Agenda
Planning Commission
City Of Edina, Minnesota
City Hall, Council Chambers
4801 West 50th Street Edina, MN 55424
Wednesday, September 27, 2017
7:00 PM

I. Call To Order

II. Roll Call

III. Approval Of Meeting Agenda

IV. Approval Of Meeting Minutes

   A. Minutes, Planning Commission, September 06, 2017

V. Public Hearings

   A. Comprehensive Plan Amendment - OR, Office Residential District; Estelle Edina, 69th & France

   B. Comprehensive Plan Amendment, Rezoning, CUP and Variances - 4404 & 4416 Valley View Road, and 6108, 6112, 6116 and 6120 Kellogg Avenue

VI. Community Comment

During "Community Comment," the Board/Commission will invite residents to share relevant issues or concerns. Individuals must limit their comments to three minutes. The Chair may limit the number of speakers on the same issue in the interest of time and topic. Generally speaking, items that are elsewhere on tonight's agenda may not be addressed during Community Comment. Individuals should not expect the Chair or Board/Commission Members to respond to their comments tonight. Instead, the Board/Commission might refer the matter to staff for consideration at a future meeting.

VII. Reports/Recommendations

   A. 70th and Cahill Working Group applicant approval

VIII. Correspondence And Petitions

IX. Chair And Member Comments

X. Staff Comments

XI. Adjournment

The City of Edina wants all residents to be comfortable being part of the public process. If you need assistance in the way of hearing amplification, an

interpreter, large-print documents or something else, please call 952-927-8861 72 hours in advance of the meeting.

CITY OF EDINA

4801 West 50th Street
Edina, MN 55424
www.edinamn.gov

Date: September 27, 2017

Agenda Item #: IV.A.

To: Planning Commission

Item Type: Minutes

From: Jackie Hoogenakker, Planning Division

Item Activity: Action

Subject: Minutes, Planning Commission, September 06, 2017

ACTION REQUESTED:

Please approve the September 06, 2017, Planning Commission Meeting Minutes.

INTRODUCTION:

See attached.

ATTACHMENTS:

Minutes: Planning Commission, September 06, 2017

Draft Minutes☒
Approved Minutes☐
Approved Date: Click here to enter a date.

Minutes
City Of Edina, Minnesota
Planning Commission
Edina City Hall Council Chambers
September 6, 2017, 7:00 P.M.

I. Call To Order

Chair Olsen called the meeting to order at 7:05 P.M.

II. Roll Call

Answering the roll were: Commissioners Hobbs, Lee, Strauss, Hamilton, Berube, Chair Olsen. Student Member Mittal. Staff, City Planner, Teague, Assistant Planner, Bodeker, Communications Coord., Eidsness, Support Staff, Hoogenakker

Members Absent: Jones, Nemerov, Thorsen, Bennett.

III. Approval Of Meeting Agenda

A motion was made by Commissioner Strauss to approve the September 6, 2017, meeting agenda. The motion was seconded by Commissioner Lee. All voted aye. The motion carried.

IV. Approval Of Meeting Minutes

A motion was made by Commissioner Hobbs to approve the minutes of the August 30, 2017, meeting. The motion was seconded by Commissioner Strauss. All voted aye. The motion carried.

V. Public Hearings

A. Variance. 5401 Blake Road, Edina, MN. First floor elevation variance.

Staff Presentation

Planner Bodeker addressed the Commission and reported that JMS Custom homes has submitted a variance application to increase the first floor elevation of a new home 4.1 feet higher than the current first floor elevation. A demolition permit for the house that existed at 5401 Blake Road was pulled in December 2012 and the subject property sits vacant today. Before the house was demolished, the existing house was oriented to the west towards Blake Road. The proposed house will be oriented to the north, and be addressed off of Pine Grove Road.

The existing basement elevation of the home is at 942.6. The proposed first floor elevation is 946.7. The zoning ordinance allows for a maximum 1-foot increase in height of an existing first floor. The applicant is asking for a 3.1-foot variance to increase the first floor height by 4.1 feet.

Planner Bodeker concluded that staff recommends approval of a 3.1 foot 1st floor height variance to allow the construction of a new home that will be more than one foot (4.1 feet total) above the existing first floor elevation of the previous home located at 5401 Blake Road. Approval is also subject to the he following conditions:

Survey date stamped August 11, 2017.
Elevations and building plans date stamped August 11, 2017
Revised site plan with city comments dated August 31, 2017.

Compliance with the conditions and comments listed in the Environmental Engineer's memo.

Appearing for the Applicant

Tom Bakritges, JMS Custom Homes

Applicant Presentation

Mr. Bakritges told the Commission he met with adjoining neighbors, adding the meeting was positive. Bakritges said reorienting the new home to Pine Grove Road made the most sense, adding it also eliminates a curb cut on Blake Road. Bakritges explained the site would continue to drain to the southeast. He said that (as requested) a drainage pipe system would also be added to minimize water runoff. Concluding, Bakritges said the house as proposed is at the lowest elevation that "works", adding in his opinion the new house works well with the site and adjoining neighbors.

Public Hearing

Chair Olsen opened the public hearing.

No one spoke to the issue.

Commissioner Hamilton moved to close the public hearing. Commissioner Berube seconded the motion. All voted aye. The motion carried.

Discussion/Comments

Commissioners acknowledged that the request to build a new house orienting on Pine Gove Road makes sense. It was also suggested that Staff ensure that any added fill, removal of fill or movement of fill on lot be monitored to ensure that Code is met and that the site drains properly.

The discussion also focused on drainage and if the best solution to this site and other sites was to tie into the City system at the curb or would other methods be more productive.

Planner Teague responded that the Engineering Division was nearing completion of the City's Storm Water Management Plan. When the plan is completed a joint meeting between Planning and Engineering Commissions would occur. Teague suggested at that time the any questions on drainage and best practices could be discussed. Commissioners agreed that a discussion on drainage would be helpful.

Motion

A motion was made by Commissioner Hamilton to approve the variance based on staff findings and subject to staff conditions. The motion was seconded by Commissioner Berube. All voted aye. The motion carried.

VI. Special Recognitions and Presentations

A. Grandview Green: A Case Study for Lid Development in Minnesota.

Planner Teague introduced Katie Clark Sieben, Economic Development Project Consultant.

Consultant Presentation

Ms. Sieben addressed the Commission and briefed Commissioners on past work on the Grandview District Area Plan and updated the Commission on the initial lid concept.

With graphics, Sieben presented the following on "Grandview Green":

- The proposed "lid" would reconnect neighborhoods and communities divided by Highway 100.
- Increases economic productivity.
- Enhances sustainability practices through increases in storm water collection, potential solar installations, etc.
- Leverages unused public land.
- Serves as a case study for lid development in Minnesota.
- Creates a place with a unique identity.
- Rethinks and reorganizes the District's transportation infrastructures.

Continuing, Sieben explained that the Grandview Green Feasibility Study found the following:

- No major fatal flaws in the development of a green lid over limited portions of Highway 100. This concept has the potential to create 13 acres of new buildable land.
- The area has the potential to support 2, 525 new parking spaces and 2.4 million square feet in private development.
- After completion, property tax revenue is projected to increase approx. $2 million to $100 million.

- Public investment is needed for this project with an estimate of $37 million.
- Several public entities could be involved in the project to include MnDOT, Metropolitan Council, Hennepin County and the City of Edina.
- The initial economic analysis predicts the public investment of $37 million could realize a 348% return on investment for a 15-year period.

Sieben concluded sharing visual lid concepts.

Chair Olsen opened the discussion to Commissioners:

Discussion/Comments

Commissioners commented on and raised the following:

- Commissioners expressed the opinion that they were intrigued by the lid concept and find it very interesting, bold and innovative.
- Sieben was asked the reason Edina is considering a "lid", is it to achieve more greenspace, public space or to increase revenue. Sieben responded that she believes it is both, adding the lid would provide public spaces along with private development opportunities.
- Sieben was asked who initiated the study. Sieben responded that the City Council provided the opportunity for the study.
- The question was raised if the Grandview Area was the best place for the lid and the use of public dollars. The importance of a healthy Southdale Campus was stressed and it was pointed out if $37 million was invested in the Greater Southdale Area and the Southdale Campus the public benefit would be great.
- Commissioners asked if other lid locations in Edina were considered (France/Crosstown). Sieben responded that she does not believe so, adding this location is being considered as a "case study" or "pilot" study, adding that the City is working closely with MnDOT on this "pilot" study. Sieben noted that if successful, lids could be built in other areas of the City and throughout the Metro area. Commissioners indicated they were pleased with the initial support from MnDOT. Sieben reiterated MnDOT has interest in this concept.
- Again, it was expressed that the lid concept was great, ambitious, forward thinking and continues Edina's leadership in the development arena; however, this project requires a significant public component to make it work. It was noted if interest is "out there" to invest public dollars further thought should be given to areas of Edina that may need greater attention. Again, is this the best place or is another location more worthy.

A discussion ensued with Commissioners stressing how important it is to them to continue to have a vibrant successful Southdale campus. The importance of maintaining that area as a vibrant and healthy destination for Edina residents and visitors to the City is very important and cannot be dismissed.

Planner Teague agreed, adding with the future changes in retail that it is important to maintain Southdales status; however, the proposed lid location is something that came out of the Grandview Area Plan. At

that time the Council expressed interest in developing a type of "civic center" connecting City Hall to the neighborhood across Highway 100.

Commissioners agreed and acknowledged the work of the Grandview Area Study; however, suggested that the City Council further study this concept and location and take a step back and look at the needs of the entire City. Commissioners also noted there are many "what ifs" out there. It was pointed out that even though MnDOT has expressed interest this is the first time a development project would implement right-of-way to achieve success. It was also noted that there are so many variables in the partnership, between local, State, and County. In conclusion, Commissioners also said attention must be paid to what is developed noting building height and density could become an issue.

Chair Olsen thanked Ms. Sieben for her presentation.

VII. Community Comment

No one spoke.

Commissioner Strauss moved to close Community Comment. Commissioner Berube seconded the motion. All voted aye. Community Comment closed.

VIII. Reports and Recommendations

A. 2018 Planning Commission Work Plan

Planner Comments

Planner Teague said at this time he would recommend that the Work Plan be adopted as presented. Teague said he envisions updating the Comprehensive Plan including all small area plans to be a full time job. Teague said in his opinion in 2018 the Commission should focus on the Comprehensive Plan. Commissioners agree.

Motion

Commissioner Berube moved to adopt the 2018 Planning Commission Work Plan. Commissioner Hobbs seconded the motion. All voted aye. The motion carried.

IX. Chair And Member Comments

Chair Olsen introduced and welcomed Anand Mittal as the new Student Member to the Commission.

Anand Mittal thanked the Commission for this opportunity and informed them he was a Senior at the High School.

Commissioner Berube updated the Commission on 44th and France Small Area Plan working group.

X. Staff Comments

Planner Teague reported that the 70th and Cahill Small Area Plan is seeking members to serve on the Committee. Teague said all interested should visit the website and apply.

Teague said that work is still being done to complete the consultant contract for the Greater Southdale Area plan. He said he hopes the contract would be confirmed at the first Council meeting in October.

It was also suggested that the Commission liaisons to the small area plans look outside their specific area to find members, noting small area plans benefit the entire City.

XI. Adjournment

Motion

Commissioner Strauss moved to adjourn the meeting of the Edina Planning Commission at 8:30 P.M. Commissioner Berube seconded the motion. All voted aye. The motion carried.

Jackie Hoogenakker

Respectfully submitted

CITY OF EDINA

4801 West 50th Street
Edina, MN 55424
www.edinamn.gov

Date: September 27, 2017

Agenda Item #: V.A.

To: Planning Commission

Item Type:
Report and Recommendation

From: Cary Teague, Community Development Director

Item Activity:
Action

Subject: Comprehensive Plan Amendment - OR, Office Residential District; Estelle Edina, 69th & France

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ACTION REQUESTED:
Recommend the City Council approve the Comprehensive Plan Amendment.

INTRODUCTION:
See attached Staff Report

ATTACHMENTS:

Staff Report

Engineering Memo & Height Expamples

Spack Traffic Study

WSB Traffic Study

STAFF REPORT

Date: August 27, 2017

To: Planning Commission

From: Cary Teague, Community Development Director

Subject: Comprehensive Plan Amendment – Estelle Edina, 69th & France Avenue

Information / Background:

Ryan Companies on behalf of Luigi Bernardi, is requesting an amendment to the Edina Comprehensive Plan regarding height and density in the OR, Office Residential District. (See location on page A1.) The specific request is to increase the density from 30 units per acre to 60 units per acre, and increase the height maximum from four stories and 48 feet, to allow height to exceed four stories up to 26 stories and 360 feet. (See location and applicant narrative and plans on pages A2-A51.)

The purpose of the request is for Ryan Companies to construct a multi-phase mixed use development at the southwest corner of 69th and France. (See development plans on pages A7-A51.) Phase 1 of the project would include 11,000 square feet of retail that would include a restaurant, office and bank; 6 owner occupied townhouse; 92 owner-occupied condos. Phase 2 of the project would be a 22 story building with retail on the main level and 75 owner occupied condos. Of the housing units, 20% would be included for affordable housing in each phase.

This request before the Planning Commission and City Council does not include a Rezoning or Site Plan review. If the Comprehensive Plan Amendment is approved by the City Council, the applicant would then come back with Rezoning and Site Plan review applications. It is at that time that the details of the project would be reviewed, and considered for approvals.

Because this request includes 20% of the housing units to be for affordable housing, this would require a 3/5 vote of approval by the City Council. Minnesota State Law mandates that if projects contain 20% of the units for affordable housing to persons with incomes no greater than 60% of the area median income, and with respect to rental units, the rents for affordable units do not exceed 30 percent of 60 percent of area median income, then the approving vote for a Comprehensive Plan Amendment be done by a majority vote. A super majority vote (2/3) is typically required. (See state law on page A6a.)

As this is a request for a Comprehensive Plan Amendment, the City has complete discretion as to approving or denying this request. (See the pyramid of discretion on page A6b.)

Comprehensive Guide Plan Amendments

Density

The OR, Office Residential Area allows up to 30 units per acre. This density is low given the density that has been considered as part of the Greater Southdale Area Study. Densities that have been contemplated to date have been 80 units per acre over the whole of the district. The thinking behind that density has been to allow greater densities in between France and York (100-125 units per acre; the CAC, Community Activity Center allows up to 105 units per acre in the existing Comprehensive Plan); and lesser densities 50-75 units per acre west of France and East of York. The City has allowed greater densities on the east side of York (Envi Edina is 105 units per acre; and the Onyx is 52 units per acre. On the west side of France, the Aurora on France project (senior housing) is 80 units per acre.

Below is table of existing high density developments in the City. Note that the trend in multi-family development is higher density. This is due to the high cost of land in Edina, the City's requirement for affordable housing, and the added cost of redeveloping a site with existing buildings.

High Density Development in Edina

Development	Address	Units	Units Per Acre
Yorktown Continental	7151 York	264	45
The Durham	7201 York	264	46
York Plaza Condos	7200-20 York	260	34
York Plaza Apartments	7240-60 York	260	29
Walker Elder Suites	7400 York	72	40
7500 York Cooperative	7500 York	416	36
Edinborough Condos	76xx York	392	36
South Haven	3400 Parklawn	100	42
The Waters	Colonial Drive	139	22
6500 France – Senior Housing	6500 France	188	80

Lennar - Onyx	6725 York	240	52
Estelle Edina	***69th & France***	***173***	***53***
5000 France	5000 France	23	29
The Collaborative	Market Street	131	46
Gateway Point	66th & York	191	96
The Millennium	66th & York	372	60
Lincoln Residences	5901 Lincoln Drive	250	30

Red – Indicates recent projects

Example Residential Density Ranges in Surrounding City's Comprehensive Plans

City	Range – Per Acre
Bloomington	
Medium Density Residential	5-10
High Density Residential	No limit
General Business	0-83
Commercial (Community & Regional)	0-83
High Intense mix use	0-60
Airport South mix use	30-131
Richfield	
Medium Density Residential	7-12
High Density Residential	Minimum of 24
High Density Res./Office	Minimum of 24
Mixed Use	50+
St. Louis Park	
Medium Density Residential	6-30
High Density Residential	20-75 (PUD for high end)
Mixed Use	20-75 (PUD for high end)
Commercial	20-50
Minnetonka	
Medium Density Residential	4-12
High Density Residential	12+
Mixed Use	No range established (density based on site location and site conditions.)
Minneapolis	
Medium Density (mixed use)	20-50

High Density (mixed use)	50-120
Very High Density(mixed use)	120+

The site's location on an arterial roadway provides a good location for higher density. The Comprehensive Plan currently suggests allowing higher density subject to proximity to utilities capacity, level of transit service available, and impact on adjacent roads. Other desired items to allow greater density would include: Below grade parking, provision of park or open space, affordable housing, sustainable design principles, provision of public art, pedestrian circulation, and podium height.

The proposed project would contain most of these elements. There is adequate utility capacity available. There is a transit station located at Southdale. A traffic study was done by Spack Consulting and concludes that there would be minimal impact to the roads, and the existing roads could support the development. (See study on pages A72-A141.) WSB has also done a traffic study of the entire Southdale Area, and also concludes that the proposed density could be supported by the roadway network. (See pages A142-A191.) Underground parking would be included; there would be minimal surface parking lots at ultimate buildout; open space/public area is provided along the front streets and in front of the building in phase 1; affordable housing is proposed to meet the City of Edina policy of 10% of the area proposed for housing, and the State of Minnesota requirement that 20% of the units be sold to persons with incomes at 60% of the average median income, and with respect to rental units, the rents for affordable units do not exceed 30 percent of 60 percent of area median income.

This area is adjacent to the CAC, Community Activity Center, which is the City's most intense development district. (See page A1.) A case could be made for extending the CAC to the West side of France to match the area east of York. Please note that the density allowed east of York Avenue adjacent to single-family homes to the east is 105 units per acre.

Height

The most significant request of the Comprehensive Plan Amendment is in regard to height, going from a 4-story and 48-foot limit to up to 26 stories and 360 feet. However, height is typically a function of a Zoning Regulation and <u>not</u> a specific requirement in a Comprehensive Plan. Comprehensive Plans typically discuss height in general parameters, and gives guidance for allowing greater height than the Zoning allows as part of a variance or rezoning request. The proposed amendment would allow the City Council to do just that. All of the height limitations that are suggested currently in the 2008 Comprehensive Plan have been memorialized into the Zoning Ordinance with the adoption of the Height Overlay District. (See the adopted Height Overlay District map on page A5.) An amendment could give the City Council specific criteria to review when considering this project or any other with height limits over four stories. Approving this Comprehensive Plan Amendment <u>would not obligate</u> the City Council to approve a rezoning or height variance for this project. The merits of that request would be considered at that time.

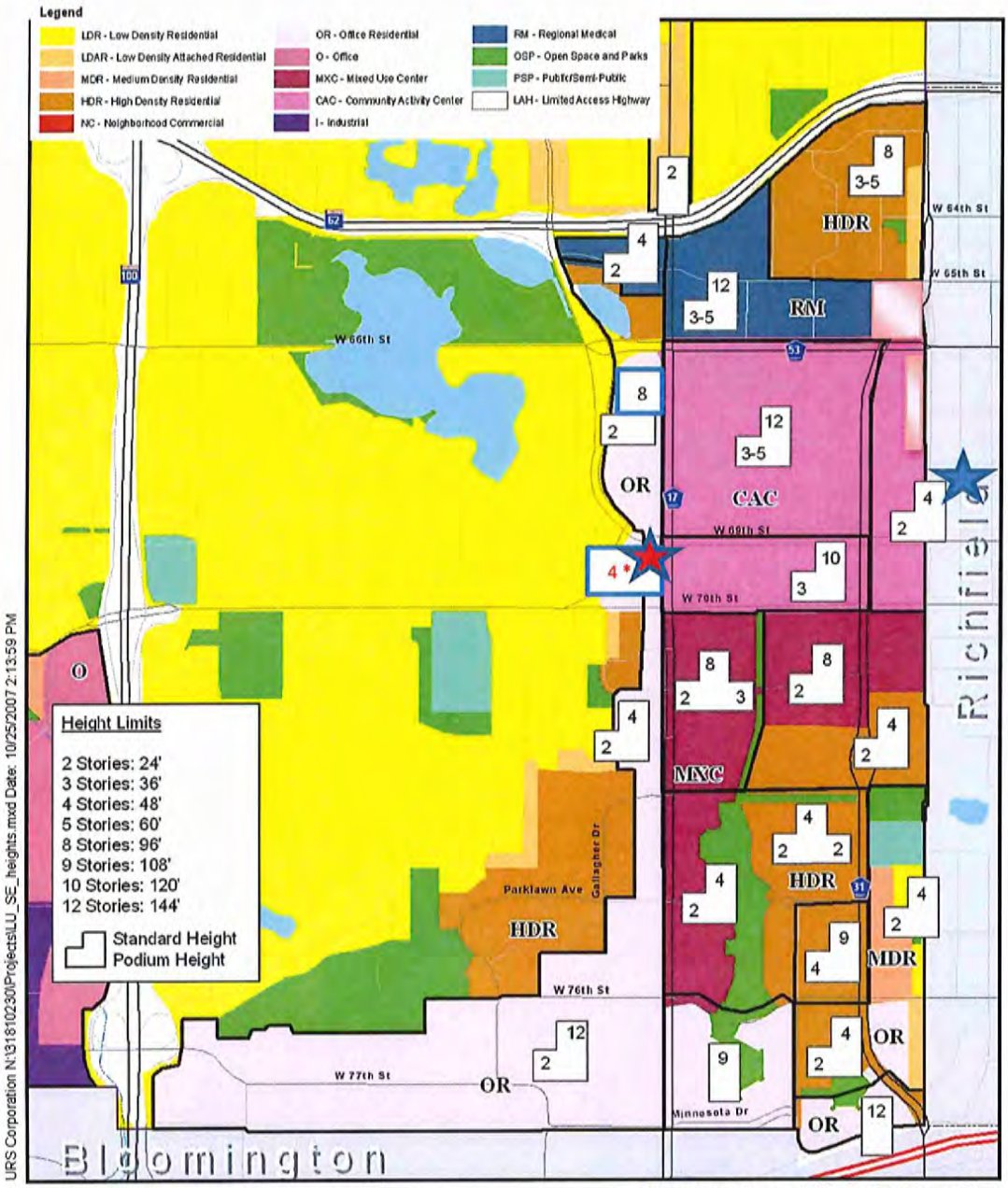
Additionally, there is a general code provision that requires buildings that are taller than nine stories to be setback six times the building height to property zoned R-1, Single Dwelling Unit District. This standard would require a building that is 360 feet tall to be setback 2,160 feet from the nearest single-family home. The proposed buildings would have a setback of 410 and 440 feet.

The tallest buildings in the City of Edina are generally in the Southdale areas. The building contemplated for this site however, would be the tallest building in the City. The tallest buildings in Edina include: Park Plaza and Westin at 18-stories; Edina Towers at 17-stories and the Durham Apartment and Point of France at 13 stories. (See a map and pictures of the tallest buildings in the Southdale area on pages A54-A71.) Note that the 13 story Durham is located on the east side of York adjacent to single-family residential homes.

If this building were located on the east side of France, across the street, the visual impact would be very similar to the neighborhood to the west.

In potentially allowing buildings over four stories, the city could continue to restrict height adjacent to the single-family homes at 4-stories, through the Zoning Ordinance. The proposed taller buildings would be located adjacent to France.

The map on the following page shows how the Comprehensive Plan could be amended to accommodate the change in height designation. In making this change, the allowed height on this block could be expanded to over four stories, subject to City Council approval of a rezoning to PUD. The specific requirements that would have to be included in a rezoning or variance application are listed right after the map on page 7.



City of Edina
2008 Comprehensive Plan Update

Future Land Use Plan with Building Heights
Southeast Quadrant
Figure 4.6B

* Height may be increased up to twenty-six stories and 360 feet on a case by case basis, subject to review and approval of the City Council as part of a rezoning or variance request. (See review criteria below)

* Height may be increased to six stories & 75 feet if podium height is utilized on York and Xerxes subject to review and approval of the City Council.

The allowed height south of 69th Street, north of 70th Street, west of France and west of Valley View Road could be expanded to over 4 stories and 48 feet up to 26 stories and 360 feet subject to City Council approval of a rezoning to PUD or a variance for a project that must include but not be limited to the following:

1. Project must include affordable housing to meet the State requirement that 20% of the housing units be provided for affordable housing for persons that earn no greater than 60% of the area median income and with respect to rental units, the rents for affordable units do not exceed 30 percent of 60 percent of area median income.
2. Project must meet the City's affordable housing policy.
3. Project must provide underground parking.
4. Project must include public art.
5. Public enhancement of the sidewalks around the perimeter and through the site; including a 50 foot setback from the paved portion of France Avenue and 30 feet back from 69th to include sidewalks and green space.
6. Building must be of high quality architecture subject to review and approval of the City Council as part of a Rezoning.
7. Project must include sustainable design principles subject to approval of the City Council.
8. The development must adequately respond to the Greater Southdale Area Guiding Principles.
9. Project must include public space.
10. Project must include accommodation for bikes.
11. Buildings over four stories must be separated from the single-family homes on the west side of Valley View Road by buildings four stories or less to provide a transitional area between taller buildings on France Avenue and single-family homes to the west.

Office-Residential No current examples in City. Potential examples include Pentagon Park area and other I-494 corridor locations	***Transitional areas along major thoroughfares or between higher-intensity districts and residential districts.*** Many existing highway-oriented commercial areas are anticipated to transition to this more mixed-use character. Primary uses are offices, attached or multifamily housing. Secondary uses: Limited retail and service uses (not including "big box" retail), limited industrial (fully enclosed), institutional uses, parks and open space. Vertical mixed use should be encouraged, and may be required on larger sites.	Upgrade existing streetscape and building appearance, improve pedestrian and transit environment. Encourage structured parking and open space linkages where feasible; emphasize the enhancement of the pedestrian environment.	12-30 60 residential dwelling units/acre **Floor to Area Ratio-Per current Zoning Code: maximum of 0.5 to 1.5*** Floor to Area Ratio may exceed 1.0 on a case by case basis, subject to proximity to utilities capacity, level of transit service available, and impact on adjacent roads. Other desired items to allow greater density or density on the high end of the residential housing range above, would include: Below grade parking, provision of park or open space, affordable housing, sustainable design principles, provision of public art, pedestrian circulation, and podium height.

PRIMARY ISSUES/STAFF RECOMMENDATION

Primary Issues

- **Is the Comprehensive Plan Amendment density reasonable?**

Yes. Staff believes the proposed density is reasonable for the following reasons:

1. The proposed density range is reasonable for the west side of France Avenue. The density proposed is less than what is allowed on the east side of York, which is considered a similar area, as it also transitions to single-family homes to the east. East of York, south of 66th Street and North of 70th Street allows up to 105 units per acre, nearly double the density considered here.

2. Higher Densities are generally located on arterial roadways. The OR district is generally located on France Avenue, an arterial roadway that connects to both Crosstown 62 and I-494.

3. The densities that have been contemplated as part of the Greater Southdale Area Study have been 80 units per acre over the whole of the district. Higher Density is contemplated in between France Avenue and York Avenue (100-125 units per acre…the existing CAC area allows up to 105 units per acre); and lesser densities 50-75 units per acre west of France and East of York. The City has allowed greater densities on the east side of York (Envi Edina is 105 units per acre; and the Onyx is 52 units per acre. On the west side of France, the Aurora on France project (senior housing) is 80 units per acre.

4. Density proposed is similar or less than density for mixed use areas for surrounding communities including Minnetonka, Minneapolis, Bloomington, Richfield, and St. Louis Park.

5. Allowing higher densities allows the City greater opportunity to provide affordable housing units.

6. Traffic studies done by Spack Consulting and WSB conclude that densities contemplated on the west side of France can be supported by the existing roadway system. (See page A73 and pages A142-A191.)

- **Is the Comprehensive Plan Amendment height reasonable?**

Yes. Staff believes the proposed height is reasonable for the following reasons:

1. Height is typically a function of a Zoning Regulation and not a specific requirement in a Comprehensive Plan. Comprehensive Plans typically discuss height in general parameters, and gives guidance for allowing greater height than the Zoning allows as part of a Variance or Rezoning request. The proposed amendment could allow the City Council to do just that. Staff would suggest that the 2018 Comprehensive Plan follow similar guidance. All of the height limitations that are suggested currently in the 2008 Comprehensive Plan have been memorialized into the Zoning Ordinance with the adoption of the Height Overlay District. (See the adopted Height Overlay District map on page A5.)

2. The amendment would give the Council specific criteria to review when considering a project with height limits over four stories on this block. Below is the criterion:

   The allowed height south of 69th Street, north of 70th Street, west of France and west of Valley View Road could be expanded from 4 stories to up to 26 stories and 360 feet subject to City Council approval of a rezoning to PUD for a project that would include but not be limited to the following:

   a. Project must include affordable housing to meet the State requirement that 20% of the housing units be provided for affordable housing for persons that earn no greater than 60% of the area median income, and with respect to rental units, the rents for affordable units do not exceed 30 percent of 60 percent of area median income.
   b. Project must meet the City's affordable housing policy.
   c. Project must provide underground parking.
   d. Project must include public art.
   e. Public enhancement of the sidewalks around the perimeter and through the site must be included in the project; including a 50 foot setback from the paved portion of France Avenue and 30 feet back from 69th to include sidewalks and green space.
   f. Building must be of high quality architecture subject to review and approval of the City Council as part of a rezoning.
   g. Project must include sustainable design principles subject to approval of the City Council.
   h. The development must adequately respond to the Greater Southdale Area Guiding Principles.
   i. Project must include public space.
   j. Project must include accommodation for bikes.
   k. Buildings over four stories must be separated from the single-family homes on the west side of Valley View Road by buildings four stories or less to provide a transitional area between taller buildings on France Avenue and single-family homes to the west.

Conclusion/Recommendation

As this is a request for a Comprehensive Plan Amendment, the City has complete discretion as to approving or denying this request. (See the pyramid of discretion on page A6b.)

Below are the alternative actions to be considered by the Planning Commission and City Council:

Denial

Recommend the City Council deny the request for a Comprehensive Plan Amendment. Denial is based on the following findings:

1. The proposed height is too high given the proximity to the single-family homes to the west.

2. The current zoning standards would require a building that is 360 feet tall to be setback 2,160 feet from the nearest single-family home. The proposed buildings would have a setback of 410 and 440 feet.

3. This area west of France is considered a transition area between the high density commercial development on the east side of France and the single family homes to the west. The proposed height is too tall for this transition area.

4. The density proposed is too high for this site.

Approval

Recommend that the City Council approve the requests for Comprehensive Plan Amendments as follows:

- The density in the OR, Office Residential Area is increased from 30 units an acre to 60 units per acre.

- The allowed height south of 69th Street, north of 70th Street, west of France and west of Valley View Road could be expanded from 4 stories and 48 feet up to exceed four stories up to 26 stories and 360 feet subject to City Council approval of a rezoning to PUD for a project that would include the following:

    a. Project must include affordable housing to meet the State requirement that 20% of the housing units be provided for affordable housing for persons that earn no greater than 60% of the area median income, and with respect to rental units, the rents for affordable units do not exceed 30 percent of 60 percent of area median income.
    b. Project must meet the City's affordable housing policy.
    c. Project must provide underground parking.
    d. Project must include public art.

e. Public enhancement of the sidewalks around the perimeter and through the site must be including in the development; including a 50 foot setback from the paved portion of France Avenue and 30 feet back from 69th to include sidewalks and green space.
f. Building must be high quality architecture subject to review and approval of the City Council as part of a rezoning.
g. Project must include sustainable design principles subject to approval of the City Council.
h. The development must adequately respond to the Greater Southdale Area Guiding Principles.
i. Project must include public space.
j. Project must include accommodation for bikes.
k. Buildings over four stories must be separated from the single-family homes on the west side of Valley View Road by buildings four stories or less to provide a transitional area between taller buildings on France Avenue and single-family homes to the west.

Approval is subject to the following findings:

1. The proposed density range is reasonable for the west side of France Avenue. The density proposed is less than what is allowed on the east side of York, which is considered a similar area, as it also transitions to single-family homes to the east. East of York, south of 66th Street and North of 70th Street allows up to 105 units per acre, nearly double the density considered here.

2. Higher Densities are generally located on arterial roadways. The OR district is generally located on France Avenue, an arterial roadway that connects to both Crosstown 62 and I-494.

3. The densities are consistent with those contemplated in the Great Southdale Area Study.

4. Density proposed is similar or less than density for mixed use areas for surrounding communities including Minnetonka, Minneapolis, Bloomington, Richfield, and St. Louis Park.

5. Allowing higher densities allows the City greater opportunity to provide affordable housing units.

6. Height is typically a function of a Zoning Regulation and <u>not</u> a specific requirement in a Comprehensive Plan.

7. Traffic studies done by Spack Consulting and WSB conclude that densities of 60 units an acre on the west side of France can be supported by the existing roadway system.

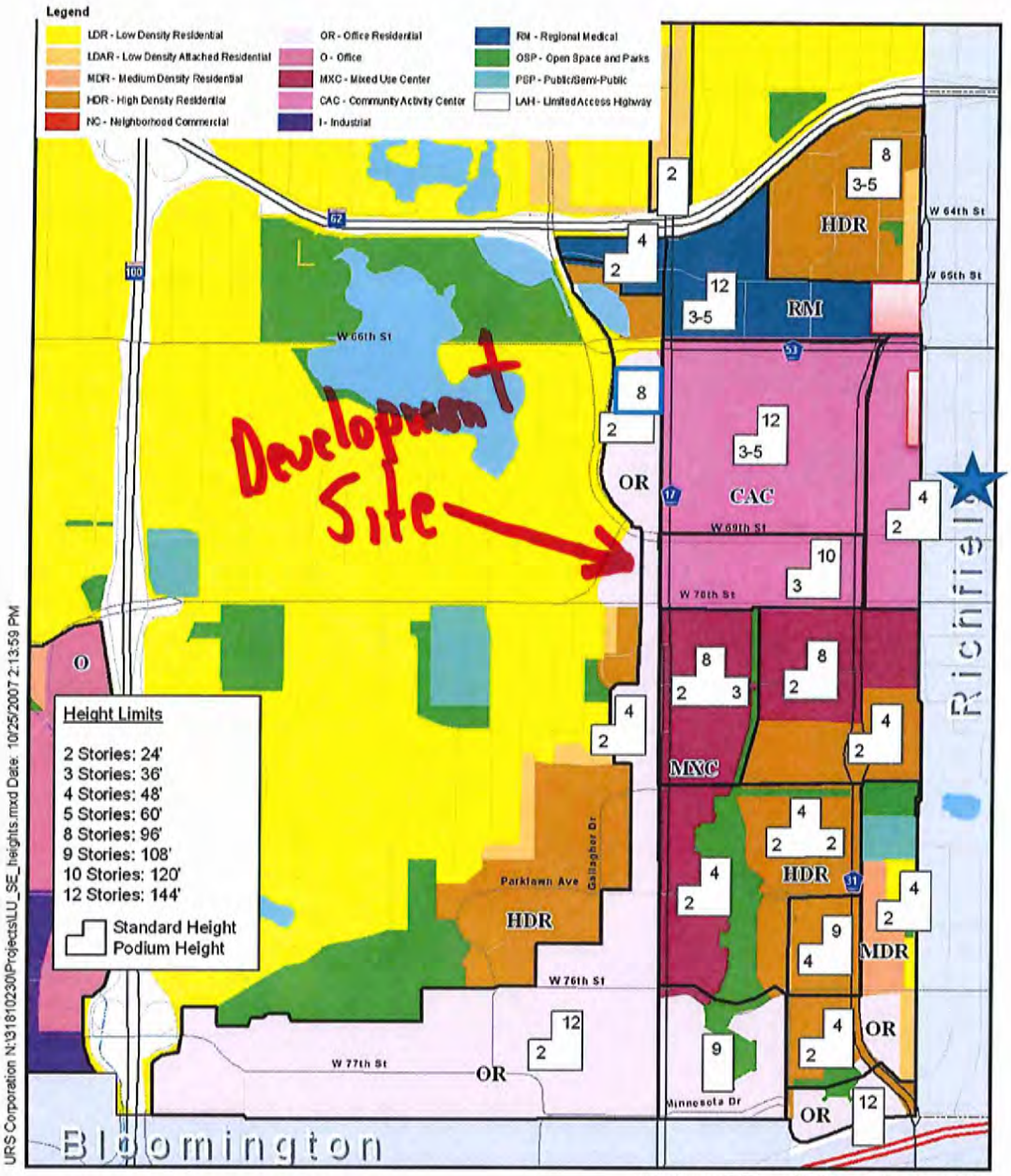
8. The amendment would give the Council specific criteria to review when considering a project with height limits over four stories.

9. Public benefits in allowing building height over four stories would include: significant contributions to the city's stock of affordable housing units; high quality architecture and overall development; increase in public space; added green space; significantly pedestrian friendly developments; increase tax base; catalytic development for future high quality

development in the area; public art; elimination of surface parking; and underground parking.

Staff Recommendation:

Staff recommends approval of the Comprehensive Plan Amendment to increase density to up to 60 units an acre in the OR, Office Residential District, and allowing height to be increased to up to 360 feet subject to future consideration of a Rezoning or Variance for a project that must include all the findings and conditions listed above.



City of Edina
2008 Comprehensive Plan Update

Data Source: URS

Future Land Use Plan with Building Heights
Southeast Quadrant
Figure 4.6B

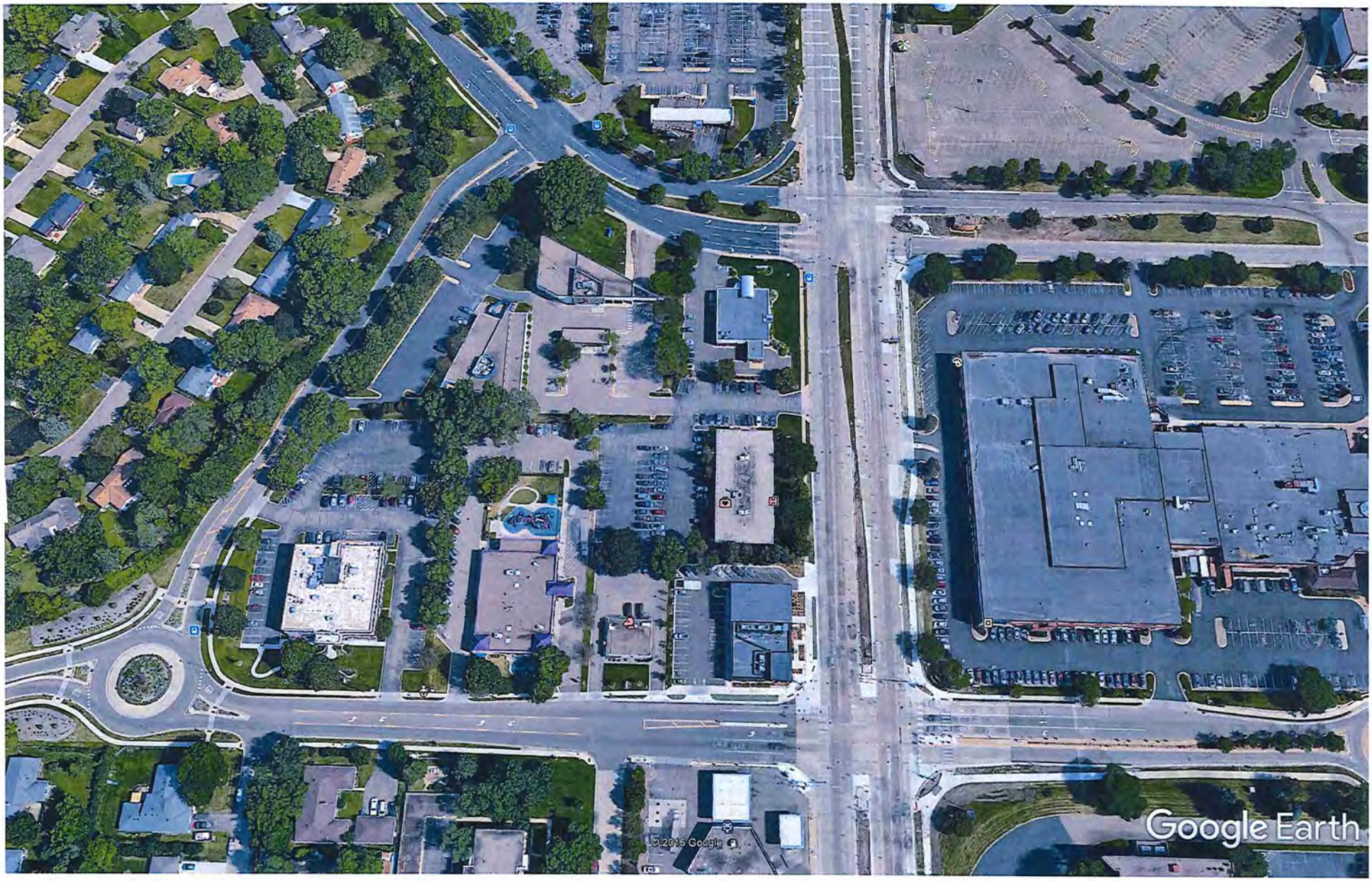
0 0.5 Miles

* Height may be increased to six stories & 75 feet if podium height is utilized on York and Xerxes subject to review and approval of the City Council.

Google Earth

feet 2000
meters 600

A3



Google Earth

feet 800

meters 200

A2

A4

Google Earth

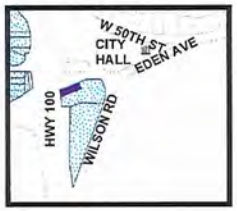
feet 1000

meters 400

A5

Building Height Overlay Districts
City of Edina
Hennepin County, Minnesota
Appendix A

WILSON RD & EDEN AVE DETAIL

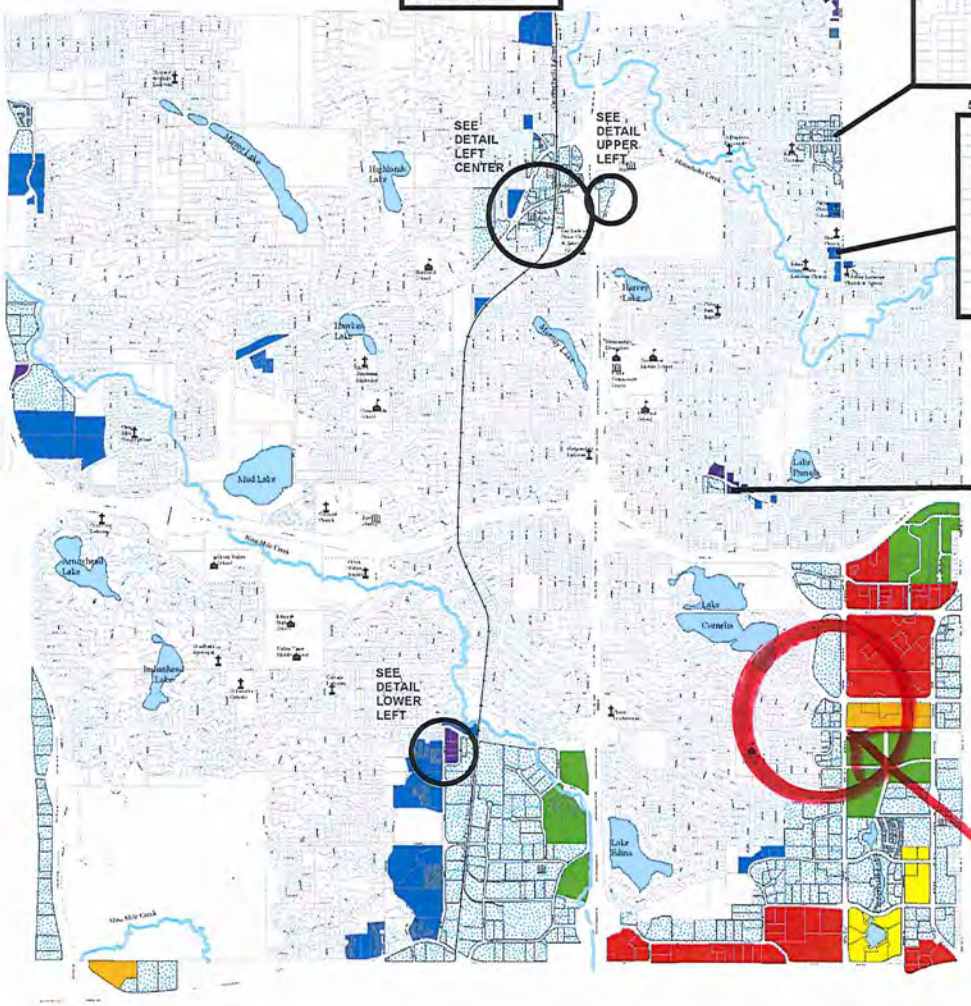


44TH & FRANCE DETAIL

50TH & FRANCE DETAIL

GRANDVIEW DETAIL

54TH & FRANCE DETAIL



Legend

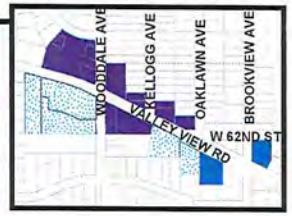
HOD-2	Building height shall be determined by required setbacks, but shall not exceed 2 stories or 24 feet, whichever is less.
HOD-3	Building height shall be determined by required setbacks, but shall not exceed 3 stories or 36 feet, whichever is less.
HOD-4	Building height shall be determined by required setbacks, but shall not exceed 4 stories or 48 feet, whichever is less.
HOD-8	Building height shall be determined by required setbacks, but shall not exceed 8 stories or 96 feet, whichever is less.
HOD-9	Building height shall be determined by required setbacks, but shall not exceed 9 stories or 108 feet, whichever is less.
HOD-10	Building height shall be determined by required setbacks, but shall not exceed 10 stories or 120 feet, whichever is less.
HOD-12	Building height shall be determined by required setbacks, but shall not exceed 12 stories or 144 feet, whichever is less.

Church
City Buildings
Private School
Public School

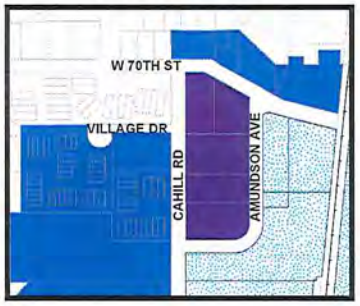
N W E S

Planning Dept
December, 2013

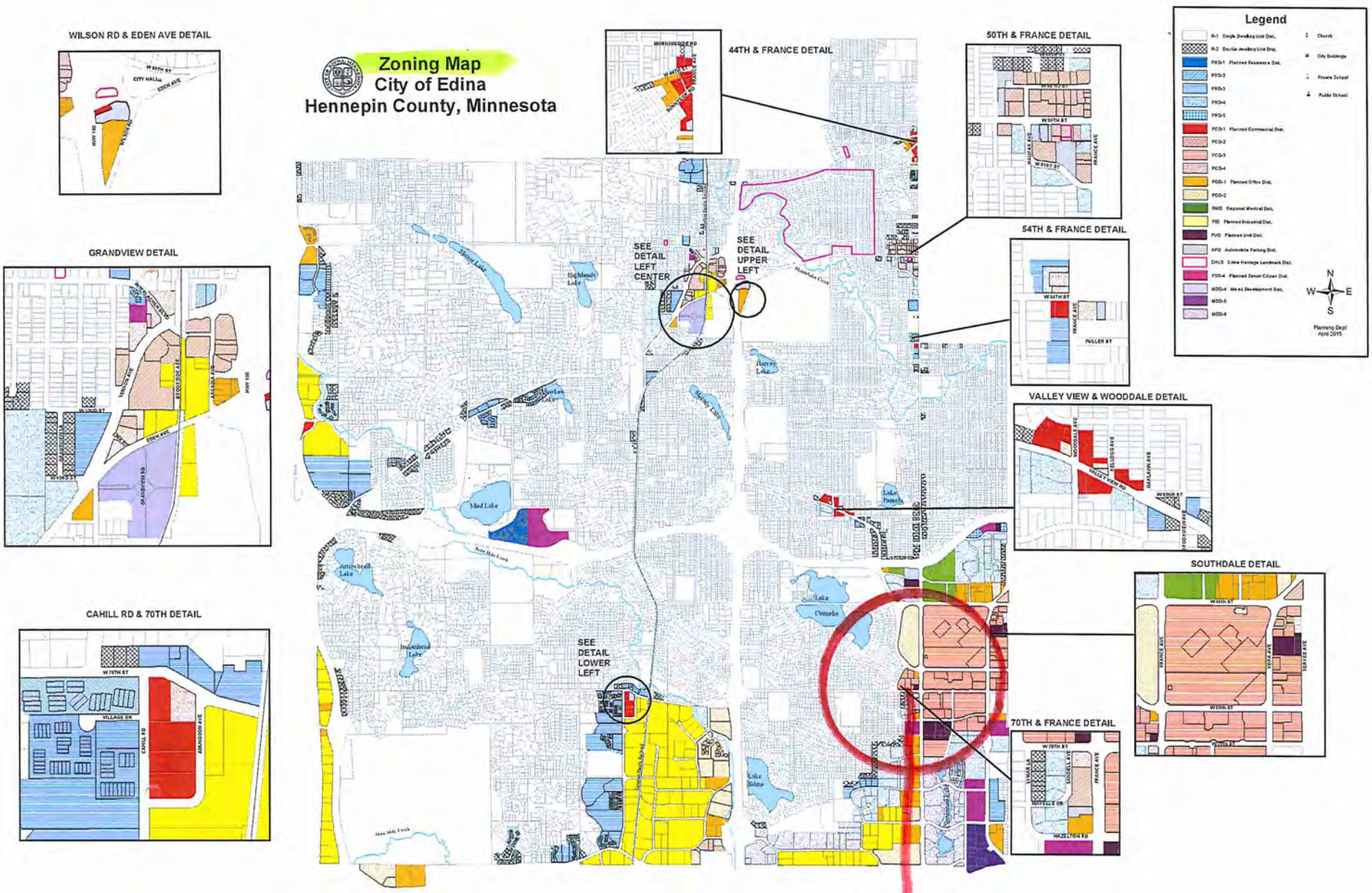
VALLEY VIEW & WOODDALE DETAIL



CAHILL RD & 70TH DETAIL



Zoning Map
City of Edina
Hennepin County, Minnesota



Site
PCD-3 + POD-1

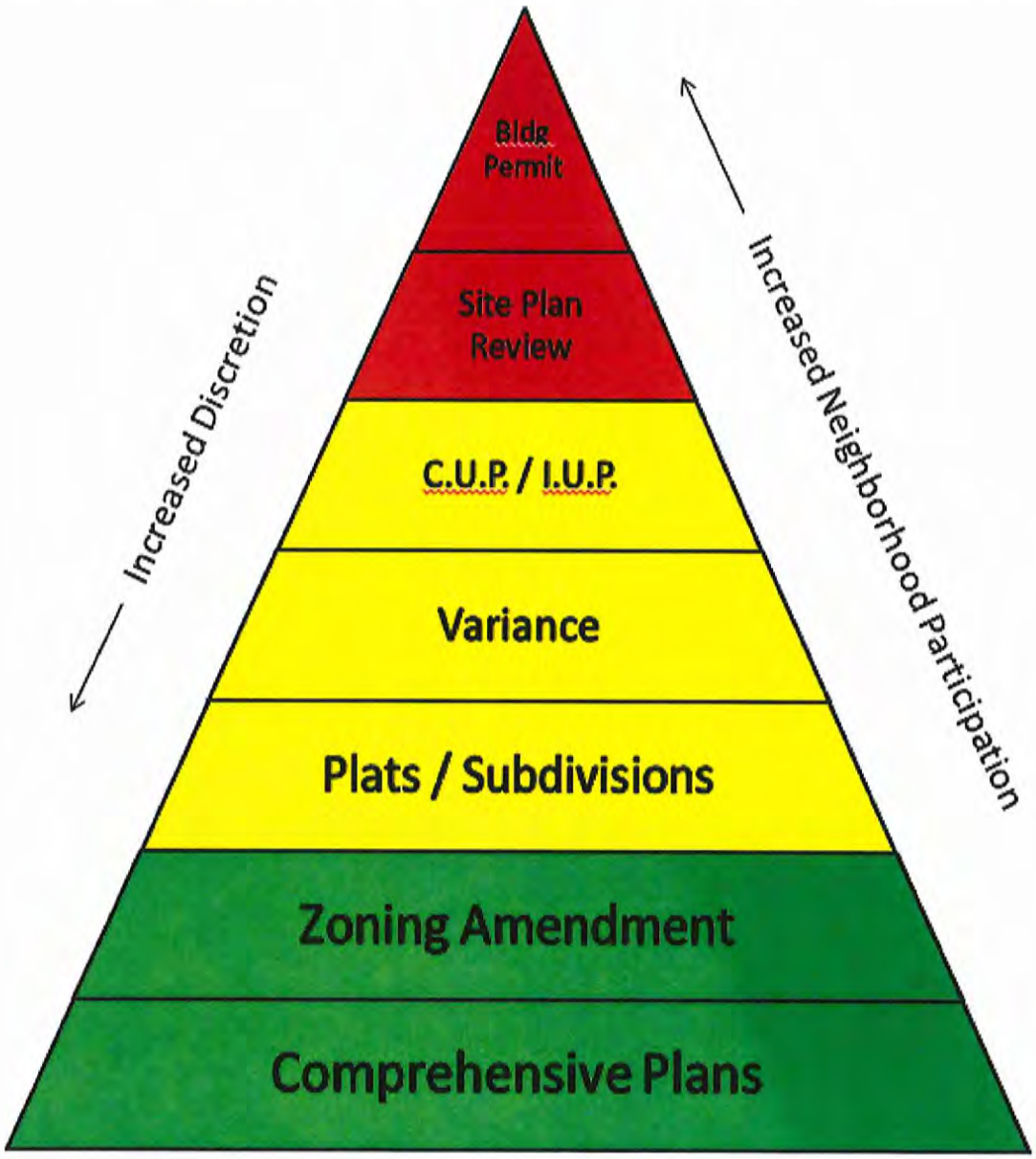
A6

MINNESOTA STATUTES

462.355 ADOPT, AMEND COMPREHENSIVE PLAN; INTERIM ORDINANCE.

Subd. 3. Adoption by governing body. A proposed comprehensive plan or an amendment to it may not be acted upon by the governing body until it has received the recommendation of the planning agency or until 60 days have elapsed from the date an amendment proposed by the governing body has been submitted to the planning agency for its recommendation. Unless otherwise provided by charter, the governing body may by resolution adopt and amend the comprehensive plan or portion thereof as the official municipal plan upon such notice and hearing as may be prescribed by ordinance. Except for amendments to permit affordable housing development, a resolution to amend or adopt a comprehensive plan must be approved by a two-thirds vote of all of the members. Amendments to permit an affordable housing development are approved by a simple majority of all of the members. For purposes of this subdivision, "affordable housing development" means a development in which at least 20 percent of the residential units are restricted to occupancy for at least ten years by residents whose household income at the time of initial occupancy does not exceed 60 percent of area median income, adjusted for household size, as determined by the United States Department of Housing and Urban Development, and with respect to rental units, the rents for affordable units do not exceed 30 percent of 60 percent of area median income, adjusted for household size, as determined annually by the United States Department of Housing and Urban Development.

Public Discretion in the Land Use Process



Roger N. Knutson
Campbell Knutson, P.A.
860 Blue Gentian Road, Suite 290
Eagan, Minnesota 55121

RYAN

Estelle Edina Project Narrative

September 13, 2017

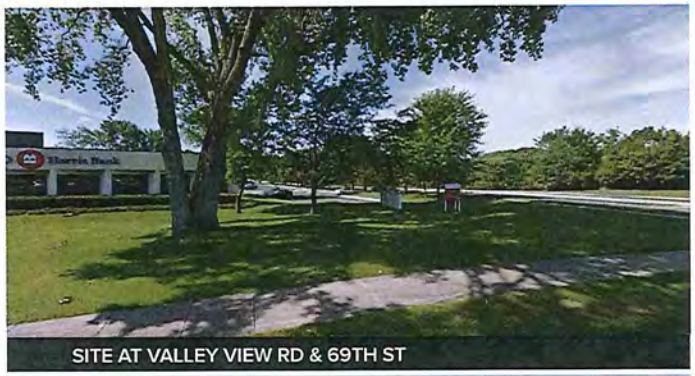
INTRODUCTION

Luigi Bernardi, a Lake Cornelia neighborhood Edina native, has partnered with Ryan Companies, a national developer, architect and design builder based in Minneapolis, to present a project that signals an important new direction for the Edina community and Southdale district.

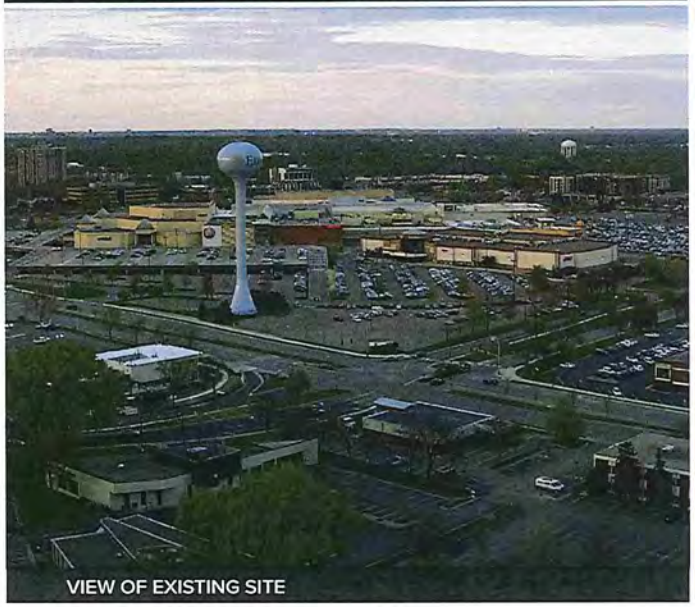
Estelle Edina builds upon the Lake Cornelia neighborhood and Southdale area's existing assets while introducing a walkable, connected, mixed-use, and architecturally-varied development of extraordinarily high quality. The first of its kind in a decade, Estelle will be home to luxury owner-occupied condominium residences including 20% affordably priced units, six brownstones, a public plaza, a fountain surrounded by seating, and neighborhood retail, including a signature restaurant at the corner of France and 69th Street

WHY APPROVE ESTELLE EDINA:

1. $250 million total value is one of the most significant investments in the history of Edina
2. Overwhelming citywide resident and business community support for the project; substantial neighborhood support
3. Compelling affordable housing solution
4. Provides a living option currently not available to Edina residents who are looking to downsize. Without projects like Estelle, those residents will leave the City.
5. Inspired by the guiding principles of the Greater Southdale Area Work Group and realizes Victor Gruen's original vision for density on this block and others surrounding Southdale
6. Enables the creation and continuation of the 'Promenade West'
7. Unprecedented levels of green space, landscaping and pedestrian-oriented experience
8. Will not be detrimental to nearby property values, in fact it may enhance them (see Shenehon report)
9. Does not create a meaningful traffic challenge (see Spack report)
10. Significant net new City tax base and Edina schools tax base
11. Replaces unattractive buildings and surface parking lots with new, distinctive, and iconic architecture
12. Creates new opportunities for stunning public art



SITE AT VALLEY VIEW RD & 69TH ST



VIEW OF EXISTING SITE

EXISTING AREA

The Greater Southdale Area is an iconic district in the Minneapolis / St. Paul region. As the first enclosed shopping center in the United States, Southdale holds a special place of pride in the hearts of not only Edinans, but of Minnesotan's at large. Building upon the success of this shopping destination, the Galleria was built in 1976 and has served as the preeminent luxury shopping destination of the upper Midwest. Beyond a retail destination, the area is also home to the Fairview Southdale Medical campus, which offers best-in-class medical care ranging from outpatient clinics to a full service hospital as well as Centennial Lakes, a notable mixed-use district offering a range of housing, retail and recreational uses.

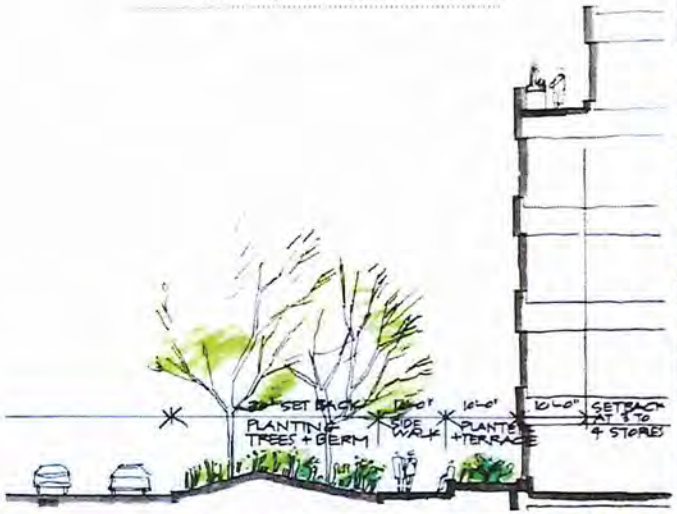
Beginning in Centennial Lakes and working its way north, The Promenade is a linear park that includes seating and activity destinations along its route. The Promenade provides a much needed break to the large "superblocks" that span from France Ave to York Ave, as it currently connects the southern end of Centennial Lakes to the Galleria. There is a desire to continue The Promenade further north to further break down the superblocks of the area and provide better connection between the Southdale district assets.

As The Promenade has become an important north/south thread through the greater Southdale district, an opportunity emerges to reimagine activity and connections west of France Ave.

With the right economic forces and a planning vision for the future, properties west of France now have the opportunity to continue the momentum of successful development in the area and build a new network of activity and connections. France Ave is ripe with opportunity for a re-imagined streetscape, one that promotes pedestrian and bike activity, a greater mix of active uses and an enhanced landscape that offers beauty, quality and vitality for decades to come. Furthermore, with changing demographics and the increasing desire to live in active, mixed-use environments, market forces are suggesting that France Ave could become the next owner-occupied neighborhood in Edina; an owner-occupied district that elevates the quality of life in the area throughout the week and year.

Estelle Edina elevates the currently underutilized parcels southwest of the France Avenue/ 69th street intersection by introducing a higher density mix of uses in a manner that help to shape the France Ave of the future. The project is a collection of owner-occupied residences and retail to create activity and beauty along the street as well as internal to the block, providing connections to neighboring blocks and offering enhanced environments to live, work, shop, dine, walk, bike... or just to pause and enjoy the moment, day or night. Estelle Edina plants a flag at perhaps the most prominent intersection in Edina. It is a development that celebrates the success of the district's assets as it sets a new direction of vitality, beauty and quality.

Conceptual street section from Greater Southdale Area Planning Framework Work Group



NEW LANDSCAPING ON 69TH STREET

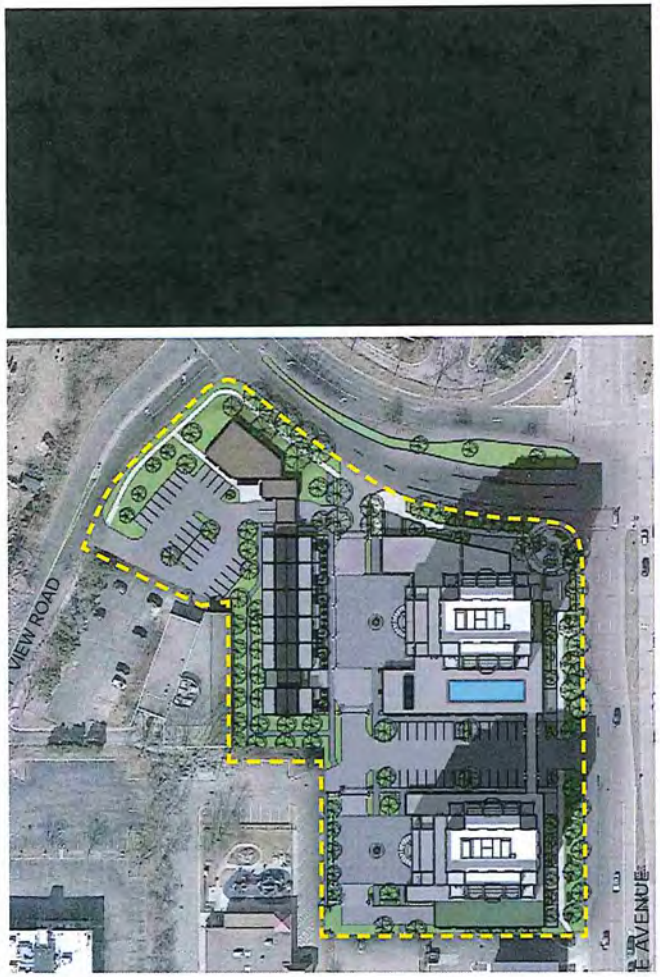
PROMENADE WEST

THE GREATER SOUTHDALE AREA WORK GROUP

Purpose: The Greater Southdale Area Work Group was created by the city of Edina in 2015 to establish what Edina of the future should look like, as a 21st century first ring suburb. The work group is composed of individuals appointed by the city who collectively represent leadership in the realms of civic, commercial, and residential interests. Through a process of research, discussion, collaboration, and interaction, this group established a set of guiding principles to be considered as part of the comprehensive development plan for the Greater Southdale Area.

Vision: 9 guiding principles were established, which in turn distilled down to very brief statements that convey the overarching vision through tangible reference points. Those vision points are:

- Build upon existing assets
- Improve access
- Walkable
- Human-scaled
- Architecturally varied
- Mixed-use
- Family-friendly
- Green
- Summer City
- Winter City
- Connected
- Destination



RESPONSE TO VISION PRINCIPLES:

Build upon existing assets
- Connections to Galleria, Southdale, Promenade, Lake Cornelia, Bike Trails

Improve access
- Better connection from Cornelia neighborhood to France Avenue and associated amenities

Walkable
- Pedestrian-friendly setback and landscape along France and 69th
- Pedestrian-friendly internal streets and motorcourt
- Open green spaces with publicly accessible walkways

Human-scaled
- Pedestrian scaled plinth at base of residential

Architecturally varied
- Multiple masses with varied heights, separated by streets

Mixed-use
- Residential, retail, public uses in and around site

Family-friendly
- Pedestrian scale, traffic calming measures, public plaza, and variety of uses on site make project great location for users of all ages

Green
- Significantly enhanced landscape buffer along France Ave and 69th Street
- Stormwater management shift from currently being fed into city system to fully maintained within site boundary

Summer City
- Water features and landscape to engage street life and encourage public use and interaction
- Outdoor restaurant seating at corner for vibrancy and activity

Winter City
- Restaurant activity visible from exterior

Connected
- Easy access to Galleria and Southdale
- Vehicular access from 69th, Valley View, and France
- Bike trail directly accessible on 70th
- Great pedestrian connection experience for residents of Cornelia Neighborhood

Destination
- Builds on Galleria as luxury destination / location
- Mix of uses brings a diverse mix of residents, customers, and visitors to site throughout day/night and weather cycles
- Visibility of project as landmark serves as an orientation device and point of reference for geographic area

PROGRAM SUMMARY (PHASE 1)

- 11,000 SF of retail (Restaurant, Office, Bank)
- 6 Owner Occupied Townhomes
- 92 Owner-Occupied vertical residences (including 20 affordable units)
- France avenue vegetation and landscaping improvements
- Public plaza amenity on hard corner of 69th and France

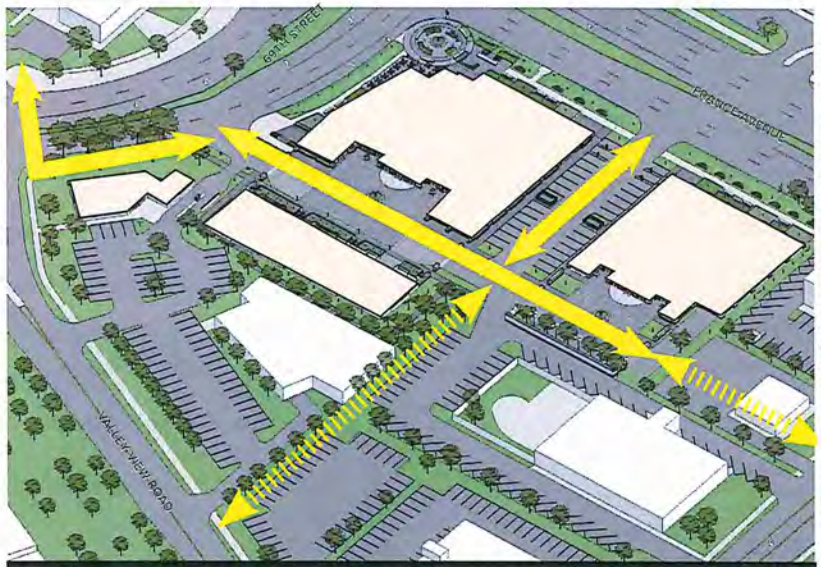
The project design intentionally eases the transition in scale and density from the Cornelia Neighborhood to the west toward France Avenue by building up in scale in the east/west direction.

The podium of the building extends out from the residential floorplates at the ground floor to embrace the sidewalks at a pedestrian scale with single-story retail storefronts that interact with the landscaped planters between the building and the sidewalk. Inside the site, but to the east of the BMO Harris site, the architecture steps up to 4 story owner-occupied townhomes. These have enclosed parking at grade that is kept out of site from the pedestrian experience. Across the motorcourt from the townhomes and stepped in from the podium is the residential volume that extends upward. This mass includes 24 inhabitable floors, which have been intentionally kept small for a slender, elegant form to the building. At several levels the massing steps further away from the edge of the building to add character and drama to the skyline, as well as reduce shadow impact on the surrounding area.

As an owner-occupied use, this project has a lasting benefit to the community in terms of extended connection to the area, and owners that invest long-term in their community and the area around them. Unlike apartments, which have frequent turnover and lack the permanence of a traditional neighborhood, these owner-occupied homes will be actively lived-in and used on an ongoing, consistent basis.

This project is an attractive relocation option for current Edina residents that want to stay in the community without the maintenance concerns of a single family home, but are unwilling to accept the current apartment offerings that are available. By freeing up existing single-family housing stock, this opens up new opportunities for population growth by providing existing homes for families looking to move to Edina.

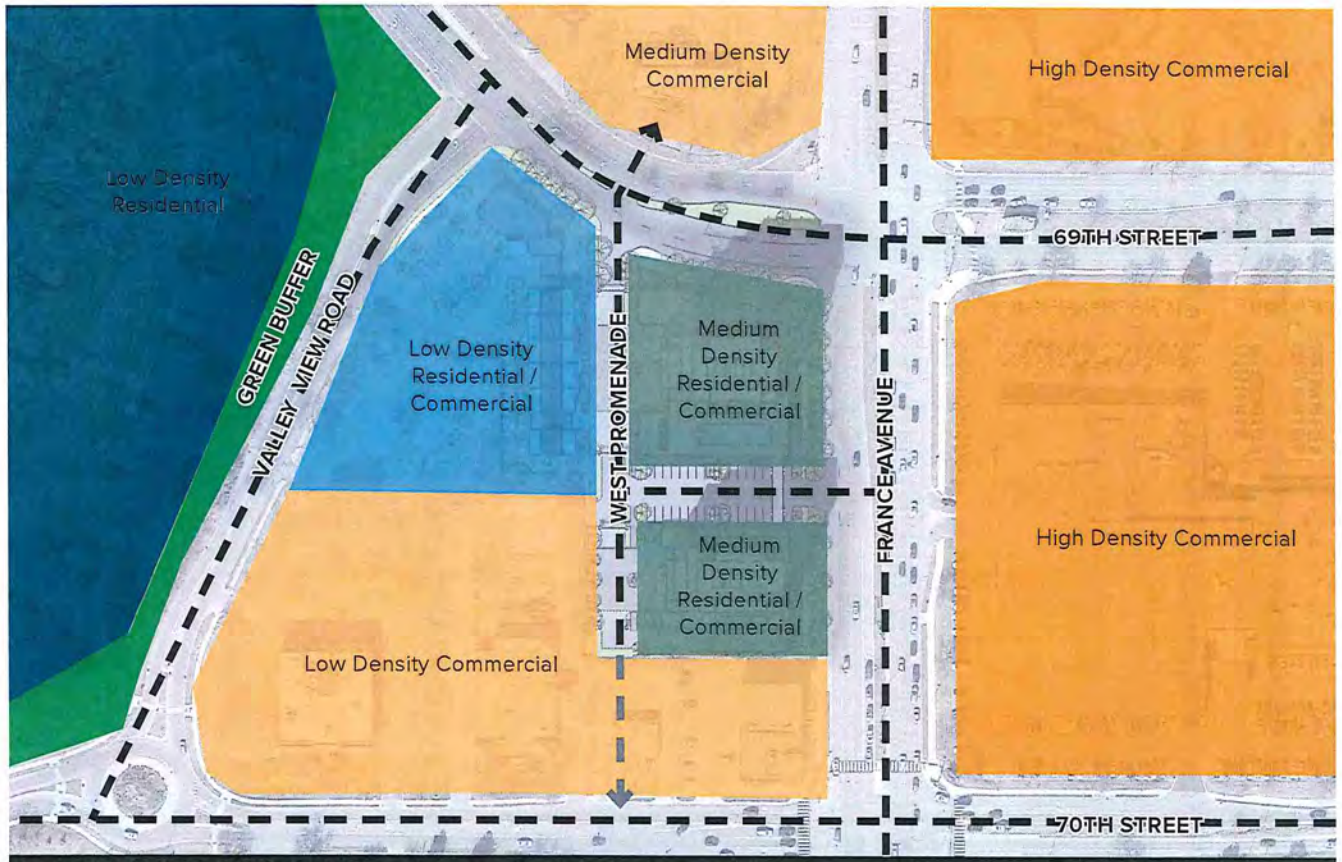
As the first project in the Southdale area to be approved and entitled with the new comprehensive plan in mind, this dramatic project with very intense effort put on an attractive, inspiring design that sets the right tone for how future developments can embrace the tenets set forth by the Greater Southdale Area Work Group.



BREAKING DOWN THE SUPERBLOCK

TRANSITION

Estelle offers a unique and relevant transition between the Cornelia neighborhood to the west and the commercial intensive uses east of France Ave. With owner-occupied residences and retail on the ground floor, Estelle transitions the residential to commercial districts with a pedestrian-friendly mixed-use environment. Height transition also occurs within the proposed development, with townhomes to the west and a one story retail base extending to the north and east of the tower.



NEIGHBORHOOD DENSITY DIAGRAM

A14

SURROUNDING NEIGHBORHOOD

In response to concerns expressed during the Sketch Plan Review, Shenehon and Spack Consulting were asked to analyze the impact of the Estelle Edina development on the adjacent neighborhood. The findings of the study indicate minimal or positive impacts for all areas.

Property Values:
Shenehon conducted market research on single-family property values near recently constructed large developments in the West Metro and discovered that, in a majority of cases, the property values were not negatively impacted within four years of the new development.

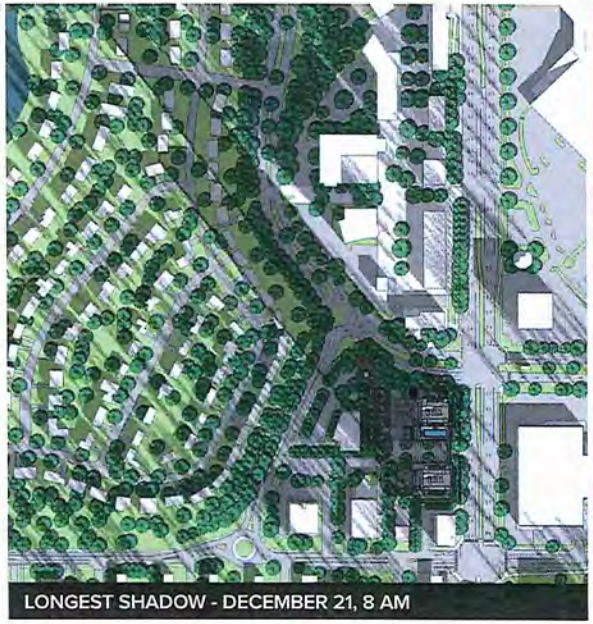
In fact, the property values could be positively impacted by the increased offerings and improvement in amenities in the local marketplace, especially considering the adjacency to an already vibrant commercial district.

Traffic:
The development proposal shows the main vehicle access point on France Avenue, with two smaller driveways on West 69th Street and Valley View Road. As a result, the majority of the traffic would remain on France Avenue.

The analysis concluded that the proposed development is in keeping with the surrounding commercial district, and neither noise nor traffic concerns would severely alter the existing nature of the neighborhood and nearby homes.

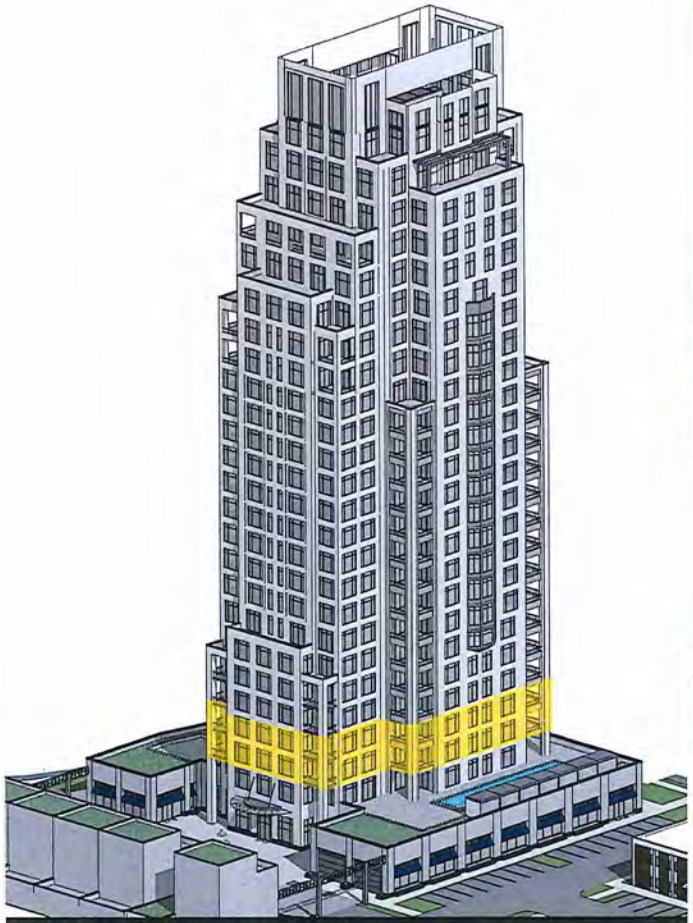
Views & Shadows:
The nearest single-family homes are approximately 450 feet away across Valley View Road, with existing mature vegetation as a natural buffer. Even in winter, the woody parts of the trees and brush will provide screening.

The towers have been designed to taper as they rise, to limit shadows on surrounding properties. Both the tower massing and the intermediate vegetation result in a minimal impact on neighboring homes.

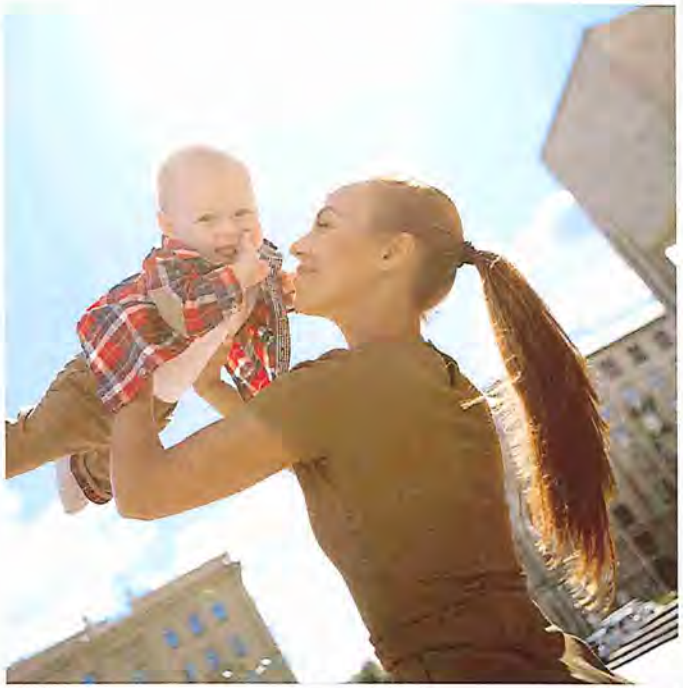

LONGEST SHADOW - DECEMBER 21, 8 AM


SHORTEST SHADOW - JUNE 21, 8 AM

A15



AFFORDABLE UNIT LOCATION



Estelle Edina's integration of 20% affordable for-sale units presents a once-in-a-generation opportunity to offer new choices to thousands of Edina residents who are increasingly priced out of the city.

AFFORDABLE HOUSING

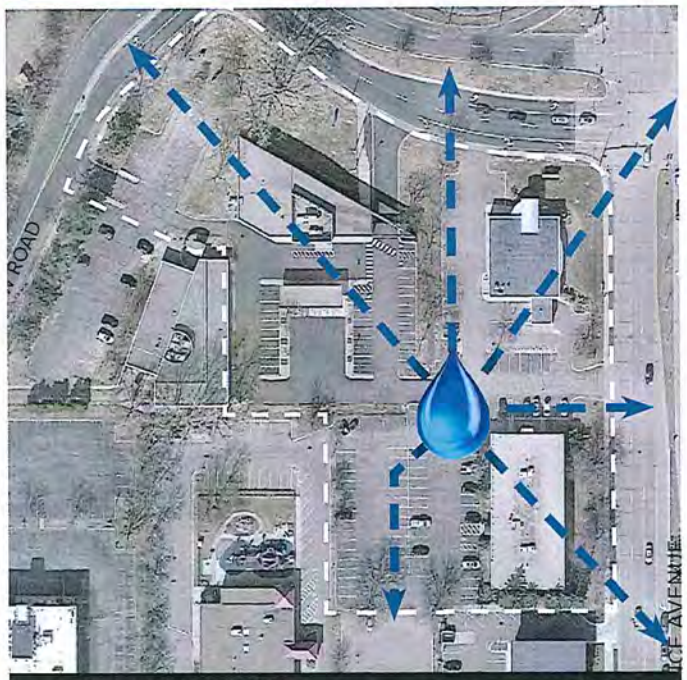
More than 98% of Edina's 23,000 housing units are considered unaffordable for a four-person family making $48,840 a year or less[1]. Increasingly, Edina's teachers, police officers, firefighters and medical workers are unable to live in the city they serve. Jobs may go away if workers cannot find housing nearby.

Further, Edina seniors ages 65+ with incomes under $50,000 represent more than 3,700 households[1]. Options for them to downsize to affordable and maintenance-free owner-occupied housing are extremely scarce within the city. As a result, longtime Edina residents are increasingly leaving the city for metro area communities with more choices.

Estelle is pleased to provide 20% of its units (2x the City Policy requirement) to be affordable to residents earning $48,840 and less. A combination of 2 bedroom and 1 bedroom units will be integrated within the towers. 20 units are incorporated in Phase 1, and 15 will be planned for Phase 2.

No other luxury Twin Cities condo towers (including Westin Galleria, The Carlyle, Grant Park, Phoenix on The River, and The Landings in Wayzata) offer affordably priced units at restricted sales prices. Not since Edinborough Park of Edina has there been such a forward-thinking, innovative housing solution in the market that solves a real need, present and future.

[1]Source: Marquette Advisors



EXISTING STORMWATER

PROPOSED STORMWATER

SUSTAINABILITY

Estelle Edina addresses all three aspects of sustainable development by adding community amenities, boosting the local economy, and minimizing environmental impacts.

- Multifamily housing is inherently more energy-efficient than single-family detached housing.
- High density developments near public transit and amenities create a strong community network and reduce transportation resource usage
- Proposed landscaping is heavily vegetated, reducing stormwater runoff and urban heat island effect.
- All stormwater will be treated on-site, reducing demand on existing stormwater systems.
- The public plaza and street-level amenities encourage pedestrian activity.
- High-quality exterior materials like stone and architectural precast are low-energy, low-maintenance, and long-lasting. They will create a durable and energy-efficient building shell, suitable for the Minnesota climate.

COMMUNITY SUPPORT

The Ryan/Bernardi team has been deeply engaged in community outreach in the Southdale Corridor, Lake Cornelia Neighborhood, and with residents and business owners throughout greater Edina.

Prior to Sketch Plan Review, concept plans were presented and discussed with over 50 neighborhood residents on May 11th and May 18th at Think Bank, Edina.

Estelle Edina was presented to the Economic Develement Commission of the Edina Chamber of Commerce and discussed. The team also met with the Greater Southdale Area Work Group and had an on-going dialogue with several key members.

Over the summer, the team knocked on the doors of more than 50% of the homes in the Lake Cornelia Neighborhood, with a focus on the homes closest to the proposed development site.

- 67 signatures from Edina residents on a petition supporting the Estelle development
- 45 signatures of support from Lake Cornelia residents
- 95 letters of support have been sent to the city by Estelle supporters in Edina
- By September 27th our goal is to have knocked on the doors of more than 75% of homes in the Lake Cornelia neighborhood

"I feel that the Estelle project is exactly the type of development that is appropriate and needed to enhance the Southdale area and our greater community's sustained growth and dynamic viability into the 21st century... We have always wanted to provide a suitable buffer between commercial and single-family homes and I believe in the case of Estelle through its amenities the project does provide the intended buffer, especially when tempered by the need to help ensure a dynamic future for the the Southdale commercial district... While the Estelle project is just one project for consideration, it signals an important new direction for our Edina community."

- Dennis Maetzold
Former Mayor of Edina

ESTELLE MOTOR COURT

"I have been following the Estelle Edina project and the worry of some about the height of the two proposed towers. The height of buildings can be an issue in an historic district or when tall buildings get constructed immediately adjacent to people's backyards, but neither is the case here. This project replaces a lot of surface parking and some low-rise buildings and is far enough away from any residential area that might be unduly affected by any shadows cast by the two towers. Tall buildings when well designed and well situated, as is the case with Estelle Edina, are a great testament to the confidence people have in the future of a community. Rather than see the height of these two towers as a problem, I think the people of Edina should be proud that there exists that much demand among potential condominium owners to want to live in the community. Estelle Edina will greatly enhance the Southdale district and greatly benefit the City of Edina. I urge the city not to miss this opportunity. I know that Victor Gruen would strongly support Estelle Edina as the kind of development that will help ensure the financial health of the mall, especially in an era in which online shopping has begun to threaten the viability of bricks-and-mortar retail."

- Thomas Fisher
Metropolitan Design Center
University of Minnesota

"As Edina homeowners who live on Southdale Road directly next to the proposed Estelle Edina development, we are writing to express our support for the project.

We have met with members of the Ryan Companies and their support staff, they have thoughtfully and kindly been meeting with us and other neighbors near the proposed development. I have appreciated the time they have taken to answer our questions and listen to our concerns.

We believe Estelle Edina will transform a block that currently is ugly looking bank drive-through lanes into a community asset that is walkable. This is what we are most excited about. We love the idea of being able to walk to more local restaurants and shops. This is one of the reasons we decided to move to our current house.

Neighborhood concerns are understandable and we had a number of them ourselves, but we believe the development team is listening to those concerns and doing everything possible to address them. While this project would be taller than any buildings currently in Edina, the combined towers have a smaller footprint than the Westin, which has now been open for more than 8 years. We believe that Estelle Edina has the potential to be a prestigious building/complex that will offer more to people of the Lake Cornelia neighborhood than the Westin with all the proposed shopping, restaurants and public spaces.

We have been told the slender, "needle" towers will help minimize the impact of shadows on homes including ours. This was a big concern of ours. After hearing the engineers were able to shave 30ft off the top of the building, seeing perspective renderings and downloading an app that shows the Sun's path during different times of the year we don't see this posing much of an issue.

We are hopeful that you will work with the developers to move this project forward and turn the France Ave, Southdale and Galleria area into the shopping and restaurant hub we want it to be."

- Cole & Brandi DeVries
6900 Southdale Road

"This is exactly the kind of development that Edina needs to maintain our community as a forward looking, exciting place to live, work and raise of children! As the former Chairman and CEO of Wells Fargo, Minnesota, I was involved when we chose Cesare Pelli to design the Wells Fargo Center in downtown Minneapolis. I am thrilled that the design of Estelle Edina looks a bit like the iconic tower that identifies the Twin Cities as one of the most progressive cities in the world. I have looked at the economics of this project and they appear to be outstanding from a Edina taxpayer's perspective. Please move forward with Estelle Edina. This is one of the most exciting projects that Edina has ever considered."

- James R. Campbell
5521 Woodcrest Drive

FRANCE AVENUE ENTRY

"In approving this project it would, in my judgement, provide in a most positive fashion more owner occupied housing choices for people who now desire to move from a single family detached housing environment. This in turn makes available that housing stock which has proven to be most desirable for young families which in turn greatly benefits our Edina School system, which, as we all know, is one of the cornerstones of our community. Additionally, I believe vertical growth is essential to capture the dynamics of the future as our city continues to move forward into the 21st century."

- Fred Richards
Former Mayor of Edina

"I wanted to send you this e-mail as an interested citizen who has lived in the Cornella neighborhood for the past 32 years. I have been actively involved in our community, including being a part of Edina Federated Women's Club – its president in 2014.

I think you have already heard from a very vocal minority of folks in my neighborhood expressing opposition to an upcoming project that I'm looking forward to seeing. I feel it is important for you to know that in my opinion, the majority of my neighbors welcome the proposed Estelle condo project and see it as a major improvement for that site and are happy about the significant benefits it brings to our great city. Clearly we need more empty nester condo housing options so we can free up the single family homes so that younger and growing families can continue to live and flourish in our city. Further, the number of units being proposed on this project will significantly increase the tax base and will support both our City and School district for many years to come. I have been told this is about $4M per year of additional local property tax revenue.

I also want to tell you that this is the most beautiful development I've seen proposed in Edina for as long as I've lived in the city – which has been since 1970. I love the park-like feeling I got when I saw the drawings. It felt so warm and welcoming. This is the kind of beauty – architecturally and aesthetically – that we'd love to see in Edina.

I'd like to conclude by saying that the height of the proposed condo buildings seem to be just fine with me – much better than a box-like structure. I love how slender and attractive they are – would love to live there myself. It would be an easy move as I live but three or four blocks west.

I've talked with a realtor friend and a near-by neighbor, who's a developer, and they're both in favor of cheering this project on. Please, as leaders of our great city, give it all the support you can."

- Arlene Clapp

6525 Cornella Drive

"I believe the Estelle project provides an opportunity akin to the one presented in the late 50s and 1960s when Southdale Center and the Fairview Southdale complex were created by future-looking and bold community business and government leaders. The Centennial Lakes development of the late 1980s and the creation of the Promenade represent more recent aspirational projects that required strong and forward-looking leadership and direction. An exceptional opportunity exists with the proposed Estelle project for today's community leaders to exhibit a similar bold and future looking commitment to the long-term health and quality of our uniquely endowed community.

An excellent community such as ours can go one of two directions. It can solidify and improve upon an existing strong base – or it can gradually drift towards the norm or the average, or worse. Once a community becomes mediocre and average one can only imagine how difficult if not impossible it would be to regain the former luster and appeal that once made it distinctive and appealing. Estelle would be the kind of addition to our community that would strengthen and build upon our strong base and maintain positive momentum."

- Don Hutchison

7260 York Ave. S #403

69TH & FRANCE AVENUE PLAZA

"As part of a family with a long history in Edina, and Edina resident I am sending this letter in support of the Estelle Edina Residential proposal from Arcadia and Ryan Companies. I believe a project such as this is just what the Southdale area and Edina needs. As my wife and I look beyond single family living there are very few choices for ownership that will keep us in Edina.

My parents in their late 80's live above the Westin hotel and this condominium life style has greatly enhanced their quality of life.

In addition, the Southdale area needs bold projects to enhance the area and maintain its vibrancy. The Art Deco style and 24 stories is a bold classic statement that would be an Iconic addition to the City. When completed it would provide a long term solution for we, who wish to remain in Edina after the single family home time of our life. In addition it would add tax revenue, and provide walkability to residents in adjacent neighborhood areas, who may enjoy the accessible retail, restaurants, and coffee shops. In conclusion, it is my hope you will support this project."

- Stephen J. Hedberg
Edina

"I believe that a plan as unique and of such high quality design and intelligent land use deserves recognition for what it offers as a major step forward. Edina's Greater Southdale area is experiencing an active period of redevelopment and transition of Edina's most highly valued properties. Over the past five to seven years, several new and redeveloped projects of multi-family residential, retail, hospitality, and other commercial uses have replaced buildings that responded to the original Southdale Center, built in the mid-1950's as the first enclosed mall retail center in the country.

Its bold and forward thinking developers not only created the centerpiece itself, but fostered a variety of projects that complemented and shared the success of Southdale Center. It truly identified Edina in the '50's and '60's as a forward thinking, high quality, progressive community with excellent schools, high quality neighborhoods, centrally located library and county service center, and an excellent regional hospital which gave life to active medical services located in its surrounding area. A great variety of businesses, both new and existing, sought to locate in the areas near Southdale extending their reach west to Highway 100 and south to Interstate 494. All of which served to create the laudable financial balance between Edina's residential areas and its strong and diversified commercial base.

We are now offered an opportunity by a team of developers who's prior generations have contributed to the preceding 50-60 years of growth and development in Edina. The unique design of the Estelle project, with its 10,000 square foot footprint that facilitates 4 units per floor, each a corner unit, will be a very desirable marketing feature of the property. But rather than offer a rectangular mid-rise block structure, the exterior will offer a tall, more slender and graceful presence on a corner, offering light and views between the towers. The smaller floor plate also creates opportunity for more green space and landscaping rather than a shorter building requiring much more ground coverage and restricted ground level views.

The possibility of a skyway-type connection to the Galleria Center across France Avenue addresses the often expressed desire for more "walkability" and "connectivity" in an area such as Southdale. The development team has created possibilities for those qualities as well as having been responsive to the City Council's initiative to foster diversity in the housing options in Edina by committing to offer 20 units of workforce housing within the structures of the Estelle project.

Edina's bold and forward looking leadership has traditionally seized the opportunity to create and foster innovation in property uses and design quality, and those who have followed through the years have generally tried to encourage similar results. However, in the past decade, many critics of what has been built in the Southdale area have cited some of the multi-family projects as lacking the quality that has been characteristic of Edina's previous high standards. Specifically that most of the projects look the same with little distinctive about their appearance or design uniqueness.

While judgment and opinions of appearance and quality are individual, Edina has always valued excellence in every aspect of the community's life and activities. To strive for continuing improvement in many areas of Edina's life is a continuing tradition, there is no reason not to encourage proposed projects that reflect bold and excellent design rather than reduce them to something acceptable, but less than outstanding, or even worse, lose them altogether when they challenge us to embrace high quality in "something new"."

James Nelson
7790 Lochmere Terrace

"Change is hard. As leaders in our community, you get to help guide and direct change in Edina. Thank you for your service to our community!

The development known as Estelle Edina introduces height into a commercial area formerly dominated by smaller buildings. Allowing height into this area will be challenging because there will be many who would prefer things to stay the same.

We've dealt with these issues before. We have consistently allowed more height into our commercial and retail areas to gain density that allows new resources and amenities for our citizens. These new buildings often provide living solutions for older citizens looking to "downsize". People love Edina and they want to be able to stay in Edina after their children have grown. As an older community, these types of facilities allow us to recruit younger families into our residential neighborhoods while giving the outgoing owners options as well.

In addition to housing diversity, density tends to allow for additional transportation resources and amenities such as restaurants and hotels. Our community in the aggregate benefits from these types of amenities.

I encourage you to be open to the benefits the Estelle Edina project can provide for Edina. "

- Scot Housh
Former Edina Council Member

Why Here? Why Now?

Since 2008, Edina has seen:

- 668 single family tear downs & rebuilds
- 0 New condos (despite pent-up demand)
- Loss of residents to downtown and Wayzata projects that offer more choices
- 98% of the city's 23,000 housing units are considered unaffordable to families earning under 60% of AMI

Aging of baby boomers/empty nester growth:

- Projected +80,000 persons ages 55-74 in Twin Cities 2016-2021
- Seeking housing / lifestyle balance – attracted to high-end multifamily ownership product that offers amenities, walkability, and connectivity
- New rental apartments are not providing quality and unit sizes that match current housing demand
- Edina has 3,700+ households over age 65 earning less than $50,000 per year; affordable condos are in scarce supply

Best condo location in the Twin Cities:

- 110% corner of Edina that needs revitalization and new tax base
- Walkability to Southdale medical services, Galleria, Centennial Lakes, Promenade
- Good neighborhood use that acts as transition from commercial to residential

Community Support:

- 67 signatures from Edina residents on a petition supporting the Estelle development
- 45 signatures of support from Lake Cornelia residents
- 95 letters have been sent to the city by Edina residents, business leaders, and former City officials supporting the Estelle Edina project


KEEP EDINA ON TOP
APPROVE ESTELLE EDINA

RYAN

WE BUILD STORIES

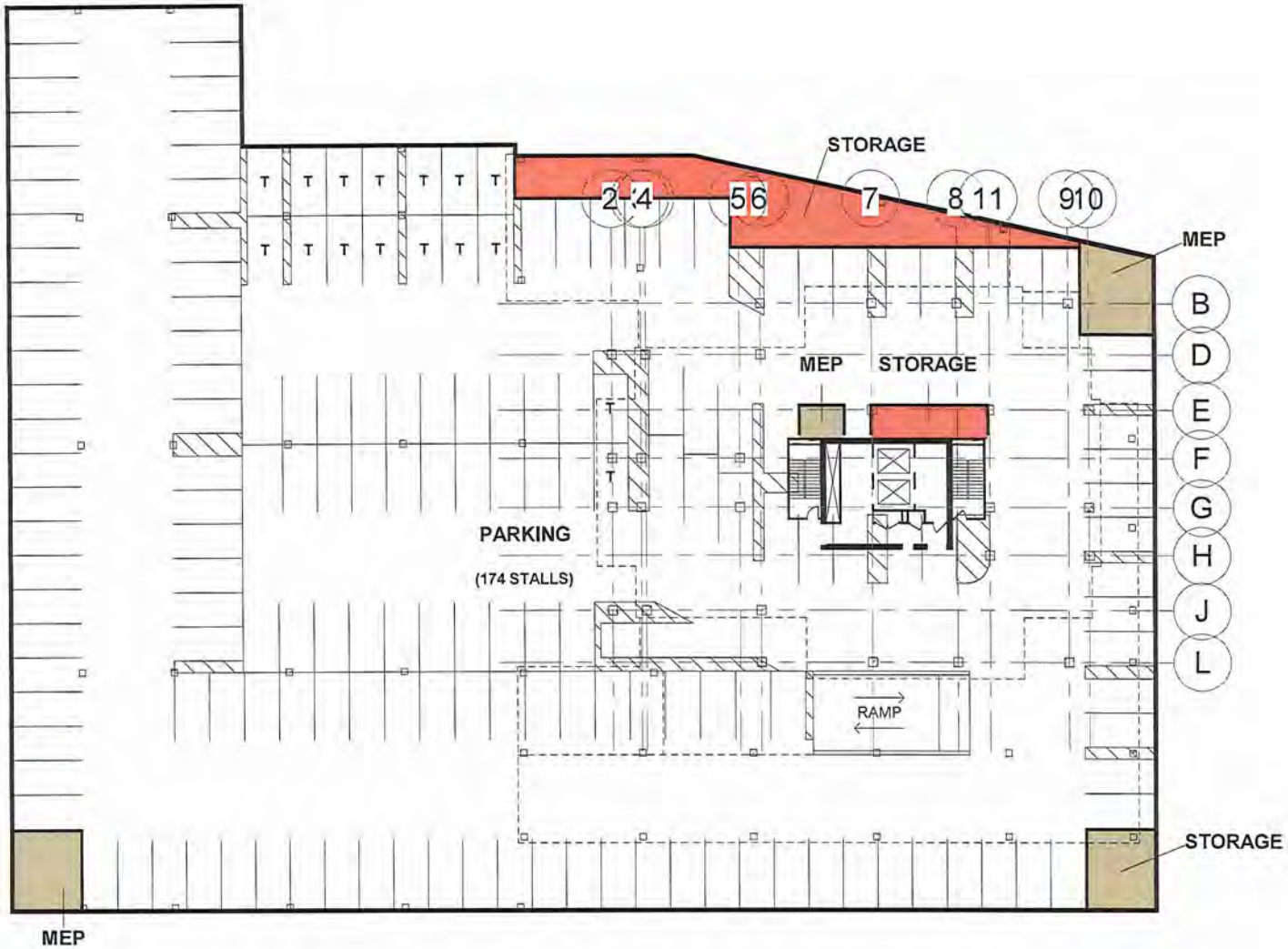
ARCADIA
On France, LLC

Estelle Edina

Concept Floor Plans
Edina, Minnesota

9.13.2017

A27



RYAN

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0 30 60

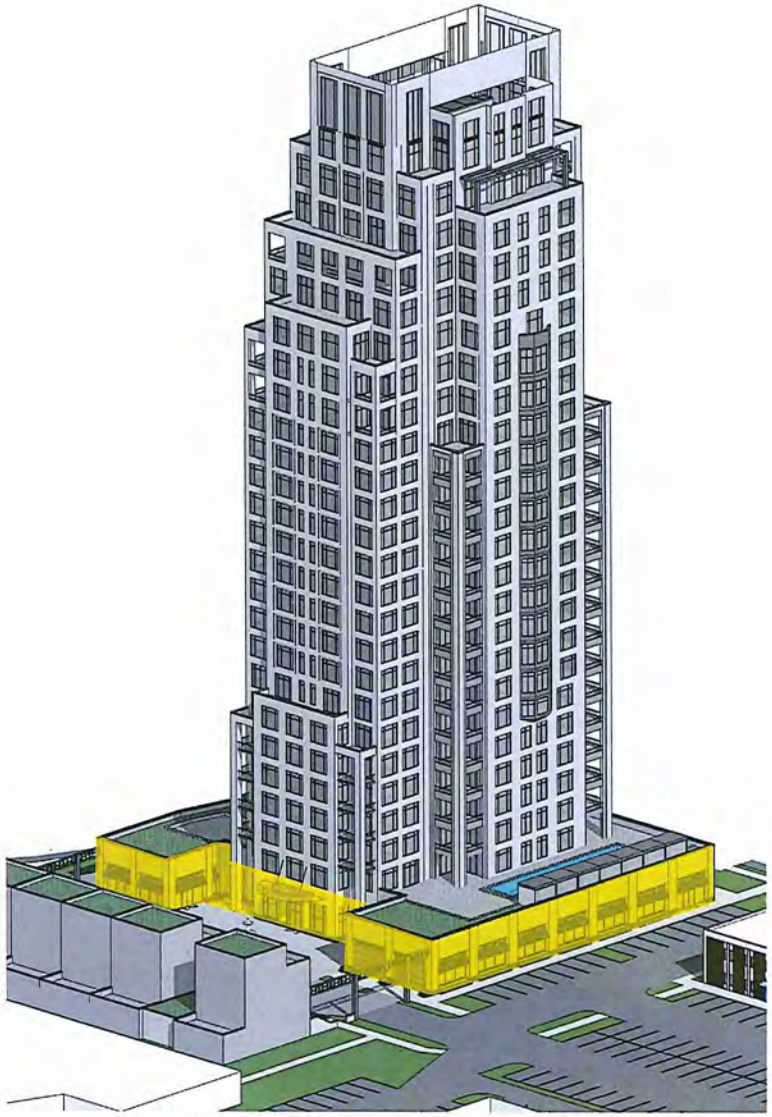
Estelle Edina Concept

Subgrade Parking Plan

NORTH

ARCADIA

A28



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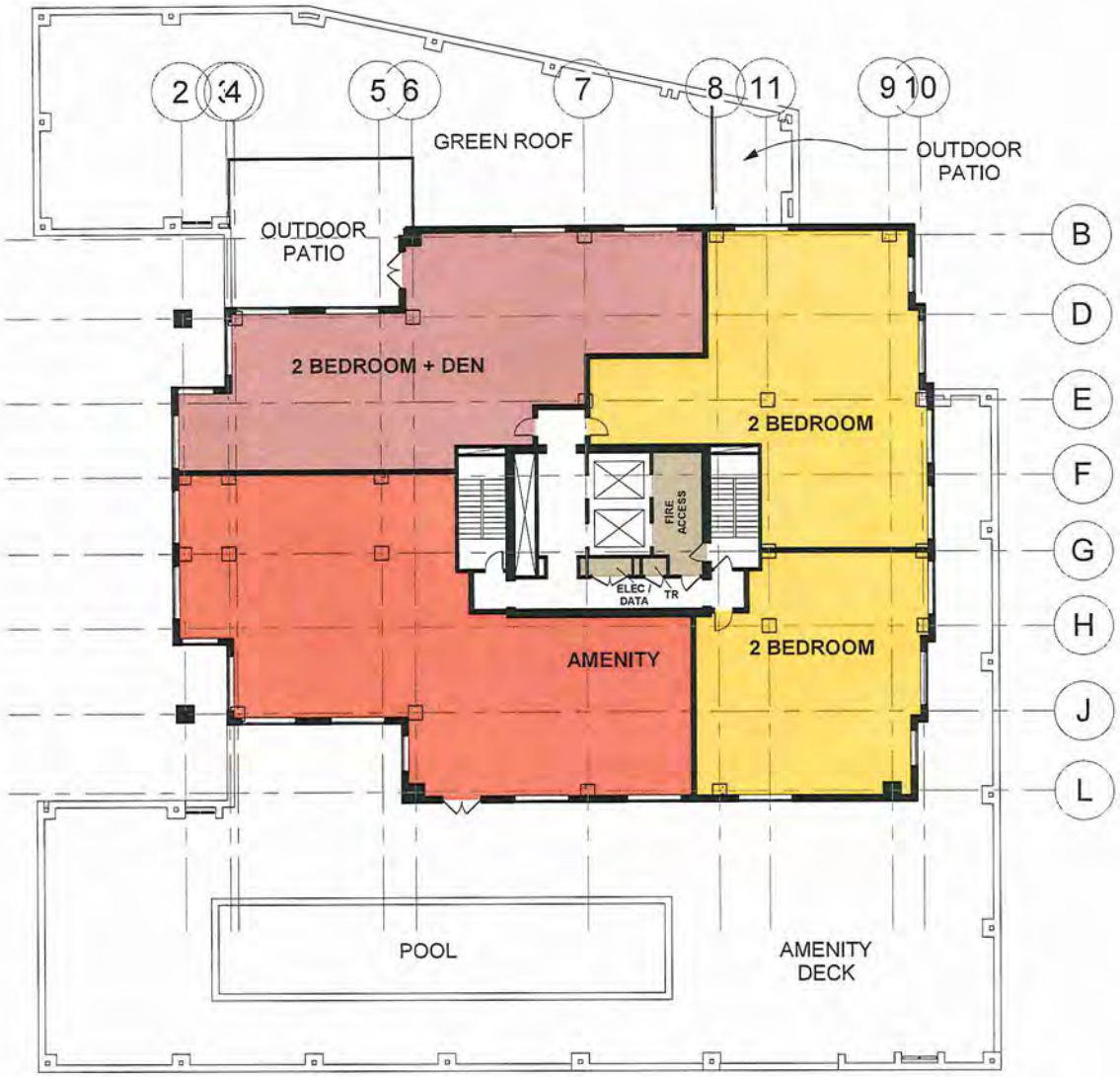
Estelle Edina Concept

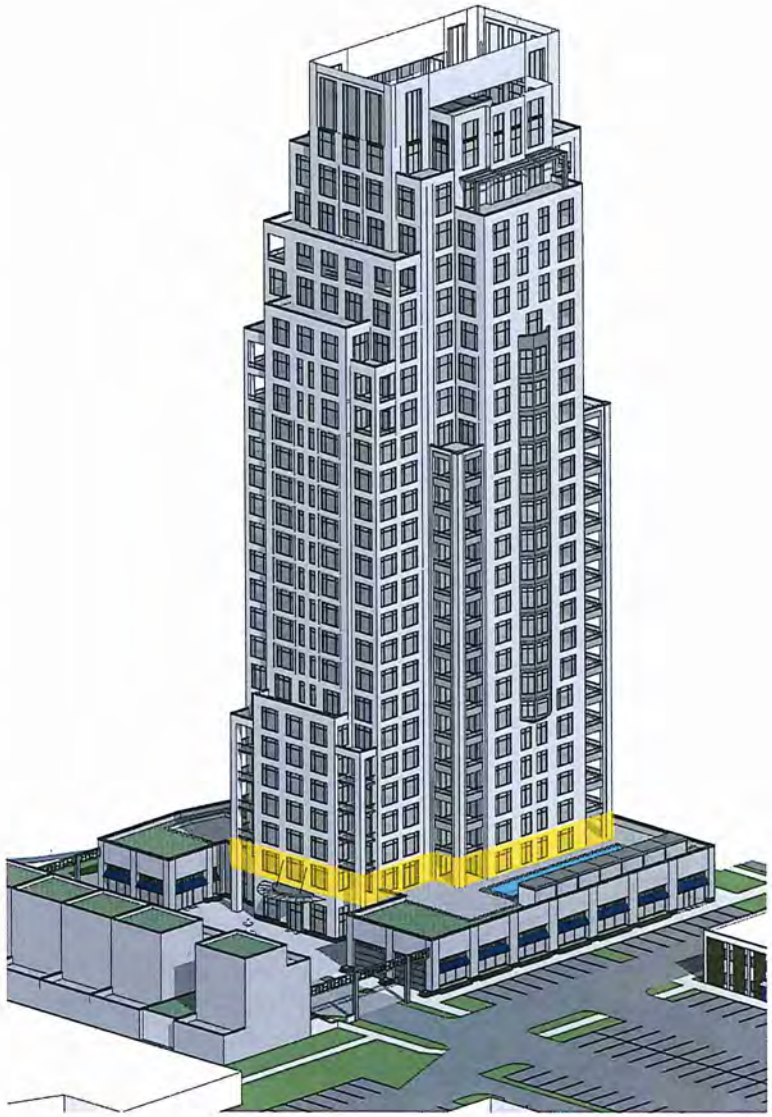
Ground Floor Plan

NORTH

ARCADIA
On France, LLC

A21





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Estelle Edina Concept

Amenity Deck Plan

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ARCADIA On Francc, LLC

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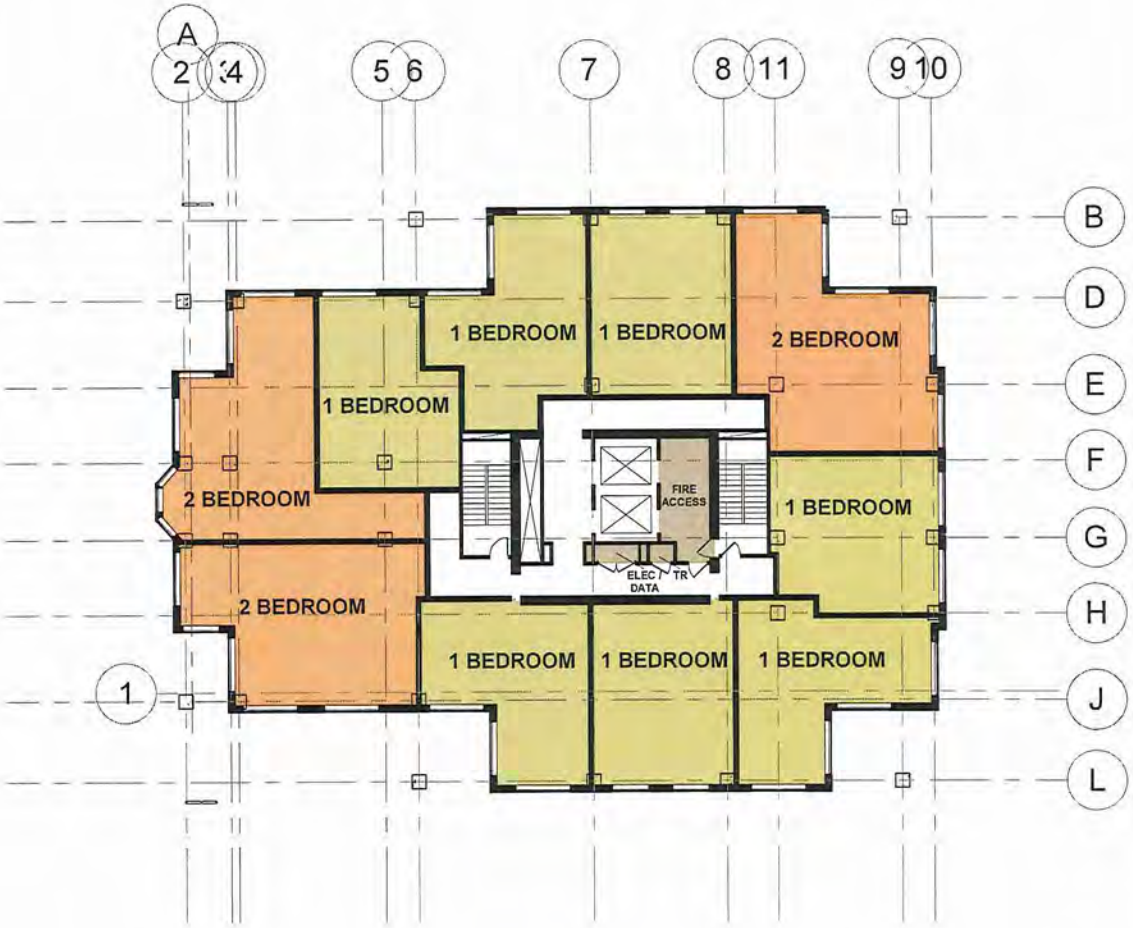

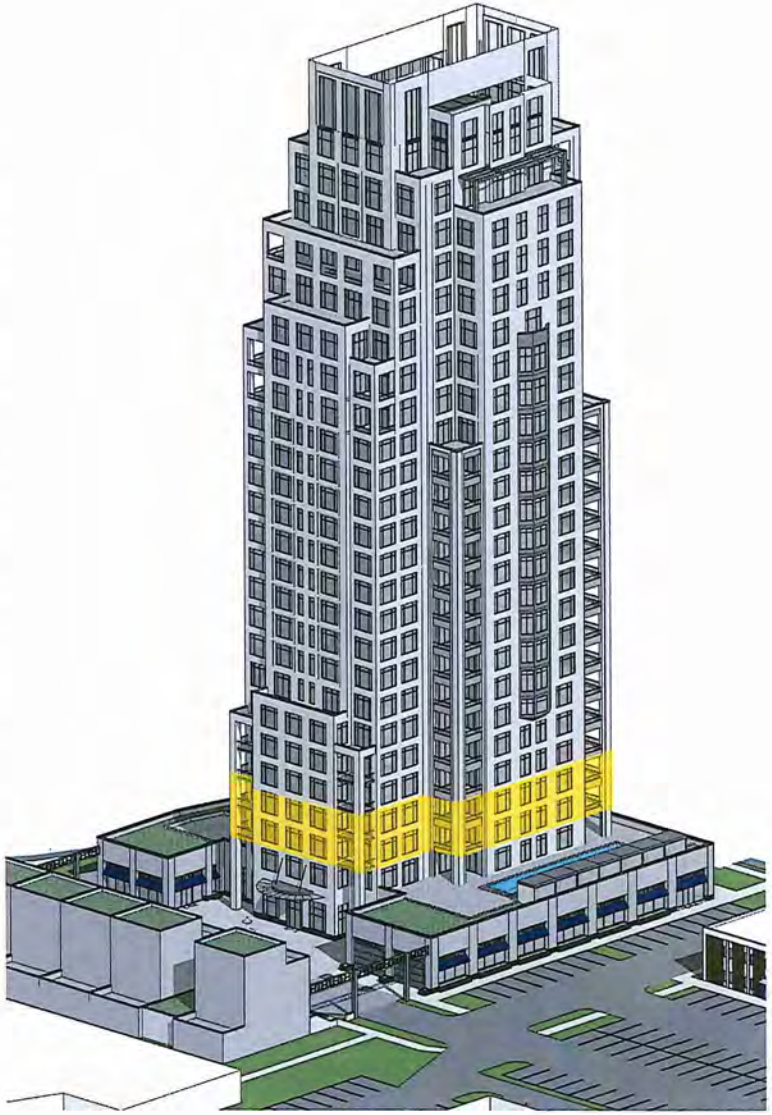

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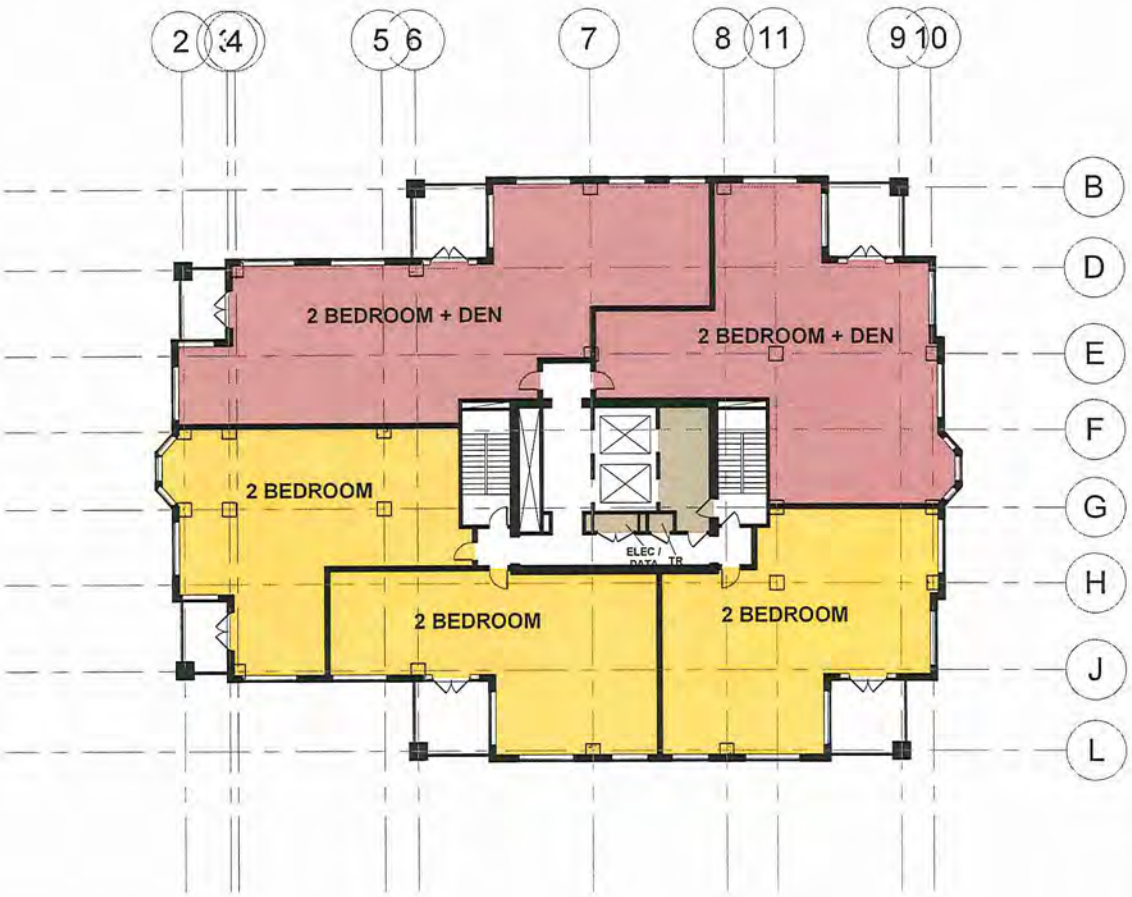
Estelle Edina Concept

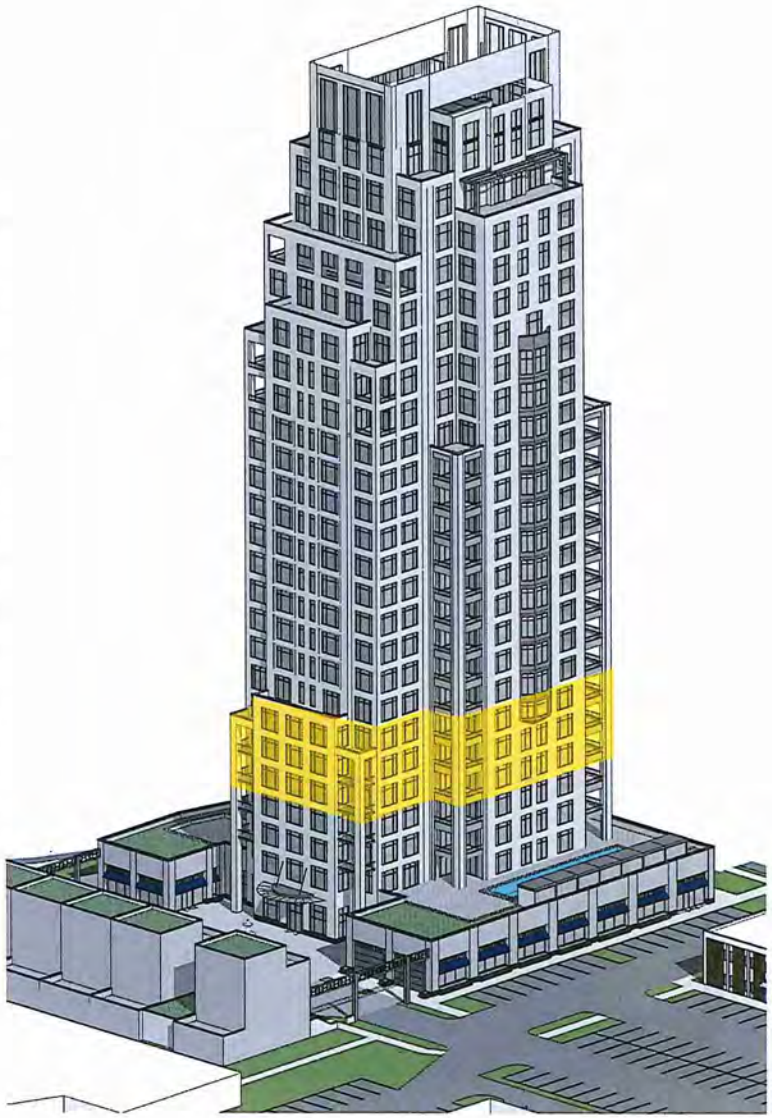
10 Unit Floor Plan

NORTH

ARCADIA On France, LLC

A31





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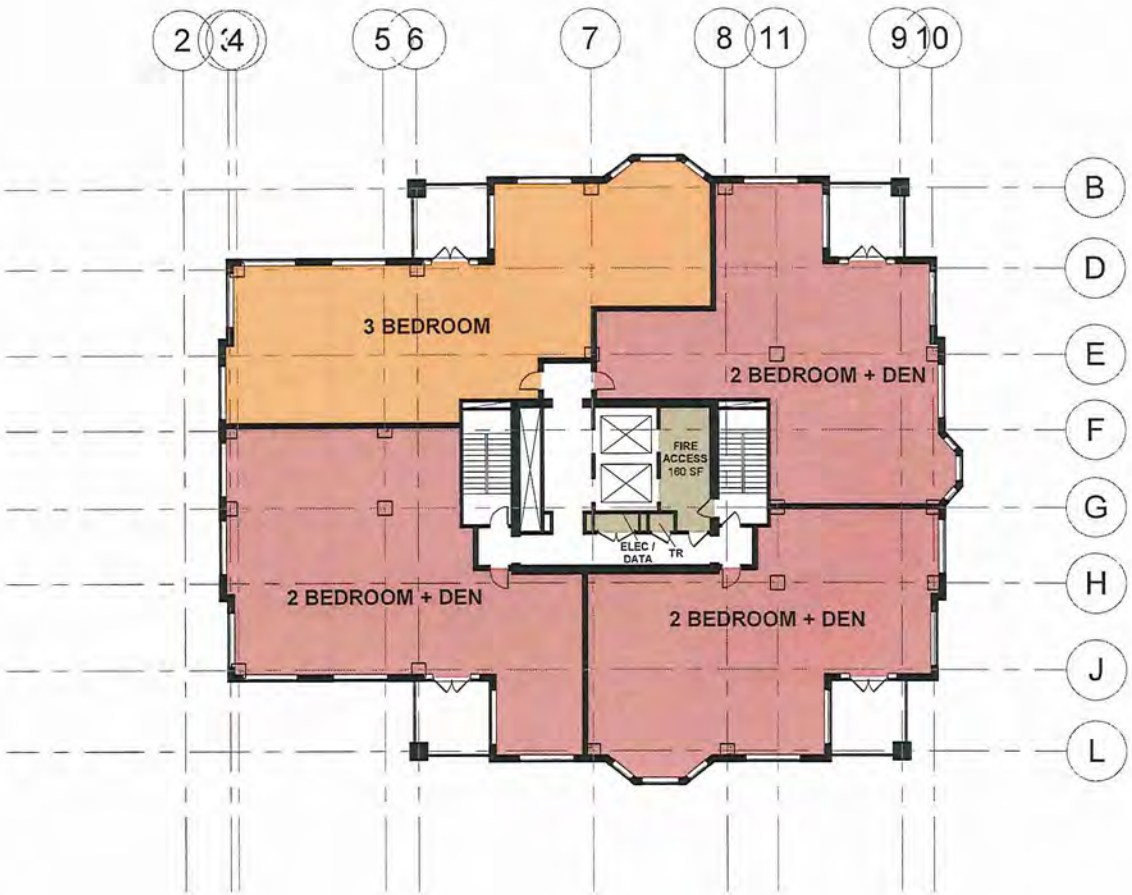
Estelle Edina Concept

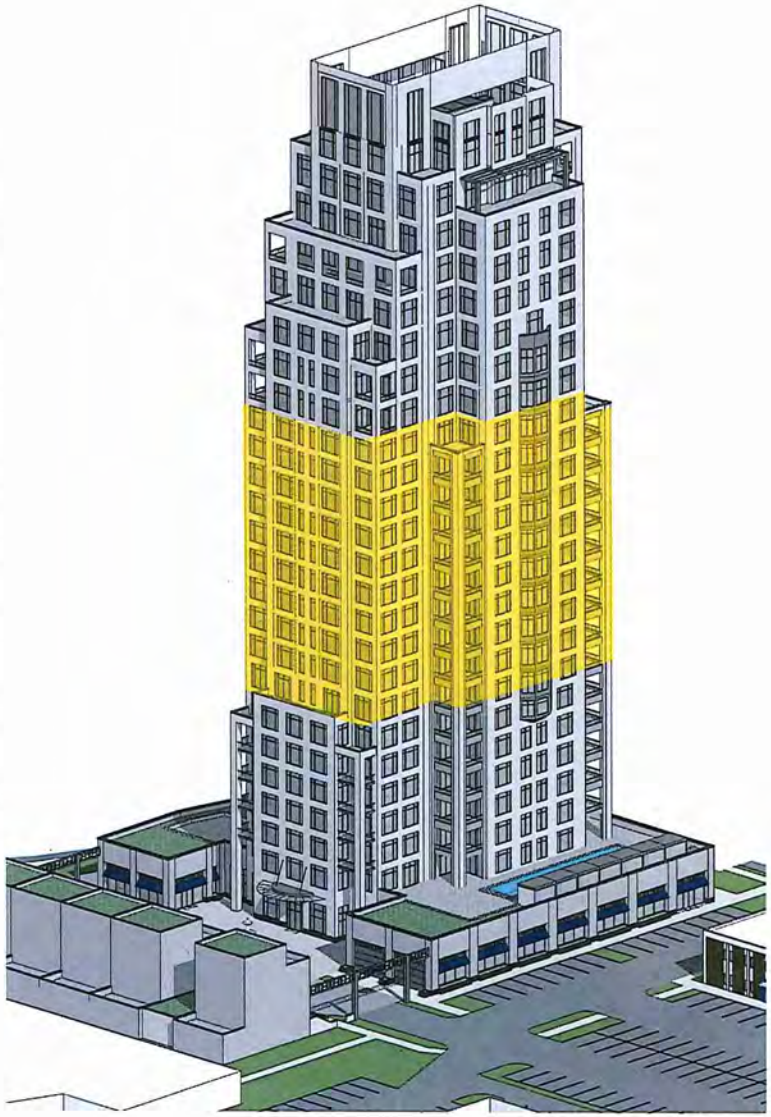
5 Unit Floor Plan

NORTH

ARCADIA On France, LLC

A32





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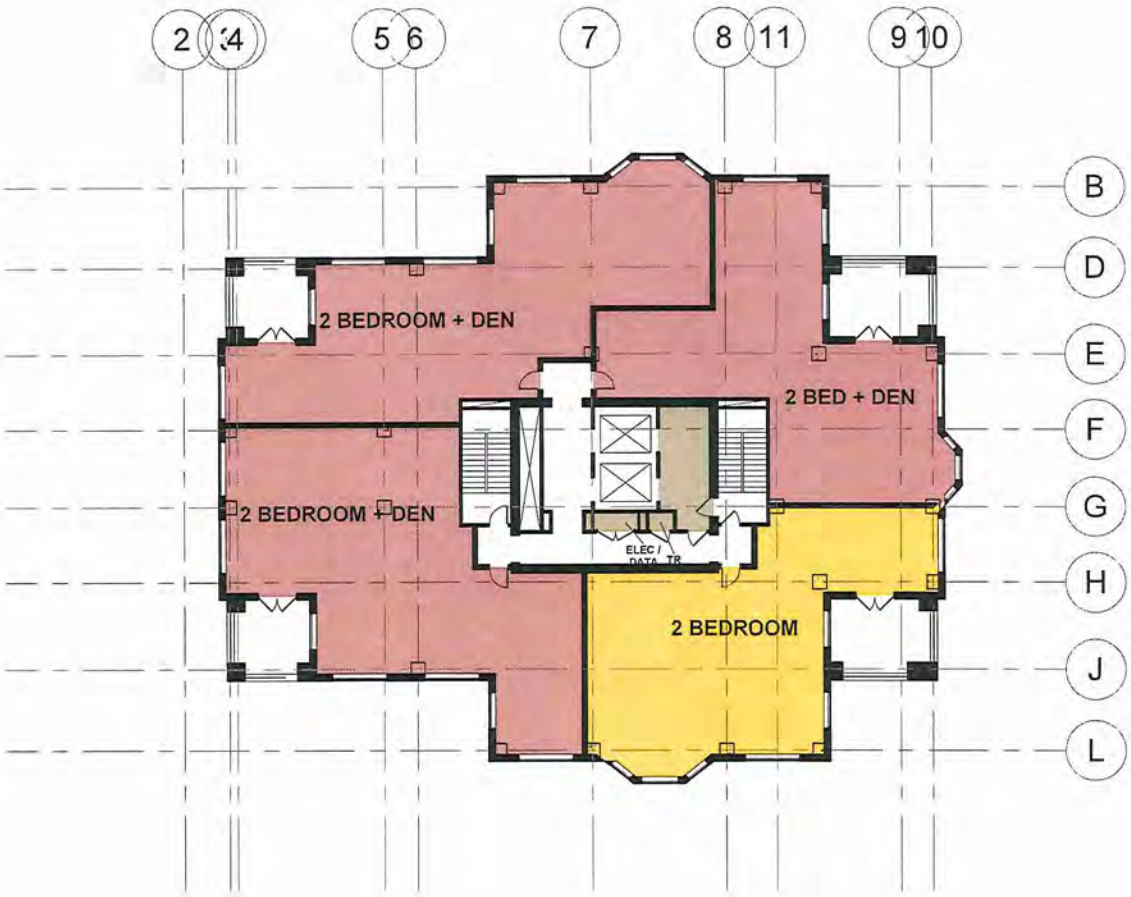
Estelle Edina Concept

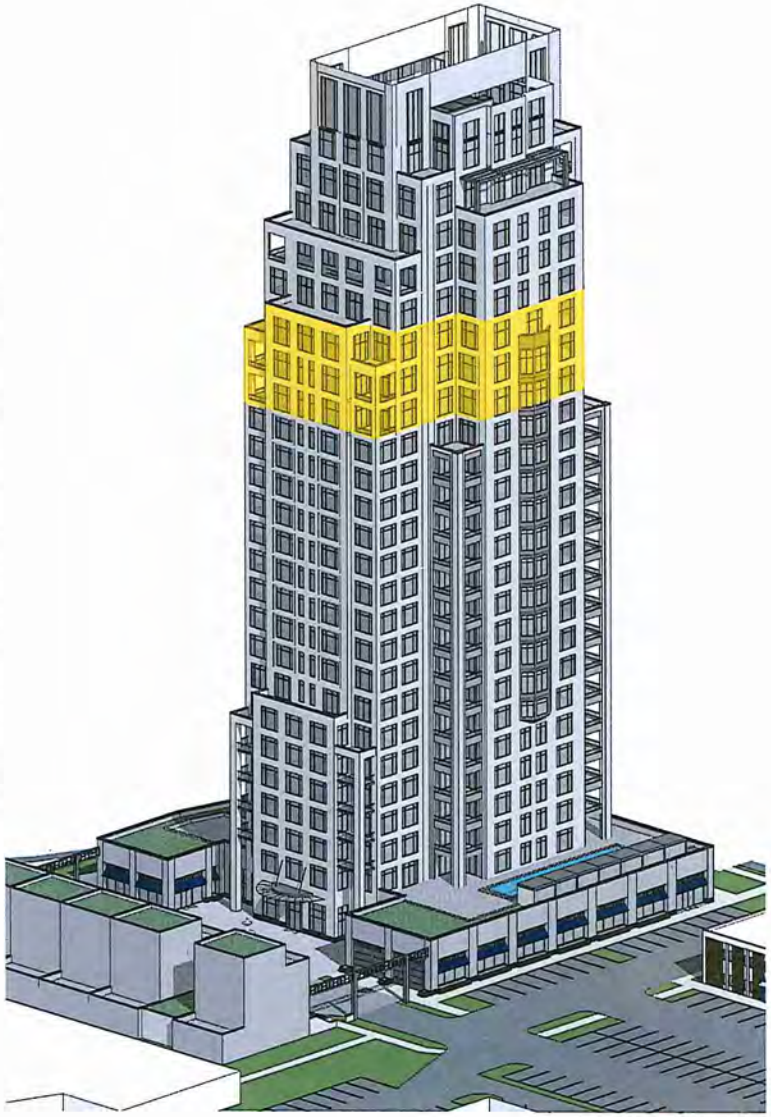
4 Unit Floor Plan - A

NORTH

ARCADIA On France, LLC

A33





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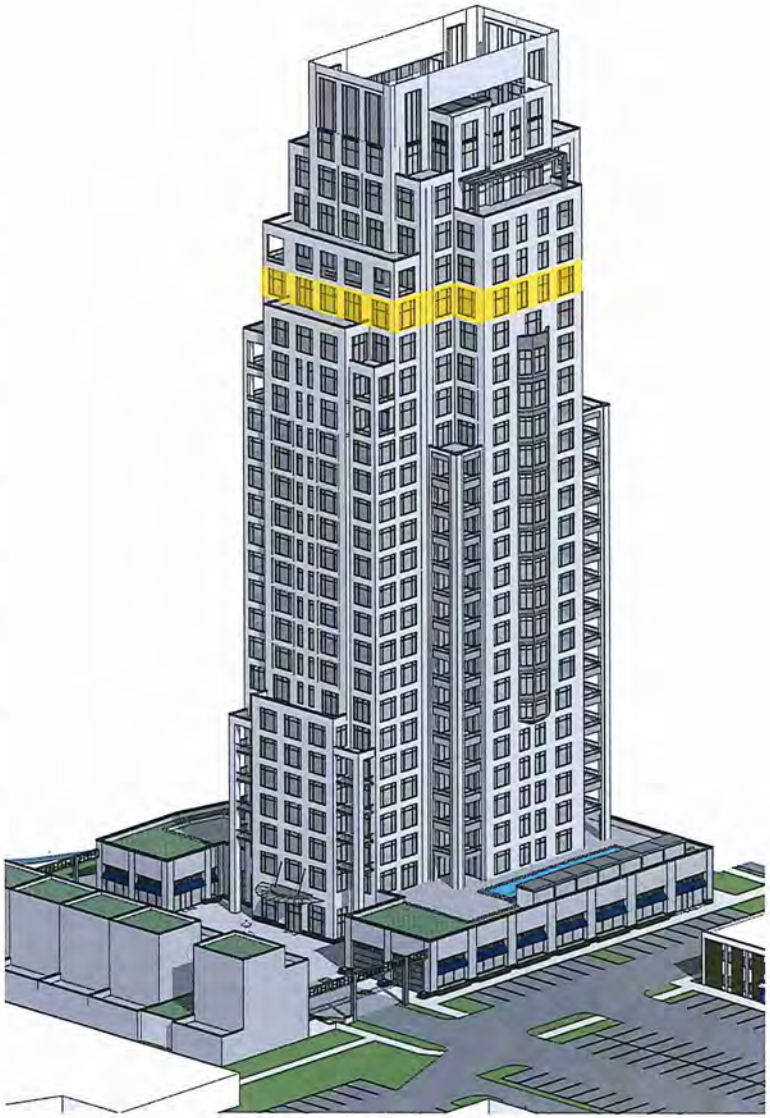
Estelle Edina Concept

4 Unit Floor Plan - B

NORTH

ARCADIA On Fresco, LLC

A34



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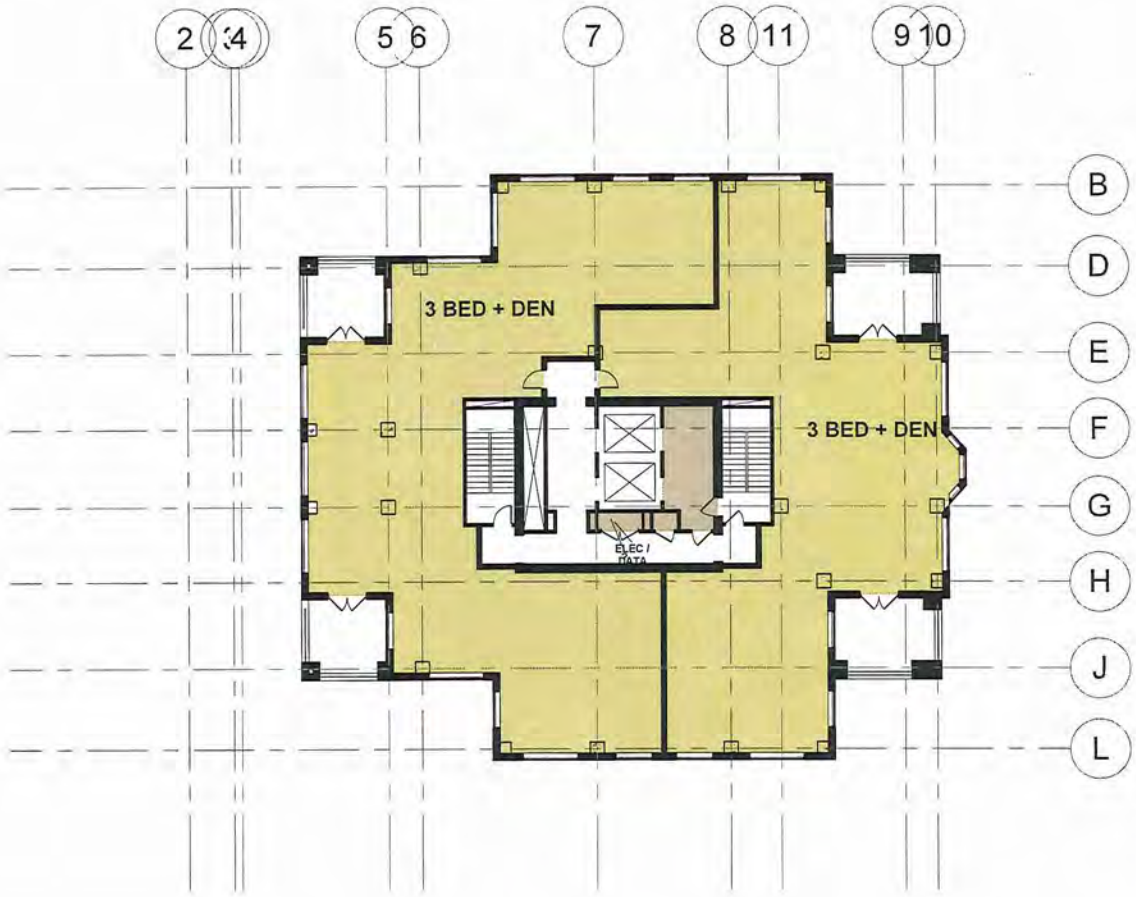
Estelle Edina Concept

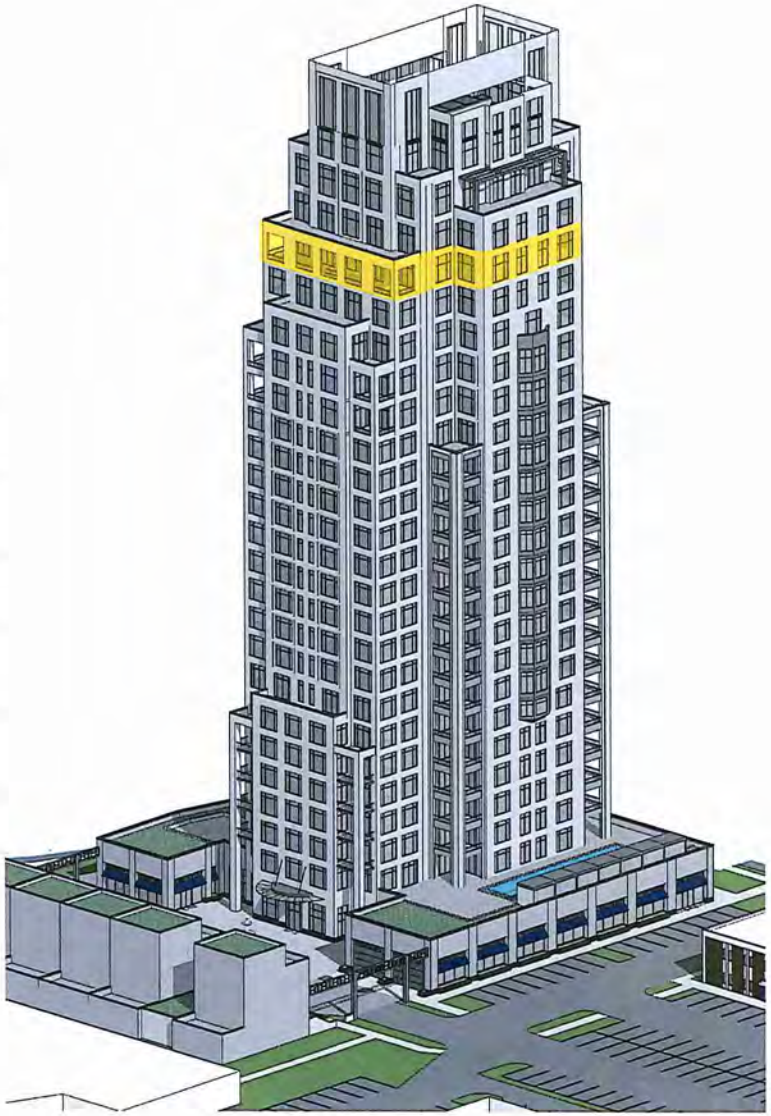
2 Unit Floor Plan - A

NORTH

ARCADIA On Fresno, LLC

135





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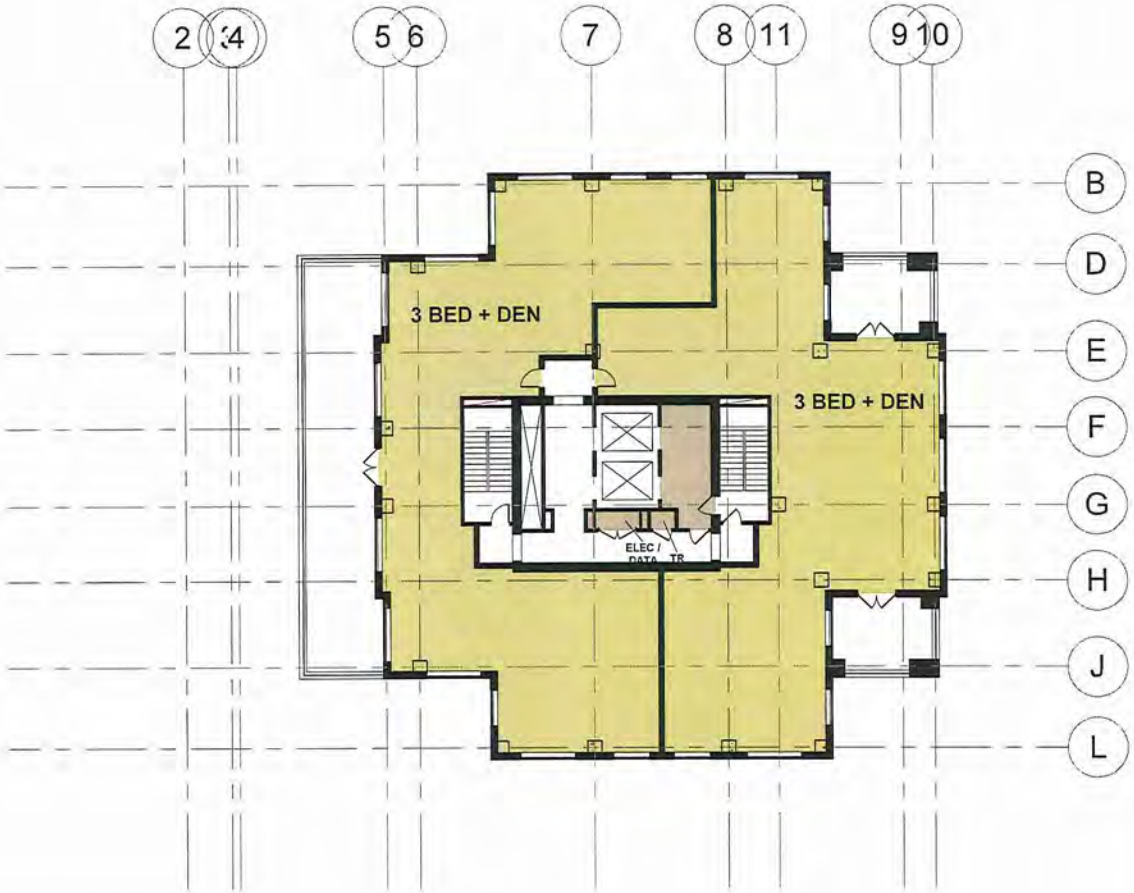
Estelle Edina Concept

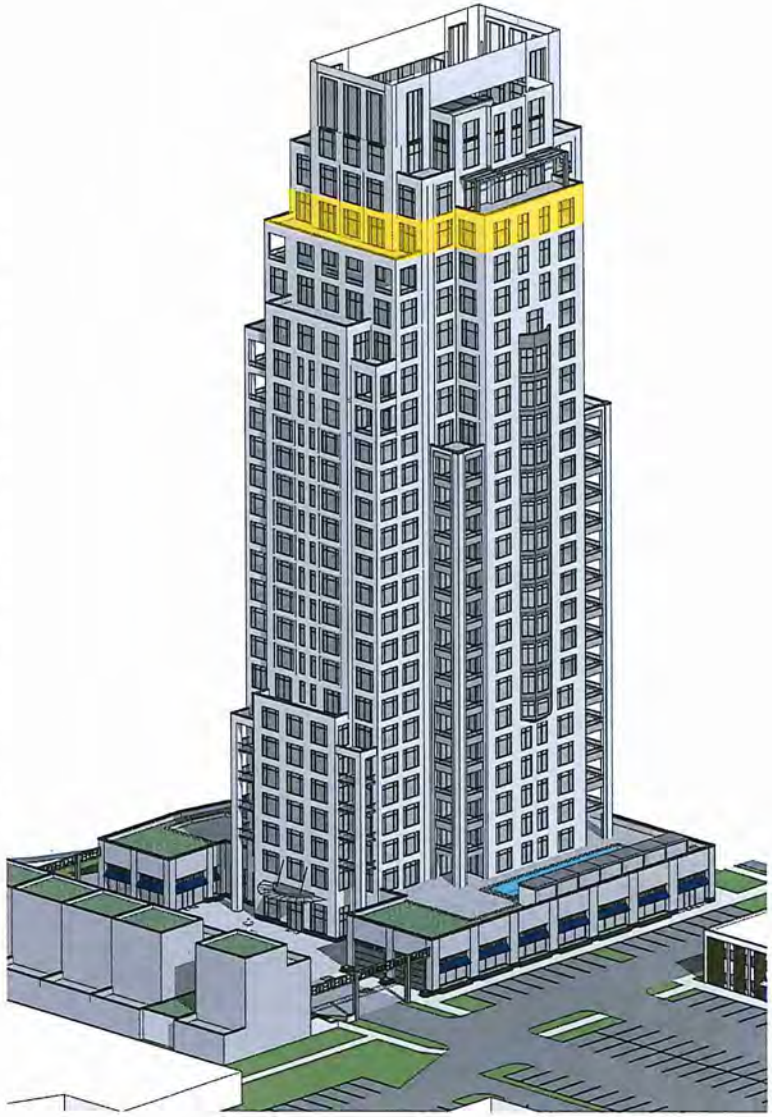
2 Unit Floor Plan - B

NORTH

ARCADIA On France, LLC

A36





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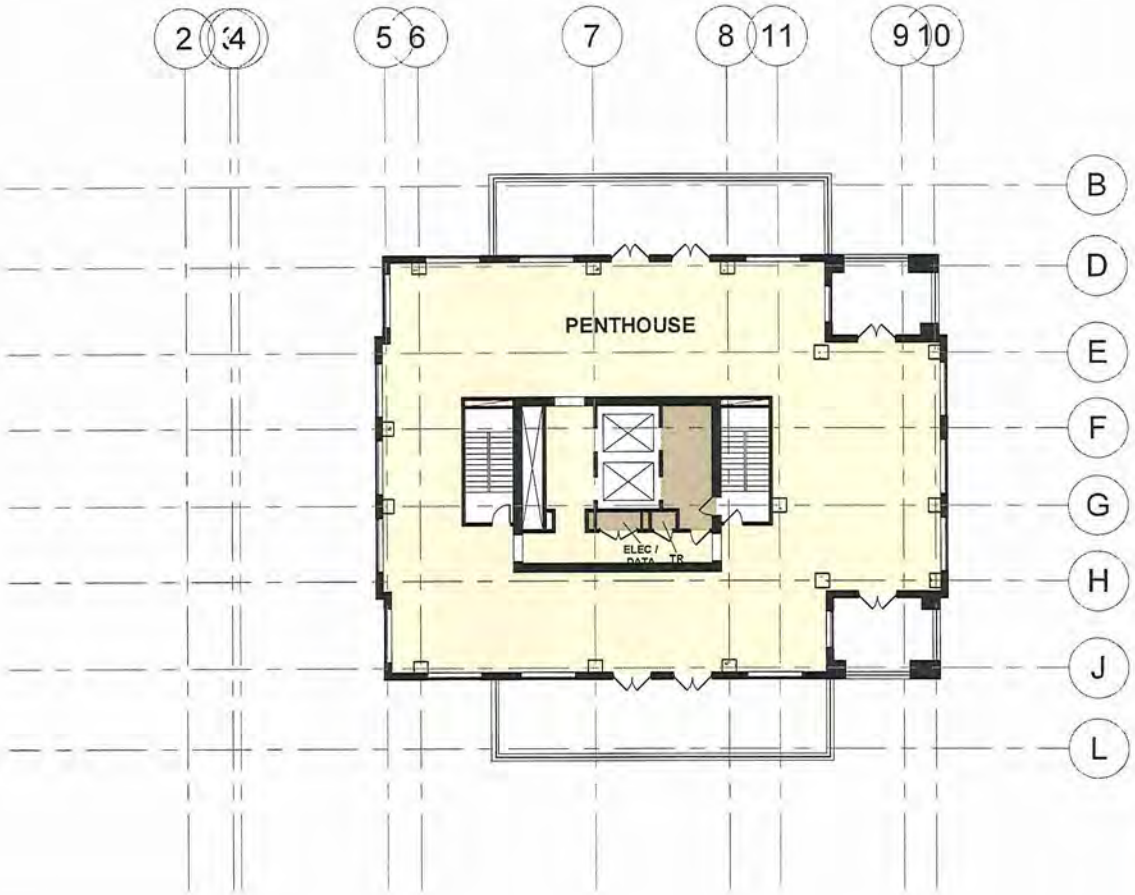
Estelle Edina Concept

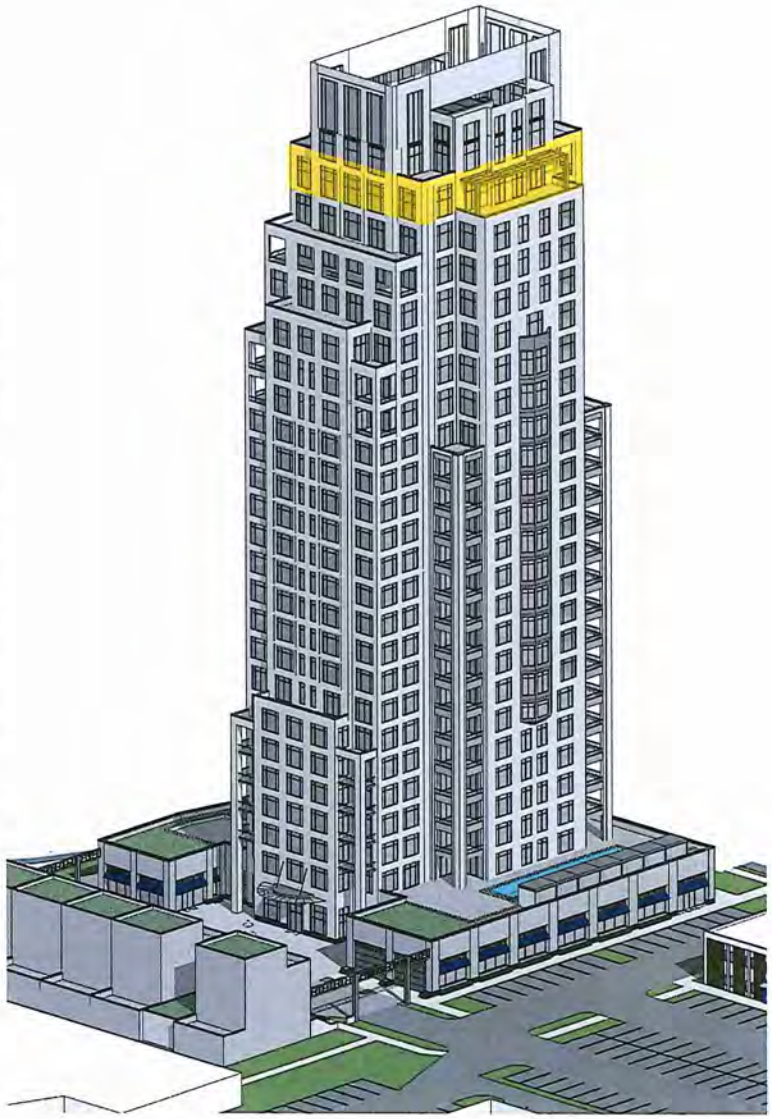
2 Unit Floor Plan - C

NORTH

ARCADIA On France, LLC

A37





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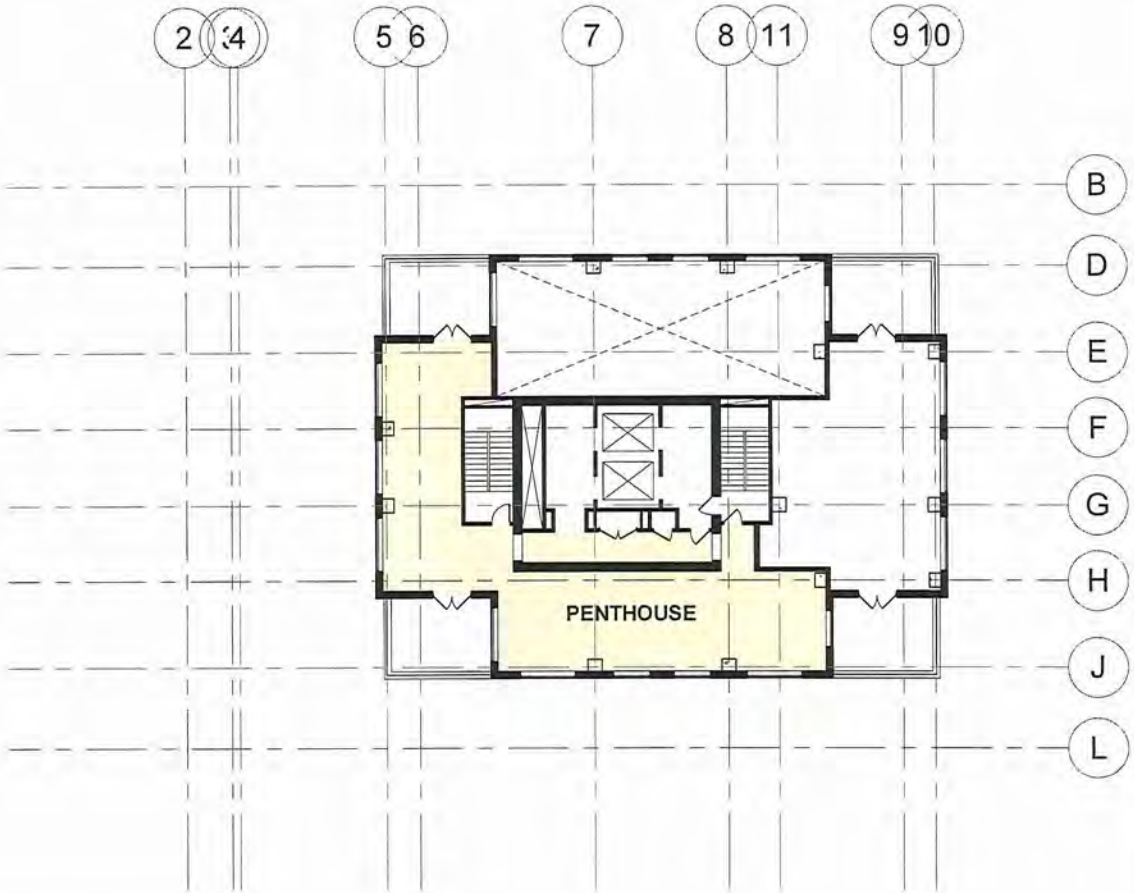
Estelle Edina Concept

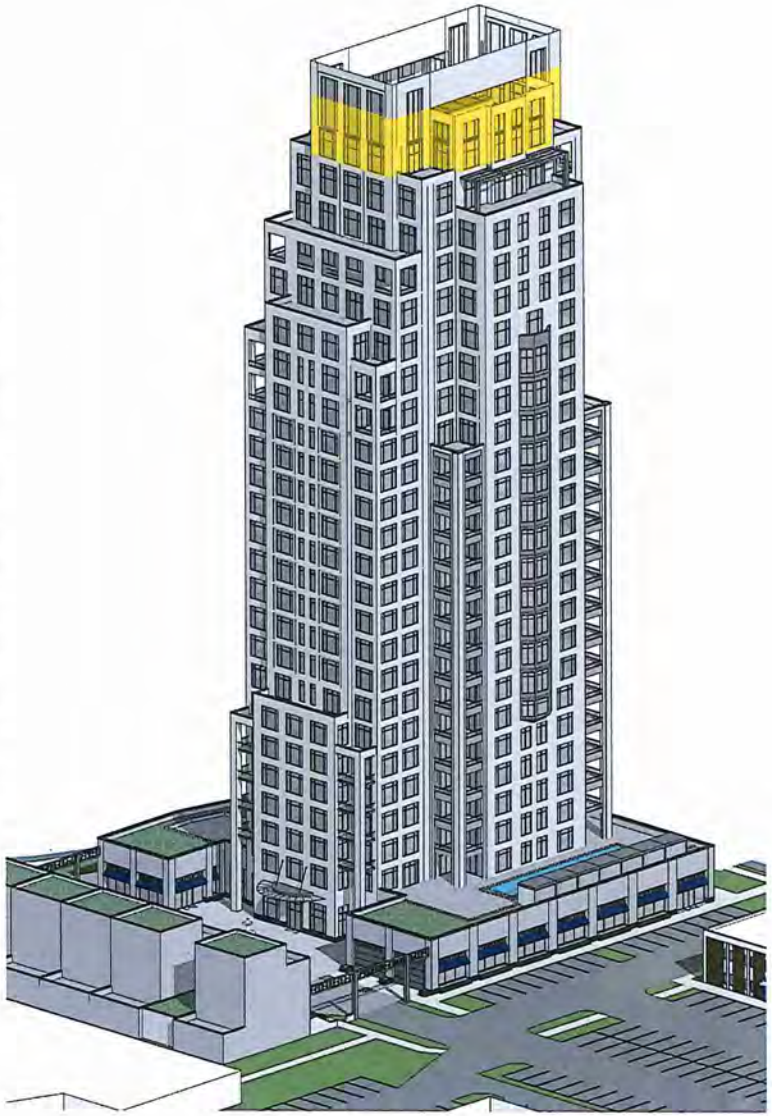
Penthouse Floor Plan - A

NORTH

ARCADIA On Fresse, LLC

A38





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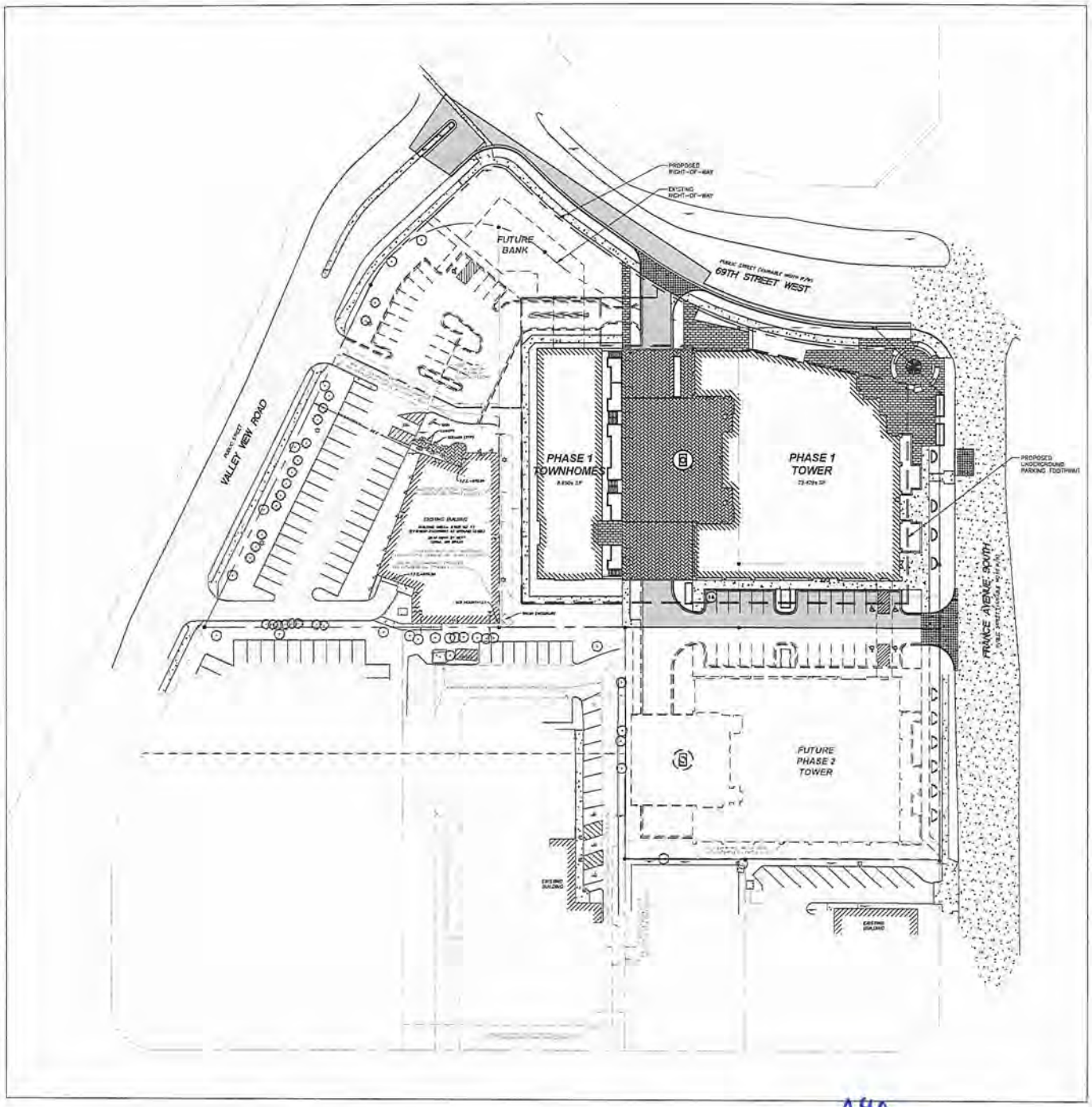
Estelle Edina Concept

Penthouse Floor Plan - B

NORTH

ARCADIA On France, LLC



SITE DATA

FUTURE LAND USE CATEGORY

CURRENT: OR, OFFICE RESIDENTIAL
PROPOSED: OR, OFFICE RESIDENTIAL

PROPOSED PROPERTY AREA

PHASE 1: 79,571± SF (1.83 AC)

PROPOSED BUILDING AREA

PHASE 1: 376,520± SF

PROPOSED USES

PHASE 1
RESIDENTIAL: 32 CONDOMINIUM
6 TOWNHOMES
TOTAL: 38 UNITS
RETAIL
RESTAURANT: 5,550± SF
OFFICE: 3,000± SF
BANK: 2,550± SF
TOTAL: 11,000± SF

OFF-STREET PARKING

PROPOSED

UNDERGROUND PARKING	174 SPACES
STRUCTURED SURFACE PARKING	12 SPACES (TOWNHOMES)
SURFACE PARKING	21 SPACES (7 PARALLEL)
TOTAL	207 SPACES

N

0 20 40
SCALE IN FEET

RYAN

RYAN A+E, INC.
533 South Third Street, Suite 100
Minneapolis, MN 55415
612-492-4000 tel
612-492-3000 fax

WWW.RYANCOMPANIES.COM

OWNER

CONSULTANTS

NOT FOR CONSTRUCTION

PROJECT INFORMATION

ESTELLE EDINA

FRANCE AVE S & W 69TH ST
EDINA, MN 55435

DRAWN BY	CHECKED BY
—	—
JOB NO.	DATE
760-421	09/12/2017

COMPREHENSIVE GUIDE PLAN AMENDMENT

CONCEPT SITE PLAN

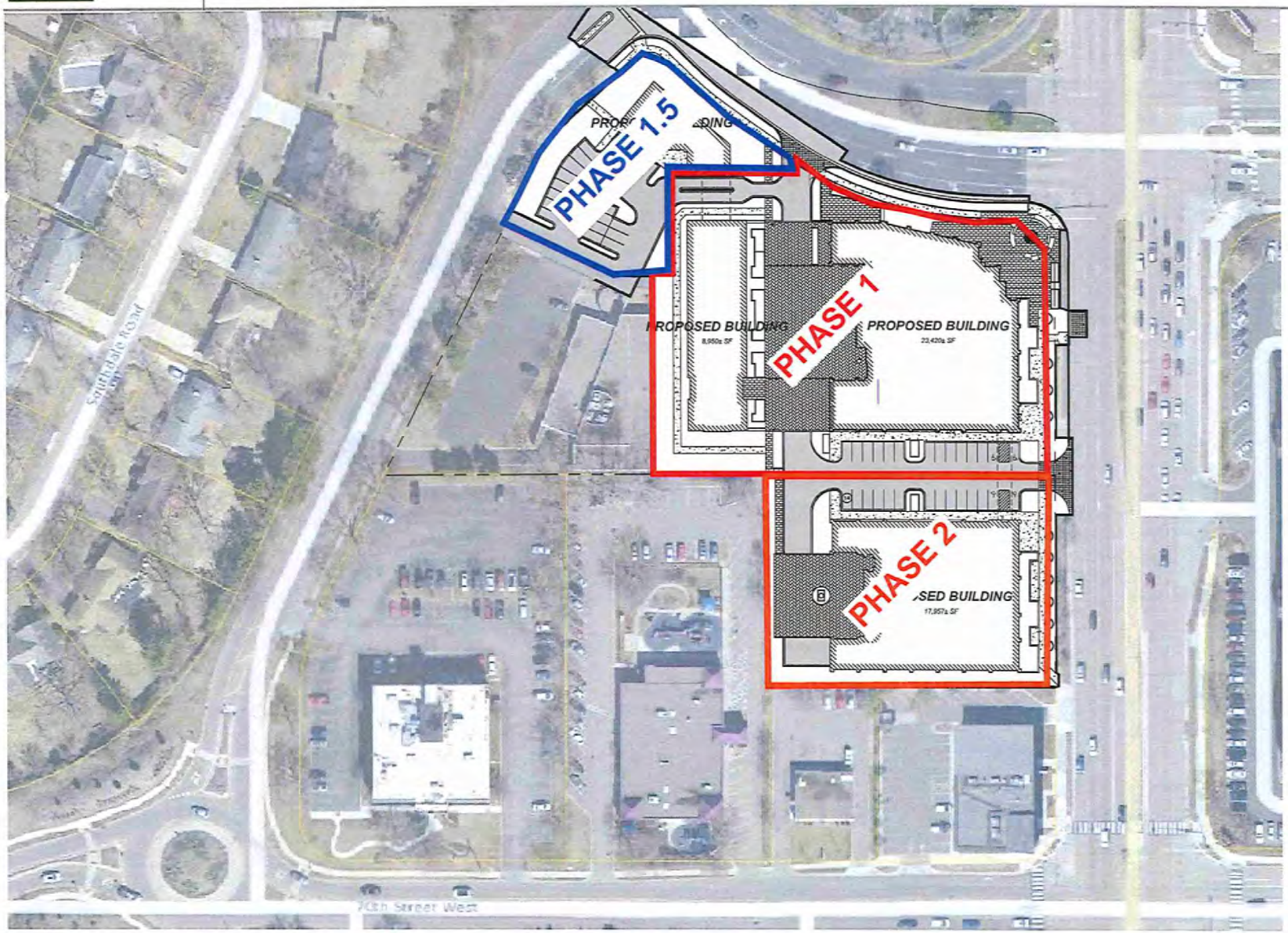
C100

A40

RYAN

ESTELLE EDINA

SITE PLAN



N

SCALE 0 40 80 IN FEET

07/28/17

A4

SHENEHON
BUSINESS & REAL ESTATE VALUATIONS

July 28, 2017

Mr. Carl Runck
Ryan Companies
Directory of Real Estate Development
533 South Third Street, Suite 100
Minneapolis, MN 55415

RE: Estelle Towers Proposed Development

Dear Mr. Runck:

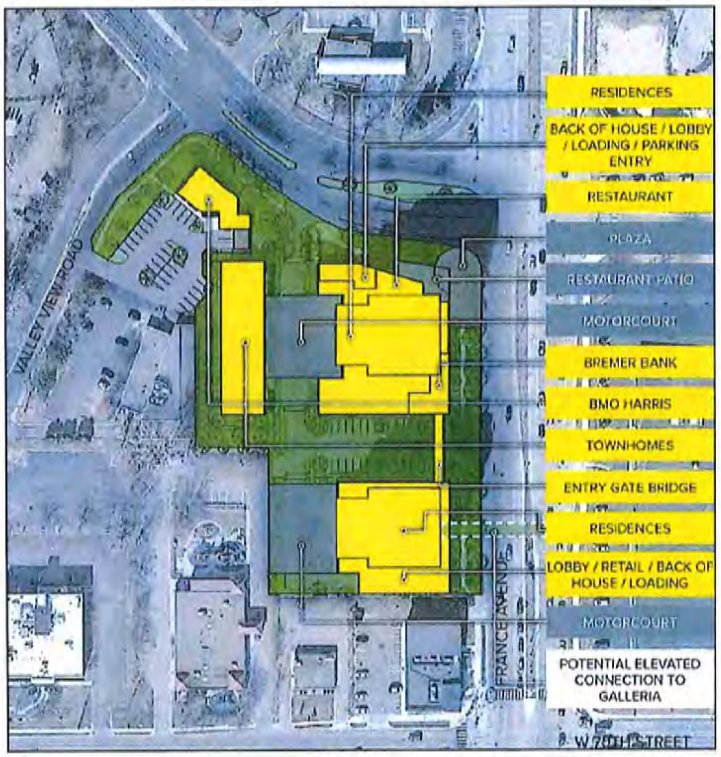
Luigi Bernardi and Ryan Companies have proposed a new mixed-use development at the corner of France Avenue South and 69th Street West. The proposed project, Estelle Edina, consists of two condominium towers along France Avenue that are anchored by retail on the ground level, and buffered in the rear by townhomes. A map of the parcel, along with a site plan, is below.

At your request, we analyzed the impact on property values of nearby single-family homes as a result of the proposed residential towers and mixed-use development. Based upon our analysis summarized in this letter, it is our opinion that there will be no measurable impact on property values of nearby single-family properties if the Estelle Edina is constructed as proposed.

It is possible that the increased offerings and improvement in amenities could be perceived by many in the marketplace as a neighborhood benefit, which could increase property values, especially considering the already existing proximity to the vibrant commercial district.

A42


62
W 65th St
Valley View Rd
Drew Ave S
Colony Way
Barrie Rd
York Ave
17
66th St
W 66th St
Lake Cornelia
Edina
W 69th St
Cornelia Dr
Upton Ave S
France Ave S
York Ave S
Cornelia Park
Hazelton Rd
72nd St W
Fondell Dr
Parklawn Ave


RESIDENCES
BACK OF HOUSE / LOBBY / LOADING / PARKING ENTRY
RESTAURANT
PLAZA
RESTAURANT PATIO
MOTORCOURT
BREMER BANK
BMO HARRIS
TOWNHOMES
ENTRY GATE BRIDGE
RESIDENCES
LOBBY / RETAIL / BACK OF HOUSE / LOADING
MOTORCOURT
POTENTIAL ELEVATED CONNECTION TO GALLERIA
VALLEY VIEW ROAD
FRANCE AVENUE
W 70TH STREET

A43

IMPACT OF PROPERTY VALUES ON SURROUNDING PROPERTY

Neighbors may be concerned the mixed-use development will affect property values and ruin what is now a peaceful environment and neighborhood. This is no different than the initial concerns some neighbors may have when a residential subdivision, office building, solar garden, or something else is developed on vacant land. We researched issues relating to property values and found no conclusive evidence that suggests the proposed mixed-use development will diminish property values. In particular, we studied visual impact including views and shadows, noise, and traffic. We briefly discuss each issue below.

VISUAL IMPACT

The client is proposing a mixed-use development which consists of two condominium towers along France Avenue that are anchored by retail on the ground level, and buffered in the rear by townhomes. As proposed, the two condominium towers, situated on France Avenue, would be twenty-four and twenty stories tall. Neighbors are concerned about the visual impact of the proposed development, which includes, views and shadows. The nearest single-family homes are approximately 450 feet across Valley View Road, with existing mature vegetation as a natural buffer. Even in the winter, the woody parts of the trees and brush will provide screening. The towers are planned to be situated on France Avenue with low-density townhomes along the back of the property as another buffer, along with additional landscaping. The townhomes will only be three and a half stories, with private backyards that will provide more buffer for surrounding homes. The towers have been designed to taper as they rise, to limit shadows on surrounding properties. The client has already performed shadow studies showing minimal effect on the neighboring homes.

TRAFFIC AND NOISE

Although the proposed development will bring more car and foot traffic to the site, we believe it will have a nominal effect on surrounding single-family homes. The development proposal shows the main vehicle access point on France Avenue, with two smaller driveways on West 69th Street and Valley View Road. As a result, the majority of the traffic would remain on France Avenue, and not affect the neighboring single-family homes. Finally, the surrounding single-family homes are already near a highly commercial area and France Avenue, which has high daily traffic counts, according to the Minnesota Department of Transportation.

In addition, we relied on the Traffic Impact Study conducted by Spack Consulting for the purpose of determining traffic impacts associated with the Estelle Edina development project. The formal study concludes that "the redevelopment adds minimal traffic…with a negligible difference in queue lengths" at surrounding stop lights. The study found that "the proposed redevelopment is expected to generate approximately 1,464 new daily trips" on the surrounding roads. Assuming most of the additional traffic will be on France Avenue, that constitutes a nominal increase of 5% in daily traffic (1,464 new trips/28,500 existing traffic count=5% increase).

We conclude that the proposed development is in keeping with the surrounding commercial district, and would not severely alter the existing nature of the neighborhood and the nearby homes. The conclusion is the same for noise concerns. Most noise from increased car and foot traffic will be confined to the France Avenue side of the development. There will be more foot traffic as well, but it will be contained to the retail and restaurant options along France Avenue. We don't believe there will be measurable noise generated from the residential towers.

MnDOT Daily Traffic Counts, Existing as of July 2017

MARKET RESEARCH ON PROPERTY VALUES

We conducted market research on single-family property values near recently constructed large developments in the West Metro. The goal of this market research was to determine how single-family home prices are affected by large development projects. We identified six recently constructed towers that are situated near single-family residential, and researched home sales four years prior to and following the development project, within and quarter mile radius and a half mile radius.

	1	2	3
Building	Optum Tower 1	Optum Tower 2	City Bella on Lyndale
Street Address	11020 Optum Circle	11000 Optum Circle	6600 Lyndale Ave S
City	Eden Prairie	Eden Prairie	Richfield
Stories	8	15	15
Height (feet)	138	238	177
Year Built	2014	2015	2004
Distance from nearest SF home (approx feet)	630	1,000	460
RESEARCH & FINDINGS			
Number of home sales in study	51	43	225
Years studied	2010-2017	2011-2017	2000-2008
Difference in home sale prices before vs. after development			
0-0.25 mile radius	-0.4%	24.9%	30.9%
0.25-0.5 mile radius	8.3%	-7.6%	26.4%

	4	5	6
Building	Gramercy Park Coop	The Lakes Apartments	The Edgewater Calhoun
Street Address	6711 Lake Shore Drive	2622 Lake Street West	1805 Lake Street West
City	Richfield	Minneapolis	Minneapolis
Stories	12	8	6
Height (feet)	125	N/A	83
Year Built	2000	2015	2005
Distance from nearest SF home (approx feet)	230	130	30
RESEARCH & FINDINGS			
Number of home sales in study	186	96	183
Years studied	1996-2004	2011-2017	2001-2009
Difference in home sale prices before vs. after development			
0-0.25 mile radius	-6.5%	14.9%	21.8%
0.25-0.5 mile radius	42.5%	-0.1%	20.5%

Based on our market study, four out of six projects had a significant positive impact on surrounding single-family home sales within a quarter mile radius, with rising prices in the four years following the development versus the four years prior. As a result of this relevant, current, local evidence, we conclude that there will be no measurable negative impact on property values of nearby single-family properties if the Estelle Edina is constructed as proposed. In fact, our market research supports the possibility that the increased offerings and improvement in amenities could be perceived by many in the marketplace as a neighborhood benefit, which could increase property values, especially considering the already existing proximity to the vibrant commercial district.

Along with local market research, we reviewed articles written about similar projects around the country. We referenced several studies and have summarized their conclusions:

Study: The Impact of Commercial Development Surrounding Residential Property Values
By: Jonathan A. Wiley, Ph.D., Department of Real Estate, Georgia State University
Conclusion: "…retail development is the most likely to be considered a neighborhood amenity and an important aspect to community revitalization…Perhaps most surprising is the lack of evidence for negative and significant impacts of commercial developments on housing values. Scores of political arguments to the contrary are voiced at local debates across the nation, yet this research does not find substantive evidence of a negative interaction."

Study: The Impact of Multifamily Development on Single Family Home Prices in the Greater Boston Area
By: Arah Schuur, which was written in pursuit of graduate degrees in Science in Real Estate Development and City Planning at the Massachusetts Institute of Technology
Conclusion: "In the four cases…, no negative effects in the impact zone were found."

Article: No, Large Apartment Buildings Won't Devalue Your Home
By: Alex Cecchini, mechanical engineer, for Streets.MN
Conclusion: "…Five of the seven studies found dense development, including affordable and market-rate, had negligible or positive effects on home values."

Study: Examining the Impact of Mixed-Use/Mixed Income Housing Developments in the Richmond Region
By: Lisa A. Sturtevant, Ph.D. and John McClain, AICP, Center for Regional Analysis, George Mason University
Conclusion: "Overall, this analysis of mixed income/mixed-use house shows that the development have positive impacts on the surrounding neighborhoods, with relatively strong home price appreciation and lower crime levels…The home prices and assessments of nearby single-family homes were not adversely impacted by the presence of mixed income/mixed-use developments."

Article: What Does That New Luxury Building in Your Neighborhood Mean for Your Home's Value?
By: Devon Thorsby, US News
Conclusion: "If the area's up and growing and there's a lot of activity, and it's making the area better, it should make home values go up." (Matt Nixon, COO, Pendley & Pendley Appraisers in Cumming, Georgia)

Book: Real Estate Damages: An Analysis of Detrimental Conditions
Chapter 3 Case Study
By: Randall Bell, MAI and Orell C. Anderson, MAI
Conclusion: "Based upon the paired sales analysis, no correlation exists between home values and adjacent… shopping centers."

CONCLUSION

Considering our research and findings, we conclude that there will be no measurable negative impact on property values of nearby single-family properties if the Estelle Edina is constructed as proposed.

In fact, our market research supports the possibility that the increased offerings and improvement in amenities could be perceived by many in the marketplace as a neighborhood benefit, which could increase property values, especially considering the already existing proximity to the vibrant commercial district.

Respectfully,

SHENEHON COMPANY

Robert J. Strachota, MAI, MCBA, CRE®
President, Shareholder
Minnesota License No. 4000882
Certified General Appraiser
value@shenehon.com

I certify that to the best of my knowledge and belief:

1. The statements of fact contained in this report are true and correct.

2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.

3. I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.

4. I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

5. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.

6. My engagement in this assignment was not contingent upon developing or reporting predetermined results.

7. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

8. My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.

9. I have made a personal inspection of the property that is the subject of this report.

10. Katherine A. Ostlund provided significant real property appraisal assistance to the person signing this certification. She gathered and verified information about the property that is the subject of this report, and gathered and analyzed information on the market conditions for this property.

11. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.

12. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

13. As of the date of this report, I have completed the continuing education program for Designated Members of the Appraisal Institute.

Robert J. Strachota, MAI, MCBA, CRE®
President, Shareholder
Minnesota License No. 4000882
Certified General Appraiser

DATE: September 20, 2017

TO: Estelle Edina, Owner and Development Team
6900 France Avenue

CC: Cary Teague – Community Development Director

FROM: Chad Millner, PE - Director of Engineering
Charlie Gerk, PE – Graduate Engineer

RE: **Estelle Edina, 6900 France Avenue – Development Review,**

The Engineering Department has reviewed the project narrative dated September 13, 2017 associated with the application for a Comprehensive Plan Amendment. No detailed plans were provided or reviewed.

Details

1. A Developer's Agreement or Site Improvement Performance Agreement may be required for construction of public sidewalk and utilities.
    a. Deliver as-build records of public infrastructure post construction.
    b. Plat public easements or transfer fee ownership of dedicated public right of way.

Survey

2. A proposed site survey is required.
    a. Show all easements, public and private.
3. Apply for vacation of existing easements or right-of-ways if needed.

Living Streets

4. Design sidewalks to meet ADA requirements.
5. Sawcut concrete sidewalk joints on public sidewalks.

Traffic and Street

6. Continue to plan for E-W and N-S connections through the 6900 block of France Avenue.
7. Maintain sidewalk access or provide sidewalk detour during construction as approved by the City.
8. Clearly denote private sidewalk. Maintenance for non-public sidewalks to be responsibility of property owner.
9. Construction staging, traffic control, and pedestrian access plans will be required.
10. Review fire access requirements with fire department. Consider truck overhang when proposing plantings.
11. Work in France Avenue ROW will require a Hennepin County Permit.

Sanitary and Water Utilities

12. Verify fire demand and hydrant locations.
13. Clearly indicate private vs public utilities.
14. Northwest corner of site has sanitary trunk line that would likely need relocation as part of plan.
15. Domestic water shall be sized by the developer's engineer.

16. Domestic sanitary shall be sized by the developer's engineer.
17. Provide geotechnical report with soil borings.
18. Re-routed sanitary sewer must have a capacity analysis completed on existing and proposed flows. Analysis must be reviewed and approved prior to permitting.
19. Create north-south water loop from Valley view/69th to 70th along Valley View.
20. Apply for a sewer and water connection permit with public works.
    a. Separate meters for fire and domestic services will be required.
21. A SAC and WAC determination will be required and Met Council and City REC fees will be calculated from the determination.

Storm Water Utility

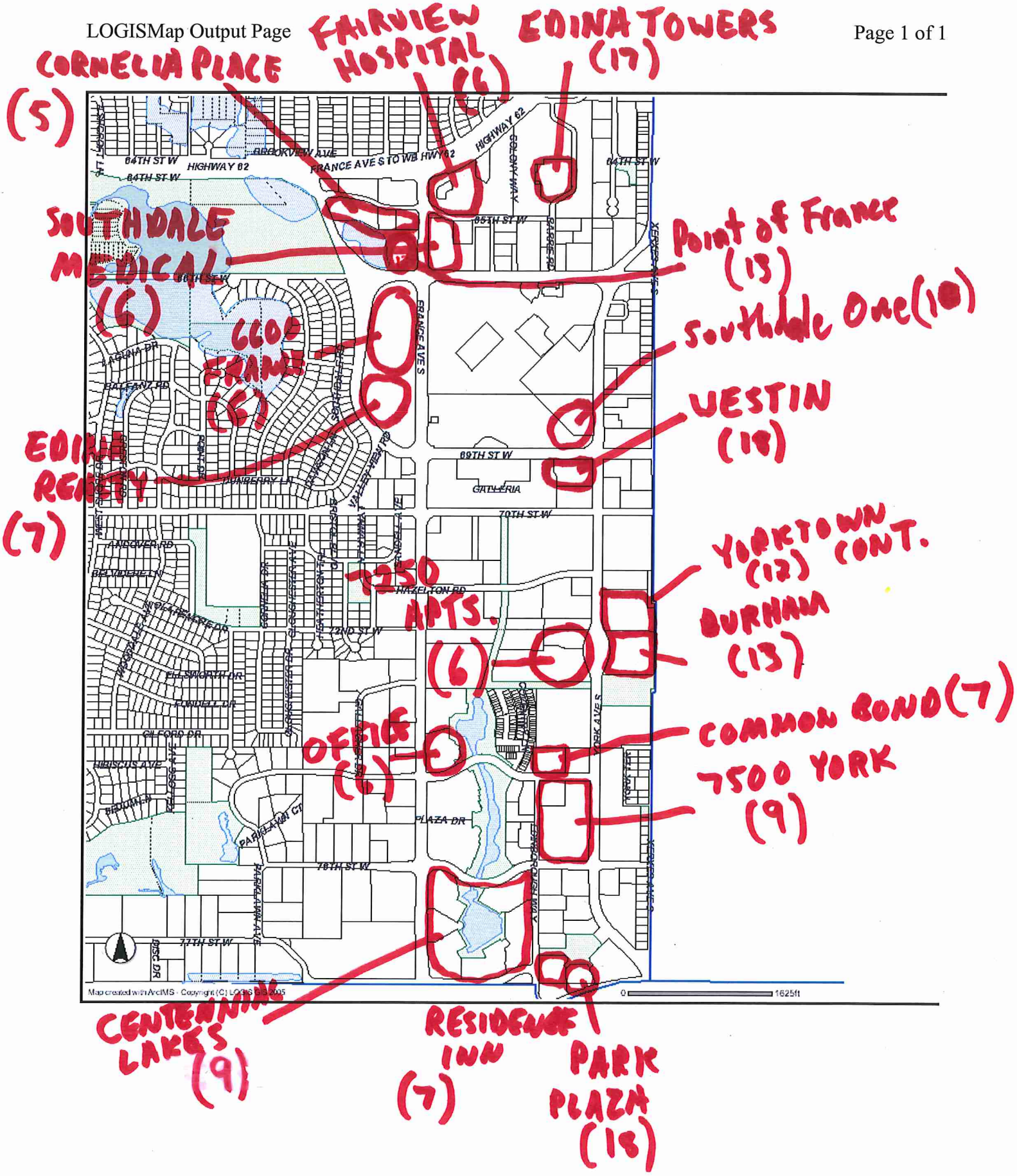
22. Provide hydraulic and hydrologic report.
23. Part of this site drains to CWRMP subwatershed LE-34 which has significant flood concerns. Limit runoff to maximum extent to LE-34.
24. The wubwatershed NC_119 part of this site is subject to limited flow in high water conditions, and Valley View backflows through this site to the west toward LE-34. Remove backflow condition and temporarily store flood water to release off-peak.
25. Provide more detailed information for retention system.
26. Evidence of watershed district permit and copies of private maintenance agreement in favor of watershed is required for building permit.
27. Retention system engineer required to verify construction of the underground retention systems done per plan.
28. Confirm retention system or drive isles are structurally designed for Edina's 80,000lb fire truck load and outriggers in parking lot areas.

Grading Erosion and Sediment Control

29. A SWPPP consistent with the state general construction site permit is required.

Other Agency Coordination

30. Nine Mile Creek Watershed permit is required. Hennepin County, MDH, MPCA and MCES permits required as needed.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FAIRVIEW HOSPITAL (6)
EDINA TOWERS (17)
SOUTHDALE MEDICAL (6)
Point of France (13)
Southdale One (18)
GLOE FRANCE (6)
WESTIN (18)
EDINA REGENCY (7)
YORKTOWN (12) CONT.
7250 APTS. (6)
BURNHAM (13)
COMMON BOND (7)
OFFICE (6)
7500 YORK (9)
CENTENNIAL LAKES (9)
RESIDENCE INN (7)
PARK PLAZA (18)
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HIGHWAY 62
BROOKVIEW AVE
FRANCE AVE S TO WB HWY 62
COLONY WAY
65TH ST W
66TH ST W
FRANCE AVE S
69TH ST W
GALLERIA
70TH ST W
HAZELTON RD
72ND ST W
PLAZA DR
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MEDICAL CENTER
MEDSEARCH
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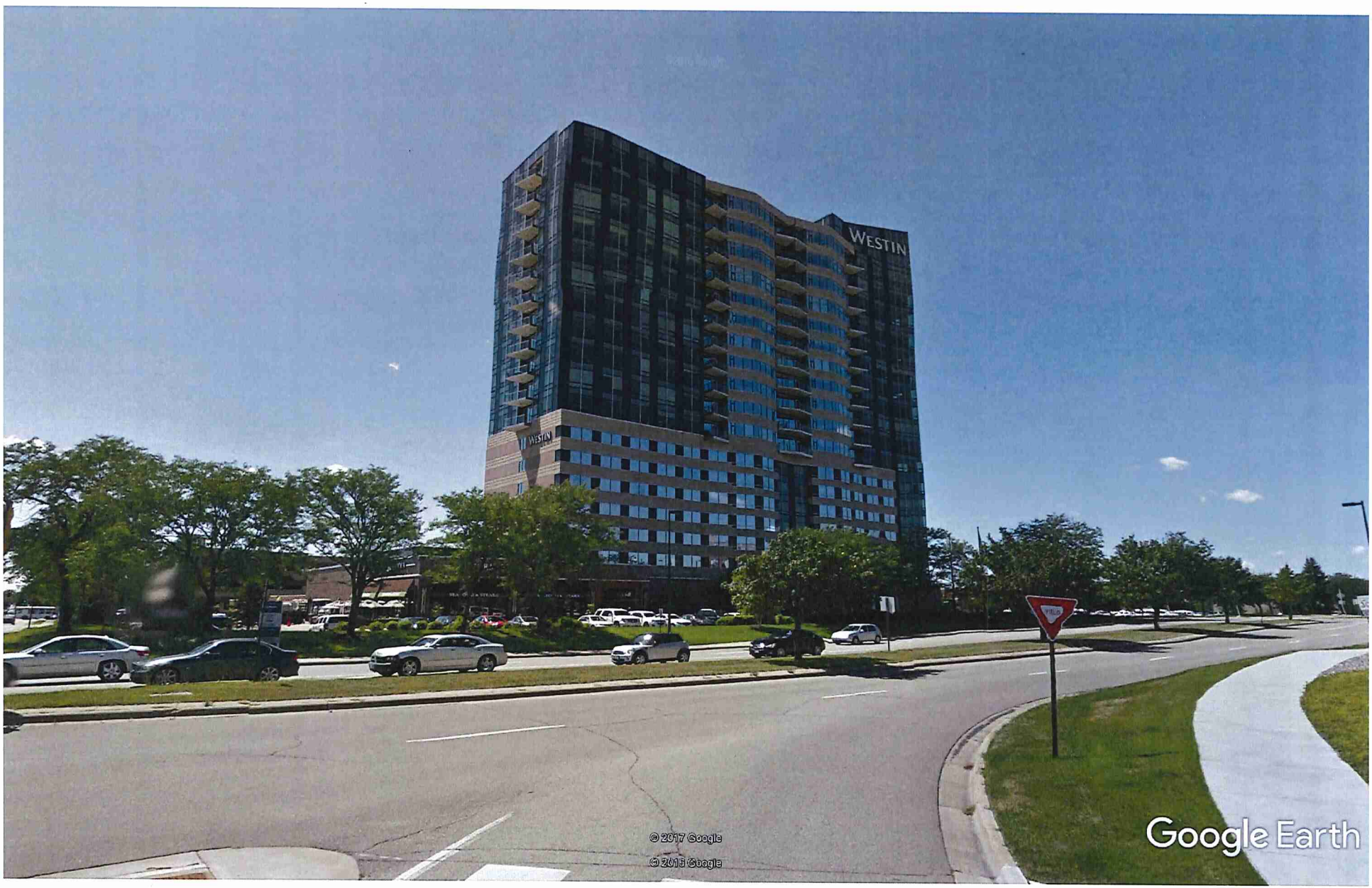

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POINT OF FRANCE
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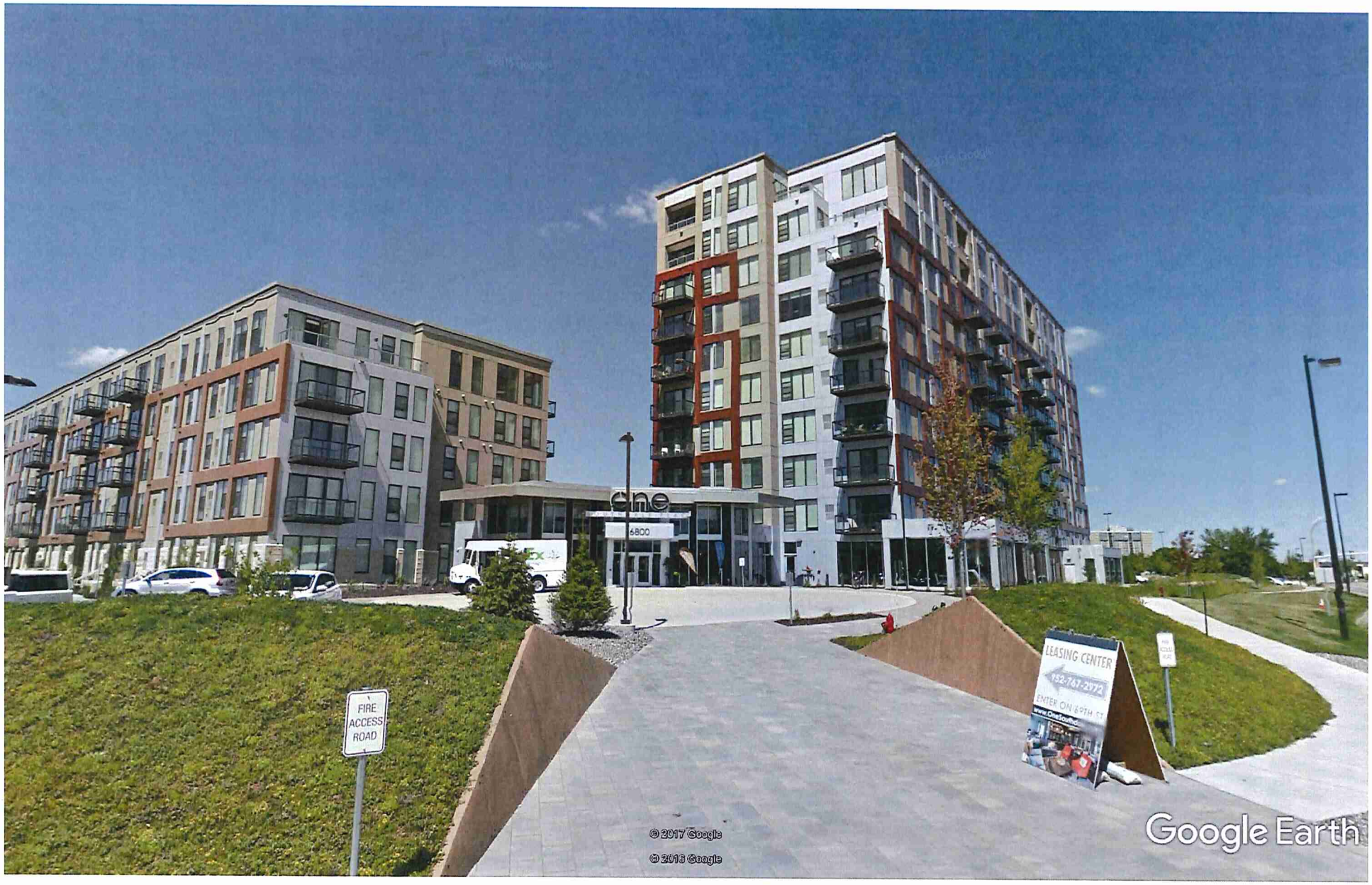

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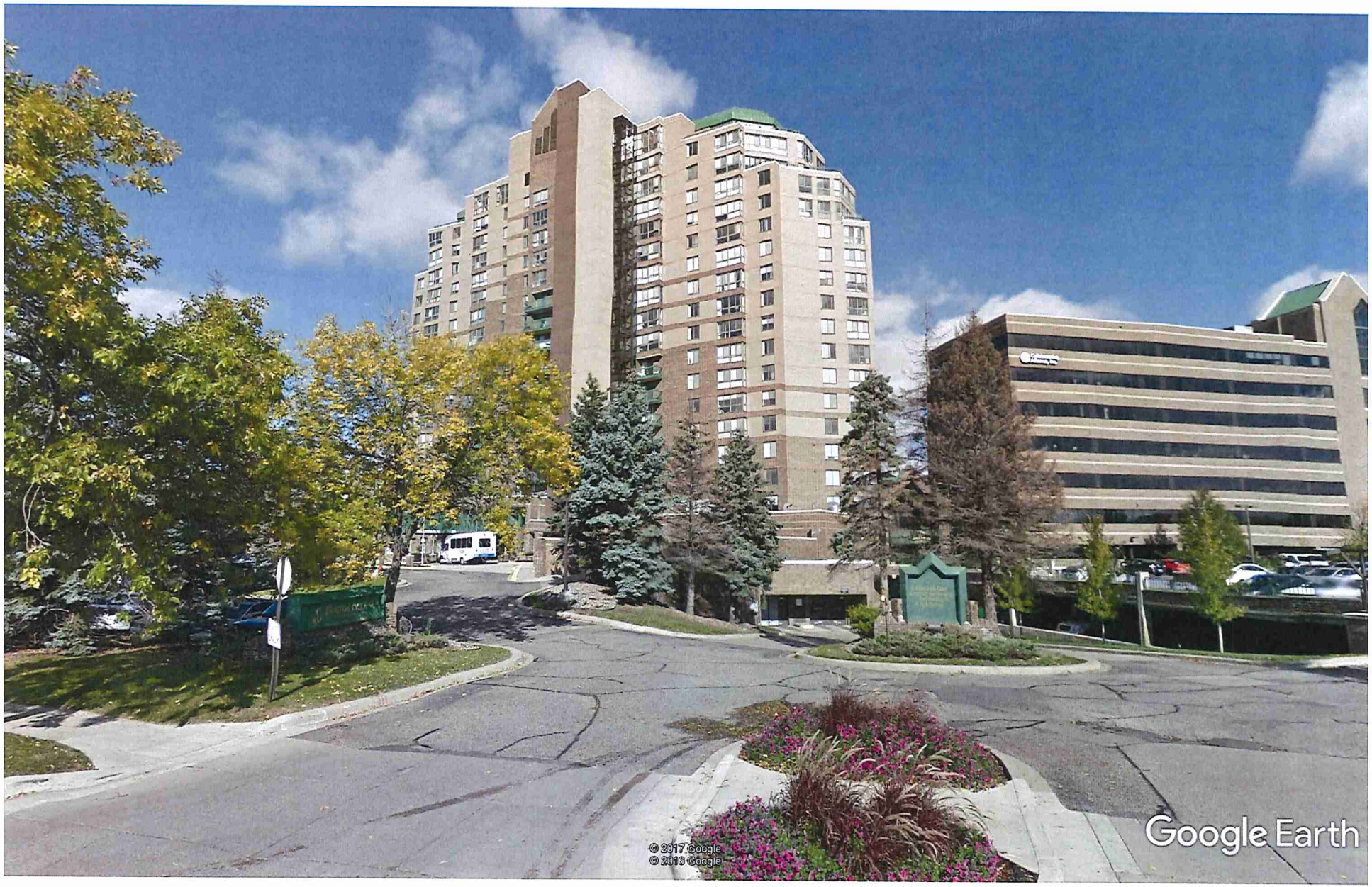

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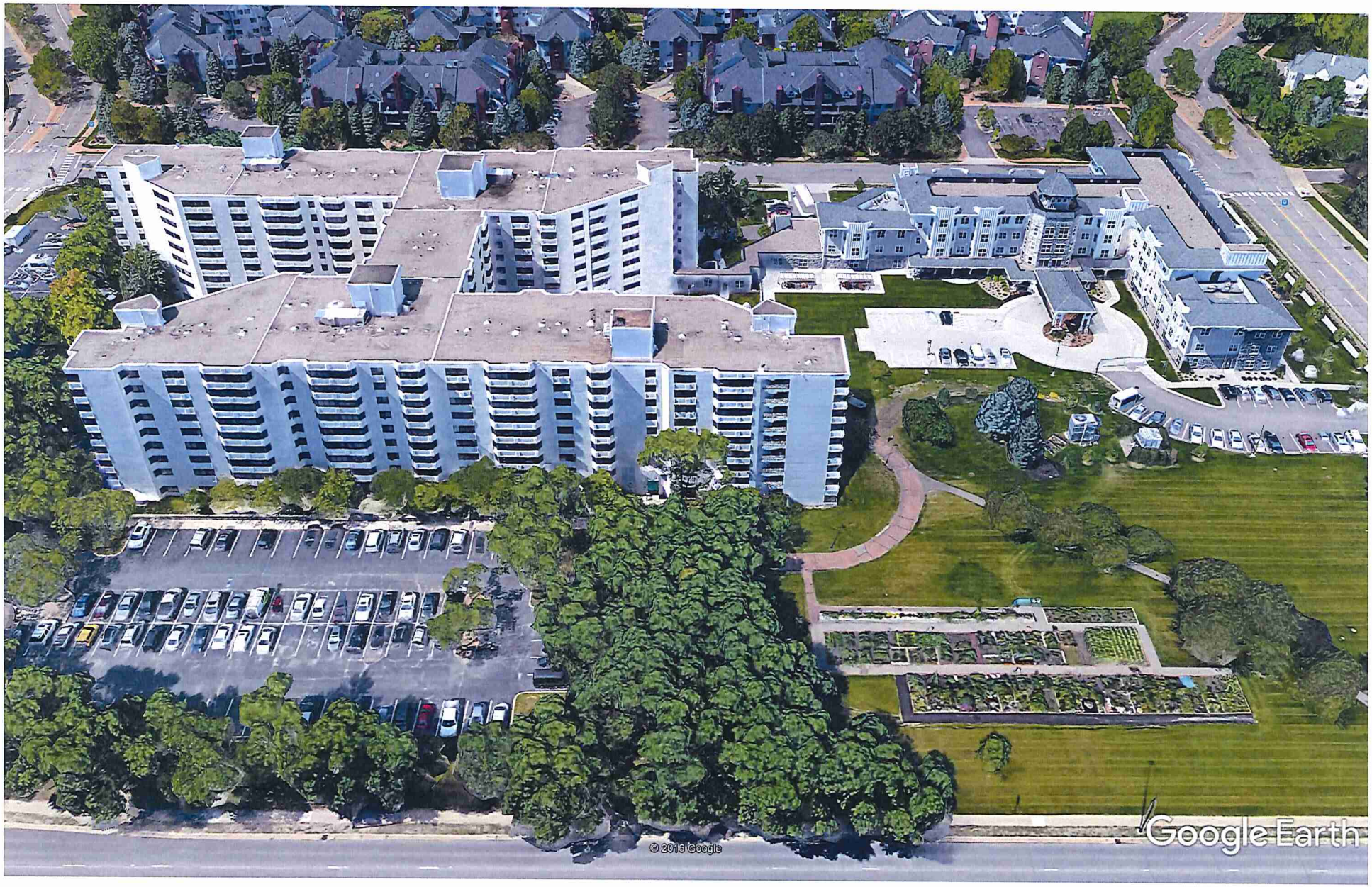

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A71

Spack CONSULTING
ENGINEERING TRAFFIC FORWARD

Traffic Impact Study

Estelle Edina Mixed Use Development
Edina, Minnesota

I hereby certify this report was prepared by me or under my direct supervision, and I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By: _____
Bryant J. Ficek, P.E., P.T.O.E.
License No. 42802

Date: September 21, 2017

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Executive Summary

Background:
A new mixed-use development is proposed on the southwest corner of the France Avenue and 69th Street intersection in Edina, Minnesota. The purpose of this study is to determine the traffic impacts associated with the build out of the proposed development on the study intersections where significant impact is anticipated.

Results:
The principal findings of this traffic study are:

- The proposed redevelopment is expected to generate approximately 752 new daily trips, approximately 77 new trips during the a.m. peak hour and approximately 86 new trips during the p.m. peak hour. This new traffic represents the increase expected beyond what the site currently generates today.
- The proposed redevelopment is expected to generate significantly less traffic compared to the maximum intensity use of the site, commercial land use that would increase traffic by 7,918 new trips daily, 89 new trips during the a.m. peak hour, and 431 new trips during the p.m. peak hour.
- All intersections are projected to operate with acceptable delays and queueing through all scenarios except for the eastbound 70th Street movement, which has significant queues during all p.m. peak scenarios.
- The redevelopment adds minimal traffic to this eastbound approach of 70th Street, with a negligible difference in queue lengths between the No-Build and Build scenarios.
- Negligible queue lengths at the site accesses.

Recommendations:
The following items are recommended based on the analyses contained in this study:

- Reevaluate signal timing at 70th Street and France Avenue intersection.
- The proposed access to 69th Street be limited to right-in/right-out operation.
- Consider signing for eastbound traffic on 70th Street directing drivers to the alternative route 69th Street from the 70th Street/Valley View Road intersection.
- Continue development of the City-wide facilities for transit, bicycle, and pedestrian networks to reduce reliance on vehicle travel.
- Consider the reconstruction of the 69th Street/Valley View Road intersection to roundabout control.
- Explore the revision of the 69th Street corridor to a three-lane roadway, allowing for improved access to the side street and development of bicycle lanes.
- Encourage/schedule truck deliveries and other activities as well as residential moving activities outside of the weekday peak periods.
- Improve the pedestrian facilities at the 69th Street/France Avenue intersection.
- Provide indoor and/or outdoor bicycle storage/stalls for tenants and visitors on site.
- Provide tenants with information regarding transit options.

TABLE OF CONTENTS

LIST OF TABLES & CHARTS

i. Introduction

a. Proposed Development

A new mixed-use redevelopment is proposed on the current site of the BMO Harris Bank, Bremer Bank, and the Galleria Offices on France buildings, located at the southwest corner of the France Avenue and 69th Street intersection in Edina, Minnesota. This redevelopment is proposed as 15,000 square feet of retail including a restaurant, a BMO Harris Bank and a Bremer Bank, as well as two residential towers with a total of 161 units.

b. Purpose of Study

The purpose of this study is to determine the traffic impacts associated with the build out of the proposed mixed-use redevelopment. The traffic impacts are studied on the roads and intersections where significant impact is anticipated and improvements are recommended where mitigation is needed. For those not familiar with the general concepts and terms associated with traffic engineering, *The Language of Traffic Engineering* guide is included in the Appendix.

c. Study Objectives

The objectives of this study are:

i. Document how the study intersections and roadways currently operate.
ii. Forecast the amount of traffic expected to be generated by the proposed development.
iii. Determine how the study intersections and roadways will operate in the future with and without the proposed development.
iv. Review the site circulation and multi-modal aspect.
v. Recommend appropriate mitigation measures if poor operations or areas of concern are identified.

For the purposes of this traffic study, the study intersections where the greatest impact is expected were chosen for review and include:

i. France Avenue/69th Street
ii. France Avenue/70th Street
iii. Valley View Road/70th Street
iv. Valley View Road/69th Street
v. 69th Street/Site Access 1
vi. 69th Street/Site Access 2
vii. France Avenue/Site Access 3
viii. Valley View Road/Site Access 4
ix. Valley View Road/Site Access 5

Two analysis years were chosen for this study representing the year after phase one of the redevelopment in year 2020 and the year after full build out of the redevelopment in the year 2023.

ii. Existing Conditions

a. Corridor Characteristics

As mentioned, the proposed site is located on the southwest corner of the France Avenue and 69th Street. Figure 1 shows the vicinity of the site and the study area, while Figure 2 shows the proposed site's Concept Plan. Table 1 shows the characteristics of the key roadway corridors around this site and within the study area.

Table 1 – Study Corridor Characteristics

Name	Designation[1]	Classification[2]	Speed Limit	Lanes	Transit	Peds/ Bicycles
France Avenue	CSAH 17	A Minor Arterial	40 mph	6 divided	1 Route	Sidewalk on west side, trail on east side
69th Street	MSA 159	Local	30 mph	4 divided	1 Route	Sidewalk on both sides
70th Street	MSA 145	Major Collector	30 mph	3 undivided	1 Route	Sidewalk on both sides
Valley View Road	MSA 150	Local	30 mph	2 undivided	N/A	Sidewalk on east side

[1]CSAH = County State Aid Highway, MSA = Municipal State Aid Route.
[2] Met Council Functional Classification.

b. Traffic Volumes

Intersection videos were collected at the study intersections under weekday conditions in June 2017. Using these videos, 24-hour turning movement counts were obtained at the study intersections.

The a.m. and p.m. peak hours for the intersections were found to be from 8:00 to 9:00 a.m. and 4:30 to 5:30 p.m. The counts from these two peak hours were used for analysis. The turning movement count data from the counts are contained in 15-minute intervals in the Appendix.

c. Existing Observations

All study area intersections were observed during the peak hours to determine any pre-existing concerns. The key observations are:

- During the a.m. peak hour, all intersections were observed with acceptable vehicle operations and reasonable queues.
- During the p.m. peak hour, vehicle queues on eastbound 70th Street at France Avenue are excessive. The stacking extended past the 70th Street/Valley View Road roundabout several times during this peak period. All other intersections had acceptable vehicle operations and queues.

iii. Forecasted Traffic

a. *Site Traffic Forecasting*

The *Institute of Transportation Engineers (ITE)* provides the *Trip Generation Manual, 9th Edition*, the standard document for determining expected traffic for proposed land uses. Using this ITE information, trip generation forecasts can be made for the development site.

For each analysis, the raw trip generation was divided among three types of trips – new, pass-by, and internal. Pass-by trips are those vehicles already on the roads which will stop at the development site in the future. Internal trips are those vehicles within the site visiting two or more stores. New trips represent traffic increasing the overall number of vehicles at the intersections. All pass-by, internal, and net new percentages used in this study were based on the values published in the *ITE Trip Generation Manual, 9th Edition*, the breakdown between these types of trip generation is:

- 10 percent Internal Trips.
- 20 percent Pass-By Trips.
- 70 percent New Trips.

The resultant new trips generated by the proposed development are shown in Table 2. It is noted while pass-by trips are not new to the system, they are new to the site and are included at the driveways. While most of the retail land uses were known, the exact square footages of each use were estimated based off the site plan provided. The Table also shows the net new trips to the study area by removing the traffic from the existing land uses.

For comparison purposes, Table 3 presents the trip generation assuming the maximum intensity of development for the site. In this case, the maximum intensity is commercial use of approximately 145,000 square feet. As shown, the proposed Estelle mixed-use development has a much smaller traffic impact than the maximum commercial use. A detailed trip generation table showing the exact breakdowns is provided in the Appendix.

Table 2 – New Trip Generation

Land Use Code – Source	Description & Size	Daily		AM Peak Hour		PM Peak Hour	
		In	Out	In	Out	In	Out
230 - ITE	Res. Tower/ Townhome (164 units)	429	429	9	57	53	23
710 - ITE	General Office (3,000 sq. ft.)	17	17	4	1	1	4
911 - ITE	Walk-In Bank (2,500 sq. ft.)	40	40	4	2	5	8
912 - ITE	Drive-In Bank (3 drive lanes)	90	90	9	3	20	22
932 - ITE	High Turnover/Sit Down Restaurant (5,500 sq. ft.)	164	164	17	11	18	7
TOTAL NEW TRIPS GENERATED		**740**	**740**	**43**	**74**	**97**	**64**
EXISTING TRIPS REMOVED		**363**	**365**	**30**	**10**	**32**	**43**
NEW TRIPS TO STUDY AREA		**377**	**375**	**13**	**64**	**65**	**21**

Table 3 – Maximum Commercial Trip Generation

Land Use Code – Source	Description & Size	Daily		AM Peak Hour		PM Peak Hour	
		In	Out	In	Out	In	Out
820 - ITE	Shopping Center (145,000 sq. ft.)	4323	4323	80	49	243	263
TOTAL NEW TRIPS GENERATED		**4,323**	**4,323**	**80**	**49**	**243**	**263**
EXISTING TRIPS REMOVED		**363**	**365**	**30**	**10**	**32**	**43**
NEW TRIPS TO STUDY AREA		**3,960**	**3,958**	**50**	**39**	**211**	**220**

A trip distribution pattern was then developed for the generated traffic going to and from the site. This pattern is based on the existing traffic volumes and access to the regional transportation system. The general trip distribution pattern assumed for this study is:

i. 10% of the generated traffic to/from the northwest on Valley View Road.
ii. 10% of the generated traffic to/from the west on 70th Street.
iii. 10% of the generated traffic to/from the east on 69th Street.
iv. 10% of the generated traffic to/from the east on 70th Street.
v. 30% of the generated traffic to/from the south on France Avenue.
vi. 30% of the generated traffic to/from the north on France Avenue.

Traffic generated by the site development was assigned to the area roadways per this distribution pattern.

b. Non-site Traffic Forecasting

To forecast traffic volumes for the future years 2020 and 2023 beyond the proposed development's traffic, general growth in traffic was added. Using the Minnesota Department of Transportation (MnDOT) data, the historic roadway volumes in the study area were examined. These volumes show relatively stable or decreasing volumes within the study area. In general, Edina could also be considered a relatively developed city expected to experience a lower growth rate. However, the France Avenue corridor is experiencing an increase in redevelopment. The 2016 Southdale Area Transportation Study was also consulted for expected growth in this area.

From this information, a 1.0 percent annual growth rate was applied to the existing volumes to generate the forecast 2020 and 2023 traffic volumes. This growth was applied to all existing movements in the study network to establish the No-Build forecasts.

c. Total Traffic

Traffic forecasts were developed for the 2020 and 2023 Build scenarios by adding the traffic generated by the proposed residential development to the No-Build forecast volumes. Peak hour forecasts are shown in the Appendix.

iv. Analyses

a. *Site Access Review*

The site will be accessible from each of the surrounding roadways, either directly or through the adjacent building parking areas. The right in/right out (RIRO) on France Avenue (site access 3) and full access Valley View Road (site access 5) will remain the same as the existing condition. The site access on 69th Street (site access 1) will consolidate two RIRO access points into one. The concept site plan shows the site access on 69th Street as a full access. However, with the existing corridor geometry, this access is not acceptable for the following reasons:

- Short distance between intersections not meeting accepted spacing guidelines.
- Potential weaving issues for entering and exiting traffic navigating to the left turn lanes.
- Potential sight distance issues for exiting left turn traffic as drivers would need to keep track of various movements from the France Avenue/69th Street intersection.
- Potential conflicts between vehicle queuing on eastbound 69th Street at France Avenue and turning traffic, although this situation is limited and occurs primarily during the peak periods.

Based on these reasons, full access onto 69th Street with the current geometry was not explored further. Instead, this access was initially analyzed as a RIRO intersection.

b. *Corridor Vehicular Analysis*

While many factors contribute to a road feeling congested, the two biggest factors are volume, how many vehicles are using the road, and capacity, how many vehicles the road can accommodate a day. Transportation professionals use these pieces of information to create a ratio of volume to capacity. For example, a road with a volume to capacity ratio of 1.0, where the traffic demand is nearly equal to the traffic supply, will feel congested to motorists.

Below is a rough guide of the daily traffic volumes different types of roads can accommodate based on the *Highway Capacity Manual, 6th Edition* Exhibit 16-16. If the Average Daily Traffic (ADT) volume on a roadway is below the threshold, then it is considered un-congested. If the daily volume falls inside the range, the road is almost congested, and if the daily volume is over the threshold the road is congested.

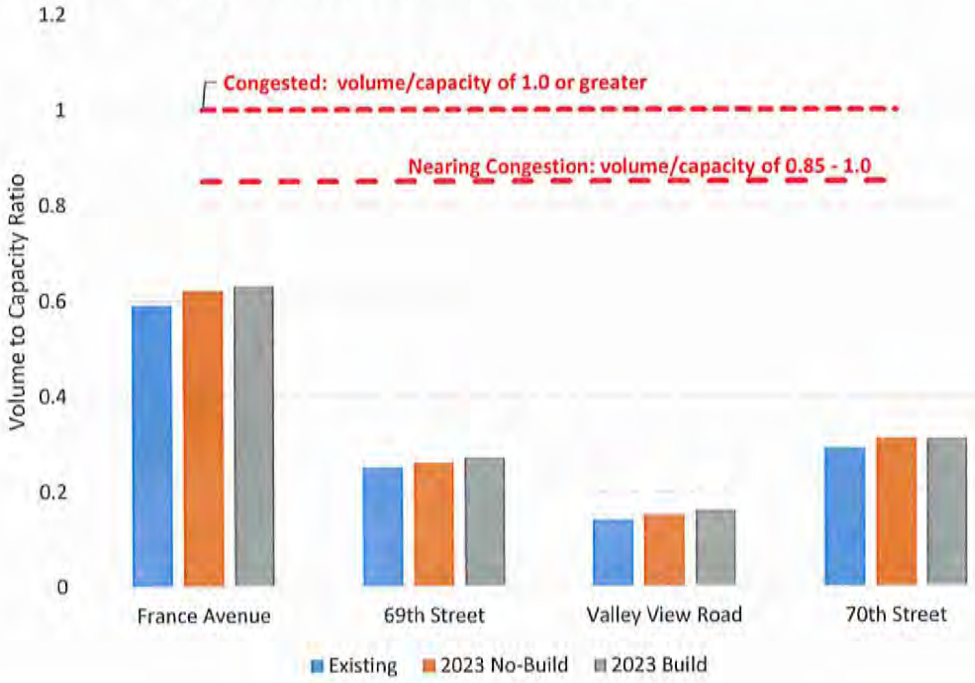
- 2-Lane (one in each direction with left turn lanes at busy intersections and coordinated signals), undivided street, are considered almost congested with a volume of 8,900 to 18,300 vehicles per day.

- 4-Lane, undivided street (two in each direction with left turn lanes at busy intersections and coordinated signals), – 18,600 to 36,800 vehicles per day.
- 6-Lane, divided street (three in each direction with left turn lanes at busy intersections and coordinated signals), – 29,100 to 55,300 vehicles per day.

The above capacities represent physical capacity in ideal roadway conditions. Research from UC Berkley, for example, indicates quality of life along a residential street is negatively impacted when the ADT exceeds 1,000 vehicles per day. Therefore, the 1,000 vehicle per day threshold is used for the capacity along neighborhood two lane roads even though its physical capacity is approximately ten times larger.

To provide an initial planning level screening, Chart 1 provides the daily volume to capacity ratios of the study corridors during each of the study full build out study year to determine if any of the roadway corridors are candidates for additional through lanes. As shown, the study corridors are all below the planning capacity of each road. In addition, the proposed development does not significantly add to the corridor daily volumes.

Chart 1 – Study Corridor Volume to Capacity



c. *Intersection Analysis*

The initial scenarios analyzed in this study for both the a.m. and p.m. peak hours were the existing, 2020 No-Build, 2023 No-Build, 2020 Build, and 2023 Build.

The traffic operation analysis is based on delay calculations done in accordance with the *Highway Capacity Manual, 6th Edition* using the Vistro software package. The full calculations for each study scenario, including traffic operational Level of Service (LOS) grades and queue lengths, are included in the Appendix. Also, included in the Appendix is a guide explaining the Level of Service grade concept.

Chart 2 (a.m. peak hour) and Chart 3 (p.m. peak hour) show the average peak hour delay for signal controlled intersections for each study scenario. These intersections include France Avenue/69th Street and France Avenue/70th Street. The LOS D/E boundary of 55 seconds of delay per vehicle is considered the threshold between acceptable and unacceptable traffic signal operation in Minnesota. The initial signal timing for the existing conditions was provided by Hennepin County.

Chart 2 – A.M. Peak Hour Delays: Signal Controlled Intersection

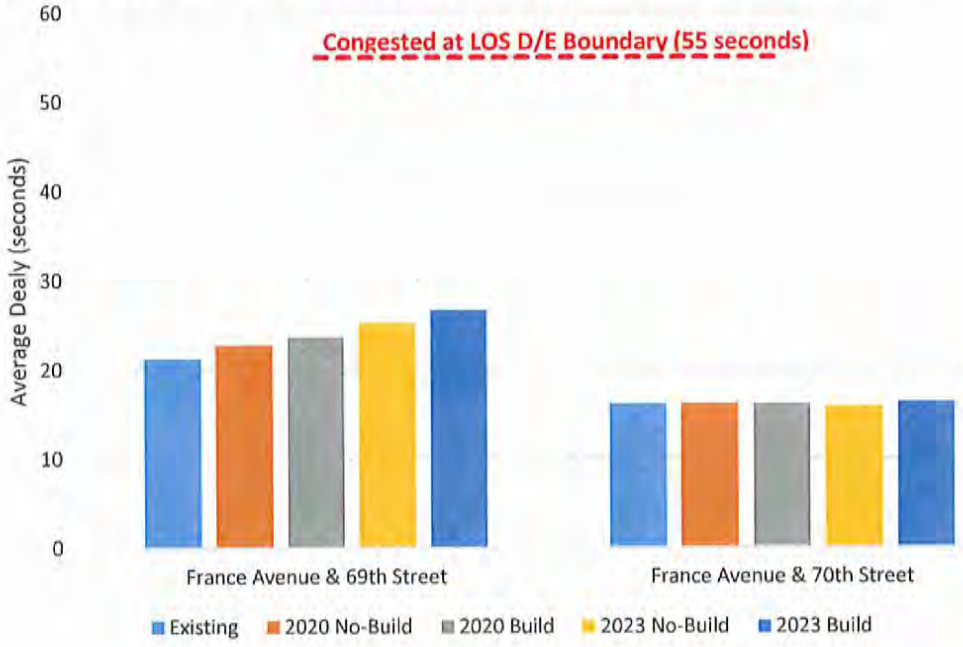


Chart 3 – P.M. Peak Hour Delays: Signal Controlled Intersection

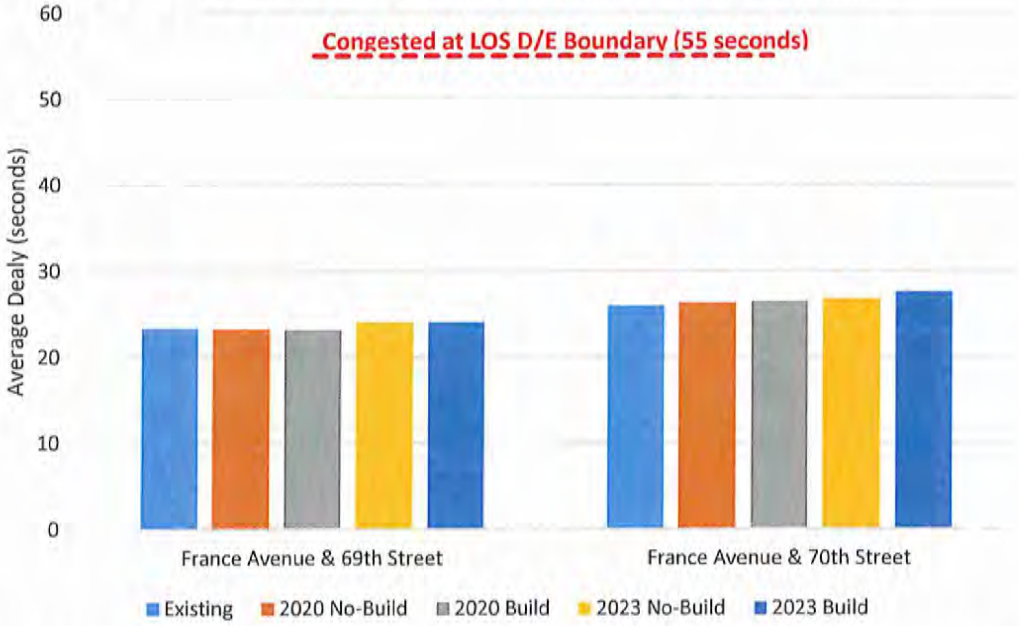


Chart 4 (a.m. peak hour) and Chart 5 (p.m. peak hour) show the average peak hour delay for the Roundabout Controlled intersection of 70th Street & Valley View Road. The LOS D/E boundary of 35 seconds of delay per vehicle is considered the threshold between acceptable and unacceptable traffic Roundabout operation in Minnesota.

Chart 4 – A.M. Peak Hour Delays: Roundabout Controlled Intersection

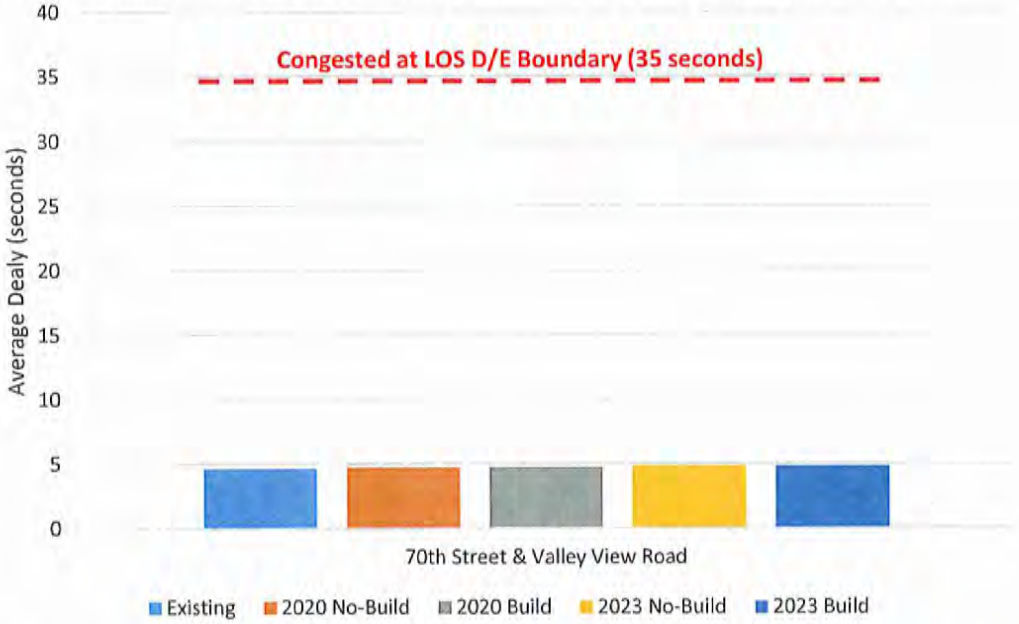


Chart 5 – P.M. Peak Hour Delays: Roundabout Controlled Intersection

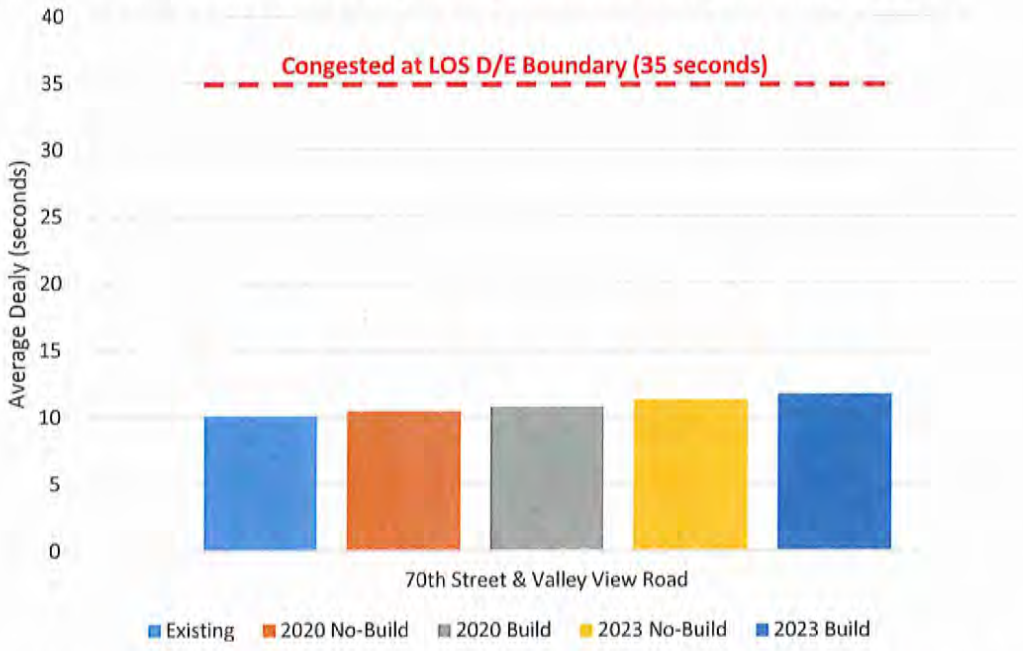


Chart 6 (a.m. peak hour) and Chart 7 (p.m. peak hour) show the 95th percentile vehicle queue lengths as the measures of effectiveness at intersections with side street stop sign control. For this type of control, vehicle queues are a better measure than LOS or delay, which can be poor with even a handful of vehicles. Queues are presented for the longest queue experienced at the intersection. Based on our experience, improvements are not warranted until the 95th percentile queue at a stop sign is in the five to ten vehicle range.

Chart 6 – A.M. Peak Hour Queues: Side Street Stop Sign Controlled Intersection

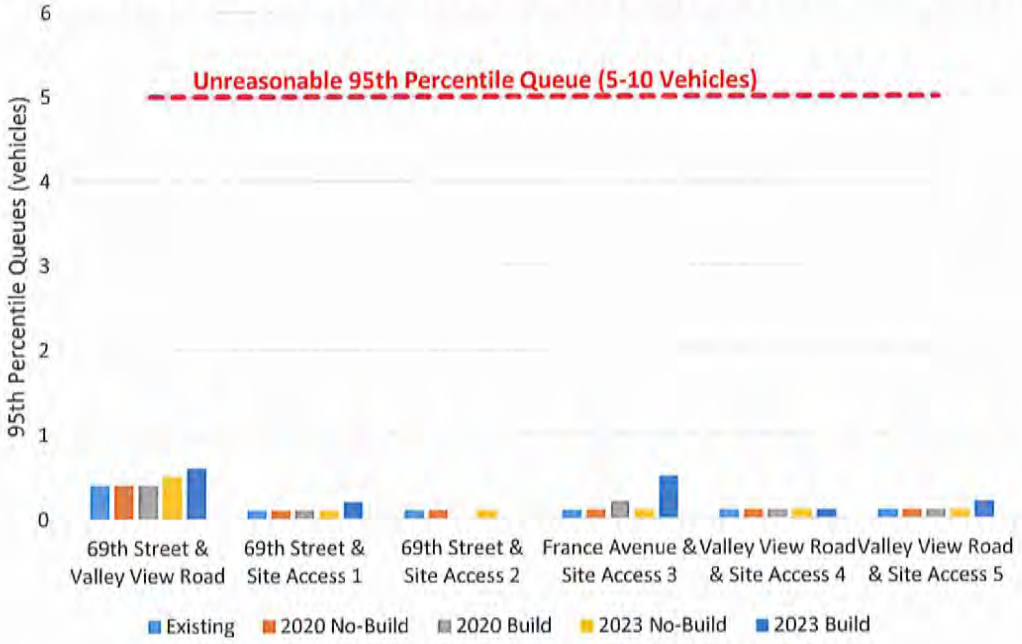
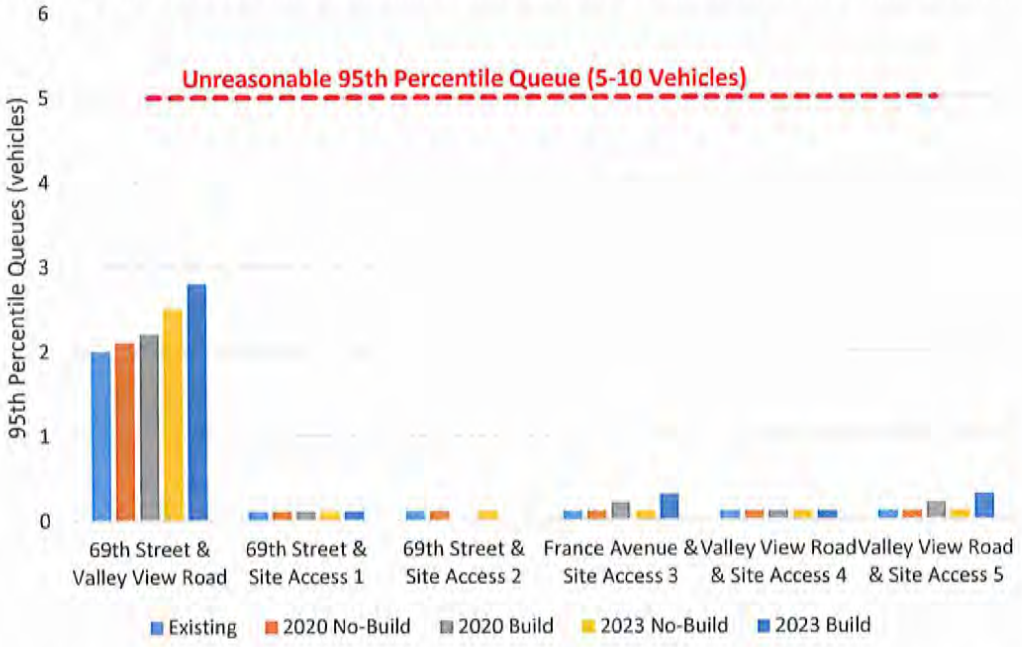


Chart 7 – P.M. Peak Hour Queues: Side Street Stop Sign Controlled Intersection



Overall, the results of the capacity show acceptable vehicle operations at the study intersections. With traffic from the proposed redevelopment is distributed amongst the study corridors and intersections, operations are expected to

remain similar and overall acceptable. The additional vehicles generated redevelopment of the southwest corner of France Avenue/69th Street as a proposed mixed-use complex is not expected to significantly impact the surrounding roadway system. This is evidenced by the relatively similar delay and queuing results between the No-Build and Build scenarios under either analysis year.

While overall results are acceptable, the intersections of France Avenue with 69th Street and with 70th Street are currently operating at LOS E on the side streets during all p.m. peak scenarios, with minimal differences in delay between the No-Build and Build scenarios Part of this result is due to the signal coordination timing on France Avenue that limits the green time devoted to the side street movements. The eastbound vehicle queues sometimes reach the right-in/right-out access during the peak periods at 69th Street. The eastbound vehicle queues on 70th Street have extended back to the roundabout at Valley View Road for small periods of time within the peak hour.

Although not desirable, these results are generally limited to the p.m. peak period. In addition, the proposed redevelopment will add less than one vehicle to the 95th percentile vehicle queue.

These results match that of the 2016 Southdale Area Transportation Study. This 2016 study noted generally overall acceptable operations, although some individual movements experience difficulties. Another conclusion of this 2016 study was the need to conduct detailed analysis of intersections in the area with additional development of the area to document the need for specific improvements.

d. Mitigation Analysis

Per the above analyses, consideration was given to improving operations regarding two issues:

- Reducing the vehicle queuing on 70th Street at France Avenue.
- Improving access to the proposed redevelopment via 69th Street without providing a full access development intersection.

70th Street is a three-lane road with a single lane in each direction and a two way left turn lane in the middle. At France Avenue, the eastbound direction of 70th Street has a dedicated left turn lane, a through lane, and a dedicated right turn lane. Options considered for reducing the vehicle queues include:

- Signal timing adjustments.
- Signal phasing adjustments.
- Additional geometric lanes.
- Reduction/redirection of traffic volumes.

The signal timing is set based upon providing the most green time to the approaches with the highest volume, in this case France Avenue. This is routine

practice and should continue. However, traffic patterns often change and the signal timing should be updated to reflect the latest volumes and trends. Only a minor reduction in the vehicle queues is expected with an updated timing plan, but is recommended to occur periodically to ensure the most efficient operations are provided.

A signal phasing change could include moving to split phase operations between the eastbound and westbound approaches on 70th Street. By devoting the green time to all eastbound movements at once and then all westbound movements, the left turn traffic would not get caught in the thru movement queue nor be subject to conflicting movements from the opposing thru movement. With split phasing, striping could change to allow for dual lefts or other types of combined movement lanes (left turn/thru, thru/right turn, etc.). Atypical for signal operation, split phasing has inherent disadvantages for off-peak operation and future flexibility for changing volumes. In addition, the eastbound (and westbound) movements are roughly equal among the left turn, thru, and right turn movements. Split phasing is not likely to provide many, if any, gains and could have more negative impacts during non-peak periods. Split phasing is not recommended for improvement.

Additional vehicle lanes will allow more vehicle stacking and additional vehicles to proceed through the intersection during the limited green time provided. In terms of capacity and improving operations, additional lanes are an option. However, the surrounding land is relatively built-up with limited right-of-way or available land for added geometric lanes. These types of improvements would also impact pedestrian movements by creating a longer crossing and increasing exposure to vehicles and bicycle movements by potential removing the on-street bicycle lanes provided to make room for the vehicle lanes. Increasing the vehicle lanes, though an improvement to operations that would reduce the vehicle queues, is not recommended due to these reasons.

The last improvement option for eastbound traffic on 70th Street is to redirect or reduce the volume. 70th Street has more eastbound traffic compared to eastbound 69th Street. Using the roundabout at the 70th Street/Valley View Road intersection easily allows drivers to travel to 69th Street and use that intersection to access France Avenue. Redirecting traffic is an education process that is difficult to reach commuters, but could be accomplished through signing at the roundabout. Based on observations, at least some drivers have already 'discovered' this alternative route and use it during the peak periods if vehicle queues are present.

A reduction in traffic volume could occur through the continued effort of the City to develop the pedestrian and bicycle network as well as ensuring transit options are provided. More discussion on these options is explored in the next section. As mentioned, the proposed redevelopment access to 69th Street is not recommended for full access and was instead studied as RIRO only. To improve

potential access to the redevelopment site and potential better balance traffic between the 69th Street and 70th Street corridors, the following options were considered:

- Construction of a roundabout at the 69th Street/Valley View Road intersection.
- Conversion of the 69th Street corridor to provide a three-lane road (one thru lane in each direction with a center, two-way left turn lane), similar to 70th Street.

Roundabout operation would allow for an easy U-turn movement, westbound to eastbound on 69th Street, for motorists to use the proposed redevelopment access. Roundabouts are generally safer than traditional intersections and would improve the left turn movement from northbound Valley View Road. A multi-lane roundabout, assuming two thru lanes eastbound and westbound on 69th Street, would provide good vehicle operations and would not impact operations at the adjacent intersections. This option should be further explored for future consideration.

The volumes on 69th Street are slightly lower than 70th Street and within the capacity of a three-lane roadway. Assuming a corridor-wide change to at least the 66th Street intersection would allow for a change of two intersections from RIRO to ¾-access (allowing left turns into the access, but not left turns out). The exiting left turns at the redevelopment access would still need to be prohibited due to the close spacing to adjacent intersections. Revising the corridor would provide space for on-street bicycle lanes, improving a multi-modal option. The vehicle operations would decrease compared to today due to the loss of a thru lane for travel and stacking at the signalized intersections. Conversation of the 69th Street corridor to a three-lane roadway is recommended for further study to fully understand the impacts, positive and negative, beyond those for this redevelopment site.

e. *Concept Site Plan & Multi-Modal Review*

The concept site plan contained in the Appendix was reviewed for potential improvements to the circulation and connection of the multi-modal system. The following are the key categories reviewed and highlights of that review:

i. **Vehicle Circulation**: The site would have sufficient vehicle circulation with accesses to three surrounding roadways, either directly or indirectly through adjacent parking lots. These accesses allow vehicles options for entering and exiting the development which will help spread traffic more evenly through the site and parking facilities.

   To reduce traffic impacts, truck deliveries including garbage/recycling collection and tenant move-in/move-out times should be scheduled during non-peak periods to the extent possible.

ii. **Bicycle and pedestrian infrastructure:** Sidewalks are proposed to be provided on all roadways surrounding the development and throughout

the site. Connections to existing sidewalks and paths to the west and south will be provided. Attention is needed for the at-grade pedestrian crossings at the 69th Street intersection with France Avenue, which allows for important connections to the east and north. The pedestrian signal timing should be checked for the latest standards and the proper ADA ramps, pedestrian indications, and striping should be provided to increase safety and accessibility. There will be a pedestrian bridge between the two residential towers. The potential to build a pedestrian bridge across France Avenue to the Galleria Shops should continue to be explored to reduce the exposure of pedestrians to France Avenue traffic.

The existing site plan does not show or mention bicycle parking facilities for tenants or visitors. Indoor bicycle storage is recommended for tenants along with outdoor bicycle parking for short-term by tenants and visitors. Whether indoor or outdoor, bicycle parking should be convenient to the residential or retail entrances and in well-lit locations for safety and visibility.

iii. **Adjacent Transit:** There are bus stops within walking distance of the development site with existing transit routes available to St. Paul and Minneapolis. It is recommended bus route information be provided to tenants to inform them of the transit options available within the area (potentially as part of a move-in packet). In the commons or lobby of the residential or retail components, real-time transit screens could also be explored. Routinely used in the downtown areas, real-time transit screens replace printed material, provide the most accurate data regarding the adjacent transit facilities, and are a visible reminder of the transit option. The developer could work with Met Transit to further explore the feasibility of this option.

V. Conclusions and Recommendations

The traffic impacts of the proposed mixed-use redevelopment were studied and the principal findings are:

- The proposed redevelopment is expected to generate approximately 752 new daily trips, approximately 77 new trips during the a.m. peak hour and approximately 86 new trips during the p.m. peak hour. This new traffic represents the increase expected beyond what the site currently generates today.
- The proposed redevelopment is expected to generate significantly less traffic compared to the maximum intensity use of the site, commercial land use that would increase traffic by 7,918 new trips daily, 89 new trips during the a.m. peak hour, and 431 new trips during the p.m. peak hour.
- All intersections are projected to operate with acceptable delays and queueing through all scenarios except for the eastbound 70th Street movement, which has significant queues during all p.m. peak scenarios.
- The redevelopment adds minimal traffic to this eastbound approach of 70th Street, with a negligible difference in queue lengths between the No-Build and Build scenarios.
- Negligible queue lengths are expected at the site accesses.

The following recommendations are made based on the above findings:

- Signal timing at 70th Street & France Avenue should be reevaluated to try to improve side street operations.
- No geometric or striping changes are required because of the development.
- The proposed access to 69th Street is not recommended for full access and should instead be limited to right-in/right-out operation.
- Consider signing for eastbound traffic on 70th Street directing drivers to the alternative route 69th Street from the 70th Street/Valley View Road intersection.
- Continue development of the City-wide facilities for transit, bicycle, and pedestrian networks to reduce reliance on vehicle travel.
- Consider the reconstruction of the 69th Street/Valley View Road intersection to roundabout control.
- Explore the revision of the 69th Street corridor to a three-lane roadway, allowing for improved access to the side street and development of bicycle lanes.
- Encourage/schedule truck deliveries and other activities as well as residential moving activities outside of the weekday peak periods.
- Improve the pedestrian facilities at the 69th Street/France Avenue intersection, including ADA improvements, pedestrian timing to current standards, and appropriate striping to encourage connections to the north and south.
- Provide indoor and/or outdoor bicycle storage/stalls for tenants and visitors on site, preferably convenient to entrances and well-lit.
- Provide tenants with information regarding transit options as part of a move-in packet and explore the feasibility of a real-time transit screen to increase visibility of the transit option and provide the latest data.

vi. Appendix

A. Figures

B. The Language of Traffic Engineering

C. Traffic Counts

D. Trip Generation Tables

E. Peak Hour Volumes

F. Level of Service (LOS)

G. Capacity Analysis Backups

- AM Existing
- PM Existing
- AM 2020 No-Build
- PM 2020 No-Build
- AM 2020 Build
- PM 2020 Build
- AM 2023 No-Build
- PM 2023 No-Build
- AM 2023 Build
- PM 2023 Build

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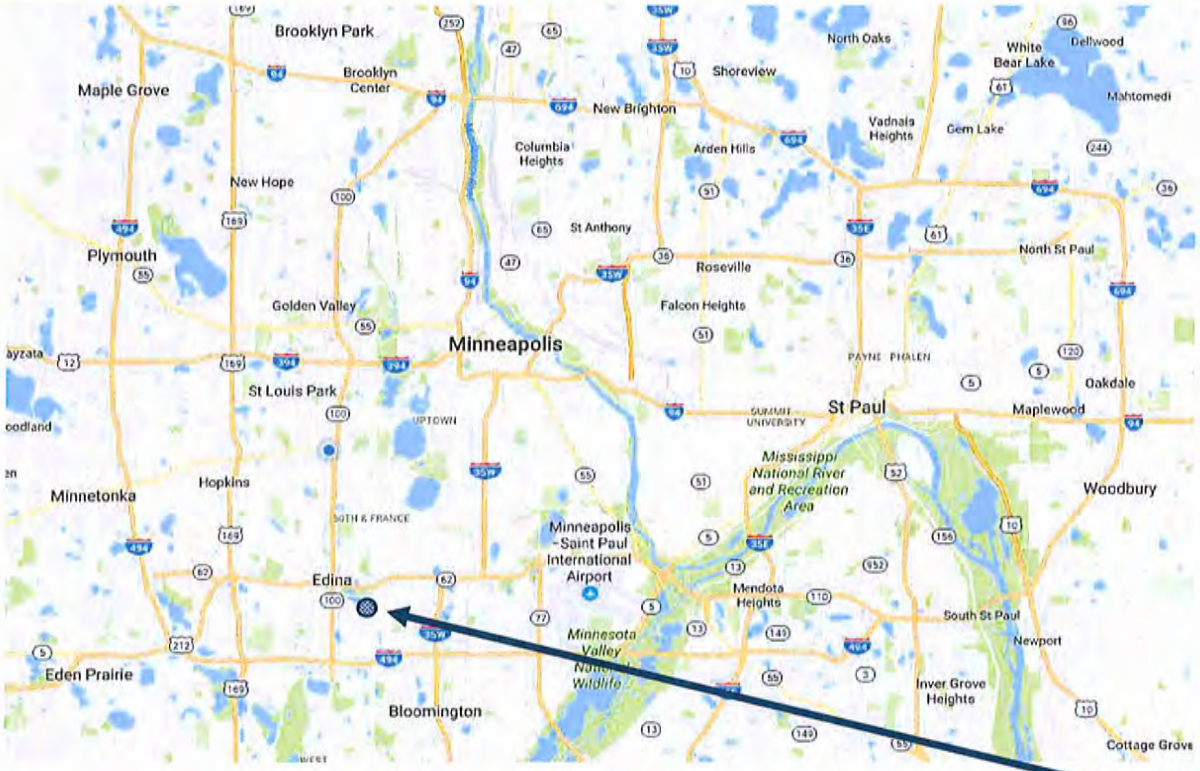
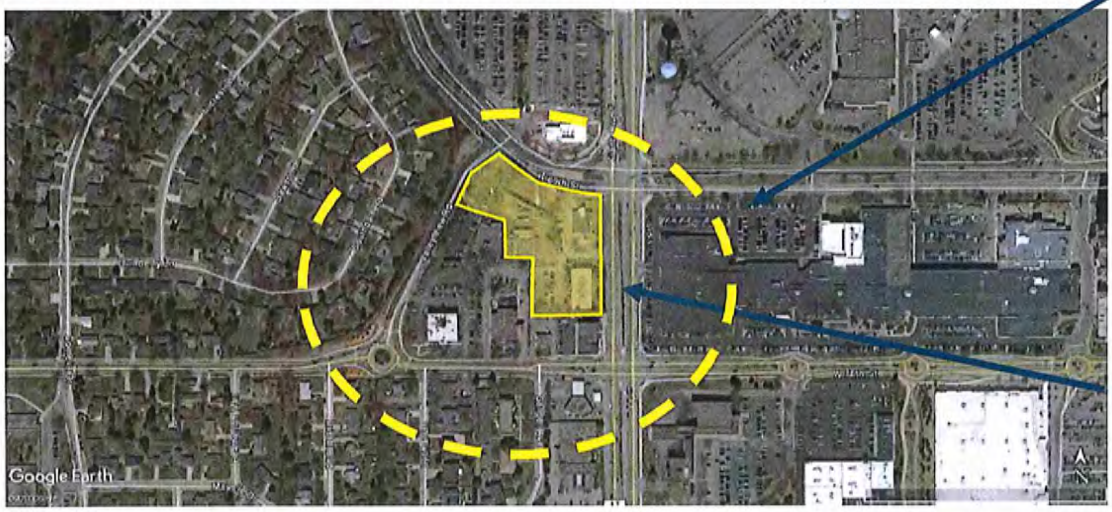
Figure 1
Location Maps

North
No Scale



Study Area



Proposed Site

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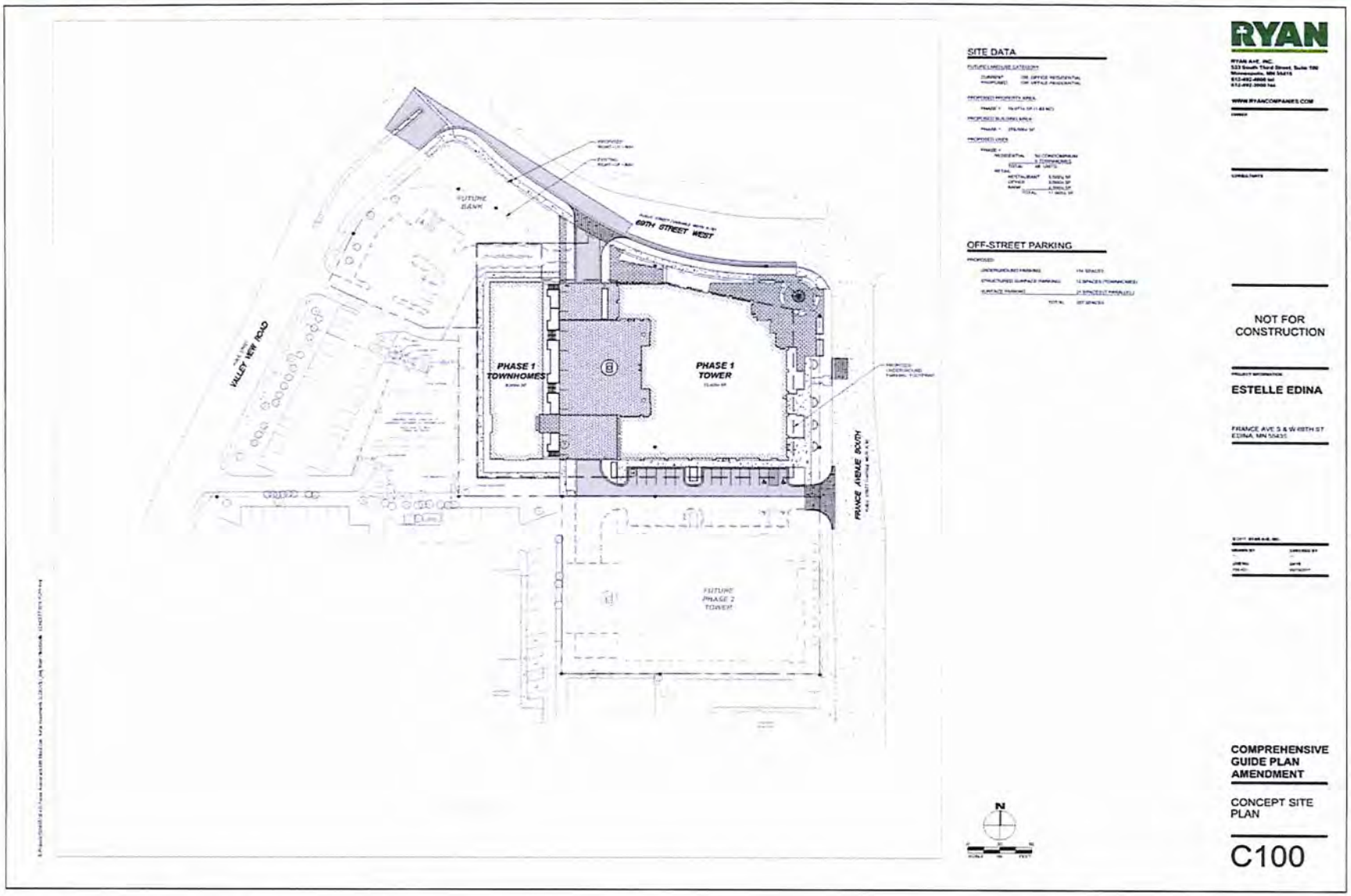
Figure 2
Concept Plan



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The Language of Traffic Engineering

Traffic Engineering, and Traffic Engineers, often use technical terms or jargon that may be confusing or tough to understand even within the context of a sentence. Key terms and acronyms that can generally be found in all types of traffic studies are defined in this document.

Types of Studies

Access Management – The practice of government agencies limiting the amount of intersections (both public roadway crossings and private driveways) along a roadway corridor based on the function of the roadway to improve safety and mobility while streamlining access.

Corridor Study – A transportation review and analysis of the existing and future traffic operations of a roadway segment. Varies in length from a couple blocks to a few miles and typically covers all modes of travel.

Intersection Control Evaluation (ICE) Report – A document that examines and determines the most appropriate type of control (stop sign, signal, roundabout, or other) at one or more intersections.

Safety Study – An examination of crash records to identify potential trends, issues, and problem intersections/ corridors. Usually includes potential mitigation options expected to decrease crash rates in the future.

Speed Study – A review of existing travel speeds and the corridor characteristics to determine if speeding is an issue, the appropriate speed to post as the limit, and/or areas to provide reduced speed warnings.

Traffic Impact Study (TIS) – A document that addresses the expected traffic impacts of a development and, if necessary, mitigation options that will reduce or eliminate negative impacts. Also referred to as a Traffic Impact Analysis.

Transportation Plan – A document developed by a government agency to take inventory of their transportation network, identify concerns or issues and lay out the path for improvement of the system.

Travel Demand Management Plan (TDMP) – A plan that documents the existing infrastructure around a site, including transit and non-motorized vehicle options, and develops measures to be implemented to encourage those alternative modes of travel.

Warrant Evaluation – Review of traffic volumes and other characteristics at an intersection against thresholds to determine if a traffic signal or other traffic control option is needed/warranted.

Source: ETH Zurich

Traffic Engineering is a branch of civil engineering that focuses on the safe and efficient movement of people and vehicles. It is part science and part art, requiring not only technical skills for analysis but an understanding of motivations in choosing travel routes.

Key Organizations

AASHTO – American Association of State Highway and Transportation Officials. A nonprofit, nonpartisan association representing transportation departments with a primary goal of fostering the development, operation, and maintenance of an integrated national transportation system.

DOT – Department of Transportation. Government organizations within federal and state agencies dedicated to serving the transportation needs of the community and typically responsible for study, design, operation, and maintenance of all facets of transportation.

FHWA – Federal Highway Administration. An agency within the US Department of Transportation that supports State and local governments in the design, construction, and maintenance of the highway system.

ITE – Institute of Transportation Engineers. An international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs.

Results

85th Percentile Speed – Speed at which 85 percent of drivers are traveling at or below. Speed limits are typically set at the 85th percentile speed.

95th Percentile Queue – The distance, generally measured in feet or number of vehicles, which will be exceeded in a lane, typically at an intersection, only five percent of the time. Usually used to help determine intersection turn lane lengths.

Control Delay – The total amount of time a motorist takes to get through a road segment or intersection minus the time it would take without stopping due to traffic controls (like stop signs or traffic signals). Control delay includes decelerating and accelerating back to full driving speed.

Functional Classification – the grouping of streets and highways into categories according to their characteristics and emphasis on mobility or access. Generally, categories include arterials (emphasizing mobility and fast travel), local roads (emphasizing access to adjoining properties), and collector roads (emphasizing a balance between the two and usually connecting arterials to local roads).

Intersection Delay – The average amount of time, usually expressed in seconds, experienced by any vehicle traveling through an intersection.

Level of Service (LOS) – Qualitative measure of traffic operations related to the amount of average delay experienced. Expressed in letter grades with LOS A representing the best operations with little to no delay and LOS F representing the worst operations with excessive delays and congestion.

Measures of Effectiveness – Performance measures that define how well traffic is moving along a corridor or thru an intersection. The common MOEs are travel time, corridor speed, delay, and queues.

Mitigation – Measures intended to reduce the impact of a development or improve an identified traffic issue by either improving capacity (like adding lanes) or reducing demand (like encouraging carpooling).

Queue – Length of line of cars waiting at an intersection or at a bottleneck in a corridor, typically measured for each individual lane of traffic in feet or number of vehicles.

Volume to Capacity (v/c) ratio – the number of vehicles through an intersection or roadway segment in a specific amount of time divided by the expected capacity of the road. Less than 1.0 indicates available capacity and above 1.0 indicates more vehicles than can be accommodated. Typically, a v/c ratio above 0.85 suggests operational issues.

Trip Generation – The amount of vehicle traffic generated by a land use. One trip is equal to one vehicle traveling from an origin to a destination (traveling to and from work equals two trips).

Warrants – Criteria based on volumes and other Measures of Effectiveness for determining when all way stop signs, roundabouts, traffic signals, or other type of control should be installed.

Important Manuals/Guides

HCM – Highway Capacity Manual (released by the Transportation Research Board, or TRB). The guide for engineers and planners to assess traffic and environmental effects of highway projects. This manual presents the foundation of traffic analysis procedures in the US.

MUTCD – Manual of Uniform Traffic Control Devices. A document that sets minimum standards and provides guidance to ensure uniformity of traffic control devices (such as messages, location, size, shapes, and colors) across the nation. All roads are subject to its jurisdiction.

HSM – Highway Safety Manual (released by AASHTO). A guide that presents a variety of methods for quantitatively estimating crash frequency or severity.

Resources

MUTCD, 2009 Edition, published by FHWA

Highway Capacity Manual, HCM2010

Highway Safety Manual, HSM

About This Brief

Spack Consulting prepared this brief as part of our company's vision to significantly improve the practice of traffic engineering and transportation planning. Transportation professionals from around the world have assisted us in developing this document. We are providing this brief under the Creative Commons Attribution License. Feel free to use-modify-share this guide, but please give us some credit in your document. To request our whole series of Design Briefs and to be included on our distribution list for new materials, please email mspack@spackconsulting.com. And please reach out if you have any comments or questions related to this Design Brief.

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 69th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 1

France Avenue & 69th Street
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						69th Street From East						France Avenue From South						69th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
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12:15 AM	0	0	8	0	0	8	0	4	1	3	0	8	1	1	9	1	0	12	0	0	4	2	0	6	34
12:30 AM	0	0	9	0	0	9	0	9	0	4	0	13	0	1	3	5	0	9	0	0	1	2	0	3	34
12:45 AM	0	0	6	1	0	7	0	2	0	2	0	4	1	0	13	3	0	17	0	0	1	2	0	3	31
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01:45 AM	0	0	2	0	0	2	0	0	0	1	0	1	0	0	7	0	0	7	0	0	1	1	0	2	12
Total	0	2	19	0	0	21	0	10	2	4	0	16	0	1	20	3	0	24	0	0	1	7	0	8	69
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Total	0	0	8	0	0	8	1	3	1	0	0	5	0	0	6	2	0	8	0	1	0	1	0	2	23
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03:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	4	0	0	4	0	0	1	0	0	1	7
03:45 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	1	0	2	10
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04:00 AM	0	0	2	0	0	2	0	0	1	0	0	1	0	0	4	0	0	4	0	0	0	1	0	1	8
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05:45 AM	0	6	33	0	0	39	0	2	0	3	0	5	0	3	29	7	0	39	0	0	19	19	0	38	121
Total	0	13	83	1	0	97	0	8	7	6	1	22	0	5	84	16	0	105	0	1	40	45	0	86	310
06:00 AM	0	4	33	0	0	37	0	1	5	3	0	9	0	2	42	6	0	50	0	1	9	14	0	24	120
06:15 AM	0	6	34	1	0	41	0	3	6	2	0	11	0	9	54	5	0	68	0	1	12	14	0	27	147
06:30 AM	0	5	44	0	0	49	0	2	6	5	0	13	0	3	68	13	0	84	0	0	11	26	1	38	184
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Total	0	22	186	1	1	210	0	10	24	12	0	46	0	21	260	35	0	316	0	2	47	84	1	134	706

Traffic Data Inc

3268 Xenwood Avenue South
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	France Avenue From North						69th Street From East						France Avenue From South						69th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	4	72	1	0	77	0	7	15	0	0	22	0	7	141	9	0	157	0	0	11	28	0	39	295
07:15 AM	1	4	81	2	0	88	0	7	31	11	0	49	1	3	107	7	0	118	0	4	22	58	1	85	340
07:30 AM	0	7	116	4	0	127	0	16	30	14	0	60	0	8	135	6	0	149	0	5	21	43	0	69	405
07:45 AM	0	6	163	2	0	171	1	17	26	8	0	52	0	18	156	9	0	183	0	4	30	65	1	100	506
Total	1	21	432	9	0	463	1	47	102	33	0	183	1	36	539	31	0	607	0	13	84	194	2	293	1546
08:00 AM	0	3	140	2	1	146	0	11	24	4	0	39	2	11	134	7	1	155	0	1	21	65	1	88	428
08:15 AM	0	4	134	3	1	142	0	12	19	10	0	41	2	13	135	19	0	169	0	0	33	57	3	93	445
08:30 AM	0	8	115	3	0	126	0	18	20	4	0	42	2	18	154	19	0	193	0	2	23	69	2	96	457
08:45 AM	0	12	152	2	1	167	0	9	20	16	0	45	0	15	160	17	0	192	0	1	51	88	1	141	545
Total	0	27	541	10	3	581	0	50	83	34	0	167	6	57	583	62	1	709	0	4	128	279	7	418	1875
09:00 AM	0	12	150	2	0	164	0	15	16	7	0	38	1	10	145	15	0	171	0	2	30	63	1	96	469
09:15 AM	3	14	126	4	0	147	0	10	21	7	0	38	4	12	171	18	0	205	0	12	36	61	0	109	499
09:30 AM	0	13	158	4	0	175	0	9	9	11	0	29	0	14	201	24	0	239	0	2	37	79	1	119	562
09:45 AM	0	27	152	2	0	181	0	12	6	8	1	27	4	17	198	23	0	242	0	6	51	64	0	121	571
Total	3	66	586	12	0	667	0	46	52	33	1	132	9	53	715	80	0	857	0	22	154	267	2	445	2101
10:00 AM	0	19	130	8	0	157	0	12	4	7	0	23	0	17	214	28	0	259	0	6	40	66	0	112	551
10:15 AM	0	17	159	0	0	176	0	12	15	10	0	37	1	19	202	26	0	248	0	7	35	55	1	98	559
10:30 AM	0	25	161	4	0	190	1	15	11	18	0	45	2	14	191	29	0	236	0	8	48	60	0	116	587
10:45 AM	2	26	166	6	0	200	1	19	9	14	0	43	2	30	236	34	0	302	0	13	58	68	0	139	684
Total	2	87	616	18	0	723	2	58	39	49	0	148	5	80	843	117	0	1045	0	34	181	249	1	465	2381
11:00 AM	0	30	162	4	0	196	0	23	17	17	0	57	1	30	266	48	0	345	0	9	48	57	0	114	712
11:15 AM	0	30	147	3	0	180	0	27	9	19	0	55	4	32	253	42	4	335	0	11	76	61	0	148	718
11:30 AM	0	21	186	3	0	210	0	33	22	22	0	77	3	30	255	46	0	334	0	9	48	68	0	125	746
11:45 AM	0	26	178	4	1	209	0	29	26	20	1	76	2	27	250	43	0	322	0	4	68	53	0	125	732
Total	0	107	673	14	1	795	0	112	74	78	1	265	10	119	1024	179	4	1336	0	33	240	239	0	512	2908
12:00 PM	1	26	202	6	0	235	0	39	17	12	0	68	1	45	281	47	0	374	0	11	49	52	1	113	790
12:15 PM	1	28	162	6	0	197	0	29	25	24	0	78	4	38	306	48	0	396	0	13	51	52	0	116	787
12:30 PM	0	22	186	9	0	217	1	39	26	18	0	84	1	30	274	40	1	346	0	7	52	53	0	112	759
12:45 PM	0	28	198	6	1	233	0	44	37	34	0	115	0	40	303	39	4	386	0	11	43	50	1	105	839
Total	2	104	748	27	1	882	1	151	105	88	0	345	6	153	1164	174	5	1502	0	42	195	207	2	446	3175
01:00 PM	0	31	184	7	0	222	1	44	25	26	1	97	4	39	270	40	0	353	0	11	51	61	0	123	795
01:15 PM	1	11	153	11	0	176	0	40	22	38	0	100	3	26	230	47	1	307	0	6	36	63	3	108	691
01:30 PM	0	28	162	11	0	201	0	53	19	22	0	94	1	26	246	27	5	305	0	10	40	46	0	96	696
01:45 PM	0	17	176	1	0	194	1	39	24	24	0	88	3	34	290	39	1	367	0	12	36	53	0	101	750
Total	1	87	675	30	0	793	2	176	90	110	1	379	11	125	1036	153	7	1332	0	39	163	223	3	428	2932

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 69th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 3

France Avenue & 69th Street
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						69th Street From East						France Avenue From South						69th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
02:00 PM	0	25	164	8	0	197	1	23	25	23	0	72	2	33	257	43	0	335	0	6	42	52	2	102	706
02:15 PM	1	20	159	4	0	184	0	44	29	19	0	92	0	34	215	31	3	283	0	6	33	50	0	89	648
02:30 PM	0	25	125	5	0	155	0	26	26	25	0	77	3	45	255	34	0	337	0	8	36	50	0	94	663
02:45 PM	1	22	160	4	0	187	0	33	32	31	0	96	3	34	258	26	1	322	0	7	40	37	0	84	689
Total	2	92	608	21	0	723	1	126	112	98	0	337	8	146	985	134	4	1277	0	27	151	189	2	369	2706
03:00 PM	0	18	165	6	0	189	1	46	34	24	0	105	0	26	231	32	2	291	0	11	44	34	0	89	674
03:15 PM	0	20	156	9	2	187	0	34	18	18	0	70	6	36	264	36	0	342	0	9	22	39	0	70	669
03:30 PM	0	12	156	7	0	175	0	31	20	19	0	70	2	35	291	38	0	366	0	6	38	50	1	95	706
03:45 PM	0	16	159	5	0	180	0	27	24	16	0	67	3	37	281	40	1	362	0	11	47	29	0	87	696
Total	0	66	636	27	2	731	1	138	96	77	0	312	11	134	1067	146	3	1361	0	37	151	152	1	341	2745
04:00 PM	1	23	166	3	0	193	0	31	34	30	0	95	3	39	284	55	0	381	0	14	35	45	0	94	763
04:15 PM	1	17	156	7	0	181	0	26	25	26	0	77	0	48	340	54	0	442	0	6	53	42	0	101	801
04:30 PM	0	28	163	1	0	192	0	30	25	20	2	77	1	47	343	57	1	449	0	20	54	39	0	113	831
04:45 PM	0	26	141	9	0	176	0	33	48	16	0	97	0	40	306	63	2	411	0	15	71	37	1	124	808
Total	2	94	626	20	0	742	0	120	132	92	2	346	4	174	1273	229	3	1683	0	55	213	163	1	432	3203
05:00 PM	0	19	157	4	1	181	0	27	46	23	0	96	0	53	378	64	0	495	0	15	56	52	0	123	895
05:15 PM	0	25	165	6	0	196	0	41	46	23	0	110	0	44	344	48	0	436	0	11	55	54	0	120	862
05:30 PM	0	18	133	7	0	158	0	33	44	36	0	113	0	43	322	57	0	422	0	6	57	41	1	105	798
05:45 PM	0	13	130	3	0	146	0	25	42	20	0	87	0	51	297	58	0	406	0	7	53	44	1	105	744
Total	0	75	585	20	1	681	0	126	178	102	0	406	0	191	1341	227	0	1759	0	39	221	191	2	453	3299
06:00 PM	1	30	130	7	0	168	0	37	44	39	1	121	0	27	270	67	0	364	0	13	57	47	0	117	770
06:15 PM	3	26	136	10	0	175	0	29	27	27	0	83	1	34	230	53	0	318	0	4	49	40	0	93	669
06:30 PM	0	27	120	3	0	150	0	29	20	29	1	79	0	29	215	46	0	290	0	7	29	27	0	63	582
06:45 PM	0	18	103	4	1	126	0	31	20	26	0	77	1	14	195	33	0	243	0	5	51	33	1	90	536
Total	4	101	489	24	1	619	0	126	111	121	2	360	2	104	910	199	0	1215	0	29	186	147	1	363	2557
07:00 PM	0	13	99	7	1	120	0	35	21	16	0	72	0	26	216	31	0	273	0	8	21	32	0	61	526
07:15 PM	0	14	110	6	0	130	0	30	27	34	0	91	1	15	171	43	0	230	1	4	32	43	1	81	532
07:30 PM	0	17	111	5	0	133	0	40	14	31	0	85	2	20	160	46	0	228	0	1	22	31	0	54	500
07:45 PM	0	19	102	3	0	124	0	32	20	37	0	89	2	20	167	28	0	217	0	0	28	25	0	53	483
Total	0	63	422	21	1	507	0	137	82	118	0	337	5	81	714	148	0	948	1	13	103	131	1	249	2041
08:00 PM	1	13	101	3	0	118	0	39	23	33	0	95	0	20	181	22	0	223	0	6	18	22	1	47	483
08:15 PM	0	10	92	2	0	104	1	39	13	34	0	87	2	17	152	20	0	191	0	2	22	32	0	56	438
08:30 PM	0	11	97	0	1	109	0	38	17	32	0	87	0	15	159	21	0	195	0	3	31	26	0	60	451
08:45 PM	0	8	85	6	0	99	0	31	23	33	0	87	1	21	123	23	0	168	0	0	21	18	0	39	393
Total	1	42	375	11	1	430	1	147	76	132	0	356	3	73	615	86	0	777	0	11	92	98	1	202	1765

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Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 69th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 4

France Avenue & 69th Street
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						69th Street From East						France Avenue From South						69th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
09:00 PM	0	11	69	2	0	82	0	24	16	36	0	76	1	15	123	11	0	150	0	0	18	16	0	34	342
09:15 PM	1	3	56	2	0	62	0	30	18	23	1	72	0	11	137	12	0	160	0	2	18	15	0	35	329
09:30 PM	0	4	45	0	0	49	0	17	5	19	0	41	0	10	99	11	0	120	0	1	15	13	1	30	240
09:45 PM	0	4	54	1	0	59	0	18	13	21	0	52	0	7	93	11	0	111	0	0	12	6	0	18	240
Total	1	22	224	5	0	252	0	89	52	99	1	241	1	43	452	45	0	541	0	3	63	50	1	117	1151
10:00 PM	0	2	31	1	0	34	0	20	9	17	0	46	2	6	60	9	0	77	0	0	5	5	0	10	167
10:15 PM	0	1	30	1	0	32	0	11	2	9	1	23	0	4	70	7	0	81	0	2	8	3	0	13	149
10:30 PM	0	3	30	1	0	34	0	14	6	9	0	29	0	5	61	5	0	71	0	1	6	4	0	11	145
10:45 PM	0	4	16	1	0	21	0	9	7	14	0	30	0	4	36	3	0	43	0	2	1	5	0	8	102
Total	0	10	107	4	0	121	0	54	24	49	1	128	2	19	227	24	0	272	0	5	20	17	0	42	563
11:00 PM	0	1	24	3	0	28	0	3	5	10	0	18	0	1	22	2	0	25	0	0	4	5	0	9	80
11:15 PM	0	2	18	1	0	21	0	6	3	5	0	14	0	0	12	4	0	16	0	0	3	3	0	6	57
11:30 PM	0	0	18	1	0	19	0	6	4	7	0	17	0	0	19	2	0	21	0	0	1	5	0	6	63
11:45 PM	0	1	9	0	0	10	0	7	0	3	0	10	0	0	11	2	0	13	0	0	1	3	0	4	37
Total	0	4	69	5	0	78	0	22	12	25	0	59	0	1	64	10	0	75	0	0	9	16	0	25	237
Grand Total	19	1111	8770	281	12	10193	11	1778	1457	1376	10	4632	86	1619	13996										
Cars +	19	1089	8634	280	6	10028	11	1739	1434	1361	2	4547	85	1603	13817	2073	21	17599	1	406	2434	2933	15	5789	37963
% Cars +	100	98	98.4	99.6	50	98.4	100	97.8	98.4	98.9	20	98.2	98.8	99	98.7	97.8	77.8	98.6	100	98.8	98.9	98.9	53.6	98.7	98.5
Trucks	0	22	136	1	6	165	0	39	23	15	8	85	1	16	179	47	6	249	0	5	27	33	13	78	577
% Trucks	0	2	1.6	0.4	50	1.6	0	2.2	1.6	1.1	80	1.8	1.2	1	1.3	2.2	22.2	1.4	0	1.2	1.1	1.1	46.4	1.3	1.5

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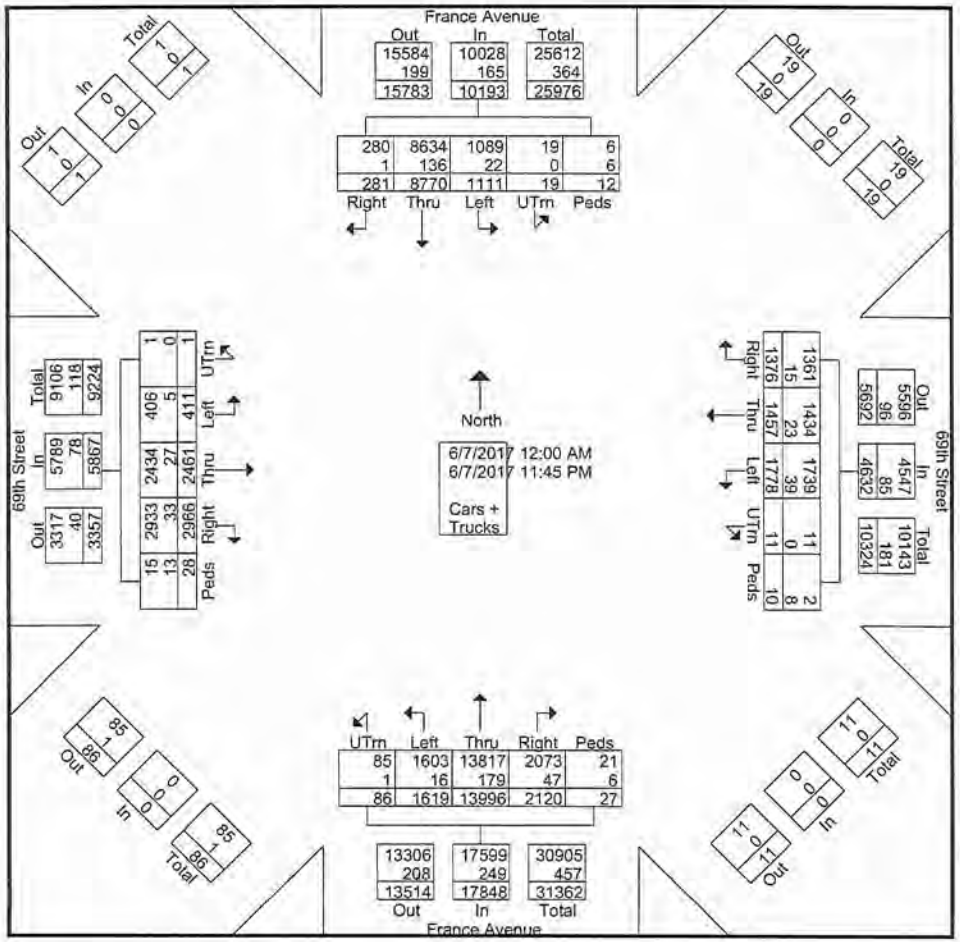
Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 69th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 5

France Avenue & 69th Street
Edina, MN



A-100

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 69th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 6

France Avenue & 69th Street
Edina, MN

	France Avenue From North						69th Street From East						France Avenue From South						69th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 AM to 09:45 AM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 09:00 AM																									
09:00 AM	**0**	**12**	**150**	**2**	**0**	**164**	**0**	15	16	7	0	38	1	10	145	15	0	171	0	2	30	63	1	96	469
09:15 AM	3	14	126	**4**	0	147	0	10	**21**	7	0	38	**4**	12	171	18	0	205	0	**12**	36	61	0	109	499
09:30 AM	0	13	**158**	4	0	175	0	9	9	**11**	0	29	0	14	**201**	**24**	0	239	0	2	37	**79**	1	119	562
09:45 AM	0	**27**	152	2	0	**181**	0	12	6	8	**1**	27	4	**17**	198	23	0	**242**	0	6	**51**	64	0	**121**	**571**
Total Volume	3	66	586	12	0	667	0	46	52	33	1	132	9	53	715	80	0	857	0	22	154	267	2	445	2101
% App. Total	0.4	9.9	87.9	1.8	0		0	34.8	39.4	25	0.8		1.1	6.2	83.4	9.3	0		0	4.9	34.6	60	0.4		
PHF	.250	.611	.927	.750	.000	.921	.000	.767	.619	.750	.250	.868	.563	.779	.889	.833	.000	.885	.000	.458	.755	.845	.500	.919	.920
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 12:15 PM																									
12:15 PM	**1**	28	162	6	0	197	0	29	25	24	0	78	**4**	38	**306**	**48**	0	**396**	0	**13**	51	52	0	116	787
12:30 PM	0	22	186	**9**	0	217	**1**	39	26	18	0	84	1	30	274	40	1	346	0	7	**52**	53	0	112	759
12:45 PM	0	28	**198**	6	**1**	**233**	0	**44**	**37**	**34**	0	**115**	0	**40**	303	39	**4**	386	0	11	43	50	**1**	105	**839**
01:00 PM	0	**31**	184	7	0	222	1	44	25	26	**1**	97	4	39	270	40	0	353	0	11	51	**61**	0	**123**	795
Total Volume	1	109	730	28	1	869	2	156	113	102	1	374	9	147	1153	167	5	1481	0	42	197	216	1	456	3180
% App. Total	0.1	12.5	84	3.2	0.1		0.5	41.7	30.2	27.3	0.3		0.6	9.9	77.9	11.3	0.3		0	9.2	43.2	47.4	0.2		
PHF	.250	.879	.922	.778	.250	.932	.500	.886	.764	.750	.250	.813	.563	.919	.942	.870	.313	.935	.000	.808	.947	.885	.250	.927	.948
Peak Hour Analysis From 02:00 PM to 11:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:30 PM																									
04:30 PM	0	**28**	163	1	0	192	0	30	25	20	**2**	77	**1**	47	343	57	1	449	0	**20**	54	39	0	113	831
04:45 PM	0	26	141	**9**	0	176	0	33	**48**	16	0	97	0	40	306	63	**2**	411	0	15	**71**	37	**1**	**124**	808
05:00 PM	0	19	157	4	**1**	181	0	27	46	**23**	0	96	0	**53**	**378**	**64**	0	**495**	0	15	56	52	0	123	**895**
05:15 PM	0	25	**165**	6	0	**196**	0	**41**	46	23	0	**110**	0	44	344	48	0	436	0	11	55	**54**	0	120	862
Total Volume	0	98	626	20	1	745	0	131	165	82	2	380	1	184	1371	232	3	1791	0	61	236	182	1	480	3396
% App. Total	0	13.2	84	2.7	0.1		0	34.5	43.4	21.6	0.5		0.1	10.3	76.5	13	0.2		0	12.7	49.2	37.9	0.2		
PHF	.000	.875	.948	.556	.250	.950	.000	.799	.859	.891	.250	.864	.250	.868	.907	.906	.375	.905	.000	.763	.831	.843	.250	.968	.949

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Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 70th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 1

France Avenue & 70th Street
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						70th Street From East						France Avenue From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
12:00 AM	0	1	17	0	0	18	0	1	7	1	0	9	0	0	16	3	0	19	0	1	2	0	0	3	49
12:15 AM	0	0	12	1	0	13	0	0	1	2	0	3	0	1	9	2	0	12	0	1	0	0	0	1	29
12:30 AM	0	0	20	1	0	21	0	1	1	0	0	2	1	0	7	0	0	8	0	1	0	1	0	2	33
12:45 AM	0	1	9	2	0	12	0	1	1	1	0	3	0	0	13	2	0	15	0	0	0	0	0	0	30
Total	0	2	58	4	0	64	0	3	10	4	0	17	1	1	45	7	0	54	0	3	2	1	0	6	141
01:00 AM	1	0	12	0	0	13	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	22
01:15 AM	0	0	11	0	0	11	0	1	0	0	0	1	0	0	5	1	0	6	0	0	1	2	0	3	21
01:30 AM	0	0	9	0	0	9	0	0	0	0	0	0	0	1	3	0	0	4	0	1	0	0	0	1	14
01:45 AM	0	1	2	0	0	3	0	0	1	2	0	3	0	0	5	0	0	5	0	0	1	0	0	1	12
Total	1	1	34	0	0	36	0	1	1	2	0	4	0	1	22	1	0	24	0	1	2	2	0	5	69
02:00 AM	0	0	3	2	0	5	0	0	1	0	0	1	0	0	1	1	0	2	0	0	0	0	0	0	8
02:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	1	0	1	6
02:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
02:45 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	0	10
Total	0	0	10	2	0	12	0	0	1	0	0	1	0	0	8	4	0	12	0	0	0	1	0	1	26
03:00 AM	0	2	2	0	0	4	0	2	0	0	0	2	0	0	2	1	0	3	0	0	0	0	0	0	9
03:15 AM	0	0	3	0	0	3	0	1	1	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	7
03:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	0	1	6
03:45 AM	0	1	2	1	0	4	0	1	0	0	0	1	0	0	5	1	0	6	0	0	0	0	0	0	11
Total	0	3	9	1	0	13	0	4	1	0	0	5	0	0	12	2	0	14	0	1	0	0	0	1	33
04:00 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	0	10
04:15 AM	0	0	3	0	0	3	0	0	0	0	1	1	0	0	8	0	0	8	0	1	1	0	0	2	14
04:30 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	1	4	2	0	7	0	1	0	1	0	2	14
04:45 AM	0	5	10	0	0	15	0	1	0	1	0	2	0	1	10	2	0	13	0	1	3	0	0	4	34
Total	0	5	22	0	0	27	0	1	0	1	1	3	0	2	26	6	0	34	0	3	4	1	0	8	72
05:00 AM	0	9	10	1	0	20	0	1	0	1	1	3	1	0	17	6	0	24	0	0	7	1	0	8	55
05:15 AM	0	2	16	2	0	20	0	2	0	0	0	2	0	0	14	0	0	14	0	2	1	1	0	4	40
05:30 AM	1	1	33	2	0	37	0	1	0	0	0	1	0	1	31	5	0	37	0	2	3	5	1	11	86
05:45 AM	0	4	48	2	0	54	0	1	2	1	0	4	0	0	33	5	0	38	0	6	3	3	0	12	108
Total	1	16	107	7	0	131	0	5	2	2	1	10	1	1	95	16	0	113	0	10	14	10	1	35	289
06:00 AM	0	13	32	5	0	50	0	6	7	4	1	18	0	5	40	13	0	58	0	2	6	6	1	15	141
06:15 AM	0	5	42	0	0	47	0	3	8	13	1	25	0	5	55	7	0	67	0	2	7	11	1	21	160
06:30 AM	0	5	68	2	0	75	0	1	9	2	0	12	0	2	72	8	0	82	0	5	10	15	0	30	199
06:45 AM	0	6	88	10	0	104	0	1	10	8	1	20	1	9	103	13	0	126	0	10	22	22	0	54	304
Total	0	29	230	17	0	276	0	11	34	27	3	75	1	21	270	41	0	333	0	19	45	54	2	120	804

A102

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 70th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 2

France Avenue & 70th Street
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						70th Street From East						France Avenue From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	11	90	7	0	108	0	4	22	8	0	34	1	17	127	8	0	153	0	16	26	25	0	67	362
07:15 AM	1	9	133	7	1	151	0	16	34	16	0	66	1	10	91	14	2	118	0	19	18	21	0	58	393
07:30 AM	0	7	154	9	0	170	0	11	26	4	0	41	0	12	129	16	0	157	0	16	21	25	1	63	431
07:45 AM	0	20	204	12	0	236	0	8	36	6	0	50	1	18	156	8	1	184	0	16	30	36	0	82	552
Total	1	47	581	35	1	665	0	39	118	34	0	191	3	57	503	46	3	612	0	67	95	107	1	270	1738
08:00 AM	0	18	190	12	0	220	0	18	26	9	0	53	3	11	113	8	1	136	0	19	22	31	0	72	481
08:15 AM	0	16	179	10	0	205	0	13	29	12	0	54	3	16	131	18	1	169	1	27	47	30	1	106	534
08:30 AM	0	16	188	12	1	217	0	12	12	12	0	36	1	14	173	12	0	200	0	20	22	37	5	84	537
08:45 AM	1	23	227	12	0	263	0	21	18	17	0	56	2	13	156	24	2	197	0	24	32	31	1	88	604
Total	1	73	784	46	1	905	0	64	85	50	0	199	9	54	573	62	4	702	1	90	123	129	7	350	2156
09:00 AM	1	21	204	6	0	232	0	18	7	17	0	42	3	11	130	15	0	159	0	23	29	29	1	82	515
09:15 AM	0	23	168	10	0	201	0	14	26	15	1	56	1	21	163	28	0	213	0	23	41	27	0	91	561
09:30 AM	0	27	213	12	2	254	0	18	14	32	0	64	4	25	174	21	7	231	0	28	30	42	7	107	656
09:45 AM	0	29	189	6	0	224	0	16	25	23	1	65	2	17	207	24	0	250	0	24	43	44	0	111	650
Total	1	100	774	34	2	911	0	66	72	87	2	227	10	74	674	88	7	853	0	98	143	142	8	391	2382
10:00 AM	0	25	184	6	0	215	0	22	19	29	1	71	2	17	206	23	2	250	0	25	34	30	0	89	625
10:15 AM	0	24	187	8	1	220	1	22	26	30	0	79	2	26	194	23	2	247	0	19	40	33	1	93	639
10:30 AM	0	23	218	13	1	255	0	27	19	23	0	69	4	33	201	26	2	266	0	18	31	28	0	77	667
10:45 AM	1	36	203	7	0	247	1	32	22	51	0	106	4	27	247	33	0	311	0	19	47	33	0	99	763
Total	1	108	792	34	2	937	2	103	86	133	1	325	12	103	848	105	6	1074	0	81	152	124	1	358	2694
11:00 AM	2	27	221	8	0	258	0	28	27	49	0	104	3	25	243	36	7	314	0	28	40	31	4	103	779
11:15 AM	1	38	208	13	0	260	0	26	29	45	0	100	3	38	264	40	1	346	0	29	49	35	0	113	819
11:30 AM	0	27	238	12	0	277	1	37	45	40	1	124	2	25	240	24	3	294	0	29	63	46	3	141	836
11:45 AM	1	36	243	11	0	291	1	32	35	51	1	120	3	46	278	49	2	378	0	34	48	58	1	141	930
Total	4	128	910	44	0	1086	2	123	136	185	2	448	11	134	1025	149	13	1332	0	120	200	170	8	498	3364
12:00 PM	1	35	247	8	0	291	2	31	43	39	2	117	2	48	303	32	1	386	0	39	44	53	1	137	931
12:15 PM	5	29	195	15	0	244	0	42	49	44	0	135	3	37	295	33	3	371	0	34	62	40	1	137	887
12:30 PM	0	23	242	12	0	277	0	39	41	41	1	122	3	42	260	24	2	331	0	31	48	39	0	118	848
12:45 PM	0	32	295	23	2	352	0	45	49	37	3	134	1	53	284	27	3	368	0	36	48	39	1	124	978
Total	6	119	979	58	2	1164	2	157	182	161	6	508	9	180	1142	116	9	1456	0	140	202	171	3	516	3644
01:00 PM	3	37	268	18	0	326	0	34	47	45	2	128	6	33	266	37	5	347	0	24	43	31	0	98	899
01:15 PM	1	25	244	13	1	284	0	38	33	45	2	118	3	31	247	26	2	309	0	27	43	52	2	124	835
01:30 PM	1	29	245	11	2	288	1	38	50	33	0	122	1	36	239	28	4	308	0	31	35	46	1	113	831
01:45 PM	0	28	221	13	1	263	0	39	53	43	0	135	1	30	270	34	2	337	0	22	42	35	0	99	834
Total	5	119	978	55	4	1161	1	149	183	166	4	503	11	130	1022	125	13	1301	0	104	163	164	3	434	3399

A103

Appindix C: Counts
Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 70th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 3

France Avenue & 70th Street
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						70th Street From East						France Avenue From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
02:00 PM	2	29	225	12	0	268	0	28	53	50	0	131	2	39	258	29	0	328	0	21	45	48	1	115	842
02:15 PM	0	19	239	11	1	270	1	41	44	33	0	119	4	41	223	30	0	298	0	20	35	40	0	95	782
02:30 PM	0	23	191	12	1	227	0	36	40	48	0	124	3	37	238	33	2	313	0	28	42	32	2	104	768
02:45 PM	0	20	229	14	1	264	1	35	32	44	1	113	2	53	230	23	3	311	0	35	45	42	2	124	812
Total	2	91	884	49	3	1029	2	140	169	175	1	487	11	170	949	115	5	1250	0	104	167	162	5	438	3204
03:00 PM	0	15	235	13	0	263	0	35	49	28	2	114	2	52	255	44	7	360	0	22	42	43	0	107	844
03:15 PM	1	33	203	12	0	249	0	39	47	43	0	129	2	41	255	22	3	323	0	35	55	26	1	117	818
03:30 PM	1	21	229	7	1	259	0	34	41	36	0	111	1	40	290	15	3	349	0	37	50	50	1	138	857
03:45 PM	3	25	247	9	0	284	0	22	42	49	1	114	0	34	260	28	2	324	0	39	77	39	1	156	878
Total	5	94	914	41	1	1055	0	130	179	156	3	468	5	167	1060	109	15	1356	0	133	224	158	3	518	3397
04:00 PM	1	15	200	10	3	229	2	29	63	35	1	130	0	37	280	26	0	343	0	64	70	47	2	183	885
04:15 PM	0	18	242	15	0	275	1	16	40	39	0	96	1	46	329	32	2	410	0	62	63	45	0	170	951
04:30 PM	2	21	211	18	0	252	0	24	43	39	2	108	1	47	300	26	1	375	0	63	80	46	0	189	924
04:45 PM	0	20	190	10	2	222	1	17	37	40	1	96	2	48	328	36	2	416	0	85	90	51	3	229	963
Total	3	74	843	53	5	978	4	86	183	153	4	430	4	178	1237	120	5	1544	0	274	303	189	5	771	3723
05:00 PM	0	25	249	14	0	288	0	28	52	28	1	109	6	38	380	20	0	444	0	67	82	44	0	193	1034
05:15 PM	0	28	212	25	1	266	0	25	48	40	1	114	4	31	301	30	3	369	0	79	90	54	0	223	972
05:30 PM	0	19	195	16	0	230	1	21	36	34	2	94	3	41	335	40	1	420	0	69	72	62	0	203	947
05:45 PM	0	20	214	19	2	255	0	18	37	41	1	97	1	27	282	29	1	340	0	57	75	44	1	177	869
Total	0	92	870	74	3	1039	1	92	173	143	5	414	14	137	1298	119	5	1573	0	272	319	204	1	796	3822
06:00 PM	0	21	185	13	0	219	0	31	37	46	1	115	2	40	281	20	2	345	0	55	59	32	0	146	825
06:15 PM	1	30	186	15	0	232	0	25	25	39	0	89	1	33	233	26	1	294	0	36	52	41	0	129	744
06:30 PM	0	22	161	11	0	194	1	35	38	35	1	110	1	18	193	24	1	237	0	37	60	24	0	121	662
06:45 PM	1	19	158	7	2	187	0	25	21	23	0	69	0	33	204	19	0	256	0	21	28	35	1	85	597
Total	2	92	690	46	2	832	1	116	121	143	2	383	4	124	911	89	4	1132	0	149	199	132	1	481	2828
07:00 PM	0	14	162	11	0	187	0	27	32	18	1	78	0	22	227	23	0	272	0	19	28	14	1	62	599
07:15 PM	1	25	164	3	1	194	0	32	23	40	0	95	0	20	165	19	2	206	0	19	31	16	1	67	562
07:30 PM	1	14	172	12	0	199	0	23	24	27	0	74	0	21	180	21	5	227	0	12	29	19	1	61	561
07:45 PM	1	13	148	9	0	171	0	26	29	30	0	85	1	13	185	26	0	225	0	10	18	19	0	47	528
Total	3	66	646	35	1	751	0	108	108	115	1	332	1	76	757	89	7	930	0	60	106	68	3	237	2250
08:00 PM	1	13	136	7	0	157	0	27	24	36	5	92	1	32	165	15	3	216	0	14	21	14	1	50	515
08:15 PM	0	12	135	15	0	162	0	33	21	26	2	82	1	27	158	19	1	206	0	8	12	18	1	39	489
08:30 PM	0	11	154	9	0	174	0	18	29	25	0	72	2	29	159	15	0	205	0	7	21	8	0	36	487
08:45 PM	0	11	118	8	0	137	0	13	25	27	0	65	0	22	125	9	1	157	0	14	14	12	1	41	400
Total	1	47	543	39	0	630	0	91	99	114	7	311	4	110	607	58	5	784	0	43	68	52	3	166	1891

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Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 70th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 4

France Avenue & 70th Street
Edina, MN

Groups Printed- Cars + - Trucks

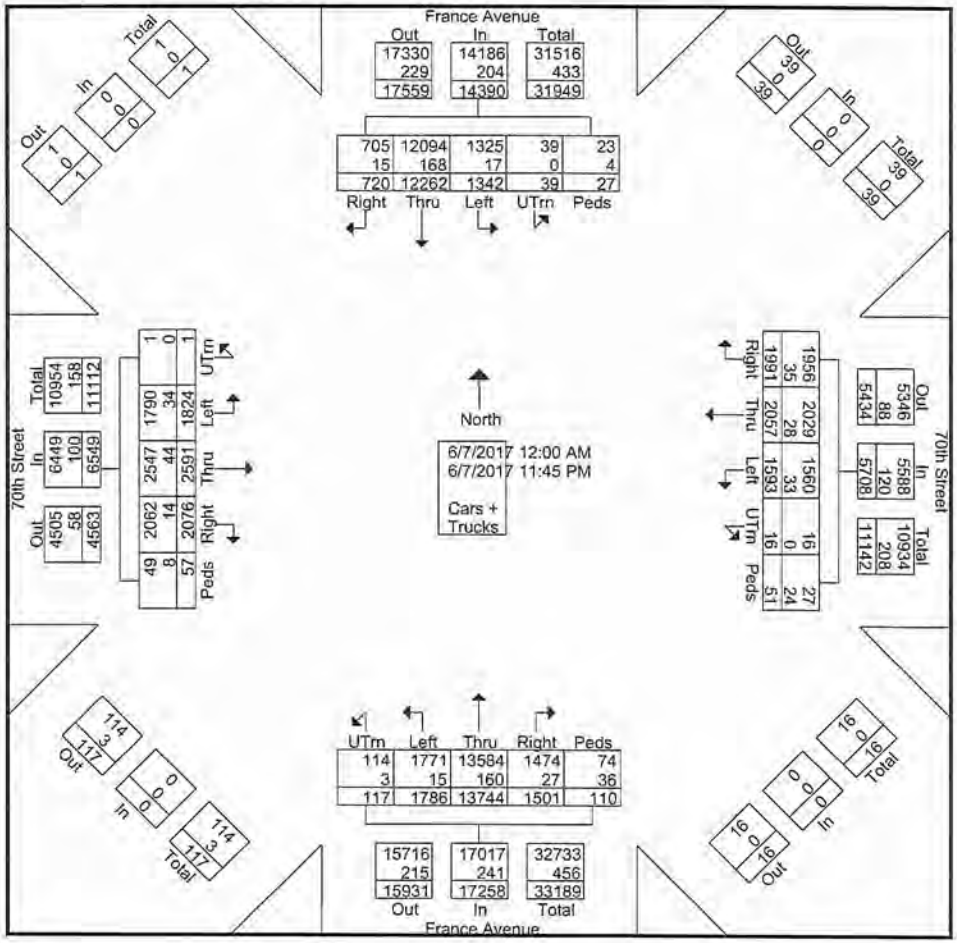
	France Avenue From North						70th Street From East						France Avenue From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
09:00 PM	1	9	104	15	0	129	0	17	26	34	0	77	0	15	100	2	0	117	0	10	14	6	0	30	353
09:15 PM	1	4	91	4	0	100	0	8	20	30	1	59	2	8	111	5	1	127	0	10	7	8	1	26	312
09:30 PM	0	8	68	3	0	79	0	20	17	13	2	52	1	11	94	7	0	113	0	8	8	4	1	21	265
09:45 PM	0	3	64	6	0	73	0	9	17	22	0	48	2	6	86	5	3	102	0	2	3	4	0	9	232
Total	2	24	327	28	0	381	0	54	80	99	3	236	5	40	391	19	4	459	0	30	32	22	2	86	1162
10:00 PM	0	7	57	8	0	72	0	10	11	12	0	33	1	8	51	3	0	63	0	4	3	5	0	12	180
10:15 PM	0	1	38	4	0	43	0	17	6	13	2	38	0	5	69	5	4	83	0	2	7	0	0	9	173
10:30 PM	0	3	50	0	0	53	0	4	5	5	2	16	0	1	55	0	0	56	0	3	9	0	0	12	137
10:45 PM	0	0	24	3	0	27	1	6	3	2	0	12	0	4	38	2	0	44	0	3	1	2	0	6	89
Total	0	11	169	15	0	195	1	37	25	32	4	99	1	18	213	10	4	246	0	12	20	7	0	39	579
11:00 PM	0	1	31	1	0	33	0	7	2	3	0	12	0	2	20	1	0	23	0	4	3	1	0	8	76
11:15 PM	0	0	28	0	0	28	0	0	2	2	0	4	0	2	10	1	1	14	0	3	3	0	0	6	52
11:30 PM	0	0	28	1	0	29	0	4	4	3	1	12	0	2	16	2	0	20	0	2	2	3	0	7	68
11:45 PM	0	0	21	1	0	22	0	2	1	1	0	4	0	2	10	1	0	13	0	1	0	2	0	3	42
Total	0	1	108	3	0	112	0	13	9	9	1	32	0	8	56	5	1	70	0	10	8	6	0	24	238
Grand Total	39	1342	12262												13744										
Cars +	39	1325	12094	705	23	14186	16	1560	2029	1956	27	5588	114	1771	13584	1474	74	17017	1	1790	2547	2062	49	6449	43240
% Cars +	100	98.7	98.6	97.9	85.2	98.6	100	97.9	98.6	98.2	52.9	97.9	97.4	99.2	98.8	98.2	67.3	98.6	100	98.1	98.3	99.3	86	98.5	98.5
Trucks	0	17	168	15	4	204	0	33	28	35	24	120	3	15	160	27	36	241	0	34	44	14	8	100	665
% Trucks	0	1.3	1.4	2.1	14.8	1.4	0	2.1	1.4	1.8	47.1	2.1	2.6	0.8	1.2	1.8	32.7	1.4	0	1.9	1.7	0.7	14	1.5	1.5

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 70th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 5

France Avenue & 70th Street
Edina, MN



A106

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 2- 70th St & France Ave, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 6

France Avenue & 70th Street
Edina, MN

	France Avenue From North						70th Street From East						France Avenue From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 AM to 09:45 AM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 09:00 AM																									
09:00 AM	1	21	204	6	0	232	0	18	7	17	0	42	3	11	130	15	0	159	0	23	29	29	1	82	515
09:15 AM	0	23	168	10	0	201	0	14	26	15	1	56	1	21	163	28	0	213	0	23	41	27	0	91	561
09:30 AM	0	27	213	12	2	254	0	18	14	32	0	64	4	25	174	21	7	231	0	28	30	42	7	107	656
09:45 AM	0	29	189	6	0	224	0	16	25	23	1	65	2	17	207	24	0	250	0	24	43	44	0	111	650
Total Volume	1	100	774	34	2	911	0	66	72	87	2	227	10	74	674	88	7	853	0	98	143	142	8	391	2382
% App. Total	0.1	11	85	3.7	0.2		0	29.1	31.7	38.3	0.9		1.2	8.7	79	10.3	0.8		0	25.1	36.6	36.3	2		
PHF	.250	.862	.908	.708	.250	.897	.000	.917	.692	.680	.500	.873	.625	.740	.814	.786	.250	.853	.000	.875	.831	.807	.286	.881	.908
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 12:00 PM																									
12:00 PM	1	35	247	8	0	291	2	31	43	39	2	117	2	48	303	32	1	386	0	39	44	53	1	137	931
12:15 PM	5	29	195	15	0	244	0	42	49	44	0	135	3	37	295	33	3	371	0	34	62	40	1	137	887
12:30 PM	0	23	242	12	0	277	0	39	41	41	1	122	3	42	260	24	2	331	0	31	48	39	0	118	848
12:45 PM	0	32	295	23	2	352	0	45	49	37	3	134	1	53	284	27	3	368	0	36	48	39	1	124	978
Total Volume	6	119	979	58	2	1164	2	157	182	161	6	508	9	180	1142	116	9	1456	0	140	202	171	3	516	3644
% App. Total	0.5	10.2	84.1	5	0.2		0.4	30.9	35.8	31.7	1.2		0.6	12.4	78.4	8	0.6		0	27.1	39.1	33.1	0.6		
PHF	.300	.850	.830	.630	.250	.827	.250	.872	.929	.915	.500	.941	.750	.849	.942	.879	.750	.943	.000	.897	.815	.807	.750	.942	.931
Peak Hour Analysis From 02:00 PM to 11:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:45 PM																									
04:45 PM	0	20	190	10	2	222	1	17	37	40	1	96	2	48	328	36	2	416	0	85	90	51	3	229	963
05:00 PM	0	25	249	14	0	288	0	28	52	28	1	109	6	38	380	20	0	444	0	67	82	44	0	193	1034
05:15 PM	0	28	212	25	1	266	0	25	48	40	1	114	4	31	301	30	3	369	0	79	90	54	0	223	972
05:30 PM	0	19	195	16	0	230	1	21	36	34	2	94	3	41	335	40	1	420	0	69	72	62	0	203	947
Total Volume	0	92	846	65	3	1006	2	91	173	142	5	413	15	158	1344	126	6	1649	0	300	334	211	3	848	3916
% App. Total	0	9.1	84.1	6.5	0.3		0.5	22	41.9	34.4	1.2		0.9	9.6	81.5	7.6	0.4		0	35.4	39.4	24.9	0.4		
PHF	.000	.821	.849	.650	.375	.873	.500	.813	.832	.888	.625	.906	.625	.823	.884	.788	.500	.928	.000	.882	.928	.851	.250	.926	.947

A-7

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 5- France Ave & Site Access, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 1

France Avenue & Site Access
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						From East						France Avenue From South						Site Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
12:00 AM	0	0	18	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
12:15 AM	0	0	17	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
12:30 AM	0	0	20	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	21
12:45 AM	0	0	14	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Total	0	0	69	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	70
01:00 AM	0	0	18	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
01:15 AM	0	0	14	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
01:30 AM	0	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
01:45 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	45	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
02:00 AM	0	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	10
02:15 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
02:30 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:45 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	22	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	23
03:00 AM	0	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	9
03:15 AM	0	0	11	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
03:30 AM	0	0	4	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	6
03:45 AM	0	0	9	0	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	13
Total	0	0	32	0	3	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	39
04:00 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	7
04:15 AM	0	0	6	0	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
04:30 AM	0	0	6	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	8
04:45 AM	0	0	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	17
Total	0	0	33	0	3	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	40
05:00 AM	0	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
05:15 AM	0	0	23	2	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
05:30 AM	0	0	38	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
05:45 AM	0	0	55	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	56
Total	0	0	140	2	0	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	143
06:00 AM	0	0	54	0	0	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	55
06:15 AM	0	0	53	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
06:30 AM	0	0	72	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
06:45 AM	0	0	106	4	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
Total	0	0	285	4	0	289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	290

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Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 5- France Ave & Site Access, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 2

France Avenue & Site Access
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						From East						France Avenue From South						Site Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	109	3	0	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112
07:15 AM	0	0	152	2	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	156
07:30 AM	0	0	169	10	0	179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	180
07:45 AM	0	0	246	4	0	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	252
Total	0	0	676	19	0	695	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5	700
08:00 AM	0	0	212	2	0	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	215
08:15 AM	0	0	217	6	0	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	225
08:30 AM	0	0	214	3	0	217	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	221
08:45 AM	0	0	259	4	0	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	266
Total	0	0	902	15	0	917	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	10	927
09:00 AM	0	0	224	8	1	233	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	237
09:15 AM	0	0	201	4	0	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	208
09:30 AM	0	0	248	5	0	253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8	13	266
09:45 AM	0	0	228	9	0	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	241
Total	0	0	901	26	1	928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12	24	952
10:00 AM	0	0	216	2	0	218	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	219
10:15 AM	0	0	222	1	0	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	6	229
10:30 AM	0	0	250	4	0	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	258
10:45 AM	0	0	243	4	0	247	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	250
Total	0	0	931	11	0	942	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	2	14	956
11:00 AM	0	0	260	3	0	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	8	271
11:15 AM	0	0	248	2	0	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	254
11:30 AM	0	0	281	3	0	284	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3	3	6	291
11:45 AM	0	0	263	3	0	266	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	274
Total	0	0	1052	11	0	1063	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	17	9	26	1090
12:00 PM	0	0	282	4	0	286	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	8	294
12:15 PM	0	0	244	7	0	251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	8	259
12:30 PM	0	0	307	3	0	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	313
12:45 PM	0	0	332	4	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	339
Total	0	0	1165	18	0	1183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	5	22	1205
01:00 PM	0	0	315	6	0	321	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9	330
01:15 PM	0	0	274	3	0	277	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	6	283
01:30 PM	0	0	282	1	0	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	287
01:45 PM	0	0	269	0	0	269	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	274
Total	0	0	1140	10	0	1150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	2	24	1174

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Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 5- France Ave & Site Access, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 3

France Avenue & Site Access
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						From East						France Avenue From South						Site Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
02:00 PM	0	0	263	2	0	265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	270
02:15 PM	0	0	272	4	0	276	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	280
02:30 PM	0	0	225	2	0	227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	6	233
02:45 PM	0	0	250	2	0	252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	255
Total	0	0	1010	10	0	1020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	3	18	1038
03:00 PM	0	0	251	3	0	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	260
03:15 PM	0	0	232	3	0	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	242
03:30 PM	0	0	257	3	0	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	264
03:45 PM	0	0	277	4	0	281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5	286
Total	0	0	1017	13	0	1030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	3	22	1052
04:00 PM	0	0	232	4	0	236	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	242
04:15 PM	0	0	264	5	0	269	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	273
04:30 PM	0	0	259	3	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	267
04:45 PM	0	0	203	4	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	6	213
Total	0	0	958	16	0	974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	3	21	995
05:00 PM	0	0	284	2	0	286	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	5	291
05:15 PM	0	0	274	4	0	278	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	281
05:30 PM	0	0	227	3	0	230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	235
05:45 PM	0	0	238	1	0	239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	242
Total	0	0	1023	10	0	1033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1	16	1049
06:00 PM	0	0	216	0	0	216	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	218
06:15 PM	0	0	220	1	0	221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	221
06:30 PM	0	0	201	0	0	201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	202
06:45 PM	0	0	169	0	0	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	170
Total	0	0	806	1	0	807	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	811
07:00 PM	0	0	191	0	0	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	194
07:15 PM	0	0	195	0	0	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	195
07:30 PM	0	0	192	0	1	193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	196
07:45 PM	0	0	169	1	0	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	171
Total	0	0	747	1	1	749	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	756
08:00 PM	0	0	161	0	0	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161
08:15 PM	0	0	171	1	0	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	174
08:30 PM	0	0	168	0	1	169	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	1	171
08:45 PM	0	0	137	2	1	140	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	2	143
Total	0	0	637	3	2	642	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	4	1	5	649

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Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 5- France Ave & Site Access, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 4

France Avenue & Site Access
Edina, MN

Groups Printed- Cars + - Trucks

	France Avenue From North						From East						France Avenue From South						Site Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
09:00 PM	0	0	118	1	0	119	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	120
09:15 PM	0	0	104	0	0	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104
09:30 PM	0	0	73	0	0	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
09:45 PM	0	0	76	0	1	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	78
Total	0	0	371	1	1	373	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	375
10:00 PM	0	0	66	0	0	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
10:15 PM	0	0	45	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
10:30 PM	0	0	49	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	50
10:45 PM	0	0	27	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Total	0	0	187	0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	188
11:00 PM	0	0	33	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
11:15 PM	0	0	27	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
11:30 PM	0	0	28	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
11:45 PM	0	0	21	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	22
Total	0	0	109	0	0	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	110
Grand Total	0	0	14258																						
Cars +	0	0	14040	170	1	14211	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	174	30	204	14417
% Cars +	0	0	98.5	99.4	9.1	98.4	0	0	0	0	100	66.7	0	0	0	0	0	0	0	0	0	99.4	51.7	87.6	98.2
Trucks	0	0	218	1	10	229	0	0	1	0	0	1	0	0	0	0	1	1	0	0	0	1	28	29	260
% Trucks	0	0	1.5	0.6	90.9	1.6	0	0	100	0	0	33.3	0	0	0	0	100	100	0	0	0	0.6	48.3	12.4	1.8

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 5- France Ave & Site Access, 6-7-17
Site Code :
Start Date : 6/7/2017
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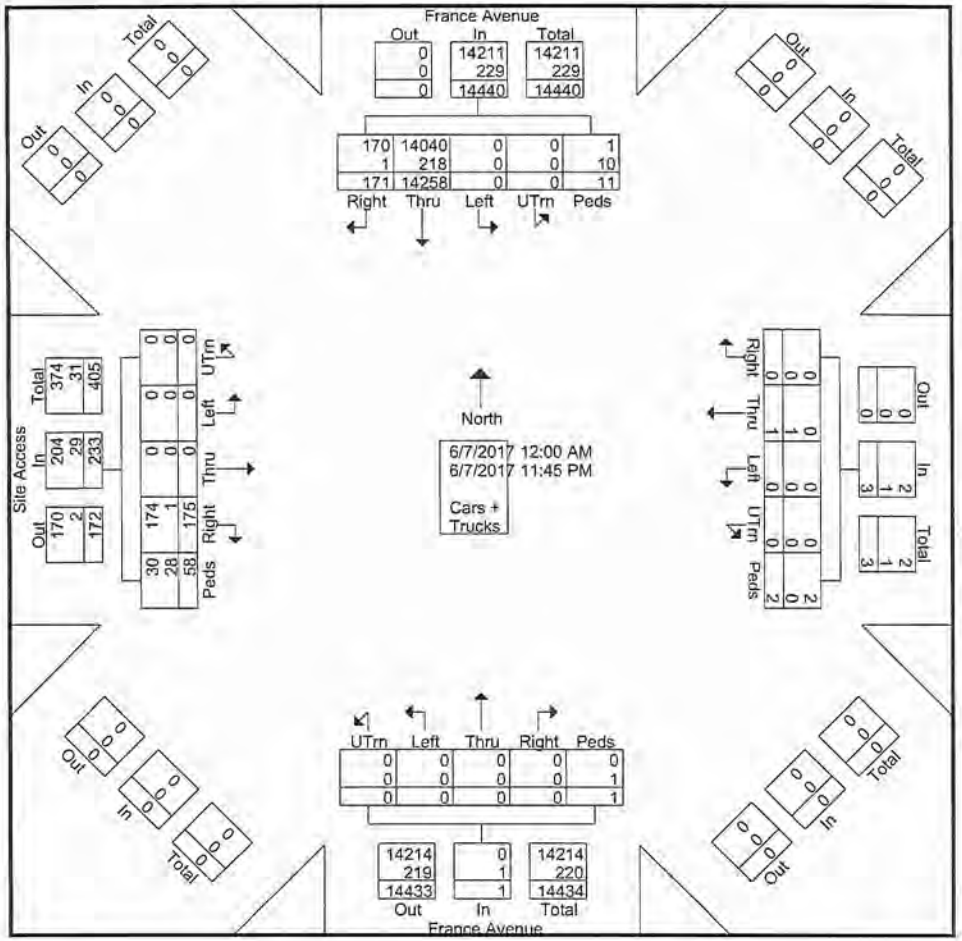
France Avenue & Site Access
Edina, MN



Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 5- France Ave & Site Access, 6-7-17
Site Code :
Start Date : 6/7/2017
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France Avenue & Site Access
Edina, MN

	France Avenue From North						From East						France Avenue From South						Site Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 AM to 09:45 AM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 08:45 AM																									
08:45 AM	**0**	**0**	259	4	0	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	266
09:00 AM	0	0	224	8	1	233	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	237
09:15 AM	0	0	201	4	0	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	208
09:30 AM	0	0	248	5	0	253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**	**8**	**13**	266
Total Volume	0	0	932	21	1	954	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	14	23	977
% App. Total	0	0	97.7	2.2	0.1		0	0	0	0	0		0	0	0	0	0		0	0	0	39.1	60.9		
PHF	.000	.000	.900	.656	.250	.907	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.450	.438	.442	.918
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 12:30 PM																									
12:30 PM	0	0	307	3	0	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	313
12:45 PM	0	0	**332**	4	0	**336**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	**339**
01:00 PM	0	0	315	6	0	321	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9	330
01:15 PM	0	0	274	3	0	277	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	6	283
Total Volume	0	0	1228	16	0	1244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	3	21	1265
% App. Total	0	0	98.7	1.3	0		0	0	0	0	0		0	0	0	0	0		0	0	0	85.7	14.3		
PHF	.000	.000	.925	.667	.000	.926	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.750	.583	.933
Peak Hour Analysis From 02:00 PM to 11:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 03:45 PM																									
03:45 PM	0	0	**277**	4	0	**281**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	**2**	5	**286**
04:00 PM	0	0	232	4	0	236	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**	0	**6**	242
04:15 PM	0	0	264	**5**	0	269	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	273
04:30 PM	0	0	259	3	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	267
Total Volume	0	0	1032	16	0	1048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	3	20	1068
% App. Total	0	0	98.5	1.5	0		0	0	0	0	0		0	0	0	0	0		0	0	0	85	15		
PHF	.000	.000	.931	.800	.000	.932	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.708	.375	.833	.934

A113

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 1- 69th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 1

Valley View Road & 69th Street
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						Valley View Road From East						69th Street From South						Bank of America Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
12:00 AM	0	0	3	1	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	6
12:15 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	7
12:30 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5
12:45 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	5
Total	0	0	16	1	0	17	0	0	0	0	0	0	0	1	4	0	0	5	0	1	0	0	0	1	23
01:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	5
01:15 AM	0	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	6
01:30 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
01:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	3
Total	0	0	7	3	0	10	0	0	0	0	0	0	0	1	2	0	0	3	0	3	0	1	0	4	17
02:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
03:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
03:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	4	0	0	4	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1	6
04:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
04:15 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 AM	0	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
04:45 AM	0	0	9	0	0	9	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	10
Total	0	0	16	1	0	17	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	19
05:00 AM	0	0	17	0	0	17	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	21
05:15 AM	0	0	14	0	0	14	0	0	0	0	0	0	0	1	2	0	0	3	0	2	0	0	1	3	20
05:30 AM	0	0	15	0	0	15	0	0	0	0	0	0	0	1	2	0	0	3	0	1	0	3	0	4	22
05:45 AM	0	0	38	0	0	38	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	1	1	43
Total	0	0	84	0	0	84	0	0	0	0	0	0	0	4	10	0	0	14	0	3	0	3	2	8	106
06:00 AM	0	0	22	0	0	22	0	0	0	0	0	0	0	0	6	0	0	6	0	1	0	2	1	4	32
06:15 AM	0	0	24	5	1	30	0	0	0	0	0	0	0	3	14	0	1	18	0	1	0	1	1	3	51
06:30 AM	0	0	37	3	0	40	0	0	0	0	1	1	0	4	9	0	0	13	0	2	0	2	1	5	59
06:45 AM	0	0	44	11	0	55	0	0	0	0	0	0	0	3	11	0	1	15	0	3	0	1	1	5	75
Total	0	0	127	19	1	147	0	0	0	0	1	1	0	10	40	0	2	52	0	7	0	6	4	17	217

AM

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 1- 69th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 2

Valley View Road & 69th Street
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						Valley View Road From East						69th Street From South						Bank of America Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	43	10	4	57	0	0	0	0	0	0	0	4	19	0	0	23	0	9	0	3	2	14	94
07:15 AM	0	0	79	10	1	90	0	0	0	0	0	0	1	9	24	0	0	34	0	8	0	2	1	11	135
07:30 AM	0	0	64	6	0	70	0	0	0	0	0	0	1	13	30	0	0	44	0	8	0	2	1	11	125
07:45 AM	0	0	95	9	1	105	0	0	0	0	0	0	1	15	38	0	0	54	0	20	0	4	2	26	185
Total	0	0	281	35	6	322	0	0	0	0	0	0	3	41	111	0	0	155	0	45	0	11	6	62	539
08:00 AM	0	0	92	8	0	100	0	0	0	0	0	0	0	7	30	0	0	37	0	8	0	3	2	13	150
08:15 AM	0	0	95	15	1	111	0	0	0	0	0	0	1	10	25	0	0	36	0	14	0	0	5	19	166
08:30 AM	0	0	90	9	1	100	0	0	0	0	0	0	1	11	35	0	0	47	0	15	0	2	0	17	164
08:45 AM	0	0	130	20	1	151	0	0	0	0	0	0	0	10	26	0	0	36	0	12	0	2	0	14	201
Total	0	0	407	52	3	462	0	0	0	0	0	0	2	38	116	0	0	156	0	49	0	7	7	63	681
09:00 AM	0	0	97	12	0	109	0	0	0	0	0	0	3	6	21	0	0	30	0	8	0	10	1	19	158
09:15 AM	1	0	92	9	0	102	0	0	0	0	0	0	3	11	23	0	0	37	0	10	0	7	1	18	157
09:30 AM	1	0	98	12	2	113	0	0	0	0	0	0	1	4	22	0	0	27	0	14	0	9	8	31	171
09:45 AM	1	0	112	12	0	125	0	0	0	0	0	0	0	4	26	0	0	30	0	14	0	9	1	24	179
Total	3	0	399	45	2	449	0	0	0	0	0	0	7	25	92	0	0	124	0	46	0	35	11	92	665
10:00 AM	0	0	113	14	0	127	0	0	0	0	0	0	1	7	17	0	0	25	0	9	0	7	0	16	168
10:15 AM	0	0	88	8	1	97	0	0	0	0	0	0	1	3	33	0	0	37	0	14	0	8	2	24	158
10:30 AM	0	0	101	13	1	115	0	0	0	0	0	0	3	4	22	0	2	31	1	12	0	3	2	18	164
10:45 AM	0	0	139	20	1	160	0	0	0	0	0	0	1	9	36	0	0	46	0	9	0	7	1	17	223
Total	0	0	441	55	3	499	0	0	0	0	0	0	6	23	108	0	2	139	1	44	0	25	5	75	713
11:00 AM	0	0	112	8	0	120	0	0	0	0	0	0	1	7	42	0	0	50	0	14	0	8	3	25	195
11:15 AM	0	0	138	20	2	160	0	0	0	0	1	1	3	7	41	0	1	52	0	17	0	9	8	34	247
11:30 AM	0	0	108	10	2	120	0	0	0	0	0	0	3	6	48	0	1	58	0	15	0	9	6	30	208
11:45 AM	1	0	128	12	0	141	0	0	0	0	0	0	0	12	44	0	0	56	0	16	0	11	0	27	224
Total	1	0	486	50	4	541	0	0	0	0	1	1	7	32	175	0	2	216	0	62	0	37	17	116	874
12:00 PM	1	0	98	13	0	112	0	0	0	0	0	0	1	16	57	0	0	74	0	20	0	14	4	38	224
12:15 PM	2	0	92	10	0	104	0	0	0	0	0	0	4	9	55	0	0	68	0	21	0	10	1	32	204
12:30 PM	1	0	97	12	0	110	0	0	0	0	0	0	2	11	65	0	0	78	0	13	0	16	0	29	217
12:45 PM	0	0	97	11	0	108	0	0	0	0	0	0	1	17	61	0	0	79	0	20	0	10	0	30	217
Total	4	0	384	46	0	434	0	0	0	0	0	0	8	53	238	0	0	299	0	74	0	50	5	129	862
01:00 PM	0	0	110	8	0	118	0	0	0	0	1	1	3	12	61	0	0	76	0	18	0	8	2	28	223
01:15 PM	0	0	101	18	2	121	0	0	0	0	0	0	1	13	40	0	0	54	0	14	0	9	4	27	202
01:30 PM	1	0	97	15	0	113	0	0	0	0	0	0	3	14	43	0	0	60	0	16	0	5	4	25	198
01:45 PM	0	0	97	9	1	107	0	0	0	0	0	0	1	15	46	0	0	62	0	22	0	10	0	32	201
Total	1	0	405	50	3	459	0	0	0	0	1	1	8	54	190	0	0	252	0	70	0	32	10	112	824

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 1- 69th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 3

Valley View Road & 69th Street
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						Valley View Road From East						69th Street From South						Bank of America Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
02:00 PM	1	0	99	20	2	122	0	0	0	0	0	0	3	16	44	0	0	63	0	11	0	8	1	20	205
02:15 PM	0	0	80	13	0	93	0	0	0	0	0	0	6	16	54	0	0	76	0	24	0	11	2	37	206
02:30 PM	0	0	79	6	0	85	0	0	0	0	0	0	2	12	58	0	0	72	0	21	0	9	2	32	189
02:45 PM	0	0	73	9	0	82	0	0	0	0	0	0	3	14	53	0	0	70	0	11	0	10	1	22	174
Total	1	0	331	48	2	382	0	0	0	0	0	0	14	58	209	0	0	281	0	67	0	38	6	111	774
03:00 PM	2	0	66	16	1	85	0	0	0	0	0	0	3	9	58	0	0	70	0	17	0	11	1	29	184
03:15 PM	1	0	71	11	1	84	0	0	0	0	0	0	6	10	51	0	1	68	0	20	0	10	2	32	184
03:30 PM	0	0	82	15	0	97	0	0	0	0	0	0	3	10	49	0	0	62	0	12	0	14	0	26	185
03:45 PM	2	0	78	9	2	91	0	0	0	0	0	0	4	12	52	0	0	68	0	18	0	13	2	33	192
Total	5	0	297	51	4	357	0	0	0	0	0	0	16	41	210	0	1	268	0	67	0	48	5	120	745
04:00 PM	0	0	83	19	1	103	0	0	0	0	2	2	0	13	60	0	2	75	0	20	0	14	4	38	218
04:15 PM	0	0	78	12	1	91	0	0	0	0	1	1	3	10	69	0	0	82	0	30	0	18	2	50	224
04:30 PM	1	0	96	19	2	118	0	0	0	0	0	0	1	9	58	0	0	68	0	34	0	24	8	66	252
04:45 PM	0	0	100	18	0	118	0	0	0	0	0	0	1	21	76	0	0	98	0	31	0	33	4	68	284
Total	1	0	357	68	4	430	0	0	0	0	3	3	5	53	263	0	2	323	0	115	0	89	18	222	978
05:00 PM	0	0	97	22	1	120	0	0	0	0	0	0	2	19	86	0	0	107	0	34	0	22	3	59	286
05:15 PM	0	0	110	17	1	128	0	0	0	0	0	0	1	20	77	0	0	98	0	31	0	17	3	51	277
05:30 PM	0	0	95	9	0	104	0	0	0	0	0	0	1	15	68	0	0	84	0	26	0	17	0	43	231
05:45 PM	0	0	99	11	0	110	0	0	0	0	0	0	1	19	87	0	1	108	0	28	0	19	1	48	266
Total	0	0	401	59	2	462	0	0	0	0	0	0	5	73	318	0	1	397	0	119	0	75	7	201	1060
06:00 PM	0	0	92	6	1	99	0	0	0	0	0	0	0	19	62	0	0	81	0	17	0	11	3	31	211
06:15 PM	0	0	81	11	0	92	0	0	0	0	0	0	1	14	54	0	0	69	0	13	0	11	3	27	188
06:30 PM	2	0	73	8	1	84	0	0	0	0	2	2	1	10	46	0	0	57	0	10	0	4	1	15	158
06:45 PM	0	0	89	8	1	98	0	0	0	0	0	0	0	10	30	0	2	42	0	9	0	4	1	14	154
Total	2	0	335	33	3	373	0	0	0	0	2	2	2	53	192	0	2	249	0	49	0	30	8	87	711
07:00 PM	0	0	66	17	0	83	0	0	0	0	1	1	2	11	40	0	0	53	0	15	0	4	1	20	157
07:15 PM	0	0	78	7	1	86	0	0	0	0	0	0	2	17	34	0	0	53	0	10	0	1	2	13	152
07:30 PM	0	0	50	13	0	63	0	0	0	0	1	1	2	9	27	0	1	39	0	9	0	6	0	15	118
07:45 PM	0	0	45	10	0	55	0	0	0	0	0	0	2	7	33	0	0	42	0	7	0	1	1	9	106
Total	0	0	239	47	1	287	0	0	0	0	2	2	8	44	134	0	1	187	0	41	0	12	4	57	533
08:00 PM	0	0	41	10	1	52	0	0	0	0	0	0	0	8	42	0	0	50	0	6	0	6	1	13	115
08:15 PM	0	0	53	5	0	58	0	0	0	0	0	0	2	3	30	0	0	35	0	4	0	0	0	4	97
08:30 PM	0	0	56	10	0	66	0	0	0	0	1	1	0	4	26	0	0	30	0	7	0	4	0	11	108
08:45 PM	0	0	36	8	0	44	0	0	0	0	0	0	1	9	39	0	0	49	0	5	0	0	1	6	99
Total	0	0	186	33	1	220	0	0	0	0	1	1	3	24	137	0	0	164	0	22	0	10	2	34	419

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 1- 69th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 4

Valley View Road & 69th Street
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						Valley View Road From East						69th Street From South						Bank of America Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
09:00 PM	0	0	36	7	0	43	0	0	0	0	0	0	0	7	34	0	0	41	0	4	0	1	1	6	90
09:15 PM	0	0	24	2	0	26	0	0	0	0	0	0	0	10	22	0	0	32	0	5	0	1	1	7	65
09:30 PM	0	0	25	0	0	25	0	0	0	0	0	0	0	3	14	0	0	17	0	3	0	1	1	5	47
09:45 PM	0	0	16	0	0	16	0	0	0	0	0	0	1	7	11	0	0	19	0	4	0	1	0	5	40
Total	0	0	101	9	0	110	0	0	0	0	0	0	1	27	81	0	0	109	0	16	0	4	3	23	242
10:00 PM	0	0	9	4	2	15	0	0	0	0	0	0	0	4	10	0	0	14	0	3	0	0	0	3	32
10:15 PM	0	0	13	3	0	16	0	0	0	0	0	0	0	1	11	0	0	12	0	1	0	1	0	2	30
10:30 PM	0	0	11	3	0	14	0	0	0	0	0	0	1	1	11	0	0	13	0	7	0	0	0	7	34
10:45 PM	0	0	4	3	0	7	0	0	0	0	0	0	1	1	10	0	0	12	0	2	0	1	0	3	22
Total	0	0	37	13	2	52	0	0	0	0	0	0	2	7	42	0	0	51	0	13	0	2	0	15	118
11:00 PM	0	0	12	0	0	12	0	0	0	0	0	0	0	3	6	0	0	9	0	0	0	0	0	0	21
11:15 PM	0	0	5	2	0	7	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	11
11:30 PM	0	0	7	4	0	11	0	0	0	0	0	0	0	2	3	0	0	5	0	1	0	0	0	1	17
11:45 PM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	1	6
Total	0	0	28	6	0	34	0	0	0	0	0	0	0	6	13	0	0	19	0	1	0	1	0	2	55
Grand Total	18	0	5371	724	41	6154	0	0	0	0	11	11	97	670	2687	0	13	3467	1	915	0	516	120	1552	11184
Apprch %	0.3	0	87.3	11.8	0.7		0	0	0	0	100		2.8	19.3	77.5	0	0.4		0.1	59	0	33.2	7.7		
Total %	0.2	0	48	6.5	0.4	55	0	0	0	0	0.1	0.1	0.9	6	24	0	0.1	31	0	8.2	0	4.6	1.1	13.9	
Cars +	16	0	5300	713	4	6033	0	0	0	0	0	0	97	658	2656	0	0	3411	1	906	0	511	57	1475	10919
% Cars +	88.9	0	98.7	98.5	9.8	98	0	0	0	0	0	0	100	98.2	98.8	0	0	98.4	100	99	0	99	47.5	95	97.6
Trucks	2	0	71	11	37	121	0	0	0	0	11	11	0	12	31	0	13	56	0	9	0	5	63	77	265
% Trucks	11.1	0	1.3	1.5	90.2	2	0	0	0	0	100	100	0	1.8	1.2	0	100	1.6	0	1	0	1	52.5	5	2.4

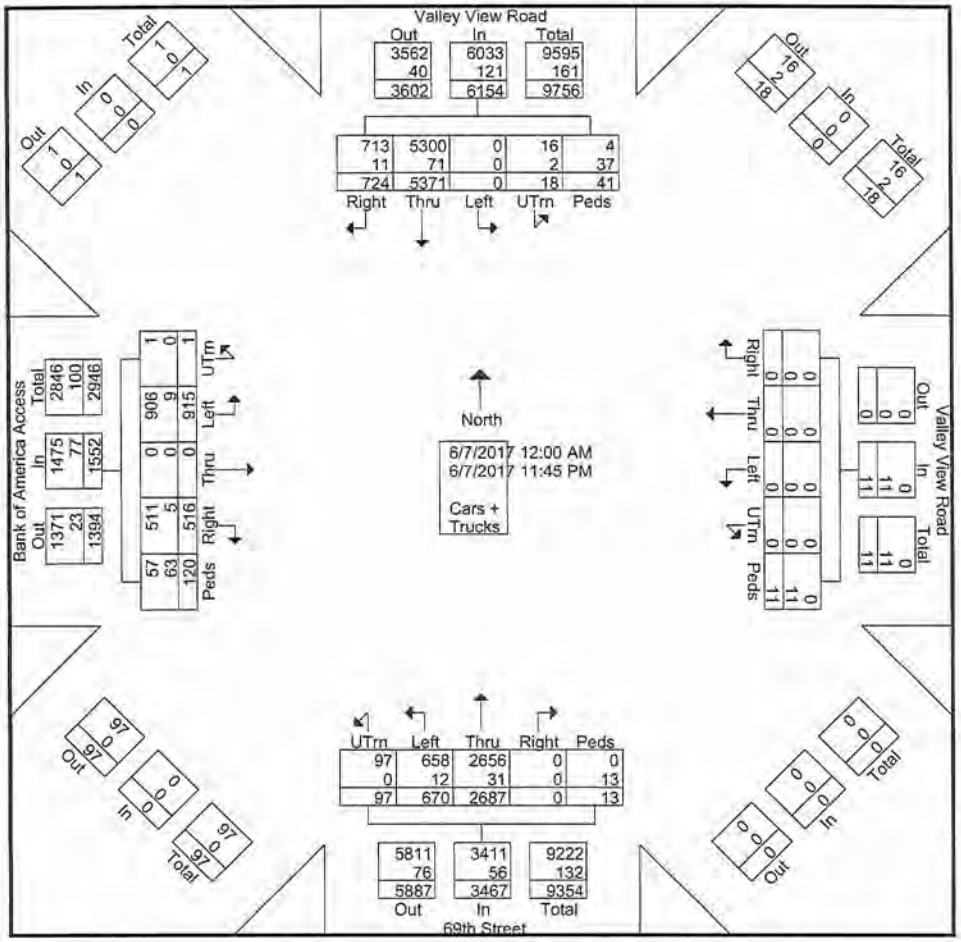
A117

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 1- 69th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 5

Valley View Road & 69th Street
Edina, MN



A118

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 1- 69th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 6

Valley View Road & 69th Street
Edina, MN

	Valley View Road From North						Valley View Road From East						69th Street From South						Bank of America Access From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 AM to 09:45 AM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 08:15 AM																									
08:15 AM	**0**	**0**	**95**	**15**	[illegible]	111	0	0	0	0	0	0	1	10	25	0	0	36	0	14	0	0	[illegible]	[illegible]	166
08:30 AM	0	0	90	9	1	100	0	0	0	0	0	0	1	[illegible]	**35**	0	0	**47**	0	**15**	0	2	0	17	164
08:45 AM	0	0	**130**	**20**	1	**151**	0	0	0	0	0	0	0	10	26	0	0	36	0	12	0	2	0	14	**201**
09:00 AM	0	0	97	12	0	109	0	0	0	0	0	0	**3**	6	21	0	0	30	0	8	0	**10**	1	19	158
Total Volume	0	0	412	56	3	471	0	0	0	0	0	0	5	37	107	0	0	149	0	49	0	14	6	69	689
% App. Total	0	0	87.5	11.9	0.6		0	0	0	0	0		3.4	24.8	71.8	0	0		0	71	0	20.3	8.7		
PHF	.000	.000	.792	.700	.750	.780	.000	.000	.000	.000	.000	.000	.417	.841	.764	.000	.000	.793	.000	.817	.000	.350	.300	.908	.857
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 11:15 AM																									
11:15 AM	0	0	**138**	**20**	**2**	**160**	0	0	0	0	**1**	**1**	**3**	7	41	0	**1**	52	0	17	0	9	**8**	34	**247**
11:30 AM	0	0	108	10	2	120	0	0	0	0	0	0	3	6	48	0	1	58	0	15	0	9	6	30	208
11:45 AM	**1**	0	128	12	0	141	0	0	0	0	0	0	0	12	44	0	0	56	0	16	0	11	0	27	224
12:00 PM	1	0	98	13	0	112	0	0	0	0	0	0	1	**16**	**57**	0	0	**74**	0	**20**	0	**14**	4	**38**	224
Total Volume	2	0	472	55	4	533	0	0	0	0	1	1	7	41	190	0	2	240	0	68	0	43	18	129	903
% App. Total	0.4	0	88.6	10.3	0.8		0	0	0	0	100		2.9	17.1	79.2	0	0.8		0	52.7	0	33.3	14		
PHF	.500	.000	.855	.688	.500	.833	.000	.000	.000	.000	.250	.250	.583	.641	.833	.000	.500	.811	.000	.850	.000	.768	.563	.849	.914
Peak Hour Analysis From 02:00 PM to 11:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:30 PM																									
04:30 PM	**1**	0	96	19	**2**	118	0	0	0	0	0	0	1	9	58	0	0	68	0	**34**	0	24	**8**	66	252
04:45 PM	0	0	100	18	0	118	0	0	0	0	0	0	1	**21**	76	0	0	98	0	31	0	**33**	4	**68**	284
05:00 PM	0	0	97	**22**	1	120	0	0	0	0	0	0	**2**	19	**86**	0	0	**107**	0	34	0	22	3	59	**286**
05:15 PM	0	0	**110**	17	1	**128**	0	0	0	0	0	0	1	20	77	0	0	98	0	31	0	17	3	51	277
Total Volume	1	0	403	76	4	484	0	0	0	0	0	0	5	69	297	0	0	371	0	130	0	96	18	244	1099
% App. Total	0.2	0	83.3	15.7	0.8		0	0	0	0	0		1.3	18.6	80.1	0	0		0	53.3	0	39.3	7.4		
PHF	.250	.000	.916	.864	.500	.945	.000	.000	.000	.000	.000	.000	.625	.821	.863	.000	.000	.867	.000	.956	.000	.727	.563	.897	.961

A104

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 4- 70th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 1

Valley View Road & 70th Street
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						70th Street From East						From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
12:00 AM	0	1	0	0	0	1	0	0	5	0	0	5	0	0	0	0	0	0	0	1	2	0	0	3	9
12:15 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	4
12:30 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 AM	0	0	0	1	0	1	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	0	1	0	1	0	2	0	0	14	0	0	14	0	0	0	0	0	0	0	1	3	0	0	4	20
01:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
01:15 AM	0	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	5
01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
01:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	1	0	0	3	4
Total	0	2	0	2	0	4	0	0	1	0	0	1	0	0	0	0	0	0	0	4	3	0	0	7	12
02:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
03:15 AM	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
03:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	1	1	0	0	2	5
04:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
04:30 AM	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	3
04:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	4	5
Total	0	1	0	1	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	7	0	0	7	11
05:00 AM	0	1	0	1	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	8	0	0	8	11
05:15 AM	0	0	0	1	0	1	0	0	1	1	0	2	0	0	0	0	0	0	0	1	4	0	0	5	8
05:30 AM	0	0	0	1	2	3	0	0	2	0	0	2	0	0	0	0	2	2	0	4	9	0	2	15	22
05:45 AM	0	0	0	1	1	2	0	0	5	0	0	5	0	0	0	0	0	0	0	0	12	0	1	13	20
Total	0	1	0	4	3	8	0	0	9	1	0	10	0	0	0	0	2	2	0	5	33	0	3	41	61
06:00 AM	0	0	0	0	0	0	0	0	14	2	0	16	0	0	0	0	0	0	0	1	13	0	0	14	30
06:15 AM	0	3	0	1	0	4	0	0	9	1	0	10	0	0	0	0	0	0	0	2	16	0	1	19	33
06:30 AM	0	0	0	6	0	6	0	0	12	1	0	13	0	0	0	0	0	0	0	4	30	0	0	34	53
06:45 AM	0	7	0	4	1	12	0	0	14	1	0	15	0	0	0	0	1	1	0	3	50	0	0	53	81
Total	0	10	0	11	1	22	0	0	49	5	0	54	0	0	0	0	1	1	0	10	109	0	1	120	197

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 4- 70th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 2

Valley View Road & 70th Street
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						70th Street From East						From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	8	0	5	2	15	0	0	40	2	0	42	0	0	0	0	0	0	0	9	52	0	1	62	119
07:15 AM	0	8	0	14	1	23	0	0	43	4	0	47	0	0	0	0	3	3	0	6	51	0	0	57	130
07:30 AM	0	5	0	9	1	15	0	0	49	7	1	57	0	0	0	0	0	0	0	5	61	0	0	66	138
07:45 AM	0	7	0	16	1	24	0	0	47	12	0	59	0	0	0	0	2	2	0	14	83	0	1	98	183
Total	0	28	0	44	5	77	0	0	179	25	1	205	0	0	0	0	5	5	0	34	247	0	2	283	570
08:00 AM	0	7	0	7	0	14	0	0	50	3	0	53	0	0	0	0	1	1	0	7	73	0	0	80	148
08:15 AM	0	10	0	13	1	24	0	0	47	5	0	52	0	0	0	0	2	2	0	12	90	0	0	102	180
08:30 AM	0	5	0	13	1	19	0	0	41	5	0	46	0	0	0	0	2	2	0	12	70	0	0	82	149
08:45 AM	0	11	0	14	1	26	1	0	41	6	0	48	0	0	0	0	1	1	0	11	77	0	0	88	163
Total	0	33	0	47	3	83	1	0	179	19	0	199	0	0	0	0	6	6	0	42	310	0	0	352	640
09:00 AM	0	7	0	10	0	17	0	0	13	4	1	18	0	0	0	0	0	0	0	13	70	0	0	83	118
09:15 AM	0	6	0	11	1	18	1	0	41	6	0	48	0	0	0	0	1	1	0	12	84	0	0	96	163
09:30 AM	0	9	0	7	2	18	0	0	41	7	1	49	0	0	0	0	1	1	0	12	97	0	0	109	177
09:45 AM	0	9	0	6	0	15	0	0	32	10	0	42	0	0	0	0	0	0	1	11	98	0	1	111	168
Total	0	31	0	34	3	68	1	0	127	27	2	157	0	0	0	0	2	2	1	48	349	0	1	399	626
10:00 AM	0	9	0	11	1	21	0	0	34	6	1	41	0	0	0	0	1	1	1	10	78	0	1	90	153
10:15 AM	0	8	0	5	1	14	1	0	50	10	0	61	0	0	0	0	1	1	0	8	84	0	1	93	169
10:30 AM	0	9	0	5	3	17	1	0	50	9	0	60	0	0	0	0	0	0	0	10	68	0	2	80	157
10:45 AM	0	12	0	15	0	27	0	0	42	6	0	48	0	0	0	0	0	0	0	10	85	0	1	96	171
Total	0	38	0	36	5	79	2	0	176	31	1	210	0	0	0	0	2	2	1	38	315	0	5	359	650
11:00 AM	0	5	0	8	0	13	0	0	46	12	0	58	0	0	0	0	0	0	0	5	89	0	0	94	165
11:15 AM	0	9	0	16	2	27	1	0	59	12	1	73	0	0	0	0	0	0	0	15	112	0	0	127	227
11:30 AM	0	8	0	10	2	20	2	0	69	13	1	85	0	0	0	0	0	0	0	13	113	0	0	126	231
11:45 AM	0	11	0	16	0	27	2	0	70	13	0	85	0	0	0	0	1	1	0	14	127	0	0	141	254
Total	0	33	0	50	4	87	5	0	244	50	2	301	0	0	0	0	1	1	0	47	441	0	0	488	877
12:00 PM	0	9	0	17	0	26	1	0	85	12	0	98	0	0	0	0	1	1	1	16	117	0	1	135	260
12:15 PM	0	5	0	11	2	18	1	0	80	12	2	95	0	0	0	0	2	2	0	12	115	0	0	127	242
12:30 PM	0	4	0	19	0	23	0	0	81	15	0	96	0	0	0	0	0	0	0	10	108	0	0	118	237
12:45 PM	0	7	0	21	0	28	0	0	100	16	0	116	0	0	0	0	1	1	1	12	109	0	0	122	267
Total	0	25	0	68	2	95	2	0	346	55	2	405	0	0	0	0	4	4	2	50	449	0	1	502	1006
01:00 PM	0	1	0	20	0	21	0	0	86	11	0	97	0	0	0	0	0	0	0	12	99	0	0	111	229
01:15 PM	0	12	0	16	0	28	0	0	66	12	0	78	0	0	0	0	2	2	1	11	112	0	1	125	233
01:30 PM	0	9	0	19	0	28	1	0	83	10	0	94	0	0	0	0	0	0	0	7	96	0	0	103	225
01:45 PM	0	6	0	17	1	24	0	0	73	20	0	93	0	0	0	0	2	2	1	12	95	0	0	108	227
Total	0	28	0	72	1	101	1	0	308	53	0	362	0	0	0	0	4	4	2	42	402	0	1	447	914

A131

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 4- 70th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 3

Valley View Road & 70th Street
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						70th Street From East						From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
02:00 PM	0	14	0	24	1	39	0	0	91	12	0	103	0	0	0	0	0	0	1	8	94	0	2	105	247
02:15 PM	0	8	0	20	0	28	0	0	74	16	1	91	0	0	0	0	1	1	1	16	94	0	0	111	231
02:30 PM	0	5	0	11	1	17	0	0	78	16	0	94	0	0	0	0	2	2	0	11	93	0	1	105	218
02:45 PM	0	5	0	17	0	22	0	0	79	10	0	89	0	0	0	0	2	2	0	12	110	0	0	122	235
Total	0	32	0	72	2	106	0	0	322	54	1	377	0	0	0	0	5	5	2	47	391	0	3	443	931
03:00 PM	0	8	0	19	2	29	0	0	95	10	1	106	0	0	0	0	2	2	0	11	113	0	3	127	264
03:15 PM	1	4	0	17	1	23	0	0	84	16	0	100	0	0	0	0	1	1	0	7	103	0	0	110	234
03:30 PM	0	6	0	19	0	25	0	0	90	10	0	100	0	0	0	0	1	1	0	14	138	0	0	152	278
03:45 PM	0	4	0	19	1	24	3	0	77	11	1	92	0	0	0	0	0	0	1	14	143	0	0	158	274
Total	1	22	0	74	4	101	3	0	346	47	2	398	0	0	0	0	4	4	1	46	497	0	3	547	1050
04:00 PM	0	10	0	26	3	39	2	0	83	13	3	101	0	0	0	0	0	0	0	17	175	0	1	193	333
04:15 PM	0	5	0	20	1	26	0	0	87	18	0	105	0	0	0	0	3	3	0	24	172	0	1	197	331
04:30 PM	0	8	0	22	1	31	3	0	88	24	2	117	0	0	0	0	3	3	0	28	191	0	0	219	370
04:45 PM	0	11	0	31	2	44	1	0	83	17	2	103	0	0	0	0	0	0	0	47	196	0	1	244	391
Total	0	34	0	99	7	140	6	0	341	72	7	426	0	0	0	0	6	6	0	116	734	0	3	853	1425
05:00 PM	0	7	0	37	2	46	2	0	88	20	0	110	0	0	0	0	0	0	0	31	196	0	1	228	384
05:15 PM	0	11	0	27	0	38	1	0	84	24	0	109	0	0	0	0	6	6	0	24	198	0	1	223	376
05:30 PM	0	5	0	20	0	25	1	0	80	19	0	100	0	0	0	0	1	1	0	19	212	0	0	231	357
05:45 PM	0	2	0	30	4	36	2	0	75	14	1	92	0	0	0	0	1	1	0	31	162	0	0	193	322
Total	0	25	0	114	6	145	6	0	327	77	1	411	0	0	0	0	8	8	0	105	768	0	2	875	1439
06:00 PM	0	2	0	19	0	21	2	0	78	6	2	88	0	0	0	0	0	0	0	21	134	0	3	158	267
06:15 PM	0	6	0	19	1	26	0	0	65	7	2	74	0	0	0	0	1	1	0	16	114	0	0	130	231
06:30 PM	0	5	0	17	0	22	1	0	56	7	0	64	0	0	0	0	1	1	0	6	109	0	1	116	203
06:45 PM	0	5	0	13	9	27	1	0	50	3	0	54	0	0	0	0	0	0	0	10	73	0	4	87	168
Total	0	18	0	68	10	96	4	0	249	23	4	280	0	0	0	0	2	2	0	53	430	0	8	491	869
07:00 PM	0	8	0	20	0	28	0	0	53	7	0	60	0	0	0	0	0	0	0	6	47	0	0	53	141
07:15 PM	0	6	0	18	0	24	0	0	36	3	0	39	0	0	0	0	2	2	1	6	54	0	3	64	129
07:30 PM	0	5	0	16	1	22	0	0	47	5	0	52	0	0	0	0	2	2	0	6	49	0	2	57	133
07:45 PM	0	1	0	16	0	17	0	0	46	2	0	48	0	0	0	0	0	0	0	5	41	0	0	46	111
Total	0	20	0	70	1	91	0	0	182	17	0	199	0	0	0	0	4	4	1	23	191	0	5	220	514
08:00 PM	0	3	0	15	0	18	0	0	52	4	0	56	0	0	0	0	2	2	0	7	35	0	2	44	120
08:15 PM	0	2	0	5	0	7	0	0	60	5	0	65	0	0	0	0	4	4	0	1	37	0	1	39	115
08:30 PM	0	2	0	12	1	15	0	0	57	5	0	62	0	0	0	0	1	1	0	5	32	0	0	37	115
08:45 PM	0	2	0	15	0	17	0	0	49	5	0	54	0	0	0	0	0	0	0	1	34	0	0	35	106
Total	0	9	0	47	1	57	0	0	218	19	0	237	0	0	0	0	7	7	0	14	138	0	3	155	456

A1c2

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 4- 70th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 4

Valley View Road & 70th Street
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						70th Street From East						From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
09:00 PM	0	4	0	11	1	16	0	0	58	1	0	59	0	0	0	0	0	0	0	3	24	0	0	27	102
09:15 PM	0	1	0	12	0	13	0	0	31	1	0	32	0	0	0	0	0	0	0	6	23	0	0	29	74
09:30 PM	0	0	0	3	0	3	0	0	28	2	2	32	0	0	0	0	0	0	0	2	15	0	0	17	52
09:45 PM	0	0	0	7	1	8	0	0	24	2	0	26	0	0	0	0	1	1	0	2	10	0	1	13	48
Total	0	5	0	33	2	40	0	0	141	6	2	149	0	0	0	0	1	1	0	13	72	0	1	86	276
10:00 PM	0	2	0	6	0	8	0	0	16	2	0	18	0	0	0	0	0	0	0	1	6	0	0	7	33
10:15 PM	0	1	0	2	0	3	0	0	12	1	0	13	0	0	0	0	0	0	0	2	8	0	0	10	26
10:30 PM	0	1	0	2	0	3	0	0	5	1	0	6	0	0	0	0	2	2	0	1	12	0	2	15	26
10:45 PM	0	3	0	1	0	4	0	0	9	1	0	10	0	0	0	0	0	0	0	2	6	0	0	8	22
Total	0	7	0	11	0	18	0	0	42	5	0	47	0	0	0	0	2	2	0	6	32	0	2	40	107
11:00 PM	0	0	0	3	0	3	0	0	5	0	0	5	0	0	0	0	0	0	0	0	5	0	0	5	13
11:15 PM	0	1	0	3	0	4	0	0	5	0	0	5	0	0	0	0	0	0	0	0	2	0	0	2	11
11:30 PM	0	1	0	4	0	5	1	0	2	1	0	4	0	0	0	0	2	2	0	0	4	0	1	5	16
11:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	3	0	0	4	6
Total	0	2	0	10	0	12	1	0	14	1	0	16	0	0	0	0	2	2	0	1	14	0	1	16	46
Grand Total	1	405	0	969	60	1435	32	0	3820	587	25	4464	0	0	0	0	68	68	10	746	5937	0	45	6738	12705
Apprch %	0.1	28.2	0	67.5	4.2		0.7	0	85.6	13.1	0.6		0	0	0	0	100		0.1	11.1	88.1	0	0.7		
Total %	0	3.2	0	7.6	0.5	11.3	0.3	0	30.1	4.6	0.2	35.1	0	0	0	0	0.5	0.5	0.1	5.9	46.7	0	0.4	53	
Cars +	1	400	0	953	24	1378	31	0	3777	586	15	4409	0	0	0	0	49	49	9	738	5863	0	24	6634	12470
% Cars +	100	98.8	0	98.3	40	96	96.9	0	98.9	99.8	60	98.8	0	0	0	0	72.1	72.1	90	98.9	98.8	0	53.3	98.5	98.2
Trucks	0	5	0	16	36	57	1	0	43	1	10	55	0	0	0	0	19	19	1	8	74	0	21	104	235
% Trucks	0	1.2	0	1.7	60	4	3.1	0	1.1	0.2	40	1.2	0	0	0	0	27.9	27.9	10	1.1	1.2	0	46.7	1.5	1.8

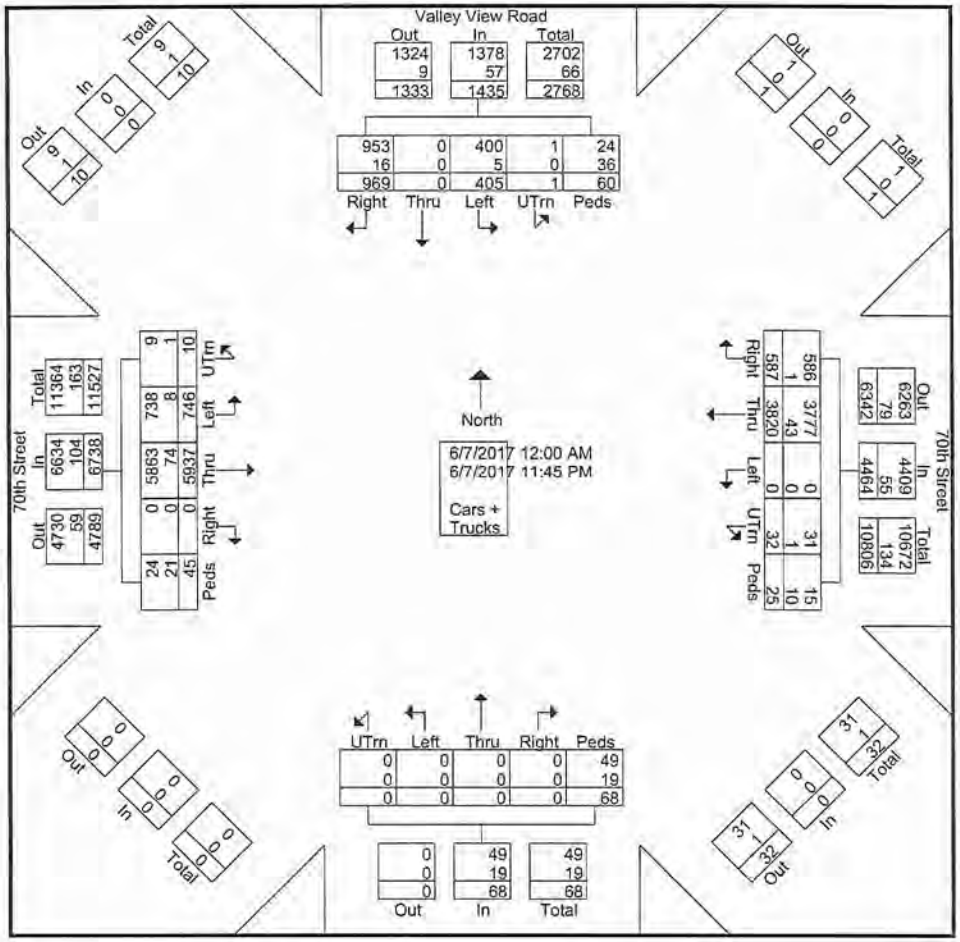
A123

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 4- 70th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 5

Valley View Road & 70th Street
Edina, MN



Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 4- 70th St & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 6

Valley View Road & 70th Street
Edina, MN

	Valley View Road From North						70th Street From East						From South						70th Street From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 AM to 09:45 AM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 07:45 AM																									
07:45 AM	**0**	**7**	**0**	16	1	24	0	0	47	12	0	**59**	0	0	0	0	**2**	**2**	0	**14**	83	0	**1**	98	**183**
08:00 AM	0	7	0	7	0	14	0	0	**50**	3	0	53	0	0	0	0	1	1	0	7	73	0	0	80	148
08:15 AM	0	**10**	0	13	1	24	0	0	47	5	0	52	0	0	0	0	2	2	0	12	**90**	0	0	**102**	180
08:30 AM	0	5	0	13	1	19	0	0	41	5	0	46	0	0	0	0	2	2	0	12	70	0	0	82	149
Total Volume	0	29	0	49	3	81	0	0	185	25	0	210	0	0	0	0	7	7	0	45	316	0	1	362	660
% App. Total	0	35.8	0	60.5	3.7		0	0	88.1	11.9	0		0	0	0	0	100		0	12.4	87.3	0	0.3		
PHF	.000	.725	.000	.766	.750	.844	.000	.000	.925	.521	.000	.890	.000	.000	.000	.000	.875	.875	.000	.804	.878	.000	.250	.887	.902
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 12:00 PM																									
12:00 PM	0	**9**	0	17	0	26	**1**	0	85	12	0	98	0	0	0	0	1	1	**1**	**16**	**117**	0	**1**	**135**	260
12:15 PM	0	5	0	11	**2**	18	1	0	80	12	**2**	95	0	0	0	0	**2**	**2**	0	12	115	0	0	127	242
12:30 PM	0	4	0	19	0	23	0	0	81	15	0	96	0	0	0	0	0	0	0	10	108	0	0	118	237
12:45 PM	0	7	0	**21**	0	**28**	0	0	**100**	**16**	0	**116**	0	0	0	0	1	1	1	12	109	0	0	122	**267**
Total Volume	0	25	0	68	2	95	2	0	346	55	2	405	0	0	0	0	4	4	2	50	449	0	1	502	1006
% App. Total	0	26.3	0	71.6	2.1		0.5	0	85.4	13.6	0.5		0	0	0	0	100		0.4	10	89.4	0	0.2		
PHF	.000	.694	.000	.810	.250	.848	.500	.000	.865	.859	.250	.873	.000	.000	.000	.000	.500	.500	.500	.781	.959	.000	.250	.930	.942
Peak Hour Analysis From 02:00 PM to 11:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:30 PM																									
04:30 PM	0	8	0	22	1	31	**3**	0	**88**	**24**	**2**	**117**	0	0	0	0	3	3	0	28	191	0	0	219	370
04:45 PM	0	**11**	0	31	**2**	44	1	0	83	17	2	103	0	0	0	0	0	0	0	**47**	196	0	**1**	**244**	**391**
05:00 PM	0	7	0	**37**	2	**46**	2	0	88	20	0	110	0	0	0	0	0	0	0	31	196	0	1	228	384
05:15 PM	0	11	0	27	0	38	1	0	84	24	0	109	0	0	0	0	**6**	**6**	0	24	**198**	0	1	223	376
Total Volume	0	37	0	117	5	159	7	0	343	85	4	439	0	0	0	0	9	9	0	130	781	0	3	914	1521
% App. Total	0	23.3	0	73.6	3.1		1.6	0	78.1	19.4	0.9		0	0	0	0	100		0	14.2	85.4	0	0.3		
PHF	.000	.841	.000	.791	.625	.864	.583	.000	.974	.885	.500	.938	.000	.000	.000	.000	.375	.375	.000	.691	.986	.000	.750	.936	.973

A125

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 7- Site Access & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 1

Valley View Road & Site Access
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						Site Access From East						Valley View Road From South						From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

A126

Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 7- Site Access & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 2

Valley View Road & Site Access
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						Site Access From East						Valley View Road From South						From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	14	0	0	14	0	0	0	0	1	1	0	0	11	0	0	11	0	0	0	0	2	2	28
07:15 AM	0	0	21	0	0	21	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	31
07:30 AM	0	0	15	0	0	15	0	0	0	1	1	2	0	0	9	1	0	10	0	0	0	0	2	2	29
07:45 AM	0	0	24	0	0	24	0	0	0	0	1	1	0	0	25	0	0	25	0	0	0	0	1	1	51
Total	0	0	74	0	0	74	0	0	0	1	3	4	0	0	55	1	0	56	0	0	0	0	5	5	139
08:00 AM	0	1	14	0	0	15	0	0	0	0	0	0	0	0	10	1	0	11	0	0	0	0	0	0	26
08:15 AM	0	3	23	0	0	26	0	1	0	0	0	1	0	0	14	0	0	14	0	0	0	0	1	1	42
08:30 AM	0	1	20	0	1	22	0	1	0	0	1	2	0	0	17	1	0	18	0	0	0	0	0	0	42
08:45 AM	0	2	28	0	0	30	0	0	0	0	0	0	0	0	15	1	0	16	0	0	0	0	1	1	47
Total	0	7	85	0	1	93	0	2	0	0	1	3	0	0	56	3	0	59	0	0	0	0	2	2	157
09:00 AM	0	0	19	0	0	19	0	0	0	1	1	2	0	0	16	1	0	17	0	0	0	0	0	0	38
09:15 AM	0	2	19	0	0	21	0	0	0	2	0	2	0	0	17	0	0	17	0	0	0	0	0	0	40
09:30 AM	0	1	15	0	0	16	0	1	0	2	1	4	0	0	21	2	0	23	0	0	0	0	1	1	44
09:45 AM	0	1	15	0	0	16	0	0	0	3	1	4	0	0	20	1	0	21	0	0	0	0	0	0	41
Total	0	4	68	0	0	72	0	1	0	8	3	12	0	0	74	4	0	78	0	0	0	0	1	1	163
10:00 AM	0	1	20	0	0	21	0	2	0	2	0	4	0	0	14	1	0	15	0	0	0	0	1	1	41
10:15 AM	0	0	11	0	0	11	0	0	0	2	3	5	0	0	19	1	0	20	0	0	0	0	0	0	36
10:30 AM	0	4	13	0	0	17	0	0	0	1	3	4	0	0	15	2	0	17	0	0	0	0	0	0	38
10:45 AM	0	3	26	0	0	29	0	1	0	3	1	5	0	0	14	1	0	15	0	0	0	0	0	0	49
Total	0	8	70	0	0	78	0	3	0	8	7	18	0	0	62	5	0	67	0	0	0	0	1	1	164
11:00 AM	0	3	12	0	0	15	0	1	0	4	0	5	0	0	17	0	0	17	0	0	0	0	0	0	37
11:15 AM	0	2	25	0	0	27	0	0	0	1	0	1	0	0	26	1	0	27	0	0	0	0	1	1	56
11:30 AM	0	1	15	0	0	16	0	2	0	0	2	4	0	0	24	1	0	25	0	0	0	0	1	1	46
11:45 AM	0	1	26	0	0	27	0	1	0	3	1	5	0	0	25	1	0	26	0	0	0	0	0	0	58
Total	0	7	78	0	0	85	0	4	0	8	3	15	0	0	92	3	0	95	0	0	0	0	2	2	197
12:00 PM	0	2	26	0	0	28	0	0	0	2	0	2	0	0	31	2	0	33	0	0	0	0	0	0	63
12:15 PM	0	1	19	0	0	20	0	0	0	3	0	3	0	0	27	0	0	27	0	0	0	0	0	0	50
12:30 PM	0	2	21	0	0	23	0	2	0	8	0	10	0	0	24	0	0	24	0	0	0	0	0	0	57
12:45 PM	0	0	28	0	0	28	0	3	0	2	0	5	0	0	27	2	0	29	0	0	0	0	0	0	62
Total	0	5	94	0	0	99	0	5	0	15	0	20	0	0	109	4	0	113	0	0	0	0	0	0	232
01:00 PM	0	0	20	0	0	20	0	2	0	3	0	5	0	0	21	0	0	21	0	0	0	0	0	0	46
01:15 PM	0	3	28	0	0	31	0	0	0	0	2	2	0	0	25	1	0	26	0	0	0	0	0	0	59
01:30 PM	0	2	27	0	0	29	0	0	0	1	0	1	0	0	18	0	0	18	0	0	0	0	0	0	48
01:45 PM	0	2	22	0	0	24	0	2	0	4	0	6	0	0	28	1	0	29	0	0	0	0	1	1	60
Total	0	7	97	0	0	104	0	4	0	8	2	14	0	0	92	2	0	94	0	0	0	0	1	1	213

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Appindix C: Counts

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 7- Site Access & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 3

Valley View Road & Site Access
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						Site Access From East						Valley View Road From South						From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
02:00 PM	0	1	37	0	0	38	0	1	0	3	1	5	0	0	16	1	0	17	0	0	0	0	0	0	60
02:15 PM	0	2	27	0	0	29	0	1	0	4	2	7	0	0	31	1	0	32	0	0	0	0	0	0	68
02:30 PM	0	2	16	0	0	18	0	0	0	2	2	4	0	0	28	0	0	28	0	0	0	0	1	1	51
02:45 PM	0	2	24	0	0	26	0	1	0	0	0	1	0	0	23	0	0	23	0	0	0	0	0	0	50
Total	0	7	104	0	0	111	0	3	0	9	5	17	0	0	98	2	0	100	0	0	0	0	1	1	229
03:00 PM	0	1	24	0	0	25	0	1	0	3	2	6	0	0	24	0	0	24	0	0	0	0	0	0	55
03:15 PM	0	2	21	0	0	23	0	0	0	2	0	2	0	0	26	0	0	26	0	0	0	0	1	1	52
03:30 PM	0	2	23	0	0	25	0	2	0	2	0	4	0	0	26	1	0	27	0	0	0	0	0	0	56
03:45 PM	0	0	21	0	0	21	0	0	0	4	2	6	0	0	25	0	0	25	0	0	0	0	1	1	53
Total	0	5	89	0	0	94	0	3	0	11	4	18	0	0	101	1	0	102	0	0	0	0	2	2	216
04:00 PM	2	1	29	0	0	32	0	2	0	6	3	11	0	0	26	1	0	27	0	0	0	0	0	0	70
04:15 PM	0	1	21	0	0	22	0	2	0	4	1	7	0	0	44	2	0	46	0	0	0	0	0	0	75
04:30 PM	0	0	29	0	0	29	0	0	0	6	1	7	0	0	51	1	0	52	0	0	0	0	1	1	89
04:45 PM	0	2	37	0	0	39	0	1	0	2	1	4	0	0	63	3	0	66	0	0	0	0	0	0	109
Total	2	4	116	0	0	122	0	5	0	18	6	29	0	0	184	7	0	191	0	0	0	0	1	1	343
05:00 PM	0	1	41	0	0	42	0	2	0	7	1	10	0	0	48	1	0	49	0	0	0	0	0	0	101
05:15 PM	0	0	38	0	0	38	0	1	0	2	1	4	0	0	48	1	0	49	0	0	0	0	0	0	91
05:30 PM	0	1	23	0	0	24	0	1	0	2	0	3	0	0	38	0	0	38	0	0	0	0	0	0	65
05:45 PM	0	1	30	0	0	31	0	0	0	2	0	2	0	0	45	0	0	45	0	0	0	0	1	1	79
Total	0	3	132	0	0	135	0	4	0	13	2	19	0	0	179	2	0	181	0	0	0	0	1	1	336
06:00 PM	0	1	24	0	0	25	0	0	0	1	3	4	0	0	28	0	0	28	0	0	0	0	0	0	57
06:15 PM	0	1	24	0	0	25	0	1	0	1	3	5	0	0	23	1	0	24	0	0	0	0	0	0	54
06:30 PM	0	0	18	0	0	18	0	0	0	1	3	4	0	0	12	0	0	12	0	0	0	0	0	0	34
06:45 PM	0	1	18	0	0	19	0	1	0	0	0	1	0	0	13	0	4	17	0	0	0	0	3	3	40
Total	0	3	84	0	0	87	0	2	0	3	9	14	0	0	76	1	4	81	0	0	0	0	3	3	185
07:00 PM	0	0	28	0	4	32	0	0	0	6	0	6	0	0	13	0	0	13	0	0	0	0	0	0	51
07:15 PM	0	1	24	0	0	25	0	1	0	2	1	4	0	0	10	0	0	10	0	0	0	0	0	0	39
07:30 PM	0	2	20	0	0	22	0	0	0	2	0	2	0	0	12	0	0	12	0	0	0	0	1	1	37
07:45 PM	0	0	17	0	0	17	0	0	0	1	0	1	0	0	7	0	0	7	0	0	0	0	0	0	25
Total	0	3	89	0	4	96	0	1	0	11	1	13	0	0	42	0	0	42	0	0	0	0	1	1	152
08:00 PM	0	0	18	0	0	18	0	0	0	2	1	3	0	0	11	0	0	11	0	0	0	0	0	0	32
08:15 PM	0	1	7	0	0	8	0	0	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	14
08:30 PM	0	0	14	0	0	14	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	24
08:45 PM	0	0	17	0	0	17	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	22
Total	0	1	56	0	0	57	0	0	0	2	1	3	0	0	31	1	0	32	0	0	0	0	0	0	92

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Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 7- Site Access & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 4

Valley View Road & Site Access
Edina, MN

Groups Printed- Cars + - Trucks

	Valley View Road From North						Site Access From East						Valley View Road From South						From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
09:00 PM	0	0	14	0	0	14	0	1	0	0	0	1	0	0	5	0	0	5	0	0	0	0	0	0	20
09:15 PM	0	0	12	0	0	12	0	1	0	0	0	1	0	0	6	1	0	7	0	0	0	0	0	0	20
09:30 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7
09:45 PM	0	0	7	0	0	7	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	12
Total	0	0	36	0	0	36	0	2	0	0	0	2	0	0	20	1	0	21	0	0	0	0	0	0	59
10:00 PM	0	0	8	0	0	8	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	11
10:15 PM	0	1	3	0	0	4	0	0	0	1	0	1	0	0	2	0	0	2	0	0	0	0	0	0	7
10:30 PM	0	1	3	0	0	4	0	0	0	1	0	1	0	0	5	0	0	5	0	0	0	0	0	0	10
10:45 PM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	7
Total	0	2	18	0	0	20	0	0	0	2	0	2	0	0	13	0	0	13	0	0	0	0	0	0	35
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	66	1290	0	5	1363	0	39	0	117	47	203	0	0	1284	37	4	1325	0	0	0	0	21	21	2912
Apprch %	0.1	4.8	94.6	0	0.4		0	19.2	0	57.6	23.2		0	0	96.9	2.8	0.3		0	0	0	0	100		
Total %	0.1	2.3	44.3	0	0.2	46.8	0	1.3	0	4	1.6	7	0	0	44.1	1.3	0.1	45.5	0	0	0	0	0.7	0.7	
Cars +	2	65	1275	0	4	1346	0	38	0	116	16	170	0	0	1274	37	4	1315	0	0	0	0	1	1	2832
% Cars +	100	98.5	98.8	0	80	98.8	0	97.4	0	99.1	34	83.7	0	0	99.2	100	100	99.2	0	0	0	0	4.8	4.8	97.3
Trucks	0	1	15	0	1	17	0	1	0	1	31	33	0	0	10	0	0	10	0	0	0	0	20	20	80
% Trucks	0	1.5	1.2	0	20	1.2	0	2.6	0	0.9	66	16.3	0	0	0.8	0	0	0.8	0	0	0	0	95.2	95.2	2.7

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Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 7- Site Access & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
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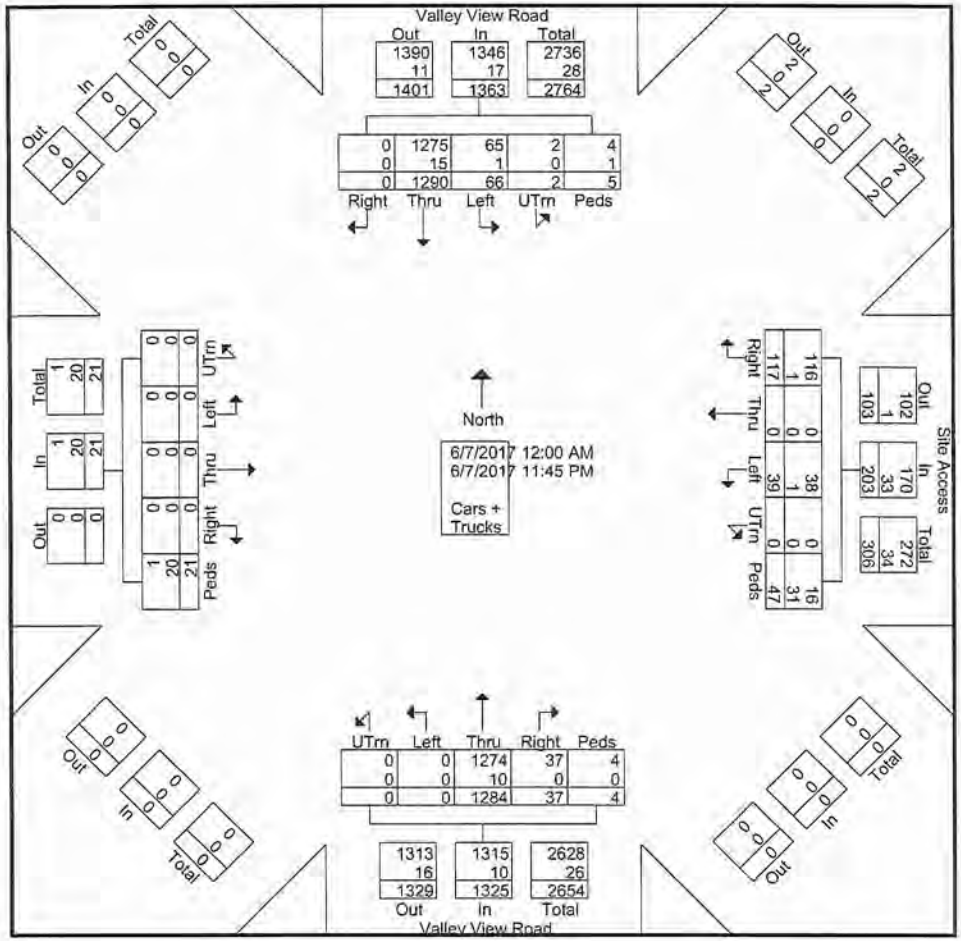
Valley View Road & Site Access
Edina, MN



A136

Traffic Data Inc

3268 Xenwood Avenue South
St. Louis Park, MN 55416

File Name : Count Sheet - 7- Site Access & Valley View Rd, 6-7-17
Site Code :
Start Date : 6/7/2017
Page No : 6

Valley View Road & Site Access
Edina, MN

	Valley View Road From North						Site Access From East						Valley View Road From South						From West						
Start Time	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 AM to 09:45 AM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 08:15 AM																									
08:15 AM	**0**	1	23	0	0	26	0	1	0	0	0	1	0	0	14	0	0	14	0	0	0	0	1	1	42
08:30 AM	0	1	20	0	**1**	22	0	1	0	0	**1**	**2**	0	0	**17**	**1**	0	**18**	0	0	0	0	0	0	42
08:45 AM	0	2	**28**	0	0	**30**	0	0	0	0	0	0	0	0	15	1	0	16	0	0	0	0	1	1	**47**
09:00 AM	0	0	19	0	0	19	0	0	0	**1**	1	2	0	0	16	1	0	17	0	0	0	0	0	0	38
Total Volume	0	6	90	0	1	97	0	2	0	1	2	5	0	0	62	3	0	65	0	0	0	0	2	2	169
% App. Total	0	6.2	92.8	0	1		0	40	0	20	40		0	0	95.4	4.6	0		0	0	0	0	100		
PHF	.000	.500	.804	.000	.250	.808	.000	.500	.000	.250	.500	.625	.000	.000	.912	.750	.000	.903	.000	.000	.000	.000	.500	.500	.899
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 12:00 PM																									
12:00 PM	0	**2**	26	0	0	**28**	0	0	0	2	0	2	0	0	**31**	**2**	0	**33**	0	0	0	0	0	0	**63**
12:15 PM	0	1	19	0	0	20	0	0	0	3	0	3	0	0	27	0	0	27	0	0	0	0	0	0	50
12:30 PM	0	2	21	0	0	23	0	2	0	**8**	0	**10**	0	0	24	0	0	24	0	0	0	0	0	0	57
12:45 PM	0	0	**28**	0	0	28	0	**3**	0	2	0	5	0	0	27	2	0	29	0	0	0	0	0	0	62
Total Volume	0	5	94	0	0	99	0	5	0	15	0	20	0	0	109	4	0	113	0	0	0	0	0	0	232
% App. Total	0	5.1	94.9	0	0		0	25	0	75	0		0	0	96.5	3.5	0		0	0	0	0	0		
PHF	.000	.625	.839	.000	.000	.884	.000	.417	.000	.469	.000	.500	.000	.000	.879	.500	.000	.856	.000	.000	.000	.000	.000	.000	.921
Peak Hour Analysis From 02:00 PM to 11:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:30 PM																									
04:30 PM	0	0	29	0	0	29	0	0	0	6	**1**	7	0	0	51	1	0	52	0	0	0	0	**1**	**1**	89
04:45 PM	0	**2**	37	0	0	39	0	1	0	2	1	4	0	0	**63**	**3**	0	**66**	0	0	0	0	0	0	**109**
05:00 PM	0	1	**41**	0	0	**42**	0	**2**	0	**7**	1	**10**	0	0	48	1	0	49	0	0	0	0	0	0	101
05:15 PM	0	0	38	0	0	38	0	1	0	2	1	4	0	0	48	1	0	49	0	0	0	0	0	0	91
Total Volume	0	3	145	0	0	148	0	4	0	17	4	25	0	0	210	6	0	216	0	0	0	0	1	1	390
% App. Total	0	2	98	0	0		0	16	0	68	16		0	0	97.2	2.8	0		0	0	0	0	100		
PHF	.000	.375	.884	.000	.000	.881	.000	.500	.000	.607	1.00	.625	.000	.000	.833	.500	.000	.818	.000	.000	.000	.000	.250	.250	.894

A3.1

69th Street & Site Accesses 6-7-17

Total Vehicles

Start Time	Southbound U Turns	Southbound Left Turns	Southbound Straight Through	Southbound Right Turns	Southbound Bikes/Peds	Westbound U Turns	Westbound Left Turns	Westbound Straight Through	Westbound Right Turns	Westbound Bikes/Peds	Northbound U Turns	Northbound Left Turns	Northbound Straight Through	Northbound Right Turns	Northbound Bikes/Peds	Eastbound U Turns	Eastbound Left Turns	Eastbound Straight Through	Eastbound Right Turns	Eastbound Bikes/Peds
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
0:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
0:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
4:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	1	0
5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0
5:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0
5:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	21	1	0
6:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	1	0
6:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	36	1	0
6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	43	2	0
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	1	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	3	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	1	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	87	7	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	95	3	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	94	3	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	87	4	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134	1	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	102	5	0
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	97	1	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0	0	108	3	0
9:45	0	0	0	0	1	0	0	0	0	0	0	0	0	3	3	0	0	114	3	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	119	2	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	89	3	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	106	2	0

A138

Appindix C: Counts

69th Street & Site Accesses 6-7-17

10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	137	4	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	0	0	118	1	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	145	3	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	120	4	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	129	3	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	105	5	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	103	3	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	103	4	0
12:45	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0	0	109	3	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	109	3	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	0	0	104	4	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	99	4	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	102	6	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	100	5	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	85	4	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	86	2	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	89	1	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0	0	75	2	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	0	0	72	8	1
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	92	2	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	92	4	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	89	6	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	95	4	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	108	3	0
16:45	0	0	0	0	1	0	0	0	0	0	0	0	0	2	6	0	0	127	5	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	0	0	123	3	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	127	3	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	109	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	116	2	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	102	2	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	1	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	77	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	91	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	67	3	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	77	1	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	1	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	47	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	45	1	0
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	1	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	1	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	35	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	27	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0

A133

Appindix C: Counts

69th Street & Site Accesses 6-7-17

23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0

A134

Spack CONSULTING
ENGINEERING TRAFFIC FORWARD

Forecast Trip Generation

Daily Volumes

LAND USE	ITE CODE #	DEVELOPMENT UNITS	QUANTITY	DAILY RATE	ENTER PERCENT	EXIT PERCENT	INTERNAL PERCENT	INTERNAL TRIPS	PASSBY PERCENT	PASSBY TRIPS	NEW TRIPS ENTER	NEW TRIPS EXIT
Phase 1												
Residential Condo/Townhome	230	Dwelling Unit	92.0	5.81	50%	50%	10%	53	0%	0	241	241
General Office	710	1,000 GFA	3.0	11.03	50%	50%	10%	9	0%	0	17	17
Walk-in Bank	911	1,000 GFA	2.5	73.95	50%	50%	10%	18	47%	87	40	40
High Turnover/Sit Down Restaurant	932	1,000 GFA	5.5	127.15	50%	50%	10%	70	43%	301	164	164
Phase 1 Sub-Total								*151*		*388*	*462*	*462*
Phase 2												
Drive-in Bank	912	Drive-in Lanes	3.0	139.25	50%	50%	10%	42	47%	196	90	90
Residential Condo/Townhome	230	Dwelling Unit	72.0	5.81	50%	50%	10%	42	0%	0	188	188
Phase 2 Sub-Total								*305*		*196*	*278*	*278*
TOTALS (Phase 1 and 2)								**235**		**584**	**740**	**740**

AM Peak Hour

LAND USE	ITE CODE #	DEVELOPMENT UNITS	QUANTITY	DAILY RATE	ENTER PERCENT	EXIT PERCENT	INTERNAL PERCENT	INTERNAL TRIPS	PASSBY PERCENT	PASSBY TRIPS	NEW TRIPS ENTER	NEW TRIPS EXIT
Phase 1												
Residential Condo/Townhome	230	Dwelling Unit	92.0	0.44	17%	83%	10%	4	0%	0	5	32
General Office	710	1,000 GFA	3.0	1.56	88%	12%	10%	1	0%	0	4	1
Walk-in Bank	911	1,000 GFA	2.5	6.03	57%	43%	10%	2	47%	7	4	2
High Turnover/Sit Down Restaurant	932	1,000 GFA	5.5	10.81	55%	45%	10%	6	43%	26	17	11
Phase 1 Sub-Total								*13*		*33*	*30*	*46*
Phase 2												
Drive-in Bank	912	Drive-in Lanes	3.0	9.29	60%	40%	10%	3	47%	13	9	3
Residential Condo/Townhome	230	Dwelling Unit	72.0	0.44	17%	83%	10%	3	0%	0	4	25
Phase 2 Sub-Total								*25*		*13*	*13*	*28*
TOTALS (Phase 1 and 2)								**19**		**46**	**43**	**74**

PM Peak Hour

LAND USE	ITE CODE #	DEVELOPMENT UNITS	QUANTITY	DAILY RATE	ENTER PERCENT	EXIT PERCENT	INTERNAL PERCENT	INTERNAL TRIPS	PASSBY PERCENT	PASSBY TRIPS	NEW TRIPS ENTER	NEW TRIPS EXIT
Phase 1												
Residential Condo/Townhome	230	Dwelling Unit	92.0	0.52	67%	33%	10%	5	0%	0	30	13
General Office	710	1,000 GFA	3.0	1.49	17%	83%	10%	8	0%	0	1	4
Walk-in Bank	911	1,000 GFA	2.5	12.13	44%	56%	10%	3	47%	14	5	8
High Turnover/Sit Down Restaurant	932	1,000 GFA	5.5	9.85	60%	40%	10%	5	43%	23	18	7
Phase 1 Sub-Total								*21*		*38*	*54*	*32*
Phase 2												
Drive-in Bank	912	Drive-in Lanes	3.0	33.24	49%	51%	10%	10	47%	47	20	22
Residential Condo/Townhome	230	Dwelling Unit	72.0	0.52	67%	33%	10%	4	0%	0	23	10
Phase 2 Sub-Total								*41*		*47*	*43*	*32*
TOTALS (Phase 1 and 2)								**35**		**84**	**97**	**64**

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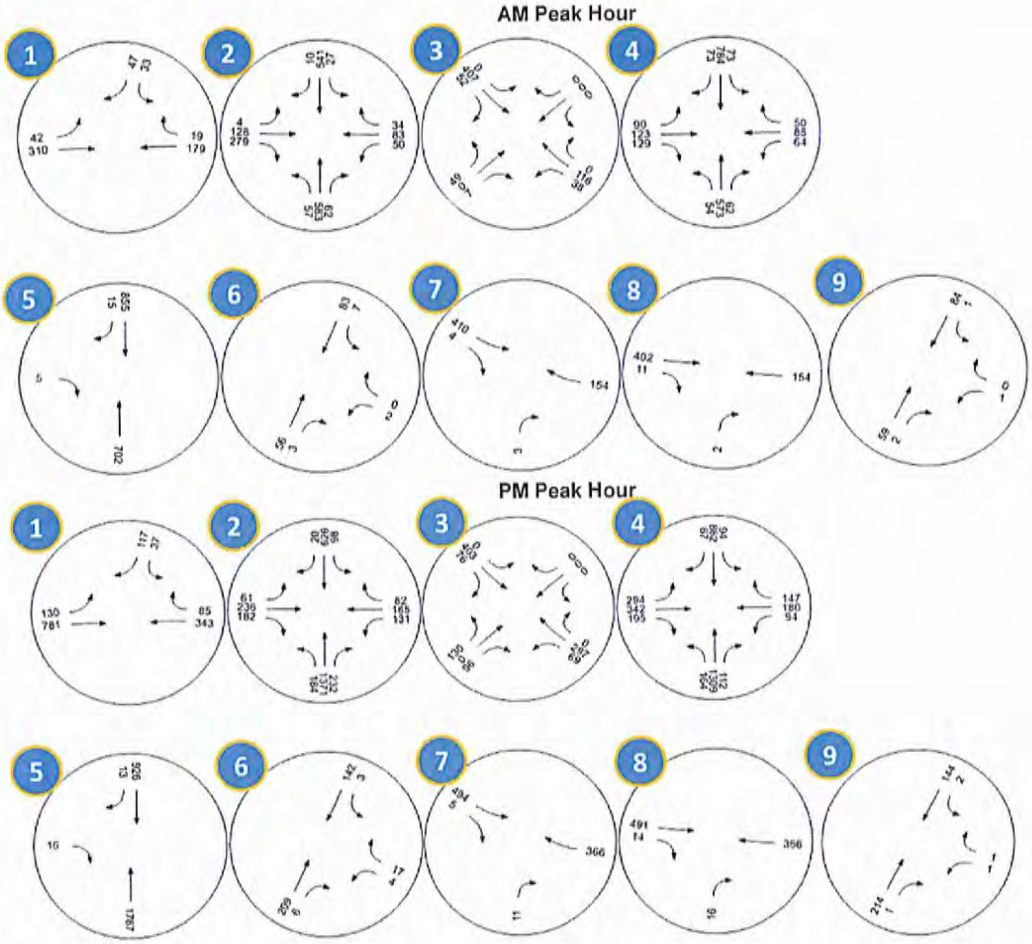
NOTES:

1. GFA = Gross Floor Area
2. Trip generation rates based on "Trip Generation", Institute of Transportation Engineers, 9th Edition.
3. A.M. Trip Generation is for the peak hour of adjacent street traffic (one hour between 7 and 9 a.m.).
4. P.M. Trip Generation is for the peak hour of adjacent street traffic (one hour between 4 and 6 p.m.).
5. Walk-In Bank does not have Daily or AM Peak Hour rates, instead, a ratio of the PM Peak Hours for the Walk-In Bank and Drive-In Bank was applied to the Drive-In Bank rates for those periods.

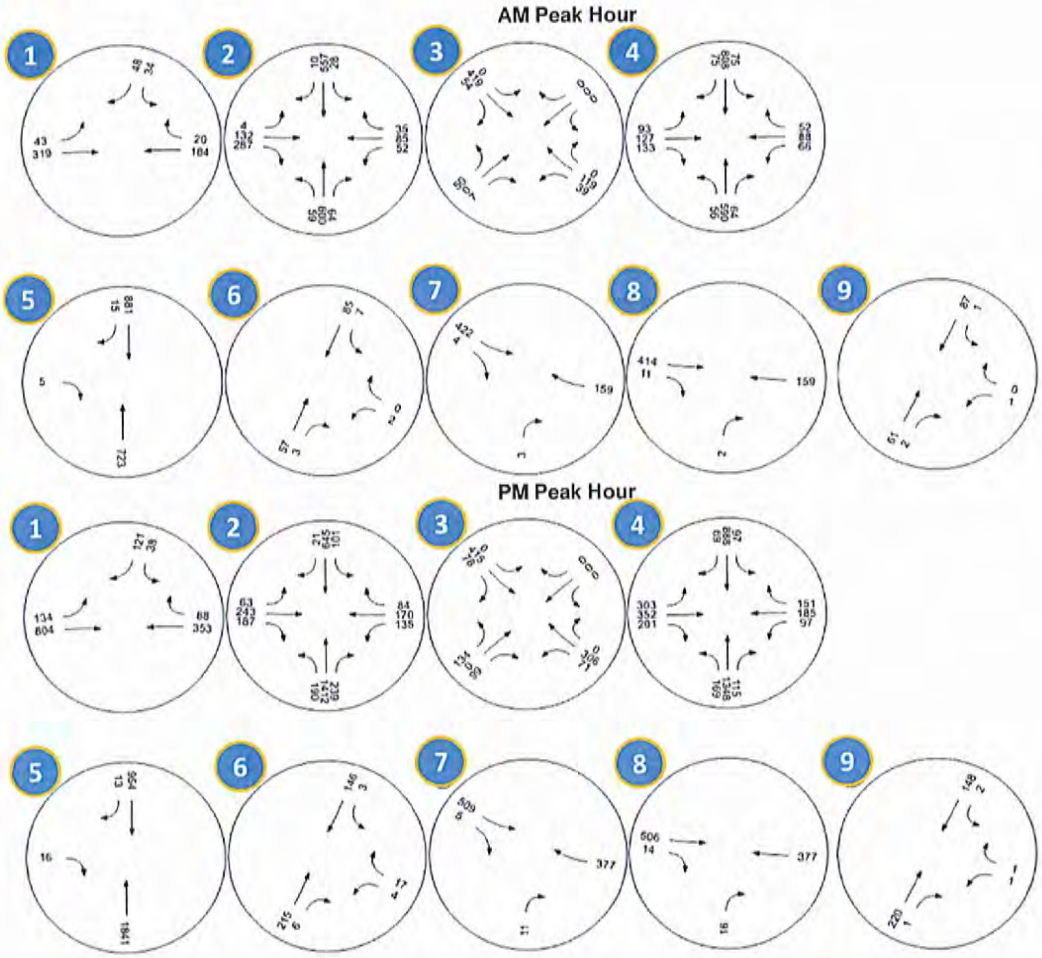
Spack CONSULTING
ENGINEERING TRAFFIC FORWARD

Figure B1
Existing Peak Hour Volumes



Spack CONSULTING
ENGINEERING TRAFFIC FORWARD

Figure B2
2019 No Build Peak Hour Volumes



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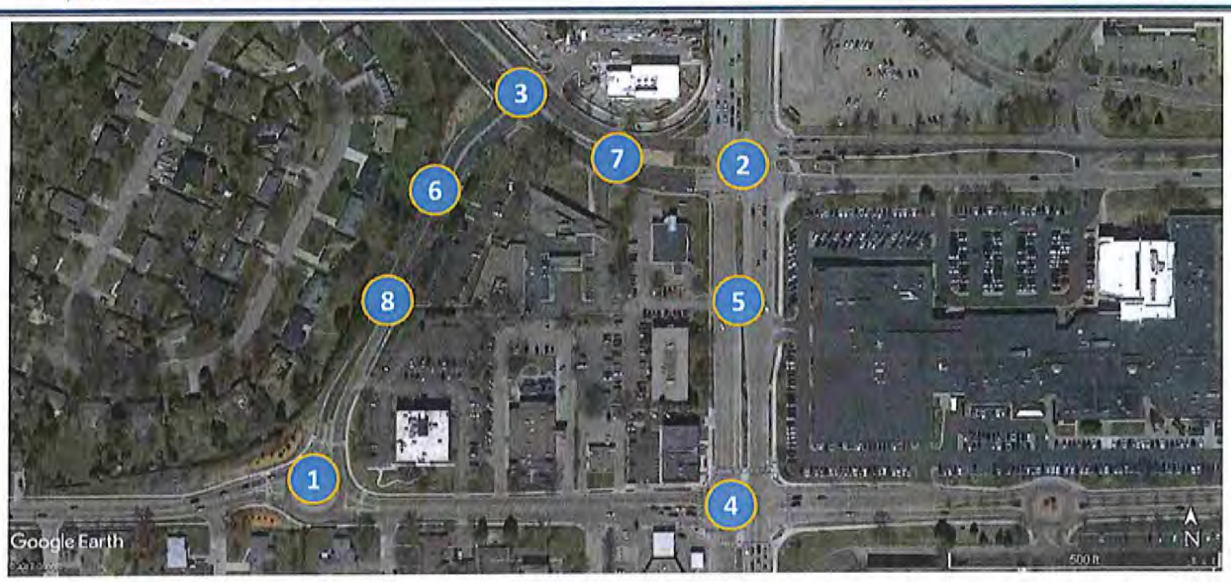
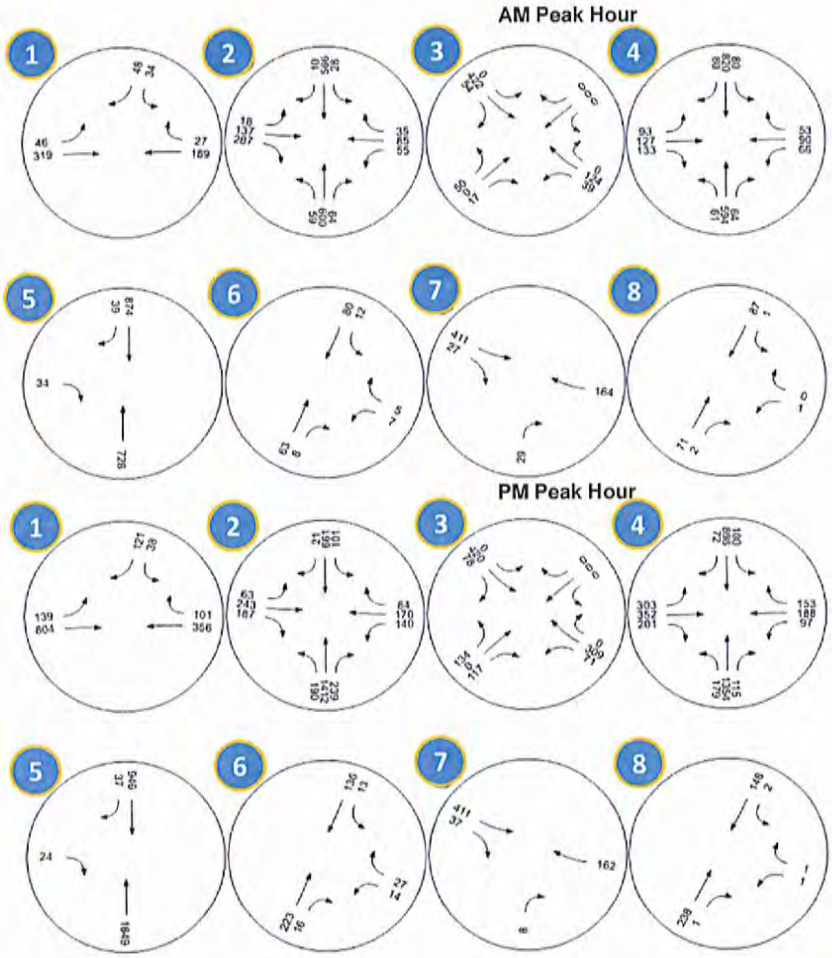
Spack CONSULTING
ENGINEERING TRAFFIC FORWARD

Figure B3
2019 Build Peak Hour Volumes





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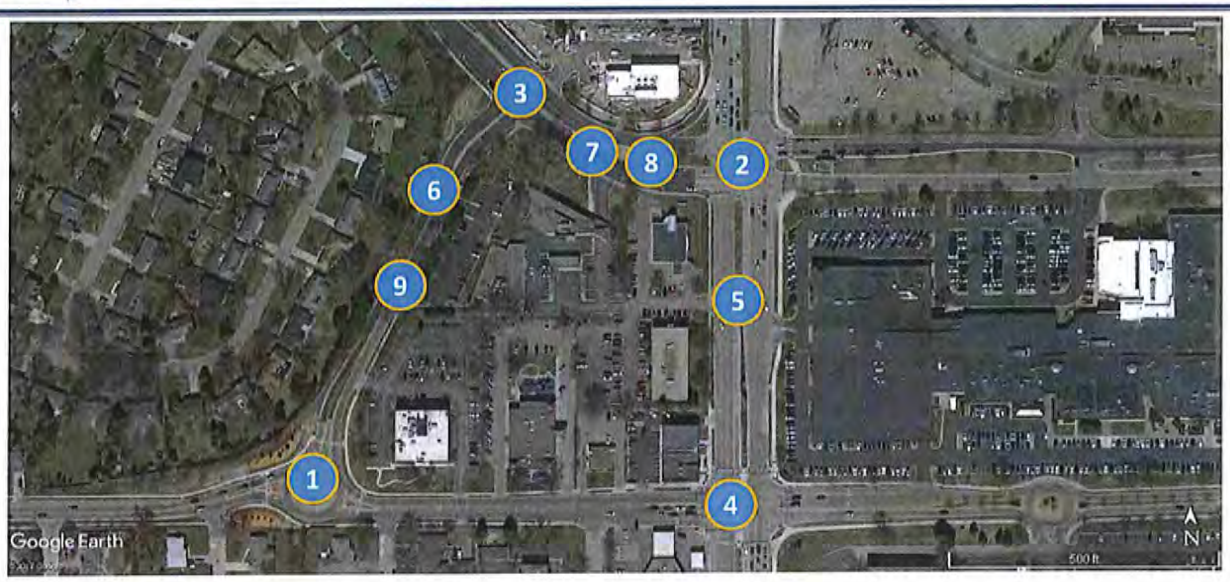
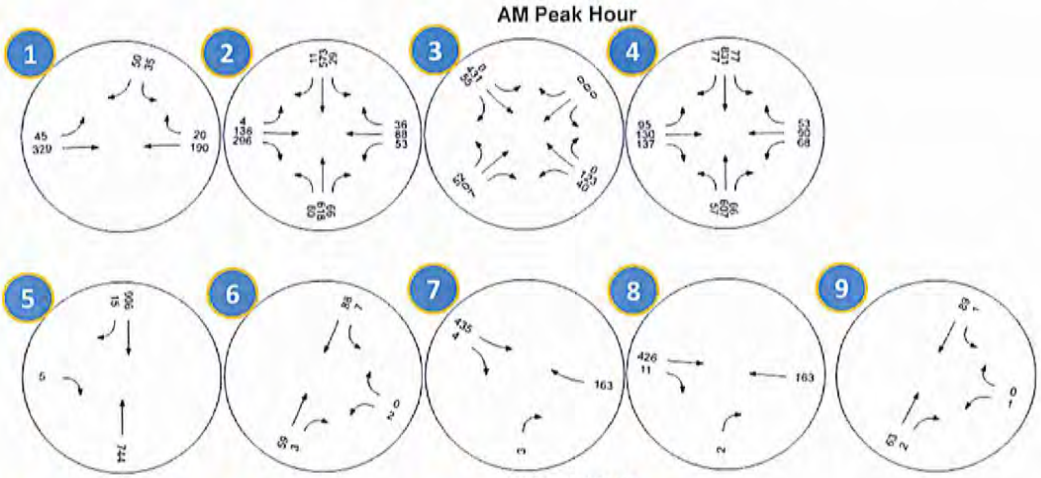
ENGINEERING TRAFFIC FORWARD

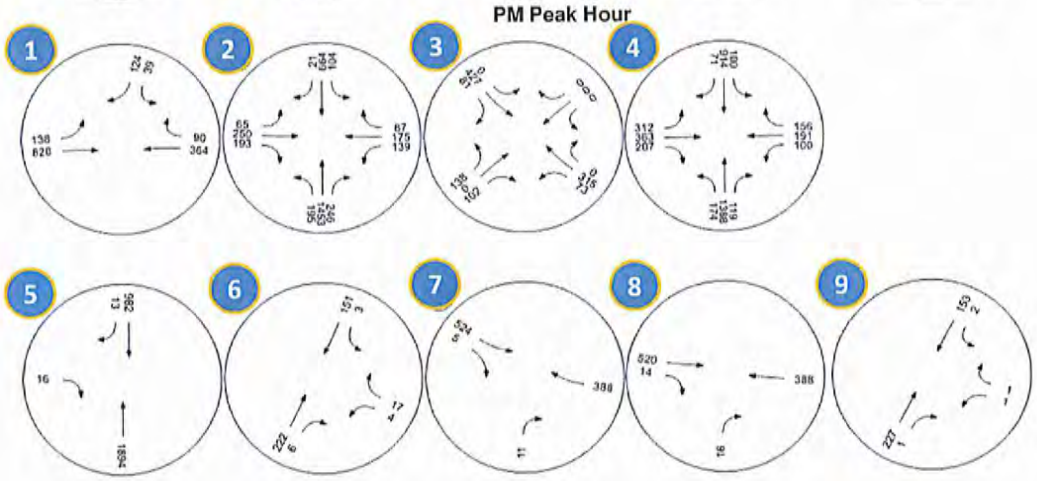
Figure B4
2024 No Build Peak Hour Volumes



AM Peak Hour

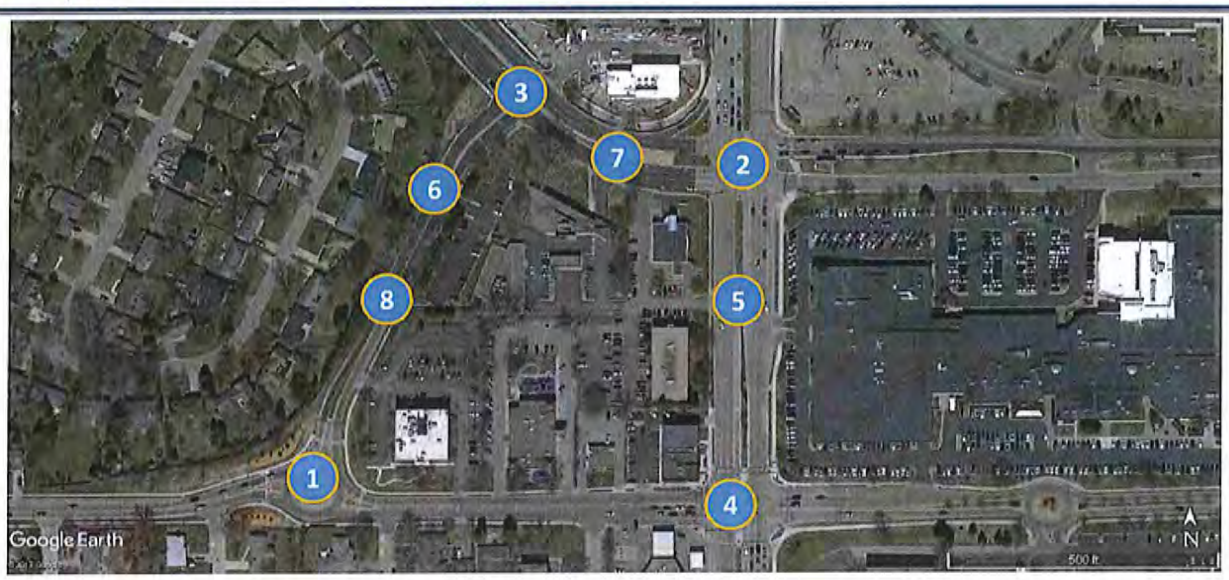


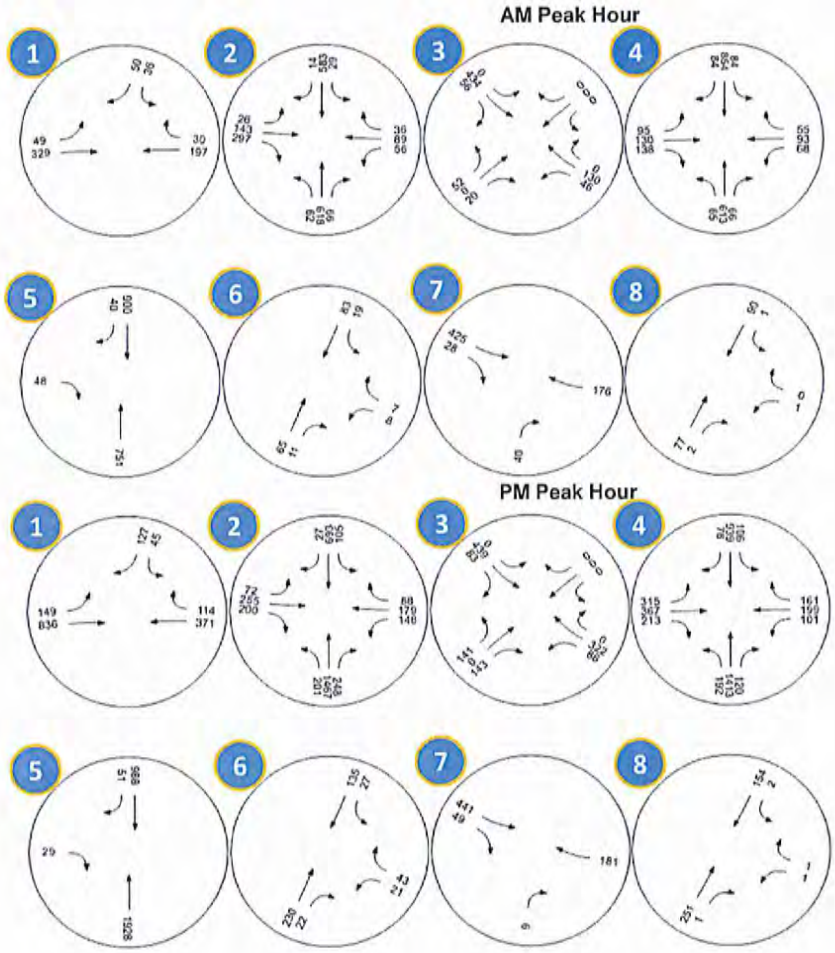
PM Peak Hour



Spack CONSULTING
ENGINEERING TRAFFIC FORWARD

Figure B5
2024 Build Peak Hour Volumes





Level of Service (LOS)

Level of Service (LOS) is a qualitative description, similar to typical school grades, that traffic engineers use to communicate how good or bad traffic operations are on a corridor, intersection, or interchange.

Common Factors

Traffic can be a hard thing to quantify as everyone has a different tolerance for congestion. What seems excessively long to one person may seem good enough for another. These differences are readily apparent when comparing small towns or rural areas, where five cars an hour can be the norm, to big cities or downtowns, where less than hundred cars an hour, even in the middle of night, is rare.

To combat this issue and provide a consistent measuring tool for traffic studies, a "Level of Service" rating was developed. Level of Service ratings are based on the roadway or intersection characteristics and the amount of traffic. Just like grade school, LOS A represents the best traffic operations, where traffic flows freely. LOS F, on the other hand, represents failing operations, where the road or intersection is congested and running beyond maximum capacity. LOS E is typically considered "at capacity" which means the amount of traffic is right at the level the roadway or intersection can adequately accommodate. Using Level of Service letter grades provides an easy way to convey road operations to the general public and has been adopted across the United States.

Common Factors Impacting Level of Service

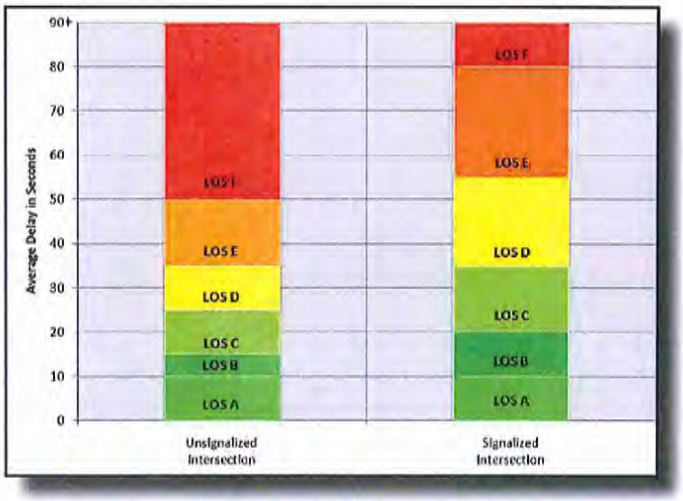
- **Number of Lanes.**
- **Traffic Volumes.**
- **Intersection Control (stop sign, signal, roundabout, interchange.)**
- **Amount of access on a corridor.**
- **Percentage of turning traffic.**
- **Traffic signal cycle length (green time devoted to each approach) and phasing (one green for all approach movements or separate green arrows.)**
- **Percentage of heavy trucks.**
- **Roadway Grades.**
- **Distribution of traffic within a peak hour as well as over the course of a day.**
- **Pedestrian activity.**
- **Bicycle activity.**

Level of Service criteria have been developed for multiple types of traffic operations including:

- Intersections
- Urban Corridors
- Freeways
- Transit Service
- Bicycle Operations
- Pedestrian Operations

The most common LOS criteria used is for car operations at intersections; both signalized and unsignalized. For an intersection Level of Service analysis, average delay for cars travelling through the intersection is used to determine the appropriate grade. A high delay results in a poor LOS rating and equates to poor operations. Similarly, low delay results in a good LOS rating and equates to good or great operations.

LOS can be determined for the intersection as a whole, or for individual movements. It is common during peak periods in major population areas for an intersection to have an acceptable overall LOS rating, but fail to achieve a good grade for individual movements.



Appendix F: Level of Service (LOS)

Research Brief — Volume No. 3

LOS A

LOS C

LOS D = Acceptable

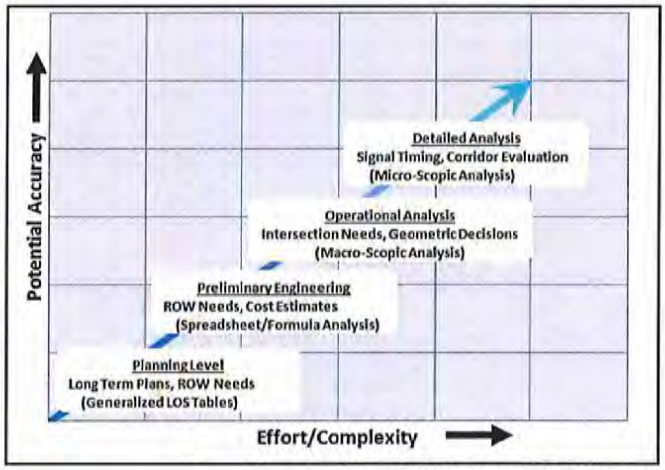
LOS F = Unacceptable

Source: City of San Jose, CA.

Although a Level of Service rating of A represents the best traffic operations, it is not always the most desirable. Providing LOS A for all corridors and all operations at all times would require a significant amount of land to be devoted to the road infrastructure, which makes it extremely costly to build and maintain. During non-peak times, like overnight, much of that infrastructure would sit unused.

On the opposite side of the spectrum, a Level of Service rating of E and F represent traffic operations close to breaking down, or that already have. These ratings mean high delays, long queues, and slow speeds, not to mention driver frustration. Instead of trying to achieve one or the other, government agencies try to strike a balance between providing acceptable operations, neither falling nor flowing too freely. Because of this, LOS D is typically considered the lowest LOS acceptable by government agencies and is reflective of a balanced approach between cost and benefit.

There are many tools and guidelines used to determine a roads Level of Service rating. Simple tools like generalized roadway capacities allow for planning-level efforts. While inexpensive and quick to complete, they are not as accurate as other options. More complicated tools, such as micro-simulations, provide more accurate results, but cost more and take more time. It is important to understand the trade-offs between the analysis types as well as the purpose of the study.



Source: Florida Deptarment of Transportation

Resources

- Highway Capacity Manual, fifth edition
- Nation Cooperative Highway Research Program Report 616; Multimodal Level of Service Analysis for Urban Streets
- http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_616.pdf
- Florida Department of Transportation Quality/Level of Service Handbook
- http://www.dot.state.fl.us/planning/systems/programs/sm/los/pdfs/2009FDOTQLOS_Handbook.pdf

About This Brief

Spack Consulting prepared this brief as part of our company's vision to significantly improve the practice of traffic engineering and transportation planning. Transportation professionals from around the world have assisted us in developing this document. We are providing this brief under the Creative Commons Attribution License. Feel free to use-modify-share this guide, but please give us some credit in your document. To request our whole series of Design Briefs and to be included on our distribution list for new materials, please email mspack@spackconsulting.com. And please reach out if you have any comments or questions related to this Design Brief.

Vistro File: C:\...\Edina Estelle.vistro
Report File: C:\...\Existing AM Peak Report.pdf

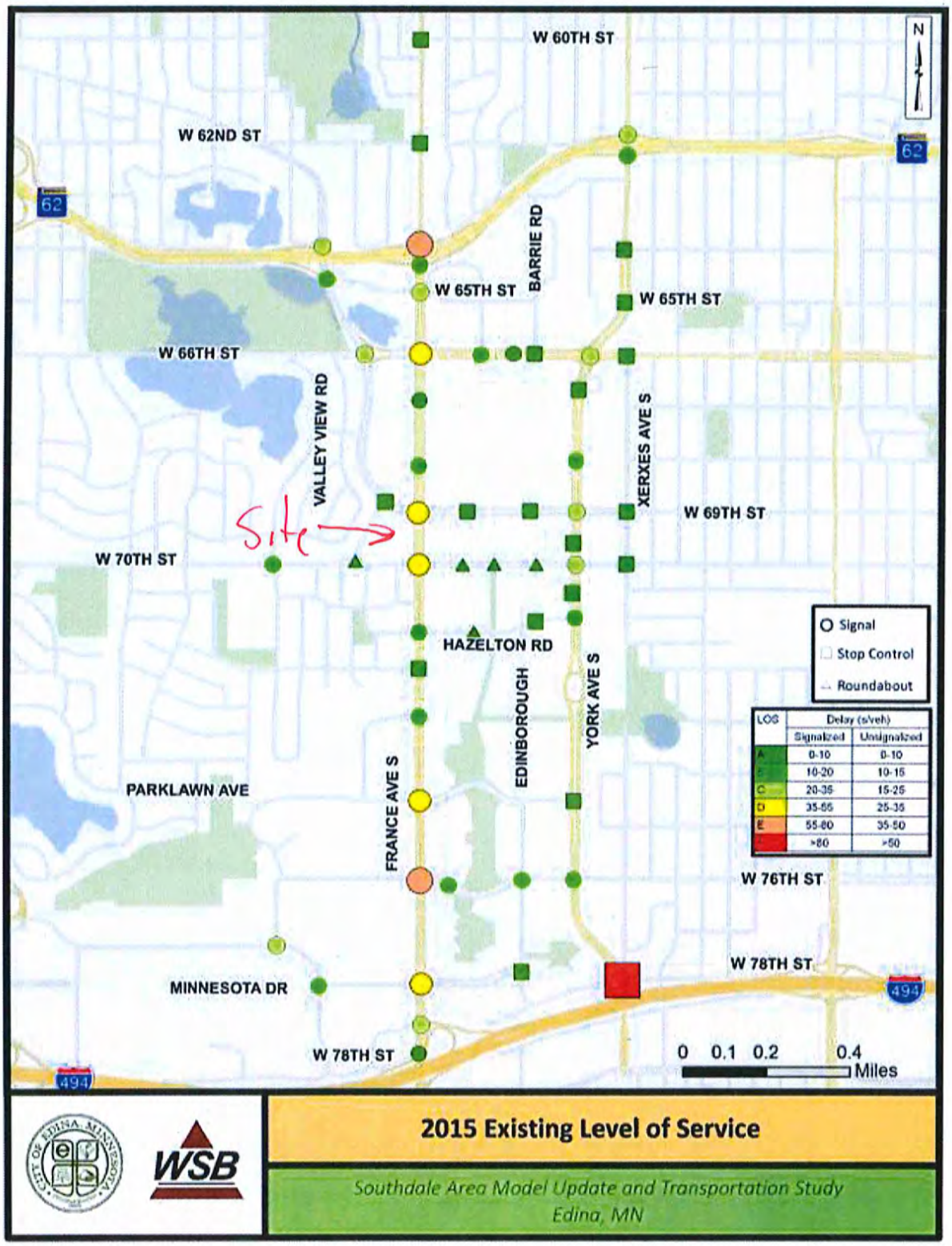
Scenario 1 Existing AM
7/18/2017

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	W 70th St & Valley View Rd	Roundabout	HCM 6th Edition	EB Thru		4.6	A
2	France Ave S & W 69th St	Signalized	HCM 6th Edition	EB Left	0.342	21.2	C
3	Valley View Rd & W 69th St	Two-way stop	HCM 6th Edition	NEB Left	0.119	14.9	B
4	France Ave S & W 70th St	Signalized	HCM 6th Edition	NB Left	0.304	16.0	B
5	France Ave & Site Access 3	Two-way stop	HCM 6th Edition	EB Right	0.010	12.5	B
7	Valley View Rd & Site Access 5	Two-way stop	HCM 6th Edition	NWB Left	0.002	9.3	A
9	W 69th St & Site Access 1	Two-way stop	HCM 6th Edition	NB Right	0.004	9.5	A
16	W 69th St & Site Access 2	Two-way stop	HCM 6th Edition	NB Right	0.003	9.5	A
22	Valley View Rd & Site Access 4	Two-way stop	HCM 6th Edition	WB Left	0.001	9.3	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

Figure 4: Existing Level of Service



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FORECASTED 2040 CONDITIONS

The regional Travel Demand Model developed by Metropolitan Council and used for the City's current (2008) Transportation Plan, was utilized to obtain base 2040 forecasts for traffic growth in the area. The models were updated with projected traffic and the forecasted 2040 level of service was determined at the study area intersections. Subsequently, an alternative analysis was conducted with updated information on development density in the City's Transportation Analysis Zones (TAZs) in the Southdale area. The regional Travel Demand Model was rerun with the higher density conditions and traffic growth rates were estimated for the year 2040 with the higher density developments in place. Using the growth rates obtained from this alternative, the Synchro/SimTraffic model was updated to reflect higher traffic forecasts and the Level of Service under this scenario. Areas of concern were highlighted.

Proposed Development Density Scenario's

In order to understand the impacts of increasing the density of development in the Southdale Area, an alternative was analyzed which involved increasing the development density in future leading to higher number of trips. ***Table 1*** below shows the assumptions used in this alternative. The increased density was assumed to be in form of number of households

Table 1: Population and Households Assumptions

TAZ	2040 Population - Base Scenario	2040 Number of Households - Base Scenario	Comp Plan Average Density (Units/Acre)	High Density Assumption (Units/Acre)	Increase Factor	2040 Population - High Density Scenario	2040 Number Of Households - High Density Scenario
512	2170	1130	21.00	50.00	2.4	5167	2690
513	5060	2610	19.75	48.00	2.4	12298	6343
514	280	130	43.50	100.00	2.3	644	299
515	3110	1550	33.50	65.00	1.9	6034	3007
517	1560	680	22.80	50.00	2.2	3421	1491
518	6470	2910	9.55	14.25	1.5	9654	4342
519	1930	880	10.35	13.25	1.3	2471	1127
Total	20580	9890	N/A			39689	19299

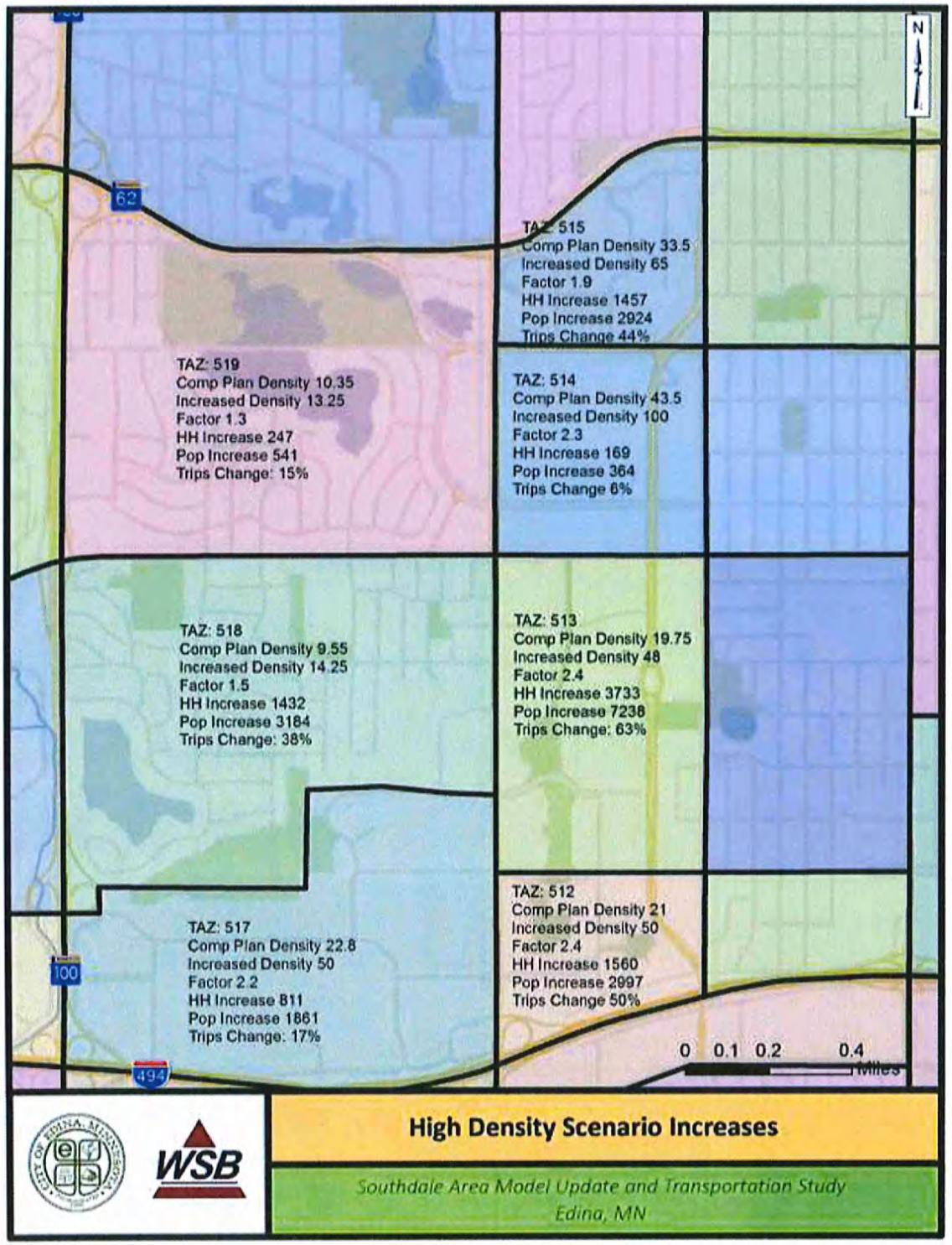
These assumptions correspond to trip generation numbers from each zone as shown in ***Table 2*** below.

Table 2: Change in Number of Trips

	2040 Base Scenario			2040 High Density Scenario			Total Change	
TAZ	Productions	Attractions	Total	Productions	Attractions	Total	Absolute Change	Percent Change
512	11340	18641	29981	20810	24249	45059	15078	50%
513	25413	32107	57520	47950	45611	93561	36041	63%
514	9836	23915	33751	11116	24632	35749	1998	6%
515	14735	19284	34019	24425	24633	49059	15040	44%
517	15669	40355	56024	22234	43488	65722	9698	17%
518	25110	19261	44371	36392	24980	61372	17001	38%
519	9106	11176	20282	11053	12177	23230	2948	15%

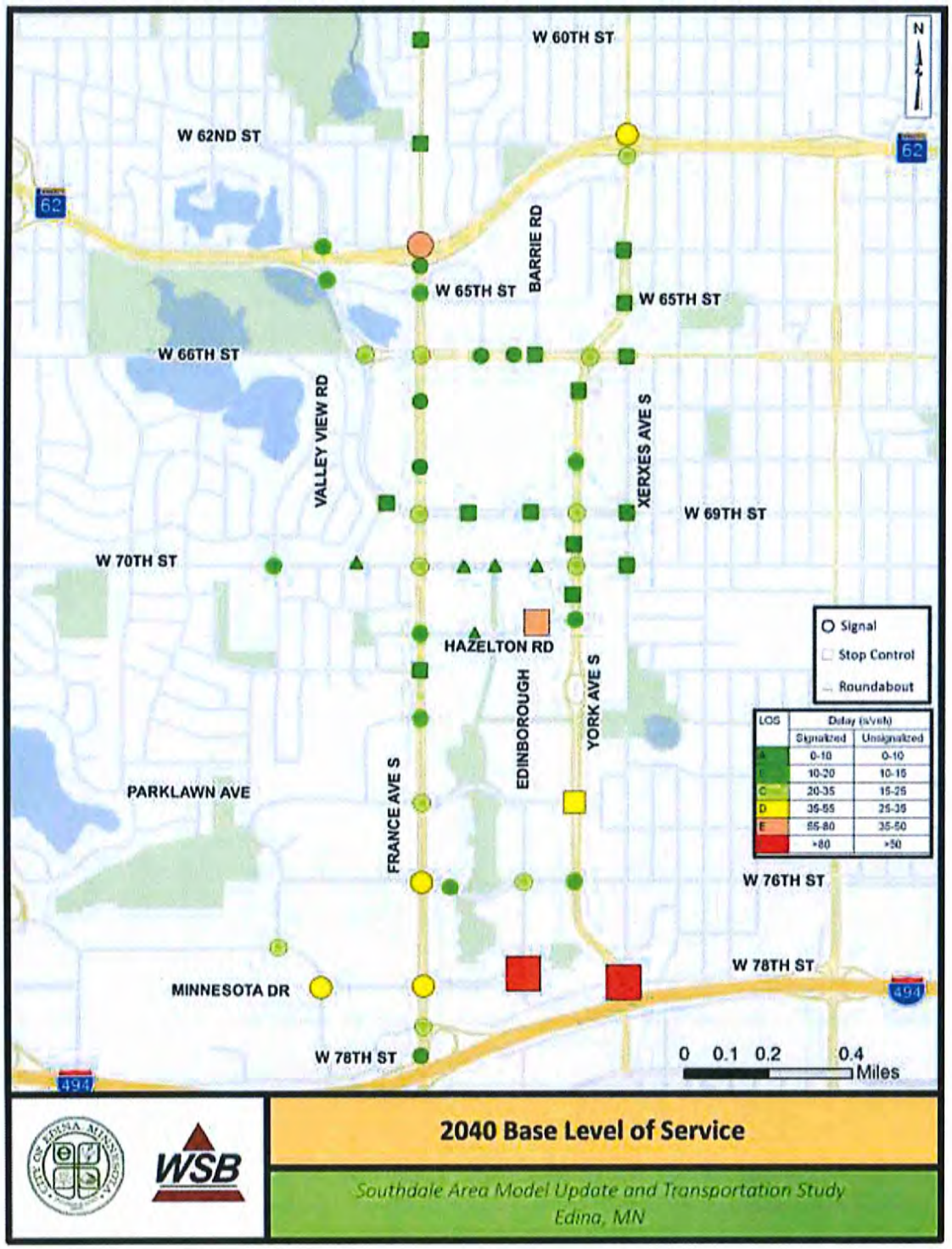
Figure 5 shows the increase in households and population along with resulting trip increases from each Transportation Analysis Zone (TAZ).

Figure 5: TAZ Trip Increase Assumptions



The turning movement volumes for the PM peak hour in 2040 were estimated based on the ADT growth percentages derived from the model for various links. The turning movements were then simulated in the Synchro/SimTraffic network. ***Figure 11*** shows the 2040 Level of Service assuming growth levels consistent with the 2040 regional Travel Demand model.

Figure 11: 2040 Base Condition Level of Service



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Projected 2040 Conditions Analysis

The turning movement volumes for the PM peak hour were adjusted from the base condition based on the ADT growth percentages derived from the high density scenario model. ***Figure 12*** shows the Level of Service at the study intersections in the High Density Scenario assuming no significant improvements to the intersections from current conditions. The results indicate that in general most intersections with either the 2040 Base conditions or 2040 High Density conditions would continue to operate at an overall Level of Service (LOS) D or better, with the exception of:

2040 Base Condition:

1. York Avenue at W. 78th Street = LOS F
2. Minnesota Drive at Edinborough Way = LOS F
3. France Avenue at TH 62 North Ramp = LOS E
4. France Avenue at W. 76th Street = LOS E
5. Hazelton Road at Target Access = LOS E

2040 High Density Condition:

1. York Avenue at W. 78th Street = LOS F
2. Minnesota Drive at Edinborough Way = LOS F
3. York Avenue at Parklawn Avenue = LOS F
4. France Avenue at TH 62 North Ramp = LOS E
5. Xerxes Avenue at TH 62 North Ramp = LOS E
6. France Avenue at Parklawn Avenue = LOS E
7. France Avenue at W. 76th Street = LOS E
8. Hazelton Road at Target Access = LOS E
9. France Avenue at Minnesota Drive = LOS E

It should be noted that at some intersections which are not operating at an overall LOS E or F, may still be individual movements that are at LOS E or F. ***Figure 13*** shows individual movements that are at LOS E or F at the study intersections.

In addition to the intersections listed above, as development continues to occur in the Southdale area particular attention should be given to the following intersections as part of any traffic analysis prepared, which could be operating at LOS F:

1. France Avenue at W. 66th Street – Westbound approach
2. France Avenue at W. 65th Street – Southbound left turn
3. France Avenue at W. 69th Street – Westbound approach, Southbound left turn
4. France Avenue at W. 70th Street – Westbound left turn
5. France Avenue at Hazelton Road – Westbound approach, Northbound and Southbound left turns
6. France Avenue at Gallagher Drive – Westbound approach, Eastbound left turn
7. Valley View Road at W. 69th Street – Southbound approach
8. Minnesota Drive at W. 77th Street – Southbound left turn
9. York Avenue at W. 69th Street – Westbound approach
10. York Avenue at Hazelton Road – Westbound approach, Northbound left turn
11. Edinborough Way at W. 76th Street – Northbound approach

Figure 12: 2040 High Density Scenario Level of Service

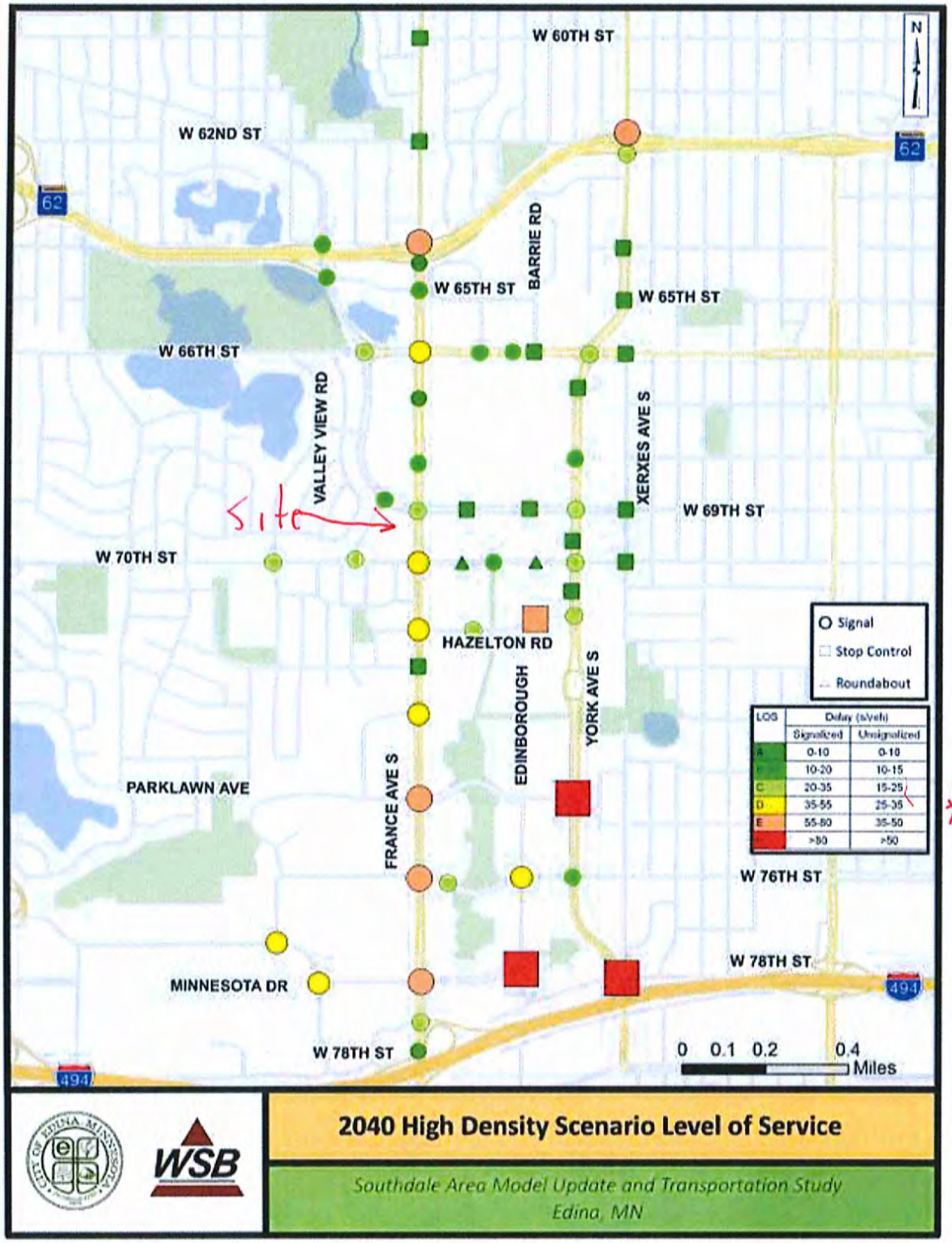

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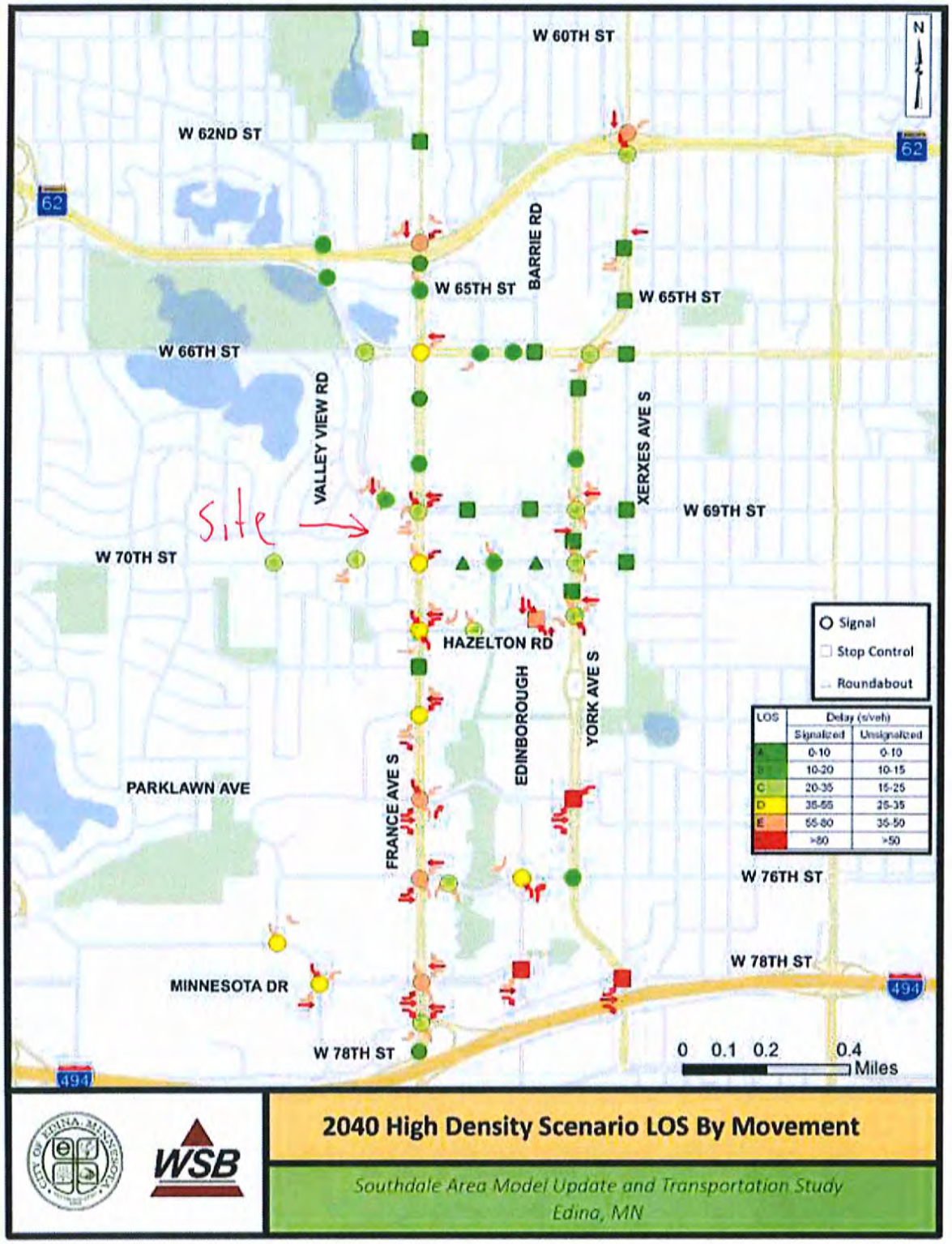
Figure 13: 2040 High Density Scenario LOS By Movement



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Southdale Area Transportation Study

For:

City of Edina
4801 W. 50th Street
Edina, MN 55024

July 22, 2016

Prepared By:

WSB & Associates, Inc.
701 Xenia Avenue South
Minneapolis, MN 55416

CERTIFICATION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the State of Minnesota.

Charles T. Rickart, P.E.

Date: July 22, 2016 Reg. No. 26082

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INTRODUCTION / BACKGROUND

In 2008 WSB assisted the City in the development of a traffic model using the Synchro/SimTraffic modeling software for the Southeast area (Southdale) of the City. The study area was bounded by TH 62 (Crosstown) on the north, the Richfield/Edina border on the east, the Bloomington/Edina border on the south and TH 100 on the west. The model included 40 signalized intersections, 20 un-signalized intersections, and three roundabouts.

The purpose in developing the model was to provide a consistent baseline for traffic analysis and to provide continuously updated results to help gauge the compound effect of multiple developments in the Southdale area. Since the model was completed, it has been used by several developers and the City in reviewing the area traffic impacts of proposed development. Although, the model has been continually updated with traffic characteristics from approved developments the original traffic conditions were based on 2007 traffic counts. It is now in need of updating and recalibration with new traffic counts.

Also in 2008 WSB assisted the City in preparation of the Transportation Plan in conjunction with the Comprehensive Plan update. As part of the Transportation Plan a city wide transportation planning model was developed for the existing and future land use projections. Since the preparation of the land use projections in the Transportation Plan density changes have occurred in the Southdale area. In addition questions of the appropriate density have been asked for the area specifically on the west side of France Avenue.

In March of 2015 the City Council appointed a working group that developed the Working Principles for the France Avenue Southdale Area. These principals will serve as a tool to guide the development process for the whole Southdale area, and demonstrate methods that might be used during the Comprehensive Plan update in 2018. In order to provide data to assist in moving this process to the next stages, development of transportation forecasts should be completed.

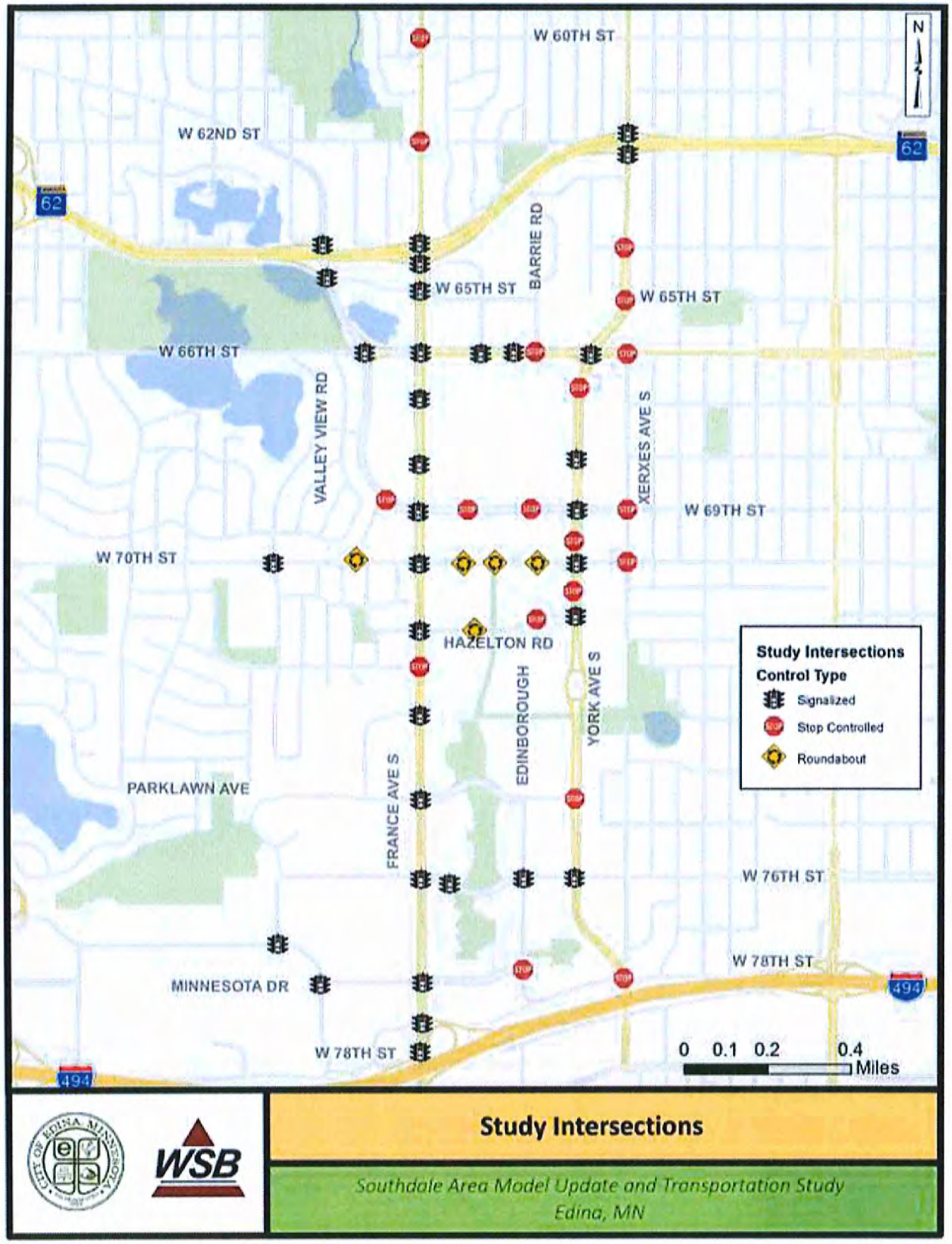
The purpose of this Study is to:

1. Update the existing Synchro/SimTraffic traffic model in the Southdale area, Including expanding the study area to north of TH 62 to W. 60th Street;
2. Updating the CUBE transportation planning Regional Travel Demand model for the entire City, and;
3. Preparation of a transportation analysis for two land use density scenarios for the Southdale area.
4. Review and analysis of pedestrian/bicycle connections and conflicts in the Southdale area in relation to the local/regional system.

Figure 1 shows the study area and intersections included with the analysis.

The following sections of this memorandum provide an update on the data collection and preliminary study results.

Figure 1: Study Area Intersections



EXISTING CONDITIONS

WSB collected traffic counts at 20 intersections and 20 roadway segments in the study area. These counts together with traffic counts provided by Hennepin County and the City of Edina were used to update the Synchro/SimTraffic models.

Traffic signal timing information was updated based on information provided by Hennepin County. Lane geometry, new intersections, changes of intersection control, pedestrian timing and other information like speed limits were updated based on field visit to all the study intersections. ***Figure 2*** shows the existing Average Daily Traffic volumes on the adjacent roadways.

Traffic Analysis Methodology

The traffic operations analysis is derived from established methodologies documented in the *Highway Capacity Manual 2000* (HCM). The HCM provides a series of analysis techniques that are used to evaluate traffic operations.

Intersections are given a Level of Service (LOS) grade from "A" to "F" to describe the average amount of control delay per vehicle as defined in the HCM. The LOS is primarily a function of peak traffic hour turning movement volumes, intersection lane configuration, and the traffic controls at the intersection. LOS A is the best traffic operating condition, and drivers experience minimal delay at an intersection operating at that level. LOS E represents the condition where the intersection is at capacity, and some drivers may have to wait through more than one green phase to make it through an intersection controlled by traffic signals. LOS F represents a condition where there is more traffic than can be handled by the intersection, and many vehicle operators may have to wait through more than one green phase to make it through the intersection. At a stop sign-controlled intersection, LOS F would be characterized by exceptionally long vehicle queues on each approach at an all-way stop, or long queues and/or great difficulty in finding an acceptable gap for drivers on the minor legs at a through-street intersection.

The LOS ranges for both signalized and un-signalized intersections are shown in ***Figure 3***. The threshold LOS values for un-signalized intersections are slightly less than for signalized intersections. This variance was instituted because drivers' expectations at intersections differ with the type of traffic control. A given LOS can be altered by increasing (or decreasing) the number of lanes, changing traffic control arrangements, adjusting the timing at signalized intersections, or other lesser geometric improvements. LOS also changes as traffic volumes increase or decrease.

LOS, as described, can also be determined for the individual legs (sometimes referred to as "approaches") or lanes (turn lanes in particular) of an intersection. It should be noted that a LOS E or F might be acceptable or justified in those cases where a leg(s) or lane(s) has a very low traffic volume as compared to the volume on the other legs. For example, improving LOS on such low-volume legs by converting a two-way stop condition to an all-way stop, or adjusting timing at a signalized intersection, could result in a significant penalty for the many drivers on the major road while benefiting the few on the minor road. Also, geometric improvements on minor legs, such as additional lanes or longer turn lanes, could have limited positive effects and might be prohibitive in terms of benefit to cost.

Figure 2: Existing Average Daily Traffic Volumes

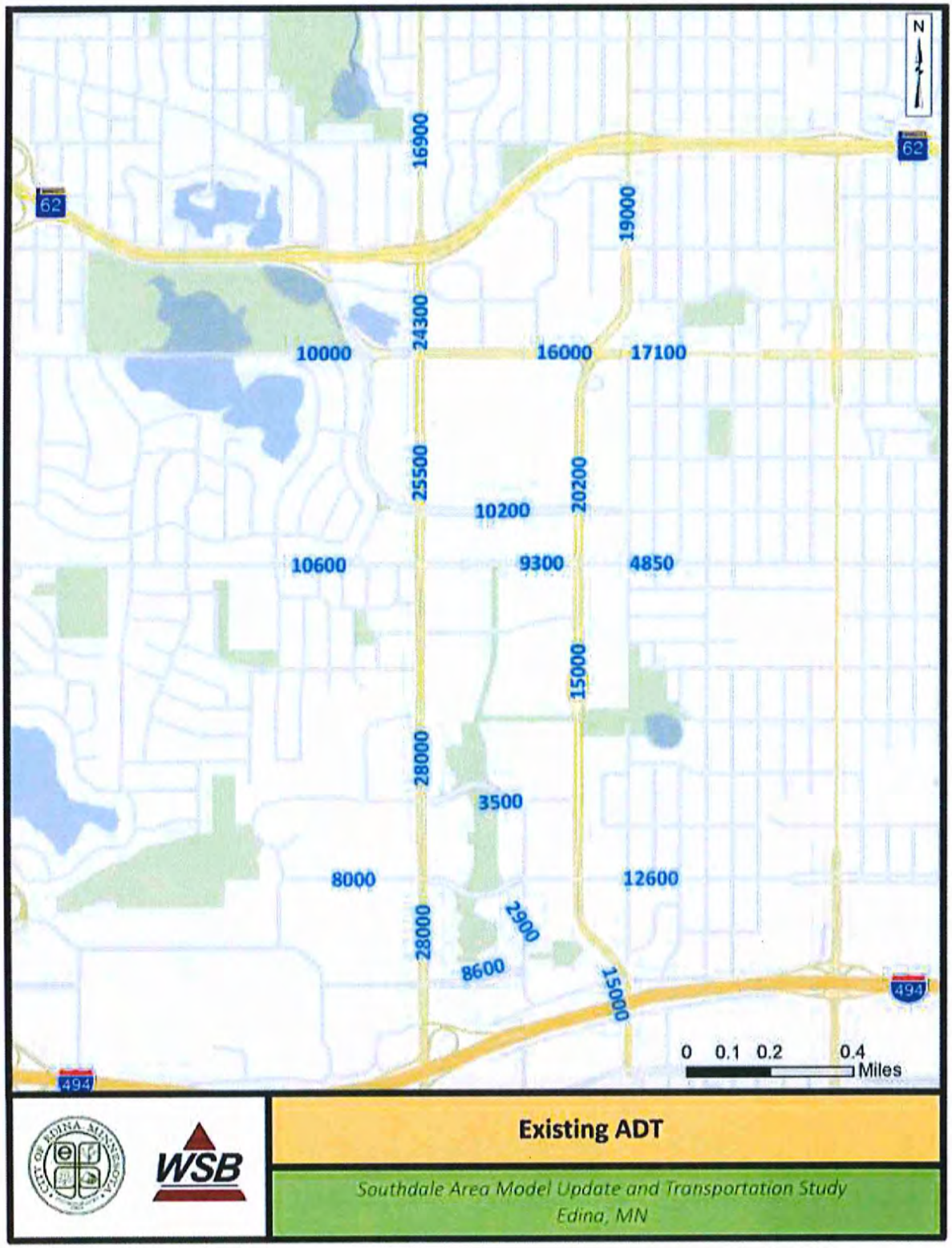
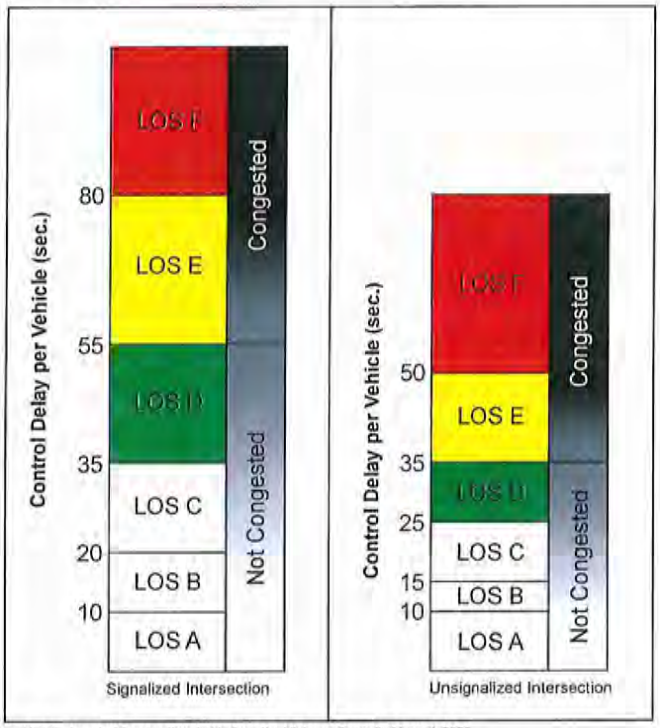


Figure 3 - Level of Service Ranges for Signalized and Un-signalized Intersections



SOURCE: Level of Service thresholds from the Highway Capacity Manual, 2000.

Although LOS A represents the best possible level of traffic flow, the cost to construct roadways and intersection to such a high standard often exceeds the benefit to the user. Funding availability might also lead to acceptance of intersection or roadway designs with a lower LOS. An overall LOS D is generally accepted as the lowest acceptable level in urban areas. LOS C is often considered to be the desirable minimum level for rural areas. LOS D or E may be acceptable for limited durations or distances, or for very low-volume legs of some intersections.

The LOS analysis was performed using Synchro/SimTraffic:

- Synchro, a software package that implements Highway Capacity Manual (HCM) methodologies, was used to build each signalized intersection and provide an input database for turning-movement volumes, lane geometrics, and signal design and timing characteristics. In addition, Synchro was used to optimize signal timing parameters for future conditions. Output from Synchro is transferred to SimTraffic, the traffic simulation model.

- SimTraffic is a micro-simulation computer modeling software that simulates each individual vehicle's characteristics and driver behavior in response to traffic volumes, intersection configuration, and signal operations. The model simulates drivers' behaviors and responses to surrounding traffic flow as well as different vehicle types and speeds. It outputs estimated vehicle delay and queue lengths at each intersection being analyzed.

Existing Conditions Analysis

The turning movement counts obtained from the field counts were input into the Synchro/SimTraffic model using the existing roadway geometrics and intersection control. The SimTraffic model was then run for five replications. The output from the five simulations was then averaged.

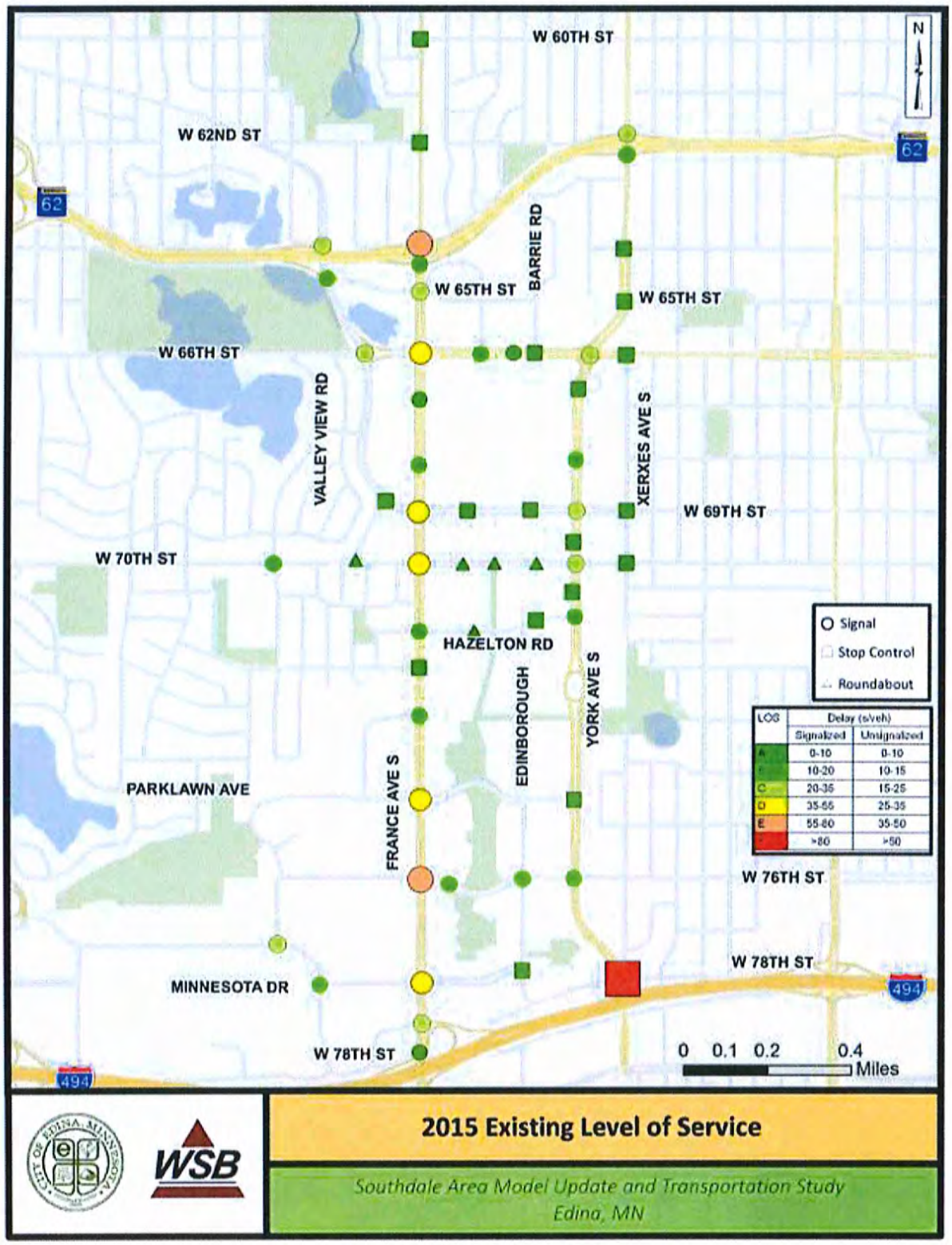
It should be noted that Roundabouts and Stop Controlled intersections are classified as un-signalized intersections and have different delay thresholds than signalized intersections according to the Highway Capacity Manual (HCM).

The result of the analysis indicates that in general most intersections are operating at an acceptable overall Level of Service (LOS) D or better, with the exception of:

1. York Avenue at W. 78th Street = LOS F
2. France Avenue at TH 62 North Ramp = LOS E
3. France Avenue at W. 76th Street = LOS E

Figure 4 shows the existing Level of Service (LOS) at each of the study area intersections.

Figure 4: Existing Level of Service



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FORECASTED 2040 CONDITIONS

The regional Travel Demand Model developed by Metropolitan Council and used for the City's current (2008) Transportation Plan, was utilized to obtain base 2040 forecasts for traffic growth in the area. The models were updated with projected traffic and the forecasted 2040 level of service was determined at the study area intersections. Subsequently, an alternative analysis was conducted with updated information on development density in the City's Transportation Analysis Zones (TAZs) in the Southdale area. The regional Travel Demand Model was rerun with the higher density conditions and traffic growth rates were estimated for the year 2040 with the higher density developments in place. Using the growth rates obtained from this alternative, the Synchro/SimTraffic model was updated to reflect higher traffic forecasts and the Level of Service under this scenario. Areas of concern were highlighted.

Proposed Development Density Scenario's

In order to understand the impacts of increasing the density of development in the Southdale Area, an alternative was analyzed which involved increasing the development density in future leading to higher number of trips. ***Table 1*** below shows the assumptions used in this alternative. The increased density was assumed to be in form of number of households

Table 1: Population and Households Assumptions

TAZ	2040 Population - Base Scenario	2040 Number of Households - Base Scenario	Comp Plan Average Density (Units/Acre)	High Density Assumption (Units/Acre)	Increase Factor	2040 Population - High Density Scenario	2040 Number Of Households - High Density Scenario
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518	6470	2910	9.55	14.25	1.5	9654	4342
519	1930	880	10.35	13.25	1.3	2471	1127
Total	20580	9890	N/A			39689	19299

These assumptions correspond to trip generation numbers from each zone as shown in ***Table 2*** below.

Table 2: Change in Number of Trips

	2040 Base Scenario			2040 High Density Scenario			Total Change	
TAZ	Productions	Attractions	Total	Productions	Attractions	Total	Absolute Change	Percent Change
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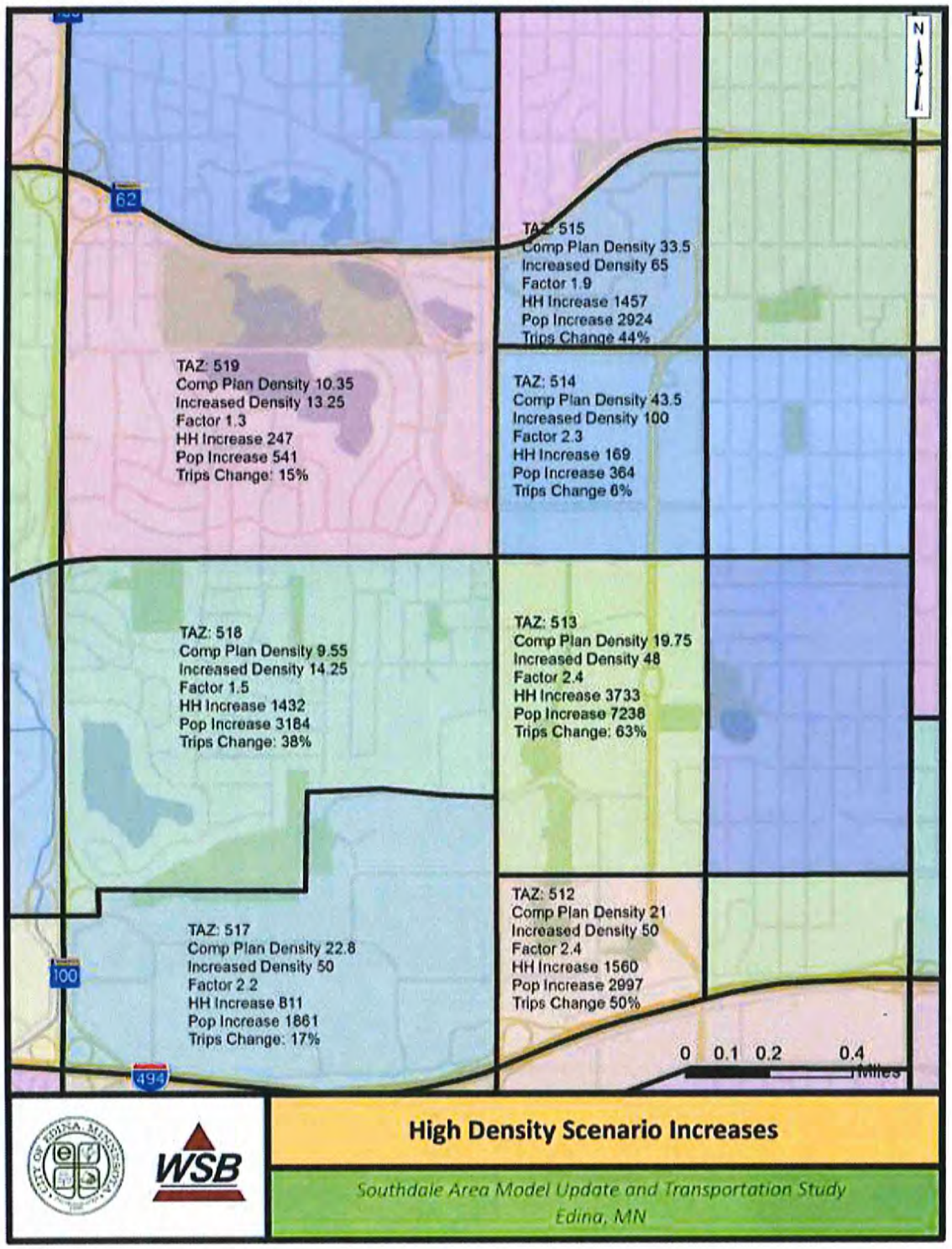
518	25110	19261	44371	36392	24980	61372	17001	38%
519	9106	11176	20282	11053	12177	23230	2948	15%

Figure 5 shows the increase in households and population along with resulting trip increases from each Transportation Analysis Zone (TAZ).

Figure 5: TAZ Trip Increase Assumptions



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Transit Model Assumptions

Transit is a key component to the transportation system in the Southdale area. In 2014 Metro Transit opened the Southdale Transit Center and Park & Ride facility. The Transit Center is located southwest of the York Avenue and 66th Street intersection, on the east side of Southdale Center near the entrance to JC Penney. The site includes 70 surface Park & Ride parking spaces, with overflow parking for additional vehicles east of the Southdale Center ring road.

Transit service is provided to the Southdale Center from 8 primary routes including:

- **Route 6 -** to Minneapolis (urban local)
- **Route 515 -** to Bloomington, 66th Street Richfield, METRO Blue Line (VA Medical Center, Mall of America)
- **Route 537 -** to Bloomington, Normandale College
- **Route 538 -** to south Bloomington, METRO Blue Line (Mall of America)
- **Route 578 -** to Minneapolis (express)
- **Route 579 -** to U of M (express)
- **Route 684 -** to Minneapolis, Eden Praire, Chanhassen and Chaska (SouthWest Transit)
- **Route 694 -** to Eden Praire, Chaska, Normandale College, Richfield (Southwest Transit)

The Metropolitan Council regional Travel Demand Model assumes a Transit mode share for the area when determining the future traffic projection. This percentage for the study area was 3.5% on the average. The transit mode percentage varies by TAZ and the value for each TAZ is shown in ***Figure 6***.

Figure 6: Transit Mode Share Assumptions

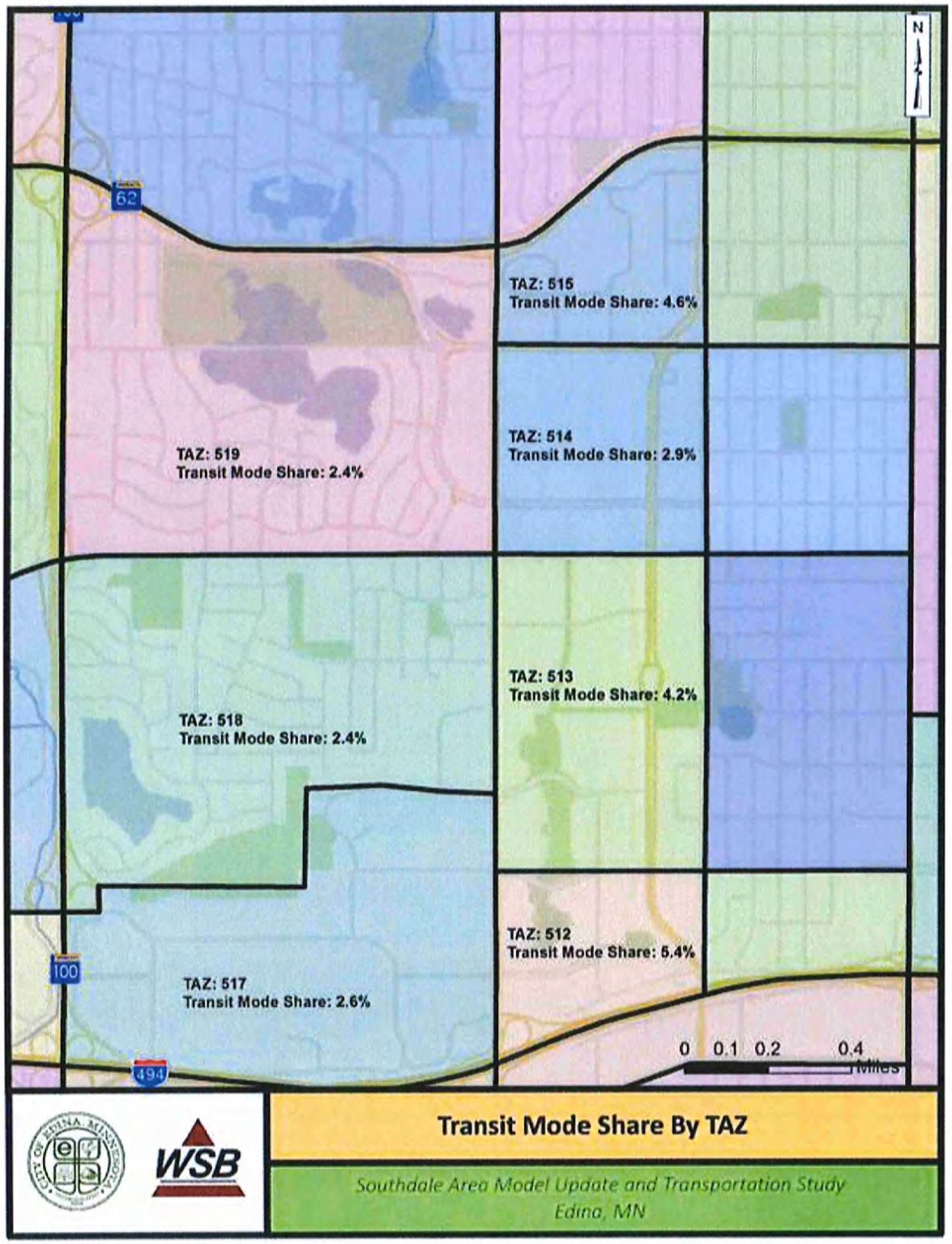


Figure 7 shows the Average Daily Traffic (ADT) as forecasted by the regional Travel Demand Model for the year 2040 base condition.

Figure 7: 2040 Base Conditions ADT

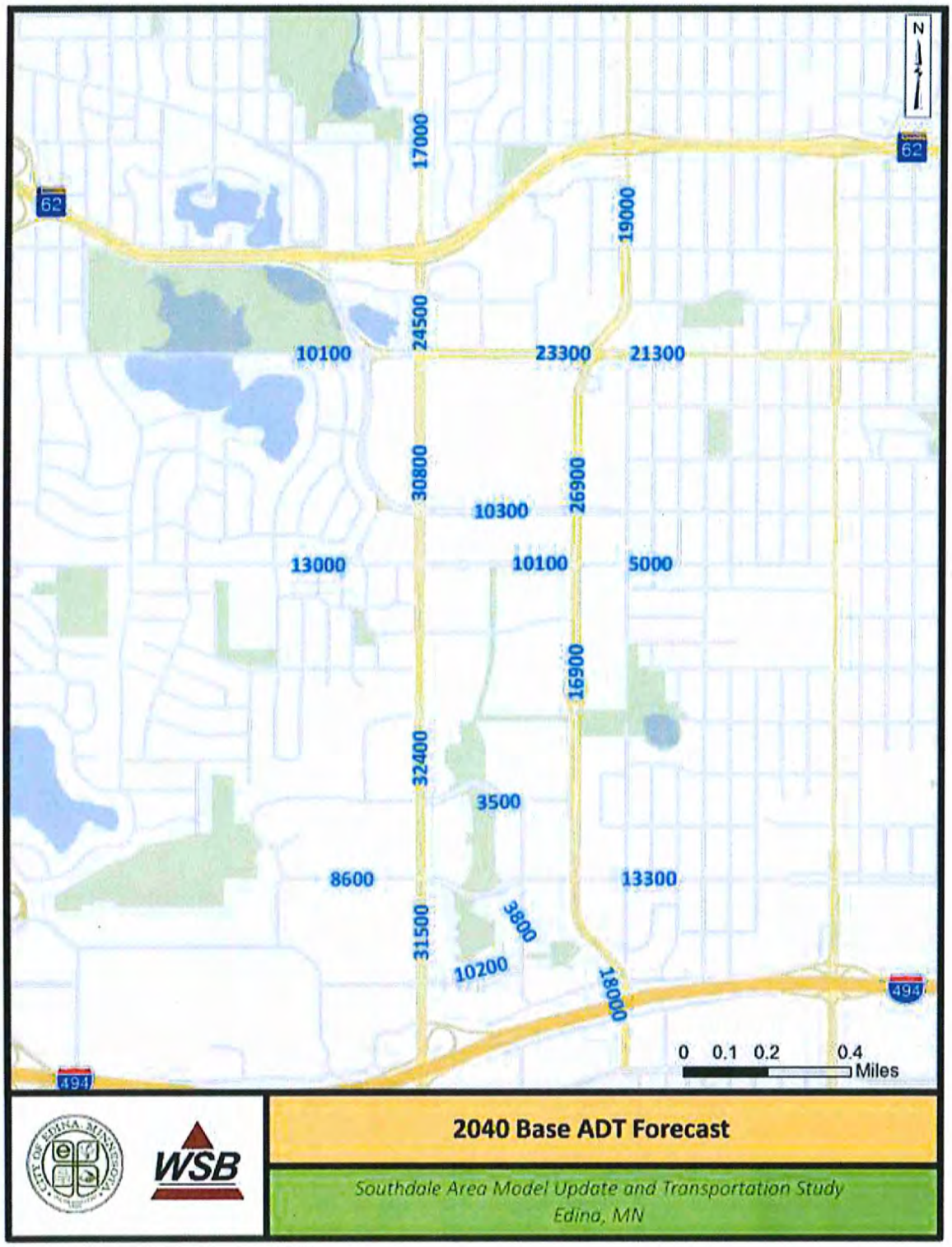


Figure 8 shows the percentage change in ADT as forecasted by the regional Travel Demand Model between the base model year (2010) and the year 2040.

Figure 8: Base Condition ADT Percentage Change

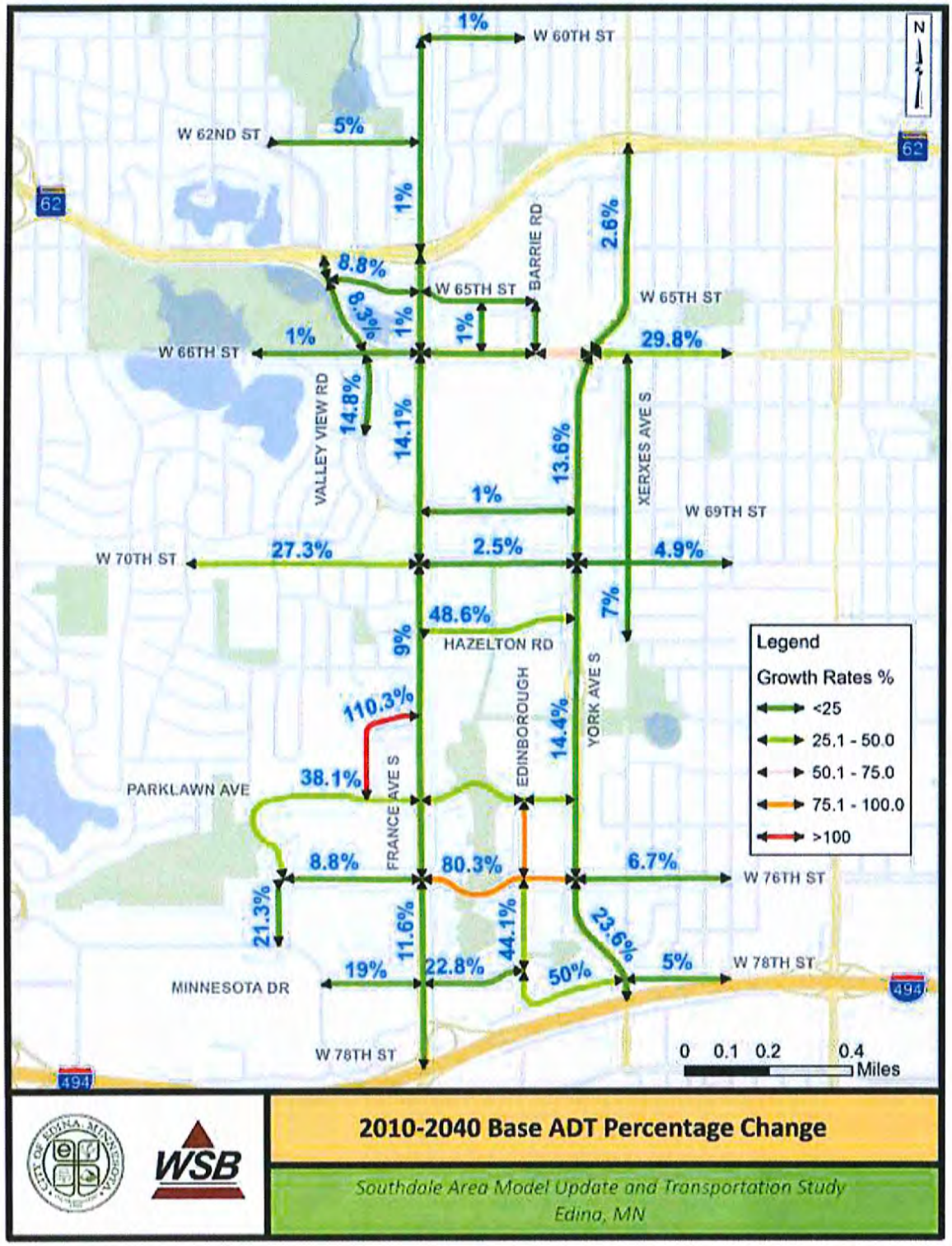


Figure 9 shows the forecasted 2040 ADT for the high density scenario.

Figure 9: 2040 High Density Scenario ADT

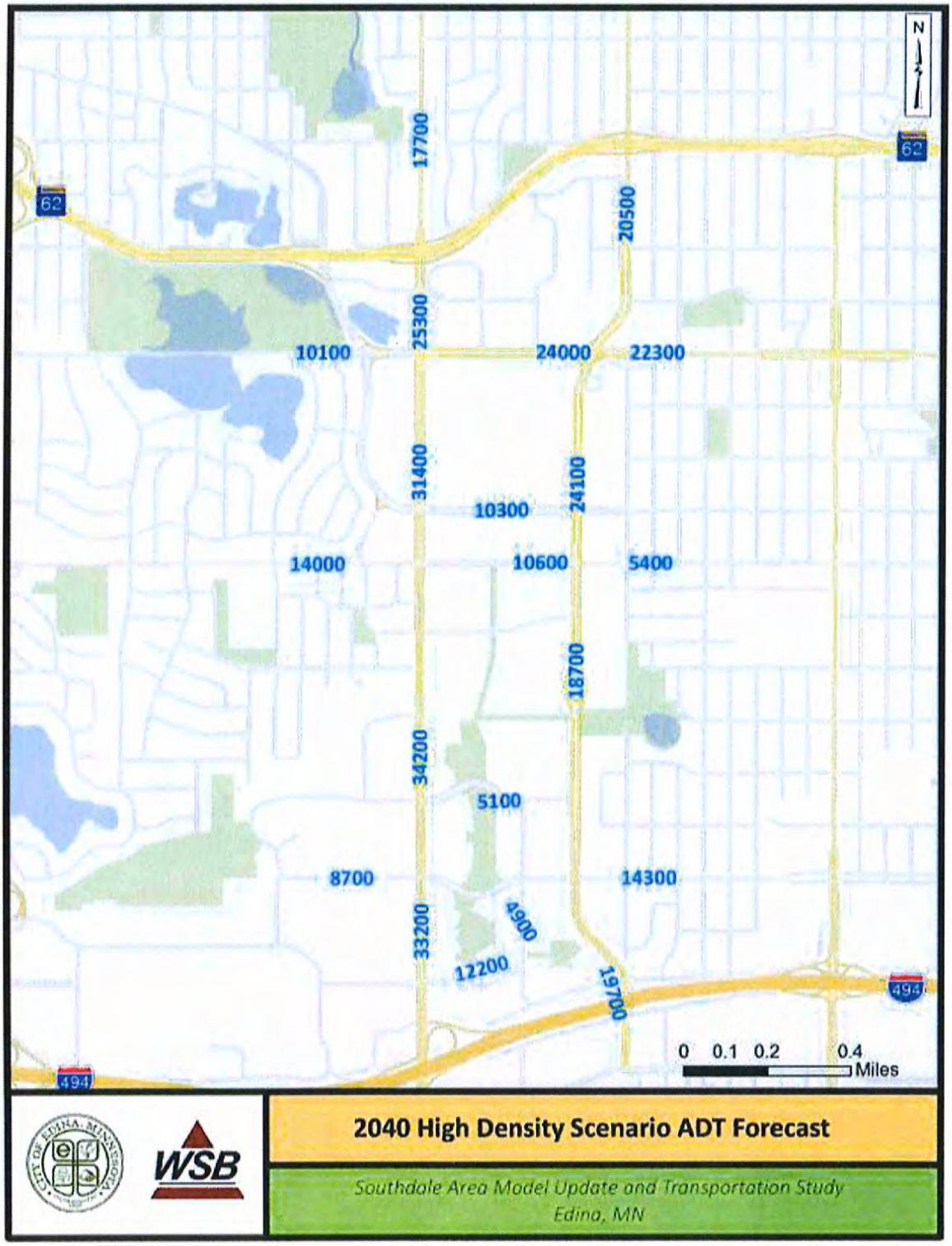
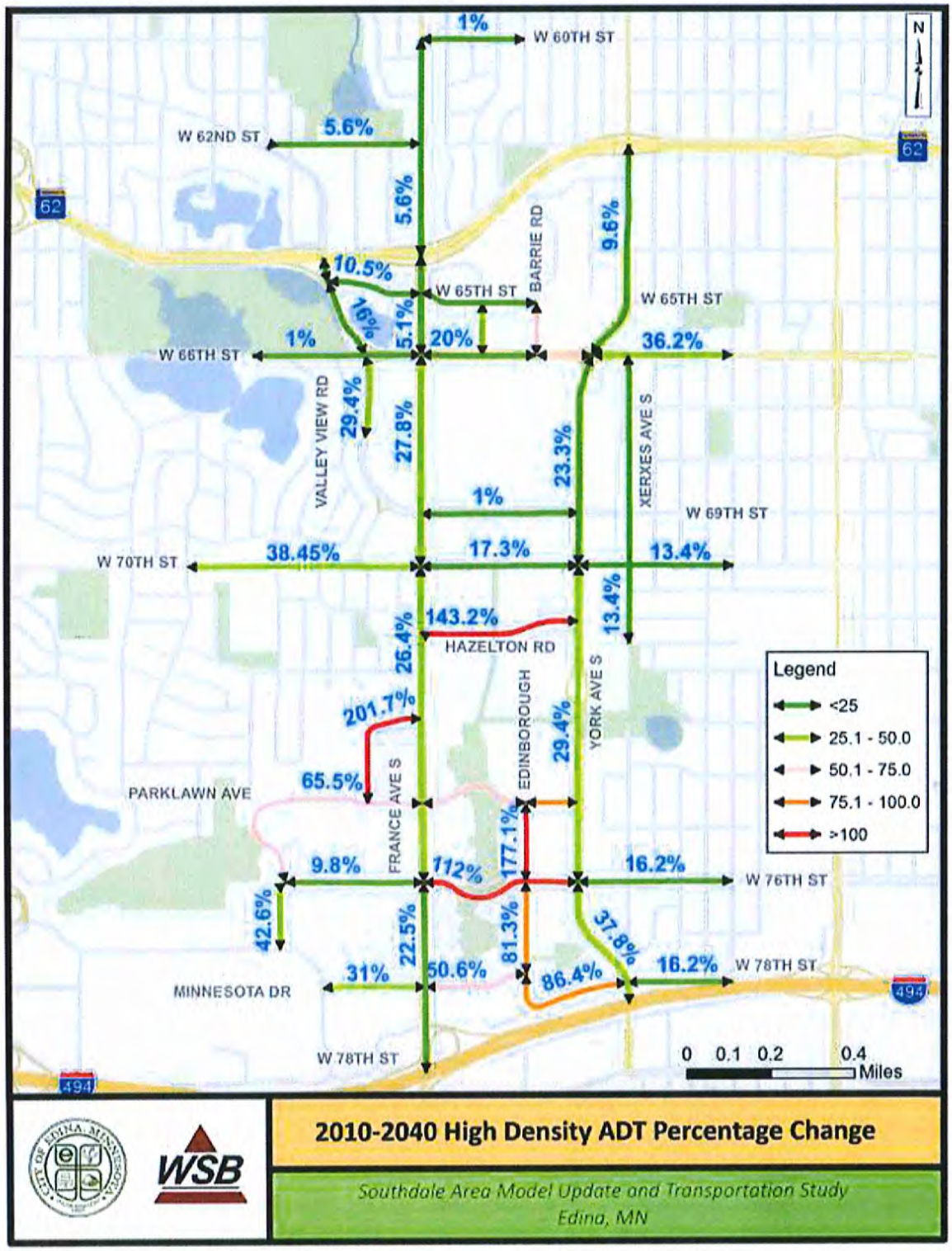


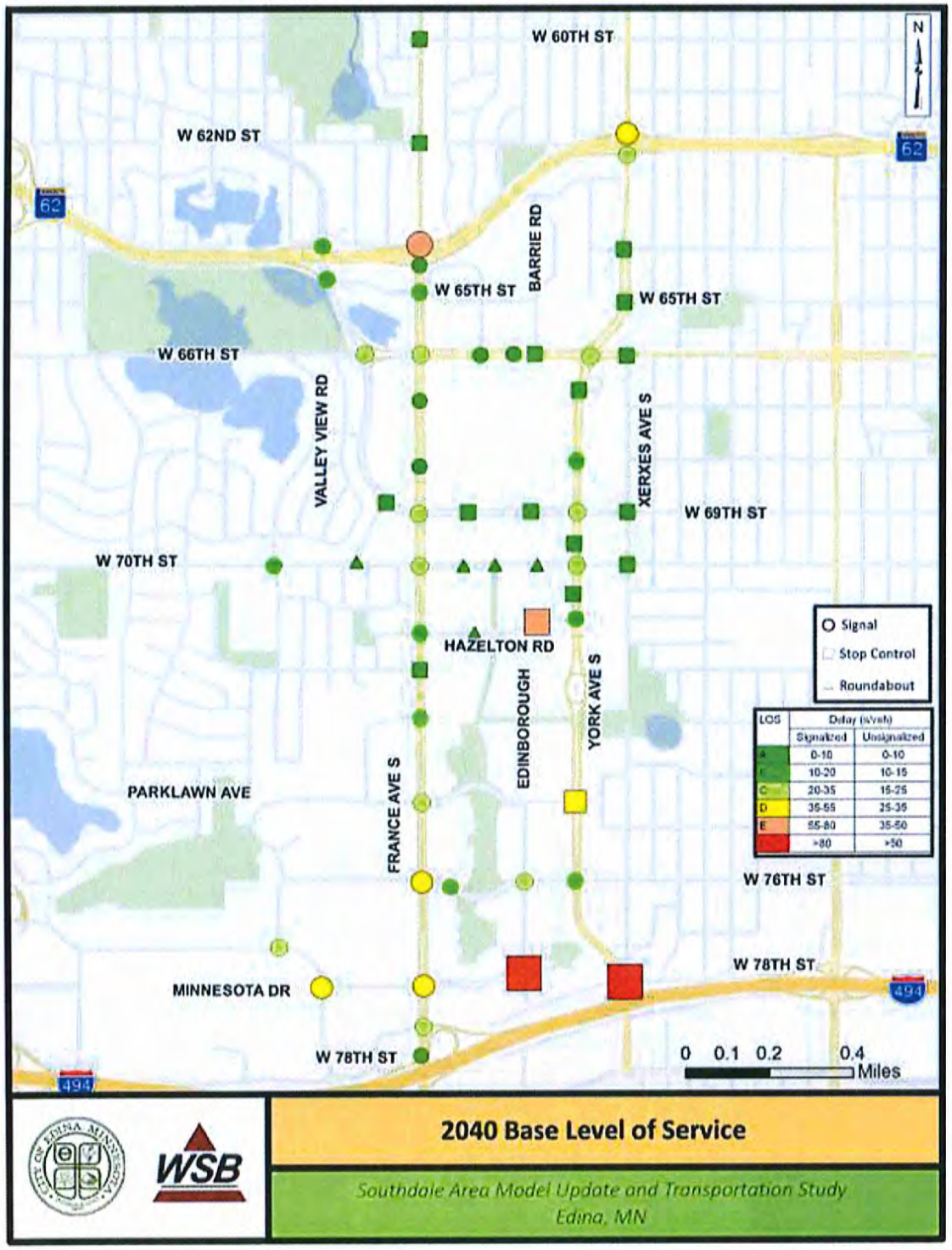
Figure 10 shows the percentage change in ADT for the increased density scenario from year 2040 and the base model year (2010).

Figure 10: High Density Scenario ADT Percentage Change



The turning movement volumes for the PM peak hour in 2040 were estimated based on the ADT growth percentages derived from the model for various links. The turning movements were then simulated in the Synchro/SimTraffic network. ***Figure 11*** shows the 2040 Level of Service assuming growth levels consistent with the 2040 regional Travel Demand model.

Figure 11: 2040 Base Condition Level of Service



Projected 2040 Conditions Analysis

The turning movement volumes for the PM peak hour were adjusted from the base condition based on the ADT growth percentages derived from the high density scenario model. ***Figure 12*** shows the Level of Service at the study intersections in the High Density Scenario assuming no significant improvements to the intersections from current conditions. The results indicate that in general most intersections with either the 2040 Base conditions or 2040 High Density conditions would continue to operate at an overall Level of Service (LOS) D or better, with the exception of:

2040 Base Condition:

1. York Avenue at W. 78th Street = LOS F
2. Minnesota Drive at Edinborough Way = LOS F
3. France Avenue at TH 62 North Ramp = LOS E
4. France Avenue at W. 76th Street = LOS E
5. Hazelton Road at Target Access = LOS E

2040 High Density Condition:

1. York Avenue at W. 78th Street = LOS F
2. Minnesota Drive at Edinborough Way = LOS F
3. York Avenue at Parklawn Avenue = LOS F
4. France Avenue at TH 62 North Ramp = LOS E
5. Xerxes Avenue at TH 62 North Ramp = LOS E
6. France Avenue at Parklawn Avenue = LOS E
7. France Avenue at W. 76th Street = LOS E
8. Hazelton Road at Target Access = LOS E
9. France Avenue at Minnesota Drive = LOS E

It should be noted that at some intersections which are not operating at an overall LOS E or F, may still be individual movements that are at LOS E or F. ***Figure 13*** shows individual movements that are at LOS E or F at the study intersections.

In addition to the intersections listed above, as development continues to occur in the Southdale area particular attention should be given to the following intersections as part of any traffic analysis prepared, which could be operating at LOS F:

1. France Avenue at W. 66th Street – Westbound approach
2. France Avenue at W. 65th Street – Southbound left turn
3. France Avenue at W. 69th Street – Westbound approach, Southbound left turn
4. France Avenue at W. 70th Street – Westbound left turn
5. France Avenue at Hazelton Road – Westbound approach, Northbound and Southbound left turns
6. France Avenue at Gallagher Drive – Westbound approach, Eastbound left turn
7. Valley View Road at W. 69th Street – Southbound approach
8. Minnesota Drive at W. 77th Street – Southbound left turn
9. York Avenue at W. 69th Street – Westbound approach
10. York Avenue at Hazelton Road – Westbound approach, Northbound left turn
11. Edinborough Way at W. 76th Street – Northbound approach

Figure 12: 2040 High Density Scenario Level of Service

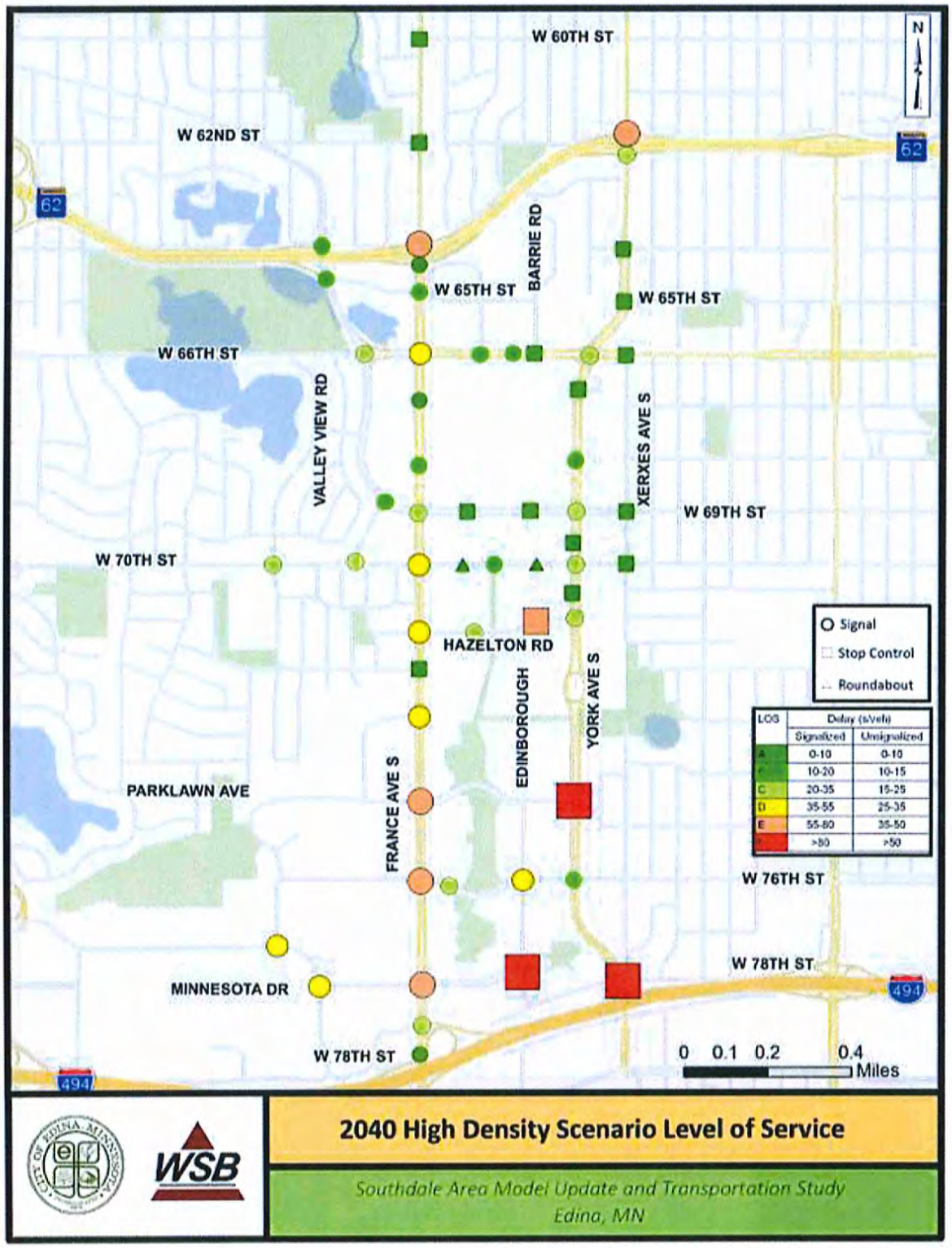
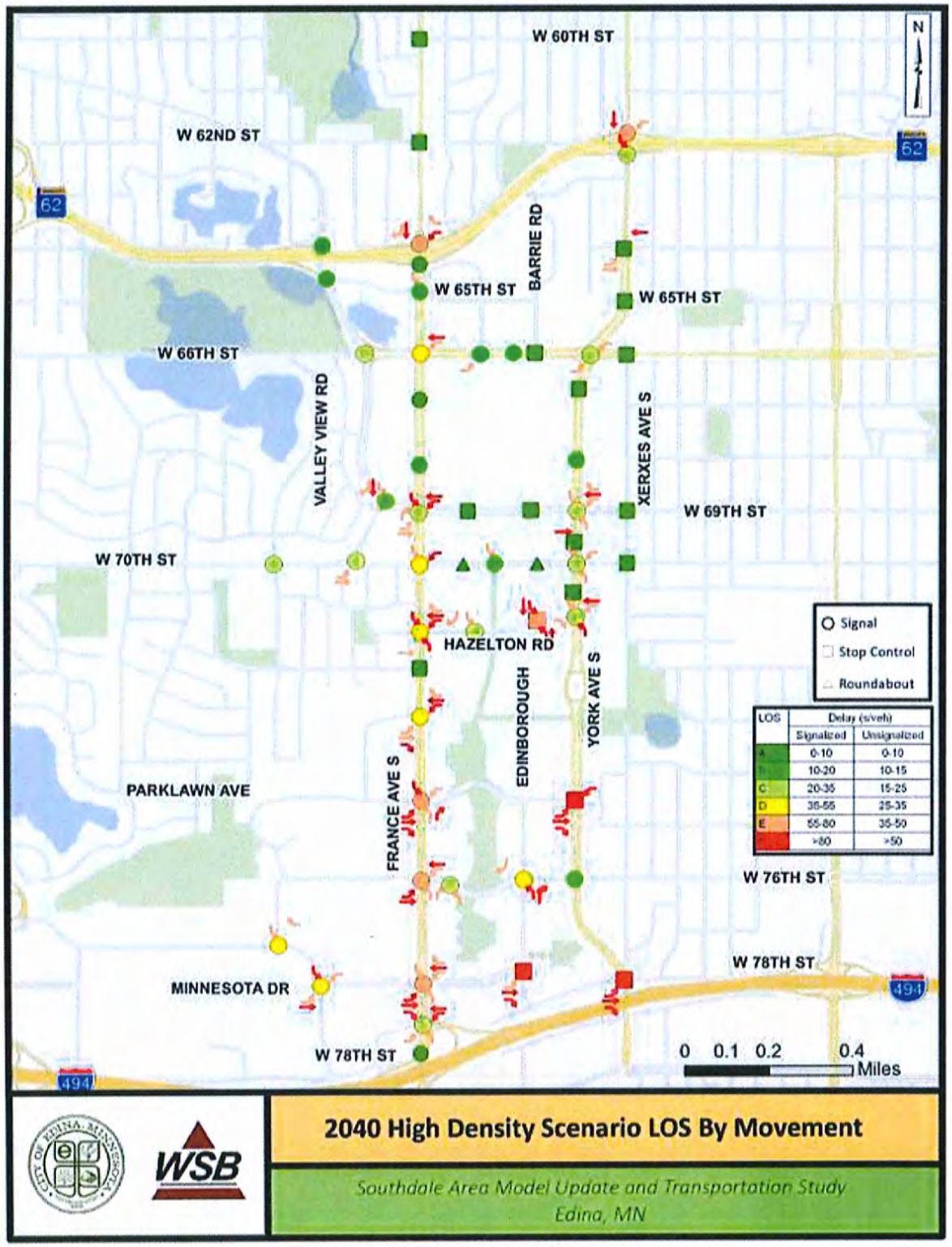


Figure 13: 2040 High Density Scenario LOS By Movement



PEDESTRIAN NETWORK ANALYSIS

The purpose of the pedestrian and bicycle analysis was to highlight existing and potential future pedestrian and bicycle trip generation and needs in the Southdale area. The analysis is separated into five sections. The first section provides documentation of the existing pedestrian and bicycle system in the Southdale Area; the second provides background considerations about pedestrian and bicycle trip generation; the third section describes existing pedestrian and bicycle trip generators; the fourth section identified potential pedestrian and bicycle trip generators based on planned development in the Southdale area, and; the fifth section includes general conclusions for walking and bicycling in the Southdale area.

Existing Pedestrian/Bicycle System

There are some existing pedestrian and bicycle facilities in place in the Southdale area. The existing and planned sidewalk and bicycle networks are shown in ***Figures 14 & 15.*** There are sidewalks in place on many of the streets in the commercial and higher-density residential areas of the study area, including France Avenue, W. 66th Street, W. 70th Street, and York Avenue. In most cases, there are sidewalks along both sides of these roadways.

While there are sidewalks in place along many of the busier streets in the study area, there are some challenges for pedestrians. In some locations there are narrow sidewalks at the back of the curb. Many pedestrians feel uncomfortable walking close to busy roadways, and it can be a challenge to keep back-of-curb sidewalks clear of snow and ice in the winter. Additionally, it can be uncomfortable for pedestrians to cross four- and six-lane roadways within the study area. Crossing distances can be long due to the number of through and turn lanes. The City of Edina has begun to address these challenges in some locations, including France Avenue. The sidewalks and intersections along France Avenue have recently been upgraded to provide a more comfortable pedestrian experience for people walking along and across France Avenue. There is a very limited sidewalk network in the residential areas west of France Avenue, and within large commercial developments such as Southdale Center.

There is a limited bicycle network in place within the study area. The Edina Promenade is an off-street shared use path that extends from W. 70th Street through Centennial Lakes Park. There is also an off-street path along Parklawn Avenue. There are bike lanes and shared lane markings in place along W. 70th Street west of France Avenue. Cornelia Drive is also a bicycle boulevard.

The lack of dedicated bicycle facilities creates challenges for people bicycling within the study area. West of France Avenue, many of the low-volume local streets are comfortable for bicycling without dedicated bicycle facilities. However, the street grid is interrupted in this area and many of the low-traffic local streets do not provide direct connections. There are very few bicycle facilities within the commercial and high-density residential areas in the eastern half of the study area.

The street network in this area is not conducive to on-street bicycling without dedicated bicycle facilities. Many of the streets in this area are high-volume, multilane roadways. Most people do not feel comfortable sharing a lane with motorists under these conditions.

Figure 14 – Existing Comprehensive Plan Sidewalk System

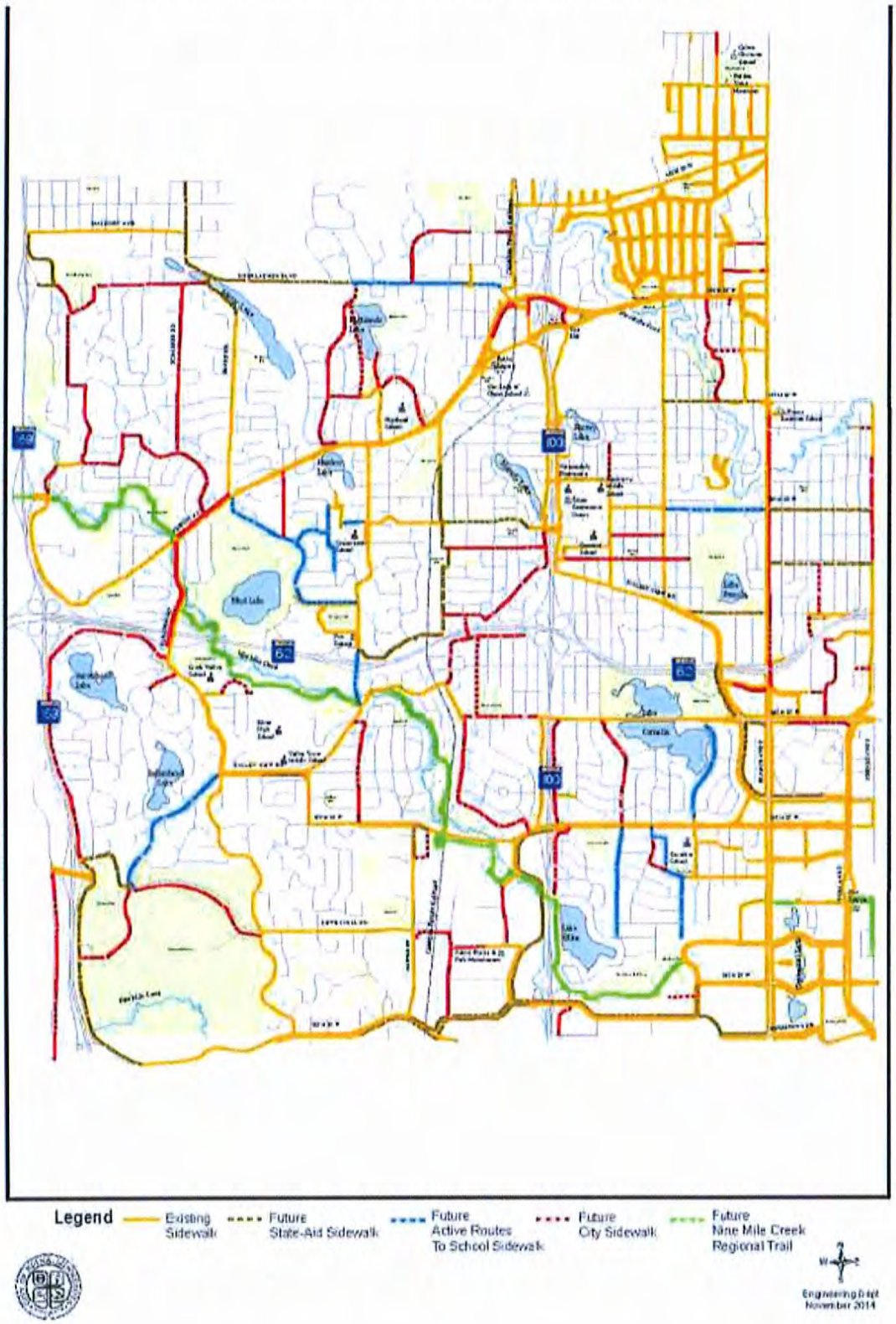
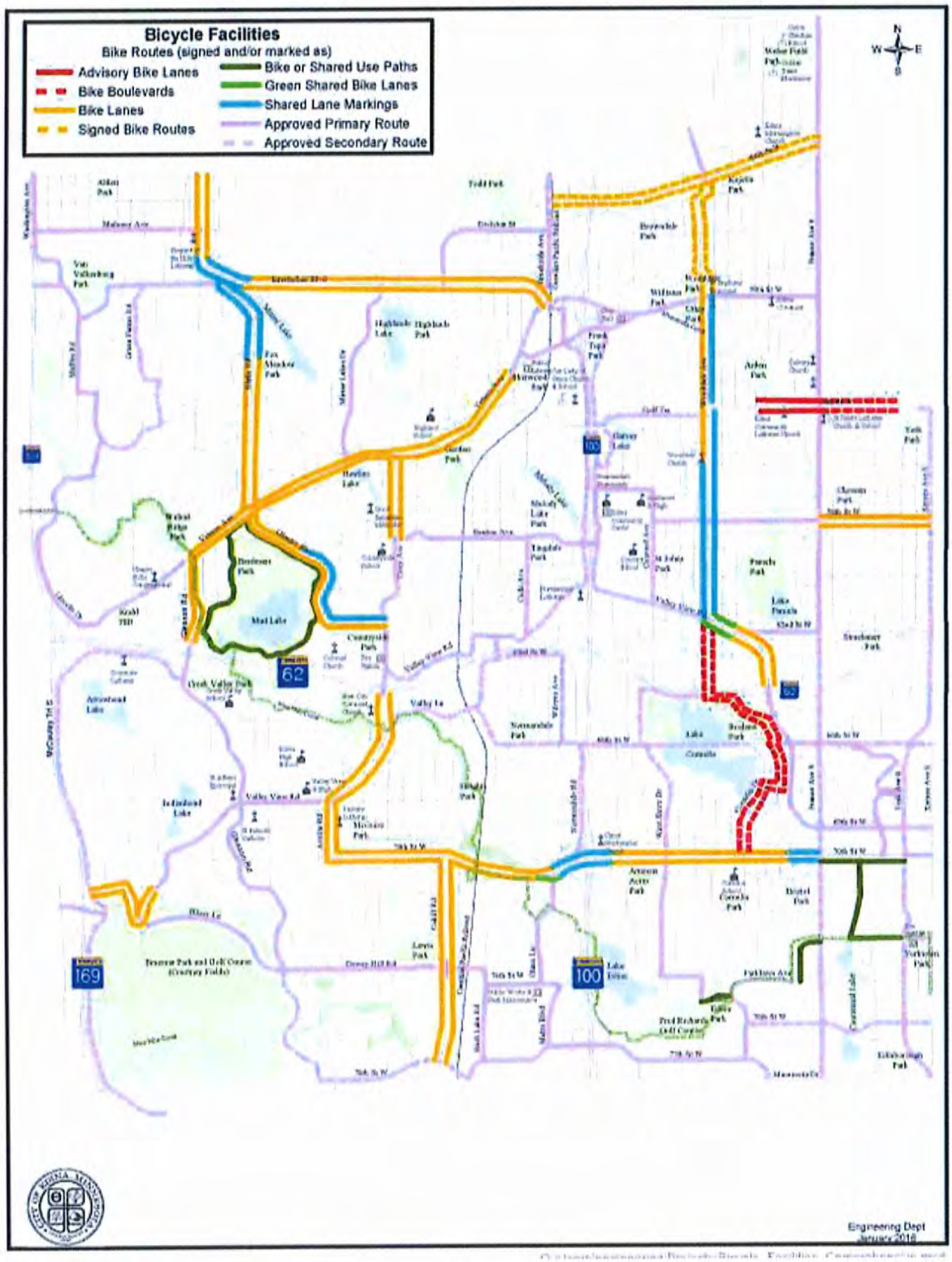


Figure 15 – Existing Comprehensive Plan Bicycle System



Pedestrian and Bicycle Trip Generation Background

Unlike motor vehicle trip generation, there are not established methods for estimating bicycle and pedestrian trip generation. Rates of walking and bicycling vary throughout the U.S. and even within the same metro area. For that reason, it is not possible to make clear forecasts of pedestrian and bicycle trip generation. Specific land uses cannot be considered in isolation. There are number of factors that influence rates of pedestrian and bicycle trip generation, including:

- **Residential proximity to retail/office land uses:** Walking and bicycle use are typically higher in mixed-use areas or areas where residential land uses are in close proximity to retail/office land use. Retail, office, and recreational land uses tend to attract the most bicycle and pedestrian trips.

- **Residential density:** Areas with higher density residential land use tend to see more walking and bicycling than lower density areas.

- **Scale of land use and building design:** People tend to prefer to walk and bike in areas where the land use and building design are at a pedestrian scale, including smaller building footprint, active uses on ground floors, visually interesting buildings, and concealed parking.

- **Road network:** Small block sizes and narrow streets are associated with more pedestrian and bicycle activity. In areas with large blocks and large-scale development, people often have to walk or bike out of their way to reach their destination. Wide streets tend to be difficult for people to cross on foot or bike.

- **Pedestrian and bicycle network:** People tend to walk and bicycle more in areas with continuous and comfortable pedestrian and bicycle facilities. Areas with higher quality facilities (wide sidewalks with separation from the roadway and/or physically separated bicycle facilities) often see more pedestrian and bicycle use.

- **Transit network:** People tend to walk and bike more in areas with frequent public transit service.

- **Ease or difficulty of vehicle use in an area:** Areas with traffic congestion, lack of parking, and/or parking fees tend to generate more bicycle and pedestrian trips as vehicle trips can be more costly or frustrating.

There are certainly other factors that influence rates of walking and bicycling in an area. Weather, personal preference, access to a personal vehicle (or lack thereof), income, physical ability, and other factors influence whether people walk or bike to a destination. However, the factors listed above are those that a city has the strongest potential to influence. With this information in mind, the sections below identify assumed pedestrian and bicycle generators based on current and future land uses.

Existing Pedestrian and Bicycle Trip Generators

Commercial retail and office development has been in place for a long time in the Southdale area. However, there is limited bicycling and walking in the area due to auto-oriented development, large block sizes, wide roadways with high traffic volumes, gaps in pedestrian and bicycle network, and separation between commercial and residential land uses. The sections below describe different types of pedestrian and bicycle trip generators in the study area. Many of these destinations may not attract significant bicycle and pedestrian traffic today; however, they have the potential to be generators as residential density increases and new pedestrian/bicycle infrastructure is constructed.

Office Land Uses: Within suburban contexts, office land uses are less of a pedestrian generator than other commercial land uses. Most people do not live within walking distance of their workplace, medical provider, or other professional services. Office land uses tend to attract some bicycle trips due to people bicycling to work. Office land uses are situated in the following locations:

- Medical offices north of W. 66th Street (Fairview Southdale Hospital, Southdale Medical Center, Twin Cities Orthopedics, and others)
- Offices north of W. 66th Street between France and York Avenues
- Offices along the west side of France Avenue
- Offices located along W. 77th Street
- Centennial Lakes office buildings

It is assumed that offices located in the study area do not attract significant pedestrian traffic at this time. However, this could change as additional high density housing units are constructed in the study area. It is possible some people will move to the area to be close to their workplace. It is also assumed that there are low rates of bicycle transportation to offices in the study area, mostly due to lack of bicycle infrastructure in the study area and surrounding neighborhoods.

Retail Land Uses: Retail land uses tend to attract more pedestrians and bicyclists than other land uses, provided that housing is located within close proximity to retail land uses. People tend to visit retailers close to their home or workplace, unless they have needs for specialty goods or are visiting destination retail areas. The Southdale area is a regional retail destination. It is expected that most people drive to Southdale retail if they live outside of the study area; however, some people shopping in the area prefer to walk between retail destinations once they reach the Southdale area. The diversity of retail land uses in the study area mean that most nearby residents should be able to meet their retail needs within the study area. Retail pedestrian/bicycle generators include the following:

- Southdale Center
- Galleria
- Southdale Square (York Avenue and W. 66th Street)
- Retail uses along France Avenue
- Retail uses along York Avenue
- Retail uses along Hazelton Street
- Limited retail/banks north of W. 66th Street

As with office land uses, it is assumed that retail in the study area does not currently attract significant pedestrian and bicycle traffic. However, existing retail will likely draw additional pedestrian and bicycle traffic as residential density increases.

Hotel Land Uses: There is currently one hotel in the study area. The Westin Edina Galleria is located at York Avenue and W. 69th Street, in close proximity to both the Galleria and Southdale Center. It is expected that the hotel generates more pedestrian traffic than other land uses, given its close proximity to retail and restaurants in the area. Hotel guests are more likely to walk to their destinations as some might not have access to a vehicle during their stay. The Westin is unlikely to be a significant bicycle trip generator as most guests do not have access to bicycles during their stay; however, there may be some bicycle use among employees of the hotel.

Transportation Land Uses: The Southdale Transit Center is located on the east side of Southdale Center, near York Avenue. It serves several local and express buses. The transit center is expected to be a more significant pedestrian and bicycle trip generator, as most people access transit by walking and bicycling.

Recreational, Worship, and Institutional Land Use: There are several recreational, worship, and institutional land uses within the study area. Several of these are expected to generate more bicycle and pedestrian trips than other destinations in the study area, particularly parks and schools. These destinations include:

- Lake Cornelia/Edina Aquatic Center
- Arneson Acres Park
- Lake Edina Park
- Centennial Lakes
- Edina Art Center
- Southdale YMCA
- Southdale Library and County Service Center
- Cornelia Elementary School
- Christ Presbyterian Church – W. 70th Street and TH 100

Residential Land Uses: Residential land uses are currently located along the edges of the study area. Single family residential is generally located west of Valley View Road/France Avenue and east of Xerxes Avenue. High density residential (apartments, condos, and townhomes) are located north of W. 66th Street, west of France Avenue, south of Hazelton Road, and along both sides of York Avenue south of Hazelton Road.

It is expected that high density housing generates a greater share of pedestrian and bicycle trips in the area. This is assumed in part because high density housing is located closer to retail, office, and transit than single family residential areas. Single family residential land uses are likely to generate more pedestrian and bicycle trips to the recreational and school land uses in the study area, as those destinations are located closer to single family residential.

New high density housing has been constructed at York Avenue and W. 69th Street (One Southdale Place). It is assumed that this housing generates more pedestrian trips than other residential land uses in the study area, given its close proximity to retail and restaurant destinations in Southdale Center, the Galleria, and along the east side of York Avenue.

Potential Future Pedestrian and Bicycle Trip Generators

Pedestrian and bicycle use is expected to grow in conjunction with anticipated development in the Southdale area. As part of the city's land use plan, the city is considering an increased density scenario that would plan for 100-150 units per acre within the area bounded by TH 62, Xerxes Avenue, France Avenue, and W. 77th Street. This area is dominated by retail and office land uses at this time. As residential density grows in this area, there will be more people living within a short walk or bike ride of retail and office destinations. As a result, it is assumed that more people will walk and bicycle for transportation. The increased density scenario is already coming to fruition. The sections below describe private development that is planned within the study area and expected to be constructed over the next one to two years.

New development in is also an opportunity to influence walking and bicycling behavior in the area. Given the proximity of new residential to commercial land uses, there is a lot of potential for pedestrian and bicycle transportation. The city can work with developers to integrate new or enhanced walking and bicycling routes into or adjacent to developments. The city can also encourage pedestrian-scale development including as active uses on ground floors, windows, and entrances that are oriented towards the sidewalk (rather than towards parking).

Residential development: Within the study area, over 1,400 units of high density residential housing are in some stage of the development process. These developments are generally located much closer to existing commercial development and are therefore expected to generate more pedestrian and bicycle trips as compared to existing residential land uses. Planned residential developments include:

- Gateway Pointe (York Avenue and W. 66th Street) – 210 apartment units
- 6725 York (Wicks site) – 242 apartment units
- 7200 France – 160 apartment units
- Aurora on France (6500 France) – 188 senior/transitional housing units
- Byerly's/Think Bank development – 234 units
- Continental Gardens (York Avenue) -100 senior housing units
- Titus/Eberhardt development (W. 66th Street and Xerxes Avenue) – 275 units
- Beacon Housing – 39 units for homeless young adults

Retail/restaurant development: At this time, there is less commercial development planned than residential development. Several of the residential developments listed above will be mixed-use and will include restaurant and/or retail spaces. The only stand-alone commercial development planned at this time is the Bank of America redevelopment at France Avenue and W. 69th Street. New commercial development is expected to attract pedestrian and bicycle traffic.

In addition, the existing commercial land uses are expected to generate additional pedestrian and bicycle trips as residential development occurs in close proximity to existing retail and restaurant land uses. It is also possible that residents of the new units (particularly apartment units, as people renting typically have more flexibility in housing location than people who own their homes) will move to the area to be closer to jobs in area retail and restaurants. These residents will be more likely to walk and bike to their work due to the close proximity.

Hotel development: The Southdale Hotel is currently in the development process, to be constructed at the southwest corner of York Avenue and W. 66th Street. Given the hotel's proximity to Southdale Center and Southdale Square, it is expected that this development would generate pedestrian trips. As discussed above, the hotel is unlikely to be a strong generator of bicycle trips.

Office/medical development: Fairview Southdale is expanding its Emergency Room. Southdale Medical Center is also pursuing an expansion. It is unlikely that these developments would have an impact on pedestrian and bicycle trip generation in the area.

Pedestrian and Bicycle Analysis Conclusion

Currently, the greatest pedestrian and bicycle trip generators in the area are the commercial areas located in the core of the study area (bounded by W. 66th Street, York Avenue, Hazelton Road, and France Avenue), the Southdale Transit Center, and existing high density housing. However, pedestrian and bicycle use in the area is currently low due for several reasons. Current development patterns are auto-oriented, with parking fronting the street in most cases and large block sizes that add travel time for people walking and bicycling.

Transportation infrastructure is also a barrier, as there are wide roadways and intersections with fast-moving vehicles, gaps in the pedestrian network, and a lack of bicycle facilities. Additionally, most residential land use is separated from commercial land uses, which means that people need to cover greater distances if they wish to walk or bike from their home to retail/office destinations.

Increased residential density in the study area is expected to increase pedestrian and bicycle trips. The greatest future generators are the planned residential development in the core of the study area. As the study area shifts to a mixed-use development pattern, the shorter distances between residential and commercial land uses will make it easier for residents to walk and bike for transportation within the study area. It is expected that future residential and existing retail land uses will generate more pedestrian and bicycle trips than today. Hotel development will also generate additional pedestrian and bicycle trips.

The Southdale Working Group is continuing to develop a framework plan for the area based on a set of "Working Principles and Supporting Questions". One of the principals identified with Phase 1 was "Foster a logical, safe, inviting and expansive public realm facilitating movement of people within and to the district" the identified attribute developed in Phase 2 for this principal is "Improved and new pedestrian connections, new street grid".

Figure 16 – Existing Pedestrian and Bicycle Generators

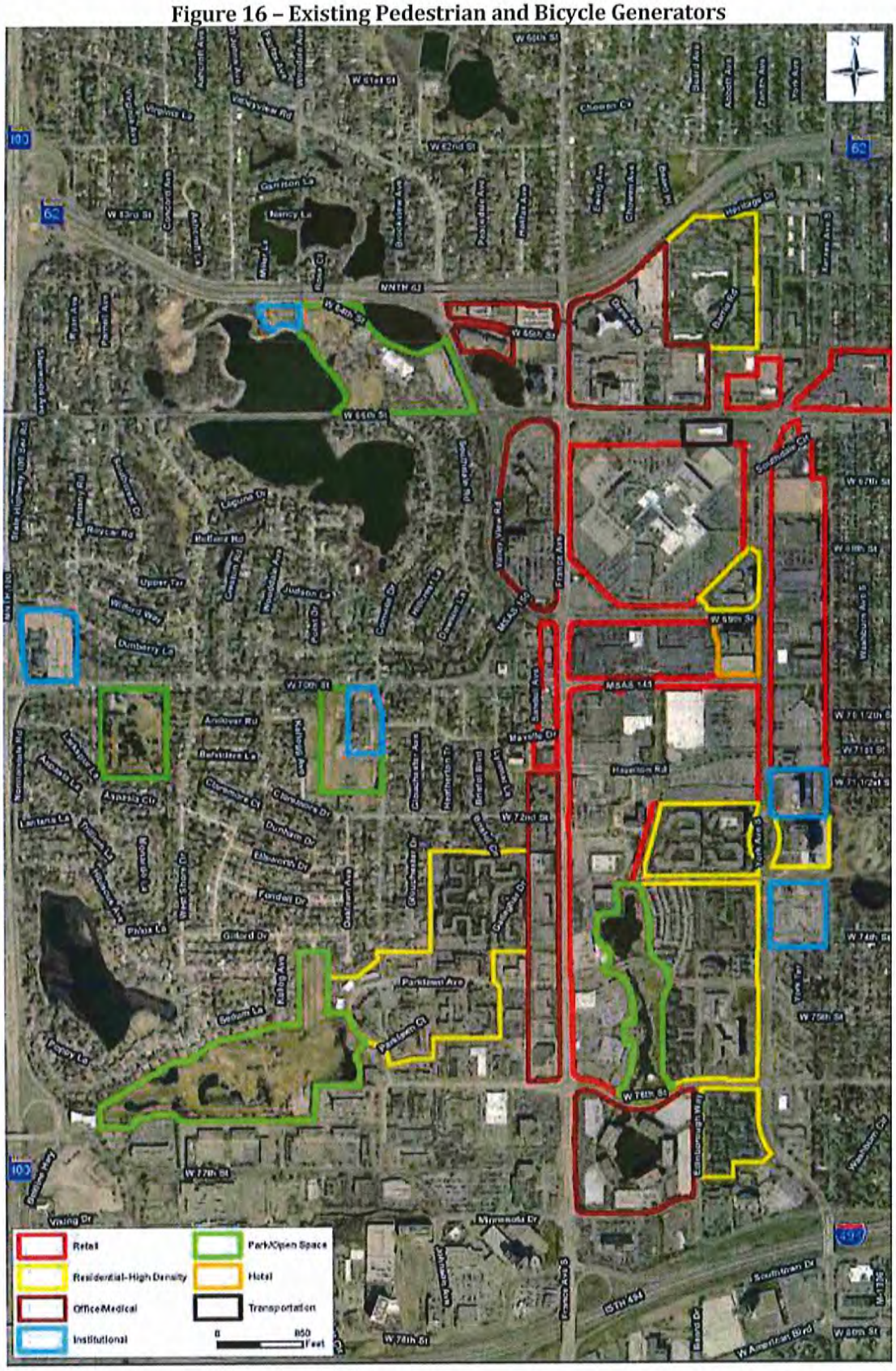
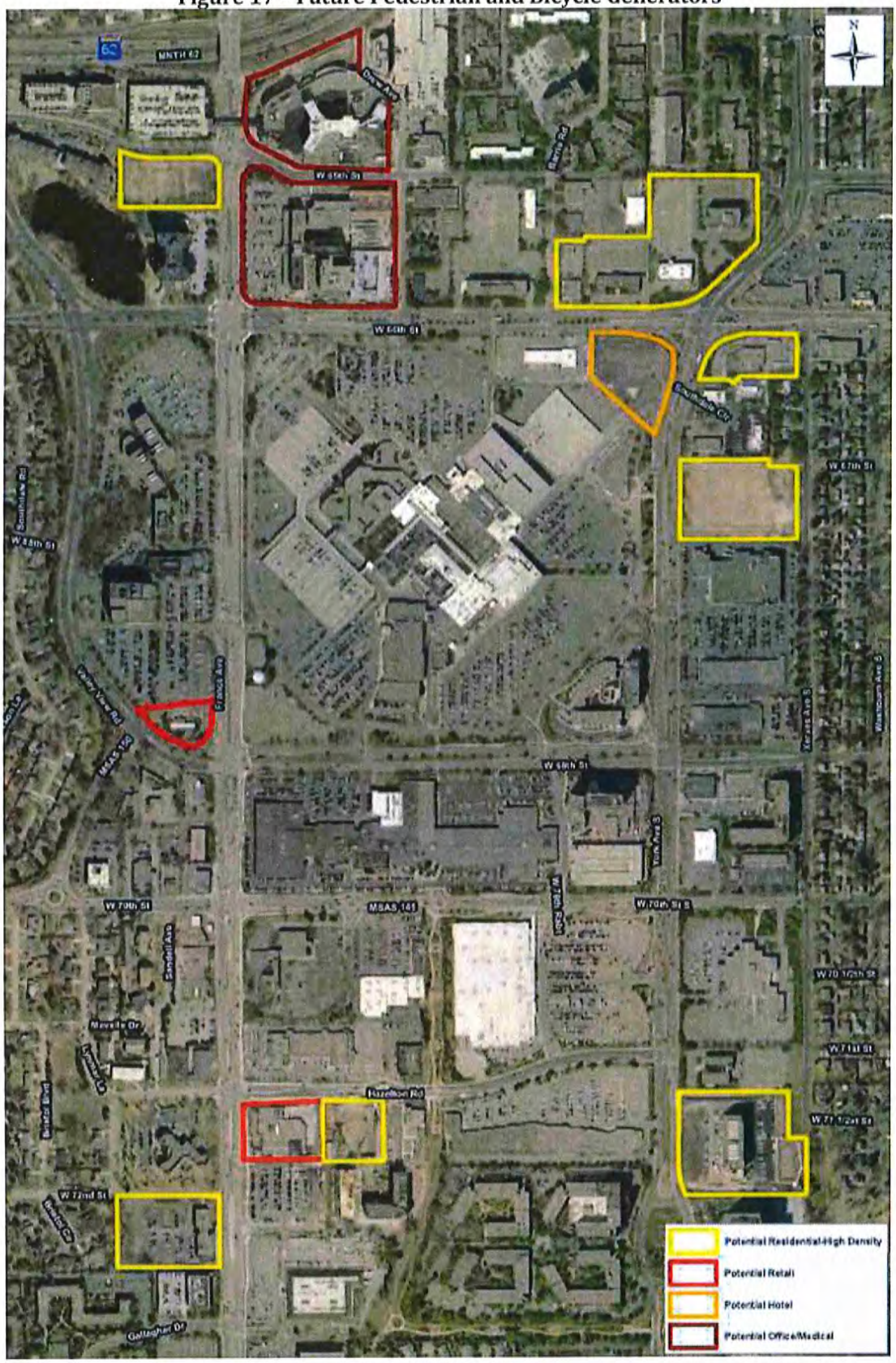


Figure 17 – Future Pedestrian and Bicycle Generators



CONCLUSIONS / RECOMMENDATIONS

Based on the analysis and modeling for both the 2040 base scenario and 2040 high density scenario, issues with some intersections and/or movements will exist if improvements are not made to the transportation system.

As development is proposed in the Southdale Area detailed analysis of adjacent intersections should be conducted to document the need for specific improvements at the critical intersections. These intersections at a minimum would include:

2040 Base Conditions Scenario

1. France Avenue at TH 62 Ramps
2. France Avenue at W. 65th Street
3. France Avenue at W. 66th Street
4. France Avenue at W. 69th Street
5. France Avenue at W. 70th Street
6. France Avenue at W. 76th Street
7. France Avenue at Minnesota Drive
8. York Avenue at W. 69th Street
9. York Avenue at Parklawn Avenue
10. York Avenue at W. 78th Street
11. Hazelton Road at Target Access
12. Minnesota Dr at Edinborough Way

2040 High Density Scenario

1. France Avenue at TH 62 Ramps
2. France Avenue at W. 65th Street
3. France Avenue at W. 66th Street
4. France Avenue at W. 69th Street
5. France Avenue at W. 70th Street
6. France Avenue at Hazelton Road
7. France Avenue at Gallagher Drive
8. France Avenue at Parklawn Ave
9. France Avenue at W. 76th Street
10. France Avenue at Minnesota Drive
11. Xerxes Ave at TH 62 North Ramp
12. York Avenue at W. 69th Street
13. York Avenue at Hazelton Road
14. York Avenue at Parklawn Avenue
15. York Avenue at W. 78th Street
16. Valley View Road at W. 69th Street
17. Hazelton Road at Target Access
18. Edinborough Way at W. 76th Street
19. Minnesota Dr at Edinborough Way
20. Minnesota Drive at W. 77th Street

Most of the traffic issues documented in this Study can be addressed by relatively low-cost improvements such as:

- Signal Timing;
- Improvements to turn lanes geometry, or:
- Installation of traffic signals or roundabouts at stop controlled intersections;

With the current proposed development and possible increased development scenario, in the future more trips are expected by all modes of transportation. If a greater proportion of these trips are walking, bicycling, and/or transit trips, it will reduce the pressure on the roadway system. The study area has potential to be a place where residents can meet many of their transportation needs by walking, bicycling, and using transit. Below are general recommendations that the City could pursue to encourage walking and bicycling in the Southdale area:

1. Enhance and expand the pedestrian and bicycle network in the study area:

    - Develop a dense web of pedestrian connections so people can access destinations more directly (rather than walking out of their way to follow existing pedestrian connections)
    - Identify, enhance, and develop key pedestrian and bicycle routes between residential and commercial land uses
    - Plan and implement a low-stress bicycle network to expand upon the successful Edina Promenade
    - Address challenging pedestrian and bicycle crossings within the study area: work to shorten crossing distances, remove free-right turns, and improve key pedestrian crossings at currently un-signalized locations
    - Improve and/or develop pedestrian timing plans in coordination with vehicle signal timing plans

2. Balance the needs of different transportation modes: Improved signal timing, adding turn lanes or widening roadways may improve conditions for people driving, but will make crossings more challenging for people walking and bicycling. It will be important to consider impacts to people walking and bicycling as the city considers improvements to the roadway system.

3. Work with residential and commercial developers to improve bicycle and pedestrian conditions in the study area:

    - Integrate new or enhanced walking and bicycling facilities into or adjacent to development
    - Develop building designs and site plans that are pedestrian scale: including active uses on ground floors and entrances oriented towards the sidewalk

4. Work with owners of existing large commercial properties (for example, Southdale Center and the Galleria) to develop pedestrian and bicycle routes through their development.

5. Coordinate with "Southdale Working Group" to implement the identified Working Principals and associated Attributes.

CITY OF EDINA

4801 West 50th Street
Edina, MN 55424
www.edinamn.gov

Date: September 27, 2017

Agenda Item #: V.B.

To: Planning Commission

Item Type:
Report and Recommendation

From: Cary Teague, Community Development Director

Item Activity:
Action

Subject: Comprehensive Plan Amendment, Rezoning, CUP and Variances - 4404 & 4416 Valley View Road, and 6108, 6112, 6116 and 6120 Kellogg Avenue

---

ACTION REQUESTED:
Recommend the City Council approve the requests.

INTRODUCTION:
See attached staff report.

ATTACHMENTS:

Staff Report

STAFF REPORT

Date: September 27, 2017

To: Planning Commission

From: Cary Teague, Community Development Director

Subject: Comprehensive Plan Amendment & Rezoning – 4404 & 4416 Valley View Road, and 6108, 6112, 6116 and 6120 Kellogg Avenue

Information / Background:

Edina Flats LLC is requesting a Comprehensive Plan Amendment, & Rezoning to build 18 units of owner occupied housing at 4404 & 4416 Valley View Road, and 6108, 6112, 6116 and 6120 Kellogg Avenue. (See site locations on pages A1-A6.) The Comprehensive Plan Amendment is required to expand the Neighborhood Commercial District to include 6108, 6112, 6116 and 6120 Kellogg Avenue. The Rezoning is from R-1, PCD-4 and APD to PCD-1, Planned Commercial Development. (See applicant narrative and plans on pages A26-A45.)

The purpose of the request is to re-develop the city owned property at 4416 Valley View Road (the vacant property on the corner of Kellogg), the row of parking for the commercial development to the west, the vacant parcel at 6120 Kellogg and the three single-family home parcels at 6116, 6112 and 6108 Kellogg. (See page A1a.) This portion of the development would include a 3-story condo building with six units on the corner, and three 2-story condo/townhome buildings to the north. (See page A32.)

Additionally, the property at 4404 Valley View Road would be re-developed with a four-unit, two story condo building. The existing structure would be removed. (See page A32.)

The property is 1.27 acres in size. The density proposed in the project would be 14 units per acre. (18 units total.) This site is guided in the Comprehensive Plan as NN, Neighborhood Node, which allows up to 30 units per acre in this area. (See language from the Comprehensive Plan/Small Area Plan on pages A7-A20.)

The proposal is generally consistent with the Comprehensive Plan/Small Area Plan in terms of height and density proposed; however, the proposal does require an amendment to re-guide and re-zone the single family homes to NN, Neighborhood Node and PCD-1, Planned

Commercial District. (See page A.) The multi-family residential units would be a conditionally permitted use within the existing PCD-1, Planned Commercial District Zoning District. Variances would be required for the setbacks that are proposed, and the height of the 2-story buildings.

The applicant and the property owner to the west, Noonan Properties, did go through a sketch plan review for the proposed project. (See sketch plans on pages A21-A25) The following changes were made to address issues raised during the sketch plan reviews:

- Reduced the height from 3 stories to 2 stories adjacent to single-family homes.
- Increased the setback and green space along Valley View Road, Oaklawn and Kellogg.
- Increased the setbacks on Oaklawn and Kellogg to better fit the neighborhood.
- Enhanced the architecture.
- Enhanced the pedestrian experience.
- Enhanced Landscaping.
- Eliminated the Commercial building on the Kellogg intersection.

Noonan Properties would sell the applicant their land if this project is approved by the City Council.

To accommodate the request the following is required:

- A Comprehensive Plan Amendment to expand the NN, Neighborhood Node District to include 6108, 6112, 6116 and 6120 Kellogg Avenue;
- A Rezoning from R-1, PCD-4 and APD to PCD-1, Planned Commercial Development, Preliminary Development Plan with Variances; and
- Conditional Use Permit to allow multi-family residential use.

SOUTHDALE AREA DEVELOPMENT PRINCIPLES

The Southdale Area Development Principles were shared with the applicant; and they have responded. (See Pages A28a-A28h.) The site size is limiting in regard to creating significant public spaces; however the applicant is providing opportunities to move pedestrians through the project by the boulevard style sidewalks. Small public spaces are proposed on the corners of Valley View and Kellogg and Oaklawn. (See page A32.)

SUPPORTING INFORMATION

Surrounding Land Uses

Northerly:	Single-family homes; zoned R-1, Single Dwelling Unit District and guided low density residential.
Easterly:	Single-family homes and a commercial building; zoned PCD-1, Planned Commercial District and guided NN, Neighborhood Node.
Southerly:	New Horizon Day Care; zoned PCD-1, Planned Commercial District; and guided NN, Neighborhood Node.
Westerly:	Commercial mixed use building; zoned PCD-1, Planned Commercial District and guided NN, Neighborhood Node

Existing Site Features

The subject properties total 1.27 acres in size, and include a vacant lot, a parking lot, single family homes and a commercial building. (See page A1a.)

Planning

Guide Plan designation:	NN, Neighborhood Node and LD, Low Density Residential
Zoning:	R-1, Single-Dwelling Unit District, PCD-1, Planned Commercial District, PCD-4, Planned Commercial District and APD, Automobile Parking District.

Parking

Each unit would have two enclosed parking spaces. Limited parking space would be available in front of the garages, and on the street. The commercial property to the west would still maintain enough parking spaces, despite the loss of parking. Based on the square footage of the commercial/office building 71 parking stalls are required; the resulting site would contain 82 stalls.

Site Circulation

Access to all of the housing units would be off of Valley View Road, and not on the local residential streets, Oaklawn and Kellogg. (See page A32.) Underground parking would be provided below the 6 and 4 unit buildings on Valley View Road. The proposal includes boulevard style sidewalks along Valley View Road and Kellogg Avenue. (See page A32.) Staff recommends adding a sidewalk on Oaklawn Avenue.

Landscaping

Based on the perimeter of the site 34 over-story trees would be required. Currently, there are only a few trees on the site, and very little landscaping. The applicant is proposing 45 over-story trees around the perimeter of the site. A full complement of under-story shrubs and bushes (226) are also proposed. (See landscape plan on pages A42-A45.)

Grading/Drainage/Utilities

The city engineer has reviewed the proposed plans and found them to be acceptable subject to the comments and conditions outlined on the attached page A46-A47. A developer's agreement would be required for the construction of the proposed sidewalks within the right-of-way. Any approvals of this project would be subject to review and approval of the Minnehaha Creek Watershed Districts, as they are the City's review authority over the grading of the site.

Building/Building Material

The building materials would be a variety combination of stone, stucco, composite siding and glass. (See renderings on pages A29-A31.) The applicant will have a materials board for the Planning Commission to review at the Planning Commission meeting.

Height

The proposed height is 3 and 2-two stories tall consistent with the Comprehensive Plan. (See pages A29-A31.) Height of the two story buildings would be 30 feet to the top of the gable, 24-5 feet to the mid-point of the roof. The three-story building would be 36 feet tall. Variances are required, but the proposed heights are generally consistent with the Comprehensive Plan.

Living Streets/Multi-Modal Consideration

Sec. 36-1274. - Sidewalks, trails and bicycle facilities.

(a) In order to promote and provide safe and effective sidewalks and trails in the city and encourage the use of bicycles for recreation and transportation, the following improvements are required, as a condition of approval, on developments requiring the approval of a final development plan or the issuance of a Conditional Use Permit pursuant to Article V of this Chapter:

(1) It is the policy of the city to require the construction of sidewalks and trails wherever feasible so as to encourage pedestrian and bicycle connectivity throughout the city. Therefore, developments shall provide sidewalks and trails which adjoin the applicant's property:

a. In locations shown on the city's sidewalk and trail plan; and

b. In other locations where the council finds that the provision of such sidewalks and trails enhance public access to mass transit facilities or connections to other existing or planned sidewalks, trails or public facilities.

(2) Developments shall provide sidewalks between building entrances and sidewalks or trails which exist or which will be constructed pursuant to this section.

(3) Developments shall provide direct sidewalk and trail connections with adjoining properties where appropriate.

(4) Developments must provide direct sidewalk and trail connections to transit stations or transit stops adjoining the property.

(5) Design standards for sidewalks and trails shall be prescribed by the engineer.

(6) Nonresidential developments having an off-street automobile parking requirement of 20 or more spaces must provide off-street bicycle parking spaces where bicycles may be parked and secured from theft by their owners. The minimum number of bicycle parking spaces required shall be five percent of the automobile parking space requirement. The design and placement of bicycle parking spaces and bicycle racks used to secure bicycles shall be subject to the approval of the city engineer. Whenever possible, bicycle parking spaces shall be located within 50 feet of a public entrance to a principal building.

(b) The expense of the improvements set forth in subsection (a) of this section shall be borne by the applicant.

The applicant would be installing boulevard sidewalks along Valley View Road and Kellogg Avenue to provide a more safe and comfortable walking experience. (See page A32.)

Conditional Use Permit

Per Section 36-305, the City Council shall not grant a Conditional Use Permit unless it finds that the establishment, maintenance and operation of the use:

1. Does not have an undue adverse impact on governmental facilities, utilities, services or existing or proposed improvements;

The existing utilities are adequate to serve the proposed use. A traffic study was done by Wenck Associates, which concludes that the existing roadways can support the proposed development. (See the traffic study on pages A48–A69.)

2. Will generate traffic within the capacity of the streets serving the property;

As mentioned, Wenck conducted a traffic study to determine the impact of the proposed development on the existing roadways. As demonstrated on page A66 of the study, the level of service on the adjacent roadways and intersections would remain the same.

3. Does not have an undue adverse impact on the public health, safety or welfare;

This site is located in the NN, Neighborhood Node, which is described in the Comprehensive Plan as a small to moderate-scale commercial residential or mixed use area. The proposed residential development is moderate in scale at a density of 14 units an acre. The NN allows up to 30 units per acre. The proposal provides a "graceful transition" with a two-story residential building closest to the single-family homes to the north and east.

4. Will not impede the normal and orderly development and improvement of other property in the vicinity;

The development fits in well on the site. It would be located within an under-utilized parking lot, the vacant city property, and a run-down vacant house. The sizes of the proposed buildings are generally consistent with the Comprehensive Plan.

5. Conforms to the applicable restrictions and special conditions of the district in which it is located as imposed by this Section; and

With the exception of the variances that are requested, the plans meet all city code provisions and are consistent with the Comprehensive Plan. As a conditionally permitted use within the PCD-1 District, which is primarily a commercial retail zoning district; a residential use should be integrated into the development where it is located.

As proposed, the applicant is proposing to add pedestrian walkways along Kellogg and Valley View to provide connections to the retail uses to the west. These will also provide connections from the existing single-family neighborhood to the north and east.

6. Is consistent with the Comprehensive Plan.

As mentioned previously, the proposed use and density of the proposal is consistent with the Comprehensive Plan. This site is located in the NN, Neighborhood Node, which is described in the Comprehensive Plan as a small to moderate-scale commercial residential or mixed use area. The proposed residential development is moderate in scale at a density of 14 units an acre. The NN allows up to 30 units per acre. The proposal provides a "graceful transition" with a two-story residential building closest to the single-family homes to the north and east. The height of the 2-story units would be 30 feet to the roof line; consistent with the maximum height allowed in the R-1 District.

Compliance Table

As demonstrated on the following table, the proposed development would require variances for height and building setbacks.

	City Standard (PCD-1)	Proposed
Front – Kellogg Avenue Front – Valley View Road Front – Oaklawn Avenue Side	35 feet 35 feet 35 feet 25 feet	***9 feet**** ***23 & 5 feet**** ***16 feet**** ***6 & 5 feet****
Building Height	2-stories or 24 feet	2-***3*** stories ***& 30-36 feet*****
Floor Area Ratio (FAR)	1.0	.63
Density	30 units per acre (19 units)	14
Parking	1.5 stalls/ unit - 1,500 s.f.+ (14)=21 1 stall/unit under - 1,500 s.f. (4)=4 25 required	36

***Variance required**

** ***Variance required but story maximum is consistent with the VV/Wooddale Small Area Plan City Code now measures height to the roof line.***

Variance – Building Setbacks & Height

Per the compliance table above, variances are requested for the building setbacks and height. The PCD zoning district however, encourages buildings to be brought up to the street to create a pedestrian friendly environment, which is what the proposed project is attempting to accomplish.

Per the Zoning Ordinance, a variance should not be granted unless it is found that the enforcement of the Ordinance would cause practical difficulties in complying with the Zoning Ordinance and that the use is reasonable. As demonstrated below, staff believes the proposal does meet the variance standards, when applying the three conditions:

Minnesota Statues and Edina Ordinances require that the following conditions must be satisfied affirmatively. The Proposed Variance will:

1) Relieve practical difficulties that prevent a reasonable use from complying with ordinance requirements.

Reasonable use does not mean that the applicant must show the land cannot be put to any reasonable use without the variance. Rather, the applicant must show that there are practical difficulties in complying with the code and that the proposed use is reasonable. "Practical difficulties" may include functional and aesthetic concerns.

Staff believes the proposed variances are reasonable. The building could be located on the site to meet the required setback; however that would result in parking and drive aisles in front of the buildings. Chapter 36 of the Zoning Ordinance suggests that the City Council will consider exceptions to the setback requirements if the use creates an active pedestrian and streetscape environment. The applicant is proposing sidewalks along Valley View and Wooddale. Staff recommends a sidewalk on Oaklawn as well. These sidewalks would provide an active pedestrian and streetscape environment, which would provide opportunity for residents to the north and east to move through the development to connect to the commercial development to the west. (See page A32.)

The depth of the lots and the triangular shape of the corner lots create the practical difficulty in developing these properties with multifamily residential or commercial uses, without having the parking areas in front of the buildings. The proposed parking area and garages face the commercial district to the west and not the single-family homes to the east.

The way building height is measured was changed in 2014. The City Code requires building height to be measured to the roof line (top of the roof). When the 2008 Comprehensive Plan established the current 2-story and 24-foot height limitation, the measurement was to the mid-point of a pitched roof. The definition of building height now measures height to the top of the ridge-line. The height limitation of 24 feet is not reasonable given the way the City now measures height. The mid-point of the proposed two story buildings are 24-5 feet,

however the ridge line is 30 feet. The proposed height is consistent with the maximum height of a single-family home which was the intent of the 24-foot limit. Staff would recommend that the small area plan be revised to allow two-stories and 30 feet based on the way building height is now measured.

2) ***There are circumstances that are unique to the property, not common to every similarly zoned property, and that are not self-created?***

Yes. The site is unique in the PCD-1 zoning district, given the lot depths and triangular shape at the corners. These conditions were not created by the applicant. The City encourages buildings to be brought up to the street, rather than having large parking lots in front of the building from the adjacent streets.

3) ***Will the variance alter the essential character of the neighborhood?***

No. The proposed buildings have been designed to fit the neighborhood and are consistent with the Valley View/Wooddale small area plan. The pitched roof buildings have been designed to blend in with the single-family homes to the north and east. The proposed development would add to the neighborhood and create some vibrancy at a currently predominantly vacant area.

Comprehensive Guide Plan Amendment

To accommodate the request, a Comprehensive Plan amendment is requested to expand the NN, Neighborhood Node District to 6108, 6112, 6116 and 6120 Kellogg Avenue.

The NN, Neighborhood Node allows up to 30 units per acre. The proposed density of 14 units per acre is well under the maximum allowed. The map on the following page shows how the Comprehensive Plan/Valley View Wooddale Small Area Plan would be amended to accommodate the change in designation.

NN, Neighborhood Node (2 stories & 30 feet)

PRIMARY ISSUES/STAFF RECOMMENDATION

Primary Issues

- **Is the Comprehensive Plan Amendment to expand the boundary reasonable?**

Yes. Staff believes the proposal is reasonable for the following reasons:

1. The proposed density is low. The density of the project is half of what would be allowed in the NN, Neighborhood Node district. The four single-family home lots are being replaced with three, three unit buildings.

2. The units would be two-stories at 30 feet tall in height to match the maximum height allowed in the R-1, Single-family neighborhood to the north and east. The small area plan suggests graceful transitions to the single family homes. (See pages A10-A11.) By designing the homes to be two stories with pitched roofs and all the parking in back facing the commercial area, the applicant has created a graceful transition.

3. Additional density would support the retail uses in the district.

4. The proposed project would meet the following goals and policies of the Comprehensive Plan and Valley View Wooddale Small Area Plan:

a. Movement Patterns.
   - Provide sidewalks along primary streets and connections to adjacent neighborhoods along secondary streets or walkways.
   - Provide pedestrian amenities, such as wide sidewalks, street trees, pedestrian-scale lighting, and street furnishings (benches, trash receptacles, etc.)
   - A Pedestrian-Friendly Environment. Improving the auto-oriented design pattern discussed above under "Issues" will call for guidelines that change the relationship between parking, pedestrian movement and building placement.

b. Encourage infill/redevelopment opportunities that optimize use of City infrastructure and that complement area, neighborhood, and/or corridor context and character.

c. Support and enhance commercial areas that serve the neighborhoods, the City, and the larger region.

d. Increase mixed-use development where supported by adequate infrastructure to minimize traffic congestion, support transit, and diversify the tax base.

e. Increase pedestrian and bicycling opportunities and connections between neighborhoods, and with other communities, to improve transportation infrastructure and reduce dependence on the car.

f. Buildings should be placed in appropriate proximity to streets creating pedestrian scale. Buildings "step down" at boundaries with lower-density districts and upper stories "step back" from street.

g. Building Placement and Design. Where appropriate, building facades should form a consistent street wall that helps to define the street and enhance the pedestrian environment. On existing auto-oriented development sites, encourage placement of liner buildings close to the street to encourage pedestrian movement.

   i. Locate prominent buildings to visually define corners and screen parking lots.
   ii. Locate building entries and storefronts to face the primary street, in addition to any entries oriented towards parking areas.
   iii. Encourage storefront design of mixed-use buildings at ground floor level, with windows and doors along at least 50% of the front façade.
   iv. Encourage or require placement of surface parking to the rear or side of buildings, rather than between buildings and the street.

h. Height Limits Near the Center of the Neighborhood Node. North of Valley View Road, building heights may be up to three stories, not to exceed 36 feet. South of Valley View Road building heights may be up to four stories, not to exceed 48 feet.

i. Graceful Transitions to Surrounding Neighborhood. At certain specified locations at the perimeter of the Neighborhood Node where graceful transitions to single family areas are important (as specified on the Building Height Limits Plan), the height of new buildings may be up to two stories.

j. Establish universally accessible sidewalks along all edges of all spaces.

k. Plant trees along the edges of all streets and spaces to provide shade and protection for pedestrians moving next to and in and out of buildings.

l. Gentle Transition from Node to Neighborhood. Whether the site is used for commercial or residential development, landscaping, screening and building height should be designed to help the building serve as an end cap for the residential block next to Valley View Road. The building height limit in this location is two stories.

m. Encourage Underground Parking. Residents' parking should be located under the buildings to the extent allowed by market conditions.

n. Commercial parking should be behind or along-side the buildings and be visually buffered by plantings so as to encourage an active streetscape.

- **Is the Rezoning to PCD-1 reasonable?**

Yes. Staff believes the proposed Rezoning is reasonable for the following reasons:

1. Zoning would be consistent with adjacent Zoning. The PCD-1 Zoning would be consistent over the majority of the NN, Neighborhood Node District. (See Zoning Map on page A6.)

2. The existing roadways would support the project. Wenck conducted a traffic impact study based on the proposed development, and concluded that the existing traffic generated from the project would be supported by the existing roads. (See page A66 of the traffic study.)

- **Are the Variances justified?**

Yes, staff believes the variances are justified for the following reasons:

1. The building could be located on the site to meet the required setback; however that would result in parking and drive aisles in front of the buildings. Chapter 36 of the Zoning Ordinance suggests that the City Council will consider exceptions to the setback requirements if the use creates an active pedestrian and streetscape environment; which is proposed.

2. As demonstrated on pages 7-8 of this report, the proposal meets the variance criteria.

3. The building heights of the two-story buildings are consistent with the maximum height of single-family residential home. The way building height is measured was recently changed.

The definition of building height is now to the top of the ridge-line. The suggested height limitation of 24 feet was based on measuring height to the mid-point of a pitched roof, when the Comprehensive Plan established the two-story & 24-foot height limitation. The mid-point of the proposed two story buildings are 24 feet, however the ridge line is 30 feet. The proposed height is consistent with the maximum height of a single-family home which was the intent of the 24-foot limit. Staff would recommend that the small area plan be revised to allow two-stories and 30 feet based on the way building height is now measured. The plans could be revised to have flat roofs, however, that would not be consistent with a single-family home neighborhood.

Staff Recommendation

Comprehensive Plan Amendment

Recommend that the City Council approve the requests for Comprehensive Plan Amendments as follows:

The NN, Neighborhood Node is expanded to include 6108, 6112, 6116 and 6120 Kellogg Avenue. The height maximum for a two-story structure is increased to 30 feet to the ridge line.

Approval is subject to the following findings:

1. The density of the project is half of what would be allowed in the NN, Neighborhood Node district. The four single-family home lots are being replaced with three, three unit buildings.

2. The units would be two-stories and 30 feet tall in height to match the maximum height allowed in the R-1, Single-family neighborhood to the north and east.

3. The proposed project would meet the following goals and policies of the Comprehensive Plan and Valley View Wooddale Small Area Plan:

   a. Movement Patterns.
      - Provide sidewalks along primary streets and connections to adjacent neighborhoods along secondary streets or walkways.
      - Provide pedestrian amenities, such as wide sidewalks, street trees, pedestrian-scale lighting, and street furnishings (benches, trash receptacles, etc.)
      - A Pedestrian-Friendly Environment. Improving the auto-oriented design pattern discussed above under "Issues" will call for guidelines that change the relationship between parking, pedestrian movement and building placement.

   b. Encourage infill/redevelopment opportunities that optimize use of City infrastructure and that complement area, neighborhood, and/or corridor context and character.

c. Support and enhance commercial areas that serve the neighborhoods, the City, and the larger region.

d. Increase mixed-use development where supported by adequate infrastructure to minimize traffic congestion, support transit, and diversify the tax base.

e. Increase pedestrian and bicycling opportunities and connections between neighborhoods, and with other communities, to improve transportation infrastructure and reduce dependence on the car.

f. Buildings should be placed in appropriate proximity to streets creating pedestrian scale. Buildings "step down" at boundaries with lower-density districts and upper stories "step back" from street.

g. Building Placement and Design. Where appropriate, building facades should form a consistent street wall that helps to define the street and enhance the pedestrian environment. On existing auto-oriented development sites, encourage placement of liner buildings close to the street to encourage pedestrian movement.

   v. Locate prominent buildings to visually define corners and screen parking lots.
   vi. Locate building entries and storefronts to face the primary street, in addition to any entries oriented towards parking areas.
   vii. Encourage storefront design of mixed-use buildings at ground floor level, with windows and doors along at least 50% of the front façade.
   viii. Encourage or require placement of surface parking to the rear or side of buildings, rather than between buildings and the street.

h. Height limits near the center of the Neighborhood Node. North of Valley View Road, building heights may be up to three stories, not to exceed 36 feet. South of Valley View Road building heights may be up to four stories, not to exceed 48 feet.

i. Graceful Transitions to Surrounding Neighborhood. At certain specified locations at the perimeter of the Neighborhood Node where graceful transitions to single family areas are important (as specified on the Building Height Limits Plan), the height of new buildings may be up to two stories, not to exceed 24 feet.

j. Establish universally accessible sidewalks along all edges of all spaces.

k. Plant trees along the edges of all streets and spaces to provide shade and protection for pedestrians moving next to and in and out of buildings.

l. Gentle Transition from Node to Neighborhood. Whether the site is used for commercial or residential development, landscaping, screening and building height should be designed to help the building serve as an end cap for the residential block next to Valley View Road. The building height limit in this location is two stories.

m. Encourage Underground Parking. Residents' parking should be located under the buildings to the extent allowed by market conditions.

n. Commercial parking should be behind or along-side the buildings and be visually buffered by plantings so as to encourage an active streetscape.

Preliminary Rezoning to PCD-1, Planned Commercial District & Preliminary Development with a Conditional Use Permit and Variances

Recommend that the City Council approve the Preliminary Rezoning from R-1, PCD-4 and APD to PCD-1, Planned Commercial Development, Preliminary Development Plan and a Conditional Use Permit with Variances at 4404 & 4416 Valley View Road, and 6108, 6112, 6116 and 6120 Kellogg Avenue. The Variances are as follows:

1. Building height from 2 stories and 24 feet to 2 stories and 30 feet, and 3 stories and 36 feet on the corner of Valley View and Wooddale.
2. Front setback on Kellogg from 35 feet to 9 feet.
3. Front setback on Valley View Road from 35 feet to 23 & 5 feet.
4. Side setback on Oaklawn from 25 feet to 6 and 5 feet.

Approval is subject to the following findings:

1. Zoning would be consistent with the predominant Zoning District (PCD-1) in this area. The PCD-1 Zoning would be consistent over the majority of the NN, Neighborhood Node District.

2. The existing roadways would support the project. Wenck conducted a traffic impact study based on the proposed development, and concluded that the existing traffic generated from the project would be supported by the existing roads.

3. The proposed uses are consistent with the Comprehensive Plan.

4. The proposal meets the Conditional Use Permit Standards of Chapter 36.

5. The findings for the height and setback variances are met. The practical difficulty is the unique shape of the lot and lack of lot depth. Meeting the setback requirements would result in the parking and garages to be located in the front of the buildings.

6. With the exception of the NN area expansion, the project is consistent with the Valley View and Wooddale Small Area Plan.

Approval is subject to the following Conditions:

1. The Final Development Plans must be consistent with the Preliminary Development Plans dated August 25, 2017, and the materials board as presented to the Planning Commission.

2. The Final Landscape Plan must meet all minimum landscaping requirements per Chapter 36 of the Zoning Ordinance. A performance bond, letter-of-credit, or cash deposit must be submitted for one and one-half times the cost amount for completing the required landscaping, screening, or erosion control measures at the time of any building permit. The property owner is responsible for replacing any required landscaping that dies after the project is built.

3. Compliance with all of the conditions outlined in the city engineer's memo dated September 20, 2017; including a Developer's Agreement or Site Improvement Performance Agreement, vacation of existing easements if needed, construction of a boulevard style sidewalk on Oaklawn to connect to the Valley View Road sidewalk.

4. Variances and Conditional Use Permit are subject to Final Rezoning and Final Development Plan approval by City Council.

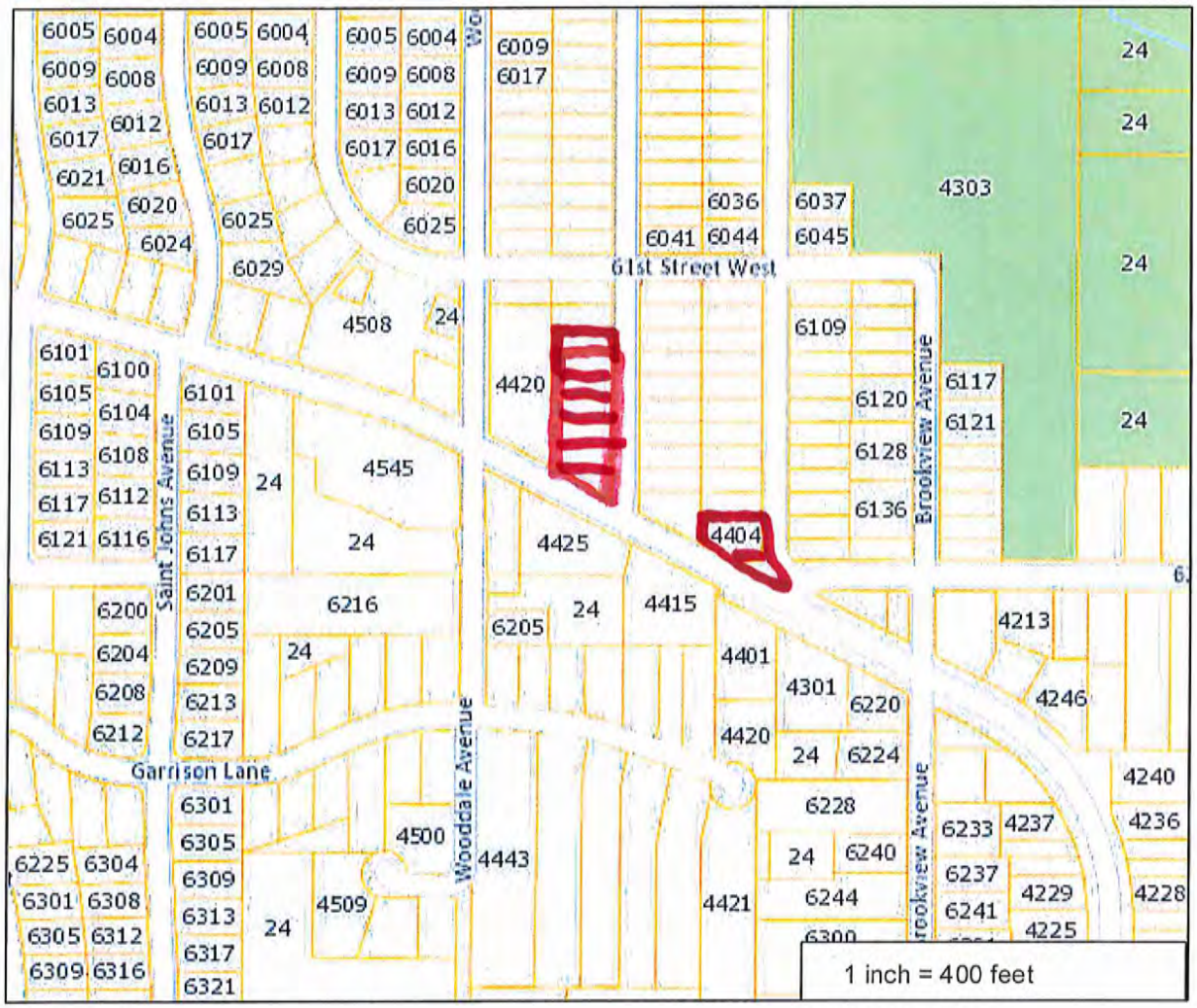
5. Submit a copy of the Minnehaha Creek Watershed District permit. The City may require revisions to the approved plans to meet the district's requirements.

6. Final Rezoning is contingent on the Metropolitan Council approval of the Comprehensive Plan Amendments.

Deadline for a city decision: December 19, 2017

Hennepin County Property Map

Date: 1/17/2017



No results

Comments:

Site Location

1 in = 188 ft

Addresses

The CITY of EDINA

Ala

N
W E
S

September 20
Map Powered by DataLink

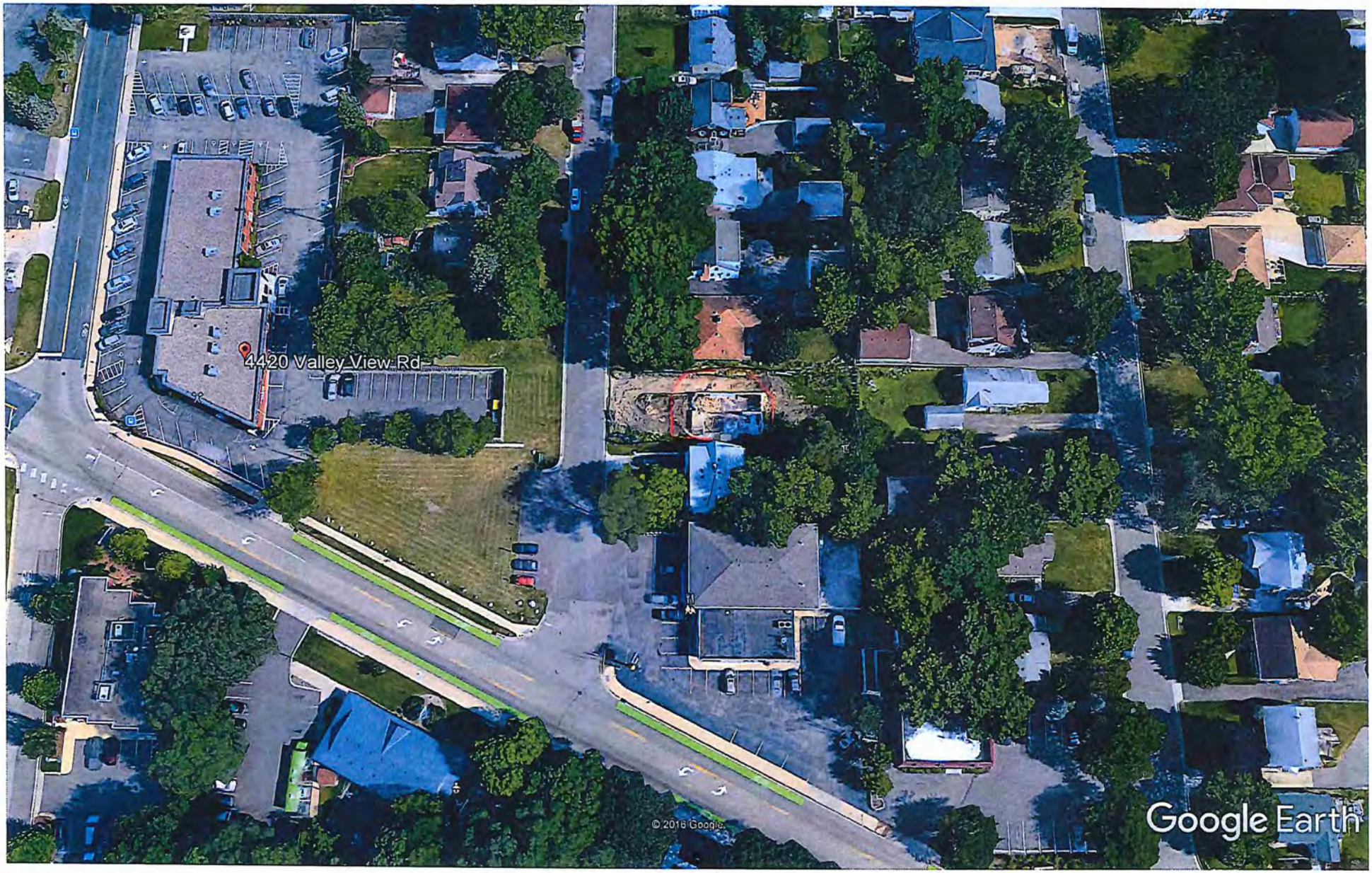
Google Earth

feet 800

meters 200

A2

A2



Google Earth

feet 400

meters 100

A3

Google Earth

feet 10
meters 3

A4

Google Earth

feet 20
meters 6

Wooddale Ave & Valley View Rd Zoning Map
City of Edina
Hennepin County, Minnesota

A6

Four Story Limit.
Up to four stories, not to exceed 48 feet

Three Story Limit.
Up to three stories, not to exceed 36 feet

Two Story Limit.
Up to two stories, not to exceed 24 feet

Two Story Transition (36' Deep)*
Height Limit: Up to two stories, not to exceed 24 feet (vertically) within the specified 36 feet in horizontal distance from property line.

Two Story Transition (60' Deep)*
Height limit: Up to two stories, not to exceed 24 feet (vertically) within the specified 60 feet in horizontal distance from property line.

** (These 'Transition' designations were created to establish a graceful transition from Neighborhood Node properties with three story limits to immediately adjacent residential areas outside the node.)*

Figure 4.3
Building Height Limits Plan

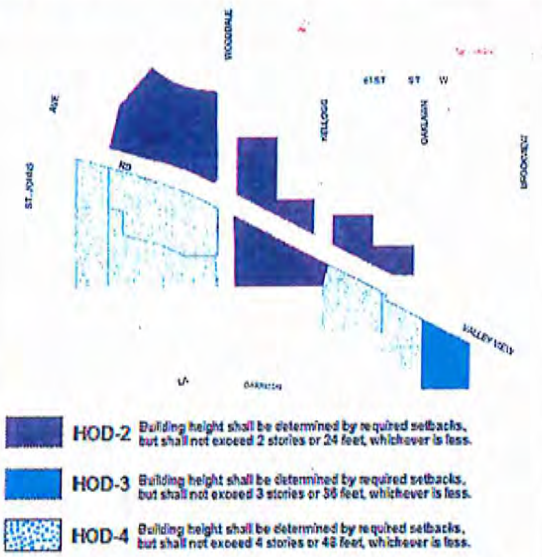


Figure 4.3-b
Existing Building Height Limits as Defined by Building Height Overlay District *(Source: Article XI, Division 2, Building Height Overlay District, and Appendix A of the Official Zoning Map.)*

Preferred Land Use Plan: Neighborhood Node (NN)

This plan introduces Neighborhood Node (NN) as a new land use category specifically for use within a portion of the Wooddale Valley View Study Area. *Also see description and Table 4A.* At shown, at Wooddale Valley View it replaces the previous Neighborhood Commercial (NC) designation that was established within this area in the 2008 *Edina Comprehensive Plan*.

NN **Neighborhood Node (NN).**

HDR **High Density Residential (HDR).** It is recommended that the apartment building located at the southwest corner of Wooddale Avenue and Valley View Road, currently planned HDR, be included in the *Neighborhood Node* classification on the Preferred Land Use Plan, as shown above.

LDR **Low Density Residential (LDR)**

LDA **Low Density Attached Residential (LDAR)**

OSP **Open Space and Parks (OSP)**

PSP **Public/Semi-Public (PSP)**

No changes are recommended to these Land Use Plan classifications from the 2008 *Edina Comprehensive Plan*. They are all located outside the boundary of the Study Area.

Figure 4.2
Preferred Land Use Plan

Similar to the Neighborhood Commercial category, Neighborhood Node:

- **Supports Neighborhood Serving Businesses.** Encourages small- to moderate-scale businesses that serve primarily the adjacent neighborhoods. Primary land uses should be retail and services, offices, studios, and institutional uses.

In addition, designation as Neighborhood Node provides:

- **Predictability for Current Landowners.** Supports current owners' efforts to invest in improvements their properties by providing a predictable planning framework for the area.
- **Flexibility for Redevelopment.** Provides greater flexibility to the development market by more explicitly encouraging the inclusion of needed housing.
- **New Gathering Space / Placemaking.** Encourages intentional integration of landscaped open space and new formal public spaces.
- **Protection of Community Values such as Scale, Walkability and Character.** A set of Development Guidelines protects the scale, walkability and character of the existing area by regulating the relationship of buildings-to-streets and the transition of building heights from node-to-neighborhood.

Table 4A - Neighborhood Node Land Use Category *(Also see Figure 4.2.)*

Land Use Category	General Description	Development Guidelines	Density Guidelines
NN Neighborhood Node	In general, small- to moderate-scale commercial, residential or mixed use buildings serving primarily the adjacent neighborhood(s). Primary uses encouraged are neighborhood-serving retail and services, offices, studios, institutional and residential.	Building footprints generally less than 20,000 square feet (or less for individual storefronts). Parking is less prominent than pedestrian features. Encourage structured parking and open space linkages where feasible; emphasize enhancement of the pedestrian environment. Encourage development to comply with the ***Wooddale Valley View Neighborhood Node Development Guidelines****: **A. Building Height Limits Plan** **B. Building Frontage Guidelines** **C. Gathering Space Guidelines** **D. Site-Specific Guidelines** **E. General Guidelines**	Maximum residential density up to 30 dwelling units per acre (du/acre). (Densities are further constrained by the parameters of the Building Height Limits Plan*). Maximum Floor Area Ratio (FAR) per zoning code.

** The **Wooddale Valley View Neighborhood Node Development Guidelines** are found on the following pages.*

1.5 Guiding Principles

These principles, which were mentioned on the previous two pages, were initially drafted by the Consultant Team during preparation of six long range scenarios following the Discovery Workshop. The principles were vetted by the community at the Dream Workshop along with scenarios and a list of public realm improvements. They were subsequently revised by the Consultant Team and approved by the SAPT. These principles steered the preparation of the goals, policies and implementation steps in Chapters 3-5 of this plan, and should be used by the City in the review of development and redevelopment proposals and plans within the Study Area.

Place. The Study Area should be recognizable as a place and visually attractive.

Gathering. There should be a places for people to spend leisure time, whether in a commercial or public locations.

Neighborhood Businesses. There should be businesses that provide services or goods desired in the neighborhood, including small offices. The amount and configuration of commercial space should be allowed to adjust in response to the market. Property owners are encouraged to keep their properties economically viable and attractive.

Housing. Sites should be allowed to transition to housing from business use in response to the changing market demands.

Height and Size of Buildings. Future buildings north of Valley View Road should be one to three stories tall depending on their location relative to nearby single family housing. Properties in sloping topography on the south side of Valley View Rd should be allowed to be four stories.

Graceful Transitions to Neighborhood. Graceful transitions should be maintained from more active areas to quieter neighborhood streets immediately beyond the node.

Parking. Most residential parking should be in attached garages or under the building. Views to commercial parking should be softened by plantings, walls or fences.

Street Edges. Buildings should be located near the street sidewalk without intervening parking. There should be trees between the curb and the sidewalk.

Circulation and Connections. Walking, bicycling or catching the bus in the Study Area should be safe and comfortable. The Study Area should be well-linked to the nearby neighborhoods.

Role of the City. The City should provide a land use plan, zoning regulations, design guidelines and public improvements that support the intentions of the property owners and the broader community while being sufficiently flexible to guide alternative ideas.

Wooddale Valley View
Neighborhood Node Development Guidelines

Wooddale Valley View
Neighborhood Node
Development
Guidelines

A. Building Height Limits Plan

The building height limits for the Neighborhood Node are indicated in Figure 4.3. Generally:

- **Height Limits Near the Center of the Neighborhood Node.** North of Valley View Road, building heights may be up to three stories, not to exceed 36 feet. South of Valley View Road building heights may be up to four stories, not to exceed 48 feet.
- **Graceful Transitions to Surrounding Neighborhood.** At certain specified locations at the perimeter of the Neighborhood Node where graceful transitions to single family areas are important (as specified on the Building Height Limits Plan), the height of new buildings may be up to two stories, not to exceed 24 feet.

Figure 4.3 Building Height Limits Plan, on the following page, defines height limits throughout the Neighborhood Node.

Figure 4.3b, also on the following page, depicts existing height limits so that comparison can be made between current policy and what is proposed.

A11

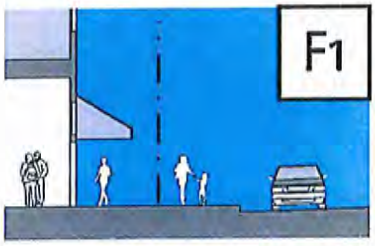
Wooddale Valley View
Neighborhood Node
Development
Guidelines

B. Building Frontage Guidelines

The location of a range of climatically-appropriate frontage types is depicted by Figure 4.4 and Figure 4.5. These guidelines do not address style or building vernacular but will ensure streets that are lined with ground level features that contribute to active, safe and walkable streets. Generally:

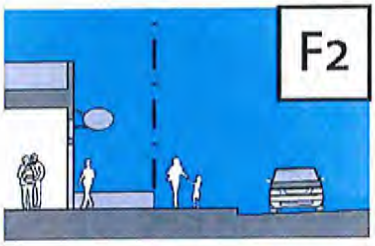
- **Building-to-Street Relationships**. *Figure 4.4 Building Frontages F1-F6* illustrates typical configurations of building to street (private-to-public) relationships and describes their varying appropriate context. These 'Frontage Types' shown are based on successful historic precedents found in many older multi-modal neighborhoods of Edina, including the Wooddale Valley View Study Area, and throughout the Twin Cities and the Midwest.
- **Node-to-Neighborhood Transitions.** The frontage types are keyed to their appropriate neighborhood context within the Neighborhood Node in *Figure 4.5 Context Areas*. The purpose of the map is to guide new development toward ground level building design that maintains visually graceful and walkable transitions from the more active areas to the quieter single-family residential neighborhood streets.

Figures 4.4 and 4.5 on the following pages present the Building Frontage Guidelines of Wooddale Valley View's Neighborhood Node Development Guidelines.



Storefront

Appropriate Context: This frontage type is for small retail or service spaces fronting public spaces in Core areas.
Configuration: There may be an exterior entrance for each leasable space, spaced relatively closely along the sidewalk. Follow City of Edina guidelines for commercial storefronts for glazing, setbacks, awnings, signage, lighting and for related outdoor commercial uses such as sidewalk cafes.



Doorway (At-Grade)

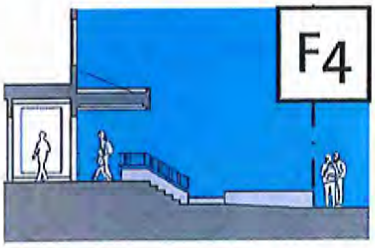
Appropriate Context: This frontage type is for smaller commercial spaces in commercial or mixed use buildings that front a sidewalk. This is not to be used as a substitute for Storefront, where Storefront is merited or preferred, in core areas. The Doorway has less window space because the interior use might be office rather than retail.

Configuration: The at-grade doorway may serve one or multiple interior users. If set back 6'-12', a 'door-court' provides space for bike parking, seating and greenery.

Stoop

Appropriate Context: This frontage type is primarily for single family row houses and multifamily buildings with units facing the street. They provide a good transitional frontage condition for buildings in between neighborhood and core areas.

Configuration: Exterior stairs access a sheltered or recessed area large enough for a family to stand and wait for the door to be unlocked, and for guests to stand back after ringing the doorbell. Stairs facing the street provide a social setting.

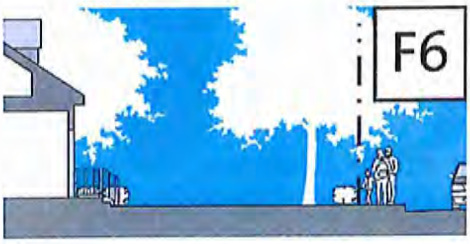


Shared Entry

Appropriate Context: This frontage type is for apartment buildings. This residential frontage may be also used in a vertically mixed-use building that also features Storefront frontage.
Configuration: There would be a single entrance to the building with security features. Individual apartments would have entry doors along central hallways. Buildings with this condition may also feature the Stoop frontage for first-floor units having direct access to the sidewalk.

Porch & Yard

Appropriate Context: This frontage is typically for residential applications but can be found on commercial buildings, especially in transitional areas between single family streets and more commercial blocks.
Configuration: 7.5' clear zone allows porch to become furnishable living space. Accessible entries should be accessed from the front to the side of central stair, which should be visible from the street.



Common Lawn

Appropriate Context: Common Lawn describes the predominant primary frontage condition found throughout Edina's residential neighborhood streets.
Configuration: See City of Edina's current regulations governing setbacks and lot, yard and building placement of single family homes.

Figure 4.4
Building Frontages F1-F6
High Resolution PDF available in *Project Archive* at EdinaMN.gov/WVV

Wooddale Valley View Neighborhood Node Development Guidelines

C. Gathering Space Guidelines

As redevelopment occurs over time, small landscaped open spaces and a larger public multi-use space should be introduced strategically throughout the Neighborhood Node. These may soften the buildings, buffer views to surface parking, provide transitions to nearby single-family housing, provide outdoor gathering places and generally extend the green character of the neighborhood. These spaces may be privately or publicly owned and maintained or owned and maintained as part of a public-private partnership.

Multi-Use Gathering Space. A public multi-use space such as a plaza could be incorporated into improvements or redevelopments proposed at these locations:

- The City-owned property at Valley View Road and Kellogg Avenue
- The ValleyWood office site at the northeast of Wooddale Avenue and Valley View Road intersection
- The Edina Village Market and/or the former gas station site on the northwest corner of the Wooddale Avenue and Valley View Road intersection

Figure 4.6 on the following page illustrates methods of incorporating gathering space guidelines.

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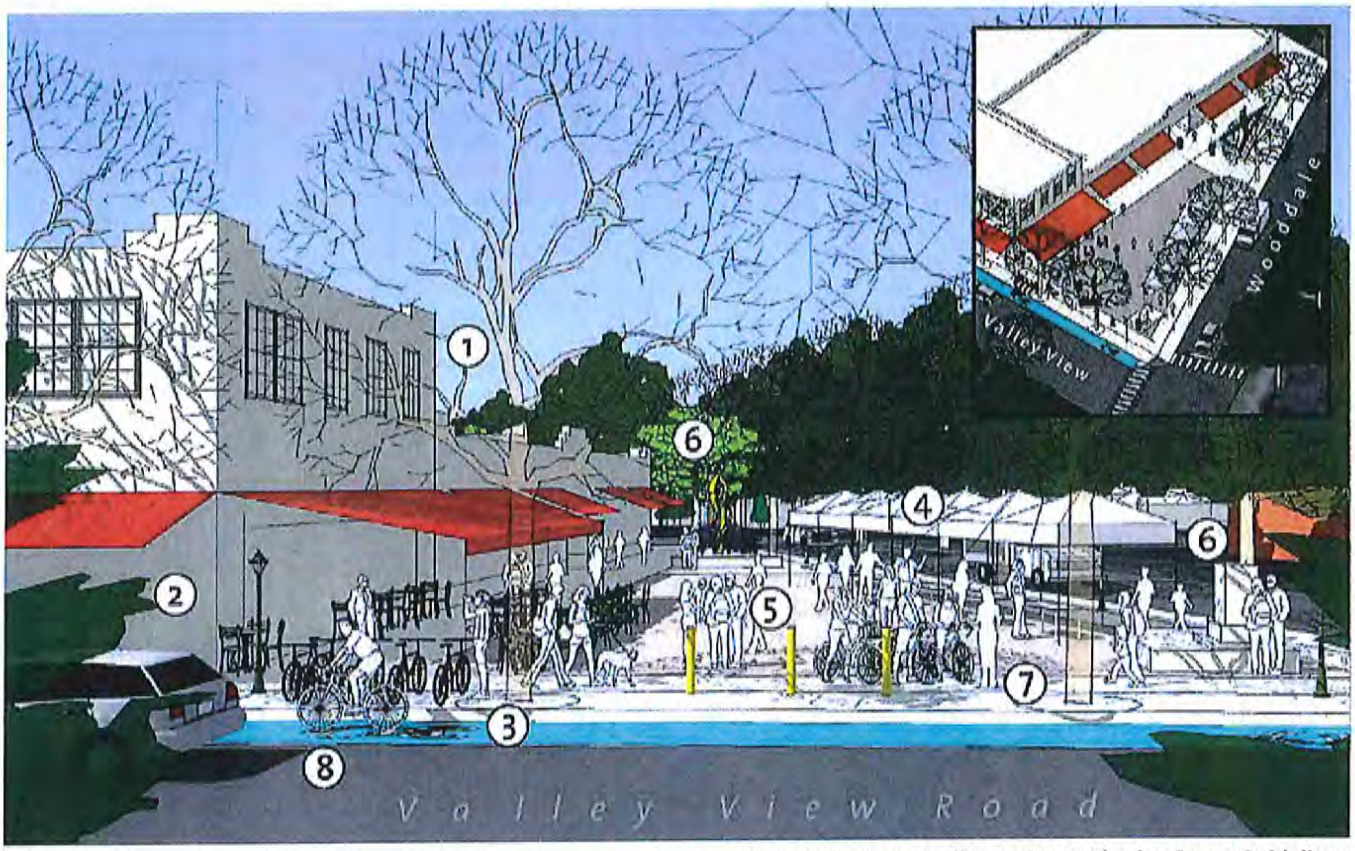

Figure 4.6: Concept Illustrating Gathering Space Guidelines at the Northwest Corner of Wooddale Avenue and Valley View Road

1. **Spatial Enclosure.** Enclose and activate the space with taller buildings with active ground level uses.

2. **Holding the Street.** Bring (cozy) all buildings up close to the public space or the street.

3. **Protection From Elements.** Plant trees along the edges of all streets and spaces to provide shade and protection for pedestrians moving next to and in and out of buildings. Encourage deep awnings along all shopfronts.

4. **Programming.** Program the space with annual, seasonal and weekly events to activate the space.

5. **Flexibility.** Maximize flexibility by using temporary or mobile event equipment, and avoid encumbering the space with permanent vertical features.

6. **Visual Interest and Identity.** Anchor key visual points or defining and active spots such as intersection corners with meaningful/interpretive public art, perhaps doubling as rest/seating.

7. **Universal Design.** Establish universally accessible sidewalks along all edges of all spaces.

8. **Accommodate Cyclists.** Accommodate bicycles around the perimeter of the space with fewer steps, ample bike parking and safe access to bike lanes.

The site owned by the City at Valley View Road and Kellogg Avenue

Site C) The City-Owned Site at Kellogg Avenue and Valley View Road
Because of its ownership by the City, size, configuration, and location near the eastern end of the Study Area, the City-owned parcel is recognized as a unique and critical property. (See Parcel A on Figure 4.8) Community members' opinions about its future use in the Study Area were varied and included commercial, residential, mixed use, and a public use consisting of a plaza/park/open space. Of primary importance to the community is that any new development be carefully designed to respect the scale and context of the single family homes northward along Kellogg, and that the success of adjacent businesses are not negatively affected.

- **Leveraging the Property to Accomplish Plan Goals.** The City-owned property should be leveraged to advance the principles, goals, policies and guidelines of this plan. Optimizing the use of the City-owned property (0.25 acres) will likely require assembling the property with neighboring privately-owned parcels in the future. At that time, the City will review the merits of any development proposal for conformance to this plan. Future uses could include residential and/or commercial development, with possibility of dedication of a *portion* of the site as a Gathering Space (see Gathering Space Guidelines) or other public space. During the interim period, the city-owned land should continue to be maintained as passively used and publicly accessible open space. *

> ***Regarding the Long Range Use of the Land as Public Space:** Both the Guiding Principles (in Section 1.5), and the Land Use and Community Design Goals (earlier in Section 4.3), encourage the strengthening of the intersection of Wooddale Avenue and Valley View Road as the active center Neighborhood Node. Land uses near this location (such as the City–owned site) that encourage economic activity, public gathering and social interaction, will be encouraged. Accordingly, the long term exclusive use of the City-owned property as a passive open space is not encouraged.*

- **Creating a Flexible Framework for Public–Private Collaboration.** Previously the City worked with major commercial property owners to facilitate new development in the node, so somewhat greater flexibility in the planning for parcels labeled A,B,C (as shown in Figure 4.8) was assumed in the small area plan. Thus, the goals and policies stated earlier in this chapter, along with the site specific guidelines on the following pages, were developed simply as a guiding framework. Similar to all other sites in the node, there exists the premise that land assembly and market forces should and will determine the

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exact land use of any redevelopment. Figure 4.8 shows optional redevelopment alternatives for the City-owned site are considered in this plan in the context of various land assembly alternatives illustrated by Figure 4.8.

- ***Property A Only (0.25 acres)*** - Capacity studies were not performed during the planning process for Property A as a redevelopment site (by itself) due to size constraints. It is conceivable that a small commercial or residential development could be accommodated, but would likely require off-site shared parking.
- ***Properties A + B (0.40 acres combined)*** - This is alternative was studied during the planning process. *See Figures 4.8 - 4.10.* The current land use on Property B is a surface parking lot that is provided for patrons of the ValleyWood office building.
- ***Properties A + B + C (0.55 acres combined)*** - This land assembly alternative, due to its size, presents the most flexibility in terms of design alternatives. However, site plan alternatives were not studied during the planning process because Property C was outside of the Neighborhood Commercial boundary in the *Comprehensive Plan* and, therefore, outside of the Study Area.*

**** Regarding Application of Guidelines:*** *If Property C were to be combined with the other two sites in a redevelopment project, the principles, goals and policies of the Small Area Plan, including the Neighborhood Node Development Guidelines, should apply, ensuring a graceful transition (both in regards to height and frontage) northward along Kellogg to the single family homes adjacent and across the street.*

Figure 4.8
Property Ownership near City–Owned Site at Kellogg Avenue and Valley View Road

Gauging Community Preferences. Three hypothetical site development scenarios (site capacity studies) were presented to residents at the Progress Update Event on December 3rd 2014, to spark discussion on the merits of different types of development that could occur on the property. (See Figure 4.9). Each of the three options assume that collaboration is possible with the owner of the parking lot parcel to the north. Opinions of the neighborhood residents attending were exactly split between support for the commercial (50%) vs. residential concepts (50%):

- **Flex Commercial.** (The favorite of 50% of participants.) The 'Flex Commercial' option includes one or more neighborhood-serving businesses in a one story format. Preferred design guidelines for this option are shown in Figure 4.11.
- **Rowhouses.** (The favorite of 34% of participants.) The 'Rowhouses option includes a diverse set of market rate attached single family homes with tuck-under garages and elevated stoops.
- **Manor (Flats/Apts).** (The favorite of 17% of participants.) This option included a multi-unit residential building with parking underneath.

If the market determines that commercial use is unsuitable, acceptable alternatives to commercial use could be rowhouses or a small multi-family residential building using the Stoop (F3) or Shared Entry (F4) building frontage. Other uses and design concepts are certainly possible.

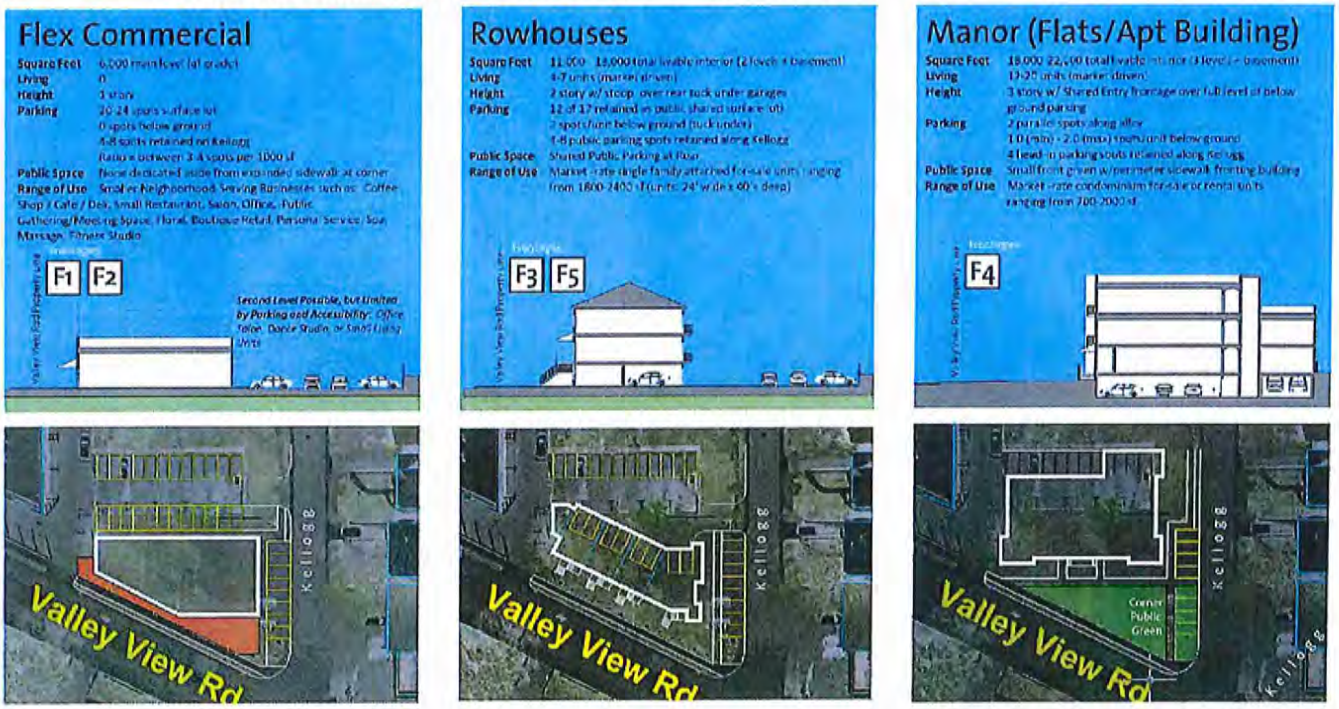

Figure 4.9

Three Alternatives for Properties A+B: City-Owned Site (Property A) + ValleyWood Parking Lot (Property B)

Presented for Community Review at Community Meeting in November 2014

High Resolution PDF available in *Project Archive* at EdinaMN.gov/WVV

Redevelopment Guidelines for Properties A + B 'Flex Commercial' Alternative

Guidelines for the redevelopment of the City-owned site as "Flex Commercial" alternative are as follows. Please also refer to Figure 4.10.

a. **Shared Parking.** Partially reconfigure parking to open up for shared use by the new commercial spaces.

b. **On-Street Parking.** Retain head-in parking along Kellogg Avenue.

c. **Frontage.** Storefront (F1) Frontage along Valley View Road.

d. **Public (Gathering) Space.** Increased set-back/chamfering at the southeast corner allows for an expanded sidewalk seating area and/or fair weather retail/merchandising space. It also allows for continued visibility to the small shops on the northeast corner of Kellogg Avenue and Valley View Road.

e. **Service.** Loading, solid waste and recycling bins accessed and handled off the rear service lane, away from Kellogg Avenue and Valley View Road.

f. **Neighborhood-Serving Businesses.** Initial tenants should include neighborhood-serving commercial businesses.

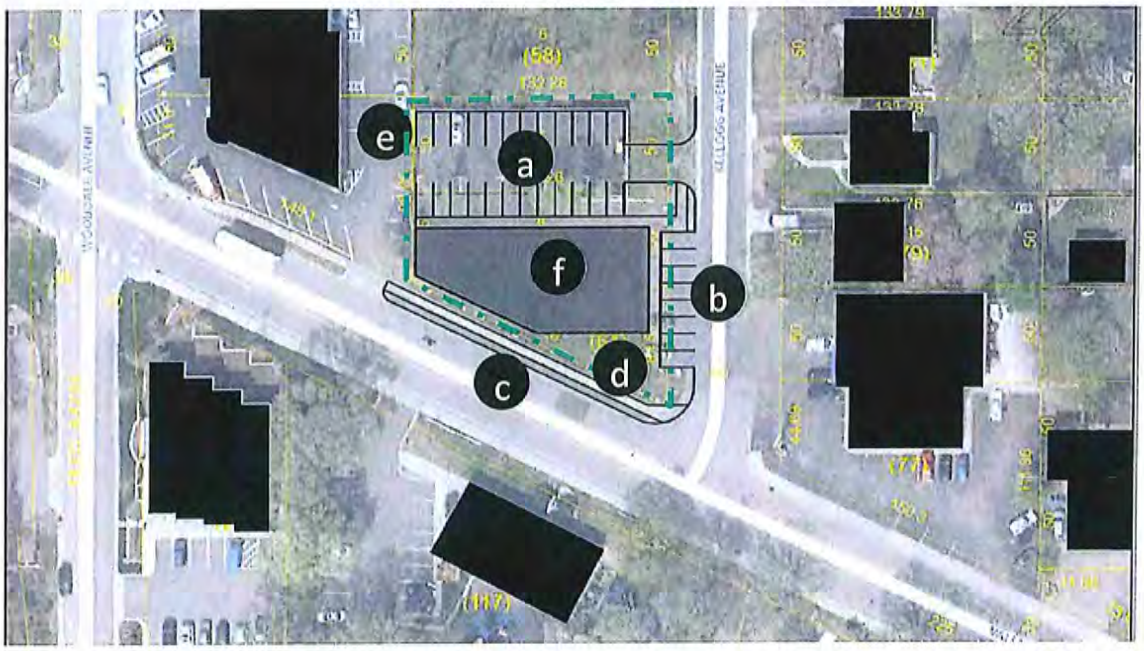

Figure 4.10
Redevelopment Guidelines for Properties A + B as "Flex Commercial"

Graceful Transitions to Surrounding Neighborhood. At certain specified locations at the perimeter of the Neighborhood Node where graceful transitions to single family areas are important (as specified on the Building Height Limits Plan), the height of new buildings may be up to two stories, not to exceed 24 feet.

B. Building Frontage Guidelines

Building-to-Street Relationships. Guidelines describing preferred relationships of buildings to streets establish a sense of place, provide a graceful visual transition from busy areas to nearby housing, and ensure that the pedestrian experience is pleasant.

Node-to-Neighborhood Transitions. Typical configurations of street-to-building relationships are described in the small area plan and keyed on a map to their appropriate neighborhood context within the Neighborhood Node.

C. Gathering Space Guidelines

Introducing small landscaped open spaces and a larger public multi-use gathering space should be introduced strategically throughout the Neighborhood Node and will help to support pedestrian movement and visual identity. Suitable locations are identified in the plan.

D. Site Specific Guidelines

Site specific guidelines are outlined for the following:

- Corner Properties at Wooddale Avenue and Valley View Road
- Fairfax Avenue and West 61st Street
- City-owned site at Kellogg Avenue and Valley View Road
- The Eastern Gateway - Valley View Road at Oaklawn Avenue and West 62nd Street

E. General Guidelines for the Entire Neighborhood Node

Parking will be a constant issue within the Neighborhood Node for businesses, residents and customers alike. The plan recommends ways to include parking yet minimize the visual impact while strengthening the visual identity of the node through plant screenings and consistent signage. Enhancements to pedestrian and bicycle networks such as additional sidewalks, consistent lighting and bike parking facilities will improve the pedestrian experience for residents and visitors. This in turn, helps to create a more attractive work and retail destination for area businesses.

Transportation and Street Design

As was evident during the planning process, the City and residents desired to have the Neighborhood Node become more pedestrian and bicycle friendly as well as transit-oriented. This must take place within the context of Valley View Road, Wooddale Avenue and 62nd Street all being classified as Municipal State Aid streets, which serve as connectors to Highway 62 and Highway 100. The City should consider the following future improvements:

- **Automobile Traffic** Ensure safe and convenient travel for traffic passing through and within the Study Area by:
  - Reducing lane widths

Sketch Plan

A21

Sketch Plan

EDINA FLATS
4416 Valley View Road 10.03.16

PEDESTRIAN VIEW - OAKLAWN AVE

Sketch Plan

A23

EDINA FLATS

4416 Valley View Road 10.03.16

PEDESTRIAN VIEW - VALLEY VIEW RD & OAKLAWN AVE

GATEHOUSE PROPERTIES LTD | MCGLYNN | esg

Sketch Plan

A24

EDINA FLATS
4416 Valley View Road 10.03.16

PEDESTRIAN VIEW - KELLOGG AVE & VALLEY VIEW RD

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"Sanssouci on Kellogg"
8 Unit Study - Site Plan
SCALE: 1/16" = 1'-0" Date: 12-27-16

SPA

APPLICANT NARRATIVE

Project Overview

Edina Flats LLC, a joint venture of Gatehouse Properties and McGlynn Partners, proposes a low-density residential development with 18 for-sale condominium units within five different buildings. Refer to the enclosed site plan. The proposed buildings will be 3 stories at 4416 Valley View Rd. and 2 stories for remaining four buildings. 3 story building will be approximately 35 feet high with below-grade parking stalls. 2 story buildings will be approximately 30 feet high with enclosed attached garage parking. Within the five buildings there are 26 below-grade stalls, 16 enclosed stalls at grade.

The development is envisioned to meet the demands of young professionals and empty-nesters alike. It offers an option for those empty-nesters who want to stay in Edina while downsizing their homes, and at the same time it provides a low maintenance living opportunity for young professionals who are attracted to the idea of living within walking distance to many recreational parks and facilities.

The buildings will be constructed utilizing wood-framed structures, and the exterior materials will consist of stone, stucco panels, composite siding and glass. Windows will be expansive, allowing plenty of daylight into the dwelling units. Each home will feature exterior terraces that allow residents to take advantage of private outdoor space.

Wooddale Valley View Small Area Plan

The proposed redevelopment was designed to address the guiding principles of the Small Area Plan. The redevelopment will dramatically improve the current site conditions at this important intersection of Valley View Road and Kellogg Avenue. The buildings will have handsome exteriors and site designs that will provide a warm and welcoming pedestrian experience. The buildings will be positioned to visually define the street edge while screening all enclosed parking. No parking will front Kellogg Avenue. The project will incorporate attractive, high-quality native landscaping and lighting.

Adding resident dwelling units at this location naturally creates a more inviting streetscape, as more people will be walking and biking to and from the site which creates an energetic, safe and people-friendly environment, in place of the existing vacant lot conditions today. The surrounding properties will benefit from the new improvements which include pedestrian walkways, yards and porches fronting Kellogg Avenue, dense landscaping, below-grade and enclosed parking and a strong design aesthetic.

At the corner of Kellogg and Valley View, an outdoor public amenity is proposed.

Zoning

Existing single-family homes will need to be re-zoned to multi-family designation, commercial properties will need to be re-zoned to multi-family. Some setback variance will be needed for properties along Valley View Rd.

Identification of parcels which will be included in the overall development proposal: 6120 Kellogg Ave., 6116 Kellogg Ave., 6112 Kellogg Ave., 6108 Kellogg Ave., 4416 Valley View Rd., 4404 Valley View Rd.

Edina Flats LLC _____

GATEHOUSE PROPERTIES LTD

David Carlson, Owner
Gatehouse Properties Ltd
Minnesota Real Estate
Brokers License: #586773

DEVELOPER: GATEHOUSE PROPERTIES LTD.

David and Jan Carlson have over 70 years of experience in the real estate markets of Minneapolis and the western suburbs. Having developed over 800 townhomes, condominiums and single-family homes, David Carlson knows and understands the real estate market. In addition, working with a solid lender, he can demonstrate how an FHA Home Equity Conversion Mortgage will help the over 62-year-old buyer purchase more than twice the home with no qualifying, no personal guarantee, and no monthly payments. David has the technical expertise and financing options to make dreams realities. (See attached Pro Forma on page 4)

Development	Location	No. of Units	Unit Type
Cherry Hill	Minnetonka	85	SF & Th
Woodside	Minnetonka	7	SF
Hilloway Glen	Minnetonka	16	SF
Woodbine	Minnetonka	9	Condominiums
Cheyenne Trails	Minnetonka	6	SF
Woodhill	Minnetonka	24	TH
Boulder Pointe West	Eden Prairie	30	TH
Oak Pointe	Bloomington	61	TH
Boulder Pointe East	Eden Prairie	50	TH
Waterford	Shorewood	54	TH
West Arm	Spring Park	25	TH
Normandale Lakes	Bloomington	65	TH
Vernon Hills*	Edina	16	TH
Crowne Oaks	Eden Prairie	16	TH
Northrop Lane	Minneapolis	6	SF
The Wilds	Prior Lake	15	TH
Dewey Hill South*	Edina	41	Condominiums
Normandale Terrace	Bloomington	49	Condominiums
Widsten	Wayzata	29	TH
Arbor Glen	Baxter	62	Senior Apts
Arbor Glen Villas	Baxter	25	TH
Village Place	Buffalo	48	Senior Apts
Various Single Family Homes	Western Suburbs	33	SF
Parker Village	Robbinsdale	9	SF
Portico Green	Wayzata	5	TH & SF
Wooddale Flats*	St. Louis Park	33	Condominiums
Total Units		**819**	

*Projects with similar scope and scale to this proposed development.

CBS

CONTRACTOR: CBS CONSTRUCTION

As a general contractor for commercial and multi-family senior living and affordable housing buildings since 1992, CBS Construction Services has established a superb reputation for professional, quality and on-time performance at very competitive pricing, while delivering value to our clients. The owners and architects from our past projects are well acquainted with our ability to deliver great value to your buildings while being very user friendly and upholding the highest standards of quality and integrity.

RELEVANT PROJECT EXPERIENCE

Keystone Crossings Townhomes
Lakeville, MN

Wooddale Flats
St. Louis Park, MN

Northwood Family Housing
Eagan, MN

Twin Ponds Family Housing
Farmington, MN

Oakwoods East
Eagan, MN

Carbury Hills Townhomes
Rosemount, MN

Forest Ridge Townhomes
Forest Lake, MN

Hastings Marketplace Housing
Hastings, MN

Maple Ridge Townhomes
Maple Grove, MN

Lafayette Family Housing
Inver Grove Heights, MN

Episcopal Homes
St. Paul, MN

Legacy of St. Anthony
St. Anthony, MN

MCGLYNN

Patrick McGlynn
3927 W. 49th St. Edina, MN 55424
612) 325-9436
pmcglynn04@gmail.com

DEVELOPER: MCGLYNN PARTNERS

Patrick is an expert in the day-to-day management of multiple construction projects, bidding and estimating of costs, enhance client relationships and drive corporate profitability. Aggressive in the identification and analysis of potential business/real estate pportunities. Successful in the identification of specific client needs, creating a unique product for a variety of clients. He is skilled in sales functions, specializing in raising capital, management, brand marketing, construction and development.

McGlynn Partners (Edina, MN)

Founder

Apply knowledge in construction to seek out value add opportunities in all different types of real estate. Ability to relate to many different types of client needs and wants. Deep understanding of Minneapolis and surrounding are real estate markets. Find hidden value in many different types and locations of property.

- Bought and successfully repositioned distressed multi-family property in Edina
- Owner, value add and management of multi-family property in Minneapolis
- Sucessful negotiation and sale of distressed single family homes in Edina

Reuter Walton Construction (Minneapolis, MN)

Project Manager

Lead estimator for many single-family and multi-family construction projects throughout Minneapolis and surrounding areas. Negotiation with multiple sub-contractors throughout project, scheduling of multiple large construction projects, help clients and building owners understand scope of project. Problem solving on many complex projects. Follow-up with clients to ensure satisfaction of project completion.

- Numerous new home spec builds in the Linden Hills area
- Custom new $1 Million+ home on Lake Minnetonka
- Multi-story, multi-unit student housing buildings at University of Minnesota
- Negotiation of sale of multiple single family home sites in Minneapolis

RELEVANT PROJECT EXPERIENCE

Student Housing - 525 10th Avenue SE
Minneapolis, MN

Student Housing - 401 8th Avenue SE
Minneapolis, MN

Single Family Home - 5185 Greenwood Circle
Greenwood, MN

Multi-Family Investment Property - 3940 West 49th Street
Edina, MN

Multi-Family Investment Property - 2652 Bryant Avenue S
Edina, MN

Land Development - 16870 Cedarcrest Drive
Eden Prairie, MN

France Avenue Southdale Area Working Principles and Supporting Questions

Element	Working Principle and Supporting Questions
Give-to-Get; Plan & Process	**Allow latitude to gain tangible and intangible outcomes aligned with the district principles.** 1 How does the proposal contribute to the realization of the principles for the district? **Response: The proposed project is located within the Valley View/ Wooddale district, which is envisioned to be a mixed-use community with a unique identity and increased transit connections that is inviting to pedestrians and cyclists and improves the quality of the neighborhood for residents, businesses, and property owners. Per the City's recommendations, the building layouts provide setback from the streets, creating more green space and walkability throughout the node. The building heights don't compete with surrounding single- family homes but create a smooth transition into the neighborhood.** 2 How can the proposal move beyond the principles for the district? **Response: The creation of this type of housing is creating a product that a great many residents of Edina have been asking for, single level condo with great walkability.** 3 What tangible and intangible outcomes might be offered by the proposal but cannot be achieved by the project on its own? **Response: The Valley View Wooddale District has the potential to be a very pedestrian-friendly and bike-oriented neighborhood, but this one proposed project cannot do it alone. All property owners within the district need to work together to make improved connections throughout the District, so that this is truly a walkable community.** 4 What does the proposal offer as a way of balancing those outcomes provided by others? **Response: By providing multi-family housing in the district, area restaurants and retail will be supported by adjacent residents. Additionally, new civic or municipal uses will also be possible because of the economic benefits of developing this site and the new residents who will be using the facilities.** 5 What alternatives were explored to arrive at a proposal that is best

aligned with the principles and the opportunities of the district?
Response: Per the City's recommendations and that of the neighbors, the building layout has evolved in order to create more of a neighborhood feel, creating multiple buildings vs. one or two large buildings. Maintain greater setback from Valley View Rd. to make the sidewalks more inviting to pedestrians

Edina Cultural Preferences; Identity

Advance quality through thoughtful and artful design of buildings and publicly accessible spaces, highlighted human activity, and enhanced economic vibrancy.

1 Discuss the materials and construction techniques intended for the building and the site with attention directed to ensuring an enduring quality is achieved, especially considering whether the proposal is a background or foreground element of the district.
Response: The building will be constructed utilizing a wood-framed structure over a concrete podium, foundation and the exterior materials will consist of stone, brick, stucco, composite siding and glass. Windows will be expansive, allowing plenty of daylight into and views from the dwelling units.

2 What qualities of the proposal will be most valued by the community in 50 years?
Response: The attractive, well-designed streetscape and public realm of the site are project qualities that will be valued by the community for a long time. Improvements to storm water management will promote better water quality in the receiving water body, including less pollutants and sediment that will leave the site.

3 Describe the ways in which the proposal highlights human activity in the building and on the site, especially when viewed from adjacent or nearby public ways?
Response: Resident activity on the site will be readily visible, as some of the units at ground level will have walk-up porches and units on levels two through three will have outdoor space in the form of balconies and terraces.

4 In what ways does the proposal enhance the economic vibrancy of the district?
Response: The project replaces a previous gas station, hair salon, and aging single family homes with a multi-million dollar luxury development. Adding residential units in this area will support the existing retail and commercial uses nearby and encourage new stores and restaurants to open.

5 How does the proposal adapt itself to changing economic opportunities of the community and the district?

Response: As residents age in place, this type of housing option can meet the growing needs of the resident population, and adapt to the changing economic opportunity. This is a unique housing option that Edina does not currently offer its resident base and the subject site is a perfect fit given its location within the community.

District Function

Look beyond baseline utilitarian functions of a single site to create mutually supportive and forward-looking infrastructure sustaining the district.

1 Describe the ways in which the proposal is self-supporting related to on- and off-site infrastructure and resources.
Response: The proposed re-development will utilize existing on-site and off-site infrastructure, and no significant infrastructure improvements will be required to support the new use.

2 What impacts does the proposal pose on existing on- and off-site infrastructure?
Response: The proposed re-development will slightly increase the number of residential units (increased density), and therefore pose a slight impact to the City's roadway and utility infrastructure.

3 What elements of the proposal support infrastructure needs of adjacent or nearby sites?
Response: The proposed re-development will incorporate new pedestrian sidewalks, that may not currently exist within adjacent or nearby sites. Future extension of these new pedestrian facilities within the area community may be necessary.

4 Describe the infrastructure features of the proposal that are truly extraordinary by relating the performance of those features to current standards, requirements, or best practices.
Response: The proposed re-development will incorporate storm water management features that will improve the storm water quality by means of infiltration.

5 How the proposal relies on infrastructure of the district for baseline performance?
Response: The proposed re-development will rely on the existing roadway networks and public/private utility infrastructure for normal everyday use.

Comprehensive Connections; Movement

Foster a logical, safe, inviting and expansive public realm facilitating movement of people within and to the district.

1 What features and amenities does the proposal lend to the public

realm of the district?
Response: Per the Valley View/ Wooddale small area plan, this development will connect the neighborhood to the east with the commercial district to the west. Creating new sidewalks set back from Valley View rd. and public space to create gathering locations for the neighborhood.

2 What features and amenities does the proposal introduce to extend the sense of an expansive and engaging public realm to its site?
Response: Creating more green space and place to display public art will significantly improve the public engagement. Adding resident dwelling units at this location naturally creates a more inviting streetscape, as more people will be walking and biking to and from the site which creates an energetic, safe and people-friendly environment, in place of the existing vehicular-oriented conditions today.

3 Demonstrate the ways in which the proposal supports pedestrians and bicyclists movement and identify those nearby district features that are important destinations.
Response: The new development will work closely with all surrounding land uses to provide appropriate connectivity and long-term compatibility. The surrounding properties will benefit from the new improvements which include pedestrian walkways, yards and porches. Dense landscaping, below-grade and enclosed parking and a strong design aesthetic. The parcel's sidewalk conditions will be improved, thus supporting nearby sites (Town Hall Station, Snuffy's and Fitness centers) and encouraging area residents to walk for their shopping and entertainment needs.

4 What features does the proposal employ to ensure a safe and inviting pedestrian experience on the site?
Response: The proposed access driveways will be new and clearly marked, replacing wide broken expanses of concrete thereby improving sidewalk connections and pedestrian safety. All site sidewalks will be reconstructed, and the project will incorporate attractive, high-quality native landscaping, and lighting throughout the property.

Site Design; Transitions

Encourage parcel-appropriate intensities promoting harmonious and interactive relationships without "leftover" spaces on sites.

1 How does the proposal relate in terms of scale to it neighbors?
Response: At the tallest point, the proposed project is 3 stories in height along Valley View Rd. Buildings going north along Kellogg and at the corner of Valley View and Oaklawn will be 2 stories, creating a smooth transitions to existing single family homes.

2 How does the proposal make full use of the available site, especially those portions of the site not occupied by parking and buildings?
Response: The project redevelops the site very efficiently and landscapes the perimeter, making the public realm pedestrian-friendly and aesthetically appealing.

3 How does the proposal interact with its neighbors?
Response: Drawing on the existing surroundings, the exterior facades will feature contextual details, such as front porch style outdoor space, as well as a simple system of recessed balconies that allow residents to take advantage of the outdoors.

4 Describe the zones of activity created by the proposal and compare those areas to zones of activity on adjacent and nearby sites.
Response: The redevelopment will dramatically improve the current site conditions. Beyond the active residential use, the building will have a handsome exterior and site design that will provide a warm and welcoming pedestrian experience. The building will be positioned to visually define the street edge and supports the Valley View/ Wooddale Small Area plan vision of incorporating a pedestrian-friendly link along the southern edge of the new development to the commercial activities to the West.

Health

Advance human and environmental health as the public and private realms evolves.

1 How does this proposal enhance key elements of environmental health (air, water, noise, habitat)?
Response: The building will be designed to incorporate assemblies that ensure the highest quality acoustical and energy performance (wall and floor assemblies). Construction phase sustainable practices will include construction waste management and recycling. Finally, this project will incorporate energy-efficient appliances, low-flow water fixtures, low-VOC paints and building-wide recycling practices.

2 How does the proposal mitigate any negative impacts on environmental health on its own site?
Response: Like most infill sites, the project is dense, located in an area that has adequate utilities and infrastructure. All parking for the residents will be enclosed within the building, and the building will be designed with outdoor space for dwelling units as well as common outdoor space for shared use.

3 How does proposal provide for a healthful environment beyond the current condition?
Response: The project redevelops two existing sites that were previously used as a gas stations (one is now a hair salon) – both a vehicular-oriented land use. As a medium-density housing

development, the project makes efficient use of the land area and is located within walking distance to many services that residents will use daily.

4 Describe ways in which human health needs are advanced by the proposal.
Response: The building will offer its residents on-site care taker, indoor tempered parking, private storage lockers. Enclosed bicycle parking will also be provided within the building to encourage residents use of the nearby bike trail system.

Innovation

Embrace purposeful innovation aimed at identified and anticipated problems.

1 Identify the problems posed by the proposal or the district requiring innovative solutions and describe the ways in which the proposal responds?
Response: The proposed use is designed to meet the wave of the baby boomer demand over the next decade and create housing options for those families looking to live in Edina with maintenance free living.

2 Describe the metrics to be used to compare the innovations posed by the proposal.
Response: The proposed re-development will offer current and future residents an option for new construction housing that is owned not rented but offers the ease of condo living with the neighborhood feel of single-family homes.

3 For those solutions posed by the proposal as innovative, describe how they might become "best practices" for the district.
Response: Creating this type of housing will bring a vibrancy to the neighborhood that does not currently exist. This re-development will encourage more of this type of housing to be built in other areas within the city.

4 Describe innovations in systems and aesthetics and the ways in which systems and aesthetics for integrated solutions.
Response: There are a number of design strategies that are critical for this type of housing. Key to it all is that it be located within a walkable community that integrates housing and commercial uses so that residents can integrate themselves into the larger neighborhood.

5 Describe other projects where innovations similar to those included in the proposal have been employed.
Response: The co-developer has recently completed this type of

project in St. Louis Park, MN. He has had great success with this type of housing, many would be residents have been asking for and Edina project.

Land Use; Live-able Precincts

Promote well-balanced aggregations of "come to" and "stay at" places focused on human activity and linked to an engaging public realm.

1 How does the proposal complement the mix of uses in the district?
Response: The proposed development will offer a housing option for empty-nesters to stay in Edina and downsize their homes, acting as a catalyst to recycling the existing housing stock. This serves the baby boomer's growing desire to live in an urban environment, makes economic sense by offering new construction with the ease of condo living at a price point much lower than existing newer condo buildings, and provides a rich social experience. The market for this segment of buyer is robust. There is an avalanche of demand over the next 10 years as residents age into this type of housing, Currently, there is a shortage of adequate for-sale housing options in the City of Edina.

2 Describe the proposal in terms of "come to" and/or "stay at" places.
Response: This residential community will offer various unit types for its diverse tenant profile, tailored to the active adult demographic in search of flexible luxury living. Unit types will range from smaller 1,500 sq. ft. units to larger 2,500+ sq. ft. units. This variety in housing types will help to accommodate a variety of household formations, sizes and incomes.

3 What adjacent or nearby "come to" or "stay at" places does the proposal rely on for vitality?
Response: The Valley View/ Wooddale area, with its mix of uses and a vision for walkable streetscapes and a neighborhood feel, is highly desirable to prospective residents. The nearby public park, shops and restaurants within walking distance to the development are very important features and places that will ensure the continued vitality of the project.

4 Demonstrate the flows of activity generated by the site during a typical weekday and weekend day.
Response: Future residents of this site will most likely be 50+ years of age. Many will be retired; therefore, the anticipated weekday and weekend traffic will be less than a typical urban type condo building. The site is walkable to nearby amenities that will most likely be utilized by foot.

Economic Vitality

Ensure every component contributes to the sustained economic vitality of the district and the community.

1 Describe the proposal in terms of its economic contributions to the district.
Response: The proposed re-development will create a much higher tax base for the city. Existing single-family homes will see a rise in value, helping to promote the neighborhood. The property will be managed by a professional 3rd party operator when the project opens its doors for move-ins.

2 How does the proposal enhance development on adjacent or nearby sites?
Response: The project can serve as a catalyst for other development in the Valley View/ Wooddale area. A successful housing project at this site will give others encouragement to invest here because there will be a true mixed-use district. In addition, there is not enough of this type of housing stock in Edina and there are strong demand fundamentals.

3 What features of the site or district limit the potential of the proposal from being fully realized?
Response: To the east of the site there is a distressed building that is under leased and poorly maintained. If that property is not redeveloped, it could have a negative impact on the eastern facing view units.

4 Why is the proposal best situated on its proposed site from the perspective of economic vitality?
Response: The developers have done market research and have determined that many current and future residents want a neighborhood feel but would also like the ease of condo living. Small areas like this are the best way to create this product type.

5 How does the proposal make the district and the community a better place?
Response: The project replaces a number of un-desirable property types; vacant land, un-occupied home, poorly maintained buildings with a vibrant residential community that will have a handsome exterior design and bring positive activity to this site within the Valley View/ Wooddale area. Edina will be one of the first communities to offer its residents this type of housing option if this project moves forward.

5/17/2017

esg

Edina Flats
Edina, MN

STREET VIEW - ALONG
KELLOGG AVE

5/17/2017

esg

Edina Flats
Edina, MN

STREET VIEW - CORNER OF
OAKLAWN AND VALLEY VIEW

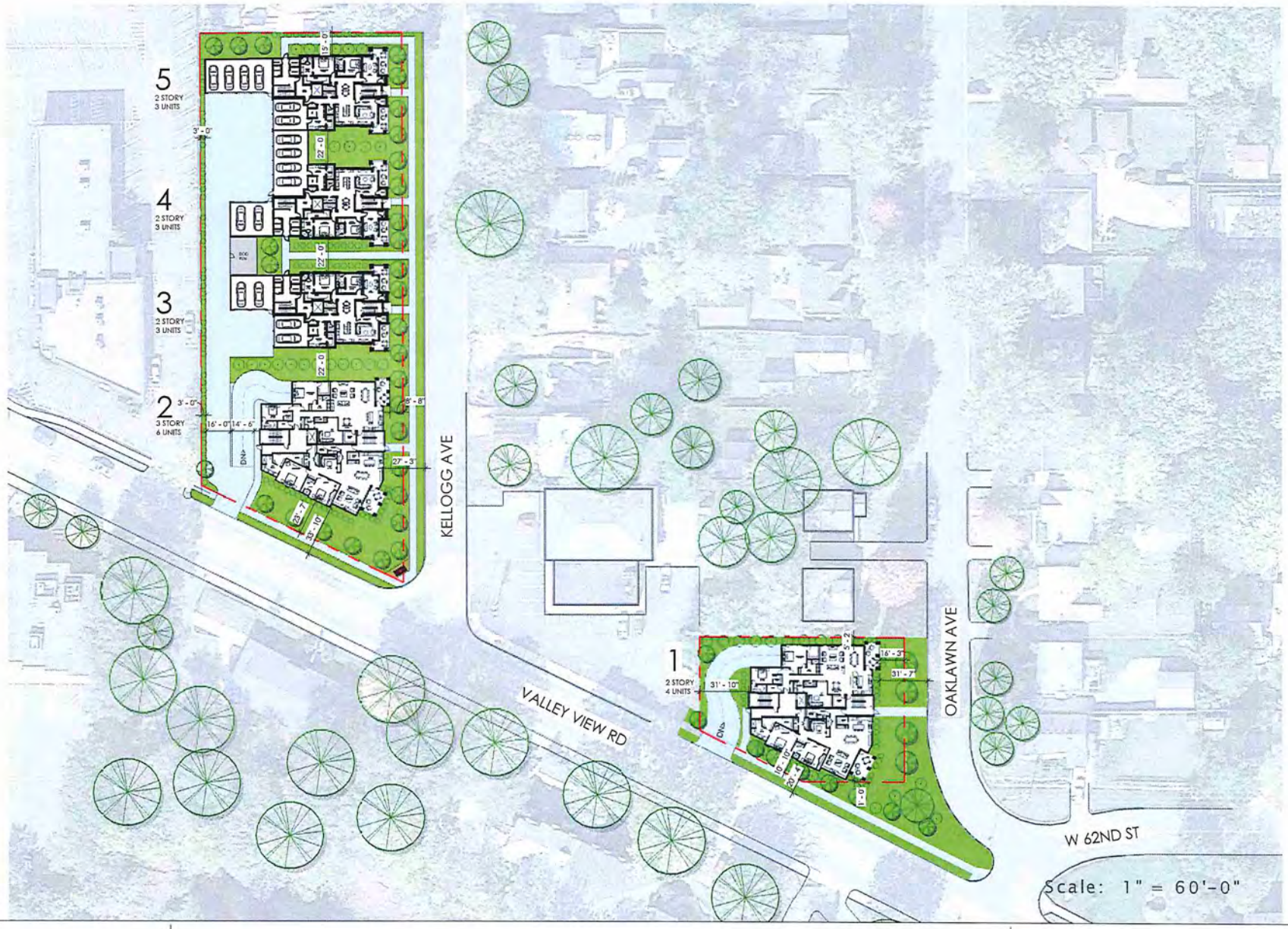
5/17/2017

esg

Edina Flats
Edina, MN

BUILDING #3

A31



5/19/2017

esg

Edina Flats
Edina, MN

SITE PLAN

A32

Isles Plan: 1520 sf

Harriet Plan: 1350 sf

Second Floor

0' 4' 8' Dimensions Approximate

Edina Flats
Edina, MN

A33

Calhoun Plan: 2000 sf

First Floor

0' 4' 8' Dimensions Approximate

Edina Flats
Edina, MN

A34

Nokomis: 2,345 sf

Cedar Plan @ 1: 2,321 sf

Cedar II Plan @ 2-3: 2,402 sf

First-Third Floors

Dimensions Approximate

Edina Flats

Edina, MN

A35

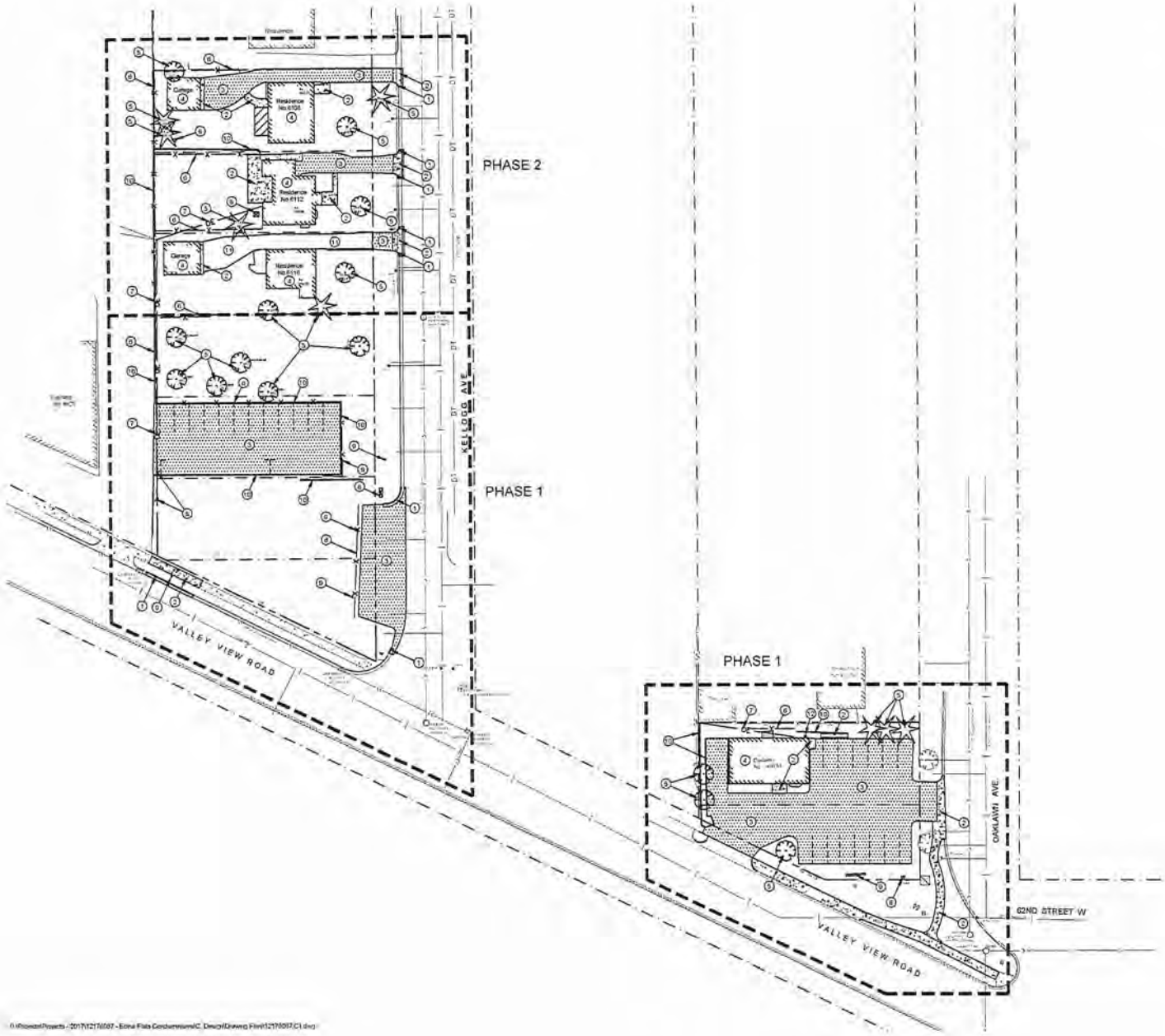
Below Grade Parking

Dimensions Approximate

Edina Flats

Edina, MN

A36



SYMBOL LEGEND

REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION

REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION

KEY NOTES

1. SAWCUT, REMOVE, AND DISPOSE OF EXISTING CONCRETE CURB AND GUTTER.
2. SAWCUT, REMOVE, AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION.
3. SAWCUT, REMOVE, AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION.
4. REMOVE AND DISPOSE OF EXISTING BUILDING
5. REMOVE AND DISPOSE OF EXISTING TREE
6. REMOVE AND DISPOSE OF EXISTING FENCE OR GUARD RAIL.
7. REMOVE AND DISPOSE OF EXISTING OVERHEAD ELECTRIC.
8. REMOVE AND DISPOSE OF EXISTING TRANSFORMER, LIGHT POLE, AC UNIT, ETC.
9. REMOVE AND DISPOSE OF EXISTING SIGN, POST, AND FOOTING
10. REMOVE AND DISPOSE OF EXISTING WALL.
11. REMOVE AND DISPOSE OF EXISTING GRAVEL
12. REMOVE AND DISPOSE OF EXISTING GAS METER

DEMOLITION NOTES

1. Verify all existing utility locations.
2. It is the responsibility of the Contractor to perform or coordinate all necessary utility demolitions and relocations from existing utility locations to all onsite amenities and buildings. These connections include, but are not limited to, water, sanitary sewer, cable tv, telephone, gas, electric, site lighting, etc.
3. Prior to beginning work, contact Gopher State One-call (651-454-0002) to locate utilities throughout the area under construction. The Contractor shall retain the services of a private utility locator to locate the private utilities.
4. Sawcut along edges of pavements, sidewalks, and curbs to remain.
5. All construction shall be performed in accordance with state and local standard specifications for construction.

NORTH

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Client
GATEHOUSE PROPERTIES, LTD
2249 PORTICO GREEN
WAYZATA, MN 55391

CITY SUBMITTAL

Project Title
EDINA FLATS CONDOMINIUM DEVELOPMENT
EDINA, MN

I hereby certify that this plan, specifications or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the state of Minnesota.

Matt Woodruff

Matt Woodruff, P.E.

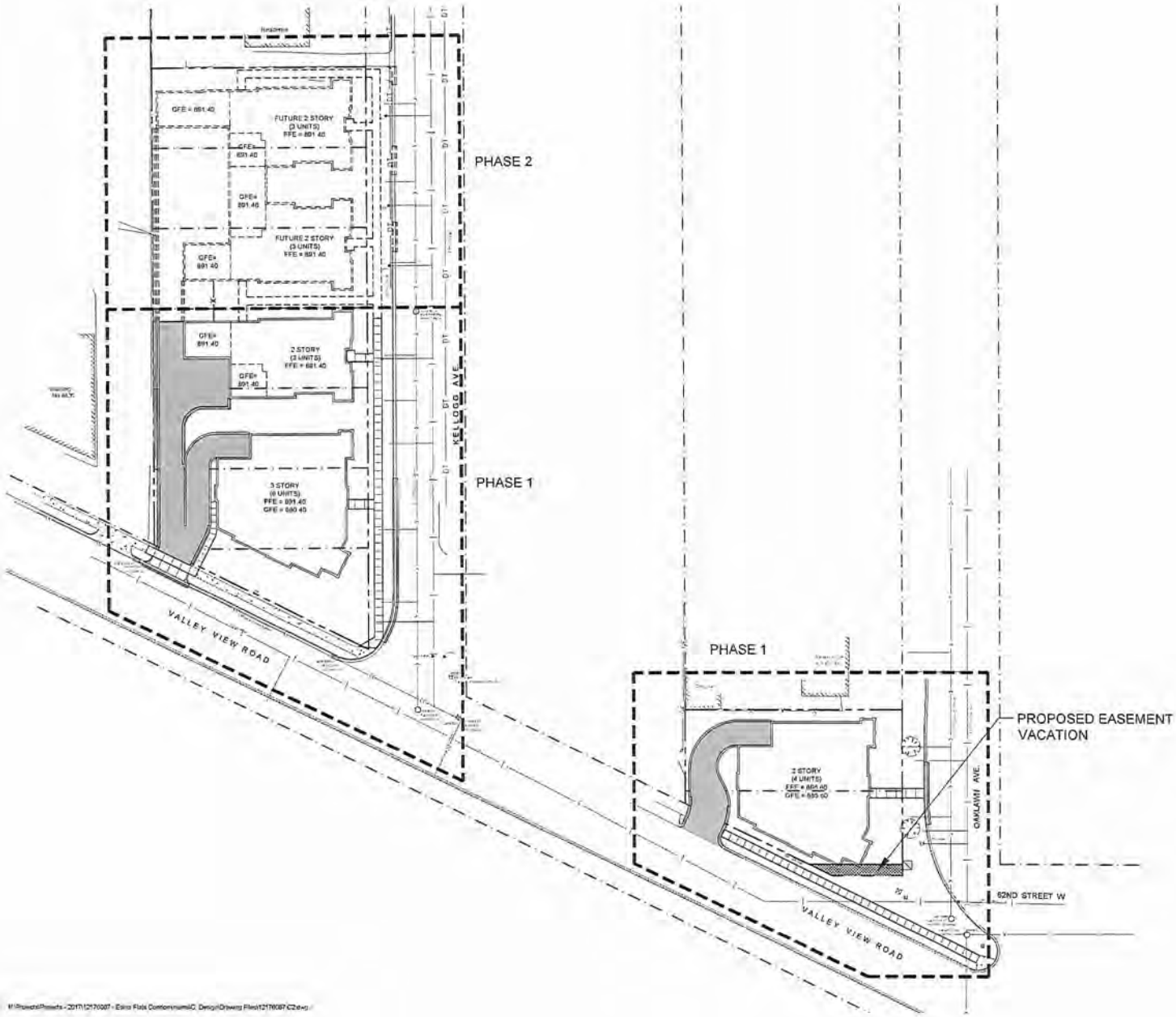
Date 06.05.17 Reg. No. 41885

Rev	Date	Description

Project # 1217.0007
Drawn By: KBK
Checked By: MJW
Issue Date 06.05.17
Sheet Title
DEMOLITION PLAN

Sheet
C1

A37



SYMBOL LEGEND

NEW 3" BITUMINOUS PAVEMENT OVER NEW 8" CRUSHED AGGREGATE BASE SEE DETAIL

NEW 4" CONCRETE PAVEMENT OVER NEW 6" CRUSHED AGGREGATE BASE SEE DETAIL

WHERE APPLICABLE, DIMENSIONS ARE FROM BACK OF CURB TO BACK OF CURB OR BACK OF CURB TO END OF STALL LINE.

NORTH

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Project Title: EDINA FLATS CONDOMINIUM DEVELOPMENT
EDINA, MN

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Matt Woodruff

Matt Woodruff, P.E.

Date: 08.25.17 Reg. No. 41865

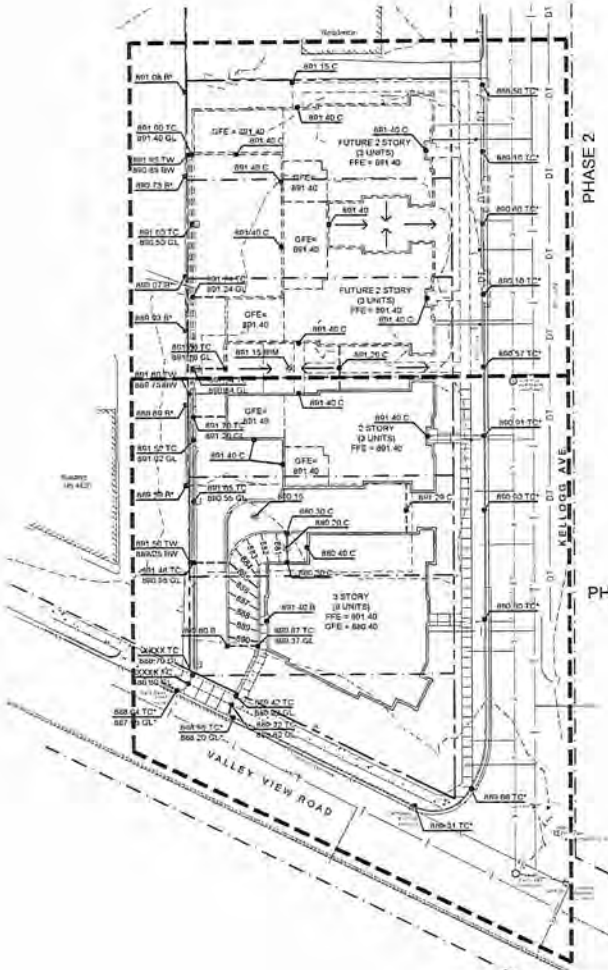
Rev.	Date	Description

Project #: 12170087
Drawn By: KBK
Checked By: MJW
Issue Date: 08.25.17

Sheet Title: PAVING AND DIMENSION PLAN

Sheet: C2

A38



EROSION CONTROL NOTES

1. Owner and Contractor shall obtain MPCA-NPDES permit. Contractor shall be responsible for all fees pertaining to the permit. The SWPPP shall be kept onsite at all times.
2. Install temporary erosion control measures (inlet protection, silt fence, and rock construction entrances) prior to beginning any excavation or demolition work at the site.
3. Erosion control measures shown on the erosion control plan are the absolute minimum. The contractor shall install temporary earth dikes, sediment traps or basins, additional silation fencing, and/or disk the soil parallel to the contours as deemed necessary to further control erosion. All changes shall be recorded in the SWPPP.
4. All construction site entrances shall be surfaced with crushed rock across the entire width of the entrance and from the entrance to a point 50' into the construction zone.
5. The toe of the silt fence shall be trenched in a minimum of 6". The trench backfill shall be compacted with a vibratory plate compactor.
6. All grading operations shall be conducted in a manner to minimize the potential for site erosion. Sediment control practices must be established on all down gradient perimeters before any up gradient land disturbing activities begin.
7. All exposed soil areas must be stabilized as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement.
8. The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water. Stabilization of the remaining portions of any temporary or permanent ditches or swales must be complete within 14 days after connecting to a surface water and construction in that portion of the ditch has temporarily or permanently ceased.
9. Pipe outlets must be provided with energy dissipation within 24 hours of connection to surface water.
10. All spoils shall be installed with a filter material or soil separation fabric and comply with the Minnesota Department of Transportation Standard Specifications.
11. All storm sewers discharging into wetlands or water bodies shall outlet at or below the normal water level of the respective wetland or water body at an elevation where the downstream slope is 1 percent or flatter. The normal water level shall be the invert elevation of the outlet of the wetland or water body.
12. All storm sewer catch basins not needed for site drainage during construction shall be covered to prevent runoff from entering the storm sewer system. Catch basins necessary for site drainage during construction shall be provided with inlet protection.

EROSION CONTROL NOTES

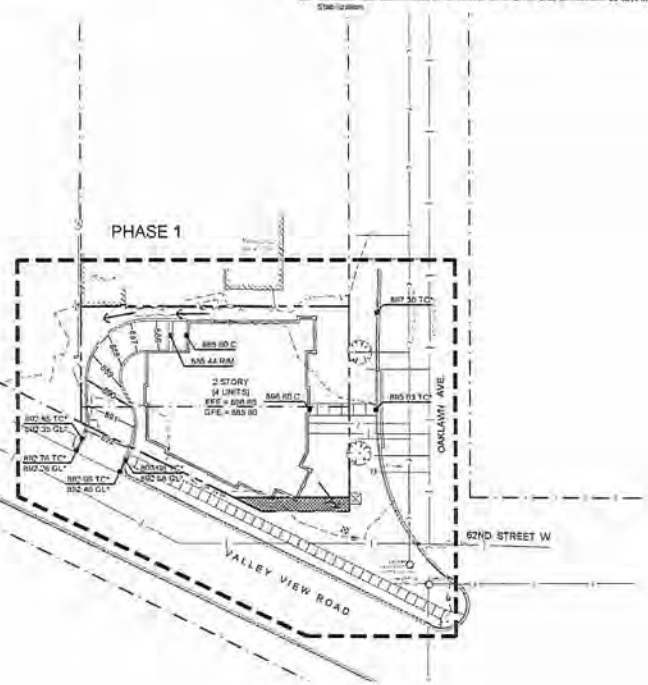
13. In areas where concentrated flows occur (such as swales and areas in front of storm catch basins and inlets) the erosion control facilities shall be backed by stabilization structure to protect these facilities from the concentrated flows.
14. Inspect the construction site once every seven days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. All inspections shall be recorded in the SWPPP.
15. All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access. All repairs shall be recorded in the SWPPP.
16. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts.
17. All soils tracked onto pavement shall be removed daily.
18. All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the infiltration area and these areas are protected from compaction due to construction equipment driving across the infiltration area.
19. Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.
20. Collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.
21. Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.
22. External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed onsite.
23. All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter ground water is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
24. Upon completion of the project and stabilization of all graded areas, all temporary erosion control facilities (silt fences, hay bales, etc.) shall be removed from the site.
25. All permanent sedimentation basins must be restored to their design condition immediately following stabilization of the site.
26. Contractor shall submit Notice of Termination for MPCA-NPDES permit within 30 days after Final Stabilization.

LEGEND

- 850 — EXISTING CONTOURS
- 850 — PROPOSED CONTOURS - MAJOR INTERVAL
- 849 — PROPOSED CONTOURS - MINOR INTERVAL
- GRADE BREAK LINE
- 2.0% — GRADE SLOPE
- SILT FENCE
- RIP-RAP / ROCK CONST. ENTRANCE
- INLET PROTECTION
- CONCRETE WASHOUT STATION
- 850.00 TC / 849.90 GL — SPOT ABBREVIATIONS:
  - TC - TOP OF CURB
  - GL - GUTTER LINE
  - B - BITUMINOUS
  - C - CONCRETE
  - ED - EMERGENCY OVERFLOW
  - TW - TOP OF WALL
  - BW - BOTTOM OF WALL (FIG)
  - (*) - EXISTING TO BE VERIFIED

GRADING NOTES

1. Tree protection consisting of snow fence or safety fence installed at the drip line shall be in place prior to beginning any grading or demolition work at the site.
2. All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
3. Grades shown in paved areas represent finish elevation.
4. Restore all disturbed areas with 4" of good quality topsoil and seed.
5. All construction shall be performed in accordance with state and local standard specifications for construction.



NORTH

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Client: GATEHOUSE PROPERTIES, LTD
2249 PORTICO GREEN
WAYZATA, MN 55391

CITY SUBMITTAL

Project Title: EDINA FLATS CONDOMINIUM DEVELOPMENT
EDINA, MN

I hereby certify that this plan, specifications or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the state of Minnesota.

Matt Woodruff

Matt Woodruff, P.E.
Date: 08.25.17 Reg. No. 41865

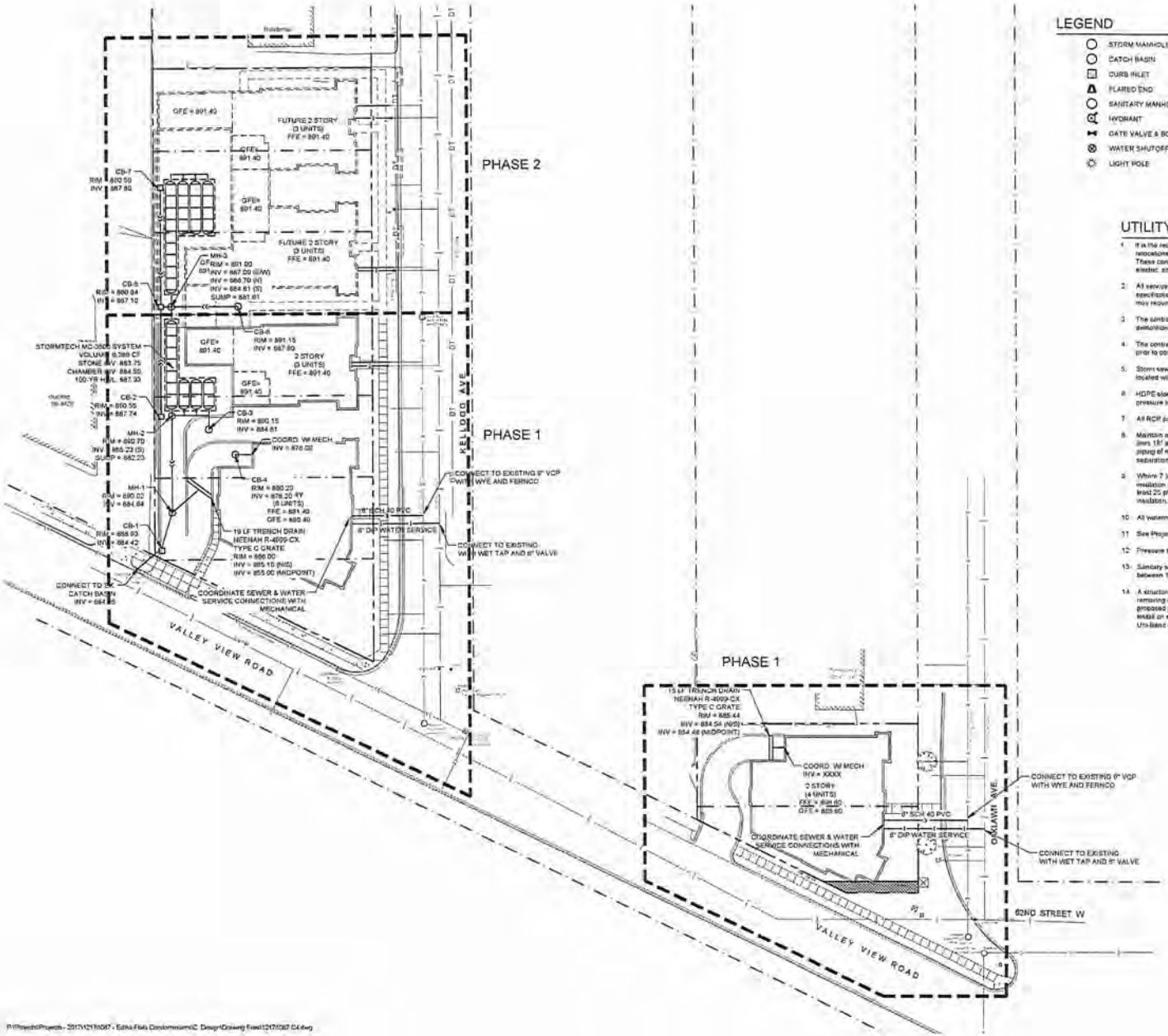
Rev.	Date	Description

Project #: 1217B087
Drawn By: KBK
Checked By: MJW
Issue Date: 08.25.17
Sheet Title: GRADING AND EROSION CONTROL PLAN

C3

Sheet

A31



LEGEND

- STORM MANHOLE
- CATCH BASIN
- CURB INLET
- FLARED END
- SANITARY MANHOLE
- HYDRANT
- GATE VALVE & BOX
- WATER SHUTOFF
- LIGHT POLE
- CABLE UNDERGROUND LINE
- ELECTRIC OVERHEAD LINE
- ELECTRIC UNDERGROUND LINE
- FIBER OPTIC UNDERGROUND LINE
- NATURAL GAS UNDERGROUND LINE
- SANITARY SEWER PIPE
- STORM SEWER PIPE
- TELEPHONE UNDERGROUND LINE
- WATERMAIN PIPE
- DRAINTILE PIPE

UTILITY NOTES

1. It is the responsibility of the contractor to perform or coordinate all necessary utility connections and relocations from existing utility locations to the proposed building, as well as to all onsite amenities. These connections include but are not limited to water, sanitary sewer, cable TV, telephone, gas, electric, site lighting, etc.
2. All service connections shall be performed in accordance with state and local standard specifications for construction. Utility connections (sanitary sewer, watermain, and storm sewer) may require a permit from the City.
3. The contractor shall verify the elevations at proposed connections to existing utilities prior to any demolition or excavation.
4. The contractor shall notify all appropriate engineering departments and utility companies 72 hours prior to construction. All necessary precautions shall be made to avoid damage to existing utilities.
5. Storm sewer requires testing in accordance with Minnesota plumbing code 4714.1109 where located within 10 feet of waterlines or the building.
6. HDPE storm sewer piping shall meet ASTM F2306 and fittings shall meet ASTM D3212 joint pressure test. Installation shall meet ASTM C2321.
7. All RCP pipe shown on the plans shall be MN/DOT class 3.
8. Maintain a minimum of 7 ½' of cover over all water lines and sanitary sewer lines. Install water lines 18" above sanitary sewers. Where the sanitary sewer crosses over the water line, install sewer piping of materials equal to watermain standards for 9 feet on both sides and maintain 18" of separation.
9. Where 7 ½' of cover is not provided over sanitary sewer and water lines, install 2" rigid polystyrene insulation (MN/DOT 3760) with a thermal resistance of at least 5 and a compressive strength of at least 25 psi. Insulation shall be 6' wide, centered over pipe with 6" sand cushion between pipe and insulation. Where depth is less than 5', use 4" of insulation.
10. All watermain piping shall be class 52 ductile iron pipe unless noted otherwise.
11. See Project Specifications for bedding requirements.
12. Pressure test and disinfect all new watermains in accordance with state and local requirements.
13. Sanitary sewer piping shall be PVC, SDR-35 for depths less than 10', PVC SDR-26 for depths between 10' and 26', and class 52 D.I.P. for depths of 26' or more.
14. A structure adjustment shall include removing and salvaging the existing casting assembly, removing existing concrete rings to the precast section. Install new rings and salvaged casting to proposed grades, cleaning casting flange by mechanical means to insure a sound surface and install an external chimney seal from casting to precast section. Chimney seals shall be Infi-Shield Uni-Band or an approved equal.

NORTH

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WAYZATA, MN 55391

CITY SUBMITTAL

Project Title: EDINA FLATS CONDOMINIUM DEVELOPMENT
EDINA, MN

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Matt Woelfel

Matt Woelfel, P.E.

Date: 08.25.17 Reg. No. 41885

Rev	Date	Description

Project # 1217.007
Drawn By: KRK
Checked By: MJW
Issue Date: 08.25.17
Sheet Title: UTILITY PLAN

Sheet: C4

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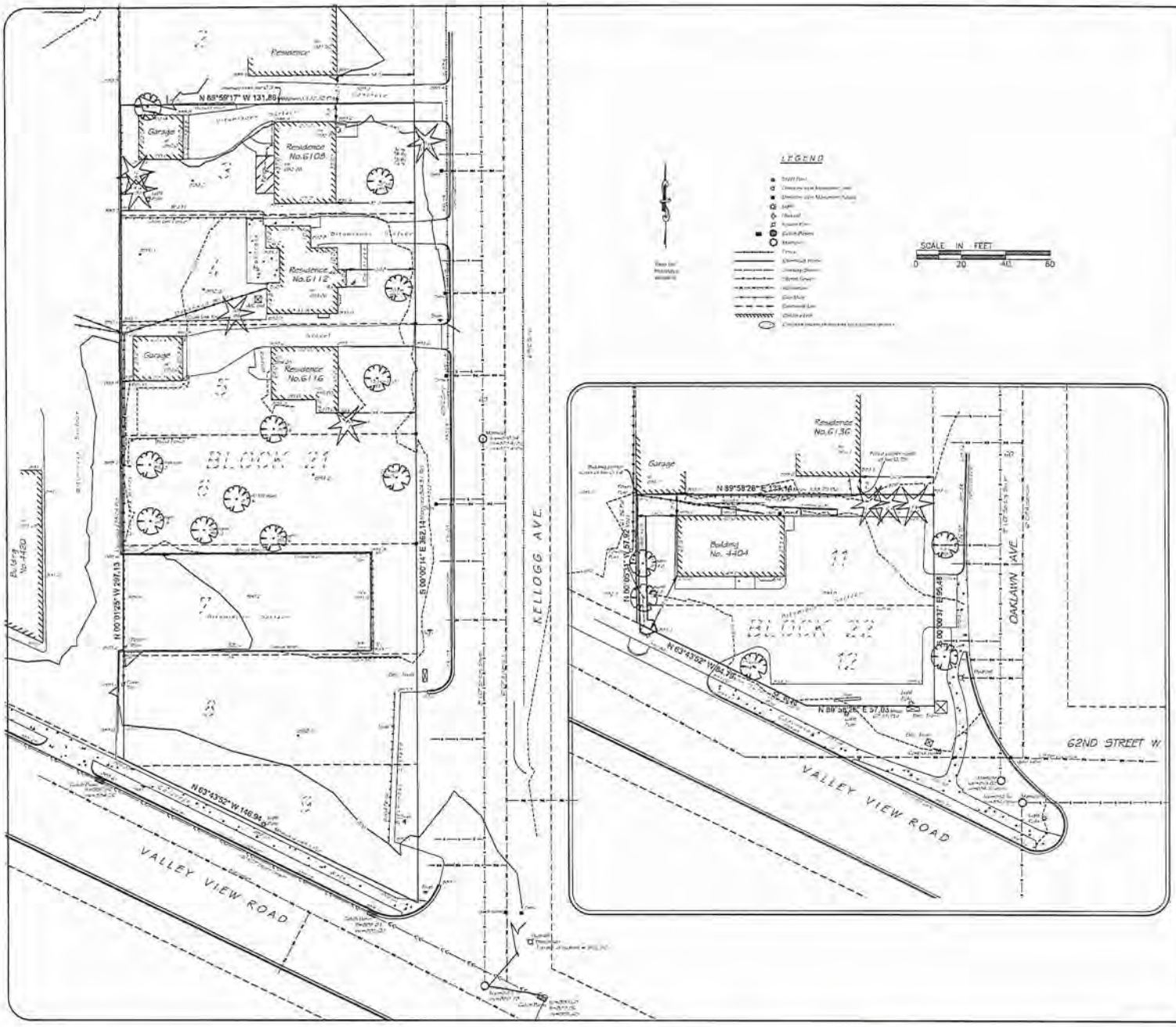
A40

EXISTING CONDITIONS SURVEY FOR:

GATEHOUSE PROPERTIES

2249 Portico Green
Wayzata, MN 55391



Legal Description

Lots 3 thru 9, Block 21, Fairfax, Hennepin County, Minnesota

and

Lots 11 and 12, Block 22, Fairfax, Hennepin County, Minnesota

MISCELLANEOUS NOTES

Title commitment showing easements of record not provided.

Property Address:
Lot 3, Block 21 - 6108 Kellogg Ave., Edina, MN 55424
Lot 4, Block 21 - 6112 Kellogg Ave., Edina, MN 55424
Lot 5, Block 21 - 6116 Kellogg Ave., Edina, MN 55424
Lot 6, Block 21 - 6120 Kellogg Ave., Edina, MN 55424
Lot 7, Block 21 - 4420 Valley View Road., Edina, MN 55424 (part of a larger piece of property)
Lot 8, Block 21 - 4416 Valley View Road., Edina, MN 55424
Lot 9, Block 21 - 4410 Valley View Road., Edina, MN 55424
Lot 11, Block 22 - 6136 Oaklawn Ave., Edina, MN 55424
Lot 12, Block 22 - 4404 Valley View Road., Edina, MN 55424

Benchmark: Top nut of hydrant located on east side of Kellogg Ave. at Valley View Road as shown hereon.
Elevation = 802.97 feet

Underground utility information from City records. Locations are only approximate.

Property is in Flood Zone "X", an area of minimal flooding per FEMA Flood Insurance Rate Map No. 27053C0304F, map revised November 4, 2016.

Certification

The only easements shown are from data of record or information provided by client.

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Dated this 31st day of July, 2017

Prepared by:
The Gregory Group, Inc. d.b.a.
Lot Surveys Company
7601 73rd Avenue N.
Brooklyn Park, MN 55428
phone 763-560-3030
fax 763-560-3522

Signed: Gregory R. Roach, Registration No. 24992

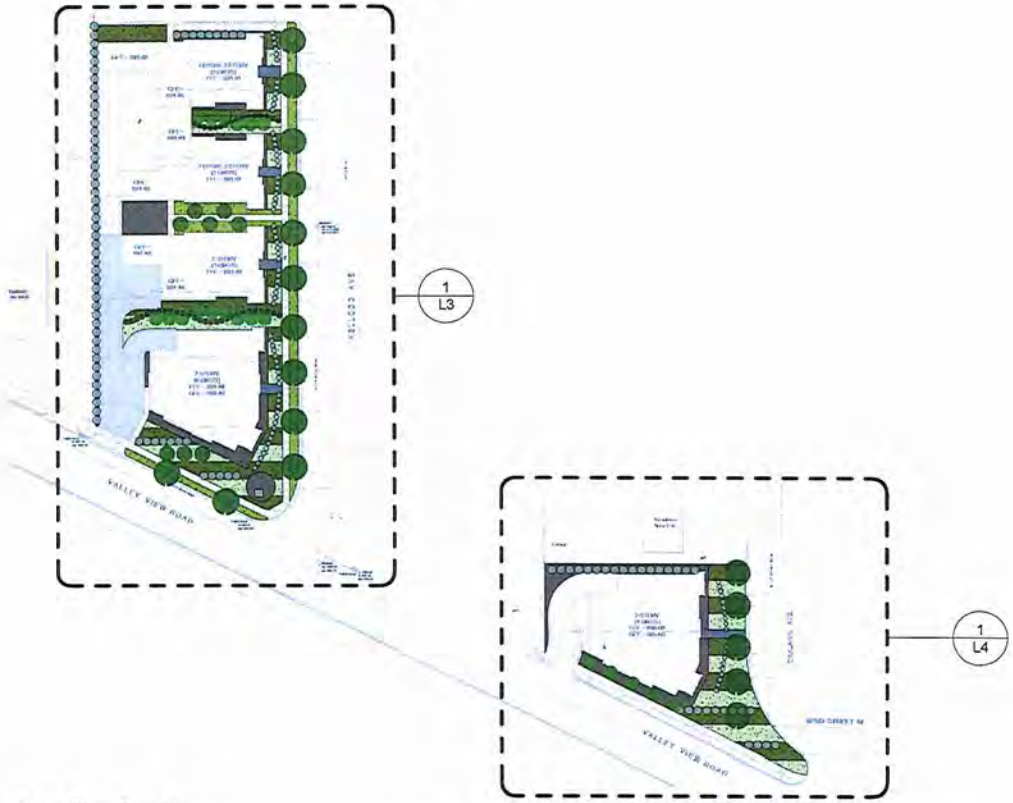
File No.

A4

PLANT SCHEDULE

#	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
TREES						
8	BN	Betula nigra	RIVER BIRCH	3" CAL.	B+B	MATCHED SPECIMEN
20	MS	Malus x 'Spring Snow'	SPRING SNOW CRABAPPLE	12' Height	B+B	MULTISTEM SPECIMEN
17	UA	Ulmus Americana 'Princeton'	PRINCETON ELM	3" CAL.	B&B	
45						
SHRUBS						
85	JU	Taxus cuspidata 'Capitata'	JAPANESE UPRIGHT YEW	7' Height	B+B	SPACE AT APPX. 36" O.C.
97	JY	Hydrangea paniculata 'Limelight'	HYDRANGEA LIMELIGHT	5 GAL	CONT.	SPACE AT APPX. 36" O.C.
44	TO	Thuja occidentalis 'Art Boe'	NORTH POLE ARBORVITAE	7' Height	B&B	
226						

NOTES:
1. ALL PLANTING BEDS TO HAVE 3" DEPTH HARDWOOD MULCH AND 10" PLANTING SOIL UNLESS SPECIFIED IN PLANTING DETAILS.
2. ALL TREES, SHRUBS AND PERENNIALS TO BE IRRIGATED WITH DRIP IRRIGATION.
3. ALL NO MOW FESCUE AREAS TO BE IRRIGATED WITH SPRAY IRRIGATION.
4. SEE CIVIL DRAWINGS FOR ALL PARKING, ROAD, UTILITY AND GRADING INFORMATION.
5. SEE ARCHITECTURAL DRAWINGS FOR BUILDING INFORMATION.

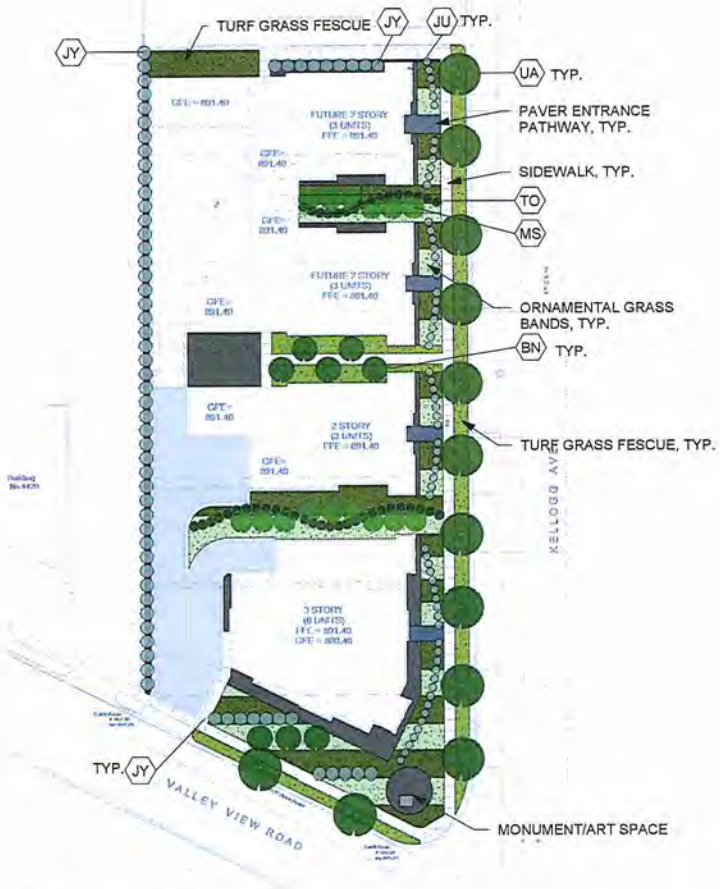


1 Edina Flats Overall
1" = 80'-0"

oslund.and.assoc.
LANDSCAPE ARCHITECTURE
MASTER PLANNING
ENVIRONMENTAL DESIGN

Edina Flats

L2 - Landscape Overall Plan
08/25/17



1 Edina Flats West Area
1" = 50'-0"

NOTES:
1. SEE SHEET L1 - LANDSCAPE COVER PAGE FOR PLANT SCHEDULE AND NOTES.

0' 20' 40' 60' 80'

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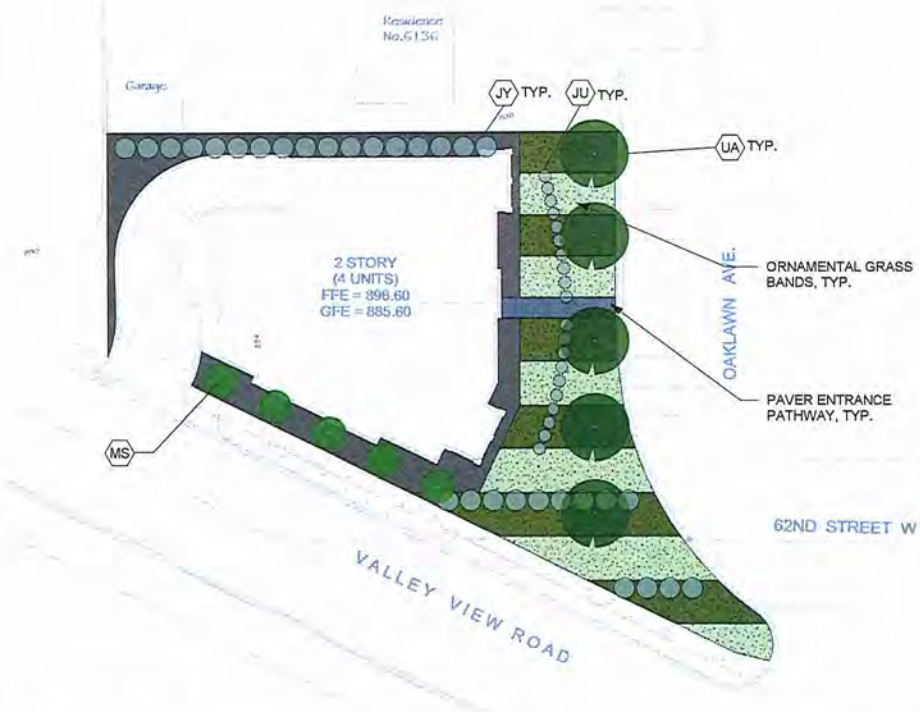
LANDSCAPE ARCHITECTURE
MASTER PLANNING
ENVIRONMENTAL DESIGN

Edina Flats

L3 - Landscape Enlarged Plan - West Portion
08/25/17

A44



1 Edina Flats East Area
1" = 30'-0"

NOTES:
1. SEE SHEET L1 - LANDSCAPE COVER PAGE FOR PLANT SCHEDULE AND NOTES.

0' 20' 40' 60' 80'

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LANDSCAPE ARCHITECTURE
MASTER PLANNING
ENVIRONMENTAL DESIGN

Edina Flats

L4 - Landscape Enlarged Plan - East Portion
08/25/17

A45

DATE: September 20, 2017

TO: Edina Flats, Owner and Development Team
4416 Valley View Road

CC: Cary Teague – Community Development Director

FROM: Chad Millner, PE - Director of Engineering
Charlie Gerk, PE – Graduate Engineer

RE: **Edina Flats, 4416 Valley View Road – Development Review**

The Engineering Department has reviewed the subject property for pedestrian facilities, utility connections, grading, and storm water. Plans reviewed were; Civil drawings dated 8/25/2017.

Details

1. A Developer's Agreement or Site Improvement Performance Agreement will be required for construction of public sidewalk and utilities.
    a. Deliver as-build records of public infrastructure post construction.
    b. Plat public easements or transfer fee ownership of dedicated public right of way.
2. Parking ramp entrance walls should include provisions for safety fence.

Survey

3. A proposed site survey is required.
    a. Show all easements, public and private.
4. Apply for vacation of existing easements if needed.
5. Describe easements or transfer dedicated outlets for public sidewalks not located within the rights-of-way and any public utilities.

Living Streets

6. Provide sidewalk connection from outwalk to Oaklawn Avenue at 4404 Valley View Road to Valley View Road (similar to the existing condition).
7. Design sidewalks to meet ADA requirements.
8. Sawcut concrete sidewalk joints on public sidewalks per Edina standard plates.

Traffic and Street

9. Maintain sidewalk access or provide sidewalk detour during construction as approved by the City.
10. Clearly denote private sidewalk. Maintenance for non-public sidewalks to be responsibility of property owner.
11. Construction staging, traffic control, and pedestrian access plans will be required.
12. Review fire access requirements with fire department. Fire truck turning template attached. Consider truck overhang when proposing plantings.
13. Street patches following utility connections shall follow standard plate's #540 – #545.

Sanitary and Water Utilities

14. Verify size, location, and condition of existing sanitary sewer services prior to connecting to public sanitary sewer main. Review findings with city prior to making new connections. Use of existing sanitary sewer connections is preferred.
15. All unused sewer and water services shall be capped at the main and removed to the right-of-way line.
16. Verify fire demand and hydrant locations.
17. Clearly indicate private vs public utilities.
18. Domestic water shall be sized by the developer's engineer.
19. Domestic sanitary shall be sized by the developer's engineer.
20. Provide geotechnical report with soil borings.
21. Apply for a sewer and water connection permit with public works.
22. Separate meters for fire and domestic services will be required.
23. A SAC and WAC determination will be required and Met Council and City REC fees will be calculated from the determination.
24. If proposing wet tap, please note existing pipe is an older cast iron pipe at 85 psi.

Storm Water Utility

25. Provide hydraulic and hydrologic report.
26. Evidence of watershed district permit and copies of private maintenance agreement in favor of watershed is required for building permit.
27. Remove trench drain to western ramp, model surface overflow to ensure no overtopping into underground parking on either ramp.
28. Retaining wall on western ramp should be designed for extended saturated soil conditions due to nearby water infiltration feature.
29. Take soil borings and certify that groundwater or water from infiltration feature will not circulate to western ramp sump pump.
30. Parking ramp entrance walls and nearby grading should be designed to keep drainage out.
31. Retention system engineer required to verify construction of the underground retention systems done per plan.
32. Confirm retention system is structural designed for Edina's 80,000lb fire truck load and outriggers in parking lot or drive lane areas.

Grading Erosion and Sediment Control

33. A SWPPP consistent with the state general construction site permit is required.

Other Agency Coordination

34. Minnehaha Creek Watershed permit is required. Hennepin County, MDH, MPCA and MCES permits required as needed.

WENCK File #3022-08
September 15, 2017

DRAFT

Traffic Impact Study for Edina Flats in Edina, MN

Prepared for:
City of Edina

4801 W. 50th Street
Edina, MN 55424

WENCK ASSOCIATES

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Prepared by:

WENCK Associates, Inc.
1800 Pioneer Creek Center
Maple Plain, MN 55359
Phone: 7963-479-4200
Fax: 763-479-4242

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Table of Contents

FIGURES

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

_____ DATE: September 15, 2017

Edward F. Terhaar
License No. 24441

1.0 Executive Summary

The purpose of this Traffic Impact Study is to evaluate the traffic impacts of the proposed condominium development called Edina Flats located in Edina, MN. The project site is located on the north side of Valley View Road at Kellogg Avenue and Oaklawn Avenue.

Based on direction from City of Edina staff, this study examined weekday a.m. and p.m. peak hour traffic impacts of the proposed development on the following intersections:

- Valley View Road/Wooddale Avenue
- Valley View Road/Kellogg Avenue
- Valley View Road/62nd Street
- Wooddale Avenue/61st Street
- Kellogg Avenue/61st Street
- Oaklawn Avenue/61st Street

The proposed project will involve the construction of 18 new condominiums. Three existing single family houses and a hair salon building will be removed and replaced by the proposed condominiums.

Access for four of the condominiums will be provided with a driveway on Valley View Road west of Oaklawn Avenue. Access for the remaining fourteen condominiums will be provided with a driveway on Valley View Road west of Kellogg Avenue. The project is expected to be complete by the end of 2019.

The conclusions drawn from the information and analyses presented in this report are as follows:

- The proposed development is expected to generate 5 net trips during the weekday a.m. peak hour, 4 net trips during the weekday p.m. peak hour, and 56 net weekday daily trips.

- Traffic generated by the proposed development has minimal impact on the intersection operations and does not change the level of service of any movement. No improvements are needed at these intersections to accommodate the proposed project.

- Under existing conditions during the p.m. peak hour, the westbound through and right turn movements at the Valley View Road/Wooddale Avenue intersection operate at poor levels of service. This results in a vehicle queue that extends east to 62nd Street. This condition does not occur during the a.m. peak hour. Additional consideration should be given to operations at this intersection to determine if changes to the intersection control are appropriate.

- The proposed project is expected to have minimal impact on pedestrian and bicycle operations in this area. The number of trips generated by the proposed project has minimal impact on operations at the nearby intersections, including pedestrian and bicycle operations.

2.0 Purpose and Background

The purpose of this Traffic Impact Study is to evaluate the traffic impacts of the proposed condominium development called Edina Flats located in Edina, MN. The project site is located on the north side of Valley View Road at Kellogg Avenue and Oaklawn Avenue. The project location is shown in **Figure 1**.

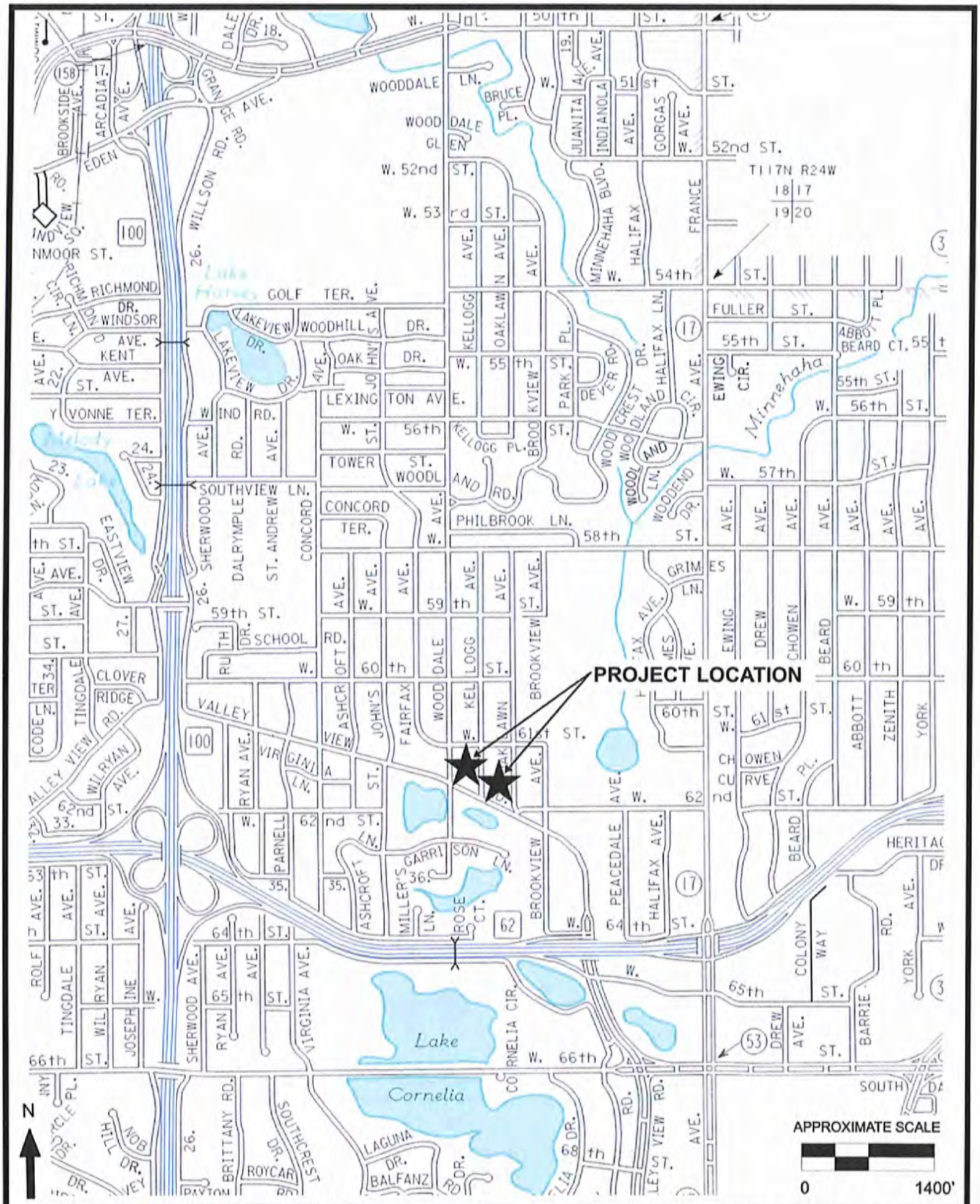
Based on direction from City of Edina staff, this study examined weekday a.m. and p.m. peak hour traffic impacts of the proposed development on the following intersections:

- Valley View Road/Wooddale Avenue
- Valley View Road/Kellogg Avenue
- Valley View Road/62nd Street
- Wooddale Avenue/61st Street
- Kellogg Avenue/61st Street
- Oaklawn Avenue/61st Street

Proposed Development Characteristics

The proposed project will involve the construction of 18 new condominiums. Three existing single family houses and a hair salon building will be removed and replaced by the proposed condominiums.

Access for four of the condominiums will be provided with a driveway on Valley View Road west of Oaklawn Avenue. Access for the remaining fourteen condominiums will be provided with a driveway on Valley View Road west of Kellogg Avenue. The current site plan is shown in **Figure 2**. The project is expected to be complete by the end of 2019.



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TRAFFIC IMPACT STUDY
FOR EDINA FLATS
IN EDINA, MN

FIGURE 1

PROJECT LOCATION

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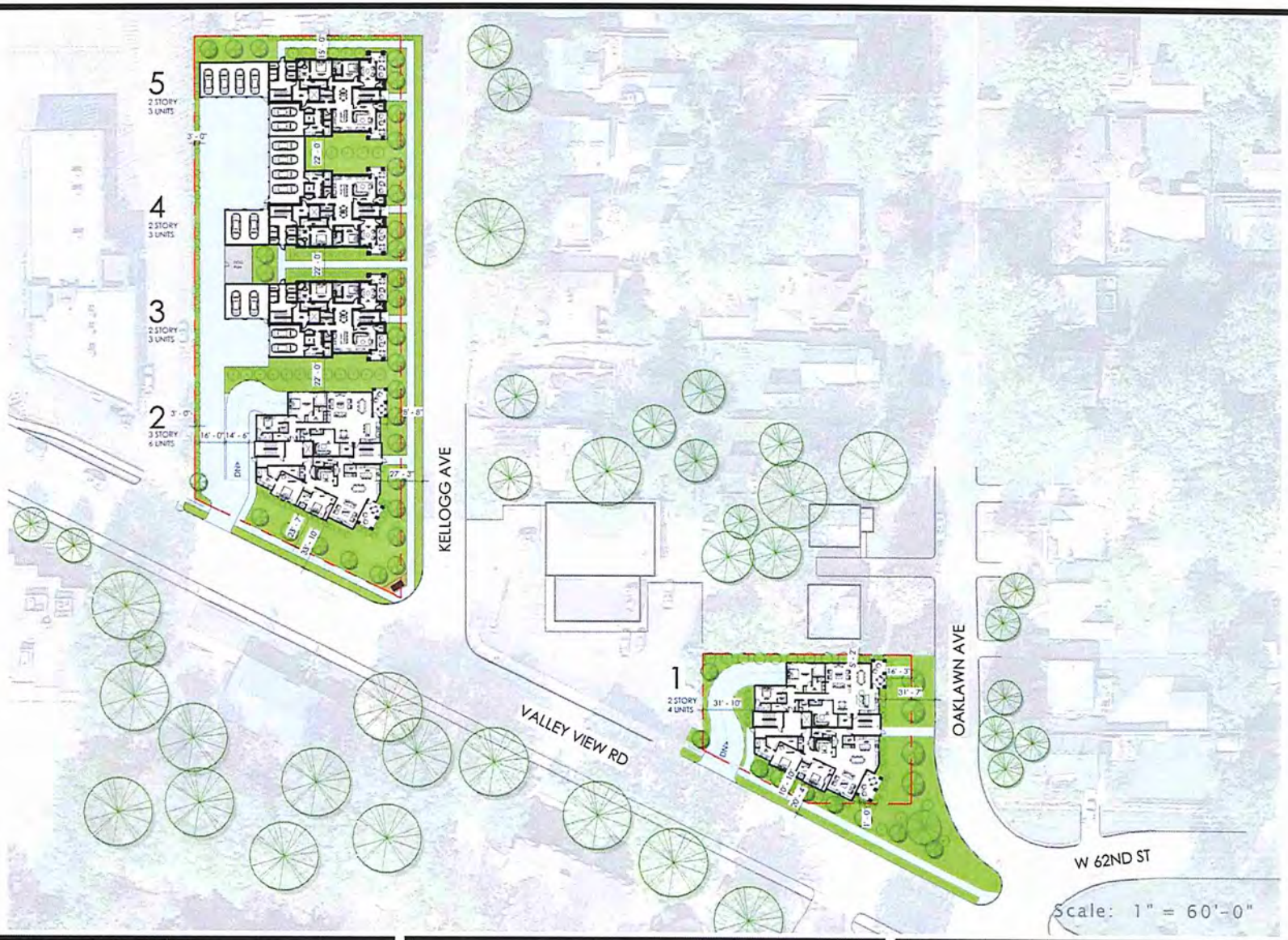

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FOR EDINA FLATS
IN EDINA, MN

FIGURE 2

SITE PLAN

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3.0 Existing Conditions

The proposed site on Kellogg Avenue currently consists of three single family homes and a surface parking lot. The proposed site on Oaklawn Avenue consists of a hair salon building and parking lot.

Near the site location, Valley View Road is a three-lane local roadway. Wooddale Avenue is a two-lane undivided north/south roadway. Kellogg Avenue, Oaklawn Avenue, 61st Street, and 62nd Street are two-lane undivided roadways. Existing conditions at the proposed project location are shown in **Figure 3** and described below.

Valley View Road/Wooddale Avenue

This four-way intersection is controlled with stop signs on all approaches. The eastbound and westbound approaches provide one left turn lane and one through/right turn lane. The northbound and southbound approaches consist of one shared left turn/through/right turn lane. Striped crosswalks are present across the east and south legs.

Valley View Road/Kellogg Avenue

This three-way intersection is controlled with a stop sign on the southbound Kellogg Avenue approach. The eastbound and westbound approaches provide one left turn lane and one through/right turn lane. The southbound approach consists of one shared left turn/right turn lane. A bike lane is provided on both sides of Valley View Road.

Valley View Road/62nd Street

This three-way intersection is controlled with a stop sign on the southbound 62nd Street approach. The eastbound and westbound approaches provide one left turn lane and one through/right turn lane. The southbound approach consists of one shared left turn/right turn lane. A bike lane is provided on both sides of Valley View Road.

Wooddale Avenue/61st Street

This four-way intersection is controlled with stop signs on the eastbound and westbound approaches. All approaches consist of one shared left turn/through/right turn lane.

Kellogg Avenue/61st Street

This four-way intersection is controlled with stop signs on the northbound and southbound approaches. All approaches consist of one shared left turn/through/right turn lane.

Oaklawn Avenue/61st Street

This four-way intersection is controlled with yield signs on the eastbound and westbound approaches. All approaches consist of one shared left turn/through/right turn lane.

Turn movement data for the intersections was collected during the weekday a.m. (7:00 - 9:00 a.m.) and p.m. (4:00 - 6:00 p.m.) peak periods in August 2017.

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TRAFFIC IMPACT STUDY
FOR EDINA FLATS
IN EDINA, MN

FIGURE 3

EXISTING CONDITIONS

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4.0 Traffic Forecasts

Traffic Forecast Scenarios

To adequately address the impacts of the proposed project, forecasts and analyses were completed for the year 2020. Specifically, weekday a.m. and p.m. peak hour traffic forecasts were completed for the following scenarios:

- *2017 Existing*. Existing volumes were determined through traffic counts at the subject intersections. The existing volume information includes trips generated by the uses currently on the site.
- *2019 No-Build*. Existing volumes at the subject intersections were increased by 1.0 percent per year to determine 2020 No-Build volumes. The 1.0 percent per year growth rate was calculated based on both recent growth experienced near the site and projected growth in the area.
- *2019 Build*. Trips generated by the proposed development were added to the 2020 No-Build volumes to determine 2020 Build volumes. In addition, existing trips generated by the uses currently on the site were subtracted from the total volume.

Trip Generation

Weekday a.m. and p.m. peak hour trip generation for the existing and proposed developments were calculated based on data presented in the ninth edition of Trip Generation, published by the Institute of Transportation Engineers (ITE). The resultant trip generation estimates are shown in **Table 4-1**.

Table 4-1
Trip Generation for Proposed Project

Land Use	Size	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Daily
		In	Out	Total	In	Out	Total	Total
Proposed Project								
Condominiums	18 DU	2	7	9	6	3	9	105
Existing Uses Removed								
Hair Salon	1,400 SF	(2)	(0)	(2)	(1)	(1)	(2)	(20)
Single Family	3 DU	(1)	(1)	(2)	(2)	(1)	(3)	(29)
Net Trips		**(1)**	**6**	**5**	**3**	**1**	**4**	**56**

DU=dwelling unit, SF=square feet

Table 1 shows the net number of trips generated by the proposed development including reductions for existing trips. As shown, the project adds 5 net trips during the a.m. peak hour, 4 net trips during the p.m. peak hour, and 56 net trips daily.

Trip Distribution Percentages

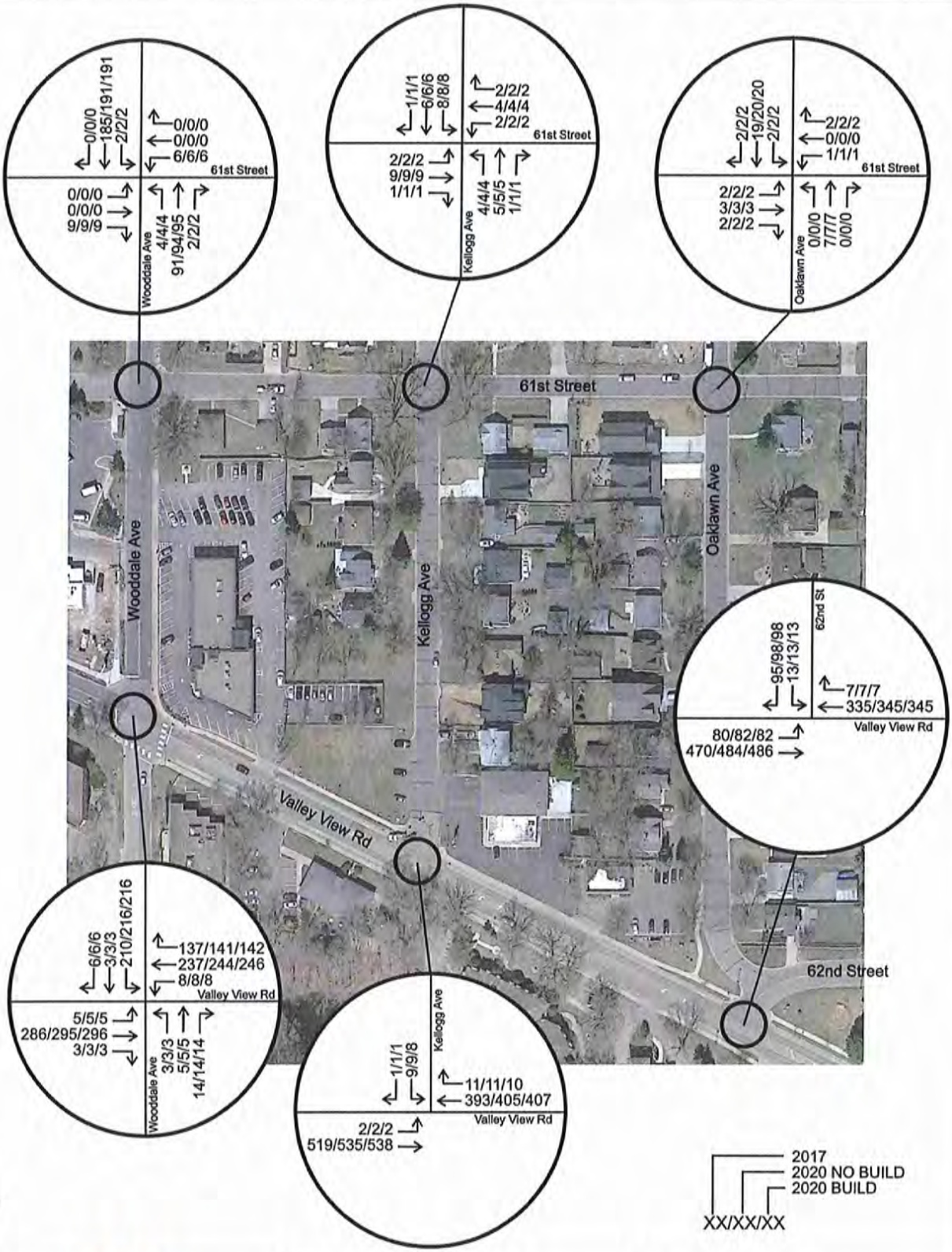
Trip distribution percentages for the subject development trips were established based on the nearby roadway network, existing and expected future traffic patterns, and location of the subject development in relation to major attractions and population concentrations.

The distribution percentages for trips generated by the proposed development are as follows:

- 40 percent to/from the east on Valley View Road
- 30 percent to/from the west on Valley View Road
- 10 percent to/from the east on 62nd Street
- 15 percent to/from the north on Wooddale Avenue
- 2 percent to/from the north on Kellogg Avenue
- 3 percent to/from the north on Oaklawn Avenue

Traffic Volumes

Development trips were assigned to the surrounding roadway network using the preceding trip distribution percentages. Traffic volumes were established for all the forecasting scenarios described earlier during the weekday a.m. and p.m. peak hours. The resultant traffic volumes are presented in **Figures 4 and 5.**



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IN EDINA, MN

FIGURE 4

WEEKDAY A.M. PEAK HOUR TRAFFIC VOLUMES

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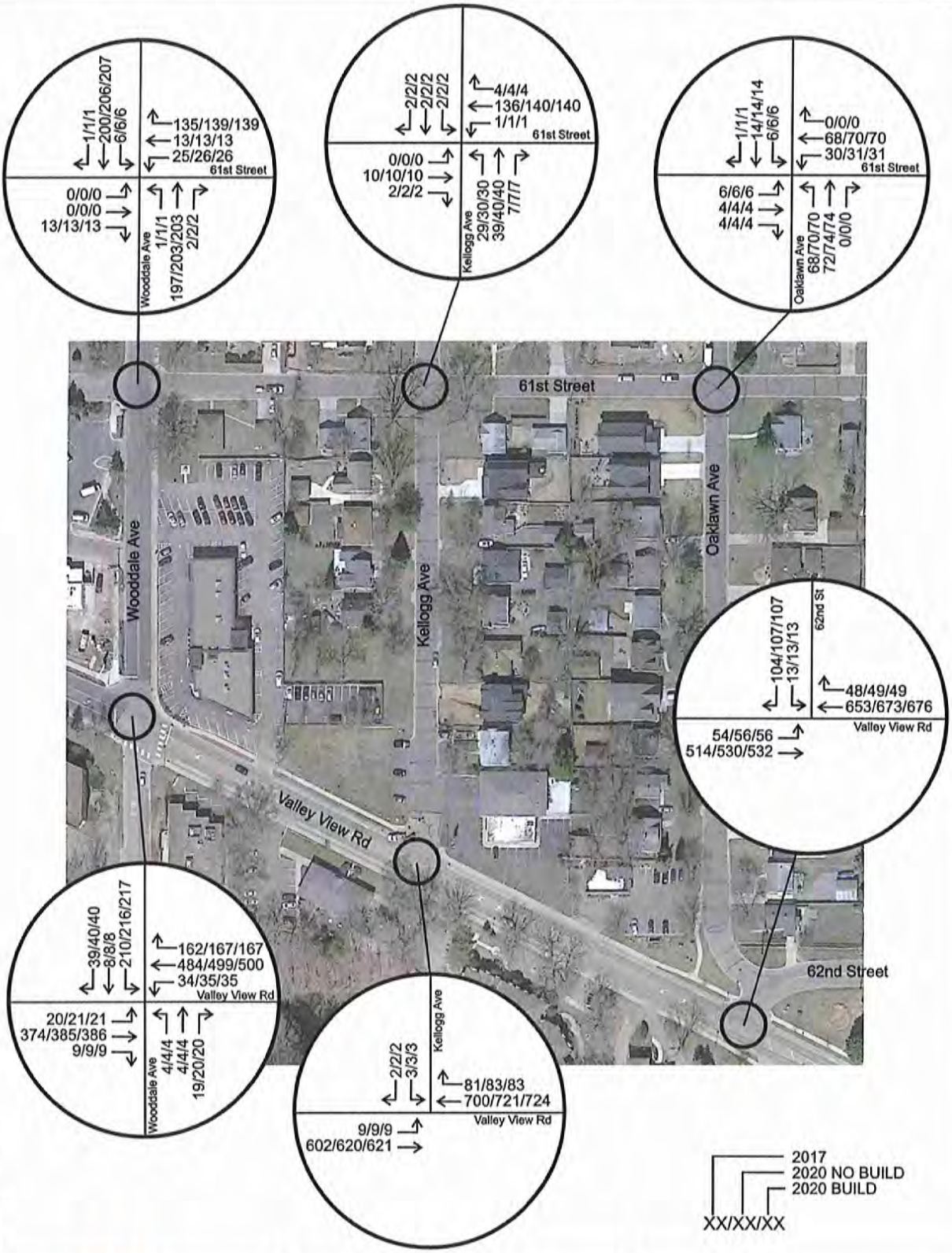

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IN EDINA, MN

FIGURE 5

WEEKDAY P.M. PEAK HOUR TRAFFIC VOLUMES

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5.0 Traffic Analysis

Intersection Level of Service Analysis

Traffic analyses were completed for the subject intersections for all scenarios described earlier during the weekday a.m. and p.m. peak hours using Synchro software. Initial analysis was completed using existing geometrics and intersection control.

Capacity analysis results are presented in terms of level of service (LOS), which is defined in terms of traffic delay at the intersection. LOS ranges from A to F. LOS A represents the best intersection operation, with little delay for each vehicle using the intersection. LOS F represents the worst intersection operation with excessive delay. The following is a detailed description of the conditions described by each LOS designation:

- Level of service A corresponds to a free flow condition with motorists virtually unaffected by the intersection control mechanism. For a signalized or an unsignalized intersection, the average delay per vehicle would be approximately 10 seconds or less.

- Level of service B represents stable flow with a high degree of freedom, but with some influence from the intersection control device and the traffic volumes. For a signalized intersection, the average delay ranges from 10 to 20 seconds. An unsignalized intersection would have delays ranging from 10 to 15 seconds for this level.

- Level of service C depicts a restricted flow which remains stable, but with significant influence from the intersection control device and the traffic volumes. The general level of comfort and convenience changes noticeably at this level. The delay ranges from 20 to 35 seconds for a signalized intersection and from 15 to 25 seconds for an unsignalized intersection at this level.

- Level of service D corresponds to high-density flow in which speed and freedom are significantly restricted. Though traffic flow remains stable, reductions in comfort and convenience are experienced. The control delay for this level is 35 to 55 seconds for a signalized intersection and 25 to 35 seconds for an unsignalized intersection.

- Level of service E represents unstable flow of traffic at or near the capacity of the intersection with poor levels of comfort and convenience. The delay ranges from 55 to 80 seconds for a signalized intersection and from 35 to 50 seconds for an unsignalized intersection at this level.

- Level of service F represents forced flow in which the volume of traffic approaching the intersection exceeds the volume that can be served. Characteristics often experienced include long queues, stop-and-go waves, poor travel times, low comfort and convenience, and increased accident exposure. Delays over 80 seconds for a signalized intersection and over 50 seconds for an unsignalized intersection correspond to this level of service.

The LOS results for the study intersections are presented in **Figures 6 and 7** and discussed below.

Valley View Road/Wooddale Avenue (all-way stop) - During the a.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS C or better. The overall intersection operates at LOS B for all scenarios.

During the p.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements except the westbound through and right turn operate at LOS D or better. The westbound through and right turn operate at LOS F under all scenarios. The overall intersection operates at LOS F for all scenarios.

The traffic generated by the proposed development has minimal impact on the intersection operations and does not change the level of service of any movement.

Valley View Road/Kellogg Avenue (southbound stop controlled) - During the a.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS C or better. The overall intersection operates at LOS A for all scenarios.

During the p.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS C or better. The overall intersection operates at LOS A for all scenarios.

The traffic generated by the proposed development has minimal impact on the intersection operations and does not change the level of service of any movement. No improvements are needed at this intersection to accommodate the proposed project.

Valley View Road/62nd Street (southbound stop controlled) - During the a.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS B or better. The overall intersection operates at LOS A for all scenarios.

During the p.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS C or better. The overall intersection operates at LOS A for all scenarios.

The traffic generated by the proposed development has minimal impact on the intersection operations and does not change the level of service of any movement. No improvements are needed at this intersection to accommodate the proposed project.

Wooddale Avenue/61st Street (eastbound/westbound stop control) - During the a.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS B or better. The overall intersection operates at LOS A for all scenarios.

During the p.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS B or better. The overall intersection operates at LOS A for all scenarios.

The traffic generated by the proposed development has minimal impact on the intersection operations and does not change the level of service of any movement. No improvements are needed at this intersection to accommodate the proposed project.

Kellogg Avenue/61st Street (northbound/southbound stop control) - During the a.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS A. The overall intersection operates at LOS A for all scenarios.

During the p.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS B or better. The overall intersection operates at LOS A for all scenarios.

The traffic generated by the proposed development has minimal impact on the intersection operations and does not change the level of service of any movement. No improvements are needed at this intersection to accommodate the proposed project.

Oaklawn Avenue/61st Street (eastbound/westbound yield control) - During the a.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS A. The overall intersection operates at LOS A for all scenarios.

During the p.m. peak hour under existing, 2020 No-Build, and 2020 Build conditions, all movements operate at LOS B or better. The overall intersection operates at LOS A for all scenarios.

The traffic generated by the proposed development has minimal impact on the intersection operations and does not change the level of service of any movement. No improvements are needed at this intersection to accommodate the proposed project.

Valley View Road/west access (southbound stop controlled) - During the a.m. peak hour under 2020 Build conditions, all movements operate at LOS C or better. The overall intersection operates at LOS A.

During the p.m. peak hour under 2020 Build conditions, all movements operate at LOS C or better. The overall intersection operates at LOS A.

Valley View Road/east access (southbound stop controlled) - During the a.m. peak hour under 2020 Build conditions, all movements operate at LOS C or better. The overall intersection operates at LOS A.

During the p.m. peak hour under 2020 Build conditions, all movements operate at LOS C or better. The overall intersection operates at LOS A.

Valley View Road/Wooddale Avenue Intersection

Under existing conditions during the p.m. peak hour, the westbound through and right turn movements at the all-way stop controlled Valley View Road/Wooddale Avenue intersection operate at poor levels of service. This results in a vehicle queue that extends east to 62nd Street. This condition does not occur during the a.m. peak hour.

The westbound queue impacts the ability of motorists to access Kellogg Avenue as well as driveway access points between Wooddale Avenue and 62nd Street. As shown in the site plan, the proposed access points for the project are located in this area and therefore will be impacted by the vehicle queue.

During the p.m. period when the westbound movements are operating poorly, some westbound motorists that want to travel north on Wooddale Avenue bypass the intersection

by turning onto Oaklawn Avenue or Brookview Avenue. While this results in additional traffic traveling through the area north of the project, it does not result in any level of service issues.

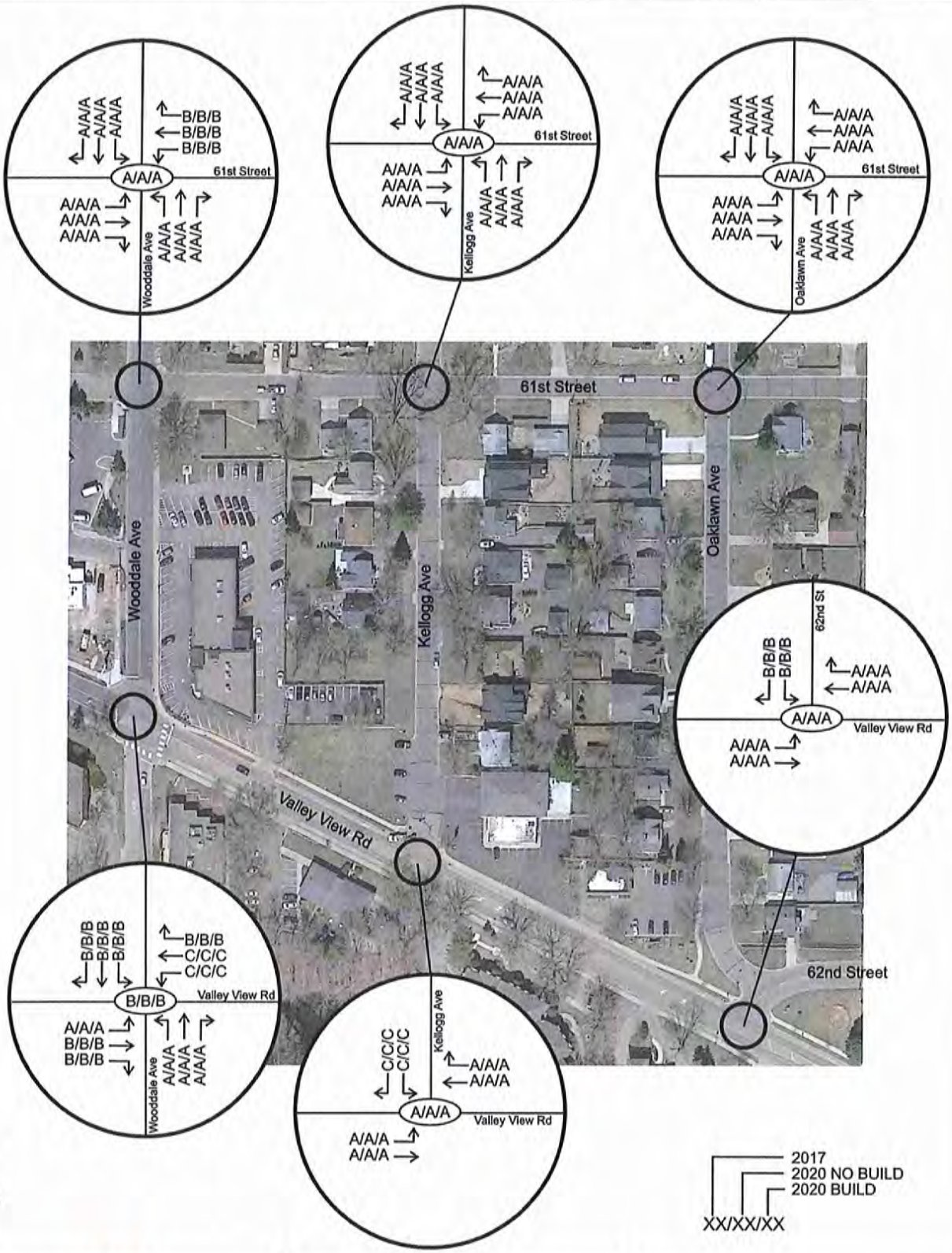
Changing from all-way stop control to traffic signal or roundabout control could help to improve traffic operations and reduce the amount of traffic bypassing the intersection. Additional consideration should be given to operations at this intersection to determine if changes to the intersection control are appropriate.

Bicycle and Pedestrian Facilities

Under existing conditions, sidewalk is provided both sides of Valley View Road and the east side of Wooddale Avenue. Sidewalk is not provided on Kellogg Avenue, Oaklawn Avenue, 61st Street, or 62nd Street. A striped bicycle lane is provided on both sides of Valley View Road. Bicycles are allowed on all the surrounding streets.

The proposed project is expected to have minimal impact on pedestrian and bicycle operations in this area. The number of trips generated by the proposed project has minimal impact on operations at the nearby intersections, including pedestrian and bicycle operations.

Future plans for this area include additional sidewalk on 60th Street, which is located north of the proposed project. The bicycle facilities plan shows additional future bike lanes on both Valley View Road and Wooddale Avenue. The proposed project will benefit from the existing and proposed sidewalk and bicycle facilities in this area. The full sidewalk and bicycle facility plan maps are included in the Appendix.



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TRAFFIC IMPACT STUDY
FOR EDINA FLATS
IN EDINA, MN

FIGURE 6

WEEKDAY A.M. PEAK HOUR LOS RESULTS

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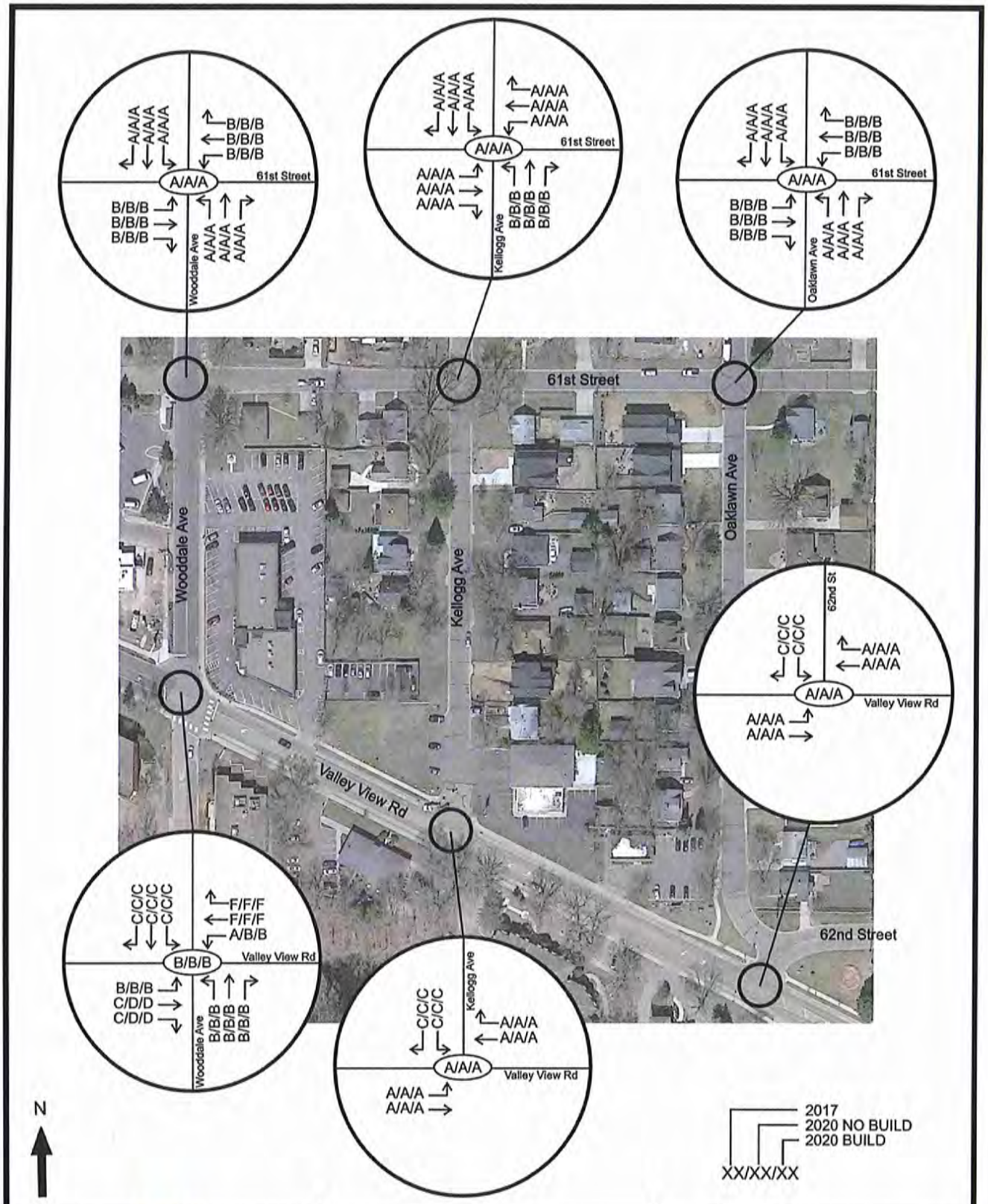

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FOR EDINA FLATS
IN EDINA, MN

FIGURE 7

WEEKDAY P.M. PEAK HOUR LOS RESULTS

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6.0 Conclusions and Recommendations

The conclusions drawn from the information and analyses presented in this report are as follows:

- The proposed development is expected to generate 5 net trips during the weekday a.m. peak hour, 4 net trips during the weekday p.m. peak hour, and 56 net weekday daily trips.

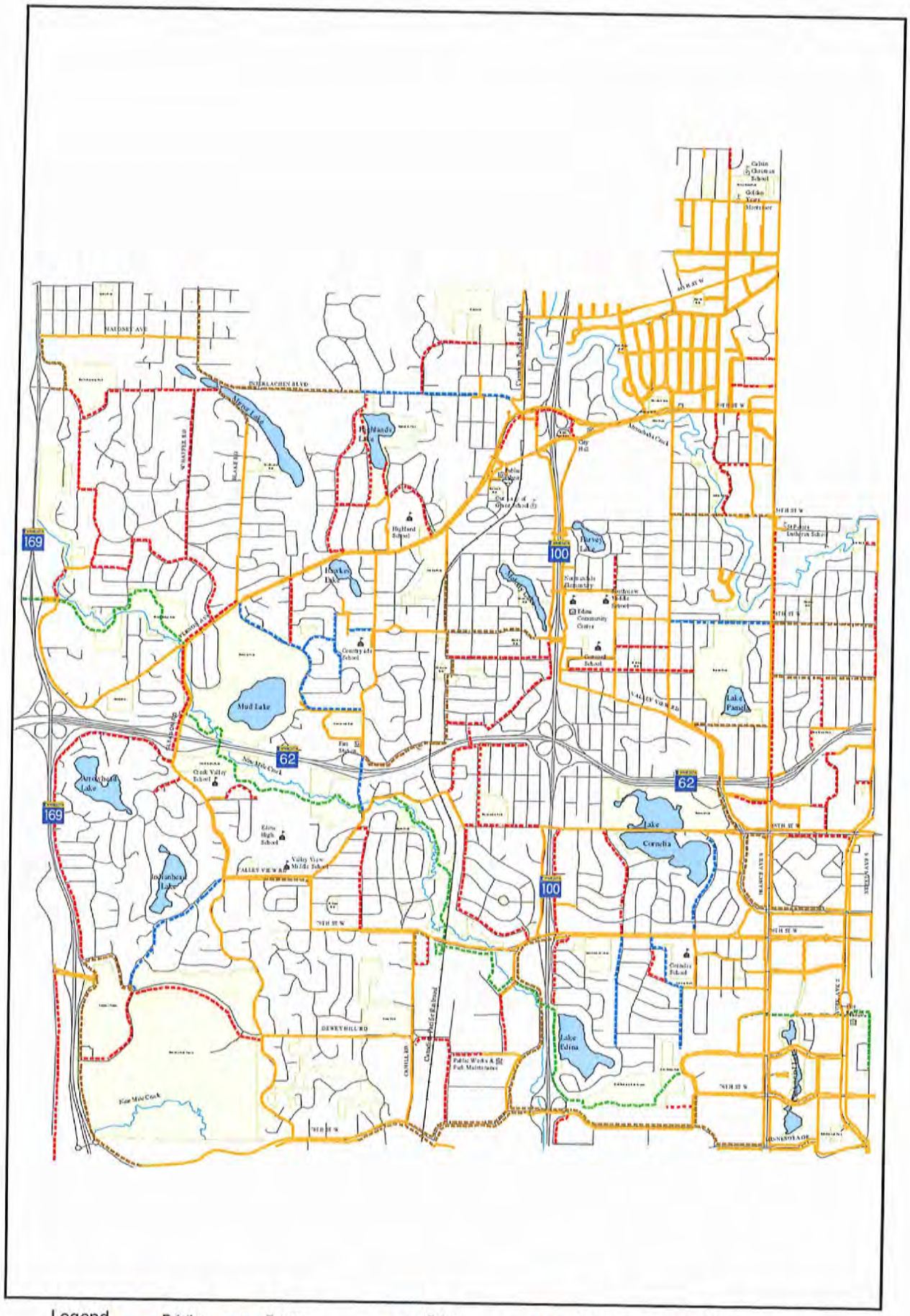
- Traffic generated by the proposed development has minimal impact on the intersection operations and does not change the level of service of any movement. No improvements are needed at these intersections to accommodate the proposed project.

- Under existing conditions during the p.m. peak hour, the westbound through and right turn movements at the Valley View Road/Wooddale Avenue intersection operate at poor levels of service. This results in a vehicle queue that extends east to 62nd Street. This condition does not occur during the a.m. peak hour. Additional consideration should be given to operations at this intersection to determine if changes to the intersection control are appropriate.

- The proposed project is expected to have minimal impact on pedestrian and bicycle operations in this area. The number of trips generated by the proposed project has minimal impact on operations at the nearby intersections, including pedestrian and bicycle operations.

7.0 Appendix

- Bicycle and Sidewalk Facilities Maps
- Level of Service Worksheets



Legend

- Existing Sidewalk
- Future State-Aid Sidewalk
- Future Active Routes To School Sidewalk
- Future City Sidewalk
- Future Nine Mile Creek Regional Trail

City of Edina
2008 Comprehensive Plan Update

Sidewalk Facilities

N W E S

Engineering Dept
November 2014

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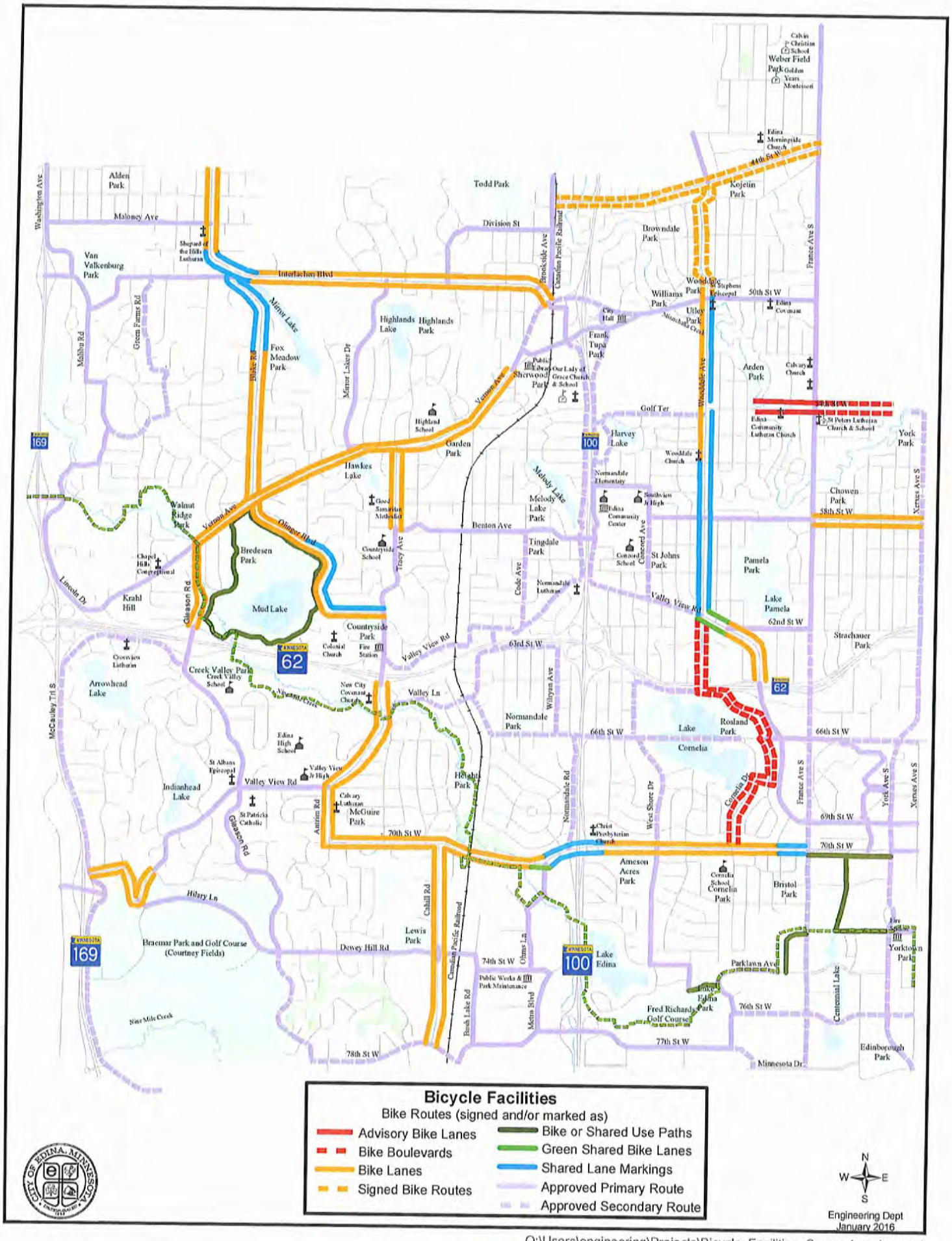

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CITY OF EDINA

4801 West 50th Street
Edina, MN 55424
www.edinamn.gov

Date: September 27, 2017

Agenda Item #: VII.A.

To: Planning Commission

Item Type: Report and Recommendation

From: Kris Aaker, Assistant Planner

Item Activity: Action

Subject: 70th and Cahill Working Group applicant approval

ACTION REQUESTED:
Approve the 70th and Cahill Working Group Members as recommended by the Co-Chairs of the 70th and Cahill Small Area Plan Working Group

INTRODUCTION:
Commission Members/Co-Chairs Strauss and Lee have recommended the attached applicants to populate the 70th and Cahill Working Group for the 70th and Cahill Small Area Plan.

ATTACHMENTS:

70th and Cahill Work Group Members

CITY OF EDINA

City Hall • Phone 952-927-8861

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MEMO

Date: September 27, 2017

To: Planning Commission

From: Kris Aaker, Assistant City Planner

Re: 70th and Cahill Small Area Plan Task Force appointments.

Background

The following are the suggested appointments to the 70th and Cahill Small Area Plan Task Force as recommended for appointment by Susan Lee and Jerry Strauss, Planning Commission members of the Task Force;

Members:

1. Alice Hulbert, Resident Owner
2. Connie Carrino, Resident Owner
3. Philip Peterson, Resident Owner
4. Kyle Udseth, Resident Owner
5. Kristi Neal, Resident Owner
6. Jeff Melin, Commercial Owner
7. Tim Murphy, Commercial Owner