



DEWDNEY MOUNTAIN FARMS QUARRY ROAD/LEDGE ROAD IMPROVEMENTS

December 3, 2020
Updated April 29 2022

To the Municipality of Trent Lakes

760 County Road 36
Trent Lakes, ON
K0M 1A0

County of Peterborough

470 Water Street
Peterborough, ON
K9H 3M3

This brief report has been prepared to clarify the current design of the Quarry Road/Ledge Road improvements being undertaken by Dewdney Mountain Farms to provide a safe and sustainable haul road to their proposed quarry located in parts of Lots 28, 29 & 30, Concession 15 in the former Township of Harvey. The location of the road works is shown in Appendices 1 & 2.

The road design has been premised on the requirement to upgrade the existing municipal road structure to accommodate truck traffic anticipated to be approximately 14 trips/day. The road design is based on a 40km/hr speed limit (50 km/hr design speed) and proposes a rural cross-section with a 7.0m travelled portion with 1.0m shoulders.

The road design makes use of the existing rights-of-way for Quarry Road and Ledge Road and in most cases, maintains the existing location and profile of the existing travelled roadway.

The engineering design encompasses 18 drawings consisting of an overall plan, a details plan and sixteen (16) plan and profile drawings. The design was originally prepared by D. M. Wills and Associates, Peterborough in 2013 and 2014 and has since been modified by Lakeview Engineering, North Kawartha in 2020. The design is in keeping with current rural road design standards and is based on the recommendations of Tranplan Associates, the Project's traffic consultants for a haul road required for the permitted extraction volumes.

Work within the County's right-of way has been reviewed and approved by County engineering staff. The County had requested during the evolution of this design that among other things, the road grades on Quarry Road at the intersection be reduced and the existing spring be contained. The existing shoulders will be paved on either side of the intersection to act as acceleration and deceleration lanes.

Work within the Quarry Road/Ledge Road rights-of-way is under the Municipality's jurisdiction and from the information provided to us by staff, has been endorsed by Municipality's Public Works Department. During the design process, the Municipality had requested that sight lines be improved for safety, the roads be resurfaced, and that a hammerhead turn-around facility for school buses be accommodated.

Reduced copies of the engineering drawings (Revised November 21, 2021) are included in Appendix 3.

.../2

There are four distinct sections of road improvement design, being:

- County Road 36/Quarry Road intersection improvements;
- Quarry Road to Ledge Road;
- Ledge Road, fronting the existing residential properties; and
- Ledge Road, from the existing residential properties north to the quarry site.

These are further detailed within the following Sections 1 to 4 inclusive.

Section 1 - County Road 36/Quarry Road intersection improvements

(Lakeview Engineering Drawings, Sheets 1,2 & 3)

- The north shoulder on County Road 36 is being provided with a paved 3.5m wide lane with heavy duty asphalt for a distance of 180m± west of the centreline and 140m± east of the centreline of the Quarry Road intersection to act as an acceleration and deceleration lane.
- The acceleration lane will consist of a 100m lane with a 60m taper. The deceleration lane will be 60m in length with a 60m taper. Both lane dimensions have been recommended by the County.
- The north shoulder is proposed to be re-ditched to provide improved drainage and a new large diameter culvert will be installed under Quarry Road. The culvert sizing (800mm x 580mm) has been requested by the County.
- The existing spring (artesian well) located on the west side of Quarry Road is proposed to be removed due to public health concerns and safety concerns from icing of the roadway in the winter.
- Part of County Road 36 roadway is being ground down and resurfaced with 40mm of HL3 for a distance of approximately 180m west and 140m east of the Quarry Road intersection.
- A new guard rail is proposed to be installed along part of the County Road 36 north shoulder.
- Quarry Road for a distance of approximately 90m north of County Road 36 is proposed to be re-graded to reduce the existing steep slope entering onto County Road 36. This will improve safety conditions and reduce the possibility of vehicle conflicts in winter conditions at this intersection.

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- The location of the existing mailboxes will remain in their general location but will need to be temporarily relocated during construction.
- The works on County Road 36 as shown has been approved by the County's engineering staff (Appendix 4).

Section 2 - Quarry Road to Ledge Road

(Lakeview Engineering Drawings, Sheets 3, 4, 5 & 6)

- The improvements proposed are for the 1.2km length of roadway from County Road 36 to the Ledge Road/Ties Mountain Road intersection.
- The existing road cross-section and profile is to be maintained for most of this section of road except for a 200m± length just north of #25 and south of #110 Quarry Road where the road is being realigned to straighten its centreline and remove an identified existing blind spot.
- Just north of Ledge Road, a hammerhead turning facility is proposed to be provided to allow school buses to turn around safely. This will be provided with a double surface treatment.
- The entire surface of Quarry Road to the Ledge Road intersection will be pulverized and re-graded to a proper cross-section and will then be provided with double surface treatment (two separate applications of asphalt binder material and mineral aggregate).
- Pedestrian movement is being maintained along the existing rural roadway.

Section 3 - Ledge Road, fronting the existing residential properties

(Lakeview Engineering Drawings, Sheets 6, 7, 8, 9, & 10)

- The improvements in this section of the travelled roadway include the re-grading and surface treatment of approximately 1.2km of roadway from the Quarry Road intersection to the last residential property north of # 130 Ledge Road.
- The existing curve west of Quarry Road is being re-graded to reduce the existing steep grade onto Quarry Road. In addition, the inside curve is proposed to be provided with double surface treatment to reduce the likelihood of gravel wash and shoulder damage.
- Some sections of the roadway are proposed to be re-graded and re-aligned to eliminate potential and existing blind spots.

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DEWDNEY MOUNTAIN FARMS QUARRY ROAD/LEDGE ROAD IMPROVEMENTS

- The roadway cross-section will be proposed to be 7.0m wide with a 1.0m shoulder each side and ditching as detailed on Sheet 18. This is a typical rural standard for a 20.0m wide right-of-way and will allow heavy vehicles to pass safely.
- The roadway improvements proposed will be completed to the current road base in its current location.
- As noted previously, this section of roadway is proposed to be provided with double surface treatment to eliminate the potential for dust generation.
- Pedestrian movements will be maintained within the widened rural roadway.
- Ledge Road will be designated a stop road at Quarry Road, through the use of a stop sign and painted stop bar.

Section 4 - Ledge Road, from the existing residential properties to the quarry site

(Lakeview Engineering Drawings, Sheets 10-17 inclusive)

- The work in this section of the roadway includes the regrading and re-surfacing of the balance of the 2.3km± roadway from the existing residential properties north to the proposed quarry gate.
- The roadway proposed is proposed to be aligned within the existing right-of-way with a cross-section being a 7.0m wide carriageway, 1.0m shoulders each side and ditching.
- The road is proposed to be regraded to significantly reduce if not eliminate potential and existing blind spots, unnecessary curves, and improper grade changes.
- The road base is proposed to be provided with gravel base to a depth of 150mm.

Cost Estimates

The works as described above has had a detailed cost estimate prepared for the Municipality's section of the roadworks. This was submitted to the Municipality in June 2020 for their review and approval and subsequently updated in February 2022. A detailed cost estimate has also been prepared for the County's section of the works and this was updated and subsequently accepted by County staff in July 2020.

The works have been costed to be (exclusive of taxes):

Municipal Works	\$706,758.75
County Works	\$248,022.50
Total cost, all works	\$954,781.25

The detailed cost estimates are included in Appendices 5 & 6.

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We look forward to the Municipality reviewing the proposed Haul Road improvements and providing approval of the engineering drawings and resultant cost estimates to undertake these works as part of the overall approval for the quarry use.

All which is respectfully submitted,

Lakeview Engineering Inc.

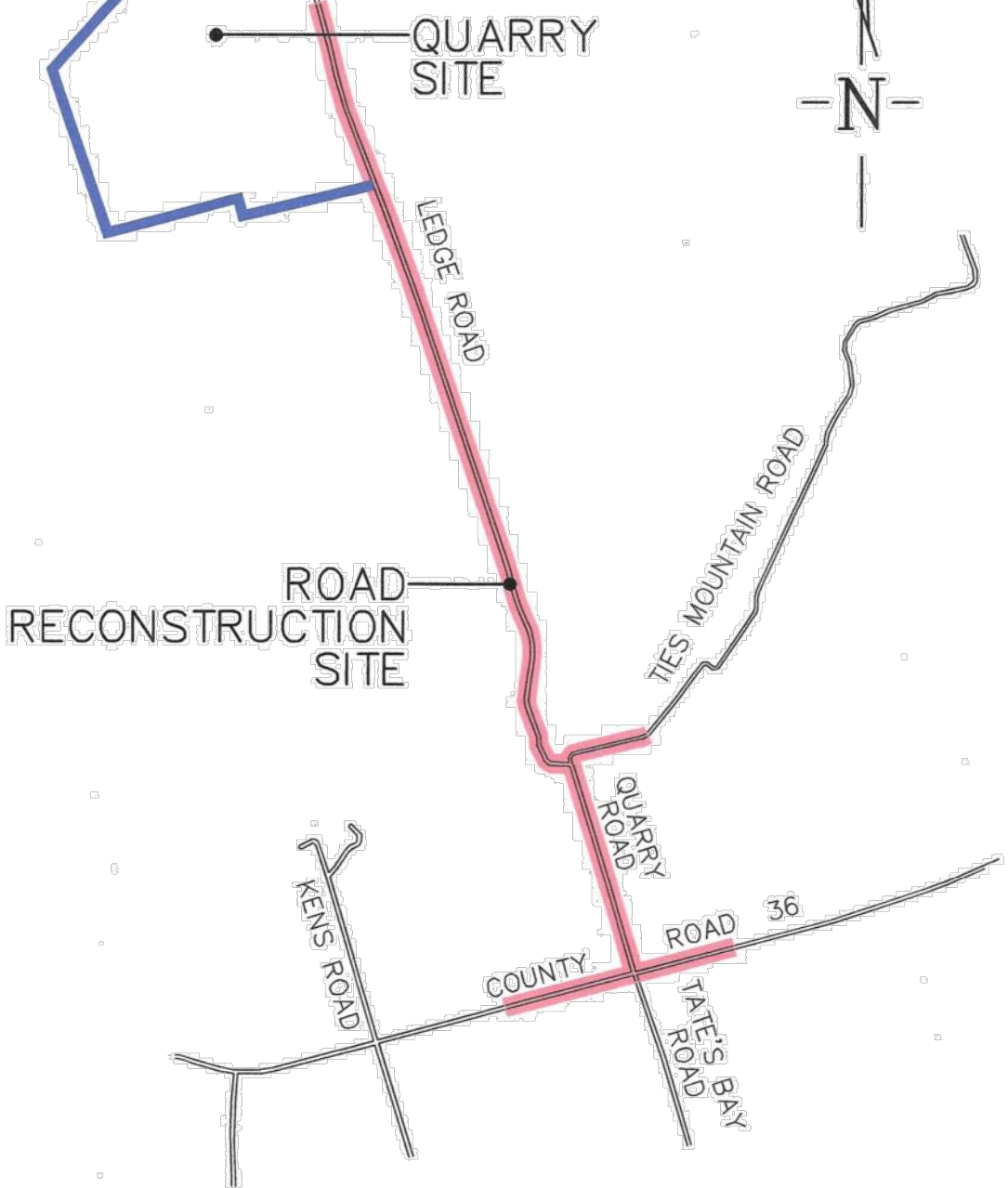


Roy P. Hylkema P.Eng
Principal

Attachments:

- Appendix 1 Location Plan (Drawing)
- Appendix 2 Location Plan (Aerial View)
- Appendix 3 Engineering Drawings (Reduced copies)
- Appendix 4 County design comments
- Appendix 5 Municipal Cost Estimate
- Appendix 6 County Cost Estimate

APPENDIX 1 LOCATION OF WORKS



APPENDIX 2 - AERIAL VIEW OF PROPOSED ROAD WORKS



County of
Peterborough

Dewdney Mountain Farms Ltd. Quarry Use Haul Route, Trent Lakes, County of Peterborough



Legend

- Roads < 100,000
 - ART
 - County
 - COL
 - EXP
 - Provincial
 - TWP
- Outside Roads < 100,000
- Settlement Area (Pt)
 - Named Place
 - Official Plan Approved
- First Nations
- DTM
 - High : 434.39
 - Low : -9999
- Hillshade
 - High : 254
 - Low : 0

1: 54,267



North_American_1983_CSRS_UTM_Zone_17N
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This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

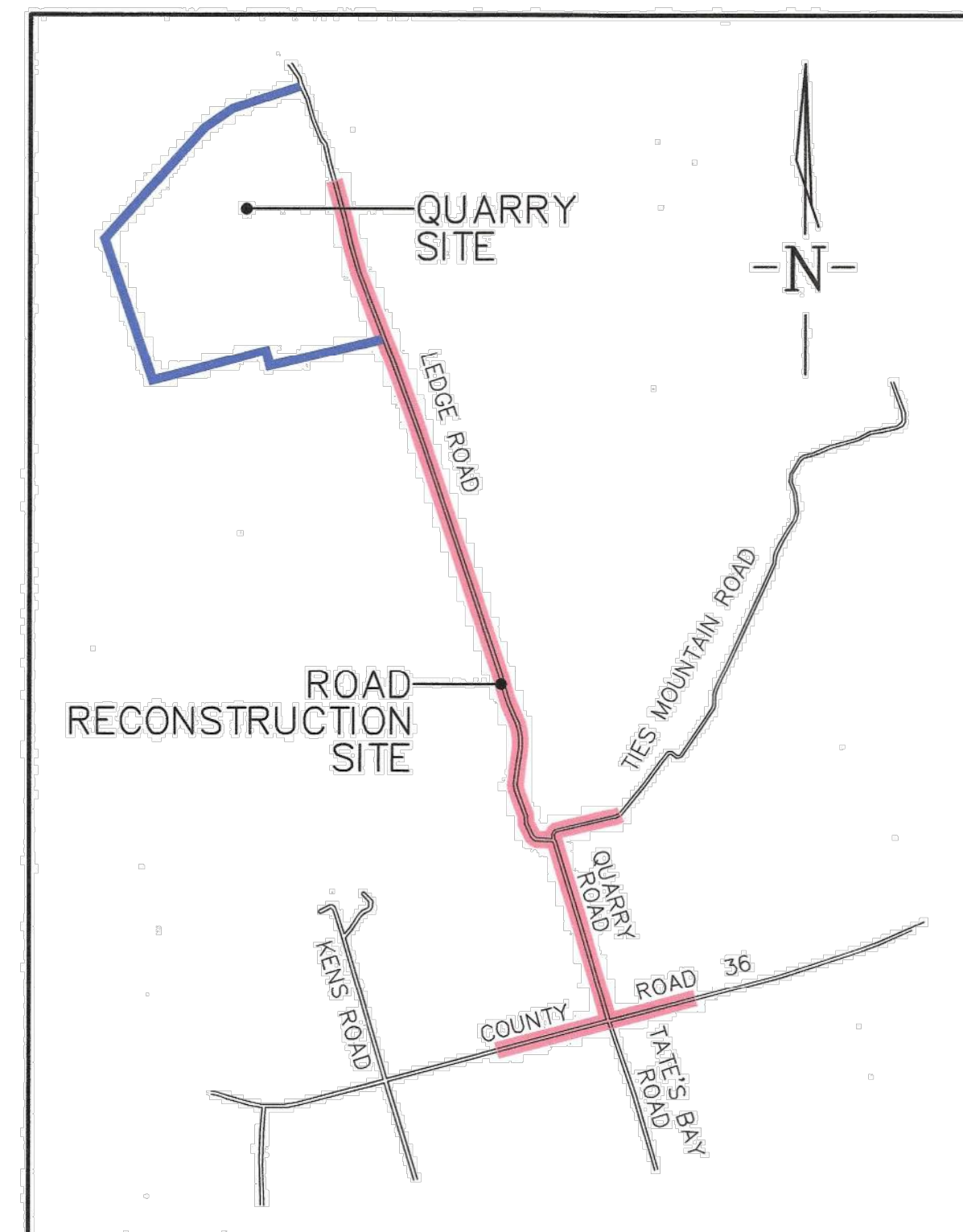
Notes

DEWDNEY MOUNTAIN QUARRY

ROAD IMPROVEMENTS

MUNICIPALITY OF TRENT LAKES, ONTARIO

LAKEVIEW PROJECT No. 15030



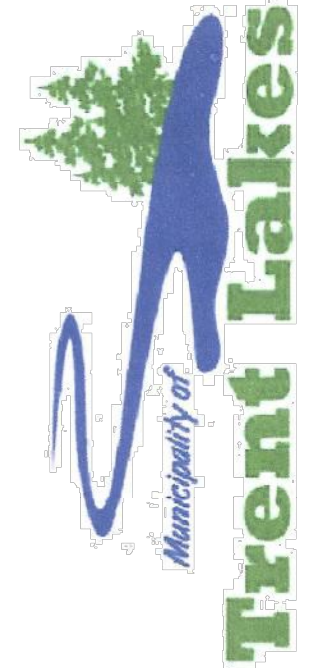
DRAWING INDEX	
DRAWING	SHEET No.
OVERALL SITE PLAN	01
PLAN & PROFILE – COUNTY ROAD 36 STA. 0+000 TO STA. 0+360	02
PLAN & PROFILE – QUARRY ROAD STA. 0+000 TO STA. 0+330	03
PLAN & PROFILE – QUARRY ROAD STA. 0+330 TO STA. 0+630	04
PLAN & PROFILE – QUARRY ROAD STA. 0+630 TO STA. 0+960	05
PLAN & PROFILE – QUARRY ROAD STA. 0+960 TO STA. 1+260	06
PLAN & PROFILE – LEDGE ROAD STA. 0+000 TO STA. 0+330	07
PLAN & PROFILE – LEDGE ROAD STA. 0+330 TO STA. 0+630	08
PLAN & PROFILE – LEDGE ROAD STA. 0+630 TO STA. 0+970	09
PLAN & PROFILE – LEDGE ROAD STA. 0+970 TO STA. 1+310	10
PLAN & PROFILE – LEDGE ROAD STA. 1+310 TO STA. 1+650	11
PLAN & PROFILE – LEDGE ROAD STA. 1+650 TO STA. 1+990	12
PLAN & PROFILE – LEDGE ROAD STA. 1+990 TO STA. 2+320	13
PLAN & PROFILE – LEDGE ROAD STA. 2+320 TO 2+650	14
PLAN & PROFILE – LEDGE ROAD STA. 2+650 TO 2+980	15
PLAN & PROFILE – LEDGE ROAD STA. 2+980 TO 3+310	16
PLAN & PROFILE – LEDGE ROAD STA. 3+310 TO 3+480	17
DETAILS	18



653 Fire Route 42
North Kawartha, ON, K0L 2H0
705-772-7910
info@lakeviewpeng.com

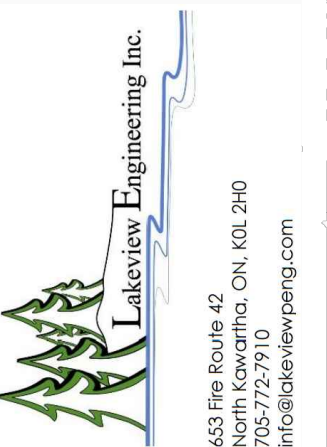


PER PEER REVIEW – APRIL 26, 2022
PER PEER REVIEW – FEBRUARY 7, 2022
PER PEER REVIEW – NOVEMBER 21, 2021
DRAWING UPDATE – MAY 1, 2020
LEDGE ROAD ALIGNMENT REVISIONS – MAY 14, 2014
ISSUED FOR APPROVAL – JUNE 12, 2013
1st SUBMISSION FOR REVIEW – JUNE 4, 2013



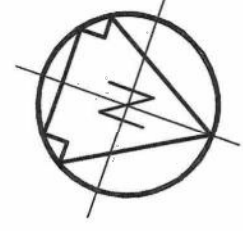
DEWDNEY MOUNTAIN QUARRY

TRENT LAKES, ONTARIO
LAKEVIEW PROJECT No. 15030
PER PEER REVIEW - APRIL 26, 2022



653 Fire Route 42
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705-772-7910
info@lakeviewpeng.com

BM 1 ELEV. 257.345m
 HCM #001960u3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



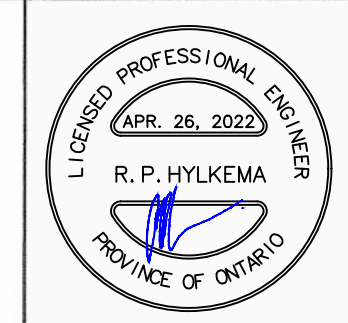
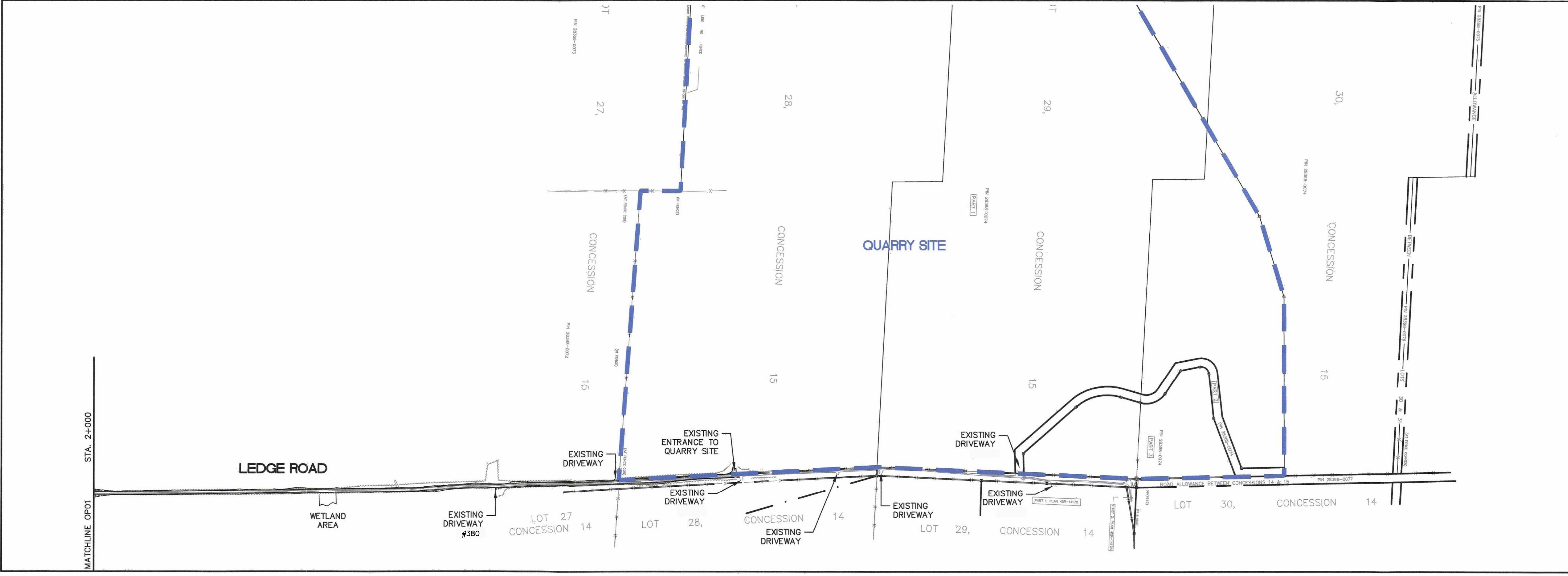
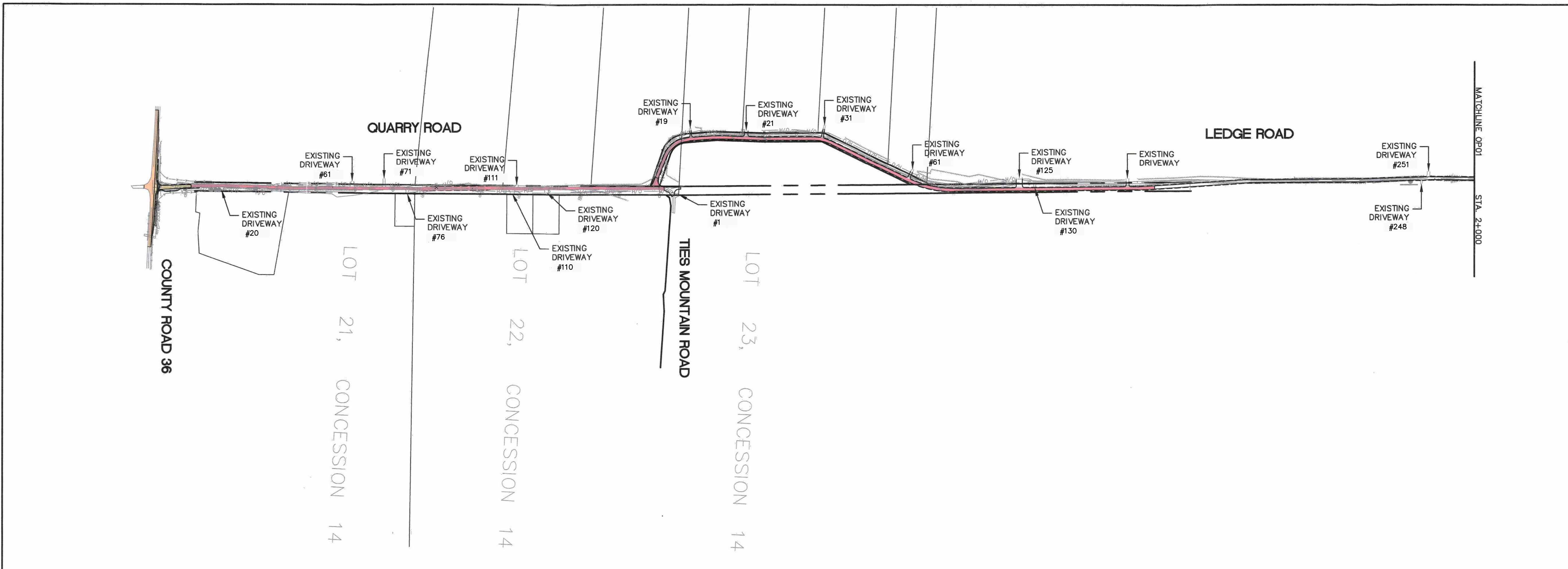
KEY PLAN



REVISIONS		
No.	Description	Date
8	Per Peer Review	APR. 26/22
7	Per Peer Review	FEB. 7/22
6	Per Peer Review	NOV. 21/21
5	Drawing Update	MAY 1/20
4	Ledge Road Alignment Revisions	MAY 14/14
3	Issued for Approval	JUNE 12/13
2	1st Submission for Review	JUNE 4/13
1	Issued for County Review	MAY 2/13

METRIC
 Dimensions are in METRES and/or
 MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION
 WITH OP&D 100 SERIES

LEGEND	
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO
	FOUND IRON BAR
	EX./PR. ELEVATION
	EXISTING FENCE
	EX R.O.W/PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE



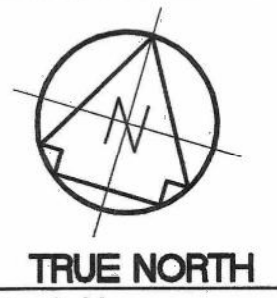
Lakeview Engineering Inc.
 653 Fire Route 42
 North Kawartha, ON, K0L 2H0
 705-772-7910
 info@lakeviewpeng.com

Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 MUNICIPALITY OF TRENT LAKES

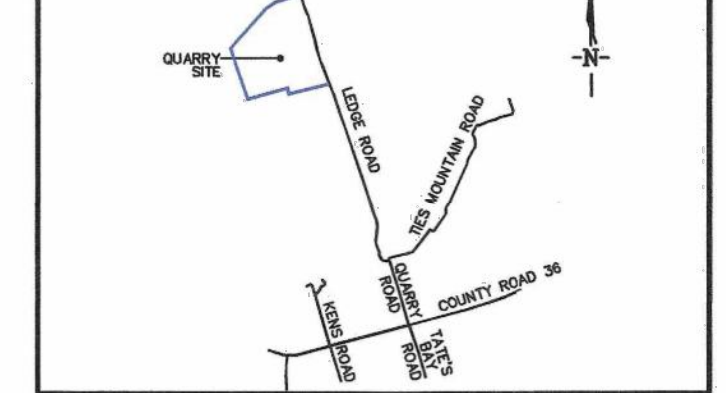
OVERALL SITE PLAN

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Checked By: RPH	Project No.: 15030	Sht. No.:
Engineer: RPH	Dwg File No.: 10497 OP01	01

BM 1 ELEV. 257.345m
 HCM #001960J3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



KEY PLAN



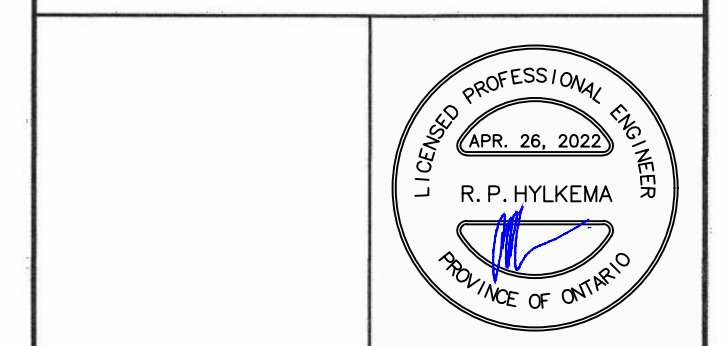
REVISIONS

No.	Description	Date
10	Per Peer Review	APR. 26/22
9	Per Peer Review	FEB. 7/22
8	Per Peer Review	NOV. 21/21
7	Drawing Update	MAY 1/20
6	Revised as per COP comments	NOV. 14/13
5	Form access re-instated	SEP. 23/13
4	Revised as per COP comments	AUG 13/13
3	Issued for Approval	JUNE 12/13
2	1st Submission for Review	JUNE 4/13
1	Issued for County Review	MAY 2/13

METRIC
 Dimensions are in METRES and/or MILLIMETRES unless otherwise shown TO BE READ IN CONJUNCTION WITH OPSD-100 SERIES

LEGEND

	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

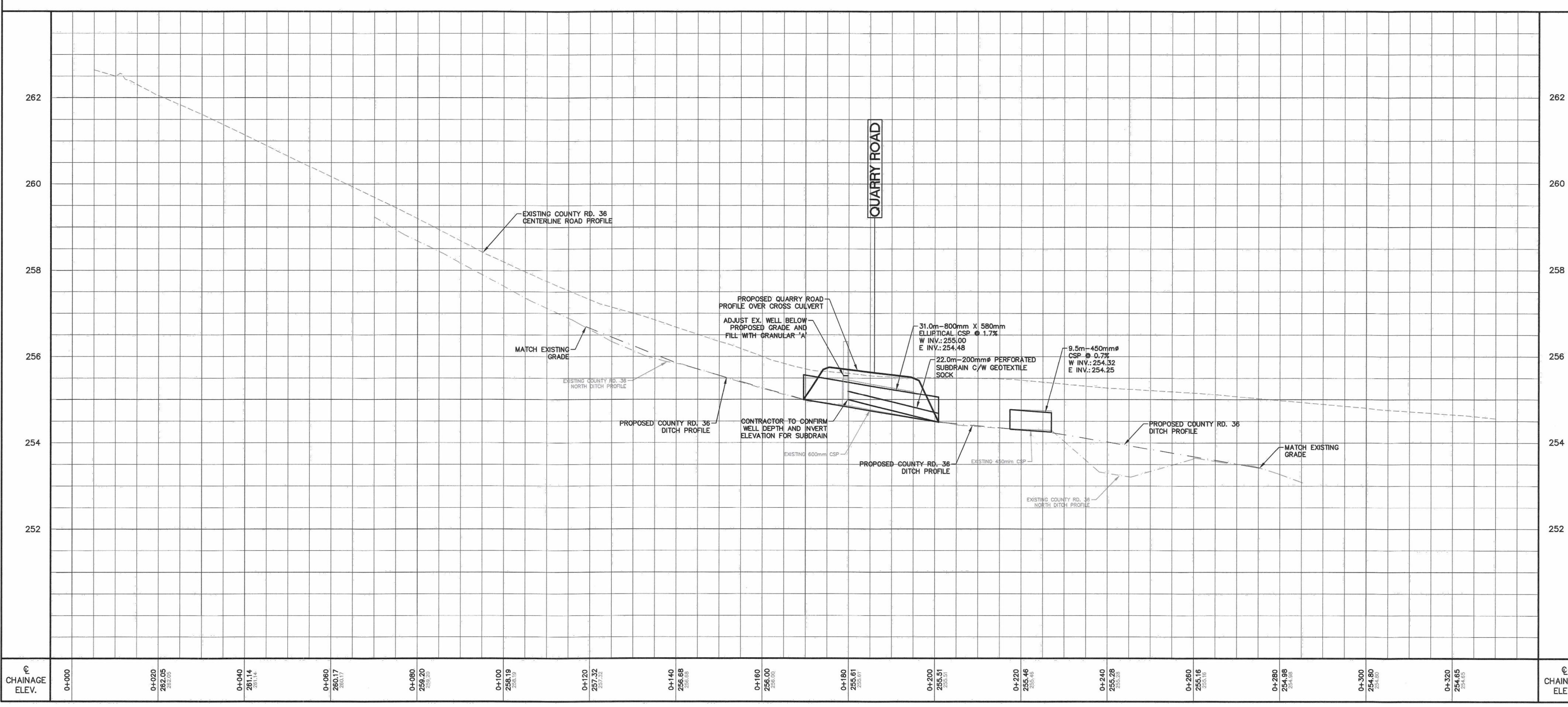
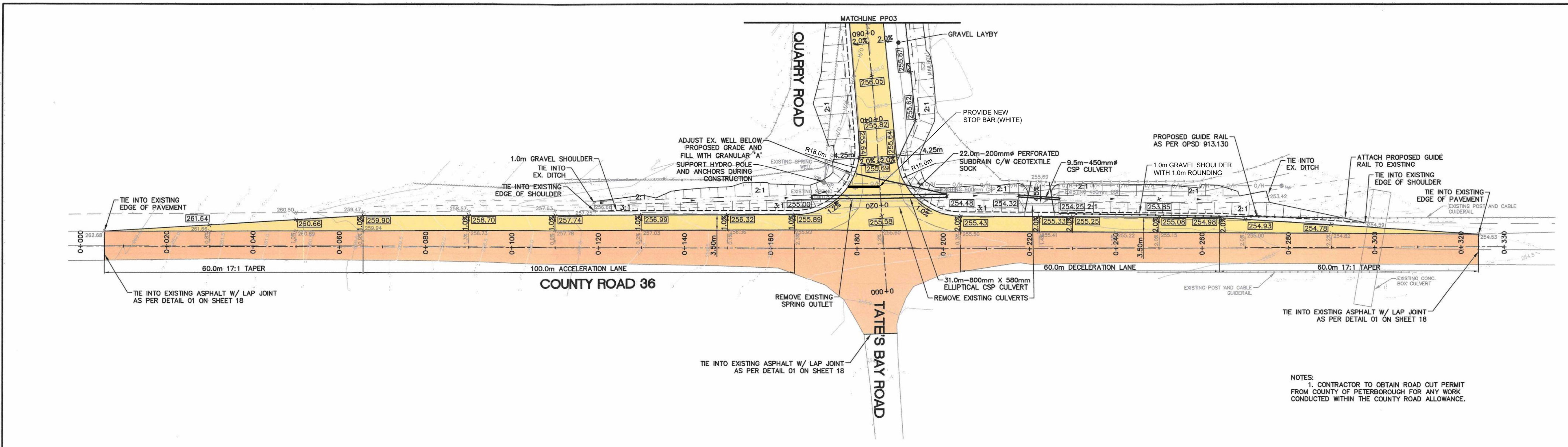


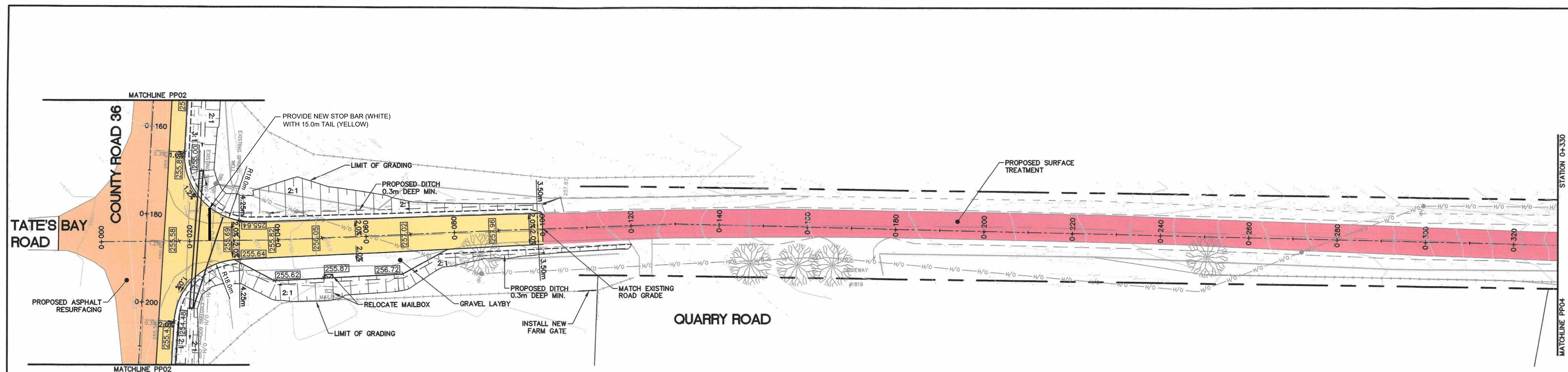
Lakeview Engineering Inc.
 653 Fire Route 42
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Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

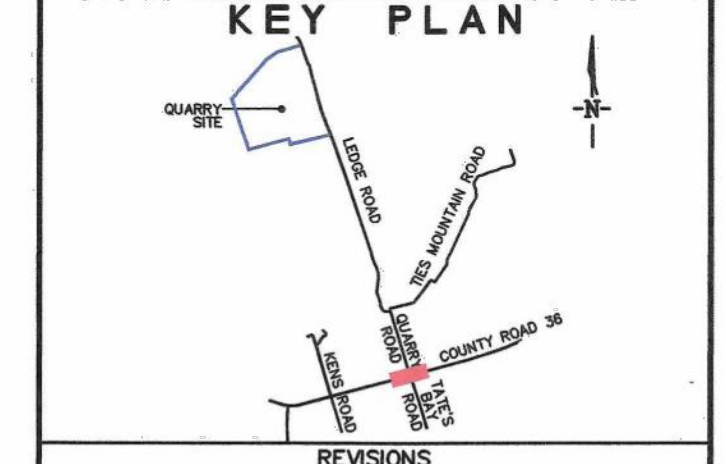
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 Checked By: RPH Project No.: 15030 Sht. No.:
 Engineer: RPH Dwg File No.: 10497MP 02





BM 1 ELEV. 257.345m
 HCM #001960u3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



No.	Description	Date
8	Per Peer Review	APR. 26/22
7	Per Peer Review	FEB. 7/22
6	Per Peer Review	NOV. 21/21
5	Drawing Update	MAY 1/20
4	Revised as per COP comments	AUG 13/13
3	Issued for Approval	JUNE 12/13
2	1st Submission for Review	JUNE 4/13
1	Issued for County Review	MAY 2/13

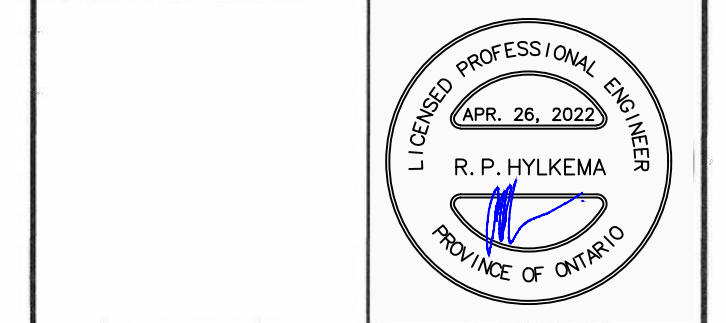
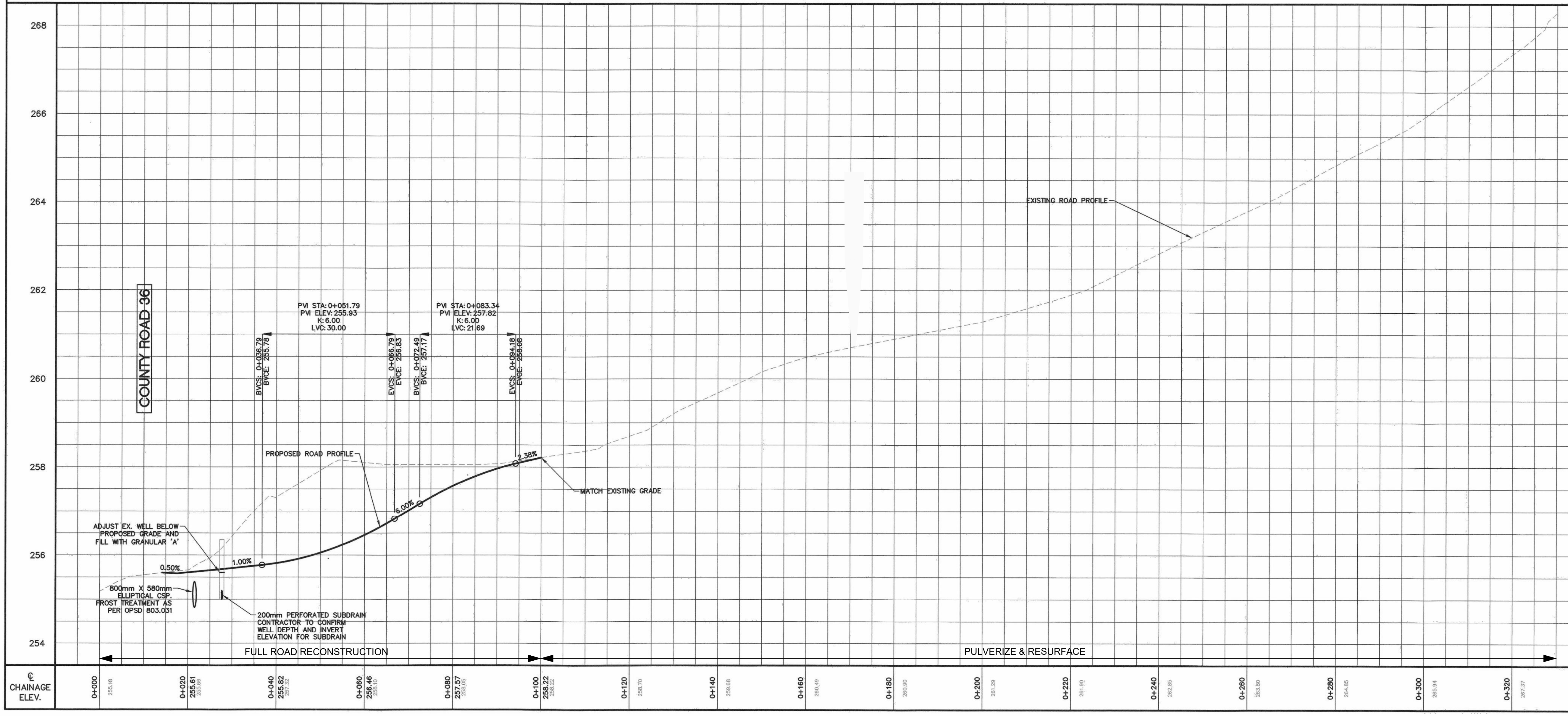
NOTES:

- FULL RECONSTRUCTION ALONG QUARRY ROAD (STA. 0+020 TO STA. 0+100) AS PER DETAIL 3 ON SHEET 18.
- PULVERIZE & REGRADE QUARRY ROAD (STA. 0+100 TO STA. 0+640) AS PER DETAIL 3 ON SHEET 18.

Dimensions are in METRES and/or MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION WITH CP30-100 SERIES

METRIC LEGEND

- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED ASPHALT RESURFACING
- PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
- PROPOSED GRAVEL ROAD TREATMENT
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- EX./PR. ELEVATION
- PROPOSED GRADE
- EX./PR. FENCE
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- EXISTING PROPERTY LINE
- EXISTING VEGETATION
- EXISTING CONTOUR
- EXISTING SIGN
- EXISTING SHRUB
- EXISTING TREE



Lakeview Engineering Inc.
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Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

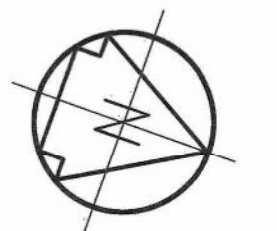
Drawing Title
QUARRY ROAD PLAN AND PROFILE STA 0+000 TO 0+330

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 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030
 Engineer: RPH Dwg File No.: 10497MP

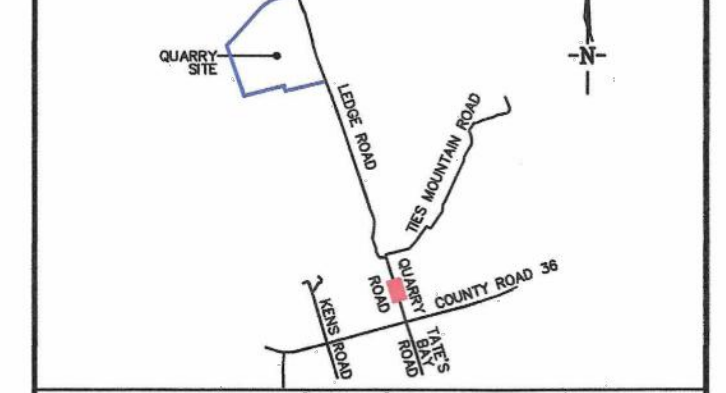
Sht. No.: 03

CHAINAGE ELEV.	0+000	0+020	0+040	0+060	0+080	0+100	0+120	0+140	0+160	0+180	0+200	0+220	0+240	0+260	0+280	0+300	0+320
	255.18	255.61	255.82	256.46	257.57	258.22	258.70	259.68	260.49	260.90	261.29	261.60	262.85	263.90	264.85	265.94	267.37

BM 1 ELEV. 257.345m
 HCM #011960.3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



KEY PLAN

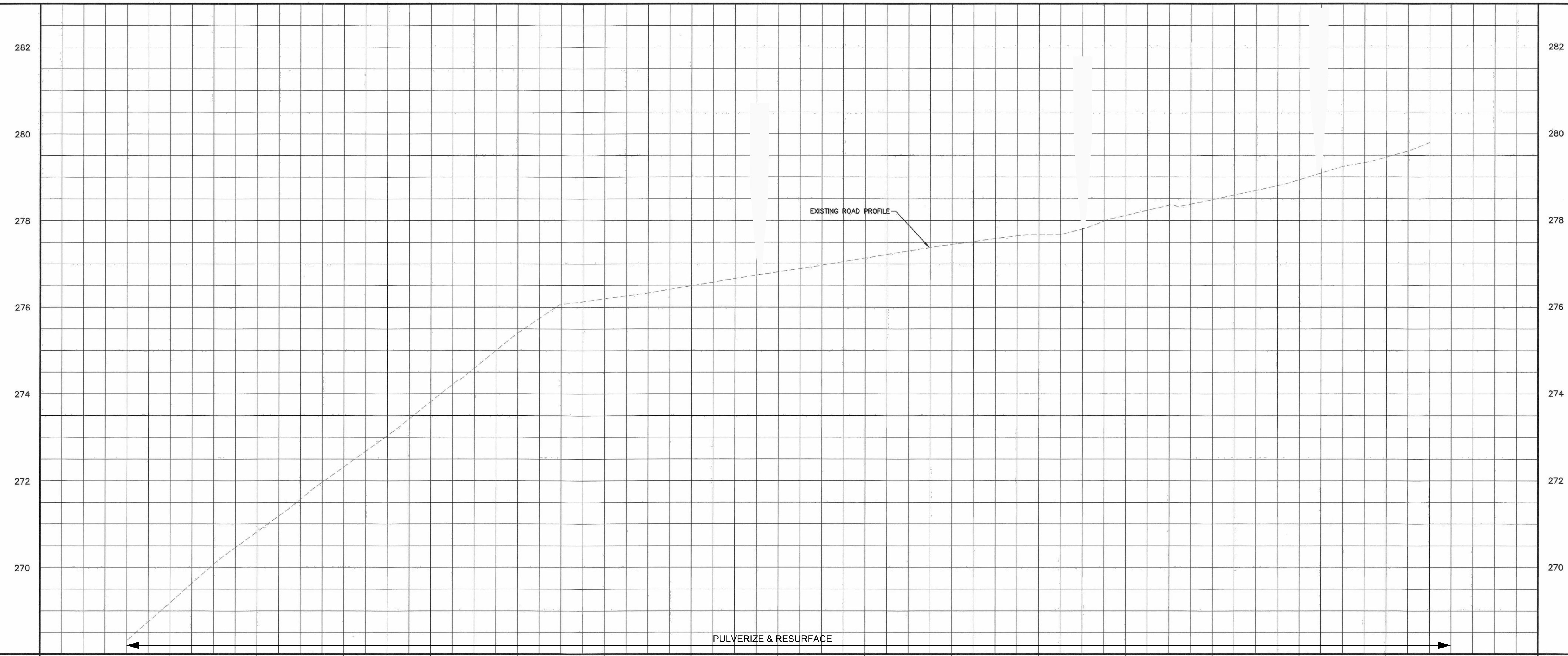
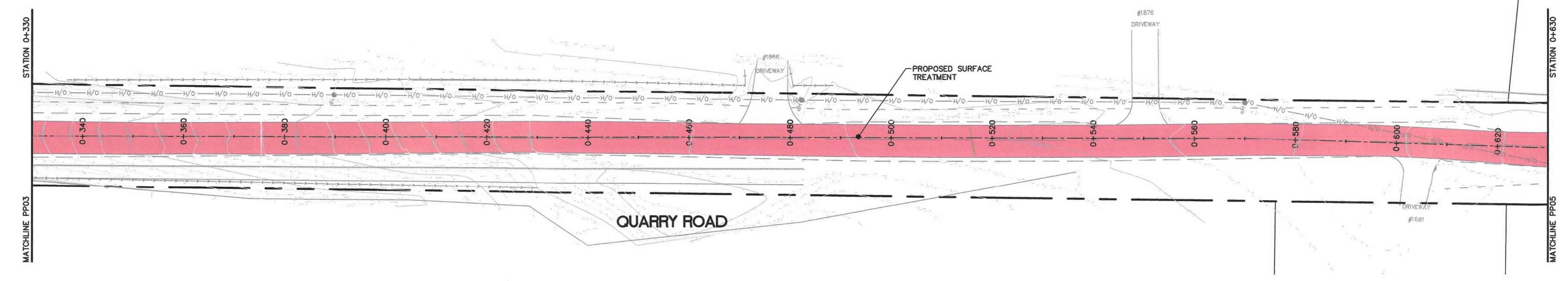


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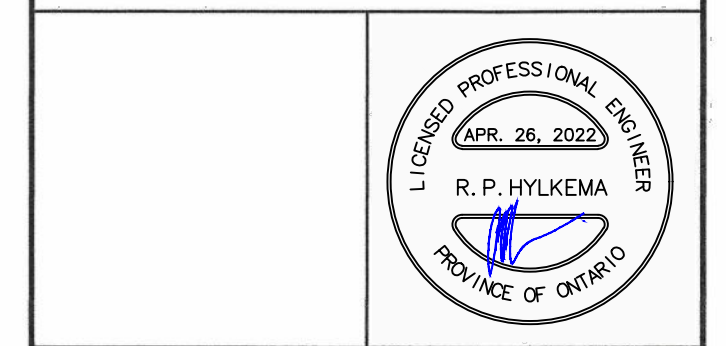
METRIC
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 TO BE READ IN CONJUNCTION
 WITH OPIB 100 SERIES

LEGEND	
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
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	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

NOTE:
 1. PULVERIZE & REGRADE QUARRY ROAD (STA. 0+100 TO STA. 0+640) AS PER DETAIL 3 ON SHEET 18.



CHAINAGE ELEV.	0+340	0+360	0+380	0+400	0+420	0+440	0+460	0+480	0+500	0+520	0+540	0+560	0+580	0+600	0+620
	299.19	270.82	272.32	273.82	275.40	276.19	276.49	276.82	277.14	277.45	277.87	278.12	278.48	278.94	279.46



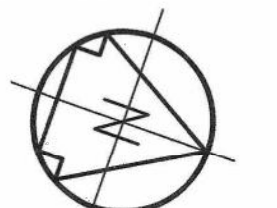
Lakeview Engineering Inc.
 633 Fire Route 42
 North Kewartha, ON, K0L 2H0
 705-772-7910
 info@lakeviewpeng.com

Project Name/Location
**DEWDNEY MOUNTAIN
 QUARRY ROAD**
 TRENT LAKES, ONTARIO

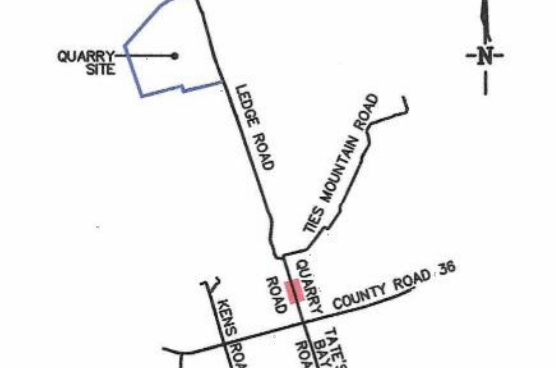
Drawing Title
**QUARRY ROAD
 PLAN AND PROFILE
 STA 0+330 TO 0+630**

Drawn By: AMR/JTA	SCALE: Horiz. 1:500	Ver. 1:50
Designed By: AMR/JTA	Plot Date: APRIL 26, 2022	
Checked By: RPH	Project No.: 15030	Sht. No.: 04
Engineer: RPH	Dwg File No.: 10497MP	

BM 1 ELEV. 257.345m
 HCM #011960.3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



KEY PLAN



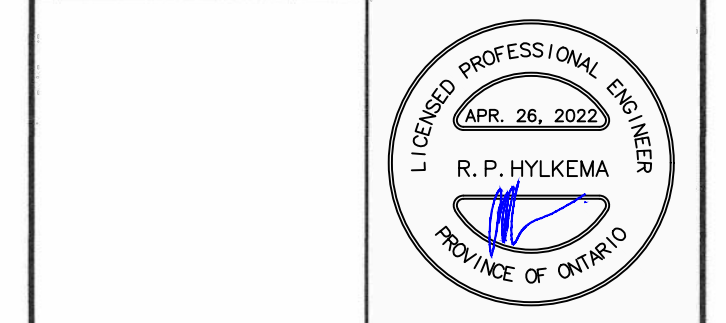
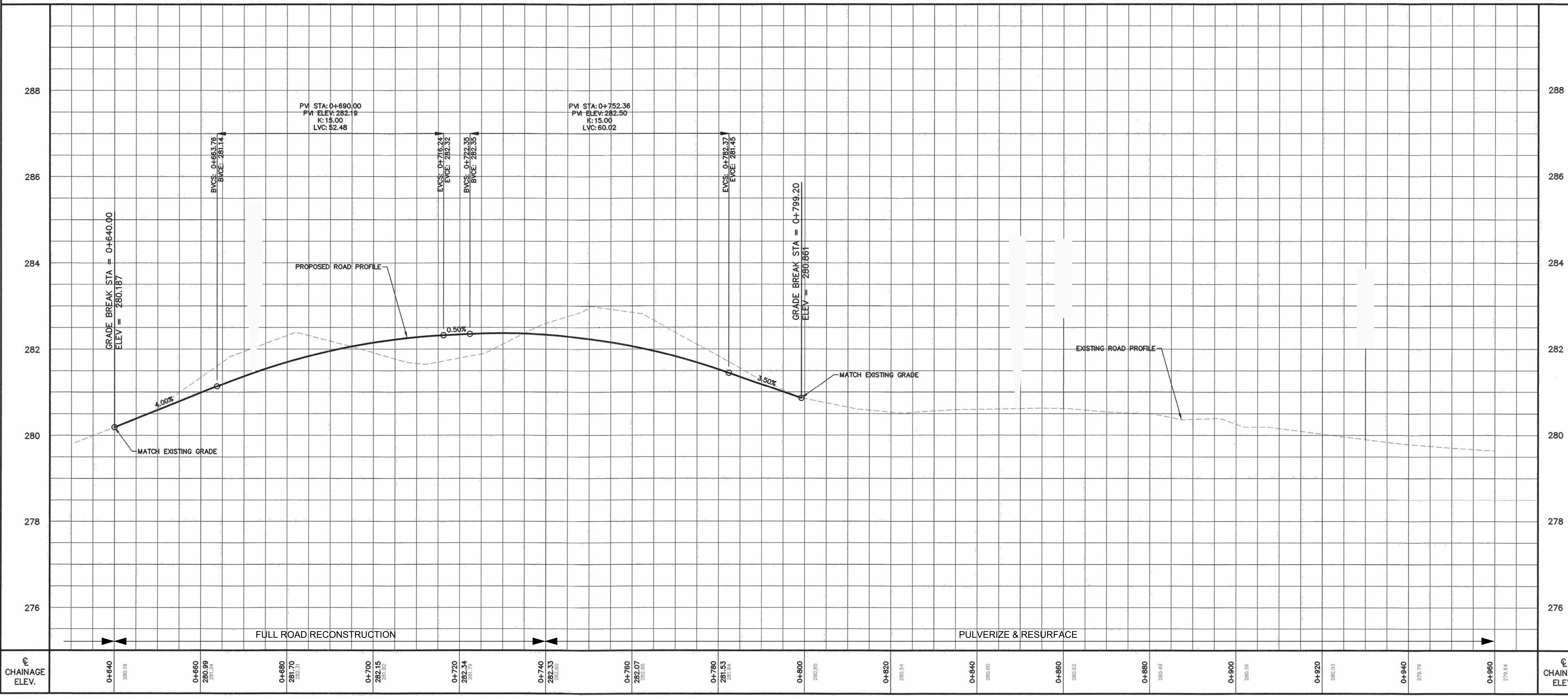
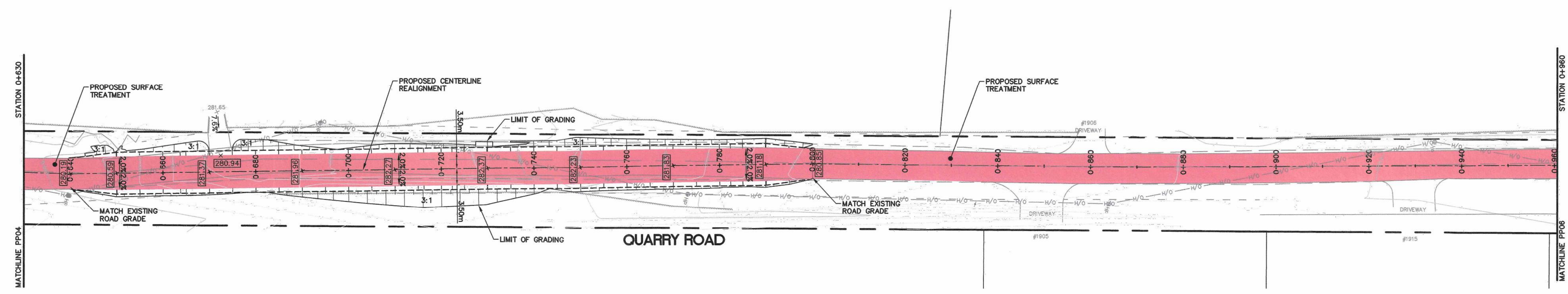
No.	Description	Date
6	Per Peer Review	APR. 26/22
5	Per Peer Review	FEB. 7/22
4	Per Peer Review	NOV. 21/21
3	Drawing Update	MAY 1/20
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
 Dimensions are in METRES and/or
 MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION
 WITH OPISS 100 SERIES

LEGEND	
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	LS
	HP
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION
	PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

NOTES:

- FULL RECONSTRUCTION ALONG QUARRY ROAD (STA. 0+640 TO STA. 0+800) AS PER DETAILS 3 AND 5, ON SHEET 18.
- PULVERIZE & REGRADE QUARRY ROAD (STA. 0+800 TO STA. 1+205) AS PER DETAIL 3 ON SHEET 18.



Lakeview Engineering Inc.
 653 Fire Route 42
 North Keweenaw, ON, K0L 2H0
 705-772-7910
 info@lakevieweng.com

Project Name/Location
**DEWDNEY MOUNTAIN
 QUARRY ROAD**
 TRENT LAKES, ONTARIO

Drawing Title
**QUARRY ROAD
 PLAN AND PROFILE
 STA 0+630 TO 0+960**

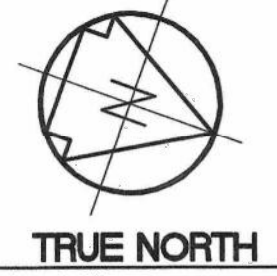
Drawn By: AMR/JTA
 Checked By: RPH
 Engineer: RPH

SCALE: Horiz. 1:500 Vert. 1:50
 Plot Date: APRIL 26, 2022
 Project No.: 15030
 Dwg File No.: 10497MP

Sht. No.: 05

CHAINAGE ELEV.	0+640	0+660	0+680	0+700	0+720	0+740	0+760	0+780	0+800	0+820	0+840	0+860	0+880	0+900	0+920	0+940	0+960
	280.19	280.99	281.70	282.15	282.34	282.33	282.07	281.33	280.85	280.54	280.50	280.62	280.49	280.26	280.03	279.79	279.64

BM 1 ELEV. 257.345m
 HCM #001960J304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



KEY PLAN

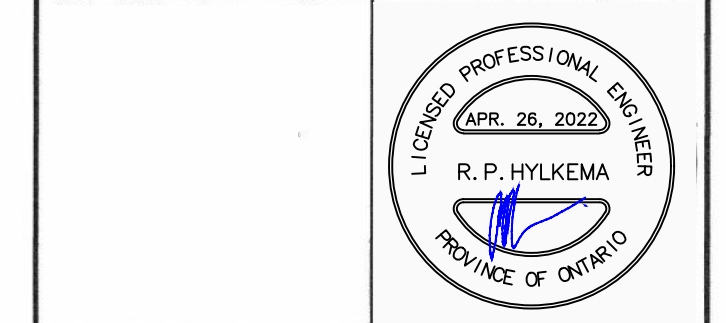
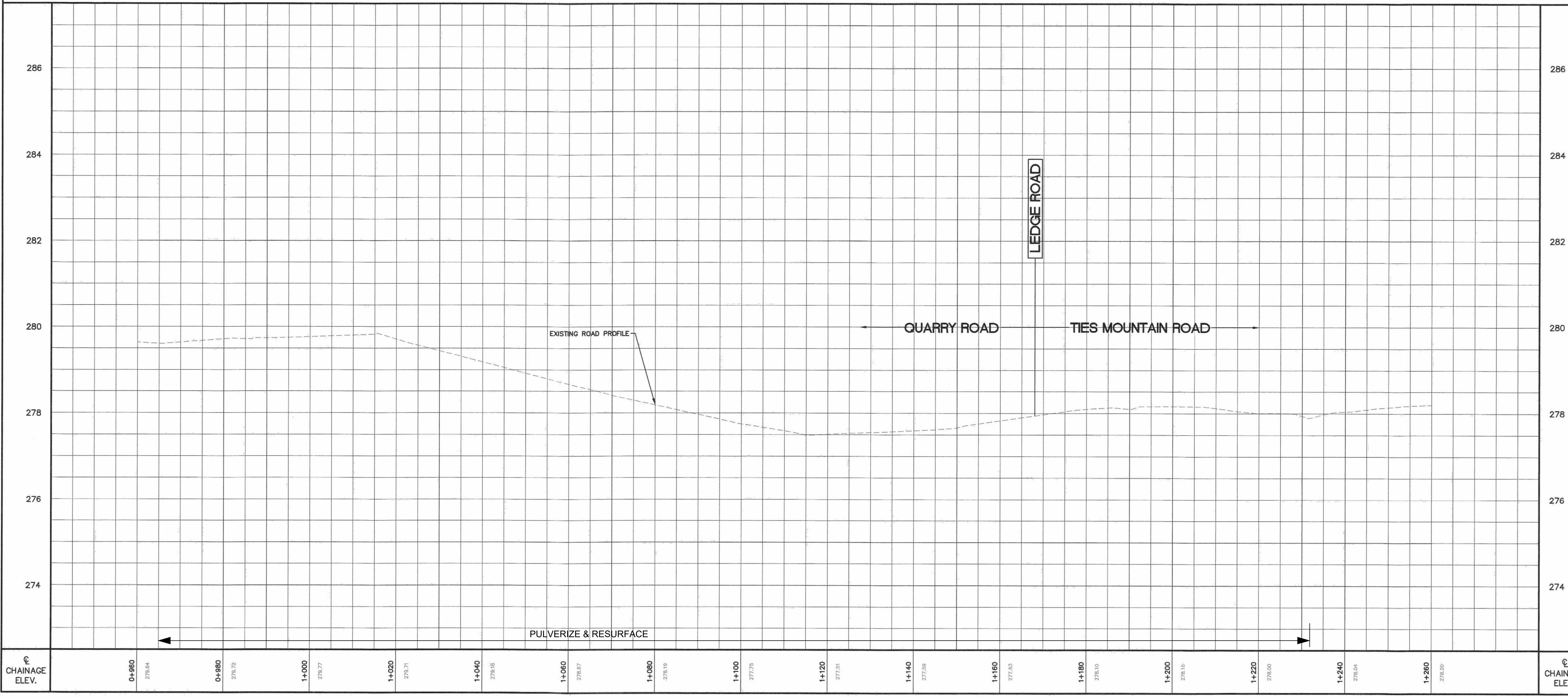
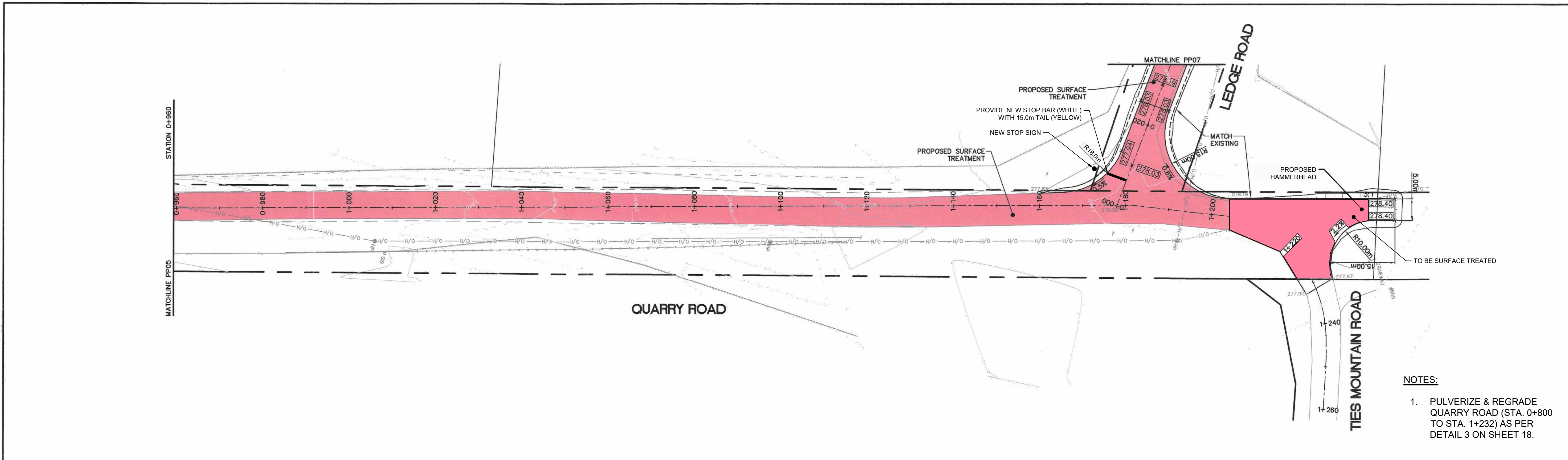


No.	Description	Date
7	Per Peer Review	APR. 26/22
6	Per Peer Review	FEB. 7/22
5	Per Peer Review	NOV. 21/21
4	Drawing Update	MAY 1/20
3	Ledge Road Alignment Revisions	MAY 14/14
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
 Dimensions are in METRES and/or MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION WITH OPSD 100 SERIES

LEGEND	
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION
	PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

- NOTES:
- PULVERIZE & REGRADE QUARRY ROAD (STA. 0+960 TO STA. 1+232) AS PER DETAIL 3 ON SHEET 18.

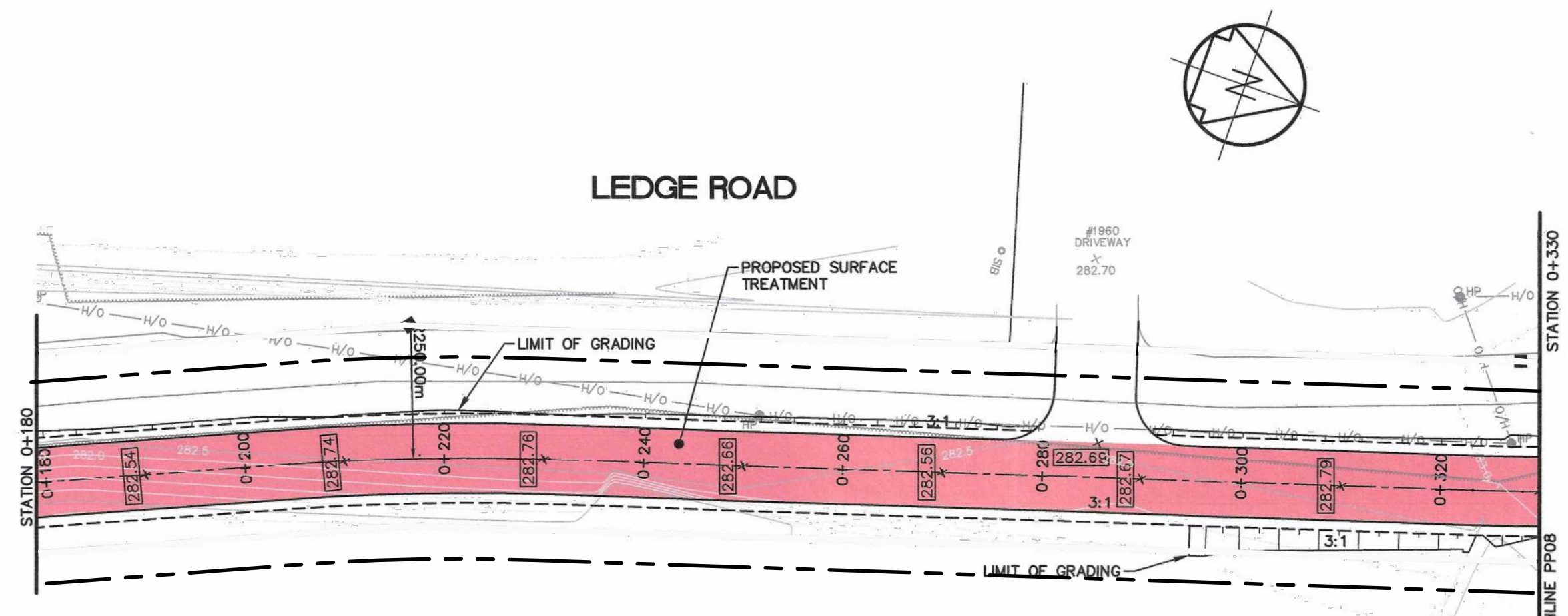
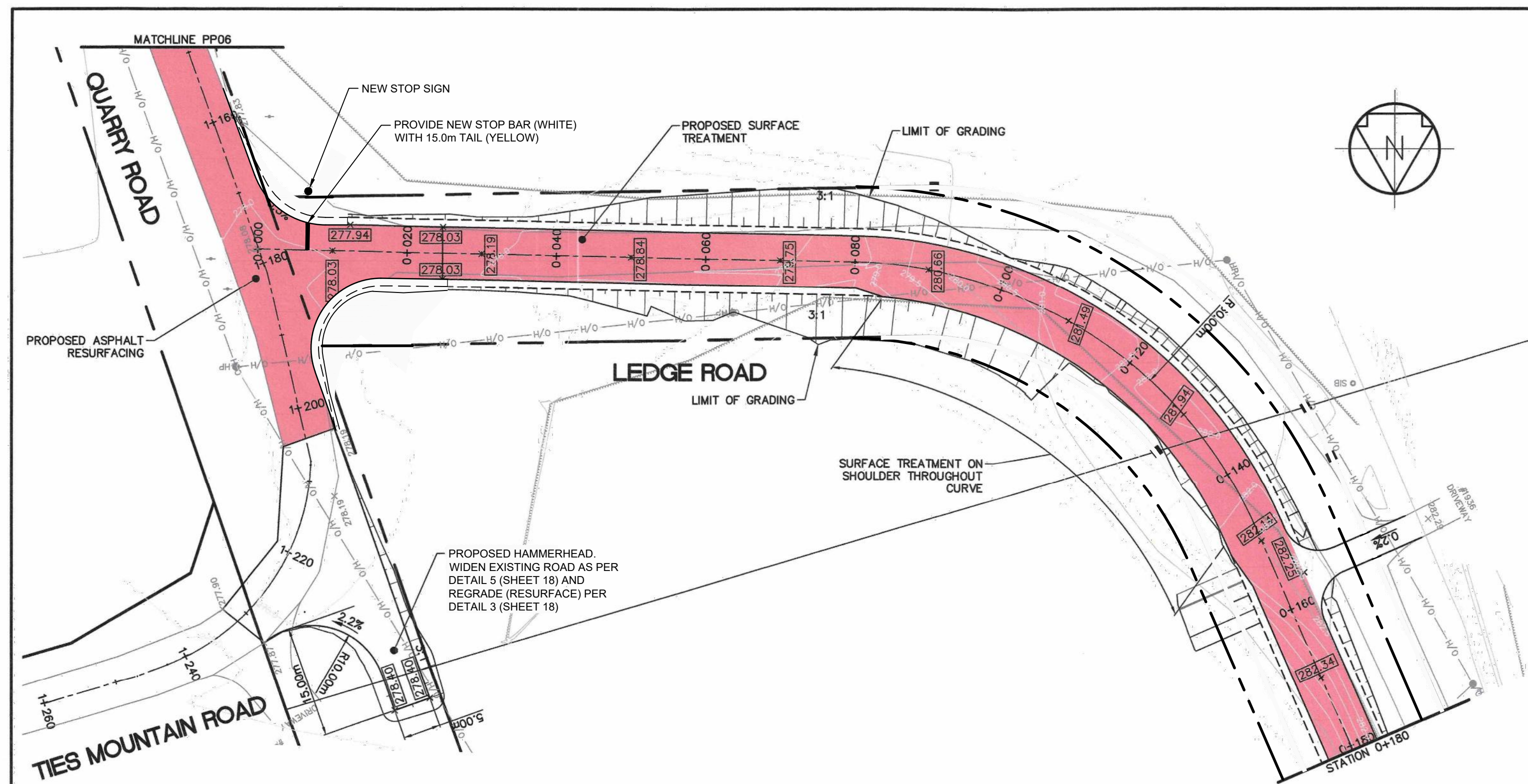


Lakeview Engineering Inc.
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 705-772-7910
 info@lakeviewpeng.com

Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

Drawing Title
QUARRY ROAD PLAN AND PROFILE STA 0+960 TO 1+260

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030 Sht. No.:
 Engineer: RPH Dwg File No.: 10497MP 06



NOTE:
 1. WIDEN EXISTING ROAD AS PER DETAIL 5 (SHEET 18) AND REGRADE (RESURFACE) PER DETAIL 3 (SHEET 18)

BM 1 ELEV. 257.345m
 HCM #001960u3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.

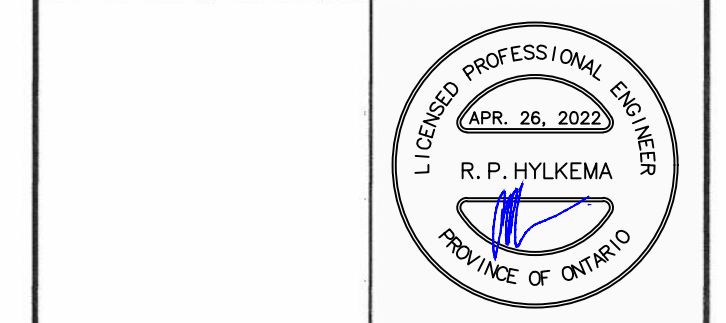
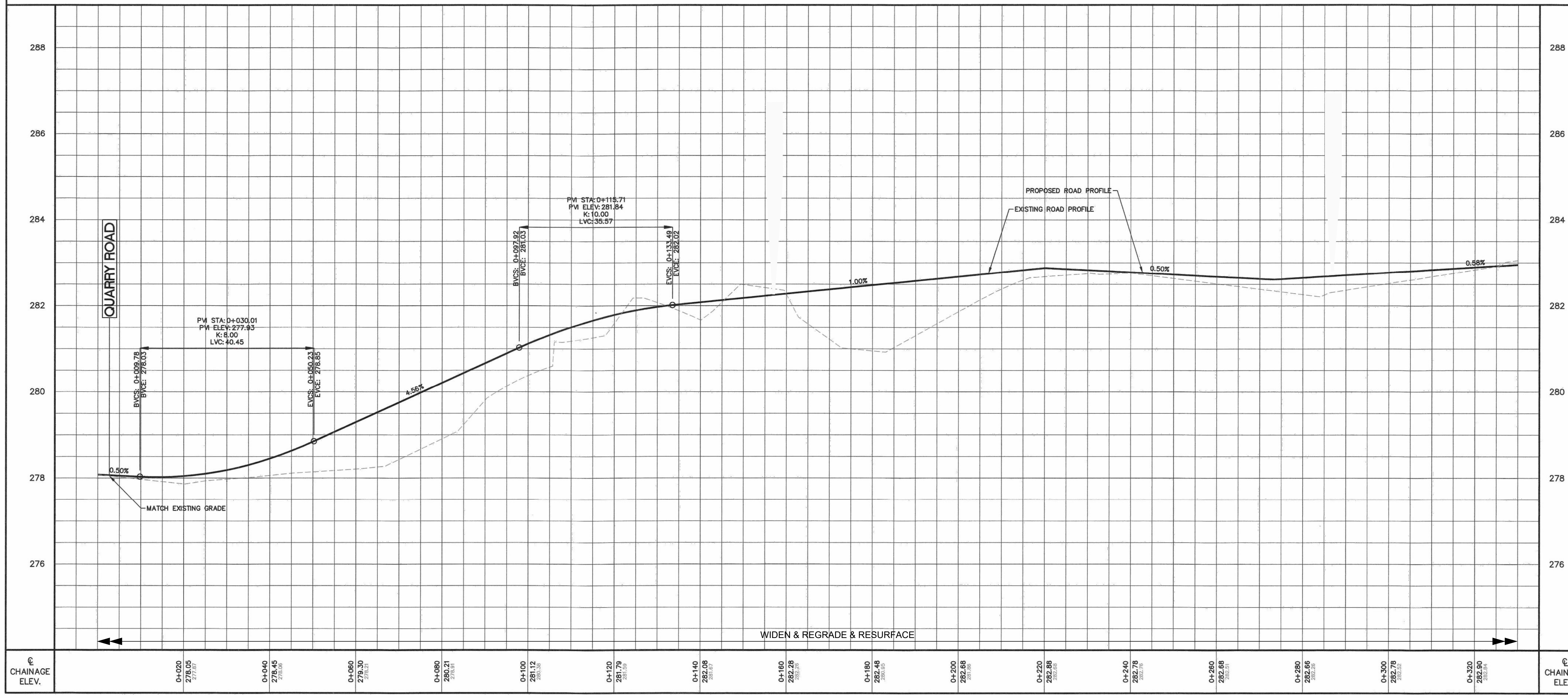


No.	Description	Date
9	Per Peer Review	APR. 26/22
8	Per Peer Review	FEB. 7/22
7	Per Peer Review	NOV. 21/21
6	Drawing Update	MAY 1/20
5	Client Revisions	SEPT. 8/14
4	Added Property Bars	JUNE 16/14
3	Ledge Road Alignment Revisions	MAY 14/14
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
 Dimensions are in METRES and/or MILLIMETRES unless otherwise shown TO BE READ IN CONJUNCTION WITH QPSD 100 SERIES

LEGEND

- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED ASPHALT RESURFACING
- PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
- PROPOSED GRAVEL ROAD TREATMENT
- PROPOSED RIP-RAP
- EX./PR. BUILDING
- EX./PR. EDGE OF ROAD
- EX./PR. ROAD CENTERLINE
- EX./PR. EDGE OF SHOULDER
- EX./PR. CENTERLINE OF DITCH
- EX./PR. DITCH TOP OF SLOPE
- EXISTING LIGHT STANDARD
- EXISTING HYDRO POLE
- EX. OVERHEAD HYDRO FOUND IRON BAR
- EX./PR. ELEVATION
- PROPOSED GRADE
- EX./PR. FENCE
- EX. R.O.W./PROPERTY BOUNDARY
- EXISTING PROPERTY LINE
- EXISTING VEGETATION
- EXISTING CONTOUR
- EXISTING SIGN
- EXISTING SHRUB
- EXISTING TREE

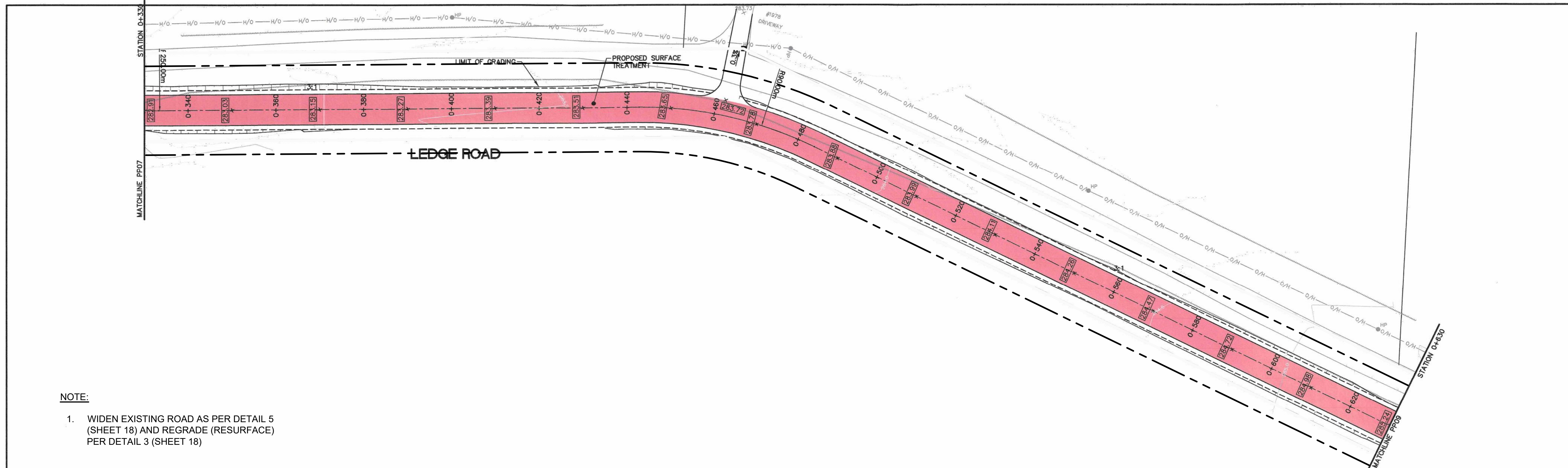


Lakeview Engineering Inc.
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 info@lakeviewpeng.com

Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

Drawing Title
LEDGE ROAD PLAN AND PROFILE STA 0+000 TO 0+330

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030
 Engineer: RPH Dwg File No.: 10497MP 07



BM 1 ELEV. 257.345m
 HCM #001960J304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.

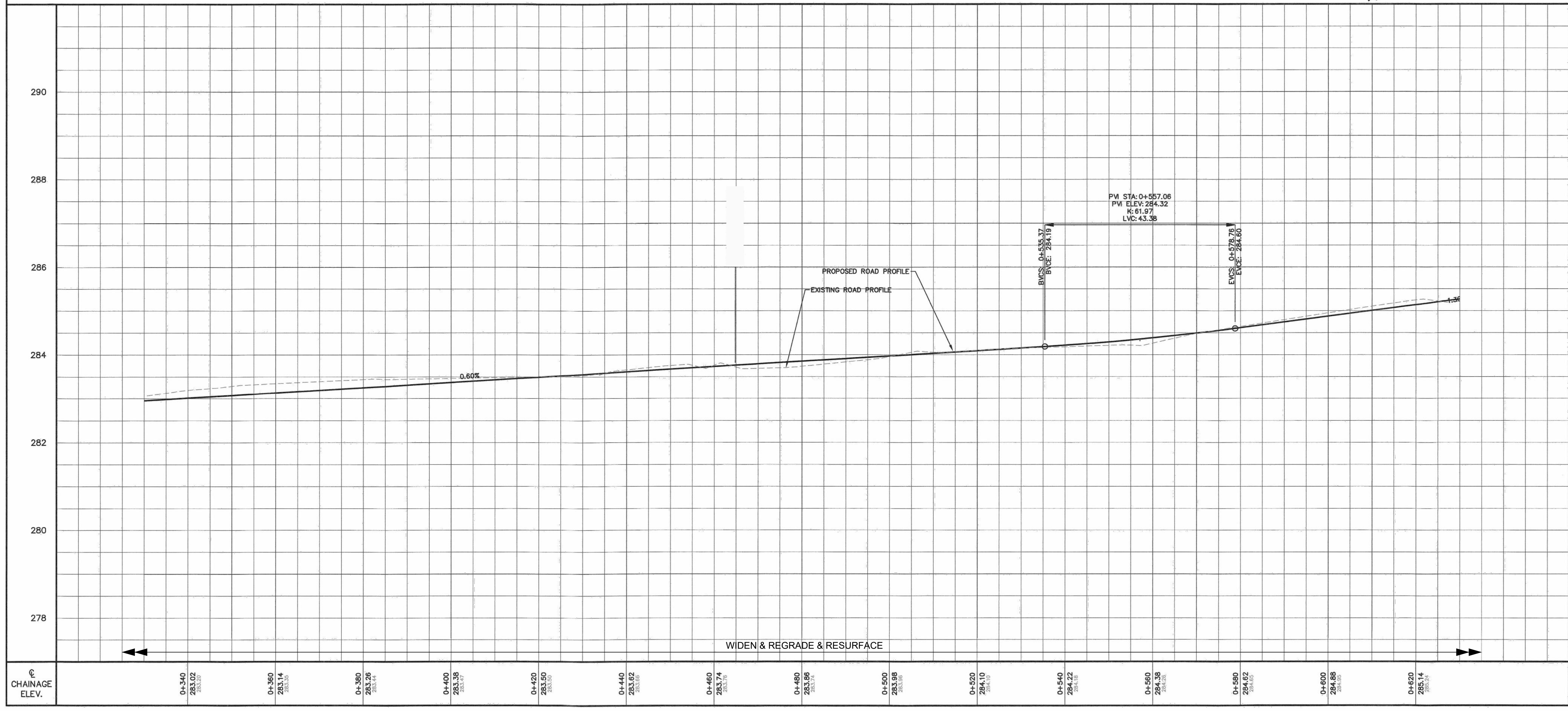


No.	Description	Date
8	Per Peer Review	APR. 26/22
7	Per Peer Review	FEB. 7/22
6	Per Peer Review	NOV. 21/21
5	Drawing Update	MAY 1/20
4	Added Property Bars	JUNE 16/14
3	Ledge Road Alignment Revisions	MAY 14/14
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
 Dimensions are in METRES and/or
 MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION
 WITH CPSS 100 SERIES

LEGEND	
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION
	PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W/PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

NOTE:
 1. WIDEN EXISTING ROAD AS PER DETAIL 5 (SHEET 18) AND REGRADE (RESURFACE) PER DETAIL 3 (SHEET 18)



Lakeview Engineering Inc.
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 705-772-7910
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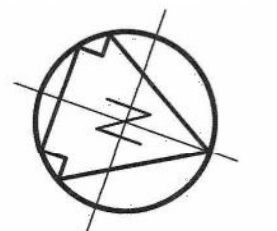
Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

Drawing Title
LEDGE ROAD PLAN AND PROFILE STA 0+330 TO 0+630

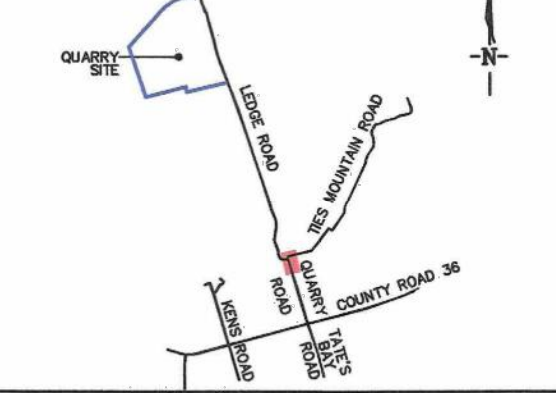
Drawn By: AMR/JTA SCALE: Horiz: 1:500 Vert: 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030 Sht. No.:
 Engineer: RPH Dwg File No.: 10497MP 08

CHAINAGE ELEV.

BM 1 ELEV. 257.345m
 HCM #001960J3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



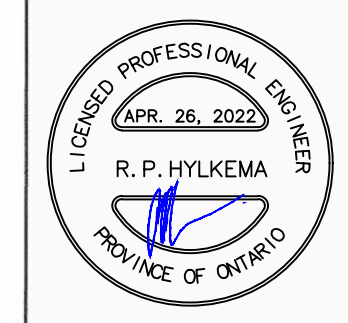
KEY PLAN



No.	Description	Date
9	Per Peer Review	APR. 26/22
8	Per Peer Review	FEB. 7/22
7	Per Peer Review	NOV. 21/21
6	Drawing Update	MAY 1/20
5	Client Revisions	SEPT. 9/14
4	Add Property Bars	JUNE 16/14
3	Ledge Road Alignment Revisions	MAY 14/14
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
 Dimensions are in METRES and/or
 MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION
 WITH QPSD 100 SERIES

LEGEND	
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION
	PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

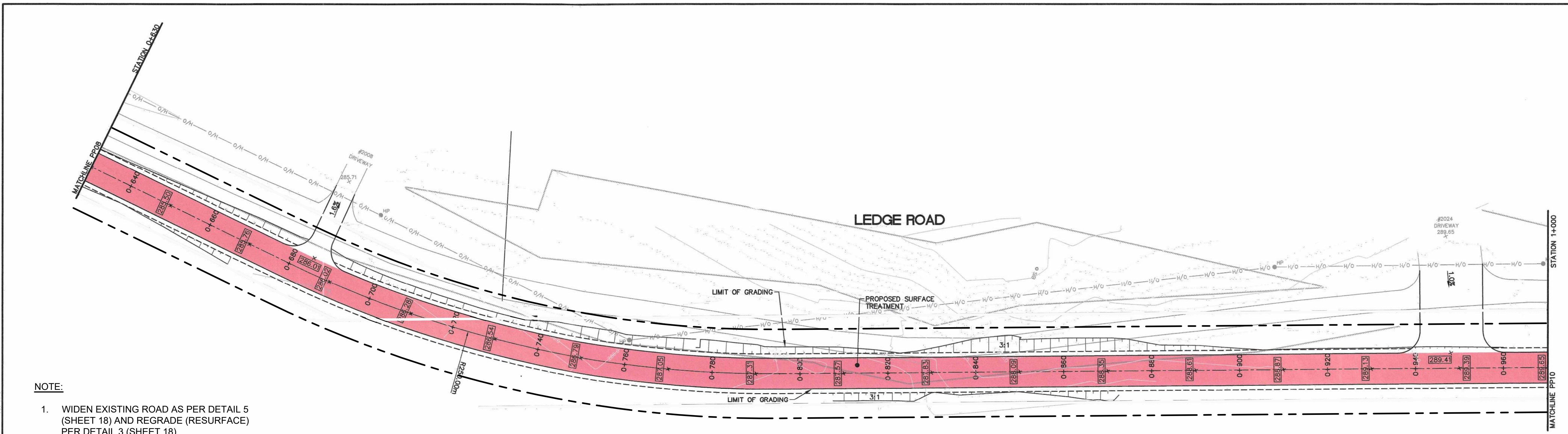


Lakeview Engineering Inc.
 653 Fire Route 42
 North Kawartha, ON, K0L 2H0
 705-772-7910
 info@lakeviewpeng.com

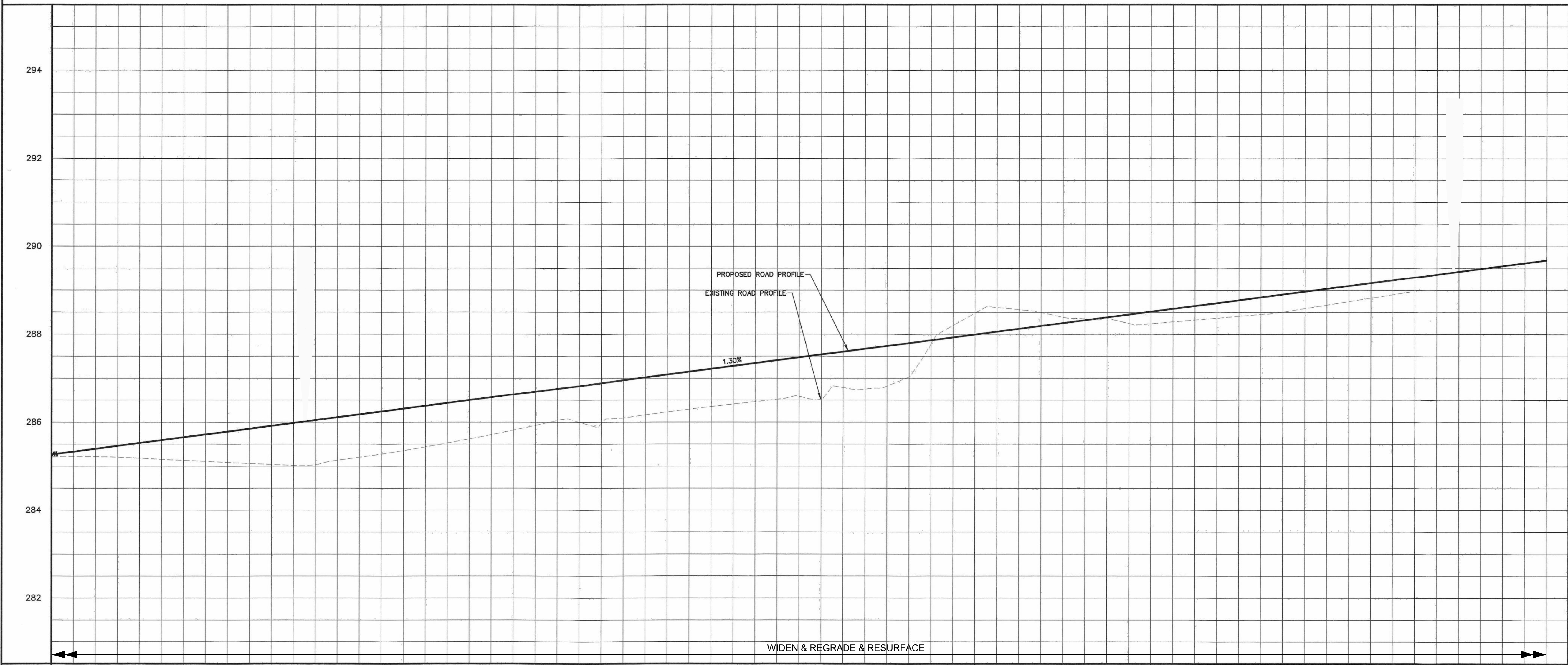
Project Name/Location
**DEWDNEY MOUNTAIN
 QUARRY ROAD**
 TRENT LAKES, ONTARIO

Drawing Title
**LEDGE ROAD
 PLAN AND PROFILE
 STA 0+630 TO 0+970**

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030 Sht. No.:
 Engineer: RPH Dwg File No.:10497MP 09

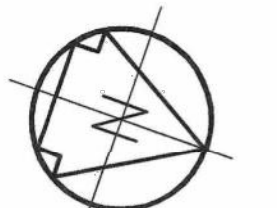


NOTE:
 1. WIDEN EXISTING ROAD AS PER DETAIL 5 (SHEET 18) AND REGRADE (RESURFACE) PER DETAIL 3 (SHEET 18)



CHAINAGE ELEV.	0+640 285.40 285.22	0+660 285.66 285.13	0+680 285.92 285.05	0+700 286.18 285.01	0+720 286.44 285.33	0+740 286.70 285.33	0+760 286.96 285.00	0+780 287.22 285.00	0+800 287.48 285.00	0+820 287.74 285.65	0+840 288.00 285.48	0+860 288.26 285.29	0+880 288.52 285.00	0+900 288.78 285.00	0+920 289.04 285.00	0+940 289.30 285.00	0+960 289.56 285.00
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BM 1 ELEV. 257.345m
 HCM #0011860.3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



KEY PLAN



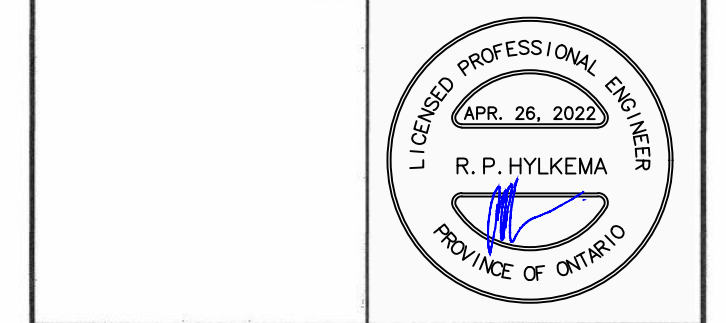
REVISIONS

No.	Description	Date
7	Per Peer Review	APR. 26/22
6	Per Peer Review	FEB. 7/22
5	Per Peer Review	NOV. 21/21
4	Drawing Update	MAY 1/20
3	Ledge Road Alignment Revisions	MAY 14/14
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
 Dimensions are in METRES and/or
 MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION
 WITH CPSS 100 SERIES

LEGEND

	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION
	PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE



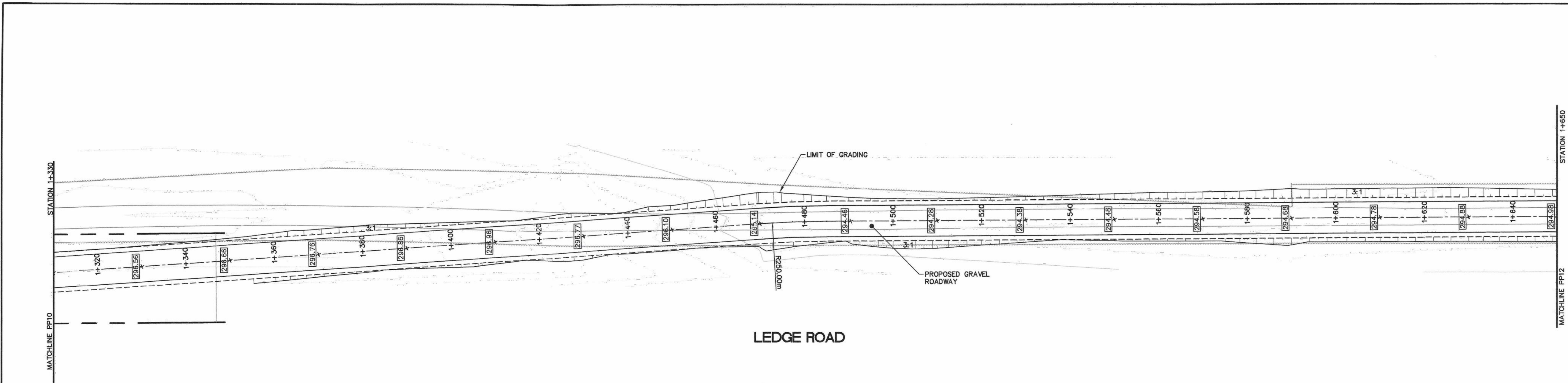
Lakeview Engineering Inc.
 653 Fire Route 42
 North Kawartha, ON, K0L 2H0
 705-772-7910
 info@lakeviewpeng.com

Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

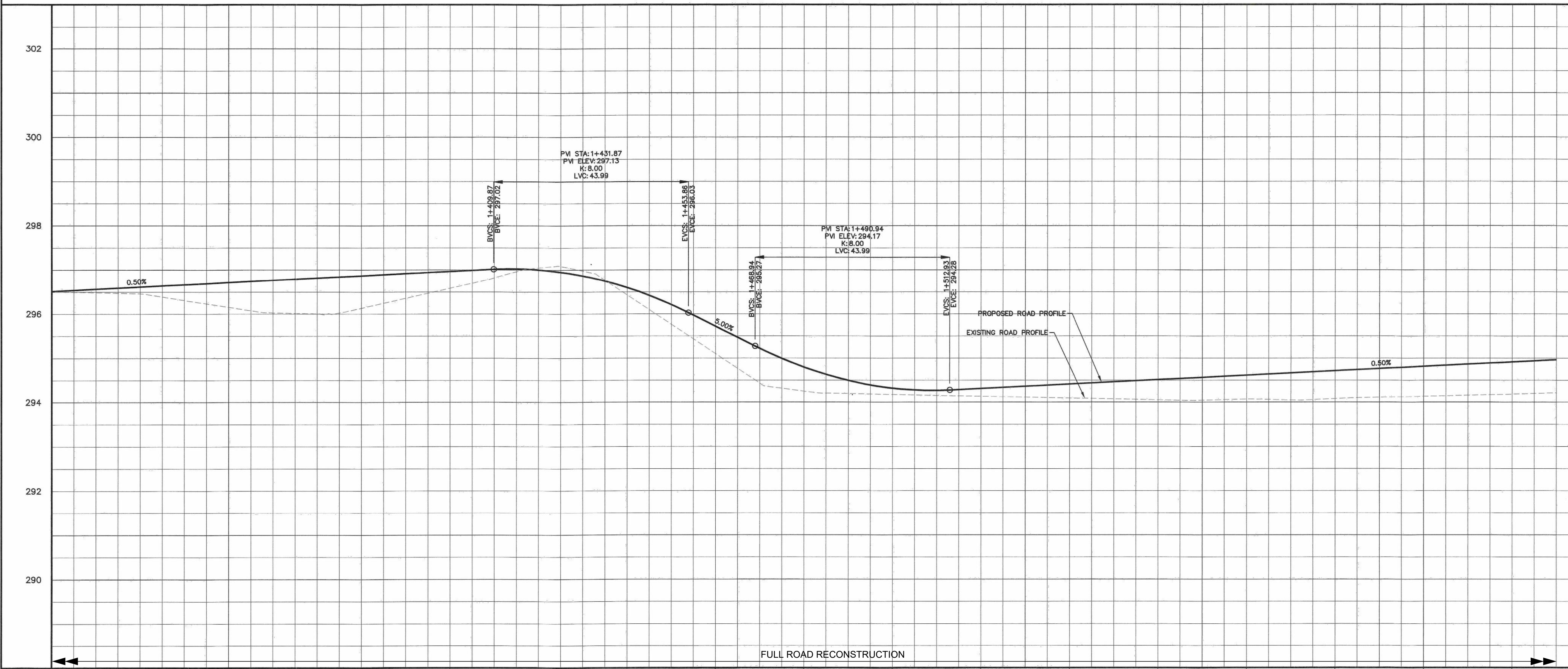
Drawing Title
LEDGE ROAD PLAN AND PROFILE STA 1+310 TO 1+650

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030
 Engineer: RPH Dwg File No.: 10497MP

Sht. No.: 11



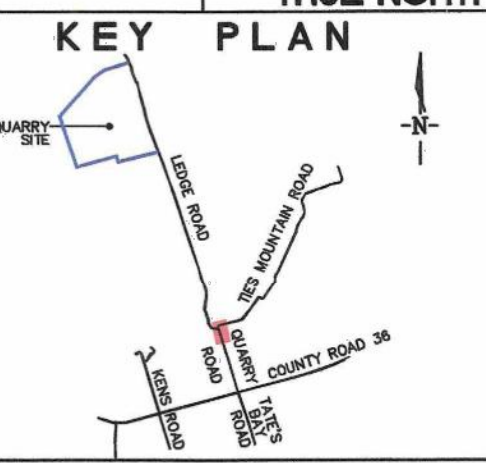
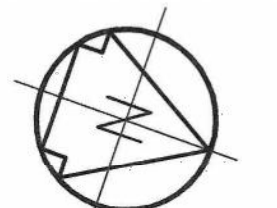
NOTE:
 1. FULL ROAD RECONSTRUCTION PER DETAIL 5 (SHEET 18)
 REGRADE/RESURFACE PER DETAILS 3 & 4 (SHEET 18)



CHAINAGE ELEV.	1+320 296.57 296.19	1+340 296.67 296.31	1+360 296.77 296.42	1+380 296.87 296.51	1+400 296.97 296.58	1+420 297.00 297.05	1+440 296.60 296.45	1+460 296.72 296.57	1+480 294.80 294.65	1+500 294.32 294.15	1+520 294.32 294.14	1+540 294.42 294.26	1+560 294.52 294.40	1+580 294.62 294.50	1+600 294.72 294.58	1+620 294.82 294.64	1+640 294.92 294.78
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CHAINAGE ELEV.

BM 1 ELEV. 257.345m
 HCM #011960.3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.

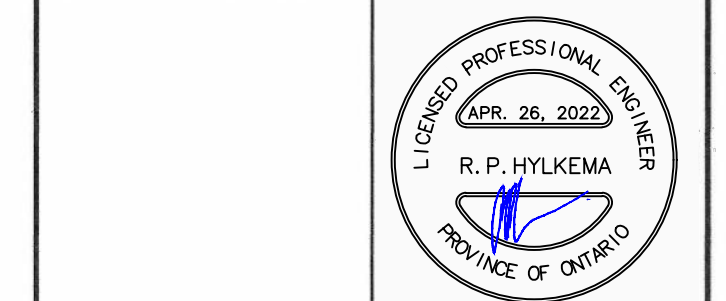


No.	Description	Date
7	Per Peer Review	APR. 26/22
6	Per Peer Review	FEB. 7/22
5	Per Peer Review	NOV. 21/21
4	Drawing Update	MAY 1/20
3	Ledge Road Alignment Revisions	MAY 14/14
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
 Dimensions are in METRES and/or
 MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION
 WITH OPSD 100 SERIES

LEGEND

	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

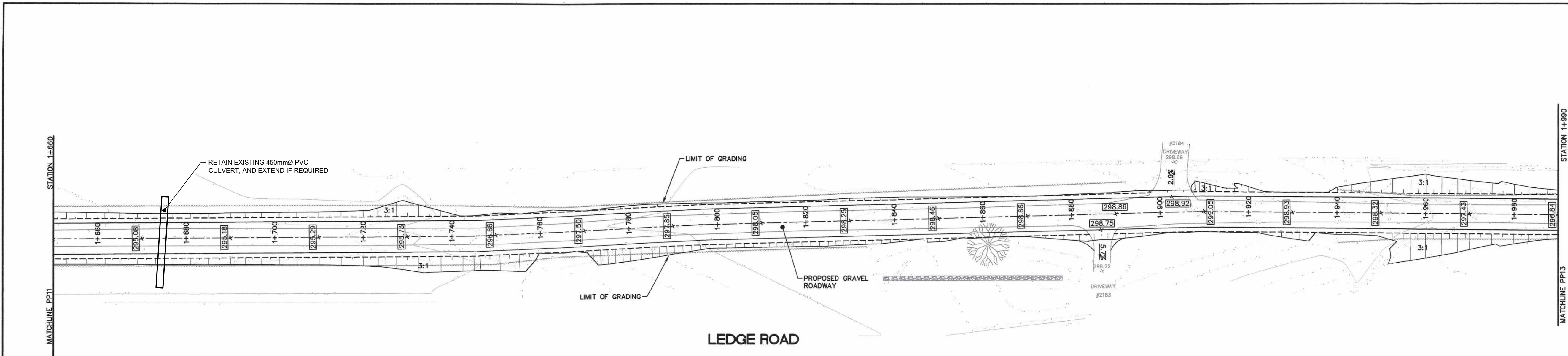


Lakeview Engineering Inc.
 653 Fire Route 42
 North Keweenaw, ON, K0L 2H0
 705-772-7910
 info@lakeviewpeng.com

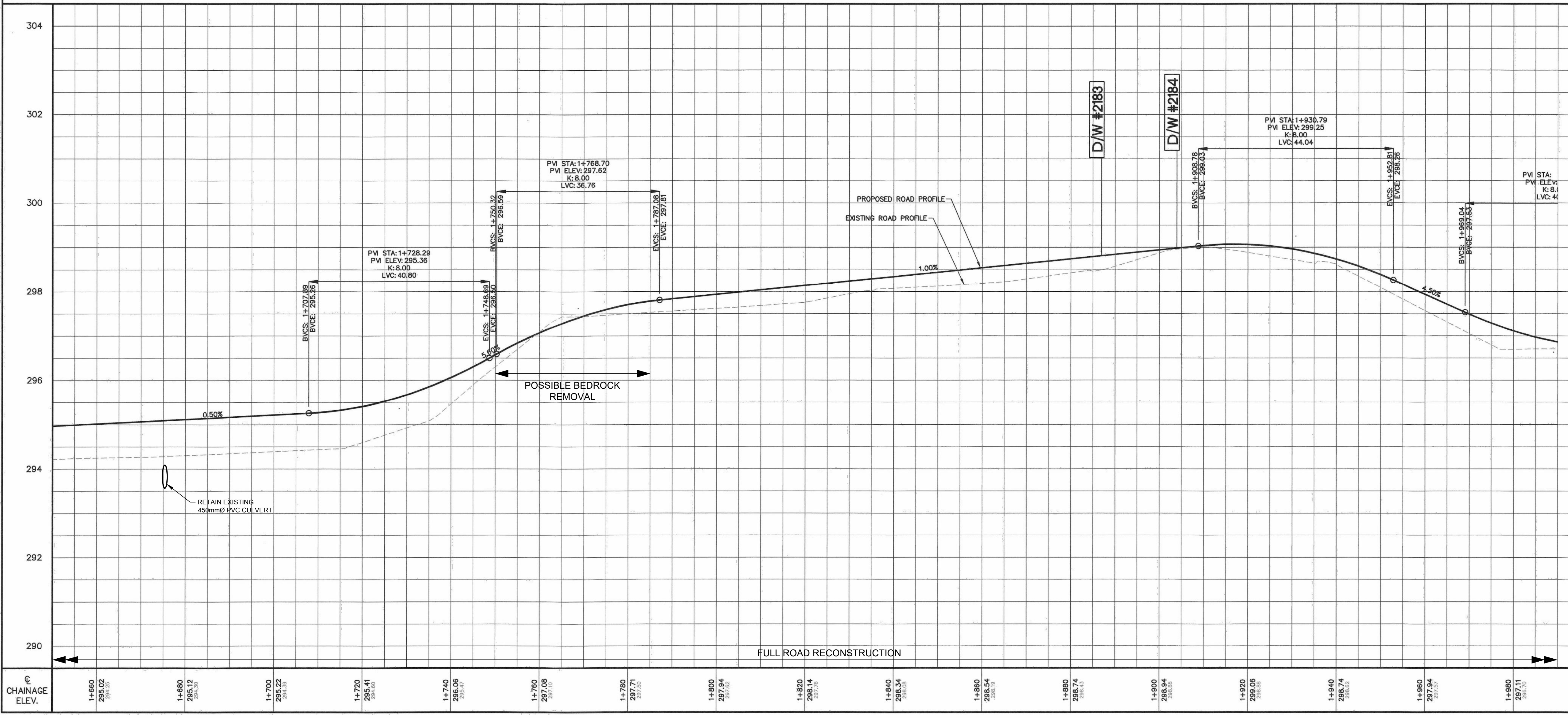
Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

Drawing Title
LEDGE ROAD PLAN AND PROFILE STA 1+650 TO 1+990

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030
 Engineer: RPH Dwg File No.: 10497MP Sht. No.: 12

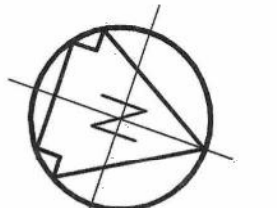


NOTE:
 1. FULL ROAD RECONSTRUCTION PER DETAIL 5 (SHEET 18)
 REGRADE/RESURFACE PER DETAILS 3 & 4 (SHEET 18)



CHAINAGE ELEV.	1+660	1+680	1+700	1+720	1+740	1+760	1+780	1+800	1+820	1+840	1+860	1+880	1+900
	295.02	295.32	295.22	295.41	295.47	297.08	297.51	297.94	298.14	298.34	298.54	298.74	299.06

BM 1 ELEV. 257.345m
 HCN #011860.3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



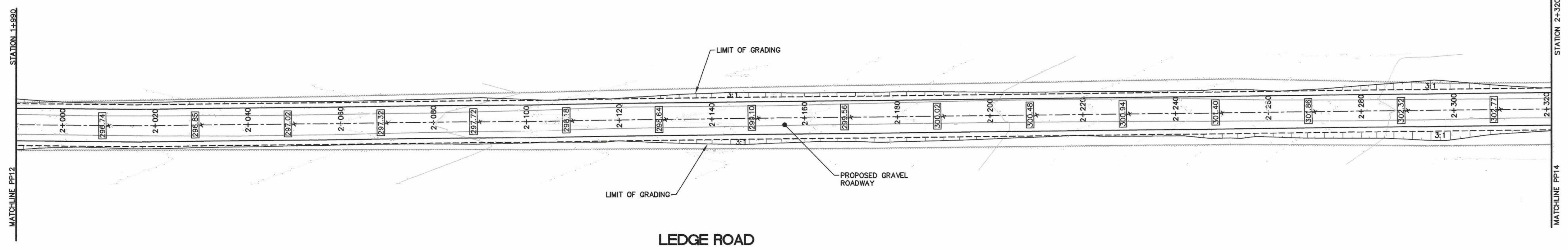
KEY PLAN



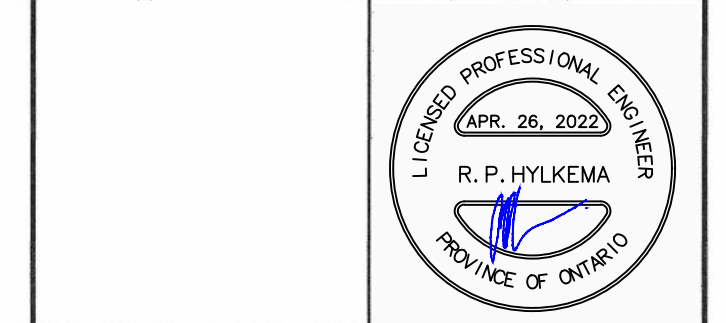
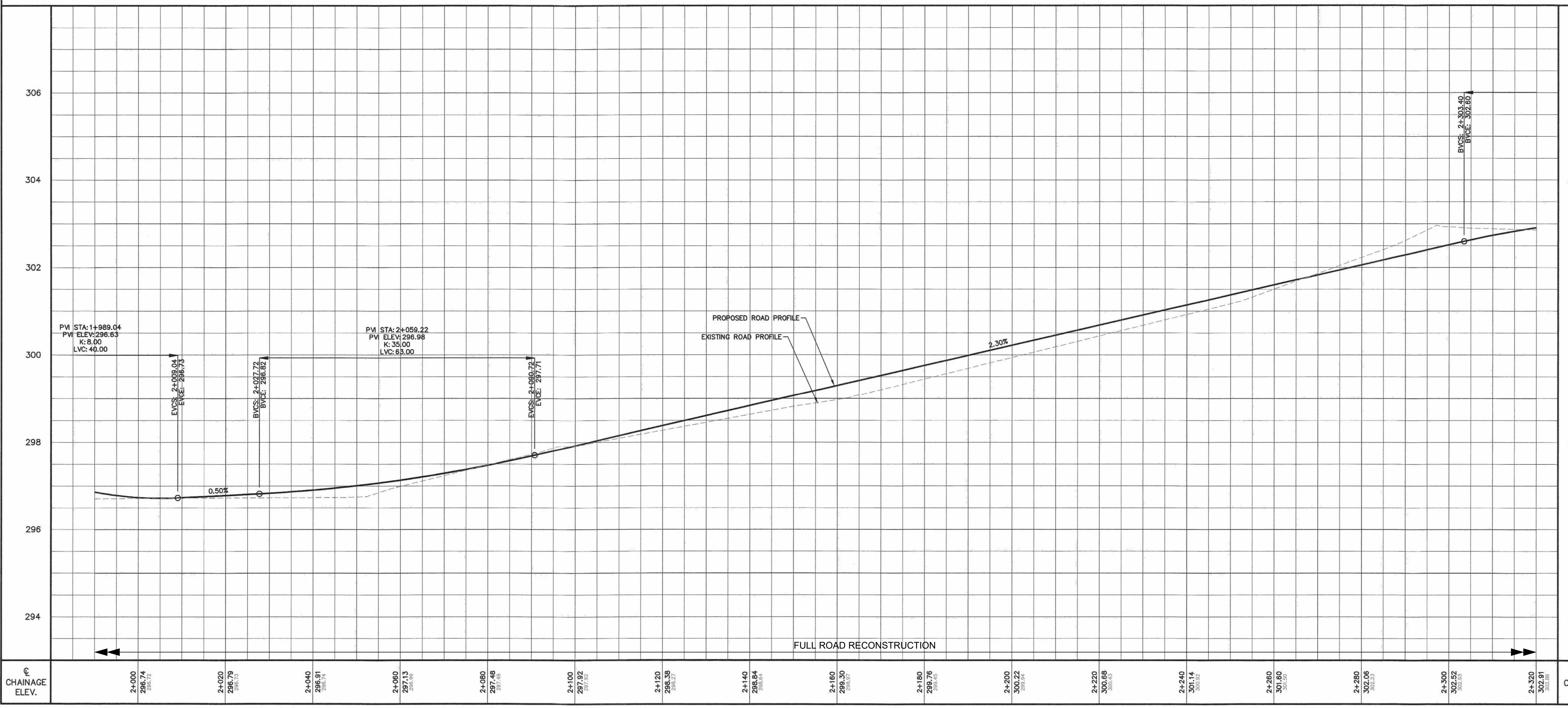
No.	Description	Date
7	Per Peer Review	APR. 26/22
6	Per Peer Review	FEB. 7/22
5	Per Peer Review	NOV. 21/21
4	Drawing Update	MAY 1/20
3	Ledge Road Alignment Revisions	MAY 14/14
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
 Dimensions are in METRES and/or
 MILLIMETRES unless otherwise shown
 TO BE READ IN CONJUNCTION
 WITH OPSD 100 SERIES

LEGEND	
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE



NOTE:
 1. FULL ROAD RECONSTRUCTION PER DETAIL 5 (SHEET 18)
 REGRADE/RESURFACE PER DETAILS 3 & 4 (SHEET 18)



Lakeview Engineering Inc.
 653 Fire Route 42
 North Kawartha, ON, K0L 2H0
 705-772-7910
 info@lakeviewpeng.com

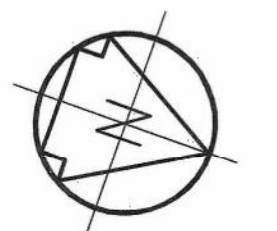
Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

Drawing Title
LEDGE ROAD PLAN AND PROFILE STA 1+990 TO 2+320

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030 Sht. No.:
 Engineer: RPH Dwg File No.: 10497MP 13

CHAINAGE ELEV.	2+000	2+020	2+040	2+060	2+080	2+100	2+120	2+140	2+160	2+180	2+200	2+220	2+240	2+260	2+280	2+300	2+320
ELEV.	296.74	296.72	296.91	297.13	297.48	297.92	298.39	298.84	299.30	299.76	300.22	300.69	301.14	301.60	302.06	302.52	302.98

BM 1 ELEV. 257.345m
 HCM #001960u3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



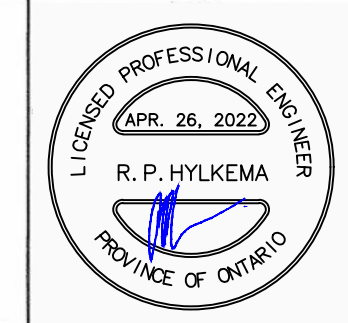
KEY PLAN



No.	Description	Date
7	Per Peer Review	APR. 26/22
6	Per Peer Review	FEB. 7/22
5	Per Peer Review	NOV. 21/21
4	Drawing Update	MAY 1/20
3	Ledge Road Alignment Revisions	MAY 14/14
2	Issued for Approval	JUNE 12/13
1	1st Submission for Approval	JUNE 4/13

METRIC
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 WITH OPSD 100 SERIES

LEGEND	
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	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT—DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION
	1.0% PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

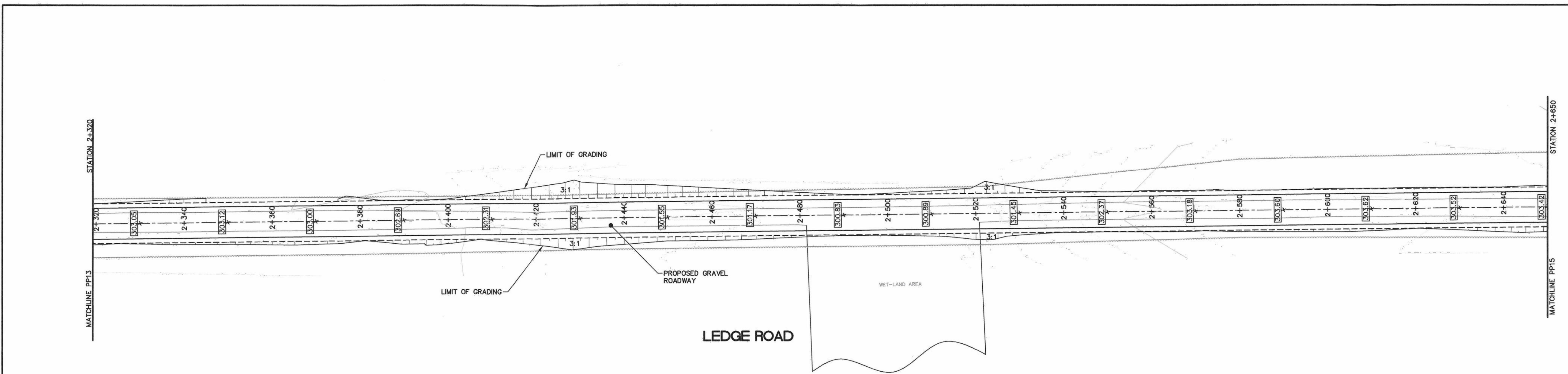


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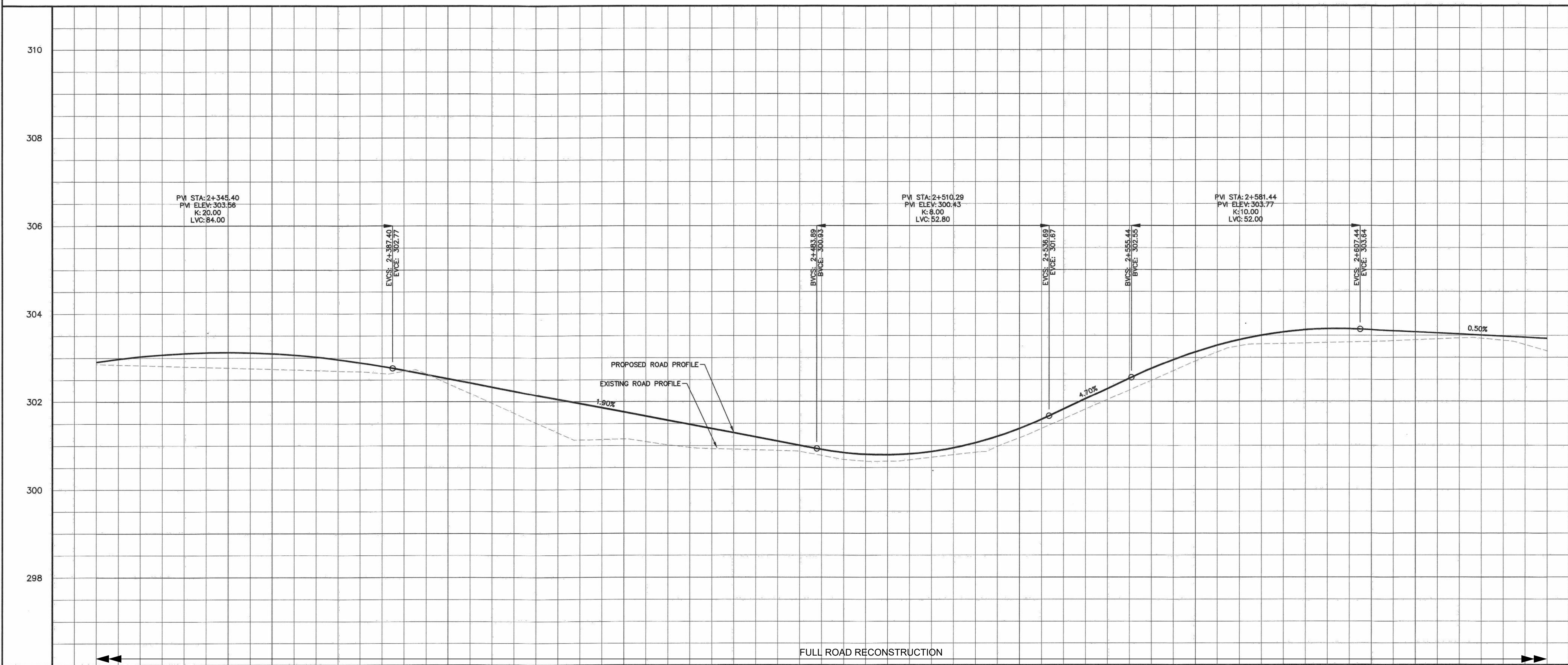
Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

Drawing Title
LEDGE ROAD PLAN AND PROFILE STA 2+320 TO 2+650

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030
 Engineer: RPH Dwg File No.: 10497MP



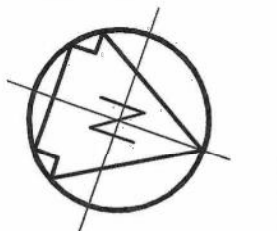
NOTE:
 1. FULL ROAD RECONSTRUCTION PER DETAIL 5 (SHEET 18)
 REGRADE/RESURFACE PER DETAILS 3 & 4 (SHEET 18)



CHAINAGE ELEV.	2+320 302.86	2+340 302.90	2+360 303.10	2+380 302.89	2+400 302.53	2+420 302.15	2+440 301.77	2+460 301.39	2+480 301.01	2+500 300.64	2+520 301.08	2+540 301.50	2+560 302.76	2+580 303.41	2+600 303.65	2+620 303.59	2+640 303.26	CHAINAGE ELEV.

Sht. No.: 14

BM 1 ELEV. 257.345m
 HCM #0011960.3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



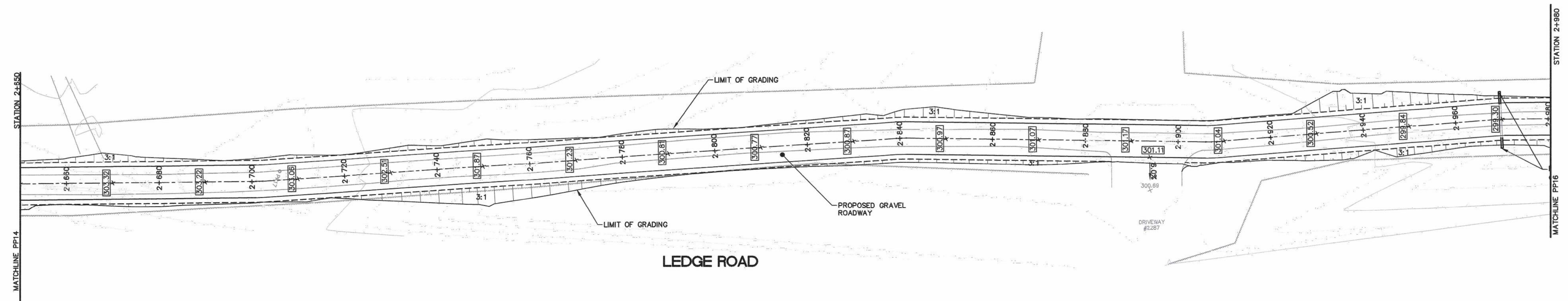
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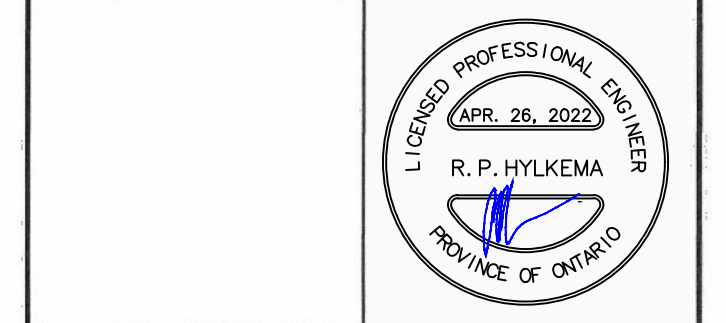
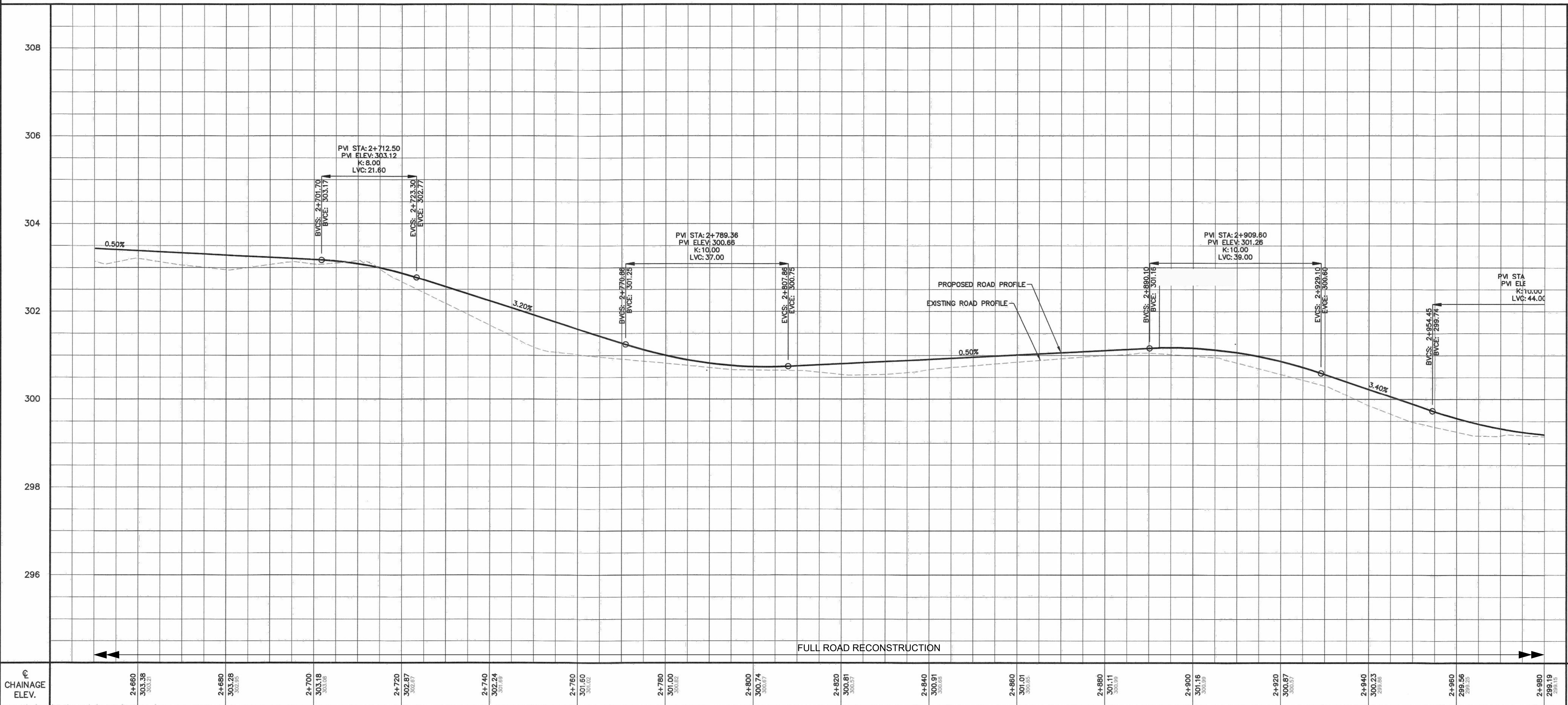
No.	Description	Date
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	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT—DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION
	PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
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NOTE:
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Lakeview Engineering Inc.
 633 Fire Route 42
 North Kawartha, ON, K0L 2H0
 705-772-7910
 info@lakevieweng.com

Project Name/Location
**DEWDNEY MOUNTAIN
 QUARRY ROAD**
 TRENT LAKES, ONTARIO

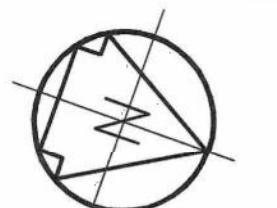
Drawing Title
**LEDGE ROAD
 PLAN AND PROFILE
 STA 2+650 TO 2+980**

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030
 Engineer: RPH Dwg File No.: 10497MP

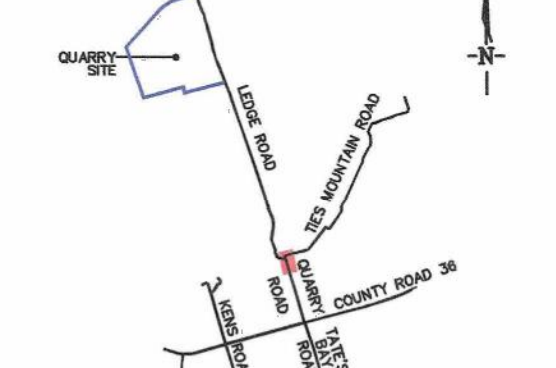
CHAINAGE
 ELEV.

CHAINAGE
 ELEV.

BM 1 ELEV. 257.345m
 HCM #0011960J3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



KEY PLAN



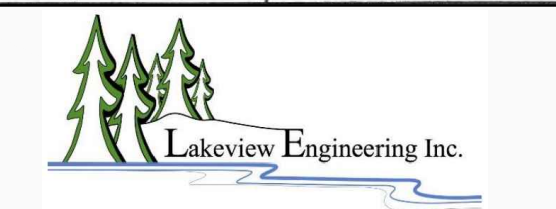
REVISIONS

No.	Description	Date
7	Per Peer Review	APR. 26/22
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LEGEND

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	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
	EX./PR. EDGE OF SHOULDER
	EX./PR. CENTERLINE OF DITCH
	EX./PR. DITCH TOP OF SLOPE
	EXISTING LIGHT STANDARD
	EXISTING HYDRO POLE
	EX. OVERHEAD HYDRO FOUND IRON BAR
	EX./PR. ELEVATION
	PROPOSED GRADE
	EX./PR. FENCE
	EX. R.O.W./PROPERTY BOUNDARY
	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

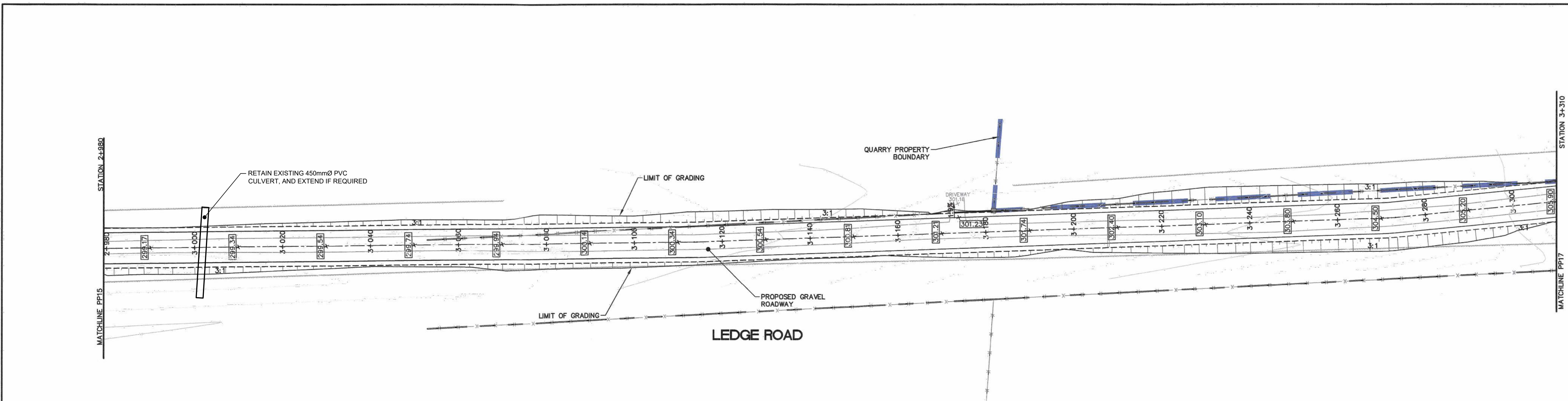


653 Fire Route 42
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 info@lakeviewpeng.com

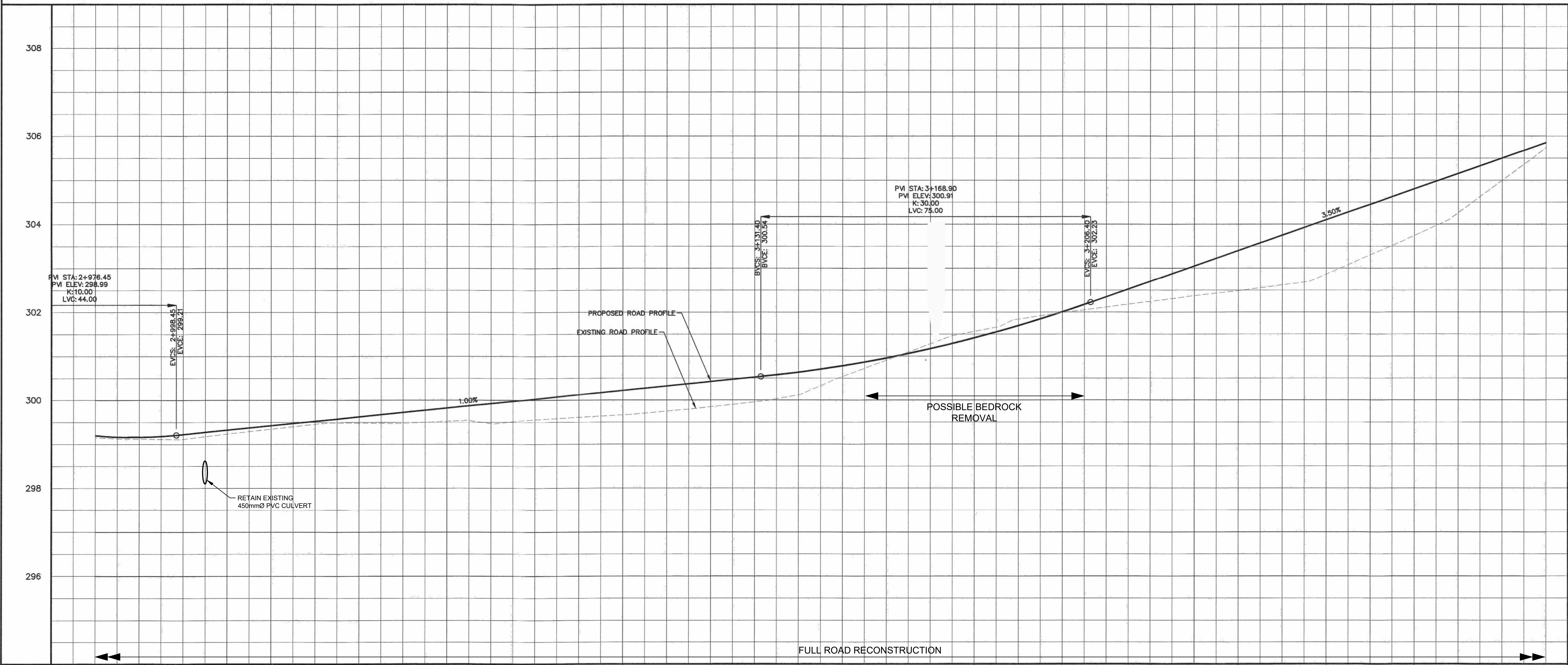
Project Name/Location
**DEWDNEY MOUNTAIN
 QUARRY ROAD**
 TRENT LAKES, ONTARIO

Drawing Title
**LEDGE ROAD
 PLAN AND PROFILE
 STA 2+980 TO 3+310**

Drawn By: AMR/JTA SCALE: Horz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030
 Engineer: RPH Dwg File No.: 10497MP Sht. No.: 16

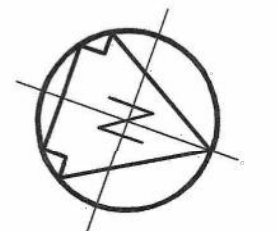


NOTE:
 1. FULL ROAD RECONSTRUCTION PER DETAIL 5 (SHEET 18)
 REGRADE/RESURFACE PER DETAILS 3 & 4 (SHEET 18)



CHAINAGE ELEV.	2+980 299.19	2+985 299.15	3+000 299.22	3+005 299.18	3+020 299.27	3+025 299.23	3+040 299.62	3+045 299.58	3+060 299.82	3+065 299.78	3+080 300.02	3+085 299.98	3+100 300.22	3+105 300.18	3+120 300.42	3+125 300.38	3+140 300.64	3+145 300.60	3+160 300.96	3+165 300.92	3+180 301.42	3+185 301.38	3+200 302.01	3+205 301.97	3+220 302.70	3+225 302.66	3+240 303.40	3+245 303.36	3+260 304.10	3+265 304.06	3+280 304.80	3+285 304.76	3+300 305.00	3+305 304.96
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BM 1 ELEV. 257.345m
 HCM #0011960.3304
 NORTHWEST CORNER OF
 COUNTY RD. 36 & QUARRY
 RD. NEAR HYDRO POLE.



KEY PLAN

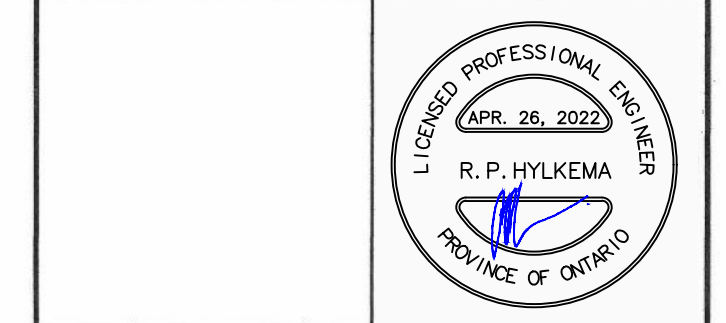


No.	Description	Date
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LEGEND

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	PROPOSED ASPHALT RESURFACING
	PROPOSED SURFACE TREATMENT-DOUBLE LAYER OF TAR AND CHIP
	PROPOSED GRAVEL ROAD TREATMENT
	PROPOSED RIP-RAP
	EX./PR. BUILDING
	EX./PR. EDGE OF ROAD
	EX./PR. ROAD CENTERLINE
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	EX./PR. CENTERLINE OF DITCH
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	EXISTING LIGHT STANDARD
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	EXISTING PROPERTY LINE
	EXISTING VEGETATION
	EXISTING CONTOUR
	EXISTING SIGN
	EXISTING SHRUB
	EXISTING TREE

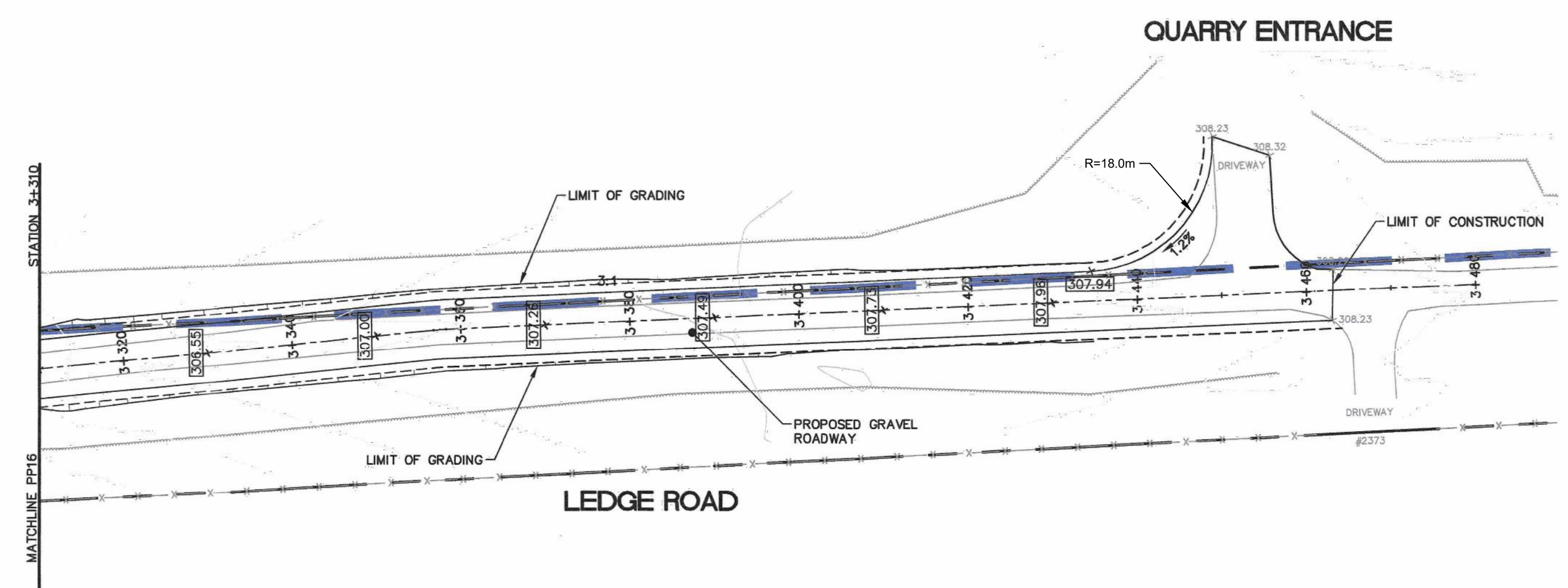


Lakeview Engineering Inc.
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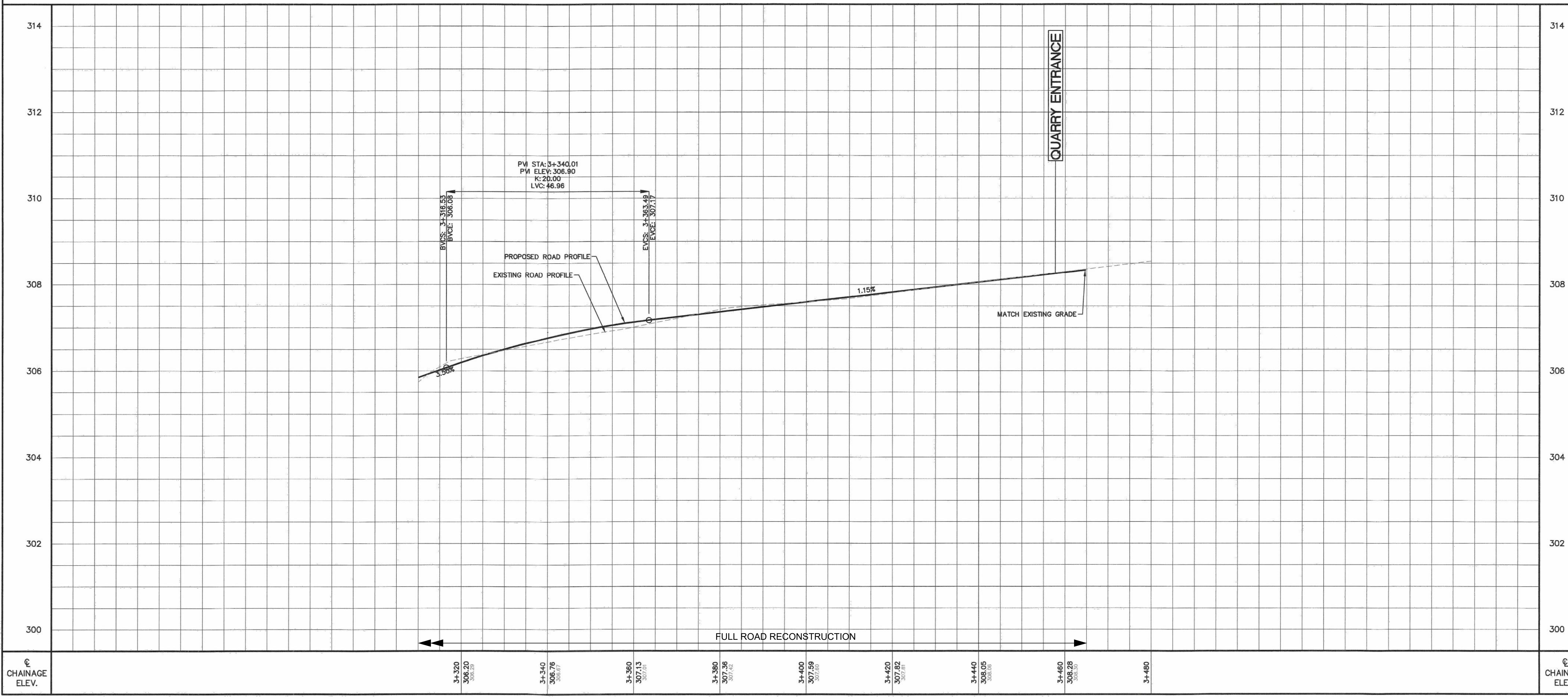
Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
 TRENT LAKES, ONTARIO

Drawing Title
LEDGE ROAD PLAN AND PROFILE STA 3+310 TO 3+480

Drawn By: AMR/JTA SCALE: Horiz. 1:500 Vert. 1:50
 Designed By: AMR/JTA Plot Date: APRIL 26, 2022
 Checked By: RPH Project No.: 15030 Sht. No.:
 Engineer: RPH Dwg File No.:10497MP 17



- NOTE:**
- FULL ROAD RECONSTRUCTION PER DETAIL 5 (SHEET 18)
 REGRADE/RESURFACE PER DETAILS 3 & 4 (SHEET 18)



CHAINAGE ELEV.

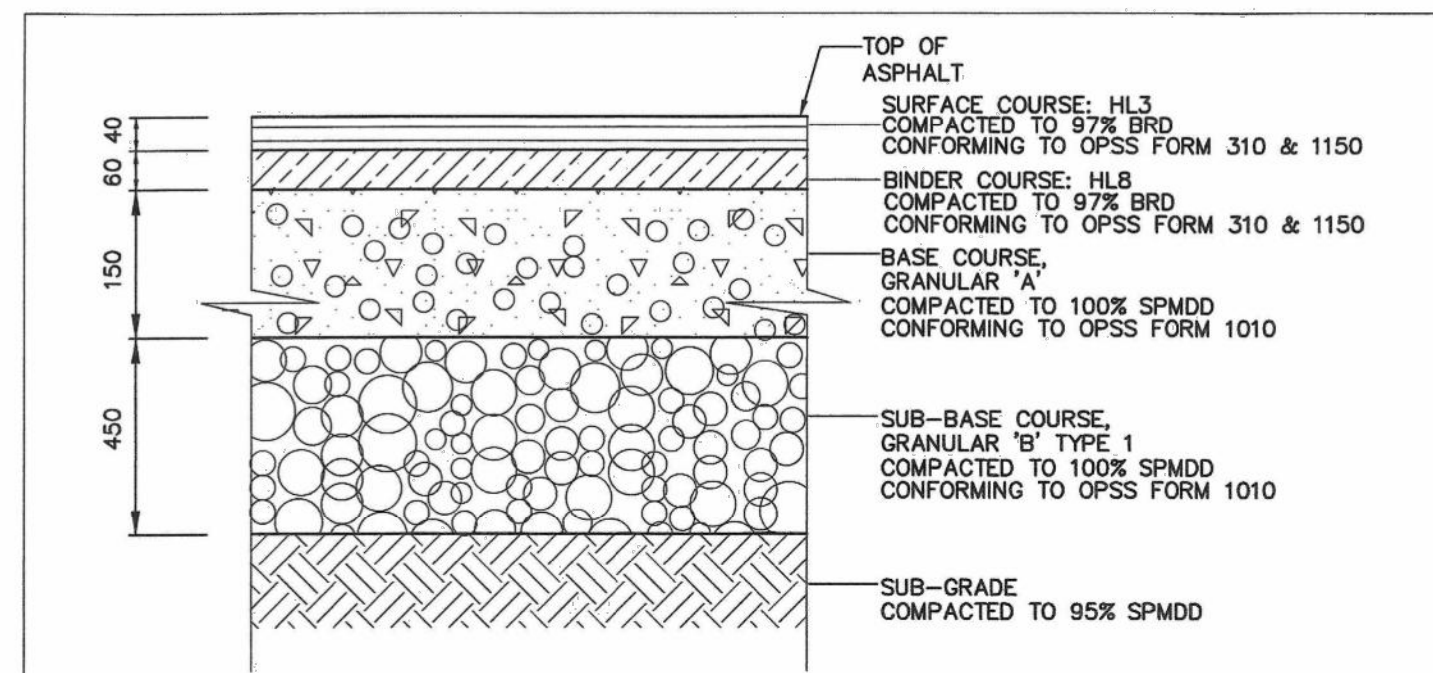
CHAINAGE ELEV.

GENERAL NOTES

- THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS IS APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR THE FIELD LOCATION OF ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR IS TO CONFIRM THE LOCATION OF EXISTING UTILITIES AND ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND HAVING ON SITE, A COPY OF THE ONTARIO PROVINCIAL STANDARDS.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS RELATED TO SERVICE CONNECTIONS INCLUDING THIRD PARTY UTILITY COSTS.
- ALL CULVERT CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATEST PROVINCIAL STANDARDS.
- THE DETAILS IN THESE DRAWINGS SHALL TAKE PRECEDENCE OVER THE LATEST OPSD DETAILS WHERE APPLICABLE.
- CONTRACTOR TO UNCOVER EXISTING UTILITIES WELL IN ADVANCE OF PIPE LAYING IN ORDER TO CORRECT GRADE PROBLEMS AS REQUIRED, IF REQUIRED.
- THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS ON THE JOB AND REPORT ANY DISCREPANCY TO THE ENGINEER BEFORE PROCEEDING WITH THE WORKS.
- THE APPROVAL OF THE PLANS DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING, BUT NOT LIMITED TO THE FOLLOWING PERMITS: ROAD CUT, RELOCATION OF SERVICES, ENCROACHMENT AGREEMENTS, APPROACH PERMITS, ETC...
- ALL CONSTRUCTION WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS. ALL SIGNS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS IN THE ONTARIO TRAFFIC MANUAL, BOOK 7, TEMPORARY CONDITIONS.
- ALL AREAS DISTURBED BY THE CONTRACTOR'S CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS AS INDICATED ON THE CONTRACT DRAWINGS AND IN ACCORDANCE WITH OPS5 507.
- ANY HYDRO POLES OR BELL POLES THAT ARE IN DANGER OF BEING UNDERMINED ARE TO BE BRACED. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE POLES BRACED TO THE SATISFACTION OF THE APPROPRIATE UTILITY. ALL COSTS ASSOCIATED WITH THE BRACING OF POLES SHALL BE CARRIED BY THE CONTRACTOR.
- ALL TREES AND ROOTS TO BE COMPLETELY REMOVED AND DISPOSED OF OFF SITE.
- ALL EXISTING PROPERTY ACCESS, TRAFFIC MOVEMENT ON INTERSECTING STREETS AND MUNICIPAL/SECONDARY SERVICES ARE TO BE MAINTAINED DURING ALL WORKS. TEMPORARY ACCESS RESTRICTION AND MUNICIPAL SERVICE INTERRUPTION SHALL BE PERMITTED ONLY TO FACILITATE UNDERGROUND SERVICING AND ASPHALT PLACEMENT. AFFECTED PARTIES SHALL BE INFORMED OF ALL ACCESS RESTRICTIONS OR SERVICE INTERRUPTIONS. CONTRACTOR TO PROVIDE A WORK PLAN TO THE ENGINEER STATING HOW ACCESS AND TRAFFIC FLOW WILL BE MAINTAINED.
- THE ENGINEER SHALL PROVIDE BENCHMARK ELEVATIONS AND HORIZONTAL ALIGNMENT REFERENCE FOR THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETAILED LAYOUT OF THE WORK.

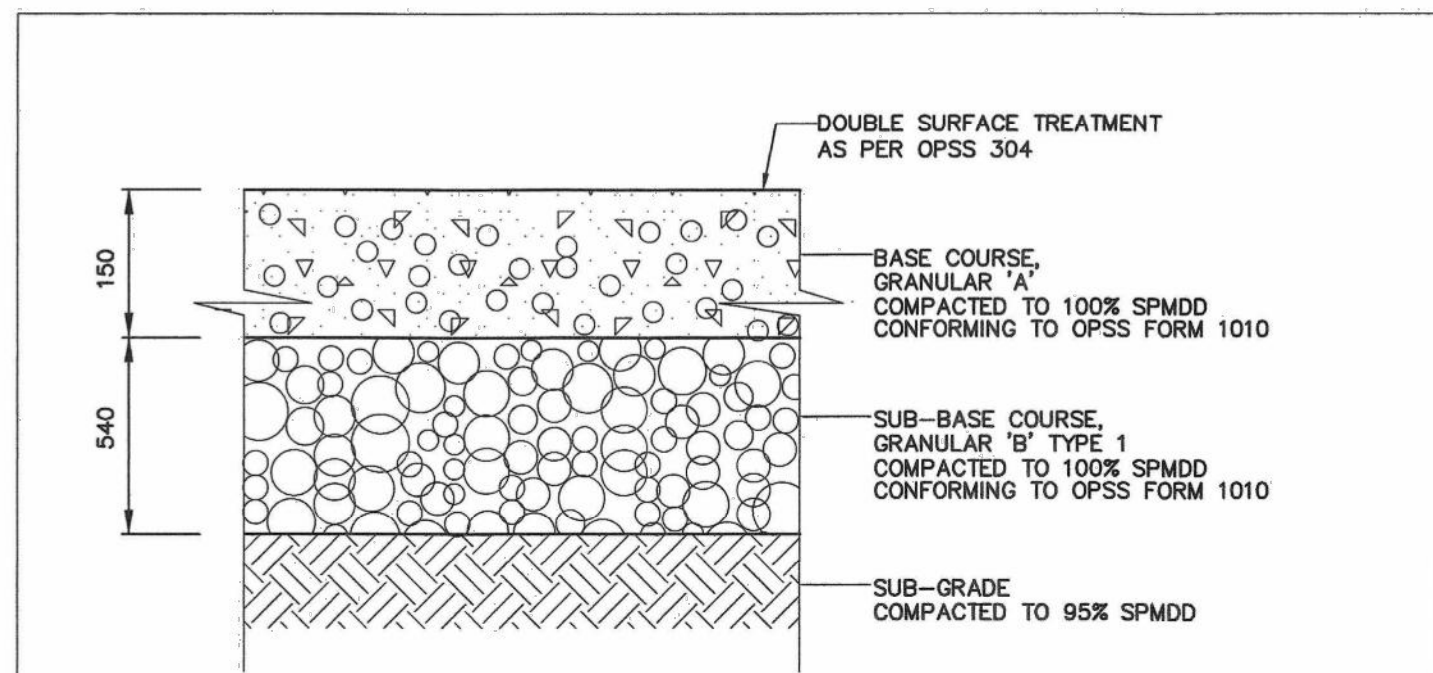
SITE NOTES

- ALL MATERIALS (CONCRETE ASPHALT, ETC.) THAT ARE TO BE REMOVED MUST BE DISPOSED OF IN ACCORDANCE WITH THE LATEST MINISTRY OF THE ENVIRONMENT GUIDELINES AND LOCAL MUNICIPAL BYLAWS.
- ALL LANDSCAPE AREAS DISTURBED BY CONSTRUCTION SHALL HAVE 100mm TOPSOIL AND NURSERY SOD UNLESS OTHERWISE NOTED. ALL SLOPES GREATER THAN 4:1 REQUIRE THE SOD TO BE STAKED.
- ALL DISTURBED DRIVEWAYS SHALL BE RESTORED TO EXISTING OR BETTER CONDITION.
- ALL SERVICES AND UTILITIES ARE TO BE SUPPORTED AS PER OPSD 1007.010.
- ANY TEMPORARY SILTATION CONTROL DEVICES ARE TO BE PLACED AND MAINTAINED BEFORE CONSTRUCTION STARTS. CONTROL DEVICES SHALL BE REMOVED ONCE ALL CONSTRUCTION HAS BEEN COMPLETED, ALL VEGETATION HAS BEEN ESTABLISHED AND AT THE DIRECTIONS OF THE ENGINEER (LAKEVIEW ENGINEERING INC.)
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE NO DEBRIS IS TRACKED ONTO THE MUNICIPALITY ROADS. ANY DEBRIS TRACKED ONTO THE ROADWAYS SHALL BE POWER SWEEP AT THE END OF EACH DAY.
- ALL EXISTING ASPHALT EDGES SHALL BE SAW CUT CLEAN PRIOR TO ANY PAVING OPERATION. REFER TO DETAIL 1 ON THIS SHEET.
- ALL EXISTING ROAD SIGNAGE SHALL BE MAINTAINED DURING CONSTRUCTION.
- TEMPORARY SILTATION CONTROL DEVICES TO BE LOCATED IN THE FIELD AT DIRECTION OF THE ENGINEER



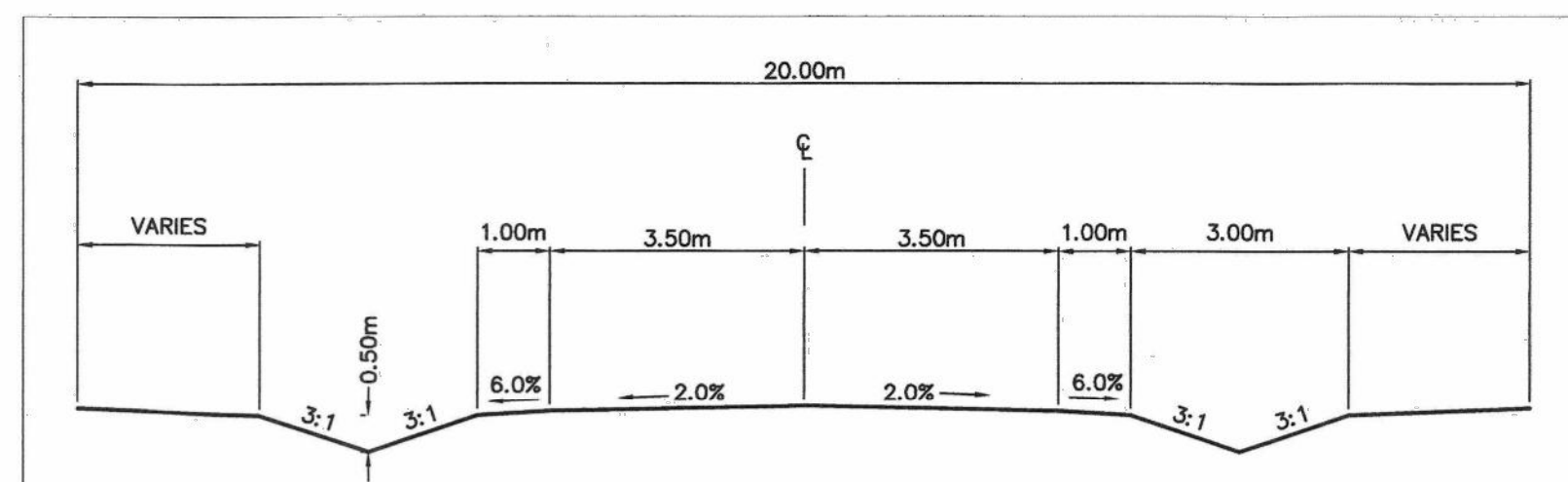
NOTE: 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
2. REFER TO GEOTECHNICAL INVESTIGATION PREPARED BY GENIVAR, DATED DECEMBER 14, 2012.

2
DT18 ROAD STRUCTURE FOR PAVEMENT
SCALE = N.T.S.

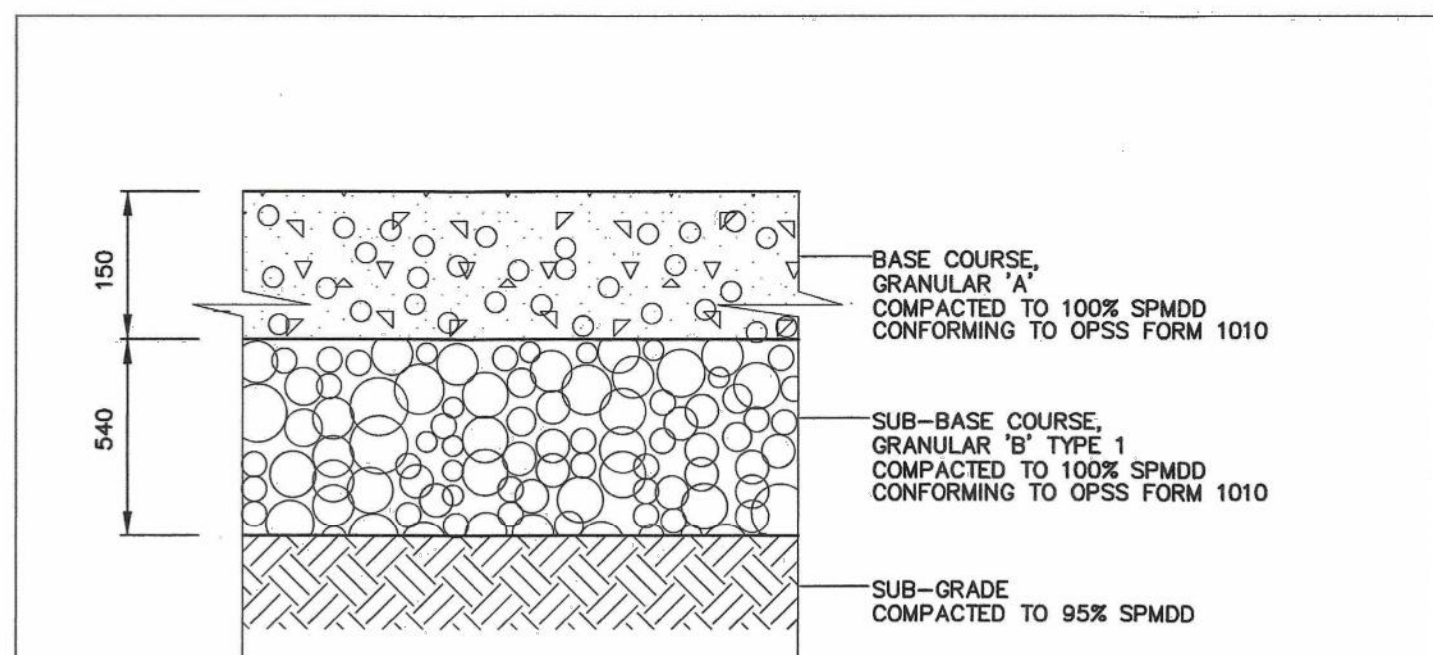


NOTE: 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
2. REFER TO GEOTECHNICAL INVESTIGATION PREPARED BY GENIVAR, DATED DECEMBER 14, 2012.

3
DT18 ROAD STRUCTURE FOR SURFACE TREATMENT
SCALE = N.T.S.

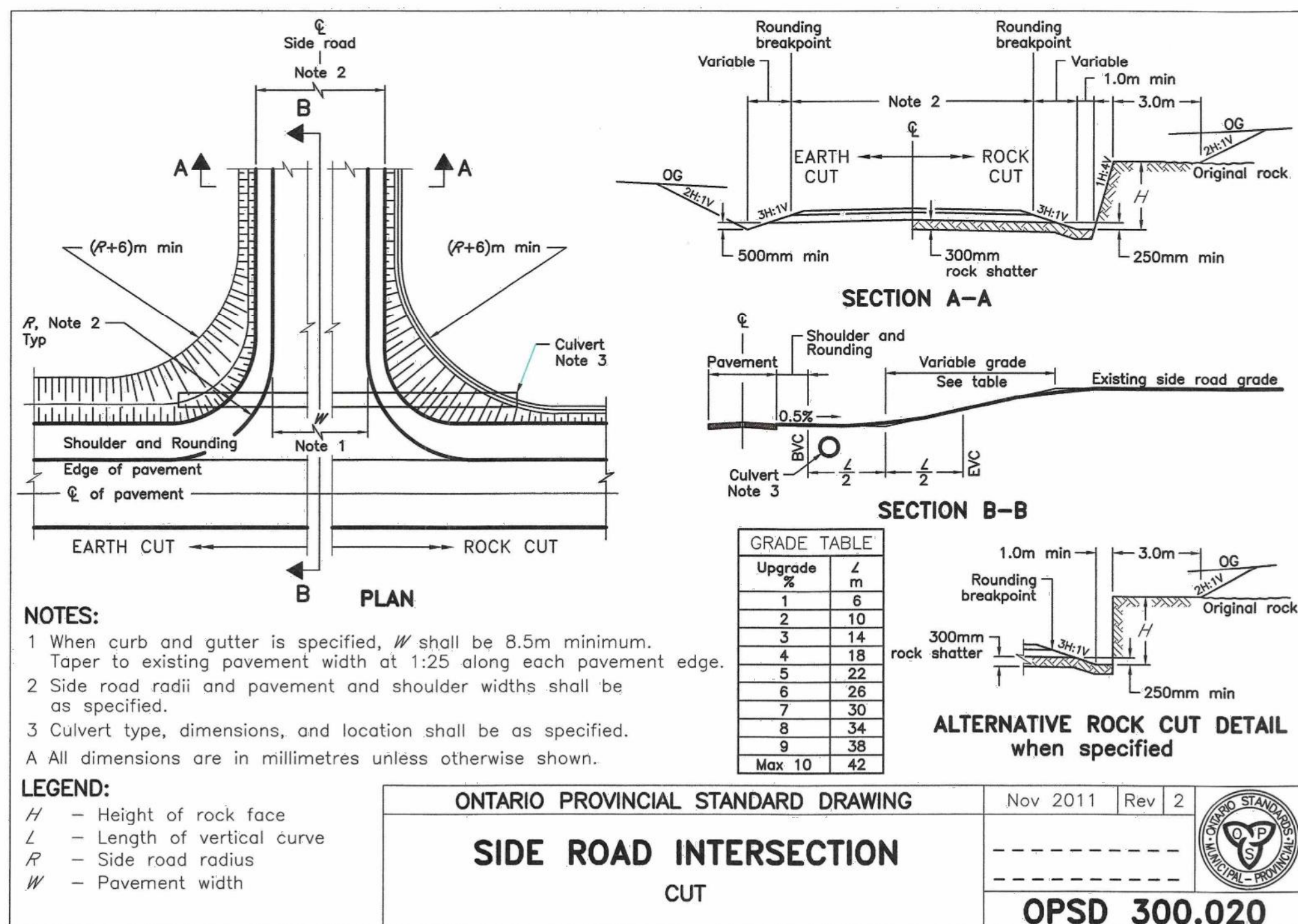


5
DT18 TYPICAL SECTION FOR 20m R.O.W. WITH 7m ROADWAY
SCALE = 1:100

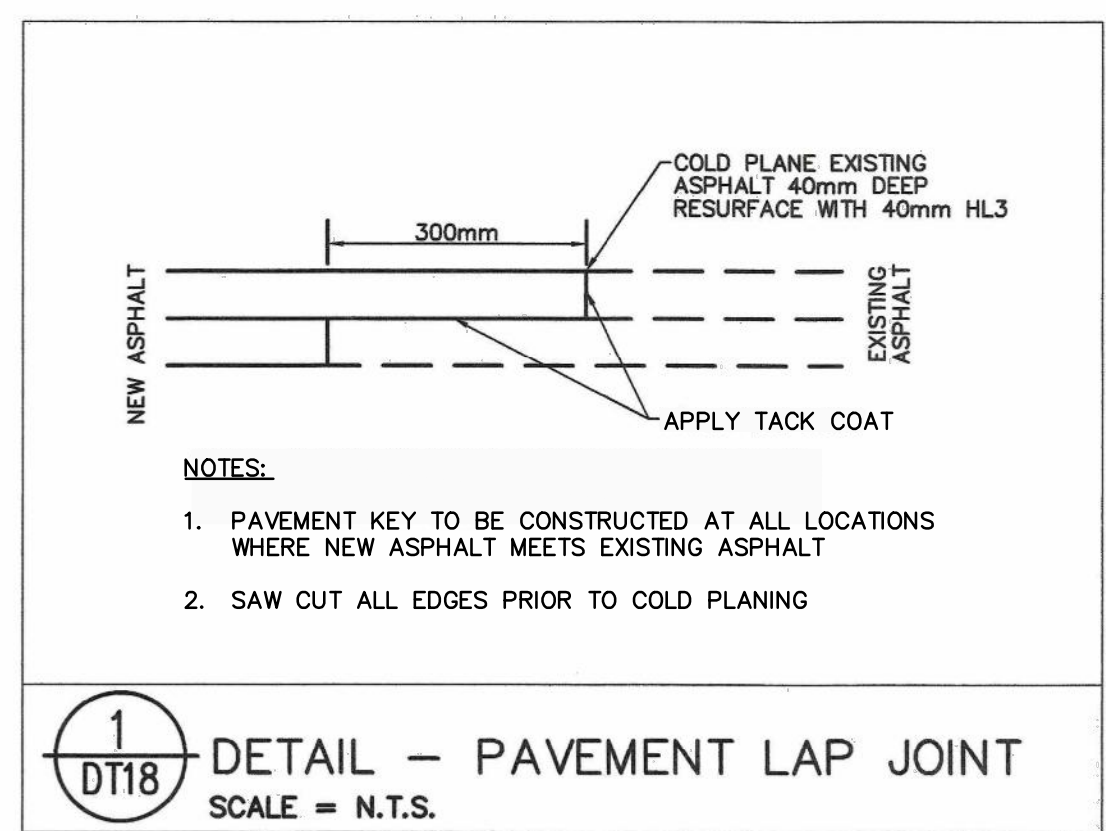


NOTE: 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
2. REFER TO GEOTECHNICAL INVESTIGATION PREPARED BY GENIVAR, DATED DECEMBER 14, 2012.

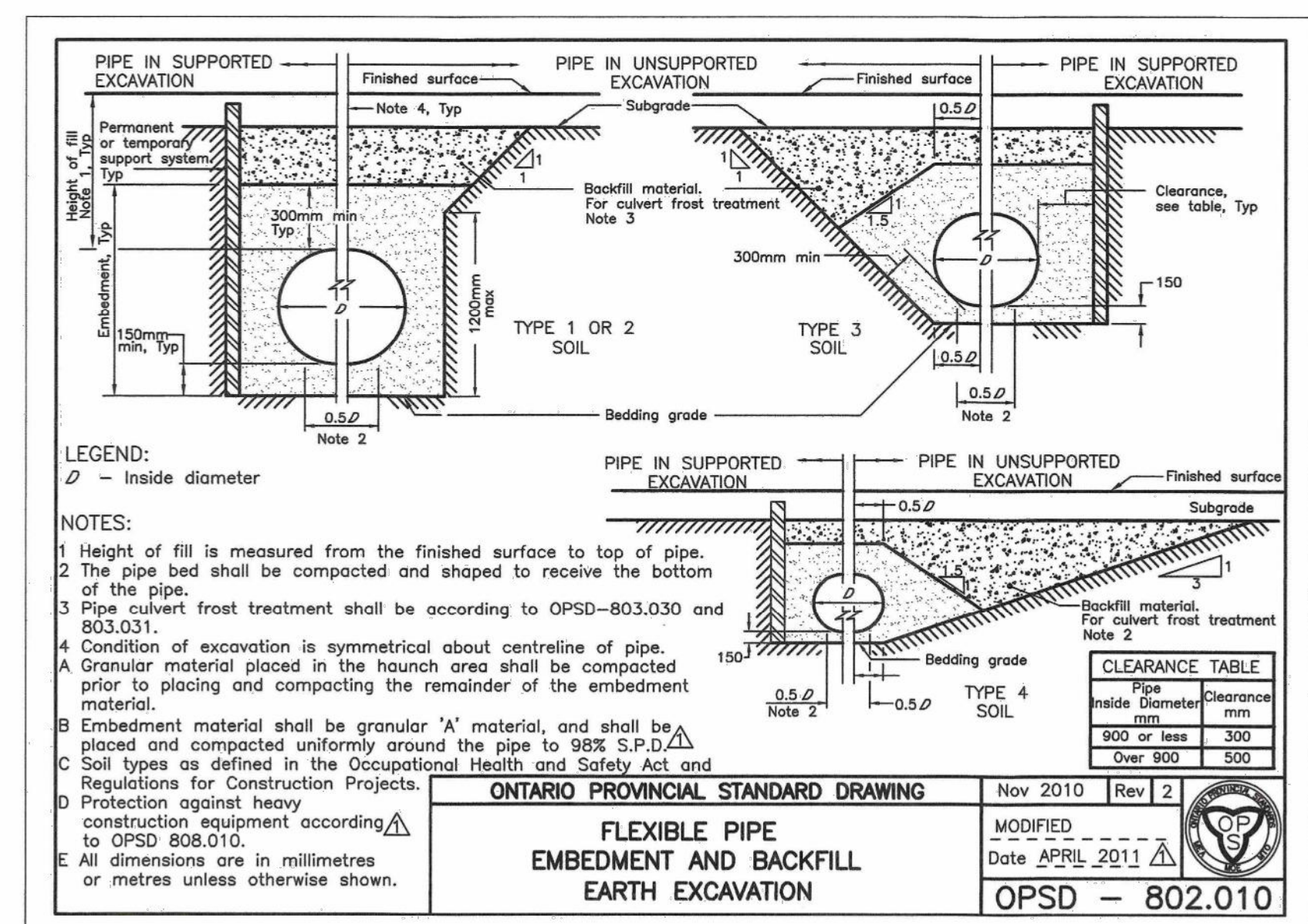
4
DT18 ROAD STRUCTURE FOR GRAVEL
SCALE = N.T.S.



ONTARIO PROVINCIAL STANDARD DRAWING
SIDE ROAD INTERSECTION CUT
Nov 2011 Rev 2
OPSD 300.020



1
DT18 DETAIL - PAVEMENT LAP JOINT
SCALE = N.T.S.



ONTARIO PROVINCIAL STANDARD DRAWING
FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION
Nov 2010 Rev 2
MODIFIED Date APRIL 2011
OPSD - 802.010

BM 1 ELEV. 257.345m
HCM #001960u3304
NORTHWEST CORNER OF
COUNTY RD. 36 & QUARRY
RD. NEAR HYDRO POLE.

TRUE NORTH

KEY PLAN

No.	Description	Date
6	Per Peer Review	APR. 26/22
5	Per Peer Review	FEB. 7/22
4	Per Peer Review	NOV. 21/21
3	Drawing Update	MAY 1/20
2	Issued for Approval	JUNE 12/13
1	1st Submission for Review	JUNE 4/13

METRIC
Dimensions are in METRES and/or MILLIMETRES unless otherwise shown
TO BE READ IN CONJUNCTION WITH OPSD 100 SERIES

LEGEND

LI-CENCED PROFESSIONAL ENGINEER
APR. 26, 2022
R. P. HYLKEMA
PROVINCE OF ONTARIO

Lakeview Engineering Inc.
653 Fire Route 42
North Kawartha, ON, K0L 2H0
705-772-7910
info@lakevieweng.com

Project Name/Location
DEWDNEY MOUNTAIN QUARRY ROAD
TRENT LAKES, ONTARIO

Drawing Title
DETAILS

Drawn By: AMR/JTA SCALE: Horz. 1:750 Vert. 1:75
Designed By: AMR/JTA Plot Date: APRIL 26, 2022
Checked By: RPH Project No.: 15030 Sht. No.:
Engineer: RPH Dwg File No.: 10497 DT18 18

Roy Hylkema

From: Murphy, Grant <GMurphy@ptbocounty.ca>
Sent: June 11, 2020 4:18 PM
To: Roy Hylkema
Cc: Saccoccia, Doug
Subject: RE: COUNTY ROAD 36/QUARRY ROAD - TRENT LAKES

Good afternoon Roy:

I apologize for my delayed response.

We have reviewed the attached drawings and have also had similar inquiry from Gord Russell, Planning and Development Services about the validity of the drawings. We see no significant issues or changes with the submission at this time.

However, we are awaiting the findings and decisions of the Tribunal on this matter and so that we can supply these to our solicitor. We will then initiate the process of drafting a haul route agreement.

Best regards,

Grant Murphy P.Eng.
Director, Infrastructure Services
County of Peterborough
705 775 2737 ext 3100

Please be advised our offices are closed to the public as recommended by public health officials. Staff are still available between the hours of 8:30 and 4:30 Monday to Friday, and can be reached via phone or email. Updates regarding closure will be provided on our website at www.ptbocounty.ca



**DEWDNEY MOUNTAIN FARMS QUARRY
QUARRY ROAD/LEDGE ROAD IMPROVEMENTS
COST ESTIMATE**

ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
QUARRY ROAD				
1. Excavation	m ³	4,400	\$6.50	\$28,600.00
2. 540mm Granular 'B'	t	2,850	\$14.07	\$40,099.50
3. 150mm Granular 'A'	t	780	\$20.41	\$15,919.80
4. Pulverize ex. road base	m ²	8,500	\$4.50	\$38,250.00
5. H. D. Asphalt	m ²	560	\$20.00	\$11,200.00
6. Double surface treatment	m ²	7,950	\$9.85	\$78,307.50

LEDGE ROAD

7. Excavation	m ³	10,950	\$6.50	\$71,175.00
8. 540mm Granular 'B'	t	12,090	\$14.07	\$170,106.30
9. 150mm Granular 'A'	t	1,130	\$20.41	\$23,063.30
10 Granular fill	m ³	9,280	\$14.07	\$130,569.60
11 Double surface treatment	m ²	8,855	\$9.85	\$87,221.75
12 Gravel driving surface	t	600	\$20.41	\$12,246.00

\$706,758.75

Note: Granular and fill materials to be supplied by Dewdney Mountain Farms Quarry



DEWDNEY MOUNTAIN FARMS QUARRY COUNTY ROAD 36 IMPROVEMENTS COST ESTIMATE

ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1. Remove existing culverts & dispose	ea	2	\$195.00	\$390.00
2. Fill existing well tile	ea	1	\$320.00	\$320.00
3. Remove existing spring outlet	ea	1	\$140.00	\$140.00
4. Re-grade Quarry Road and remove surplus	m ³	1,600	\$9.50	\$15,200.00
5. Install 200mm sub-drain with filter wrap	m	22.0	\$12.50	\$275.00
6. Install 800 x 580 CSP culvert	m	31.0	\$145.00	\$4,495.00
7. Install 450mm CSP culvert	m	9.5	\$110.00	\$1,045.00
8. Re-grade ditches, topsoil & seed	m	280	\$35.00	\$9,800.00
9. 450mm Granular 'B'	t	1,100	\$23.00	\$25,300.00
10. 150 mm Granular 'A'	t	450	\$29.00	\$13,050.00
11. 60 mm HL8 H.D. Asphalt	t	270	\$135.00	\$36,450.00
12. 50mm HL1 Asphalt	t	200	\$146.00	\$29,200.00
13. Scarify existing road surface 50mm	m ²	4,800	\$5.85	\$28,080.00
14. Tack Coat	m ²	6,700	\$1.10	\$7,370.00
15. Grind lap joint to existing pavement	m	30	\$19.25	\$577.50
16. 50mm HL1 Asphalt overlay	t	480	\$146.00	\$70,080.00
17. Install gravel lay-by lane	m ²	200	\$22.00	\$4,400.00
18. Install OPSD 912.185 guide rail, including 1.0m granular seal under rails	m	235	\$172.00	\$40,420.00
19. Install new farm gate	ea	1	\$350.00	\$350.00



**DEWDNEY MOUNTAIN FARMS QUARRY
COUNTY ROAD 36 IMPROVEMENTS
COST ESTIMATE**

ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
20. Relocate existing community mailboxes	ea	1	\$200.00	\$200.00
21. Pavement Markings	LS	1	\$1,200.00	\$1,200.00
22. Relocate existing signage	LS	1	\$300.00	\$300.00
23. Traffic Control	LS	1	\$3,500.00	\$3,500.00
				\$292,142.50