STAFF REPORT

Department of Metropolitan Development Division of Planning Current Planning Section

Case Number:	2023-ZON-109
Address:	5136 Michigan Road (<i>Approximate Address</i>)
Location:	Washington Township, Council District #8
Petitioner:	Paramount Schools of Excellence, Inc., by Timothy Ochs
Request:	Rezoning of 10.13 acres from the SU-1 district to the SU-2 district to provide for educational uses.

ADDENDUM FOR FEBRUARY 29, 2024 HEARING EXAMINER

This petition was continued from the February 15, 2024 hearing to the February 29, 2024 hearing at the request of a registered neighborhood organization.

Traffic impact studies were submitted to staff on February 5, 2024 and were provided to the Department of Public Works for comments. The petitioner's traffic study results showed that delays in service would drop during the morning and evening peak time and during the school dismissal peak time. It was determined that the existing Michigan Road right-of-way has adequate width to have northbound and southbound turn lanes added. DPW did not see that a traffic control signal would be necessary at this location. There is concern with a traffic control officer being on this street, but a left turn lane would allow space for an officer's vehicle to park.

A traffic study was provided by the remonstrator, with slightly similar recommendations, but the study results or references will need to be addressed by the remonstrator at the hearing.

Staff **recommends approval** of the rezone petition, subject to the following commitments being reduced to writing on the Commission's Exhibit "B" forms at least three days prior to the MDC hearing:

- 1. The driveway shall be constructed with one lane entering and two lanes exiting per commercial driveway standards within 12 months of issuance of an Improvement Location Permit (ILP).
- 2. A north bound left turn lane and south bound right turn lane shall be installed per DPW and INDOT standards. Traffic study figures should be used to determine storage length. The turn lanes shall be installed within 12 months of issuance of an Improvement Location Permit (ILP).
- 3. An arrival/dismissal traffic control plan prepared by or consulting with a school safety officer shall be provided to the Program Manager Multi-Modal for the Department of Public Works Engineering.
- 4. A queuing plan shall be provided to Program Manager Multi-Modal for the Department of Public Works Engineering that demonstrates adequate storage for parent drop off/pick up vehicles on site without overflow onto Michigan Road.

ADDENDUM FOR FEBRUARY 15, 2024 HEARING EXAMINER

This petition was continued from the January 11, 2024 hearing to the February 15, 2024 hearing at the request of a registered neighborhood organization.

STAFF REPORT 2023-ZON-109 (Continued)

The same registered neighborhood organization submitted a written request for a **continuance for cause from the February 15, 2024 hearing to the February 29, 2024 hearing**. The petitioner has agreed to the proposed continuance date. However, last month's continuance request was stated to be the final continuance request. Unless an additional continuance is granted, staff is prepared to go forward with the hearing.

January 11, 2024

This petition was automatically continued from the December 14, 2023 hearing, to the January 11, 2024 hearing at the request of a registered neighborhood organization.

It is staff's understanding that a registered neighborhood organization will request a continuance for cause from the January 11, 2024 hearing to the February 15, 2024 hearing to allow additional time for discussions to take place. Staff has no objection to this additional continuance request but will be prepared to move forward.

RECOMMENDATIONS

Staff recommends approval of the rezoning.

SUMMARY OF ISSUES

LAND USE

O The 10.13-acre subject site is developed with a large church, associated parking areas, and an accessory structure. It is surrounded by single-family dwellings in each direction, zoned D-2 and D-S, except for a multi-family development to the north, zoned D-6.

REZONING

- The property has historically been used as a church since 1972, per an historical aerial map depicted in the staff report. The religious use was permitted in 1967 through rezone petition 67-Z-103 that rezoned the property from the D-5 district to the SU-1 district for the construction of a church.
- The site is zoned SU-1, which is only intended for religious uses where the proposed SU-2 district is only intended for school uses.
- The Comprehensive Plan recommends rural or estate neighborhood development. The Rural or Estate Neighborhood typology applies to both rural or agricultural areas and historic, urban areas with estate-style homes on large lots. In both forms, this typology prioritizes the exceptional natural features such as rolling hills, high quality woodlands, and wetlands that make these areas unique. Development in this typology should work with the existing topography as much as possible. Typically, this typology has a residential density of less than one dwelling unit per acre unless housing is clustered to preserve open space

STAFF REPORT 2023-ZON-109 (Continued)

Staff Analysis

- Staff determined that rezoning the site to the SU-2 district would allow for the adaptive reuse of the existing church building into a school and would allow the construction of an additional building on site for more classrooms.
- Although the rural or estate neighborhood typology does not specifically call out educational uses, it is common to see schools and places of worship mixed in primarily residential neighborhoods. Thus, staff did not find the proposed school use to be out of line with the context of the surrounding area considering that the previous religious use had limited business hours and days when events, gatherings, and the like would take place.
- ♦ For these reasons, staff is recommending approval of the request.

GENERAL INFORMATION

EXIST	ING ZONING	AND LAND	JSE							
	SU-1	Metro	Churc	h						
SURF	JRROUNDING ZONING AND LAN North D-6 / D-S Re South D-S Re East D-3 Re West D-2 Re OMPREHENSIVE PLAN		Reside Reside Reside	AND USE Residential (Multi-family and Single-family dwellings) Residential (Single-family dwellings) Residential (Single-family dwellings) Residential (Single-family dwellings)						
COM	PREHENSIVE	PLAN		The Comprehensive Plan recommends rural or estate neighborhood development.						
				Michigan Road is classified in the Official Thoroughfare Plan for Marion County, Indiana as a primary arterial street, with a 100-foot existing right-of-way and a 102-foot proposed right- of-way.						
FLOC	DWAY / FLO	ODWAY FRIN	IGE	This site is not located within a floodway or floodway fringe.						
WELL	FIELD PROT	ECTION DIST	FRICT	This site is not located within a wellfield protection district.						
SITE	PLAN			File-dated November 13, 2023.						
TRAF	FIC STUDY			File-dated February 5, 2024.						
<u>ZONII</u>	NG HISTORY	– SITE								
EXIST	ING VIOLAT	IONS								
None.										

STAFF REPORT 2023-ZON-109 (Continued)

PREVIOUS CASES

67-Z-103; (subject site), Rezoning of approximately 10.126 acres being in D-5 district to Special Use (1) classification to provide for the construction of a church, **approved.**

ZONING HISTORY – VICINITY

2006-SE2-001; 5210 and 5212 Michigan Road (north of site), Special Exception of the Dwelling Districts Zoning Ordinance to provide for the construction of a 10,491 square-foot church building, with 34 off-street parking spaces, and with a four-foot tall,30-square foot ground sign encroaching into the right-of-way of Michigan Road (minimum fifteen-foot front setback required), **denied.**

93-Z-70; **1836 West 51**st **Street** (west of site), Rezoning of 13.79 acres, being in the D-S district, to the D-2 classification to provide for the development of a single-family residential subdivision, **approved.**

89-SE1-3; **5210 Michigan Road** (north of site), Special exception of the Dwelling Districts Zoning Ordinance to provide for religious uses within an existing dwelling structure, with proposed hard surfaced and striped off-street parking areas and a sanitary sewer connection; **granted.**

88-Z-245; 5210 Michigan Road (north of site), Rezoning of approximately 0.5 acre from SU-1 to D-S to comply with a commitment that the zoning of the property would revert to the D-S classification five years after the adoption of rezoning petition 74-Z-150; **approved.**

86-Z-237; 5105 Grandview Drive (southeast of site), Rezoning of 4.62 acres, being in the D-S district, to the D-P classification, to provide for the construction of seven residential structures containing two living units each, **dismissed**.

85-UV1-78; 5210 Michigan Road (north of site), Variance of use to provide for the continued use of a day care center within an existing building; **granted.**

84-Z-5; 5117 Michigan Road (southeast of site), Rezoning of 0.48 acre from the D-3 to SU-9 to conform the zoning to its current use as a fire station and to correct a mapping error, **approved**.

81-Z-15; 5210 Michigan Road (north of site), Rezoning of approximately 0.5 acre from SU-1 to C-1 to provide for the continued use of a daycare center; **withdrawn.**

74-Z-150; 5210 Michigan Road (north of site), Rezoning of approximately 0.5 acre from D-S to SU-1 to provide for a daycare center; **approved.**

MI

2023-ZON-109; Location Map



2023-ZON-109; Aerial Map (1972)



2023-ZON-109; Site Plan



2023-ZON-109; Site Plan



Traffic Study Title Page

Traffic Study Paramount Schools of Excellence 5136 Michigan Road Indianapolis, Indiana 46228

Applicant: Tommy Redicks Chief Executive Officer Paramount Schools of Excellence 1203 East Saint Clair Street Indianapolis, Indiana 46202 317-519-4588 <u>treddicks@paramountindy.org</u>

Yarger Engineering Job Number: 20231001

By: Yarger Engineering, Inc. © 1401 Alimingo Drive Indianapolis, Indiana 46260 317-475-1100 <u>bwyarger@yargerengineering.com</u> <u>www.yargerengineering.com</u>

I certify that this Traffic Study has been prepared by me or under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.



Bully With Joge

Bradley William Yarger, P.E. President Yarger Engineering, Inc.

Saturday, November 25, 2023

Prepared by Yarger Engineering, Inc. for Paramount Schools of Excellence Saturday, November 25, 2023

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Traffic Study Executive Summary

arterial. The southbound right turn traffic warrants a right turn lane when considered as unsignalized.

The Driveway at Michigan Road intersection warrants a traffic signal with the peak hour warrant, and would operate at level of service B or better. See <u>Table 7</u> on pages 25 for more information.

VI. Recommendations

A. Existing

No changes are recommended.

B. 2029 with Paramount Schools of Excellence

Michigan Road at the Driveway should have a northbound left turn lane, a southbound right turn lane, and two exit lanes with a traffic signal for full build-out. Per Indiana Codes and MUTCD, the signal should not be installed until there is sufficient traffic forecasted to satisfy at least one of the warrants. Until then, uniformed traffic control, preferable police, should control the Michigan Road intersection during the three peak periods. Given the high traffic volume and multiple through lanes on Michigan Road, and the offset approach for Woodside Drive, at least two people will be needed to control traffic. See Figure 20 on page 40.

Queuing within the site for picking up students with full occupancy could be 850 to 1,125 feet long at school dismissal time, with shorter queues at the other times. The range in queue length reflects the possibility that some parents may park in the lot and walk up to the door instead of using the curb side loading. Some parents parked and walked up at the Cottage Home site, both on the site and the adjacent streets, and were included in the traffic counts. No on-street parking is assumed for the Michigan Road site. Queuing for the exit to Michigan Road also needs to be provided so that it doesn't back in to the vehicles leave the curb side pickup zone. The site plan in Figure 21 on page 41 shows an example of how the lengths could be accomplished, but other options that provide adequate queue storage are possible. The blue line is the loading zone queue storage length, while the yellow line is the queue storage at Michigan Road. The blue and yellow lines are comprised of both existing and new pavement.

VII. Conclusions

Traffic in the study area should not be unreasonably delayed due to the construction of Paramount Schools of Excellence with the recommended road improvements.

With flagging traffic there is a risk to the flaggers due to higher speeds and potentially limited sight distance for those following large vehicles. A traffic signal is preferred due to it being there all the time so motorists become accustom to it, and that people don't need to stand in the pavement to control traffic. The signal heads would also be much more visible than vehicle mounted lights due to mounting them overhead.

Traffic Study Section 4: Traffic Analysis

C. Capacity and Level of Service

Capacity and level of service are interrelated. This section deals directly with level of service and therefore indirectly with capacity. In the 2000 Highway Capacity Manual, delay per vehicle is the primary method of determining level of service. Unsignalized intersections are analyzed based on estimated delay using movement flow rate and capacity that provides a level of service by movement. Signalized intersections also use capacity and flow rates to determine level of service for movements and for the overall intersection.

The following tables summarize levels of service definitions for signalized and unsignalized intersections.

Table 5 – Levels of Service Definitions									
Level of Service	Fasignalized	Signalized							
(LOS)	(Second of Delay Per Vehicle)	(Second of Delay Per Vehicle							
A	0-10.0	0 - 10.0							
В	10.1 - 15.0	10.1 - 20.0							
С	15.1-25.0	20.1 - 35.0							
D	25.1-35.0	35.1 - 55.0							
Е	35.1 - 50.0	55.1 - 80.0							
F	Over 50 or V/C > 1.0*	Over 80 or V/C > 1.0*							

V/C is volume to capacity ratio. V/C criteria is applicable only to movements, not approaches or intersections.

Levels of service for this project were calculated using the peak 15-minute forecasts multiplied times four to get an equivalent hourly flow rate. Level of service E has been assumed to be the minimum acceptable level of service for individual movements and approaches, and level of service D for intersections.

Traffic Study Section 4: Traffic Analysis

1. Existing Conditions

With the geometry and traffic control shown in Figure 4 on page 8, the levels of service are as shown on the following table. While there was some construction traffic during the counts, the driveway movements were set to zero since they will not be there when the school opens. Some movements had less than 0.05 second of delay and more than zero, but show up as 0.0 in the table. When a single zero is shown, that movement had zero delay due to having no traffic that was delayed.

Table	6 –				f S Ex				nd	D	ela	ÿ			
		NM S	inee	Pea	k	School Dismissal					PW Street Peak				
Intersection	-		-		-	-					-				
Michigan Road at Driveway	A 0	- B 11	A 0	A 0	A 0	A 0	A 0	A 0.0	A 0.0	A 0	A 0	A 0	A 0.0	A 0	A 0

2. 2029 with Paramount Schools of Excellence

With the geometric and traffic control improvements shown in Figure 10 through Figure 13 on pages 25 - 29, the levels of service are as shown on the following table. The stop sign control assumes that there is no one flagging traffic and side street drivers are on their own to find gaps in the Michigan Road traffic. With someone flagging traffic, delay and levels of service should be similar to with a traffic signal.

Table 7 – Level of Service and Delay2029 with Paramount Schools of Excellence															
A State of the state		W S	() (H)	8	Domiced Veals					(PM Street Fork					
Intersection	100					110					1				
Michigan Road at Driveway Stop, No Additional Lanes Figure 10	F,	в 11	A 4	A 0	F	F 353	A 0	A 2	A 0.0	F 52	F 262	A 0	A 1	A 0.0	C 15
Michigan Road at Driveway Stop, EBLT, NBLT, SBRT Figure 11	F +	B 11	A 2	A 0	F.	¥ 136	A 0	A 1	A 0.0	8 20	Е. 141	A 0	A 0.3	A 0	A 8
Michigan Road at Driveway Signal, No Additional Lanes Figure 12	D 43	D 43	B. H	А 9	В 13	D 44	A 0	A 3	A S	B 11	D 39	А ()	A J	A 3	A 5
Michigan Road at Driveway Signal, EBLT, NBLT, SBRT Figure 13	D 36	D 43	A 6	A 6	A 9	D 38	A 0	A 3	A 3	A 8	D 39	А 0	A 3	A. 3	A 5

* - The movement is severely over capacity causing a calculation error, and the delay will continue to grow until the situation changes.

Traffic Study Section 4: Traffic Analysis

D. Queuing Analyses

Queuing analyses for the intersections comes from the level of service analyses for the Michigan Road alternative, and from calculations of the Cottage Home school data adjusted for 300 students at Michigan Road. As mentioned before, the level of service was analyzed using Synchro with its internal methods as well as Highway Capacity Manual methods. The queue lengths shown are the longer forecasted for the three peak periods. These queue lengths do not include deceleration or tapers.

1. Existing

Figure 14 on page 32 shows the calculated peak queue lengths in blue and the existing storage lengths in red.

2. 2029 with School - Stop Sign, No Turn Lanes Alternative

Figure 15 on page 33 shows the calculated peak queue lengths in blue and the longer of the existing or recommended storage lengths in red. Due to the eastbound lane being overcapacity, its queue will continue to grow until the situation changes.

3. 2029 with School - Stop Sign, EBLT, NBLT, & SBRT Alternative

Figure 16 on page 34 shows the calculated peak queue lengths in blue and the longer of the existing or recommended storage lengths in red. Due to the eastbound left turn lane being overcapacity, its queue will continue to grow until the situation changes.

4. 2029 with School - Signal, No Turn Lanes Alternative

Figure 17 on page 35 shows the calculated peak queue lengths in blue and the longer of the existing or recommended storage lengths in red.

5. 2029 with School - Signal, EBLT, NBLT, & SBRT Alternative

Figure 18 on page 36 shows the calculated peak queue lengths in blue and the longer of the existing or recommended storage lengths in red.

6. 2029 with School - Loading Zone

Using total entering and exiting vehicle data from Cottage Home school taken in oneminute increments, and accounting for vehicles parked on Highland Avenue and Saint Clair Street, plus accounting for pedestrian activity during the drop off and dismissal times, the peak period for the queue was 3:05 PM for the first dismissal wave. Other times had shorter queues. Some of the calculated queued vehicles at Cottage Home were parked and the parents walked up to the door to get their children. This may have been in preference to waiting in line, or in some cases, a desire not to queue in Saint Clair Street when the queue length extended outside the school's property.

The Michigan Road site's main door for drop-off and dismissal will be at the southeast corner of the existing building so drivers will pull up to the door leaving as much curb space as possible behind them. See Figure 19 on page 37. The sidewalk along the east side of the building will be used for loading, but students will have to walk from the southeastern door to their parents'

Traffic Study Section 4: Traffic Analysis

cars. During peak times, traffic control will be needed on-site in addition to in the Michigan Road intersection, and cones will be needed to force drivers to take the queuing loop.

The Cottage Home school uses a wireless data base and placard system to call the students to the door for loading, and the same system is anticipated for the new school.

For the dismissal time loading, the estimated queue length was a minimum of 850 feet to a maximum of 1,125 feet. The existing pavement does not provide enough queuing length, and it is too narrow to have two queue lanes plus a bypass lane, so addition pavement for queuing is needed. Figure 19 on page 37 shows the potential queuing with a loop to the north of the building with 1,400 feet in blue. This is only an example of what is possible on-site to show that the maximum queue can be accommodated. The yellow shows the available length for the queue at Michigan Road to show that it has 700 feet of queuing storage space to accommodate that queue without interfering with the loading zone.

Traffic Study Section 5: Recommended Improvements

V. RECOMMENDED IMPROVEMENTS

A. Existing Conditions

1. Michigan Road at Driveway & Woodside Drive

No changes are recommended.

B. 2029 with Paramount Schools of Excellence

See Figure 20 on page 40 for recommended geometrics and traffic control, and Figure 21 on page 41 for queue lengths.

1. Michigan Road at Driveway & Woodside Drive

A signal with two exit lanes on the school driveway, one eastbound left turn lane and a shared eastbound through and right turn lane, a northbound left turn lane with a transition shift to provide space for the police cruiser until a signal is warranted, and southbound right turn lane are recommended. The signal should be split phased due to the offset between the driveway and Woodside Drive.

2. On-Site Driveway Queue Storage & Parking

The driveway needs to provide sufficient queue space for the curbside loading zone such that vehicles never queue into Michigan Road. The driveway option shown in the site plan in Figure 21 on page 41 provides 1,400 feet of queue space shown in blue, and has available parking in excess of staff needs such that is there were a queuing problem, vehicles could be directed to park. Assuming no parking during the dismissal loading, the maximum queue length is calculated to be 1,125 feet. The maximum queue length at other times would be shorter, and the loop to the north of the building might not be needed, so drivers could use the existing pavement loop to access the curbside loading zone. Additional storage on the new loop could be provided, but this would likely mean the removal of mature trees. The queue storage pavement needs to provide a bypass lane so that vehicles can leave the queue once loaded. A bypass lane also will address the issue of vehicles breaking down in the queue.

The yellow line shows over 600 feet of queue storage available to the vehicles leaving the school and stopped at Michigan Road. The calculated maximum length of the queue at Cottage Home was 10 vehicles, but that length was not observed since Highland Avenue has so little traffic, that 10 vehicles could leave within the one-minute interval used for the counts. The exit to Highland Avenue also has two exit lanes. With the signal and turn lanes, the calculated 95th percentile queue length at Michigan Road was 132 feet, which is less than the 200 feet back to the parking lot exit lane where the queue would become a single lane.

Since there will be buses and other heavy vehicles using the driveway, lanes should be at least 12 feet wide. Narrow lanes could have the bus or other heavy vehicle mirrors colliding with each other due to the narrow lanes.

2023-ZON-109; Traffic Study (Continued)



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2023-ZON-109; Traffic Study (Continued)



Traffic Study Section 6: Conclusion

VI. CONCLUSION

Traffic in the study area should not be unreasonably delayed due to Paramount Schools of Excellence traffic with the recommended road improvements.

With flagging traffic there is a risk to the flaggers due to higher speeds on Michigan Road and potentially limited sight distance for those following large vehicles. A traffic signal is preferred due to it being there all the time so motorists become accustom to it being there, and that people don't need to stand in the pavement to control traffic. The signal heads would also be much more visible than vehicle mounted lights due to mounting the signal heads overhead instead of at vehicle height, where tall vehicles could block the view of trailing vehicles.

2023-ZON-109; Photographs



Photo of the Subject Property: 5136 Michigan Road



Photo of the parking area looking south on the site.



Photo of the existing church building looking west on the site.



Photo of the north property boundary and existing drive.



Photo of the rear yard where the proposed building will be located.



Photo of the rear yard and exisitng accessory structure looking north.



Photo of the rear of the existing building looking north.



Phoot of the rear building façade looking east on the site.



Photo of the single-family dwelling southeast of the site.



Photo of the single-family dwelling northeast of the site.



Michigan Road looking northeast from the site.



Michigan road looking east from the entrance drive.