



CITY of NOVI CITY COUNCIL

Agenda Item C
March 13, 2017

SUBJECT: Approval of the request of Commerce Park, JSP 17-02, for Zoning Map Amendment 18.716 to rezone property in Section 16, located on the southwest corner of Twelve Mile Road and Taft Road from RA (Residential Acreage) to OST (Planned Office Service Technology). The subject parcel is approximately 30.64 acres. **SECOND READING**

SUBMITTING DEPARTMENT: Community Development Department - Planning ^{Barb}

CITY MANAGER APPROVAL: 

BACKGROUND INFORMATION:

The petitioner is requesting a Zoning Map amendment for 30.64 acres of property located at the southwest corner of the Twelve Mile Road and Taft Road. The request is to rezone from RA (Residential Acreage) to OST (Planned Office Service Technology). The applicant states that the rezoning request is necessary for a possible development plan that will be consistent with the OST zoning district, and therefore the applicant elected to request a simple rezoning that does not include a Planned Rezoning Overlay Concept Plan.

The subject property is currently vacant. The property to the south is used for the ITC Transmission corridor and runs parallel to the I-96 freeway. The properties to the east, across Taft Road are developed with single family homes. Further to the east, across the railroad tracks, the land is developed with the Somnio building. Land to the north is developed with an office building and is also used for outdoor storage.

The existing zoning of the property is RA, Residential Acreage, as is the zoning to the south and to the east, across Taft Road. The property to the north is zoned I-1, Light Industrial. To the west, the property is zoned OST, Planned Office Service Technology district.

The Future Land Use Plan recommends the Office Research Development and Technology land use category for the property. The same land use category is recommended for the properties to the south, east, and west. The requested OST zoning is consistent with the recommendation of the Future Land Use Plan. To the north, across Twelve Mile Road, the Plan recommends Industrial, Research, Development and Technology land uses.

With regard to the natural features, there is a significant area of regulated woodlands and wetland on the site. The applicants have performed a wetland and woodland survey of the property. The City's environmental consultant, ECT, performed an on-site evaluation of the survey and the findings are provided in a memo which is attached. A total of four wetland areas are located on the property totaling 2.43 acres. Any proposed use of all four Wetlands will require applicable permits from the City at the time of Preliminary Site Plan approval.

The highest quality woodlands are found in the southern and western sections of the subject site. As this is not a PRO (Planned Rezoning Overlay) rezoning, the applicant is not

bound to develop a specific plan after the rezoning has been approved. Staff is unable to determine the extent of impact on wetlands or woodlands at this time. A thorough review will be performed at the time site plan submittal and necessary permits will have to be obtained for any impacts to the regulated woodlands. The applicant is encouraged to minimize impacts to the wetlands and wetland buffer areas to the least amount feasible.

Planning staff estimates that the development potential of the site under the current Residential Acreage zoning could result in the construction of 20 single family homes under the allowable maximum density of 0.8 units to the acre. The actual number of units may be more or less depending on the proposed layout and the existing wetlands on the property. For purposes of completing the traffic study, the applicant's consultant used an estimate of 28 homes for the existing Residential Acreage zoning, and no more than 240,000 square feet would be possible under the proposed OST zoning for the site.

The City's Traffic Engineering consultant has reviewed the submitted Traffic Impact Study and indicated the additional traffic that is anticipated to be generated by the site under the proposed zoning classification is not expected to degrade the existing roadway network levels of service below acceptable limits. The consultant has noted that additional trip generation estimates should be performed at the time of Preliminary Site Plan submittal in order to determine whether a full Traffic Impact Statement will be required once a proposed development has been prepared.

The City's staff engineer has reviewed the rezoning request and has no concerns regarding the sanitary sewer capacity and no concerns with the available city water capacity under the proposed OST zoning district. The impacts of rezoning land in this area to OST had been evaluated previously by the Engineering Department to determine viability of the proposed uses, and no concerns were found.

Planning Staff **recommends approval** of the proposed Zoning Map Amendment, which would rezone the property RA (Residential Acreage) to OST (Planned Office Service Technology). The Planning Commission held the required public hearing on this matter on February 8, 2017 and **recommended favorable consideration** of the request, with one member dissenting due to the reasons that a PRO Concept Plan would have been preferred to be reviewed prior to matter being recommended for approval. The City Council considered this matter on February 27, 2017 and **approved the first reading**.

RECOMMENDED ACTION:

Approval of second reading of the request of Commerce Park, JSP 17-02, for Zoning Map Amendment 18.716 to rezone property in in Section 16, located on the southwest corner of Twelve Mile Road and Taft Road RA (Residential Acreage) to OST (Office Service Technology). Approval is provided for the following reasons:

1. The rezoning is consistent with the recommended land use on the Future Land Use Plan and will be consistent with the existing zoning to the west.
2. The rezoning provides an opportunity to develop the property in conformance with the Master Plan for Land Use recommendations, and puts a vacant parcel of land to use.
3. The rezoning request fulfills three objectives of the Master Plan for Land Use by:
 - a. Fostering a favorable business climate,
 - b. Showing support of development in the OST district, and
 - c. Maintaining a competitive market place.
4. The rezoning will not have a negative impact on public utilities.



MEMORANDUM

TO: PETE AUGER, CITY MANAGER
FROM: BARBARA MCBETH, AICP, CITY PLANNER
SUBJECT: EAST SIDE OF TAFT ROAD, SOUTH OF TWELVE MILE TOAD
DATE: MARCH 9, 2017

At the first reading of the rezoning request for the property at the southwest corner of Taft Road and Twelve Mile Road, questions were raised regarding the property located on the east side of Taft Road, and how it may be expected to be redeveloped in the future from its current state as (primarily) residential homes on large lots. The property is depicted on the Future Land Use Plan for use as Office Research Development and Technology, and so it is anticipated that at some point in the future the land on the east side of Taft Road may be rezoned to OST, Planned Office Service Technology. Please see the attached map for the area commented on in this memo.

There are nine homes currently located on the east side of Taft Road, south of Twelve Mile Road, and one parcel that is developed with the ITC Corridor. Current parcels sizes range from 0.29 acres to 9.24 acres, with most of the lots in the range of 2-3 acres in size. The area is bounded by the railroad tracks on the east side, Taft Road on the west, and I-96 to the south. Twelve Mile Road is located to the north, and there is an at-grade railroad crossing near the intersection of Taft Road and Twelve Mile. The Walled Lake Branch of the Rouge River extends north/south through the properties on the east side of the street. The area in total consists of approximately 35 acres of land, and is triangular in shape.

Development Potential

Given the irregular shape of the overall parcel, the location of the creek that bisects a number of properties, and the location of the ITC corridor, development of these parcels is likely to be more limited than OST zoned parcels that do not have these characteristics. Planning staff estimates that, if the parcels are combined, but excluding the ITC parcel of approximately 9.24 acres, and assuming that at least a portion of the river may be rerouted or crossed as a part of the overall development, a total of approximately 150,000 square feet of office, research and technology buildings could be constructed. If and when the properties on the east side of Taft are proposed to be redeveloped it will be important to insure that there will be safe traffic routing from Twelve Mile Road.

Road Improvements and Traffic Consideration

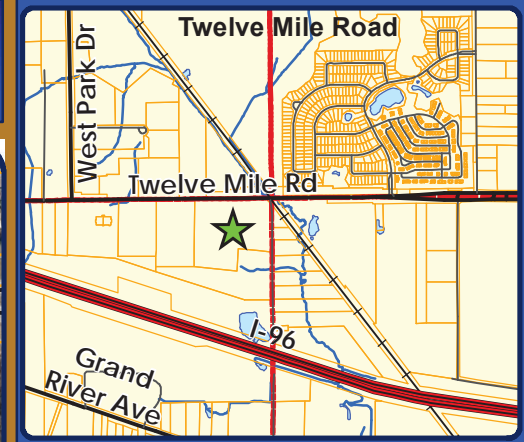
The City Council may recall that the Road Commission for Oakland County has been studying this portion of Twelve Mile Road between Beck Road on the west and the Liberty Park Apartments to the east for possible improvements. Please see memo from Engineering Division dated January 2016. Recent conversations with the Road Commission show that the area is still being studied, and the RCOC is interested in feedback from the community on which design is preferred. Any comments from Council on the proposed alternatives will be welcomed by City Administration and staff at this time.

Staff has alerted the RCOC that a development plan is expected to be submitted for the property at the southwest corner of Twelve Mile and Taft. Discussions have been ongoing regarding the possible future realignment of that intersection to provide better safety and separation from the rail crossing.

Additionally, the developer has provided updated traffic count information, and the City's Traffic Engineer has reviewed that information in a memo included in this packet.

JSP: 17-02 Commerce Park

Context Map



LEGEND

 Sections



City of Novi

Community Development Department
Civic Center
45175 W Ten Mile Road
Novi, MI 48375
www.cityofnovi.org

Map Author: Kirsten Mellem
Date: 03/09/2017
Project: JSP17-02 Commerce Park
Version #: 1



MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City of Novi GIS Manager to confirm source and accuracy information related to this map.

MEMORANDUM



TO: ROB HAYES, DIRECTOR OF PUBLIC SERVICES/CITY ENGINEER
FROM: BRIAN COBURN, ENGINEERING SENIOR MANAGER *BTC*
SUBJECT: 12 MILE ROAD (DIXON-WEST PARK) PRELIMINARY DESIGN
DATE: JANUARY 7, 2016

The Road Commission for Oakland County (RCOC) has been working on the environmental assessment and development of preliminary design alternatives for 12 Mile Road between Dixon and West Park Drive. Staff has been working with RCOC and their consultant, Spalding DeDecker Associates, to develop various design alternatives that would be presented at a future public meeting for input. Illustrations of each alternative are attached and summarized below:

Alternative	Description
0	Roundabout at 12 Mile and West Park—works with any of the options below
1	5-lane section between City limit and CSX railroad, with a 4-lane boulevard section between Dixon and CSX.
2	4-lane boulevard for entire segment. Indirect left turn at West Park Drive.
3	5-lane section at west end of segment, 4 lane boulevard east of West Park Drive. This design decreases the amount of right-of-way needed.
4	4-lane narrow boulevard at west end of segment, 5-lane boulevard west of the railroad.
5	4-lane boulevard for entire segment with left turn lanes at West Park Drive

There are several factors that staff considered regarding each of the alternatives including (in no particular order):

- Safety
- Availability of existing right-of-way
- Aesthetics
- Non-Motorized Improvements
- Economic Development

Staff reviewed the option of a roundabout at the intersection of West Park Drive, Alternative 0. The amount of traffic at the intersection would benefit from the construction of a roundabout at this location and staff would like the Road Commission to study this option in more detail to assess the right-of-way and traffic impacts.

The following table summarizes the evaluation of the five road section alternatives:

Table 1. Alternative Evaluation Matrix

Alternative	Improves Safety	Limits amount of ROW Needed?	Improves Aesthetics	Improves Non-Motorized	Promotes Economic Development
1 5-lane section between City limit and CSX railroad, with a 4-lane boulevard section between Dixon and CSX.	X		X	X	X
2 4-lane boulevard for entire segment. Indirect left turn at West Park Drive.	X		X	X	X
3 5-lane section at west end of segment, 4 lane boulevard east of West Park Drive. This design decreases the amount of right-of-way needed.	X				X
4 4-lane narrow boulevard at west end of segment, 5-lane boulevard west of the railroad	X	X		X	X
5 4-lane boulevard for entire segment with left turn lanes at West Park Drive	X	X	X	X	X

In reviewing each alternative against each of the factors, staff recommends Alternative 5 as a good balance between providing a boulevard section (which improves safety by separating eastbound and westbound traffic and improves aesthetics by providing a planted median) while decreasing the amount of right-of-way that would be needed. Each of the alternatives provides non-motorized improvements and promotes economic development by reducing congestion and improving access. Alternative 2 extends the existing 12 Mile Road cross-section from its current terminus at Dixon Road, but requires an extensive amount of right-of-way to construct. For this reason, staff is reluctant to recommend Alternative 2. The other alternatives (Alternatives 1, 3 and 4) provide a 5-lane section, which does not provide for a planting area and a narrower boulevard section to limit the ability to make U-turns.

While this very preliminary phase of the project received Federal grant funding, the right-of-way acquisition and construction phases are not currently funded. This project is not currently in the 6-year capital improvement plan, however once this preliminary phase is approved by the Federal Highway Administration, this project will be cleared to get in line for funding as it becomes available.

Once we receive feedback from Administration and other Departments, we will provide a formal response to the Road Commission regarding the alternatives.

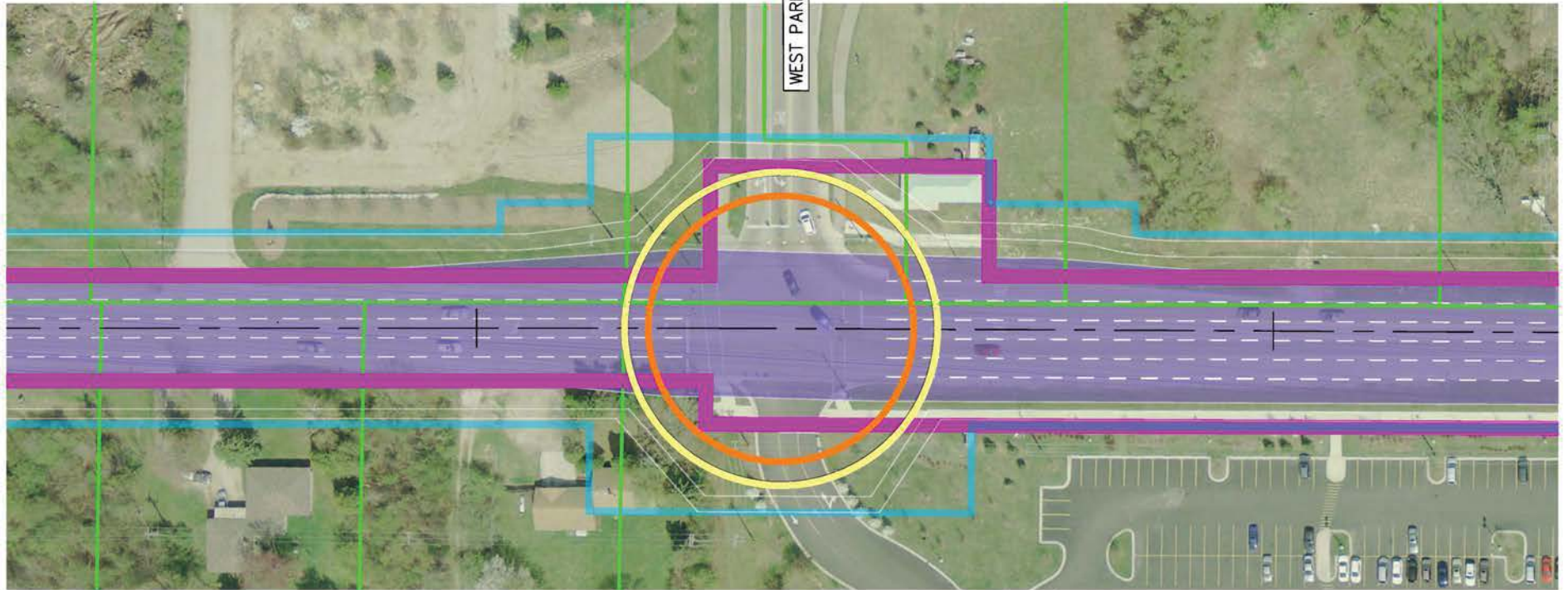
cc: Charles Boulard, Community Development Director
 Barb McBeth, Deputy Community Development Director
 David Molloy, Director of Public Safety/Chief of Police

12 Mile Road Improvements – Potential Roundabout at West Park Drive











EXISTING AM PEAK HOUR VOLUME (ALL APPROACHES) = 2,103 VPH
EXISTING PM PEAK HOUR VOLUME (ALL APPROACHES) = 2,277 VPH
APPROXIMATE PEAK HOUR CAPACITY, SINGLE-LANE ROUNDABOUT = 2,000 VPH
APPROXIMATE PEAK HOUR CAPACITY, TWO-LANE ROUNDABOUT = 4,000 VPH

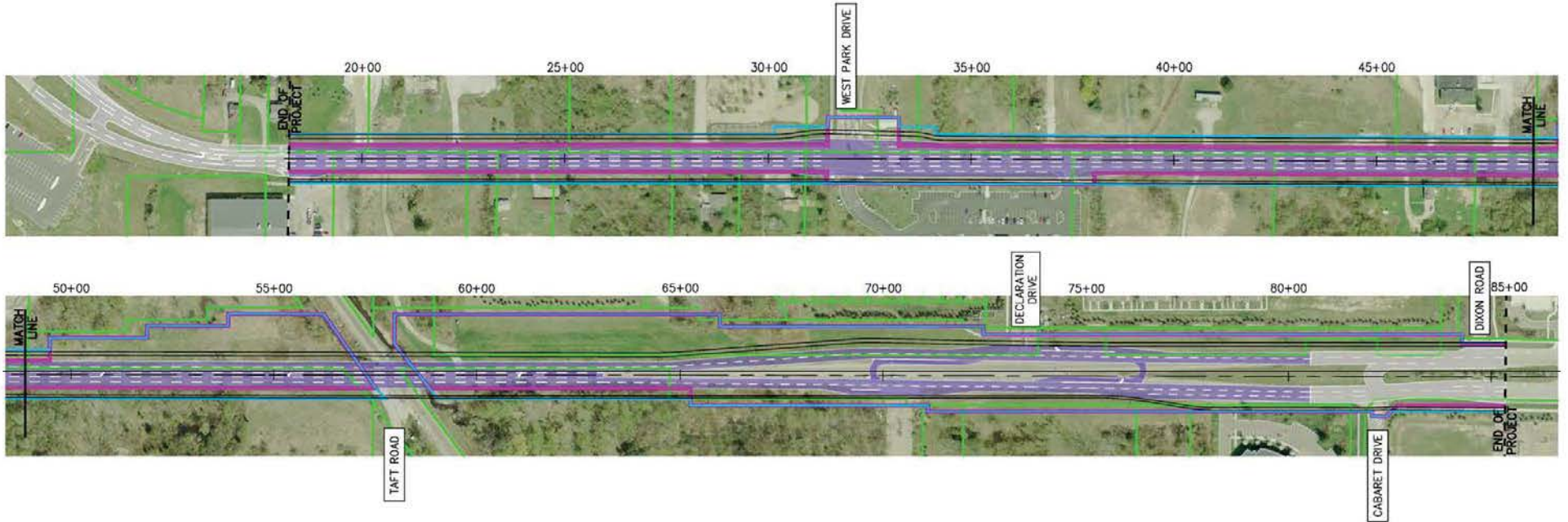
WEST PARK DRIVE



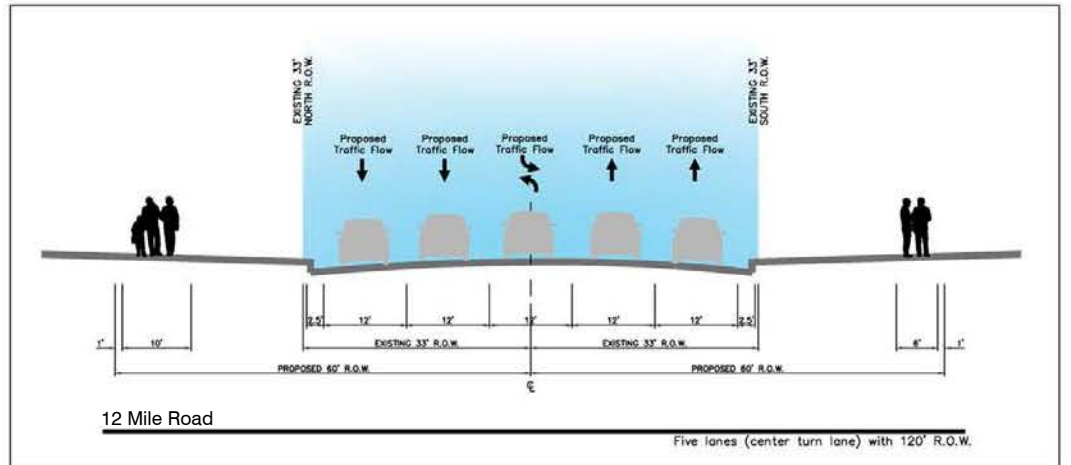
LEGEND

- | | | | |
|---|---|--|-----------------------|
|  | 170' DIAMETER
SINGLE LANE ROUNDABOUT |  | PROPOSED RIGHT-OF-WAY |
|  | 200' DIAMETER
TWO-LANE ROUNDABOUT |  | EXISTING RIGHT-OF-WAY |
|  | PROPOSED PAVEMENT |  | EXISTING PARCELS |
|  | EXISTING PAVEMENT |  | PROPOSED SIDEWALK |

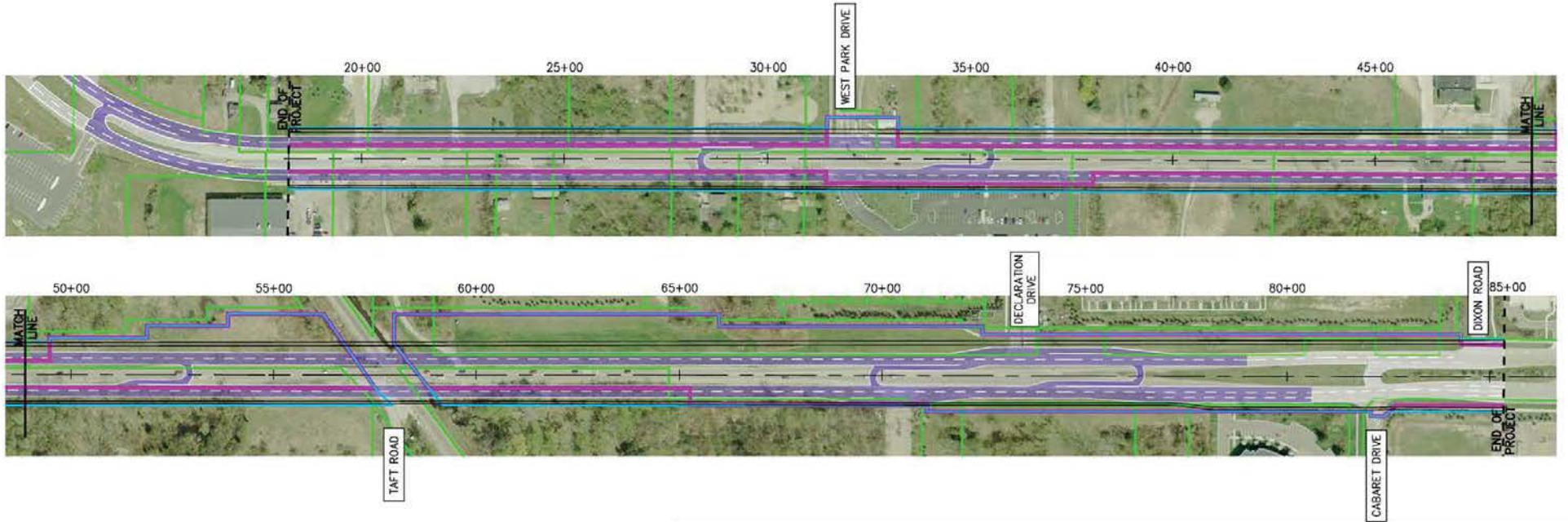
12 Mile Road Improvements – Alternative 1



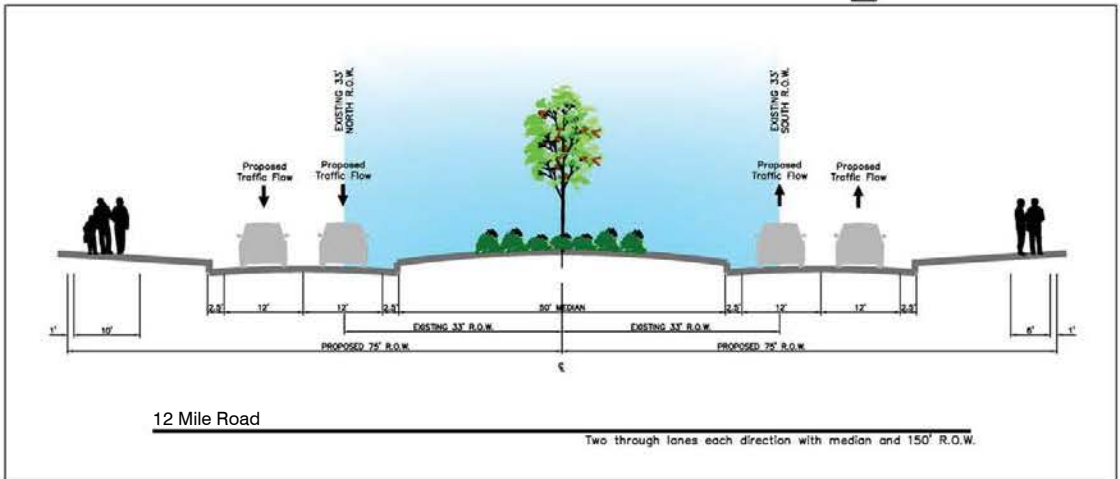
LEGEND	
	PROPOSED PAVEMENT
	EXISTING PAVEMENT
	PROPOSED RIGHT-OF-WAY
	EXISTING RIGHT-OF-WAY
	EXISTING PARCELS
	PROPOSED SIDEWALK



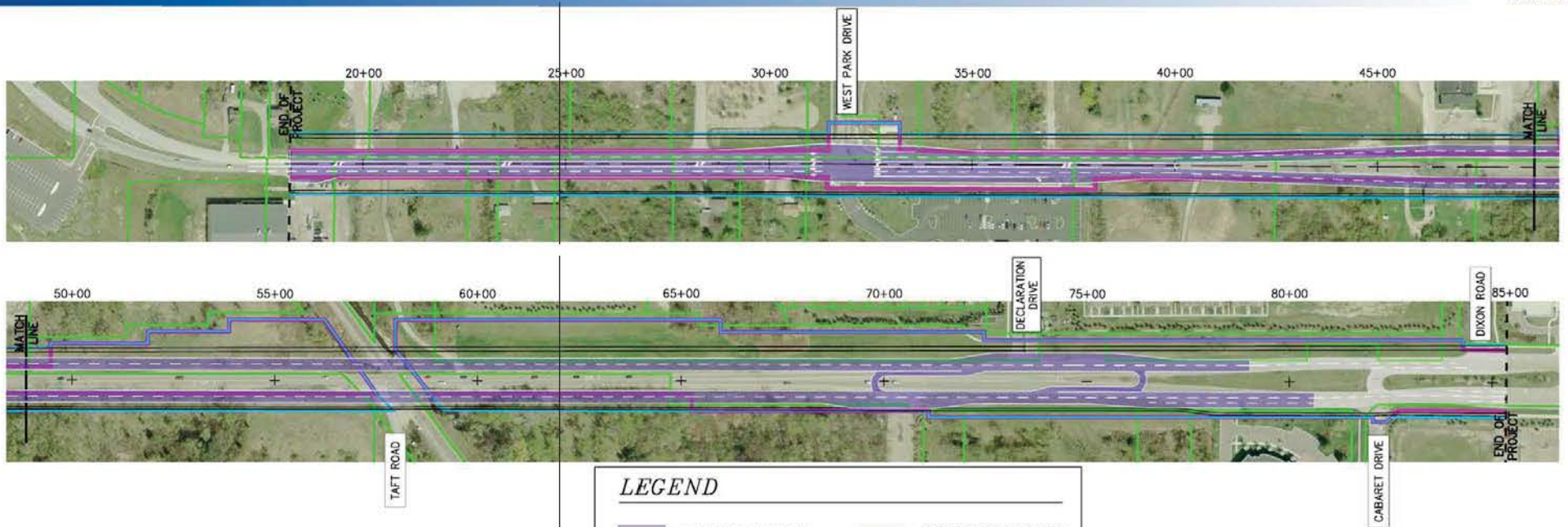
12 Mile Road Improvements – Alternative 2



LEGEND	
	PROPOSED PAVEMENT
	EXISTING PAVEMENT
	PROPOSED RIGHT-OF-WAY
	EXISTING RIGHT-OF-WAY
	EXISTING PARCELS
	PROPOSED SIDEWALK

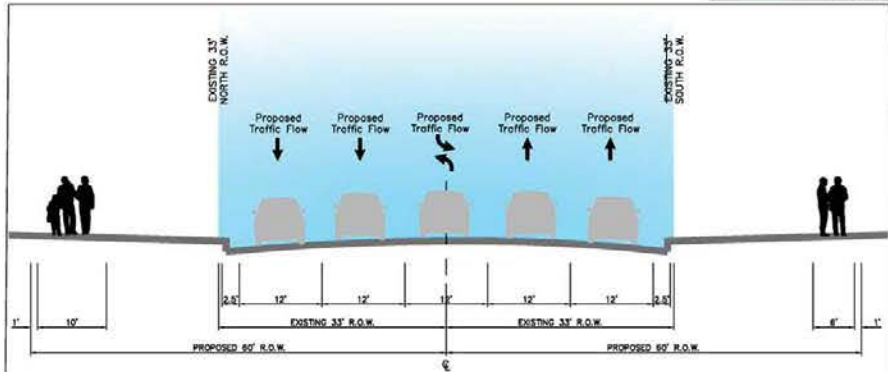


12 Mile Road Improvements – Alternative 3



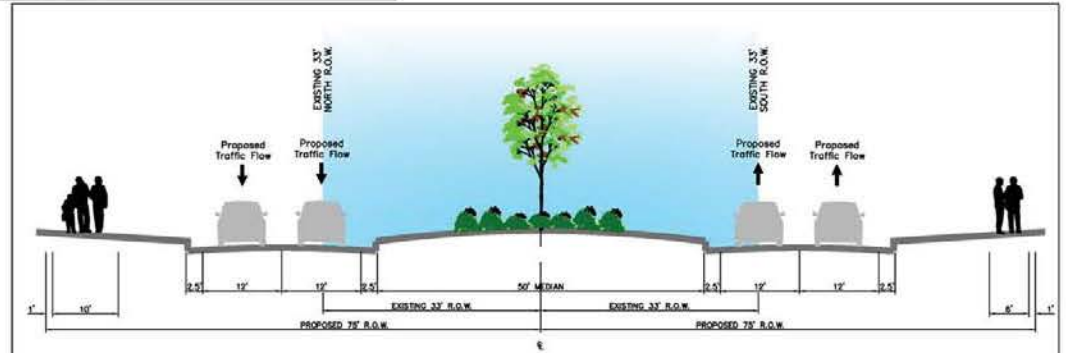
LEGEND

	PROPOSED PAVEMENT		EXISTING RIGHT-OF-WAY
	EXISTING PAVEMENT		EXISTING PARCELS
	PROPOSED RIGHT-OF-WAY		PROPOSED SIDEWALK



12 Mile Road

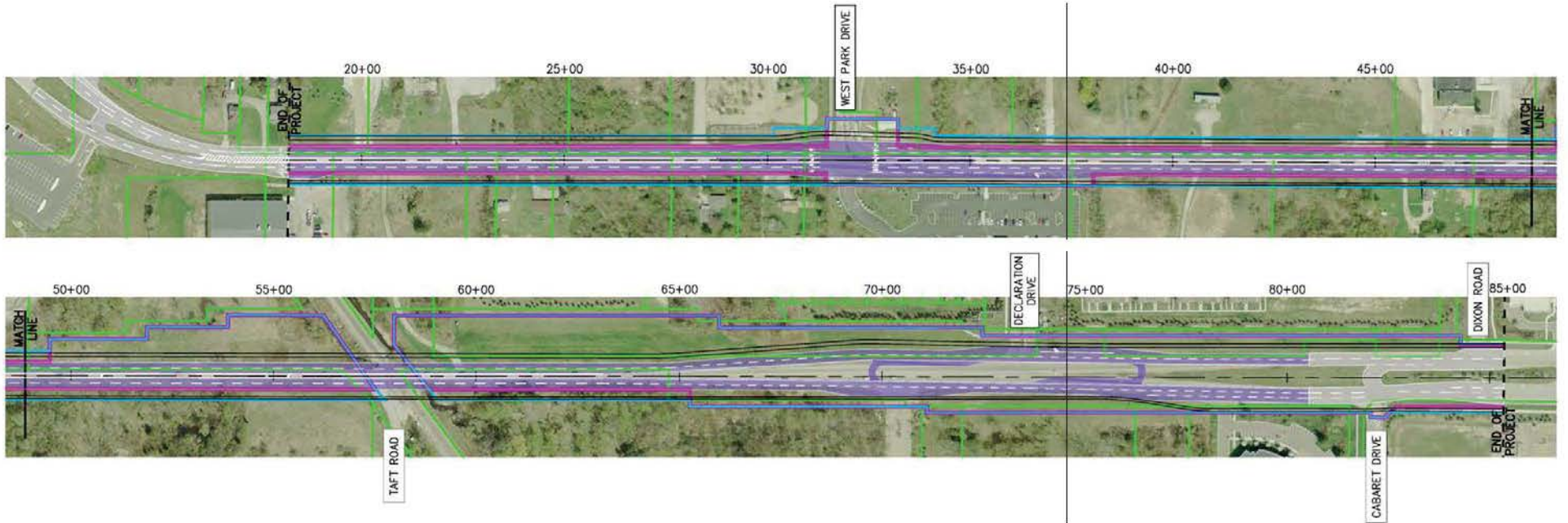
Five lanes (center turn lane) with 120' R.O.W.



12 Mile Road

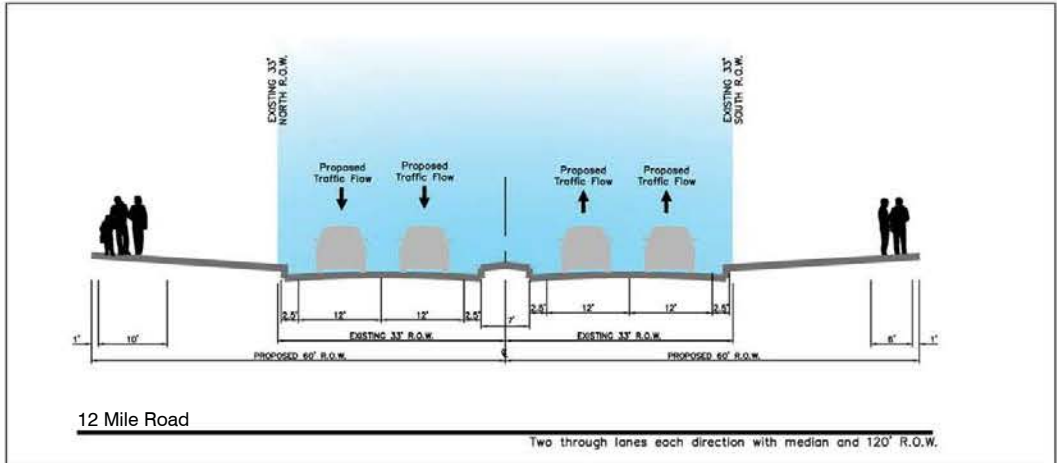
Two through lanes each direction with median and 150' R.O.W.

12 Mile Road Improvements – Alternative 4

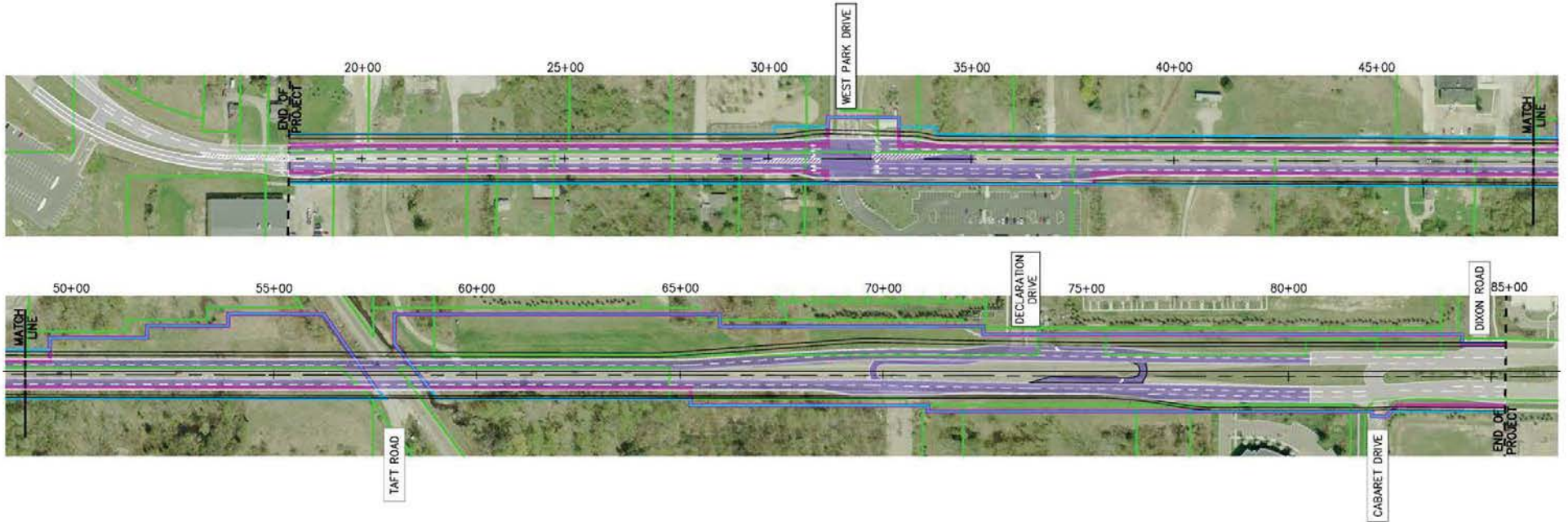


LEGEND

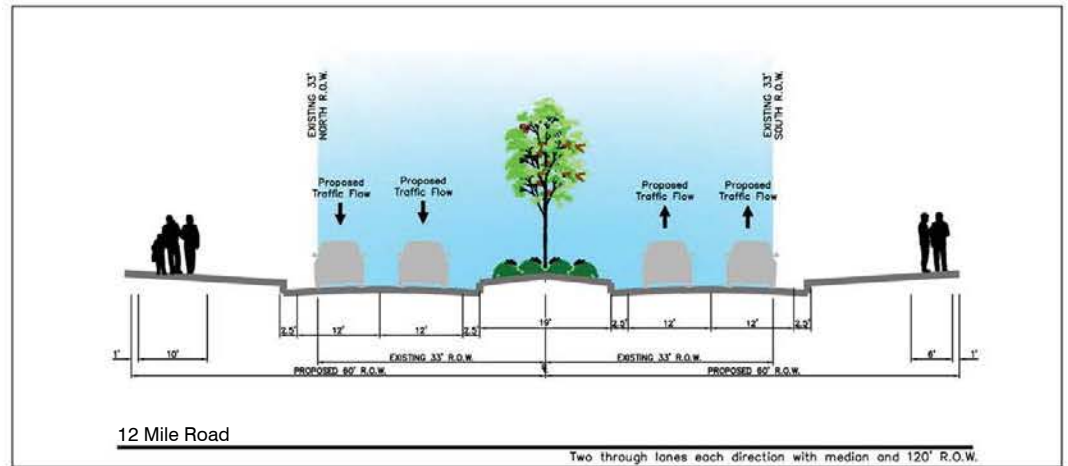
	PROPOSED PAVEMENT
	EXISTING PAVEMENT
	PROPOSED RIGHT-OF-WAY
	EXISTING RIGHT-OF-WAY
	EXISTING PARCELS
	PROPOSED SIDEWALK



12 Mile Road Improvements – Alternative 5



LEGEND	
	PROPOSED PAVEMENT
	EXISTING PAVEMENT
	PROPOSED RIGHT-OF-WAY
	EXISTING RIGHT-OF-WAY
	EXISTING PARCELS
	PROPOSED SIDEWALK





AECOM
27777 Franklin Road
Southfield
MI, 48034
USA
aecom.com

Project name:
JZ17-01 Revised Twelve Mile and Taft Rezoning
TIS Review

From:
AECOM

Date:
March 8, 2017

To:
Barbara McBeth, AICP
City of Novi
45175 10 Mile Road
Novi, Michigan 48375

CC:
Sri Komaragiri, Kirsten Mellem, George Melistas,
Richelle Leskun

Memo

Subject: Revised Twelve Mile and Taft RTIS Review

The rezoning TIS was reviewed in conjunction with the recently collected 2017 traffic counts along Twelve Mile Road in the vicinity of the project and to the level of detail provided, and AECOM **recommends approval** for the applicant to move forward based upon the comments provided below.

TRAFFIC IMPACT STUDY COMMENTS

General Comments:

1. The RTIS references a proposed approximately 30-acre site, which is currently zoned RA (Residential Acreage), to be rezoned to OST (Office Service and Technology District).
2. The site is located on the southwest quadrant of the intersection of Twelve Mile Road and Taft Road. The intersection is a three-leg intersection with stop control on the minor approach.
3. There is an at-grade railroad crossing in the vicinity of the site.
4. Twenty-four hour counts were collected in the vicinity of the site along Twelve Mile Road on Thursday, March 2, 2017. AADT and peak-hour volume counts from 2012 were also obtained for Twelve Mile Road from the Southeast Michigan Council of Governments (SEMCOG). However, traffic data was not available for Taft Road at this location.
5. The City's Code of Ordinances restricts access to streets that are not major thoroughfare. Taft Road is not considered a major thoroughfare. Therefore, primary access should only be permitted by means of Twelve Mile Road.

Existing Conditions

1. The peak hour of Twelve Mile Road is 5:00-6:00PM with a corresponding bi-directional volume of approximately 1,677 vehicles per hour (vph) based on a traffic count performed on Thursday, March 2, 2017. The total 24-hour count for both directions of traffic on Twelve Mile Road was 16,552 vehicles per day. The initial analysis was performed with SEMCOG data from the year 2012.
 - a. The revised study provided the 2017 counts collected and an additional 2012 SEMCOG data set on Twelve Mile Road between Beck Road and Taft Road.
 - b. Comparison of the 2012 SEMCOG traffic volume data to the 2017 collected traffic data indicate minimal 24-hour differences but some variability in the peak hour volumes over the last five years.

Direction	AM Peak	PM Peak	Daily
Eastbound	1,030	704	8,700
Westbound	386	973	7,852
Bi-directional	1,416 / 1,357 / 956	1,677 / 2,022 / 1,930	16,552 / 17,441 / 16,465

Key: 2017 Data / **2012 SEMCOG Data: Taft to Dixon** / **2012 SEMCOG Data: Beck to Taft**

2. According to data obtained from the applicant, under the current zoning (RA), a maximum of 28 homes could be built on the site when accounting for minimum lot size, the actual geometry of the property and providing area for roadways to fully access all potential residences on site.
3. If the maximum 28 homes were to be built on the property, the site would generate an estimated 326 daily trips per week day with 30 and 34 trips for the AM and PM peak hours, respectively. These approximations are based on land use 210 (single-family detached housing) in the ITE Trip Generation Manual.

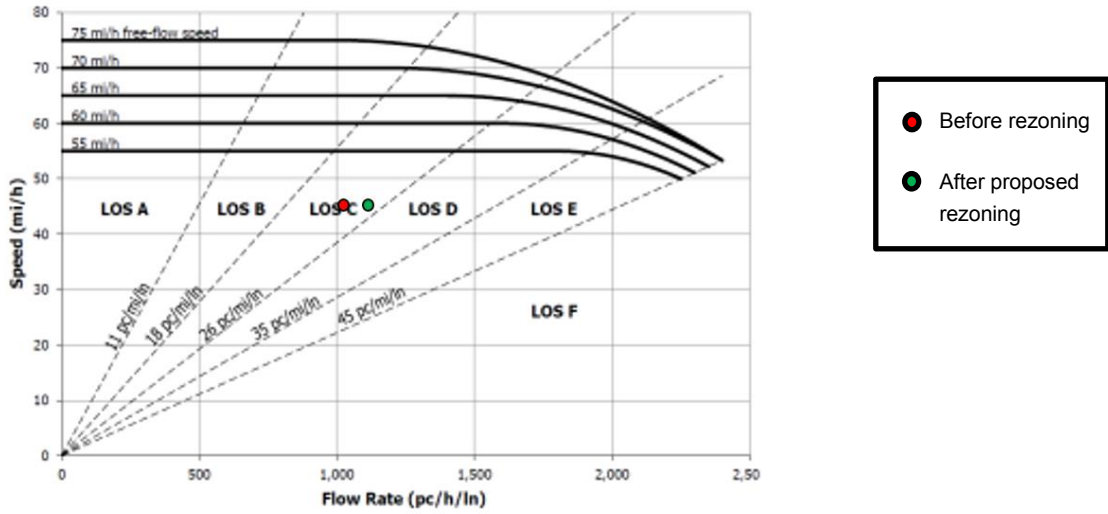
Proposed Rezoning Conditions

1. Under the proposed zoning (OST), a maximum building size of 240,000 square feet could be built.
2. If the maximum building size of 240,000 square feet were to be built on the property, the site would generate an estimated 1,947 daily trips per week day with 279 and 273 trips for the AM and PM peak hours, respectively. These approximations are based on land use 760 (research and development center) in the ITE Trip Generation Manual.
3. The proposed zoning change would generate up to 1,621 more daily trips with 249 trips and 239 trips during the AM and PM peak hours, respectively, compared to the existing zoning.
4. The applicant has proposed a building size of 124,418 square feet, which is estimated to generate 197 trips during the peak hour and 1,473 trips per day. The estimated volumes require a full-scale traffic impact study because the estimated volumes surpass the City of Novi's thresholds.

Conclusions

1. The rezoning traffic impact study performed by Tetra Tech fulfills the requirements required by the City of Novi and provides sound methodology for the estimation of trips for existing and proposed zonings.
2. Additional trip generation estimates should be performed in order to determine if a full TIS is required once the proposed development has been defined in greater detail (i.e., building size, facility use, etc.).
3. AECOM would support the rezoning application from a traffic standpoint. The maximum amount of additional traffic that would be generated by the site is not expected to degrade the existing roadway network levels of service below acceptable limits. Traffic volumes obtained from 2012 and 2017 were similar and the original analysis will suffice as the peak hour volumes from 2012 are more conservative than the volumes collected in 2017.
4. The figure below estimates the increased level of service on Twelve Mile Road due rezoning with the maximum building size. The red circle indicates the existing level of service along Twelve Mile Road and the green circle indicates the estimated level of service along Twelve Mile Road with the proposed rezoning with the maximum building size during the peak hour of traffic. However, as indicated above, a full-scale traffic impact study is required in order to make a more accurate determination to the amount of delay caused by the development.

Memo



Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

AECOM

Sterling J. Frazier, E.I.T.
Reviewer, Traffic/ITS Engineer

Matthew G. Klawon, PE
Manager, Traffic Engineering and ITS Engineering Services



March 3, 2017

Ms. Teresa Bruce
General Development Company
Two Towne Square, Suite 850
Southfield, Michigan 48076

**Re: Rezoning Traffic Impact Study Letter
Proposed Twelve Mile and Taft Roads OST Rezoning Application
City Council Request for Additional Information
City of Novi, Michigan
200-163821-17001**

Dear Ms. Bruce:

Tetra Tech (Tt) has completed collection of an Average Daily Traffic (ADT) count on Twelve Mile Road in the vicinity of your proposed rezoning application, as requested by the City of Novi Council. We set up APOLLYON automatic machine counting equipment utilizing roadway tubes on both eastbound and westbound Twelve Mile Road approximately 400 feet west of its intersection with Taft Road, which would be approximately at the location of the proposed site driveway as indicated on your site plan. The equipment was placed on Wednesday, March 1, 2017, and remained in place until it was collected on Friday, March 3, 2017. Photos of the equipment layout have been attached to this letter.

The volume information collected by the equipment was downloaded and processed utilizing the software program TRAXPro developed by JAMAR Technologies, Inc., which was then exported to Excel. Data collected from Thursday, March 2, 2017 from 12:00 a.m. to 11:59 p.m. (a complete 24 hour period in a single day) was used for our analysis. The results of our traffic data collection effort are summarized in the following table.



Table 1
Directional and Combined 24 Hour Traffic Count Information
Twelve Mile Road West of Taft Road

Date	Hour Beginning	Eastbound Volume	Westbound Volume	Combined Volume
3/2/2017	12:00 AM	25	47	72
3/2/2017	01:00 AM	12	32	44
3/2/2017	02:00 AM	20	21	41
3/2/2017	03:00 AM	28	21	49
3/2/2017	04:00 AM	50	28	78
3/2/2017	05:00 AM	112	61	173
3/2/2017	06:00 AM	372	132	504
3/2/2017	07:00 AM	1,002	268	1,270
3/2/2017	08:00 AM	1,030	386	1,416
3/2/2017	09:00 AM	572	226	798
3/2/2017	10:00 AM	417	242	659
3/2/2017	11:00 AM	467	333	800
3/2/2017	12:00 PM	495	443	938
3/2/2017	01:00 PM	429	439	868
3/2/2017	02:00 PM	426	463	889
3/2/2017	03:00 PM	526	658	1,184
3/2/2017	04:00 PM	651	1020	1,671
3/2/2017	05:00 PM	704	973	1,677
3/2/2017	06:00 PM	553	770	1,323
3/2/2017	07:00 PM	328	399	727
3/2/2017	08:00 PM	220	340	560
3/2/2017	09:00 PM	149	293	442
3/2/2017	10:00 PM	65	153	218
3/2/2017	11:00 PM	47	104	151
Daily Totals:		8,700	7,852	16,552

The above table indicates that the total daily volume on Twelve Mile Road in the vicinity of your site was approximately 16,550 vehicles per day, with a peak hour bi-directional volume of 1,677 vehicles per hour (from 5:00 to 6:00 p.m.) and a peak directional volume of 1,030 vehicles per hour (eastbound from 8:00 to 9:00 a.m.).

By comparison, the 2012 traffic count information obtained from the SEMCOG website in our original Rezoning Traffic Impact Study dated December 27, 2016 (for the segment of Twelve Mile Road between Taft and Dixon Roads to the east of your site) indicated a daily volume of approximately 17,500 vehicles per day, with a peak hour bi-directional volume of approximately 2,025 vehicles per hour. We have also attached the 2012 count for the segment of Twelve Mile Road between Beck and Taft Roads (which your site is located



on), which indicated a daily count of 16,465 vehicles per day, with a peak hour count of 1,930 vehicles per hour (from 5:00 to 6:00 p.m.), which correlates very closely with the count data we collected. Copies of the count data we collected, as well as the 2012 counts are attached to this letter for your reference.

We trust that this letter fulfills your current transportation needs regarding your proposed development. If you have any questions, please feel free to call our office at (810)-220-2112.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kyle W. Ramakers', written over a light blue rectangular background.

Kyle W. Ramakers, P.E., PTOE
Transportation Engineer

200-163821-17001

P:\IER\163821\200-163821-17001\SupportDocs\Cals\Traffic\Deliverables\Taft-Road_ADT-Count.docx

**APOLLYON TRAFFIC COUNTING EQUIPMENT SETUP
TWELVE MILE ROAD WEST OF TAF ROAD, CITY OF NOVI
MARCH 1, 2017**



FACING EAST



FACING WEST

Combined

File Name: P:\IER\163821\200-163821-17001\SupportDocs\Cals\Traffic\ADT_Counts\EB-WB_Twelve_Mile_Rd.tf2

Start Date: 3/1/2017

Start Time: 10:00:00 AM

Site Code: EB & WB TWELVE MILE RD

Date	Hour Beginning	Eastbound Volume	Westbound Volume	Combined Volume
3/2/2017	12:00 AM	25	47	72
3/2/2017	01:00 AM	12	32	44
3/2/2017	02:00 AM	20	21	41
3/2/2017	03:00 AM	28	21	49
3/2/2017	04:00 AM	50	28	78
3/2/2017	05:00 AM	112	61	173
3/2/2017	06:00 AM	372	132	504
3/2/2017	07:00 AM	1,002	268	1,270
3/2/2017	08:00 AM	1,030	386	1,416
3/2/2017	09:00 AM	572	226	798
3/2/2017	10:00 AM	417	242	659
3/2/2017	11:00 AM	467	333	800
3/2/2017	12:00 PM	495	443	938
3/2/2017	01:00 PM	429	439	868
3/2/2017	02:00 PM	426	463	889
3/2/2017	03:00 PM	526	658	1,184
3/2/2017	04:00 PM	651	1020	1,671
3/2/2017	05:00 PM	704	973	1,677
3/2/2017	06:00 PM	553	770	1,323
3/2/2017	07:00 PM	328	399	727
3/2/2017	08:00 PM	220	340	560
3/2/2017	09:00 PM	149	293	442
3/2/2017	10:00 PM	65	153	218
3/2/2017	11:00 PM	47	104	151
Directional Daily Total:		8,700	7,852	16,552
Daily Total:		16,552		

Combined

File Name: P:\IER\163821\200-163821-17001\SupportDocs\Calcs\Traffic\ADT_Counts\EB_Twelve_Mile_Rd.tf2

Start Date: 3/1/2017

Start Time: 10:00:00 AM

Site Code: EB TWELVE MILE RD

Date	Hour Beginning	Volume
3/2/2017	12:00 AM	25
3/2/2017	01:00 AM	12
3/2/2017	02:00 AM	20
3/2/2017	03:00 AM	28
3/2/2017	04:00 AM	50
3/2/2017	05:00 AM	112
3/2/2017	06:00 AM	372
3/2/2017	07:00 AM	1,002
3/2/2017	08:00 AM	1,030
3/2/2017	09:00 AM	572
3/2/2017	10:00 AM	417
3/2/2017	11:00 AM	467
3/2/2017	12:00 PM	495
3/2/2017	01:00 PM	429
3/2/2017	02:00 PM	426
3/2/2017	03:00 PM	526
3/2/2017	04:00 PM	651
3/2/2017	05:00 PM	704
3/2/2017	06:00 PM	553
3/2/2017	07:00 PM	328
3/2/2017	08:00 PM	220
3/2/2017	09:00 PM	149
3/2/2017	10:00 PM	65
3/2/2017	11:00 PM	47
Daily Total:		8,700

Daily Eastbound Volume on Twelve Mile Road, West of Taft Road

Combined

File Name: Untitled Volume

Start Date: 3/1/2017

Start Time: 10:00:00 AM

Site Code: WB TWELVE MILE RD

Date	Hour Beginning	Volume
3/2/2017	12:00 AM	47
3/2/2017	01:00 AM	32
3/2/2017	02:00 AM	21
3/2/2017	03:00 AM	21
3/2/2017	04:00 AM	28
3/2/2017	05:00 AM	61
3/2/2017	06:00 AM	132
3/2/2017	07:00 AM	268
3/2/2017	08:00 AM	386
3/2/2017	09:00 AM	226
3/2/2017	10:00 AM	242
3/2/2017	11:00 AM	333
3/2/2017	12:00 PM	443
3/2/2017	01:00 PM	439
3/2/2017	02:00 PM	463
3/2/2017	03:00 PM	658
3/2/2017	04:00 PM	1020
3/2/2017	05:00 PM	973
3/2/2017	06:00 PM	770
3/2/2017	07:00 PM	399
3/2/2017	08:00 PM	340
3/2/2017	09:00 PM	293
3/2/2017	10:00 PM	153
3/2/2017	11:00 PM	104
Daily Total:		7,852

Daily Westbound Volume on Twelve Mile Road, West of Taft Road

Location Info	
Location ID	2049
Type	LINK
Functional Class	-
Located On	12 Mile
Between	TAFT AND DIXON
Direction	2-WAY
Community	Novi
MPO_ID	297
HPMS ID	
Agency	Road Commission for Oakland County

Count Data Info	
Start Date	8/27/2012
End Date	8/28/2012
Start Time	12:00 PM
End Time	12:00 PM
Direction	
Notes	
Count Source	FO380_____
File Name	counttemp1143.mdb
Weather	
Study	
Owner	rcoc

Interval: 60 mins	
Time	Hourly Count
00:00 - 01:00	79
01:00 - 02:00	38
02:00 - 03:00	24
03:00 - 04:00	20
04:00 - 05:00	34
05:00 - 06:00	145
06:00 - 07:00	455
07:00 - 08:00	1240
08:00 - 09:00	1357
09:00 - 10:00	775
10:00 - 11:00	777
11:00 - 12:00	927
12:00 - 13:00	1176
13:00 - 14:00	995
14:00 - 15:00	1034
15:00 - 16:00	1130
16:00 - 17:00	1713
17:00 - 18:00	2022
18:00 - 19:00	1222
19:00 - 20:00	798
20:00 - 21:00	627
21:00 - 22:00	464
22:00 - 23:00	271
23:00 - 24:00	118
TOTAL	17441

Location Info	
Location ID	2042
Type	LINK
Functional Class	-
Located On	12 Mile
Between	BECK AND TAFT
Direction	2-WAY
Community	Novi
MPO_ID	275
HPMS ID	
Agency	Road Commission for Oakland County

Count Data Info	
Start Date	8/30/2012
End Date	8/31/2012
Start Time	10:00 AM
End Time	10:00 AM
Direction	
Notes	
Count Source	FO370_____
File Name	counttemp1143.mdb
Weather	
Study	
Owner	rcoc

Interval: 60 mins	
Time	Hourly Count
00:00 - 01:00	67
01:00 - 02:00	51
02:00 - 03:00	35
03:00 - 04:00	37
04:00 - 05:00	22
05:00 - 06:00	124
06:00 - 07:00	378
07:00 - 08:00	956
08:00 - 09:00	940
09:00 - 10:00	769
10:00 - 11:00	764
11:00 - 12:00	941
12:00 - 13:00	1068
13:00 - 14:00	995
14:00 - 15:00	1035
15:00 - 16:00	1115
16:00 - 17:00	1679
17:00 - 18:00	1930
18:00 - 19:00	1333
19:00 - 20:00	739
20:00 - 21:00	604
21:00 - 22:00	456
22:00 - 23:00	273
23:00 - 24:00	154
TOTAL	16465

- R. Approval to purchase a 2018 7400 model single axle chassis from International through the current MiDeal contract in the amount of \$89,915.00.
- S. Approval of Resolution No. 1 for Special Assessment District 180 - Andes Hills Condominium Water Main Extension, authorizing the preparation of plans, specifications and cost estimate.
- T. Approval to authorize ICS Integration Services LLC to purchase and install replacement modems at the City's twenty-two monitoring locations within the City's sanitary sewer system, in the amount of \$28,094.
- U. Approval of Claims and Accounts – Warrant No. 982

CM 17-02-019 Moved by Burke, seconded by Wrobel; CARRIED UNANIMOUSLY:

To approve the Consent Agenda as presented.

**Roll call vote on CM 17-02-019 Yeas: Burke, Casey, Markham, Mutch, Wrobel, Gatt, Staudt
Nays: None**

MATTERS FOR COUNCIL ACTION

- 1. Approval to award a unit price Water Service Connections Contract to D&D Water & Sewer, Inc., the low bidder, for a term of one year with three 1-year renewal options for an estimated annual amount of \$150,000.

CM 17-02-020 Moved by Mutch, seconded by Burke; CARRIED UNANIMOUSLY:

To approve award of a unit price Water Service Connections Contract to D&D Water & Sewer, Inc., the low bidder, for a term of one year with three 1-year renewal options for an estimated annual amount of \$150,000.

**Roll call vote on CM 17-02-020 Yeas: Casey, Markham, Mutch, Wrobel, Gatt, Staudt, Burke
Nays: None**

- 2. Approval of the request of Commerce Park, JSP 17-02, for Zoning Map Amendment 18.716 to rezone property in Section 16, located on the southwest corner of Twelve Mile Road and Taft Road from RA (Residential Acreage) to OST (Planned Office Service Technology). The subject parcel is approximately 30.64 acres. **FIRST READING**

CM 17-02-021 Moved by Wrobel, seconded by Burke; CARRIED UNANIMOUSLY:

To approve the introduction and first reading of the request of Commerce Park, JSP 17-02, for Zoning Map Amendment 18.716 to rezone property in in Section 16, located on the southwest corner of Twelve Mile Road and Taft Road RA (Residential Acreage) to OST (Office Service Technology). Approval is provided for the following reasons:

- 1. The rezoning is consistent with the recommended land use on the Future Land Use Plan and will be consistent with the existing zoning to the west.**
- 2. The rezoning provides an opportunity to develop the property in conformance with the Master Plan for Land Use recommendations, and puts a vacant parcel of land to use.**
- 3. The rezoning request fulfills three objectives of the Master Plan for Land Use by:**
 - a. Fostering a favorable business climate,**
 - b. Showing support of development in the OST district, and**
 - c. Maintaining a competitive market place.**
- 4. The rezoning will not have a negative impact on public utilities.**

Member Mutch commented he was glad to see this had come forward with a proposal that will bring this property into conformance with the Master Plan. He felt this was the right direction to move in. He questioned City Planner, Barb McBeth about a concern that he had with the infrastructure in this particular area. He said 12 Mile Road borders the north side of this property. His understanding was that we do not have a particular development plan for this property at this point, at least when we are reconsidering this zoning. He mentioned staff has done some calculations in terms of what could be developed on that property as far as future land uses. He asked if Ms. McBeth could speak a little about those particular development potentials for that property. Ms. McBeth said the zoning was currently RA (Residential Acreage) and there were some wetlands on that site. There are a couple of different calculations, anywhere from 20 to 28 single family homes could be built under the existing RA zoning. With the rezoning to OST, they estimate around 124,000 square feet of building area could be built. She noted that this was not based on any particular plan. Member Mutch said the traffic review was done for the site and actually looked at a larger potential building. He questioned Ms. McBeth about the potential size of the building if we ignored all of the natural resources on the site and we allowed that to be completely developed. She said it could be up to 240,000 square feet. Member Mutch wondered if staff was comfortable with that number in terms of her review based on the OST zoning and what is allowed. Ms. McBeth said yes, they think that would be right, they are allowed considerable height in this location, along the freeway. He said one of the things mentioned in the review was the fact that all of the traffic from this development would go to 12 Mile Road and wouldn't be utilizing Taft Road, which is unpaved on the east side of this site. Ms. McBeth said the expectation would be that the majority of the

traffic would come from 12 Mile Road. Member Mutch said that raised a couple of concerns regarding the review letter which referenced the traffic counts from 2012. He said anyone who has driven that corridor at peak hours knows it is congested. He said he knows if they come in with a development plan they will be required to do certain improvements in front of their property on 12 Mile Road. He wondered how big of an area it was between Taft Road and the railroad tracks to the east. Ms. McBeth said she didn't have that information in front of her, but there were about 7 homes on large lots on the east side. Member Mutch confirmed with Ms. McBeth they would anticipate that it would transition over to OST zoning and it will develop into a large office style development. She said that is in the Master Plan for zoning as well. Member Mutch said we have an unpaved road that exits near the railroad tracks at 12 Mile Road and noted that it was unsafe. He said that it probably supports the 7 homes there, but it will never support any significant development. He said at the same time we will be bringing in a new development on this property which we need to figure out how to get Taft Road to 12 Mile Road in a safe way. He was concerned that we haven't had that discussion and doesn't want it to be a problem down the road. Member Mutch said this was the "First Reading", but what he would like for "Second Reading" would be more detail from staff on traffic impacts on 12 Mile Road, how we address the future development along the east side of Taft Road, and to ensure we have safe access to that. He would like something from staff showing how we can do that if we develop that property. He implied that he wants the property owner to know up front that we can't have them building at the corner because that will create an issue. He said we are going to need an area where the road can be rerouted. He also requested additional information from the traffic engineers explaining what the 2012 counts were. He wanted to know if they looked at the additional development that has gone on in the area since 2012 and what it means to the roadway and levels of service. Member Mutch supported the "First Reading", but he said he will be looking for additional information on the "Second Reading".

Roll call vote on CM 17-02-021

**Yeas: Markham, Mutch, Wrobel, Gatt, Staudt,
Burke, Casey**

Nays: None

3. Appointments to Boards and Commissions

Mayor Gatt submitted Datará Michener for nomination for the Library Board.

CM 17-02-022

Moved by Wrobel, seconded by Casey; CARRIED UNANIMOUSLY

**To approve the appointment of Datará Michener to the Library
Board.**

Voice vote on CM 17-02-022

Carried Unanimously

Mayor Gatt submitted Geoffrey Wood for nomination for the Library Board.

CM 17-02-023 Moved by Wrobel, seconded by Casey; CARRIED UNANIMOUSLY

To approve the appointment of Geoffrey Wood to the Library Board.

Voice vote on CM 17-02-023 Carried Unanimously

City Clerk Hanson provided the results of balloting:

Celia Todd – Beautification Commission
Jeffrey Bowdell – Construction Board of Appeals
John Enkemann – Construction Board of Appeals
Kamran Qadeer – Construction Board of Appeals (alternate)

AUDIENCE COMMENT - None

COMMITTEE REPORTS - None

MAYOR AND COUNCIL ISSUES - None

CONSENT AGENDA REMOVALS FOR COUNCIL ACTION:

ADJOURNMENT – There being no further business to come before Council, the meeting was adjourned at 8:00 P.M.

Cortney Hanson, City Clerk

Robert J. Gatt, Mayor

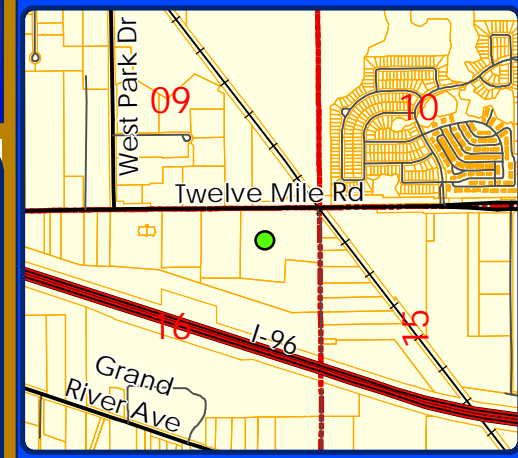
Transcribed by Deborah S. Aubry

Date approved: March 13, 2017

MAPS
Location
Zoning
Future Landuse
Natural Features

17-02 Commerce Park Zoning Map Amendment 18-716

Location Map



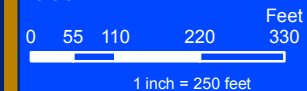
LEGEND

 Sections



City of Novi
Dept. of Community Development
City Hall / Civic Center
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

Map Author: Sri Komaragiri
Date: 02/01/17
Project: 17-02 Commerce Park Zoning Map Amendment 18-716
Version #: 1

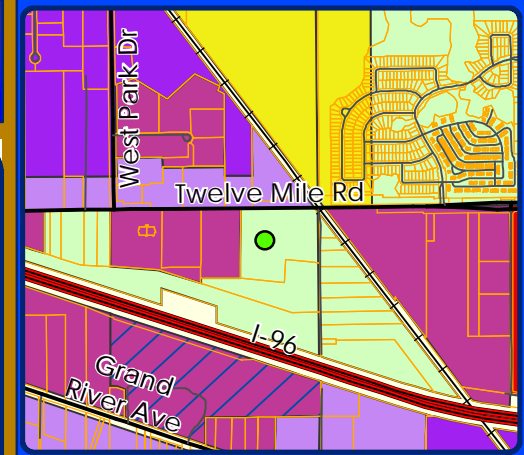
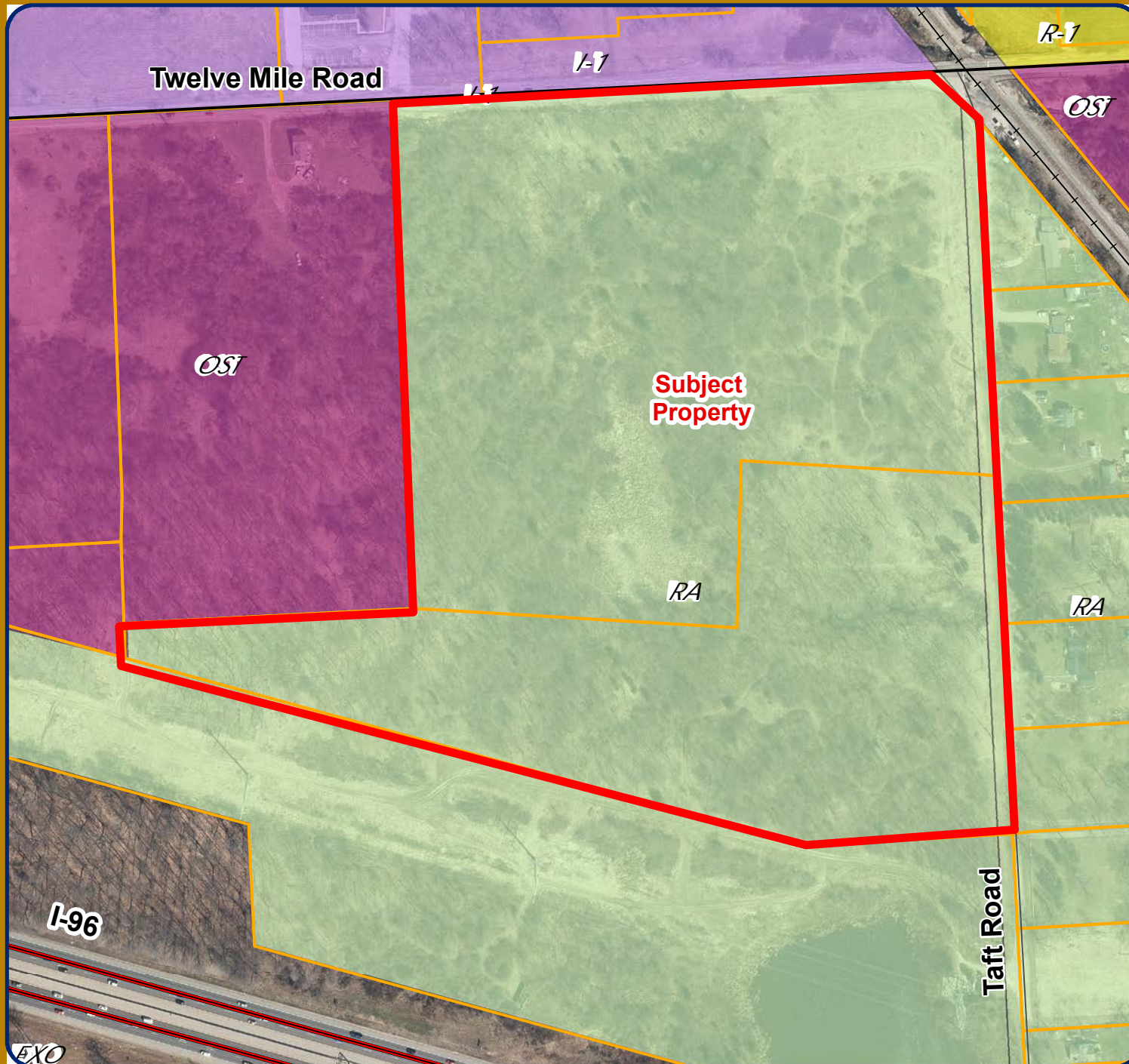


MAP INTERPRETATION NOTICE





Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

17-02 Commerce Park Zoning Map Amendment 18-716

Zoning Map



LEGEND

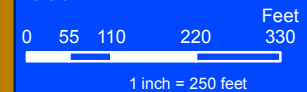
-  R-A: Residential Acreage
-  R-1: One-Family Residential District
-  EXO: OST District with EXO Overlay
-  I-1: Light Industrial District
-  I-2: General Industrial District
-  OST: Office Service Technology
-  RC: Regional Center District



City of Novi

Dept. of Community Development
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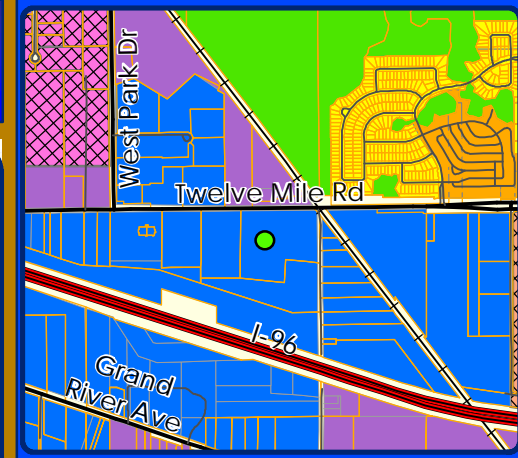
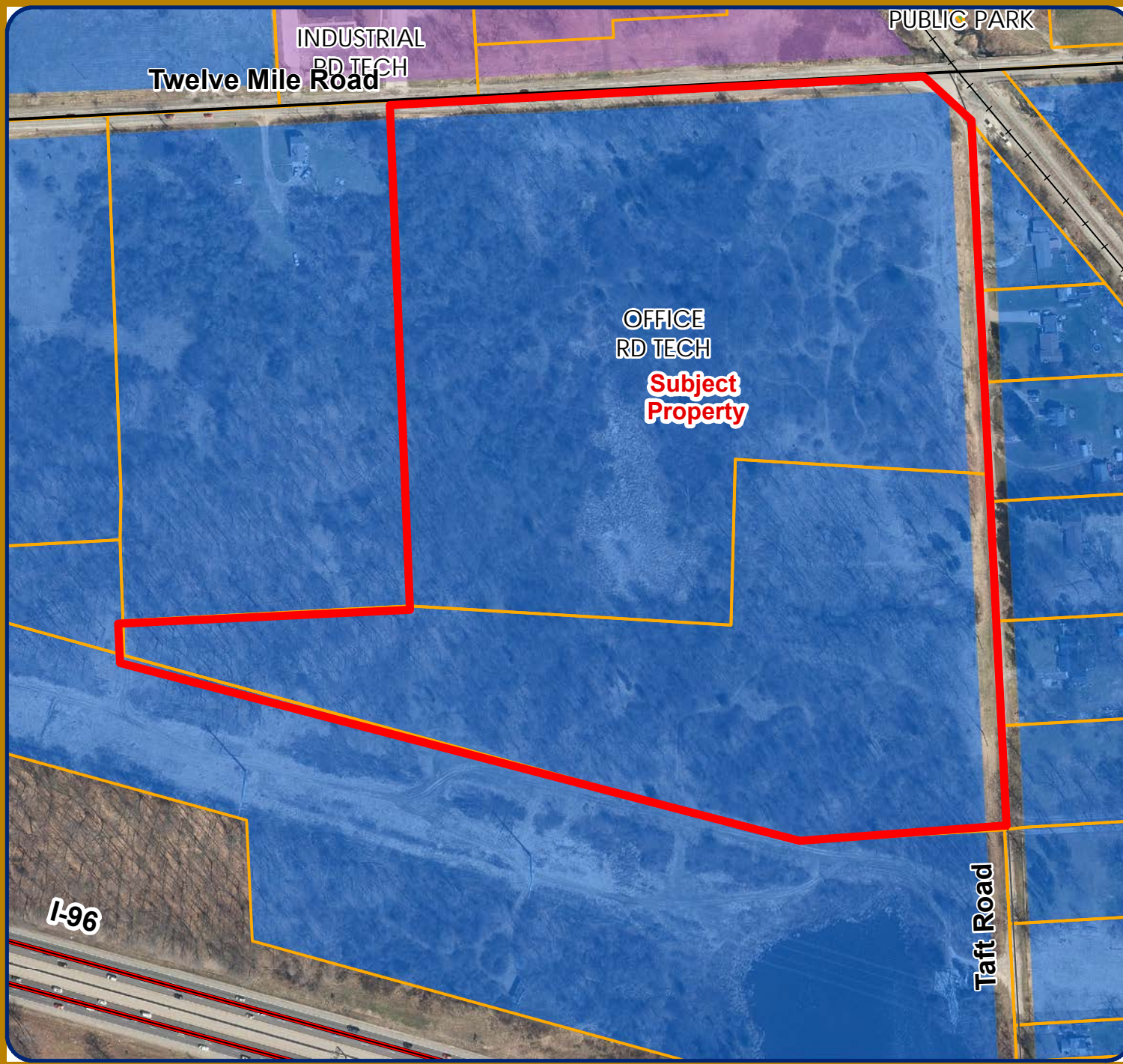


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17-02 Commerce Park Zoning Map Amendment 18-716

Future Land Use



LEGEND

FUTURE LAND USE

- Single Family
- Multiple Family
- Office RD Tech
- Industrial RD Tech
- Heavy Industrial
- Regional Commercial
- Public Park

 **City of Novi**
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0 55 110 220 330 Feet
1 inch = 250 feet

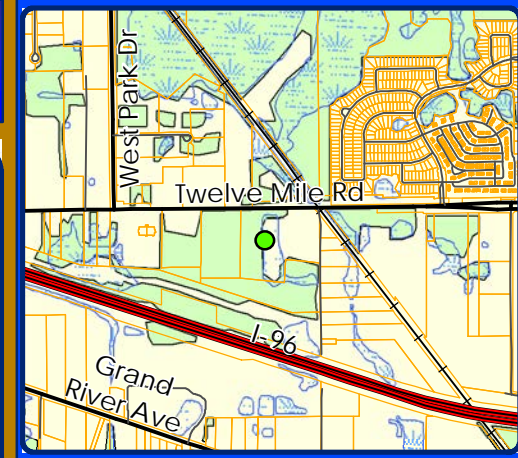


MAP INTERPRETATION NOTICE



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17-02 Commerce Park Zoning Map Amendment 18-716

Natural Features



LEGEND

-  WETLANDS
-  WOODLANDS

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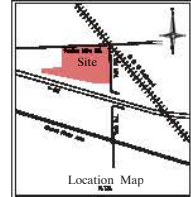
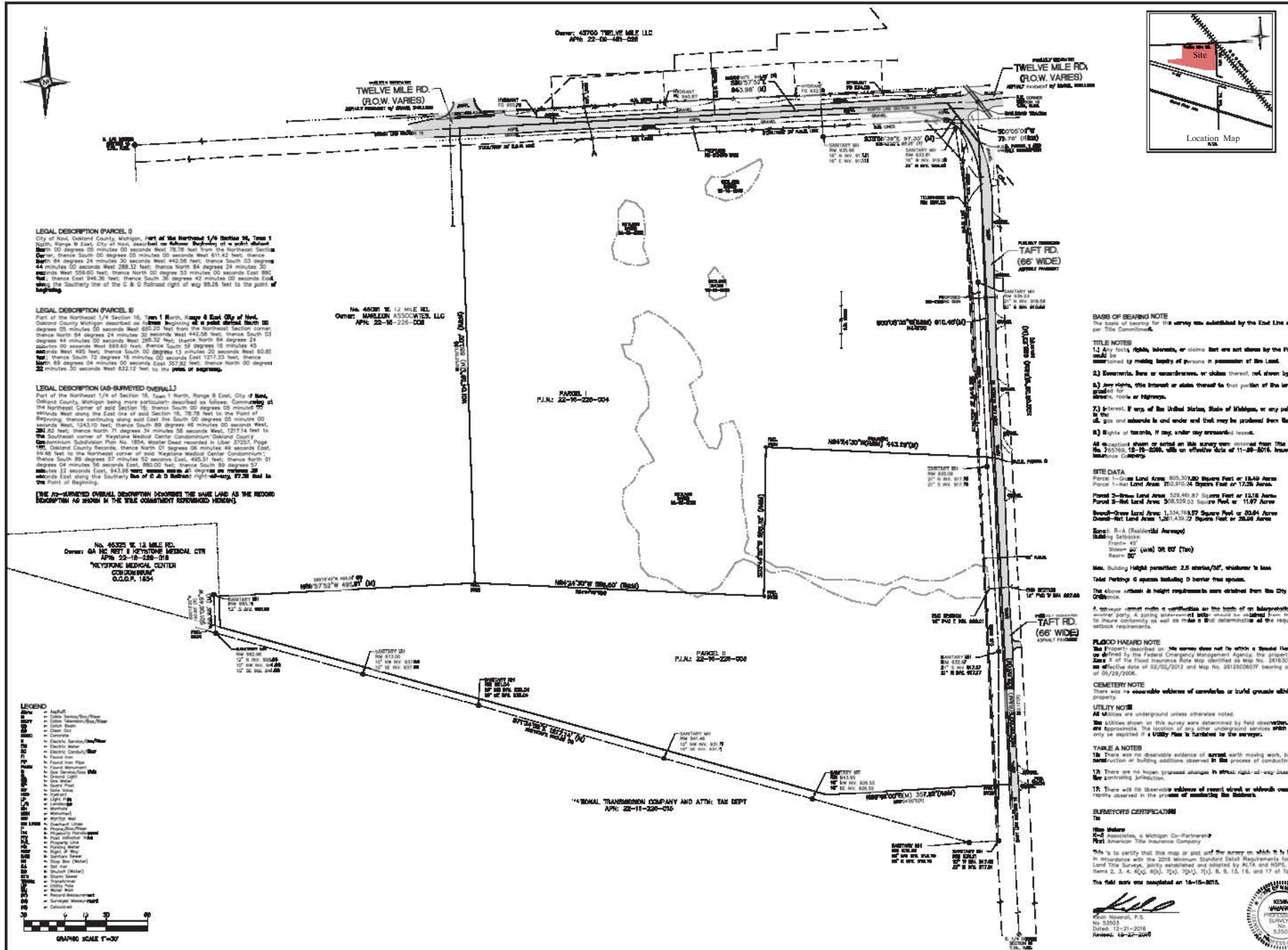
Map Author: Sri Komaragiri
Date: 02/01/17
Project: 17-02 Commerce Park Zoning Map Amendment 18-716
Version #: 1



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SUBJECT PROPERTY ALTA SURVEY
(Full Plan available at the Community Development Department)



LEGAL DESCRIPTION (PARCEL I)
City of Novi, Oakland County Michigan, Part of the Northeast 1/4 Section 16, Twp 1 North, Range 9 East, City of Novi, described as follows: Beginning at a well-defined Point of Beginning 00 degrees 00 minutes 00 seconds East, 78.78 feet from the Northeast Corner of said Section 16, thence South 00 degrees 00 minutes 00 seconds East 611.42 feet, thence South 84 degrees 24 minutes 24 seconds West 443.28 feet, thence South 23 degrees 44 minutes 00 seconds West 258.32 feet, thence North 84 degrees 24 minutes 24 seconds East 443.28 feet, thence North 00 degrees 00 minutes 00 seconds East 588.60 feet, thence South 00 degrees 00 minutes 00 seconds East 890 feet, thence South 84 degrees 24 minutes 24 seconds West 611.42 feet to the point of beginning.

LEGAL DESCRIPTION (PARCEL II)
Part of the Northeast 1/4 Section 16, Twp 1 North, Range 9 East, City of Novi, Oakland County Michigan described as follows: Beginning at a point adjacent to the Northeast Corner of said Section 16, thence North 00 degrees 00 minutes 00 seconds East 443.28 feet, thence South 84 degrees 24 minutes 24 seconds West 443.28 feet, thence South 23 degrees 44 minutes 00 seconds West 258.32 feet, thence North 84 degrees 24 minutes 24 seconds East 443.28 feet, thence North 00 degrees 00 minutes 00 seconds East 588.60 feet, thence South 00 degrees 00 minutes 00 seconds East 890 feet, thence South 84 degrees 24 minutes 24 seconds West 611.42 feet to the point of beginning.

LEGAL DESCRIPTION (AB-SURVEYED OVERALL)
Part of the Northeast 1/4 of Section 16, Twp 1 North, Range 9 East, City of Novi, Oakland County Michigan being more particularly described as follows: Commencing at the Northeast Corner of said Section 16, thence South 00 degrees 00 minutes 00 seconds West along the East line of said Section 16, 78.78 feet to the Point of Beginning, thence continuing along said East line South 00 degrees 00 minutes 00 seconds West, 1243.10 feet, thence South 89 degrees 46 minutes 00 seconds West, 782.82 feet, thence North 71 degrees 24 minutes 58 seconds West, 1237.14 feet to the Southeast corner of Keystone Medical Center Condominium Oakland County Condominium Subdivision Plat No. 1854, Wester Deed recorded in Liber 272251, Page 190, Oakland County Records, thence North 01 degree 06 minutes 49 seconds East, 50.48 feet to the Northeast corner of said Keystone Medical Center Condominium, thence South 89 degrees 57 minutes 52 seconds East, 495.51 feet, thence North 01 degree 06 minutes 49 seconds East, 603.00 feet, thence South 89 degrees 57 minutes 52 seconds East, 643.85 feet, thence West 40 degrees 38 minutes 30 seconds East along the Subdivided line of C. & D. Subdiv. right-of-way, 17.31 feet to the Point of Beginning.

THIS AB-SURVEYED OVERALL DESCRIPTION DESCRIBES THE SAME LAND AS THE RECORD DESCRIPTION AS SHOWN IN THE TITLE COMMITMENT REFERENCED HEREON.

BASES OF BEARING NOTE
The bases of bearing for the survey are established by the East Line of Section 16 per The Condominium.

TITLE NOTES
1.) Any facts, rights, interests, or claims that are not shown by the Public Records but that could be determined by making inquiry of persons in possession of the Land.
2.) Easements, liens or encumbrances, or claims thereof, not shown by the Public Records, but which, in the interest or claim thereof to this portion of the land, used or intended for domestic, public or highway.
3.) Eminent, if any, of the United States, State of Michigan, or any official subdivision thereof, in the title and interests in and under and that may be produced from the registered land.
4.) Rights of easements, if any, under any recorded record.
5.) All easements shown or noted on this survey were shown from The Condominium No. 205769, 12-10-2006, with an effective date of 11-30-2016, issued by First American Title Insurance Company.

SITE DATA
Parcel 1-1048 Land Area: 605,307.80 Square Feet or 13.840 Acres
Parcel 1-1049 Land Area: 702,610.34 Square Feet or 16.226 Acres
Parcel 2-1048 Land Area: 329,449.87 Square Feet or 7.514 Acres
Parcel 2-1049 Land Area: 338,529.03 Square Feet or 7.697 Acres
Parcel 3-1048 Land Area: 1,334,188.97 Square Feet or 30.541 Acres
Parcel 3-1049 Land Area: 1,431,431.22 Square Feet or 32.826 Acres

Grade: R-1A (Residential Average)
Building Setbacks:
Front: 40'
Side: 20' (min) OR 60' (Typ)
Rear: 30'

Min. Building Height: 2.5 stories/25', whichever is less

Other Building & spacing including 4' barrier free space.
The above setbacks & height requirements were established from The City of Novi Zoning Ordinance.

A developer cannot make a certification on the basis of an interpretation or opinion of another party. A zoning determination shall be made and maintained from the City of Novi to insure conformity as well as make a final determination of all required building setback requirements.

FLOOD HAZARD NOTE
The Project described on this survey does not lie within a Flood Hazard Impact Area as defined by the Federal Emergency Management Agency; the property lies within Zone X of the Flood Insurance Rate Map identified as Map No. 261630030K bearing an effective date of 02/06/2012 and Map No. 2616300607 bearing an effective date of 06/29/2006.

CEMETERY NOTE
There were no observable evidences of cemeteries or burial grounds within the subject property.

UTILITY NOTE
All utilities are underground unless otherwise noted.
The utilities shown on this survey were determined by field observation, all locations are approximate. The utility locations shown on this survey may not be indicated if a Utility Plan is furnished to the surveyor.

TABLE A NOTES
1a) There was no observable evidence of: a) ground with moving water, b) building foundation, or c) building additions observed in the process of conducting the survey.
1b) There are no known proposed alterations in stress, right-of-way, base, and/or other controlling jurisdiction.
1c) There was no observable evidence of recent work or otherwise construction or repairs observed in the process of conducting the survey.

SURVEYORS CERTIFICATION
We, the undersigned, are duly Licensed Professional Surveyors in the State of Michigan.
We are duly Licensed Professional Surveyors in the State of Michigan.
We are duly Licensed Professional Surveyors in the State of Michigan.
We are duly Licensed Professional Surveyors in the State of Michigan.

NOTICE TO CERTIFY
This map or plat of the survey on which this land is based was made in accordance with the 2016 Minimum Standards for ALTA/NSPS Land Title Survey, jointly established and adopted by ALTA and NSPS, and includes Items 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, and 17 of Table A thereof.
This field work was completed on 10-15-2016.



PROJECT
Vacant Land

FORM/CONTROLS
No. 27515
Taft Rd.

Part of the N.E. 1/4 of Section 16, T.1N., R.9E., City of Novi, Oakland County, MI

CLIENT
ALTA/NSPS
Land Title Survey

REVISIONS
02-21-2016 ORIGINAL SURVEY
02-21-2016 WHITE PEG CITY

DRAWN BY
A. ETZEMBERG

CHECKED BY
K.N.

DATE
12-21-2016

SCALE
1" = 50'

DATE PLOTTED
1/4/17

SHEET NO.
1

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

January 20, 2017

Planning Review

Commerce Park

JSP17-02 with Rezoning 18.716

Petitioner

Premier Realty

Review Type

Rezoning Request from RA (One Family Residential) to OST (Office Service Technology)

Property Characteristics

Section	16	
Site Location	At the south west corner of Twelve Mile and Taft Road intersection	
Site School District	Novi Community School District	
Site Zoning	RA One Family Residential	
Adjoining Zoning	North	I-1 Light Industrial District
	East	RA One Family Residential
	West	OST: Office Service Technology
	South	RA One Family Residential
Current Site Use	Vacant	
Adjoining Uses	North	Office/outdoor storage/vacant
	East	Single Family Residences
	West	Vacant
	South	Vacant
Site Size	30.64 Acres	
Plan Date	December 27, 2016	

Project Summary

The petitioner is requesting a Zoning Map amendment for 30.64 acres of property located at the south west corner of Twelve Mile and Taft Road intersection (Section 16) from RA (One Family Residential) to OST (Office Service Technology). The applicant states that the rezoning request is necessary for a possible headquarters for research and warehouse facilities.

The applicant met with the planning staff to discuss the process and determined to apply for a straight rezoning as the proposed rezoning category is supported by the Future Land Use map recommendation for the subject property. As this is not a PRO (Planned Rezoning Overlay) rezoning, the applicant is not bound to develop a specific plan after rezoning has been approved.

Master Plan for Land Use

The Future Land Use Map of the 2010 City of Novi Master Plan for Land Use identifies this property and properties to east, west and south as Office Research Development and Technology. Property to north is identified as Industrial research development and technology.

The proposal would follow objectives listed in the Master Plan for Land Use including the following:

1. Objective: The City, working with the development community and partners, should continue to foster a favorable business climate.
2. Objective: Continue to promote and support development community in Novi's Office Service Technology (OST) district.
3. Objective: Attract and maintain quality businesses in a competitive market place.

Development Potential

Development under the current RA zoning could result in the construction of approximately up to 20 single-family homes under the allowable density (0.8 DUA) and net acreage of the site (80 percent of 30.64 acres). The actual number of units may be even less considering the amount of wetlands and woodlands on the property. It is not known whether the site could be developed with 20 lots that meet the dimensional requirements of the RA zoning district. The applicant's traffic consultant estimates about 28 homes based on the existing zoning and indicate that about 124,000 Square feet would be a reasonable development for this site.

Existing Zoning and Land Use

The following table summarizes the zoning and land use status for the subject property and surrounding properties.

Land Use and Zoning: For Subject Property and Adjacent Properties

	Existing Zoning	Existing Land Use	Master Plan Land Use Designation
Subject Property	RA One Family Residential	Vacant land	Office Research Development and Technology (uses consistent with Office Service and Technology, OST)
Northern Parcels (across Twelve Mile Ave.)	I-1 Light Industrial District	Office/outdoor storage/vacant (Part of a consent judgement)	Industrial research development and technology. (uses consistent with Light Industrial Districts, I-1)
Southern Parcels	RA One Family Residential	Vacant land	Office Research Development and Technology (uses consistent with Office Service and Technology, OST)
Eastern Parcels	RA One Family Residential	Single Family Residences	Office Research Development and Technology (uses consistent with Office Service and Technology, OST)
Western Parcels	Office Service and Technology, OST	Single Family Residences (Non-conforming)	Office Research Development and Technology (uses consistent with Office Service and Technology, OST)

Compatibility with Surrounding Land Use

The surrounding land uses are shown in the above chart. The compatibility of the proposed rezoning with the zoning and uses on the adjacent properties should be considered by the Planning Commission in making the recommendation to City Council on the rezoning request.

The properties directly **north** of the subject property are currently functioning as office and vacant land. The current zoning map indicates I-1 for the property.

Directly to the **south** of the subject properties is currently vacant and is used for the ITC transmission corridor and zoned RA.

The property to the **west** of the subject property along Twelve Mile Road has a single family house and is zoned OST.

To the **east** of the subject property are existing single family houses. Further east is the Office Technology Development east of the railroad tracks.

Future Land Use map indicates OST for the subject property and the surrounding properties south of Twelve Mile with intent to encourage development of Office research and warehousing kind of uses.



Existing Zoning



Future Land Use

Comparison of Zoning Districts

The following table provides a comparison of the current (RA) and proposed (OST) zoning classifications.

	RA Zoning (Existing)	OST Zoning (Proposed)
Principal Permitted Uses	1. One-family dwellings 2. Farms and greenhouses 3. Publicly owned and operated parks 4. Cemeteries 5. Schools 6. Home occupations 7. Accessory buildings and uses 8. Family day care homes	1. Professional office buildings, offices and office sales and service activities 2. Data processing and computer centers 3. Laboratories 4. Research, testing, design and development, technical training, and design of pilot or experimental products 5. Hotels& and business motels 6. Colleges, universities, and other such postsecondary institutions of higher learning, public or private, offering courses in general, technical, or religious education 7. Motion picture, television, radio and

		photographic production facilities 8. Medical offices, including laboratories and clinics 9. Facilities for human care 10. Off-street parking lots 11. Publicly owned and operated parks, parkways and outdoor recreational facilities 12. Publicly-owned buildings, telephone exchange buildings, and public utility offices, but not including storage yards, transformer stations, substations or gas regulator stations 13. Financial institution uses with drive-in facilities as an accessory use only 14. Public or private indoor and private outdoor recreational facilities 15. Day care centers and adult day care centers 16. Secondary uses 17. Sit down restaurants 18. Other uses similar to the above uses and subject to the same conditions noted 19. Accessory buildings and uses customarily incidental and integral to any of the above permitted uses
Special Land Uses	1. Raising of nursery plant materials 2. Dairies 3. Keeping and raising of livestock 4. All special land uses in Section 402 5. Nonresidential uses of historical buildings 6. Bed and breakfasts	(None eligible for this site)
Minimum Lot Size	43,560 square feet (1 acre)	Determined by off-street parking, loading, greenbelt screening, yard setback or usable open space requirements
Minimum Lot Width	150 feet	Determined by off-street parking, loading, greenbelt screening, yard setback or usable open space requirements (80 feet for single-family dwellings)
Building Height	2 1/2 stories -or- 35 feet	46 ft or 3 stories, whichever is less
Building Setbacks	Front: 45 feet Side: 20 feet (aggregate 50 feet) Rear: 50 feet	Front: 50 feet Side: 50 feet Rear: 50 feet

Infrastructure Engineering

The Staff Engineer has reviewed the rezoning request and expressed no concerns regarding sanitary sewer capacity and available water capacity. The impacts of OST land use on the utilities in this area have been reviewed during the 2010 Master Plan for Land Use update.

Traffic

City Traffic consultants reviewed the Traffic Impact study provided by the applicant and indicated that the maximum amount of additional traffic that would be generated by the site is not expected

to degrade the existing roadway network levels of service below acceptable limits. Traffic supports the rezoning request. Traffic also noted that additional trip generation estimates should be performed at the time of site plan in order to determine if a full TIS is required once the proposed development has been defined in greater detail (i.e., building size, facility use, etc.). See the traffic review letter for additional information.

Natural Features

There is a significant area of regulated woodlands and wetland on the site. The applicants have performed a wetland survey of the property and have identified, which is yet to be confirmed by the City's wetland consultant, that the subject property has 2.44 acres of regulated wetlands on the site.

As this is not a PRO (Planned Rezoning Overlay) rezoning, the applicant is not bound to develop a specific plan after rezoning has been approved. Staff is unable to determine the extent of impact on wetlands or woodlands at this time. More thorough review will be performed at the time site plan submittal and necessary permits will have to be obtained. The applicant is encouraged to propose minimum or no impacts to the wetlands and wetland buffer areas.



Recommendation

Approval of the **Rezoning is recommended** because

- The rezoning request fulfills three objectives of the Master Plan for Land Use by fostering a favorable business climate, support development in OST district and maintain a competitive market place.
- The rezoning is a recommended land use for the subject property by 2010 Master plan for Land Use and will be consistent with zoning to the west.
- The rezoning provides an opportunity for developing the subject property in conformance with Master Plan for Land Use recommendations and puts to use a vacant parcel.
- The rezoning will not have impact on public utilities.

The rezoning is the first step in the process; the applicant will still need to seek the required approvals from Planning Commission for the Preliminary Site Plan, Wetland Permit, Woodland Permit, and Stormwater Management Plan depending on the requirements as determined at the time of site plan review.

Next Steps: Planning Commission Meeting

This Rezoning request is scheduled to go before the **Planning Commission on February 08, 2017** for recommendation to City Council. **Please provide the initial submittal packet in PDF format.**

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5607 or skomaragiri@cityofnovi.org.

A handwritten signature in black ink, appearing to be 'SR' or similar initials.

TRAFFIC STUDY REVIEW



AECOM
27777 Franklin Road
Southfield
MI, 48034
USA
aecom.com

Project name:
JZ17-01 Commerce Park TIS Review

From:
AECOM

Date:
January 5, 2017

To:
Barbara McBeth, AICP
City of Novi
45175 10 Mile Road
Novi, Michigan 48375

CC:
Sri Komaragiri, Kirsten Mellem, George Melistas,
Adrianna Jordan, Jeremy Miller, Richelle Leskun

Memo

Subject: Commerce Park RTIS Review

The preliminary rezoning TIS was reviewed to the level of detail provided and AECOM **recommends approval** for the applicant to move forward based upon the comments provided below.

TRAFFIC IMPACT STUDY COMMENTS

General Comments:

1. The TIS references a proposed approximately 30-acre site, which is currently zoned RA (Residential Acreage), to be rezoned to OST (Office Service and Technology District).
2. The site is located on the southwest quadrant of the intersection of Twelve Mile Road and Taft Road. The intersection is a three-leg intersection with stop control on the minor approach.
3. There is an at-grade railroad crossing in the vicinity of the site.
4. AADT and peak-hour volume counts were obtained for Twelve Mile Road from the Southeast Michigan Council of Governments (SEMCOG). However, traffic data was not available for Taft Road at this location.
5. The City's Code of Ordinances restricts access to streets that are not major thoroughfare. Taft Road is not considered a major thoroughfare. Therefore, primary access should only be permitted by means of Twelve Mile Road.

Existing Conditions

1. The peak hour of Twelve Mile Road is 5:00-6:00PM with a corresponding bi-directional volume of approximately 2,025 vehicles per hour (vph).
2. According to data obtained from the applicant, under the current zoning (RA), a maximum of 28 homes could be built on the site when accounting for minimum lot size, the actual geometry of the property and providing area for roadways to fully access all potential residences on site.
3. If the maximum 28 homes were to be built on the property, the site would generate an estimated 326 daily trips per week day with 30 and 34 trips for the AM and PM peak hours, respectively. These approximations are based on land use 210 (single-family detached housing) in the ITE Trip Generation Manual.

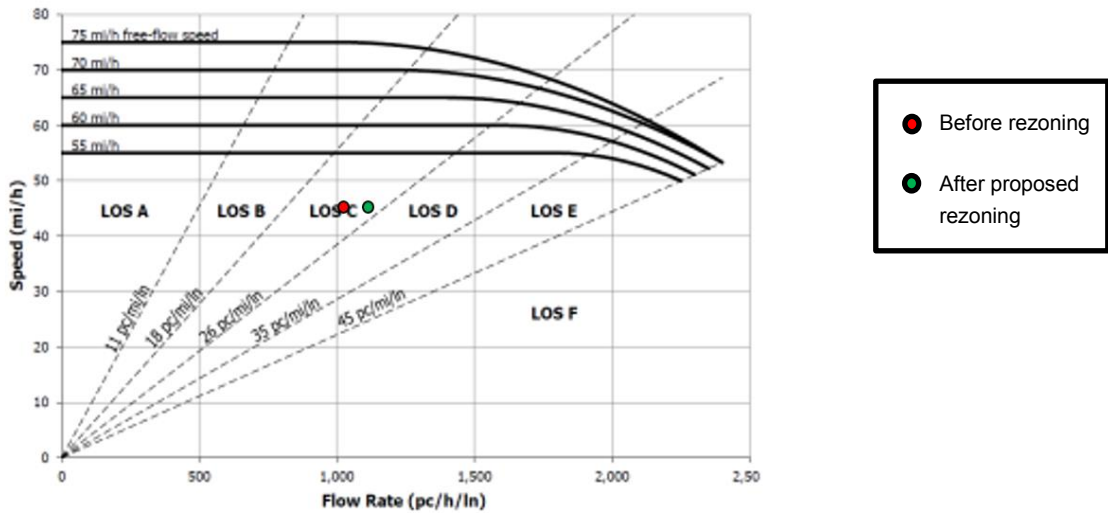
Proposed Rezoning Conditions

1. Under the proposed zoning (OST), a maximum building size of 240,000 square feet could be built.

2. If the maximum building size of 240,000 square feet were to be built on the property, the site would generate an estimated 1,947 daily trips per week day with 279 and 273 trips for the AM and PM peak hours, respectively. These approximations are based on land use 760 (research and development center) in the ITE Trip Generation Manual.
3. The proposed zoning change would generate a maximum of 1,621 daily trips with 249 trips and 239 trips during the AM and PM peak hours, respectively.

Conclusions

1. The rezoning traffic impact study performed by Tetra Tech fulfills the requirements required by the City of Novi and provides sound methodology for the estimation of trips for existing and proposed zonings.
2. Additional trip generation estimates should be performed in order to determine if a full TIS is required once the proposed development has been defined in greater detail (i.e., building size, facility use, etc.).
3. AECOM would support the rezoning application from a traffic standpoint. The maximum amount of additional traffic that would be generated by the site is not expected to degrade the existing roadway network levels of service below acceptable limits. The figure below estimates the increased level of service on Twelve Mile Road due rezoning with the maximum building size. The red circle indicates the existing level of service along Twelve Mile Road and the green circle indicates the estimated level of service along Twelve Mile Road with the proposed rezoning with the maximum building size during the peak hour of traffic.



Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

AECOM

Sterling J. Frazier, E.I.T.
Reviewer, Traffic/ITS Engineer

Matthew G. Klawon, PE
Manager, Traffic Engineering and ITS Engineering Services

ENGINEERING MEMO

MEMORANDUM



TO: BARBARA MCBETH, CITY PLANNER
FROM: DARCY RECHTIEN, STAFF ENGINEER *DRechtien*
SUBJECT: REVIEW OF REZONING IMPACT ON PUBLIC UTILITIES
COMMERCE PARK
DATE: JANUARY 24, 2017

The Engineering Division has reviewed the rezoning request for the 30 acre site located on the west side of Taft Road and south side of Twelve Mile Road. The applicant is requesting to rezone 30 acres from RA to OST. The Master Plan for Land Use indicates OST as the master planned land use for this site. The impact of OST land use on the utilities in this area has previously been reviewed and considered in light of the Master Plan for Land Use, with no concerns regarding sanitary sewer capacity and available water capacity. Therefore the Engineering Division recommends approval of this rezoning request.

cc: George Melistas, Engineering Senior Manager
Ben Croy, P.E., Water and Sewer Senior Manager

WETLAND AND WOODLAND ON-SITE EVALUATION

February 2, 2017

Ms. Barbara McBeth
City Planner
Community Development Department
City of Novi
45175 W. Ten Mile Road
Novi, Michigan 48375

Re: Commerce Park (12 Mile & Taft)
JSP17-0002
Wetland & Woodland Verification Inspection (PSP17-0001)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has conducted a wetland and woodland evaluation for a property located south of Twelve Mile Road and west of Taft Road, Section 16, Novi, Michigan. The subject property consists of the parcels 50-22-16-226-004 and 50-22-16-226-008. The proposed parcel consists of approximately 13.6 acres. Nowak & Fraus previously completed the on-site wetland delineation and tree survey.

WETLAND VERIFICATION

The site was reviewed for the presence of regulated wetlands as defined in the City of Novi Wetland and Watercourse Protection Ordinance. ECT completed an on-site wetland evaluation on Tuesday, January 31, 2017.

City of Novi Wetland Ordinance Requirements

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 2.) describes the regulatory criteria for wetlands and review standards for wetland permit applications. The City of Novi regulates wetlands that are: (1) contiguous to a lake, pond, river or stream, as defined in Administrative Rule 281.921; (2) two (2) acres in size or greater; or (3) less than two (2) acres in size, but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b). Wetlands deemed regulated by the City of Novi require the approval of a use permit for any proposed impacts to the wetland.

The wetland essentiality criteria as described in the Wetland and Watercourse Protection Ordinance are included below.

All noncontiguous wetland areas of less than two (2) acres which appear on the wetlands inventory map, or which are otherwise identified during a field inspection by the city, shall be analyzed for the purpose of determining whether such areas are essential to the preservation of the natural resources of the city....In making the determination, the city shall find that one (1) or more of the following exist at the particular site:

- (1) *The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in Section 36505 of the Natural Resources Environmental Protection Act (Act 451 of 1994) [previously section 6 of the endangered species act of 1974, Act No. 203 of the Public Acts of 1974, being section 229.226 of the Michigan Compiled Laws].*
- (2) *The site represents what is identified as a locally rare or unique ecosystem.*
- (3) *The site supports plants or animals of an identified local importance.*

- (4) *The site provides groundwater recharge documented by a public agency.*
- (5) *The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.*
- (6) *The site provides wildlife habitat by providing breeding, nesting or feeding grounds or cover for forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened or endangered wildlife species.*
- (7) *The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.*
- (8) *The site provides pollution treatment by serving as a biological and chemical oxidation basin.*
- (9) *The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.*
- (10) *The site provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.*

After determining that a wetland less than two (2) acres in size is essential to the preservation of the natural resources of the city, the wetland use permit application shall be reviewed according to the standards in subsection 12-174(a).

Wetland Evaluation

ECT's in-office review of available materials included the City of Novi Regulated Wetland and Watercourse map, USGS topographic quadrangle map, NRCS soils map, USFWS National Wetland Inventory map, and historical aerial photographs. Based on historic aerial photos (1940 and 1963, available from the Oakland County Property Gateway; <https://gis.oakgov.com/PropertyGateway/Home.mvc>), the eastern half of parcel 50-22-16-226-004 had been agricultural land. The site includes areas indicated as City-regulated wetland on the official City of Novi Regulated Wetland and Watercourse Map (see *Figure 1*).

The focus of the wetland site inspection was to review site conditions in order to determine whether City-regulated wetlands are found on-site. Wetland boundary flagging was in place at the time of this site inspection. ECT reviewed the flagging and agrees that the wetland boundaries were accurately flagged in the field. A total of four (4) wetland areas are located on the property (see Site Photos):

- Wetland A (2.19 acres);
- Wetland B (0.10-acre);
- Wetland C (0.10-acre);
- Wetland D (0.04-acre).

Wetland A is an emergent wetland located on the south and west sides of the subject property. Many areas of the wetland contained standing water at the time of our site visit. The wetland contains the following species of vegetation: common buckthorn (*Rhamnus cathartica*), American elm (*Ulmus americana*), silky dogwood (*Cornus amomum*), green ash (*Fraxinus pennsylvanica*), narrow-leaved cattail (*Typha angustifolia*), dogbane (*Apocynum cannabinum*), and panicled aster (*Aster lanceolatus*). The upland fringe of Wetland A contains the following species of vegetation: common blackberry (*Rubus allegheniensis*), tall goldenrod (*Solidago altissima*), common buckthorn (*Rhamnus cathartica*), motherwort (*Leonurus cardiaca*), honeysuckle (*Lonicera spp.*), black walnut (*Juglans nigra*), and tick trefoil (*Desmodium canadense*).

Wetland B is a forested/open-water wetland located south of Twelve Mile Road on the north side of the subject site. This wetland contained a significant amount of standing water at the time of our site inspection; approximately 14-inches at the southern edge of the wetland. The wetland contains the following species of vegetation: cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), and silky dogwood (*Cornus amomum*). The upland fringe of Wetland B contains the following species of vegetation: common buckthorn (*Rhamnus cathartica*), black walnut (*Juglans nigra*), Amur honeysuckle (*Lonicera maackii*), and honeysuckle (*Lonicera spp.*).

Wetland C is an emergent wetland located in the northwest section of the subject site. This wetland contained approximately 4-inches of standing water in the area that was accessed during our site visit. The following species of vegetation were found within the wetland: broad-leaved cattail (*Typha latifolia*), pussy willow (*Salix discolor*), silky dogwood (*Cornus amomum*), water plantain (*Alisma plantago-aquatica*), and panicked aster (*Aster lanceolatus*). The upland fringe of Wetland C contains the following species of vegetation: black walnut (*Juglans nigra*), common buckthorn (*Rhamnus cathartica*), black cherry (*Prunus serotina*), and red cedar (*Juniperus virginiana*).

Wetland D is an open water/vernal pool wetland located in the central, northern section of the site. The wetland contained several inches of open water at the time of our inspection. The following species of vegetation were found within the wetland: silver maple (*Acer saccharinum*), green ash (*Fraxinus pennsylvanica*), and silky dogwood (*Cornus amomum*). The upland fringe of Wetland D contains common buckthorn (*Rhamnus cathartica*) and autumn olive (*Elaeagnus umbellata*).

Wetland Conclusion

Wetlands A through D all appear to be considered essential/regulated wetlands by the City of Novi as each wetland meets one or more of the essentiality criteria outlined in the City of Novi Wetland Ordinance (listed above).

Although not shown individually, these wetlands are generally depicted on the available mapping materials and are shown as regulated wetland on the official City of Novi Regulated Wetland and Watercourse map. Wetlands A, B, C and D all appear to be accurately flagged in the field.

The Michigan Department of Environmental Quality (MDEQ) generally regulates wetlands that are within 500 feet of a waterbody, regulated stream or are part of wetland system greater than 5 acres in size. It is the applicant's responsibility to contact MDEQ in order to confirm the regulatory authority with respect to the on-site wetland areas. At a minimum, it appears as if Wetland B (located at the north end of the subject property) may be within 500 feet of the Walled Lake Branch of the Middle Rouge River (located east of the site).

Any proposed use of Wetlands A, B, C, or D will require a City of Novi *Wetland Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback* for any proposed impacts to the 25-foot wetland buffers.

WOODLAND VERIFICATION

Existing Conditions and Regulatory Assessment

ECT's in-office review of available materials included the City of Novi Regulated Woodland map and other available mapping. The subject property does include a significant area indicated as City-regulated woodland on the official City of Novi Regulated Wetland and Watercourse Map (see Figure 1). It is our understanding that any site plans submitted for the development of this site will likely include development in the northeast section of the site; area that is partially located outside of the mapped Regulated Woodland boundaries.

Any site plans submitted for development of the subject site will be reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37:

- 1) *Provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the city in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the intent of this chapter to protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives;*
- 2) *Protect the woodlands, including trees and other forms of vegetation, of the city for their economic support of local property values when allowed to remain uncleared and/or unharvested and for their natural beauty, wilderness character of geological, ecological, or historical significance; and*
- 3) *Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.*

The highest quality woodlands on site are found in the southern and western sections of the subject site. These areas are dominated by 8-inch to 20-inch diameter-at-breast-height (DBH) black walnut trees. In general, the on-site trees consist of black walnut (*Juglans nigra*), American elm (*Ulmus americana*), black cherry (*Prunus serotina*), box elder (*Acer negundo*), red maple (*Acer rubrum*), eastern red cedar (*Juniperus virginiana*), black willow (*Salix nigra*), sugar maple (*Acer saccharum*), black locust (*Robinia pseudoacacia*), Colorado blue spruce (*Picea pungens*), and eastern white pine (*Pinus strobus*).

In terms of habitat quality and diversity of tree species, the overall subject site consists of fair to good quality trees. In terms of a scenic asset, wildlife habitat, windblock, noise buffer or other environmental asset, the forested area located on the subject site is considered to be of good to high quality. As noted above, a portion of the northeastern section of the site is not mapped as Regulated Woodland on the City of Novi's Regulated Woodland Map.

The City of Novi regulates all trees 8-inches diameter-at-breast-height (DBH) and greater that are located within the areas delineated as regulated woodlands on the City-Regulated Woodlands Map. The City also regulates any individual tree greater than or equal to 36-inches DBH, irrespective of whether such tree is within a regulated woodland.

ECT recommends that the applicant indicate on any future site plans the existing regulated woodland boundary as indicated on the City map. In addition, the applicant should provide information on the Plan that identifies the locations, species and diameters of any trees greater than or equal to 8-inch DBH that are located on-site within the City-Regulated woodland boundary and within the overall proposed limits of disturbance. Tree information for any areas outside of the proposed overall limits of disturbance does not need to be provided.

Please note that the City of Novi requires replacements according to the following Table:

Replacement Tree Requirements Table

Removed Tree D.B.H. (In Inches)	Ratio Replacement/ Removed Tree
$\geq 8 \leq 11$	1
$> 11 \leq 20$	2
$> 20 \leq 29$	3
≥ 30	4

In addition, for multi-stemmed trees, Woodland Replacements required are calculated by summing the d.b.h. of each stem greater than or equal to 8 inches and dividing the total by 8. All fractional Woodland Replacements required are rounded up to the nearest whole tree replacement. The applicant shall indicate on the Plan all regulated trees to be removed as well as the number of Woodland Replacement tree credits required for these removals.

City of Novi Woodland Review Standards and Woodland Permit Requirements

Based on Section 37-29 (*Application Review Standards*) of the City of Novi Woodland Ordinance, the following standards shall govern the grant or denial of an application for a use permit required by this article:

No application shall be denied solely on the basis that some trees are growing on the property under consideration. However, the protection and conservation of irreplaceable natural resources from pollution, impairment, or destruction is of paramount concern. Therefore, the preservation of woodlands, trees, similar woody vegetation, and related natural resources shall have priority over development when there are location alternatives.

In addition,

"The removal or relocation of trees shall be limited to those instances when necessary for the location of a structure or site improvements and when no feasible and prudent alternative location for the structure or improvements can be had without causing undue hardship".

Proposed woodland impacts will require a Woodland Permit from the City of Novi that allows for the removal of trees eight (8)-inch diameter-at-breast-height (d.b.h.) or greater within City-Regulated Woodland boundaries or for

any tree 36-inches DBH or greater. Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and will be counted at a 1:1 replacement ratio. All proposed coniferous replacement trees shall be 6-feet in height (minimum) and will be counted at a 1.5:1 replacement ratio. See the attached City of Novi Woodland Replacement Chart for acceptable woodland replacement species.

Woodland Comments

Please consider the following comments when submitting future site development plan submittals:

1. ECT recommends that the upland woods (mainly black walnut) located south of Wetland A near the southern section of the subject property be preserved by the Applicant during the site development process (see Photo 6).
2. ECT recommends that the applicant indicate on the Plan the existing regulated woodland boundary as indicated on the City Regulated Woodland map. In addition, the applicant should provide information on the Plan that identifies the locations, species and diameters of any trees greater than or equal to 8-inch DBH that are located on-site within the City-Regulated woodland boundary and within the overall proposed limits of disturbance.
3. The applicant shall indicate on the Plan all regulated trees to be removed as well as the number of Woodland Replacement tree credits required for these removals.
4. A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch DBH or greater located within the regulated woodland boundaries or any tree greater than 36-inches DBH. Such trees shall be relocated or replaced by the permit grantee either through approved on-site replacement trees or through a payment to the City of Novi Tree Fund.
5. A Woodland Replacement Performance financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400.
6. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on site.
7. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement Performance Guarantee shall be returned to the Applicant. A Woodland Maintenance and Guarantee bond equal to twenty-five percent (25%) of the value of the original Woodland Replacement material will then be kept for a period of 2-years after the successful inspection of the tree replacement installation.
8. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of remaining woodland and woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City

Commerce Park (12 Mile & Taft)
JSP17-0002
Wetland & Woodland Verification Inspection (PSP17-0001)
February 2, 2017
Page 7 of 13

Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit.

9. Replacement material should not be located 1) within 10' of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the *Plant Material Spacing Relationship Chart for Landscape Purposes* found in the City of Novi *Landscape Design Manual*.

As always, please feel free to contact our office if you have any questions.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Peter Hill, P.E.
Senior Associate Engineer



Matthew Carmer
Senior Scientist
Professional Wetland Scientist #1746

cc: Sri Komaragiri, City of Novi Planner
Richelle Leskun, City of Novi Planning Assistant
Barb McBeth, City Planner
Rick Meader, City of Novi Landscape Architect
Kirsten Mellem, City of Novi Planner

Attachments: Figure 1 – City of Novi Regulated Wetland and Woodland Map
Figure 2 – Overall Boundary Survey
Site Photos



Figure 1. City of Novi Regulated Wetland and Woodland Boundaries Map. Regulated Wetland Boundaries are shown in blue and Regulated Woodland boundaries are shown in green. The subject property boundary is shown in red.

Commerce Park (12 Mile & Taft)
 JSP17-0002
 Wetland & Woodland Verification Inspection (PSP17-0001)
 February 2, 2017
 Page 9 of 13

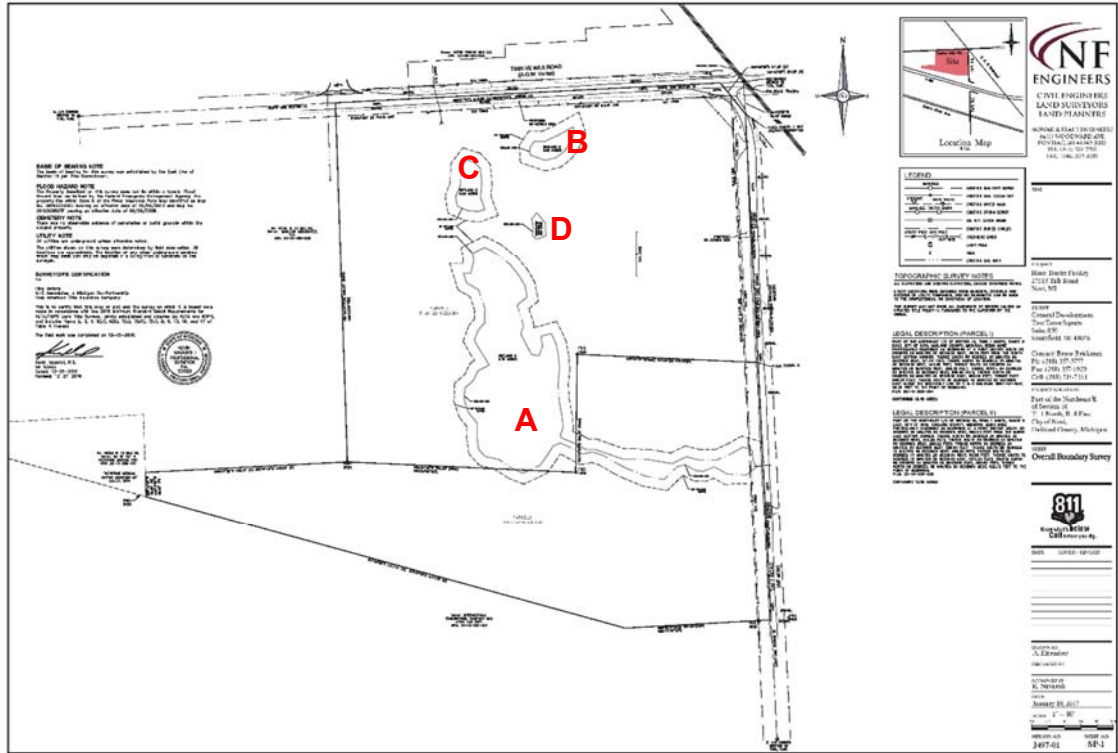


Figure 2. Overall Boundary Survey (provided by Nowak & Fraus Engineers). Wetlands A through D are indicated on this plan.

Site Photos



Photo 1. Looking south at east end of Wetland A adjacent to Taft Road (ECT, January 31, 2017).



Photo 2. Looking northwest at widest part of Wetland A (ECT, January 31, 2017).



Photo 3. Looking northeast at Wetland B, south of 12 Mile Road (ECT, January 31, 2017).



Photo 4. Looking northeast at Wetland C (ECT, January 31, 2017).



Photo 5. Looking northeast at Wetland D (ECT, January 31, 2017).



Photo 6. Looking south at regulated woodland area south of Wetland A, on the south side of the subject property (ECT, January 31, 2017).



Photo 7. Tree No. 710; 37-inch black walnut located on the southern portion of the site (ECT, January 31, 2017).



Photo 8. Looking northwest towards area of mapped regulated woodland north of Wetland B on the north side of the subject site (ECT, January 31, 2017).

APPLICANT COVER LETTER



**PREMIER
REALTY, L.L.C.**

560 Kirts Boulevard • Suite 100
Troy, Michigan 48084
(248) 362-4666
Fax (248) 362-0546

City of Novi
45175 West 10 Mile Road
Novi, MI 48375

Re: 12 Mile and Taft Commerce Park

To whom it may concern:

I hereby give Teresa Bruce of General Development Company to submit the Application for Site Plan and Land Use approval on my behalf.

Sincerely,
Premier Novi, LLC

Michael Kahan
Member

**PLANNING COMMISSION
ACTION SUMMARY**



PLANNING COMMISSION ACTION SUMMARY

CITY OF NOVI

Regular Meeting

February 8, 2017 7:00 PM

Council Chambers | Novi Civic Center
45175 W. Ten Mile (248) 347-0475

CALL TO ORDER

The meeting was called to order at 7:00 PM.

ROLL CALL

Present: Member Avdoulos, Member Giacometti, Member Greco, Chair Pehrson, Member Zuchlewski

Absent: Member Lynch (excused), Member Anthony (excused)

Also Present: Barbara McBeth, City Planner; Kirsten Mellem, Planner; Beth Saarela, City Attorney

APPROVAL OF AGENDA

Motion to approve the February 8, 2017 Planning Commission Agenda. *Motion carried 5-0*

CONSENT AGENDA

1. **NOVI PLAZA FAÇADE JSP 15-40**

Approval at the request of Scott Monchnik & Associates for revised Preliminary Site Plan and Section 9 Façade Waiver. The subject property is located in Section 26, South of Ten Mile Road and west of Meadowbrook Road, in the B-1, Local Business District. The subject property is approximately 1.6 acres and the applicant is proposing to remodel the existing façade for Novi plaza shopping center along with modifications to the existing parking lot.

In the matter of Novi Plaza Façade JSP 15-40, motion to approve the revised Preliminary Site Plan and a Section 9 Waiver, based on and subject to the following:

- a. **To allow the underage of brick on all facades and overage of painted CMU on east and west facades (50% allowed, 65% provided), because the proposed alteration will significantly improve the overall appearance of the building and is consistent with the intent and purpose of the Façade Ordinance, which is hereby granted, and**
- b. **The findings of compliance with Ordinance standards in the staff review letter and the conditions and the items listed in that letter being addressed.**

This motion is made because the plan is otherwise in compliance with Article 3, Article 4 Article 5 and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance. Motion carried 4-1(Zuchlewski)

PUBLIC HEARINGS

1. COMMERCE PARK JSP17-02 WITH ZONING MAP AMENDMENT 18.716

Public hearing at the request of Premier Realty for Planning Commission's recommendation to City Council for rezoning of property in Section 16, located on the southwest corner of Twelve Mile Road and Taft Road RA (Residential Acreage) to OST (Office Service Technology). The subject parcel is approximately 30.64 acres.

In the matter of the request of Commerce Park JSP 17-02 with Zoning Map Amendment 18.716, motion to recommend approval to City Council to rezone the subject property from RA (Residential Acreage) to OST (Office Service Technology) for the following reasons:

1. The rezoning request fulfills three objectives of the Master Plan for Land Use by fostering a favorable business climate, supporting development in OST district, and maintaining a competitive market place.
2. The proposed zoning is a recommended land use for the subject property by 2010 Master Plan for Land Use and will be consistent with zoning to the west.
3. There is no negative impact expected on public utilities as stated in the Engineering memo.
4. The rezoning provides an opportunity for developing the subject property in conformance with Master Plan for Land Use recommendations and puts to use a vacant parcel. Motion carried 4-1 (Giacopetti)

MATTERS FOR CONSIDERATION

1. 18.284 ZONING ORDINANCE TEXT AMENDMENT

Set Public Hearing for March 8, 2017 for Text Amendment 18.284 – to allow outdoor display in the OSC, Office Service Commercial Districts, and to allow above ground storage tanks in the OST, Planned Office Service Technology Districts.

Motion to set a public hearing for consideration of the proposed amendments on March 8, 2017. Motion carried 5-0.

2. APPROVAL OF THE OCTOBER 26, 2016 PLANNING COMMISSION MINUTES

Motion to approve the October 26, 2016 Planning Commission Minutes. Motion carried 5-0.

ADJOURNMENT

The meeting was adjourned at 7:17 p.m.

**Actual language of the motions subject to review.*

TRAFFIC IMPACT STUDY



December 27, 2016

Ms. Teresa Bruce
General Development Company
Two Towne Square, Suite 850
Southfield, Michigan 48076

**Re: Rezoning Traffic Impact Study Letter
Proposed Twelve Mile and Taft Roads OST Rezoning Application
City of Novi, Michigan
200-163821-17001**

Dear Ms. Bruce:

Tetra Tech (Tt) has reviewed the information provided by your office regarding your existing RA Residential Acreage property, and have completed our assessment of the trip generation forecast for the proposed rezoning of the site to OST Office Service Technology District as it compares to the existing zoning for the site. As we understand it, the approximately 30 acre site is located on the southwest quadrant of Twelve Mile Road and Taft Road. This letter has been prepared as part of your rezoning application and in accordance with the requirements of the City of Novi, as specified in their Community Development Department Site Plan and Development Manual.

In the vicinity of your property, Twelve Mile Road is a two-lane arterial road with shoulders under the jurisdiction of the Road Commission for Oakland County (RCOC), and has a posted speed limit of 45 MPH. Taft Road is two lane residential road without shoulders under the jurisdiction of the City of Novi, and has an unposted speed limit of 25 MPH. Twelve Mile Road has pavement markings, such as edge and centerlines, while Taft does not have any pavement markings. The intersection of Twelve Mile Road and Taft Road is currently unsignalized, with stop control for only the northbound Taft Road approach (the intersection is a three-legged or "T" intersection, and does not have a southbound approach). There is also an at-grade railroad crossing with automatic gates adjacent to the intersection of Twelve Mile Road and Taft Road (just east of the intersection).

A recent Average Daily Traffic (ADT) count obtained from the SouthEast Michigan Council Of Governments (SEMCOG) website indicates that the daily traffic volume on Twelve Mile Road in the vicinity of your property is approximately 17,500 vehicles per day, with the peak hour being between 5:00 – 6:00 p.m., with a bi-directional volume of approximately 2,025 vehicles per hour. Information on traffic counts for Taft Road near your development are not available. A copy of the Twelve Mile Road count from the SEMCOG website is attached to this letter for reference.



To the north of your property, across Twelve Mile Road, the current zoning is a mix of Residential Zonings (R-1 and RA) to the east, and to the west the current zoning is I-1. To the east of your property (across Taft Road) and to the west of your property (adjacent to), the current zoning is OST (identical to the zoning you are seeking under this rezoning application). To the south of your property, the current zoning is RA.

Currently the site is undeveloped, and consists of woodland and wetland areas that would require extensive clearing and/or remediation to fully develop the site. Based on information provided by your office, under the current RA Residential Acreage zoning, you estimated a maximum of 28 homes could be built on the site, accounting for the minimum lot size, the actual geometry of the property, and providing area for roadways to fully access all potential residences on the site.

Under the proposed OST Office Service Technology District zoning, which is the use indicated under the current City of Novi’s Master Plan for Land Use, a maximum building size of approximately 240,000 sq. ft. could be built on the site with the required parking. Again, this size development could only be built if the previously mentioned extensive clearing and remediation were performed for the woodland and wetland areas on the site. Discussions with your office indicated that this site work would be very costly, and that a building closer to half the maximum size, or approximately 124,000 sq. ft., would be a more reasonable development for the site. However, for the purposes of this study, the maximum sizes possible under the existing and proposed zoning were considered.

Using the information and methodologies specified in the latest version of *Trip Generation (9th Edition)* published by the Institute of Transportation Engineers (ITE), Tt forecast the total weekday, weekday AM peak hour and weekday PM peak hour trips associated with the site specified above for uses under the existing and proposed zoning for the site.

Following are tables that summarize our findings.

Table 1
ITE Trip Generation for Twelve Mile and Taft Roads Site, Existing RA Zoning

Land Use	Land Use Code	Size (units)	AM Peak Hour			PM Peak Hour			Week Day
			In	Out	Total	In	Out	Total	
Single-Family Detached Housing	210	28	7	23	30	21	13	34	326
MAXIMUM TRIPS – EXISTING ZONING			7	23	30	21	13	34	326



Table 2

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Land Use	Land Use Code	Size (sq. ft.)	AM Peak Hour			PM Peak Hour			Week Day
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Research and Development Center	760	240,000	232	47	279	41	232	273	1,947
MAXIMUM TRIPS – PROPOSED ZONING			232	47	279	41	232	273	1,947

Under the existing RA Residential Acreage zoning, the site is forecast to generate a maximum of 30 trips during the AM peak hour, 34 trips during the PM peak hour, and 326 total weekday trips. Under the proposed OST Office Service Technology District zoning, the site is forecast to generate a maximum of 279 trips during the AM peak hour, 273 trips during the PM peak hour, and 1,947 total daily trips. The proposed zoning would generate a maximum of 249 additional trips during the AM peak hour, 239 additional trips during the PM peak hour, and 1,621 additional daily trips.

We trust that this letter fulfills your current transportation needs regarding your proposed development. If you have any questions, please feel free to call our office at (810)-220-2112.

Sincerely,


 Kyle W. Ramakers, P.E., PTOE
 Transportation Engineer

200-163821-17001



12/27/2016

Location Info	
Location ID	2049
Type	LINK
Functional Class	-
Located On	12 Mile
Between	TAFT AND DIXON
Direction	2-WAY
Community	Novi
MPO_ID	297
HPMS ID	
Agency	Road Commission for Oakland County

Count Data Info	
Start Date	8/27/2012
End Date	8/28/2012
Start Time	12:00 PM
End Time	12:00 PM
Direction	
Notes	
Count Source	FO380_____
File Name	counttemp1143.mdb
Weather	
Study	
Owner	rcoc

Interval: 60 mins	
Time	Hourly Count
00:00 - 01:00	79
01:00 - 02:00	38
02:00 - 03:00	24
03:00 - 04:00	20
04:00 - 05:00	34
05:00 - 06:00	145
06:00 - 07:00	455
07:00 - 08:00	1240
08:00 - 09:00	1357
09:00 - 10:00	775
10:00 - 11:00	777
11:00 - 12:00	927
12:00 - 13:00	1176
13:00 - 14:00	995
14:00 - 15:00	1034
15:00 - 16:00	1130
16:00 - 17:00	1713
17:00 - 18:00	2022
18:00 - 19:00	1222
19:00 - 20:00	798
20:00 - 21:00	627
21:00 - 22:00	464
22:00 - 23:00	271
23:00 - 24:00	118
TOTAL	17441



Mr. Ramakers has been involved in numerous facets of traffic and transportation engineering. He has performed numerous traffic operation and impact studies to evaluate the impacts of proposed improvements and developments on the surround roadway network. As part of these evaluations, Mr. Ramakers performs Level of Service (LOS) evaluations, determine traffic signal operational improvements (timing and coordination improvements), roadway and intersection geometry requirements, the need for turn treatments based on roadway agency requirements, safety reviews, signal warrant analyses, and sight distance evaluations. He is knowledgeable in Synchro/SimTraffic, HCS, Rodel, Sidra, Vissim, TSIS/CORSIM, AutoCAD and MicroStation.

EXPERIENCE

Traffic Engineering Consultant, City of Brighton, Livingston Co., MI

As part of overall civil engineering consulting services for the City of Brighton, performed as-needed traffic engineering services consisting of collecting and reviewing traffic counts, reviewing spot speed studies, determine scope for and review of traffic impact studies for commercial and residential developments, attend council meetings to provide recommendations and comments on various traffic engineering related issues, safety reviews of intersections and corridors, interacting with other local agencies in determining recommendations on developments and improvement projects, signal timing and operation recommendations, and other various duties as required.

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Traffic Impact Studies, Various Locations, MI

Traffic Engineer for traffic impact studies around southeast Michigan, requiring operational analyses and safety reviews as part of the study evaluations. Included reviewing traffic counts, developing trip generation forecasts, performing operational analyses of existing, future No Build and Build conditions utilizing Synchro and HCS, and developing recommended geometric and operational mitigation measures, as required, including for traffic signal installations and signal timing improvements.

Grand Region Signal Optimization, Grand Region, MI

Project Manager for the operational analysis and optimization of 35 signalized intersections within Ionia, Mecosta and Montcalm Counties in the MDOT Grand Region. As part optimization services performed, a full safety review was performed, collection of intersection field inventories, simultaneous collection of turning movement and ADT counts, timing plan preparation and simulation of optimized conditions. A final report was prepared documenting all data collected, findings, and recommendations.

E. Grand River Avenue Corridor Study, Brighton, MI

Traffic Engineer for the East Grand River Corridor Study undertaken to perform a traffic analysis of existing and future traffic levels and operations within the study corridor using Synchro, and to develop preliminary conceptual design alternatives to improve the City's east gateway. Traffic projections, level of service and corridor safety analyses (intersection crash reviews and development

Project Role:

Project Manager/Lead Traffic Engineer

Education:

MS, Construction Engineering and Management, University of Michigan, 1997

BS, Civil and Environmental Engineering, University of Michigan, 1996

VISSIM Training Courses, 2014

ODOT Focused Highway Safety Manual Training, 2013

ODOT Highway Safety Manual Safety Studies Training, 2013

Ohio DOT/Ohio Rail Development Commission Railroad Preempted Traffic Signal Training, 2012

Ohio DOT Interchange Justification Studies, 2010

Ohio DOT Safety Studies Training, 2010

FHWA Road Safety Audits/ Assessments, 2010

Synchro/SimTraffic, 2002

Highway Capacity Analysis Training, 2001

Registrations/Certifications:

Professional Traffic Operations Engineer, ITE, 2006, No. 1843

Professional Engineer:
Michigan, 2003, No. 50769
Ohio, 2010, No. 74462
Florida, 2011, No. 73180
Kentucky, 2012, No. 28594
Oklahoma, 2014, No. 27026
Texas, 2014, No. 117792

Professional Affiliations:

Institute of Transportation Engineers, Associate

Office:

Brighton, Michigan

Years of Experience:

18

Years at Tetra Tech:

12



of mitigation measures), access management initiatives, and conceptual roadway design were performed to enhance safety and operations of the gateway and to provide an economic stimulus for redevelopment in the eastern corridor.

US-24 Bloomfield Park Traffic Impact Study Review, Bloomfield Township, MI

Traffic Engineer that assisted Bloomfield Township with the review of the multi-jurisdictional traffic impact study and associated Synchro models, along with reviewing the shared parking analysis prepared for the proposed development. Tasks included reviewing study requirements from MDOT, Bloomfield Township and the City of Pontiac, checking consultant adherence to those requirements, checking Synchro models for adherence to analysis standards and providing appropriate analysis of standards, checking assumptions and reviewing mitigation recommendations as appropriate and adequate to maintain safe and efficient flow of traffic in and around the proposed development. For the shared parking analysis, checked for adherence to standards, the study recommendations were appropriate and adequate, and ensuring that parking findings and recommendations were consistent with site plans prepared for the proposed development. Provided written review comments and recommendations to Bloomfield Township regarding the need for revisions to the studies as required.

M-59 Wal-Mart Traffic Impact Study, Hartland Twp., MI

Traffic Engineer for the multi-jurisdictional traffic impact study performed to determine the required intersection geometry and traffic control improvements required for acceptable operation of the proposed retail development utilizing the analysis program Synchro. Study requirements included coordination between the various reviewing agencies, traffic forecasts, distribution of traffic from the proposed development, and evaluation of traffic operations and development of recommendations, including signalization and coordination, all in accordance with MDOT traffic study requirements. A final analysis model was prepared, which included all required mitigation measures for the proposed development, and approved by both the Livingston County Road Commission and MDOT.

M-10 Northwestern Highway Retail Development Traffic Impact Study, Farmington Hills, MI

Traffic Engineer for the multi-jurisdictional traffic impact study performed to determine if a proposed signalization of the site driveway could result in acceptable operation within the proposed Northwestern Connector project utilizing the analysis program Synchro. Study requirements included coordination between the various reviewing agencies, traffic forecasts, distribution of traffic from the proposed development, and evaluation of traffic operations in accordance with MDOT traffic study requirements. A final analysis model was approved by RCOC and MDOT.

M-150, South Blvd to Auburn Road, Oakland Co., MI

Traffic Engineer for a traffic signal operational study that included signal warrant analysis, safety reviews, data collection, intersection layout, and operational reviews with progression analyses within the existing traffic signal system utilizing Synchro. Collision diagrams were prepared and crash analyses performed along with crash rates and trends. Geometric improvements and access management modifications were recommended.

M-53, 34 Mile Road to Boardman Road, Macomb County, MI

Signal warrant analysis of five unsignalized intersections. Tasks included collecting turning movement and 24-hour counts, obtaining and reviewing crash data, performing gap analyses, stopped vehicle delay studies, and reviewing all requirements for signalization per the 2005 MMUTCD. Synchro was used to determine the level of service (LOS) for both signalized and unsignalized control. A summary report was prepared with all findings and recommendations.

Grand River Avenue and I-96 Ramp / Hilton Road Intersection Study, Brighton, MI

Traffic Engineer for a complex intersection evaluation / preliminary interchange study for a poorly operating intersection at the city limit. Project tasks included evaluations of existing operations, determining future No-Build operating conditions, development of potential intersection improvements including preliminary traffic signal design, determining future build operating conditions, and comparative construction cost estimates. Analysis of existing conditions and mitigation alternatives was performed utilizing Synchro, Rodel, and Sidra software.

City of Lansing CSO Maintenance of Traffic and Mobility Analysis, City of Lansing, Michigan

Traffic Engineer that assisted with the development of Maintenance of Traffic schemes and performed the Mobility analysis for the various stages of construction of new sewer and water mains under major MDOT arterials within the City of Lansing. The Mobility analysis, performed to Michigan DOT standards and requirements, consisted of determining traffic pattern diversions due to construction activities and the effect on operations of various intersections within the construction zone and along the detour route. Travel time estimates were determined based on Synchro and SimTraffic results, and mitigation measures were recommended to reduce traveler delay and improve operations. A final report was prepared documenting all assumptions, finding and recommendations.



TETRA TECH

December 27, 2016

Ms. Teresa Bruce
General Development Company
Two Towne Square, Suite 850
Southfield, Michigan 48076

**Re: Rezoning Traffic Impact Study Letter
Proposed Twelve Mile and Taft Roads OST Rezoning Application
City of Novi, Michigan
200-163821-17001**

Dear Ms. Bruce:

Tetra Tech (Tt) has reviewed the information provided by your office regarding your existing RA Residential Acreage property, and have completed our assessment of the trip generation forecast for the proposed rezoning of the site to OST Office Service Technology District as it compares to the existing zoning for the site. As we understand it, the approximately 30 acre site is located on the southwest quadrant of Twelve Mile Road and Taft Road. This letter has been prepared as part of your rezoning application and in accordance with the requirements of the City of Novi, as specified in their Community Development Department Site Plan and Development Manual.

In the vicinity of your property, Twelve Mile Road is a two-lane arterial road with shoulders under the jurisdiction of the Road Commission for Oakland County (RCOC), and has a posted speed limit of 45 MPH. Taft Road is two lane residential road without shoulders under the jurisdiction of the City of Novi, and has an unposted speed limit of 25 MPH. Twelve Mile Road has pavement markings, such as edge and centerlines, while Taft does not have any pavement markings. The intersection of Twelve Mile Road and Taft Road is currently unsignalized, with stop control for only the northbound Taft Road approach (the intersection is a three-legged or "T" intersection, and does not have a southbound approach). There is also an at-grade railroad crossing with automatic gates adjacent to the intersection of Twelve Mile Road and Taft Road (just east of the intersection).

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Sincerely,



Kyle W. Ramakers, P.E., PTOE
Transportation Engineer

200-163821-17001



12/27/2016

Location Info	
Location ID	2049
Type	LINK
Functional Class	-
Located On	12 Mile
Between	TAFT AND DIXON
Direction	2-WAY
Community	Novi
MPO_ID	297
HPMS ID	
Agency	Road Commission for Oakland County

Count Data Info	
Start Date	8/27/2012
End Date	8/28/2012
Start Time	12:00 PM
End Time	12:00 PM
Direction	
Notes	
Count Source	FO380_____
File Name	counttemp1143.mdb
Weather	
Study	
Owner	rcoc

Interval: 60 mins	
Time	Hourly Count
00:00 - 01:00	79
01:00 - 02:00	38
02:00 - 03:00	24
03:00 - 04:00	20
04:00 - 05:00	34
05:00 - 06:00	145
06:00 - 07:00	455
07:00 - 08:00	1240
08:00 - 09:00	1357
09:00 - 10:00	775
10:00 - 11:00	777
11:00 - 12:00	927
12:00 - 13:00	1176
13:00 - 14:00	995
14:00 - 15:00	1034
15:00 - 16:00	1130
16:00 - 17:00	1713
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EXPERIENCE

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E. Grand River Avenue Corridor Study, Brighton, MI

Traffic Engineer for the East Grand River Corridor Study undertaken to perform a traffic analysis of existing and future traffic levels and operations within the study corridor using Synchro, and to develop preliminary conceptual design alternatives to improve the City's east gateway. Traffic projections, level of service and corridor safety analyses (intersection crash reviews and development

Project Role:

Project Manager/Lead Traffic Engineer

Education:

MS, Construction Engineering and Management, University of Michigan, 1997

BS, Civil and Environmental Engineering, University of Michigan, 1996

VISSIM Training Courses, 2014

ODOT Focused Highway Safety Manual Training, 2013

ODOT Highway Safety Manual Safety Studies Training, 2013

Ohio DOT/Ohio Rail Development Commission Railroad Preempted Traffic Signal Training, 2012

Ohio DOT Interchange Justification Studies, 2010

Ohio DOT Safety Studies Training, 2010

FHWA Road Safety Audits/ Assessments, 2010

Synchro/SimTraffic, 2002

Highway Capacity Analysis Training, 2001

Registrations/Certifications:

Professional Traffic Operations Engineer, ITE, 2006, No. 1843

Professional Engineer:
Michigan, 2003, No. 50769
Ohio, 2010, No. 74462
Florida, 2011, No. 73180
Kentucky, 2012, No. 28594
Oklahoma, 2014, No. 27026
Texas, 2014, No. 117792

Professional Affiliations:

Institute of Transportation Engineers, Associate

Office:

Brighton, Michigan

Years of Experience:

18

Years at Tetra Tech:

12

of mitigation measures), access management initiatives, and conceptual roadway design were performed to enhance safety and operations of the gateway and to provide an economic stimulus for redevelopment in the eastern corridor.

US-24 Bloomfield Park Traffic Impact Study Review, Bloomfield Township, MI

Traffic Engineer that assisted Bloomfield Township with the review of the multi-jurisdictional traffic impact study and associated Synchro models, along with reviewing the shared parking analysis prepared for the proposed development. Tasks included reviewing study requirements from MDOT, Bloomfield Township and the City of Pontiac, checking consultant adherence to those requirements, checking Synchro models for adherence to analysis standards and providing appropriate analysis of standards, checking assumptions and reviewing mitigation recommendations as appropriate and adequate to maintain safe and efficient flow of traffic in and around the proposed development. For the shared parking analysis, checked for adherence to standards, the study recommendations were appropriate and adequate, and ensuring that parking findings and recommendations were consistent with site plans prepared for the proposed development. Provided written review comments and recommendations to Bloomfield Township regarding the need for revisions to the studies as required.

M-59 Wal-Mart Traffic Impact Study, Hartland Twp., MI

Traffic Engineer for the multi-jurisdictional traffic impact study performed to determine the required intersection geometry and traffic control improvements required for acceptable operation of the proposed retail development utilizing the analysis program Synchro. Study requirements included coordination between the various reviewing agencies, traffic forecasts, distribution of traffic from the proposed development, and evaluation of traffic operations and development of recommendations, including signalization and coordination, all in accordance with MDOT traffic study requirements. A final analysis model was prepared, which included all required mitigation measures for the proposed development, and approved by both the Livingston County Road Commission and MDOT.

M-10 Northwestern Highway Retail Development Traffic Impact Study, Farmington Hills, MI

Traffic Engineer for the multi-jurisdictional traffic impact study performed to determine if a proposed signalization of the site driveway could result in acceptable operation within the proposed Northwestern Connector project utilizing the analysis program Synchro. Study requirements included coordination between the various reviewing agencies, traffic forecasts, distribution of traffic from the proposed development, and evaluation of traffic operations in accordance with MDOT traffic study requirements. A final analysis model was approved by RCOC and MDOT.

M-150, South Blvd to Auburn Road, Oakland Co., MI

Traffic Engineer for a traffic signal operational study that included signal warrant analysis, safety reviews, data collection, intersection layout, and operational reviews with progression analyses within the existing traffic signal system utilizing Synchro. Collision diagrams were prepared and crash analyses performed along with crash rates and trends. Geometric improvements and access management modifications were recommended.

M-53, 34 Mile Road to Boardman Road, Macomb County, MI

Signal warrant analysis of five unsignalized intersections. Tasks included collecting turning movement and 24-hour counts, obtaining and reviewing crash data, performing gap analyses, stopped vehicle delay studies, and reviewing all requirements for signalization per the 2005 MMUTCD. Synchro was used to determine the level of service (LOS) for both signalized and unsignalized control. A summary report was prepared with all findings and recommendations.

Grand River Avenue and I-96 Ramp / Hilton Road Intersection Study, Brighton, MI

Traffic Engineer for a complex intersection evaluation / preliminary interchange study for a poorly operating intersection at the city limit. Project tasks included evaluations of existing operations, determining future No-Build operating conditions, development of potential intersection improvements including preliminary traffic signal design, determining future build operating conditions, and comparative construction cost estimates. Analysis of existing conditions and mitigation alternatives was performed utilizing Synchro, Rodel, and Sidra software.

City of Lansing CSO Maintenance of Traffic and Mobility Analysis, City of Lansing, Michigan

Traffic Engineer that assisted with the development of Maintenance of Traffic schemes and performed the Mobility analysis for the various stages of construction of new sewer and water mains under major MDOT arterials within the City of Lansing. The Mobility analysis, performed to Michigan DOT standards and requirements, consisted of determining traffic pattern diversions due to construction activities and the effect on operations of various intersections within the construction zone and along the detour route. Travel time estimates were determined based on Synchro and SimTraffic results, and mitigation measures were recommended to reduce traveler delay and improve operations. A final report was prepared documenting all assumptions, finding and recommendations.