CONTRACT DRAWINGS

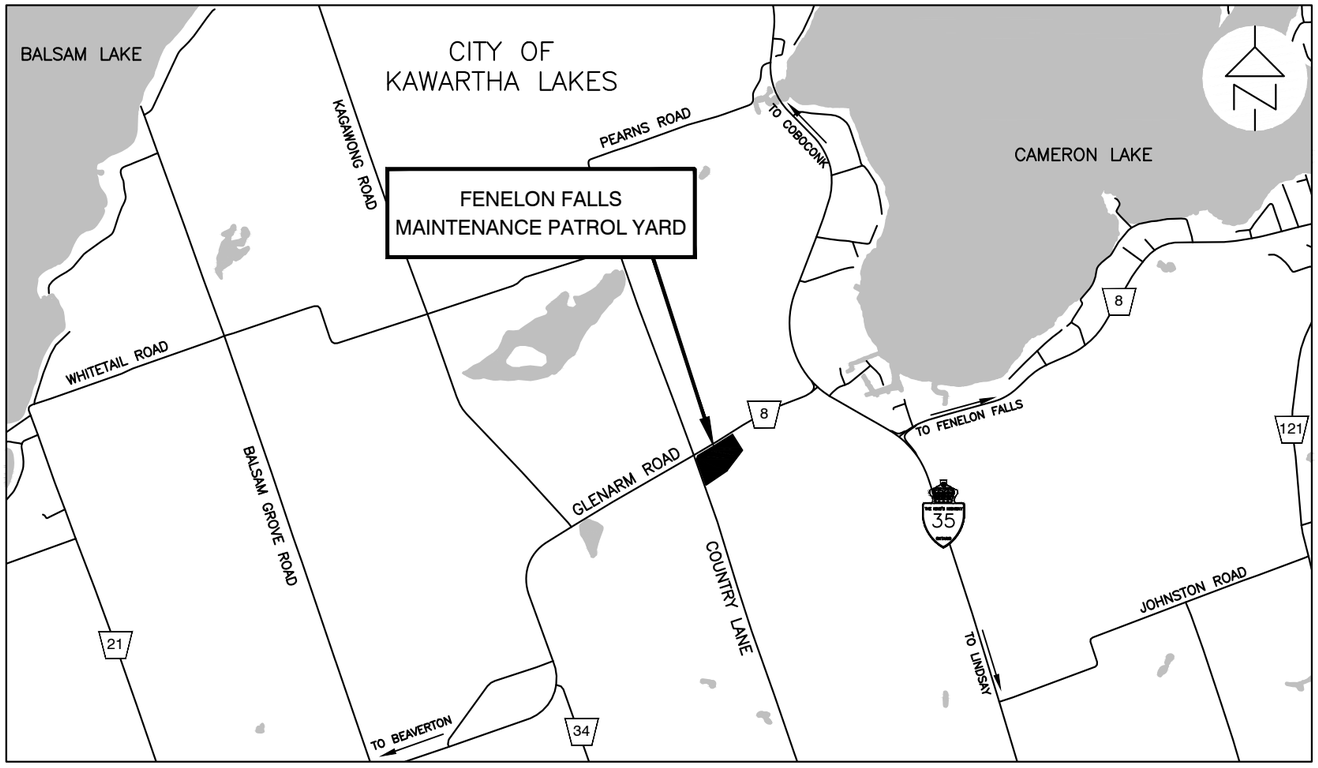
CONTRACT NO. 2023-4010

BOOK 1 OF 2

EAST REGION

Ministry of Transportation

Ontario



Key Plan

0.2 km 0 0.4 km

Horizontal

GWP No 4106-19-01
4044-22-00 Contract No 2023-4010

Work of GRADING, DRAINAGE, GRANULAR BASE, HOT MIX PAVING, ELECTRICAL AND STRUCTURES

Hwy No 35 Region EAST

Location FENELON FALLS MAINTENANCE PATROL YARD (MPY 249)
SOUTH EAST QUADRANT OF GLENARM ROAD AND COUNTRY LANE

Length 0 km

Reference Plans

Oct 21/2024
Date

Norm Meyers
Digitally signed by Norm Meyers
Date: 2024.10.21 10:51:30 -04'00'

Norm Meyers, P.Eng., Manager,
Engineering Program Delivery

Date

Becca Lane
Digitally signed by Becca Lane
Date: 2024.10.21 11:26:34 -04'00'

Becca Lane. P.Eng., Director,
Design & Engineering

Ministry of Transportation

LICENSED PROFESSIONAL ENGINEER
M. D. PLANT
Oct. 11, 2024
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
Oct. 11, 2024
B. W. DAVIS
100136021
PROVINCE OF ONTARIO

Ontario

INDEX

W.P. No. 4106-19-01

Contract No. 2023-4010

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SUPPLEMENTARY LEGEND

NMS — NATIONAL MASTER SPECIFICATION

DESIGNATED AREA TO BE INCLUDED IN NMS TENDER ITEMS (SEE NOTES AND SECTION ON THIS DRAWING AND OPSS AND NMS CONTRACT DOCUMENTS FOR FURTHER DETAILS)

DESIGNATED LIMIT FOR NMS LUMP SUM TENDER ITEMS

NOTES:

1. THIS CONTRACT INCLUDES A COMBINATION OF UNIT PRICE ITEMS AND LUMP SUM ITEMS.
2. UNIT PRICES ITEMS ARE INCLUDED IN THE QUANTITY SHEETS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE OPSS CONTRACT DOCUMENTS.
3. EACH BUILDING ON THE SITE (VEHICLE MAINTENANCE GARAGE/ADMIN SPACE, MATERIAL STORAGE BUILDING AND THE AUXILIARY STORAGE BUILDING) HAS A UNIQUE LUMP SUM ITEM IN THE FORM OF TENDER. ALL ITEMS INCLUDED IN THE CONTRACT DRAWINGS AND NMS CONTRACT DOCUMENTS FOR THESE BUILDINGS SHALL BE INCLUDED IN THE LUMP SUM TENDER ITEM FOR EACH BUILDING WITH THE EXCEPTION OF THE FOLLOWING:
   - ALL EXCAVATION AND BACKFILL FOR THE PROJECT INCLUDING EXCAVATION AND BACKFILL AROUND AND UNDER THE BUILDING SHALL BE INCLUDED IN THE UNIT PRICE ITEMS SHOWN ON THE QUANTITY SHEETS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE OPSS CONTRACT DOCUMENTS.
   - ALL BOLLARDS (INCLUDING BOLLARDS SHOWN WITHIN THE BUILDINGS) SHALL BE INCLUDED IN THE UNIT PRICE ITEMS SHOWN ON THE QUANTITY SHEETS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE OPSS CONTRACT DOCUMENTS.
4. INCLUDE COST FOR ALL APRON SLABS SURROUNDING THE VEHICLE MAINTENANCE GARAGE IN LUMP SUM TENDER ITEM FOR THE VEHICLE MAINTENANCE GARAGE. SEE NMS CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON APRON SLABS.
5. THE SEPTIC SYSTEM HAS IT OWN UNIQUE LUMP SUM TENDER ITEM. THIS ITEM SHALL INCLUDE THE SEPTIC TANKS, PUMPS, LEVEL MONITORING SYSTEM, CONTROL PANEL AND ALARM SYSTEM, FORCE MAIN SYSTEM PIPING, GRAVITY DRAINAGE PIPING OUTSIDE THE BUILDING, WIRING, BREAKERS, AND OTHER ELECTRICAL COMPONENTS FOR THE SEPTIC SYSTEM OF THE BUILDINGS, LEACHING FIELD, PERMITTING AND APPROVALS AND ALL OTHER ITEMS REQUIRED FOR THE SEPTIC SYSTEM AND LEACHING FIELD. SEE NMS CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE SEPTIC SYSTEM. THE SITE ELECTRICAL ITEMS FEEDING POWER TO THE SEPTIC SYSTEM AND CONTROL PANEL SHALL BE INCLUDED IN THE UNIT PRICE ITEMS SHOWN ON THE QUANTITY SHEETS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE OPSS CONTRACT DOCUMENTS.
6. INCLUDE ALL COSTS FOR THE EXTERIOR PROPANE TANK, PROPANE SYSTEM PIPING, PROPANE TANK FOUNDATION, THE FIRST FILL OF PROPANE TANKS AND ALL OTHER ITEMS RELATED TO THE PROPANE SUPPLY SYSTEM IN THE LUMP SUN TENDER ITEM FOR THE VEHICLE MAINTENANCE GARAGE.
7. INCLUDE ALL COSTS FOR THE ROOF MOUNTED MECHANICAL EQUIPMENT, ALL DUCTING AND APPURTENANCES LEADING TO AND WITHIN THE BUILDING, ETC IN THE LUMP SUM TENDER ITEM FOR THE VEHICLE MAINTENANCE GARAGE. SEE NMS CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE MECHANICAL EQUIPMENT.
8. INCLUDE ALL COSTS FOR THE FIRE WATER STORAGE SYSTEM AND ALL RELATED COMPONENTS (FRP TANKS, EXCAVATION AND BACKFILL REQUIRED FOR THE TANKS AND APPURTENANCES,IN STRICT ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS, DRAFT PORT CONNECTIONS, PIPING, LEVEL MONITORING SYSTEM, ANTI-BUOYANCY BALLAST, FILTER FABRIC, CONTROL PANEL, ALARM SYSTEM, ELECTRICAL ITEMS ASSOCIATED WITH THE FIRE WATER STORAGE SYSTEM WITH THE BUILDING, ETC.) IN THE LUMP SUM ITEM TENDER ITEM FOR THE VEHICLE MAINTENANCE GARAGE. SEE NMS CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE FIRE WATER STORAGE SYSTEM. THE SITE ELECTRICAL COMPONENTS FROM THE BUILDING TO THE FIRE TANKS SHALL BE INCLUDED IN THE UNIT PRICE ITEMS SHOWN ON THE QUANTITY SHEETS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE OPSS CONTRACT DOCUMENTS AND THE MANUFACTURER RECOMMENDATIONS FOR THE FIRE WATER STORAGE TANKS.
9. INCLUDE ALL COSTS FOR THE FUEL PAD IN THE LUMP SUM TENDER ITEM FOR THE VEHICLE MAINTENANCE GARAGE. SEE NMS CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE FUEL PAD AREA. THE EXCAVATION AND BACKFILL FOR THE FUEL PAD, BOLLARDS AND THE SITE ELECTRICAL COMPONENTS FROM THE BUILDING TO THE FUEL PAD SHALL BE INCLUDED IN THE UNIT PRICE ITEMS SHOWN ON THE QUANTITY SHEETS AND BE CONSTRUCTED IN ACCORDANCE WITH THE OPSS CONTRACT DOCUMENTS.
10. INCLUDE ALL COSTS FOR THE WELL SYSTEM IN THE LUMP SUM TENDER ITEM FOR THE WELL. SEE CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE WELL SYSTEM. THE SITE ELECTRICAL COMPONENTS FROM THE BUILDING TO THE WELL PUMPS SHALL BE INCLUDED IN THE UNIT PRICE ITEMS SHOWN ON THE QUANTITY SHEETS AND BE CONSTRUCTED IN ACCORDANCE WITH THE OPSS CONTRACT DOCUMENTS.
11. INCLUDE ALL COSTS FOR THE BLOCK HEATERS IN THE UNIT PRICE ITEMS. SEE CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE BLOCK HEATERS. THE ALUMINUM POLES, CONCRETE FOOTINGS, AND SITE ELECTRICAL COMPONENTS FROM THE BUILDING TO THE BLOCK HEATERS SHALL BE INCLUDED IN THE UNIT PRICE ITEMS SHOWN ON THE QUANTITY SHEETS AND BE CONSTRUCTED IN ACCORDANCE WITH THE OPSS CONTRACT DOCUMENTS. ANY ITEMS NOT COVERED FOR THE BLOCK HEATERS UNDER THE UNIT PRICE TENDER ITEMS SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR THE VEHICLE MAINTENANCE GARAGE.
12. ASPHALT PAVING AND ALL EXCAVATION AND BACKFILL WITHIN THE MATERIAL STORAGE BUILDING, SHALL BE INCLUDED IN THE UNIT PRICE ITEMS AND CONSTRUCTED IN ACCORDANCE WITH THE OPSS DOCUMENTS.
13. INCLUDE ALL COSTS FOR THE HYDRO ONE PERMANENT CONNECTIONS IN THE LUMP SUM ITEM FOR THE VEHICLE MAINTENANCE GARAGE. SEE CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE TRANSFORMER PAD, METER BASE, DISCONNECT SWITCH, CONDUIT, WIRING AND MAINTENANCE HOLE. THIS ITEM SHALL INCLUDE ALL COSTS RELATED TO PERMANENT CONNECTIONS.
14. INCLUDE ALL COSTS FOR THE BELL CANADA TELECOMMUNICATIONS CONNECTIONS IN THE LUMP SUM ITEM FOR THE VEHICLE MAINTENANCE GARAGE. SEE CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE CONDUIT, AND WIRING.

LICENSED PROFESSIONAL ENGINEER
Oct. 21/24
B. W. DAVIS
100136021
PROVINCE OF ONTARIO

CONT No. 2023-4010
GWP No. 4044-22-00

MISCELLANEOUS DETAILS

SHEET 01

FENELON FALLS MPY

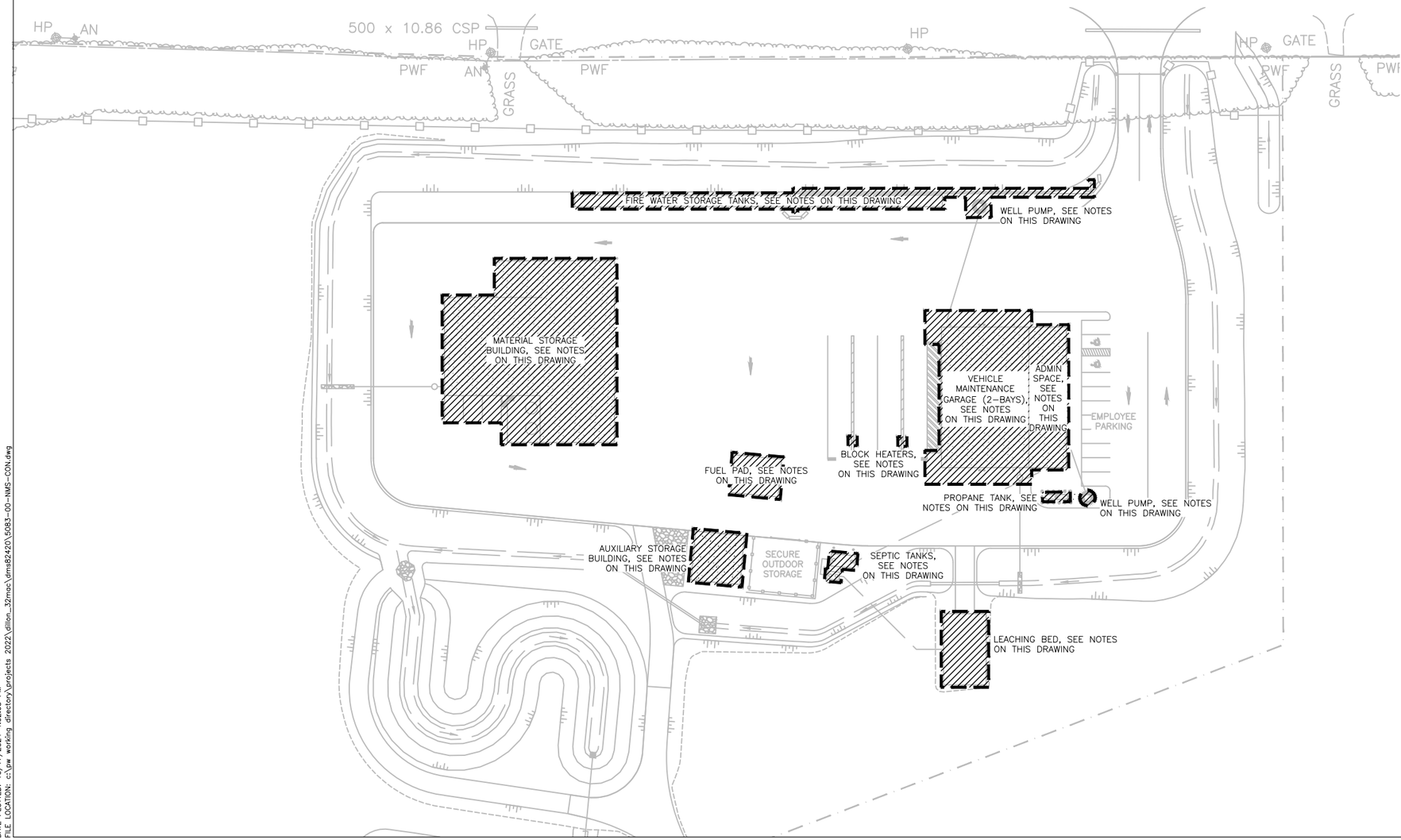
CONTRACT DELINEATION BETWEEN LUMP SUM NMS ITEMS AND UNIT PRICE OPSS ITEMS

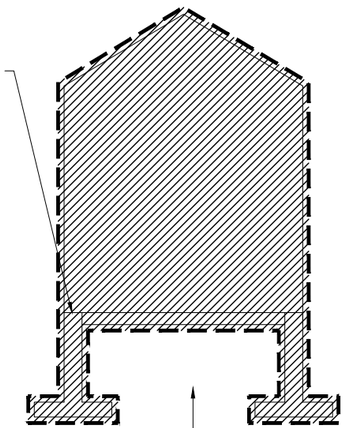
DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.07.03	MDP	ISSUED FOR 100% CLIENT REVIEW
	2	24.09.27	MDP	ISSUED FOR EXECUTIVE REVIEW
	3			
	4			
	5			
	6			

ISSUED FOR EXECUTIVE REVIEW

NOT FOR CONSTRUCTION





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CONT No. 2023-4010
GWP No. 4044-22-00

HORIZONTAL ALIGNMENT

SHEET 02

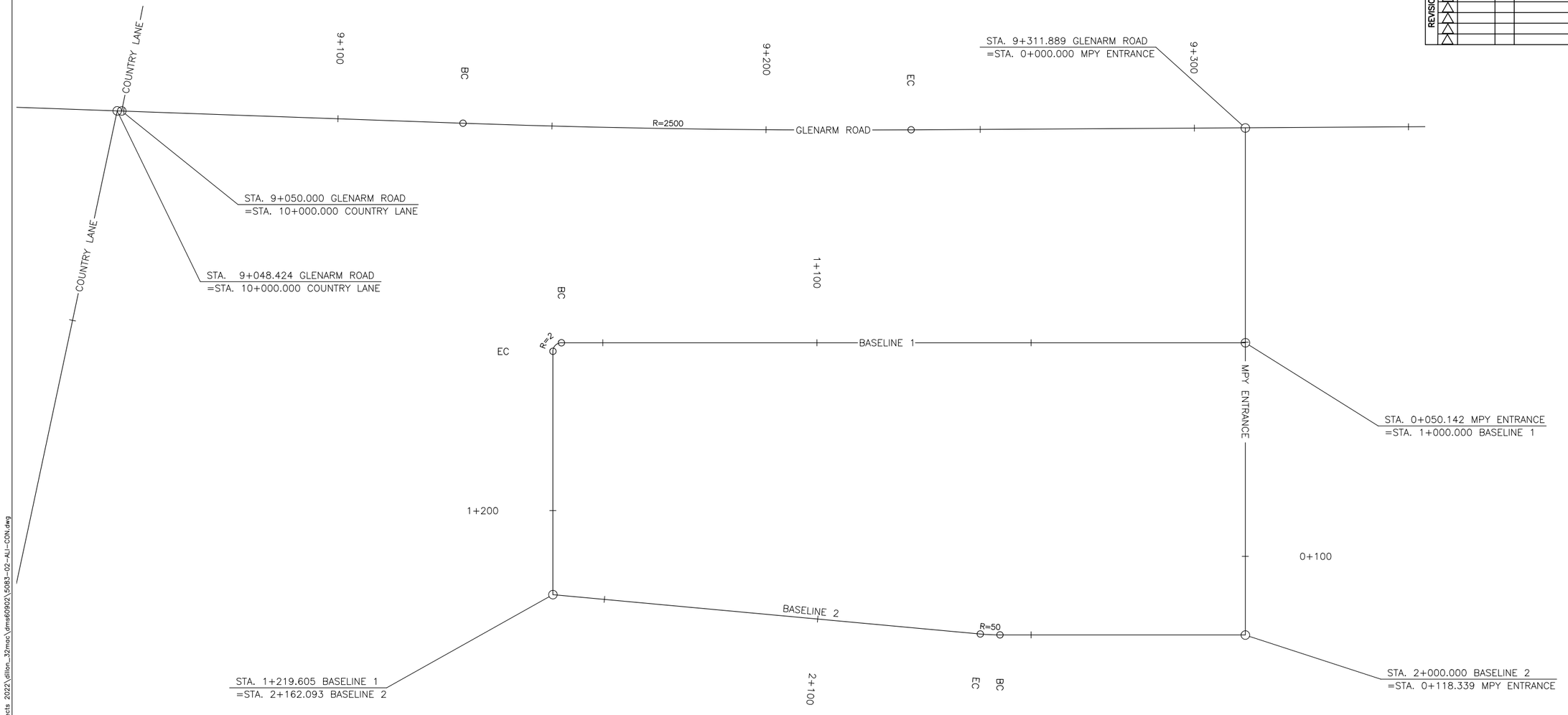
MPY SITE

FENELON FALLS MPY

DILLON CONSULTING

LICENSED PROFESSIONAL ENGINEER
M. D. PLANT
Oct. 21, 2024
PROVINCE OF ONTARIO

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER



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MPY ENTRANCE				
		Station	Northing	Easting
Element: Linear				
POB	( )	0+00.000	4931484.089	361086.427
POE	( )	1+18.339	4931383.783	361149.216
Tangential Direction:		S 32°02'47.7" E		
Tangential Length:		118.339		

BASELINE 1				
		Station	Northing	Easting
Element: Linear				
POB	( )	10+00.000	4931445.273	361118.919
PC	( )	11+66.610	4931356.868	360977.698
Tangential Direction:		S 57°57'12.3" W		
Tangential Length:		166.61		
Element: Circular				
PC	( )	11+66.610	4931356.868	360977.698
PI	( )	11+68.610	4931355.807	360976.003
CC	( )		4931355.173	360978.759
PT	( )	11+69.751	4931354.112	360977.064
Radius:		2		
Delta:		90°00'00.0"	Left	
Degree of Curvature (Arc):		2864°47'20.3"		
Length:		3.142		
Tangent:		2		
Chord:		2.828		
Middle Ordinate:		0.586		
External:		0.828		
Tangent Direction:		S 57°57'12.3" W		
Radial Direction:		N 32°02'47.7" W		
Chord Direction:		S 12°57'12.3" W		
Radial Direction:		S 57°57'12.3" W		
Tangent Direction:		S 32°02'47.7" E		
Element: Linear				
PT	( )	11+69.751	4931354.112	360977.064
POE	( )	12+26.550	4931305.968	361007.202
Tangential Direction:		S 32°02'47.7" E		
Tangential Length:		56.799		

BASELINE 2				
		Station	Northing	Easting
Element: Linear				
POB	( )	20+00.000	4931305.968	361007.202
PC	( )	21+00.214	4931351.128	361096.664
Tangential Direction:		N 63°12'55.6" E		
Tangential Length:		100.214		
Element: Circular				
PC	( )	21+00.214	4931351.128	361096.664
PI	( )	21+02.511	4931352.164	361098.715
CC	( )		4931395.764	361074.132
PT	( )	21+04.806	4931353.383	361100.662
Radius:		50		
Delta:		5°15'43.3"	Left	
Degree of Curvature (Arc):		114°35'29.6"		
Length:		4.592		
Tangent:		2.298		
Chord:		4.59		
Middle Ordinate:		0.053		
External:		0.053		
Tangent Direction:		N 63°12'55.6" E		
Radial Direction:		S 26°47'04.4" E		
Chord Direction:		N 60°35'04.0" E		
Radial Direction:		S 32°02'47.7" E		
Tangent Direction:		N 57°57'12.3" E		
Element: Linear				
PT	( )	21+04.806	4931353.383	361100.662

BASELINE 2				
		Station	Northing	Easting
PC	( )	21+61.843	4931383.648	361149.008
Tangential Direction:		N 57°57'12.3" E		
Tangential Length:		57.037		
Element: Circular				
PC	( )	21+61.843	4931383.648	361149.008
PI	( )	21+71.843	4931388.954	361157.484
CC	( )		4931392.124	361143.702
PT	( )	21+77.551	4931397.43	361152.178
Radius:		10		
Delta:		90°00'00.0"	Left	
Degree of Curvature (Arc):		572°57'27.0"		
Length:		15.708		
Tangent:		10		
Chord:		14.142		
Middle Ordinate:		2.929		
External:		4.142		
Tangent Direction:		N 57°57'12.4" E		
Radial Direction:		S 32°02'47.6" E		
Chord Direction:		N 12°57'12.4" E		
Radial Direction:		N 57°57'12.4" E		
Tangent Direction:		N 32°02'47.6" W		
Element: Linear				
PT	( )	21+77.551	4931397.43	361152.178
PC	( )	22+18.796	4931432.389	361130.294
Tangential Direction:		N 32°02'47.7" W		

BASELINE 2				
		Station	Northing	Easting
Tangential Length:		41.244		
Element: Circular				
PC	( )	22+18.796	4931432.389	361130.294
PI	( )	22+25.534	4931438.101	361126.718
CC	( )		4931405.859	361087.913
PT	( )	22+32.191	4931442.662	361121.759
Radius:		50		
Delta:		15°21'01.3"	Left	
Degree of Curvature (Arc):		114°35'29.6"		
Length:		13.396		
Tangent:		6.738		
Chord:		13.356		
Middle Ordinate:		0.448		
External:		0.452		
Tangent Direction:		N 32°02'47.6" W		
Radial Direction:		N 57°57'12.4" E		
Chord Direction:		N 39°43'18.2" W		
Radial Direction:		N 42°36'11.2" E		
Tangent Direction:		N 47°23'48.8" W		
Element: Linear				
PT	( )	22+32.191	4931442.662	361121.759
POE	( )	22+36.049	4931445.273	361118.919
Tangential Direction:		N 47°23'48.8" W		
Tangential Length:		3.857		

CONT No. 2023-4010
GWP No. 4044-22-00

PROJECT CONTROL

SHEET 03

MPY SITE

FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
	6			

N.T.S.

GLENARM ROAD

		Station	Northing	Easting
Element: Linear				
POB	( )	88+89.024	4931268.02	360723.004
PC	( )	91+29.217	4931388.12	360931.016
Tangential Direction:		N 59°59'57.1" E		
Tangential Length:		240.193		
Element: Circular				
PC	( )	91+29.217	4931388.12	360931.016
PI	( )	91+81.544	4931414.284	360976.332
CC	( )		4933553.166	359680.986
PT	( )	92+33.856	4931442.321	361020.514
Radius:		2500		
Delta:		2°23'53.3"	Left	
Degree of Curvature (Arc):		2°17'30.6"		
Length:		104.639		
Tangent:		52.327		
Chord:		104.631		
Middle Ordinate:		0.547		
External:		0.548		
Tangent Direction:		N 59°59'57.1" E		
Radial Direction:		S 30°00'02.9" E		
Chord Direction:		N 58°48'00.4" E		
Radial Direction:		S 32°23'56.2" E		
Tangent Direction:		N 57°36'03.8" E		
Element: Linear				
PT	( )	92+33.856	4931442.321	361020.514
PC	( )	93+87.341	4931524.56	361150.107
Tangential Direction:		N 57°36'03.8" E		
Tangential Length:		153.485		
Element: Circular				
PC	( )	93+87.341	4931524.56	361150.107
PI	( )	94+35.910	4931550.584	361191.115
CC	( )		4928991.547	362757.54
PT	( )	94+84.470	4931575.266	361232.945
Radius:		3000		
Delta:		1°51'18.1"	Right	
Degree of Curvature (Arc):		1°54'35.5"		
Length:		97.129		
Tangent:		48.569		
Chord:		97.125		
Middle Ordinate:		0.393		
External:		0.393		
Tangent Direction:		N 57°36'03.8" E		
Radial Direction:		S 32°23'56.2" E		
Chord Direction:		N 58°31'42.8" E		
Radial Direction:		S 30°32'38.1" E		
Tangent Direction:		N 59°27'21.9" E		
Element: Linear				
PT	( )	94+84.470	4931575.266	361232.945
PC	( )	94+94.485	4931580.356	361241.57

GLENARM ROAD

		Station	Northing	Easting
Tangential Direction:		N 59°27'21.9" E		
Tangential Length:		10.015		
Element: Circular				
PC	( )	94+94.485	4931580.356	361241.57
PI	( )	96+37.829	4931653.203	361365.024
CC	( )		4930202.372	362054.688
PT	( )	97+80.410	4931702.946	361499.46
Radius:		1600		
Delta:		10°14'20.2"	Right	
Degree of Curvature (Arc):		3°34'51.6"		
Length:		285.925		
Tangent:		143.344		
Chord:		285.545		
Middle Ordinate:		6.383		
External:		6.408		
Tangent Direction:		N 59°27'21.9" E		
Radial Direction:		S 30°32'38.1" E		
Chord Direction:		N 64°34'32.0" E		
Radial Direction:		S 20°18'17.9" E		
Tangent Direction:		N 69°41'42.1" E		
Element: Linear				
PT	( )	97+80.410	4931702.946	361499.46
PC	( )	98+61.603	4931731.121	361575.607
Tangential Direction:		N 69°41'42.1" E		
Tangential Length:		81.192		
Element: Circular				
PC	( )	98+61.603	4931731.121	361575.607
PI	( )	99+15.124	4931749.694	361625.803
CC	( )		4932012.479	361471.502
PT	( )	99+67.531	4931784.479	361666.479
Radius:		300		
Delta:		20°13'51.3"	Left	
Degree of Curvature (Arc):		19°05'54.9"		
Length:		105.929		
Tangent:		53.522		
Chord:		105.379		
Middle Ordinate:		4.663		
External:		4.737		
Tangent Direction:		N 69°41'42.1" E		
Radial Direction:		S 20°18'17.9" E		
Chord Direction:		N 59°34'46.5" E		
Radial Direction:		S 40°32'09.2" E		
Tangent Direction:		N 49°27'50.8" E		
Element: Linear				
PT	( )	99+67.531	4931784.479	361666.479
POE	( )	100+00.000	4931805.582	361691.156
Tangential Direction:		N 49°27'50.8" E		
Tangential Length:		32.469		

COUNTRY LANE

		Station	Northing	Easting
Element: Linear				
POB	( )	100+00.000	4931347.722	360861.047
PC	( )	101+00.565	4931253.236	360895.48
Tangential Direction:		S 20°01'22.5" E		
Tangential Length:		100.565		
Element: Circular				
PC	( )	101+00.565	4931253.236	360895.48
PI	( )	101+31.010	4931224.63	360905.905
CC	( )		4929541.257	356197.701
PT	( )	101+61.455	4931195.9	360915.98
Radius:		5000		
Delta:		0°41'51.9"	Right	
Degree of Curvature (Arc):		1°08'45.3"		
Length:		60.89		
Tangent:		30.446		
Chord:		60.89		
Middle Ordinate:		0.093		
External:		0.093		
Tangent Direction:		S 20°01'22.5" E		
Radial Direction:		S 69°58'37.5" W		
Chord Direction:		S 19°40'26.5" E		
Radial Direction:		S 70°40'29.4" W		
Tangent Direction:		S 19°19'30.6" E		
Element: Linear				
PT	( )	101+61.455	4931195.9	360915.98
POE	( )	102+71.497	4931092.059	360952.396
Tangential Direction:		S 19°19'30.6" E		
Tangential Length:		110.042		
Element: Linear				
POB	( )	99+41.956	4931402.6	360841.58
POE	( )	100+00.000	4931348.255	360861.97
Tangential Direction:		S 20°33'58.3" E		
Tangential Length:		58.044		

CONT No. 2023-4010
GWP No. 4044-22-00

PROJECT CONTROL

SHEET 04

MPY SITE

FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
	6			

HORIZONTAL AND VERTICAL CONTROL

POINT No.	ID	NORTHING	EASTING	ELEVATION
100	HCP	4931885.4520	361596.5870	267.811
101	HCP	4931725.8810	361765.9940	264.963
102	HCP	4931686.9710	361509.5960	275.095
103	HCP	4931626.7130	361352.0810	272.727

HORIZONTAL DATUM
NAD 83 CSRS, MTM GRID CO-ORDINATE SYSTEM ZONE 10

VERTICAL DATUM
ELEVATIONS ARE GEODETIC, BASED ON (CGVD28)

N.T.S.

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NOTES:

A. TC-64 SIGNS TO BE INSTALLED A MINIMUM OF SEVEN DAYS PRIOR TO SCHEDULED GLENARM ROAD CLOSURES.
B. LOCATIONS OF SIGNS ARE APPROXIMATE AND SHOULD BE CONFIRMED WITH THE CONTRACT ADMINISTRATOR.
C. SIGNS TO BE ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF OTM BOOK 7. THE SIGNS SHOWN ON THE DRAWING DO NOT INDICATE ALL SIGNAGE REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE TEMPORARY TRAFFIC CONTROL SIGNING IN ACCORDANCE WITH OTM BOOK 7.
D. ALL TC-64 SIGNS SHALL:
   -BE 120cmx240cm IN SIZE
   -HAVE 30cmx240cm TABS, AND
   -HAVE 200mm (8") FHWA D LETTERING, UNLESS OTHERWISE NOTED.

TC- 64 SIGNS

PRIOR TO GLENARM ROAD LANE CLOSURE

Glenarm
Road
Lane Reductions
Begins MMM-DD

TAB

DURING GLENARM ROAD LANE CLOSURE

Glenarm
Road
Lane Reductions
MMM-DD

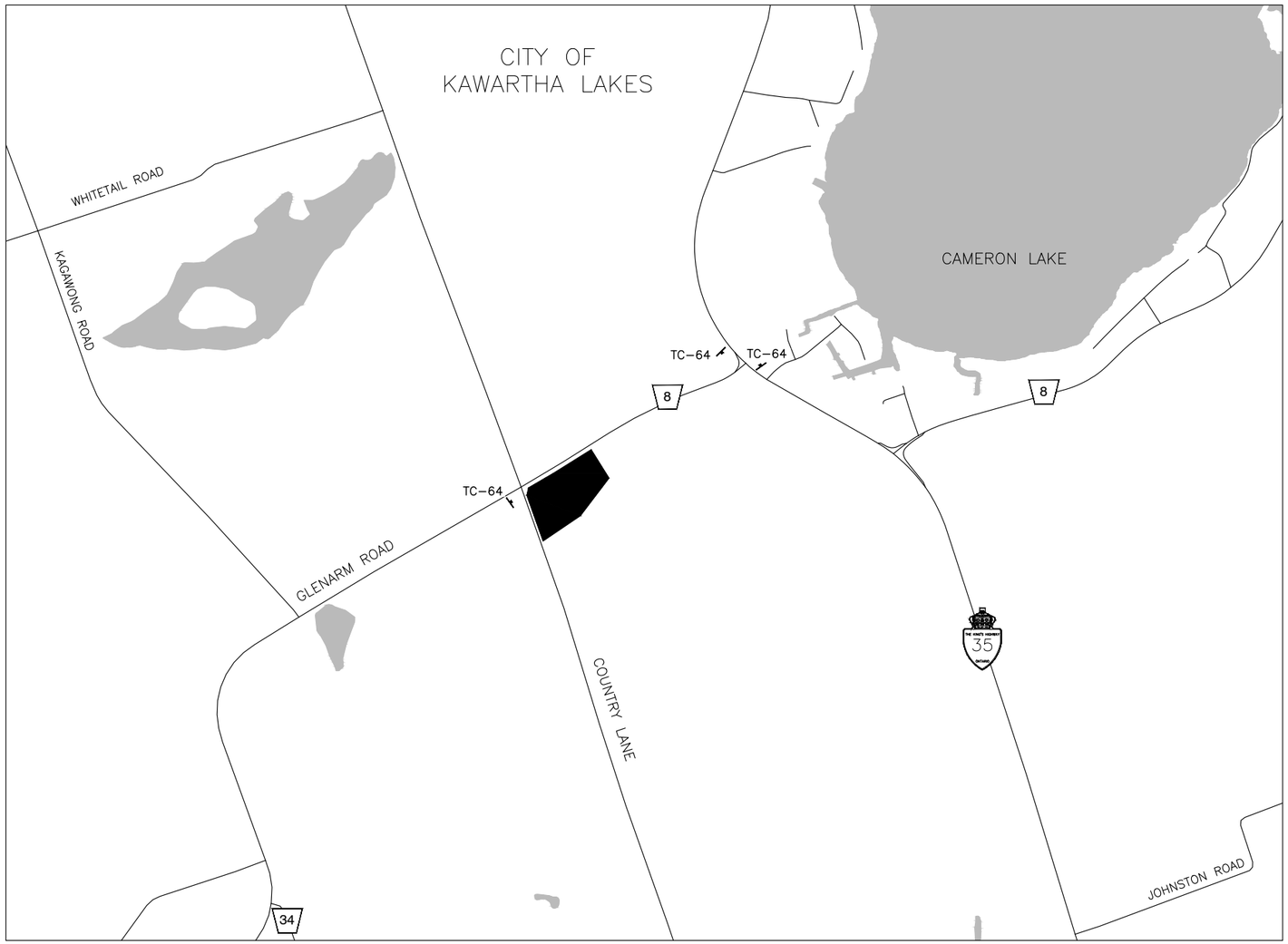
TAB

CONTRACT INFORMATION SIGNS

SIGN NUMBER	MESSAGE DETAILS	MIN. SIGN HEIGHT	MAX. SIGN HEIGHT	MAX. SIGN WIDTH
*	*	900 mm *	1500 mm *	2400 mm *

* FINAL SIGN NUMBER, MESSAGE DETAILS, AND SIGN HEIGHT TO BE SUPPLIED BY THE OWNER AFTER CONTRACT AWARD.

LICENCED PROFESSIONAL ENGINEER
M. D. PLANT
Oct. 21, 2024
PROVINCE OF ONTARIO



5m 0 10m
Horizontal

CONT No. 2023-4010
GWP No. 4044-22-00

CONSTRUCTION STAGING

SUPPLEMENTAL SIGNING
FENELON FALLS MPY

SHEET 05

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
	6			

DATE PLOTTED: 10/17/2024 4:02:13 PM
FILE LOCATION: c:\pw working directory\projects 2022\dillon_32mac\dms80902\50B3-02-KEY-CON.dwg

SUPPLEMENTARY LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- TC-54 BARREL (FOLLOW OTM BOOK 7 FOR SPACING)

GENERAL STAGING NOTES

A. THE SIGNS SHOWN ON THIS DRAWING DO NOT INDICATE ALL SIGNAGE REQUIREMENTS. ALL TEMPORARY TRAFFIC CONTROL AND SIGNING ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7.
B. ALL SIGNS, BARRICADES AND LIGHTS SHALL BE INSPECTED AND MAINTAINED DAILY BY THE CONTRACTOR.
C. REFLECTIVE MATERIALS TO BE USED IN THE MANUFACTURING OF THE SIGNS SHALL BE IN ACCORDANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7.
D. FLAGGERS TO BE PRESENT FOR ENTIRE DURATION OF LANE CLOSURE DURING CONSTRUCTION.

STAGE 1 – MPY ENTRANCE	
SUGGESTED SEQUENCING OF GLENARM ROAD CONSTRUCTION	
DESCRIPTION OF CONSTRUCTION WORKS	GLENARM ROAD TRAFFIC
1. CONSTRUCT MPY ENTRANCE AND TIE INTO THE EXISTING GLENARM ROAD EDGE OF PAVEMENT	1. WB TRAFFIC FLAGGED WITH TRAFFIC CONTROL PERSON DURING THE DAY.
2. EB LANE TO BE BACKFILLED/RAMPED UP TO CREATE A LEVEL GRANULAR DRIVING SURFACE AT THE END OF EACH DAYS WORK.	2. EB TRAFFIC FLAGGED WITH TRAFFIC CONTROL PERSON DURING THE DAY.
	3. ALL LANES OPEN EVERY EVENING.

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M. D. PLANT
Oct. 21, 2024
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CONT No. 2023-4010
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CONSTRUCTION STAGING

SHEET 06

STAGE 1
FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
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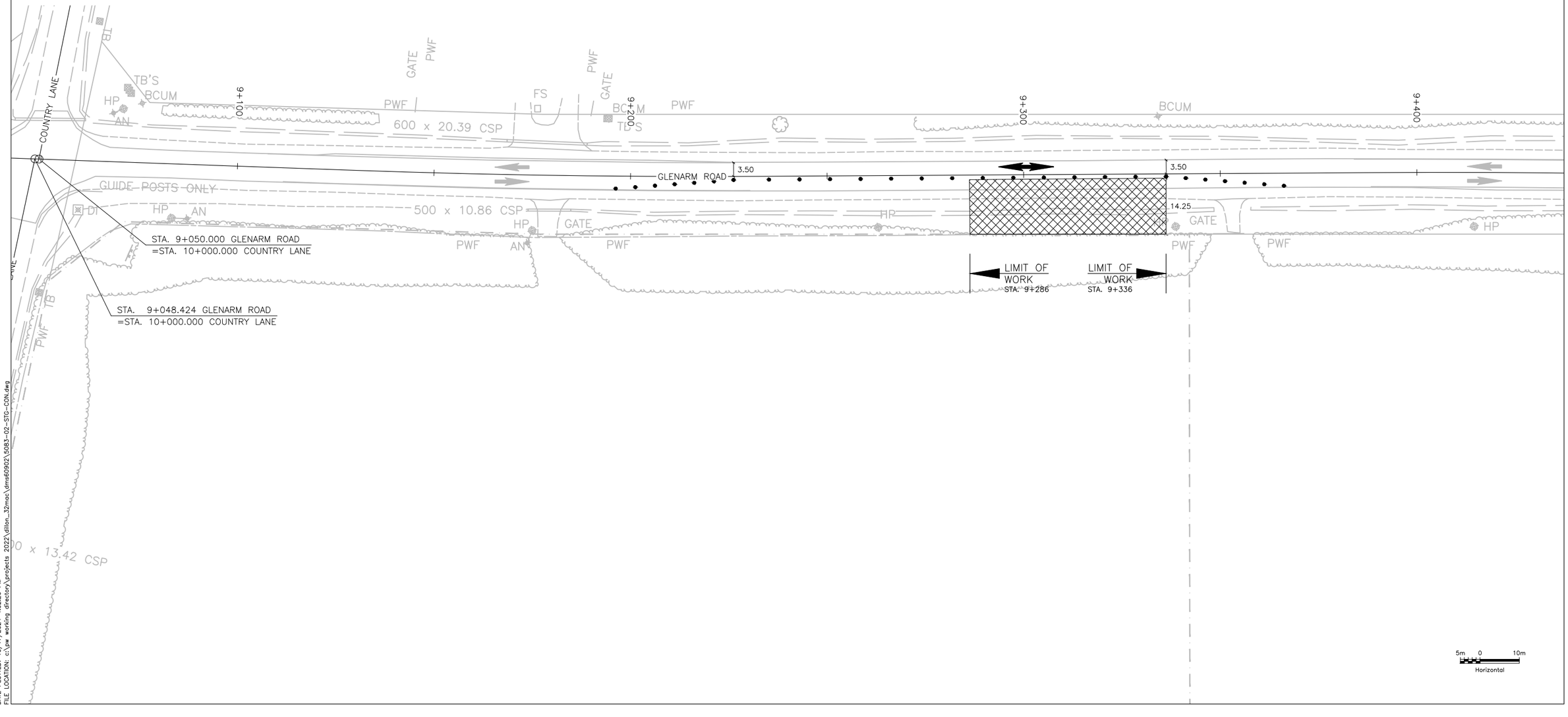
	2			
	3			
	4			
	5			
	6			



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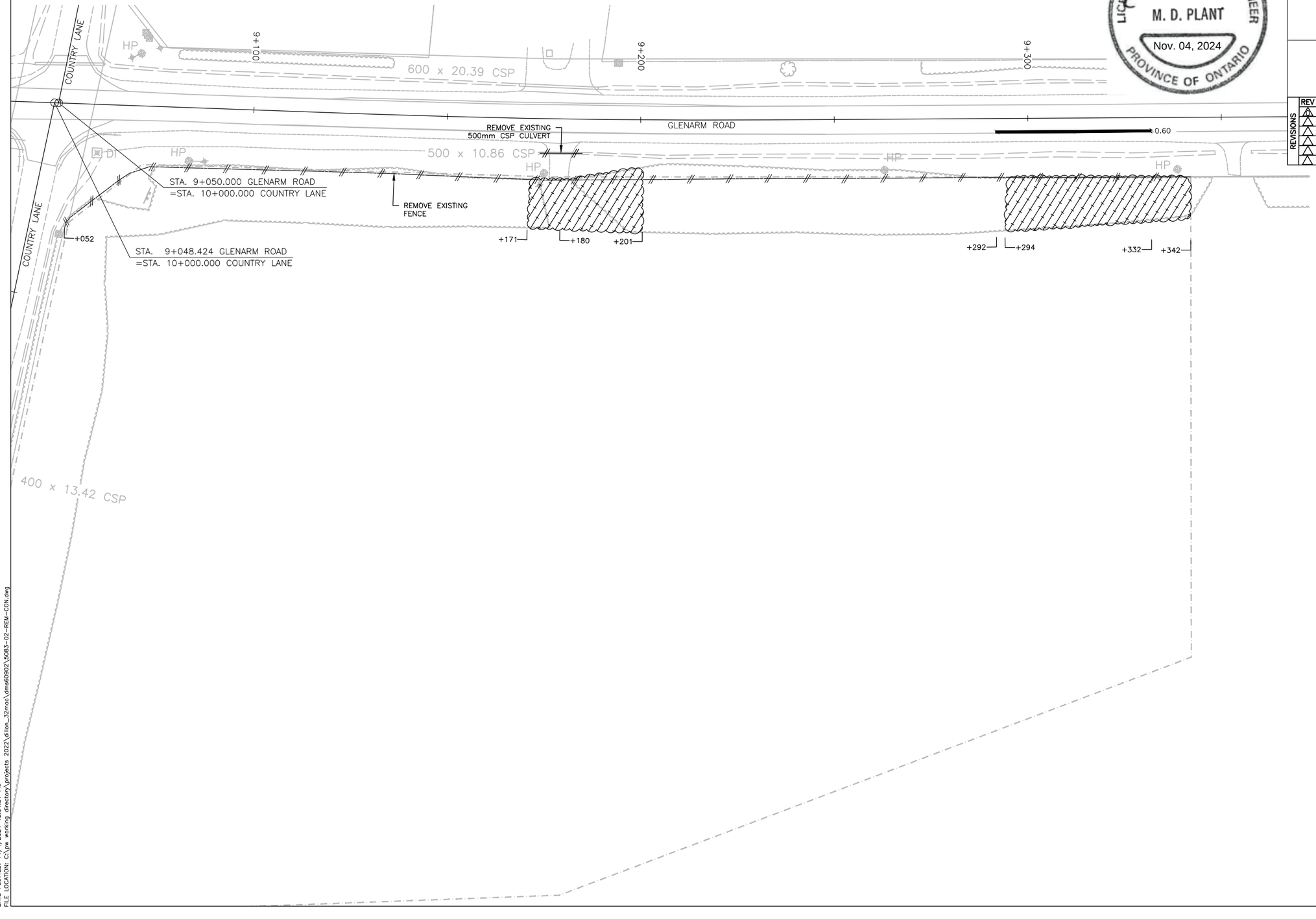
FILE LOCATION: c:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-STG-CON.dwg

SUPPLEMENTARY LEGEND

- REMOVAL OF ASPHALT, PARTIAL DEPTH (50 mm)
- CLEARING AND GRUBBING
- CULVERT REMOVAL
- FENCE REMOVAL



LICENSED PROFESSIONAL ENGINEER
M. D. PLANT
Nov. 04, 2024
PROVINCE OF ONTARIO

CONT No. 2023-4010
GWP No. 4044-22-00

REMOVALS

MPY SITE
FENELON FALLS MPY

SHEET
07

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.11.04	MDP	ISSUED FOR TENDER

5m 0 10m
Horizontal

DATE PLOTTED: 11/4/2024 12:01:31 PM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-REM-CON.dwg

CONT No. 2023-4010
GWP No. 4044-22-00

PAVEMENT DATA

SHEET 08

MPY SITE

FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
	6			

PAVEMENT DATA CHART

LOCATION	SURFACE	UPPER BINDER
	50mm SUPERPAVE 12.5	50mm SUPERPAVE 19.0
MPY ENTRANCE	X	X
MPY SITE	X	X
MATERIAL STORAGE BUILDING	X	X
SECURE OUTDOOR STORAGE	X	X

N.T.S.

DATE PLOTTED: 10/17/2024 4:02:38 PM
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SUPPLEMENTARY LEGEND

- SITE CONSTRUCTION (FLEXIBLE PAVEMENT STRUCTURE)
  - 50mm SUPERPAVE 12.5
  - 50mm SUPERPAVE 19.0
- PARTIAL DEPTH PAVEMENT
  - 50mm SUPERPAVE 12.5
- WASTE AREA (IF REQUIRED)
- BUILDING ENVELOPE
- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- HIGHWAY FENCE (MTOD 971.101)
- CHAIN–LINK FENCE (MTOD 972.130)
- RIP–RAP

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CONT No. 2023–4010
GWP No. 4044–22–00

NEW CONSTRUCTION

SHEET 09

MPY SITE

FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.11.04	MDP	ISSUED FOR TENDER

COUNTRY LANE
TB'S
BCUM
HP
AN
9+100
PWF
600 x 20.39 CSP
GRASS
FS
GR
GATE
9+200
BCUM
TB'S
STA. 9+311.889 GLENARM ROAD
=STA. 0+000.000 MPY ENTRANCE
9+300
GLENARM ROAD
GUIDE POSTS ONLY
DI
500 x 10.86 CSP
STA. 9+050.000 GLENARM ROAD
=STA. 10+000.000 COUNTRY LANE
STA. 9+048.424 GLENARM ROAD
=STA. 10+000.000 COUNTRY LANE
R=15.0
01
ENTRANCE CLOSURE GATES, SEE DETAILS ELSEWHERE IN CONTRACT
9.00
UNDERGROUND FIRE WATER STORAGE TANKS. SEE DETAILS ELSEWHERE IN CONTRACT
0+100
WELL #2 (WASH BAY SERVICE)
R=8.0
R=50.0
BASELINE 1
8.00
22.00
DRAFTING PORT (SEE DETAILS ELSEWHERE IN CONTRACT)
DRAFTING PORT (SEE DETAILS ELSEWHERE IN CONTRACT)
SEE BUILDING WATER CONNECTION DETAILS ELSEWHERE IN CONTRACT
OPSD 600.110
3.00
MPY ENTRANCE
STA. 0+050.142 MPY ENTRANCE
=STA. 1+000.000 BASELINE 1
MATERIAL WASTE AREA (IF REQUIRED)
MATERIAL STORAGE BUILDING
15.00
02
69.00
SEE BUILDING STORM CONNECTION DETAILS ELSEWHERE IN CONTRACT
VEHICLE MAINTENANCE GARAGE
ADMIN SPACE
3.00
1+200
200
BOLLARD (TYP.)
BLOCK HEATER (TYP.) (SEE DETAILS ELSEWHERE IN CONTRACT)
10.50
400 x 13.42 CSP
3.5m x 3.5m RIP–RAP, R–10 (OPSD 810.010)
23.62
WINTER LIQUID STORAGE
17.06
PROPOSED FUEL TANK LOCATION (FUEL TANK TO BE PROVIDED BY TENANT)
FUEL PAD
16.50
01
0+100
SEE BUILDING STORM CONNECTION DETAILS ELSEWHERE IN CONTRACT
3.5m x 3.5m RIP–RAP, R–10 (OPSD 810.010)
R=10.0
6.0m CHAIN–LINK SLIDING GATE
BASELINE 2
R=50.0
STORAGE SHED
SECURE OUTDOOR STORAGE
02
200
8.00
R=10.0
SEE BUILDING WATER CONNECTION DETAILS ELSEWHERE IN CONTRACT
STA. 2+000.000 BASELINE 2
=STA. 0+118.339 MPY ENTRANCE
STA. 1+219.605 BASELINE 1
=STA. 2+162.093 BASELINE 2
POND INLET SPILLWAY SEE DETAILS ELSEWHERE IN CONTRACT
STORMWATER MANAGEMENT POND
03
2+100
LEACHING BED
WELL #1 (BUILDING SERVICE)
PROPANE TANK (SEE DETAILS ELSEWHERE IN CONTRACT)
SEE BUILDING SANITARY CONNECTION DETAILS ELSEWHERE IN CONTRACT
2.4m CHAIN–LINK FENCE
PUMP CHAMBER. SEE DETAILS ELSEWHERE IN CONTRACT.
SEPTIC TANK. SEE DETAILS ELSEWHERE IN CONTRACT.
0.8m x 4.4m RIP–RAP, R–10 (OPSD 810.010)
3.5m x 3.5m RIP–RAP, R–10 (OPSD 810.010)
LEECHING BED. SEE DETAILS ELSEWHERE IN CONTRACT.
R–10 RIP–RAP UNDERLAIN BY GEOTEXTILE
R=40.0
R=40.0
5m 0 10m
Horizontal

DATE PLOTTED: 11/4/2024 3:16:51 PM
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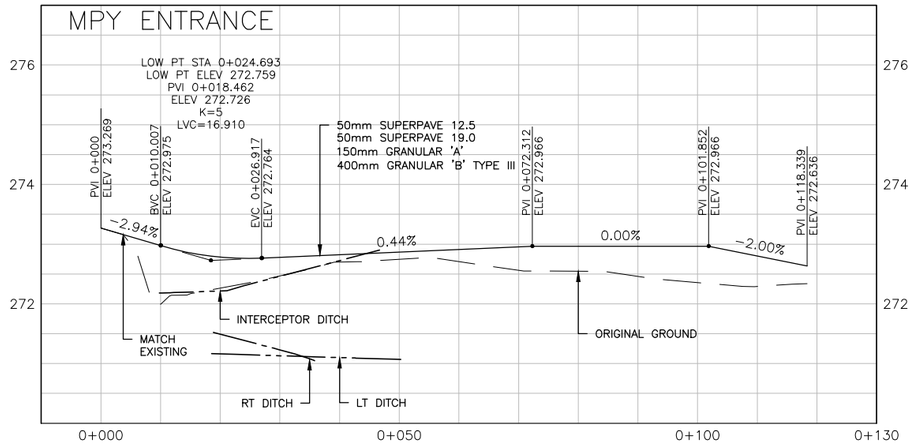

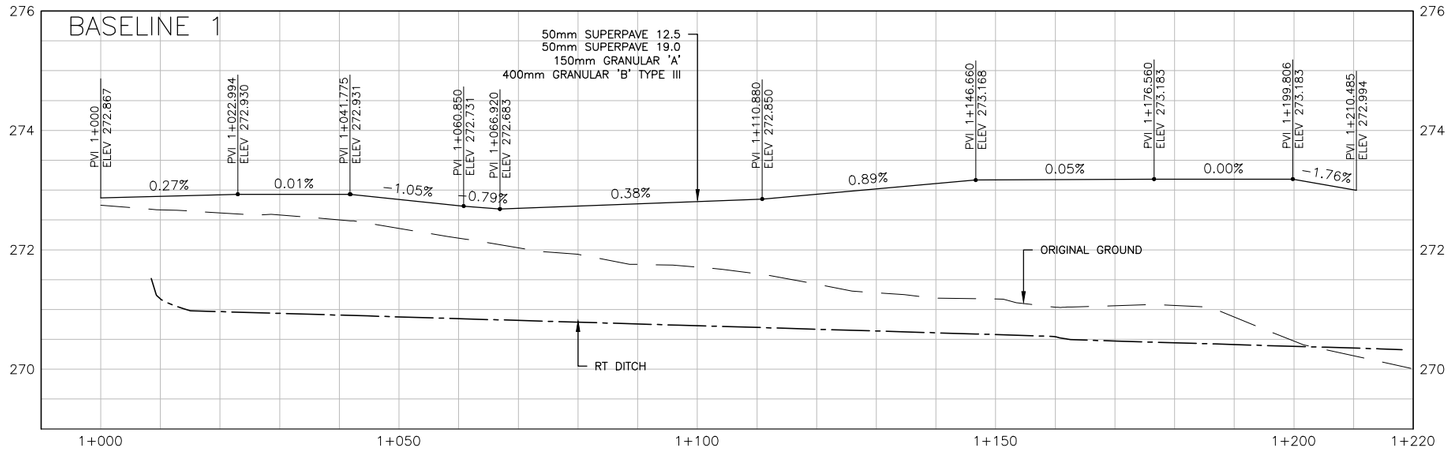

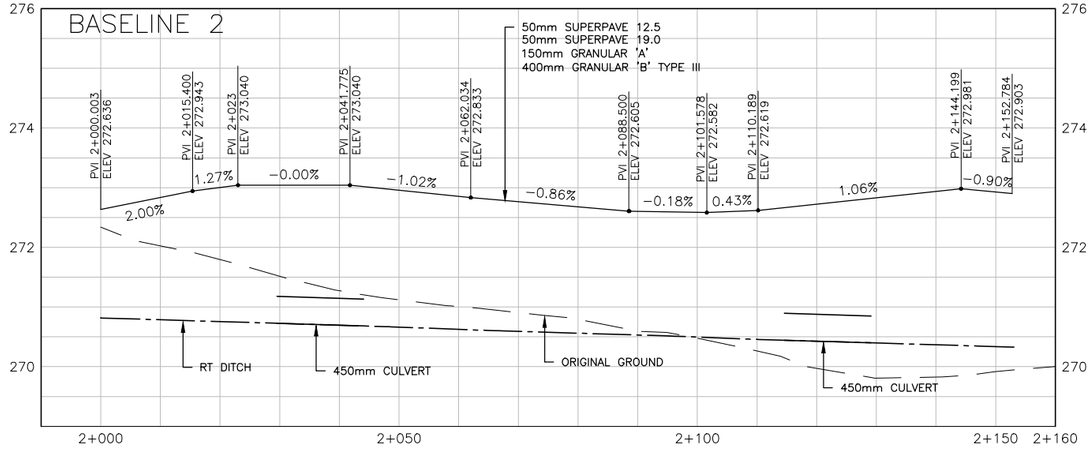

CONT No. 2023-4010
GWP No. 4044-22-00

PROFILES

MPY SITE

FENELON FALLS MPY

SHEET 10

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
	6			

0.5m 0 1m
Vertical

5m 0 10m
Horizontal

DATE PLOTTED: 10/17/2024 4:15:09 PM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-PRF-CON.dwg

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GWP No. 4044-22-00

PAVEMENT MARKINGS & SIGNS

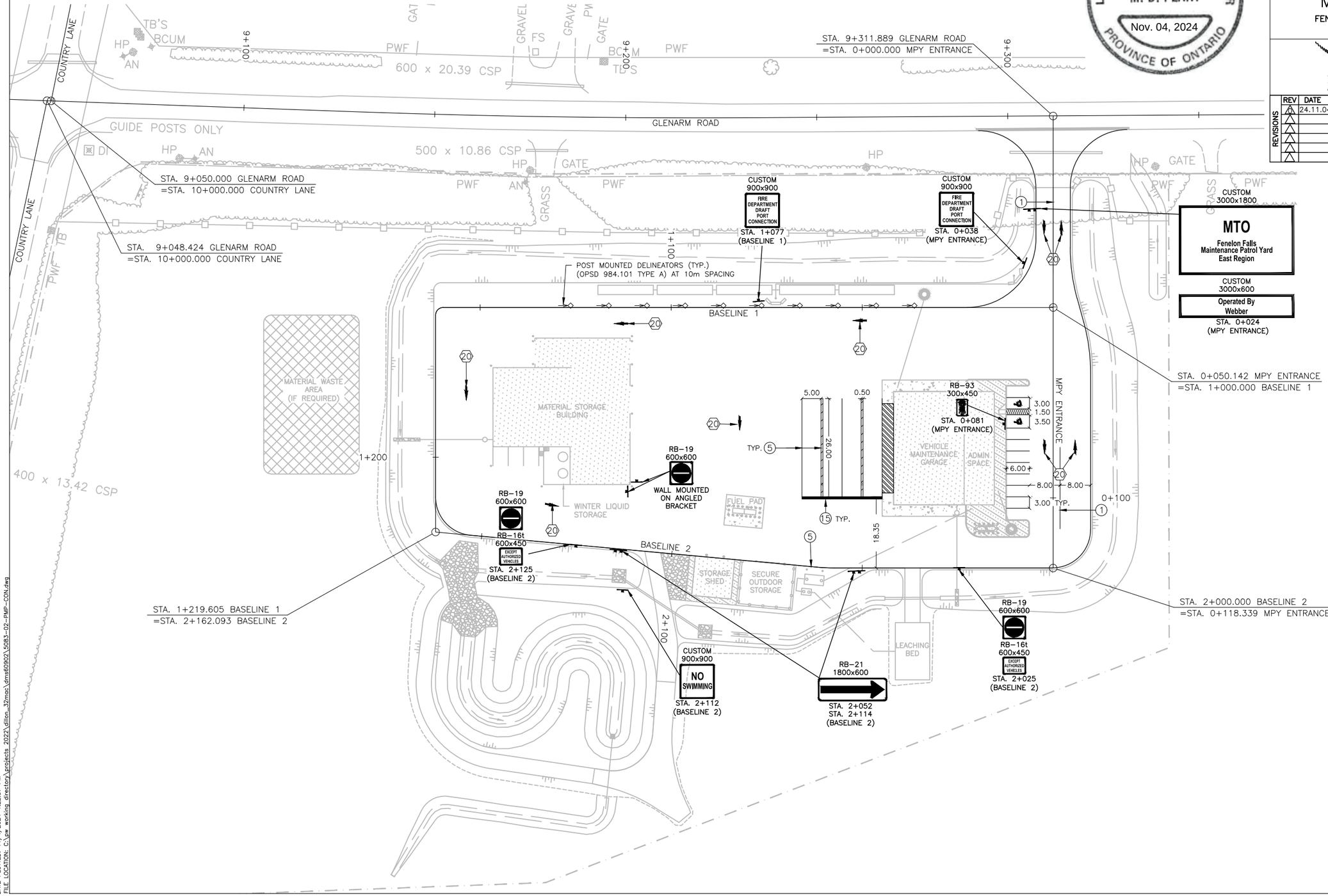
SHEET 11

MPY SITE
FENELON FALLS MPY

DILLON CONSULTING

LICENCED PROFESSIONAL ENGINEER
M. D. PLANT
Nov. 04, 2024
PROVINCE OF ONTARIO

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.11.04	MDP	ISSUED FOR TENDER



LEGEND
PAVEMENT MARKINGS

1	SOLID YELLOW,10cm
2	SOLID DOUBLE YELLOW,10cm
3	363 BROKEN YELLOW,10cm
4	SOLID YELLOW,20cm
5	SOLID WHITE,10cm
6	333 BROKEN WHITE,10cm
7	363 BROKEN WHITE,10cm
8	393 BROKEN WHITE,10cm
9	SOLID WHITE,20cm
10	111 BROKEN WHITE,20cm
11	333 BROKEN WHITE,20cm
12	333 BROKEN WHITE,30cm
13	SOLID WHITE,30cm
14	SOLID WHITE,45cm
15	SOLID WHITE,60cm
20	SYMBOLS
] [	LIMITS OF MARKINGS

NOTES:

1. 333, 363, 393, DENOTES PAVEMENT MARKING SPACING (ie., 3m LINE, 3m GAP, 3m LINE)
2. USE (1) TO DENOTE PAVEMENT MARKING (GROUP 1)
3. USE [1] TO DENOTE PAVEMENT MARKING, TEMPORARY
4. USE ⚠ TO DENOTE PAVEMENT MARKING, TEMPORARY-REMOVABLE
5. USE ⟨1⟩ TO DENOTE PAVEMENT MARKING, DURABLE (GROUP 3)

5m 0 10m
Horizontal

DATE PLOTTED: 11/4/2024 1:22:57 PM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_32mat\dms609022\5083-02-PMP-CON.dwg

CONT No. 2023-4010
GWP No. 4044-22-00

PAVEMENT MARKINGS & SIGNS

SHEET 12

SIGN TABLE

FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.11.04	MDP	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
	6			

LOCATION: MPY ENTRANCE

STATION	OFFSET FROM CL (m)	SIGN NUMBER	Sign Message / Description	SIZE BxH (cm)	Sign Area (m^2)	SUPPORT TYPE	SIGN SUPPLIED BY	ACTION	Comments
0+024	5.7 RT	CUSTOM	MTO FENELON FALLS MAINTENANCE PATROL YARD EAST REGION	300x180	5.40		MTO	NEW	
		CUSTOM	OPERATED BY WEBBER	300x60	1.80		MTO	NEW	
0+038	9.0 RT	CUSTOM	FIRE DEPARTMENT DRAFT PORT CONNECTION	90x90	0.81	METAL/BK	MTO	NEW	
0+081	12.6 RT	Rb-93	HANDICAPPED PARKING - BY PERMIT ONLY	30x45	0.14	METAL/BK	MTO	NEW	

LOCATION: MPY BASELINE 1

STATION	OFFSET FROM CL(m)	SIGN NUMBER	Sign Message / Description	SIZE BxH (cm)	Sign Area (m^2)	SUPPORT TYPE	SIGN SUPPLIED BY	ACTION	Comments
1+077	2.1 RT	CUSTOM	FIRE DEPARTMENT CONNECTION TO DRAFT PORT	90x90	0.81	METAL/BK	MTO	NEW	

LOCATION: MPY BASELINE 2

STATION	OFFSET FROM CL (m)	SIGN NUMBER	Sign Message / Description	SIZE BxH (cm)	Sign Area (m^2)	SUPPORT TYPE	SIGN SUPPLIED BY	ACTION	Comments
2+025	0.3 LT	Rb-19	DO NOT ENTER	60x60	0.36	METAL/BK	MTO	NEW	
		Rb-16t	EXCEPT AUTHORIZED VEHICLES	30x60	0.18	METAL/BK	MTO	NEW	
2+052	1.5 LT	Rb-21	ONE WAY	180x60	1.08	WOODEN/NBK	MTO	NEW	
2+112	10.6 LT	CUSTOM	NO SWIMMING	90x90	0.81	METAL/BK	MTO	NEW	
2+112	17.1 RT	Rb-19	DO NOT ENTER	60x60	0.36	N/A	MTO	NEW	WALL MOUNTED ON ANGLED BRACKET
		Rb-19	DO NOT ENTER	60x60	0.36	N/A	MTO	NEW	WALL MOUNTED ON ANGLED BRACKET
2+114	0.8 LT	Rb-21	ONE WAY	180x60	1.08	WOODEN/NBK	MTO	NEW	
2+125	0.3 LT	Rb-19	DO NOT ENTER	60x60	0.36	METAL/BK	MTO	NEW	
		Rb-16t	EXCEPT AUTHORIZED VEHICLES	30x60	0.18	METAL/BK	MTO	NEW	

CONT No. 2023-4010
GWP No. 4044-22-00

TYPICAL SECTIONS

KEY PLAN

FENELON FALLS MPY

SHEET 13

LICENCED PROFESSIONAL ENGINEER
M. D. PLANT
Oct. 21, 2024
PROVINCE OF ONTARIO

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER

BCUM
TB
TB'S
BCUM
HP
AN
9+100
PWF
GATE
PWF
GRAVEL
FS
GRAVEL
PWF
GATE
9+200
BCUM
TB'S
PWF
600 x 20.39 CSP
x 17.89 CSP
BURIED (RT)
COUNTRY LANE
80°01'20"
80°33'55"
GLENARM ROAD
GUIDE POSTS ONLY
UNDER WATER)
BH
L 269.74
CEMBER 2020
DI
HP
AN
500 x 10.86 CSP
HP
GATE
PWF
AN
GRASS
PWF
HP
HP
PWF
COUNTRY LANE
HP
AN
PWF
TB
ASPHALT
F
D
C
A
A
1+100
BASELINE 1
MPY ENTRANCE
MATERIAL WASTE AREA (IF REQUIRED)
G
G
MATERIAL STORAGE BUILDING
E
1+200
E
VEHICLE MAINTENANCE GARAGE
ADMIN SPACE
B
B
0+100
FUEL PAD
BASELINE 2
H
STORAGE SHED
SECURE OUTDOOR STORAGE
F
2+100
C
STORMWATER MANAGEMENT POND
LEACHING BED
H
D
TB
BCUM
HP
400 x 13.42 CSP

5m 0 10m
Horizontal

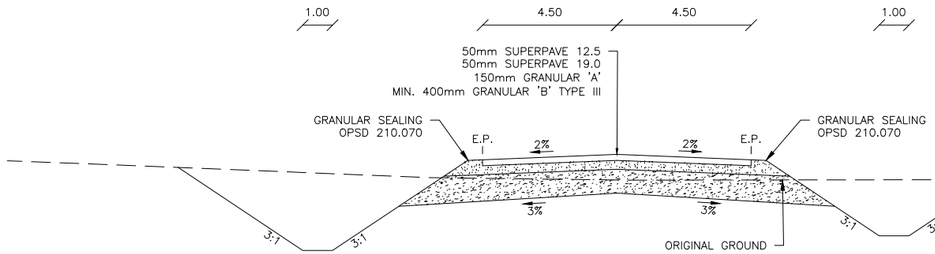
DATE PLOTTED: 10/17/2024 4:03:47 PM
FILE LOCATION: c:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-TYP-CON.dwg

SUPPLEMENTARY LEGEND

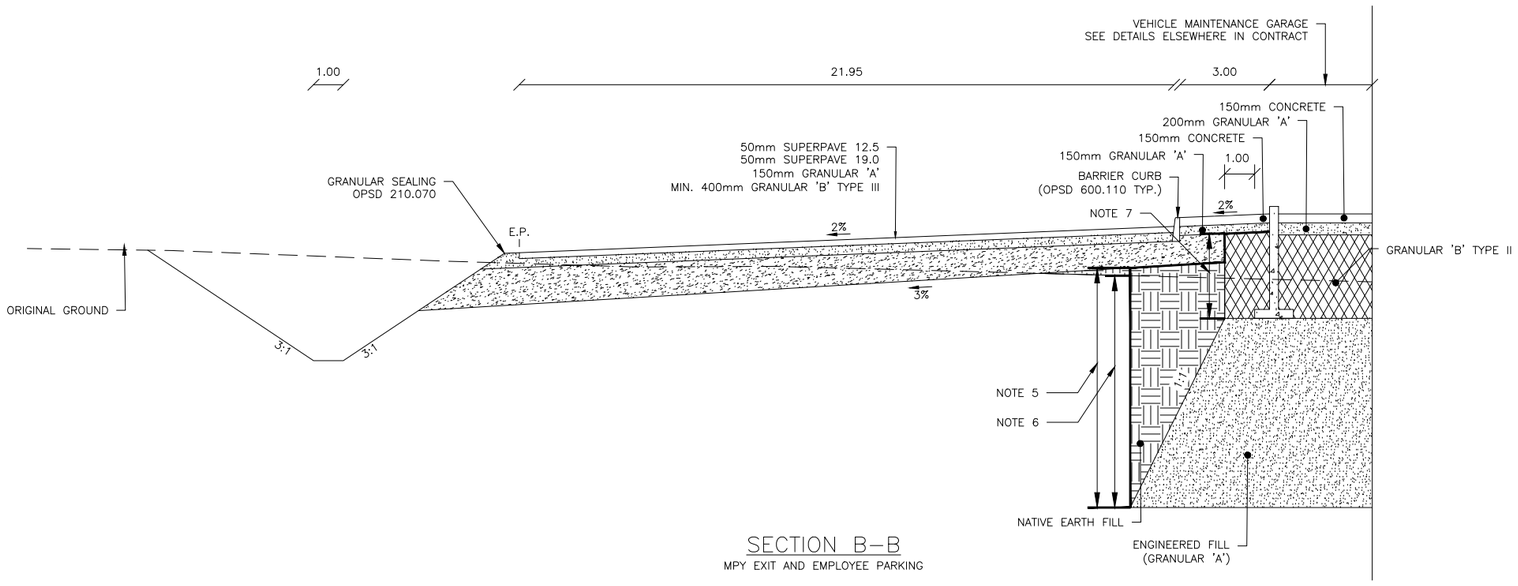
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- GRANULAR 'A'
- GRANULAR 'B' TYPE II
- GRANULAR 'B' TYPE III
- COMPACTED NATIVE EARTH FILL

NOTES:

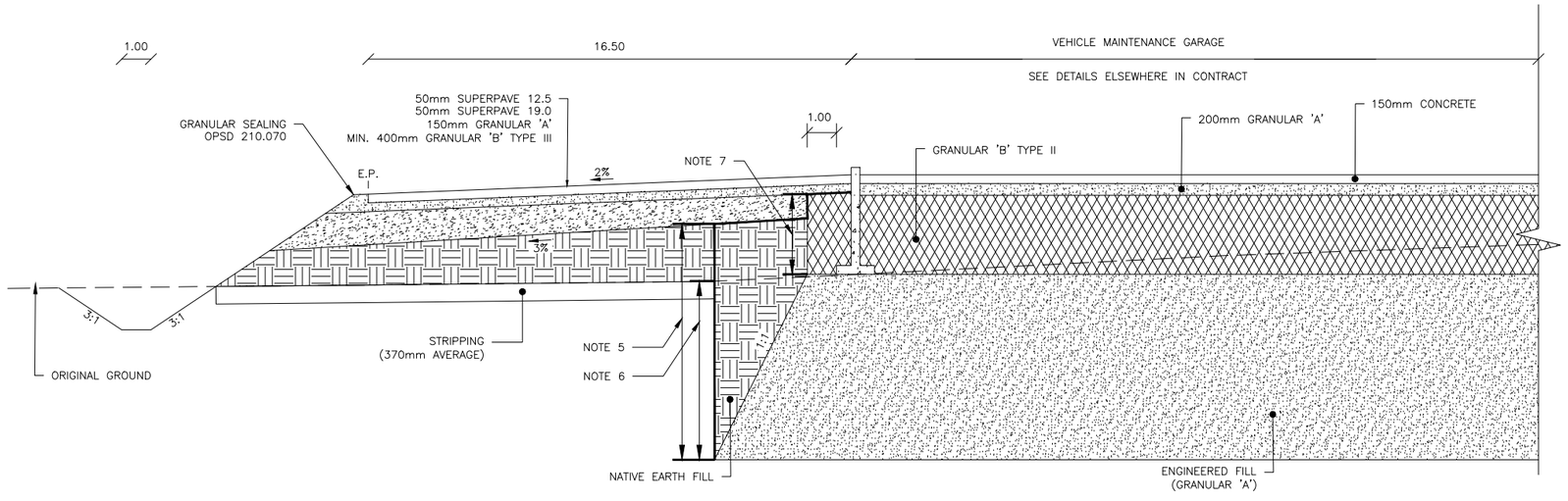
1. ALL AREAS TO BE COVERED BY FILL SHALL BE STRIPPED OF TOPSOIL.
2. GRANULAR SEALING AS PER OPSD 210.070.
3. TACK COAT TO BE APPLIED AS SPECIFIED ELSEWHERE IN CONTRACT.
4. ALL TYPICALS TO BE READ IN CONJUNCTION WITH OPSD 200 SERIES.
5. STRUCTURE BACKFILL PAYMENT LINE EXTENDS FROM TOE OF SLOPE OF THE ENGINEERED FILL TO SUBGRADE.
6. STRUCTURE EXCAVATION PAYMENT LINE EXTENDS FROM TOE OF SLOPE OF THE ENGINEERED FILL TO ORIGINAL GROUND.
7. STRUCTURE BACKFILL PAYMENT LINE CAPTURES GRANULAR 'B' TYPE II, EXTENDING FROM ENGINEERED FILL TO BOTTOM OF GRANULAR 'A'.



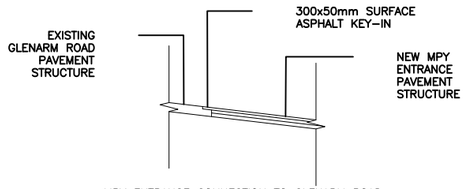
SECTION A–A
MPY ENTRANCE



SECTION B–B
MPY EXIT AND EMPLOYEE PARKING



SECTION C–C
VEHICLE MAINTENANCE GARAGE



MPY ENTRANCE CONNECTION TO GLENARM ROAD
TRANSVERSE PAVEMENT JOINT

N.T.S.

LICENCED PROFESSIONAL ENGINEER
M. D. PLANT
Oct. 21, 2024
PROVINCE OF ONTARIO

CONT No. 2023–4010
GWP No. 4044–22–00

TYPICAL SECTIONS

SHEET 14

MPY SITE
FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
	6			

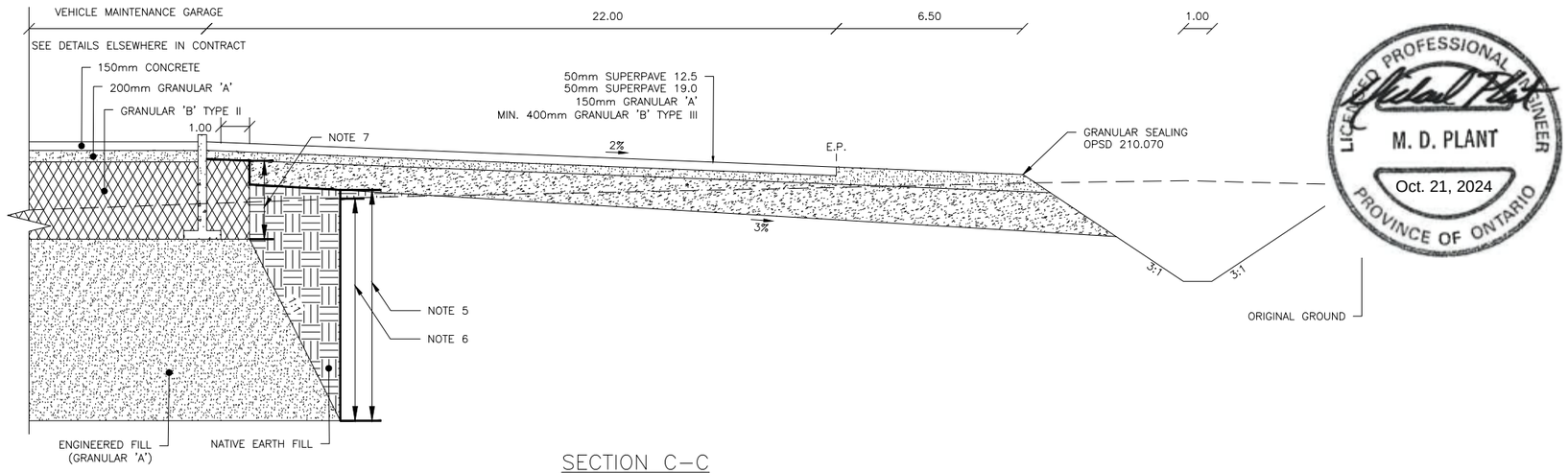
DATE PLOTTED: 10/17/2024 4:04:13 PM
FILE LOCATION: c:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-TYP-CON.dwg

SUPPLEMENTARY LEGEND

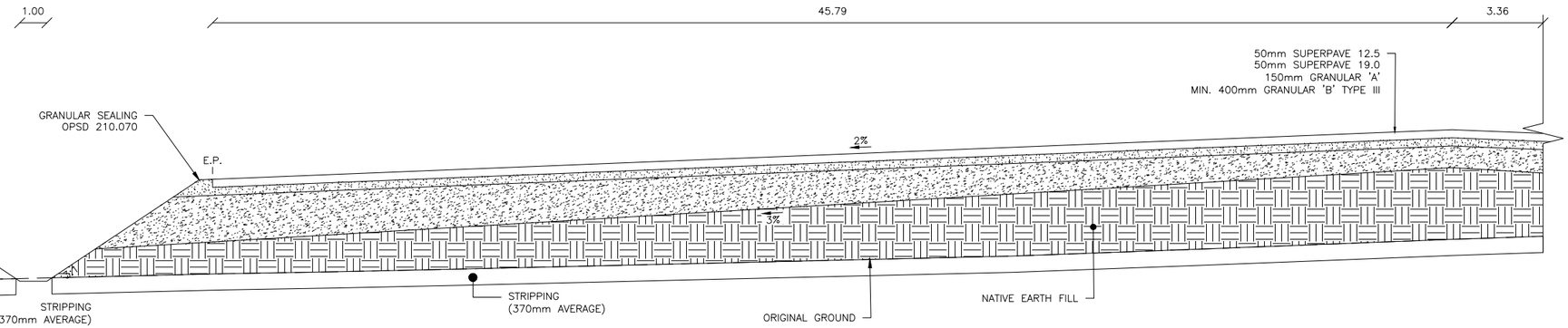
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- GRANULAR 'A'
- GRANULAR 'B' TYPE II
- GRANULAR 'B' TYPE III
- COMPACTED NATIVE EARTH FILL

NOTES:

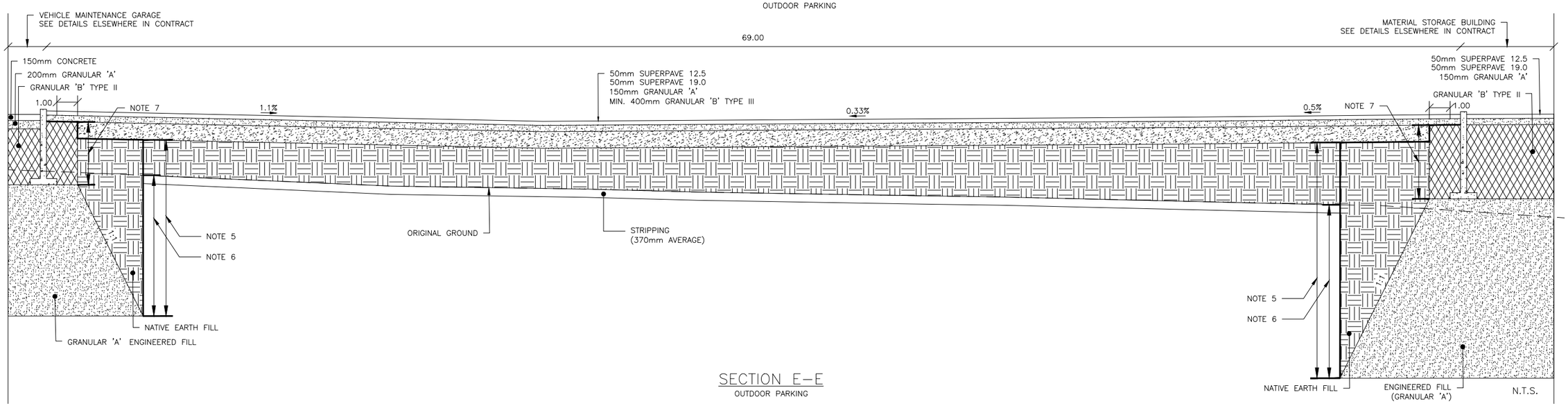
1. ALL AREAS TO BE COVERED BY FILL SHALL BE STRIPPED OF TOPSOIL.
2. GRANULAR SEALING AS PER OPSD 210.070.
3. TACK COAT TO BE APPLIED AS SPECIFIED ELSEWHERE IN CONTRACT.
4. ALL TYPICALS TO BE READ IN CONJUNCTION WITH OPSD 200 SERIES.
5. STRUCTURE BACKFILL PAYMENT LINE EXTENDS FROM TOE OF SLOPE OF THE ENGINEERED FILL TO SUBGRADE.
6. STRUCTURE EXCAVATION PAYMENT LINE EXTENDS FROM TOE OF SLOPE OF THE ENGINEERED FILL TO ORIGINAL GROUND.
7. STRUCTURE BACKFILL PAYMENT LINE CAPTURES GRANULAR 'B' TYPE II, EXTENDING FROM ENGINEERED FILL TO BOTTOM OF GRANULAR 'A'.



SECTION C–C
VEHICLE MAINTENANCE GARAGE – CONTINUED



SECTION D–D
OUTDOOR PARKING



SECTION E–E
OUTDOOR PARKING

N.T.S.

LICENCED PROFESSIONAL ENGINEER
M. D. PLANT
Oct. 21, 2024
PROVINCE OF ONTARIO

CONT No. 2023–4010
GWP No. 4044–22–00

TYPICAL SECTIONS

SHEET 15

MPY SITE
FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
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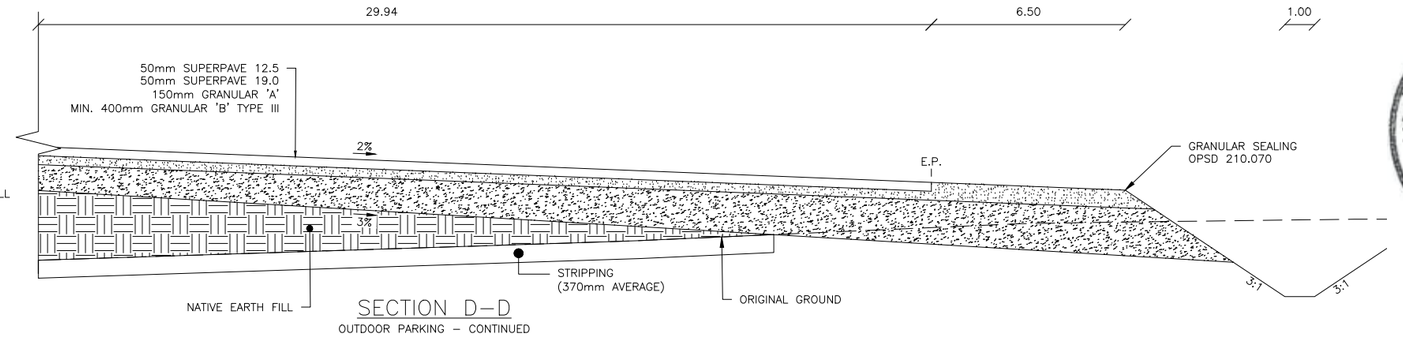
SUPPLEMENTARY LEGEND

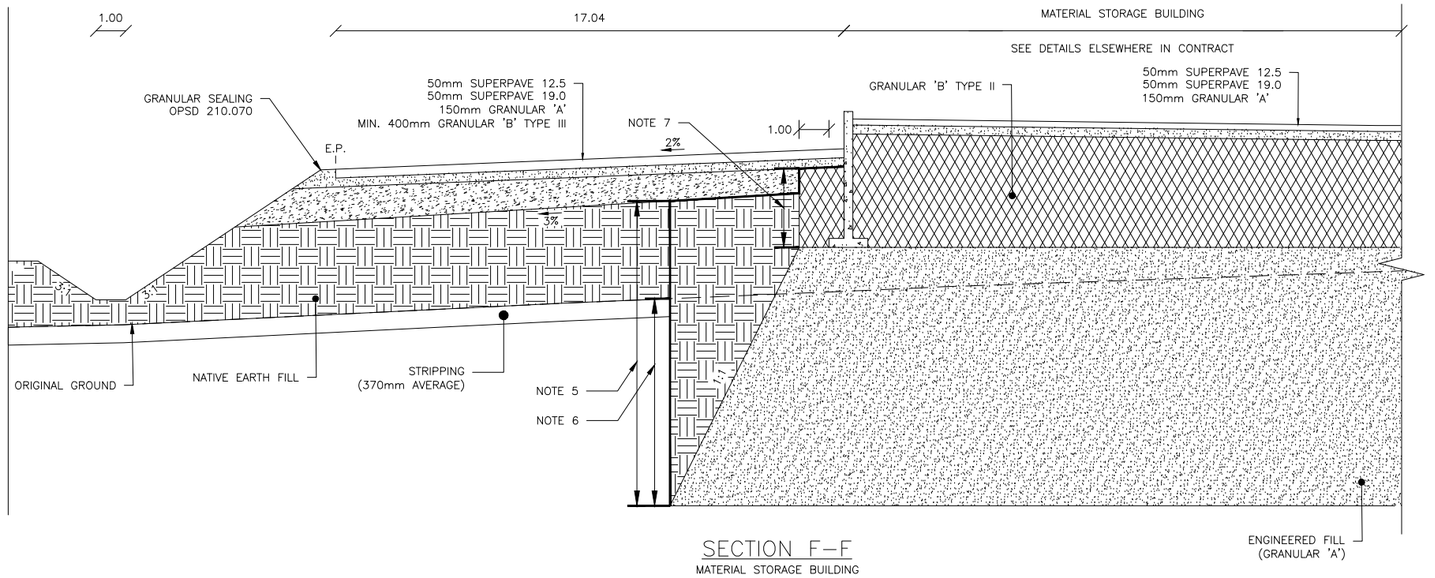
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- GRANULAR 'A'
- GRANULAR 'B' TYPE II
- GRANULAR 'B' TYPE III
- COMPACTED NATIVE EARTH FILL

NOTES:

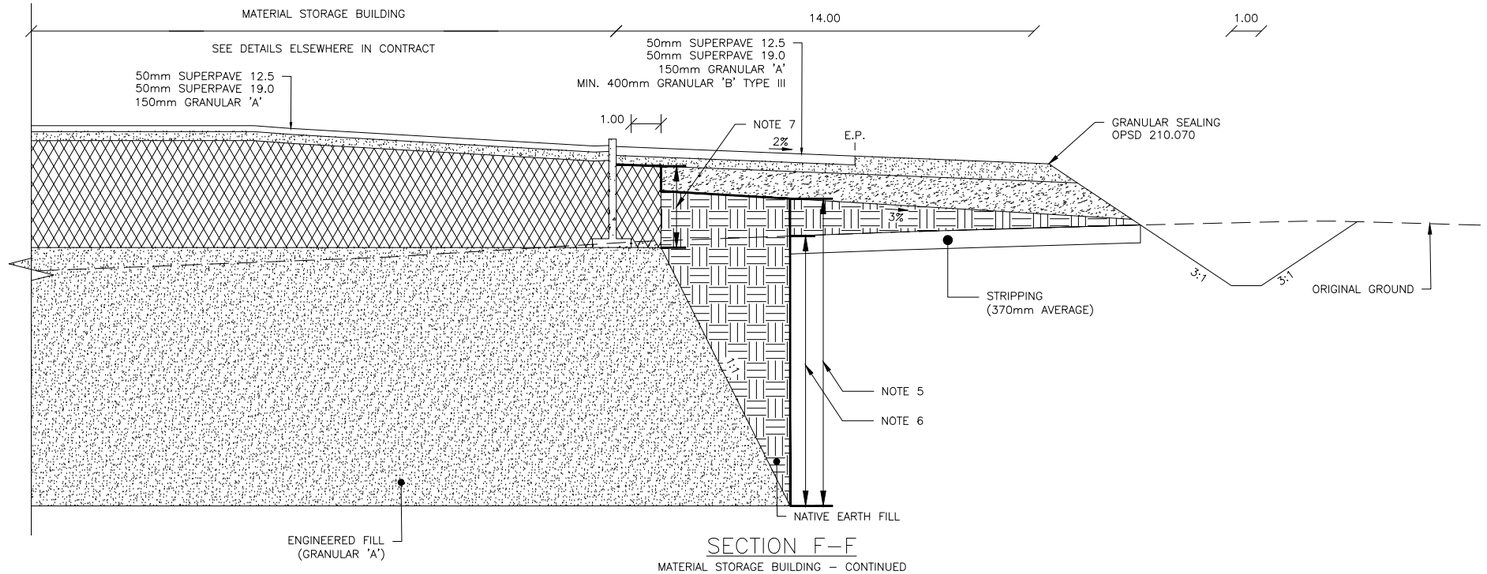
1. ALL AREAS TO BE COVERED BY FILL SHALL BE STRIPPED OF TOPSOIL.
2. GRANULAR SEALING AS PER OPSD 210.070.
3. TACK COAT TO BE APPLIED AS SPECIFIED ELSEWHERE IN CONTRACT.
4. ALL TYPICALS TO BE READ IN CONJUNCTION WITH OPSD 200 SERIES.
5. STRUCTURE BACKFILL PAYMENT LINE EXTENDS FROM TOE OF SLOPE OF THE ENGINEERED FILL TO SUBGRADE.
6. STRUCTURE EXCAVATION PAYMENT LINE EXTENDS FROM TOE OF SLOPE OF THE ENGINEERED FILL TO ORIGINAL GROUND.
7. STRUCTURE BACKFILL PAYMENT LINE CAPTURES GRANULAR 'B' TYPE II, EXTENDING FROM ENGINEERED FILL TO BOTTOM OF GRANULAR 'A'.



SECTION D–D
OUTDOOR PARKING – CONTINUED



SECTION F–F
MATERIAL STORAGE BUILDING



SECTION F–F
MATERIAL STORAGE BUILDING – CONTINUED

N.T.S.

CONT No. 2023–4010
GWP No. 4044–22–00

TYPICAL SECTIONS

SHEET 16

MPY SITE
FENELON FALLS MPY

LICENCED PROFESSIONAL ENGINEER
M. D. PLANT
Oct. 21, 2024
PROVINCE OF ONTARIO

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER
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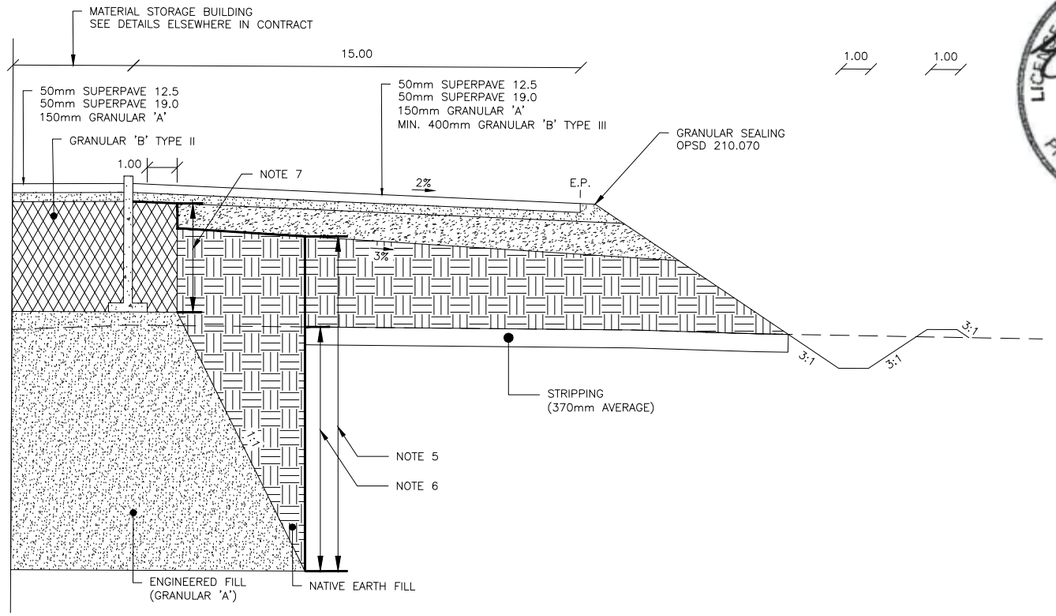
SUPPLEMENTARY LEGEND

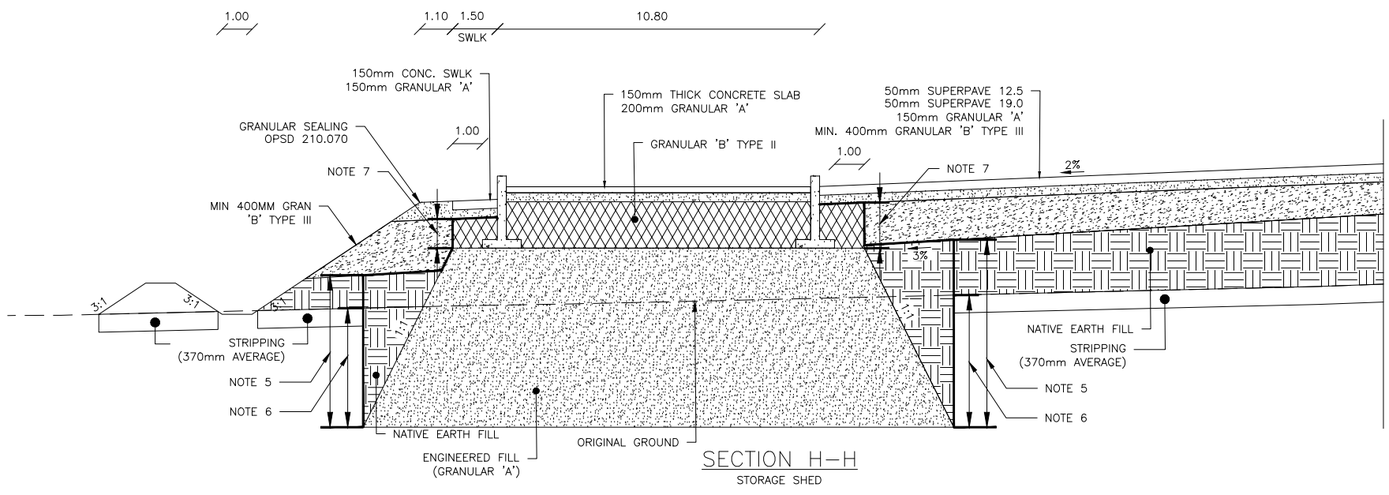
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- GRANULAR 'A'
- GRANULAR 'B' TYPE II
- GRANULAR 'B' TYPE III
- COMPACTED NATIVE EARTH FILL

NOTES:

1. ALL AREAS TO BE COVERED BY FILL SHALL BE STRIPPED OF TOPSOIL.
2. GRANULAR SEALING AS PER OPSD 210.070.
3. TACK COAT TO BE APPLIED AS SPECIFIED ELSEWHERE IN CONTRACT.
4. ALL TYPICALS TO BE READ IN CONJUNCTION WITH OPSD 200 SERIES.
5. STRUCTURE BACKFILL PAYMENT LINE EXTENDS FROM TOE OF SLOPE OF THE ENGINEERED FILL TO SUBGRADE.
6. STRUCTURE EXCAVATION PAYMENT LINE EXTENDS FROM TOE OF SLOPE OF THE ENGINEERED FILL TO ORIGINAL GROUND.
7. STRUCTURE BACKFILL PAYMENT LINE CAPTURES GRANULAR 'B' TYPE II, EXTENDING FROM ENGINEERED FILL TO BOTTOM OF GRANULAR 'A'.



SECTION G–G
BEHIND MATERIAL STORAGE BUILDING



SECTION H–H
STORAGE SHED

N.T.S.

CONT No. 2023–4010
GWP No. 4044–22–00

TYPICAL SECTIONS

MPY SITE
FENELON FALLS MPY

SHEET 17

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
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	2			
	3			
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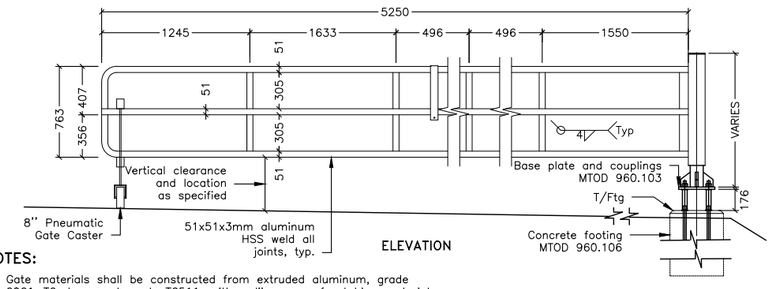
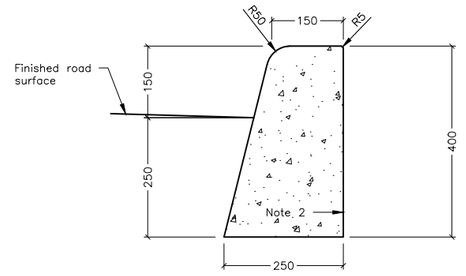


ELEVATION

NOTES:

A. Gate materials shall be constructed from extruded aluminum, grade 6061–T6, tempered grade T6511, with radii corners for tubing materials.
B. All joints shall be electrically mig welded.
C. System configuration is equivalent to South Dakota gate which meets NCHRP Report 350 TL–3 in open position.
D. Gate shown in open position.
E. This drawing shall be read in conjunction with MTOD 960.102, MTOD 960.103, MTOD 960.106 and MTOD 960.108.
F. All dimensions are in millimetres unless otherwise shown.

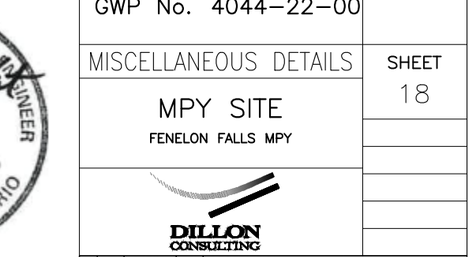


NOTES:

1. When sidewalk is continuously adjacent, the dropped curb at entrances shall be reduced to 75mm.
2. For slipforming procedure, a 5% batter is acceptable.
   A. Treatment at entrances shall be according to OPSD 351.010
   B. Outlet treatment shall be according to the OPSD 610 Series.
   C. The transition from on curb type to another shall be a minimum length of 3.0M, except in conjunction with guide rail where is shall be according to the OPSD 900 series.
   D. All dimensions are in millimetres unless other shown.

CONCRETE BARRIER CURB

OPSD 600.110



CONT No. 2023–4010
GWP No. 4044–22–00

MISCELLANEOUS DETAILS

SHEET 18

MPY SITE
FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
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	2			
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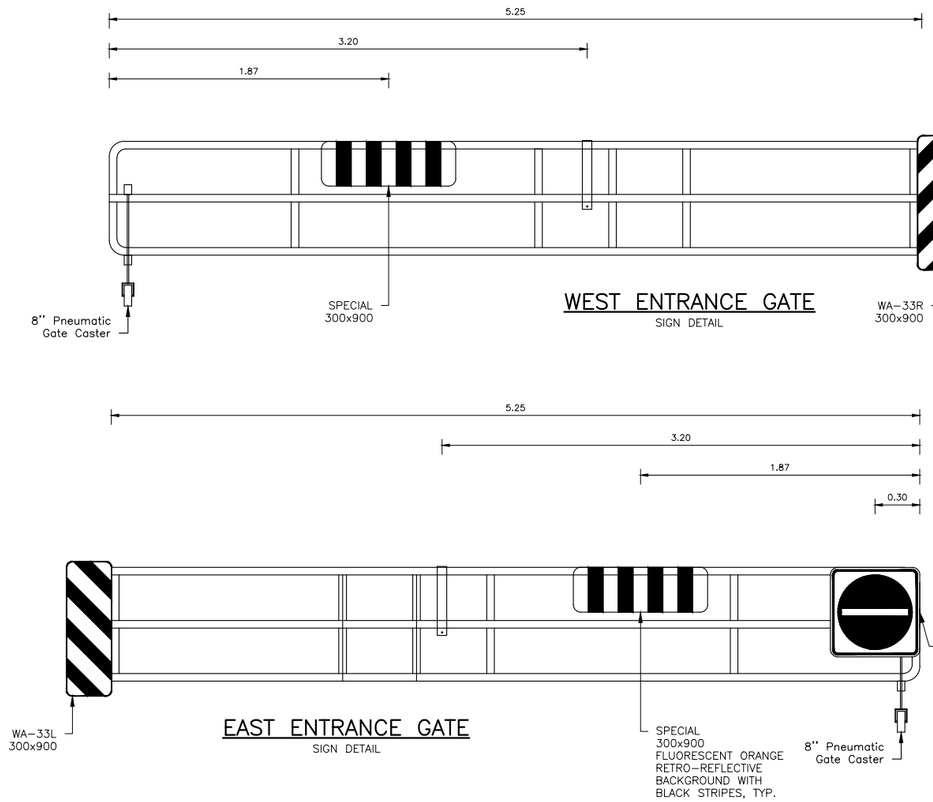
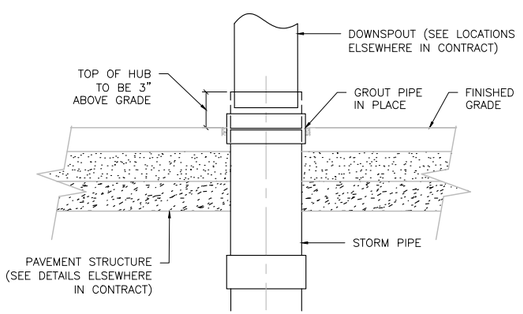


WEST ENTRANCE GATE

SIGN DETAIL

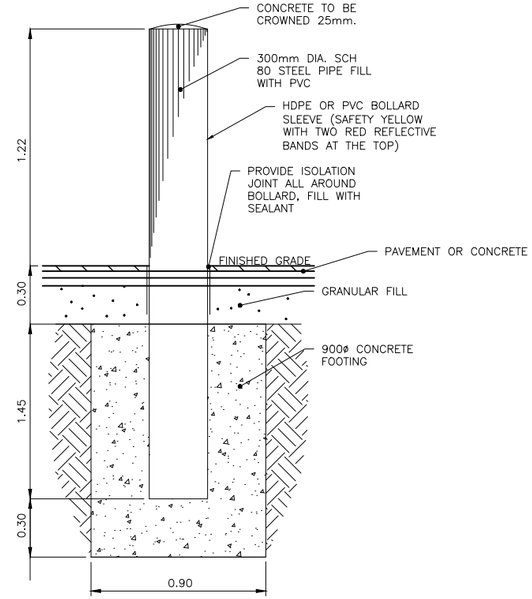
EAST ENTRANCE GATE

SIGN DETAIL



HUB DRAIN DETAIL

MATERIAL STORAGE BUILDING ROOF DOWNSPOUT CONNECTION TO STORM DRAIN SYSTEM



NOTES:

A. When protecting doorway, bollard is to be half into doorway.

TYPICAL BOLLARD DETAIL

N.T.S.

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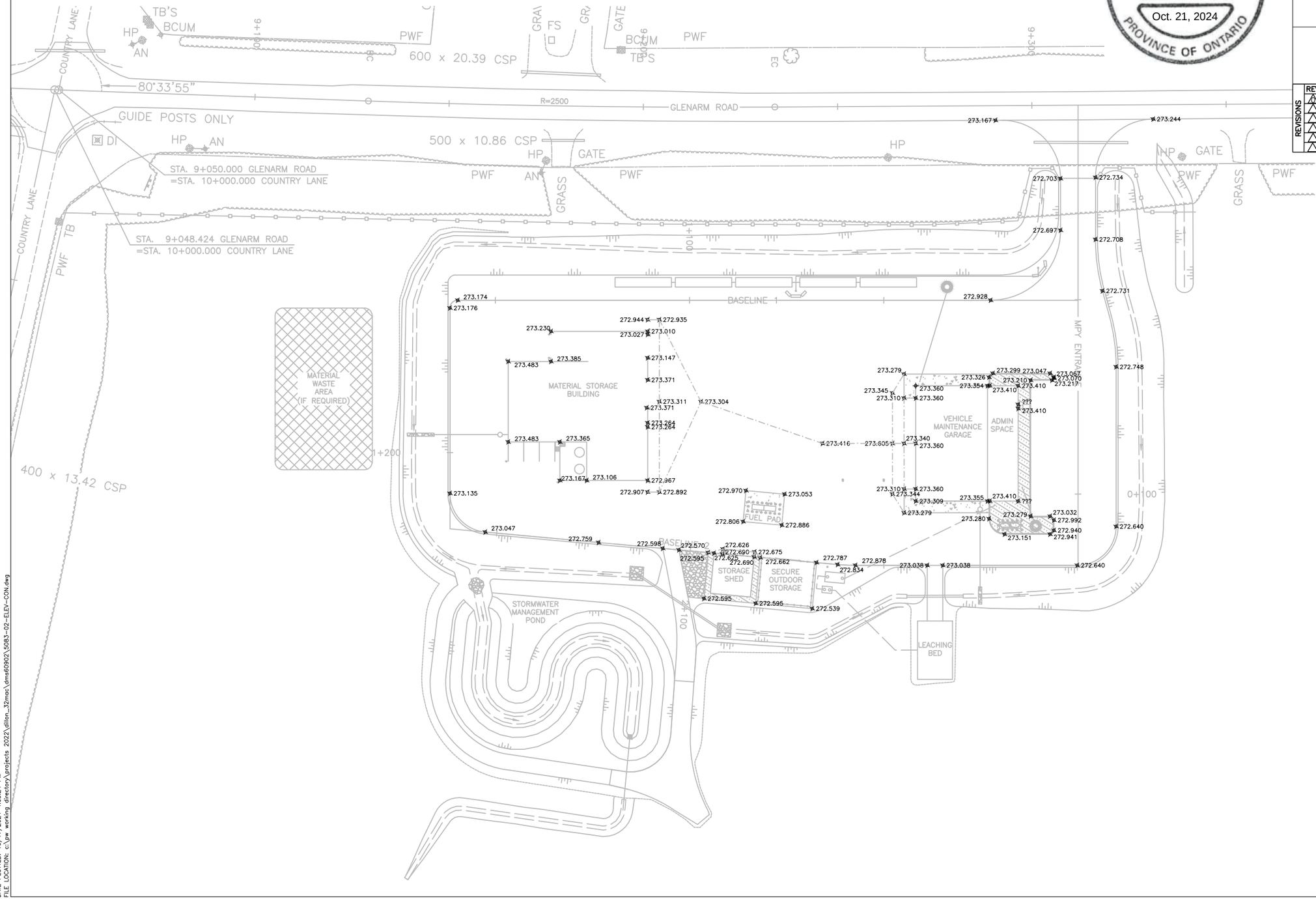
SUPPLEMENTARY LEGEND

FF DENOTES FINISHED FLOOR ELEVATION

DENOTES FINISHED GROUND ELEVATION

DENOTES SLOPE BREAKPOINT



CONT No. 2023-4010
GWP No. 4044-22-00

MISCELLANEOUS DETAILS

SHEET 19

KEY ELEVATIONS

FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
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DATE PLOTTED: 10/17/2024 4:05:24 PM
FILE LOCATION: c:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-ELEV-CON.dwg

SUPPLEMENTARY LEGEND

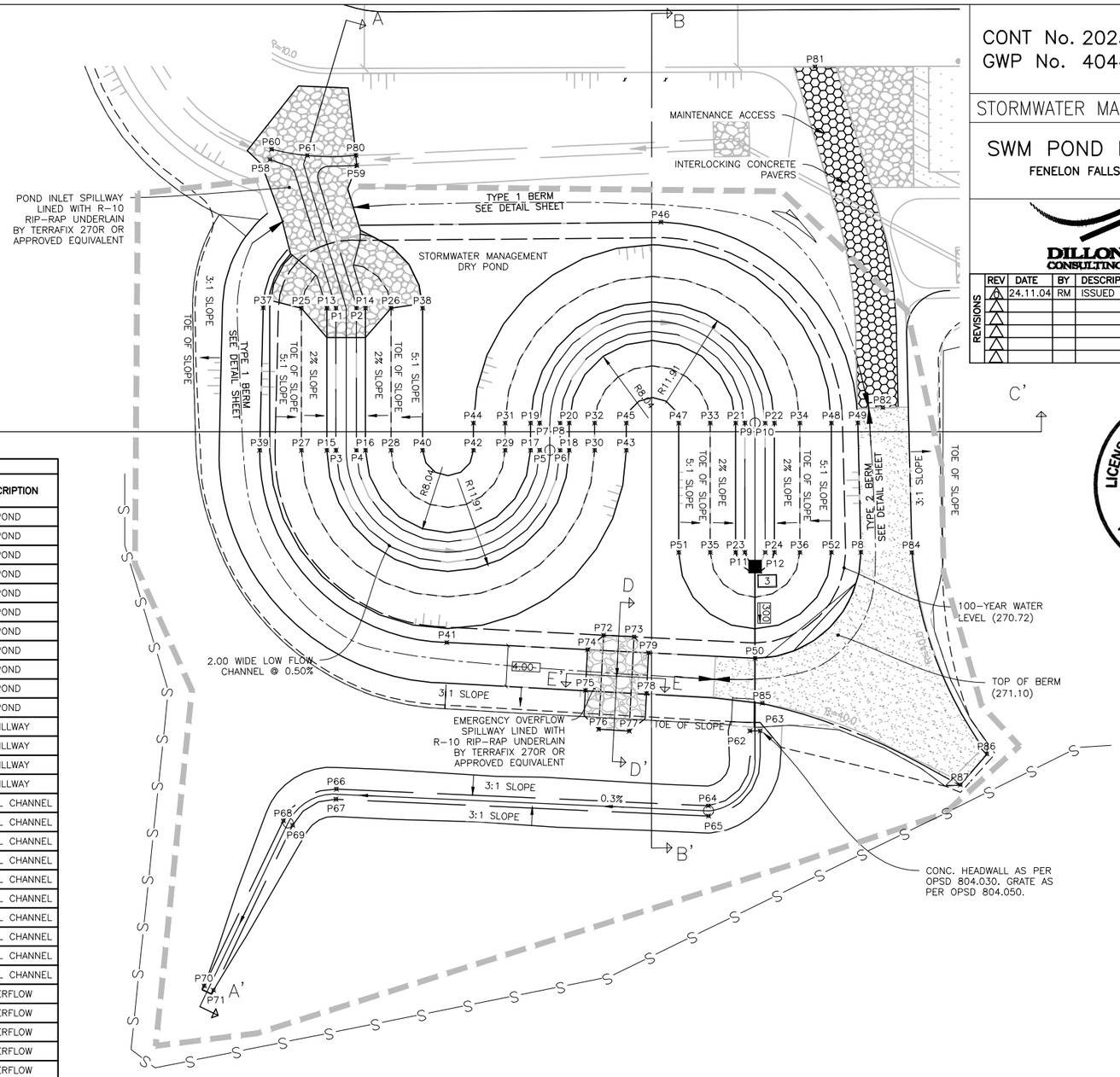
- RIP RAP (R–10)
- —S— HEAVY DUTY SILT FENCE BARRIER AS PER OPSD 219.130
- LIMITS OF STORMWATER MANAGEMENT POND CONSTRUCTION AREA
- PX DENOTES LAYOUT REFERENCE POINT
- B/BANK DENOTES BOTTOM OF BANK/SLOPE
- INTERLOCKING CONCRETE PAVER
- GRANULAR 'A'

NOTES:

1. SEE SHEET 22 FOR SECTION VIEW OF A–A', B–B', and C–C'.

POINT TABLE				
No.	ELEVATION (m)	NORTHING (m)	EASTING (m)	DESCRIPTION
1	270.000	4931289.4471	361026.7221	LOW FLOW CHANNEL
2	270.000	4931290.3416	361028.5109	LOW FLOW CHANNEL
3	269.932	4931276.9628	361032.9687	LOW FLOW CHANNEL
4	269.932	4931277.8577	361034.7573	LOW FLOW CHANNEL
5	269.779	4931285.9122	361050.8547	LOW FLOW CHANNEL
6	269.779	4931286.8071	361052.6433	LOW FLOW CHANNEL
7	269.766	4931288.3026	361049.6587	LOW FLOW CHANNEL
8	269.766	4931289.1975	361051.4472	LOW FLOW CHANNEL
9	269.612	4931297.3179	361067.6764	LOW FLOW CHANNEL
10	269.612	4931298.2129	361069.4650	LOW FLOW CHANNEL
11	269.550	4931285.9580	361073.3605	LOW FLOW CHANNEL
12	269.550	4931286.8529	361075.1491	LOW FLOW CHANNEL
13	270.293	4931289.0444	361025.9172	POND
14	270.300	4931290.7447	361029.3156	POND
15	270.232	4931276.5600	361032.1639	POND
16	270.232	4931278.2604	361035.5622	POND
17	270.079	4931285.5094	361050.0499	POND
18	270.079	4931287.2098	361053.4482	POND
19	270.066	4931287.8999	361048.8538	POND
20	270.066	4931289.6003	361052.2521	POND
21	269.912	4931296.9159	361066.8712	POND
22	269.912	4931298.6156	361070.2699	POND
23	269.850	4931285.5553	361072.5556	POND
24	269.850	4931287.2556	361075.9539	POND
25	270.350	4931287.9257	361023.6815	POND
26	270.350	4931291.8634	361031.5513	POND
27	270.282	4931275.4414	361029.9281	POND
28	270.282	4931279.3791	361037.7980	POND
29	270.129	4931284.3901	361047.8144	POND
30	270.129	4931288.3278	361055.6843	POND
31	270.116	4931286.7812	361046.6180	POND
32	270.116	4931290.7189	361054.4879	POND
33	269.962	4931295.7965	361064.6358	POND
34	269.962	4931299.7343	361072.5056	POND
35	269.900	4931284.4366	361070.3199	POND
36	269.900	4931288.3678	361078.1915	POND
37	271.100	4931286.2733	361020.3148	POND
38	270.970	4931293.2506	361034.3237	POND
39	271.100	4931273.6111	361026.2701	POND
40	270.902	4931280.7663	361040.5703	POND
41	271.100	4931264.9583	361051.1417	POND

POINT TABLE				
No.	ELEVATION (m)	NORTHING (m)	EASTING (m)	DESCRIPTION
42	270.749	4931283.0036	361045.0418	POND
43	270.749	4931289.7156	361058.4563	POND
44	270.736	4931285.3940	361043.8457	POND
45	270.736	4931292.1061	361057.2602	POND
46	271.100	4931311.2811	361051.4718	POND
47	270.582	4931294.4094	361061.8635	POND
48	270.582	4931301.1214	361075.2780	POND
49	271.100	4931302.2993	361077.5847	POND
50	271.100	4931277.1058	361078.9147	POND
51	270.520	4931283.0494	361067.5475	POND
52	270.520	4931289.7615	361080.9620	POND
58	270.317	4931299.5925	361014.3829	SPILLWAY
59	270.336	4931302.8792	361022.2727	SPILLWAY
60	270.311	4931300.5610	361014.0874	SPILLWAY
61	270.322	4931301.5874	361017.4901	SPILLWAY
62	270.082	4931270.5061	361081.6510	OUTFALL CHANNEL
63	270.081	4931270.9536	361082.5453	OUTFALL CHANNEL
64	269.473	4931262.0977	361081.2798	OUTFALL CHANNEL
65	269.469	4931261.2108	361081.7464	OUTFALL CHANNEL
66	269.370	4931247.2264	361047.8919	OUTFALL CHANNEL
67	269.366	4931246.3129	361048.2987	OUTFALL CHANNEL
68	269.352	4931242.1115	361044.6304	OUTFALL CHANNEL
69	269.352	4931242.1280	361045.6303	OUTFALL CHANNEL
70	269.301	4931224.1304	361044.9270	OUTFALL CHANNEL
71	269.301	4931224.1511	361045.9268	OUTFALL CHANNEL
72	270.800	4931272.4798	361064.5953	OVERFLOW
73	270.800	4931273.6820	361067.3439	OVERFLOW
74	271.100	4931270.5044	361063.8221	OVERFLOW
75	271.101	4931266.8397	361065.4251	OVERFLOW
76	270.800	4931264.0058	361068.2902	OVERFLOW
77	270.800	4931265.1803	361071.0505	OVERFLOW
78	271.101	4931269.2597	361070.9267	OVERFLOW
79	271.100	4931272.9089	361069.3193	OVERFLOW
80	270.336	4931303.7363	361021.7560	SPILLWAY
81	272.537	4931331.6959	361058.1681	ACCESS
82	272.537	4931304.7485	361079.1026	ACCESS
83	271.098	4931291.0703	361083.5387	TOP OF BERM
84	270.770	4931293.2772	361088.0263	TOP OF BERM
85	270.958	4931273.4872	361081.5114	TOP OF BERM
86	270.560	4931278.8871	361103.4588	TOP OF BERM
87	270.467	4931275.0132	361102.4810	TOP OF BERM



CONT No. 2023–4010
GWP No. 4044–22–00

STORMWATER MANAGEMENT

SHEET 20

SWM POND LAYOUT

FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.11.04	RM	ISSUED FOR TENDER

LICENSED PROFESSIONAL ENGINEER
R. R. MOORE
100126348
Nov.4,2024
PROVINCE OF ONTARIO

DATE PLOTTED: 11/4/2024 1:27:52 PM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_32mod\dms60902\5083-02-PND-CON.dwg

SUPPLEMENTAL LEGEND

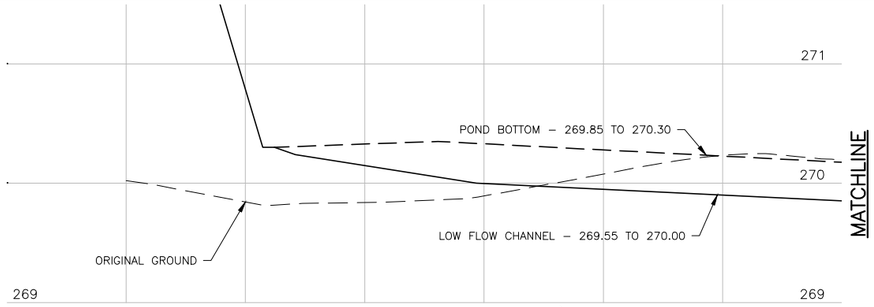
- GRANULAR 'A'
- INTERLOCKING CONCRETE PAVER
- R–10 RIP RAP
- COMPACTED NATIVE EARTH FILL

NOTES:

1. DRAWING UNITS IN METERS UNLESS OTHERWISE SPECIFIED.

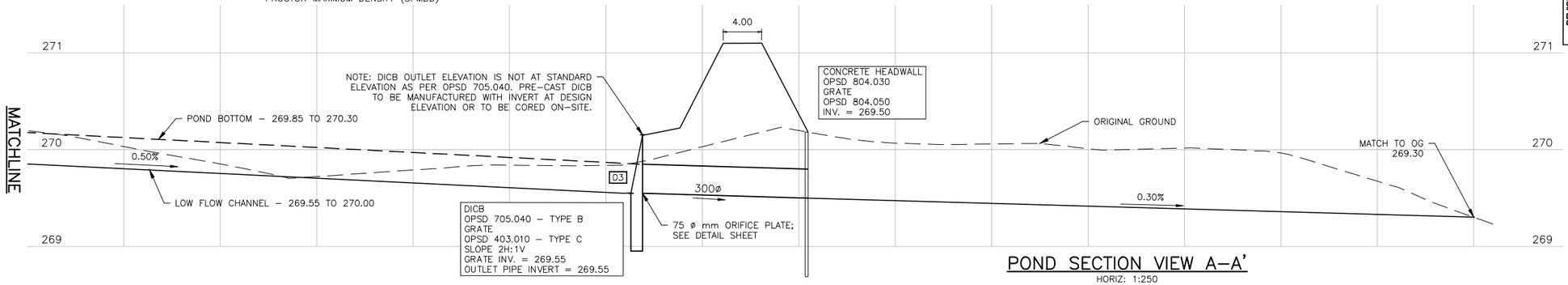
STORMWATER MANAGEMENT NOTES

1. SEDIMENT LOADING TO RECEIVING SEWERS AND WATER COURSES MUST BE MINIMIZED AT ALL TIMES. THE CONTRACTOR SHALL INSTALL FENCES AND PLACE STRAW BALES AS NECESSARY TO ADDRESS SILT MIGRATION TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR AND ALL OTHER REGULATORY AGENCIES OR MINISTRIES, IN PARTICULAR, TO THE GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES (MNRF). THE CONTRACTOR SHALL RETURN TO REMOVE THE SILT FENCES AND/OR STRAW BALES UPON ESTABLISHMENT OF GROWTH AT NO EXTRA COST. ANY ACCUMULATED SILT SHALL BE REMOVED AT REGULAR INTERVALS AT NO ADDITIONAL COST TO THIS PROJECT.
2. HEADWALLS, CHAINLINK FENCE, AND GRATING SHALL BE PER THE OPSD LISTED IN THE DETAILS BELOW.
3. THE POND BOTTOM, SIDE SLOPES, AND ALL ABUTTING LIMITS DISTURBED SHALL RECEIVE 50mm TOPSOIL AND SEED. CONTRACTOR SHALL RETURN TO CORRECT ANY EROSION AND SHALL BE RESPONSIBLE FOR MAINTENANCE UNTIL GROWTH IS ESTABLISHED.
4. THE CONTRACTOR SHALL PLACE THE NATURAL CLAY LINER IN THREE EQUAL THICKNESS LOOSE LIFTS. EACH LIFT SHALL BE COMPACTED TO AT LEAST 95 PER CENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DENSITY (SPMDD)
5. THE CONTRACTOR SHALL PLACE NATIVE EARTH FILL IN LOOSE LIFT NOT EXCEEDING 300 MM. EACH LIFT SHALL BE COMPACTED TO AT LEAST 95 PER CENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DENSITY (SPMDD)



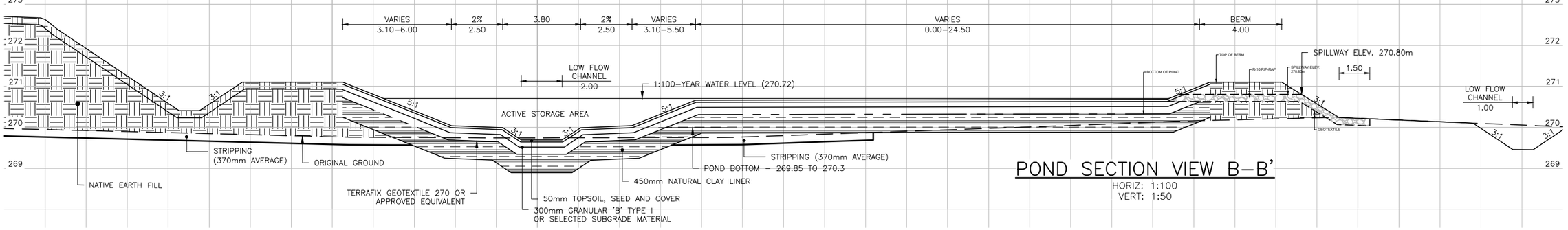
POND SECTION VIEW A–A'

HORIZ: 1:250
VERT: 1:25



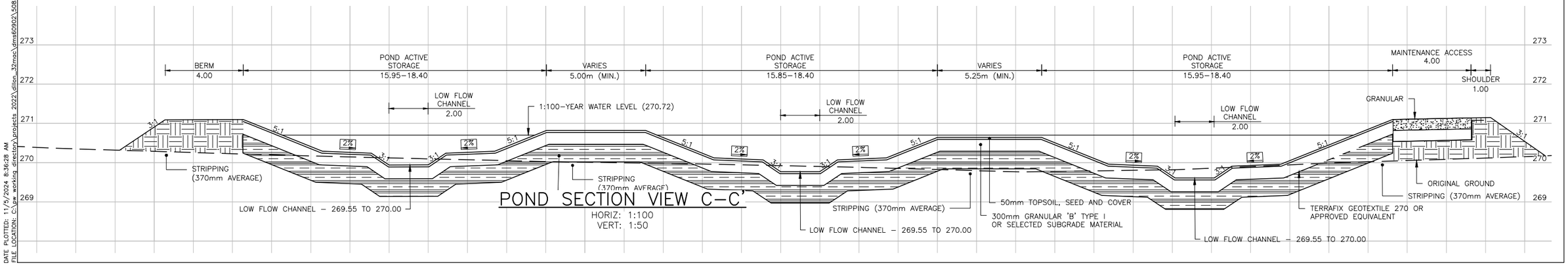
POND SECTION VIEW A–A'

HORIZ: 1:250
VERT: 1:25



POND SECTION VIEW B–B'

HORIZ: 1:100
VERT: 1:50



POND SECTION VIEW C–C'

HORIZ: 1:100
VERT: 1:50

CONT No. 2023–4010
GWP No. 4044–22–00

STORMWATER MANAGEMENT

SHEET 21

POND CROSS SECTIONS
FENELON FALLS MPY

DILLON CONSULTING

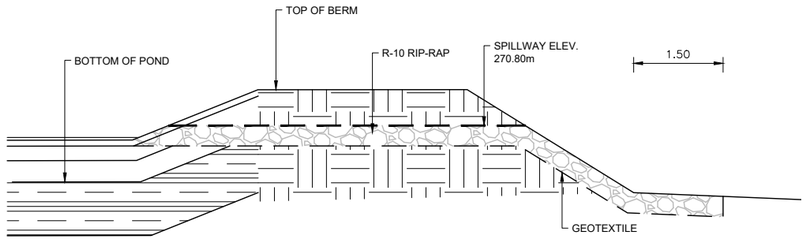
REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.11.04	RM	ISSUED FOR TENDER

LICENSED PROFESSIONAL ENGINEER
R. R. MOORE
100126348
Nov.4,2024
PROVINCE OF ONTARIO

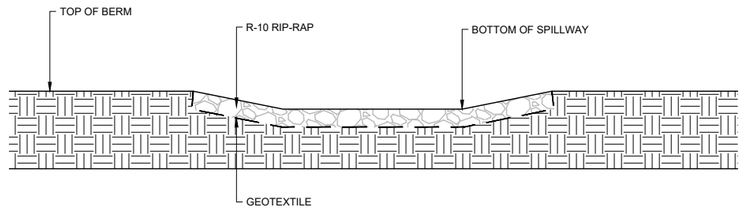
DATE PLOTTED: 11/5/2024 8:36:28 AM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-PND-CON.dwg

SUPPLEMENTAL LEGEND

- GRANULAR 'A'
- INTERLOCKING CONCRETE PAVER
- R-10 RIP RAP
- COMPACTED NATIVE EARTH FILL



SPILLWAY DETAIL D-D'
(N.T.S.)



SPILLWAY DETAIL E-E'
(N.T.S.)

CONT No. 2023-4010
GWP No. 4044-22-00

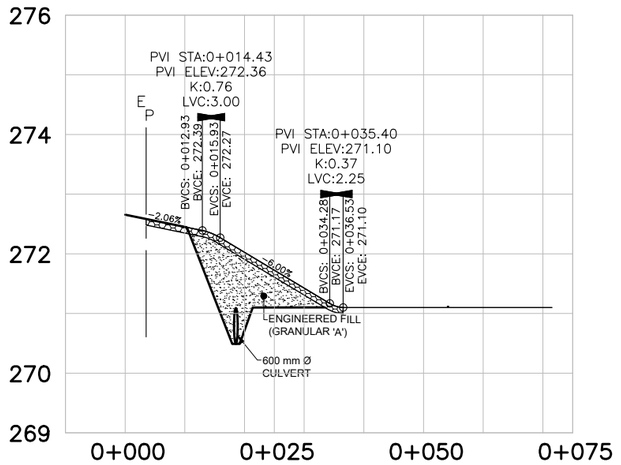
STORMWATER MANAGEMENT

SHEET 22

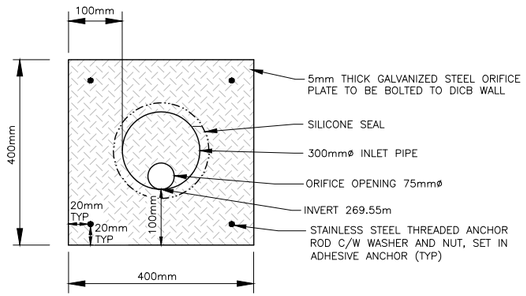
DETAILS
FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.11.04	RM	ISSUED FOR TENDER

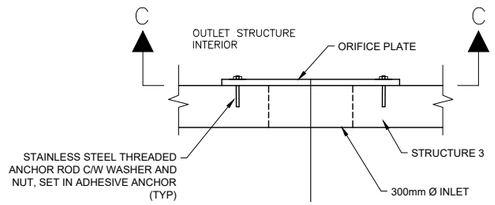


POND ACCESS ROAD
(N.T.S.)

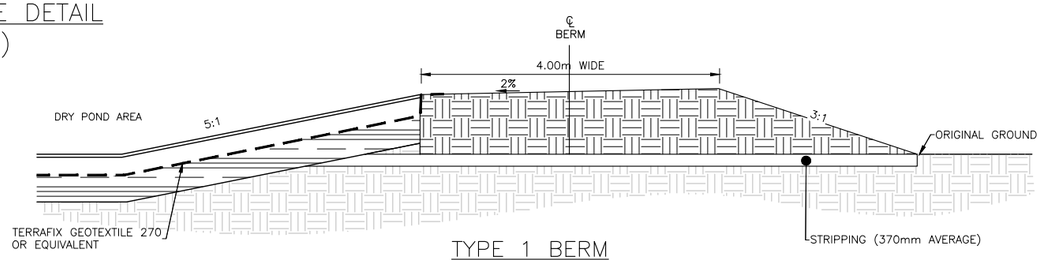


SECTION C-C

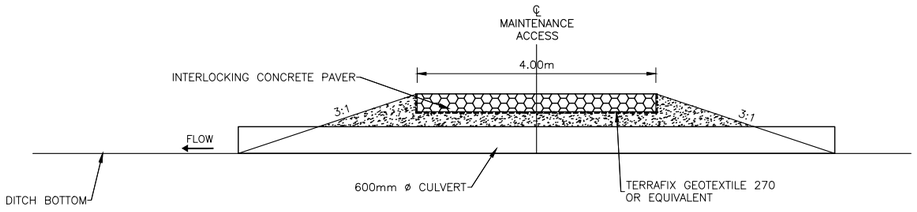
ORIFICE PLATE DETAIL
(N.T.S.)



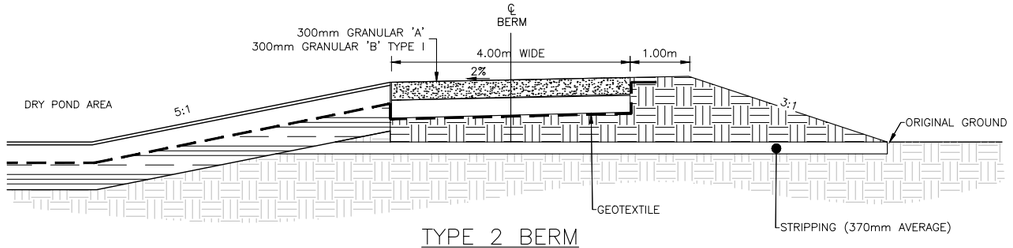
PLAN



TYPE 1 BERM
DRY POND BERM WITHOUT MAINTENANCE ACCESS DETAIL
(N.T.S.)



MAINTENANCE ACCESS DETAIL
(N.T.S.)



TYPE 2 BERM
DRY POND BERM WITH MAINTENANCE ACCESS DETAIL
(N.T.S.)

LICENSED PROFESSIONAL ENGINEER
R. R. MOORE
100126348
Nov.4, 2024
PROVINCE OF ONTARIO

DATE PLOTTED: 11/4/2024 11:58:20 AM
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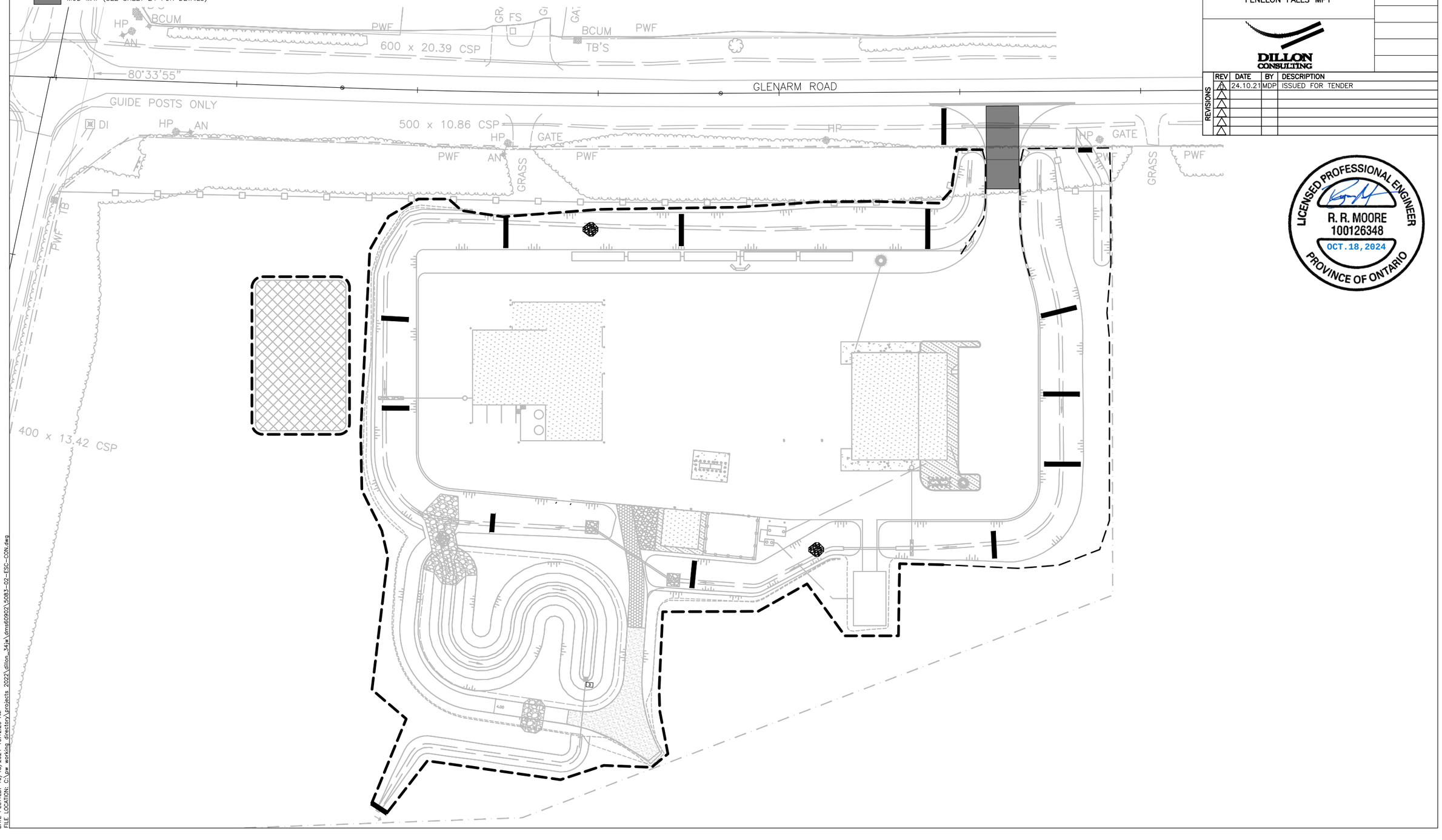
SUPPLEMENTARY LEGEND

- TEMPORARY ROCK FLOW CHECK DAM (MTOD 219.211)
- WIRE-BACKED SEDIMENT FENCE BARRIER (MTOD 219.131)
- SEDIMENT FENCE BARRIER (MTOD 219.110)
- FIBRE ROLL CHECK DAM – 450mm DIA. (OPSD 219.191)
- MUD MAT (SEE SHEET 24 FOR DETAILS)
- MTO PROPERTY LIMIT



CONT No. 2023-4010
GWP No. 4044-22-00

EROSION AND SEDIMENT CONTROL

SHEET 23

MPY SITE
FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	MDP	ISSUED FOR TENDER

LICENSED PROFESSIONAL ENGINEER
R. R. MOORE
100126348
OCT.18,2024
PROVINCE OF ONTARIO

DATE PLOTTED: 10/18/2024 10:12:29 AM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_34iw\dms60902\5083-02-ESC-CON.dwg

GENERAL NOTES:

A. FOLLOWING INSTALLATION OF THE PROPOSED EROSION AND SEDIMENT CONTROL (ESC) MEASURE, A QUALIFIED AGENT OF THE PROPONENT, PREFERABLE AN ENVIRONMENTAL MONITOR, WILL CONDUCT REGULAR SITE VISITS TO MONITOR ALL WORKS, PARTICULARLY THE CONDITION OF THE ESC MEASURES, DEWATERING, AND IN– OR NEAR–WATER WORKS. SHOULD CONCERNS ARISE, THE ENVIRONMENTAL MONITOR WILL CONTACT THE CONTRACT ADMINISTRATOR/SITE INSPECTOR IN WRITING WITHIN 24 HOURS OF IDENTIFYING THE CONCERN.

B. ESC MEASURES SHALL BE IN PLACE PRIOR TO THE CONTRACTOR UNDERTAKING CONSTRUCTION ACTIVITIES, AS TO PREVENT ENTRY OF SEDIMENT FROM BEING DISCHARGED TO RECEIVING OUTLETS OR UNDISTURBED AREAS. ESC MEASURES ARE TO BE EVALUATED ON A WEEKLY BASIS AND AFTER ANY STORM EVENT. ANY REPAIRS REQUIRED ARE TO BE RECTIFIED BY THE CONTRACTOR IMMEDIATELY. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION AND SEDIMENT CONTROL MEASURES, UPON RECEIVING DIRECTION FROM THE CONTRACT ADMINISTRATOR/SITE INSPECTOR.

C. ALL CONSTRUCTION ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, BE CONTROLLED TO PREVENT THE ENTRY OF DEBRIS, SEDIMENTS OR OTHER DELETERIOUS PRODUCTS TO THE RECEIVING OUTLETS OR WATERBODIES. EQUIPMENT MAINTENANCE WILL BE CONDUCTED A MINIMUM OF 30 METRES FROM THE THE RECEIVING OUTLETS OR WATERBODIES.

D. DIRECT DISCHARGE OF SEDIMENT LADEN RUNOFF FROM DISTURBED AREAS TO THE RECEIVING OUTLETS, WATERBODIES, AND/OR NATURAL FEATURES IS NOT ALLOWED. ALL DEWATERING SHALL BE TREATED AND THEN RELEASED 30 METRES FROM A RECEIVING OUTLET AND/OR WATERBODY. DISCHARGE IS TO BE RELEASED TO AN UNDISTURBED NATURAL AREA. THESE CONTROL MEASURES SHALL BE MONITORED AND MAINTAINED OR REVISED TO ENDURE WATER QUALITY TARGETS ARE BEING ACHIEVED.

E. PLEASE REFER TO THE MTO, ENVIRONMENTAL GUIDE FOR EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION OF HIGHWAY PROJECTS (2015) FOR THE DESIGN AND DESIGN ALTERATION OF ESC MEASURES.

F. THE EROSION AND SEDIMENT CONTROL (ESC) PLAN IS A DYNAMIC DOCUMENT, WHICH MAY BE SUBJECT TO CHANGE OR MODIFICATIONS AS A RESULT OF SITE DEVELOPMENT OR CHANGE ON SITE. ANY DEVIATION FROM APPROVED PLANS MUST BE DESIGNED BY A QUALIFIED PROFESSIONAL.

G. ADDITIONAL ESC MATERIALS (I.E. SILT FENCE, FILTER SOCKS, FIBRE ROLLS, CLEAR STONES, ETC.) ARE TO BE KEPT ON SITE FOR EMERGENCIES AND REPAIRS.

H. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR CONTROLLING SEDIMENT AND EROSION WITHIN THE CONSTRUCTION SITE FOR THE TOTAL PERIOD OF THE CONSTRUCTION. THIS SHALL INCLUDE THE PERIOD OF TIME REQUIRED FOR ALL RESTORED AREAS TO BECOME LUSH AND GREEN WITH DESIRED VEGETATION, AND THE SITE IS CONSIDERED TO BE STABILIZED AS DETERMINED BY THE CONTRACT ADMINISTRATOR/SITE INSPECTOR.

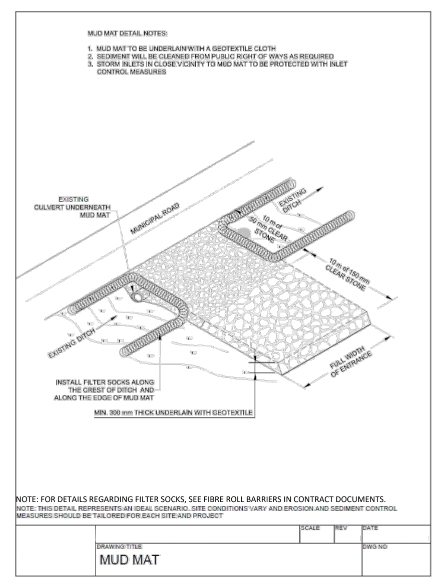
I. DISTURBED AREAS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE, AND TEMPORARILY OR PERMANENTLY STABILIZED OR RESTORED AS THE WORK PROGRESSES. ALL DISTURBED GROUND LEFT INACTIVE FOR MORE THAN 45 DAYS SHALL BE STABILIZED USING APPROPRIATE EROSION CONTROL MEASURES AND APPROPRIATE NATIVE NON–INVASIVE SEED MIX OR WITH THE FINAL APPROVED RESTORATION PLAN.

J. ANY SEDIMENT SPILL FROM THE SITE SHOULD BE REPORTED TO THE MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS (SPILL ACTION CENTRE) AT 1–800–268–6060.

K. IF EXCESSIVE SILTATION RESULTS FROM THE CONSTRUCTION ACTIVITIES, THE ONSITE SUPERVISOR/INSPECTOR AND /OR DESIGN ENGINEER RESERVE THE RIGHT TO REQUEST ADDITIONAL ESC MEASURES WHICH SHOULD BE INSTALLED PRIOR TO FURTHER CONSTRUCTION ACTIVITIES.

L. SEDIMENT LOADING TO RECEIVING OUTLETS AND/OR WATERBODY MUST BE MINIMIZED AT ALL TIMES. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY TO ADDRESS SILT MIGRATION TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR AND ALL OTHER REGULATORY AGENCIES OR MINISTRIES, IN PARTICULAR, TO THE MTO, ENVIRONMENTAL GUIDE FOR EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION OF HIGHWAY PROJECTS (2015). THE CONTRACTOR SHALL RETURN TO REMOVE THE SILT FENCES AND/OR FIBRE ROLL CHECK DAMS UPON ESTABLISHMENT OF GROWTH AT NO EXTRA COST. ANY ACCUMULATED SILT SHALL BE REMOVED AT REGULAR INTERVALS AT NO ADDITIONAL COST TO THIS CONTRACT.

M. THE POND BOTTOM, SIDE SLOPES, AND ALL ABUTTING LIMITS DISTURBED SHALL RECEIVE 50MM TOPSOIL AND SEED. CONTRACTOR SHALL RETURN TO CORRECT ANY EROSION AND SHALL BE RESPONSIBLE FOR MAINTENANCE UNTIL GROWTH IS ESTABLISHED.



CONT No. 2023–4010
GWP No. 4044–22–00

EROSION AND SEDIMENT CONTROL

DETAILS

FENELON FALLS MPY

SHEET 24

DILLON CONSULTING

REVISIONS

REV	DATE	BY	DESCRIPTION
0	24.11.04	RM	ISSUED FOR TENDER

LICENSED PROFESSIONAL ENGINEER
R. R. MOORE
100126348
Nov.4,2024
PROVINCE OF ONTARIO

DATE PLOTTED: 11/4/2024 9:16:06 AM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-ESC-CON.dwg

CONT No 2023-4010
GWP No 4044-22-00

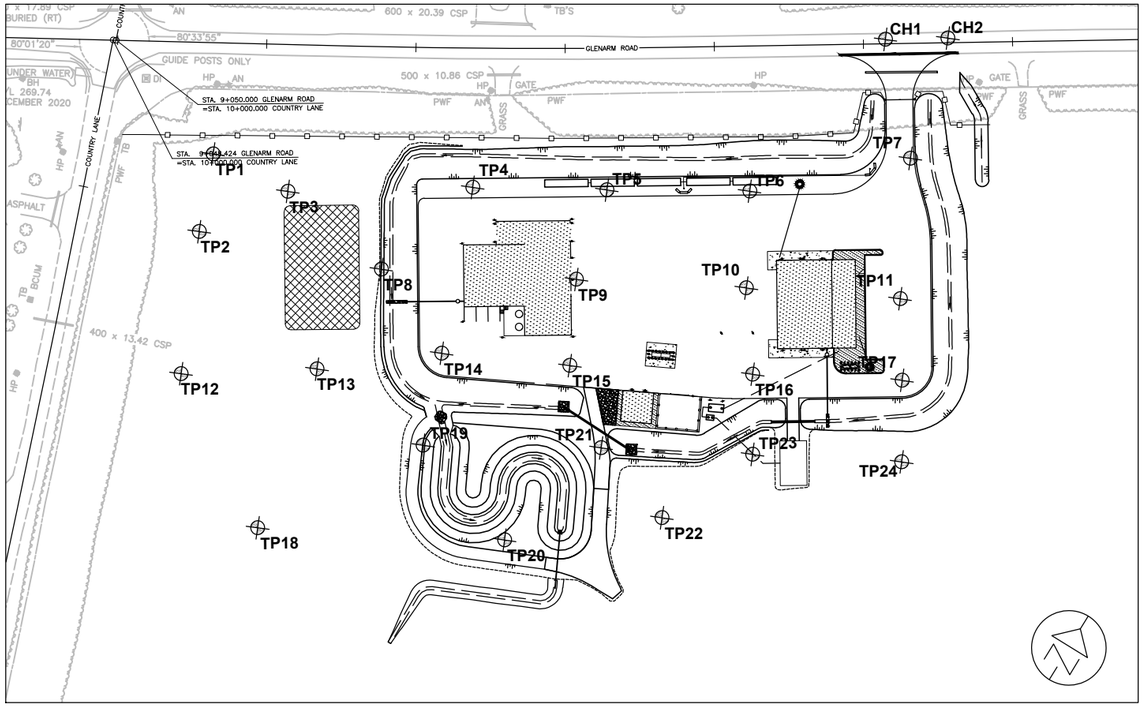
MISCELLANEOUS DETAILS

SHEET 25

SOILS DATA

FENELON FALLS MPY

DILLON CONSULTING



TP4, 4936646.705 N, 198544.8391 E (271.051 m)

0	-	350	Br Sa so Si & Fib Org tr Cl, loose
350	-	1.00	Br Sa so Si tr Cl, loose
1.00	-	2.00	Br/Grey Si & Sa so Cl, loose, moist, compact at 1.80 m, JC003
			% Passing JC003
			4.75 mm = 100.0
			75 µm = 59.0
			5 µm = 24.0 LSFH
			2 µm = 18.0
			Moisture Content = 17.7%
	-	2.00	End of TP

TP5, 4936671.352 N, 198587.4576 E (271.805 m)

0	-	450	Br Sa so Si & Fib Org tr Cl, loose
450	-	1.10	Br Sa so Si, loose, JC002
1.10	-	1.80	Br/Grey Si & Sa so Cl, loose, moist, compact at 1.35 m
	-	1.80	End of TP

TP6, 4936695.362 N, 198628.4029 E (272.447 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose JC001
			% Passing JC001
			4.75 mm = 100.0
			75 µm = 22.0
			5 µm = 7.0 LSFH
			2 µm = 5.0
			Moisture Content = 5.8%
400	-	1.20	Br Sa so Si tr Cl & Cobs, loose
1.20	-	1.80	Br/Grey Si & Sa so Cl tr Cobs, moist, loose, compact at 1.50 m
	-	1.80	End of TP

TP7, 4936719.031 N, 198674.862 E (272.719 m)

0	-	300	Br Sa so Si & Fib Org tr Cl, loose
300	-	800	Br Sa so Si tr Cl, loose
800	-	1.80	Br/Grey Si & Sa so Cl, moist, loose, compact at 1.20 m
	-	1.80	End of TP

TP8, 4936605.653 N, 198534.6331 E (270.946 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.20	Br Si Sa tr Cl, loose, JC011
1.20	-	1.80	Grey Si & Sa so Cl, compact, moist
	-	1.80	End of TP

TP9, 4936630.14 N, 198599.6567 E (270.831 m)

0	-	300	Br Sa so Si & Fib Org tr Cl, loose
300	-	1.00	Br Si Sa tr Cl, loose
1.00	-	2.00	Grey Sa so Si tr Gr & Cl & Cobs, loose, compact at 1.20 m
	-	2.00	End of TP

TP10, 4936652.234 N, 198647.6955 E (271.374 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.10	Br Si Sa tr Cl, loose
1.10	-	3.00	Grey/Br Sa so Si tr Gr & Cl, loose, moist, compact at 1.80 m, JC009
	-	3.00	End of TP

TP11, 4936676.841 N, 198696.2455 E (272.421 m)

0	-	300	Br Sa so Si & Fib Org tr Cl, loose
300	-	1.40	Br Si Sa tr Cl, loose
1.40	-	1.80	Grey/Br Si & Sa so Cl, loose, moist, compact at 1.50 m
	-	1.80	End of TP

TP12, 4936542.846 N, 198491.7615 E (270.736 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.30	Br Sa so Si tr Cl, loose
1.30	-	2.00	Grey Si & Sa so Cl, loose, moist, compact at 1.80 m
	-	2.00	End of TP

TP13, 4936565.427 N, 198529.9672 E (270.862 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.60	Br Si Sa tr Cl, loose
1.60	-	1.80	Grey/Br Sa so Si tr Gr & Cl, compact, moist, JC012
	-	1.80	End of TP

TP14, 4936591.587 N, 198567.4109 E (269.799 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.50	Br Sa so Si tr Cl, loose
1.50	-	2.00	Grey Si & Sa so Cl, loose, moist, compact at 1.80 m
	-	2.00	End of TP

TP15, 4936601.215 N, 198609.7531 E (269.957 m)

0	-	450	Br Sa so Si & Fib Org tr Cl, loose
450	-	1.60	Br Si Sa tr Cl, loose
1.60	-	2.00	Br/Grey Sa so Si tr Gr & Cl, loose, moist, compact at 1.75 m
	-	2.00	End of TP

TP16, 4936630.831 N, 198660.9027 E (271.078 m)

0	-	350	Br Sa so Si & Fib Org tr Cl, loose
350	-	1.20	Br Si Sa tr Cl, loose, JC010
			% Passing JC010
			4.75 mm = 100.0
			75 µm = 46.0
			5 µm = 9.0 LSFH
			2 µm = 7.0
			Moisture Content = 14.8%
1.20	-	1.80	Br/Grey Si & Sa so Cl, moist, loose, compact at 1.50 m
	-	1.80	End of TP

TP17, 4936652.284 N, 198709.3806 E (272.159 m)

0	-	300	Br Sa so Si & Fib Org tr Cl, loose
300	-	1.00	Br Si Sa tr Cl, loose
1.00	-	1.80	Grey Sa so Si tr Gr & Cl & Cobs, compact, JC008
			% Passing JC008
			4.75 mm = 94.2
			75 µm = 16.2
			Moisture Content = 3.8%
	-	1.80	End of BP

TP18, 4936508.597 N, 198539.3488 E (269.582 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.35	Br Sa so Si tr Cl, loose, JC005
			% Passing JC005
			4.75 mm = 100.0
			75 µm = 19.9
			Moisture Content = 8.6%
1.35	-	2.00	Grey Sa so Si tr Gr & Cl, loose, moist, compact at 1.80 m
	-	2.00	End of TP

TP19, 4936558.339 N, 198574.1689 E (270.223 m)

0	-	350	Br Sa so Si & Fib Org tr Cl, loose
350	-	700	Br Sa so Si tr Cl, loose
700	-	2.20	Br/Grey Si & Sa so Cl, loose, moist, compact at 1.65 m
2.20	-	3.00	Grey Sa tr Si, compact, wet
	-	3.00	End of TP

TP20, 4936543.652 N, 198608.8386 E (270.266 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose, JC006
400	-	1.50	Br Sa so Si tr Cl, loose
1.50	-	2.00	Br/Grey Si & Sa so Cl, loose, moist, compact at 1.35 m
	-	2.00	End of TP

TP21, 4936588.341 N, 198630.7924 E (270.081 m)

0	-	300	Br Sa so Si & Fib Org tr Cl, loose
300	-	1.20	Br Sa so Si, loose
1.20	-	2.00	Br/Grey Si & Sa so Cl tr Cobs, loose, moist, compact at 1.50 m
	-	2.00	End of TP

TP22, 4936575.396 N, 198656.3456 E (270.295 m)

0	-	350	Br Sa so Si & Fib Org tr Cl, loose
350	-	2.00	Br Sa so Si tr Cl, loose
	-	2.00	End of TP

TP23, 4936600.86 N, 198677.9456 E (270.762 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.40	Br Sa so Si tr Cl, loose
1.40	-	1.80	Br/Grey Sa so Si tr Gr & Cl, compact, JC007
			% Passing JC007
			4.75 mm = 94.0
			75 µm = 26.6
			Moisture Content = 2.3%
	-	1.80	End of TP

TP24, 4936629.535 N, 198718.4373 E (272.003 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.20	Br Si Sa tr Cl, loose
1.20	-	2.00	Br/Grey Si & Sa so Cl, moist, loose, compact at 1.80 m
	-	2.00	End of TP

CH1, WBL, 1.8 m from CL, 4936755.211 N, 198647.0262 E (273.168 m)

0	-	100	Asphalt
	-	100	End of CH

CH2, EBL, 1.8 m from CL, 4936756.769 N, 198657.4059 E (273.186 m)

0	-	100	Asphalt
	-	100	End of CH

TP1, 4936609.692 N, 198463.2133 E (270.366 m)

0	-	350	Br Sa so Si & Fib Org tr Cl, loose
350	-	1.00	Br Sa so Si tr Cl, loose
1.00	-	2.00	Br/Grey Si & Sa so Cl, loose, moist, compact at 1.50 m
	-	2.00	End of TP

TP2, 4936583.632 N, 198471.999 E (271.048 m)

0	-	300	Br Sa so Si & Fib Org tr Cl, loose
300	-	1.50	Br Si Sa tr Cl, loose
1.50	-	2.00	Grey Sa so Si tr Gr & Cl, loose, moist, compact at 1.50 m, JC004
	-	2.00	End of TP

TP3, 4936614.302 N, 198495.4027 E (270.663 m)

0	-	400	Br Sa so Si & Fib Org tr Cl, loose
400	-	1.40	Br Si Sa tr Cl, loose
1.40	-	2.00	Br/Grey Si & Sa so Cl, loose, compact at 1.65 m
	-	2.00	End of TP

10m 0 20m
Horizontal

DATE PLOTTED: 10/16/2024 11:29:43 AM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_32mac\dms60902\5083-02-SOIL-CON.dwg

MASTER PLANT LIST

CODE	BOTANICAL NAME	COMMON NAME	QTY	SIZE	COND.
CONIFEROUS TREES					
JE	Juniperus virginiana	Eastern Redcedar	7	200cm ht.	POTTED
PG	Picea glauca	White Spruce	12	250cm ht.	WB
PS	Pinus strobus	Eastern White Pine	20	250cm ht.	WB
DECIDUOUS TREES					
AR	Acer rubrum	Red Maple	13	60mm Cal.	W.B.
AS	Acer saccharum	Silver Maple	6	60mm Cal.	W.B.
AL	Amelanchier laevis	Allegheny Serviceberry	8	50mm Cal.	W.B.
CO	Celtis occidentalis	Common Hackberry	10	60mm Cal.	W.B.
QA	Quercus alba	White Oak	10	60mm Cal.	W.B.
TA	Tilia americana	Basswood	20	60mm Cal.	W.B.
SHRUBS					
RT	Rhus typhina	Staghorn Sumac	13	3 gal	

CONT No. 2023-4010
GWP No. 4044-22-00

MISCELLANEOUS DETAILS

SHEET 26

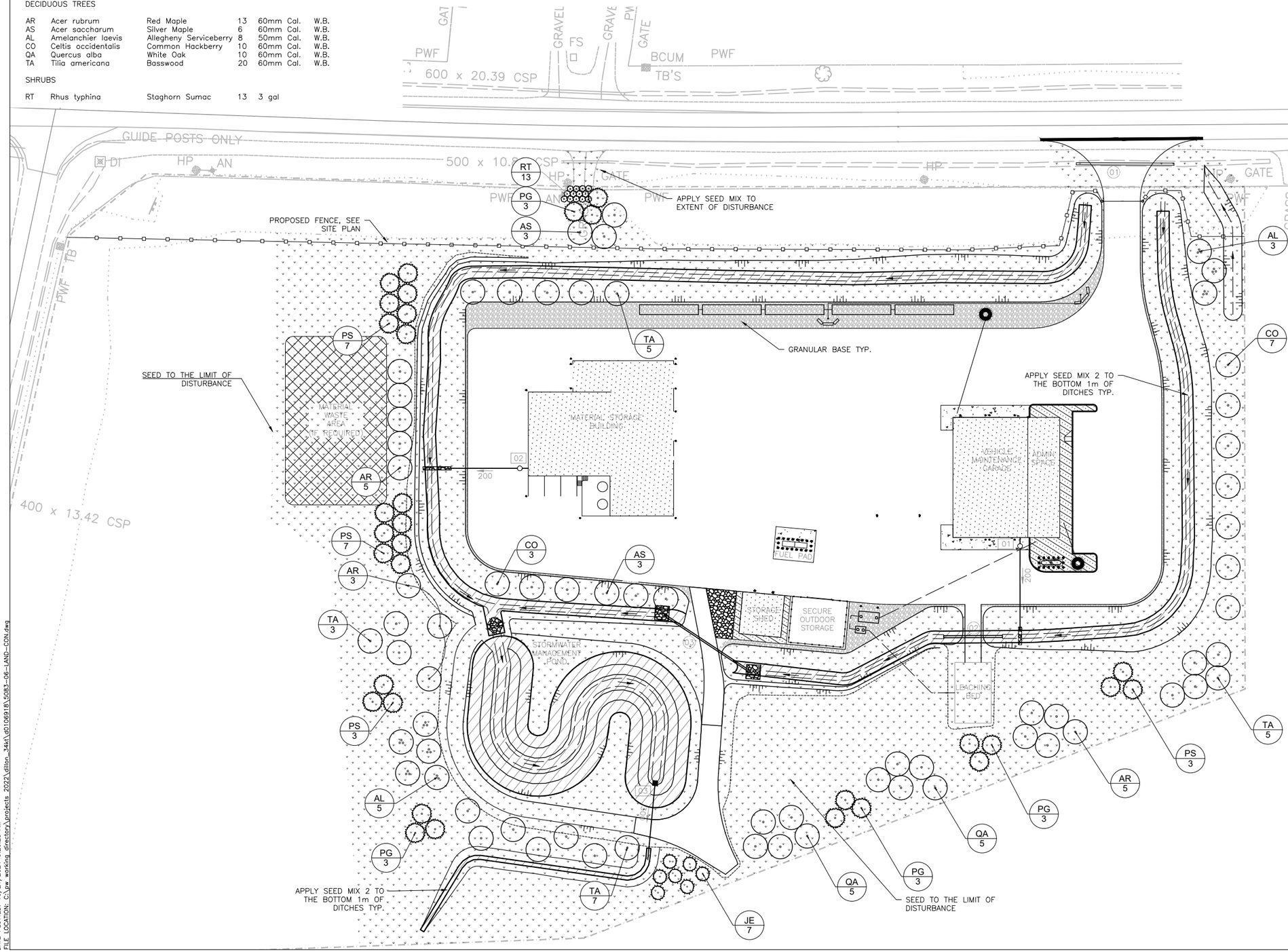
LANDSCAPE PLAN

FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	KT	ISSUED FOR TENDER

ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS — JASON R. DIENI — OALA MEMBER — Oct 21, 2024



LEGEND:

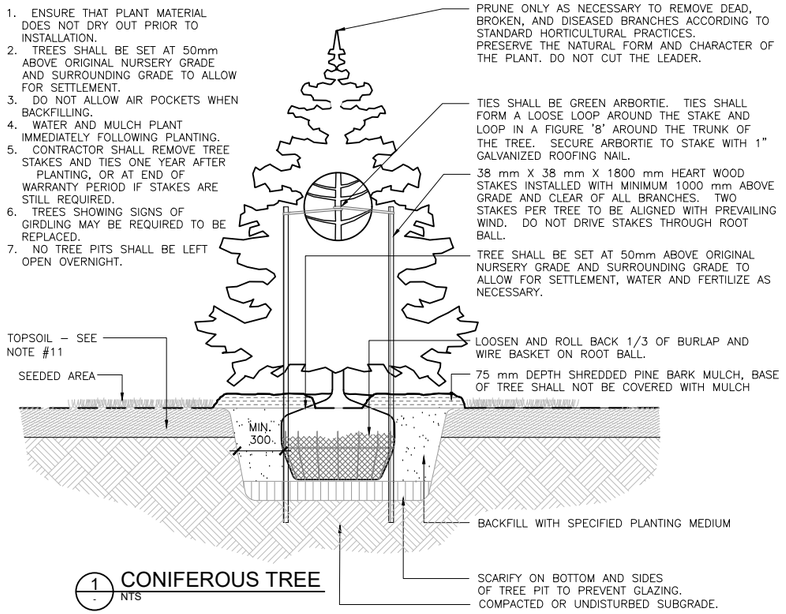
- PROPOSED DECIDUOUS TREE
- PROPOSED CONIFEROUS TREE
- PROPOSED MULIT-STEM TREE
- PROPOSED SHRUB
- SEED MIX 1 - SEE NOTE #1
- SEED MIX 2 - SEE NOTE #2
- GRANULAR SEALING OPSD 210.070

NOTES:
1. SEED MIX 1 - SALT TOLERANT MIX AS PER OPSS.PROV.803 TABLE 3. APPLICATION RATE AS PER TABLE 5.
   1.1. NURSE CROP TO BE APPLIED IN CONJUNCTION AS PER OPSS.PROV.803 TABLE 4
2. SEED MIX 2 - SOUTH ONTARIO NATIVE GRASS AND FORB MIX - POORLY DRAINED AREAS AS PER OPSS.PROV.803 TABLE 3. APPLICATION RATE AS PER TABLE 5
   1.1. NURSE CROP TO BE APPLIED IN CONJUNCTION AS PER OPSS.PROV.803 TABLE 4

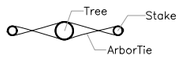
5m 0 10m
Horizontal

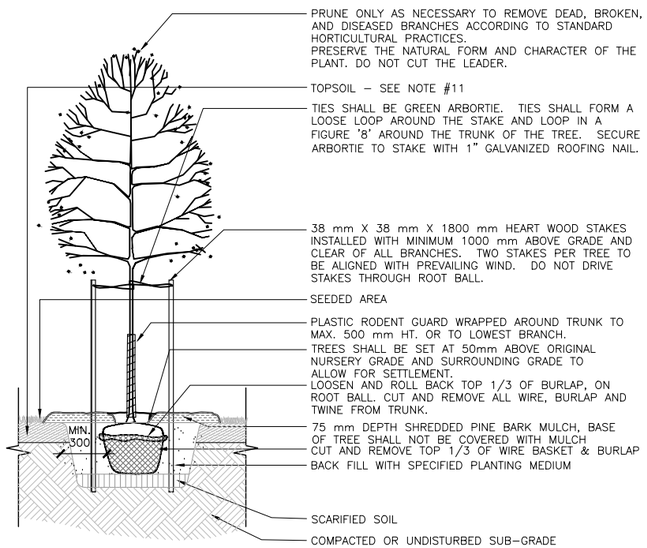
DATE PLOTTED: 10/21/2024 9:20:25 AM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_34kt\d0106918\5083-06-LAND-CON.dwg

1. ENSURE THAT PLANT MATERIAL DOES NOT DRY OUT PRIOR TO INSTALLATION.
2. TREES SHALL BE SET AT 50mm ABOVE ORIGINAL NURSERY GRADE AND SURROUNDING GRADE TO ALLOW FOR SETTLEMENT.
3. DO NOT ALLOW AIR POCKETS WHEN BACKFILLING.
4. WATER AND MULCH PLANT IMMEDIATELY FOLLOWING PLANTING.
5. CONTRACTOR SHALL REMOVE TREE STAKES AND TIES ONE YEAR AFTER PLANTING, OR AT END OF WARRANTY PERIOD IF STAKES ARE STILL REQUIRED.
6. TREES SHOWING SIGNS OF GIRDLING MAY BE REQUIRED TO BE REPLACED.
7. NO TREE PITS SHALL BE LEFT OPEN OVERNIGHT.

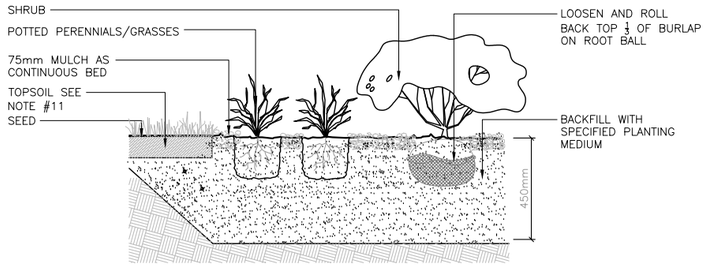


1. CONIFEROUS TREE
NTS





2. DECIDUOUS TREE
NTS



1. PLACE AT CORRECT ELEVATION, REMOVE POT WITHOUT DISTURBING ROOT SYSTEM. ROOT SYSTEM SHALL HOLD SOIL BUT SHALL NOT BE POTBOUND. IF POTBOUND, PRUNE ROOTS FOLLOWING PROPER HORTICULTURAL PRACTICES.
2. PROVIDE LOCAL AREA AROUND PLANTS AND SHRUBS FREE OF MULCH.

3. CONTINUOUS PLANT BED
NTS

GENERAL PLANTING NOTES

SEEDING

THE PERCENTAGE SPECIFIED FOR EACH SPECIES IS THE TARGET GROUND COVER IN THE INDICATED PLANTING AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO TRANSLATE THAT TARGET GROUND COVER INTO THE APPROPRIATE VOLUME OF SEED MIX FOR A GIVEN AREA USING INDUSTRY STANDARD FORMULA AND CONSIDERING SEED SIZE AND WEIGHT. THE TOTAL FOR ALL PERMANENT SPECIES MUST ADD UP TO 100% INCLUDING SPRING AND FALL OVERSEED SPECIES.

APPLICATION RATES

THE SEEDING RATES IN THE SEED MIX TABLES ASSUME USE OF HYDROSEEDING. IT IS RECOMMENDED THAT THE APPLICATION RATE BE INCREASED FOR HYDROSEEDING. INDUSTRY STANDARDS TEND TO EMPLOY A RANGE OF PERCENTAGE INCREASES UP TO 100% (I.E. DOUBLING) OF THE BASE APPLICATION RATE.

FINAL DETERMINATION OF SEEDING RATES SHOULD BE CONSIDERED SITE SPECIFIC CONDITIONS (E.G. SOIL PREPARATION, SLOPES, ETC), TIME OF YEAR, APPLICATION METHOD, AND MULCH TYPE AND THICKNESS. APPLICATION RATES MAY INCREASE FROM THOSE INCLUDED IN THE SPECIFIED SEED MIX TABLES AT THE DISCRETION OF AN EXPERIENCED CONTRACTOR, WITH THE UNDERSTANDING THAT THE PERFORMANCE MEASURES OF THE SEED MIX AS OUTLINED IN THESE NOTES MUST BE ACHIEVED.

WHEN APPLYING SEED ON SLOPING LAND, THE SEED SHALL BE APPLIED FOLLOWING THE GENERAL CONTOUR. ON SLOPES STEEPER THAN 3:1, HYDROSEEDING IS TO BE USED WITH A BONDED FIBER MATRIX

NURSE CROP:

APPLICATION RATES FOR THE NURSE CROP SHOULD BE CONSIDERED SEPARATE AND IN ADDITION TO THE RATE SPECIFIED FOR THE PRIMARY SEED MIX.

SEED SOURCES

THE FOLLOWING SOURCES OF SEED ARE ACCEPTABLE FOR SEED MIXES SUPPLIED TO THIS PROJECT, LISTED IN PRIORITY ORDER.

a. SEED GROWN AND COLLECTED FROM PROJECT REGION.

b. SEED GROWN AND COLLECTED FROM ONTARIO MINISTRY OF NATURAL RESOURCES ZONE 34 OR A CORRESPONDING GEOGRAPHIC DISTANCE OF APPROXIMATELY 300 KM FROM THE PROJECT FOOTPRINT.

c. ALL SEED SUPPLIED, EITHER AS SINGLE SEED SPECIES, OR AS A SEED MIX SHALL COMPLY WITH THE PROVISIONS OF THE CANADA SEEDS ACT AND THE GRADE STANDARDS FOR THE PARTICULAR SEED SPECIES.

d. THE CONTRACTOR SHALL PROVIDE A CERTIFICATION OF SEED ANALYSIS IN ACCORDANCE WITH OPSS 803. THE CERTIFICATE OF SEED ANALYSIS SHALL SPECIFY GERMINATION AND PURITY FOR EACH SEED SPECIES OF THE MIX WHERE POSSIBLE. AS WELL AS THE SEED MIX COMPOSITION EXPRESSED AS A PERCENTAGE OF EACH SEED SPECIES BY MASS FOR EACH SPECIFIED SEED MIX. TEST RESULTS SHALL CORRESPOND WITH THE SEED MIX COVER PERCENTAGES AND VALUES SPECIFIED IN THESE DRAWINGS. IF CONTRACTOR CANNOT PROVIDE CERTAIN SEEDS OR SEED MIXES WITH THE MINIMUM CERTIFICATE ANALYSIS VALUES ESTABLISHED IN TABLE 3 OF OPSS PROV 803 OR AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL DISCLOSE DEVIATION AND OBTAIN APPROVAL FOR USE BY THE CONSTRUCTION MANAGER.

QUALITY ASSURANCE/PERFORMANCE MEASURES

THE SEEDING OPERATION AT 30, 60, AND 90 DAY PERIODS IN ACCORDANCE WITH PERFORMANCE MEASURES CONTAIN IN OPSS PROV 803.

THE QUALITY ASSURANCE/PERFORMANCE MEASURES SHALL BE:

a. SUCCESSFUL GERMINATION OF THE NURSE CROP WHERE APPLIED AS VISUALLY EVIDENT BY 30 DAYS;

b. SUCCESSFUL GERMINATION OF SPECIFIED PERMANENT SEED SPECIES (APPROPRIATE SPECIES SHALL BE VISUALLY EVIDENT BY 60 AND/OR 90 DAYS).

c. UNIFORM, EVENLY DISPERSED COVER OF SEEDED SPECIES (I.E. NO SIGNIFICANT BARE AREAS) AS EVIDENT ACROSS ALL INSPECTION PERIODS.

d. AT THE END OF THE FIRST FULL GROWING SEASON, A MAJORITY OF THE MANDATORY SPECIES SHALL BE VISUALLY EVIDENT, AND NON NATIVE INVASIVE PLANT SPECIES AND UNDESIRABLE NATIVE PLANT SPECIES INCOMPATIBLE WITH THE TARGET TYPOLOGY AND/OR STAGE OF TYPOLOGY DEVELOPMENT SHALL NOT EXCEED 30% OF SEEDED AREA.

e. AT THE END OF THE SECOND FULL GROWING SEASON, A MAJORITY OF THE MANDATORY SPECIES SHALL BE VISUALLY EVIDENT; AND NON NATIVE INVASIVE PLANT SPECIES AND UNDESIRABLE NATIVE PLANT SPECIES INCOMPATIBLE WITH THE TARGET TYPOLOGY AND/OR STAGE OF TYPOLOGY DEVELOPMENT SHALL NOT EXCEED 20% OF SEEDED AREA.

SEED PACKAGING, LABELLING AND STORAGE

SEED PACKAGING, LABELING, AND STORAGE SHALL BE IN ACCORDANCE WITH OPSS PROV 803.

PLANTING TIME

SEED MIXES ARE BEST PLANTED IN SPRING/EARLY SUMMER. SEEDING DURING THE SUMMER MONTHS SHALL BE AVOIDED AND SHALL REQUIRE EXPLICIT APPROVAL OF THE CONSTRUCTION MANAGER. SUMMER SEEDING SHALL BE IMPLEMENTED WITH APPROPRIATE MEASURES FOR WATERING/MAINTENANCE OF GOOD SOIL MOISTURE REGIME.

SEED MIXES CONTAINING A MIX OF COOL AND WARM SEASON GRASSES SPECIES MAY ALSO BE SUCCESSFULLY PLANTED IN LATE FALL DURING DORMANCY WHEN SOIL TEMPERATURE IS CONSISTENTLY BELOW 5°C. WHILE FALL OR DORMANT SEEDING OF WARM SEASON GRASSES IS NOT RECOMMENDED FOR REASON OF SOIL TEMPERATURE, IT IS EQUALLY IMPORTANT TO CONSIDER AVAILABLE MOISTURE CONDITIONS. THIS IS ALL THE MORE CRITICAL IN SLOPED ROADSIDE AREAS PRONE TO SURFACE CRUSTING AND SIGNIFICANT EROSION.

GENERAL PLANTING NOTES:

ALL DIMENSIONS ARE IN MILLIMETRES AND ALL ELEVATION IN METRES UNLESS OTHERWISE NOTED.

a. ALL EXPOSED SUB-GRADE SOIL AND FILL MATERIAL TO BE COVERED WITH TOPSOIL TO FINAL ELEVATION, PRIOR TO RECEIVING SEED OR PLANTING TREATMENT. REFER TO SURFACE GRADING DRAWINGS FOR FINISH GRADES.

b. ANY COMPACTED SOIL DUE TO MACHINERY ACCESS SHALL BE LOOSENED PRIOR TO TOPSOIL AND SEED MIX APPLICATION.

c. PLANT ONLY WHERE INDICATED ON PLANS. AREAS WITHIN HIGHWAY CLEAR ZONES AND SIGHTLINE TRIANGLES AND OVER UNDERGROUND SERVICES AND OTHER INFRASTRUCTURE ARE TO RECEIVE SEEDING TREATMENT ONLY. CONTRACTOR IS RESPONSIBLE FOR CROSS-REFERENCING OTHER DRAWINGS AND SPECIFICATIONS AND LOCATING AND STAKING RESTRICTED AREAS PRIOR TO PLANTING.

d. ALL TREE, SHRUB AND GROUND COVER SPECIES SHALL BE NATIVE WHERE NOTED. ANY SUBSTITUTION OF NATIVE PLANT SPECIES TO THOSE IDENTIFIED ON THE PLANTING PLANS SHALL BE APPROVED IN ADVANCE AND SELECTED TO BE COMPATIBLE WITH LOCAL GROWING CONDITIONS.

e. SIZE AND NURSERY CONDITION FOR EACH SPECIES SHALL BE AS INDICATED ON THE PLANT LISTS.

f. EXCAVATION AND PREPARATION OF PLANTING BEDS AND INDIVIDUAL TREE AND SHRUB PLANTING PITS, PLANTING OF VEGETATION, AND MULCHING SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE PLANTING DETAILS.

TREE AND SHRUB PLANTING

THE FOLLOWING REQUIREMENTS APPLY TO PLANTING LANDSCAPE AND RESTORATION AREAS.

a. ALL EXPOSED SUB-GRADE SOIL AND FILL MATERIAL TO BE COVERED WITH TOPSOIL TO FINAL ELEVATIONS PRIOR TO RECEIVING SEED OR PLANTING TREATMENT.

b. ANY COMPACTED SOIL DUE TO MACHINERY ACCESS TO BE LOOSENED PRIOR TO TOPSOIL AND SEED MIX APPLICATION.

c. STABILIZE TOPSOIL AS SOON AS POSSIBLE WITHIN THE CONSTRUCTION YEAR'S GROWING SEASON.

d. DEPENDING ON TIMING OF WORK, STABILIZATION MEASURES (I.E. HYDROSEEDING IN COMBINATION WITH ENGINEERED METHODS SUCH AS EROSION MATTING) MAY BE REQUIRED DUE TO SEASONAL CONDITIONS (E.G. FALL/WINTER RAINS).

e. IF THE SEASON PERMITS, PLANT MATERIAL SHOULD BE INSTALLED SOON AFTER CONSTRUCTION AND/OR SITE PREPARATION IS COMPLETED

f. ALL TREES AND SHRUBS ARE TO BE A MINIMUM OF 1m OFFSET FROM ANY UNDERGROUND UTILITIES

TOPSOIL

TOPSOIL USED ON THE SITE FOR LANDSCAPING AND RESTORATION PURPOSES WILL COMPLY WITH THE FOLLOWING PARAMETERS OUTLINED IN OPSS 802 – CONSTRUCTION SPECIFICATION FOR TOPSOIL.

a. TOPSOIL SHALL BE A FERTILE LOAM MATERIAL THAT IS FREE OF ROOTS, VEGETATION, OR OTHER DEBRIS OF A SIZE AND QUANTITY THAT PREVENTS PROPER PLACEMENT OF THE TOPSOIL. THE TOPSOIL SHALL NOT CONTAIN MATERIAL GREATER THAN 25 MM IN SIZE, SUCH AS STONES AND CLODS.

b. IMPORTED TOPSOIL SHALL NOT HAVE CONTAMINANTS THAT ADVERSELY AFFECT PLANT GROWTH.

c. SOIL FROM SWAMPS OR MUSKEG AREAS MAY BE USED IN PLACE OF TOPSOIL, WHEN APPROVED BY THE CONTRACT ADMINISTRATOR.

d. TOPSOIL HEAVILY CONTAMINATED WITH SALT SHOULD NOT BE USED FOR PLANTING AREAS.

PLANTING TECHNIQUES

EXCAVATION AND PREPARATION OF PLANTING AREAS AND INDIVIDUAL TREE AND SHRUB PLANTING PITS WILL BE UNDERTAKEN IN ACCORDANCE WITH THE PLANTING DETAILS.

a. THE CANADIAN STANDARDS FOR NURSERY STOCK,

a. CURRENT EDITION (CANADIAN NURSERY LANDSCAPE ASSOCIATION) WILL BE USED AS A GUIDANCE TOOL FOR SPECIFICATION'S NOMENCLATURE, INCLUDING APPLICABLE STANDARDS FOR PLANTING MATERIAL, AND TERMS USED IN THE PLANTING PLANS.

b. EXCAVATE TO DEPTH AND WIDTH AS INDICATED ON THE PLANTING DETAILS, GENERALLY TWO TIMES THE DIAMETER OF THE ROOT BALL.

c. SCARIFY SIDES AND BOTTOM OF PLANTING PITS SO THAT WATER AND ROOTS CAN EASILY PENETRATE.

d. REMOVE WATER THAT ENTERS THE PLANTING PITS PRIOR TO PLANTING.

e. PLANTS ARE TO BE PLACED IN THE PLANTING PIT SUCH THAT THE ROOT CROWN IS AT THE SAME LEVEL AS THE SURROUNDING GRADE.

f. FOR CONTAINER STOCK, REMOVE ENTIRE CONTAINER WITHOUT DAMAGING ROOT BALL.

g. FOR JUTE BURLAPPED AND WIRE BASKET ROOT BALLS, CUT AWAY TOP ONE THIRD OF WRAPPING AND WIRE BASKET WITHOUT DAMAGING ROOT BALL. DO NOT PULL BURLAP OR ROPE FROM UNDER BALL.

h. BACKFILL PLANTING PITS TO FINISH GRADE IN 150MM LIFTS, TAMPING BETWEEN LIFTS. FORM WATERING SAUCER WITH EXCESS MATERIAL AS INDICATED ON PLANTING DETAILS.

i. MULCH SAUCERS TO BE CREATED AND MAINTAINED AROUND THE BASE OF TREES IN ACCORDANCE WITH THE PLANTING DETAILS.

j. IF WATERING PLANT MATERIAL AFTER APPLYING MULCH, CARE SHOULD BE TAKEN TO ENSURE THAT WATER PENETRATES THROUGH THE MULCH AND REACHES PLANT ROOTS WITHIN THE SOIL.

SPACING

a. 1 METER ON CENTER FOR SMALL GROWING SHRUBS, AND 1.25 – 2.0 METERS FOR MEDIUM TO LARGE GROWING SHRUBS.

b. 6–8 METERS ON CENTER AS SHOWN FOR DECIDUOUS TREE PLANTING.

c. 3–4 METERS ON CENTER FOR CONIFEROUS TREE PLANTING IN HEDGEROWS AND SNOW DRIFT AREAS.

CONT No. 2023-4010
GWP No. 4044-22-00

MISCELLANEOUS DETAILS

LANDSCAPE DETAILS
FENELON FALLS MPY

SHEET 27

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	KT	ISSUED FOR TENDER

ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS
JASON R. DIENI
OALA
MEMBER
Oct 21, 2024

DATE PLOTTED: 10/21/2024 9:20:25 AM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_34x1\d0106918\5083-06-LAND-CON.dwg

GENERAL NOTES:

A. REFER TO THE MISCELLANEOUS DETAILS DRAWINGS FOR INFORMATION ON THE DELINEATION OF WORK BETWEEN NMS ITEMS AND OPSS ITEMS.

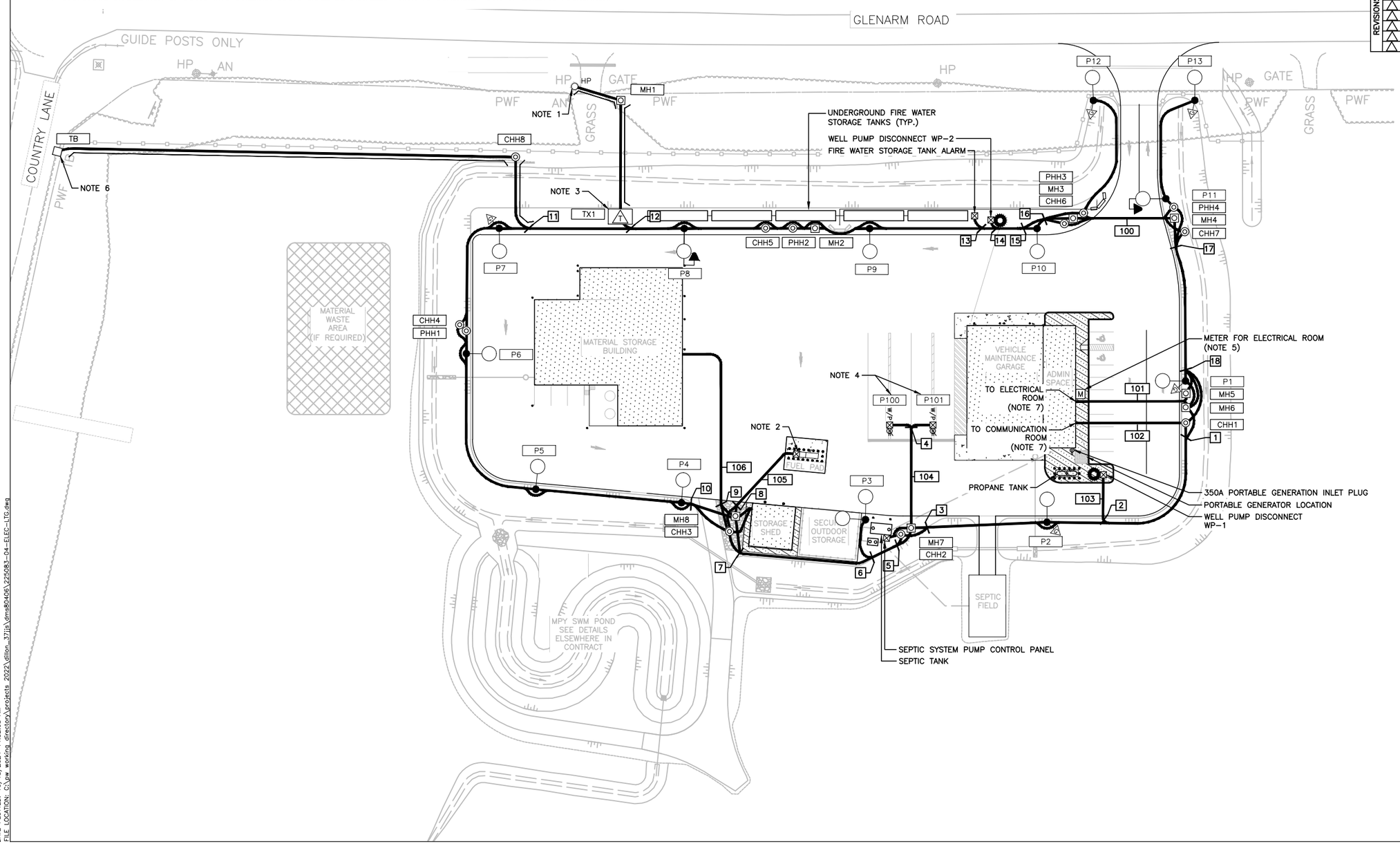
B. SITE ELECTRICAL DRAWINGS TO BE READ IN CONJUNCTION WITH THE BUILDING ELECTRICAL DRAWINGS.

NOTES:

1. STUB CONDUIT 1.0m ABOVE FINISHED GRADE AND SUPPLY RISER CONDUIT COMPLETE WITH WEATHER HEAD FOR INSTALLATION ON HYDRO POLE BY HYDRO ONE. CONTRACTOR TO COORDINATE THIS WORK WITH HYDRO ONE.
2. COORDINATE WITH TENANT FOR FUEL SYSTEM REQUIREMENTS. FINAL LOCATION FOR DISCONNECT SHALL BE COMPLETED IN THE FIELD.
3. CONTRACTOR TO INSTALL CONCRETE PAD FOR TRANSFORMER PER HYDRO ONE STANDARDS. STUB CONDUITS 300mm ABOVE CONCRETE PAD AND LEAVE CABLES COILED FOR INSTALLATION OF TRANSFORMER AND FINAL CONNECTION BY HYDRO ONE. COORDINATE WITH HYDRO ONE FOR INSTALLATION OF TRANSFORMER AND CABLE TERMINATIONS.
4. REFER TO THE BUILDING ELECTRICAL DRAWING SHEETS FOR BLOCK HEATER POST DETAILS.
5. COORDINATE INSTALLATION OF METER ON EXTERIOR OF BUILDING WITH HYDRO ONE. CONTRACTOR SHALL INSTALL METER BASE AND ASSOCIATED CONDUITS AND WIRING. HYDRO ONE SHALL SUPPLY AND INSTALL THE METER AND ASSOCIATED CURRENT TRANSFORMERS AND MAKE ALL FINAL CONNECTIONS.
6. STUB CONDUIT 1.0m ABOVE FINISHED GRADE NEXT TO BELL PEDESTAL FOR INSTALLATION BY BELL CANADA. BELL CANADA TO SUPPLY AND DELIVER CABLE REQUIRED BETWEEN THE BELL PEDESTAL AND COMMUNICATION ROOM. COORDINATE THIS WORK WITH BELL CANADA.
7. COORDINATE INSTALLATION OF DUCTS INTO BUILDING. DUCTS SHALL BE INSTALLED PRIOR TO CONCRETE POUR OF BUILDING FOUNDATION.

SUPPLEMENTARY LEGEND:

- BLOCK HEATER
- M HYDRO METER
- T PAD MOUNTED TRANSFORMER
- CCTV CAMERA



CONT No. 2023-4010
GWP No. 4044-22-00

SITE LIGHTING

MPY SITE
FENELON FALLS MPY

SHEET 28

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	SPW	ISSUED FOR TENDER

LICENSED PROFESSIONAL ENGINEER
S. P. C. WALL
100114120
Oct 21.24
PROVINCE OF ONTARIO

5m 0 10m
Horizontal

DATE PLOTTED: 10/18/2024 11:52:08 AM
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CONT No. 2023-4010
GWP No. 4044-22-00

SITE LIGHTING WIRING

SHEET 29

MPY SITE
FENELON FALLS MPY

DILLON CONSULTING

REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	SPW	ISSUED FOR TENDER

LICENSED PROFESSIONAL ENGINEER
S. P. C. WALL
100114120
Oct 21.24
PROVINCE OF ONTARIO

GLENARM ROAD

FENELON FALLS MPY

1 – 100mm (COMM)
[4 – 1/C #2/0 HV] – 100mm
TB
CHH8
HP
MH1
[4 – 1/C #2/0 HV] – 100mm
TX1
[4 – 1/C #600 KCMIL, 1 – 1/C #2 IGRD] – 100mm
50mm – [4 – 1/C #4 LV, 1 – 1/C #6 IGRD]
1 – 100mm (SPARE)
2 – 100mm (COMM)
FIRE
WELL PUMP 2
2 – 100mm (COMM)
1 – 100mm (COMM)
1 – 100mm (COMM)
100mm – [2 – 1/C #3 LV (FIRE), 1 – 1/C #8 IGRD]
100mm – [3 – 1/C #3 LV (WP–2), 1 – 1/C #8 IGRD]
50mm – [2 – 1/C #6 (CAM2), 1 – 1/C #6 IGRD]
P12 A BLK 4
P13 A BLU 5
[4 – 1/C #4 LV, 1 – 1/C #6 IGRD] – 50mm
P11 A BLK 3 CAM 1 EMER 78
[4 – 1/C #4 LV, 1 – 1/C #6 IGRD] – 50mm
[4 – 1/C #4 LV, 2 – 1/C #6 LV (CAM1), 1 – 1/C #6 IGRD] – 50mm
16
PHH3
PHH4
CHH5
MH2
CHH6
CHH7
MH3
MH4
17
100mm – [4 – 1/C #600 KCMIL, 1 – 1/C #2 IGRD]
2 – 100mm (COMM)
1 – 100mm (SPARE)
1 – 100mm (SPARE)
[4 – 1/C #4 LV, 1 – 1/C #6 IGRD] – 50mm
[4 – 1/C #600 KCMIL, 1 – 1/C #2 IGRD] – 100mm
[2 – 1/C #6 (CAM2), 2 – 1/C #6 (CAM1), 1 – 1/C #6 IGRD] – 100mm
[2 – 1/C #3 LV (FIRE), 3 – 1/C #3 LV (WP–2), 1 – 1/C #8 IGRD] – 100mm
[2 – 1/C #3 LV (FIRE), 3 – 1/C #3 LV (WP–2), 2 – 1/C #4/0 LV (WIN C P), 2 – 1/C #2/0 LV (FP), 2 – 1/C #2/0 LV (FP), 3 – 1/C #3/0 LV (SEP), 1 – 1/C #4 IGRD] – 100mm
PHH2
P7 A RED 2
P8 A BLK 4 CAM 2 EMER 56
P9 A BLU 6
P10 A RED 2
11
12
13
14
15
100mm – [2 – 1/C #6 (CAM2), 1 – 1/C #6 IGRD]
100mm – [3 – 1/C #3 LV (WP–2), 2 – 1/C #3 LV (FIRE), 1 – 1/C #8 IGRD]
1 – 100mm (SPARE)
2 – 100mm (COMM)
2 – 100mm (SPARE)
8 – 100mm CONCRETE ENCASED
50mm – [2 – 1/C #6 LV (CAM2), 4 – 1/C #4 LV, 1 – 1/C #6 IGRD]
100mm – [4 – 1/C #600 KCMIL, 1 – 1/C #2 IGRD]
100mm – [4 – 1/C #600 KCMIL, 1 – 1/C #2 IGRD]
100mm – [4 – 1/C #400 KCMIL, 1 – 1/C #3 IGRD]
100mm – [4 – 1/C #4 LV, 4 – 1/C #4 LV, 2 – 1/C #6 (CAM2), 2 – 1/C #6 (CAM1), 1 – 1/C #6 IGRD]
100mm – [3 – 1/C #4 LV (P100), 3 – 1/C #4 LV (P101), 3 – 1/C #4 LV (WP–1), 1 – 1/C #6 IGRD]
1 – 100mm (SPARE)
2 – 100mm (SPARE)
2 – 100mm (COMM)
10 – 100mm CONCRETE ENCASED
4 – 100mm CONCRETE ENCASED
18
MH5
P1 A RED 1
[2 – 1/C #4 LV, 6 – 1/C #1/0 LV, 2 – 1/C #2/0 LV, 1 – 1/C #6 IGRD] – 100mm (MSB LTG)
MH6
1 – 100mm (COMM)
1 – 100mm (SPARE)
[4 – 1/C #4 LV, 1 – 1/C #6 IGRD] – 50mm
CHH4
PHH1
P6 A BLU 6
MATERIAL STORAGE BUILDING
1 – 100mm (COMM)
2 – 100mm (SPARE)
100mm – [6 – 1/C #1/0 LV (MSB–LTG), 2 – 1/C #4 LV (MSB–LTG), 2 – 1/C #2/0 LV (MSB–LTG), 2 – 1/C #4/0 LV (WIN C P), 1 – 1/C #4 IGRD]
100mm – [4 – 1/C #600 KCMIL, 1 – 1/C #2 IGRD]
100mm – [2 – 1/C #2/0 LV (FP), 2 – 1/C #2/0 LV (FP), 1 – 1/C #6 IGRD]
2 – 100mm (SPARE)
5 – 100mm CONCRETE ENCASED
FUEL PAD
1 – 100mm (COMM)
4 – 100mm CONCRETE ENCASED
50mm CONCRETE ENCASED – [3 – 1/C #4 LV (P101), 1 – 1/C #6 IGRD]
50mm CONCRETE ENCASED – [3 – 1/C #4 LV (P100), 1 – 1/C #6 IGRD]
P100
P101
4
MAIN 347/600V
LP–A 347/600V
EMER2 347/600V
EMER 120/208V
ELECTRICAL ROOM IN ADMIN BUILDING
COMMUNICATION ROOM IN ADMIN BUILDING
2 – 100mm (SPARE)
8
9
STORAGE SHED
2 – 50mm CONCRETE ENCASED
8 – 1/C #4 LV, 1 – 1/C #6 IGRD – 50mm
CHH1
1
[3 – 1/C #4 LV (WP–1), 1 – 1/C #8 IGRD] – 100mm
[4 – 1/C #4 LV, 1 – 1/C #6 IGRD] – 50mm
[3 – 1/C #4 LV (P101), 3 – 1/C #4 LV (P100), 1 – 1/C #6 IGRD] – 100mm
2 – 100mm (COMM)
2 – 100mm CONCRETE ENCASED
[4 – 1/C #400 KCMIL, 1 – 1/C #3 IGRD] – 100mm
[4 – 1/C #600 KCMIL, 1 – 1/C #2 IGRD] – 100mm
2 – 100mm (SPARE)
P5 A BLK 4
P4 A RED 2
1 – 100mm (SPARE)
100mm – [4 – 1/C #400 KCMIL, 1 – 1/C #3 IGRD]
P3 A BLK 4 A BLU 6
SEPTIC TANK
P2 A RED 2
WELL PUMP 1
10
7
6
5
MH7
3
2
1 – 100mm (COMM)
1 – 100mm (COMM)
1 – 100mm (SPARE)
[4 – 1/C #4 LV, 1 – 1/C #6 IGRD] – 50mm
MH8
CHH3
1 – 100mm (COMM)
2 – 100mm (SPARE)
1 – 100mm (COMM)
[4 – 1/C #4 LV, 1 – 1/C #6 IGRD] – 50mm
[4 – 1/C #400 KCMIL, 1 – 1/C #3 IGRD] – 100mm
[4 – 1/C #600 KCMIL, 1 – 1/C #2 IGRD] – 100mm
CHH2
[2 – 1/C #2/0 LV (FP), 2 – 1/C #2/0 LV (FP), 2 – 1/C #4/0 LV (WIN C P), 1 – 1/C #4 IGRD] – 100mm
[3 – 1/C #3/0 LV (SEP), 1 – 1/C #6 IGRD] – 100mm
[3 – 1/C #3/0 LV (SEP), 2 – 1/C #2/0 LV (FP), 2 – 1/C #2/0 LV (FP), 2 – 1/C #4/0 LV (WIN C P), 1 – 1/C #4 IGRD] – 100mm
[2 – 1/C #4 LV, 6 – 1/C #1/0 LV, 2 – 1/C #2/0 LV, 1 – 1/C #6 IGRD] – 100mm (MSB LTG)
CONCRETE ENCASED

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CONT No. 2023-4010
GWP No. 4044-22-00

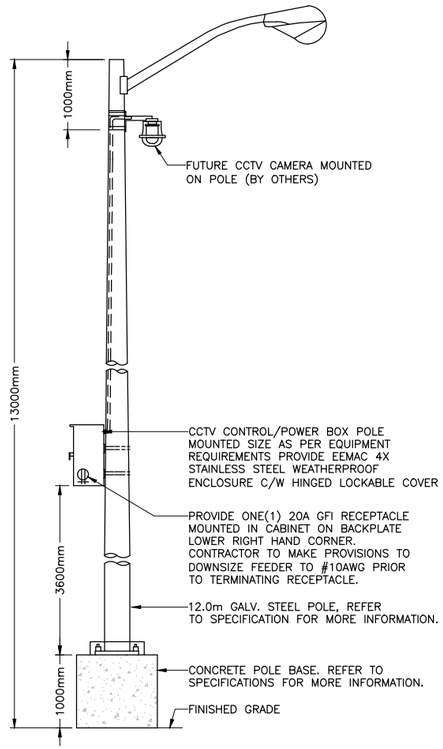
NON-STANDARD DETAILS

SHEET 30

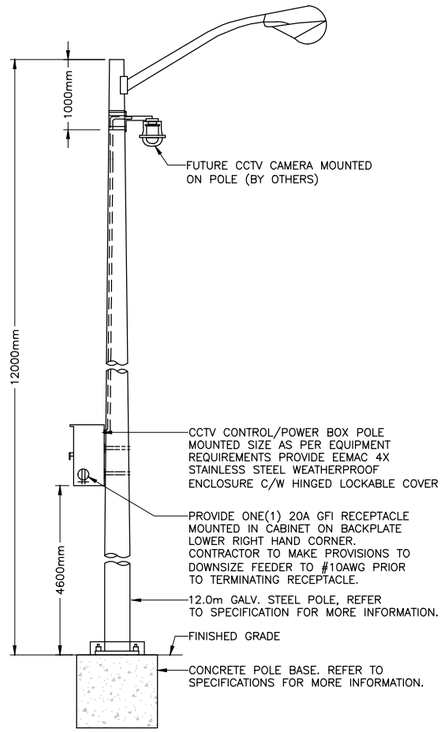
MPY SITE
FENELON FALLS MPY

DILLON CONSULTING

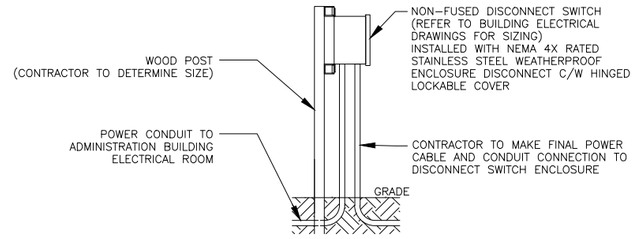
REVISIONS	REV	DATE	BY	DESCRIPTION
	1	24.10.21	SPW	ISSUED FOR TENDER
	2			
	3			
	4			
	5			
	6			



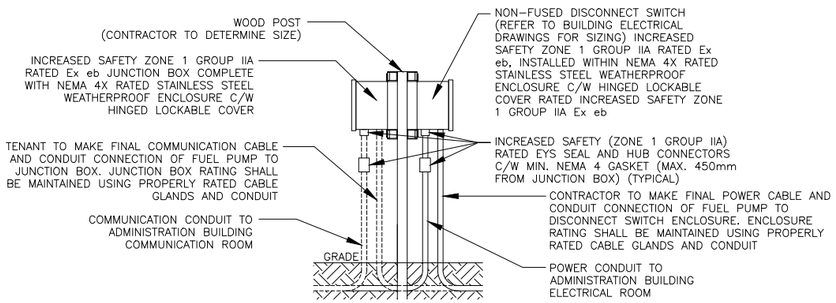
1 N.T.S.
DETAIL: CCTV CAMERA AND CONTROL MOUNTING ON LIGHTING POLE WITH RAISED CONCRETE FOOTING



2 N.T.S.
DETAIL: CCTV CAMERA AND CONTROL MOUNTING ON LIGHTING POLE WITH STANDARD CONCRETE FOOTING



DISCONNECT SWITCH DETAIL (NOTE 1)
(SEPTIC TANK, WELL PUMPS, & FIRE WATER STORAGE)
N.T.S.



FUEL PAD DISCONNECT SWITCH DETAIL (NOTE 1)
N.T.S.

LICENSED PROFESSIONAL ENGINEER
S. P. C. WALL
100114120
Oct 21.24
PROVINCE OF ONTARIO

NOTE:

1. CONTRACTOR SHALL SUPPLY AND INSTALL POST, CONDUIT, CABLES, MOUNTING EQUIPMENT, ACCESSORIES AND ALL EQUIPMENT REQUIRED FOR THE DISCONNECT SWITCHES. REFER TO THE NMS DELINEATION DRAWING AND SPECIFICATIONS FOR DETAILS AND COSTING OF THESE DETAILS.

DATE PLOTTED: 10/18/2024 11:51:55 AM
FILE LOCATION: C:\pw working directory\projects 2022\dillon_37ila\dms80406\225083-04-ELEC-LTG-NSTD.dwg