



# The Corporation of the City of Grand Forks

## Regular Meeting

### AGENDA

Meeting #: R-2018-09  
Date: Monday, May 7, 2018, 7:00 pm  
Location: 7217 - 4th Street, City Hall Council Chambers

Pages

1. CALL TO ORDER

2. ADOPTION OF AGENDA

- a. Adopt agenda  
May 7, 2018, Regular Meeting agenda

Recommendation

THAT Council adopts the May 7, 2018, Regular Meeting agenda as presented.

3. MINUTES

- a. Adopt minutes - Special to go In-Camera  
April 23, 2018, Special to go In-Camera Meeting minutes

5 - 6

Recommendation

THAT Council adopts the April 23, 2018, Special to go In-Camera Meeting minutes as presented.

- b. Adopt minutes - Regular  
April 23, 2018, Regular Meeting minutes

7 - 17

Recommendation

THAT Council adopts the April 23, 2018, Regular Meeting minutes as presented.

4. REGISTERED PETITIONS AND DELEGATIONS

5. UNFINISHED BUSINESS

6. REPORTS, QUESTIONS AND INQUIRIES FROM MEMBERS OF COUNCIL

- a. Written Reports of Council  
Corporate Officer's Report

18 - 27

Recommendation

THAT all written reports of Council submitted to the May 7, 2018, Regular Meeting be received.

7. **REPORT FROM COUNCIL'S REPRESENTATIVE TO THE REGIONAL DISTRICT OF KOOTENAY BOUNDARY**

- a. Verbal Report - RDKB Representative  
Corporate Officer's Report

28 - 28

Verbal report from Council's representative to the Regional District of Kootenay Boundary

Read the RDKB agendas here: <https://rdkb.civicweb.net/filepro/documents/314>

**Recommendation**

**THAT Mayor Konrad's report on the activities of the Regional District of Kootenay Boundary, given verbally at this meeting be received.**

8. **RECOMMENDATIONS FROM STAFF FOR DECISIONS**

- a. Sewer Phasing Plan Draft Report  
Development and Engineering

29 - 98

**Recommendation**

**THAT Council adopts the Sewer Phasing Plan report.**

- b. Request for Waiving Development Fees  
Development and Engineering

99 - 103

**Recommendation**

**THAT Council considers suspending Development Cost Charges and waiving Building Permit and water/sewer connection inspection fees for the BC Housing development at Lot 1, District Lot 380 SDYD Plan KAP85777;**

**AND FURTHER THAT Council directs staff to initiate development of a Development Cost Reduction Bylaw to enable reduction of Development Cost Charges for this and other eligible developments.**

- c. James Donaldson Park Accessibility Upgrades  
Development and Engineering

104 - 106

**Recommendation**

**THAT Council approves the Grand Forks International Baseball (GFI) Tournament Organizing Committee undertaking accessibility improvements to James Donaldson Park;**

**AND FURTHER THAT Council approves in-kind contributions of labour and materials, if necessary for completion of the project, to a maximum contribution of \$\_\_\_\_\_.**

- d. Service Sustainability Assessment Tool  
Corporate / Administration

107 - 110

**Recommendation**

**THAT Council adopts the Service Sustainability Assessment Tool as a reporting tool for use towards determining the City's performance measurements.**

- e. Tree Policy 111 - 116  
Outside Works

**Recommendation**

**THAT Council adopts Urban Forest Policy #1105.**

9. **REQUESTS ARISING FROM CORRESPONDENCE**

10. **INFORMATION ITEMS**

- a. Quarter 1 2018 Financials 117 - 123  
Chief Financial Officer

**Recommendation**

**THAT Council receives for information the memo from the Chief Financial Officer regarding the Quarter 1 2018 Financials.**

- b. Citizens for Safe Technology 124 - 124  
Thank you letter regarding UBCM Microcell Resolution

**Recommendation**

**THAT Council receives for information the letter of thank you on behalf of Citizens for Safe Technology regarding the UBCM Microcell Resolution.**

- c. Ministry of Forests, Lands, Natural Resource Operations and Rural Development 125 - 126  
Letter of proposal to adopt Saddle Mountain as official name for an unnamed peak east of Saddle Lake Regional Park

**Recommendation**

**THAT Council determines to approve the proposed name of 'Saddle Mountain' to the unnamed peak east of Saddle Lake Regional Park and west of Grand Forks in Area D and directs staff to advise the BC Geographical Names Office of the City's approval.**

- d. RDKB - Kettle River Watershed Authority 127 - 129  
Letter of appreciation for funding support for Outreach Program. Council has previously approved the \$15,000 in the Financial Plan and the funds are scheduled to the RDKB remittance.

**Recommendation**

**THAT Council receives for information the letter of appreciation for funding support from the RDKB - Kettle River Watershed Authority.**

- e. GFI Organizing Committee 130 - 130  
Letter of improvements to James Donaldson Park

**Recommendation**

**THAT Council receives for information a letter of improvements as per Grand Forks International Organizing Committee to James Donaldson Park.**

11. BYLAWS

- a. Bylaw 2046 - 2018 Tax Rates 131 - 137  
Chief Financial Officer

Recommendation

THAT Council gives final reading to the 2018 Tax Rates Bylaw, No. 2046.

- b. Bylaw 2047 – Freedom of Information and Protection of Privacy Update 138 - 153  
Corporate Services

Recommendation

THAT Council gives final reading of the proposed Freedom of Information and Protection of Privacy Bylaw No. 2047.

- c. Bylaw 2048 – Records and Information Management Program Bylaw update 154 - 163  
Corporate Services

Recommendation

THAT Council gives final reading of the proposed Records and Information Management Program Bylaw No. 2048.

12. LATE ITEMS

13. QUESTIONS FROM THE PUBLIC AND THE MEDIA

14. ADJOURNMENT





**The Corporation of the City of Grand Forks  
Special to go In-Camera Meeting of Council  
MINUTES**

**Meeting #:** SP-2018-07  
**Date:** Monday, April 23, 2018, 1:30 pm  
**Location:** 7217 - 4th Street, City Hall Council Chambers

**Present:** Mayor Frank Konrad  
Councillor Julia Butler  
Councillor Chris Hammett  
Councillor Colleen Ross  
Councillor Christine Thompson  
Councillor Beverley Tripp

**Absent:** Councillor Neil Krog (with notice)

**Staff:** Diane Heinrich - Chief Administrative Officer / Corporate Officer  
Daniel Drexler - Deputy Corporate Officer

**GALLERY**

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**1. CALL TO ORDER**

Mayor Konrad called the April 23, 2018, Special To Go In-Camera Meeting to order at 1:38 pm.

**2. IN-CAMERA RESOLUTION**

a. Adopt Resolution as per Section 90

Moved by: Thompson

Seconded by: Tripp

**THAT Council convene an In-Camera Meeting as outlined under Section 90 of the Community Charter to discuss matters in a closed meeting which are subject to Section 90 (1)(e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality;**

**BE IT FURTHER RESOLVED THAT persons, other than members, officers, or other persons to whom Council may deem necessary to conduct City business, will be excluded from the In-Camera Meeting.**

**Carried**

**3. LATE ITEMS**

**4. ADJOURNMENT**

The April 23, 2018, Special to go In-Camera Meeting was adjourned at 1:39 pm.

Moved by: Butler

Seconded by: Tripp

**THAT the April 23, 2018, Special to go In-Camera Meeting be adjourned at 1:39 pm.**

**Carried**

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Mayor Frank Konrad

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Deputy Corporate Officer - Daniel Drexler



**The Corporation of the City of Grand Forks**  
**Regular Meeting of Council**  
**MINUTES**

**Meeting #:** R-2018-08  
**Date:** Monday, April 23, 2018, 7:00 pm  
**Location:** 7217 - 4th Street, City Hall Council Chambers

**Present:** Mayor Frank Konrad  
Councillor Julia Butler (*joined the meeting at 7:26 pm*)  
Councillor Chris Hammett  
Councillor Neil Krog  
Councillor Colleen Ross  
Councillor Christine Thompson  
Councillor Beverley Tripp

**Staff:** Diane Heinrich - Chief Administrative Officer / Corporate Officer  
Daniel Drexler - Deputy Corporate Officer  
Daphne Popoff - Corporate Administrative Assistant  
Juliette Rhodes - Chief Financial Officer  
Dolores Sheets - Manager of Development & Engineering Services  
Cavan Gates - Deputy Manager of Operations & Sustainability  
Graham Watt - Senior Planner

**GALLERY**

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**1. CALL TO ORDER**

Mayor Konrad called the April 23, 2018, Regular Meeting to order at 7:00 pm.

**2. ADOPTION OF AGENDA**

a. Adopt agenda

April 23, 2018, Regular Meeting agenda

**Resolution #: R125/18/04/23**

Moved by: Tripp

Seconded by: Ross

**THAT Council adopts the April 23, 2018, Regular Meeting agenda as presented.**

**Carried**

**3. MINUTES**

- a. Adopt minutes - Special to go In-Camera

April 9, 2018, Special to go In-Camera Meeting minutes

**Resolution #: R126/18/04/23**

Moved by: Ross

Seconded by: Tripp

**THAT Council adopts the April 9, 2018, Special to go In-Camera Meeting minutes as presented.**

**Carried**

- b. Adopt minutes - Regular

April 9, 2018, Regular Meeting minutes

**Resolution #: R127/18/04/23**

Moved by: Ross

Seconded by: Tripp

**THAT Council adopts the April 9, 2018, Regular Meeting minutes as presented.**

**Carried**

**4. REGISTERED PETITIONS AND DELEGATIONS**

- a. Boundary Country Regional Chamber of Commerce

Quarterly Report

The BCRCC report was deferred to the Regular Meeting of Council on April 23, 2018.

Kendra Begg and Cathy Korolek gave an overview of the BCRCC 2017/2018 year, announced the new board positions after the AGM in March, provided a list of events that the Chamber does yearly and is looking forward to moving to the new office space on Market Avenue.

- b. Grand Forks Downtown Business Association

Fee for Service

Amber Esovoloff from Work n Play, Chairperson of the DBA, and John McNamara, Dave Dale Insurance, gave an overview of the various activities of the Association.

**Discussion:**

- heritage signs - brochures and passports
- concerns of the downtown core - pedestrians and fast cars on Market and 2nd Street, parking

**5. UNFINISHED BUSINESS**

**6. REPORTS, QUESTIONS AND INQUIRIES FROM MEMBERS OF COUNCIL**

- a. Written Reports of Council

Corporate Officer's Report

Councillor Krog made a Notice of Motion regarding repainting of the rainbow crosswalks with everlasting rainbow paint.

Councillor Thompson made a Notice of Motion regarding the provincial government's denial for additional funding of 130 RCMP officers throughout the province.

Councillor Tripp announced the three resolutions put forth by Council at the AKBLG were approved, one of the resolutions was ranked in the top seven.

**Resolution #: R128/18/04/23**

Moved by: Ross

Seconded by: Tripp

**THAT all written reports of Council submitted to the April 23, 2018, Regular Meeting be received.**

**Carried**

b. Councillor Hammett

Motion regarding concerns of the downtown core with excessive speeds and safety

**Discussion:**

- different types of roundabouts for consideration, traffic flow

**Resolution #: R129/18/04/23**

Moved by: Hammett

Seconded by: Ross

**WHEREAS the Grand Forks Downtown Business Association (DBA) is concerned about excessive speeds and safety in the downtown core, citing several accidents and near miss accidents on downtown roads;**

**THEREFORE BE IT RESOLVED THAT Council directs staff to install 4-way stop signs at 72nd Avenue and 2nd Street, and at Market Avenue and 2nd Street;**

**AND FURTHER RESOLVED THAT Council directs staff to reduce the speed limit to 30km per hour within the boundaries of 72nd Avenue on the South to 75th Avenue to the North and 6th Street from the West to Riverside Drive on the East excluding Central Avenue.**

**Amended**

**Amendment:**

**Resolution #: R130/18/04/23**

Moved by: Ross

Seconded by: Hammett

**WHEREAS the Grand Forks Downtown Business Association (DBA) is concerned about excessive speeds and safety in the downtown core, citing several accidents and near miss accidents on downtown roads;**

**THEREFORE BE IT RESOLVED THAT Council directs staff to research the installation of 4-way stop signs at 72nd Avenue and 2nd Street, and at Market Avenue and 2nd Street;**

**AND FURTHER to research the reduction of the speed limit to 30km per hour within the boundaries of 72nd Avenue on the South to 75th Avenue to the North and 6th Street from the West to Riverside Drive on the East excluding Central Avenue.**

**Carried**

**7. REPORT FROM COUNCIL'S REPRESENTATIVE TO THE REGIONAL DISTRICT OF KOOTENAY BOUNDARY**

**a. Verbal Report - RDKB Representative**

Corporate Officer's Report

Verbal report from Council's representative to the Regional District of Kootenay Boundary

Read the RDKB agendas here:

<https://rdkb.civicweb.net/filepro/documents/314>

Mayor Konrad had no report this evening.

He mentioned that there will be a meeting with BC Transit on May 2nd to discuss transportation between Grand Forks and Greenwood.

**8. RECOMMENDATIONS FROM STAFF FOR DECISIONS**

**a. Temporary Use Permit for Tourist Commercial / Special Events Camping**

Development and Engineering Services

**Discussion:**

- public notice feedback

- planned security at camping site

**Resolution #: R131/18/04/23**

Moved by: Ross

Seconded by: Krog

**THAT Council grant a Temporary Use Permit for Tourist Commercial / Special Event Camping with special event and recreational activities to CannaFest Music Festival Ltd. on land zoned Small Lot Residential (R-2), legally described as Lot 1 District Lots 380 & 520 SDYD Plan KAP64274.**

**Carried**

- b. Licence of Occupation and Zoning Compliance for Grand Forks Wildlife Association Rifle Range

Development and Engineering

**Discussion:**

- noise concerns and possible sound reduction options
- RCMP and Canadian Border Services use of the range for training
- hours of operation for the range 9am-9pm (depending on daylight)
- usage of range throughout the year
- Wildlife Association land area use on City and Regional District properties

**Resolution #: R132/18/04/23**

Moved by: Hammett

Seconded by: Thompson

**THAT Council receives the report on the requested Licence of Occupation;**

**AND FURTHER THAT Council directs staff to prepare the Licence of Occupation for the Grand Forks Wildlife Association for a rifle and trap range on the property legally described as Portion of District Lot 495 shown on Plan B2093 SDYD excluding plans B5146 B5147 B6314 7267 27381 KAP61265 KAP64475 KAP67245 & KAP67367.**



Amended

**Resolution #: R133/18/04/23**

Moved by: Krog

Seconded by: Butler

**THAT Council allows John McNamara, Secretary of the Grand Forks Wildlife Association, to speak on the subject matter.**

**Carried Unanimously**

**Amendment:**

**Resolution #: R134/18/04/23**

Moved by: Hammett

Seconded by: Thompson

**THAT Council directs staff to prepare a Temporary Licence of Occupation for the Grand Forks Wildlife Association for a rifle and trap range on the property legally described as Portion of District Lot 495 shown on Plan B2093 SDYD excluding plans B5146 B5147 B6314 7267 27381 KAP61265 KAP64475 KAP67245 & KAP67367.**

Opposed (1): Ross

**Carried**

**9. REQUESTS ARISING FROM CORRESPONDENCE**

**10. INFORMATION ITEMS**

- a. Boundary Musical Theatre Society  
Request for establishment of permanent home

**Resolution #: R135/18/04/23**

Moved by: Tripp

Seconded by: Krog

**THAT Council directs staff to forward a copy of correspondence to Community Futures who is championing a Community Centre study for the area.**

**Carried**

**Resolution #: R136/18/04/23**

Moved by: Thompson

Seconded by: Tripp

**THAT Council may further determine to direct staff to research the feasibility of a City area to consider storage of Theatre Society property with the understanding that the Society would require their own insurance responsibilities.**

**Carried**

b. Brian Noble

Correspondence regarding the Grand Forks Wildlife Association Gun Range location

**Resolution #: R137/18/04/23**

Moved by: Thompson

Seconded by: Tripp

**THAT Council receives for information the correspondence from Brian Noble.**

**Carried**

**11. BYLAWS**

a. Bylaw 2046 - 2018 Tax Rates  
Chief Financial Officer

**Resolution #: R138/18/04/23**

Moved by: Ross

Seconded by: Thompson

**THAT Council gives first three readings to the 2018 Tax Rates Bylaw No. 2046.**

**Carried**

- b. Bylaw 2047- Freedom of Information and Protection of Privacy Update  
Corporate Services

**Resolution #: R139/18/04/23**

Moved by: Thompson

Seconded by: Krog

**THAT Council gives the first three readings of the proposed Freedom of Information and Protection of Privacy Bylaw No. 2047;**

**AND FURTHER instructs Staff to present the Bylaw for final reading at the May 7, 2018, Regular Meeting.**

**Carried**

- c. Bylaw 2048 – Records and Information Management Program Bylaw  
update

Corporate Services

**Resolution #: R140/18/04/23**

Moved by: Thompson

Seconded by: Ross

**THAT Council gives the first three readings of the proposed Records and Information Management Program Bylaw No. 2048;**

**AND FURTHER instructs Staff to present the Bylaw for final reading at the May 7, 2018, Regular Meeting.**

**Carried**

- d. Bylaw 1958-A4 - Campground Fees and Charges Update  
Corporate Services

**Resolution #: R141/18/04/23**

Moved by: Thompson

Seconded by: Krog

**THAT Council gives final reading to the “City of Grand Forks Fees and Charges Amendment Bylaw No. 1958-A4, 2018”.**

**Carried**

- e. Bylaw 2039-A1 - Zoning Bylaw Cannabis Amendment  
Development and Engineering

**Discussion:**

- public input survey
- cannabis smoking area restrictions
- business licensing procedures
- production and processing requirements
- retail and industrial

**Resolution #: R142/18/04/23**

Moved by: Thompson

Seconded by: Hammett

**THAT Council gives first and second readings to Zoning Bylaw Amendment No. 2039-A1.**

Opposed (1): Butler

**Carried**

**12. LATE ITEMS**

**13. QUESTIONS FROM THE PUBLIC AND THE MEDIA**

Kate Saylors, Gazette, inquired as to the resolutions that were brought forth to the AKBLG/UBCM? Councillor Tripp replied, 1) additional crown lawyers, 2) increased access to court services in rural communities, and 3) to drop the

"Substantial Likelihood of Conviction" standard to a "Reasonable Likelihood of Conviction" standard.

Kate also asked Council Ross the perspective of Council if she thought that they were overstepping by trying to set the hours for the Grand Forks Wildlife Range, which is mostly on Crown land? Councillor Ross replied that in her opinion it was not overstepping, just to potentially cooperate and have a greater empathy to those who are not comfortable of gun fire and to modernize their usage.

Gene Koch agreed with Councillor Ross and stated that rifles used to be smaller before and that the rifle range should be outside of City limits.

Nigel James spoke in regards to the speed limits and intersections on 2nd Street and would like to write a discussion paper for Council and Staff.

**14. ADJOURNMENT**

The April 23, 2018, Regular Meeting was adjourned at 8:28 pm.

**Resolution #: R143/18/04/23**

Moved by: Hammett

Seconded by: Krog

**THAT the April 23, 2018, Regular Meeting be adjourned at 8:28 pm.**

**Carried**

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Mayor Frank Konrad

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Corporate Administrative Assistant -  
Daphne Popoff

# Request for Decision



To: Regular Meeting  
From: **Procedure Bylaw / Corporate Services**  
Date: May 7, 2018  
Subject: Reports, Questions and Inquiries from the Members of Council  
Recommendation: **THAT all written reports submitted by members of Council be received.**

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## Background

Under the City's Procedures Bylaw No. 1946, 2013, the Order of Business permits the members of Council to report to the Community on issues, bring community issues for discussion and initiate action through motions of Council, ask questions on matters pertaining to the City Operations and inquire on any issues and reports.

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## Benefits or Impacts

### General

The main advantage of using this approach is to bring the matter before Council on behalf of constituents. Immediate action might result in inordinate amount of resource inadvertently directed without specific approval in the financial plan.

### Strategic Impact



#### Community Engagement

- Members of Council may ask questions, seek clarification and report on issues.

### Policy/Legislation

Procedure Bylaw No. 1946, 2013

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## Recommendation

**THAT all written reports submitted by members of Council be received.**

## Options

1. THAT Council accepts the report.
2. THAT Council does not accept the report.
3. THAT Council refers the matter back to staff for further information.

## REPORT TO COUNCIL

FROM: Councillor Christine Thompson

DATE: May 7, 2018

SUBJECT: Report to Council

April 12<sup>th</sup>, I attended the Humboldt Tragedy Memoriam in honour of those killed in a tragic accident on their way to a hockey game in a neighbouring community. This was held in the Jack Goddard Arena. The organizers of this memoriam did an excellent job in a very short time. They had a table with pictures on pucks of the team, coaches and bus driver who lost their lives in this horrific accident. There was a fair turnout of residents and hockey fans. Mayor Konrad spoke on behalf of the City. Also attending were Councillors Hammett and Ross.

I attended the Association of Kootenay-Boundary Local Governments Annual Convention in Fernie April 17<sup>th</sup> through April 20<sup>th</sup>. The convention keynote speaker was Chief Joe Pierre, St. Mary's band who spoke about his experience growing up on a reserve, and of 7 Generations of Relationships and 7 Generations of Reconciliation. A plenary panel discussion about Wildfire Threat – Facing New Reality – Learning from Fort McMurray and other Fire Disasters. This session was complemented by a second plenary panel discussion regarding exercising emergency powers for community evacuation and implementing the plan in emergencies. This discussion focused on lessons learned from recent flooding and wildfire disasters, and how to better communicate and assist those in danger. Two additional plenary panel sessions rounded out the discussions on the conventions theme, "Emergency Preparedness in Local Governments: Response: Response, Recovery and Reflection". These panels focused on the use of technology and innovation differently in emergency management through the Smart Communities movement and building interconnected teams in our municipalities. Of the concurrent sessions offered, I attended the ones on Crisis Management and Connecting the Dots on Housing Affordability. I attended the post-convention workshop titled High Impact Leadership on Climate Action.

I was very complimented when Director Rotvold from the Village of Midway asked me to let my name stand for election to the AKBLG Board of Directors as she would not be seeking re-election to the Board. She thought that I would work well with the Board and would ably represent the Boundary along with Director Russell. An election was held Friday morning, and the two incumbents (Rob Gay, RDEK Chair, Garry Jackman, RDCK, and Diane Langman, Mayor of Warfield) were elected. I wish them well and know that they will work together in the best interests of our Association.

At the last Regular Meeting of Council, I verbally gave notice of motion relative to the Provincial Government's denial to the RCMP for an additional 130 officers. While at the AKBLG, I took the opportunity to discuss this matter with Wendy Booth, President of the UBCM and Director Russell. Ms. Booth has put me in contact with a UBCM staff member

## REPORT TO COUNCIL

and I sent her a copy of a resolution that I am proposing requesting her comments, and to advise me what additional backup information she may require. I have not heard back yet and will bring this forward to Council when I do. Ms. Booth advised me that if Council adopts my proposed resolution and submits it to UBCM prior to June 30<sup>th</sup>, it may be considered by the delegates as a Late Resolution at the Annual Convention in September.

I have received several e-mails from members of the Grand Forks Wildlife Association regarding their request for a Licence of Occupation on a small portion of City owned land that is adjacent to the rifle range. I understand the concerns expressed by members of Council regarding the noise reverberating off the mountain that disturbs residents of Riverside, and appreciate the suggestions made that might mitigate the noise. I would suggest that a meeting with Council and the Grand Forks Wildlife Association executive to address these concerns happen because the tone of these e-mails cause me to believe that the members feel that Council was being adversarial.

Respectfully submitted,

Councillor Christine Thompson



## Councillor Tripp's Report for May 7<sup>th</sup>, 2018

### Humboldt Memorial

On Thursday, April 12<sup>th</sup>, I attended the community Vigil/Memorial service for the victims of the Humboldt Broncos hockey team, held at the Jack Goddard Memorial Arena. The well-attended service was coordinated and hosted by Gerry Foster. Several members of the community contributed thoughts and memories of their interactions with the Humboldt players through their involvement with our own Border Bruins, while Scripture readings and prayers were brought by local pastors, John Siemens and Ben Jepsen. I was personally touched and reminded that small town communities are enriched immensely by local sports teams, and especially junior hockey, which is a nationally celebrated pastime and integral part of the fabric of this community.

### Kettle River Watershed Authority Annual Stakeholder Meeting

On Monday, April 23<sup>rd</sup>, I attended the Kettle River Watershed Authority Annual Stakeholder Meeting held at the Grand Forks Seniors Center in the park. The first part of the meeting involved a field tour showcasing some work that the group have undertaken to restore and repair endangered riparian areas along the Kettle River. The first stop was behind the Doukhobor Cemetery and flour mill; another two stops included some private land in the Johnson Flats area, and along a part of Kettle River Drive south of 68th Avenue. We learned that when flooding occurs over vegetated areas, that action cleans the river and recharges the aquifer. The goal is to manage human and animal encroachment on these sensitive ecosystems, and not the other way around.

Along with other presenters (Jessica Mace, Roly Russell, Jenny Colshill), the new manager of RDKB Emergency Services, Chris Marsh, gave an overview of upcoming EOC plans for the Boundary with respect to the upcoming river freshet. He was hopeful that even while the snowpack for the region is the highest yet recorded for this time of year, through the first part of May, the weather forecast looks measured and this year they are prepared with an EOC command center already in operation. He stressed the need for residents to be proactive and responsible for their own properties, and to take advantage of the sandbag resources that are already available.

### AKBLG Convention

I attended the 2018 AKBLG Convention in Fernie, BC from April 17<sup>th</sup> to 20<sup>th</sup>. To their immense credit, Mayor Mary Giuliano and her council pressed through and hosted a top rate convention, despite the tragic accident last fall that took the lives of three workers at their memorial arena due to an ammonia leak. The event was attended by around 100 delegates, as well as sponsors who came from around the province to support and promote their services to municipalities. For starters, on Wednesday morning about 40 delegates hopped on a chartered bus and headed for the Tech Elkview mine located just outside of Sparwood. The impressive mine has been in operation at various digging sites on the 60 square kms of their property for over 100 years. This region produces the most metallurgical coal in the world, except for Australia, and they are a major employer for the area, providing about 1,000 jobs for locals.

That afternoon the convention kicked off at the community center with the theme of "Emergency Preparedness in Local Governments: Response, Recovery and Reflection." Considering the flood and fire disasters of 2016, this was a timely subject, and sessions and speakers addressing issues germane to the

topic were interesting and well informed. Plenary sessions over the next couple of days featured panelists from the service sector, such as Mike LoVecchio, Canadian Pacific Director Government Affairs. He spoke to the issue of crisis management and the importance of the activation of a well-planned “Community Emergency Plan.” Ryan Kuhn, Emergency Coordinator for Interior Health East & West Kootenays described what IH does during an emergency. For example, they identify and work with vulnerable individuals to evacuate them in a timely manner, and they work to redirect critical health care resources to where they are most needed. Matthew Colling, Sr. Manager for the BC & Yukon Canadian Red Cross, spoke about how their organization works with the EOC in a disaster, providing trained volunteers to help set up and host evacuees at emergency centers, supply meals and personal care items, and a host of other supports that become necessary during a disaster event. He spoke to the necessity of communities having a practical disaster preparedness plan, including contracts in place with key organizations such as Red Cross, Salvation Army, and others, to deal with community resilience in the face of an emergency. Other presenters shared information that had been gleaned from the Fort McMurray fire, and other fires in BC last year. One key factor in fire management and suppression is to reduce fire hazards that are around homes and buildings, and to keep them free from combustibles as much as possible. A comment that really made sense to me was made about buildings being required to have sprinkler heads mounted on roofs, just as certain buildings are required to have them inside. It will remain to be seen if this makes it into the BC Building Code.

During another plenary session on the “Possibilities of Tech and Innovation,” Christina Moore, Communications Manager for the District of Squamish shared about her community’s Emergency Communication Notification System, which produces a “Squamish Alert” information text or phone call for members who have signed up to receive those notifications. Open data policies and programs were also discussed as foundational to the success of these kinds of systems. Making municipal data available to the public through an online app resource can enhance economic development, and engage the community in city issues like infrastructure, social services, recreation, utilities, flood plain mapping, etc. This was a very interesting concept to hear about, and one our community could potentially embark on with positive results, I believe.

I also attended an informative break-out session one afternoon on Cannabis Regulation in BC, where Lisa Anderson, Executive Director of the Cannabis Legalization and Regulation Secretariat spoke about the work her committee has been doing in preparation for the federal legalization of cannabis this fall. She advised that the provincial context for roll-out prioritizes health and safety, reducing crime and the illegal market, protecting children and youth, cannabis impairment, and support of economic development. She said that there are seven key policies to build the regulatory framework around: 1) the minimum age of 19 being aligned with liquor consumption; 2) a 30 gram limit for personal consumption; 3) cannot be open in cars, 4) consumption allowed in some public places (like tobacco); 5) landlords can prohibit it; 6) impaired driving issues; 7) four plants for personal growing that cannot be seen from the street. The distribution model they are looking at will be the same as the Liquor Distribution Branch. Additional considerations she named were the ALR for growing; economic development, workplace impairment, housing considerations, and school-based education. She made it clear that municipalities do have the right to go above and beyond provincially mandated guidelines for such things as retail locations and designated smoking areas. At our last Regular Meeting when the Zoning Bylaw was given first and second reading, I suggested that, like the City of Calgary, we could ban smoking cannabis on public property, including parks, streets, and sidewalks, and require all business

license applications for cannabis retail and production to be brought before council for approval. I will be requesting that the Zoning Bylaw be amended to include this change, and further, that we receive a new Smoking Bylaw by the expected legalization date of Sept. 1<sup>st</sup>.

We also heard from UBCM President, Wendy Booth, who shared that the new provincial government is open to hearing from local governments, and that this is an opportune time to bring issues that rural communities face to the table to be heard. Specifically, she said that local governments are key players in ALR lands, and the cannabis production is not the best use of ALR land. She also pointed out that cannabis legislation must not increase property taxes.

Another highlight of the convention was the Resolutions business section. There were 17 resolutions presented for the voting delegates to debate this year; we had three on the table: 1) request for increased court access; 2) amend criminal justice branch charge assessment guidelines, and 3) request for additional crown counsel lawyers. I am pleased to report that all three of the resolutions that I put forward were endorsed by the membership and will now make their way to the UBCM this fall. Further, at least one of the resolutions made it into the top seven ranked for importance, which speaks to the AKBLG memberships' acknowledgement that these resolutions are a significant attempt to address public safety issues and keep BC's rural communities safe.

There is much more that I could write about the convention, but for the sake of keeping this report "brief," I will end off here. If you have any questions about the convention, I would be pleased to speak with you personally.

Back at home, it looks like work is continuing on 22<sup>nd</sup> Street as digging proceeds towards the hospital. I have been approached about this by a resident of the community and would request an update from staff as to the status of this project.

Respectfully submitted,

Beverley Tripp

## Councillor's Report

May 7, 2018

Julia Butler

The 2018 AKBLG conference took place in Fernie this year between April and 18<sup>th</sup> and 20<sup>th</sup>. For ease of reading I have summarized the highlights below:

### **Keynote speaker:** Chief Joe Pierre, St Mary's Band

Joe comes from a long line of story tellers and his personable approach made him both informative and interesting to hear. He highlighted the importance of thinking in seven generational thought; both seven generations in the past and seven generations into the future. Coupled with stories of his parents and grandparents growing up on the reserve, was the political climate of the time. While his mother was attending the school, now converted into a prosperous casino, she could look across the small river to see her home but was only allowed to visit a couple times a year. Although the Tnah Ha people have lived there for hundreds of generations with their own rules, organization, place names and governance structure, the federal government made their traditional blood line chiefs illegal and required them to elect their representatives. Although they retain the knowledge of who the bloodline chief is, elections are now held every two years to elect half of the council. This process allows overlap in the four year terms, to provide continuity. It is also noteworthy that Joe and the elders are carrying on their traditional language, which is so important to the identity of a nation.

### **Plenary Panel Discussion:** Learning from Ft. McMurray and other Fire Disasters

A panel of four experts guided us through the four steps in dealing with an EOC event:

- Planning and Preparedness

- Loss Prevention and Risk Mitigation

- Response

- Recovery

Over 70% of the time homes are ignited from falling embers, sometimes in blizzard like spark conditions. The 30-60 m surrounding the home is the ignition zone and landscaping and watering should be planned in such a way as to keep evergreens away from the zone and plants within it green and debris free. More information on how to keep the ignition zone safe, can be found in the "Firesmart Community Recognition Program BC" or "Firesmart in 9 easy steps". <http://gabriolafire.ca/2015/07/firesmart-nine-steps/>

The three key successes for the EOC in the Boundary are:

- Evacuation mapping program

- EOC staff team trained and prepared

## Partnered with Red Cross

Cranbrook was the first community in the AKBLG to do an extensive fuel management and treatment study of their surrounding area. In all, 33 000 hectares were identified as needing mitigation. The overall cost for this was estimated at 28 Million, whereas the cost of responding to a fire with a three day evacuation would exceed 51 Million!

As a result of last years wildfires, direct expenditures totalled 568 million and 168 million was spent on emergency management. This however, in no way reflects the total costs of the fires which is too numerable to calculate. As a preventative measure, more prescribed burns are required and many more contractors to perform the work.

Cannabis legalization was again a hot topic for presentations, as our UBCM president updated us on the work of the provincial committee she is involved with, as well as a talk by a legal expert in the field. The province has five key areas they are focussing on: health and safety, decreasing crime and the illegal market, protecting children and youth, addressing impaired driving and supporting economic development. They have done a lot of public engagement in key areas and as a result came to these conclusions:

Minimum age of consumption and purchasing – 19

Personal possession – limit 30g

No open cannabis in vehicles

4 plant limit for home growers – must be hidden (landlords and local governments may restrict)

Distribution will be through the liquor distribution branch, liquor control board will be responsible for licencing, rural stores may sell both pot and alcohol but in urban settings they will be sold in separate stores.

At the federal level there are five committees of the senate making recommendations that will be voted on at the June 7 meeting. This is expected to be followed by a couple weeks of amendments, followed by an eight to twelve week transition period for the provinces, after the new legislation receives royal assent. It won't be until mid September that we see true legalization take place and another twelve months before edible products become legal. The federal government will be responsible for the legislation surrounding packaging, marketing, public awareness campaign, licencing and product type. Bill C 46 will amend the impaired driving laws. Right now, there are four oral screening devices being tested. The UBCM is recommending for municipalities to designate spaces for consumption because right now the provincial laws haven't been finalized and open consumption remains the same as for tobacco. The UBCM is also recommending tax sharing of at least 50% by the province to offset a myriad of costs to cities including increased policing and licencing costs. The FCM has a tool developed for local governments on cannabis legalization. It would prove helpful to us moving forward, in trouble shooting the details, for example, the different regulations for micro producers under 2200sq ft.

<https://fcm.ca/home/issues/emergency-preparedness-and-response/cannabis-legalization/cannabis-legalization-primer.htm>

After the official opening ceremonies on Thursday, we began the AGM business meeting, accepting the agenda, minutes, financial report, draft budget, constitution and bylaw amendments, nominations

report and then debating resolutions. Seventeen resolutions were brought forward. Similar resolutions on speculation tax were combined, as well as scheduling of the legislative assembly, to allow for MLAs to attend area association conventions. Other motions included: Charter changes for interior lot lines, venting index, increased court access, amend criminal justice branch charge assessment guidelines, additional crown lawyers, taxes for fossil fuel companies (defeated), cannabis tax revenue sharing, developing a rural needs act, crown lands for cannabis production, compensation for damages resulting from voltage variations and amendments to the wildlife act.

Following the business meeting, we had a plenary discussion on exercising emergency powers for community evacuation. The AGLG (Auditor General for Local Governments) has a best practices “Perspective Series” that details the four phases of an emergency and also gives guidance to businesses on how to prepare for evacuation. Perhaps this is something that our Chamber or DBA liaison would be interested in discussing with their members. Also discussed, was the communication and coordination between other groups in the community, such as the school district and hospital during an evacuation. Governing legislation for such an event is the Emergency Program Act and the Local Authority Emergency Management Regulation. The RDEK explained how they used U Tube as a tool to publish educational videos last year and they were quite popular. Communities need to plan for managing utilities remotely, as well as payroll. Often families living pay check to pay check can be negatively impacted, if payroll is not completed on time, due to evacuation. Planning for a long-term evacuation also provides unique challenges, as does dealing with people who refuse to evacuate. RCMP cannot make people evacuate and although they may prove successful in saving their properties, more often than not, they get in the way of professionals, prove a danger to themselves and others and can damage essential equipment. Once people are evacuated though, they are not permitted back into the zone.

The possibilities of tech and innovation in emergency management panel, discussed the idea of an open data policy for local governments. Cities are publishing their statistics, studies and other information to allow the public free access without staff time. It is being promoted as a tool for economic development, as companies can easily research before coming into city hall. New Westminster partnered with BCIT to develop apps for better services. A hundred millennials were recruited and developed twenty-five apps to help people gain access to specific city data tailored to their needs.

I did enjoy another session this year on media relations for politicians. Encouragement to be proactive rather than reactive or inactive when sharing information was encouraged. Many other techniques for clear and concise communication were also demonstrated.

On Monday April 3, I attended the Kettle River Watershed Authority’s Public Meeting from 3pm-7:30pm. The implementation of the Kettle River Watershed Management Plan was the priority of the meeting. Coordinator, Jessica Mace did an excellent job of engaging the crowd and communicating their progress. The day started with a site tour, led by Jenny Coleshill, of riparian habitat that is under rehabilitation. Of course, the dynamics of flooding was a hot topic with the crowd as well as the city’s requirements for building in the flood plane. Vegetation along the rivers edge is important habitat but also helps mitigate erosion of property during a flood. Following the tour, we heard presentations from:

Chris Marsh, RDKB Manager of Emergency Programs - Flood Preparation

Jenny Coleshill - Granby Wilderness Society - Importance of Riparian Areas

Rich McCleary - BC Government Regional Drought Manager and Nicole McCallum - Kettle River Watershed Authority Project Officer - Drought Management

Hamish Aubrey - BC Government FLNROD - Groundwater Licencing

Tara White - BC Government FLNROD, Senior Fisheries Biologist - Invasive Bass

I was late for the last regular meeting because I wanted to take the time after the presentations to connect with the First Nations representative from the Okanagan Nation Alliance, of which the Sinixt people are a part. I encouraged her to connect with our council to develop a relationship and discuss land claim issues in our area. Many of the workshops at conventions focus on First Nations/local government relationships but, as of yet, I have not received any communication from the Sinixt people in our area. It would be nice to develop that working relationship.

Finally! Baseball season is upon us and both kids and adults alike have descended upon Angus MacDonald and Dick Bartlett Parks. Unfortunately, many teams have once again been faced with drug paraphernalia and garbage in the dugouts. There has been talk about how the city is going to deal with this issue. I believe public works is in the process of securing the dugouts and would like to ask our manager of operations what is being done, how much it will cost and when the project will be completed? Baseball in Grand Forks is such a great way to get outside this time of year and enjoy the encouragement of team spirit and a few laughs with friends. What if council and staff were to field a team next year?!

Respectfully submitted,

Julia Butler

# Request for Decision



To: Regular Meeting  
From: **Procedure Bylaw / Corporate Services**  
Date: May 7, 2018  
Subject: Report – from the Council's Representative to the Regional District of Kootenay Boundary  
Recommendation: **THAT Mayor Konrad's report on the activities of the Regional District of Kootenay Boundary, given verbally at this meeting, be received.**

---

## Background

Under the City's Procedures Bylaw No. 1946, 2013, the Order of Business permits the City's representative to the Regional District of Kootenay to report to Council and the Community on issues, and actions of the Regional District of Kootenay Boundary.

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## Benefits or Impacts

### General

The main advantage is that all of Council and the Public is provided with information on the Regional District of Kootenay Boundary.

### Strategic Impact



#### Community Engagement

- Information sharing with members of Council and the Public regarding regional issues.

### Policy/Legislation

Procedure Bylaw No. 1946, 2013

---

## Recommendation

**THAT Mayor Konrad's report on the activities of the Regional District of Kootenay Boundary, given verbally at this meeting, be received.**

## Options

1. THAT Council accepts the report.
2. THAT Council does not accept the report.
3. THAT Council refers the matter back to staff for further information.



# Request for Decision



To: Regular Meeting  
From: **Development and Engineering**  
Date: May 7, 2018  
Subject: Sewer Phasing Plan Draft Report  
Recommendation: **THAT Council adopts the Sewer Phasing Plan report.**

---

## Background

The City received funding under the 2017 Federal/Provincial Clean Water and Wastewater Fund to undertake a report on potential future expansion of the sewer collection system, which includes a prioritization of areas based on safeguarding the environment, the quality of the City groundwater supply, and public health.

The scope of the work is limited to those parts of the City (7 neighborhood areas) that currently do not have community sewer service (see figure 2.1). These areas utilize on-site septic tank and ground dispersal systems. It is not intended to address the functionality of the existing sewer network, which was previously examined as part of a multi-utility risk assessment exercise.

The assessment of risk factors provides a desktop overview of 5 parameters that relate to contamination risks:

- Soil types and permeability
- Slope
- Depth to groundwater
- Parcel size
- Distance to surface water and/or wells

Capital cost estimates are developed for retrofit sewer installation for each area and priority rankings are suggested for a retrofit sewer program.

The Department recommends that the Sewer Phasing Plan is utilized in the Official Community Plan and Capital Planning to service long-term needs of the City while protecting the aquifer.

---

## Benefits or Impacts

### Strategic Impact



#### Fiscal Accountability

- Create a plan for protecting the aquifer

- Infrastructure risk management and prioritization

**Policy/Legislation**

Official Community Plan; Asset Management Investment Plan

**Attachments**

Sewer Phasing Plan Report

---

**Recommendation**

**THAT Council adopts the Sewer Phasing Plan report.**

**Options**

1. RESOLVED THAT Council accepts the report.
2. RESOLVED THAT Council does not accept the report.
3. RESOLVED THAT Council refers the matter back to staff for further information.

### Report Approval Details

Document Title:	20180507_RFD_RMC_DevEng_SewerPhasingPlan.docx
Attachments:	- 2018-04-27-Grand Forks Sewer Phasing Plan Report v3 .pdf
Final Approval Date:	Apr 30, 2018

This report and all of its attachments were approved and signed as outlined below:

**Dolores Sheets - Apr 30, 2018 - 9:13 AM**

**Diane Heinrich - Apr 30, 2018 - 1:31 PM**

# DRAFT REPORT

PREPARED FOR THE CITY OF GRAND FORKS

## Sewer Phasing Plan Study

*April 2018*

**URBAN**  
systems

April 27, 2018

City of Grand Forks  
PO Box 220  
Grand Forks, BC V0H 1H0

**Attention:** Dolores Sheets

**Re: Sewer Phasing Plan**

Attached please find a "Draft" report on the Sewer Phasing Plan as requested. We have included an "Executive Summary" of the findings and are reserving final recommendations pending City review of this draft.

We look forward to the City's comments and completion of the assignment with your approval.

Sincerely,

A handwritten signature in blue ink, appearing to be 'Scott Shepherd', with a long horizontal line extending to the right.

Scott Shepherd, ASCT

A handwritten signature in blue ink, appearing to be 'Peter Gigliotti', with a long horizontal line extending to the right.

Peter Gigliotti, P. Eng

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APPENDICES

- Appendix A     Golder Report
- Appendix B     Unit Costs

## EXECUTIVE SUMMARY

This report was commissioned by the City of Grand Forks in April 2017 and was approved for funding assistance under the Clean Water and Wastewater Fund.

The first section of the report deals with the expansion of the City's sewer collection. It is the City's long-term goal to eliminate on-site ground disposal systems by connecting to the community sewer system. Since this will happen gradually, it is the intent of this report to assess which areas represent the highest priority with respect to safeguarding the environment, the quality of the City groundwater supply, and public health.

The second part of the report deals with biosolids and the available opportunities for reclamation of biosolids. These include biosolids that have accumulated over many years in the City's lagoon system, as well as the forecast quantities of biosolids produced by the wastewater treatment plant. The treatment plant is currently undergoing an upgrade to provide equipment for sludge dewatering.

### Extension of Sewer Collection System

The scope of the work is limited to those parts of the City (7 neighborhood areas) that currently do not have community sewer service (see figure 2.1). These areas utilize on-site septic tank and ground dispersal systems. It is not intended to address the functionality of the existing sewer network, which was previously examined as part of a multi-utility risk assessment exercise.

The assessment of risk factors was undertaken by Golder Associates and provides a desktop overview of 5 parameters that relate to contamination risks:

- ▶ Soil types and permeability
- ▶ Slope
- ▶ Depth to groundwater
- ▶ Parcel size
- ▶ Distance to surface water and/or wells

A copy of the Golder Associates report is located in **Appendix A**. The overall risk factor for each area represents a blend of the Final Risk Rating Overview. The risk ratings are developed as numerical ratings 1 to 4. For the purpose of the assessment, a Risk Factor of 1 is interpreted to have the lowest risk; while a Risk Factor of 4 is interpreted to have the highest risk.

The resulting classifications are as follows:

**Risk 3:** Hwy 3 East

**Risk 2** South Ruckles, Johnson Flats, SW Grand Forks, Donaldson

**Risk 1:** PW/Richmond, Airport Industrial

All of the "Various" areas are classified as Risk 2. It is assumed that these areas will be Pay-as-You-Go, since they are close to existing sewer and driven by new growth. The exception is the north end Industrial parcel, which requires a long extension of sewer along Granby Road.

The rankings, areas and number of parcels in each neighbourhood are summarized in **Table 4.2**. The study also includes a resident questionnaire to provide a sense of how many property owners are experiencing any issues with wastewater surfacing or problems with their septic systems. Capital cost estimates are developed for retrofit sewer installation for each area and priority rankings are suggested for a retrofit sewer program.

**Table 4.2** also includes these estimated capital costs for retrofit community sewer in each of the seven neighborhoods. A copy of the proposed expansion is located in **Figure 4.1**.

*Table 4.2 – Areas, Risk Factors and \$ / Hectare*

	Area	Overall Risk Factor	Area (ha)	Parcels (Dev and Undev)	Capital Cost Estimate (\$M)	Average \$ per ha
1	Hwy 3 East end	3	6	8	1.9	317,000
2	Public works & Richmond Ave Industrial	1	13	19	1.9	146,000
3	Airport / Industrial	1	40	33	1.7	42,500
4	South Ruckles	2	20	124	3.8	190,000
5	Johnson Flats	2	60	170	3.3	55,000
6	SW GF	2	53	101	2.4	45,000
7	Donaldson / NW	2	31	66	1.1	35,500

Some of the neighbourhoods have already been extensively subdivided (e.g. South Ruckles). Others consist of large parcels. The retrofit sewer quantities are based on provision of community sewer on existing roads. Collection system networks for future subdivision of large parcels are not included and are assumed to be “Pay-as-You-Go” (PYG) This means that future expansion of the sewer network would become the developer’s responsibility and would be turned over to the City when completed.

The capital cost to service each area is divided by the number of existing parcels to arrive at a value per parcel, and by the number of hectares to arrive at the cost per hectare.

Two neighbourhoods are identified for further study in the context of risk level and potential cost of servicing per hectare: Johnson Flats and Donaldson.

The city wastewater treatment plant is currently being upgraded and provision is made for increased flows from potential infill and additional service areas.



## 1.0 INTRODUCTION

### 1.1 Subject and Purpose

This report was commissioned by the City of Grand Forks in April 2017. The report is to deal with the areas of the City that do not have a community sewer and are not connected to the existing network. It is the City's long-term goal to eliminate on-site ground disposal systems by connecting to the community sewer system. Since this will happen gradually, it is the intent of this report to assess which areas represent the highest priority with respect to safeguarding the environment, the quality of the City groundwater supply, and public health. The project was approved for funding assistance under the Clean Water and Wastewater Fund.

The study also includes an assessment of how the City can deal with the biosolids produced at their wastewater treatment plant, both from past accumulation and from ongoing production.

### 1.2 Scope

The scope of the work is limited to those parts of the City that currently do not have community sewer service. These areas utilize on-site septic tank and ground dispersal systems. It is not intended to address the functionality of the existing sewer network, which was previously examined as part of a multi-utility risk assessment exercise.

The assessment of risk factors is undertaken by Golder Associates (see **Appendix A** for a copy) and provides a desktop overview of 5 parameters that relate to contamination risks:

- ▶ Soil types and permeability
- ▶ Slope
- ▶ Depth to groundwater
- ▶ Parcel size
- ▶ Distance to surface water and/or wells

The study also includes a resident questionnaire to provide a sense of how many property owners are witnessing any issues with wastewater surfacing or problems with their septic systems. Capital cost estimates are developed for retrofit sewer installation for each area and priority rankings are suggested for a retrofit sewer program.

The second part of the report deals with biosolids and the available opportunities for reclamation of biosolids. These include biosolids that have accumulated over many years in the City's lagoon system, as well as the forecast quantities of biosolids produced by the wastewater treatment plant. The treatment plant is currently undergoing an upgrade to provide equipment for sludge dewatering.

## 2.0 BACKGROUND

The sanitary sewer system in Grand Forks is comprised of a combination of individual on-site septic disposal systems and a community sanitary sewer collection system. Since the mid-1990's, Grand Forks has been committed to pursuing sanitary sewer service for all residents on a phased basis and has made some progress in providing sewer service for the community since then.

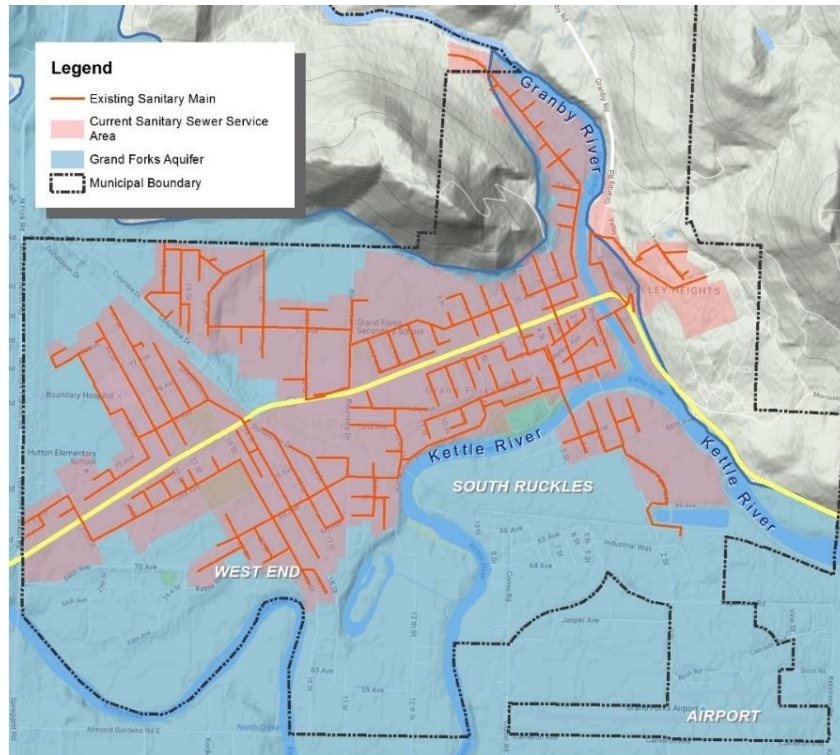
The process has recently gained community interest with the preparation of the Kettle River Watershed Management Plan (KRWMP) and the City's Well and Aquifer Protection Plan. The KRWMP identified the impacts to the water quality and quantity for both the Kettle River as well as the Grand Forks Aquifer. The unsewered areas of Grand Forks are considered to be a major source of nitrate and phosphorous loading to both the aquifer and to the Kettle River, particularly near the east end of the community where the aquifer is shallowest and the unsewered areas are located in the floodplain of the Kettle River. A key recommendation from these studies is to reduce the number of on-site septic disposal systems since they continue to age and the number of failures is expected to increase and potentially further impact the health of the public and that of the aquifer and the Kettle River.

The Grand Forks aquifer provides potable and agricultural water supply to several water utilities including the City of Grand Forks, Sion Improvement District, Grand Forks Irrigation District, Covert Irrigation District and several smaller community water systems. **Figure 2.1** below illustrates the location of the Grand Forks Aquifer in relation to the City's community sewer system.

The Kettle River is a significant tributary to the Columbia River which flows from the Monashee Mountains through the City of Grand Forks and south into the Washington State. The Kettle River is a significant community natural asset for the City and the region. In the Grand Forks region, the Kettle River provides a habitat for fish and aquatic ecosystems while enhancing several community water systems through recharging the Grand Forks aquifer. However, there are a number of cumulative impacts affecting the water quality of the Kettle River including on-septic disposal systems.

The City of Grand Forks wastewater system currently services the majority of parcels on the north side of the Kettle River and the North Ruckles area. The Airport, South Ruckles and portions of the West end directly adjacent to the Kettle River are currently not serviced with a community sewer system. **Figure 2.1** below illustrates the extents of the City's existing sewer system.

Figure 2.1 Existing Community Sewer System and Location of the Grand Forks Aquifer



The areas and number of parcels outside of the community sewer system are as follows:

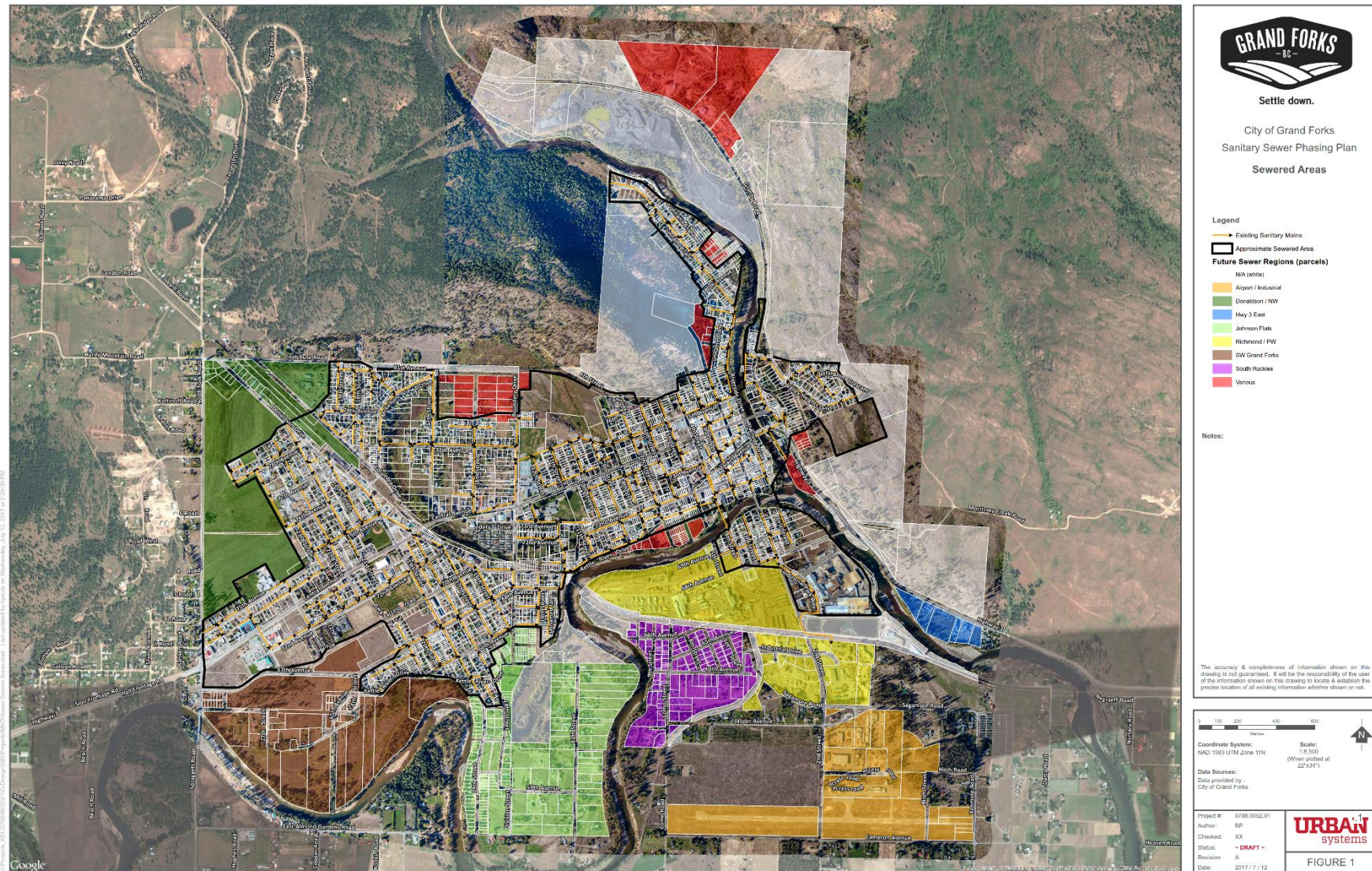
#	Location	ha	# parcels	*undeveloped	zoning
1	Hwy 3 East end	6	6	2	Highway / tourist commercial
2	Public works & Richmond Ave Industrial	13	14	5	Gravel / Mineral processing & Light Industrial
2	Airport / Industrial	40	22	11	Airport & light industrial 1
4	South Ruckles	20	118	6	Residential 1 & Rural Residential 4
5	Johnson Flats	60	131	39	Rural residential, residential 1 and small lot residential
6	SW GF	53	67	34	Rural residential, residential 1 and small lot residential
7	Donaldson / NW	31	57	9	R1, Light industrial
8	Under observation	24	34	11	R1 (but large lot, some acreage)

\* For unserved lots, only selecting ones outside wetland / core Environmental DPA area

The total parcels are 449, of which 332 are constructed with on-site septic systems. **Figure 2.2** on the following page illustrates the location of these parcels.



Figure 2.2 – Sewer Service Areas



## 2.1 Existing and Future Densities

The existing densities in areas without community sewer are governed by the Official Community Plan (OCP) for the various land use zones. The OCP requires a minimum parcel size of 1 hectare in areas without community sewer service. The minimum parcel size changes to 0.14 hectare when community sewer service is present. This would mean that a 1-hectare parcel could be subdivided into seven 1,400 m<sup>2</sup> parcels in residential zones R1, R2, R4, and R4A. Other zoning designations such as I1, AP, TH and TC may result in smaller parcels depending on market demand.

**Table 2.1** provides an approximation of the potential additional parcels that might evolve as a result of community sewer service. These approximations are purely arithmetical extensions of area and allowable density. The subdivision of parcels will depend on a host of other factors such as flood plain, market demand, etc.

*Table 2.1 - Existing and Projected Densities*

	Area	Predominant Zone	Area (ha)	Min Parcel Size (w/o sewer ha)	Min Parcel Size (w/ sewer ha)	Exst Parcels	Pot. Parcels w/sewer #
1	Hwy 3 East end	TC / HC	6	1	0.14	8	-
2	Public works & Richmond Ave Industrial	I1	13	N/A	N/A	19	-
3	Airport / Industrial	AP	40	N/A	N/A	33	-
4	South Ruckles	R1 / R4	20	1	0.14	124	140
5	Johnson Flats	R4 / R2	60	1	0.14	170	430
6	SW GF	R4	53	1	0.14	101	380
7	Donaldson / NW	R4A	31	1	0.14	66	220



## 3.0 RISK ASSESSMENT

### 3.1 Approach to Risk Assessment

The approach to formulating a risk assessment matrix for each area with on-site sewer systems is to provide an overview of the risk factors that relate to a range of key parameters. The key parameters are under the headings of:

- ▶ Soil Types;
- ▶ Parcel area;
- ▶ Slope;
- ▶ Depth to groundwater;
- ▶ Distance to surface water or wells.

The risk ratings are developed as numerical ratings 1 to 4. For the purpose of the assessment, a Risk of 1 is interpreted to have the lowest risk; while a Risk of 4 is interpreted to have the highest risk. Risk ratings of 2 and 3 are low medium and high medium respectively. The representation of the risk is provided on a series of mapsets prepared by Golder Associates; the maps and report are included in **Appendix A**. A brief summary of the interpretations is provided below.

	Risk Details
Soils Mapset	<p>Fluvial/glaciofluvial (Risk 1). Most soils in study area were described as fluvial/glaciofluvial.</p> <p>Fluvial/glaciofluvial soils within the floodplain were assigned a Risk of 2; these soils are closer to major creeks and inferred to consist of higher fines content.</p> <p>Colluvium (Risk 3)</p> <p>Till over Bedrock and Colluvium within the floodplain (Risk 4)</p>
Parcel Area Mapset	<p>Parcels larger than 1 ha are a Risk 1. As per Grand Forks Bylaw No. 1606, 1999, the minimum parcel size (for subdivision purposes and most zoning) is 1 ha where there is no community sewage or water system.</p> <p>0.5 – 1 ha (Risk 2)</p> <p>0.14 – 0.5 ha (Risk 3)</p> <p>&lt;0.14 ha (Risk 4). As per bylaw, minimum parcel size (for subdivision purpose; for most zoning) of 0.14 ha when the parcel is connected to either a community sewage or water system, but not both; or 0.07 ha when the parcel or parcels are connected to a community sewage and water system.</p>
Slope Mapset	<p>2 - 5% (Risk 1); 5 – 10% (Risk 2); 10 -30% (Risk 3); and &lt;2% and &gt;30% (Risk 4). Risk 4 accounts for potential mounding affects (&lt;2% slope).</p>
Depth to Groundwater Mapset	<p>Depths greater than 10 m are a Risk; 3 – 10m are Risk 2; 1 – 3 m are Risk 3; less than 1 m are Risk 4.</p>
Setbacks and Capture Zones	<p>To account for surface water bodies, private water wells and larger municipal wells, a Risk of 4 was assigned to those parcels where the majority of the lot was located</p>

	Risk Details
	<p>within a 30 m setback to surface water bodies, within a 30 m setback to private water wells and/or within the 10-year time of travel capture zone of a municipal well.</p> <p>The risks are assigned on the basis of available information on lot sizes, surficial geology, available well logs from the Ministry of Environment database, and available mapping of topography and surface water features. Figures #A through #E depict the risk ratings for each neighbourhood.</p> <p>The averages of the risk ratings for each neighbourhood are then weighted for importance as follows:</p> <ul style="list-style-type: none"> <li>▶ Depth to groundwater and slope are given a weighting multiplier of 1</li> <li>▶ Parcel size, setbacks and capture zones are given a weighting multiplier of 2.</li> </ul> <p>The weighted risk ratings are then overlain, and a final feasibility risk rating calculated for each polygon.</p>

### 3.2 Resident Questionnaire

A questionnaire was sent out to residents of the various neighbourhoods in an effort to determine the age of the on-site systems and if they are having problems with their systems. A total of 53 responses were recorded. The questions were:

1. What is your survey number?
2. How long has there been a septic system at your house?
3. Do you know the location of your septic tank and drainfield?
4. Is your drainfield located at the front of your property or in the backyard?
5. Do you have your system inspected and maintained by a qualified technician according to a maintenance schedule?
6. Have you ever experienced any problems with blockages or overflows?
7. Have you ever seen any spongy ground or smelt odours in the field area?
8. If so, which season is worst? [Spring] [Summer] [Fall] [Winter]
9. Do you also have a well that you use for: [Drinking water]
10. Do you also have a well that you use for: [Other]

Age: 21 respondents did not know the age of their system. The other responses ranged from 2 to 30 years, with two at 8 months. The overall average age was 20 years. Most respondents said they have regular inspections (10 said no regular inspections). Four respondents said they have had problems with their systems in terms of back-ups and spongy ground in their dispersal field area. Six respondents reported having a domestic well on the same property.

## 4.0 RETROFIT COMMUNITY SEWER SERVICE

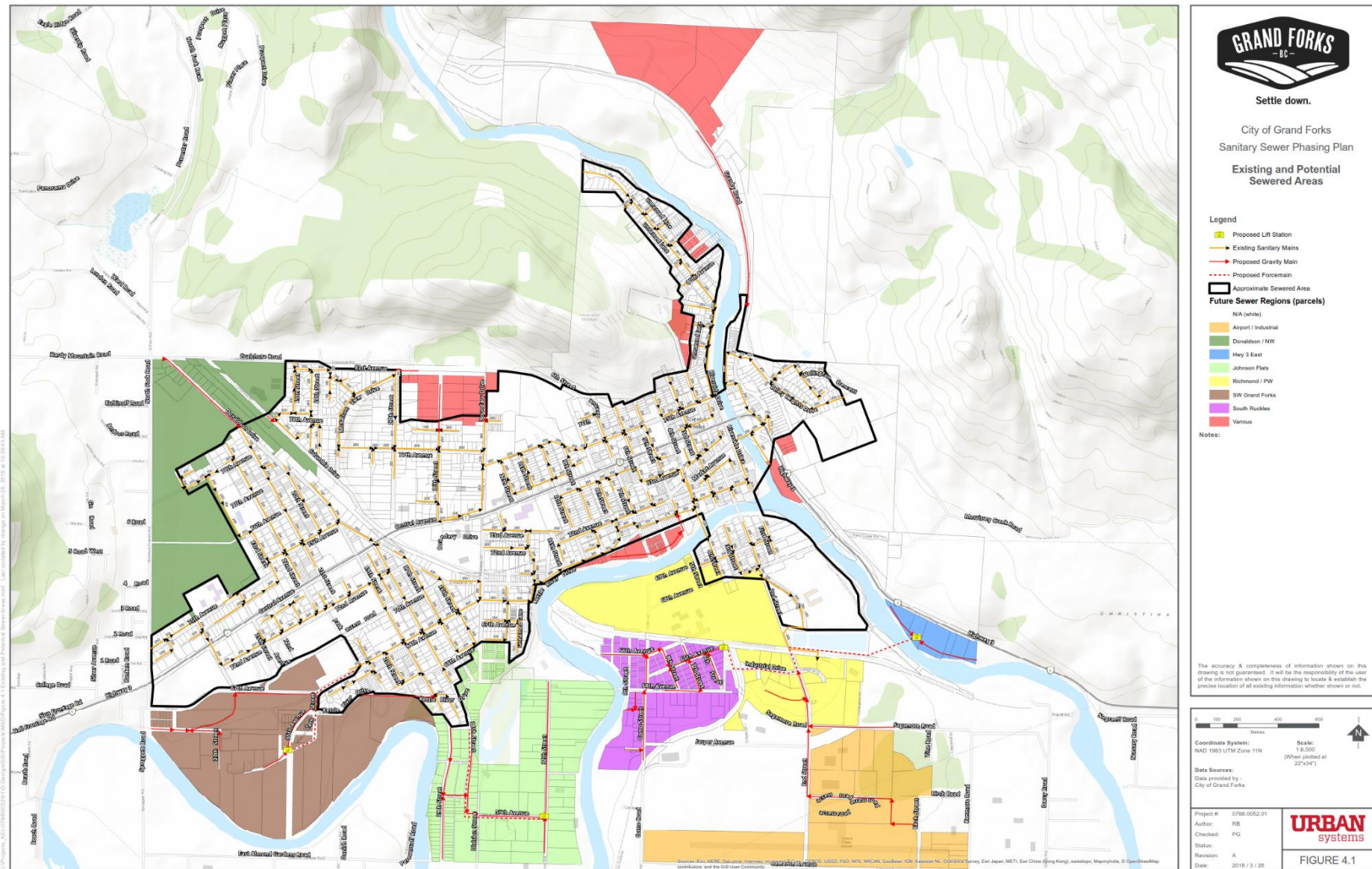
Each of the seven neighbourhoods were assessed for the installation of a community collection system with a connection to the periphery of the existing sewer network. A copy of the proposed expansion of the collection system is located in **Figure 4.1** on the following page.

The topography in Grand Forks results in a requirement for a lift station in each of the seven neighbourhoods and a forcemain to deliver sewage to the existing collection system. The additional flows will, in some cases, require upgrading the existing pump stations. The impacts on existing lift stations are listed below:

- ▶ Marlex Station: impacted by flows from SW Grand Forks
- ▶ Val-Mar Station: not impacted
- ▶ Boundary Station: not impacted
- ▶ Granby Station: impacted by flows from the North area
- ▶ City Park Station; impacted by flows from Johnson Flats
- ▶ Industrial Station: impacted by flows from all neighbourhoods



Figure 4.1 – Existing and Potential Sewer Areas



The Marlex Station will require larger pumps. The Granby Station will require larger pumps, will need slope stabilization because it is in a precarious location, and will require a new forcemain river crossing as the existing aerial crossing is at risk of collapse. City Park Station will be impacted by higher flows arising from several neighbourhoods and may need an increased pump size. There has been concern over the safety and reliability of the “under-river” crossing of the Kettle River as the pipe is old and in potential danger of collapse from corrosion. The Industrial Station pumps the entire City flow and it is in need of renovations and refurbishing. All of the additional neighbourhood flows will arrive at the Industrial Station, so larger pumps will be required.

The timing of lift station upsizing will depend on how quickly community sewer is extended into the candidate neighbourhoods. For some lift stations (such as Industrial Ave.) it is the cumulative effect of connecting additional neighbourhoods that will trigger an upsizing program. The cost of upsizing existing lift stations has therefore not been included in this stage of the report.

There are two forcemains that will require replacement to reduce risk of failure. These are:

- a) The forcemain from City Park Station under the Kettle River. This could be replaced as a bored crossing under the river bed, or as a pipe bridge crossing. A detailed cost comparison should be undertaken before a method is selected.
- b) The forcemain crossing of the Granby River from the Granby Station should be replaced with a more robust pipe bridge.

#### 4.1 Basis of Capital Cost Estimates

The capital cost estimates for retrofit sewer construction use a set of assumptions with respect to excavation and backfill, restoration, dewatering and pipe grades. Some of these key assumptions include:

- ▶ Soils will be largely suitable for trench backfill, but sand will be used for pipe bedding
- ▶ PVC sewer pipe (200 mm diameter) will be used for collection system gravity sewer and for service connection
- ▶ Manholes will be 1050 mm diameter pre-cast concrete barrels
- ▶ Service connection will be 100 mm diameter PVC pipe (average length – 10 m to property line)
- ▶ Forcemains will be 150 mm diameter PVC pressure pipe.
- ▶ Asphalt surfaces will be reinstated with 50 mm thick asphalt pavement, 3.5 m wide

Unit prices used for estimates are listed in **Appendix B**.

A summary of the estimated quantities for each of the neighbourhoods is provided in **Table 4.1** below. The areas designated as “Various” are sub-split into areas (a) through (g).

Table 4.1 - Collection System Quantities for Designated Retrofit Areas

	Area	Gravity Sewer (m)	Manholes	Force main	Services	Pump Stations	Specials
1	Hwy 3 East end	500	4	1,200	10	1	River/Rail Crossing
2	Public works & Richmond Ave Industrial	600	8	200	180	1	Hwy Crossing
3	Airport / Industrial	1,400	8	600	10	1	-
4	South Ruckles	2,300	30	540	200	1	Rail/Hwy Crossing
5	Johnson Flats	3,000	26	1,200	20	1	-
6	SW GF	2,400	20	800	10	1	-
7	Donaldson / NW	500	8	500	15	1	-

## 4.2 Risk Factor and Capital Cost Estimates

The Golder Associates report included in **Appendix A** provides a summary of the risk factors and the ranking of each of the neighbourhoods under consideration. The rankings, areas and number of parcels in each neighbourhood are summarized in **Table 4.2**. This table also includes the estimated capital cost for retrofit community sewer in each of the seven neighbourhoods.

Some of the neighbourhoods have already been extensively subdivided (e.g. South Ruckles). Others consist of large parcels. The retrofit sewer quantities are based on provision of community sewer on existing roads. Collection system networks for future subdivision of large parcels are not included and are assumed to be “Pay -as-You-Go” (PYG). This means that future expansion of the sewer network would become the developer’s responsibility and would simply be turned over to the City when completed.

The capital cost to service each area is divided by the number of existing parcels to arrive at a value per parcel, and by the number of hectares to arrive at the cost per hectare.

It is evident that the cost per hectare is highest when the neighbourhood is remote from the existing network and there are obstacles such as river, railway or highway crossings. The lowest per parcel and per hectare costs are in Johnson Flats and Donaldson areas. The highest are in Hwy 3 East and PW/Richmond areas.

The overall risk factors represent a blend of the Final Risk Rating Overview as determined by Golder Associates. For example, if a neighbourhood has mostly Risk 2 with some Risk 1, it is classified as Risk 2. If the neighbourhood is rated as mostly Risk 3, with some Risk 2, it is classified overall as Risk 3.

The resulting classifications are as follows:

**Risk 3:** Hwy 3 East

**Risk 2** South Ruckles, Johnson Flats, SW Grand Forks, Donaldson

**Risk 1:** PW/Richmond, Airport Industrial

All of the “Various” areas are classified Risk 2. It is assumed that these areas will be PYG, since they are close to existing sewer. The exception is the north end Industrial parcel, which requires a long extension of sewer along Granby Road.

*Table 4.2 – Areas, Risk Factors and \$ / Hectare*

	Area	Overall Risk Factor	Area (ha)	Parcels (Dev and Undev)	Capital Cost Estimate (\$M)	Average \$ per ha
1	Hwy 3 East end	3	6	8	1.9	317,000
2	Public works & Richmond Ave Industrial	1	13	19	1.9	146,000
3	Airport / Industrial	1	40	33	1.7	42,500
4	South Ruckles	2	20	124	3.8	190,000
5	Johnson Flats	2	60	170	3.3	55,000
6	SW GF	2	53	101	2.4	45,000
7	Donaldson / NW	2	31	66	1.1	35,500

# APPENDIX A

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## Golder Report

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16 March 2018

Reference No. 1895271-001-L-Rev0

Mr. Peter Gigliotti, PEng  
Urban Systems Ltd.  
304 – 1353 Ellis Street  
Kelowna, BC  
V1Y 1Z9

## **SUMMARY OF THE HYDROGEOLOGICAL COMPONENT OF GROUND EFFLUENT DISPOSAL ASSESSMENT, CITY OF GRAND FORKS, BRITISH COLUMBIA**

Dear Mr. Gigliotti,

Golder Associates Ltd. (Golder) is pleased to provide the results of a hydrogeological desktop study for evaluating in-ground effluent disposal systems within the City of Grand Forks (City) on behalf of Urban Systems Ltd. (USL; Client). It is our understanding that the City wishes to connect existing on-site septic systems to the municipal sanitary sewer system; and that the results of this desktop study will aid in prioritizing the existing systems for connection to the municipal sanitary sewer system.

The hydrogeological desktop study involved the classification of site-specific controlling factors (i.e., soil type, depth to groundwater, topographical slope, parcel size and horizontal setbacks) within select septic disposal regions (identified as sewer regions herein: refer to the Index Map attached) of the City (collectively referred to as the Study Area) and a subsequent qualitative risk overlay analysis using the controlling factors to categorize each sewer region in terms of its effectiveness for in-ground effluent disposal and to prioritize areas for connection to the municipal sanitary sewer system. Details of the scope of the work for this study were presented to USL in our proposal entitled “*Proposal and Cost Estimate for Hydrogeological Component of Effluent Disposal Assessment, City of Grand Forks*”, dated 26 January 26 2018.

We note that this report, including all attached figures and tables, should not be used to determine the potential risk of in-ground effluent disposal on a local (lot-by-lot) basis; rather, it is only intended to assist the City and USL in the prioritization of the select sewer regions for connection to the municipal sanitary sewer system. Additional limitations are discussed in Section 2.0 and Section 5.0.



## 1.0 STUDY AREA

The study was completed for the following sewer regions specified by USL:

**Table 1: Sewer Regions Assessed for Hydrogeological Desk-top Study**

Sewer Region	Figure Numbers (for use with Section 3.0 below)
Donaldson / NW	1A through 1F
Various*	2A through 2F and 3A through 3F
Johnson Flats	4A through 4F
SW Grand Forks	4A through 4F
South Ruckles	5A through 5F
Airport / Industrial	5A through 5F
Hwy 3 East	5A through 5F
Richmond / PW	5A through 5F

Note:

\* The "Various" sewer region is comprised of clusters of parcels that are spread across the Study Area; thus, to assist Golder with prioritization of sewer regions as part of this hydrogeological desktop study, the "Various" sewer region was subdivided into five separate sub-regions: North (2A through 2F), Central, South, East and West (3A through 3F).

## 2.0 METHODS

A Geographic Information System (GIS) qualitative risk overlay analysis was identified as the most efficient method of meeting the study objective of categorizing the sewer regions in terms of their effectiveness for in-ground effluent disposal. The risk overlay analysis involved the following:

- Selecting a total of 559 polygons within the specified City of Grand Forks sewer regions for analysis in the qualitative risk overlay model, where each polygon was represented by a single parcel.
- Classifying suitable controlling factors (refer to Section 2.1);
- Assigning risk ratings to each controlling factor on a polygon basis (refer to Section 2.3); and
- Combining ("overlying") the risk ratings and assigning a final risk rating to each sewer region (refer to Section 3.0).

Supplemental information obtained from on-line government maps, water well logs from the BC Ministry of Environment (MOE) Water Resources Atlas, a small number of reports accessed from Agriculture and Agri-Food Canada, BC MOE websites and Golder's in-house library, were used to confirm and/or modify the risk ratings for the soil type, depth to groundwater and horizontal setback factors. Based on the results of the risk analysis, sewer regions were prioritized for connection to the municipal sanitary sewer system.



## 2.1 Controlling Factors

Controlling factors influencing the effectiveness of in-ground effluent disposal were based on selected parameters outlined in Oosting and Joy (2011), which represent standard hydrogeological parameters generally assessed as part of site-specific effluent disposal studies; and were limited by the size of the Study Area, as follows (in no specific order):

- The capability of a soil to infiltrate effluent; for the purposes of the risk analysis, this capability was identified by surficial geology, or soil type, evaluated to an approximate depth of five meters below surface. Soil type directly relates to the permeability of the soil, and hence, its capability of infiltrating effluent. Given the presence of the Kettle River and Granby River within the Study Area, it has been assumed that some interrelationship exists between soil type and the location of the floodplain adjacent to the Kettle and Granby Rivers (i.e., that soils within the floodplain are comprised to some degree of finer-grained materials that reduce soil permeability and infiltrating capability).
- Depth to a limiting condition (identified as a subsurface condition that limits the downward infiltration of groundwater/effluent; generally identified as fine-grained silty, clayey soils, till, bedrock or groundwater). For the purposes of the risk analysis, only depth to groundwater was considered as the limiting condition, as available soil data were not extensive and did not contain the level of detail necessary to identify soils or bedrock as limiting conditions. The depth to groundwater relates to the thickness of the unsaturated zone; effluent that infiltrates through a thicker unsaturated zone (i.e., deeper groundwater level) is less likely to result in excessive groundwater mounding or to daylight as effluent seepage down-gradient of the effluent disposal area. Higher groundwater levels, that are expected be present in areas adjacent to surface water bodies, are accounted for in the Soil Type (floodplain) controlling factor (see bullet above).
- Slope of the ground surface. A relatively steep slope may impede the ability of the effluent to infiltrate into the ground surface, resulting in more surface run-off. Where steep slopes consist of soils with a high clay or silt content, infiltration of effluent may result in erosion or slide conditions. A relatively shallow slope may increase the potential for mounding of effluent due to the inability to naturally dissipate down slope.

Other regulatory factors that influence the feasibility of effluent disposal include the availability of sufficient area to accommodate in-ground disposal fields; that effluent does not surface or daylight within a certain distance from the disposal area; and that minimum setback distances are met, as follows:

- The area available for disposal (in terms of individual parcel size) was considered to be a controlling factor influencing the effectiveness of in-ground effluent disposal. A small parcel (<0.14 hectare) may not have the area available to accommodate a septic field, particularly when other setback requirements (for example, setback from buildings, roadways, groundwater wells, etc.) must be met. Additionally, parcel size also correlates with population density, where an abundance of smaller parcels is inferred to represent a relatively more populated community, or populated area within a community.
- A horizontal setback distance from surface water bodies, private water wells and larger municipal wells was considered a controlling factor. In order to account for minimum regulatory horizontal setback distances from surface water bodies and the potential increased risks associated with effluent disposal near a surface water body (including, but not limited to: an increase in the typically shallow groundwater levels observed near surface water bodies, reduced renovation time of effluent prior to seepage into surface water body, deterioration of surface water quality, eutrophication of surface water body, etc.), a 30 m horizontal setback



distance was applied from all surface water bodies present in the Study Area. To account for minimum regulatory horizontal setback distances from groundwater wells, a 30 m horizontal setback distance was applied from all known private water wells (specifically, those registered with BC MOE). For larger high-production municipal wells, the published 10-year time of travel capture zone for each municipal well was considered a controlling factor. The time of travel capture zone indicates the time frame for contaminants (including effluent) to travel to the municipal well from a given point within the capture zone during pumping.

## 2.2 Sources of Information

The following data sources were used in this study:

### 2.2.1 Soil Type

Soil data was acquired from the Soil Information Tool map application (Ministry of Agriculture and MOE, 2018). The Soil Information Tool captures data from multiple sources, which for the Study Area included the 1:50,000 scale dataset "*Soil Survey of the Kettle River Valley in the Boundary District of British Columbia*" (SSKRV) maintained by Agriculture and Agri-Food Canada (1964 - 1976) and the coarser 1:1,000,000 scale dataset "*Soil Landscapes of Canada*" produced by Canadian Soil Information Service (CanSIS).

Soils information available on individual water well logs accessed through the BC MOE Water Resources Atlas, government reports and/or Golder's in-house investigation reports was used to augment the datasets. For each parcel the dominant soil types were selected; if two soil types fell into one parcel, the soil type that occupied a higher percentage of the parcel was used for classification.

Floodplain maps for the Kettle and Granby Rivers were sourced from BC MOE Floodplain Maps by Region (Acres International Limited, 1992). This source included a finer 1:5,000,000 scale dataset with drawing Number 90-34 Sheets 5 through 8 defining the floodplain in the Study Area.

### 2.2.2 Slope of Ground Surface

A 20 m resolution Digital Elevation Model (DEM) was acquired from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, through DataBC (2018). The DEM was used to generate approximate slope, described as percentage rise over run. The average slope was then calculated for each parcel.

### 2.2.3 Parcel Size (available area for effluent disposal)

Parcel size was sourced directly from spatial data (shapefiles) provided to Golder by USL on 15 February 2018. Parcel area in hectares (ha) was calculated directly from the spatial information.

### 2.2.4 Depth to Groundwater

Depth to groundwater was derived from the BC MOE Water Resources Atlas, sourced from GeoBC; however, its original derivation was from the BC MOE – Water Protection and Sustainability Branch. For this study, water level information available from 485 water wells registered with BC MOE was used to derive a groundwater surface layer. Wells with a depth of zero were removed from the dataset. Due to the sparseness of water level data in

some areas, and overall variations in depth to groundwater, an inverse distance weighting (IDW) interpolation scheme was used to create the desired surface across each sewer region. IDW interpolation scheme minimizes errors such as those described above, but in turn, reduces the overall precision of the analysis.

In some cases, specifically, where groundwater information was not available for entire sewer regions via the sources above (i.e., Richmond/PW, Airport/Industrial, Various – Central, Various – West, and Various – South), individual water wells logs adjacent or near the Study Area were used to augment the datasets.

### **2.2.5 Horizontal Setback Distance and 10 Year Capture Zone**

The setback distance of 30 m from a freshwater body and a domestic water supply well was derived from the *Sewerage System Regulation* (SSR, 2010) and associated Version 3 of the *Sewerage System Standard Practice Manual* (2014). Effluent discharges to ground at flows  $<22.7 \text{ m}^3/\text{day}$  are authorized under the SSR. It is noted that a horizontal setback distance of 60 to 300 m from a water supply (depending on maximum daily effluent flows) is required for effluent discharge authorized under the *Municipal Wastewater Regulation* (MWR, 2016) (i.e., at flows  $>22.7 \text{ m}^3/\text{day}$ ). Based on a review of the MOE's online discharge database, where water wells are present in a sewer region, there are no authorizations of  $>22.7 \text{ m}^3/\text{day}$  inside that sewer region; thus, a 30 m setback was applied in this study, in accordance with the SSR.

The 10-year capture zone was acquired from the BC Government application iMapBC. The extents of the 10-year capture zones were cross-referenced for validation with Golder's report "Contaminant Inventory for the Grand Forks Aquifer" (Golder, 2003).

## **2.3 Assignment of Risk Rating for Controlling Factors**

Risk ratings for each of the five controlling factors were assigned to each polygon in the model, as described in Table 2 below, and shown on the attached figures. Risk ratings were based on applicable regulatory requirements and on professional experience.

There are five figures for each sewer region (Figures #A through #F; refer to Table 1), where the first four figures in each mapset (Figures #A through #E) correspond to the risk rating of the five controlling factors, and the last figure in each mapset (Figure #F) corresponds to the final risk rating. An map showing the final risk rating of the whole Study Area is also provided and labelled as Figure 6.

**Table 2: Assignment of Risk Ratings for Controlling Factors**

Risk Factor	Risk Unit	Risk 1	Risk 2	Risk 3	Risk 4	Assumptions/Comments
Soil Type (Figure #A)	Soil Type	Fluvial <sup>a</sup> , Glaciofluvial <sup>a</sup>	Fluvial, Glaciofluvial Within Floodplain	Colluvial	Till over Bedrock and Colluvial Within Floodplain	Soil types ranged from (inferred low to non-permeable) till over bedrock, (inferred moderately permeable) colluvial deposits, and (inferred permeable) fluvial/glaciofluvial sands and gravels. Soil type was assigned a risk rating based on its inferred permeability (infiltration capability), with the most permeable (highest infiltration capacity) as Risk 1, and least permeable (lowest infiltration capacity) as Risk 4. A similar soil type within the floodplain was assigned a higher risk rating due to the higher probability of underlying silts and clay deposits and general low permeability characteristics of soil within the floodplain.
Depth to Groundwater (Figure #B)	Metres Below Ground	>10	3 to 10	1 to 3	0 to <1	A lower risk rating was assigned to deeper groundwater, while a higher risk rating was assigned to shallower groundwater.
Average Slope (Figure #C)	Percent	0 <sup>b</sup> to 5	5 to 10	10 to 30	>30	A lower risk rating was assigned to a shallower slope, while a higher risk rating was assigned to steeper slope.
Parcel Size (Figure #D)	Hectares	>1	0.5 to 1	0.14 to 0.5	<0.14	A lower risk rating was assigned to larger parcel sizes, while a higher risk rating was assigned to smaller parcel sizes. As per the City of Grand Forks Bylaw No. 1606, 1999 (for subdivision purposes; for most zoning), a minimum parcel size of 0.14 hectares is required when the parcel is connected to either a community sewage or water system, but not both; and a minimum parcel size of 0.07 ha is required when the parcel is connected to a community sewage and water system.
Horizontal Setback <sup>c</sup> and Capture Zones (Figure #E)	n/a	Outside of Setback and Capture Zone	n/a	n/a	Inside of Setback and Capture Zone	The lowest risk rating (Risk 1) was assigned to parcels outside of the setback requirements and capture zones, while the highest risk rating (Risk 4) was assigned to parcels within the setback requirements and capture zones. Where setbacks/capture zones intersected parcels, the risk rating was assigned based on the location of the majority of the parcel.

Notes:

- <sup>a</sup> While all fluvial and glaciofluvial deposits have been assigned a ranking of Risk 1, in some cases, these deposits may be too permeable for sufficient renovation of effluent, which may potentially have a negative impact on the water quality of receiving water bodies. For the purposes of this large-scale study, differentiation has not been made between permeable deposits with sufficient renovation and those with insufficient renovation.
- <sup>b</sup> A very flat topographical slope (i.e., <2%) may, in some cases, correlate with a “flat” groundwater surface, potentially resulting in excessive groundwater mounding due to a low hydraulic gradient. For the purposes of this study, higher risk ratings for “flat” groundwater surfaces have not been made, and all slopes less than 5% were assigned a ranking value of Risk 1.
- <sup>c</sup> For the purposes of this study, setback requirements have only been applied to groundwater wells registered with the BC MOE. It was beyond the scope of this study to confirm whether registered wells within the Study Area are operational or abandoned/decommissioned, and/or if other wells not registered with the Province exist within the Study Area.

## 2.4 Assignment of Final Feasibility Risk Rating

### 2.4.1 Polygons (within Sewer Regions)

For each polygon, risk ratings for soil type, depth to groundwater and average slope were given a weighting of 1; while the risk rating for parcel size, setback requirements and capture zones was given a weighting of 2. Weightings were determined during the model calibration process and were based on available information for the Study Area, and on professional knowledge, resulting in a higher weighting being assigned to parcel size, setback requirements and capture zones. The weighted risk ratings were overlain, and a final feasibility risk rating was then calculated for each polygon.

### 2.4.2 Sewer Regions

For the purposes of assigning a final risk rating to each sewer region, the average weighted risk rating for each sewer region was calculated, and a final feasibility risk rating was then determined, as summarized in Table 3. Final feasibility risk ratings were assigned a Risk 1 through Risk 4, corresponding to an increase in risk associated with the effectiveness of in-ground effluent disposal, based on the five controlling factors listed above. Risk 1 corresponds to an area inferred to pose the lowest risk associated with the effectiveness of in-ground effluent disposal, while Risk 4 corresponds to an area inferred to pose the highest risk associated with the effectiveness of in-ground effluent disposal.

**Table 3: Final Risk Ratings for Sewer Regions**

Average Weighted Risk Rating	Final Feasibility Risk Rating
1.0 - <2.0	Risk 1
2.0 - <3.0	Risk 2
3.0 – 3.4	Risk 3
3.5 – 4.0	Risk 4

## 3.0 RESULTS OF QUALITATIVE RISK ANALYSIS

The final feasibility risk ratings for each polygon are shown on all attached figures with the suffix “E”.

The final feasibility risk ratings for each sewer region are summarized in Table 4. The sewer regions have been arranged such that the “*Average Weighted Risk Rating*” is shown from lowest (at the top of the table) to highest (at the bottom of the table). General comments regarding the final risk ratings are also provided.

Note again that each sewer region has been assigned a single value for final feasibility risk rating, where the single value is the average of the polygons within the sewer region. Therefore, each sewer region will be graphically shown as comprising polygons of more than one final feasibility risk rating.

**Table 4: Results of Qualitative Overlay Risk Analysis**

Sewer Region and Corresponding Figure		Average Risk Rating for each Controlling Factors					Average Weighted Risk Rating	Final Feasibility Risk Rating	Comments
		Soil Type	Depth to Groundwater	Slope	Parcel Size	Setback and Capture Zone			
Airport/ Industrial	5F	1.0	1.4	1.1	1.7	1.0	1.3	Risk 1	Minimal well data. Mostly Risk 1 with minor Risk 2 areas.
Various - West	3F	1.0	1.9	1.0	3.0	1.0	1.7	Risk 1	No well data within sewer region. Mostly Risk 1 with some intermediate risk (Risk 2-3) areas relating to small parcels and shallow groundwater recorded from surrounding wells.
Richmond/ PW	5F	1.9	1.5	1.5	2.8	2.3	1.9	Risk 1	Minimal well data. No well data in Northern section of this region. Mostly Risk 1 with some Risk 2 areas and minor Risk 3 areas due to small parcel sizes.
Various – North	2F	4.0	2.3	3.0	1.0	1.0	1.9	Risk 1	Minimal well data. Mostly Risk 1 with high risk till over bedrock (Risk 4), steep sloping topography (Risk 3) and intermediate depth to groundwater/ wells drilled into bedrock (Risk 2-3). Spring noted in centre of parcel by USL.

Sewer Region and Corresponding Figure		Average Risk Rating for each Controlling Factors					Average Weighted Risk Rating	Final Feasibility Risk Rating	Comments
		Soil Type	Depth to Groundwater	Slope	Parcel Size	Setback and Capture Zone			
South Ruckles	5F	1.9	1.0	1.2	3.6	1.1	1.9	Risk 1	Minimal depth to groundwater data. Mostly Risk 2 with some Risk 1 and minimal Risk 3 areas (small parcel size). Some areas near river within setback zone are higher risk and have steeper slope.
Hwy 3 East	5F	2.0	2.0	1.8	2.0	2.5	2.1	Risk 2	Mostly Risk 2 with some Risk 1 and Risk 3 areas. High risk areas (Risk 4) within river and well setback distance.
Donaldson/ NW	1F	1.0	1.0	1.7	2.7	2.9	2.1	Risk 2	Mostly Risk 2 with some Risk 1 and minimal high Risk 3-4 areas. Central portion of this region is within the 10-year well capture zone.
Various - Central	3F	2.1	2.0	1.5	3.8	1.0	2.2	Risk 2	No well data within sewer region. Mostly low to intermediate (Risk 1-2) areas. Minimal high risk soil type (Risk 3-4) of colluvium within floodplain and some high risk (Risk 4) small parcels.

Sewer Region and Corresponding Figure		Average Risk Rating for each Controlling Factors					Average Weighted Risk Rating	Final Feasibility Risk Rating	Comments
		Soil Type	Depth to Groundwater	Slope	Parcel Size	Setback and Capture Zone			
Johnson Flats	4F	1.5	2.0	1.3	3.4	1.9	2.2	Risk 2	Mostly Risk 2 with some low Risk 1 and high Risk 3 areas. This region has a broad range of parcel sizes and a large portion of this region is within the floodplain. Some areas are high Risk 4 within the 10-year well capture zone and well setback distance.
Various – East	3F	1.1	1.1	3.4	3.5	1.4	2.2	Risk 2	Minimal well data within sewer region. High (Risk 4) area within setback distance from the Kettle/Granby Rivers. High risk (Risk 3-4) steep slope and high risk small parcel sizes.
Various - South	3F	1.7	2.0	1.7	3.8	1.5	2.3	Risk 2	No well data within sewer region. High (Risk 4) risk for small parcel sizes and some portions of this region within the setback distance from the Kettle River.
SW Grand Forks	4F	1.2	1.8	1.1	3.2	4.0	2.6	Risk 2	Mostly Risk 2, with some Risk 3 areas including majority of region within floodplain. High Risk 4 as region is entirely within 10-year well capture zone.

## **4.0 DISCUSSION OF QUALITATIVE RISK ANALYSIS**

### **4.1 Sewer Regions**

#### **4.1.1 Risk 4**

There are no sewer regions that are considered a Risk 4. However, note that some smaller areas within individual sewer regions have individual parcel risk rankings of 4.

#### **4.1.2 High Risk Areas**

Based on the qualitative risk analysis, the sewer regions of SW Grand Forks (Figure 4F), Various – South (Figure 3F), Various – East (Figure 3F), Johnson Flats (Figure 4F) and Various – Central (Figure 3F) appear to pose the highest risk with respect to the effectiveness of in-ground effluent disposal. This is mainly due to the higher risk ratings associated with a small parcel size, location within the setback distance requirements and/or capture zones, as well as flooding and high groundwater table as a result of proximity to the Kettle and/or Granby Rivers.

#### **4.1.3 Lower Risk Areas**

Based on the qualitative risk analysis, the sewer regions of Airport/Industrial (Figure 5F), Various – West (Figure 3F), Richmond/PW (Figure 5F), Various – North (Figure 2F), South Ruckles (Figure 5F), Hwy 3 East (Figure 5F), Donaldson/NW (Figure 1F) and Various – Central (Figure 3F), appear to pose a low (Risk 1) to intermediate (Risk 2) risk with respect to the effectiveness of in-ground effluent disposal.

Where numerous groundwater wells are concentrated within one area of the sewer region (i.e., Donaldson/NW, South Ruckles and Richmond/ PW), the risk of impacting groundwater supply sources from the in-ground disposal of effluent is likely to increase, particularly in established communities where disposal systems may be older and/or in developed communities where parcel sizing may be smaller.

## **4.2 Corroboration of Desktop Study**

Should the City wish to corroborate the results of this qualitative risk analysis, additional assessment may be conducted, including subsurface investigations to confirm local soil and groundwater conditions; and long-term groundwater and surface water monitoring programs within select sewer regions, particularly those in proximity to clustered water wells or aquatic receiving environments.

Additionally, the City may wish to identify existing and operational/abandoned/decommissioned private water wells within each sewer region. This study only accounted for water wells registered with the Province. Additional (non-registered) water wells may exist, and their presence may result in an increase to the risk ratings in that sewer region.

We understand that the City has completed a preliminary survey to identify individual septic disposal system issues within the City boundary as well as to assess which properties utilize both a septic field and water well. The results of the survey may be superimposed onto the final risk rating figures to assist in prioritizing sewer regions.



The maps and risk ratings generated as part of this study should not be relied upon for prioritizing individual parcels for connection to municipal sanitary system, but should rather be used to assist in the prioritizing of the larger sewer regions.

## 5.0 STANDARD LIMITATIONS

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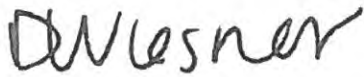
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## 6.0 CLOSURE

We trust this report provides you with the information you require at this time. Should you have any questions or require additional information or clarification, please do not hesitate to contact the undersigned.

Yours very truly,

**GOLDER ASSOCIATES LTD.**



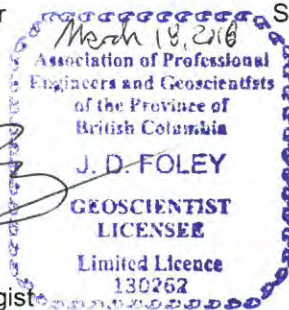
Danielle Wiesner, EIT  
Junior Environmental Engineer



Pana Athanasopoulos, MSc, PGeo  
Senior Hydrogeologist



Jacqueline Foley, MSc, Geol  
Associate, Senior Hydrogeologist



DW/PA/JF/asd

Attachments: Figures    Index Map

1A through 1F	Donaldson / NW
2A through 2F	Various*
3A through 3F	Various*
4A through 4F	Johnson Flats
4A through 4F	SW Grand Forks
5A through 5F	South Ruckles
5A through 5F	Airport / Industrial
5A through 5F	Hwy 3 East
5A through 5F	Richmond / PW
6	Final Risk Rating Overview

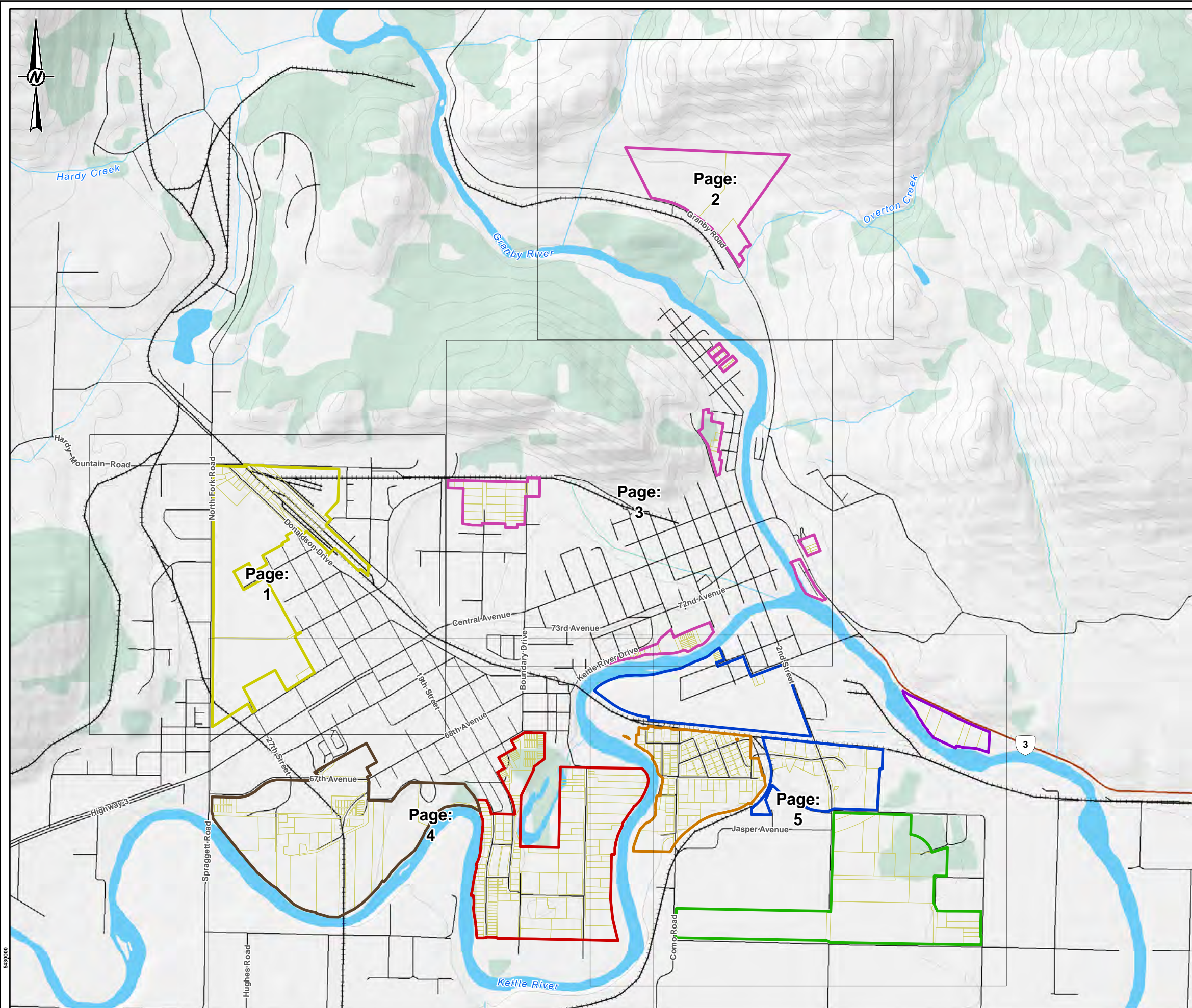
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## 7.0 REFERENCES

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#### LEGEND

- PARCEL
- SEWER REGION**
  - AIRPORT / INDUSTRIAL
  - DONALDSON / NW
  - HWY 3 EAST
  - JOHNSON FLATS
  - RICHMOND / PW
  - SW GRAND FORKS
  - SOUTH RUCKLES
  - VARIOUS
- BASE DATA**
  - HIGHWAY
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - WATERCOURSE
  - WATERBODY
  - VEGETATION



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URBAN SYSTEMS/SEWER/GRAND FORKS

#### TITLE

INDEX MAP

#### CONSULTANT



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PREPARED	RC
REVIEWED	PA
APPROVED	JF

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1000

REV.

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FIGURE

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**LEGEND**

PARCEL

**SEWER REGION**

DONALDSON / NW

**RISK RATING FOR SOIL**

RISK 1: FLUVIAL / GLACIOFLUVIAL

RISK 2: FLUVIAL / GLACIOFLUVIAL WITHIN FLOODPLAIN

RISK 3: COLLUVIUM

RISK 4: TILL / COLLUVIUM OVER BEDROCK AND COLLUVIUM WITHIN FLOODPLAIN

**BASE DATA**

ROAD

RAILWAY

CONTOUR (20m)

VEGETATION

**KEY MAP**

0 90 180

1:6,000 METRES

**REFERENCE(S)**

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RISK RATING FOR SOIL  
DONALDSON / NW

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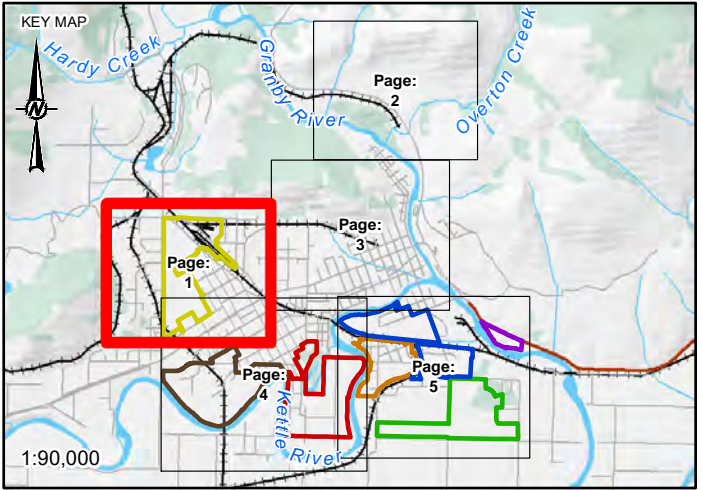
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- LEGEND**
- GROUNDWATER WELL
  - PARCEL
  - SEWER REGION**
  - DONALDSON / NW
  - RISK RATING FOR DEPTH TO GROUNDWATER**
  - RISK 1: > 10 m
  - RISK 2: 3 - 10 m
  - RISK 3: 1 - 3 m
  - RISK 4: < 1 m
  - BASE DATA**
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - VEGETATION



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PROJECT  
**URBAN SYSTEMS/SEWER/GRAND FORKS**

TITLE  
**RISK RATING FOR DEPTH TO GROUNDWATER  
DONALDSON / NW**

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REVIEWED	PA	
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PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 103  
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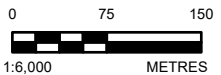
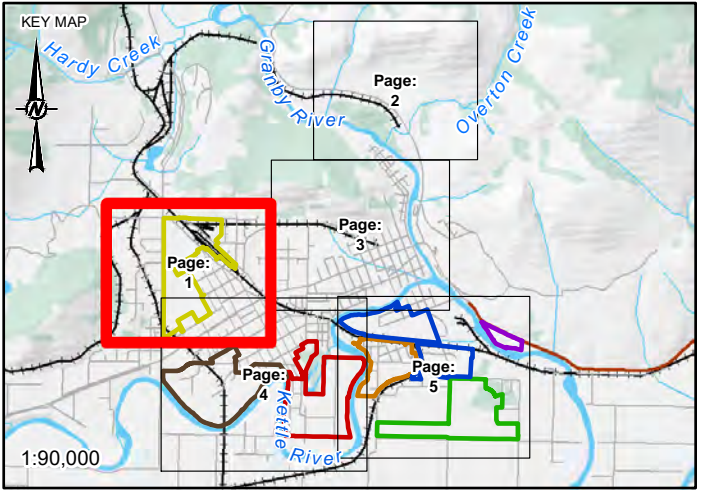
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- PARCEL
  - SEWER REGION**
    - DONALDSON / NW
  - RISK RATING FOR SLOPE**
    - RISK 1: < 5 %
    - RISK 2: 5 - 10 %
    - RISK 3: 10 - 30 %
    - RISK 4: > 30 %
  - BASE DATA**
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - VEGETATION



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TITLE  
RISK RATING FOR SLOPE  
DONALDSON / NW

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PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 103  
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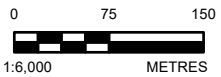
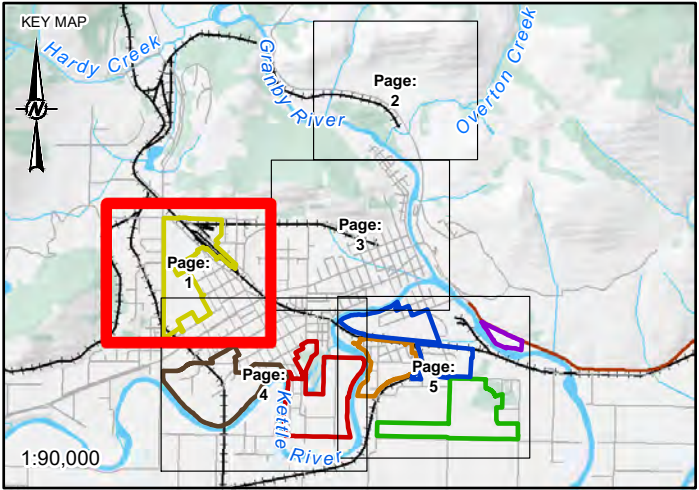
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- LEGEND**
- PARCEL
  - SEWER REGION**
  - DONALDSON / NW
  - RISK RATING FOR PARCEL SIZE**
  - RISK 1: > 1 ha
  - RISK 2: 0.5 - 1 ha
  - RISK 3: 0.14 - 0.5 ha
  - RISK 4: < 0.14 ha
  - BASE DATA**
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - VEGETATION



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URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE

RISK RATING FOR PARCEL SIZE

DONALDSON / NW

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DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 103

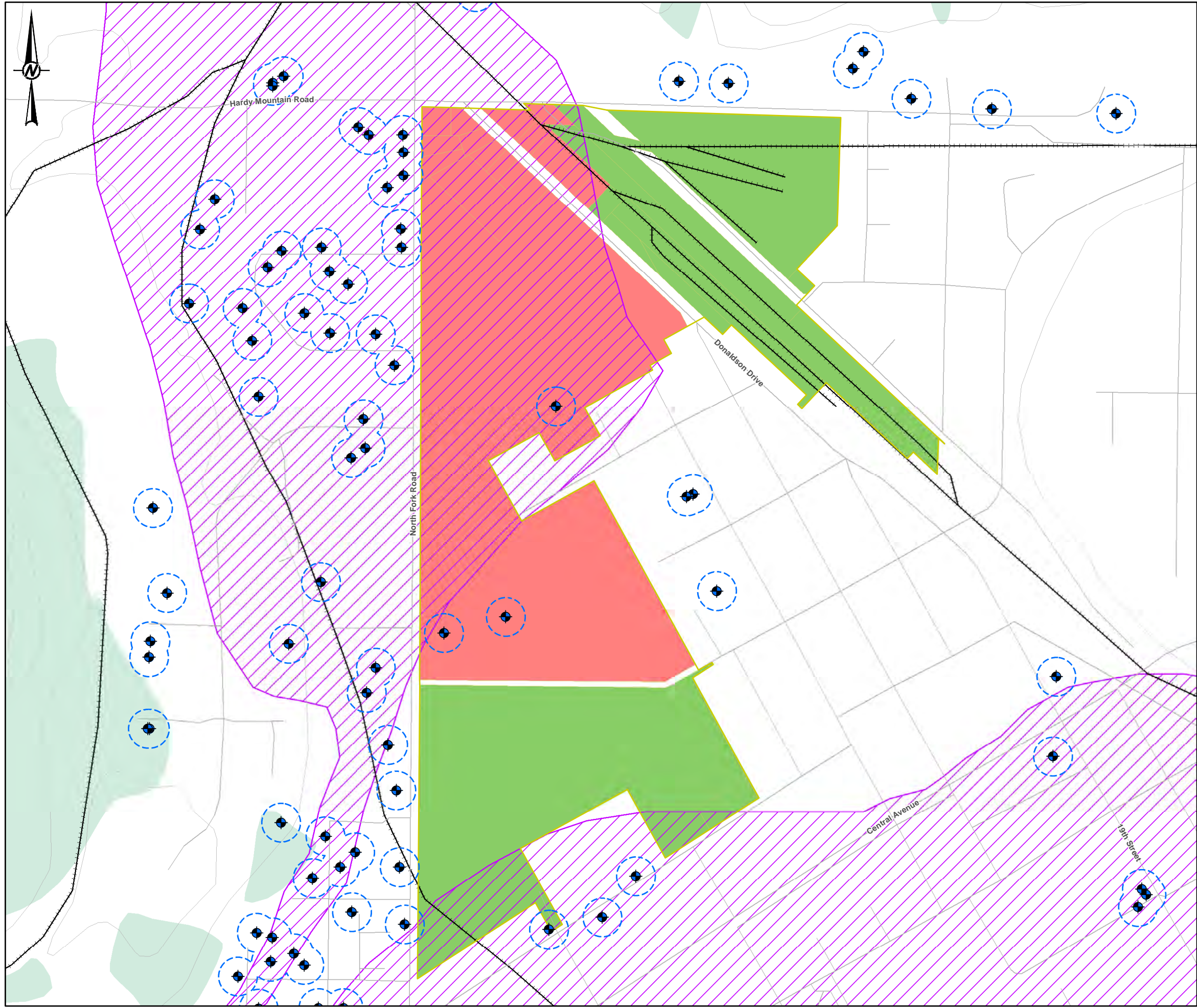
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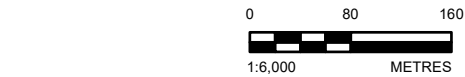
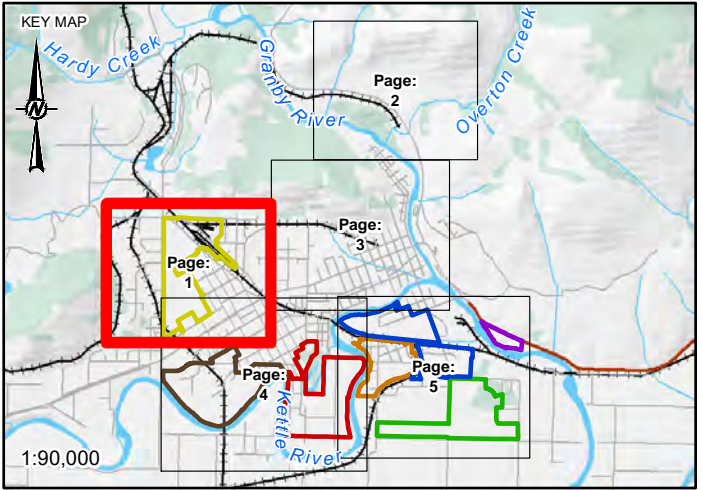
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- LEGEND**
- GROUNDWATER WELL
  - PARCEL
  - SEWER REGION**
  - DONALDSON / NW
  - RISK RATING FOR SURFACE WATER SETBACKS AND WELL CAPTURE ZONES**
  - RISK 1
  - RISK 4
  - BASE DATA**
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - VEGETATION
  - HORIZONTAL SETBACK FOR SURFACE WATER BODIES/WATER SUPPLY WELLS
  - WELL CAPTURE ZONE (10 YEAR)



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RISK RATING FOR SURFACE WATER/WATER WELL SETBACKS AND WELL CAPTURE ZONES DONALDSON / NW

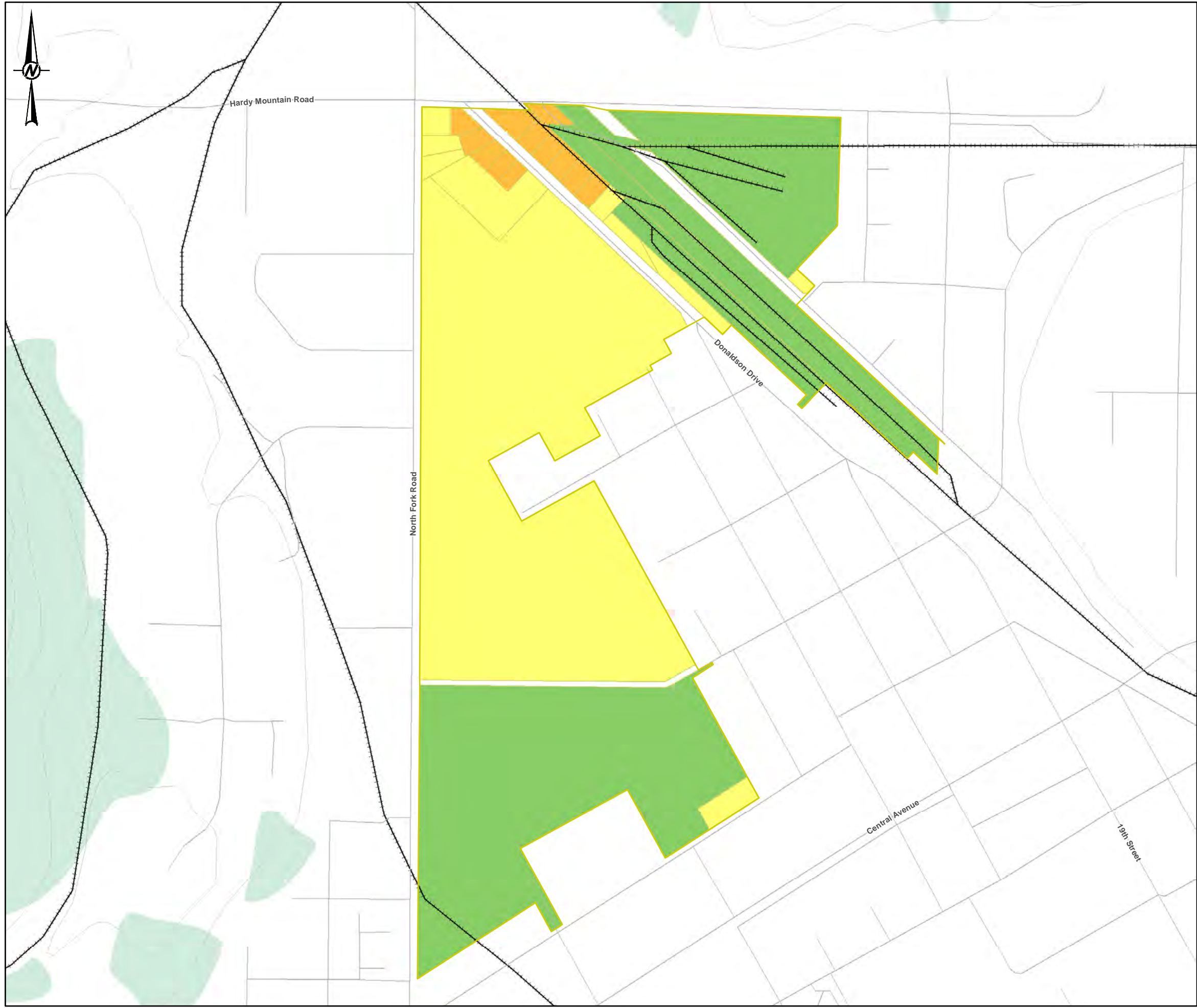
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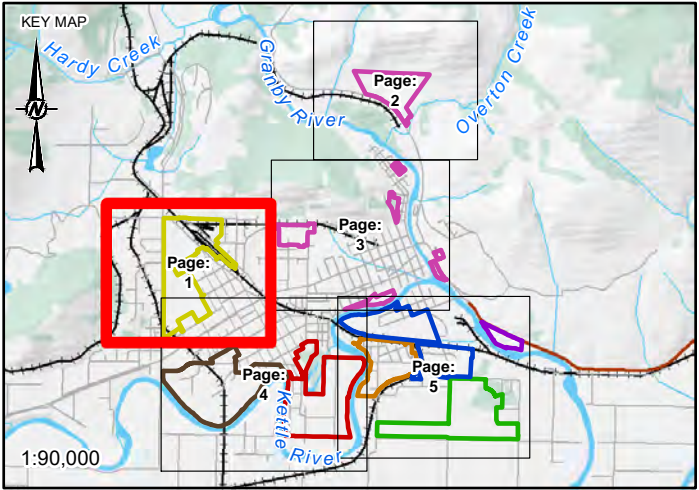
PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 103



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- LEGEND**
- PARCEL
  - SEWER REGION**
  - DONALDSON / NW
  - FINAL RISK RATING**
  - RISK 1
  - RISK 2
  - RISK 3
  - BASE DATA**
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - VEGETATION



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TITLE

FINAL RISK RATING

DONALDSON / NW

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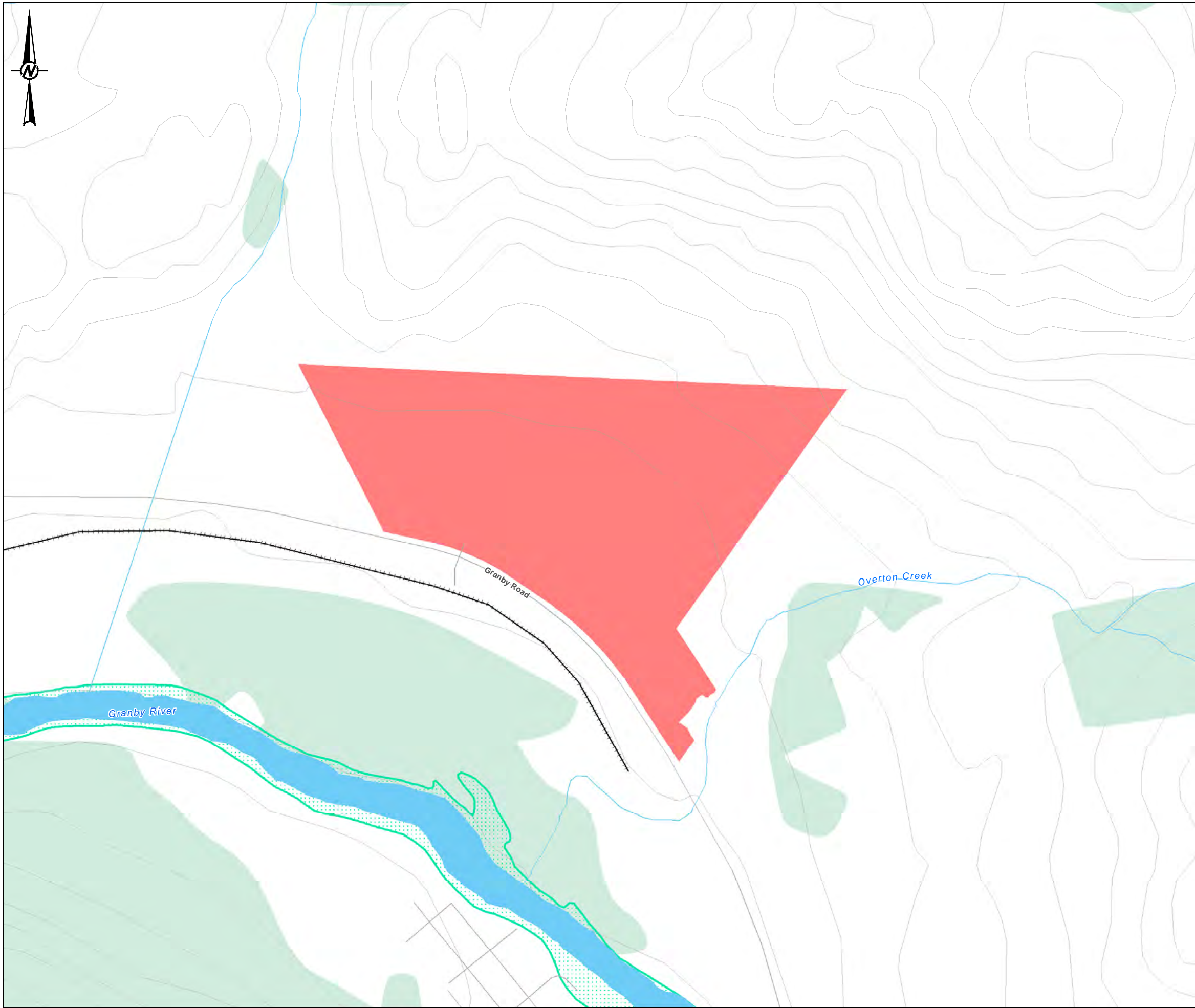


PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 193

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**LEGEND**  
**RISK RATING FOR SOIL**  
RISK 1: FLUVIAL / GLACIOFLUVIAL  
RISK 2: FLUVIAL / GLACIOFLUVIAL WITHIN FLOODPLAIN  
RISK 3: COLLUVIUM  
RISK 4: TILL / COLLUVIUM OVER BEDROCK AND COLLUVIUM WITHIN FLOODPLAIN  
**BASE DATA**  
ROAD  
RAILWAY  
CONTOUR (20m)  
WATERCOURSE  
VEGETATION  
FLOODPLAIN

**KEY MAP**  
1:90,000  
0 90 180  
1:6,000 METRES  
Page: 1  
Page: 2  
Page: 3  
Page: 4  
Page: 5  
Hardy Creek  
Granby River  
Overton Creek  
Kettle River

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**PROJECT**  
URBAN SYSTEMS/SEWER/GRAND FORKS

**TITLE**  
RISK RATING FOR SOIL  
VARIOUS - NORTH

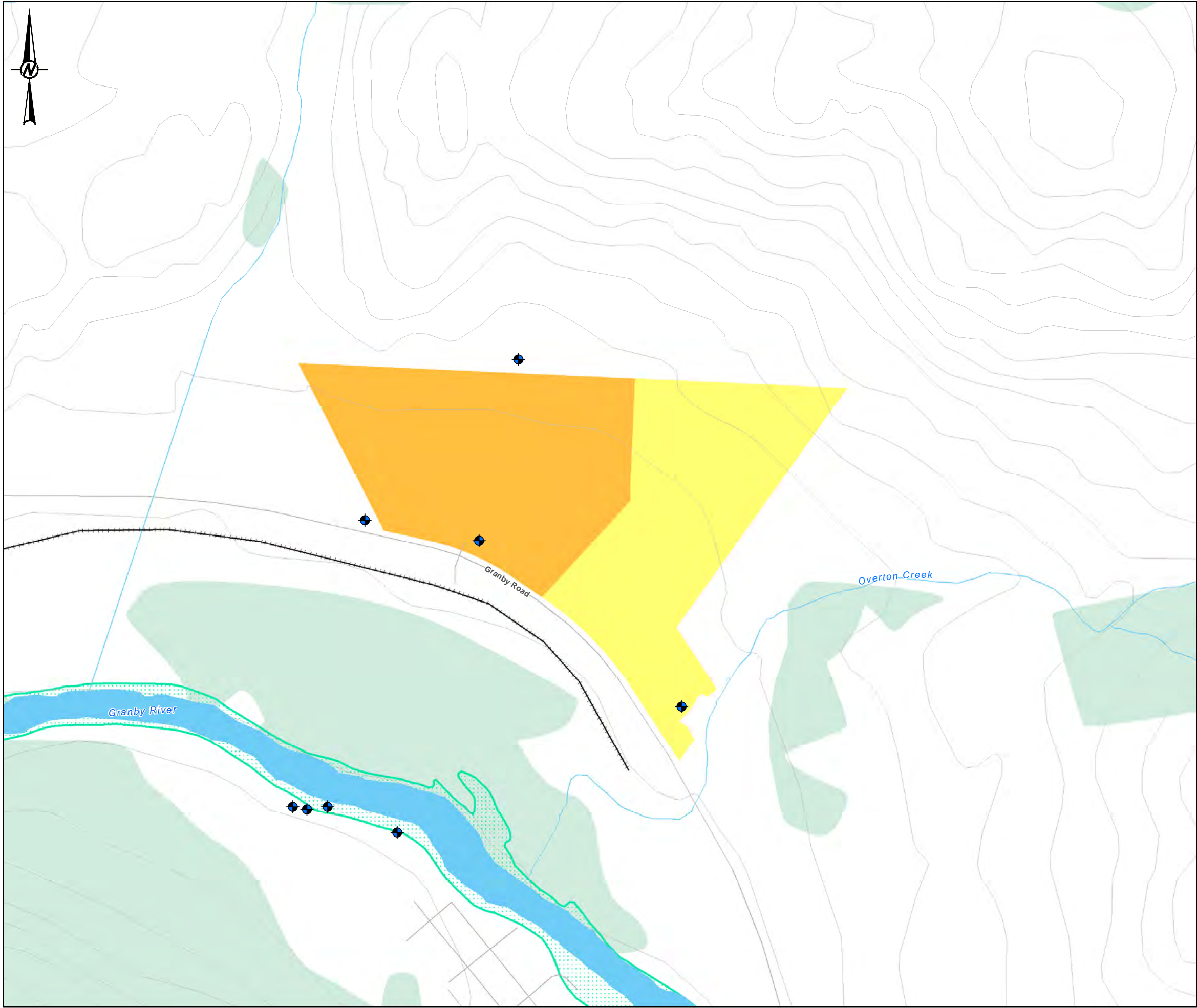
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PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

PROJECT NO.	CONTROL	REV.	FIGURE
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**LEGEND**

GROUNDWATER WELL

**RISK RATING FOR DEPTH TO GROUNDWATER**

RISK 1: > 10 m

RISK 2: 3 - 10 m

RISK 3: 1 - 3 m

RISK 4: < 1 m

**BASE DATA**

ROAD

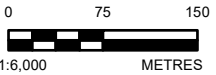
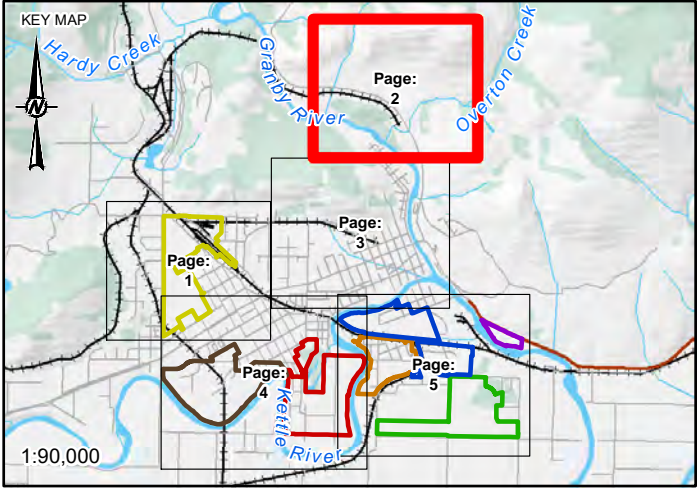
RAILWAY

CONTOUR (20m)

WATERCOURSE

VEGETATION

FLOODPLAIN



**REFERENCE(S)**

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URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE

RISK RATING FOR DEPTH TO GROUNDWATER

VARIOUS - NORTH

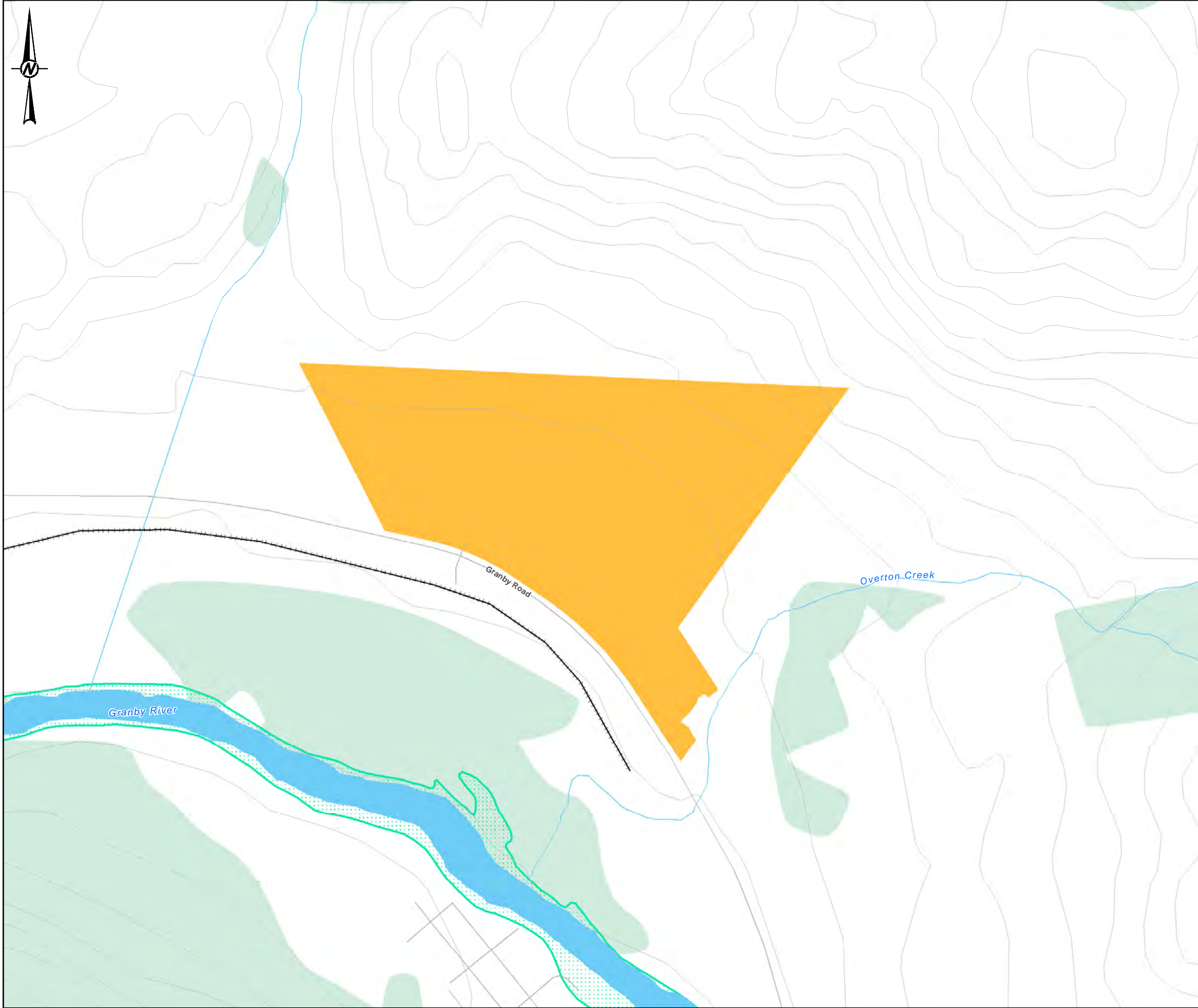
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PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



PROJECT NO.	CONTROL	REV.	FIGURE
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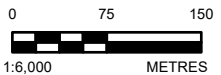
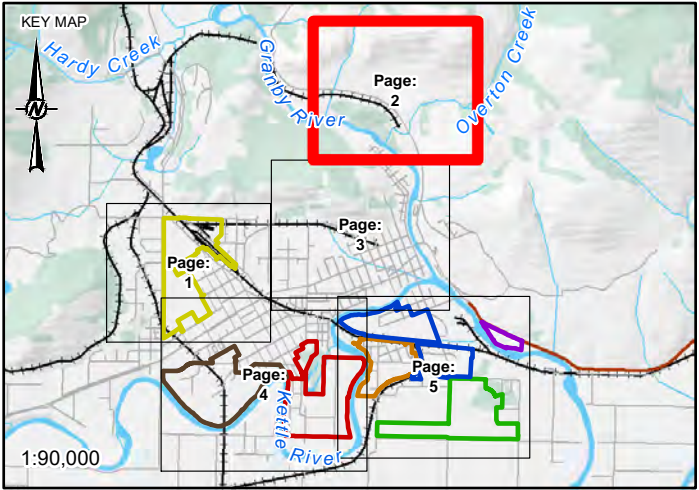
**LEGEND**

**RISK RATING FOR SLOPE**

- RISK 1: < 5 %
- RISK 2: 5 - 10 %
- RISK 3: 10 - 30 %
- RISK 4: > 30 %

**BASE DATA**

- ROAD
- RAILWAY
- CONTOUR (20m)
- WATERCOURSE
- VEGETATION
- FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

2. CONTOURS, ROADS, VEGETATION, WATERCOURSES, AND WATERBODIES OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

**CLIENT**

URBAN SYSTEM LTD.

**PROJECT**

URBAN SYSTEMS/SEWER/GRAND FORKS

**TITLE**

RISK RATING FOR SLOPE  
VARIOUS - NORTH

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



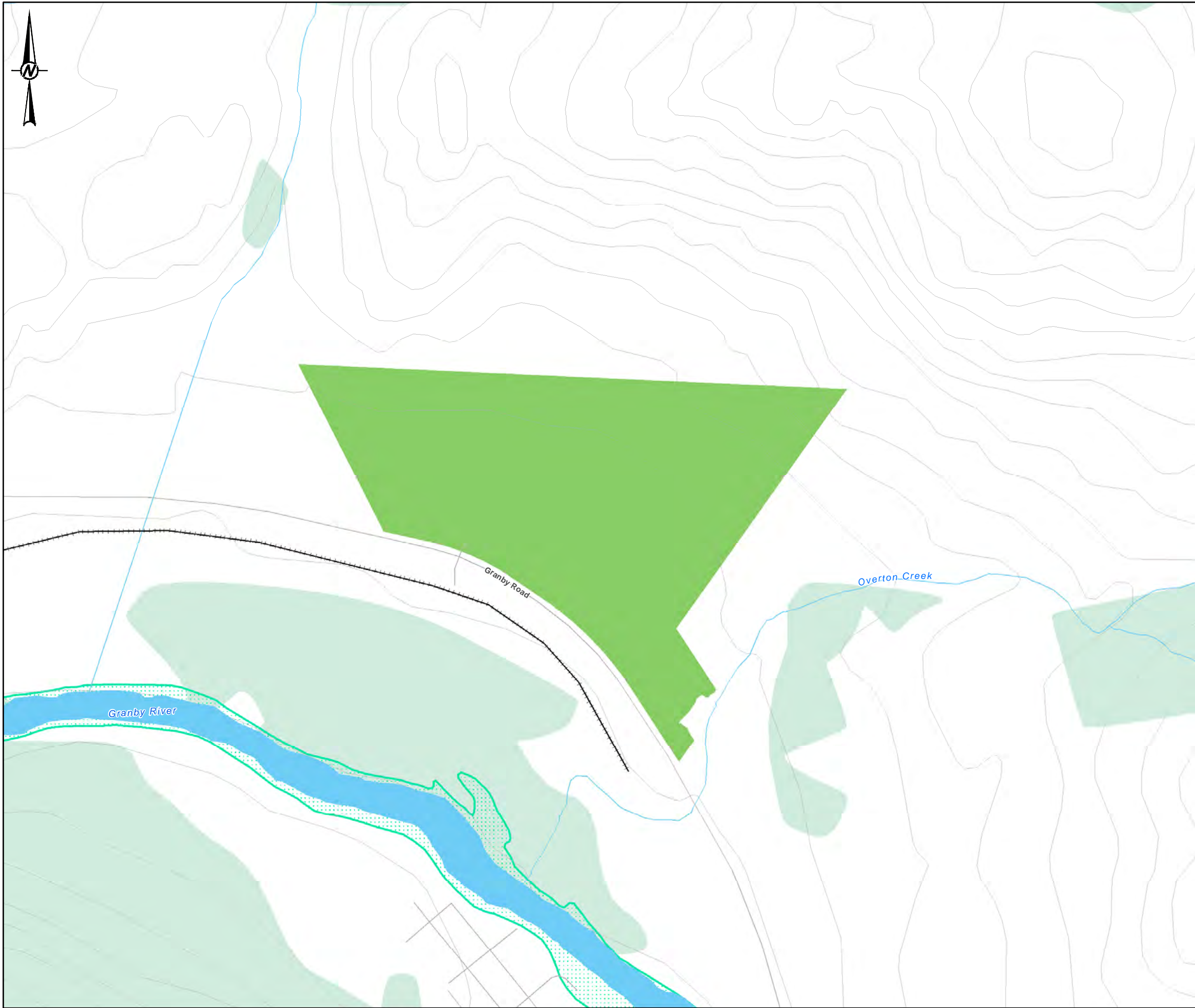
PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE

Agenda Page 73 of 103

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



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**LEGEND**  
**RISK RATING FOR PARCEL SIZE**  
RISK 1: > 1 ha  
RISK 2: 0.5 - 1 ha  
RISK 3: 0.14 - 0.5 ha  
RISK 4: < 0.14 ha  
**BASE DATA**  
ROAD  
RAILWAY  
CONTOUR (20m)  
WATERCOURSE  
VEGETATION  
FLOODPLAIN

KEY MAP

1:90,000

**REFERENCE(S)**  
1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.  
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CLIENT  
**URBAN SYSTEM LTD.**

PROJECT  
**URBAN SYSTEMS/SEWER/GRAND FORKS**

TITLE  
**RISK RATING FOR PARCEL SIZE  
VARIOUS - NORTH**

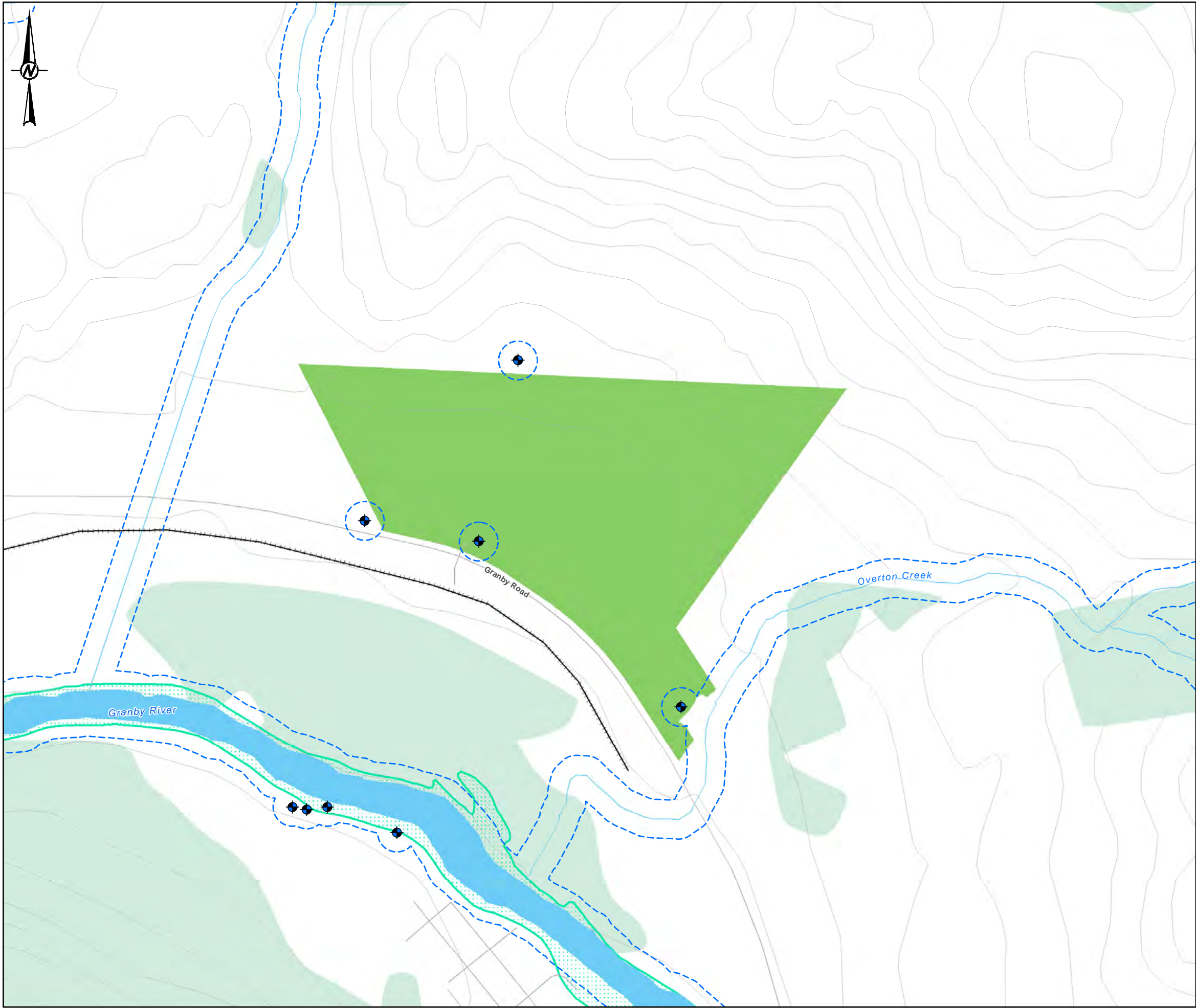
CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

PROJECT NO.	CONTROL	REV.	FIGURE
1895271	1000		Agenda Page 74 of 203

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



R:\FH\lgolder\golder\Urban\Urban Systems\Urban Systems\1895271\_1000\_Figure\_E\_Risk\_Rating\_for\_Setbacks\_and\_Capture\_Zones.mxd PRINTED ON: 2018-03-16 AT: 4:59:45 PM



**LEGEND**

- GROUNDWATER WELL
- RISK RATING FOR SURFACE WATER SETBACKS AND WELL CAPTURE ZONES**
  - RISK 1
  - RISK 4
- BASE DATA**
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - WATERCOURSE
  - VEGETATION
- HORIZONTAL SETBACK FOR SURFACE WATER BODIES/WATER SUPPLY WELLS
- FLOODPLAIN

**KEY MAP**

**REFERENCE(S)**

- SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.
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**CLIENT**

URBAN SYSTEM LTD.

**PROJECT**

URBAN SYSTEMS/SEWER/GRAND FORKS

**TITLE**

RISK RATING FOR SURFACE WATER/WATER WELL SETBACKS AND WELL CAPTURE ZONES VARIOUS - NORTH

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

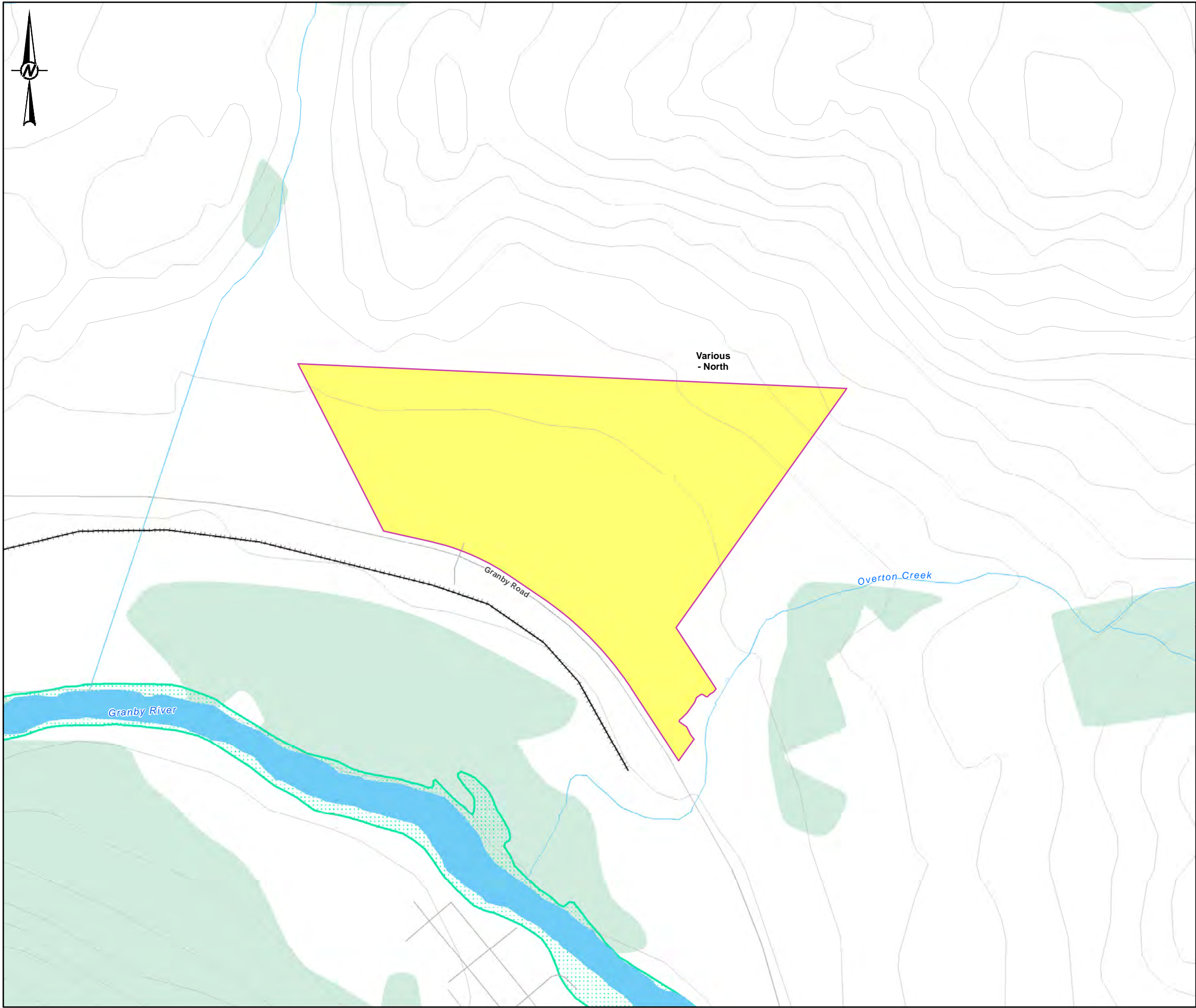
**GOLDER**

PROJECT NO.	CONTROL	REV.	FIGURE
1895271	1000		Agenda Page 75 of 123

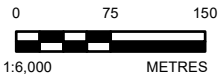
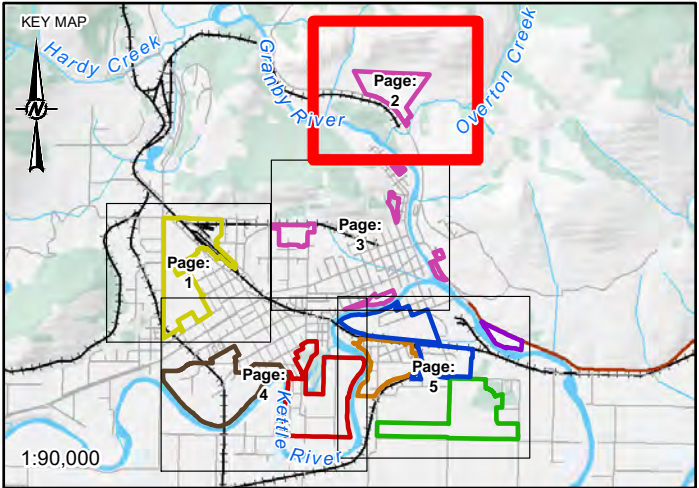
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



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- LEGEND**
- SEWER REGION**
- VARIOUS
- FINAL RISK RATING**
- RISK 2
- BASE DATA**
- ROAD
  - RAILWAY
  - CONTOUR (20m)
  - WATERCOURSE
  - VEGETATION
  - FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

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CLIENT

URBAN SYSTEM LTD.

PROJECT

URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE

FINAL RISK RATING

VARIOUS - NORTH

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

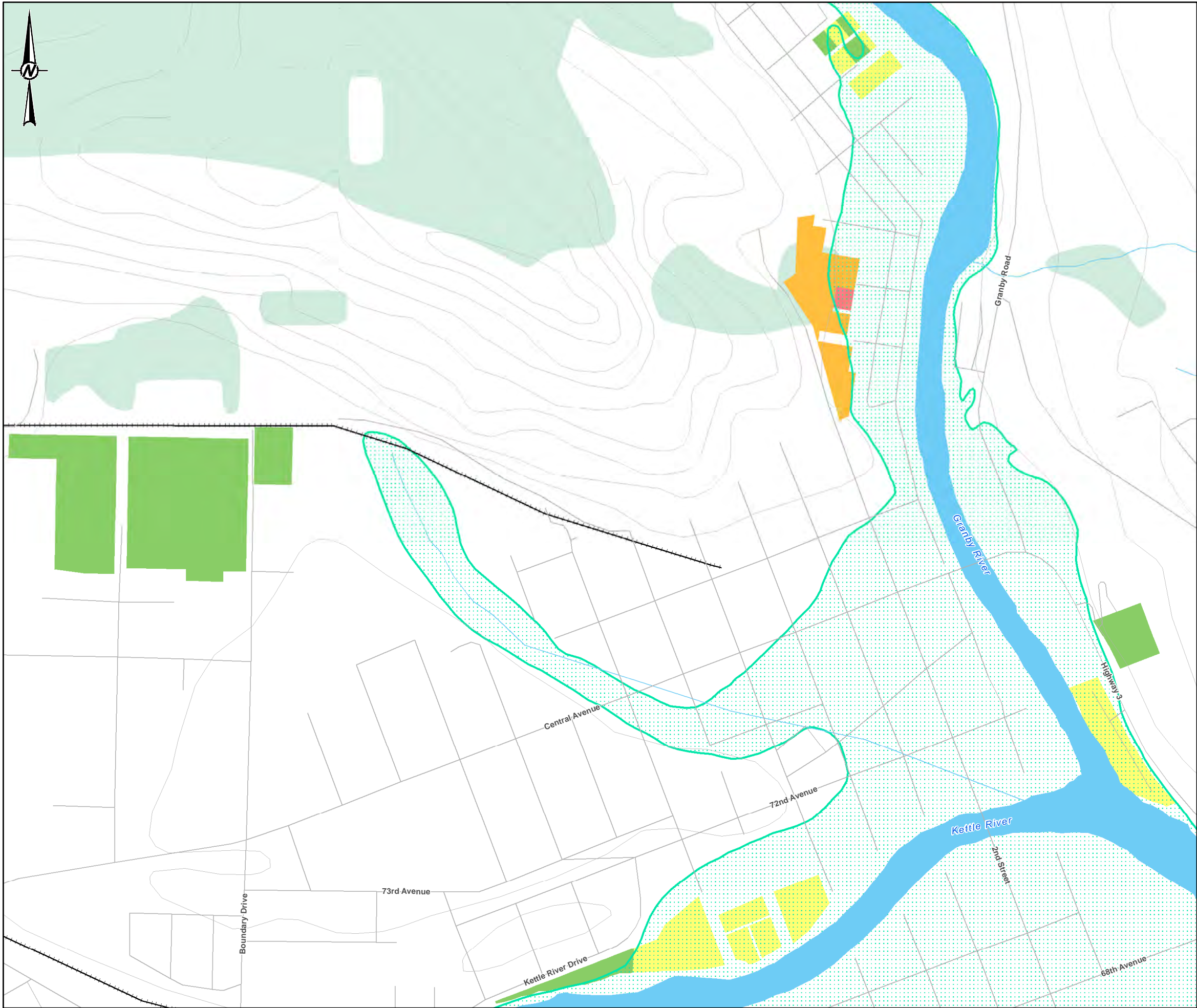


PROJECT NO.	CONTROL	REV.	FIGURE
1895271	1000		Agenda Page 76 of 123

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



P:\04 - U.S. - Grand Forks - 1895271 - 1000 - Figure A Risk Rating for Soil.mxd PRINTED ON: 2018-03-16 AT: 5:06:12 PM



**LEGEND**

**RISK RATING FOR SOIL**

- RISK 1: FLUVIAL / GLACIOFLUVIAL
- RISK 2: FLUVIAL / GLACIOFLUVIAL WITHIN FLOODPLAIN
- RISK 3: COLLUVIUM
- RISK 4: TILL / COLLUVIUM OVER BEDROCK AND COLLUVIUM WITHIN FLOODPLAIN

**BASE DATA**

- ROAD
- RAILWAY
- CONTOUR (20m)
- WATERCOURSE
- VEGETATION
- FLOODPLAIN

**KEY MAP**

0 90 180  
1:6,500 METRES

**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.  
2. CONTOURS, ROADS, VEGETATION, WATERCOURSES, AND WATERBODIES OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

CLIENT  
**URBAN SYSTEM LTD.**

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
**RISK RATING FOR SOIL  
VARIOUS - CENTRAL, EAST, SOUTH, WEST**

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

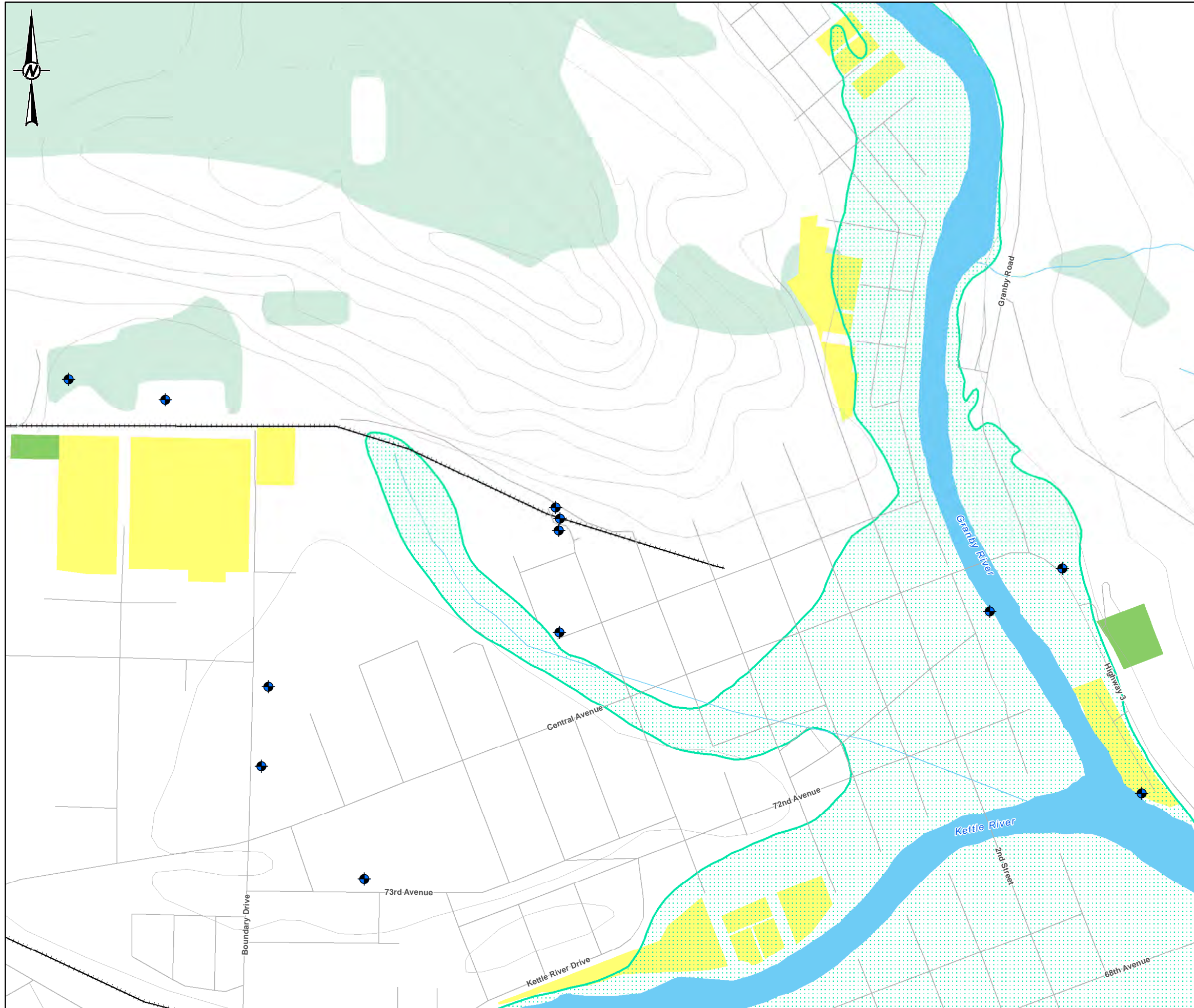
PROJECT NO. 1895271 CONTROL 1000

REV. FIGURE  
Agenda Page 77 of 178

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**LEGEND**

GROUNDWATER WELL

**RISK RATING FOR DEPTH TO GROUNDWATER**

RISK 1: > 10 m

RISK 2: 3 - 10 m

RISK 3: 1 - 3 m

RISK 4: < 1 m

**BASE DATA**

ROAD

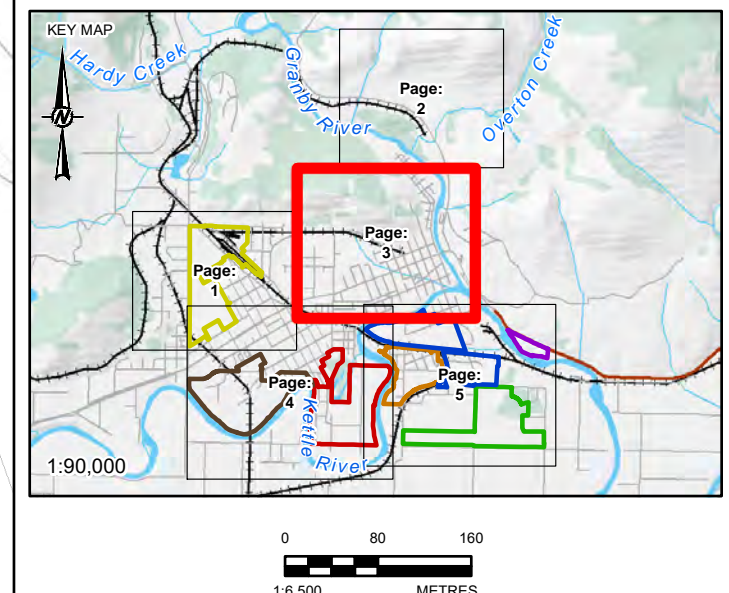
RAILWAY

CONTOUR (20m)

WATERCOURSE

VEGETATION

FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

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**CLIENT**

URBAN SYSTEM LTD.

**PROJECT**

URBAN SYSTEMS/SEWER/GRAND FORKS

**TITLE**

RISK RATING FOR DEPTH TO GROUNDWATER  
VARIOUS - CENTRAL, EAST, SOUTH, WEST

**CONSULTANT**

YYYY-MM-DD	3/16/2018
DESIGNED	PA
PREPARED	RC
REVIEWED	PA
APPROVED	JF

**PROJECT NO.** 1895271

**CONTROL** 1000

**REV.**

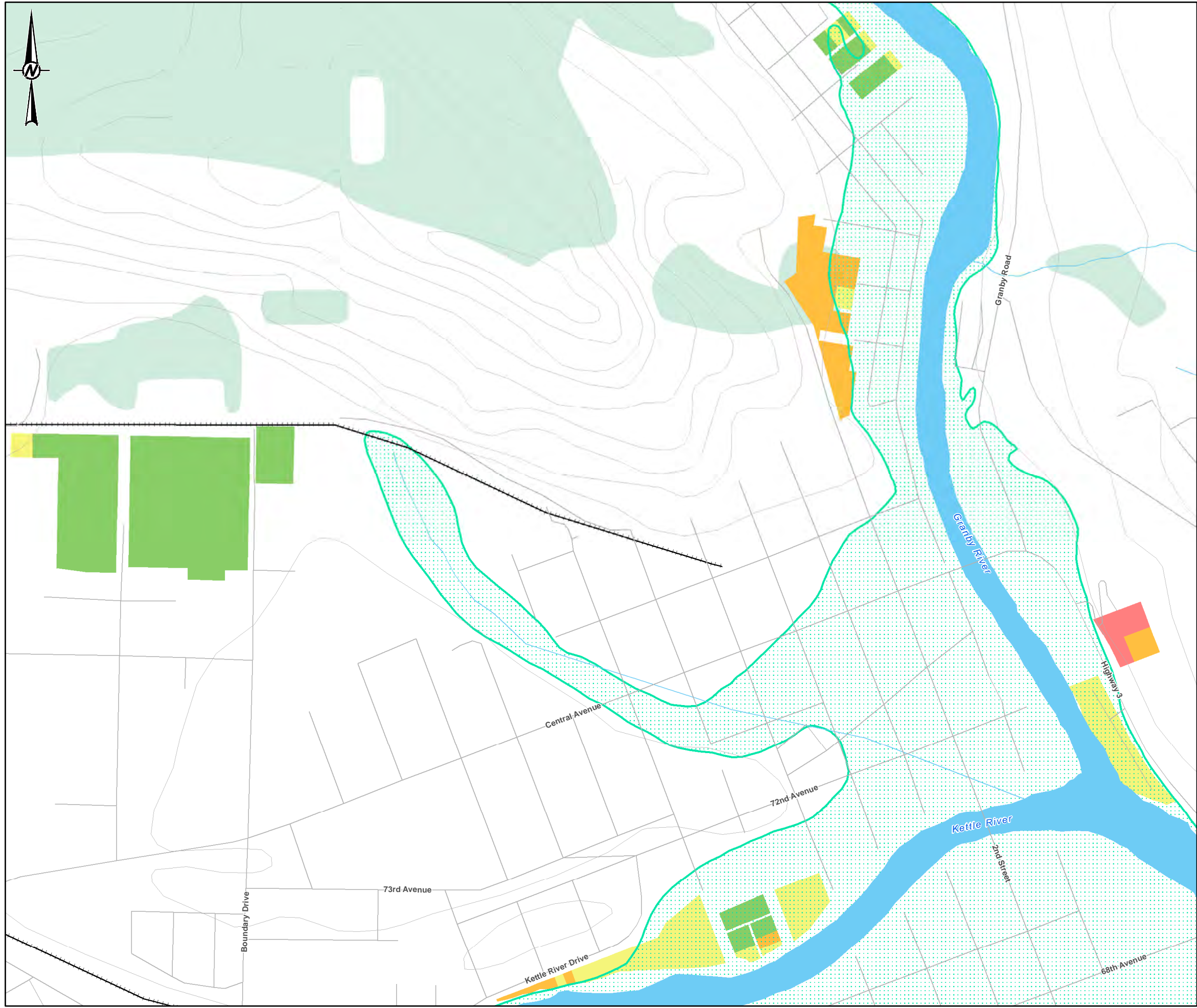
**FIGURE** 189

**GOLDER**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



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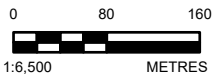
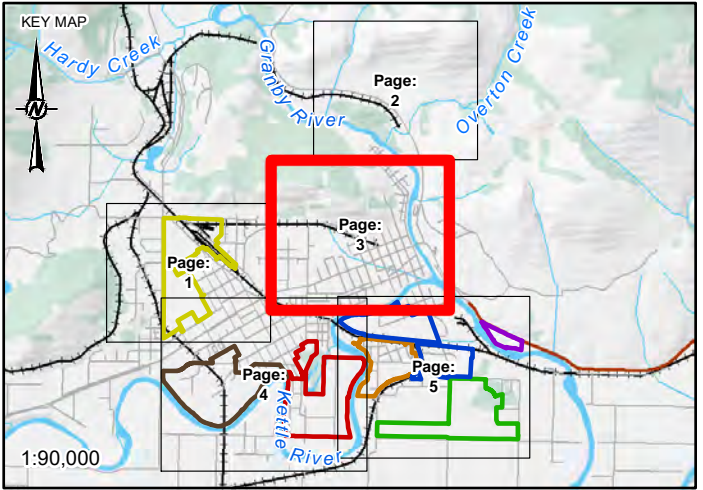
**LEGEND**

**RISK RATING FOR SLOPE**

- RISK 1: < 5 %
- RISK 2: 5 - 10 %
- RISK 3: 10 - 30 %
- RISK 4: > 30 %

**BASE DATA**

- ROAD
- RAILWAY
- CONTOUR (20m)
- WATERCOURSE
- VEGETATION
- FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

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CLIENT

URBAN SYSTEM LTD.

PROJECT

URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE

RISK RATING FOR SLOPE  
VARIOUS - CENTRAL, EAST, SOUTH, WEST

CONSULTANT	YYYY-MM-DD	3/16/2018
	DESIGNED	PA
	PREPARED	RC
	REVIEWED	PA
	APPROVED	JF

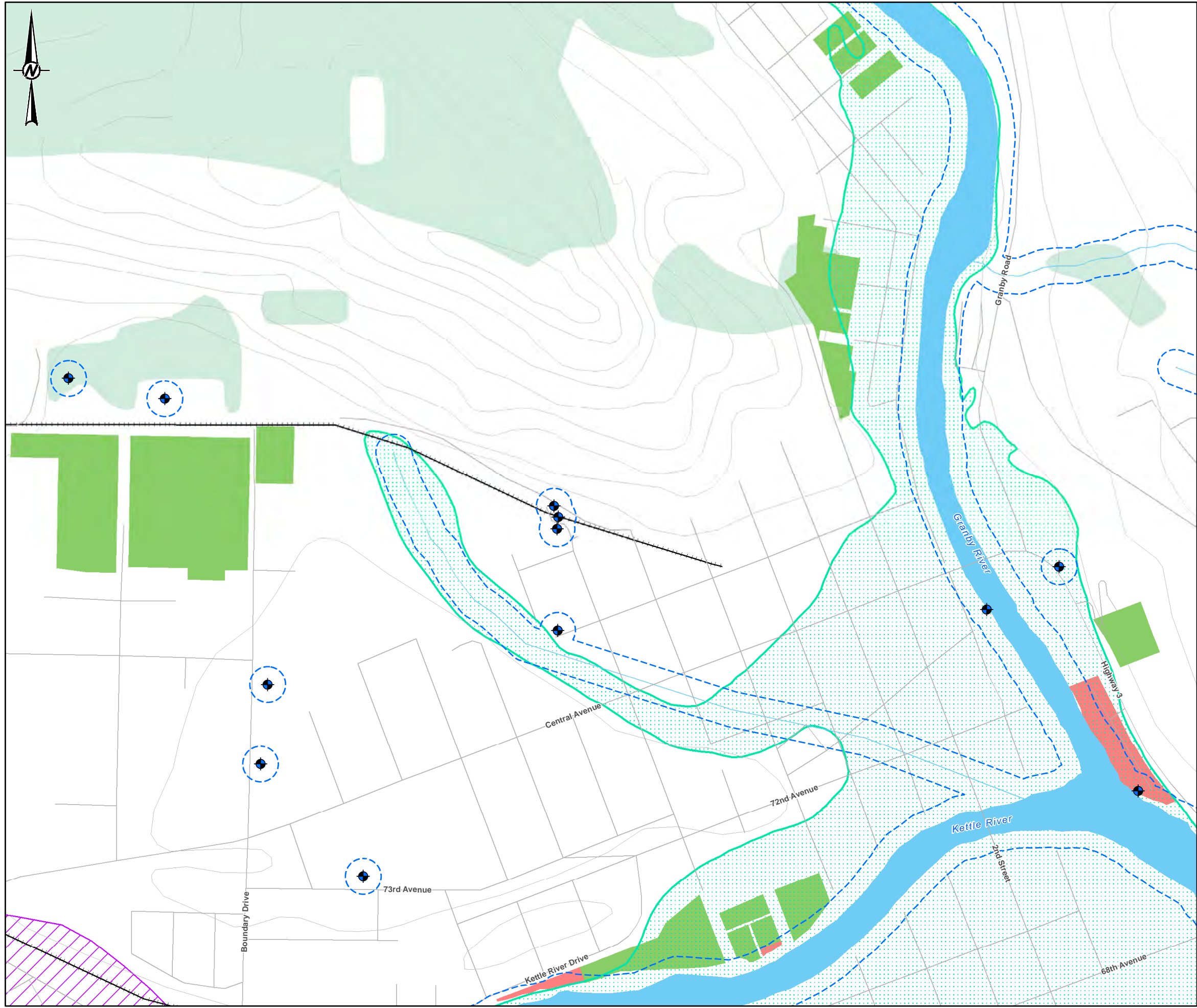
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



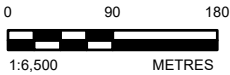
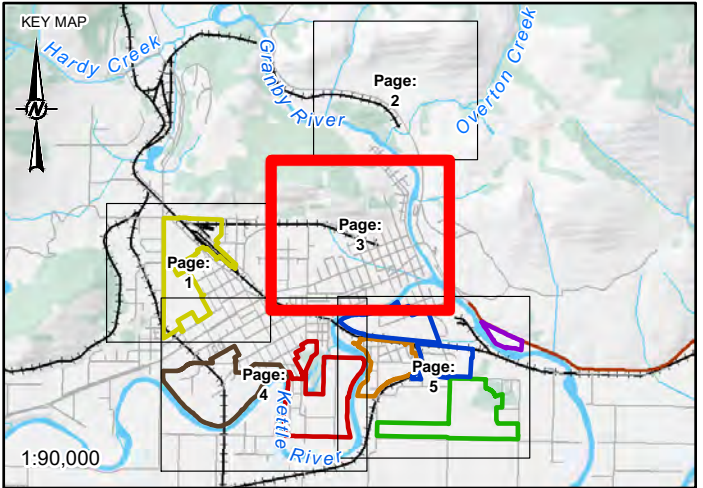




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- LEGEND**
- GROUNDWATER WELL
  - RISK RATING FOR SURFACE WATER SETBACKS AND WELL CAPTURE ZONES**
    - RISK 1
    - RISK 4
  - BASE DATA**
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - WATERCOURSE
    - VEGETATION
  - HORIZONTAL SETBACK FOR SURFACE WATER BODIES/WATER SUPPLY WELLS
  - FLOODPLAIN
  - WELL CAPTURE ZONE (10 YEAR)



**REFERENCE(S)**  
1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.  
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CLIENT  
URBAN SYSTEM LTD.

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
RISK RATING FOR SURFACE WATER/WATER WELL SETBACKS AND WELL CAPTURE ZONES - VARIOUS - CENTRAL, EAST, SOUTH, WEST

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

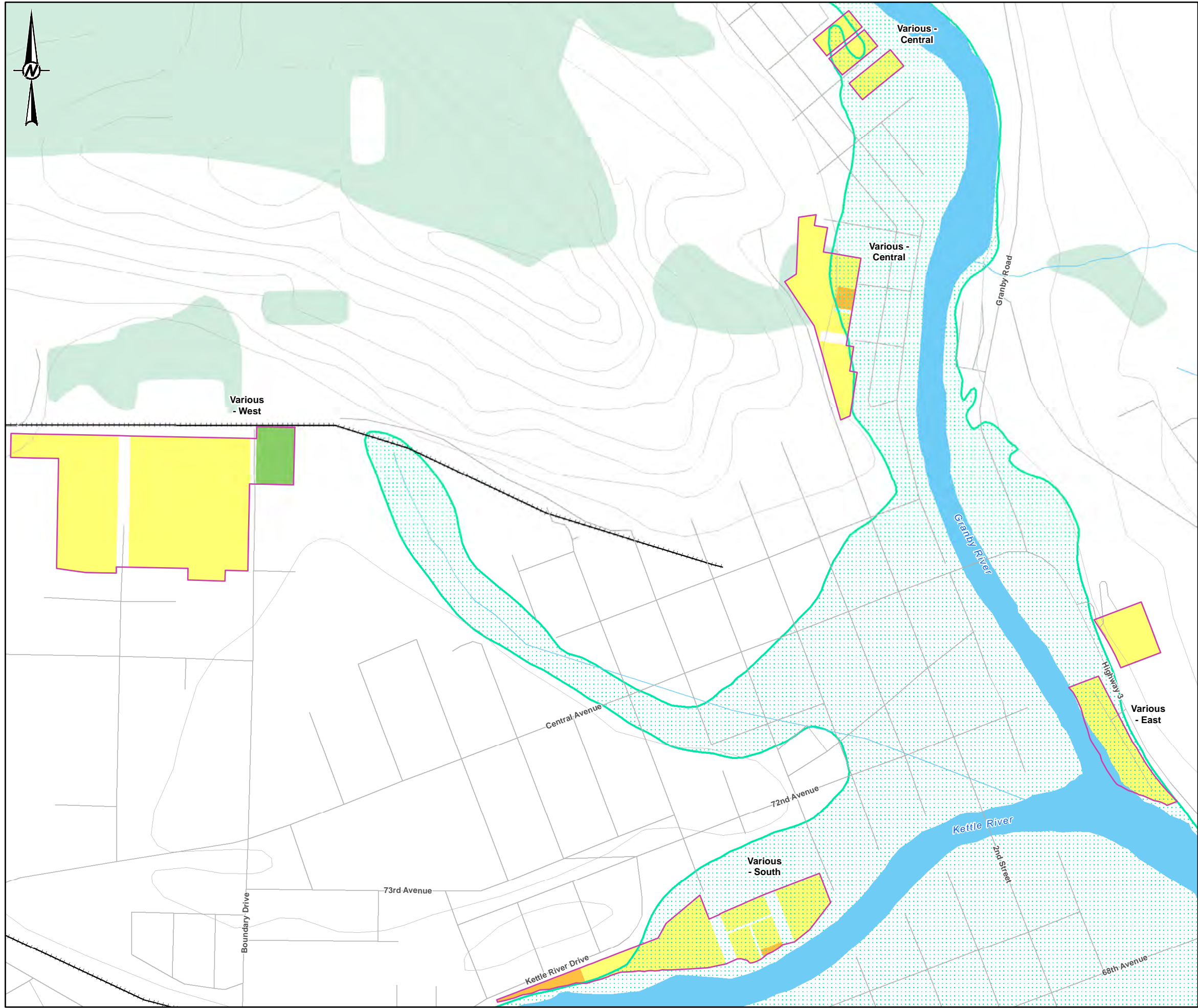


PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 1000  
Agenda Page 81 of 103

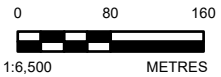
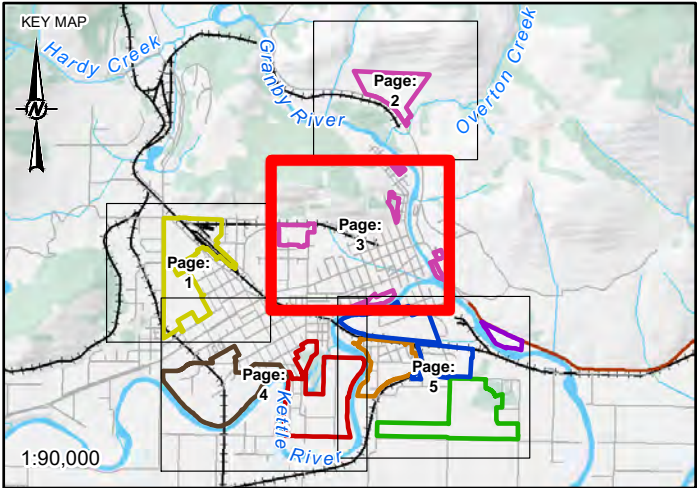
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



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- LEGEND**
- SEWER REGION**
- VARIOUS
- FINAL RISK RATING**
- RISK 1
  - RISK 2
  - RISK 3
- BASE DATA**
- ROAD
  - RAILWAY
  - CONTOUR (20m)
  - WATERCOURSE
  - VEGETATION
  - FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

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CLIENT

URBAN SYSTEM LTD.

PROJECT

URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE

FINAL RISK RATING

VARIOUS - CENTRAL, EAST, SOUTH, WEST

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

PROJECT NO. 1895271

CONTROL 1000

REV.

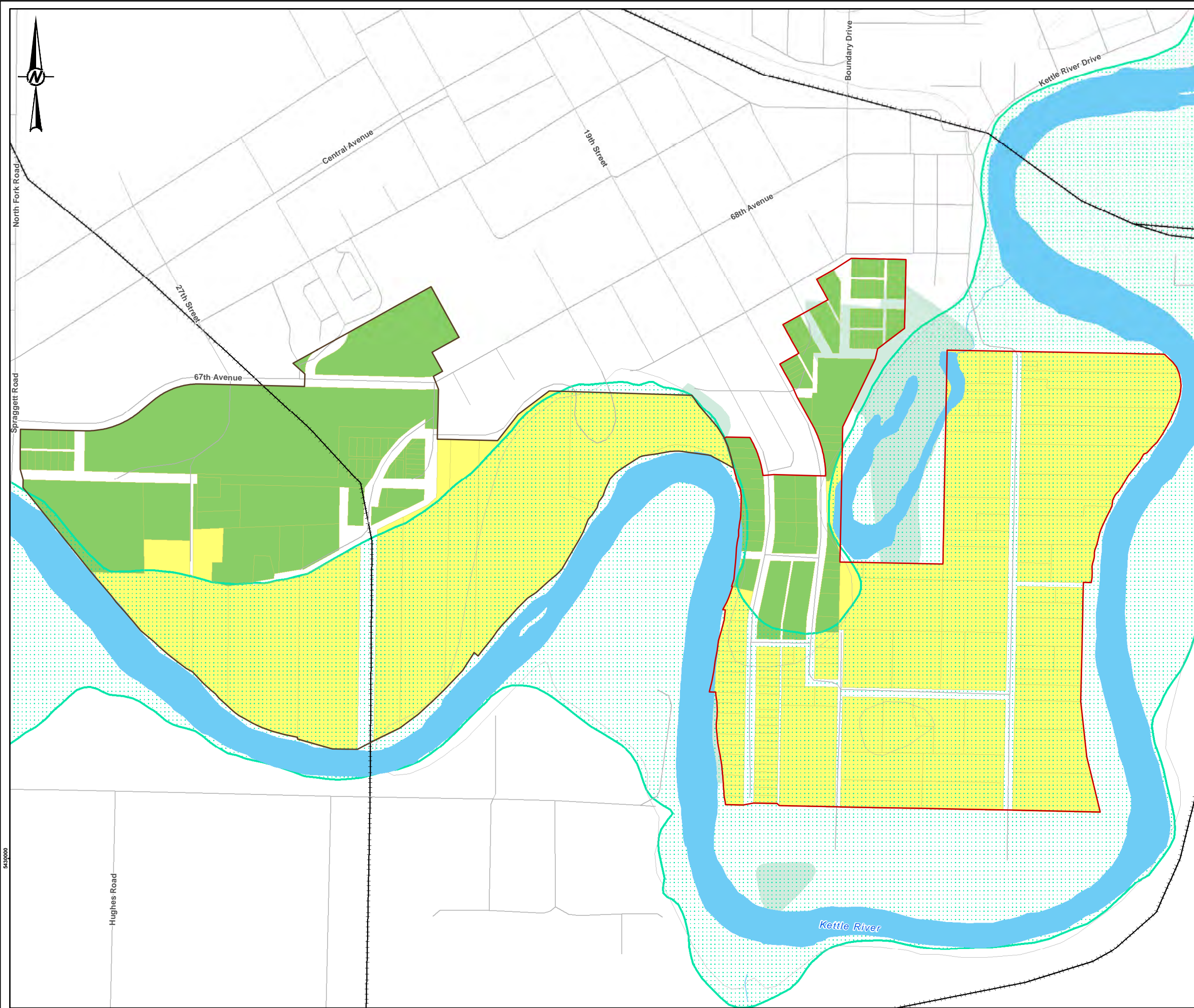
FIGURE

Agenda Page 82 of 193

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

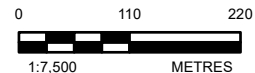
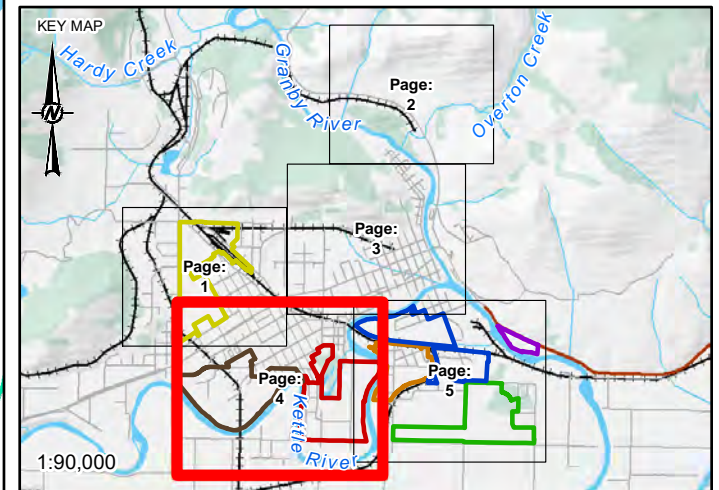


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**LEGEND**

- PARCEL**
- SEWER REGION**
- JOHNSON FLATS
  - SW GRAND FORKS
- RISK RATING FOR SOIL**
- RISK 1: FLUVIAL / GLACIOFLUVIAL
  - RISK 2: FLUVIAL / GLACIOFLUVIAL WITHIN FLOODPLAIN
  - RISK 3: COLLUVIUM
  - RISK 4: TILL / COLLUVIUM OVER BEDROCK AND COLLUVIUM WITHIN FLOODPLAIN
- BASE DATA**
- ROAD
  - RAILWAY
  - CONTOUR (20m)
  - WATERCOURSE
  - WATERBODY
  - VEGETATION
  - FLOODPLAIN



**REFERENCE(S)**

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CLIENT  
URBAN SYSTEM LTD.

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
RISK RATING FOR SOIL  
SW GRAND FORKS AND JOHNSON FLATS

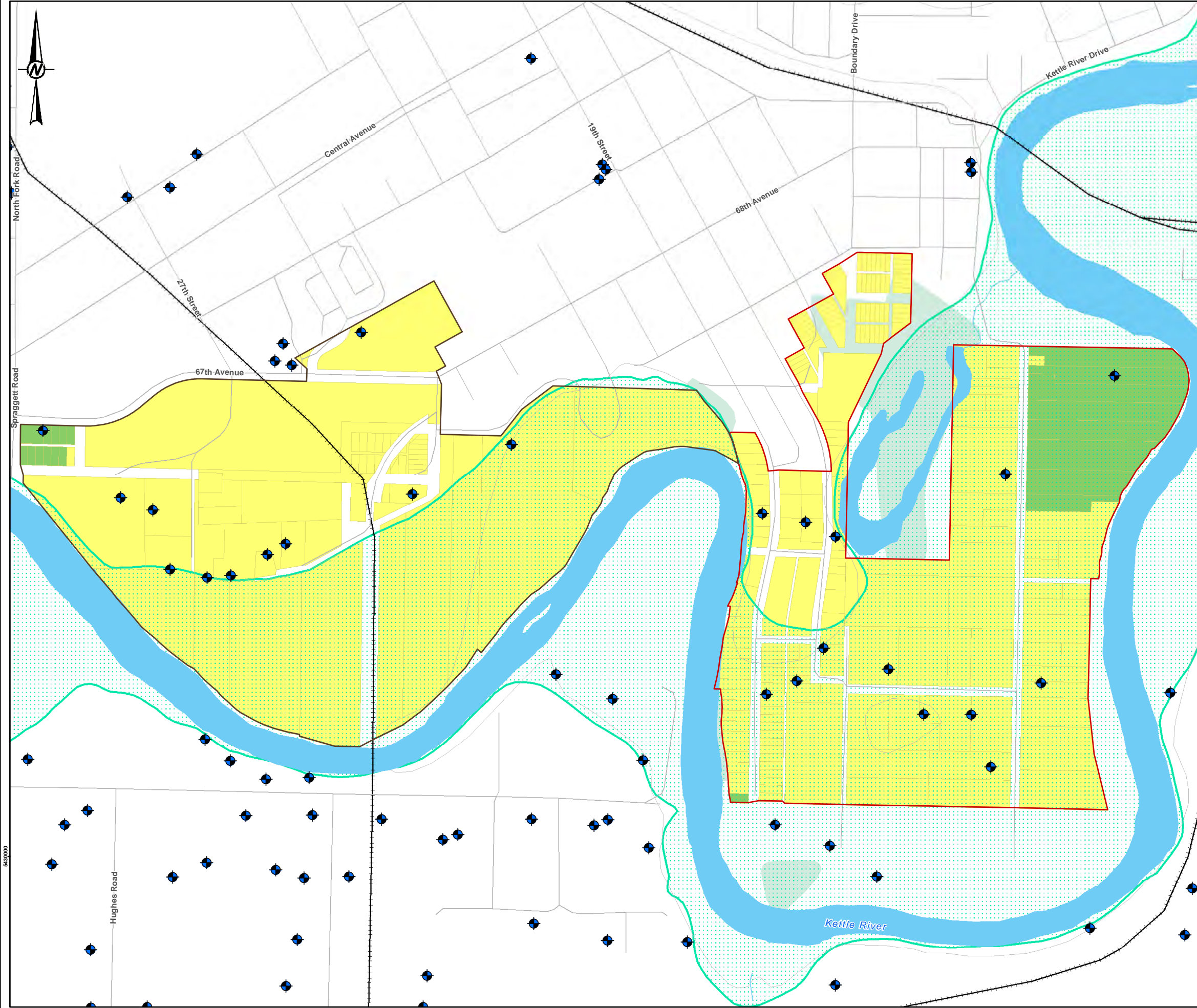
CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



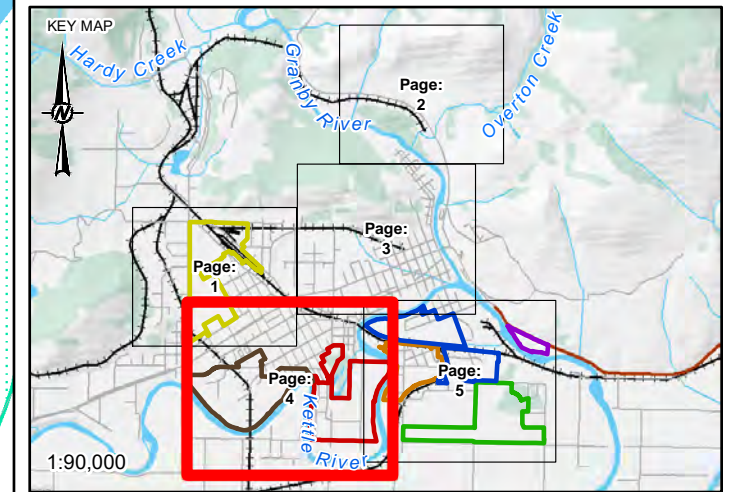
PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 1000



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- LEGEND**
- GROUNDWATER WELL
  - PARCEL
  - SEWER REGION**
    - JOHNSON FLATS
    - SW GRAND FORKS
  - RISK RATING FOR DEPTH TO GROUNDWATER**
    - RISK 1: > 10 m
    - RISK 2: 3 - 10 m
    - RISK 3: 1 - 3 m
    - RISK 4: < 1 m
  - BASE DATA**
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - WATERCOURSE
    - WATERBODY
    - VEGETATION
    - FLOODPLAIN



**REFERENCE(S)**  
1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.  
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CLIENT  
URBAN SYSTEM LTD.

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
RISK RATING FOR DEPTH TO GROUNDWATER  
SW GRAND FORKS AND JOHNSON FLATS

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 103  
Agenda Page 84 of 103

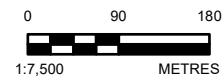
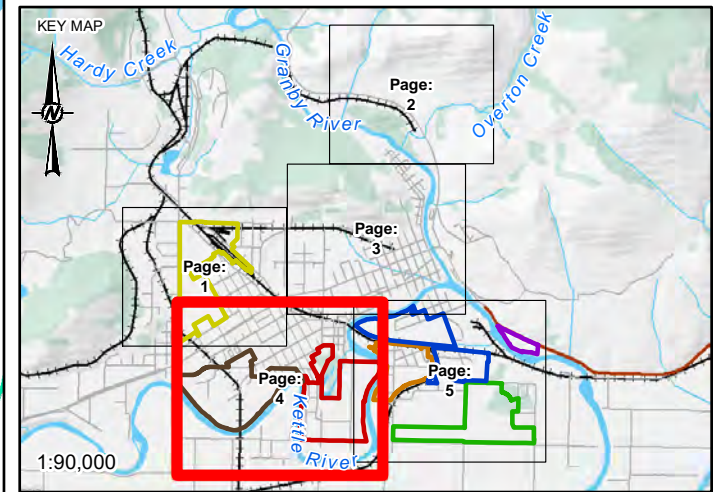
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



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- LEGEND**
- PARCEL
  - SEWER REGION**
    - JOHNSON FLATS
    - SW GRAND FORKS
  - RISK RATING FOR SLOPE**
    - RISK 1: < 5 %
    - RISK 2: 5 - 10 %
    - RISK 3: 10 - 30 %
    - RISK 4: > 30 %
  - BASE DATA**
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - WATERCOURSE
    - WATERBODY
    - VEGETATION
    - FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

2. CONTOURS, ROADS, VEGETATION, WATERCOURSES, AND WATERBODIES OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

CLIENT  
URBAN SYSTEM LTD.

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
RISK RATING FOR SLOPE  
SW GRAND FORKS AND JOHNSON FLATS

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

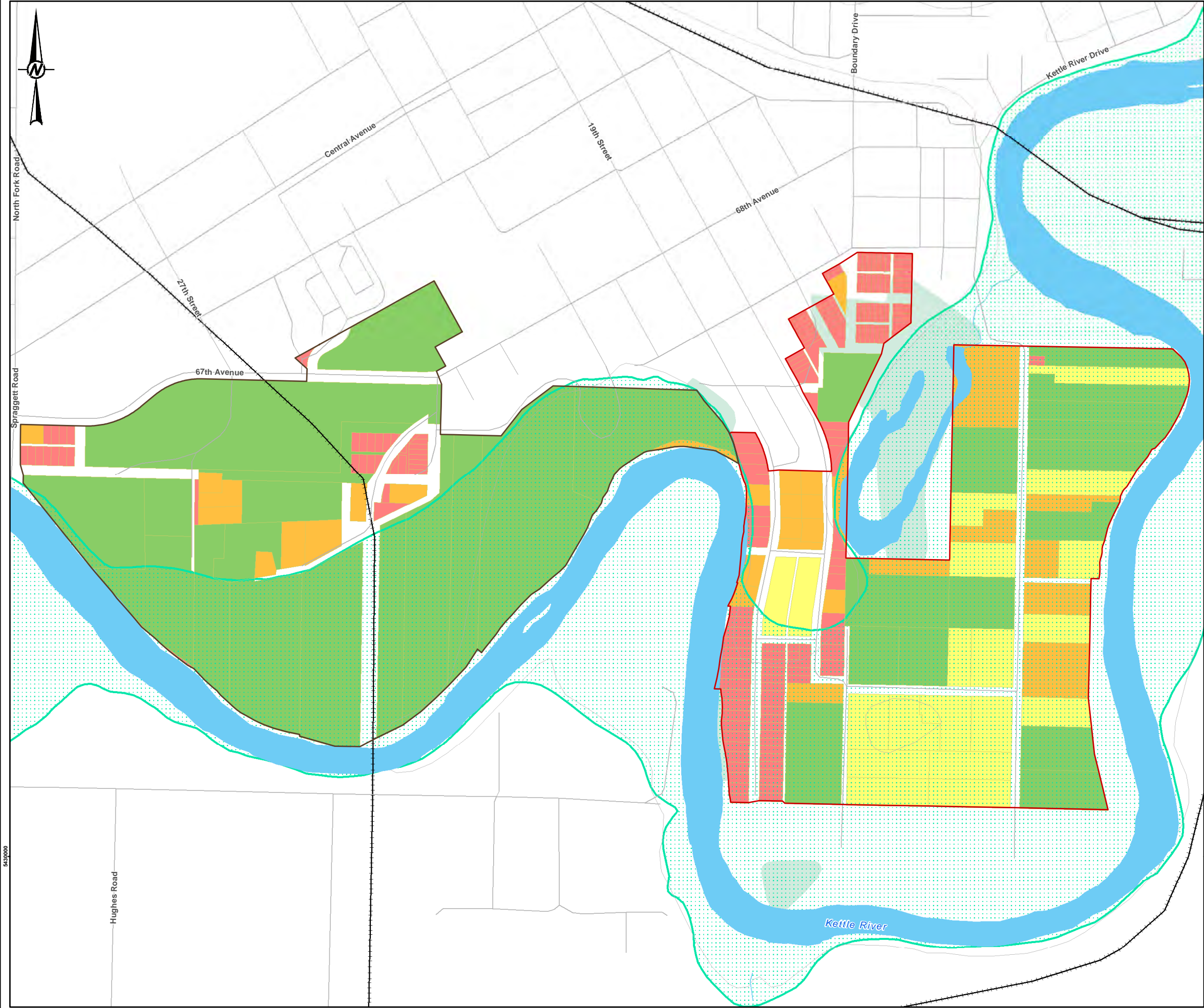


PROJECT NO.	CONTROL	REV.	FIGURE
1895271	1000		Agenda Page 85 of 103

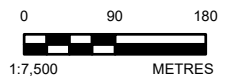
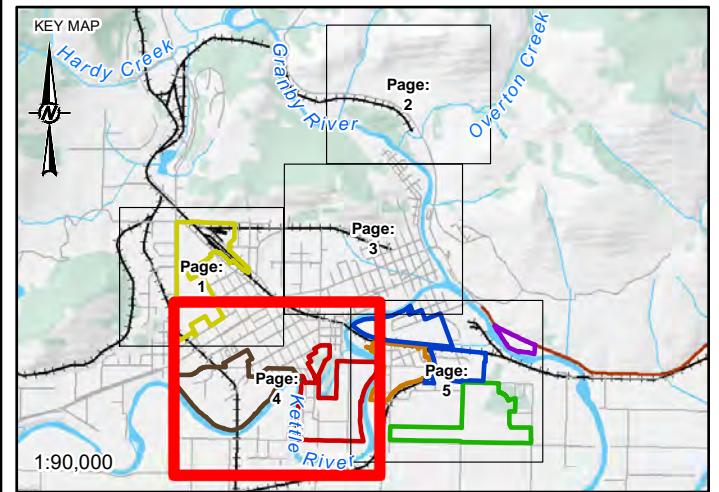
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- LEGEND**
- PARCEL
  - SEWER REGION**
    - JOHNSON FLATS
    - SW GRAND FORKS
  - RISK RATING FOR PARCEL SIZE**
    - RISK 1: > 1 ha
    - RISK 2: 0.5 - 1 ha
    - RISK 3: 0.14 - 0.5 ha
    - RISK 4: < 0.14 ha
  - BASE DATA**
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - WATERCOURSE
    - WATERBODY
    - VEGETATION
    - FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

2. CONTOURS, ROADS, VEGETATION, WATERCOURSES, AND WATERBODIES OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

CLIENT  
URBAN SYSTEM LTD.

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
RISK RATING FOR PARCEL SIZE  
SW GRAND FORKS AND JOHNSON FLATS

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

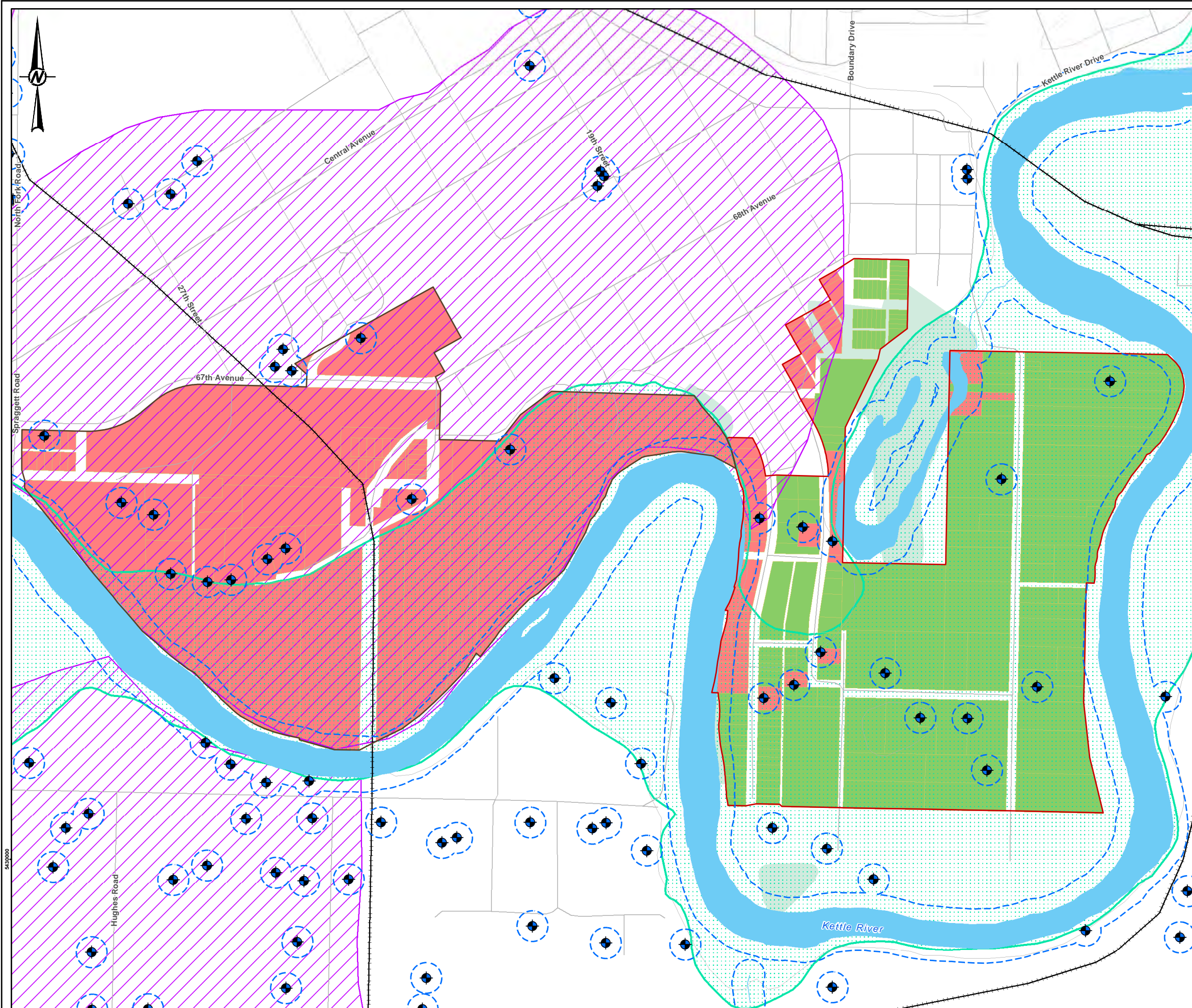


PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 403

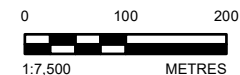
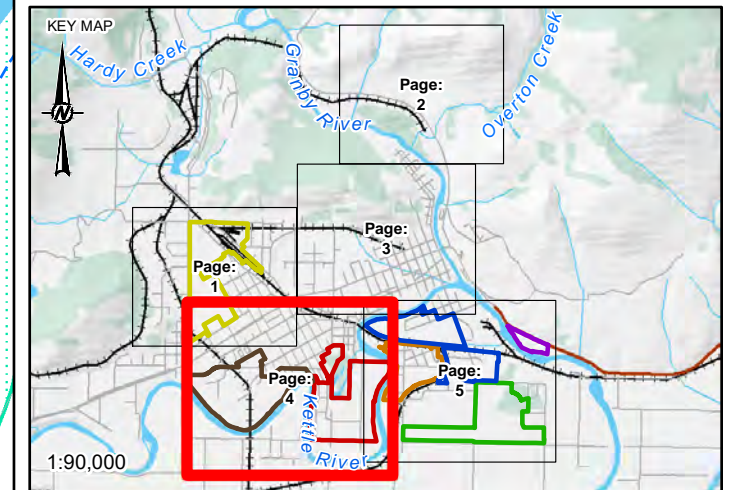
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



R:\04 - Uptake\golder\Urban\CityCAD\GISClient\Urban Systems Ltd\Grand Forks\08 - Projects\1895271\02 - PRODUCTION\1000\Map\Report\1895271\_1000\_Figure\_E\_Risk\_Rating\_for\_Setbacks\_and\_Capture\_Zones.mxd PRINTED ON: 2018-03-16 AT 5:01:04 PM



- LEGEND**
- GROUNDWATER WELL
  - PARCEL
  - SEWER REGION**
    - JOHNSON FLATS
    - SW GRAND FORKS
  - RISK RATING FOR SURFACE WATER SETBACKS AND WELL CAPTURE ZONES**
    - RISK 1
    - RISK 4
  - BASE DATA**
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - WATERCOURSE
    - WATERBODY
    - VEGETATION
  - HORIZONTAL SETBACK FOR SURFACE WATER BODIES/WATER SUPPLY WELLS
  - FLOODPLAIN
  - WELL CAPTURE ZONE (10 YEAR)



**REFERENCE(S)**  
1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.  
2. CONTOURS, ROADS, VEGETATION, WATERCOURSES, AND WATERBODIES OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

CLIENT  
URBAN SYSTEM LTD.

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
RISK RATING FOR SURFACE WATER/WATER WELL SETBACKS AND WELL CAPTURE ZONES SW GRAND FORKS AND JOHNSON FLATS

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

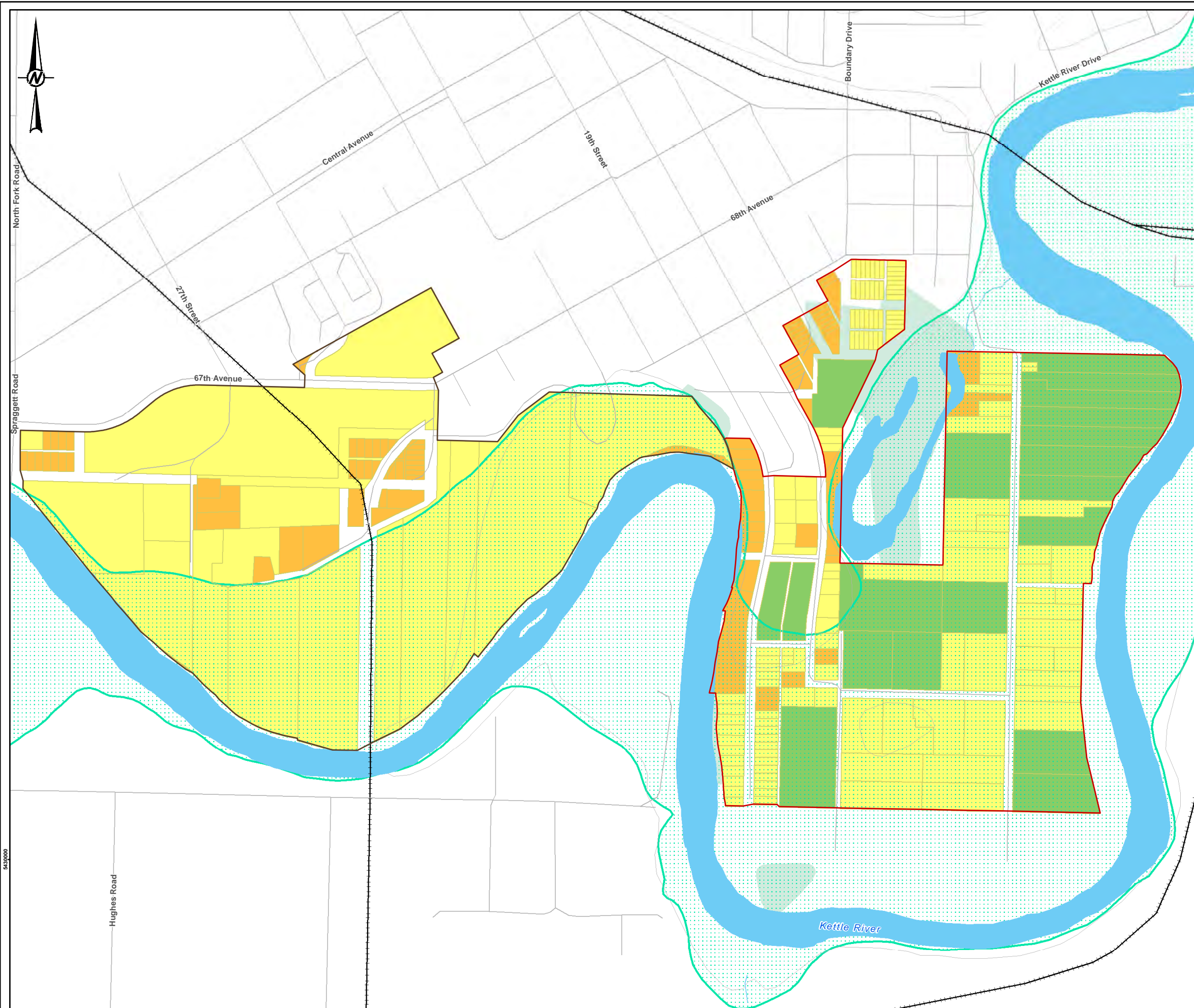


PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 103  
Agenda Page 87 of 103

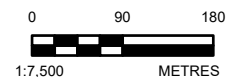
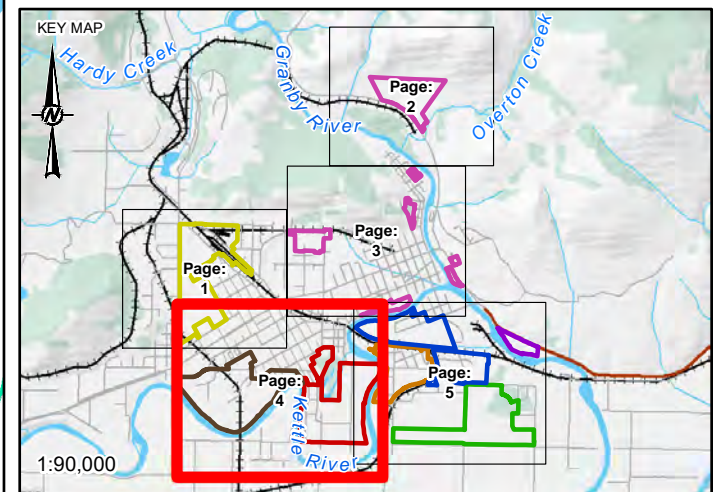
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



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- LEGEND**
- PARCEL
  - SEWER REGION**
    - JOHNSON FLATS
    - SW GRAND FORKS
  - FINAL RISK RATING**
    - RISK 1
    - RISK 2
    - RISK 3
  - BASE DATA**
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - WATERCOURSE
    - WATERBODY
    - VEGETATION
    - FLOODPLAIN



**REFERENCE(S)**

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CLIENT  
URBAN SYSTEM LTD.

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
FINAL RISK RATING  
SW GRAND FORKS AND JOHNSON FLATS

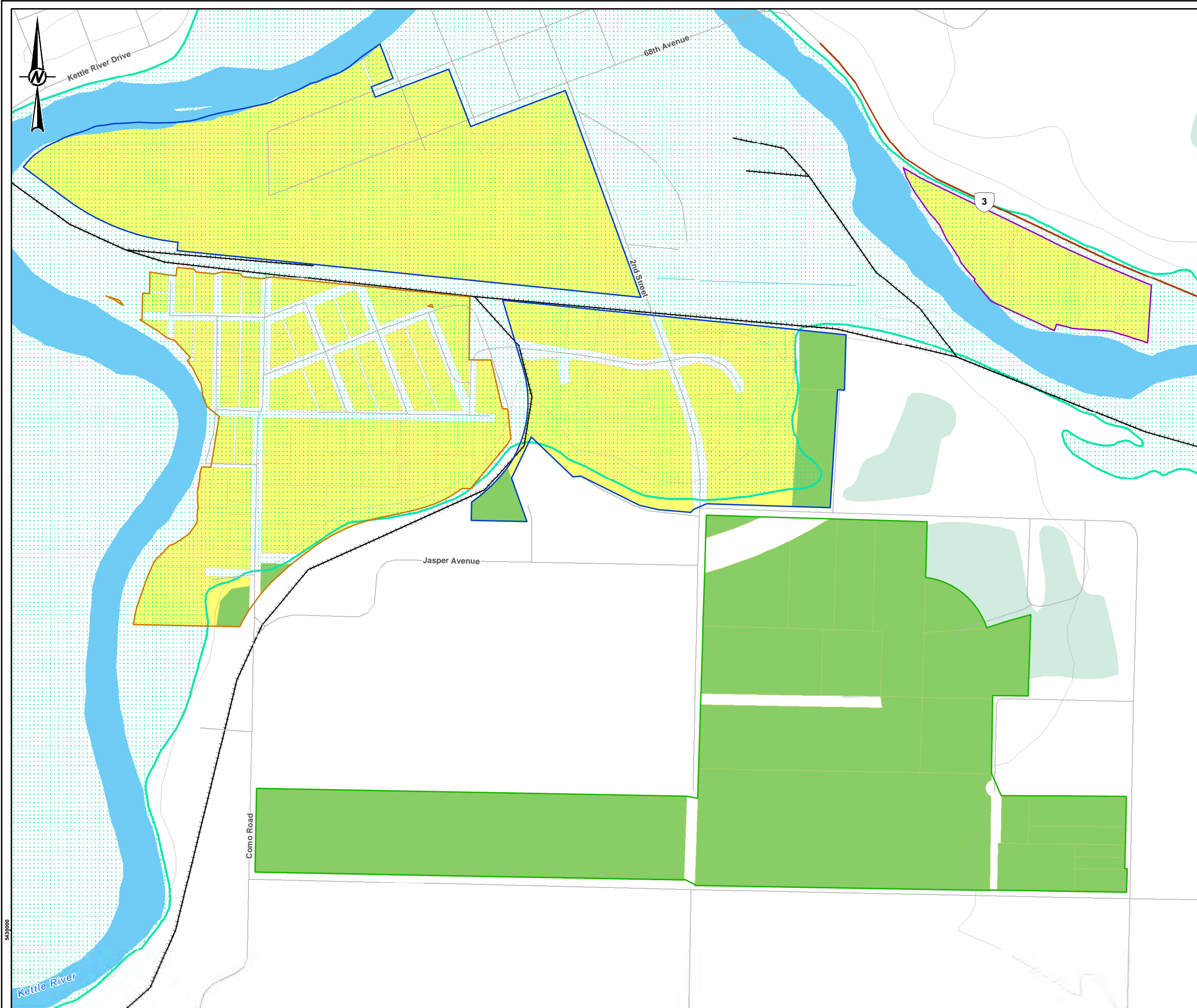
CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



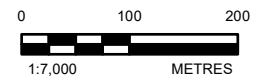
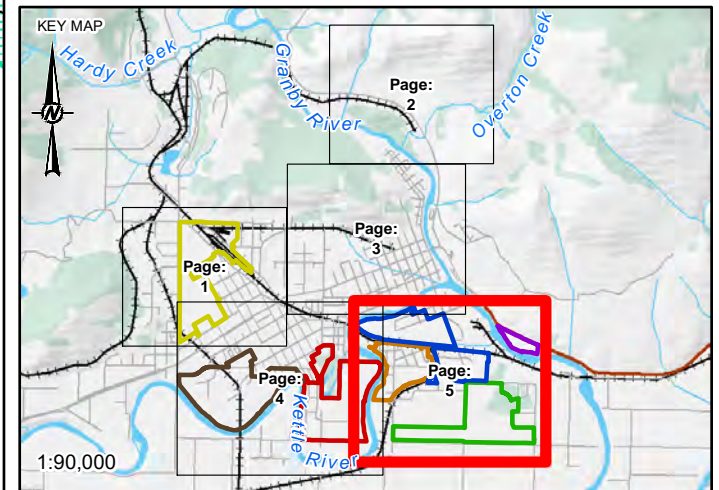
PROJECT NO.	CONTROL	REV.	FIGURE
1895271	1000		1895271



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- LEGEND**
- PARCEL
  - SEWER REGION**
    - AIRPORT / INDUSTRIAL
    - HWY 3 EAST
    - RICHMOND / PW
    - SOUTH RUCKLES
  - RISK RATING FOR SOIL**
    - RISK 1: FLUVIAL / GLACIOFLUVIAL
    - RISK 2: FLUVIAL / GLACIOFLUVIAL WITHIN FLOODPLAIN
    - RISK 3: COLLUVIUM
    - RISK 4: TILL / COLLUVIUM OVER BEDROCK AND COLLUVIUM WITHIN FLOODPLAIN
  - BASE DATA**
    - HIGHWAY
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - WATERCOURSE
    - VEGETATION
    - FLOODPLAIN



**REFERENCE(S)**  
1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.  
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CLIENT  
**URBAN SYSTEM LTD.**

PROJECT  
**URBAN SYSTEMS/SEWER/GRAND FORKS**

TITLE  
**RISK RATING FOR SOIL  
RICHMOND / PW, SOUTH RUCKLES, AIRPORT / INDUSTRIAL, AND HWY 3 EAST**

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



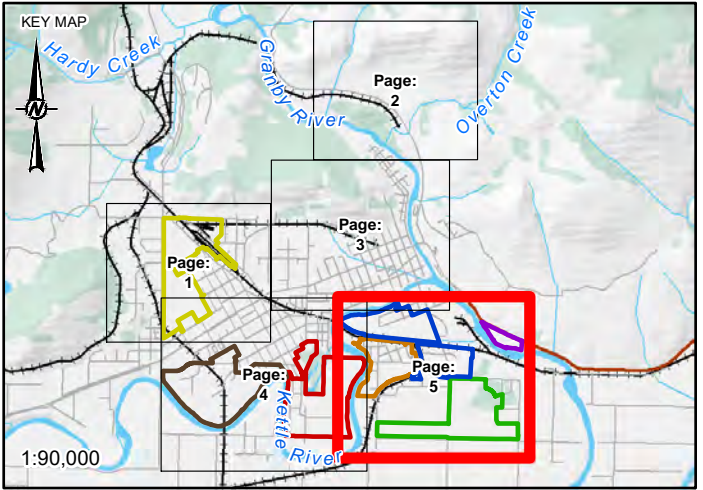
PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 159

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

R:\04 - UGolder\golder\Urban Systems Ltd\Grand Forks\09 - Projects\1895271\02 - Production\100\MAXD\Report\1895271\_1000\_Figures\_B\_Risk\_Rating\_for\_Groundwater\_mapbook.mxd PRINTED ON: 2018-03-16 AT 4:41:12 PM



- LEGEND**
- GROUNDWATER WELL
  - PARCEL
  - SEWER REGION**
  - AIRPORT / INDUSTRIAL
  - HWY 3 EAST
  - RICHMOND / PW
  - SOUTH RUCKLES
  - RISK RATING FOR DEPTH TO GROUNDWATER**
  - RISK 1: > 10 m
  - RISK 2: 3 - 10 m
  - RISK 3: 1 - 3 m
  - RISK 4: < 1 m
  - BASE DATA**
  - HIGHWAY
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - WATERCOURSE
  - VEGETATION
  - FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

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CLIENT

URBAN SYSTEM LTD.

PROJECT

URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE

RISK RATING FOR DEPTH TO GROUNDWATER

RICHMOND / PW, SOUTH RUCKLES, AIRPORT / INDUSTRIAL, AND HWY 3 EAST

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 103

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



\\P07H\lgolder\golder\Burnaby\CAD\GIS\Client\Urban Systems Ltd\Grand Forks\09\_PROJECTS\1895271\02\_PRODUCTION\1000\MXD\Report\1895271\_1000\_Figure\_C\_Risk\_Rating\_for\_Slope.mxd PRINTED ON: 2018-03-16 AT 4:35:53 PM



**LEGEND**

PARCEL

**SEWER REGION**

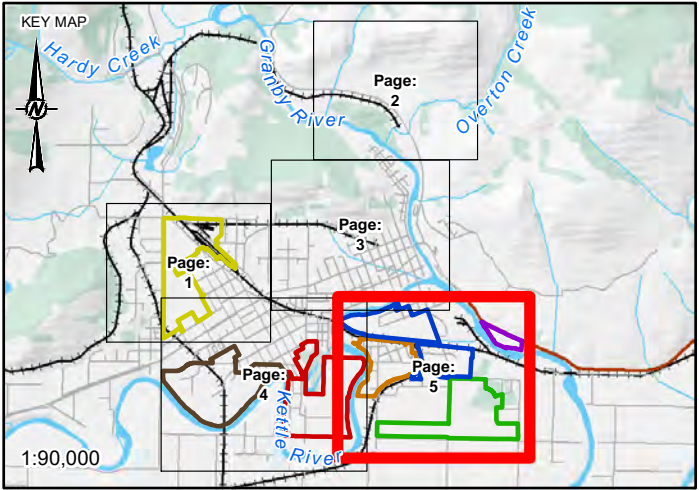
- AIRPORT / INDUSTRIAL
- HWY 3 EAST
- RICHMOND / PW
- SOUTH RUCKLES

**RISK RATING FOR SLOPE**

- RISK 1: < 5 %
- RISK 2: 5 - 10 %
- RISK 3: 10 - 30 %
- RISK 4: > 30 %

**BASE DATA**

- HIGHWAY
- ROAD
- RAILWAY
- CONTOUR (20m)
- WATERCOURSE
- VEGETATION
- FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

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URBAN SYSTEM LTD.

PROJECT

URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE

RISK RATING FOR SLOPE

RICHMOND / PW, SOUTH RUCKLES, AIRPORT / INDUSTRIAL, AND HWY 3 EAST

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



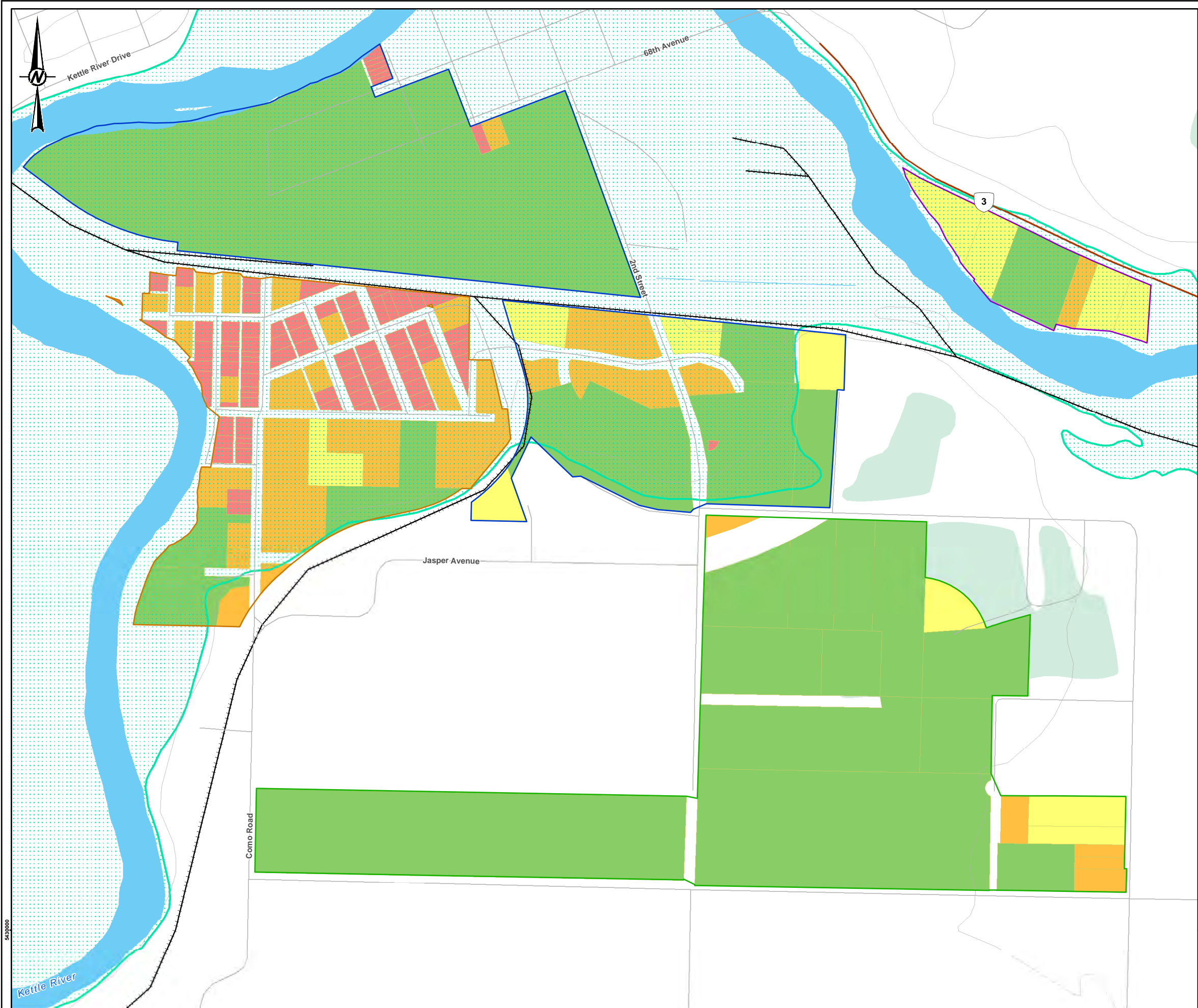
PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 100

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

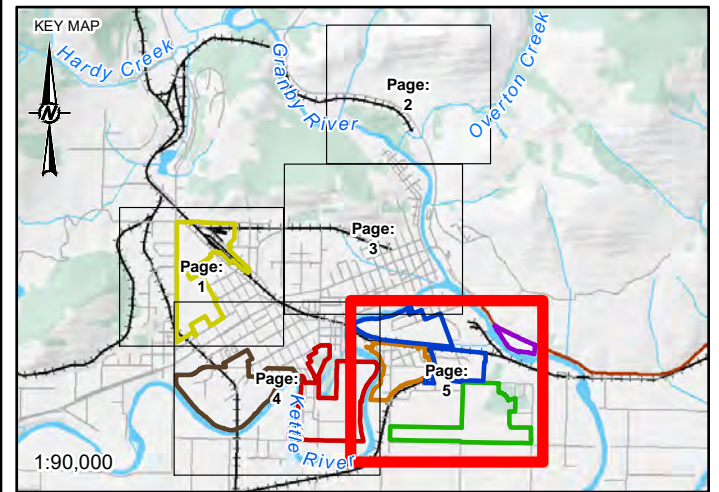
2mm



\\P07H\lgolder\golder\Bumaby\CAD\GIS\Client\Urban Systems Ltd\Grand Forks\09\_PROJECTS\1895271\02\_PRODUCTION\1000\MXD\Report\1895271\_1000\_Figure\_D\_Risk\_Rating\_for\_Parcel\_Size\_mapbook.mxd PRINTED ON: 2018-03-16 AT 5:39:02 PM



- LEGEND**
- PARCEL
  - SEWER REGION**
    - AIRPORT / INDUSTRIAL
    - HWY 3 EAST
    - RICHMOND / PW
    - SOUTH RUCKLES
  - RISK RATING FOR PARCEL SIZE**
    - RISK 1: > 1 ha
    - RISK 2: 0.5 - 1 ha
    - RISK 3: 0.14 - 0.5 ha
    - RISK 4: < 0.14 ha
  - BASE DATA**
    - HIGHWAY
    - ROAD
    - RAILWAY
    - CONTOUR (20m)
    - WATERCOURSE
    - VEGETATION
    - FLOODPLAIN



**REFERENCE(S)**  
1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.  
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CLIENT  
**URBAN SYSTEM LTD.**

PROJECT  
**URBAN SYSTEMS/SEWER/GRAND FORKS**

TITLE  
**RISK RATING FOR PARCEL SIZE  
RICHMOND / PW, SOUTH RUCKLES, AIRPORT / INDUSTRIAL, AND HWY 3 EAST**

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

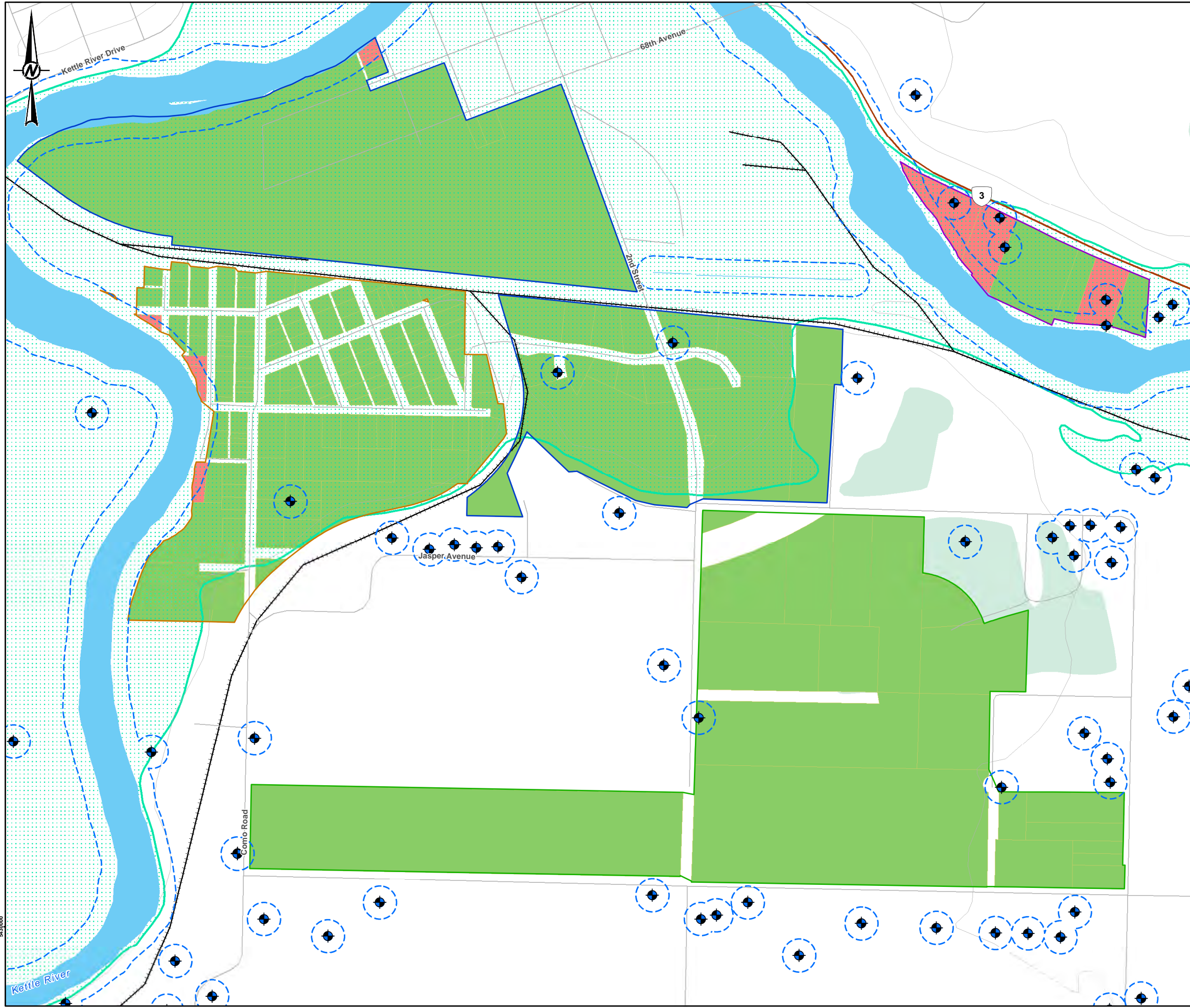


PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 503  
Agenda Page 92 of 103

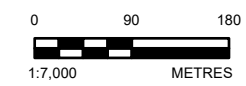
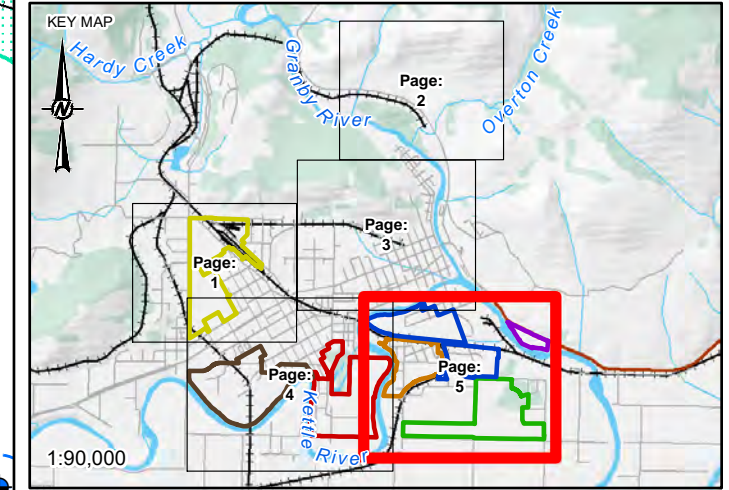
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B 20mm



\\P07H\lgolder\golder\Urban\City\GIS\Client\Urban Systems Ltd\Grand Forks\09\_PROJECTS\1895271\02\_PRODUCTION\1000\MAXD\Report\1895271\_1000\_Figure\_E\_Risk\_Rating\_for\_Setbacks\_and\_Capture\_Zones.mxd PRINTED ON: 2018/03/16 AT 5:01:37 PM



- LEGEND**
- GROUNDWATER WELL
  - PARCEL
  - SEWER REGION**
  - AIRPORT / INDUSTRIAL
  - HWY 3 EAST
  - RICHMOND / PW
  - SOUTH RUCKLES
  - RISK RATING FOR SURFACE WATER SETBACKS AND WELL CAPTURE ZONES**
  - RISK 1
  - RISK 4
  - BASE DATA**
  - HIGHWAY
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - WATERCOURSE
  - VEGETATION
  - HORIZONTAL SETBACK FOR SURFACE WATER BODIES/WATER SUPPLY WELLS
  - FLOODPLAIN



**REFERENCE(S)**

1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.

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CLIENT

URBAN SYSTEM LTD.

PROJECT

URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE

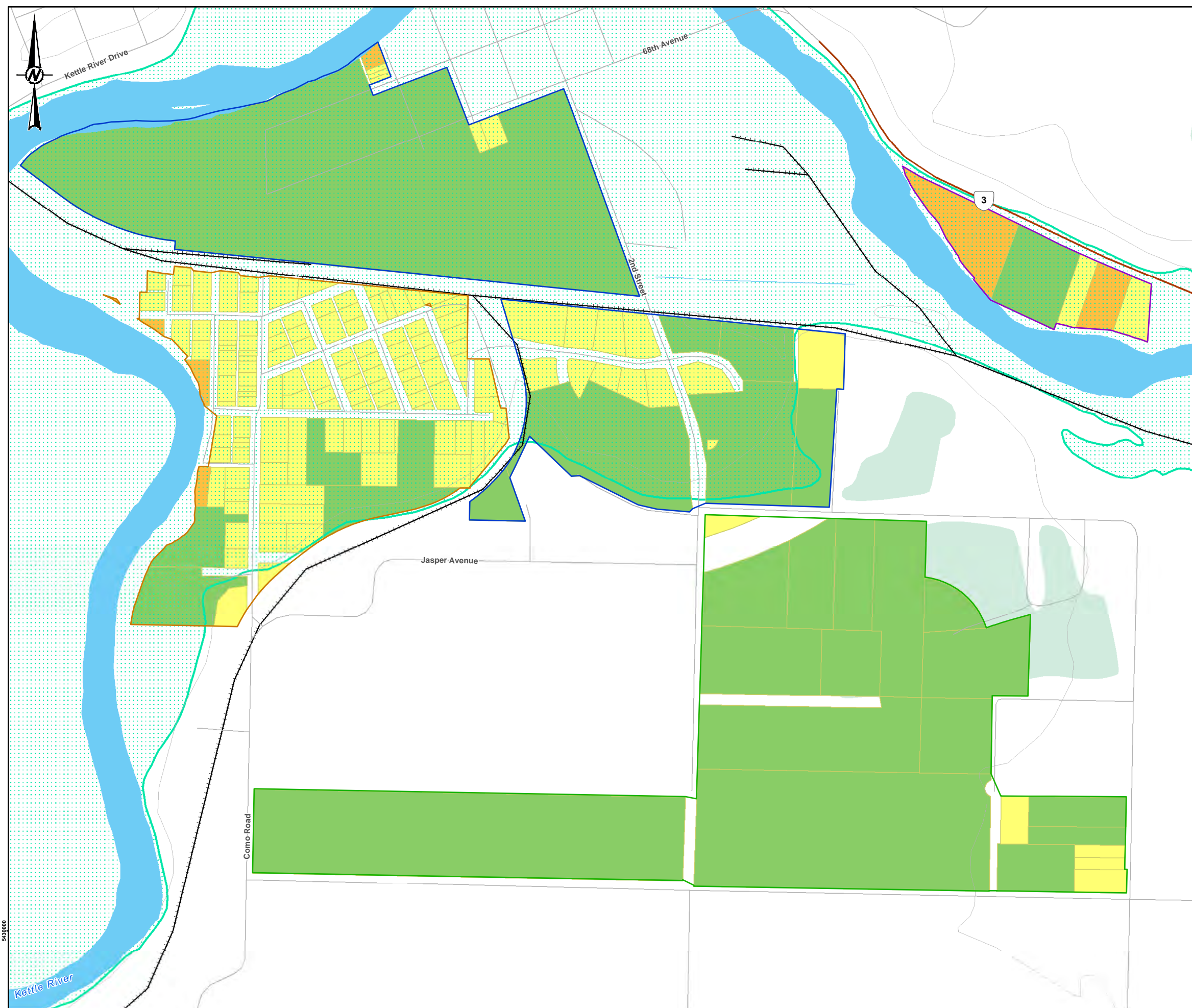
RISK RATING FOR SURFACE WATER/WATER WELL SETBACKS AND WELL CAPTURE ZONES RICHMOND / PW, SOUTH RUCKLES, AIRPORT / INDUSTRIAL, AND HWY 3 EAST

CONSULTANT	YYYY-MM-DD	3/16/2018
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	



PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE 103





## LEGEND

SEWER REGION

 HWY 3 EAST

**SOUTH RUCKLES**

### FINAL RISK RATING

## RISK 1

### RISK 3

## BASE DATA

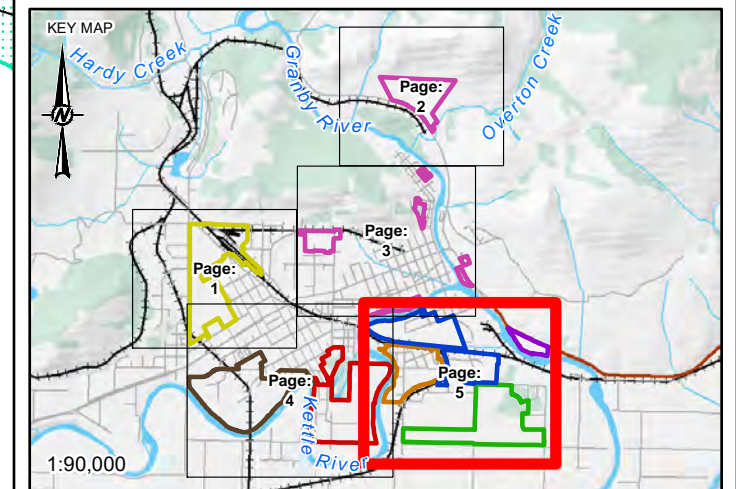
— HIGHWAY

+++ RAILW

— WATERCOURSE

 FLOODPLAIN

100



## REFERENCE(S)

2. CONTOURS, ROADS, VEGETATION, WATERCOURSES, AND WATERBODIES OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

CLIENT

## PROJECT

TITLE
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CONSULTANT

DESIGNED	PA
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DESIGNED PA

PREPARED	RC
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REVIEWED PA

APPROVED \_\_\_\_\_ IE \_\_\_\_\_

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PROJECT NO.  
1005071

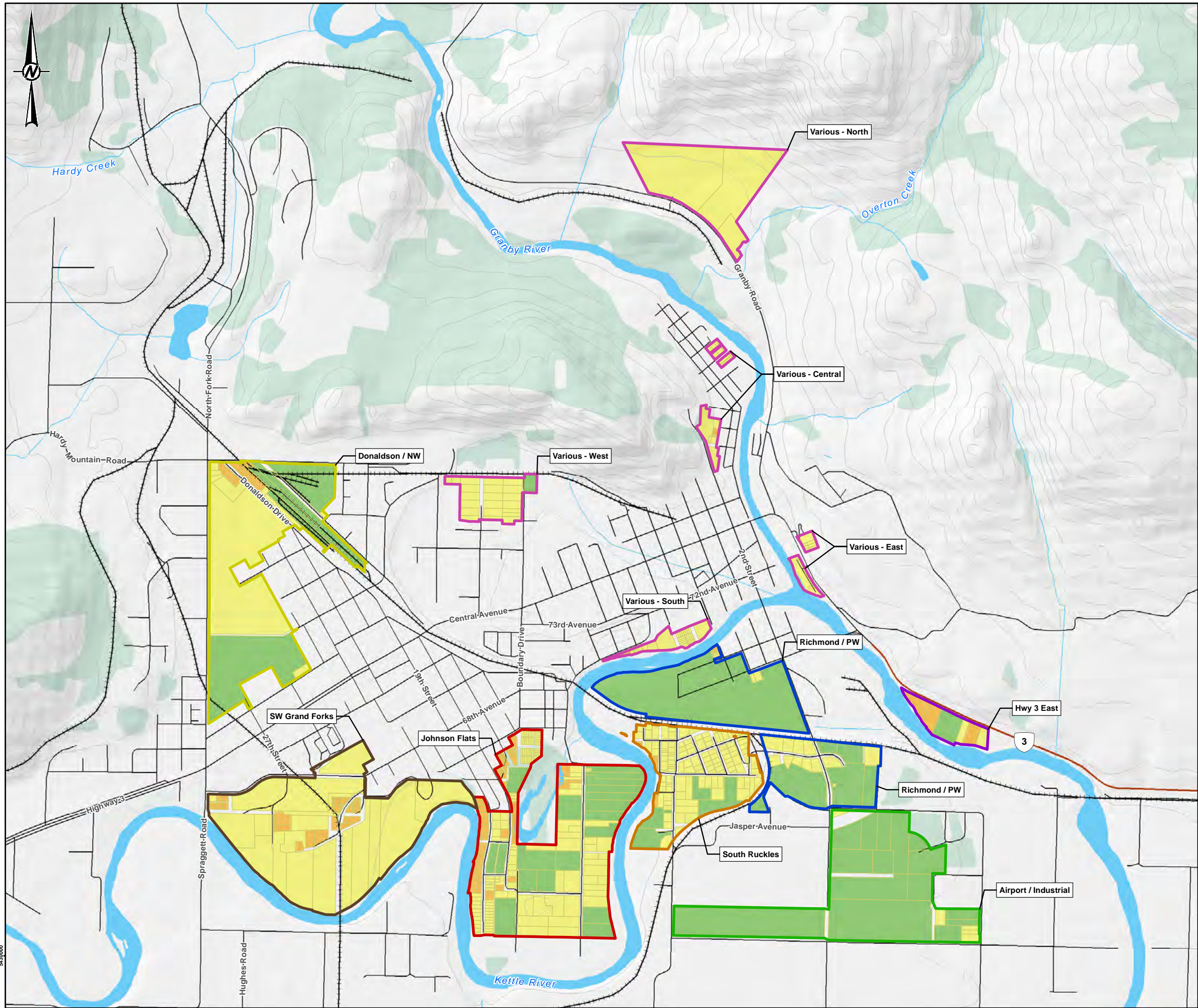
CONTRC  
1000

REV. FIGURE  
Acme Page 04 of 103

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



R:\04 - UGolder\golder\Burbach\CAD\GIS\Client\Urban Systems Ltd\Grand Forks\09 - PROJECTS\1895271\02 - PRODUCTION\1000\Map\Report\1895271\_1000\_Figures\Final\_Risk\_Rating\_Separate\_3\_Parcel\_Weight\_2\_Selback\_Weight\_2\_Overview.mxd PRINTED ON: 2018-03-16 AT: 4:55:34 PM



LEGEND

- PARCEL
- SEWER REGION
- AIRPORT / INDUSTRIAL
  - DONALDSON / NW
  - HWY 3 EAST
  - JOHNSON FLATS
  - RICHMOND / PW
  - SW GRAND FORKS
  - SOUTH RUCKLES
  - VARIOUS
- FINAL RISK RATING
- RISK 1
  - RISK 2
  - RISK 3
- BASE DATA
- HIGHWAY
  - ROAD
  - RAILWAY
  - CONTOUR (20m)
  - WATERCOURSE
  - WATERBODY
  - VEGETATION



REFERENCE(S)  
1. SEWER REGIONS PROVIDED BY THE CITY OF GRAND FORKS.  
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CLIENT  
URBAN SYSTEM LTD.

PROJECT  
URBAN SYSTEMS/SEWER/GRAND FORKS

TITLE  
FINAL RISK RATING  
OVERVIEW

CONSULTANT	YYYY-MM-DD	2018-03-16
DESIGNED	PA	
PREPARED	RC	
REVIEWED	PA	
APPROVED	JF	

PROJECT NO. 1895271 CONTROL 1000 REV. FIGURE  
Agenda Page 95 of 163

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



# APPENDIX B

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## Unit Costs

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Table of Unit Prices (2018)	Unit	Price
1. 200mm Diameter PVC Gravity Sewer	I.m.	\$260
2. Manholes	Each	\$8,000
3. Service Connections	Each	\$2,800
4. Road Restoration (asphalt – 3.5m wide)	I.m.	\$120
5. 100mm Diameter PVC Forcemain	I.m.	\$180
6. Small Lift Station (under 5L/s)	Each	\$250,000
7. Medium Lift Station (5-10 L/s)	Each	\$300,000

#### Highway 3 East

500 @ \$440	\$220,000
Manholes: 4 @ \$8,000	\$32,000
Force mains: 1,200 @ \$300	\$360,000
Service Connections: 1 @ \$2,800	\$28,000
Pump Station	\$250,000
River Crossing	\$250,000
Rail Crossing	\$150,000
	<b>\$1,290,000</b>
Contingency (30%)	\$387,000
Engineering & Construction Services (15%)	\$253,000
	<b>\$1,930,000</b>
Rounded	<b>\$2,000,000</b>

#### PW / Richmond

600 @ \$440	\$264,000
Manholes: 8 @ \$8,000	\$64,000
Force mains: 200 @ \$300	\$60,000
Service Connections: 180 @ \$2,800	\$504,000
Pump Station	\$250,000
Highway Crossing	\$150,000
	<b>\$1,292,000</b>
Contingency (30%)	\$388,000
Engineering & Construction Services (15%)	\$252,000
	<b>\$1,932,000</b>
Rounded	<b>\$2,000,000</b>

**Airport / Ind**

1,400 @ \$440	\$616,000
Manholes: 8 @ \$8,000	\$64,000
Forcemains: 600 @ \$300	\$180,000
Service Connections: 10 @ \$2,800	\$284,000
Pump Station	\$250,000
	<b>\$1,138,000</b>
Contingency (30%)	\$342,000
Engineering & Construction Services (15%)	\$322,000
	<b>\$1,702,000</b>

**South Ruckles**

2,300 @ \$440	\$1,012,000
Manholes: 30 @ \$8,000	\$240,000
Forcemains: 540 @ \$300	\$162,000
Service Connections: 200 @ \$2,800	\$560,000
Pump Station	\$250,000
Rail / Highway Crossing	\$300,000
	<b>\$2,524,000</b>
Contingency (30%)	\$757,000
Engineering & Construction Services (15%)	\$492,000
	<b>\$3,773,000</b>

**Johnson Flats**

3,000 @ \$440	\$1,320,000
Manholes: 26 @ \$8,000	\$208,000
Forcemains: 1,200 @ \$300	\$360,000
Service Connections: 20 @ \$2,800	\$56,000
Pump Station	\$250,000
	<b>\$2,194,000</b>
Contingency (30%)	\$658,000
Engineering & Construction Services (15%)	\$428,000
	<b>\$3,280,00</b>

**SW GF**

2,400 @ \$440	\$1,056,000
Manholes: 20 @ \$8,000	\$56,000
Forcemains: 800 @ \$300	\$240,000
Service Connections: 10 @ \$2,800	\$28,000
Pump Station	\$250,000
	<b>\$1,630,000</b>
Contingency (30%)	\$489,000
Engineering & Construction Services (15%)	\$318,000
<b>Total</b>	<b>\$2,437,000</b>

**Donaldson**

500 @ \$440	\$220,000
Manholes: 8 @ \$8,000	\$64,000
Forcemains: 500 @ \$300	\$150,000
Service Connections: 15 @ \$2,800	\$42,000
Pump Station	\$250,000
	<b>\$726,000</b>
Contingency (30%)	\$218,000
Engineering & Construction Services (15%)	\$142,00
<b>Total</b>	<b>\$1,086,000</b>

# Request for Decision



To: Regular Meeting  
From: **Development and Engineering**  
Date: May 7, 2018  
Subject: Request for Waiving Development Fees  
Recommendation: **THAT Council consider suspending Development Cost Charges and waiving Building Permit and water/sewer connection inspection fees for the BC Housing development at Lot 1, District Lot 380 SDYD Plan KAP85777; and further**

**THAT Council directs staff to initiate development of a Development Cost Reduction Bylaw to enable reduction of Development Cost Charges for this and other eligible developments.**

---

## Background

BC Housing has approached the City to request in-kind and financial support of a current development through waiving development charges and fees.

The Official Community Plan amendment bylaw 1919-A2 brought forward several policies to facilitate and support affordable and supportive housing, including:

- 4.3.10 Support non-profit organizations in their work of sponsoring, developing and managing housing projects and addressing housing needs of homeless and at-risk families and individuals.
- 4.3.14 Consider waiving, reducing, or deferring payment of development cost charges and other planning and development fees for affordable housing projects.

Costs to be considered for suspension or waiving include a total of \$20,408 to \$39,100, drawn from:

- Development Cost Charges (DCCs)(\$23,100 if considered multi-family; \$4,408 if considered institutional).
- Building Permit Fees (less than \$15,000)
- Sewer/Water inspection fees (less than \$1,000)

Council may resolve to waive building permit and water/sewer connection fees at this time. However, to proceed with supporting the BC Housing (or any other) project through DCC reduction, the City would need to implement a bylaw specifying the types of development and degree of fee reduction enabled, as per Local Government Act section 563. Eligible developments include not-for-profit rental housing, including supportive living housing; for-profit affordable rental housing; small-lot subdivisions designed to result in low greenhouse gas emissions; or developments designed to result in a low environmental impact.



If so directed, staff would bring forward a report and draft bylaw language in the coming months in addition to the scheduled update of the Development Cost Charges bylaw.

---

## Benefits or Impacts

### General

Supports affordable and supportive housing as directed in the Official Community Plan

### Strategic Impact



#### Community Livability

- We advocate for appropriate funding for our most vulnerable residents: Collaborate with grass roots organizations to better understand needs in community and work with groups to find solutions where possible.

### Policy/Legislation

Official Community Plan; Local Government Act

## Attachments

Letter from BC Housing.

---

## Recommendation

**THAT Council consider suspending Development Cost Charges and waiving Building Permit and water/sewer connection inspection fees for the BC Housing development at Lot 1, District Lot 380 SDYD Plan KAP85777; and further**

**THAT Council directs staff to initiate development of a Development Cost Reduction Bylaw to enable reduction of Development Cost Charges for this and other eligible developments.**

## Options

1. RESOLVED THAT Council accepts the report.
2. RESOLVED THAT Council does not accept the report.
3. RESOLVED THAT Council refers the matter back to staff for further information.

### Report Approval Details

Document Title:	20180507-RMC-RFD-DevEng-WaiveFeeRequest.docx
Attachments:	- BC Housing request for Collaboration of Contribution.pdf
Final Approval Date:	Apr 30, 2018

This report and all of its attachments were approved and signed as outlined below:

**Dolores Sheets - Apr 30, 2018 - 2:54 PM**

**Diane Heinrich - Apr 30, 2018 - 3:20 PM**



BC Housing

**RECEIVED**

**APR 16 2018**

THE CORPORATION OF  
THE CITY OF GRAND FORKS

Home Office  
1701 - 4555 Kingsway  
Burnaby, BC V5H 4V8

Tel 604-433-1711  
Fax 604-439-4722  
www.bchousing.org

April 13<sup>th</sup>, 2018

To the City of Grand Forks,

BC Housing would like the City of Grand Forks to consider a collaboration of contribution, with the goal of achieving greater social outcomes through partnership within your community and within the Province of British Columbia. Collaboration includes government supports from your community, such as grants, concessions on property taxes, concessions on levies, waiver of development cost charges or other municipal fees, waiver of community amenity contributions, accelerated approvals, and land donation.

As the provincial housing agency, BC Housing knows that building partnerships with municipal governments - along with the private and non-profit sectors, provincial health authorities and ministries, other levels of government and community groups - is essential to maximizing the amount of housing that we can deliver to our communities. A collaborative effort is needed to realize a project, as each group can bring forward their expertise and value to achieve greater social outcomes.

We deliver housing in over 200 communities, to approximately 104,000 households, across British Columbia. Our mandate is to address critical gaps across the housing continuum, which range from emergency shelter to rent assistance in the private market to affordable home ownership. We recognize that our actions impact on local communities and ecosystems, therefore sustainability is a key part of our business strategy. BC Housing's sustainability plan "livegreen" has been in place for nearly a decade, and we continue to deliver on our core mandate while reducing environmental impacts. We want to share your commitment to ensure all three components of sustainability are considered for every project; the social, economic and environmental sustainability that form the triple bottom line towards your Sustainable Community Plan.

As you may be aware, we are currently working with the Boundary Women's Coalition Society. They have demonstrated the need for funding to build a new six bed women's transition house to replace their existing transition house, and this development will be available to women with their children who have experienced violence or are at risk of violence within the Grand Forks/Boundary area.

In January of 2016, the Provincial Rental Housing Corporation (PRHC) acquired a site with the intended use as replacement for the existing transition house location. We are facilitating the planning for the transition house replacement project and will have drawings ready for review by the City of Grand Forks. We request that you consider participating in-kind towards development cost charges, permissive property tax exemptions, accelerated approvals, or any other means for this project.

We also ask that the City consider implementing policy for future affordable and sustainable housing projects within the community. Municipal participation through changes in local policy can influence the viability of making projects happen in future. Applications from community



**FILE CODE**  
BC Housing request  
of BI - for Collaboration of Contribution



groups in the Grand Forks area will benefit from an established policy, when applications for funding are being compared against other communities with similar policies in place.

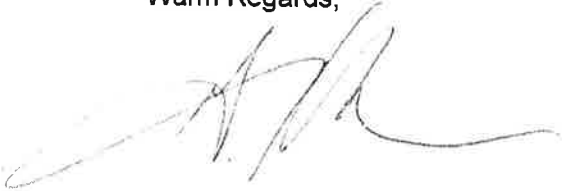
Respectfully, it is inefficient use of public dollars to provide for municipal levies of another level of government for the purpose of delivering affordable housing in the community.

Section 563 of the Local Government Act also allows City Council to waive or reduce DCCs for certain "Eligible Developments" under a number of categories, including not for profit rental housing. The waiving or reduction of DCC's must be done in accordance with a bylaw adopted by the municipality: "a Development Cost Charges Reduction Bylaw".

Any assistance the City is willing or able to provide through whatever means possible towards reducing or eliminating municipal levies would be greatly appreciated.

In closing, thank you very much for considering our request.

Warm Regards,

A handwritten signature in dark ink, appearing to read 'G. Maniotakis', with a long horizontal flourish extending to the right.

George Maniotakis  
Development Manager, BC Housing  
Tele: 604.454.2042  
[gmaniotakis@bchousing.org](mailto:gmaniotakis@bchousing.org)

# Request for Decision



To: Regular Meeting

From: **Development & Engineering Services**

Date: May 7, 2018

Subject: James Donaldson Park Accessibility Upgrades

Recommendation: **RESOLVED THAT Council approve the Grand Forks International Baseball (GFI) Tournament Organizing Committee undertaking accessibility improvements to James Donaldson Park;**

**AND FURTHER THAT Council approve in-kind contributions of labour and materials, if necessary for completion of the project, to a maximum contribution of \$\_\_\_\_\_.**

---

## Background

The GFI (Grand Forks International) baseball tournament organizing committee sent a letter to the City asking for permission to undertake accessibility improvements at James Donaldson Park prior to this year's 37th tournament. The goal is to make the park more accessible for wheelchairs, baby strollers, and anyone who may experience difficulty navigating through the park. The committee approached a local construction company that agreed to provide the materials and labour for paving pathways as their sponsorship to the GFI. Urban Systems Ltd., the City's engineering firm, have agreed to provide in-kind engineering design support as their contribution to the community. CannaFest organizers have indicated they would like to work with the GFI Organizing Committee to improve the front gate entranceways and is willing to provide funding for this project.

The GFI Tournament Organizing Committee thanks the City for its continued support of the event and hopes the City will welcome these new upgrades to the facility.

---

## Benefits or Impacts

### General

Improved accessibility at a City-owned facility allowing for ease of use by members of the public.

## Strategic Impact



### Community Livability

- Continued investment in sport in Grand Forks and supporting an initiative to develop an amenity to promote inclusivity



### Economic Growth

- The upgrades provide the opportunity to market this community event to a larger, more diverse audience

## Policy/Legislation

## Attachments

N/A

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## Recommendation

**RESOLVED THAT Council approve the Grand Forks International Baseball (GFI) Tournament Organizing Committee undertaking accessibility improvements to James Donaldson Park;**

**AND FURTHER THAT Council approve in-kind contributions of labour and materials, if necessary for completion of the project, to a maximum contribution of \$\_\_\_\_\_.**

## Options

1. RESOLVED THAT Council accepts the recommendation.
2. RESOLVED THAT Council does not accept the recommendation.
3. RESOLVED THAT Council refers the matter back to staff for further information.



### Report Approval Details

Document Title:	2018-05-07_RFD_DevEng_JD Park Accessibility Upgrades RM.docx
Attachments:	
Final Approval Date:	May 2, 2018

This report and all of its attachments were approved and signed as outlined below:

**Diane Heinrich - May 2, 2018 - 10:16 AM**

# Request for Decision



To: Regular Meeting

From: **Corporate / Administration**

Date: May 7, 2018

Subject: Service Sustainability Assessment Tool

Recommendation: **THAT Council adopts the Service Sustainability Assessment Tool as a reporting tool for use towards determining the City's performance measurements.**

---

## Background

Early in 2016, the City of Grand Forks hosted the project which was 100% funded through the 2016 Gas Tax Strategic Priorities Fund and was developed by Urban Systems. Five other communities worked in concert with the project. The program's objective was to provide a measurement tool for both Council and staff, and thus determine where improvements were required.

On April 9<sup>th</sup>, 2018 Urban Systems conducted a workshop for Council to get an idea on how the tool intends to function. Urban Systems Ltd. presented the SSAT at the COTW this morning in order to publicly present the tool, and to further to have Council consider adopting the tool at tonight's Regular meeting for best practices use for the organization.

---

## Benefits or Impacts

### General

Council has the authority to authorize the use of programs and tools to assist the organization in determining present and future needs or requirements.

### Strategic Impact



#### Community Livability

- Performance Measurements in place to gauge quality of services



#### Fiscal Responsibility

- To better plan for future projects through best practices in measuring capital needs or upgrades

### Policy/Legislation

Council has the authority to authorize the use of programs and tools to assist the organization in determining present and future needs or requirements.

## Attachments

- Snapshot of the Service Sustainability Assessment Tool for Canadian communities
- 

## Recommendation

**THAT Council adopts the Service Sustainability Assessment Tool as a reporting tool for use towards determining the City's performance measurements.**

## Options

1. RESOLVED THAT Council accepts the report.
2. RESOLVED THAT Council does not accept the report.
3. RESOLVED THAT Council refers the matter back to staff for further information.



### Report Approval Details

Document Title:	RFD 2018 - Service Sustainability Assessment Tool.docx
Attachments:	- SSAT for Canadian Communities.pdf
Final Approval Date:	Apr 30, 2018

This report and all of its attachments were approved and signed as outlined below:

**Diane Heinrich - Apr 30, 2018 - 1:49 PM**

# Performance Improvements: Service Sustainability Assessment Tool for Canadian Communities

## What is the Service Sustainability Assessment Tool?

The Service Sustainability Assessment Tool (SSAT) is a simple tool that helps communities self-assess their sustainable service delivery performance in eight core services:



The tool is intended to be used by any local government, of any size, and at any stage of reviewing the way that services are delivered.

## The SSAT tool will help you:

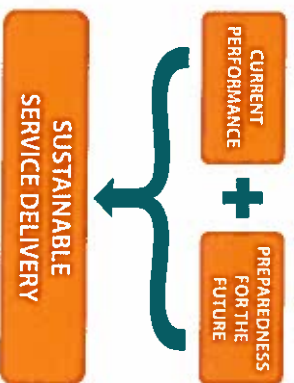
- Communicate to Council / public about sustainability
- Identify where services are doing well
- Identify where the sustainability of the service is at risk
- Develop plans to improve service provision sustainability
- Track progress over time

A service is sustainable if it is possible for the community to meet present needs without compromising the community's ability to meet future needs.

Given this definition, the SSAT assesses both current performance and preparedness for the future.

## What does the tool look like?

The SSAT is an Excel file with an accompanying 3-page User Guide. Each service area has its own Excel page with questions related to both **Current Performance** and **Preparedness for the Future**. Scores in each of these two areas are combined to give an overall measure of Sustainability for the service.



The SSAT is quick and easy to fill out. For each measure, enter a score between 0 and 3 that best describes the situation in your community. It should take approximately 15 minutes to complete one service area assessment. As an example, here is one of the twenty-one questions from the Water page:

SCORE	WATER QUALITY - SAFETY
0	Boil advisories occur in most years
1	Boil water advisories occur, but infrequently (no more than every 5 years)
2	Water quality consistently meets schedule B testing requirements of the DWPR.
3	Water quality consistently meets Schedule B of the DWPR requirements, plus testing is done for additional risk parameters

## How are the results communicated?

Once scores have been entered, click "Generate Report" in the Excel file. The Excel file will automatically generate three different dashboards that can be used to meet different communication needs.

DASHBOARD #1 | AUDIENCE: COUNCIL / PUBLIC



DASHBOARD #2 | AUDIENCE: SENIOR MANAGERS



DASHBOARD #3 | AUDIENCE: DEPARTMENT STAFF

WATER	CURRENT PERFORMANCE	PREPAREDNESS FOR THE FUTURE
Service Delivery	90%	70%
Finance	75%	90%
Governance	60%	80%
	75%	80%

## Where can I find the SSAT?

The SSAT is available for free to all BC municipalities at [assetmanagementbc.ca](http://assetmanagementbc.ca)

SUBMISSION BY:

**URBAN**  
systems

CLIENT:

**GRAND FORKS**

SPECIAL THANK YOU TO:

**INNOVIA**

Doug Allin, CAO  
Township of Spallumcheen

**UBCM**

City of Rossland  
Village of Salmo  
District of Clearwater

District of Squamish  
District of Central Saanich  
District of Saanich

ASSOCIATION OF CONSULTING  
ENGINEERING COMPANIES  
BRITISH COLUMBIA

# Request for Decision



To: Regular Meeting  
From: **Outside Works**  
Date: May 7, 2018  
Subject: Tree Policy  
Recommendation: **THAT Council adopts Urban Forest Policy #1105.**

---

## Background

The Urban Forest Policy regulates the management of trees on City property, for example, on roads, parks, and boulevards. It covers the reasons for maintaining an urban forest, risk assessment, species at risk and habitat, tree donations, and removal criteria. The policy covers the broad criteria for planting, pruning, or removing trees and vegetation. It allows Council to set targets for staff to follow, for example, replacing every removed tree with two new trees where possible.

The City does not have a current policy that guides tree maintenance. Creating this policy makes sure that the criteria are consistently applied and clarifies the decision making process. It also serves as a values statement by setting the compliance and direction of the City's actions in maintaining green infrastructure and the reasons for managing an urban forest.

Committee of the Whole discussed the draft policy at the April 9, 2018 meeting. The main concern raised was the ratio of trees planted to replace a tree removed. Staff subsequently reviewed the policy structure and made changes to better outline the related documents. The policy draft now presented has an outline of the tree management procedure and the urban forest plan to be developed. The intent of the outline in the policy is so Council can set the main headings (the "what") for staff to consider in the plan and procedure (the "how").

---

## Benefits or Impacts

### General

Staff will have increased guidance on tree maintenance decisions. Residents will have a more consistent explanation for why trees are being removed, replaced, or pruned.

### Policy/Legislation

This establishes a new policy.

## Attachments

Urban Forest Policy # 1105

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## **Recommendation**

**THAT Council adopts Urban Forest Policy #1105.**

## **Options**

1. RESOLVED THAT Council accepts the report.
2. RESOLVED THAT Council does not accept the report.
3. RESOLVED THAT Council refers the matter back to staff for further information.



### Report Approval Details

Document Title:	RFD 2018 - Tree policy RM1.docx
Attachments:	- City of Grand Forks Council Urban Forest Policy 1105.docx
Final Approval Date:	Apr 30, 2018

This report and all of its attachments were approved and signed as outlined below:

**David Reid - Apr 27, 2018 - 2:12 PM**

**Diane Heinrich - Apr 30, 2018 - 1:53 PM**



City of Grand Forks  
 7217 4<sup>th</sup> Street  
 Grand Forks, BC V0H 1H0  
 250.442.8266  
 www.grandforks.ca

# Council Policy

## Urban Forest

Established: May 7, 2018

Rescinded: N/A

Contact Department: Public Works

### Guiding Principle

A healthy urban forest provides habitat, ecosystem function and amenity values to the City.

### Purpose

To provide regulations for the control and management of trees and vegetation on City owned property.

### Definitions

In this policy, unless the context otherwise requires:

**"certified wildlife / danger tree assessor"** means a person who has completed the *Wildlife Danger Tree Assessor's Course*, administered by the Wildlife Tree Committee (WTC).

**"dangerous tree"** means the same as in the Occupational Health and Safety Regulation

**"managed open space"** means all City-owned parks, playgrounds, pathways and boulevards

**"recreational trail"** means an informal trail used by the public for accessing natural areas and waterways and not established or maintained by the City.

**"wildlife trees"** means any standing dead or live tree with special characteristics that provide valuable habitat for the conservation or enhancement of wildlife.

### Scope

This policy applies to City staff and contractors maintaining the City's urban forest.

### Policy Statements

The City will manage its urban forest for the public benefit including, but not limited to:

- Reduction of air pollution
- Dust control
- Wind breaks
- Noise control
- Rainfall interception
- Shade
- Habitat improvement
- Aesthetics
- Biodiversity
- Soil stabilization and improvement
- Riparian area improvement

The City will maintain and periodically review an Urban Forest Plan to meet these policy goals.

**Risk management**

The City will manage risk in accordance with industry standards for recreational trails and areas. The City will provide minimal oversight of natural areas with no City maintained infrastructure.

To manage risk for trees with the potential to interact with City-maintained public use areas, trails, roads, and infrastructure, and private property, the City will undertake a periodic risk assessment of trees and vegetation to:

- inform planning decisions and management procedures regarding trails, parks, recreation, infrastructure and property protection;
- identify areas with wildlife habitat value and potential danger tree issues requiring further assessment;
- inspect trees capable of causing damage.
- minimize the spread of invasive species.

The City will comply with the federal Migratory Birds Convention Act, federal Species at Risk Act and the provincial Wildlife Act. Tree-cutting will be avoided during the bird nesting season and a Qualified Environmental Professional (QEP – includes Arborist, R.P. Biologist, or R.P. Forester) is required to complete an assessment prior to cutting during bird nesting season.

**Tree Donations by Individuals**

At the discretion of the Manager of Operations or designate, the City will accept donations by individuals for trees. Tree location and species must be approved by Manager of Operations or designate. Fees may apply.

**Prohibitions**

The City of Grand Forks shall not permit the planting or pruning of any tree on property owned by the City except in compliance with the guidelines set by the Provincial and Federal legislation or this policy.

**Tree Selection**

The selection of City tree types shall be chosen from the recommended list of trees by the public works department and will take into account the input from the affected neighbors.

**Tree Removal**

The Tree Management Procedure directs the pruning, removal, or transplanting of any City tree by public works or authorized persons. It considers:

1. staff decision making and authorizations
2. tree management triggers
  - a. disease or injurious insects
  - b. interference with another tree
  - c. interference with municipal or utility infrastructure
  - d. high hazard rating as determined by a certified wildlife / danger tree assessor
3. replacement plan
  - a. ratio of trees removed to trees planted
4. tree management requests by residents
  - a. neighbourhood significance
  - b. removal and replacement costs
  - c. impact on service provided by green infrastructure
5. reconsideration of staff decisions.

**References**

- Urban Forest Plan
- Tree Management Procedure

**Amendments**

- N/A

DRAFT



# Memo



To: Regular Meeting  
From: **Chief Financial Officer**  
Date: 2018-05-07  
Subject: Quarter 1, 2018 Financial Reports

---

## Background

The financial reports for the period ending March 31, 2018 are enclosed here for review. These include statements of revenues, expenditures, capital expenditures and a continuity schedule of reserves.

These statements have been prepared from a management perspective and consequently are presented on a different basis than the annual audited financial statements. The budget figures used in these reports are from the 2018-2022 Five Year Financial Plan, Bylaw No. 2045.

Utility revenues, which are invoiced bi-monthly, represent approximately one and a half months of billed consumption up to the February 13<sup>th</sup> invoicing cut-off date. Certain revenues, notably franchise fees and business licences are invoiced in January and thus reflect the full annual amount of income. Most grant revenues which were deferred in 2017 have been recognized in this first quarter of 2018.

The cost of purchased electricity for resale includes January and February amounts, and thus a full two months of expense. IT charges are generally prepaid at the beginning of the year, but are being allocated evenly to the other departments on a quarterly basis, resulting in a significant balance at the end of this quarter which will be reduced through the remainder of the year.

---

## Benefits or Impacts

### Strategic Impact

- 💰 Provision of quarterly financial reports provides Council with information on the City's financial performance and status of spending against budget.

## Attachments

Quarter 1, 2018 Financial Reports

### Report Approval Details

Document Title:	CFO - Quarter 1 2018 Financials.docx
Attachments:	- Q1 2018 Financials.pdf
Final Approval Date:	Apr 26, 2018

This report and all of its attachments were approved and signed as outlined below:

**Diane Heinrich - Apr 26, 2018 - 1:19 PM**



# CITY OF GRAND FORKS REVENUES

For the Three Months Ending March 31, 2018

	BUDGET FULL YEAR 2018	ACTUAL YTD QTR 1 2018	% OF BUDGET 2018
<b>General Fund Revenues</b>			
Property taxes	\$3,804,524		0%
Parcel & frontage taxes	155,185		0%
Grants and Payments in Lieu			
Grants in Lieu	17,147		0%
1% Utility	99,895		0%
Fees and Charges			
Franchise Fees	63,958	63,958	100%
Slag Sales	215,000	49,118	23%
Solid Waste Collection	237,500	40,567	17%
Airport	61,035	24,002	39%
Cemetery	27,000	3,497	13%
Campground	60,000		0%
Business Licences & Municipal Ticketing	30,000	30,150	101%
Land Development	27,000	2,953	11%
Building Rentals & Leases	111,689	21,500	19%
Miscellaneous Fees & Charges		25	
Operating Grants & Donations			
Small Communities Operating Grant	495,000		0%
Other Operating Grants	31,345	8,975	29%
Rural Fire Recovery	290,224		0%
Donations	40,000	14,000	35%
Capital Grants			
Community Works Gas Tax	223,000		0%
Other Capital Grants	124,224	33,750	27%
Other Revenues			
Other Recoveries	12,000		0%
Investment Income	85,000	29,611	35%
Penalties & interest	153,800	21,273	14%
Other Proceeds		1,840	
<b>Total General Fund Revenues</b>	<b>6,364,526</b>	<b>345,219</b>	<b>5%</b>
<b>Water Utility Revenues</b>			
Fees and Charges	946,157	140,432	15%
Capital Grants	2,480,000		0%
Other Revenues	4,500	384	9%
<b>Total Water Utility Revenues</b>	<b>3,430,657</b>	<b>140,816</b>	<b>4%</b>
<b>Electrical Utility Revenues</b>			
Fees and Charges	5,084,757	766,102	15%
Capital Grants	9,000		0%
Other Revenues	27,000	1,914	7%
<b>Total Electrical Utility Revenues</b>	<b>5,120,757</b>	<b>768,016</b>	<b>15%</b>
<b>Wastewater Utility Revenues</b>			
Parcel & frontage taxes	6,041		0%
Fees and Charges	922,770	140,159	15%
Capital Grants	2,638,573	613,986	23%
Other Revenues	5,000	392	8%
<b>Total Wastewater Utility Revenues</b>	<b>3,572,384</b>	<b>754,537</b>	<b>21%</b>
<b>TOTAL REVENUES</b>	<b>\$18,488,324</b>	<b>\$2,008,588</b>	<b>11%</b>



**CITY OF GRAND FORKS**  
**EXPENDITURES**  
For the Three Months Ending March 31, 2018

	BUDGET FULL YEAR 2018	ACTUAL YTD QTR 1 2018	% OF BUDGET 2018
<b>GENERAL FUND</b>			
General Government			
Legislative Committees			
Legislative	278,614	60,678	22%
Administrative	615,057	138,186	22%
Finance	329,200	54,781	17%
Information Technology	-	42,670	
Elections	15,000	51	0%
Communications	59,000	766	1%
Protective Services			
Fire & Emergency	669,982	116,637	17%
Bylaw Enforcement	106,750	24,362	23%
Building Inspection Services	125,050	27,464	22%
Wildlife Management	25,000	151	1%
Transportation Services			
Airport	160,614	31,828	20%
Roads	891,305	262,188	29%
Public Works Admin	237,396	66,180	28%
Net fleet revenue	-	(36,324)	
Development Services			
Zoning & Planning	195,150	27,394	14%
Engineering	183,250	35,827	20%
Economic Development	26,500	10,911	41%
Property Management	30,500	211	1%
Slag Remediation	5,000	-	0%
Contaminated Sites	5,000	-	0%
Environmental Health Services			
Solid Waste	236,145	38,960	16%
Public Health Services			
Cemetery	84,823	1,711	2%
Parks, Recreation and Cultural Services			
Parks	667,665	31,215	5%
Campground	37,720	1,071	3%
Fee For Service	353,800	5,400	2%
City Events	16,050	12,077	75%
Public Real Estate			
Facilities	288,705	48,167	17%
Parcel taxes for City property	27,000	-	0%
Total Operations	5,670,276	1,002,562	18%
Debt interest	46,456	5,853	13%
Debt Principal			
Amortization	1,154,658	284,913	25%
<b>TOTAL GENERAL FUND</b>	<b>6,871,390</b>	<b>1,293,328</b>	<b>19%</b>





**CITY OF GRAND FORKS**  
**EXPENDITURES**  
For the Three Months Ending March 31, 2018

	<b>BUDGET FULL YEAR 2018</b>	<b>ACTUAL YTD QTR 1 2018</b>	<b>% OF BUDGET 2018</b>
<b>WATER UTILITY</b>			
Operations	822,067	120,226	15%
Debt interest	10,937	2,603	24%
Amortization	392,242	85,562	22%
<b>TOTAL WATER</b>	<b>1,225,246</b>	<b>208,391</b>	<b>17%</b>
<b>ELECTRICAL UTILITY</b>			
Operations	674,674	132,309	20%
Electrical Purchases	3,457,408	633,203	18%
Debt interest	-	-	
Amortization	78,754	13,087	17%
<b>TOTAL ELECTRICAL</b>	<b>4,210,836</b>	<b>778,599</b>	<b>18%</b>
<b>WASTE WATER UTILITY</b>			
Operations	700,468	163,279	23%
Debt interest	75,333	851	1%
Amortization	241,957	42,267	17%
<b>TOTAL WASTE WATER</b>	<b>1,017,758</b>	<b>206,397</b>	<b>20%</b>
<b>TOTAL EXPENSES</b>	<b>13,325,230</b>	<b>2,486,715</b>	<b>19%</b>
<b>DEBT PRINCIPAL PAYMENTS</b>	<b>324,105</b>	<b>35,070</b>	<b>11%</b>



**CITY OF GRAND FORKS**  
**CAPITAL EXPENDITURES**  
For the Three Months Ending March 31, 2018

	BUDGET 2018	YTD QTR1 2018	% BUDGET 2018	FUNDING SOURCE
<b>GENERAL OPERATIONS</b>				
Silver Kettle Sidewalk	181,141		0%	General capital reserve
Public Works Fuel Tanks	53,826		0%	General capital reserve
Public Works Upgrades	20,000	19,486	97%	General capital reserve
Public Works - 22nd Street	556,070	135	0%	Debt
Wayfaring Signs	65,000		0%	Slag Reserve
Airport AWOS Upgrade	42,298	28,354	67%	General capital reserve/grant
Expo Sign changes	35,000		0%	Slag Reserve
Library HRV	12,000		0%	Other
Emergency Repair Fund	10,914		0%	General capital reserve
Flood Plain Mapping & Dike Restoration	117,500		0%	General capital reserve/grant
5 Tonne Dump Truck	250,000	216,400	87%	Equipment reserve
T-Tech trailer	11,325		0%	Equipment reserve
Service Truck Replacement	15,305		0%	General capital reserve
Holder Replacement	40,541		0%	Equipment reserve
City Park Campground Upgrade	20,000		0%	General capital reserve
Data Collection Equipment	30,000		0%	General capital reserve
Ball Diamond Rebuild to baseball specs	10,000		0%	General capital reserve
LED Street Lighting	400,000		0%	Gas tax reserve
Public Works Upgrades	45,000		0%	General capital reserve
Facilities Review	10,000		0%	General capital reserve
Annual Facility upgrades and replacement plan	15,000	28	0%	General capital reserve
Annual Emergency Facility Fund	30,000		0%	General capital reserve
Renewable energy program	25,000		0%	General capital reserve
Replace Crosswalks in City Core	50,000		0%	Gas tax reserve
Central Ave Sidewalk Replacement	40,000		0%	Gas tax reserve
Bridge Approach Paving	20,000		0%	Gas tax reserve
Annual Water and Sewer Emergency Repair Fund	50,000		0%	General capital reserve
7th Street Storm Sewer	10,000		0%	General capital reserve
SolarNow Solar Panel Installation	65,000		0%	Climate Action reserve/grant
Fleet Replacement	300,000		0%	General capital reserve
Electric Mower	20,000		0%	Equipment reserve
Annual Low Impact Storm water Program	25,000		0%	General capital reserve
<b>ELECTRICAL</b>				
Electrical Engineering	30,367		0%	General capital reserve
Electrical Voltage Conversion	535,767	66,981	13%	General capital reserve
Annual Electrical System Upgrade Programs	100,000		0%	General capital reserve
Fuse Coordination Study and implementation	15,000		0%	General capital reserve
Electrical Master Plan	35,000		0%	Electrical capital reserve
<b>WASTEWATER</b>				
Wastewater Treatment Plant UV	437,932		0%	Land sales reserve/grant
Headworks Grinder	38,679	36,062	93%	Land sales reserve
Water/Sewer Scada	2,854		0%	Land sales reserve
3rd Street Sewer Main Repair	35,309		0%	General capital reserve
Wastewater Treatment Plant Upgrades	2,748,751	198,569	7%	General capital reserve/grant
Bio-Solids Land Application Plan	25,000		0%	General capital reserve
Sewer Phasing Plan	78,500	78,500	100%	General capital reserve/grant
Sewer Main Relining	60,000		0%	General capital reserve
Lift Station Pumps	25,000		0%	General capital reserve
Granby River Force Main Crossing	10,000		0%	General capital reserve
MWR Discharge Requirements	500,000		0%	General capital reserve
<b>WATER</b>				
Water/Sewer Scada	3,219		0%	Land sales reserve
5th Street Watermain Replacement	41,152	6,014	15%	Gas tax reserve
West Side Fire Protection	923,932	3,963	0%	Debt
Water Supply & Conservation	10,000		0%	Water capital reserve
Granby Water Crossing / Yale Bridge water main	10,000		0%	Water capital reserve
Interfor Property Isolation	150,000		0%	General capital reserve
Well 5 VFD	50,000		0%	General capital reserve
Shared Property (strata, trailers) Water Meters	50,000		0%	Gas tax reserve
Water service upgrade - City Park, 7th St., etc...	125,000		0%	General capital reserve
136 Sagamore/Airport Water Line Extension	25,000		0%	Water capital reserve
Airport Water Main Looping	75,000		0%	General capital reserve
Water Main Airport	2,480,000		0%	Grant
<b>TOTAL CAPITAL</b>	<b>11,197,382</b>	<b>654,492</b>	<b>6%</b>	



**CITY OF GRAND FORKS**  
**RESERVE INCOME AND TRANSFERS**  
**For the Three Months Ending March 31, 2018**

	Climate Action	General Capital	Water Capital	Electrical Capital	Sewer Capital	Equipment	Land Sales	Parking	Slag	Gas Tax	Total
<b>Balance - Jan 1, 2018</b>	<b>38,959</b>	<b>4,221,839</b>	<b>97,645</b>	<b>50,010</b>	<b>16,248</b>	<b>326,439</b>	<b>250,698</b>	<b>4,192</b>	<b>529,716</b>	<b>606,204</b>	<b>6,141,950</b>
Interest income	177	19,410	465	249	77	1,590	1,303	19	3,478	2,844	29,612
Revenue transfers to reserves Slag revenues									49,118		49,118
<b>Balance - Mar 31, 2018</b>	<b>39,136</b>	<b>4,241,249</b>	<b>98,110</b>	<b>50,259</b>	<b>16,325</b>	<b>328,029</b>	<b>252,001</b>	<b>4,211</b>	<b>582,312</b>	<b>609,048</b>	<b>6,220,680</b>

# Citizens for Safe Technology

April 12, 2018.

Dear Mayor Konrad and Counsellors,



Last October I sent a letter, on behalf of Citizens for Safe Technology, to all municipalities and provincial authorities with jurisdiction related to Microcell installations. The letter was in support of the resolution that you had drafted for the UBCM. I understand now that this resolution is not going forward to the upcoming FCM in Halifax.

This is deeply disappointing to all of us working towards improving the safe use and installation of these amazing wireless technologies. We are not luddites but citizens who enjoy the benefits as much as anyone else. We are just concerned regarding the health impacts and lack of knowledge surrounding the safer application of devices that emit electromagnetic radiation. Our country's regulations and Safety Code 6 need to be revised to keep up with the telecommunication industries strides forward and you were trying to expediate this at a provincial and national level!

**With that fact in mind we wish to commend you on the visionary leadership role you have played in drafting the resolution and getting it passed at both the AKBLG and the UBCM. We hope you realize the important role you have played in attempting to create a more responsive, current, and comprehensive telecommunications policy in Canada. Thank you all for bringing this resolution to the table. Let's hope the next time it makes it to the national level.**

Sincerely,

Sherry Ridout  
2814 Arbutus Rd.  
Victoria, B.C. V8N 5X3  
[s.ridout@shaw.ca](mailto:s.ridout@shaw.ca)

On Behalf Of: **Citizens for Safe Technology**  
[cst.citizensforsafetechnology@gmail.com](mailto:cst.citizensforsafetechnology@gmail.com)

**FILE CODE**  
*Citizens for Safe*  
*WE3' CI- Technology re*  
*Microcell Resolution*  
Agenda Page 124 of 163





April 6, 2018

File: 10280-60 (82E/01)

Mayor and Council  
City of Grand Forks  
PO Box 220  
Grand Forks, BC, V0H 1H0

Dear Mayor and Council:

The BC Geographical Names Office has received a proposal to adopt "**Saddle Mountain**" as an official name for an unnamed peak east of Saddle Lake Regional Park and west of Grand Forks in Area D/Rural Grand Forks of the Regional District of Kootenay Boundary (see attached map). This proposal was put forward by the Regional District.

The name "Saddle Mountain" references the saddle-like shape of Saddle Lake Regional Park's valley, a natural feature of the landscape. It is interesting to note that "Saddle Lake" is the reservoir of a dam built by the Doukhobours in 1912, likely originating from the word "sedlina" meaning "saddle" in Doukhobour Russian. "Saddle Mountain" has appeared in local print sources, such as trail guides produced by the Grand Forks Community Trails Society.

This peak is within or forms a portion of the boundary of the traditional territory of several First Nations and local governments, so it is important to ascertain a) if there is a known traditional name for this feature, and b) if the proposed name reflects the heritage values in the area.

Before considering adoption of "Saddle Mountain," may I have your advice and comments? In particular as the feature is near to the City of Grand Forks, is there a reason why this name should not be suitable names for this feature?

Adoption of this name does not prejudice legitimate claims to the land.

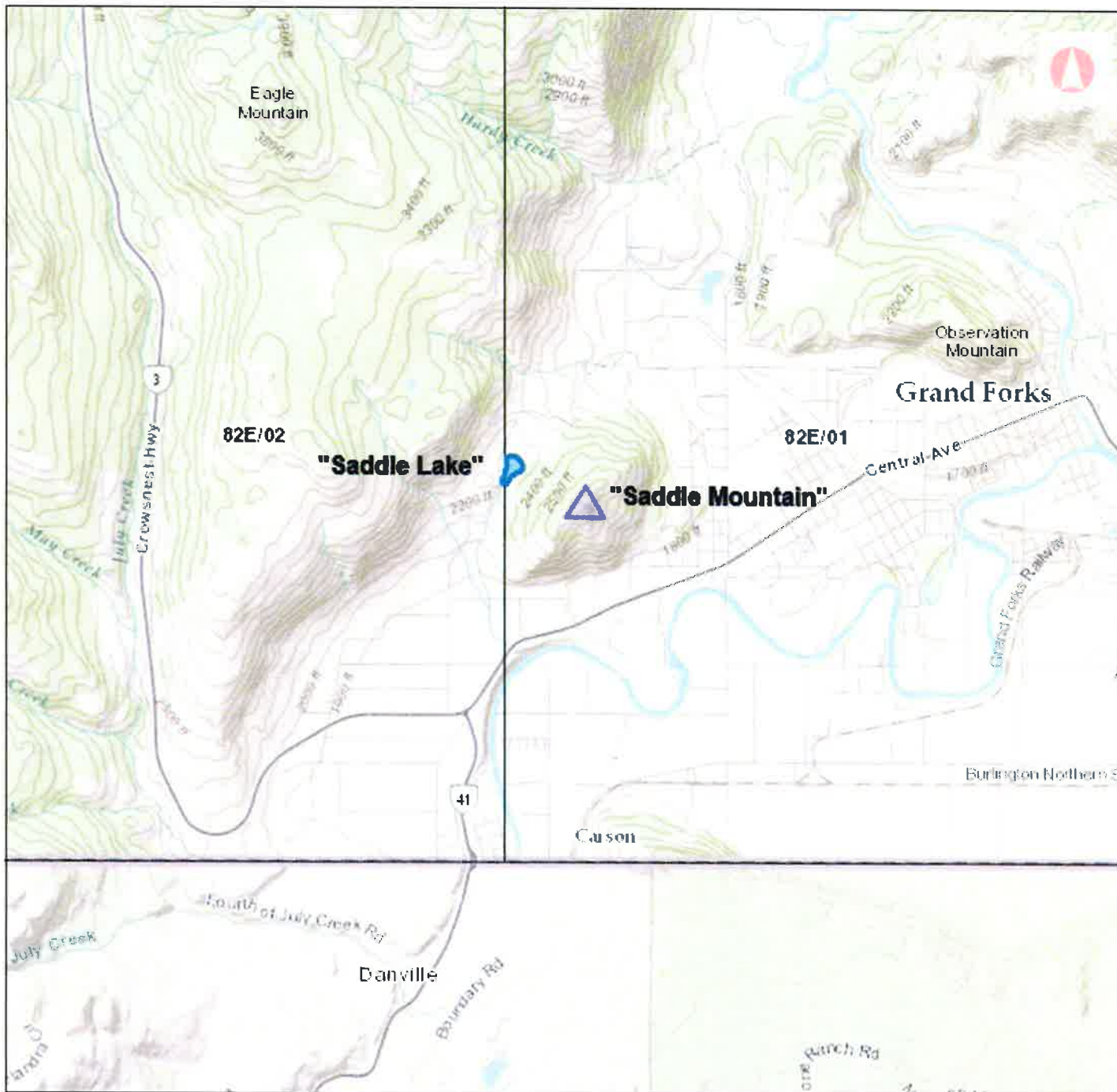
Thank you in advance for your comments. Your response before 16 July 2018 would be appreciated.

Kind regards,

Carla Jack  
BC Geographical Names Office  
[Carla.Jack@gov.bc.ca](mailto:Carla.Jack@gov.bc.ca)

enclosure

**FILE CODE**  
*WE3-*  
*Proposal to adopt*  
*m8 - Saddle mtn as*  
*official name*



Proposed Name

### Legend

Feature

Associated Feature

Proposed name: **Saddle**

**Mountain**

Centre point: 49.02664,

-118.49069

NTS map: 82E/01



1: 72,224

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Datum: NAD83

Projection: WGS\_1984\_Web\_Mercator\_Auxiliary Sphere

### Key Map of British Columbia





Mayor Konrad and City Councillors  
City of Grand Forks  
7217 – 4<sup>th</sup> St. Grand Forks, BC

Jessica Mace  
Coordinator, Kettle River Watershed Authority  
Regional District of the Kootenay Boundary  
2140 Central Ave. Grand Forks, BC  
[plan@kettleriver.ca](mailto:plan@kettleriver.ca)  
(250)442-4111

**Re: Kettle River Watershed Authority Public Outreach Program Funding Support**

Dear Mayor Konrad and City Councillors,

The Kettle River Watershed Authority (KRWA) would like to thank all of you for your decision to support the Kettle River Watershed Authority in continuing our public outreach program.

The KRWA was created in 2016 and is governed by representatives from multiple levels of government including provincial, local (including Grand Forks), and First Nations and numerous stakeholders (e.g. industry, forestry, environmental groups). The goal of the KRWA is to implement the 59 actions in the Kettle River Watershed Management Plan (the Plan) (<http://kettleriver.ca>, 2014). The Plan was originally developed to address public concern around watershed function. There was and continues to be major public concern around high and low flows in the river, water temperature, riparian health and fish prevalence and size.

Our latest and most concerning issues in the watershed are floods and droughts. In 2017 we had a flood and a drought in the same year. Both events were unexpected. For the flood, there was normal snow pack levels which lead us to believe that there would be average water flows in the river. For the drought, there was so much water in the system in the spring, it was hard to predict a drought later in the summer. What we are coming to realize is that we need to be prepared for floods and droughts even if they are not expected. Part of our role as the Kettle River Watershed Authority it to help people understand watershed issues and be prepared. Specifically, Action 1.2.5 of the Plan is to implement a watershed education strategy to improve watershed literacy.

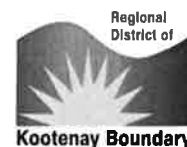
FILE CODE  
WE3  
or R3 - Kettle River Watershed  
Authority - Letter of  
Appreciation  
Agenda Page 127 of 163

With the funds that you have committed to the Kettle River Watershed Authority work we will complete the following public educational activities including but not limited to:

1. Attend and set up a booth at a number of public events in Grand Forks. At these booths we will:
  - Provide educational material related to floods and droughts. We will work with City staff to ensure that City specific material is available. We will provide flood information material that has been provided by the government of BC and the Regional District of the Kootenay Boundary (RDKB).
  - At these events, we will be available to discuss any watershed related issues with citizens and will point them in the right direction if we cannot answer their questions.
  - At these events we will also discuss the importance of healthy riparian areas since these areas can impact droughts and floods.
  - We will have a children's learning booth available to ensure that we are reaching all ages of citizens.
2. Provide flood and drought educational material through social media specifically through Facebook posts. Our Facebook page (Kettle River Watershed Authority) regularly reaches hundreds of people and during emergencies (e.g. last year's flood) it reached over a thousand people.
3. Provide flood and drought educational material through the media including writing newspaper articles and radio ads.
4. Work closely with Chris Marsh, the new RDKB Manager of Emergency Services to support the citizens of Grand Forks and the Boundary in flood preparation activities (e.g. attending neighbourhood meetings, helping with emergency family plans).
5. Run at least one public meeting to provide information related to the watershed discuss current conditions.
6. During an emergency, support the Emergency Team where possible including activities such as managing a list of volunteers that are willing to help with sandbagging (as requested by Chris Marsh) and being available to talk face to face with people to help alleviate stress.

We are requesting that the funds (\$15,000) be paid in one chunk to the RDKB (attention Donna Dean, Manager of Planning and Development) at your earliest possible convenience. The funds will be paid by the RDKB to the consultant on a monthly basis as per work completed.





*The Kettle River Starts Here*

Again we would like to express our many thanks to Mayor Konrad and the City Councillors for supporting this outreach program. The Boundary Regional Directors are certainly appreciative.

If you have any questions or concerns, please contact me at 250-442-4111.

Sincerely,

Jessica Mace / [plan@kettleriver.ca](mailto:plan@kettleriver.ca)  
Kettle River Watershed Authority Coordinator



Baseball Tournament June 26 - July 2, 2018

RECEIVED

APR 17 2018

THE CORPORATION OF  
THE CITY OF GRAND FORKS

Diane Heinrich, CAO  
City of Grand Forks

April 16, 2018

Dear Ms. Heinrich

The GFI organizing committee is pleased to report that they would like to undertake improvements at James Donaldson Park prior to this year's 37<sup>th</sup> tournament. The goal is to make the park more accessible for wheelchairs, baby strollers, and anyone who may experience difficulty navigating through the gravel pathway from the front gates to the Hard Ball Café. We have approached Argosy Construction and they have agreed to provide the materials and labour for paving as their sponsorship to the GFI. Having spoken with both yourself and Dolores, it is our understanding that Urban Systems will provide the engineering report as their contribution to the community.

On another note, we have been in communication with Chuck Varibioff (CannaFest) and he has indicated that he would like to work with us to improve the front gate entranceways and be willing to provide funding for this project.

We would like to thank you for your continued support of our event and hope that you will welcome these new upgrades to your facility.

Best Regards

From the organizing committee for the 2018 Grand Forks International Baseball Tournament.

FILE CODE

CIO GFI Organizing  
& GFI-Committee Improvements  
(Parks...) to Donaldson Park  
Agenda Page 180 of 183

# Request for Decision



To: Regular Meeting  
From: **Chief Financial Officer**  
Date: May 7, 2018  
Subject: 2018 Tax Rates Bylaw No. 2046  
Recommendation: THAT Council gives final reading to the 2018 Tax Rates Bylaw, No. 2046.

---

## Background

Section 197 of the Community Charter requires the City to adopt an annual property value tax bylaw to establish the tax rates for the collection of municipal revenue as provided in the financial plan, as well as the amounts to be collected on behalf of other local governments or public bodies.

The amount of 2018 property tax revenue included in the 2018-2022 Financial Plan Bylaw No. 2045 is \$3,804,524. This tax rates bylaw sets revenues from Class 4 Major Industry at the same amount as 2017, caps the rate for Class 2 Utilities at \$40 per \$1,000 of assessed value, and uses the same multipliers as last year for the remaining classes. The residential tax rate under this option is \$4.8974 per \$1,000 of assessed value.

The tax rates for the regional and hospital districts are determined by the amount levied by those authorities, and are based on legislated provincial class multiples.

2018 Tax Rates Bylaw No. 2046 was introduced to the Committee of the Whole on April 9, 2018 and given first three readings on April 23, 2018. The bylaw is presented here for final reading.

---

## Benefits or Impacts

### General

Adoption of an annual property tax rates bylaw before May 15 is a requirement of the Community Charter. The Five Year Financial Plan determines the amount of revenue to be raised by property value taxes and used in the calculation of tax rates.

## Strategic Impact



### Fiscal Responsibility

The Tax Rates Bylaw has been developed by taking into consideration the taxation policy statements included in the annual financial plan and Asset Management Financial Policy 808.

Property taxation is one of the main sources of revenue for the City. The amount of revenue proposed to be collected through property taxation for 2018 is \$3,804,524.

## Policy/Legislation

Section 197 of the Community Charter  
Five Year Financial Plan Bylaw 2018-2022, No. 2045  
Asset Management Policy Financial Policy 808

## Attachments

2018 Tax Rates Bylaw No. 2046

---

## Recommendation

**THAT Council gives final reading to the 2018 Tax Rates Bylaw, No. 2046.**

## Options

1. RESOLVED THAT Council accepts the recommendation.
2. RESOLVED THAT Council does not accept the recommendation.
3. RESOLVED THAT Council refers the matter back to staff for further information.



### Report Approval Details

Document Title:	Bylaw 2046 2018 tax rates 3 readings.docx
Attachments:	- By2046 - 2018 Property Tax Rates Bylaw.docx
Final Approval Date:	Apr 12, 2018

This report and all of its attachments were approved and signed as outlined below:

**Diane Heinrich - Apr 12, 2018 - 4:00 PM**

### Report Approval Details

Document Title:	Bylaw 2046 2018 tax rates final reading.docx
Attachments:	- By2046 - 2018 Property Tax Rates Bylaw.docx
Final Approval Date:	Apr 30, 2018

This report and all of its attachments were approved and signed as outlined below:

**Diane Heinrich - Apr 30, 2018 - 1:26 PM**

**THE CORPORATION OF THE CITY OF GRAND FORKS**  
**BYLAW NO. 2046**

**A BYLAW TO IMPOSE RATES ON ALL TAXABLE LAND  
AND IMPROVEMENTS FOR THE YEAR ENDED DECEMBER 31, 2018**

=====

The Council for the Corporation of the City of Grand Forks, in open meeting assembled, enacts as follows:

1. This bylaw may be cited, for all purposes, as the "2018 Annual Tax Rates Bylaw, No. 2046".
2. Bylaw No. 2038, cited as "2017 Annual Tax Rates Bylaw", is hereby repealed.
3. The following Tax Rates are hereby imposed and levied for the Year Ended December 31, 2018:
  - a) For all lawful general purposes of the Municipality on the value of all taxable land and improvements, rates appearing in Column "A" of Schedule "A" attached hereto and forming a part of the bylaw;
  - b) For West Kootenay Boundary Regional Hospital purposes on the value of all taxable land and improvements, rates appearing in Column "B" of Schedule "A" attached hereto and forming a part of the bylaw;
  - c) For purposes of the Regional District of Kootenay Boundary on the value of all taxable land and improvements rates appearing in Column "C" of Schedule "A", attached hereto and forming a part hereof;
4. The minimum amount of taxation upon a parcel of real property shall be One Dollar (\$1.00).
5. Pursuant to Section 233 of the *Community Charter*
  - a) The due date for taxes shall be the 3th day of July, 2018.
  - b) The Collector shall, as soon as is practicable on or after the 4th day of July 2018, add to the unpaid taxes of the current year, in respect of each parcel of land and improvements thereon upon the real property tax roll, ten per centum of the amount unpaid as of the 3rd day of July, 2018.

Read a first, second and third time by the Municipal Council this 23<sup>rd</sup> day of April, 2018.

Finally adopted on this 7<sup>th</sup> day of May 2018.

---

Mayor Frank Konrad

---

Corporate Officer – Diane Heinrich

### **C E R T I F I C A T E**

I hereby certify the foregoing to be a true and correct copy of the “2018 Annual Tax Rates Bylaw, No. 2046 as adopted by the Municipal Council of the City of Grand Forks on this 7th day of May, 2018.

---

Corporate Officer of the Municipal Council of  
The City of Grand Forks



**Schedule "A"**  
**City of Grand Forks**  
**2018 Property Tax Rates Bylaw 2046**

Property Class	Description	"A"	"B"	"C"
		General Municipal	West Kootenay Boundary Regional Hospital District	Regional District of Kootenay Boundary
		(Dollars of tax per \$1,000 taxable assessed value)		
1	Residential	4.8974	0.2767	2.0742
2	Utility	40.0000	0.9685	7.2597
4	Major Industry	43.3561	0.9408	7.0523
5	Light Industry	14.3494	0.9408	7.0523
6	Business/Other	11.7048	0.6779	5.0818
8	Rec/Non-Profit	3.9179	0.2767	2.0742
9	Farm	5.2892	0.2767	2.0742

# Request for Decision



To: Regular Meeting  
From: **Corporate Services**  
Date: May 7, 2018  
Subject: Bylaw 2047 – Freedom of Information and Protection of Privacy Update  
Recommendation: **THAT Council gives final reading of the proposed Freedom of Information and Protection of Privacy Bylaw No. 2047.**

---

## Background

As part staff's ongoing review process regarding procedures, policies, and bylaws; it was determined that the Freedom of Information Bylaw needs to be updated.

The currently active bylaw (Bylaw No. 1423) is from 1994 and was established before the latest edition of the Freedom of Information and Protection of Privacy Act was established in 1996 and amended several times thereafter. The bylaw is also referencing outdated sections and overall procedures that are not required to be listed.

Municipalities and Regional Districts must have a bylaw to designate related roles and to establish a fee schedule for Freedom of Information request related charges.

Attached is the proposed modernized Bylaw No. 2047 to designate those roles and establish the fees accordingly. Once adopted, the next revision of the Fees and Charges bylaw would see the removal of a few line items that will be no longer required.

April 9, 2018: The COTW reviewed the Bylaw and recommended to present the Bylaw to Council for the first three readings.

Some minor changes had to be made to the Bylaw regarding the designations of the Head and Coordinator roles due to the unique organizational configuration at the moment. The changes are highlighted in yellow.

April 23, 2018: Council gave the first three readings of the Bylaw with the minor changes included.

The Bylaw is now presented for final reading.

---

## Benefits or Impacts

### General

Updating outdated bylaws helps reduce risk to the organization and ensures up to date legislation is referred to.

## Strategic Impact



### Community Engagement

- Freedom of Information requests are an integral component of Community Engagement

## Policy/Legislation

Freedom of Information and Protection of Privacy Act

## Attachments

Proposed Bylaw No. 2047

Current Freedom of Information Bylaw No. 1423, 1994

---

## Recommendation

**THAT Council gives final reading of the proposed Freedom of Information and Protection of Privacy Bylaw No. 2047.**

## Options

1. THAT Council accepts the report.
2. THAT Council does not accept the report.
3. THAT Council refers the matter back to staff for further information.

### Report Approval Details

Document Title:	RFD 2018 - Bylaw 2047 - Freedom of Information - Final Reading.docx
Attachments:	- By2047 - Freedom of Information.docx - By1423-Freedom of Information.pdf
Final Approval Date:	Apr 24, 2018

This report and all of its attachments were approved and signed as outlined below:

**Diane Heinrich - Apr 24, 2018 - 10:23 AM**



# THE CORPORATION OF THE CITY OF GRAND FORKS

## BYLAW NO. 2047

### A Bylaw for the Administration of the Freedom of Information and Protection of Privacy Act

---

The Municipal Council for the Corporation of the City of Grand Forks, in an open meeting of Council, **ENACTS** as follows:

#### 1. Citation

- 1.1 This bylaw may be cited as the “**Freedom of Information and Protection of Privacy Bylaw No. 2047**”.

#### 2. Definitions

- 2.1 In this bylaw,

“**Act**” means the Freedom of Information and Protection of Privacy Act, R.S.B.C., 1996 Chapter 165, as amended or replaced from time to time.

- 2.2 The definitions contained in Schedule 1 of the Act shall apply to this bylaw except where the context requires otherwise.

#### 3. Designations

- 3.1 The **Chief Administrative Officer** is designated as the Head for the purpose of the Act.

- 3.2 The **Corporate Officer** is designated as the Information and Privacy Coordinator for the purpose of the Act and is authorized to perform the duties and functions of the Head.

- 3.3 **The Deputy Corporate Officer is designated as the Information and Privacy Coordinator for the purpose of the Act and is authorized to perform the duties and functions of the Head in the event that the roles and duties of the Chief Administrative Officer and the Corporate Officer are fulfilled by the same person.**

#### 4. Fees

- 4.1 The Schedule of Maximum Fees as established by British Columbia Regulation 155/2012 (Freedom of Information and Protection and Privacy Regulation), as amended from time to time, shall be the maximum fees charged by the City as permitted under the Act.

#### 5. General

- 5.1 Any enactment referred to herein is a reference to an enactment of British Columbia and regulations thereto, as amended, revised, consolidated or replaced from time to time.

5.2 If any part, section, sentence, clause, phrase or word of this Bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder which shall continue in full force and effect and be construed as if the Bylaw had been adopted without the invalid portion.

**6. Repeal**

6.1 The following bylaws and any amendments thereto, are hereby repealed:

- **“City of Grand Forks Freedom of Information Bylaw No. 1423, 1994”**

Read a first, second, and third time by the Municipal Council this 23<sup>rd</sup> day of April, 2018.

Finally Adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

---

Mayor, Frank Konrad

---

Corporate Officer, Diane Heinrich

**CERTIFICATE**

I hereby certify the foregoing to be a true copy of the “Freedom of Information and Protection of Privacy Bylaw No. 2047”, as adopted by the Municipal Council of the City of Grand Forks on the \_\_\_\_\_ day of \_\_\_\_\_, 2018.

---

Corporate Officer of the Corporation of the  
City of Grand Forks

THE CORPORATION OF THE CITY OF GRAND FORKS

BYLAW NO. 1423

A BYLAW FOR THE ADMINISTRATION OF THE FREEDOM OF  
INFORMATION AND PROTECTION OF PRIVACY ACT

---

**WHEREAS** under Section 76.1 of the Freedom of Information and Protection of Privacy Act, a local government

- a) must designate a person or group of persons as the head of the Municipality for the purposes of the Freedom of Information and Protection of Privacy Act; and
- b) may authorize any person to perform any duty or exercise any function under the Freedom of Information and Protection of Privacy Act of the person or group of persons designated as the head of the Municipality; and
- c) may set any fees the local public body requires to be paid under Section 75 of the Freedom of Information and Protection of Privacy Act.

**NOW THEREFORE** the Council of the Corporation of the City of Grand Forks, **ENACTS** as follows:

1.0 This bylaw may be cited, for all purposes, as the "**City of Grand Forks Freedom of Information Bylaw No. 1423, 1994**".

2.0 Definitions and Interpretation

2.1 The definitions contained in Schedule 1 of the Act shall apply to this bylaw, except where the context requires otherwise.

2.2 In this bylaw:

"**Act**" means the Freedom of Information and Protection of Privacy Act, Stats B.C. 1992, c.61.

"**Commercial Applicant**" means a person who makes a request for access to a record to obtain information for use in connection with a trade, business, profession or other venture for profit.

"**Coordinator**" means the person designated in Section 3.2 as the Information and Privacy Coordinator.

"**Council**" means the Council of the Corporation of the City of Grand Forks.

**"Head"** means the person or group of persons designated as the Head of the municipality under Section 3 of this bylaw.

**"Municipality"** means the Corporation of the City of Grand Forks.

**"Request"** means request under Section 5 of the Act.

### 3.0 Administration

3.1 The Administrator is designated as the Head for the purposes of the Freedom of Information and Protection of Privacy Act.

3.2 The Duties and Functions of Head, which remain those of the Head, are set out for reference in Appendix 1.

3.3 The Council hereby designates the Clerk to be the Information and Privacy Coordinator.

### 4.0 Power of Coordinator

The Council hereby authorizes the Coordinator to perform the following duties or exercise the following functions of the Head, under the Act:

#### 4.1 Responding to Requests

- (1) The duty to create a record from a machine readable record in the custody or under the control of the Municipality using its normal computer hardware and software and technical expertise if creating the record would not unreasonably interfere with the operations of the Municipality;
- (2) The power to respond to a request except where the Head has the discretion under the Act, to determine whether a record shall be released or withheld from disclosure.
- (3) The power to respond to a request after the Head has made a decision regarding the disclosure or non-disclosure of a record.
- (4) The power to refuse in a response to confirm or deny the existence of:
  - a) a record containing information described in Section 15 of the Act (information harmful to law enforcement) or
  - b) a record containing personal information of a third party if disclosure of the existence of the information would be an unreasonable invasion of that party's personal privacy.



- (5) The duty to:
  - a) provide an applicant with a copy of a record or part of a record with a response where the record can reasonably be reproduced, or
  - b) to give reasons for the delay in providing the record.

#### 4.2 Extension of Time

- (1) The power to extend time for responding to a request for up to 30 days.
- (2) The power to apply to the Information and Privacy Commissioner for a longer time period for response to a request where:
  - a) the applicant does not give enough detail to enable the municipality to identify a requested record,
  - b) a large number of records is requested or must be searched and meeting the time limit would unreasonably interfere with the operations of the Municipality,
  - c) more time is needed to consult with a third party or other public body before the Head can decide whether or not to give the applicant access to a requested record, or
  - d) a third party asks for a review under Section 52(2) or 62(2) of the Act.
- (3) The power to tell the applicant the reason for an extension, when a response can be expected and that the applicant may complain about the extension under Section 42(2)(b) or 60(1)(a) of the Act where the time for a response to a request has been extended under Section 10(1) of the Act.

#### 4.3 Transfer Request

- (1) The power to transfer a request and, if necessary, the records to another public body if:
  - a) the record was produced by or for the other public body,
  - b) the other public body was the first to obtain the record, or
  - c) the record is in the custody or under the control of the other public body.

- (2) The power to notify the applicant of the transfer.

#### 4.4 Information to be Released Within 60 Days

- (1) The power to refuse to disclose information that is available for purchase by the public under Section 20(1)(a) of the Act.
- (2) The power to notify an applicant of the publication or release of information that the Head has refused to disclose under Section 20(1)(b) of the Act on the basis that the information is to be published or released to the public, within 60 days after the applicant's request is received.

#### 4.5 Business Interests

- (1) The power to refuse to disclose to an applicant, information:
  - a) that would reveal
    - (i) trade secrets of a third part, or
    - (ii) commercial, financial, labour relations, scientific or technical information of a third party
  - b) that is supplied, implicitly or explicitly, in confidence, and
  - c) the disclosure of which could reasonably be expected to
    - (i) harm significantly the competitive position or interfere significantly with the negotiating position of the third party,
    - (ii) result in similar information no long being supplied to the public body when it is in the public interest that similar information continues to be supplied,
    - (iii) result in undue financial loss or gain to any person or organization, or
    - (iv) reveal information supplied to, or the report of, an arbitrator, mediator, labour relations officer or other person or body appointed to resolve or inquire into a labor relations dispute.
- (2) The duty to refuse to disclose to an applicant, information that was collected on a tax return or gathered for the purpose of determining tax liability or collecting a tax.

- (3) The duty set out in paragraphs (1) and (2) is subject to Section 21(3) of the Act which provides that the duty to refuse disclosure does not apply if a third party consents to the disclosure or the information is in a record that is in the custody or control of the British Columbia Archives and Records Service or the archives of a public body and that has been in existence for 50 or more years.

#### 4.6 Notification

- (1) The power to notify a third party that the Municipality intends to give access to a record that the Coordinator has reason to believe contains information that might be excepted from disclosure under Section 21 (information harmful to business interests of a third Party) or Section 22 (information harmful to personal privacy) of the Act.
- (2) The power to give a notice under Section 23(1.2) of the Act where the Coordinator does not intend to give access to a record that contains information excepted from disclosure under Section 21 (third party) or Section 22 (information harmful to personal privacy) of the Act.
- (3) The power to give written notice of the decision whether or not to give access to a record that the Coordinator has reason to believe contains information that might be excepted from disclosure under Section 21 or 22 of the Act to the applicant and a third party.

#### 4.7 Public Interest

The power to disclose information in accordance with Section 25 of the Act to the public, to an affected group of people or to an applicant:

- a) about a risk of significant harm to the environment or to the health or safety of the public or a group of people, or
- b) the disclosure of which is, for any other reason, clearly in the public best interest.

#### 4.8 Information Protection

- (1) The power to protect personal information by making reasonable security arrangements against such risks as unauthorized access, collection, use, disclosure or disposal.
- (2) The duty to refuse to disclose information to an applicant if the disclosure is prohibited or restricted by or under another Act.

#### 4.9 Commissioner's Orders

The power to comply with an order of the Information and Privacy Commissioner.

#### 5.0 Fees

An applicant making a request shall pay to the Municipality, the fees set out in Schedule "A" for the purpose of:

- a) locating, retrieving and producing the record;
- b) preparing the record for disclosure;
- c) shipping and handling the record;
- d) providing a copy of the record.

6.0 This bylaw shall come into force and effect upon proclamation of Stats B.C. 1992, c.46.

**INTRODUCED** this 17<sup>th</sup> day of October, 1994.

Read a **FIRST** time this 17<sup>th</sup> day of October, 1994.

Read a **SECOND** time this 17<sup>th</sup> day of October, 1994.

Read a **THIRD** time this 17<sup>th</sup> day of October, 1994.

**FINALLY ADOPTED** this 7<sup>th</sup> day of November, 1994.

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Y. Sugimoto – Mayor

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J.L. Burch – City Clerk

#### **CERTIFICATE**

I hereby certify the foregoing to be a true copy of Bylaw No. 1423,  
as passed by the Municipal Council of the City of Grand Forks  
on the 7<sup>th</sup> day of November, 1994.

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Clerk of the Municipal Council of the  
City of Grand Forks



## APPENDIX 1

### **DUTIES AND FUNCTIONS OF THE HEAD WHICH REMAIN THOSE OF THE HEAD**

<u>Section</u>	<u>Description</u>
6(1)	The duty to assist applicants.
12.1	The power to refuse to disclose to an applicant, information that would reveal: <ul style="list-style-type: none"><li>a) a draft of a resolution, bylaw or other legal instrument by which the local public body acts or a draft of a private bill, or</li><li>b) the substance of deliberations or a meeting of its elected officials or of its governing body or a Committee of its governing body, if an <u>Act</u> or a regulation under this <u>Act</u> authorizes the holding of that meeting in the absence of the public.</li></ul>
13	The power to refuse to disclose information that would reveal advice or recommendations developed by or for a public body.
14	The power to refuse to disclose information subject to solicitor/client privilege.
15	The power to refuse to disclose information if the disclosure could reasonably be expected to harm a law enforcement matter or that would have any of the other results set out in Section 15 of the <u>Act</u> .
16	The power to refuse to disclose information if the disclosure could reasonably be expected to be harmful to intergovernmental relations or negotiations in accordance with Section 16 of the <u>Act</u> .
17(1)	The power to refuse to disclose information which could reasonably be expected to harm the financial or economic interests of a local public body or the government of British Columbia or the ability of that government to manage the economy including the matters set out in Section 17(1) of the <u>Act</u> .
17(1.1)	The power to refuse to disclose research information under Section 17(1.1) of the <u>Act</u> .

- 18 The power to refuse to disclose information, if the disclosure could reasonably be expected to result in damage to or interfere with the conservation of any of the things referred to in Section 18 of the Act (heritage sites, endangered species, etc.).
- 19(1) The power to refuse to disclose information, including personal information about an applicant, where the disclosure could reasonably be expected to threaten anyone else's safety or mental or physical health or interfere with public safety under Section 19(1) of the Act.
- 19(2) The power to refuse to disclose to an applicant, personal information about the applicant if the disclosure could reasonably be expected to result in immediate and grave harm to the applicant's safety or mental or physical health under Section 19(2) of the Act.
- 22 The power to refuse to disclose personal information if disclosure would be an unreasonable invasion of a third party's personal privacy under Section 22 of the Act.
- 24 The duty to make a decision and to give written notice of a decision under Section 24 of the Act.
- 70 The duty to make available to the public manuals, instructions, or guidelines issued to the offices or employees of the public body or substantive rules or policy statements adopted by the public body in accordance with Section 70 of the Act.
- 71 The power to prescribe categories of records that are in the custody or under the control of the public body and that are available to the public on demand without request for access under the Act, to require persons who ask for a copy of an available record to pay a fee to the public body in accordance with Section 71 of the Act.
- 75(5) The power to excuse an applicant from paying all or part of a fee if, in the Head's opinion, the applicant cannot afford the payment or for any other reason it is fair to excuse payment where the record relates to a matter of public interest, including the environment or public health or safety.

## **SCHEDULE "A"**

### **SCHEDULE OF MAXIMUM FEES**

1. For applicants other than Commercial applicants:
  - a) for locating and retrieving a record \$7.50/1/4 hour  
after the first  
3 hours
  - b) for producing a record manually \$7.50/14 hour
  - c) for producing a record from a machine  
readable record \$16.50/minute  
for cost of use of  
central mainframe  
processor and all  
locally attached  
devices plus \$7.50/  
¼ hour for develop-  
ing a computer  
program to produce  
the record.
  - d) for preparing a record for disclosure and  
handling a record \$7.50/1/4 hour
  - e) for shipping copies actual costs of  
shipping method  
chosen by applicant
  - f) for copying records \$0.25/page
    - photocopies and computer printouts (8.5x11 & 8.5x14)  
\$0.30/page (11x17)
    - floppy disks \$10.00/disk
    - computer tapes \$40.00/tape up to  
2,400 feet
    - microfiche \$10.00/fiche
    - 16mm microfilm duplication \$25.00/roll
    - 35mm microfilm duplication \$40.00/roll

- microfilm to paper duplication	\$0.50/page
- photographs (colour/black & white)	\$5.00 to produce a negative \$12.00 (16"x20") \$9.00 (11"x14") \$4.00 (8"x10") \$3.00 (5"x7")
- photographic print of textual, graphic or cartographic record (8"x10") black & white	\$12.50 each
- hard copy laser print, b/w, 300 dots/inch	\$0.25 each
- hard copy laser print, b/w, 1200 dots/inch	\$0.40 each
- hard copy laser print, colour	\$1.65 each
- photomechanical reproduction of 105mm cartographic record/plan	\$3.00 each
- slide duplication	\$0.95 each
- plans	\$1.00/sq.m.
- audio cassette duplication	\$10.00 plus \$7.00/1/4 hour of recording
- video cassette (1/4" or 8mm) duplication	\$11.00/60 min. cassette plus \$7.00/1/4 hour of recording;  \$20.00/120 min. cassette plus \$7.00/1/4 hour of recording
- video cassette (1/2") duplication	\$15.00/cassette plus \$11.00/1/4 hour of recording
- video cassette (3/4") duplication	\$40.00/cassette plus \$11.00/1/4 hour of recording



- |    |   |   |
|----|---|---|
| 2. | For commercial applicants for each service listed in item 1 | the actual cost of providing that service |
|----|---|---|

# Request for Decision



To: Regular Meeting  
From: **Corporate Services**  
Date: May 7, 2018  
Subject: Bylaw 2048 – Records and Information Management Program Bylaw update  
Recommendation: **THAT Council gives final reading of the proposed Records and Information Management Program Bylaw No. 2048.**

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## Background

As part of staff's ongoing review process regarding procedures, policies, and bylaws; it was determined that the Records Retention and Scheduling Bylaw needs to be updated.

The currently active bylaw (Bylaw No. 1662) is from 2001 and was established to include all disposition and retention schedules directly within the bylaw. Several of these timelines are outdated and other items that need to be included are not on the list, while others need to be completely removed.

In discussion with other municipalities, it was determined that the best approach would be at this point to introduce a full Records and Information Management Program and associated Bylaw. This coincides with the overall records and information management review and update that Staff has been working on. Staff is in the progress of finishing up the first phase of the records and information management overhaul and requires having Bylaw 1662 replaced by a modernized bylaw to continue with the process.

As the retention and classification schedules for records continually change and evolve, this modernized bylaw removes the retention and disposition schedules from the actual bylaw but integrates those and more dynamic content into a Records and Information Management Program that will be continually updated as necessary or as legislation and best practices change.

Attached is the proposed modernized Bylaw No. 2048 to authorize the Corporate Officer to implement, review, amend, and maintain the Records and Information Management Program along with its operational procedures, manuals, policies, and other related items for the organization.

April 9, 2018: The COTW reviewed the Bylaw and recommended to present the Bylaw to Council for the first three readings.

April 23, 2018: Council gave the first three readings of the Bylaw.

The Bylaw is now presented for final reading.

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## Benefits or Impacts

### General

Updating outdated bylaws helps reduce risk to the organization and ensures up to date legislation is referred to.

### Strategic Impact



#### Community Engagement

- An effective Records and Information Management program is integral for expedient access to data and records
- Support for access for Freedom of Information requests



#### Fiscal Responsibility

- Removing often time-consuming searches for documents and records by all of staff will increase productivity throughout the organization

### Policy/Legislation

Freedom of Information and Protection of Privacy Act  
Community Charter

## Attachments

Proposed Bylaw No. 2048

Current Retention and Scheduling Bylaw No. 1662, 2001

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## Recommendation

**THAT Council gives final reading of the proposed Records and Information Management Program Bylaw No. 2048.**

## Options

1. THAT Council accepts the report.
2. THAT Council does not accept the report.
3. THAT Council refers the matter back to staff for further information.

### Report Approval Details

Document Title:	RFD 2018 - Bylaw 2048 - Records and Information Management Program - Final Reading.docx
Attachments:	- By2048 - Records and Information Management Program Bylaw.docx - By1662-Records Retention.pdf
Final Approval Date:	Apr 24, 2018

This report and all of its attachments were approved and signed as outlined below:

**Diane Heinrich - Apr 24, 2018 - 10:55 AM**

# THE CORPORATION OF THE CITY OF GRAND FORKS

## BYLAW NO. 2048

### A Bylaw for the Administration of the Records and Information Management Program

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The Municipal Council for the Corporation of the City of Grand Forks, in an open meeting of Council, **ENACTS** as follows:

**1. Citation**

- 1.1 This bylaw may be cited as the “**Records and Information Management Program Bylaw No. 2048**”.

**2. Definitions**

- 2.1 In this bylaw,

“**Corporate Officer**” means the Officer assigned responsibility for corporate administration under the *Community Charter*, or their Deputy.

“**Records and Information Management Program**” means a program used by the City to manage the life-cycle of records of the City from record creation through to final disposition.

“**Records Schedules**” means the records classification and retention schedules prepared under Part 3, as amended from time to time.

- 2.2 The definitions contained in Schedule 1 of the *Freedom of Information and Protection of Privacy Act*, R.S.B.C., 1996 Chapter 165, as amended or replaced from time to time, shall apply to this bylaw except where the context requires otherwise.

**3. Records and Information Management Program**

- 3.1 The Records and Information Management Program is established under the direction of the Corporate Officer to provide for the systematic control of the creation, use, maintenance, storage, security, retrieval, and disposition of records created or received by the City in the conduct of its operations.

- 3.2 Records of the City are created, accessed, maintained and disposed of only as provided by the records schedule.

- 3.3 The Corporate Officer is authorized to create and maintain a manual of policies and procedures that provides for the management of the records of the City and includes those related to the records schedules for:

- a) Classification of records
- b) Custody & Control of records;



- c) Creation or Receipt of records;
  - d) Access to records;
  - e) Disclosure of records;
  - f) Retention, Security and Storage of records;
  - g) Disposition of records;
  - h) Preservation of records; and
  - i) Vital records;
  - j) Any other matter(s) the Corporate Officer authorizes to be included in the manual.
- 3.4 The Corporate Officer is authorized to review and amend the Records and Information Management Program as required.
- 4. General**
- 4.1 Any enactment referred to herein is a reference to an enactment of British Columbia and regulations thereto, as amended, revised, consolidated or replaced from time to time.
- 4.2 If any part, section, sentence, clause, phrase or word of this Bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder which shall continue in full force and effect and be construed as if the Bylaw had been adopted without the invalid portion.
- 5. Repeal**
- 5.1 The following bylaws and any amendments thereto, are hereby repealed:
- **“Records Retention and Scheduling Bylaw No. 1662”**

Read a first, second, and third time by the Municipal Council this 23<sup>rd</sup> day of April, 2018.

Finally Adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

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Mayor, Frank Konrad

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Corporate Officer, Diane Heinrich

**C E R T I F I C A T E**

I hereby certify the foregoing to be a true copy of the "Records and Information Management Program Bylaw No. 2048", as adopted by the Municipal Council of the City of Grand Forks on the \_\_\_\_ day of \_\_\_\_\_, 2018.

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Corporate Officer of the Corporation of the  
City of Grand Forks

**THE CORPORATION OF THE CITY OF GRAND FORKS**

**BYLAW NO. 1662**

**A Bylaw to provide for the Retention and Disposition of Records  
of the City of Grand Forks**

=====

**WHEREAS** provisions of Section 198 of the Local Government Act, vests the responsibility for the care of all municipal records, with respect to retention and disposal, in the City Clerk;

**NOW THEREFORE**, Council of the Corporation of the City of Grand Forks, in open meeting assembled, ENACTS as follows:

1. That the Clerk shall ensure the retention and disposal of records in compliance with the terms and conditions of the policy, attached hereto as Schedule "A".
2. That this Bylaw may be cited, for all purposes, as the "Records Retention and Scheduling Bylaw No. 1662".
3. City of Grand Forks "Records Retention and Scheduling Bylaw No. 1471" is hereby repealed.

Read a **FIRST** time this 22<sup>nd</sup> day of May, 2001.

Read a **SECOND** time this 22<sup>nd</sup> day of May, 2001.

Read a **THIRD** time this 22<sup>nd</sup> day of May, 2001.

**FINALLY ADOPTED** this 4<sup>th</sup> of June, 2001.



\_\_\_\_\_  
Lori Lum, Mayor



\_\_\_\_\_  
J. Lynne Burch, City Clerk

n/Lynne/Policy

**C E R T I F I C A T E**

I hereby certify the foregoing to be a true copy of Bylaw No. 1662 as passed by the Municipal Council of the City of Grand Forks on the 4<sup>th</sup> day of June, 2001.

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Clerk of the Municipal Council of the  
City of Grand Forks

**Schedule 'A'**

**FIVE YEARS:**

- ◆ Correspondence - general

**TWO YEARS:**

- ◆ Bylaw Enforcement Complaints
- ◆ Accounting Records - payroll transaction sheets, staff travel expenses, etc.
- ◆ Public Works Administration Records

**INDIVIDUALLY IDENTIFIED:**

- ◆ Other Insurance's - (i.e. fire, vehicle) - **one year after expiry.**
- ◆ Debentures (paid) - **two years after fully paid.**
- ◆ Time Cards - **three years after audit.**
- ◆ Consultants Reports, Municipal maps and plans - **when obsolete.**
- ◆ Contracts, Leases and Agreements - **when expired plus one year.**
- ◆ Voters Lists - **when new one prepared.**
- ◆ Voters Registration Cards - **after recorded on the voters list.**
- ◆ Disclosure Statements – **seven years after the voting day to which they relate**
- ◆ Development Permits and Design Review Applications - **life of building.**
- ◆ Variance Permits - **life of building.**
- ◆ Water, Sewer Service Connection Applications - **life of building.**
- ◆ Tax Notices - **after one year.**
- ◆ Fire & Fire Inspection Reports - **life of building.**
- ◆ Fire Manuals & Reference Material - **when obsolete.**



RECORDS AND DOCUMENTS TO BE RETAINED:

PERMANENTLY:

- ◆ Bylaws
- ◆ Minute Books
- ◆ Burial Permits
- ◆ Certificates of Title
- ◆ Legal Matters - claims and cases
- ◆ Personnel records - including payroll, W.C.B. time loss
- ◆ Assessment roll
- ◆ Insurance Policies - liability, errors and omissions.
- ◆ Engineering & Electrical Records - relating to projects.
- ◆ Public Works Plans - electrical, subdivisions, etc.
- ◆ Easements, Rights of Way, Restrictive Covenants and Encroachments

TEN YEARS:

- ◆ Fire Fighter Response Records

EIGHT YEARS:

- ◆ Cemetery receipts
- ◆ Tax Rolls
- ◆ Tax Information Requests
- ◆ Bank Statements
- ◆ Canceled cheques
- ◆ Vouchers
- ◆ Utility Billings and Registers
- ◆ Custom Work Orders
- ◆ Budgets
- ◆ Cash Receipts - Tax Receipts
- ◆ Business Licenses