City of Ramsey
Agenda
Housing and Redevelopment Authority (HRA)
Regular Session
Tuesday February 28, 2012
Immediately Following the City Council Meeting
Council Chambers, 7550 Sunwood Drive NW

1. Call to Order

2. Citizen Input

3. Approve Agenda

4. Approve Minutes

1. Approve the Following HRA Meeting Minutes:

HRA meeting minutes dated November 1, 2011
HRA meeting minutes dated November 22, 2011
HRA meeting minutes dated December 6, 2011
HRA meeting minutes dated January 10, 2012
HRA meeting minutes dated January 17, 2012
HRA meeting minutes dated January 24, 2012

5. HRA Business

1. Consider Contract for Alternative Urban Areawide Review Update for The COR

2. Initiate Strategic Plan for the Development of North Commons

3. Authorize Sale of Bonds for The Residence at the COR - Flaherty and Collins and Debt Subordination Agreement for PNC Bank Financing

6. Executive Director's Report

7. Commissioner Input

8. Adjournment

HRA Regular Session **4. 1.**

Meeting Date: 02/28/2012

By: JoAnn Shaw, Community Development

Title:

Approve the Following HRA Meeting Minutes:

HRA meeting minutes dated November 1, 2011
HRA meeting minutes dated November 22, 2011
HRA meeting minutes dated December 6, 2011
HRA meeting minutes dated January 10, 2012
HRA meeting minutes dated January 17, 2012
HRA meeting minutes dated January 24, 2012

Background:

n/a

Funding Source:

n/a

Council Action:

Motion to approve HRA meeting minutes.

Attachments

11-01-11
11-22-11
12-06-11
01-10-12
01-17-12
01-24-12

Form Review

Inbox	Reviewed By	Date
Heidi Nelson	Heidi Nelson	02/23/2012 01:13 PM

Form Started By: JoAnn Shaw Started On: 02/22/2012 10:06 AM

Final Approval Date: 02/23/2012

HOUSING AND REDEVELOPMENT AUTHORITY
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Housing and Redevelopment Authority conducted a work session meeting on Tuesday, November 1, 2011, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson David Elvig Commissioner Randy Backous Commissioner Colin McGlone Commissioner Bob Ramsey Commissioner Sarah Strommen Commissioner Jason Tossey
Members Absent:	Commissioner Jeffrey Wise
Also Present:	Deputy City Administrator/HRA Exec. Dir. Heidi A. Nelson City Administrator Kurtis Ulrich Public Works Director Brian Olson Economic Development/Marketing Manager Aaron Backman Development Manager Darren Lazan HRA Legal Counsel Tom Bray, Briggs and Morgan

CALL TO ORDER

Chairperson Elvig called the work session meeting of the Housing and Redevelopment Authority to order at 7:05 p.m.

OPEN FORUM

There was none.

APPROVAL OF AGENDA

Chairperson Elvig suggested moving cases around on the agenda so the closed portion (Case 5.2) would be discussed as the last case.

Motion by Commissioner McGlone, seconded by Commissioner Backous to approve the agenda as amended.

Motion carried. Voting Yes: Chairperson Elvig, Commissioners McGlone, Backous, Ramsey, Strommen, and Tossey. Voting No: None. Absent: Commissioner Wise.

APPROVAL OF MINUTES

No minutes to approve as it was a work session. Chairperson Elvig asked that staff revamp the template for the work session agendas as it is not necessary for the formal approvals of the agenda or minutes, nor is it necessary to call out for citizen input.

HRA BUSINESS

5.1. Discuss RTC Master Declaration/Association

Executive Director Nelson noted that HRA Legal Counsel, Tom Bray was present to update the Commissioners on the status of the RTC Master Declaration/Association. She reported that an informal meeting had been held and since then, there has been a meeting with Mr. Deal's attorney. She called on Mr. Bray.

Attorney Bray stated he had met with Ben Halsey, Attorney with the RTC. He stated they compared notes and found areas where there was agreement with the membership and areas where there was not. He referenced a map that was displayed for the HRA this evening. He noted the four parcels identified in blue and stated that in original correspondence, Mr. Deal's position was that these parcels were not owned by RTC at the time of the Master Declaration. Mr. Bray stated that he has since asked for Mr. Deal's position with regard to these four parcels and he has not gotten a response from him yet. Mr. Bray reported that he wanted to check with staff on a couple of parcels. Two will be developed together but will be developed in a way that will be entitled to a membership vote – two parcels have the membership vote – two do not. He explained what qualifies a membership vote. He also described the three categories of membership. He continued that there are four parcels subject to the Master Declaration. The drainage pond does not qualify for membership vote. He noted there is also drainage in the northwest corner. The park is subject to the Master Declaration but not the membership vote. He talked about the RTC 8th, 9th and 10th Additions and that neither the HRA nor PSD is in control of these additions. Mr. Bray was not aware of any active homeowners associations on these parcels. He stated we have 18 known membership votes which includes six votes on the parcels he is not sure of. The HRA has nine, PSD has three, and PSD LLC & Anchor's Away have one, Symphony at Town Center has one, Gable Manor has one, Gable Terrace has one, Anoka County has one and Allina has one. He referred to the map presented to the HRA and talked about doing title work on parcels. He noted that the four parcels shown in blue on the map were all purchased by Jim Deal or another of Mr. Deal's entities; however, the question remains who owned them at the time of the Master Declaration. Mr. Bray stated he broached Mr. Halsey with the idea that if there is not a full agreement with the membership voting rights, does anyone want this association to remain or should it be terminated. Mr. Halsey will discuss that with Mr. Deal. He added he is not sure Mr. Deal would do anything until he knows what is going on with the Special Services District. The HRA is not in a position to impose a Special Services District. Mr. Bray is waiting for feedback from Mr. Halsey. He stated that we have the complaint drafted to get the declatory judgment – there are significant expenses and there is a lot of title work to be done. Mr. Bray noted a couple of bids were from $12,000 to $16,000 and others were at $20.000. he felt there were some things we could do with cheaper alternatives -

especially where it's Torrens property. With that in mind, the figure could maybe be more like $10,000 to $12,000.

Commissioner Ramsey noted it looks like there are 18 votes and we maybe control nine of them. The four parcels in blue are wild cards. It is not known if a homeowners associations will "pop up" or not. The title work will take time. We may want to get that started; we want to be in the position to move forward.

Commissioner McGlone felt it was a stall tactic. We wanted to do everything in our power to make this clear and marketable.

Commissioner Ramsey stated that the benefit to getting this title work going is a value puts us in a position to make a declaration later.

Attorney Bray stated he is not sure it is a stall tactic and added it's very hard for him to get a read on it. He noted he was not trying to pick and raise issues at that meeting.

Chairperson Elvig suggested that if the HRA has half the membership votes, now is a wonderful time to have this drawn up. We were trying to reach out and not look contentious. It's time to move forward. He inquired what the goal is for this evening.

Executive Director Nelson stated we just wanted to share this with the HRA and get feedback. The complaint is prepared, the title work is being done and we can move forward with the litigation.

Chairperson Elvig inquired who would be funding the title work.

Ms. Nelson responded that we would have the option to try to do that cooperatively. We feel we are better positioned to try to correct this on our own.

Mr. Bray added that we would spend more time talking about sharing costs and that might be more contentious than talking about terminating the Master Declaration.

Chairperson Elvig stated he is in favor of going ahead and funding it and getting this moving.

Commissioner Ramsey inquired how long it would take to get the title work done to which Mr. Bray replied about three weeks. Chairperson Elvig inquired how long might it take for the judgment to which Mr. Bray responded he did not know for sure but it's at least three to four months before you get a hearing.

Ms. Nelson reported that we had visited this issue some time ago. There are costs to do the title work but there is still cost to the litigation piece.

Mr. Bray suggested about a $25,000 to $30,000 cost.

Ms. Nelson stated that given the HRA budget for legal fees, we will be outside of that. We will get the title piece done and come back to the HRA.

Commissioner Ramsey stated that previously we said let's move forward and we delayed that because we thought we could work together. Now we have incurred more costs. Let's get the title work done and get the declaration moving forward.

Development Manager Lazan stated that we have three Letters of Intent and one more building subject to this Master Declaration. We are keying these up for spring closings.

Commissioner McGlone asked if there is anything stopping us in advance of the title work.

It was noted that the authorization was as soon as the title work is back; this is work that needs to be done. Staff had been directed to move forward with the work on the declatory action.

Executive Director Nelson stated that the HRA already approved the declatory action and that she can bring back a ratification of that direction. She just wanted the HRA to understand this will be on the fund balance side.

Attorney Bray stated that the other issue we need to be aware of is some sort of educational process with the homeowners associations.

5.3 Consider Purchase of Tax Forfeit Parcel at North Commons

Development Manager Lazan noted that the staff report was incorrect with regard to the statement "At a previous meeting of the HRA, direction was given to table discussion of the option to develop up to six single family parcels on the west side of the property known as North Commons". The direction was to forego development of five to seven parcels within North Commons – the west side of North Commons. Revenue was to be dedicated to advance funding of the park. Originally, it was thought the development of these parcels would generate revenues that could be contributed to the improvement of the park. When a preliminary pro-forma was developed, it was determined that the cost of providing services and the development fees associated with the project left basically no revenue that could be used for park improvements. He went through the pro-forma and stated it did not make sense to preserve this piece. He stated there is a current request to purchase this parcel and there are a couple of options. We could acquire the whole piece for parkland for approximately $300 to $500, we could acquire the park portion for $300 to $500 and the developable portion for $15,000, keeping the option to develop the property for future consideration, or we could do nothing and let the property go to tax forfeit. If we do nothing, it could be subject to acquisition by the public - only the 90' strip. The rest of the park is not subject to this. He stated he would like to be able to close the file on this County work and is looking for direction on how to proceed.

Commissioner Ramsey commented on the small amount of money $300 to $500 and said let's just do it. He wondered if it is currently in our Comp Plan as parkland, how someone could develop it if they purchase it; however, that is a moot point if we just purchase it.

Commissioner McGlone stated he had spoken with Commissioner Wise and he (Wise) is against the purchase of this property and suggested letting it go tax forfeit. Commissioner McGlone stated he agrees with Mr. Wise. He feels that is not dedicated parkland. He stated we do not need any more parkland and, in fact, he hoped we would have less parkland. He reiterated he has no desire to purchase that for any price and have it dedicated as parkland.

Commissioner Tossey noted it is in the Comp Plan as parkland. He stated this land could be restricted to just parkland. Most of it is wetland so it will not be developed anyway. Three hundred dollars is not really significant. As citizens age, you tend to have parks that do not get used. In this case, it's such a small portion and small amount of money, he does not have a problem with it.

Commissioner Ramsey suggested the piece could be purchased and made marketable. He stated for $300, just clear it up and be done with it.

Commissioner McGlone stated a portion is developable so why not allow someone to purchase it. Most of us want to be out of the developing business. Let's just leave it alone. Maybe in eight to ten years, the State will just give it to us.

Development Manager Lazan stated that $15,500 is the cost to preserve the right to develop it. His argument is if you have a developable piece of property surrounded by wetland and parks, someone can sweep in and get this parcel. However, if the idea is that we do not want houses here, why are we doing that.

Commissioner Strommen expressed her agreement with Commissioner Ramsey. She felt the simplest, least expensive way to do that is to purchase it for parkland. That way you do not have to deal with what someone might do with it.

Consensus was to proceed with the purchase of the tax forfeit parcel in North Commons.

5.4 Update on Sunwood Realignment

Development Manager Lazan stated that work has continued on the feasibility of the realignment of Sunwood Drive to its permanent intersection with Armstrong Boulevard. Potential development interest on HRA property south and west of the new alignment has necessitated consideration of this work and the effort to establish the alignment and consider this project. He reviewed from the staff report that the intersection location contemplated by the current development plan does not align with the current 147th alignment, nor does the current right-of-way for West Ramsey Parkway. He reported that there has been considerable discussion on the proposed Armstrong/Sunwood intersection and the best way to phase these improvements with the Armstrong Interchange. He presented a map to the HRA and detailed what the colors on the map were. He stated that Sunwood is a hard urban-edged character of the street and merges into a retail area where the sidewalks are pulled out a ways. This alignment contemplates only as it is today – that's the current status. He stated that staff will be having a discussion with Solomon. He talked about better access – better right in – right out and additional parking. He stated that is all the chips in the mix right now.

Commissioner Ramsey noted that the alignment is fine but asked why the raised medians.

Development Manager Lazan responded this is typical roundabout spacing.

Commissioner Ramsey asked why concrete – paint is much cheaper and easier to plow around.

Mr. Lazan stated that creating hard channelization is the way for the roundabout, however, we can relook at that. One unique component to this roundabout is a lane to the right to prevent traffic backup.

Commissioner McGlone felt that the area would be problematic – a plowing nightmare.

Mr. Lazan stated we will do a blow-up of this and walk through it.

Commissioner Tossey stated he will never be supportive with any roundabout plan. He talked about social engineering and stated this is ludicrous.

Commissioner Ramsey pointed out that roundabouts are starting to become more common and noted that the ones he has driven on are efficient. He expressed his support of this but added that Mr. Lazan needs to show us that scale so we can see how big it is. This makes sense because you can get many more trucks on it.

Chairperson Elvig talked about the efficient roundabouts he's driven on as well. When we talked about a big box development in the area, they were talking about 700 cars an hour just for that retail establishment. You are talking about a lot of volume.

Mr. Lazan stated that the interior component can be widened. We can go to a two-lane but we are designing for 30 years build-out. He noted that he understands the concerns and talked about a T-intersection but stated that the roundabout is really the only way to go.

Commissioner McGlone stated he is not against roundabouts.

Commissioner Tossey stated to go ahead and build the roundabout but he guaranteed that in 10 years, you will be putting in a T-intersection. He felt this is a waste of money. He asked why the thought is that traffic will be backed up so far. People will figure out ways to get in and out.

Commissioner Ramsey stated it's the County and everyone saying you cannot stack traffic there.

Commissioner Backous stated he had no problems with roundabouts – he feels they are efficient and convenient. He added he would rather have this than a stop sign or stop lights.

Chairperson Elvig stated he is concerned about stacking in the parking lot like at Kohl's in Riverdale. If everyone is funneling out of one place to leave – that's an issue.

Discussion ensued about poor traffic patterns in other areas.

Mr. Lazan reiterated the pluses again - the parking and maybe having more signage. He talked about a couple different alignments and added that this can be discussed in more detail. Tonight the hope is to "get the nod" to go meet with them.

Chairperson Elvig noted the area would be big enough for pedestrian traffic but wondered about squads and ambulances.

Commissioner Ramsey stated that if we create a pedestrian underpass or something along those lines, we would want it to be as wide as possible.

Mr. Lazan agreed that was a good suggestion. Mr. Lazan continued that if we look at the work necessary to facilitate this, you will note this alignment for the new Sunwood is not on center with 147th. We want to leave ample space for big retail. He talked about the impacts as well. We have three parcels that come into question with what we have drawn up. We could proceed with the appraisal and get the title work but does it make sense to acquire these ahead of the County project. Should we start these discussions now. He stated he would like to discuss this now before there are businesses there. He talked about getting the basics for the offer and sitting down and having a discussion. If they are not willing sellers or the cost is too great, we do not have to do anything right now.

Commissioner McGlone suggested before we go through all this, it may be prudent to see if we have a willing seller. If there are two willing sellers, etc. for the two parcels, we could put the third on the back burner. We would like to talk about acquisition ahead of the roadway – if we don't get a good feel - we can wait until the roadway comes in. He inquired if there are any grants available.

Director of Public Works Olson stated that any grant we have tried to apply for is nowhere near the price of the roadway improvement. We would have to have other funds. He believed reimbursement for the two north parcels would be difficult to justify from a grant perspective.

Chairperson Elvig asked do we get credit for acquiring these properties.

Mr. Olson replied not on the north two but for transportation takings, they will be absolutely necessary. We are acquiring more than we need from a transportation perspective but we will need to get the whole piece if we want to have it in that alignment. A brief discussion ensued relating to accesses. Mr. Olson continued that the northerly parcel "wanted to be bought" and he really supports moving forward with that appraisal.

Chairperson Elvig suggested they may not want to keep the property if it's been chopped up like this.

Mr. Olson stated that there's a chance they can come back and try to sue for each of the accesses or change of access.

Commissioner Strommen stated that this makes all the sense in the world – getting the Armstrong project off the ground is huge. She agrees we should get ahead of the game and there is no point in asking if they are willing sellers if we do not know what to offer.

Commissioner Ramsey expressed agreement. He mentioned funding in TIF 14.

Development Manager Lazan stated that you will create developable remnants when the roadway is done and suggested there may be revenue from that.

Director of Public Works Olson stated that the $1.7 million the County would provide for the rail improvements could go toward this as well.

HRA Executive Director Nelson stated that once we get down the road with appraisals, we will come back with the funding proposal, which could be a combination of TIF 14 and the sale of the parcel. At that point we should know what the cost estimate for the project is.

Consensus was that staff proceed with the appraisals, put together a strategy, and bring back to the HRA for consideration.

5.2 Consider Offer to Purchase Property – Sunwood/Ramsey and Sunwood/Armstrong (Portions may be closed to the public)

Development Manager Lazan stated that the development team has received an offer to purchase property at both the southwest corner of Sunwood/Ramsey and the southeast corner of Sunwood/Armstrong. He noted the meeting was advertised as portions closed and he requested the meeting be closed at this time. It was noted that this closed portion of the meeting will be tape-recorded and the recording will be kept for eight years, according to State Statute

Motion by Commissioner Ramsey and seconded by Commissioner McGlone to close this portion of the HRA work session.

Motion carried. All voted in favor. The HRA work session moved into closed session.

The meeting was reopened to the public at 8:37 p.m.

Development Manager Lazan reported that the closed session discussion was about pursuing the sale of two parcels and how they might be developed. The direction was to continue negotiations.

Executive Director's Report

HRA Executive Director Nelson reported on the events scheduled for the month of November:

- Veterans Day Festivities which include a Ceremony at PACT Charter School in the a.m. and the grand opening ceremony/event for the Veteran's Clinic in the afternoon.
- She noted a COR report was done for QCTV.

- The Ramsey Rail Stop is scheduled for November 16. Ms. Nelson detailed some of the planned events for the day.
- Ms. Nelson passed out the new marketing piece for the Armstrong Interchange.
- She noted the tenant panels on the pylon sign on Highway #10 should be on within the next couple of days.
- Toti: Development Manager Lazan reported that they did not close on November 1 and that they contacted him prior and updated him on the funding. They are working on a price for the extension for the four to six weeks. They are willing to pay $15,000 for a few more weeks. He stated they have brand new funding commitments and they do not want to wait until spring for groundbreaking. Commissioner Ramsey commented on the extension money – it's basically free money and he is fine with that.
- Ms. Nelson stated that with regard to Flaherty and Collins – staff is hoping to get the documents executed within the next couple of weeks. Commissioner Ramsey questioned when they plan to close – Mr. Lazan replied spring.
- Rail Station – Ms. Nelson reported that the plan is to commence construction in February – complete construction in October – and the train will be running November 16, 2012. There is on-going discussion regarding the fare. Chairperson Elvig inquired about extending the bus service. City Administrator Ulrich responded they will be here next week to talk about this.

ADJOURNMENT

Motion by Commissioner Ramsey and seconded by Commissioner Backous to adjourn the meeting.

Motion carried. All present voted in favor. The work session of the HRA adjourned at 8:48 p.m.

Respectfully submitted,

_____

Heidi A. Nelson
HRA Executive Director

ATTEST:

_____

Jo Ann M. Thieling
City Clerk

Minutes drafted by Jo Thieling, City Clerk

HOUSING AND REDEVELOPMENT AUTHORITY
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Housing and Redevelopment Authority conducted a regular meeting on Tuesday, November 22, 2011, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson David Elvig Commissioner Randy Backous Commissioner Colin McGlone Commissioner Sarah Strommen Commissioner Jason Tossey Commissioner Jeffrey Wise
Members Absent:	Commissioner Bob Ramsey
Also Present:	HRA Executive Director Heidi A. Nelson City Administrator Kurtis G. Ulrich Public Works Director Brian Olson City Engineer Tim Himmer Development Manager Darren Lazan City Attorney Bill Goodrich

CALL TO ORDER

Chairperson Elvig called the regular meeting of the Housing and Redevelopment Authority to order at 8:48 p.m.

CITIZEN INPUT

There was none.

APPROVAL OF AGENDA

Motion by Commissioner McGlone, seconded by Commissioner Wise, to approve the agenda as submitted.

Motion carried. Voting Yes: Chairperson Elvig, Commissioners McGlone, Wise, Backous, Strommen, and Tossey. Voting No: None. Absent: Commissioner Ramsey.

APPROVAL OF MINUTES

None.

HRA BUSINESS

Case #1: Consider Amendment to Purchase Agreement – Suite Living

HRA Executive Director Nelson reviewed the staff report.

Development Manager Lazan advised the amendment includes a nonrefundable fee of $20,000 for the 60-day extension and provided an update on earnest monies and fees paid to date. He advised that Mr. Winges is performing due diligence for financing.

Brian Winges, 4721 Fable Parkway North, Hugo, representing Suite Living, provided an update on the project and assured the HRA they are committed to proceed with this $20 million building. He indicated the site plan approvals included the flexibility to increase the number of rooms, within the existing footprint so another level would not be required. To allow winter construction, they plan to blanket the site.

Development Manager Lazan indicated staff would bring forward an amendment to the license agreement to accommodate blanketing the site.

Motion by Commissioner McGlone, seconded by Commissioner Wise, to approve the proposed Fourth Amendment to the Purchase Agreement with Toti Development and direct staff to execute the agreement.

Motion carried. Voting Yes: Chairperson Elvig, Commissioners McGlone, Wise, Backous, Strommen, and Tossey. Voting No: None. Absent: Commissioner Ramsey.

EXECUTIVE DIRECTOR'S REPORT

HRA Executive Director Nelson provided an update on the feasibility work for the realignment of Sunwood Road and negotiations with Coborns.

Development Manager Lazan provided an update on the Sunwood Road realignment feasibility study and work with WSB and Anoka County on lane alignment.

HRA Executive Director Nelson reported on the two proposals for appraisals for the properties west of Armstrong Boulevard. Following a brief discussion, the HRA indicated its preference to consider this matter as an agenda item at the December 13, 2011, meeting.

HRA Executive Director Nelson reported on productive meetings held with parties interested in The COR, the positive media coverage on recent events, and upcoming agenda items.

COMMISSIONER INPUT

Chairperson Elvig reported on the successful opening of the VA Clinic and inaugural train stop in Ramsey.

City Administrator Ulrich provided an update on a recent meeting with Mn/DOT, Anoka County, and Metro Transit and support of Mn/DOT to make the Armstrong Boulevard/Highway 10 interchange the highest priority with the Highway 10 project.

ADJOURNMENT

Motion by Commissioner Wise, seconded by Commissioner Backous, to close the regular meeting of the Housing and Redevelopment Authority.

Motion carried.

The regular meeting of the Housing and Redevelopment Authority adjourned at 9:10 p.m.

Respectfully submitted,

_____
Heidi A. Nelson
HRA Executive Director

ATTEST:

_____
Jo Ann M. Thieling
City Clerk

Drafted by Carla Wirth
TimeSaver Off Site Secretarial, Inc.

HOUSING AND REDEVELOPMENT AUTHORITY
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Housing and Redevelopment Authority conducted a Work Session meeting on Tuesday, December 6, 2011, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson David Elvig Commissioner Randy Backous Commissioner Colin McGlone Commissioner Sarah Strommen Commissioner Jason Tossey Commissioner Jeffrey Wise
Members Absent:	Commissioner Bob Ramsey
Also Present:	HRA Executive Director Heidi A. Nelson City Administrator Kurtis G. Ulrich Development Manager Darren Lazan Landform Project Principal and Planner Kendra Lindahl

CALL TO ORDER

Chairperson Elvig called the Work Session meeting of the Housing and Redevelopment Authority to order at 7:28 p.m.

TOPICS FOR DISCUSSION

1) Review Proposed Amendment to The COR Design Framework

Senior Planner Gladhill reviewed the staff report and explained the next step is to amend the City's Zoning Ordinance to implement the City's vision for land use for The COR.

Kendra Lindahl, Project Principal and Planner with Landform, presented the amendments to The COR Design Framework and described the inclusion of new maps and six levels of street hierarchy to create design solutions for public realm improvements. Different standards have been created for each street type. She explained Part 1 is the guideline philosophy, more general in nature, and tells the story of what it will look like. Part 2 is more subscripted and includes requirements. Parking districts have been added to address how parking will be dealt with in addition to minimum and maximum parking standard guidance. Ms. Lindahl stated staff wants to make sure the proposed amendments are moving in the right direction, and if the HRA would like to focus on any specific issues.

Chairperson Elvig asked about the inclusion of minimum and maximum parking standards.

Ms. Lindahl explained staff discussed whether a use needed to provide a minimum number of parking stalls to supply their use. The proposed language sets out the minimum number of stalls and on street parking can be included for particular buildings as well as stalls within the parking ramp. The idea is that all have to do their fair share to meet the minimum parking demands for their use.

Senior Planner Gladhill explained staff found there was a need for a maximum as well as a minimum to be sure parking needs are met for peak use.

Chairperson Elvig raised a scenario where the parking needs are met for the original use but a later tenant, such as a restaurant, has a higher need for parking.

Senior Planner Gladhill explained that staff would recalculate the parking requirement when that use change is being considered.

HRA Executive Director Nelson stated this issue was addressed with the Ramsey Professional Building when The Falls restaurant use was considered. Staff reviewed the parking and it became apparent there was a need for a minimum parking requirement. In that case, the applicant was required to conduct a parking study to show they could meet the parking requirements for the new intended use (restaurant).

Development Manager Lazan explained the requirements originally included a minimum but the City wanted to assure there was not too much parking or asphalt so a maximum was determined. Now the City has realized there is a need for both to assure each use addresses its share of parking. He noted if a developer wants to fill the entire block with building then they will need to purchase stalls.

Chairperson Elvig asked about the ability to modify parking after build out.

Development Manager Lazan indicated some room for modification exists since there is a 30 ramp stalls influx and, going forward, he suggested the HRA hold that margin. In addition, the City can consider cross use, allocating ramp stalls, and shared ramp stalls.

Chairperson Elvig noted the build out can occur quickly and asked what will trigger the mandate for a ramp.

Development Manager Lazan reviewed that it was previously discussed that densification could be built into the plan. He noted that Ramp A can accommodate two more vertical stories and that may also be possible with Ramps B and C. Development Manager Lazan clarified the shift in parking philosophy in the District Plan approved several months ago because street parking no longer counts toward required parking, which simplifies the process. The trade-off was to not allocate for the parks.

Commissioner Wise noted there had been discussion about angled parking with mixed use on the first floor and asked if handicapped parking would be allocated to the business.

Development Manager Lazan stated the concept of on-street handicapped parking came up with The Falls. He thinks the City would want to incorporate handicapped spacing so that type of space is available where needed. Street parking is now all parallel but staff has thought about the next generation of users, looking at those street sections, and considering whether the parking should be angled.

Commissioner McGlone stated his preference to require the use to provide its own handicapped parking stalls so it is not the City's responsibility.

Development Manager Lazan explained if the City wants an urban environment, it will have to facilitate handicapped parking. He noted that providing handicapped parking within the ramp may not meet the needs for some uses so maybe the City should start spacing handicapped stalls throughout The COR.

Commissioner McGlone noted The Falls has already petitioned for yellow curbs and a drop off area. He was concerned it may be a "slippery slope" if the City starts providing handicapped stalls, noting the users will want the stalls located in front of their store.

Ms. Lindahl presented the signage section, noting it requires the master developer to prepare a master sign plan for public areas. She presented the signage plan and standards for single versus multi-tenant buildings.

Commissioner Tossey left the meeting at 7:53 p.m.

Ms. Lindahl noted the section added pertaining to buildings along Highway 10 allow unlimited square footage for signage as long as within the same scale of The COR. She reviewed the regulatory signage language noting it allows a process to consider creative signage.

Chairperson Elvig asked if the signage will be standardized in location, color, and type, making it more difficult to create individual identity.

Ms. Lindahl noted the signage language encourages awning signs and projecting signs.

HRA Executive Director Nelson stated the signage language allows for architectural branding identity.

Senior Planner Gladhill advised that the proposed language provides more flexibility than available today. In addition, the Conditional Use Permit process is available as a tool to consider unique circumstances.

Ms. Lindahl presented the subdistrict map and presented the prescriptive design standards.

Commissioner Backous left the meeting at 8:03 p.m.

Commissioner McGlone asked if the standards address roof style, gables, or overhangs.

Senior Planner Gladhill reviewed the text created to address roof slope, architectural features, and eaves. He stated more detail can be added, if desired.

Chairperson Elvig stated he does not want the text to stifle modern or prairie type of designs.

Senior Planner Gladhill indicated some flexibility will be provided as long as it meets the overall goal.

The HRA discussed restrictions on exterior colors.

Senior Planner Gladhill indicated floor plan variation and change in exterior color are addressed.

Ms. Lindahl presented the COR1 Development Standards chart, noting additional detail remains to be added and will define the concept of what is being proposed. Staff is working to develop streetscape standards that will be added to this information.

The HRA discussed streetscape standards and agreed that a tree species should not be allowed that may die from the same infestation/disease, should not create a root system that will push up the sidewalk, should not produce nuts or fruits, and the species be of a type that can be supported within the planter box.

Chairperson Elvig noted that when buildings are constructed to the sidewalk and streets to create an urban feel, it does not work well with traffic sight lines, such as at Coborns.

Development Manager Lazan agreed that sight distance is often a challenge with urban design. He explained how additional width can be incorporated with a bump out design at pedestrian intersections.

Chairperson Elvig agreed that bump outs will help improve visibility; however, will involve some challenges with plowing.

Commissioner Strommen commented this is a tradeoff with urban designed areas but also results in slowing traffic and enhances the pedestrian environment. She stated it will take some time to accustom drivers to this design element.

Commissioner McGlone commented on the need to assure intersection designs still accommodate truck and trailer access.

Ms. Lindahl stated she has presented the highlights of the Design Framework amendments and asked for comments.

Senior Planner Gladhill asked whether the amendments are going in the right direction to implement the Development Plan.

Chairperson Elvig stated these details are important but the broader issues were addressed by the Planning Commission relating to parking, how to screen parking, design standards, and how to make it work to the City's advantage.

HRA Executive Director Nelson stated this issue will be in front of the Planning Commission in February 2012, and will then start the formal process with Zoning Code amendments.

Commissioner Wise stated he does not want to "start wheels rolling" in the same direction taken with the Town Center being too restrictive. He stated he wants to be sure the standards are developer friendly and allow some "wiggle room" for deviation, especially during times of economic downturn.

Development Manager Lazan stated the amendments have added flexibility and provide the ability to be more responsive to the market.

Senior Planner Gladhill concurred and added it will also help at a staff level to know the Council's baseline.

EXECUTIVE DIRECTOR'S REPORT

HRA Executive Director Nelson reported on upcoming agenda items and provided an update on outstanding negotiations.

Chairperson Elvig indicated that Minnesota Department of Employment and Economic Development Commissioner Mark Philips is interested in The COR and asked staff to contact him to schedule a tour.

COMMISSIONER INPUT

None.

ADJOURNMENT

Chairperson Elvig adjourned the Work Session meeting of the Housing and Redevelopment Authority at 8:30 p.m.

Respectfully submitted,

_____

Heidi A. Nelson
HRA Executive Director

ATTEST:

_____

Jo Ann M. Thieling
City Clerk

Drafted by Carla Wirth
TimeSaver Off Site Secretarial, Inc.

HOUSING AND REDEVELOPMENT AUTHORITY
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Housing and Redevelopment Authority conducted a regular meeting on Tuesday, January 10, 2012, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson David Elvig Commissioner Randy Backous Commissioner Colin McGlone (arrived at 9:32 p.m.) Commissioner Bob Ramsey Commissioner Sarah Strommen Commissioner Jason Tossey Commissioner Jeffrey Wise
Members Absent:	None.
Also Present:	City Administrator Kurtis G. Ulrich HRA Executive Director Heidi A. Nelson City Engineer Tim Himmer Development Manager Darren Lazan Planning Intern Patrick Brama City Attorney Bill Goodrich

CALL TO ORDER

Chairperson Elvig called the regular meeting of the Housing and Redevelopment Authority to order at 9:31 p.m.

CITIZEN INPUT

There was none.

APPROVAL OF AGENDA

Motion by Commissioner Wise, seconded by Commissioner Ramsey, to approve the agenda as submitted.

Motion carried. Voting Yes: Chairperson Elvig, Commissioners Wise, Ramsey, Backous, Strommen, and Tossey. Voting No: None. Absent: Commissioner McGlone.

APPROVAL OF MINUTES

None.

Commissioner McGlone arrived at 9:32 p.m.

HRA BUSINESS

Case #1: Elect 2012 HRA Officers

HRA Executive Director Nelson reviewed the staff report.

Motion by Commissioner Tossey, seconded by Commissioner Ramsey, to elect Commissioner McGlone as HRA Chairperson for 2012.

Further discussion: Commissioner Backous stated his intention to vote against the motion due to Commissioner McGlone's close relationship with contractor. He indicated he means no offense but felt there was a need for a more distant relationship. Commissioner Strommen stated her intention to vote against the motion, seeing no need to change the Chair and preferring to stay the course.

Motion carried. Voting Yes: Commissioners McGlone, Ramsey, Tossey and Wise. Voting No: Chairperson Elvig, Commissioners Backous and Strommen. Absent: None.

Motion by Commissioner Strommen, seconded by Commissioner Tossey, to elect Commissioner Elvig as HRA Vice Chairperson and Commissioner Backous as Secretary Treasurer for 2012.

Motion carried. Voting Yes: Chairperson McGlone, Commissioners Strommen, Tossey, Backous, Elvig, Ramsey, and Wise. Voting No: None. Absent: None.

EXECUTIVE DIRECTOR'S REPORT

HRA Executive Director Nelson and Development Manager Darren Lazan provided updates on negotiations and pending projects.

HRA Director Nelson reviewed agenda items to be considered at the January 17, 2012, HRA Work Session.

No objections were expressed relating to Commissioner Ramsey's request to Skype into the HRA meeting.

COMMISSIONER INPUT

None.

ADJOURNMENT

Motion by Commissioner Ramsey, seconded by Commissioner Elvig, to close the regular meeting of the Housing and Redevelopment Authority.

Motion carried.

The regular meeting of the Housing and Redevelopment Authority adjourned at 9:47 p.m.

Respectfully submitted,

_____
Heidi A. Nelson
HRA Executive Director

ATTEST:

_____
Jo Ann M. Thieling
City Clerk

Drafted by Carla Wirth
TimeSaver Off Site Secretarial, Inc.

HOUSING AND REDEVELOPMENT AUTHORITY
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Housing and Redevelopment Authority conducted a Work Session on Tuesday, January 17, 2012, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson Colin McGlone Commissioner Randy Backous Commissioner David Elvig Commissioner Bob Ramsey (via Skype) Commissioner Sarah Strommen Commissioner Jason Tossey Commissioner Jeffrey Wise
Members Absent:	None.
Also Present:	City Administrator Kurtis G. Ulrich HRA Executive Director Heidi A. Nelson Public Works Director Brian Olson Economic Development/Marketing Director Aaron Backman Development Manager Darren Lazan

CALL TO ORDER

Chairperson McGlone called the Work Session of the Housing and Redevelopment Authority to order at 8:16 p.m. He announced that Commissioner Ramsey is out of town and, as allowed by State Law, attending this meeting via Skype. However, Commissioner Ramsey will be reflected as being absent during votes.

TOPICS FOR DISCUSSON

Case #1: Consider Offer by Northgate Church to Purchase Property in The COR

HRA Executive Director Nelson introduced Northgate Church Pastor Wayne Skaff and Church member Bill Dorn who is its legal representative. She indicated staff met with both on several occasions and worked through initial discussions. Northgate Church has provided a letter of intent to purchase property in The COR and retained Station 19, an architectural firm. The location is across from the Municipal Center, anchoring the east side of Center Street.

Wayne Skaff, Executive Pastor of Northgate Church, stated they are a congregation of 700-800 on a typical Sunday with 80-85 children attending Wednesday programs. Northgate Church decided to come to The COR because it believes in the future of the City and wants to continue to partner with The Fountains, Caribou, Acapulco, the Charter School, and The Falls Café. Pastor Skaff described their plans to construct a 21st Century church that contained a performing

arts center seating for 500-700 people, state-of-the-art sound system and acoustics, flat floor, portable raised stage that can be reconfigured, backdrop video walls, stadium seating to a second level, with great sight lines. The glass entrance/atrium will be similar to that exhibited at the City Hall, Veterans Clinic and Allina Health. The Church will use the facility on Sunday and the rest of the week it will be available for concerts, meetings, movies for family night, Happy Days enhancements during inclement weather, and the PACT Charter School arts programs. In addition, if desired by the City, they are willing to consider a daycare/preschool. He noted that with such a use parents can park in the ramp, bring their child to the day care center/preschool, then take the train to/from work, picking up their child at the end of the day, getting their car from the ramp and heading home. Pastor Skaff stated they want to partner with the City and use parking that is already constructed in the ramp. The Church would also use The Fountains for banquet services and may rent office space above The Falls Café. Plans are to begin construction by the end of 2012 and open late next year. Pastor Skaff explained that instead of developing the church facility in phases, they would build only 25,000 sq. ft., which is adequate for Northgate Church, and look for a joint use to meet parking and other needs. Rather than expanding in The COR, the Church would look for other satellite locations.

Pastor Skaff stated they would raise $3 million in funds during the next four months to build this structure. He indicated they were looking to pay a fair price for 55,000 sq. ft. and enter an agreement with the City for their share of costs for allocation of parking spaces in the ramp and common area of The COR. Pastor Skaff stated they think the Church will bring a lot to the City and can be a catalyst for growth in The COR. He indicated they have other options but feel The COR is the best location and they are willing to take the next step to have their architectural staff provide exterior renderings to assure the HRA that the structure will be similar in appearance to what already exists in The COR.

Commissioner Elvig stated support for the concept of a performing arts center; however, the HRA would need to address the issue of zoning since it is not set up for a non-profit within The COR. The HRA will also need to consider how to address not establishing precedence, tools available to "level the field," surrounding mixed uses, and potential for air rights over the top of the Church for residential. Commissioner Elvig raised the option of a private/public venture to lease the property, which would create a revenue generator for the HRA.

Chairperson McGlone asked about zoning for this assembly use.

HRA Executive Director Nelson stated she will review the Zoning Ordinance and report back.

Commissioner Backous supported the concept of the mixed uses described and thinks it will serve the area well. He stated it is a beautiful plan and asked whether it is a performing arts center with a church, or a church with a performing arts center. He noted this is some of the most expensive land the HRA has and the tax income is a concern.

Chairperson McGlone stated he appreciates the desire for the structure to blend in with existing buildings but the two-story issue has to be overcome. On the tax base issue, he stated he does not have a big a concern as long as the land is sold for its value. Chairperson McGlone noted the HRA cannot discriminate against uses with tax-exempt status.

Commissioner Backous agreed the value of the land is important and if in The COR, generating taxes is a concern. He noted, however, that one could argue this use would serve other purposes so the HRA could forego taxes, and that may be a valid point.

Chairperson McGlone pointed out that 800 people on Sunday plus additional uses will bring in a lot of people to The COR.

Commissioner Backous felt The COR already had enough catalyst.

Commissioner Strommen stated the concept did not come through in the drawings so she appreciated the presentation. She supported the performing arts center concept and noted the numbers and balance sheet can be discussed in closed session.

Pastor Skaff stated they see this as a performing arts center for five days a week. Northgate Church will have no offices in the building and the exterior will not have a cross or steeple but there may be inside art with a cross. Northgate Church would be the owner and the only use restriction would be for family oriented venues. With regard to taxes, he noted Northgate could locate on another property along Armstrong Boulevard, Legacy, Hope Fellowship, or the Diamonds property resulting in those properties becoming tax exempt. Their proposal is for 55,000 sq. ft, about an acre and one-third. Pastor Skaff clarified they are proposing a two-story structure throughout plus parapets to hide HVAC, etc. The area for expansion will be built as a shell for future build out.

City Administrator Ulrich advised a number of cities have built performing art centers that do not pay taxes, run a deficit, result in costs to operate and maintain, and require additional employees. In this case, the HRA would have land proceeds and opportunity to collect on the Special Services District (SSD) and activity it generates. He felt the HRA could make a case for public purpose through negotiations.

Commissioner Tossey stated his biggest issue is taxable versus non-taxable. He indicated he would need to see what would outweigh the nontaxable issue, such as people coming into The COR, events like weddings, and use of the ramp. Without knowing the land price, on its face, he shared some of Commissioner Backous' concerns but would defer until the HRA knows the sale price.

Development Manager Lazan requested direction on parking, the tax item, and price (during closed session). He noted the church of 21st Century concept results in a lot of operations being fulfilled outside this facility, in tax paying facilities such as The Fountains.

Chairperson McGlone asked about the surface parking being proposed.

Development Manager Lazan displayed a site plan of the subject site and parking arrangement to provide for daily use on their property. The rest of the parking requirement would be met in PUMA A or PUMA C or a combination. He felt there was no better example of compatible

shared parking and the appropriate level of parking would be considered during the zoning approval process.

Commissioner Backous asked if the road alignment will have to change.

Development Manager Lazan explained that the Center Street alignment may change to arrive at a 90-degree intersection with Sunwood Drive. He stated he will put together those numbers.

Commissioner Ramsey stated he thinks this is the perfect project for this proposed location. He indicated he understands there may be a problem with public perception of a nontaxable entity in The COR but the HRA needs to remember that Northgate Church is large, successful, and will build somewhere in Ramsey on much larger parcel. Commissioner Ramsey stated he favors putting forth the effort to make this multi-use facility happen.

Chairperson McGlone asked about the potential for daycare, which would require parking for drop-off.

Pastor Skaff clarified that Northgate Church does not want to be in the daycare or preschool business but it had been brought up that those uses were desired in The COR and this location makes sense. He indicated they would be willing to work with those uses, but don't want to be in the business of running it.

Commissioner Strommen asked about fund raising plans.

Pastor Skaff described their fund raising timetable between now and May 6, 2012, their Celebration Sunday. They will be asking for donations and three-year pledges and encourage front end giving to purchase the land and move architecture and construction ahead. Pastor Skaff explained Northgate Church is already paying rent to someone else, needs a place, and it is their prayer for a miracle to allow the building to be under construction at this time next year.

Commissioner Wise stated he likes the proposed project but his biggest concern is the nontaxable status.

Commissioner Elvig stated he does not know if two stories are really the goal if there will be four or five stories surrounding. However, he felt the design could emphasize the performing arts space to make it a "real jewel." He asked if a community center could be connected to this use.

Development Manager Lazan explained that not much has been done in the way of architectural elevations but this project will meet or exceed the HRA's architectural and heights standards. The structure will be two stories plus, as high as or higher than the City Hall, plus parapets.

Pastor Skaff stated they are open to anything at this point including retail, residential, and/or office stacked if it fits within the construction design. He indicated they are ready to hold those discussions.

Development Manager Lazan stated if the HRA is comfortable with the parking, the tax issue is on the table for discussion. He noted the HRA can move that issue to closed session along with discussion of the sale price.

Pastor Skaff assured the HRA that everything is on the table but their Board of Directors does not want to be a precedence setter of falling into the role of paying taxes. He noted the YMCA Legacy Campus, or Charter School would not be expected to pay taxes. Pastor Skaff stated they want to find a win-win in other ways so the City feels it is getting its fair share. He stated Northgate Church will bring synergy and a quality performing arts center to The COR and they will negotiate through the process and provide architectural drawings so the HRA can also sell it to the public.

Commissioner Elvig stated he appreciates their approach and asked about concerns with a nonprofit in a TIF District.

HRA Executive Director Nelson explained it would affect the long-term proforma since a church is not a taxable entity. She stated she looked at the Zoning Ordinance and in COR 1; religious institutions are a conditional use.

City Administrator Ulrich noted it is a 25-year TIF District and the odds that the whole 130 acres will be fully maximized are low. If the HRA's strategy is to spur development and get other taxable properties built as accessory to this use, he felt it was a reasonable argument.

Bill Dorn, attorney representing Northgate Church, reminded the HRA it will be able to impose covenants on the property to assure the other uses will materialize and there will be enforceability.

Commissioner Backous again asked if this will be a church with a performing arts center or a performing arts center with a church. He also asked if they will have revenue-producing uses so this could be perceived as a scheme around taxable versus non-taxable status.

Pastor Skaff stated they plan to build a church and want the facility to be used by the public as much as possible. The revenue received by those uses would just offset operational costs and not be a revenue generator or financial income to offset mortgage payments.

Commissioner Tossey asked about Pastor Skaff's earlier comment that he had identified churches by city halls while visiting eastern states. However, this building will not have an exterior cross or spire to create the identity of a church.

Pastor Skaff stated he was commenting that the faith component was the synergy of the community.

Development Manager Lazan pointed out that one of the key perspectives is that this is a use that creates separation between a "strip mall fake downtown" and more of a community component with a tremendous downtown character.

Chairperson McGlone stated this meeting will move into closed session to discuss the offer by Northgate Church to purchase property in The COR.

Chairperson McGlone called a recess at 9:10 p.m. The meeting was reconvened at 9:13 p.m.

Motion by Commissioner Elvig, seconded by Commissioner Backous, to move to closed session.

Motion carried. Voting Yes: Chairperson McGlone, Commissioners Elvig, Backous, Strommen, Tossey and Wise. Voting No: None. Absent: Commissioner Ramsey.

The HRA meeting moved into a closed session at 9:13 p.m.

The HRA meeting returned to open session at 9:53 p.m.

Chairperson McGlone indicated that during the closed session, the HRA gave the development team direction to counter offer.

Case #2: Consider Offer to Purchase Property – Sunwood / Ramsey and Sunwood / Armstrong

Development Manager Lazan presented the details of the Kwik Trip offer and negotiations for clean purchase on the Sunwood/Ramsey parcel and right of first refusal for the Sunwood/Armstrong parcel. He indicated the site plan will be presented at the next HRA meeting and asked the HRA for its input.

Commissioner Elvig asked if performance language can be included and suggested a greater setback from the corner so the canopy is farther back and similar to the use across the street.

Development Manager Lazan stated they propose an extremely aggressive timeline to close in 2012 and build in 2013. He described the setback area and location of a landscaping wall.

Commissioner Ramsey stated he is concerned with the proposed site plan, and would prefer the car wash be located on the other side, not near the street, due to the noise it creates.

Commissioner Backous asked whether the HRA will receive a higher price with the right of first refusal.

Development Manager Lazan noted the HRA accepted the offer of $11/sq. ft.

Commissioner Strommen noted the right of first refusal carries a restrictive covenant.

Development Manager Lazan explained if Kwik Trip takes the second parcel there would be a restriction of no other gas station.

Commissioner Elvig noted this C-store/fuel station will require a CUP. He stated he is not suggesting rezoning because the CUP process allows the City to work with the site.

Commissioner Strommen asked whether the covenant will define the convenience store use, explaining she does not want the City to get strapped later on because of the restrictive covenant.

Development Manager Lazan explained the HRA will discuss, in the future, if it should be restricted from gas or from convenience of a certain size.

The consensus of the HRA was to support furthering the Kwik Trip offer and negotiations for clean purchase on Sunwood/Ramsey parcel and right of first refusal for the Sunwood/Armstrong parcel.

Case #3: Consider Offer to Purchase Land – Sunwood Retail Area

Commissioner Wise recused himself from this discussion at 10:06 p.m. because he may be relocating his business to this area.

Development Manager Lazan explained the Sunwood Retail area was created when Sunwood Drive was realigned. Osborne Capital is interested in purchasing the five-acre Sunwood Retail area along with the 3-4 land deals the HRA has been negotiating. If approved, Osborne Capital would be responsible for closing those transactions and the City would only have one transaction (with Osborne Capital). Another benefit is that it would create momentum, moving forward, and engage the West 30 as well. Development Manager Lazan stated he would loosely describe the offer as being less than the average of the current offers but the City would realize savings by passing along three to four closing costs. The price range with Osborne Capital is $7-$9/sq. ft. and the range with the single users is $9-$11/sq. ft. Because of the savings from closing costs, he felt the Osborne Capital offer was probably a "wash."

Chairperson McGlone stated support to sell the land sooner rather than later and get the HRA out of the development business.

Commissioner Strommen asked about the West 30.

Development Manager Lazan explained it is a complicated draft, they continue to have discussions, and need time to draft the documents. He stated staff may be able to get this under agreement concurrent with West 30. It was noted a phasing program will be needed on the 30 acres, triggered by success on the interchange.

Commissioner Strommen stated this may be a way to do a trial on a smaller scale. She explained why she was not overwhelmed by Mr. Osborne's presentation but felt this consideration may have merit if the dollars are a "wash."

Commissioner Elvig stated he did not think the dollars were a "wash" and he was concerned the HRA is about to step away from something when it has spent money on marketing and the development team for 24 months of effort. Commissioner Elvig asked about the past discussion of a Walgreen's at $16/sq. ft. He indicated he liked the timing but felt the HRA had made an investment, has capable staff, and there is a need to be diligent to get the comps and cash.

Development Manager Lazan clarified that Osborne Capital will not get the projects done faster than staff will get it done.

Chairperson McGlone stated there has been no agreement with Walgreen's and he thinks this proposal results in a "wash" because Kwik Trip is at $11/sq. ft.

Motion by Commissioner Tossey, seconded by Commissioner Backous, to move to closed session to discuss potential land sales in the Sunwood Retail Area.

Motion carried. Voting Yes: Chairperson McGlone, Commissioners Tossey, Backous, Elvig, and Strommen. Voting No: None. Absent: Commissioners Ramsey and Wise.

The HRA meeting moved into a closed session at 10:15 p.m.

The HRA meeting returned to open session at 10:20 p.m.

Chairperson McGlone indicated the HRA discussed a concept offer for a bulk purchase of land at the southeast corner of Armstrong Boulevard and Sunwood Drive, the Sunwood Retail Area, and had requested staff provide more detail.

Commissioner Backous requested a summary of the due diligence conducted of Osborne Capital.

Commissioner Wise returned to the meeting at 10:21 p.m.

Case #4: Review of 2011 Efforts and 2012 Goals and Objectives

Development Manager Lazan presented the Development Management Recap for 2011 and goal setting for 2012.

Commissioner Tossey asked for an update on the bonding bill.

City Administrator Ulrich stated he is not aware of one being passed but will check on the status.

The HRA discussed its desire to sell The COR property in an expedient manner, get back the City's investment, and get out of the real estate business. Development Manager Lazan was asked to provide financial information and the dashboard whenever requesting the HRA's input on sale prices and financial matters. It was agreed that the HRA members do not have expertise in real estate and rely on the Development Manager to provide an accurate and professional recommendation on the appropriate sale price.

The HRA acknowledged that residents have raised questions about The COR land sales considered by the HRA, the value of Landform's contract, and have a perception of mistrust. It was agreed that Members are doing their job by asking questions and doing so does not disparage Landform or Mr. Lazan.

Commissioner Elvig left at 11:03 p.m.

HRA Executive Director Nelson commented on the practice in the real estate world to build relationships and complete deals through those networks. She assured the HRA that staff is completing its due diligence and thoroughly vetting all sale offers to assure the public is protected. HRA Executive Director Nelson indicated staff will do a better job of giving the HRA that analysis.

The HRA agreed with the benefit of discussing, openly and honestly, issues that arise. It was also agreed the HRA serves as ambassadors to the City and community, needs to work together with positive intent to complete this project, and minimize issues that arise.

EXECUTIVE DIRECTOR'S REPORT

None.

COMMISSIONER INPUT

None.

ADJOURNMENT

Motion by Commissioner Tossey, seconded by Commissioner Backous, to close the Work Session meeting of the Housing and Redevelopment Authority.

Motion carried.

The Work Session meeting of the Housing and Redevelopment Authority adjourned at 11:17 p.m.

Respectfully submitted,

_____
Heidi A. Nelson
HRA Executive Director

ATTEST:

_____
Jo Ann M. Thieling
City Clerk

Drafted by Carla Wirth
TimeSaver Off Site Secretarial, Inc.

HOUSING AND REDEVELOPMENT AUTHORITY
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Housing and Redevelopment Authority conducted a regular meeting on Tuesday, January 24, 2012, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson Colin McGlone Commissioner David Elvig Commissioner Randy Backous Commissioner Bob Ramsey Commissioner Sarah Strommen Commissioner Jason Tossey Commissioner Jeffrey Wise
Members Absent:	None.
Also Present:	City Administrator Kurtis G. Ulrich HRA Executive Director Heidi A. Nelson Public Works Director Brian Olson City Engineer Tim Himmer Planning Intern Patrick Brama Development Manager Darren Lazan City Attorney Bill Goodrich

CALL TO ORDER

Chairperson McGlone called the regular meeting of the Housing and Redevelopment Authority to order at 8:20 p.m.

CITIZEN INPUT

There was none.

APPROVAL OF AGENDA

Motion by Commissioner Wise, seconded by Commissioner Ramsey, to approve the agenda as submitted.

Motion carried. Voting Yes: Chairperson McGlone, Commissioners Wise, Ramsey, Backous, Elvig, Strommen, and Tossey. Voting No: None. Absent: None.

APPROVAL OF MINUTES

Motion by Commissioner Ramsey, seconded by Commissioner Tossey, to approve the following minutes:

Regular Meeting Minutes dated November 7, 2011
Work Session Meeting Minutes dated November 15, 2011
Special Meeting Minutes dated November 15, 2011
Regular Meeting Minutes dated December 13, 2011

Motion carried. Voting Yes: Chairperson McGlone, Commissioners Ramsey, Tossey, Backous, Elvig, Strommen, and Wise. Voting No: None. Absent: None.

HRA BUSINESS

Case #1: Consider Deviations from the Current Policy on Distribution of Land Sale Proceeds for Potential Funding of the Sunwood Drive Realignment

HRA Executive Director Nelson reviewed the staff report and indicated the City Council had discussed and determined to rely on funding from grant applications, TIF funding, and undesignated reserves. The City Council also indicated that deviating in the policy relating to funding from land sales proceeds would be a last resort to fill the funding gap. The City Council determined to move forward with engineering for the Sunwood Drive realignment, which will be considered again by the City Council once the study is completed.

Motion by Commissioner Ramsey, seconded by Commissioner Elvig, to postpone indefinitely.

Motion carried. Voting Yes: Chairperson McGlone, Commissioners Ramsey, Elvig, Backous, Strommen, Tossey and Wise. Voting No: None. Absent: None.

EXECUTIVE DIRECTOR'S REPORT

HRA Executive Director Nelson indicated the HRA will not meet on January 31, 2012, and reported on the items that will be considered at the February 14, 2012, meeting. She provided an update on project negotiations and the ICSC Conference. The HRA asked staff to contact Anoka County about the potential for a local conference.

COMMISSIONER INPUT

Commissioner Elvig requested an update on the Toti/Suite Living contract.

Development Manager Lazan stated he had discussion with Toti/Suite Living prior to the January 15, 2012, deadline but did not put an extension together because Toti/Suite Living is exploring closing the property in part and complete the close in the spring, and another option is for an extension to spring. Development Manager Lazan stated he had asked Toti/Suite Living to gather their refreshed financing documents and redo the term sheet. He indicated Toti/Suite Living had moved two other projects out of the way so he is confident they will move forward. Development Manager Lazan stated he will report again at the February 14, 2012, meeting.

Commissioner Elvig stated his understanding that the HRA had remedies in place if they extended but now the deadline is passed and there is no documentation in place.

Development Manager Lazan noted Toti/Suite Living had paid to extend but the deadline is gone so the HRA could notice them it will cancel the contract or bring another tool forward to put Toti/Suite Living back under agreement. He explained the partial closing is in rough form and he will discuss that option again tomorrow with Toti/Suite Living. It would involve a partial payment of half the total sale value up front, close the sale, and the HRA would carry a six-month note that would have to be fulfilled prior to starting construction. That option allows Toti/Suite Living to close with the existing environmental work so they can focus on financing construction.

Commissioner Elvig stated he remains concerned because the deadline was passed and the HRA did not act on it. He noted a contract is in place, has not been met, and been extended four times previously. Commissioner Elvig stated this is an important project and piece of ground and holding it has locked other's ability to come to Ramsey for senior assisted housing. He believed this should be discussed by the HRA on a timely basis; however, it was still not scheduled for discussion.

Commissioner Ramsey asked what the drop-dead date is.

Development Manager Lazan stated it was January 15 but it is not uncommon to let that date go by and get to a decision point. He stated he plans to bring a proposal forward for the HRA's consideration at its February 14, 2012, meeting.

Commissioner Strommen stated she would be willing to meet in special session to respond to real estate negotiations. She indicated she is also concerned the deadline was January 15 and the HRA is not meeting again for a month from that date. She stated the HRA needs to be able to respond.

Commissioner Tossey concurred that discussion needs to occur and a contract should mean something. He stated the HRA needs to consider if it is willing to let it go on and on and he believed holding that discussion a month beyond the drop dead date is too long.

Commissioner Ramsey stated he is also concerned that is too long but noted this perspective purchaser has paid a significant amount of money for the extensions and that is not refundable. Commissioner Ramsey agreed the HRA needed to make sure it holds contracts to a higher value but he believed Toti/Suite Living was committed because it has paid $110,000 in non-refundable fees.

Chairperson McGlone concurred the HRA was at a point of concern, noting Toti/Suite Living had passed contract deadlines four times.

Development Manager Lazen clarified that the other times staff had prepared and presented an extension before the deadline.

Chairperson McGlone noted this is the first HRA meeting since the expiration on January 15 and asked whether that date needs to lapse before the HRA can take action and decide if it wants to continue further or prepare documents to cancel.

City Attorney Goodrich advised that often the date of closing passes by and the HRA's remedy is to prepare a cancelation, serve it on Toti/Suite Living, and then Toti/Suite Living has 30 days to perform or not perform.

Chairperson McGlone stated he had no problem calling a special meeting.

Commissioner Ramsey stated we all want to assure we keep our "eye on the ball."

Development Manager Lazan stated the reason he did not bring it forward tonight is Toti/Suite Living introduced the complexity of a close with 50% and he wants to vet that option before presenting it to the HRA. Development Manager Lazan indicated he has told Toti/Suite Living that an extension would be a substantial fee and nonrefundable because of the high cost for the HRA to bring in another developer to meet the 2012 closure.

Commissioner Elvig stated he knows the buyer has been putting up funds but his concern remains with the process and he wants the HRA to be informed when coming to a closing date or a deadline that is not met. Commissioner Elvig suggested the HRA be informed ten days in advance.

Commissioner Tossey agreed and suggested Development Manager Lazan provide weekly updates and calendar with contract deadlines and expected closing.

The HRA agreed with this suggestion.

Development Manager Lazan stated he had brought up Toti/Suite Living during the last HRA meeting and indicated they were discussing extension terms.

Commissioner Elvig took exception to that statement, noting he had asked Development Manager Lazan several weeks ago for an update and Mr. Lazan had said he hadn't gotten that information yet and wanted it before the end of the extension.

ADJOURNMENT

Motion by Commissioner Backous, seconded by Commissioner Tossey, to close the regular meeting of the Housing and Redevelopment Authority.

Motion carried.

The regular meeting of the Housing and Redevelopment Authority adjourned at 8:38 p.m.

Respectfully submitted,

_____
Heidi A. Nelson
HRA Executive Director

ATTEST:

_____
Jo Ann M. Thieling
City Clerk

Drafted by Carla Wirth
TimeSaver Off Site Secretarial, Inc.

HRA Regular Session **5. 1.**

Meeting Date: 02/28/2012

By: Tim Gladhill, Community Development

Title:

Consider Contract for Alternative Urban Areawide Review Update for The COR

Background:

In 2003, the Ramsey Town Center, LLC completed an Alternative Urban Areawide Review (AUAR) for environmental review purposes for the Ramsey Town Center project. This AUAR was approved by the City and the Environmental Quality Board (EQB). The time frame for approval of this document now requires an update to avoid any unnecessary delays in approving development projects or triggering additional environmental review such as an EAW or EIS for those projects meeting required thresholds. In addition, amendments to the Development Plan from the original Master Plan also appear to require an update to the AUAR regardless of the time frame.

Notification:

No notification required at this time. Completion of the AUAR will include a required comment period for residents as well as affected and surrounding jurisdictions.

Observations:

Minnesota Statutes require that projects meeting certain benchmarks complete environmental review to study potential environmental impacts of development and identify potential mitigation to address these impacts. Environmental review is coordinated through the EQB. As development continues to progress in The COR, it is important to keep current with environmental review for required projects to avoid unnecessary delay. A brief Fact Sheet is attached as background of the Environmental Review process.

An AUAR is an alternative environmental review tool available to governmental units to study the cumulative effect of multiple, overlapping projects and is often considered a hybrid of the Environmental Assessment Worksheet (EAW) and Environmental Impact Statement (EIS) required for certain projects. This tool gives governmental units the ability to be proactive in this type of review as opposed to reactive to individual projects as is the case with an EAW or EIS. As the Development Plan for The COR is included in the Comprehensive Plan, the project is eligible for AUAR review. Since the original study was completed in 2003, Minnesota Statute requires that the developer must update the AUAR to remain valid. A draft copy of the original Town Center AUAR is attached for review to illustrate the level of detail that is required for an AUAR.

Staff is recommending approval of only the required sections listed in the Work Plan Proposal submitted by Landform; not the optional sections. In addition, Staff will work with the Development Team to identify areas (such as the land use section) that can be updated internally by City Staff in order to reduce the costs of certain line items of the proposal.

Recommendation:

Staff recommends approval of the required sections only of the Work Plan for the AUAR Update for The COR. If optional updates are required based on the comment period, Staff will being a revised case to the HRA.

Funding Source:

The AUAR Update is proposed to be funded by TIF District #14.

Council Action:

Motion to approve the required sections of the Work Plan and Contract for the AUAR Update.

Attachments

Landform Estimate
Landform Work Plan
DRAFT Copy of Original AUAR
Environmental Review Fact Sheet

Form Review

Inbox	Reviewed By	Date
Heidi Nelson	Heidi Nelson	02/23/2012 03:07 PM

Form Started By: Tim Gladhill Started On: 02/22/2012 11:09 AM

Final Approval Date: 02/23/2012

LANDFORM
From Site to Finish

105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
Fax: 612-252-9077
www.landform.net

WORK ORDER

DATE	REVISED February 6, 2012	CONTRACT NO.	P11056
CLIENT INFORMATION		BILLING INFORMATION (IF DIFFERENT FROM CLIENT)	
COMPANY NAME	City of Ramsey	COMPANY NAME	
CLIENT CONTACT	Heidi Nelson – Executive Director HRA	CONTACT	
ADDRESS	7550 Sunwood Dr.	ADDRESS	
CITY, STATE, ZIP	Ramsey, MN 55303	CITY, STATE, ZIP	
PHONE/FAX	763.433.9817	PHONE/FAX	

PROJECT INFORMATION

PROJECT NAME	The COR AUAR Update	PRINCIPAL	Darren Lazan
PROJECT DESCRIPTION	Preparation of AUAR Update for The COR (Ramsey Town Center AUAR Update)	STUDIO/DEPT	RCD
		EST. START DATE	Immediately
PROPERTY LOCATION	The COR	EST. COMPLETE DATE	To Be Determined
CITY, STATE, ZIP	Ramsey, MN, 55303	PROJECT MANAGER	Kendra Lindahl
PIN:		PHASE MANAGER	Kendra Lindahl

SCOPE OF SERVICES LANDFORM AGREES TO PERFORM PROFESSIONAL SERVICES FOR THE CLIENT AS FOLLOWS:

PHASE	DESCRIPTION	TASK	BILLING MESSAGE
90	Background Information	Collect and analyze background information including the 2003 Ramsey Town Center AUAR, 2030 Comprehensive Plan and any other studies that have been completed since the AUAR was completed. This includes review of city and other agency documents to develop the framework for the AUAR update. Additionally, we will contact agencies where updated data may be needed (MPCA, DNR Natural Heritage database, MN Historical Society, etc.). We will work with staff to coordinate with the EQB on this update.	HOURLY TO MAXIMUM $9,370
90	Review and Update Development Scenarios	We will use the current COR development plan for the updated development scenario and identify areas where AUAR updates are needed due the changes to the development scenario originally included in the AUAR.	HOURLY TO MAXIMUM $3,890
90	Prepare AUAR Update (including mitigation plan)	• Update Land Use to reflect changes to The COR development scenario. • Update Traffic to incorporate all of the studies that have been completed since the adoption of the AUAR. This scope assumes that the work done as part of the Sunwood Drive will be acceptable for agency review. We will use this information to update the traffic, air and noise elements of the AUAR. If additional studies are needed, they will be conducted as an additional service. • Update Stormwater Management will be updated to reflect any changes to resulting from the revised development scenario and/or regulatory changes. • Update Wetlands to reflect current development scenario.	HOURLY TO MAXIMUM $13,375

		• Update Water Supply/ Waste Water to reflect current development scenario. • Update Compatibility with Other Plans including 2030 Comprehensive Plan.	
90	Review and Comment	We will prepare the AUAR update document for review by staff and council prior to distribution for the required comment period. We will then submit the document to the required agencies for the 10-day comment period. If objections are filed, we will work with the city to respond to the comments. The document will be prepared for a City Council meeting for adoption.	HOURLY TO MAXIMUM $6,180
99	**OPTIONAL**- WSB Noise Study	We will update the noise section of the AUAR if required. We will work with the MPCA to determine what type of analysis is needed and conduct this work only if needed. WSB is currently doing a noise study for Armstrong and has indicated that they could expand the scope for the AUAR update for a fixed fee if needed. We will work determine whether or not this is needed in the first phase of our work.	$5,000 FIXED FEE
99	**OPTIONAL**- Transportation Plan update	This work plan assumes that that previous transportation studies that have been done, including the Sunwood Study, provide adequate information for the AUAR update. However, if the agencies require an update of the Transportation Plan additional services will be required and can be defined after agency review and comment if necessary.	$40,000 ESTIMATE

Reimbursable Expenses, including but not limited to Mileage, Plotting, Printing, Scanning, and Subconsultants are not included in the fees below and will be billed as a reimbursable expense at 1.15 times cost.

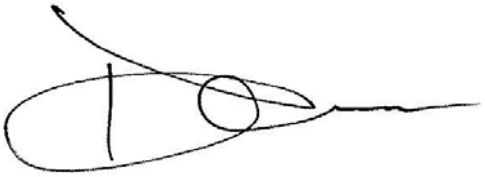
FEES (RATE SCHEDULE IS AVAILABLE UPON REQUEST FOR HOURLY CONTRACTS)

☐	FIXED FEE	FIXED FEE AMOUNT:	Plus Typical Reimbursables	
☒	HOURLY WITH AN ESTIMATE	ESTIMATE FEE:	RATES	
☐	HOURLY TO A MAXIMUM	MAXIMUM FEE:	RATES	2011 Landform Schedule

IN WITNESS WHEREOF, the parties have accepted, made and executed this agreement upon the terms, conditions and provisions stated above and on the attached General Conditions including, but not limited to, provisions relating to limitations on liability of Consultant.

Accepted By:

Landform



Darren Lazan
President
Date: February 6, 2012
Landform Federal Tax ID: 27-1199905

Heidi Nelson

Date:

General Conditions

1. All required services outside SCOPE OF WORK outline will be provided upon the CLIENT'S request and will be billed at the rates quoted on the CURRENT FEE SCHEDULE. A copy of the CURRENT FEE SCHEDULE has been made available to CLIENT or is attached hereto. Rates and multiples for Additional Services and other services as set forth in the fee schedule shall be adjusted annually in accordance with normal salary review practices of Consultant.
2. Fees outlined in this contract will be adhered to subject to site conditions and criteria set forth by the CLIENT and requirements of all applicable governmental agencies, utility companies, etc., in effect on the date of the CONSULTANT'S signing of this contract. No work by the CONSULTANT will commence until fully dimensioned and client-approved plans have been received from CLIENT. Subsequent changes to the plans, which require additional work by the CONSULTANT, will result in extra charges at the rates quoted on the CURRENT FEE SCHEDULE.
3. Field staking will be performed one time only for the fees quoted. Any restaking due to the loss of stakes beyond the CONSULTANT'S control will be billed at the rate on the CURRENT FEE SCHEDULE. In addition, fees outlined for field survey and construction staking are subject to the CONSULTANT being able to perform each item without delays beyond its control. The CLIENT shall request construction-staking items a minimum of two (2) working days in advance of when desired.
4. In the event that a question or claim may arise as to an error or omission in the CONSULTANT'S work or plans, the CONSULTANT will assume no liability for errors or omissions unless notified within 48 hours of the client's discovery of such. If notified within 48 hours, the CONSULTANT will have the right to remedy any such errors or omissions within a reasonable and agreed upon time thereafter, at no additional cost to the CLIENT. The CONSULTANT will assume no liability for construction staking unless all stakes are maintained intact and verified as to their origin.
5. The CLIENT shall give separate authorization to the CONSULTANT to commence each item of work as outlined in the SCOPE OF WORK.
6. CLIENT will be billed monthly, based upon percentage of work completed and/or hourly charges and reimbursable costs. Invoices are due and payable upon presentation. Objections to invoices not made in writing within thirty (30) days of the billing date are waived. A FINANCE CHARGE of one and one half percent (1.5) per month (18% ANNUAL PERCENTAGE RATE) will be added to portions of accounts over 30 days past due. FINANCE CHARGES may be compounded. CLIENT's failure to make timely payments is justification for suspension of all services and withholding of all deliverables until payment is received or other written agreements made. CONSULTANT shall be entitled to recover all costs, expenses and fees incurred by CONSULTANT (including litigation and arbitration fees and costs, reasonable attorneys' fees, and CONSULTANT's internal labor at the rates quoted on the CURRENT FEE SCHEDULE) due to CLIENT's failure to make timely payments.
7. This Agreement may be terminated by either party upon seven (7) days' written notice. In the event of any termination, the CONSULTANT will be paid for all services rendered to the date of termination plus unpaid reimbursable expenses. Such termination shall not affect the parties' accrued rights and liabilities as of the date of termination. Without limiting the generality of the foregoing, paragraphs 4, 6, 9, 10, 11, 12, 14, 15, and 16 of these General Conditions shall survive any cancellation, expiration, or termination of this Agreement.
8. The CONSULTANT will not be responsible for the cost of permits, title company charges, governmental review fees, soil reports, printing, photographic charges, etc. as applicable, except those printing charges necessary for the CONSULTANT to do it's work. The CONSULTANT will be reimbursed for such charges paid by it for the CLIENT at the rates quoted on the CURRENT FEE SCHEDULE.
9. The CONSULTANT will not be responsible or liable for the following:(a) Any use of plans, surveys, specifications, etc. not signed and sealed by the CONSULTANT and approved by the appropriate governmental agencies; (b) Inaccuracy of data, plans, legal descriptions or any other information supplied by the CLIENT or others; (c) Site soil, hydrologic, or geologic conditions; (d) Changes to the plans and specifications made by the CLIENT or others; (e) Job site conditions; or (f)The performance of work on this project by any construction contractor or third party.
10. All original work will be property of the CONSULTANT. The CLIENT at its request will be furnished with reproducible copies as a reimbursable expense. All documents furnished by the CONSULTANT are instruments of its service. They are not suitable for reuse or extensions of this project or any other project. CONSULTANT is the author of these documents and retains all common law, statutory and/or reserved rights, including copyright. Any reuse without specific written approval by the CONSULTANT in each case will be at the sole risk of the user and without liability or legal exposure to the CONSULTANT.
11. Neither the CLIENT nor the CONSULTANT shall assign, sublet or transfer any rights under or interest in the contract without the written consent of the other. Nothing herein shall be construed to give any rights or benefits hereunder to anyone other then the CLIENT or CONSULTANT.
12. The CONSULTANT makes no representation concerning any cost estimate figures made in connection with maps, plans, specifications or drawings other than that all cost figures are estimates only and the CONSULTANT shall not be responsible for fluctuations in costs or quality figures.
13. The CLIENT agrees to cooperate in every way requested by the CONSULTANT to expedite the completion of the work set forth in the contract. The CLIENT agrees to provide the CONSULTANT access to the property involved and to make available any records, documents, deeds, legal descriptions or other items requested by the CONSULTANT for the reasonable pursuit of the completion of the work.
14. The CONSULTANT makes no warranty, either expressed or implied, as to its services. Services will be performed in accordance with generally accepted engineering and/or surveying practices.
15. Any claim, dispute or other matter in question arising out of or relating to this Agreement or breach thereof ("Claim") in which the aggregate amount in controversy exclusive of interest, attorneys' fees and costs, is less than or equal to $100,000 shall be decided by binding arbitration in Minneapolis in accordance with the Construction Industry Rules of the American Arbitration Association. Judgment on any award by the arbitrator(s) shall be enforceable in any court having jurisdiction. Any Claim in which the aggregate amount in controversy, exclusive of interest, attorneys' fees and costs, is greater than $100,000 shall be resolved by litigation in the State or Federal Court located within Hennepin County, Minnesota. Consultant and Client expressly consent to the exclusive personal jurisdiction and venue of the Minnesota courts for all purposes relating to this Proposal. The parties waive trial by jury. This Agreement shall be governed by Minnesota law, without regard to conflicts of law principles.
16. CONSULTANT'S TOTAL LIABILITY TO CLIENT FOR ANY LOSS, CLAIM OR DAMAGE ARISING OUT OF THE NEGLIGENCE OR OTHER LEGAL FAULT OF CONSULTANT IN PERFORMING ITS SERVICES SHALL BE LIMITED TO THE GREATER OF (I) THE AMOUNT STATED IN THIS PROPOSAL AS COMPENSATION FOR CONSULTANT'S BASIC SERVICES, OR (II) THE LIMITS OF ANY INSURANCE ACTUALLY AVAILABLE TO THE CONSULTANT. AT ANY TIME PRIOR TO COMMENCEMENT OF SERVICES. CLIENT MAY, BY PAYING A 20% PREMIUM IN ADDITION TO CONSULTANT'S FEE, ELIMINATE THIS LIMITATION ON LIABILITY. In no event shall CONSULTANT be liable for loss of profits, loss of use, loss of revenue, or any or special, indirect or consequential damages of any kind.
17. NOTICE OF LIEN RIGHTS (MINNESOTA): (a) Any person or company supplying labor or materials for this improvement to your property may file a lien against your property if that person or company is not paid for the contributions. (B) UNDER MINNESOTA LAW, YOU HAVE THE RIGHT TO PAY PERSONS WHO SUPPLIED LABOR OR MATERIALS FOR THIS IMPROVEMENT DIRECTLY AND DEDUCT THIS AMOUNT FROM OUR CONTRACT PRICE, OR WITHHOLD THE AMOUNTS DUE THEM FROM US UNTIL 120 DAYS AFTER COMPLETION OF THE IMPROVEMENT UNLESS WE GIVE YOU A LIEN WAIVER SIGNED BY PERSONS WHO SUPPLIED ANY LABOR OR MATERIAL FOR THE IMPROVEMENT AND WHO GAVE YOU TIMELY NOTICE.
18. There are no understandings or agreements except as herein expressly stated.

The COR (formerly Ramsey Town Center) AUAR Update

						$/HR	Bob Schunicht, P.E., Project Manager $195	Darren Lazan, RLA., Project Landscape Architect $195	Kendra Lindahl, AICP, Project Planner $160	Steve Sabraski, P.E., Designer III $115	Mike Bultman, EIT, Designer I $65	TOTAL HOURS	TOTAL FEE/EST
		Feb-12	Mar-12	Apr-12	May-12								
	Background Information						**10**	**4**	**30**	**16**	**0**	**60**	**$9,370**
	Collect and analyze background information including the 2003 Ramsey Town Center AUAR, 2030 Comprehensive Plan and any other studies that have been completed since the AUAR was completed.						2	4	8	8		22	$3,370
P	Review of city and other agency documents to develop the framework for the AUAR update.						2		8	6		16	$2,360
l	contact agencies where updated data may be needed (MPCA, DNR Natural Heritage database, MN Historical Society, etc.).								8	2		10	$1,510
a	Coordinate with the EQB and Metropolitan Council on this update.						6		6			12	$2,130
n	**Review and Update Development Scenarios**						**4**	**2**	**8**	**8**	**8**	**30**	**$3,890**
i	identify areas where AUAR updates are needed due the changes to the development scenario originally included in the AUAR.						4	2	8	4		18	$2,910
n	Update graphics as needed									4	8	12	$980
g	**Prepare AUAR Update to sections including mitigation plan**						**17**	**4**	**26**	**40**	**8**	**95**	**$13,375**
	Update Land Use to reflect changes to The COR development scenario.							2	8			10	$1,670
a	Update Traffic to incorporate all of the studies that have been completed since the adoption of the AUAR. this scope assumes that the work done as part of the Sunwood Drive, will be acceptable for agency review. We will use this information to update the traffic, air and noise elements of the AUAR. If additional studies are needed, they will be conducted as an additional service.						4		4	8	8	24	$2,860
n	Update Stormwater Management will be updated to reflect any changes to resulting from the revised development scenario and/or regulatory changes.						4		2	8		14	$2,020
d	Update Wetlands to reflect current development scenario.						4		2	8		14	$2,020
	Update Water Supply/ Waste Water to reflect current development scenario.						4		2	8		14	$2,020
D	Update Compatibility with Other Plans including 2030 Comprehensive Plan.						1	2	8	8		19	$2,785
e	**Project Management**						**4**	**4**	**26**	**4**	**0**	**38**	**$6,180**
s	Prepare the AUAR update document for review by staff and council prior to distribution for the required comment period.						2	2	12	4		20	$3,160
i	Submit the document to the required agencies for the 10-day comment period.								8				$1,280
g	Respond to the comments and prepare document for City Council adoption.				★		2	2	6			10	$1,740
n	**TOTAL**					**TOTAL**	**35**	**14**	**90**	**68**	**16**	**185**	**$32,815**
							$32,815						
	Optional Noise Study from WSB												**$5,000**
	Optional Transportation Plan Update												**$40,000**
	Estimated Total												**$77,815**

LANDFORM
From Site to Finish

Alternative Urban Areawide Review (AUAR)
Ramsey Town Center
City of Ramsey (RGU)

1. Project Title
Ramsey Town Center

2. Proposer
Ramsey Town Center, LLC
John Feges, President
4200 Central Ave., NE
Minneapolis, MN 55421

Prepared By:
Emmons and Olivier Resources, Inc. (Gary Oberts, AUAR Project Manager)
North American Wetland Engineering, P.A. (Curt Sparks, NAWE Manager)
Meyer, Mohaddes Associates, Inc. (Fred Dock, MMA Manager)

3. RGU (Responsible Governmental Unit)
RGU: City of Ramsey
Contact: Patrick Trudgeon, Principal Planner
15153 Nowthen Boulevard, NW
Ramsey, MN 55303
Direct phone: (763) 433-9843
E-mail: ptrudgeon@ci.ramsey.mn.us

4. Reason for EAW Preparation
This task is not applicable to an AUAR.

5. Project Location

This site is located in Section 28; Township 32N; Range 25W, entirely within Anoka County and the City of Ramsey.

> *EQB Guidance: A county map is not required. The USGS map should be included. Instead of a site plan map, include: 1) a map clearly depicting the boundaries of the AUAR and any sub-districts used in the AUAR analysis; 2) land use, and planning and zoning maps as required in conjunction with Items 9 and 27; and 3) a cover type map as required for Item 10. Additional maps may be included throughout the document wherever maps are useful for displaying relevant information.*

The following series of project location and preliminary site feature maps are included. These maps provide the basis for later reference in subsequent Items.

- USGS map - Figure 5.1
- Site map depicting the boundaries used throughout the AUAR analysis - Figure 5.2 (City location) and Figure 5.3 (County location)
- City Land Use map – Figure 5.4 (also used in Items 9 and 27)
- City Zoning map - Figure 5.5
- Cover-type (Minnesota Land Cover Classification System - MLCCS) map – Figure 5.6 (also used in Item 10)

6. Description of Site

Instead of the information required on the EAW form, the description section of an AUAR should include the following elements for each major development scenario included:

***6a**. Anticipated types and intensity (density) of residential and commercial/warehouse/light industrial development throughout the AUAR area;*

***6b.** Infrastructure planned to serve development (roads, sewers, water, stormwater system, etc.). Roadways intended primarily to serve as adjoining land uses within an AUAR area are normally expected to be reviewed as part of an AUAR. More "arterial" types of roadways that would cross an AUAR area are an optional inclusion in the AUAR analysis; if they are included, a more intensive level of review, generally including an analysis of alternative routes, is necessary; and*

***6c.** Information about the anticipated staging of various developments, to the extent known, and of the infrastructure, and how the infrastructure staging will influence the development schedule.*

****Optional 6d.** Although the EQB guidance does not require an abstract to be included, one is contained in the AUAR for the purposes of any reference to nature of the document.*

6a. The preferred design concept drawing is presented in Figure 6.1. The progression of conceptual design to get to the preferred one is portrayed in Figure 6.2. This progression extends from the Metropolitan Council's Smart Growth Illustrative Plan developed by Calthorpe Associates through the various iterations of the City and RTC LLC design team. The preferred design resulted from discussions with City staff, citizens, community leaders, regulatory agencies and nationally recognized urban designers, as well as site visits nationwide to similar communities that have shown success.

The preferred design reflected in Figure 6.1 is consistent with the City's February 2002 *Comprehensive Plan*, as discussed in Item 27 later in this document.

The preferred design (Figure 6.1) contains the following land use breakdown:

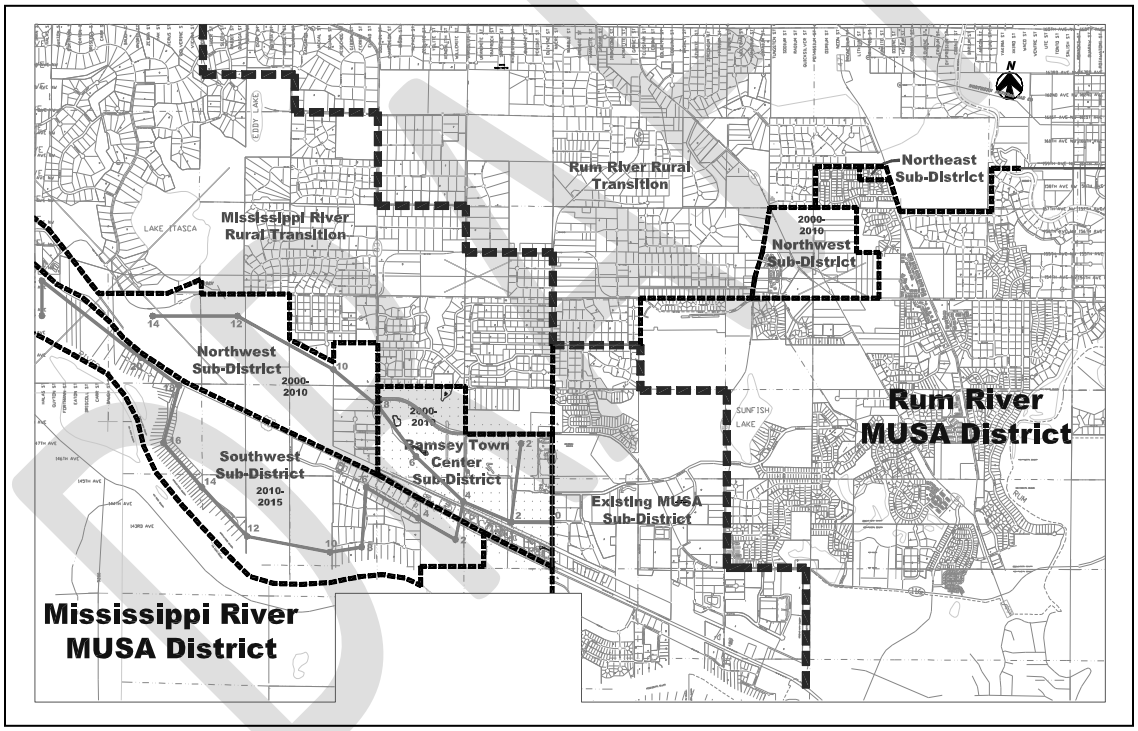
Residential:	93.64 acres
Mixed Use:	56.90
Business Enterprise:	28.43
Commercial Service/Convenience:	7.97
Commercial Shopping:	11.83
Retail:	7.84
Existing Highway Commercial:	25.04
Green/Public Space:	38.31
Railway:	15.74
Roads and streets:	83.82
Total Acreage:	369.5 acres

6b. The infrastructure planned to serve the development has been defined within the City of Ramsey *2001 Comprehensive Plan*, as amended in February 2002. The infrastructure components for roads/highways, sanitary sewers, municipal water supply, and stormwater follow:

1. Roads and Highways Details of the transportation elements related to this project are contained within Item 21. Figure 6.3 illustrates the general road and highway system serving the RTC site. The complete traffic analysis is included as Appendix B.

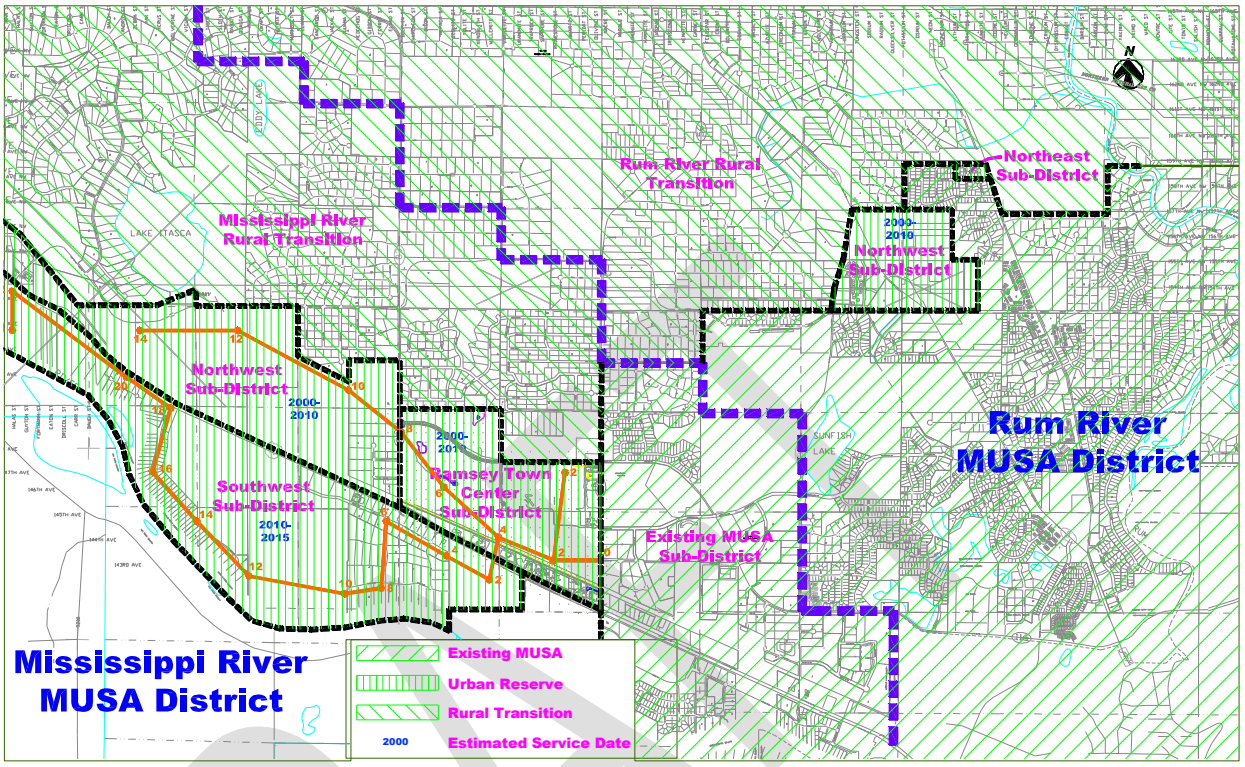
2. Sanitary Sewer Details of the sanitary sewer elements related to this project are contained within Item 18. Figure 6.4 displays both the staging and service areas for sanitary sewer service in Ramsey.

Figure 6.4. Sanitary Sewer Plan for City of Ramsey (see Item 18 for details).



3. Municipal Water Supply Details of the water supply elements related to this project are contained within Item 13. Figure 6.5 shows the water supply staging and plan for future service.

Figure 6.5. City of Ramsey Water Supply System and Plan for Staging.



4. Stormwater Details on the stormwater management elements related to this project are contained in Item 17. Figure 6.6 portrays the general stormwater management system that is envisioned for the RTC site and for the drainage that enters the site from the north and northwest. Installation of major water-carrying elements of this system will occur very early in the site development process to assure proper movement and treatment of runoff. The internal site drainage system will be tied into the major stormwater management system as the site develops and design specifics are determined. Item 17 describes the manner in which runoff volume will be mitigated through stormwater management BMPs.

6c. The preferred design in Figure 6.1 shows only a single development concept that will provide the framework for the RTC site. Staging of infrastructure for the various components is addressed as part of the specific infrastructure section as follows: roads and highways in Item 21; sanitary sewer in Item 18; water supply in Item 13; and stormwater in Item 17.

6d. Abstract for the Environmental Quality Board *Monitor*:

The potential environmental impacts of converting agricultural land to the Ramsey Town Center are assessed in an Alternative Urban Areawide Review (AUAR). Impacts on site drainage, traffic, connection to local and regional trails, groundwater protection and protected wetlands are the centerpieces of the evaluation. A mitigation plan has been developed that lays out the actions that the City of Ramsey will follow to assure minimum environmental impact as the project proceeds in stages, from initiation of construction in 2003, through completion in approximately 2007.

Summary of Environmental Impact. The change in appearance that results from changing over 300 acres of land use from predominantly agricultural to an urban center will be dramatic. The challenge to the City of Ramsey is to implement this change without equally dramatic impacts on the environment. This AUAR lays out a plan by the City to identify and mitigate, to the extent possible, the potential detrimental impacts.

Each of the Items within the AUAR that have an associated potential for impact will include a section summarizing the impact, followed by a mitigation element that addresses how that impact will be mitigated. Obviously, developing over 300 acres of land will have some impact both during and after construction. The goal of the City is to do everything possible to minimize that impact and incorporate amenities that improve the current situation, such as standing water ponds, improved wetlands, open space and parks, trail connections and a nice place for citizens to live, work, shop and recreate.

7. Project Magnitude Data

The cumulative totals of the parameters below should be given for each major development scenario, except that information on "manufacturing", "other industrial", "institutional" and "agricultural".

- *Total project acreage:* 369.5

- *Number of residential units (Table 7.1):* 2,400 attached

- *Commercial, industrial or institutional area (gross floor space):* 1,651,000 total square feet

- *Indicate areas of specific uses (in square feet) (Table 7.2):*

Table 7.1 Residential Units by Type

Residential Type	Units
Mixed-Use Residential	1012
Apartment	**Rural Develop**
Duplex	18
Duplex (2 story)	44
Townhouse (2 story)	704
Townhouse (3 story)	120
Townhouse (4 story)	330

Table 7.2 Square Footage by Use Type

Specific Use	Square Footage
Cinema	50,000
City Hall / Police / Transit	50,000
Community Center	25,000
Convenience Retail	20,000
Fitness	40,000
Gas Station, convenience	62,000
Grocery	60,000
Hotel	38,000
Ice Rink	38,000
Live / Work	32,000
Mixed-Use Retail / Office / Clinic	126,000
Mixed- Use Retail / Restaurant	161,000
Office	439,000
Retail	261,000
School	55,000
Variety Store	194,000

8. Permits and Approvals Required

A listing of major approvals and public financial assistance and infrastructure likely to be required by the anticipated types of development projects should be given. This list will help orient reviewers to the framework that will protect environmental resources. The list can also serve as a starting point for the development of the implementation aspects of the mitigation plan to be developed as part of the AUAR.

A project the magnitude of the Ramsey Town Center will require many local, regional, state and federal environmental permits and approvals. This section identifies the many permits and approvals that form the basis for implementation of the mitigation plan (Item 33). Table 8.1 lists the permits and approvals that will be needed for this project. The reader should note that the need for compatibility with plans is addressed in Item 27, and that brief descriptions of the permit requirements for some permits are listed after the table.

The cost of most infrastructure improvements will be borne by the developer. The County may improve the County road system as part of routine upgrades that accompany traffic increases with development. There is a possibility the City will pay for some infrastructure improvements, expansions or upgrades, and service enhancements that it deems appropriate to provide an acceptable quality of service. A level of commitment has not been determined at this time.

Table 8.1. Permits and Approvals

Unit of Government	Type of Permit	Status
City of Ramsey	Site plan	Pre-permit review under way
	Grading and erosion control **(1)**	NAF*
	Preliminary and final plat approval	NAF
	Obstruction Permit **(2)**	
	Excavation Permit **(3)**	
	Sewer and water connection	NAF
	Building and occupancy permits	NAF
	Tree preservation	NAF
Anoka County	Access via County Highway, consistency with County standards	Pre-permit review under way
Metropolitan Council	Sanitary sewer connection	NAF
Lower Rum River WMO	Grading and erosion control	NAF
	Storm sewer	NAF
	Wetland alteration (WCA)	Pre-permit review under way

Minnesota Pollution Control Agency	Sanitary sewer connection and wastewater routing	NAF
	NPDES Phase II construction and MS4 **(4)**	MS4 Permit application submitted 3/10/03; construction permits submitted as needed
Minnesota Dept. of Transportation	State Highway Access and consistency with standards	Pre-permit review under way
Minnesota Dept. of Natural Resources	Water appropriation for municipal system and construction de-watering	NAF
	Work in the bed of a public water **(5)**	NAF
Minnesota Dept. of Health	Water system infrastructure (wells, water mains, storage)	NAF
State Historic Preservation Office	Historic and archeological site preservation	No significant sites found
Burlington Northern Santa Fe Railroad	Access Permit **(6)**	
U.S. Army Corps of Engineers	Section 404 Clean Water Act	Determined not to be "waters of the United States" (see Appendix E)

*NAF = Permit not yet applied for

(1) Grading, mining and filling permits are required to control operations to minimize conflicts with adjacent land uses, to preserve good soils and to regulate the type of materials used for fill, to employ all reasonable means to reduce dust, noise, and nuisances, and to ensure that disturbed areas are restored upon completion of the operation. The following standards need to be applied during construction activities to fulfill the requirements of the permits.

- General Provisions. All equipment used for operations shall be maintained and operated to minimize, as far is practicable, noises, dust, and vibrations adversely affecting surrounding properties. The maximum noise level at the perimeter of the work site shall not exceed the levels outlined in Table 8.2. There shall be no emission of any solid or liquid particles in concentrations exceeding 0.3 grains per cubic foot of the conveying gas or air. No operations shall be allowed when wind gusts exceed thirty miles per hour. Existing tree and ground cover shall be preserved to the extent feasible.

Table 8.2 Sound levels measured at property line

Octaves, Band Cycles/Sec.		Residential Districts	Non-Residential Districts
37.5	75	58	73
76	150	54	69
151	300	50	65
301	600	46	61
601	1200	40	55
1201	2400	33	48
2401	4800	26	41
Over	4800	20	35

- Water Resources. The operation will minimize impacts to surface water drainage outside of the Town Center. Excavation occurring below groundwater elevation may require an analysis performed by a hydrologist or other qualified professional.

- Safety Fencing. Safety fencing may be required around all or portions of the operation at the discretion of the Council.

- Access Roads. The location of the intersection of access roads with any public roads shall be selected such that traffic on the access roads will have sufficient distance of public roads in view so that any turns onto the public road can be completed with a margin of safety as determined by the City Engineer.

- Fill Materials. An analysis of all fill materials must be provided to and approved by the City Engineer prior to commencing any filling activities.

- Screening Barrier. To minimize problems of dust and noise and to shield operations from public view, a screening barrier may be required between the work site and adjacent properties.

- Slopes. The maximum permitted slope for any operation other than the working face shall be sloped on all sides at a maximum ratio of two (2) foot horizontal to one (1) foot vertical, unless a steeper slope shall be approved by the Engineer. Where excavations are adjacent to a public roadway or other right-of-way, the excavation shall have a maximum four to one slope. Slopes adjacent to or contiguous to bodies of water shall be sloped at a maximum of six to one (6:1).

- Earth Material. No earth material shall be imported to or exported from the work site until the haul road has been officially designated as a haul road by the City and all materials hauled from the source shall be hauled over that road. The haul

road designation process shall be pursuant to §2051.3 of the Minnesota Department of Transportation's Standard Specifications for Construction, 1983 Edition. All top soil shall be retained at the work site until complete rehabilitation of the work site has taken place according to the rehabilitation plan.

(2) An obstruction permit is required to allow free and open passage over the specified portion of right-of-way by placing equipment, vehicles, or other obstructions described therein on the right-of-way for the duration specified therein.

(3) An Excavation Permit is required to allow the holder to excavate that part if the right-of-way described in such permit and/or to hinder free and open passage over the specified portion of the right-of way by placing equipment described therein, to the extent and for the duration specified therein.

(4) The City of Ramsey is required by MPCA to be under the NPDES Phase II Nonpoint Source Control Program for Municipal Separate Storm Sewer Systems (MS4s). Under this program, the City will need to adopt a "Storm Water Pollution Prevention Program (SWPPP)". The City submitted an application on March 10, 2003, and will have until May 9, 2003 to have the application authorized by the City Council. Pollution prevention includes solid waste, hazardous materials, and vehicle washing. The SWPP must include or address the following:

- Six "minimum control measures"
    1) Public education and outreach on storm water impacts (including at least one public meeting per year)
    2) Public participation/involvement
    3) Illicit discharge detection and elimination - includes storm sewer map with water bodies and structural pollution control devices, outfalls, discharges to groundwater, and prohibitive ordinances
    4) Construction site storm water runoff control - need erosion and sediment control, and onsite waste control
    5) Post-construction storm water management in new development
    6) Pollution prevention/good housekeeping for municipal operations - training of operation and maintenance staff, annual and 20% inspections
- BMPs for each of the above minimum control measures will need to be described and the following will need to be identified:
    - measurable goals for each BMP
    - timeline for implementation
    - responsible party for implementation and coordination
- Analysis of Total Maximum Daily Load (TMDL) if discharge applies to an adopted TMDL plan. Of note here is that the latest (January 22, 2003) MPCA "impaired waters" (303d) list includes the Mississippi River reach from the Crow River to the Rum River as impaired for fecal coliform, PCB FCA (fish consumption advisory) and Hg FCA, with official TMDL study scheduled, respectively, for 2004-2006, 2002-2015 (regional EPA), and 2002-2015 (regional EPA). All discharges from the RTC site will be treated extensively prior to

ultimate discharge to this reach of the Mississippi River (see Item 17 discussion). The discharge is not expected to impact the existing impairment.

- Design and management strategies to minimize the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP) with an annual report on implementation.

The SWPP must be completed at least 30 days prior to commencing construction and prior to applying for construction permits. Elements 4, 5 and 6 are directly applicable to the stormwater management approach adopted for the RTC site as it develops. The stormwater management approach is spelled-out in Item 17.

In addition to the complying with the City's MS4 requirements, essentially any construction activity that is part of this "common plan of development" must apply for a construction permit under the NPDES Phase II Construction Permit process.

Elements of this program are intended to avoid erosion and construction site pollution. To prevent this, construction at the RTC site should:

- Establish fast growing cover crops as soon as possible to disturbed soils to prevent both water and wind erosion. The sand content of the soils on site could lead to wind blown sands could be potentially hazardous, particularly to traffic on Highway 10.
- Install temporary sediment basins for any areas of disturbance, installed before discharge leaves the site or enters a surface water body.
- Install a permanent stormwater management system that assure stormwater is "…discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or harmful inundation in wetlands." Maintain peak flow rates from two, twenty, and one hundred year twenty four hour events at existing conditions.
- During construction, the maximum area of disturbance shall not exceed the ability to keep up with exposed area limits on slopes. All areas with greater than 3:1 slopes must have vegetative cover by November first. Site inspections will be once every seven days during construction and within 24 hours after a quarter inch event in 24 hours. At that time, any non-functioning BMPs must be repaired.
- If stormwater discharge to a wetland has potential for significant adverse impacts to the wetland, the impacts should be addressed with BMPs and permit provisions. Appropriate rules (7050.0186) and any applicable regulations must be followed.

All of these elements would be part of the erosion and sediment control plan listed in the mitigation element under Item 16 of the AUAR.

The Mississippi River as it passes through Ramsey is an Outstanding Resource Value Water (ORVW). Prior to stormwater discharge to an ORVW, the MPCA must find that there are no prudent or feasible alternatives to the new or expanded discharge. For ORVWs the following BMPs are also required.

- Any exposed 3:1 slope must have temporary erosion control cover within three days
- For every 5 acres or more disturbed, a temporary sediment basins will be required
- An undisturbed buffer zone of 100 feet will surround the ORVW
- WQ volume treated shall be 1" from new impervious surfaces

Item 17 of the AUAR addresses the actions that will be taken to treat runoff from the site before it reaches the Mississippi River.

(5) DNR also regulates discharges to Waters of the State, as defined in M.S. Chapter 103G.005. Although a defined drainage path to the Mississippi River from the Ramsey Town Center does not exist at present, Items 12 and 17 lay out a recommended flow path for the City, Lower Rum River Watershed Management Organization and DNR to consider. This flow path ultimately results in a discharge of water to the Mississippi River, and will fall under the permitting provisions of the DNR. It also establishes the ordinary high water levels (OHWL) for lakes, and would be issuing a determined level if an outlet is installed on Lake Itasca or any of the public waters wetlands.

(6) An access agreement is required to enter BNSF property. Permits can be applied for through the Staubach Group by contacting Shane Krueger (817) 230-2625. Additionally, for safety purposes, the BNSF road and train masters should be contacted prior to the commencement of construction in the vicinity of the railroad tracks. The road master is Ron Raatike who can be contacted at (320) 267-1831 and the train master is Tom Rowley who can be contacted at (612) 865-6531.

9. Land Use

Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.

The City of Ramsey *2001 Comprehensive Plan*, as amended in 2002, contains land use maps for both existing (fall 1997) and future (2020) conditions for the site and adjacent lands. Figure 9.1 shows the existing condition, while Figure 5.4 in Item 5 illustrates the 2020 expectation. Metropolitan Council 2000 Land Use was used to portray existing land use. The information that follows characterizes the individual land uses on the Ramsey Town Center site under current conditions and future conditions based on the City of Ramsey *Plan*. Details of compatibility with the City's *Plan* occur in Item 27.

Current Land Use (2000 Met Council Land use)

Commercial:	5.3 acres
Industrial	13.4
Railway	12.4
Major Vehicular Roadways	1.4
Mixed Use	1.9
Single Family Residential:	6.0
Farmstead:	2.8
Undeveloped	19.2
Agricultural:	307.1
Total	369.5 acres

Future (2020) Land Use, from Ramsey Comprehensive Plan, as amended in 2002

Low Density Residential	23.4 acres
Medium Density Residential	10.2
Mixed Use	205.1
Places to Shop	24.4
Places to Work	44.3
Railway	15.7
Roadway	30.7
Wetlands	15.7
Total	369.5

AUAR guidelines also call for an assessment of compatibility of the project with adjacent and nearby land uses, including potential impact on environmental resources. Figures 9.1 and 5.4 clearly illustrate the land uses surrounding the project site now and in 2020. Following are the narrative summaries:

Adjacent Current Land Use:

North: single-family residential, 149th Lane NW (CR 116), vacant land
East: Ramsey Blvd. NW, Connexus Energy, commercial and industrial properties
South: BNSF Railroad tracks, commercial properties, Hwy. 10, Mississippi Regional Park south of Hwy. 10
West: Armstrong Blvd. NW, commercial and industrial properties, single-family residential properties

Adjacent 2020 City of Ramsey Land Use:

North: 149th Lane NW (CR 116), rural residential
East: Ramsey Blvd. NW, Connexus Energy, commercial and industrial
South: BNSF tracks, commercial properties, Hwy. 10, commercial properties, low density residential, West Mississippi Regional Park, Mississippi River
West: Armstrong Blvd. NW, commercial and industrial properties, high, medium, and low density residential

Figure 9.2 identifies nearby environmental resources, as listed in the following descriptions:

Nearby Environmental Resources:

- Mississippi River (approximately 2000 ft. to the south) within the Mississippi National River and Recreation Area (MNRRA)
- Lake Itasca (approximately 1.25 miles to the east)
- Several wetlands within 0.25 miles of site
- Complex of wetlands along the drainage swale within the site boundary
- MCBS Mapped Floodplain Forest on island in Mississippi River
- Mississippi Regional Park south of the site, between the site and the Mississippi River

Soils contaminated with lead arsenate on the Southeast corner of the site are a potential hazard. Burlington Northern-Santa Fe Railroad (BNSF) has an agreement with the current landowner to remove the contaminated soils and is working with the MPCA to assure proper clean-up. BNSF should be contacted before earth-moving activities begin. An additional hazard may exist at an abandoned farmstead on the proposed Town Center. Improper handling and storage of hazardous materials at this site could pose a potential contamination hazard to soil and groundwater. Phase I investigations indicate the presence of the materials, but no soil or water samples have been collected or analyzed to date. Several abandoned vehicles at this location may pose an additional contamination hazard. More detailed descriptions and mitigation is discussed in Task 20.

Summary of Environmental Impact. The conversion of the RTC site from agricultural to urbanized land is consistent with the future development plans of the City of Ramsey. This change has the potential to adversely impact the environment of the site and surrounding areas if proper mitigation measures are not followed according to this AUAR. Specific potential impacts are discussed by category in following sections of the AUAR.

Mitigation element. Assuring the compatibility of development within Ramsey as growth occurs is the primary goal of the comprehensive planning process. Item 27 contains discussion of plan compatibility for a number of other planning documents that cover land in and adjacent to the RTC site. Continued planning efforts will assure that non-compatible uses do not occur as the RTC site develops.

As stated above, BNSF is currently working to address a contamination problem in the southeast corner of the site. Prior to any earth-moving activity in this area, the developer must notify BNSF, MPCA and the City to make sure that clean-up has progressed such that additional problems will not be caused.

Many of the nearby environmental resources shown in Figure 9.2 can actually be enhanced by the development of the RTC site. There is an intent to link regional, County and City trails through the site, as well as establishing a drainage corridor that could potentially increase habitat and allow movement of wildlife between Lake Itasca and the Mississippi River. Every attempt will be made to incorporate habitat suitable for this to occur.

10. Cover Types

Instead of the EAW requirements, provide information on the following:
***10a**. Cover type map, at least at the scale of a USGS topographic map, depicting:*
- *wetlands identified by Circular 30 type*
- *watercourses (rivers, streams, creeks, ditches)*
- *lakes (identify protected waters status and shoreland management classification)*
- *woodlands (breakdown by classes where possible)*
- *grasslands (identify native and old field)*
- *cropland*
- *current development*

***10b**. An "overlay" map showing anticipated development in relation to the cover types; this map should also depict any "protection areas", existing or proposed, that will preserve sensitive cover types. Separate maps for each major development scenario should generally be provided.*

Cover types based on the Minnesota Land Cover Classification System (MLCCS) are depicted in Figure 5.6 (Item 5). This MLCCS was completed to a Level 5 for the Highway 10 Corridor (Mn/DOT) and for the MNRRA Corridor (National Park Service). Figure 10.1 is the wetland delineation map prepared for this site (full report in Appendix A). Data for this map were collected by North American Wetland Engineering (NAWE) in October 2002, and reviewed by a WCA Technical Evaluation Panel (TEP) on February 4, 2003 (see discussion also in Item 12). A revision to the delineation was made on March 14, 2003 and is reflected in the current delineation document.

Figure 5.6 presents MLCCS data for all vegetative and non-vegetative land coverage, including artificial surfaces, planted/cultivated cropland, forests, woodlands (none on site), shrublands (none on site), herbaceous vegetation (including wetlands), nonvascular vegetation (none on site), sparse vegetation (none on site) and open water (watercourses, rivers, streams, creeks, ditches, lakes). Table 10.1 summarizes all of the cover types on the site to Level 5.

Figure 10.2 shows the MLCCS coverage in Figure 5.6 next to the preferred design shown in Figure 6.1. Creating an overlay, as suggested in the AUAR guidelines, created an image with details that could not be seen. This image replaces the suggested overlay. Table 10.1 provides a summary of existing and proposed cover types with both MLCCS and general cover type categories listed for existing and proposed conditions.

Figure 10.1. Wetland Delineation (NAWE, revised March 14, 2003). See Appendix A for full report.

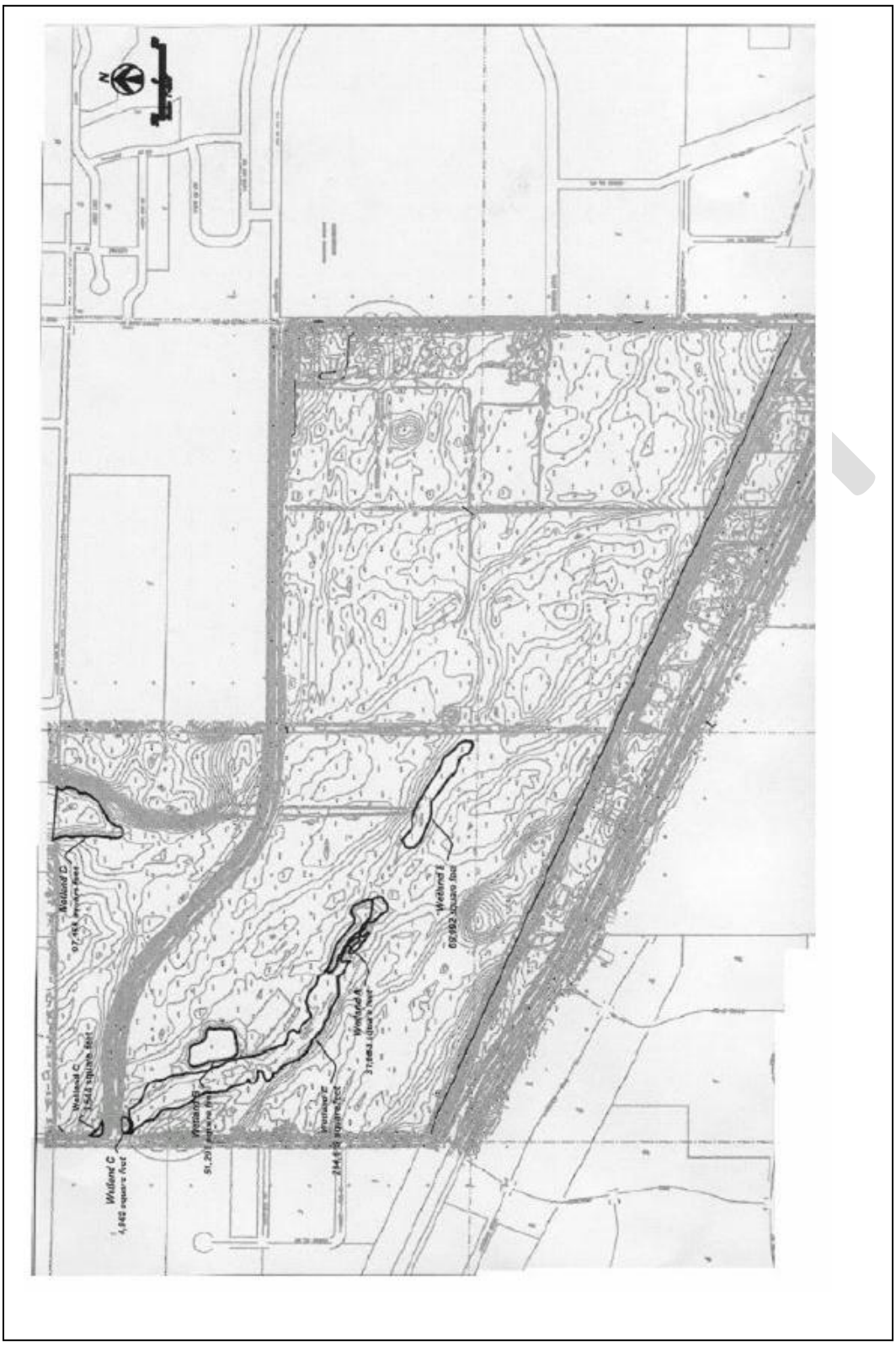


Table 10.1. Summary of Existing and Proposed Cover Types

Cover Type	Minnesota Land Cover Classification	Circular 39	Acres	
			Existing	Proposed
Open Water	Littoral – open water (storm water ponds)	NA	0	5.80
		Subtotal	0	5.80
Wetlands	Cropped Hydric Soils	Type 1	8.13	0
	Wet Meadow/Wet Prairie*	Type 1	0	4.45
	Nonnative dominated graminoid vegetation	Type 2	2.23	0
	Wet Meadow*	Type 2	0	2.68
	Cattail marsh, seasonally flooded	Type 3	0.72	0
	Mixed emergent marsh (seasonally flooded)*	Type 3	.20	0.65
	Mixed emergent marsh (semipermanently flooded)	Type 4	1.18	1.18
		Subtotal	12.46	8.96
Forests and Woodland	Boxelder-green ash disturbed native forest	NA	4.01	0
	Boxelder-green ash forest with 11-25% impervious cover	NA	7.58	0
		Subtotal	11.59	0
Grasslands	Long grasses with sparse tree cover	NA	3.85	1.87
	Medium-tall grass, nonnative-dominated	NA	6.29	2.80
	Short grasses on upland soils	NA	0	2.03
	Short grasses and mixed trees with 4-10% impervious cover		4.73	14.49
	Mesic/Dry Prairie*	NA	0	5.36
		Subtotal	14.87	26.55
Cropland	Cropland on up-land soils	NA	284.27	0
		Subtotal	284.27	0
Residential, Commercial, Transportation	Short grasses with 11-25% impervious cover	NA	13.31	4.84
	Short grasses with 26-50% impervious cover	NA	11.92	10.45
	Short grasses with 51-75% impervious cover	NA	0	8.49
	26-50% impervious with perennial grasses and sparse trees	NA	2.81	2.72
	Short grasses and mixed trees with 11-25% impervious cover		6.39	7.23
	Short grasses and mixed trees with 26-50% impervious cover	NA	0	75.21
	Short grasses and mixed trees with 51-75% impervious cover	NA	0	88.51
	Buildings/pavement with 76-90% impervious cover	NA	11.48	33.24
	Buildings/pavement with 91-100% impervious cover	NA	0	13.39
	Pavement with 76-90% impervious cover	NA	0	0.31
	Pavement with 91-100% impervious cover	NA	0.41	83.80
		Subtotal	46.32	328.19
TOTAL ACRES FOR ALL COVER TYPES			**369.50**	**369.50**

**Native plant communities created as part of wetland mitigation*

Following is a general description of cover types within the project area:

Open Water
Figure 10.3 is a map of DNR Public Waters within the RTC drainage area. Under existing conditions, no lakes, ponds or other open water exists. It is anticipated that under proposed conditions, a total of 7.06 acres of open water will be created. This open water is expected to be created within several stormwater detention ponds proposed for the project.

Wetlands
Based on the wetland delineation completed for the project (Appendix A, *Ramsey Station Wetland Delineation Report),* a total of 12.46 acres of wetlands currently exists on the site. Wetland acres are distributed among five separate wetlands, designated as wetlands A though E. The location of these wetlands is shown in Figure 10.1. A breakdown of wetland types for each of the five wetland areas is summarized in Table 10.2. A detailed description of each wetland is provided in Appendix A, *Ramsey Station Wetland Delineation Report.*

Table 10.2. Wetland Inventory According to Circular 39 Classification (NAWE Delineation, October 2002).

Wetland	Type 1	Type 2	Type 3	Type 4	Acres	
					Existing	Proposed
A		40%	60%		0.72	0
B		5%	15%	80%	1.18	1.18
C		50%	50%		0.20	0.20
D		90%	10%		2.23	2.23
E	100%				8.13	1.91
Total					12.46	5.52

Forest/Woodland
Forest and woodland occurs on 11.59 acres of the site under existing conditions. Most of this forest/woodland is located in the vicinity of an abandoned farmstead and several shelterbelt/property line edges. The dominant tree species within these forest/woodlands are boxelder, hackberry, eastern red cedar, black cherry and the non-native Siberian elm. Dominant shrubs include honeysuckle, nannyberry, buckthorn and red raspberry. The ground cover is dominated by mostly weedy native and introduced grasses and forbs including orchard grass, smooth brome, Canada goldenrod and motherwort. In places, the shelter belts contain plantings of Colorado blue spruce. Under proposed conditions, all forest/woodland will be converted to other cover types.

Grassland
Grassland occurs on 14.87 acres of the site under current conditions. Grassland is present along field edges, wetland edges, the railroad right-of-way and in slopes of road right-of-ways. There are also patches of grassland with planted conifers (blue spruce, white spruce, red pine) in the northwestern portion of the project area, located to the south and

west of Wetland B. Grassland in the project area is generally dominated by nonnative species of perennial and annual graminoids including smooth brome, orchard grass, Kentucky blue grass, reed canary grass, yellow foxtail and timothy. A few weedy forbs are present including horseweed, wormwood and Canada goldenrod. In general, grassland consisting of long grass will decrease, while grassland consisting of short grass will increase as a result of the project. Grassland cover types will increase to over 26 acres under proposed conditions.

Cropland
A total of 292.4 acres of cropland is present on the site under existing conditions. The majority of this cropland has been planted to soybeans or corn. All cropland will be converted to other land covers as a result of the project.

Residential/Commercial/Transportation
A total of 46.32 acres of residential/commercial/transportation cover types are presently located on the site. The majority of these cover types contain low percentages of impervious surfaces. Under proposed conditions, the total acreage and percentage impervious will increase significantly. The total acreage of this cover type under proposed conditions will be 328.19 acres, the majority of the project area acreage.

Summary of Environmental Impact. The composition of cover types within the RTC will change substantially from an area dominated by row-crop agriculture with scattered forest and wetland, to urbanized land uses with no agricultural land. Item 11 of this document will discuss natural cover type changes more fully within the context of wildlife habitat. Item 12 will discuss cover type changes with respect to water resource impacts, while Item 17 will discuss how this land use conversion impacts storm water runoff quantity and quality.

Mitigation element. The only issue related to cover type to emerge during this review is the alteration of wetlands, which is discussed in the mitigation element under Item 12. A complete discussion of loss of cover types with respect to fish, wildlife and ecologically sensitive resources follows in Item 11.

11. Fish, Wildlife, and Ecologically Sensitive Resources

11a. *Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts. The description of wildlife and fish resources should be related to the habitat types depicted on the cover types maps (of Item 10). Any differences in impacts between development scenarios should be highlighted in the discussion.*

11b. *Are any state-listed (endangered, threatened or special concern) species, rare plant communities or other sensitive ecological resources such as native prairie habitat, colonial water-bird nesting colonies or regionally rare plant communities on or near the site? _X_Yes __No*

If yes, describe the resource and how it would be affected by the project. Indicate if a site survey of the resources has been conducted and describe the results. If the DNR Natural Heritage and Nongame Research program has been contacted give the correspondence reference number: ***ERDB 20030469*** *(Dec. 5, 2002). Describe measures to minimize or avoid adverse impacts.*

For an AUAR, prior consultation with the DNR Natural Heritage program for information about reports of rare plant and animal species in the vicinity is required. If such consultation indicates the need, an on-site habitat survey for rare species in the appropriate portions of the AUAR area is required. Areas of on-site surveys should be depicted on a map, as should any "protection zones" established as a result.

Plant Communities

The pre-settlement vegetation associated with the RTC was dominated by dry and mesic prairie with oak openings and barrens probably located along the north edge of the site. Today, the RTC site is largely dominated by agricultural land use with only a small portion of the overall site containing low quality native plant communities. Within a one mile radius of the proposed project site are found the following land cover types and natural communities: planted mixed coniferous and deciduous trees, perennial grasses, oak savanna, non-native short- and long-grasses, transitional land, sand and gravel pits, eastern red cedar woodlands, aspen woodlands, non-native upland shrubs, dry prairie, wet prairie, wet meadows, cattail marsh, temporarily flooded aspen forest, mixed hardwood swamps, dry oak savanna, mesic oak savanna, open water wetlands, and the Mississippi River. Table 10.1 and Figure 5.6 detailed existing and proposed cover types within the project area. Figure 11.1 identifies sensitive resources near the RTC site.

Wildlife Resource

Wildlife that might occur within the project area are shown in Table 11.1. Wildlife resources are broken into mammals, amphibians & reptiles, and birds. The table includes species that might be present under existing conditions and the possible future occurrence of these species. The table also shows major habitat types that each species is generally

associated with. In addition, for birds, a column is included that indicates migratory status.

Note that no formal survey has been completed for wildlife; therefore, other species not shown in Table 11.1 may be present and species shown in Table 11.1 may not be present. All of the species shown, however, are documented in Anoka County and known to occur in the types of habitat present on or near the RTC site today.

Under existing conditions, the project area provides habitat to species adapted to a mosaic of cropland, wetland, small woodlots and grassland. The most significant habitat on the site is wetland, which may provide habitat for aquatic fur-bearing mammals, such as muskrat and mink, shorebirds and waterfowl. Forest and woodland occur in the northeastern corner, and as patches and windrows in other portions of the project site. These areas would support birds and mammals that require trees for nesting and cover and provide the moist, shaded conditions favorable to amphibians. Fragmentation of these areas, however, would limit the use of these woodlands, particularly for larger mammals and birds that require interior forest habitat. The grassland habitat is generally low in diversity, but would support species that prefer more open areas. Species typically found in disturbed grassland include such species as the plains pocket gopher, red fox and American kestrel. The dry sandy conditions that occur over much of the project area provide habitat for species that prefer loose, sandy soil for burrowing and nesting. Examples include the badger, prairie skink and Blanding's turtle.

Under proposed conditions, all of the forest/woodland and portions of the wetland/grassland will be converted to non-natural cover types. For this reason, the greatest impact will occur to forest associates. Species associated with wetland and grassland will probably continue to be present, but at much lower numbers. The degree to which these species continue to exist will be a function of how fragmented remaining patches of habitat are under post development conditions. An additional factor is how good of quality these patches are.

Rare Plant Communities
The *Natural Communities and Rare Species of Anoka and Ramsey Counties Map* (DNR Natural Heritage Program, 1994), shows a high quality flood plain forest plant community on an island of the Mississippi River approximately ½ mile south of the RTC site. No impacts to this floodplain forest plant community area expected.

Fisheries
There are no permanent rivers, lakes or ponds known to support fish within the project site. The nearest water bodies supporting fisheries include Lake Itasca and the Mississippi River. No impacts to these fisheries are expected to result from this project.

11b. The DNR Natural Heritage Program database was checked for information concerning reports of rare plant and animal species that might be located at or within approximately one mile of the project location. The results of DNR's search of the

Natural Heritage Database©[1] showed that there were no known occurrences on site, but five known occurrences of the Blanding's turtle to the north and west. The general locations of these known occurrences are within Sections 20, 21 and 22, T032N, R25W[1]. The closest record of Blanding's turtles lies approximately ½ mile north of the RTC project area. The Blanding's turtle is a state-listed, threatened species in Minnesota.

Most of the local records of Blanding's turtles correspond to roadway sections between different elements of turtle habitat. Turtles often cross roads as they attempt to travel between different wetland and upland areas that provide for their different habitat needs. The turtles use deeper wetlands and lakes for over wintering; sandy, open areas such as dry prairie and grassland for nesting; and shallow emergent marsh and shrub swamps for forging (Oldfield and Moriarty, 1994). These key habitats can be further described as (Lang, 2002):

> 1) **Activity season wetlands**, encompassing a variety of wetland types and sizes that are typically occupied for various periods during the spring, summer and fall;
> 2) **Over-wintering wetlands**, comprising specific wetlands that provide refuge from lethal winter temperatures and protection from predators during inactivity; and
> 3) **Nesting uplands**, characterized by exposed, well drained soils, used largely during the reproductive season by reproductive females and emerging hatchlings.

Local Blanding's turtle records (DNR Natural Heritage Program, 2003), showed turtle movement during times of the year when they emerge from over wintering wetlands and disperse into activity season wetlands, or as they travel to nesting uplands during the month of June.

The wetland and grassland habitat concentrated around the northwest corner of the RTC site provides potential Blanding's turtle habitat. In particular, the constructed wetland and adjacent wetland swales (delineated wetlands A, B and C), provide potential habitat. This area provides over-wintering habitat within the constructed wetland (Wetland B). Limited activity season habitat is available due to the small size of wetlands, degree of fragmentation and agricultural land uses. Nesting upland habitat is marginal due to the fact that agricultural activities would typically disturb turtle nest before hatchlings have emerged from the nest. Areas not subject to agricultural disturbance are generally narrow or small and would tend to concentrate predators resulting in high mortality. Other possible areas of Blanding's turtle habitat include the wetlands located along the north portion of the RTC, including the two DNR Public Waters Wetlands (670W and 671W). 2.23 acres of DNR Wetland 670W, (delineated wetland D) is located within the project boundaries. Both of these wetlands would be considered activity season wetlands and do not contain sufficient depth of water (under existing conditions) to support over-wintering turtles. Nesting upland habitat is potentially available adjacent to these wetlands.

---

[1] Copyright 2000, State of Minnesota, Department of Natural Resources. This information may be reprinted, unaltered, in Environmental Assessment Worksheets, municipal natural resource plans, and internal reports. For any other use, written permission is required.

Under post-development conditions, turtles attempting to move through or into the RTC site will encounter many physical obstacles. Examples include curb and gutter, retaining walls, discontinuous waterways, stormwater control structures such as skimmers and submerged culverts. These barriers also impact other reptiles, amphibians and mammals attempting to move though the site.

Summary of Environmental Impact.

Natural Communities: Table 10.1 summarizes changes in cover types, including natural communities for post-development conditions. The most significant impacts will be to wetlands and forest/woodlands. No impact to the floodplain forest community on the Mississippi River island is expected.

Fish and Wildlife Habitat: Wildlife that currently use the mixture of agricultural land, forest, grassland and wetland will likely be eliminated or reduced in proportion to acres of habitat converted to other land uses. Additional impacts are expected to occur due to increased mortality related to traffic and other accidents, predation by domestic animals and pesticides and other chemicals concentrated by stormwater runoff.

Blanding's Turtles: Blanding's turtles potentially occur within the project area, either as individuals of nearby populations passing though in route to other areas, or as individuals using specific habitats within the RTC site. Under post-development conditions, turtles may continue to use portions of the site, namely some of the wetlands clustered around the north and northwest portions of the site. These turtles will likely encounter many obstacles and hazards and for this reason the project could be a sink to nearby turtle populations.

Mitigation element.

Natural Communities: Item 12 of this report addresses wetland mitigation fully. Mitigation for loss of forest/woodland can be accomplished though additional tree planting within some areas of the site listed in Table 10.1 as containing grassland communities. Additional forest/woodland planting can be incorporated into planting plans for the infiltration/wetland system extending south from the RTC site to the Mississippi River. The edges of the wetlands and infiltration areas could be established as an oak savanna/woodland natural community.

Wildlife Habitat: Several strategies are proposed to mitigate impacts to wildlife. These include:

1). Establish Greenway Corridor Though the Site. A proposed greenway corridor is shown in Figures 6.1, 12.5 and 12.6. The corridor will incorporate a system of wetland treatment ponds, infiltration ponds and constructed wetlands. Areas of the corridor up to the 100-year flood elevation will be planted to a mixture of native short grasses and forbs. Although this corridor will not extend though the site completely, it will provide an

opportunity for some species (those more tolerant of human presence, noise, etc.) to use natural areas within the site, and to move to and from larger tracks of habitat connected to the site.

2). Wetland Restoration and Creation. As described in Item 12, the combination of existing wetlands and created wetlands will provide more diverse habitat than is generally available now. Most of the existing wetlands have either been cropped or have very low vegetative diversity (primarily reed canary grass). These wetlands will be restored to native wet prairie, wet meadow and shallow emergent marsh. Wetlands within the RTC portion of the greenway will be planted to shorter species of grass and forbs, but will be un-mown, and will provide habitat for many of the wetland species currently found on the RTC site. Additional areas of riparian buffer will be established to provide some upland habitat.

3). Culverts and Road Crossings. To the extent possible, all culverts and road crossings will be designed to enable upstream or downstream passage of wildlife as they move though the greenway. During dry conditions, most of the culverts are expected to be available for terrestrial species to move though. During wet conditions, these culverts may only enable species that swim or move through water to pass through. Fences at major road crossing will be designed and placed so as to funnel wildlife though these crossing areas. These same fences may also be used to discourage larger species, such as white-tailed deer, from crossing roads where they may become a traffic hazard.

Blanding's Turtles
Strategies outlined for Wildlife Mitigation generally apply to Blanding's turtles. Appendix C is the DNR Fact Sheet and Hand-out on Blanding's Turtles. Several additional recommendations applying to Blanding's turtles follow:

1). The system of infiltration ponds and wetlands proposed south of the RTC site between TH 10 and the Mississippi River can be designed to provide additional turtle habitat. This system, if developed, should incorporate some deep, over-winter pond area along with a good diversity of wetland community types. Some excavated material should be retained on-site to create sandy, dune-like areas planted to sand gravel prairies. These areas could provide excellent nesting habitat for Blanding's turtles.

2). Culvert crossings should be designed so that water (when flowing) flows continuously though the pipe, with no physical barriers such as weirs or gates blocking upstream or downstream travel.

3). Fencing may be used to guide or block movement. Depending on the final design of the greenway/stormwater conveyance system, access to the site by turtles should be blocked to reduce the possibility that the site will become a sink to nearby turtle populations.

12. Physical Impacts on Water Resources

*Will the project involve the physical or hydrologic alteration (dredging, filling, stream diversion, outfall structure, diking, and impoundment) of any surface waters such as a lake, pond, wetland, stream or drainage ditch? _**X**_Yes __No*

If yes, identify water resource affected and give the DNR Protected Waters Inventory number(s) if the water resources affected are on the PWI. Describe alternatives considered and proposed mitigation measures to minimize impacts.

For an AUAR, the information called for on the EAW form should be supplied for any of the infrastructure associated with the AUAR development scenarios, and for any development expected to physically impact any water resources. Where it is uncertain whether water resources will be impacted depending on the exact design of future development, the AUAR should cover the possible impacts through "worst case scenario" or else prevent impacts through the provisions of the mitigation plan.

Surface Water Hydrology

The Ramsey Town Center site lies within the Lower Rum River Watershed Management Organization (LRRWMO) boundaries, but actually discharges south to the Mississippi River. The RTC lies within a watershed that extends from Lake Itasca, southeast to the Mississippi River. Figure 12.1 shows the sub-watersheds within this drainage area, as well as the water resource features within this watershed.

Soils on site are illustrated in Figure 12.2, and are discussed in Items 19 and 25.

The following analysis describes direct and indirect impacts to water resources associated with the RTC. A detailed description of watershed hydrology and the stormwater conveyance system is contained in Item 17.

Description of Water Resources and Related Impacts

A wetland delineation was performed in October 2002 by North American Wetland Engineering (NAWE) and reported in November 2002. The results of this delineation were revised on March 14, 2003 after discussion with the WCA Technical Evaluation Panel (TEP) convened to review the delineation. Figure 10.1 shows the location of delineated wetlands located wholly or partially within the RTC project area. Note that wetlands within the project area are denoted by an identifying letter (from A-E). The complete *NAWE Wetland Delineation Report* is contained in Appendix A. Figure 10.3 showed the location of DNR Public Waters within the RTC drainage area. Figures 12.3 and 12.4 show the location of all wetlands within the RTC project area with respect to wetland impacts. A description of each water resource is provided in Table 12.1 and a discussion of each of these water resources with respect to potential impacts follows.

Table 12.1 – Water Resources Potentially Impacted

Basin Name/ID	PWI	Within Project Area*	Wetland Impact (acres)	Type of Impact
A	NA	T	0.72	Fill
B	NA	T	0	Indirect - Stormwater Discharges
C	NA	T	0	Indirect - Stormwater Discharges
D	670W	P	0	Indirect - Stormwater Discharges
E	NA	T	6.22	Fill/Conversion to Stormwater Pond
Lake Itasca	110P	O	0	Potential Outlet
Unnamed Wetland	671W	O	0	Potential Outlet
Mississippi River	NA	O	0	Outfall Structure
TOTAL ACRES IMPACTED			**6.94**	

** T – Totally within project area*
P – Partially within project area
O – Outside project area

Wetland A: Wetland A is expected to be completely filled as part of the project. A total of 0.72 acres of Type 2 and Type 3 wetland will require mitigation.

Wetland B: Wetland B is a 1.18 acre Type 4 wetland. This wetland was constructed in 1997 for mitigation of the Anoka County Road 116 road construction project. The mitigation site has a permanent conservation easement that encompasses both the wetland and an upland buffer area. Stormwater from the RTC has the potential to indirectly impact this wetland by altering the wetland hydroperiod and increasing the discharge of sediments, nutrients and other pollutants. No direct impacts are anticipated to this wetland.

Wetland C: Wetland C is a 0.20 acre Type 2 and Type 3 wetland. Stormwater from the RTC has the potential to indirectly impact this wetland by altering the wetland hydroperiod and increasing the discharge of sediments, nutrients and other pollutants. No direct impacts are expected to this wetland.

Wetland D: Wetland D lies partially within the RTC project and is the only public waters wetland (670W) located within the project area. This wetland is landlocked and does not outlet under existing conditions. The City of Ramsey has proposed installation of an outlet from this wetland, south into the RTC stormwater conveyance system. Any outlet installed for this wetland will be above the DNR ordinary high water (OHW) elevation. Since a key strategy for stormwater management is to maintain or provide on-site storage where possible, this outlet will consist of an emergency overflow located at or above the 100-year flood elevation of 868.0 feet. No OHW is established for this wetland, nor are wetland impacts expected from placement of this outlet pipe.

Wetland E: At 8.13 acres, Wetland E is the largest wetland in the RTC project area. This wetland is located within a shallow, linear, drainage swale that bisects the west central portion of the RTC project area. This entire wetland has been row cropped to soybeans or corn during recent years. A total of 6.22 acres of Type 1 wetland will be directly impacted though a combination of fill and conversion to stormwater ponds. The remaining 1.91 acres will be retained within a proposed water way corridor and 6.22 acres of Wetland E will require mitigation.

Lake Itasca: Lake Itasca and its direct drainage area are located approximately 1.2 miles northwest of the RTC (Figure 12.1). A lake overflow elevation of 871 was determined from a field survey of the area and two-foot contour information from development plans. An analysis of lake elevations for the 100-year, 24-hour rainfall and 100-year, 10-day snowmelt events, show that Lake Itasca does not outlet from the low point along the southeast side of the lake. This assessment held true for both existing and future land uses. Lake levels do, however; rise to within a few one hundredths of a foot for the 100-year, 10-day snowmelt event and within ½ foot for the 100-year, 24-hour rainfall events. For this reason, the City of Ramsey has proposed installation of an outlet for the lake. Since a DNR permit would be required for an outlet below the DNR OHW, it has been assumed that any outlet would be above the OHW and above the 100-year flood elevation of approximately 871.0 feet. This outlet would provide assurances that existing and future homes will not be impacted by high water. No impacts to Lake Itasca or adjacent wetlands are anticipated.

Mississippi River: The Mississippi River is located approximately ½ mile south of the RTC. There currently is no outlet from the RTC to the River; all flow leaving the site crosses Highway 10, flows to the southeast in a ditch, and eventually infiltrates. As shown in Figure 17.2c, an overland waterway system is proposed to convey stormwater south from the RTC to the Mississippi River. This waterway system would consist of a series of water quality treatment ponds, infiltration ponds and constructed wetlands. As discussed in Item 17 of this AUAR, a peak flow rate of 25.3 cfs is predicted under post-development conditions for the 100-year storm event. For small events (1-year and less), discharge ranges from 14.2 cfs, assuming no infiltration in the ponds, to 2.3 cfs when infiltration is included. The outfall to the Mississippi River is proposed to follow a County owned linear piece of land that extends from Highway 10 to the River (see Figure 12.5). The use of this property is not confirmed by the County at this time, but discussions continue. If built, the outlet will consist of a 21-inch pipe, enlarged near the Mississippi River to reduce velocities. Potential impacts include disturbance to the river bluff line where the outfall pipe is installed and in-stream scour and erosion where the pipe meets the river. If the County alternative outlet is not approved, an alternative alignment along Highway 10 to the southeast, with a connection to the River will be pursued.

Groundwater-Surface Water Interaction and Wetland Impacts
As part of the wetland delineation (Appendix A, *NAWE Wetland Delineation Report)* completed for this AUAR, aerial photography for the period 1981 – 1996 was analyzed to determine if any trends existed with respect changes in wetland hydrology. The aerial

photography analysis showed that for the period 1981 though 1996, the acreage of wetlands remained fairly constant. Beginning in 1997, however, the acreage of wetlands visible on the aerial photography declined sharply. With this decline, the area of wetlands visible on aerial photos became progressively smaller each year. Since this decline, wetland hydrology (as defined by water pooling on the surface) has not returned to pre-1997 levels, in spite of the fact that in recent years, northwestern Anoka County has received normal levels of annual precipitation. Both 2000 and 2002 were determined by the State Office of Climatology to be normal precipitation years. An on-site assessment of wetland hydrology and vegetation completed as part of the wetland delineation concurs with the aerial photography analysis.

A groundwater elevation and soils study was conducted by Braun Intertec in January 2003 to evaluate if the wetlands were influenced by groundwater. Results of the study indicated the wetlands at and adjacent to the site are groundwater dependent and directly linked to the regional groundwater system. The study showed that wetland hydrology is not linked to localized conditions, such as impermeable clay lenses that function to "perch" the wetlands above the water table.

There are several land use changes and other activities that might have had an impact on the regional groundwater system. In 1997, County Road 116 (including wetland B) was constructed along the north side of the RTC site. It is possible that this road construction interrupted groundwater flows; however, wetlands both up-gradient and down-gradient of the County Road 116 (with respect to ground water flow direction), appear to be impacted. The City of Ramsey also installed two new municipal wells (Wells No. 3 and 4) along the north side of the County Road 116. Because there are no data linking groundwater pumping to surface water response, these "new" land uses cannot be conclusively proven to have caused the changes in hydrology. It is, however, evident that the groundwater influence, wherever it may come from, on the wetlands has changed. Additional data on the influence of land uses and groundwater appropriations is needed to conclusively determine if these activities are impacting groundwater-dependent wetlands.

Summary of Environmental Impact.

Wetlands – Direct Impacts: Table 12.2 summarizes direct wetland impacts associated with the RTC. A total of 6.94 acres of wetland impact will result from the RTC. A break down of wetland types impacted is also shown.

Table 12.2 Summary of Wetland Impacts

Wetland Type	Acres of Impacted Wetland		Totals (acres)
	Wetland A	Wetland E	
1*		6.22	6.22
2	0.28		0.28
3	0.44		0.44
4			
5			
Total	0.72	6.22	6.94

**** All Type 1 Wetland is row cropped under existing conditions***

Wetlands – Indirect Impacts: Indirect impacts to wetlands include discharge of stormwater, interference with groundwater-surface water interactions and fragmentation of wetland and upland habitat that diminishes wildlife habitat functions.

DNR Public Waters: Outlet structures are proposed on two public waters wetlands and one lake. These structures are generally proposed to be installed above the OHW and 100-year flood elevation. No impacts are therefore expected within these public waters. The proposed stormwater outfall to the Mississippi River could impact the river bluff zone through alteration of shoreline vegetation, increased susceptibility to erosion, aesthetic views and water quality impacts (discussed in Item 17).

Mitigation element.

Wetland Sequencing - Minnesota Rules 8420, also known as the Wetland Conservation Act (WCA), requires specific steps ("sequencing") be taken when evaluating mitigation for unavoidable wetland impacts. The WCA requires that wetland impacts be avoided, if possible. If wetland avoidance cannot be accomplished, impacts to wetlands need to be minimized. Finally, any wetland impacts that can not either be avoided or minimized to the extent possible, must be mitigated though wetland replacement. The wetland replacement must mitigate all wetland functions and values lost as part of the wetland impact.

The degradation present on site allows the applicant to evaluate sequencing flexibility in their mitigation plan. It also allows the Technical Evaluation Panel (TEP) the opportunity to be flexible on the sequencing provisions of the WCA rule. This process may only be applied in the event the wetlands on-site are degraded to the point where replacement of the wetland would result in a gain in functions and values. This is an item that will be considered by the TEP during the permitting process.

Wetlands located on site are described in the Wetland Delineation Report (Appendix A), and are discussed in Item 10. With a few exceptions, wetlands located within the boundaries of the RTC are either cropped or are of low quality. These wetlands have

marginal functions and values due to their low vegetative diversity, partial drainage and lack of connectivity to other nearby wetlands and natural areas. Sequencing is addressed as follows:

Avoidance: The better quality portions of existing wetlands are generally avoided. This includes all of wetlands B, C and D.

Minimization: The mix of development proposed as part of the RTC requires that retail, commercial and residential land use blocks are a minimum size with adequate infrastructure to service them. The focus of minimization has been to incorporate as much of existing wetland area into a central greenway corridor, thereby lowering overall wetland loss across the project site. To avoid indirect impacts to remaining wetlands, each of the development blocks will incorporate a treatment train of stormwater best management practices designed to improve water quality and lower wetland bounce magnitude and duration. Currently, row cropping occurs into the wetlands. The RTC will incorporate wetland buffers wherever practical.

Wetland Replacement: The LRRWMO Stormwater Management Plan provides that the following may be eligible for wetland replacement credits:

- Creation of "new" wetland - Rules, Sub-part 11;
- Addition of "public value" Rules, Sub-part 6;
- "Public value" restoration from invasive species to permanent native, non-invasive species - Rules, Sub-part 8; and
- Incorporation of "water quality treatment ponds" under the criteria contained in Sub-part 10(A* and B), with nature of "credit" determined by LRRWMO.

**The City of Ramsey has adopted the LRRWMO stormwater management plan by reference for this portion of the City, thus qualifying the City for eligibility under this element.*

As Table 12.2 shows, a total of 6.94 acres of wetland will be impacted and require replacement. A central feature of the RTC is a greenway corridor running though the central portion of the site. A system of stormwater ponds, infiltration swales and meandering channels will link flows entering the site from the northwest with flows generated on-site. This "waterway" will continue south from the RTC to the Mississippi River. Within the context of this waterway system, on-site wetland replacement will be provided though a combination of new wetlands, upland buffers and water quality improvement ponds designed to improve functions and values to downstream wetlands. The location of proposed on-site wetland replacement is shown in Figures 12.3 and 12.4. Table 12.3 summarizes the acreage and type of wetland replacement for each location. A general description for each wetland replacement site follows.

Table 12.3 Summary of Proposed Wetland Mitigation

Wetland Type Created	Wetland Replacement by Location (Drainage Area)									Totals (acres)
	6	7	8	10	18	19	24	26a	26b	
Type 1			1.35			1.30	1.80		1.90	6.35
Type 2							0.45			0.45
Type 3							0.45			0.45
Type 4										
Subtotal			1.35			1.30	2.70		1.90	7.25
PVC* (Stormwater)		2.30			3.50			3.40		9.20
PVC* (Buffers)	0.81		1.35			1.30			1.90	5.36
PVC* (Restoration)	0.77			3.79						4.56
Subtotal	1.58	2.30	1.35	3.79	3.50	1.30		3.40	1.90	19.12
									Grand Total	**26.37**

PVC – Public Value Credits

Drainage Area 6 includes three existing wetlands (Wetland B, C and E). Wetland B is a created wetland that includes a narrow buffer within a conservation easement. The existing drainageway will be left intact, while 0.81 acres of the cropped wetland will be restored to a Type 1, wet prairie wetland. A 0.77-acre riparian buffer will be incorporated along the wetland transition zone in this area.

Drainage Area 7 will include a 2.30-acre stormwater detention pond. This pond will include a shallow bench that will support a fringe of emergent vegetation. Since this pond will provide pretreatment of stormwater that will benefit the wetland immediately downstream of it (within Drainage Area 8), it is proposed for public value wetland credits.

Drainage Area 8 includes 1.35 acres of wetland and 1.35 acres of PVC buffer with a meandering channel flowing though it. Portions of the basin will be designed to establish Type 1, wet meadow/wet prairie wetland hydrology. The basin will be established with respect to groundwater levels and a low weir will be installed in front of the outlet such that infiltration will be maintained, but water will be retained at a frequency to facilitate saturation of soils. Finer soils could be mixed in to promote Type 1 vegetation.

Within *Drainage Area 10*, and along the north boundary of the RTC site, is a 3.79 acre wetland, where 2.23 acres of this wetland is within the RTC site and is denoted as "Wetland D". This wetland is a low quality reed canary grass monotype with a few small areas of mixed emergent marsh vegetation. A total of 3.79 acres of wetland restoration

and buffer PVC is proposed for this wetland. The primary objective of this restoration would be to remove the non-native reed canary grass and reestablish a diverse, wetland community of wet meadow and mixed emergent marsh. Since portions of this 3.79-acre wetland occur on private property, landowner cooperation would be necessary to successfully restore this wetland. The 3.79 acres of proposed restoration includes both wetland restoration and establishment of buffers.

Drainage Area 18 will include a 3.5-acre stormwater pond that will function much the same as the stormwater pond proposed for Drainage Area 7. The concept design described for Area 7 generally applies to Area 18.

The wetland system in *Drainage Area 19* will function in a way similar to Drainage Area 8; that is, it will include a narrow, meandering, perennial stream with a wet meadow/wet prairie fringe. The design concept described for Drainage Area 8 describes this wetland. A total of 1.3 acres of wetland and 1.3 acres of buffer are proposed for Drainage Area 19.

Drainage Area 24: This drainage area encompasses a linear area between the Railroad ROW and the RTC. This entire strip of land encompasses some 10.8-acres of land. A total of 2.7-acres, or 1/4 of Area 24, is proposed as new wetland credit. A central, meandering drainage-way of Type 3 wetland is proposed. The edges of this wetland will be bordered with Type 1 and 2 wetland meadow.

Drainage Area 26: Development of this combined wetland/infiltration system is conditioned on approval by Anoka County. This system would receive flows from Drainage Area 25 and would include a wetland treatment/stormwater pond (26a). From this initial pond, flows would outlet into an infiltration pond/wetland system (26b). A landscape theme that incorporates a mixture of dry prairie, oak savanna, and wet prairie with an ephemeral water-way could serve as the cornerstone for this area and provide a valuable link between RTC and Mississippi West Regional Park.

Off-Site Wetland Mitigation
Two additional areas have been identified for off-site wetland mitigation in the event on-site mitigation is not feasible. These sites are illustrated in Figure 12.5.

Site #1 would be within the Mississippi Regional Park when development of the park proceeds. Although a specific location cannot be identified at this time, the City, WMO and County would work together to select and develop a site that would hold the best potential for successful wetland establishment. Figure 12.6 illustrates the Anoka County Park Department's concept for how the Park will be designed. Several locations could be possible sites for incorporation of "new" wetland. To accomplish this action in the future, RTC LLC would need to escrow an amount of funds sufficient to construct the additional wetland acreage not provided for on-site.

Site #2 is located along the south - southeast side of Lake Itasca on land already owned by the City of Ramsey. This area currently contains some excellent quality shrub swamp, wet prairie and emergent marsh along the shores of Lake Itasca. A suitable site could be

located where wetland does not currently exist, but where adequate hydrology is available. There are also several areas of reed canary-dominated wetland that could be improved for public value credit though re-establishment of native wetland communities. Any wetland improvements in this area could be designed to also improve Blanding's turtle habitat.

The following are proposed to mitigate impacts associated with the stormwater outfall to the Mississippi River:

Reduce Frequency of Stormwater Discharge, Lower Magnitude of Peak Flow Rates: The RTC project incorporates a variety of strategies to lower increases in stormwater rate and volume. While all stormwater conveyance features are designed to accommodate the 100-year runoff event without taking infiltration into consideration, on-site retention and infiltration can be incorporated at multiple scales into the RTC during the detailed design phase for smaller storm retention. Peak flow rates for the 100-year, 24-hour runoff and 100-year, 10-day snowmelt events are 25.1 cfs and 25.3 cfs respectively.

Oversize Culvert and Reduced Slope at Outfall: The last section of culvert will be enlarged from 21-inches to 36-inches and include an apron and rip-rap to lower velocities and dissipate the energy at the discharge point. This will minimize the potential for scour and erosion.

Directional Boring to Install Culvert: If possible, the culvert will be placed within the river bank by directional boring rather than an open cut. This will reduce the need to remove shoreline vegetation and will minimize the area of disturbance. Erosion control measures will be implemented where soil is disturbed. All disturbed areas will be replanted to native trees, shrubs, grasses and forbs and if appropriate, a temporary cover crop will be established.

13. Water Use

*Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)? _**X**_Yes __No*

If yes, as applicable, give location and purpose of any new wells; public supply affected, changes to be made, and water quantities to be used; the source, duration, quantity and purpose of any appropriations; and unique well numbers and DNR appropriation permit numbers, if known. Identify any existing and new wells on the site map. If there are no wells known on site, explain methodology used to determine.

If the area requires new water supply wells, specific information about that appropriation and its potential impacts on groundwater levels should be given; if groundwater levels would be affected, any impacts resulting on other resources should be addressed.

Background

Ramsey residents, businesses and others receive their water from one of two sources; the City of Ramsey municipal water system or privately owned wells. Those with private wells are mainly located in the Rural Preserve, Central Rural Reserve, Rural Developing and un-served areas of within the Urban Growth Boundary. Those receiving water from the municipal water system are generally located in the Existing MUSA area (Figure 13.1).

Future municipal water users would be those new developments occurring within the existing MUSA and those areas within the Urban Growth Boundary as designated in the *2001 Ramsey Comprehensive Plan*, as amended in 2002 *(Plan)*. Extension of municipal water service into areas outside of the Urban Growth Area may be necessary at a future date due to environmental or public health concerns. The *Plan*, however, states that there are no known concerns at this time and, therefore, there is no known timeline for if or when service may be extended.

Population Projections

The *1999 City of Ramsey Water Study* prepared by Bolton and Menk, Inc., estimated population growth and water service categories as shown in Table 13.1. This report has served as the primary planning document for the City's municipal water system and was incorporated by reference into the City's *Comprehensive Plan.*

Table 13.1 Population Projections and Water Service Category

Year	Total Population	Rural Population (Private Wells)	Urban Population	Municipal Water Service Population
2000	19,630	8,768	10,862	8,412
2005	21,748	9,403	12,345	12,345
2010	23,865	10,037	13,828	13,828
2015	26,873	10,939	15,934	15,934
2020	29,880	11,840	18,040	18,040

These numbers only represent residential populations and do not include water used by businesses for manufacturing, customers, employees, etc. In addition, growth projections for the City were slightly increased in the Comp Plan. Table 13.2 outlines this information. The last column of this table estimates the number of residents and employees that will be served by the municipal water system based on the ratio of rural to urban residents shown in Table 13.1 above.

Table 13.2 *2001 Comprehensive Plan* Population Projections by City of Ramsey

Year	Population	Number of Households	Number of Employees	Population Served by Municipal System
1990	12,408	3,620	1,941	---
2000	19,630	5,950	2,500	11,000
2010	25,050	8,350	7,000	22,000
2020	32,250	10,750	9,000	28,000

Existing Water System Description

Water Supply. The City currently operates five municipal wells in two well fields (Figure 13.2) and anticipates drilling an additional well in the near future. Approved wellhead protection plans for both well fields are on file with the Minnesota Department of Health (MDH).

All five wells have been developed in the Franconia-Ironton-Galesville (FIG) aquifer. A more complete description of the subsurface stratigraphy and geologic morphology is provided in Item 19. Figure 19.3 graphically displays the well drilling logs for the three wells on and adjacent to the RTC site.

Table 13.3 summarizes the capacity of each well and its permitted appropriation.

Table 13.3: Well Capacities and Permitted Appropriations

Well	DNR Permit Number	Unique Well Number	Permitted Flow (gpm)	Permitted Withdraw-al (MGY)	Pump Capacity (gpm)	Maximum Annual Capacity (MGY)[1]
No. 1	856005-1	161441	4,900		970	424.860
No. 2	856005-2	416183	4,900		220	96.360
No. 3	856005-3	580303	4,900		1,450	635.100
No. 4	856005-4	580313	4,900		855	374.490
No. 5	856005-5	593672	4,900		900	394.200
Total				500[2]	4,395	1,925.010

(1) Assumes 20-hour pumping day for 365-days and does not allow for recharge or resting of the aquifer.
(2) Current DNR Permit allows a combined annual appropriation of 500 MGY.

Water Storage. Storage and distribution pressure for the municipal water system is provided by two elevated storage tanks with capacities of 0.5 and 1.5 million gallons respectively. The *1999 Water System Study* demonstrated the need for the construction of additional elevated storage to meet future demands on the water system. This recommendation was based on an analysis of existing and projected future flows and included factors such as fire flow capacity, emergency storage, daily peak use, and water supply and pumping capacity.

Table 13.4 lists the existing water storage facilities as well as those projected in the *1999 Water System Study* for future construction. The location of these facilities is indicated in Figure 13.3.

Table 13.4: Existing and Future Water Storage Facilities

Description	Usable Storage Volume (gal)	Year Constructed	High Water Elevation
Reservoir No. 1	500,000	1989	1036
Reservoir No. 2	1,500,000	2000	±1035
Reservoir No. 3	1,000,000	Projected 2009	N/A

Water Treatment. The City does not currently operate a water treatment plant. The current water supply does not violate any of the Primary Drinking Water Standards provided for in the Safe Drinking Water Act. Therefore, water treatment would be required only to treat for secondary contaminants and aesthetic purposes. Because of this, the existing City Capital Improvement Program (CIP) projects constructing a water treatment plant within approximately five years.

Table 13.5 is a summary of average water quality data for the system. Variations in quality may occur periodically due to minor differences in concentrations of each

contaminant and depending on which well or combination of wells in operation. Planning for water treatment will occur within the design of the RTC site. Funding for a water treatment facility needs to be identified concurrent with approval for the RTC. This facility should be on line consistent with 60% of the RTC site or completion of wells #6 and #7.

Table 13.5: Water System Quality Data

Parameter	Average Level of Water Quality Parameter[(1)]	Primary Drinking Water Standard	Secondary Drinking Water Standard
Langelier Index (standard unit)	0.43		
Total Iron (mg/l as Fe)	0.87		0.3
Manganese (mg/l as Mn)	0.21		0.05
Calcium (mg/l as Ca)	58		
Calcium Hardness (mg/l as $CaCO_3$)	145		
Magnesium (mg/l as $CaCO_3$)	12		
Magnesium Hardness (mg/l as $CaCO_3$)	50		
Total Hardness (mg/l as $CaCO_3$)	195		
Sodium (mg/l as Na)	8		
Arsenic (mg/l as As)	0.006	0.010	
Chloride (mg/l as Cl)	15		250
Sulfate (mg/l as SO_4)	4.83	400	250
Total Alkalinity (mg/l as $CaCO_3$)	221		
pH (Standard Unit)	7.9		6.5 – 8.5
Total Dissolved Solids (mg/l)	210		500

(1) Based on data collected on 4/6/99 and extrapolated from the 1999 Water System Study. In addition, each parameter has been normalized based on average annual pumping times and rates for each well.

The City currently adds chlorine, fluoride, and polyphosphate to the raw water at each well-house. Chlorine is added as a protective barrier against harmful pathogens that may enter the water system from the raw well water or through breaks or cross connections in the distribution system. Fluoride is added as a dietary supplement that aids in the prevention of tooth decay. Polyphosphate is added to prevent the precipitation of iron and, to a lesser extent, manganese primarily for aesthetic purposes, such as color, and to prevent the staining of plumbing fixtures and laundry.

Water Distribution. The City's water distribution system is comprised of 6-, 8-, 10-, 12- and 16-inch ductile iron pipe. The system includes various necessary appurtenances such as isolation valves, altitude/pressure valves, and fire hydrants. In 1999, the distribution system was analyzed by Bolton and Menk, Inc., using the CYBERNET Hydraulic

Network Model. Results of the model indicated that the system functions well by meeting demand for the existing uses.

Computer modeling and analysis of future expansions to the distribution network, including the RTC development, should be performed at the time of design to ensure there is no impact on the existing users.

Projected Future Water Demands

Flow Projections. Development of the RTC site and the remaining areas within the Urban Growth Boundary will result in an increased demand on the existing water system. Projections for the additional demands will be developed in this section in an effort to quantify the potential impacts on the existing water system infrastructure, ground water resources and other related resources.

Projections of future demands from the RTC site will be based on the latest Design Concept Plan (February 15, 2003, as shown in Figure 6.1). Projections for demands from additional growth in areas within the Urban Growth Boundary will be based on information contained in the *2001 Comprehensive Plan*, as amended in 2002.

Table 13.6: Projected Water Usage for RTC Sub-district Residential Development

Development Type	Quantity	Occupants per Unit	Total Occupants	Usage per Occupant(1) (gpd)	Total Usage (gpd)
Mixed Use Residential	1012	5	5,060	120	607,200
Apartment	172	3	516	120	61,920
Duplex	62	4	186	120	22,320
Townhouse	1154	4	4,616	120	553,920
Total Residential	**2,400**		**10,378**	**120**	**1,245,360**

(1) Per capita usage based on historic average annual usage for existing Ramsey residents; includes only residential use

Table 13.7: Projected Wastewater Flows in RTC Commercial/Service Development

Development Type	Acres Used (ac)	Usage per Acre[(1)] (gpd)	Total Usage (gpd)
Commercial (Existing Hwy. 10)	32.2	2,000	64,400
Commercial (Service/Convenience)	11.6	2,000	23,200
Commercial (Shopping)	24.4	1,600	39,040
Mixed Use (Retail/Office)	30.6	2,300	70,380
Civic Center	3.6	13,300	47,880
Business Enterprise	35.9	1,330	47,747
Transit	4.5	1,330	5,985
Public/Open Space	58.2	1,500	87,300
Total Developed Area	**201**	**1,920[(2)]**	**385,932**

(1) Projected water usage based on average existing demand per day including irrigation.
(2) Average per acre water usage.

Appendix I shows the water usage and pumping rates for 2002. This information is combined with the above water usage projections for the RTC site plus the projected water use for the undeveloped Urban Growth Area to determine total projected water demand at 2020 and is summarized in Table 13.8. The projected water use for the undeveloped areas, excluding the RTC site, were based on the wastewater flow projections contained in Item 18 and Appendix G (Wastewater Data) and include a premium for irrigation.

Table 13.8: 2020 Urban Growth Area Projected Water Use

Area	Average Daily Usage[(1)] (MGD)	Average Annual Usage (MGY)
RTC Development[(2)]	1.631	595
Future Northwest Sub-district	0.160	58
Future Southwest Sub-district	0.839	306
Future Rum River District Usage	0.677	247
Sub-total Future Usage	**3.307**	**1,207**
Existing Service Area Usage	1.198	437
2020 PROJECTED USAGE	**4.505**	**1,645**

(1) Future usage estimated based on projected land use and includes irrigation
(2) Sum of totals from Tables 18.6 and 18.7.

Discussion of Results: Historic records show that overall per capita water usage (including both residential and commercial/industrial) in Ramsey averages between 130 and 150 gpd per capita . The total projected water usage for the RTC development is estimated to be about 1.631 MGD. Dividing this number by the upper usage of 150 gpd yields an equivalent design population for the RTC of approximately 10,900. This

compares extremely well with the projected residential population at the RTC site of 10,378 persons (Table 13.6).

Similarly, the total future projected water usage for 2020 is estimated to be 4.505 MGD which equates to an equivalent population of about 30,000 persons. In comparison, the information contained in Tables 13.1 and 13.2 estimates the 2020 population served by the community water system to be approximately 28,000 persons. The difference between the two of 2,000 equivalent persons is in line with the *2001 Comprehensive Plan* and can be attributed to two factors.

First, the number of new housing units to be built between 2000 and 2020 was estimated in the *Plan* to be 4,800 (3,346 single family and 1,434 multi-family units). Of this amount, we now know that the RTC site will contribute 2,400 housing units alone while using only a small percentage of the land available for development within the Urban Growth area. Secondly, the *Plan* did not consider the higher water usage per acre of developed land using the higher density development model inherent in the RTC design.

The historic peaking factor for water usage is about 2.6. Based on the above, the peak daily flows for 2020 will be about 11.7 MGD. Potential impacts on the FIG or other resources during average and peak demand are discussed in Appendix F. In addition, storage and distribution designs for the RTC and future development should take into account the need to meet these demands.

In short, growth projections and the assumed resulting water usage estimated in the *2001 Comprehensive Plan* seem to be generally in line with the projections of this Item. The difference discussed above, which is based on design and growth information not available during the preparation of the *Comprehensive Plan*, results in an increase in future water usage of about 7% above that anticipated.

Summary of Environmental Impact. To meet the projected future demands, the City will most likely increase appropriations from the Franconia-Ironton-Galesville (FIG) aquifer. At a minimum, two additional wells (#6 and #7) will be required to meet the RTC demand with the need for additional wells as growth continues. Appendix F indicates that at full 2020 build out, there will be a need for as many as 4 or 5 additional wells pumping at rates similar to the existing ones.

Groundwater level data for the FIG that is collected continuously by the City shows that trending has been in an upward direction in the last two years meaning a recharge condition existed during this period (Appendix F). In addition, because the pumps operate intermittently, they allow the aquifer to recover on a daily basis with a maximum residual drawdown level averaging of 5- to 10-feet during peak summer demand. This would mean that the radius of influence for the wells is very, very small. Taken together, that water levels are rising in the FIG and that there is very little drawdown, water level fluctuations in the surficial drift material are not anticipated. In addition, it does not appear that the municipal wells would have any negative influence on private wells developed in the same unit. However, long term monitoring of the surficial aquifer's

water level is recommended so that data can be collected to correlate against the long term trending patterns within the FIG.

Permitting: The increase in demand will subsequently require an amended DNR water appropriations permit. At that time, the DNR is likely to require the collection of the surficial groundwater data mentioned above. In addition, the DNR may require a pumping test to correlate short term temporal relationships between the two aquifers. The design of additional wells can then be based on this information in an effort to mitigate impacts, assuming any exist.

Wellhead Protection: The RTC is located directly within the Wellhead Protection Area (WHPA) and Drinking Water Source Management Area (DWSMA) determined by the Ramsey wellhead protection program. Additional groundwater modeling information is included in Appendix H. Any contaminating material that is spilled on the permeable sands within the site can potentially migrate into the groundwater system. Additionally, some net decrease in recharge is expected as the RTC develops and infiltration decreases. Storm water management practices that encourage the infiltration of treated runoff will be part of the design and is discussed in detail in Tasks 17 and 20.

Mitigation element. Because the RTC site is within a DWSMA, special precautions are needed to protect groundwater resources. To make sure this occurs, any discharge of runoff into an area dedicated to infiltration will be pre-treated through such practices as particulate settling, vegetative filtration, skimming, installation of compact, sub-grade treatment (ex. catch basin inserts, cyclonic separators, filters), and various types of pre-treatment soil filtering systems. These practices will be routinely maintained and inspected to make sure these pre-treatment practices do not provide a pathway for contamination of groundwater. Areas that are potential major sources of contamination ("hot-spots") will be identified during construction and special precautions added. These areas would include any location where pollutant spills are more likely to occur (service stations, public works/police/fire fueling operations, significant chemical storage).

Within WHPAs, the use of conventional underground storage tanks to store anything other than water is restricted. If underground tanks are utilized in these areas they must be double-walled with interstitial sensors and a network of monitoring wells must be installed to assess potential groundwater contamination. In addition, an emergency response plan should be developed for the immediate remediation of any spills or leaky tanks.

When assembling the issues that were to be addressed as part of this AUAR, it was noted by the Anoka Conservation District and by the DNR that there is a possible connection between the increased demand for municipal groundwater and the observed lowering of wetlands in the vicinity of Municipal Wells 3, 4 and 5. Appendix F was prepared to assess the general magnitude of the problem and the solutions required to address the issue. It is now apparent that the wetlands in question experience natural drying during periods of relative low precipitation. The photographic history included as part of the

Wetland Delineation report shows wetlands in the vicinity of the RTC site disappearing during the mid to late 1980's which is prior to the development of the municipal wells. This same phenomenon occurs again in the mid to late 1990's and prior to the installation of Wells 4 and 5. The evaluation also found, as stated earlier, that drawdown levels in the FIG unit are minimal and, therefore, could not be influencing the wetlands. To verify these finding, however, it is recommended that long term monitoring be performed.

There is also some concern that increased pumping in the FIG aquifer could impact private wells that pump from this aquifer. Again, the residual drawdown levels in the FIG average 5- to 10-feet during the peak summer pumping period (Appendix F) and recover fully during the Fall, Winter and Spring. Therefore, the radius of influence of the wells will be very small meaning there could be no impacts to private wells developed in the same unit.

Before additional wells are constructed, additional appropriations will be applied for through the DNR. This will most likely require both short- and long-term testing and monitoring to verify the above findings. Through this process, the City can insure that there continue to be no impacts on groundwater and surface resources due to their appropriations from the FIG.

14. Water-Related Land Use Management District

*Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district? __Yes _**X**_No*

If yes, identify the district and discuss project compatibility with district land use restrictions.

For an AUAR, such districts should be delineated on appropriate maps and the land use restrictions applicable in those districts should be described. If any variances or deviations from these restrictions within the AUAR area are envisioned, this should be discussed.

Resource Protection Zones
Ramsey Town Center does not lie within a protected floodplain or shoreland zone, nor does it occur within the boundaries of a designated resource protection zone (see Figure 9.2). However, the site is adjacent to, and will potentially discharge water into the state-designated Mississippi River Critical Area, the federal Mississippi National River and Recreation Area (MNRRA), a state Wild and Scenic River area, and a regional park. All of these areas overlap in coverage south of Highway 10 adjacent to the Town Center (Figure 14.1).

The City's *2001 Comprehensive Plan* (Chapter XI), as updated in 2002, contains the City's DNR-approved Mississippi River Critical Area Corridor/MNRRA plan. This chapter of the *Plan* addresses the requirements of the Governor's 1979 Executive Order 79-19, which designated this reach of the Mississippi River as a "critical area" in need of special protection. The Executive Order lays out the required elements, which the City has met and exceeded. The *Plan* chapter similarly is consistent with the National Park Service's MNRRA 1994 management plan.

The City's Critical Area Plan (Chapter XI of the 2002 Ramsey updated LCP) closely follows the directions provided by both the National Park Service and the State of Minnesota. As stated in the *2001 Comprehensive Plan* (page XI-2), "The [Critical Area] plan achieves the required elements of the Critical Area Act (Tier I) and identifies goals, policies and strategies to protect, preserve and enhance the Mississippi River Corridor beyond the required elements of …Tier II."

The City's Critical Area Plan presents the following: an inventory of natural and cultural features; existing and planned land use; key issues discussion; 38 policies on protecting the environment, preserving and celebrating history and culture, and ensuring sensitive development; performance criteria for developments within the Corridor; and six implementation strategies to assure that the City's plans get put in place.

Although none of the project site is within the state-designated Mississippi Wild, Scenic, and Recreation River management area, established in 1976, the project is

adjacent to this area and could have some impact upon it as development proceeds. The reach of River covered is classified as "recreational", which indicates it is a river that "…may have adjacent lands which are considerably developed, but that are still capable of being managed so as to further the purposes of ..." the State act. The established State policy is that it is in the interest of present and future generations to preserve and protect the outstanding scenic, recreational, natural, historical, and scientific values of certain Minnesota rivers and their adjacent lands. All state, local, and special governmental units, councils, commissions, boards, districts, agencies, departments, and other authorities shall exercise their powers so as to further the purpose of the Minnesota Wild and Scenic Rivers Act and adopted management plans for the preservation, protection, and management of designated rivers. State Rules pertaining to River management under this program are contained within Chapter 6105.08. The Environmental Protection/Resource Management element of the LCP and its supporting ordinances fulfill these requirements.

The Ramsey Town Center site is also adjacent to the state-designated Mississippi River Critical Area Corridor (Corridor) established in 1976 and the federal Mississippi National River and Recreation Area (MNRRA), a unit of the National Park System, established in 1988. The purposes of designating the Mississippi River as a Critical Area include protecting and preserving a unique and valuable state and regional resource; preventing and mitigating irreversible damage to this resource; preserving and enhancing its natural, aesthetic, cultural, and historical value for public use; protecting and preserving the river as an essential element in the national, state and regional transportation, sewer and water and recreational systems; and protecting and preserving the biological and ecological functions of the corridor.

Under the Critical Area program, Executive Order 79-19 requires that the Standards and Guidelines provided in the Executive Order shall be followed by local units of government when preparing plans and regulations, and followed by State and regional agencies for permit regulation and in developing plans within their jurisdiction affecting lands within the Corridor. Once plans and regulations have been approved by DNR, local units of government shall permit development only in accordance with those adopted plans and regulations and approval. All capital improvement programs or public facilities programs of local units of government, regional agencies, and State agencies which affect lands within the Corridor are required to be consistent with the standards and guidelines in the Critical Area Executive Order 79-19. The City of Ramsey Critical Area Plan has been approved by the DNR as part of the City's LCP.

Summary of Environmental Impact. The RTC site borders management districts, but does not include them. The mitigation element addresses the planning efforts that will be used to assure compatibility.

Mitigation element. The Ramsey *2001 Comprehensive Plan* was amended in 2002 and contains the measures needed to effectively implement resource protection for all of the resource protection zones adjacent to the RTC site.

The City's compliance with each of the applicable Executive Order 79-19 Standards and Guidelines that must be followed is assured through implementation of the *Plan*. Since the regulated area is not on the project site, but could be affected by it, the City will evaluate all phases of construction for impact on the regulated area.

DNR has ascertained that, based on the information provided to them, the applicable Executive Order 79-19 Standards and Guidelines for which compliance is needed appear to include the following items. The Executive Order citation is followed by the section in the Ramsey *2001 Comprehensive Plan* (*CP*) in which the DNR reference is addressed:

- The lands and waters within the Rural Open Space District shall be used and developed to preserve their open, scenic and natural characteristics and ecological and economic functions. [E.O. 79-19 - A. *CP XI.C.1.a*]
- Protect bluffs greater than 18% and provide conditions for the development of bluffs between 12% and 18% slopes.[E.O. 79-19 - C.1.a.(4) *CP XI.C.2.c*]
- Minimize runoff [E.O. 79-19 - C.1.a.(5) *CP XI.C.2.a*]
- Improve the quality of runoff. [E.O. 79-19 - C.1.a.(5) *CP XI.C.2.a*]
- Minimize site alteration. [E.O. 79-19 - C.1.a.(6) *CP XI.C.1.c*]
- Erosion control. [E.O. 79-19 - C.1.a.(6) *CP XI.C.2.a*]
- Management of vegetation cutting. [E.O. 79-19 - C.1.a.(7) *CP XI.C.2.a*]
- *Control of noise in open space and recreational areas. [E.O. 79-19 - C.1.a.(8)]
- Site plans required for all development for which a permit is required, except single-family residential structures. [E.O. 79-19 - C.2.a. *CP XI.C.2.c*]
  - New development and expansion permitted only after the approval of site plans which adequately assess and minimize adverse effects and maximize beneficial effects.
  - Site plans shall include activities undertaken to ensure consistency with the objectives of the Designation Order and shall include measures which address adverse environmental effects.
  - Site plans shall include standards to ensure that structures, roads, screening, landscaping, construction placement, maintenance, and storm water runoff are compatible with characteristics and use of corridor in that district.
  - Site plans shall contain specific conditions with regard to buffering, landscaping, and revegetation.
- Standards for structure site and location to ensure riverbanks, bluffs, and scenic overlooks remain in their natural state. [E.O. 79-19 - C.2.b. *CP XI.C.2.c*]
- Retention of existing vegetation and landscaping [E.O. 79-19 - C.2.e.(1) *CP XI.C.2.a*]
- Maximization of the creation and maintenance of open space and recreational potential of the Corridor in accordance with the standards. [E.O. 79-19 - C.6 *CP XI.C.2.c*]
- Plans and programs to protect open space areas shall be developed. [E.O. 79-19 - 6. d. *CP XI.C.2.c*]
- Programs to manage undeveloped islands in their natural state. [E.O. 79-19 - 6.e. *CP XI.C.2.c*]

- New or modified utility facilities shall complement the planned land and water uses and shall not stimulate incompatible development. [E.O. 79-19 - C.7.b. *CP XI.C.2.c*]
- Capital improvement programs or public facilities programs shall be consistent with the standards and guidelines in Ex. Ord. Section B. and C. [E.O. 79-19 - C.8. *CP XI.C.2.c*]

*Although Chapter XI of the Ramsey *2001 Comprehensive Plan* contains a thorough set of policies and related actions to protect the natural character of the Critical Area, the Chapter does not contain a specific provision addressing control of noise in this area. The next amendments to the City *Plan* will add a specific provision to address this specific element in Executive Order 79-19.

DNR particularly emphasizes the mandates for protection of slopes and bluffs; minimization of site alteration; retention of existing vegetation; minimization of runoff; erosion control; minimization of adverse effects. Selection from among the many available low-impact stormwater development tools and Best Management Practices, as discussed in Item 17, will occur to achieve both minimization and improvement of runoff. As a best management practice for enhancing ecological function of the Critical Area Corridor, DNR highly encourages the use of native vegetation for the required buffering and landscaping, revegetation of removed vegetated areas, and erosion control (grasses, seeding). DNR is also concerned about any cumulative adverse impacts from this project that accelerate development within the Rural Open Space District in violation of those District's standards, and supports voluntary vegetative buffering of structures outside of the Corridor in order to minimize interference with views of and from the water. Since the project does not directly affect the Critical Area (or MNRRA/WSR), the City will identify those areas potentially under its land use control and apply the appropriate standards from its LCP. The City will also work with Anoka County Parks to implement these standards within MRP land controlled by the County.

15. Water Surface Use

*Will the project change the number or type of watercraft on any water body? __Yes _**X**_No*

If yes, indicate the current and projected watercraft usage and discuss any potential overcrowding or conflicts with other uses.

This item need only be addressed if the AUAR area would include or adjoin recreational water bodies.

Within the site, there are no water bodies where watercrafts are operated. The nearest recreational water bodies are Lake Itasca to the northwest and the Mississippi River to the south. There is no public water access on Lake Itasca and surface water use is limited to surrounding residents use. The nearest public water access on the Mississippi River is approximately two and a half miles to the northwest in the city of Dayton. According to the Anoka County Parks Department, travel by boat upstream of Anoka is very difficult because of shallow water and numerous sandbars. However, development of Mississippi Regional Park (MRP) may increase watercraft in the area as boaters with small motors or non-motorized boats make their way to the Park. There is not a landing facility proposed in the latest MRP development plan, but casual landing anywhere in the Park can be expected. Also, the availability of parking stalls in the new park will surely add to the ability of canoe and kayak users to more easily access the River. Limited small engine boat use and non-motorized watercraft are not expected to adversely impact the Mississippi River near the MRP.

Summary of Environmental Impact. None are expected.

Mitigation element - Adverse environmental impacts associated with increased small motor and non-motorized boats is not anticipated along the Mississippi River south of the Ramsey Town Center site. In fact, the new Mississippi Regional Park hopes to attract visitors to this portion of the upper River. The use of the park as a formal recreational facility will focus river-related uses to planned areas, and provide resource oversight and supervision of recreational activities.

16. Erosion and Sedimentation

The number of acres to be graded and the number of cubic yards of soil to be moved need not be given; instead a general discussion of the likely earthmoving needs for development of the area should be given, with an emphasis on unusual or problem areas. In discussing mitigation measures, both the standard requirements of the local ordinances and any special measures (ex.WMO) that would be added for AUAR purposes should be included.

The Ramsey Town Center site is relatively flat and contains very sandy, coarse-grained soils (Figure 12.2). Both of these physical characteristics are advantageous when it comes to erosion and sedimentation. This does not mean, however, that erosion will not occur and that sediment will not move if disturbed. Because the disturbance of over 300 acres of land will present the certainty of erosion, the mitigation plan that follows outlines the measures the City will undertake to minimize its adverse impacts.

Figure 16.1 shows the general areas of borrow and fill that will result when earth-moving activity begins. The general concept that will be followed will be creation of a central low area along the drainage corridor alignment, with land gradually sloping upward to the north and south away from the drainageway. Earth will be moved from the drainageway corridor and placed on the north and south slopes. Some grading will likely also be needed on the southern drainage swale just north of the railroad tracks and around Wetlands B and D (Figure 10.1) as buffer areas are incorporated. Exact numbers on the volume of soil moved will not be available until the detailed design phase.

Care will be taken not to disturb or compact the central drainage corridor that will be used to transmit and store water. Similar efforts will be made to avoid compaction in areas where infiltration best management practices (BMPs) will be used. The soil within any landscaped areas will be loosened after heavy construction traffic has subsided. This will enhance the ability of all landscaped areas, whether formal or native, to infiltrate water.

It is expected that organic topsoil will need to be imported to the site to establish a good vegetative cover. The sandy soils will not support many of the typical landscaping plants and ground cover. Native plants that are inherent to the Anoka Sandplain will be used wherever possible to avoid the need for massive soil importation and extensive irrigation.

Summary of Environmental Impact. The grading and development of over 300 acres of land has the potential to contribute sediment to receiving waters where water could flow. Currently, there are few actual receiving areas where water is present. With the establishment of a central drainage corridor and the possibility of mitigated wetlands and water storage areas, the possibility of water-related impact increases. The following mitigation plan addresses how construction will proceed with adequate erosion BMPs in place.

Mitigation element. Prior to any earth-moving activity on the site, an erosion and sediment control plan will be prepared in accord with the requirements of the City of Ramsey and the LRRWMO. Technical assistance in the preparation of this plan will also be sought from the Anoka Conservation District, the Minnesota Pollution Control Agency and the DNR. The City will be permitted through the Phase II NPDES nonpoint program as a Municipal Separate Storm Sewer System (MS4) operator, and will be subject to all of the provisions of that program, including reducing the discharge of pollutants to the "maximum extent practicable" (MEP) through construction site runoff control. Any construction on the site will also be permitted through MPCA's NPDES general construction permit process.

Prior to any earth moving in the south east corner of the site, Burlington Northern Santa Fe Railroad should be contacted in regards to arsenic contaminated soils. A more detailed description of contamination and contact information is included in Item 20.

Elements of erosion protection will include: phased construction with minimized periods of bare soil exposure, rapid re-vegetation, slope/grade stabilization, use of mulch and fabric on exposed soils, temporary and permanent (if needed) sediment basins, properly installed and maintained silt fencing, and adoption of a regular maintenance and inspection schedule.

17. Water Quality-Stormwater Runoff

***17a**. Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any stormwater pollution prevention plans.*

***17b.** Identify routes and receiving water bodies for runoff from the site; include major downstream water bodies as well as the immediate receiving waters. Estimate impact runoff on the quality of receiving waters.*

For an AUAR the following guidance should be followed in addition to that in "EAW Guidelines":

- *it is expected that an AUAR will have a detailed analysis of stormwater issues*
- *a map of the proposed stormwater management system and of the water bodies that will receive stormwater should be provided*
- *the description of the stormwater systems would identify on-site and "regional" detention ponding and also indicate whether the various ponds will be new water bodies or converted existing ponds or wetlands. Where on-site ponds will be used but have not yet been designed, the discussion should indicate the design standards that will be followed.*
- *if present in or adjoining the AUAR area, the following types of water bodies must be given special analyses*
    - *lakes: within the TC metro area a nutrient budget analysis must be prepared for any "priority lake" identified by the Metropolitan Council.*

Background

Watershed Setting. The details of the surface water management system being proposed for the RTC site are best described by joining **Items 17a and b** into a single discussion. Figure 17.1 illustrates the entire watershed within which the RTC site lays. The watershed extends from north of Lake Itasca to the Mississippi River, covering an area of approximately 2,687 acres.

The larger watershed can be sub-divided into a series of 31 sub-watersheds, which were shown in Figure 12.1 in Item 12. Each of these smaller units was characterized for water quantity and quality modeling under existing conditions, and was subsequently modeled for fully developed conditions as proposed under the City's *2001 Comprehensive Plan*, as amended in 2002 (Item 5, Figure 5.4), and the preferred site development (Item 6, Figure 6.1).

Drainage through the site. The principal drainage feature currently passing through the site, and evident in Figure 12.1, is a well- to poorly-defined swale that occurs from the northwest corner of the site to the middle of the site, whereupon it disappears. Historically, this swale appears to have been a more significant drainage feature, but

limited runoff has diminished its overall hydrologic function and subsequent farming activities have taken advantage of the swale as tillable land. Reference to Figure 10.1, however, shows that Wetlands A and C occur within this swale, while Wetland B lies adjacent to it. The Wetland E, Type 1 acreage also occurs within this historic drainage swale. General concept possibilities for the drainage corridor and how it fits into the current design and the overall site stormwater mitigation plan are contained in Figures 17.2a, -b, and -c. The collection of features that will be incorporated into the new drainage swale includes a channel to convey baseflow, ponds to store water and promote infiltration, created and restored wetlands, and open space areas where excess water can temporarily be stored. The specifics of these features will not be fully known until the design phase proceeds prior to construction, but Figures 17.2a, -b, and -c contain schematics of how these features will generally appear.

The presence of an historic drainage swale on the site presents an excellent opportunity to incorporate the feature into the site drainage system as an amenity. Although the actual drainage swale alignment will change, incorporating the vegetative and hydrologic character of this historic drainageway can provide both functional and recreational value to the feature. As shown in the preferred design in Figure 6.1, the corridor extends beyond the current terminus, reaching into the Mississippi Regional Park, creating a natural drainageway that could extend from Lake Itasca to the Mississippi River.

The introduction of a drainage connection to the northern wetlands (see Figure 6.6) provides two more corridor connections that could establish greenways to connect to northern Ramsey natural areas. The surface water system can be modeled with these changes/additions in mind, and various optional innovative/natural surface water management assumptions can be used to maximize storage, infiltration, and water quality treatment within it.

Surface water as an Amenity. Water can be treated as a nuisance that must be moved away quickly, or as an amenity that can enhance the natural features of a site. Ramsey Town Center will use water as an amenity. The large events will be drained to prevent flooding, and smaller events will be stored and infiltrated to the extent possible.

The primary drainage-related consideration for the City is to assure the movement of the 100-year runoff event through the site without damage due to flooding. The proposed stormwater management system accomplishes this. However, with the sandy nature of the soils on site (see Figure 12.2), there is also an opportunity to soak water from smaller events into the ground to retain some of the recharge function that will otherwise be lost with development. This combination of safely routing the 100-year event and trying to reduce overall runoff from the site will form the basis for stormwater management developed in Item 17. Under this approach, provision will be made to route, store and treat the 100-year runoff event safely in a series of storm sewers, drainage swales, floodways and ponds. The system will take maximum advantage of the central drainage swale and its corridor to store water as it meanders through the site. Major storage will occur in lined detention ponds, with open areas also available to detain smaller volumes of water and allow it to soak into the ground after settling and vegetative filtering. The

exact character of the corridor and the stormwater management system has not yet been determined, but a range of runoff management effectiveness is discussed in the mitigation section of this Item. The open space value of the corridor will be enhanced with pathways that will parallel the corridor.

Runoff from the areas draining to the central drainage corridor or elsewhere off of the site also could be managed to reduce overall runoff volumes. During the design phase, each major parking area within the Town Center will be evaluated to see whether a system that will pre-treat runoff prior to its introduction into the central drainage system is feasible. Under the ideal scenario, runoff would be routed to the pre-treatment BMP (small-scale detention or filtration) prior to entry into a vegetated flow system that will encourage further filtration and infiltration. Excess flows from these connector drainage features should only occur with substantial precipitation events. Most routinely occurring, small-scale events would soak into the sandy soils. This conveyance system will likely be a connected system of pervious drainage swales, wetlands and vegetated drainageways, but could also include sub-grade settling and filtration treatment trains. The exact character of this system will be determined as part of the final design prior to building construction.

During the detailed design process, the City has the option of incorporating additional volume control features into the drainage system. The specifics of these features can not be defined until the design phase, but they could be used to minimize runoff on a parcel or block scale within the Town Center to hold down the amount of water that will eventually reach the surface water drainage system. Impervious area reduction BMPs that will be used to do this are numerous and will be pursued at the proper design stage. These alternative design features are not intended to replace standard engineering practices of assuring the movement of large storm-related water volumes, but rather supplement the drainage system by reducing overall runoff volumes and peaks.

In addition to the flow reduction benefits, there are water quality benefits. Pre-treating runoff from potentially high loading areas, such as parking lots and roadways, reduces the amount of pollution moving to the regional collection system. Routing pre-settled runoff through wetlands and vegetated swales furthers treatment through vegetative filtration. It is anticipated that these two BMP suites (pre-settling and filtration) will properly prepare water for infiltration into the soil, where additional physical and biological treatment will cleanse the water on its way toward the regional groundwater system. Using the natural cleansing ability of settling areas, vegetative and soil filtration, microbes in the soil and vegetative uptake of nutrients will make the RTC site compatible with the needs of a wellhead protection area. Additional discussion occurs in the groundwater protection section of Item 13 and a recommendation in the Mitigation Plan (Item 33) is made to assure that an ordinance is adopted to assure that incompatible land uses are not allowed within the DWSMA.

Surface Water Modeling

Development of a flow model (XP-SWMM). To adequately predict the impact that this site will have on water resources, a tool is needed to incorporate development and infrastructure assumptions. The model used by EOR for this exercise is the XP-SWMM model (XP Software, Inc.). This model is used to contrast existing conditions with proposed changes associated with development within a watershed. The model looks at the change in land use and land cover, and relates the change to runoff behavior. Runoff predictions can be made for variable frequency events, and routed through the proposed drainage system. The model output and routing can then be used to determine areas where flooding or high water will occur, and then can be used to design a system of stormwater management facilities, which could include detention storage, diversion, infiltration or any number of associated BMPs.

Existing Conditions. The first phase of the quantity and quality modeling involved defining the water behavior as it exists currently. The physical characteristics of each sub-watershed noted in Figure 12.1 form the basis for determining the amount of water that will run off of it during specified climatic events, specifically rainfall and snowmelt events of certain statistical frequency.

The results of the existing conditions quantity analysis using the XP-SWMM model are displayed in Table 17.1 by sub-watershed for the 100-year frequency, 24-hour rainfall event and 10-day snowmelt. This represents the peak flow and volume discharges that would be expected for an event that would occur with a frequency of once every one-hundred years, or 1% in any given year. Volume discharges are based on a 5-day runoff simulation for the 24-hour rainfall event and a 30-day runoff simulation for the 10-day snowmelt event.

Of note in Table 17.1 is the small amount of flow leaving this site at the Highway 10 culvert (subwatershed 30). During a 100-year event, a peak flow of only 28 cubic feet per second (cfs) leaves the AUAR area, reflective of the sandy nature of the watershed and the low intensity agricultural and low density land use. Flow to the Mississippi River from the southeast corner of the site does not occur, but rather soaks into the sandy soils as it flows in a small ditch to the southeast. Because of this reason, the base level for water quantity and quality eventually reaching the Mississippi River is zero.

Table 17.1. XP-SWMM model results for existing conditions

	100-year 24-hour rainfall (5.9 inches precipitation)		100-year 10-day snowmelt (7.2 inches runoff)		
subwatershed	peak flow discharge (cfs)	volume discharge (ac-ft)	peak flow discharge (cfs)	volume discharge (ac-ft)	
1	0.1	0.9	1.6	22.8	
2	0.0	0.0	0.0	0.0	
3	24.9	14.5	38.7	55.7	
4	17.7	64.0	21.2	247.6	
5	18.3	67.3	22.2	259.4	
6	0.4	-2.6	2.9	1.3	
7	22.2	64.7	42.1	279.0	
8	10.8	30.1	31.9	159.3	
9	0.0	0.0	0.0	0.0	
10	0.0	0.0	1.4	6.1	
11	0.0	0.0	1.0	8.2	
12	4.4	0.9	3.0	12.4	
13	0.0	0.0	1.3	11.9	
14	2.0	10.7	9.0	28.1	
15	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	
17	10.3	6.0	15.4	27.5	
18	0.1	0.1	0.7	0.7	
19	0.1	0.1	1.3	1.4	
20	0.0	0.0	15.1	32.3	
21	0.4	-0.5	0.9	1.3	
22	2.3	-6.3	10.0	18.0	
23	2.0	1.9	7.3	9.3	
24	9.4	35.6	16.0	144.8	
25	8.8	1.2	5.1	6.3	
26	12.4	57.9	87.0	404.4	
27	12.4	58.7	84.1	408.5	
28	0.0	0.0	1.6	-2.7	
29	12.4	53.8	39.2	402.9	
30	12.4	54.9	28.3	334.7	*Discharge from AUAR area at Hwy 10 culvert
31	3.4	0.5	10.4	70.8	

Note: Negative volume discharge results from backwater into subwatershed from downstream subwatershed.

Runoff Under Developed Conditions. As development proceeds on the 300+ acres that are part of the RTC, runoff will markedly increase. Conversion of sandy open space and agricultural land to commercial and residential uses invariably leads to increased runoff from paved surfaces associated with that development. The translation of the preferred design in Figure 6.1 to a developed schematic for runoff routing was shown in Figure 6.6 as part of the site description. The essential elements of the drainage system proposed for the site are as follows:

- It incorporates a 100-year design event with no infiltration considered, thus generating the "worst case" scenario upon which design can proceed.

- It routes water locally into the central drainage corridor, using a system of smaller ponds, followed by an area of flood storage and infiltration.

- It uses existing detention storage and develops increased storage for the highly impermeable retail center on City property between the railroad tracks and TH10.

- It proposes a connection of the site to the Mississippi River via the County-owned swath of land. This piece of land would contain a detention facility on the upstream side to add storage, followed by an infiltration zone, then a stabilized channel (piped or series of landscaped drop-structures) over the bluff to the river. Of note here is the additional need of this outflow as an outlet for any future TH10 upgrade. Although the development of this corridor for the passage of water has not been approved yet by the County, discussions are under way. This corridor presents the best option for out-letting this closed basin for the RTC site and for future TH10 work. If reaching the River through this option is not approved, another option will need to be pursued, most likely to the southeast along TH10. However, outflow in that direction is also closed and prevented from out-letting to the River, so additional study would be needed to identify an ultimate connection.

- It incorporates infiltration throughout the RTC site as an <u>added benefit</u> rather than as a design component for runoff management. The LRRWMO will not allow infiltration in design of the 100-year event. Rather, whatever other soaking-in that can be achieved in the central corridor will supplement water management. Infiltration can be used to cut peaks and volume, reduce major parts of small-scale events, maintain recharge and treat water quality. Each infiltration feature will need to be designed with an overflow/outlet to assure that water will not remain a permanent feature.

- It develops on-site detention in the central corridor on the western-most of the two sets of available areas; that is, parcel #s 49 and 54. The eastern-most cells (#s 51 and 56) will then be areas with a meandering (baseflow) stream that will rise during runoff events and spill over into a floodplain/infiltration zone, where water can soak into native vegetation, grading upward to a more landscaped, green

mowed grass up near trails by the road. If additional storage is needed, these cells could be changed to contain ponds of the needed size.

Following the development of a drainage system, detailed modeling was done for the individual blocks within the RTC site, and combined with the model output for the areas draining into the site from the north and northwest. All of this drainage was then routed through the site, into the stormwater handling facilities south of the site, and through the proposed drainage corridor to the Mississippi River.

Two modeling scenarios were run to bracket a range of flow under maximum and minimum conditions. The first run of the XP-SWMM quantity modeling developed traditional runoff estimates for the 100-year design event with no infiltration occurring on site. This "maximum runoff condition" is contained in Table 17.2.

In the second scenario, a factor was incorporated into the model on a block-by-block basis to account for some infiltration under small-scale events, reflective of the sandy soils inherent to the site. Infiltration is not a design element for the 100-year event, but rather used to estimate volume and rate reductions during frequently occurring events. Infiltration features will be considered during the design phase, but are not proposed as part of this evaluation. However, to demonstrate the effect of infiltration on the 100-year event, Table 17.3 contains the results of the "minimum runoff condition".

Table 17.2. XP-SWMM model results for developed conditions ("maximum runoff condition").

	100-year 24-hour rainfall (5.9 inches precipitation)		100-year 10-day snowmelt (7.2 inches runoff)		
subwatershed	peak flow discharge (cfs)	volume discharge (ac-ft)	peak flow discharge (cfs)	volume discharge (ac-ft)	
1	0.1	0.8	2.7	32.3	
2	0.0	0.0	0.0	0.0	
3	24.6	14.5	45.5	66.4	
4	9.4	45.6	14.8	284.5	
5	9.6	52.2	16.3	302.9	
6	11.4	47.5	16.1	301.3	
7	23.4	58.2	22.8	329.3	
8	24.3	74.1	30.5	371.8	
9	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	
11	31.5	9.1	17.5	34.5	
12	26.7	11.4	14.4	38.3	
13	20.7	74.0	22.6	373.2	
14	2.0	10.8	25.1	32.4	
15	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	
17	12.0	5.6	17.4	28.3	
18	29.4	14.4	16.6	23.3	
19	44.9	30.2	34.8	70.0	
20	72.8	38.4	36.3	83.5	
21	15.1	9.1	7.7	13.5	
22	22.8	6.1	7.3	9.3	
23	65.3	85.3	32.8	387.7	
24	132.6	155.1	87.8	516.4	
25	110.0	156.0	74.5	524.1	
26 WQ Pond	88.7	155.2	46.3	524.0	
26 Inf Basin	25.1	150.3	25.3	520.5	*Discharge to Mississippi River
27	5.7	1.1	1.7	2.4	
28	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.1	0.3	
30	12.4	1.3	2.0	2.7	
31	3.4	0.4	0.5	0.7	

Table 17.3. XP-SWMM model results for developed conditions with some infiltration considered ("minimum run off condition").

	100-year 24-hour rainfall (5.9 inches precipitation)		100-year 10-day snowmelt (7.2 inches runoff)		
subwatershed	Peak flow discharge (cfs)	volume discharge (ac-ft)	peak flow discharge (cfs)	volume discharge (ac-ft)	
1	0.1	0.8	2.7	32.3	
2	0.0	0.0	0.0	0.0	
3	24.6	14.5	45.5	66.4	
4	9.9	45.7	15.7	284.5	
5	10.3	52.2	17.5	303.0	
6	11.8	47.6	16.9	302.4	
7	19.8	56.4	18.8	325.4	
8	19.3	50.0	20.4	284.9	
9	0.0	0.0	0.0	0.0	
10	0.0	0.0	4.9	12.5	
11	25.2	9.3	12.5	30.6	
12	28.4	11.5	13.0	34.5	
13	20.3	51.4	20.5	287.5	
14	2.0	10.8	24.7	31.8	
15	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	
17	12.0	5.6	17.4	28.3	
18	29.4	16.6	16.1	25.3	
19	34.4	24.1	26.7	47.6	
20	41.9	32.2	33.5	61.1	
21	17.3	9.2	7.7	13.5	
22	37.2	6.4	7.3	9.3	
23	64.7	61.4	31.5	302.0	
24	131.8	125.6	86.1	408.0	
25	109.4	126.0	78.4	413.9	
26 WQ Pond	89.1	123.3	54.2	409.7	
26 Inf Basin	24.7	92.1	24.8	356.2	*Discharge to Mississippi River
27	5.7	1.1	1.7	2.4	
28	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.1	0.3	
30	12.4	1.3	2.0	2.7	
31	3.4	0.4	0.5	0.7	

Table 17.4 shows a comparison of discharge from the site for the existing and proposed developed scenarios for the 100-year events. For existing conditions, a maximum peak flow of 28.3 cfs under the Highway 10 culvert occurs during the 100-year, 10-day snowmelt event. Peak flow discharge for proposed development conditions is slightly less (25.3 cfs) than existing conditions, excluding infiltration and assuming that no bio-retention facilities are incorporated into the individual blocks. The existing peak flow rate (12.4 cfs) is exceeded for the 100-year, 24-hour rainfall event under proposed developed conditions (25.1 cfs), but has been significantly reduced from the peak rate of 132.6 cfs at the culvert crossing the RR tracks. Since infiltration is excluded, the numbers presented under proposed conditions are conservative. Slight reductions in peak flow rate discharge at the outlet and significant reductions in volume discharge could be achieved with the incorporation of properly designed and maintained infiltration basins. Volume discharge reductions of 30 to 40 percent could be achieved assuming a moderate rate of infiltration during the 100-year, 24-hour rainfall event and some infiltration during the last 15 days of the 30-day runoff simulation of the 100-year snowmelt event.

Table 17.4. Comparison of peak flows and volumes discharged from site for 100-year events

Model	100-year 24-hour rainfall (5.9 inches precipitation)		100-year 10-day snowmelt (7.2 inches runoff)	
	Peak flow discharge (cfs)	Volume discharge (ac-ft)	Peak flow discharge (cfs)	Volume discharge (ac-ft)
Existing conditions	12.4	54.9	28.3	334.7
Proposed	25.1	150.3	25.3	520.5
Proposed w/ some infiltration occurring	24.7	92.1	24.8	356.2

The primary benefit of incorporating infiltration BMPs into the site is achieved during small storm events. Table 17.5 compares site discharge for the 1-year and 10-year, 24-hour rainfall events considering site design that first excludes infiltration in the basins and then considers infiltration in the basins.

For existing conditions, a peak flow of 2.3 cfs discharge at the Highway 10 culvert for the 1-year, 24-hour event is due to local drainage south of the railroad tracks only, as there is no flow leaving the site at the railroad tracks. As discussed earlier, the flow discharging from Highway 10 is small and does not reach the Mississippi River. For proposed development conditions excluding infiltration in the basins, peak discharge into the Mississippi River would be 14.4 cfs. By incorporating infiltration basins into the site, peak flow is reduced by 50 percent (7.8 cfs) and volume discharge is also significantly reduced.. The 10-year, 24-hour rainfall event results in a slight reduction in peak flow, but significant reduction in volume (50 percent) by incorporating the infiltration BMPs.

Table 17.5. Comparison of peak flows and volumes discharged from site for 1-year and 10-year events

Model	1-year 24-hour rainfall (2.3 inches precipitation)		10-year 24-hour rainfall (4.1 inches precipitation)	
	Peak flow (cfs)	Volume (ac-ft)	Peak flow (cfs)	Volume (ac-ft)
Existing conditions	2.3	0.3	7.1	0.7
Proposed	14.4	14.4	23.1	65.0
Proposed w/ infiltration occurring	7.8	4.0	22.6	35.4

Smaller, more frequent rainfall events are critical for water quality. Achievement of long-term year-round water quality benefits requires the ability to retain and treat smaller storm events. To meet LRRWMO water quality requirements based on NURP design criteria, the final design should provide for a dead storage volume of at least 38 ac-ft, which is the volume required to accommodate the runoff volume from a 2.5-inch rainfall event (excluding infiltration in basins).

Water Quality Modeling

Water Quality Under Developed Conditions. As shown in a previous section, the amount of water leaving the site under current conditions is minimal. Consequently, the amount of pollution associated with the runoff is equally minimal. However, this all changes once development occurs. An increase in nonpoint pollution from this site will occur from many new sources, including some or all of the following:

- Automobile, truck and bus traffic (oil, exhaust, vehicle decomposition);
- Lawn and landscaping chemicals (fertilizer and pesticide);
- Litter;
- Vegetative debris;
- Pet waste;
- Fueling spillage from the convenience stations;
- Increased sanding and salting; and
- New construction (erosion, debris).

The pollutant removal efficiencies of the proposed stormwater management practices were assessed using the P8 Urban Catchment Model (*Program for Predicting Polluting Particle Passage through Pits, Puddles and Ponds,* developed by William Walker). This approach allowed for the evaluation of different runoff scenarios, as well as the prediction of pollutant loads passing through the proposed development and eventually into the Mississippi River. Model results presented are for a complete year with a long term average precipitation depth (23.85 inches). This scenario is different than those

presented in the water quantity modeling results, where specific storm events were considered.

Water quality was modeled for several pollutants for two runoff scenarios. Both scenarios consider the likely treatment that runoff would receive in stormwater BMPs located along the route that the water would follow. For example, the runoff routed into a properly designed detention pond would lose about 75% of the total suspended solids it carries. This water can then be routed downstream, where it might encounter another detention pond or infiltration system where another increment is removed.

In the first scenario, runoff is stored only in the detention ponds and infiltration basins within the central drainage corridor. In the second scenario, extra storage that would exist elsewhere on the site in small ponds is considered. In this case, runoff is stored, but does not infiltrate into the groundwater.

The exact nature of the primary solids removal BMPs located at the storm sewer inflows to various drainageways has not yet been determined. These could be a mix of forebays created from earthen material, catch basin inlet filters, all the way to sub-grade treatment train systems.

Table 17.6 presents the results of water quality modeling for total phosphorus (TP). TP was chosen to present the quality results because it is one of the more difficult pollutants to remove. That is, if effective removal of TP occurs, the other pollutants will have equal or better removals. The table shows that with storage and treatment in the central drainage corridor facilities, the total phosphorus load leaving the RTC site (out of subwatersheds 26 and 31) is approximately 20 lbs/year. This figure is cut in half when additional site storage is considered. In terms of a per unit area loading rate, the first scenario yields 0.053 lbs TP/acre-year; that figure is approximately halved with the addition of extra storage. These areal loading rates are reflective of the numerous detention ponds and the natural infiltration occurring throughout the RTC site.

Table 17.6. Average Annual Total Phosphorus in runoff leaving RTC site

	With storage in the central corridor	With additional on-site storage
lbs TP/yr	19.6	10.3
lbs TP/ac-yr	0.053	0.028

The modeled phosphorus removals are contained in Table 17.7. These results are presented to show the reductions that the water quality treatment system used on the RTC site can achieve.

Table 17.7. Total phosphorus load (lbs/yr) entering and exiting several of the major proposed detention basins and infiltration basins.

BMP and Sub-watershed (see Figure 12.1)		lbs TP/yr	
		With central corridor facilities only	With additional on-site storage
Detention basin in sub-watershed 7	In	27.3	15.6
	Out	10.2	4.3
Infiltration basin in sub-watershed 8	In	31.5	16.0
	Out	0	0
Detention basin in sub-watershed 18	In	35.2	20.4
	Out	9.5	3.7
Infiltration basin in sub-watershed 19	In	32.1	16.9
	Out	0	0
Detention basin in sub-watershed 25	In	64.6	34.6
	Out	38.4	20.2
Detention basin in sub-watershed 26 (south of TH10)	In	38.4	20.2
	Out	24.0	12.6
Infiltration basin in sub-watershed 26 (south of TH10)	In	24.0	12.6
	Out	18.9	9.5

Summary of Environmental Impact. The incorporation of a stormwater management system into the RTC site as it develops raises the need for proper collection, routing and storage of runoff. The standard routing of the 100-year frequency event without consideration of any infiltration, in accordance with LRRWMO regulations, yields a volume of 113 ac-ft that must be accounted for in on-site or near-site storage. When infiltration is considered, the volume can be reduced to 105 ac-ft. For events with a return frequency less than 100-years, infiltration can be designed to reduce volume substantially and provide continued recharge to a certain degree.

Mitigation element. The conversion of agricultural land to urban land ultimately increases the amount and rate of runoff leaving the land. Minimizing the impact of that increased runoff is the objective of this mitigation plan.

It must be stressed that this portion of Ramsey does not have a natural outlet to the Mississippi River. The preliminary drainage system described within this AUAR assumes an outlet that takes advantage of publicly-owned, County land that extends from Highway 10 to the Mississippi River south of the RTC site. Preliminary discussions with the County on the use of this land have occurred, but resolution has not been agreed upon. Advantages of using this land extend beyond the RTC site, to the entire sub-watershed, including the eventual upgrade of Highway 10, which will also need a River outlet. If permission cannot be obtained from the County to use its land, an outlet option will need to be pursued to the southeast, along Highway 10. The small amount of water that now leaves the site, runs southeast along the highway, but infiltrates within a short distance.

Mitigation Approach

The quantity and quality approach laid-out earlier in this section describes an approach driven by the need to comply with runoff control rules of the LRRWMO and water quality requirements that are described in the next section. The runoff management system proposed in Figure 17.2 is done in a preliminary sense to allow the City and the developer to proceed with some knowledge of what design specifics will be needed. The City will assure that the developer(s) will design and build the final drainage and runoff management system within this overall framework, in compliance with the mandates of the LRRWMO.

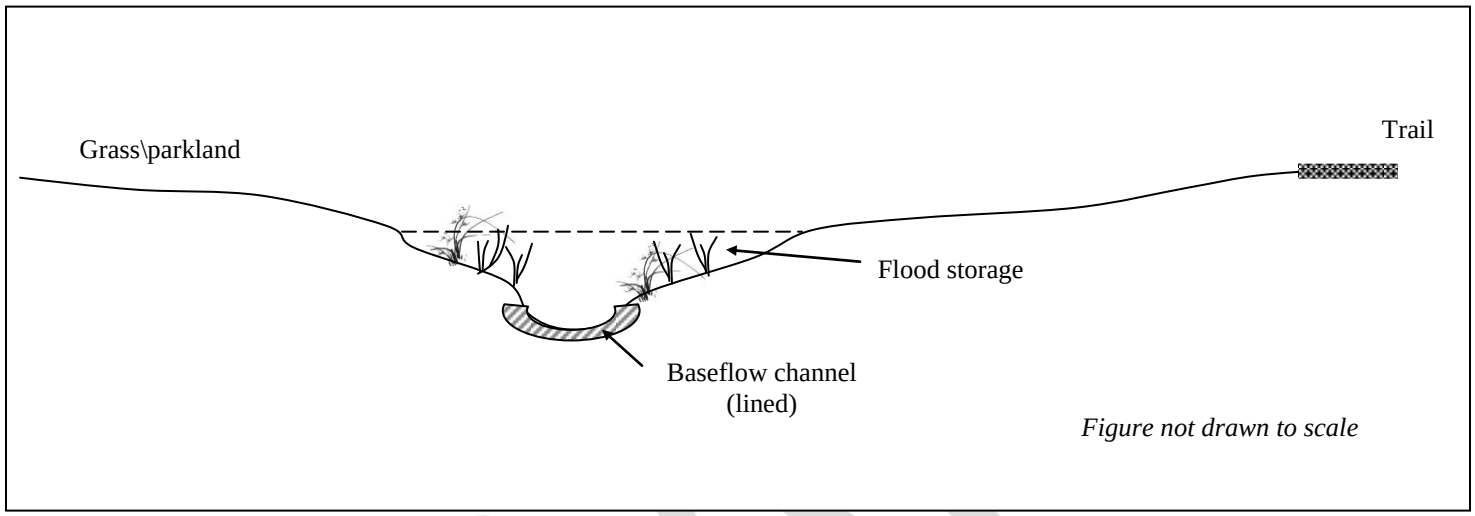
Implementation of BMPs in Preliminary Design

A system of BMPs can be initially proposed to meet the needs identified in the Item 12 and 17 discussions. The first aspect of this design is the handling of the large-scale (100-year) event. Figures 17.2 (a-c) illustrate the major management practice features that are proposed to store and treat runoff in the central drainage corridor. This system is designed to provide volume/peak reduction storage for the runoff, as well as water quality treatment. This approach starts with large detention storage in ponds located on-site in sub-watersheds 7 and 8, followed by similarly sized detention in ponds located in subwatersheds 25 and 26 south of the active development site. This storage is supplemented with additional smaller-scale storage in sub-watersheds 5, 11, 13, 21 and 22. Tables 17.1-17.5 describe the water quantity reductions in these ponds, and Tables 17.6 and 17.7 describe the water quality improvements for TP.

The ponding system provides both permanent pool storage for water quality treatment and temporary flood storage above the permanent pool. The ponds in the central drainage corridor are supplemented by two areas for additional storage of pre-treated runoff. These two areas in sub-watersheds 8 and 19 will allow for water levels to raise and take advantage of storage available. This water will be slowly drained by a controlled outlet, but infiltration will also occur. Figure 17.3 is a schematic cross-section of this approach. Keeping these areas dry except during high flows allows for their use as open space, recreation areas for essentially all of the year, with the exception of that time when they are needed to absorb flow. They then serve to dampen peaks, reduce

volume and enhance recharge. A similar feature is also proposed for sub-watershed 26. This would be the last BMP in the chain of BMPs installed throughout the site and south of it before flows reaches the Mississippi River. Table 17.7 showed the dramatic water quality improvement that this system could provide. Such an approach is mandated by the Phase II discharge requirements (next section) and the MNRRA/Critical Area guidelines (Item 27).

Figure 17.3 Schematic of Flood Storage/Infiltration Portion of Central Corridor.



The runoff calculations in this section included determination of the 100-year event runoff and a condition supplemented by additional on-site storage. Figures 17.2 (a-c) showed the preliminary concept for the central drainage corridor. These figures illustrate the ponding system concept for storage during the large-scale event. Reference to Figure 6.6, however, shows that many additional smaller ponds exist on the site. Use of these ponds and consideration of the infiltration that naturally occurs through the sandy soils inherent to the site, yield a net reduction in flow leaving the site. Even further reduction can be made during the design and construction phases with the incorporation of additional BMPs. These features can also be used to filter inflow to the shallow groundwater system and replace some of the recharge lost to increased urbanization. The City can expect that volumes will be reduced if these features are incorporated in block design runoff routing. The largest benefit would likely accrue from installation associated with large parking lot surfaces. Further reductions can be explored during the detailed design phase.

The final BMP element proposed for runoff control is the use of solids removal pre-treatment at storm sewer outfalls. These installations can be any of a wide variety of forebays or installed sumps/filters that remove particulates from stormwater prior to discharge into any of the drainageways throughout the site. These will also reduce overall pollutant removal and will be a major part of the city's Phase II list of available BMPs.

As part of the design process for BMPs, replacement of non-native vegetation with native vegetation will occur whenever practicable and desirable.

Phase II National Pollutant Discharge Elimination System (NPDES) permit

The City of Ramsey has submitted its draft application for a Phase II National Pollutant Discharge Elimination System (NPDES) permit. The unsigned permit was submitted on March 10, 2003 under the MPCA requirements for the program of the U.S. Environmental Protection Agency (EPA). MPCA extended the timeline for receipt of an officially signed permit so that the City could authorize signature through a City Council action. The new deadline for receipt of a signed application is May 9, 2003. After that, the City will need to adopt a Storm Water Pollution Prevention Program (SWPPP). Since the City owns and operates a municipal drainage system, it is subject to the provisions of the Municipal Separate Storm Sewer System (MS4) provisions of the law. Construction activities within the City, and specifically on the Ramsey Town Center site, are also subject to the Phase II General Storm Water Permit for Construction Activity.

The MS4 program requires the City to develop and implement a Storm Water Pollution Prevention Program (SWPPP) that includes six minimum control measures:

- Public education and outreach;
- Public participation and involvement;
- Illicit discharge, detection and elimination;
- Construction site runoff control;
- Post-construction site runoff control; and
- Pollution prevention/good housekeeping.

The City must identify best management practices (BMPs) and measurable goals associated with each minimum control measure noted above. The City will be given five-years to develop an effective program after the permit is issued. This period of time coincides with the phased development of the Ramsey Town Center site, which must then include the provisions of the City SWPPP. The City will assure that the provisions of its Program are properly implemented within the Center as development proceeds.

Construction within the City of Ramsey is also subject to the provisions of the NPDES Phase II General Storm Water Permit for Construction Activity. This provision is in addition to the construction control measure required under the MS4 permit. Revisions to the current permit will be implemented by the State in September 2003. Under the proposed State Construction permit, any construction meeting the following criteria will be expected to obtain a permit from the MPCA:

- Any construction activity that results in the disturbance of one acre or more;
- Any construction activity less than one acre, but part of a "larger common plan for development or sale" that is larger than one acre (This would apply to any sub-area construction on the Ramsey Town Center site that is less than one acre because the overall site meets the above criteria.); and

- Any construction activities that MPCA determines will potentially contribute to a violation of a water quality standard or for significant contribution of pollutants to a water resource.

Clearly, any construction on the Ramsey Town Center of any size will be subject to the provision of the Phase II construction permit, especially since the City's MS4 permit requires it to implement control measures addressing construction site runoff control. The SWPPP required for the general construction activity Permit must address the potential for discharge of sediment and/or other potential pollutants from the site, and must include the following elements:

- Temporary erosion prevention and sediment control BMPs;
- Permanent erosion prevention and sediment control BMPs;
- A permanent storm water management system; and
- Pollution prevention management measures.

These elements must be incorporated into the final plans and specifications before applying for permit coverage. Special provisions are made within the General Permit language for discharges to Outstanding Resource Value Waters (ORVW), which includes the Mississippi River through the City of Ramsey, discharges to wetlands and discharges to scenic or recreational river segments, which include the Ramsey reach of the Mississippi River. Within these areas, additional protective BMPs are required. Since the ultimate discharge from Ramsey Town Center is the Mississippi River, these provisions will apply to the construction permits issued for the site. The Item 17 assessment of discharge found that discharge of any storm water from the Town Center downstream to the River will occur under wet conditions. The only feasible and economic alternative for surface water discharge from the site is to the River. Every effort will be made to retain and, if possible, infiltrate normal events on the Town Center site. Excess volumes of surface water runoff will be pre-treated before allowed to drain from the Center or its nearby/adjacent runoff treatment system.

Because the Ramsey Town Center will not have any heavy industrial uses, it is not expected that the provisions of the Phase II NPDES program dealing with Industrial Activity will apply. However, if development conditions change before the site is finally built-out, and heavier industry is allowed on the site, these provisions could apply. Although there is no intent for heavy industry to occur in the Center, the City will monitor the permit requirements relative to land uses under which the permit conditions apply, and implement a control program if ever needed.

Relationship to Mississippi River TMDL

One water quality element of note in the mitigation plan is the need to reduce the negative impact of a discharge to an "impaired water" under the Total Maximum Daily Load (TMDL) program. The Mississippi River through the City of Ramsey has been listed on the MPCA recommended "303d" list as impaired relative to fecal coliform, PCB and mercury. The PCB and mercury programs are regional in scale and are the subject of regional MPCA and USEPA remediation programs. The discharge of storm water high

in fecal coliform, however, is something that the City will need to address. The implementation of nonpoint source pollution control BMPs does not necessarily assure the reduction of fecal coliform. The process for setting a TMDL includes the initiation of a formal study that results in recommendations for control of the pollutant causing the impairment. MPCA has not yet begun this study for the impaired Mississippi River reach; however, once this study begins (currently scheduled for 2004-2006), the City will cooperate to the best of its ability with the MPCA to reduce the input of fecal coliform to the River.

18. Water Quality-Wastewater

18a. *Describe sources, composition and quantities of all sanitary, municipal and industrial wastewater produced or treated at the site.*

18b*. Describe waste treatment methods or pollution prevention efforts and give estimates of composition after treatment. Identify receiving waters, including major downstream water bodies, and estimate the discharge impact on the quality of receiving waters. If the project involves on-site sewage systems, discuss the suitability of site conditions for such systems.*

18c. *If wastes will be discharged into a publicly owned treatment facility, identify the facility, describe any pretreatment provisions and discuss the facility's ability to handle the volume and composition of wastes, identifying any improvements necessary.*

18d. *Does not apply.*

Observe the following points of guidance in an AUAR:

- *only domestic wastewater would be coming from industrial uses that are excluded from review through an AUAR process;*
- *wastewater flows should be estimated by land use sub-areas of the AUAR area; the basis of flow estimates should be explained;*
- *the major sewer system features should be shown on a map and the expected flows should be identified;*
- *if not explained under Item 6, the expected staging of the sewer system construction should be described; and*
- *the relationship of the sewer system extension to the RGU's comprehensive sewer plan and (for metro area AUARs) to Metropolitan Council regional systems plans, including MUSA expansions, should be discussed.*

18a. General - Source, composition and quantity

In Minnesota communities, the management of wastewater is a health-related necessity. Providing adequate wastewater management services to residents and businesses in a community results in several additional benefits, including protection of the environment, enhanced economic development, and beneficial reuse of bio-solids and nutrients.

Policies within the City's *2001 Comprehensive Plan*, as amended in 2002 (*Comp Plan*), indicate that the City will:

- Extend municipal sewer services to areas within the existing and future Metropolitan Urban Services Area (MUSA) as shown on Figure 5.4 and consistent with the provisions and process outlined by the City.

- Extend municipal sewer services to rural areas *only if*:
  - A pollution problem exists due to failing or leaking septic systems;
  - The only cost effective solution to the problem is connection to municipal sewer or a central sewer system;
  - Capacity exists in the metropolitan treatment system to provide service to the rural area in question; and
  - A fair and equitable financing tool is in place to recover the costs of building the sewer expansion facilities, so that existing rural residents who remain on functioning private septic systems are not required to pay assessments.

- Develop an equitable and fair financial framework for building and maintaining the existing and future municipal sewer system.

- Provide for the efficient and timely extension of municipal sewer services in accordance with the development staging plan as depicted in the future land use plan.

- Oversize sewer pipes so that in the event private septic systems fail the municipal sewer system is properly sized to handle additional capacity.

- Annually monitor sewer flowage into the two metropolitan interceptors in order to identify infiltration and inflow (I&I) problems, which can cost-effectively be repaired.

- Work with the Metropolitan Council Environmental Services division to identify any points of major I&I into the system and devise a plan to minimize future I&I.

- Emphasize prevention and education to protect against ground water pollution related to on-site sewage disposal systems.

- Ensure existing on-site sewage disposal systems in the City are consistently maintained and monitored as required under Minnesota Rules Section 7080.

Based on the *Comp Plan*, the availability of wastewater management services within the City can be divided into three distinct service categories as follows:

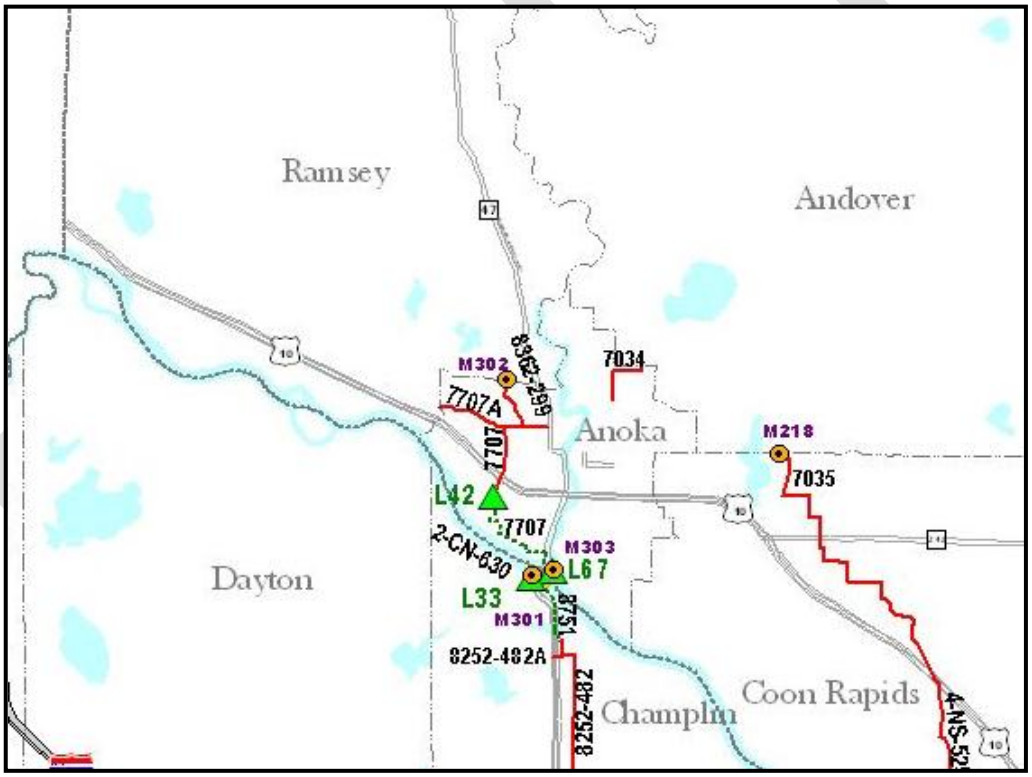
- Existing Urban (MUSA) Area: Residents and businesses within this area are currently served by the MCES's regional interceptor. Wastewater is transported via this interceptor to the MCES Metro Wastewater Treatment Plant in St. Paul (Figure 18.1 and 18.2).

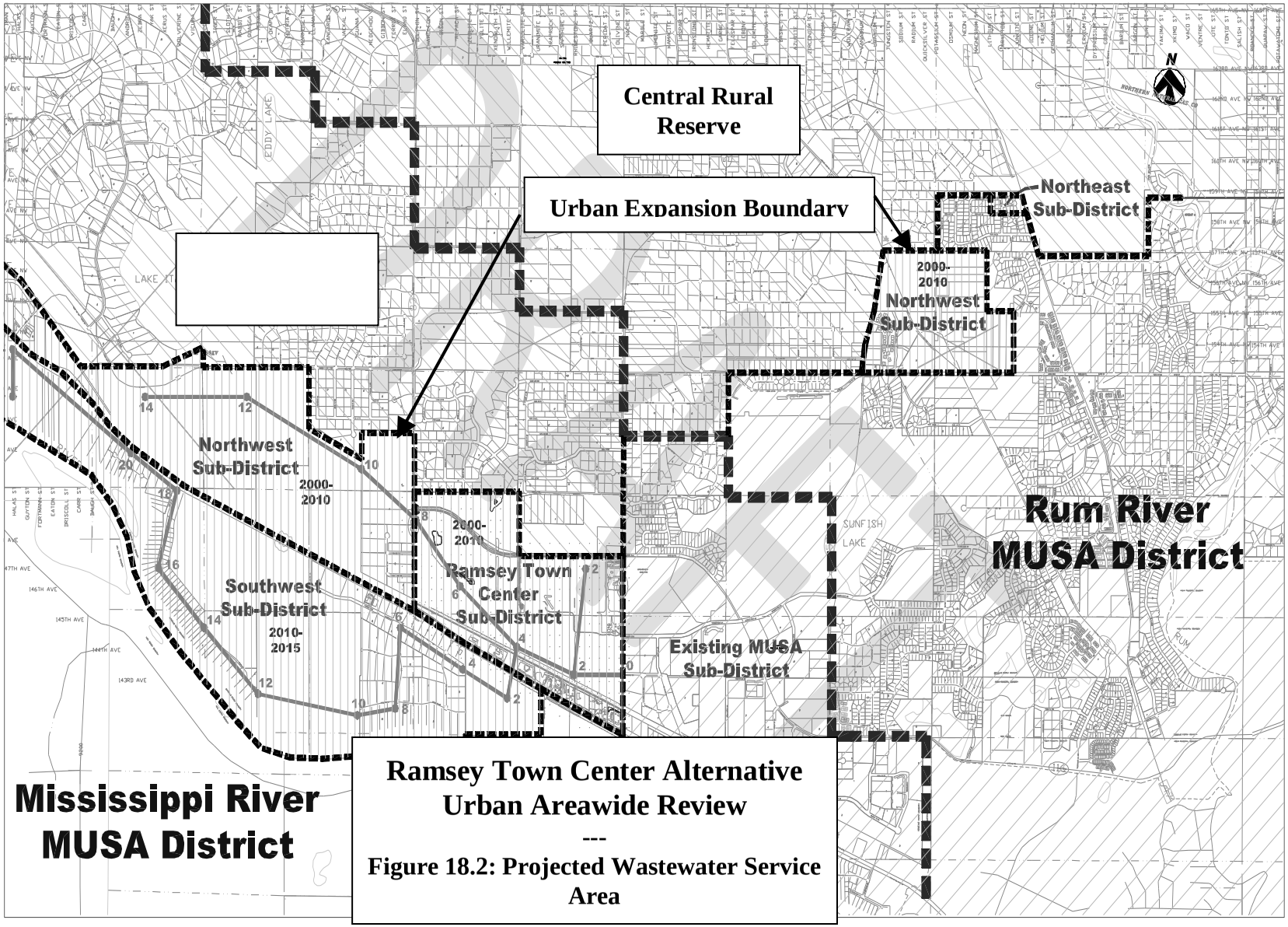
- Urban Growth Area: These are areas designated by the City of Ramsey in its *Comp Plan*, as being within the Urban Growth Boundary. Wastewater services for future development in this area will be provided by an extension

of the City's wastewater collection system for transport to the MCES regional interceptor (Figure 18.1 and 18.2). Existing residences and businesses currently within this area are serviced by individual septic systems.

- Central Rural Reserve and Rural Developing: Residents and businesses in these areas use primarily individual septic systems for wastewater management and individual wells for potable water (Figure 18.2). Although extension of MUSA service to these areas is not currently planned, design of the existing and future sewer mains must take into account any potential future need. Therefore, for purposes of the AUAR, projected flows are calculated for those areas within the Sewer Service Boundary shown in the *1991 Comprehensive Sanitary Sewer Plan* (Sewer Plan). Generally, these areas are designated Rural Developing in the *Comp Plan* and are located north of the Urban Growth Boundary and south of Trott Brook.

Figure 18.1: MCES Wastewater Facilities Serving Ramsey





Ramsey Town Center Alternative Urban Areawide Review

Figure 18.2: Projected Wastewater Service Area

Table 18.1: Projected Wastewater Composition and Loadings

Contaminant	Concentration (mg/l)	Total Annual Mass Loading[(1)] (tons)
Total Dissolved Solids	500	4,871
Total Suspended Solids	220	2,143
Biochemical Oxygen Demand - 5-Day (BOD_5)	250	2,435
Chemical Oxygen Demand (COD)	500	4,870
Nitrogen (Total as N)	50	487
Phosphorous (Total as P)	10[(2)]	97

(1) Based on a projected annual flow of 2,336 MGY.
(2) Phosphorous levels are somewhat elevated to compensate for disposal and restaurant wastes.

Wastewater from the RTC development is considered domestic as no industrial waste is proposed. Table 18.1 lists the projected composition of the wastewater and the projected concentration of common contaminants. The above projected loadings fall within the range of "average" wastewater strengths. Because of this, it appears that the MCES Metro Wastewater Treatment Plant will be able to handle the projected waste composition and loadings from the RTC Development.

18b. Description of Existing Wastewater Management Systems

Local Collection System Capacity – Within each of the Districts, wastewater is collected and transported to the main interceptors primarily by gravity sewer. When necessary, pumping stations and force-mains are used to overcome elevation changes. Inflow and infiltration into the sanitary sewer is expected to be minimal due to the relatively new age of the system.

The City's *Comp Plan* documented MCES Projected Wastewater flows for the City of Ramsey to be between 542 and 668 MGY or a maximum of 1.8 MGD. The *Sewer Plan* indicated that at full build out, 2.8 MGD of flow would be generated by a sewered population of 27,200 persons and a sewered employment of 7,000 employees. It appears that the existing sewer collection system has been designed to accommodate the larger flow of 2.8 MGD.

Regional Interceptor Capacity – Availability of capacity in the regional interceptor system depends on several factors but is generally based on Met Council design and growth projections for developing communities. The *Comp Plan* indicates that Met Council projections of wastewater flows for the City of Ramsey in 2020 were between 1.5 and 1.8 MGD. The *Sewer Plan* states that the two regional interceptors serving Ramsey were design to handle a combined average daily flow of 7.87 MGD. However, the regional facilities downstream of the interceptors are not. The *Sewer Plan* also states that approximately 30% (2.8 MGD) of the capacity at the Anoka lift station is reserved for Ramsey. In either case, the *Comp Plan* states that "If and when growth or sewer demand exceeds the current regional facility sizing, those facilities will require

upgrading".

For purposes of this AUAR, it is assumed that the available capacity in the MCES Regional System is at a minimum 2.8 MGD and could be as high as 3.8 MGD without requiring significant upgrades. This 3.8 MGD figure is based on a telephone conversation held in February of 2003 in which MCES Officials indicated that additional capacity may be available due to slower than anticipated growth and development in other cities. Therefore, it is recommended that the City contact MCES to formalize a new agreement on existing and future available capacity. Future decisions on growth, and the need for infrastructure improvements, can then be planned and executed as necessary.

Existing Urban Flows – Within the existing Urban Wastewater Service Area (Table 18.2), approximately 1,500 residential households and 250 acres of commercial, industrial and institutional development are served by the MCES regional interceptor. The entire Urban Service Area is divided into two service districts that connect to separate regional interceptors: the Mississippi River District and the Rum River District (Figure 18.2). These Districts are divided somewhat along the watershed divide for the two rivers.

Table 18.2: Existing MUSA (Category 1) Flows by District

Description	**Average Daily Flow (MGD)**	**Peak Hourly Flow (MGD)**	**Average Annual Flow (MGY)**	**Average Daily Flow Capacity (MGD)**	**Peak Hourly Flow Capacity (MGD)**
Mississippi River MUSA District	0.161[(1)]	0.475	59	-	10
Rum River MUSA District	0.390[(2)]	1.120	143	-	8
TOTAL	**0.551**	**1.595**	**202**	**2.8 to 3.8**	**18**

(1) Based on 2002 monthly flow records provided by MCES. (2001 Comp Plan estimated at 0.199 MGD)
(2) Based on 2002 average quarterly flow monitoring records provided by MCES. (2001 Comp Plan estimated at 0.406 MGD)
(3) Peak hourly flows were calculated using average design value formulas.

The two regional interceptors serving the City have a combined peak capacity of 18.0 MGD. The Rum River MUSA District, which is served by a 30-inch diameter interceptor, has a maximum design capacity of about 8 million gallons per day (MGD). The Mississippi River MUSA District, which is served by a 30-inch diameter interceptor, has a maximum peak design capacity of about 8 MGD. As stated earlier, it is assumed that 2.8 to 3.8 MGD of average daily flow capacity is available in the regional system. Therefore, it appears that approximately 1.2 to 2.2 MGD of average daily capacity is currently available, without upgrades to regional facilities, for future development in Ramsey.

The capacity of the MCES interceptors appears to be adequate for the existing average daily and peak hourly wastewater flows from each District. In addition, the combined average daily flow of 0.551 MGD does not exceed the MCES limit of 2.8 to 3.8 MGD.

The reserve capacity for future growth with the Ramsey MUSA, therefore, appears to be about 2.2 to 3.2 MGD.

Rural Wastewater Management – In areas outside of the existing MUSA, a total of 3,750 households are served by private on-site septic systems and drain fields. Of these, 3,260 are systems that are outside of the current Urban Growth Boundary. The remaining 490, which are located within the Urban Growth Boundary, are earmarked in the *Comp Plan* to be connected to the MUSA system during phased expansion through about 2015. Approximately half of the 3,750 onsite systems where constructed before 1974 and have not been replaced or upgraded since. The remaining systems are new or have been upgraded since 1974 due to failures or real estate sales. There has been no known or reported groundwater quality issues related to failing septic systems. The City has passed an ISTS ordinance.

Future Wastewater Management. As stated earlier, the City's wastewater collection system is divided into two Districts that generally follow a watershed boundary: the Rum River MUSA District and the Mississippi River MUSA District. The City's 2001 Comprehensive Plan identified areas within the City limits that would receive MUSA wastewater service under future planned expansions through 2015. These areas are all within the Urban Growth Boundary.

In the Rum River MUSA District Urban Growth Area, future expansion is planned to serve two small areas to the north of 163rd Ave. (Figure 18.2). In the Mississippi River MUSA District Urban Growth Area, future expansions are planned for a fairly large area to the west of Ramsey Blvd., and to the north and south of U.S. Hwy. 10, also shown in Figure 18.2.

The RTC Site is located within the Mississippi River MUSA District. It was identified in the City's *2001 Comprehensive Plan*, as amended in 2002, for expansion of the centralized wastewater system between 2000 and 2010. In addition to the RTC Site, the plan identified other Urban Growth Areas to the west of the RTC Site with sewer extension occurring between 2000 and 2015.

(Note: The selection of sub-districts is solely for convenience in determining current and future design flows and was not intended to correlate with any development timelines..)

Methodology: Existing and projected future flows for each District need to be determined in order to consider potential future impacts from the RTC Development. In general, the methodology follows that used in the City's *2001 Comprehensive Plan*, as amended in 2002, and estimates future flows for all areas within the Sewer Service Boundary developed in the *Sewer Plan* (Generally all areas south of Trott Brook).

Flows for the areas currently served by the MUSA will be based on the 2001 MCES reported flows as shown in Table 18.2. Flows for the future Urban Growth Areas are based on projected land use and generally follow the procedures developed in the City's *2001 Comprehensive Sewer Plan*, as amended in 2002 (A summary of the projected

flows is included as Appendix G). For the RTC Site, future flows were estimated based on projected occupancy and development types presented in the latest RTC preferred design shown in Figure 6.1.

Mississippi River MUSA District – To determine future wastewater flows, the Mississippi River MUSA District Urban Growth Area was divided into five sub-districts: the existing MUSA Sub-district, the Rural Sub-district, the RTC Sub-district, the Northwest Sub-district and the Southwest Sub-district (Figure 18.2).

Table 18.3: Projected Wastewater Flows for RTC Sub-district Residential Development

Development Type	**Quantity**	**Occupants per Unit**	**Total Occupants**	**Flow per Occupant (gpd)**	**Total Flow (gpd)**
Mixed Use Residential	1012	5	5,060	75	379.500
Apartment	172	3	516	75	38,700
Duplex	62	4	186	75	13,950
Townhouse	1154	4	4,616	75	346,200
Total Residential	**2,400**		**10,378**	**75**	**778,350**

Table 18.4: Projected Wastewater Flows For RTC Commercial/Service Development

Development Type	**Acres Used (ac)**	**Flow per Acre (gpd)**	**Total Flow (gpd)**
Commercial (Existing Hwy. 10)	32.2	1,500	48,300
Commercial (Service/Convenience)	11.6	1,500	17,400
Commercial (Shopping)	24.4	1,200	29,280
Mixed Use (Retail/Office)	30.6	1,700	52,020
Civic Center	3.6	10,000	36,000
Business Enterprise	35.9	1,000	35,900
Transit	4.5	1,000	4,500
Public/Open Space	58.2	100	5,820
Total Developed Area	**201**		**229,220**

Table 18.5: Mississippi River District Projected Future Wastewater Flows by Sub-district

Sub-district	Existing Average Daily Flow (MGD)	Existing Peak Hourly Flow (MGD)	Future Average Daily Flow (MGD)	Future Peak Hourly Flow (MGD)
RTC Sub-district	0	0	1.010	3.100
Northwest Sub-district	0	0	0.472	1.342
Southwest Sub-district	0	0	0.599	1.677
Rural Developing(1)	0	0	1.427	3.602
Sub-total	**-**	**-**	**3.508**	**6.422**
Existing MUSA	0.161	0.475	0.161	0.475
TOTAL	**0.161**	**0.475**	**3.669**	**6.520**

(1) From 1991 Comprehensive Sanitary Sewer Plan.

The combined future wastewater average and peak daily flows for the Mississippi River MUSA District are 3.669 MGD and 6.520 MGD, respectively (Table 18.5). These flows are well within the range for the design of the local regional interceptor which has a peak daily capacity of 10 MGD. However, it does appear that improvements to downstream MUSA infrastructure, such as the Anoka lift station, may be required at some future date.

In addition, there is a 27-inch sewer main that terminates at a manhole on the eastern edge of the RTC development at the corner of Ramsey Boulevard and 143rd Avenue. Assuming the minimum allowable design slope of 0.07%, the maximum instantaneous flow that can be handled by this line is 8.216 MGD. Therefore, it appears that the existing 27-inch main is sized to handle wastewater flows from the RTC development and future growth from the Urban Growth and Rural Developing Areas.

Note: The 27-inch main mentioned above runs for two blocks before tying into a 30-inch main. Because of this, and the uncertainty of future flows and pipe slopes, it is recommended that a 30-inch sewer main be installed throughout the entire RTC development and, if required, only two blocks of 27-inch main will need replacing in the future.

Rum River MUSA District – To determine the future wastewater flows, the Rum River MUSA Sub-District has been divided into four sub-districts: the Existing MUSA Sub-district, the Rural Sub-district, the Northwest MUSA Sub-districts and the Northeast MUSA Sub-district (Figure 18.2). Table 18.6 shows the current and future flows for the Rum River District.

Table 18.6: Rum River District Projected Future Wastewater Flows by Sub-district

Sub-district	Existing Average Daily Flow (gpd)	Existing Peak Hourly Flow (gpd)	Future Average Daily Flow (MGD)	Future Peak Hourly Flow (MGD)
Northwest MUSA Sub-district	0	0	0.097	0.287
Northeast MUSA Sub-district	0	0	0.021	0.063
Rural Sub-district	0	0	2.221	5.775
Sub-total	**-**	**-**	**2.339**	**6.081**
Existing MUSA	0.390	1.119	0.390	1.119
TOTAL	**0.390**	**1.119**	**2.729**	**5.704**

The combined projected average daily flow for the Rum River District is 2.729 MGD with peak flows reaching 5.704 MGD. Therefore, there appears to be sufficient capacity in the MUSA regional interceptor which is designed for a peak flow of 8 MGD. Again, it is recommended that the City reevaluates their MCES allocation of the interceptor capacity prior to performing an update of their Comprehensive Sewer Plan.

Combined City of Ramsey Flows. Table 18.7 below shows the total future average daily wastewater flow for the entire City to be 6.4 MGD with a peak hourly flow of 12.2 MGD. It should be noted that these flows assume the maximum possible density at final build-out and, therefore, represent the most conservative scenario. As a result, it appears that the existing interceptors are large enough to carry the projected future average daily flows, as well as the projected future peak hourly flows. However, it appears that the future average daily wastewater flow is above the MCES allocated flow of 2.8 MGD as well as the higher allocation of 3.8 MGD. Discussions with MCES on allocated capacity should begin.

Table 18.7: Projected Wastewater Flows for 2020

Sub-district	Future Average Daily Flow (MGD)	Future Peak Hourly Flow (MGD)	Average Annual Flow
Mississippi River MUSA District	3.7	6.5	1,350
Rum River MUSA District	2.7	5.7	985.5
TOTAL	**6.4**	**12.2**	**2,336**

Summary of Environmental Impact. The provision of sanitary sewage collection and transport to a treatment facility is a normal urban service provided by a community as its urban area develops. There is no adverse environmental impact expected as long as the plan for provision of this service is followed according to the City's *2001 Comprehensive Plan*, as amended in 2002 and coordinated with MCES.

Mitigation element - Both the wastewater flows and the projected loadings from the RTC development can be effectively transported and treated by the MCES system. In addition, future development and resulting flows are within the range of those estimated in the City's *2001 Comprehensive Plan*, as amended in 2002. Therefore, it does not appear that there is any cause for specific remediation actions. A 30-inch sewer main is recommended to serve the RTC.

As noted earlier, it will be necessary for the City to update its *Comprehensive Sewer Plan*, following discussion with MCES on increased allocated capacity. In addition, it will be important to measure and test the wastewater flows from the new development on a periodic basis. This will allow the City and MCES officials to monitor the characteristics of the wastewater generated by the development over time and to address any future unforeseen changes.

19. Geologic Hazards and Soil Conditions

19a. *Approximate depth (in feet) to ground water:* **4 minimum, 10 average**
Approximate depth (in feet) to bedrock: **120 minimum, 160 average**

Describe any of the following geologic site hazards to groundwater and also identify them on the site map: sinkholes, shallow limestone formations or karst conditions. Describe measure to avoid or minimize environmental problems due to any of these hazards

19b*. Describe the soils on the site, giving NRCS (SCS) classifications, if known. Discuss soil granularity and potential for groundwater contamination from wastes or chemicals spread or spilled onto the soils. Discuss any mitigation measures to prevent such contamination.*

For an AUAR, a map should also be included to show any groundwater hazards identified. A standard soils map for the area should be included.

19a. The regional water table is four feet from the surface in low areas of the site, but average depth to groundwater is ten feet (Figure 19.1). The easily accessible water table provides a readily available source of groundwater. Bedrock units below surficial materials provide additional groundwater sources. The City of Ramsey drinking water is currently supplied by five wells. Three of these well are in, and adjacent to, the Town Center and pump water from the Franconia-Ironton-Galesville (FIG) aquifer. Details of this system are provided in Item 13. Groundwater flows at low gradients to the south-southeast towards the Mississippi River in the FIG aquifer.

Surficial sediments consist of Quaternary glacial outwash composed primarily of sand and gravel (Figure 19.2). The majority of the site lies within the Langdon Terrace. The northeast edge of the site consists of the Richfield Terrace. Both Terraces are deposits of the historic Mississippi River and consist of sand layers of varying thickness overlaying till or bedrock. Boulder lags and scarps are typically found at the contact between the two Terraces. Clay layers of varying thickness are found at typical depths of 50 feet. Thickness varies and the layers do not appear to be continuous. These clay layers inhibit the downward flow of groundwater to lower bedrock units. The clay is typically mixed with sand or gravel, or has pockets of sand and gravel. Silt, clay, and hydric soils can be found at or near the surface in some areas. These materials are hydraulic barriers retaining surface water where surface water features are not reflections of groundwater.

Beneath the Town Center, minimum depth to bedrock is 120 feet and average depth is approximately 160 feet (Figure 19.3). The uppermost bedrock unit below the Town Center is the Franconia Formation (Figure 19.3). The Upper Franconia is fine- to coarse-grained dolomite cemented sandstone with thin beds of shale. The Lower Franconia units are glauconitic and feldspathic well-cemented sandstone inter-bedded with thin shale layers. The two are separated by a thicker shale bed, which is far less able to transmit water, further slowing the downward flow of water to deeper aquifers. Below the

Franconia is the Ironton-Galesville Formation. The Ironton and Galesville formations are medium to very coarse-grained sandstones interlaid with thin beds of shale. The formations are separated from the water at the surface by clay layers in glacial material and by the thick shale bed in the Franconia Formation. These units of shale and clay act as "aquitards", meaning they have low permeability and slowly transmit water, or retard the flow of water to lower bedrock units.

The Minnesota Geological Survey (MGS) is currently reviewing the bedrock geology of this region. A final map from this study will be available in fall 2003. The study identifies the possibility of shallow bedrock valleys where the St. Lawrence formation is absent throughout Anoka County. These shallow valleys can be difficult to identify, as the St. Lawrence is often misinterpreted as Upper Franconia. It is typically present as a cap on high bedrock areas. Well logs from the project site (Figure 19.3) indicate that the St. Lawrence does not exist below the Town Center, but because of common misinterpretations, a thin layer may be present.

Through the course of the MGS study, a bedrock valley was identified two miles north of the Town Center site (Figure 19.4). The valley cuts down through all upper bedrock units into the Ironton-Galesville Formation. Bedrock valleys bring quaternary sediments in direct contact with deep bedrock formations. This interaction may result in the quaternary aquifer recharging bedrock aquifers without the typical aquitards that protect these aquifers from surface pollutants.

19b. Soils within the Town Center are highly permeable sand and gravel in the upper 50 feet. These are the soils through which RTC stormwater infiltrates (Figure 12.2). Soil borings on-site indicate the first foot of soil is silt and sand, followed by poorly graded fine to medium-grained sand with traces of gravel. The Natural Resources Conservation Service (NRCS) classifies the soils on site as Hubbard series, Duelm, and Isanti. The Hubbard soils classified on site are coarse sand with slopes that range from 0-12 percent. The Duelm is a loamy coarse sand and the Isanti is a sandy loam. The Isanti is a hydric soil.

All soils on site have a permeability that ranges from six-to-twenty inches per hour. The high permeability of the soils increases the potential for shallow groundwater contamination. To reduce this risk, pretreatment of stormwater runoff prior to infiltration and community education programs on household chemical and fertilizer use can be implemented.

City wells were tested for tritium as part of the wellhead protection area (WHPA) and drinking water supply management area (DWSMA) delineation for the City of Ramsey. Tritium is a form of hydrogen and can act as an indicator of groundwater age, but does not pose a health risk. Atmospheric tritium levels increased during the 1950's due to testing of atomic bombs. Therefore, tritium levels are used to indicate whether groundwater entered the ground before or after 1950. Public water supply wells with high levels of tritium are classified as "vulnerable" to surface processes because of the relatively recent (post-1950) interaction with the surface. Tritium levels in the three city

wells around the Town Center are high. The high levels may be caused by the rapid rate of infiltration through the highly permeable sand and gravel materials of the Anoka Sand Plain, or by the interaction of the quaternary and bedrock aquifers in the bedrock valley to the north of the site.

Water quality tests of Ramsey public water supply wells including tests for nitrates, pesticides, volatile organic compounds, and arsenic were found to meet all of the Safe Drinking Water Act drinking water limits. Manganese and iron are present and may produce staining and metallic tasting water, but do not pose a health risk. Clay layers in the glacial material and shale layers in the Franconia Formation slow or impede the course of potential surface pollutants towards the lower bedrock formations and therefore help to maintain the quality of the Ramsey water supply.

Summary of Environmental Impact. There were no geologic hazards within the Town Center site. A bedrock valley was identified by the MGS approximately a mile and a half north of the Town Center. Due to the high permeability of the Anoka Sand Plain, the surficial aquifer is susceptible to contamination from surface activities. This contamination could potentially reach the water supply. The following mitigation plan details means to minimize the risk of contamination.

Mitigation element. The high permeability of the soils at the Town Center are ideal for the implementation of infiltration practices that will manage stormwater runoff, provide flood control and recharge the water table aquifer. However, the high permeability also increases the risk for potential contamination of groundwater resources. In order to mitigate this risk, best management practices (BMPs) and community education programs will be implemented.

Extensive use of herbicides, pesticides, and fertilizers on residential and public lawns, and agricultural fields is discouraged in the City of Ramsey, as stated in the City's *2001 Comprehensive Plan*. Implementing community education and awareness programs to discourage the above stated activities, as well as to inform on household and business chemical usage and hazardous waste storage and disposal will help reduce the potential for groundwater contamination by these types of substances. The appropriate use of native vegetation will also reduce the need for herbicides, pesticides and fertilizer throughout the Town Center.

Infiltration of stormwater under carefully managed conditions is essential for recharging groundwater. Infiltration through soil also removes nutrients and other potential pollutants from surface water, pretreating and maintaining the quality of the water. Potential groundwater contaminants from stormwater runoff associated with land uses similar to the proposed Town Center land uses include nitrates, pesticides, organic compounds, and heavy metals. The potential for contamination from these substances is greatly reduced when stormwater runoff is pre-treated prior to infiltration and BMPs are implemented. Pretreatment methods vary, but include the use of permeable materials to promote infiltration and pollutant removal by soil, vegetation to filter surface water, settling to remove solids and pollutants associated with them, and preventative measures

such as limiting the storage of chemicals and homeowner education on chemical use. Several manuals for design, installation and maintenance of BMPs are available to guide the City. Citizen and staff education will also help implement protective practices.

The use of these types of practices increases wildlife habitat and public green space while reducing the risk of groundwater contamination. Several manuals are available to guide actual installation, use and operation/maintenance of chosen BMPs.

20. Solid Wastes; Hazardous Wastes; Storage Tanks

***20a**.Describe types, amounts and compositions of solid or hazardous wastes, including solid animal manure, sludge and ash, produced during construction and operation. Identify method and location or disposal. For projects generating municipal solid waste, indicate if there is a source separation plan; describe how the project will be modified for recycling. The total quantity of municipal solid waste generated and information about any recycling or source separation programs of the RGU need to be included. If hazardous waste is generated, indicate if there is a hazardous waste minimization plan and routine hazardous waste reduction assessments.*

***20b**. Not applicable to an AUAR.*

***20c**. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans. Potential locations of storage tanks associated with commercial uses in the AUAR should be identified (for example, gasoline tanks at service stations).*

20a. Information on solid waste generation expected from the RTC site was obtained from Ace Solid Waste Inc. (Rick Nelson, 763-427-3110). The analysis used the preferred design shown in Figure 6.1 and the extensive local experience of Ace Solid Waste Inc. to calculate the most likely amount of solid waste that will be generated by the Town Center. The completed analysis is shown in Table 20.1.

Table 20.1 Solid Waste Analysis

Use Type	Solid Waste (tons/month)
Business/Medical Office	21.33
Commercial	12.11
Mixed-Use	86.93
Residential	123.65
Retail	26.99

20b. Not applicable to an AUAR.

20c. There are no underground storage tanks at the Town Center Site at this time, nor were there any identified to have been present historically. A Phase I investigation conducted by Delta Environmental Consultants, Inc. in 2002 identified two sites within one-half mile of the project area that were of regulatory environmental concern (Figure

19.4). Both sites were part of the Minnesota Pollution Control Agency's (MPCA) Leaking Underground Storage Tank (LUST) Cleanup Program. Brook's Food Store (LUST #7470) at 14550 Armstrong Boulevard Northwest was added to the LUST database in 1994 due to a release of unleaded gasoline. Custom Coaches (LUST #1042) at 6845 Highway 10 North was added to the LUST database in 1989 after a release of gasoline. Both sites were closed as of 1997.

Within the project area, there is an active site in the MPCA's Voluntary Investigation and Cleanup (VIC) program (Figure 19.4). The site is located on the corner of Ramsey Boulevard and Highway 10, and is identified as VP8480. In July 1963, a railcar accident resulted in the release of powdered lead arsenate. There was also a report of several barrels, possibly containing lead arsenate, being buried at this same location at a later, unspecified, date and then removed. An electromagnetic induction survey indicated three disturbed areas in the subsurface that could be burial locations. Burlington Northern Santa Fe (BNSF) has no record of the burial of any items. From soil boring investigations, the extent of arsenic contamination is 350 feet long and 40 feet wide (Figure 19.4).

The Minnesota Department of Health (MDH) and the United States Environmental Protection Agency (USEPA) determined the maximum contaminant level (MCL) for arsenic in drinking water to be 50 parts per billion (ppb). In the 1990's the limit was reviewed and changed to 10 ppb. The new regulation does not go into affect until 2006. Groundwater samples were collected from monitoring wells at the spill site and from several residential wells near the spill. Soil samples were taken at varying depths from soil borings at the spill site. Of forty-two soil samples taken from 1998-2000, eight were over current MCL for arsenic. Groundwater samples were taken from six monitoring wells in 2000, and all six were over the current limit. In 2001, only one of these wells was over the MCL. Sample collection methods in 2001 differed from those used in 2000. The only arsenic level that exceeded the present MCL in a sampled residential well was to the north of this site. Because groundwater flow is to the south, the BNSF site is not thought to be the source of arsenic in that well.

A supplementary Phase II investigation has been completed for this site and is under review by the MPCA.

BNSF indicated its intent to remove the contaminated soils prior to the construction of the Burger King restaurant, parking lot, and stormwater detention pond. BNSF currently has plans to remove the contaminated soils in the summer of 2003. BNSF and the MPCA should be notified prior to any earth moving activities. The project representative for the MPCA is Karen Kromar, who can be contacted at (651) 297-3080. The BNSF representative is Mike Woolridge, who can be contacted at (763) 782-3483. Thomas Dahl, of Retec, performs environmental testing for BNSF at this site and can be contacted at (651) 222-0841.

BNSF hauls hazardous materials along the tracks that adjoin RTC. There has been only one known derailment of hazardous materials on the site over the past 40 years, as

discussed above. The transportation of hazardous materials is regulated at the federal, state and local level. Hazardous materials hauled through this area are reported to the Anoka County Emergency Management Department and are required to be properly placarded, stored and transported according to all applicable regulations. The City of Ramsey Police and Fire Departments are fully trained and prepared for potential derailments. Further information on City preparedness plans can be obtained from Fire Chief Dean Kapler at (763) 427-3764.

The Phase I Environmental Assessment performed in June 2002 by Delta Environmental Consultants Inc., concluded, based on site inspection, that hazardous substances and petroleum products were used and stored on an abandoned farmstead along Ramsey Boulevard Northwest within the Town Center site (Figure 19.4). Due to the unsecured nature of these substances, the potential for release or improper disposal exists. Materials identified at the farmstead included cement cans, motor oil containers, an open bucket of motor oil, rust retardant, bonding adhesive, car batteries, antifreeze, air conditioners, refrigerators, and several abandoned vehicles. Tests of ceiling tiles, floor tiles, insulation, and siding from the abandoned farmstead buildings were negative for asbestos. If this site is found to have contaminated soils or groundwater, appropriate remediation will be needed.

In order to safeguard and sustain the public water supply, "wellhead protection areas" (WHPAs) and "drinking water supply management areas" (DWSMAs) are delineated around public water supply wells (Figure 20.1). The Ramsey *Wellhead Protection Plan* was developed in cooperation with Anoka County Environmental Services as part of a ten-city program to delineate WHPAs and identify potential contaminant sources by parcel number. The WHPA is the recharge area for the public water supply. Parameters used to determine recharge area include a ten-year travel time, aquifer transmissivity, pumping volume, flow direction, flow boundaries, and geologic setting. The DWSMA is the geographic area including and adjacent to the WHPA extended to public roads and/or property lines.

WHPA and DWSMA designations restrict or specially manage land uses that could degrade the quantity and quality of the public water supply. The most controlled land use in the WHPA is the use of underground storage tanks to store petroleum and any other potentially harmful substance. Underground tanks are allowed in the WHPA if the tanks are double-walled and groundwater around the tank is monitored for contamination from a possible leak in the tank. However, the use of underground tanks in these areas is strongly discouraged. In the case that a leak occurred, alternative water sources, such as the emergency connection with the city of Anoka, would potentially have to be used. Ramsey city wells would be particularly susceptible to an up gradient leak. In the event of a water supply emergency, the City would respond using its normal police and fire emergency response plan until a specific emergency response plan can be developed as part of an updated water supply plan.

Summary of Environmental Impact. There is an active MPCA VIC site in the southeast corner of the site as result a release of lead arsenate. The soils and groundwater in that

area were contaminated with arsenic. BNSF is working with current landowners and the MPCA to remove the contaminated soils during the summer of 2003. Additionally, improperly handled and stored hazardous materials on an abandoned farmstead may pose an environmental impact. Finally, the Town Center site includes the WHPAs and DWSMAs for the city of Ramsey west well field. The following mitigation plan discusses how to minimize the impact to the drinking water supply within the regulated areas, as well as how to minimize further impact by the farmstead and VIC sites.

Mitigation element. To decrease the amount of solid waste generated within the City, Ramsey maintains the following policies as stated in its *2001 Comprehensive Plan* -

- Work with the Anoka County Integrated Waste Management Department to develop and implement programs that contribute to waste reduction, resource recovery, recycling and limited landfilling;
- Continue to support curbside recycling of reusable waste materials through educational events, promotional events, and volunteer efforts;
- Research grants and funding programs through federal, state, and local organizations that support the "Three R's" (reduce, reuse, and recycle); and
- Continue to pursue and support research efforts in innovative techniques that enhance the environment, provide alternative means of energy, and reduce the waste stream.

The implementation of these policies will help to reduce the quantities of solid waste produced at the Town Center.

The contaminated soils at the BNSF VIC site must be removed as soon as possible under the plan for the summer of 2003. Removal could potentially occur during construction of the multi-modal facility, Highway 10 improvements, or Town Center construction. BNSF and the MPCA should be contacted in regards to any earth moving activity in the vicinity of the spill site. The project representative for the MPCA is Karen Kromar, who can be contacted at (651) 297-3080. The BNSF representative is Mike Woolridge, who can be contacted at (763) 782-3483. The contamination of groundwater may restrict the installation of additional water supply wells near Ramsey Boulevard and Highway 10.

Further investigation may be needed in order to determine the extent, if any, of contamination at the abandoned farmstead. If there is soil or groundwater contamination due to the improper handling and storage of chemicals and hazardous substances at this site, appropriate removal and remediation of the contaminated areas may be required. State and county fiscal aid programs exist for the cleanup and investigation of these types of sites. The MPCA Site Assessment Unit has fiscal aid available for Phase I and Phase II investigations; contact Tom Whear at 651-296-7349 for additional information. The United States Environmental Protection Agency also currently has funding for cleanup and investigation. For additional information regarding cleanup and investigation programs, the Minnesota Brownfields Resource Guide is available at http://www.pca.state.mn.us/publications/reports/brg-0901.pdf.

Within the WHPA, underground storage tanks and infiltration are not recommended. Should contamination occur due to these or any other practice, alternative water supply sources may be required. Currently the city water towers store an extra amount of water equivalent to meet the supply need for one day. There is also an emergency connection with the City of Anoka for additional water needs. A contingency plan should be developed as part of the next water supply plan update to deal with contamination. According to the EPA, a contingency plan should include the following:

- Basic water supply information
- List of potential contamination sources and location
- Mapped WHPA
- Firefighting plan for toxic chemical storage locations
- Surface spill emergency response plan
- Alternative short term water supply
- Alternative long term water supply

These could be coordinated with existing city plans, data, and management procedures, many of which are detailed in the city's Water Supply Plan, WHP Plan, *2001 Comprehensive Plan*, and this document. A contingency plan is also required by the State as part of the city's water supply plan (M.S., Section 103G.291, subd.3). Guidelines provided by the DNR and Metropolitan Council for the content of this water supply plan element indicate the need for the following components:

- emergency telephone contact list
- current water sources and service area description
- procedure for augmenting supplies
- demand reduction procedures
- procedures for water allocation
- establishment of triggers for implementing plan components
- enforcement
- water supply protection

As part of its next revision, the City of Ramsey will amend its *1999 Water Supply Plan* to include an emergency response element. The amendment will include all of the above components. This will occur prior to applying for a DNR appropriation permit amendment, which would likely trigger the DNR request for emergency plan completion, as well.

Use of underground storage tanks within the WHPA should be discouraged. If underground storage tanks are used to store anything other than water within the WHPA, the tanks must be double-walled and the groundwater around the tank must be appropriately monitored for contamination. The development of a contingency plan as discussed previously should address the management and procedures that would be implemented in the case of a leaky tank.

Infiltration practices within the WHPAs will be carefully controlled to prevent any water that has not been pre-treated from entering. Rain barrels, grading, and other on-lot best management practices should be utilized in these areas as long as the infiltration of street,

parking lot, or industrial runoff does not occur within the WHPA. Implementation of community education programs for residential and business contaminant sources, such as fertilizers and hazardous household products, will reduce the risk of groundwater contamination from these sources.

The installation of monitoring wells throughout the WHPA would be appropriate to protect the water quality of the upper aquifer. Should contamination occur, a network of monitoring wells would help to quickly identify the contaminant source and aid in the quick remediation and possibly reduce the extent of contamination. A monitoring well network would also help to understand the relationship between the pumping in the Franconia-Ironton-Galesville aquifer and the upper aquifer. The extent of any further monitoring will be determined during wellhead protection plan development and State water appropriation permitting.

21. Traffic

For most AUAR reviews, a relatively detailed traffic analysis will be needed, especially if there is to be much commercial development in the AUAR area or if there are major congested roadways in the vicinity. The results of the traffic analysis must be used in the response to Item 22 and to the noise aspect of Item 24. Instead of responding to the information called for in the EAW Guidelines for Item 21, the following information should be provided:

- *Description and map of existing and proposed roadway system (including state, regional and local roads to be affected by the development of the AUAR area. This information will include existing and proposed roadway capacities and existing and projected background traffic volumes.*
- *Trip generation data for each major development scenario broken down by land use zones and/or other relevant subdivisions in the area. The projected distributions onto the roadway system must be included.*
- *Analysis of impacts of the traffic generated by the AUAR area on the roadway system, including: a comparison of peak period total flows to capacities and analysis of Levels of Service and delay times at critical points (if any).*
- *A discussion of structural and non-structural improvements and traffic management measures that are proposed to mitigate problems.*

NOTE: in the above analyses, the geographical scope must extend outward as far as the traffic to be generated would have a significant effect on the roadway system and traffic measurements, and projections should include peak days and peak hours, or other appropriate measures related to identifying congestion problems, as well as ADTs.

Appendix B contains a complete traffic analysis compiled by Meyer, Mohaddes Associates, Inc. for this AUAR. The report entitled *Ramsey Town Center Traffic Analysis* was completed in March 2003 and is contained in its entirety in the Appendix.

Classification Summary

The project site is served by a network of principal and minor arterial roadways and local streets as shown in Figure 21.1. Highway 10/169 near the study area is a four-lane divided US Highway that is classified as a Principal Arterial. Ramsey Boulevard (CR 56) and Industry Avenue (CR 116) near the study site are two-lane County Roads that are classified as B-Minor Arterials. Armstrong Boulevard (CSAH 83) and Sunfish Lake Boulevard (CSAH 57) near the study area are two-lane County State Aid Highways that are functionally classified as Collectors. Sunwood Drive, a two-lane local street that extends in an east-west direction and connects Ramsey Boulevard to Industry Avenue and Sunfish Lake Boulevard, is identified in the City of Ramsey *2001Comprehensive Plan* as a future Collector. Anoka County is in the process of requesting a functional class change for Industry Avenue and Armstrong Boulevard to upgrade their designations to A-Minor Arterial.

Traffic Volumes

Average daily traffic volumes on streets and highways in the study area vary widely with TH 10 carrying about 42,000 vehicles per day (vpd) east of Ramsey Boulevard and 31,000 west of Armstrong Boulevard. By contrast, volumes on the other roadways in the study area range from about 5,000 to 8,000 vpd, with the exception of Industry Avenue between Ramsey and Armstrong Boulevards, which carries about 2,400 vpd.

Planned Improvements

The intersection of TH 10 and Ramsey Boulevard is currently a T-intersection. The city has approved the construction of the south leg at this intersection by a private developer. However, after discussions with the Anoka County staff, the proposal to construct this leg is on hold as a result of budget considerations and other factors. Signal operations improvements at the intersection of Sunfish Lake Boulevard and TH 10 to address existing congestion have been identified, but are deferred because of current state budget considerations.

No other roadway projects are currently programmed for the study area, but several regional studies are in process or recently completed that affect the study area. The TH 10 IRC Study/Corridor Management Plan[2] is a regional roadway planning analysis for Mn/DOT that evaluated future needs on TH 10 through Anoka County. While the study findings have been adopted, the improvements suggested in the study have not yet been incorporated into the State Transportation Improvement Plan, nor are they yet in the Metro Division *Transportation Systems Plan*. Updates of these planning documents are expected to address the recommendations from the TH 10 study. The TH 10 study estimates that traffic volumes on TH 10 will grow between 40 and 50 percent by the year 2025 to over 50,000 vpd in the study area. The report notes that to accommodate this level of volume, even if the Northstar Commuter Rail service and a new Mississippi River crossing are implemented, will require TH 10 to become a six-lane freeway through Ramsey by 2025 with interchanges at Sunfish Lake and Ramsey Boulevards.

In the interim by 2010, the report suggests that TH 10 in the study area be expanded to a six-lane expressway with improved intersections. In the near terms by 2005, the study suggests that signal timing optimization and improvements to Ramsey, Armstrong, and Sunfish Lake Boulevards are necessary. The report notes that one "concern with constructing a 6-lane expressway as an interim strategy to constructing a freeway is the roadway alignment. As an expressway, it is preferable to have TH 10 as far away as possible from the parallel railroad in order to allow for vehicle stacking at the intersections. As a freeway, it would be preferable to have the roadway alignment as close to the railroad as possible so that interchanges can provide grade separation over both the highway and the railroad. "[3] The study also notes that environmental documentation for the proposed improvements has not started and that an EIS will likely be required for the expansion of the roadway.

[2] H. R. Green Co., *TH 10 IRC Study Corridor Management Plan*, Mn/DOT, January 2002
[3] *ibid.* Page 6-24.

The draft Scoping Document for the Northwest Metro Corridor and River Crossing Study[4] has been completed by Mn/DOT and the final is expected to be published in May 2003. This document explored a reasonable range of alternatives for a new Mississippi River crossing and for the highway and network elements needed to connect the crossing to the existing regional roadway system. The new crossing would be located west of the TH 169 crossing in Anoka and east of the TH 101 crossing in Elk River. The Scoping Document has established the purpose and need for the study and the Draft Scoping Decision has identified a corridor for the crossing.

It is anticipated that the northern terminus of the crossing will likely be west of Armstrong Boulevard and will likely connect to an extension of Industry Avenue. The next step for the crossing would be to start preparation of an EIS, but this work has not been initiated because of the current state budget status and issues with the City of Dayton about alignments south of the river. It is unlikely that interchanges with TH 10 would be allowed at both Armstrong and the river crossing, but might be possible and would depend on the distance separating the interchanges and the function of each in the roadway system. Detailed planning for the section of TH 10 adjacent to the project site would be part of an EIS for the river crossing, if/when it is initiated.

Traffic volumes on Armstrong Boulevard and Industry Avenue would be directly affected by the proposed river crossing if the new roadway terminates in an extension of Industry Avenue. The portion of Armstrong Boulevard south of Industry Avenue, currently a direct connection to and across TH 10 would become a local-serving street, while north of Industry Avenue, its regional role serving traffic north and west would be expanded since it would directly connect to the new river crossing. Similarly Industry Avenue would be expected to see an increase in regional traffic. Anoka County's proposal to change the functional class on these roadways to Principal Arterial is in anticipation of this increased regional role.

The project site is located west of the portion of Anoka County served by fixed route transit service and is currently served only by Anoka County Traveler demand responsive service. The North Star commuter coach operated by Mn/DOT, which currently provides peak period, peak direction, express service between Elk River, Coon Rapids and Minneapolis, is expected to serve a park and ride at the project site in the future. The Northstar service is a demonstration project that is operating motor coaches along the proposed route for the Northstar commuter rail service and is currently carrying between 500 and 600 passenger trips per day[5].

A Final Environmental Impact Statement[6] has been completed for the Northstar Corridor. The preferred alternative for the corridor is a commuter rail service that would operate on the freight railroad tracks that are adjacent to the site. In the FEIS, the Ramsey station location was dropped in favor of the Anoka station location for the preferred alternative. However, the Ramsey station location is listed in the EIS as a candidate for expansion once service has commenced.

[4] *Northwest Metro Corridor and River Crossing Study*, Mn/DOT, Draft, April 2002
[5] *Rider Report, Northstar Commuter Coach*, Mn/DOT, October 2002
[6] BRW, Inc., *Northstar Corridor FEIS*, Mn/DOT, March 2002

Accordingly, this traffic analysis assumes that a rail station is active on the site in the future and that 450 riders per day would use the Ramsey stop[7].

Traffic Analysis Report Summary

A detailed Traffic Analysis has been prepared to fully investigate the effects of the proposed project on the local and regional roadway systems. This report has been included in its entirety in Appendix B.

Two sets of future conditions, Future Base and Future with Project, were analyzed. The Future Base represents growth in traffic from non-project sources at the year of project buildout, which was assumed to be the year 2007. A growth factor was used to account for the regional growth in traffic in the area irrespective of the proposed development. This growth factor was calculated to be two percent per year on the basis of forecasts for 2025 from the Metropolitan Council. This level of growth is consistent with the volume projections in the TH 10 IRC Study.[8]
The Future Base also includes the effects of other approved development projects in the vicinity of the project site that anticipate being constructed and occupied within the 2007 time line. The following two projects were identified as having a qualifying development time line:

- The Rivenwick 3rd Subdivision residential development, which is located south of TH 10 at Ramsey Boulevard, would have 112 townhouses and would add a fourth leg to the intersection of Ramsey Boulevard and TH 10.
- The Bright Keys residential development, located across Industry Boulevard from the project site near Ramsey Boulevard, would have 284 townhouse units.

Traffic for the Rivenwick 3rd Subdivision, as reported in that project's traffic study[9], was added into the Future Base. Traffic for the Bright Keys development was generated using standard trip generation rates and assigned to the study area street system using the data developed for the project traffic forecasts (see below).

The Future with Project conditions were developed by adding the project trip generation to the Future Base volumes. Trip generation for the proposed development was estimated using the rates from the 6th edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. Some trips generated by a mixed-use development of the project type will move between uses within the development site and not reach intersections external to the site and should be excluded from traffic assignment at those locations. This internal trip making is attributed to the interaction between various land uses in a development. Additionally, some trips will take alternate forms of transport, which can be bicycling, walking, and use of transit. The presence of sidewalks, street network density and proximity to transit facilities affect the amount

[7] Ridership estimate is from the supplemental analysis commissioned by the City of Ramsey and presented to the Northstar Corridor Development Authority in support of a Ramsey station (HKGI/SRF, April 4, 2000).
[8] Table 3.4-5 of the TH 10 study reports growth rates of 1.66 and 1.96 percent per year for TH 10 with and without the Northstar Commuter Rail respectively.
[9] SRF, Inc., Traffic *Study for Rivenwick 3rd Subdivision Residential Development in the City of Ramsey*, October 2002.

of trip making by non-auto modes. Because of the limited nature of transit service to the site, no reductions have been made for alternate mode use.

Rather, a single factor was used to calculate the percentage of trips that would remain internal to the proposed redevelopment. This factor considers the diversity of uses within the project and their potential to create linked trips among the project land uses. This factor is based on ITE data for mixed-use developments and is a function of the size and mix of land uses. For the proposed project, the diversity factor indicates that approximately nine percent of AM peak trips and about 16 percent of PM peak trips would be internal.

No adjustments for pass-by or diverted traffic[10] within the site were made, although some of the uses would warrant incorporation of such reductions. Accordingly, the amount of linked trips is conservatively low in relation to the scale and mix of land uses.

Table 21.1 shows the trip generation rates for the proposed redevelopment scenario estimated using the ITE rates for both the AM and PM peak hours. Northstar riders who would park and ride from the site (assumed to be 150 peak hour trips) were included in the analysis, but were added directly to the intersection traffic assignment and are not shown in the trip generation numbers in Table 21.1. Since the existing site is largely vacant and not generating any traffic, no adjustments were made to subtract existing trips from the project site.

Table 21.1: Project Trip Generation

		AM PEAK HOUR			PM PEAK HOUR		
	Daily	Total	In	Out	Total	In	Out
Total New Trips	51,200	2,920	1,700	1,220	5,210	2,480	2,730

Future direction of approach trip distribution for the site-generated trips was estimated using forecast data for zones in the project area from the Metropolitan Council's regional travel demand forecasting model and used to assign trips to turning movements at the study area intersections. The regional forecasts used for this analysis did not include the new Mississippi River crossing. Accordingly, traffic distribution is highly biased with about 43 percent of the trips being made to and from the south and east along TH 10 (this also includes traffic destined south on TH 169). It should be noted that with the new Mississippi River crossing, approximately one-third to one-half of the project trips on TH 10 to the south and east would redistribute to the new crossing.[11]

AM and PM peak hour capacity analyses were conducted for all the study area intersections using Synchro software that estimates delay at intersections on the basis of *Highway Capacity Manual*[12] procedures. Since many of the intersections included in the analysis are currently stop controlled, it is important to distinguish that while signalized and all-way stop controlled

[10] Pass-by and diverted trips are opportunity trips that are already on the street system and divert to a new land use. As such, these trips are included in the counted traffic volumes (other than at site access points) and are double-counted in the trip generation rates for some retail uses.
[11] See *Ramsey Smart Growth Twin Cities Opportunity Site* (Calthorpe Associates, 2003)
[12] Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C.

intersections are analyzed for total intersection delay, two-way stop controlled intersections are analyzed only for minor approach delay. Level of Service D is a generally acceptable standard for planning and design of urban transportation facilities. At Level of Service E, poor intersection operations occur as traffic volume approach capacity and LOS F represents extremely congested conditions.

Table 21.2 shows the results of the capacity analyses at the study area intersections for existing conditions and for both Future scenarios.

Table 21.2: Level of Service Comparison

Intersection	Traffic Control at Intersection	Existing[(a)]		Future Base[(a)]		Future w Project[(a)]		Mitigated[(a,b)]	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Armstrong Blvd at TH 10	Signalized	B	A	B	B	F	F	C	C
Ramsey Blvd at TH 10	Signalized	B	A	C	B	F	F	C	D
Sunfish Lake Blvd at TH 10	Signalized	C	F	D	F	F	F	C	E
Armstrong Blvd at Industry Ave	One way Stop	(B)	(B)	(B)	(B)	(C)	(E)	A[(c)]	A[(c)]
Ramsey Blvd at Industry Ave	All-way Stop	B	B	C	B	F	F	C[(c)]	C[(c)]
Industry Ave at Sunfish Lake Blvd	All-way Stop	B	C	C	C	D	F	A[(c)]	B[(c)]
Ramsey Blvd at Sunwood Drive	One way Stop	(B)	(B)	(B)	(B)	(F)	(F)	C[(c)]	C[(c)]
Sunwood Drive at Industry Ave	One way Stop	(B)	(B)	(B)	(B)	(C)	(F)	B[(c)]	B[(c)]
Sunwood Drive at Armstrong Blvd	One way Stop					(F)	(F)	A[(c)]	B[(c)]
NS2 Street at Industry Ave	One way Stop					(B)	(C)	(B)	(C)
NS3 Street at Industry Ave	One way Stop					(C)	(F)	A[(c)]	A[(c)]
NS5 Street at Industry Ave	One way Stop					(B)	(C)	(B)	(B)
EW1 Parkway at Ramsey Blvd	One way Stop					(F)	(F)	(B)	(B)
EW1 Parkway at Armstrong Blvd	One way Stop					(B)	(F)	(A)	(B)

Notes:
(a) Values in parentheses indicate Minor Approach LOS only
(b) Mitigated conditions include lane adjustments and lane additions at intersections as noted in the text.
(c) Intersection is signalized in the mitigated condition

Under existing conditions, the intersection of TH 10 and Sunfish Lake Boulevard is operating in substandard conditions (worse than LOS D) in the PM peak hour. The other intersections are operating in good conditions in both peak hours. However, the analysis of conditions at TH 10 and Ramsey and Armstrong Boulevards indicates that conditions are unstable, particularly in the PM peak hour when the Ramsey and Armstrong approaches are at LOS F and E respectively. Left turns from TH 10 are also at LOS F and E respectively at these intersections. Under these conditions, moderate increases in volumes on either Ramsey or Armstrong Boulevard or left turning from TH 10 would cause conditions to deteriorate similar to what is currently experienced at Sunfish Lake Boulevard and the intersections could quickly move into LOS E and F.

The Future Base conditions show that addition of the background growth in traffic will cause the intersection of TH 10 and Sunfish Lake Boulevard to deteriorate to LOS D during the AM peak period. The other intersections in the study area remain in acceptable conditions. Unstable

conditions continue to be present at the intersections of TH 10 and Ramsey and Armstrong Boulevards.

Project traffic would cause the intersections on TH 10 to deteriorate to LOS F and would cause the stop-controlled intersection on Industry Avenue, Ramsey Boulevard, and Armstrong Boulevard to move into LOS E and F conditions during one or both peak periods.

New intersections created by the project with Industry Avenue (see Figure 21.2) would operate in acceptable conditions with the exception of the central north-south street (NS3) at Industry Avenue during the PM peak period. The two new intersections of the east-west parkway (EW1) with Ramsey and Armstrong Boulevards would operate in unacceptable conditions during at least one peak period.

Within the project site, the extension of Sunwood Drive would be the primary east-west connector street in the project site and is estimated to carry 10,000 to 13,000 vehicles per day (vpd) west of NS6 Street. Volumes on Sunwood west of Ramsey would be about 18,000 vpd as shown in Figure 21.2. West of NS6 Street, the volume on Sunwood Drive would be adequately handled by a two-lane cross section (one lane in each direction). However, left-turn lanes would be needed at cross streets. Between NS6 Street and Ramsey Boulevard, four lanes would be needed to accommodate the projected volumes. Two-way or all-way stop control at the intersections of Sunwood Drive internal to the site would provide LOS C or better conditions for the level of traffic projected at those locations, although the intersections with NS~~1~~6 and/or NS~~2~~5 Streets may require signalization for acceptable PM peak hour operations.

The EW1 parkway would carry about 3,600 vpd on the western end of the project and between 5,000 and 9,000 vpd on the eastern end. The proposed one-lane parkway cross section would be adequate for the segments of the EW1 parkway.

The other east-west streets internal to the project, because of their discontinuous nature would carry less volume than either Sunwood Drive or the EW1 Parkway and would generally be under 4,000 vehicles per day (and some would be in the under 1,000 range). Two-lane cross sections and stop (or yield control on the lower volume ones) would be appropriate.

The north-south streets internal to the project would carry slightly higher volumes, particularly the three streets that would have full access intersections with Industry Avenue. Those streets would have between 2,100 and 5,700 vehicles per day. The other north-south streets inside the project would be expected to have less than 2,000 vehicles per day, with the exception of the NS~~1~~6 Street that serves the employment cluster in the southeast corner of the site, which would have upwards of 4,000 vpd. Two-lane cross sections and stop (or yield control on the lower volume ones) would be appropriate although signals may be required at the NS6 and/or NS5Streets intersections with Sunwood Drive.

Summary of Environmental Impact. Direct environmental impacts due to the traffic analysis are addressed in Items 22 and 24, which address vehicle related air emissions, and dust, odors, and noise, respectively.

Mitigation element. Analysis of the intersection operations indicates that lane additions and installation of intersection channelization and traffic signals would be adequate to mitigate the project impacts at the intersections in the study area. The following roadway widenings are suggested:

- Ramsey Boulevard—widen to five lane cross section south of Industry Avenue to provide two through lanes in each direction and a left turn lane/center median
- Industry Avenue—widen to five lane cross section west of Ramsey Boulevard to provide two through lanes in each direction and a left turn lane/center median

The existing cross sections on Armstrong Boulevard north of the railroad, Sunwood Drive and Industry Avenue east of Ramsey, and Sunfish Lake Boulevard north of the railroad would be adequate to meet the future demand.

Turn lanes and lane adjustments would be needed at the following intersections:

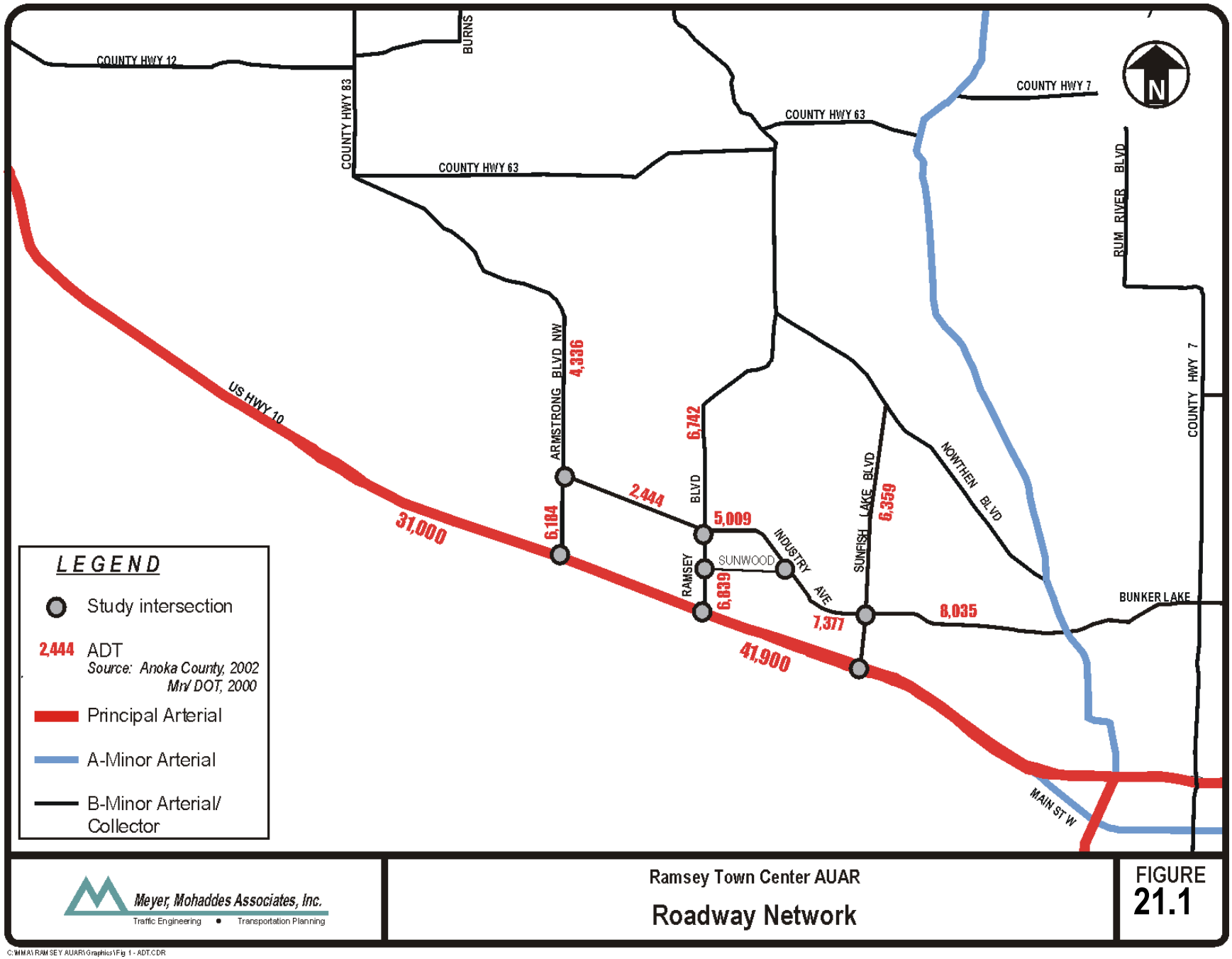
- TH 10 at Armstrong Boulevard—add an eastbound and a westbound through lane on the intersection approaches; add an eastbound and a southbound left turn lane and a southbound right turn lane.
- TH 10 at Ramsey Boulevard—add an eastbound and a westbound through lane on the intersection approaches; add an eastbound and a southbound left turn lane and a westbound right turn lane. A southbound through lane and a northbound left turn lane and northbound through/right lane would need to be added to serve the Rivenwick 3rd Subdivision traffic independent of the project traffic.
- TH 10 at Sunfish Lake Boulevard—add an eastbound and a westbound through lane on the intersection approaches; convert the southbound approach from a through/left turn lane and a right turn lane to through/right turn lane and two left turn lanes (this adds one lane to the approach).
- Industry Avenue at Ramsey Boulevard—add a southbound right turn lane; eastbound and northbound approaches would be widened by the above recommendations.
- Sunwood Drive at Industry Avenue—modify the shared lanes on the northbound, eastbound and westbound approaches to provide left turn lanes and shared through/right turn lanes

The following stop-controlled intersections would need to be signalized:

- Ramsey Boulevard at Industry Avenue
- Armstrong Boulevard at Industry Avenue
- Industry Avenue at Sunfish Lake Boulevard
- Ramsey Boulevard at Sunwood Drive
- Sunwood Drive at Industry Avenue
- Sunwood Drive at Armstrong Boulevard
- NS3 Street at Industry Avenue

The left turn volumes from the EW1 parkway onto both Armstrong and Ramsey Boulevard cannot be accommodated at an acceptable LOS under stop control and require signalization to achieve acceptable operations. However, the close spacing between the intersections of the EW1

parkway and the intersections of Armstrong and Ramsey Boulevard with Industry Avenue limits the potential for the two parkway intersections to be signalized. Accordingly the parkway intersections should be channelized to provide right-in/right-out and left-in access (¾ access). Left out from the parkway would be prohibited and would redistribute to the north-south streets and to Industry Avenue (these volumes have been included in the mitigated calculations for the other intersections).



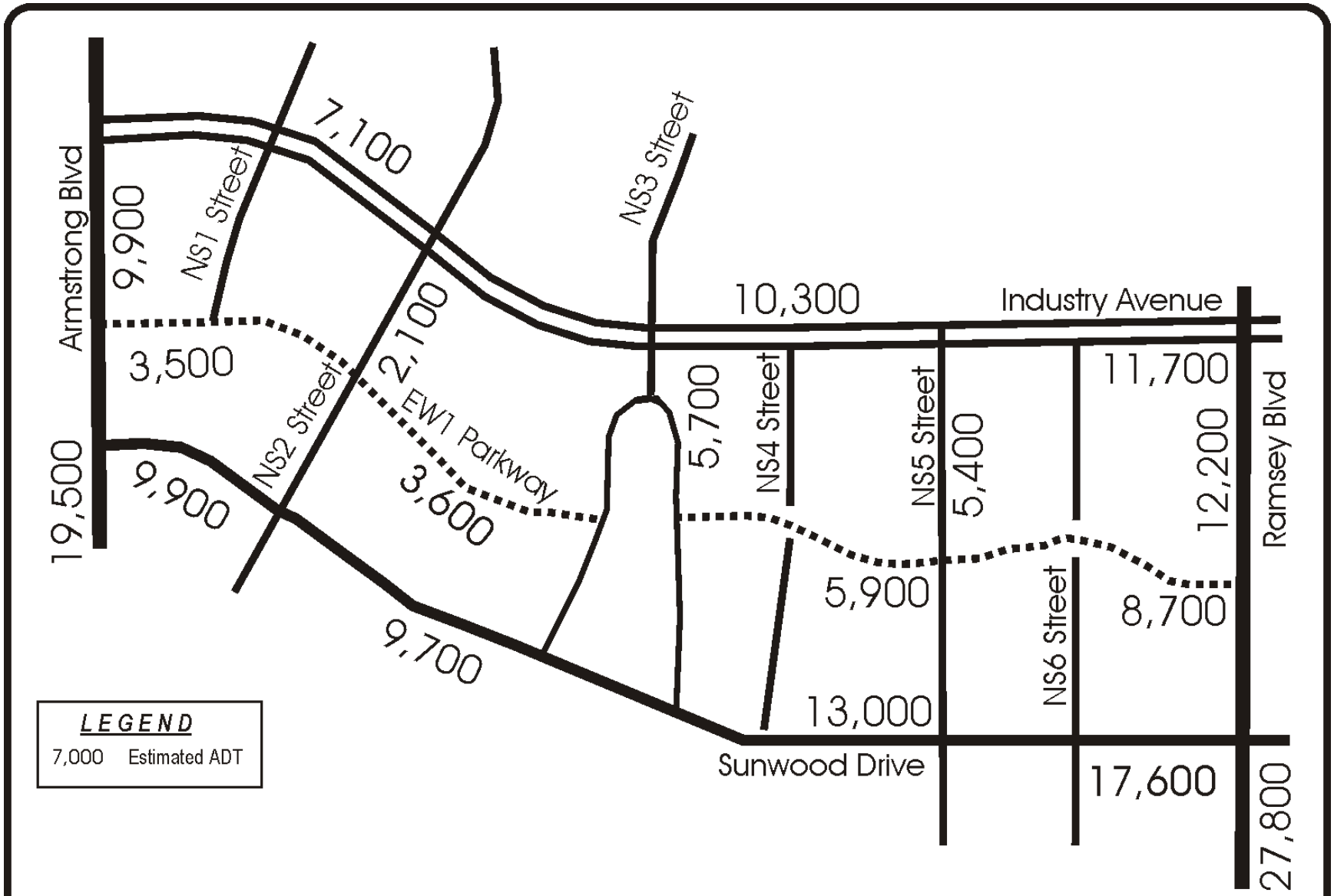
Meyer, Mohaddes Associates, Inc.
Traffic Engineering • Transportation Planning

Ramsey Town Center AUAR

Roadway Network

FIGURE
21.1

C:\MMA\RAMSEY AUAR\Graphics\Fig 1 - ADT.CDR



Meyer, Mohaddes Associates, Inc.
Traffic Engineering • Transportation Planning

Ramsey Town Center AUAR

Estimated Daily Traffic Volumes

FIGURE **21.2**

C:\MMA\RAMSEY AUAR\Graphics\Figure 10-Project ADT.CDR

22. Vehicle Related Air Emissions

Estimate the effect of the project's traffic generation on air quality, including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts. Note: If the project involves 500 or more parking spaces, consult EAW Guidelines about whether a detailed air quality analysis is needed.

Mitigation proposed to eliminate any potential problems may be presented under Item 21 and merely reference here. The MPCA staff should be consulted regarding possible ISP requirements for certain proposed developments; although the RGU may not want to assume responsibility for applying for an ISP for specific developments, it may be desirable to coordinate the AUAR and ISP analyses closely.

Motorized vehicles emit airborne pollutants that affect air quality. Changes in traffic volumes, travel patterns and roadway locations affect the level and dispersion of vehicle emissions. The proposed Ramsey Town Center Development will impact the traffic flow along the Highway 10 corridor and within the development site as discussed in Item 21. The purpose of this air quality analysis is to estimate the future air quality conditions along the Highway 10 corridor with the implementation of the Ramsey Town Center Development. Based on the future air conditions, the AUAR will identify potential effects on regional and local air quality, address conformity with national and state air quality standards, and determine if any mitigation measures are necessary.

Regulatory Requirements

National and state ambient air quality standards identify pollutant concentrations that are not to be exceeded over specified periods of time. Table 22.1 shows the National and State Ambient Air Quality Standards (NAAQs) for carbon monoxide (CO), the major airborne pollutant of interest. Primary ambient air quality standards are defined for the protection and preservation of public health. Secondary standards are intended to protect the environment and properties from damage. Compliance is required for both primary and secondary standards.

Under federal regulations, areas that violate primary ambient air quality standards are designated as "non-attainment areas". The Twin Cities Metropolitan Area was previously designated as a CO non-attainment area as a result of violations of the NAAQs. In 1999 the Environmental Protection Agency (EPA) reclassified Minneapolis/St. Paul as an attainment area for CO. The attainment status is contingent upon the implementation of measures to assure that CO concentrations remain below standards. Therefore, carbon monoxide is the traffic-related pollutant of most concern in the Twin Cities Metropolitan Area. The State of Minnesota has established the standards listed in Table 22.1. It should be noted that the state one-hour carbon monoxide standard of 30 ppm is more stringent than the national standard of 35 ppm.

Table 22.1: National and State Ambient Air Quality Standards

Pollutant	Averaging Period	National Standards		MN State Standards	
		Primary	Secondary	Primary	Secondary
Carbon Monoxide (CO)	8-hour	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
	1-hour	35 ppm (40 mg/m^3)	35 ppm (40 mg/m^3)	30 ppm (35 mg/m^3)	30 ppm (35 mg/m^3)

Carbon Monoxide Modeling Methodology

The methodology for identifying potential local air quality impacts follows the EPA-recommended procedure for carbon monoxide micro-scale impact analysis. The general evaluation procedure, outlined in the Guideline for Modeling Carbon Monoxide for Roadway Intersections (EPA 1992), includes a multiple intersection screening process followed by micro-scale CO analysis with the CAL3QHC line-source dispersion model.

Screening Process. The intersection screening process includes the following steps:

1. Identify the signalized intersections in the project vicinity that will be impacted by the project alternatives.
2. Determine the average delay and Level of Service (LOS) for those intersections.
3. Determine total intersection delay as the product of average delay and total intersection approach volume.
4. Rank the intersections according to total delay and select the intersections with the highest total vehicle delay for analysis.

Carbon monoxide concentrations are generally highest at intersections with poor levels of service and consequently, more idling vehicles. Typically intersections with levels of service of D, E, and F (worst levels) are analyzed. As described in Item 21, all of the major intersections within the project area were analyzed to determine both present and forecasted levels of service. Peak hour traffic volumes used for this analysis assumed that the Ramsey Town Center would reach full built-out potential by 2007.

Based on consultation with the Minnesota Pollution Control Agency (MPCA), it was agreed that carbon monoxide analysis would be performed at intersections that were projected to operate at level of service D or worse for year 2008 (one year after the anticipated Ramsey Town Center completion). The traffic study identified that the three intersections of prime concern are all located along the Highway 10 corridor. The locations of these intersections in relationship to the project site are shown on Figure 22.1 and include the following:

- Highway 10 and Armstrong Boulevard
- Highway 10 and Ramsey Boulevard

- Highway 10 and Sunfish Lake Boulevard.

CAL3QHC Model. In accordance with the EPA procedure for carbon monoxide analysis, the CAL3QHC dispersion model was used to forecast the air quality along the Highway 10 corridor. Required input for this model includes meteorological characteristics, traffic characteristics, intersection geometries, and emission rates.

Meteorological Characteristics. The meteorological characteristics used in the model are summarized in Table 22.2. The inputs listed are consistent with EPA and MPCA recommendations.

Table 22.2 CAL3QHC Meteorological Characteristics

Characteristic	Model Input
Analysis Year	2002 (existing) 2008 (future)
Wind Speed	1 m/s
Wind Direction	Tested 360 degrees at 10º increments
Atmospheric Stability Class	D
Mixing Height	1000 cm
Surface Roughness	321 cm
Averaging Time	60 min
Settling Velocity	0 cm/s
Deposition Velocity	0 cm/s
8-Hour Persistence Factor	0.7

Traffic Characteristics. Traffic characteristics were based on the existing traffic conditions in 2002 and the modeled levels of 2007 (including traffic generated by the proposed project). Traffic volumes, saturation levels, lane configurations, signal type, signal cycle length, red time length and clearance lost time were taken from the traffic analysis conducted for the project. The heaviest traffic volumes were projected to occur during the evening; therefore the CO concentrations using p.m. peak traffic data were modeled as a worst-case scenario.

Intersection Geometries. Intersection geometries were based on existing roadway dimensions from maps and aerial photographs. The proposed roadway improvements discussed in Item 21 were not incorporated into the intersection geometries in order to model a worst-case (most idling traffic) scenario.

Emission Rates. EPA model Mobile 5b was used to calculate carbon monoxide emission rates. There are two types of emission rates needed for the CAL3QHC CO dispersion model, and include a running emission rate and an idling emission rate. The running emission rate was generated directly by the Mobile 5b model assuming an average free flow speed of 35-mph on all roadways and links. The idling emission rate was calculated by converting a 2.5-mph Mobile 5b running emission rate from grams per

mile to grams per hour. The parameters and assumptions used in the Mobile 5b analysis are summarized in Table 22.3.

Table 22.3 Mobile 5b Model Inputs

Parameter	*Model Inputs*
Analysis Year	2002 (existing) 2008 (future)
Free Flow Speed	35-mph for all roadways
Idling Factor Speed	2.5-mph for all roadways
Cold Start Percentages	20.6 % for all traffic
Hot Start Percentage	27.3 % for all traffic
Traffic Mix	MN Car Registration Distribution
Temperature	January, 20ºF
Inspection/Maintenance Program	No
Oxygenated Fuel	Yes
Average Fuel Volatility	9.0 psi

Background Carbon Monoxide Concentrations

Background carbon monoxide concentrations are needed as a baseline to accurately predict future CO concentrations that incorporate modeled vehicle related emissions. These background concentrations are added to the model generated vehicle CO emissions to determine compliance with national and state air quality standards.

The background (2002) carbon monoxide concentrations for the three intersections analyzed were derived from the MPCA-monitored CO site at 6000 West Moore Lake Road in Fridley, MN. Figure 22.2 shows the location of this site. In discussions with the MPCA it was agreed that this site had background characteristics similar to the intersections being modeled and would be a conservative representation of background CO concentrations.

Carbon monoxide emissions are monitored daily at the Fridley site by the MPCA. In 2002, the maximum one-hour and eight-hour CO concentrations were 2.1 ppm and 1.4 ppm respectively. In order to obtain the background concentration for 2008 (modeled year), these 2002 concentrations were adjusted for increases in regional traffic volume and reductions in vehicle emission rates.

Average CO emission rates in the region are expected to decrease due to improved emission controls, turnover in vehicle fleet and cleaner burning fuel sources. Because over 50 percent of the overall carbon monoxide concentrations in the metropolitan area are due to vehicle related emissions, the reduction in vehicle emission rates will tend to decrease the overall background CO concentrations. The Mobile 5b model takes these

factors into account when generating emission rates. Average CO emission rates for 2002 and 2008 were generated using Mobile 5b. The ratio of the 2008 rate to the 2002 rate was used to decrease background CO concentrations by a factor of 0.91.

Background traffic volume will increase from 2002 to 2008. This increase will in turn increase vehicle CO emission, which increases overall background CO concentrations. The ratio of the future regional traffic volume (2008) to the existing regional traffic volume (2002) was used to increase the background CO concentration by a factor of 1.34. These emission and traffic volume adjustment factors are summarized in Table 22.4.

Table 22.4: Calculation of CO Background Concentrations

	2008	
Factor	**1-Hour**	**8-Hour**
Maximum 2002 Monitored Concentration (ppm)	2.1	1.4
Background Traffic Volume Adjustment Factor	1.34	1.34
Emission Adjustment Factor	0.91	0.91
Worst Case Background Concentration (ppm)	2.56	1.71
State Standard (ppm)	**30**	**9**
Federal Standard (ppm)	**35**	**9**

Modeling Results

The carbon monoxide modeling analysis was based on forecasted traffic volumes and signal timing under predicted 2008 P.M. peak traffic conditions. Locations of likely outdoor human activity next to the analyzed intersections were selected for air quality receptors. Receptor locations were sited within a 1,000-foot radius of the analyzed intersections and are depicted in Figure 22.3.

The siting of carbon monoxide receptors was based on the likelihood of human outdoor activity occurring in excess of one hour. This is consistent with the MPCA's method of quantifying adverse air quality impacts based on hours of exposure. Locations chosen include gas station parking lots, entrances to offices and buildings, parks, and open space. Existing commercial buildings and retail stores along Highway 10 are located in close proximity to the road. Therefore, receptors were placed on all four corners of the intersections as depicted in Figure 22.3. These receptors represent the locations of the greatest potential exposure to vehicle CO emissions. A total of twenty receptor locations were selected.

The results of the air quality analysis are presented in Tables 22.5 and 22.6. Table 22.5 lists the 2008 P.M. peak one-hour CO concentrations which were derived directly from the CAL3QHC dispersion model. The 2008 background concentrations were added to the model results to yield a total one-hour CO concentration in ppm for each receptor. The wind angle for the highest CO concentration is also included in the table. The highest one-hour CO concentration modeled was 11.4 ppm at Receptor 15 at the

intersection of Highway 10 and Sunfish Lake Boulevard. This is below the state and national air quality standards of 30 ppm and 35 ppm respectively.

Table 22.6 lists the 2008P.M. peak eight-hour CO concentrations. These concentrations were derived from the one-hour CO concentration results listed in Table 22.5. The CAL3QHC dispersion model predicts one-hour CO concentrations only. These one-hour concentrations are adjusted using a persistence factor. EPA recommends an eight-hour persistence factor for urban areas of 0.7. The factor takes into account the fluctuations of wind directions, temperatures, and traffic volumes that are likely to occur over eight hours. The highest eight-hour CO concentration calculated was 7.9 ppm at Receptor 15 at the intersection of Highway 10 and Sunfish Lake Boulevard. This is below both the state and national air quality standards of 9 ppm.

Table 22.5: 2008 P.M. Peak Carbon Monoxide Modeling Results – 1 Hour

	1-Hour Average (ppm)			
	Modeled	Background	Total Concentration	Wind Angle
Highway 10 & Armstrong Blvd.				
Receptor 1	6.8	2.6	9.4	100
Receptor 2	6.1	2.6	8.7	120
Receptor 3	7.6	2.6	10.2	10
Receptor 4	6.6	2.6	9.2	350
Receptor 5	2.6	2.6	5.2	260
Receptor 6	2.6	2.6	5.2	210
Receptor 7	2.1	2.6	4.7	230
Receptor 8	3.9	2.6	6.5	160
Highway 10 & Ramsey Blvd.				
Receptor 9	6.5	2.6	9.1	100
Receptor 10	5.8	2.6	8.4	260
Receptor 11	8.0	2.6	10.6	10
Receptor 12	6.3	2.6	8.9	350
Receptor 13	2.4	2.6	5.0	150
Receptor 14	3.2	2.6	5.8	250
Highway 10 & Sunfish Lake Blvd				
Receptor 15	8.8	2.6	11.4	100
Receptor 16	7.6	2.6	10.2	110
Receptor 17	7.2	2.6	9.8	10
Receptor 18	6.1	2.6	8.7	350
Receptor 19	3.3	2.6	5.8	120
Receptor 20	3.5	2.6	6.1	240
State Standard	**30.0**			
Federal Standard	**35.0**			

Table 22.6: 2008 P.M. Peak Carbon Monoxide Modeling Results – 8 Hour

	8-Hour Average (ppm)			
	Modeled	Background	Total Concentration	Wind Angle
Highway 10 & Armstrong Blvd.				
Receptor 1	4.8	1.7	6.5	100
Receptor 2	4.3	1.7	6.0	120
Receptor 3	5.3	1.7	7.0	10
Receptor 4	4.6	1.7	6.3	350
Receptor 5	1.8	1.7	3.5	260
Receptor 6	1.8	1.7	3.5	210
Receptor 7	1.5	1.7	3.2	230
Receptor 8	2.7	1.7	4.4	160
Highway 10 & Ramsey Blvd.				
Receptor 9	4.6	1.7	6.3	100
Receptor 10	4.1	1.7	5.8	260
Receptor 11	5.6	1.7	7.3	10
Receptor 12	4.4	1.7	6.1	350
Receptor 13	1.7	1.7	3.4	150
Receptor 14	2.2	1.7	3.9	250
Highway 10 & Sunfish Lake Blvd				
Receptor 15	6.2	1.7	7.9	100
Receptor 16	5.3	1.7	7.0	110
Receptor 17	5.0	1.7	6.7	10
Receptor 18	4.3	1.7	6.0	350
Receptor 19	2.3	1.7	4.0	120
Receptor 20	2.5	1.7	4.1	240
State Standard	**9.0**			
Federal Standard	**9.0**			

Summary of Environmental Impact. The implementation of the proposed Ramsey Town Center project will increase the amount of vehicle-related carbon monoxide emissions. This increase is due to the increase in traffic volume along the Highway 10 corridor. Peak CO emissions were modeled along Highway 10 for the year 2008 (one year after anticipated build-out) under a worst-case (p.m. traffic, no road improvement) scenario. The CO concentrations modeled were less than the state air quality standards of 30 ppm for one-hour and 9 ppm for eight-hours. The modeled CO concentrations are summarized in Tables 22.5 and 22.6.

Mitigation Element. There are no specific air quality mitigation measures proposed for the Ramsey Town Center Development, because implementation of the project does not

result in violation of State or National Air Quality Standards. Carbon monoxide concentrations were modeled along the Highway 10 corridor assuming no road improvements in the project vicinity. The road improvements discussed in Section 21 would help to reduce carbon monoxide emissions, although they are not required as a result of the air quality analysis.

23. Stationary Source Air Emissions

This item is not applicable to an AUAR.

24. Dust, Odors, Noise

EAW: will the project generate odors, noise or dust during construction and/or operation? ___ *no* _x_ *yes*

If yes, describe the source, characteristics, duration, and quantities or intensity, and any proposed measures to mitigate adverse impacts. Also, identify the locations of sensitive receptors and estimate the impacts on them. Discuss potential impacts on human health or quality of life.

Dust, odors, and construction noise need not be addressed in an AUAR unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any dust control or construction noise ordinances in effect. If the area will include or adjoin major noise sources, a noise analysis is needed to determine if any noise levels in excess of standards would occur and if so, to identify appropriate mitigation measures. With respect to traffic-generated noise, the noise analysis should be based on the traffic analysis of Item 21.

Construction-related Odors, Dust and Noise

The proposed project will not generate any odors during construction. Dust normal to construction will occur as a result of this project and will be minimized through standard control measures such as watering. These dust minimization efforts will be identified in the grading plan submitted to the City prior to construction. After construction is complete, anticipated dust levels will be minimal, as all soil surfaces will have permanent cover (i.e. pavement or lawn).

Construction noise will be limited to daytime hours in accordance with the City of Ramsey ordinances. Construction equipment will be fitted with mufflers, which will be maintained during the construction.

Traffic-related Noise

Background/Regulatory Framework

After construction is complete, potential sources of noise from the proposed development will include transit noise and traffic noise. The analysis and impacts related to transit noise adhere to the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment, April 1995* guidelines and are fully addressed in the *Northstar Corridor Project Final Environmental Impact Statement, March 2002.*

Noise is defined as any unwanted sound. Sounds are described as noise if they disturb the person hearing them. Noise levels are measured in a logarithmic unit called a decibel (dB). Humans are more receptive to middle- and high-frequency sounds than they are to low-frequency sounds, so a weighted unit is used to reflect human perception more closely. For the purpose of this study, sounds are measured using this adjusted scale, called dBA. All references to decibels in the discussion of traffic noise impacts refer to this scale. According to the MPCA publication "An Introduction to Sound Basics", a sound increase of 3 dBA in an outdoor setting results in a barely perceptible increase in noise, whereas a 5 dBA increase is clearly audible. An increase of 10 dBA is perceived twice as loud as the original sound.

Under Minnesota Statute 116.07, Subdivisions 2 and 4, the Minnesota Pollution Control Agency has developed Noise Pollution Control Rules (Minnesota Rules Chapter 7010.0001 – 7010.008). The noise criteria used in a noise analysis depends on whether the land use is designated as Noise Area Category (NAC) 1, 2, or 3. NAC Category 1 land use includes parks, single-family and multi-family residences, libraries, hospitals, and other areas where nighttime sensitivity to noise is high. NAC Category 2 standards are applied to commercial areas, hotels, and residences which have adequate acoustic insulation, year-round climate control, and no accommodations that are intended for outdoor use. NAC Category 3 includes industrial areas. Table 24.1 details the MPCA noise level standards for each category.

Table 24.1: Minnesota Pollution Control Agency Noise Level Standards

MPCA Noise Level Standards					
Classification	Land Use	Daytime Noise Level [dBA] (7a.m. – 10 p.m.)		Nighttime Noise Level [dBA] (10 p.m. – 7 a.m.)	
NAC-1	Residential	L_{10} of 65	L_{50} of 60	L_{10} of 55	L_{50} of 50
NAC-2	Commercial	L_{10} of 70	L_{50} of 65	L_{10} of 70	L_{50} of 65
NAC-3	Industrial	L_{10} of 80	L_{50} of 75	L_{10} of 80	L_{50} of 75

Traffic-generated noise can vary considerably over a relatively short period of time. There are two analytical approaches which may be used for reporting traffic-related noise levels, the first of which uses L_{10} and L_{50}. For these values, the subscript value refers to the percent of time during a one hour period that the noise level exceeds the specified value. For example, an L_{10} value of 65 dBA during the peak hour indicates that the noise level exceeded 65 dBA 10% of the time, or for 6 minutes during that hour. The second approach, used in this report, uses L_{eq}. This value represents the equivalent of a constant sound level which, over a period of time, contains the same average amount of sound energy as the varying level of traffic noise. According to the Federal Highway Administration noise abatement procedures detailed in the Code of Federal Regulations (23 CFR 722), L_{eq} for typical traffic conditions is usually about 3 dBA less than the L_{10} for the same conditions. This rule has been used to create an equivalent table of L_{eq} values based on the MPCA Noise Level Standards and is presented is Table 24.2.

Table 24.2: Equivalent L_{eq} values for MPCA Noise Level Standards

Equivalent MPCA Noise Level Standards			
Classification	Land Use	Daytime Noise Level [dBA] (7a.m. – 10 p.m.)	Nighttime Noise Level [dBA] (10 p.m. – 7 a.m.)
NAC-1	Residential	L_{eq} of 62	L_{eq} of 52
NAC-2	Commercial	L_{eq} of 67	L_{eq} of 67
NAC-3	Industrial	L_{eq} of 77	L_{eq} of 77

Noise Level Monitoring

Background noise level monitoring is performed during a noise study to measure existing noise levels. These levels are often used as a baseline against which modeling scenarios can be compared. They are also used to validate computer-generated results. Monitoring at receptor "M3" was performed as part of the *Northstar Corridor Project Final Environmental Impact Statement, March 2002*. Receptor "M3" is located on the northwest corner of the intersection of Highway 10 and Ramsey Boulevard (shown in Figure 24.1) and was used in this report as the background noise level monitoring location for the site.

Table 24.3: Monitored Existing Noise Levels for Receptor M3

Monitoring Site	**L_{eq} [dBA]**	**Primary Noise Sources**
M3	62	Airplanes/Cars

Source: Northstar Corridor Project Final Environmental Impact Statement, March 2002

Noise Modeling Methodology

A noise analysis was conducted to assess the extent to which the proposed project will affect future noise levels. The analysis was performed using Traffic Noise Model v. 2.1 (TNM). The noise model uses traffic volumes, vehicle type mix, vehicle speed, receptor locations, and road alignment to calculate noise levels. TNM is approved by the Federal Highway Administration for modeling traffic noise.

For the purpose of this study, 58 noise receptors were chosen to represent each of the 58 proposed blocks of land presented in Figure 24.2. Each block was assigned a land use according to the Ramsey Town Center Preferred Design Schematic shown in Figure 6.1 located in Item 6. Residential and public space areas (shown in brown and green) were classified as NAC-1 noise receivers. All other parcels fall under the NAC-2 commercial classification previously discussed. An additional noise receptor was placed at the northwest corner of the intersection of Highway 10 and Ramsey Boulevard to compare modeled results with the existing noise level at monitoring site "M3".

Modeling for receptor "M3" was performed using the current traffic volumes for the AUAR project area. Speed limits and vehicle mix were taken from the traffic analysis of Item 21. The modeled results differ somewhat from the measured noise levels but are

within a reasonable margin of error, keeping in mind that an increase of 3 dBA is barely perceptible to the human ear. The remainder of this section discusses the future traffic noise impacts based on computer-generated modeling results.

Table 24.4: Existing and Modeled Noise Levels for Receptor M3

	Modeled Noise Level Receptor M3 [dBA]	**Existing Noise Level Receptor M3 [dBA]**
Day	$\mathbf{L_{eq}}$ = 65.9	$\mathbf{L_{eq}}$ = 62.0
Night	$\mathbf{L_{eq}}$ = 64.0	

Noise Modeling Results

The noise analysis was conducted for the existing year 2002 and for one year after the AUAR development scenario, year 2008. Traffic conditions for both morning and afternoon peak traffic hours were analyzed. The year 2008 analysis includes the impact of the AUAR development traffic as well as the increased background traffic on local and regional roadways over the six-year period. Existing speed limits were assumed, and the remaining data necessary for analysis was taken from the traffic analysis of Section 21.

Traffic noise modeling results for 2008 are presented in Tables 24.5 and 24.6. Both daytime and nighttime L_{eq} values are shown. The analysis shows that during daytime hours, for both existing and future traffic scenarios, there are no receptors that exceed state standards. Three receptors (Blocks 36, 37, and 38) currently exceed the state nighttime NAC-1 standard of 52 dBA. These receptors will continue to exceed the state nighttime NAC-1 standard in 2008, along with one additional receptor, Block 28. These four blocks are all located along the south side of Industry Avenue.

Table 24.5: Daytime and Nighttime Peak Hour Noise Assessment Results (Modeled)
For NAC-1 Noise Receivers

Receptor	Modeled 2002 Daytime L_{eq} [dBA]	Modeled 2008 Daytime L_{eq} [dBA]	Modeled 2002 Nighttime L_{eq} [dBA]	Modeled 2008 Nighttime L_{eq} [dBA]	Potential Noise Impact
Block 27	47.9	51.1	46.7	49.8	None
Block 28	52.0	57.1	51.4	**55.7**	Impact
Block 31	47.5	51.5	46.5	50.3	None
Block 32	47.0	51.0	45.8	49.8	None
Block 33	49.4	53.4	48.3	52.3	None
Block 36	55.8	61.1	**55.2**	**59.7**	Impact
Block 37	56.0	61.4	**55.4**	**59.9**	Impact
Block 38	56.2	61.7	**55.7**	**60.3**	Impact
Block 39	48.4	52.3	47.5	50.9	None
Block 40	46.5	50.1	45.5	48.7	None
Block 41	48.2	52.0	47.3	50.5	None
Block 43	47.6	49.3	46.4	48.2	None
Block 44	46.3	48.9	45.0	47.7	None
Block 45	45.5	48.0	44.2	46.9	None
Block 46	46.7	48.4	45.3	47.3	None
Block 48	48.9	52.1	47.8	50.5	None
Block 49	50.6	52.8	49.2	51.5	None
Block 50	50.9	53.1	49.4	51.7	None
Block 51	50.5	52.6	49.2	51.5	None
Block 53	50.9	56.1	49.4	54.2	None
Block 54	46.6	49.9	45.2	48.7	None
Block 55	46.9	50.6	45.8	49.4	None
Block 56	47.9	52.5	46.7	51.5	None
Block 57	47.2	51.9	45.9	50.8	None
State Standard	**62.0**	**62.0**	**52.0**	**52.0**	

Bold noise levels exceed State noise standards.

Table 24.6: Daytime and Nighttime Peak Hour Noise Assessment Results (Modeled)
For NAC-2 Noise Receivers

Receptor	Modeled 2002 Daytime L_{eq} [dBA]	Modeled 2008 Daytime L_{eq} [dBA]	Modeled 2002 Nighttime L_{eq} [dBA]	Modeled 2008 Nighttime L_{eq} [dBA]	Potential Noise Impact
Block 4	53.9	55.7	52.3	54.5	None
Block 5	50.5	53.3	49.0	52.2	None
Block 6	53.1	56.6	51.6	55.7	None
Block 7	52.0	57.8	50.9	57.0	None
Block 8	46.9	51.4	45.5	50.2	None
Block 9	47.2	50.7	45.7	49.3	None
Block 10	48.7	53.0	47.2	51.3	None
Block 11	49.2	51.7	47.6	50.4	None
Block 12	49.6	51.7	48.0	50.5	None
Block 13	51.0	55.9	49.5	54.0	None
Block 14	49.1	51.6	47.6	50.2	None
Block 15	48.1	50.8	46.9	49.7	None
Block 16	51.0	54.7	49.5	53.1	None
Block 17	51.9	53.5	50.4	52.4	None
Block 18	50.6	56.5	49.1	54.5	None
Block 19	50.9	53.0	49.4	51.7	None
Block 20	50.4	54.8	49.0	53.1	None
Block 21	52.9	57.7	51.7	56.1	None
Block 22	57.0	60.7	55.8	58.6	None
Block 23	57.3	60.0	56.2	57.5	None
Block 29	48.2	52.3	47.2	51.0	None
Block 30	47.6	51.8	46.5	50.5	None
Block 34	53.4	59.5	52.4	58.8	None
Block 35	57.1	62.9	56.4	61.8	None
Block 42	52.3	55.5	51.3	53.3	None
Block 47	59.0	61.6	57.8	59.0	None
Block 52	48.5	50.6	47.1	49.5	None
Block 58	59.4	65.7	58.4	65.0	None
State Standard	**70.0**	**70.0**	**70.0**	**70.0**	

Bold noise levels exceed State noise standards.

Summary of Environmental Impacts. There are no areas within the proposed Ramsey Town Center development that are projected to exceed the state daytime standards. However, there are four blocks along Industry Avenue (Blocks 28, 36, 37, and 38) that either already or will exceed the state nighttime NAC-1 standard of 52 dBA. The exceedances are less than 10 dBA. While these predicted noise levels are above the state nighttime standard, they are not uncommon in developed residential areas that are adjacent to busy roadways.

Mitigation Element. Noise wall mitigation would not be practical along Industry Avenue. Driveways and street intersections would create gaps in the wall, defeating its purpose. It is suggested that the proposed residential units in Blocks 28, 36, 37, and 38 be designed to minimize noise impacts. The noise around the homes and surrounding areas can be reduced by providing climate-controlled units, increasing wall insulation, and providing common areas on the side of the buildings furthest from Industry Avenue.

25. Sensitive Resources

Are any of the following resources on or in proximity to the site?

25a. *Archeological, historic, and architectural resources.__Yes _**X**_ No*
For an AUAR, contact with the State Historic Preservation Office is required to determine whether there are areas of potential impacts to these resources. If any exist, an appropriate site survey of high probability areas is needed to address the issue in more detail. The mitigation plan must include mitigation for any impacts identified

25b. *Prime or unique farmlands.__Yes _**X**_ No*
The extent of conversion of existing farmlands anticipated in the AUAR should be described. If any farmland will be preserved by special protection programs, this should be discussed.

25c. *Designated Parks, recreation areas or trails._**X**_Yes __ No*
If development of the AUAR will interfere or change the use of any existing such resource, this should be described in the AUAR. The RGU may also want to discuss under this item any proposed parks, recreation areas or trails to be developed in conjunction with the development of the AUAR area.

25d. *Scenic Views and Vistas.__Yes _**X**_ No*
Any impacts of such resources present in the AUAR should be addressed. This would include both direct physical impacts and impacts on visual quality or integrity.

25a. A request was made to the Minnesota State Historic Preservation Office (SHPO) to provide a list of potential historical or archaeological resources in the project area. In a letter dated December 19, 2002 (Appendix E), SHPO stated that their research of the National and State Registers of Historic places as well as other sources showed that there were no known or suspected historic or archeological resources in the affected area.

25b. "Prime Farmland" is considered rural land with the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available for these uses. Prime farmland has the soil quality, growing season, and moisture supply needed to economically produce consistently high yields of crops when treated and managed with modern farming methods.

In general, the Natural Resources Conservation Service (NRCS) indicates that prime farmland soils must: have an adequate and dependable water supply from precipitation or irrigation; have a favorable temperature and growing season; have acceptable levels of acidity or alkalinity, content of salt or sodium, and few or no rocks; be permeable to water and air; are not excessively erodible; not be saturated with water for long periods of time; and, not flood frequently or are protected from flooding.

Agricultural land that is not considered Prime Farmland may be considered "State-wide Important Farmland". This is land, in addition to prime farmlands, which is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. Generally, soils of statewide importance include those that are nearly prime and produce high yields of crops in an economic manner when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmland soils if conditions are favorable.

Table 25.1 lists the soil map units present on the proposed project site (also see Figure 12.2). Land within the project site was historically agricultural in nature. Commonly grown agricultural crops include corn and soybeans in the Hubbard coarse sand, Duelm loamy sand, Dickman sandy loam and portions of the Isan sandy loam. No agricultural activity occurred in soils designated as Marsh.

As seen in the table, no soils on the property are designated as prime farmland; however, the Dickman sandy loam is considered a State-wide important farmland. The soil unit however, only consists of 0.5% of the total area of the site located in the far southwest corner (Figure 25.1). Project related impacts to prime farmland and State-wide important farmland are therefore considered to be minimal.

Table 25.1 RTC Site Soil Units

Series No.	Series Name	Prime Farmland Status	Percent Coverage in Project Area
HuA/B/C	Hubbard coarse sand	None	**77%**
Dp	Duelm loamy coarse sand	None	18%
DnA	Dickman sandy loam	None*	0.5%
Is	Isanti sandy loam	None	4%
Mc	Marsh	None	0.5%

* - Identified as a State-wide Important Farmland, but not Prime Farmland.

The other area of farmland designation that exists is "Green Acres", which is more of a tax-based program to keep productive farmland in business than an environmental program. The acreage is shown here for information purposes. Figure 25.2 shows all of the Green Acres program acreage on the RTC site.

Figure 25.1. Designation of State-wide Important Farmland

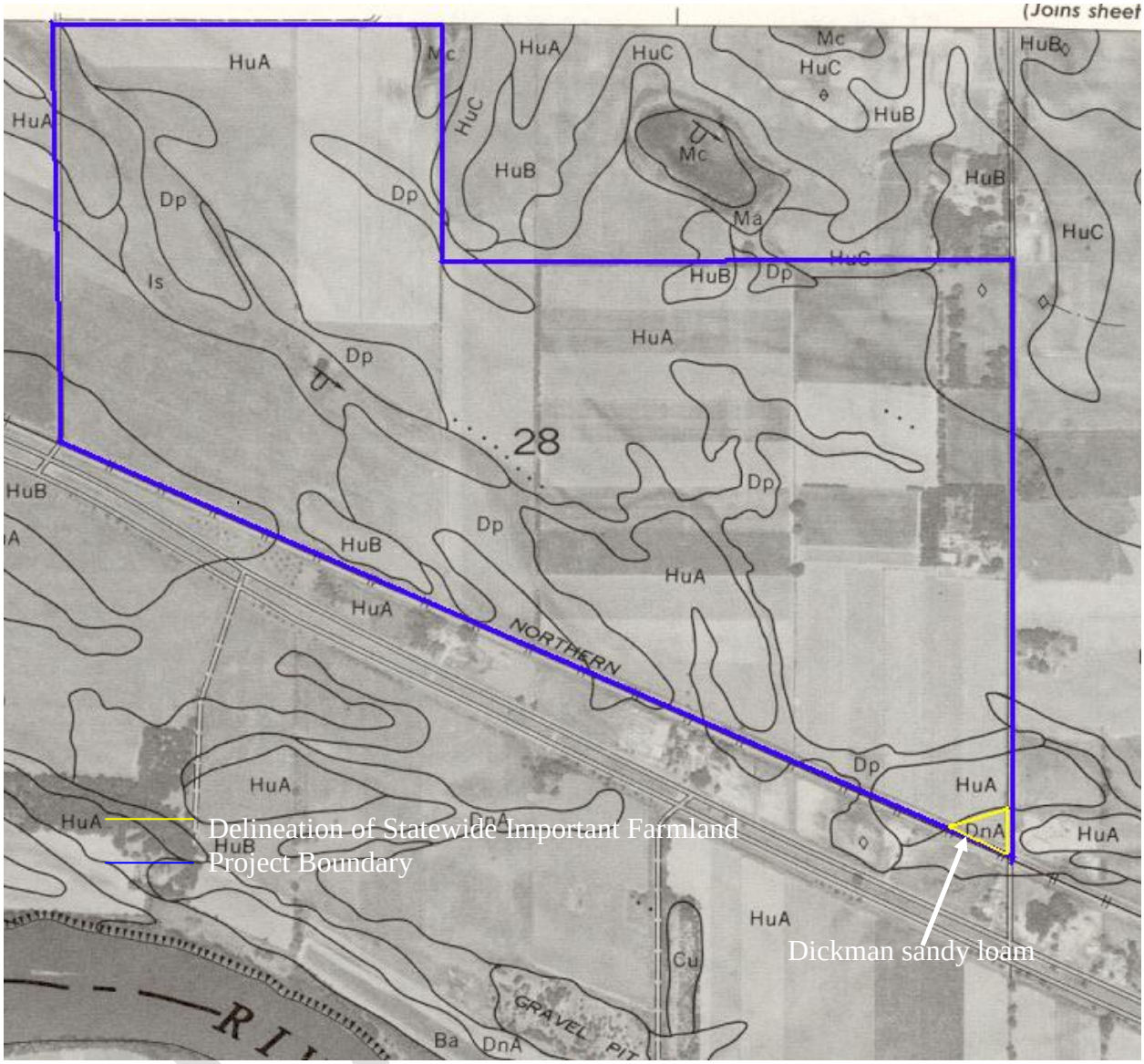
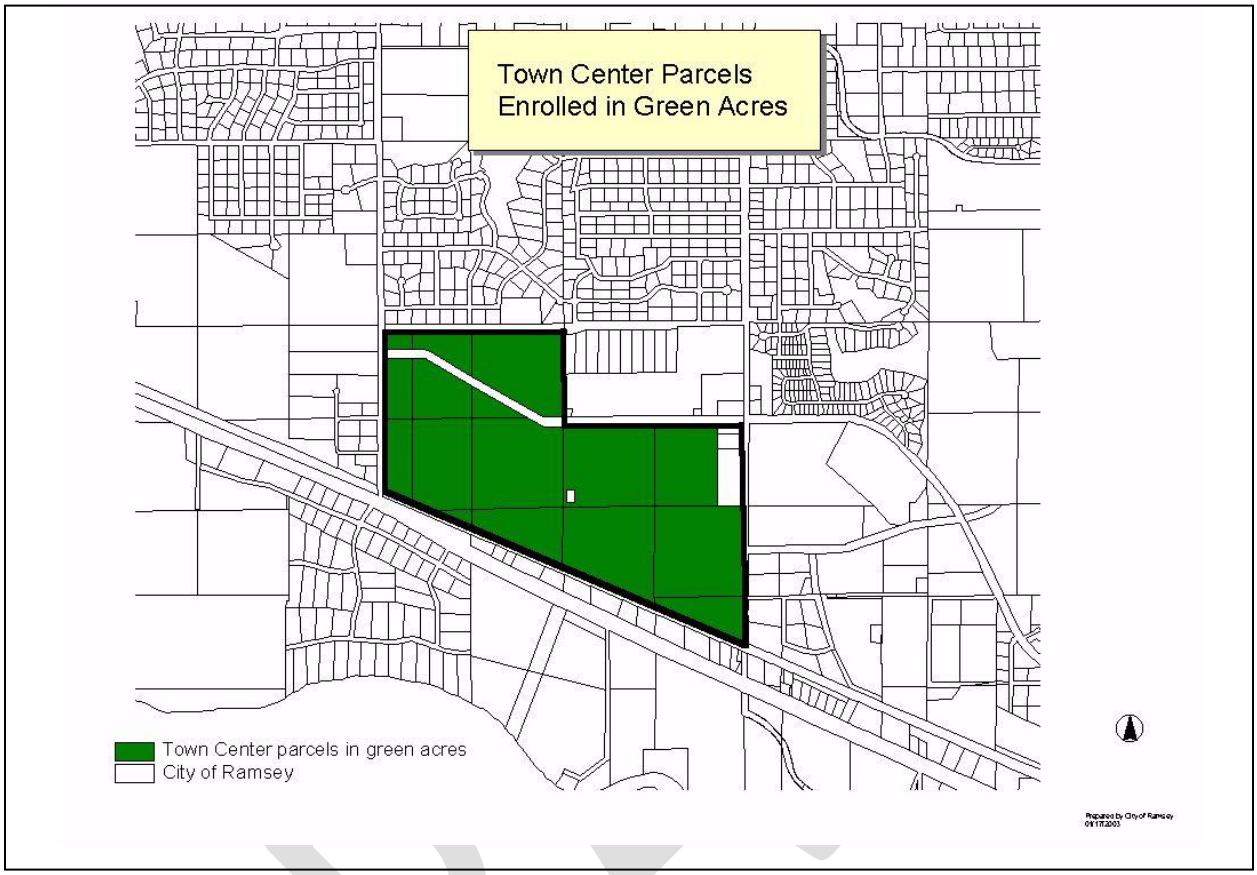


Figure 25.2 Green Acres land within the RTC site.



25c. The Ramsey Town Center site is fortunate to fall within an area surrounded by parks and trails. A unique opportunity exists within the site to incorporate new parks and open space, and to tie together several trail links. Figures 25.3 and 25.4 show the Anoka County and City of Ramsey parks and trail plans, respectively. The City of Ramsey plan reflected in the figure is the most recent version. Because of rapid growth within the City, the park and trails system has been changing often, such that revisions are constantly under way. The information in Figure 25.4 should be considered current through the Spring of 2003.

Reference to the preferred design in Figure 6.1 shows several parks and open space areas that will be included in the RTC development. The latest design contains approximately 40 acres of "green/open space" in a series of neighborhood parks, drainage corridors, preserved and restored wetlands, and general open space. Much of this area, especially in the drainageways, can serve a dual purpose of open space and temporary detention of water.

Among the many issues identified during the stakeholder issues interview was the key role that the RTC site could play in linking open space areas (parks, trails, green space)

throughout this portion of Anoka County. Staff from both Anoka County and City of Ramsey Parks Departments stressed the importance of incorporating green space into the site plan and providing for trail connections to the Mississippi Regional Park (MRP) Trail, which is part of the MNRRA regional River trail, and to trails north and northwest of the RTC site.

Figure 25.5 is a concept depiction of a greenway/trail connection that extends from the City trail at Lake Itasca to the Mississippi River. This corridor is also discussed in Item 17 (Figure 17.1) as a surface water flow route for water from the Lake and from the area to the northwest of RTC as it develops.

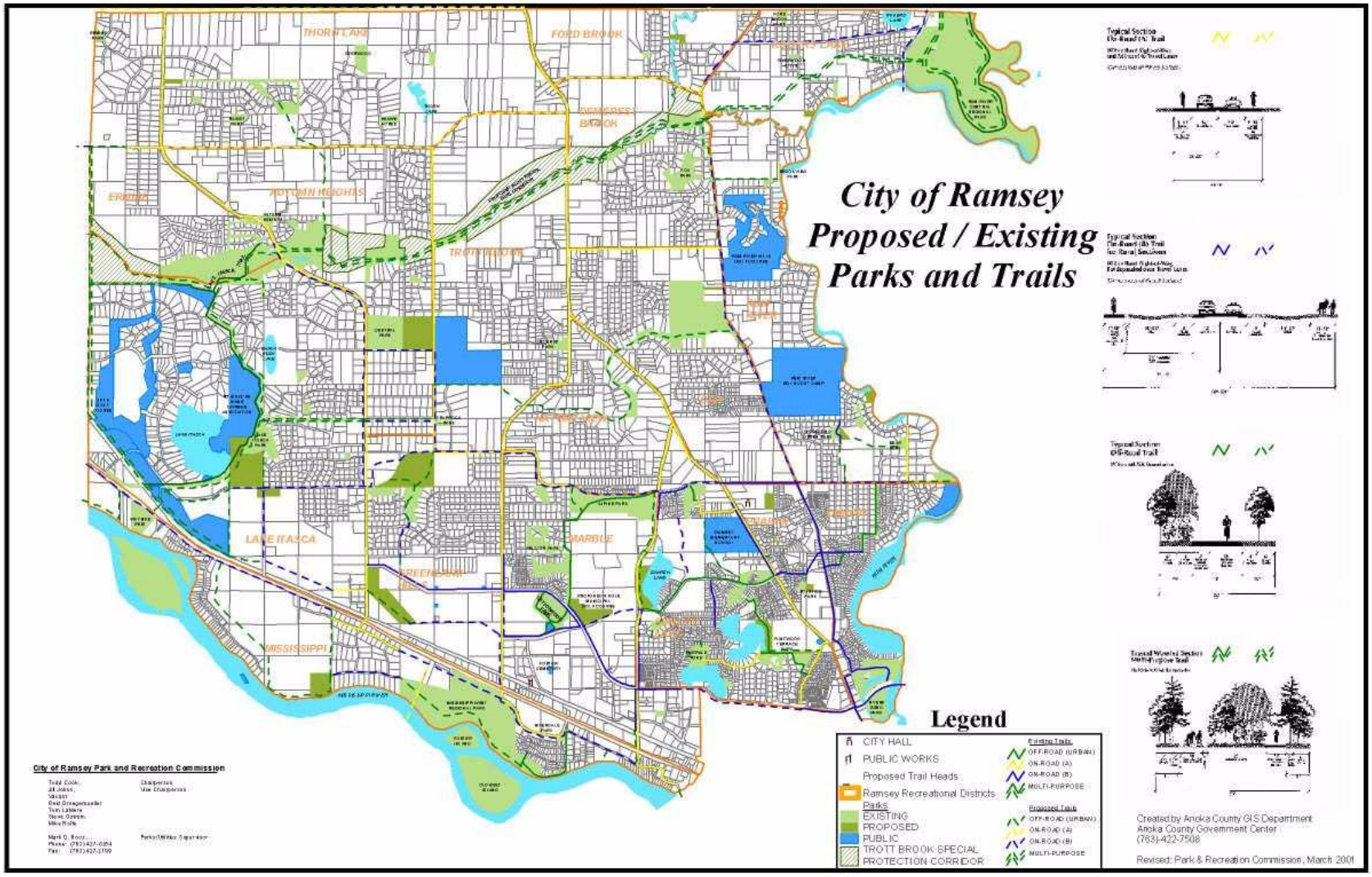
Within the RTC site, as reflected in Figure 6.1, are numerous opportunities to expand open space and trails. The prominent trail feature will be along the central drainage corridor portrayed as green space in the figure. Trails will be present on both sides of the corridor, providing the desired opportunity for linkage with MRP and Lake Itasca. The trail crossings of the BNSF railroad tracks and Highway 10 to the south, and Armstrong Boulevard to the northwest need to be carefully considered during the design phase. Options for crossing the railroad tracks and Highway 10 include numerous locations at-grade, above via elevated crossing or walkway (needed for transit station if Northstar becomes a reality), or sub-grade. The exact nature of this crossing will not be known until many of the design features of the site are coordinated with the agencies involved, including Mn/DOT and BNSF. Anoka Parks prefers a connection south of the site (similar to the Calthorpe location shown in Figure 6.2) rather than along Ramsey Boulevard, but the nature of the crossing could dictate the location, which will be determined during detailed site design. RTC LLC is committed, however, to making the trail connection to MRP an integral part of the RTC when completed.

With proximity to the MRP comes the need for attention to minimize any adverse impact that could result from a new urban center. The development should enhance the park by using the project site as a connection to existing and new open space, and as a source of new users interested in supporting the recreational system. Land use along the trail connection within the site should be compatible with the trail. High intensity commercial use would deter use of the trail leading from the site into the Regional Park.

Anoka Parks has expressed an interest in having the architectural style of the MRP buildings and RTC be compatible. Since the Park development will not proceed for years, the exact style to consider is unknown. RTC LLC will consider the need for visual coordination during the building design phase, and will make its design decisions known to Anoka Parks for its use in future park development.

In 1988, Congress passed Public Law 100-696 establishing the Mississippi National River and Recreation Area (MNRRA) as a unit of the National Park System to preserve, protect, and enhance the nationally significant historical, recreational, scenic, cultural, natural, economic, and scientific resources of the Mississippi River Corridor in the Twin Cities metro area. Item 14 previously addressed the reflection of MNRRA, Critical Area, and Wild and Scenic Rivers language into the City's *Comprehensive Plan*. In 1995, a

Figure 25.4. City of Ramsey Parks and Trails (under revision).



Comprehensive Management Plan (CMP) for the MNRRA was approved by the Secretary of the Interior. The CMP provides a management framework to assist the State of Minnesota and units of local government in the implementation of integrated resource management programs and to ensure orderly public and private development in the area. The CMP incorporates the state Critical Area program and other state land use management programs by reference as the foundation for compliance with the CMP, and encourages voluntary state and local compliance with additional policies to protect and enhance the river corridor. The Mississippi River Critical Area Corridor and MNRRA are geographically identical. In 1991, the Minnesota Legislature designated the federal MNRRA as a state Critical Area by the enactment of Minn. Stat. 116G.15.

25d. A complete analysis of visual impacts is contained in Item 26 that follows.

Summary of Environmental Impact. None are expected with regards to archeological, historical or cultural resources.

The RTC site will be converted from over 350 acres of largely agricultural land to urban uses. This change reflects growth by the City of Ramsey in a manner contained within its *2001 Comprehensive Plan,* as amended in 2002.

The addition of new open space, trail connections and park land in an area previously not publicly accessible will be a benefit to the community. The addition of these features will be carefully coordinated with the proper agencies to assure compatibility.

Mitigation element. *Unidentified Resources*. Various circumstances may lead to the discovery of unidentified historic or archeological resources within the project boundaries. When any such new discovery is brought to the attention of the developer or the City, an evaluation of the significance will be conducted and appropriate management measures will be devised in consultation with SHPO.

Discovery does not mean that all work must stop. However, depending on the nature of the cultural resource and the activity's apparent effects on it, the developer and City will make reasonable efforts to avoid or minimize harm to the resource until it has been processed. Following are the procedures that will be followed when a discovery of what appears to be a cultural resource (historic or archaeological artifacts) has been made:

> (a) Contact the supervisor in charge immediately. If human remains are discovered, also refer to the below section, *Unmarked Human Burial Sites*.
>
> (b) The supervisor will contact SHPO immediately (651-296-6126). The supervisor will arrange for the site or the relevant portion of the site to be secured against further disturbance until a professional assessment of the potential finding can be made.

(c) The contractor, lessee or employees will consult with SHPO to safeguard the resource and note its location, depth, etc. for future report, and to determine what type of investigation (if any) or mitigation is appropriate for the circumstances.

Unmarked Human Burial Sites. The discovery of human remains is covered under Minnesota Statute, Section 307.08. Human remains deserve respect and should be treated appropriately. The discovery of human remains involves legal as well as archaeological issues. The odds of discovering human remains are low; however, complete records of all Native American, pioneer and settler burial sites are not available. Therefore, discovery of such unidentified sites is typically accidental and will occur at sites where the soil has not been previously excavated to an appropriate depth.

Immediately upon the discovery of buried human remains, the procedures listed below will to be followed:

(a) Stop the excavation, and using appropriate safety precautions, and with a minimum of further disturbance to the remains, verify that it appears to be human remains. Make note of what was found, its location and depth, etc.

(b) Contact the supervisor in charge immediately. The supervisor will contact the Ramsey Police Department immediately if it is suspected that the remains are recent.

(c) If unable to contact a supervisor, or if instructed, call the Ramsey Police Department and report the discovery. If necessary, the developer will cooperate with law enforcement authorities in securing the site.

(d) As soon as possible but within 48 hours, the supervisor shall contact the State Archaeologist and consult with them on how to proceed.

Disposition - Ownership/disposition of historic and prehistoric archaeological items, including Native American human remains or grave goods, will be determined by the State Archaeologist, the Native American Council or other appropriate authority.

Because there is no prime farmland on the site, there are no mitigation measures needed to address the change in land use. The very small amount of State-wide Important Farmland in the far southeast corner of the site will be lost from productive agricultural land, but will be replaced by green space uses that preserve the open character of the land.

Although the RTC site is not within the geographic area covered by MNRRA, every effort will be made by RTC LLC to work with Anoka County Parks, Ramsey Parks and the National Park Service to comply with the policies of these agencies and to minimize or avoid any adverse impacts from development of the RTC site.

26. Adverse Visual Impacts

*Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling towers or exhaust stacks? _**X**_Yes __No*

If yes, explain. If any non-routine visual impacts would occur from the anticipated development, this should be discussed here along with appropriate mitigation.

The current visual aesthetic on the site is one of an actively farmed area surrounded by residences to the north, a busy state highway and commercial strip to the immediate south, and commercial strips to the east and west. Although views from the site will not be impacted, those used to viewing farmland on the site will have a change.

Views during construction will change from the agricultural view currently seen at the site. Although "adverse" is not a quantitative measure relative to visual impressions, it is anticipated that most would consider an active construction site as less than visually appealing.

Views from the Mississippi River northward are not likely to be directly impacted because of the elevation difference between the River and the site. The site elevation is between about 860' and 865', with a knoll on the north end of the site reaching about 880'. The Mississippi River through this reach is about 830' and located below a forested bluff. Direct viewing of the Ramsey Town Center will not be possible from the River. However, lights emanating from the site would likely be seen once the site is developed.

Summary of Environmental Impact. Conversion of agricultural land to urbanized land will have a net change in views that many do not view positively. Changing this view of "open land" to one of a fully developed urban area, however, is part of the City's plan for its growth. The impacts of the conversion, however, can be mitigated, as outlined in the next section.

Mitigation element. Light emissions from commercial and residential areas cannot be avoided because of safety issues and the need for residences and businesses to see clearly at night. City Ordinance 9.11.07 describes any lighting used to illuminate an off-street parking area, sign, or other structure, must be arranged so that the light is deflected away from residential districts and public streets. Bulbs emitting in excess of 3,000 lumens (150 watts) must be arranged so that the light is not visible outside of the property where the light is located. There are several methodologies of acceptable screening methods for these nuisances that can also be used for transitioning from high- to low-density residential or from residential to commercial areas. Screening methods typically include a vegetative barrier no less than five feet high or other natural materials. Applying shields to street and parking lot lamps directs the light to the ground surface where it's wanted, not into the adjacent neighborhood. All of these practices should minimize the impact of the light at the River, but will not eliminate it.

The visual impacts of construction on a scale that will occur at RTC over several years will be difficult to mitigate, but several measures to minimize the impact will be followed. The most offensive visual characteristics of construction, and possible mitigating actions are:

- Soil erosion leading to sediment movement off-site - Item 16 spelled-out a mitigation element to control on-site erosion and off-site sedimentation.
- Access streets and roads covered with dirt and gravel/rocks - The erosion and sediment control program will include egress gravel wash pads and will contain a daily sweeping plan for roads affected by construction traffic.
- Swirling dust caused by earth-moving activity on dry soil - A water truck will be available on site to spray areas experiencing dust movement. This will be especially critical on the sandy soils prevalent on site.
- Construction equipment and temporary trailers - Every effort will be made to screen immobile equipment and to park mobile equipment in a visually sheltered location at the end of the working day.
- Exposed soil - One of the essential elements in the erosion and sediment control plan will be rapid stabilization, covering and re-vegetation of exposed soils. Although some exposed soil will be impossible to avoid, every attempt will be made to minimize exposure.

27. Compatibility with Plans

*Is the project subject to an adopted local comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency? _**X**_Yes __No.*

If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.

The AUAR must include a statement of certification from the RGU that its comprehensive plan complies with the requirements set out in (Minnesota Rules) 4410.3610, subpart 1. The AUAR document should address the proposed AUAR area development in the context of the comprehensive plan. If this has not been done as part of the responses to Items 6, 9, 18 21, and others, it must be addressed here; a brief synopsis should be presented here if the material has been presented in detail under other Items. Necessary amendments to comprehensive plan elements to allow for any of the development scenarios should be noted. If there are any management plans of other local, state, or federal agencies applicable to the AUAR area, the document must discuss the compatibility of the plan with the various development scenarios studies, with emphasis on any incompatible elements.

City of Ramsey Local Comprehensive Plan. The basis of implementing a large-scale development as covered by an AUAR is the compatibility of that development with the local unit of government's plan for the future of its community. In the Metropolitan Area, this outlook is described in a local comprehensive plan (LCP) prepared in accordance with Minnesota Statutes, Section 473. Among the requirements of this statute is the inclusion of a land use plan with staged development, housing and surface water management components, a public facilities section that addresses transportation, sanitary sewer, parks and open space, and water supply, and finally, an implementation program that describes the financial and institutional methods to be used to implement the LCP.

Minnesota Rules 4410.3610 references the need for a local unit of government within which an AUAR is being prepared to certify that the three elements referenced above are contained in its LCP. The City of Ramsey has an adopted *2001 Comprehensive Plan* that was most recently amended on February 26, 2002. The following list identifies the specific LCP chapter references meeting the content requirements for AUAR/LCP conformity:

- Chapter V - Land Use (existing land use, future land use, historic preservation, solar access protection)

- Chapter VI - Transportation Element (framework and goals, existing roadways, analysis of roadway system needs, roadway system plan, transit, aviation, railroad lines, bicycle and pedestrian trail system)

- Chapter VII - Housing Plan (existing conditions, senior housing, affordability, the plan for housing)

- Chapter VIII - Sewer Element (existing system, future sanitary sewer services)

- Chapter X - Park, Recreation and Open Space (existing park and creation facilities, the parks and creation plan)

- Chapter XV - Public Facilities (city administration, fire and rescue, police, public works, public schools, public facilities and services plan)

- Chapter XVI - Implementation Strategy (zoning ordinance, subdivision ordinance, septic system management program, capital improvement program, corridor studies, housing program, redevelopment planning, area master planning, part and trail comprehensive planning, GIS development, public services and facilities, central rural reserve area)

- Appendix C - Surface Water Management Policy

- Appendix E - Individual Sewage Treatment System (ISTS - septic tank) Program

- Appendix F - Water Supply Plan

- Appendix G - Capital Improvement Program

Based on the content contained with the February 26, 2002 Ramsey *Comprehensive Plan Update*, the City of Ramsey certifies that the requirements of Minnesota Rules 4410.3610 have been met.

Preferred site design conformity with Ramsey LCP. The preferred site design illustrated in Figure 6.1 is consistent with the City of Ramsey LCP, as referenced above and illustrated in Figure 5.4. The key element in establishing conformity is consistency with the future land use expectations of the City. The consistency set the stage for infrastructure support and financing needed to assure smooth development staging. Figure 5.4 illustrates that the Ramsey Town Center site is noted as predominantly "Mixed Use", with additional increments of "Places to Work", "Medium Density Residential" and "Low Density Residential". The corridor between Highway 10 and the BNSF railroad tracks is designated as "Places to Shop". The "Mixed Use" category represents a combination of residential, commercial, light industrial, open space and a transit hub. "Places to Work" is defined by the City as areas primarily reserved for office and industrial type development. The plan's description of mixed use and the other less prominent uses fits perfectly with the preferred design. The existing highway commercial strip on the north side of Highway 10 (Figure 6.1) is subject to change as Mn/DOT's plans for the highway take shape, but until that happens, there is no

anticipated change in its usage, other than possible use of City land for detention of stormwater.

Consistency on a map does not assure that project implementation will fully meet the City's intent with respect to the provision of service. It is for this reason that the various AUAR Items address infrastructure needs and phasing. The timing within which services will be provided to Ramsey Town Center is spelled-out in Items 12, 13, 17, 18, 21, 25 and 28. However, at this time, there has not been any financial commitment by the City to meet the timing schedule.

Although the entire LCP supports the approach proposed for Ramsey Town Center, some specific elements within the Plan pertain especially to the project. The Guiding Principles within the Vision and Guiding Principles section of the Plan (Chapter II) contain many statements that reflect the "town center" concept of development, with its emphasis on mixed land uses, pedestrian and environmental friendliness, and building a sense of community.

Chapter III of the LCP (Community Background) and Chapter XIV (Community Identity) address the City's intent to grow in a well thought-out manner and to build a sense of community. The Ramsey Town Center project will provide an opportunity to develop a central focal point for municipal civic activities, as well as working, shopping, establishing a home and finding local entertainment as the City's population grows from about 19,500 in the year 2000 to well over 30,000 by 2020.

Consistency relative to sense of community cannot be shown with maps and charts, but must be gained through repeated contact with public officials and members of the community. The preferred concept that eventually evolved into Figure 6.1 was derived after many such meetings. The list of forums for discussion included: Metropolitan Council Smart Growth community meetings; presentation and listening sessions with City officials and community leaders; a Town Center Task Force; the January 2003 retail design charette; and day-to-day interaction with City staff.

Consistency is also assured by matching the character of a new Ramsey Town Center with what the City expresses as its needs and desires in the LCP. Following are several such statements from the LCP for which the Town Center design fits:

> *"Landowners are encouraged to preserve and restore areas of significant natural resources such as open prairie or tree canopy as permanent open space by increasing density in areas more conducive to development." (page V-11)*
>
> *It is an Urban Residential policy of the City to "Encourage environmentally conscious site design and construction methods to assure that development respects the natural environment", to "Ensure open space that is part of a residential development is preserved as permanent open space…" and to "Ensure projects are consistent with the goals and policies of the Mississippi River*

Critical Area Plan (MNRRA) and are sensitive to the Rivers natural environment". (pages V-20 and 21)

It is a Places to Work policy of the City to "Require developments to adhere to environmentally sensitive design and construction standards", to "Facilitate the clean up and redevelopment of brownfields and underutilized sites…" and to "Require individual sites to be connected to a trail system that links employees with the Town Center, parks and neighborhoods." (page V-25)

"The purpose of the Town Center Mixed Use Area is to establish a community hub that integrates places to work, play and live and embraces transit oriented design in anticipation of the potential future commuter rail station." The site will be a "pedestrian friendly environment that supports mass transit" with mixed use development that would support the station with connections to MRP. (pages V-26 and 27)

It is a Park and Recreation Plan goal of the City "To preserve continuous open space corridors that protect natural vegetation and water quality, provide wildlife habitat, and preserve the natural identity of Ramsey." (page X-7)

"The Ramsey community has acknowledged and embraced the importance of the Mississippi River Corridor, its history, water quality, beauty and recreational opportunities. The future of the corridor through Ramsey consists of a sanctuary where wildlife and nature coexist with people and development." (page XI-3)

"All future development should minimize the negative environmental impacts on the region's ecological system ensuring that the built environment is in harmony with the natural environment." (page XIII-1)

Reference to Figure 5.4 shows the future land use reflected in the LCP. A comparison with the preferred concept plan for Ramsey Town Center (Figure 6.1) clearly illustrates the compatibility between the City's vision for the future and the proposed development. Chapter V of the LCP describes how the City's expectations on how it will develop by 2020. The Chapter is replete with references to the City's intentions. All of this guidance will be used as Ramsey Town Center moves through the various phases of development and comes to the City for the approvals that accompany the development steps. Specific reference is made in Chapter V to a sub-set of Mixed Use called "Town Center Mixed Use Area". This description addresses the area being proposed for development under this AUAR. The vision laid-out in the description parallels the site concept and sense of community focus proposed for Ramsey Town Center. The entire parcel being considered is within the MUSA (Figure 5.4) and will be served accordingly, as described in the various infrastructure elements of this AUAR, consistent with the 2000-2010 staging plan identified in the LCP (Figure V-3 in the Plan).

Chapter VI also identifies the City's desire to improve its trail system. The connection of trail linkages from Mississippi Regional Park (MRP) through Ramsey Town Center, connecting to Lake Itasca and other trails north of the Center is an integral part of this City vision. Completing this vision during development has always been part of the Town Center plan, as evidenced in Figure 6.1.

The water and sanitary sewer service elements of the LCP (Chapters IX and VIII) are discussed within the AUAR in Item s 13 and 18, respectively. The storm sewer element is discussed in both Items 12 and 17. All of the infrastructure details are also discussed in Item 28.

Chapter X of the LCP addresses the parks and open space plans for the City. Figure 6.1 shows that a substantial portion of the proposed Ramsey Town Center will be devoted to open space that can become part of the City's system. Trail linkages have already been identified, but additionally, linkages within the site will occur among the various neighborhood parks and more regional-scale trails. The development of MRP will be a major benefit to the City's long-term goal of providing public access to the River. The connection of Ramsey Town Center trails to the River, as described in the site concept plan, will be a critical step in achieving this goal. Similarly, the opportunity exists to tie the Center to the Lake Itasca trail via a green corridor trail. Figure 25.5 illustrates one potential alignment for this trail. The City has not yet formalized the means by which this trail would be established, but identifying a possible path is part of the process. The City's Parks and Recreation Committee and City Council will ultimately decide upon the method of incorporating that this trail into development as it occurs northwest of Ramsey Town Center.

The connection and coordinated planning between the City and the state Mississippi River Critical Area and Wild and Scenic River (WSR), and the federal Mississippi National River and Recreation Area (MNRRA) was discussed in Task 14. The boundaries of these three specially designated areas overlap, as shown in Figure 14.1. Chapter XI of the City's LCP contains the required elements for implementing Executive Order 79-19 issued by the state for defined Critical Areas in 1979. This chapter addresses all of the required elements and also ties in the coordination aspects with MNRRA and WSR. Although none of these protected areas occurs within the boundaries of Ramsey Town Center, the AUAR must address potential impacts that site development could have on them. Task 14 addressed this impact and the mitigation plan associated with it. Reference is made in the LCP to the 1994 MNRRA Plan, *Comprehensive Management Plan for the Mississippi National River and Recreation Area* prepared by the Mississippi River Coordinating Commission and the USDI-NPS. This plan serves as general management plan for MNRRA and is reflected in the City's LCP, which exceeds Tier II requirements of MNRRA.

Chapter XIII of the LCP establishes the City's vision for environmental protection and resource management. A key feature of the Ramsey Town Center is its integration of natural resource attributes into the concept design. Chapter XIII identifies the natural features of the City and the manner in which they will be protected and enhanced.

Development of the Center site actually presents an opportunity to restore and incorporate environmental features that have not been a part of the landscape in recent memory. For example, the central green corridor is a remnant drainage feature that has not transmitted water in the memory of City or WMO officials. Connecting drainage from Lake Itasca to the Mississippi River to and through this feature will provide a chance to restore a natural function and the habitat, water quality and aesthetic benefits that accompany it. Similarly, installing runoff management practices that take full advantage of the infiltration character of porous Anoka Sandplain soils assures that surface water continues to recharge the essential drinking water aquifer supplying drinking water to City residents, whether on a municipal or private system.

Finally, the public facilities and implementation requirements of planning are addressed in Chapters XV and XVI of the LCP.

Management plans of any other government agencies.
As discussed previously in this AUAR, there are several other plans that potentially cover the Town Center site and its adjacent area.

Lower Rum River Watershed Management Organization (LRRWMO). The entire site falls within the jurisdiction of the Lower Rum River Watershed Management Organization (LRRWMO), which is a Joint Powers Agreement among the Cities of Ramsey, Anoka, Andover and Coon Rapids. Aspects of the LRRWMO relationship to this project were addressed in both Item 8 (permits) and Item 14 (related management districts).

The WMO's state approved (BWSR) second generation watershed plan was adopted by the LRRWMO in late 1998. The Ramsey Town Center site occurs within the WMO's West Mississippi District. The WMO plan, however, mapped the portion of the sub-watershed surrounding Lake Itasca as part of the Trott Brook drainage area, which meant that flow would be to the north from the Lake rather than to the south. Because flow emanating from Lake Itasca has not occurred within recent history, there was some uncertainty over the direction of flow, if it were ever to occur. To address this uncertainty, an EOR survey team established elevations around the lake and determined the drainage directions located in Figure 12.1. Determining this flow direction is essential for to the modeling effort to quantify the area contributing to flow that could cross the Ramsey Town Center site.

LRRWMO is also the designated "Local Governmental Unit" or LGU under the 1991 Wetland Conservation Act. This means that regulatory decisions on wetland impact within the City are made by the WMO. The WMO participated in all of the Technical Evaluation Panel (TEP) meetings related to this site, and is ultimately responsible for any subsequent permit decisions.

Critical Area, MNRRA, Wild and Scenic River. The management overlap between the Critical Area component of the City's LCP and the MNRRA plan were addressed in Item 14. This discussion also addressed the Wild and Scenic River coverage. Local

governments within the state Critical Area Corridor are required to incorporate the Standards and Guidelines of Executive Order 79-19 into local plans and ordinances for the Corridor. Local units of government shall permit development in the Corridor only in accordance with those adopted, approved plans and regulations. Specific policies within the Ramsey Critical Area Plan address those needs, as referenced earlier (Item 14). In addition to the Executive Order standards (previously listed) that were incorporated and approved in the City of Ramsey Critical Area plan, the following additional policies occur in the City's plan:

- Minimize direct overland runoff and maintain natural watercourses such as ditches, wetlands and floodplains to handle existing storm water runoff and slow the process of surface water infiltration.
- Ensure urban best management practices are strictly adhered to during and after construction projects including the replacement of all vegetative cover which is removed for construction purposes.
- Adopt development controls consistent with NURP standards and the MPCA's Urban Best Management Practices to reduce nonpoint source pollutant loading in storm water runoff.
- Minimize site alterations and protect natural watercourses, bottomland forests, prairies and woodlands as part of the development plan through such means as conservation easements or land preservation techniques.
- Prohibit alterations or disturbances of wetlands, tree canopy, significant habitat areas and natural vegetation areas.
- Ensuring that trail locations minimize any negative affects on the natural resource base.
- Ensure future development emphasizes continuous open space, minimizes utility and infrastructure needs and crossings....
- Ensure adequate views to and from the river are preserved while maintaining appropriate landscaping buffers and vegetative covers.
- Require future utility construction ... to be underground while minimizing disturbance of endangered habitat areas or undisturbed natural vegetation areas.
- Prohibit any unnecessary grading, filling, or any other significant alteration of areas within the Critical Area Corridor.
- Prohibit development on or alteration of slopes exceeding 12% including the riverfront bluff face.

Anoka County. Anoka County has a Comprehensive Master Plan for the County that covers all parts of the Critical Area under County jurisdiction in the Plan's Mississippi River Critical Area Management section. Planning and development of parks within this area by Anoka County Parks reflects the Critical Area goals under the Critical Area Act and Executive Order 79-19. The County's plan for Parks and Trail Corridors was shown in Figure 25.3. The City of Ramsey is working very closely with Anoka County Parks to develop trail connections paralleling the Mississippi River through MRP and connecting this regional trail to other City and County trails north of the River. The connections to Lake Itasca and Trott Trails would then traverse the Town Center site. Anoka County Parks has also expressed an interest to tie the architecture of the MRP buildings to the

architectural themes used in Ramsey Town Center. Finally, Anoka County Highway Department is working with the City and the site developer to assure that all of the road work potentially impacting County highways is acceptable and meets County standards.

Anoka Conservation District (ACD). ACD has a greenway corridor plan for wildlife corridors that crosses the Ramsey Town Center watershed and the site itself. Figure 27.1 illustrates the ACD greenway contained within the plan. Currently the plan indicates that an ideal wildlife corridor would go through the Town Center in essentially the same location as the central drainage swale. The location of the corridor is critical here because of the proximity of the Town Center to Mississippi West Regional Park, which is a local hub for wildlife. In a conversation with EOR, ACD staff (Rich Biske, Wildlife Habitat Management Technician) indicated that the drainage swale could be an appropriate wildlife corridor if native vegetation (specifically mentioned big blue stem and forbs) instead of turf grass was planted. He noted that if turf grass is planted in the central drainage swale, a wildlife corridor would need to be created in a less desirable location, possibly in the undeveloped area to the west of the site, as east of the site is already developed. ACD also expressed interest in connecting the trail system and possibly the wildlife corridor to the trails and open space associated with Sunfish Lake to the east.

Department of Natural Resources (DNR). DNR implements the State's Critical Area program and has approved the City's Critical Area Plan as part of its local comprehensive plan (see Item 27). DNR also administers the State Wild and Scenic Rivers program. Provisions to coordinate the Critical Area Plan with the Wild and Scenic River and the federal Mississippi National River and Recreation Area (MNRRA) are contained within the City's comprehensive plan.

Metropolitan Council. The Metropolitan Council is charged under Minnesota Statutes, Chapter 473 with assuring the orderly and economic development of the seven-county metropolitan area. To implement this responsibility, the Council reviews the local comprehensive plans (LCP) of communities within the region, and has approval authority over aspects of the plan that affect one of the four "regional systems" - wastewater, transportation, regional parks and airports. Other elements of the LCP that are not related directly to the four regional systems are reviewed for consistency with overall regional plans.

Of specific AUAR concern to the RTC site are the Ramsey LCP regional system elements addressing traffic and wastewater, and the non-system components addressing water supply and stormwater. The Ramsey LCP was adopted in 2001 by the City and approved by the Metropolitan Council. This AUAR reviewed the traffic and wastewater elements of the site development and drew some conclusions in Items 21 and 18, respectively, on system impact. Items 13 and 17 similarly addressed the water supply and stormwater aspects of the development.

Minnesota Department of Health (MDH). The MDH is the state agency responsible for assuring that municipal water suppliers meet the requirements of the state and federal

Wellhead Protection Program. The City of Ramsey has joined with several other communities in Anoka County, and the County itself, to develop its wellhead protection plan. This plan was addressed in Item 6.

Summary of Environmental Impact. The proposed RTC site development is consistent with all of the planning documents covering its area.

Mitigation element. At this time, the Ramsey *2001 Comprehensive Plan*, as amended in 2002, fully addresses the development of the RTC site and adequately relates this development to the various other agency plans with which it must comply. However, any change in the project that would lead to deviation in one or more of the plans must be corrected by a plan amendment.

28. Impact on Infrastructure and Public Services

*Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? _**X**_Yes __No.*

If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see EAW Guidelines for details.)

For an AUAR, this item should first of all summarize information on physical infrastructure presented under Items such as 6,17, 18, and 21. Other major infrastructure or public services not covered under other items should be discussed as well – this includes major social services such as schools, police, fire, etc. The RGU must be careful to include project-associated infrastructure as an explicit part of the AUAR review if it is to exempt from project-specific review in the future.

Social Services. The project area is served by the Ramsey Police Department. Based on the current standard ratio of 1.3-1.5 licensed officers per 1000 residents, the City of Ramsey should have 26 officers. There are typically 3 police officers on duty at a time from a total of 17 full time police offers, therefore the current ratio is 0.85 licensed officers per 1000 residents. The Police Department, when predicting future needs, considers crime rate, traffic increases, and overall growth. Future personnel, equipment and training needs are based on the general population growth of the City of Ramsey, which would include, but is not specific to the RTC. Future personnel needs are listed in Table 28.1. Through 2015, equipment and training needs are expected to increase proportionately with staffing changes. The Department is investigating the equipment and training required for preparing an officer for a potential terrorist attack anywhere within the city. The RTC is described by the department as the most likely location within the city for such an attack. Currently, the streets adjacent to the RTC are patrolled at least once a day. The RTC development may require more frequent patrols. The preferred design plan for the RTC includes the construction of a new police station, which would establish a permanent police presence on the site.

Table 28.1 Ramsey Police Department Future Personnel Needs

Year	No. of Police Officers Needed	Additional Personnel Needs
2004	2 Patrol Officers	1 Crime Prevention Specialist 1 Technician
2005	2 Patrol Officers	1 Community Service Officer
2006	2 Patrol Officers	
2007	2 Patrol Officers	1 Investigator 1 Technician
2008	2 Patrol Officers	1 Supervisor
2009	2 Patrol Officers	1 Lieutenant
2010-2015	1-2 Patrol Officers per year	1-2 Technicians

The Ramsey Fire Department serves the project area and has two full-time fire fighters, thirty one volunteers, two class A rated engines, a tanker engine, a tanker truck, two rescue vehicles, and two grass/brush fire trucks. The Fire Department has two stations with intentions to build a third. The recently built fire station on Armstrong Boulevard is less than a quarter of a mile from the RTC. The current equipment and staff should continue to be adequate after the development of the RTC. The Department does not foresee future needs until the completion of the third station.

The City of Ramsey feels that there is going to be a substantial level of commitment necessary for the Ramsey Towne Center as it relates to the Public Works Department. Due to the operational expectations of this area and impacts on the existing level of service, the City expects that there will be a need for 3 to 4 additional Public Works personnel to meet these increased demands such as: additional street maintenance, additional mowing and park clean-up, snow removal instead of snow plowing, sidewalk maintenance on a higher priority, additional street lighting with aesthetic banners, as well as traffic signals.

The City also expects an increased impact to its equipment needs to perform these additional and unique services such as banner hanging, replacement, and service, storm sewer cleaning at a increased increment and snow removal. This includes an additional sweeper due to the increased regularity of sweeping, sidewalk sweeper to keep the debris and therefore particulates and floatables out of the storm sewer, vacuum truck to keep up with the demands of catch basin cleaning and additional "snow removal" equipment with conveyor to help with removal activities. Since the amount of responsibility for maintenance is unclear at this stage, the above information is the City's estimate of the needs that will accompany this project.

The site should be adequately served by existing library and post office facilities. The preferred design includes a community center and new city hall to better serve the City of Ramsey and RTC residents.

The RTC and the surrounding area are within School District #11, served by nearby Ramsey Elementary School, Sandburg Middle School and Anoka High School, as well as several private schools. From the Anoka-Hennepin School District, new housing construction in the City of Ramsey impacts school enrollment as listed in Table 28.2. Using the data from the school district and the total residential units from the February 28, 2003 RTC concept design, the impact to school enrollment was calculated and is listed in Table 28.3. When residential type was specified as mixed use in the concept plan, the highest impact unit type, "Single Family Homes", was assumed in order to determine the highest possible impact scenario. The unit type "Apartments" in Table 28.3 includes apartments and duplexes. All calculations were rounded up to the nearest whole number. Based on statistics and stated criteria, the impact of the RTC on school enrollment will be 830 school age enrollments and 399 preschool enrollments. Because the development will occur over time, not all enrollments will occur at the same time. Also, if the unspecified residential units are not single family homes, the enrollment impact will be significantly less than assumed here. Additionally, the RTC currently maintains that a school will be built on-site, which could absorb some of the additional enrollments. Finally, according to the Anoka-Hennepin School District, new housing is needed in order to replace the 100 graduating students every year. Therefore, as new housing units are constructed in the RTC over time, new students should be absorbed without significant impacts to school enrollment.

Table 28.2 City of Ramsey's assumptions for new housing impacts on school enrollment

Unit Type	No. of School Age Children/ No. of Units	No. of Preschool Age Children/ No. of Units
Townhouses	1/8	1/25
Apartments	1/25	1/16
Single Family Homes	2/3	1/3

Table 28.3 Impact scenario of proposed RTC development

Unit Type	Ramsey Town Center New Units	New School Age Children	New Preschool Age Children
Townhouses	1154	145	47
Apartments	234	10	15
Mixed Use	1012	675	337
Total	2400	830	399

Summary of Environmental Impact. No adverse impacts to the social service infrastructure are anticipated. Road, sanitary sewer, water supply and stormwater infrastructure are addressed in Items 21, 18, 13 and 17, respectively.

Mitigation element. The major physical infrastructure elements of roads and streets, sanitary sewer, municipal water and storm sewer have all previously been addressed within this AUAR.

An evaluation of the social services needed for the RTC development indicates that the planning done for the City has accounted for the growth related to the RTC. Police, fire, public works, schools, and related City and postal services will all be impacted by the development. Additional equipment to perform City public works services will be needed. No additional mitigation is needed to meet the expected growth.

29. Cumulative Impacts

This item does not require a response from an AUAR since the entire AUAR process deal with cumulative impacts from related developments within the AUAR area.

30. Other Potential Environmental Impacts

If applicable, this item should be answered as requested by the EAW form (if the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation).

There are no additional major adverse environmental impacts beyond those addressed by Items 1-28. There are, however, two minor issues that need to be raised. First, the impacts of the Anoka-Ramsey Landfill on the RTC are presented to alleviate any potential concerns. The landfill is located within one mile of the RTC site in Township 32N, Range 25W, Section 22 (Figure 19.5). The RTC is located southwest of the landfill. Regional groundwater flow throughout this part of Ramsey is to the southeast, indicating that pollutants from the landfill are flowing away from the project area. Additionally, the continued mitigation at the landfill has contained the plume horizontally using twelve barrier wells and eight recovery wells. Finally, sampled residential wells screened in the Franconia aquifer have been negative for all monitored contaminants. This means that the potential for contamination of the water supply from the landfill is minimal because the City of Ramsey wells are screened in an aquifer that has not been contaminated and groundwater flow direction is away from the wells (Anoka/Ramsey Landfill SW-094 2000 Annual Report). Because of the location of the RTC, the minimal threat to the water supply and the successful remediation at the landfill, there should not be any adverse environmental impacts.

Secondly, the RTC will change land use from agricultural to urban. Although this marks an end to agricultural use of the site, Item 27 described the orderly planning process under which this transition occurred. The mitigation elements summarized in Appendix D address how the lost environmental features of the undeveloped agricultural site will be replaced, and in some cases, improved.

31. Summary of Issues

List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.

The RGU may answer this question as asked by the form or instead may choose to provide an Executive Summary to the document that basically covers the same information. Either way, the major emphasis should be on potentially significant impacts, the difference in impacts between major development scenarios, and the proposed mitigation.

Meetings were held with many agency staff to identify issues related to this project that would be of interest to them. The agencies contacted for input were:

- Anoka Conservation District
- Anoka County - Parks, Public Services, Environmental Health, and Highways
- City of Ramsey
- Lower Rum River Watershed Management Organization
- Metropolitan Council - Comprehensive Planning, Environmental Services
- Minnesota Department of Natural Resources - Waters (Metro Region, Critical Areas Program)
- Minnesota Department of Transportation
- Minnesota Pollution Control Agency- Planning, Permitting
- National Park Service - MNRRA
- U.S. Army Corps of Engineers

Based on the input received, the following issues statements emerged as those in need of attention in the AUAR:

Surface Water and Wetlands

- There is a need to maintain the small amount of wetlands on the site, mitigate any losses and focus on maintaining infiltration capability through a surface water management plan; the City would like to incorporate Lake Itasca and the two northern wetlands, and an outlet for the site into the surface water management plan for the site. Issue addressed in Items 8, 11 and 17.

- A Ramsey street and sewer maintenance staff member stated that he could deal with pipes, but things like storm rain gardens and native vegetation he is not used to handling; therefore, the O&M is "different" and would require new training and possibly new equipment. Issue addressed in Item 17.

- A green drainage corridor/trail extending from Lake Itasca through the site to the Mississippi River crosses large tracts of privately held land. Although many are in favor of this, until a development proposal is received by the City, this can only be referenced as a "recommended" corridor. Issue addressed in Item 17

- The impact of the new NPDES Phase II nonpoint source control permit program should be assessed relative to future requirements as the site develops. Water quality impact should be evaluated down to the ultimate receiving water - the Mississippi River - because of its status as a highly valued and protected water throughout this reach. Issue addressed in Items 8 and 17.

- Any wetland alteration must be mitigated according to the Wetland Conservation Act process. Issue addressed in Items 8, 11 and 17.

- The adequate handling and passage of the 100-year flood event must be assured, and all LRRWMO requirements associated with this design must be met in doing so. Issue addressed in Item 17.

- An outlet is needed from this drainage area, since currently the minimal amount of flow leaving the site soaks into the ground along Highway 10 shortly to the southeast of the site. Issue addressed in Item 17.

Parks and Trails

- Project needs to provide an opportunity to link a trail system through the site. Issue addressed in Item 25.

- Attention is needed to minimize adverse impact on the Mississippi Regional Park; instead, it should enhance the park by using the project site as a connection to Lake Itasca via greenway and trail. Issue addressed in Item 25.

- In its dealings with Anoka Parks, BNSF has not allowed any elevated pedestrian crossings and has strict rules on tunneling under tracks; the at-grade option presents safety problems. Issue addressed in Items 21.

- Traffic plans for the Ramsey Boulevard/Highway 10 intersection should incorporate Anoka Parks' plan for development of the Mississippi Regional Park because this will be the only vehicle access location (with parking) allowed for the park. Issue addressed in Items 21 and 25.

- Land use along the trail connection within the site should be compatible with the trail. High intensity commercial use would deter use of the trail leading from the site into the Regional Park. Anoka Parks prefers a connection south of the site (similar to the Calthorpe location) rather than along Ramsey Boulevard, but the nature of the crossing could dictate the location. Issue addressed in Items 21 and 25.

Traffic and Highways

- The project needs to assess traffic patterns and flow to move cars in and out, and take advantage of site as regional center for transit. The site needs to fit into the regional and state plans for the City. Issue addressed in Item 21.

- The project needs to assess parking needs and traffic impact on, and adjacent to, the site, including traffic along County Roads 22, 64 and 5 that are used to bypass Highway 10, and using Ramsey and Sunfish Boulevards to by-pass Highway 47 through Anoka. Issue addressed in Item 21.

- Anoka County is requesting changes in the functional classification of several route segments on the County Road system near the project. Changes are being requested from collector to arterial status to address changing regional traffic patterns. Issue addressed in Item 21.

- Anoka County has identified traffic issues along Highway 10 that need to be addressed in any highway modifications. Issue addressed in Item 21.

- Transit planning coordination needs to occur among the site developers, the City the County and Mn/DOT. Issue addressed in Item 21.

- Access spacing on Industry Avenue must be negotiated with the County and the AUAR should recognize the changing character of Industry Avenue when it becomes a feeder road for the new River crossing. Issue addressed in Item 21.

- Impacts on air quality related to new traffic levels should be assessed. Issue addressed in Item 22.

- Mn/DOT plans for the Northwest River Crossing will start to take shape with the publication of a scoping study in May 2003. RTC will likely be impacted by the location of the crossing and its relationship to Highway 10 at Armstrong. Meanwhile, short-term improvements will be underway on Ramsey and Sunfish intersections. Issue addressed in Item 21.

- Longer-term improvements for Highway 10 have been studied but not yet added to the Mn/DOT list of projects (STIP). Mn/DOT's area manager for Highway 10 should be included in discussions about the sliver of land between the railroad tracks and Highway 10. Issue addressed in Item 21, and Mn/DOT brought into discussions on land in question.

- The status of the park and ride location, and the grant from Mn/DOT is not yet resolved (late February 2003), but funding could face some difficulty because of the state budget crisis. Details on location are needed by the City to keep the grant process alive. Issue addressed as part of the site design process and should be resolved by the time of AUAR document issuance.

Drinking Water Protection

- The project site is within the City's Drinking Water Supply Management Area (DWSMA) under the MDH Wellhead Protection (WHP) Program, and needs to be protected as such. The area has been identified as "vulnerable" in the WHP plan

preparation process because of tritium levels in the bedrock aquifer. Maintaining clean water infiltration is essential. Issue addressed in Items 13,17 and 19.

- The clean-up of all possible contamination on the site must be assured, including the BNSF railroad and the derelict farm. Issue addressed in Items 19 and 20.

- Coordination between infiltration practices and wellhead/groundwater protection is essential and should be a key design factor; that is, pre-filter pollutants prior to infiltration through such means as use of native vegetation swales and small-scale detention near parking lots, minimized pavement, or possible clay sealing of ponds that drain pollutant sources that could degrade groundwater (if any such sources are even allowed in the RTC). Issue addressed in Items 17 and 19.

- An assessment of the potential for the increased demand from the municipal system to impact local wells should be done. Issue addressed in Items 13 and 19.

Planning

- The site should be consistent with the local comprehensive plan, including the Critical Area component, and also consistent with MNRRA and "Wild and Scenic River" status of the River across Highway 10. Issue addressed in Items 8, 11, 14 and 27.

Natural Resources

- The existing wetlands should be incorporated into the surface water system as an amenity that adds to the environmental benefits of the site. Any alteration of wetlands must be mitigated according to the WCA process. Issue addressed in Items 11, 12 and 17.

- The few mature trees there are on the site should be preserved. Issue addressed in Item 11.

- The project should relate the natural features of the site to the Regional Park, featuring native vegetation types typical of the Anoka Sandplain. Issue addressed in Item 11.

Hazardous Material Transport

- There are many trains per day on the BNSF tracks. Some surely contain hazardous material that could pose a risk if spilled. Issue addressed in Item 20.

32. Certification by the RGU

In an AUAR document, no certification by the RGU is required. However, the RGU is legally responsible for the accuracy and completeness of the document, for properly conducting the process associated with it, and for implementing the mitigation elements contained within the plan.

33. Mitigation Plan

The final AUAR document must include an explicit mitigation plan. At the RGU's option, a draft plan may be included in the draft AUAR document; of course, whether or not there is a separate item for a draft mitigation plan, proposed mitigation must be addressed through the document.

It must be understood that the mitigation plan in the final document takes on the nature of a commitment by the RGU to prevent potentially significant impacts from occurring from specific projects. It is more than just a list of ways to reduce impacts- it must include information about how the mitigation will be applied and assurance that it will. Otherwise the AUAR may not be adequate and/or specific projects may lose their exemption from the individual review. The RGU's final action on the AUAR must specifically adopt the mitigation plan; therefore, the plan has a political as well as a technical dimension.

Mitigation elements have been included with each of the Tasks contained within this AUAR. The various elements have been combined to present a single reviewable element in Appendix D.

The City of Ramsey, in adopting this AUAR document, commits itself to implementing the mitigation elements contained throughout the document. To accomplish this, the City will work with its own programs, as well as those of the State, the County, the developer(s) and any builders they use, and citizens of the City.

34. Response to Comments on the Draft AUAR Document

The final AUAR document must include a section specifically responding to each timely and substantive comment on the draft that indicates the way in which the comment has been addressed. Similar comments may be combined for the purposes of responding.

Comments will be addressed as they are received after City release of the AUAR draft document for public review.

The ABC's of
The Environmental Review Process

A Fact Sheet for Citizens with Instructions for Filing a Citizens' Petition

The Minnesota Environmental Policy Act of 1973 established a formal process for reviewing the environmental impacts of major developmental projects. The purpose of the review is to provide information to units of government on the environmental impacts of a project before approvals or necessary permits are issued. After projects are completed, unanticipated environmental consequences can be very costly to undo, and environmentally sensitive areas can be impossible to restore. Environmental review creates the opportunity to anticipate and correct these problems before projects are built. The process operates according to rules (legally binding regulations) adopted by the Environmental Quality Board, but it is carried out by a local governmental unit or state agency (which is termed the RGU, for Responsible Governmental Unit). The primary role of the EQB is to advise local units and state agencies on the proper procedures for environmental review and to monitor the effectiveness of the process in general.

The EIS and EAW

Prior to any governmental approval of a project with potential for significant environmental effects, an Environmental Impact Statement (EIS) must be prepared. An EIS identifies the likely environmental impacts of the project along with ways to lessen or avoid significant impacts either through alternative means of accomplishing the project or by redesigning aspects of the project.

There are two routes to an EIS -- it may be mandatory or it may be ordered by a unit of government upon the determination that a project has potential for significant environmental effects EISs are mandatory for projects whose nature, size, or location makes it inevitable that there is the potential for significant environmental effects. When not mandatory, case-by-case decisions on the need for an EIS are based on a six-page questionnaire about the project and its potential environmental effects called an Environmental Assessment Worksheet (EAW).

An Environmental Assessment Worksheet may be prepared for two reasons. Most are required by mandatory categories in the rules, which cover projects of a nature, size, or location which may have the potential for significant environmental effects Other EAWs are ordered by governmental units either on their own initiative or as a result of a citizen petition when the facts indicate the project may have the potential for significant environmental effects.

The EAW process contains the following steps. The process typically requires 3-4 months to complete.

1. The RGU determines if an EAW is needed.
2. The RGU obtains data needed for the completion of the EAW form from the projects proposer.
3. The RGU completes the EAW form and distributes it to reviewing agencies. The member agencies of the EQB receive and review all EAWs as do other local, state, and federal agencies.
4. Notice of the EAW is published in the EQB Monitor and a press release is given to a local newspaper.
5. Any interested person can review the EAW and submit written comments to the RGU for 30 days following the Monitor notice. Comments may address the accuracy and completeness of information, additional environmental effects or corrective actions that should be considered and the potential for significant environmental effects due to the project.
6. The RGU considers the EAW information and the comments received and officially decides if the project has the potential for significant environmental effects. If not, the environmental review process is over. (Any appeal of this decision must be made in district court within 30 days.)

The EIS process contains the following steps.

1. The RGU determines if an EIS is needed.
2. An EAW form is completed by the RGU and the projects proposer as an aid in scoping the EIS. The EAW is distributed to reviewing agencies and noticed in the EQB Monitor. A press release is provided to a local newspaper.
3. A 30-day scoping period follows the notice allowing for public review of the EAW and input into a decision on the issues to be analyzed. A public meeting is held during this period to receive verbal comments. The purpose of the scoping is to focus the EIS analysis on the pertinent issues and to determine what reasonable alternatives will be compared to the project.
4. The RGU makes an official scoping decision which outlines the contents of the EIS.
5. A summary of the scoping decision is published in the EQB Monitor and a press release is supplied to a local newspaper. (The Monitor notice is termed an EIS Preparation Notice.)
6. The scoped issues are analyzed with economic and sociological impacts being considered in addition to environmental impacts. The results of the analysis are compiled into a draft EIS document. Frequently, a consulting firm is hired to assist the RGU with the analysis and the document.
7. Any person can review and comment on the draft EIS for a period of at least 25 working days after a notice of the draft EIS is published in the EQB Monitor. A press release is sent to a local newspaper. A public meeting

must be held to receive verbal comments.
8. The EIS is revised into final form based on the comments received.
9. The RGU makes an official decision on the adequacy of the EIS. A notice of the impending decision is published in the Monitor at least 10 working days in advance. The adequacy decision is based on three criteria: (1) Were all issues for which information was reasonably available addressed? (2) Were all legitimate comments on the draft responded to? and (3) Were proper procedures followed? In exceptional circumstances, this decision may be made by the EQB instead of the RGU.

WHO DECIDES IF AN EAW OR EIS IS NEEDED?
Responsibility for making case-by-case decisions on the need for EISs and EAWs and for determining if an EIS or an EAW is mandatory lies with local governments and state agencies. For almost any project, the rules identify the governmental unit which has this responsibility. This unit is termed the Responsible Governmental Unit, or RGU. Appeals of the decision of the RGU must be made in district court. The EQB provides assistance to governmental units in interpreting the rules and carrying out their responsibilities, but the EQB is not involved in the decisions, except in specific, limited circumstances.

Environmental review is intended to be used as an information source in the decision-making processes. In order to serve its purpose, environmental review must be built into decision-making processes at an early stage, before approvals are given for the project. For this reason, the rules prohibit governmental units from making a final decision to grant any permit or approval necessary until the environmental review is completed. However, decisions to deny permits can be made before environmental review is completed since these decisions stop the project and eliminate the need for review.

TYPES OF PROJECTS WHICH REQUIRE EAWS OR EISS
Projects of the following category types may require an EAW or EIS. Whether or not a given project requires environmental review depends on the magnitude and location of the project as well as its type.

- Airport Projects
- Animal Feedlots
- Commercial Developments
- Electric Generating Facilities
- Fuel Conversion Facilities
- Hazardous Waste Facilities
- Highway Projects
- Industrial Developments
- Marinas
- Metallic mineral Mining and Processing
- Nonmetallic Mineral Mining
- Nuclear Fuels Processing
- Paper and Pulp Processing Mills
- Parking Facilities
- Petroleum Refineries
- Pipelines
- Recreational Developments
- Recreational trails
- Residential Developments
- Sewage Systems, including sewer extensions
- Solid Waste Facilities
- Sports/Entertainment Facilities
- Stream Diversions
- Transfer Facilities
- Transmission Lines
- Underground Storage
- Impoundments

Projects which would:

- Convert land use from agriculture or forest to a more developed use
- Affect Natural Areas
- Affect Protected Waters or Wetlands
- Appropriate Water

The environmental review program rules detail the circumstances in which an EAW or EIS is mandatory for each project type.

Exemptions
Some projects are automatically exempted from review under this program. If a project is exempted, no EAW or EIS can be prepared. The EQBs rules specify the projects and situations to which the exemption applies.

A table of all mandatory EAW, mandatory EIS and Exemption categories can be found in chapter 6 of the "Guide to Minnesota Environmental Review Rules" (available at the EQB website).

AUARs – Alternative Urban Areawide Review Process

The EAW & EIS processes are best suited for distinct projects with environmental effects that do not overlap. The EQB created an alternative form of review called the Alternative Urban Areawide Review process to better review incremental effects accumulating from a series of sequential projects, as frequently occurs in rapidly growing areas. The AUAR's key feature is that it reviews possible development scenarios for an entire geographical area chosen by the RGU based on the comprehensive plan, developers' plans and other information, and develops a mitigation plan to be implemented to avoid environmental impacts when specific developments are later constructed. The AUAR process can be used by any local governmental unit that has a qualifying comprehensive plan in effect. The AUAR substitutes for any EAW or EIS required for specific qualifying projects provided they comply with the review assumptions and mitigation measures developed in the AUAR. Procedurally, the AUAR is a hybrid of the EAW and EIS processes.

Citizen Participation
Interested citizens may participate in the environmental review of projects. A section of this fact sheet explains

how citizens can petition for an EAW when one is not mandatory. A second way for citizens to participate is to make suggestions for issues to be studied in an EIS during the scoping process. A third way for citizens to participate is to review and comment on EAWs, EISs, and AUARs. By commenting on these documents, citizens can assure that the governmental units responsible for permitting the project are aware of their environmental concerns, and can suggest ways in which potential problems can be resolved. Additionally, citizens can offer their opinions on the need for an EIS or on its adequacy.

Environmental review documents can be reviewed at the office of the RGU or the EQB, at a designated regional library (in the metropolitan area, this is the Minneapolis Public Librarys ECOL Library), and in some cases, at other public libraries. A copy of an EAW can be obtained from the RGU by submitting a written request.

The EQB Monitor

EQB distributes a bi-weekly publication, known as the EQB Monitor, which provides official notice of public comment periods, public meetings, decisions by governmental units on petitions, EAWs, EISs, AUARs, and other events occurring pursuant to the environmental review program. Other environmentally related governmental actions are also noticed in the Monitor, from time to time. The Monitor can be found at the EQB website.

Citizen Petitions

Since only projects in certain categories (based on size, type, and location) will automatically receive environmental review, Minnesota law provides for a public petition process as part of the environmental review program. When 25 citizens are aware of a project which may have the potential for significant environmental impacts, they can use the petition process to initiate consideration of environmental review if the project is not exempted by the EQBs rules.

The petition is a process for formally asking a local governmental unit or a state agency to consider preparing an EAW. The agency or local authority which becomes the RGU on a petition is normally the one which issues the primary permits for a proposed project to be built. For most projects, the RGU is the local government.

The petition process is not a means for resolving a disagreement with local government over whether a project should be built. If environmental concerns are involved, people can use the petition to bring their case to the attention of the RGU, but petitioning does not create an additional source of approval for projects, nor does it bring the state government into the dispute.

A second limitation to petitions is that they are generally ineffective when a land use conflict is the principal issue and environmental effects are minor. A decision on whether an EAW is needed must be based on potential environmental impacts. The rules define environmental to mean physical conditions, including: land, air, water, minerals, flora, fauna, ambient noise, energy resources, and artifacts or natural features of historic, geologic or aesthetic significance.

Before filing a petition, concerned citizens should also give thought to whether any potential impacts on the physical environment are noteworthy. Every development project has some impacts on environmental conditions. However, environmental review is only appropriate when there may be the potential for significant environmental impacts. If there is nothing out of the ordinary about the project or its setting, it is unlikely that an EAW will be ordered.

The petition must include the following:
A **description** of the proposed project.

The name of the projects **proposer**. (Also, the petitioners must notify the proposer in writing that a petition has been filed.)

The name, address, and telephone number of the **representative** of the petitioners. (The representative will receive notification of the RGUs decision on the need for an EAW and will automatically receive a copy of the EAW if one is prepared.)

A brief description of the potential **environmental effects** which may result from the project

Material evidence indicating that, because of the nature or location of the proposed project, there may be a potential for significant environmental effects.

Signature and mailing addresses, ***including city, state, and zip code***, of at least 25 persons. Only 25 signatures are required because the government agency's decision should be based on the potential for significant environmental impacts. It is not necessary to demonstrate widespread public concern about the project.

The petitioners bear the burden of making a case that the particular project warrants an EAW despite the fact that the Mandatory EAW requirements are not exceeded. The petition must do more than raise questions or concerns – it must present facts that tend to demonstrate that something about the location and nature of the project makes it more deserving of review that most other similar projects. Examples of types of evidence that have been submitted include: maps, site plans, photographs, testimonial letters, letters from expert agencies, existing reports. The petition should also explain how the evidence demonstrates that there may be potential for significant environmental effects.

The complete petition should be sent to the

environmental review staff of the EQB at the address listed below. The petitioners must also notify the project proposer in writing that they have filed a petition. The EQB will forward the petition to the designated RGU within five days if it is complete. The RGU must decide whether to prepare an EAW within 30 working days. Petitioners are responsible for contacting the RGU concerning the decision-making procedures for the petition.

Further Information

More information about the environmental review program can be obtained at the EQB website or by calling the following telephone number: 651-757-2873

Environmental Quality Board
300 Centennial Building
658 Cedar Street
St. Paul, MN 55155

Fax number: 651/296-3698

Website: http://www.eqb.state.mn.us

]

HRA Regular Session **5. 2.**

Meeting Date: 02/28/2012

By: Mark Riverblood, Engineering/Public Works

Title:

Initiate Strategic Plan for the Development of North Commons

Background:

At the January 17th 2012 City Council work session, a 10-point plan was discussed that brought together several of Council's goals relating to encouraging investment in Ramsey by the development community, increasing tax base and focusing on the effective delivery of recreational opportunities. This strategy is summarized within the attached Power-Point presentation.

As the consensus of the Council was to progress the development of the park and the aforementioned goals, the purpose of this case is to initiate the first actionable items for the HRA property known as North Commons.

These first phase aspects for the development of the park are addressed below by individual subject for purposes of clarity, though each is interrelated and the success of one morceau is generally dependent upon the other elements.

Notification:

The proposed disposition of 'Peltzer Park' and the relocation of the play equipment was mailed to each address in the city via the current issue of the *Ramsey Resident* as part of the City Owned Land Inventory article.

Observations:

Topsoil for North Commons:
The park area, aside from the wetland in the center, comprising about half of the 7 acres is largely devoid of any topsoil. Landform has been tasked with preparing a grading plan and volume of soil that will need to be imported - both for the non-wetland areas, and also the three, topsoil experimental 'plots'. This information and cost/cubic yard calculation will be available for the meeting

As a significant part of this park project's purpose is to address the topsoil question itself - staff is recommending that the topsoil to be hauled to the site need not be certified to meet the current ordinance's specifications (for the non-test areas). Further, the city will be managing the irrigation system (for the whole site) with sophisticated soil moisture sensors, assuring that only the appropriate amount of water is applied. The primary purpose of the stringent topsoil requirement was indeed for water conservation - however, to save the city cost, and in particular give due justice to the experiment, it would seem to make sense to waive the requirement for the MnDot soil specification for larger park space. (It is estimated that this cost differential will be available at the meeting as well.)

Staff also anticipates examining the permitting costs associated with the excavation of a portion of the wetland to provide the topsoil resource. This may be a significant cost saving by not having to purchase the soil and pay for trucking. The other benefit would be to diversify the wetland habitat for wildlife, and at the same time improve aesthetics and wildlife viewing.

Grading:
Pending a defined scope of the grading plan, a plan and procedure has not yet been developed. There is the potential pond work discussed above, and/or the city may perform some grading in-house. Another scenario may be the importation of soil using city forces in early spring (as opposed to contracted hauling). More information

may be available at the meeting.

Future Lot Sales:
The proposed future lots along Zeolite Street will be graded concurrent with the park's grading, with a look-out or walk-out bench as the lots slope toward the wetland. This same area reserved for homes will be the site of the topsoil test plots. One rationale is that the area will be level and have the same environmental conditions. Further, during the turf establishment phase the site may need to be roped off to prevent disproportionate foot traffic over the plots, which could have a minor influence on the precipitation demand for the test areas. The plots along Zeolite are somewhat removed from the programmed park spaces, and therefore will not present a problem while they may need to be roped or fenced off.

At such time as the lots may be platted and sold, the city may salvage portions of the irrigation system from the interior of the plots, with the rear yards potentially left for future homeowners. Until this would occur, the flat irrigated area is available for various recreational pursuits after the irrigation and topsoil experiment has concluded in late October 2012.

Irrigation:
A key component of the topsoil and irrigation experiment is engaging topsoil and irrigation wholesalers to 'team-up' in responding to an RFP, inviting them to be the providers of the materials and labor for this project. Ideally, at least the cost of the experimental area would be at no cost to the city. In a different scenario, much of the irrigation system would be underwritten as the vendors would be named in funding an experiment that could result in significant advertising and sales for their firm.

Similar to the water tower and community garden location at Dysprosium Street and Nowthen Boulevard (where volunteers are maintaining the whole utility owned property) - it is believed the municipal water utility can provide some of the funding for providing the water service and irrigation for North Commons. Also like the water tower, this park is encumbered by well number #8, and the utility will be benefited by park services taking care of the landscape there, (with the utility having a responsibility for landscaping its facility in this residential neighborhood - now by virtue of the interdepartmental 'trade' of irrigation installation for mowing labor). (Well #8's proximity is shown within slide #35 in the PP presentation circled in a thin blue oval.)

Community Garden:
The proposed community garden beds have already generated interest from residents. It is hoped that they may be made available for the early spring planting season. The beds will likewise be irrigated, which has been part of the success with Ramsey's first community garden at the water tower site. Additionally, the primary volunteer organizer there, has agreed to be a mentor for the gardeners at North Commons, with the goal of having this new location also run and operated on an annual basis by volunteers

Again, like our inaugural community garden at the water tower, staff is proposing 'free' plots at least initially to maximize interest in this new endeavor and connect a growing number of people to one another in this public space.

Playground:
Attached is an excerpt from the current issue of the Ramsey Resident which invites persons interested (or concerned) in the proposal to sell Peltzer Park, and relocate the play equipment to North Commons - to attend the Mayor's Town Hall on March 12th, 2012. This community meeting will help inform the city on the sentiment of the Peltzer Park neighborhood on the sale of the land and moving of the play equipment.

It is anticipated that one next step may be a Council Case acknowledging the relocation of the playstructure, which would be timed for early to mid-summer. The play equipment would likely be moved in late June, early July, when the parks' department have a peak number of seasonals, with a *brief* slow-down in athletic field maintenance demand.

Crosswalk:
While a somewhat minor detail, relocation of the crosswalk from a mid-block point north of Ramsey Market (on Ramsey Boulevard), south to 149th Avenue's trails is part of the connectivity solution for neighborhoods on either

side of CSAH #56; and should occur with out regard to any other element or improvement this case discusses. Staff will proceed with this as soon as time allows.

Tree Installation:
Tree establishment may be deferred to a Fall 2012 planting as part of a proposed $15,000 MN DNR tree grant entitled 'Majesty of the Commons'. If the city is found not to be successful (March 2012 award announcement), the trees may be funded by the $15,000 proposed within the city's Parks 2012 CIP for this same park and purpose. In either event, neighborhood volunteers are expected to be tapped for the labor component, and also to broaden ownership for the park.

The aforementioned grant also frames the project as an opportunity for a neighborhood arboretum (a component of the Environmental Policy Board's 2012 approved work plan) and a partnership with PACT Charter School for students there to actually develop the interpretive signage within the park (relative to the trees) as part of their curriculum. Attached is the narrative portion of the grant application in the event details are desired to be known.

Trail Easement and Neighborhood Connection(s):
A red dashed line within slide #35 in the attached PP presentation calls attention to what is viewed as an important connection to the neighborhoods to the north and east of North Commons. This route is presently being used by residents - receiving a trail easement formalizes this pedestrian link from the larger existing neighborhood and the COR, and 'protects' the town home association from this public use that is already occuring.

The homeowners of Parkside Village are very enthusiastic about the park's development and have agreed to convey the easement to the city. Staff requests that the HRA direct the City Attorney to prepare an easement for the appropriate parties to sign and record.

Similar to several of the park development components above, staff will organize a plan with costs for paving this new trail connection to the COR. It should be favorably noted, that independent and subsequent of North Commons' park development discussion in January, representatives of Town Center Gardens approached the city desiring assistance in developing park amenities and a place to garden in their area of town homes. Needless to say, they were ecstatic that the city was already in the process of meeting their stated needs with North Commons, and the trail connection.

Funding Source:
The primary purpose of this case is to receive HRA approval to move forward with a work plan for North Commons development. A key cost element is receiving HRA's concurrence that 'ordinary' topsoil may be approved for the park space - such that staff can obtain costs and bring this forward for City Council approval. Additionally, the RFP responses will inform what water utility monies may be needed for the irrigation.

The grading costs will also return (with a funding source) once a plan with the specified number of cubic yards of appropriate material has been determined, (and an estimate may be available at the meeting).

Pending the Mayor's Town Hall meeting on March 12th, a plan with cost details may be brought forward to City Council for the relocation of Peltzer Park's playstructure - together with a recommendation to sell Lot 1, Block 5 of the Peltzer Addition (exhibit attached), which may be a partial funding source for the park improvements discussed within this case.

Council Action:
Direct Staff to initiate the first phase improvements for North Commons pursuant to the proposed work plan, and issuance of an RFP to address the topsoil requirement experiment, and direct the City Attorney to acquire and record the trail easement over Willemite Way in the favor of the City.

Attachments

Initiate North Commons' Dev.
North Commons Concept
Peltzer Lot Exhibit
Ramsey Resident Article
Tree Grant Narrative

Form Review

Inbox	Reviewed By	Date
Heidi Nelson	Heidi Nelson	02/23/2012 04:52 PM

Form Started By: Mark Riverblood Started On: 02/21/2012 03:53 PM

Final Approval Date: 02/23/2012

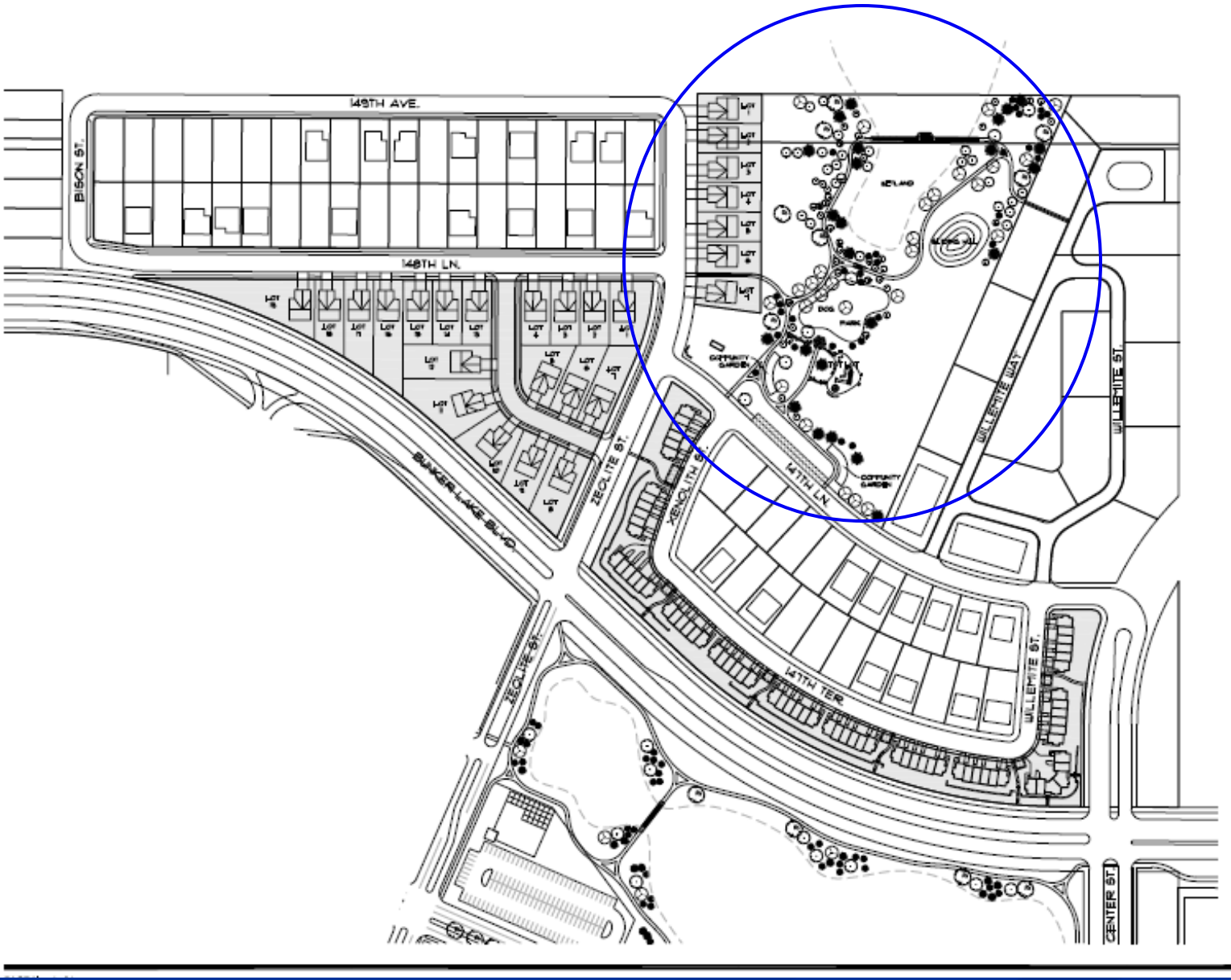
Strategic Development Calculation for:

North Commons

City of RAMSEY

#1,

Residents in Town Center 8th, 9th and 10th Addition (entitled “Parkside Village”) invested in their homes anticipating the eventual development of North Commons.



THE COR

RAMSEY, MINNESOTA

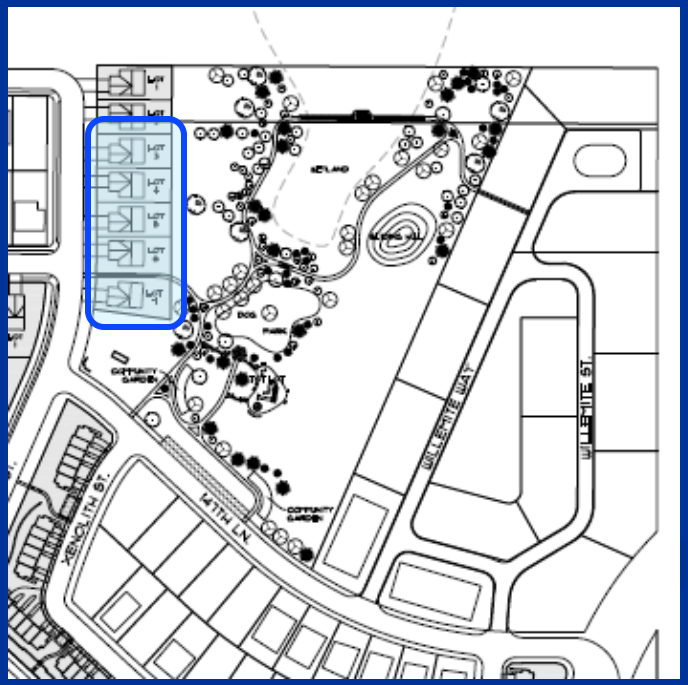
LANDFORM

From Site to Finish

NORTH COMMONS CONCEPT

#2,

Council did evaluate the creation of lots to pay for North Commons' development – and finds that the market value is not great enough to cover the cost of municipal service installation. *(But these lots may remain 'ghost platted' for a future opportunity.)*



#3,

Creation of the park is likely to boost single family home sales (of existing lots), which;

~ *Adds to the property tax base within the COR…*

~ *Brings construction employment which adds retail purchases in the community during each home's construction…*

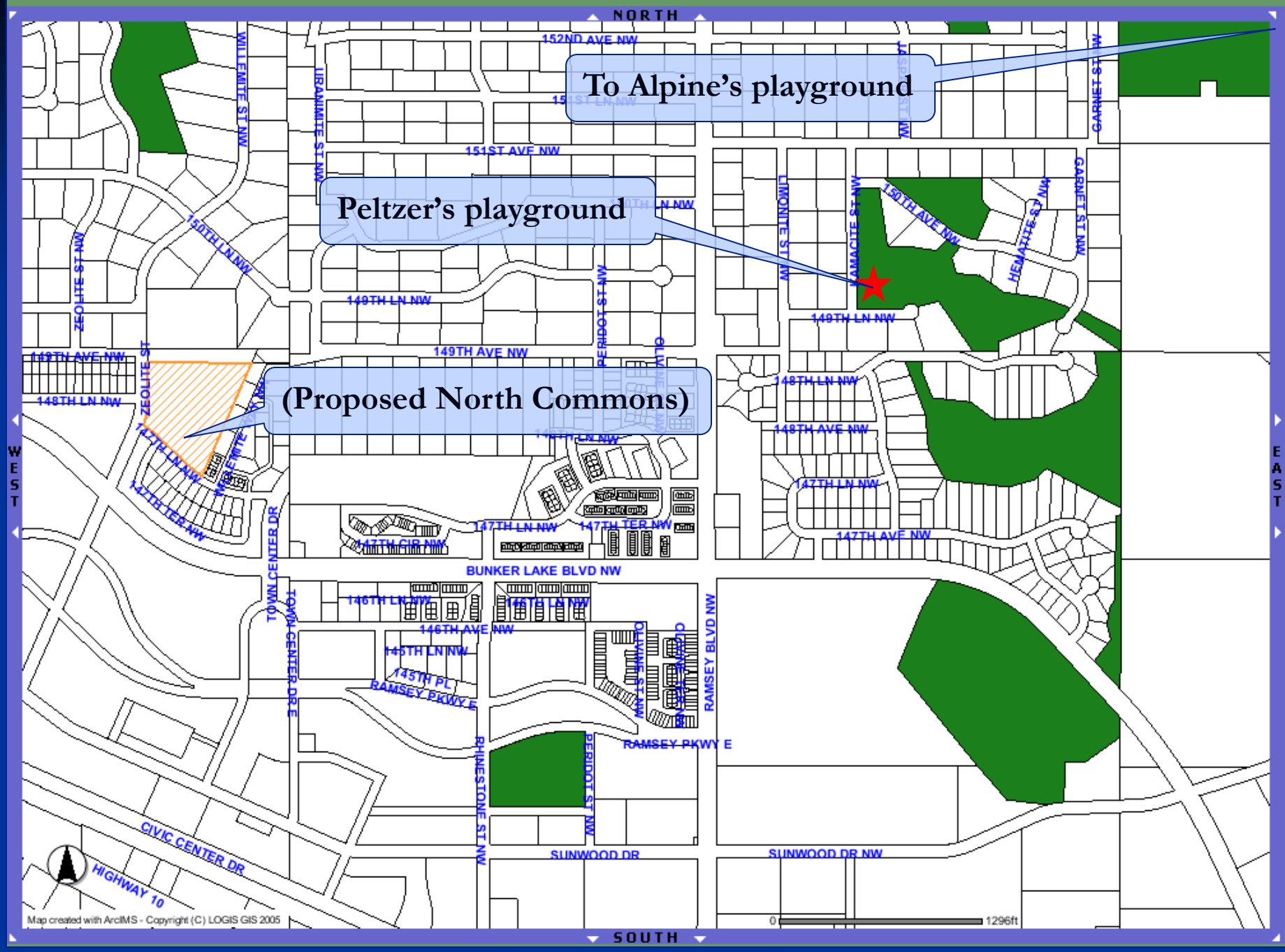
~ *Adds more residents to support existing COR retailers'…*

~ *More homes and activity signal to future investors that both the COR is a success, and consumer base is growing…*

#4,
Concurrent (and separate) with the consideration for the development of North Commons, Council has generally agreed to:

~ Look at reducing maintenance costs for any underutilized parks…

~ And has identified 'Peltzer Park' (east of Ramsey Market) as one that *may* not presently meet the public's annual return on investment…


NORTH
To Alpine's playground
Peltzer's playground
(Proposed North Commons)
WEST
EAST
SOUTH
152ND AVE NW
151ST AVE NW
150TH LN NW
149TH LN NW
149TH AVE NW
148TH LN NW
148TH AVE NW
147TH LN NW
147TH AVE NW
147TH TER NW
147TH CIR NW
146TH LN NW
146TH AVE NW
145TH LN NW
145TH PL
BUNKER LAKE BLVD NW
RAMSEY PKWY E
RAMSEY BLVD NW
SUNWOOD DR
SUNWOOD DR NW
CIVIC CENTER DR
HIGHWAY 10
TOWN CENTER DR
WILLEMITE ST NW
URANIMITE ST NW
ZEOLITE ST NW
PERIDOT ST NW
RHINESTONE ST NW
OLIVINE ST NW
LIMONITE ST NW
LAMACITE ST NW
HEMATITE ST NW
GARNET ST NW
Map created with ArcIMS - Copyright (C) LOGIS GIS 2005
0
1296ft


(Note housing densities)


(Move play equipment to North Commons?)

#5,
…*continued*…Concurrent (and separate) with the consideration for the development of North Commons, Council has also agreed to:

~ Look at all development costs so as to encourage development, particularly in the COR and areas served by municipal utilities…

#6,
While the city continues to look with an eye to lower development costs…

~ The prudent ***requirement, amounts, and specifications*** of the Topsoil Ordinance remain somewhat unresolved…

#7,
While the city continues to look with an eye to lower development costs…

~ The ***requirement, amounts, and specifications*** of the Topsoil Ordinance remain somewhat unresolved

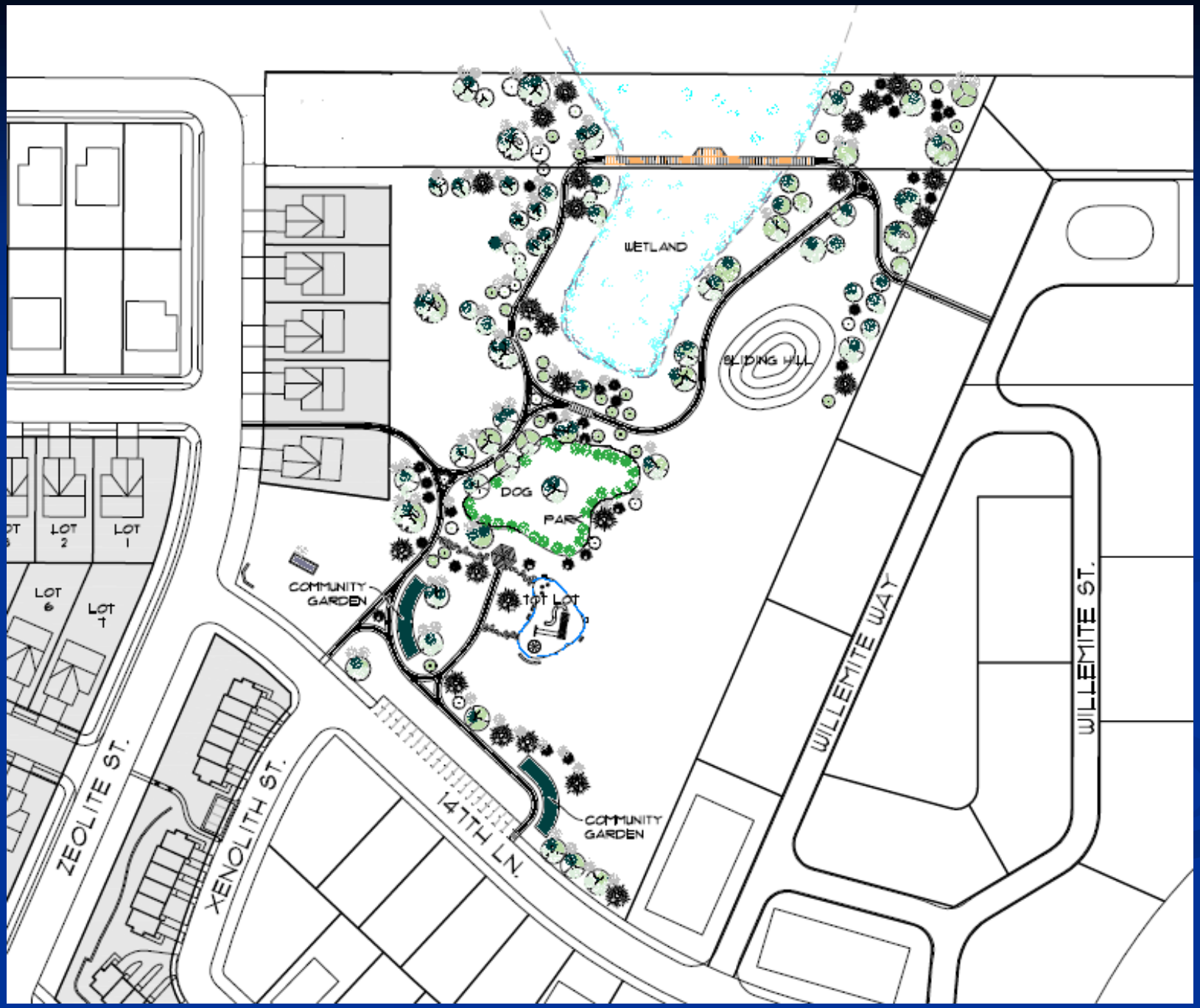
~ <u>And, in addition to the cost for developers, the city's water utility has an interest in this question…</u>

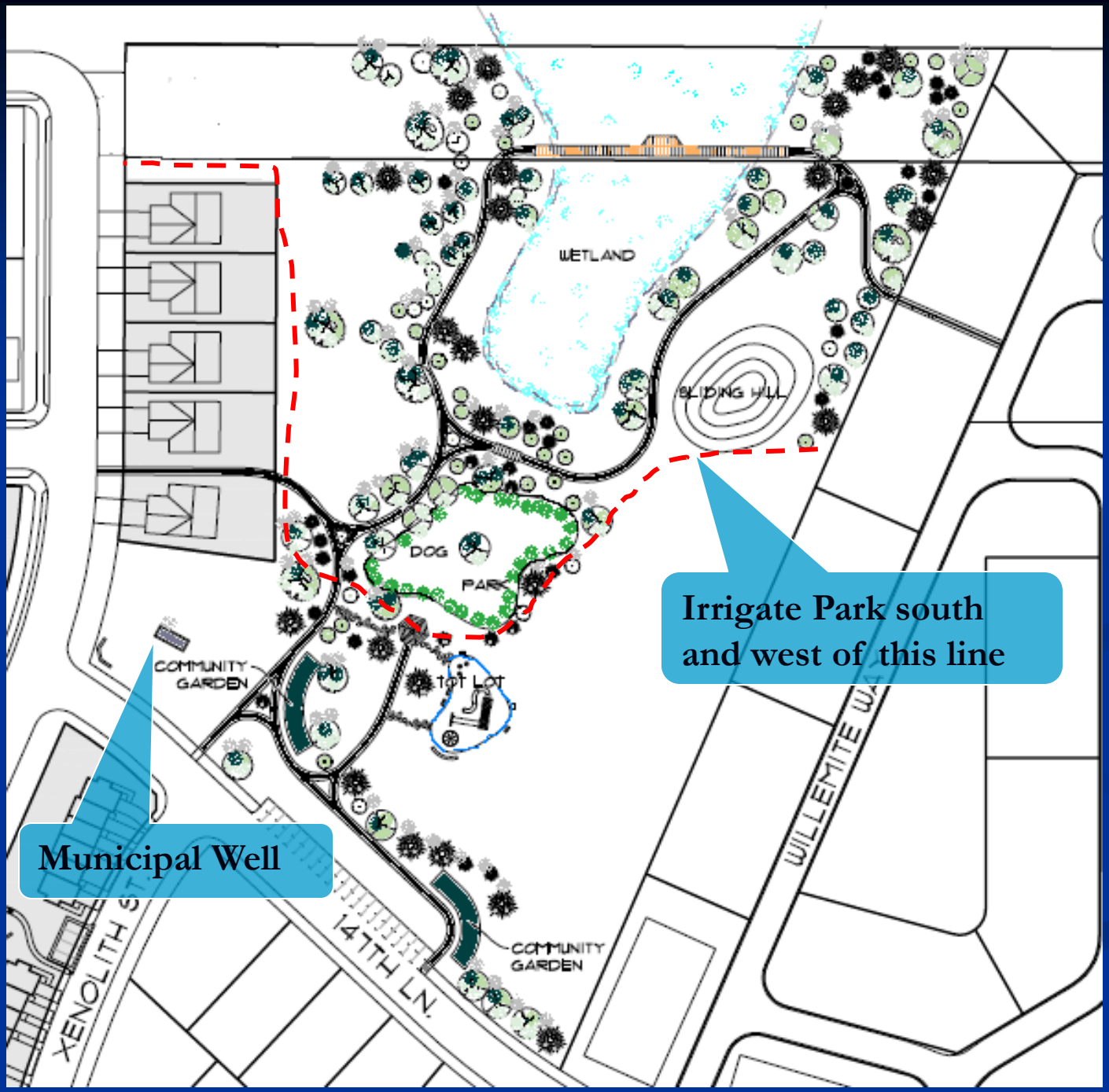
#8

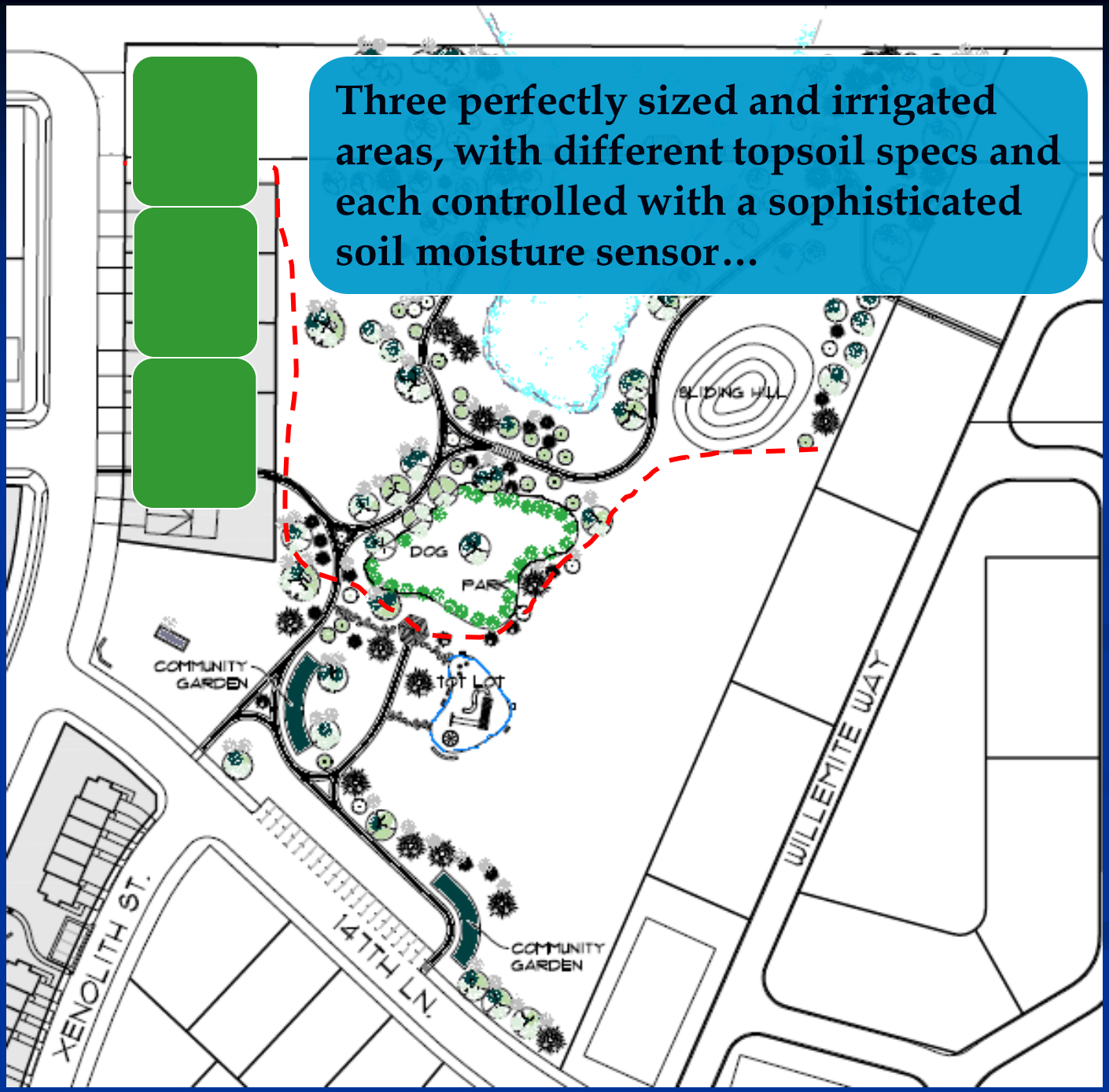
To address the topsoil question for the Development Cost Study and for the Utility - the development of North Commons is a 2012 solution to this question, whereby…

#9

The utility can fund an irrigation system to provide prudent landscaping around Municipal Well # 8 and invest in a project at the park that will *quantify* what topsoil matrix makes the most sense for ***both*** the city and developers….


WETLAND
SLIDING HILL
DOG
PARK
TOT LOT
COMMUNITY GARDEN
COMMUNITY GARDEN
LOT 2
LOT 1
LOT 6
LOT 7
ZEOLITE ST.
XENOLITH ST.
147TH LN.
WILLEMITE WAY
WILLEMITE ST.


WETLAND
SLIDING HILL
DOG
PARK
COMMUNITY
GARDEN
TOT LOT
COMMUNITY
GARDEN
147TH LN.
XENOLITH
WILLEMITE
Irrigate Park south and west of this line
Municipal Well

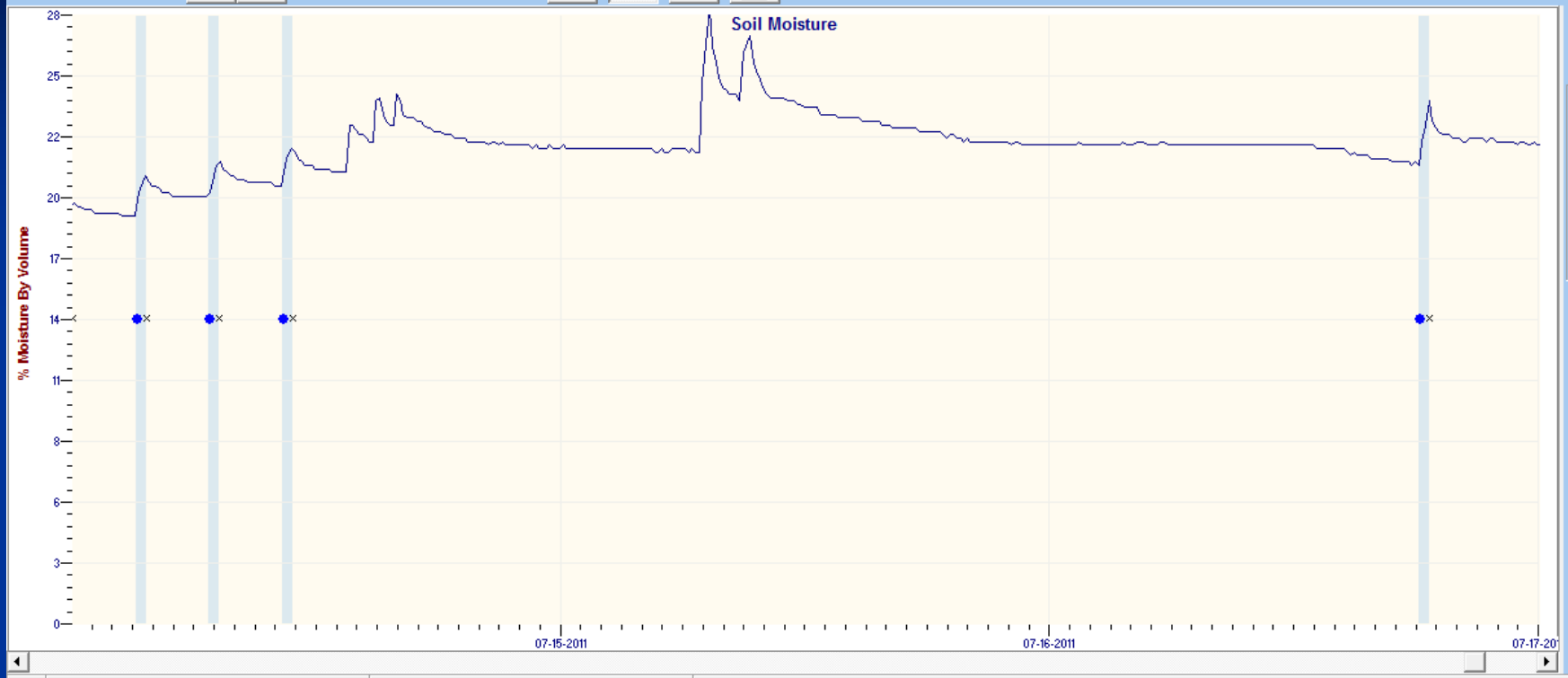

Three perfectly sized and irrigated areas, with different topsoil specs and each controlled with a sophisticated soil moisture sensor…
SLIDING HILL
DOG PARK
COMMUNITY GARDEN
TOT LOT
WILLEMITE WAY
XENOLITH ST.
147TH LN.
COMMUNITY GARDEN

Acclima Irrigation Manager - 3544 (Offline)

File System Configure View Help

Connect | Map View | System View | Configure Zones | Configure Devices | Reports | Zone Graphs | Water Restrictions | Event Pause | Manual Programs | Diagnostics

Locate Date 7/16/2011 °F dSm Zoom



Sensor	Host Zone	Details
NAU Moisture Sensor 2	NAU	Lower: 21.64% Upper: 31.18
Soil Moisture Sensor 4	Zone 7 EAST	Lower: 20.64% Upper: 27.77
zone 5 moisture sensor	Zone 3 EAST	Lower: 21.00% Upper: 29.25

Acclima Irrigation ... 12:45 PM

#10

Convergences:

~ Deliver a value to both residents and builders

~ Invest in improvements to the tax base within the COR

~ ‘Shutter’ (or sell) Peltzer Park – and reapply these maintenance resources to North Commons…

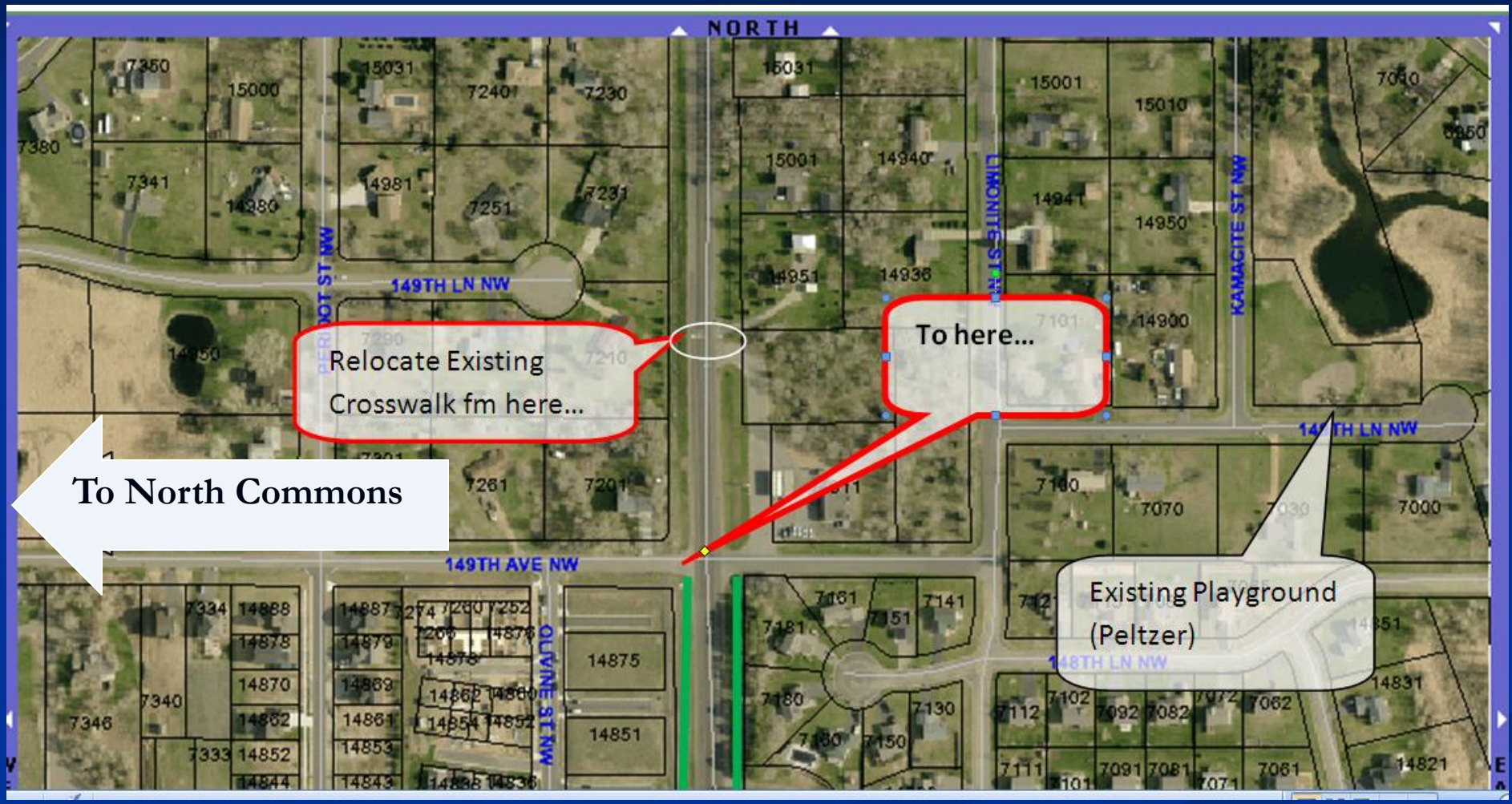
#10

…Convergences:

~ Move the modern playground from Peltzer to North Commons

~ Develop community gardens in proximity to the ‘new’ playground for a successful gathering place for the neighborhood

~ Relocate mid-block pedestrian crossing for the Ramsey Market neighborhood to facilitate better walking and biking access to the COR (for the Peltzer area residents)


NORTH
Relocate Existing Crosswalk fm here...
To here...
To North Commons
149TH AVE NW
149TH LN NW
148TH LN NW
OLIVINE ST NW
LIMONITE ST NW
KAMACITE ST NW
Existing Playground (Peltzer)

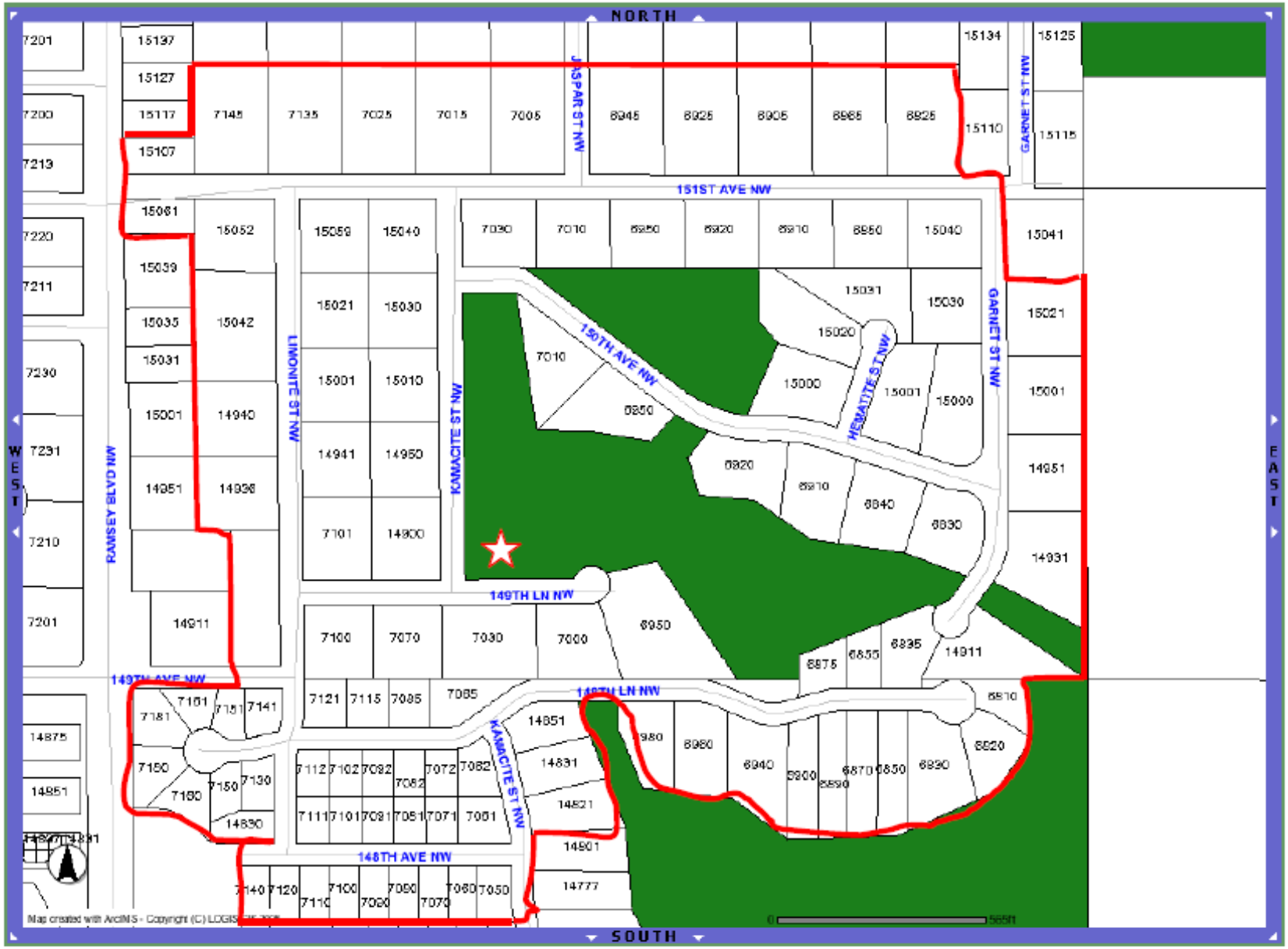
#10

…Convergences:

~ Quantify topsoil specifications to the financial benefit and conclusion for both the city and developers

~ Capitalize on neighborhood volunteerism and ownership by tree planting at North Commons in Fall 2012

~ Publish 2012 findings in appropriate water utility journals and as documentation for future DNR water appropriation requests



Estimated Service Area for Walkers to Peltzer Park

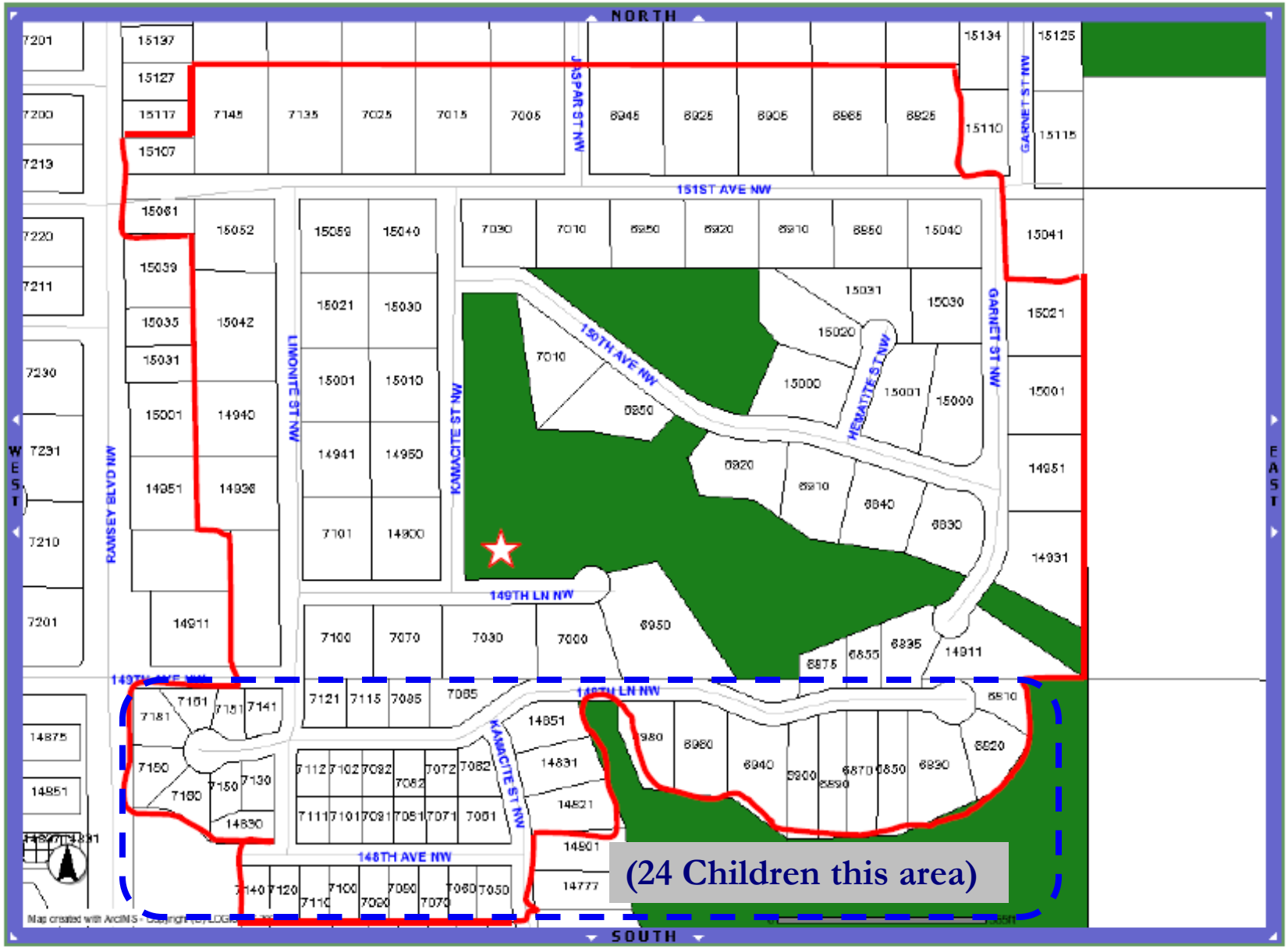
Age on Jan1 2012	Nbr of Children	E	N	S	W
1	2	1		1	
2	3			3	
3	3			2	1
4	5	1		4	
5	10			6	4
6	6			4	2
7	2			2	
8	6			6	
9	3			3	
10	7	3	1	3	
11	5		1	3	1
12	4		1	3	
13	6	1	1	2	2
14	1				1
15	2		1	1	
16	8	4	1	2	1
17	8	3	1	1	3
18	1		1		
	82	**13**	**8**	**46**	**15**
Families represented	*41*	*9*	*4*	*19*	*9*

(33 Children between 6 and 12 years of age)

Age on Jan1 2012	Nbr of Children	E	N	S	W
1	2	1		1	
2	3			3	
3	3			2	1
4	5	1		4	
5	10			6	4
6	6			4	2
7	2			2	
8	6			6	
9	3			3	
10	7	3	1	3	
11	5		1	3	1
12	4		1	3	
13	6	1	1	2	2
14	1				1
15	2		1	1	
16	8	4	1	2	1
17	8	3	1	1	3
18	1		1		
	82	**13**	**8**	**46**	**15**
Families represented	*41*	*9*	*4*	*19*	*9*

Age on Jan1 2012	Nbr of Children	E	N	S	W
1	2	1		1	
2	3			3	
3	3			2	1
4	5	1		4	
5	10			6	4
6	6			4	2
7	2			2	
8	6			6	
9	3			3	
10	7	3	1	3	
11	5		1	3	1
12	4		1	3	
13	6	1	1	2	2
14	1				1
15	2		1	1	
16	8	4	1	2	1
17	8	3	1	1	3
18	1		1		
	82	**13**	**8**	**46**	**15**
Families represented	*41*	*9*	*4*	*19*	*9*

Age on Jan1 2012	Nbr of Children	E	N	S	W
1	2	1		1	
2	3			3	
3	3			2	1
4	5	1		4	
5	10			6	4
6	6			4	2
7	2			2	
8	6			6	
9	3			3	
10	7	3	1	3	
11	5		1	3	1
12	4		1	3	
13	6	1	1	2	2
14	1				1
15	2		1	1	
16	8	4	1	2	1
17	8	3	1	1	3
18	1		1		
	82	**13**	**8**	**46**	**15**
Families represented	*41*	*9*	*4*	*19*	*9*



Estimated Service Area for Walkers to Peltzer Park

Sources of Funding

- Irrigation and Topsoil = Water Utility
- Increased City Share of Property Tax for New Homes* $35,000

*Property Tax Revenue 'Math'

- Assumes 5 more homes built each year by virtue of the development of North Commons.
- ~ Built upon $220k – Ramsey's share of Property Tax $700 *more than* vacant lot.
- ~ 5 new homes each year for 10 years (does not include HRA's lot potentials) = $35,000

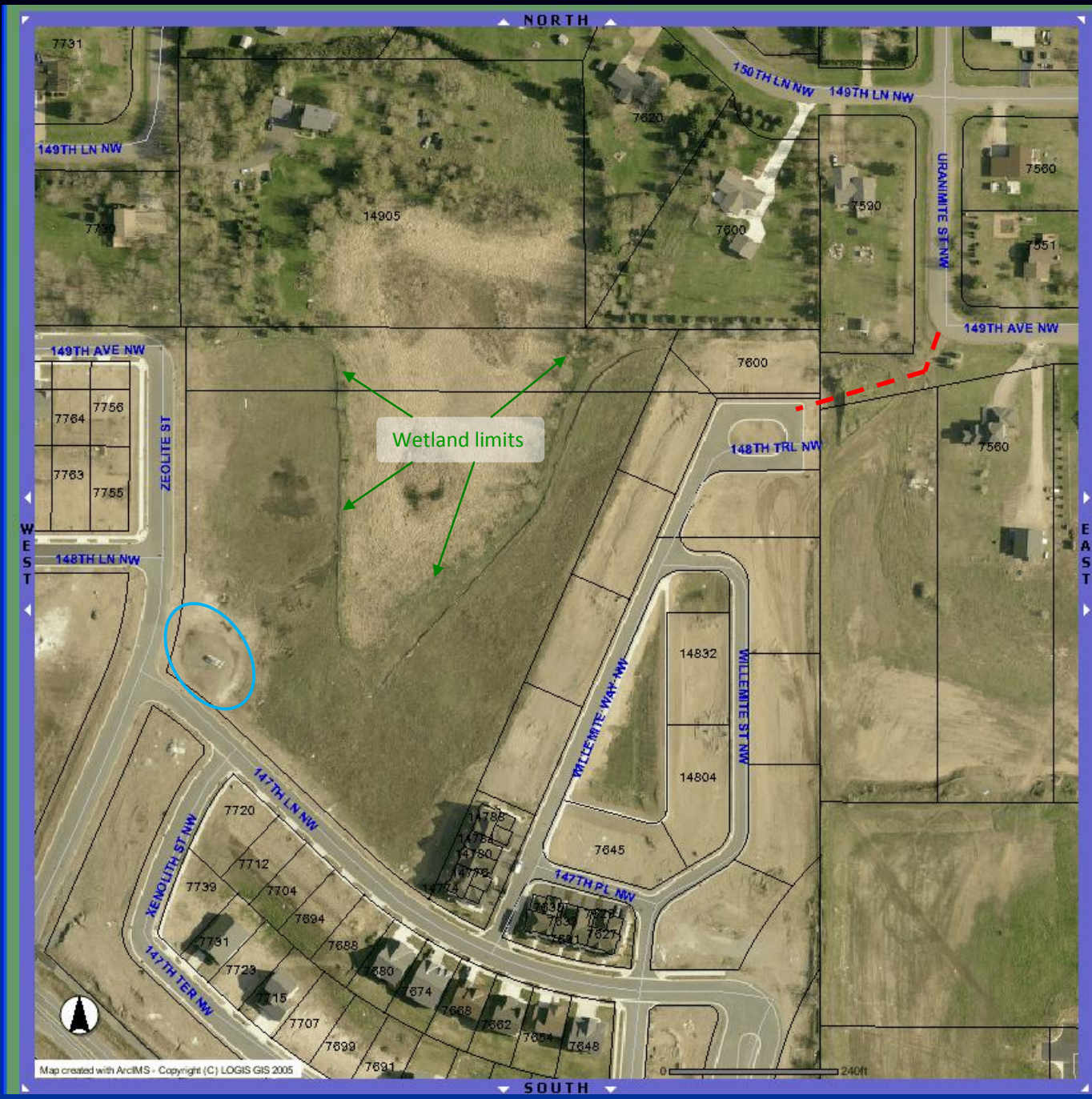
Sources of Funding

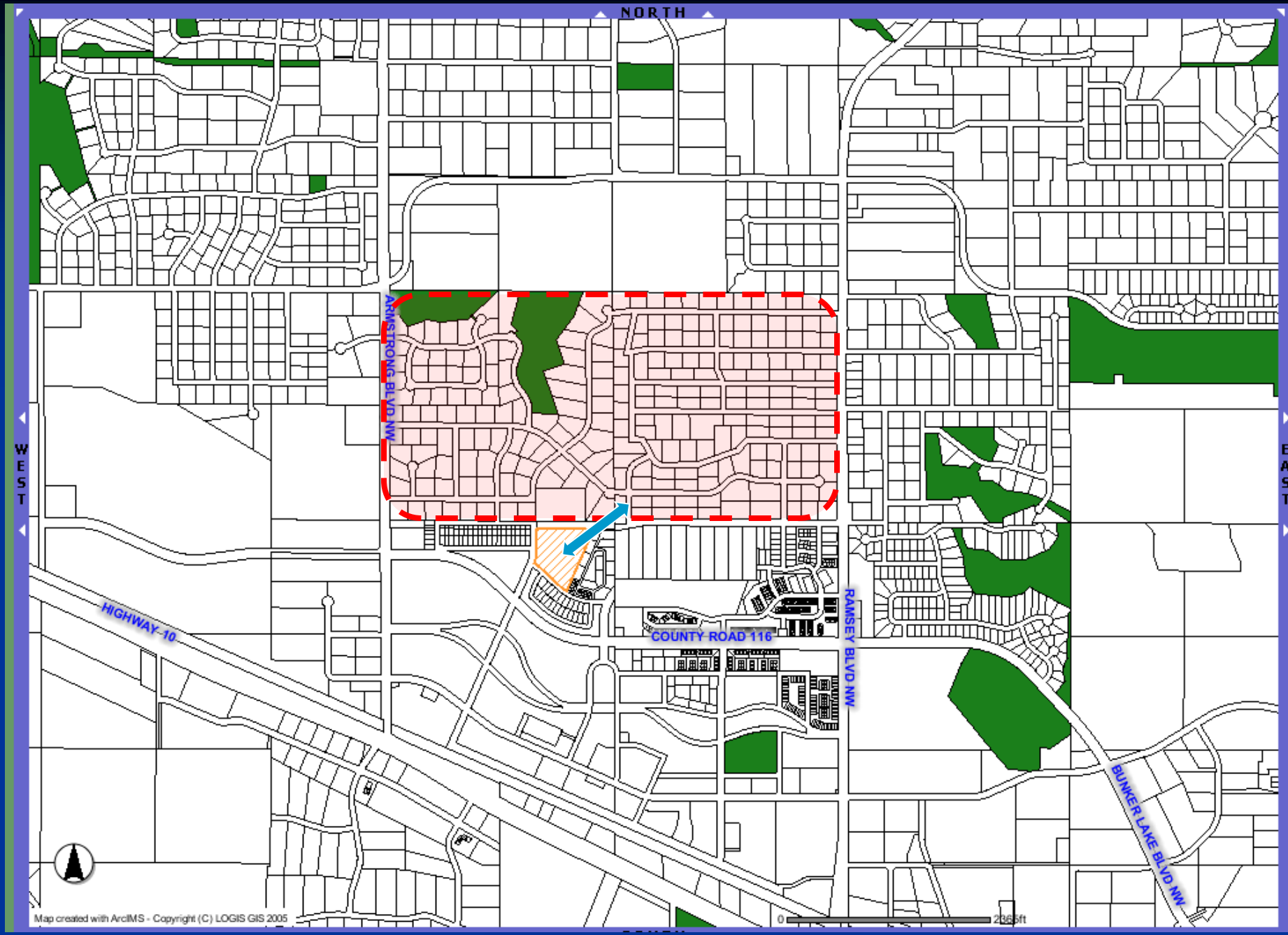
- Irrigation and Topsoil = Water Utility
- Increased City Share of Property Tax for New Homes $35,000
- $15,000 for Landscape presently proposed within 2012 Parks CIP *(Or DNR tree grant application deadline February 17th.)*
- Volunteer planting of the above estimated $2,000+

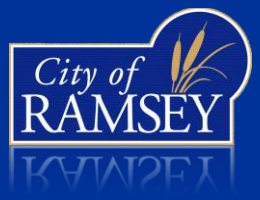
Sources of Funding (continued…)

- Irrigation and Topsoil = Water Utility
- Increased City Share of Property Tax for New Homes $35,000
- $15,000 for Landscape presently proposed within 2012 Parks CIP
  (Or DNR tree grant application deadline February 17th.)
- Volunteer planting of the above estimated $2,000+
- $20k from sale of Peltzer Park(???)
  (Anoka County's valuation for the parcel is $40,300)
- Maintenance Labor – 'swap' for Peltzer…

And, throw in better connectivity to the COR and recreational access….


NORTH
SOUTH
WEST
EAST
Wetland limits
149TH LN NW
150TH LN NW
149TH AVE NW
URANINITE ST NW
ZEOLITE ST
148TH LN NW
148TH TRL NW
WILLEMITE WAY NW
WILLEMITE ST NW
147TH LN NW
147TH PL NW
147TH TER NW
XENOLITH ST NW
7731
7730
14905
7620
7600
7590
7560
7551
7800
7764
7756
7763
7755
14832
14804
7645
7720
7712
7739
7704
7724
7731
7723
7715
7707
7699
7691
7688
7680
7674
7668
7662
7654
7648
Map created with ArcIMS - Copyright (C) LOGIS GIS 2005
0
240ft


NORTH
WEST
EAST
ARMSTRONG BLVD NW
HIGHWAY 10
COUNTY ROAD 116
RAMSEY BLVD NW
BUNKER LAKE BLVD NW
Map created with ArcIMS - Copyright (C) LOGIS GIS 2005
0
2865ft


City of
RAMSEY

THE COR

RAMSEY, MINNESOTA

NORTH 0 80 160

LANDFORM

From Site to Finish

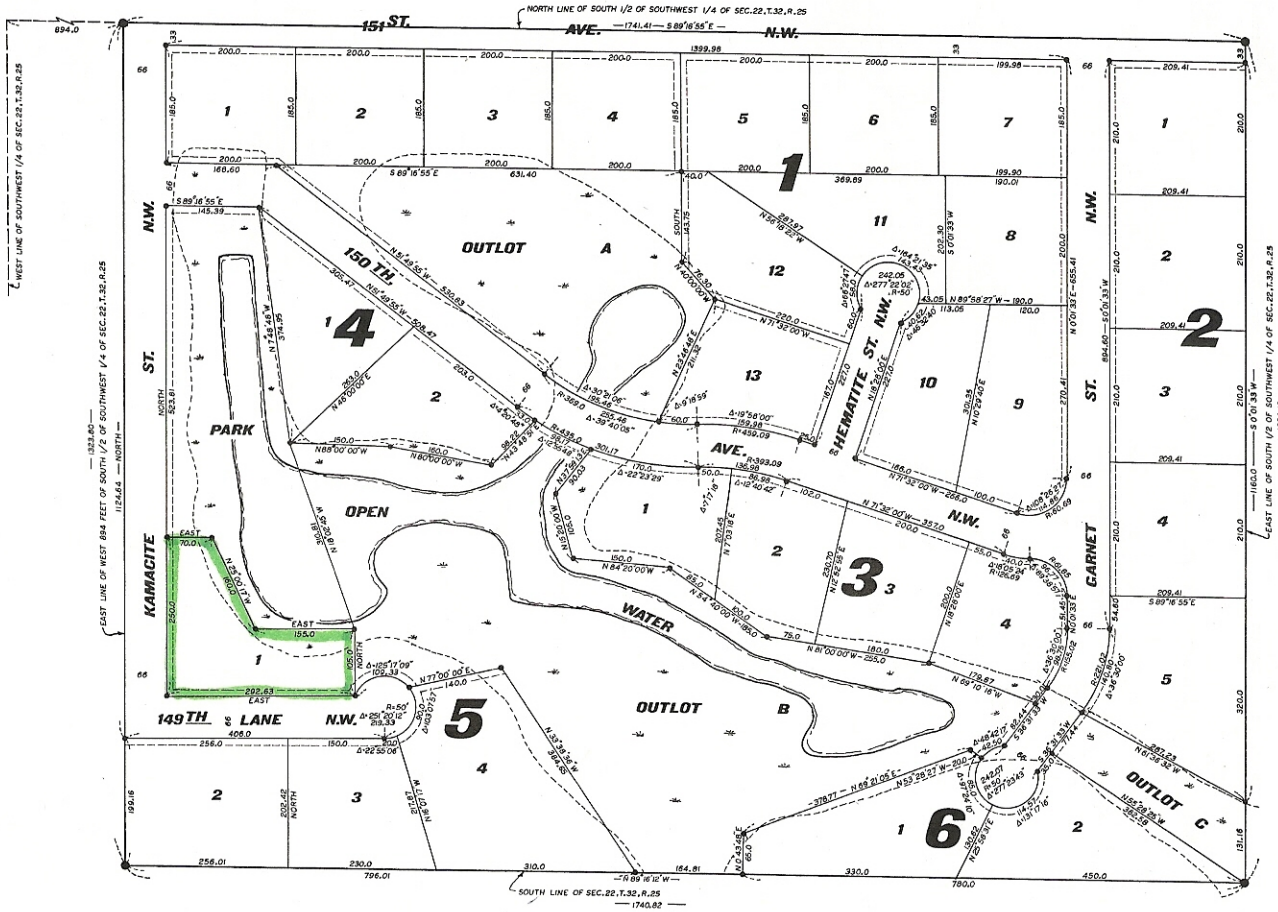
NORTH COMMONS CONCEPT

02.23.2012

PELTZER ADDITION

TOWNSHIP OF RAMSEY
ANOKA COUNTY, MINNESOTA

SCALE: 1 INCH = 100 FEET
BEARINGS SHOWN ARE ASSUMED
DENOTES IRON MONUMENT
UTILITY AND DRAINAGE EASEMENT



N.C.HOIUM & ASSOCIATES, INC.
Engineers - Surveyors

Dog Regulations

The Ramsey City Council recognizes that dogs are an important part of the community. They provide companionship, recreation, and protection for many citizens. However, if not properly trained and controlled, a dog may become a nuisance and a hazard to people and property.

One way the city controls dogs is through licensing. City Code requires all dogs to be licensed. Licenses are available from the city, for a fee, upon proof of rabies vaccination. Licenses are valid for a two-year period. The city limits three dogs per residence. Four or more dogs requires a conditional use permit for a kennel license. Call the Community Development Department at 763-433-9824 for additional information on kennel licenses.

When a dog is off its owner's premises, it must be in control and custody of a person of sufficient age to adequately control the dog at all times. Control and "custody" means on a leash of not more than six (6) feet in length. It is legal to have a dog in an automobile without a leash, but it must be on a leash if taken out of the vehicle.

Remember to take a scoop along when walking your dog! City Code requires any person who owns or has custody of a dog to clean up dog excrement and place it in a proper receptacle.

To protect citizens, no person may keep a dog that howls, yelps or barks to the reasonable annoyance of another person. The city's Animal Control Officer may request the person to stop or prevent the annoyance, and if they refuse to comply, a citation will be issued. If the officer needs to stop the annoyance, the dog may be taken to the Animal Pound.

Call the Animal Control Officer at 763-427-6812 for additional information regarding dog regulations.

City Owned Lands Inventory

Consideration to Eliminate Underutilized Park Spaces; Peltzer Park

As a part of its 2011 strategic goals, the City Council made it a priority to identify an inventory of all city owned lands and their uses. The inventory was completed in August 2011 and a report was provided to the City Council in December 2011. The report identified a number of salable properties with no title limitations. Transitioning these properties back to private ownership returns them to a taxable status and reduces maintenance costs.

In its review, the City Council looked at 36 properties which were identified as potentially developable and no longer needed by the city. Of the 36 reviewed, eight (8) properties could be to be put up for sale. The remaining 24 properties require further review by staff, as they have a significant level of legal restrictions.

After review by city staff, it has been determined that Peltzer Park is an underutilized park when compared to other improved and maintained parks within the city. Peltzer Park is located at 146th Lane and Kamacite Street. One reason Peltzer Park may be underutilized is its relatively close proximity to Alpine Park; a highly improved, large and well-maintained community park. Peltzer Park is being considered for elimination by the City Council.

As expressed by the City Council, the demand for parks is shifting away from small neighborhood 'pocket parks' and refocusing on large regional multi-use parks. Furthermore, the cost to maintain a large number of small neighborhood parks can be greater than the cost to maintain a small number of regional parks.

Persons wishing to learn more about the City Owned Lands Project, or the elimination of Peltzer Park, may come to the Mayor's Town Hall Meeting between 7 and 8 pm on March 12, 2012 in the Lake Itasca Room at the Ramsey Municipal Center.

If you would like additional information on any of the properties under consideration for disposition (including reference maps), please contact Patrick Brama, 763-433-9903, pbrama@ci.ramsey.mn.us or visit the City's website under "In the News."

1. **Organization Name and Project Title:** City of Ramsey's MAJESTY OF THE COMMONS

2. **Project Purpose:** In contrast to the 'Tragedy of the Commons', this unified planting project engages the residents within this livable community in the communal care, education and ongoing stewardship of their shared park space named North Commons. The outcome will be a diverse array of trees that are well adapted to the Anoka Sand Plain for this new public space; *and*, the endeavor will also meet the Environmental Policy Board's strategic goal of implementing a 'mini-arboretum' showcasing species that perform well in sandy soils. Small, didactic placards will be installed adjacent to the individual species as on-going tools for public education. Additional, larger interpretive signs will be strategically placed throughout the park highlighting the many benefits trees provide.

   Complimenting the foresting effort will be a one-year scientific analysis of varying mixtures and depths of topsoil at the park, and their precise effectiveness of retaining water - utilizing integrated soil moisture sensors. The results of this review will provide quantitative data the City can use to establish topsoil specs for new landscapes (a critical issue within the Anoka Sand Plain). The combination of native trees and a comprehensive examination of topsoil requirements will better position *both* the City and its residents in a continuing movement toward more sustainable growth and development.

3. **Project Location Description:** The project will occur in North Commons, a park within Ramsey's pedestrian and transit oriented, master-planned community known as The COR. The park is just over seven (7) acres in size, located in the south central portion of the community and connects the higher density urban area with the existing larger, rural lot neighborhoods to the north and east. The northern and northeastern portions of the property are wetland with the remainder of the site being upland consisting of sandy soil (Hubbard-Nymore association). The western half of the site is fairly flat while the eastern portion slopes downward to the wetland area.

4. **Document Public Ownership:** The project site's legal description is Outlot D Ramsey Town Center 8th Add (see attached map).

5. **Project Goals:** Engage residents from the adjacent neighborhood and townhome associations, who have expressed their desire to initiate park improvements, in the place-making practice of planting trees to create an aesthetically pleasing, inviting and functional public space. The project will also serve as an educational tool for the community by showcasing species well adapted to the area, their growth characteristics (habit and form), and pertinent facts about the needs, benefits and care of trees (*e.g.* what is considered 'adequate' watering for trees, retention of storm water, pruning needs).
   This project will provide living examples of tree species that perform well in sandy soils, which residents can see, touch and replicate as they landscape or reforest their property. The project will incorporate participation of a K-12 school, within walking distance of North Commons, to develop language for interpretive signage to highlight the benefit of trees and community/urban forests. Finally, the project will provide valuable, hands-on training for volunteers by an ISA Certified Arborist to ensure proper planting techniques are utilized and what constitutes critical short and long-term maintenance needs for trees.

6. **Methods:** City Staff will enhance the concept plan for North Commons by developing a diverse species palette and assigning planting locations within the park. In the spring of 2012, City Staff will work with the principal and faculty of PACT Charter School to incorporate benefits of trees into lesson plans such that the students can quite literally develop the educational content for the placards and interpretive signs. In October of 2012, City Staff will prep the site, including pre-digging holes and placing trees with attendant soil work (pre and post planting). Volunteers, (assisted by City Staff) will plant the trees in October of 2012. Spring of 2013, the placards will be installed by City Staff

adjacent to the individual species identifying them by both common and scientific names and larger, interpretive signs will be placed throughout the park with information on the *majesty* of trees in addressing storm water management, carbon sequestration, diversifying the landscape and wildlife habitat.

7. **Personnel:** The following staff will be active participants in this project:
    - Chris Anderson, Associate Planner/Environmental Coordinator, ISA Certified Arborist (PN-1767A)— responsible for development of landscape plan as well as training/instructing team of volunteers that will conduct the plantings (emphasis will be placed on correct planting depth and corrective/structural pruning over the first three [3] years after planting).
    - Mark Riverblood, Parks Supervisor, MN Certified Tree Inspector—responsible for the new park's development, overseeing site preparation by Parks Staff, and coordination of volunteers.
    - Mike Berge, Parks Lead, MN Certified Tree Inspector—will be responsible for material delivery, site preparation, assisting with plantings and on-going maintenance.
    - Volunteers—will assist with installation of 106 trees. Prior to planting, proper planting techniques will be demonstrated by ISA Certified Arborist to emphasis hole prep and depth, locating 1st set of primary roots for proper planting depth, and mulching. The training will also review necessary maintenance, such as pruning, watering, and winter protection for the first three (3) years of a newly installed tree.
    - PACT Charter School—Dan DeBruyn, Principal, work with his faculty to incorporate into their Science lesson plans the benefits trees provide. Students will then be involved in developing the text and content for the interpretive signs at the site.

8. **Maintenance and Management Plan**
    - **A.** One time activities at time of planting: application of slow-release fertilizer (Parks Staff), pruning of dead/broken limbs only (Parks Staff/Volunteers). On-going maintenance activities (all by Parks Staff) over the first three (3) growing seasons: watering, as needed, May-October, pruning (corrective and structural) November-March, liquid fence application April, September/October, installing and removing tree wrap/guards November and April/May respectively. Monitoring/assessing trees occurs each time the site is visited, regardless of the maintenance activity, and any symptoms/signs that are evident are investigated and addressed as necessary.
    - **B.** The City has developed a draft Emerald Ash Borer Management Plan in an effort to prepare for the inevitable appearance of this insect. The City does employ an ISA Certified Arborist that routinely monitors the community forest (both public and private lands) for oak wilt and Dutch elm disease to limit the impacts of these destructive pathogens. When detected, contact is made with the property owner to discuss appropriate management strategies and actions. The City will also continue its comprehensive public outreach including the newsletter, website and cable TV spots to keep residents and businesses aware and informed of current tree related issues (*e.g.* drought, hail damage, pine bark beetles, European pine sawfly oak wilt and EAB).

HRA Regular Session **5. 3.**

Meeting Date: 02/28/2012

Submitted For: Heidi Nelson **By:** Heidi Nelson, Administrative Services

Title:

Authorize Sale of Bonds for The Residence at the COR - Flaherty and Collins and Debt Subordination Agreement for PNC Bank Financing

Background:

On September 27th, 2011 the HRA and City Council approved a Purchase Agreement and Development Agreement with Flaherty and Collins for the construction of a 230-unit market rate apartment project in the COR at Ramsey. The project will wrap the existing and newly expanded parking facility and complete a significant component of the 'transit village' in The COR.

The development and purchase agreements included project financing by the HRA in the amount of a $1.3 million note and a $6.85 million dollar note. As the HRA will recall, the private financing in this project being provided by PNC Bank for $20.45 million, included contingencies with regard to the construction of the Ramsey Station on the Northstar Commuter Rail. Those contingencies have now been satisfied with the contracts for the construction of the Ramsey Station being let in late January. Ground breaking for the Ramsey Station is scheduled for March 27, 2012.

Additionally, at the September 27, 2011 meetings of the HRA, the public hearing for the sale of the bonds associated with the financing being provided by the HRA was held. Stacie Kvilvang of Ehlers, the HRA's financial advisor for this project, will be present at the HRA meeting this evening to review the action requested to call for the sale of the bonds on April 24th and begin the required process for that sale.

At the time of the approval of the Development and Purchase Agreements, it was noted that an agreement may be necessary between PNC bank and the HRA with regard to the financing being provided by each entity. Over the past several months, the Development Management Team and the HRA's legal counsel, Mr. Tom Bray, have been in negotiations with PNC Bank and Flaherty and Collins regarding the Debt Subordination Agreement. The Development Team and legal counsel have worked to ensure that the HRA's rights under its loan terms and development and purchase agreements were not substantially altered under the Debt Subordination Agreement. A memo has been prepared by HRA legal counsel that outlines the HRA's rights and remedies under the subordination agreement, it is attached, along with the Debt Subordination Agreeement, for HRA review. Mr. Tom Bray will be present for the HRA meeting to review the terms of the subordination agreement.

Flaherty and Collins will proceed to close on their private financing for the project in early March and the closing on the land with the HRA would occur on March 23, 2012. The land sale proceeds from this transaction are $750,000. On Thursday, February 23rd, plans were received by the Ramsey Building Division for review which begins the process to satisfy a requirement prior to closing under the development agreement with regard to our review and acceptance of plans for the project. Ground breaking for The Residence at the COR project has been tentatively scheduled for Tuesday, April 10, 2012 at 3:00 p.m.

Notification:

Public Hearing for the sale of the bonds was completed on September 27, 2011.

Observations:

Attached documents:

Sale of Bond docuemnts

Memo from HRA legal counsel Tom Bray regarding the Debt Subordination Agreement.

Debt Subordination Agreement

Recommendation:
Staff recommends that the HRA:

Approve resolution for sale of bonds for The Residence at the COR - Flaherty and Collins project - and -

Approve Debt Subordination Agreement with PNC bank for private financing.

Funding Source:
TIF 14 bond proceeds.

Council Action:
Approve resolution for sale of bonds for The Residence at the COR - Flaherty and Collins project - and -

Approve Debt Subordination Agreement with PNC bank for private financing.

Attachments

Bray memo re Subordination Agreement
Debt Subordination Agreement
Bond Presale Report - Ehlers
Temp Bond Schedule
Option 10 YR Bond with early call

Form Review

Inbox	Reviewed By	Date
Heidi Nelson (Originator)	Heidi Nelson	02/23/2012 03:08 PM

Form Started By: Heidi Nelson Started On: 02/23/2012 12:36 PM

Final Approval Date: 02/23/2012

BRIGGS
BRIGGS AND MORGAN

2200 IDS Center
80 South 8th Street
Minneapolis MN 55402-2157
tel 612.977.8400
fax 612.977.8650

MEMORANDUM

TO: The Board of Commissioners and the Executive Director of The Housing and Redevelopment Authority in and for the City of Ramsey, Minnesota

CC: Kurt Ulrich, City Administrator
Stacie Kvilvang, Ehlers, Inc.
Mary Ippel, Briggs and Morgan, P.A.

FROM: Thomas L. Bray

DATE: February 22, 2012

RE: **The Housing and Redevelopment Authority in and for the City of Ramsey, Minnesota--Purchase Agreement and Development Agreement with F&C Ramsey, LLC**
Our File No.: 12952.47

I. BACKGROUND

On September 27, 2011 the Board of Commissioners ("Board") of The Housing and Redevelopment Authority in and for the City of Ramsey, Minnesota (the "HRA") approved a Purchase Agreement for the sale of Lot 3, Block 1, COR ONE, Anoka County, Minnesota (the "Property") to F&C Ramsey, LLC (" F&C Ramsey") (the "Purchase Agreement") and approved a Development Agreement among and between the HRA, the City of Ramsey and F&C Ramsey (the "Development Agreement"). The Development Agreement obligates the HRA to make a $1.42 MM loan and an approximately $6.825 MM loan (collectively, the "HRA Loans") to F&C Ramsey Member, LLC ("F&C Member"). F&C Ramsey intends to assign all of its rights, except the right to receive the TIF Note, and all of its obligations under the Purchase Agreement and the Development Agreement to F&C Ramsey Apartments, LLC ("F&C Apartments") before the Property closing or the PNC Loan closing. F&C Ramsey and F&C Member own 100% of the membership interests in F&C Apartments.

F&C Ramsey's obligations under the Purchase Agreement and Development Agreement are contingent upon the closing of an approximately $20.475MM loan from PNC Bank, National Association ("PNC") to F&C Ramsey Apartments (the "PNC Loan"). As a condition of the loan, PNC requires that F&C Apartments, PNC, the HRA and the City sign a Debt Subordination Agreement (the "Debt Subordination Agreement"). Neither the requirement for nor the terms of

the Debt Subordination Agreement were known, when the HRA approved the Purchase Agreement and the Development Agreement, so the HRA's Board could not approve and authorize the execution of the Debt Subordination Agreement at that time. HRA staff is submitting the Debt Subordination Agreement to the Board for consideration at the Board's February 28, 2012 meeting.

This Memorandum describes the HRA's remedies if F&C Apartments defaults under the Development Agreement or if F&C Member defaults under either the Loan Agreement to be executed by the HRA and F&C Member (the "HRA Loan Agreement")or either of the two Promissory Notes that F&C Member will execute in favor of the HRA to evidence the HRA Loans (the "HRA Notes") and, where applicable, describes the impact of the Debt Subordination Agreement on those remedies.

II. RIGHT OF REVERTER

The Purchase Agreement and Development Agreement provide for the HRA's conveyance of the Property to the "Developer" (initially F&C Ramsey but, following the assignment to F&C Apartments, F&C Apartments) subject to a right of reverter. If the Developer does not complete construction of the project on or before the date 27 months from the date of the conveyance, the HRA may commence an action in Anoka County District Court seeking a court order transferring title to the Property and any improvements thereon back to the HRA. In the Development Agreement the HRA agreed to subordinate its right of reverter to the lien of the mortgage securing the PNC Loan (the "PNC Mortgage"), so if PNC forecloses its mortgage and the Developer does not redeem the Property from foreclosure, the HRA must either redeem the Property from foreclosure by paying off the PNC mortgage or the HRA's right of reverter will be extinguished.

In the Debt Subordination Agreement, the HRA agrees that the HRA's enforcement of the right of reverter is a non-curable default under the terms of the PNC Mortgage. The HRA also agrees that if F&C Apartments defaults in the performance of its obligations to PNC under the PNC loan documents, the HRA will not oppose PNC's efforts to have a receiver appointed for the Property and will not seek to have the receiver discharged unless PNC fails to commence foreclosure proceedings within 6 months following the appointment of the receiver, PNC commences a foreclosure but fails to schedule a sheriff's sale within a reasonable period of time or the HRA redeems the Property from a foreclosure of the PNC mortgage.

III. ENFORCEMENT OF THE DEVELOPMENT AGREEMENT

The Developer's failure to complete the project with 27 months of closing is a default under the Development Agreement. In addition, a default by F&C Ramsey under the Loan Agreement or the HRA Notes is a default under the Development Agreement. Although the HRA has the right to sue the Developer to recover damages resulting from a default, it would be difficult for the HRA to articulate the monetary damages the HRA would suffer from the Developer's failure to complete the project on time. The more significant remedy available to

the HRA is the right to suspend performance of the HRA's obligation to issue the TIF Note to F&C Ramsey or, if the HRA has already issued the TIF Note, the right to terminate and rescind the TIF Note.

The Debt Subordination Agreement does not impact the HRA's ability to terminate the TIF Note based on a default under the Development Agreement.

Under the terms of the Development Agreement, the HRA has agreed that if PNC forecloses the PNC Mortgage, PNC may elect to either (i) treat the PNC Mortgage as being prior to the Development Agreement in which case the foreclosure would extinguish the Development Agreement and the TIF Note (but not the Assessment Agreement); or (ii) treat the Development Agreement as being prior in which case the Development Agreement would survive a foreclosure, PNC would be subject to all the terms of the Development Agreement and if PNC complies with the terms of the Development Agreement, PNC would be eligible to receive the TIF Note payments.

IV. ENFORCEMENT OF THE LOAN AGREEMENT AND THE HRA NOTES

Under the terms of the HRA Loan Agreement and the HRA Notes, the HRA may sue F&C Member for money damages if F&C Member fails to make payments due to the HRA under the HRA Notes or otherwise defaults under the HRA Loan Agreement. As we advised the Board during the Board's consideration of the Development Agreement, this right is of questionable value because it is unlikely that F&C Member will have any assets other than membership interests in F&C Apartments (and those membership interests will be subject to a security interest in favor of the HRA as described in Section V below).

The Debt Subordination Agreement imposes the following restrictions on F&C Member's right to make payments to the HRA, the HRA's right to receive payments from F&C Member and the HRA's right to sue F&C Member if those payments are not made:

1. So long as F&C Apartments is not in default under the terms of the PNC Loan documents,

(a) F&C Apartments may make annual distributions of "Net Cash Flow," as defined in the Development Agreement, to F&C Member, and F&C Member may make payments due to the HRA under the HRA Notes. If F&C Apartments defaults under the PNC Loan documents or if a distribution to F&C Member would cause F&C Apartments to violate covenants in the PNC Loan documents, F&C Apartments may not make distributions to F&C Member and F&C Member would have funds to pay the HRA;

(b) the members of F&C Member may make additional capital contributions to F&C Member and F&C Member may use those capital contributions to prepay amounts due under the HRA Notes; and

(c) F&C Member may obtain "take out" mezzanine financing and use the proceeds of such financing to pay amounts due under the HRA Notes provided PNC determines, in its reasonable discretion, that the terms of the "take out" mezzanine financing are not less favorable to PNC than the terms of the HRA financing;

2. Before PNC has made its first advance to F&C Apartments and after the PNC Loan has been paid in full (principal, interest and any fees or reimbursements), the HRA may sue F&C Member for defaults under the HRA Loan Agreement or the HRA Notes;

3. The Debt Subordination Agreement prohibits the HRA from suing F&C Member after PNC's first advance and before PNC has been paid in full, but it does not prevent the HRA from foreclosing the Membership Interest Pledge described below.

If the HRA attempts to enforce the HRA Loan Agreement or the HRA Notes in violation of the Debt Subordination Agreement, PNC may seek an injunction to stop the HRA. If F&C Member makes or if the HRA receives payments other than as described in Section 1 above or in Section VI below, the Debt Subordination Agreement requires the HRA to pay those amounts over to PNC for application to the PNC Loan.

V. MEMBERSHIP PLEDGE AGREEMENT

The HRA Loan Agreement obligates F&C Ramsey and F&C Member to grant the HRA a first lien security interest in their membership interests in F&C Apartments, and the Debt Subordination Agreement expressly recognizes the HRA's right to foreclose that security interest and become the owner of F&C Apartments if F&C Member defaults under the HRA Loan Agreement or the HRA Notes. We assume that if the HRA forecloses its security interest, PNC will, if it has not already done so, commence foreclosure of the PNC Mortgage and seek to have a receiver appointed to complete construction and/or operate the Project until the foreclosure is complete. Unless the HRA can persuade PNC to enter into some type of workout agreement to allow the HRA to complete construction and/or operate the project, the affect of the HRA's foreclosure of its security interest would likely be to trigger a foreclosure of the PNC Mortgage and give HRA the right to redeem the property from that foreclosure. Note, however that because the HRA does not have a mortgage on the Property, the HRA cannot effectively prevent F&C Apartments from conveying the Property to PNC pursuant to a deed in lieu of foreclosure a (although such a conveyance would be a default under the Development Agreement and allow the HRA to terminate the TIF Note).

VI. GUARANTIES

Under the terms of the Development Agreement, F&C Member is required to cause Flaherty & Collins Construction, Inc. to execute a corporate guaranty guaranteeing the full performance of F&C Member's obligations and the payment of the amounts due under the terms of the Promissory Note evidencing the $1.42 MM loan from the HRA to F&C Member and is obligated to deliver a personal guaranty of David Flaherty guaranteeing the full performance of

and the payment of the amounts due under the Promissory Note evidencing the $6.825 MM loan from the HRA to F&C Member (the "HRA Guaranties"). Under the terms of the HRA Guaranties, the HRA may commence an action against the guarantors if F&C Member fails to repay the HRA loans when and as due or otherwise defaults under the HRA Loan Agreement or the HRA Notes. The Debt Subordination Agreement restricts the HRA's right to enforce the guaranties as follows:

1. The HRA retains the unrestricted right to enforce the guaranties at all times prior to PNC's first advance and after PNC has been paid in full.

2. After PNC's first advance and prior to PNC's receipt of payment in full, the HRA retains the unfettered right to enforce the personal guarantees if:

a. PNC voluntarily satisfies or releases the Mortgage;

b. PNC releases the guarantors from the terms of PNC's guarantees or otherwise agrees not to enforce the PNC guarantees(which could happen in a deed in lieu situation); or

c. PNC forecloses the PNC mortgage and the amount bid at the foreclosure sale equals the amount owed to PNC; and

3. If After PNC's first advance and prior to PNC's receipt of payment in full, F&C defaults in the performance of its obligations under the PNC loan documents and PNC either accepts a deed in lieu of foreclosure without releasing or agreeing not to enforce the PNC guarantees, or PNC forecloses but the amount PNC receives from the foreclosure sale is less than the amount that PNC owes, either PNC or the HRA may commence enforcement of their rights under their respective guarantees but only after providing the other party with 30 days prior written notice and subject to the requirement that any resulting enforcement action will be taken jointly by PNC and the HRA and the proceeds from such joint action will be allocated between PNC and the HRA on a pro rata basis based on the then-outstanding balances of the PNC loan and the HRA loans. If notice of an enforcement action is given and the other party elects not to proceed with enforcement then the party providing the notice is free to pursue collection under its own guarantees; and

4. If PNC and F&C Apartments amend the terms of the PNC loan documents to extend the maturity date of the PNC loans beyond March 1, 2018, the HRA may commence an action to enforce its guarantees but enforcement is subject to the same joint enforcement provisions described in Subsection 3 above.

As described in Section IV with respect to the HRA's right to obtain a judgment against F&C Member, if the HRA obtains payments from the guarantors that are prohibited by the terms of the Debt Subordination Agreement, the Debt Subordination Agreement requires that the HRA

remit the amounts collected in violation of the terms of the Debt Subordination Agreement to PNC for application to the PNC debt.

VII. CONCLUSIONS

In general, the Debt Subordination Agreement is intended to ensure that if the project struggles or fails and there is not enough money to pay both PNC and the HRA that PNC is made whole before the HRA. In that respect, it does not significantly change the HRA's position. The HRA is and always has been a junior creditor in this transaction. The Debt Subordination Agreement does not impact the rights of the City and the HRA to enforce the Development Agreement as drafted and to terminate the TIF Note if the Developer does not perform under the Development Agreement. Likewise, the Debt Subordination Agreement does not impact the HRA's right to enforce the Membership Pledge Agreement, although, with or without the Debt Subordination Agreement, enforcement of the Membership Pledge Agreement is not a remedy is likely to result in direct cash recovery if the project is not performing. It could, however, give the HRA a redemption right which, if exercised, could allow the HRA to capture any value in excess of the PNC debt.

The most significant impact of the Debt Subordination Agreement is to prevent the HRA from suing the guarantors if there is a default under the HRA Notes between the time PNC first advances loan proceeds and when PNC is paid off or elects to foreclose its mortgage. This eliminates one tool the HRA could use to put pressure on F&C and the Guarantors to address the defaults under the HRA Notes. It is important to remember, however, that, in the first instance, the HRA, as a junior creditor, is far more likely to seek to maximize their recover by negotiating with F&C and modifying the repayment terms than by moving to enforce the HRA's legal remedies, and, if those negotiations fail, two other tools, termination of the TIF Note and foreclosure of the Membership Pledge Agreement, remain available to the HRA. Another significant impact, which is more difficult to quantify, is the fact that, once PNC has advanced loan proceeds to F&C, any legal action by the HRA to enforce the Loan Agreement or the Guaranties in effect becomes a three party action and any disputes between the HRA and PNC regarding the meaning or effect of the Debt Subordination Agreement get added to the list of issues that may need to be resolved through litigation. That can certainly could have an impact on the time and money the HRA may have to spend to enforce its rights.

wp

DEBT SUBORDINATION AGREEMENT

THIS DEBT SUBORDINATION AGREEMENT (this "Agreement") is entered into as of the ___ day of _____, 2012, by and among **PNC BANK, NATIONAL ASSOCIATION**, a national banking association (the "Bank"), **F&C RAMSEY APARTMENTS, LLC**, an Indiana limited liability company (the "Borrower"), **F&C RAMSEY MEMBER, LLC**, an Indiana limited liability company (the "Mezzanine Borrower"), **THE HOUSING AND REDEVELOPMENT AUTHORITY IN AND FOR THE CITY OF RAMSEY, MINNESOTA**, a public body politic and corporate under the laws of the State of Minnesota (the "Creditor"), and the **CITY OF RAMSEY, MINNESOTA**, a home rule charter city organized and existing under the constitution and laws of the State of Minnesota (the "City").

RECITALS

A. Bank has established or is establishing certain credit facilities with Borrower as evidenced by certain documents, instruments and agreements entered into between Bank and Borrower from time to time (collectively, the "Loan Documents"), including without limitation a certain construction loan in the maximum principal amount of Twenty Million Four Hundred Seventy-Five Thousand and 00/100 Dollars ($20,475,000.00) (collectively, the "Loans") pursuant to a certain Loan Agreement by and between Borrower and Bank dated _____, 2012 (the "Loan Agreement").

B. The Loans are secured in part by a first priority mortgage lien on approximately four (4) acres of real property located on U.S. Highway 10 in Ramsey, Anoka County, Minnesota, as more particularly described in Exhibit A attached hereto and made a part hereof, together with the improvements now or hereafter erected thereon (the "Real Estate"), which has been transferred by Creditor to Borrower concurrently herewith pursuant to the terms of a Purchase Agreement dated of even date with the Loan Agreement executed by and among Creditor, the City and F & C Ramsey, LLC ("Ramsey"), under which all rights and obligations of Ramsey have been assigned to Borrower (the "Purchase Agreement").

C. The Loans are further secured in part by certain guaranties (the "Bank Guaranties") executed by David M. Flaherty and Flaherty & Collins Construction, Inc. (together, the "Guarantors").

D. The proceeds of the Loans shall be used solely for the construction of a two hundred thirty (230) -unit luxury midrise apartment building with three thousand (3,000) square feet of retail space on the Real Estate (the "Project").

E. Creditor, the City, Ramsey and Mezzanine Borrower are parties to that certain Development Agreement dated of even date with the Loan Agreement (the "Development Agreement"), under which all rights and obligations of Ramsey have been assigned to Borrower, except the right to require the City to deliver the TIF Note (as defined in the Development Agreement) to Ramsey.

F. Mezzanine Borrower holds a ninety percent (90%) membership interest in Borrower.

G. Creditor has extended or is extending to Mezzanine Borrower certain loans, advances and extensions of credit (the "Mezzanine Loans"), as evidenced by a certain note or notes dated on or about the date hereof (collectively, the "Creditor Documents"), the proceeds of which will be contributed into Borrower by Mezzanine Borrower.

H. The Mezzanine Loans are secured in part by a pledge, collectively, by Mezzanine Borrower and Ramsey to Creditor of one hundred percent (100%) of the membership interests in Borrower (the "Membership Pledge").

I. The Mezzanine Loans are also further secured in part by certain guaranties (the "Creditor Guaranties") executed by the Guarantors.

J. Bank and Creditor hereby desire to set forth the respective rights and obligations each has as against the other with respect to Borrower and Mezzanine Borrower

NOW, THEREFORE, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Definitions.

"Collateral" means any collateral now or in the future securing the Obligations, including, but not limited to, the first priority mortgage lien on the Real Estate and claims against either Guarantor of the Obligations and any collateral securing such Bank Guaranties.

"Guaranties" means, collectively, the Bank Guaranties and the Creditor Guaranties.

"Obligations" means all loans, advances, debts, liabilities, obligations, covenants and duties owing by Borrower to Bank or to any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., in connection with the Loans as described in the Loan Agreement, of any kind or nature, present or future (including any interest accruing thereon after maturity or after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding relating to Borrower, whether or not a claim for

post-filing or post-petition interest is allowed in such proceeding), whether direct or indirect (including those acquired by assignment or participation), absolute or contingent, joint or several, due or to become due, now existing or hereafter arising, whether or not: (i) evidenced by any note, guaranty or other instrument, (ii) arising under any agreement, instrument or document, (iii) for the payment of money, (iv) arising by reason of an extension of credit, opening of a letter of credit, loan, equipment lease or guarantee, (v) under any interest or currency swap, future, option or other interest rate protection or similar agreement, (vi) under or by reason of any foreign currency transaction, forward, option or other similar transaction providing for the purchase of one currency in exchange for the sale of another currency, or in any other manner, or (vii) arising out of overdrafts on deposit or other accounts or electronic funds transfers (whether by wire transfer or through automated clearing houses or otherwise) or out of the return unpaid of, or other failure of Bank to receive final payment for, any check, item, instrument, payment order or other deposit or credit to, deposit or other account, or out of Bank's non-receipt of or inability to collect funds or otherwise not being made whole in connection with depository transfer check or other similar arrangements; and any amendments, extensions or renewals and all costs and expenses of Bank incurred in the documentation, negotiation, modification, enforcement, collection or otherwise in connection with any of the foregoing, including reasonable attorneys' fees and expenses.

"Subordinated Debt" means any loans, advances, debts, liabilities, obligations, covenants and duties owing by Mezzanine Borrower to Creditor in connection with the Mezzanine Loans as described in the Creditor Documents, of any kind or nature, present or future, whether or not evidenced by any note, guaranty or other instrument, whether arising under any agreement, instrument or document, whether or not for the payment of money, whether arising by reason of an extension of credit, loan or guarantee or in any other manner, whether direct or indirect, absolute or contingent, joint or several, due or to become due, now existing or hereafter arising (including any such obligations purchased or otherwise acquired by Creditor), whether consisting of principal, interest, expense payments, management and consulting fees, liquidation costs, attorneys' fees and costs or otherwise.

2. Subordination.

(a) Subject to Section 3 hereof, Creditor hereby irrevocably subordinates and postpones the payment and the time of payment of all the Subordinated Debt and all claims and demands arising therefrom to the Obligations and directs that the Obligations be paid in full before the Subordinated Debt.

(b) Creditor shall: (i) make notations on the books of Creditor beside all accounts or on such other statements evidencing or recording any Subordinated Debt to the effect that such Subordinated Debt is subject to the provisions of this Agreement, (ii) furnish Bank, upon Bank's request from time to time, a statement of the account between Creditor and Mezzanine Borrower representing the Subordinated Debt and copies of each of Creditor Documents, and (iii) give Bank, upon its request, full and free access to Creditor's books pertaining only to such accounts with the right to make copies thereof. Each and every Creditor Document shall bear a legend as set forth in Section 16(b) hereof.

3. Payments to Creditor. Notwithstanding the provisions of Section 2(a) hereof or any other provision of this Agreement, so long as (i) Borrower is in compliance with all financial covenants and reporting requirements contained in the Loan Documents; (ii) no other Event of Default (as defined in the Loan Agreement) has occurred or exists beyond any applicable notice and grace period; and (iii) a payment hereunder shall not give rise to or result in a breach of any affirmative or negative covenant contained in the Loan Agreement or any other Event of Default, Borrower may make annual distributions to Mezzanine Borrower in amounts equal to, and Mezzanine Borrower may pay to Creditor, the Net Cash Flow (as defined in the Development Agreement) for the immediately preceding calendar year, for regularly scheduled payments of principal and/or interest, when due, on the Subordinated Debt (which shall not include any payments due or past due as a result of any acceleration of the Subordinated Debt) and, to the extent Net Cash Flow exceeds the scheduled payment amounts, prepayments of principal on the Subordinated Debt. Additional prepayments of principal on the Subordinated Debt, default interest thereon and/or costs and expenses shall be permitted or made only in accordance with the terms of Section 9.29 of the Loan Agreement. After the occurrence and during the continuance of an Event of Default under the Loan Documents and following receipt by Creditor of written notice thereof from Bank to Creditor, Mezzanine Borrower shall not make, and Creditor shall not receive, any direct or indirect payments of principal, interest, fees or expenses under the Subordinated Debt.

4. Security for Subordinated Debt. The Subordinated Debt is secured by the Membership Pledge and the guarantee of Guarantors pursuant to the Creditor Guaranties. Mezzanine Borrower and Borrower shall not grant and Creditor shall not take any further lien on or security interest in any Collateral, other than the guarantee of Guarantors, or any other of Mezzanine Borrower's or Borrower's property, now owned or hereafter acquired or created, without the prior written consent of Bank.

5. Standby Limitation. Notwithstanding any breach or default by Mezzanine Borrower under the Creditor Documents, following Bank's first advance of funds to Borrower under the Loan Documents, which shall not be made until Bank has received certification from Borrower and/or Creditor of (i) the cash equity injection from the members of Borrower in the amount of One Million Dollars ($1,000,000), and (ii) the cash equity injection from Mezzanine Borrower's contribution of the full amount of the Mezzanine Loans (the "First Advance"), Creditor shall not at any time or in any manner: (a) foreclose upon, take possession of, or attempt to realize on any Collateral or proceed in any way to enforce any claims it has or may have against Mezzanine Borrower under the Subordinated Debt and Creditor Documents, or (b) contest, protest or object to any action taken by Bank under the Loan Documents or otherwise, unless and until the Obligations have been fully and indefeasibly paid and satisfied in full. Nothing herein shall prevent Creditor from taking action at any time with respect to the Membership Pledge or the Creditor Guaranties (pursuant to Section 6 hereof) upon the occurrence and continuance of a default or event of default under the Creditor Documents.

6. Guaranties. As a condition to the extension of credit facilities to Borrower and Mezzanine Borrower, Bank and Creditor have each required that Guarantors execute the Guaranties. Notwithstanding anything herein or in the Guaranties to the contrary, Bank and Creditor hereby agree as follows with respect to enforcement of the Guaranties:

(a) Prior to the First Advance, Creditor may enforce its rights with respect to the Creditor Guaranties with prior written notice to Bank. All proceeds collected in connection with any such action taken by Creditor against a Guarantor shall be retained by Creditor and used to reduce the outstanding principal balance of the Subordinated Debt.

(b) Upon the First Advance, Creditor shall not seek to enforce the Creditor Guaranties until the earlier of the following to occur:

(i) Bank voluntarily satisfies or releases the Mortgage (as defined in the Loan Agreement);

(ii) Bank releases Guarantors or agrees not to enforce the Bank Guaranties;

(iii) Bank forecloses the Mortgage and the purchaser at the foreclosure sale (whether it be Bank or a third party) bids an amount equal to or greater than either (x) the amount that Bank would be entitled to credit bid at the foreclosure sale (in a foreclosure by action), or (y) the amount of Bank's judgment (in a foreclosure by action);

(iv) Bank accepts a deed in lieu of foreclosure from Borrower without releasing or agreeing not to enforce the Bank Guaranties;

(v) Bank forecloses the Mortgage and the amount bid at the foreclosure sale (whether it be by Bank or a third party) is less than either (x) the amount that Bank would be entitled to credit bid at the foreclosure sale (in a foreclosure by action), or (y) the amount of Bank's judgment (in a foreclosure by action); or

(vi) Bank extends the final maturity date of the Loans to a date that is later than March 1, 2018.

Upon the occurrence of (i), (ii) or (iii) above, Creditor shall thereafter have an unfettered right to enforce the Creditor Guaranties with prior written notice to Bank. Upon the occurrence of (iv), (v) or (vi) above, either Bank or Creditor may thereafter enforce its rights with respect to the Guaranties only after providing thirty (30) days prior written notice to the other party, and any resulting action taken against a Guarantor shall be a joint collection action by Bank and Creditor. All proceeds from such joint action shall be allocated to Bank and Creditor on a pro rata basis based on the then-outstanding balances of the Loans and the Mezzanine Loans, respectively. In the event that either Bank or Creditor chooses to not join the collection action within thirty (30) days after receipt of such written notice, the other party may thereafter pursue such Guarantor individually and retain all proceeds collected in connection with such action.

7. Subordination and Standstill of Right of Reverter. Notwithstanding anything to the contrary contained in the Limited Warranty Deed for the Real Estate executed and delivered by Creditor to Borrower of even date herewith (the "Deed"), Creditor acknowledges and agrees that the right of reverter in its favor described in the Purchase Agreement and reserved in the Deed (the "Right of Reverter") is hereby made junior, subject and subordinate to the rights of Bank under the Loan Documents. Following the First Advance and until Bank is paid in full with no obligation to make further advances under the Loans, Creditor agrees as follows:

(a) following an Event of Default, Creditor will not oppose Bank's efforts to have a receiver appointed either before or after Creditor commences an action to enforce the Right of Reverter;

(b) Creditor's enforcement of the Right of Reverter shall be a non-curable default under the Mortgage, such that if Creditor enforces the Right of Reverter, Creditor may not reinstate the Mortgage prior to a foreclosure sale by curing any other Event of Default; and

(c) in the event that Creditor exercises the Right of Reverter and becomes the owner of the Real Estate, Creditor may not seek to have the receiver discharged unless (i) Bank fails to commence foreclosure proceedings within six (6) months following the appointment of the receiver, (ii) Bank commences a foreclosure but fails to schedule and hold a sheriff's sale within a reasonable time, if foreclosing by advertisement, or fails to prosecute a foreclosure by action and schedule and hold a sheriff's sale within a reasonable time after obtaining a final judgment in the action, or (iii) Creditor redeems the property from foreclosure following a sheriff's sale.

8. Notice of Default. Bank hereby agrees to notify Creditor of any Event of Default not waived and existing beyond any grace or cure period, and to give Creditor a reasonable period of time to cure any such defaults before Bank's declaration of acceleration or commencement of any action to enforce its security interests under the Loan Documents. Creditor hereby agrees to notify Bank of any default under the Creditor Documents not waived and existing beyond any grace or cure period, and to give Bank a reasonable period of time to cure any such defaults before Creditor's commencement of any action to enforce its security interests under the Membership Pledge or the Creditor Guaranties. Notwithstanding the foregoing, no failure by either party to provide such notice shall result in liability on the part of such party to the other or affect the other rights and obligations of the parties hereunder.

9. Bankruptcy/Probate of Borrower. In the event a petition or action for relief shall be filed by or against Borrower under any federal bankruptcy statute in effect from time to time, or under any other law relating to bankruptcy, insolvency, reorganization, receivership, general assignment for the benefit of creditors, moratorium, creditor composition, arrangement or other relief for debtors, Bank's claim (secured or unsecured) against the assets or estate of Borrower for repayment of the Obligations shall be indefeasibly paid in full before any payment is made by Mezzanine Borrower to Creditor on the Subordinated Debt, whether such payment is in cash, securities or any other form of property or rights. Bank may, in its discretion, file a proof of claim for or collect Creditor's claim first for the benefit of Bank to the extent of the unpaid

Obligations and then for the benefit of Creditor (but without creating any duty or liability to Creditor other than to remit to Creditor distributions, if any, actually received in such proceedings after the Obligations have been paid and satisfied in full) directly from the receiver, trustee, custodian, liquidator or representative of Borrower's estate in such proceeding. Borrower and Creditor shall furnish all assignments, powers or other documents requested by Bank to facilitate such direct collection by Bank.

10. Receipt of Payments by Creditor. Should Creditor directly or indirectly receive (i) any payment or distribution not permitted pursuant to Section 3 hereof, or (ii) any Collateral or proceeds thereof not permitted pursuant to Section 5 hereof, prior to the full and indefeasible payment and satisfaction of the Obligations and the termination of all financing arrangements between Bank and Borrower, Creditor will deliver the same to Bank in the form received (except for the endorsement or assignment of Creditor where necessary), for application to the Obligations in such order and manner as Bank may elect. Until so delivered, Creditor shall hold the same, in trust, for Bank as property of Bank, and shall not commingle such property of Bank with any other property held by Creditor. In the event Creditor fails to make any such endorsement or assignment, Bank, or any of its officers or employees on behalf of Bank, is hereby irrevocably authorized in its own name or in the name of Creditor to make such endorsement or assignment and is hereby irrevocably appointed as Creditor's attorney-in-fact for those purposes.

11. Bank's Rights.

(a) Creditor hereby consents that at any time and from time to time, without further consent of or notice to Creditor and without in any manner affecting, impairing, lessening or releasing any of the provisions of this Agreement, Bank may, in its sole discretion: (i) renew, compromise, extend, expand, postpone, waive, accelerate, terminate, change the payment terms of, or otherwise modify the Obligations or amend, renew, replace or terminate the Loan Documents or any and all other agreements now or hereafter related to the Obligations; (ii) extend credit to Borrower in whatever amount on a secured or unsecured basis or take other support for the Obligations and exchange, enforce, waive, sell, transfer, collect, adjust or release any such security or other support or any part thereof; (iii) apply any and all payments or proceeds of such security or other support and in any order or manner as Bank, in its discretion, may determine; and (iv) release or substitute any party liable on the Obligations, any guarantor of the Obligations, or any other party providing support for the Obligations. Notwithstanding anything in this Agreement to the contrary, during the term of this Agreement: (x) Bank shall not modify the Loan Documents to increase the aggregate maximum principal amount of the Loans; and (y) Creditor shall not modify the Creditor Documents to increase the aggregate maximum principal amount of the Mezzanine Loans.

(b) This Agreement will not be affected, impaired or released by any delay or failure of Bank to exercise any of its rights and remedies against Borrower or any Guarantor or under any of the Obligations or against any Collateral, by any failure of Bank to take steps to perfect or maintain its lien on, or to preserve any rights to, any Collateral by any irregularity, unenforceability or invalidity of any of the Obligations or any part thereof or any security or Guaranty therefor, or by any other event or circumstance which otherwise might constitute a

defense available to, or a discharge of, Borrower or a subordinated creditor. Creditor hereby waives demand, presentment for performance, protest, notice of dishonor and of protest with respect to the Subordinated Debt and the Collateral and notice of acceptance of this Agreement.

(c) Nothing in this Agreement will obligate Bank to grant credit to, or continue financing arrangements with, Borrower.

12. Continuing Agreement. This is a continuing agreement and will remain in full force and effect until all of the Obligations and all of Creditor's obligations and undertakings to Bank have been fully performed and indefeasibly satisfied and until all the Loan Documents have been terminated. This Agreement will continue to be effective or will be automatically reinstated, as the case may be, if at any time payment of all or any part of the Obligations is rescinded or must otherwise be returned by Bank upon insolvency, bankruptcy, or reorganization of Borrower or otherwise, all as though such payment had not been made.

13. No Challenge to Liens. Creditor agrees that it will not make any assertion, claim or argument in any action, suit or proceeding of any nature whatsoever in any way challenging the priority, validity or effectiveness of the liens and security interests granted to Bank.

14. Disposition or Release of Collateral.

(a) If at any time or from time to time the Collateral, or any portion thereof, is in any manner sold or otherwise transferred, Creditor shall not be entitled to receive any proceeds (cash or non-cash) of such disposition unless and until the Obligations have been indefeasibly paid in full.

(b) If, at any time and for any reason, Bank releases its lien on the Collateral, or any portion thereof, Creditor shall likewise release its lien on the property so released from Bank's lien, if Creditor has obtained such a lien.

15. Order of Proceedings. Nothing in this Agreement is intended to compel Bank or Creditor at any time to declare Borrower and/or Mezzanine Borrower in default or compel Bank to proceed against or refrain from proceeding against any Collateral in any order or manner. All rights and remedies of Bank with respect to the Collateral, Borrower, and any other obligors concerning the Obligations are cumulative and not alternative.

16. Assignments.

(a) Creditor agrees that as a prior condition of any assignment of any of its interests under any of Creditor Documents, Creditor shall require the assignee to acknowledge this Agreement and agree, in writing, to be bound by the terms and conditions hereof.

(b) Each and every Creditor Document shall bear the following legend, or a similar legend acceptable to Bank, in boldface type:

This Note is subject to the terms of a Debt Subordination Agreement in favor of PNC Bank, National Association. Notwithstanding any contrary statement contained in the within instrument, no payment on account of any obligation arising from or in connection with the within instrument or any related agreement (whether of principal, interest or otherwise) shall be made, paid, received or accepted except in accordance with the terms of said Debt Subordination Agreement.

17. Financing of Fiduciary. In the event a bankruptcy, reorganization, other insolvency or court proceeding for Borrower commences, Bank shall have the option (in its sole and absolute discretion) to continue to provide financing (on terms acceptable to Bank) of the trustee, other fiduciary, or of Borrower as a debtor-in-possession, if Bank deems such financing to be in its best interests. The subordination and lien priority provisions of this Agreement shall continue to apply to all advances made during the pendency of such court proceedings, so that Bank shall have a prior lien on all Collateral as set forth in this Agreement, created before or during such court proceeding, to secure all Obligations, whether created before or during such court proceeding. Creditor hereby waives any right it may have to object to financing by Bank during the pendency of such court proceeding and Creditor's consent to such financing shall not be required regardless of whether the court supervising such proceeding approves, grants or allows adequate protection to Creditor.

18. Investigation of Parties. Creditor has entered into the Creditor Documents with Mezzanine Borrower, Bank has entered into the Loan Documents with Borrower and Creditor and Bank have entered into this Agreement, each upon its own independent investigation, and each makes no warranty or representation as to each other with respect to the financial condition of Borrower or Mezzanine Borrower, or either entity's ability to repay its loans to Creditor or Bank in the future. Nothing in this Agreement shall be deemed to constitute this Agreement as a security or create a joint venture or partnership between Creditor and Bank for any purpose.

19. Improper Action by Creditor. If any of Creditor, Mezzanine Borrower or Borrower, contrary to this Agreement, make, attempt to or threaten to allow Creditor to exercise its remedies against Mezzanine Borrower under Creditor Documents, or make any payment or take any action contrary to this Agreement, Bank may restrain or enjoin Creditor, Mezzanine Borrower and Borrower from so doing, it being expressly understood and agreed by Creditor, Mezzanine Borrower and Borrower that: (i) Bank's damages from their actions may at that time be difficult to ascertain and may be irreparable, and (ii) Creditor, Mezzanine Borrower and Borrower waive any defense or claim that Bank or Borrower cannot demonstrate damages or can be made whole by the awarding of damages.

20. Indemnification of Bank. Creditor agrees to indemnify and to hold Bank, its officers, directors, agents and employees harmless for any and all losses, damages, liabilities, expenses and obligations, including attorneys' fees and expenses, as they arise, relating to actions of Creditor taken contrary to this Agreement.

21. Notices. All notices, demands, requests, consents, approvals and other communications required or permitted hereunder ("Notices") must be in writing and will be effective upon receipt. Notices may be given in any manner to which the parties may separately

agree, including electronic mail. Without limiting the foregoing, first-class mail, facsimile transmission and commercial courier service are hereby agreed to as acceptable methods for giving Notices. Regardless of the manner in which provided, Notices may be sent to a party's address set forth below or to such other address as any party may give to the other in writing for such purpose in accordance with this Section:

If to Bank:	PNC Bank, National Association 101 West Washington Street Mail Locator I1-Y013-01-3 Indianapolis, IN 46255 Attn: Sarah E. Beeson, Vice President
If to Creditor:	The Housing and Redevelopment Authority in and for the City of Ramsey, MN Ramsey Municipal Center 7550 Sunwood Drive Ramsey, MN 55303 Attn: Executive Director
If to the City:	City of Ramsey, Minnesota Ramsey Municipal Center 7550 Sunwood Drive Ramsey, MN 55303 Attn: City Administrator
If to Borrower:	F&C Ramsey Apartments, LLC 8900 Keystone Crossing, #1200 Indianapolis, IN 46240 Attn: David M. Flaherty
If to Mezzanine Borrower:	F&C Ramsey Member, LLC 8900 Keystone Crossing, #1200 Indianapolis, IN 46240 Attn: David M. Flaherty

22. Preservation of Rights. No delay or omission on Bank's part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will Bank's action or inaction impair any such right or power. Bank's rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which Bank may have under other agreements, at law or in equity. Nothing in this Agreement is intended to modify, alter, reduce or impair any rights which Bank or Creditor may have against Borrower and/or Mezzanine Borrower under the Loan Documents or Creditor Documents, respectively, or under any other agreement between them, or either of them, and Borrower and/or Mezzanine Borrower.

23. Illegality. If any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, it shall not affect the validity, legality and enforceability of the remaining provisions of this Agreement.

24. Changes in Writing. No modification, amendment or waiver of, or consent to any departure by Borrower, Mezzanine Borrower or Creditor from, any provision of this Agreement, will be effective unless made in a writing and signed by Bank, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on Borrower in any case will entitle Borrower to any other or further notice or demand in the same, similar or other circumstance.

25. Entire Agreement. This Agreement (including the documents and instruments referred to herein) constitutes the entire agreement and supersedes all other prior agreements and understandings, both written and oral, among the parties with respect to the subject matter hereof.

26. Counterparts. This Agreement may be signed in any number of counterpart copies and by the parties hereto on separate counterparts, but all such copies shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by facsimile transmission shall be effective as delivery of a manually executed counterpart. Any party so executing this Agreement by facsimile transmission shall promptly deliver a manually executed counterpart, provided that any failure to do so shall not affect the validity of the counterpart executed by facsimile transmission.

27. Successors and Assigns. This Agreement will be binding upon and inure to the benefit of Borrower, Mezzanine Borrower, Creditor and Bank and their respective heirs, executors, administrators, successors and assigns; *provided, however*, that neither Borrower, Mezzanine Borrower nor Creditor may assign this Agreement in whole or in part without Bank's prior written consent and Bank at any time may assign this Agreement in whole or in part. No claims or rights are intended to be created hereunder for the benefit of Borrower, Mezzanine Borrower or any alleged third party beneficiary hereof.

28. Interpretation. In this Agreement, unless the parties otherwise agree in writing, the singular includes the plural and the plural the singular; words importing any gender include the other genders; references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to; the word "or" shall be deemed to include "and/or", the words "including", "includes" and "include" shall be deemed to be followed by the words "without limitation"; references to articles, sections (or subdivisions of sections) or exhibits are to those of this Agreement; and references to agreements and other contractual instruments shall be deemed to include all subsequent amendments and other modifications to such instruments, but only to the extent such amendments and other modifications are not prohibited by the terms of this Agreement. Section headings in this Agreement are included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose. If this Agreement is executed by more than one party as Borrower, Mezzanine Borrower or Creditor, the obligations of such persons or entities hereunder will be joint and several.

29. Governing Law and Jurisdiction. This Agreement has been delivered to and accepted by Bank and will be deemed to be made in the State where Bank's office indicated above is located. THIS AGREEMENT WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE PARTIES HERETO DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE BANK'S OFFICE INDICATED ABOVE IS LOCATED, EXCLUDING ITS CONFLICT OF LAWS RULES. Each of Borrower, Mezzanine Borrower and Creditor hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where Bank's office indicated above is located; *provided* that nothing contained in this Agreement will prevent Bank from bringing any action, enforcing any award or judgment or exercising any rights against Borrower, Mezzanine Borrower or Creditor individually, against any security or against any property of Borrower within any other county, state or other foreign or domestic jurisdiction. The parties hereto agree that the venue provided above is the most convenient forum for each of the parties. Each of Borrower, Mezzanine Borrower and Creditor waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Agreement.

30. WAIVER OF JURY TRIAL. **EACH OF BORROWER, MEZZANINE BORROWER, CREDITOR AND BANK IRREVOCABLY WAIVES ANY AND ALL RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS AGREEMENT, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS.** BORROWER, MEZZANINE BORROWER, CREDITOR AND BANK ACKNOWLEDGE THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

31. Subordination of Development Agreement. Creditor and the City hereby agree that, upon an Event of Default, Bank may elect, in an instrument to be recorded in the Anoka County, Minnesota land record and delivered to the City and Creditor prior to commencement of proceedings to foreclose the Mortgage, to either:

(i) treat the Development Agreement as being subordinate to the lien of the Mortgage such that the foreclosure of the Mortgage and the failure of any owner to redeem the Real Estate from such foreclosure will extinguish and terminate the Development Agreement, and the TIF Note (but not the Assessment Agreement (as defined in the Development Agreement)) will automatically be canceled and rescinded; or

(ii) treat the Development Agreement as having priority over the Mortgage, in which case the Development Agreement and the TIF Note will survive foreclosure of the Mortgage and the Development Agreement will be binding upon the holder of the Sheriff's Certificate in conjunction with the foreclosure of the Mortgage.

If Bank fails to notify the City and Creditor of its election under this Section on or before the commencement of foreclosure proceedings, Bank shall have been deemed to have elected to

treat the Development Agreement as being subordinate to the lien of the Mortgage such that the foreclosure of the Mortgage and the failure of any owner to redeem the Real Estate from such foreclosure will extinguish and terminate the Development Agreement, and the TIF Note (but not the Assessment Agreement) will automatically terminate. The City further agrees that if Bank elects to treat the Development Agreement as having priority over the Mortgage, the City will, upon completion of the foreclosure without redemption by Borrower or any junior creditor, amend the Development Agreement to extend the time for the completion of Minimum Improvements (as defined in the Development Agreement) to a date that is twelve (12) months after the expiration of all applicable redemption periods.

32. Rights of City. Bank hereby acknowledges and agrees that the City is only a party to this Agreement with respect to Section 31 hereof. Nothing in this Agreement shall impair the City's right to cancel and terminate the TIF Note upon the occurrence of any default or event of default under the Development Agreement or Creditor Documents.

[Signatures on following page]

IN WITNESS WHEREOF, the parties hereto have executed this Debt Subordination Agreement as of the date and year first set forth above.

"BORROWER"
F&C RAMSEY APARTMENTS, LLC,
an Indiana limited liability company

By: _____
David M. Flaherty, Manager

STATE OF INDIANA)
) SS:
COUNTY OF _____)

BEFORE ME, a Notary Public in and for said County and State, personally appeared David M. Flaherty, the duly authorized Manager of F&C Ramsey Apartments, LLC, who executed the foregoing Debt Subordination Agreement on behalf of such entity and acknowledged the signing and execution of said instrument to be his voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and Notarial Seal this ___ day of _____, 2012.

My Commission Expires:

_____

_____

_____, Notary Public
and Resident of _____ County

IN WITNESS WHEREOF, the parties hereto have executed this Debt Subordination Agreement as of the date and year first set forth above.

"MEZZANINE BORROWER"
F&C RAMSEY MEMBER, LLC,
an Indiana limited liability company

By: _____
David M. Flaherty, Manager

STATE OF INDIANA)
) SS:
COUNTY OF _____)

BEFORE ME, a Notary Public in and for said County and State, personally appeared David M. Flaherty, the duly authorized Manager of F&C Ramsey Member, LLC, who executed the foregoing Debt Subordination Agreement on behalf of such entity and acknowledged the signing and execution of said instrument to be his voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and Notarial Seal this ___ day of _____, 2012.

My Commission Expires:

_____

_____

_____, Notary Public
and Resident of _____ County

IN WITNESS WHEREOF, the parties hereto have executed this Debt Subordination Agreement as of the date and year first set forth above.

"CREDITOR"
THE HOUSING AND REDEVELOPMENT AUTHORITY IN AND FOR THE CITY OF RAMSEY, MINNESOTA, a public body politic and corporate under the laws of the State of Minnesota

By: _____
Printed: _____
Title: _____

STATE OF INDIANA)
) SS:
COUNTY OF _____)

BEFORE ME, a Notary Public in and for said County and State, personally appeared _____, the duly authorized _____ of The Housing and Redevelopment Authority in and for the City of Ramsey, Minnesota, who executed the foregoing Debt Subordination Agreement on behalf of such entity and acknowledged the signing and execution of said instrument to be his voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and Notarial Seal this ___ day of _____, 2012.

My Commission Expires:

_____

_____

_____, Notary Public
and Resident of _____ County

IN WITNESS WHEREOF, the parties hereto have executed this Debt Subordination Agreement as of the date and year first set forth above.

"CITY"
CITY OF RAMSEY, MINNESOTA, a home rule charter city organized and existing under the constitution and laws of the State of Minnesota

By: _____
Printed: _____
Title: _____

STATE OF INDIANA)
) SS:
COUNTY OF _____)

BEFORE ME, a Notary Public in and for said County and State, personally appeared _____, the duly authorized _____ of the City of Ramsey, Minnesota, who executed the foregoing Debt Subordination Agreement on behalf of such entity and acknowledged the signing and execution of said instrument to be his voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and Notarial Seal this ___ day of _____, 2012.

My Commission Expires:

_____

_____

_____, Notary Public
and Resident of _____ County

IN WITNESS WHEREOF, the parties hereto have executed this Debt Subordination Agreement as of the date and year first set forth above.

"BANK"
PNC BANK, NATIONAL ASSOCIATION,
a national banking association

By: _____
Sarah E. Beeson, Vice President

STATE OF INDIANA)
) SS:
COUNTY OF MARION)

BEFORE ME, a Notary Public in and for said County and State, personally appeared Sarah E. Beeson, the duly authorized officer of PNC Bank, National Association, who executed the foregoing Debt Subordination Agreement on behalf of such entity and acknowledged the signing and execution of said instrument to be her voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and Notarial Seal this ___ day of _____, 2012.

My Commission Expires:

_____

_____

_____, Notary Public
and Resident of _____ County

This instrument drafted by (and return recorded instrument to): Keith A. Bice, Bingham Greenebaum Doll LLP, 2700 Market Tower, 10 West Market Street, Indianapolis, IN 46204, (317) 635-8900.

EXHIBIT A

LEGAL DESCRIPTION

February 28, 2012

Pre-Sale Report for Up to $7,450,000 Taxable General Obligation Tax Increment Bonds, Series 2012

City of Ramsey, Minnesota

Prepared and Presented by:

Stacie Kvilvang
Executive Vice President

And

Mark Ruff
Executive Vice President

Executive Summary of Proposed Debt

Proposed Issue:	Up to $7,450,000 Taxable GO Tax Increment Bonds, Series 2012
Authority:	The TIF Bonds are being issued pursuant to Minnesota Statues, Chapter 469 and 475. The Bonds will be general obligations of the City, for which its full faith, credit and taxing powers are pledged. Because tax increment from TIF District #14 is expected to equal not less than 20% of the principal amount of the Bonds, the Bonds can be a general obligation without a referendum and will not count against the City's debt limit.
Purposes/Funding Sources:	The Bonds are being issued to pay for certain qualified costs related to the construction of the COR Apartments which will consist of approximately 230 rental units. The Bonds will be paid by tax increment generated by the project and payments to be made by the developer or the parent of the developer pursuant to the Loan Agreement, Note and Development Agreement.
Discussion Issues	Due to extremely low rates in the bond market, staff and Ehlers would like to have the flexibility to determine if the City should issue a 3 year temporary bond or issue a longer term bond with a short call (payoff or refinance) date of 3 years. Staff and Ehlers would continue to monitor the market and as the sale date of April 24, 2012 gets closer, inform the Council on financial implications of each option and recommended way to proceed. If the City issued a 3 year temporary Bond, the principal amount of the bonds would be $7,125,000 and would have capitalized interest in the amount of approximately $207,338 to pay interest payments through August 1, 2014. It is anticipated that at the end of the 3 year term, the developer will have secured permanent financing to pay the Bonds in their entirety on June 1, 2015. If the developer is unable to secure financing to pay the entire outstanding principal on the Bonds, then the City has the option to issue another 3 year temporary bond for the unpaid portion and/or issue a long-term bond to be paid from tax increment. These options would have increased costs due to expenses associated with issuing another bond (financial advisor, bond counsel, rating, county, underwriters discount, etc.) and possible increased interest costs at the time of issuance. The City could issue a 10 year Bond, with a 3 year call date (pay off/refinance) like the temporary bonds. If the City did this, the principal amount of the Bonds would be $7,415,000 and would include capitalized interest in the amount of approximately $450,339 to pay interest payments through August 1, 2014. Like the 3 year temporary Bond, it is anticipated that the developer will have secured

	permanent financing to pay the Bonds in their entirety on June 1, 2015. The cost difference between the 2 options is that it will cost the City approximately $240,000 more to issue a 10 year bond now versus a 3 year temporary bond. However, this amount decreases to approximately $130,000 if the temporary bond is not paid in full on June 1, 2015 and the City has to issue another temporary bond and/or long term bond. Further reducing this difference would be the impact of higher interest rates in 2015.
Term/Call Feature	If the Bonds are issued for a temporary 3 year term, they can be prepaid at any time after February 1, 2013. Interest is payable every six months on February 1 and August 1 and principal on the Bonds will be due on February 1, 2015. If the Bonds are issued for a 10 year term, they would contain a 3 year call date, meaning that they cannot be prepaid until February 1, 2015.
Bank Qualification	Because the Bonds are taxable obligations they will not be designated as "bank qualified" obligations.
Rating:	The City's most recent bond issue was rated AA+ by Standard & Poor's. The City will request a new rating for the Bonds. If the winning bidder on the Bonds elects to purchase bond insurance, the rating for the issue may be higher than the City's bond rating in the event that the bond rating of the insurer is higher than that of the City.
Method of Sale/Placement:	In order to obtain the lowest interest cost to the City, we will solicit competitive bids for purchase of the Bonds from local banks in your area and national and regional underwriters. We have included an allowance for discount bidding equal to .5% of the principal amount of the issue. The discount is treated as an interest item and provides the underwriter with all or a portion of its compensation in the transaction. If the Bonds are purchased at a price greater than the minimum bid amount (maximum discount), the unused allowance may be used to lower your borrowing amount.
Continuing Disclosure:	Because the City has more than $10,000,000 in outstanding debt (including this issue) and this issue is over $1,000,000, the City will be agreeing to provide certain updated Annual Financial Information and its Audited Financial Statement annually as well as providing notices of the occurrence of certain "material events" to the Municipal Securities Rulemaking Board (the "MSRB"), as required

	by rules of the Securities and Exchange Commission (SEC). The City is already obligated to provide such reports for its existing bonds, and has contracted with Northland Securities to prepare and file the reports.
Arbitrage Monitoring:	The Bonds are taxable obligations and are therefore not subject to IRS arbitrage and yield restriction requirements.

Proposed Debt Issuance Schedule

Pre-Sale Review by Council:	February 28, 2012
Distribute Official Statement:	Week of April 2 ,2012
Conference Call With Rating Agency:	Week of April 16 , 2012
City Council Meeting to Award Sale of the Bonds:	April 24, 2012
Estimated Closing Date:	June 5, 2012

Attachments

Sources and Uses of Funds

Proposed Debt Service Schedules

Resolution Authorizing Ehlers to Proceed With Bond Sale

Ehlers Contacts:

Financial Advisors:	Stacie Kvilvang Mark Ruff	(651)-697-8506 (651)-697-8505
Bond Analyst:	Pia Troy	(651) 697-8556
Bond Sale Coordinator:	Alicia Aulwes	(651) 697-8523
Financial Analyst:	Alicia Gage	(651) 697-8551

The Official Statement for this financing will be mailed to the City Council members at their home address or e-mailed for review prior to the sale date.

Resolution No. _____

Council Member _____ introduced the following resolution and moved its adoption:

Resolution Providing for the Sale of
Up to $7,450,000 Taxable G.O. Tax Increment Bonds, Series 2012

A. WHEREAS, the City Council of the City of Ramsey, Minnesota, has heretofore determined that it is necessary and expedient to issue up to the City's $7,450,000 Taxable G.O. Tax Increment Bonds, Series 2012 (the "Bonds"), to finance certain qualified costs related to the construction of the COR Apartments in the City; and

B. WHEREAS, the City has retained Ehlers & Associates, Inc., in Roseville, Minnesota ("Ehlers"), as its independent financial advisor for the Bonds and is therefore authorized to solicit proposals in accordance with Minnesota Statutes, Section 475.60, Subdivision 2(9);

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ramsey, Minnesota, as follows:

1. Authorization; Findings. The City Council hereby authorizes Ehlers to solicit proposals for the sale of the Bonds.

2. Meeting; Proposal Opening. The City Council shall meet at 7:00 p.m. on April 24, 2012, for the purpose of considering sealed proposals for and awarding the sale of the Bonds.

3. Official Statement. In connection with said sale, the officers or employees of the City are hereby authorized to cooperate with Ehlers and participate in the preparation of an official statement for the Bonds and to execute and deliver it on behalf of the City upon its completion.

The motion for the adoption of the foregoing resolution was duly seconded by Council Member _____ and, after full discussion thereof and upon a vote being taken thereon, the following Council Members voted in favor thereof:

and the following voted against the same:

Whereupon said resolution was declared duly passed and adopted.

Dated this 28th day of February, 2012.

_____

City Clerk

City of Ramsey, Minnesota

$7,125,000

Taxable General Obligation Temporary Tax Increment Notes, Series 2012

Sources & Uses

Dated 06/05/2012 | Delivered 06/05/2012

Sources Of Funds

Par Amount of Bonds	$7,125,000.00
Total Sources	**$7,125,000.00**

Uses Of Funds

Deposit to Project Construction Fund	6,825,000.00
Deposit to Capitalized Interest (CIF) Fund	207,337.50
Costs of Issuance	54,500.00
Total Underwriter's Discount (0.500%)	35,625.00
Deposit to Project Fund	2,537.50
Total Uses	**$7,125,000.00**

City of Ramsey, Minnesota

$7,125,000

Taxable General Obligation Temporary Tax Increment Notes, Series 2012

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	CIF	Net New D/S	105% of Total	Fiscal Total
06/05/2012	-	-	-	-	-	-	-	-
02/01/2013	-	-	63,056.25	63,056.25	(63,056.25)	-	-	-
08/01/2013	-	-	48,093.75	48,093.75	(48,093.75)	-	-	-
02/01/2014	-	-	48,093.75	48,093.75	(48,093.75)	-	-	-
08/01/2014	-	-	48,093.75	48,093.75	(48,093.75)	-	-	-
02/01/2015	7,125,000.00	1.350%	48,093.75	7,173,093.75	-	7,173,093.75	7,531,748.44	7,531,748.44
Total	**$7,125,000.00**	**-**	**$255,431.25**	**$7,380,431.25**	**(207,337.50)**	**$7,173,093.75**	**$7,531,748.44**	**-**

Significant Dates

Dated	6/05/2012
First Coupon Date	2/01/2013

Yield Statistics

Bond Year Dollars	$18,920.83
Average Life	2.656 Years
Average Coupon	1.3500000%
Net Interest Cost (NIC)	1.5382845%
True Interest Cost (TIC)	1.5424873%
Bond Yield for Arbitrage Purposes	1.3496464%
All Inclusive Cost (AIC)	1.8397603%

City of Ramsey, Minnesota

$7,415,000

Taxable General Obligation Bonds, Series 2012

10 Year Term

Sources & Uses

Dated 06/05/2012 | Delivered 06/05/2012

Sources Of Funds

Par Amount of Bonds	$7,415,000.00
Total Sources	**$7,415,000.00**

Uses Of Funds

Total Underwriter's Discount (1.000%)	74,150.00
Costs of Issuance	63,000.00
Deposit to Capitalized Interest (CIF) Fund	450,338.67
Deposit to Project Construction Fund	6,825,000.00
Deposit to Project Fund	2,511.33
Total Uses	**$7,415,000.00**

City of Ramsey, Minnesota

$7,415,000

Taxable General Obligation Bonds, Series 2012

10 Year Term

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
06/05/2012	-	-	-	-	-
02/01/2013	-	-	136,958.67	136,958.67	136,958.67
08/01/2013	-	-	104,460.00	104,460.00	-
02/01/2014	-	-	104,460.00	104,460.00	208,920.00
08/01/2014	-	-	104,460.00	104,460.00	-
02/01/2015	665,000.00	1.750%	104,460.00	769,460.00	873,920.00
08/01/2015	-	-	98,641.25	98,641.25	-
02/01/2016	675,000.00	1.900%	98,641.25	773,641.25	872,282.50
08/01/2016	-	-	92,228.75	92,228.75	-
02/01/2017	690,000.00	2.150%	92,228.75	782,228.75	874,457.50
08/01/2017	-	-	84,811.25	84,811.25	-
02/01/2018	705,000.00	2.550%	84,811.25	789,811.25	874,622.50
08/01/2018	-	-	75,822.50	75,822.50	-
02/01/2019	725,000.00	2.750%	75,822.50	800,822.50	876,645.00
08/01/2019	-	-	65,853.75	65,853.75	-
02/01/2020	740,000.00	3.000%	65,853.75	805,853.75	871,707.50
08/01/2020	-	-	54,753.75	54,753.75	-
02/01/2021	765,000.00	3.150%	54,753.75	819,753.75	874,507.50
08/01/2021	-	-	42,705.00	42,705.00	-
02/01/2022	790,000.00	3.350%	42,705.00	832,705.00	875,410.00
08/01/2022	-	-	29,472.50	29,472.50	-
02/01/2023	815,000.00	3.500%	29,472.50	844,472.50	873,945.00
08/01/2023	-	-	15,210.00	15,210.00	-
02/01/2024	845,000.00	3.600%	15,210.00	860,210.00	875,420.00
Total	**$7,415,000.00**	**-**	**$1,673,796.17**	**$9,088,796.17**	**-**

Yield Statistics

Bond Year Dollars	$54,705.94
Average Life	7.378 Years
Average Coupon	3.0596239%
Net Interest Cost (NIC)	3.1951668%
True Interest Cost (TIC)	3.1934290%
Bond Yield for Arbitrage Purposes	3.0387794%
All Inclusive Cost (AIC)	3.3264179%

IRS Form 8038

Net Interest Cost	3.0596239%
Weighted Average Maturity	7.378 Years

City of Ramsey, Minnesota

$7,415,000

Taxable General Obligation Bonds, Series 2012

10 Year Term

Net Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	CIF	Net New D/S	Fiscal Total
06/05/2012	-	-	-	-	-	-	-
02/01/2013	-	-	136,958.67	136,958.67	(136,958.67)	-	-
08/01/2013	-	-	104,460.00	104,460.00	(104,460.00)	-	-
02/01/2014	-	-	104,460.00	104,460.00	(104,460.00)	-	-
08/01/2014	-	-	104,460.00	104,460.00	(104,460.00)	-	-
02/01/2015	665,000.00	1.750%	104,460.00	769,460.00	-	769,460.00	769,460.00
08/01/2015	-	-	98,641.25	98,641.25	-	98,641.25	-
02/01/2016	675,000.00	1.900%	98,641.25	773,641.25	-	773,641.25	872,282.50
08/01/2016	-	-	92,228.75	92,228.75	-	92,228.75	-
02/01/2017	690,000.00	2.150%	92,228.75	782,228.75	-	782,228.75	874,457.50
08/01/2017	-	-	84,811.25	84,811.25	-	84,811.25	-
02/01/2018	705,000.00	2.550%	84,811.25	789,811.25	-	789,811.25	874,622.50
08/01/2018	-	-	75,822.50	75,822.50	-	75,822.50	-
02/01/2019	725,000.00	2.750%	75,822.50	800,822.50	-	800,822.50	876,645.00
08/01/2019	-	-	65,853.75	65,853.75	-	65,853.75	-
02/01/2020	740,000.00	3.000%	65,853.75	805,853.75	-	805,853.75	871,707.50
08/01/2020	-	-	54,753.75	54,753.75	-	54,753.75	-
02/01/2021	765,000.00	3.150%	54,753.75	819,753.75	-	819,753.75	874,507.50
08/01/2021	-	-	42,705.00	42,705.00	-	42,705.00	-
02/01/2022	790,000.00	3.350%	42,705.00	832,705.00	-	832,705.00	875,410.00
08/01/2022	-	-	29,472.50	29,472.50	-	29,472.50	-
02/01/2023	815,000.00	3.500%	29,472.50	844,472.50	-	844,472.50	873,945.00
08/01/2023	-	-	15,210.00	15,210.00	-	15,210.00	-
02/01/2024	845,000.00	3.600%	15,210.00	860,210.00	-	860,210.00	875,420.00
Total	**$7,415,000.00**	**-**	**$1,673,796.17**	**$9,088,796.17**	**(450,338.67)**	**$8,638,457.50**	**-**