

**GENERAL NOTES:**

1. ORIGINAL TOPOGRAPHY, GROUND ELEVATION DATA AND LEGAL SURVEY INFORMATION SHOWN ON THE PLANS WERE DERIVED FROM SURVEY INFORMATION PROVIDED BY MCINTOSH PERRY SURVEYING INC.
2. THE LOCATION AND CONFIGURATION OF UNDERGROUND SERVICES AND UTILITIES WERE NOT INCLUDED IN THE ORIGINAL SURVEY. THE BUILDER/OWNER IS RESPONSIBLE TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING SERVICES & UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UNDERGROUND SERVICES & UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE BUILDER/OWNER IS TO NOTIFY THE ENGINEER PROMPTLY.
3. THE BUILDER SHALL OBTAIN AND PAY FOR ALL APPLICABLE PERMITS AND APPROVALS FROM THE TOWN BEFORE COMMENCING CONSTRUCTION.
4. PROPOSED GRADING SHALL NOT BE REVISED WITHOUT WRITTEN PERMISSION OF THE TOWN.
5. PROPOSED SERVICES SHALL BE INSTALLED AS PER TOWN OF PERTH AND/OR OPSD STANDARDS.
6. BUILDER/OWNER SHALL CONFIRM ALL UTILITY SERVICING WITH THE APPROPRIATE UTILITY PROVIDER PRIOR TO CONSTRUCTION.
7. BUILDER/OWNER SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
8. BUILDER/OWNER IS RESPONSIBLE FOR ALL LAYOUT.
9. ALL PERVIOUS/LAWN AREAS TO BE TREATED WITH 100mm TOPSOIL & SEED OR SOD AS SOON AS FEASIBLE, EXCEPT WHERE NOTED.
10. 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.
11. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE.
12. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
13. THE BUILDER/OWNER SHALL BE RESPONSIBLE FOR ANY TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ANY NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
14. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH APPROPRIATE TOWN STANDARDS AND SPECIFICATIONS.
15. CONTACT THE TOWN FOR INSPECTION OF ROUGH GRADING OF LOT PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ANY DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE SATISFACTION OF THE TOWN PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
16. TEMPORARY SEDIMENT CONTROL (FILTER CLOTH UNDER GRATE OR COVER) TO BE IMPLEMENTED BY BUILDER/OWNER DURING CONSTRUCTION ON ALL ROAD CATCHBASINS, REAR YARD CATCHBASINS, AND CATCHBASIN MANHOLES. NO RECYCLED GEOTEXTILE MATERIAL SHALL BE PERMITTED FOR USE ON SITE.

**EROSION & SEDIMENT CONTROL NOTES:**

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, USING MUD MATS AT ALL CONSTRUCTION ENTRANCES, USING GEOSOCK WITH OVERFLOW UNDER THE GRATES OF CATCH BASINS AND MANHOLES AND INSTALLING SILT FENCES AND OTHER SEDIMENT TRAPS.
2. AT THE DISCRETION OF THE PROJECT MANAGER OR MUNICIPAL STAFF, ADDITIONAL SILT CONTROL DEVICES SHALL BE INSTALLED AT DESIGNATED LOCATIONS.
3. FOR SILT FENCE BARRIER, USE OPSD 219.110. GEOTEXTILE FOR SILT FENCE SHALL BE ACCORDING TO OPSD 1860, TABLE 3.
4. EXCEPT AS PROVIDED IN PARAGRAPHS 4.(a), and (b) BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.
  - (a) WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE.
  - (b) WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.
5. SEDIMENT THAT IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED IN A MANNER THAT AVOIDS ESCAPE OF THE SEDIMENT TO THE DOWNSTREAM SIDE OF THE CONTROL MEASURE AND AVOIDS DAMAGE TO THE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED TO THE LEVEL OF THE GRADE EXISTING AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOLLOWING:
  - (a) FOR LIGHT-DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE FOLLOWING:
    - I. A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE.
    - II. A DEPTH OF 300 mm IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.
  - (b) FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS.
  - (c) ACCUMULATED SEDIMENT SHALL BE REMOVED IMMEDIATELY PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
  - (d) ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS PER OPSD 180.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MONITORED TO ENSURE THEY ARE IN EFFECTIVE WORKING ORDER. THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED DAILY AND FOLLOWING A STORM EVENT.
7. DUST CONTROL MEASURES SHOULD BE CONSIDERED PRIOR TO CLEARING AND GRADING. THE USE OF WATER, CALCIUM CHLORIDE FLAKES/SOLUTION OR MAGNESIUM CHLORIDE FLAKES/SOLUTION SHALL BE USED AS DUST SUPPRESSANTS AS PER OPSD 506. THIS IS TO LIMIT WIND EROSION OF SOILS WHICH MAY TRANSPORT SEDIMENTS OFFSITE, WHERE THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM.
8. ALL 'GREEN AREAS' TO BE TREATED WITH 75mm TOPSOIL, SEEDED & MULCHED AS SOON AS FEASIBLE, AS PER OPSD 570.
9. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
10. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
11. STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS, MANHOLES, WATERCOURSES), AND BE SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS TO BE LEFT IN PLACE IN EXCESS OF 14 DAYS.
12. IF REQUIRED, DEWATERING/SETTLING BASINS SHALL BE CONSTRUCTED AS PER OPSD 219.240 AND LOCATED ON FLAT GRADE UPSTREAM OF OTHER EXISTING MITIGATION MEASURES. WATERCOURSES SHALL NOT BE DIVERTED, OR BLOCKED, AND TEMPORARY WATERCOURSES CROSSINGS SHALL NOT BE CONSTRUCTED OR UTILIZED, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY, THE CONTRACTOR SHALL RELEASE ANY STRANDED FISH TO THE OPEN PORTION OF THE WATERCOURSE WITHOUT HARM.
13. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSD 577.
14. WHERE DEWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSD 518.
15. FOR STRAW BALE FLOW CHECK, USE OPSD 219.180. AND FOR TURBIDITY CURTAIN, USE OPSD 219.260 AND OPSD 219.261.
16. FOR POTENTIAL SPILLS, THE CONTRACTOR SHALL HAVE ON SITE AT ALL TIMES AN EMERGENCY SPILL KIT THAT WILL INCLUDE AS A MINIMUM THE FOLLOWING ITEMS:
  - 10 - 18 in. X 18 in. ABSORBENT PADS,
  - 5 LBS ZORBAL ABSORBING MATERIAL,
  - 1 PAIR GOGGLES, 1 PAIR PVC GLOVES.
17. STABILIZED WORKSITE ENTRANCE SHALL BE PER BMP10 OF MTO'S ENVIRONMENTAL GUIDE FOR EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION OF HIGHWAY PROJECTS, FEB. 2007 OR APPROVED EQUIVALENT.

**WATERMAIN NOTES:**

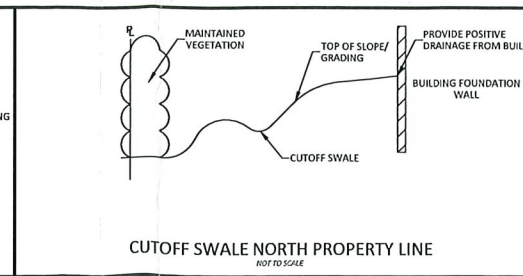
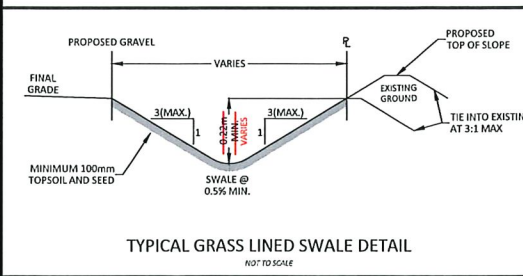
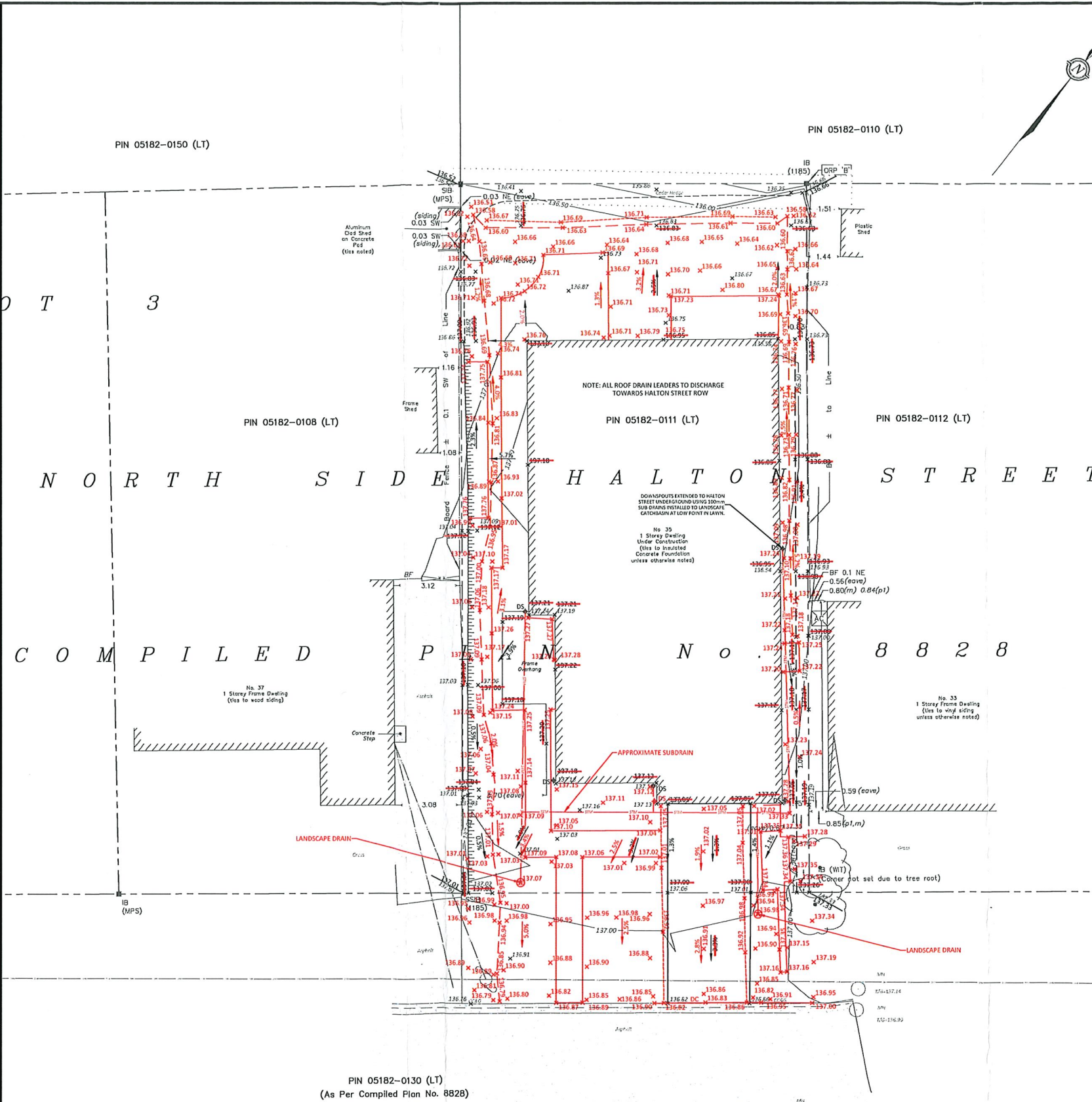
1. RESIDENTIAL SERVICE CONNECTIONS TO CONFORM TO ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
2. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS WILL BE COMPLETED BY THE CONTRACTOR. CONNECTION TO EXISTING WATERMAIN TO BE COMPLETED BY CONTRACTOR.
3. WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.1m.
4. IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
5. VALVES AND VALVE BOXES TO CONFORM WITH ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. VALVE CHAMBER REQUIRED ON WATERMAIN 300mm OR BIGGER TO CONFORM WITH ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
6. FIRE HYDRANT C/W GATE VALVE AND BOX SHALL CONFORM TO ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
7. CONCRETE THRUST BLOCKS TO CONFORM TO ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
8. WATERMANS TO BE C900 CLASS 235 DR-18 OR APPROVED EQUIVALENT.
9. ALL WATERMANS TO BE EQUIPPED WITH TRACER WIRE.

**DISCLAIMER**

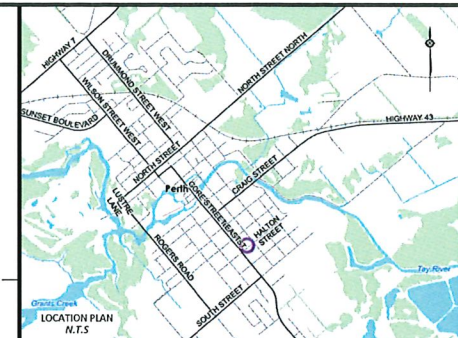
LOCATIONS OF ANY UTILITIES AND UNDERGROUND SERVICES ON THE PLAN ARE PROVIDED FOR INFORMATION PURPOSES ONLY AND MAY DIFFER FROM WHAT IS EXISTING. CONTRACTOR IS RESPONSIBLE FOR ALL ONSITE LOCATES AND WILL BE RESPONSIBLE SHOULD ANY INFRASTRUCTURE BE DAMAGED IN ANY WAY. MCINTOSH PERRY AND THE OWNER SHALL NOT BE RESPONSIBLE FOR DAMAGES ON ACCOUNT OF ANY DISCREPANCIES SHOWN ON THE PLAN.

**ELEVATIONS**

ALL ELEVATIONS SHOWN ON THE PLAN ARE RELATIVE TO THE FINISHED FLOOR ELEVATION (FFE) OF THE EXISTING BUILDING ON SITE. CONTRACTOR SHALL CONFIRM ALL ELEVATIONS SHOWN PRIOR TO CONSTRUCTION



THE ISSUANCE OF THIS RECORD DOCUMENT IS A REPRESENTATION BY THE PRACTITIONER THAT THIS DOCUMENT IS A REFLECTION OF THE COMPLETED WORK TO THE LEVEL OF ACCURACY AND PURPOSE SET OUT IN THE SITE GRADING AND DRAINAGE PLAN. IT IS NOT A REPRESENTATION THAT THE COMPLETED WORK IS IN CONFORMITY WITH THE DESIGN, EVEN IF SUCH INFORMATION IS REPRESENTED ON THIS DOCUMENT.

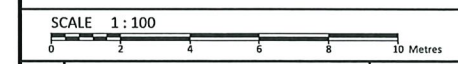


**LEGEND**

OFFSITE LEGAL	---
EX. ASPHALT	---
EX. GRAVEL	---
EX. DITCH	---
EX. FENCE	---
AS CONSTRUCTED GRADE	---
LOT CORNER GRADE	---
EX. GRADE	---
PROPOSED LOT LINE	---
PROPOSED BUILDING	---
PROPOSED DOWNSPOUT	---
PROPOSED SWALE	---
PROPOSED SPOT GRADE	---
PROPOSED OVERLAND FLOW DIRECTION	---
PROPOSED GRADING FILL LIMITS	---
PROPOSED GRADING CUT LIMITS	---
EXISTING STORM PIPE	---
EXISTING SANITARY PIPE	---
EXISTING WATER PIPE	---
EXISTING STORM MANHOLE	---
EXISTING SANITARY MANHOLE	---
EXISTING FIRE HYDRANT	---
EXISTING WATER VALVE	---
EXISTING HYDRO POLE	---
EXISTING HYDRO	---

**BENCHMARKS:**

No.	DESCRIPTION	ELEVATION
TBM1	NAIL IN B&H	136.95m



No.	Revision/Issue	Date
02	RECORD DRAWING REVISION	11.02.2023
01	RECORD DRAWING	10.11.2023
00	ISSUED FOR REVIEW	06.07.2023

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

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Stamp:

Client: **STONE AND PINE INC.**  
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Project: **PROJECT ADDRESS**  
**34 HALTON STREET**

PERTH ONTARIO

Drawing Title: **SITE GRADING AND DRAINAGE PLAN**

Scale: 1:100	Project Number: CCO-23-4515
Drawn by: M.D.	Checked By: A.M.
Designed By: M.D.	Drawing Number: 01