

FINAL DEVELOPMENT PLAN APPLICATION

PLEASE NOTE: This application is not to be considered complete until all documents are received and approved by the Planning & Zoning Administrator.

Project/Property Address or Location: 1041 North Hamilton Road		Project Name/Business Name (if applicable): The Shops at Oberer's Crossing	
Parcel ID No.(s): 025-009953	Current Zoning: PCC	Total Acreage: 5.19	
Project Description: Neighborhood service retail, office and restaurant in three buildings located at the southwest corner of Beecher Road and North Hamilton Road.			
APPLICANT Name (primary contact) -do not use a business name: Academy Development Limited Partnership		Applicant Address: 107 S. High Street, Suite 300, Columbus, OH 43215	
Applicant E-mail: jsugar@arshot.com		Applicant Phone No.: 614-463-9730	
BUSINESS Name (if applicable):			
ATTORNEY/AGENT Name: Glen A. Dugger, Smith & Hale LLC		Attorney/Agent Address: 37 W. Broad Street, Columbus, OH 43215	
Attorney/Agent E-Mail: gdugger@smithandhale.com		Attorney/Agent Phone No.: 614-221-4255	
ADDITIONAL CONTACTS (please list all applicable contacts)			
Name(s): Contractor Feller Finch & Associates Developer Architect Gieseke Rosenthal Architecture + Design		Contact Information (phone no./email): Greg Feller; 419-893-3680; feller@fellerfinch.com Joe Moss; 614-228-2122; moss@grad.cc	
PROPERTY OWNER Name: (if different from Applicant)		Property Owner Contact Information (phone no./email): Joseph A. Sugar; 614-463-9730; jsugar@arshot.com	

APPLICANT SIGNATURE BELOW CONFIRMS THE SUBMISSION REQUIREMENTS HAVE BEEN COMPLETED (see page 2)

I certify that the information on this application is complete and accurate to the best of my knowledge, and that the project as described, if approved, will be completed in accordance with the conditions and terms of that approval.

Applicant Signature:  Date: 10/3/2017
THIS FORM IS AVAILABLE TO BE SUBMITTED ONLINE: www.gahanna.gov

INTERNAL USE

PC Meeting Date: _____
PC File No. _____

RECEIVED: _____
DATE: _____

DATE: _____
CHECK#: _____

FINAL DEVELOPMENT PLAN APPLICATION – SUBMISSION REQUIREMENTS

PLEASE NOTE: This application is not to be considered complete until all documents are received and approved by the Planning & Zoning Administrator.

STAFF USE - INTAKE	TO BE COMPLETED/SUBMITTED BY THE APPLICANT:	APPLICANT		STAFF USE	
		YES	N/A	YES	N/A
	1. Review Gahanna Code Section 1108 (visit www.municode.com) & Chapter 914 , Tree Requirements				
	2. Review the State of Ohio Fire Code Fire Service Requirements				
	3. Pre-application conference with staff	X			
FINAL DEVELOPMENT PLAN shall contain the following:					
	4. Scale: Minimum - one inch equals 100 feet.	X			
	5. The proposed name of the development, approximate total acreage, north arrow, and date	X			
	6. The names of any public and/or private streets adjacent to or within the development	x			
	7. Names and addresses of owners, developers and the surveyor who designed the plan	X			
	8. Vicinity map showing relationship to surrounding development and its location within the community	X			
	9. Natural features currently within proposed development, including drainage channels, tree lines, bodies of water, and other significant features	X			
	10. Current zoning district, building and parking setbacks	X			
	11. Proposed location, size and height of building and/or structures	X			
	12. Proposed driveway dimensions and access points	X			
	13. Proposed parking and number of parking spaces	X			
	14. Distance between buildings	X			
	15. Any other information the Planning Commission may deem to be necessary to evaluate the application. These items can include such things as elevations, traffic studies, floor plans, etc.				
THE DEVELOPER SHALL SUBMIT A TABLE OF DEVELOPMENT CALCULATIONS. TABLE SHALL INCLUDE:					
	16. Parking calculations: (square footage of proposed buildings, number of spaces per square foot, number of spaces required, and actual number of spaces proposed)	X			
	17. Lot coverage calculations: (square footage of site, area of permanently impervious surfaces broken down into buildings and parking, area of uncovered land, coverage requirements, proposed lot coverage)	X			
	18. Setback calculations, (if needed)				
	19. Landscaping calculations: (square footage of pavement, proposed area of landscaping, square footage of landscaping, number of two-inch caliper trees required, and number of trees proposed)	X			
	20. List of contiguous property owners & their mailing address	X			
	21. Pre-printed mailing labels for all contiguous property owners	✓			
	22. Application fee (in accordance with the Building & Zoning Fee Schedule)	✓			
	23. Application & all supporting documents submitted in digital format	✓			
	24. Application & all supporting documents submitted in hardcopy format	✓			
	25. Authorization Consent Form Complete & Notarized (see page 3)	✓			

THIS FORM IS AVAILABLE TO BE SUBMITTED ONLINE: www.gahanna.gov

APPLICATION ACCEPTANCE

This application has been reviewed and is considered complete and is hereby accepted by the Zoning Division of the City of Gahanna and shall be forwarded to the City of Gahanna Planning Commission for consideration.

Planning & Zoning Administrator Signature: _____

Date: _____

4/13/18

PROPERTY OWNER

Academy Development L.P.
c/o Joe Sugar
107 South High Street
Columbus, OH 43215

Michelle Carter
Paul Szymanski
"or current occupant"
1040 Ridge Crest Drive
Columbus, OH 43220

Ronald A & Janice E Stahl
"or current occupant"
1022 Ridge Crest Drive
Columbus, OH 43220

Constance Camman
"or current occupant"
400 Beecher Road
Columbus, OH 43220

Canini Investments Ltd
"or current occupant"
630 Link Road
Grove City, OH 43123

State of Ohio
"or current occupant"
2003 Millikin Road, Suite 200
Columbus, OH 43210

SURROUNDING PROPERTY OWNERS

Joseph S & Beverly S Gyure
"or current occupant"
1034 Ridge Crest Drive
Columbus, OH 43220

Mary Louise Cartwright TR
"or current occupant"
1016 Ridge Crest Drive
Columbus, OH 43220

Hammerhead-Gahanna LLC
"or current occupant"
2555 Bethel Road
Columbus, OH 43220

Cruise-N-Carwash LLC
"or current occupant"
1040 North Hamilton Road
Gahanna, OH 43230

William C Johnson
Huei-Nin Liu-Johnson
"or current occupant"
1028 Ridge Crest Drive
Columbus, OH 43220

James P & Jane F Peck
"or current occupant"
1010 Ridge Crest Drive
Columbus, OH 43220

4328 North Hamilton Road Properties
"or current occupant"
4328 North Hamilton Road
Columbus, OH 43230

Otterbein Gahanna Real Estate LLC
"or current occupant"
580 North State Route 741
Lebanon, OH 45036

AUTHORIZATION CONSENT FORM

(must sign in the presence of a notary)

If you are filling out more than one application for the same project & address, you may submit a copy of this form with additional applications.

AUTHORIZATION FOR OWNER'S APPLICANT OR REPRESENTATIVE(S) If the applicant is not the property owner, this section must be completed & notarized.

I, William J. Schottenstein, the owner or authorized owner's representative of the subject property listed on this application, hereby authorize Glen A. Dugger to act as my applicant or representative(s) in all matters pertaining to the processing and approval of this application, including modifying the project. I agree to be bound by all terms and agreements made by the designated representative.

Property Owner Signature: [Signature]

Date: 10/3/2017

AUTHORIZATION TO VISIT THE PROPERTY

I, William J. Schottenstein, the owner or authorized owner's representative of the subject property listed on this application, hereby authorize City representatives to visit, photograph and post notice (if applicable) on the property as described in this application.

Property Owner Signature: [Signature]

Date: 10/3/2017

NOTARY

Subscribed and sworn to before me on this 3rd day of October, 2017.

State of Ohio County of Franklin

Notary Public Signature: [Signature]



JOSEPH A. SUGAR, III
Attorney At Law
NOTARY PUBLIC
STATE OF OHIO
My Commission Has
No Expiration Date
Section 147.03 O.R.C.

AGREEMENT TO COMPLY AS APPROVED

I, William J. Schottenstein, the applicant of the subject property listed on this application, hereby agree that the project will be completed as approved and any proposed changes to the approved plans shall be submitted for review and approval to the Zoning Division staff.

Applicant Signature: [Signature]

Date: 10/3/2017

NOTARY

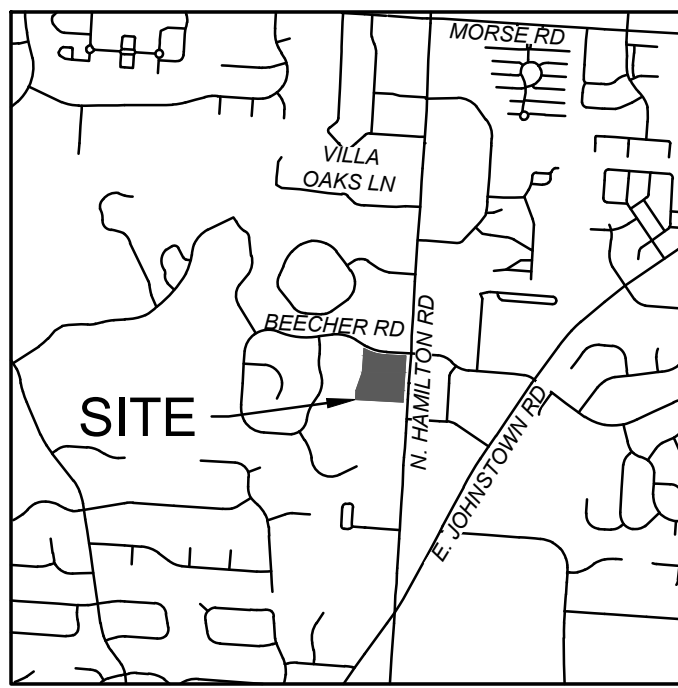
Subscribed and sworn to before me on this 3rd day of October, 2017.

State of Ohio County of Franklin

Notary Public Signature: [Signature]



JOSEPH A. SUGAR, III
Attorney At Law
NOTARY PUBLIC
STATE OF OHIO
My Commission Has
No Expiration Date
Section 147.03 O.R.C.



INDEX MAP
NTS



DEVELOPMENT DATA

SITE ANALYSIS:

AREA: 5.19 ACRES
EXISTING ZONING: PCC
TYP. PARKING STALL: 9' x 19'
TYP. AISLE WIDTH: 25'
SIDEWALK WIDTH: 4' MIN
PAVEMENT SURFACE: ASPHALT
TOTAL BUILDING AREA: 32,094 SF
BUILDING HEIGHT x WIDTH: 26' x 40'
FRONT YARD: 60'
SIDE YARD: 10'
REAR YARD: 15'
SETBACK REQUIRED TO RESIDENTIAL: 1/4 OF THE SUM OF BUILDING HEIGHT AND WIDTH
 $26' + 40' = 66' \times 1/4 = 16.5'$
SETBACK PROVIDED TO RESIDENTIAL: 82.92'
PARKING SETBACK: 36' (60% OF FRONT SETBACK)
EXISTING SITE: WOODED

LOT COVERAGE AND PARKING:

SITE AREA: 226,135 SF
BUILDING AREA: 32,094 SF (14.8%)
SPACES PER BUILDING S.F.: 0.0066
PAVEMENT COVERAGE: 91,156 SF (39.7%)
TOTAL COVERED AREA: 123,250 SF
UNCOVERED LAND: 102,885 SF
PROPOSED LOT COVERAGE: 54.5%
COVERAGE REQUIREMENT: 75% MAX
INTERIOR LANDSCAPING REQUIRED: 4,489 SF (5% OF PAVEMENT COVERAGE)
INTERIOR LANDSCAPING PROVIDED: 5,198 SF
3" CALIPER TREES REQUIRED: 45
3" CALIPER TREES PROVIDED: SEE LANDSCAPE PLAN
REQUIRED PARKING: RETAIL - 1 SPACE/300 SF * 24,794 SF = 86
RESTAURANT - 1 SPACE/50 SF * 24,794 SF = 126
TOTAL = 212
PROVIDED PARKING: 212
*PAVEMENT COVERAGE INCLUDES ALL IMPERVIOUS AREAS OTHER THAN THE BUILDINGS

OWNER
ACADEMY DEVELOPMENT LIMITED PARTNERSHIP
107 SOUTH HIGH STREET, 3RD FLOOR
COLUMBUS, OHIO 43215
PHONE: 614-463-9730

ENGINEER
AMERICAN STRUCTUREPOINT
2550 CORPORATE EXCHANGE DRIVE, SUITE 300
COLUMBUS, OHIO 43231
PHONE: 614-901-2235

NOTES:

- ALL RADII ARE 4.5' UNLESS OTHERWISE DIMENSIONED.
- ALL LANE WIDENING LIMITS ARE SHOWN FOR PRELIMINARY CONCEPTUAL PLANNING PURPOSES ONLY.

FINAL DEVELOPMENT PLAN FOR

THE SHOPS AT OBERER'S CROSSING

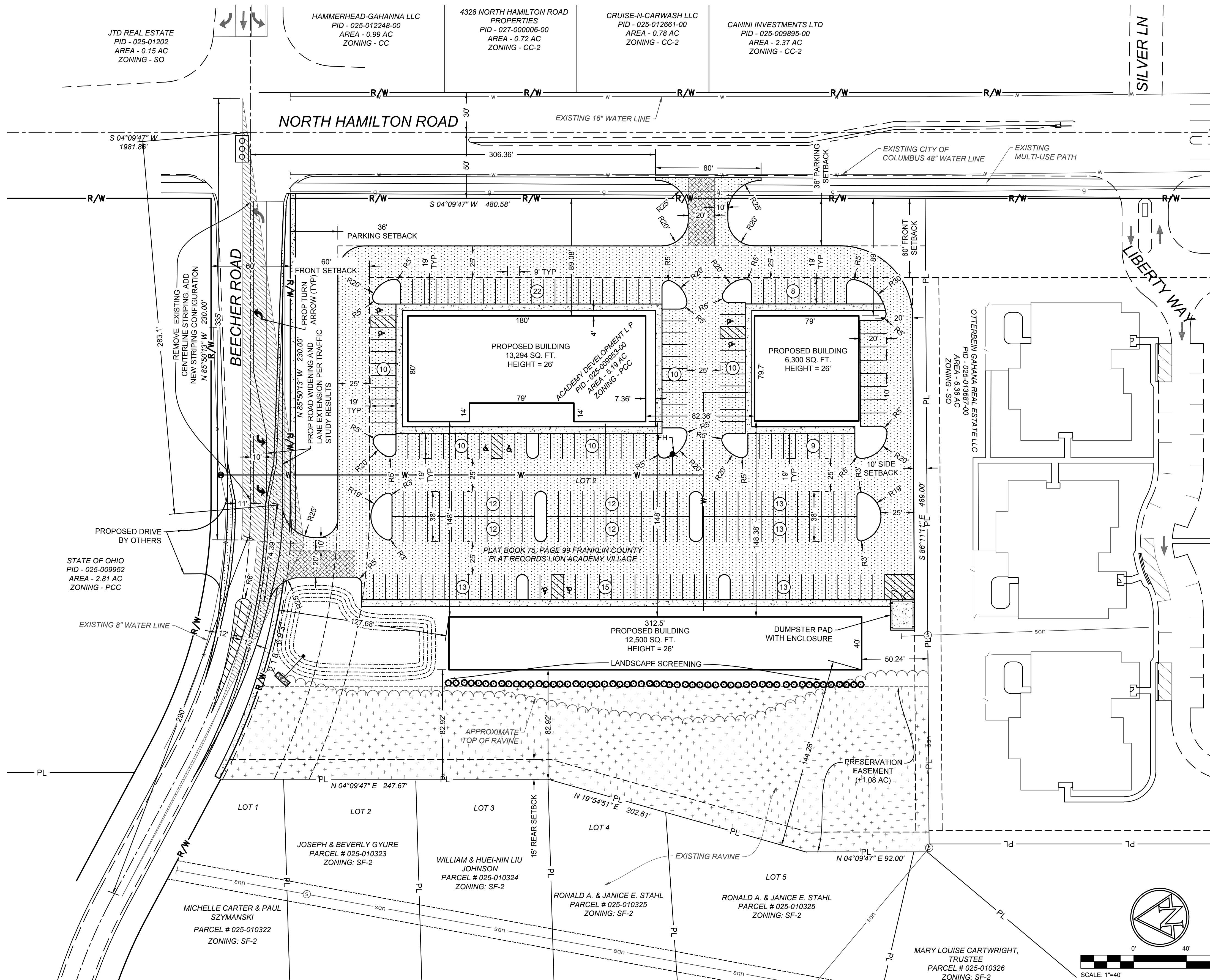
GAHANNA, FRANKLIN COUNTY, OHIO

RECEIVED

By KAW at 1:44 pm, Apr 17, 2018

SITE LEGEND

- PL PROPERTY LINE
- R/W RIGHT-OF-WAY
- W WATER SERVICE
- (X) PARKING STALL COUNT
- ASPHALT PAVEMENT
- CONCRETE
- SIGHT DISTANCE TRIANGLE
- PRESERVATION EASEMENT AREA
- 20' FIRE INGRESS



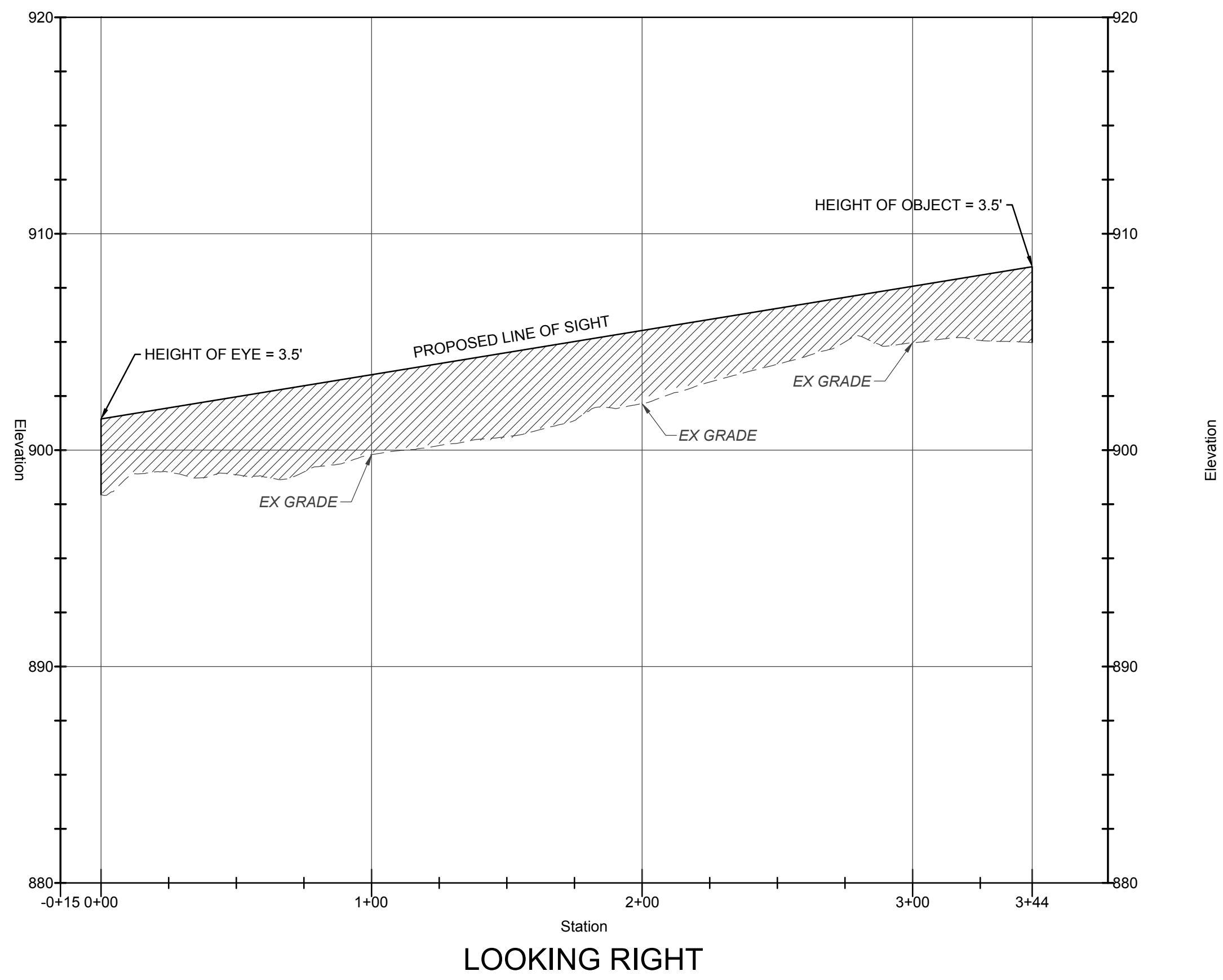
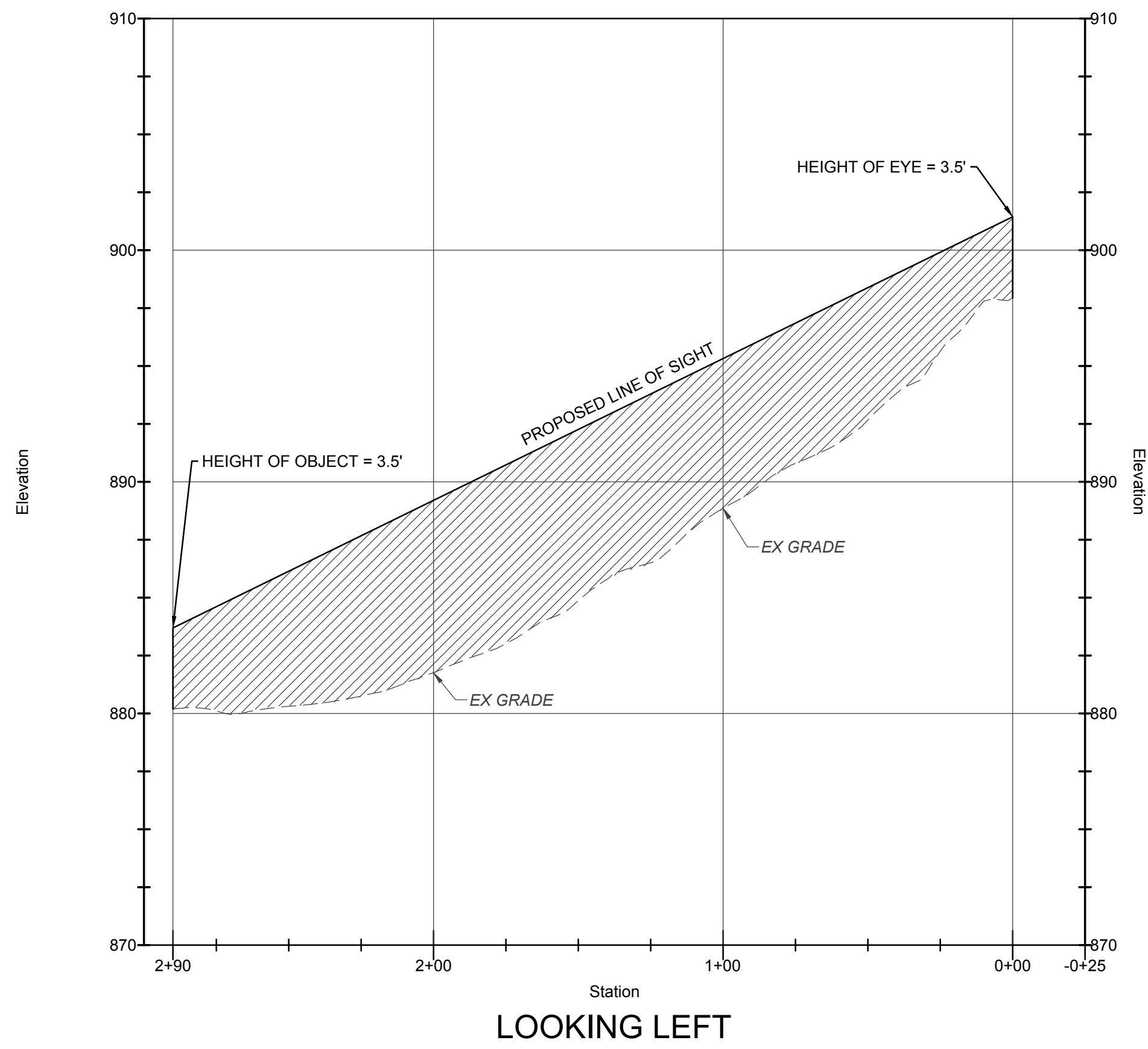
FINAL DEVELOPMENT PLAN FOR THE SHOPS AT OBERER'S CROSSING GAHANNA, FRANKLIN COUNTY, OHIO LOCATION PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION	APPROVED	DATE

DATE:	04/16/2018
DRAWN BY:	BAJ
CHECKED BY:	OSD
JOB NUMBER:	2017.02838

C100

PLOT SCALE: 1"=40' DATE: 4/16/18 - 10:04 AM EDITED BY: BJOHNSON DRAWING FILE: O:201702838D DRAWINGSS\CIVIL\PLAN SET\FDP2017.02838 PP PNP DWG



INTERSECTION SIGHT DISTANCE INFORMATION	
ROADWAY SPEED	25 MPH
DESIGN SPEED	30 MPH
ISD LOOKING LEFT	290 FT
ISD LOOKING RIGHT	335 FT



RECEIVED
By KAW at 1:44 pm, Apr 17, 2018



FINAL DEVELOPMENT PLAN
FOR
THE SHOPS AT OBERER'S CROSSING
GAHANNA, FRANKLIN COUNTY, OHIO
SIGHT DISTANCE PROFILE

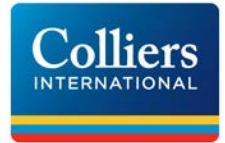
REVISIONS	DATE	SHEET NO.	DESCRIPTION	APPROVED	DATE

DATE:	04/16/2018
DRAWN BY:	BAJ
CHECKED BY:	OSD
JOB NUMBER:	2017.02838

C101

Two Miranova Place, Suite 900
Columbus, Ohio 43215

MAIN +1 614 436 9800
FAX +1 614 436 9700



January 11, 2018

Academy Development Limited Partnership
Attn: Mr. Thomas H. Schottenstein
107 S. High Street, Suite 300
Columbus, Ohio 43215

Re: The Shops at Oberer's Crossing, N. Hamilton Road, Gahanna, Ohio

Dear Tom:

At the request of Academy Development Limited Partnership ("Owner"), Colliers International ("Colliers") has analyzed Owner's plans for development of 5.19 acres located on the southwest corner of Hamilton Road and Beecher Road in Gahanna, Franklin County, Ohio (the "Site") for use as a neighborhood commercial center (the "Project"). The Site is zoned Planned Commercial Center District (PCC) under the City of Gahanna's zoning code.

Based upon our professional experience and our understanding of current market conditions, Colliers believes that the Project is economically feasible. It is our recommendation, therefore, that Owner proceed with its plans for development of the Site.

We hope that the foregoing is responsive to your inquiry. Should you require any further information, however, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in blue ink, appearing to read "Richard B. Schuen".

Richard B. Schuen, SIOR CCIM
CEO | Columbus
Dir +1 614 410 5612
richard.schuen@colliers.com

A handwritten signature in blue ink, appearing to read "Gilli Zofan".

Gilli Zofan
Brokerage Vice President
Direct +1 614 437 4652
gilli.zofan@colliers.com

ACADEMY DEVELOPMENT LIMITED PARTNERSHIP

Project 1041 N. Hamilton Rd. Final Development Plan Responses to comments dated December 18, 2017

Parks

1. **Comment** – Currently this is a heavily wooded lot with a very good mix of tree species. The mix includes Black Walnut, Oak, Maple, Beech, Dogwood, and Paw Paw to mention some of them. City Ordinance 914 will be addressed with the final plat and design drawings. My concern is the placement of the building to the west along the Preservation Zone. This building and the needed construction limits may be too close to the root zone of the trees in the Preservation Zone. The other comment is that there may be some street trees that will end up being removed as a result of construction, are will getting any compensation for the loss of these trees (value of the trees)? Per Rob Wendling

Response – Complete. A tree survey has been performed and tree preservation has been proposed as part of the revised landscaping plan. Such tree preservation provides for the protection of a select number of surveyed trees located along the property's frontage on Hamilton Rd. In addition, the developer will employ best construction practices to safeguard against damaging any trees located within the preservation easement.

Building

2. **Comment** – No comment Per Ken Fultz.

Response – Complete.

Public Safety

3. **Comment** – No comment from the Police Department per Sheila Murphy.

Response – Complete.

Fire District

4. **Comment** – The proposed main entrance shall have an unobstructed ingress width of not less than 20 feet for fire apparatus access in accordance with Section 503.2 of the 2011 Ohio Fire Code. The roadway around the development is of adequate width. The roadways shall be constructed of heavy duty pavement to support a 75,000-lb. fire apparatus. See attached tables and Fire Codes per Steve Welsh

Response – Complete. FDP shows main entrance with a width of 25 feet. Roadways will be constructed per code.

Community Development

5. **Comment** – CH 914 requires trees to be planted or preserved based on the impervious surface of a project. The FDP indicates 123,250 sf of impervious. 123 caliper inches are required to be planted or preserved. Please be aware that this requirement is in addition to other code requirements. Please submit a tree preservation plan that shows trees to be planted or preserved trees. Refer to CH 914 for details regarding tree credits based on preservation. It appears that the required number of tree inches can be accounted for in the preservation easement, however, size, type, location of trees are required to be depicted on the tree preservation plan.

Response – Complete. A tree survey has been performed and tree preservation has been proposed as part of the revised landscaping plan. Such tree preservation provides for the protection of a select number of surveyed trees located along the property's frontage on Hamilton Rd. Total caliper inches of the preserved trees exceed the requirement.

6. **Comment** – PCC zoning requires an economic feasibility study/market analysis to be submitted with the FDP (CH 1153.06(c)(9)). Please submit.

Response – Complete. A statement of economic feasibility has been submitted.

Public Service & Engineering

7. **Comment** – General Comments:
- (a) A formal final engineering plan review will be required following approval of the Final Development Plan (FDP), or concurrently with the FDP process if requested by the Developer at their risk.
 - (b) The developer will be responsible for the vacation of any easements and or right-of-way necessary for the development.
 - (c) A stream exists on the rear portion of this property. This area is protected by a conservation easement. The developer is responsible for obtaining all necessary permits and approvals related to the potential stream impacts if permitted in this area.
 - (d) There exists a very small portion of FEMA regulated 100-year floodway and floodplain on this parcel. Any impacts to these areas will require permitting through our office.

Response – Complete. All general comments are noted.

8. **Comment** – Site Access:

- (a) Any development that may generate more than 100 vehicle trips in the peak hour, or more than 1,000 total trips in a 24-hour period, will require that a Traffic Impact Study be completed and submitted to our office for review. A traffic impact study for this development has been previously completed. There are outstanding comments, and the site plan for this project has changed following that study, so the Traffic Impact Study shall be updated to conform to the current plan and be submitted for review and comment.
- (b) Two access drives are shown for the project.
- (c) Access management is a goal of our office to restrict the number of access locations along major thoroughfares to help reduce the potential for collisions. At this time, our office will permit one right-in/right-out access to Hamilton Road for this parcel.
- (d) A full access drive will be considered on Beecher Road, pending the update and final review of the Traffic Impact Study. A minor widening of Beecher Road will be required through the proposed drive on Beecher Road to accommodate a future left turn lane on Beecher Road for the property located on the south side of Beecher Road. The full extent of this widening shall be shown on the final development plan.
- (e) Please verify that the adequate intersection sight distance is provided for the proposed access location on Beecher Road.
- (f) Sidewalk and or multi-use trail shall be constructed, re-constructed and or maintained along the entire frontage of the development.

Response – Site Access:

- (a) Complete. The traffic impact study has been updated and submitted.
- (b-d) Complete. The FDP shows one full-service access on Beecher Rd. and one right-in/out access on Hamilton Rd. A minor widening of Beecher Rd. is also shown, as necessary to accommodate a future left turn lane.
- (e) Complete. Adequate intersection sight distance is provided for Beecher Rd. access.
- (f) Complete. Sidewalk and multi-use trail will be maintained and/or constructed along frontage as shown on FDP.

- 9. **Comment – Sanitary Sewer:** There is an existing 8-inch sanitary sewer located along the southern property line that can be accessed to provide sanitary sewer service for the development.

Response – Complete. Location of the sanitary sewer is noted.

- 10. **Comment – Water Service:** There is an existing 16-inch water line located along the curb line for the northbound lane of Hamilton Road, and an 8” waterline located along the north side of Beecher Road. These lines can be tapped to provide service to the development for both domestic and fire suppression. If the taps require excavation into

the roadway, we will require a repair and then a mill and overlay of a 50' section of the roadway.

Response – Complete. Location of water lines is noted.

11. **Comment** – Storm Water Management:

- (a) Storm water detention and water quality requirements shall be addressed on-site. Detention and water quality treatment design to be per City of Gahanna standards, Codified Ordinances Chapter 1193, and 1195.
- (b) We recommend that strong consideration be given to incorporating green infrastructure best management practices (BMP's) for detention and water quality measures.
- (c) Erosion Control design and Post Construction Runoff Control to be per City of Gahanna (Chapter 1195) and Franklin Soil and Water Conservation District requirements.

Response – Storm Water Management:

- (a-b) Complete. Storm water detention will be engineered and constructed per code. Proposed detention basins are shown on FDP.
- (c) Complete. Erosion and runoff controls will be implemented per code.

Soil & Water Conservation District

12. **Comment** – No comments were made.

Response – Complete.



Traffic Impact Study

The Shops at Oberer's Crossing

N. Hamilton Road @ Beecher Road
Gahanna, Ohio

Prepared for

Arshot Investment Corporation

By

 **Trans** ASSOCIATES

Trans Associates Engineering Consultants, Inc.

March 30, 2018

ARSHT00 - 17119



Traffic Impact Study

The Shops at Oberer's Crossing

**N. Hamilton Road @ Beecher Road
Gahanna, Ohio**

Prepared for

Arshot Investment Corporation

By



Trans Associates Engineering Consultants, Inc.
941 Chatham Lane, Suite 319
Columbus, Ohio 43221
(614) 459-7930

Steven P. Koch, P.E.
Ohio Regional Manager

Simon Addei, P.E.
Associate Engineer

March 30, 2018

ARSHT00 - 17119

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- Appendix A. Site Plan & Intersection Site Distance
- Appendix B. Traffic Count Data
- Appendix C. MORPC Growth Rate Information
- Appendix D. Trip Assignment
- Appendix E. Turn Lane Warrants
- Appendix F. Turn Lane Length Calculation Worksheets
- Appendix G. Capacity Analyses and Results

Introduction

Arshot Investment Corporation has expressed interest in developing a vacant parcel of land located on the southwest quadrant of the North Hamilton Road and Beecher Road signalized intersection in the City of Gahanna, Ohio. The project location for the proposed development of The Shops at Oberer's Crossing (previously known as The Shops at McKenna) Creek is shown in Figure 1.

Based on a site plan dated 03-16-17, The Shops at Oberer's Crossing may be developed with 25,142 sf of shopping center, and 6,320 sf of restaurant space. The site plan showing this development package can be found in Appendix A.

The preliminary site plan indicates that the proposed Shops at Oberer's Crossing development will have two access drives. The access drive on north Hamilton Road will be restricted to a right-in/right-out (RIRO) only and located 345 feet south of the signalized intersection. The access point to the development on Beecher Road will be located about 325 feet (centerline to centerline) to the west of the signalized intersection and directly opposite the Beecher Road access for the Hamilton Commerce Center development to the north. This ingress/egress point will permit all movements.

As part of the Hamilton Commerce Center development, it is understood that the west leg of Beecher Road, between the signal and the access drive serving Hamilton Commerce Center on Beecher Road will be widened to include a left turn lane to the south and a shared through/right lane

The objective of this traffic study is to evaluate traffic operations at the signalized intersection, and at the access points to the Shops at Oberer's Crossing to ensure that drivers can safely enter and exit the site and that the driveways do not impede traffic flow on Beecher Road or North Hamilton Road.

An additional focus of this study is to determine the impacts, if any, the Oberer's Crossing development will have on the operation of the North Hamilton Road and Beecher Road signalized intersection. Any improvements that might be required to mitigate the impacts of this development will be investigated.

This study has been prepared based upon the specific analysis items that have been requested by the City.

Study Parameters

This study will focus mainly on the following intersections:

1. North Hamilton Road and Beecher Road
2. North Hamilton Road and Right-In/Right-Out Access Drive
3. Beecher Road and Full Access Drive



SCALE: N.T.S.

Trans
ASSOCIATES

Small Firm Client Experience, Big Firm Capabilities

941 Chatham Lane, Suite 319
Columbus, Ohio, 43221 / (614) 459-7930

PROJECT NO. ARSHT00 - 17119

PROJECT: THE SHOPS AT OBERER'S CROSSING
N HAMILTON @ BEECHER

TITLE:

PROJECT LOCATION

FIGURE

1

D.B. JR
C.B. DRC
REV.

In evaluating the effects that the new traffic generated by the proposed development will have on the operation of the North Hamilton Road and Beecher Road intersection, both “no build” and “build” conditions will be considered. The “no build” condition will identify the expected operating characteristics without the proposed development. The “no build” condition will also include the traffic generated by Hamilton Commerce Center development. The “build” condition includes the newly generated trips from the Oberer's Crossing development on top of the no-build traffic volumes. By comparing the results of the no-build and build analyses, the specific impacts of the new development can be established.

The “opening year” for the Shops at Oberer's Crossing is assumed to be 2018. Conditions twenty years beyond the expected opening of the development will be evaluated -- thus making the “design year” as 2038. Traffic conditions during the critical AM and PM commuter peak hours will be evaluated.

No Build Conditions

Current Roadway System

The intersection of North Hamilton Road and Beecher Road is signalized. In the vicinity of the proposed development, North Hamilton Road has a north-south orientation with two moving through lanes in each direction and a concrete median. Beecher Road runs in the east-west direction. At the signal, the northbound approach of North Hamilton Road contains two through lanes, a 325 foot left turn lane and a 450 foot right turn lane. The southbound approach has a 375 foot left turn lane, a through lane and a shared through/right lane. The westbound approach at the signal has a single through lane and exclusive right and left turn lanes both 325 feet long. The eastbound approach of Beecher Road has a shared through/right lane and a 130 foot left turn lane. Within the study area, the posted speed limit is 35 mph on Hamilton Road and 25 mph on Beecher Road.

There is a mix of land uses including commercial, office and residential on the eastside of North Hamilton Road at the signalized intersection. On the west of North Hamilton Road, it is expected that the Hamilton Commerce Center development would be constructed adjacent to The Shops at Oberer's Crossing, north of Beecher Road. Otterbein Senior Lifestyle Choices borders the proposed development to the south and a ravine to the west.

The west leg of Beecher Road leads to a residential neighborhood and the Columbus Academy School about 0.75 miles west of the signalized intersection.

Figure 2 summarizes the lane usages, speed limits and traffic control on the current roadway system. Storage lengths on the existing turn lanes are also shown.

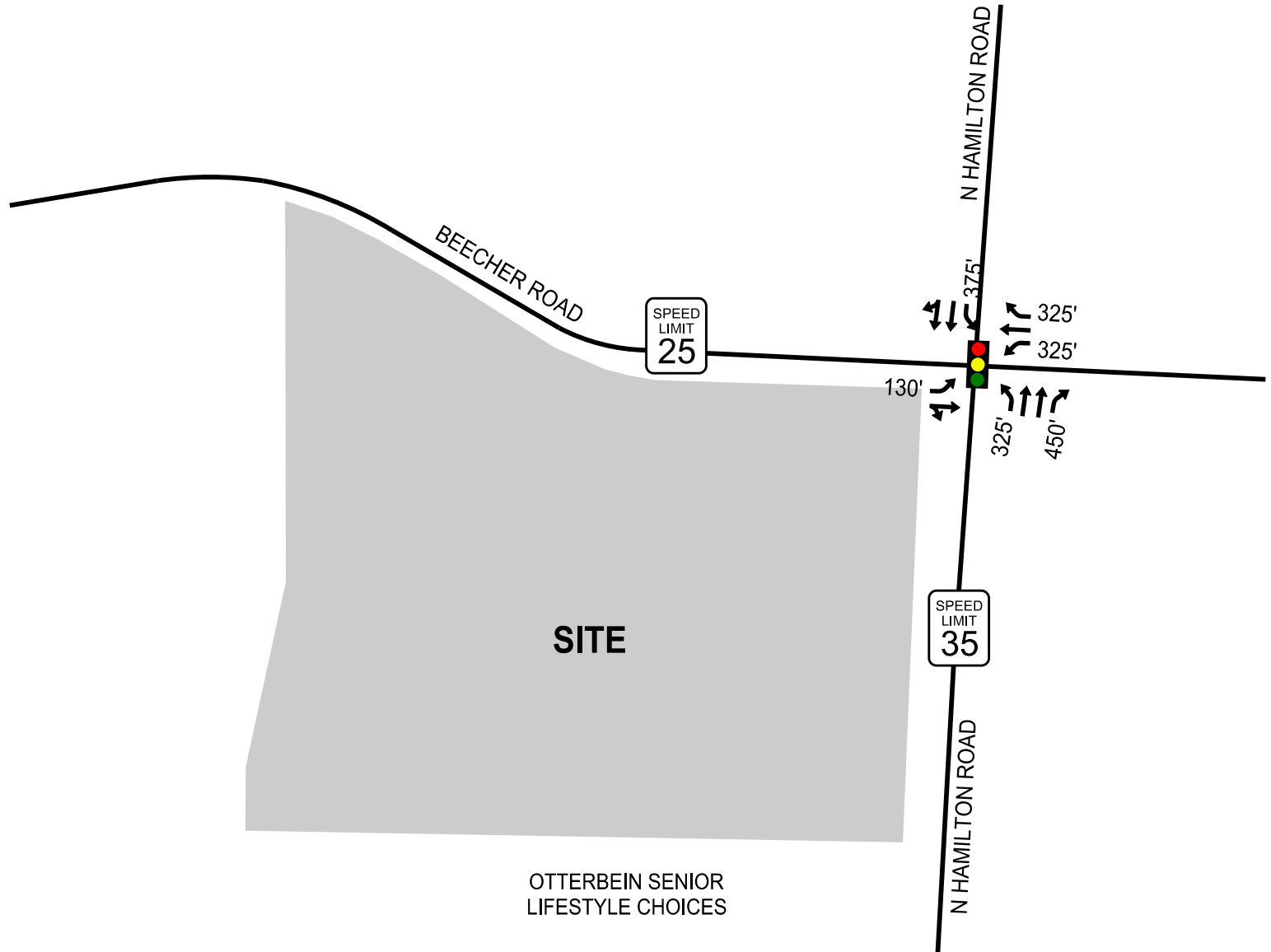
Current Traffic Volumes

Intersection turning movement count data was collected at the North Hamilton Road and Beecher Road intersection by Smart Services Inc. on April 27, 2017 from 7:00 AM to 7:00 PM. The overall peak hours from these counts were determined as follows:

- AM Peak Hour – 7:30 AM to 8:30 AM
- PM Peak Hour – 4:45 PM to 5:45 PM



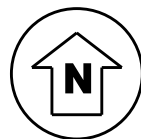
SIGNAL



SITE

OTTERBEIN SENIOR
LIFESTYLE CHOICES

NOTE: ONLY STORAGE
LENGTHS SHOWN



SCALE: N.T.S.

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Columbus, Ohio, 43221 / (614) 459-7930

PROJECT NO. ARSH00 - 17119

PROJECT: THE SHOPS AT OBERER'S CROSSING
N HAMILTON @ BEECHER

TITLE:
EXISTING CONDITIONS

FIGURE

2

D.B. JR
C.B. DRC
REV.

The current traffic volumes are shown in Figure 3 and copies of all the traffic count data are provided in Appendix B.

Background Traffic Volumes

The current traffic volumes were applied directly as the 2018 traffic volumes. The 2018 background traffic volumes were obtained by adding traffic generated by the development of the Hamilton Commerce Center to the current traffic volumes. The 2018 background traffic volumes are presented in Figure 4. The 2018 background traffic volumes were projected out to the design year (2038) to account for potential growth along the North Hamilton and Beecher Road corridors by applying the following linear annual growth rates over a 20 year horizon.

- Beecher Road, east of Hamilton Road: 1.0%
- Beecher Road, west of Hamilton Road : 0.5%
- Hamilton Road, north of Beecher Road: 1.0%
- Hamilton Road, south of Beecher Road: 1.0%

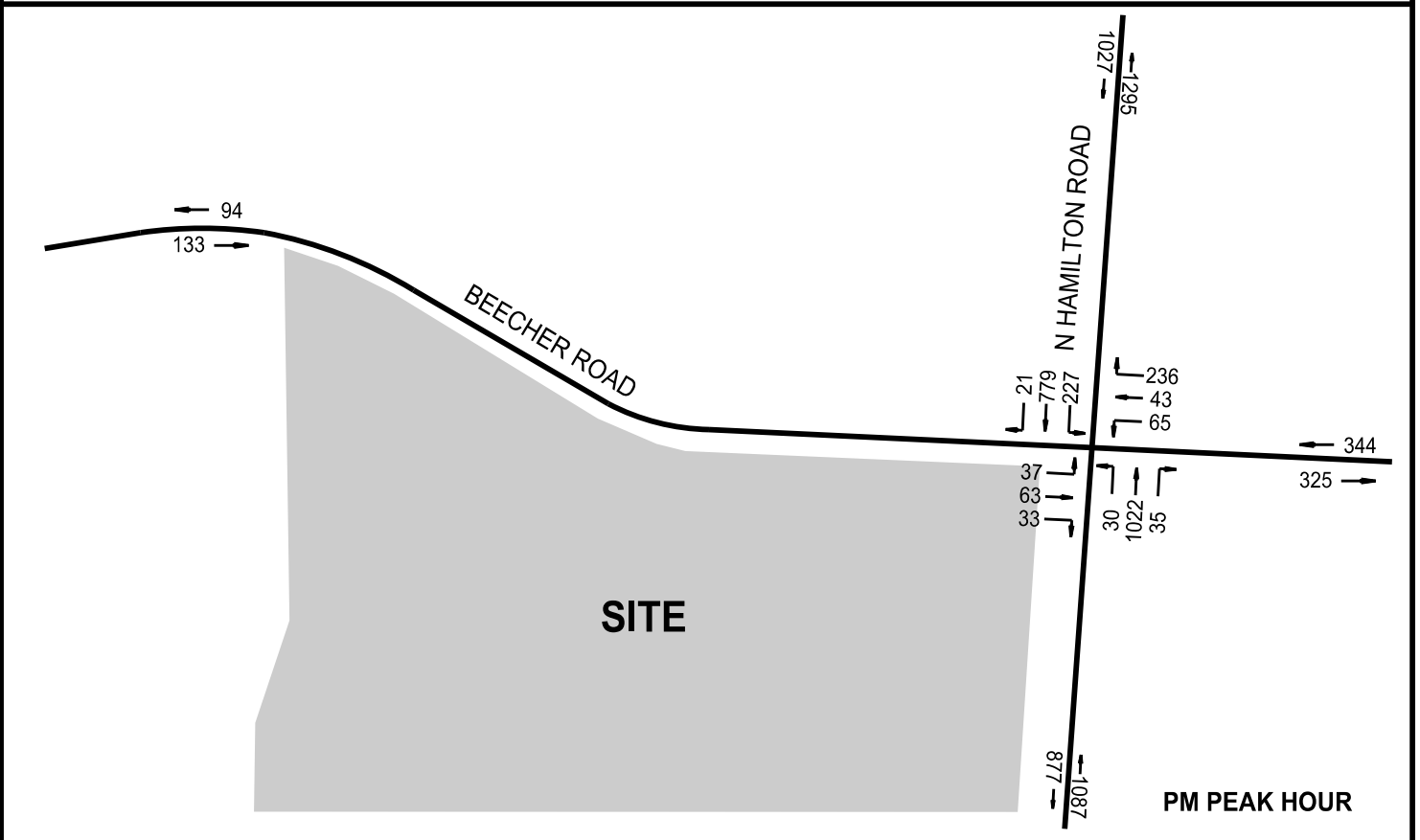
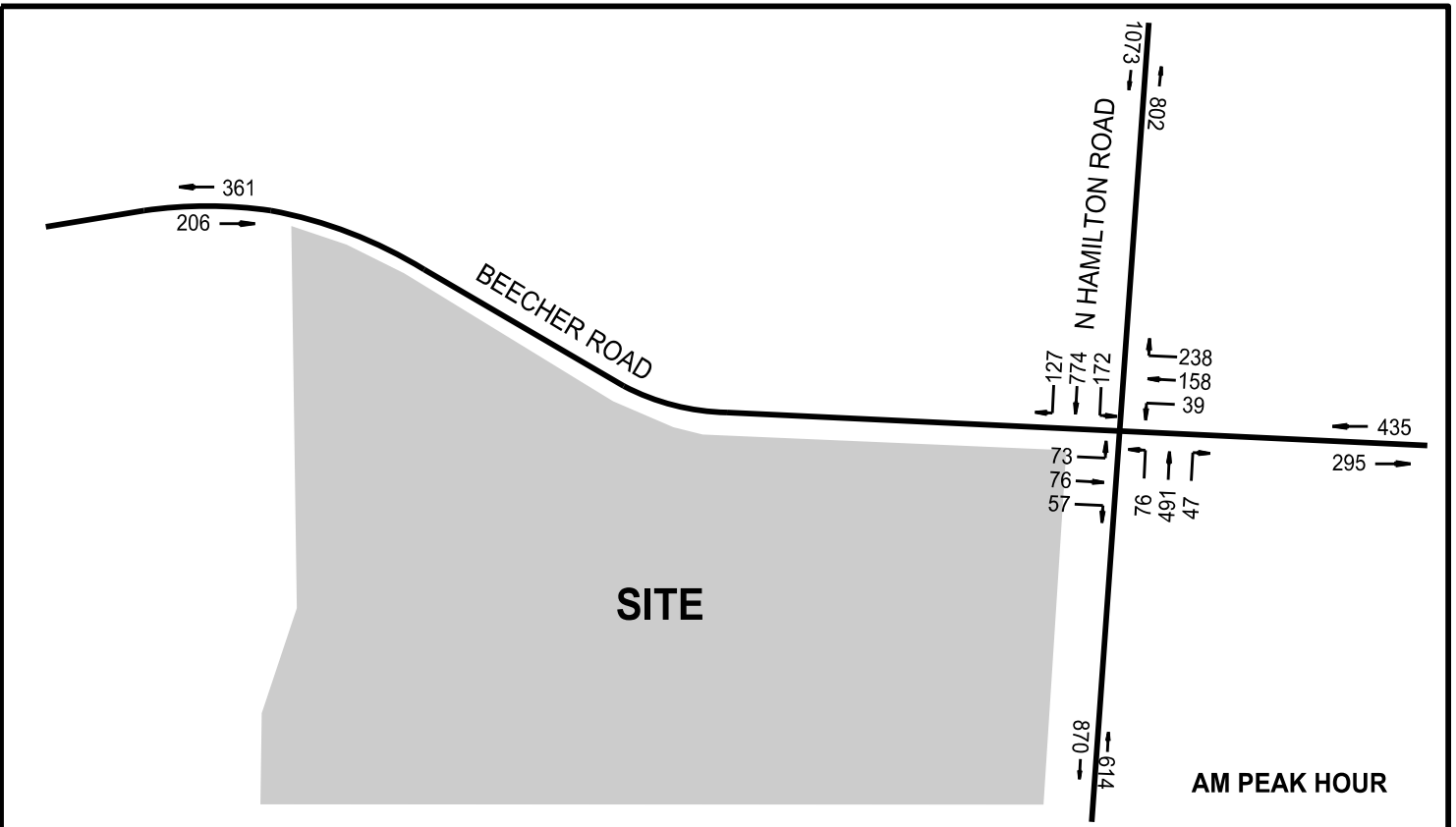
This is the same growth rate that was obtained from the Mid-Ohio Regional Planning Commission (MORPC) and applied in the Hamilton Commerce Center traffic study dated June 8, 2017. The resulting 2038 background traffic volumes are presented in Figure 5. The correspondence with MORPC is found in Appendix C.



Proposed Build Conditions

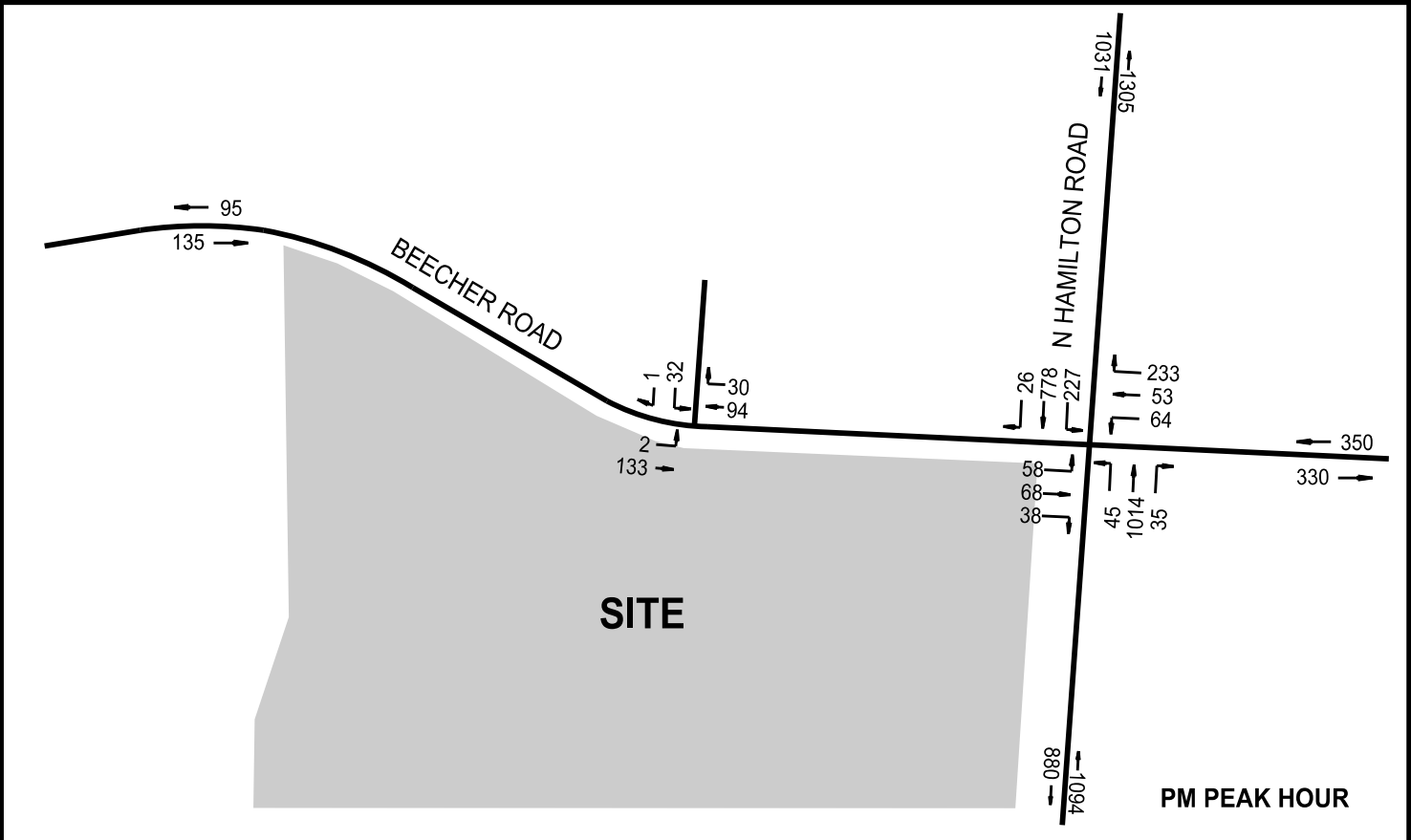
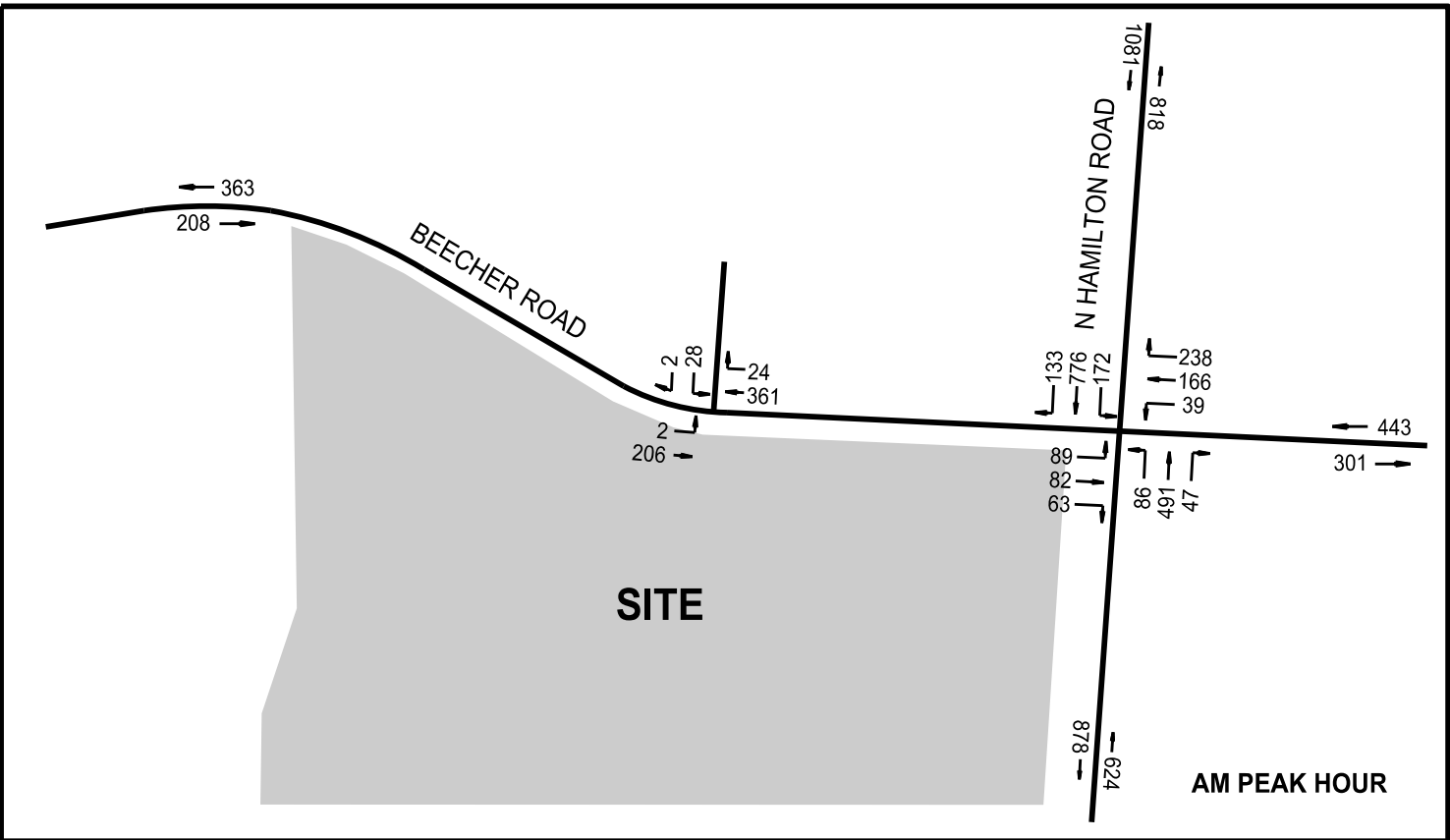
Trip Generation



The traffic volumes generated by The Shops at Oberer's Crossing were calculated based on trip generation factors contained in the *ITE Trip Generation Manual (9th Edition)*. In total, the development could be characterized using a combination of land use codes 820 (Shopping Center which is 24,142 sf) and 932 (High Turnover (Sit-Down) Restaurant of 6,320 sf). Trip rates associated with "high turnover restaurant" were applied during both AM and PM peak hours even though the actual restaurant(s) that may occupy the space may not be opened during both commuter peak hours. This was done in order to provide estimates of the highest potential traffic volumes generated by this component.

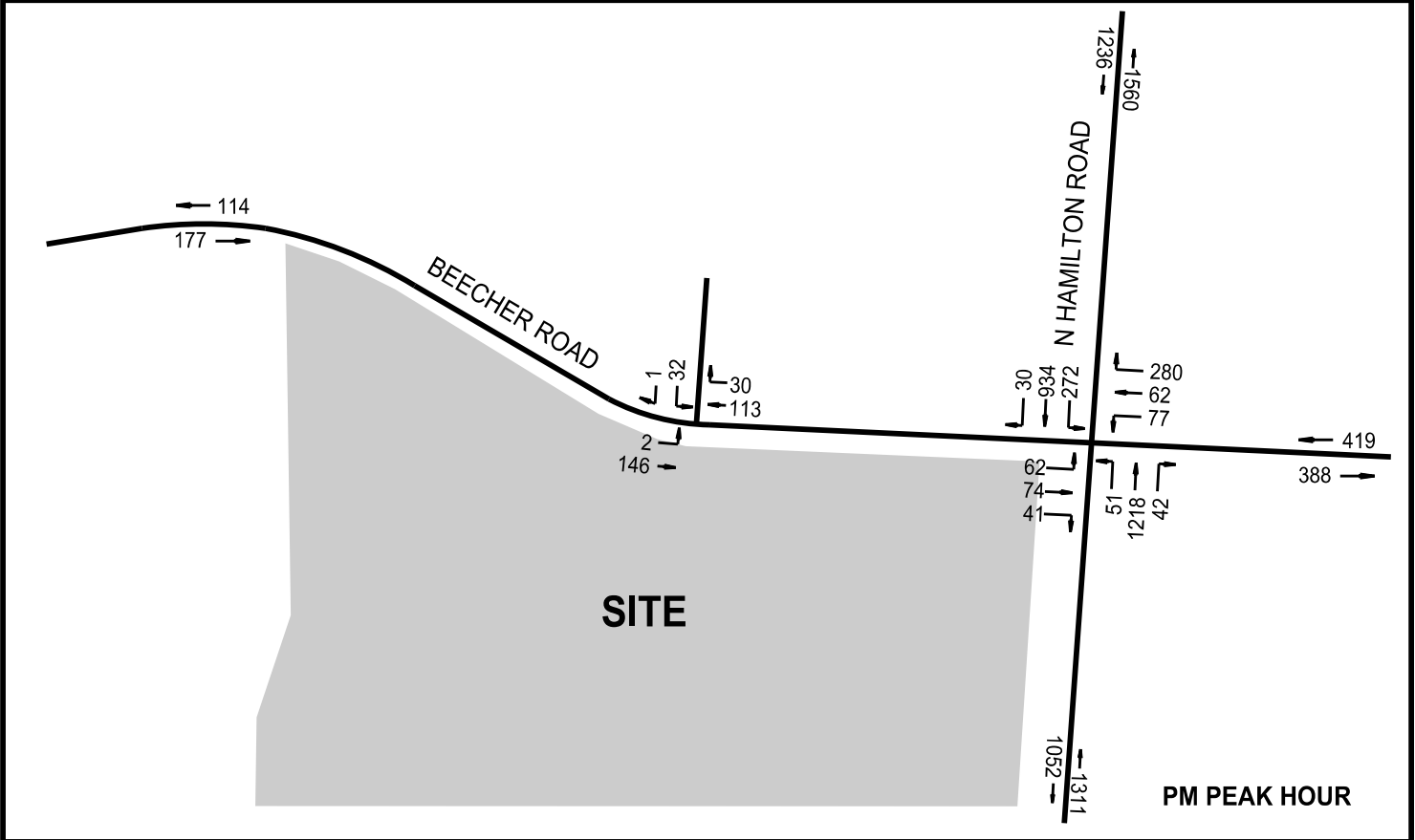
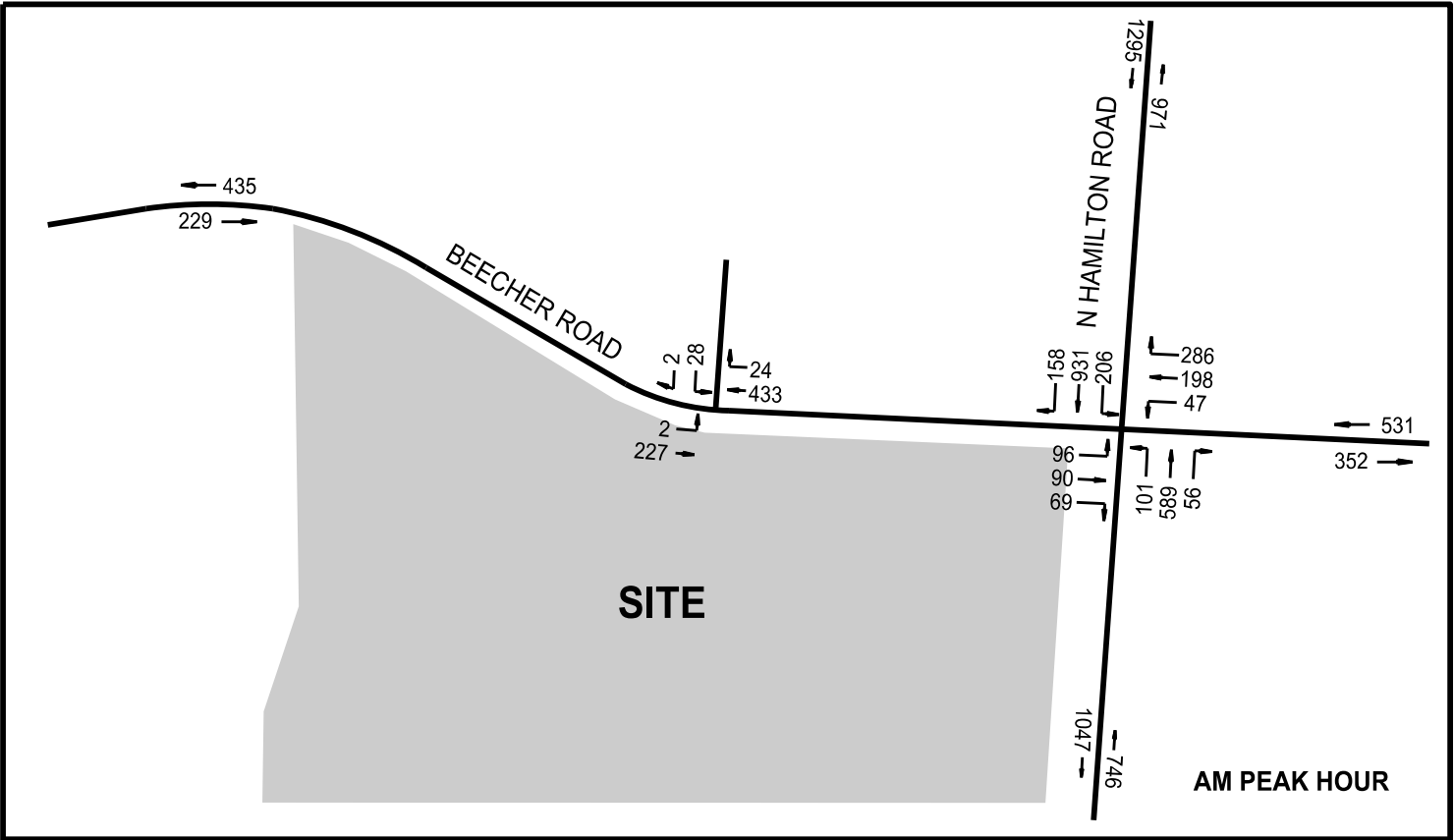
The *ITE Trip Generation Handbook (9th Edition)* provides average AM and PM pass-by rates for all the various land uses in this study. A certain proportion of the trips generated by the development can be attributed to pass-by and diverted link trips. These are not new trips that are added to the "no build" traffic, but are trips made to and from the site by drivers that are already traveling on the adjacent street system. These drivers stop at the development and then return to their original path. All the land uses in this development generated only new trips during the AM peak hour. The Shopping Center and the High Turnover (Sit Down) Restaurant had pass-by percentages of 34% and 43% respectively during the PM peak period. The calculations of trip generation are presented in Tables 1 and 2.



 SCALE: N.T.S.	 ASSOCIATES Small Firm Client Experience, Big Firm Capabilities 941 Chatham Lane, Suite 319 Columbus, Ohio, 43221 / (614) 459-7930	PROJECT NO. ARSH00 - 17119	FIGURE 3 D.B. <u>JR</u> C.B. <u>DRC</u> REV. _____
		PROJECT: THE SHOPS AT OBERER'S CROSSING N HAMILTON @ BEECHER	
		TITLE: CURRENT (2017) TRAFFIC VOLUMES	



 SCALE: N.T.S.	 ASSOCIATES Small Firm Client Experience, Big Firm Capabilities 941 Chatham Lane, Suite 319 Columbus, Ohio, 43221 / (614) 459-7930	PROJECT NO. ARSHT00 - 17119	FIGURE 4 D.B. SA C.B. DRC REV.
		PROJECT: THE SHOPS AT OBERER'S CROSSING N HAMILTON @ BEECHER	
		TITLE: 2018 BACKGROUND TRAFFIC VOLUMES	



<p>SCALE: N.T.S.</p>	<p>Trans ASSOCIATES</p> <p>Small Firm Client Experience, Big Firm Capabilities</p> <p>941 Chatham Lane, Suite 319 Columbus, Ohio, 43221 / (614) 459-7930</p>	PROJECT NO. ARSH00 - 17119	<p>FIGURE</p> <p>5</p> <p>D.B. <u>SA</u> C.B. <u>DRC</u> REV. _____</p>
		PROJECT: THE SHOPS AT OBERER'S CROSSING N HAMILTON @ BEECHER	
		TITLE: 2038 BACKGROUND TRAFFIC VOLUMES	

Table 1. Trip Generation Data, AM Peak

Land Use	Independent Variable	Weekday AM Peak Hour			
		Directional Distribution	Total	Pass-By	Primary
820 - Shopping Center	12,500 sf			0%	100%
		Total	12	0	12
		Entering 62%	7	0	7
		Exiting 38%	5	0	5
932 - High-Turnover (Sit-Down) Restaurant	6,320 sf	Directional Distribution	Total	Pass-By	Primary
				0%	100%
		Total	68	0	68
		Entering 55%	37	0	37
820 - Shopping Center	12,642 sf	Directional Distribution	Total	Pass-By	Primary
				0%	100%
		Total	12	0	12
		Entering 62%	7	0	7
Total		Directional Distribution	Total	Pass-By	Primary
				0%	100%
		Total	92	0	92
		Entering 55%	51	0	51
Total		Exiting 45%	41	0	41

Table 2. Trip Generation Data, PM Peak

Land Use	Independent Variable	Weekday PM Peak Hour			
		Directional Distribution	Total	Pass-By	Primary
820 - Shopping Center	12,500 sf			34%	66%
		Total	46	16	30
		Entering 48%	22	7	15
		Exiting 52%	24	9	15
932 - High-Turnover (Sit-Down) Restaurant	6,320 sf	Directional Distribution	Total	Pass-By	Primary
				43%	57%
		Total	62	27	35
		Entering 60%	37	16	21
820 - Shopping Center	12,642 sf	Directional Distribution	Total	Pass-By	Primary
				34%	66%
		Total	47	16	31
		Entering 48%	23	8	15
Total		Exiting 52%	24	8	16
		Directional Distribution	Total	Pass-By	Primary
				38%	62%
		Total	155	59	96
Total		Entering 53%	82	31	51
		Exiting 47%	73	28	45

Trip Distribution

The distribution of primary (new) trips was established using the current distribution of traffic that enters the study area from the north and south directions on North Hamilton Road and from the east and west directions on Beecher Road. The AM distribution was applied for both peak periods since it generally indicates where people live. The complete distribution of primary trips is as follows:

- 51% to/from the north on Hamilton Road
- 25% to/from the south on Hamilton Road
- 19% to/from the east on Beecher Road
- 5% to/from the west on Beecher Road

The current PM peak directional distribution of traffic at the Hamilton Road and Beecher Road intersection was used to distribute the pass-by trips.

Trip Assignment

Trips arriving at the proposed Shops at Oberer's Crossing were split, with 40% entering through the full access drive on Beecher Road and the remaining 60% using the right-in/right-out access drive on North Hamilton Road. The vehicle trips leaving the development were also split with 25% going south from the North Hamilton Road right-in/right-out access point, and the remainder coming out from the Beecher Road full access drive – with 5% to westbound Beecher Road and 70% to eastbound Beecher Road.

The total 2038 “build” traffic volumes were obtained by adding the site generated traffic volumes to the projected background traffic volumes. The resulting total traffic volumes are illustrated in Figure 6. Negative values represent those vehicles that are diverted from their original path to visit the development (pass-by trips). A detailed trip assignment worksheet for each peak hour can be found in Appendix D.

Turn Lane Warrants

Turn lane warrant evaluations were performed at the access points to The Shops at Oberer's Crossing development on North Hamilton Road and on Beecher Road in accordance with Figures 401-5bE and 401-6bE of the ODOT Location and Design Manual, Volume 1 using the total 2038 “build” projected traffic volumes.

It was determined from the turn lane warrant analyses that neither the North Hamilton Road right-in/right-out access point nor the Beecher Road full access point required any exclusive turn lanes into the development. All turn lane warrant analyses worksheets are contained in Appendix E.

It should however be noted that, plans are in place to widen Beecher Road to provide a westbound left lane into the proposed site. (This widening is required as an element of the approval of Hamilton Commerce center on the site north of the subject development).

Turn Lane Length Requirements

At the intersection of North Hamilton Road and Beecher Road, storage lengths of the affected turn lanes were checked for adequacy (Figures 401-9E and 401-10E of the ODOT Location and Design Manual, Volume 1) under the 2038 AM and PM peak period “no-build” and “build” conditions. The turn lane length calculation worksheets are contained in Appendix F, and a summary of the results is found in Table 3. For the purpose of estimating turn lane requirements, a cycle length of 90 seconds was used at the signal. The existing northbound left turn lane is about 325 feet in length, and is adequate for all the scenarios under consideration in this study.

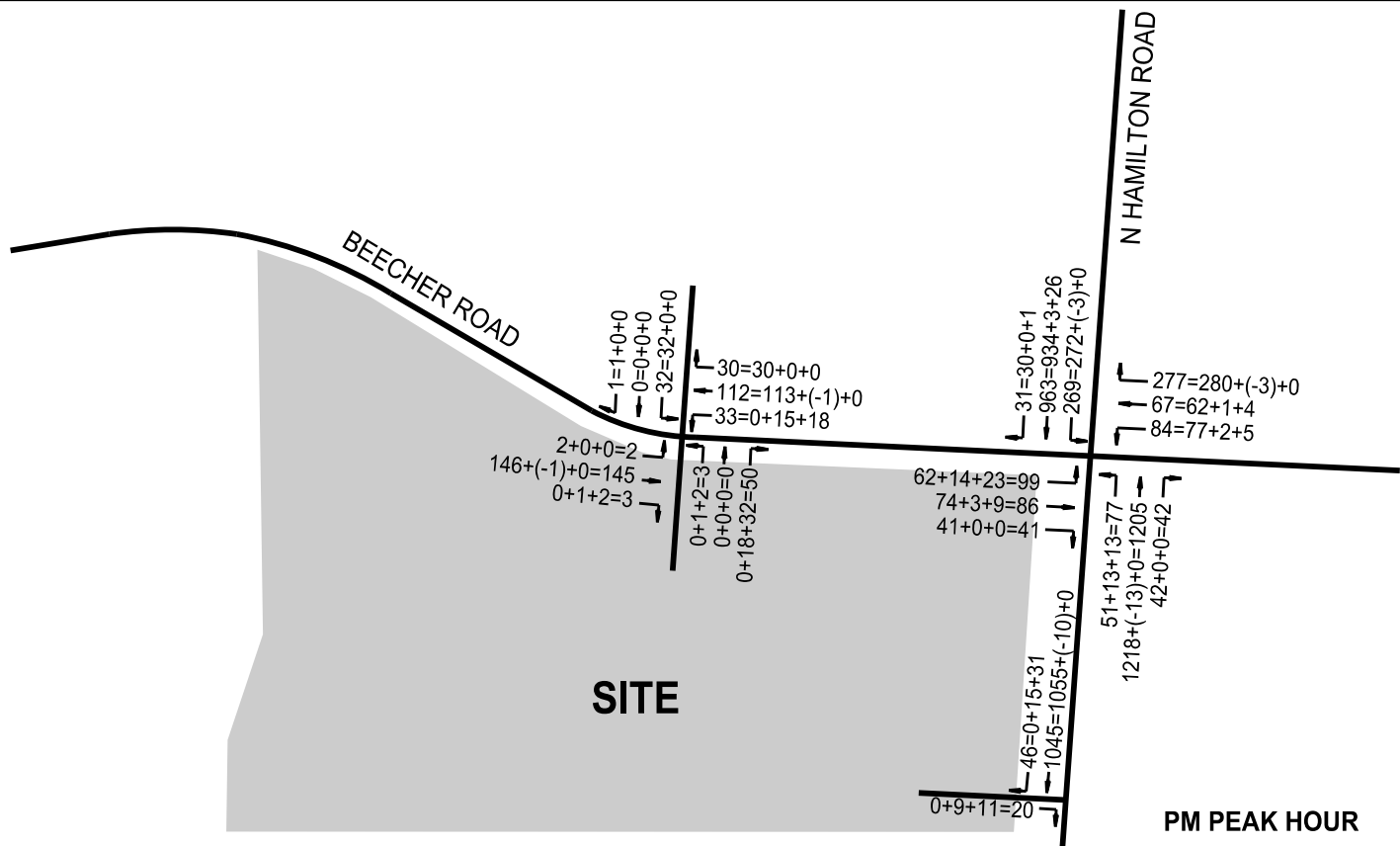
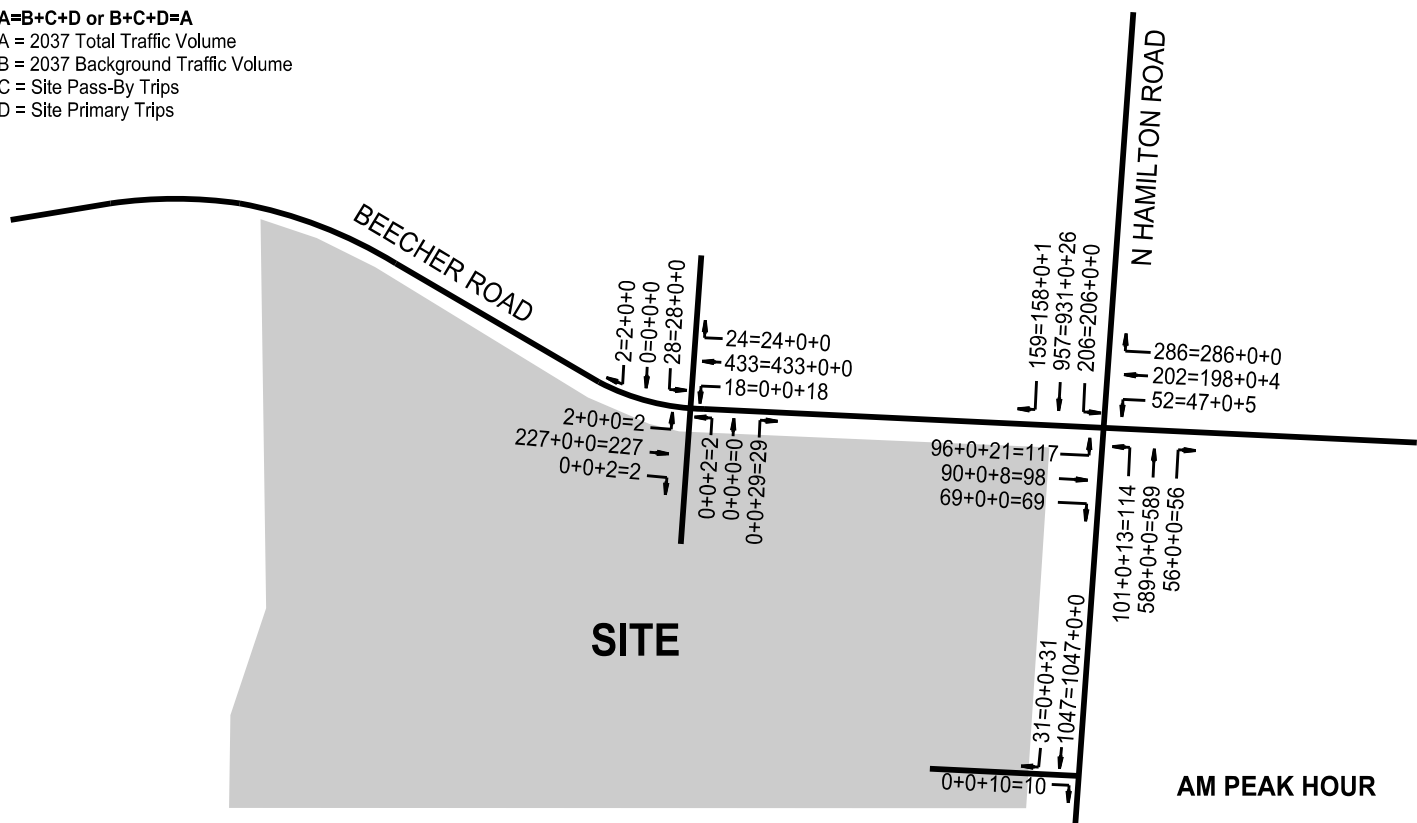
A=B+C+D or B+C+D=A

A = 2037 Total Traffic Volume

B = 2037 Background Traffic Volume

C = Site Pass-By Trips

D = Site Primary Trips



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Columbus, Ohio, 43221 / (614) 459-7930

PROJECT NO. ARSH00 - 17119

PROJECT: THE SHOPS AT OBERER'S CROSSING
N HAMILTON @ BEECHER

TITLE: PROJECTED 2038 TOTAL TRAFFIC
VOLUMES

FIGURE

6

D.B. JR
C.B. DRC
REV.

Table 3. 2038 Turn Lane Length Requirements, North Hamilton Road @ Beecher Road

Approach	Lane	*Existing Length	No Build		Build	
AM Peak						
Eastbound	Left	130'	*Required Length	150'	*Required Length	150'
			Through Queue Backup	150'	Through Queue Backup	150'
Northbound	Left	325'	*Required Length	150'	*Required Length	150'
			Through Queue Backup	325'	Through Queue Backup	325'
PM Peak						
Eastbound	Left	130'	*Required Length	100'	*Required Length	150'
			Through Queue Backup	100'	Through Queue Backup	150'
Northbound	Left	325'	*Required Length	100'	*Required Length	100'
			Through Queue Backup	550'	Through Queue Backup	550'

*Excludes diverging taper

The existing eastbound left turn lane is technically not long enough for all the AM conditions as well as the PM “build” scenario. The calculated storage requirement for the eastbound left turn lane is 20 feet longer than the existing turn lane length of 130 feet.

Potential queues in the eastbound through/right lane were also evaluated to see if they might interfere with egress from the proposed site driveway. According to the ODOT manual, a through/right queue might reach 150 feet in length -- which would not block the driveways to the Hamilton Commerce Center and the proposed development respectively.

Capacity Analyses and Results

Capacity analyses were performed using Synchro 8 Software. The analyses were based on Highway Capacity Manual (HCM) 2010 methodologies.

The quality of traffic flow was determined for 2038 “no-build” and “build” conditions. The standard criterion used to define the quality of traffic flow is the level of service, which is a measure of effectiveness of the operation of an intersection. The level of service value is based on the procedure defined in the Highway Capacity Manual (HCM) and the associated Highway Capacity Software (HCS). This is a qualitative assessment of factors such as speed, volume, geometry, delays, and ease of maneuvering. All analysis techniques specify the quality of operations as a letter with respect to the amount of delay at the intersection, and the resulting level of service criteria are shown in Table 4. A level of service ‘D’ is typically acceptable during peak periods of operation. No individual movement should operate below level of service ‘E’, and no approach should be below ‘D’.

The HCM 2010 analyzes T-intersections as Two Way Stop Controlled (TWSC) and the North Hamilton Road and Beecher Road access points to the proposed development were analyzed as such. HCM analysis of a stop controlled intersection does not provide an overall intersection LOS for three reasons:

1. Major-street through vehicles are assumed to experience zero delay.
2. The disproportionate number of major-street through vehicles at a typical TWSC intersection skews the weighted average of all movements, resulting in a very low overall average delay for all vehicles.
3. The resulting low delay can mask important LOS deficiencies for minor movements.

A summary of the intersection lane LOS for the design year (2038) build and no-build scenarios are shown in Tables 5 and 6 and detailed software outputs are contained in Appendix G.

Table 4. HCM Level of Service Criteria for Intersections

Level of Service	Average Delay (sec/veh)	
	Unsignalized Intersections	Signalized Intersections
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 15.0	> 10.0 and ≤ 20.0
C	> 15.0 and ≤ 25.0	> 20.0 and ≤ 35.0
D	> 25.0 and ≤ 35.0	> 35.0 and ≤ 55.0
E	> 35.0 and ≤ 50.0	> 55.0 and ≤ 80.0
F	> 50.0	> 80.0

Source: Transportation Research Board, *Highway Capacity Manual*, Special Report 209, National Research Council, Washington, DC, 2010.

The results in Table 5 show that the signalized intersection approaches operate at the same acceptable level of service for both “build” and “no-build” conditions during all time periods under consideration except the southbound approach which changed from level of service B during the AM “no build” to level of service C under the build condition.

The overall intersection level of service remained unchanged during all the time periods considered in this study as seen in Table 5. Under the “build” condition, the overall increase in delay was 1.5 sec for the AM peak hour and 2.1 sec for the PM peak hour.

Table 5. 2038 HCM Level of Service (Delay), North Hamilton Road & Beecher Road

Approach	AM Peak Hour		PM Peak Hour	
	No Build	Build	No Build	Build
Eastbound	C (22.9)	C (23.4)	C (26.9)	C (26.2)
Westbound	C (24.3)	C (25.6)	C (25.8)	C (27.5)
Northbound	B (16.5)	B (17.2)	C (26.7)	C (28.3)
Southbound	B (19.9)	C (22.1)	C (20.4)	C (23.5)
Overall	C (20.1)	C (21.6)	C (24.1)	C (26.2)

Table 6. 2038 HCM Lane Level of Service (Delay), Beecher Rd and Full Access Drive

Lane	Delay, sec/veh (HCM 2010 Level of Service)	
	Build	
	AM Peak Hour	PM Peak Hour
Eastbound <i>Left Turn</i>	8.4 (A)	7.5 (A)
Westbound <i>Left Turn</i>	7.8 (A)	7.6 (A)
Northbound <i>Left Turn</i>	10.3 (B)	9.5 (A)
Southbound <i>Left Turn</i>	18.4 (C)	12.4 (B)

The values in Table 6 show that the full access drive on Beecher Road will operate at a high performance level. The northbound left turn out of the proposed development will operate at level of service B during the AM peak hour with a delay of 10.3 sec/veh.

Conclusions and Recommendations

Based on the results of this study, the likely impacts associated with the construction of The Shops at Oberer's Crossing on the operation of the North Hamilton Road and Beecher Road signalized intersection, and the performance of the access driveways to the proposed site were determined.

No exclusive turn lane will be required at the North Hamilton Road right-in/right-out access drive to the proposed development. An exclusive turn lane is not required at the Beecher Road access point according to the ODOT Location and Design Manual. However, planned widening of the west leg of Beecher Road between this access drive and the signal will provide an exclusive turn lane to the south and a shared through/right turn lane to enhance traffic flow especially during the peak hours.

Capacity analyses of the signalized intersection and the access points show that, with the construction of The Shops at Oberer's Crossing, all the approaches at the intersection will continue to operate effectively with no significant increase in delay even with the addition of access points on North Hamilton Road and Beecher Road.

Due to the traffic management plan (concrete median) put in place by the city on Hamilton Road along the study area, access to the site from Hamilton Road is limited to right turns in and out. The subject property also has a right of access on Beecher Road, as such, a full access drive on Beecher Road is essential. Beyond providing general site access, the Beecher Road driveway is needed for economic viability and to serve as a safe and convenient access for fire and emergency services.

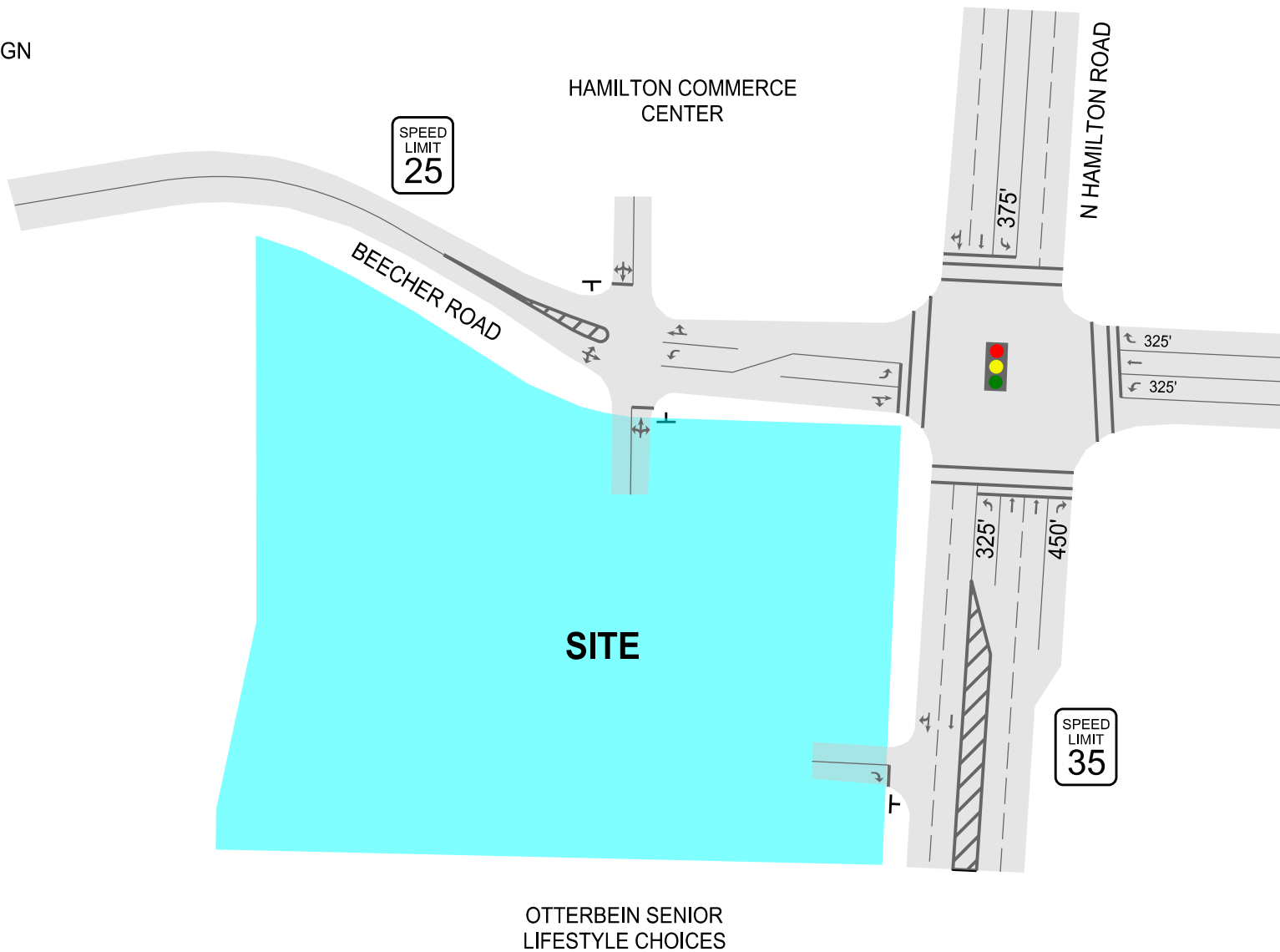
In order to advise drivers exiting the site onto Beecher Road that Beecher Road west of the Ravine is basically limited to neighborhood or school traffic, it is recommended that signage be provided just west of the drive stating "Local Traffic Only" or "No Outlet". A sign on eastbound Beecher Road just west of the site drive stating "Do Not Block Intersection" is also

recommended. Further, it is recommended that a “No Left Turn” signage be installed at the right-in/right-out access drive for eastbound left turn prohibition onto Hamilton Road.

The recommended conditions as a result of this study are illustrated in Figure 7.

FILE NAME: X:\Active ISO Projects\OH Office Projects\ARSH00 Arshot Development\17119 McKenna Creek (Oberers Crossing) - Arshot\Draws\Created\zzz-Figure 7 - Proposed Conditions.dwg

-  SIGNAL
-  STOP SIGN



NOTE:
- NOT TO SCALE
- ONLY STORAGE LENGTHS SHOWN



SCALE: N.T.S.

 **Trans**
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941 Chatham Lane, Suite 319
Columbus, Ohio, 43221 / (614) 459-7930

PROJECT NO. ARSHT00 - 17119
PROJECT: THE SHOPS AT OBERER'S CROSSING
N HAMILTON @ BEECHER

TITLE: PROPOSED CONDITIONS

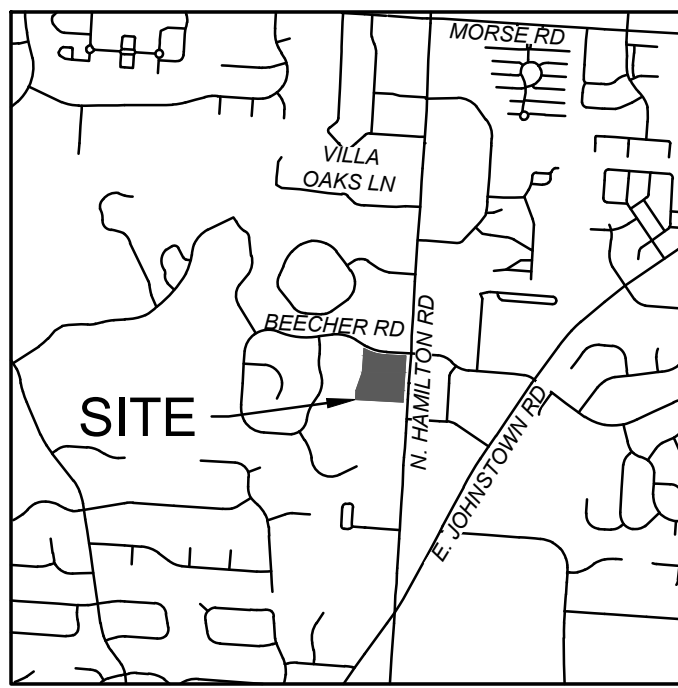
FIGURE

7

D.B. SA
C.B. DRC
REV. _____

Appendices

**Appendix A. Site Plan & Intersection
Site Distance**



INDEX MAP
NTS



DEVELOPMENT DATA

SITE ANALYSIS:

AREA: 5.19 ACRES
EXISTING ZONING: PCC
TYP. PARKING STALL: 9' x 19'
TYP. AISLE WIDTH: 25'
SIDEWALK WIDTH: 4' MIN
PAVEMENT SURFACE: ASPHALT
TOTAL BUILDING AREA: 32,094 SF
BUILDING HEIGHT x WIDTH: 26' x 40'
FRONT YARD: 60'
SIDE YARD: 10'
REAR YARD: 15'
SETBACK REQUIRED TO RESIDENTIAL: 1/4 OF THE SUM OF BUILDING HEIGHT AND WIDTH
 $26' + 40' = 66' \times 1/4 = 16.5'$
SETBACK PROVIDED TO RESIDENTIAL: 82.92'
PARKING SETBACK: 36' (60% OF FRONT SETBACK)
EXISTING SITE: WOODED

LOT COVERAGE AND PARKING:

SITE AREA: 226,135 SF
BUILDING AREA: 32,094 SF (14.8%)
SPACES PER BUILDING S.F.: 0.0066
PAVEMENT COVERAGE: 91,156 SF (39.7%)
TOTAL COVERED AREA: 123,250 SF
UNCOVERED LAND: 102,885 SF
PROPOSED LOT COVERAGE: 54.5%
COVERAGE REQUIREMENT: 75% MAX
INTERIOR LANDSCAPING REQUIRED: 4,489 SF (5% OF PAVEMENT COVERAGE)
INTERIOR LANDSCAPING PROVIDED: 5,198 SF
3" CALIPER TREES REQUIRED: 45
3" CALIPER TREES PROVIDED: SEE LANDSCAPE PLAN
REQUIRED PARKING: RETAIL - 1 SPACE/300 SF * 24,794 SF = 86
RESTAURANT - 1 SPACE/50 SF * 24,794 SF = 126
TOTAL = 212
PROVIDED PARKING: 212
*PAVEMENT COVERAGE INCLUDES ALL IMPERVIOUS AREAS OTHER THAN THE BUILDINGS

OWNER
ACADEMY DEVELOPMENT LIMITED PARTNERSHIP
107 SOUTH HIGH STREET, 3RD FLOOR
COLUMBUS, OHIO 43215
PHONE: 614-463-9730

ENGINEER
AMERICAN STRUCTUREPOINT
2550 CORPORATE EXCHANGE DRIVE, SUITE 300
COLUMBUS, OHIO 43231
PHONE: 614-901-2235

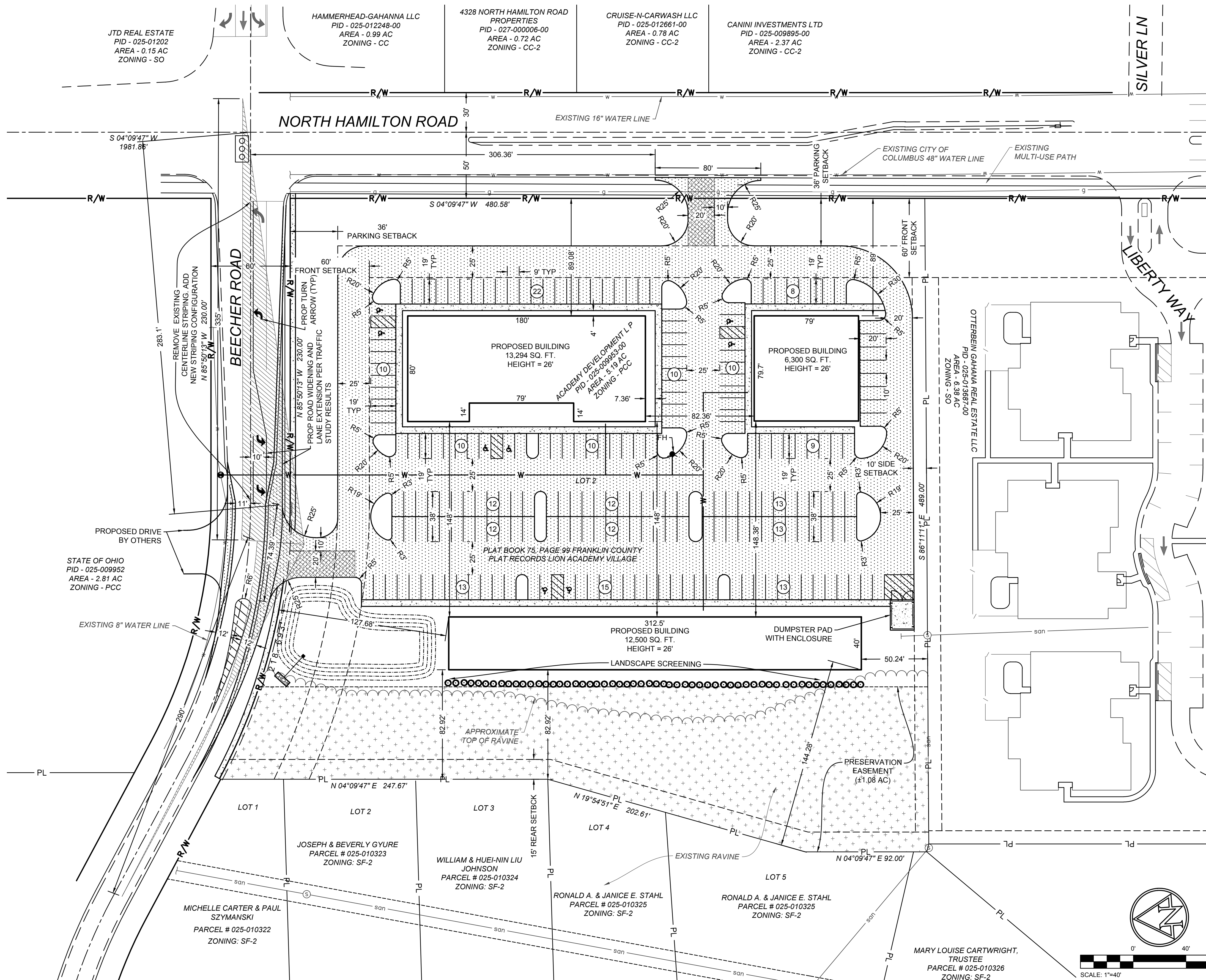
NOTES:

- ALL RADII ARE 4.5' UNLESS OTHERWISE DIMENSIONED.
- ALL LANE WIDENING LIMITS ARE SHOWN FOR PRELIMINARY CONCEPTUAL PLANNING PURPOSES ONLY.

FINAL DEVELOPMENT PLAN FOR THE SHOPS AT OBERER'S CROSSING GAHANNA, FRANKLIN COUNTY, OHIO

SITE LEGEND

— PL —	PROPERTY LINE
— R/W —	RIGHT-OF-WAY
— W —	WATER SERVICE
(X)	PARKING STALL COUNT
[Pattern]	ASPHALT PAVEMENT
[Pattern]	CONCRETE
[Pattern]	SIGHT DISTANCE TRIANGLE
[Pattern]	PRESERVATION EASEMENT AREA
[Pattern]	20' FIRE INGRESS

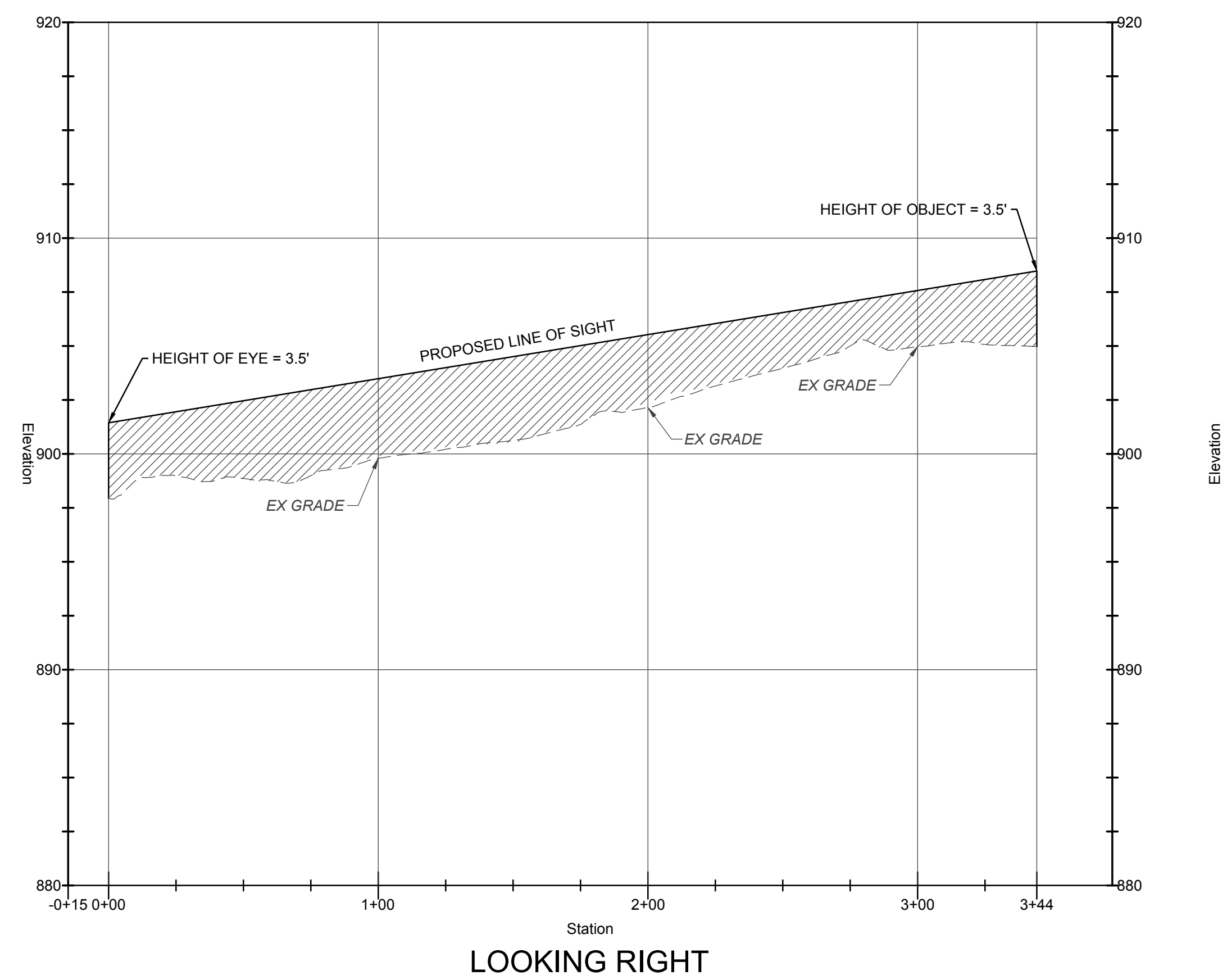
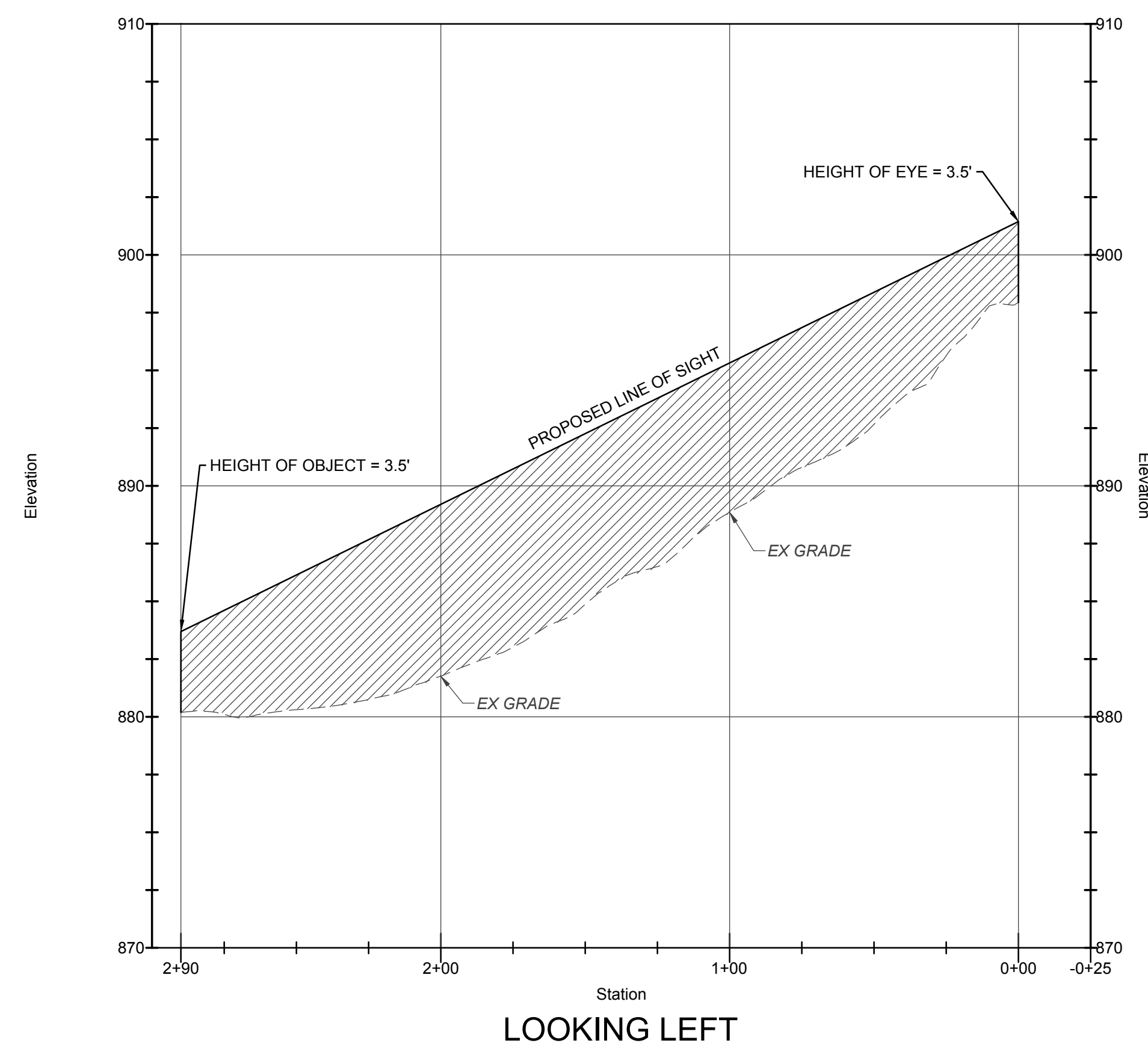


FINAL DEVELOPMENT PLAN FOR THE SHOPS AT OBERER'S CROSSING GAHANNA, FRANKLIN COUNTY, OHIO LOCATION PLAN

REVISIONS	DATE	SHEET NO.	DESCRIPTION	APPROVED	DATE

DATE:	04/16/2018
DRAWN BY:	BAJ
CHECKED BY:	OSD
JOB NUMBER:	2017.02838

C100



INTERSECTION SIGHT DISTANCE INFORMATION	
ROADWAY SPEED	25 MPH
DESIGN SPEED	30 MPH
ISD LOOKING LEFT	290 FT
ISD LOOKING RIGHT	335 FT

[illegible]

DATE:	04/16/2018
DRAWN BY:	BAJ
CHECKED BY:	OSD
JOB NUMBER:	2017.02838

C101



Appendix B. Traffic Count Data

Smart Services, Inc.

88 W. Church Street
Newark, OH 43055
(740) 345-4700

File Name : Hamilton_Road_&_Beecher_Road_404565_04-27-2017

Site Code : 404565

Start Date : 4/27/2017

Page No : 1

Groups Printed- Cars - Trucks

	Hamilton Road Southbound				Beecher Road Westbound				Hamilton Road Northbound				Beecher Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	17	189	12	218	3	12	43	58	11	61	9	81	2	2	7	11	368
07:15 AM	24	170	23	217	5	37	47	89	12	71	11	94	10	8	19	37	437
07:30 AM	30	202	54	286	10	87	55	152	31	103	8	142	16	16	14	46	626
07:45 AM	49	191	59	299	9	55	62	126	36	110	18	164	34	37	26	97	686
Total	120	752	148	1020	27	191	207	425	90	345	46	481	62	63	66	191	2117
08:00 AM	37	203	5	245	10	11	69	90	8	154	8	170	20	19	11	50	555
08:15 AM	56	178	9	243	10	5	52	67	1	124	13	138	3	4	6	13	461
08:30 AM	46	155	3	204	8	5	58	71	0	144	20	164	4	8	7	19	458
08:45 AM	37	175	1	213	8	3	45	56	4	151	13	168	3	5	6	14	451
Total	176	711	18	905	36	24	224	284	13	573	54	640	30	36	30	96	1925
09:00 AM	45	126	6	177	13	2	33	48	3	112	13	128	5	5	5	15	368
09:15 AM	34	119	1	154	8	3	42	53	2	121	16	139	4	3	2	9	355
09:30 AM	38	113	3	154	11	2	46	59	2	112	17	131	5	0	3	8	352
09:45 AM	44	111	2	157	16	2	39	57	3	139	14	156	7	1	3	11	381
Total	161	469	12	642	48	9	160	217	10	484	60	554	21	9	13	43	1456
10:00 AM	35	100	4	139	12	7	45	64	4	133	12	149	7	7	3	17	369
10:15 AM	47	120	4	171	18	2	42	62	2	154	16	172	3	1	4	8	413
10:30 AM	28	120	2	150	11	1	49	61	0	140	18	158	3	3	1	7	376
10:45 AM	40	128	2	170	13	1	41	55	0	136	12	148	3	4	2	9	382
Total	150	468	12	630	54	11	177	242	6	563	58	627	16	15	10	41	1540
11:00 AM	40	137	5	182	15	1	46	62	2	171	12	185	3	2	2	7	436
11:15 AM	35	151	6	192	15	3	53	71	2	178	12	192	6	0	4	10	465
11:30 AM	42	148	3	193	14	0	74	88	0	172	10	182	3	1	5	9	472
11:45 AM	50	163	4	217	14	3	74	91	3	185	6	194	6	3	3	12	514
Total	167	599	18	784	58	7	247	312	7	706	40	753	18	6	14	38	1887
12:00 PM	55	156	3	214	8	0	67	75	2	232	3	237	3	1	4	8	534
12:15 PM	55	176	6	237	7	0	68	75	1	163	8	172	5	4	5	14	498
12:30 PM	55	182	3	240	9	1	42	52	1	176	16	193	0	0	4	4	489
12:45 PM	59	184	7	250	7	0	44	51	4	169	13	186	5	5	2	12	499
Total	224	698	19	941	31	1	221	253	8	740	40	788	13	10	15	38	2020
01:00 PM	47	176	4	227	10	3	49	62	7	170	13	190	5	0	3	8	487
01:15 PM	50	169	8	227	8	2	41	51	3	147	10	160	2	3	3	8	446
01:30 PM	43	166	6	215	8	4	36	48	3	163	15	181	1	2	1	4	448
01:45 PM	52	177	4	233	19	8	49	76	2	173	15	190	4	3	2	9	508
Total	192	688	22	902	45	17	175	237	15	653	53	721	12	8	9	29	1889
02:00 PM	35	165	2	202	13	2	35	50	3	165	15	183	2	4	2	8	443

Smart Services, Inc.

88 W. Church Street
Newark, OH 43055
(740) 345-4700

File Name : Hamilton_Road_&_Beecher_Road_404565_04-27-2017

Site Code : 404565

Start Date : 4/27/2017

Page No : 2

Groups Printed- Cars - Trucks

	Hamilton Road Southbound				Beecher Road Westbound				Hamilton Road Northbound				Beecher Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:15 PM	52	166	6	224	11	6	37	54	7	152	12	171	1	1	1	3	452
02:30 PM	46	172	10	228	14	7	42	63	4	173	8	185	2	0	5	7	483
02:45 PM	42	162	8	212	9	24	39	72	11	179	12	202	2	2	4	8	494
Total	175	665	26	866	47	39	153	239	25	669	47	741	7	7	12	26	1872
03:00 PM	42	171	16	229	12	16	33	61	17	153	16	186	14	18	8	40	516
03:15 PM	51	154	4	209	15	7	57	79	11	202	13	226	35	67	17	119	633
03:30 PM	47	171	5	223	16	4	62	82	8	208	14	230	23	19	9	51	586
03:45 PM	58	155	8	221	13	7	57	77	5	201	12	218	9	7	6	22	538
Total	198	651	33	882	56	34	209	299	41	764	55	860	81	111	40	232	2273
04:00 PM	55	161	13	229	18	9	41	68	8	231	12	251	14	13	12	39	587
04:15 PM	46	174	8	228	17	9	52	78	4	234	6	244	6	4	6	16	566
04:30 PM	61	186	12	259	13	6	42	61	9	196	8	213	7	13	8	28	561
04:45 PM	53	190	4	247	8	12	59	79	4	243	7	254	9	13	4	26	606
Total	215	711	37	963	56	36	194	286	25	904	33	962	36	43	30	109	2320
05:00 PM	54	199	4	257	31	10	68	109	9	277	12	298	11	10	5	26	690
05:15 PM	65	196	8	269	14	12	61	87	12	264	8	284	12	32	17	61	701
05:30 PM	55	194	5	254	12	9	48	69	5	238	8	251	5	8	7	20	594
05:45 PM	62	182	3	247	5	6	52	63	13	242	8	263	9	13	6	28	601
Total	236	771	20	1027	62	37	229	328	39	1021	36	1096	37	63	35	135	2586
06:00 PM	58	177	9	244	11	10	55	76	10	232	6	248	9	14	5	28	596
06:15 PM	58	176	9	243	6	6	50	62	7	194	8	209	8	21	8	37	551
06:30 PM	48	160	6	214	8	5	48	61	9	200	5	214	5	6	11	22	511
06:45 PM	43	152	5	200	6	5	39	50	7	194	9	210	5	8	6	19	479
Total	207	665	29	901	31	26	192	249	33	820	28	881	27	49	30	106	2137
Grand Total	2221	7848	394	10463	551	432	2388	3371	312	8242	550	9104	360	420	304	1084	24022
Apprch %	21.2	75	3.8		16.3	12.8	70.8		3.4	90.5	6		33.2	38.7	28		
Total %	9.2	32.7	1.6	43.6	2.3	1.8	9.9	14	1.3	34.3	2.3	37.9	1.5	1.7	1.3	4.5	
Cars	2197	7691	389	10277	544	429	2364	3337	310	8088	542	8940	360	416	297	1073	23627
% Cars	98.9	98	98.7	98.2	98.7	99.3	99	99	99.4	98.1	98.5	98.2	100	99	97.7	99	98.4
Trucks	24	157	5	186	7	3	24	34	2	154	8	164	0	4	7	11	395
% Trucks	1.1	2	1.3	1.8	1.3	0.7	1	1	0.6	1.9	1.5	1.8	0	1	2.3	1	1.6

Smart Services, Inc.

88 W. Church Street
Newark, OH 43055
(740) 345-4700

File Name : Hamilton_Road_&_Beecher_Road_404565_04-27-2017

Site Code : 404565

Start Date : 4/27/2017

Page No : 3

	Hamilton Road Southbound				Beecher Road Westbound				Hamilton Road Northbound				Beecher Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	30	202	54	286	10	87	55	152	31	103	8	142	16	16	14	46	626
07:45 AM	49	191	59	299	9	55	62	126	36	110	18	170	34	37	26	97	686
08:00 AM	37	203					69			154			20	19	11	50	555
08:15 AM	56	178	9	243	10	5	52	67	1	124	13	138	3	4	6	13	461
Total Volume	172	774	127	1073	39	158	238	435	76	491	47	614	73	76	57	206	2328
% App. Total	16	72.1	11.8		9	36.3	54.7		12.4	80	7.7		35.4	36.9	27.7		
PHF	.768	.953	.538	.897	.975	.454	.862	.715	.528	.797	.653	.903	.537	.514	.548	.531	.848

Peak Hour Analysis From 12:00 PM to 06:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

04:45 PM	53	190	4	247	8	12	59	79	4	243	7	254	9	13	4	26	606
05:00 PM	54	199	4	257	31		68	109		277	12	298					
05:15 PM	65	196	8	269	14	12	61	87	12	264	8	284	12	32	17	61	701
05:30 PM	55	194	5	254	12	9	48	69	5	238	8	251	5	8	7	20	594
Total Volume	227	779	21	1027	65	43	236	344	30	1022	35	1087	37	63	33	133	2591
% App. Total	22.1	75.9	2		18.9	12.5	68.6		2.8	94	3.2		27.8	47.4	24.8		
PHF	.873	.979	.656	.954	.524	.896	.868	.789	.625	.922	.729	.912	.771	.492	.485	.545	.924

Appendix C. MORPC Growth Rate Information

From: [Hwashik Jang](#)
To: [Simon Addei](#)
Cc: [Nick Gill](#); [Zhuojun Jiang](#)
Subject: RE: Growth Rate Request - N. Hamilton Road and Beecher Road
Date: Thursday, June 02, 2016 2:41:32 PM
Attachments: [image001.jpg](#)

Simon,

We have completed growth rate for N. Hamilton Road and Beecher Road intersection.
Please use a linear annual growth rates as summarized in the following table below.

<u>Location</u>	<u>Linear Annual Growth Rate</u>
Beecher Rd e/o Hamilton Rd	1.00%
Hamilton Rd n/o Beecher Rd	1.00%
Beecher Rd w/o Hamilton Rd	0.50%
Hamilton Rd s/o Beecher Rd	1.00%

Note: This is planning level analysis based on MORPC regional travel demand model.
If you have any other questions, please let me know.

Thanks,

-Hwashik

Hwashik Jang | hjang@morpc.org | MORPC
Tel 614.233.4145 | Fax 614.233.4245

From: Nick Gill
Sent: Wednesday, May 18, 2016 11:52 AM
To: Hwashik Jang
Cc: nickgill5+dpjlwd79ukyuvqdzlgu@boards.trello.com; [Zhuojun Jiang](#)
Subject: FW: Growth Rate Request - N. Hamilton Road and Beecher Road

From: Simon Addei [<mailto:AddeiS@transassociates.com>]
Sent: Wednesday, May 18, 2016 11:26 AM
To: Nick Gill
Cc: Mark Mann
Subject: Growth Rate Request - N. Hamilton Road and Beecher Road

Hi Nick,

We are working on a traffic study near the intersection of N. Hamilton Road and Beecher Road in Gahanna. Would you be able to assist us in providing the appropriate traffic growth rates to apply to the current volumes at this intersection?

I have attached AM and PM peak hour traffic count data at the intersection. Also attached is the most current site plan. The site will contain 16,000 -sf of general office space, 11,500-sf of Dental/Medical Office, 4,200-sf of restaurant, and, 3,900-sf. of retail space.

Our opening year is 2017 and the design year is 2027. We are not considering any significant road network improvements for the design year. The study will be approved by Robert Priestas of the City of Gahanna.

Should you have any questions, please contact me. Thank you in advance.

Simon Addei, E. I. T.

Traffic Engineer



941 Chatham Lane, Suite 319

Columbus, OH, 43221

P: (614) 459- 7930 f: (614) 459-4485

addeis@transassociates.com

www.transassociates.com

Appendix D. Trip Assignment

AM Peak Hour Trip Assignments
The Shops At McKenna Creek - North Hamilton Road @ Beecher Road

Linear Annual Growth Rate (%)	Varies
Current Year	2017
Opening Year	2018
Design Year	2038

Legend	
Entering	Exiting

		Weekday AM Peak Hour (7:30 - 8:30 AM)															
Intersection	Lane Group	Current Traffic Volumes (2017)	Hamilton Commerce Center			No Build Traffic Volumes		Site Generated Traffic Volumes								Build Traffic Volumes	
								Pass-By				Pass-By		Primary			
			Pass-By	Primary	Total	Opening Year (2018)	Design Year (2038)	Entering		Exiting		Distribution	Trips	Distribution	Trips	Opening Year (2018)	Design Year (2038)
								Distribution	Trips	Distribution	Trips						
N Hamilton Rd @ Beecher Rd	EBL	73	0	16	16	89	96	0%	0	0%	0	0%	0	51%	21	110	117
	EBT	76	0	6	6	82	90	0%	0	0%	0	0%	0	19%	8	90	98
	EBR	57	0	6	6	63	69	0%	0	0%	0	0%	0			63	69
	WBL	39			0	39	47	0%	0	0%	0	0%	0	10%	5	44	52
	WBT	158	0	8	8	166	198	0%	0	0%	0	0%	0	9%	4	170	202
	WBR	238			0	238	286	0%	0	0%	0	0%	0			238	286
	NBL	76	0	10	10	86	101	0%	0	0%	0	0%	0	25%	13	99	114
	NBT	491			0	491	589	0%	0	0%	0	0%	0			491	589
	NBR	47			0	47	56	0%	0	0%	0	0%	0			47	56
	SBL	172			0	172	206	0%	0	0%	0	0%	0			172	206
	SBT	774	0	2	2	776	931	0%	0	0%	0	0%	0	50%	26	802	957
	SBR	127	0	6	6	133	158	0%	0	0%	0	0%	0	1%	1	134	159
N Hamiton @ McKenna Site Access	EBL				0											0	0
	EBT				0											0	0
	EBR	0			0	0	0	0%	0			0%	0	25%	10	10	10
	WBL				0											0	0
	WBT				0											0	0
	WBR				0											0	0
	NBL				0											0	0
	NBT	614	0	10	10	624	746	0%	0			0%	0	25%	13	637	759
	NBR				0											0	0
	SBL				0											0	0
	SBT	870	0	8	8	878	1047	0%				0%	0			878	1047
	SBR	0			0	0	0	0%				0%	0	60%	31	31	31
Beecher Rd @ McKenna Site Access	EBL	0	0	2	2	2	2	0%								2	2
	EBT	206			0	206	227	0%	0	0%	0	0%	0			206	227
	EBR	0			0	0	0	0%						5%	2	2	2
	WBL	0			0	0	0	0%						35%	18	18	18
	WBT	361			0	361	433	0%	0	0%	0	0%	0			361	433
	WBR	0	0	24	24	24	24	0%								24	24
	NBL	0			0	0	0	0%						5%	2	2	2
	NBT				0	0	0	0%								0	0
	NBR	0			0	0	0	0%						70%	29	29	29
	SBL	0	0	28	28	28	28	0%								28	28
	SBT				0	0	0	0%								0	0
	SBR	0	0	2	2	2	2	0%								2	2

PM Peak Hour Trip Assignments
The Shops At McKenna Creek - North Hamilton Road @ Beecher Road

Linear Annual Growth Rate (%)	Varies
Current Year	2017
Opening Year	2018
Design Year	2038

Legend	
Entering	Exiting

		Weekday PM Peak Hour (4:45 - 5:45 PM)															
Intersection	Lane Group	Current Traffic Volumes (2017)	Hamilton Commerce Center			No Build Traffic Volumes		Site Generated Traffic Volumes								Build Traffic Volumes	
			Pass-By	Primary	Total	Opening Year (2018)	Design Year (2038)	Pass-By				Pass-By		Primary		Opening Year (2018)	Design Year (2038)
								Entering		Exiting		Distribution	Trips	Distribution	Trips		
N Hamilton Rd @ Beecher Rd	EBL	37	9	12	21	58	62	-1%	0	50%	14	49%	14	51%	23	95	99
	EBT	63		5	5	68	74	-2%	-1	12%	4	9%	3	19%	9	80	86
	EBR	33		5	5	38	41	-1%	0			-1%	0		38	41	
	WBL	65	-1	0	-1	64	77	-3%	2			-3%	1.98	10%	5	71	84
	WBT	43	4	6	10	53	62	-2%	1			-2%	1	9%	4	58	67
	WBR	236	-3		-3	233	280	-9%	-3			-9%	-3			230	277
	NBL	30	8	7	15	45	51	-1%	13			-1%	13	25%	13	71	77
	NBT	1022	-8		-8	1014	1218	-40%	-13			-40%	-13			1001	1205
	NBR	35			0	35	42	-1%	0			-1%	0			35	42
	SBL	227			0	227	272	-9%	-3			-9%	-3			224	269
	SBT	779	-2	1	-1	778	934	-30%	3			-30%	3	50%	26	807	963
	SBR	21		5	5	26	30	-1%	0			-1%	0	1%	1	27	31
N Hamiton @ Site Access	EBL				0							0%	0			0	0
	EBT				0							0%	0			0	0
	EBR				0			0%		34%	9	34%	9	25%	11	20	20
	WBL				0							0%	0			0	0
	WBT				0							0%	0			0	0
	WBR				0							0%	0			0	0
	NBL				0							0%	0			0	0
	NBT	1087	0	7	7	1094	1311	0%				0%	0	25%	13	1107	1324
	NBR				0							0%	0			0	0
	SBL				0							0%	0			0	0
	SBT	877		6	6	883	1055	-33%	-10			-33%	-10			873	1045
	SBR	0			0	0	0	48%	15			48%	15	60%	31	46	46
Beecher Rd @ Site Access	EBL	0		2	2	2	2	0%				0%	0			2	2
	EBT	133			0	133	146	-4%	-1			-4%	-1			132	145
	EBR				0	0	0	4%	1			4%	1	5%	2	3	3
	WBL				0	0	0	48%	15			48%	15	35%	18	33	33
	WBT	94			0	94	113	-4%	-1			-4%	-1			93	112
	WBR	0	12	18	30	30	30	0%				0%	0			30	30
	NBL				0	0	0	0%		4%	1	4%	1	5%	2	3	3
	NBT				0	0	0	0%				0%	0			0	0
	NBR				0	0	0	0%		62%	18	62%	18	70%	32	50	50
	SBL	0	10	22	32	32	32	0%				0%	0			32	32
	SBT				0	0	0	0%				0%	0			0	0
	SBR	0		1	1	1	1	0%				0%	0			1	1

Appendix E. Turn Lane Warrants

RIGHT TURN LANE WARRANT WORKSHEET

Intersection Beecher Road Full Access Drive
 Project Name The Shops at McKenna Creek
 Project # ARSHT00 - 17119
 Analyst SA - Trans Associates

Approach EB
 Year Analyzed 2038
 Condition Build
 Peak Hour(s) AM and PM

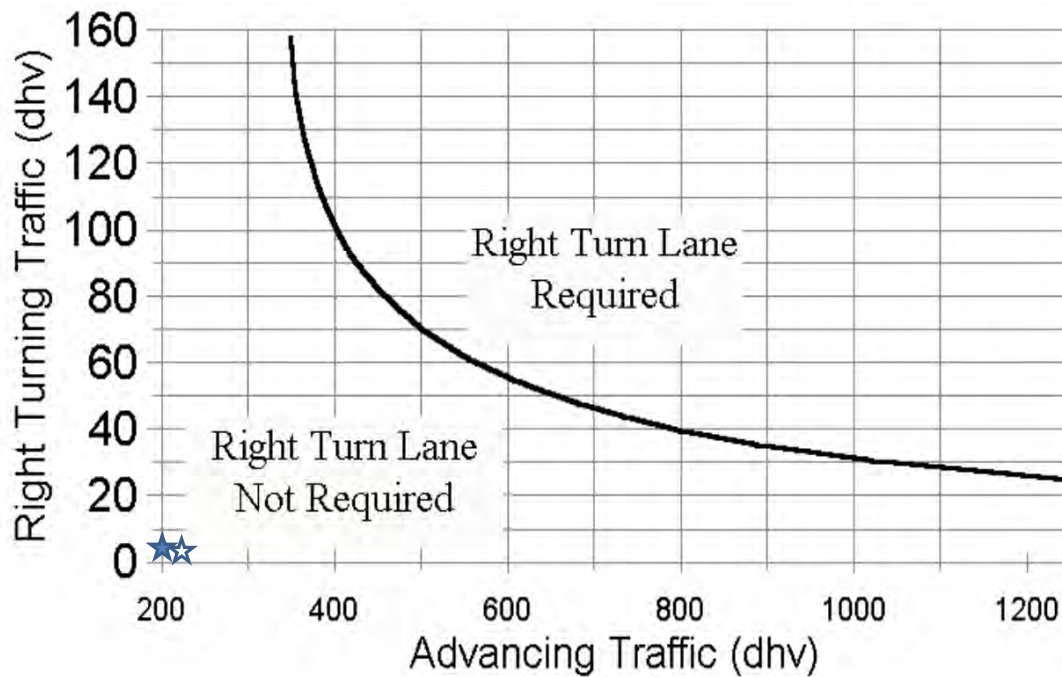
Right Turning traffic
 Advancing Traffic
 Warrant Met?

AM	PM
2	3
231	150
NO	NO



General Information:

2-Lane Highway Right Turn Lane Warrant =< 40 mph or 70 kph Posted Speed



Source: ODOT Location & Design Manual - Volume I (January 2006)
 401-6aE

6/9/2017

LEFT TURN LANE WARRANT WORKSHEET

Intersection Beecher Road Full Access Drive
 Project Name The Shops at McKenna Creek
 Project # ARSHT00 - 17119
 Analyst SA - Trans Associates

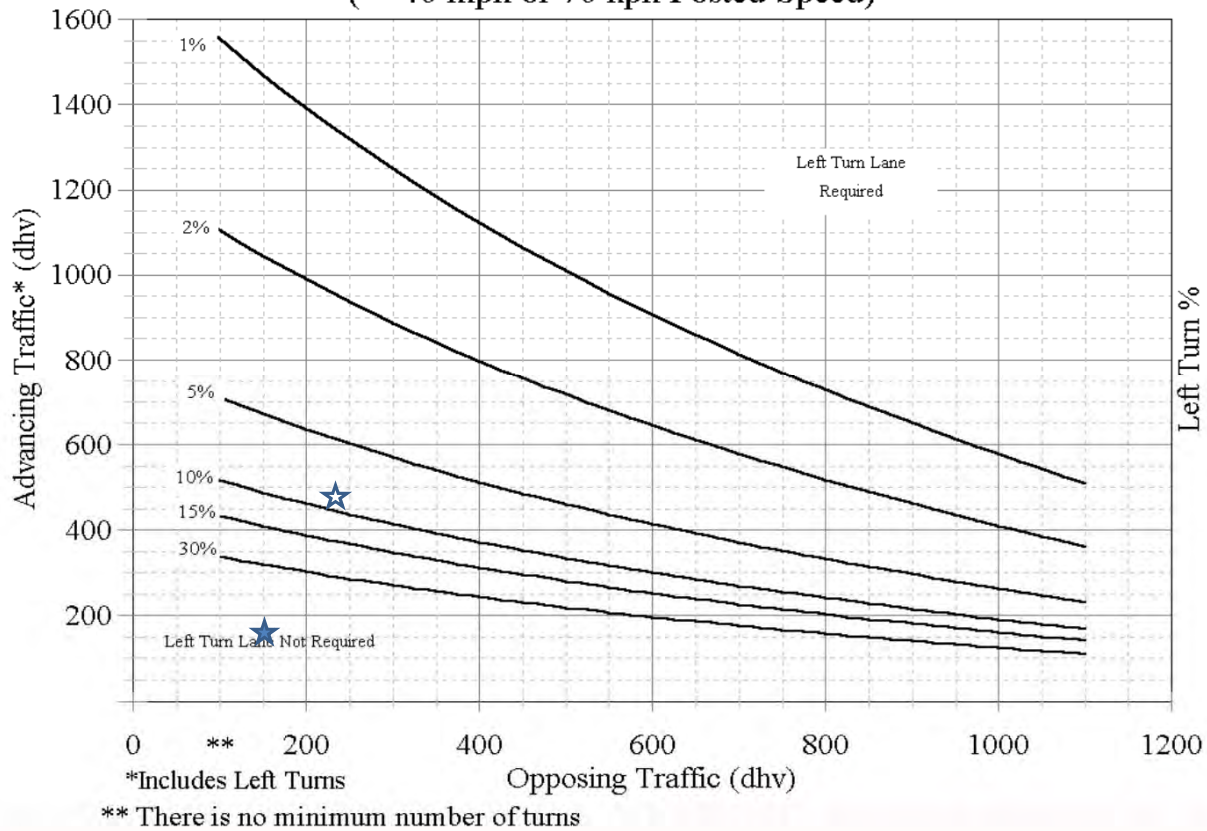
Approach WB
 Year Analyzed 2038
 Condition Build
 Peak Hour(s) AM and PM

	AM	PM
Advancing Traffic	475	175
Opposing Traffic	231	150
Left Turn %	4%	19%
Warrant Met?	NO	NO



General Information:

2-Lane Highway Left Turn Lane Warrant (= < 40 mph or 70 kph Posted Speed)



Source: ODOT Location & Design Manual - Volume I (January 2006)
 401-5aE

6/9/2017

RIGHT TURN LANE WARRANT WORKSHEET

<i>Project Name</i>	<u>The Shops at McKenna Creek</u>	<i>Approach</i>	<u>SB</u>
<i>Project #</i>	<u>ARSHT00 - 17119</u>	<i>Year Analyzed</i>	<u>2038</u>
<i>Compiled By:</i>	<u>SA - Trans Associates</u>	<i>Condition</i>	<u>Build</u>
<i>Intersection</i>	<u>Hamilton Rd & RIRO Access Dr</u>	<i>Peak Hour(s)</i>	<u>AM and PM</u>

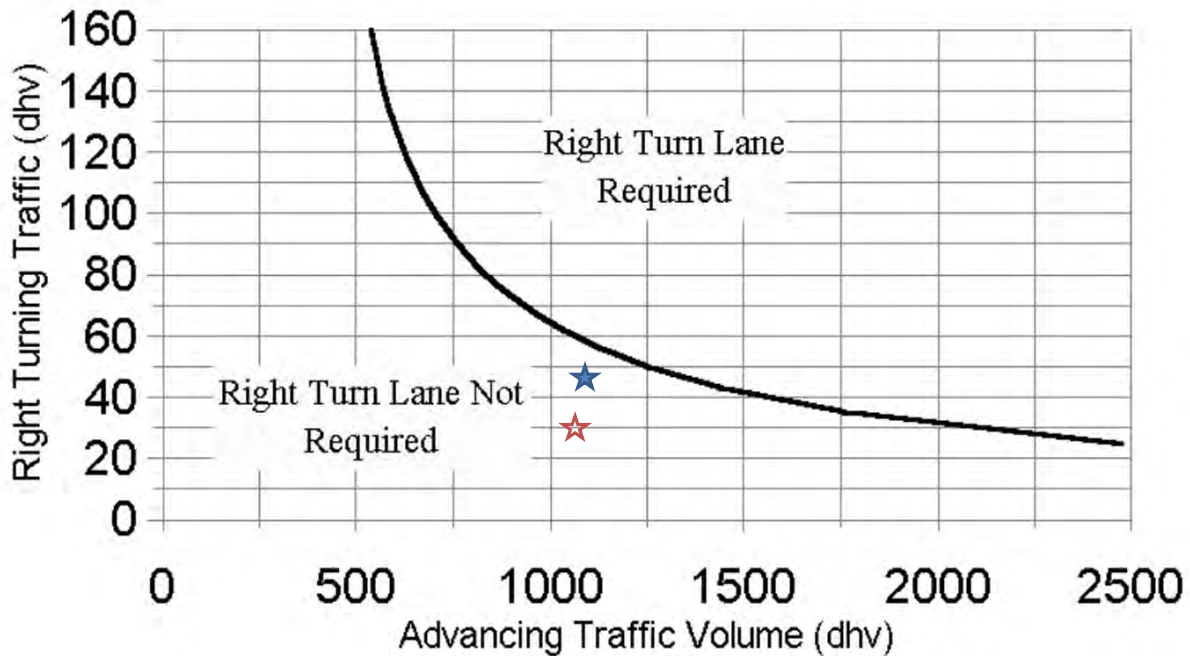
Right Turning traffic
Advancing Traffic
Warrant Met?

AM	PM
31	46
1,078	1,091
NO	NO



General Information:

4 Lane Highway Right Turn Lane Warrant (= \leq 40 mph or 70 kph Posted Speed)



Source: ODOT Location & Design Manual - Volume I (January 2006)
401-6cE

6/9/2017

Appendix F. Turn Lane Length Calculation Worksheets

Turn Lane Length Computation Worksheet (Based on ODOT's Location Design Manual)

Project Name: The Shops at McKenna Creek
Project Number: ARSHT00 - 17119
Compiled By: SA - Trans Associates

Intersection: Hamilton Road @ Beecher Road
Year: 2038
Condition: No Build

General Information:

Approach	NB	EB
Movement	Left	Left
Peak Hour	AM	AM

Type of Traffic Control

Signalized	YES	YES
Unsignalized Stopped Crossroad	NO	NO
Unsignalized Through Road	NO	NO

Design Parameters

Design Speed	35	25
Turn Volume (vph)	101	96
Approach Volume (vph)	746	255
Turn Percentage	14%	38%
High or Low	HIGH	HIGH
Applicable Design Condition (A, B or C)	A	A
Cycle Length (sec)	90	90
Cycles/Hour	40	40
Average Number of Vehicles/Cycle	3	3
Storage Length (ft)	150	150

Design Method

Condition A (Storage Only)	Taper	50	50
	Storage	150	150
	Total	200	200
Condition B (High Speed Decel Only)	Taper	-	-
	Decel Length	-	-
	Total	-	-
Condition C (Moderate Speed Deceleration & Storage)	Taper	-	-
	Decel Length	-	-
	Storage	-	-
	Total	-	-

Required Storage and/or Decel Length (ft/lane) =	150	150
Required Turn Lane Length, including 50' taper (ft/lane) =	200	200

Note: EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound

Source: January 2006 ODOT L & D Manual-Volume I: 401 - 9E, 401 -10E

Turn Lane Length Computation Worksheet (Based on ODOT's Location Design Manual)

Project Name: The Shops at McKenna Creek
Project Number: ARSHT00 - 17119
Compiled By: SA - Trans Associates

Intersection: Hamilton Road @ Beecher Road
Year: 2038
Condition: Build

General Information:

Approach	NB	EB
Movement	Left	Left
Peak Hour	AM	AM

Type of Traffic Control

Signalized	YES	YES
Unsignalized Stopped Crossroad	NO	NO
Unsignalized Through Road	NO	NO

Design Parameters

Design Speed	35	25
Turn Volume (vph)	114	117
Approach Volume (vph)	759	284
Turn Percentage	15%	41%
High or Low	HIGH	HIGH
Applicable Design Condition (A, B or C)	A	A
Cycle Length (sec)	90	90
Cycles/Hour	40	40
Average Number of Vehicles/Cycle	3	3
Storage Length (ft)	150	150

Design Method

Condition A (Storage Only)	Taper	50	50
	Storage	150	150
	Total	200	200
Condition B (High Speed Decel Only)	Taper	-	-
	Decel Length	-	-
	Total	-	-
Condition C (Moderate Speed Deceleration & Storage)	Taper	-	-
	Decel Length	-	-
	Storage	-	-
	Total	-	-

Required Storage and/or Decel Length (ft/lane) =	150	150
Required Turn Lane Length, including 50' taper (ft/lane) =	200	200

Note: EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound

Source: January 2006 ODOT L & D Manual-Volume I: 401 - 9E, 401 -10E

Turn Lane Length Computation Worksheet (Based on ODOT's Location Design Manual)

Project Name: The Shops at McKenna Creek
Project Number: ARSHT00 - 17119
Compiled By: SA - Trans Associates

Intersection: Hamilton Road @ Beecher Road
Year: 2038
Condition: No Build

General Information:

Approach	NB	EB
Movement	Left	Left
Peak Hour	PM	PM

Type of Traffic Control

Signalized	YES	YES
Unsignalized Stopped Crossroad	NO	NO
Unsignalized Through Road	NO	NO

Design Parameters

Design Speed	35	25
Turn Volume (vph)	51	62
Approach Volume (vph)	1311	177
Turn Percentage	4%	35%
High or Low	LOW	HIGH
Applicable Design Condition (A, B or C)	A	A
Cycle Length (sec)	90	90
Cycles/Hour	40	40
Average Number of Vehicles/Cycle	2	2
Storage Length (ft)	100	100

Design Method

Condition A (Storage Only)	Taper	50	50
	Storage	100	100
	Total	150	150
Condition B (High Speed Decel Only)	Taper	-	-
	Decel Length	-	-
	Total	-	-
Condition C (Moderate Speed Deceleration & Storage)	Taper	-	-
	Decel Length	-	-
	Storage	-	-
	Total	-	-

Required Storage and/or Decel Length (ft/lane) =	100	100
Required Turn Lane Length, including 50' taper (ft/lane) =	150	150

Note: EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound

Source: January 2006 ODOT L & D Manual-Volume I: 401 - 9E, 401 -10E

Turn Lane Length Computation Worksheet (Based on ODOT's Location Design Manual)

Project Name: The Shops at McKenna Creek
Project Number: ARSHT00 - 17119
Compiled By: SA - Trans Associates

Intersection: Hamilton Road @ Beecher Road
Year: 2038
Condition: Build

General Information:

Approach	NB	EB
Movement	Left	Left
Peak Hour	PM	PM

Type of Traffic Control

Signalized	YES	YES
Unsignalized Stopped Crossroad	NO	NO
Unsignalized Through Road	NO	NO

Design Parameters

Design Speed	35	25
Turn Volume (vph)	64	99
Approach Volume (vph)	1311	226
Turn Percentage	5%	44%
High or Low	LOW	HIGH
Applicable Design Condition (A, B or C)	A	A
Cycle Length (sec)	90	90
Cycles/Hour	40	40
Average Number of Vehicles/Cycle	2	3
Storage Length (ft)	100	150

Design Method

Condition A (Storage Only)	Taper	50	50
	Storage	100	150
	Total	150	200
Condition B (High Speed Decel Only)	Taper	-	-
	Decel Length	-	-
	Total	-	-
Condition C (Moderate Speed Deceleration & Storage)	Taper	-	-
	Decel Length	-	-
	Storage	-	-
	Total	-	-

Required Storage and/or Decel Length (ft/lane) =	100	150
Required Turn Lane Length, including 50' taper (ft/lane) =	150	200

Note: EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound

Source: January 2006 ODOT L&D Manual-Volume I: 401 - 9E, 401 -10E

Through Lane Backup Computation Worksheet (Based on ODOT's Location Design Manual)

Project Name: The Shops at McKenna Creek
Project Number: ARSHT00 - 17119
Compiled By: SA - Trans Associates

Intersection: Hamilton Road @ Beecher Road
Year: 2038
Condition: No Build

General Information:

Approach	NB	EB
Number of Through Lanes	2	1

AM Peak Hour:

Through Volume (vph)	589	90
Cycle Length (sec)	90	90
Cycles/Hour	40	40
Average Number of Vehicles/Cycle	15	3
Average Number of Vehicles/Cycle/Lane	8	3
Through Queue Backup (ft)	325	150

PM Peak Hour:

Through Volume (vph)	1218	74
Cycle Length (sec)	90	90
Cycles/Hour	40	40
Average Number of Vehicles/Cycle	31	2
Average Number of Vehicles/Cycle/Lane	16	2
Through Queue Backup (ft)	550	100

Through Queue Backup Length (ft/lane) =

550	150
------------	------------

Note: EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound

Source: January 2006 ODOT L&D Manual-Volume I: 401 - 9E, 401 -10E

Through Lane Backup Computation Worksheet (Based on ODOT's Location Design Manual)

Project Name: The Shops at McKenna Creek
Project Number: ARSHT00 - 17119
Compiled By: SA - Trans Associates

Intersection: Hamilton Road @ Beecher Road
Year: 2038
Condition: Build

General Information:

Approach	NB	EB
Number of Through Lanes	2	1

AM Peak Hour:

Through Volume (vph)	589	98
Cycle Length (sec)	90	90
Cycles/Hour	40	40
Average Number of Vehicles/Cycle	15	3
Average Number of Vehicles/Cycle/Lane	8	3
Through Queue Backup (ft)	325	150

PM Peak Hour:

Through Volume (vph)	1205	86
Cycle Length (sec)	90	90
Cycles/Hour	40	40
Average Number of Vehicles/Cycle	31	3
Average Number of Vehicles/Cycle/Lane	16	3
Through Queue Backup (ft)	550	150

Through Queue Backup Length (ft/lane) = **550** **150**

Note: EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound
























Source: January 2006 ODOT L&D Manual-Volume I: 401 - 9E, 401 -10E

Appendix G. Capacity Analyses and Results

HCM 2010 Signalized Intersection Summary

3: Hamilton Rd & Beecher Rd
























No Build 2037 - AM
The Shops at McKenna Creek (ARSHT00-17119)

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	96	90	69	47	198	286	101	589	56	206	931	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	104	98	75	51	215	311	110	640	61	224	1012	172
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	229	175	100	422	522	270	1370	613	468	1309	222
Arrive On Green	0.06	0.23	0.23	0.06	0.23	0.23	0.06	0.39	0.39	0.10	0.43	0.43
Sat Flow, veh/h	1774	980	750	1774	1863	1583	1774	3539	1583	1774	3028	514
Grp Volume(v), veh/h	104	0	173	51	215	311	110	640	61	224	591	593
Grp Sat Flow(s),veh/h/ln	1774	0	1730	1774	1863	1583	1774	1770	1583	1774	1770	1772
Q Serve(g_s), s	3.2	0.0	6.2	2.0	7.3	11.9	2.7	9.8	1.8	5.2	20.7	20.7
Cycle Q Clear(g_c), s	3.2	0.0	6.2	2.0	7.3	11.9	2.7	9.8	1.8	5.2	20.7	20.7
Prop In Lane	1.00		0.43	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	321	0	404	100	422	522	270	1370	613	468	765	766
V/C Ratio(X)	0.32	0.00	0.43	0.51	0.51	0.60	0.41	0.47	0.10	0.48	0.77	0.77
Avail Cap(c_a), veh/h	355	0	404	391	667	729	315	1370	613	652	877	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	0.0	23.7	33.3	24.6	20.3	14.7	16.6	14.2	11.3	17.6	17.6
Incr Delay (d2), s/veh	0.6	0.0	0.7	4.0	1.0	1.1	1.0	0.2	0.1	0.8	3.8	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	3.0	1.1	3.9	5.3	1.4	4.8	0.8	2.6	10.8	10.9
LnGrp Delay(d),s/veh	20.5	0.0	24.4	37.3	25.5	21.4	15.7	16.9	14.3	12.1	21.3	21.4
LnGrp LOS	C		C	D	C	C	B	B	B	B	C	C
Approach Vol, veh/h		277			577			811			1408	
Approach Delay, s/veh		22.9			24.3			16.5			19.9	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	32.1	8.1	21.0	8.2	35.4	8.6	20.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	15.0	27.0	16.0	16.0	6.0	36.0	6.0	26.0				
Max Q Clear Time (g_c+I1), s	7.2	11.8	4.0	8.2	4.7	22.7	5.2	13.9				
Green Ext Time (p_c), s	0.4	10.3	0.1	2.2	0.0	8.7	0.0	2.6				
Intersection Summary												
HCM 2010 Ctrl Delay			20.1									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

3: Hamilton Rd & Beecher Rd
























Build 2037 - AM
The Shops at McKenna Creek (ARSHT00-17119)

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	117	98	69	52	202	286	114	589	56	206	957	159
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	127	107	75	57	220	311	124	640	61	224	1040	173
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	243	171	105	414	514	266	1367	612	465	1294	215
Arrive On Green	0.08	0.24	0.24	0.06	0.22	0.22	0.06	0.39	0.39	0.10	0.43	0.43
Sat Flow, veh/h	1774	1021	716	1774	1863	1583	1774	3539	1583	1774	3039	505
Grp Volume(v), veh/h	127	0	182	57	220	311	124	640	61	224	605	608
Grp Sat Flow(s),veh/h/ln	1774	0	1736	1774	1863	1583	1774	1770	1583	1774	1770	1774
Q Serve(g_s), s	4.1	0.0	6.7	2.3	7.8	12.4	3.1	10.1	1.8	5.4	22.3	22.4
Cycle Q Clear(g_c), s	4.1	0.0	6.7	2.3	7.8	12.4	3.1	10.1	1.8	5.4	22.3	22.4
Prop In Lane	1.00		0.41	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	332	0	414	105	414	514	266	1367	612	465	753	755
V/C Ratio(X)	0.38	0.00	0.44	0.55	0.53	0.60	0.47	0.47	0.10	0.48	0.80	0.81
Avail Cap(c_a), veh/h	341	0	414	379	647	713	296	1367	612	638	851	853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	24.3	34.2	25.7	21.2	15.7	17.2	14.7	11.8	18.7	18.8
Incr Delay (d2), s/veh	0.7	0.0	0.7	4.4	1.1	1.2	1.3	0.3	0.1	0.8	5.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	3.3	1.3	4.1	5.6	1.6	4.9	0.8	2.7	11.8	11.9
LnGrp Delay(d),s/veh	21.1	0.0	25.0	38.6	26.7	22.4	16.9	17.5	14.7	12.6	23.8	23.9
LnGrp LOS	C		C	D	C	C	B	B	B	B	C	C
Approach Vol, veh/h		309			588			825			1437	
Approach Delay, s/veh		23.4			25.6			17.2			22.1	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.7	32.9	8.4	21.8	8.7	35.9	9.6	20.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	15.0	27.0	16.0	16.0	6.0	36.0	6.0	26.0				
Max Q Clear Time (g_c+I1), s	7.4	12.1	4.3	8.7	5.1	24.4	6.1	14.4				
Green Ext Time (p_c), s	0.4	10.2	0.1	2.2	0.0	7.4	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			21.6									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

3: Hamilton Rd & Beecher Rd
























No Build 2037 - PM
The Shops at McKenna Creek (ARSHT00-17119)

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	74	41	77	62	280	51	1218	42	272	934	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	67	80	45	84	67	304	55	1324	46	296	1015	33
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	202	113	131	393	521	317	1478	661	332	1749	57
Arrive On Green	0.04	0.18	0.18	0.07	0.21	0.21	0.04	0.42	0.42	0.12	0.50	0.50
Sat Flow, veh/h	1774	1121	631	1774	1863	1583	1774	3539	1583	1774	3499	114
Grp Volume(v), veh/h	67	0	125	84	67	304	55	1324	46	296	513	535
Grp Sat Flow(s),veh/h/ln	1774	0	1751	1774	1863	1583	1774	1770	1583	1774	1770	1843
Q Serve(g_s), s	2.3	0.0	4.8	3.5	2.2	12.1	1.3	26.5	1.3	7.2	15.6	15.6
Cycle Q Clear(g_c), s	2.3	0.0	4.8	3.5	2.2	12.1	1.3	26.5	1.3	7.2	15.6	15.6
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	352	0	315	131	393	521	317	1478	661	332	885	921
V/C Ratio(X)	0.19	0.00	0.40	0.64	0.17	0.58	0.17	0.90	0.07	0.89	0.58	0.58
Avail Cap(c_a), veh/h	369	0	368	373	685	770	370	1535	687	332	885	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	27.6	34.3	24.6	21.2	12.3	20.6	13.3	17.3	13.4	13.4
Incr Delay (d2), s/veh	0.3	0.0	0.8	5.1	0.2	1.0	0.3	7.1	0.0	24.7	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	2.4	1.9	1.2	5.4	0.7	14.3	0.6	8.4	7.8	8.1
LnGrp Delay(d),s/veh	24.1	0.0	28.4	39.4	24.8	22.2	12.6	27.7	13.3	41.9	14.4	14.3
LnGrp LOS	C		C	D	C	C	B	C	B	D	B	B
Approach Vol, veh/h		192			455			1425			1344	
Approach Delay, s/veh		26.9			25.8			26.7			20.4	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	35.8	9.6	17.7	6.7	42.0	7.3	20.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	9.0	33.0	16.0	16.0	5.0	37.0	4.0	28.0				
Max Q Clear Time (g_c+I1), s	9.2	28.5	5.5	6.8	3.3	17.6	4.3	14.1				
Green Ext Time (p_c), s	0.0	3.3	0.1	1.6	0.0	15.2	0.0	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			24.1									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

3: Hamilton Rd & Beecher Rd

Build 2037 - PM
The Shops at McKenna Creek (ARSHT00-17119)

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	99	86	41	84	67	277	77	1205	42	269	963	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	108	93	45	91	73	301	84	1310	46	292	1047	34
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	384	234	113	136	387	508	303	1455	651	318	1681	55
Arrive On Green	0.07	0.20	0.20	0.08	0.21	0.21	0.04	0.41	0.41	0.11	0.48	0.48
Sat Flow, veh/h	1774	1187	574	1774	1863	1583	1774	3539	1583	1774	3499	114
Grp Volume(v), veh/h	108	0	138	91	73	301	84	1310	46	292	530	551
Grp Sat Flow(s),veh/h/ln	1774	0	1761	1774	1863	1583	1774	1770	1583	1774	1770	1843
Q Serve(g_s), s	3.8	0.0	5.4	4.0	2.6	12.6	2.1	27.5	1.4	7.6	17.6	17.6
Cycle Q Clear(g_c), s	3.8	0.0	5.4	4.0	2.6	12.6	2.1	27.5	1.4	7.6	17.6	17.6
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	384	0	347	136	387	508	303	1455	651	318	850	885
V/C Ratio(X)	0.28	0.00	0.40	0.67	0.19	0.59	0.28	0.90	0.07	0.92	0.62	0.62
Avail Cap(c_a), veh/h	401	0	355	358	610	698	314	1472	658	318	850	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	0.0	27.8	35.7	25.9	22.6	13.5	21.8	14.2	18.5	15.3	15.3
Incr Delay (d2), s/veh	0.4	0.0	0.7	5.5	0.2	1.1	0.5	7.9	0.0	30.4	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.7	2.2	1.3	5.7	1.1	14.9	0.6	8.9	8.9	9.2
LnGrp Delay(d),s/veh	23.3	0.0	28.5	41.2	26.2	23.7	14.0	29.7	14.2	48.9	16.7	16.7
LnGrp LOS	C		C	D	C	C	B	C	B	D	B	B
Approach Vol, veh/h		246			465			1440			1373	
Approach Delay, s/veh		26.2			27.5			28.3			23.5	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	36.6	10.1	19.6	7.5	42.1	9.3	20.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	9.0	33.0	16.0	16.0	4.0	38.0	6.0	26.0				
Max Q Clear Time (g_c+I1), s	9.6	29.5	6.0	7.4	4.1	19.6	5.8	14.6				
Green Ext Time (p_c), s	0.0	3.2	0.1	1.6	0.0	14.6	0.0	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			26.2									
HCM 2010 LOS			C									

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	227	2	18	433	24	2	0	29	28	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	247	2	20	471	26	2	0	32	30	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	497	0	0	249	0	0	776	788	248	791	776	484
Stage 1	-	-	-	-	-	-	252	252	-	523	523	-
Stage 2	-	-	-	-	-	-	524	536	-	268	253	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1067	-	-	1317	-	-	315	323	791	307	328	583
Stage 1	-	-	-	-	-	-	752	698	-	537	530	-
Stage 2	-	-	-	-	-	-	537	523	-	738	698	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1067	-	-	1317	-	-	310	317	791	291	322	583
Mov Cap-2 Maneuver	-	-	-	-	-	-	310	317	-	291	322	-
Stage 1	-	-	-	-	-	-	750	697	-	536	522	-
Stage 2	-	-	-	-	-	-	527	515	-	707	697	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	10.3	18.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	719	1067	-	-	1317	-	-	301
HCM Lane V/C Ratio	0.047	0.002	-	-	0.015	-	-	0.108
HCM Control Delay (s)	10.3	8.4	0	-	7.8	-	-	18.4
HCM Lane LOS	B	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	145	3	33	112	30	3	0	50	32	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	158	3	36	122	33	3	0	54	35	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	154	0	0	161	0	0	374	390	159	401	375	138
Stage 1	-	-	-	-	-	-	164	164	-	210	210	-
Stage 2	-	-	-	-	-	-	210	226	-	191	165	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1426	-	-	1418	-	-	583	545	886	560	556	910
Stage 1	-	-	-	-	-	-	838	762	-	792	728	-
Stage 2	-	-	-	-	-	-	792	717	-	811	762	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1426	-	-	1418	-	-	570	530	886	515	541	910
Mov Cap-2 Maneuver	-	-	-	-	-	-	570	530	-	515	541	-
Stage 1	-	-	-	-	-	-	836	760	-	790	710	-
Stage 2	-	-	-	-	-	-	771	699	-	760	760	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	9.5	12.4
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	859	1426	-	-	1418	-	-	522
HCM Lane V/C Ratio	0.067	0.002	-	-	0.025	-	-	0.069
HCM Control Delay (s)	9.5	7.5	0	-	7.6	-	-	12.4
HCM Lane LOS	A	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2



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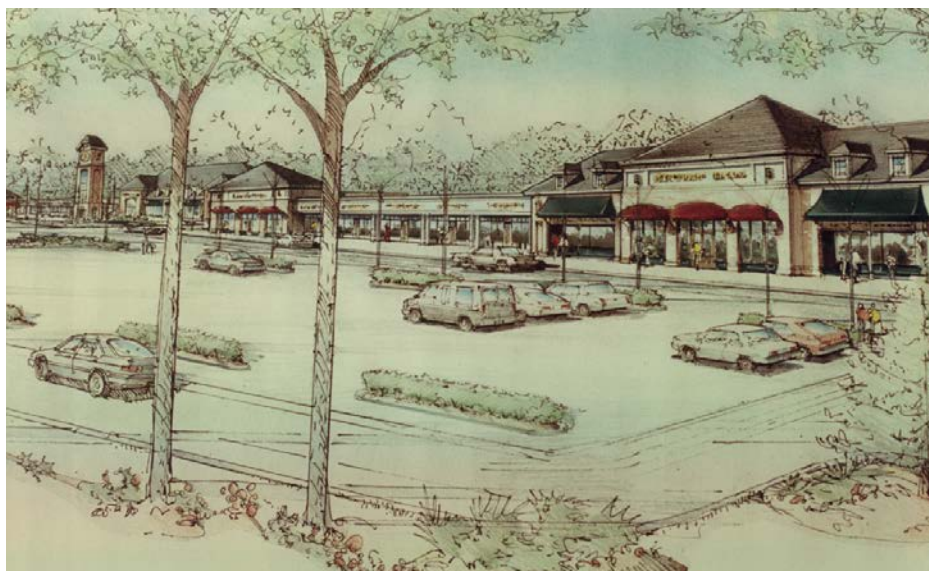
PLANNING AND DEVELOPMENT STAFF REPORT

Project Summary

This is a request to develop just over 5 acres of property with 32,000 square feet of retail, restaurant, and office uses. The property is zoned Planned Commercial Center District (PCC). The property was rezoned to PCC in 1990. The 1990 ordinance contains a text and images of what the proposed center was anticipated to look like. The renderings below were meant as a representation of what the buildings facing Hamilton Road would look like, not necessarily the exact style of the center. The applicant proposes an alternative style and therefore has requested a variance to this provision of the text.



Attachments to the 1990 ordinance depicting a general style of architecture of the project.



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In 1993 the City amended the zoning code to prohibit additional properties from being rezoned to PCC. PCC is classified as a “General Commercial District” in the zoning code and has many of the same development parameters as typical commercial zone districts such as Suburban Office or Community Commercial.

The property is not located within a subarea plan but it was included in the 2015 Economic Development Strategy as a target site. A specific style of architecture and site layout was not identified, however, the site was identified as being appropriate for up to 52,000 square feet of retail and office uses. This preliminary site analysis did not take into account the ravine along the western boundary of the site. The applicants have provided a significant setback along this area ranging from approximately 82 feet to 140 feet. Providing the setback significantly reduces the amount of developable acreage.

Area Commission

The project was heard by the area commissions on June 1, 2017. The comments from area commissioners and the public in attendance at that meeting are included with this report. It should be noted that the request for Final Development Plan (FDP), Design Review (DR), and Variance approval are not required to go through the area commission process. The applicant was requested by city staff to submit an area commission application and they agreed. Please remember that feedback from the area commission is non-binding. It is not a review for code consistency but rather an attempt at getting the thoughts of the community on what they like or don't like about a project.

Variance

Variances to Ordinance 111-1990 have been requested. Exhibit C of the ordinance contain development standards for the property and section F of the exhibit contains building design standards. Section F reads as follows:

Section F. Building design standards.

- 1. The design of building facades facing Hamilton Road which are constructed on Parcel #1 will be in the style shown on the renderings attached to these Design Standards as Attachments 1 and 2, although those renderings do not depict the exact appearance of those facades because the building layout and final detailing has not been determined.*
- 2. The building facades facing Hamilton Road on buildings constructed on Parcel #1 will be articulated and have varying roof lines generally as shown on those renderings in order to avoid the appearance of a flat-walled traditional strip shopping center.*
- 3. The architectural design of all buildings shall employ only the following building finish materials: wood; brick; stone; dryvit; or stucco, except that windows, doors and accents may be of other materials. All four sides, or all facades, shall be finished in one or more of those materials.*

The request deviates from this section of the ordinance in that the proposed facades do not closely match that of the facades in Attachment 1 and 2, the buildings do not have a varied roof line as generally depicted in Attachment 1 and 2, and the building materials include metal panels and awnings.



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Staff does not object to the variance request. It is staff's opinion that the building design is superior to that of the proposed buildings supplied in the 1990 ordinance. It should be noted that properties within PCC zoning are subject to the standards of Design Review District 3 (DRD-3). This district allows and promotes the use of some materials prohibited by the ordinance such as aluminum.

Planning Commission shall not grant a variance unless it finds that all of the following conditions apply to the case in question:

- a) There are special circumstances or conditions applying to the land, building or use referred to in the application.
- b) The granting of the variance is necessary for the preservation and enjoyment of substantial property rights.
- c) The granting of the application will not materially affect adversely the health or safety of persons residing or working in the neighborhood of the proposed use and will not be materially detrimental to the public welfare or injurious to property or improvements in such neighborhood.

Final Development Plan

Planning Commission shall approve a FDP application if the following four conditions are met:

- A. The proposed development meets the applicable development standards of this Zoning Ordinance.
- B. The proposed development is in accord with appropriate plans for the area.
- C. The proposed development would not have undesirable effects on the surrounding area.
- D. The proposed development would be in keeping with the existing land use character and physical development potential of the area.

Planning commission may deny a FDP application for any of the following reasons:

- A. The proposed development does not meet the applicable development standards of this Zoning Ordinance.
- B. The proposed development is not in accord with appropriate plans of the area.
- C. The proposed development will have undesirable effects on the surrounding area.
- D. The proposed development is not in keeping with the existing land use character and physical development potential of the area.

Design Review

The property is zoned PCC and therefore subject to the standards of Design Review District 3 (DRD-3). Relevant standards include the following:



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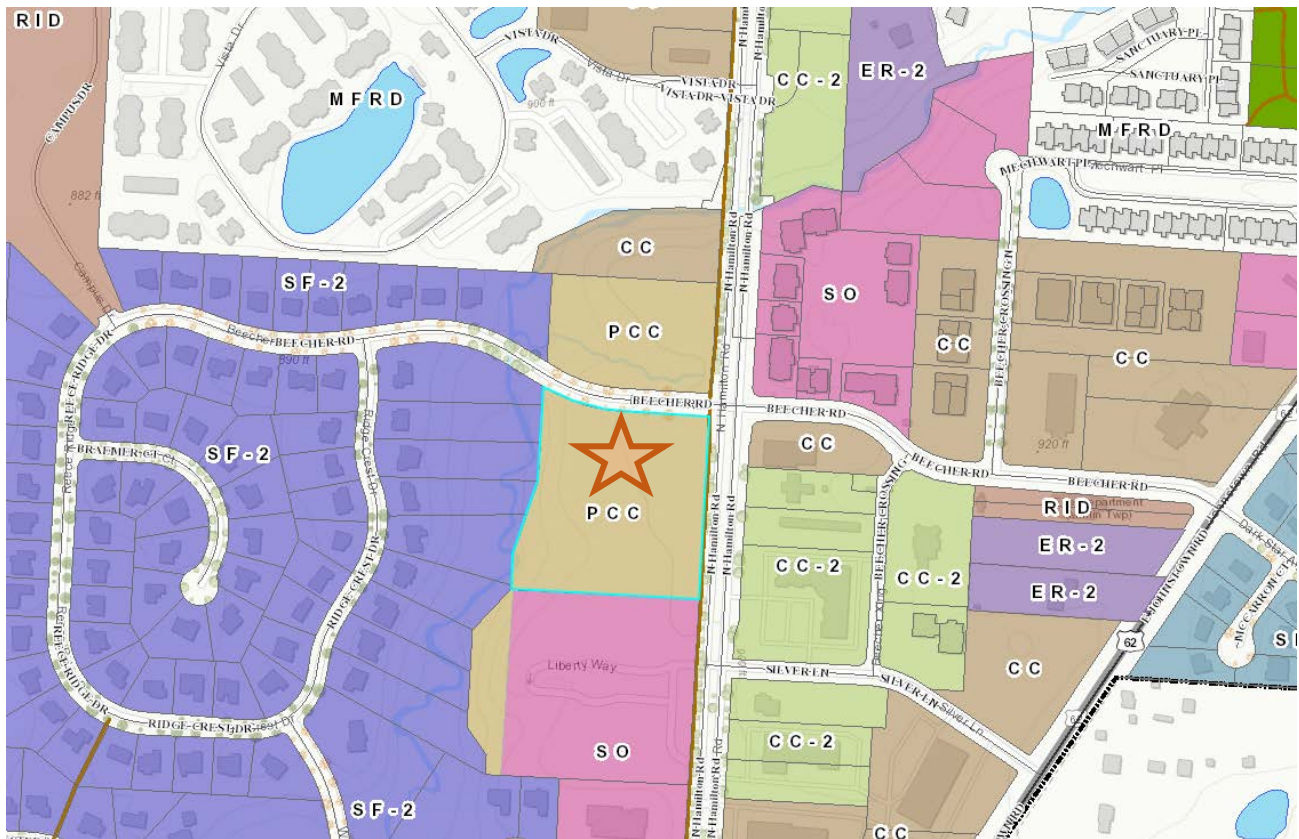


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- Brick, stone, cement, aluminum, wood, and other materials that will enhance the development in a positive manner are encouraged.
- Specific colors and color schemes are not identified but colors should be designed to ensure universal harmony on all commercial developments.
- Orientation of the development should focus on and compliment the surrounding topographic features and existing developments.

The 1990 ordinance contains language regarding colors and materials and is attached.

Zoning Map



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Building Elevations



Respectfully Submitted By:
Michael Blackford, AICP
Deputy Director



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Area Commission Feedback

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Shops at McKenna Creek

Meeting date:

6-1-2017

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☒ Other _____

Reviewer name:

Paul Benson

Reviewer status:

- ☒ Commission Member
☐ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

The scale is similar to other properties on Hamilton Rd.

How would you improve the proposal as submitted?

I would prefer to have more dedicated tenants for the shops before going ahead with construction.

What do you see as some of the outcomes of the proposal?

I worry about the shops running empty as there are many empty retail locations nearby.

What are your overall comments or suggestions?

The traffic scenarios with Bucken rd. directly impact the decision.

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable



Very appropriate
and desirable



N/A

1

2

3

4

5

Pedestrian friendliness

X

Scale

X

Compatibility with surrounding uses

X

Vehicular circulation

X

Traffic impact on neighboring streets

X

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Shops at McKenna Creek

Meeting date:

6/1/17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☒ Other

Reviewer name:

Mark Silveggio

Reviewer status:

- ☒ Commission Member
☐ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

Yes, with respect to Beecher Hamilton Rd, but perhaps not on Beecher Rd.
Depends greatly upon actual execution.

How would you improve the proposal as submitted?

Reduce parking; create only one entrance/exit.

What do you see as some of the outcomes of the proposal?

Increased congestion, potential entrant of new business and jobs

What are your overall comments or suggestions?

Consider impact to surrounding traffic; consider applying for fewer parking spaces

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:	Not appropriate or desirable		Very appropriate and desirable			N/A
	←		→			
	1	2	3	4	5	
Pedestrian friendliness		X				
Scale			X			
Compatibility with surrounding uses				X		
Vehicular circulation		X				
Traffic impact on neighboring streets		X				

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

THE SHOPS AT MCKENNA CREEK

Meeting date:

6-1-17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☒ Other DEVELOPMENT & DESIGN REVIEW

Reviewer name:

GRETCHEN FLOYD

Reviewer status:

- ☒ Commission Member
☐ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

I'M UNSURE AT THIS POINT. THE DRAWING AVAILABLE SEEMS VERY UTILITARIAN - - ALMOST INSTITUTIONAL. I'D LIKE TO SEE A MORE NEIGHBORHOOD FRIENDLY LOOK/FEEL.

How would you improve the proposal as submitted?

SEE ABOVE. I WOULD ALSO LIKE TO SEE LESS PARKING AND MORE LANDSLAPING.

What do you see as some of the outcomes of the proposal?

I'M CONCERNED ABOUT IMPACT ON TRAFFIC, THE IMPACT ON THE RESIDENTS DIRECTLY BEHIND THE DEVELOPMENT, AND THE IMPACT ON GREEN SPACE.

What are your overall comments or suggestions?

IF THE CITY HAS ARCHITECTURE OR BRANDING STANDARDS IT WOULD BE HELPFUL TO HAVE THEM TO EVALUATE THINGS LIKE THIS. IF NOT, IT'S SOMETHING NEEDED. IS THERE A PLAN TO CONTINUE THE WALKING/BIKING PATHS THROUGH THIS AREA? ← IMPORTANT

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable

Very appropriate
and desirable

N/A

←

→

1

2

3

4

5

Pedestrian friendliness			X			
Scale			X			
Compatibility with surrounding uses			X			
Vehicular circulation			X			
Traffic impact on neighboring streets			X			

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Shops @ McKenna Creek

Meeting date:

6-1-17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☐ Other _____

Reviewer name:

Jeff Mahoney

Reviewer status:

- ☒ Commission Member
☐ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

Yes

How would you improve the proposal as submitted?

What do you see as some of the outcomes of the proposal?

What are your overall comments or suggestions?

Traffic concerns

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable



1

2

3

Very appropriate
and desirable



4

5

N/A

Pedestrian friendliness

Scale

Compatibility with surrounding uses

Vehicular circulation

Traffic impact on neighboring streets

+

+

+

+

+

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

THE SHOPS AT MCKENNA CREEK

Meeting date:

6/1/17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☒ Other

Reviewer name:

JAMIE MCKENNA

Reviewer status:

- ☒ Commission Member
☐ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

Yes

How would you improve the proposal as submitted?

MORE DETAILS NECESSARY BUT PROBABLY AS NO APPROVAL IS NEEDED.

What do you see as some of the outcomes of the proposal?

What are your overall comments or suggestions?

TRAFFIC INGRESS/EGRESS IS A CONCERN

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable



1

2

3

4

5

Very appropriate
and desirable



N/A

Pedestrian friendliness

Scale

Compatibility with surrounding uses

Vehicular circulation

Traffic impact on neighboring streets

X

X

X

X

X

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

SHOPS AT McKenna Creek

Meeting date:

6-1-17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☒ Other

Reviewer name:

DON JENSEN

Reviewer status:

- ☒ Commission Member
☐ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

NOT SURE, WOULD PREFER IT NOT BE DEVELOPED, I LIKE THE TREES THERE NOW

How would you improve the proposal as submitted?

"APPROVE" PER ZONING I GUESS - BUT HIGHLY CONCERNED WITH TRAFFIC, NOISE, ETC

What do you see as some of the outcomes of the proposal?

HIGH VOLUME OF TRAFFIC

What are your overall comments or suggestions?

- CONCERNED ABOUT SIGNAGE - NO POLE SIGNS PLEASE
 - DETERMINE WHO MAINTAINS "PRESERVATION AREA"
 - STONE OR BRICK EXTERIOR ONLY
 - NEED A SIDEWALK ON BEECHER SOUTH SIDE

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate or desirable

Very appropriate and desirable

N/A



1

2

3

4

5

	1	2	3	4	5	N/A
Pedestrian friendliness			X	X		
Scale			X			
Compatibility with surrounding uses			X			
Vehicular circulation	X					
Traffic impact on neighboring streets	X					

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Shops at McHenry Creek

Meeting date:

6/1/17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☐ Other _____

Reviewer name:

Mary Cartwright

Reviewer status:

- ☐ Commission Member
☒ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

How would you improve the proposal as submitted?

tenant specificity

What do you see as some of the outcomes of the proposal?

What are your overall comments or suggestions?

more information needed as to tenants,
resolution of traffic issues

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable



1

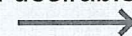
2

3

4

5

Very appropriate
and desirable



N/A

Pedestrian friendliness			X			
Scale						
Compatibility with surrounding uses						
Vehicular circulation	X					
Traffic impact on neighboring streets	X					

I not really know

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Sul Corner Beacher

Meeting date:

1. Jan 17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☐ Other _____

Reviewer name:

FREDERICK GOTTLIEB

Reviewer status:

- ☐ Commission Member
☒ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

No

How would you improve the proposal as submitted?

No Curb cut on Beacher

What do you see as some of the outcomes of the proposal?

*Impact on Home values
 People coming S on Hamilton will try to Turn Rt on Beacher then
 Left into Proposed center
 Traffic out of site to go N on Hamilton not cross street traffic*

What are your overall comments or suggestions?

*Have a U Turn on Hamilton so all traffic enters & leaves
 from Rt Turn on Hamilton*

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable

Very appropriate
and desirable

N/A

1	2	3	4	5
	X			
	X	X		
X				
X				

Pedestrian friendliness

Scale

Compatibility with surrounding uses

Vehicular circulation

Traffic impact on neighboring streets

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Development SW
corner of Beecher
+ Hamilton

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☐ Other _____

Meeting date:

6/1

Reviewer name:

DAYNA McCRARY

Reviewer status:

- ☐ Commission Member
☒ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

NO

How would you improve the proposal as submitted?

change the use to
professional office space. we do not need flowers and
restaurants over here.

What do you see as some of the outcomes of the proposal?

less green space. worse traffic.
development that is unnecessary and unwanted.

What are your overall comments or suggestions?

Cutting Beecher Rd. will make the adjacent
neighborhood less pedestrian friendly. We've only
had side walks for 3-4 years, now this big
project is being inserted.

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable

Very appropriate
and desirable

N/A

←

→

1

2

3

4

5

Pedestrian friendliness

Scale

Compatibility with surrounding uses

Vehicular circulation

Traffic impact on neighboring streets

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Shops at McKenna Creek

Meeting date:

6/1/2017

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☐ Other _____

Reviewer name:

Rebecca Allen

Reviewer status:

- ☐ Commission Member
☒ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

No, it is too large

How would you improve the proposal as submitted?

Unacceptable as to size.

What do you see as some of the outcomes of the proposal?

Increased traffic in an area that already has traffic issues & safety issues.

What are your overall comments or suggestions?

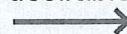
Decrease the size of the development or change use from retail to medical office space.

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable

Very appropriate
and desirable

N/A



1

2

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Pedestrian friendliness

X

Scale

X

Compatibility with surrounding uses

X

Vehicular circulation

X

Traffic impact on neighboring streets

X

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Shops @ McKenna Creek

Meeting date:

6/31/2017

Project type:

☐ Annexation

☐ Conditional Use

☐ Zoning Change (rezoning)

☒ Other Final Development
Plan & Design Review

Reviewer name:

Tracy Clay

Reviewer status:

☐ Commission Member

☒ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

How would you improve the proposal as submitted?

* Put a sidewalk on Beecher Rd on South side of Beecher

* Be sure curb cut on both sides of Beecher to both developments

What do you see as some of the outcomes of the proposal?

"I can walk to dinner if there's a restaurant is not in a blind spot."

"Maybe extra traffic in our neighborhood due to ignorance of traffic & streets"

What are your overall comments or suggestions?

I am not opposed to development on either side - I would just like a small footprint and safety issues addressed. * turn over please

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate or desirable

Very appropriate and desirable

N/A

← 1 2 3 4 5 →

	1	2	3	4	5	N/A
Pedestrian friendliness		X				
Scale			X			
Compatibility with surrounding uses				X		
Vehicular circulation		X				
Traffic impact on neighboring streets		X				

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

The Shops at McKenna Creek

Meeting date:

6/1/17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☐ Other _____

Reviewer name:

Greg Sergio
373 Beecher Rd Gahanna Ohio 43230

Reviewer status:

~~614-614-471-7174~~

☐ Commission Member

☒ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

Does not fit at all. Too much retail directly in front of a residential community.

How would you improve the proposal as submitted?

No retail. The Otterbein facility just to the South would have been much better on this site.

What do you see as some of the outcomes of the proposal?

Severe traffic issues on Beecher Rd, due to 2 new curb cuts. North bound Hamilton Rd traffic can only access both new developments via Beecher Rd.

What are your overall comments or suggestions?

The traffic study must be completed while Columbus Academy is in full session. The traffic is already unbearable at times with no new development.

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

Not appropriate
or desirable

Very appropriate
and desirable

N/A

←

→

1

2

3

4

5

Pedestrian friendliness

Scale

Compatibility with surrounding uses

Vehicular circulation

Traffic impact on neighboring streets

XXXXX

Gahanna Area Commission Framework

COMMISSION FEEDBACK CRITERIA

Project name:

Shops @ McKenna Creek

Meeting date:

6-1-17

Project type:

- ☐ Annexation
☐ Conditional Use
☐ Zoning Change (rezoning)
☐ Other _____

Reviewer name:

Deborah House

Reviewer status:

- ☐ Commission Member
☒ General Public

Does the scale and use of the proposal fit the context of the surrounding neighborhood?

No. Destroys existing wooded, beautiful site next to residential area w/ negative impact on residential area.

How would you improve the proposal as submitted?

Eliminate curb cuts into Beecher

What do you see as some of the outcomes of the proposal?

- Dangerous intersections at Beecher and Hamilton with new curb cuts
- Decreased property values in Academy Ridge and Thurston
- If a restaurant is built would it serve alcohol?
- Concerned about traffic flow coming onto Beecher and increasing already high traffic from Columbus Academy
- Include sidewalk along Beecher
- Eliminate curb cuts into Beecher

What are your overall comments or suggestions?

- Maintain horticultural beauty w/ existing trees (can't tell from plan)
- Too much "junky" retail along Hamilton and within Gahanna
- Concern about existing empty "retail" in Gahanna, just start w/ Creekside
- Concern about impact on McKenna Creek and drainage

Please rate the following aspects of the proposal for its level of appropriateness or inappropriateness for its context and for the City of Gahanna:

	Not appropriate or desirable		Very appropriate and desirable		N/A
	1	2	3	4	5
Pedestrian friendliness	X				
Scale	X				
Compatibility with surrounding uses	X				
Vehicular circulation	X				
Traffic impact on neighboring streets	X				

Gahanna Area Commission Feedback

Name: Ryan Spak

Area Commission #2

Meeting Date: 6/1/2017

Project Name: Shops at McKenna Creek (AC-0001-2017)

Project Type: Other (Pre-Final Plan Review)

Comments:

1. The thing that struck me almost immediately was that the parking lot seems large for this development. We discussed this at the meeting (City mandates minimum parking). Perhaps nothing can be done now, but hopefully this can be addressed in the future.
2. Several of the planning documents previously provided by the City emphasize that it is desirable to have a consistent “brand” of architecture. I have to admit that I didn’t fully understand what they meant until I saw a rendering of these shops. A wood/aluminum finish screams “Easton Gateway”, not “Gahanna”. It would be a fish out of water at that location on Hamilton. I’m not an architect so I can’t suggest something better, but I have to imagine it would be more in the direction of a decorative brick.
3. At the time of the meeting, building heights were not determined. I think 1-story would be most appropriate for this area, perhaps with additional height for decorative roofs.
4. A question for the City: who decides the design vehicle of the access points? I don’t know how delivery deals are made, but I know I’ve seen large Sysco food trucks even at tiny restaurants. Therefore, if a restaurant is a likely tenant, it seems like at least one access point should accommodate a WB-50 trailer. The right-in/right-out would be most logical, but sizing that for a trailer would have to be balanced to consider the shared use path (i.e., pavement width designed for trucks would allow cars to navigate it at a higher speed while crossing the path).

It doesn’t look like the current parking lot or drives are designed for a larger truck. Maybe that’s mostly the developer’s risk, but if it is built for a smaller design vehicle than is used, it will tear up landscaping, curbs, drive aprons, walks, paths, etc. that all exist within the public Right-of-Way.

5. I got the impression there is a history between the City and residents of the Academy Ridge neighborhood, so I didn’t want to interject in the discussion at the meeting. Maybe it’s still not my place, but I wanted to offer a few thoughts in private.

I understand people are protective of their neighborhoods...that’s a natural reaction. I also understand that some traffic concepts can be obtuse or even counter-intuitive. That said, I hope the City stands up for itself and considers the wants of “81 homes” vs the other 33,000+ residents and users of the roadways.

For example, adding two driveways is not a “four way intersection”...it’s a two-lane road with two drives. It’s nothing special, this configuration is ubiquitous throughout the city/region/state/country. Adding a walk on the north side of this proposal wouldn’t make sense without connecting it to the neighborhood. Connecting it would require moving/replacing guardrail, cutting down a significant number of trees and probably substantial earthwork in the “preservation area” that was to be untouched; all this for a sidewalk that is redundant with the other side of the road—which they were so quick to point out is “only 26 feet away”.

Gahanna Area Commission Feedback

Name: Ryan Spak

Area Commission #2

Meeting Date: 6/1/2017

Project Name: Shops at McKenna Creek (AC-0001-2017)

Project Type: Other (Pre-Final Plan Review)

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Exhibit C

Ordinance 111-1990

EXHIBIT C

DEVELOPMENT STANDARDS

for

Planned Commercial Center District

Zoning Application No. ZC-10-90

A. Use limitations.

1. No building or premises shall be used, constructed, erected, arranged, designed or intended to be used as:
 - a. An adult bookstore, adult theater or adult entertainment establishment;
 - b. A vehicle sales or service facility of any kind, including gasoline service station and repair shop for automobiles, recreational vehicles or other vehicles; or
 - c. A boat or trailer sales or service establishment.
2. Free-standing or guyed antenna towers are prohibited.

B. Lighting standards.

1. All lighting fixtures shall not exceed 24 feet in height, and any light fixture more than 16 feet in height, other than internally illuminated signs, shall be a cut-off type fixture (down lighting) so that such lighting shall not shine above the horizontal.
2. Pole mounted lighting shall be mounted on poles which are wood or black, dark brown or bronze colored metal.

C. Signage standards.

1. Sign frames and poles shall be black, dark brown, dark charcoal, dark rust, dark maroon, dark green or dark bronze in color.
2. Only internally illuminated graphics shall be utilized, except that monument-type signs may be externally illuminated.

D. Landscape standards.

1. Development planning and engineering shall assure that all reasonable steps are taken to assure that the ravine along the west edge of the PCC District shall, to the extent located in the PCC District, remain substantially in its natural state, subject to deviation therefrom necessary for the construction of the Access Road (the road separating Parcel #1 and Parcel #2 as those Parcels are designated on the Survey) and utility lines in and adjacent thereto, the construction of sanitary sewer lines to provide service for the PCC District to the sanitary sewer line to be constructed in said ravine and any improvements required to provide for proper storm water drainage from the PCC District into said ravine.
2. Within the required parking set back along Hamilton Road and the south side of the Access Road, reasonable efforts will be made to preserve a reasonable number of existing trees having a diameter of more than eight inches in order to provide a pleasing streetscape without unduly restricting visibility of the development in the PCC District from Hamilton Road and the Access Road.
3. Landscaping shall be provided at the following ratio of lot coverage (both buildings and parking/loading).
 - a. 0 to 20,000 square feet - 6" of total trunk diameter plus an additional 1" of total trunk diameter for every 4,000 square feet of coverage.
 - b. 20,000 to 100,000 - 10" of total trunk diameter plus an additional 1" of total trunk diameter for every 4,000 square feet of coverage over 20,000.
 - c. Over 100,000 square feet - 20" of total trunk diameter plus an additional 1" of total trunk diameter for every 6,500 square feet of coverage over 100,000.

Such tree planting material shall be used to provide plantings within parking areas, as part of frontage treatment, and to accent buildings. Existing trees of 3" diameter or greater which are

retained on a site may be used as part of the above requirements as long as such trees are not located in service areas. Minimum tree trunk size shall be not less than 2" diameter at time of planting.

4. At the east edge of the parking lot on Parcel #1, except at driveways onto Hamilton Road, screening from Hamilton Road shall be provided to a total height of not less than 3 feet above the finished grade of the parking lot by means of one, or a combination of two or more, of the following: (a) earthen mounding; (b) plantings having an opacity of not less than 75% at time of planting; (c) walls; or (d) grading the parking lot to an elevation below the grade of the area east of the parking lot.
- E. Dumpster screening: Trash containers and dumpsters of any type shall be contained within buildings or shall be enclosed on all sides with fences or walls of brick, stone or wood at least six feet in height or with landscape materials of at least 80% opacity and at least six feet in height at time of planting.
- F. Building design standards.
1. The design of building facades facing Hamilton Road which are constructed on Parcel #1 will be in the style shown on the renderings attached to these Design Standards as Attachments 1 and 2, although those renderings do not depict the exact appearance of those facades because the building layout and final detailing has not been determined.
 2. The building facades facing Hamilton Road on buildings constructed on Parcel #1 will be articulated and have varying roof lines generally as shown on those renderings in order to avoid the appearance of a flat-walled traditional strip shopping center.
 3. The architectural design of all buildings shall employ only the following building finish materials: wood; brick; stone; dryvit; or stucco, except that windows, doors and accents may be of other materials. All four sides, or all facades, shall be finished in one or more of those materials.

4. The colors of exterior finishes of buildings will be either natural colors (for example, but not by way of limitation, brick, stone, copper or brass) or applied finishes in white or shades and tones of brown, rust, tan, grey and cream, with accents of other colors being permitted.



