

AGENDA

EAST GRAND RAPIDS TRAFFIC COMMISSION
October 26, 2015
Community Center – Commission Chambers
5:30 PM

1. Call to Order
2. Approval of Minutes
3. Consideration: Extension of “no parking zone” and increased left turn lane capacity on Breton Road just south of the Lake/Lakeside/Breton Intersection. (Action requested)
4. Consideration: “No left turn” improvements for east bound traffic on Lake Drive. (Action Requested)
5. Consideration: Traffic calming bump outs on Lake Drive at Princeton and Bellclaire. (Action Requested)
6. Public Comment
7. Report of the City Commission
8. Next Scheduled Meeting Date: November 23, 2015

PROCEEDINGS OF THE TRAFFIC COMMISSION

City of East Grand Rapids, Michigan

September 28, 2015

East Grand Rapids Community Center – Commission Chambers

Present: Commissioners Reynolds Brander, Vasilij Gagin, Michelle Grinnell, Hunter Meriwether, Laura Roy, Phil Skaags and Frank Spies

Also Present: Assistant City Manager Doug LaFave, Public Safety Director Mark Herald and Recording Secretary Lynda Taylor

1. CALL TO ORDER

The meeting was called to order at 5:30 PM by Vice-chairman Frank Spies.

2. APPROVAL OF MINUTES – November 24, 2014

A motion was made by Commissioner Brander and supported by Commissioner Skaags to approve the minutes as corrected to show that Commissioner Roy was not in attendance.

Yeas: Commissioners Brander, Gagin, Grinnell, Meriwether, Roy, Skaags, and Spies – 7

Nays: -0-

3. ELECTION OF CHAIRMAN AND VICE-CHAIRMAN

A motion was made by Commissioner Brander and supported by Commissioner Roy to elect Commissioner Spies as chairman. A motion was made by Commissioner Skaags and supported by Commissioner Brander to close the nominations.

Yeas: Commissioners Brander, Gagin, Grinnell, Meriwether, Roy, Skaags, and Spies – 7

Nays: -0-

Commissioner Roy volunteered to serve as Vice-chairman.

Yeas: Commissioners Brander, Gagin, Grinnell, Meriwether, Roy, Skaags, and Spies – 7

Nays: -0-

Public Safety Director Herald announced that Assistant City Manager Doug La Fave will be the primary staff contact for the Traffic Commission.

4. PRESENTATION BY URS – PROPOSED LAKE DRIVE, LAKESIDE DRIVE AND BRETON ROAD INTERSECTION

Assistant City Manager LaFave introduced Nick LaCroix from URS who was present to review the traffic study URS conducted in June and to present their recommendations for the project which will take place next year. He reported that video monitors were used at the main intersection and at each of the school driveways to count both vehicles and pedestrians.

The study revealed issues with capacity at the intersection itself and school drive backups along eastbound Lake Drive which created further issues at the intersection.

Mr. LaCroix reviewed the recommendations given by URS which included the following:

- Signal Timing – recommended no change. The cycle length is currently at 80 seconds. They looked at varying the cycle from 70 seconds up to 100 seconds and found that they couldn't improve on the operations by just adjusting signal timing.
- Geometric Movements – recommended changes:
 - Widen the lanes from 40 feet to 44 feet to create a 12 foot eastbound lane, a 10 foot west bound turn lane, and 10 foot west bound through lane and a 12 foot right turn lane.
 - Extend the northbound left turn queue to 200 feet so all the cars move out of the through lane.
 - Eastbound left turn into the driveway would be prohibited by building a median in Lake Drive and shift the driveway to the West.

Mr. LaCroix said if these improvements are implemented, the delay at the intersections would be better than the existing conditions.

Commissioner Roy asked if consideration was given to having a dedicated turn signal for east/west traffic. Mr. LaCroix responded that they did model the signal with protected turns for eastbound left and it did not help the overall operations of the intersection.

Commissioner Roy asked about putting left turn lights for all four ways. Mr. LaCroix said that it would help the delay for the movement, but added extra time into the cycle which made it worse overall than without it.

Chief Herald reported that there are no accident problems at the intersection even though there are a lot of cars and kids.

Commissioner Gagin asked if there was another option to the median, such as installing "no left turn" signs. Mr. LaCroix said that signs would most likely be ineffective unless there was someone in place to enforce them.

Commissioner Grinnell questioned the width of the median. Mr. LaCroix responded that the current pavement is 40 feet and the recommendation is that it be increased to 44 ft. The median would take up what is now the west bound left turn lane, so the median would be 8 – 10 feet wide and be within the existing pavement. The entrance to the school would be moved to the west. Mr. La Fave added that the school officials are very open minded to moving the drive because it would improve the traffic flow within their own parking lot and would also improve pedestrian safety. The City will be acquiring 10 feet of property from the schools to make all the lanes comply with ASHTO standards. The City will also relocate the middle school sign and will replace sidewalks.

Chief Herald added that Public Safety really liked the idea of the median because it will eliminate some of the congestion and will make it safer.

Commissioner Grinnell asked about the length of time for construction. Mr. LaFave said the construction is tentatively scheduled to start when school gets out in June and should be wrapped up before school starts again. The project on Lake Drive goes from Conlon to Bagley.

Mr. La Fave reported that the schools are considering making changes to the parking lot to improve traffic flow at the Lake Drive entrance and within the lot.

5. REPORT OF THE CITY COMMISSION

Commissioner Skaags reported that the biggest thing that had happened since the last meeting was the streets and sidewalk millage passed with 64% of the vote. He thanked Mr. La Fave and staff for putting the money to good use. The City has paved 15 streets and did a Cape Seal on one street.

Mr. La Fave added that the millage dollars will be used for local street projects. The Lake, Lakeside and Breton intersection project will come from savings and major streets.

6. PUBLIC COMMENT

Chairman Spies opened public comment.

Ryan Minkus – 2114 Wealthy Street, said he was glad the intersection is being looked at and remarked that there wasn't a safety analysis in the study. He also questioned if the extension of the north bound left turn lane needed to be a full 200 feet.

Commissioner Skaags asked Chief Herald to provide some history on the safety and accidents that have happened at the intersection for the next meeting.

Communications Received:

Email from Emily Lorenz – 2228 Hampton, suggested the installation of right turn arrows at the intersection of Breton and Boston.

7. ADJOURNMENT

A motion was made by Commissioner Roy and supported by Commissioner Brander to adjourn the meeting at 6:21 PM.

Yeas: Commissioners Brander, Gagin, Grinnell, Meriwether, Roy, Skaags, and Spies – 7

Nays: -0-

8. NEXT SCHEDULED MEETING

The next regular meeting is scheduled for Monday, October 26, 2015.

Respectfully submitted,

Lynda Taylor
Recording Secretary



CITY OF EAST GRAND RAPIDS

750 LAKESIDE DRIVE SE-EAST GRAND RAPIDS, MICHIGAN 49506

DOUG LA FAVE
ASSISTANT CITY MANAGER

MEMORANDUM

TO: Traffic Commission
FROM: Doug La Fave, Assistant City Manager
DATE: 10/21/2015

RE: 2016 Lake Drive Project-Lake/Lakeside/Breton Intersection

Action Requested: Recommendations to the City Commission.

Background:

City streets are classified into two categories, local streets and major streets. Local streets receive very limited state funding and are otherwise funded by property tax revenues. Major streets receive a higher percentage of state funding, local funding and for a select few, federal funding. The City is eligible to receive federal funds towards a street project that is classified as a major street-federal aid eligible this next year. Lake Drive is one of nine City streets within this classification. The section of Lake Drive that is planned to be reconstructed as part of this project is the section between Conlon and Bagley. From Conlon to The intersection will be a completed reconstruct while the section from the intersection going west to Bagley will be a full depth grind and resurface. A complete reconstruction includes new road base, curb and road surface (base and surface) while a grind and resurface is replacement of the asphalt base and surface (3.5 inches total). The total cost of the project is estimated at \$1,166,802, with federal participation at \$371,888 and the local participation at \$794,914. For reference, the 2014 Lakeside Drive project that was a complete reconstruct of what existed cost \$814,000. This project will be funded by the federal grant and major street revenue from PA 51 (local revenue from the state through the fuel tax), along with general fund funds that are normally transferred from the general fund to street funds. Funds from the recent street millage are not used to fund this project.

At the previous Traffic Commission meeting URS (now AECOM) Traffic Engineer Nick LaCroix presented findings and recommendations from the traffic study that was conducted.

Accident history was requested with respect to the Lake/Lakeside/Breton intersection. Below is a summary of the accident history at the intersection for the past three years:

- 2015: 5 accidents. 4 of these accidents involved vehicles rear ending vehicles stopped at the traffic signal. 1 accident was due to a driver driving through a red light.
- 2014: 8 accidents. All 8 accidents at the intersection involved vehicles rear ending vehicles stopped at the traffic signal.
- 2013: 2 accidents. Both accidents at the intersection involved vehicles rear ending vehicles stopped at the traffic signal.

The accidents at the intersection were all related to distracted drivers (usage of cell phones or distracted by other activity in vehicles) or not driving for weather conditions (snow and ice). There were no pedestrian related accidents reported.

The City also recently completed a speed/volume study at the 2600 block of Lake Drive (near Lake Drive/Conlon). The result was that the average speed in this area was 28 mph but that the 85th percentile was 32 mph. Per the City's traffic calming policy (which was approved by the Traffic and City Commission), when traffic speeds exceed 5mph over the posted speed limit (25 mph on Lake Drive), traffic calming measures are studied and implemented. The purpose is to try and reduce speed by implementing a physical feature versus raising the speed limit. In this case, at/near this location, engineers from Moore and Bruggink have designed bump outs at Princeton and Bellclaire as part of this project. Because the City is already planning construction for this stretch of road and it qualifies for traffic calming, the Traffic Commission needs to consider formally approve the recommendation to the City Commission for the bump outs.

It is important to note that Lake Drive is designed to handle the current existing daily traffic flow of 10,683 vehicles and not designed to increase or reroute and traffic volumes.

The City also had the recommendations from AECOM reviewed by Moore and Bruggink, the design and construction engineering firm. They have confirmed the recommendations made by AECOM. There are two memos included in the packet from each firm noting the recommendations and best practices or required standards as to why they were made.

For the purposes of the Traffic Commission, the items that are to be considered for a recommendation to the City Commission are as follows:

- Extension of "no parking zone" in the south bound lane of Breton Road that is south of the intersection by 100 ft. for a total of 300ft. (200ft. currently) which would eliminate 1 parking spot. This would allow for additional north bound left turn lane storage on Breton to improve flows during peak times. Engineers from AECOM and Moore and Bruggink recommend this change. The estimated cost is approximately \$300 for this change. This is a discretion item.
- "No left turn" improvements for east bound traffic on Lake Drive, just east of the intersection at the middle school. There are 2 options to consider for a recommendation, constructing a center median to eliminate left hand turns along with modification to the drive access to the middle school or utilize signage and pavement markings to help prevent left turn traffic into the middle school drive. The cost estimate for the median is approximately \$4,500 and the removal and relocation of the middle school drive is estimated at \$12,000. The estimate for signage and pavement markings is approximately \$700. This is a discretion item.
- Traffic calming bump outs on Lake Drive at Bellclaire and Princeton. This meets criteria for traffic calming, per policy. This is a discretion item.

Items related to the proposed projects that do not allow for Traffic Commission discretion due to federal safety requirements are:

- The existing traffic signal be modernized and updated. The existing traffic signal is beyond its useful life. The City of Grand Rapids Traffic Safety Department that services East Grand Rapids signals has advised the City that this signal needs to be updated. Replacement parts and function of the signal are concerns. Because of the condition of the signal, it must be replaced therefore there is no discretion as to whether the signal gets replaced or left in its current state.
- Lane widths for west bound traffic on Breton Road will be changed to 12' and 10' lanes respectively. This is a requirement for the project because of federal funding participation. This follows AASHTO and MDOT standards. There is no discretion with respect to this change.

MOORE & BRUGGINK, INC.

Consulting Engineers

2020 Monroe Avenue, N.W.

Grand Rapids, Michigan 49505-6298

Phone: (616) 363-9801 Fax: (616) 363-2480

Email: mailbox@mbce.com

Date: October 20, 2015

To: Doug LaFave, Assistant City Manager

From: Ryan Arends, P.E.

Re: 150164.01 – Lake Drive Improvements, City of East Grand Rapids

We have reviewed URS's traffic report and recommendations and offer the following:

- Extending the left turn lane on Breton Road would provide additional storage and help reduce backups at peak times. This is a relatively inexpensive change and would only result in the loss of one parking spot on Breton Road.
- The traffic signal will be modernized and upgraded to meet current AASHTO standards.
- The lane widths at the intersection will be widened to meet the requirements of AASHTO. This is a requirement of the Federal and State funding and cannot be waived.
- Constructing a permanent median and relocating the middle school drive would eliminate left turns and the backups that result. Although, medians such as this can become a maintenance headache as they tend to get beat up by snowplows through the course of the winter. Another option is keeping the existing drive location and adding signage and pavement markings which would help prevent left turns. You would still get the occasional motorist that disregards the signage and pavement markings and attempts the left hand turn causing backups. The signage and pavement marking option is easier to implement, less costly and less permanent than a median and drive relocation.

Traffic calming measures to be implemented that were not in the URS's traffic report are as follows:

- Pavement markings will be added to designate the parking on the north side of Lake Drive from Kenesaw Drive to Conlon Avenue. This will also ensure the lane widths meet the requirements of AASTHO.
- Minor bump outs will be added on the west leg of the Bellclaire Avenue intersection and on the west leg of Princeton Boulevard intersection. AASHTO required lane widths will be maintained.



**PROJECT
MEMORANDUM**

Client: **City of East Grand Rapids**
Project Name: **Lake Dr./Breton Rd./Lakeside Dr.**
Location: **East Grand Rapids, MI**
Project Number: **12945147**
Issue Date: **October 21, 2015**

**TO: Doug La Fave
Brian Bigorowski**

FROM: Nick LaCroix, PE PTOE

SUBJECT: Lake Drive/Breton Road/Lakeside Drive Traffic Analysis Recommendations Summary

AECOM performed an analysis of the Lake Drive/Breton Road/Lakeside Drive intersection in June 2015. Based on the analyses performed as part of the study, the following is a summary of the recommendations to increase the safety and traffic operations within the study area:

1. The existing traffic signal equipment should be modernized and signal timings optimized.
2. Per industry best practices, the existing northbound left-turn lane should be extended to provide a total of 200 feet of storage to accommodate the existing vehicle queues observed in the field.
3. Per AASHTO and MDOT standards, the existing east leg of the intersection should be widened to accommodate a 12-foot eastbound lane, 10-foot westbound left-turn and thru lanes, and a 12-foot right-turn lane.
4. The eastbound left-turn at the middle school driveway on Lake Drive should be prohibited. To adequately deter left-turn movements, a center median should be constructed along Lake Drive. The center median should be designed to meet the following:
 - Maintain a minimum 150-foot westbound left-turn lane at the Lake Drive/Breton Road/Lakeside Drive intersection.
 - Minimize impacts to the residential driveways on the south side of Lake Drive.
 - The geometric layout of the school drive and median should be designed to allow a vehicle to drive around a vehicle waiting to enter the school drive by tapering the school driveway approach and/or the median.

In lieu of constructing the recommended center median, the following alternatives could be implemented:

- “No Left-Turn” signs and pavement markings could be constructed at the existing school driveway, however this option would not be as effective as a center median.
 - In addition to the “No Left-Turn” signs and pavement markings, the right-in only driveway could be constructed with an increased radius and splinter island to help deter left-turn movements into the driveway.
-



Traffic Calming Guidelines For Resident Initiated Projects

1. **Initiating a Project.** Residents or neighborhood associations may contact the Engineering Services Division for a Traffic Calming Questionnaire. The project will move to the next step if a majority of the property owners (51%) sign the questionnaire.
2. **Informal Meeting.** Residents and staff hold an initial meeting to review concerns and possible solutions. Depending on the outcome of the meeting a traffic study will be performed.
3. **Traffic Study.** Engineering Services Division undertakes a traffic study. When the study is complete, staff will meet with residents to go over the data and possible solutions.
4. **Plan Development.** If the 85th percentile exceeds the posted speed limit by 5 miles per hour, the project is a candidate for traffic calming. City Staff will work with interested residents to develop a traffic calming plan. Public meetings will be held to exchange information and ideas. Plan must be accepted by the Traffic Commission and a majority of property owners (51%) to move to the testing phase.
5. **Testing Phase.** Depending on the traffic calming device selected, temporary testing will be conducted. Testing is required to ensure that an unacceptable amount of traffic is not shifting onto other streets. The testing phase must last a minimum of two (2) months.
6. **Project Ballot.** Upon successful completion of the testing phase, if improvement provides a benefit to the neighborhood, staff conducts a survey to determine if the trial becomes permanent.
7. **City Commission Endorsement.** If a majority of the property owners who vote yes or no (51%) are in favor of the project, then the project will be presented to the City Commission for their action. The City Commission will proceed with special assessment hearings and will generally assess 100% of the project costs. However, in extraordinary situations, if the City Commission determines the project has substantial benefit city-wide the City Commission may consider providing partial funding for the project on local streets. If a majority of property owners who vote are against the project, then the City will take no further action.
8. **Design/Construction/Implementation.** If the City Commission approves the project, the City will pursue the final design and construction of the traffic calming device. Depending on the nature of the project design and construction process can take between six (6) and twelve (12) months.
9. **Project Evaluation.** Twelve (12) months after the construction is complete, the City will evaluate the project

MODERNIZE EXISTING TRAFFIC SIGNAL

EXISTING "NO PARKING ZONE" SOUTH ELIMINATES 1 PARKING SPOT

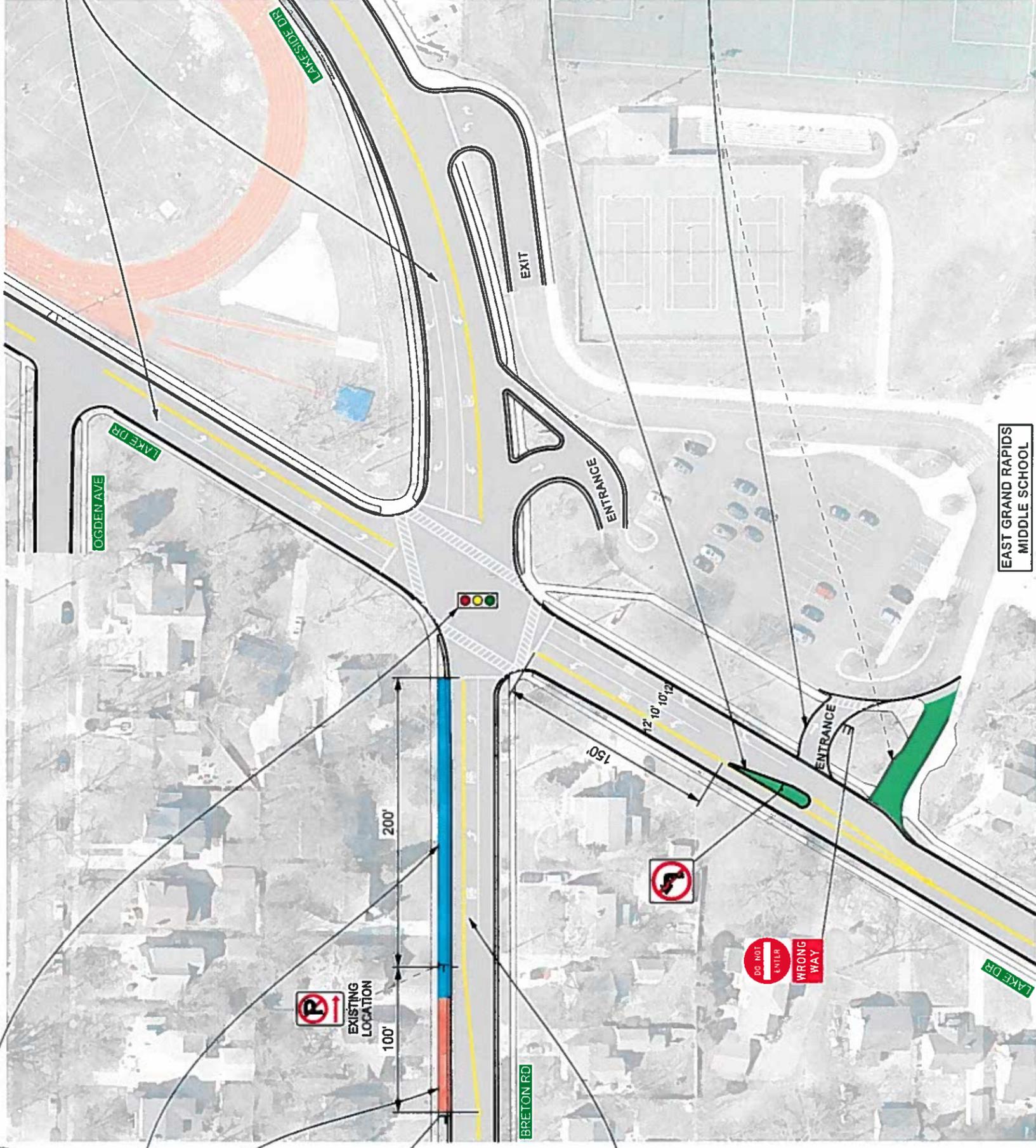
EXTEND "NO PARKING ZONE" SOUTH ELIMINATES 1 PARKING SPOT

EXTEND NORTHBOUND LEFT-TURN LANE FROM 110' TO 200'

EXISTING PAVEMENT MARKINGS TO REMAIN ON WEST AND NORTH LEGS

CONSTRUCT CENTER MEDIAN TO PROHIBIT EASTBOUND LEFT-TURN MOVEMENTS

RELOCATE EXISTING ENTRANCE ONLY DRIVE



LAKE DR / BRETON RD / LAKESIDE DR

PROPOSED INTERSECTION CONFIGURATION
LAKE DRIVE / BRETON ROAD / LAKESIDE DRIVE



URS
Surface Transportation
Grand Rapids, Southfield
Troy, MI



CS: 12045147
JN: 12045147
DATE: 2015-06-24

FIGURE
4

Your Company Name

Street Address
Location, Zip or Postal Code
Change These in File > Preferences > Titles

Site Code: 2600 Block
Station ID: Lake Drive

Latitude: 0° 0.0000 South

COMBINED

Report for 10/13/2015 9:00:00 AM to 10/16/2015 1:00:00 PM

SPEED STATISTICS - 15 to 70+ by 5 MPH

Speed in MPH	1 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	51 - 55	56 - 60	61 - 65	66 - 70	71 - 75	76 - 999
Count	95	390	4594	13425	4995	549	49	5	2	0	0	0	0	0
Percent	0.4	1.6	19.1	55.7	20.7	2.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Over Speed Count	15	20	25	30	35	40	45	50	55	60	65	70	75	999
Over Speed Percent	99.6	98.0	78.9	23.2	2.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile	5%	10%	15%	45%	50%	55%	85%	90%	95%					
Speed	22	24	25	28	28	29	32	33	34					

Average 28
(Mean)

Pace Speed 24.33
Number in 20519
Pace
Percent in 85.1
Pace

Untitled Speed

