURIED ELECTRICAL CONDUIT
- APPROX. PROPERTY LIMITS
- EX STM CATCHBASIN FILTER FABRIC TO BE INSTALLED BETWEEN FRAME AND COVER
- SILT FENCE BARRIER AS PER OPSD 219.110
- PROPOSED ELEVATION
- EX ELEVATION
- BOLLARD
- PROPOSED CATCH BASIN
- STORM SEWER
- SAN SEWER AND MAINTENANCE HOLE
- WATERMANN / FIRE HYDRANT AND VALVE
- HEAVY DUTY ASPHALT (TYP.)
- PONDING AREA
- MAXIMUM WATER LEVEL (STATIC)

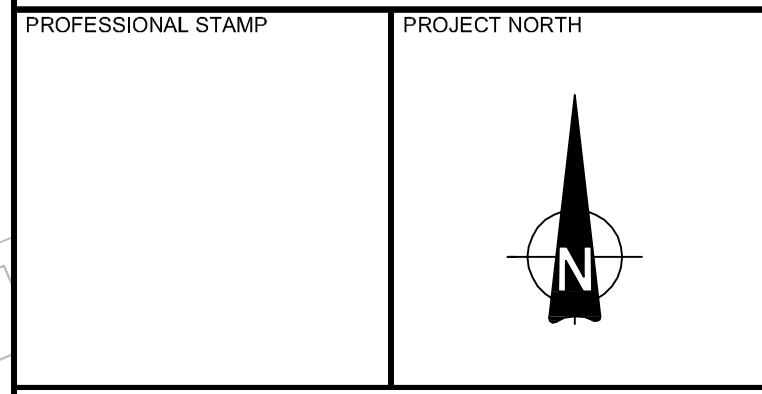
01	ISSUED FOR CITY SITE PLAN CONTROL	28/04/22
No.	ISSUE / REVISION	DD/MM/YY

This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.
VERIFY SHEET SIZE AND SCALES. BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING.
SCALE: 1:500

CLIENT:
CONSULTANT: www.jlrichards.ca



CONSULTANT:
PROFESSIONAL STAMP
PROJECT NORTH



PROJECT:
**OC TRANSPO E-BUS BUILDING
SITE PLAN APPLICATION**
1500 ST. LAURENT BOULEVARD, OTTAWA, ONTARIO

DRAWING:
GRADING PLAN

DESIGN: MD	DRAWING #:
DRAWN: TB	C003
CHECKED: MD/LJ	
JLR #: 31489-004	