

Roseville Public Works, Environment and Transportation Commission Meeting Agenda

Tuesday, February 24, 2015, at 6:30 p.m.
City Council Chambers, 2660 Civic Center Drive
Roseville, Minnesota 55113

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- | | |
|-----------|--|
| 6:30 p.m. | 1. Introductions/Roll Call |
| 6:35 p.m. | 2. Public Comments |
| 6:40 p.m. | 3. Approval of January 27, 2015 Meeting Minutes |
| 6:45 p.m. | 4. Communication Items |
| 7:00 p.m. | 5. Sanitary Sewer Ordinance Update |
| 7:20 p.m. | 6. Sewer and Water Lateral Ownership |
| 7:45 p.m. | 7. ROW Width Discussion |
| 8:00 p.m. | 8. Twin Lakes Traffic Study |
| 8:15 p.m. | 9. Possible Items for Next Meeting – March 24, 2015 |
| 8:20 p.m. | 10. Adjourn |

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**Roseville Public Works, Environment and
Transportation Commission**

Agenda Item

Date: February 24, 2015

Item No: 3

Item Description: Approval of the January 27, 2015 Public Works Commission Minutes

Attached are the minutes from the January 27, 2015 meeting.

Recommended Action:

Motion approving the minutes of January 27, 2015 subject to any necessary corrections or revision.

January 27, 2015 Minutes

Move: _____

Second: _____

Ayes: _____

Nays: _____

Roseville Public Works, Environment and Transportation Commission Meeting Minutes

Tuesday, January 27, 2015, at 6:30 p.m.
City Council Chambers, 2660 Civic Center Drive
Roseville, Minnesota 55113

1 **1. Introduction / Call Roll**

2 Chair Dwayne Stenlund called the meeting to order at approximately 6:30 p.m.
3 and Public Works Director Schwartz called the roll.
4

5 **Members Present:** Chair Dwayne Stenlund; Vice Chair Steve Gjerdingen; and
6 Members Brian Cihacek, Joan Felice, and Duane Seigler
7

8 **Members Excused:** Members Joe Wozniak and Sarah Brodt Lenz
9

10 **Staff Present:** Public Works Director Duane Schwartz and City Engineer
11 Marc Culver

12 **2. Public Comments**

13 None.
14

15 Chair Stenlund expressed his personal appreciation to outgoing PWETC members
16 Felice and Gjerdingen for their service to the PWETC, which will end in April of
17 this year.
18

19 **3. Approval of November 25, 2014 Meeting Minutes**

20 Cihacek/Felice

21 Member Cihacek moved, Member Felice seconded, approval of the November 25,
22 2014, meeting as amended.
23

24 **Corrections:**

25 **Page 4, line 151 (Stenlund)**

- 26 • Add “electric” in front of meter
27

28 **Ayes: 5**

29 **Nays: 0**

30 **Motion carried.**
31

32 **4. Communication Items**

Mr. Schwartz and Mr. Culver each briefly reviewed project updates and maintenance activities listed in the staff report and attachments dated January 27, 2015.

Discussion included clarification of tax increment financing (TIF) types of uses depending on the District with its defined area in accordance with applicable maps, and legislation and terms when implemented; recent award of Metropolitan Council funds, including for the Sherman apartment project at the intersection of Fairview Avenue and Terrace Drive in Roseville, and concerns in that immediate neighborhood regarding the project as proposed and neighborhood informational meetings held to-date; other confirmed development or redevelopment projects slated for the Twin Lakes Redevelopment Area and infrastructure specifics, including the extension of Twin Lakes Parkway; and local and regional traffic and transportation assessments for infrastructure needs.

Further discussion included Chair Stenlund's request for additional information on the expiration date of each existing TIF District in Roseville; and how TIF District fund balances are determined based on contributions from taxes generated.

Specific to the St. Croix and Wagner Lift Stations, at the request of Chair Stenlund, Mr. Culver explained the proposed work for each station, their size and one a stormwater and the other a sanitary lift station, all pending completion of the consultant study recently authorized by the City Council; and no significant amount of land being disturbed for work required at either location.

Additional discussion included the maps included as attachments to the staff report, and identification of keys used on the map.

5. **Sanitary Sewer Ordinance Update**

The City's Civil Engineer Kristine Giga was present to participate in this portion of the agenda.

Staff provided a presentation on inflow and infiltration (I/I) reduction and elimination efforts as a priority of the City, and authorization by the City Council for Ferguson Waterworks, as part of their replacement of water meters to complete the automated meter reading program, with an alternate bid component incorporating sump pump connection inspections. Staff noted that the data collected would be used to determine how much of a percentage of the overall I/I was due to illegal sump pump connections.

As part of that process, staff noted the need for an update of the City's current sanitary sewer ordinance (Attachment A), with a redlined copy indicating proposed revisions provided via bench handout, ***attached hereto and made a part hereof***. Mr. Culver reviewed I/I issues consisting of an excess flow of clear water being routed into the City's sanitary sewer system and therefore needing

79 unnecessary treatment, costing significant money in excess fees by the
80 Metropolitan Council Environmental Services (MCES) for that additional volume
81 all being routed into the Pigs Eye Treatment Plant.
82

83 Staff noted two kinds of inflow: that from illegal connections (e.g. sump pumps,
84 downspouts, foundation drains) being channeled directly into sanitary sewer
85 pipes; and inflow from groundwater seeping into sewer pipes due to cracks or
86 leaky joints. Staff advised that this becomes a problem as the excess clear water
87 uses sanitary sewer capacity needed for the treatment of the city's wastewater,
88 often resulting in more back-ups and increased costs for treating that clear water.
89 Staff further noted that the MCES required communities with excess I/I to invest
90 in local reduction remedies, including disconnecting sump pumps and foundation
91 drains from the sanitary sewer system, and repairing leaky sanitary sewer pipes.
92 Staff advised that the City of Roseville was one of 74 cities identified and
93 required to pay an annual surcharge for that excess I/I. For the City as a whole,
94 staff reviewed what was being done to reduce I/I and this additional cost to City
95 taxpayers and utility users through sanitary sewer lining, manhole inspections,
96 and sump pump inspections.
97

98 With the current Sewer Use and Regulations Ordinance (Chapter 802) originally
99 adopted in 1969, with only minor revisions since then, staff noted the need for a
100 general update of the entire chapter, as well as incorporating the sump pump
101 inspection portion (Section 802.06.h) specific to construction requirements; and
102 additional language in Section 802.08 prohibiting certain discharges.
103

104 Chair Stenlund addressed the lack of specifics regarding pollution prevention
105 requirements omitted in Section 802.06 during the construction process, with staff
106 advising that any and all ground water management was part of the application,
107 permitting, and review process to ensure environmental structures during
108 construction work.
109

110 As noted by Member Cihacek, staff confirmed that other parts of City Code
111 addressed that (e.g. permit requirements for anything utility related) with erosion
112 control addressed as part of that construction and under separate sections of City
113 Code.
114

115 Member Stenlund noted the need to address how and where soils being excavated
116 are stored and managed (e.g. no "garbage" allowed in the hole, smells, and
117 models of how to perform the work).
118

119 Staff advised that the proposed language revisions incorporated into the new draft
120 for Chapter 802 had been researched from the ordinance examples from the
121 Village of St. Anthony and the City of Golden Valley.
122

Various portions of the code were reviewed with the Commission, with staff attempting to simplify language and references for the general public to better understand (e.g. Section 802.08) and other agency requirements as well.

Section 802.08

Member Cihacek pointed out apparent language missing (e.g. “this”) in reference to prohibited discharges including but not limited to...

Section 802.11

Staff reviewed staff options for entry upon private property, and alternate language proposed for a licensed plumber to provide an acceptable certification of an inspection to meet I/I requirements as an option beyond staff performing inspections if so desired by the property owner.

802.12

Specific to rates and charges, staff advised that the intent was to address these (e.g. surcharges for non-compliance) as part of the annual review of City fees reviewed and adopted by the City Council via resolution versus continually changing ordinances.

Discussion ensued regarding how “certified” inspections would be handles and requirements for that certification if staff was not welcomed by the property owner to perform this due diligence and how inspections could be verified and legitimate.

Mr. Schwartz referenced a court case in Little Canada in the recent past when a property owner refused the City entrance into their home, resulting in a court finding that the City could not demand access to perform sump pump inspections. However, Mr. Schwartz noted that the court determined that a city did have the ability to shut off water/sewer service to encourage property owners to allow access in some situations, but not in a sump pump inspection situation, thereby leaving a city with no recourse. Mr. Schwartz advised that this had prompted cities to find alternative ways to have a sump pump inspection certified by a third party.

Ms. Giga advised that, as part of the water meter replacement program, the City anticipated 5,000 additional homes available for sump pump inspections; with the certification process an option available for those homes with new meters already installed.

At the request of Member Seigler, Mr. Schwartz clarified that this was applicable for any home currently without an automated meter; with 6,000 remaining to be done, 5,000 under the contract approved with Ferguson Waterworks and the other 1,000 to be completed by City staff. Mr. Schwartz advised that, for those homes with no sump pump, the inspection sheet would indicate that no sump pump existed, but with those homes constructed prior to foundation drains being

required, there was no mandate to do anything at this point, with data being gathered on those sump pump connections to the sanitary sewer system.

Member Gjerdingen sought further discussion ensued on the definition of a licensed plumber and who issued that license (City of Roseville and/or State of MN), and asked that the revised language clarify that definition.

Mr. Culver noted the need to have some level of control in who signs off on that inspection, that it be someone licensed and qualified versus a relative or other party not having that expertise. Mr. Culver advised that staff was aware of some homes having sump pump connections since significant discharge was evidenced coming through during annual televising of the system, noting that those areas had already been documented. Mr. Culver advised that, to-date, 3,000 automated meters had already been installed without the data collected on sump pump installations, and some of the proposed ordinance language was attempting to determine those connections through following-up, which would be addressed by the option to use of certified plumbers in performing those inspections. Mr. Culver advised that licensing plumbers was more of a building code functions with contractors required to pull certain permits and registering as a way to verify licensure and protect residents in hiring work done.

Members Seigler and Cihacek questioned the mandate of the MCES, and whether it could be handled at the point of sale for homes rather than at this time or if inspections already occurred on a periodic basis and if so, what triggered inspections.

Mr. Schwartz responded that other communities have used a variety of ways to address this MCES mandate, such as using point of sale programs or others inspecting the entire community. Ms. Schwartz advised that this inspection program as part of the Ferguson Waterworks contract would provide data on 6,000 out of 9,000 single-family homes in Roseville, allowing the City to use that data to develop a mitigation program. Specific to re-inspections, Mr. Schwartz noted that staff may support point of sale inspections after the magnitude of illegal sump pump connections had been determined. However, Mr. Schwartz advised that one of the main issues is the significant amount of money, in the hundreds of thousands of dollars, the City of Roseville currently paid for sewer treatment costs for metered flow, including I/I, and rates paid by utility users for that extra and unnecessary treatment. Mr. Schwartz noted that, since the City Council had already approved the Ferguson contract at their meeting last night, staff was not seeking PWETC debate on the potential inspections, which had already been discussed over the years, since it was deemed an important issue to the City Council.

Member Felice noted that, since staff was observing additional flow during televising, it seems a good idea to have further inspections.

Member Cihacek opined that he found the proposed ordinance revisions fine, but questioned long-term impacts, and suggested that as staff moved forward from initial inspections, they consider future impacts and schedule future discussion of those potential impacts moving forward.

Ms. Giga noted that many cities, as part of their annual pavement management program (PMP), have televised sewer inspections as part of their process to determine if a significant amount of clear water is coming into the system, and at that point send written notice to property owners in that area that inspections would be performed.

In Section 802.11, Ms. Giga noted additional language, modeled from ordinance in three other communities (St. Anthony, Arden Hills and Golden Valley), with language suggested not as stringent or aggressive as those communities, nor with the stiff fine for those found not in compliance. Ms. Giga advised that the Arden Hills model was found to be more general and less detailed, especially the portion addressing surcharges for those found not in compliance at the determination of the City Council, with that fee included in the annual fee schedule and periodically updated to avoid seeming arbitrary or capricious.

Chair Stenlund concurred with the language; but opined it was unfair for the City Council to penalize property owners, preferring to set a fee to avoid being arbitrary and capricious.

Ms. Giga referenced language of the St. Anthony model (Section G) regarding the City not issuing permits for any property found not in compliance and required inspections at the time any other permits are being pulled, noting that this language could be incorporated for future inspections. Regarding rates and charges, Ms. Giga provided a table showing other city fees for surcharges and non-compliance continuing after re-inspection, with that research based on a survey of the Cities of Eden Prairie, Fridley, Falcon Heights, Lauderdale, Minnetonka, Mounds View, New Hope, Plymouth, Shoreview, St. Anthony and West St. Paul.

At the request of Member Cihacek, Mr. Culver noted the intent of a community was to provide the appropriate fee for non-compliance that would provide sufficient financial incentive to become compliant in a timely manner. Mr. Culver estimated the cost for sump pump connections could vary from several hundred to several thousand dollars depending on the amount of piping required to reroute discharges to the exterior of a home.

Member Seigler expressed concern that elderly residents may not have money to pay the surcharge, nor to pay for work needing done to reroute connections.

Mr. Schwartz noted that concern for future reference, while reiterating that the initial issue is gathering data, with proposed ordinance language to address that

attempt, with the noncompliance penalty intended now for those not allowing staff access to make the inspections. Once that data is compiled, Mr. Schwartz noted that the next step in the future would address consequences after those initial inspections.

Mr. Culver noted the anticipated 5,000 meter replacements to be done in one year, providing significant data regarding how much of an issue sump pump noncompliance is to the overall I/I issue, and will provide the magnitude of the problem and options to address those illegal connections based on that data. Mr. Schwartz noted that, once that data is available, the City Council could then determine whether or not to consider resources for residents, an incentive program, or other options.

Section 802.12

At the request of Member Cihacek, Mr. Schwartz clarified that ordinance language regarding a grace period would not be included until completion of the initial assessment. Mr. Schwartz suggested proposed language be modified to address access issues at this point versus noncompliance of the system.

Member Cihacek noted specific language in Sections 11 and 12 that would clarify that.

At the request of Member Gjerdingen, Mr. Schwartz confirmed that the City would keep a record of what was found as part of the data gathering efforts.

Discussion ensued regarding how language defined penalties or fines; further modification of the ordinance after initial data mining inspections; how to determine whether or not sump pump connections were compliant in older homes or for those not having pulled any permits; clarification by staff that the initial inspection was simply a yes/no sump pump connection and how/where they're discharged, with the draft inspection checklist consisting of only 5-6 questions.

Further discussion included defining foundation drains, their typical location and/or visibility; and clarification and/or frequency of non-compliance fees for non-entry inspections versus connections.

Mr. Culver clarified that the City owned water meters and determined when and if they needed changed out, usually with a target area and notification provided to homeowners during a certain time period and appointments scheduled accordingly. Mr. Culver noted that it was seldom a problem to schedule those appointments, with the City being flexible in meeting the needs of the homeowner, including those out-of-town during winter months. Mr. Culver opined that it would be only when resolution seemed unavailable, that a surcharge would be applied, and then only until final resolution was accomplished.

Member Cihacek asked that such language be memorialized in the ordinance.

At the request of Chair Stenlund, Mr. Culver advised that the intent was for the City Council to have an annual fee established versus fees on a case by case basis.

Consensus of the body was that staff return with a revised draft ordinance based on tonight's discussion.

6. **Pathway Maintenance Discussion (Parks staff)**

Parks and Recreation Director Lonnie Brokke was welcomed and introduced by Public Works Director Schwartz; and Mr. Brokke provided a bench handout, ***attached hereto and made a part hereof***, consisting of Policy #42 entitled, "Snow Plowing-Pathway" dated October of 2014. As previously requested by Member Gjerdingen, Mr. Schwartz provided a copy of the City's Streets and Parking Lot Snow and Ice Control Policy," ***also attached hereto and made a part hereof***.

Staff's presentation included a map showing plow routes and location of city parking lots and ice control routes, city and postal installation requirements for mailboxes, snowplow visibility diagrams, roadway clearing diagram, and other applicable information in snow removal efforts by staff, noting that snow removal efforts were a joint responsibility of the Public Works and Parks & Recreation Departments.

Mr. Brokke noted that the city's park trails and off-road paths consisted of 74 miles of pathways, with 53 of those miles plowed by staff and the remaining 21 miles plowed by commercial property owners, with the city's focus on residential and park areas. Mr. Brokke advised that pathway maintenance included plowing, estimating that the Parks & Recreation Department was responsible for 95% of that maintenance, in addition to joint efforts by the departments in trimming of trees and vegetation, sweeping, repairs and/or reconstruction. Mr. Brokke reviewed goals of these efforts, including complete plowing within twenty-four hours to provide passable footing (not bare pavement), and with few exceptions, and no use of salt and sand to avoid adjacent turf damage. Mr. Brokke noted the winter season required continual clean-up with freeze/thaw issues, as well as systematic sweeping and trimming done seasonally as applicable or on an as-needed basis.

At the request of Chair Stenlund, Mr. Brokke reviewed the types of equipment used whether by a sidewalk machine (two currently available) with sweeper, blower or blade attachment for narrower paths, with 8' paths done by truck. Mr. Brokke reviewed other challenges in keeping the pathway system accessible and safe in all seasons. At the request of Chair Stenlund, Mr. Brokke also addressed issues with sidewalk irregularities in some areas, rate of vegetative grown, competing activities and limited staffing, and storm events. Other variables addressed by Mr. Brokke included the amount/type and duration of snow and weather conditions and temperature, equipment failure, and obstructions on pathways.

At the request of Chair Stenlund, Mr. Brokke estimated the life cycle for pathway machines was ten years, with one currently due for replacement and intended to be retained as a back-up since it had little if any trade-in value due to its age and the considerable beating the machines took during their life cycle.

At the request of Chair Stenlund, Mr. Brokke reviewed efforts of the departments in addressing pathway pavement irregularities (e.g. frost heaves, tree roots, handicapped accessibility issues); and continual and/or periodic inspections of the entire system for repairs before the winter season.

Mr. Schwartz noted that the entire trail and pathway network was included in the PMP so they were rated every 4-5 years and built into the Capital Improvement Program (CIP) based on their condition index.

Discussion ensued regarding types or configurations of roads and plowing concerns (e.g. roundabouts, cul-de-sacs, turn lanes at intersections); and prioritization for plowing City streets and/or pathways as applicable with schools, residential areas, and major thoroughfares to bus stops receiving some of the higher priorities, some of which were noted on the plowing route maps provided, with collector streets, obviously serving higher traffic volumes, among the first to be plowed.

Member Gjerdingen noted his prior request to staff to include the pathway and street policies on the City's website for public information; and suggested an additional comment be included on the website for the street policy, with his comments, intended as a disclaimer or as a way to connect the pathway and street plowing policies, provided as a bench handout, ***attached hereto and made a part hereof***. Member Gjerdingen commended staff for their response with snow removal and the great job they did in accomplishing the task. However, part of Member Gjerdingen's concerns, in Section 407.03 of City Code, were that commercial property owners needed to be reminded that they needed to maintain their areas.

Chair Stenlund noted the need to also consider MS4 issues to continually make the public aware of why it was necessary to keep trails flush with and avoid new vegetation growing higher than the pavement, affecting ice accumulation and creating issues with materials not leaving debris for water or ice collection. Chair Stenlund advised that this was his rationale in the "pick-up" versus "flicking" systems of pathway maintenance; and asked that when staff considered new equipment then look at grooming turf to continue drainage to the gutter line versus creating an ice ridge where vegetation could grow over time (e.g. along County Road C).

At the request of Chair Stenlund, Mr. Brokke advised that those areas inadvertently damaged during snow removal operations, were addressed by staff

as time allowed or by homeowners in some cases, or a combination of both parties. Chair Stenlund suggested that issue could become a service project for local Boy Scout troops, which could use compost available from the city and provide benefit to the city overall. Chair Stenlund referenced a salt tolerant seed mix developed by the U of MN for boulevard repair (MNST12) that provided a better turf edge than sod that could convert some of those tougher areas.

Regarding ordinance language for commercial property owners, Member Gjerdingen opined that current language for off-road, non-motorized pathway maintenance didn't seem strong enough, and not clearly stating the obligation of those property owners to provide that maintenance. Therefore, Member Gjerdingen suggested the language as noted on his bench handout, for Section 407.03 to address those issues and provide notice to those property owners of their responsibilities and liability.

Mr. Brokke opined that he found most commercial property owners responsive to their responsibility, but clarified that was a code enforcement issue if they were not responsive, with a process in place to address those issues. Mr. Brokke noted that problems were often the result of new owners or managers not aware of the City's requirements, but upon notice by code enforcement staff, they usually comply.

Mr. Schwartz noted the unusual and extended winter season in 2013/14 that may have compounded issues as everyone tried to keep up with routine maintenance.

Member Gjerdingen reiterated, duly noted by staff, that he would like clarification of private versus public pathway responsibilities, and for pathways on public or adjacent properties.

Chair Stenlund thanked Mr. Brokke for his attendance and for clarifying things for the PWETC.

7. Solar Energy Discussion Update

Mr. Schwartz briefly reviewed background information and subsequent action taken at last night's City Council meeting as detailed in the staff report dated January 27, 2015.

Mr. Culver summarized the City Council's action, as recommended by the PWETC at their November 2014 meeting; authorizing application for two, Made in Minnesota grants, while continuing to pursue a larger KW solar system on the City's larger roofs.

Based on staff's receipt of two proposals as noted in the staff report, Mr. Culver noted authorization for a Letter of Intent with TruNorth to develop specific terms and financing for installation on the City Hall or Fire Station roof. Mr. Culver noted that this would allow time for exploring options and more community

discussion on the potential for a 100Kw system on some of the larger available roofs for community solar based on the interest of the community in pursuing that option. Mr. Culver advised that part of that discussion would include clarification on administration of such a program and potential energy savings available, as staff continued consultation with various agencies and firms on pros and cons, as well as case studies from prior installations in other communities and areas.

Discussion ensued on the Letter of Intent and potential contingencies in place if a tax equity partner was not available; and staff's update of the PWETC on proformas received most recently on the ownership and financial breakdowns, and costs to the City during the term, all of which would become part of any future agreement approved by the City Council and City Attorney.

Further discussion included the competition for these grants; guaranteed energy savings programs per future contracts; whether or not upfront monies would be needed from the City for installation/design; apparent minimal financial risk to the City; and panels sized to allow moving the system from one half of the roof to another in case of maintenance needs.

Mr. Schwartz noted that nothing had been finalized on a community solar garden or expansion of the solar energy program, with the City Council needing additional consideration of such a program, and any approvals on future agendas.

Mr. Culver clarified that, in previous City Council action, the City had entered into agreement with the St. Paul Port Authority (SPPA) allowing private business or church could apply for an SPPA loan to install a solar system, with the City acting as an agent for that private entity should they default, with the City assessing their property to collect any outstanding funds, essentially with the City serving as an agent to the SPPA for that collection of those funds, all based on a legal contract.

Mr. Schwartz clarified that the reason for a third party was to access tax credits that are unavailable to the City or SPPA; and would ultimately provide financial incentives of better benefit to the City rather than the City using its reserve funds for upfront costs.

8. Sewer and Water Lateral Ownership

Mr. Schwartz advised the PWETC that the City Council had requested their study of the current policy for ownership responsibility of sewer and water service laterals. Mr. Schwartz referenced the current code, Chapter 801.17 (Attachment A) provided for preliminary review by the PWETC as background research prior to more detailed discussion planned at the February 2015 PWETC meeting. Mr. Schwartz advised that staff would provide additional information for that meeting.

Mr. Culver referenced related City Code, Chapter 802.07 as previously discussed tonight for the water portion of the discussion, with Section 802.06.L spelling out those specific maintenance areas.

Chair Stenlund noted his personal interested initially in Section 801.08 specific to excavation and construction requirements, especially in consideration of MS4 drainage requirements, and tree resource damages and ownership of trees in public rights-of-way or areas of open-cut excavation. Chair Stenlund asked that staff provide information on that as part of upcoming discussions, and whether those are addressed elsewhere in City Code, which was duly noted by staff. Chair Stenlund noted the ongoing need to include that public information for enforcement purposes.

Chair Stenlund further noted references in current language specific to private use of water tower connections; with Mr. Culver noting this section of code was written in 1964, and while updated in 1995, was in need of updating beyond the City Council charge to make recommendations on ownership of sewer and water laterals.

9. Victoria Street Reconstruction Plan Review

As detailed in the staff report, Mr. Culver provided a review of the Victoria Street Reconstruction plans, and public informational meetings held to-date.

As part of his presentation, Mr. Culver reviewed parking, mailboxes, unique project features, Minnesota State Aid (MSA) design requirements; storm sewer drainage management; and maintaining the existing characteristics to the extent possible.

Mr. Culver further reviewed funding for the project including MSA funds, utility funds, and some assessments (estimated at \$150,000 of the total \$1.3 million project); sidewalk construction costs partially funded by Park Renewal Project funds; park land; cemetery land not assessable per state law; and work plan schedule during the 2015 construction season.

Mr. Culver sought input at this time from the PWETC, especially related to vertical and/or horizontal curves not meeting 40 mph design speeds and potential changes in the roadway profile. Given issues that could significantly impact existing driveways, receipt of an MSA variance to retain the 20 mph speed at the curve at Reservoir Woods, and considering the all-way stop at Roselawn Avenue, Mr. Culver asked the PWETC's consideration in declaring Victoria Street as a 30 mph urban section road to address geometric design concerns, reducing current 40 mph posted speeds. Given that this is a local street with significant residential footage, Mr. Culver noted that problems were encountered managing speeds along some areas. In an effort to reduce current predominant speeds of in excess of 40 mph, Mr. Culver noted the intentional narrower lane reconstruction that would serve as a traffic calming aspect. Mr. Culver noted that residents would

prefer a posted speed of 30 mph, and from a geometric perspective costs could be kept down, but questioned if that may create more speed management issues, and sought PWETC input.

Member Cihacek spoke in support of 30 mph as recommended by staff, providing sufficient educational efforts were involved to alert people.

Discussion included education dictating speed management; design of bank elements on the roadway to reduce speed; variety of areas of the roadway and higher traffic volumes from Larpenteur Avenue up to County Road B, with the roadway north of County Road B under Ramsey County jurisdiction and posted at 40 mph; and additional costs to build up the roadway and driveways, with regrading front yards if that was the recommended option.

Member Gjerdingen spoke in support of a more usable and friendly roadway if posted at 30 mph.

Chair Stenlund supported a 30 mph speed from a safety point of view given the number of residential properties along Victoria Street.

Member Seigler spoke in support of a 30 mph.

Further discussion ensued regarding observed traffic patterns along this corridor; consultations with the Police Department to address current and future complaints and enforcement issues with use of temporary speed boards as part of the education process; and proposed striping for parking on the east side restricted within a certain distance approaching stop signs and/or curves; and more formal designation for on-street parking in other areas.

Member Gjerdingen asked that staff work with MnDOT in addressing heights of bridge railings to create more safety for pedestrians and/or bikers.

Mr. Culver duly noted that request; however, qualified that MnDOT may not be amenable to that request, given the multiple considerations under which the project was developed.

Chair Stenlund opined that this was one of the more complicated projects undertaken by the City in some time; and clarified that references on page 17 and 19 of the Feasibility Report needed correcting as to in which watershed district the project was located. Chair Stenlund further opined that this should be a good improvement for this roadway for livability of its residents as well as reducing speeds.

Other than for the assessment to benefitting properties, Mr. Culver opined that the neighborhood seemed to be excited about the project.

581 **10. Possible Items for Next Meeting – February 24, 2015**

- 582 • **Sewer and Water Utility Lateral Ownership**
583 • **Solar Update**
584 • Soil permitting process (Cihacek)
585 • Examination of penalties for no access to sump pumps (Cihacek)
586 • Examination of permeable pavement construction guidelines for parking as
587 part of the PMP (Cihacek)
588 • Easements on larger roadways and current setback requirements and how they
589 were determined if they were still needed, or could be relaxed to allow
590 homeowners flexibility options to build 2-3 stall garages if so desired
591 (Seigler)

592 Mr. Schwartz noted that, in some areas, there may be other jurisdictions also
593 involved.

594
595 Member Seigler asked that the PWETC be provided by staff with an overview
596 of current rules and areas with pressure (e.g. High Density Residential
597 Districts) that may be applicable for zero setbacks to provide flexibility for
598 home improvements; also providing a better understanding of how/when
599 commercial properties are built up to the curb
600

601 Mr. Culver noted that right-of-way widths were one issue, but setback
602 requirements from a right-of-way were more a zoning issue, with the
603 Community Development Department needing to address that.
604

605 Mr. Seigler clarified that he was seeking a better understanding of lots that
606 may have some flexibility when an easement may take up a significant portion
607 of a lot, and a homeowner was seeking to enlarge their home; and when and
608 where easements were still relevant or could be relaxed.
609

610 Chair Stenlund asked that PWETC members consider participating in the City's
611 annual Ethics training when it became available later this spring, and asked that
612 all members consider attending this very informative and important training.
613

614 For the benefit of the listening audience, Chair Stenlund announced vacancies on
615 the PWETC for two members, and encouraged residents to apply and bring their
616 particular skill sets to the body.
617

618 **11. Adjourn**

619 Member Felice moved, Member Cihacek seconded, adjournment of the meeting at
620 approximately 9:06 p.m.
621

622 **Ayes: 5**

623 **Nays: 0**

624 **Motion carried.**

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: February 24, 2015

Item No: 4

Item Description: Communication Items

Projects update:

- Snelling Ave Bus Rapid Transit: This project is still on schedule for a 2015 construction timeline with actual bus operations beginning in the end of 2015.
- Victoria Street Reconstruction and Sidewalk Project: The City Council is holding a Public Hearing on Monday, February 23rd to consider the proposed public improvements along Victoria Street including the installation of a pathway along the east side of the roadway. Staff will give a quick update on the outcome of the Council's consideration and any significant issues raised by the Council or residents.
- TH 36 Bridge Replacement at Lexington Ave: Staff continues to work with the Minnesota Department of Transportation on the design of the bridge replacement project. Plans are well underway and Mn/DOT intends to advertise for bids this fall.
- Some minor updates have been made to the 2015 Street/Pathway Project Map to reflect the removal of the Gluek Lane area from the Pavement Management Program for 2015 so that the watermain along Gluek Lane can be replaced in 2016 instead of this year which allows us to better manage the water utility fund expenses.

Maintenance Activity:

- Street maintenance staff is providing winter snow and ice control as necessary, boulevard tree trimming, and sign maintenance as well as other preventative equipment maintenance.
- Utility crews have been busy with occasional water main breaks and other normal seasonal maintenance activity. Frost levels are at 4.5 -5 feet which is normal for this time of year.

Solar Update:

The City Council authorized the application for Made in Minnesota Solar Credits Program for possible installation of two 40KW Solar PV rooftop systems. A letter of intent has been signed with TruNorth Solar to submit the applications on the city's behalf. We believe the results of the lottery drawing for funding will be available in April.

Staff also recently met with Minnesota Community Solar to discuss their business model to develop solar subscription projects in this area. They have developed two solar 500KW projects that are fully subscribed in Minneapolis. They only develop projects that are 250KW or larger and currently do not have a project available to Roseville residents for subscription. They indicated a subscriber can typically save 10-15% on their electric energy bill. They are looking for large rooftops and community partners for future projects.

Other:

Staff will brief the Commission on some department reorganization for facility management due to a recent retirement.

Attachments:

A: 2015 Street/Pathway Project Map

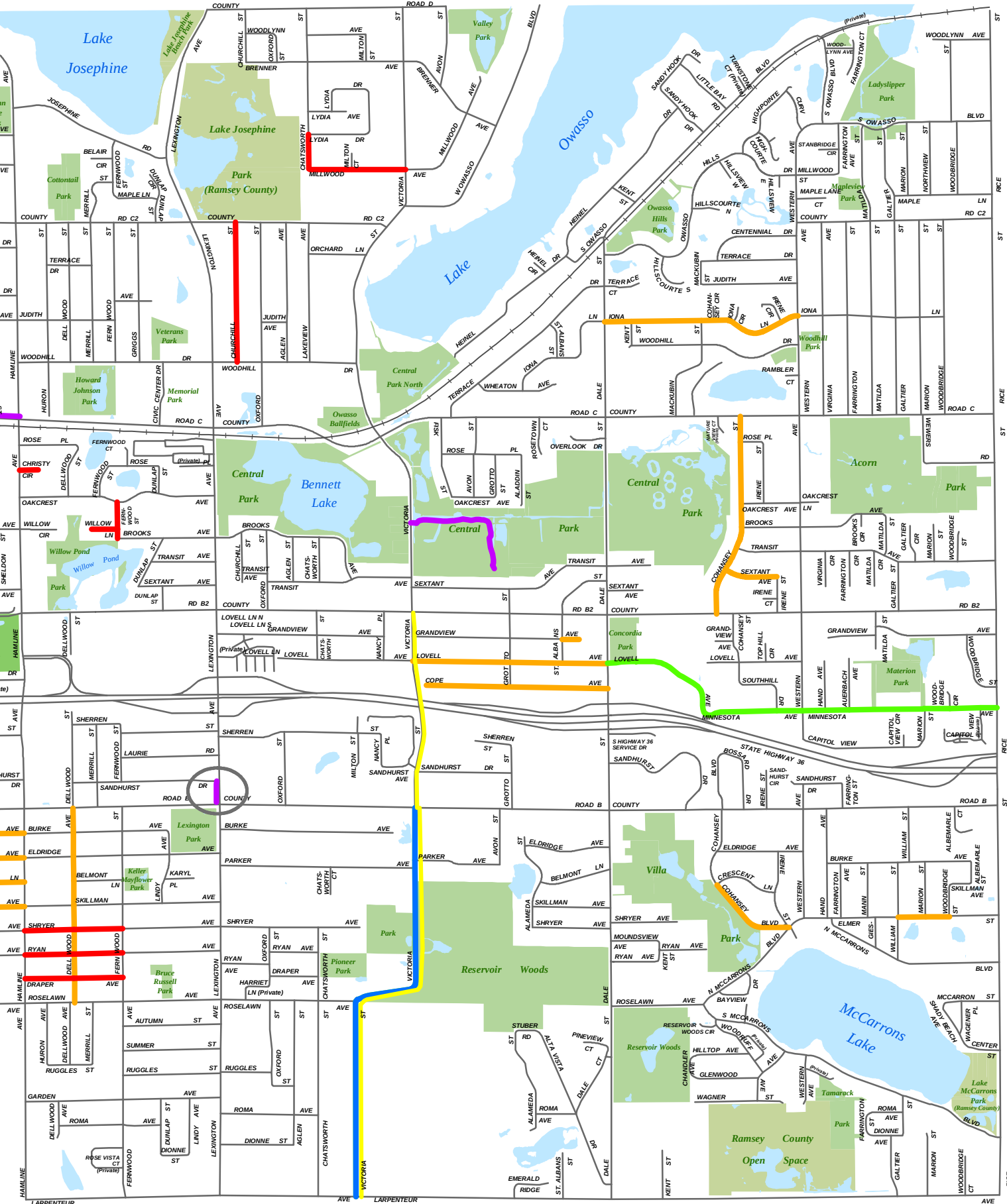
B: 2015 Utility Project Map

2015 Projects



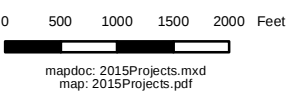
Prepared by:
Engineering Department
February 11, 2015

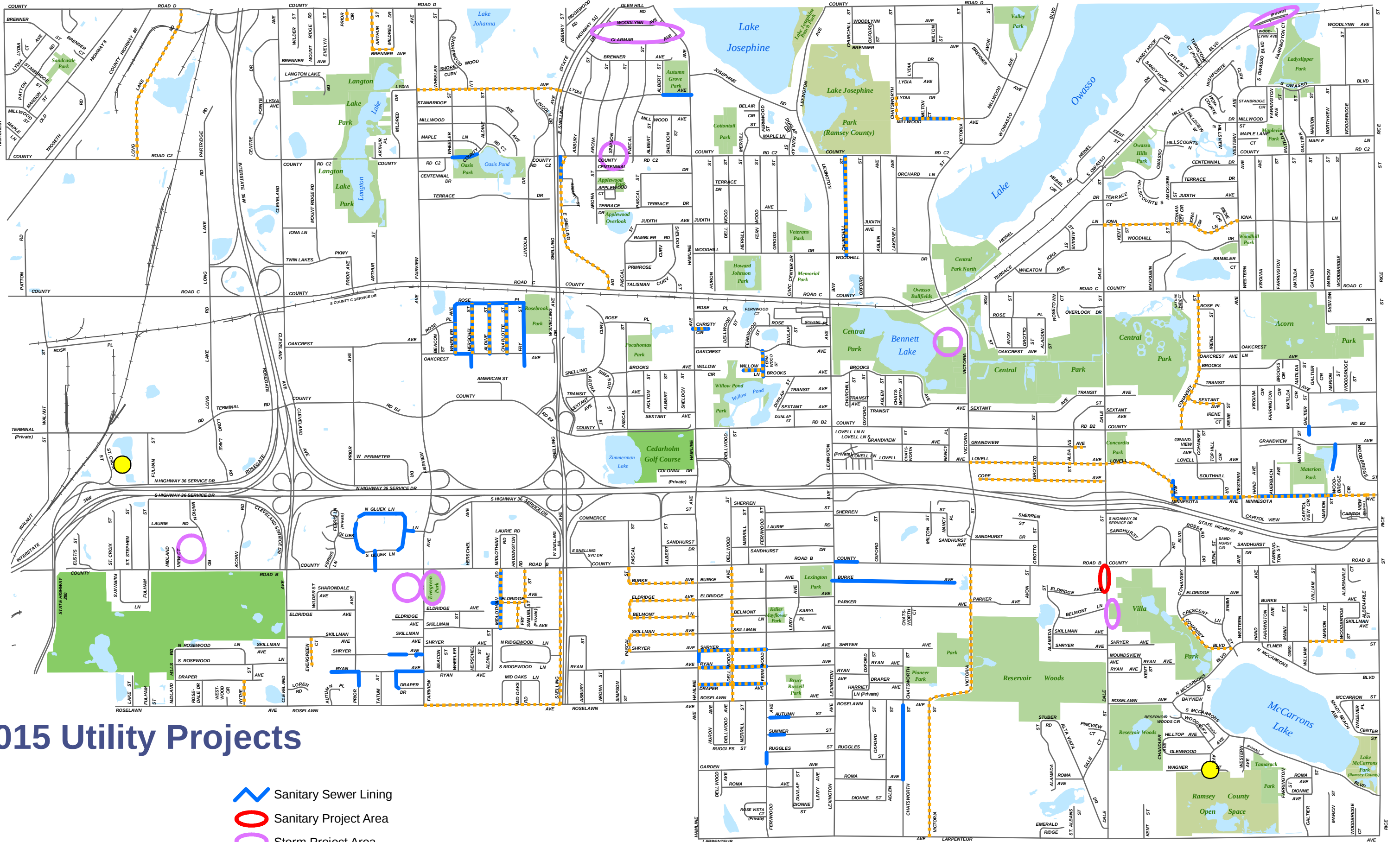
- Reconstruction (1.1 miles & Intersection)
- Mill & Overlay MSA (1.6 miles)
- Mill & Overlay City (3.17 miles)
- Seal Coat (6.39 miles)
- Sidewalk/Pathway Maintenance
- Pathway New Construction



Data Sources and Contacts:
* Ramsey County GIS Base Map (1/05/15)
* City of Roseville Engineering Department
For further information regarding the contents of this map contact:
City of Roseville, Engineering Department,
2600 Civic Center Drive, Roseville MN

DISCLAIMER:
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2015 Utility Projects

-  Sanitary Sewer Lining
-  Sanitary Project Area
-  Storm Project Area
-  Lift Station Improvements
-  Regular Maintenance Work (Seal Coat and Mill & Overlay Segments)

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**Roseville Public Works, Environment and
Transportation Commission**

Agenda Item

Date: February 24, 2015

Item No: 5

Item Description: Sanitary Sewer Ordinance Update

Background:

At the January meeting we discussed potential changes to the Sanitary Sewer Code to bring the language up to date and to make modifications to the access to premises language. These changes are recommended prior to commencing the sump pump inspections as we install the remaining 5500 plus AMR radios/water meters. Data collected will help focus a program to reduce inflow and infiltration.

Inflow and infiltration (I/I) reduction and elimination continues to be a priority for the City. The Metropolitan Council Environmental Services (MCES) requires communities with excess I/I to invest in local reduction remedies such as disconnecting sump pumps and foundation drains from sanitary sewers and repairing leaky sanitary sewer pipes. To urge compliance, MCES incorporated surcharges for communities with excess I/I. Roseville, along with 74 other cities, was identified as a contributor of excess I/I.

Completing sump pump inspections in residential homes will provide staff preliminary information on how many illegal connections there are, and whether this is a major contributing factor to the City's I/I problem. Staff will use the collected data to develop further I/I reduction plans in the City for recommendation to the City Council.

Since the last meeting, staff has refined the draft ordinance language and reviewed it with the City Attorney. Staff expects to review the proposed changes with the City Council at their March 3, 2015 meeting. Attached is the draft ordinance language.

Recommended Action:

Review and motion recommending revised ordinance.

Attachments:

A: Revised Ordinance

CHAPTER 802

SEWER USE AND REGULATIONS

SECTION:

- 802.01: General Operation
- 802.02: Supervision
- 802.03: Connection Required
- 802.04: Application for Sewer Connection
- 802.05: Revocation of Contractor License
- 802.06: Construction Requirements
- 802.07: Use of Certain Buildings Restricted
- 802.08: Prohibited Discharges
- 802.09: Tampering Prohibited
- 802.10: Certain Connections Prohibited
- 802.11: Entry upon Private Property
- 802.12: Rates and Charges
- 802.13: Industrial User Strength Charges
- 802.14: Transport and Dumping of Sewage

802.01: GENERAL OPERATION:

The entire Municipal sanitary sewer system shall be operated as a public utility and convenience from which revenues will be derived, subject to the provisions of this Chapter. (Ord. 218, 9-4-56)

802.02: SUPERVISION:

The Chief Code Enforcement Officer shall supervise all house sewer connections made to the Municipal sanitary sewer system and excavations for the purpose of installing or repairing the same. (Ord. 219, 9-4-56; amd. 1995 Code)

802.03: CONNECTION REQUIRED:

- A. Existing Buildings: Any building used for human habitation and located on property adjacent to a sewer main, or in a block through which the system extends, shall be connected to the Municipal sanitary sewer system within two years from the time a connection is available to any such property.
- B. New Construction: All buildings constructed on property adjacent to a sewer main or in a block through which the system extends shall be provided with a connection to the

Municipal sanitary sewer system for the disposal of all human wastes.

- C. Senior Citizen Deferral: In cases where the owner of an existing building is receiving a senior citizens deferral of special assessments for the cost of the sewer main and no health hazard exists, the City Council may defer the requirement for a connection to the sanitary sewer system until such time as the senior citizen deferral expires or a health hazard exists. (Ord. 901, 3-10-82)

802.04: APPLICATION FOR SEWER CONNECTION:

- A. Permit; Fees: Any person desiring a connection to the Municipal sanitary sewer system for property not previously connected with the system shall make application for a permit to the Chief Code Enforcement Officer, accompanied by such information as required by the Chief Code Enforcement Officer, together with a permit and inspection fee as set by City Council resolution; provided, however, that a separate permit may be issued for that portion of the sewer connection extending from the property line to the main sewer or other outlet for which permit the fee shall be as set by City Council resolution and a separate permit may also be issued for that portion of the sewer extending from the house or building to the property line for which the permit fee shall be as set by City Council resolution. Inspection of the sewer service from the main to the building shall be performed by the Chief Code Enforcement Officer to ensure compliance to all applicable codes. (Ord. 1009, 3-23-87; amd. 1995 Code)
- B. Additional Building Permit Fees: In addition to the building permit fees established in Section 901.06 and in addition to any other fees established in this Code there is hereby established a fee to pay and reimburse the City for all sums which the City shall be required to pay to the Metropolitan Council Environmental Services ~~Metropolitan Waste Control Commission~~ because of all construction.
- C. Additional Fees to Pay for Unassessed Property and to reimburse the City for Metropolitan Council Environmental Services ~~Metropolitan Sewer Board~~ Charges: The permit fee for connection to the City sanitary sewer system shall be paid for each connection in the amount specified in subsections A and B of this Section. In addition thereto, before any permit shall be issued, the following conditions shall be complied with:
 - 1. No permit shall be issued to connect with any sanitary sewer system of the City directly or indirectly from any lot or tract of land unless the Public Works Director shall have certified:
 - a. That such lot or tract of land has been assessed for the cost of construction of the sanitary sewer main with which the connection is made; or
 - b. If no assessment has been levied for such construction cost, the proceedings for levying such assessment have been or will be completed in due course; or
 - c. If no assessment has been levied and no assessment proceedings will be completed in due course, that a sum equal to the portion of cost of constructing said sanitary sewer main which would be assessable against said lot or tract has been paid to the City; or
 - d. That all charges and fees as required by subsection B, which are fees to reimburse the City for all sums paid to the Metropolitan Council Environmental Services ~~Metropolitan Sewer Board~~ required by the construction of new buildings are paid. (Ord. 688, 12-18-72)
 - 2. If no such certificate can be issued by the Public Works Director, no permit to connect to any sanitary sewer main shall be issued unless the applicant shall pay an additional connection fee which shall be equal to the portion of the cost of construction of the said

sanitary sewer main which would be assessable against said lot or tract to be served by such connection for the main, including interest at a rate equal to the interest rate of the original assessment from the date of the original assessment and continuing for a period of 20 years or the amount of years the assessment was payable, whichever is less. Interest may be waived or decreased when it is determined by the Public Works Director that the improvement was not subject to utilization until a later date. Said assessable cost is to be determined by the Public Works Director upon the same basis as any assessment previously levied against other property for the main. If no such assessment has been levied, the assessable cost will be determined upon the basis of the uniform charge which may have been or which shall be charged for similar connection with said main, determined on the basis of the total assessable cost of said main, allocated on a frontage basis, acreage basis or both. (Ord. 745, 12-30-74)

- D. Licenses Required: Permits shall be issued only to such persons who are duly licensed by the City to engage in the business of plumbing who have filed with the City the insurance certificates required under subsection F of this Section; provided, however, that permit may be issued to any person who is duly licensed by the City as a sewer contractor and who has filed with the City the insurance certificates required under subsection F for building and repairing that portion of the house or building sewer extending from the property line to the main sewer or other outlet. (Ord. 234, 8-6-57; amd. 1995 Code)
- E. License Fees: The annual license fee shall be as set by City Council resolution.
- F. Insurance:
 - 1. Before any required permit is issued, the licensee applying for the permit shall file with the City Manager a certificate of insurance covering the licensee for the period covered by the license in the minimum liability amount of six hundred thousand dollars (\$600,000.00).
 - 2. The certificate shall state that the policies covering the licensee shall not be canceled without ten days' written notice to the City. (Ord. 531, 3-20-67; amd. 1995 Code)

802.05: REVOCATION OF CONTRACTOR LICENSE:

- A. Violation: The City Council shall have power to revoke any license upon satisfactory proof that the holder of said license has willfully violated any of the provisions of this Chapter.
- B. Reinstatement: A revoked license shall not be reinstated in any manner for a period of six months.
- C. Claim by City: The failure to pay, within sixty (60) days, any legitimate claim the City may have against a contractor shall constitute cause for revocation of license. (Ord. 233, 7-23-57; amd. 1995 Code)

802.06: CONSTRUCTION REQUIREMENTS:

- A. Materials: All pipes shall be constructed of materials approved by the Public Works Director.
- B. Joints and Connections: All joints and connections shall be constructed of materials approved by the Public Works Director.
- C. Grades:
 - 1. Unless otherwise, all house sewers shall have a grade of not less than one-eighth inch per foot. A grade of one-quarter inch per foot should be used wherever practical. The contractor shall check grades before construction proceeds. Wherever possible, the connecting sewer shall join the building at an elevation which is below the basement floor of such building.

(Ord. 219, 9-4-56)

2. In the event that a sewer service exists from the main sewer to a point outside of the street, the contractor shall excavate and expose the upper end of the service pipe. The elevation of the pipe leaving the structure shall be determined, and the difference between the two pipes shall be sufficient so that a minimum grade of one-eighth inch per foot is maintained. (1990 Code)

- D. Alignment: No connecting sewer shall contain bends or a combination of bends which at any point shall be greater than 45 degrees, and no more than two bends, regardless of angle, shall be permitted in any single house connection except where manholes or, in case of slab home, cleanouts are constructed at such points and in manner as directed by the Public Works Director. No connecting sewer shall be laid parallel to any bearing wall or footing unless further distant than three feet from any such bearing wall or footing. No connecting sewer shall be laid within 20 feet of any existing well. (Ord. 234, 8-6-57)
- E. Trenching and Backfilling:
 - 1. All excavations shall be open trench work unless otherwise authorized by the City Engineer. The foundation in the trench shall be formed to prevent any subsequent settlement of the pipes. If the foundation is good and firm earth, the earth shall be pared or molded to give a full support to the lower third of each pipe. Bell holes shall be dug to provide ample space for pouring of joints. Care must be exercised in backfilling below the center line of the pipe in order to give it proper support.
 - 2. Backfilling shall be placed in layers and solidly tamped or packed up to two feet above the pipe. Backfilling shall not be done until the section to be backfilled has been inspected and approved by the Public Works Director.
- F. Use of Existing Sewer Services: Existing sewer services or portions of such sewers may be approved for use by the Public Works Director. The Public Works Director may request that the old sewer be excavated for the purpose of facilitating inspection. No cesspool or septic tank shall be connected to any portion of a house sewer that is also laid across or over any existing cesspool or septic tank, the existing cesspool or septic tank shall first be pumped clean and filled with earth to the surrounding ground level. Where a sewer is laid across or over any existing cesspool or septic tank, only material approved by the Public Works Director shall be used for that portion of the connecting sewer which is laid across or over the existing cesspool or septic tank.
- G. Connections at "Y" Only: Every connecting sewer shall be connected to the Municipal sewer system at the "Y" designated for the property served by the connection, except where otherwise expressly authorized by the Public Works Director. Where expressly authorized by the Public Works Director, all connections made at points other than the designated "Y" shall be made only under the direct supervision of the Public Works Director in such manner as the Public Works Director may direct.
- H. Sump pumps: All new structures with sumps for which a building permit is issued shall be plumbed to the outside of the dwelling and inspected by City personnel before a certificate of occupancy is issued. A sump pump discharge system shall not be connected directly or indirectly to the City's sanitary sewer system. A sump pump shall have a permanently installed discharge line, which provides for year-round discharge to the outside of a building or structure.
- HI. Tunneling: Tunneling for distances of not more than six feet is permissible in yards, courts or driveways of any building site. When pipes are driven, the drive pipe shall be at least one

size larger than the pipe to be laid.

IJ. Independent Systems Required:

1. The drainage and plumbing system of each new building and of new work installed in an existing building shall be separate from and independent of that of any other building except where provided in this subsection and every building shall have an independent connection with a public sewer when such is available. (Ord. 219, 9-4-56; amd. 1995 Code)
2. A separate connection shall be required for each dwelling unit constructed on or after September 19, 1979, in R-1, R-2, R-4, R-5 and R-6 Districts as defined in Title 10 of this Code. A separate connection shall not be required for apartment-type buildings as determined by the Public Works Director. (Ord. 855, 9-10-79; amd. 1995 Code)

JK. Exception to Independent Sewer System Requirement: Under the following limited circumstances, the requirement for an independent sewer system provided in subsection I of this Section need not be met:

1. Where one building stands to the rear of another building on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard or driveway, the building drain from the front building may be extended to the rear building and the whole will be considered as one building drain. Where such a building drain is extended, a cleanout shall be provided immediately inside the rear wall of the front building.
2. A new structure on one parcel may be permitted to connect to an existing sewer line serving an adjacent parcel when the following conditions are met:
 - a. The alternative construction of a new sewer service to serve the parcel would create a hardship due to the necessity of crossing a railroad or roadway by method other than open cut or as determined by the Public Works Director.
 - b. The owners of the property will sign and record an instrument, in perpetuity, for joint use and maintenance of the shared service, which instrument specifically holds the City harmless and releases the City from any and all claims relating to the shared service. A copy of said instrument will be filed with the City for approval by the City Attorney.
 - c. The Public Works Director determines that the shared sewer has adequate capacity for anticipated flows.
 - d. A cleanout is provided at the junction point of the two (2) services. (Ord. 926, 5-22-83; amd. 1995 Code)

KL. Repair of Public Right of Way: No connection to the City sanitary sewer system shall be finally approved until all streets, pavements, curbs and boulevards or other public improvements have been restored to their former condition to the satisfaction of the Public Works Director. (219, 9-4-56; amd. 1995 Code)

LM. Costs and Maintenance:

1. Installation and Connection: All costs and expenses incidental to the installation and connection to the Municipal sewer system shall be borne by the owner and the owner shall indemnify the City for any loss or damage that may, directly or indirectly, be occasioned by the installation of the sewer connection, including restoring streets and street surface.
2. Maintenance: It shall be the responsibility of the owner or occupant to maintain the sewer service from the main sewer into the house or building. (Ord. 532, 3-20-67)

802.07: USE OF CERTAIN BUILDINGS RESTRICTED:

No person shall use any building or allow any other person to use any building which is not

connected to the Municipal sanitary sewer system as required by Section 802.03 of the City Code. (Ord. 414, 4-6-64)

802.08: PROHIBITED DISCHARGES:

All discharge into the City's sanitary sewer system shall be in conformance with the Waste Discharge Rules adopted by the ~~Metropolitan Council Environmental Services~~~~Metropolitan Waste Control Commission~~. (1995 Code) Prohibited discharges include, but are not limited to, any unpolluted water, such as noncontact cooling water, rain water, storm water, groundwater, or water collected from foundation drains or sumps, or roof drainage; water insoluble oils, including but not limited to, fuel oil, nonbiodegradable cutting oil, lubricating oil, hydraulic oil, mineral oil and motor oil.

802.09: TAMPERING PROHIBITED:

No person shall maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the Municipal sewer system. (Ord. 218, 9-4-56)

802.10: CERTAIN CONNECTIONS PROHIBITED:

No building located on property lying outside the limits of the City shall be connected to the Municipal sanitary sewer system unless authorization is obtained from the City Council. (Ord. 218, 9-4-56; amd. 1995 Code)

802.11: ENTRY UPON PRIVATE PROPERTY:

- A. The Public Works Director and other duly authorized employees of the City, bearing proper credentials and identification, shall at reasonable times be permitted to enter upon all properties for the purpose of inspection, observation, measurement, sampling and testing in connection with the operation of the Municipal sanitary sewer system. (Ord. 218, 9-4-56; amd. 1995 Code)
- B. Every person, owner, lessee or occupant of any parcel of land, building or premises that discharges into the City's sanitary sewer system shall allow an employee of the city or a designated representative of the City to inspect the building or premises to confirm that the building or premises conforms to the requirements of 802.06 of this Chapter. The City may periodically re-inspect any building or premises to determine continued compliance with the requirements of 802.06 of this Chapter.
- C. In lieu of the City inspection, the owner, lessee or occupant may furnish a certificate from a City registered State licensed plumber certifying that the building or premises are in compliance with the requirements of 802.06 of this Chapter.
- D. Surcharges for buildings or premises that do not comply with this section will be determined by the City Council and listed in the Fee Schedule.

802.12: RATES AND CHARGES:

- A. Charges for Use: A charge is hereby imposed upon every person whose premises are served, either directly or indirectly, by the sanitary sewer system within the City, for the use of the facilities of said sewer system and for connection to the system. Such charges shall be in an

amount set by the Council and shall be kept on file in the City Manager's office in the form of a rate schedule. (Ord. 592, 2-17-69; amd. 1990 Code)

- B. Supplemental Charges for Industrial Sewage Wastes: In respect to property which shall be connected to the City sewer for the disposal of industrial sewage wastes, which shall by virtue of its strength and volume be subject to supplementary charges by the Metropolitan Council Environmental Services~~Metropolitan Waste Control Commission~~, the City may impose a supplemental charge based generally upon and at least equal to the amount of the Metropolitan Council Environmental Services ~~Metropolitan Waste Control Commission~~ supplemental charge.
- C. Payment of Charges: Any prepayment or overpayment of charges may be retained by the City and applied on subsequent quarterly statements.
- D. Penalty for Late Payment: Each quarterly billing for sewer charges not paid when due shall incur a penalty charge of ten percent of the amount past due. (Ord. 592, 2-17-69; amd. 1995 Code)
- E. Action to Collect Charges: Any amount due for sewer charges, including Metropolitan Council Environmental Services~~Metropolitan Waste Control Commission~~ sewer charges, in excess of ninety 90 days past due shall be certified to the County Auditor for collection with real estate taxes. This certification shall take place regardless of who applied for sewer services, whether it was the owner, tenant or other person. The City shall also have the right to bring a civil action or other remedies to collect unpaid charges. (Ord. 661, 3-13-72; amd. 1995 Code) (Ord. 1383, 6-08-2009)

802.13: INDUSTRIAL USER STRENGTH CHARGES:

The Metropolitan Council Environmental Services~~Metropolitan Waste Control Commission~~, a metropolitan commission organized and existing under the laws of the State of Minnesota, in order to receive and retain grants in compliance with the Federal Water Pollution Control Act is required to impose industrial user strength charges to recover operation and maintenance cost of treatment works attributable to the strength of discharge of industrial waste. The City shall collect industrial strength charges as dictated by the Metropolitan Council Environmental Services~~Metropolitan Waste Control Commission~~ rules and Minnesota State Statutes and adopts the same by reference. (1995 Code)

802.14: TRANSPORT AND DUMPING OF SEWAGE:

The cleaning and/or emptying of the contents of any privy vault, septic tank, cesspool, sink or private drain located in the City shall be done in an inoffensive manner and the contents shall be placed in and be removed from the premises in closed, tight covered barrels, receptacles or tank trucks so as to prevent the scattering, dropping or leaking while being transported and shall be discharged or destroyed so as not to be offensive to surrounding property owners. (Ord. 168, 9-15-53; amd. 1995 Code)

**Roseville Public Works, Environment and
Transportation Commission**

Agenda Item

Date: February 24, 2015

Item No: 6

Item Description: Sewer and Water Lateral Ownership

Background:

The City Council has requested the PWETC study the current policy of sewer and water service laterals being the responsibility of the property owner as defined in city code. We attached the City Code chapters relating to the sewer and water utilities as background for the January packet. Staff will present the issues related to change of ownership policies and lead a discussion on the topic at your meeting.

Recommended Action:

Receive presentation on sewer and water lateral ownership and liability and provide staff feedback on city policy.

Attachments:

A: None

**Roseville Public Works, Environment and
Transportation Commission**

Agenda Item

Date: February 24, 2015

Item No: 7

Item Description: ROW Width Discussion

Background:

At the January PWETC Meeting, the subject of right-of-way/easement widths was offered specifically in regards to changing or vacating certain easements to allow for home expansion in “areas with pressure (e.g. High Density Residential Districts) that may be applicable for zero setbacks.”

Staff has produced a map of one area of Roseville showing lot lines and right-of-way widths for the roadways within that area. Staff will present this map along with some other information regarding setback requirements and allow the Commission to continue this discussion as to allow some clarification on what additional research may be required or what guest speakers to invite for a future Commission meeting.

The City’s standard right-of-way width for a local roadway is 60 feet. The intention is for the roadway to be centered within that 60 foot right-of-way, but many times development will occur such that the north half of the roadway developed prior to the south half, and the roadway has to be installed in the available right-of-way creating an offset of the roadway location.

The 60 foot right-of-way width was established to provide sufficient width for uses including, but limited to, the City’s standard roadway width of 32 feet, to provide space for snow storage, for the installation of public and private utilities, and the flexibility to add pedestrian facilities if the need arises.

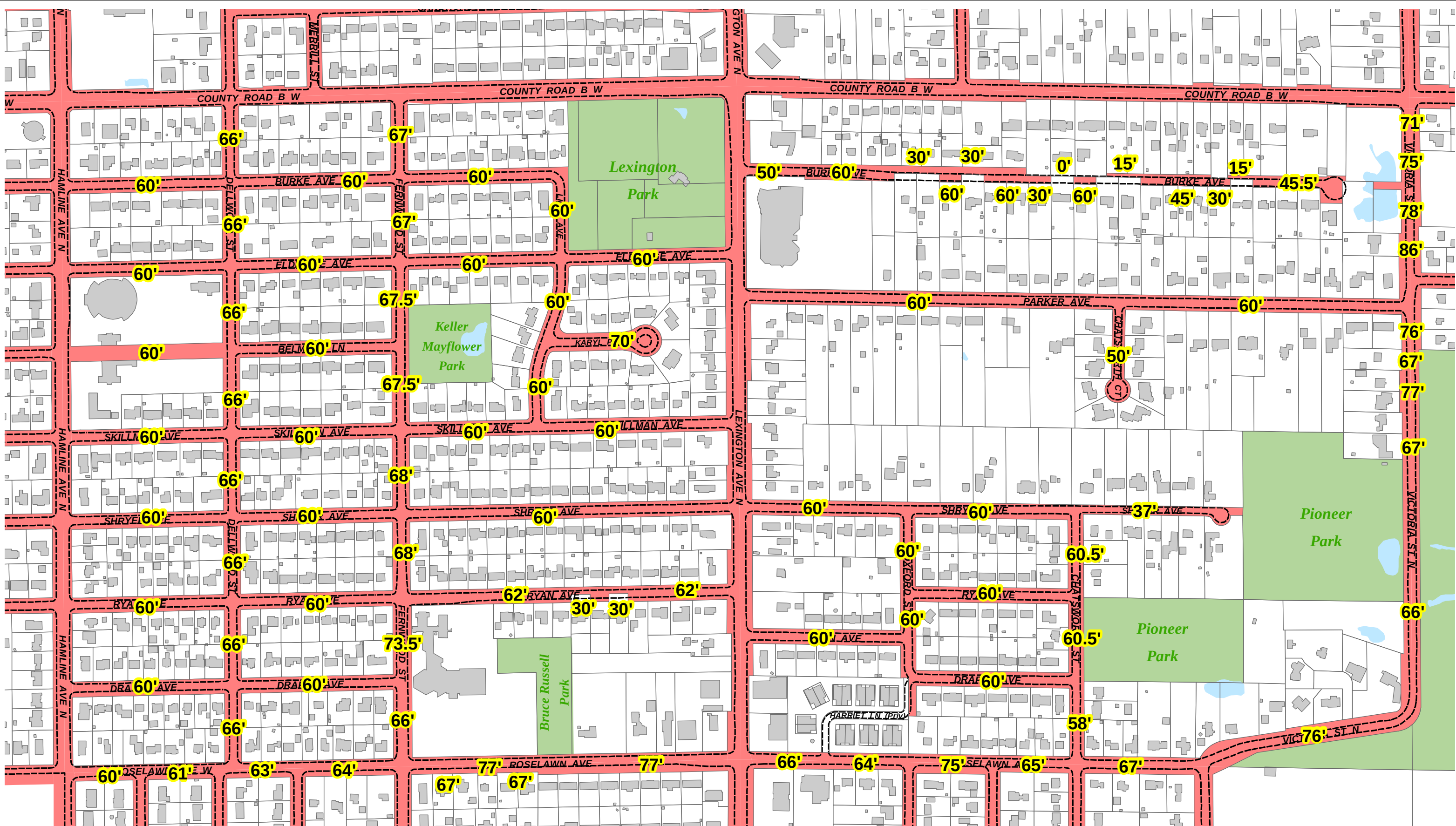
Current zoning ordinances require a 30 foot setback from the front and rear property lines and 5 foot setback from side lot lines.

Recommended Action:

Brief discussion

Attachments:

A: Right-of-way Sample Map

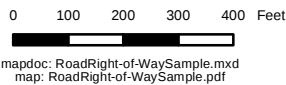


Road Right-of-Way Sample Area

ROSEVILLE
Prepared by:
Engineering Department
February 17, 2015

Data Sources and Contacts:
* Ramsey County GIS Base Map (1/05/15)
* City of Roseville Engineering Department
For further information regarding the contents of this map contact:
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mapdoc: RoadRight-of-WaySample.mxd
map: RoadRight-of-WaySample.pdf

**Roseville Public Works, Environment and
Transportation Commission**

Agenda Item

Date: February 24, 2015

Item No: 8

Item Description: Twin Lakes Traffic Study

Background:

In 2001, the Roseville City Council approved the Twin Lakes Business Park Alternative Urban Areawide Review (AUAR) and further updated the AUAR in 2007 as required by law. As part of the update to that document, a detailed traffic study of the Twin Lakes Area was conducted to provide insight into what the required transportation improvements would be in order to support the proposed levels of development.

Since then, the City has had some development occur in the area and upgraded the area transportation system in spots in accordance with the recommendations of the original and updated AUAR. Also, improvements to the overall regional system have occurred which were not modeled in the 2007 AUAR Update traffic study.

Recognizing the need to continue to provide improvements to the area transportation system to support pending development, in December of 2014, staff had asked the City Council to approve a design contract for the final phase of Twin Lakes Parkway from Prior Avenue to Fairview Avenue. Council considered the recommendation and took public comment on the subject.

At that meeting, and at preceding and subsequent public and neighborhood meetings related to the zoning and land use guidelines for the Twin Lakes Area, residents of Roseville, particularly those in the residential neighborhood north of Terrace Avenue, expressed concern over the impacts of traffic from the proposed development and most directly from the connection of Twin Lakes Parkway to Fairview Avenue. Recognizing that the traffic studies that were being referenced by staff to defend the connection were at least seven years old, the City Council directed staff to update the 2007 Twin Lakes Area traffic study.

Over the last two months, staff has been working with SRF Consulting Group to collect updated traffic counts and to analyze the proposed developments and the connection of Twin Lakes Parkway to Fairview Avenue. The updated traffic study is attached.

Staff will review the discussion and neighborhood feedback on the study from the Monday evening City Council meeting with the Commission.

Recommended Action:

Provide feedback to staff regarding the study results and recommendations.

Attachments:

A: Traffic Study



Memorandum

SRF No. 0148737

To: Marc Culver, PE
Assistant Public Works Director/City Engineer
City of Roseville

From: Craig Vaughn, PE, PTOE, Principal
Emily Gross, Engineer

Date: February 12, 2015

Subject: Twin Lakes Redevelopment Area Traffic Study Update

Introduction

As requested, SRF has completed an updated traffic operations analysis for the Twin Lakes Redevelopment area. This essentially updates the traffic analysis section of the *Twin Lakes Alternative Urban Areawide Review (AUAR) Update Technical Memorandum Traffic, Air and Noise Analysis*, dated July 3, 2007. The current analysis expands the study area to include the parcels west of Cleveland Avenue between County Road C and County Road D, as well as the parcels adjacent to Lincoln Drive between County Road C and Lydia Avenue. This expanded study area is shown in Figure 1; it is generally bounded by Snelling Avenue, Cleveland Avenue, County Road D, and County Road C in the City of Roseville.

To understand the impacts to the study area with the extension of the Twin Lakes Parkway to Fairview Avenue, the following three scenarios were reviewed under future conditions:

- Scenario 1 – No build roadway condition with background traffic growth added
 - Twin Lakes Parkway **not** extended to Fairview Avenue, background traffic growth, and no additional development in the Twin Lakes area except currently planned land uses.
- Scenario 2 – No build roadway condition with background traffic growth added and full build land use potential included
 - Twin Lakes Parkway **not** extended to Fairview Avenue, background traffic growth, and full build land use scenario for Twin Lakes area.
- Scenario 3 – Build roadway condition with background traffic growth and full build land use potential included
 - Twin Lakes Parkway extended to Fairview Avenue, background traffic growth, and full build land use scenario for Twin Lakes area.

The main objectives of this study are to update the Twin Lakes area land use assumptions, traffic forecasts, and traffic operations, as well as quantify the impact of the Twin Lakes Parkway extension to Fairview Avenue. The following information provides the assumptions, analysis, and study recommendations offered for consideration.



Existing Conditions

The existing conditions were reviewed to establish a baseline to compare future conditions. The evaluation of existing conditions includes peak hour intersection turning movement counts, field observations, and an intersection capacity analysis.

Data Collection

Recently collected weekday p.m. peak period turning movement counts were reviewed at the following study intersections:

- County Road C and Cleveland Avenue
- County Road C and Prior Avenue
- County Road C and Fairview Avenue
- County Road C and Lincoln Drive
- County Road C and Snelling Avenue
- Twin Lakes Parkway and Mount Ridge Road
- Cleveland Avenue and NB I-35W Ramps/Twin Lakes Parkway
- Fairview Avenue and Terrace Drive
- Snelling Avenue and County Road C2
- Snelling Avenue and Lydia Avenue

Weekday p.m. peak period turning movement were collected by SRF on Thursday, January 22, 2015 at the remaining study intersections:

- Cleveland Avenue and Iona Lane
- Cleveland Avenue and County Road C2
- County Road D and NB I-35W Ramps
- County Road D and Cleveland Avenue
- County Road D and Fairview Avenue/New Brighton Road
- Fairview Avenue and Lydia Avenue

Observations

Field observations were completed to identify roadway characteristics within the study area (i.e. roadway geometry, posted speed limits, and traffic controls).

- **Cleveland Avenue** is primarily a four-lane undivided roadway with a posted speed limit of 40 miles per hour (mph).
- **Fairview Avenue** is a four-lane undivided roadway south of County Road C2 and a two-lane undivided roadway north of County Road C2 with a posted speed limit of 40 mph.

- **Snelling Avenue** is a four-lane divided roadway with a posted speed limit of 50 mph.
- **County Road C** is a four-lane divided roadway with a posted speed limit of 45 mph.
- **County Road D** is four-lane undivided roadway west of Wilder Street and a two-lane undivided roadway east of Wilder Street with a posted speed limit of 35 mph.
- **Twin Lakes Parkway**, which currently extends from Cleveland Avenue to Prior Avenue, is a two-lane divided roadway with a posted speed limit of 30 mph.
- The remaining study roadways are two-lane undivided roadways with a 30 mph speed limit.

Currently, all of the study intersections are controlled by traffic signals, with the exception of the following:

- Cleveland Avenue/Iona Lane, Cleveland Avenue/County Road C2, and Fairview Avenue/Terrace Avenue are unsignalized with side-street stop control
- Fairview Avenue/Lydia Avenue and County Road D/Fairview Avenue/New Brighton Road intersections are unsignalized with all-way stop control
- Twin Lakes Parkway/Mount Ridge Road intersection is a single-lane roundabout

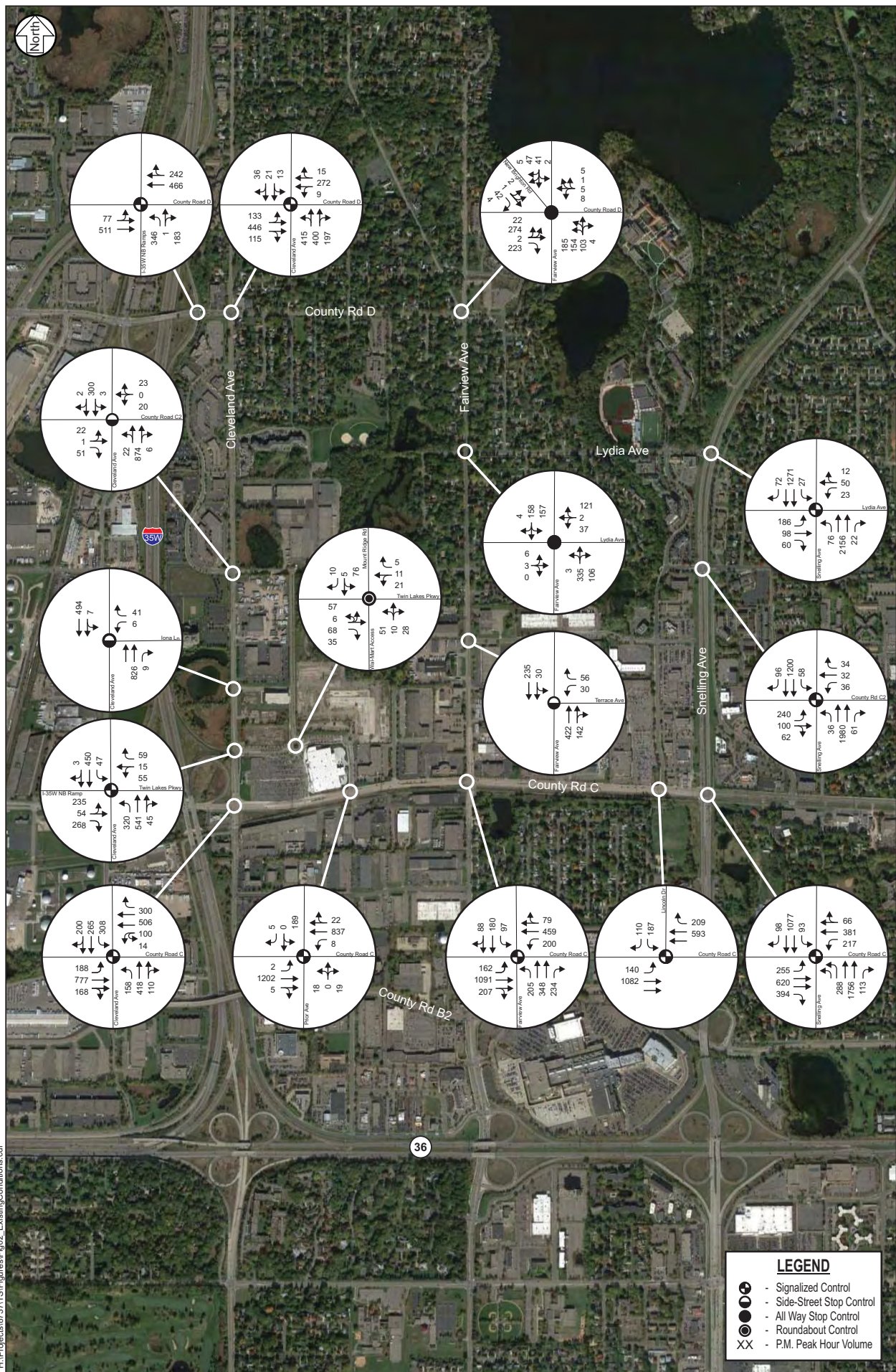
Existing geometrics, traffic controls, and volumes within the study area are shown in Figure 2.

Traffic Volume Comparison

The current study is the first comprehensive review of traffic operations and traffic volumes in the Twin Lakes area since the 2007 AUAR. There have been changes to the land use and regional transportation system that have affected traffic volumes within the study area. The following summarizes the pattern shifts observed when comparing the recently collected p.m. peak hour volumes with the year 2006 volumes reported in the 2007 AUAR:

- Traffic volumes and travel patterns have changed over the past eight years.
 - P.M. peak hour volumes along County Road D (between I-35W and Fairview Avenue) and along Fairview Avenue (between County Road D and Terrace Drive) have decreased approximately 10 to 15 percent.
 - P.M. peak hour volumes along County Road C have increased approximately 15 percent near Cleveland Avenue, 50 percent near Fairview Avenue, and 30 percent west of Snelling Avenue.
 - Eastbound approach volumes at the Cleveland Avenue and NB I-35W Ramps/Twin Lakes Parkway intersection have decreased 30 percent during the p.m. peak hour.

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Intersection Capacity Analysis

An operations analysis was conducted to determine how traffic will operate at the study intersections under existing conditions. All intersections were analyzed using Synchro/SimTraffic software and the Highway Capacity Manual (HCM). Intersection operations analysis results identify a Level of Service (LOS) which indicates how well an intersection is operating. Intersections are ranked from LOS A through LOS F. The LOS results are based on average delay per vehicle, which correspond to the delay threshold values shown in Table 1. LOS A indicates the best traffic operation and LOS F indicates an intersection where demand exceeds capacity. Overall intersection LOS A through D is considered to be acceptable traffic flow conditions based on MnDOT guidelines.

Table 1. Level of Service Criteria for Signalized and Unsignalized Intersections

LOS Designation	Signalized Intersection Average Delay/Vehicle (seconds)	Unsignalized Intersection Average Delay/Vehicle (seconds)
A	≤ 10	≤ 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

For side-street stop controlled intersections, special emphasis is given to providing an estimate for the level of service of the minor approaches. Traffic operations at an unsignalized intersection with side-street stop control can be described in two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support these volumes.

Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, the majority of delay is attributed to the minor approaches. It is typical of intersections with higher mainline traffic volumes to experience increased levels of delay (i.e. poor levels of service) on the side-street approaches, but an acceptable overall intersection level of service during peak hour conditions.

Results of the existing operations analysis shown in Table 2 indicate that all study intersections currently operate at an acceptable overall LOS D or better during the p.m. peak hour with the existing geometric layout and traffic control, except along County Road C at the Lincoln Drive and Snelling Avenue intersections, which operate at LOS F.

Table 2. Existing P.M. Peak Hour Operations Analysis

Intersection	Level of Service
County Road C and Cleveland Avenue	C
County Road C and Prior Avenue	B
County Road C and Fairview Avenue	C
County Road C and Lincoln Drive	F
County Road C and Snelling Avenue	F
County Road D and NB I-35W Ramps	B
County Road D and Cleveland Avenue	C
County Road D and Fairview Avenue/New Brighton Road ⁽²⁾	C
Twin Lakes Parkway and Mount Ridge Road ⁽³⁾	A
Cleveland Avenue and NB I-35W Ramps/Twin Lakes Parkway	C
Cleveland Avenue and Iona Lane ⁽¹⁾	A/A
Cleveland Avenue and County Road C2 ⁽¹⁾	A/B
Fairview Avenue and Terrace Drive ⁽¹⁾	A/A
Fairview Avenue and Lydia Avenue ⁽²⁾	B
Snelling Avenue and County Road C2	D
Snelling Avenue and Lydia Avenue	C

(1) Indicates an unsignalized intersection with side-street stop control where the overall LOS is shown followed by the worst approach LOS.

(2) Indicates an unsignalized intersection with all-way stop control.

(3) Indicates an unsignalized intersection with roundabout control.

The operational issues at the County Road C/Lincoln Drive intersection are a result of poor operations and significant eastbound queues at the County Road C/Snelling Avenue intersection. To mitigate this situation, modifications are necessary to the at-grade intersections along Snelling Avenue or additional capacity is needed along the Snelling Avenue corridor. For purposes of this analysis an additional lane in each direction is assumed under future conditions (six-lane Snelling Avenue facility).

Year 2030 Forecasts

Trip Generation

SRF worked with City staff to identify redevelopment opportunities in the study area. Parcels, which were not expected to redevelop or change in land use by the year 2030 were identified and are shown in Figure 3. The remaining parcels are expected to redevelop. City staff provided the appropriate land assumptions to use for the developable parcels to create a realistic land use plan. These land use assumptions are relatively consistent with Land Use Scenario C from the *Twin Lakes Alternative Urban Area-wide Review (AUAR) Update Technical Memorandum Traffic, Air and Noise Analysis*, dated July 3, 2007.

While not yet approved or constructed, the City has received the following development proposal plans in the study area, which represent the known “planned” land uses for the study area:

- Mixed-used development at 2700 and 2750 Cleveland Avenue (Block 3)
 - 18,500 square foot grocery store, 14,000 square feet of retail space, and 205 hotel rooms
- Residential development at 2785 Fairview Avenue (Block 5)
 - 190 apartment units and 6,000 square feet of office/retail space

Trip generation estimates for both the current and future land uses were developed for the p.m. peak hour and on a daily basis using the *ITE Trip Generation Manual, 9th Edition*. Tables 3, 4 and 5 display a summary of the land use and trip generation estimates for each individual block and subarea as shown in Figure 3. The known planned land uses identified above are highlighted in red in the tables below. It should be noted that since p.m. peak hour driveway counts were not available for all of the current developments within the study area, this study assumes that the existing land uses generate at the ITE average rate.

Table 3. Trip Generation Estimate –Subarea I (Center)

Block	Land Use Type (ITE Code)	Existing				Year 2030 Land Use Plan			
		Size	P.M. In	P.M. Out	Daily	Size	P.M. In	P.M. Out	Daily
1A	Light Industrial (110)	48,485 SF	6	41	338	-	-	-	-
	General Office Building (710)	-	-	-	-	150,000 SF	38	186	1,655
1B	Apartment (220)	-	-	-	-	70 DU	28	15	466
	General Office Building (710)	-	-	-	-	150,000 SF	38	186	1,655
2	Apartment (220)	-	-	-	-	45 DU	18	10	299
	General Office Building (710)	-	-	-	-	295,000 SF	75	365	3,254
3A	Park-and-Ride (90)	460 spaces	71	214	2,070	460 spaces	71	214	2,070
	Hotel (310)	-	-	-	-	205 rooms	63	60	1675
3B	Shopping Center (820)	-	-	-	-	14,000 SF	25	27	598
	Supermarket (850)	-	-	-	-	18,500 SF	89	86	1891
4	Free Standing Discount Store (813)	160,000 SF	341	355	8,120	160,000 SF	341	355	8,120
	High-Turnover Restaurant (932)	-	-	-	-	13,200 SF	78	52	1678
5	Light Industrial (110)	43,220	5	37	301	-	-	-	-
	Apartment (220)	-	-	-	-	190 DU	77	41	1264
	Shopping Center (820)	-	-	-	-	6,000 SF	11	12	256
8	Light Industrial (110)	98,710 SF	14	92	769	-	-	-	-
	Townhomes (230)	-	-	-	-	10 DU	3	2	58
13	Light Industrial (110)	101,145 SF	23	9+	705	101,145 SF	23	9+	705
14	Light Industrial (110)	47,515 SF	6	41	331	47,515 SF	6	41	331
15	Light Industrial (110)	35,605 SF	4	30	248	35,605 SF	4	30	248
16	Medical Office Building (720)	45,365 SF	45	117	1,639	45,365 SF	45	117	1,639
17A	Light Industrial (110)	27,690 SF	3	24	193	27,690 SF	3	24	193
17B	General Office Building (710)	31,445 SF	8	39	347	31,445 SF	8	39	347
18	Light Industrial (110)	74,445 SF	9	64	519	74,445 SF	9	64	519
Center Subtotal			535	1,054	15,580		1,053	1,926	28,921

Note: Red text represents known planned developments

Table 4. Trip Generation Estimate –Subarea II (East)

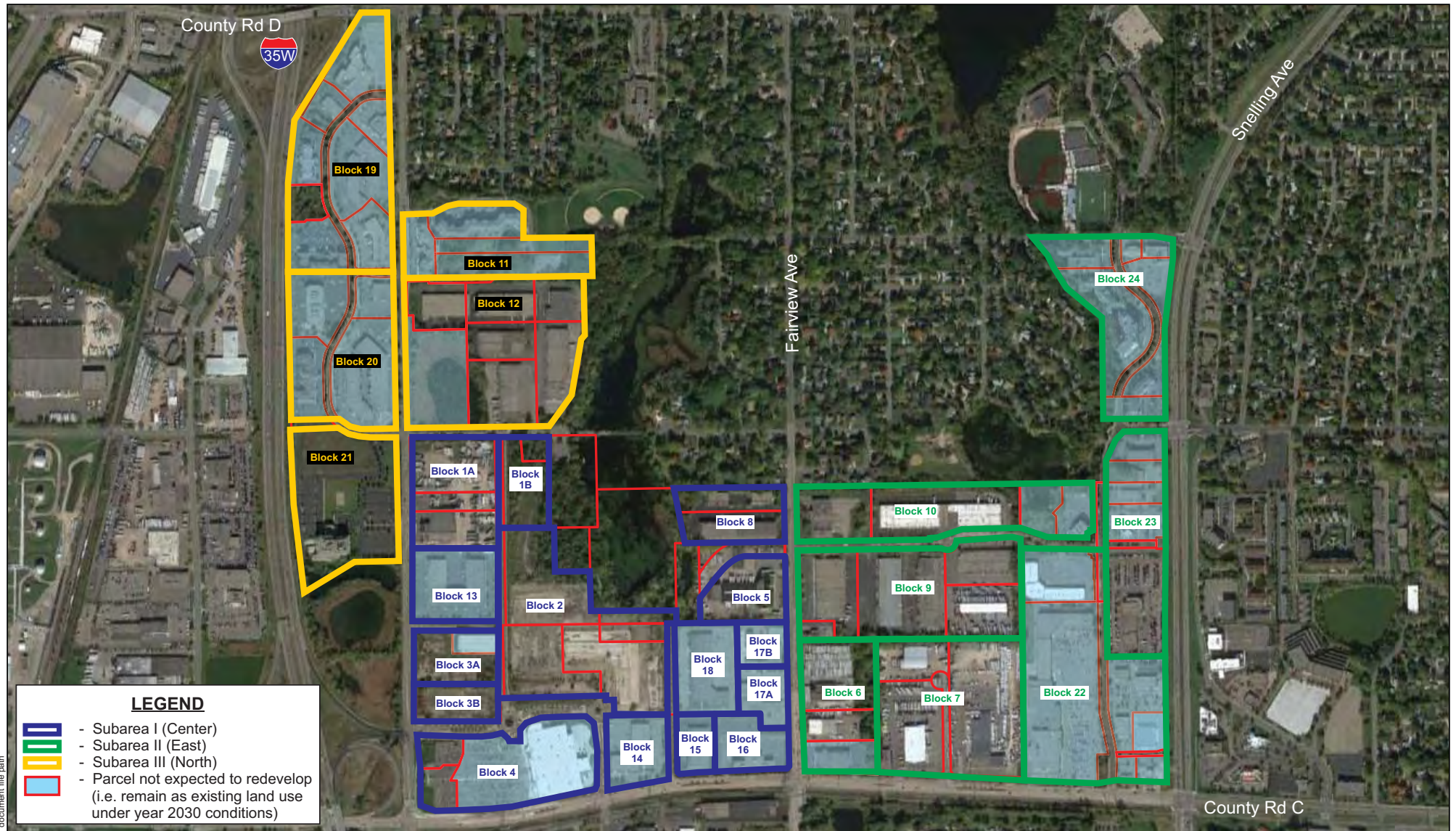
Block	Land Use Type (ITE Code)	Existing				Year 2030 Land Use Plan			
		Size	P.M. In	P.M. Out	Daily	Size	P.M. In	P.M. Out	Daily
6	Shopping Center (820)	29,670 SF	53	57	1,267	29,670 SF	53	57	1,267
	General Office Building (710)	-	-	-	-	100,000 SF	25	124	1,103
7	Light Industrial (110)	165,160 SF	19	141	1,151	-	-	-	-
	Shopping Center (820)	-	-	-	-	190,000 SF	341	355	8,120
	Fast-Food w/o Drive-Thru (933)	-	-	-	-	3,500 SF	47	45	2,506
	Gas Station (945)	-	-	-	-	8 FSP	54	54	1,302
9	Light Industrial (110)	293,695 SF	34	251	2,047	-	-	-	-
	General Office Building (710)	-	-	-	-	310,000 SF	79	383	3,419
10	Light Industrial (110)	160,700 SF	19	137	1,120	-	-	-	-
	Apartment (220)	-	-	-	-	115 DU	46	25	765
	General Office Building (710)	21,785 SF	6	27	240	21,786 SF	6	27	240
22	Shopping Center (820)	255,975 SF	456	494	10,930	255,976 SF	456	494	10,930
	Gas Station (945)	8 FPS	54	54	1,302	8 FPS	54	54	1,302
23	Medical Office Building (720)	9,875 SF	10	25	357	9,876 SF	10	25	357
	Shopping Center (820)	15,670 SF	28	30	669	90,670 SF	161	175	3872
	Auto Sales (841)	35,010 SF	37	55	1,131	-	-	-	-
	High-Turnover Restaurant (932)	16,025 SF	95	63	2,038	16,025 SF	95	63	2,038
24	Apartment (220)	275 DU	111	60	1,829	275 DU	111	60	1,829
	Hotel (310)	95 rooms	29	28	776	95 rooms	29	28	776
	General Office Building (710)	30,210 SF	8	37	333	30,210 SF	8	37	333
East Subtotal			959	1,459	25,190		1,575	2,006	40,159

Note: Red text represents known planned developments

Table 5. Trip Generation Estimate –Subarea III (North)

Block	Land Use Type (ITE Code)	Existing				Year 2030 Land Use Plan			
		Size	P.M. In	P.M. Out	Daily	Size	P.M. In	P.M. Out	Daily
11	Apartment (220)	129 DU	52	28	858	129 DU	52	28	858
12	Light Industrial (110)	314,300 SF	37	268	2,191				
	Apartment (220)	-	-	-	-	130 DU	52	28	865
	General Office Building (710)	-	-	-	-	285,000 SF	72	352	3144
19	General Office Building (710)	162,995 SF	41	202	1,798	184,235 SF	47	228	2032
	Hotel (310)	245 rooms *	75	72	2,002	245 rooms *	75	72	2,002
20	General Office Building (710)	62,305 SF	16	77	687	62,305 SF	16	77	687
	Hotel (310)	135 rooms	41	40	1,103	135 rooms	41	40	1,103
	Light Industrial (110)	117,045 SF	14	100	816	117,045 SF	14	100	816
21	General Office Building (710)	166,980 SF	42	207	1842	288,980 SF	73	357	3187
North Subtotal			318	994	11,297		442	1,282	14,694

* The number of rooms for the hotels in Block 19 were estimated based on building square foot information.



Twin Lakes Boundary Map

Arden Hills Residential Development Traffic Study
City of

00045162
September 2004

Figure 3

A summary of the existing and year 2030 trip generation estimates for each subarea is provided in Table 6. Assuming that the existing land uses generate at the average ITE trip rate, an additional 2,965 p.m. peak hour and 31,707 daily trips will be generated in the Twin Lakes Study Area under year 2030 full build conditions. Again, this takes into account the larger study area than what was previously reviewed in the 2007 AUAR.

Table 6. Trip Generation Estimate Summary

Subarea	Existing			Year 2030			Delta		
	P.M. In	P.M. Out	Daily	P.M. In	P.M. Out	Daily	P.M. In	P.M. Out	Daily
I	535	1,054	15,580	1,053	1,926	28,921	518	872	13,341
II	959	1,459	25,190	1575	2,006	40,159	616	547	14,969
III	318	994	11,297	442	1,282	14,694	124	288	3,397
Total	1,812	3,507	52,067	3,070	5,214	83,774	1,258	1,707	31,707

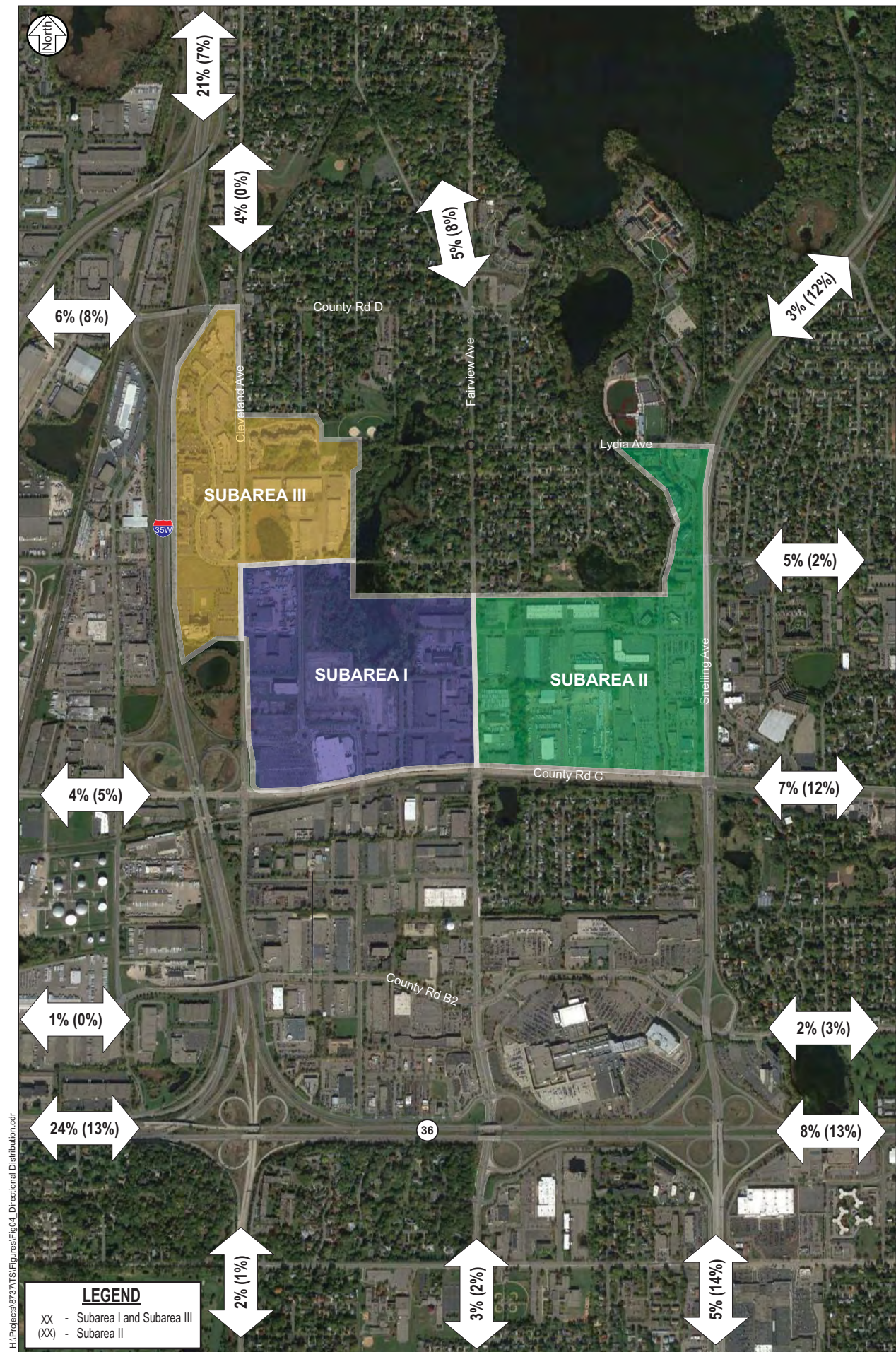
Regional Model

The Metropolitan Council regional travel demand model was refined to include the updated year 2030 land use information. The model was used to develop average daily traffic (ADT) volumes for the greater adjacent roadway network, directional distribution for the p.m. peak hour trip generation estimates, and to estimate the potential for a subregional travel pattern shift with the extension of Twin Lakes Parkway to Fairview Avenue (i.e. non-Twin Lakes area development trips diverting to Twin Lakes Parkway).

The following assumption changes are reflected in the travel demand model since the analysis completed in year 2007:

- I-35W Managed Lanes (dynamic toll lanes)
- Improvements to I-694/Snelling Avenue interchange area
- Recent background traffic volume changes
- Updated land use in Twin Lakes Study Area
- Refined development access assumptions in the Twin Lakes Study Area

The travel demand model was used to determine the origin/destination (i.e. directional distribution) of the trips entering/exiting the study area. Directional distribution percentages shown in Figure 4 were developed separately for Subarea I/Subarea III (west of Fairview Avenue) and Subarea II (east of Fairview Avenue). This is different from the 2007 AUAR, which applied the same directional distribution to the entire study area. The two directional distributions help to identify route patterns for the development trips. For example, vehicles traveling to/from the north are more likely to use I-35W for Subarea I/III and Snelling Avenue for Subarea II. This review also helped to estimate the percentage of vehicles that are expected to utilize more than one land use within the study area. To account for this a 15 percent multi-use reduction was applied to the trip generation estimates.



A background growth rate of one-half percent was applied to the existing peak hour turning movement counts to develop year 2030 background traffic forecasts. This is consistent with recent studies completed in the area and the travel demand model forecasts

Year 2030 Scenarios

As previously mentioned, to understand the impacts to traffic volumes to the study area with the extension of the Twin Lakes Parkway from Prior Avenue to Fairview Avenue, traffic forecasts were developed for year 2030 conditions for the following three scenarios (shown in Figure 5):

- Scenario 1 – No build roadway condition with background traffic growth added
 - Twin Lakes Parkway **not** extended to Fairview Avenue, background traffic growth, and no additional development in the Twin Lakes Area except currently planned land uses.
- Scenario 2 – No build roadway condition with background traffic growth added and full build land use potential included
 - Twin Lakes Parkway **not** extended to Fairview Avenue, background traffic growth, and full build land use scenario for Twin Lakes Area.
- Scenario 3 – Build roadway condition with background traffic growth and full build land use potential included
 - Twin Lakes Parkway extended to Fairview Avenue, background traffic growth, and full build land use scenario for Twin Lakes Area.

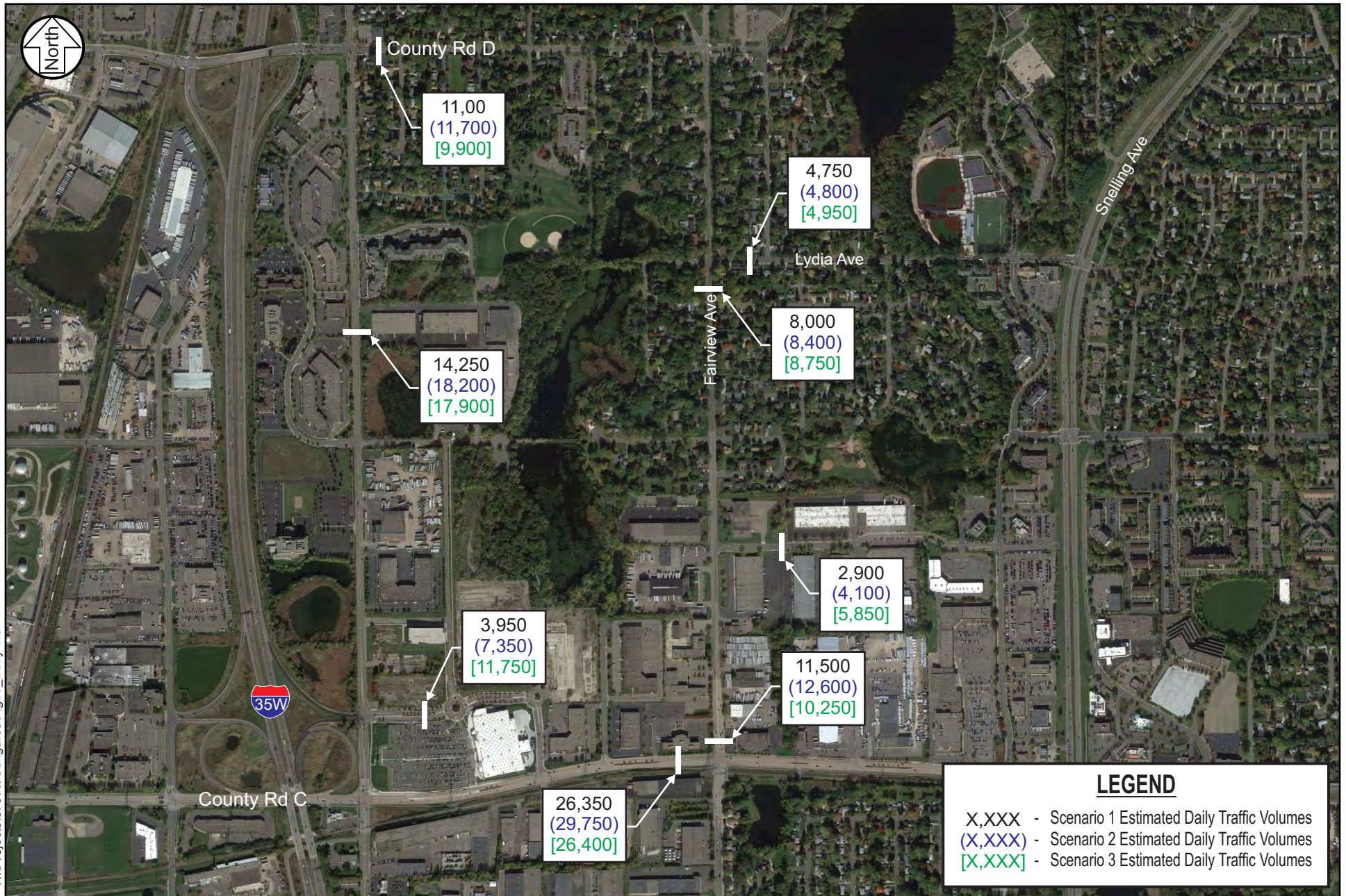
Year 2030 Conditions

Planned Roadway Improvements

Intersection improvements are planned at the Cleveland Avenue and NB I-35W Ramps/Twin Lakes Parkway intersection and are expected to be completed in the near future. The improvements include the following:

- Restriping the westbound approach of Twin Lakes Parkway to include a left-, through, and shared through/right-turn lane
- Modifying the eastbound approach to include a left-, two through and a right-turn lane.
- Modifying the northbound approach to include a second left-turn lane and a right-turn lane.
- Extending the southbound left-turn lane.

The City is also considering the extension of Twin Lakes Parkway to Fairview Avenue (analyzed under Scenario 3). This connection will provide access to current and future development in the Twin Lakes area, as well as an alternative route choice for motorists currently traveling through the Twin Lakes area. As part of the Twin Lakes Parkway extension, a traffic signal will be installed at the Fairview Avenue/Terrace Drive (Twin Lakes Parkway).



Intersection Operations Analysis

To determine if the roadway network can accommodate the year 2030 traffic forecasts, a detailed intersection capacity analysis was completed. The study intersections were analyzed using Synchro/SimTraffic software and the HCM. The intersection improvements identified at County Road C/Snelling Avenue under existing conditions (i.e. six-lane along Snelling Avenue) are included in the year 2030 analysis; as are the improvements identified at the NB I-35W Ramps/Twin Lakes Parkway intersection. Results of the year 2030 analysis shown in Table 7 indicate that there will be operational issues during the p.m. peak hour for all three scenarios under year 2030 conditions.

Table 7. Year 2030 P.M. Peak Hour Operations Analysis – Known Improvements Only

Intersection	Level of Service			
	Existing	Scenario 1	Scenario 2	Scenario 3
County Road C and Cleveland Avenue	C	D	D	D
County Road C and Prior Avenue	B	B	C	C
County Road C and Fairview Avenue	C	D	E **	D
County Road C and Lincoln Drive	F	C	C	C
County Road C and Snelling Avenue	F	E *	E *	E *
County Road D and NB I-35W Ramps	B	B	C	B
County Road D and Cleveland Avenue	C	B	D	C
County Road D and Fairview Avenue/New Brighton Road ⁽²⁾	C	F	F	F
Twin Lakes Parkway and Mount Ridge Road ⁽³⁾	A	A	A	B
Cleveland Avenue and NB I-35W Ramps/Twin Lakes Parkway	C	C	D	D
Cleveland Avenue and Iona Lane ⁽¹⁾	A/A	A/B	A/D	A/C
Cleveland Avenue and County Road C2 ⁽¹⁾	A/B	A/B	A/E	A/D
Fairview Avenue and Terrace Drive	A/A ⁽¹⁾	A/A ⁽¹⁾	A/B ⁽¹⁾	B
Fairview Avenue and Lydia Avenue ⁽²⁾	B	C	F	C
Snelling Avenue and County Road C2	D	C *	C *	C *
Snelling Avenue and Lydia Avenue	C	C *	C *	C *

(1) Indicates an unsignalized intersection with side-street stop control where the overall LOS is shown followed by the worst approach LOS.

(2) Indicates an unsignalized intersection with all-way stop control.

(3) Indicates an unsignalized intersection with roundabout control.

* Assumes Snelling Avenue is a six-lane facility

** County Road C and Fairview Avenue intersection operates at a 75-80 second LOS E under Scenario 2 conditions

Recommended Roadway Improvements

To improve operations, the recommended roadway improvements outlined below should be considered. Unless noted, the improvements apply to all of the scenarios. The year 2030 traffic forecasts, recommended intersection improvements, and resultant level of service are graphically represented in Figures 6 – 8 for Scenarios 1 – 3, respectively.

County Road C and Cleveland Avenue

- Under Scenario 1 and Scenario 2, southbound queues extend through the NB I-35W Ramps/Twin Lakes Parkway intersection approximately three and six percent of the peak hour, respectively. Due to the short distance between these two intersections no improvements are recommended that can mitigate this situation.
 - Under Scenario 3, southbound queues do not extend through the I-35W Northbound Ramps/Twin Lakes Parkway intersection due to the travel pattern shift resulting from Twin Lakes Parkway being extended to Fairview Avenue.

County Road C and Fairview Avenue

- Under Scenario 2 this intersection operates with a LOS E. Additional capacity is needed in the eastbound direction to improve operations; adjacent structures prevent expansion of this intersection (i.e. turn lanes). Therefore, no improvements are recommended to mitigate.

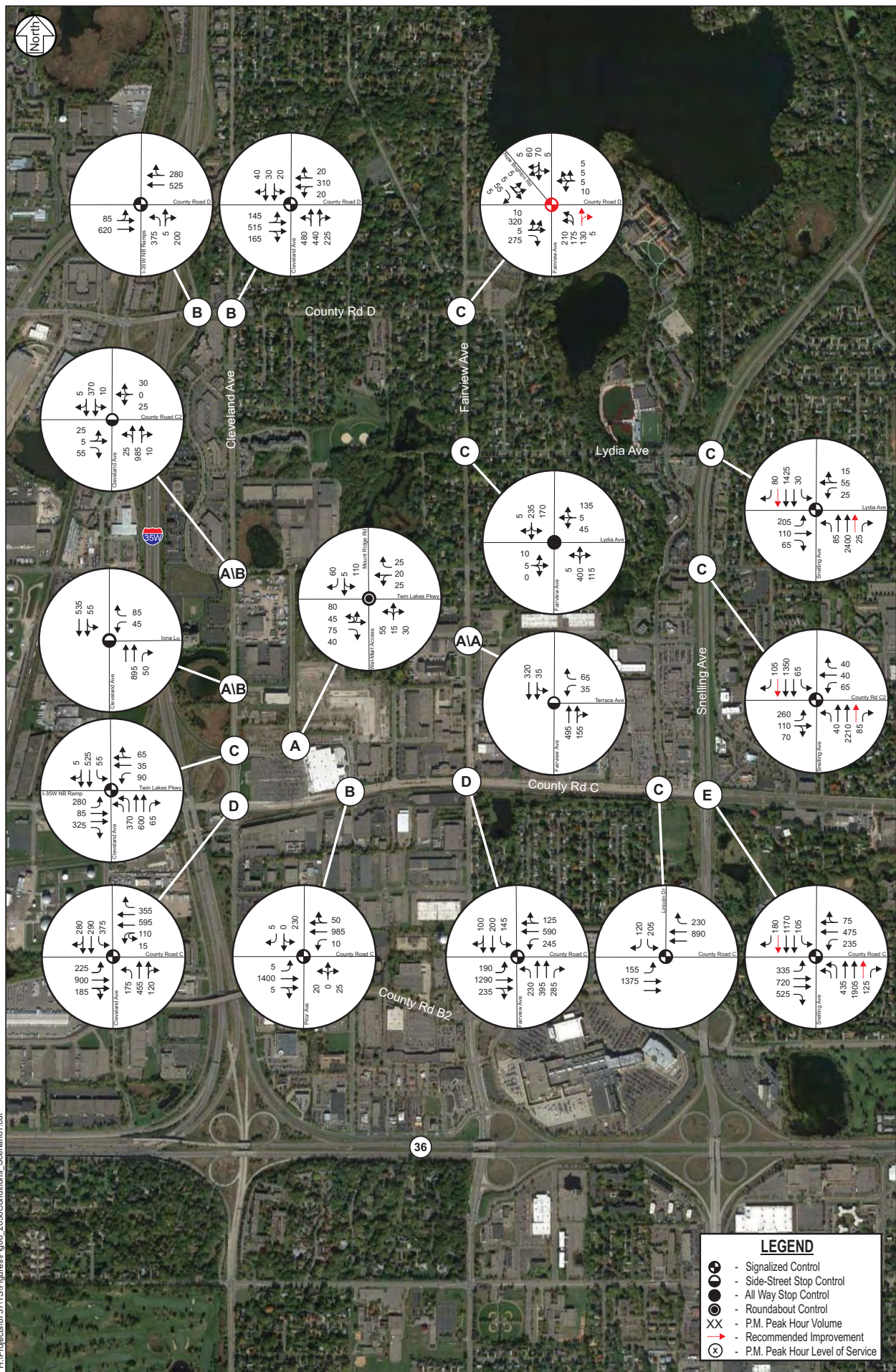
County Road D and Fairview Avenue/New Brighton Road

- Traffic control modification is recommended at this intersection. Further review is needed to determine proper traffic control, such as installation of a traffic signal or roundabout (traffic signal shown in Figures 6-8).
- Construct, or clearly delineate, a northbound through/right turn lane

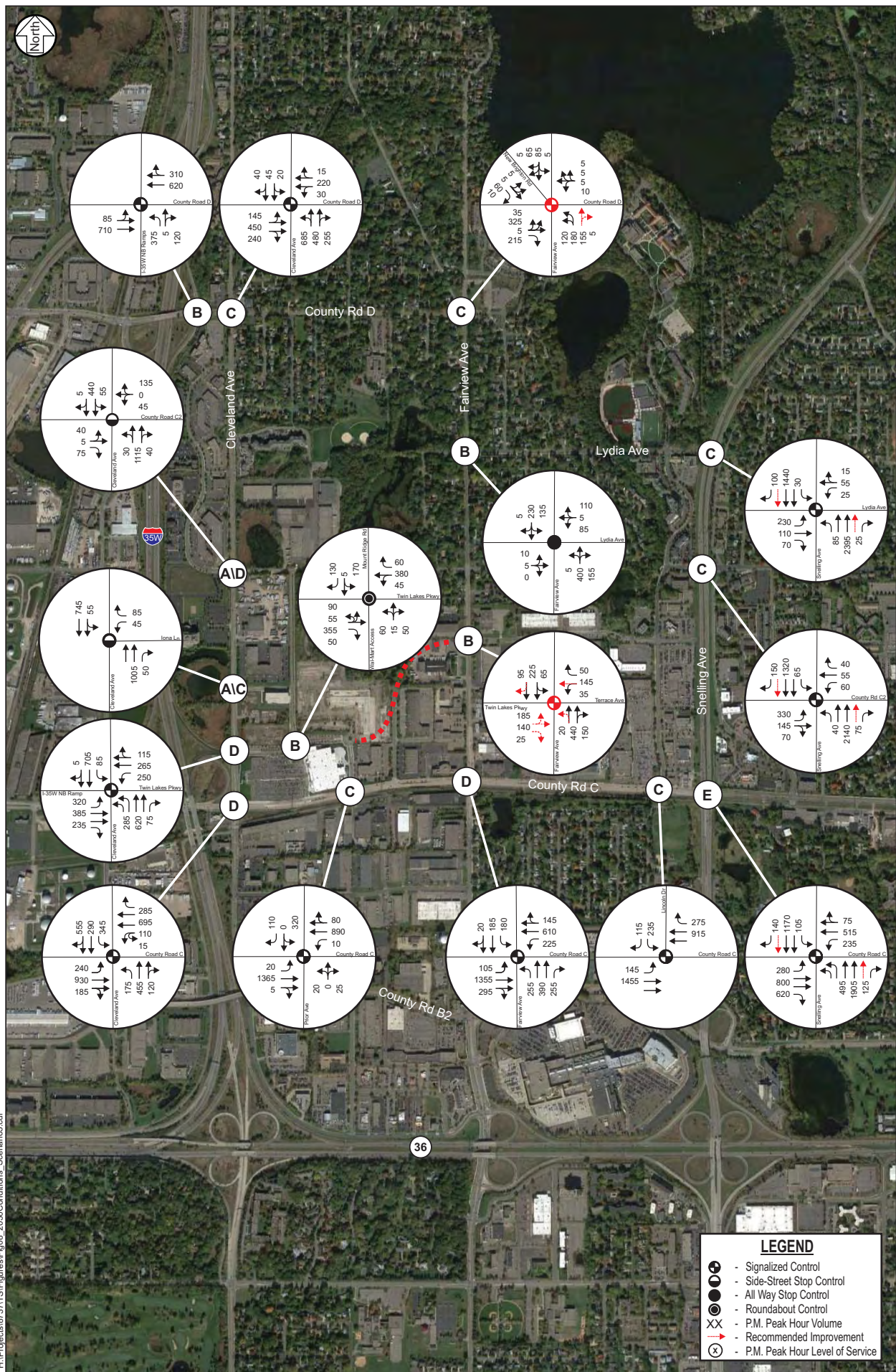
Cleveland Avenue and County Road C2

- This intersection should be monitored as development occurs to ensure proper traffic control is installed. This is due to the varying land uses that could develop near this intersection.

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Fairview Avenue and Lydia Avenue

- The operational issues under Scenario 2 are a result of northbound queues from the County Road D and Fairview Avenue/New Brighton Road intersection extending through Lydia Avenue. With the recommended traffic control and turn lane improvements at the Fairview Avenue/New Brighton Road intersection, the Fairview Avenue/Lydia Avenue intersection is expected to operate at an acceptable level of service.
 - The extension of Twin Lakes Parkway (Scenario 3) provides an alternative route to/from I-35W, which will reduce the number of vehicles that make a northbound left-turn at the County Road D and Fairview Avenue/New Brighton Road intersection. While northbound queues will be significant under Scenario 3, the queues are not expected to effect operations at the Fairview Avenue/Lydia Avenue intersection.
- Consider expanding Fairview Avenue to a three-lane facility north of County Road C2 to improve mobility and safety along the corridor.
- This intersection should be monitored under future conditions. If operational issues occur consider installation of a traffic signal or roundabout.

Snelling Avenue (Between County Road C and Lydia Avenue)

- Snelling Avenue is assumed as a six-lane facility under year 2030 conditions. This is due to the existing conditions operations analysis.
- Modifications are necessary to the at-grade intersections along Snelling Avenue or additional capacity is needed along the Snelling Avenue corridor to mitigate the capacity issues that are observed. If this does not occur it is anticipated that traffic will divert to other routes, including regionally, subregionally, and locally.

Other Considerations

Improvements to the Snelling Avenue/Lydia Avenue and Snelling Avenue/County Road C2 intersections were mentioned in association with the lack of capacity on Snelling Avenue (i.e., eastbound dual left-turn lanes). Further, with the completion of Twin Lakes Parkway between Prior Avenue and Fairview Avenue additional wayfinding, or trail blazing, can be implemented to encourage travelers destined for Snelling Avenue to use Terrace Drive as their route via Lincoln Drive. This will minimize the number of vehicles that use Twin Lakes Parkway to Lydia Avenue for similar trips. Additional intersection modifications may be necessary at the Terrace Drive/Lincoln Drive and Snelling Avenue/County Road C2 intersections.

Effects of Twin Lakes Parkway

Based on the results of the year 2030 operations analysis, the extension of Twin Lakes Parkway to Fairview Avenue is expected to have the following effects on the Twin Lakes area:

- Provides an alternative route choice for the Twin Lakes area. With its extension, trips generated within the Twin Lakes area have more travel choice to access the area.
- Improves operations along the County Road C and County Road D corridors. Vehicles currently traveling along County Road C and/or County Road D have an alternative choice depending on their origin/destination.
 - County Road C/Fairview Avenue intersection:
 - Under Scenario 2 this intersection is expected to operate at an unacceptable LOS E. Due to right-of-way constraints at the intersection, geometric improvements, such as installation of additional turn lanes, are likely not feasible.
 - Under Scenario 3 (Twin Lakes Parkway extension) this intersection is expected to operate at an acceptable LOS D.
 - In case of an incident or poor weather conditions, when the regional system is congested, Twin Lakes Parkway could serve as an alternative route, providing relief to County Road C and County Road D.
- Direct access for developments along Twin Lakes Parkway reduces unnecessary circulation and improves travel time in the study area.
- The regional travel demand model suggests that few regional trips are expected to use Twin Lakes Parkway. The majority of trips have an origin/destination near the study area.
 - Due to future regional improvements to the surrounding transportation system, such as the managed lane along I-35W, more vehicles are expected to stay on the regional system rather than use Twin Lakes Parkway as previously expected.

Conclusions and Recommendations

Based on the analysis, the following conclusions and recommendations are offered for your consideration:

- To understand the impacts to the study area with the extension of the Twin Lakes Parkway to Fairview Avenue, the following three scenarios were reviewed under future conditions:
 - Scenario 1 – No build roadway condition with background traffic growth added
 - Scenario 2 – No build roadway condition with background traffic growth added and full build land use potential included
 - Scenario 3 – Build roadway condition with background traffic growth and full build land use potential included

- Results of the existing operations analysis indicate that all study intersections currently operate at an acceptable overall LOS D or better during the p.m. peak hour with the existing geometric layout and traffic control, except along County Road C at the Lincoln Drive and Snelling Avenue intersections, which operate at LOS F.
 - To mitigate this situation, modifications are necessary to the at-grade intersections along Snelling Avenue or additional capacity is needed along the Snelling Avenue corridor.
- SRF worked with City staff to develop a year 2030 land use plan in the study area. Trip generation estimates for both the current and future land uses were developed for the p.m. peak hour and on a daily basis using the *ITE Trip Generation Manual, 9th Edition*.
 - Assuming that the existing land uses generate at the average ITE trip rate, an additional 2,965 p.m. peak hour and 31,707 daily trips will be generated in the Twin Lakes Study Area under year 2030 full build conditions.
- The Metropolitan Council regional travel demand model was used to develop average daily traffic (ADT) volumes for the greater adjacent roadway network, directional distribution for the p.m. peak hour trip generation estimates, and to estimate the potential for a subregional travel pattern shift with the extension of Twin Lakes Parkway to Fairview Avenue (i.e. non-Twin Lakes area development trips diverting to Twin Lakes Parkway).
- Results of the year 2030 analysis indicate that there will be operational issues during the p.m. peak hour for all three scenarios under year 2030 conditions.
- To improve operations, the following improvements should be considered.
 - County Road D and Fairview Avenue/New Brighton Road (all Scenarios)
 - Traffic control modification is recommended at this intersection. Further review is needed to determine proper traffic control, such as installation of a traffic signal or roundabout.
 - Construct or clearly delineate a northbound through/right turn lane.
 - Cleveland Avenue and County Road C2
 - This intersection should be monitored as development occurs to ensure proper traffic control is installed.
 - Fairview Avenue and Lydia Avenue
 - This intersection should be monitored under future conditions. If operational issues occur consider installation of a traffic signal or roundabout.
 - Snelling Avenue
 - Modifications are necessary to the at-grade intersections along Snelling Avenue or additional capacity is needed along the Snelling Avenue corridor to mitigate the capacity issues that are observed. If this does not occur it is anticipated that traffic will divert to other routes, including regionally, subregionally, and locally.

- Based on the results of the year 2030 operations analysis, the extension of Twin Lakes Parkway to Fairview Avenue is expected to have the following effects on the Twin Lakes area:
 - Provides an alternative route choice for the Twin Lakes area. With its extension, trips generated within the Twin Lakes area have more travel choice to access the area.
 - Improves operations along the County Road C and County Road D corridors. Vehicles currently traveling along County Road C and/or County Road D have an alternative choice depending on their origin/destination.
 - Direct access for developments along Twin Lakes Parkway reduces unnecessary circulation and improves travel time in the study area.
 - The regional travel demand model suggests that few regional trips are expected to use Twin Lakes Parkway. The majority of trips have an origin/destination near the study area.

Roseville Public Works, Environment and Transportation Commission

Agenda Item

Date: February 24, 2015

Item No: 9

Item Description: Look Ahead Agenda Items/ Next Meeting March 24, 2015

Suggested Items:

- Leaf Collection Program Discussion
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Recommended Action:

Set preliminary agenda items for the March 24, 2015 Public Works, Environment & Transportation Commission meeting.