

WENTWORTH LANDSCAPES

Lot 34 McDonald Drive, Picton

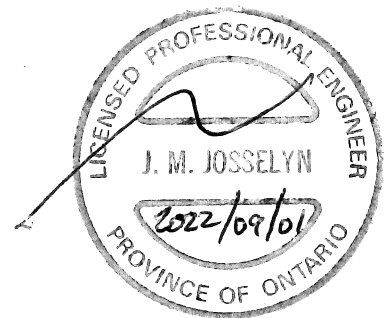
STORMWATER MANAGEMENT BRIEF

JOSELYN ENGINEERING INC.

1225 Gardiners Road, Suite 105
Kingston, Ontario, K7P 0G3
(613) 634-9278

September 1, 2022.

JEI Project 1570-2



1 Introduction

The purpose of this analysis is to review the proposed grading and drainage of the proposed development on Lot 34 within the Prince Edward Industrial Park and ensure that it is in general conformance with the recommendations of the Stormwater Management Report prepared by Greer Galloway Group Inc., dated January 2010.

2 Existing Site Conditions and Drainage

The site is presently vacant, and drains generally southeasterly to the existing roadside ditch on the northside of McDonald Drive. The site is bound by a partially developed site to the south, developed land to the north, and the millennium trail to the west.

McDonald Drive is constructed to a rural standard, with roadside ditches for drainage. Sanitary Sewer is to be provided to the property by the municipality, and water is readily available for this site.

The subject site is within the study area of the Prince Edward Industrial Park that was prepared for the County of Prince Edward Public Works Department for the North. The location of the subject property is within Area 5 described in the report.

3 Stormwater Management

The intent of the overall stormwater design was to provide quality and quantity control for the industrial development to minimize the impact of the existing and future development.

In general, the conveyance of post development runoff from the overall park development is to be overland, through a series of side and rear lot swales/ditches, road ditches and culvert crossings. Runoff quality and quantity treatment/control is achieved through the existing linear detention/retention pond located east of the subject site.

A notched weir controls the discharge of the pond to the swale along Lot 37 before it enters the road side ditch at MacStevens Drive. The proposed pond outlet structure is a 2 stage, rectangular, notched weir designed to maximize detention times for higher frequency, shorter duration storms, while reducing runoff volumes and limiting

peak flows to below predevelopment rates for storms up to and including the 100, 24 Hour Chicago Storm.

The proposed grading plan for the industrial park is provided as Appendix A. This plan has been used as a guide as part of the County's site plan approval process.

4 Proposed Development

The proposed development within the 0.5ha parcel consists of a 475m² industrial building, 920m² asphalt parking and 2300m² of gravel area.

The drainage and grading of the site is generally in accordance with the overall grading plan (Appendix A). The drainage from the majority of the site, due to the existing topography, is directed to the southerly property limit, a small portion of the site shall discharge to a swale along the northly limit. The proposed Grading Plan is provided as Appendix B for reference.

The adjacent site to the south is only partially developed and therefore no lot line swales currently exist. As the adjacent lot is developed and presumably built up from existing grade in accordance with the subdivision grading plan and form common swale along the property limit. In the interim condition drainage will flow toward the existing roadside ditch as intended

The property to the north, Hydro One lands, is developed. As noted in the industrial park drainage study, these lands have provided independent on-site stormwater management and therefore a common swale along the property limit has not been provided as to not direct additional flows to the existing development. A shallow swale has been provided within the subject site along the northly property limit, where grade permits, in order to facilitate drainage to the road side ditch.

5 Conclusions

This report demonstrates that the proposed development is in general accordance with the recommendations of the Stormwater Management Report prepared by Greer Galloway Group Inc., dated January 2010. The grading and drainage of the proposed development shall be directed to the existing stormwater management facility for the purpose of quality and quantity control of post development flows.

APPENDIX A

Grading Plan and Site Plan
prepared by Greer Galloway Group Inc

Notes

1. Do not scale drawings.

LEGEND

- H HYDRO POLE
- AN GUY WIRE ANCHOR
- MH MAINTENANCE HOLE
- CB CATCH BASIN
- FH FIRE HYDRANT
- WV WATER VALVE
- SB PROPERTY BAR
- SANITARY CLEANOUT
- 92.933 EX. ELEVATION
- 99.000 PROP. ELEVATION
- 99.00 PROP. SWALE ELEVATION
- 99.00 AS CONST. ELEVATION
- 94.11 PROP. GRADE @ BUILDING
- 1.8 M CLF
- ▶ DRAINAGE DIRECTION ARROW

Issued

No.	Date	Subject
1	DEC 22/09	C of A SUBMISSION
2	MAY 27/10	MCE REVISIONS
3	MAY 27/10	SEPARATION BERM ADDED
4	AUG 30/10	SOUTH POND OFFSET REV.
5	FEB 1/11	AS BUILT.

Project Name

PICTON INDUSTRIAL PARK

Drawing Name

SITE PLAN

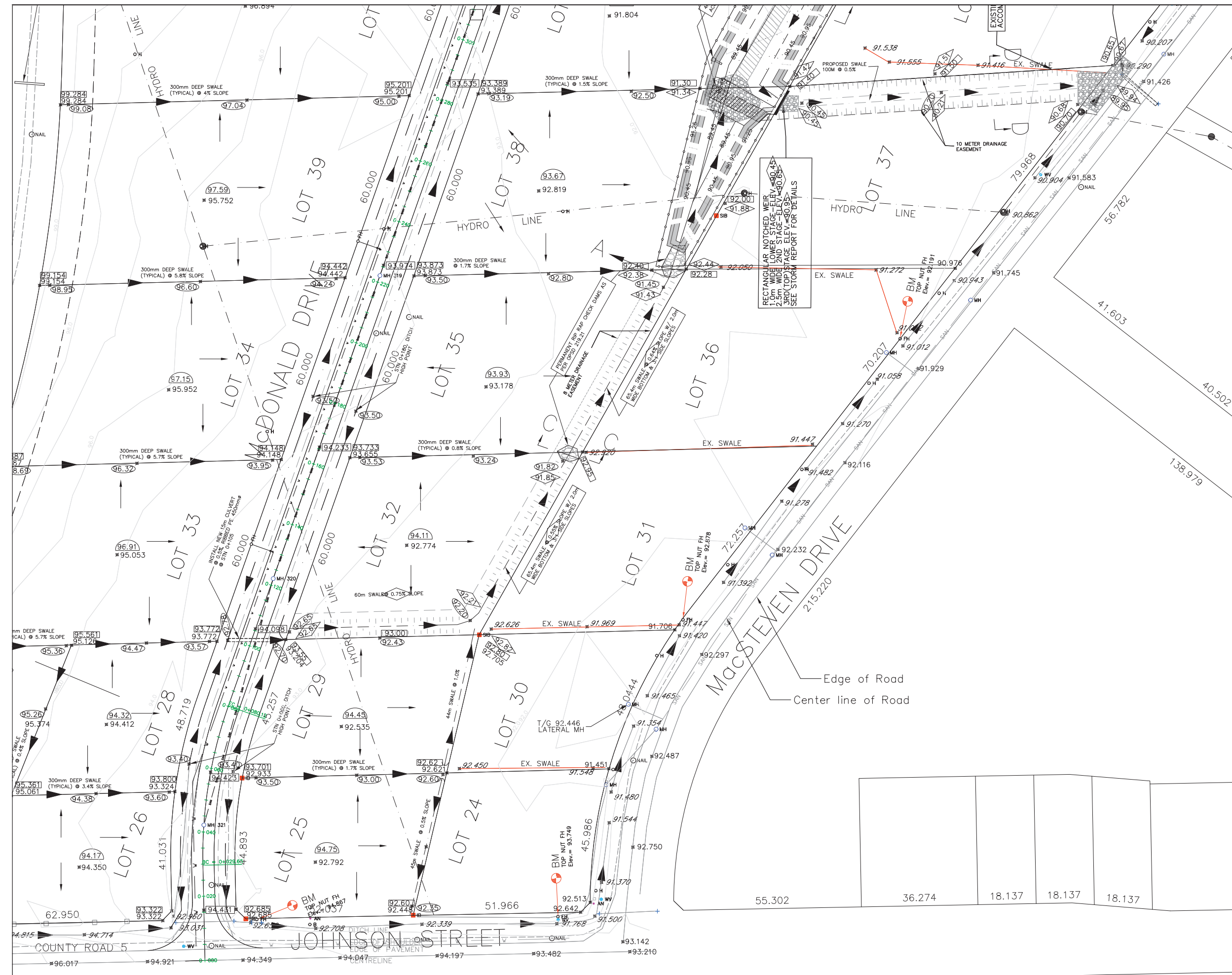
Scale 1: 1000 (H)
1: 100 (V)

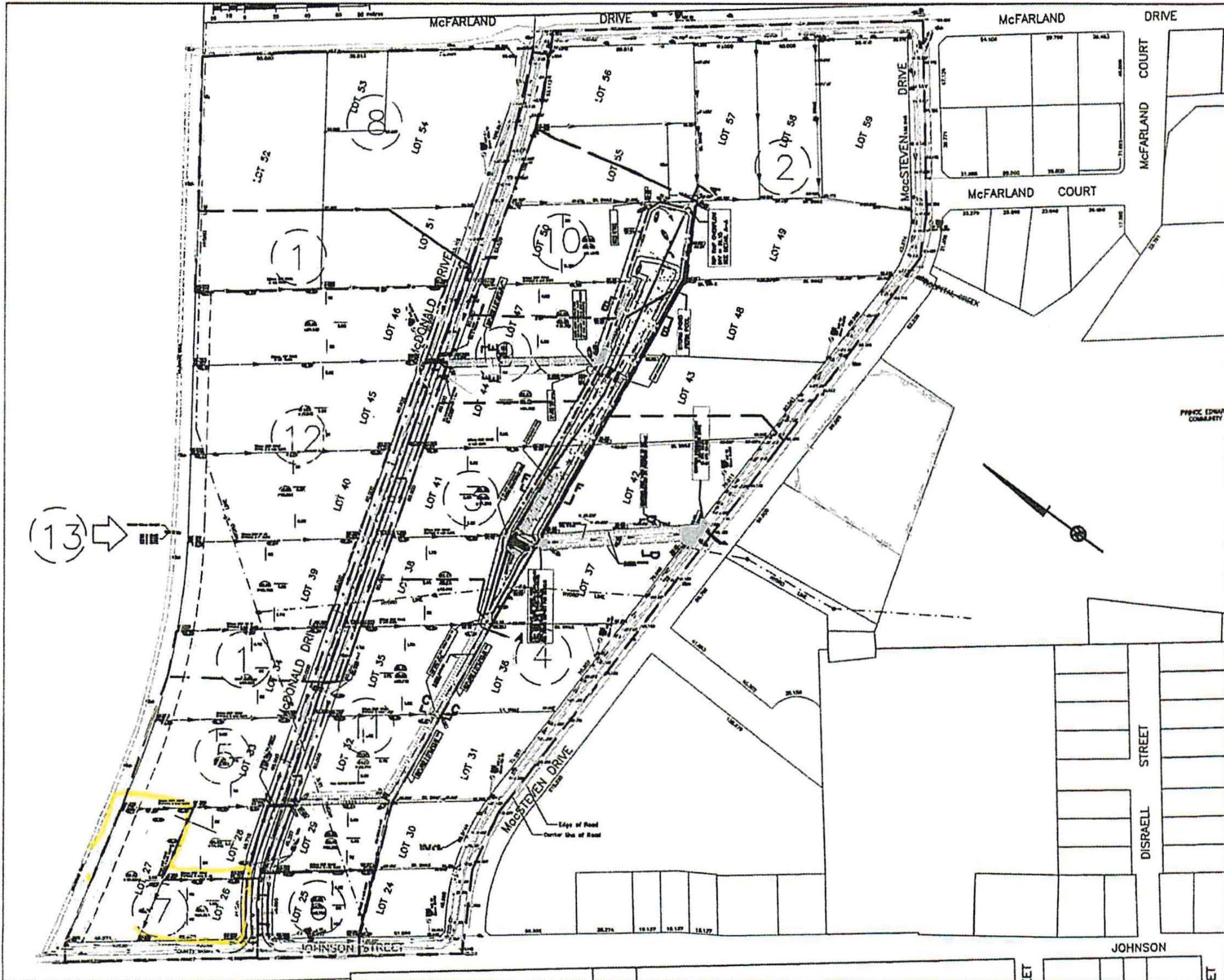
Drawn By Date
BAS JAN. 2009

Checked By Date
CW JAN. 2009

Printed
JAN. 2009

Project Number Drawing Number
09-3-5191 5191-03





The Greer Galloway Group Inc.
 Engineers & Planners
 Peterborough
 Ontario

1430 WALLBRIDGE LOYALIST ROAD
 BELLEVILLE, ONTARIO K8H 4Z5
 Phone: (413) 966-3068

- Notes
- Do not scale drawings.
- LEGEND**
- H HYDRO POLE
 - AN GUY WIRE ANCHOR
 - () MH MAINTENANCE HOLE
 - () CB CATCH BASIN
 - FH FIRE HYDRANT
 - WV WATER VALVE
 - PB PROPERTY BARR
 - SC SANITARY CLEANOUT
 - 02.933 EX. ELEVATION
 - 09.000 PROP. ELEVATION
 - 08.000 PROP. SWALE ELEVATION
 - 1.8 M CUF
 - (13) DRAINAGE AREA ID
 - ▶ DRAINAGE DIRECTION ARROW

Issued

No.	Date	Subject
1	DEC 21/09	O of A SUBMISSION
2	MAY 27/10	MOE REVISIONS

Project Name

PICTON INDUSTRIAL PARK

Drawing Name

SITE PLAN

Scale 1: 1000 (H)
 1: 100 (V)

Drawn By Date
 BAS JAN 2009

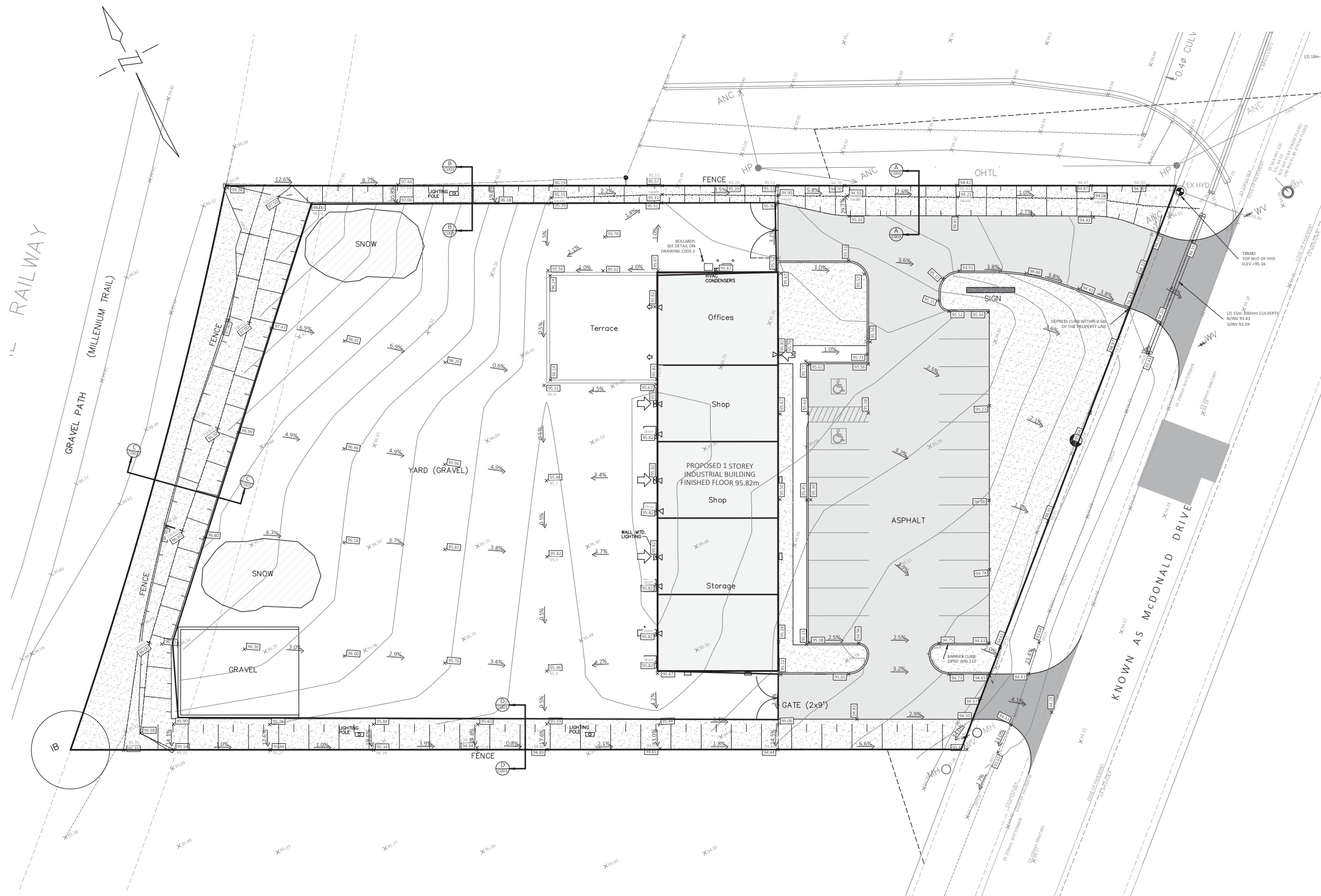
Checked By Date
 CW JAN 2009

Printed
 JAN 2009

Project Number Drawing Number
 09-3-5191 5191-05

APPENDIX B

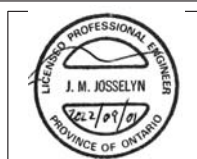
Grading Plan



LEGEND	EXISTING	PROPOSED
SHOULDER		
PAVEMENT		
CONCRETE CURB TYPE		
DITCH		
STORM SEWER & MANHOLE WITH DIRECTION OF FLOW		
SAN SEWER & MANHOLE WITH DIRECTION OF FLOW		
WATERMAIN AND VALVE CHAMBER		
CULVERT		
HYDRO CONDUIT		
HYDRO METER LOCATION		
TRANSFORMER VAULT ON CONC. PAD		
SINGLE CATCH BASIN		
DITCH INLET CATCH BASIN		
CATCH BASIN MANHOLE		
HYDRANT & VALVE BOX		
HYDRO UTILITY POLE & ANCHOR		
STREET LIGHT		
TREES		
PROPERTY BOUNDARY		
CENTRE LINE		
EASEMENT		
EXISTING FENCE		
SILT FENCE		
BENCH MARK LOCATION		
EXISTING GRADE		
PROPOSED GRADE		
DRAINAGE DIRECTION		
DOOR		
HEAVY DUTY ASPHALT		
LIGHT DUTY ASPHALT		

No.	By	Date	Revision	Checked

JE Josselyn Engineering Inc.



1225 GARDINERS ROAD
 SUITE 105
 KINGSTON, ONTARIO K7P 2R9
 TEL : 613-634-9278
 FAX : 613-634-9138
 E-MAIL : mjosselyn@josselyn.ca

OWNER: WENTWORTH LANDSCAPE INC.

PROJECT: LOT 34 McDONALD DRIVE

DRAWING TITLE: GRADING PLAN

Designed By: M.J.	Date: SEPTEMBER 1, 2022	Project No. 1570	Drawing No. C001 - 2
Drawn By: N.B.	Scale: 1:200		
Checked By: M.J.			

