

GENERAL NOTES

- THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
- THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED FROM INFORMATION SUPPLIED BY OR SHOWN ON ANS O'SULLIVAN VOLUNTARY LINT, DATED MAY 26, 2023, AND CANNOT BE RELIED UPON TO BE ACCURATE OR COMPLETE. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LAND TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
- THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN BEFORE COMMENCING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION. THESE DRAWINGS SHALL NOT BE USED FOR ANY LAYOUT OF STRUCTURAL COMPONENTS AND OTHER UTILITIES INCLUDING, BUT NOT LIMITED TO, FOOTINGS, FOUNDATION WALLS, FOUNDATION DRAINAGE, SHORING, ETC.
- THE EXACT LOCATION OF ALL NEW SERVICES SHALL BE COORDINATED AND CONFIRMED ON SITE WITH THE ARCHITECTURAL AND STRUCTURAL PLANS. THE LOCATION OF ALL NEW SERVICES SHALL BE COORDINATED WITH THE LOCATION OF EXISTING UTILITIES, SERVICES AND BUILDINGS, AS WELL AS THE FINAL BUILDING LAYOUT PRIOR TO INSTALLATION.
- ABOVE GROUND APPURTENANCES INCLUDING, BUT NOT LIMITED TO, CURBS, SIDEWALKS, WALKWAYS, PLANTER BEDS, ETC. ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. THE EXACT LAYOUT OF THE APPURTENANCES ARE TO BE COORDINATED WITH THE ARCHITECTURAL AND LANDSCAPE PLANS.
- THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF TOWN AUTHORITIES.
- EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE TOWN.
- TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS, MEETING OTM REQUIREMENTS.
- DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/TOWN.
- ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH OPSS STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- CONTACT THE TOWN FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE TOWN'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
- ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
 - ELECTRICAL SERVICE - HYDRO OTTAWA
 - GAS SERVICE - ENBRIDGE
 - TELEPHONE SERVICE - BELL CANADA
 - TELEVISION SERVICE - ROGERS
- INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO OTTAWA, BELL AND THE CITY.
- CONTRACTOR TO ENSURE ALL APPLICABLE OPSS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION.
- FOR GEOTECHNICAL INFORMATION, REFER TO THE GEOTECHNICAL INVESTIGATION BY PATERSON GROUP FOR THE INDUSTRIAL SUBDIVISION, DATED JULY 5, 2022.
- CIVIL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, STRUCTURAL, LANDSCAPING, ELECTRICAL AND MECHANICAL PLANS.

GENERAL NOTES FOR ROADWAYS

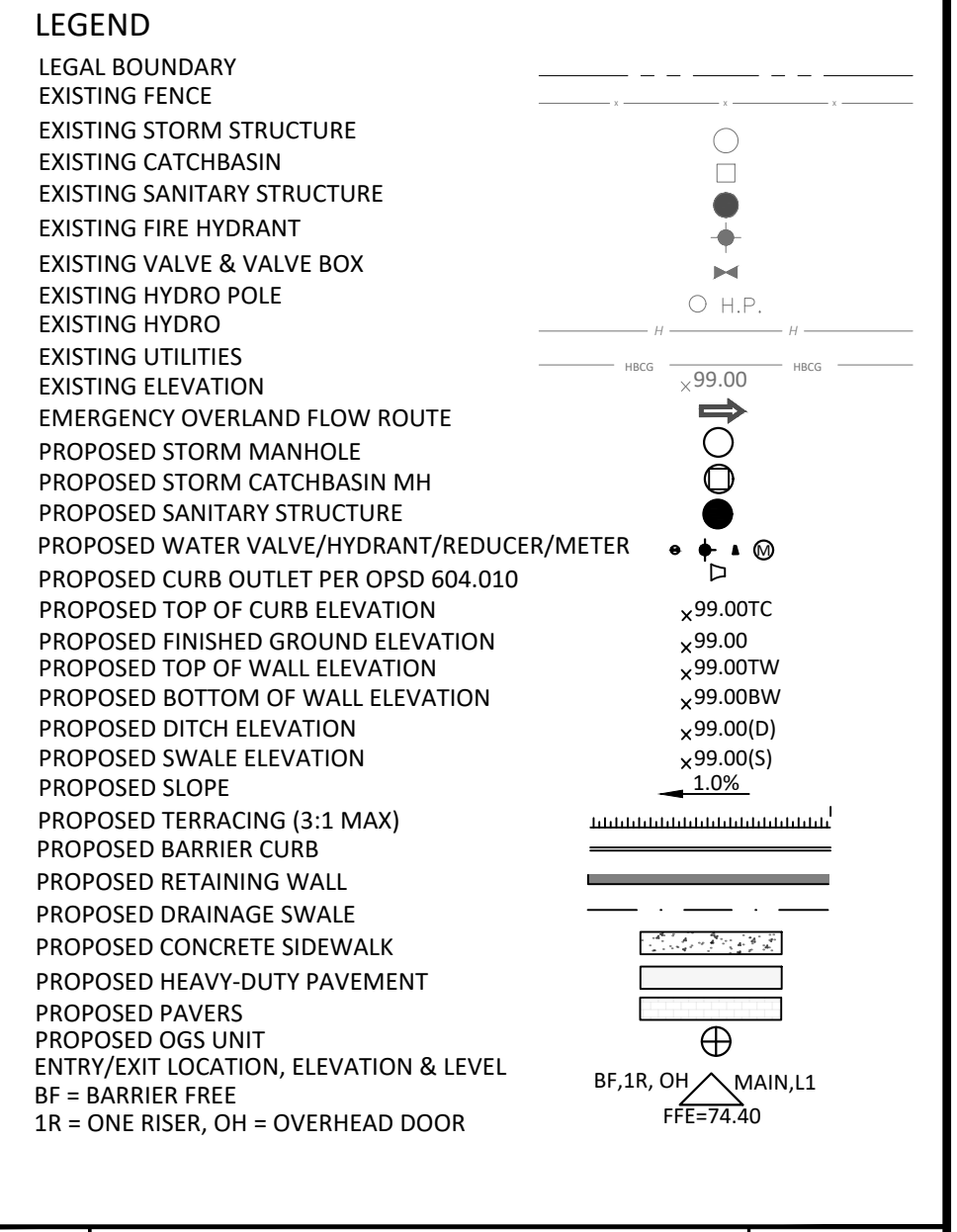
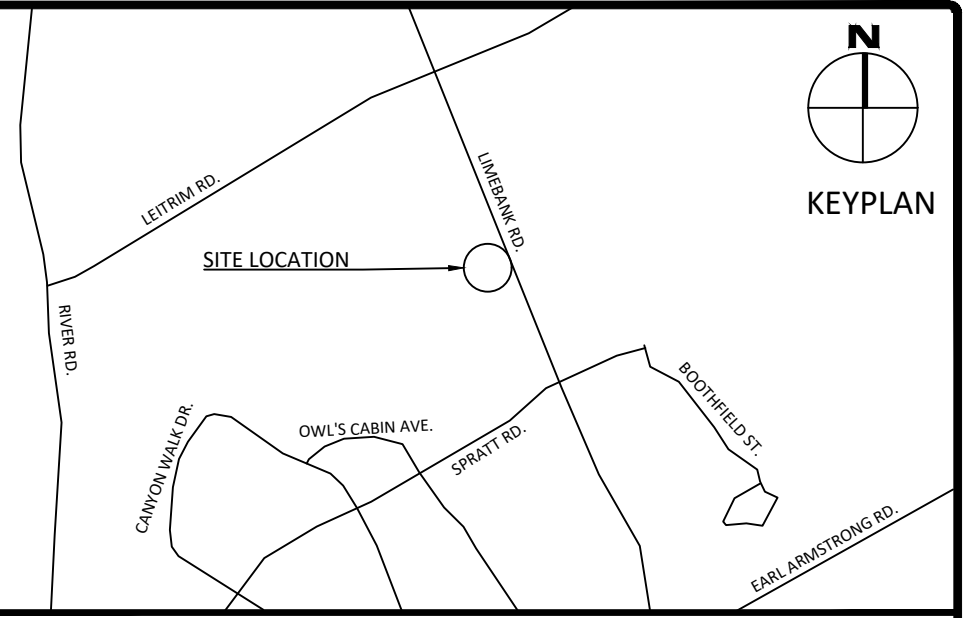
- ALL TOPSOIL AND ORGANIC MATERIAL SHALL BE STRIPPED WITHIN THE ROADWAY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF TOWN AUTHORITIES.
- CONCRETE CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD S2.1 (BARRIER CURB), S2.2 (MONOLITHIC SIDEWALK & CURB), AND S2.4 (STANDARD SIDEWALK), UNLESS OTHERWISE SPECIFIED. PROVISIONS SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS, DRIVEWAYS AND RAMPS INCLUDING TACTILE WALKING SURFACE INDICATORS (TWSI) WHERE REQUIRED PER S2.4 AND S2.7.3.
- PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY DETAIL R10, OPSS 600.010, OPSS 510.
- GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
- ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 100% SPMD OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- SUB-EXCAVATE SOFT AREAS AND FILL WITH GRANULAR "B" COMPACTED IN MAXIMUM 300mm LIFTS AS DIRECTED BY A GEOTECHNICAL ENGINEER.
- IN AREAS OF NEW PAVEMENT CONSTRUCTION, ALL SURFICIAL TOPSOIL AND ANY LOOSE/SOFT, WET, ORGANIC OR DELETERIOUS MATERIALS ARE TO BE REMOVED FROM THE PROPOSED SUBGRADE SURFACE. ANY SUBEXCAVATED AREAS SHOULD BE FILLED WITH COMPACTED EARTH BORROW APPROVED BY A GEOTECHNICAL ENGINEER. THE SUBGRADE SURFACE IS TO BE PROOF ROLLED IN THE PRESENCE OF A GEOTECHNICAL ENGINEER. THE SUBGRADE SURFACE IS TO BE SHAPED AND CROWNED TO PROMOTE DRAINAGE OF THE GRANULAR MATERIALS.
- ANY FILL REQUIRED TO MEET THE PROPOSED SUBGRADE ELEVATIONS FOR THE ACCESS ROADWAYS AND PARKING AREAS IS TO CONSIST OF MATERIAL WHICH MEETS OR EXCEEDS OPSS SPECIFICATIONS FOR GRANULAR B TYPE I OR II OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE MATERIALS ARE TO BE PLACED IN MAXIMUM 300mm THICK LIFTS AND COMPACTED TO 98% SPMD MINIMUM USING VIBRATORY COMPACTION EQUIPMENT.
- WHERE NEW PAVEMENT WILL ABUT EXISTING PAVEMENT, THE DEPTHS OF GRANULAR MATERIALS IS TO TAPER UP OR DOWN AT 5 HORIZONTAL TO 1 VERTICAL OR FLATTER, TO MATCH THE DEPTHS OF THE GRANULAR MATERIALS EXPOSED IN THE EXISTING PAVEMENT.

PROPOSED PAVEMENT STRUCTURE

- ASPHALT MATERIALS SHALL COMPLY WITH OPSS 310.
- LIGHT-DUTY PAVEMENT STRUCTURE:
 - 50mm HL-3 / SUPERPAVE 12.5mm TOP COURSE (PG58-34)
 - 150mm GRANULAR "A" BASE
 - 300mm GRANULAR "B" TYPE II SUB-BASE
- HEAVY-DUTY PAVEMENT STRUCTURE:
 - 40mm HL-3 / SUPERPAVE 12.5mm TOP COURSE (PG58-34)
 - 60mm HL-3 / SUPERPAVE 19.0mm BINDER COURSE (PG58-34)
 - 150mm GRANULAR "A" BASE
 - 400mm GRANULAR "B" TYPE II SUB-BASE
- REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR ALL TRAFFIC AREAS ABOVE FOUNDATION.

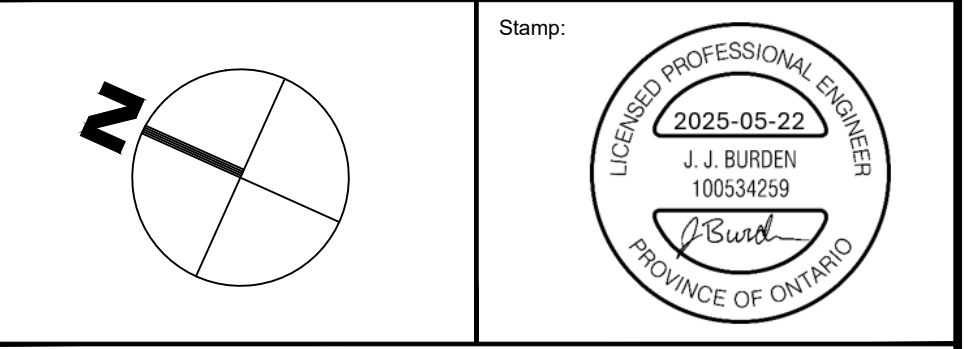
GENERAL NOTES FOR GRADING

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT GRADING AROUND HYDRANTS, TRANSFORMERS, AND UTILITY PEDESTALS, ETC. MEET CURRENT HYDRO AND UTILITY COMPANY REQUIREMENTS.
- CONTRACTOR TO ADJUST EXISTING CATCH BASINS, MANHOLES, FIRE HYDRANTS, VALVE CHAMBERS AND VALVE BOXES TO FINAL GRADE AS REQUIRED.
- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING FOUNDATIONS OF ADJACENT BUILDINGS DURING EXCAVATION AND CONSTRUCTION PERIOD.
- GRADING IN GRASSED AREAS WILL BE BETWEEN 2% TO 7%. GRADES IN EXCESS OF 7% WILL REQUIRE A MAXIMUM 3:1 TERRACING.
- ALL PERVIOUS/LAWN AREAS TO BE TREATED WITH 100mm TOPSOIL & SEED OR SOD AS SOON AS FEASIBLE, EXCEPT WHERE NOTED.



No.	Revisions	Date
5	ISSUED FOR RESUBMISSION	05.22.2025
4	ISSUED FOR RESUBMISSION	04.11.2025
3	ISSUED FOR PERMIT	02.14.2025
2	ISSUED FOR RESUBMISSION	02.10.2025
1	ISSUED FOR SUBMISSION	11.22.2024

Check and verify all dimensions before proceeding with the work Do not scale drawings



Client: CSV ARCHITECTS
190 O'CONNOR ST, SUITE 100
OTTAWA, ON

Project: GASTOPS LTD. HEADQUARTERS
RIVERSIDE SOUTH BUSINESS PARK,
OTTAWA, ON

Drawing Title: SITE GRADING PLAN

Scale: 1:500	Project Number: CO-24-2748
Drawn By: RP	Drawing Number: C101
Checked By: JB	
Designed By: RP	

1. **CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.**
2. **WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMAINS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER CITY DETAIL W22.**
3. **IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH WOULD BE REQUIRED BY THE MANUFACTURER AND CITY OF OTTAWA STANDARDS W25 AND W25.2.**
4. **THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY DETAIL W23.**
5. **VALVES TO BE OPERATED BY CITY STAFF ONLY.**
6. **NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS OFFICIAL IS ON SITE. CONNECTIONS TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CONNECTIONS TO BE COMPLETED BY CITY FORCES, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY SITE SERVING CONTRACTOR.**
7. **CONCRETE THRUST BLOCKS TO CONFORM TO CITY STANDARD W25.3.**
8. **WATERMAIN 100-300mm TO BE CLASS 150 DR-18 PVC OR APPROVED EQUIVALENT.**
9. **ALL PVC WATERMAIN SHALL BE INSTALLED WITH A 10 GAUGE STAINLESS COPPER TWIN OR RWU TRACER WIRE IN ACCORDANCE WITH CITY STANDARD W36.**
10. **FIRE HYDRANTS SHALL CONFORM TO CITY STANDARDS W18, W19, AND W20.**
11. **VALVE BOXES SHALL CONFORM TO CITY STANDARD W24.**
12. **300mmØ VALVES AND SMALLER TO BE INSTALLED WITH VALVE BOXES AS PER CITY STANDARD W24. 400mmØ VALVES AND LARGER TO BE INSTALLED WITH BUTTERFLY VALVES AND VALVE CHAMBERS AS PER CITY STANDARD W24.**
13. **AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W25.2 FOR CROSSING UNDER THE SEWER, AS PER CITY DETAIL W25.1 FOR CROSSING UNDER CITY DETAIL W25, FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED TO MAINTAIN THE REQUIRED MINIMUM DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.**

HI-40 RIGID INSULATION
(THICKNESS AND EXTENSION OF
INSULATION SHOULD BE DETERMINED
BASED ON TABLE 1 IN PATERSON GROUP
MEMORANDUM PG7255-MEMO 01)

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PROPOSED PIPE

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

Designed By:	RP	C102
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