



MEMORANDUM

"... meeting community needs... enhancing quality of life."

TO: CEDC and ARA

FROM: Karen Harkness, Director of Community and Economic Development

DATE: July 15, 2013

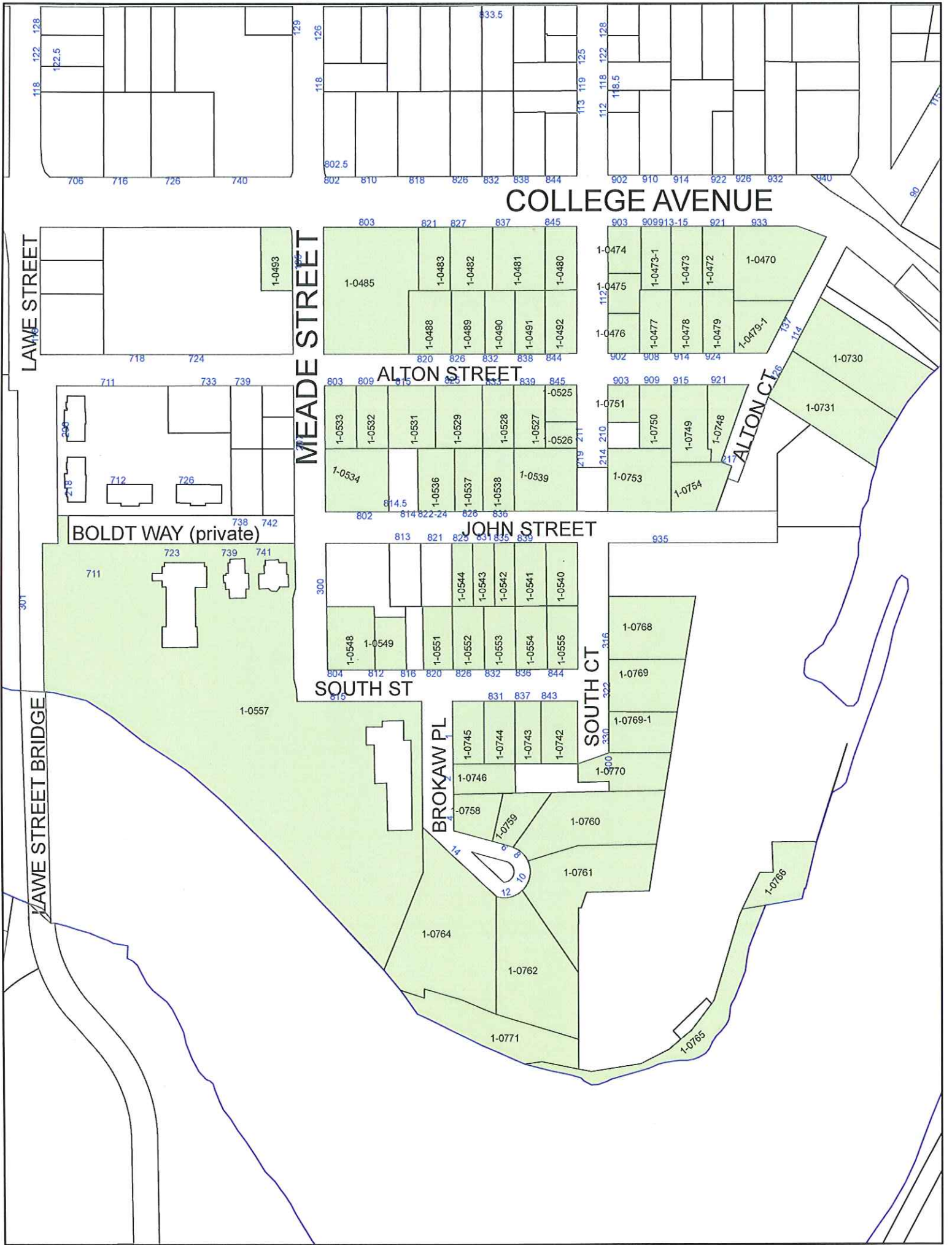
RE: 935 E. John Street Traffic Impact Analysis

City of Appleton Department of Community and Economic Development requested that the Department of Public Works conduct a Traffic Impact Analysis for 935 E. John Street based on the proposed development plan by Vetter Denk and Ganther, which was presented to the neighborhood on May 16, 2013. Public Works was asked to review traffic impacts created and or contributed by the proposed development of 180 multi-family units on the adjoining neighborhood and surrounding area. A complete copy of the Traffic Impact Analysis is attached.

Community and Economic Development staff reviewed the Traffic Impact Analysis with the developer's on Wednesday, July 10, 2013. The Traffic Impact Analysis is also attached to the Appleton Redevelopment Authority and the Community and Economic Development Committee Agenda's for the week of July 15th.

Additionally, the attached letter and Traffic Impact Analysis was mailed to the neighborhood on July 11, 2013.

If there are any additional questions or clarifications please let me know. Thanks.



COLLEGE AVENUE

MEADE STREET

LAWE STREET

ALTON STREET

JOHN STREET

SOUTH ST

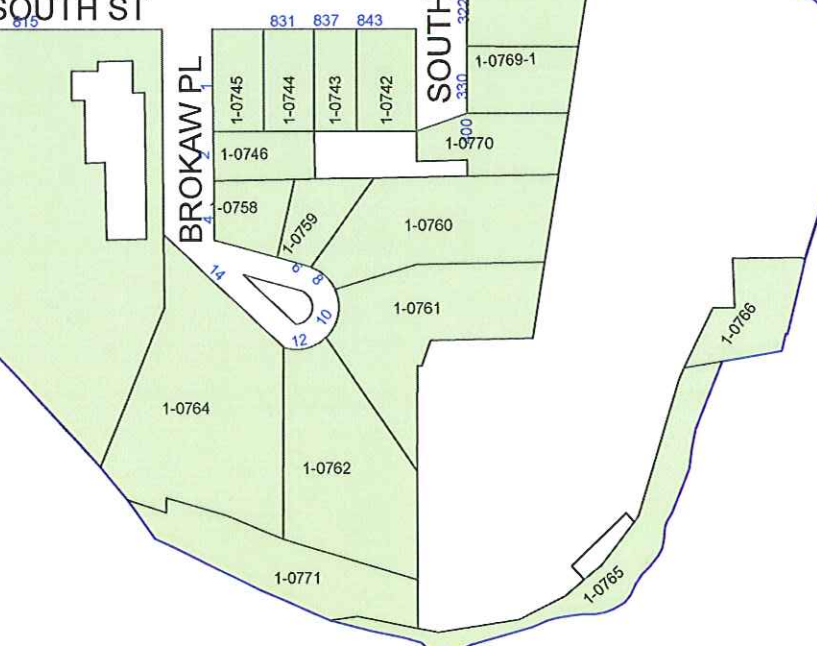
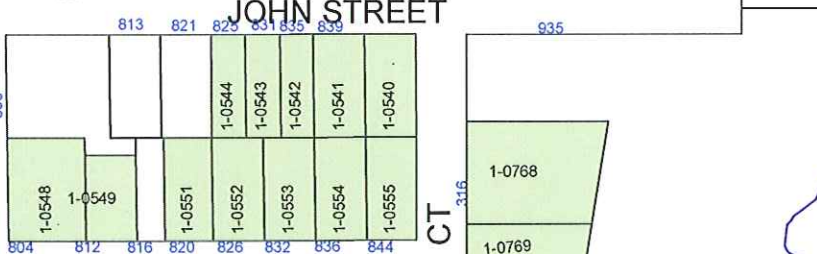
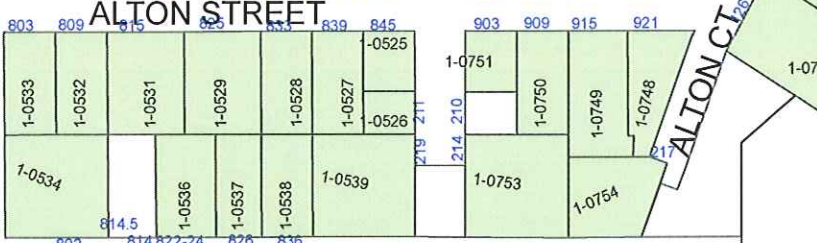
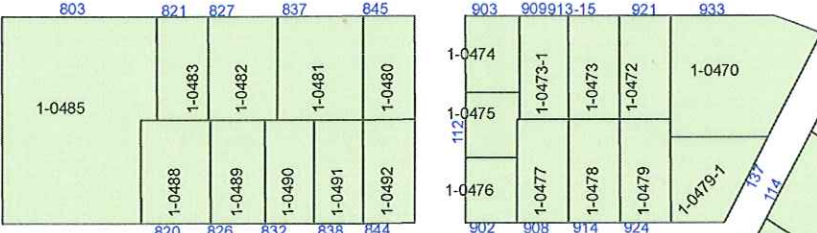
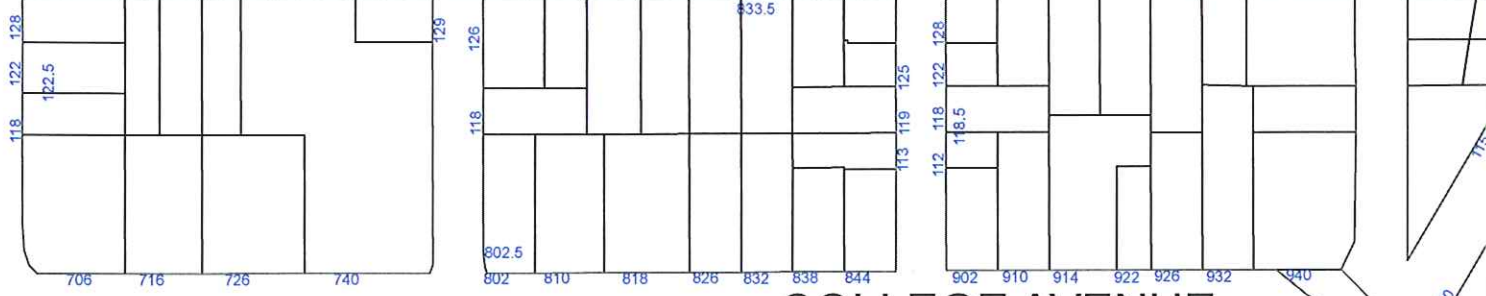
BROKAW PL

SOUTH CT

BOLDT WAY (private)

KAWE STREET BRIDGE

ALTON CT





COMMUNITY AND ECONOMIC DEVELOPMENT

100 North Appleton Street
Appleton, WI 54911
Telephone: (920) 832-6468
Fax: (920) 832-5994

July 11, 2013

Name
Address

Dear Name:

During the neighborhood meeting held at Lawrence University on May 16, 2013, the developer team (Vetter Denk and Ganther Construction) indicated they would be conducting a traffic study as one of several other steps in completing their due diligence in evaluating their proposed development for 935 E. John Street. The neighbors in attendance indicated that they would like to see the traffic study take place prior to Lawrence University's year end which was June 9, 2013.

In order to accommodate that request and expedite the gathering of information, the City of Appleton Department of Community and Economic Development requested that the Department of Public Works (DPW) conduct a Traffic Impact Analysis for 935 E. John Street. DPW was asked to review traffic impacts created and or contributed by the proposed development of 180 multi-family units on the adjoining neighborhood and surrounding area. Traffic counts on Meade Street and John Street were collected for 24 hours beginning at 11:00 a.m. on Wednesday, June 5, 2013.

Community and Economic Development staff reviewed the Traffic Impact Analysis with the developer's on Wednesday, July 10, 2013. The Traffic Impact Analysis is also attached to the Appleton Redevelopment Authority and the Community and Economic Development Committee for the week of July 15th.

We will continue to keep the neighborhood updated on this proposed project and have enclosed a copy of the Traffic Impact Analysis for your reference. This study has been mailed to the same list of neighbors that were invited to the Neighborhood Meeting held at Lawrence University on May 16, 2013.

As an update, the developers are nearing completion of their due diligence and plan to provide an update on their proposed development approximately in the next 6 to 8 weeks.

If there are any additional questions or clarifications please feel free to contact me at karen.harkness@appleton.org or my phone at 832-6468. Thanks.

Karen Harkness, Director of Community and Economic Development



DEPARTMENT OF PUBLIC WORKS
Engineering Division – Traffic Section
2625 E. Glendale Avenue
Appleton, WI 54911
TEL (920) 832-5580
FAX (920) 832-5570

To: Eric S. Lom, City Traffic Engineer
From: Michael Hardy, Assistant City Traffic Engineer
Date: June 27, 2013
Re: Traffic Impact Analysis – 935 E. John Street Apartment/Townhouse Development

The Traffic Section was asked to review the potential traffic and parking impacts associated with a development proposal of the prior Foremost Farm property, located at approximately 935 E. John Street. The property is located along the west side of the Fox River, east of South Court.

Study Intersections:

Access to the proposed development will be limited to John Street and Meade Street, with most new traffic accessing College Avenue at Meade Street. The following intersections were identified for control evaluation:

1. John Street & Meade Street
2. College Avenue & Meade Street

The intersection of John Street and Meade Street is currently stop-controlled, with northbound and eastbound traffic stopping for westbound the southbound traffic. John Street proceeds to the east of Meade Street and Lawrence University has a private street/driveway designated as Boldt Way to the west of the intersection.

The intersection of College Avenue and Meade Street is currently controlled by traffic signal. Daily traffic counts were collected on John Street east of Meade Street (511 vehicles/day), and Meade Street north of John Street (2,224 vehicles/day). Peak hour turn counts were collected at College and Meade.

Proposed Development:

The proposed development is an apartment complex consisting of 180 units, 240 parking stalls, and mostly 2 bedroom apartments/townhouses.

Generated Traffic:

The traffic expected to be generated by the proposed development is based on the land use type and size, and trip rates as published in the Institute of Transportation Engineering's (ITE) *Trip Generation Manual, 7th Edition*. The proposed development is expected to generate 1,200 new daily trips (600 entering, 600 exiting) during a typical weekday. The following table breaks down the weekday peak hour trips expected.

			Daily Total	AM Peak			PM Peak		
Site	ITE Code	Type/Size		Total	Enter	Exit	Total	Enter	Exit
Apartment	220	240 Vehicles	1,200.00	115	29%	71%	146	61%	39%
					33	82		89	57

Evaluation of New Traffic:

Control evaluations were completed for the identified intersections. The Meade / John intersection was evaluated for the possible need for all way stop control (AWSC). College and Meade was evaluated for the impact to performance with the new traffic which would be generated by the proposed development.

Meade & John:

The Federal Highway Administration *Manual on Uniform Traffic Control Devices* (MUTCD) was referenced for recommended criteria to determine if AWSC is warranted. The criteria for AWSC requires vehicles entering the major street approaches to average at least 300 vehicles per hour for any eight (8) hours of an average day. The criteria also requires entering vehicles, bicycles and pedestrians entering the minor street approaches to exceed 200 units per hour for any eight (8) hours of an average day. The application of existing counts and the new 1,200 daily trips against the criteria results in the following.

MINIMUM CRITERIA	CRITERIA FOR EACH OF 8 HRS.	Existing Conditions		With New Trips Added	
		AVG 8 HIGHEST HOURS	PERCENT OF REQ'D	AVG 8 HIGHEST HOURS	PERCENT OF REQ'D
		MINOR ST.	200	28	14%
MAJOR ST.	300	181	60%	287	96%
CRITERIA MET?		NO	37%	NO	67%

Additionally, the peak hour new trips were evaluated using Trafficware's *Synchro* simulation software to calculate the performance. No significant delays are anticipated.

College & Meade:

The combination of existing peak hour turn counts and assigned new traffic was used to predict the impact of new traffic on the signal's performance. The following is a summary of the counts and assigned new traffic.

Evaluation of On-Street Parking Impacts:

The segment of Meade Street between John Street and College Avenue is currently 32 feet wide (from face of curb to face of curb), with parking allowed on one side only. We recommend no changes to this configuration associated with the proposed development.

The segment of John Street east of Meade Street is currently 28 feet wide (from face of curb to face of curb), with parking allowed on both sides in some areas. We recommend that parking be completely removed from the entire length of one side if the proposed development occurs.

AM Traffic												
Street	Meade Northbound			Meade Southbound			College Eastbound			College Westbound		
	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	98
Existing Counts	32	23	10	127	17	16	27	336	26	13	658	17
New Trips	41	8	29	0	3	0	0	0	17	12	0	0
Applied Trips	73	31	39	127	20	16	27	336	72	25	658	17

PM Traffic												
Street	Meade Northbound			Meade Southbound			College Eastbound			College Westbound		
	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT
Existing Counts	30	18	11	261	12	15	44	829	27	19	534	139
New Trips	26	5	18	0	9	0	0	0	46	32	0	0
Applied Trips	56	23	29	261	21	15	44	829	73	51	534	139

Trafficware's *Synchro* simulation software was used to calculate the performance of existing traffic and new traffic. The average delay per vehicle for the AM and PM peak hours were calculated. No adjustments were made to the existing signal timing parameters.

AM Performance (Delay / Vehicle)												
Street	Meade Northbound			Meade Southbound			College Eastbound			College Westbound		
	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	98
Existing	35.0	26.4	<	26.1	14.5	<	7.8	9.4	<	7.1	12.5	<
New	39.2	20.2	<	26.2	15.1	<	7.8	10.5	<	7.2	12.5	<

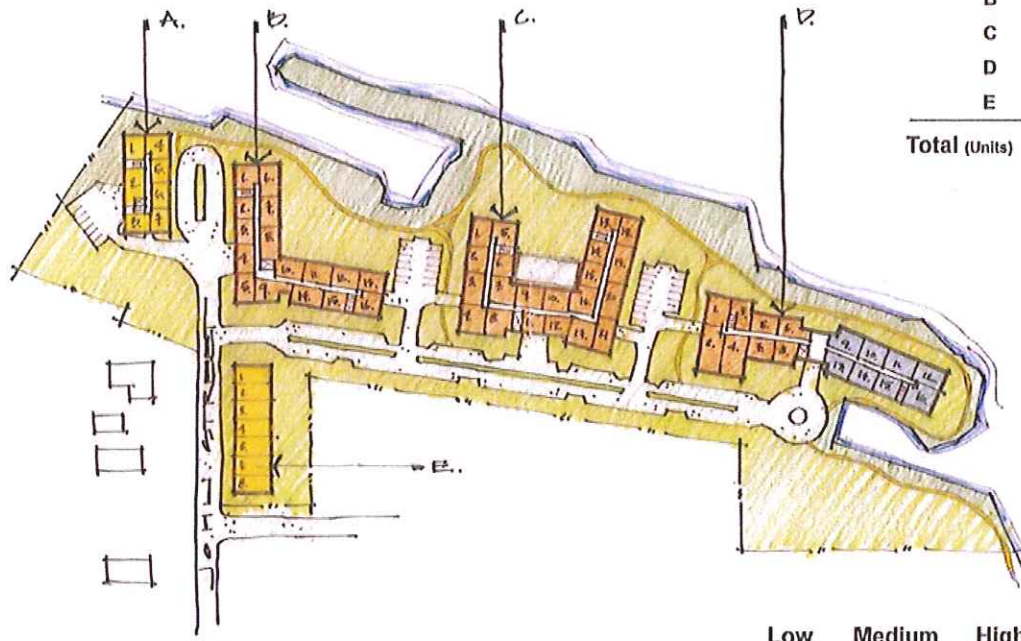
PM Performance (Delay / Vehicle)												
Street	Meade Northbound			Meade Southbound			College Eastbound			College Westbound		
	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT
Existing	39.7	27.8	<	32.5	13.6	<	10.0	17.8	<	9.2	17.1	<
New	44.3	23.0	<	32.8	14.7	<	10.1	21.9	<	10.5	17.1	<

Conclusion & Recommendations:

The completed control evaluation did not reveal any significant impacts with the introduction of a new apartment/townhouse complex connected to E. John Street near the west side of the Fox River.

At the Meade / John intersection, the installation of AWSC is recommended in conjunction with the proposed development based on the combination of proposed vehicle traffic combined with the high volume of pedestrian traffic.

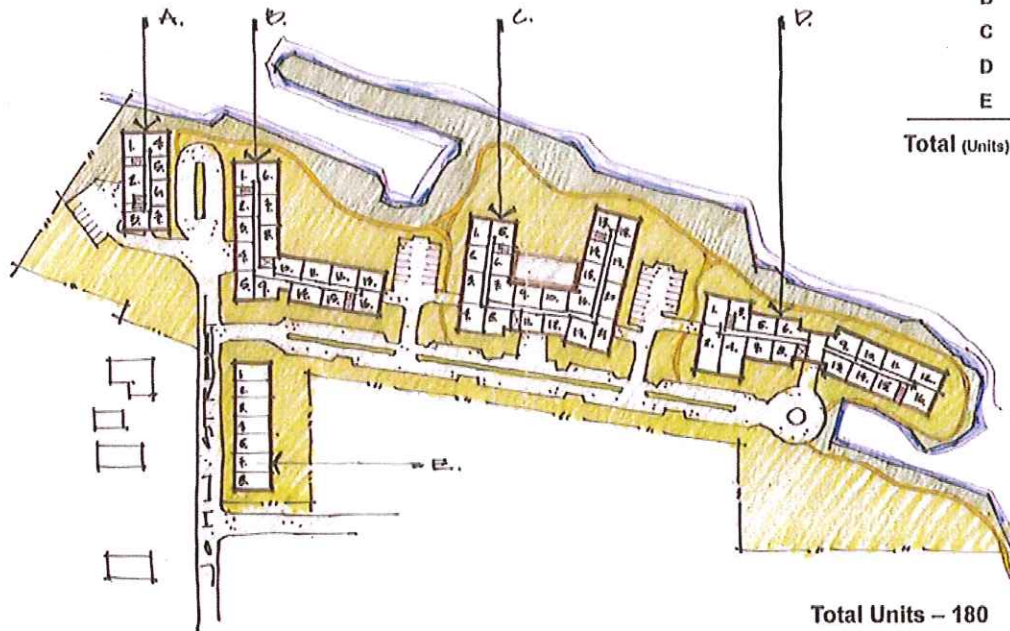
At the College / Meade intersection, the increase in delay due to the proposed traffic is not significant. No changes to the intersection or signal timing parameters are necessary.



Building	Quantity
A	12
B	48
C	64
D	48
E	8
Total (Units)	180

UNIT DIVERSITY

	Low	Medium	High
Unit Quantity	20	136	24



Building	Quantity
A	12
B	48
C	64
D	48
E	8
Total (Units)	180

Unit Types
1 BR - 10%
2 BR - 80%
3 BR - 10%

UNIT COUNTS / DENSITY

Total Units - 180
 Parking Stalls - 240