
TRAFFIC IMPACT ANALYSIS

SHORT TRIP GENERATION MEMO

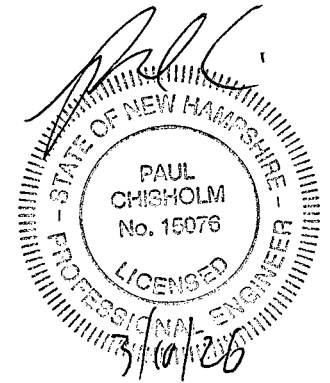
For

ROCK ROAD TOWNHOMES

Map 17; Lot 25
295 Rockingham Road
Londonderry, New Hampshire

May 6, 2025
Last Revised: March 10, 2026

KNA Project No. 21-0113-1



Prepared For: Page Rock, LLC
5 Hutchings Drive, Suite 5D
Hollis, New Hampshire 03049

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10 Commerce Park North, Suite 3
Bedford, New Hampshire 03110
(603) 627-2881
(603) 627-2915 (fax)

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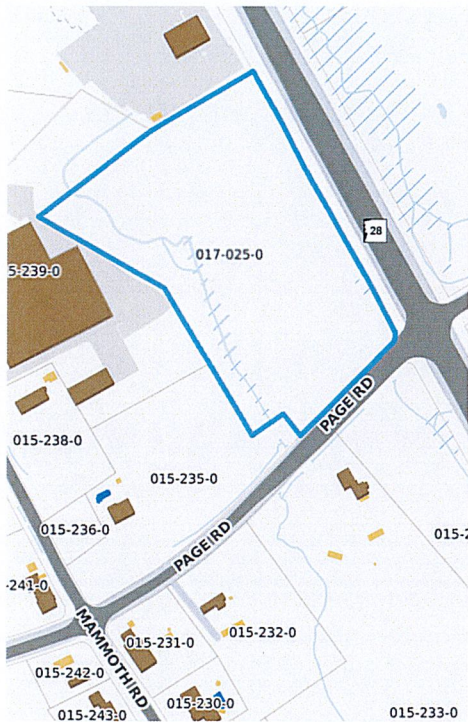
November 22, 2025

Town of Londonderry
Planning Department
268B Mammoth Road
Londonderry, NH 03054

Subject: Rock Road Townhomes
Short Form Traffic Impact Assessment
Map 17; Lot 25
295 Rockingham Road, Londonderry, New Hampshire
KNA Job No. 21-0113-1

On behalf of Page Rock, LLC (Owner & Applicant), Keach-Nordstrom Associates, Inc. respectfully submits the following short Traffic Impact Analysis (TIA), in accordance with the Town of Londonderry Site Plan Regulations Section 3.14.

The project proposes to develop the site to accommodate a 12-unit townhouse development consisting of two (2) buildings, with five (5) units in one and seven (7) in the other. Site work will include the erection of the two townhouse buildings, installation of a new driveway, and construction of the appropriate utilities and required stormwater management provisions.



The resulting traffic density falls under the “short” TIA criteria, since the project is anticipated to generate substantially less than 1,000 ADT and 100 PHT. As such, this TIA will include a description of the site, roadways, proposed driveway sight distance, and ITE trip generation with reasonable localized distribution analysis.

The project location map to the left was prepared using Town of Londonderry GIS mapping.

(Please also refer to additional USGS and Tax Map exhibits contained in the TIA appendix)

exceed the required all season safe sight distance requirements. Please refer to the sight distance plan & profile drawings included in this TIA report appendix.

TRIP GENERATION:

This TIA relies on empirical data provided by the Institute of Transportation Engineers (ITE) in their publication entitled Trip Generation Manual (12th edition) under Land Use Code 215: Single-Family Attached Housing in order to derive estimates of site generated traffic volumes (ITE Land Use Code 215 references data contained in TIA Appendix).

Trip Generation Calculation:	6.57 vehicles per day (vpd) x 12 units = <u>78.84 VPD</u> (weekday rate with 50% entering & 50% exiting)
AM Peak (Weekday)	0.57 vehicles per hour (vph) x 12 units = <u>6.84 VPH</u> (weekday rate with 23% entering & 77% exiting)
PM Peak (Weekday)	0.52 vehicles per hour (vph) x 12 units = <u>6.24 VPH</u> (weekday rate with 62% entering & 38% exiting)
Peak Hour (Saturday)	0.47 vehicles per hour (vph) x 12 units = <u>5.64VPH</u> (Saturday rate with 48% entering & 52% exiting)

Based on the above calculations, the proposed development is anticipated to generate the following traffic volumes at full build-out and occupancy:

- A weekday average of 79 vpd with 40 vpd entering and 40 vpd exiting;
- A weekday AM peak average of 7 vph with 2 vph entering and 5 vph exiting;
- A weekday PM peak average of 6 vph with 4 vph entering and 2 vph exiting; and
- A Saturday peak hour average of 6 vph.

TRIP DISTRIBUTION:

The proposed development will utilize existing roads and will not create any new road(s). This TIA assumes that the worst-case scenario of 98 vpd (Saturday average daily traffic) will be added to the surrounding roadways. The results are as follows:

Rockingham Road:	$\frac{79 \text{ vpd}}{(12,700 \text{ vpd})} \times 100 = \mathbf{0.62\%}$
Page Road:	$\frac{79 \text{ vpd}}{(4,600 \text{ vpd})} \times 100 = \mathbf{1.72\%}$

Overall, the additional daily traffic increase to adjacent roadways will be less than one (1) percent to Rockingham Road and approximately two (2) percent to Page Road. These minor increases are anticipated to be negligible. Additionally, the proposed development will generate substantially less than 1,000 average daily trips and 100 peak hour trips. Therefore, due to the minor nature of this project and negligible traffic increases, specific onsite traffic counts and peak hour distribution analysis were not performed as part of this "Short Form" TIA.

SUMMARY:

Although the proposed development will slightly increase local traffic, this minor quantitative increase is unlikely to adversely impact existing local traffic operations.

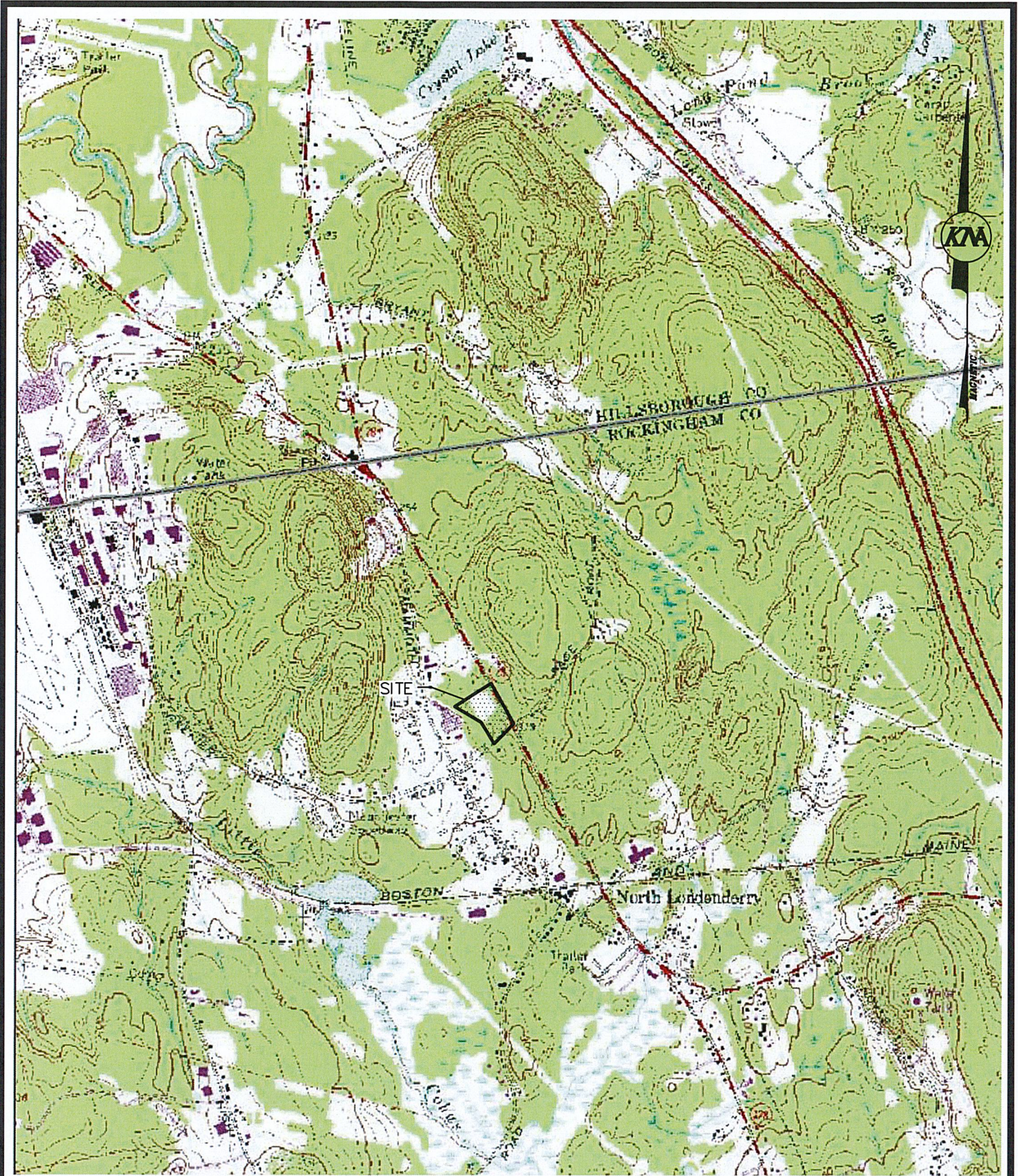
APPENDIX

USGS Location and Tax Map Aerial Exhibits

Driveway Sight Distance Plan & Profile

ITE Trip Generation Land Use Code 215

SNHPC Traffic Counts



KMA
 KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110
 Phone (603) 627-2881

TITLE:

USGS

295 ROCKINGHAM ROAD

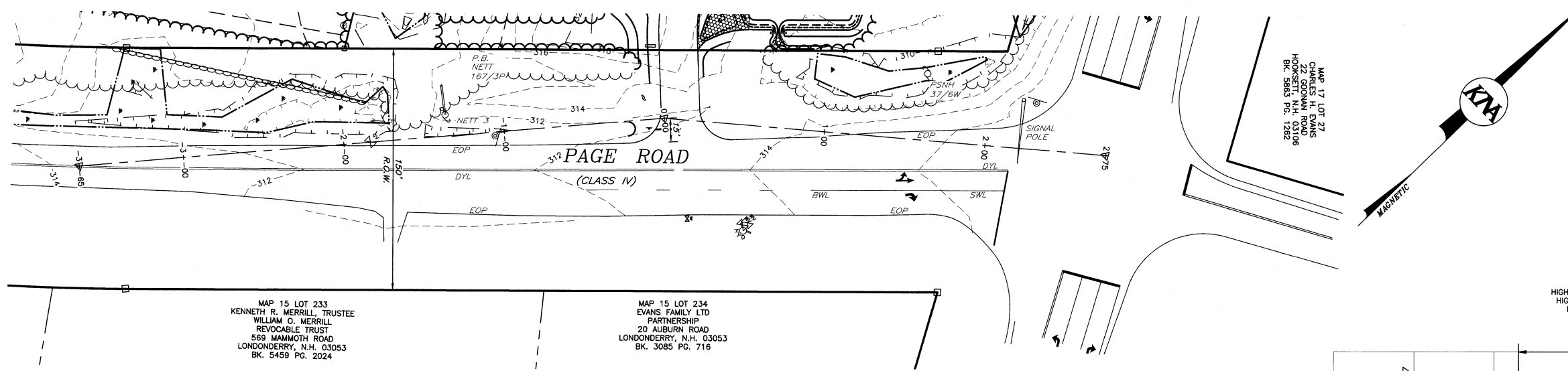
MAP 17; LOT 25 - 295 ROCKINGHAM ROAD - LONDONDERRY, NH

DATE: JUNE 26, 2024

JOB. NO. 21-0113-1

SCALE: 1" = 2000'

SHEET 1 OF 1



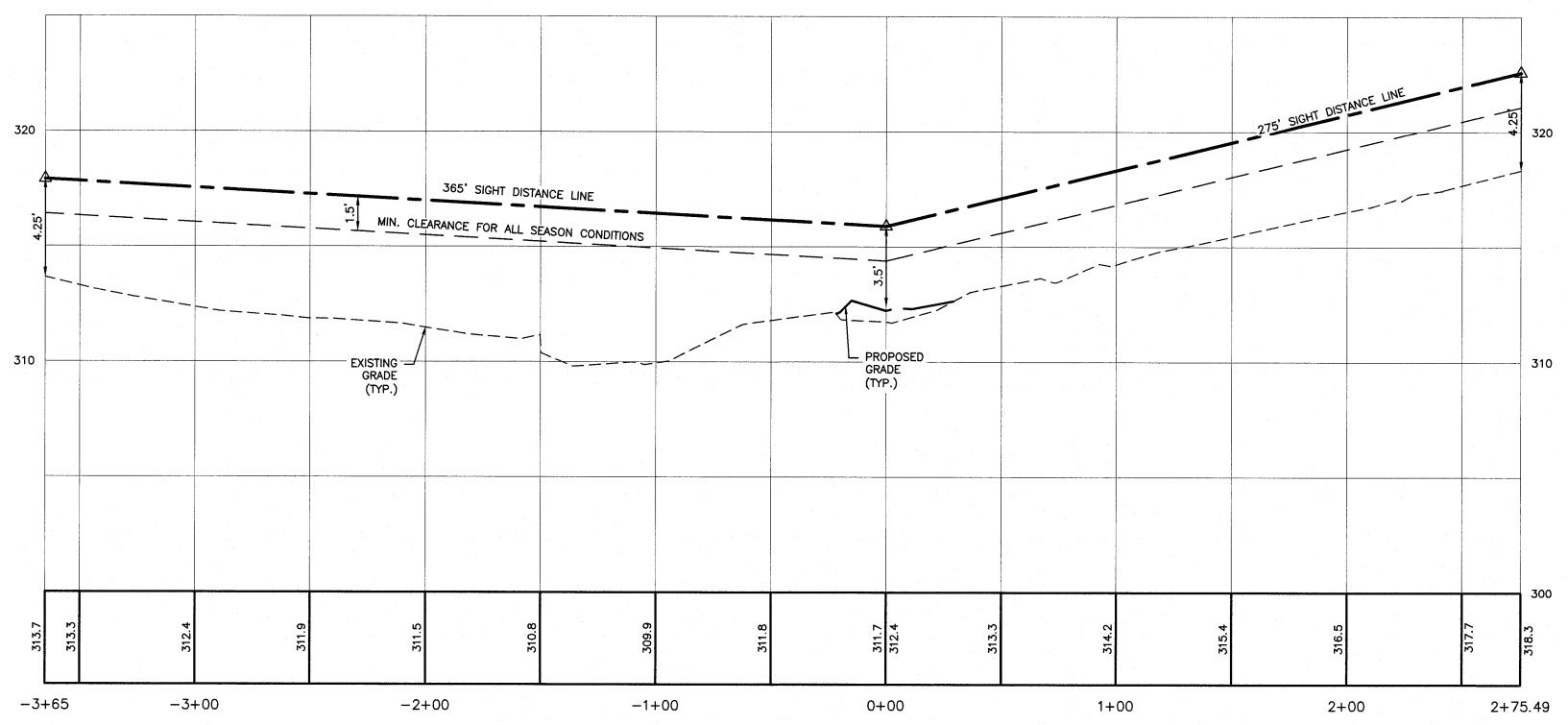
MAP 15 LOT 233
KENNETH R. MERRILL, TRUSTEE
WILLIAM O. MERRILL
REVOCABLE TRUST
569 MAMMOTH ROAD
LONDONDERRY, N.H. 03053
BK. 5459 PG. 2024

MAP 15 LOT 234
EVANS FAMILY LTD
PARTNERSHIP
20 AUBURN ROAD
LONDONDERRY, N.H. 03053
BK. 3085 PG. 716

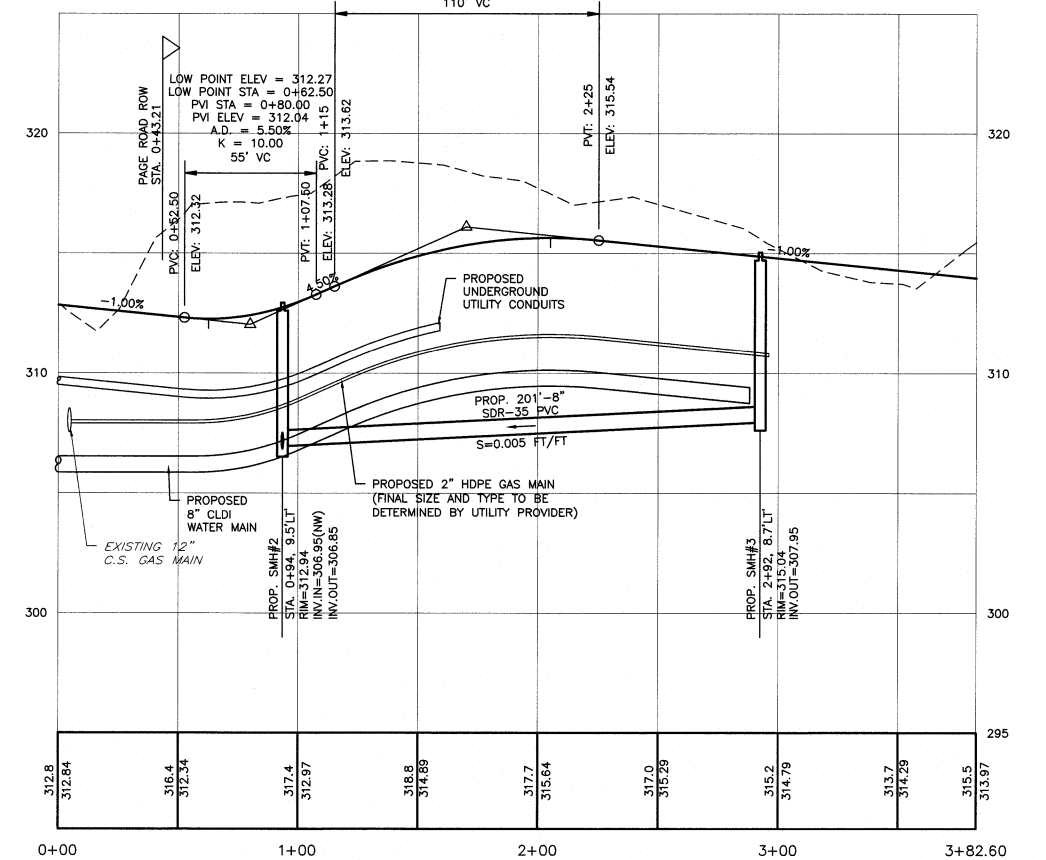
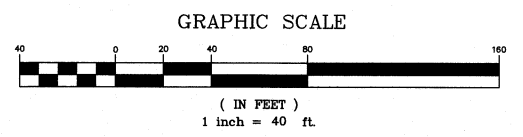
MAP 17 LOT 27
CHARLES H. EVANS
HOCKSETT ROAD
LONDONDERRY, N.H. 03053
BK. 5963 PG. 1282

SIGHT DISTANCE PLAN
SCALE: 1" = 40'

HIGH POINT ELEV = 315.64
HIGH POINT STA = 2+05
PVI STA = 1+70.00
PVI ELEV = 316.09
A.D. = -5.50%
K = 20.00
110' VC



SIGHT DISTANCE PROFILE
SCALE: 1" = 40' (HORIZ.)
1" = 4' (VERT.)



DRIVEWAY PROFILE
SCALE: 1" = 40' (HORIZ.)
1" = 4' (VERT.)

LEGEND

●	REBAR FOUND	---	PROPERTY LINE
○	IRON PIPE FOUND	---	ABUTTER LINE
⊕	UTILITY POLE	---	TREELINE
⊙	SIGN	---	EDGE OF PAVEMENT
⊕	GAS VALVE	---	BUILDING SETBACK
⊕	WATER VALVE	---	BUFFER LINE
⊕	HYDRANT	---	STONEWALL
⊕	WATER SHUT OFF	---	PROP. EDGE OF PAVEMENT
⊕	CATCH BASIN		

BENCHMARK DATA

LOCATION	DATUM	DESCRIPTION	NO.	DATE
N:155165.31, E:1054227.35	ELEV.=317.51 (NAVD88)	BENCHMARK #1 - MAGNAIL SET	1	11/25/25
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	2	2/20/25

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/25	ENGINEERING REVISIONS	PCM

- SIGHT DISTANCE NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE AVAILABLE SIGHT DISTANCE AT THE PROPOSED DRIVEWAY AND PAGE ROAD.
 2. THE CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS BETWEEN THE DRIVEWAY AND THE SIGHT LINES TO ACHIEVE VISIBILITY.
 3. THE OWNER SHALL MAINTAIN SIGHT LINES VISIBILITY AND REMOVE ALL OBSTRUCTIONS BETWEEN THE DRIVEWAY AND THE SIGHT LINES TO ACHIEVE VISIBILITY.

KEACH-NORDSTROM ASSOCIATES, INC. HEREBY CERTIFIES THAT THE ALL SEASON SAFE SIGHT DISTANCE, AS REQUIRED BY THE TOWN OF LONDONDERRY, IS ACHIEVED UPON COMPLETION OF THE IMPROVEMENTS SHOWN ON THIS PLAN

[Signature]
PROFESSIONAL ENGINEER

3/9/26
DATE

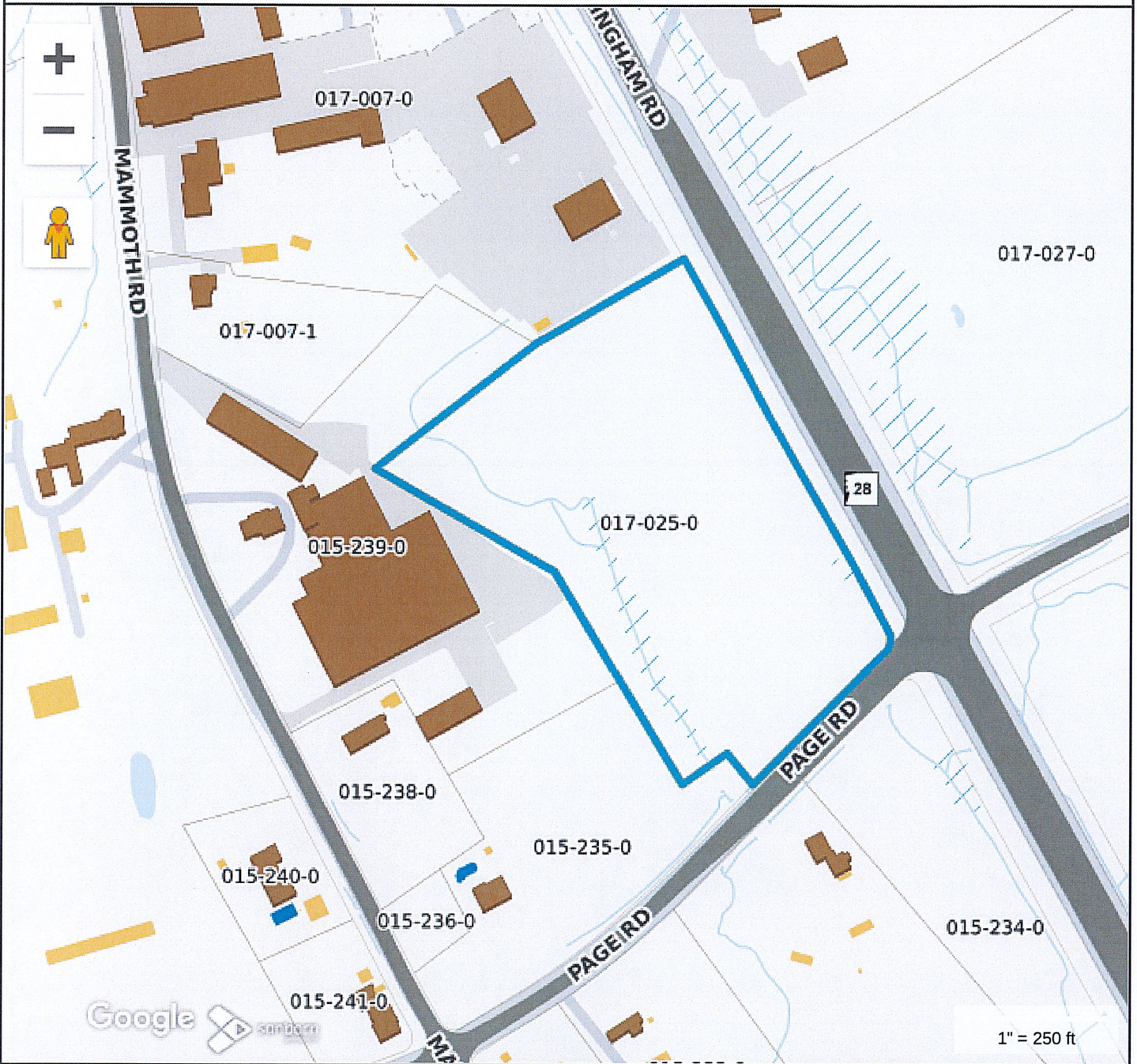
OWNER/APPLICANT:
PAGE ROCK, LLC
5 HUTCHINGS DRIVE, SUITE 5D
HOLLIS, N.H. 03049
BK. 6276 PG. 396

SIGHT DISTANCE & DRIVEWAY PLAN & PROFILE
ROCK ROAD TOWNHOMES
MAP 17 LOT 25
295 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE
ROCKINGHAM COUNTY

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

PROJ. NO: 21-0113-1
DATE: MAY 6, 2025
SCALE: 1" = 40'
FILE NO.:
SHEET NO. 11 OF 20

Tax Map



Property Information

Property ID 017-025-0
 Location 295 ROCKINGHAM RD
 Owner PAGE ROCK LLC



**MAP FOR REFERENCE ONLY
 NOT A LEGAL DOCUMENT**

Town of Londonderry, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 03/31/2025
 Data updated 03/31/2023

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

Single-Family Attached Housing (215)

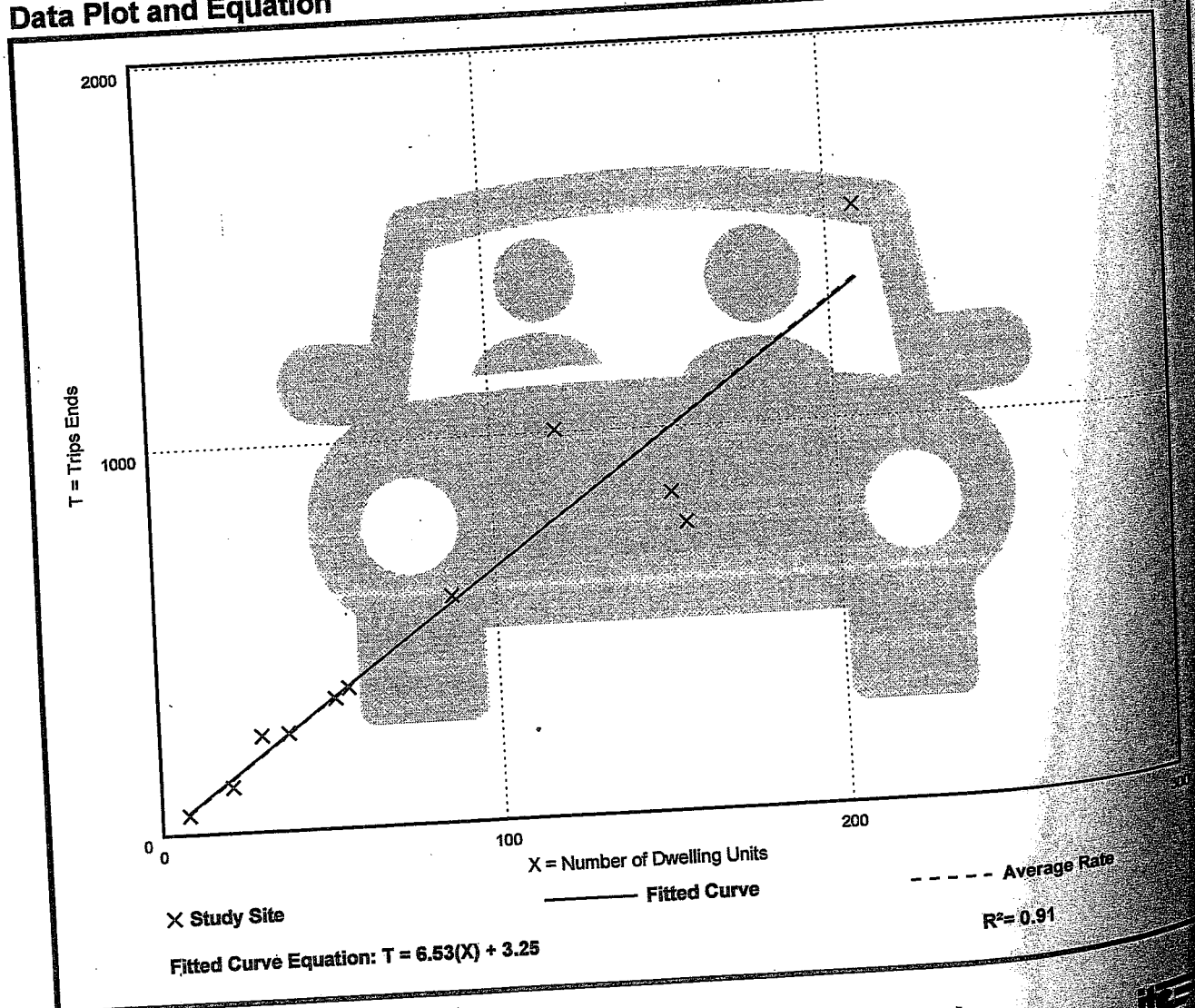
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 11
Avg. Num. of Dwelling Units: 84
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.57	4.80 - 8.45	1.28

Data Plot and Equation



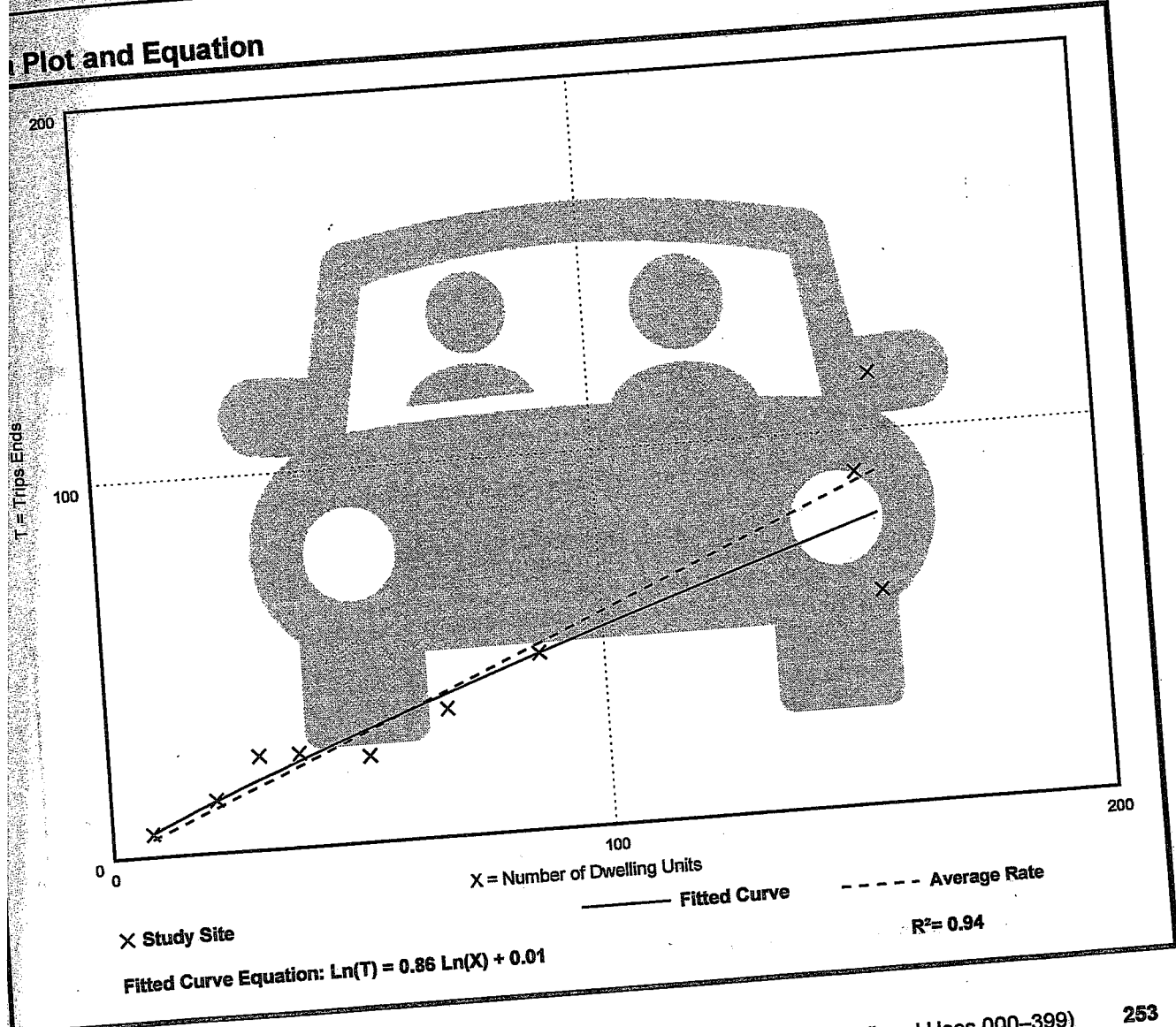
Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units
 On a: Weekday,
 AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
 Number of Studies: 10
 Avg. Num. of Dwelling Units: 77
 Directional Distribution: 23% entering, 77% exiting

Average Trip Generation per Dwelling Unit		
Average Rate	Range of Rates	Standard Deviation
0.57	0.37 - 0.83	0.15

Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 13

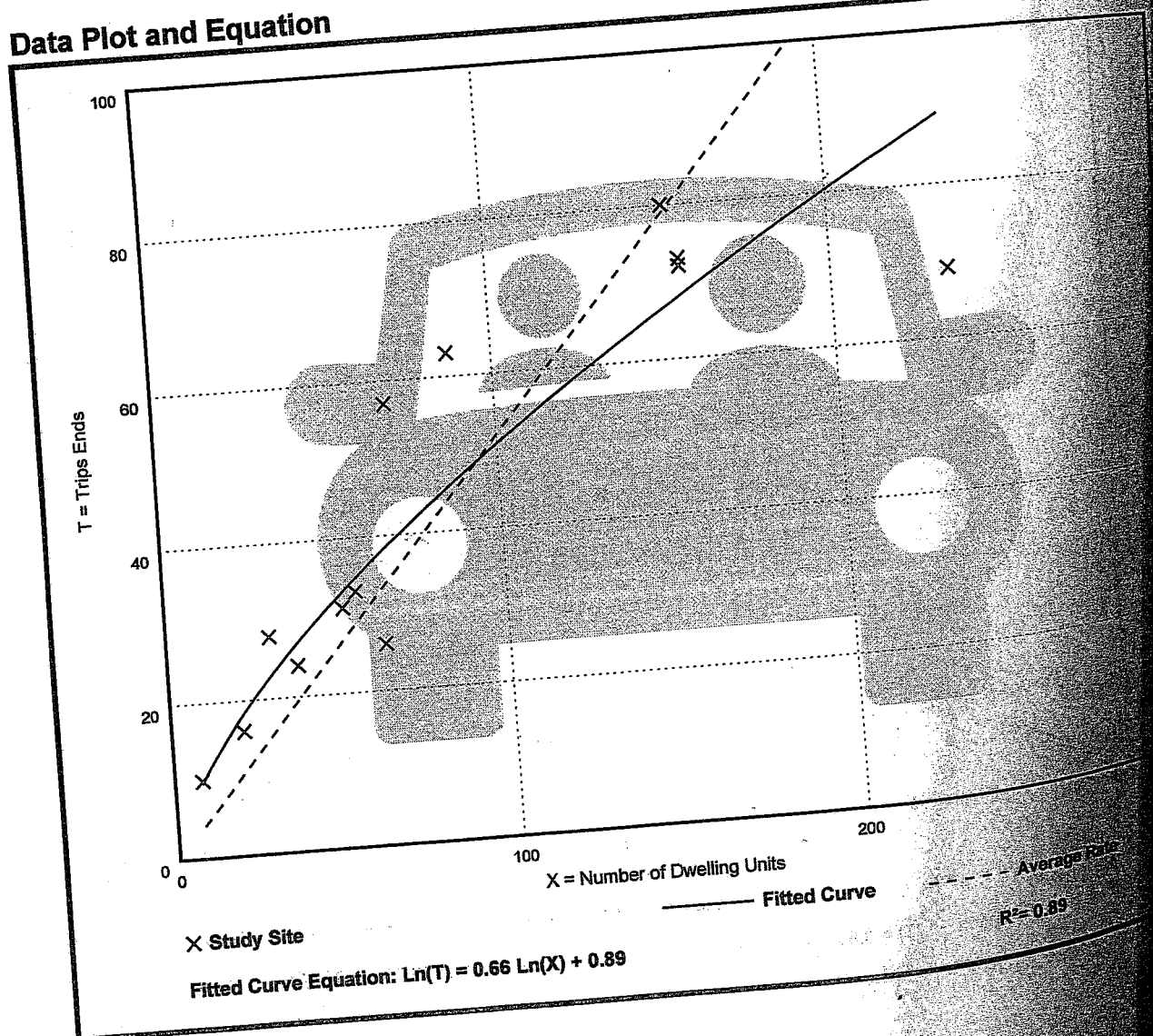
Avg. Num. of Dwelling Units: 86

Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.52	0.29 - 1.25	0.19

Data Plot and Equation



Single-Family Attached Housing (215)

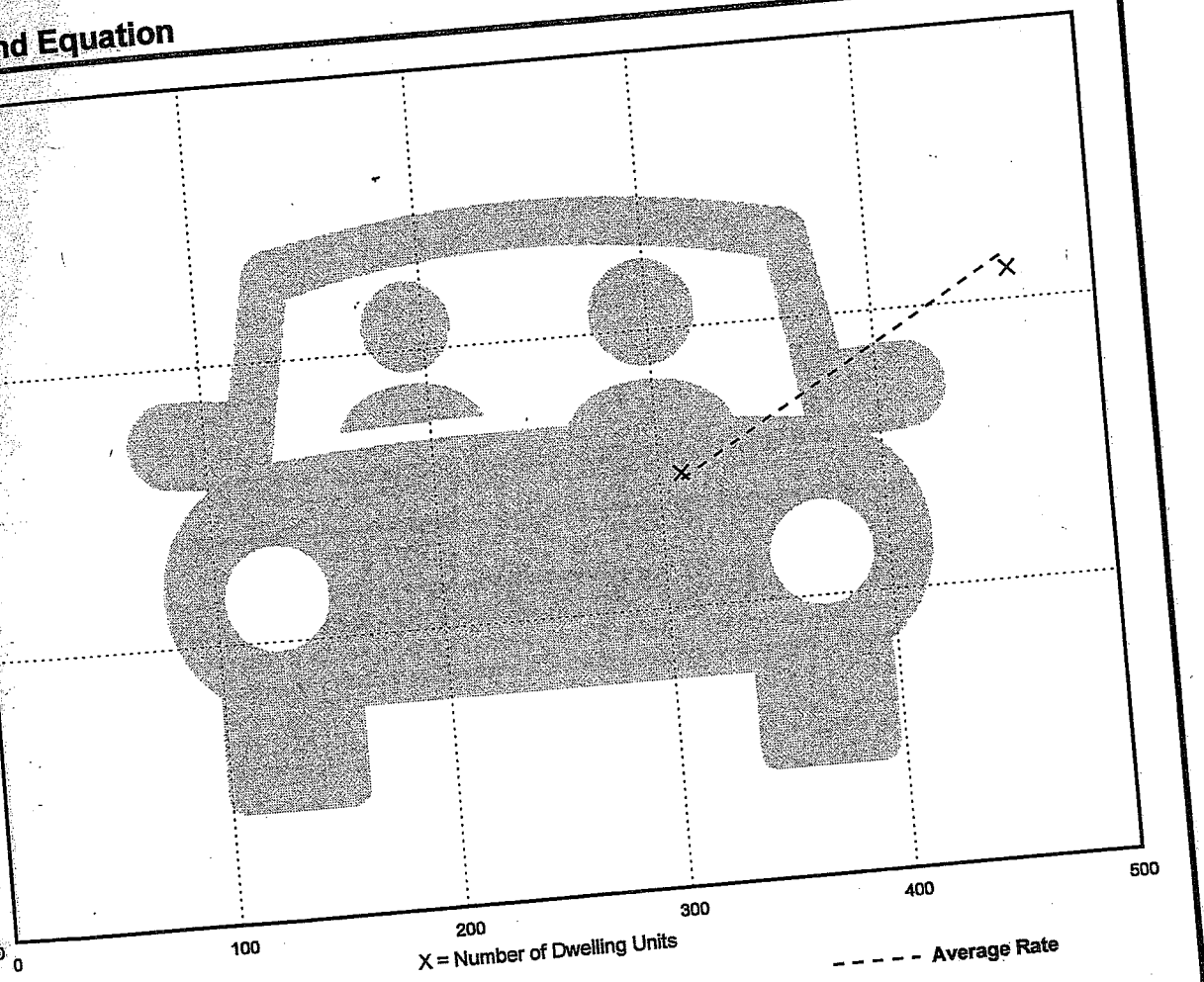
Vehicle Trip Ends vs: Dwelling Units
 On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
 Number of Studies: 2
 Avg. Num. of Dwelling Units: 386
 Directional Distribution: 48% entering, 52% exiting

Generation per Dwelling Unit		Standard Deviation
Rate	Range of Rates	***
0.47	0.46 - 0.48	

Caution - Small Sample Size

Fitted Curve Equation



Fitted Curve Equation: Not Given

SNHPC TRAFFIC COUNTS:

Most Recent AADT: 12,700	
Count Location	NH 28 ROCKINGHAM RD SOUTH OF B&M RAILRD (NORTH OF SANBORN RD)
Municipality	Londonderry
Count ID	82269069
2023 AADT	
2022 AADT	
2021 AADT	12,700
2020 AADT	
2019 AADT	
2018 AADT	12,400
2017 AADT	
2016 AADT	
2015 AADT	13,000
Zoom to	...

Most Recent AADT: 4,600	
Count Location	PAGE RD EAST OF MAMMOTH RD
Municipality	Londonderry
Count ID	269552
2023 AADT	4,600
2022 AADT	
2021 AADT	
2020 AADT	
2019 AADT	
2018 AADT	
2017 AADT	
2016 AADT	3,700
2015 AADT	
2014 AADT	
Zoom to	...