

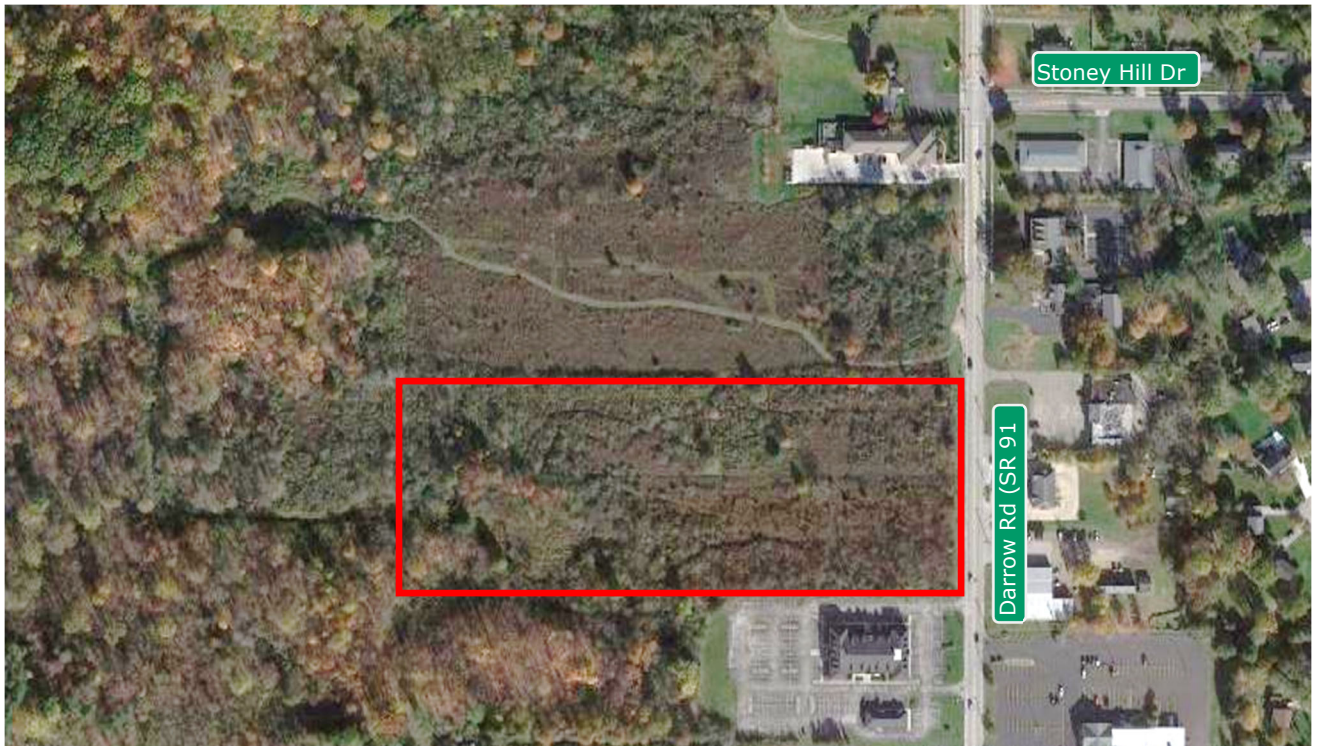
Trip Generation and Sight Distance Evaluation

Preserve of Hudson

City of Hudson, Ohio

Dear Ms. Cohan Plessner,

The purpose of this letter is to provide a trip generation for the proposed Preserve of Hudson residential development to be located on Darrow Road (SR 91) in the City of Hudson, Ohio. The proposed site is located on the west side of Darrow Road (SR 91) south of Stoney Hill Drive on what is currently vacant land. See **Attachment A** for a preliminary site plan of the proposed Preserve of Hudson townhomes.



Trip Generation

Trip generation calculations were performed utilizing the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. This manual includes data from numerous trip generation studies of different land uses that have been performed by public agencies, developers, consulting firms and associations and submitted to ITE. It serves as a tool for estimating the number of vehicle trips generated

by a proposed development. These trip generation calculations will evaluate the weekday AM and PM peak hour as these would be expected to be the busiest timeframes for a residential development. According to information contained in the ITE Trip Generation Manual, 11th Edition, the proposed Preserve of Hudson residential development is expected to generate the following trip ends once constructed:

LAND USE 215 – Single Family Attached Housing

- i. Weekday AM Peak Hour (Peak Hour of Adjacent Street):
= 14 trip ends (3 enter and 11 exit)
- ii. Weekday PM Peak Hour (Peak Hour of Adjacent Street):
= 13 trip ends (8 enter and 5 exit)

Note that the variable utilized in the trip generation calculations was 'dwelling units', which in this case is 29 homes. See **Attachment B** for the detailed trip generation calculations.

Sight Distance Evaluation

The sight distance looking north and south along Darrow Road (SR 91) from the proposed drive location was evaluated. The posted speed limit on Darrow Road (SR 91) is 35 mph, resulting in a design speed of 40 mph. According to the ODOT Location and Design Manual, Volume 1, intersection sight distance (ISD) of 445' is required for vehicles making a left turn from the side street, and 385' ISD is required for vehicles making a right turn from the side street.

Looking north along Darrow Road (SR 91), the signal at the Stoney Hill Drive intersection is visible, indicating that motorists from the proposed access drive have sight distance of approximately 570'. To the south, the signal at Barlow Road is visible, indicating a sight distance of 1,650'. These both exceed the required ISD for a design speed of 40 mph.

Summary & Conclusions

The trip generation for the proposed Preserve of Hudson residential development indicates that there will be less than 15 trips in both the AM and PM peak hours, which is not expected to have any impact on traffic operations along Darrow Road (SR 91). Sight distance evaluation indicates that there is ample ISD in both directions from the proposed access drive location.

If you have any questions regarding this Trip Generation and Sight Distance Evaluation, please feel free to contact me at (216) 927-8688 or via email at kwestbrooks@gpdgroup.com.

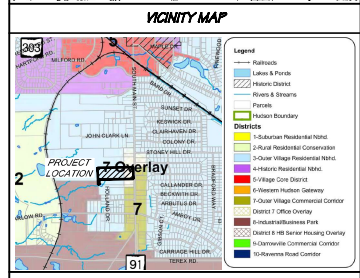
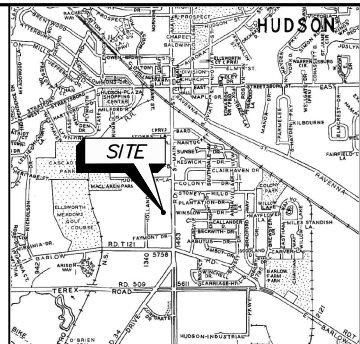
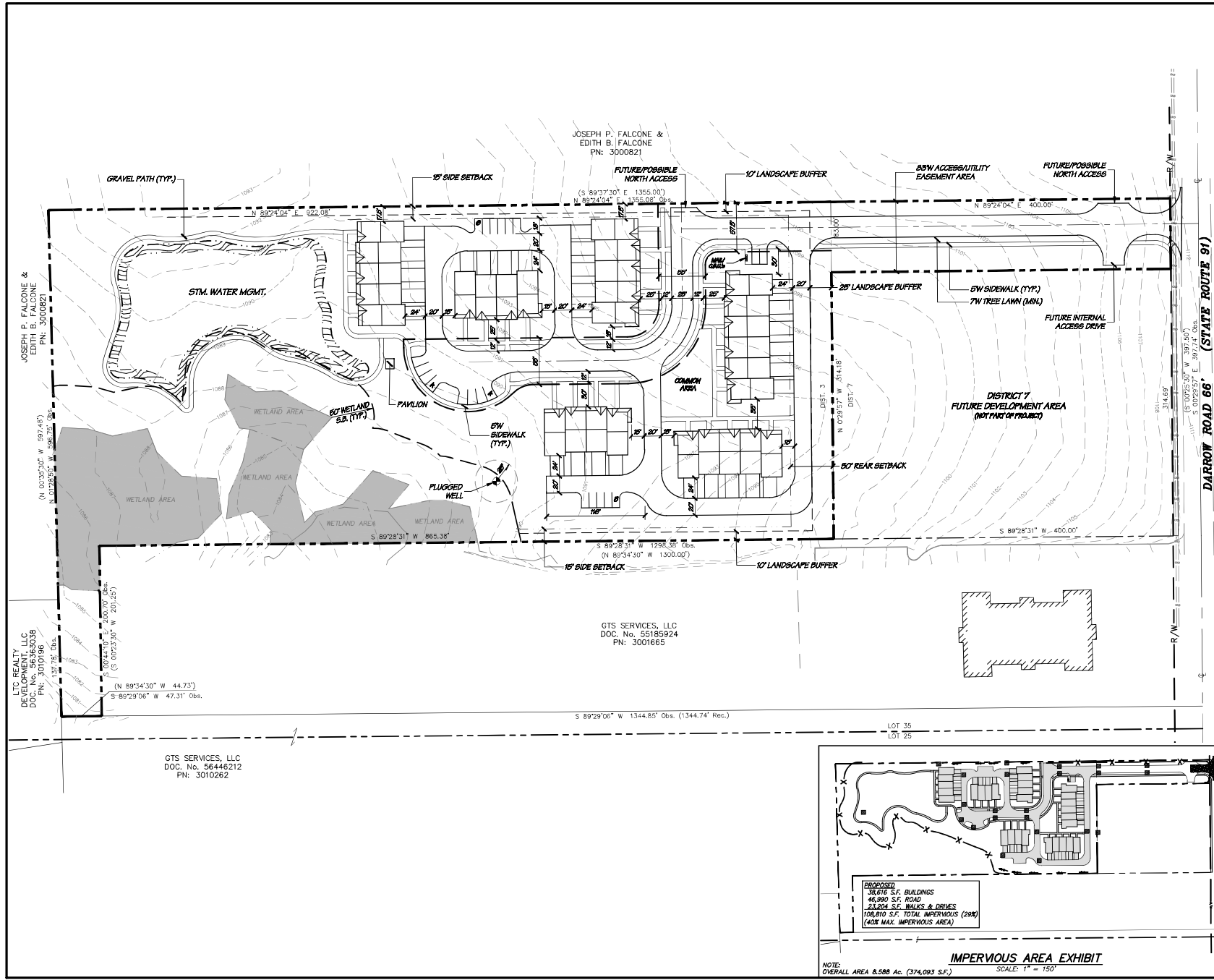
Respectfully Submitted,
GPD Group



Kevin P. Westbrooks, P.E., PTOE
Project Manager / Traffic Engineer

CC: Judy Bennett, P.E., PTOE (GPD Group)
File

ATTACHMENT A



CITY OF HUDSON ZONING MAP

SITE PLAN / CONDITIONAL USE PRESERVE OF HUDSON

PART OF ORIGINAL HUDSON TOWNSHIP, LOT 35 NOW IN THE CITY OF HUDSON, SUMMIT COUNTY, OHIO

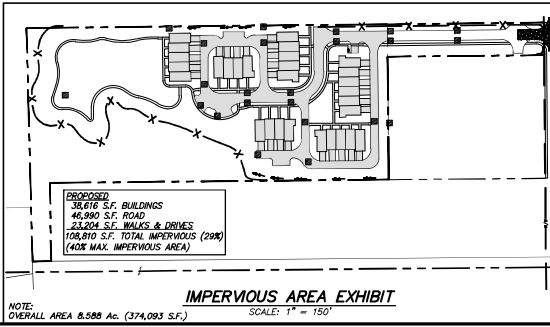
Developer:
TRUMAN INVESTMENT, LLC
1800 PUEBLO DR., SUITE 200
PARMA, OHIO 44134
HANKA FLEISHER
PH (440) 246-0066

Prepared By:
DONALD G. BARNHART & ASSOCIATES, INC.
1070 HUB PARSONS
VALLEY VIEW, OHIO 44150
GREGORY W. BARNHART
PH (330) 646-1800

Landscaping Plans By:
BDO
BDO IN OPENING INC., SUITE 200
COLUMBUS, OHIO 43260
JOHN MCCORMICK
PH (614) 496-5848

Survey By:
CHAMBERLAIN & ASSOCIATES, INC.
3840 PORTLAND DR., SUITE 200
AKRON, OHIO 44316
JAMES TUCKERHILL
PH (330) 646-4177

Wetlands:
NEW INVESTMENT CONSULTANTS, LLC
6100 HEBBLY ROAD
MANTON, OHIO 44020
PH (440) 595-6880



OR. NO. 04466 DATE: APR. 08, 2024
GRAPHIC SCALE:
1" = 20'
1" = 40'
1" = 80'
1" = 160'
1" = 320'
1" = 640'

NOTES:
OVERALL AREA 8,588 AC. (374,093 S.F.)
SCALE: 1" = 150'

ATTACHMENT B

Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 46

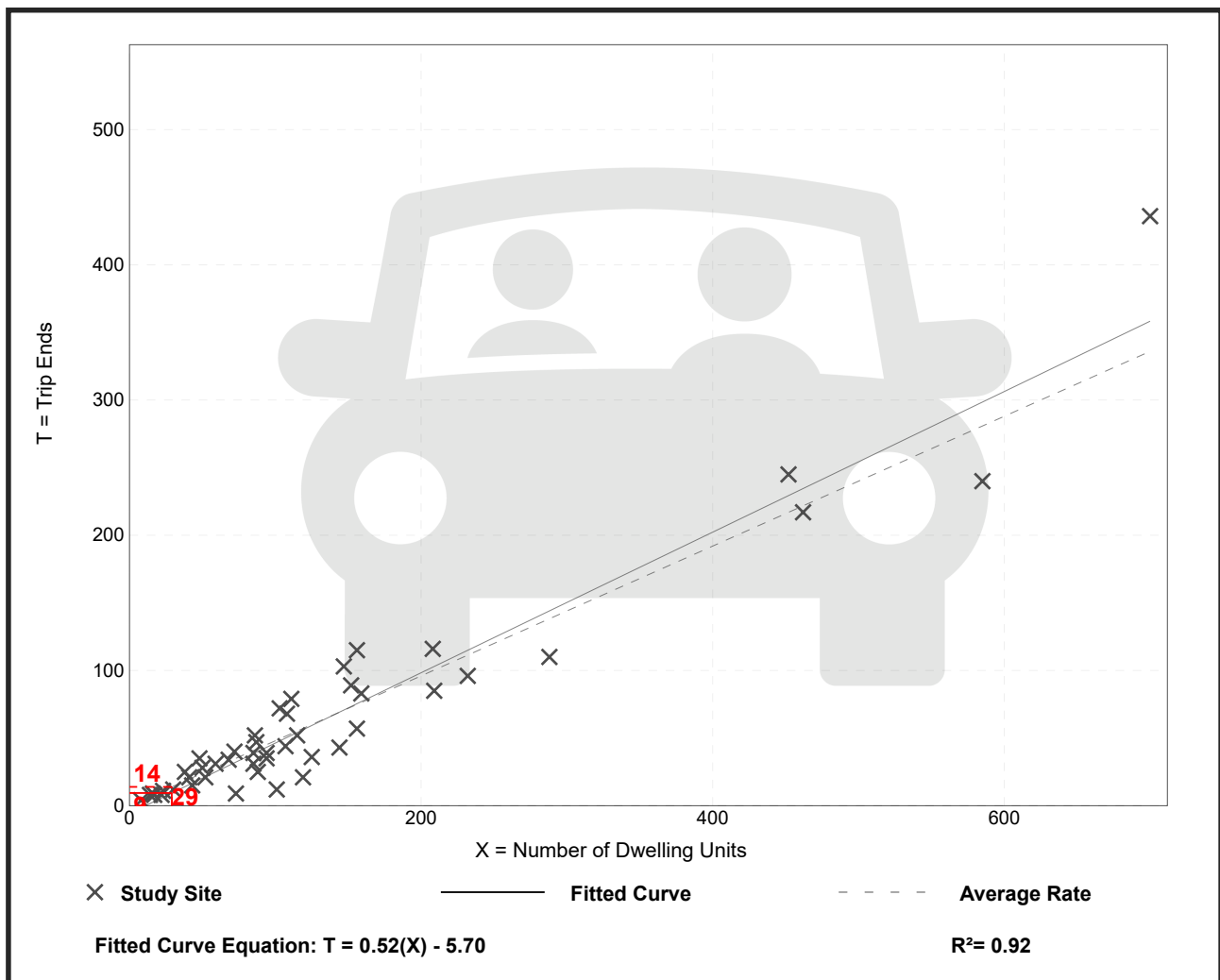
Avg. Num. of Dwelling Units: 135

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 51

Avg. Num. of Dwelling Units: 136

Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation

